

**Engineering Order of Costs**  
**Lots 296, 297, 350 & 384 Cubbine & Mitchell Streets, Cunderdin Subdivision**

17 lots

Item	Description	Detail	Amount	GST applicable	GST
<b>1.0 Local Government Statutory Fees and Charges (GST exclusive)</b>					
1.1	WAPC planning application	\$3346 plus \$79 per lot (2-100 lots) - rounded	\$ 4,700.00	No	\$ -
1.2	Deposited plan fees	\$645 plus \$8 per lot (2-100 lots) - rounded	\$ 1,000.00	No	\$ -
1.3	Clearance fees	\$73 per lot for the first 5 lots and then \$35 per lot - rounded	\$ 900.00	No	\$ -
1.4	Council Engineering supervision fees	1.5% of R&D construction estimate - rounded	\$ 11,400.00	No	\$ -
1.5	Council Engineering maintenance bond (refundable)	5% of R&D construction estimate - rounded	\$ 37,700.00	No	\$ -
1.6	Public Open Space contribution (cash in lieu)	Not included	\$ -	No	\$ -
1.7	Council Developer Contributions fees	Not included	\$ -	No	\$ -

<b>2.0 Water Corporation Fees and charges</b>					
2.1	Water contributions	Standard infrastructure charge for water \$2,643/lot (16 new) - rounded	\$ 42,300.00	No	\$ -
2.2	Drainage contributions	N/A	\$ -	No	\$ -
2.3	Wastewater contributions	Standard infrastructure charge for wastewater \$4037/lot (15 new) - rounded	\$ 60,600.00	No	\$ -
2.3	Water Corporation Water Connection Fees	2 Connections \$4000.00 per connection	\$ 8,000.00	No	\$ -
2.3	Water Corporation Sewer Main Connection Fees	Connection to existing sewer main at 2 locations \$7500.00 each	\$ 15,000.00	No	\$ -

<b>3.0 Infrastructure Works</b>					
3.1	Construction (Earthworks, Roads, Drainage, Water only)	Developer funded construction - refer breakdown attached	\$ 754,000.00	Yes	\$ 75,400.00
3.2	Construction cost Contingency	20% surplus on construction works estimate	\$ 151,000.00	Yes	\$ 15,100.00
3.3	Electrical Services	UPD9985 - Subdivision Preliminary Investigation Report V1.0	\$ 195,000.00	Yes	\$ 19,500.00
3.4	Communications Services		\$ 59,400.00	Yes	\$ 5,940.00

<b>4.0 Professional Services Fees</b>					
4.1	Town Planning	WAPC/Council application - estimate	\$ 5,000.00	Yes	\$ 500.00
4.2	Surveyor	Subdivision fees including peg & repeg - estimate	\$ 25,000.00	Yes	\$ 2,500.00
4.3		Feature Survey	\$ 8,000.00	Yes	\$ 800.00
4.4	Acoustic Engineer	Not included	\$ -	Yes	\$ -
4.5	Traffic Engineer	Not included	\$ -	Yes	\$ -
4.6	Flora & Fauna	Not included	\$ -	Yes	\$ -
4.7	Arborist	Not included	\$ -	Yes	\$ -
4.8	Archaeological & Heritage	Not included	\$ -	Yes	\$ -
4.9	Landscape Architecture	Not included		Yes	\$ -
4.10	Geotechnical Engineer	Inspection, testing and reporting	\$ 15,000.00	Yes	\$ 1,500.00
4.11	Civil Engineer	Design, Tender and Contract Administration	\$ 50,000.00	Yes	\$ 5,000.00
4.12	Electrical Engineer	estimate	\$ 15,000.00	Yes	\$ 1,500.00
4.13	Structural Engineer	Not included	\$ -	Yes	\$ -
4.14	Project Manager	Not included	\$ -	Yes	\$ -

<b>5.0 Reimbursements</b>					
5.1	Council roadworks maintenance bonds		\$ -	No	\$ -

<b>6.0 Total</b>					
	Subtotal		\$ 1,459,000.00		
	GST		\$ 127,740.00		
	Total		\$ 1,586,740.00		

**Assumptions, Exclusions and Clarifications**

- An "engineering order of cost" is an opinion only. No liability is accepted by DWA for any variance in actual costs. If a more accurate cost estimate is required, a qualified Quantity Surveyor should be commissioned.
- The costing is based the proposed subdivision of Lots 296, 297, 350 & 384 Cubbine & Mitchell Streets, Cunderdin, to be subdivided into 17 lots. Refer to attached plan showing outline of proposed lots.
- This construction costing is a preliminary estimate only, based on rates extracted from Rawlinson's Australian Construction Handbook 2023 and is only within an accuracy of plus or minus 20%, and therefore a 20% contingency is allowed.
- The costing is based on the full subdivision being undertaken as a single contract.
- Lots 6 to 14 must be filled to enable the lots to be serviced by the gravity sewer. To reduce the required fill, the sewer is to be run along the eastern boundary of proposed Lots 4 and 6. A 3m wide easement will be required to be created for the sewer main.
- There is an existing private sewer pressure main located within the northeast corner of the lot to be subdivided. To avoid creation of easements within the proposed lots, this private sewer pressure main is to be diverted at Cubbine St and re-directed to the new road reserve, connecting to the existing gravity sewer main.
- The following items are excluded:
  - Gravity sewer reticulation to Lot 4. It is assumed that this lot will be served with a septic tank. If the lot is to be served with gravity sewer, approximately 3000m<sup>3</sup> of fill and an additional 60m of retaining wall is required.
  - Any earthworks other than within the road reserve and Lots 6 to 14
  - Fencing, landscaping, site re-vegetation
  - Excavation in rock
  - Upgrade of Mitchell St and Cubbine St. It is assumed the existing Mitchell St will not be required to be extended to the north western boundary of proposed Lot 4, and the existing road will be sufficient to provide access to the lot.
  - Demolition of any existing structures.
- Piped stormwater drainage - It is assumed the stormwater runoff will be conveyed overland to the Cubbine St drainage system.

9. The power costings are based on UPD9985 - Subdivision Preliminary Investigation Report V1.0
10. Under the Telecommunications In New Developments (TIND) policy, there is a requirement for new developments to provide fibre-ready pits and pipes. Even though the NBN Satellite service is available in the area, it is assumed that the lots will be provided with pits and pipes, extending from the existing infrastructure in Watts Street. There may be additional backhaul charges from NBN for the extension of the NBN cables to service this area with fibre. A nominal allowance of \$1000 per lot has been included.

**Engineering Order of Costs**  
**Lots 296, 297, 350 & 384 Cubbine & Mitchell Streets, Cunderdin Subdivision - Construction works**

Item	Description	Unit	Qty	Rate	Price
<b>3.1</b>	<b>Construction</b>				
<b>3.1.1</b>	<b>General</b>				
3.1.1.1	Comply with Conditions of Contract	Item	1	\$3,500.00	\$3,500.00
3.1.1.2	Insurances and CTF Levy	Item	1	\$10,000.00	\$10,000.00
3.1.1.3	Site establishment, site stabilisation, dust control - mobilisation, fortnightly site meetings and de-mobilisation of equipment, project management	Item	1	\$25,000.00	\$25,000.00
3.1.1.4	Location and protection of all existing services within & adjacent to the site	Item	1	\$5,000.00	\$5,000.00
3.1.1.5	Survey control and setout	Item	1	\$8,500.00	\$8,500.00
3.1.1.6	Submit Traffic Management to Local Authority	Item	1	\$2,500.00	\$2,500.00
3.1.1.7	Traffic Management for the duration of the works.	Item	1	\$7,500.00	\$7,500.00
3.1.1.8	Liaison with owner of private sewer pressure main to decommission, divert and re-connect	Item	1	\$2,000.00	\$2,000.00

**Subtotal General: \$64,000.00**

<b>3.1.2</b>	<b>Siteworks and Earthworks</b>				
3.1.2.1	Remove and dispose of existing vegetation within road reserve	Item	1	\$10,000.00	\$10,000.00
3.1.2.2	Remove and dispose of existing vegetation within lots 6 to 10	Item	1	\$10,000.00	\$10,000.00
3.1.2.3	Remove topsoil and stockpile 2710.5m <sup>2</sup> x 150mm average thickness (Road Reserve only)	m <sup>3</sup>	400	\$16.00	\$6,400.00
3.1.2.4	Cut to subgrade for road pavement and verges	m <sup>3</sup>	130	\$30.00	\$3,900.00
3.1.2.5	Fill to subgrade for road pavement and verges	m <sup>3</sup>	800	\$45.00	\$36,000.00
3.1.2.6	Remove topsoil and stockpile 10515m <sup>2</sup> x 150mm average thickness (lots 6 to 15)	m <sup>3</sup>	750	\$16.00	\$12,000.00
3.1.2.7	Import, place and compact fill to design levels (lots 6 to 15)	m <sup>3</sup>	3500	\$45.00	\$157,500.00
3.1.2.8	Construct limestone block retaining walls 400-1000 high	Lm	110	\$260.00	\$28,600.00
3.1.2.9	Construct limestone block retaining walls 1000-1500 high	Lm	70	\$630.00	\$44,100.00

**Subtotal Siteworks and Earthworks \$308,500.00**

<b>3.1.3</b>	<b>Roadworks</b>				
3.1.3.1	Sub-grade preparation for roadworks, compact to 92% MMDD	m <sup>2</sup>	1200	\$14.00	\$16,800.00
3.1.3.2	Insitu density testing of subgrade by registered NATA testing organisation	Item	1	\$5,500.00	\$5,500.00
3.1.3.3	Supply materials, place and compact road base course 250 thick, trim to line and level	m <sup>2</sup>	1200	\$30.00	\$36,000.00
3.1.3.4	Insitu density testing of base course by registered NATA testing organisation	Item	1	\$5,500.00	\$5,500.00
3.1.3.5	Supply and install primer seal to full width of road formation.	m <sup>2</sup>	1000	\$15.00	\$15,000.00
3.1.3.6	Supply, lay and compact 30mm Thick Black Asphalt, SMA 7, M.B.50. Tie into existing	m <sup>2</sup>	100	\$35.00	\$3,500.00
3.1.3.7	Install kerbing, tie into existing kerb	m	300	\$45.00	\$13,500.00
3.1.3.8	Backfill kerb and grade verges	m <sup>2</sup>	1800	\$15.00	\$27,000.00
3.1.3.9	Intersection treatment to existing road	Item	1	\$12,000.00	\$12,000.00
3.1.3.10	Reinstatement of Cubbine St road verge for installation of private sewer pressure main diversion. Inc Kerbing.	Item	1	\$10,000.00	\$10,000.00

**Subtotal Roadworks: \$144,800.00**

<b>3.1.4</b>	<b>Sewer reticulation</b>				
3.1.4.1	Excavate and backfill to 2.0m max, supply, bed and lay PVC pipework DN150 (Gravity Main)	Lm	250	\$140.00	\$35,000.00
3.1.4.2	DN150 Maintenance Shafts	No.	4	\$3,500.00	\$14,000.00
3.1.4.3	Supply and install lot connection	No.	16	\$1,300.00	\$20,800.00
3.1.4.4	Install Capped End	No.	4	\$750.00	\$3,000.00
3.1.4.5	Supply and install Access chamber	No.	4	\$5,300.00	\$21,200.00
3.1.4.6	Decommissioning and removal of existing private pressure main	Item	1	\$20,000.00	\$20,000.00
3.1.4.7	Relocation of private pressure main	m	30	\$180.00	\$5,400.00
3.1.4.8	Excavate and backfill to 2.0m max, supply, bed and lay PVC pipework DN150 (Private Gravity Main)	m	30	\$140.00	\$4,200.00
3.1.4.9	Quality inspections and testing	Item	1	\$7,500.00	\$7,500.00
3.1.4.10	Provide "As-Constructed" information of completed sewer reticulation	Item	1	\$4,500.00	\$4,500.00

**Subtotal Sewer reticulation: \$135,600.00**

<b>3.1.5</b>	<b>Water Reticulation</b>				
3.1.5.1	Excavate, supply, install and backfill with sand DN100 PVC water main	m	300	\$110.00	\$33,000.00
3.1.5.2	Extra Over to excavate Cubbine St and Install water main. Inc. Road pavement reinstatement	m	40	\$150.00	\$6,000.00
3.1.5.3	Supply and install fittings to Water Corporation requirements, including hydrants, valves, bends, reducers and tees as shown on drawings.	No.	1	\$25,000.00	\$25,000.00
3.1.5.4	Install long dual service connections	No.	2	\$2,000.00	\$4,000.00
3.1.5.5	Install short single and dual service connections	No.	15	\$1,000.00	\$15,000.00
3.1.5.6	Connect to existing water main by Water Corporation	Item	2	\$4,000.00	\$8,000.00
3.1.5.7	Pressure testing	Item	1	\$1,500.00	\$1,500.00
3.1.5.8	Water disinfectant	Item	1	\$1,800.00	\$1,800.00
3.1.5.9	Provide compaction test results	Item	1	\$4,000.00	\$4,000.00
3.1.5.10	Provide "As-Constructed" information of completed water reticulation	Item	1	\$2,800.00	\$2,800.00

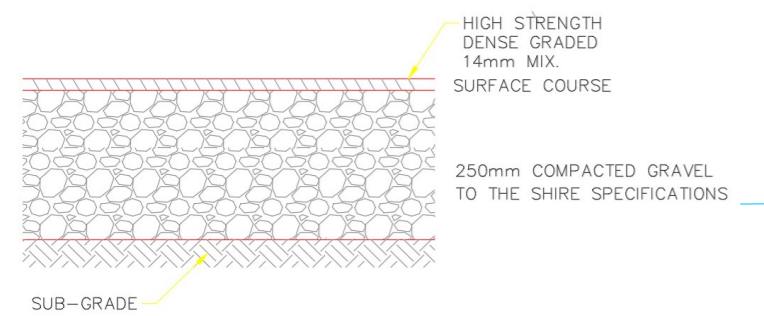
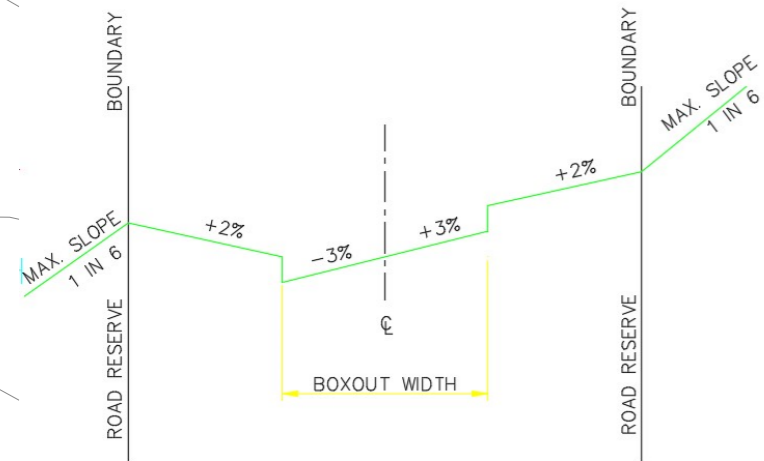
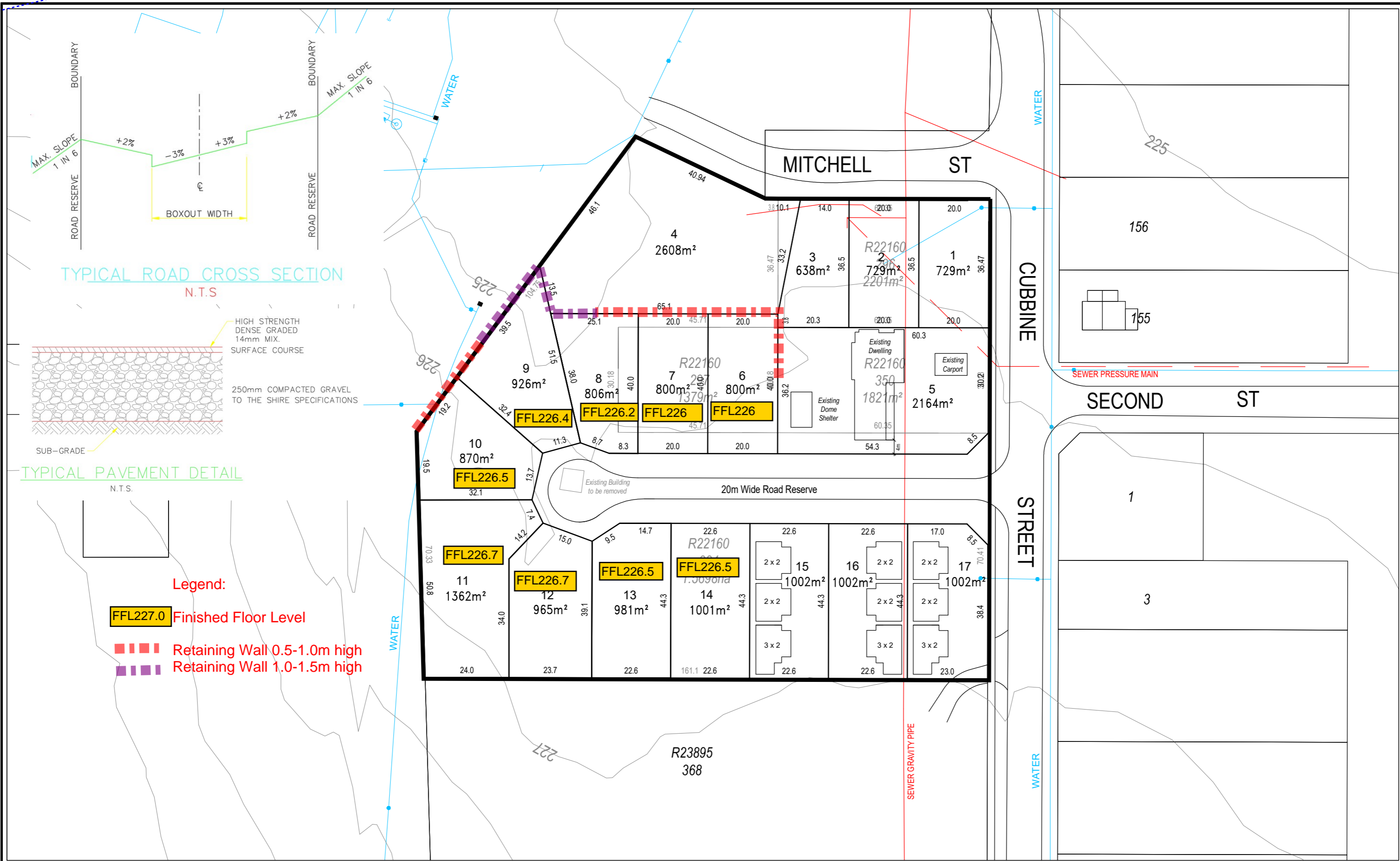
**Subtotal Water Reticulation: \$101,100.00**

<b>3.1</b>	<b>TOTAL excluding GST</b>				\$754,000.00
<b>3.2</b>	<b>Contingency 20%</b>				\$151,000.00
	GST				\$90,500.00
	<b>TOTAL</b>				<b>\$995,500.00</b>

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  - c) Fencing, landscaping, site re-vegetation
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  - g) Demolition of any existing structures
8. Piped stormwater drainage - It is assumed the stormwater runoff will be conveyed overland to the Cubbine St drainage system.

**Proposed Earthworks Plan**



- Legend:**
- FFL227.0 Finished Floor Level
  - Retaining Wall 0.5-1.0m high
  - Retaining Wall 1.0-1.5m high

**EXURBAN**  
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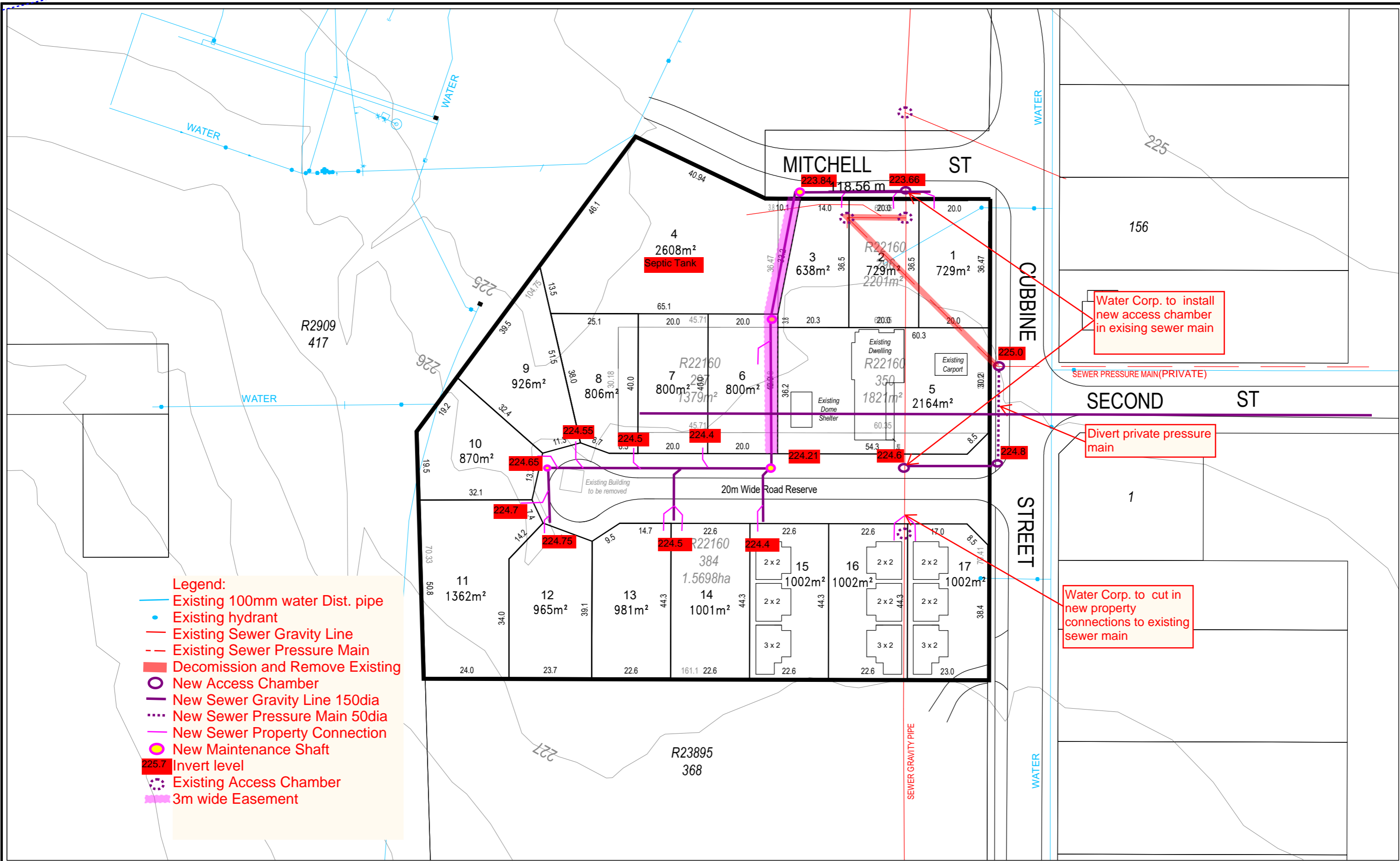
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LEGEND:  
SUBJECT LAND.....

**INDICATIVE RESIDENTIAL SUBDIVISION  
PLAN & GROUPED DWELLING  
DEVELOPMENT**

LOTS 296, 297, 350 & 384 CUBBINE & MITCHELL STREETS  
CUNDERDIN  
Shire of Cunderdin

**Proposed Concept Sewer Reticulation Plan**



**Legend:**

- Existing 100mm water Dist. pipe
- Existing hydrant
- Existing Sewer Gravity Line
- - - Existing Sewer Pressure Main
- Decomission and Remove Existing
- New Access Chamber
- New Sewer Gravity Line 150dia
- - - New Sewer Pressure Main 50dia
- New Sewer Property Connection
- New Maintenance Shaft
- 225.7 Invert level
- Existing Access Chamber
- 3m wide Easement

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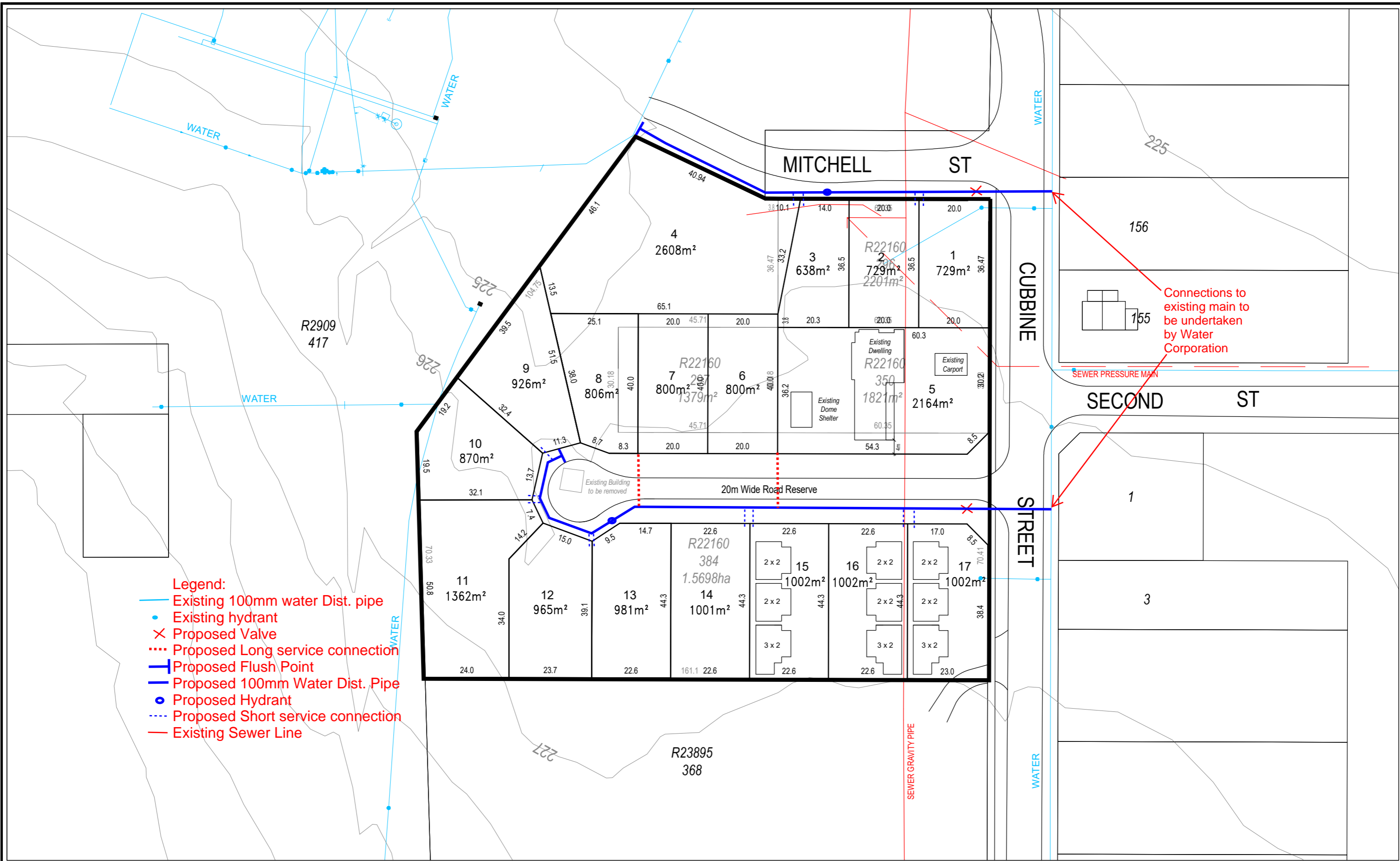
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PLAN & GROUPED DWELLING  
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LOTS 296, 297, 350 & 384 CUBBINE & MITCHELL STREETS  
CUNDERDIN  
Shire of Cunderdin

**Proposed Concept Water Reticulation Plan**



- Legend:**
- Existing 100mm water Dist. pipe
  - Existing hydrant
  - ✕ Proposed Valve
  - ⋯ Proposed Long service connection
  - └ Proposed Flush Point
  - Proposed 100mm Water Dist. Pipe
  - Proposed Hydrant
  - ⋯ Proposed Short service connection
  - Existing Sewer Line

Connections to existing main to be undertaken by Water Corporation

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