# DALMA

# OPERATIONAL WORKS STAGE 2B No. 35701-02B

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2022/1544

Dated: .... 26 April 2023

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

	SC	HEDULE OF	DRAW	INGS		
NUMBER	REV. NO.	TITLE	NUMBER	REV. NO.	TITLE	
GENERAL			RETAINING WALL AND	DETAIL GRADING	•	
35701-02B-000	В	COVER SHEET	35701-02B-450	А	PLAN-SHEET	
35701-02B-005	А	ROAD HIERARCHY & STAGING PLAN	35701-02B-460 35701-02B-461	A	RETAINING WALL DETAILS	
EARTHWORKS: DEMO	LITION PLAN	JIMUNG TEAM	SEWER RETICULATION: SEWER			
35701-02B-020	IA .	PLAN SHEET 01	35701-02B-500	A	PLAN SHEET 01 OF 02	
EARTHWORKS: CUT	AND FILL		35701-02B-500	A	PLAN SHEET 02 OF 02	
35701-02B-040	Α	CUT TO FILL PLAN SHEET 01	35701-02B-501	A	DETAILS SHEET 01	
OF 02		CUT TO FILL PLAN SHEFT	SEWER RETICULATION: PROFILES			
35701-02B-041	Α	02 OF 02	35701-02B-530	Α	PROFILE	
35701-02B-042	A	EARTHWORKS SECTIONS	SEWER RETICULATION	HOUSE CONNECTIONS		
EARTHWORKS: SEDIM	1ENT AND EROSION		35701-02B-550	А	HC PROFILES SHEET	
35701-02B-070	Α	PLAN SHEET 01 OF 02	STORMWATER: DRAINA	AGE		
35701-02B-071	A	PLAN SHEET 02 OF 02	35701-02B-600	В	PLAN SHEET 01	
EARTHWORKS: COMB	INED SERVICES	<u> </u>	STORMWATER: PROFILES			
35701-02B-090	Α	PLAN SHEET 01	3570-02B-620	A	PROFILES	
ROADS: ROADWORKS	;		STORMWATER: PIT DETAILS			
35701-02B-100	Α	PLAN SHEET 01	35701-02B-640	Α	DETAILS	
35701-02B-120	A	DETAILS SHEET 01	STORMWATER: CATCH	MENT PLANS		
ROADS: LONGITUDINA	AL SECTIONS		35701-02B-670	Α	CATCHMENT PLAN	
35701-02B-200	A	MCCREADIE ROAD (02) &	STORMWATER: CALCU	ATION TABLES	Lunion a maion	
ROADS: CROSS SECT	11	ALLORA CRES (03)	35701-02B-680	Α	MINOR & MAJOR CALCULATION TABLES	
RUAUS: CRUSS SECT	IUNS	MCCREADIE ROAD (02) &	WATER: WATER RETIO	ΙΙΙ ΔΤΙΩΝ	TEALCOLATION TABLES	
35701-02B-300	Α	ALLORA CRES (03)	35701-02B-700	A	PLAN	
ROADS: JOINTING DE	TAILS	(	35701-02B-701	A	DETAIL	
35701-02B-410	В	DETAILS PLAN				
ROADS: LINEMARKING	AND SIGNAGE		1			
35701-02B-420	А	PLAN SHEET 01	<u> </u>			





CLIENT

ORMEAU DEVELOPMENT PTY LTD

SUB-CONSULTANTS





Lot 4 RP883725 , LOT 4 DALMA STREET
ORMEAU HILLS
LOCALITY OF ORMEAU
LOCAL AUTHORITY-GOLD COAST CITY COUNCIL



35701-02B-005

A M E N D. Α

Postal Addres

#### NOTE:

CONTRACTOR TO MAKE ALL NECESSARY ALLOWANCES FOR EXISTING SERVICES DURING BULK EARTHWORKS EXCAVATION.

#### **LEGEND**

- EXISTING PROPERTY LINE - EXISTING FENCE EXISTING KERB EXISTING EDGE OF BITUMEN CONTROL LINE / CENTER OF ROAD EXISTING FOOTPATH EXISTING EDGE OF VEGETATION -RM- - FXISTING RISING MAIN — EXISTING SEWER -SW- - EXISTING STORMWATER W100 - EXISTING WATER -G - - EXISTING GAS - E — — EXISTING UNDERGROUND ELECTRICITY <u> ▼ - E - ▼ - EXISTING OVERHEAD ELECTRICITY</u> -T - - EXISTING TELSTRA — — C — — EXISTING COMMUNICATIONS — 1.0 — — FXISTING CONTOURS MAJOR — 1.5 — — EXISTING CONTOURS MINOR ---W--X-W-X--- DEMOLISH WATER

SITE BOUNDARY



PROJECT NAME **DALMA** 

## **OPERATIONAL WORKS**

STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD



ISSUES			DATE			
TEND	ER			XX-XX-XX		
COUN	CIL			24-11-22		
CONS	TRUCTION					
A	24-11-22	COUNCIL I	SSUE			
PRE	DATE			AMEND	MENT	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000. DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

**EXISTING FEATURES** AND DEMOLITION PLAN SHEET 01



MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

Postal Addres

Gold Coast Offic Suite 9, 19 Short S Southport QLD 421

DESIGNED RB APPROVED A.K. MATE RPEQ 4706 DATE 24-11-22

35701-02B-020

DIAL BEFORE YOU DIG www.1100.com.au

1. TOPSOIL STRIPPING

TOPSOIL SHALL BE STRIPPED ACROSS THE ENTIRE LIMIT OF THE EARTHWORKS CUT AND FILL AREAS AND SHALL BE STOCKPILED IN A LOCATION APPROVED BY THE SUPERINTENDENT. THE EXISTING STRATA IS TO BE TREATED IN ACCORDANCE WITH THE SPECIFICATION PRIOR TO PLACING ANY FILL.

2. EARTHWORKS LEVELS

EARTHWORKS LEVELS SHOWN ON DRAWINGS ARE TO FINISHED SURFACE LEVELS AND INCLUDE 100mm OF TOPSOIL.

3. COMPACTION STANDARD

SITE FILLING AND TRENCH BACKFILL SHALL BE COMPACTED TO THE STANDARDS OUTLINED IN THE LOCAL AUTHORITY'S SPECIFICATIONS.

4. PAVEMENT DEPTHS

THE DESIGN PAVEMENT DEPTHS ALLOWED IN EARTHWORKS CALCULATIONS ARE BASED ON THE DEPTHS SHOWN IN THE SCHEDULE OF PAVEMENT DEPTHS. THE PAVEMENT DEPTHS GIVEN ARE DESIGN DEPTHS ONLY AND MAY BE VARIED AFTER SUB GRADE TESTS ARE TAKEN AND AUTHORITY APPROVAL.

5. TESTING AND CERTIFICATION

ALL COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED N.A.T.A.
TESTING AUTHORITY. ALL SITE FILLING SHALL BE TESTED AT LEVEL 1 REQUIREMENTS.
THE CONTRACTOR IS TO PROVIDE ALL REQUIRED EARTHWORKS CERTIFICATIONS IN
ACCORDANCE WITH THE APPROVAL CONDITIONS.

6. TOPSOIL REPLACEMENT

ALL FOOTPATHS, BATTERS AND ALLOTMENT CUT & FILL AREAS SHALL BE TOPSOILED WITH TOPSOIL FROM ONSITE STOCKPILES.

7. GRASSING

ALL CUT/FILL AREAS, DISTURBED AREAS AND TRENCHED AREAS SHALL BE GRASSED TO THE SATISFACTION OF THE SUPERINTENDENT AND AUTHORITY. 8. ROCK

THE CONTRACTOR IS TO INCLUDE ROCK EXCAVATION AS PART OF THEIR EARTHWORKS

9. EARTHWORKS ZONE

THE FOLLOWING ACTIVITIES ARE PROHIBITED OUTSIDE THE EARTHWORKS ZONE STORAGE AND MIXING OF MATERIALS, VEHICLE PARKING, LIQUID DISPOSAL, MACHINERY
REPAIRS/REFUELING, PLACEMENT OF SITE OFFICES OR SHEDS, COMBUSTION OF ANY MATERIAL, STOCKPILING OF SOIL, RUBBLE OR DEBRIS, ANY FILLING OR EXCAVATION INCLUDING TRENCHES, TOPSOIL, SKIMMING AND/OR SURFACE EXCAVATION UNLESS OTHERWISE APPROVED BY THE RELEVANT AUTHORITY.

10. CONSTRUCTION - STOCKPILING

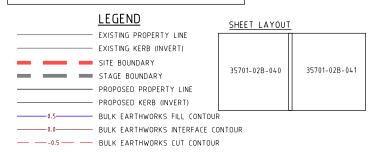
TEMPORARY SILT FENCE TO BE ERECTED 5m FROM TOE OF BATTER ON LOW SIDE OF STOCKPILING. STOCKPILE SITE TO BE CLEAR OF ADJACENT PROPERTY BOUNDARIES SO AS NOT TO CAUSE A NUISANCE TO ADJOINING PROPERTIES. NO STOCKPILES ARE TO BE LOCATED WITHIN THE TREE PROTECTION ZONE, REFER VEGETATION MANAGEMENT PLAN FOR MORE DETAILS. THE CONTRACTOR SHALL NOT CREATE STOCKPILES OF SURPLUS MATERIALS UNLESS DIRECTED BY THE SUPERINTENDENT. ALL MATERIALS ARISING FROM THE WORKS SHALL BE COMPACTED TO FUTURE FILL AREAS AS NOMINATED.

11. TOPSOIL SCREENING

TOPSOIL SHALL BE SCREENED BY THE CONTRACTOR WHEN DIRECTED BY THE SUPERINTENDENT. ALL UNSUITABLE MATERIAL SCREENED FROM THE TOPSOIL WILL BE TAKEN TO AN OFFSITE TIP BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE.

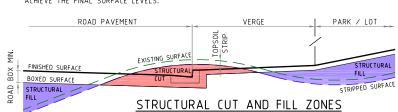
#### NOTE:

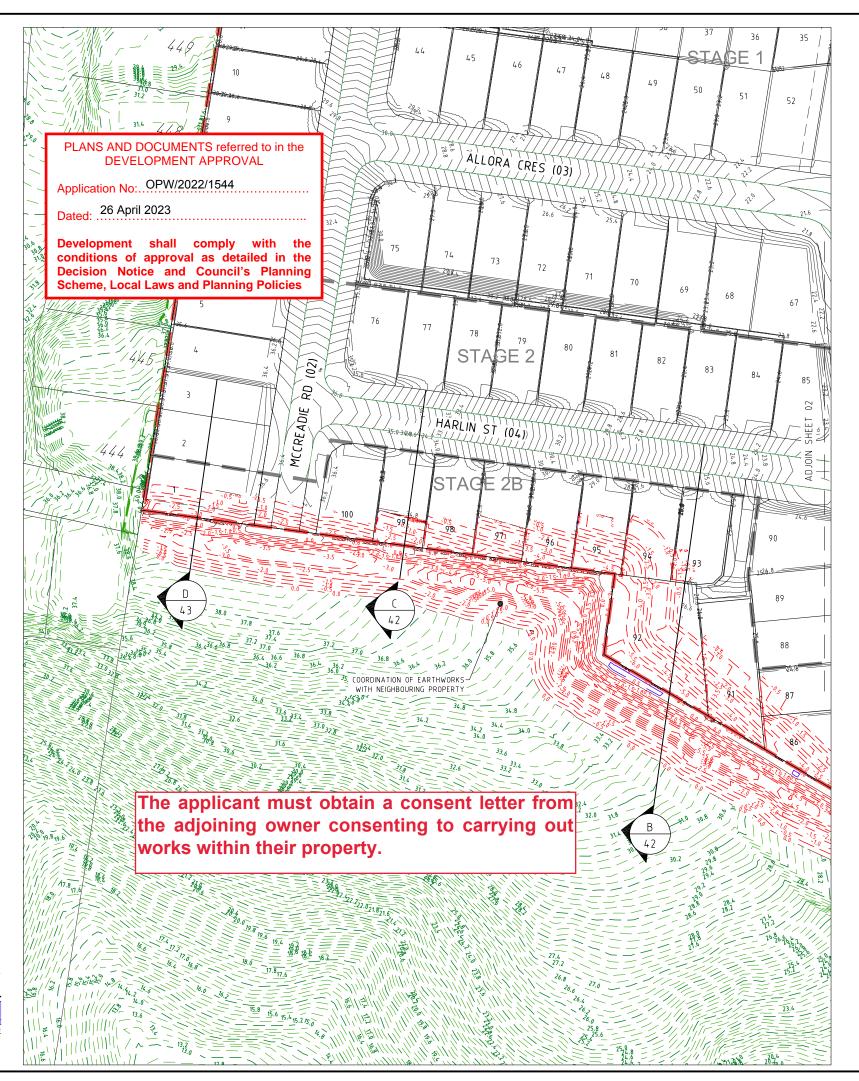
CONTRACTOR TO MAKE ALL NECESSARY ALLOWANCES FOR EXISTING SERVICES DURING ALL WORKS.





- EARTHWORKS VOLUMES ARE APPROXIMATE ONLY, CONTRACTOR TO VERIFY. VOLUMES INDICATE THE STRUCTURAL QUANTITY OF EARTHWORKS, IE BETWEEN THE EXISTING SURFACE STRIP SURFACE AND THE UNDERSIDE OF THE MINIMUM BOX AND UNDERSIDE OF THE TOPSOIL, AS PRESCRIBED IN THE
- CONTRACT DOCUMENTATION. NO ALLOWANCE FOR COMPACTION OR BULKING FACTOR IS INCLUDED. THE CONTRACTOR IS TO VERIFY EXISTING SURFACE AND TOPSOIL
- DISTRIBUTION PRIOR TO SIGNING THE CONTRACT. THE CONTRACTOR IS REQUIRED TO EXPORT / IMPORT AS NEEDED TO ACHIEVE THE FINAL SURFACE LEVELS.





## **DALMA**

**OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD



- 1	ISSUES			DAT	Е	П	
TEND	ER			XX-XX-	xx		
COUN	CIL			24-11-2	2		
CONS	TRUCTION					П	
A	24-11-22	COUNCIL 19	SUE				
PRE	DATE			AMEN	D.M.E	M T	
PKE	DAIL	l		AMEN	ם ויו ט	N I	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000 DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

**EARTHWORKS CUT TO FILL** PLAN SHEET 01 OF 02



MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 iortons@urbansolutions.net.au

Gold Coast Offic Southport QLD 421

#### NOTE:

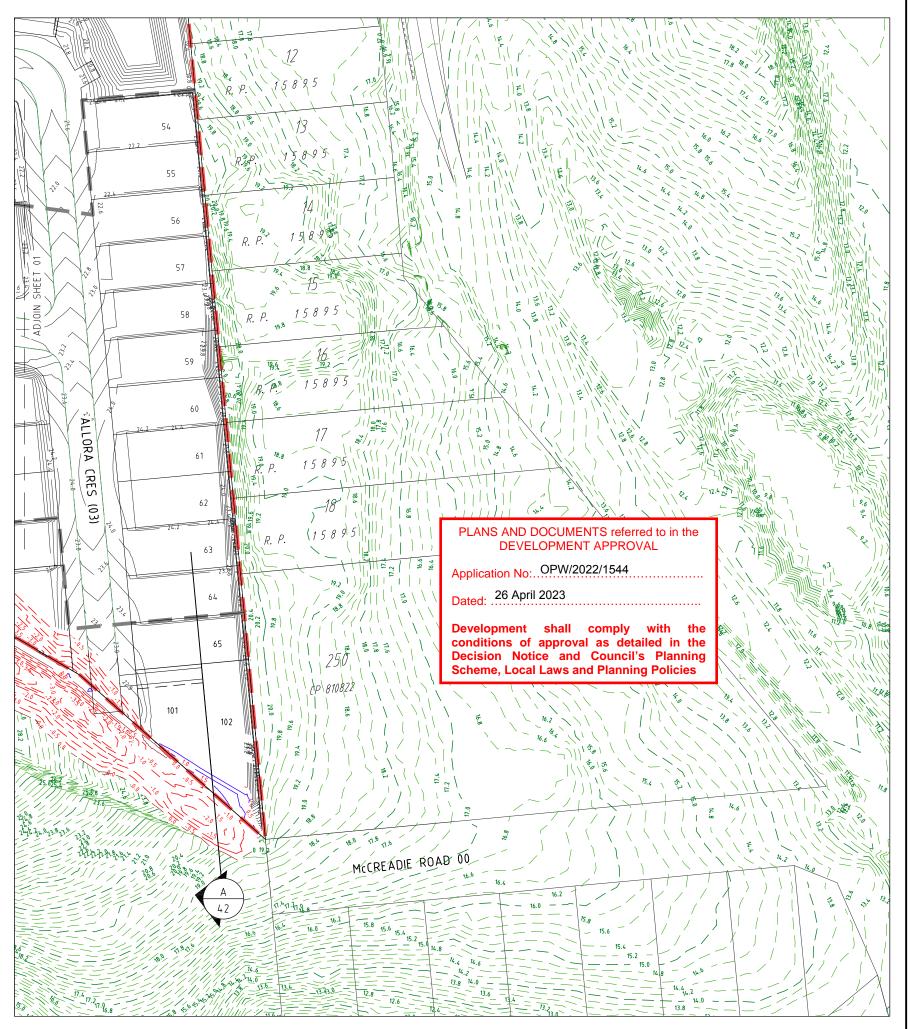
CONTRACTOR TO MAKE ALL NECESSARY ALLOWANCES FOR EXISTING SERVICES DURING ALL WORKS.



#### SHEET LAYOUT

35701-02B-040

35701-02B-041



DALMA

#### OPERATIONAL WORKS STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4
DALMA STREET ORMEAU HILLS
LOCALITY OF ORMEAU
LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

CLIEN

ORMEAU DEVELOPMENTS PTY LTD



0 5 10 15 20 25m Scale 1.500 - A1 (1:1000 - A3)

- 1	SSUE	S		DATE		
TEND	ER			xx-xx-xx		
COUN	CIL			24-11-22		
CONS	TRUCTION					
A	24-11-22	COUNCIL IS	SUE			
D D E	DATE				MENT	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000 .

DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

EARTHWORKS CUT TO FILL PLAN SHEET 02 OF 02



MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

Postal Address PO Box 2484 outhport QLD 4215

Gold Coast Office Suite 9, 19 Short St Southport QLD 4215

Southport C

35701-02B-041

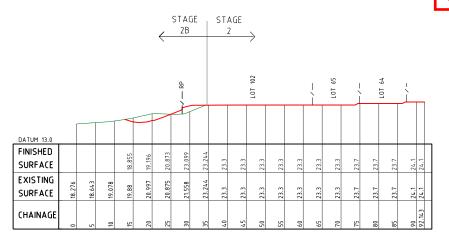
2B-041

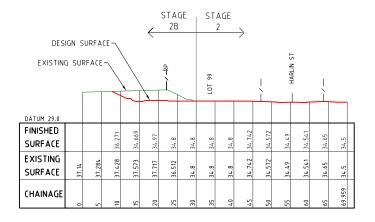
## PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2022/1544

Dated: .... 26 April 2023

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies





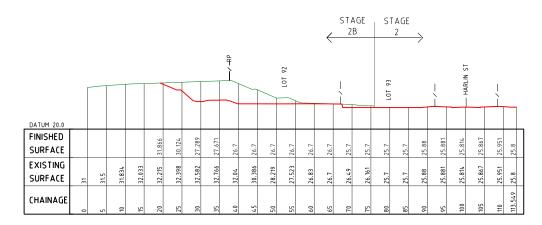
#### LONGITUDINAL SECTION A

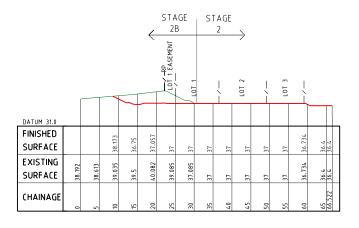
Horizontal scale 1:500 Vertical scale 1:500

#### LONGITUDINAL SECTION C

Horizontal scale 1:500 Vertical scale 1:500

The applicant must obtain a consent letter from the adjoining owner consenting to carrying out works within their property.





#### LONGITUDINAL SECTION B

Horizontal scale 1:500 Ventical scale 1:500 LONGITUDINAL SECTION D

Horizontal scale 1:500

Vertical scale 1:500 Vertical scale 1:500 DALMA

#### OPERATIONAL WORKS STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4

DALMA STREET ORMEAU HILLS

LOCALITY OF ORMEAU

LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

CLIENT

ORMEAU DEVELOPMENTS PTY LTD

0 2.5 5 7.5 10 12.5m

	ISSUES				DATE		
	TEND	TENDER			10-01-20		
Ш	COUN	CIL			30-04-20		
Ш	CONS	TRUCTION					
Ш							
Ш							
Ш							
Ш							
Ш							
Ш							
Ш	A	24-11-22	COUNCIL IS	SUE			
	PRE	DATE			A M E N [	MENT	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000 .

DO NOT SCALE FROM THIS DRAWING.

SOCIATED CONSULTANTS





DRAWING TITLE

EARTHWORKS CUT TO FILL SECTIONS SHEET 01



MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

PO Box 2484 uthport QLD 4215

Α

Gold Coast Office Suite 9, 19 Short St Southport QLD 4215

DESIGNED RB DRAWN JB

APPROVEDM.K. MATE 21-09-22

DRAWING NUMBER

a. ENVIRONMENTAL PROTECTION ACT WITH SPECIFIC REFERENCE TO PARTS \$440G AND \$319 b. STATE PLANNING POLICY

PRESCRIBED WATER CONTAMINANTS (AS DEFINED IN THE ENVIRONMENTAL PROTECTION ACT 1994) MUST NOT BE RELEASED FROM THE SITE OR TO WATERS WITHIN THE SITE, OR BE LIKELY TO BE RELEASED SHOULD RAINFALL OCCUR, UNLESS ALL REASONABLE AND PRACTICABLE MEASURES ARE TAKEN TO PREVENT OR MINIMISE THE RELEASE AND CONCENTRATION OF CONTAMINATION. THE ESC PLAN MUST BE DESIGNED, IMPLEMENTED AND MAINTAINED IN ACCORDANCE WITH "BEST PRACTICE EROSION AND SEDIMENT (ONTROL" PUBLISHED BY THE INTERNATIONAL EROSION (ONTROL ASSOCIATION (AUSTRALASIAN CHAPTER)

TO COMPLY WITH THE REQUIREMENTS OF THE EP ACT AND BEST PRACTICE DESIGN. THE SEDIMENT BASINS ON THE SITE MUST BE DESIGNED AND IMPLEMENTED TO ACHIEVE THE FOLLOWING:

SEDIMENT BASINS ARE TO BE DESIGNED, IMPLEMENTED AND MAINTAINED TO A STANDARD WHICH WOULD ACHIEVE AT LEAST 80% OF THE AVERAGE ANNUAL RUNOFF VOLUME OF THE CONTRIBUTING CATCHMENT TREATED (I.E. 80% HYDROLOGIC EFFECTIVENESS) TO 50MG/L TSS OR LESS AND PH IN

THIS WILL REQUIRE THE INSTALLATION AND OPERATION OF A HIGH-EFFICIENCY SEDIMENT BASIN(S)
DESIGNED IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED IN THE "BEST PRACTICE EROSION AND SEDIMENT CONTROL - APPENDIX B SEDIMENT BASIN DESIGN AND OPERATION" PUBLISHED BY THE INTERNATIONAL EROSION CONTROL ASSOCIATION (AUSTRALASIAN CHAPTER) (IECA, 2016, DRAFT)

THE EROSION AND SEDIMENT CONTROL PLAN MUST BE PREPARED AND CERTIFIED BY A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL AND FOLLOW THE REQUIREMENTS OUTLINED IN IECA'S BEST PRACTICE EROSION AND SEDIMENT CONTROL DOCUMENT AND THE QUEENSLAND URBAN DRAINAGE

PRIOR TO THE COMMENCEMENT OF WORKS ONSITE THE CONTRACTOR MUST MAKE THEMSELVES AWARE OF ALL PREVIOUS GEOTECHNICAL REPORTS AND DETERMINE THE DISPERSIVE CHARACTERISTICS OF THE SOIL (INCLUDING PERFORMING ANY SOIL TESTS IF REQUIRED). THE RESULTS OF THIS REVIEW AND ANY TESTS MUST BE INCLUDED IN THE CONTRACTOR'S EROSION AND SEDIMENT CONTROL PLAN. A COPY OF ALL TEST RESULTS MUST BE PROVIDED TO THE SUPERINTENDENT.

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONTROL EROSION AND DOWNSTREAM SEDIMENTATION DURING ALL STAGES OF CONSTRUCTION (INCLUDING THE MAINTENANCE PERIOD). NOTWITHSTANDING THE CONTROL MEASURES OR FINISHED EARTHWORKS DESIGN SHOWN ON THESE DRAWINGS, THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING ADDITIONAL OR ALTERNATIVE EROSION

& SEDIMENT CONTROL MEASURES TO MINIMISE SEDIMENT ACROSS OR LEAVING THE SITE. AT ALL TIMES THE CONTRACTOR SHALL MONITOR THE PREVAILING WEATHER CONDITIONS (INCLUDING WEEKENDS AND PUBLIC HOLIDAYS) AND AT ALL TIMES REMAINS RESPONSIBLE TO:

a) CLEAN AND REPAIR CONTROL DEVICES WHENEVER THE ACCUMULATED SEDIMENT REDUCES THEIR

CAPACITY BY 50%.
MAINTAIN POSITIVE GRADES OF ALL PERIMETER BANKS AND SWALES TO AN OUTLET.

- PROTECT ANY DOWNSTREAM CONSTRUCTION.
- CONTROLLING DUST.
- MEASURES HAVE BEEN INSTALLED IN ACCORDANCE WITH DETAILS OUTLINED IN THEIR EROSION AND SEDIMENT CONTROL PLAN AND AS DIRECTED BY THE SUPERINTENDENT.
- THE CONTRACTOR'S PLAN SHALL ALLOW FOR SUITABLE ACCESS TO ALLOW MAINTENANCE OF ALL SEDIMENT CONTROL DEVICES. NO ADDITIONAL VEGETATION CLEARING IS PERMITTED FOR GAINING ACCESS UNLESS APPROVED BY THE SUPERINTENDENT.
- THE CONTRACTOR MAY REQUIEST APPROVAL FROM THE SUPERINTENDENT TO REUSE THE STOCKPULED MULCH FOR STABILISING BATTERS ONLY IN LOCATIONS WHERE THE APPROVED LANDSCAPE OPW DESIGN REQUIRES MULCH ULTIMATELY CONSTRUCTION STOCKPILING
- TOPSOIL SHALL BE STRIPPED AND STOCKPILED IN LOCATIONS NOMINATED ON THE CONSTRUCTION DRAWINGS OR IN LOCATIONS AGREED WITH THE SUPERINTENDENT.
- ADDITIONAL VEGETATION CLEARING IS NOT PERMITTED TO FACILITATE THE STOCKPILING OF MATERIALS UNLESS SHOWN ON THE APPROVED VEGETATION MANAGEMENT PLAN.
- ANY STOCKPILE SITE MUST BE CLEAR OF ADJACENT PROPERTY BOUNDARIES SO AS NOT TO CAUSE A NUISANCE TO ADJOINING PROPERTIES.
- A NOSANCE TO ADJUNING PROPERTIES.

  NO STOCKPILES ARE TO BE LOCATED WITHIN THE TREE PROTECTION ZONE OF VEGETATION.

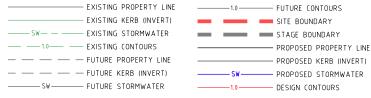
  A TEMPORARY SILT FENCE IS TO BE ERECTED APPROXIMATELY 5m FROM TOE OF BATTER ON LOW
- SIDE OF STOCKPILING.

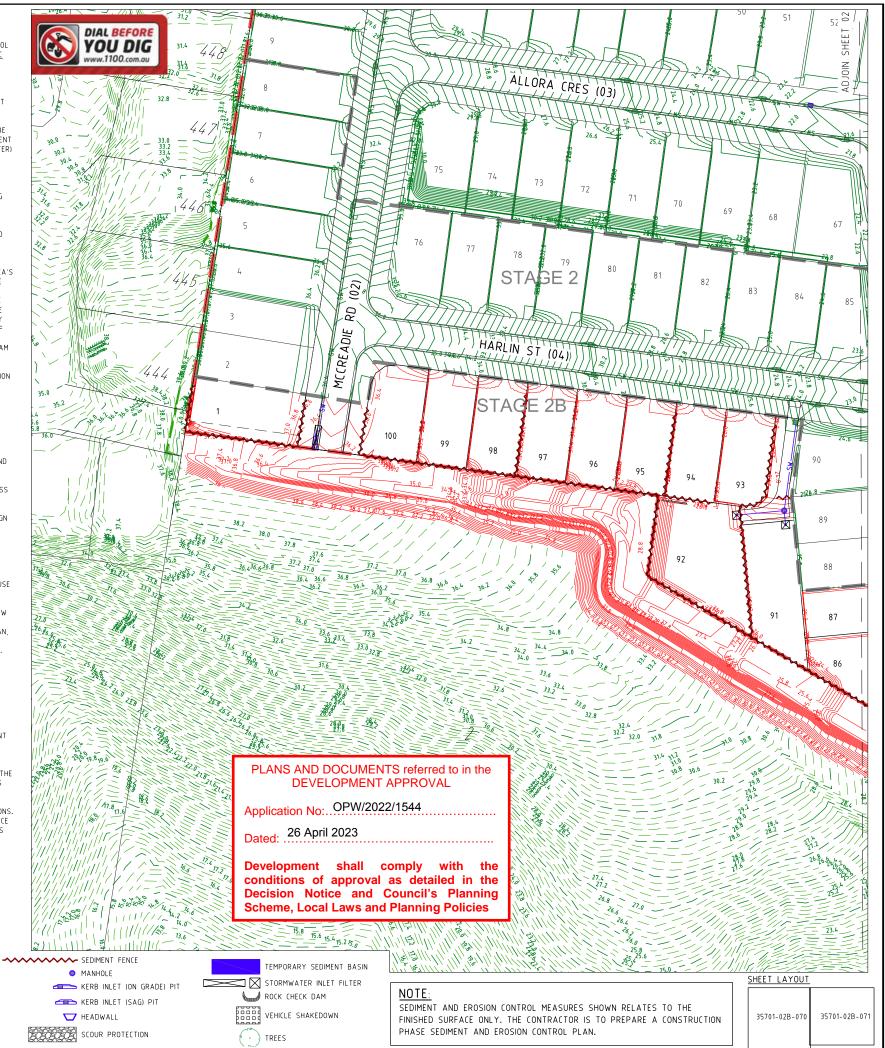
  10. NOTWITHSTANDING THE DETAILS SHOWN IN THE CONTRACTOR'S EROSION AND SEDIMENT CONTROL PLAN,
- DURING CONSTRUCTION THE CONTRACTOR MUST:
  a) SIZE ALL TEMPORARY SEDIMENT BASINS APPROPRIATELY TO TREAT THE UPSTREAM CATCHMENT.
- NOTE THAT THE PERMANENT BIO BASINS SHOWN ON THESE DRAWINGS ARE SIZED FOR THE ULTIMATE CATCHMENT NOT FOR THE CONSTRUCTION PHASE.
- PLACE A ROCK BUND AROUND ALL HEADWALLS DURING CONSTRUCTION.
- PROVIDE KERR INLET PROTECTION TO ALL GUILLIES
- PLACE A MINIMUM 1.0m WIDE TURF STRIP BEHIND ALL KERBS AND IN A HERRINGBONE LAYOUT WITHIN THE ROAD VERGE
- MAINTENANCE (INCLUDING FLOCCULATION IF REQUIRED AND PUMP OUT) OF ALL CONSTRUCTION
- SEDIMENT BASINS (WHETHER EXISTING OR NEW). CLEAN OUT OF ALL GROSS POLLUTANT TRAPS, SEDIMENT FOREBAYS AND ALL OTHER PERMANENT SEDIMENT CONTROL DEVICES AT BOTH ON AND OFF MAINTENANCE.
  CONTRACTOR TO CONFIRM THE EXTENTS OF REQUIRED GRASSING TREATMENTS WITH THE
- SUPERINTENDENT AT LEAST 7 DAYS PRIOR TO FINAL TRIMMING.

  12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT GRASSING STRIKE RATES ARE ACHIEVED AT THE ON AND OFF MAINTENANCE INSPECTIONS IN ACCORDANCE WITH COUNCIL REQUIREMENTS. THIS INCLUDES
  THE SUPPLY AND INSTALLATION OF ANY REQUIRED CHEMICAL/FERTILISER AMELIORATION TO ACHIEVE THE SPECIFIED GRASS STRIKE RATES.

  13. GEOFABRIC LINING OF CHANNELS AND CHECK DAMS MAY BE REQUIRED SUBJECT TO THE SITE CONDITIONS.
- BATTERS WITHIN PUBLIC OPEN SPACE TO BE VEGETATED IN ACCORDANCE WITH APPROVED OPEN SPACE MANAGEMENT PLAN AND LANDSCAPING OPW. CONTRACT DOCUMENTATION WILL SPECIFY WHETHER THIS THE CIVIL CONTRACTOR OR THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO SUPPLY AND INSTALL. THE CIVIL CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUITABLE ACCESS FOR THE
- LANDSCAPE CONTRACTOR TO PERFORM THEIR WORKS. 15. MAINTENANCE PERIOD (PRE TO POST CONSTRUCTION)
- ALL PROTECTION MEASURES ARE TO BE INSPECTED AND MAINTAINED REGULARLY
- REPAIRS ARE TO BE EFFECTED IMMEDIATELY. SILT AFTER RAIN IS TO BE CLEANED FROM STREETS AND ALLOTMENTS IMMEDIATELY AND
- CORRECTIVE ACTION TAKEN TO AVOID A RE-OCCURRENCE.
  AT OFF-MAINTENANCE AND ONLY WHEN DIRECTED BY COUNCIL, REMOVE AND DISPOSE OFFSITE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.

#### LEGEND





PROJECT NAME

## **DALMA**

#### **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD



ISSUES		s		DATE		
TEND	ER			xx-xx-xx		
COUNCIL				24-11-22		
CONS	TRUCTION					
Α	24-11-22	COUNCIL IS:	SUE			
PRE	DATE			AMENO	MENT	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000 DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

FINAL SURFACE AND SEDIMENT AND EROSION PLAN SHEET 01 OF 02



MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 ortons@urbansolutions.net.au

Postal Addres Gold Coast Offic

Southport QLD 421

DESIGNED RB APPROVEDANK MATE RPEQ 4706 DATE 24-11-22 35701-02B-070 Α

— EXISTING CONTOURS - FUTURE PROPERTY LINE - FUTURE KERB (INVERT)

- FUTURE STORMWATER — FUTURE CONTOURS

SITE BOUNDARY STAGE BOUNDARY - PROPOSED PROPERTY LINE

- PROPOSED KERB (INVERT) --- PROPOSED STORMWATER

—1.0 — DESIGN CONTOURS 

MANHOLE

KERB INLET (ON GRADE) PIT KERB INLET (SAG) PIT

T HEADWALL

SCOUR PROTECTION

TEMPORARY SEDIMENT BASIN STORMWATER INLET FILTER ROCK CHECK DAM

VEHICLE SHAKEDOWN

TREES

SHEET LAYOUT

35701-02B-071 35701-02B-070

PLANS AND DOCUMENTS referred to in the

Application No: OPW/2022/1544

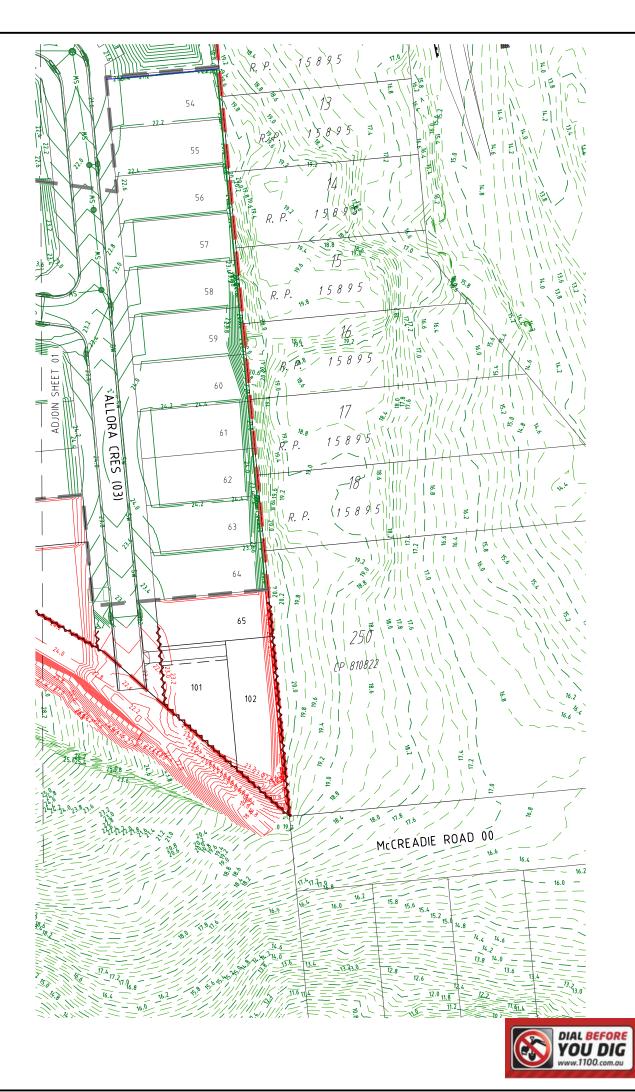
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning

**DEVELOPMENT APPROVAL** 

Dated: ..... 26 April 2023

**Scheme, Local Laws and Planning Policies** 

SEDIMENT AND EROSION CONTROL MEASURES SHOWN RELATES TO THE FINISHED SURFACE ONLY. THE CONTRACTOR IS TO PREPARE A CONSTRUCTION PHASE SEDIMENT AND EROSION CONTROL PLAN.



PROJECT NAME **DALMA** 

### **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4
DALMA STREET ORMEAU HILLS
LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD



П	ISSUES			DAT	E		
П	TENDER			XX-XX->	(X		
П	COUN	CIL			24-11-2	2	
П	CONSTRUCTION						
П							
П							
П							
П							
П							
П							
П							
П							
П							
П	Α	24-11-22	COUNCIL	ISSUE			
l	PRE	DATE			AMEN	DMENT	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000 DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

FINAL SURFACE AND SEDIMENT AND EROSION PLAN SHEET 02 OF 02



MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065

mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088 Gold Coast Office

Suite 9, 19 Short S Southport QLD 421 DESIGNED RB

35701-02B-071

Postal Addres

CONSTRUCTION OF SEWER/ROOFWATER/STORMWATER/SERVICES EXCAVATED MATERIAL TO BE PLACED ON HIGH SIDE OF TRENCH AND TO PROTECT PIPE WORK AND

DIRECT SURFACE MATERIAL AWAY FROM DIRECT SURFACE MATERIAL AWAY FROM EXCAVATIONS.
TOPSOIL AND GRASS SEED AREAS IN ALLOTMENTS IMMEDIATELY AFTER COMPLETING THE SEWER AND ROOFWATER DRAINAGE CONSTRUCTION. DEPRESS GROUND AROUND TEMPORARY FIELD INLETS TO CREATE SILT POND.

INLETS TO CREATE SILT POND.

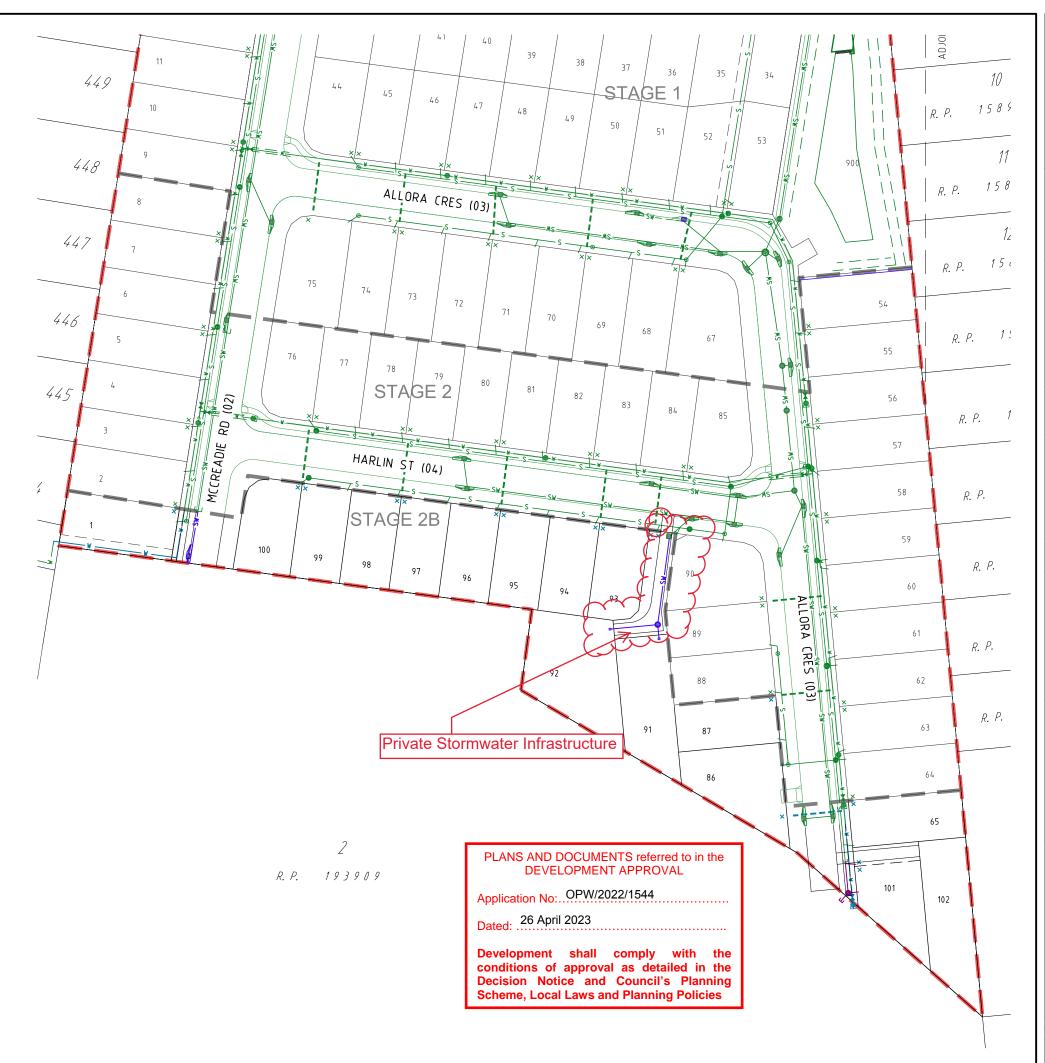
2. TRIP HAZARD

MANHOLES OR STRUCTURES INSTALLED IN THE
ROAD, FOOTPATH OR VERGE MUST MATCH NEATLY
WITH NO TRIP HAZARD.

3. EXISTING SERVICES - EXTERNAL WORKS
THE LOCATIONS OF ALL EXISTING SERVICES WITHIN
THE WORK AREA SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION COMMENCING.
IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE RELEVANT AUTHORITIES AND TO ENSURE THAT THE EXISTING SERVICES ARE NOT DAMAGED OR DISTURBED IN ANY WAY.

#### **LEGEND**

	EXISTING PROPERTY LINE
	EXISTING KERB (INVERT)
	EXISTING FOOTPATH
DM DM	EVICTING DIGING MAIN
	EXISTING RESING FIAIN
SW SW	EXISTING SEWER
	EXISTING STORMWATER
	EXISTING ROOFWATER
ssss	EXISTING SUBSOIL
	EXISTING WATER
	FXISTING WATER
	FXISTING WATER
	EXISTING WATER CONDUIT
	PROPOSED PROPERTY LINE
	PROPOSED KERB (INVERT)
	PROPOSED FOOTDATH
	PRUPUSED FUUTPATH
	PROPOSED RISING MAIN
s	- PROPOSED SEWER
SW	PROPOSED STORMWATER
	PROPOSED ROOFWATER
ss	PROPOSED SUBSOIL
	PROPOSED WATER
	PROPOSED WATER
	PROPOSED WATER
	- PROPOSED WATER - PROPOSED WATER - PROPOSED WATER
	DDODOSED WATER
	DDODOCED WATER
	PROPOSED WATER CONDUIT
	FUTURE PROPERTY LINE
	FUTURE KERB (INVERT)
	FUTURE FOOTPATH
	FUTURE RISING MAIN
s	FUTURE SEWER
SW	FUTURE STORMWATER
RW	FUTURE ROOFWATER
SS	FUTURE SUBSOIL
	FUTURE WATER
	FUTURE WATER
	FIITUDE WATED
	FUTURE WATER
	FUTURE WATER CONDUIT
	SITE BOUNDARY
	STAGE BOUNDARY





PROJECT NAME **DALMA** 

#### **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD



1.	SSUE	S		DATE		
TEND	ER			XX-XX-XX		
COUN	COUNCIL			24-11-22		
CONS	TRUCTION					
Α	24-11-22	COUNCIL	ISSUE			
PRE	DATE			AMEND	MENT	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000. DO NOT SCALE FROM THIS DRAWING.



ASSOCIATED CONSULTANTS



DRAWING TITLE

COMBINED SERVICES PLAN SHEET 01



Postal Addres

MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

Gold Coast Office

Α

Suite 9, 19 Short S Southport QLD 421 DESIGNED RB

APPROVEDA.K. MOTO RPEQ 4706 DATE 24-11-22

PAVEMENT DEPTHS

a) THE DESIGN PAVEMENT DEPTHS ALLOWED IN EARTHWORKS CALCULATIONS ARE BASED ON THE DEPTHS SHOWN IN THE SCHEDULE OF PAVEMENT DEPTHS ON DRAWING 120. b) THE PAVEMENT DEPTHS GIVEN ARE DESIGN DEPTHS

ONLY AND MAY BE VARIED AFTER SUB-GRADE TESTS
ARE TAKEN. THE CONTRACTOR IS TO PROVIDE THE
SUPERINTENDENT A SUBGRADE C.B.R. REPORT PREPARED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER.

ENGINEER.

THE SUPERINTENDENT WILL COORDINATE THE
AUTHORITIES APPROVAL OF THE PAVEMENT DESIGN.

REFER TO DWG. 120 FOR TYPICAL ROAD SECTIONS.

ALL COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED N.A.T.A. TESTING AUTHORITY. ALL SITE FILLING SHALL BE TESTED AT LEVEL 1 REQUIREMENTS.

SUBSOIL DRAINS
SUBSOIL DRAINS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL AUTHORITY'S SPECIFICATIONS. SUBSOIL DRAINS SHALL BE PLACED UNDER ALL KERB STRUCTURES AND ARE TO BE CONSTRUCTED TO A DEPTH GREATER THAN THAT OF THE INVERT OF THE DEEPEST SERVICE CROSSING.

MITRE DRAINS MITRE DRAINS ARE TO BE CONSTRUCTED ALONG THE CUT/FILL INTERFACE AND SAG/LOW POINTS OF ALL ROADS. CONTRACTOR TO REQUEST DIRECTION FROM SUPERINTENDENT WHETHER TO INSTALL MITRE DRAIN AT ROCK ENCOUNTERED IN SUBGRADE. ALL MITRE DRAINS MUST BE FREE DRAINING AND TIE INTO THE ADJACENT SUBSOIL DRAINS.

5. ROCK THE CONTRACTOR IS TO INCLUDE ROCK EXCAVATION AS PART OF THEIR RATES.

6. TURF 1.0m TURF STRIP TO BE INSTALLED BEHIND THE BACK OF ALL KERBS. A PERPENDICULAR TURF STRIP AT MAXIMUM 10m INCREMENTS MUST BE INSTALLED TO FULL VERGE WIDTH FOR SEDIMENT AND EROSION CONTROL PURPOSES.

7. KERBS
ALL KERBS TO BE CONSTRUCTED IN ACCORDANCE WITH

AUTHORITY STANDARDS

8. PAVEMENT TIE-IN
PAVEMENT TIE-IN TO BE IN ACCORDANCE WITH DWG. 120

#### LEGEND

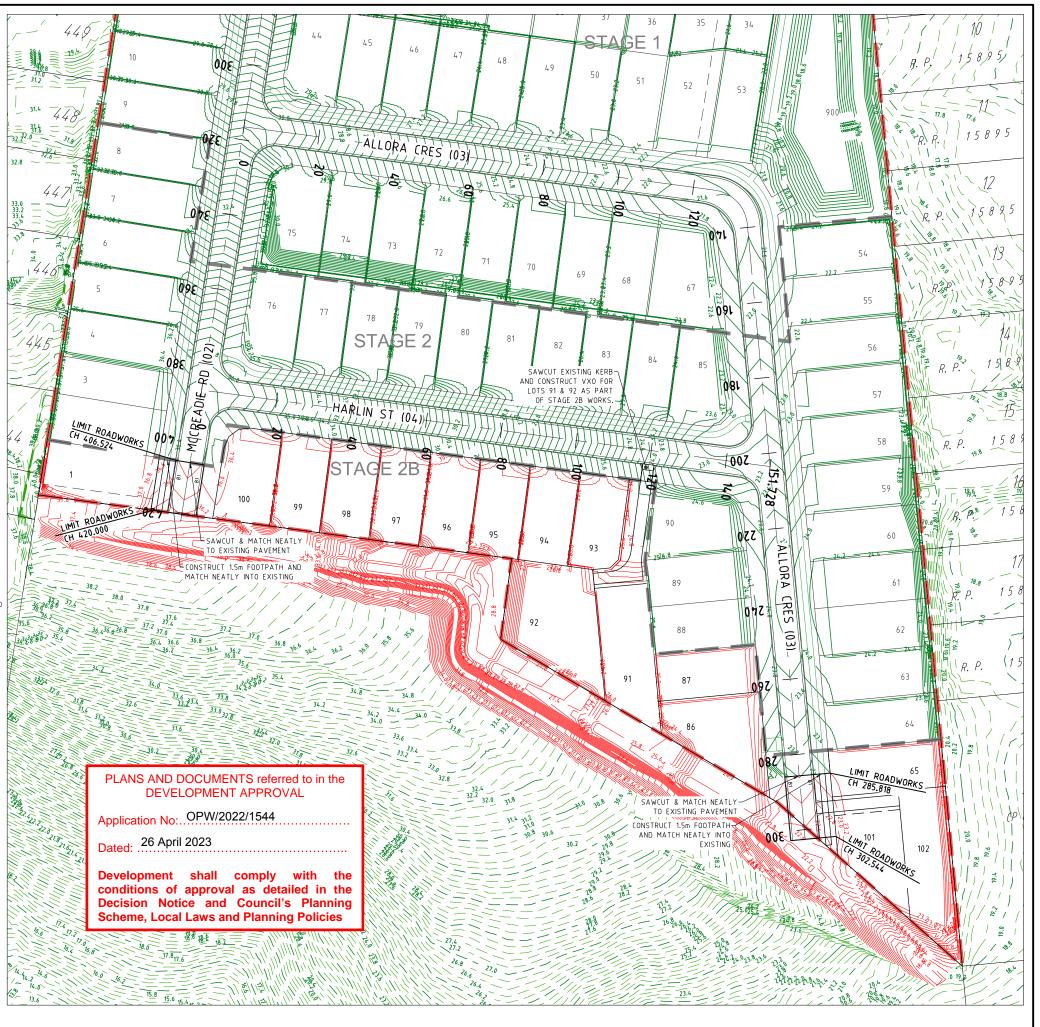
EXISTING KERB (INVERT) - FXISTING KERR (LIP & BACK) EXISTING FOOTPATH - FXISTING PROPERTY LINE - EXISTING CONTOURS - FUTURE KERB - FUTURE FOOTPATH - FUTURE PROPERTY LINE - FUTURE CONTOURS CONTROL LINE / CENTER OF ROAD - PROPOSED KERB (INVERT) - PROPOSED KERB (LIP & BACK) - PROPOSED FOOTPATH - PROPOSED PROPERTY LINE SITE BOUNDARY STAGE BOUNDARY — DESIGN CONTOURS

> PROPOSED CONCRETE — 41.065 CENTRELINE CHAINAGE

#### KERB TYPE NOTE:

120 S 2 gg B1 BARRIER KERB & CHANNEL





PROJECT NAME

## **DALMA**

#### **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD



ISSUES			DATE			
TENDER			XX-XX-XX			
COUN	CIL			24-11-22		
CONS	TRUCTION					
A	24-11-22	COUNCIL IS	SUE			
PRE	DATE			AMEND	MENT	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000. DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

**ROADWORKS** PLAN SHEET 01



MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 nortons@urbansolutions.net.au

Postal Addres

Gold Coast Offic Suite 9, 19 Short S Southport QLD 421

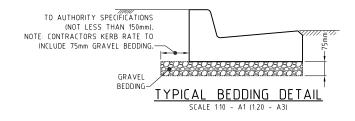
DESIGNED RB APPROVEDALK MATE 24-11-22

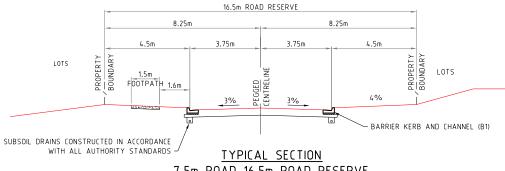
35701-02B-100

Α

SCHEDULE OF PAVEMENT DEPTHS							
ROAD NAME	SURFACING	BASE	SUB-BASE	LOWER SUB-BASE	CLASSIFICATION	DESA OR VPD	DESIGN GUIDE
MCCREADIE ROAD (02), ALLORA CRES (03),	25mm DG10	100mm TYPE 2.1 (CBR 60)	100mm TYPE 2.3 (CBR 35)	100mm TYPE 2.5 (CBR 15)	RESIDENTIAL ACCESS ST	401-750 VPD	COUNCIL TABLE 2.11

NOTE: THE PAVEMENT DEPTHS ARE GIVEN AS A GUIDE ONLY AND FINAL PAVEMENT DESIGN WILL BE DETERMINED AFTER CBR TESTING IS UNDERTAKEN, AND COUNCIL HAVE APPROVED THE DESIGN. PLEASE NOTE CBR10 IS MAXIMUM INSITU CBR VALUE.





7.5m ROAD-16.5m ROAD RESERVE MCCREADIE ROAD (02), ALLORA CRES (03)

SCALE 1:100 - A1 (1:200 - A3)

SCHEDULE OF KERB TYPES						
KERB TYPE	IMAGE	REFERENCE				
B1						
B2						
SM3		IPWEA DWG. RS-080				
ER2	Namana	NOTE: SUBSOIL DRAINS				
M3		TO BE PLACED UNDER ALL KERBS.				
M6	mana					
CHANNEL 900						

PLANS AND DOCUMENTS referred to in the **DEVELOPMENT APPROVAL** 

Application No: OPW/2022/1544

Dated: .... 26 April 2023

Development shall comply with the conditions of approval as detailed in the **Decision Notice and Council's Planning** Scheme, Local Laws and Planning Policies

PROJECT NAME

## **DALMA**

**OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4
DALMA STREET ORMEAU HILLS
LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD

0 0.1 0.2 0.3 0.4 0.5m Scale 1:10 - A1 (1:20 - A3) 0 0.2 0.4 0.6 0.8 1.0m Scale 1:20 - A1 (1:40 - A3) 0.5 1.0 1.5 2.0 2.5m Scale 1:100 - A1 (1:200 - A3)

ISSUES			DATE			
TEND	TENDER			XX-XX-XX		
COUN	COUNCIL			24-11-22		
CONS	CONSTRUCTION					
Α	24-11-22	COUNCIL	ISSUE			
DDF	DATE			AMEND	MENT	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000. DO NOT SCALE FROM THIS DRAWING.

ASSOCIATED CONSULTANTS





DRAWING TITLE

ROADWORKS DETAILS



mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

Gold Coast Office Suite 9, 19 Short S Southport QLD 4219

DESIGNED RB APPROVEDALK. MOTE RPEQ 4706 DATE 24-11-22

35701-02B-120

DRAWING NUMBER

A M E N D. Α

#### LONGITUDINAL SECTION MCCREADIE RD (02)

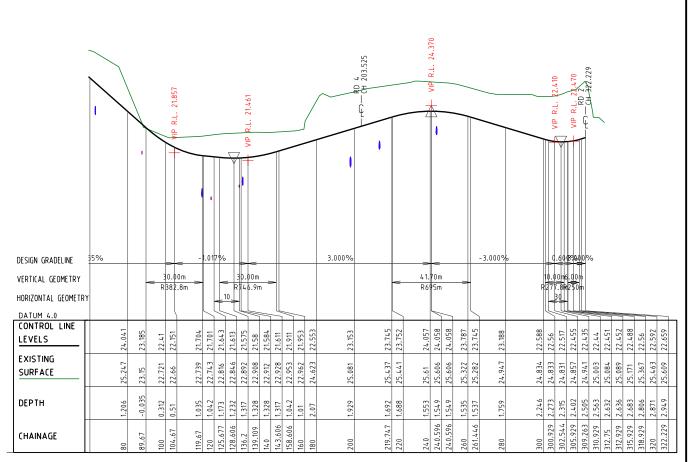
#### PLANS AND DOCUMENTS referred to in the **DEVELOPMENT APPROVAL**

Application No: OPW/2022/1544

Dated: ..... 26 April 2023

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

STAGE 1	STAGE 2	STAGE 2B FUTURE
	172.765	302.544
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	



LONGITUDINAL SECTION ALLORA CRES (03)

PROJECT NAME **DALMA** 

#### **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4
DALMA STREET ORMEAU HILLS
LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD

Horiz. Scale 1:500 - A1 (1:1000 - A3 0 1 2 3 4 5m	0 9	5 10	15	20	25m	
0 1 2 3 4 5m	Horiz.	Scale	1:500	- A1	(1:1000	- A
	0 1	1 2	3	4	5m	

- 1	SSUE	5   D	ATE	
TEND	ER	xx-	-xx-xx	
COUN	ICIL	24	-11-22	
CONS	TRUCTION			
Α	24-11-22	COUNCIL ISSUE		
PRE	DATE	A A	1 E N D M E N T	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000 DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

LONGITUDINAL SECTIONS MCCREADIE ROAD (02) & ALLORA CRES (03)

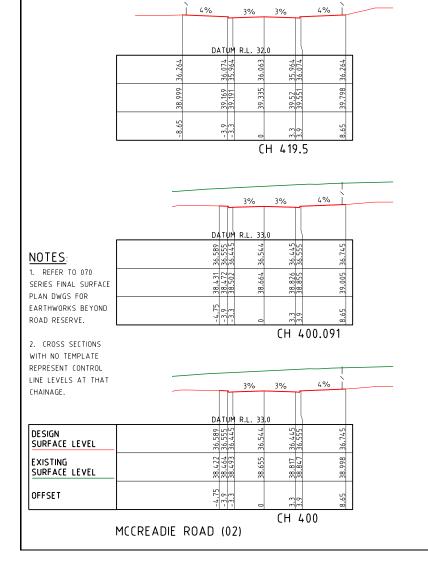


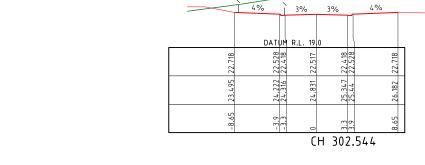
MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065

Postal Addres Gold Coast Office

mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

Suite 9, 19 Short S Southport QLD 421 DESIGNED RB





PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Development shall comply with the conditions of approval as detailed in the

**Decision Notice and Council's Planning** 

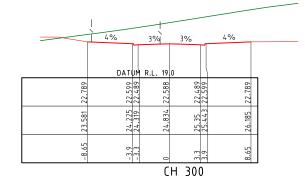
Scheme, Local Laws and Planning Policies

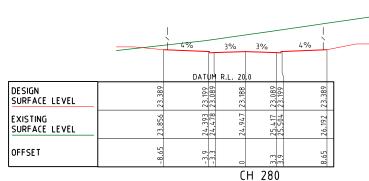
Application No: OPW/2022/1544

Dated: .... 26 April 2023

DATUM R.L. 1910 24.224 24.318 9.7

CH 300.929





ALLORA CRES (03)

PROJECT NAME **DALMA** 

### **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4
DALMA STREET ORMEAU HILLS
LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD

ISSUES			DATE	
TENDER COUNCIL CONSTRUCTION			XX-XX-XX	
			24-11-22	

PRE DATE AMENDMENT COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000 DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

CROSS SECTIONS MCCREADIE ROAD (02) ALLORA CRES (03)



MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

Gold Coast Office Suite 9, 19 Short S Southport QLD 4219

Α

DESIGNED RB APPROVEDA.K. MOTO RPEQ 4706 DATE 24-11-22

#### 1. CONCRETE MIX

THE CONCRETE SHALL HAVE A MINIMUM 28 DAY CHARACTERISTIC COMPRESSIVE STRENGTH AS SPECIFIED IN THE SCHEDULE OF CONCRETE PAVEMENTS TABLE MAXIMUM WATER/CEMENT RATIO OF 0.45 AND A MINIMUM CEMENT CONTENT OF 300kg/m³.

#### 2. SUBGRADE PREPARATION

THE SUBGRADE TO THE CONCRETE PAVEMENT AREAS SHALL BE PREPARED THE SAME AS CONVENTIONAL ROADS. REFER TO SCHEDULE OF CONCRETE PAVEMENTS TABLE.

#### 3. TRAFFIC

TRAFFIC SHALL NOT BE ALLOWED ON THE FINISHED CONCRETE PAVEMENT FOR AT LEAST 14 DAYS AFTER COMPLETION OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING MEASURES TO PREVENT UNAUTHORISED ACCESS.

#### 4. JOINTS

ALL JOINTS SHALL BE LOCATED GENERALLY PERPENDICULAR TO THE CENTRELINE. ALL CONTROL JOINTS TO BE COMPLETED AS SOON AS CONCRETE HAS CURED SUFFICIENTLY SO AS NOT TO DAMAGE THE SLAB SURFACE.

ALL JOINTS ARE TO BE INSTALLED AS DETAILED ON IPWEAD STD DWG RS-065.

#### 5. GENERAL

THE GRAVEL PAVEMENT SHALL BE NEATLY PROFILED AND TRIMMED TO ENSURE CONSTANT CONCRETE DEPTHS AND PROFILES ACTUAL CONSTRUCTION REQUIREMENTS MAY VARY FROM THE DETAILS SHOWN AND THEREFORE ALL CONSTRUCTION DETAILS SHOULD BE VERIFIED BY THE SUPERINTENDENT PRIOR TO CONSTRUCTION COMMENCING. PROVIDE ABELFLEX BETWEEN KERB AND DRIVEWAY.

#### 6. COMPLIANCE STANDARDS

SLIP RESISTANCE OF SURFACE MATERIALS IN ACCORDANCE WITH AUSTRALIAN STANDARDS. AS/NZS 4586: 2013 SLIP RESISTANCE OF NEW

PEDESTRIAN SURFACE MATERIALS. AS/NZS 4663: 2013 SLIP RESISTANCE MEASUREMENT OF

EXISTING PEDESTRIAN SURFACES HB:A:A 197: 1999 "AN INTRODUCTORY GUIDE TO THE SLIP RESISTANCE OF PEDESTRIAN SURFACE MATERIALS"

#### LEGEND EXISTING PROPERTY LINE

EXISTING KERR - FUTURE KERB — — — — FUTURE PROPERTY LINE PROPERTY LINE - FACE OF KERB, FOOTPATHS LIP AND BACK OF KERB

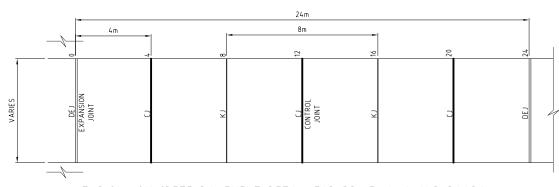
- - CONTROL LINE / CENTER OF ROAD = EJ ===== FXPANSION JOINT

\_\_\_\_DEJ\_\_\_\_\_ DOWELED EXPANSION JOINT -IJ ---- ISOLATION JOINT

— — ·SJ — — SAW JOINT - CJ ---- CONTROL JOINT - CONTROL JOINT





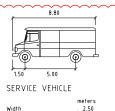


TYPICAL CONCRETE PAVEMENT DETAIL FOR DRIVEWAYS AND ROADS

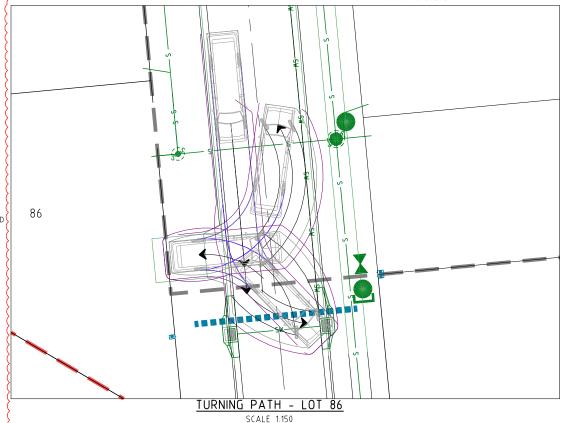
SCALE 1:50 - A1 (1:100 - A3)

SCHEDULE OF CONCRETE PAVEMENTS									
FUNCTION	SURFACING	SUBGRADE PREPARATION	THICKNESS 'T'	STRENGTH	REINCORCING				
DRIVEWAY 3m WIDE	BROOM FINISH	50mm SAND BLINDING LAYER OR 100mm (CBR 15)	150mm	32 mPa	SL 82 MESH				

NOTE: FOOTPATH JOINTING TO BE IN ACCORDANCE WITH IPWEAD DRG RS-065



Lock to Lock Time Steering Angle



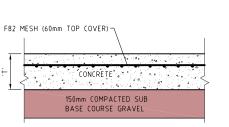
Application No: OPW/2022/1544 Dated: .... 26 April 2023 Development shall comply with the conditions of approval as detailed in the **Decision Notice and Council's Planning** Scheme, Local Laws and Planning Policies 93 DRIVEWAY TO LOTS 91 & 92

1 x Y12 EACH SIDE OF JOINT

DOWELLED AT 300mm CENTRE

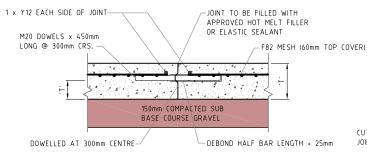
PLANS AND DOCUMENTS referred to in the

**DEVELOPMENT APPROVAL** 

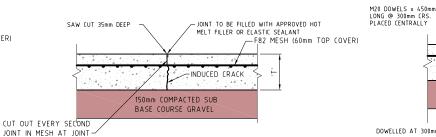


TYPICAL BROOM FINISHED CONCRETE PAVEMENT DETAIL

SCALE 1:10 - A1 (1:20 - A3)



KEY JOINT DETAIL (8m SPACING) K.J. SCALE 1:10 - A1 (1:20 - A3)



CONTROL JOINT (4m SPACING)

SCALE 1:10 - A1 (1:20 - A3)

- CLOSED CELL CROSSLINXED POLYETHYLENE FOAM 105-150kg/m³ EXPANSION JOINT DETAIL (24m SPACING) E.J. SCALE 1:10 - A1 (1:20 - A3)

150mm COMPACTED SUB

DEBOND HALF BAR LENGTH + 25mm

PROJECT NAME **DALMA** 

#### **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD



1.5 2.0 2.5m

cale 1:100 - A1 (1:200 - A3

	- 1	5 5 U E	5	U #	A I E	- 1	
H	TEND	ER		XX-	XX-XX		
П	COUN	ICIL		24-	11-22		
П	CONS	TRUCTION					
П							
H							
П							
П							
П							
П							
П							
П							
П	В	17-03-23	TURNING F	ATH ADDED			

PRE DATE AMENDMENT COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000 DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

CONCRETE JOINTING PLAN AND DETAILS



MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 rtons@urbansolutions.net.au

DESIGNED RB

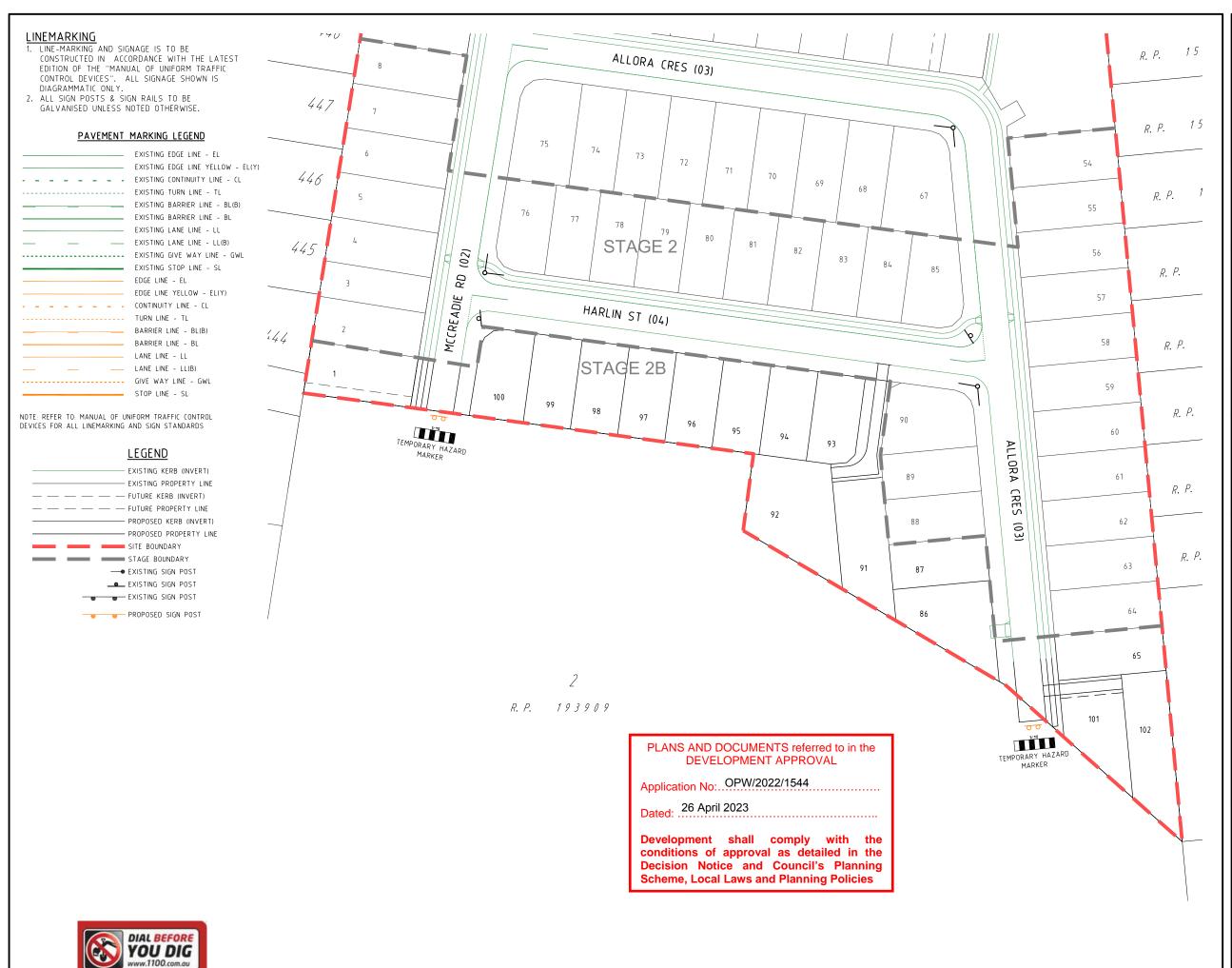
Postal Addres

Gold Coast Offic Suite 9, 19 Short S Southport QLD 421

APPROVEDANK MOTO RPEQ 4706 DATE 24-11-22

35701-02B-410

В



PROJECT NAME **DALMA** 

#### **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD



1.	ISSUES			DAT	E		
TENDER				XX-XX-	xx		
COUNCIL				24-11-2	2		
CONSTRUCTION							
A	24-11-22	COUNCIL	ISSUE				
PRE	DATE			AMEN	DMEN	ī	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000. DO NOT SCALE FROM THIS DRAWING. ASSOCIATED CONSULTANTS





DRAWING TITLE

LINEMARKING & SIGNAGE PLAN



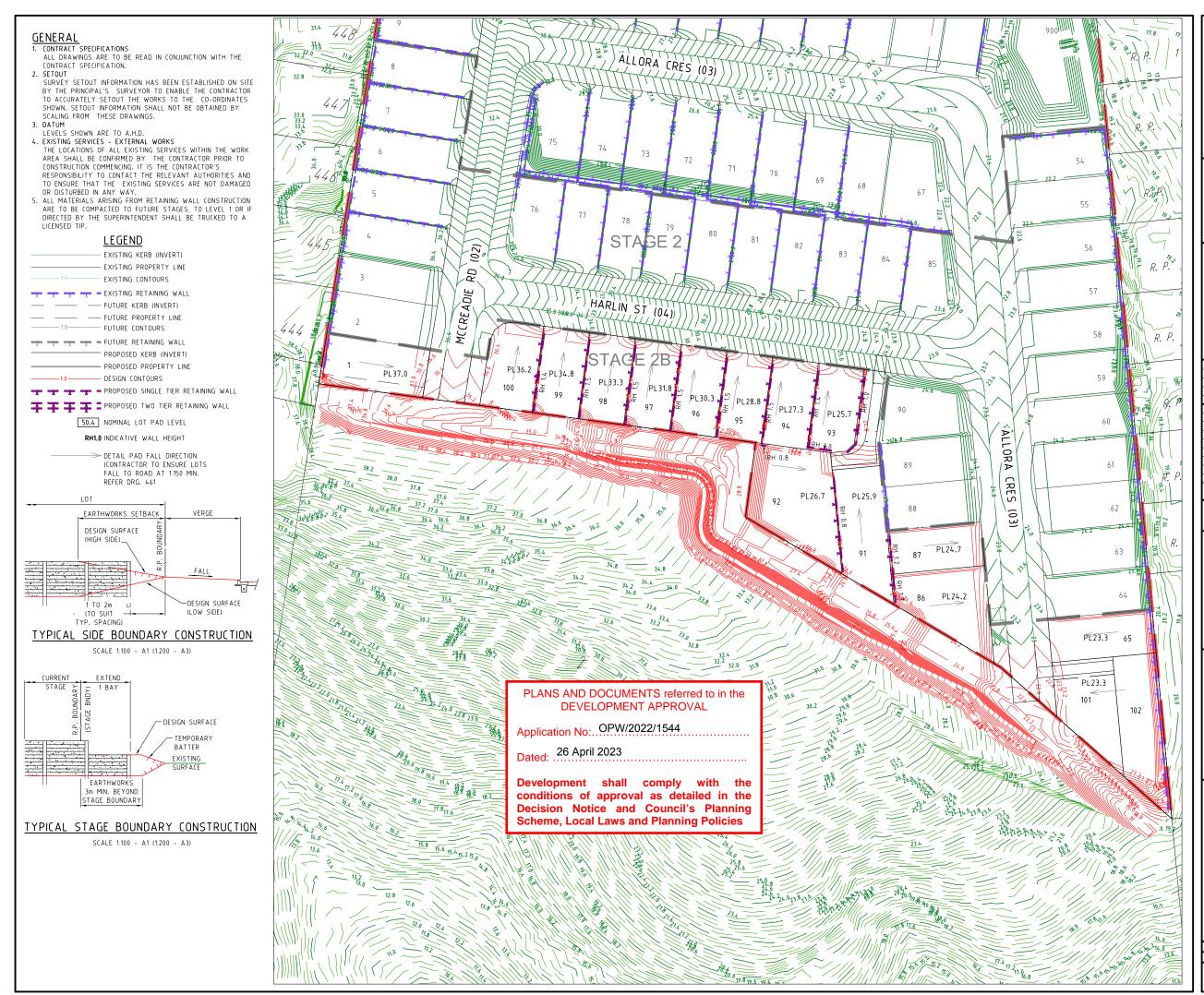
MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065

mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088 Gold Coast Office

Suite 9, 19 Short S Southport QLD 4219

Postal Addres

DESIGNED RB APPROVEDALK MOTE RPEQ 4706 DATE 24-11-22 DRAWING NUMBER A M E N D. 35701-02B-420 Α



PROJECT NAME

## **DALMA**

#### OPERATIONAL WORKS STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4

DALMA STREET ORMEAU HILLS

LOCALITY OF ORMEAU

LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

CLIEN

ORMEAU DEVELOPMENTS PTY LTD



0 5 10 15 20 25m Scale 1:500 - A1 (1:1000 - A3)

1.	SSUE	S	DATE	
TEND	ER		XX-XX-XX	
COUN	CIL		24-11-22	
CONSTRUCTION				
А	24-11-22	ISSUE FOR	INFORMATION	
PRE	DATE		AMENDMENT	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000.

DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

RETAINING WALL AND DETAIL GRADING PLAN SHEET 01



CIVII Engineering
Project Coordination
MUS Pty Ltd T/As:
Mortans-libban Solutions
PO Box 248

MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

PO Box 2484 Southport QLD 4215 Gold Coast Office

WWW.nourisidential Suite 9, 19 Short S Fax 07 5571 1088 Southport QLD 4215 DESIGNED RB DRAWN JB

APPROVEDAK MATE 24-11-22

DRAWING NUMBER

AMEND

35701-02B-450 A

#### NOTES:

- 1. RETAINING WALL DETAILS ARE INDICATIVE ONLY.
- CONTRACTOR TO ARRANGE FOR DESIGN AND CONSTRUCTION OF WALLS BY RPEQ STRUCTURAL ENGINEER. CONTRACTOR TO PROVIDE STRUCTURAL CERTIFICATION OF DESIGN AND FINAL CONSTRUCTION.
- ALLOW FOR 5KPa LOADING TO WALLS EXCEPT ADJACENT TO ROADS WHICH REQUIRE A 10kPa LOADING.
- 4. CONTRACTOR TO CONFIRM LOCATION OF LOT BOUNDARY PRIOR TO COMMENCING WALL CONSTRUCTION.
- 5. THE BUILDING ON THE HIGHER SIDE OF THE RETAINING WALL MUST MAINTAIN AN OFFSET OR APPROPRIATE FOUNDATION STRUCTURES (EG, PIERS) IN ORDER TO ENSURE THE ENTIRE DEPTH OF THE RETAINING WALL IS FREE FROM THE ZONE OF INFLUENCE OF THE BUILDING/OVERBURDEN LOAD UNLESS OTHERWISE SPECIFIED BY STRUCTURAL ENGINEER.
- 6. STRUCTURAL ENGINEER TO DESIGN SLAB AND PIER.
- AGRICULTURAL DRAIN TO DISCHARGE TO 300x300mm STORMWATER PIT. HOUSE BUILDER TO CONNECT 300x300mm STORMWATER PIT TO ROOFWATER SYSTEM.
- 8. RETAINING WALL DESIGN TO ALLOW FOR ALL SERVICES (ADJACENT OR BELOW) AND HAVE NO IMPACT.
- 200mm TO BACK OF DRAINING MATERIAL OR FOOTING FROM PROPERTY BOUNDARY.

#### RETAINING WALL COLOUR AND FACE FINISH NOTE:

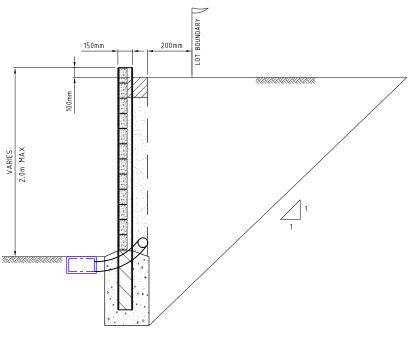
 RETAINING WALL COLOUR AND FINISH IS TO BE AS PER LANDSCAPE CONSULTANTS SPECIFICATION

## PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2022/1544

Dated: .... 26 April 2023

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



CROSS SECTION OF CONCRETE RETAINING WALL

SCALE 1:20 - A1 (1:40 - A3)

PROJECT NAME

DALMA

#### OPERATIONAL WORKS STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4

DALMA STREET ORMEAU HILLS

LOCALITY OF ORMEAU

LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

CLIENT

ORMEAU DEVELOPMENTS PTY LTD

Scale 1:200 - A1 (1:400 - A3)

	ISSUES		S		DATE		
	TENDER COUNCIL				XX-XX-XX		
					24-11-22		
	CONS	ONSTRUCTION					
	Α	16-09-19	COUNCIL 19	SUE			
	PRE	DATE			AMEND	MENT	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000 .

DO NOT SCALE FROM THIS DRAWING.

SOCIATED CONSULTANTS





DRAWING TITLE

RETAINING WALL DETAILS



Civil Engineering Project Coordination
MUS Pty Ltd T/As.
Mortons-Urban Solutions
ABN: 39 116 375 065

ABN: 39 116 375 065 mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088 Postal Address PO Box 2484 Southport QLD 4215 Gold Coast Office

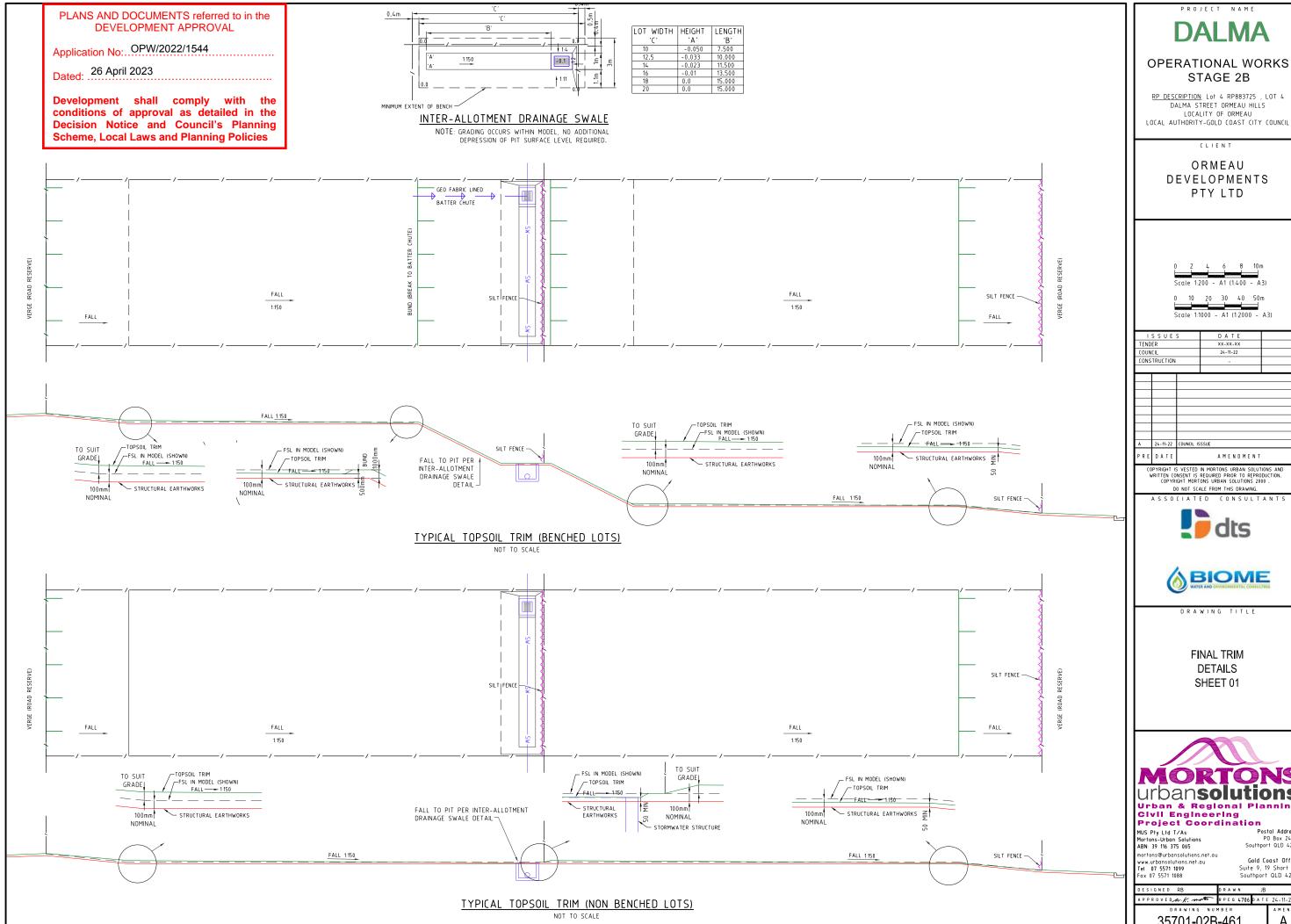
Α

WWW.nourisummismentum
Tel 07 5571 1099 Suite 9, 19 Short S
Fax 07 5571 1088 Southport QLD 421

DESIGNED RB DRAWN JB

APPROVED A.K. MATE 24-11-22

DRAWING NUMBER AMEND.



RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU

DEVELOPMENTS

10 20 30 40 50m

AMENDMENT

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000 DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE



Gold Coast Office

Α

Suite 9, 19 Short S Southport QLD 421

APPROVEDA.K. MOTO RPEQ 4706 DATE 24-11-22

SEQ CODE NOTES COPIED DIRECTLY FROM DRAWING SEQ-SEW-1101-3

VEGETATION PROTECTION

- TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
- WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHALL BE CONSTRUCTED WITH 1.8 m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES SHALL BE STRAPPED TO
- TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
  TREE ROOTS SHALL BE TUNNELLED UNDER, RATHER THAN SEVERED. IF ROOTS ARE SEVERED THE DAMAGED AREA SHALL BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT RELEVANT COUNCIL ARBORIST FOR FURTHER ADVICE. ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.

#### <u>S0IL</u>

- \_\_\_\_\_ TOPSOIL AND SUBSOIL SHALL BE STOCKPILED SEPARATELY. CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES. IF ACID SULPHATE SOILS EXIST IN THE WORKS AREA. THE CONTRACTOR MUST PREPARE A RISK ASSESSMENT
- BASED ON THE QUEENSLAND ACID SULPHATE SOIL TECHNICAL MANUAL AND MANAGE THE ACID SULPHATE SOILS AS PER THE MANUAL.

#### CREEK CROSSINGS

- SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.

  APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK.
- NO SOIL SHALL BE STOCKPILED WITHIN 5 m OF THE CREEK.

#### REHABILITATION

#### PREDISTURBANCE SOIL PROFILES AND COMPACTION LEVELS SHALL BE REINSTATED. PREDISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED.

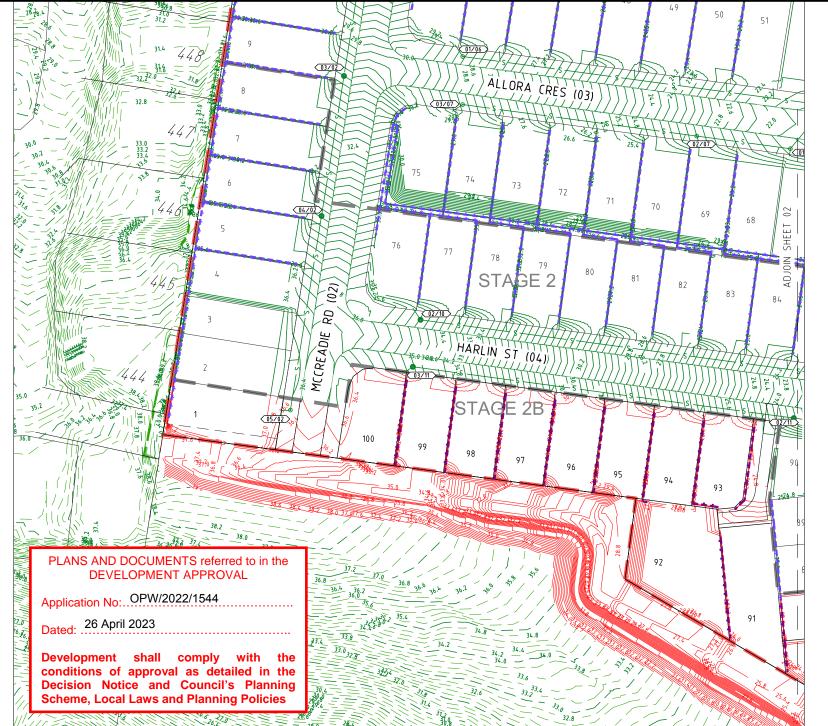
SAFETY
A. THE DESIGN AND CONSTRUCTION OF THE WORKS SHALL COMPLY WITH ALL QUEENSLAND LEGISLATION.

#### GENERAL ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND SEWERAGE CODE SPECIFICATIONS AND STANDARDS.

- UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN
- STANDARDS. THE CONSTRUCTION OF THE SEWERAGE WORK SHOWN ON THIS DRAWING SHALL BE SUPERVISED BY AN ENGINEER
- WHO HAS RPEQ REGISTRATION. SEWERAGE WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO THE SEQ SERVICE PROVIDER SEWERAGE SYSTEM. ALL WORK ASSOCIATED WITH LIVE SEWERS OR MAINTENANCE HOLES SHALL BE CARRIED OUT BY DEVELOPER'S
- APPROVED CONTRACTOR UNDER THE SUPERVISION OF SEQ'S AGENT AT THE DEVELOPER'S COST. ALL PIPES AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE "ACCEPTED PRODUCTS AND MATERIALS" LIST.
- EACH ALLOTMENT SHALL BE SERVED BY A DN100 PVC PROPERTY CONNECTION. FOR ALLOTMENTS OTHER THAN SINGLE RESIDENTIAL, A DN160 PE (OR DN150 PVC) PROPERTY CONNECTION SHALL BE PROVIDED.
- PROPERTY CONNECTIONS SHALL BE LOCATED WITHIN THE PROPERTY AS SHOWN IN THE DRAWINGS.
- PROPERTY CONNECTION BRANCHES SHALL EXTEND INTO THE PROPERTY A MINIMUM OF 300 mm AND A MAXIMUM OF 750 mm. UNITYWATER REQUIRES MINIMUM EXTENSION OF 500 mm INTO PROPERTY.
- WHERE PIPES ARE LAID IN FILL, THE FILLING SHALL BE CARRIED OUT IN LAYERS NOT EXCEEDING 300 mm (LOOSE) IN DEPTH AND SHALL BE COMPACTED UNTIL THE COMPACTION IS NOT LESS THAN 95% OF THE MATERIALS. MAXIMUM COMPACTION WHEN TESTED IN ACCORDANCE WITH A.S. 1289 (MODIFIED COMPACTION). TESTING SHALL BE CARRIED OUT AFTER EACH ALTERNATE LAYER. IN ALL SUCH CASES APPROVAL OF CONSTRUCTED SEWERS WILL NOT BE ISSUED BY THE SEQ SERVICE PROVIDER UNLESS CERTIFICATES ARE PRODUCED CERTIFYING THAT THE RECUIRED COMPACTION HAS BEEN ACHIEVED
- WHERE SEWERS HAVE A GRADE OF 1 IN 20 OR STEEPER, BULKHEADS SHALL BE CONSTRUCTED IN ACCORDANCE
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES BEFORE COMMENCING WORKS.
- 12. SEWERS SHALL BE DISUSED /ABANDONED IN ACCORDANCE WITH PROCEDURES SET OUT IN THE SEQ SEWER CODE.
- 13. BENCH MARK AND LEVELS TO AHD.
- 14. THE EXISTING DWELLING ON LOT 3, REFER SEQ-SEW-1100, SERVED BY A SEPTIC SYSTEM, SHALL BE CONNECTED TO THE NEW SEWER BY A LICENCED PLUMBER IN ACCORDANCE WITH THE RELEVANT STATUTORY AND COUNCIL REQUIREMENTS. THE SEPTIC SYSTEM, INCLUDING TRENCHES, SHALL BE REMOVED AT THE DEVELOPER'S COST. ALL FIXTURES SHALL BE UPGRADED IF REQUIRED BY PLUMBING CODE. STANDARD NOTE NOT APPLICABLE AND THEREFORE DELETED.
- 15. EXISTING ALLOTMENTS REQUIRING A PROPERTY CONNECTION FROM EXISTING SEWERS SHALL BE PROVIDED BY THE SEQ SERVICE PROVIDER AT THE DEVELOPERS COST.

#### PROJECT SPECIFIC SEWER NOTES

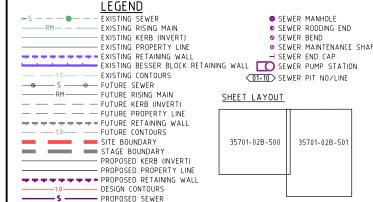
- a. ALL SEWER MAINS TO BE AS PER SEWER PIPE SPECIFICATIONS TABLE.
  b. NOTWITHSTANDING THE STANDARD SEQ NOTES ABOVE, ALL MATERIALS AND WORKS MUST BE IN
- ACCORDANCE WITH THE SERVICE PROVIDER'S APPROVAL CONDITIONS AND THE SEQ WS&S D&C CODE.
  THE CONTRACTOR IS TO INCLUDE ROCK EXCAVATION AS PART OF THEIR SEWER RATES UNLESS SCHEDULED OTHERWISE WITHIN THE CONTRACT
- THE CONTRACTOR TO PROVIDE CALCAREOUS CONCRETE WHERE SPECIFIED IN THE SEQ CODE BY THE RELEVANT AUTHORITY.
- WATER AND ELECTRICAL CROSSING LOCATIONS ARE INDICATIVE ONLY. REFER TO PLANS TO DETERMINE PRECISE CROSSING LOCATIONS. WHERE SERVICE INDICATES CLASH WITH SEWER SEWER TO TAKE PRECEDENCE, SERVICE TO BE CONSTRUCTED OVER OR UNDER SEWER ACCORDING TO SUPERINTENDENTS
- f. ALL BENDS TO BE LONG RADIUS BEND, 3m RADIUS U.N.O. g. CONTRACTOR TO VERIFY DOWNSTREAM EXISTING PIPE LEVELS PRIOR TO COMMENCEMENT OF WORKS
- PROPERTY CONNECTIONS HAVE BEEN DESIGNED TO CONTROL THE REQUIRED SERVICE AREA OF EACH LOT AT A GRADE OF 1:60 AND A MAXIMUM DEPTH OF PROPERTY CONNECTION AT 1.5m. UNIFSS OTHERWISE STATED. REFER SEQ STD. DWGS SEQ-SEW-1106-01 TO SEQ-SEW-1106-7 FOR JUNCTION DETAILS.
- CONTRACTOR TO PAY ALL FEES AND CHARGES ASSOCIATED WITH CONNECTIONS



ALL ENVIRONMENT PROTECTION MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION WORK, INCLUDING CLEARING, COMMENCING.







PROPOSED RISING MAIN

		LIVE SEWER WORKS SCHEDULE									
т	No.	Description	Dia. Sewer	MH No.	MH/MS Type	Cover Type	Lot no	F.S.L	E.S.L	I.L	Depth to invert
	1(A)	CIVIL CONTRACTOR TO MAKE APPLICATION TO GOLD COAST WATER FOR THE LIVE CONNECTION TO DOWNSTREAM SEWER MANHOLE AT EACH LOCATION (LINES 04)									
	1(B)	STUB END CAP, CONTRACTOR TO LAY NEW LINES 04. AFTER CLEANSING, TESTING AND INSPECTING, NOTIFY GOLD COAST WATER.	150	15/04	A	В	101	23.790	23.933	20.657	2.967
	1(C)	CONTRACTOR TO REMOVE PLUG FROM MANHOLE AND MAKE LIVE CONNECTION AFTER SUCCESSFUL "ON MAINTENANCE" INSPECTION.									

PROJECT NAME

## **DALMA**

#### **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD



ı	1	SSUE	S	DATE			
ı	TEND	ER		xx-xx-xx			
ı	COUN	ICIL		24 - 11 - 22			
ı	CONS	TRUCTION					
ı							
ı							
ı							
ı							
ı							
ı							
ı							
ı							
ı							
ı	Α	24-11-22	COUNCIL IS	SSUE			
l	PRE DATE			AMENDMENT			
		VRITTEN CO	NSENT IS	IN MORTONS URBAN SOLUT REQUIRED PRIOR TO REPRO ONS URBAN SOLUTIONS 20	DUCTION.		

ASSOCIATED CONSULTANTS



DO NOT SCALE FROM THIS DRAWING.



DRAWING TITLE

SEWER RETICULATION PLAN AND NOTES SHEET 01 OF 02



MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 nortons@urbansolutions.net.au

DESIGNED RB

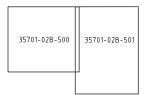
Postal Addres Gold Coast Offic

Southport QLD 421 DRAWN

APPROVEDA.K. morto RPEQ 4706 DATE 24-11-22 DRAWING NUMBER

ALL ENVIRONMENT PROTECTION MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION WORK, INCLUDING CLEARING, COMMENCING.

#### SHEET LAYOUT





PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2022/1544

Dated: .... 26 April 2023

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



PROJECT NAME DALMA

#### OPERATIONAL WORKS STAGE 2B

RP DESCRIPTION Lot 4 RP883725 , LOT 4

DALMA STREET ORMEAU HILLS

LOCALITY OF ORMEAU

LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

CLIEN

ORMEAU DEVELOPMENTS PTY LTD



0 5 10 15 20 25m

ISSUES			DATE			
TENDER			XX-XX-XX			
COUN	CIL			24-11-22		
CONS	TRUCTION					
Α	24-11-22	COUNCIL	ISSUE			
PRF	DATE			AMEND	MENT	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000 .

DO NOT SCALE FROM THIS DRAWING.



DRAWING TITLE

SEWER RETICULATION PLAN AND NOTES SHEET 02 OF 02



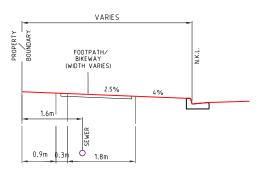
MUS Pty Ltd T/As: Martons-Urban Solutions ABN: 39 116 375 065 mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

Postal Address PO Box 2484 outhport QLD 4215

Gold Coast Office Suite 9, 19 Short St Southport QLD 4215

DESIGNED RB DRAWN JE

ROVED M.K. MOTO RPEQ 47



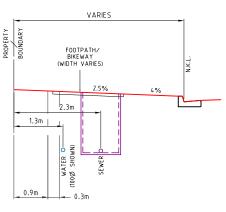
U/G POWER GAS SEWERAGE
TELECOMMUNICATIONS AND WATER
AND CABLE T.V.

#### G.C.C.C. TYPICAL SERVICES SEWER RETICULATION ONLY

SCALE 1:50 - A1 (1:100 - A3)

- PUBLIC UTILITIES ALLOCATIONS ARE MEASURED FROM THE REAL PROPERTY BOUNDARY.

  2. LIGHT POLE, TREE ALLOCATIONS AND FOOTPATHS
- ARE MEASURED FROM THE NOMINAL KERB LINE.



U/G POWER GAS TELECOMMUNICATIONS AND CABLE T.V.

#### G.C.C.C. TYPICAL POTABLE WATER AND SEWER RETICULATION (SAME SIDE)

SCALE 1:50

#### PLANS AND DOCUMENTS referred to in the **DEVELOPMENT APPROVAL**

Application No: OPW/2022/1544

Dated: .26 April 2023

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning **Scheme, Local Laws and Planning Policies** 

PROJECT NAME **DALMA** 

# **OPERATIONAL WORKS**

STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4
DALMA STREET ORMEAU HILLS
LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD



	ISSUES TENDER COUNCIL			DATE	
				XX-XX-XX	
				24-11-22	
	CONS	TRUCTION			
1					
	A	24-11-22	COUNCIL IS	SUE	

PRE DATE

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000 .

DO NOT SCALE FROM THIS DRAWING.

AMENDMENT

ASSOCIATED CONSULTANTS





DRAWING TITLE

SEWER RETICULATION DETAILS



mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

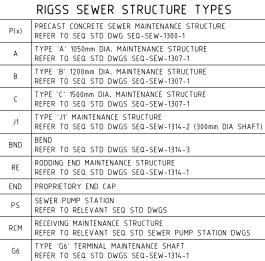
Gold Coast Office

Suite 9, 19 Short S Southport QLD 4219

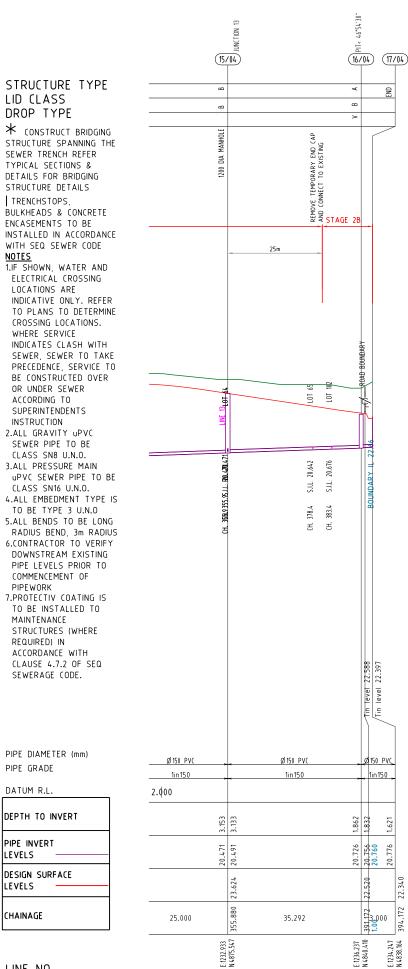
DESIGNED RB APPROVEDALK. MOTE RPEQ 4706 DATE 24-11-22

> DRAWING NUMBER 35701-02B-510

Α



#### RIGSS SEWER STRUCTURE DROPS V STRAIGHT THROUGH SEWER REFER TO SEQ STD DWG SEQ-SEW-1303-1 OBLIQUE BACKDROP REFER TO SEQ STD DWG SEQ-SEW-1303-1 INTERNAL BACKDROP REFER TO SEQ STD DWG SEQ-SEW-1303-1 EXTERNAL BACKDROP REFER TO SEQ STD DWG SEQ-SEW-1303-1



PLANS AND DOCUMENTS referred to in the **DEVELOPMENT APPROVAL** 

Application No: OPW/2022/1544

Dated: ..... 26 April 2023

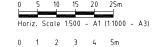
Development shall comply with the conditions of approval as detailed in the **Decision Notice and Council's Planning** Scheme, Local Laws and Planning Policies

PROJECT NAME **DALMA** 

#### **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

#### ORMEAU DEVELOPMENTS PTY LTD



0 '	1 2	3		4	5m		
				-	_		
Vert.	Scale	1:100	-	Α1	(1:200	-	A3)

	TENDER COUNCIL			xx-xx-xx				
				24-11-22	!			
	CONS	TRUCTION						
	A	24-11-22	COUNCIL IS	SUE				
	PRE	DATE			AMEN	DMENT		

ISSUES DATE

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000. DO NOT SCALE FROM THIS DRAWING.

ASSOCIATED CONSULTANTS





DRAWING TITLE

SEWER RETICULATION **PROFILES** 



MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065

Gold Coast Offic

Postal Addres

mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088 Suite 9, 19 Short S Southport QLD 421 DESIGNED RB

APPROVEDALK MATE 24-11-22 DRAWING NUMBER 35701-02B-530

	RIGSS SEWER STRUCTURE DROPS
Α	SEWER PROPERTY CONNECTION (STANDARD & EXTENDED) REFER TO SEQ STD DWGS SEQ-SEW-1104-1
В	SEWER PROPERTY CONNECTION (SLOPED CONNECTION) REFER TO SEQ STD DWGS SEQ-SEW-1104-1
D	SEWER PROPERTY CONNECTION (VERTICAL RISER) REFER TO SEQ STD DWG SEQ-SEW-1105-1
٧	SEWER PROPERTY CONNECTION (STRAIGHT THROUGH SEWER) REFER TO SEQ STD DWG SEQ-SEW-1303-1
Х	SEWER PROPERTY CONNECTION (INTERNAL BACKDROP) REFER TO SEQ STD DWG SEQ-SEW-1303-1
Z	RISER CONNECTION TO PORTION OF MAINTENANCE SHAFT

PLANS AND DOCUMENTS referred to in the

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning

DEVELOPMENT APPROVAL

Application No: OPW/2022/1544

Dated: 26 April 2023

Scheme, Local Laws and Planning Policies

**DALMA** 

PROJECT NAME

#### **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4
DALMA STREET ORMEAU HILLS
LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD

0 2.5 5 7.5 10 12.5m

0 0.5 1.0 1.5 2.0 2.5m Vert. Scale 1:50 - A1 (1:100 - A3)

- 1	SSUE	S		DAT	E	
TEND	ER			XX-XX-X	x	
COUN	CIL			24-11-22	!	
CONS	TRUCTION					
A	24-11-22	COUNCIL IS	SUE			
PRE	DATE			AMEN	DMENT	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION.
COPYRIGHT MORTONS URBAN SOLUTIONS 2000.
DO NOT SCALE FROM THIS DRAWING.

ASSOCIATED CONSULTANTS





DRAWING TITLE

SEWER RETICULATION HOUSE CONNECTION **PROFILES** 



mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

Gold Coast Office Suite 9, 19 Short S Southport QLD 4219

DESIGNED RB APPROVEDALK. MOTE RPEQ 4706 DATE 24-11-22

> DRAWING NUMBER 35701-02B-550

A M E N D. Α

PLANS TO DETERMINE PRECISE CROSSING LOCATIONS. WHERE SERVICE INDICATES CLASH
WITH SEWER, SEWER TO TAKE
PRECEDENCE, SERVICE TO BE CONSTRUCTED OVER OR UNDER SEWER ACCORDING TO SUPERINTENDANTS INSTRUCTION. 2. ALL HOUSE CONNECTIONS TO BE 100Ø CLASS SN6 UNLESS NOTED OTHERWISE

PIPE DIAMETER (mm) PIPE GRADE

NOTES

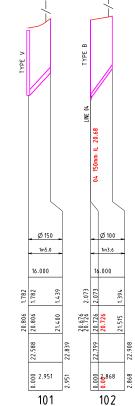
1. WATER AND ELECTRICAL CROSSING LOCATIONS ARE INDICATIVE ONLY. REFER TO

DATUM R.L.

DEPTH TO INVERT PIPE INVERT

LEVELS DESIGN SURFACE LEVELS

CHAINAGE LOT NO.



FOR FUTURE ROUPWATER DRAINAGE.
2. MANHOLES TO BE IN ACCORDANCE WITH IPWEAD STANDARD DRAWING No DS-010, DS-015, DS-018, DS-019, DS-020, DS-021 OR STRUCTURAL DRAWINGS (STRUCTURAL DRAWINGS) DRAWINGS TAKE PRECEDENCE).

OUTLET HEADWALLS TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARD DRAWINGS

ALL HEADWALLS WITH A FALL GREATER THAN 900mm HIGH REQUIRE INSTALLATION OF PEDESTRIAN SAFETY FENCES.

PEDESTRIAN SAFETY FENCES.

ALL PIPES 600mm DIA OR LESS TO BE SOCKETED CONCRETE PIPES WITH RUBBER RING JOINTS. PIPED GREATER THAN 600mm DIA SHALL BE BUTT OR FLUSH JOINTED.

ALL ALLOTMENTS TO BE GRADED SUCH THAT FUTURE ROOFWATER DRAINAGE DISCHARGES TO KERB OR TO PIPED DRAINAGE SYSTEM.

ALL PIPE 300mm DIA AND GREATER SHALL BE CONSTRUCTED USING SRC OR FRC PIPES.

CONTRACTOR MAY ELECT TO USE PVC PIPES WITHIN ALLOTMENTS FOR PIPES SMALLER THAN 300mm DIA.

THAN 300mm DIA.

8. FOR SETOUT DETAILS REFER TO 640 SERIES DRAWINGS (PROFILES AND PIT DETAILS).

9. GULLY PITS TO BE IN ACCORDANCE WITH IPWEAQ STANDARD DRAWING No DS-060, DS-061, DS-062, DS-063. WHERE PITS ARE CONSTRUCTED AS DRAINWAY PITS, TO BE IN ACCORDANCE WITH IPWEAQ STANDARD DRAWINGS No 05-068.

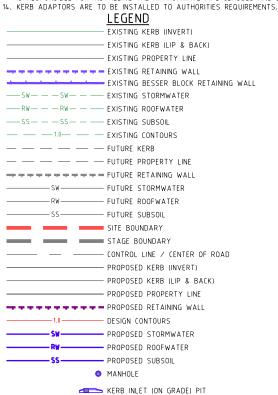
IN ALLORIANCE WITH IPWEAU STANDARD UNAWINGS NO 19-508.

10. LOTS WHICH CAN DRAIN OVERLAND FLOW TO THE STREET SWALE / DRAINAGE WITHOUT FLOWING THROUGH ADJOINING PROPERTIES NEED TO PROVIDE FOR Q100 OVERLAND FLOW TO THE ROAD

11. LOT EARTHWORKS DURING BUILDING CONSTRUCTION MUST NOT CHANGE FLOW PATH DIRECTION UNLESS IT IS REPLACED WITH ANOTHER FLOW PATH DRAINING TO THE ROAD SWALE / DRAINAGE.

12. THE CONTRACTOR IS TO INCLUDE ROCK EXCAVATION AS PART OF THEIR STORMWATER

13. PIPE (LASS - PIPE (LASSES/TRENCH BEDDING SHOWN ON THE DRAWINGS ARE SUBJECT TO THE CONTRACTORS PREFERRED INSTALLATION METHOD. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE APPROPRIATE PIPE CLASSES AND BEDDING.

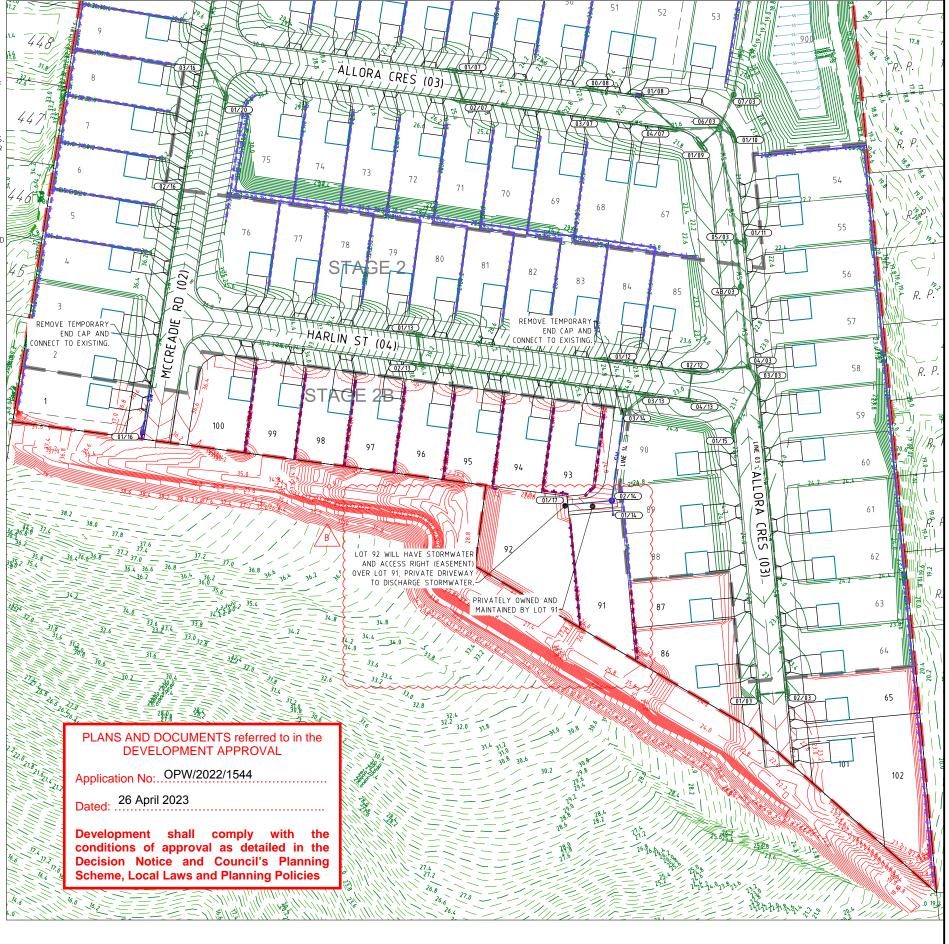


(10/001) DRAINAGE PIT & LINE NO. REFERENCE POINT LOCATION FOR DRAINAGE STRUCTURES

KERB INLET (SAG) PIT T HEADWALL SCOUR PROTECTION

	DIVANIAGE STRUCTURES	2
STRUCTURE TYPE	HORIZONTAL CONTROL (Reference Point Location)	VERTICAL CONTROL (Reference Level)
MANHOLE	CENTRE OF MANHOLE	FINISHED SURFACE LEVEL
GULLY PIT	LIP AT CENTRE OF PIT	FINISHED SURFACE LEVEL (LIP OF CHANNEL)
HEADWALL	INTERSECTION OF HEADWALL FACE & PIPE CENTRELINE	INVERT LEVEL

REFER TO DWG SERIES 640 FOR ALL DRAINAGE STRUCTURE SETOUT AND/OR CUSTOM DETAILS.





PROJECT NAME

## **DALMA**

#### **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD



ISSUES				DAT	E	Т	
TENDER				XX-XX->	(X	Т	
COUN	CIL			24-11-2	2	Т	
CONS	TRUCTION					Т	
							Ī
							Ī
В	16-03-23	NOTES ADI	DED				Ī
Α	24-11-22	COUNCIL IS	SUE				
PRE	DATE			AMEN	DMEN	ī	

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION. COPYRIGHT MORTONS URBAN SOLUTIONS 2000. DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

STORMWATER DRAINAGE PLAN



**Project Coordination** Postal Addres

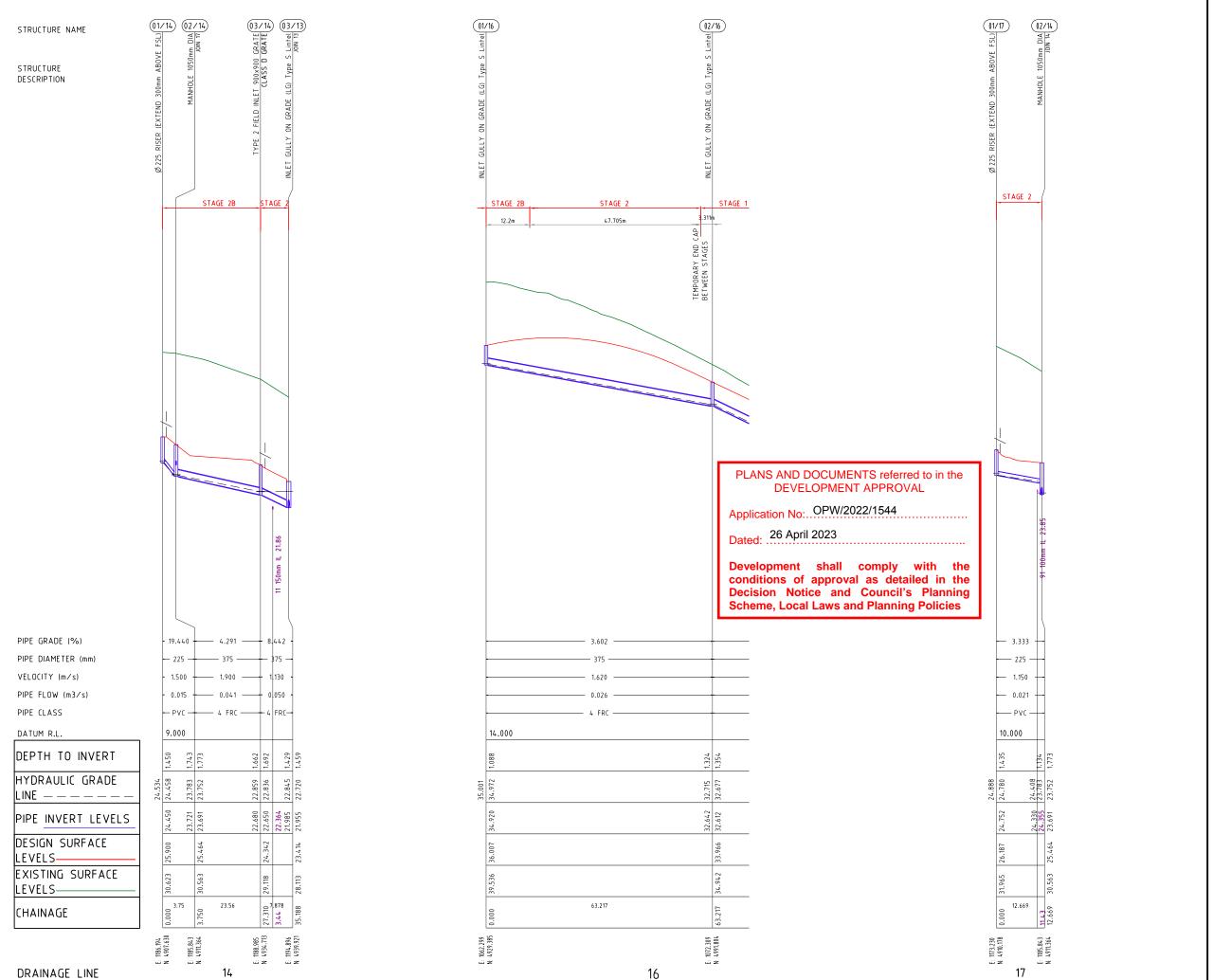
MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

Gold Coast Offic Suite 9, 19 Short S Southport QLD 421

DESIGNED RB APPROVEDA.K. morto RPEQ 4706 DATE 24-11-22

35701-02B-600

В



PROJECT NAME

DALMA

## OPERATIONAL WORKS STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4
DALMA STREET ORMEAU HILLS
LOCALITY OF ORMEAU
LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

CLIEN

#### ORMEAU DEVELOPMENTS PTY LTD

0	5 10	15	20	25m		
Horiz.	Scale	1:500	- A1	(1:1000	- A3	)
0	1 2	3	4	5m		
Vert.	Scale	1:100	- A1	(1:200 -	- A3)	

ISSUES	DATE
TENDER	xx-xx-xx
COUNCIL	24-11-22
CONSTRUCTION	
A 24-11-22	COUNCIL ISSUE
PRE DATE	AMENDMENT

COPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION.

OPYRIGHT MORTONS URBAN SOLUTIONS 2000 .

DO NOT SCALE FROM THIS DRAWING.

A S S O C I A T E D C O N S U L T A N T S





DRAWING TITLE

STORMWATER PROFILES



MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

Postal Address PO Box 2484 Southport QLD 4215

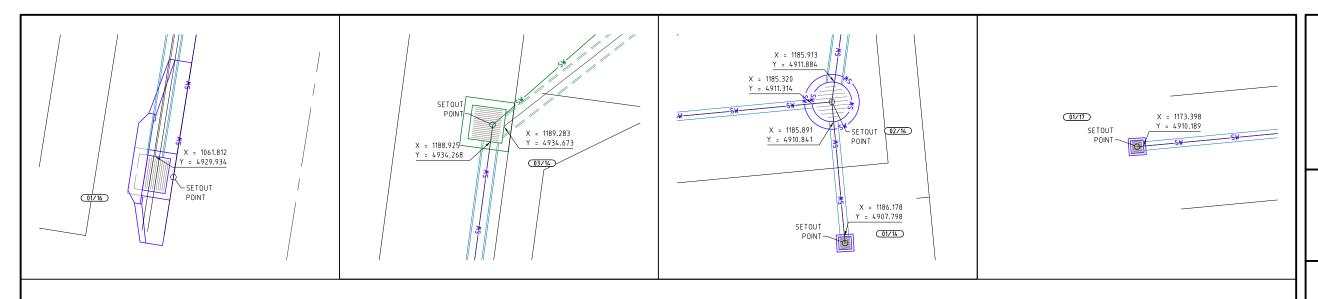
Gold Coast Office Suite 9, 19 Short St Southport QLD 4215

DESIGNED RB DRAWN JB

APPROVEDA.K. MATE 24-11-22

3570-02B-620

Α



## PLANS AND DOCUMENTS referred to in the

Application No: OPW/2022/1544

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning

## DEVELOPMENT APPROVAL

Dated: ..... 26 April 2023

Scheme, Local Laws and Planning Policies

#### LEGEND

EXISTING KERB (INVERT)
EXISTING KERB (LIP & BACK)
EXISTING FOOTPATH
EXISTING PROPERTY LINE
====== EXISTING STORMWATER PIPES (
<del>■ ■ ■ ■</del> EXISTING ROOFWATER PIPES
PROPOSED FOOTPATH

= PROPOSED STORMWATER PIPES

PROPOSED ROOFWATER PIPES

MANHOLE

FIELD INLET KERB INLET (ON GRADE) PIT KERB INLET (SAG) P

T HEADWALL 10/001) DRAINAGE PIT &

LINE NO. CONCRETE

NOTE THE STORMWATER PIT IMAGE ARE DIAGRAMATIC ONLY & THE CONTRACTOR MUST APPROVED.A.K. monto RPEQ 4706 DATE 27-05-21 ENSURE THEY MATCH NEATLY INTO THE WORKS

## PROJECT NAME **DALMA**

## **OPERATIONAL WORKS** STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4
DALMA STREET ORMEAU HILLS
LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

#### ORMEAU DEVELOPMENTS PTY LTD

0 0.5 1.0 1.5 2.0 2.5m Scale 1:50 - A1 (1:100 - A3)

	ISSUES TENDER			DATE	
				XX-XX-XX	
	COUN	CIL		24-11-22	
	CONS	TRUCTION			
	A	24-11-22	ISSUE FOR	INFORMATION	

PRE DATE OPYRIGHT IS VESTED IN MORTONS URBAN SOLUTIONS AND WRITTEN CONSENT IS REQUIRED PRIOR TO REPPRODUCTION.
OPYRIGHT MORTONS URBAN SOLUTIONS 2000 .
DO NOT SCALE FROM THIS DRAWING.

A S S O C I A T E D C O N S U L T A N T S

AMENDMENT





DRAWING TITLE

STORMWATER TYPICAL DETAILS AND PIT DETAILS



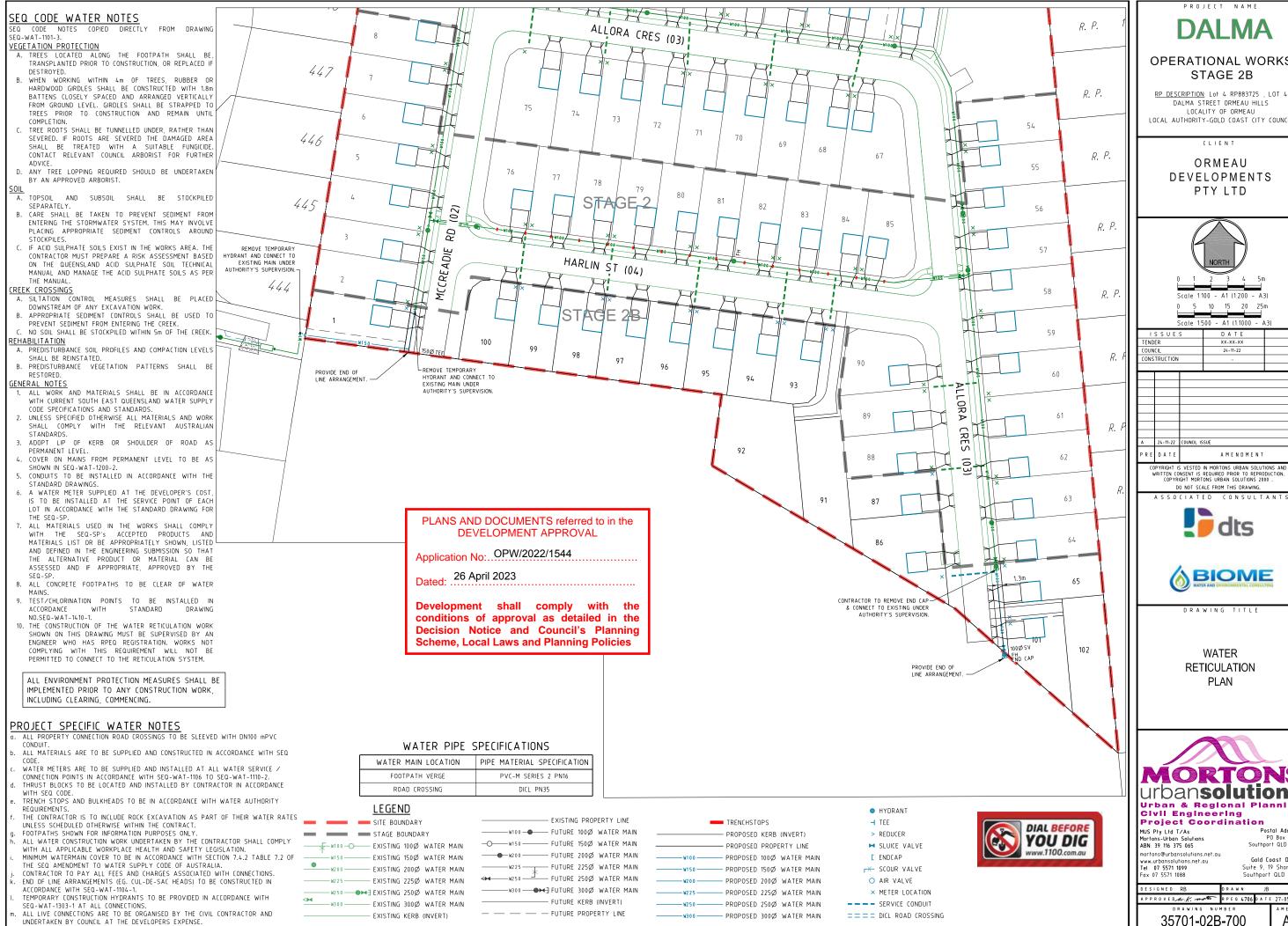
MUS Pty Ltd T/As: Mortons-Urban Solutions ABN: 39 116 375 065 mortons@urbansolutions.net.au www.urbansolutions.net.au Tel 07 5571 1099 Fax 07 5571 1088

Gold Coast Office

Α

Suite 9, 19 Short S Southport QLD 4219 DESIGNED RB

> DRAWING NUMBER 35701-02B-640

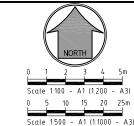


**DALMA** 

## **OPERATIONAL WORKS**

RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

DEVELOPMENTS



	J J U L	,		0 4 1	L	1
TEND	ER			xx-xx-x	x	
COUN	CIL			24-11-22		
CONS	TRUCTION					
A	24-11-22	COUNCIL ISS	SUE			
PRE	DATE			AMEN	DMENT	

DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

RETICULATION



Gold Coast Offic Southport QLD 421

APPROVEDA.K. morto RPEQ 4706 DATE 27-05-21 A M E N D. Α

THRUST BLOCK LENGTH								THRUST BLOCK LENGTH									
PIPE DN.	FITTING	MAX. THRUST IN KN	THRUST BLOCK HEIGHT	STIFF CLAY 50 KPa.	VERY STIFF CLAY SANDY LOAM 100KPa.	SAND & GRAVEL HARDCLAY 150KPa.	SAND & GRAVEL CEMENTED WITH CLAY 200KPa.	ROCK 240kPa	PIPE DN.	FITTING	MAX. THRUST IN KN	THRUST BLOCK HEIGHT	STIFF CLAY 50 KPa.	VERY STIFF CLAY SANDY LOAM 100KPa.	SAND & GRAVEL HARDCLAY 150KPa.	SAND & GRAVEL CEMENTED WITH CLAY 200KPa.	ROCK 240kPa
	90° BEND	19.8		1000	•	•	•	•		90° BEND	241.9		*	*	2220	1510	1260
	60° BEND	14.0		700	•	•	•			60° BEND	171.0		*	2140	1430	1070	890
	45° BEND	10.7	400	•	•	•	•	•	375	45° BEND	130.9	800	*	1640	1090	820	680
100	22.5° BEND	5.5	400	•	•	•	•	•		22.5° BEND	66.7	800	1670	840	•	•	•
	11.25° BEND	2.7		•	•	•	•	•		11.25° BEND	33.5		840	•	•	•	•
	TEE OR CLOSED END	14.0		700	•	•	•	•		TEE OR CLOSED END	171.0		*	2140	1430	1070	890
	90° BEND	41.7		1860	930	•	•	•		90° BEND	342.6		*	*	2540	1900	1590
	60° BEND	29.5		1320	660	•	•	•		60° BEND	242.3		*	2690	1800	1350	1120
1.50	45° BEND	22.6	450	1000			,•		450	45° BEND	185.4	900	*	2060	1375	1030	860
150	22.5° BEND	11.5	450	•	•	•	•	•		22.5° BEND	94.5	900	2100	1050	700	•	•
	11.25° BEND	5.8		•	•	•	•	•		11.25° BEND	47.5		1060	•	•	•	•
	TEE OR CLOSED END	29.5		1300	660	•	•	•		TEE OR CLOSED END	242.3		*	2690	1800	1350	1120
	90° BEND	71.7		*	1300	870	650	•		90° BEND	418		*	*	2790	2090	1740
	60° BEND	50.7	- H	1850	920	•	•	•		60° BEND	295.6		*	*	1970	1480	1230
200	45° BEND	38.8		1410	700	•	•	•		45° BEND	226.2	1000	*	2260	1510	1130	940
200	22.5° BEND	19.8	330	720	•	•	•	•	500	22.5° BEND	115.3	1000	2310	1150	770	•	•
	11.25° BEND	9.9		•	•	•	•	•		11.25° BEND	58.0		1160	•	•	•	•
	TEE OR CLOSED END	50.7		1850	920	•	•	•		TEE OR CLOSED END	295.5		*	*	1970	1480	1230
	90° BEND	89.4		*	1500	1000	750	•		90° BEND	593		*	*	*	2700	2250
	60° BEND	63.2	600	2110	1060	700	•	•	600	60° BEND	419	1100	*	*	2540	1910	1590
470 CPOROLUS	45° BEND	48.4		1620	810	•	•	•		45° BEND	320		*	2920	1950	1460	1220
225	22.5° BEND	24.6		830	•	•	•	•		22.5° BEND	164		2980	1490	990	750	620
	11.25° BEND	12.4		1.	•	•	•	•		11.25° BEND	82.2		1500	750	•	•	•
	TEE OR CLOSED END	63.2		210	1060	700	•	•		TEE OR CLOSED END	419		*	*	2540	1910	1590
	90° BEND	109.0		*	1700	1120	840	700		90° BEND	909		*	*	*	*	2920
	60° BEND	77.1		2400	1200	800	•	•		60° BEND	643		*	*	*	2480	2060
	45° BEND	59.0	650	1820	10	•	•	•		45° BEND	492	1300	*	*	2530	1890	1580
250	22.5° BEND	30.1	030	930	•	•	•	•	750	22.5° BEND	251	1300	*	1930	1290	970	810
	11.25° BEND	15.1		•		•	•	•		11.25° BEND	126.1		1940	970	650	•	•
	TEE OR CLOSED END	77.1		2400	1200	800	•	•		TEE OR CLOSED END	643		*	*	*	2480	2060
	90° BEND	158.6		*	2270	1510	1140	950		90° BEND	1.228		*	*	*	*	3420
	60° BEND	112.2	700	*	1600	1070	800	670	900 (Ø960 MSCL)	60° BEND	868	1500	*	*	*	2900	2420
	45° BEND	85.9		2453	1230	820	•	•		45° BEND	664		*	*	2960	2220	1850
300	22.5° BEND	43.8		1250	630	•	•	•		22.5° BEND	339		*	2260	1510	1130	940
	11.25° BEND	22.0		630	•	•	•	•		11.25° BEND	170		2270	1140	760	•	•
	TEE OR CLOSED END	112.2		*	1600	1070	800	750		TEE OR CLOSED END	868		*	*	*	3300	2650

TUDUCT DI OCK I ENCTU

#### THRUST BLOCK DIMENSIONS - 1200kPa

- INDICATES BLOCK LENGTH OF 600
- \* = SPECIAL DESIGN

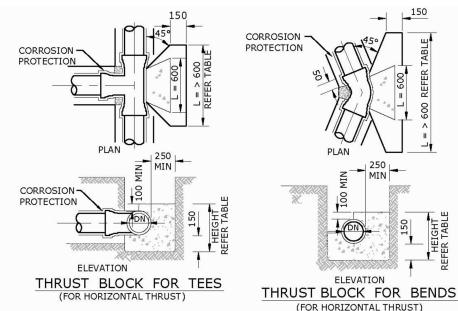
PLANS AND DOCUMENTS referred to in the **DEVELOPMENT APPROVAL** 

Application No: OPW/2022/1544

26 April 2023

TUDUCT DI OCK I ENCTU

Development shall comply with the conditions of approval as detailed in the **Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies** 



150 MIN </= DN150 \* HALF THRUST AREA 🔾 EACH SIDE (SEE NOTE 5) BEARING AREA CORROSION PROTECTION BEARING AREA

TAPER THRUST BLOCK

(FOR HORIZONTAL THRUST)

FLUSHING/WASHOUT BEND THRUST BLOCK

CORROSION

PROTECTION

(FOR HORIZONTAL THRUST) (MINIMUM REQUIRED THRUST AREA AS PER TEE OR CLOSED END)

ELEVATION

HEIGHT REFER TABLE

1. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.

- 2. CAST THE THRUST AREA OF ALL THRUST BLOCKS AGAINST A CLEAN FACE OF UNDISTURBED NATURAL SOIL. SOIL CLASSIFICATIONS USED ON THIS DRAWING ARE EXPLAINED IN SEQ-WAT-1200-1. DO NOT USE STANDARD THRUST BLOCKS AS SPECIFIED IN THIS DRAWING IN SOILS WITH < 50kPa BEARING CAPACITY EG;
  - VERY SOFT, SOFT OR FIRM CLAY.
  - LOOSE CLEAN SAND.

**NOTES** 

- UNCOMPACTED FILL OR REFUSE.
- A GEOTECHNICAL ASSESSMENT AND INDIVIDUAL DESIGN IS REQUIRED FOR THESE SOILS. THRUST BLOCKS NOT TO INTERFERE WITH OTHER SERVICES OR BE LOCATED OUTSIDE THE WATER MAIN ALLOCATION WITHOUT WATER AGENCY APPROVAL
- ALL CONCRETE GRADE N20. TABLE OF DIMENSIONS BASED ON REQUIRED TEST PRESSURE OF 1200kPa AND ACTUAL DICL PIPE DIAMETERS.
- THE MINIMUM THRUST AREA FOR TAPER THRUST BLOCKS TO BE EQUAL TO THE DIFFERENCE BETWEEN THE THRUST AREAS FOR TEES OR CLOSED ENDS OF EQUIVALENT DIAMETER TO THOSE EACH SIDE OF TAPER. THE DETAIL SHOWN IS FOR < OR = DN150 MAINS. FOR LARGER MAINS, THE TAPER THRUST BLOCK SHALL BE REINFORCED AND OF A SIZE AS SHOWN IN SEQ-WAT-1206-1.
- FOR DOWNWARD VERTICAL THRUST, THE ALLOWABLE BEARING PRESSURES FOR VARIOUS SOILS MAY BE TAKEN AS TWICE THAT FOR HORIZONTAL THRUST SHOWN.
- WHEN POURING CONCRETE AGAINST FITTINGS PLACE A MEMBRANE OF POLYETHYLENE, PVC OR FELT BETWEEN THE FITTING AND CONCRETE TO PREVENT DAMAGE TO THE FITTING. PIPE JOINTS TO BE CLEAR OF CONCRETE.
- 8. CONCRETE THRUST BLOCK ANCHORS FOR VALVES TO BE AS DETAILED ON SEQ-WAT-1206-1.

PROJECT NAME **DALMA OPERATIONAL WORKS** 

STAGE 2B

RP DESCRIPTION: Lot 4 RP883725 , LOT 4 DALMA STREET ORMEAU HILLS LOCALITY OF ORMEAU LOCAL AUTHORITY-GOLD COAST CITY COUNCIL

ORMEAU DEVELOPMENTS PTY LTD

D A T E xx-xx-xx 24-11-22	
24-11-22	
IL ISSUE	
AMENDMENT	
	ancil issue

WRITTEN CONSENT IS REQUIRED PRIOR TO REPRODUCTION.

COPYRIGHT MORTONS URBAN SOLUTIONS 2000 . DO NOT SCALE FROM THIS DRAWING.





DRAWING TITLE

WATER RETICULATION DETAIL



iortons@urbansolutions.net.a

Gold Coast Offic

Suite 9, 19 Short S Southport QLD 421

35701-02B-701

DESIGNED RB APPROVEDM.K. marta RPEQ 4706 DATE 27-05-21