Officer: Planning Administration
Direct Telephone: 07 4189 9100
Our Reference: MCU23/0012

18 September 2023

South Burnett Regional Council
ABN 89 972 463 351
PO Box 336
Kingaroy QLD 4610
1300 789 279 or (07) 4189 9100
(07) 4162 4806
info@southburnett.qld.gov.au
www.southburnett.qld.gov.au

Stephen Saunders
42 Markwell Street
KINGAROY QLD 4610

Dear Sir

Decision Notice
Planning Act 2016

I refer to your application and advise that on 12 September 2023, Council decided to approve the application in full subject to conditions.

Details of the decision are as follows:

APPLICATION DETAILS

Application No:	MCU23/0012
Street Address:	40 & 42 Markwell Street KINGAROY QLD 4610
Real Property Description:	Lot 107 & 108 on RP7914
Planning Scheme:	South Burnett Regional Council

DECISION DETAILS

Type of Decision:	Approval
Type of Approval:	Development Permit for Material Change of Use (8 x Multi Dwelling Units)
Date of Decision:	12 September 2023

CURRENCY PERIOD OF APPROVAL

The currency period for this development approval is six (6) years starting the day that this development approval takes effect. (Refer to Section 85 "Lapsing of approval at end of currency period" of the *Planning Act 2016*.)

INFRASTRUCTURE

Where conditions relate to the provision of infrastructure, these are non-trunk infrastructure conditions unless specifically nominated as a "***necessary infrastructure condition***" for the provision of trunk infrastructure as defined under Chapter 4 of the *Planning Act 2016*.

ASSESSMENT MANAGER CONDITIONS

GENERAL

GEN1. The development must be completed and maintained generally in accordance with the approved plans and documents and any amendments arising through conditions to this development approval:

Drawing title	Prepared by	Reference No	Rev	Date
Site Plan	Blue Print	23-3304-SPY sheet 1	-	19/07/2023
Unit Type A Floor Plan	Blue Print	22-3166-SPY sheet 2	-	28/04/2023
Elevation Type A (south, east, north, west).	Blue Print	22-3166-SPY sheet 3	-	28/04/2023
View Type A (south-eastern & south-western).	Blue Print	22-3166-SPY sheet 4	-	28/04/2023
View Type A (north-eastern & north-western).	Blue Print	22-3166-SPY sheet 5	-	28/04/2023
Unit Type B Floor Plan	Blue Print	22-3166-SPY sheet 6	-	28/04/2023
Elevation Type B (south, east, north, west).	Blue Print	22-3166-SPY sheet 7	-	28/04/2023
View Type B (south-eastern & south-western).	Blue Print	22-3166-SPY sheet 8	-	28/04/2023
View Type B (north-eastern & north-western).	Blue Print	22-3166-SPY sheet 9	-	28/04/2023
Unit Type C Floor Plan	Blue Print	22-3166-SPY sheet 10	-	28/04/2023
Elevation Type C (south, east, north, west).	Blue Print	22-3166-SPY sheet 11	-	28/04/2023
View Type C (south-eastern & south-western).	Blue Print	22-3166-SPY sheet 12	-	28/04/2023
View Type C (north-eastern & north-western).	Blue Print	22-3166-SPY sheet 13	-	28/04/2023
Unit Type D Floor Plan (as amended in red)	Blue Print	22-3166-SPY sheet 14	-	28/04/2023
Elevation Type D (south, east, north, west).	Blue Print	22-3166-SPY sheet 15	-	28/04/2023
View Type D (south-eastern & south-western).	Blue Print	22-3166-SPY sheet 16	-	28/04/2023
View Type D (north-eastern & north-western).	Blue Print	22-3166-SPY sheet 17	-	28/04/2023
Stormwater Management Report and addendum to the SWMR (via email from TSA Engineers Pty Ltd) dated 24 July 2023	TSA Engineering & Design	QU-0406-01	-	22/06/2023

AMENDMENTS: Refer to Unit Type D Floor Plan (marked up in Red).

GEN2. The development herein approved may not commence until the following development permits have been issued and complied with as required:

- Development Permit for Building Works; and
- Permit for Plumbing and Drainage.

Timing: As indicated

GEN3. Any new earthworks or structures are not to concentrate or impede the natural flow of water across property boundaries and onto any other lots.

GEN4. Dust prevention measures must be undertaken to ensure that dust does not cause a nuisance to occupiers of adjacent properties.

APPROVED USE

GEN5. The approved development is a material change of use for **Multiple Dwelling (8 Units),** as shown on the approved plans referred to in this decision and does not imply approval for other similar uses (**e.g. Short-term Accommodation**).

Timing: At all times.

GEN6. For the purposes of this approval, unit 8 must not exceed the footprint as per that scaled on the approved *Site Plan 23-3304-SPY sheet 1 dated 19 July 2023.* Amendments to Unit 8 will constitute a change to this approval.

Timing: At all times.

COMPLIANCE TIMING AND COSTS

GEN7. All conditions of the approval shall be complied with before the approval occurs (prior to commencement of the use) and while the use continues unless otherwise specified within these conditions.

Timing: As indicated.

GEN8. Submit for Council's records a revised Floor Plan for Unit Type D showing a consistent orientation with that expressed on approved *'Site Plan 23-3304-SPY sheet 1 dated 19 July 2023'.*

Timing: Prior to survey plan sealing/endorsement, approval of a community management statement, issue of a certificate of classification (which ever comes first).

GEN9. Submit for Council's records a set of drawings prepared by a suitably qualified person for the approved unit 8 (existing single storey dwelling) ensuring at least the following details are included:

- Floor plate detailing all internal living and other areas.
- 8m3 storage space.
- Private open space/recreation areas.
- Car park
- Clothes drying area.

Timing: Prior to survey plan sealing/endorsement, approval of a community management statement, issue of a certificate of classification (whichever comes first).

GEN10. Existing access crossover to unit 8 is to service must be retained for unit 8 only.

Timing: At all times

GEN11. Submit for Council's records documentary evidence that the development site is not on the contaminated land register.

Timing: Prior to survey plan sealing/endorsement, approval of a community management statement, issue of a certificate of classification (whichever comes first).

AMALGAMATE THE LOTS

GEN12. Amalgamate Lots 107 and 108 on RP7914 into a single allotment. Submit to Council documentary evidence of compliance with this condition.

Timing: Prior to survey plan sealing/endorsement, approval of a community management statement, issue of a certificate of classification (whichever comes first).

MAINTENANCE

GEN13. The development (including landscaping, parking, driveway and other external spaces) shall be maintained in accordance with the Approved Plans, subject to and modified by any conditions of this approval.

Timing: At all times

GEN14. Maintain the site in a clean and orderly state at all times.

Timing: At all times

MATERIAL CHANGE OF USE

MCU1. Each unit is to be provided with external clothes drying facilities in the positions shown on the approved *Site Plan_23-3304-SPY (Sheet 1) dated 19 July 2023.*

MCU2. A letter box shall be provided on the Markwell Street alignment for each habitable unit, including the body corporate if appropriate. Each box shall be distinguished with a number corresponding with each unit number.

MCU3. Each dwelling unit is to be readily identified by number.

MCU4. A maximum of one satellite dish is permitted on the premises with a maximum diameter of 1.2m with a maximum height of 10.5m above ground level.

MCU5. Communal open space area identified on the approved *Site Plan_23-3304-SPY (Sheet 1) dated 19 July 2023* is to remain within common property and shall not form part of any exclusive use area.

LANDSCAPING

MCU6. A Landscape Plan to be prepared by a suitably qualified person and is to address the following requirements.

MCU7. All 'Deep Landscaping & Landscaping areas' to be in accordance with that scaled on the approved *Site Plan_23-3304-SPY (Sheet 1) dated 19 July 2023***.**

MCU8. Planting to be consistent with requirements set out in part of the South Burnett Regional Planning Scheme 2017 v1.4

MCU9. Submit to for Council's records a detailed landscape plan certifying installation of planting specimens in accordance with South Burnett Regional Planning Scheme 2017 v1.4. Detailed landscape plan and certification to be undertaken by a registered landscape architect.

Timing: Prior to survey plan sealing/endorsement, approval of a community management statement, issue of a certificate of classification (whichever comes first).

REFUSE STORAGE COLLECTION

MCU10. Any areas that are dedicated for the collection and/or storage of solid waste on the premises are to be:
a) level;
b) provided with impervious hard stand and drained; and
c) screened around the full perimeter.

FENCING

MCU11. Fence construction between private open space areas of unit is to be solid screen fencing to a minimum height of 1.5m.

MCU12. Fences or walls proposed along road frontages are to be maximum 1.2m in height if of solid construction or maximum of 1.5m in height, if gaps permit 50% transparency, except where providing screening to bin storage area.

MCU13. Road frontage fences or walls are not to exceed 15m in length without a 1m x 0.5m indentation.

MCU14. Fence construction along the eastern, northern and western property boundary is to be solid screen fencing to a height not exceeding 1.8m.

EGINEERING WORKS

ENG1. Complete all works approved and works required by conditions of this development approval and/or any related approvals at no cost to Council, prior to commencement of the use unless stated otherwise.

Timing: As indicated

ENG2. Undertake Engineering designs and construction in accordance with the Planning Scheme, Council's standards, relevant design guides, and Australian Standards.

ENG3. Be responsible for the full cost of any alterations necessary to electricity, telephone, water mains, sewer mains, stormwater drainage systems or easements and/or other public utility installations resulting from the development or from road and drainage works required in connection with the development.

LOCATION, PROTECTION AND REPAIR OF DAMAGE TO COUNCIL AND PIBLIC UTILITY SERVICES INFRASTRUCTURE AND ASSETS

ENG4. Be responsible for the location and protection of any Council and public utility services infrastructure and assets that may be impacted on during construction of the development.

ENG5. Repair all damage incurred to Council and public utility services infrastructure and assets, as a result of the proposed development immediately should hazards exist for public health and safety or vehicular safety. Otherwise, repair all damages immediately upon completion of works associated with the development.

STORMWATER MANAGEMENT

ENG6. Undertake stormwater management in accordance with the TSA Stormwater Report QU-0406 Issue Date 22/6/2023, and addendum email trail. Guttering and downpipe sizing and configuration shall accommodate the ARI100 storm event.

ENG7. Implement all stormwater management measures required by Council.

Timing: Prior to commencement of use of units 5,6,7 & 8 shown on the approved *Site Plan_23-3304-SPY (Sheet 1) dated 19 July 2023*

ENG8. Provide overland flow paths that do not adversely alter the characteristics of existing overland flows on other properties or that create an increase in flood damage on other properties.

ENG9. Ensure that adjoining properties and roadways are protected from ponding or nuisance from stormwater as a result of any site works undertaken as part of the proposed development.

Timing: At all times

LAWFUL POINT OF DISCHARGE

ENG10. Lawful point of discharge for the development is Markwell Street.

ENG11. Discharge all minor storm flows that fall or pass onto the site to the lawful point of discharge in accordance with the Queensland Urban Drainage Manual (QUDM).

WATER SUPPLY

ENG12. Connect each premises or premises group within the development to Councils reticulated water supply network via a single connection. In accordance with the WBBROC Water Services Design and Construction Code and Queensland Plumbing and Wastewater Code.

ENG13. Each meterable premises shall have its own water meter as per the requirements of the Queensland Plumbing and Wastewater Code.

Comment: For the avoidance of doubt, each lot shall have a master meter, with each dwelling having its own sub-meter.

SEWERAGE

ENG14. Connect the development to Council's existing reticulated sewerage system via a single connection for units 1,2,3,4, and a single connection for units 5,6,7 & 8.

ENG15. Actual connection to Council’s live sewerage infrastructure must be undertaken by or under the supervision of Council.

ENG16. Do not build works (except driveways) within 1.5 metres from the centre of any existing sewer pipework or within the Zone of Influence, whichever is the greater (measured horizontally).

ENG17. Maintain a minimum of a 3-metre-wide corridor to be maintained for maintenance/upgrade purposes. A control joint shall be made in the driveway, 1.5m either side of the existing sewer main. The control joint shall be one third depth of the slab, and 6mm wide. Saw cuts shall be undertaken 4-12 hours after laying depending on conditions.

ENG18. Ensure that a clear level area of a minimum of a 2.5 metre radius surrounding any existing sewer manholes on the site is provided for future maintenance/upgrade purposes.

ENG19. The above minimum clearances to Council's sewer infrastructure do not preclude the need for works to proposed structures to prevent loading to the sewer system.

PARKING AND ACCESS – GENERAL

ENG20. Design and construct all driveway, parking, and access areas with concrete, asphalt or a two-coat bitumen seal.

Timing: Prior to survey plan sealing/endorsement, approval of a community management statement, issue of a certificate of classification (whichever comes first).

ENG21. Provide a minimum of one car parking space per dwelling (unit 8 to provide a minimum of 1 parking bay within its exclusive use area), and 2 visitor car parking spaces.

Timing: At all times

ENG22. Visitor spaces shall not form part of any exclusive use areas and must remain available to all bonafide visitors attending the site.

Timing: At all times

VEHICLE ACCESS

ENG23. Construct a residential standard crossover between the property boundary and the edge of the Markwell Street pavement, having a minimum width of six (6) metres, generally in accordance with Council's Standard Drawing SBRC 00048. Upgrade the existing crossover servicing unit 8 to comply with Council's design standards.

ENG24. Any existing kerb damaged during construction of the access shall be replaced to the same profile of the adjacent kerb.

ENG25. Construct any new crossovers such that the edge of the crossover is no closer than 1 metre to any existing or proposed infrastructure, including any stormwater gully pit, manhole, service infrastructure (e.g. power pole, telecommunications pit), road infrastructure (e.g. street sign, street tree, etc).

ELECTRICITY AND TELECOMMUNICATION

ENG26. Connect the development to electricity and telecommunication services.

ENG27. Remove all redundant telecommunication connections and reinstate the land.

ENG28. Remove all redundant electrical connections and reinstate the land.

EARTHWORKS – GENERAL

ENG29. Earthworks per site involving cut or fill with a nett quantity of material greater than $50m^3$, requires an Operational Work application.

ENG30. Undertake earthworks in accordance with the provisions of AS3798 Guidelines on Earthworks for Commercial and Residential Developments.

EROSION AND SEDIMENT CONTROL – GENERAL

ENG31. Ensure that all reasonable actions are taken to prevent sediment or sediment laden water from being transported to adjoining properties, roads and/or stormwater drainage systems.

ENG32. Remove and clean-up sediment or other pollutants in the event that sediment or other pollutants are tracked/released onto adjoining streets or stormwater systems, at no cost to Council.

REFERRAL AGENCIES

Not Applicable.

APPROVED PLANS

The following plans are Approved plans for the development:

Approved Plans

Plan No.	Rev.	Plan Name	Date
23-3304-SPY Sheet 1	-	*Site Plan*, prepared by Blue Print	19/07/2023
22-3166-SPY Sheet 2	-	*Unit Type A Floor Plan*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 3	-	*Elevation Type A (south, east, north, west)*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 4	-	*View Type A (south-eastern & south-western)*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 5	-	*View Type A (north-eastern & north-western)*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 6	-	*Unit Type B Floor Plan*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 7	-	*Elevation Type B (south, east, north, west)*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 8	-	*View Type B (south-eastern & south-western)*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 9	-	*View Type B (north-eastern & north-western)*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 10	-	*Unit Type C Floor Plan*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 11	-	*Elevation Type C (south, east, north, west)*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 12	-	*View Type C (south-eastern & south-western)*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 13	-	*View Type C (north-eastern & north-western)*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 15	-	*Elevation Type D (south, east, north, west)*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 16	-	*View Type D (south-eastern & south-western)*, prepared by Blue Print	28/04/2023
22-3166-SPY Sheet 17	-	*View Type D (north-eastern & north-western)*, prepared by Blue Print	28/04/2023

The following plans require amendment prior to becoming Approved Plans for the development:

Plans Requiring Amendment

Plan No.	Rev.	Plan Name	Date
22-3166-SPY Sheet 14	-	*Unit Type D Floor Plan*, prepared by Blue Print	28/04/2023
Amendments	1. As marked up in Red		

REFERENCED DOCUMENTS

The following documents are referenced in the assessment manager conditions:

Referenced Documents

Document No.	Rev.	Document Name	Date
QU-0406-01	-	*Stormwater Management Report and addendum to the SWMR (via email from TSA Engineers Pty Ltd) dated 24/07/2023*, prepared by TSA Engineering & Design	22/06/2023

ADVISORY NOTES

The following notes are included for guidance and information purposes only and do not form part of the assessment manager conditions:

ADVICE

Material Change of Use – Currency Period

ADV1. Section 85 (1)(a) of the Planning Act provides that, if this approval is not acted upon within the period of six (6) years the approval will lapse.

Heritage

ADV2. This development approval does not authorise any activity that may harm Aboriginal Cultural Heritage. Under the Aboriginal Cultural Heritage Act 2003 you have a duty of care in relation to such heritage. Section 23(1) provides that "A person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal Cultural Heritage." Council does not warrant that the approved development avoids affecting Aboriginal Cultural Heritage. It may, therefore, be prudent for you to carry out searches, consultation, or a Cultural Heritage assessment to ascertain the presence or otherwise of Aboriginal Cultural Heritage. The Act and the associated duty of care guidelines explain your obligations in more detail and should be consulted before proceeding. A search can be arranged by visiting https://www.datsip.qld.gov.au and filling out the Aboriginal and Torres Strait Islander Cultural Heritage Search Request Form.

Previous approvals.

ADV3. Where seeking to exercise this material change of use development permit it must be carried out in accordance with plans and conditions imposed noting that previous designs applied to the site (pursuant to previous approvals) are not relevant or justifiable under this permit.

Development Compliance

ADV4. Development must not be amended from those plans approved unless otherwise agreed as a result of a change request pursuant to the Planning Act 2016, changes that are not approved (and constructed) may constitute a development offence pursuant to the Planning Act 2016, triggering compliance action.

ADV5. All conditions imposed must be complied with as attached to this decision package, conditions that are not complied with may constitute a development offence pursuant to the Planning Act 2016, triggering compliance action.

Driveway to Unit 8

ADV6. In the event further changes involve cessation of Unit 8 (in its current form), Council will require closure of the crossover and reinstatement of kerb & channel with all access to be via the approved crossover servicing units 1,2,3,4,5,6, & 7.

Appeal Rights

ADV7. Attached for your information is a copy of Chapter 6 of the Planning Act as regards to Appeal Rights.

PROPERTY NOTES

Not Applicable.

VARIATION APPROVAL

Not Applicable.

FURTHER DEVELOPMENT PERMITS REQUIRED

- Development Permit for Building Work
- Development Permit for Plumbing Work

RIGHTS OF APPEAL

You are entitled to appeal against this decision. A copy of the relevant appeal provisions from the *Planning Act 2016* is attached.

During the appeal period, you as the applicant may suspend your appeal period and make written representations to council about the conditions contained within the development approval. If council agrees or agrees in part with the representations, a "negotiated decision notice" will be issued. Only one "negotiated decision notice" may be given. Taking this step will defer your appeal period, which will commence again from the start the day after you receive a "negotiated decision notice".

OTHER DETAILS

If you wish to obtain more information about Council's decision, electronic copies are available on line at www.southburnett.qld.gov.au, or at Council Offices.

Yours faithfully

DAVID HURSTHOUSE
COORDINATOR DEVELOPMENT SERVICES

Enc: Adopted Infrastructure Charge Notice
Approved Plans/Documents
Appeal Rights

INFRASTRUCTURE CHARGES NOTICE

(Section 119 of the Planning Act 2016)

APPLICANT:	Stephen Saunders 42 Markwell Street KINGAROY QLD 4610	
APPLICATION:	Material Change of Use (Multiple Dwelling) - Code Assessable	
DATE:	12/09/2023	
FILE REFERENCE:	MCU23/0012	
AMOUNT OF THE LEVIED CHARGE: *(Details of how these charges were calculated are shown overleaf)*	**$43,038.00**	**Total**
	$21,090.00	Water Supply Network
	$11,619.00	Sewerage Network
	$5,166.00	Transport Network
	$4,305.00	Parks and Land for Community Facilities Network
	$858.00	Stormwater Network
AUTOMATIC INCREASE OF LEVIED CHARGE:	The amount of the levied charge is subject to an automatic increase. Refer to the Information Notice attached to this notice for more information on how the increase is worked out.	
LAND TO WHICH CHARGE APPLIES:	Lots 107 & 108 on RP7914	
SITE ADDRESS:	40 & 42 Markwell St, Kingaroy	
PAYABLE TO:	South Burnett Regional Council	
WHEN PAYABLE: *(In accordance with the timing stated in Section 122 of the Planning Act 2016)*	Material Change of Use – When the change happens.	
OFFSET OR REFUND:	Not Applicable.	

This charge is made in accordance with South Burnett Regional Council's ***Charges Resolution (No. 3) 2019***

DETAILS OF CALCULATION

Water Supply

Adopted Charges

Development Description	Number of Units	Units of Measure	Charge Rate	Reference	Amount
Residential use – 2 bed dwelling	3	Dwelling	$7,030.00	CR Table 2.1	$21,090.00

Discounts*

Description	Number of Units	Units of Measure	Discount Rate	Reference	Amount
-	-	-	$0.00		$0.00

Sewerage

Adopted Charges

Development Description	Number of Units	Units of Measure	Charge Rate	Reference	Amount
Residential use – 2 bed dwelling	3	Dwelling	$3,873.00	CR Table 2.1	$11,619.00

Discounts*

Description	Number of Units	Units of Measure	Discount Rate	Reference	Amount
-	-	-	$0.00		$0.00

Transport

Adopted Charges

Development Description	Number of Units	Units of Measure	Charge Rate	Reference	Amount
Residential use – 2 bed dwelling	3	Dwelling	$1,722.00	CR Table 2.1	$5,166.00

Discounts*

Description	Number of Units	Units of Measure	Discount Rate	Reference	Amount
-	-	-	$0.00		$0.00

Parks and Land for Community Facilities

Adopted Charges

Development Description	Number of Units	Units of Measure	Charge Rate	Reference	Amount
Residential use – 2 bed dwelling	3	Dwelling	$1,435.00	CR Table 2.1	$4,305.00

Discounts*

Description	Number of Units	Units of Measure	Discount Rate	Reference	Amount
-	-	-	$0.00		$0.00

Stormwater

Adopted Charges

Development Description	Number of Units	Units of Measure	Charge Rate	Reference	Amount
Residential use – 2 bed dwelling	3	Dwelling	$286.00	CR Table 2.1	$858.00

Discounts*

Description	Number of Units	Units of Measure	Discount Rate	Reference	Amount
-	-	-	$0.00		$0.00

Levied Charges

Development Description	Water Supply	Sewerage	Transport	Parks & Land for Community Facilities	Stormwater	Total
Residential use – 2 bed dwelling (3 of)	$21,090.00	$11,619.00	$5,166.00	$4,305.00	$858.00	$43,038.00
Total	**$21,090.00**	**$11,619.00**	**$5,166.00**	**$4,305.00**	**$858.00**	**$43,038.00**

** In accordance with Section 3.3 of the Charges Resolution, the discount may not exceed the adopted charge. Any surplus discounts will not be refunded, except at South Burnett Regional Council's discretion.*

INFORMATION NOTICE

Authority and Reasons for Charge	This Infrastructure Charges Notice has been given in accordance with section 119 of the *Planning Act 2016* to support the Local government's long-term infrastructure planning and financial sustainability.
Appeals	Pursuant to section 229 and Schedule 1 of the *Planning Act 2016* a person may appeal an Infrastructure Charges Notice. Attached is an extract from the *Planning Act 2016* that details your appeal rights.
Automatic Increase Provision of charge rate ($)	An infrastructure charge levied by South Burnett Regional Council is to be increased by the difference between the Producer Price Index (PPI) applicable at the time the infrastructure charge was levied, and PPI applicable at the time of payment of the levied charge , adjusted by reference to the 3-yearly PPI average[1]. If the levied charge is increased using the method described above, the charge payable is the amount equal to the sum of the charge as levied and the amount of the increase. However, the sum of the charge as levied and the amount of the increase is not to exceed the maximum adopted charge the Authority could have levied for the development at the time the charge is paid.
GST	The Federal Government has determined that contributions made by developers to Government for infrastructure and services under the *Planning Act* 2016 are GST exempt.
Making a Payment	This Infrastructure Charges Notice cannot be used to pay your infrastructure charges. To pay the levied charge, you must request an Itemised Breakdown showing the total levied charge payable at the time of payment. An Itemised Breakdown must be presented at the time of payment. An Itemised Breakdown may be requested by emailing info@southburnett.qld.gov.au

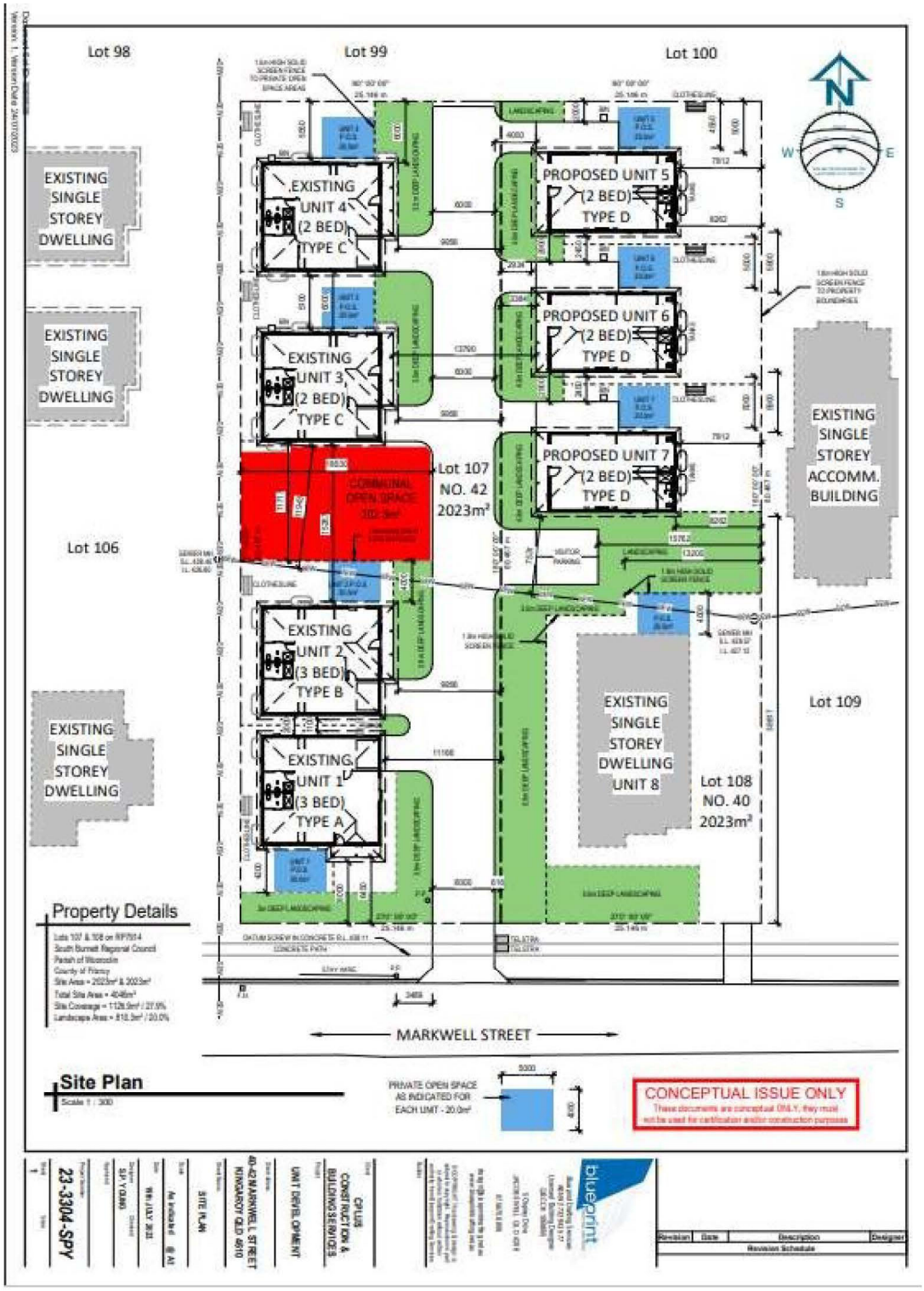
[1] 3-yearly PPI average is defined in section 114 of the *Planning Act 2016* and means the PPI adjusted according to the 3-year moving average quarterly percentage change between financial quarters. PPI Index is the producer price index for construction 6427.0 (ABS PPI) index number 3101 – Road and Bridge construction index for Queensland published by the Australian Bureau of Statistics.

Payment can be made at any of the following South Burnett Regional Council Offices:

- 69 Hart Street, Blackbutt, 4314;
- 45 Glendon Street, Kingaroy, 4610;
- 42 Stephens Street West, Murgon, 4605;
- 48 Drayton Street, Nanango, 4615;
- McKenzie Street, Wondai, 4606; or
- via other methods identified on the Itemised Breakdown.

Enquiries

Enquiries regarding this Infrastructure Charges Notice should be directed to the SOUTH BURNETT REGIONAL COUNCIL, Department of Planning and Land Management, during office hours, Monday to Friday by phoning (07) 4189 9100 or email at info@southburnett.qld.gov.au


Lot 98
Lot 99
Lot 100
EXISTING SINGLE STOREY DWELLING
EXISTING SINGLE STOREY DWELLING
EXISTING SINGLE STOREY DWELLING
EXISTING UNIT 4 (2 BED) TYPE C
EXISTING UNIT 3 (2 BED) TYPE C
EXISTING UNIT 2 (3 BED) TYPE B
EXISTING UNIT 1 (3 BED) TYPE A
PROPOSED UNIT 5 (2 BED) TYPE D
PROPOSED UNIT 6 (2 BED) TYPE D
PROPOSED UNIT 7 (2 BED) TYPE D
COMMUNAL OPEN SPACE 202.3m²
Lot 107 NO. 42 2023m²
Lot 106
EXISTING SINGLE STOREY ACCOMM. BUILDING
EXISTING SINGLE STOREY DWELLING UNIT 8
Lot 108 NO. 40 2023m²
Lot 109
Property Details
Site Plan
MARKWELL STREET
PRIVATE OPEN SPACE AS INDICATED FOR EACH UNIT - 20.0m²
CONCEPTUAL ISSUE ONLY
23-3304-SPY
40-42 MARKWELL STREET KINGAROY QLD 4610
UNIT DEVELOPMENT
SITE PLAN
CPLUS CONSTRUCTION & BUILDING SERVICES
blueprint

Legend

SA — INTERCONNECTED PHOTOELECTRIC SMOKE ALARM CONNECTED TO MAINS POWER INSTALLED IN ACCORDANCE WITH PART 3.7.5 OF THE BCA AND COMPLYING WITH AS3786

CEILING FAN

CONCEPTUAL ISSUE ONLY
These documents are conceptual ONLY, they must not be used for certification and/or construction purposes

TYPE A

Unit Type A Floor Plan

Scale 1 : 100

Floor Area

Living Area	97.8 m²
Garage Area	25.9 m²
Porch Area	5.7 m²
Grand total	129.5 m²

Revision	Date	Description	Designer
		Revision Schedule	

blueprint
Blueprint Drafting Services
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Builder

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Project
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNIT TYPE A FLOOR PLAN

Scale
1 : 100 @ A3

Date
28th APRIL 2023

Designer: **S.P. YOUNG** Checked

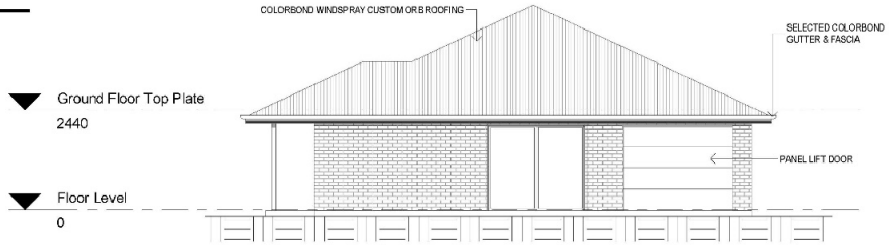
Approved

Project Number
22-3166-SPY

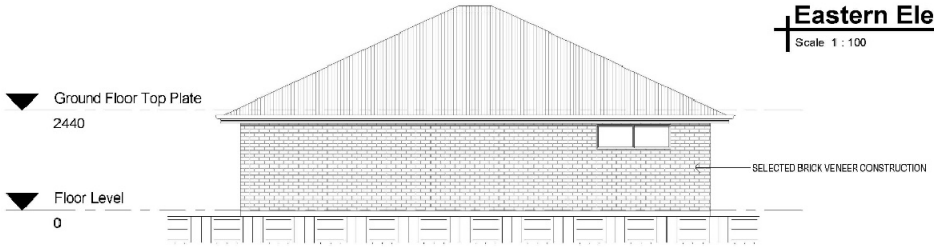
Sheet **2** Issue

Southern Elevation
Scale 1 : 100

TYPE A



Eastern Elevation
Scale 1 : 100



Northern Elevation
Scale 1 : 100

Western Elevation
Scale 1 : 100

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Revision | Date | Description | Designer
Revision Schedule

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Project
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNIT TYPE A ELEVATIONS

Scale
1 : 100 @ A3

Date
28th APRIL 2023

Designer S.P. YOUNG | Checked

Approved

Project Number
22-3166-SPY

Sheet 3 | Issue

South-Eastern View
NOT TO SCALE

TYPE A

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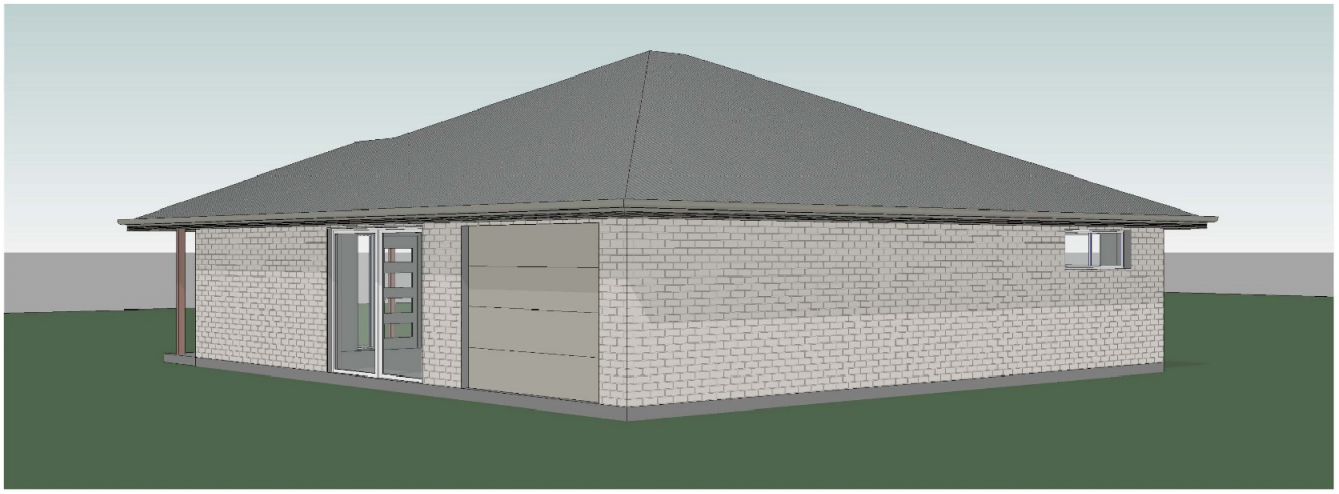

North-Eastern View
NOT TO SCALE

Revision | Date | Description | Designer
Revision Schedule

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Client:
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Project:
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNIT TYPE A 3D VIEWS 1

Scale
NOT TO SCALE @ A3

Date
28th APRIL 2023

Designer S.P. YOUNG | Checked

Approved

Project Number
22-3166-SPY

Sheet 4 | Issue

South-Western View
NOT TO SCALE

TYPE A

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North-Western View
NOT TO SCALE

Revision	Date	Description	Designer

Revision Schedule

Blueprint Drafting Services
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Project
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNIT TYPE A 3D VIEWS 2

Scale
NOT TO SCALE @ A3

Date
28th APRIL 2023

Designer
S.P. YOUNG

Checked

Approved

Project Number
22-3166-SPY

Sheet
5

Issue

Legend

SA — INTERCONNECTED PHOTOELECTRIC SMOKE ALARM CONNECTED TO MAINS POWER INSTALLED IN ACCORDANCE WITH PART 3.7.5 OF THE BCA AND COMPLYING WITH AS3786

CEILING FAN

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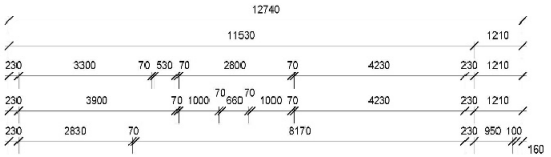
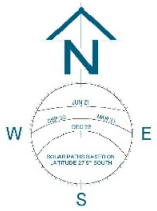
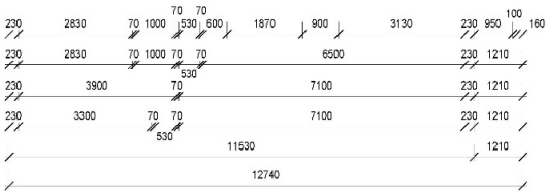




TYPE B



Unit Type B Floor Plan

Scale 1 : 100

Floor Area

Living Area	96.8 m²
Garage Area	25.9 m²
Porch Area	8.6 m²
Grand total	131.3 m²

Revision	Date	Description	Designer
		Revision Schedule	

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Project
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNITS 2 & 7 FLOOR PLAN

Scale **1 : 100 @ A3**

Date **28th APRIL 2023**

Designer **S.P. YOUNG** Checked

Approved

Project Number
22-3166-SPY

Sheet **6** Issue

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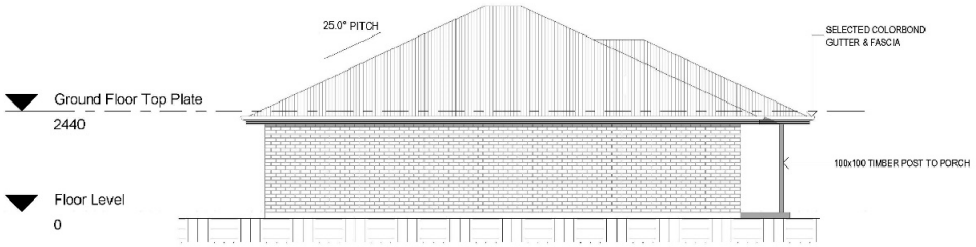
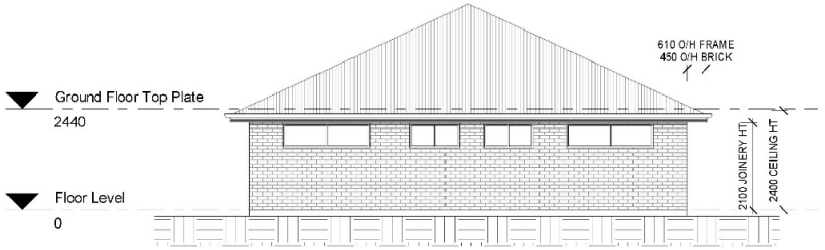
Eastern Elevation
Scale 1 : 100



Southern Elevation
Scale 1 : 100



Western Elevation
Scale 1 : 100

TYPE B

Northern Elevation
Scale 1 : 100

Revision	Date	Description	Designer

Revision Schedule

blueprint
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Project
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNITS 2 & 7 ELEVATIONS

Scale
1 : 100 @ A3

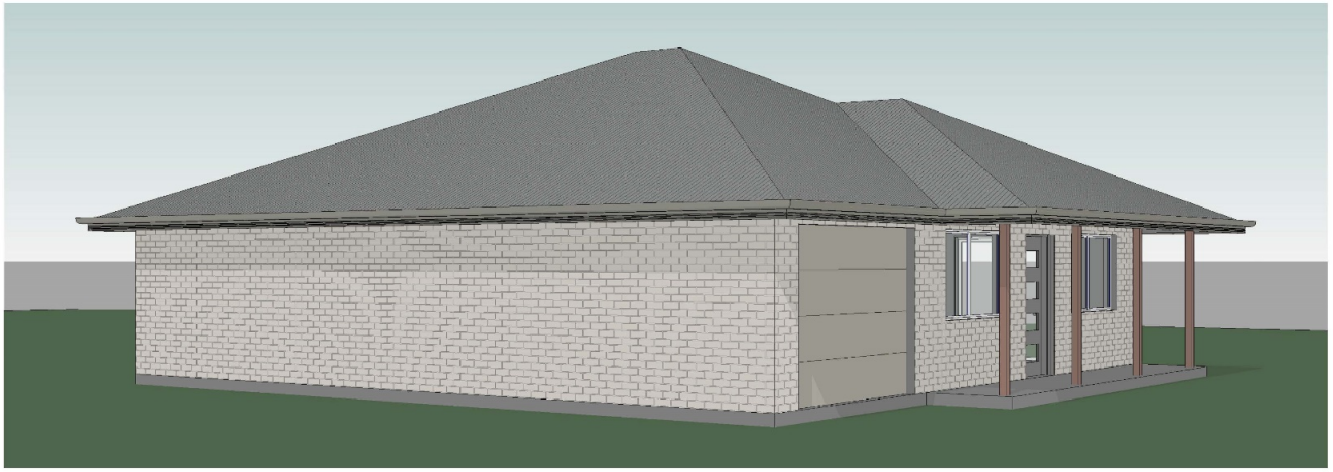
Date
28th APRIL 2023

Designer **S.P. YOUNG** Checked

Approved

Project Number
22-3166-SPY

Sheet **7** Issue



South-Eastern View
NOT TO SCALE

TYPE B

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North-Eastern View
NOT TO SCALE

Revision	Date	Description	Designer

Revision Schedule

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Builder

Client
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Project
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNITS 2 & 7 3D VIEWS 1

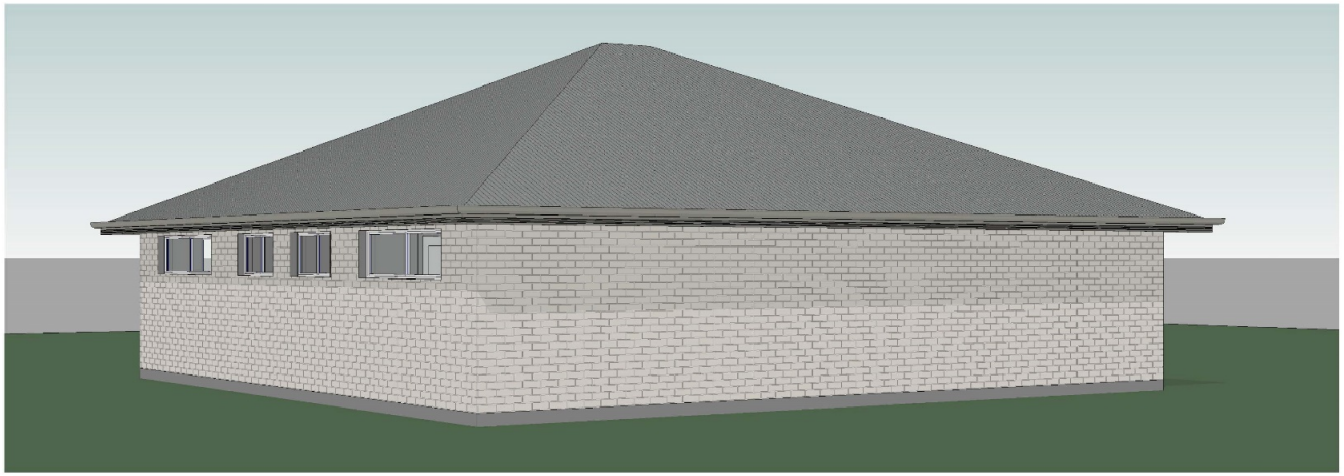
Scale
NOT TO SCALE @ A3

Date
28th APRIL 2023

Designer S.P. YOUNG
Checked
Approved

Project Number
22-3166-SPY

Sheet 8
Issue



South-Western View
NOT TO SCALE

TYPE B

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North-Western View
NOT TO SCALE

Revision	Date	Description	Designer

Revision Schedule

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Builder

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CPLUS CONSTRUCTION & BUILDING SERVICES

Project
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNITS 2 & 7 3D VIEWS 2

Scale
NOT TO SCALE @ A3

Date
28th APRIL 2023

Designer S.P. YOUNG
Checked

Approved

Project Number
22-3166-SPY

Sheet 9
Issue

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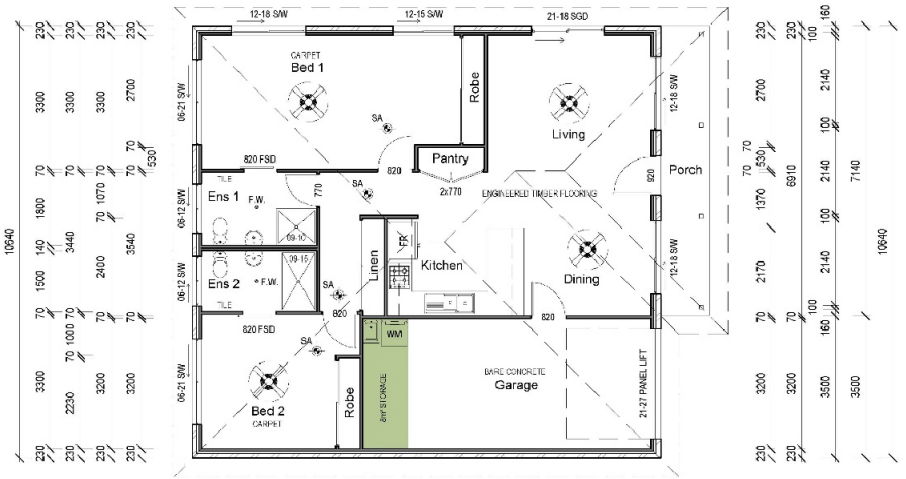
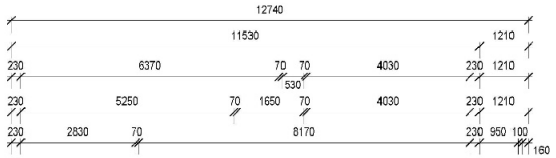
Legend

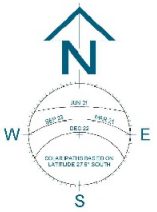
SA — INTERCONNECTED PHOTOELECTRIC SMOKE ALARM CONNECTED TO MAINS POWER INSTALLED IN ACCORDANCE WITH PART 3.7.5 OF THE BCA AND COMPLYING WITH AS3786

CEILING FAN

TYPE C

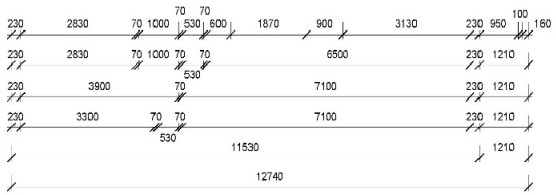






Note

UNITS 3, 4, 5 & 6 TO UTILISE THE SAME FLOOR PLAN.



Unit Type C Floor Plan

Scale 1 : 100

Floor Area

Living Area	96.8 m²
Garage Area	25.9 m²
Porch Area	8.6 m²
Grand total	131.3 m²

Revision	Date	Description	Designer
		Revision Schedule	

blueprint DRAFTING SERVICES
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Builder

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CPLUS CONSTRUCTION & BUILDING SERVICES

Project
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNITS TYPE C FLOOR PLAN

Scale
As indicated @ A3

Date
28th APRIL 2023

Designer: **S.P. YOUNG** Checked:

Approved:

Project Number
22-3166-SPY

Sheet: **10** Issue:

Eastern Elevation

Scale 1 : 100

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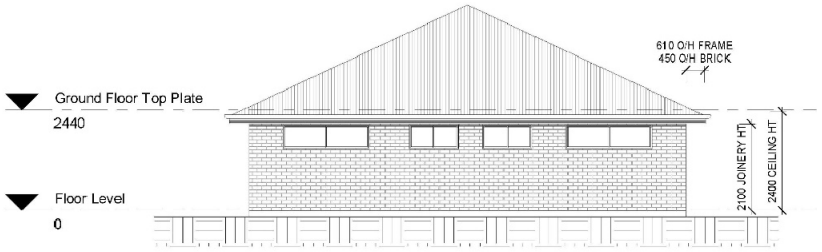
Southern Elevation

Scale 1 : 100



TYPE C

Western Elevation

Scale 1 : 100

Northern Elevation

Scale 1 : 100

Revision	Date	Description	Designer

Revision Schedule

blueprint
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UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNITS TYPE C ELEVATIONS

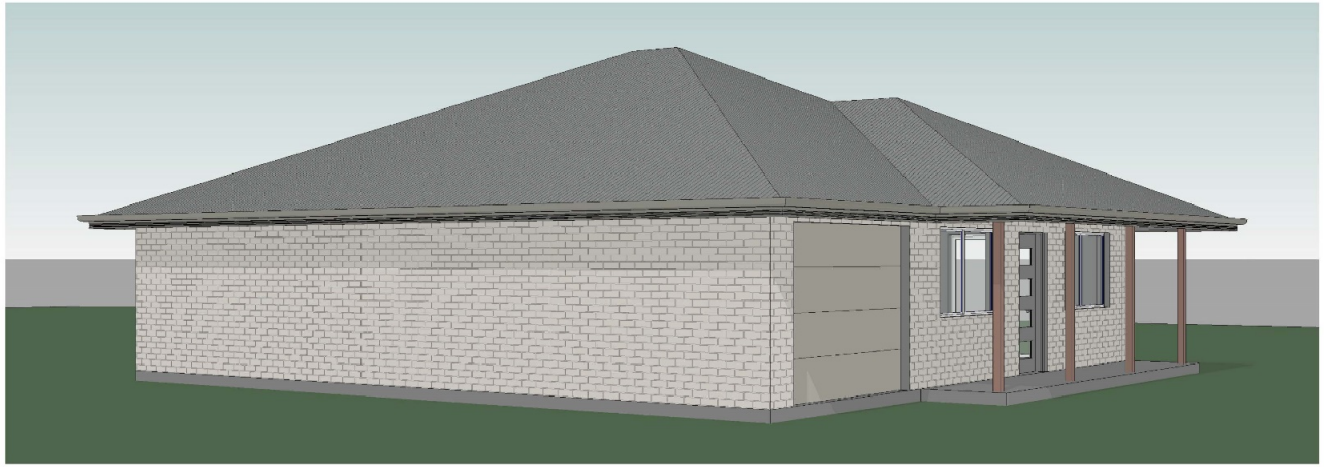
Scale
1 : 100 @ A3

Date
28th APRIL 2023

Designer S.P. YOUNG
Checked
Approved

Project Number
22-3166-SPY

Sheet 11
Issue



South-Eastern View
NOT TO SCALE

TYPE C

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North-Eastern View
NOT TO SCALE

Revision | Date | Description | Designer

Revision Schedule

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Project
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNITS TYPE C 3D VIEWS 1

Scale
NOT TO SCALE @ A3

Date
28th APRIL 2023

Designer
S.P. YOUNG

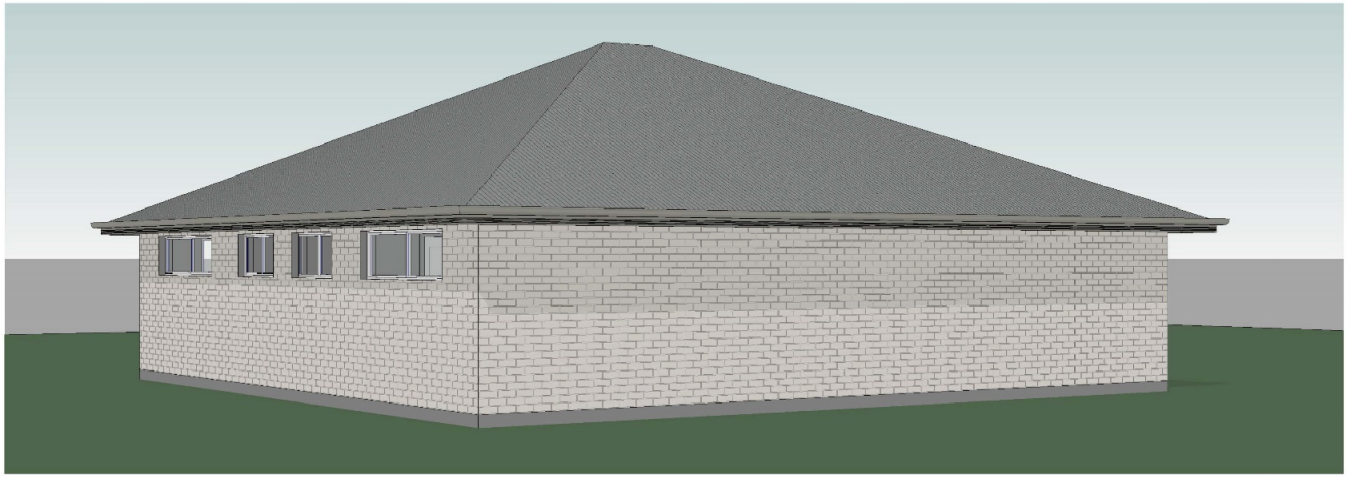
Checked

Approved

Project Number
22-3166-SPY

Sheet
12

Issue



South-Western View
NOT TO SCALE

TYPE C

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North-Western View
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Revision	Date	Description	Designer

Revision Schedule

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Project
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNITS TYPE C 3D VIEWS 2

Scale
NOT TO SCALE @ A3

Date
28th APRIL 2023

Designer S.P. YOUNG
Checked

Approved

Project Number
22-3166-SPY

Sheet 13
Issue

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Legend

SA — INTERCONNECTED PHOTOELECTRIC SMOKE ALARM CONNECTED TO MAINS POWER INSTALLED IN ACCORDANCE WITH PART 3.7.5 OF THE BCA AND COMPLYING WITH AS3786

CEILING FAN

Unit Type D floor plan and carport orientation to be consistent with that shown on approved site plan.

Amended in red 10.08.2023

Unit Type D Floor Plan

Scale 1 : 100

TYPE D

Floor Area

Living Area	95.9 m²
Carport Area	24.0 m²
Porch Area	9.4 m²
Grand total	129.3 m²

Revision Schedule

Revision	Date	Description	Designer

blueprint
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Builder

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Project
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNIT TYPE D FLOOR PLAN

Scale
1 : 100 @ A3

Date
28th APRIL 2023

Designer **S.P. YOUNG** Checked

Approved

Project Number
22-3166-SPY

Sheet **14** Issue

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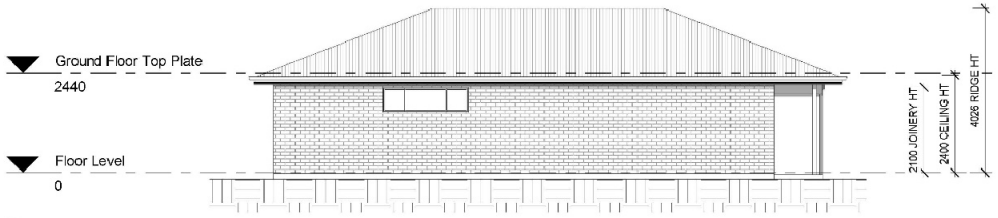
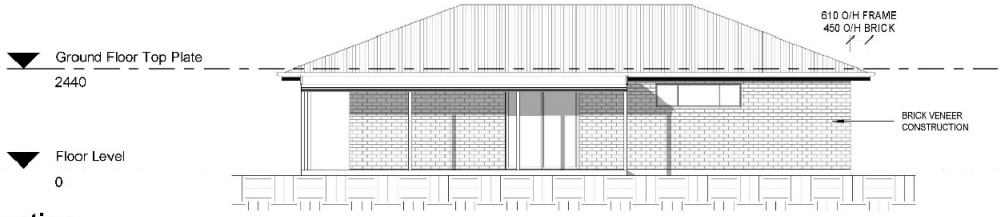
Eastern Elevation
Scale 1 : 100



Southern Elevation
Scale 1 : 100



Northern Elevation
Scale 1 : 100

Western Elevation
Scale 1 : 100

TYPE D

Revision	Date	Description	Designer

Revision Schedule

blueprint DRAFTING SERVICES
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ABN 92 732 943 577
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Builder

Client
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UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNIT TYPE D ELEVATIONS

Scale
1 : 100 @ A3

Date
28th APRIL 2023

Designer
S.P. YOUNG

Checked

Approved

Project Number
22-3166-SPY

Sheet
15

Issue

South-Eastern View
NOT TO SCALE

TYPE D

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South-Western View
NOT TO SCALE

Revision	Date	Description	Designer

Revision Schedule

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Project
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNIT TYPE D 3D VIEWS 1

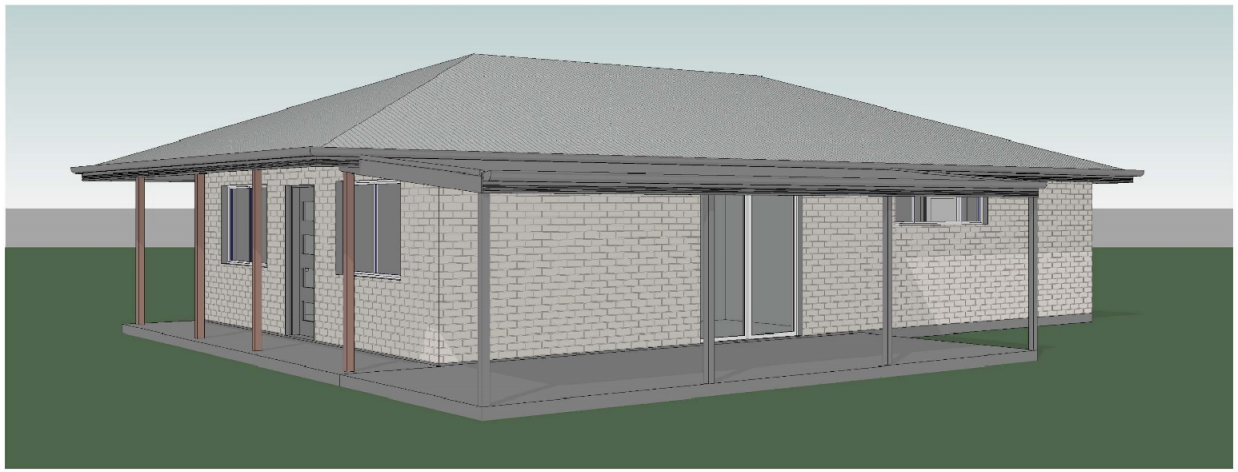
Scale
NOT TO SCALE @ A3

Date
28th APRIL 2023

Designer S.P. YOUNG
Checked
Approved

Project Number
22-3166-SPY

Sheet 16
Issue



North-Eastern View
NOT TO SCALE

TYPE D

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North-Western View
NOT TO SCALE

Designer

Revision | Date | Description | Revision Schedule

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Builder

Client:
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Project:
UNIT DEVELOPMENT

Site Address
42-44 MARKWELL STREET KINGAROY QLD 4610

Sheet Name
UNIT TYPE D 3D VIEWS 2

Scale
NOT TO SCALE @ A3

Date
28th APRIL 2023

Designer: S.P. YOUNG
Checked:

Approved:

Project Number
22-3166-SPY

Sheet: 17
Issue:

Bow Development Group P/L

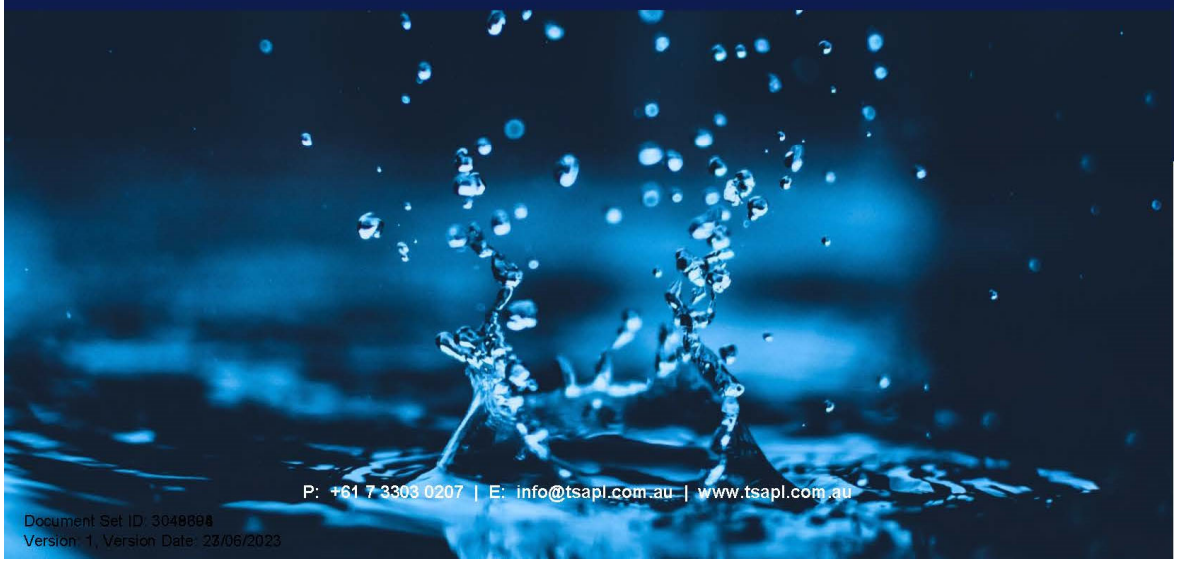
STORMWATER MANAGEMENT REPORT 40,42,44 MARKWELL ST, KINGAROY

QU-0406

Issue Date: 22/06/2023

ADAM DOYLE

TECHNICAL SERVICES AUSTRALIA



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ENGINEERING REPORT

Document ID:QU-0406-01

40, 42, 44 Markwell St, Kingaroy Stormwater Management Report

Document Revision & Approval History:

Rev	Date	Description	Prepared	Reviewed	TSA Approved
A	22/06/23	Issued for Review	AD		

Documentum File Name:	44 Markwell St Kingaroy Stormwater Report.docx		
Document Type:	Engineering Report	**Effective Date:**	
Status:		**Printed Date:**	22/06/2023 21:59:53
Approved By:		**Page:**	Page 1 of 46

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TABLE OF CONTENTS:

INTRODUCTION

Bow Development Group Pty Ltd has submitted a building application to the South Burnett Regional Council over 40,42 and 44 Markwell Street (Lot 106, 107 and 108 on RP7914) Kingaroy. The application is for the establishment of a Multiple Dwelling Development on the property.

The new development will comprise of the construction of 12 x residential units and associated carparking and driveways.

A concept layout of the proposal in in Attachment A.

TSA have been engaged to assess the stormwater management of the proposed development, on behalf of the applicant and will address the pre and post development stormwater flows, and any attenuation requirements to demonstrate that the post development flows are reduced to at least the predevelopment flows.

The purpose of the report is to demonstrate that the stormwater from the site can be appropriately managed, and that the proposed development will not have any additional impact on other properties or infrastructure including Markwell Street.

Figure 1 - 42 Markwell Street, Kingaroy (Google Earth)

SITE CHARACTERISTICS

Site Description

The site is located at 40-42-44 Markwell Street, Kingaroy as shown in *Figure 2*. A minor portion of lot 106 is within the flood overlay but with the proposed unit layout, this is not expected to cause any significant issues.

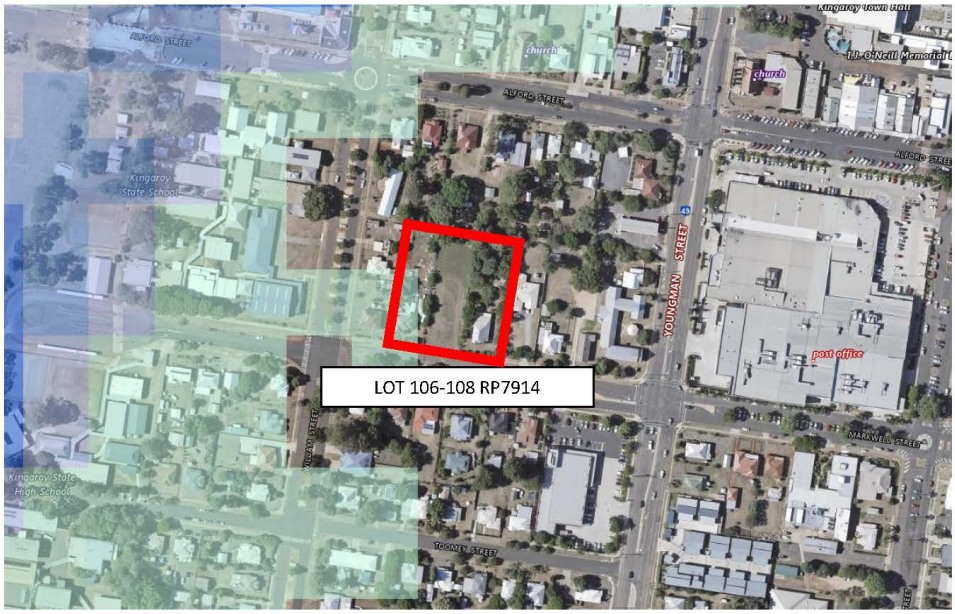


Figure 2 - 42-46 Markwell Street, Kingaroy (Image Source: Queensland Globe Flood Layers)

The access for the existing lots and the proposed development is from the Markwell Street frontage.

The existing lot 107 and 108 have dwellings existing but no other significant structures or landforms. The natural slope of the lot runs in a Southerly direction at approximately 1% before entering the Markwell Street kerb and channel.

There was no evidence of scouring or other erosion issues.

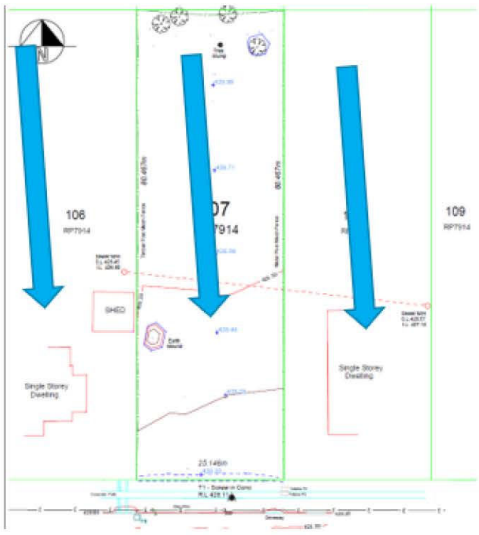


Figure 3 - Pre-Development drainage path through each lot to Markwell St, Kingaroy

Figure 4- Existing Lots with Dwellings

Stormwater Arrangements

General

The development is situated within a typical suburban environment with overland flow in the catchment managed by kerb and channel in Markwell Street. There is no underground stormwater network in this area.

STORMWATER ANALYSIS

Lawful Point of Discharge

SBRC has nominated the lawful point of discharge to the Markwell Street kerb and channel at the front of the properties. This aligns with the existing and proposed design.

Hydraulic Design

A hydraulic assessment has been undertaken for the development using the Drains software program (Version 2023.06.8567.18365 (64bit) – 16 Jun 2023). An analysis was carried out to determine the peak runoff flows for the pre and post development conditions, and potential detention requirements, for ARI 2, and 100-year storm events, with storm durations between 5 minutes to 4.5 hours.

Drains Input

The hydrological model inputs used in the Drains model are shown below.

Table 1 - Drains Inputs

Hydrological Model	ILSAX
Paved (impervious) area depression storage (mm)	1
Supplementary area depression storage (mm)	1
Grassed (pervious) area depression storage (mm)	5
Soil Type	3 (Slow Infiltration Rate)
Antecedent Moisture Condition	3 – Rather Wet

Catchment Information

Pre-Development (Existing Dwellings on Lots)

Table 2 – Pre-Dev Catchment Information

Catchment	Area (ha)	% Impervious	% Supp	% Grassed
Lot 106 RP7914 44 Markwell St	0.2023	10	0	90
Lot 107 RP7914 42 Markwell St	0.2023	10	0	90
Lot 108 RP7914 40 Markwell St	0.2023	10	0	90

Table 3 - Post Dev Catchment Information

Catchment	Area (ha)	% Impervious	% Supp	% Grassed
Lot 106 RP7914 44 Markwell St	0.2023	59	0	41
Lot 107 RP7914 42 Markwell St	0.2023	54	0	46
Lot 108 RP7914 40 Markwell St	0.2023	30	0	70

Peak Flows and the Stormwater Management Strategy

The peak flow rates for predevelopment (unattenuated), Post Development (unattenuated) and Post Development Modified (attenuated), are shown below. As can be seen in the table, the flows in the post developed state generally need to be modified in order to comply with the non-worsening impacts of the development code.

A summary of the Pre and Attenuated Peak Flows are shown below in the *Table below*.

Table 4 - Model Summary Results

Discharge Reference	44 Markwell Street	
Storm Event (ARI)	Minor (2)	Major (100)
Pre-Development m^3/s	0.032	0.120
Post Dev – Unmodified m^3/s	0.037	0.108
Modified Post-Development m^3/s	0.032	0.113
Final Difference m^3/s (%)	0.00	-0.007
Discharge Reference	42 Markwell Street	
Storm Event (ARI)	Minor (2)	Major (100)
Pre-Development m^3/s	0.016	0.086
Post Dev – Unmodified m^3/s	0.035	0.106
Modified Post-Development m^3/s	0.020	0.085
Final Difference m^3/s (%)	0.004	-0.001
Discharge Reference	40 Markwell Street	
Storm Event (ARI)	Minor (2)	Major (100)
Pre-Development m^3/s	0.020	0.098
Post Dev – Unmodified m^3/s	0.027	0.094
Modified Post-Development m^3/s	0.019	0.097
Final Difference m^3/s (%)	-0.001	-0.001

The results for the Markwell Street discharge point, show that the post development flows can be adequately attenuated back to approximately predevelopment levels for the critical storm events.

The overall stormwater strategy for the development is to:

- Overland flow from area that will grade to the street frontage and on to the back of the kerb.

- Capture stormwater runoff from the roofed areas of the existing dwelling and divert it to detention tanks.
    - 2 x 3,000L rainwater detention tanks at each Unit collecting 100% of the roof water.
    - 3,000L slimline tanks have been modelled with a usable height of 2.1m.
    - For each unit, the rainwater tanks shall be connected directly to the inter-allotment underground stormwater network.
    - All new dwelling/unit gutters are to be 100% connected to a tank.
    - The low and high flow orifices as well as the peak level overflow from these tanks are to be piped to the back of the roadside kerb and channel.

Lot 106 Option 1 for on-site detention tanks

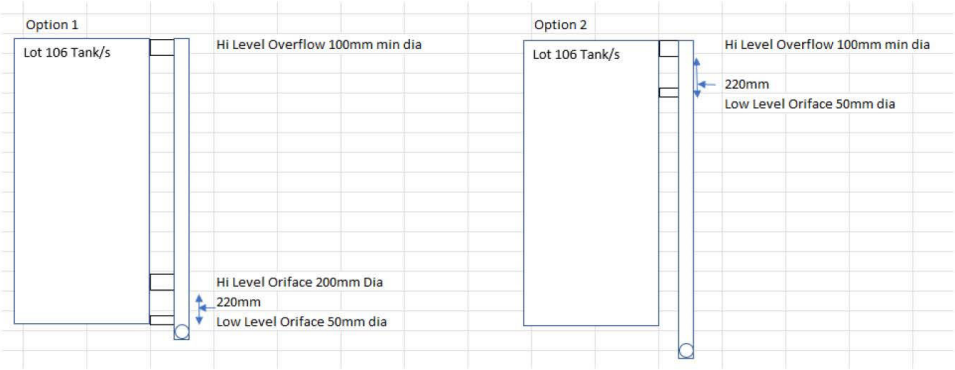
- 1 x 50mm orifice low level discharge at the invert of each tank
- 1 x 200mm orifice high level discharge at 220mm up from the invert of each tank

Lot 106 Option 2 for on-site detention tanks to allow rainwater to be re-used around the unit

- 1 x 50mm orifice low level discharge at 220mm down from the invert of the high level orifice of each tank
- 1 x 200mm orifice high level discharge at the top of the tank at the overflow level of each tank
- Local rainwater reuse plumbing has not been shown on the tank options sketches, but is assumed to be installed at the invert.

These levels have been set so that there is a retained storage for the site re-use, while still maintaining the required attenuation volume.

Figure 5- Lot 106 Tank Options



Lot 107 Option 1 for on-site detention tanks

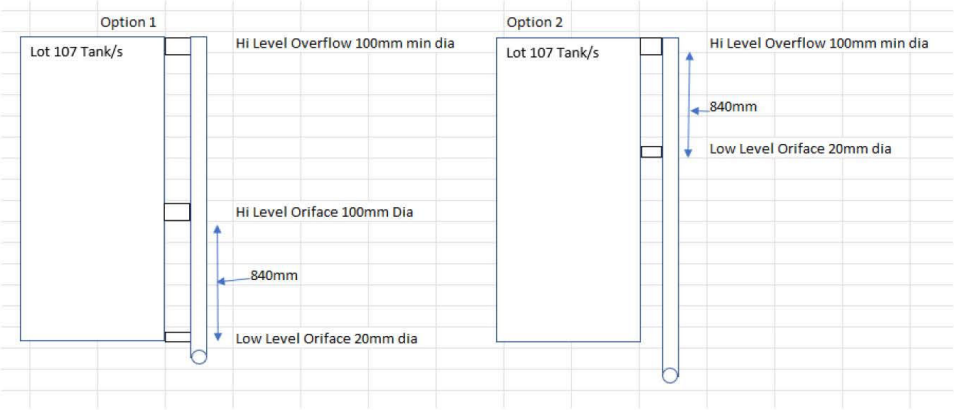
- 1 x 20mm orifice low level discharge at the invert of each tank
- 1 x 100mm orifice high level discharge at 840mm up from the invert of each tank

Lot 107 Option 2 for on-site detention tanks to allow rainwater to be re-used around the unit

- 1 x 20mm orifice low level discharge at 840mm down from the invert of the high level orifice of each tank
- 1 x 100mm orifice high level discharge at the top of the tank at the overflow level of each tank
- Local rainwater reuse plumbing has not been shown on the tank options sketches, but is assumed to be installed at the invert.

These levels have been set so that there is a retained storage for the site re-use, while still maintaining the required attenuation volume.

Figure 6 - Lot 107 Tank Options



Lot 108 Option 1 for on-site detention tanks

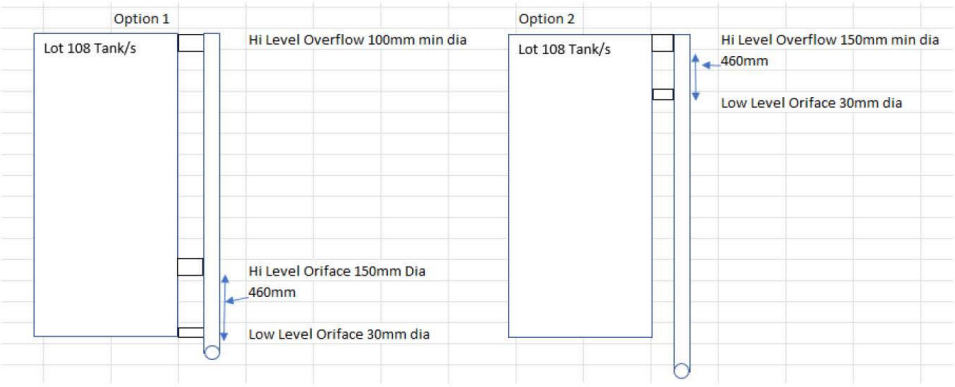
- 1 x 50mm orifice low level discharge at the invert of each tank
- 1 x 200mm orifice high level discharge at 220mm up from the invert of each tank

Lot 108 Option 2 for on-site detention tanks to allow rainwater to be re-used around the unit.

- 1 x 30mm orifice low level discharge at 460mm down from the invert of the high-level orifice of each tank
- 1 x 150mm orifice high level discharge at the top of the tank at the overflow level of each tank
- Local rainwater reuse plumbing has not been shown on the tank options sketches, but is assumed to be installed at the invert.

These levels have been set so that there is a retained storage for the site re-use, while still maintaining the required attenuation volume.

Figure 7 - Lot 108 Tank Options



A copy of the outputs from the Drains Models showing the peak flows is in *Attachments*.

DESIGN ASSUMPTIONS

The assumptions made in calculating the on-site flows are:

1. Guttering will be sized by the plumber so that all roof water up to the Q100 year event falling on the roofs will be directed to the detention tanks,
2. Overflow from the detention tanks will be drained via an adequately sized stormwater drainage pipe, directed to the back of the kerb and channel,
3. All water up to the Q100 event falling on the driveway and carpark area can be diverted to the Markwell Street kerb cross over for each unit complex,
4. Stormwater will act generally in accordance with the assumptions made in the Drains model.

OTHER CONSIDERATIONS

The provision of On-Site Retention (OSR) systems require on-going maintenance to ensure the performance of the systems and minimise the risk of external impacts from increased discharges. Tampering of installations is a significant risk and should be considered when designing the final attenuation system.

CONCLUSIONS

In summary, the proposed development:

- Will not lead to any significant increases in stormwater flow discharging from the site.

- On site rainwater tanks attached to the roof areas (tanks) is an appropriate treatment – subject to detailed design by a suitably qualified plumber or engineer.

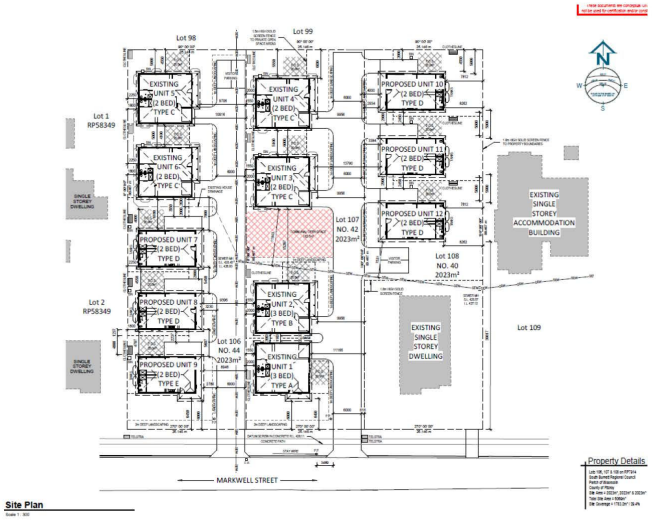
I believe that the above response satisfies the requirements of QUDM and Council with respect to the stormwater management, attenuation, and water quality requirements – subject to the application of reasonable and relevant conditions.

Should you require further assistance or information please feel free to contact me on 0419 251 127 or email at adam@tsapl.com.au.

Regards

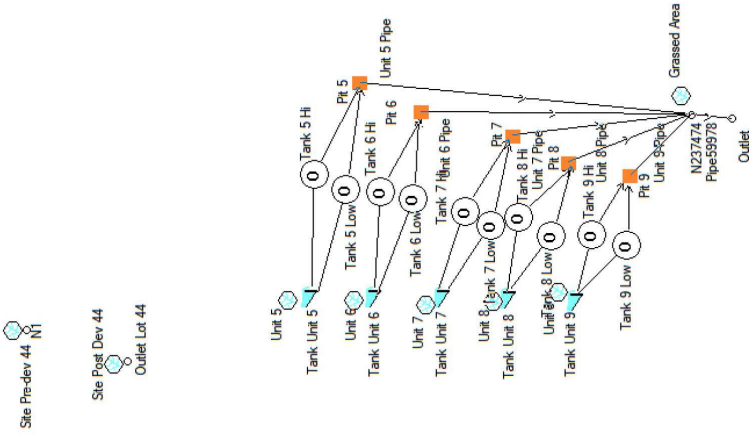
Adam Doyle
DIRECTOR
BEng (Civil) RPEQ

ATTACHMENT A – CONCEPT LAYOUT

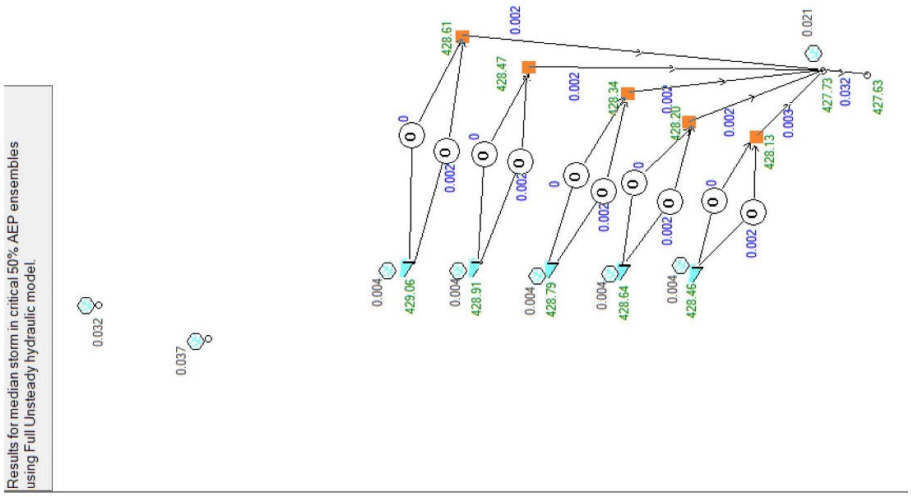


ATTACHMENT B - DRAINS OUTPUT

Drains Layout 44 Markwell St (Lot 106)



Drains Results 2 Yr. ARI 44 Markwell St



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Document Type:	Engineering Report	Effective Date:	
Status:		Printed Date:	22/06/2023 21:59:53
Approved By:		Page:	Page 16 of 46

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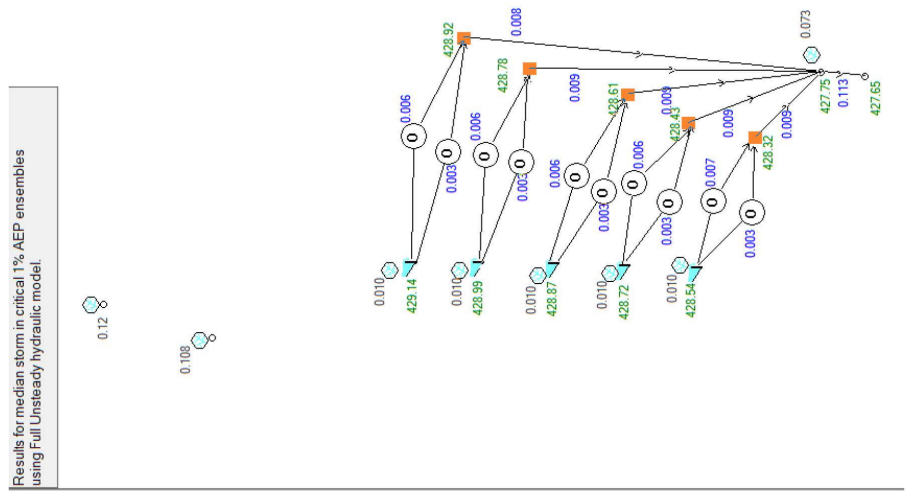
Drains Results 100 Yr. ARI 44 Markwell St



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Document Type:	Engineering Report	Effective Date:	
Status:		Printed Date:	22/06/2023 21:59:53
Approved By:		Page:	Page 17 of 46

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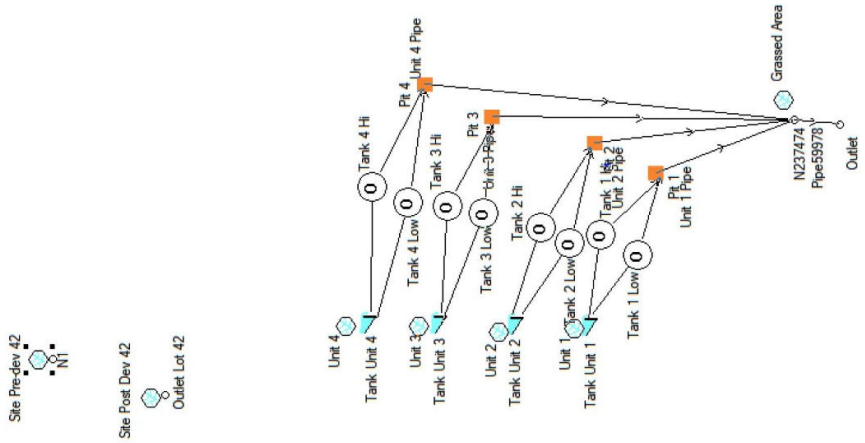
Drains Layout 42 Markwell St (Lot 107)



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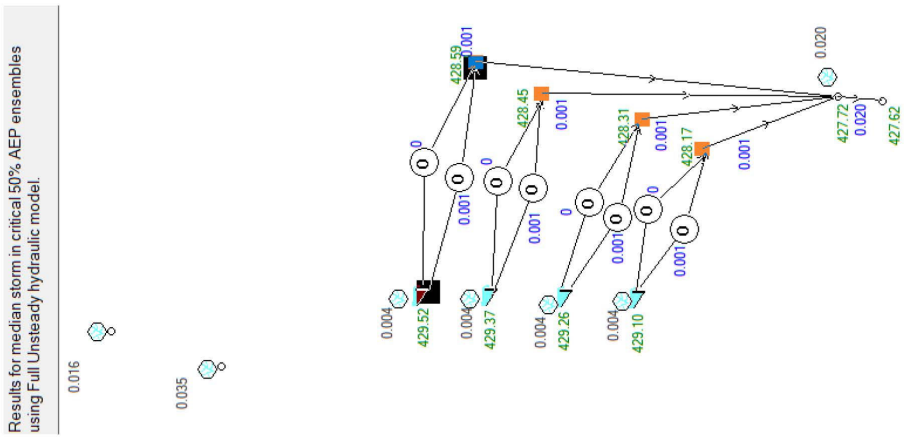
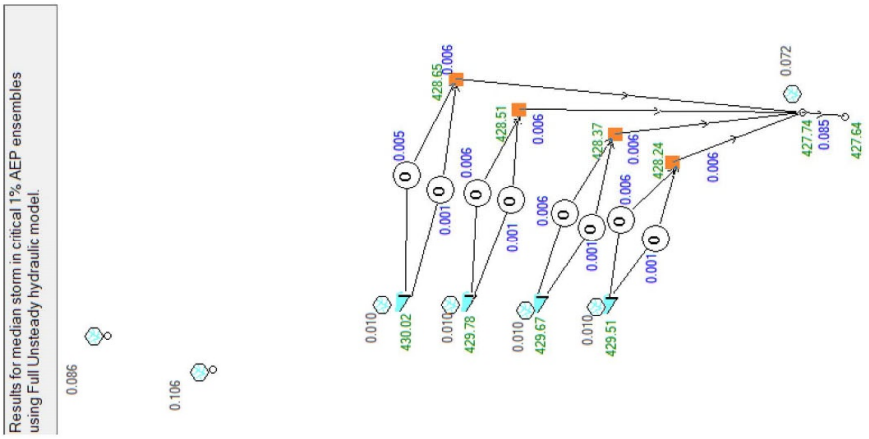
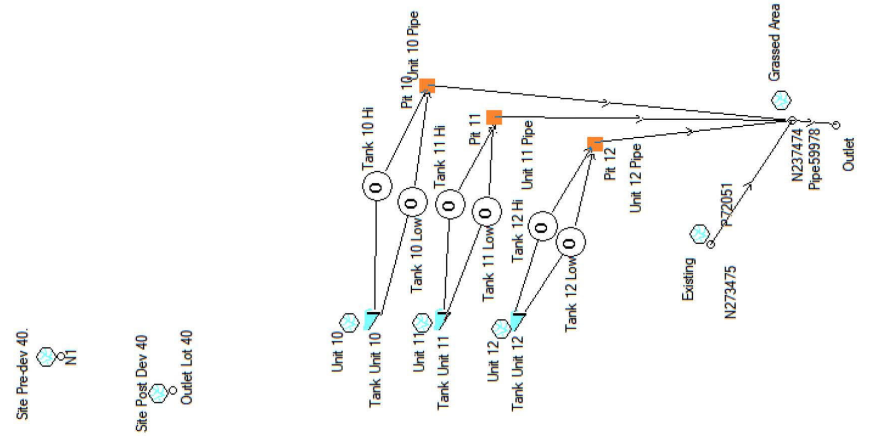


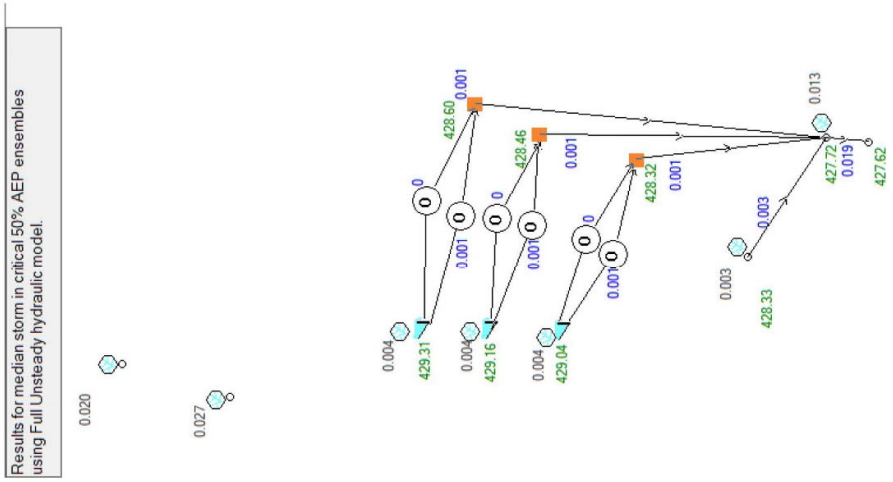
Drains Results 100 Yr. ARI 42 Markwell St



Drains Layout 40 Markwell St (Lot 108)



Drains Results 2 Yr. ARI 40 Markwell St



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Status:		Printed Date:	22/06/2023 21:59:53
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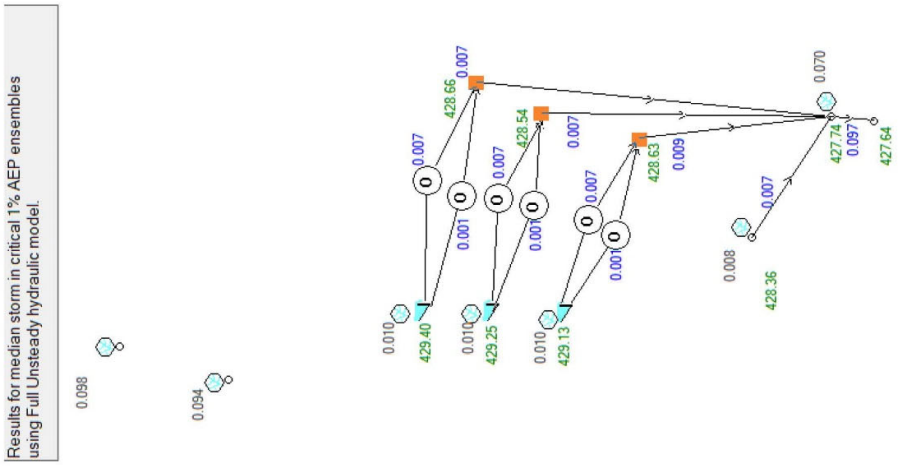
Drains Results 100 Yr. ARI 40 Markwell St



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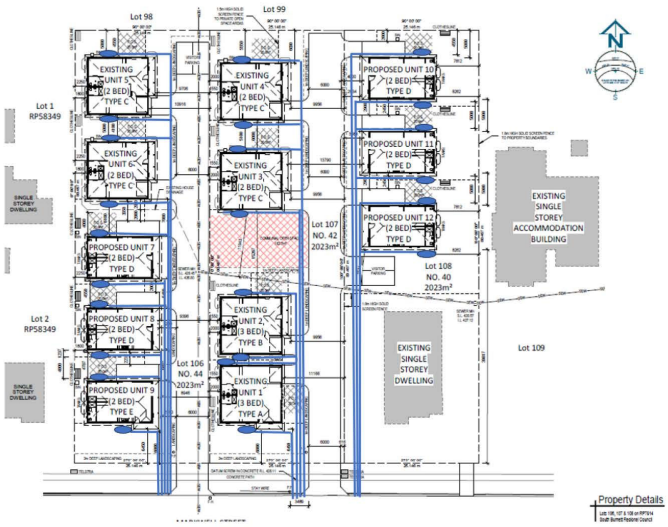
CONCEPT DRAINAGE PIPING ARRANGEMENT



Documentum File Name:	44 Markwell St Kingaroy Stormwater Report.docx		
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Status:		**Printed Date:**	22/06/2023 21:59:53
Approved By:		**Page:**	Page 24 of 46

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DETAILED DRAINS OUTPUTS

Drains Output 44 Markwell – Modified Post Dev

Q2 Peak Flows for Outlet to 44 Markwell St		
Storm	Peak Flow	
	(cu.m/s)	
50% AEP, 5 min burst, Storm 1	0.022	Critical Storm for this AEP and Burst Duration
50% AEP, 10 min burst, Storm 1	0.032	Critical Storm for this AEP and Burst Duration
50% AEP, 10 min burst, Storm 2	0.031	
50% AEP, 10 min burst, Storm 3	0.031	
50% AEP, 10 min burst, Storm 4	0.033	
50% AEP, 10 min burst, Storm 5	0.032	
50% AEP, 10 min burst, Storm 6	0.032	
50% AEP, 10 min burst, Storm 7	0.031	
50% AEP, 10 min burst, Storm 8	0.032	
50% AEP, 10 min burst, Storm 9	0.032	
50% AEP, 10 min burst, Storm 10	0.032	
50% AEP, 15 min burst, Storm 1	0.031	
50% AEP, 15 min burst, Storm 2	0.029	
50% AEP, 15 min burst, Storm 3	0.029	
50% AEP, 15 min burst, Storm 4	0.03	
50% AEP, 15 min burst, Storm 5	0.031	
50% AEP, 15 min burst, Storm 6	0.032	Critical Storm for this AEP and Burst Duration
50% AEP, 15 min burst, Storm 7	0.032	
50% AEP, 15 min burst, Storm 8	0.032	
50% AEP, 15 min burst, Storm 9	0.034	
50% AEP, 15 min burst, Storm 10	0.034	
50% AEP, 20 min burst, Storm 1	0.027	
50% AEP, 20 min burst, Storm 2	0.028	
50% AEP, 20 min burst, Storm 3	0.028	
50% AEP, 20 min burst, Storm 4	0.031	
50% AEP, 20 min burst, Storm 5	0.03	Critical Storm for this AEP and Burst Duration
50% AEP, 20 min burst, Storm 6	0.028	
50% AEP, 20 min burst, Storm 7	0.033	
50% AEP, 20 min burst, Storm 8	0.029	

50% AEP, 20 min burst, Storm 9	0.034	
50% AEP, 20 min burst, Storm 10	0.033	
50% AEP, 25 min burst, Storm 1	0.03	Critical Storm for this AEP and Burst Duration
50% AEP, 25 min burst, Storm 2	0.029	
50% AEP, 25 min burst, Storm 3	0.027	
50% AEP, 25 min burst, Storm 4	0.028	
50% AEP, 25 min burst, Storm 5	0.029	
50% AEP, 25 min burst, Storm 6	0.031	
50% AEP, 25 min burst, Storm 7	0.031	
50% AEP, 25 min burst, Storm 8	0.029	
50% AEP, 25 min burst, Storm 9	0.035	
50% AEP, 25 min burst, Storm 10	0.034	
50% AEP, 30 min burst, Storm 1	0.035	
50% AEP, 30 min burst, Storm 2	0.027	
50% AEP, 30 min burst, Storm 3	0.027	
50% AEP, 30 min burst, Storm 4	0.027	
50% AEP, 30 min burst, Storm 5	0.028	
50% AEP, 30 min burst, Storm 6	0.029	Critical Storm for this AEP and Burst Duration
50% AEP, 30 min burst, Storm 7	0.031	
50% AEP, 30 min burst, Storm 8	0.033	
50% AEP, 30 min burst, Storm 9	0.029	
50% AEP, 30 min burst, Storm 10	0.031	
50% AEP, 45 min burst, Storm 1	0.029	
50% AEP, 45 min burst, Storm 2	0.026	Critical Storm for this AEP and Burst Duration
50% AEP, 45 min burst, Storm 3	0.021	
50% AEP, 45 min burst, Storm 4	0.028	
50% AEP, 45 min burst, Storm 5	0.025	
50% AEP, 45 min burst, Storm 6	0.022	
50% AEP, 45 min burst, Storm 7	0.022	
50% AEP, 45 min burst, Storm 8	0.023	
50% AEP, 45 min burst, Storm 9	0.03	
50% AEP, 45 min burst, Storm 10	0.028	
50% AEP, 1 hour burst, Storm 1	0.028	
50% AEP, 1 hour burst, Storm 2	0.019	
50% AEP, 1 hour burst, Storm 3	0.023	
50% AEP, 1 hour burst, Storm 4	0.023	Critical Storm for this AEP and Burst Duration
50% AEP, 1 hour burst, Storm 5	0.023	

50% AEP, 1 hour burst, Storm 6	0.023	
50% AEP, 1 hour burst, Storm 7	0.021	
50% AEP, 1 hour burst, Storm 8	0.019	
50% AEP, 1 hour burst, Storm 9	0.028	
50% AEP, 1 hour burst, Storm 10	0.024	
50% AEP, 1.5 hour burst, Storm 1	0.018	
50% AEP, 1.5 hour burst, Storm 2	0.022	Critical Storm for this AEP and Burst Duration
50% AEP, 1.5 hour burst, Storm 3	0.023	
50% AEP, 1.5 hour burst, Storm 4	0.014	
50% AEP, 1.5 hour burst, Storm 5	0.026	
50% AEP, 1.5 hour burst, Storm 6	0.014	
50% AEP, 1.5 hour burst, Storm 7	0.019	
50% AEP, 1.5 hour burst, Storm 8	0.018	
50% AEP, 1.5 hour burst, Storm 9	0.026	
50% AEP, 1.5 hour burst, Storm 10	0.022	
50% AEP, 2 hour burst, Storm 1	0.017	
50% AEP, 2 hour burst, Storm 2	0.015	
50% AEP, 2 hour burst, Storm 3	0.018	
50% AEP, 2 hour burst, Storm 4	0.015	
50% AEP, 2 hour burst, Storm 5	0.021	
50% AEP, 2 hour burst, Storm 6	0.017	Critical Storm for this AEP and Burst Duration
50% AEP, 2 hour burst, Storm 7	0.023	
50% AEP, 2 hour burst, Storm 8	0.022	
50% AEP, 2 hour burst, Storm 9	0.015	
50% AEP, 2 hour burst, Storm 10	0.017	
50% AEP, 3 hour burst, Storm 1	0.016	
50% AEP, 3 hour burst, Storm 2	0.017	
50% AEP, 3 hour burst, Storm 3	0.022	
50% AEP, 3 hour burst, Storm 4	0.013	Critical Storm for this AEP and Burst Duration
50% AEP, 3 hour burst, Storm 5	0.013	
50% AEP, 3 hour burst, Storm 6	0.012	
50% AEP, 3 hour burst, Storm 7	0.011	
50% AEP, 3 hour burst, Storm 8	0.009	
50% AEP, 3 hour burst, Storm 9	0.012	
50% AEP, 3 hour burst, Storm 10	0.016	
50% AEP, 4.5 hour burst, Storm 1	0.013	
50% AEP, 4.5 hour burst, Storm 2	0.011	

50% AEP, 4.5 hour burst, Storm 3	0.016	
50% AEP, 4.5 hour burst, Storm 4	0.008	
50% AEP, 4.5 hour burst, Storm 5	0.011	
50% AEP, 4.5 hour burst, Storm 6	0.016	
50% AEP, 4.5 hour burst, Storm 7	0.013	Critical Storm for this AEP and Burst Duration
50% AEP, 4.5 hour burst, Storm 8	0.011	
50% AEP, 4.5 hour burst, Storm 9	0.013	
50% AEP, 4.5 hour burst, Storm 10	0.014	

Q100 Peak Flows for Outlet to 44 Markwell St		
Storm	Peak Flow	
	(cu.m/s)	
1% AEP, 5 min burst, Storm 1	0.094	Critical Storm for this AEP and Burst Duration
1% AEP, 10 min burst, Storm 1	0.108	
1% AEP, 10 min burst, Storm 2	0.112	
1% AEP, 10 min burst, Storm 3	0.108	
1% AEP, 10 min burst, Storm 4	0.118	
1% AEP, 10 min burst, Storm 5	0.116	
1% AEP, 10 min burst, Storm 6	0.117	
1% AEP, 10 min burst, Storm 7	0.113	Critical Storm for this AEP and Burst Duration
1% AEP, 10 min burst, Storm 8	0.107	
1% AEP, 10 min burst, Storm 9	0.131	
1% AEP, 10 min burst, Storm 10	0.109	
1% AEP, 15 min burst, Storm 1	0.126	
1% AEP, 15 min burst, Storm 2	0.12	
1% AEP, 15 min burst, Storm 3	0.107	
1% AEP, 15 min burst, Storm 4	0.1	
1% AEP, 15 min burst, Storm 5	0.114	
1% AEP, 15 min burst, Storm 6	0.11	
1% AEP, 15 min burst, Storm 7	0.098	
1% AEP, 15 min burst, Storm 8	0.135	
1% AEP, 15 min burst, Storm 9	0.113	Critical Storm for this AEP and Burst Duration
1% AEP, 15 min burst, Storm 10	0.097	
1% AEP, 20 min burst, Storm 1	0.107	
1% AEP, 20 min burst, Storm 2	0.13	

1% AEP, 20 min burst, Storm 3	0.099	
1% AEP, 20 min burst, Storm 4	0.092	
1% AEP, 20 min burst, Storm 5	0.095	
1% AEP, 20 min burst, Storm 6	0.101	Critical Storm for this AEP and Burst Duration
1% AEP, 20 min burst, Storm 7	0.094	
1% AEP, 20 min burst, Storm 8	0.099	
1% AEP, 20 min burst, Storm 9	0.103	
1% AEP, 20 min burst, Storm 10	0.109	
1% AEP, 25 min burst, Storm 1	0.097	
1% AEP, 25 min burst, Storm 2	0.127	
1% AEP, 25 min burst, Storm 3	0.105	
1% AEP, 25 min burst, Storm 4	0.099	
1% AEP, 25 min burst, Storm 5	0.106	
1% AEP, 25 min burst, Storm 6	0.093	
1% AEP, 25 min burst, Storm 7	0.086	
1% AEP, 25 min burst, Storm 8	0.105	Critical Storm for this AEP and Burst Duration
1% AEP, 25 min burst, Storm 9	0.092	
1% AEP, 25 min burst, Storm 10	0.11	
1% AEP, 30 min burst, Storm 1	0.089	
1% AEP, 30 min burst, Storm 2	0.1	
1% AEP, 30 min burst, Storm 3	0.118	
1% AEP, 30 min burst, Storm 4	0.079	
1% AEP, 30 min burst, Storm 5	0.088	
1% AEP, 30 min burst, Storm 6	0.12	
1% AEP, 30 min burst, Storm 7	0.089	
1% AEP, 30 min burst, Storm 8	0.094	Critical Storm for this AEP and Burst Duration
1% AEP, 30 min burst, Storm 9	0.099	
1% AEP, 30 min burst, Storm 10	0.09	
1% AEP, 45 min burst, Storm 1	0.109	
1% AEP, 45 min burst, Storm 2	0.099	
1% AEP, 45 min burst, Storm 3	0.075	
1% AEP, 45 min burst, Storm 4	0.092	
1% AEP, 45 min burst, Storm 5	0.086	Critical Storm for this AEP and Burst Duration
1% AEP, 45 min burst, Storm 6	0.069	
1% AEP, 45 min burst, Storm 7	0.075	
1% AEP, 45 min burst, Storm 8	0.095	
1% AEP, 45 min burst, Storm 9	0.061	
1% AEP, 45 min burst, Storm 10	0.083	

1% AEP, 1 hour burst, Storm 1	0.097	
1% AEP, 1 hour burst, Storm 2	0.085	
1% AEP, 1 hour burst, Storm 3	0.064	
1% AEP, 1 hour burst, Storm 4	0.071	Critical Storm for this AEP and Burst Duration
1% AEP, 1 hour burst, Storm 5	0.054	
1% AEP, 1 hour burst, Storm 6	0.08	
1% AEP, 1 hour burst, Storm 7	0.059	
1% AEP, 1 hour burst, Storm 8	0.067	
1% AEP, 1 hour burst, Storm 9	0.071	
1% AEP, 1 hour burst, Storm 10	0.063	
1% AEP, 1.5 hour burst, Storm 1	0.051	
1% AEP, 1.5 hour burst, Storm 2	0.062	
1% AEP, 1.5 hour burst, Storm 3	0.061	Critical Storm for this AEP and Burst Duration
1% AEP, 1.5 hour burst, Storm 4	0.05	
1% AEP, 1.5 hour burst, Storm 5	0.059	
1% AEP, 1.5 hour burst, Storm 6	0.062	
1% AEP, 1.5 hour burst, Storm 7	0.056	
1% AEP, 1.5 hour burst, Storm 8	0.067	
1% AEP, 1.5 hour burst, Storm 9	0.059	
1% AEP, 1.5 hour burst, Storm 10	0.063	
1% AEP, 2 hour burst, Storm 1	0.055	
1% AEP, 2 hour burst, Storm 2	0.043	
1% AEP, 2 hour burst, Storm 3	0.045	
1% AEP, 2 hour burst, Storm 4	0.045	
1% AEP, 2 hour burst, Storm 5	0.054	
1% AEP, 2 hour burst, Storm 6	0.051	
1% AEP, 2 hour burst, Storm 7	0.037	
1% AEP, 2 hour burst, Storm 8	0.038	
1% AEP, 2 hour burst, Storm 9	0.047	Critical Storm for this AEP and Burst Duration
1% AEP, 2 hour burst, Storm 10	0.053	
1% AEP, 3 hour burst, Storm 1	0.041	
1% AEP, 3 hour burst, Storm 2	0.036	
1% AEP, 3 hour burst, Storm 3	0.046	
1% AEP, 3 hour burst, Storm 4	0.036	
1% AEP, 3 hour burst, Storm 5	0.029	
1% AEP, 3 hour burst, Storm 6	0.037	Critical Storm for this AEP and Burst Duration
1% AEP, 3 hour burst, Storm 7	0.025	

1% AEP, 3 hour burst, Storm 8	0.048	
1% AEP, 3 hour burst, Storm 9	0.026	
1% AEP, 3 hour burst, Storm 10	0.053	
1% AEP, 4.5 hour burst, Storm 1	0.033	
1% AEP, 4.5 hour burst, Storm 2	0.025	
1% AEP, 4.5 hour burst, Storm 3	0.027	
1% AEP, 4.5 hour burst, Storm 4	0.028	
1% AEP, 4.5 hour burst, Storm 5	0.029	Critical Storm for this AEP and Burst Duration
1% AEP, 4.5 hour burst, Storm 6	0.033	
1% AEP, 4.5 hour burst, Storm 7	0.027	
1% AEP, 4.5 hour burst, Storm 8	0.024	
1% AEP, 4.5 hour burst, Storm 9	0.032	
1% AEP, 4.5 hour burst, Storm 10	0.033	

Drains Output 42 Markwell – Modified Post Dev

Q2 Peak Flows for Outlet to 42 Markwell St		
Storm	Peak Flow	
	(cu.m/s)	
50% AEP, 5 min burst, Storm 1	0.02	Critical Storm for this AEP and Burst Duration
50% AEP, 10 min burst, Storm 1	0.02	
50% AEP, 10 min burst, Storm 2	0.019	
50% AEP, 10 min burst, Storm 3	0.019	
50% AEP, 10 min burst, Storm 4	0.025	
50% AEP, 10 min burst, Storm 5	0.021	
50% AEP, 10 min burst, Storm 6	0.022	
50% AEP, 10 min burst, Storm 7	0.019	
50% AEP, 10 min burst, Storm 8	0.023	
50% AEP, 10 min burst, Storm 9	0.02	
50% AEP, 10 min burst, Storm 10	0.02	Critical Storm for this AEP and Burst Duration
50% AEP, 15 min burst, Storm 1	0.018	
50% AEP, 15 min burst, Storm 2	0.02	Critical Storm for this AEP and Burst Duration
50% AEP, 15 min burst, Storm 3	0.019	
50% AEP, 15 min burst, Storm 4	0.019	
50% AEP, 15 min burst, Storm 5	0.019	
50% AEP, 15 min burst, Storm 6	0.02	
50% AEP, 15 min burst, Storm 7	0.021	
50% AEP, 15 min burst, Storm 8	0.021	
50% AEP, 15 min burst, Storm 9	0.024	
50% AEP, 15 min burst, Storm 10	0.026	
50% AEP, 20 min burst, Storm 1	0.019	
50% AEP, 20 min burst, Storm 2	0.018	
50% AEP, 20 min burst, Storm 3	0.017	
50% AEP, 20 min burst, Storm 4	0.019	
50% AEP, 20 min burst, Storm 5	0.018	
50% AEP, 20 min burst, Storm 6	0.019	Critical Storm for this AEP and Burst Duration
50% AEP, 20 min burst, Storm 7	0.022	
50% AEP, 20 min burst, Storm 8	0.018	
50% AEP, 20 min burst, Storm 9	0.021	
50% AEP, 20 min burst, Storm 10	0.026	

50% AEP, 25 min burst, Storm 1	0.018	
50% AEP, 25 min burst, Storm 2	0.018	
50% AEP, 25 min burst, Storm 3	0.018	
50% AEP, 25 min burst, Storm 4	0.018	
50% AEP, 25 min burst, Storm 5	0.022	
50% AEP, 25 min burst, Storm 6	0.019	
50% AEP, 25 min burst, Storm 7	0.02	Critical Storm for this AEP and Burst Duration
50% AEP, 25 min burst, Storm 8	0.02	
50% AEP, 25 min burst, Storm 9	0.024	
50% AEP, 25 min burst, Storm 10	0.022	
50% AEP, 30 min burst, Storm 1	0.025	
50% AEP, 30 min burst, Storm 2	0.016	
50% AEP, 30 min burst, Storm 3	0.016	
50% AEP, 30 min burst, Storm 4	0.019	
50% AEP, 30 min burst, Storm 5	0.018	
50% AEP, 30 min burst, Storm 6	0.019	
50% AEP, 30 min burst, Storm 7	0.022	
50% AEP, 30 min burst, Storm 8	0.021	
50% AEP, 30 min burst, Storm 9	0.019	Critical Storm for this AEP and Burst Duration
50% AEP, 30 min burst, Storm 10	0.02	
50% AEP, 45 min burst, Storm 1	0.018	
50% AEP, 45 min burst, Storm 2	0.016	
50% AEP, 45 min burst, Storm 3	0.015	
50% AEP, 45 min burst, Storm 4	0.017	Critical Storm for this AEP and Burst Duration
50% AEP, 45 min burst, Storm 5	0.018	
50% AEP, 45 min burst, Storm 6	0.015	
50% AEP, 45 min burst, Storm 7	0.015	
50% AEP, 45 min burst, Storm 8	0.017	
50% AEP, 45 min burst, Storm 9	0.02	
50% AEP, 45 min burst, Storm 10	0.019	
50% AEP, 1 hour burst, Storm 1	0.018	
50% AEP, 1 hour burst, Storm 2	0.012	
50% AEP, 1 hour burst, Storm 3	0.014	
50% AEP, 1 hour burst, Storm 4	0.015	
50% AEP, 1 hour burst, Storm 5	0.016	
50% AEP, 1 hour burst, Storm 6	0.016	
50% AEP, 1 hour burst, Storm 7	0.016	Critical Storm for this AEP and Burst Duration

50% AEP, 1 hour burst, Storm 8	0.013	
50% AEP, 1 hour burst, Storm 9	0.019	
50% AEP, 1 hour burst, Storm 10	0.016	
50% AEP, 1.5 hour burst, Storm 1	0.013	
50% AEP, 1.5 hour burst, Storm 2	0.015	Critical Storm for this AEP and Burst Duration
50% AEP, 1.5 hour burst, Storm 3	0.016	
50% AEP, 1.5 hour burst, Storm 4	0.011	
50% AEP, 1.5 hour burst, Storm 5	0.019	
50% AEP, 1.5 hour burst, Storm 6	0.011	
50% AEP, 1.5 hour burst, Storm 7	0.013	
50% AEP, 1.5 hour burst, Storm 8	0.011	
50% AEP, 1.5 hour burst, Storm 9	0.017	
50% AEP, 1.5 hour burst, Storm 10	0.015	
50% AEP, 2 hour burst, Storm 1	0.011	
50% AEP, 2 hour burst, Storm 2	0.01	
50% AEP, 2 hour burst, Storm 3	0.01	
50% AEP, 2 hour burst, Storm 4	0.01	
50% AEP, 2 hour burst, Storm 5	0.015	
50% AEP, 2 hour burst, Storm 6	0.013	
50% AEP, 2 hour burst, Storm 7	0.014	
50% AEP, 2 hour burst, Storm 8	0.014	
50% AEP, 2 hour burst, Storm 9	0.011	
50% AEP, 2 hour burst, Storm 10	0.012	Critical Storm for this AEP and Burst Duration
50% AEP, 3 hour burst, Storm 1	0.012	
50% AEP, 3 hour burst, Storm 2	0.011	
50% AEP, 3 hour burst, Storm 3	0.015	
50% AEP, 3 hour burst, Storm 4	0.008	
50% AEP, 3 hour burst, Storm 5	0.01	Critical Storm for this AEP and Burst Duration
50% AEP, 3 hour burst, Storm 6	0.009	
50% AEP, 3 hour burst, Storm 7	0.007	
50% AEP, 3 hour burst, Storm 8	0.008	
50% AEP, 3 hour burst, Storm 9	0.01	
50% AEP, 3 hour burst, Storm 10	0.012	
50% AEP, 4.5 hour burst, Storm 1	0.011	
50% AEP, 4.5 hour burst, Storm 2	0.006	
50% AEP, 4.5 hour burst, Storm 3	0.01	
50% AEP, 4.5 hour burst, Storm 4	0.005	

50% AEP, 4.5 hour burst, Storm 5	0.008	
50% AEP, 4.5 hour burst, Storm 6	0.01	
50% AEP, 4.5 hour burst, Storm 7	0.009	Critical Storm for this AEP and Burst Duration
50% AEP, 4.5 hour burst, Storm 8	0.007	
50% AEP, 4.5 hour burst, Storm 9	0.009	
50% AEP, 4.5 hour burst, Storm 10	0.01	

Q100 Peak Flows for Outlet to 42 Markwell St		
Storm	Peak Flow	
	(cu.m/s)	
1% AEP, 5 min burst, Storm 1	0.065	Critical Storm for this AEP and Burst Duration
1% AEP, 10 min burst, Storm 1	0.065	
1% AEP, 10 min burst, Storm 2	0.071	
1% AEP, 10 min burst, Storm 3	0.065	
1% AEP, 10 min burst, Storm 4	0.074	
1% AEP, 10 min burst, Storm 5	0.072	
1% AEP, 10 min burst, Storm 6	0.073	
1% AEP, 10 min burst, Storm 7	0.072	Critical Storm for this AEP and Burst Duration
1% AEP, 10 min burst, Storm 8	0.068	
1% AEP, 10 min burst, Storm 9	0.082	
1% AEP, 10 min burst, Storm 10	0.064	
1% AEP, 15 min burst, Storm 1	0.081	
1% AEP, 15 min burst, Storm 2	0.085	Critical Storm for this AEP and Burst Duration
1% AEP, 15 min burst, Storm 3	0.078	
1% AEP, 15 min burst, Storm 4	0.083	
1% AEP, 15 min burst, Storm 5	0.088	
1% AEP, 15 min burst, Storm 6	0.087	
1% AEP, 15 min burst, Storm 7	0.084	
1% AEP, 15 min burst, Storm 8	0.091	
1% AEP, 15 min burst, Storm 9	0.088	
1% AEP, 15 min burst, Storm 10	0.083	
1% AEP, 20 min burst, Storm 1	0.085	
1% AEP, 20 min burst, Storm 2	0.109	
1% AEP, 20 min burst, Storm 3	0.077	
1% AEP, 20 min burst, Storm 4	0.077	

1% AEP, 20 min burst, Storm 5	0.083	
1% AEP, 20 min burst, Storm 6	0.084	Critical Storm for this AEP and Burst Duration
1% AEP, 20 min burst, Storm 7	0.082	
1% AEP, 20 min burst, Storm 8	0.087	
1% AEP, 20 min burst, Storm 9	0.081	
1% AEP, 20 min burst, Storm 10	0.098	
1% AEP, 25 min burst, Storm 1	0.074	
1% AEP, 25 min burst, Storm 2	0.101	
1% AEP, 25 min burst, Storm 3	0.076	
1% AEP, 25 min burst, Storm 4	0.087	
1% AEP, 25 min burst, Storm 5	0.084	Critical Storm for this AEP and Burst Duration
1% AEP, 25 min burst, Storm 6	0.084	
1% AEP, 25 min burst, Storm 7	0.081	
1% AEP, 25 min burst, Storm 8	0.094	
1% AEP, 25 min burst, Storm 9	0.083	
1% AEP, 25 min burst, Storm 10	0.102	
1% AEP, 30 min burst, Storm 1	0.082	Critical Storm for this AEP and Burst Duration
1% AEP, 30 min burst, Storm 2	0.08	
1% AEP, 30 min burst, Storm 3	0.108	
1% AEP, 30 min burst, Storm 4	0.075	
1% AEP, 30 min burst, Storm 5	0.065	
1% AEP, 30 min burst, Storm 6	0.073	
1% AEP, 30 min burst, Storm 7	0.082	
1% AEP, 30 min burst, Storm 8	0.087	
1% AEP, 30 min burst, Storm 9	0.092	
1% AEP, 30 min burst, Storm 10	0.078	
1% AEP, 45 min burst, Storm 1	0.099	
1% AEP, 45 min burst, Storm 2	0.075	
1% AEP, 45 min burst, Storm 3	0.062	
1% AEP, 45 min burst, Storm 4	0.08	
1% AEP, 45 min burst, Storm 5	0.074	
1% AEP, 45 min burst, Storm 6	0.062	
1% AEP, 45 min burst, Storm 7	0.062	
1% AEP, 45 min burst, Storm 8	0.071	Critical Storm for this AEP and Burst Duration
1% AEP, 45 min burst, Storm 9	0.056	
1% AEP, 45 min burst, Storm 10	0.064	
1% AEP, 1 hour burst, Storm 1	0.09	

1% AEP, 1 hour burst, Storm 2	0.077	
1% AEP, 1 hour burst, Storm 3	0.059	Critical Storm for this AEP and Burst Duration
1% AEP, 1 hour burst, Storm 4	0.057	
1% AEP, 1 hour burst, Storm 5	0.05	
1% AEP, 1 hour burst, Storm 6	0.067	
1% AEP, 1 hour burst, Storm 7	0.053	
1% AEP, 1 hour burst, Storm 8	0.047	
1% AEP, 1 hour burst, Storm 9	0.064	
1% AEP, 1 hour burst, Storm 10	0.053	
1% AEP, 1.5 hour burst, Storm 1	0.039	
1% AEP, 1.5 hour burst, Storm 2	0.057	
1% AEP, 1.5 hour burst, Storm 3	0.057	
1% AEP, 1.5 hour burst, Storm 4	0.046	
1% AEP, 1.5 hour burst, Storm 5	0.054	Critical Storm for this AEP and Burst Duration
1% AEP, 1.5 hour burst, Storm 6	0.052	
1% AEP, 1.5 hour burst, Storm 7	0.036	
1% AEP, 1.5 hour burst, Storm 8	0.048	
1% AEP, 1.5 hour burst, Storm 9	0.056	
1% AEP, 1.5 hour burst, Storm 10	0.058	
1% AEP, 2 hour burst, Storm 1	0.051	
1% AEP, 2 hour burst, Storm 2	0.038	
1% AEP, 2 hour burst, Storm 3	0.042	
1% AEP, 2 hour burst, Storm 4	0.044	
1% AEP, 2 hour burst, Storm 5	0.049	
1% AEP, 2 hour burst, Storm 6	0.048	
1% AEP, 2 hour burst, Storm 7	0.034	
1% AEP, 2 hour burst, Storm 8	0.034	
1% AEP, 2 hour burst, Storm 9	0.044	Critical Storm for this AEP and Burst Duration
1% AEP, 2 hour burst, Storm 10	0.05	
1% AEP, 3 hour burst, Storm 1	0.039	
1% AEP, 3 hour burst, Storm 2	0.03	
1% AEP, 3 hour burst, Storm 3	0.035	
1% AEP, 3 hour burst, Storm 4	0.033	Critical Storm for this AEP and Burst Duration
1% AEP, 3 hour burst, Storm 5	0.026	
1% AEP, 3 hour burst, Storm 6	0.033	
1% AEP, 3 hour burst, Storm 7	0.02	
1% AEP, 3 hour burst, Storm 8	0.044	
1% AEP, 3 hour burst, Storm 9	0.023	

1% AEP, 3 hour burst, Storm 10	0.048	
1% AEP, 4.5 hour burst, Storm 1	0.031	
1% AEP, 4.5 hour burst, Storm 2	0.02	
1% AEP, 4.5 hour burst, Storm 3	0.023	
1% AEP, 4.5 hour burst, Storm 4	0.021	
1% AEP, 4.5 hour burst, Storm 5	0.027	
1% AEP, 4.5 hour burst, Storm 6	0.021	
1% AEP, 4.5 hour burst, Storm 7	0.025	Critical Storm for this AEP and Burst Duration
1% AEP, 4.5 hour burst, Storm 8	0.022	
1% AEP, 4.5 hour burst, Storm 9	0.029	
1% AEP, 4.5 hour burst, Storm 10	0.032	

Drains Output 40 Markwell

Q2 Peak Flows for Outlet to 40 Markwell St		
Storm	Peak Flow	
	(cu.m/s)	
50% AEP, 5 min burst, Storm 1	0.012	Critical Storm for this AEP and Burst Duration
50% AEP, 10 min burst, Storm 1	0.017	Critical Storm for this AEP and Burst Duration
50% AEP, 10 min burst, Storm 2	0.017	
50% AEP, 10 min burst, Storm 3	0.017	
50% AEP, 10 min burst, Storm 4	0.019	
50% AEP, 10 min burst, Storm 5	0.017	
50% AEP, 10 min burst, Storm 6	0.018	
50% AEP, 10 min burst, Storm 7	0.017	
50% AEP, 10 min burst, Storm 8	0.018	
50% AEP, 10 min burst, Storm 9	0.016	
50% AEP, 10 min burst, Storm 10	0.017	
50% AEP, 15 min burst, Storm 1	0.017	
50% AEP, 15 min burst, Storm 2	0.018	
50% AEP, 15 min burst, Storm 3	0.018	
50% AEP, 15 min burst, Storm 4	0.018	
50% AEP, 15 min burst, Storm 5	0.018	
50% AEP, 15 min burst, Storm 6	0.019	Critical Storm for this AEP and Burst Duration
50% AEP, 15 min burst, Storm 7	0.019	
50% AEP, 15 min burst, Storm 8	0.019	
50% AEP, 15 min burst, Storm 9	0.021	
50% AEP, 15 min burst, Storm 10	0.021	
50% AEP, 20 min burst, Storm 1	0.018	
50% AEP, 20 min burst, Storm 2	0.017	
50% AEP, 20 min burst, Storm 3	0.018	
50% AEP, 20 min burst, Storm 4	0.019	
50% AEP, 20 min burst, Storm 5	0.018	
50% AEP, 20 min burst, Storm 6	0.019	Critical Storm for this AEP and Burst Duration
50% AEP, 20 min burst, Storm 7	0.019	
50% AEP, 20 min burst, Storm 8	0.018	
50% AEP, 20 min burst, Storm 9	0.02	
50% AEP, 20 min burst, Storm 10	0.022	

50% AEP, 25 min burst, Storm 1	0.018	
50% AEP, 25 min burst, Storm 2	0.018	
50% AEP, 25 min burst, Storm 3	0.018	
50% AEP, 25 min burst, Storm 4	0.018	
50% AEP, 25 min burst, Storm 5	0.02	
50% AEP, 25 min burst, Storm 6	0.018	
50% AEP, 25 min burst, Storm 7	0.019	Critical Storm for this AEP and Burst Duration
50% AEP, 25 min burst, Storm 8	0.02	
50% AEP, 25 min burst, Storm 9	0.022	
50% AEP, 25 min burst, Storm 10	0.021	
50% AEP, 30 min burst, Storm 1	0.023	
50% AEP, 30 min burst, Storm 2	0.017	
50% AEP, 30 min burst, Storm 3	0.017	
50% AEP, 30 min burst, Storm 4	0.018	
50% AEP, 30 min burst, Storm 5	0.018	
50% AEP, 30 min burst, Storm 6	0.017	
50% AEP, 30 min burst, Storm 7	0.02	
50% AEP, 30 min burst, Storm 8	0.019	
50% AEP, 30 min burst, Storm 9	0.019	Critical Storm for this AEP and Burst Duration
50% AEP, 30 min burst, Storm 10	0.02	
50% AEP, 45 min burst, Storm 1	0.017	
50% AEP, 45 min burst, Storm 2	0.014	
50% AEP, 45 min burst, Storm 3	0.015	
50% AEP, 45 min burst, Storm 4	0.016	
50% AEP, 45 min burst, Storm 5	0.017	Critical Storm for this AEP and Burst Duration
50% AEP, 45 min burst, Storm 6	0.016	
50% AEP, 45 min burst, Storm 7	0.016	
50% AEP, 45 min burst, Storm 8	0.018	
50% AEP, 45 min burst, Storm 9	0.019	
50% AEP, 45 min burst, Storm 10	0.019	
50% AEP, 1 hour burst, Storm 1	0.016	Critical Storm for this AEP and Burst Duration
50% AEP, 1 hour burst, Storm 2	0.013	
50% AEP, 1 hour burst, Storm 3	0.014	
50% AEP, 1 hour burst, Storm 4	0.016	
50% AEP, 1 hour burst, Storm 5	0.015	
50% AEP, 1 hour burst, Storm 6	0.017	
50% AEP, 1 hour burst, Storm 7	0.017	

50% AEP, 1 hour burst, Storm 8	0.014	
50% AEP, 1 hour burst, Storm 9	0.018	
50% AEP, 1 hour burst, Storm 10	0.017	
50% AEP, 1.5 hour burst, Storm 1	0.011	
50% AEP, 1.5 hour burst, Storm 2	0.013	
50% AEP, 1.5 hour burst, Storm 3	0.015	
50% AEP, 1.5 hour burst, Storm 4	0.012	
50% AEP, 1.5 hour burst, Storm 5	0.018	
50% AEP, 1.5 hour burst, Storm 6	0.01	
50% AEP, 1.5 hour burst, Storm 7	0.013	Critical Storm for this AEP and Burst Duration
50% AEP, 1.5 hour burst, Storm 8	0.011	
50% AEP, 1.5 hour burst, Storm 9	0.016	
50% AEP, 1.5 hour burst, Storm 10	0.016	
50% AEP, 2 hour burst, Storm 1	0.01	
50% AEP, 2 hour burst, Storm 2	0.007	
50% AEP, 2 hour burst, Storm 3	0.01	
50% AEP, 2 hour burst, Storm 4	0.009	
50% AEP, 2 hour burst, Storm 5	0.014	
50% AEP, 2 hour burst, Storm 6	0.013	
50% AEP, 2 hour burst, Storm 7	0.013	
50% AEP, 2 hour burst, Storm 8	0.011	
50% AEP, 2 hour burst, Storm 9	0.012	Critical Storm for this AEP and Burst Duration
50% AEP, 2 hour burst, Storm 10	0.014	
50% AEP, 3 hour burst, Storm 1	0.012	
50% AEP, 3 hour burst, Storm 2	0.011	
50% AEP, 3 hour burst, Storm 3	0.014	
50% AEP, 3 hour burst, Storm 4	0.008	
50% AEP, 3 hour burst, Storm 5	0.011	Critical Storm for this AEP and Burst Duration
50% AEP, 3 hour burst, Storm 6	0.01	
50% AEP, 3 hour burst, Storm 7	0.006	
50% AEP, 3 hour burst, Storm 8	0.007	
50% AEP, 3 hour burst, Storm 9	0.011	
50% AEP, 3 hour burst, Storm 10	0.013	
50% AEP, 4.5 hour burst, Storm 1	0.011	
50% AEP, 4.5 hour burst, Storm 2	0.005	
50% AEP, 4.5 hour burst, Storm 3	0.009	
50% AEP, 4.5 hour burst, Storm 4	0.004	

50% AEP, 4.5 hour burst, Storm 5	0.008	
50% AEP, 4.5 hour burst, Storm 6	0.009	
50% AEP, 4.5 hour burst, Storm 7	0.01	
50% AEP, 4.5 hour burst, Storm 8	0.007	
50% AEP, 4.5 hour burst, Storm 9	0.009	Critical Storm for this AEP and Burst Duration
50% AEP, 4.5 hour burst, Storm 10	0.009	

Q100 Peak Flows for Outlet to 40 Markwell St		
Storm	Peak Flow	
	(cu.m/s)	
1% AEP, 5 min burst, Storm 1	0.055	Critical Storm for this AEP and Burst Duration
1% AEP, 10 min burst, Storm 1	0.087	
1% AEP, 10 min burst, Storm 2	0.091	
1% AEP, 10 min burst, Storm 3	0.087	
1% AEP, 10 min burst, Storm 4	0.093	
1% AEP, 10 min burst, Storm 5	0.093	
1% AEP, 10 min burst, Storm 6	0.093	
1% AEP, 10 min burst, Storm 7	0.092	Critical Storm for this AEP and Burst Duration
1% AEP, 10 min burst, Storm 8	0.089	
1% AEP, 10 min burst, Storm 9	0.098	
1% AEP, 10 min burst, Storm 10	0.086	
1% AEP, 15 min burst, Storm 1	0.097	Critical Storm for this AEP and Burst Duration
1% AEP, 15 min burst, Storm 2	0.096	
1% AEP, 15 min burst, Storm 3	0.087	
1% AEP, 15 min burst, Storm 4	0.091	
1% AEP, 15 min burst, Storm 5	0.102	
1% AEP, 15 min burst, Storm 6	0.099	
1% AEP, 15 min burst, Storm 7	0.093	
1% AEP, 15 min burst, Storm 8	0.116	
1% AEP, 15 min burst, Storm 9	0.101	
1% AEP, 15 min burst, Storm 10	0.093	
1% AEP, 20 min burst, Storm 1	0.095	
1% AEP, 20 min burst, Storm 2	0.115	
1% AEP, 20 min burst, Storm 3	0.085	
1% AEP, 20 min burst, Storm 4	0.085	

1% AEP, 20 min burst, Storm 5	0.09	
1% AEP, 20 min burst, Storm 6	0.092	Critical Storm for this AEP and Burst Duration
1% AEP, 20 min burst, Storm 7	0.089	
1% AEP, 20 min burst, Storm 8	0.092	
1% AEP, 20 min burst, Storm 9	0.089	
1% AEP, 20 min burst, Storm 10	0.101	
1% AEP, 25 min burst, Storm 1	0.085	
1% AEP, 25 min burst, Storm 2	0.109	
1% AEP, 25 min burst, Storm 3	0.084	
1% AEP, 25 min burst, Storm 4	0.09	
1% AEP, 25 min burst, Storm 5	0.09	Critical Storm for this AEP and Burst Duration
1% AEP, 25 min burst, Storm 6	0.088	
1% AEP, 25 min burst, Storm 7	0.08	
1% AEP, 25 min burst, Storm 8	0.097	
1% AEP, 25 min burst, Storm 9	0.088	
1% AEP, 25 min burst, Storm 10	0.1	
1% AEP, 30 min burst, Storm 1	0.074	
1% AEP, 30 min burst, Storm 2	0.085	Critical Storm for this AEP and Burst Duration
1% AEP, 30 min burst, Storm 3	0.104	
1% AEP, 30 min burst, Storm 4	0.073	
1% AEP, 30 min burst, Storm 5	0.076	
1% AEP, 30 min burst, Storm 6	0.088	
1% AEP, 30 min burst, Storm 7	0.082	
1% AEP, 30 min burst, Storm 8	0.087	
1% AEP, 30 min burst, Storm 9	0.09	
1% AEP, 30 min burst, Storm 10	0.083	
1% AEP, 45 min burst, Storm 1	0.094	
1% AEP, 45 min burst, Storm 2	0.084	
1% AEP, 45 min burst, Storm 3	0.064	
1% AEP, 45 min burst, Storm 4	0.08	
1% AEP, 45 min burst, Storm 5	0.075	Critical Storm for this AEP and Burst Duration
1% AEP, 45 min burst, Storm 6	0.061	
1% AEP, 45 min burst, Storm 7	0.069	
1% AEP, 45 min burst, Storm 8	0.077	
1% AEP, 45 min burst, Storm 9	0.056	
1% AEP, 45 min burst, Storm 10	0.071	
1% AEP, 1 hour burst, Storm 1	0.084	

1% AEP, 1 hour burst, Storm 2	0.076	
1% AEP, 1 hour burst, Storm 3	0.058	
1% AEP, 1 hour burst, Storm 4	0.064	Critical Storm for this AEP and Burst Duration
1% AEP, 1 hour burst, Storm 5	0.05	
1% AEP, 1 hour burst, Storm 6	0.069	
1% AEP, 1 hour burst, Storm 7	0.053	
1% AEP, 1 hour burst, Storm 8	0.054	
1% AEP, 1 hour burst, Storm 9	0.064	
1% AEP, 1 hour burst, Storm 10	0.052	
1% AEP, 1.5 hour burst, Storm 1	0.042	
1% AEP, 1.5 hour burst, Storm 2	0.053	Critical Storm for this AEP and Burst Duration
1% AEP, 1.5 hour burst, Storm 3	0.058	
1% AEP, 1.5 hour burst, Storm 4	0.046	
1% AEP, 1.5 hour burst, Storm 5	0.05	
1% AEP, 1.5 hour burst, Storm 6	0.055	
1% AEP, 1.5 hour burst, Storm 7	0.045	
1% AEP, 1.5 hour burst, Storm 8	0.048	
1% AEP, 1.5 hour burst, Storm 9	0.056	
1% AEP, 1.5 hour burst, Storm 10	0.057	
1% AEP, 2 hour burst, Storm 1	0.046	
1% AEP, 2 hour burst, Storm 2	0.039	
1% AEP, 2 hour burst, Storm 3	0.041	
1% AEP, 2 hour burst, Storm 4	0.04	
1% AEP, 2 hour burst, Storm 5	0.049	
1% AEP, 2 hour burst, Storm 6	0.047	
1% AEP, 2 hour burst, Storm 7	0.033	
1% AEP, 2 hour burst, Storm 8	0.035	
1% AEP, 2 hour burst, Storm 9	0.043	Critical Storm for this AEP and Burst Duration
1% AEP, 2 hour burst, Storm 10	0.049	
1% AEP, 3 hour burst, Storm 1	0.037	
1% AEP, 3 hour burst, Storm 2	0.031	
1% AEP, 3 hour burst, Storm 3	0.039	
1% AEP, 3 hour burst, Storm 4	0.034	Critical Storm for this AEP and Burst Duration
1% AEP, 3 hour burst, Storm 5	0.027	
1% AEP, 3 hour burst, Storm 6	0.033	
1% AEP, 3 hour burst, Storm 7	0.022	
1% AEP, 3 hour burst, Storm 8	0.041	
1% AEP, 3 hour burst, Storm 9	0.024	

1% AEP, 3 hour burst, Storm 10	0.046	
1% AEP, 4.5 hour burst, Storm 1	0.028	
1% AEP, 4.5 hour burst, Storm 2	0.022	
1% AEP, 4.5 hour burst, Storm 3	0.021	
1% AEP, 4.5 hour burst, Storm 4	0.025	Critical Storm for this AEP and Burst Duration
1% AEP, 4.5 hour burst, Storm 5	0.026	
1% AEP, 4.5 hour burst, Storm 6	0.024	
1% AEP, 4.5 hour burst, Storm 7	0.023	
1% AEP, 4.5 hour burst, Storm 8	0.02	
1% AEP, 4.5 hour burst, Storm 9	0.03	
1% AEP, 4.5 hour burst, Storm 10	0.03	

From: "Stephen Saunders" <[redacted]>
Sent: Mon, 24 Jul 2023 05:57:45 +1000
To: "Stephen Saunders" <[redacted]>
Subject: FW: MCU23/0012 - IR - Stormwater, gutters and downpipes

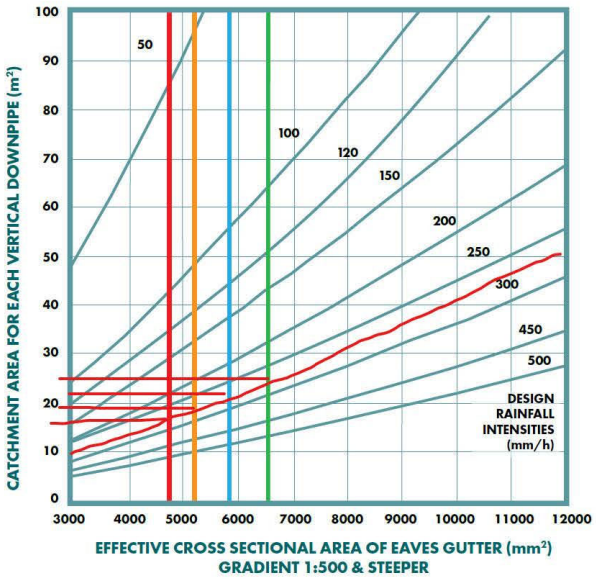
Hi Stephen,
284mm/hr is your 100yr 5min intensity for sizing the gutters.
Looking at the existing design from the invoice, you are using a 150 high front quad.
This means you will need to use a 90mm down pipe to support ~22m2 of roof area.
This means for the Existing Dwellings already built (units 1 to 4) a few extra down pipes will need to be added so each downpipe is collecting a maximum of 22m2 of roof area for the ARI 100 year event.

For new builds, you could opt for as an alternative to the 150 high front quad gutter, the largest gutter effective area as possible and use the below table to work out the downpipe spacings.
Looking at the metroll guide you sent, it looks like the 175 low front quad would give you the largest roof area/down pipe possible.
This size gutter would give you ~50m2 per downpipe.
The downpipe spacings and design can be legally completed by your qualified building designer, Steven Young from BluePrint Design.
He can then make sure he provides you with the details behind the outcome and have it shown on the Dwelling Drawings.
Please let me know if you need any further information.

INFORMATION TO ASSIST ROOF DRAINAGE SYSTEM DESIGNERS

GRAPH: CATCHMENT AREA (m²) PER VERTICAL DOWNPIPE

Adapted from AS/NZS 3500.3.2015, Figure 3.5.2 (B). Gradients 1:500 & Steeper Showing Common Metroll Gu



IFD Design Rainfall Intensity (mm/h)

Issued: 11 July 2023

Rainfall intensity for Durations, Exceedance per Year (EY), and Annual Exceedance Probabilities (AEP).
FAQ for New ARR probability terminology

Table | Chart

Unit: mm/h

	Annual Exceedance Probability (AEP)						
Duration	**63.2%**	**50%#**	**20%***	**10%**	**5%**	**2%**	**1%**
1 min	139	160	225	268	308	360	398
2 min	116	134	188	225	261	307	339
3 min	109	125	176	210	243	285	315
4 min	104	119	168	200	231	270	298
5 min	99.2	114	161	191	220	257	284
10 min	81.4	94.0	132	157	180	210	232
15 min	68.9	79.6	112	133	153	178	197
20 min	59.8	69.1	97.3	116	133	155	172
25 min	53.0	61.2	86.1	102	118	138	153
30 min	47.6	54.9	77.3	92.0	106	124	138
45 min	36.8	42.4	59.5	70.9	81.8	95.9	106
1 hour	30.2	34.7	48.6	57.9	66.9	78.5	87.1

Regards,

Adam
[redacted]

Appeal Rights

PLANNING ACT 2016 & THE PLANNING REGULATION 2017

Chapter 6 Dispute resolution

Part 1 Appeal rights

229 Appeals to tribunal or P&E Court

(1) Schedule 1 of the *Planning Act 2016* states –
  (a) Matters that may be appealed to –
    (i) either a tribunal or the P&E Court; or
    (ii) only a tribunal; or
    (iii) only the P&E Court; and
  (b) The person-
    (i) who may appeal a matter (**the *appellant***); and
    (ii) who is a respondent in an appeal of the matter; and
    (iii) who is a co-respondent in an appeal of the matter; and
    (iv) who may elect to be a co-respondent in an appeal of the matter.

(Refer to Schedule 1 of the Planning Act 2016)

(2) An appellant may start an appeal within the appeal period.
(3) The ***appeal period*** is –
  (a) for an appeal by a building advisory agency – 10 business days after a decision notice for the decision is given to the agency; or
  (b) for an appeal against a deemed refusal – at any time after the deemed refusal happens; or
  (c) for an appeal against a decision of the Minister, under chapter 7, part 4, to register premises or to renew the registration of premises – 20 business days after a notice us published under section 269(3)(a) or (4); or
  (d) for an appeal against an infrastructure charges notice – 20 business days after the infrastructure charges notice is given to the person; or
  (e) for an appeal about a deemed approval of a development application for which a decision notice has not been given – 30 business days after the applicant gives the deemed approval notice to the assessment manager; or
  (f) for any other appeal – 20 business days after a notice of the decision for the matter, including an enforcement notice, is given to the person.

Note –
See the P&E Court Act for the court's power to extend the appeal period.

(4) Each respondent and co-respondent for an appeal may be heard in the appeal.
(5) If an appeal is only about a referral agency's response, the assessment manager may apply to the tribunal or P&E Court to withdraw from the appeal.
(6) To remove any doubt. It is declared that an appeal against an infrastructure charges notice must not be about-
  (a) the adopted charge itself; or
  (b) for a decision about an offset or refund-
    (i) the establishment cost of trunk infrastructure identified in a LGIP; or
    (ii) the cost of infrastructure decided using the method included in the local government's charges resolution.

230 Notice of appeal

(1) An appellant starts an appeal by lodging, with the registrar of the tribunal or P&E Court, a notice of appeal that-
  (a) is in the approved form; and
  (b) succinctly states the grounds of the appeal.
(2) The notice of appeal must be accompanied by the required fee.
(3) The appellant or, for an appeal to a tribunal, the registrar must, within the service period, give a copy of the notice of appeal to –
  (a) the respondent for the appeal ; and
  (b) each co-respondent for the appeal; and
  (c) for an appeal about a development application under schedule 1, table 1, item 1 – each principal submitter for the development application; and
  (d) for and appeal about a change application under schedule 1, table 1, item 2 – each principal submitter for the change application; and
  (e) each person who may elect to become a co-respondent for the appeal, other than an eligible submitter who is not a principal submitter in an appeal under paragraph (c) or (d); and
  (f) for an appeal to the P&E Court – the chief executive; and
  (g) for an appeal to a tribunal under another Act – any other person who the registrar considers appropriate.
(4) The *service period* is –
  (a) if a submitter or advice agency started the appeal in the P&E Court – 2 business days after the appeal has started; or
  (b) otherwise – 10 business days after the appeal is started.
(5) A notice of appeal given to a person who may elect to be a co-respondent must state the effect of subsection (6).
(6) A person elects to be a co-respondent by filing a notice of election, in the approved form, within 10 business days after the notice of appeal is given to the person.

231 Other appeals

(1) Subject to this chapter, schedule 1 and the P&E Court Act, unless the Supreme Court decides a decision or other matter under this Act is affected by jurisdictional error, the decision or matter is non-appealable.
(2) The *Judicial Review Act 1991*, part 5 applies to the decision or matter to the extent it is affected by jurisdictional error.
(3) A person who, but for subsection (1) could have made an application under the Judicial Review Act 1991 in relation to the decision or matter, may apply under part 4 of that Act for a statement of reasons in relation to the decision or matter.
(4) In this section –
decision includes-
  (a) conduct engaged in for the purpose of making a decision; and
  (b) other conduct that relates to the making of a decision; and
  (c) the making of a decision or failure to make a decision; and
  (d) a purported decision ; and
  (e) a deemed refusal.
non-appealable, for a decision or matter, means the decision or matter-
  (a) is final and conclusive; and
  (b) may not be challenged, appealed against, reviewed, quashed, set aside or called into question in any other way under the Judicial Review Act 1991 or otherwise, whether by the Supreme Court, another court, a tribunal or another entity; and
  (c) is not subject to any declaratory, injunctive or other order of the Supreme Court, another court, a tribunal or another entity on any ground.

232 Rules of the P&E Court

(1) A person who is appealing to the P&E Court must comply with the rules of the court that apply to the appeal.
However, the P&E Court may hear and decide an appeal even if the person has not complied with the rules of the P&E Court.