

**MORGAN CONSULTING
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| Media: Print, Tracing, Electronic, CD rom | E | E | E | E | E | E | E | E | E | E | | | | | |
| Via: Your courier, Our courier, Hand, Pickup, E-mail, Ftp-site | E | E | E | E | E | E | E | E | E | E | | | | | |
| Reason: Prelim,Approval,Construction,X-information,Tender,Other | P | P | A | A | A | A | A | A | A | C | | | | | |

PROPOSED RESIDENTIAL DEVELOPMENT

43 ELANDA STREET, SUNSHINE BEACH



LOCALITY PLAN
NOT TO SCALE

GENERAL NOTES

- 1. ALL WORK IS TO CONFORM TO THE CURRENT COUNCIL STANDARDS, DRAWINGS AND SPECIFICATIONS U.N.O.
- 2. WHERE CONNECTION IS TO BE MADE TO EXISTING CONSTRUCTION THE CONTRACTOR SHALL CONFIRM THE LOCATION AND LEVEL OF THIS CONSTRUCTION PRIOR TO COMMENCING WORK ON ANY CRITICAL SECTION. THE SUPERINTENDENT MAY VARY LEVELS AND GRADIENTS OF NEW WORKS TO ACHIEVE A SATISFACTORY CONNECTION.
- 3. LEVEL DATUM IS AHD.
- 4. ALL DIMENSIONS ARE IN METRES U.N.O.
- 5. PRIOR TO CONSTRUCTION THE CONTRACTOR WILL SATISFY HIMSELF OF THE CORRECT LOCATIONS OF ALL EXISTING SERVICES WHETHER INDICATED OR NOT ON THE PLANS. ANY DAMAGE TO EXISTING SERVICES IS TO BE RECTIFIED AT THE CONTRACTORS EXPENSE.
- 6. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY BENCH MARK LEVELS AND ADVISE THE SUPERINTENDENT OF ANY DISCREPANCIES.
- 7. PRIOR TO CONSTRUCTION THE CONTRACTOR IS TO CONFIRM WITH THE SUPERINTENDENT THE FOLLOWING:
 - 7.A. ALL INSPECTION HOLD POINTS, AND;
 - 7.B. ALL COMPLIANCE TESTING REQUIREMENTS.
- 8. ANY WORK ON EXISTING SERVICES THAT REQUIRE RELOCATION BY AUTHORITIES SHALL BE CARRIED OUT BY THE RELEVANT AUTHORITY, BUT WITHIN TERMS OF THE CONTRACT, AND SHALL BE CO-ORDINATED BY THE CONTRACTOR.
- 9. AT COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL ARRANGE FOR AN INDEPENDENT LICENSED SURVEYOR TO CARRY OUT A "WORKS AS CONSTRUCTED" SURVEY IN ACCORDANCE WITH THE CURRENT COUNCIL STANDARDS AND SUBMIT THE DETAILS SHOWN ON A PLAN TO THE SUPERINTENDENT.

COORDINATION NOTES

- 1. REFER ARCHITECTS DRAWINGS FOR BUILDING AND CARPARK SETOUT.
- 2. REFER HYDRAULIC CONSULTANTS DRAWINGS FOR DOWNPIPE CONNECTIONS AND INTERNAL SEWER AND WATER RETICULATION.
- 3. REFER ELECTRICAL CONSULTANTS DRAWINGS FOR ELECTRICAL RETICULATION SETOUT.
- 4. REFER LANDSCAPE ARCHITECTS DRAWINGS FOR PLANTING DETAILS.
- 5. REFER SERVICE AUTHORITY FOR LOCATION AND CONSTRUCTION REQUIREMENTS APPLICABLE TO EXISTING SERVICES.

SHEET LIST TABLE

| DRAWING No. | REVISION CODE | DRAWING TITLE |
|-------------|---------------|--|
| 15104/C00 | C0 | COVER SHEET AND DRAWING INDEX |
| 15104/C01 | C0 | BULK EARTHWORKS PLAN |
| 15104/C02 | C0 | BULK EARTHWORKS SECTIONS |
| 15104/C03 | C0 | EROSION AND SEDIMENT CONTROL PLAN |
| 15104/C04 | C0 | EROSION AND SEDIMENT CONTROL DETAILS |
| 15104/C10 | C0 | SITEWORKS AND DRAINAGE PLAN |
| 15104/C11 | C0 | SITEWORKS AND DRAINAGE DETAILS SHEET 1 |
| 15104/C12 | C0 | SITEWORKS AND DRAINAGE DETAILS SHEET 2 |
| 15104/C15 | C0 | STORMWATER DRAINAGE CATCHMENT PLAN |
| 15104/C20 | C0 | EXTERNAL ROADWORKS PLAN |
| 15104/C30 | C0 | SEWER RETICULATION PLAN |
| 15104/C40 | C0 | WATER RETICULATION PLAN |

SURVEY INFORMATION

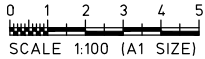
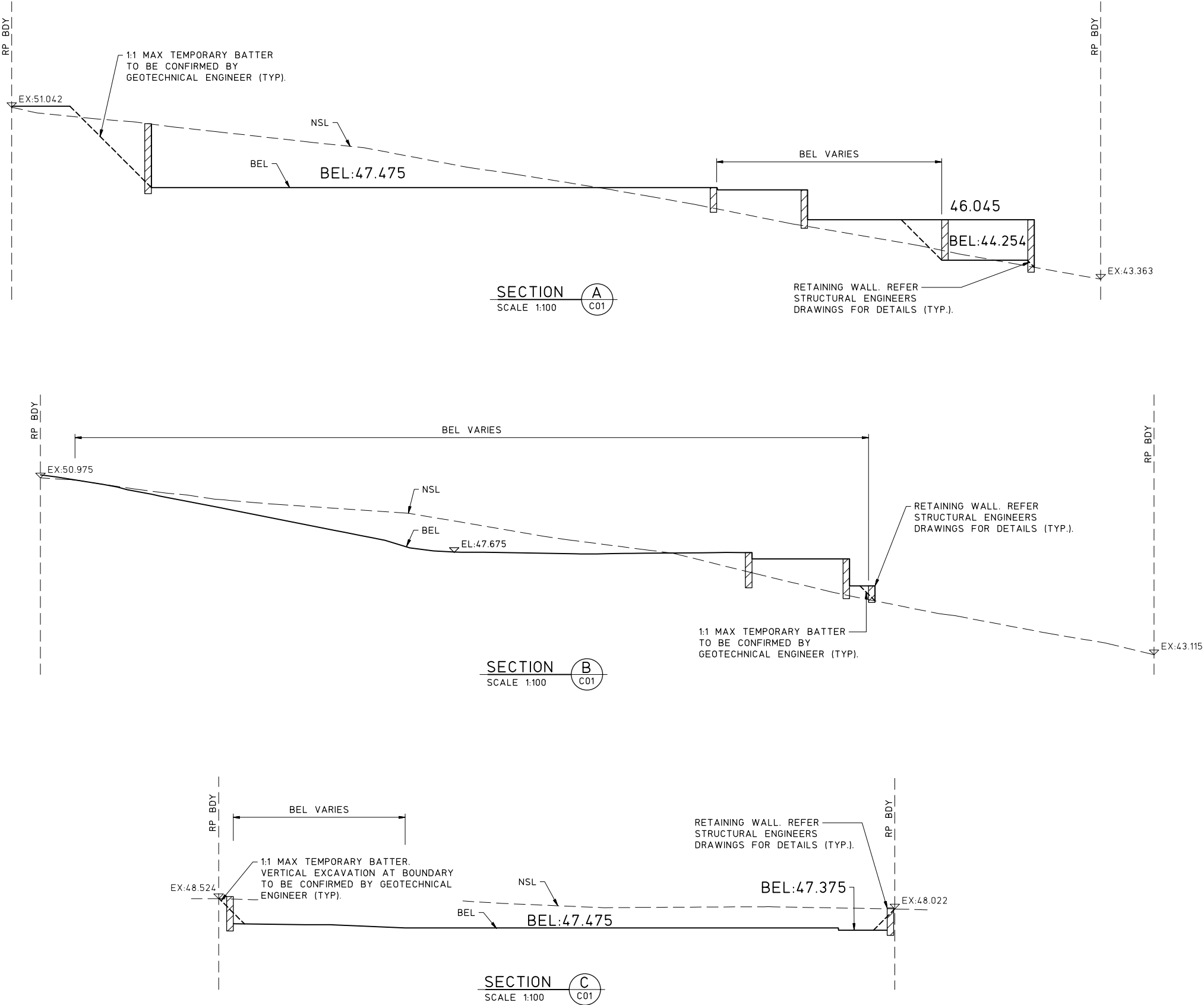
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| LOT 1 ON SP230070 | LEVEL DATUM AHD Der |
| ELANDA STREET | PM44260 |
| Parish of WEYBA | RL: 49.843 AHD |
| County of MARCH | |

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| <table><tr><td>C0</td><td>FOR CONSTRUCTION</td><td>19.09.16</td><td>HM</td></tr><tr><td>A1</td><td>FOR APPROVAL</td><td>04.05.16</td><td>HM</td></tr><tr><td>A0</td><td>FOR APPROVAL</td><td>26.04.16</td><td>HM</td></tr><tr><td>P0</td><td>PRELIMINARY ISSUE</td><td>17.12.15</td><td>HM</td></tr><tr><td>CODE</td><td>REVISION</td><td>DATE</td><td>BY</td></tr></table> | C0 | FOR CONSTRUCTION | 19.09.16 | HM | A1 | FOR APPROVAL | 04.05.16 | HM | A0 | FOR APPROVAL | 26.04.16 | HM | P0 | PRELIMINARY ISSUE | 17.12.15 | HM | CODE | REVISION | DATE | BY | <table><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>CODE</td><td>REVISION</td><td>DATE</td><td>BY</td></tr></table> | | | | | | | | | | | | | | | | | CODE | REVISION | DATE | BY | <table><tr><td colspan="2">Client</td><td colspan="2">ALTUM CONSTRUCTIONS</td></tr><tr><td colspan="2">P:</td><td colspan="2">(07) 3369 8411</td></tr><tr><td colspan="2">F:</td><td colspan="2">(07) 3369 1893</td></tr><tr><td colspan="2">E:</td><td colspan="2">mail@morgance.com.au</td></tr><tr><td colspan="2">© Morgan Consulting Engineers</td><td colspan="2">This drawing is not to be copied, retained or used without the permission of the copyright holder.</td></tr><tr><td colspan="2">1 GREAT GEORGE STREET</td><td colspan="2">PADDINGTON QLD 4064</td></tr><tr><td colspan="2">•STRUCTURAL•CIVIL•HOUSING•FORENSIC•</td><td colspan="2">CONSULT AUSTRALIA</td></tr><tr><td colspan="2">Member Firm</td><td colspan="2">RPEQ</td></tr></table> | Client | | ALTUM CONSTRUCTIONS | | P: | | (07) 3369 8411 | | F: | | (07) 3369 1893 | | E: | | mail@morgance.com.au | | © Morgan Consulting Engineers | | This drawing is not to be copied, retained or used without the permission of the copyright holder. | | 1 GREAT GEORGE STREET | | PADDINGTON QLD 4064 | | •STRUCTURAL•CIVIL•HOUSING•FORENSIC• | | CONSULT AUSTRALIA | | Member Firm | | RPEQ | | <table><tr><td colspan="2">Project</td><td colspan="2">PROPOSED RESIDENTIAL DEVELOPMENT</td></tr><tr><td colspan="2">Address</td><td colspan="2">43 ELANDA STREET, SUNSHINE BEACH</td></tr><tr><td colspan="2">Drawing title</td><td colspan="2">COVER SHEET AND DRAWING INDEX</td></tr><tr><td colspan="2">Drawing No</td><td colspan="2">15104/C00</td></tr><tr><td colspan="2">Revision Code</td><td colspan="2">C0</td></tr></table> | Project | | PROPOSED RESIDENTIAL DEVELOPMENT | | Address | | 43 ELANDA STREET, SUNSHINE BEACH | | Drawing title | | COVER SHEET AND DRAWING INDEX | | Drawing No | | 15104/C00 | | Revision Code | | C0 | |
| C0 | FOR CONSTRUCTION | 19.09.16 | HM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Client | | ALTUM CONSTRUCTIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| F: | | (07) 3369 1893 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E: | | mail@morgance.com.au | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Address | | 43 ELANDA STREET, SUNSHINE BEACH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drawing title | | COVER SHEET AND DRAWING INDEX | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drawing No | | 15104/C00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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EARTHWORKS NOTES

1. EARTHWORKS NOTES ARE TO BE READ IN CONJUNCTION WITH THE GENERAL AND COORDINATION NOTES ON DRAWING 15104/C00.
2. EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH PROCEDURES SET DOWN IN AS3798 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS'.
3. BULK EARTHWORKS INCLUDING CLEARING, FILLING AND TESTING, ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT COUNCIL STANDARDS, DRAWINGS AND SPECIFICATIONS.
4. BULK EARTHWORKS LEVELS SHALL BE DETERMINED RELATIVE TO THE FINISHED SURFACE LEVELS. REFER ARCHITECTURAL DRAWINGS FOR SLAB LEVELS AND TO THE STRUCTURAL ENGINEERS DRAWINGS FOR BUILDING AND PATH SLAB THICKNESSES.
5. CONTRACTOR TO REFER TO GEOTECHNICAL ENGINEERS REPORT PRIOR TO CONSTRUCTION.
6. ALL EXCAVATION AND FILLING ACTIVITIES ASSOCIATED WITH THE WORKS ARE TO BE UNDERTAKEN IN ACCORDANCE WITH THE APPROVED ACID SULPHATE SOIL MANAGEMENT PLAN.
7. TOPSOIL SHALL BE STOCKPILED AS DIRECTED BY THE SUPERINTENDENT ON SITE.
8. PRIOR TO PLACEMENT OF ANY FILLING OR BUILDING WORKS ALL TOPSOIL AND ORGANIC MATERIAL IS TO BE REMOVED AND THE SUBGRADE SHALL BE UNIFORMLY COMPACTED TO THE MINIMUM DRY DENSITY RATIOS SHOWN IN NOTE
10. ANY SOFT SPOTS REVEALED BY COMPACTION SHALL BE REMOVED AS DIRECTED BY THE SUPERINTENDENT AND BACKFILLED WITH COMPACTED SELECT FILL.
9. MOISTURE CONTENT OF COMPACTED FILL SHOULD BE MAINTAINED WITHIN 2% OF OPTIMUM MOISTURE CONTENT.
10. FILL SHALL BE COMPACTED IN MAXIMUM 200mm THICK LAYERS (LOOSE THICKNESS) TO THE FOLLOWING MINIMUM DRY DENSITY RATIOS (STANDARD COMPACTION A.S.1289.5-1).
- 10.A. UPPER 0.3m OF PAVEMENT SUBGRADE = 100%;
- 10.B. UNDER BUILDINGS = 98%;
- 10.C. GENERAL FILL = 95%.
11. ALL FILL MATERIAL PLACED ON THE SITE SHALL COMPRISE ONLY NATURAL EARTH AND ROCK, AND IS TO BE FREE OF CONTAMINANTS (AS DEFINED BY SECTION 11 OF THE ENVIRONMENTAL PROTECTION ACT 1994), NOXIOUS, HAZARDOUS, DELETERIOUS AND ORGANIC MATERIALS. NO DEMOLITION MATERIAL IS TO BE USED. SUITABLE FILL MATERIAL IS DEEMED TO COMPLY WITH THE REQUIREMENTS OF CLAUSE 4.3 OF AS3798, 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS'.
12. IMPORTED FILL SHALL COMPLY WITH THE FOLLOWING:
- 12.A. SOAKED CBR = MINIMUM OF 15%;
- 12.B. LIQUID LIMIT = 30% MAX;
- 12.C. PLASTICITY INDEX = 15% MAX;
- 12.D. MAXIMUM AGGREGATE SIZE = 75mm;
- 12.E. PASSING 0.075mm SIEVE = 30% MAX;
- 12.F. SHRINK/SWELL INDEX = 1.0% MAX.

NOTE:
REFER DRG 15104/C01 FOR
BULK EARTHWORKS PLAN.



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| C0 | FOR CONSTRUCTION | 19.09.16 | HM |
| A0 | FOR APPROVAL | 26.04.16 | HM |
| P0 | PRELIMINARY ISSUE | 17.12.15 | HM |
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| Client | ALTUM CONSTRUCTIONS |
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COMMIT AUSTRALIA
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| Scales (at A1) | |
| Designed | AS SHOWN |
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| Project | PROPOSED RESIDENTIAL DEVELOPMENT |
| Address | 43 ELANDA STREET, SUNSHINE BEACH |

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| Drawing title | BULK EARTHWORKS SECTIONS |
| Drawing No | 15104/C02 |
| Revision Code | C0 |

EROSION AND SEDIMENT CONTROL NOTES

1. EROSION & SEDIMENT CONTROL (ESC) NOTES ARE TO BE READ IN CONJUNCTION WITH THE GENERAL AND COORDINATION NOTES ON DRAWING 15104/C00.
2. ALL ESC MEASURES SHALL BE IN ACCORDANCE WITH CURRENT COUNCIL STANDARDS, DRAWINGS AND SPECIFICATIONS U.N.O.
3. CONSTRUCTION OF ALL SEDIMENT CONTROL MANAGEMENT DEVICES SHALL BE TO THE SATISFACTION OF THE SUPERINTENDENT. THE CONTRACTOR IS TO FOLLOW THE CONSTRUCTION PHASE AS OUTLINED:
- 3.A. CONSTRUCTION OF EROSION AND SEDIMENT DEVICES;
 - 3.B. STRIPPING TOPSOIL;
 - 3.C. BULK EARTHWORKS;
 - 3.D. SERVICES, BUILDING, PAVEMENT AND ROAD CONSTRUCTION;
 - 3.E. LANDSCAPED AREAS TO BE TOPSOILED, TURFED, MULCHED OR PLANTED.
4. BOTH TEMPORARY AND PERMANENT ESC MEASURES SHALL BE MAINTAINED AT A SUITABLE LEVEL/CONDITION THROUGHOUT CONSTRUCTION TO THE SATISFACTION OF THE SUPERINTENDENT.
5. ALL TEMPORARY ESC MEASURES SHALL BE MAINTAINED AND FULLY OPERATIONAL DURING THE CONSTRUCTION AND MAINTENANCE PERIOD, AND ARE TO BE REMOVED AFTER THE SATISFACTORY COMPLETION OF AN 'OFF MAINTENANCE' INSPECTION BY THE SUPERINTENDENT.
6. ALL ESC DEVICES ARE TO BE INSPECTED AT LEAST DAILY, PRIOR TO EXPECTED RAINFALL AND AFTER RAINFALL. ANY DAMAGE OR EXCESS EROSION/SEDIMENT IS TO BE REPAIRED/MANAGED AS REQUIRED TO MAINTAIN CONTROL DEVICES.
7. THE CONTRACTOR IS TO PROVIDE WATER TRUCKS AS REQUIRED TO MINIMISE OR ELIMINATE THE DUST PROBLEMS CAUSED BY ONSITE TRAFFIC MOVEMENT.
8. THE CONTRACTORS VEHICLES & PLANT SHALL NOT OPERATE OUTSIDE THE LIMITS OF THE IMMEDIATE CONSTRUCTION AREA AND ARE RESTRICTED FROM CROSSING OR DISTURBING AREAS NOT SUBJECT TO CONSTRUCTION.
9. ALL VEHICLES EXITING THE SITE SHALL BE CLEANED AND TREATED SO AS TO PREVENT MATERIAL BEING TRACKED OR DEPOSITED ON PUBLIC ROADS.
10. ANY WATER TRAPPED WITHIN THE TEMPORARY SEDIMENT BASIN IS TO BE REGULARLY TESTED DURING THE COURSE OF CONSTRUCTION. REFER WATER QUALITY MONITORING TABLE FOR DETAILS.
11. ALL DISTURBED GROUND IS TO BE GRASS SEEDD TO PREVENT EROSION IF THE DISTURBED GROUND IS TO BE LEFT "OPEN" FOR A PERIOD OF GREATER THEN ONE (1) MONTH.
12. THE CONTRACTOR SHALL DESIGNATE DRAINAGE SUMP AREAS FOR EACH STAGE OF EARTHWORKS AND ENSURE TREATMENT OF SEDIMENT LADEN WATER WITH THE USE OF FLOCULANTS (IE. GYPSUM, ALUM) IN ACCORDANCE WITH IEA QUEENSLAND'S SOIL EROSION AND SEDIMENT CONTROL - ENGINEERING GUIDELINES FOR QUEENSLAND CONSTRUCTION SITES. DISCHARGE OF TREATED WATER SHALL BE UNDERTAKEN BY MEANS OF A FLOATING INTAKE PUMP SO THAT SETTLED SEDIMENT IS NOT DRAWN OUT OF THE SUMP. CONTRACTOR TO CONFIRM MEANS OF DISCHARGE FROM SITE WITH SUPERINTENDENT (IE. DISCHARGE TO STORMWATER PIT, TRANSPORTED TO WASTE FACILITY). TESTING OF WATER QUALITY SHALL BE UNDERTAKEN AS PER THE WATER QUALITY MONITORING NOTES.

WATER QUALITY MONITORING NOTES

1. WITHIN 5 DAYS OF EACH STORM EVENT, THE CONTRACTOR SHALL TREAT, TEST, CONFIRM WATER QUALITY IN ACCORDANCE WITH THE WATER QUALITY OBJECTIVES ABOVE, PUMP OUT WATER FROM THE DRAINAGE SUMP AND CLEAN OUT SEDIMENT IF REQUIRED.
2. WATER QUALITY TO BE TESTED AT REGULAR INTERVALS AS SHOWN IN THE TABLE ABOVE.
3. IF SEDIMENT WATER IN THE DRAINAGE SUMP IS SHOWN TO HAVE SUSPENDED SOLIDS > 50mg/L THEN THE USE OF A GYPSUM FLOCULENT IS TO BE APPLIED AS DIRECTED BY THE SUPERINTENDENT.
4. THE CONCENTRATION OF TSS RELEASED BY DEWATERING MAY ONLY EXCEED 50mg/L WHERE IT CAN BE DEMONSTRATED AND SUPPORTED THROUGH DOCUMENTATION THAT:
- FURTHER SIGNIFICANT RAINFALL IS FORECAST TO OCCUR BEFORE THE TSS CONCENTRATION IS LIKELY TO BE REDUCED TO 50mg/L.
 - RELEASING A HIGHER CONCENTRATION OF TOTAL SUSPENDED SOLIDS WILL RESULT IN A BETTER ENVIRONMENTAL OUTCOME BY PROVIDING STORAGE FOR THE CAPTURE AND TREATMENT OF RUN-OFF FROM THE IMMINENT RAINFALL AND RUN-OFF.
 - ALL REASONABLE AND PRACTICABLE STEPS HAVE BEEN TAKEN TO TREAT THE WATER WITHIN BEST-PRACTICE TIME FRAMES.
 - FLOCCULENT HAS BEEN APPROPRIATELY APPLIED AND THE CONCENTRATION OF TSS IN THE CAPTURED WATER HAS ALREADY SIGNIFICANTLY DECREASED.
 - FOR ALL OTHER STORMWATER RELEASES, FLOWS AND DISCHARGES FROM THE SITE, THE RELEASE LIMITS PRESCRIBED ABOVE MUST NOT BE EXCEEDED UNLESS THE DEVELOPMENT IS IN FULL COMPLIANCE WITH THIS STANDARD.
5. ACCUMULATED SEDIMENT SHALL BE EXCAVATED PRIOR TO CAPACITY OF SEDIMENT STORAGE BEING EXCEEDED.

WATER QUALITY MONITORING TABLE

WATER QUALITY SAMPLES ARE TO BE TAKEN AND TESTED DURING THE COURSE OF THE CONSTRUCTION FROM THE DRAINAGE SUMP.

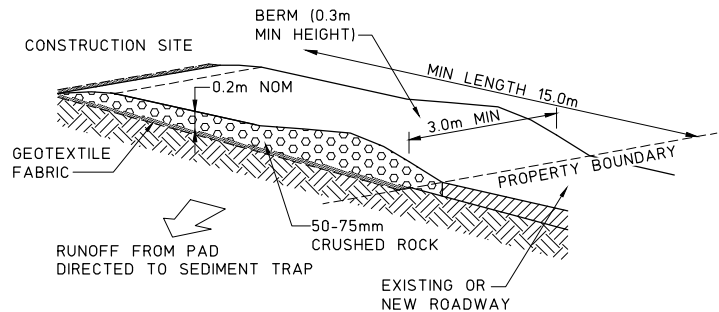
WATER QUALITY TESTING

| | |
|-----|----------------------------|
| pH | WEEKLY (MIN. REFER NOTES) |
| TSS | MONTHLY (MIN. REFER NOTES) |

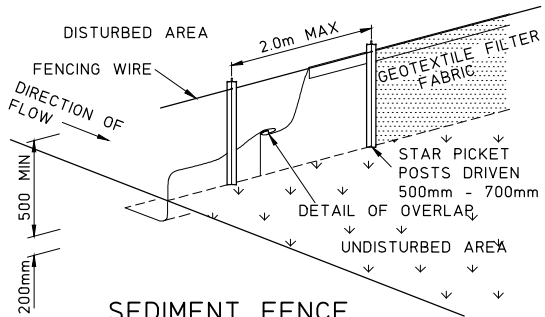
WATER QUALITY OBJECTIVES

TO BE MAINTAINED DURING CONSTRUCTION PHASE

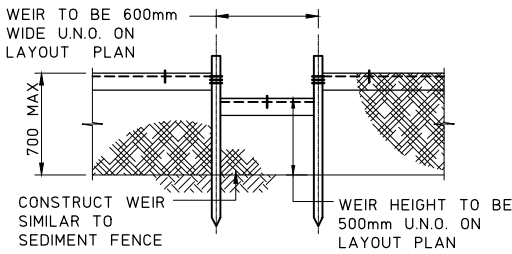
| | |
|-----|------------|
| pH | 6.5 TO 8.5 |
| TSS | 50mg/L |
| NTU | >10% |



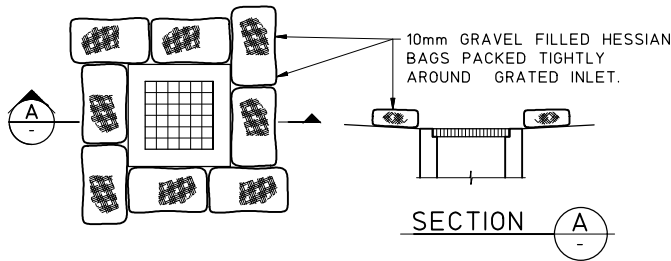
TEMPORARY CONSTRUCTION EXIT/ENTRANCE
(SHAKE DOWN DEVICE) NTS



SEDIMENT FENCE
NTS



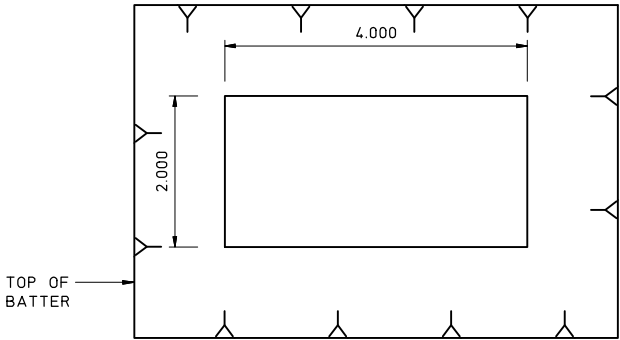
SEDIMENT FENCE WEIR
NTS



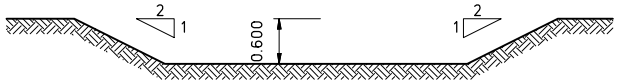
FIELD INLET

DRAINAGE STRUCTURE PROTECTION

DRAINAGE INLET SEDIMENT TRAP. NTS



PLAN



ELEVATION

DRAINAGE SUMP DETAIL

SCALE 1:50

| | | | | | | | | | |
|------|------------------|----------|----|------|----------|------|----|--|--|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| C0 | FOR CONSTRUCTION | 19.09.16 | HM | | | | | | |
| A0 | FOR APPROVAL | 26.04.16 | HM | | | | | | |
| CODE | REVISION | DATE | BY | CODE | REVISION | DATE | BY | | |

Client
ALTUM CONSTRUCTIONS



•STRUCTURAL•CIVIL•HOUSING•FORENSIC•
1 GREAT GEORGE STREET
PADDINGTON QLD 4064

P: (07) 3369 8411
F: (07) 3369 1893
E: mail@morgance.com.au
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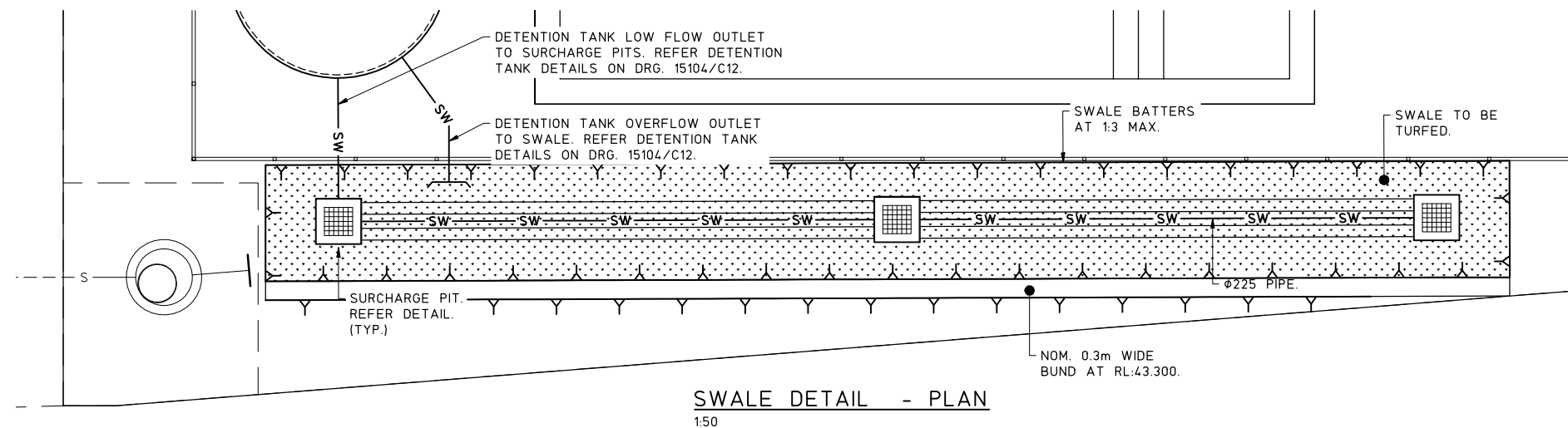
| | |
|----------------|----------|
| Scales (at A1) | AS SHOWN |
| Designed | AW |
| Drawn | NT |
| Checked | HM |
| Date | APR 16 |
| Authorised | |
| RPEQ | |

Project
PROPOSED RESIDENTIAL DEVELOPMENT
Address
43 ELANDA STREET, SUNSHINE BEACH

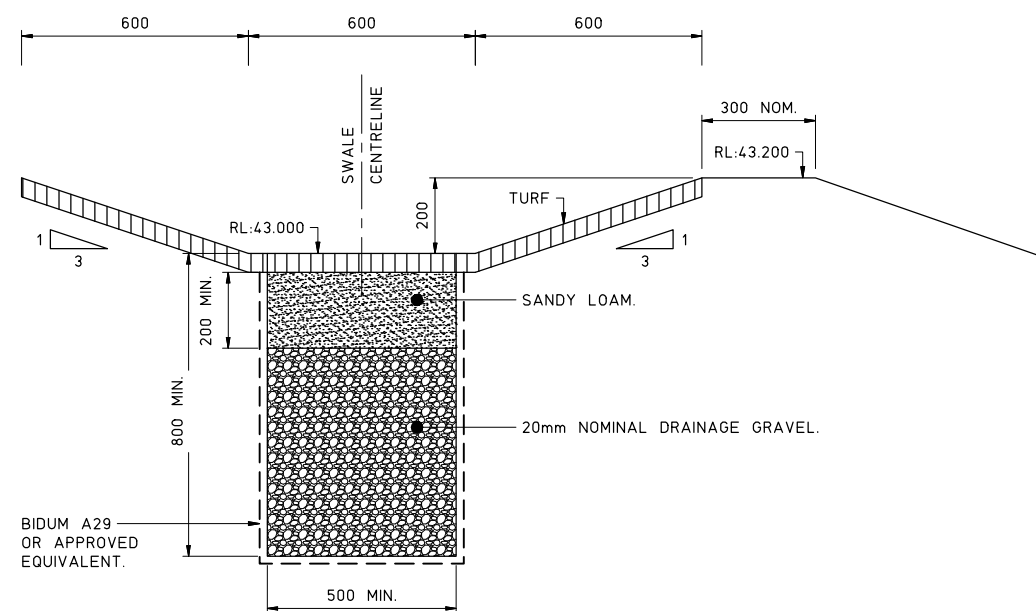
Drawing title
EROSION AND SEDIMENT CONTROL DETAILS

Drawing No
15104/C04

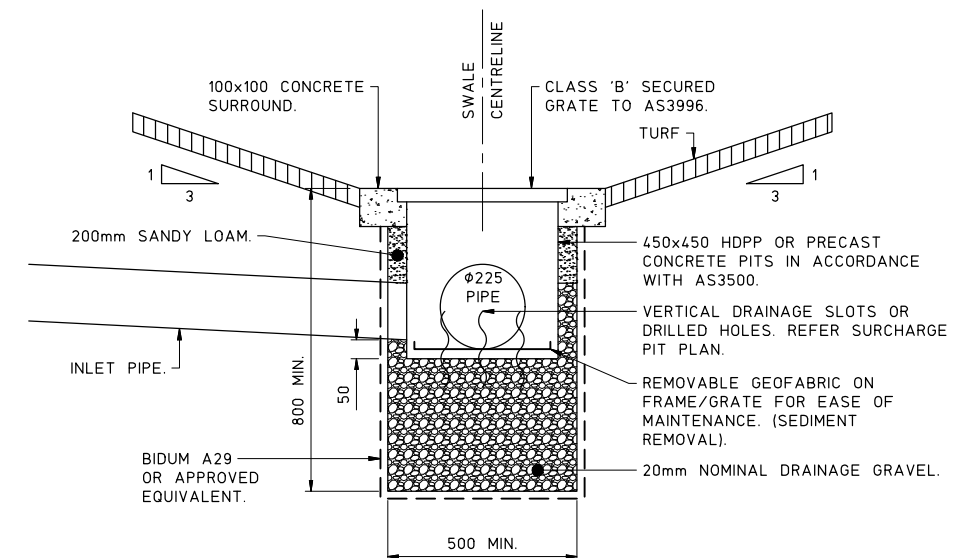
Revision Code
C0



SWALE DETAIL - PLAN
1:50

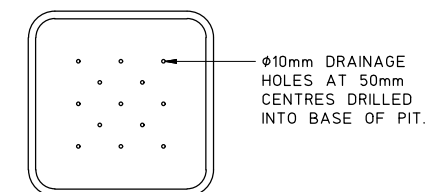


TYPICAL SWALE DETAIL - SECTION
N.T.S



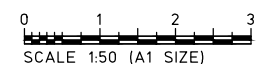
SURCHARGE PIT DETAIL - SECTION
N.T.S

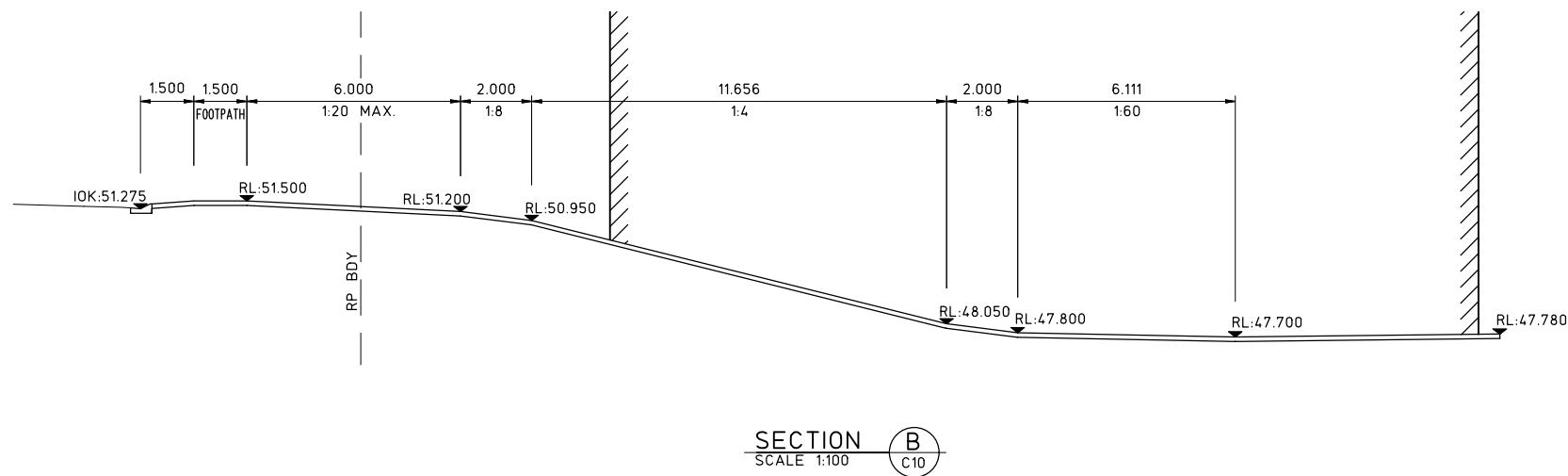
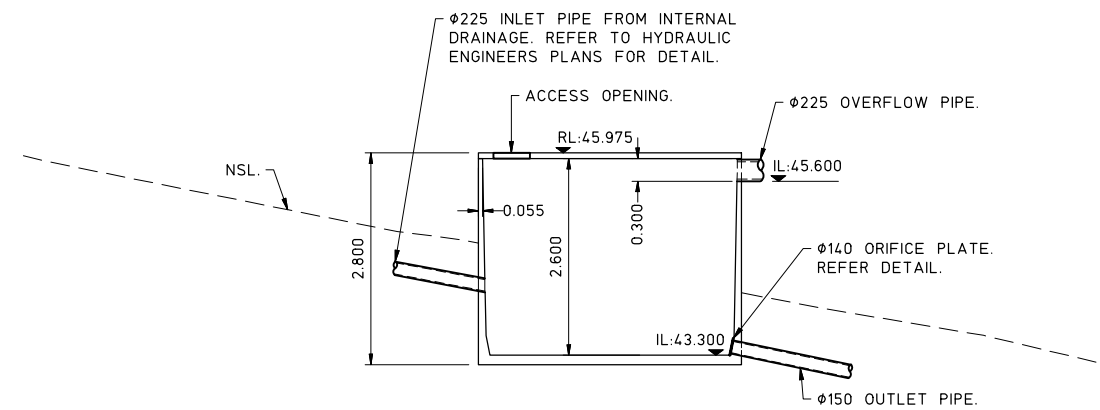
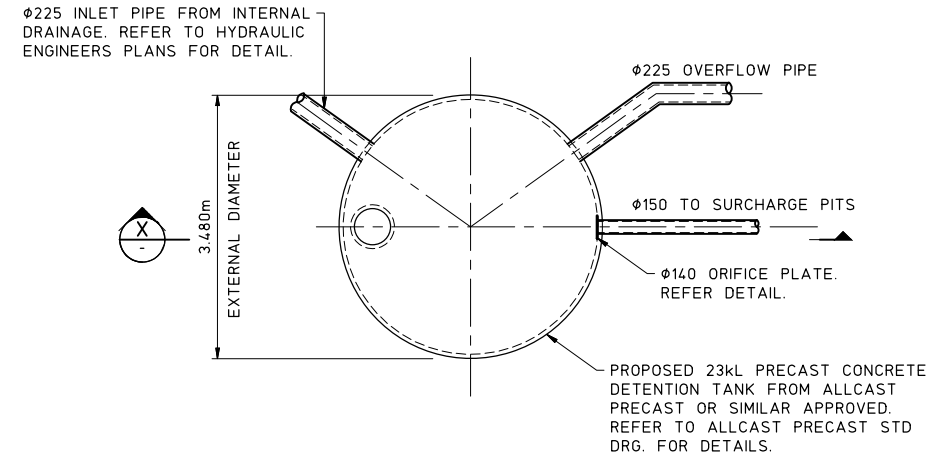
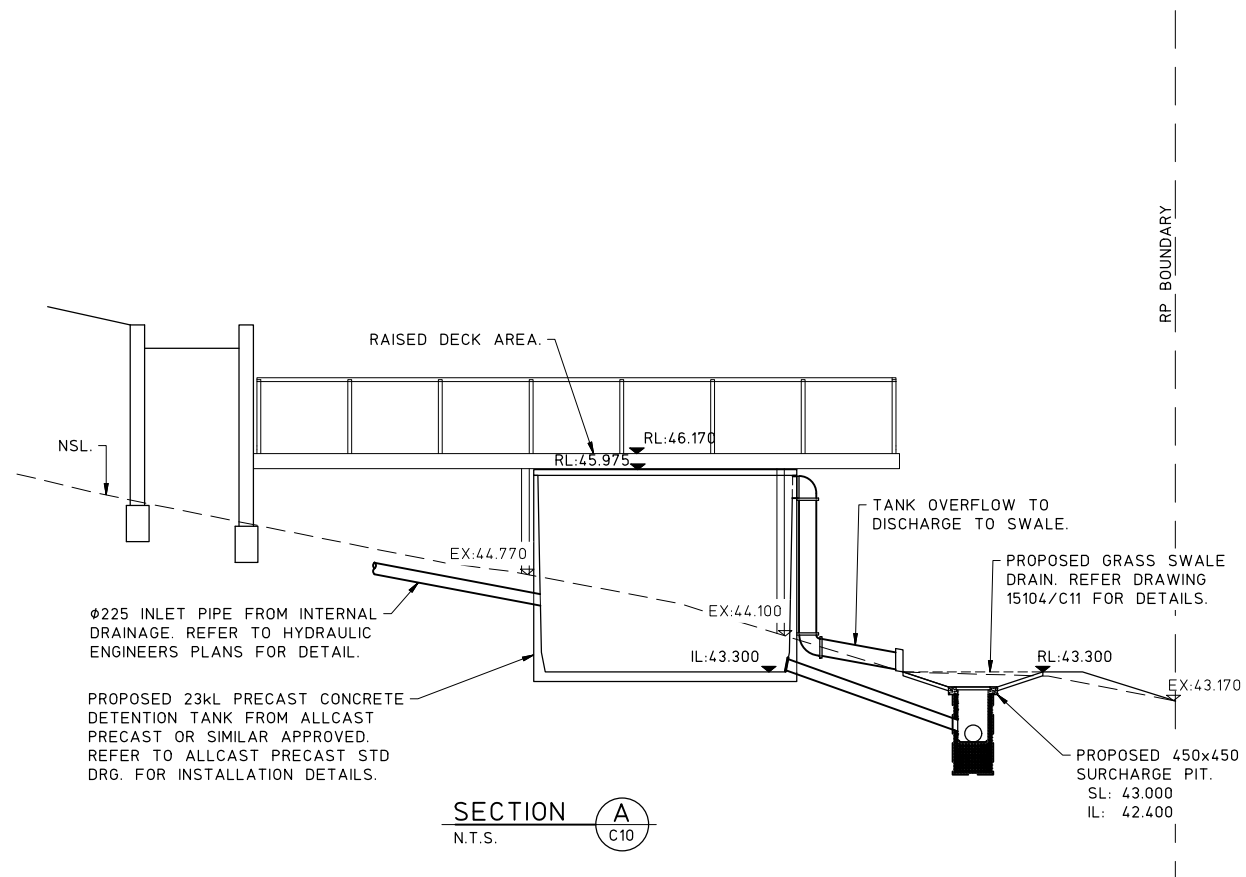
1. SITEWORKS AND DRAINAGE NOTES ARE TO BE READ IN CONJUNCTION WITH THE GENERAL AND COORDINATION NOTES ON DRAWING 15104/C00.
2. IT IS THE CONTRACTORS RESPONSIBILITY TO CHECK THAT THE PROPOSED PIPE WORKS DO NOT CLASH WITH EXISTING SERVICES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CLASHES ARE FOUND FOR ADVICE ON ANY DESIGN REQUIREMENTS.
3. STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE ASSESSMENT OF CONSTRUCTION LOADS AND PROVISION OF ANY TEMPORARY BRACING, PROPPING, ETC. REQUIRED DURING CONSTRUCTION. STRUCTURES SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.
4. ALL TRENCH EXCAVATIONS AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE WORKPLACE HEALTH AND SAFETY 1989 AS AMENDED AND THE MINE REGULATIONS ACT.
5. ALL TRENCHES IN TRAFFICABLE AND NON TRAFFICABLE ZONES SHALL BE BACKFILLED TO DENSITY RATIOS, FREQUENCIES AND LAYER INTERVALS IN ACCORDANCE WITH THE CURRENT COUNCIL STANDARDS. ALL TEST RESULTS SHALL BE FORWARDED TO THE SUPERINTENDENT AS THEY BECOME AVAILABLE.
6. ROOFWATER PIPES SHALL BE uPVC PIPES CLASS 'SN6' U.N.O.
7. TEST CERTIFICATES AND MATERIAL CERTIFICATION DOCUMENTATION IS REQUIRED FOR ALL PIPES, FITTINGS, BOX CULVERTS AND OTHER PRECAST CONCRETE PRODUCTS.
8. ALL STORMWATER SETOUT IS TO CENTRE OF STRUCTURE U.N.O.
9. THE CONTRACTOR SHALL ERECT TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE RELEVANT SPECIFICATIONS.



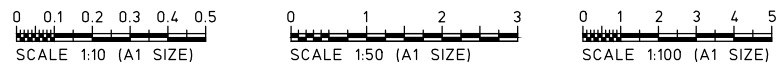
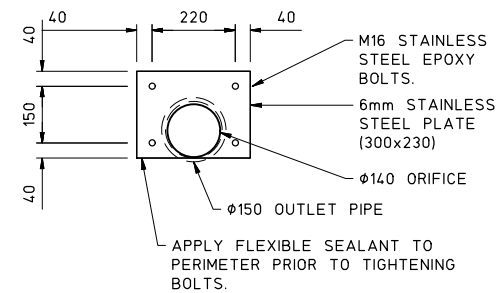
NOTE:
REFER DRG 15104/C10 FOR SITEWORKS
AND DRAINAGE PLAN.

SURCHARGE PIT DETAIL - PLAN
N.T.S

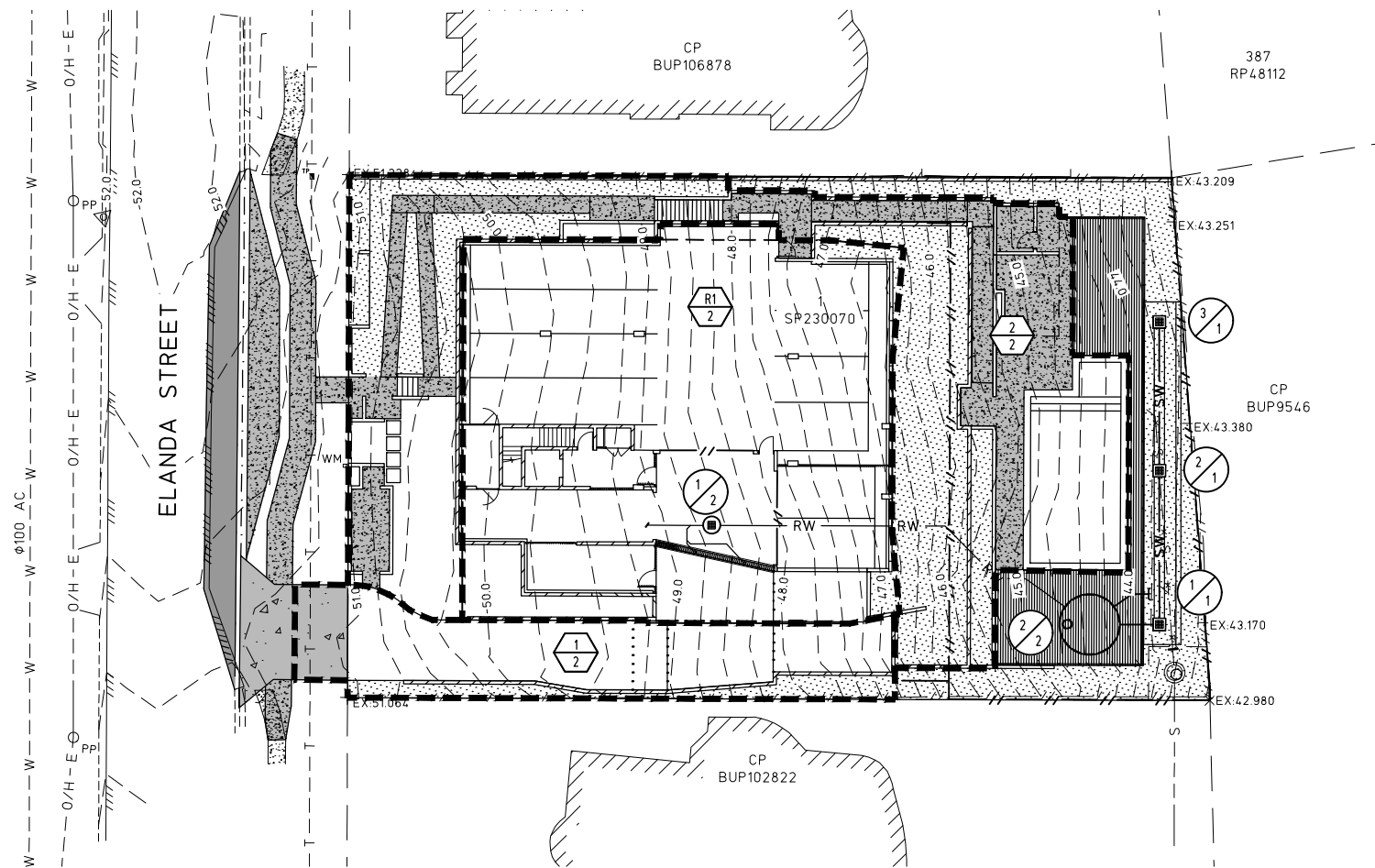
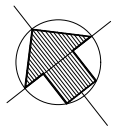
[illegible]



SECTION X
SCALE 1:50



| | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--------------------------------------|--|--|--|--|--|--|--|
| | | | | | | | | Client ALTUM CONSTRUCTIONS | | | | <div><div><div><div><div><div></div><div>MORGAN</div><div>CONSULTING ENGINEERS</div></div></div><div>•STRUCTURAL•CIVIL•HOUSING•FORENSIC•</div><div>1 GREAT GEORGE STREET PADDINGTON QLD 4064</div></div></div><div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div></div> <div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div> <div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div> 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EXISTING

| | |
|--|--------------------------------|
| | BUILDING EXTENT |
| | KERB AND CHANNEL |
| | LOT BOUNDARY |
| | CONTOUR MAJOR (1.00m INTERVAL) |
| | CONTOUR MINOR (0.25m INTERVAL) |
| | STORMWATER |
| | ROOFWATER |
| | SEWER |
| | SEWER TO BE REMOVED |
| | WATER |
| | WATER METER |
| | TELSTRA |
| | OVERHEAD ELECTRICITY |
| | FENCE |
| | FOOTPATH |

PROPOSED

| | |
|--|-----------------------|
| | BUILDING EXTENT |
| | LOT BOUNDARY |
| | STORMWATER |
| | RETAINING WALL |
| | CROSSOVER |
| | FOOTPATH |
| | CONCRETE PAVEMENT |
| | LANDSCAPING |
| | EASEMENT |
| | CATCHMENT |
| | CATCHMENT ID |
| | DRAINAGE STRUCTURE ID |

STORMWATER DRAINAGE CATCHMENT DISCHARGE CALCULATIONS

| CATCHMENT NAME | CATCHMENT AREA (ha) |
|----------------|---------------------|
| 1/2 | 0.016 |
| 2/2 | 0.054 |
| R1/2 | 0.055 |

| CATCHMENT NAME | CATCHMENT AREA (ha) | tc (MINS) | FRACTION IMPERVIOUS (f _p) | C ₁₀ VALUE | C ₂₀ VALUE | C ₅₀ VALUE | C ₁₀₀ VALUE | INTENSITY T _{Catchment} 30yr (mm/hr) | INTENSITY T _{Catchment} 50yr (mm/hr) | INTENSITY T _{Catchment} 100yr (mm/hr) | INTENSITY T _{Catchment} 150yr (mm/hr) | DISCHARGE Q ₁₀ (m ³ /s) | DISCHARGE Q ₂₀ (m ³ /s) | DISCHARGE Q ₅₀ (m ³ /s) | DISCHARGE Q ₁₀₀ (m ³ /s) |
|----------------|---------------------|-----------|---------------------------------------|-----------------------|-----------------------|-----------------------|------------------------|---|---|--|--|---|---|---|--|
| 1/2 | 0.016 | 5 | 0.85 | 0.87 | 0.91 | 1.00 | 1.00 | 209 | 237 | 275 | 305 | 0.008 | 0.010 | 0.012 | 0.014 |
| 2/2 | 0.054 | 5 | 0.60 | 0.80 | 0.84 | 0.92 | 0.96 | 209 | 237 | 275 | 305 | 0.025 | 0.030 | 0.038 | 0.044 |
| R1/2 | 0.055 | 5 | 1.00 | 0.90 | 0.95 | 1.00 | 1.00 | 209 | 237 | 275 | 305 | 0.029 | 0.034 | 0.042 | 0.047 |

| DESIGN STORM (Q _r) | TOTAL PRE DEVELOPMENT PEAK DISCHARGE FROM SITE (m ³ /s) | TOTAL UN-MITIGATED POST DEVELOPMENT PEAK DISCHARGE FROM SITE (m ³ /s) | TOTAL MITIGATED POST DEVELOPMENT PEAK DISCHARGE FROM SITE (m ³ /s) |
|--------------------------------|--|--|---|
| Q ₁ | 0.042 | 0.052 | 0.040 |
| Q ₂ | 0.060 | 0.066 | 0.049 |
| Q ₅ | 0.079 | 0.082 | 0.058 |
| Q ₁₀ | 0.089 | 0.091 | 0.063 |
| Q ₂₀ | 0.102 | 0.104 | 0.089 |
| Q ₅₀ | 0.107 | 0.111 | 0.102 |
| Q ₁₀₀ | 0.120 | 0.122 | 0.115 |

NOTE:
REFER DRAWING 15104/C10-C12 FOR
SITEWORKS AND DRAINAGE DETAILS.

0 2 4 6 8 10
SCALE 1:200 (A1 SIZE)

| CODE | REVISION | DATE | BY |
|------|------------------|----------|----|
| C0 | FOR CONSTRUCTION | 19.09.16 | HM |
| A1 | FOR APPROVAL | 04.05.16 | HM |
| A0 | FOR APPROVAL | 26.04.16 | HM |

| CODE | REVISION | DATE | BY |
|------|----------|------|----|
| | | | |
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|-------------|--|
| Client | ALTUM CONSTRUCTIONS |
| Address | 1 GREAT GEORGE STREET PADDINGTON QLD 4064 |
| Phone | (07) 3369 8411 |
| Fax | (07) 3369 1893 |
| Email | mail@morgance.com.au |
| Website | www.morgance.com.au |
| Member Firm | CONSULT AUSTRALIA |

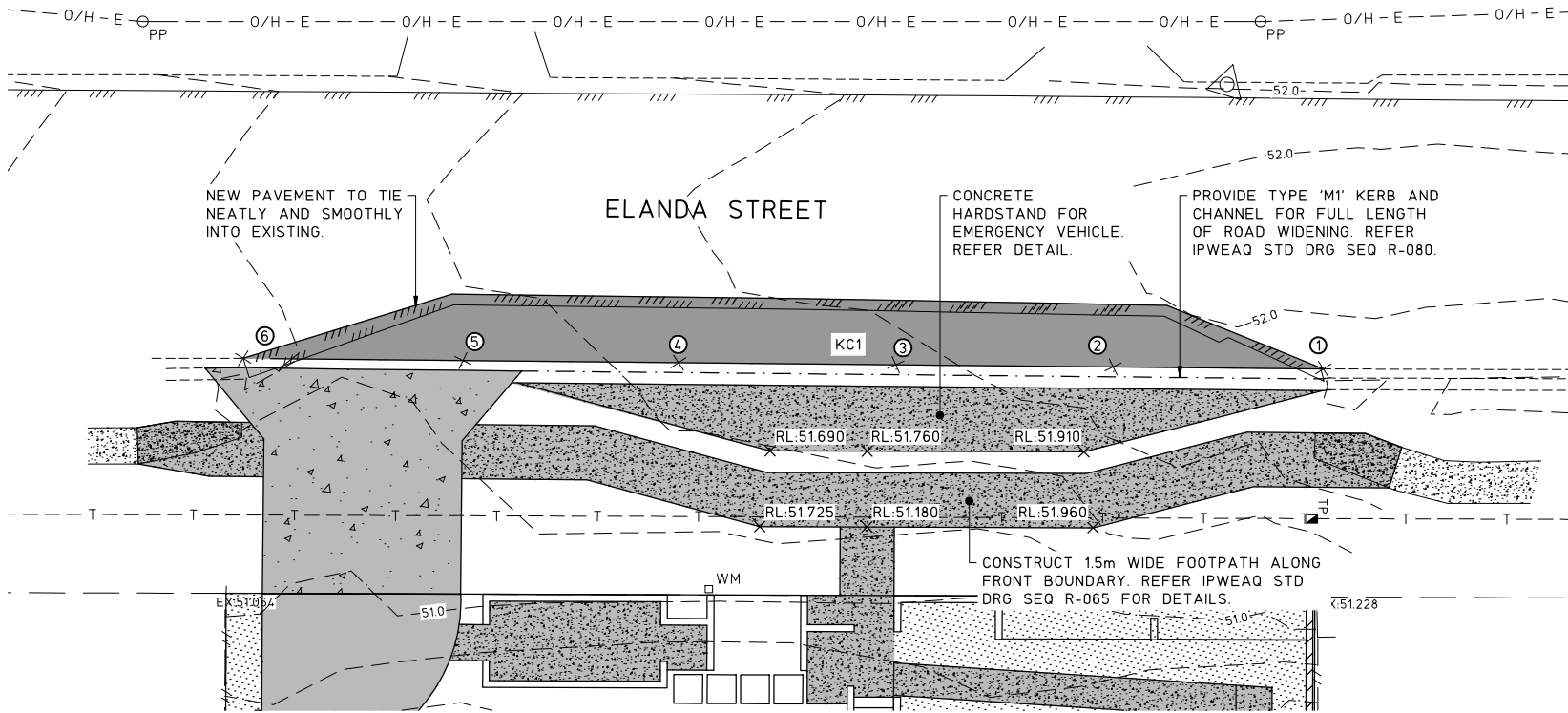
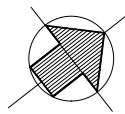
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| MORGAN CONSULTING ENGINEERS |
| •STRUCTURAL•CIVIL•HOUSING•FORENSIC• |
| 1 GREAT GEORGE STREET PADDINGTON QLD 4064 |

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| P: | (07) 3369 8411 |
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| E: | mail@morgance.com.au |
| Website | www.morgance.com.au |
| Member Firm | CONSULT AUSTRALIA |

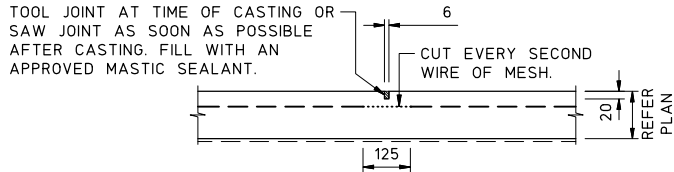
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|----------------|----------|
| Scales (at A1) | AS SHOWN |
| Designed | AW |
| Checked | HM |
| Drawn | YZ |
| Date | APR 16 |
| Authorised | |
| RPEQ | |

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|---------|----------------------------------|
| Project | PROPOSED RESIDENTIAL DEVELOPMENT |
| Address | 43 ELANDA STREET, SUNSHINE BEACH |

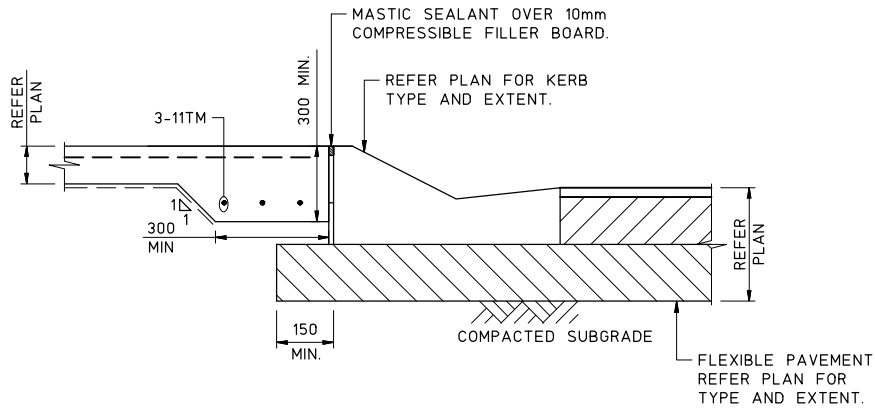
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|---------------|------------------------------------|
| Drawing title | STORMWATER DRAINAGE CATCHMENT PLAN |
| Drawing No | 15104/C15 |
| Revision Code | C0 |



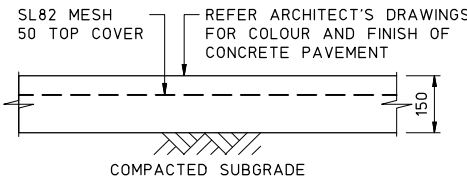
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|-------------|----------|----------|-----------|
| POINT No. | NORTHING | EASTING | ELEVATION |
| 1 | 5016.063 | 994.071 | 51.938 |
| 2 | 5012.063 | 998.305 | 51.787 |
| 3 | 5007.927 | 1002.683 | 51.631 |
| 4 | 5003.789 | 1007.063 | 51.476 |
| 5 | 4999.687 | 1011.405 | 51.321 |
| 6 | 4995.502 | 1015.835 | 51.164 |



SAWN JOINT - SJ
1:10 AT A1

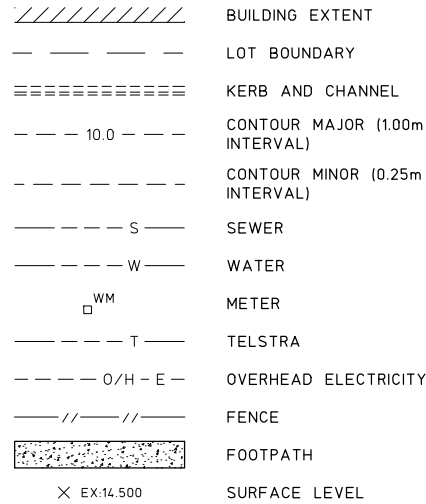


KERB TO CONCRETE HARDSTAND DETAIL
N.T.S

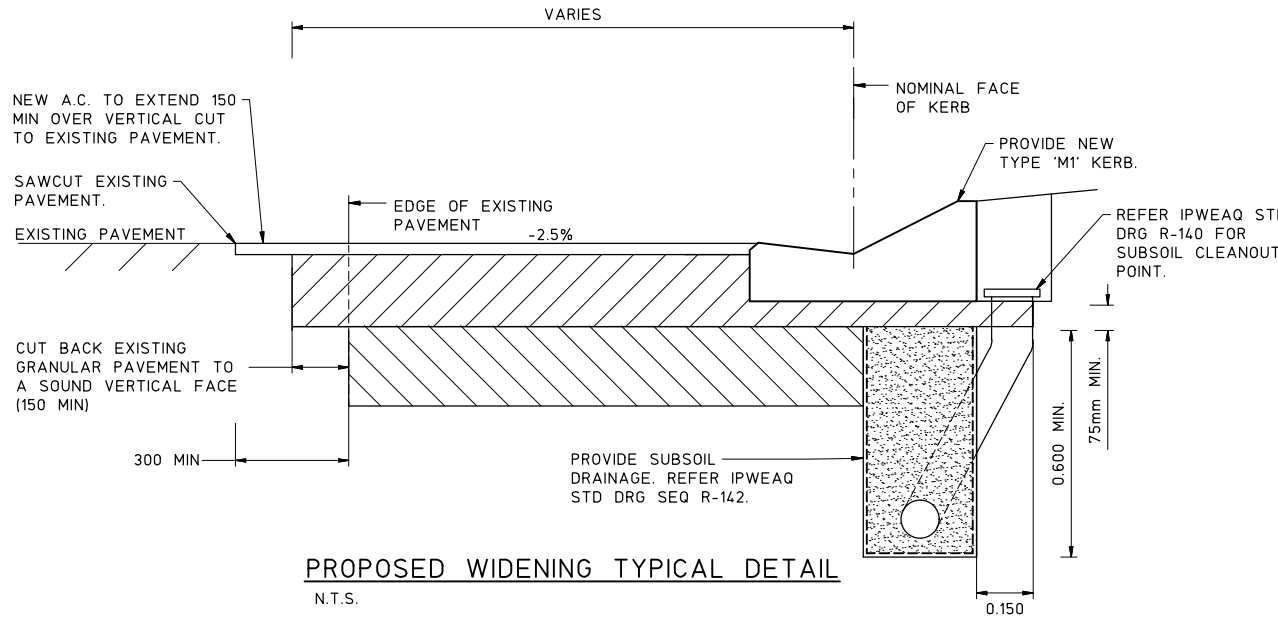
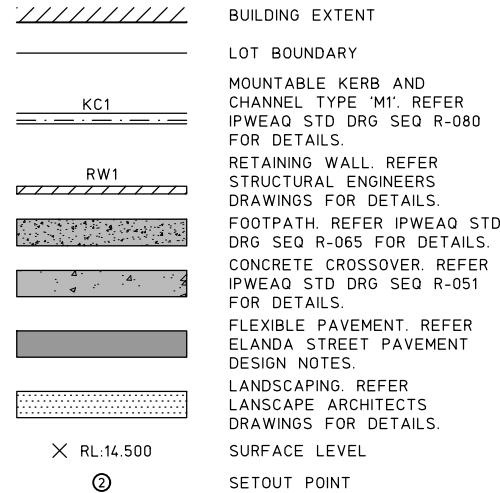


CONCRETE PAVEMENT DETAIL
N.T.S

EXISTING



PROPOSED



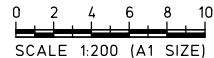
PROPOSED WIDENING TYPICAL DETAIL
N.T.S.

ROADWORKS NOTES

1. ROADWORKS NOTES ARE TO BE READ IN CONJUNCTION WITH THE GENERAL AND COORDINATION NOTES ON DRAWING 15104/C00.
2. THE CONTRACTOR SHALL ERECT TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE RELEVANT SPECIFICATIONS.
3. ALL ROAD PAVEMENT IS TO BE COMPACTED TO NO LESS THAN 100% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH AS 1289.
4. WHERE CONNECTION IS TO BE MADE TO AN EXISTING CONSTRUCTION THE CONTRACTOR SHALL CONFIRM THE LOCATION AND LEVEL OF THIS CONSTRUCTION PRIOR TO COMMENCING WORK ON ANY CRITICAL SECTION. THE SUPERINTENDENT MAY VARY LEVELS AND GRADIENTS OF NEW WORKS TO ACHIEVE A SATISFACTORY CONNECTION.
5. THE CONTRACTOR IS TO INITIALLY EXCAVATE THE PAVEMENT TO 300mm BELOW FINISHED PAVEMENT LEVEL THEN ARRANGE 4 DAY SOAKED CBR TESTS ON THE SUBGRADE AND NOTIFY THE SUPERINTENDENT WHO WILL DETERMINE FINAL PAVEMENT THICKNESS AND ARRANGE PAVEMENT APPROVAL FROM THE RELEVANT AUTHORITY.
6. PAVEMENT MATERIAL SHALL EXTEND 150mm BEHIND THE KERB AND CHANNEL.
7. SUBGRADE IS TO BE PROOF ROLLED. ANY SOFT SPOTS ENCOUNTERED ARE TO BE EXCAVATED AND REPLACED WITH SELECT MATERIAL IN LAYERS NOT EXCEEDING 150mm COMPACTED.
8. WHERE NEW PAVEMENT JOINS EXISTING PAVEMENT THE EXISTING BITUMEN IS TO BE SAW CUT TO PROVIDE A NEAT STRAIGHT LINE.
9. SETOUT POINTS TO LIP OF KERB AND CHANNEL OR EDGE OF PAVEMENT.
10. NEW SUBSOIL DRAINAGE TO TIE INTO EXISTING SUBSOIL DRAINAGE.
11. THE JOINTING ARRANGEMENT FOR PATHS LESS THAN 2 METRES WIDE SHALL BE AS FOLLOWS:
11.A. SJ @ 15 METRES MAX;
11.B. DEJ @ 15 METRES MAX;

ELANDA STREET PAVEMENT DESIGN

- PAVEMENT WIDTHS AS INDICATED ON PLAN AND SECTIONS SEALED WITH HOT PRIME, 30mm THICK ASPHALTIC CONCRETE WEARING SURFACE.
- PROVISIONAL PAVEMENT TO BE LEAN MIX COMPACTED IN TWO 200mm THICK LAYERS TO 100% RELATIVE DENSITY.
- PAVEMENT DEPTHS TO BE CONFIRMED BY SUBGRADE TEST RESULTS. THE SUPERVISING ENGINEER SHALL ADVISE FINAL PAVEMENT DEPTHS UPON RECEIPT AND CONSIDERATION OF TEST RESULTS.
- ENSURE PAVEMENT EXTENDS A MINIMUM OF 150mm BEHIND BACK OF KERB AND IS MINIMUM OF 75mm THICK UNDER KERB AND CHANNEL.



| CODE | REVISION | DATE | BY | CODE | REVISION | DATE | BY |
|------|-------------------|----------|----|------|----------|------|----|
| C0 | FOR CONSTRUCTION | 19.09.16 | HM | | | | |
| A0 | FOR APPROVAL | 26.04.16 | HM | | | | |
| P0 | PRELIMINARY ISSUE | 17.12.15 | HM | | | | |

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| Client | ALTUM CONSTRUCTIONS |
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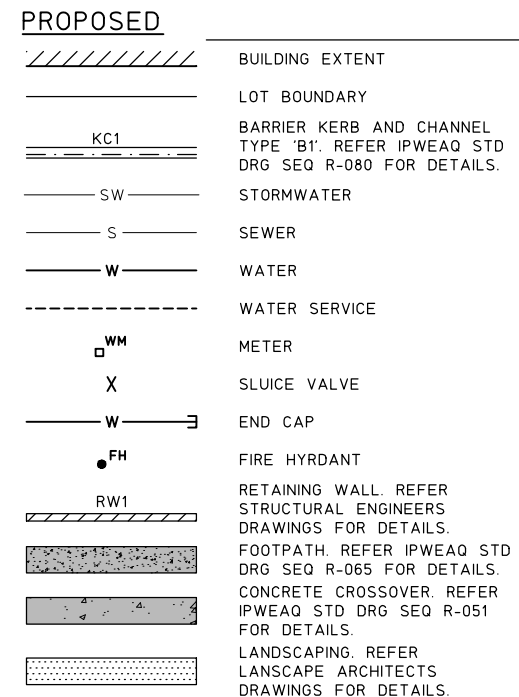
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| MORGAN CONSULTING ENGINEERS |
| 1 GREAT GEORGE STREET PADDINGTON QLD 4064 |

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| P: (07) 3369 8411 F: (07) 3369 1893 E: mail@morgance.com.au |
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| Scales (at A1) AS SHOWN |
| Designed AW |
| Checked HM |
| Drawn YZ |
| Date APR 16 |
| Authorised RPEQ |

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| Project PROPOSED RESIDENTIAL DEVELOPMENT |
| Address 43 ELANDA STREET, SUNSHINE BEACH |

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| Drawing title EXTERNAL ROADWORKS PLAN |
| Drawing No 15104/C20 |
| Revision Code C0 |



| | | |
|---|------------------------------------|---------|
| 1 | DN100 AC TO D1CL SOCKET CONNECTOR | - |
| 2 | DN100 x ϕ 100 P&F TEE | 9.42kN |
| 3 | DN100 DF RESILIENT SEAT STOP VALVE | 9.42kN |
| 4 | DN100 90° D1CL BEND | 13.33kN |
| 5 | DN100 FIRE HYDRANT | 9.42kN |
| 6 | DN100 DEAD PLATE | 9.42kN |

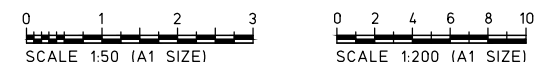
1. REMOVAL OF ASBESTOS PIPE TO BE PERFORMED BY SPECIALIST CONTRACTOR. NO CUTTING OF ASBESTOS PIPE IS ALLOWED. ALL ASBESTOS PIPE TO BE REMOVED AT SOCKET JOINTS.

2. ASBESTOS PIPE TO BE HANDLED, TRANSPORTED AND DUMPED AT SUITABLE FACILITY.



LOCALITY PLAN
NOT TO SCALE

ALL WATER AND SEWER CONSTRUCTION WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORKPLACE HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF WORKPLACE HEALTH AND SAFETY FOR INFORMATION. PHONE 1300 369 915.



1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND WATER SUPPLY CODE SPECIFICATIONS AND STANDARDS.
2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORKS SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
3. ADOPT TOP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
4. COVER ON MAINS FROM PERMANENT LEVEL TO BE AS SHOWN IN SEQ-WAT-1200-2.
5. REFER WSA WATER SUPPLY CODE OF AUSTRALIA APPENDIX C, SECTION C33 FOR SPACING OF CUT IN CONNECTION HOLES AND LOCATION OF OFF-TAKES.
6. CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS.
7. 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.
8. 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.
9. ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS.
10. TEST/CHLORINATION POINTS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NO SEQ-WAT-1410-1.
11. THE CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS RPEO REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO COUNCIL'S RETICULATION SYSTEM.
12. ALL WATER SUPPLY VALVES, HYDRANTS AND SERVICES ARE TO BE LOCATED CLEAR OF EXISTING AND PROPOSED VEHICLE CROSSINGS.
13. ALL TRENCHES IN TRAFFICABLE AND NON TRAFFICABLE ZONES SHALL BE BACKFILLED TO DENSITY RATIOS, FREQUENCIES AND LAYER INTERVALS IN ACCORDANCE WITH THE CURRENT COUNCIL STANDARDS. ALL TEST RESULTS SHALL BE MADE AVAILABLE TO THE SUPERINTENDENT AS THEY BECOME AVAILABLE.
14. ALL ABOVE-GROUND BUTTERFLY ISOLATING VALVES MUST BE WHEEL OPERATED.
15. ALL BUTTERFLY ISOLATING VALVES ON THE FIRE SERVICE LINE SHALL BE LOCKED IN THE OPEN POSITION WITH THE USE OF 003 TYPE LOCKS. (Q.F.E.S. APPROVED)
16. ALL NEW UNDER PRESSURE CONNECTIONS TO MAINTAIN A MINIMUM 0.5m CLEARANCE FROM ANY EXISTING FIXTURES OR TAPPING BANDS ALONG THE EXISTING MAIN.
17. ALL WORKS UNDERTAKEN BY UNITYWATER TO BE AT THE DEVELOPER'S EXPENSE.

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

1. TOPSOIL AND SUBSOIL SHOULD BE STOCKPILED SEPARATELY.
2. CARE SHOULD BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.

1. PRIOR TO CONSTRUCTION THE CONTRACTOR WILL SATISFY THEMSELF OF THE CORRECT LOCATIONS OF ALL EXISTING SERVICES WHETHER INDICATED OR NOT ON THE PLANS. ANY DAMAGE TO EXISTING SERVICES IS TO BE RECTIFIED AT THE CONTRACTORS EXPENSE.
2. THE DESIGN HAS BEEN PREPARED BASED ON SERVICE AUTHORITY AS CONSTRUCTED INFORMATION. NO POT HOLING HAS BEEN UNDERTAKEN TO VERIFY EXISTING SERVICE LOCATIONS AND DEPTHS. IT IS THE CONTRACTORS RESPONSIBILITY TO UNDERTAKE POT HOLING TO VERIFY THE DESIGN.
3. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT A DIAL BEFORE YOU DIG' PHONES OR LOCATION OF EXISTING PUBLIC UTILITIES PRIOR TO EXCAVATION. ANY DAMAGE CAUSED TO EXISTING PUBLIC UTILITIES BY THE CONTRACTOR WILL BE REPAIRED BY THE RELEVANT AUTHORITY AT THE CONTRACTORS EXPENSE.
4. ANY WORK ON EXISTING SERVICES THAT REQUIRE RELOCATION BY AUTHORITIES SHALL BE CARRIED OUT BY THE RELEVANT AUTHORITY, BUT WITHIN TERMS OF THE CONTRACT, AND SHALL BE CO-ORDINATED BY THE CONTRACTOR.

1. THESE WORKS ARE CONSIDERED MINOR WORKS AND ARE TO BE CONSTRUCTED BY A PRIVATE CONTRACTOR.
2. THE LIVE WORKS DETAILED ON THIS PLAN MUST BE CARRIED OUT BY THE CONTRACTOR UNDER QUEENSLAND URBAN UTILITIES SUPERVISION. APPLICATION MUST BE MADE TO OLD URBAN UTILITIES FOR QUOTATION OF AUDIT AND COMPLIANCE FEE.
3. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT QUU AND THE ENDORSED WATER AND SEWER CONSULTANT IDENTIFIED ON THIS PLAN TO ARRANGE INSPECTION OF THE WORKS AT ALL SPECIFIED HOLD POINTS. THE CONTRACTOR SHALL VERIFY THE INSPECTION HOLD POINTS WITH ENDORSED CONSULTANT, PRIOR TO CONSTRUCTION.
4. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE ALL CERTIFICATION DOCUMENTATION REQUIRED BY QUU AND THE ENDORSED WATER AND SEWER CONSULTANT IDENTIFIED ON THIS PLAN. THE CONTRACTOR SHALL VERIFY THE REQUIRED COMPLIANCE AND TESTING DOCUMENTATION WITH ENDORSED CONSULTANT, PRIOR TO CONSTRUCTION.
5. AT COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL ARRANGE FOR AN INDEPENDENT LICENSED SURVEYOR TO CARRY OUT A "WORKS AS CONSTRUCTED" SURVEY IN ACCORDANCE WITH THE CURRENT QUU STANDARDS AND SUBMIT THE DETAILS SHOWN ON A PLAN TO THE ENDORSED CONSULTANT.

| | | | | | | | | | | | | | | | |
|------|-------------------|----------|----|---------------------|----------|------|----|--|--|--|--|-------------------------|--|--|--|
| | | | | Client | | | | Project | | | | Drawing title | | | |
| | | | | ALTUM CONSTRUCTIONS | | | | <div><div><div>MORGAN</div><div>CONSULTING ENGINEERS</div></div><div><div>•STRUCTURAL•CIVIL•HOUSING•FORENSIC•</div><div>1 GREAT GEORGE STREET</div><div>PADDINGTON QLD 4064</div></div><div><div><div><div></div></div><div><div></div></div><div><div></div></div></div><div><div>CONSULT AUSTRALIA</div></div></div></div> <div>P: (07) 3369 8411 F: (07) 3369 1893 E: mail@morgance.com.au © Morgan Consulting Engineers This drawing is not to be copied, retained or used without the permission of the copyright holder.</div> <div><div>Scales (at A1) AS SHOWN</div><div><div>Designed AW</div><div>Checked HM</div></div><div><div>Drawn YZ</div><div>Date APR 16</div></div><div><div>Authorised RPEQ</div><div><div><div></div></div><div><div></div></div><div><div></div></div></div></div></div> <div>PROPOSED RESIDENTIAL DEVELOPMENT</div> <div>Address 43 ELANDA STREET, SUNSHINE BEACH</div> | | | | WATER RETICULATION PLAN | | | |
| C0 | FOR CONSTRUCTION | 19.09.16 | HM | | | | | | | | | | | | |
| A1 | FOR APPROVAL | 20.06.16 | HM | | | | | | | | | | | | |
| A0 | FOR APPROVAL | 03.06.16 | HM | | | | | | | | | | | | |
| P0 | PRELIMINARY ISSUE | 17.12.15 | HM | | | | | | | | | | | | |
| CODE | REVISION | DATE | BY | CODE | REVISION | DATE | BY | | | | | | | | |