

# DALMA

## OPERATIONAL WORKS STAGE 2 No. 35701-02

PLANS AND DOCUMENTS referred to in the  
DEVELOPMENT APPROVAL

Application No.: OPW/2020/620

Dated: 21 August 2020

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

### SCHEDULE OF DRAWINGS

| NUMBER                           | REV. NO. | TITLE                                | NUMBER                                       | REV. NO. | TITLE                      |
|----------------------------------|----------|--------------------------------------|--|----------|----------------------------|
| GENERAL                          |          |                                      | ROADS: LINEMARKING AND SIGNAGE               |          |                            |
| 35701-02-000                     | F        | COVER SHEET                          | 35701-02-420                                 | A        | PLAN SHEET 01              |
| 35701-02-005                     | A        | ROAD HIERARCHY & STAGING PLAN        | RETAINING WALL AND DETAIL GRADING            |          |                            |
| EARTHWORKS: DEMOLITION PLAN      |          |                                      | 35701-02-450                                 | C        | PLAN-SHEET                 |
| 35701-02-020                     | A        | PLAN SHEET 01                        | 35701-02-460                                 | B        | RETAINING WALL DETAILS     |
| EARTHWORKS: EARTHWORKS           |          |                                      | 35701-02-461                                 | A        | FINAL TRIM DETAILS         |
| SEWER RETICULATION: SEWER        |          |                                      | 35701-02-500                                 | E        | PLAN SHEET 01 OF 02        |
| 35701-02-040                     | C        | CUT TO FILL PLAN SHEET 01 OF 02      | 35701-02-501                                 | C        | PLAN SHEET 02 OF 02        |
| 35701-02-041                     | C        | CUT TO FILL PLAN SHEET 02 OF 02      | 35701-02-510                                 | B        | DETAILS SHEET 01           |
| 35701-02-042                     | A        | EARTHWORKS SECTIONS                  | SEWER RETICULATION: PROFILES                 |          |                            |
| 35701-02-043                     | A        | EARTHWORKS SECTIONS 2                | 35701-02-530                                 | D        | PROFILES SHEET 01 OF 04    |
| EARTHWORKS: SEDIMENT AND EROSION |          |                                      | 35701-02-531                                 | D        | PROFILES SHEET 02 OF 04    |
| 35701-02-070                     | C        | PLAN SHEET 01 OF 02                  | 35701-02-532                                 | E        | PROFILES SHEET 03 OF 04    |
| 35701-02-071                     | C        | PLAN SHEET 02 OF 02                  | 35701-02-533                                 | C        | PROFILES SHEET 04 OF 04    |
| EARTHWORKS: COMBINED SERVICES    |          |                                      | SEWER RETICULATION: HOUSE CONNECTION PROFILE |          |                            |
| 35701-02-090                     | E        | PLAN SHEET 01                        | 35701-02-550                                 | E        | HC PROFILES SHEET 01 OF 02 |
| ROADS: ROADWORKS                 |          |                                      | 35701-02-551                                 | C        | HC PROFILES SHEET 02 OF 02 |
| 35701-02-100                     | A        | PLAN SHEET 01                        | STORMWATER: DRAINAGE                         |          |                            |
| 35701-02-120                     | B        | DETAILS SHEET 01                     | 35701-02-600                                 | A        | PLAN SHEET 01              |
| ROADS: LONGITUDINAL SECTIONS     |          |                                      | STORMWATER: PROFILES                         |          |                            |
| 35701-02-200                     | A        | ROAD (02) & ROAD (03) SHEET 01 OF 02 | 35701-02-620                                 | A        | PROFILES SHEET 01 OF 03    |
| 35701-02-201                     | A        | ROAD (04) SHEET 02 OF 02             | 35701-02-621                                 | A        | PROFILES SHEET 02 OF 02    |
| ROADS: CROSS SECTIONS            |          |                                      | 35701-02-622                                 | A        | PROFILES SHEET 03 OF 03    |
| 35701-02-300                     | A        | ROAD (02) SHEET 01 OF 03             | STORMWATER: PIT DETAILS                      |          |                            |
| 35701-02-301                     | A        | ROAD (03) SHEET 02 OF 03             | 35701-02-640                                 | A        | DETAILS SHEET 01           |
| 35701-02-302                     | A        | ROAD (04) SHEET 03 OF 03             | STORMWATER: CATCHMENT PLANS                  |          |                            |
| ROADS: INTERSECTION GRADING      |          |                                      | 35701-02-670                                 | A        | CATCHMENT PLAN SHEET 01    |
| 35701-02-400                     | A        | DETAILS SHEET 01                     | STORMWATER: CALCULATION TABLES               |          |                            |
| ROADS: JOINTING DETAILS          |          |                                      | 35701-02-680                                 | A        | MINOR & MAJOR              |
| 35701-02-410                     | A        | DETAILS PLAN SHEET 01                | WATER: WATER RETICULATION                    |          |                            |
|                                  |          |                                      | 35701-02-700                                 | D        | PLAN SHEET 01              |
|                                  |          |                                      | 35701-02-701                                 | A        | DETAIL SHEET 01            |



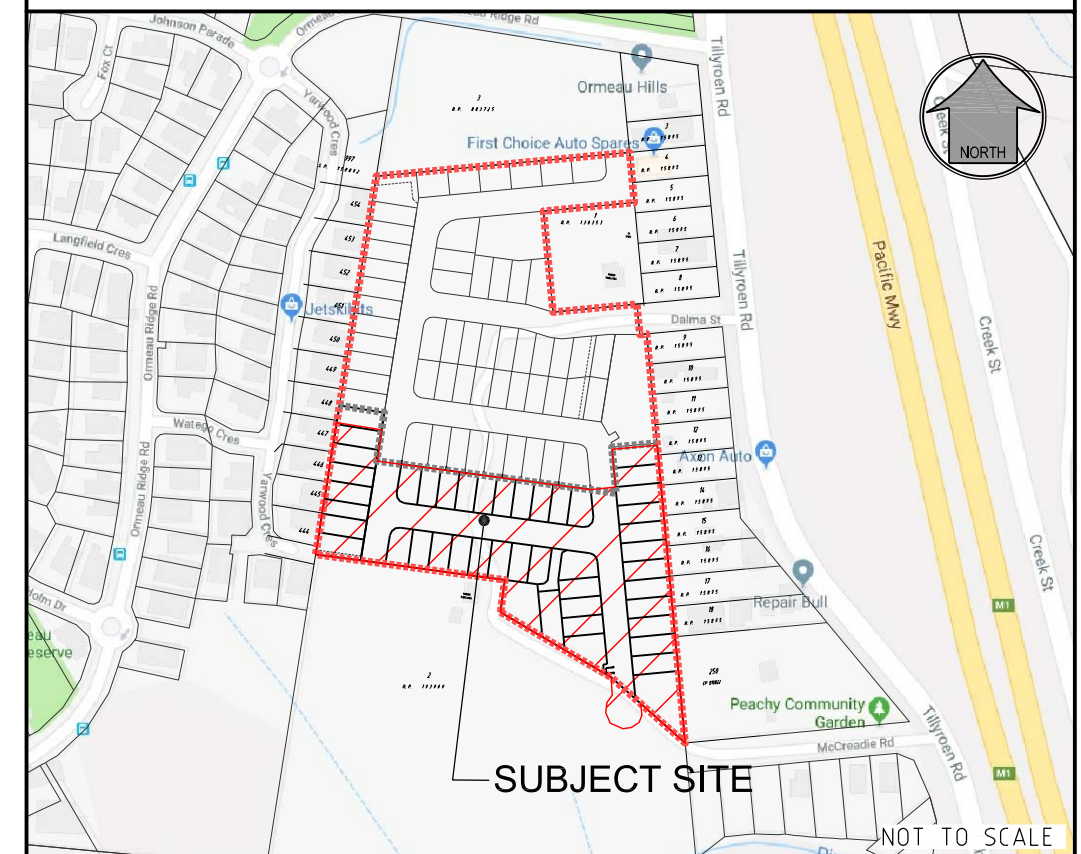
CLIENT

ORMEAU DEVELOPMENT  
PTY LTD

SUB-CONSULTANTS



### LOCALITY PLAN



SUBJECT SITE

NOT TO SCALE

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

DRAWING NUMBER  
35701-02-000

AMEND.  
F



GENERAL

1. CONTRACT SPECIFICATIONS  
ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE CONTRACT SPECIFICATION.
2. SETOUT  
SURVEY SETOUT INFORMATION HAS BEEN ESTABLISHED ON SITE BY THE PRINCIPAL'S SURVEYOR TO ENABLE THE CONTRACTOR TO ACCURATELY SETOUT THE WORKS TO THE CO-ORDINATES SHOWN. SETOUT INFORMATION SHALL NOT BE OBTAINED BY SCALING FROM THESE DRAWINGS.
3. DATUM  
LEVELS SHOWN ARE TO A.H.D.
4. TRENCH SPOIL  
ALL MATERIALS ARISING FROM ROADS AND SERVICES ARE TO BE COMPACTED TO FUTURE STAGES, TO LEVEL 1 OR IF DIRECTED BY THE SUPERINTENDENT SHALL BE TRUCKED TO A LICENSED TIP AT THE CONTRACTOR'S EXPENSE.
5. CHECK ELECTRONIC SETOUT  
CONTRACTOR IS RESPONSIBLE TO ENSURE ANY ELECTRONIC DATA FILES MATCH THE DRAWINGS.
6. PRE START  
a. ERECT SITE SIGNAGE, CONSTRUCT ENTRY AND EXIT POINT AS INDICATED.  
b. CONSTRUCT VEHICLE WASHDOWN AREA AND ASSOCIATED SILT MANAGEMENT DEVICES.  
c. CONSTRUCT SITE OFFICE AND STORAGE COMPOUND AREA.  
d. INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS PER THE CONTRACTOR'S EROSION AND SEDIMENT CONTROL PLAN.  
e. ERECT TEMPORARY TREE PROTECTION FENCING IN ACCORDANCE WITH THE APPROVED VEGETATION MANAGEMENT PLAN AND AUTHORITIES APPROVAL CONDITIONS (IF REQUIRED).
7. HEALTH AND SAFETY  
ALL WORKS UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE WORKPLACE HEALTH AND SAFETY LEGISLATION.

PROJECT SPECIFIC REPORTS

- THE CONTRACTOR MUST FOLLOW THE RECOMMENDATIONS AND PROCEDURES OUTLINED IN THE FOLLOWING REPORTS AT ALL TIMES:
- a) GEOTECHNICAL INVESTIGATION REPORTS (INCLUDING ANY ACID SULPHATE OR DISPERSIVE SOIL REPORTING)  
b) VEGETATION & FAUNA MANAGEMENT PLANS  
c) OTHER MANAGEMENT PLANS NOMINATED IN THE CONTRACT, AUTHORITIES APPROVAL CONDITIONS OR BY THE SUPERINTENDENT.

LEGEND

- RESIDENTIAL COLLECTOR STREET (7.5m CARRIAGEWAY)  
RESIDENTIAL STREET (7.5m CARRIAGEWAY)  
TWO LANE ROAD - URBAN (11.0m CARRIAGEWAY)
- REFER 120 DRAWINGS SERIES FOR TYPICAL SECTIONS
- EXISTING PROPERTY LINE  
EXISTING KERB (INVERT)  
FUTURE PROPERTY LINE  
FUTURE KERB (INVERT)  
PROPOSED PROPERTY LINE  
PROPOSED KERB (INVERT)  
SITE BOUNDARY  
STAGE BOUNDARY  
LIMIT OF WORKS BOUNDARY



PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/620

Dated: 21 August 2020

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 2

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 10 20 30 40 50m  
Scale 1:1000 - A1 (1:2000 - A3)

| ISSUES       | DATE     |  |
|--------------|----------|--|
| TENDER       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
| CONSTRUCTION | ..       |  |

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| A        | 16-09-19  | ISSUE FOR INFORMATION |
|----------|-----------|-----------------------|
| PRE DATE | AMENDMENT |                       |

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ASSOCIATED CONSULTANTS



DRAWING TITLE

ROAD HIERARCHY  
AND  
STAGING PLAN  
SHEET 1 OF 1

**MORTONS**  
urbansolutions  
Urban & Regional Planning  
Civil Engineering  
Project Coordination

MUS Pty Ltd T/As:  
Mortons-Urban Solutions  
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Southport QLD 4215

|                             |                         |
|-----------------------------|-------------------------|
| DESIGNED RB                 | DRAWN JB                |
| APPROVED <i>[Signature]</i> | PREP 4706 DATE 04-07-18 |

| DRAWING NUMBER | AMEND. |
|----------------|--------|
| 35701-02-005   | A      |







EARTHWORKS

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 RATE.
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.

LEGEND

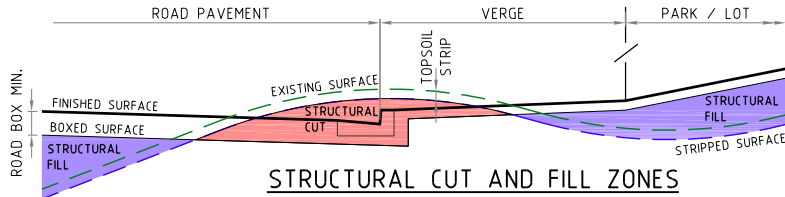
- EXISTING PROPERTY LINE  
— EXISTING KERB (INVERT)  
- - - FUTURE KERB (INVERT)  
- - - FUTURE PROPERTY LINE  
- - - SITE BOUNDARY  
- - - STAGE BOUNDARY  
— PROPOSED PROPERTY LINE  
— PROPOSED KERB (INVERT)  
— 0.5 BULK EARTHWORKS FILL CONTOUR  
— 0.0 BULK EARTHWORKS INTERFACE CONTOUR  
— -0.5 BULK EARTHWORKS CUT CONTOUR

STRUCTURAL EARTHWORKS VOLUMES

|              |                     |
|--------------|---------------------|
| CUT          | 6m <sup>2</sup>     |
| FILL         | 3,151m <sup>2</sup> |
| BORROW/SPOIL | 3,145m <sup>2</sup> |

NOTES

1. EARTHWORKS VOLUMES ARE APPROXIMATE ONLY, CONTRACTOR TO VERIFY.  
2. 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.  
3. NO ALLOWANCE FOR COMPACTION OR BULKING FACTOR IS INCLUDED.  
4. THE CONTRACTOR IS TO VERIFY EXISTING SURFACE AND TOPSOIL DISTRIBUTION PRIOR TO SIGNING THE CONTRACT.  
5. THE CONTRACTOR IS REQUIRED TO EXPORT / IMPORT AS NEEDED TO ACHIEVE THE FINAL SURFACE LEVELS.



STRUCTURAL CUT AND FILL ZONES



PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/620

Dated: 21 August 2020

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

INSET 1.0

SHEET LAYOUT

|              |              |
|--------------|--------------|
| 35701-02-040 | 35701-02-041 |
|--------------|--------------|

PROJECT NAME

**DALMA**

OPERATIONAL WORKS  
STAGE 2

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



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Scale 1:500 - A1 (1:1000 - A3)

| ISSUES       | DATE     |
|--------------|----------|
| TENDER       | 10-01-20 |
| COUNCIL      | 30-04-20 |
| CONSTRUCTION | ..       |

|   |          |   |
|---|----------|---|
| C | 16-07-20 | CUT AND FILL, SECTIONS AND NOTE AMENDED |
| B | 30-06-20 | CUT AND FILL AMENDED                    |
| A | 16-09-19 | ISSUE FOR INFORMATION                   |

| PRE DATE | AMENDMENT |
|----------|-----------|
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ASSOCIATED CONSULTANTS



DRAWING TITLE

EARTHWORKS  
CUT TO FILL  
PLAN  
SHEET 01 OF 02

**MORTONS**  
urbansolutions  
Urban & Regional Planning  
Civil Engineering  
Project Coordination

MUS Pty Ltd T/As:  
Mortons-Urban Solutions  
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Southport QLD 4215

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

|             |          |
|-------------|----------|
| DESIGNED RB | DRAWN JB |
|-------------|----------|

|                             |           |               |
|-----------------------------|-----------|---------------|
| APPROVED <i>[Signature]</i> | PREP 4706 | DATE 04-07-18 |
|-----------------------------|-----------|---------------|

| DRAWING NUMBER | AMEND. |
|----------------|--------|
| 35701-02-040   | C      |



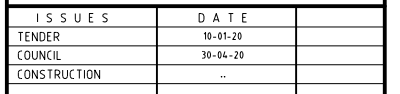




# DALMA

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

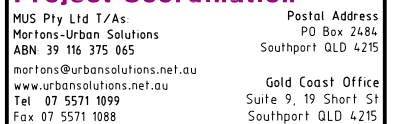
ORMEAU  
DEVELOPMENTS  
PTY LTD



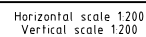
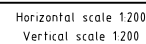
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EARTHWORKS  
CUT TO FILL  
SECTIONS  
SHEET 01 OF 02



|                                    |           |               |
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| DESIGNED RB                        | DRAWN JB  |               |
| APPROVED <i>Mr. K. [Signature]</i> | RPEQ 4706 | DATE 16-07-20 |
| DRAWING NUMBER                     |           | AMEND.        |
| 35701-02-042                       |           | A             |





PLANS AND DOCUMENTS referred to in the  
DEVELOPMENT APPROVAL

Application No: OPW/2020/620

Dated: 21 August 2020

Development shall comply with the  
conditions of approval as detailed in the  
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Scheme, Local Laws and Planning Policies

PROJECT NAME

**DALMA**

OPERATIONAL WORKS  
STAGE 2

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 4 6 8 10m  
Scale 1:200 - A1 (1:400 - A3)

| ISSUES       | DATE     |  |
|--------------|----------|--|
| TENDER       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
| CONSTRUCTION | ..       |  |

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| A        | 16-07-20 | ISSUE FOR INFORMATION |
| PRE DATE |          | AMENDMENT             |

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ASSOCIATED CONSULTANTS



DRAWING TITLE


EARTHWORKS  
CUT TO FILL  
SECTIONS  
SHEET 02 OF 02

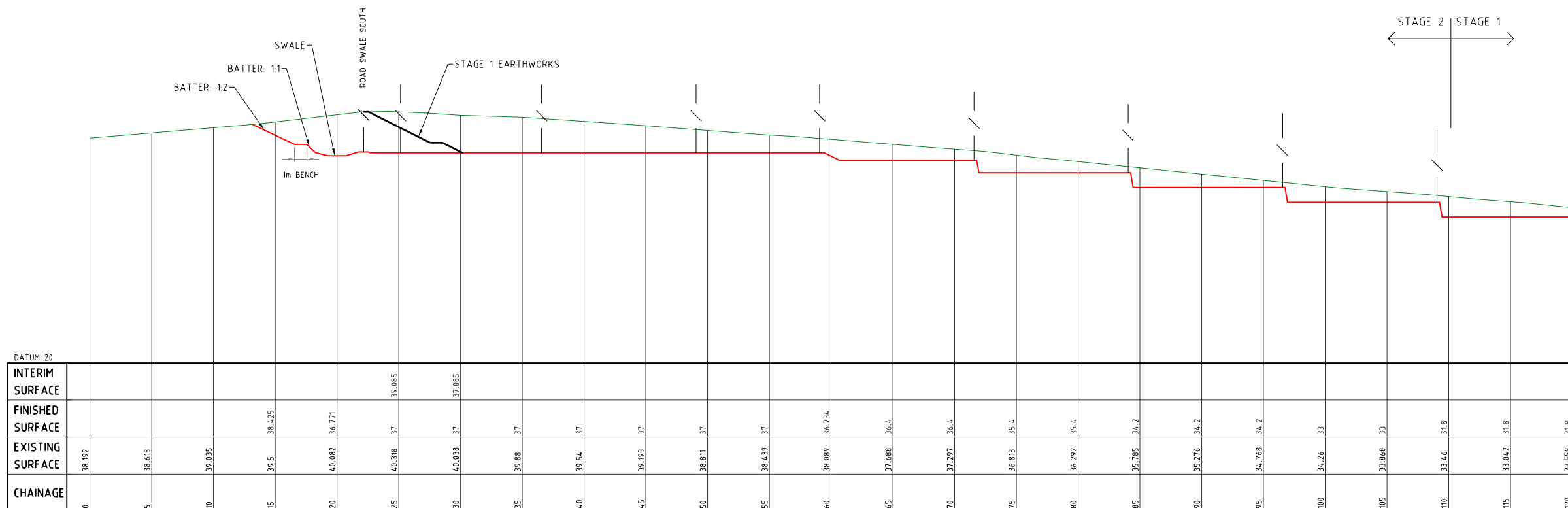
**MORTONS**  
urbansolutions  
Urban & Regional Planning  
Civil Engineering  
Project Coordination

MUS Pty Ltd T/As:  
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Fax: 07 5571 1088

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

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|--|------------------------|
| DESIGNED RB  | DRAWN JB               |
| APPROVED  | PER 4706 DATE 16-07-20 |
| DRAWING NUMBER<br>35701-02-043   | AMEND.<br>A            |


















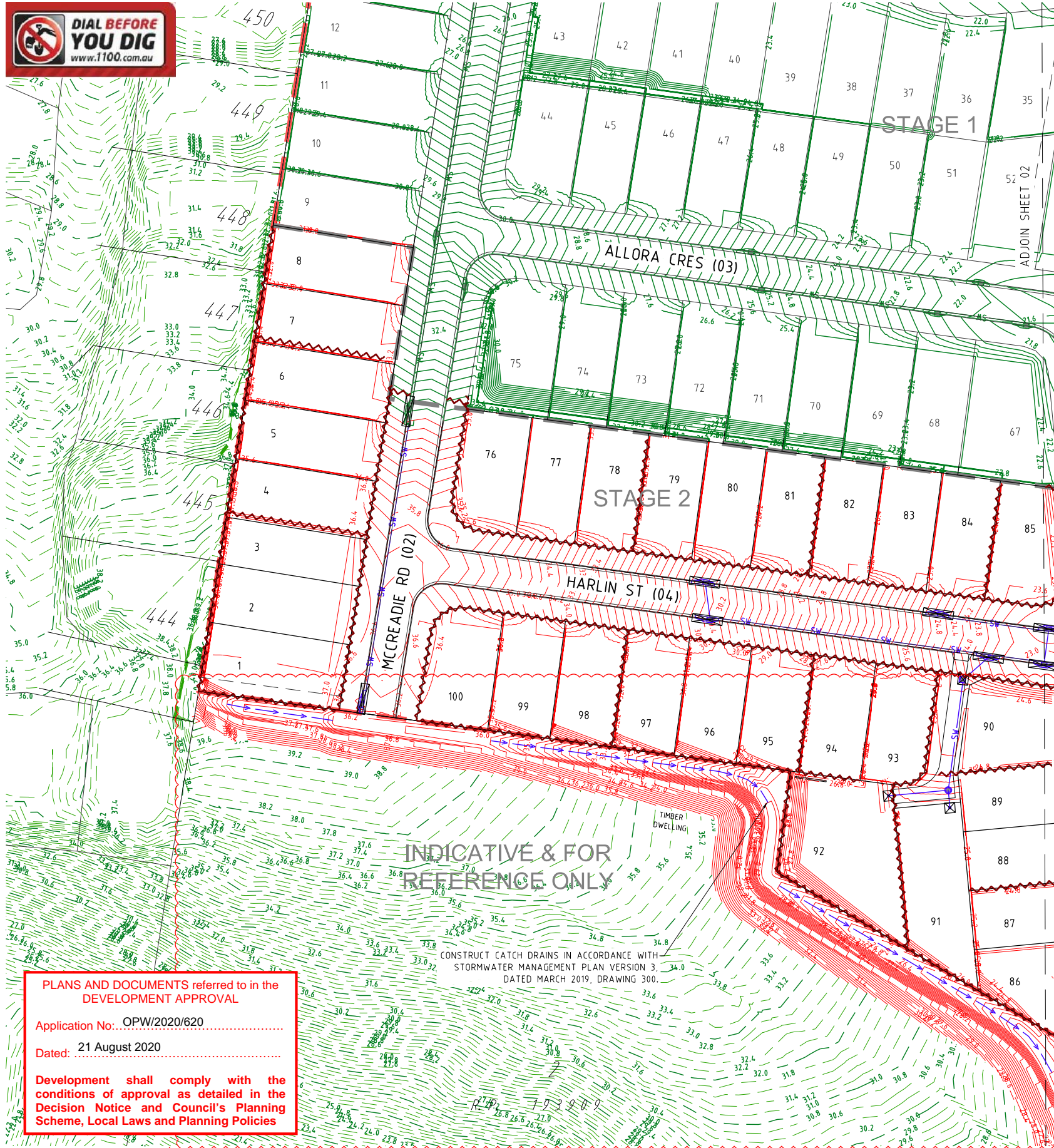
LONGITUDINAL SECTION D

Horizontal scale 1:200  
Vertical scale 1:200



1. THE EROSION AND SEDIMENT CONTROL DEVICES SHOWN ON THESE DRAWINGS ARE INDICATIVE AND PROVIDED FOR SUBMISSION TO LOCAL AUTHORITY ONLY. NOTWITHSTANDING THE EROSION AND CONTROL DEVICES SHOWN ON THESE DRAWINGS, THE CONTRACTOR MUST PREPARE AND FOLLOW A SITE SPECIFIC EROSION AND SEDIMENT CONTROL PLAN TO MEET ALL LOCAL AND STATE GOVERNMENT LEGISLATION INCLUDING BUT NOT LIMITED TO:

- ### LEGEND
- |   |                        |   |                        |   |
|---|------------------------|---|------------------------|---|
|  | EXISTING PROPERTY LINE |  | FUTURE CONTOURS        |  |
|  | EXISTING KERB (INVERT) |  | SITE BOUNDARY          |   |
|  | EXISTING STORMWATER    |  | STAGE BOUNDARY         |   |
|  | EXISTING CONTOURS      |  | PROPOSED PROPERTY LINE |   |
|  | FUTURE PROPERTY LINE   |  | PROPOSED KERB (INVERT) |   |
|  | FUTURE KERB (INVERT)   |  | PROPOSED STORMWATER    |   |
|  | FUTURE STORMWATER      |  | DESIGN CONTOURS        |   |



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

**NOTE:**  
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.

| SHEET LAYOUT |              |
|--------------|--------------|
| 35701-02-070 | 35701-02-071 |

|                                |            |               |
|--------------------------------|------------|---------------|
| APPROVED <i>W.K. m...</i>      | RFREQ 4/06 | DATE 04-07-16 |
| DRAWING NUMBER<br>35701-02-070 |            | AMEND.<br>C   |



LEGEND

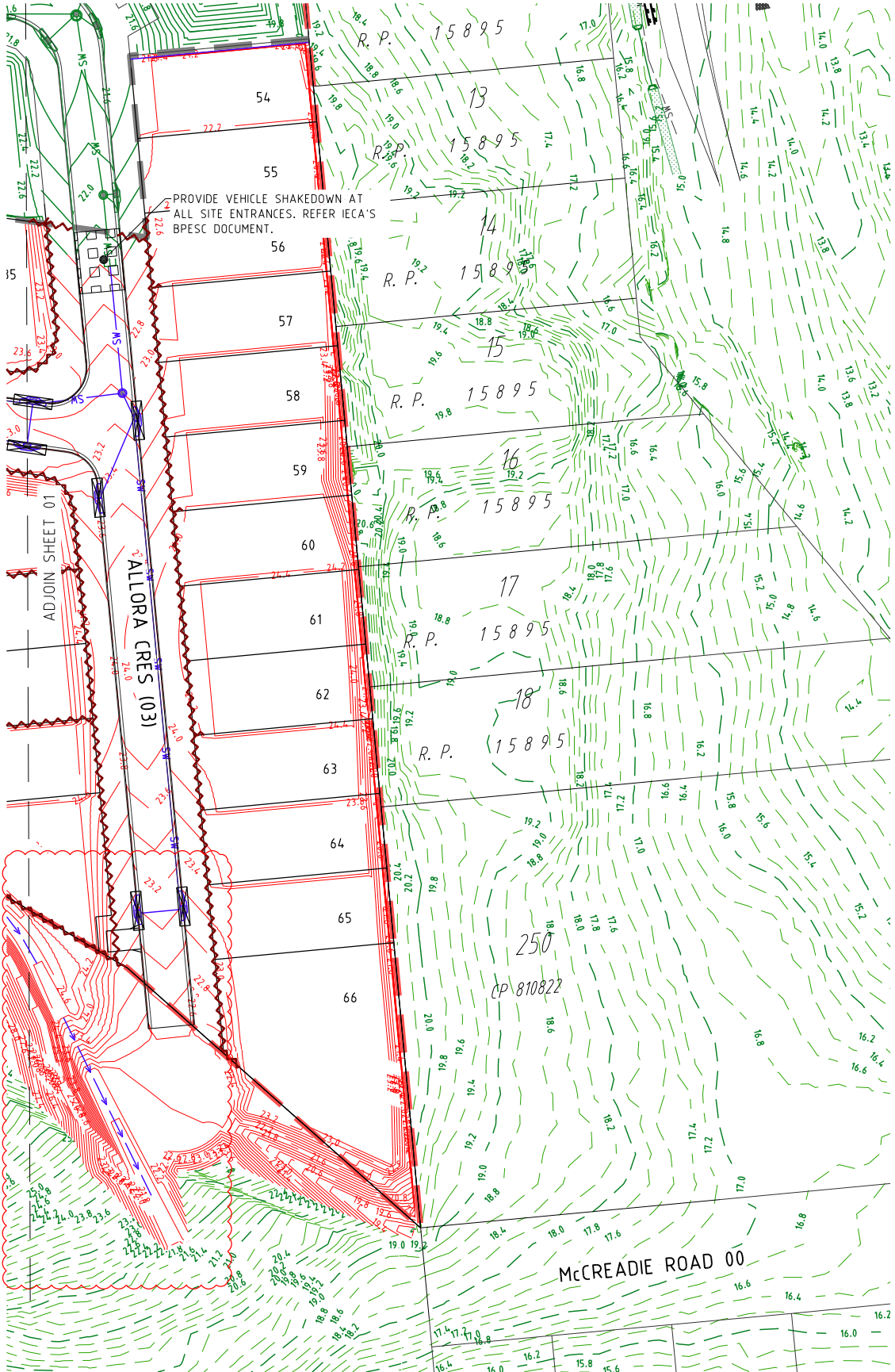
- EXISTING PROPERTY LINE
- EXISTING KERB (INVERT)
- EXISTING STORMWATER
- EXISTING CONTOURS
- FUTURE PROPERTY LINE
- FUTURE KERB (INVERT)
- FUTURE STORMWATER
- FUTURE CONTOURS
- SITE BOUNDARY
- STAGE BOUNDARY
- PROPOSED PROPERTY LINE
- PROPOSED KERB (INVERT)
- PROPOSED STORMWATER
- DESIGN CONTOURS
- SEDIMENT FENCE
- MANHOLE
- KERB INLET (ON GRADE) PIT
- KERB INLET (SAG) PIT
- HEADWALL
- SCOUR PROTECTION
- TEMPORARY SEDIMENT BASIN
- STORMWATER INLET FILTER
- ROCK CHECK DAM
- VEHICLE SHAKEDOWN
- TREES

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/620  
Dated: 21 August 2020

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

Neighbouring owners consent required for civil works occurring within their property.



SHEET LAYOUT

|              |              |
|--------------|--------------|
| 35701-02-070 | 35701-02-071 |
|--------------|--------------|

NOTE:  
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 2

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

| ISSUES       | DATE     |  |
|--------------|----------|--|
| TENDER       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
| CONSTRUCTION | ..       |  |

|   |          |                       |
|---|----------|-----------------------|
| C | 16-07-20 | CONTOURS AMENDED      |
| B | 23-06-20 | FLOW PATH ADDED       |
| A | 16-09-19 | ISSUE FOR INFORMATION |

| PRE DATE | AMENDMENT |
|----------|-----------|
|----------|-----------|

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ASSOCIATED CONSULTANTS



DRAWING TITLE

FINAL SURFACE AND  
SEDIMENT AND EROSION  
PLAN  
SHEET 02 OF 02



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

|                             |                        |
|-----------------------------|------------------------|
| DESIGNED RB                 | DRAWN JB               |
| APPROVED <i>[Signature]</i> | PEQ 4706 DATE 04-07-18 |

| DRAWING NUMBER | AMEND. |
|----------------|--------|
| 35701-02-071   | C      |

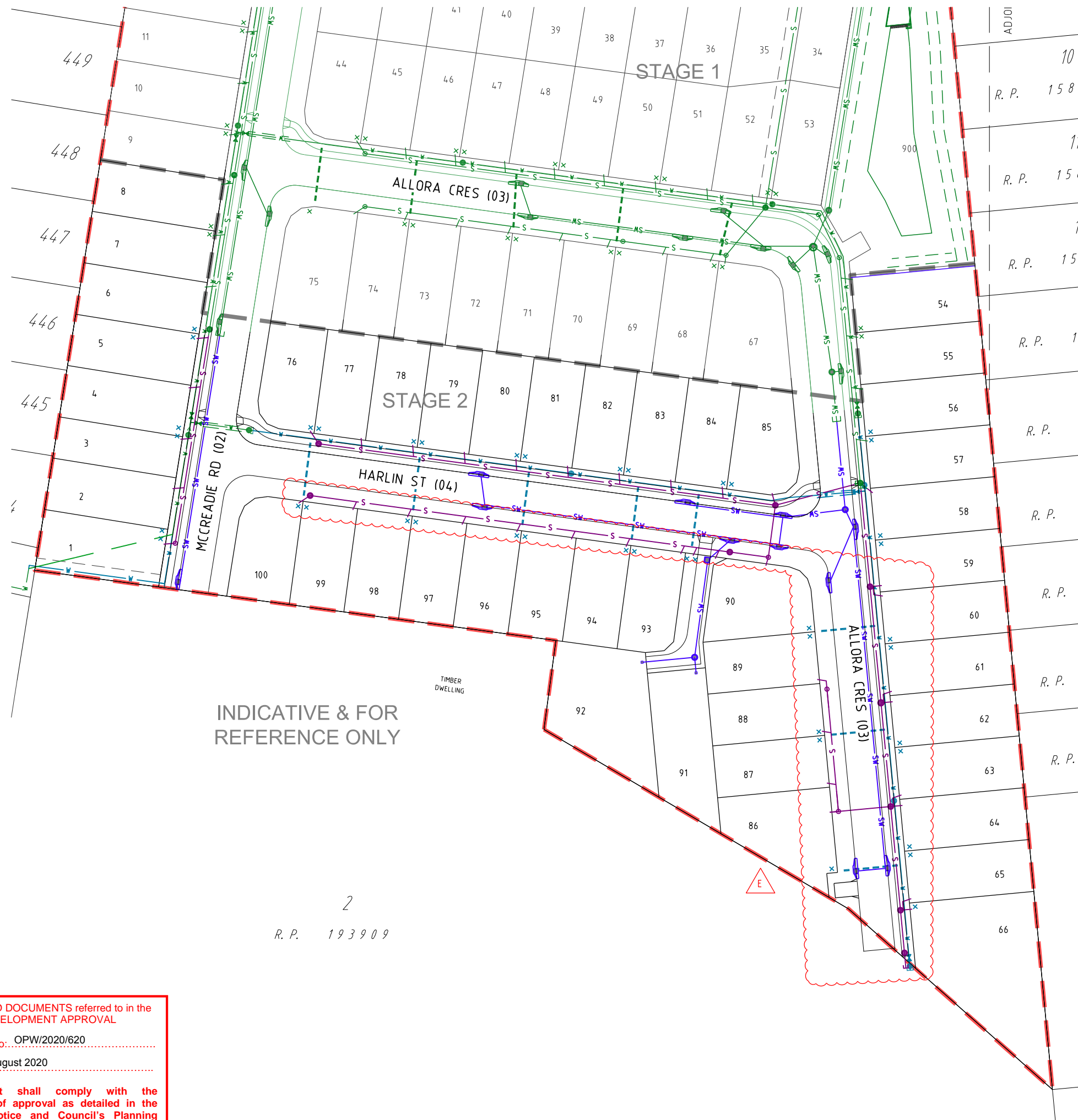


# CONSTRUCTION SERVICES

1. 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 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.
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      |
| RM   | EXISTING RISING MAIN   |
| S    | EXISTING SEWER         |
| SW   | EXISTING STORMWATER    |
| RW   | EXISTING ROOFWATER     |
| SS   | EXISTING SUBSOIL       |
| W100 | EXISTING WATER         |
| W150 | EXISTING WATER         |
| W200 | EXISTING WATER         |
| W225 | EXISTING WATER         |
| W250 | EXISTING WATER         |
| W300 | EXISTING WATER         |
| ---  | EXISTING WATER CONDUIT |
| ---  | PROPOSED PROPERTY LINE |
| ---  | PROPOSED KERB (INVERT) |
| ---  | PROPOSED FOOTPATH      |
| RM   | PROPOSED RISING MAIN   |
| S    | PROPOSED SEWER         |
| SW   | PROPOSED STORMWATER    |
| RW   | PROPOSED ROOFWATER     |
| SS   | PROPOSED SUBSOIL       |
| W100 | PROPOSED WATER         |
| W150 | PROPOSED WATER         |
| W200 | PROPOSED WATER         |
| W225 | PROPOSED WATER         |
| W250 | PROPOSED WATER         |
| W300 | PROPOSED WATER         |
| ---  | PROPOSED WATER CONDUIT |
| ---  | FUTURE PROPERTY LINE   |
| ---  | FUTURE KERB (INVERT)   |
| ---  | FUTURE FOOTPATH        |
| RM   | FUTURE RISING MAIN     |
| S    | FUTURE SEWER           |
| SW   | FUTURE STORMWATER      |
| RW   | FUTURE ROOFWATER       |
| SS   | FUTURE SUBSOIL         |
| W100 | FUTURE WATER           |
| W150 | FUTURE WATER           |
| W200 | FUTURE WATER           |
| W225 | FUTURE WATER           |
| W250 | FUTURE WATER           |
| W300 | FUTURE WATER           |
| ---  | FUTURE WATER CONDUIT   |
| ---  | SITE BOUNDARY          |
| ---  | STAGE BOUNDARY         |



INDICATIVE & FOR  
REFERENCE ONLY

PLANS AND DOCUMENTS referred to in the  
DEVELOPMENT APPROVAL

Application No.: OPW/2020/620

Dated: 21 August 2020

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 2

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

| ISSUES       | DATE     |
|--------------|----------|
| TENDER       | 10-01-20 |
| COUNCIL      | 30-04-20 |
| CONSTRUCTION | ..       |

|   |          |                         |
|---|----------|-------------------------|
| E | 11-08-20 | SEWER ALIGNMENT AMENDED |
| D | 06-07-20 | SEWER AMENDED           |
| C | 30-06-20 | SEWER AND WATER AMENDED |
| B | 04-06-20 | SEWER AMENDED           |
| A | 16-09-19 | ISSUE FOR INFORMATION   |

| PRE DATE | AMENDMENT |
|----------|-----------|
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DRAWING TITLE

COMBINED SERVICES  
PLAN  
SHEET 01

**MORTONS**  
urbansolutions  
Urban & Regional Planning  
Civil Engineering  
Project Coordination

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|                             |                        |
|-----------------------------|------------------------|
| DESIGNED RB                 | DRAWN JB               |
| APPROVED <i>[Signature]</i> | PEQ 4706 DATE 04-07-18 |

DRAWING NUMBER

35701-02-090

AMEND.

E



## ROADWORKS

- PAVEMENT DEPTHS
  - THE DESIGN PAVEMENT DEPTHS ALLOWED IN EARTHWORKS CALCULATIONS ARE BASED ON THE DEPTHS SHOWN IN THE SCHEDULE OF PAVEMENT DEPTHS ON DRAWING 120.
  - 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.
  - THE SUPERINTENDENT WILL COORDINATE THE AUTHORITIES APPROVAL OF THE PAVEMENT DESIGN.
  - REFER TO DWG. 120 FOR TYPICAL ROAD SECTIONS.
- TESTING
 

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.
- ROCK
 

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

ALL KERBS TO BE CONSTRUCTED IN ACCORDANCE WITH AUTHORITY STANDARDS
- PAVEMENT TIE-IN
 

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

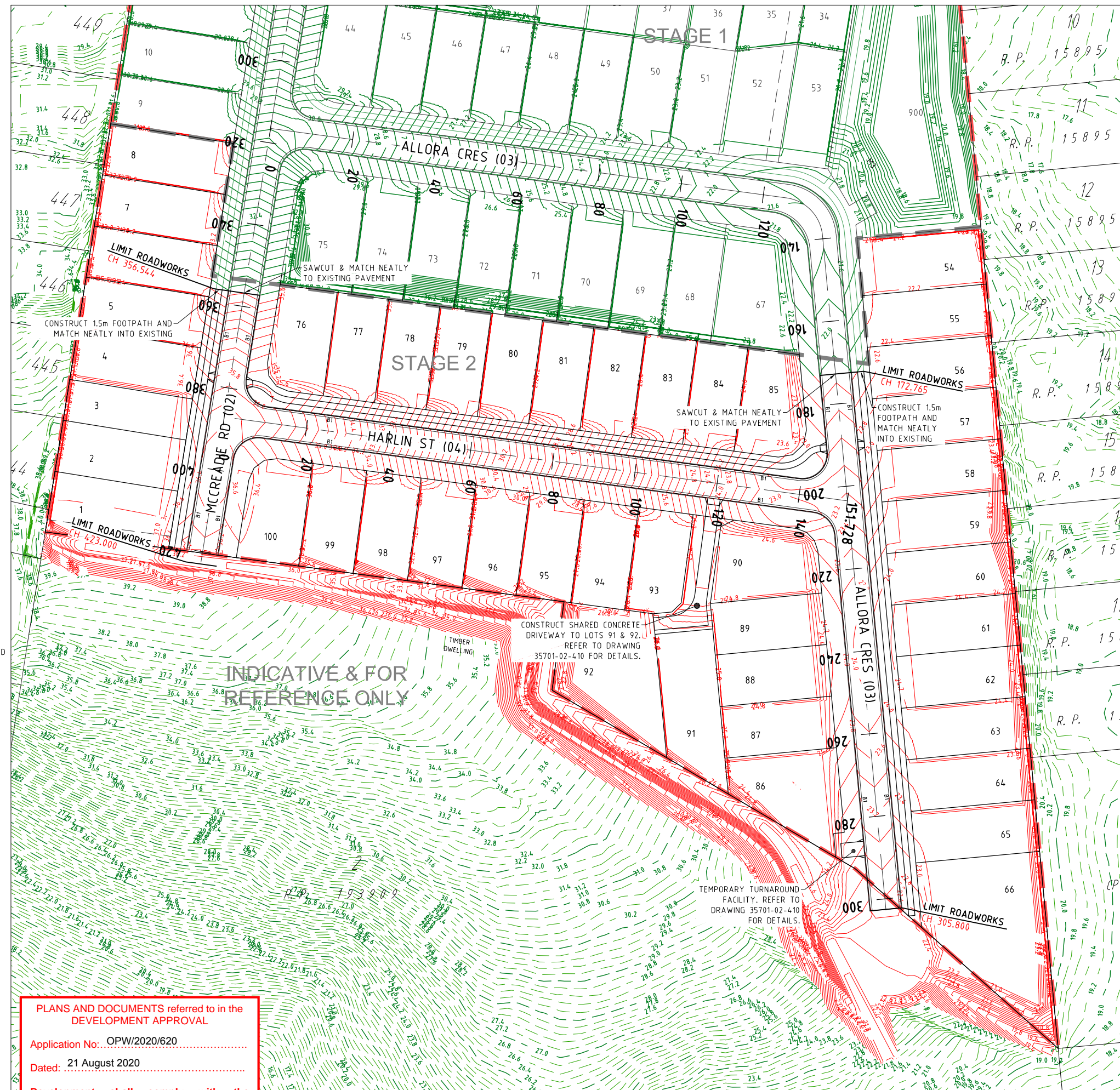
### LEGEND

|  |                               |
|--|-------------------------------|
|  | EXISTING KERB (INVERT)        |
|  | EXISTING KERB (LIP & BACK)    |
|  | EXISTING FOOTPATH             |
|  | EXISTING 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:

|             |                                  |
|-------------|----------------------------------|
| B1          | BARRIER KERB & CHANNEL           |
| B2          | BARRIER KERB                     |
| SM3         | SEMI-MOUNTABLE KERB              |
| ER2         | EDGE RESTRAINT                   |
| M3          | ROLL KERB & CHANNEL              |
| M6 (H)      | KERB EDGE RESTRAINT (HIGH)       |
| M6 (L)      | KERB EDGE RESTRAINT (LOW)        |
| B6          | MEDIAN KERB (MAJOR ROAD)         |
| SM5         | SURFACE MEDIAN KERB (MAJOR ROAD) |
| CHANNEL 900 | DISH DRAIN (900 WIDE)            |

REFER TO DRG. 120 FOR KERB TYPES



PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/620

Dated: 21 August 2020

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 2

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

| ISSUES       | DATE     |
|--------------|----------|
| TENDER       | 10-01-20 |
| COUNCIL      | 30-04-20 |
| CONSTRUCTION | ..       |

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| A        | 16-09-19 | ISSUE FOR INFORMATION |
| PRE DATE |          | AMENDMENT             |

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ASSOCIATED CONSULTANTS



DRAWING TITLE

**ROADWORKS  
PLAN  
SHEET 01**



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Southport QLD 4215

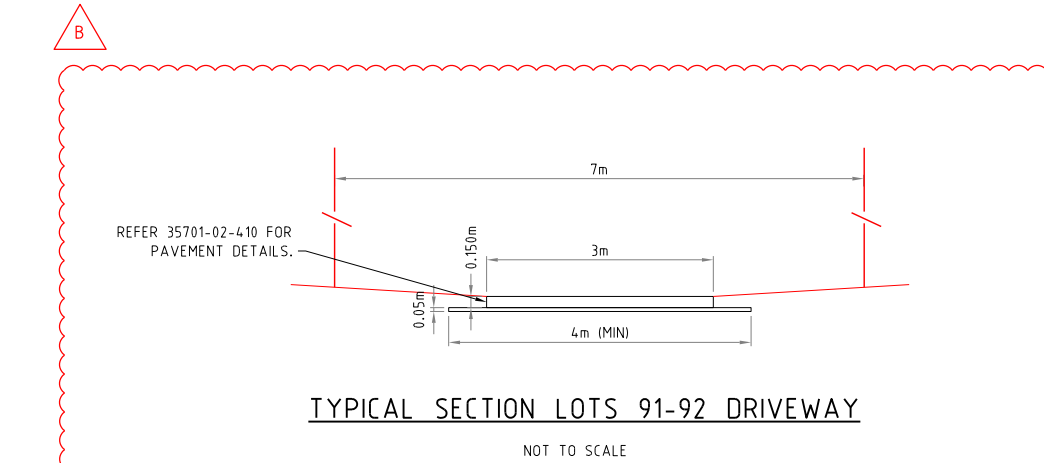
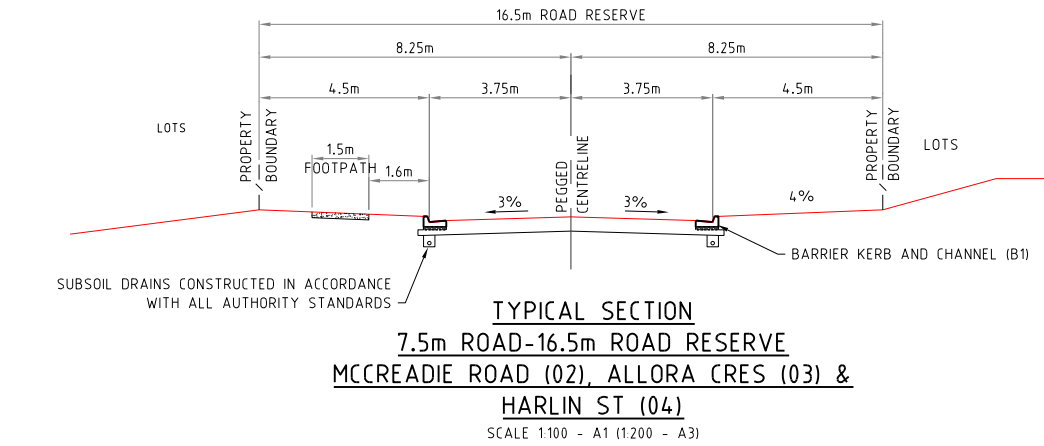
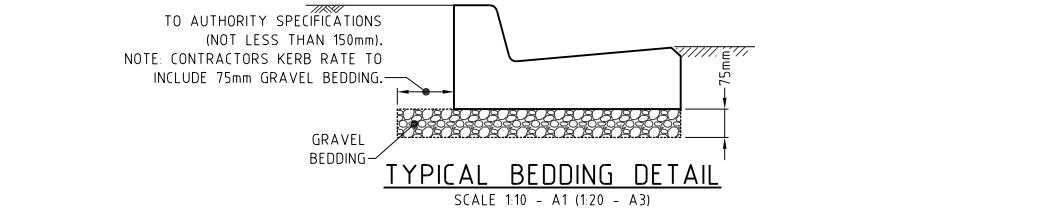
|             |                        |
|-------------|------------------------|
| DESIGNED RB | DRAWN JB               |
| APPROVED    | PER 4706 DATE 28-06-18 |

|                |        |
|----------------|--------|
| DRAWING NUMBER | AMEND. |
| 35701-02-100   | A      |



| SCHEDULE OF PAVEMENT DEPTHS                                 |           |                               |                               |                               |                          |                |                       |
|---|-----------|-------------------------------|-------------------------------|-------------------------------|--------------------------|----------------|-----------------------|
| ROAD NAME   | SURFACING | BASE                          | SUB-BASE                      | LOWER SUB-BASE                | CLASSIFICATION           | DESA OR VPD    | DESIGN GUIDE          |
| MCCREADIE ROAD (02),<br>ALLORA CRES (03),<br>HARLIN ST (04) | 25mm DG10 | 100mm<br>TYPE 2.1<br>(CBR 60) | 100mm<br>TYPE 2.3<br>(CBR 35) | 100mm<br>TYPE 2.5<br>(CBR 15) | RESIDENTIAL<br>ACCESS ST | 401-750<br>VPD | COUNCIL<br>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.



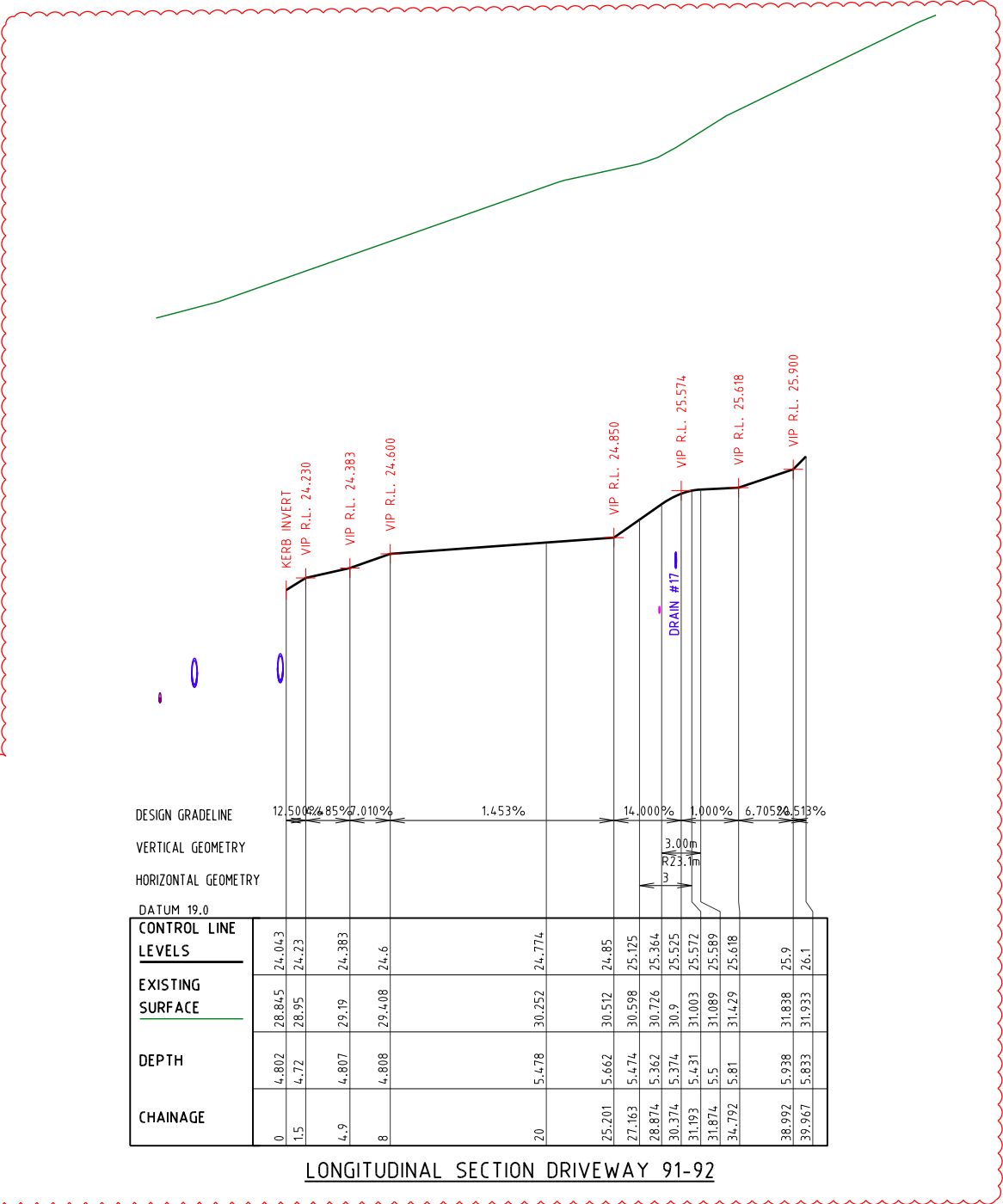
| SCHEDULE OF KERB TYPES |       |  |
|------------------------|-------|--|
| KERB TYPE              | IMAGE | REFERENCE  |
| B1                     |       | IPWEA DWG. RS-080<br><br>NOTE:<br>SUBSOIL DRAINS<br>TO BE PLACED<br>UNDER ALL KERBS. |
| B2                     |       |  |
| SM3           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

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/620

Dated: 21 August 2020

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 2

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

0 1 2 3 4 5m  
Scale 1:100 - A1 (1:200 - A3)

ISSUES

TENDER

COUNCIL

CONSTRUCTION

DATE

10-01-20

30-04-20

..

B

23-06-20

SECTIONS ADDED

A

16-09-19

ISSUE FOR INFORMATION

PRE DATE

AMENDMENT

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DRAWING TITLE

ROADWORKS  
DETAILS  
SHEET 1

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Gold Coast Office:  
Suite 9, 19 Short St  
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DESIGNED RB

DRAWN JB

APPROVED

DATE 28-06-18

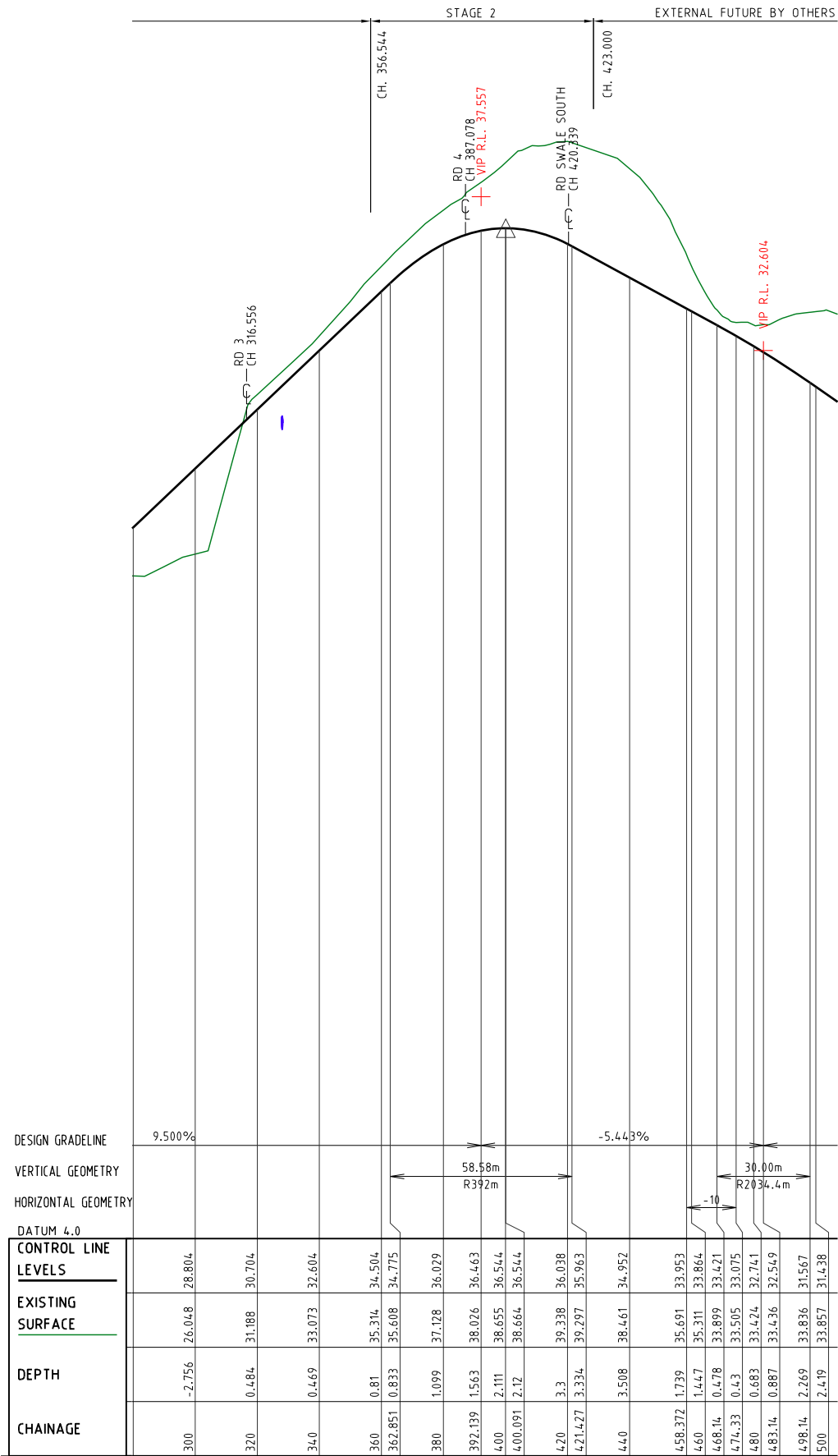
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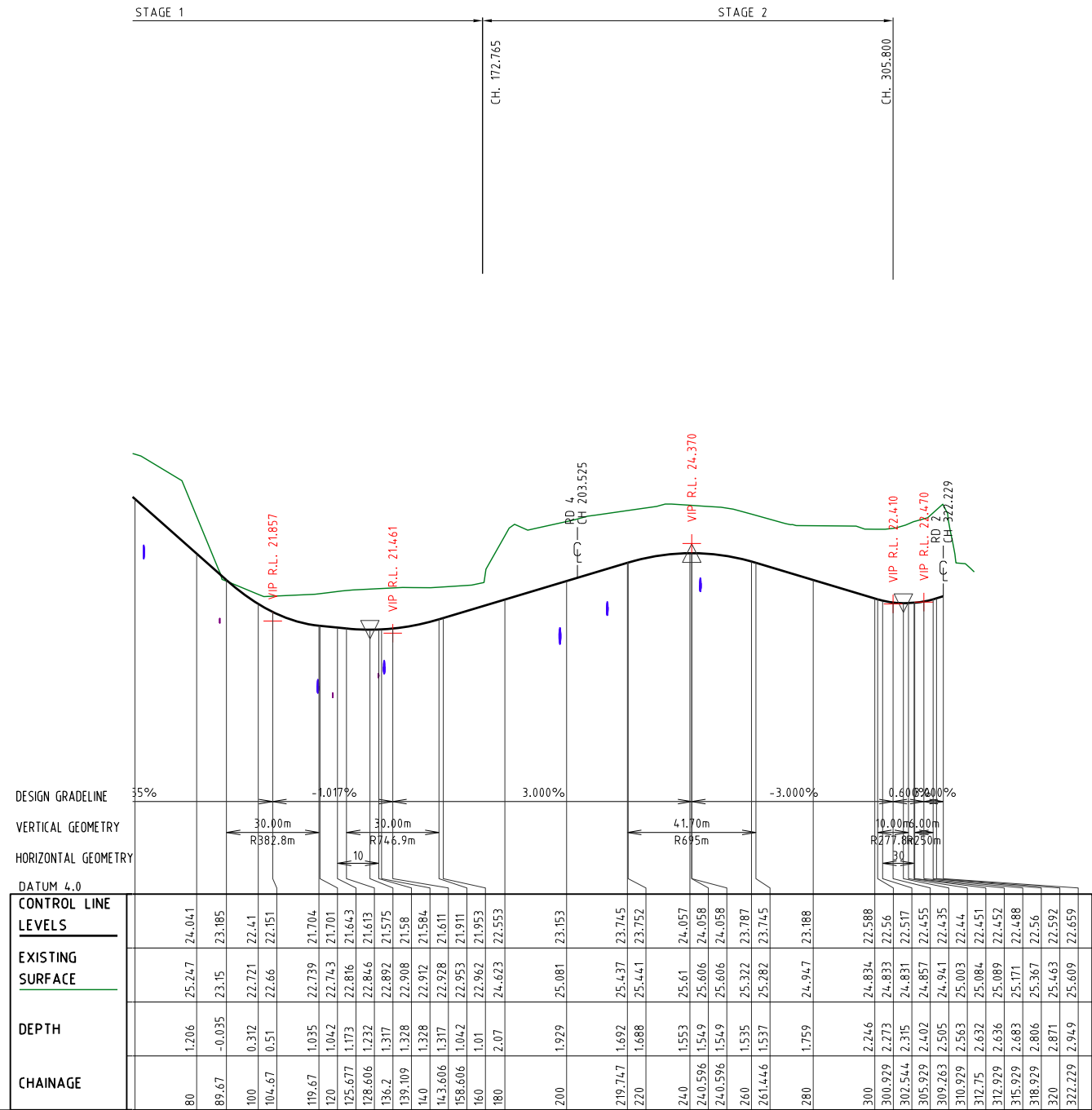
AMEND.

B





LONGITUDINAL SECTION MCCREADIE RD (02)



LONGITUDINAL SECTION ALLORA CRES (03)

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No.: OPW/2020/620

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PROJECT NAME

# DALMA

OPERATIONAL WORKS  
STAGE 2

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

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       | 10-01-20 |
| COUNCIL      | 30-04-20 |
| CONSTRUCTION | ..       |

| PRE | DATE     | AMENDMENT             |
|-----|----------|-----------------------|
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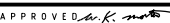
LONGITUDINAL SECTIONS  
ROAD 02 &  
ROAD 03  
SHEET 01 OF 02

  
Urban & Regional Planning  
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Project Coordination

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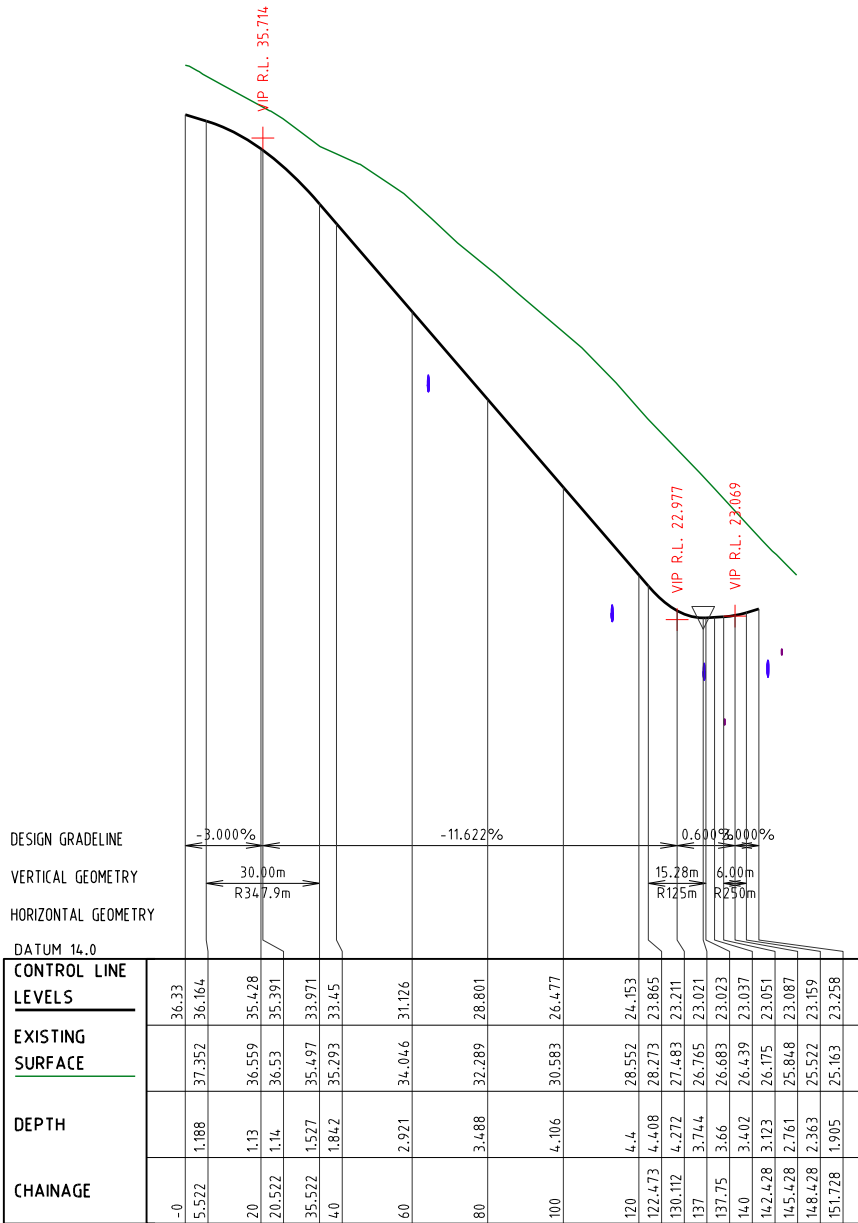
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Suite 9, 19 Short St  
Southport QLD 4215

| DESIGNED | RB  | DRAWN    | JB            |
|----------|---|----------|---------------|
| APPROVED |  | REQ 4706 | DATE 04-07-18 |

| DRAWING NUMBER | AMEND. |
|----------------|--------|
| 35701-02-200   | A      |





LONGITUDINAL SECTION HARLIN ST (04)

PLANS AND DOCUMENTS referred to in the  
DEVELOPMENT APPROVAL

Application No: OPW/2020/620

Dated: 21 August 2020

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PROJECT NAME

DALMA

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ORMEAU  
DEVELOPMENTS  
PTY LTD

0 5 10 15 20 25m

Horiz. Scale 1:500 - A1 (1:1000 - A3)

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Vert. Scale 1:100 - A1 (1:200 - A3)

| ISSUES       | DATE     |  |
|--------------|----------|--|
| TENDER       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
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DRAWING TITLE

LONGITUDINAL SECTIONS  
ROAD 04  
SHEET 02 OF 02

**MORTONS**  
urbansolutions  
Urban & Regional Planning  
Civil Engineering  
Project Coordination

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Fax: 07 5571 1088 Southport QLD 4215

DESIGNED RB DRAWN JB

APPROVED *[Signature]* PREP 4706 DATE 04-07-18

DRAWING NUMBER

35701-02-201

AMEND.

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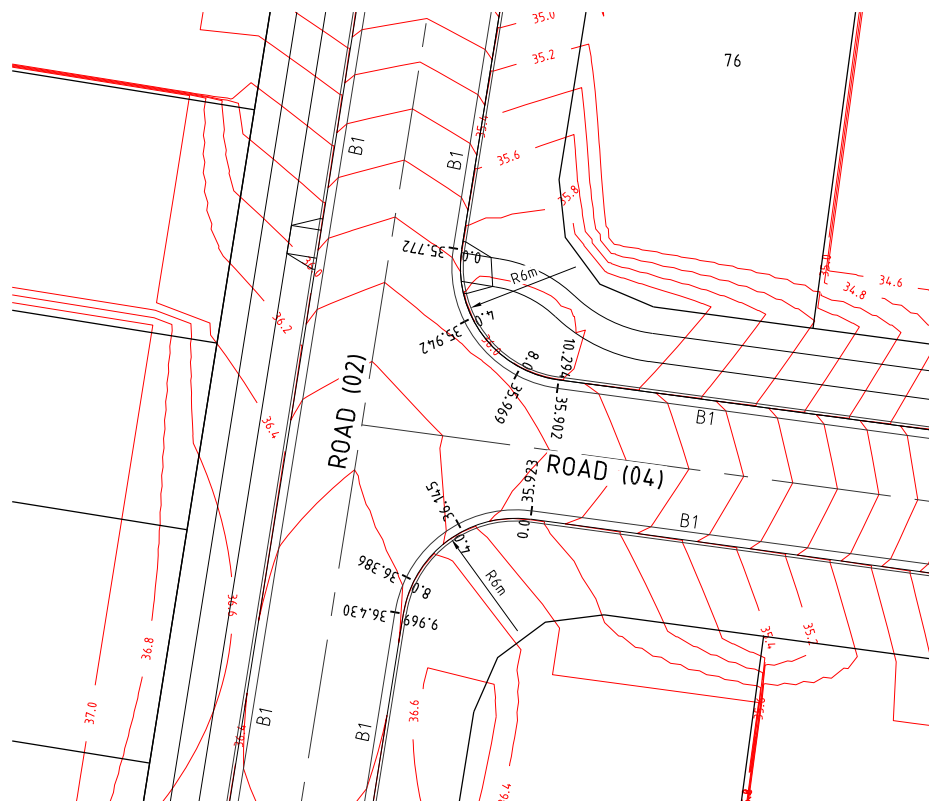




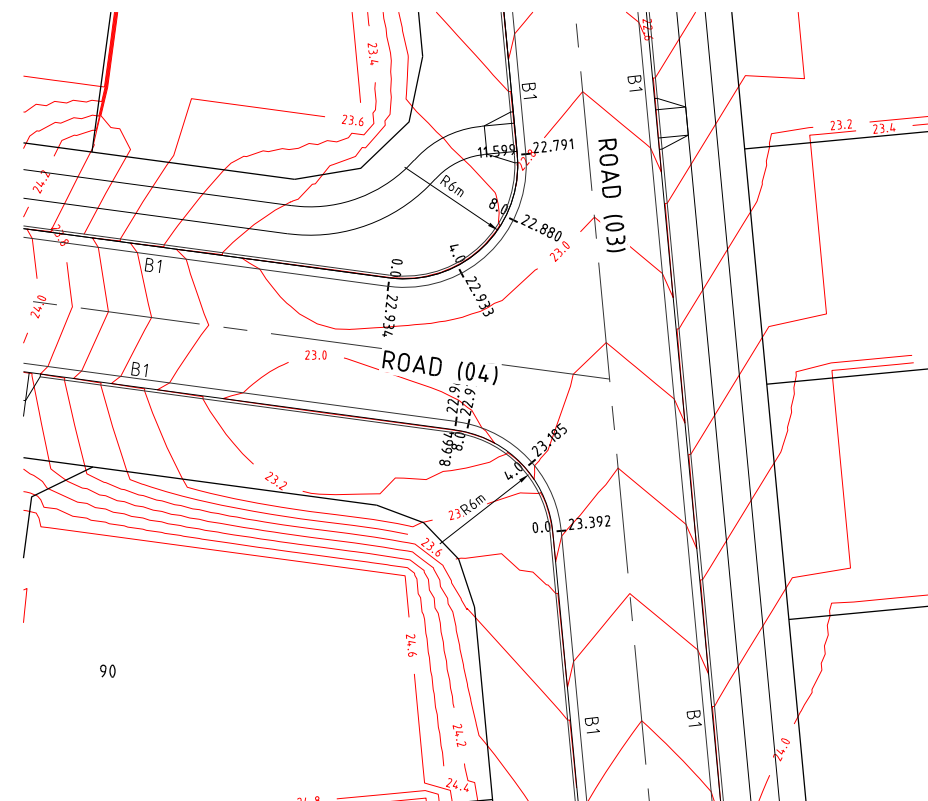
EXISTING KERB (INVERT)  
 EXISTING KERB (LIP & BACK)  
 EXISTING FOOTPATH  
 EXISTING PROPERTY LINE  
 1.0 EXISTING CONTOURS  
 FUTURE KERB  
 FUTURE FOOTPATH  
 FUTURE PROPERTY LINE  
 1.0 FUTURE CONTOURS  
 CONTROL LINE / CENTER OF ROAD  
 PROPOSED KERB (INVERT)  
 PROPOSED KERB (LIP & BACK)  
 PROPOSED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

|                                  |                       |                                  |
|----------------------------------|-----------------------|----------------------------------|
| REFER TO DRG. 120 FOR KERB TYPES | B1                    | BARRIER KERB & CHANNEL           |
|                                  | B2                    | BARRIER KERB                     |
|                                  | SM3                   | SEMI-MOUNTABLE KERB              |
|                                  | ER2                   | EDGE RESTRAINT                   |
|                                  | M3                    | ROLL KERB & CHANNEL              |
|                                  | M6 (H)                | KERB EDGE RESTRAINT (HIGH)       |
|                                  | M6 (L)                | KERB EDGE RESTRAINT (LOW)        |
|                                  | B6                    | MEDIAN KERB (MAJOR ROAD)         |
|                                  | SM5                   | SURFACE MEDIAN KERB (MAJOR ROAD) |
| CHANNEL 900                      | DISH DRAIN (900 WIDE) |                                  |

1. SETOUT POINT DENOTES LIP OF KERB WHERE LIP OF KERB, OR FACE OF KERB WHERE NO LIP.
2. FOR KERB TYPES REFER TO DWG. 120



INTERSECTION  
ROAD (02) & ROAD (04)



INTERSECTION  
ROAD (03) & ROAD (04)

# DALMA

## OPERATIONAL WORKS STAGE 2

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 4 6 8 10m  
Scale 1:200 - A1 (1:400 - A3)

| ISSUES       | DATE     |  |
|--------------|----------|--|
| TENDER       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
| CONSTRUCTION | ..       |  |

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|          |          |                       |
| A        | 16-09-19 | ISSUE FOR INFORMATION |
| PRE DATE |          | AMENDMENT             |

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ASSOCIATED CONSULTANTS



D R A W I N G   T I T L E

INTERSECTION  
GRADING DETAILS  
SHEET 1



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www.urbansolutions.net.au Gold Coast Office  
Tel 07 5571 1099 Suite 9, 19 Short St  
Fax 07 5571 1088 Southport QLD 4215

|                           |                       |
|---------------------------|-----------------------|
| DESIGNED RB               | DRAWN JB              |
| APPROVED <i>a.k. moff</i> | RPEQ 4706 DATE 04-07- |
| DRAWING NUMBER            |                       |
| 35701-02-400              | AMEN A                |

PLANS AND DOCUMENTS referred to in the  
DEVELOPMENT APPROVAL

Application No: OPW/2020/620

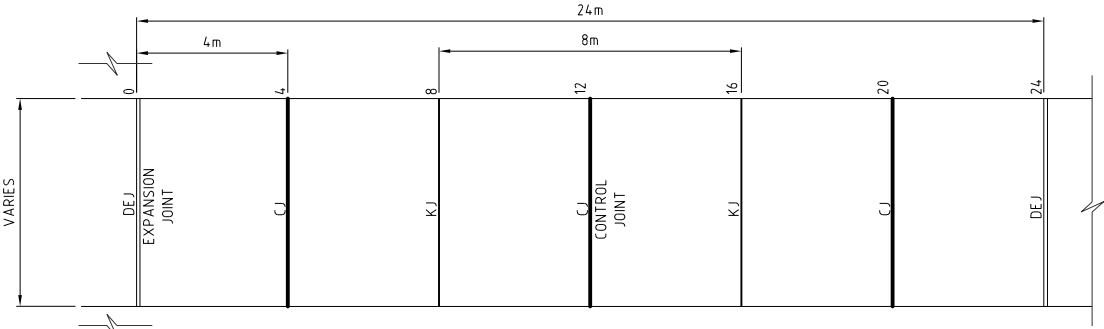
**Dated:** 21 August 2020

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



CONCRETE PAVEMENT DRIVEWAY:

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/m<sup>3</sup>.
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 IPWEAQ 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"



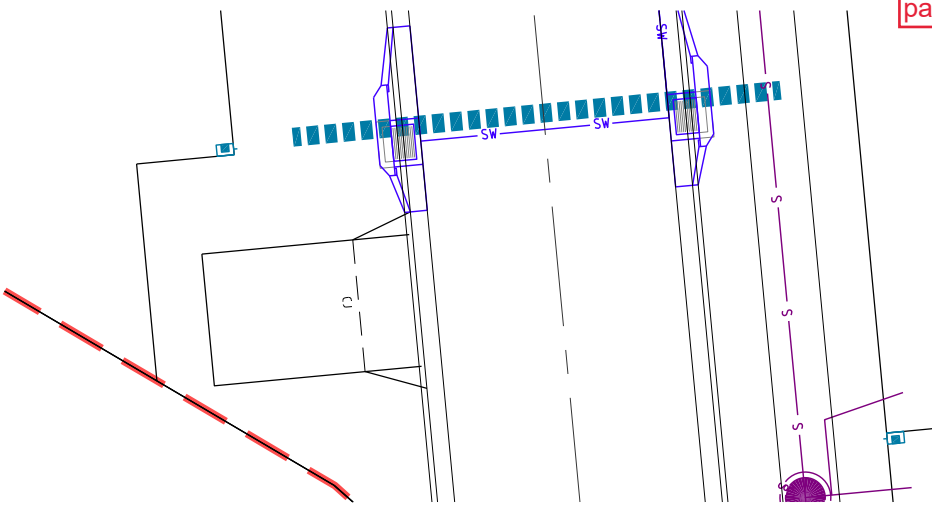
TYPICAL CONCRETE PAVEMENT DETAIL FOR DRIVEWAYS AND ROADS  
SCALE 1:50 - A1 (1:100 - A3)

| SCHEDULE OF CONCRETE PAVEMENTS |              |  |               |          |             |
|--------------------------------|--------------|--|---------------|----------|-------------|
| FUNCTION                       | SURFACING    | SUBGRADE PREPARATION                       | THICKNESS 'T' | STRENGTH | REINFORCING |
| DRIVEWAY<br>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 IPWEAQ DRG RS-065

LEGEND

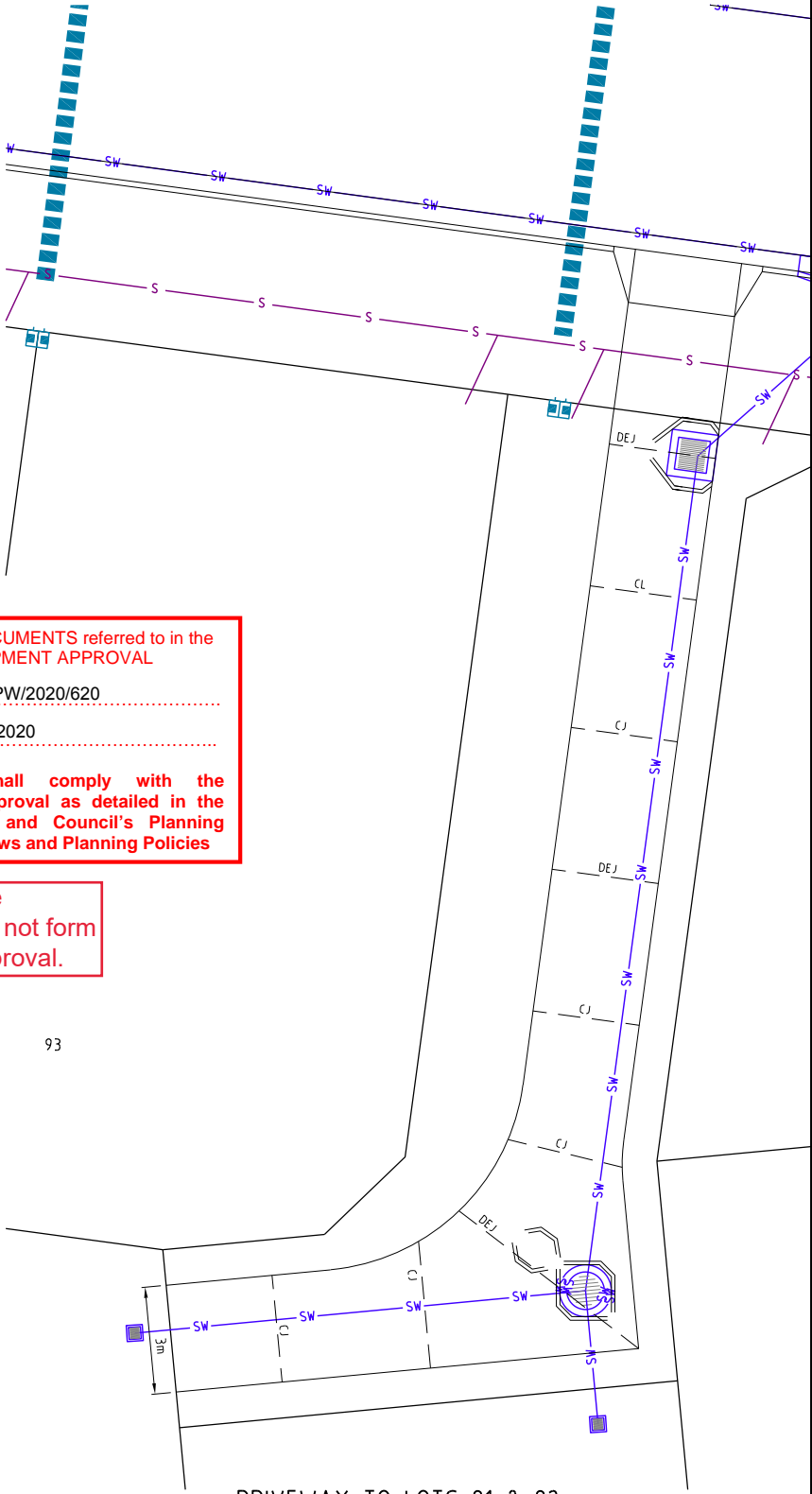
- EXISTING PROPERTY LINE
- EXISTING KERB
- FUTURE KERB
- FUTURE PROPERTY LINE
- PROPERTY LINE
- FACE OF KERB, FOOTPATHS
- LIP AND BACK OF KERB
- CONTROL LINE / CENTER OF ROAD
- EJ EXPANSION JOINT
- DEJ DOWELED EXPANSION JOINT
- IJ ISOLATION JOINT
- SJ SAW JOINT
- CJ CONTROL JOINT
- KJ CONTROL JOINT
- 2xN12 BARS AROUND PENETRATIONS TYP.



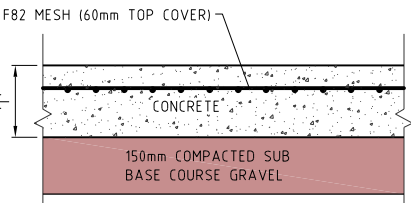
TEMPORARY TURNAROUND LOT 86

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL  
Application No.: OPW/2020/620  
Dated: 21 August 2020  
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

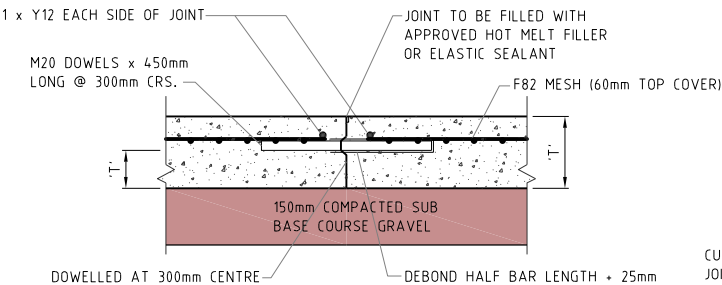
Internal private driveway does not form part of this approval.



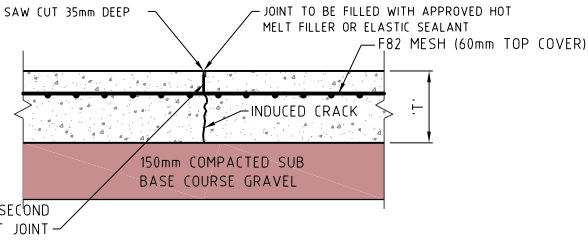
DRIVEWAY TO LOTS 91 & 92



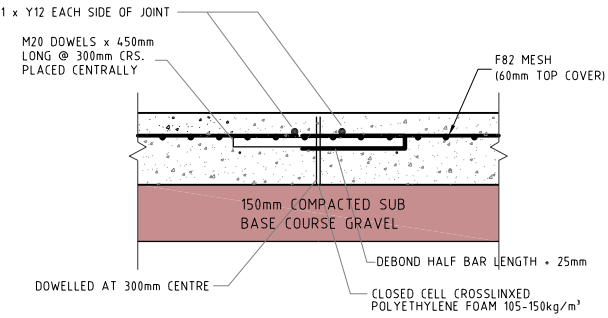
TYPICAL BROOM FINISHED CONCRETE PAVEMENT DETAIL  
SCALE 1:10 - A1 (1:20 - A3)



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)



EXPANSION JOINT DETAIL (24m SPACING) E.J.  
SCALE 1:10 - A1 (1:20 - A3)

PROJECT NAME

DALMA

OPERATIONAL WORKS  
STAGE 2

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 0.5 1.0 1.5 2.0 2.5m  
Scale 1:50 - A1 (1:100 - A3)  
0 1 2 3 4 5m  
Scale 1:100 - A1 (1:200 - A3)

| ISSUES       | DATE     |  |
|--------------|----------|--|
| TENDER       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
| CONSTRUCTION | ..       |  |

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| PRE | DATE     | AMENDMENT             |

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DRAWING TITLE

CONCRETE  
JOINTING PLAN  
AND DETAILS  
SHEET 1 OF 1

**MORTONS**  
urbansolutions  
Urban & Regional Planning  
Civil Engineering  
Project Coordination

MUS Pty Ltd T/As:  
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mortons@urbansolutions.net.au  
www.urbansolutions.net.au  
Tel 07 5571 1099  
Fax 07 5571 1088

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

|                             |                        |
|-----------------------------|------------------------|
| DESIGNED RB                 | DRAWN JB               |
| APPROVED <i>[Signature]</i> | PER 4706 DATE 03-07-18 |

DRAWING NUMBER  
35701-02-410

AMEND.  
A



## LINEMARKING

1. LINE-MARKING AND SIGNAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES". ALL SIGNAGE SHOWN IS DIAGRAMMATIC ONLY.
2. ALL SIGN POSTS & SIGN RAILS TO BE GALVANISED UNLESS NOTED OTHERWISE.

### PAVEMENT MARKING LEGEND

|  |                                   |
|--|-----------------------------------|
|  | EXISTING EDGE LINE - EL           |
|  | EXISTING EDGE LINE YELLOW - EL(Y) |
|  | EXISTING CONTINUITY LINE - CL     |
|  | EXISTING TURN LINE - TL           |
|  | EXISTING BARRIER LINE - BL(B)     |
|  | EXISTING BARRIER LINE - BL        |
|  | EXISTING LANE LINE - LL           |
|  | EXISTING LANE LINE - LL(B)        |
|  | EXISTING GIVE WAY LINE - GWL      |
|  | EXISTING STOP LINE - SL           |
|  | EDGE LINE - EL                    |
|  | EDGE LINE YELLOW - EL(Y)          |
|  | CONTINUITY LINE - CL              |
|  | TURN LINE - TL                    |
|  | BARRIER LINE - BL(B)              |
|  | BARRIER LINE - BL                 |
|  | LANE LINE - LL                    |
|  | LANE LINE - LL(B)                 |
|  | GIVE WAY LINE - GWL               |
|  | STOP LINE - SL                    |

NOTE: REFER TO: MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR ALL LINEMARKING AND SIGN STANDARDS

### LEGEND

|  |                        |
|--|------------------------|
|  | EXISTING KERB (INVERT) |
|  | EXISTING PROPERTY LINE |
|  | FUTURE KERB (INVERT)   |
|  | FUTURE PROPERTY LINE   |
|  | PROPOSED KERB (INVERT) |
|  | PROPOSED PROPERTY LINE |
|  | SITE BOUNDARY          |
|  | STAGE BOUNDARY         |
|  | SIGN POST              |
|  | SIGN POST              |
|  | SIGN POST              |

INDICATIVE & FOR  
REFERENCE ONLY

2  
R. P. 193909



PLANS AND DOCUMENTS referred to in the  
DEVELOPMENT APPROVAL

Application No: OPW/2020/620

Dated: 21 August 2020

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 2

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

| ISSUES       | DATE     |  |
|--------------|----------|--|
| TENDER       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
| CONSTRUCTION | ..       |  |

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| PRE | DATE     | AMENDMENT             |

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DRAWING TITLE

LINEMARKING & SIGNAGE  
PLAN  
SHEET 1

**MORTONS**  
urbansolutions  
Urban & Regional Planning  
Civil Engineering  
Project Coordination

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Mortons-Urban Solutions  
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Tel: 07 5571 1099  
Fax: 07 5571 1088

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

|             |                        |
|-------------|------------------------|
| DESIGNED RB | DRAWN JB               |
| APPROVED    | PEQ 4706 DATE 04-07-18 |

DRAWING NUMBER

35701-02-420

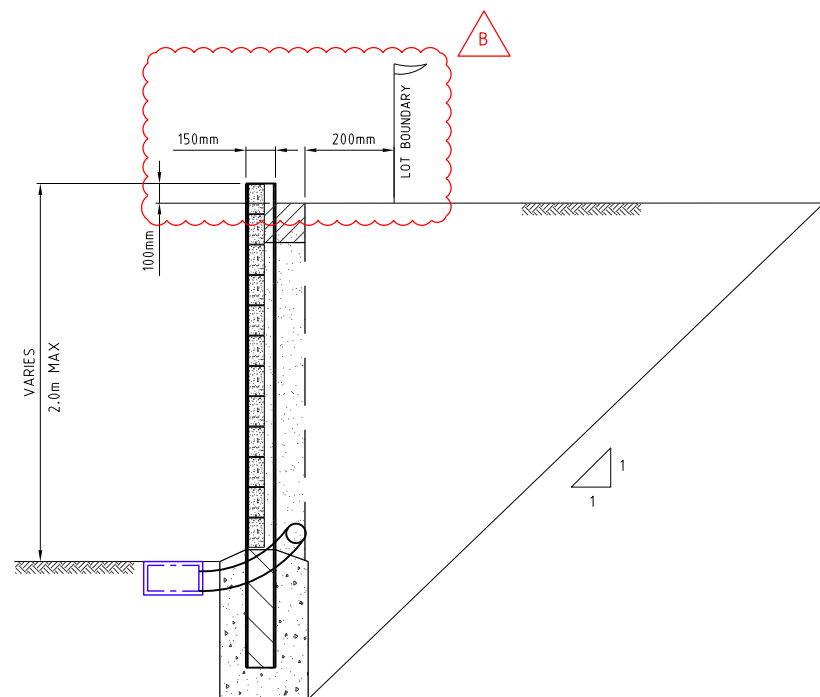
AMEND.

A









CROSS SECTION OF  
CONCRETE RETAINING WALL

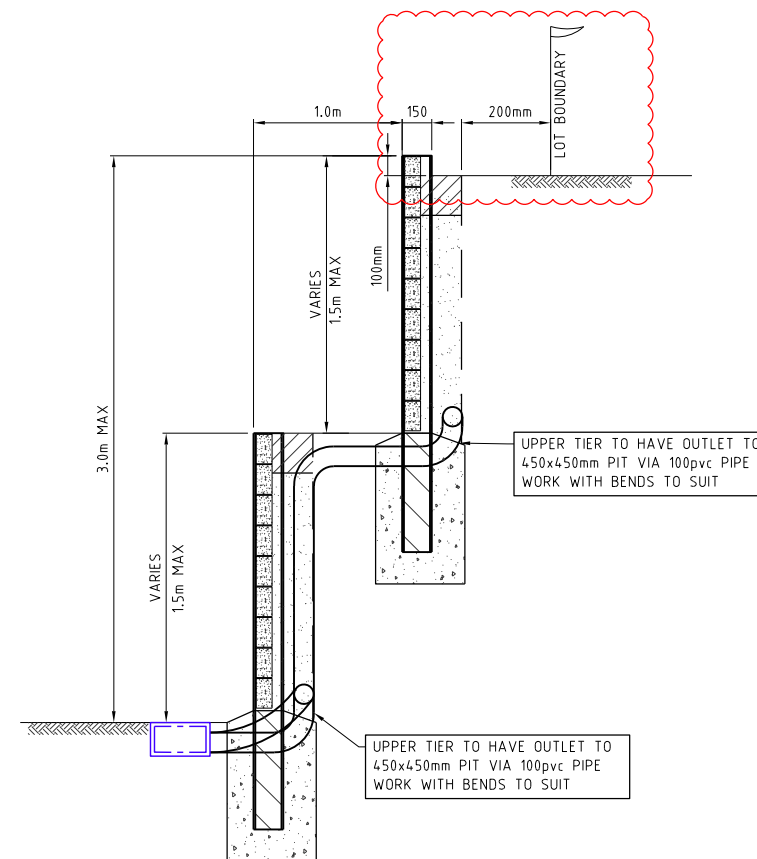
SCALE 1:20 - A1 (1:40 - A3)

**NOTES:**

1. RETAINING WALL DETAILS ARE INDICATIVE ONLY.
2. CONTRACTOR TO ARRANGE FOR DESIGN AND CONSTRUCTION OF WALLS BY RPEQ STRUCTURAL ENGINEER. CONTRACTOR TO PROVIDE STRUCTURAL CERTIFICATION OF DESIGN AND FINAL CONSTRUCTION.
3. 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.
7. 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.
9. 200mm TO BACK OF DRAINING MATERIAL OR FOOTING FROM PROPERTY BOUNDARY.

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

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



CROSS SECTION OF SPLIT  
CONCRETE RETAINING WALL

N.T.S

PLANS AND DOCUMENTS referred to in the  
DEVELOPMENT APPROVAL

Application No.: OPW/2020/620

Dated: 21 August 2020

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

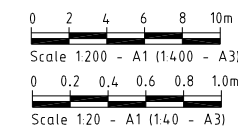
**DALMA**

**OPERATIONAL WORKS  
STAGE 2**

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**



| ISSUES       | DATE     |  |
|--------------|----------|--|
| TENDER       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
| CONSTRUCTION | ..       |  |

|          |          |                       |
|----------|----------|-----------------------|
| B        | 23-06-20 | NOTES AMENDED         |
| A        | 16-09-19 | ISSUE FOR INFORMATION |
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DRAWING TITLE

**RETAINING WALL  
DETAILS**

**MORTONS**  
urbansolutions  
Urban & Regional Planning  
Civil Engineering  
Project Coordination

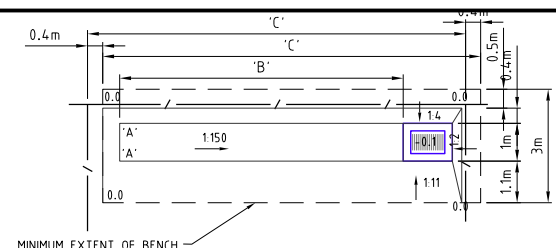
MUS Pty Ltd T/As:  
Mortons-Urban Solutions  
ABN: 39 116 375 065  
mortons@urbansolutions.net.au  
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Southport QLD 4215

|                             |                         |
|-----------------------------|-------------------------|
| DESIGNED RB                 | DRAWN JB                |
| APPROVED <i>[Signature]</i> | RPEQ 4706 DATE 04-07-18 |

|                |        |
|----------------|--------|
| DRAWING NUMBER | AMEND. |
| 35701-02-460   | B      |





| LOT WIDTH 'C' | HEIGHT 'A' | LENGTH 'B' |
|---------------|------------|------------|
| 10            | -0.050     | 7.500      |
| 12.5          | -0.033     | 10.000     |
| 14            | -0.023     | 11.500     |
| 16            | -0.01      | 13.500     |
| 18            | 0.0        | 15.000     |
| 20            | 0.0        | 15.000     |

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No... OPW/2020/620

Dated: 21 August 2020

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

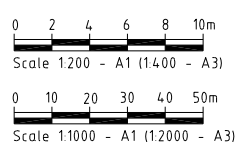
# DALMA

## OPERATIONAL WORKS STAGE 2

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



| ISSUES       | DATE     |  |
|--------------|----------|--|
| TENDER       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
| CONSTRUCTION | ..       |  |

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DRAWING TITLE

FINAL TRIM  
DETAILS  
SHEET 01

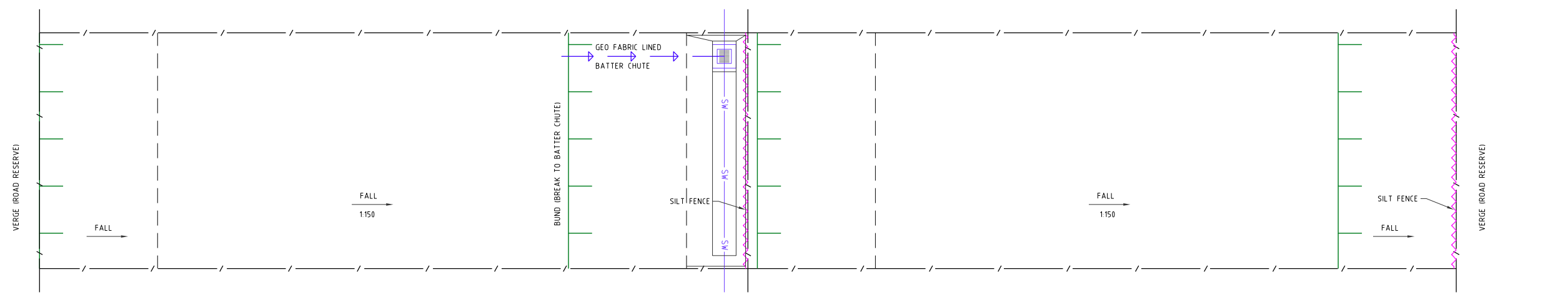


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Tel 07 5571 1099  
Fax 07 5571 1088

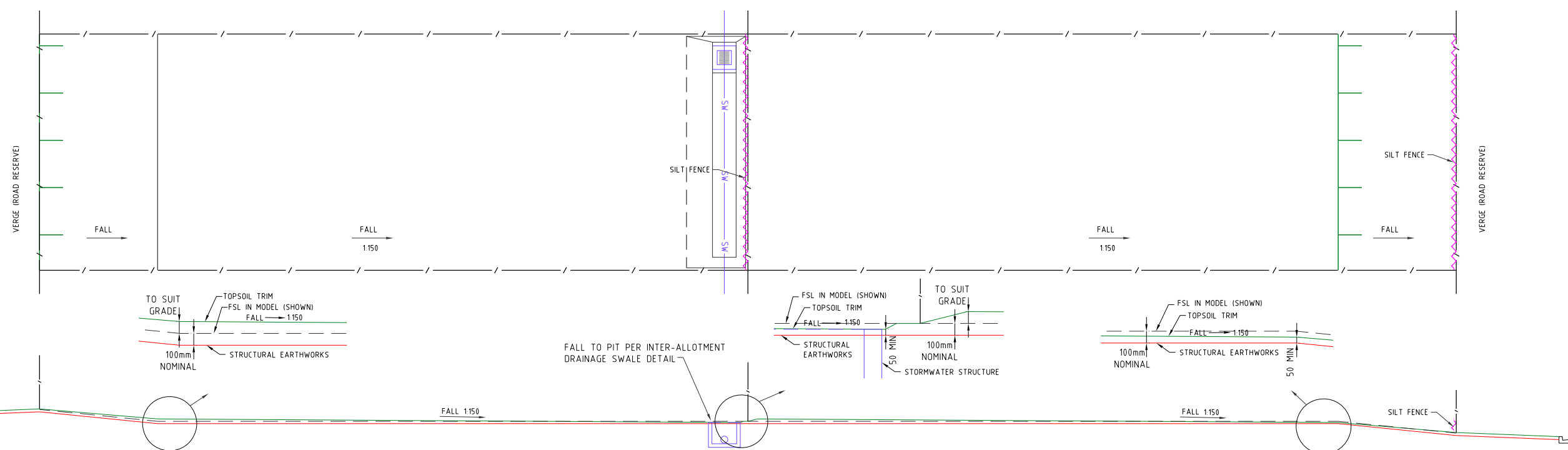
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PO Box 2484  
Southport QLD 4215

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

|                             |                        |
|-----------------------------|------------------------|
| DESIGNED RB                 | DRAWN JB               |
| APPROVED <i>[Signature]</i> | PEQ 4706 DATE 04-07-18 |
| DRAWING NUMBER              | AMEND.                 |
| 35701-02-461                | A                      |



TYPICAL TOPSOIL TRIM (BENCHED LOTS)  
NOT TO SCALE



TYPICAL TOPSOIL TRIM (NON BENCHED LOTS)  
NOT TO SCALE



## SEQ CODE SEWER NOTES

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.

### SOIL

- 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 REINSTATE.
- PREDISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED.

### SAFETY

- 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 REQUIRED COMPACTION HAS BEEN ACHIEVED.
- WHERE SEWERS HAVE A GRADE OF 1 IN 20 OR STEEPER, BULKHEADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SEQ SEWER CODE.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES BEFORE COMMENCING WORKS.
- SEWERS SHALL BE DISUSED /ABANDONED IN ACCORDANCE WITH PROCEDURES SET OUT IN THE SEQ SEWER CODE.
- BENCH MARK AND LEVELS TO AHD.
- ~~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.~~
- 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

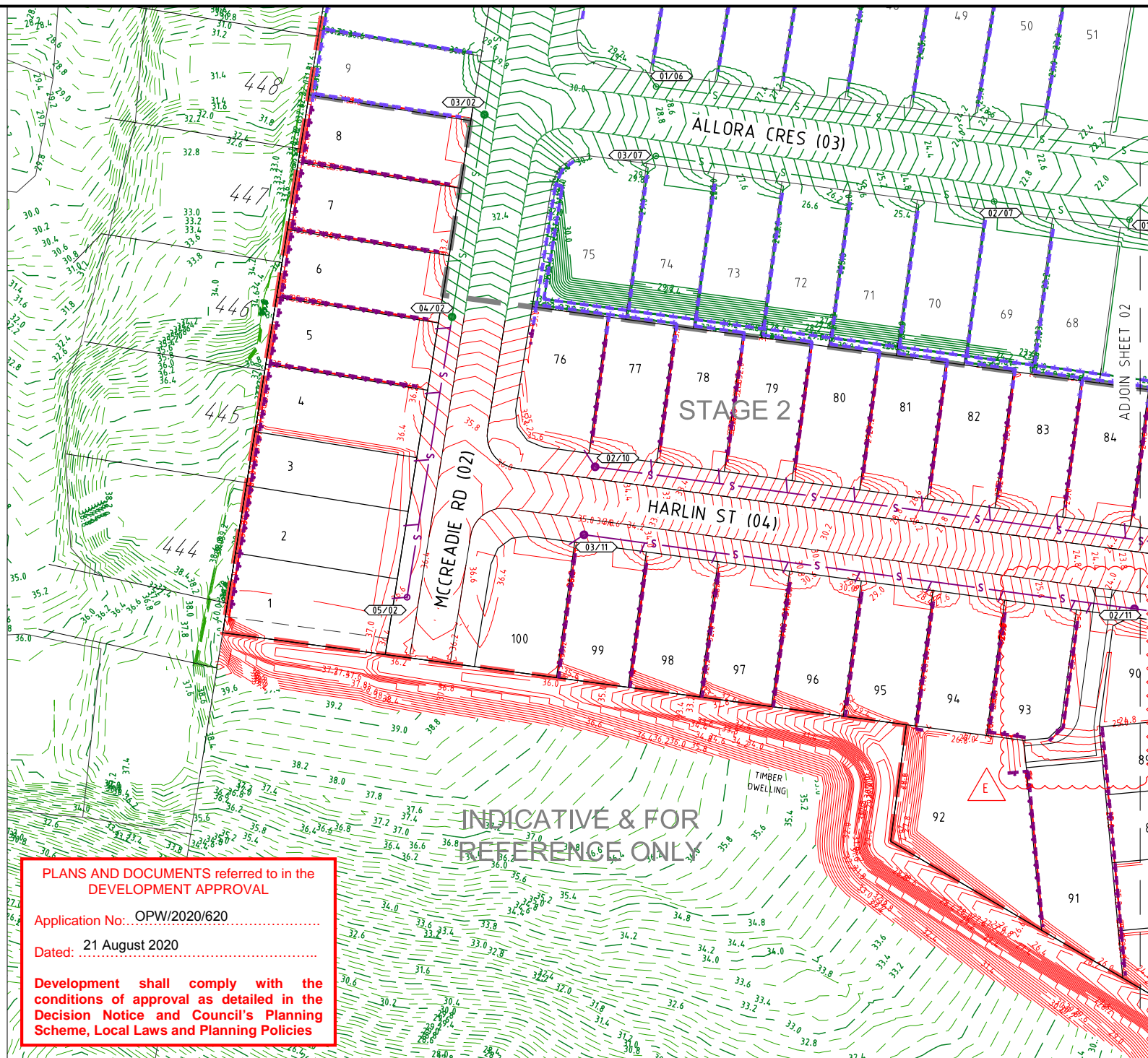
- ALL SEWER MAINS TO BE AS PER SEWER PIPE SPECIFICATIONS TABLE.
- NOTWITHSTANDING THE STANDARD SEQ NOTES ABOVE, ALL MATERIALS AND WORKS MUST BE IN ACCORDANCE WITH THE SERVICE PROVIDER'S APPROVAL CONDITIONS AND THE SEQ WS&S D&C CODE.
- THE CONTRACTOR IS TO INCLUDE ROCK EXCAVATION AS PART OF THEIR SEWER RATES UNLESS SCHEDULED OTHERWISE WITHIN THE CONTRACT.
- THE CONTRACTOR TO PROVIDE CALCREOUS 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 INSTRUCTION
- ALL BENDS TO BE LONG RADIUS BEND, 3m RADIUS U.N.O.
- CONTRACTOR TO VERIFY DOWNSTREAM EXISTING PIPE LEVELS PRIOR TO COMMENCEMENT OF WORKS ON-SITE.
- 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. UNLESS 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

## LEGEND

|      |                                      |   |                         |
|------|--------------------------------------|---|-------------------------|
| —S—  | EXISTING SEWER                       | ● | SEWER MANHOLE           |
| —RM— | EXISTING RISING MAIN                 | ● | SEWER RODDING END       |
| —    | EXISTING KERB (INVERT)               | ● | SEWER BEND              |
| —    | EXISTING PROPERTY LINE               | ● | SEWER MAINTENANCE SHAFT |
| —    | EXISTING RETAINING WALL              | — | SEWER END CAP           |
| —    | EXISTING BESSER BLOCK RETAINING WALL | — | SEWER PUMP STATION      |
| —    | EXISTING CONTOURS                    | — | SEWER PIT NO/LINE       |
| —S—  | FUTURE SEWER                         |   |                         |
| —RM— | FUTURE RISING MAIN                   |   |                         |
| —    | FUTURE KERB (INVERT)                 |   |                         |
| —    | FUTURE PROPERTY LINE                 |   |                         |
| —    | FUTURE RETAINING WALL                |   |                         |
| —    | FUTURE CONTOURS                      |   |                         |
| —    | SITE BOUNDARY                        |   |                         |
| —    | STAGE BOUNDARY                       |   |                         |
| —    | PROPOSED KERB (INVERT)               |   |                         |
| —    | PROPOSED PROPERTY LINE               |   |                         |
| —    | PROPOSED RETAINING WALL              |   |                         |
| —    | DESIGN CONTOURS                      |   |                         |
| —S—  | PROPOSED SEWER                       |   |                         |
| —RM— | PROPOSED RISING MAIN                 |   |                         |

### SHEET LAYOUT

|              |              |
|--------------|--------------|
| 35701-02-500 | 35701-02-501 |
|--------------|--------------|



PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/620

Dated: 21 August 2020

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

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



## LIVE SEWER WORKS SCHEDULE

| 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 02) |            |        |            |            |        |        |        |        |                 |
| 1(B) | STUB END CAP, CONTRACTOR TO LAY NEW LINES 02. AFTER CLEANSING, TESTING AND INSPECTING, NOTIFY GOLD COAST WATER.                          | 150        | 04/02  | A          | B          | 6      | 34.364 | 34.507 | 32.994 | 1.370           |
| 1(C) | CONTRACTOR TO REMOVE PLUG FROM MANHOLE AND MAKE LIVE CONNECTION AFTER SUCCESSFUL "ON MAINTENANCE" INSPECTION.                            |            |        |            |            |        |        |        |        |                 |
| 2(A) | CIVIL CONTRACTOR TO MAKE APPLICATION TO GOLD COAST WATER FOR THE LIVE CONNECTION TO DOWNSTREAM SEWER MANHOLE AT EACH LOCATION (LINES 10) |            |        |            |            |        |        |        |        |                 |
| 2(B) | STUB END CAP, CONTRACTOR TO LAY NEW LINES 10. AFTER CLEANSING, TESTING AND INSPECTING, NOTIFY GOLD COAST WATER.                          | 150        | 12/04  | A          | B          | 57     | 22.963 | 23.106 | 19.971 | 2.992           |
| 2(C) | CONTRACTOR TO REMOVE PLUG FROM MANHOLE AND MAKE LIVE CONNECTION AFTER SUCCESSFUL "ON MAINTENANCE" INSPECTION.                            |            |        |            |            |        |        |        |        |                 |
| 3(A) | CIVIL CONTRACTOR TO MAKE APPLICATION TO GOLD COAST WATER FOR THE LIVE CONNECTION TO DOWNSTREAM SEWER MANHOLE AT EACH LOCATION (LINES 04) |            |        |            |            |        |        |        |        |                 |
| 3(B) | STUB END CAP, CONTRACTOR TO LAY NEW LINES 04. AFTER CLEANSING, TESTING AND INSPECTING, NOTIFY GOLD COAST WATER.                          | 150        | 12/04  | A          | B          | 57     | 22.963 | 23.106 | 19.991 | 3.052           |
| 3(C) | CONTRACTOR TO REMOVE PLUG FROM MANHOLE AND MAKE LIVE CONNECTION AFTER SUCCESSFUL "ON MAINTENANCE" INSPECTION.                            |            |        |            |            |        |        |        |        |                 |

PROJECT NAME

**DALMA**

## OPERATIONAL WORKS STAGE 2

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

| ISSUES       | DATE     |  |
|--------------|----------|--|
| TENDER       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
| CONSTRUCTION | ..       |  |

|          |           |  |
|----------|-----------|--|
|          |           |  |
|          |           |  |
|          |           |  |
| E        | 05-08-20  | SEWER ALIGNMENT AMENDED                  |
| D        | 06-07-20  | SEWER AND LIVE SEWER WORKS TABLE AMENDED |
| C        | 30-06-20  | SEWER AND TABLE AMENDED                  |
| B        | 04-06-20  | SEWER AMENDED                            |
| A        | 16-09-19  | ISSUE FOR INFORMATION                    |
| PRE DATE | AMENDMENT |  |

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ASSOCIATED CONSULTANTS



DRAWING TITLE

**SEWER RETICULATION  
PLAN AND NOTES  
SHEET 01 OF 02**

**MORTONS**  
urbansolutions  
Urban & Regional Planning  
Civil Engineering  
Project Coordination

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  
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Southport QLD 4215

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

|                             |                         |
|-----------------------------|-------------------------|
| DESIGNED RB                 | DRAWN JB                |
| APPROVED <i>[Signature]</i> | PREP 4706 DATE 04-07-18 |

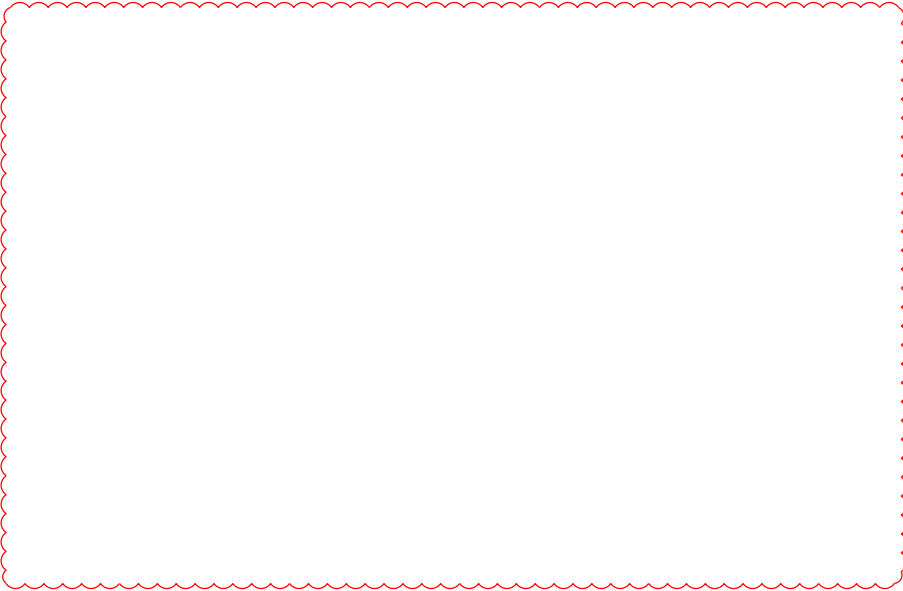
DRAWING NUMBER  
**35701-02-500**

AMEND.  
**E**

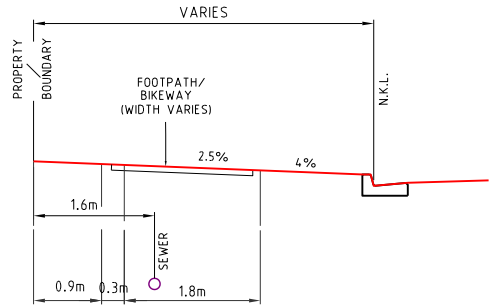








B

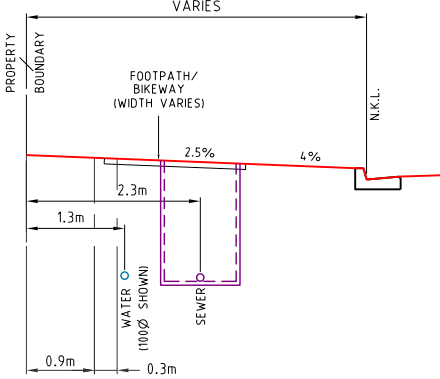


U/G POWER GAS SEWERAGE  
TELECOMMUNICATIONS AND WATER  
AND CABLE T.V.

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

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

1. 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 WATER  
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/2020/620.....

Dated: 21 August 2020.....

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 2**

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

| ISSUES       | DATE     |  |
|--------------|----------|--|
| TENDER       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
| CONSTRUCTION | ..       |  |

|          |           |                       |
|----------|-----------|-----------------------|
|          |           |                       |
|          |           |                       |
|          |           |                       |
|          |           |                       |
|          |           |                       |
|          |           |                       |
|          |           |                       |
|          |           |                       |
| B        | 20-06-20  | DETAIL REMOVED        |
| A        | 16-09-19  | ISSUE FOR INFORMATION |
| PRE DATE | AMENDMENT |                       |

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DRAWING TITLE

**SEWER RETICULATION  
DETAILS  
SHEET 1 OF 1**



MUS Pty Ltd T/As:  
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Fax: 07 5571 1088

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

|                                       |                         |
|---------------------------------------|-------------------------|
| DESIGNED RB                           | DRAWN JB                |
| APPROVED <i>[Signature]</i>           | PREP 4706 DATE 04-07-18 |
| DRAWING NUMBER<br><b>35701-02-510</b> | AMEND.<br><b>B</b>      |



| RIGSS SEWER STRUCTURE TYPES |   |
|-----------------------------|---|
| P(x)                        | PRECAST CONCRETE SEWER MAINTENANCE STRUCTURE<br>REFER TO SEQ STD DWG SEQ-SEW-1300-1       |
| A                           | TYPE 'A' 1050mm DIA. MAINTENANCE STRUCTURE<br>REFER TO SEQ STD DWGS SEQ-SEW-1307-1        |
| B                           | TYPE 'B' 1200mm DIA. MAINTENANCE STRUCTURE<br>REFER TO SEQ STD DWGS SEQ-SEW-1307-1        |
| C                           | TYPE 'C' 1500mm DIA. MAINTENANCE STRUCTURE<br>REFER TO SEQ STD DWGS SEQ-SEW-1307-1        |
| J1                          | TYPE 'J1' MAINTENANCE STRUCTURE<br>REFER TO SEQ STD DWGS SEQ-SEW-1314-2 (300mm DIA SHAFT) |
| BND                         | BEND<br>REFER TO SEQ STD DWGS SEQ-SEW-1314-3  |
| RE                          | RODDING END MAINTENANCE STRUCTURE<br>REFER TO SEQ STD DWGS SEQ-SEW-1314-1                 |
| END                         | PROPRIETARY END CAP   |
| PS                          | SEWER PUMP STATION<br>REFER TO RELEVANT SEQ STD DWGS                                      |
| RCM                         | RECEIVING MAINTENANCE STRUCTURE<br>REFER TO RELEVANT SEQ STD SEWER PUMP STATION DWGS      |
| G6                          | TYPE 'G6' TERMINAL MAINTENANCE SHAFT<br>REFER TO SEQ STD DWGS SEQ-SEW-1314-1              |

| RIGSS SEWER STRUCTURE DROPS |   |
|-----------------------------|---|
| V                           | STRAIGHT THROUGH SEWER<br>REFER TO SEQ STD DWG SEQ-SEW-1303-1 |
| W                           | OBLIQUE BACKDROP<br>REFER TO SEQ STD DWG SEQ-SEW-1303-1       |
| X                           | INTERNAL BACKDROP<br>REFER TO SEQ STD DWG SEQ-SEW-1303-1      |
| Y                           | EXTERNAL BACKDROP<br>REFER TO SEQ STD DWG SEQ-SEW-1303-1      |

STRUCTURE TYPE  
LID CLASS  
DROP TYPE

\* CONSTRUCT BRIDGING  
STRUCTURE SPANNING THE  
SEWER TRENCH REFER  
TYPICAL SECTIONS &  
DETAILS FOR BRIDGING  
STRUCTURE DETAILS

| TRENCHSTOPS,  
BULKHEADS & CONCRETE  
ENCASEMENTS TO BE  
INSTALLED IN ACCORDANCE  
WITH SEQ SEWER CODE  
NOTES

- 1.IF SHOWN, WATER AND  
ELECTRICAL CROSSING  
LOCATIONS ARE  
INDICATIVE ONLY. REFER  
TO PLANS TO DETERMINE  
CROSSING LOCATIONS.  
WHERE SERVICE  
INDICATES CLASH WITH  
SEWER, SEWER TO TAKE  
PRECEDENCE, SERVICE TO  
BE CONSTRUCTED OVER  
OR UNDER SEWER  
ACCORDING TO  
SUPERINTENDENTS  
INSTRUCTION
- 2.ALL GRAVITY uPVC  
SEWER PIPE TO BE  
CLASS SN8 U.N.O.
- 3.ALL PRESSURE MAIN  
uPVC SEWER PIPE TO BE  
CLASS SN16 U.N.O.
- 4.ALL EMBEDMENT TYPE IS  
TO BE TYPE 3 U.N.O
- 5.ALL BENDS TO BE LONG  
RADIUS BEND, 3m RADIUS
- 6.CONTRACTOR TO VERIFY  
DOWNSTREAM EXISTING  
PIPE LEVELS PRIOR TO  
COMMENCEMENT OF  
PIPEWORK
- 7.PROTECTIV COATING IS  
TO BE INSTALLED TO  
MAINTENANCE  
STRUCTURES (WHERE  
REQUIRED) IN  
ACCORDANCE WITH  
CLAUSE 4.7.2 OF SEQ  
SEWERAGE CODE.

PIPE DIAMETER (mm)  
PIPE GRADE

DATUM R.L.

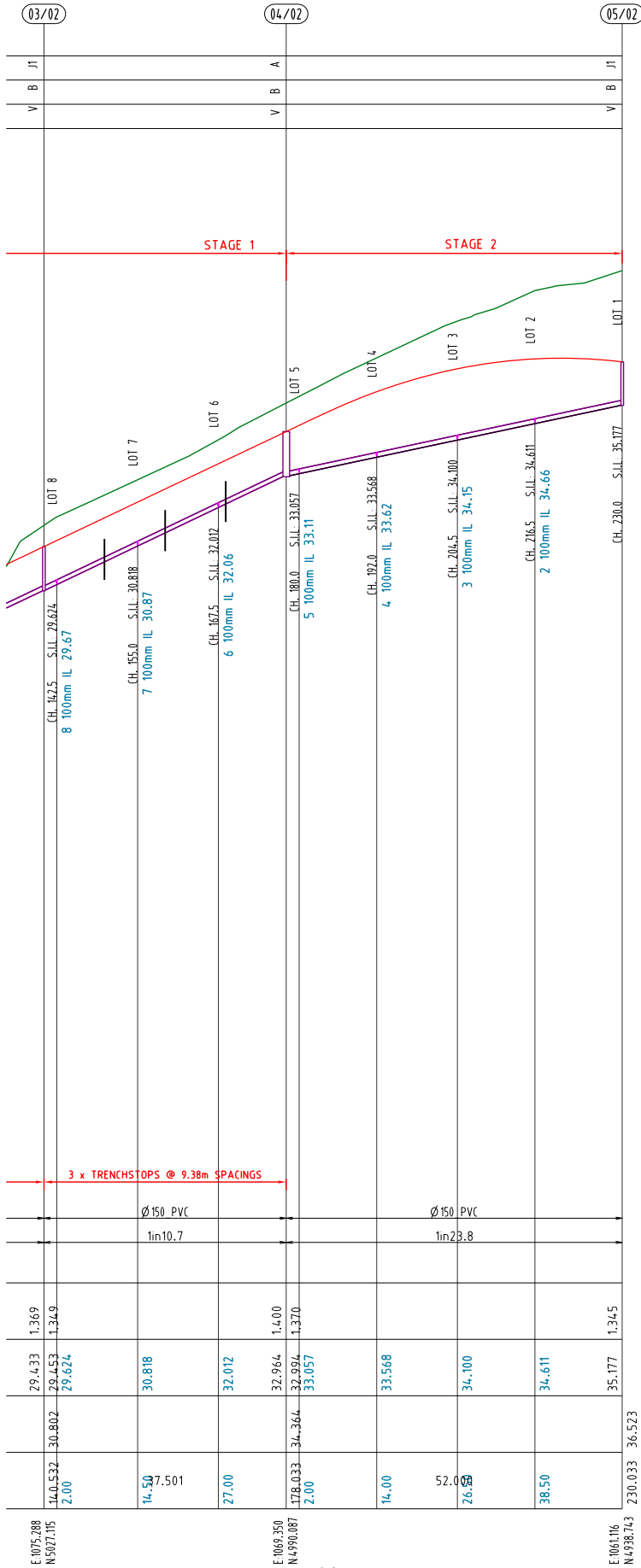
DEPTH TO INVERT

PIPE INVERT  
LEVELS

DESIGN SURFACE  
LEVELS

CHAINAGE

LINE NO.



PLANS AND DOCUMENTS referred to in the  
DEVELOPMENT APPROVAL

Application No: OPW/2020/620

Dated: 21 August 2020

Development shall comply with the  
conditions of approval as detailed in the  
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Scheme, Local Laws and Planning Policies

PROJECT NAME

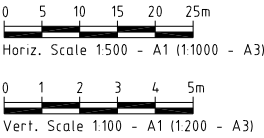
DALMA

OPERATIONAL WORKS  
STAGE 2

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



| ISSUES       |  | DATE     |  |
|--------------|--|----------|--|
| TENDER       |  | 10-01-20 |  |
| COUNCIL      |  | 30-04-20 |  |
| CONSTRUCTION |  | ..       |  |

|   |          |                        |
|---|----------|------------------------|
| D | 06-07-20 | SEWER PROFILES AMENDED |
| C | 30-06-20 | SEWER PROFILES AMENDED |
| B | 04-06-20 | SEWER PROFILES AMENDED |
| A | 16-09-19 | ISSUE FOR INFORMATION  |

| PRE DATE | AMENDMENT |
|----------|-----------|
|----------|-----------|

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ASSOCIATED CONSULTANTS



DRAWING TITLE

SEWER RETICULATION  
PROFILES  
SHEET 01 OF 04



MUS Pty Ltd T/As:  
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Gold Coast Office:  
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Southport QLD 4215

|                             |                         |
|-----------------------------|-------------------------|
| DESIGNED RB                 | DRAWN JB                |
| APPROVED <i>[Signature]</i> | PREP 4706 DATE 04-07-18 |

DRAWING NUMBER  
35701-02-530

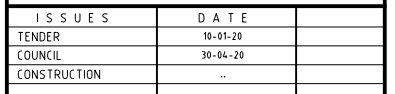
AMEND.  
D



# DALMA

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

ORMEAU  
DEVELOPMENTS  
PTY LTD



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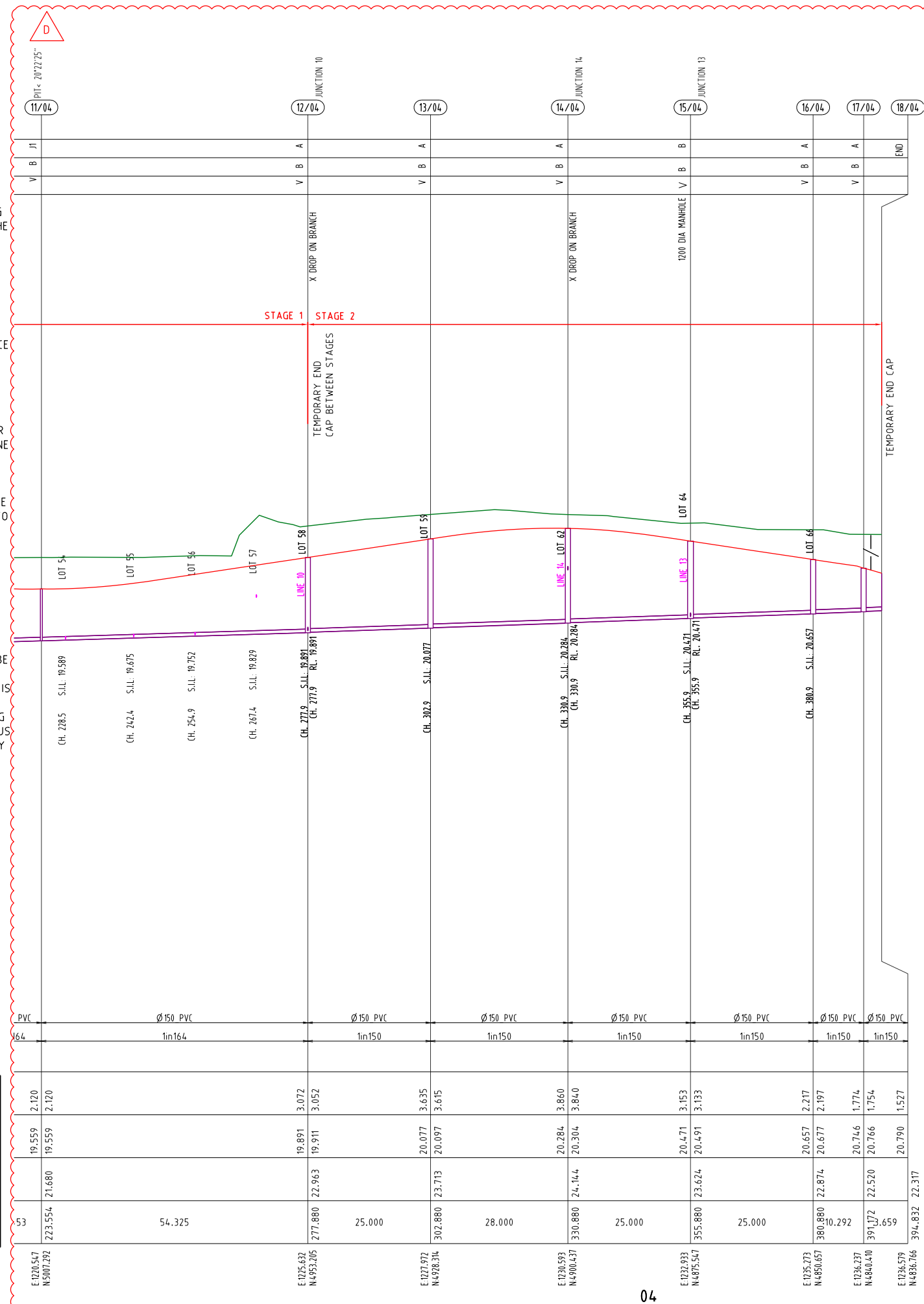


SEWER RETICULATION  
PROFILES  
SHEET 02 OF 04

MUS Pty Ltd T/As: Postal Address  
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Gold Coast Office  
Suite 9, 19 Short St  
Southport QLD 4215  
Tel 07 5571 1099  
Fax 07 5571 1088

|                                  |  |           |               |
|----------------------------------|--|-----------|---------------|
| DESIGNED RB                      |  | DRAWN JB  |               |
| APPROVED <i>W.K. [Signature]</i> |  | RPEQ 4706 | DATE 04-07-18 |
| DRAWING NUMBER                   |  |           | AMEND.        |
| 35701-02-531                     |  |           | D             |

LINE NO.



04

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











| RIGSS SEWER STRUCTURE DROPS |  |
|-----------------------------|--|
| A                           | SEWER PROPERTY CONNECTION (STANDARD & EXTENDED) REFER TO SEQ STD DWGS SEQ-SEW-1104-1   |
| B                           | 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         |
| V                           | SEWER PROPERTY CONNECTION (STRAIGHT THROUGH SEWER) REFER TO SEQ STD DWG SEQ-SEW-1303-1 |
| X                           | 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 APPROVAL

Application No: OPW/2020/620

Dated: 21 August 2020

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

#### NOTES

1. 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 SUPERINTENDANTS INSTRUCTION.

2. ALL HOUSE CONNECTIONS TO BE 100Ø CLASS SN6 UNLESS NOTED OTHERWISE

PIPE DIAMETER (mm)

PIPE GRADE

DATUM R.L.

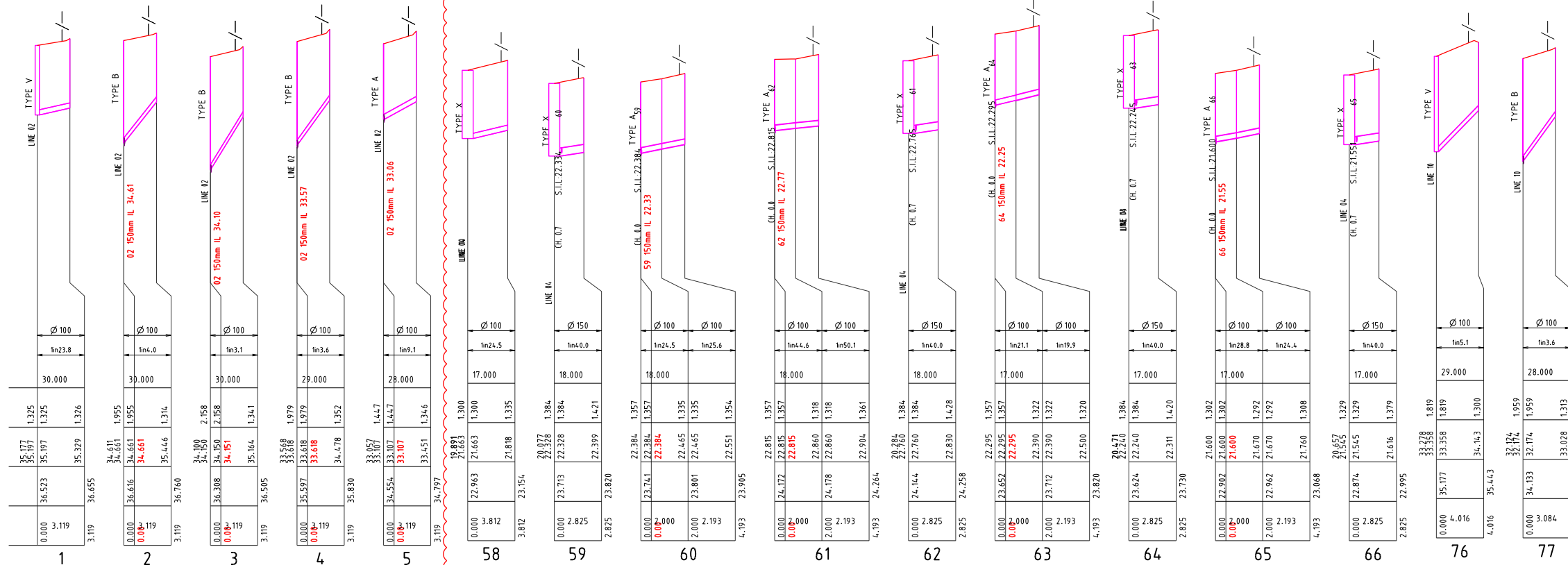
DEPTH TO INVERT

PIPE INVERT LEVELS

DESIGN SURFACE LEVELS

CHAINAGE

LOT NO.



#### NOTES

1. 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 SUPERINTENDANTS INSTRUCTION.

2. ALL HOUSE CONNECTIONS TO BE 100Ø CLASS SN6 UNLESS NOTED OTHERWISE

PIPE DIAMETER (mm)

PIPE GRADE

DATUM R.L.

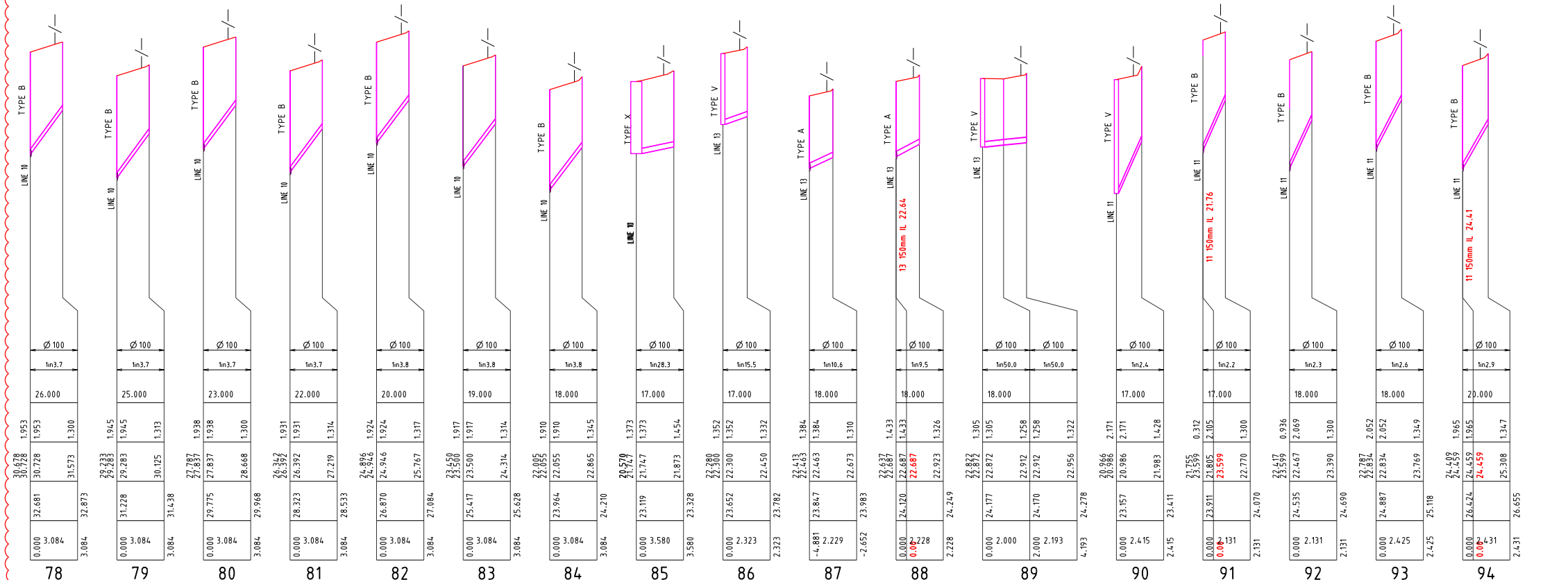
DEPTH TO INVERT

PIPE INVERT LEVELS

DESIGN SURFACE LEVELS

CHAINAGE

LOT NO.



PROJECT NAME

**DALMA**

OPERATIONAL WORKS  
STAGE 2

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  
Horiz. Scale 1:250 - A1 (1:500 - A3)

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

| ISSUES       | DATE     |  |
|--------------|----------|--|
| TENDER       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
| CONSTRUCTION | ..       |  |

| E | 11-06-20 | HOUSE CONNECTION PROFILES AMENDED |
|---|----------|-----------------------------------|
| D | 06-07-20 | HOUSE CONNECTION PROFILES AMENDED |
| C | 30-06-20 | HOUSE CONNECTION PROFILES AMENDED |
| B | 04-06-20 | HOUSE CONNECTION PROFILES AMENDED |
| A | 16-09-19 | ISSUE FOR INFORMATION             |

| PRE DATE | AMENDMENT |
|----------|-----------|
|----------|-----------|

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ASSOCIATED CONSULTANTS



DRAWING TITLE

SEWER RETICULATION  
HOUSE CONNECTION  
PROFILES  
SHEET 01 OF 02



MUS Pty Ltd T/A:  
Mortons-Urban Solutions  
ABN: 39 116 375 065  
mortons@urbansolutions.net.au  
www.urbansolutions.net.au  
Gold Coast Office  
Suite 9, 19 Short St  
Southport QLD 4215

|                             |                        |
|-----------------------------|------------------------|
| DESIGNED RB                 | DRAWN JB               |
| APPROVED <i>[Signature]</i> | PEQ 4706 DATE 04-07-18 |

| DRAWING NUMBER | AMEND. |
|----------------|--------|
| 35701-02-550   | E      |











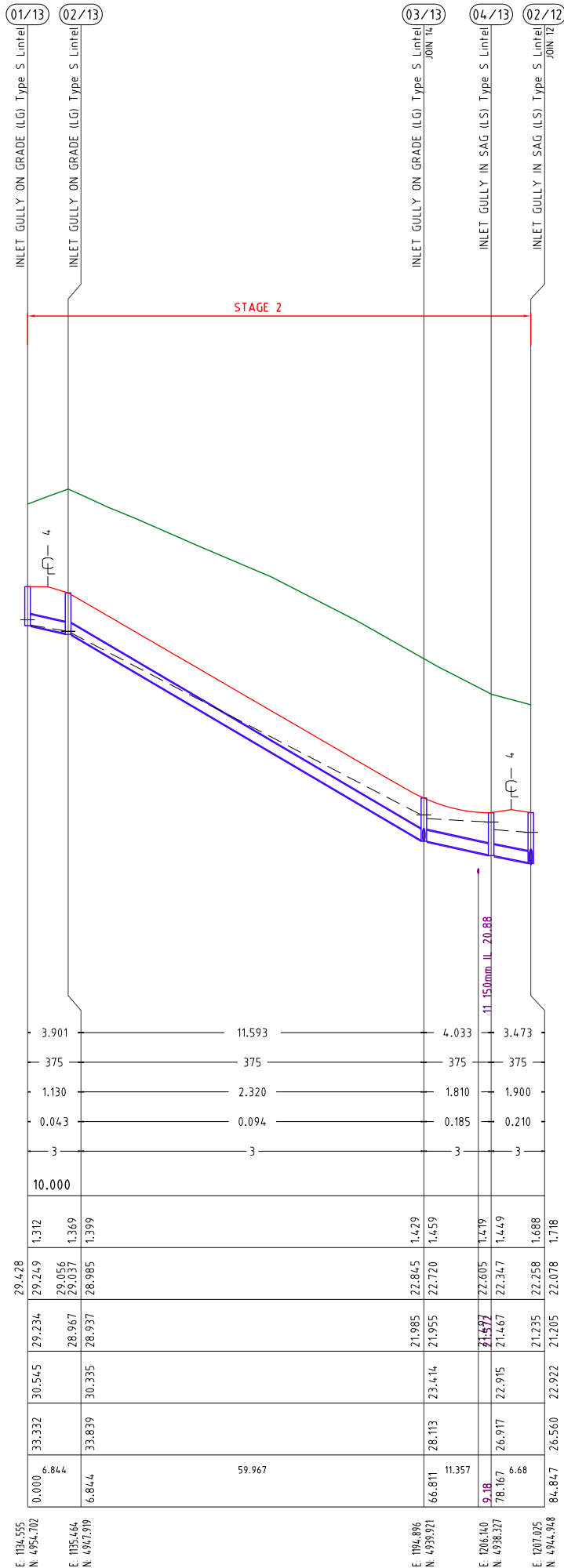




## STRUCTURE DESCRIPTION

|                                   |
|-----------------------------------|
| DEPTH TO INVERT                   |
| HYDRAULIC GRADE<br>LINE — — — — — |
| PIPE <u>INVERT LEVELS</u>         |
| DESIGN SURFACE<br>LEVELS _____    |
| EXISTING SURFACE<br>LEVELS _____  |
| CHAINAGE                          |

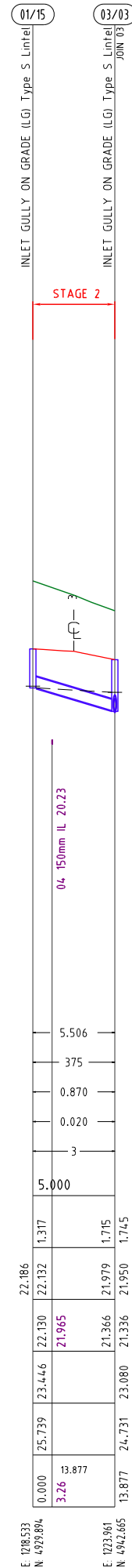
13



|                 | 01/14                                | 02/14                       | 03/14  | 03/13   |
|-----------------|--------------------------------------|-----------------------------|--|---|
| Elevation       | E 186.194                            | E 185.843                   | E 185.985  | E 184.886   |
| Northing        | N 497.630                            | N 491.364                   | N 494.713  | N 493.921   |
| Stationing      | 30.623<br>0.000<br>3.750             | 25.900<br>23.721<br>23.691  | 24.342<br>22.650<br>22.836                       | 23.414<br>21.985<br>22.845                        |
| Offset          | 3.75<br>23.56                        |                             | 0.878<br><u>3.44</u>                             | 28.113  |
| Manhole / Inlet | Ø 225 RISER (EXTEND 300mm ABOVE FSL) | MANHOLE 1050mm DIA JOIN 17' | TYPE 2 FIELD INLET 900x900 GRATE (CLASS D GRATE) | INLET GULLY ON GRADE (LG) Type S Unlined JOIN 15' |
| Pipe Size       | Ø 225                                | Ø 375                       | Ø 375  | Ø 375   |
| Material        | PVC                                  | 3                           | 3  | 3   |
| Slope           | 0.015                                | 0.041                       | 0.050  |   |
| Length          | 1.450                                | 1.743                       | 1.662  | 1.429   |
| Stationing      | 24.458                               | 23.783                      | 22.859   | 22.720  |
| Elevation       | 24.534                               |                             |  | 21.955  |
| Notes           |                                      |                             | 11' 150mm IL 21.86                               |   |
| Stage           | STAGE 2                              |                             |  |   |

14

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



15

RECOMMEND.

A

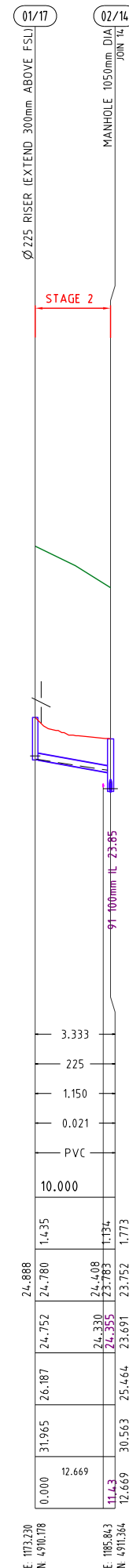
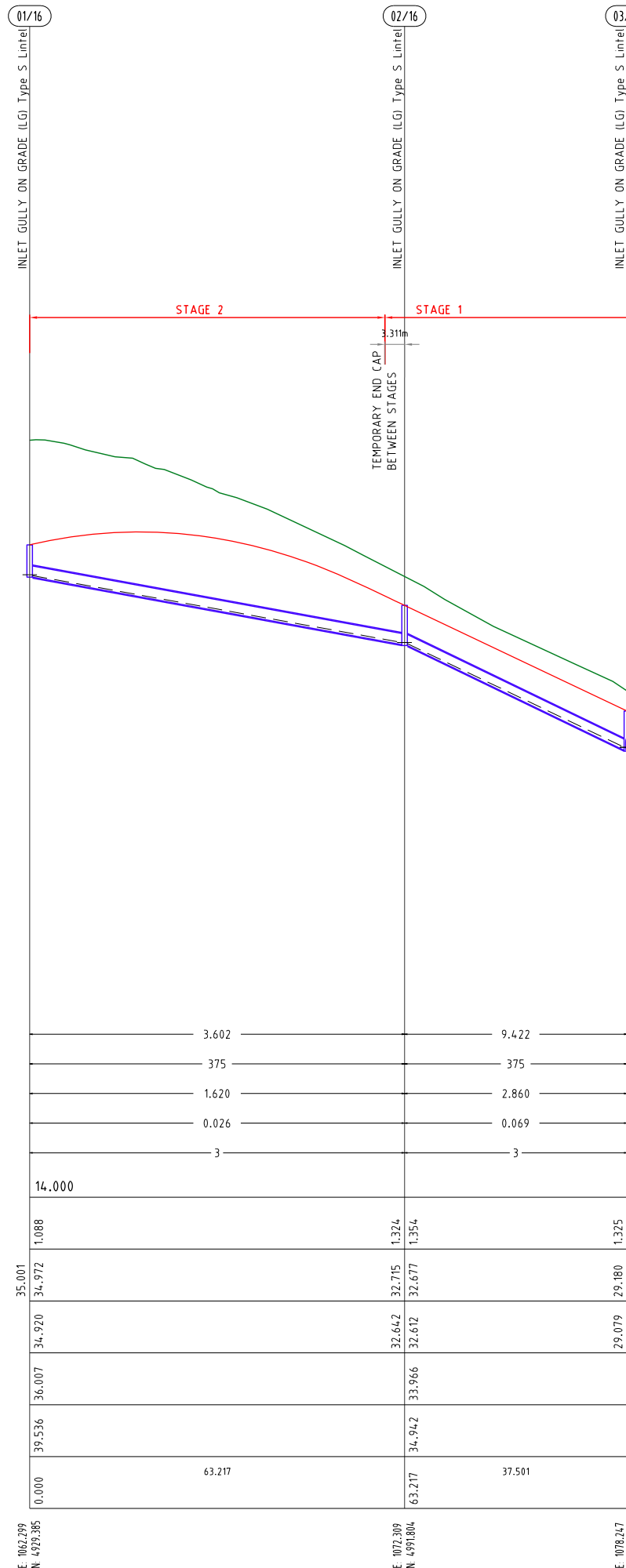


## STRUCTURE DESCRIPTION

PIPE GRADE (%)  
PIPE DIAMETER (m)  
VELOCITY (m/s)  
PIPE FLOW (m<sup>3</sup>/s)  
PIPE CLASS  
DATUM R.L.

|                                   |
|-----------------------------------|
| DEPTH TO INVERT                   |
| HYDRAULIC GRADE<br>LINE — — — — — |
| PIPE <u>INVERT LEVELS</u>         |
| DESIGN SURFACE<br>LEVELS —————    |
| EXISTING SURFACE<br>LEVELS —————  |
| CHAINAGE                          |

DRAINAGE LINE



17

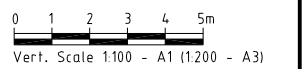
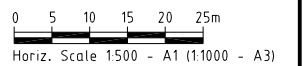
**Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies**

DALMA

## OPERATIONAL WORKS STAGE 2

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       | 10-01-20 |  |
| COUNCIL      | 30-04-20 |  |
| CONSTRUCTION | ..       |  |
|              |          |  |

|       |          |                       |
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|       |          |                       |
|       |          |                       |
|       |          |                       |
| A     | 16-09-19 | ISSUE FOR INFORMATION |
| P R E | D A T E  | A M E N D M E N T     |

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ASSOCIATED CONSULTANTS



D R A W I N G   T I T L E

STORMWATER  
PROFILES  
SHEET 03 OF 03



**Project Coordination**

|  |  |
|--|--|
| MUS Pty Ltd T/As:<br>Mortons-Urban Solutions<br>ABN 39 116 375 065<br>mortons@urbansolutions.net.au<br>www.urbansolutions.net.au<br>Tel 07 5571 1099<br>Fax 07 5571 1088 | Postal Address<br>PO Box 2484<br>Southport QLD 4215<br><br>Gold Coast Office<br>Suite 9, 19 Short St<br>Southport QLD 4215 |
|--|--|

|                            |                         |
|----------------------------|-------------------------|
| DESIGNED RB                | DRAWN JB                |
| APPROVED <i>W.K. north</i> | RPEQ 4706 DATE 04-07-18 |

DRAWING NUMBER  
35701-02-622

**RECOMMEND.**  
**A**



|                                  |           |               |
|----------------------------------|-----------|---------------|
| DESIGNED RB                      | DRAWN JB  |               |
| APPROVED <i>M.K. [signature]</i> | RPOD 4706 | DATE 04-07-18 |
| DRAWING NUMBER<br>35701-02-640   |           | AMEND.<br>A   |







## 0.5 ARI (Q2) MINOR FLOW - 12D DYNAMIC DRAINAGE RESULTS

| NOTE: NEGATIVE FLOW VALUES INDICATE REVERSE FLOWS |       | CATCHMENT AREA                          |       |       | RAINFALL VOLUME* |                | RAINFALL Coef. |         | CATCHMENT FLOW |       |       | APPROACH FLOW     |         |     |       | FLOW AT PIT |              |     |      | PIT   |         | HGL      |        |             |        | PIPE    |           | HEADLOSSES     |     |             |     | CAPACITY | VELOCITY | NODE  |
|---|-------|---|-------|-------|------------------|----------------|----------------|---------|----------------|-------|-------|-------------------|---------|-----|-------|-------------|--------------|-----|------|-------|---------|----------|--------|-------------|--------|---------|-----------|----------------|-----|-------------|-----|----------|----------|-------|
| FROM  | TO    | A1 HA                                   | A2 HA | A3 HA | CRITICAL STORM   | INTENSITY MMHR | 10 YR          | CURRENT | A1 HA          | A2 HA | A3 HA | CRITICAL ARI MIN. | GRADE % | L/S | WIDTH | DxV         | CAPTURED L/S | L/S | DxV  | NODE  | GRADE % | GRATE RL | PIT RL | PIPE U/S RL | D/S RL | GRADE % | FLOW M3/S | COEFFICIENT Ku | Kw  | HEADLOSS Ku | Kw  |          |          |       |
| 01/03   | 02/03 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.145 |       | 60               | 49.0           | 0.891          | 0.852   | 0.045          |       |       | 25                | 3.0     | 45  |       |             | 45           |     |      |       | 3.000   | 22.992   | 22.35  | 22.30       | 22.29  | 0.06    | 0.05      | 7.0            | 7.0 | 0.2         | 0.1 | 0.16     | 0.77     | 01/03 |
| 02/03   | 03/03 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.168 |       | 60               | 49.0           | 0.891          | 0.852   | 0.053          |       |       | 60                | 3.0     | 53  |       |             | 53           |     |      |       | 3.000   | 22.992   | 22.29  | 22.21       | 21.98  | 0.28    | 0.10      | 3.3            | 3.0 | 0.1         | 0.1 | 0.91     | 1.02     | 02/03 |
| 03/03   | 04/03 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.131 |       | 60               | 49.0           | 0.891          | 0.852   | 0.041          |       |       | 25                | 3.0     | 41  | 0.00  | 0.00        | 41           | 0   | 0.00 | 01/11 | 3.000   | 23.080   | 21.98  | 21.95       | 21.95  | 0.13    | 0.16      | 1.4            | 1.4 | 0.2         | 0.0 | 0.19     | 1.27     | 03/03 |
| 04/03   | 05/03 | MANHOLE 1050mm DIA                      |       |       |                  |                |                |         |                |       |       | 25                |         | 0   |       |             | 0            |     |      |       | 3.000   | 22.998   | 21.95  | 21.72       | 21.40  | 0.95    | 0.41      | 1.5            | 1.4 | 0.2         | 0.2 | 0.67     | 2.16     | 04/03 |
| 01/12   | 02/12 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.167 |       | 60               | 49.0           | 0.891          | 0.852   | 0.052          |       |       | 60                | 11.6    | 55  | 0.36  | 0.03        | 48           | 6   | 0.03 | 02/12 | 11.622  | 24.734   | 23.07  | 23.00       | 22.26  | 3.20    | 0.05      | 7.0            | 7.0 | 0.1         | 0.1 | 0.1      | 1.11     | 01/12 |
| 02/12   | 04/03 | INLET GULLY IN SAG (LS) Type S Lintel   | 0.056 |       | 60               | 49.0           | 0.891          | 0.852   | 0.017          |       |       | 60                | 2.6     | 23  | 0.00  | 0.00        | 23           | 0   | 0.00 | 01/09 | 2.590   | 22.922   | 22.26  | 22.08       | 21.95  | 0.88    | 0.28      | 1.4            | 1.4 | 0.2         | 0.2 | 1.73     | 1.73     | 02/12 |
| 04/03   |       |   |       |       |                  |                |                |         |                |       |       |                   |         |     |       |             |              |     |      |       | 22.998  |          |        |             |        |         |           |                |     |             |     |          | 04/03    |       |
| 01/13   | 02/13 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.148 |       | 60               | 49.0           | 0.891          | 0.852   | 0.046          |       |       | 25                | 11.6    | 46  | 0.24  | 0.02        | 43           | 2   | 0.01 | 01/12 | 11.622  | 30.545   | 29.43  | 29.25       | 29.06  | 2.82    | 0.04      | 9.2            | 9.2 | 0.2         | 0.1 | 0.12     | 1.13     | 01/13 |
| 02/13   | 03/13 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.194 |       | 60               | 49.0           | 0.891          | 0.852   | 0.061          |       |       | 60                | 11.6    | 61  | 0.40  | 0.05        | 51           | 9   | 0.04 | 03/13 | 11.622  | 30.335   | 29.04  | 28.99       | 22.85  | 10.24   | 0.09      | 2.7            | 3.0 | 0.1         | 0.1 | 0.16     | 2.32     | 02/13 |
| 03/13   | 04/13 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.183 |       | 60               | 49.0           | 0.891          | 0.852   | 0.057          |       |       | 60                | 11.1    | 67  | 0.54  | 0.04        | 54           | 10  | 0.04 | 04/13 | 11.140  | 23.414   | 22.85  | 22.72       | 22.61  | 1.00    | 0.19      | 1.5            | 1.3 | 0.2         | 0.2 | 0.53     | 1.81     | 03/13 |
| 04/13   | 02/12 | INLET GULLY IN SAG (LS) Type S Lintel   | 0.062 |       | 60               | 49.0           | 0.891          | 0.852   | 0.019          |       |       | 60                | 2.6     | 29  | 0.00  | 0.00        | 30           | 0   | 0.00 | 02/12 | 2.585   | 22.915   | 22.61  | 22.35       | 22.26  | 1.33    | 0.21      | 1.6            | 1.9 | 0.3         | 0.4 | 0.64     | 1.9      | 04/13 |
| 02/12   |       |   |       |       |                  |                |                |         |                |       |       |                   |         |     |       |             |              |     |      |       |         | 22.922   |        |             |        |         |           |                |     |             |     |          | 02/12    |       |
| 01/14   | 02/14 | %C225 RISER (EXTEND 300mm ABOVE FSL)    | 0.049 |       | 60               | 49.0           | 0.891          | 0.852   | 0.015          |       |       | 25                | 1.9     | 15  | 0.00  | 0.00        | 15           | 0   | 0.00 | 03/14 | 1.872   | 25.900   | 24.53  | 24.46       | 23.78  | 18.00   | 0.02      | 9.7            | 9.7 | 0.1         | 0.1 | 0.08     | 1.5      | 01/14 |
| 02/14   | 03/14 | MANHOLE 1050mm DIA                      |       |       |                  |                |                |         |                |       |       | 25                |         | 0   |       |             | 0            |     |      |       | 0.000   | 25.464   | 23.78  | 23.75       | 22.86  | 3.79    | 0.04      | 2.1            | 2.7 | 0.0         | 0.0 | 0.11     | 1.9      | 02/14 |
| 03/14   | 03/13 | TYPE 2 FIELD INLET 900x600 GRATE        | 0.023 |       | 60               | 49.0           | 0.891          | 0.852   | 0.007          |       |       | 25                | 11.6    | 7   | 0.00  | 0.00        | 7            | 0   | 0.00 | 03/13 | 11.622  | 24.342   | 22.86  | 22.84       | 22.85  | -0.10   | 0.05      | 1.1            | 1.1 | 0.1         | 0.0 | 0.1      | 1.12     | 03/14 |
| 03/13   |       |   |       |       |                  |                |                |         |                |       |       |                   |         |     |       |             |              |     |      |       | 23.414  |          |        |             |        |         |           |                |     |             |     |          | 03/13    |       |
| 01/15   | 03/03 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.063 |       | 60               | 49.0           | 0.891          | 0.852   | 0.020          |       |       | 25                | 3.0     | 20  | 0.00  | 0.00        | 20           | 0   | 0.00 | 04/13 | 3.000   | 23.446   | 22.19  | 22.13       | 21.98  | 1.10    | 0.02      | 7.8            | 7.8 | 0.1         | 0.0 | 0.05     | 0.87     | 01/15 |
| 03/03   |       |   |       |       |                  |                |                |         |                |       |       |                   |         |     |       |             |              |     |      |       |         | 23.080   |        |             |        |         |           |                |     |             |     |          | 03/03    |       |
| 01/16   | 02/16 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.085 |       | 60               | 49.0           | 0.891          | 0.852   | 0.027          |       |       | 60                | 2.1     | 27  |       |             | 27           |     |      |       | 2.071   | 36.272   | 35.06  | 35.03       | 32.72  | 4.10    | 0.03      | 7.0            | 7.0 | 0.0         | 0.0 | 0.07     | 1.66     | 01/16 |
| 02/16   | 03/16 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.145 |       | 60               | 49.0           | 0.891          | 0.852   | 0.046          |       |       | 60                | 9.5     | 46  | 0.23  | 0.02        | 43           | 2   | 0.02 | 03/16 | 9.500   | 33.966   | 32.72  | 32.68       | 29.18  | 9.33    | 0.07      | 3.4            | 3.4 | 0.0         | 0.1 | 0.13     | 2.86     | 02/16 |
| 01/17   | 02/14 | %C225 RISER (EXTEND 300mm ABOVE FSL)    | 0.069 |       | 60               | 49.0           | 0.891          | 0.852   | 0.022          |       |       | 60                | 4.1     | 22  | 0.00  | 0.00        | 22           | 0   | 0.00 | 03/14 | 4.058   | 26.187   | 24.89  | 24.78       | 24.41  | 2.94    | 0.02      | 8.9            | 8.9 | 0.1         | 0.1 | 0.26     | 1.15     | 01/17 |
| 02/14   |       |   |       |       |                  |                |                |         |                |       |       |                   |         |     |       |             |              |     |      |       |         | 25.464   |        |             |        |         |           |                |     |             |     |          | 02/14    |       |

## 0.01 ARI (Q100) Major FLOW - 12D DYNAMIC DRAINAGE RESULTS

| NOTE: NEGATIVE FLOW VALUES INDICATE REVERSE FLOWS |       | CATCHMENT AREA                          |       |       | RAINFALL VOLUME* |                | RAINFALL Coef. |             | CATCHMENT FLOW |       |       | APPROACH FLOW |                  |         |     | FLOW AT PIT |      |              |     | PIT  |       | HGL     |          | PIPE   |             | HEADLOSSES |         |             |     | CAPACITY | VELOCITY | NODE |      |       |       |      |
|---|-------|---|-------|-------|------------------|----------------|----------------|-------------|----------------|-------|-------|---------------|------------------|---------|-----|-------------|------|--------------|-----|------|-------|---------|----------|--------|-------------|------------|---------|-------------|-----|----------|----------|------|------|-------|-------|------|
| FROM  | TO    | NODE TYPE                               | A1 HA | A2 HA | A3 HA            | CRITICAL STORM | INTENSITY MMHR | 10 YR Storm | CURRENT Storm  | A1 HA | A2 HA | A3 HA         | CRITICAL ARI MN. | GRADE % | L/S | WIDTH       | DxV  | CAPTURED L/S | L/S | DxV  | NODE  | GRADE % | GRATE RL | PIT RL | PIPE U/S RL | D/S RL     | GRADE % | COEFFICIENT | Ku  | Kw       | HEADLOSS | Ku   | Kw   | RATIO | M/S   | NODE |
| 01/03   | 02/03 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.145 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.076 |       |               | 25               | 3.0     | 76  |             |      | 76           |     |      |       | 3.000   | 22.992   | 22.99  | 22.96       | 22.99      | -0.52   | 0.05        | 7.0 | 7.0      | 0.2      | 0.1  | 0.19 | 0.81  | 01/03 |      |
| 02/03   | 03/03 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.168 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.088 |       |               | 25               | 3.0     | 88  |             |      | 88           |     |      |       | 3.000   | 22.992   | 22.99  | 22.90       | 22.68      | 0.27    | 0.12        | 3.3 | 3.4      | 0.1      | 0.2  | 1.07 | 1.08  | 02/03 |      |
| 03/03   | 04/03 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.131 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.069 |       |               | 25               | 3.0     | 69  | 0.69        | 0.04 | 58           | 11  | 0.02 | 01/11 | 3.000   | 23.080   | 22.68  | 22.64       | 22.63      | 0.20    | 0.19        | 1.3 | 1.1      | 0.2      | 0.0  | 0.23 | 1.52  | 03/03 |      |
| 04/03   | 05/03 | MANHOLE 1c50mm DIA                      |       |       |                  |                |                |             |                |       |       |               | 25               |         | 0   |             |      | 0            |     |      |       | 22.998  | 22.63    | 22.42  | 22.00       | 1.27       | 0.47    | 1.5         | 1.4 | 0.2      | 0.3      | 0.75 | 2.16 | 04/03 |       |      |
| 01/12   | 02/12 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.167 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.088 |       |               | 25               | 11.6    | 107 | 1.15        | 0.09 | 69           | 37  | 0.07 | 02/12 | 11.622  | 24.734   | 23.26  | 23.03       | 23.04      | -0.05   | 0.07        | 7.0 | 7.0      | 0.2      | 0.1  | 0.14 | 1.22  | 01/12 |      |
| 02/12   | 04/03 | INLET GULLY IN SAG (LS) Type S Lintel   | 0.056 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.029 |       |               | 25               | 2.6     | 334 | 3.22        | 0.15 | 157          | 201 | 0.07 | 01/09 | 2.590   | 22.922   | 23.04  | 22.76       | 22.63      | 0.85    | 0.31        | 1.8 | 1.9      | 0.3      | 0.3  | 1.93 | 1.93  | 02/12 |      |
| 04/03   |       |   |       |       |                  |                |                |             |                |       |       |               |                  |         |     |             |      |              |     |      |       | 22.998  |          |        |             |            |         |             |     |          |          |      |      |       | 04/03 |      |
| 01/13   | 02/13 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.148 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.078 |       |               | 25               | 11.6    | 78  | 0.65        | 0.07 | 57           | 20  | 0.05 | 01/12 | 11.622  | 30.545   | 29.47  | 29.25       | 29.07      | 2.63    | 0.06        | 9.2 | 9.2      | 0.2      | 0.1  | 0.16 | 1.18  | 01/13 |      |
| 02/13   | 03/13 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.194 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.102 |       |               | 25               | 11.6    | 102 | 0.98        | 0.09 | 67           | 34  | 0.05 | 03/13 | 11.622  | 30.335   | 29.05  | 29.00       | 23.50      | 9.17    | 0.12        | 2.6 | 3.0      | 0.1      | 0.2  | 0.21 | 2.27  | 02/13 |      |
| 03/13   | 04/13 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.183 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.096 |       |               | 25               | 11.1    | 129 | 2.13        | 0.13 | 69           | 104 | 0.06 | 04/13 | 11.140  | 23.414   | 23.50  | 23.30       | 23.12      | 1.59    | 0.24        | 1.7 | 1.0      | 0.2      | 0.2  | 0.68 | 2.18  | 03/13 |      |
| 04/13   | 02/12 | INLET GULLY IN SAG (LS) Type S Lintel   | 0.062 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.032 |       |               | 25               | 2.6     | 136 | 7.49        | 0.16 | -144         | 270 | 0.08 | 02/12 | 2.585   | 22.915   | 23.12  | 23.06       | 23.04      | 0.21    | 0.25        | 2.2 | 1.8      | 0.3      | 0.4  | 0.75 | 2.22  | 04/13 |      |
| 02/12   |       |   |       |       |                  |                |                |             |                |       |       |               |                  |         |     |             |      |              |     |      |       | 22.922  |          |        |             |            |         |             |     |          |          |      |      |       | 02/12 |      |
| 01/14   | 02/14 | %C225 RISER (EXTEND 300mm ABOVE FSL)    | 0.049 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.026 |       |               | 25               | 1.9     | 26  | 0.00        | 0.00 | 26           | 0   | 0.00 | 03/14 | 1.872   | 25.900   | 25.26  | 25.18       | 23.80      | 36.99   | 0.03        | 8.3 | 8.3      | 0.1      | 0.2  | 0.09 | 1.96  | 01/14 |      |
| 02/14   | 03/14 | MANHOLE 1c50mm DIA                      |       |       |                  |                |                |             |                |       |       |               | 25               |         | 0   |             |      | 0            |     |      |       | 0.000   | 25.464   | 23.80  | 23.75       | 23.54      | 0.90    | 0.06        | 0.5 | 0.6      | 0.0      | 0.0  | 0.17 | 2.15  | 02/14 |      |
| 03/14   | 03/13 | TYPE 2 FIELD INLET 900x600 GRATE        | 0.023 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.012 |       |               | 25               | 11.6    | 12  | 0.00        | 0.00 | 12           | 0   | 0.00 | 03/13 | 11.622  | 24.342   | 23.54  | 23.52       | 23.50      | 0.17    | 0.10        | 1.0 | 1.0      | 0.1      | 0.0  | 0.2  | 1.18  | 03/14 |      |
| 03/13   |       |   |       |       |                  |                |                |             |                |       |       |               |                  |         |     |             |      |              |     |      |       | 23.414  |          |        |             |            |         |             |     |          |          |      |      |       | 03/13 |      |
| 01/15   | 03/03 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.063 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.033 |       |               | 25               | 3.0     | 33  | 0.00        | 0.00 | 33           | 0   | 0.00 | 04/13 | 3.000   | 23.446   | 22.72  | 22.69       | 22.68      | 0.04    | 0.03        | 7.8 | 7.3      | 0.1      | 0.0  | 0.08 | 0.92  | 01/15 |      |
| 03/03   |       |   |       |       |                  |                |                |             |                |       |       |               |                  |         |     |             |      |              |     |      |       | 23.080  |          |        |             |            |         |             |     |          |          |      |      |       | 03/03 |      |
| 01/16   | 02/16 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.085 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.045 |       |               | 25               | 2.1     | 45  |             |      | 45           |     |      |       | 2.071   | 36.272   | 35.08  | 35.03       | 32.74      | 4.08    | 0.04        | 7.0 | 7.0      | 0.0      | 0.1  | 0.12 | 1.86  | 01/16 |      |
| 02/16   | 03/16 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.145 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.076 |       |               | 25               | 9.5     | 76  | 0.62        | 0.06 | 59           | 17  | 0.05 | 03/16 | 9.500   | 33.966   | 32.74  | 32.69       | 29.21      | 9.26    | 0.10        | 2.9 | 2.9      | 0.1      | 0.1  | 0.19 | 3.06  | 02/16 |      |
| 03/16   | 04/16 | INLET GULLY ON GRADE (LG) Type S Lintel | 0.143 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.075 |       |               | 25               | 9.5     | 92  | 0.82        | 0.07 | 68           | 24  | 0.05 | 04/16 | 9.500   | 30.403   | 29.21  | 29.18       | 23.11      | 9.79    | 0.21        | 1.4 | 1.4      | 0.0      | 0.2  | 0.38 | 4.07  | 03/16 |      |
| 01/17   | 02/14 | %C225 RISER (EXTEND 300mm ABOVE FSL)    | 0.069 |       |                  | 60             | 97.7           | 0.891       | 0.924          | 0.036 |       |               | 25               | 4.1     | 36  | 0.00        | 0.00 | 36           | 0   | 0.00 | 03/14 | 4.058   | 26.187   | 25.29  | 25.20       | 23.80      | 11.11   | 0.04        | 6.2 | 6.2      | 0.1      | 0.3  | 0.24 | 2.21  | 01/17 |      |
| 02/14   |       |   |       |       |                  |                |                |             |                |       |       |               |                  |         |     |             |      |              |     |      |       | 25.464  |          |        |             |            |         |             |     |          |          |      |      |       | 02/14 |      |



## SEQ CODE WATER NOTES

SEQ CODE NOTES COPIED DIRECTLY FROM DRAWING SEQ-WAT-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 1.8m 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.

### SOIL

- 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 5m OF THE CREEK.

### REHABILITATION

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

### GENERAL NOTES

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND WATER SUPPLY CODE SPECIFICATIONS AND STANDARDS.
- UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
- ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
- COVER ON MAINS FROM PERMANENT LEVEL TO BE AS SHOWN IN SEQ-WAT-1200-2.
- CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS.
- A WATER METER SUPPLIED AT THE DEVELOPER'S COST, IS TO BE INSTALLED AT THE SERVICE POINT OF EACH LOT IN ACCORDANCE WITH THE STANDARD DRAWING FOR THE SEQ-SP.
- ALL MATERIALS USED IN THE WORKS SHALL COMPLY WITH THE SEQ-SP'S ACCEPTED PRODUCTS AND MATERIALS LIST OR BE APPROPRIATELY SHOWN, LISTED AND DEFINED IN THE ENGINEERING SUBMISSION SO THAT THE ALTERNATIVE PRODUCT OR MATERIAL CAN BE ASSESSED AND IF APPROPRIATE, APPROVED BY THE SEQ-SP.
- ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS.
- TEST/CHLORINATION POINTS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NO. SEQ-WAT-1410-1.
- THE CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT TO THE RETICULATION SYSTEM.

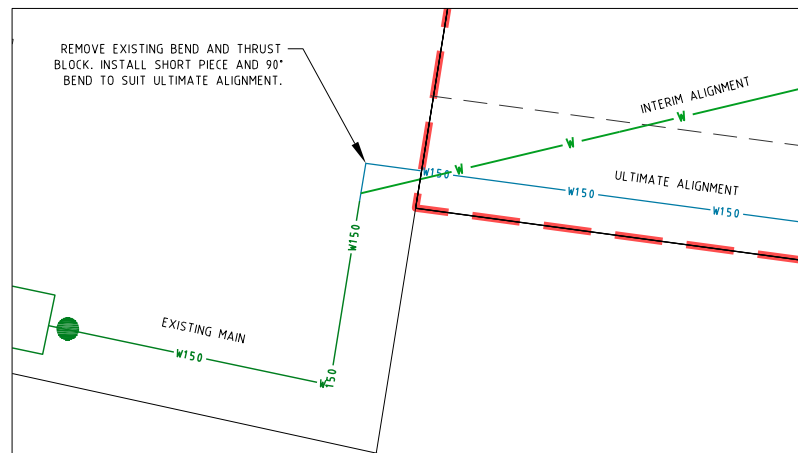
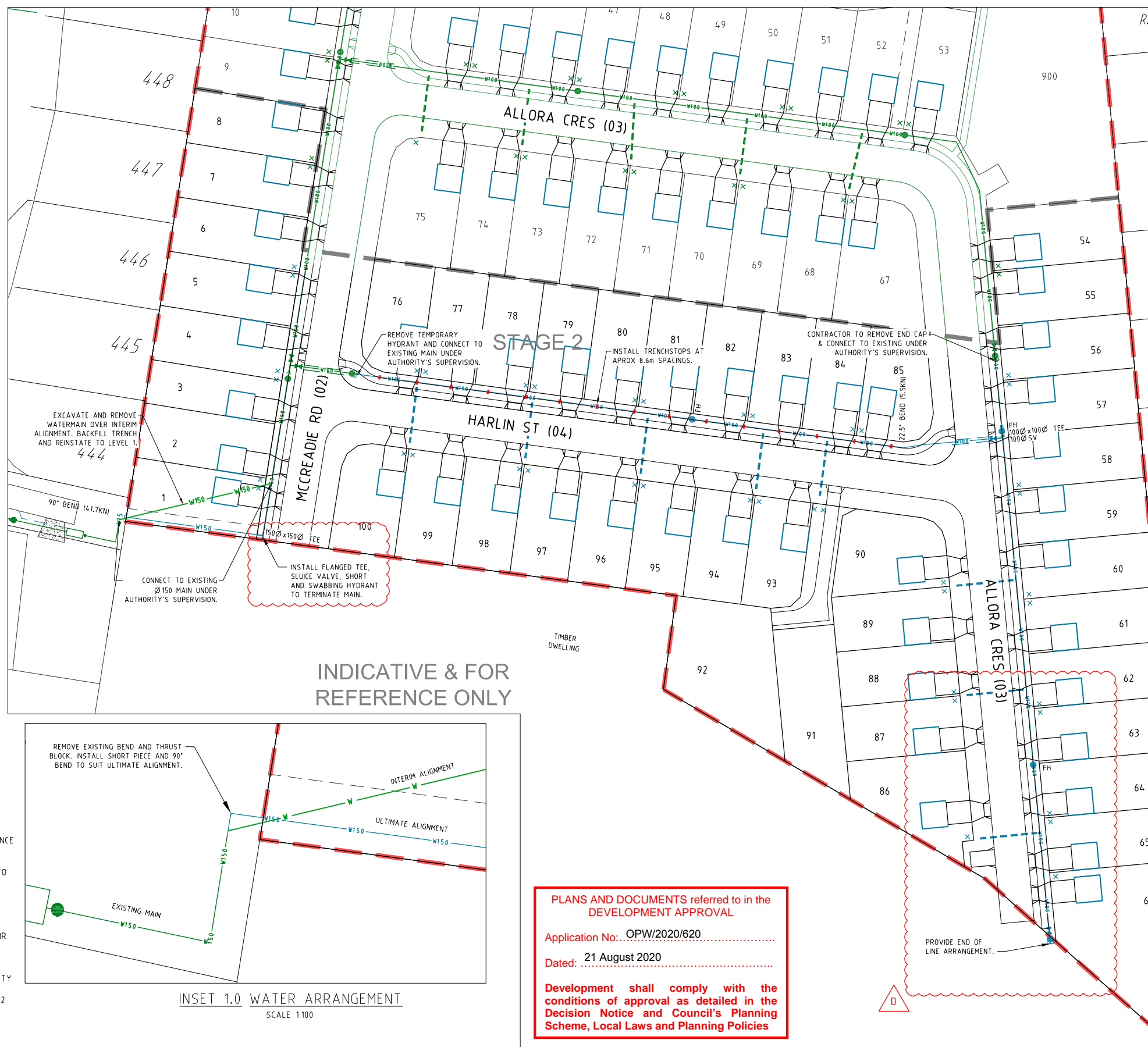
ALL ENVIRONMENT PROTECTION MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION WORK, INCLUDING CLEARING, COMMENCING.

## PROJECT SPECIFIC WATER NOTES

- ALL PROPERTY CONNECTION ROAD CROSSINGS TO BE SLEEVED WITH DN100 mPVC CONDUIT.
- ALL MATERIALS ARE TO BE SUPPLIED AND CONSTRUCTED IN ACCORDANCE WITH SEQ CODE.
- WATER METERS ARE TO BE SUPPLIED AND INSTALLED AT ALL WATER SERVICE / CONNECTION POINTS IN ACCORDANCE WITH SEQ-WAT-1106 TO SEQ-WAT-1110-2.
- THRUST BLOCKS TO BE LOCATED AND INSTALLED BY CONTRACTOR IN ACCORDANCE WITH SEQ CODE.
- TRENCH STOPS AND BULKHEADS TO BE IN ACCORDANCE WITH WATER AUTHORITY REQUIREMENTS.
- THE CONTRACTOR IS TO INCLUDE ROCK EXCAVATION AS PART OF THEIR WATER RATES UNLESS SCHEDULED OTHERWISE WITHIN THE CONTRACT.
- FOOTPATHS SHOWN FOR INFORMATION PURPOSES ONLY.
- ALL WATER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE WORKPLACE HEALTH AND SAFETY LEGISLATION.
- MINIMUM WATERMAIN COVER TO BE IN ACCORDANCE WITH SECTION 7.4.2 TABLE 7.2 OF THE SEQ AMENDMENT TO WATER SUPPLY CODE OF AUSTRALIA.
- CONTRACTOR TO PAY ALL FEES AND CHARGES ASSOCIATED WITH CONNECTIONS.
- END OF LINE ARRANGEMENTS (EG. CUL-DE-SAC HEADS) TO BE CONSTRUCTED IN ACCORDANCE WITH SEQ-WAT-1104-1.
- TEMPORARY CONSTRUCTION HYDRANTS TO BE PROVIDED IN ACCORDANCE WITH SEQ-WAT-1303-1 AT ALL CONNECTIONS.
- ALL LIVE CONNECTIONS ARE TO BE ORGANISED BY THE CIVIL CONTRACTOR AND UNDERTAKEN BY COUNCIL AT THE DEVELOPERS EXPENSE.

## WATER PIPE SPECIFICATIONS

| WATER MAIN LOCATION | PIPE MATERIAL SPECIFICATION |
|---------------------|-----------------------------|
| FOOTPATH VERGE      | PVC-M SERIES 2 PN16         |
| ROAD CROSSING       | DICL PN35                   |



INSET 1.0 WATER ARRANGEMENT  
SCALE 1:100

## LEGEND

- SITE BOUNDARY
- STAGE BOUNDARY

- EXISTING 100Ø WATER MAIN
- EXISTING 150Ø WATER MAIN
- EXISTING 200Ø WATER MAIN
- EXISTING 225Ø WATER MAIN
- EXISTING 250Ø WATER MAIN
- EXISTING 300Ø WATER MAIN
- EXISTING KERB (INVERT)

- EXISTING PROPERTY LINE
- FUTURE 100Ø WATER MAIN
- FUTURE 150Ø WATER MAIN
- FUTURE 200Ø WATER MAIN
- FUTURE 225Ø WATER MAIN
- FUTURE 250Ø WATER MAIN
- FUTURE 300Ø WATER MAIN
- FUTURE KERB (INVERT)
- FUTURE PROPERTY LINE

- TRENCHSTOPS
- PROPOSED KERB (INVERT)
- PROPOSED PROPERTY LINE
- PROPOSED 100Ø WATER MAIN
- PROPOSED 150Ø WATER MAIN
- PROPOSED 200Ø WATER MAIN
- PROPOSED 225Ø WATER MAIN
- PROPOSED 250Ø WATER MAIN
- PROPOSED 300Ø WATER MAIN

- HYDRANT
- + TEE
- > REDUCER
- ⌋ SLUICE VALVE
- ⌋ ENDCAP
- ⊗ SCOUR VALVE
- AIR VALVE
- × METER LOCATION
- SERVICE CONDUIT
- DICL ROAD CROSSING



PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/620

Dated: 21 August 2020

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

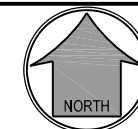
**DALMA**

## OPERATIONAL WORKS STAGE 2

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

| ISSUES       | DATE     |
|--------------|----------|
| TENDER       | 10-01-20 |
| COUNCIL      | 30-04-20 |
| CONSTRUCTION | ..       |

|   |          |                                   |
|---|----------|-----------------------------------|
| D | 11-08-20 | WATER ALIGNMENT AND NOTES AMENDED |
| C | 16-07-20 | INSET AND NOTES AMENDED           |
| B | 23-06-20 | NOTES AND WATER ALIGNMENT AMENDED |
| A | 16-09-19 | ISSUE FOR INFORMATION             |

PRE DATE AMENDMENT

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ASSOCIATED CONSULTANTS



DRAWING TITLE

**WATER  
RETICULATION  
PLAN  
SHEET 01**



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|                             |                        |
|-----------------------------|------------------------|
| DESIGNED RB                 | DRAWN JB               |
| APPROVED <i>[Signature]</i> | PEQ 4706 DATE 04-07-18 |

DRAWING NUMBER  
**35701-02-700**

AMEND.  
**D**



