

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW / 2019 / 160

Dated: 9 May 2019

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

8 LOT INDUSTRIAL SUBDIVISION 86-160 CHRISTENSEN ROAD SOUTH, STAPYLTON

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IPWEAQ

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IECA

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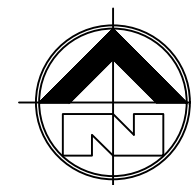
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LOCALITY PLAN
NTS

WARNING

NO GUARANTEE IS GIVEN THAT SERVICES SHOWN
ARE COMPLETE AND CORRECT. CONTRACTOR
SHALL VERIFY EXACT POSITION OF SERVICES ON
SITE BY HAND DIGGING OR OTHER NON
DESTRUCTIVE MEANS PRIOR TO CONSTRUCTION
AND SHALL MAINTAIN AND PROTECT THE SAME
FOR THE DURATION OF THE CONTRACT.

GCCC REF: xxxx



FOR COUNCIL APPROVAL

Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			
Project No.	Dwg. No.	Rev.	
17-209	C100-01	C	

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SITE PLAN
SCALE 1:1000 (A1)

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REV	DESCRIPTION	DATE	BY
C	COUNCIL RFI RESPONSE	26.03.2019	K.J.L.
B	FOR COUNCIL APPROVAL	30.01.2019	K.J.L.
A	PRELIMINARY	07.12.2018	K.J.L.

Engineers Certification:

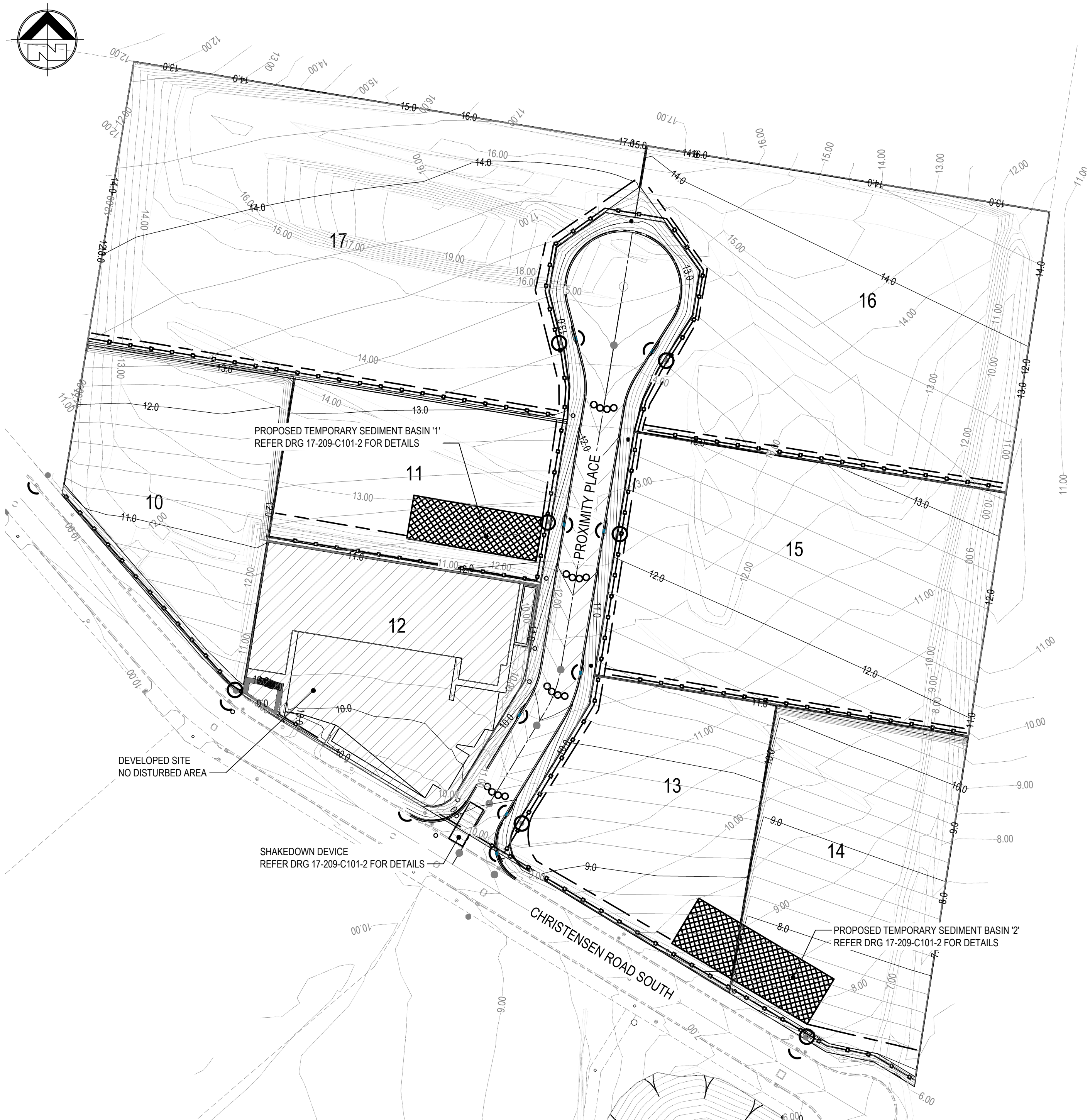
Travis Smith MIE Aust. CPEng.
RPEQ 16400

Signature: *T.S.*

Date: 26 / 03 / 2019

Project
PROPOSED SUBDIVISION AT
86-160 CHRISTENSEN ROAD
SOUTH, STAPYLTON
for
BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L

Title
COVER SHEET, LOCALITY PLAN
DRAWING INDEX



EROSION & SEDIMENT CONTROL PLAN
SCALE 1:1000 (A1)

EROSION AND SEDIMENTATION CONTROL NOTES

- CONTRACTOR TO NOMINATE SITE REPRESENTATIVE TO BE RESPONSIBLE FOR THE IMPLEMENTATION AND UP KEEP OF THE SILTATION AND EROSION MANAGEMENT CONTROL PLAN.
- CONSTRUCTION OF ALL SEDIMENT MANAGEMENT DEVICES SHALL BE COMPLETED AND EFFECTIVE PRIOR TO:
 - STRIPPING OF TOPSOIL AND GRASS
 - BULK EARTHWORKS
 - SERVICE INSTALLATION
- WHERE THE CONTRACTOR IS REQUIRED TO SLASH EXISTING VEGETATION, THE SLASHED HEIGHT SHALL BE AT LEAST 75mm, SO THAT THE STUBS CAN ASSIST IN PREVENTING EROSION.
- ENSURE NO RUN OFF OR SEDIMENT DISCHARGES TO STREET OR ADJOINING PROPERTIES.
- SHOULD THE SUPERINTENDENT, OR COUNCIL'S DESIGNATED REPRESENTATIVE, REQUEST THE CONTRACTOR TO IMPLEMENT AN EROSION AND SEDIMENT CONTROL MEASURE, THE CONTRACTOR SHALL IMPLEMENT IT WITHIN 24 HOURS.
- BOTH TEMPORARY AND PERMANENT SEDIMENT MANAGEMENT DEVICES SHALL BE MAINTAINED. AT A SUITABLE LEVEL/CONDITION THROUGHOUT CONSTRUCTION.
- SEDIMENT FENCES ARE TO BE CLEANED OUT WHEN CAPACITY IS REDUCED BY 30%.
- IF EROSION AND SEDIMENT CONTROL DEVICES HAVE BEEN FOUND TO BE DEFICIENT OR FAILED IN SERVICE. DUE TO UNFORESEEN CIRCUMSTANCES, CORRECTIVE ACTION IS TO BE UNDERTAKEN IMMEDIATELY WHICH MAY INCLUDE AMENDMENTS/ADDITIONS TO THE ORIGINAL APPROVED EROSION CONTROL PLANS. SUCH ADDITIONS OR AMENDMENTS ARE TO BE APPROVED BY RELEVANT LICENSING AND COMPLIANCE OFFICER.
- THE CONTRACTOR SHALL PROVIDE ONE VEHICLE ACCESS POINT TO SERVE THE SITE. ITS LOCATION, AND THE ASSOCIATED EROSION AND SEDIMENT CONTROL MEASURES, SHALL BE AS AGREED WITH COUNCIL'S DESIGNATED REPRESENTATIVE. THE PURPOSE OF THE ACCESS POINT AND CONTROL MEASURES IS TO MINIMIZE THE AMOUNT OF SEDIMENT TAKEN OFF SITE BY VEHICLE TYRES.
- THE CONTRACTOR SHALL PROVIDE INLET PROTECTION TO ANY EXISTING GULLIES DIRECTLY DOWNSTREAM OF THE SITE OF WORKS.
- THE CONTRACTOR SHALL TURF ALL DISTURBED AREAS OF VERGES, PRIOR TO ON MAINTENANCE INSPECTION.
- ALL REMAINING BATTERS AND DISTURBED AREAS SHALL BE GRASS SEEDED WITHIN 7 DAYS OF FINAL TRIMMING AND ESTABLISHMENT OF 70 PERCENT GROUND COVER WITHIN 30 CALENDAR DAYS.

LEGEND

- EXISTING CONTOURS
- BULK EARTHWORKS CONTOURS
- SEDIMENT FENCE
- GULLY PIT INLET PROTECTION
- FIELD INLET PROTECTION
- ENTRY / EXIT SHAKE DOWN DEVICE
- STORMWATER CUT OFF / DIVERSION DRAIN
- TEMPORARY SEDIMENT BASIN - REFER DRG 17-209-C101-2 FOR DETAILS
- SAND BAG WEIR

WARNING

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Engineers Certification:

Travis Smith MIE Aust. CPEng.
RPEQ 16400

Signature:

Date: 26 / 03 / 2019

Project
PROPOSED SUBDIVISION AT
86-160 CHRISTENSEN ROAD
SOUTH, STAPYLTON

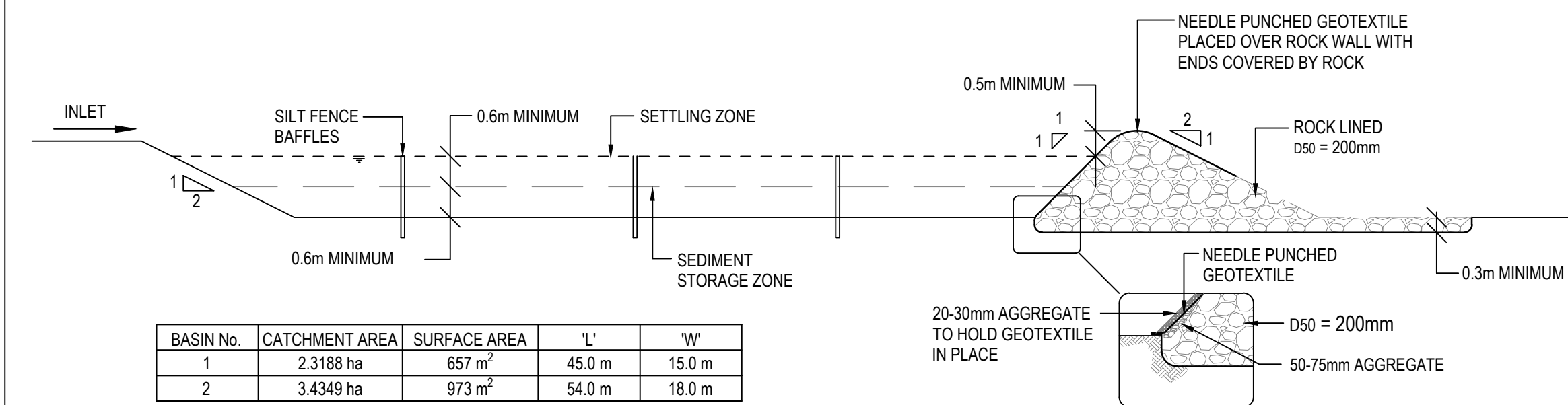
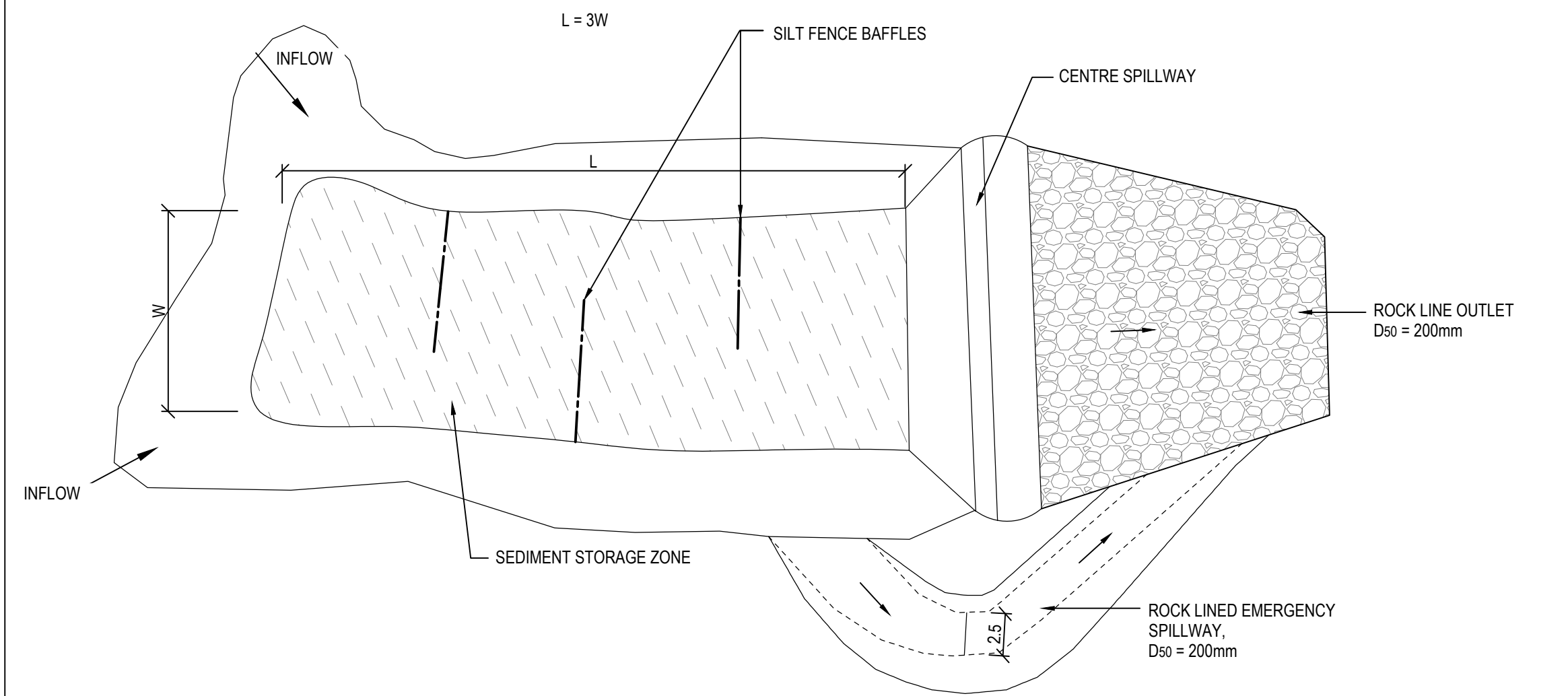
for
BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L

Title
EROSION & SEDIMENT CONTROL
PLAN

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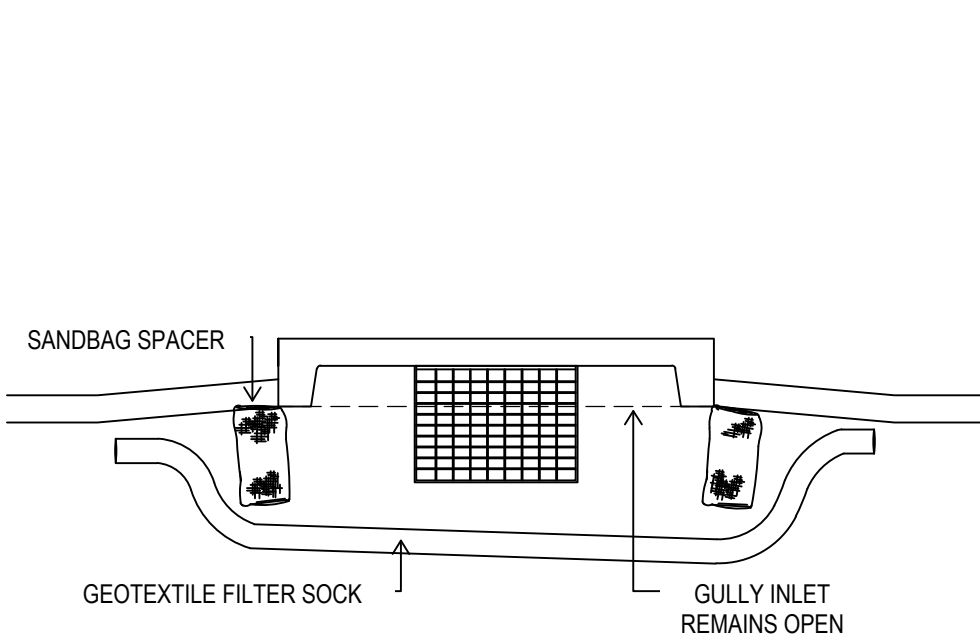


BASIN No.	CATCHMENT AREA	SURFACE AREA	L'	W'
1	2.3188 ha	657 m ²	45.0 m	15.0 m
2	3.4349 ha	973 m ²	54.0 m	18.0 m

BASIN SURFACE AREA = 3400*(0.25 Q_s) (m²)

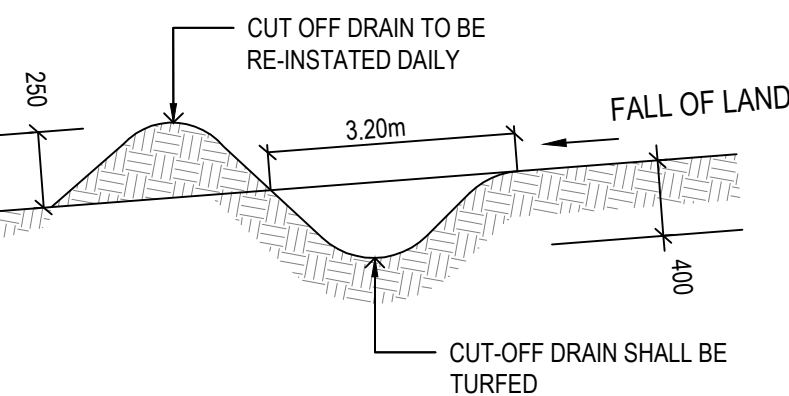
TYPE C SEDIMENT BASIN DETAILS

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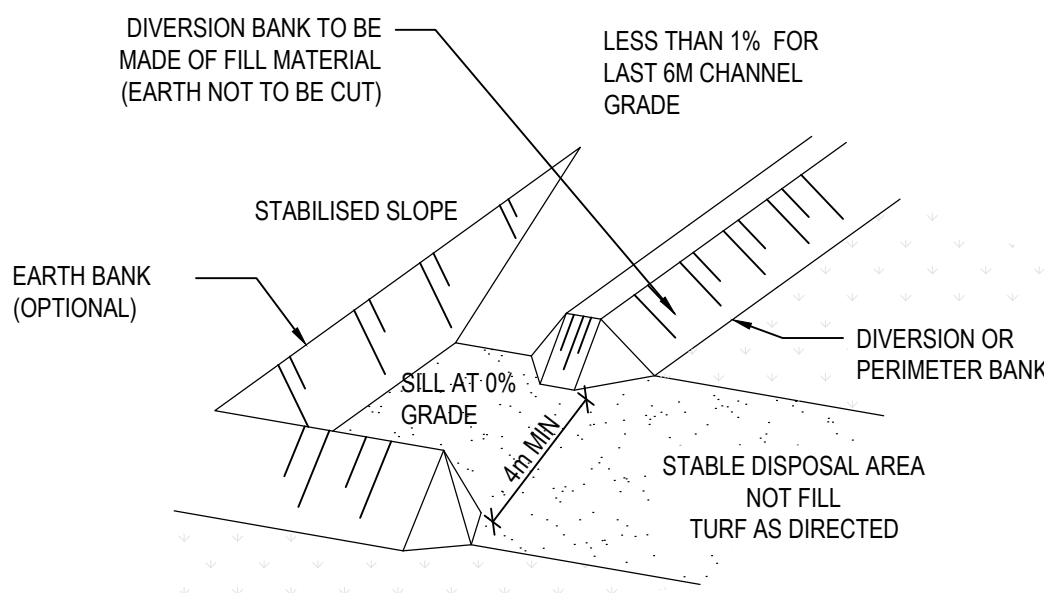
GULLY PIT SEDIMENT CONTROL

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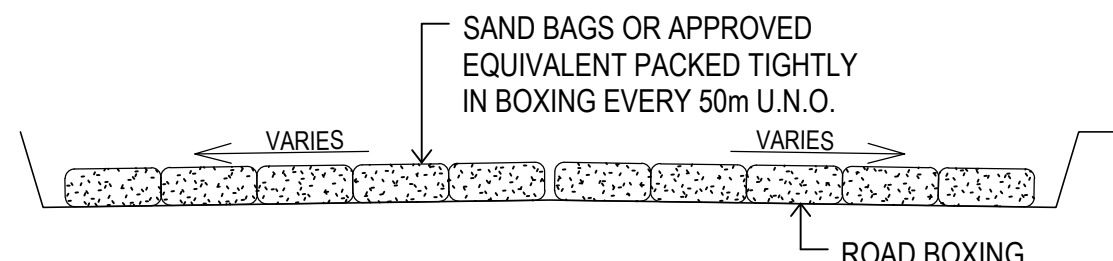
CUT OFF DRAIN / DIVERSION BERM

NTS



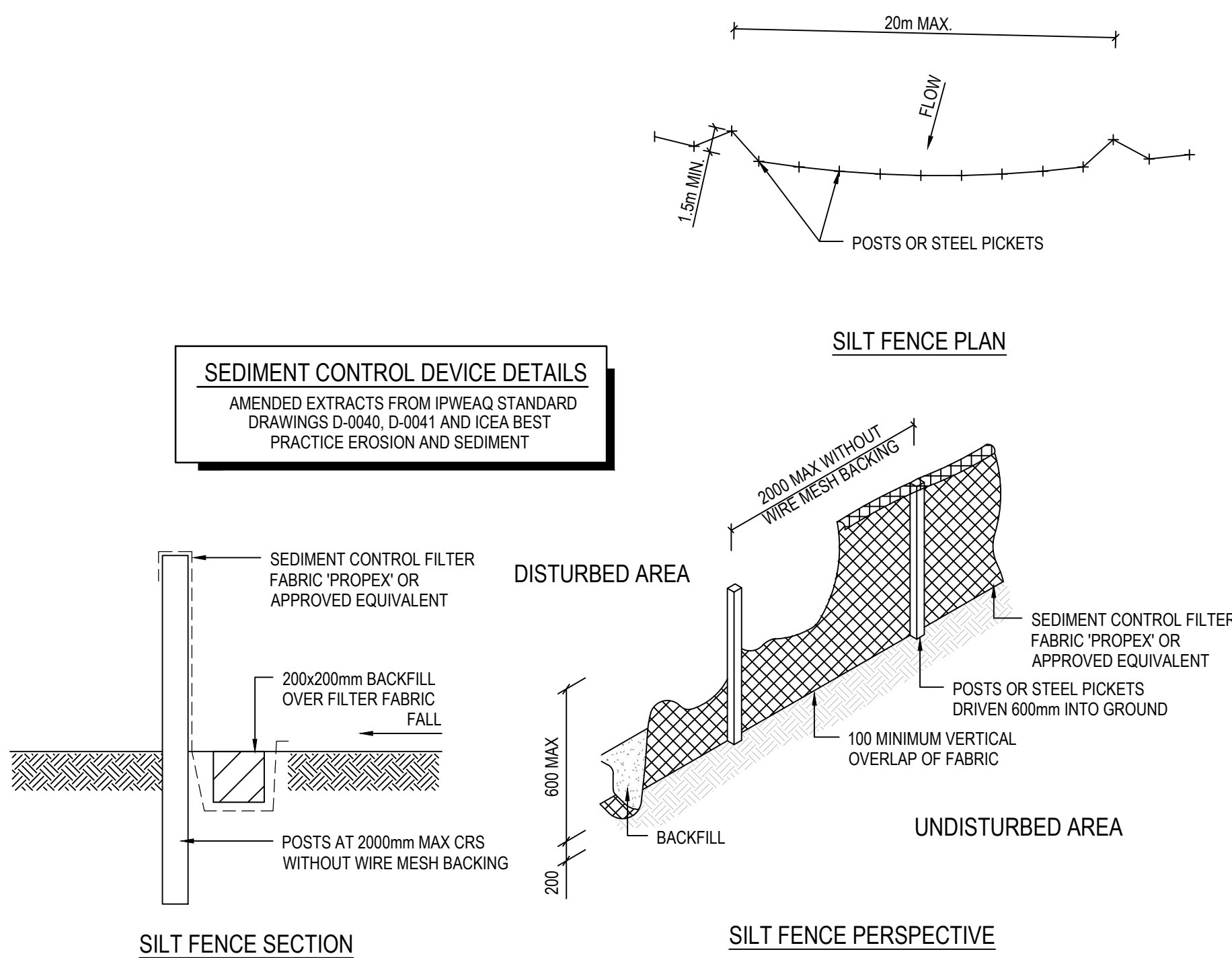
LEVEL SPREADERS

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TYPICAL SANDBAG WEIR

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SILT FENCE DETAIL

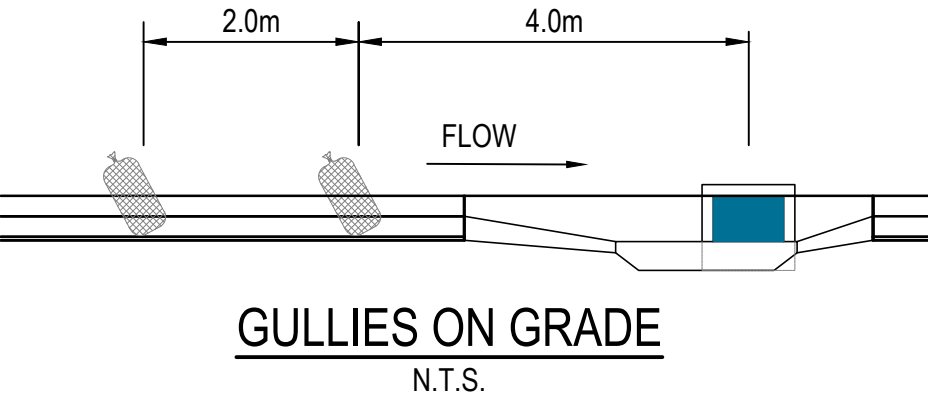
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OPERATION & MAINTENANCE NOTES

ALL ESC MEASURES MUST BE INSPECTED:
- AT LEAST DAILY (WHEN WORK IS OCCURRING ON SITE) OR WEEKLY (WHEN WORK IS NOT OCCURRING ON SITE);
- WITHIN 24 HOURS OF EXPECTED RAIN; AND
- WITHIN 18 HOURS OF A RAINFALL EVENT (ie AN EVENT OF SUFFICIENT INTENSITY AND DURATION TO MOBILISE SEDIMENT ON SITE).

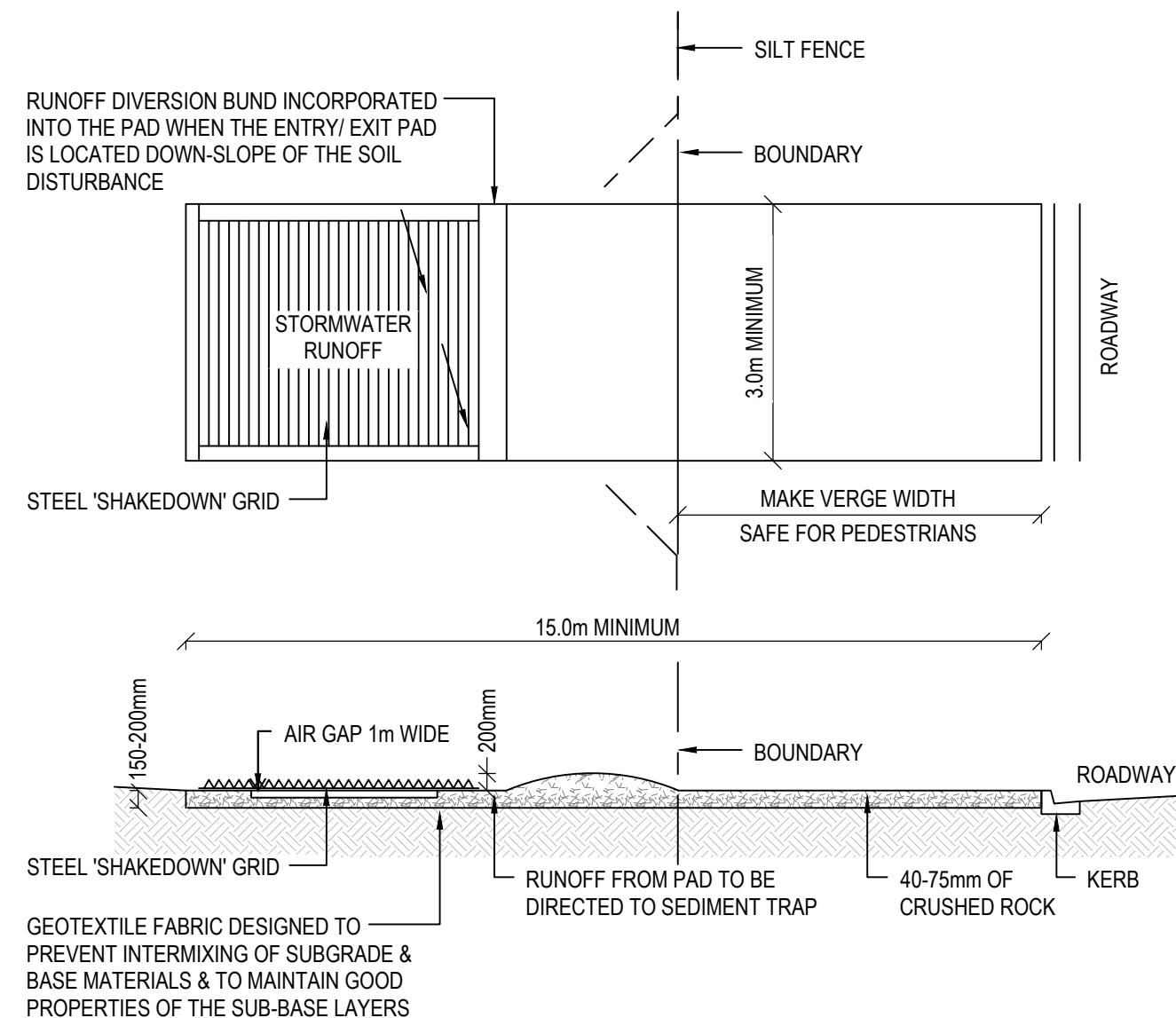
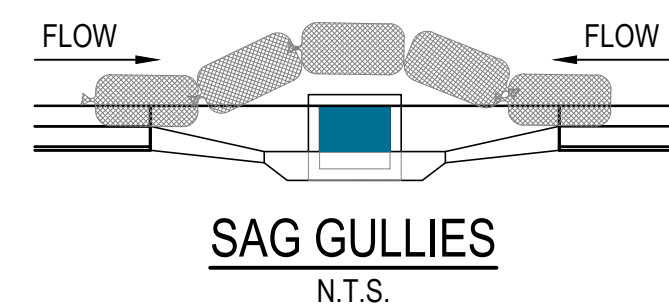
ESC MEASURE	MAINTENANCE TRIGGER	TIMEFRAME FOR COMPLETION OF MAINTENANCE
SEDIMENT BASINS	WHEN SETTLED SEDIMENT EXCEEDS THE VOLUME OF THE SEDIMENT STORAGE ZONE (SEE COUNCIL'S SEDIMENT BASIN DESIGN GUIDELINES).	WITHIN 7 DAYS OF THE INSPECTION.
OTHER ESC MEASURES	THE CAPACITY OF ESC MEASURES FALLS BELOW 30%.	BY THE END OF THE DAY

PRIOR TO LONG PERIOD OF SHUT DOWN ALL ESC MEASURES TO BE INSPECTED AND CLEANED. SEDIMENT BASIN CAPACITY TO BE CHECKED AND SIZE INCREASED IF REQUIRED FOR SHUT DOWN PERIOD.



SANDBAGS AT GULLIES

NTS



SHAKEDOWN DETAIL

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Signature: *T.S.*

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EROSION & SEDIMENT CONTROL DETAILS AND NOTES

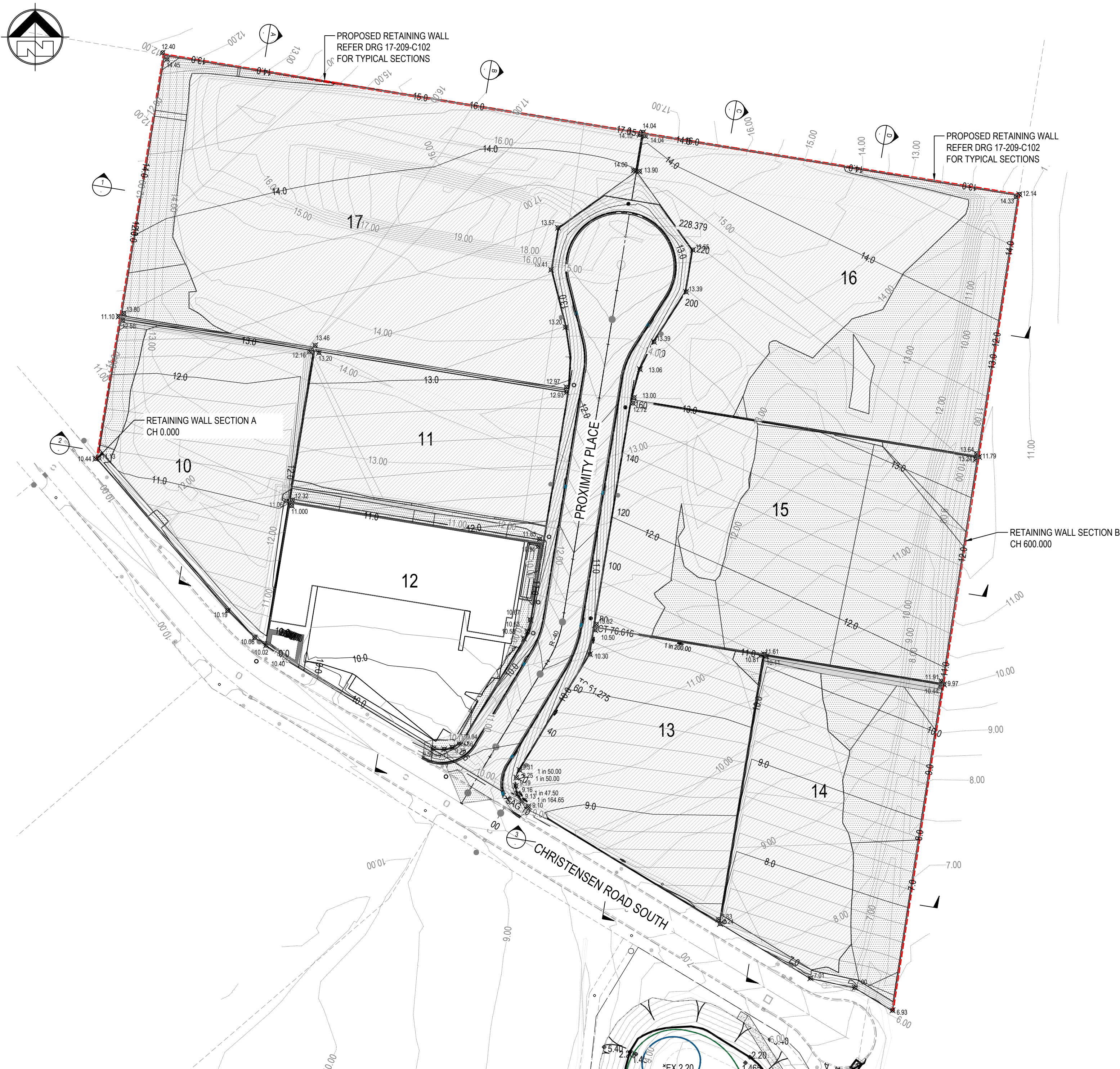
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BULK EARTHWORKS PLAN
SCALE 1:1000 (A1)

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BULK EARTHWORKS NOTES

- WORKS SHALL BE EXECUTED BY THE CONTRACTOR IN ACCORDANCE WITH AS3798 - 2007, 'GUIDELINES FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS' AND SHALL BE SUPERVISED BY AND APPROVED GEOTECHNICAL TESTING AUTHORITY, (GTA) AS DEFINED IN THE CODE TO A LEVEL 1 STANDARD.
- THE GEOTECHNICAL TESTING AUTHORITY SHALL PROVIDE A COMPLETED CONSTRUCTION PHASE REPORT INCLUDING AS A MINIMUM:
 - DAILY FIELD RECORD SHEETS INCLUDING ELEVATION AND LOCATION OF WHEEL LOAD TESTS COMPLETED AND THE NATURE OF REJECTED / ACCEPTED MATERIAL;
 - PHOTOGRAPHIC DIARY; AND
 - COMPACTION TEST RESULTS, INCLUDING X, Y, Z CO-ORDINATES OF SAMPLE;
 - RPEQ CERTIFICATION OF THE WORKS AND RE-CLASSIFICATION IN ACCORDANCE WITH AS2870.
- FOLLOWING INITIAL MOBILISATION AND PRIOR TO STRIPPING OF THE SITE, THE CONTRACTOR SHALL IMMEDIATELY UNDERTAKE THE EROSION AND SEDIMENT RUNOFF PREVENTION MEASURES.
- FOLLOWING THE STRIPPING OF THE UPPER ORGANIC SOIL, THE SITE SHALL BE PROOF ROLLED TO IDENTIFY ANY SOFT SPOTS OR FURTHER SIGNS OF UNSUITABLE MATERIAL. ANY SUCH AREAS SHALL BE RECTIFIED PRIOR TO COMMENCEMENT OF FILLING OPERATIONS.
- FILLING SHALL BE COMPLETED IN ACCORDANCE THE FOLLOWING REQUIREMENTS:
 - WORKS TO BE IN ACCORDANCE WITH AS3798 - 2007.
 - DEGREE OF COMPACTION TO BE AS FOLLOWS:
 - ALLOTMENT FILL = 95% STANDARD COMPACTION
 - VERGE = 95% STANDARD COMPACTION
 - SUBGRADE GREATER THAN 300mm BELOW TOP OF SUBGRADE = 95% STANDARD COMPACTION
 - SUBGRADE LESS THAN 300mm BELOW TOP OF SUBGRADE = 100% STANDARD COMPACTION
 - PAVEMENT 100% STANDARD COMPACTION
 - MATERIAL MOISTURE CONTENT TO BE IN THE RANGE OF 80% TO 100% OF OPTIMAL MOISTURE CONTENT (OMC).
 - FIELD DENSITY TESTING TO BE CARRIED OUT AS PER GOLD COAST CITY COUNCIL'S SUBDIVISION AND DEVELOPMENT GUIDELINES.
 - THE EXPENSE OF THE TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR.
- IT IS THE CONTRACTORS RESPONSIBILITY TO PROTECT THE SITE AND SURROUNDING AREAS FROM DAMAGE RESULTING FROM STORMWATER RUNOFF. TEMPORARY DIVERSION DRAINS AND OR OTHER DRAINAGE CONTROL DEVICES ARE TO BE IMPLEMENTED BY THE CONTRACTOR DURING CONSTRUCTION TO MINIMISE THE EFFECTS OF WEATHER. NO EXTENSIONS OF TIME WILL BE GRANTED SHOULD DAMAGE TO THE WORKS AND SURROUNDING AREAS RESULT FROM THE CONTRACTORS NEGLIGENCE IN NOT PROVIDING ADEQUATE PROTECTION.
- EXCESS SPOIL MATERIAL GENERATED DURING CONSTRUCTION IS TO BE REMOVED FROM THE SITE BY THE CONTRACTOR.
- ALL FILL MATERIAL PLACED ON THE SITE COMPRISING ONLY NATURAL EARTH AND ROCK IS TO BE FREE OF CONTAMINANTS (AS DEFINED BY SECTION 11 OF THE ENVIRONMENTAL PROTECTION ACT 1994), NOXIOUS, HAZARDOUS, DELETERIOUS AND ORGANIC MATERIALS. SUITABLE FILL MATERIAL IS DEEMED TO COMPLY WITH THE REQUIREMENTS OF CLAUSE 4.3, AS3798, GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS
- TURF SHALL BE LAID TO FULL WITH OF VERGE UPON COMPLETION OF WORKS.
- SHOULD ANY ABORIGINAL, ARCHAEOLOGICAL OR HISTORIC SITES, ITEMS OR PLACES BE IDENTIFIED, LOCATED OR EXPOSED DURING THE COURSE OR CONSTRUCTION OR OPERATION OF THE DEVELOPMENT, ALL ACTIVITIES SHALL CEASE FORTHWITH, AND THE CONTRACTOR SHALL CONTACT THE SENIOR CULTURAL HERITAGE OFFICER (PH. 3225-1074) OF THE ENVIRONMENTAL PROTECTION AGENCY.

VEGETATION MANAGEMENT

CLEARED VEGETATION SHALL NOT BE BURNED ON SITE. THE CONTRACTOR SHALL DUMP CLEARED MATERIAL AT AN APPROVED WASTE DISPOSAL FACILITY, OR MULCH AND RETAIN IT ON SITE FOR LATER USE IN LANDSCAPING AND REVEGETATION WORKS.

IN GENERAL, THE CONTRACTOR SHALL MINIMIZE THE AREA OF CONSTRUCTION VEHICLE ACTIVITY.

THE CONTRACTOR SHALL PROTECT TREES WITHIN 4 METRES OF GENERAL MACHINE OPERATION WITH TREE GUARDS, MADE OF RUBBER OR HARDWOOD GIRDLES TO WHICH HAVE BEEN ATTACHED 1.8m HIGH BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. THE CONTRACTOR SHALL STRAP THE GUARDS TO THE TREES PRIOR TO CONSTRUCTION AND KEEP THEM IN PLACE UNTIL COMPLETION.

WHERE POSSIBLE, THE CONTRACTOR SHALL TUNNEL UNDER TREE ROOTS RATHER THAN SEVERING THEM. WHERE ROOTS HAVE BEEN DAMAGED, THE CONTRACTOR SHALL SEVER THEM CLEANLY AND TREAT THE CUT FACES WITH A SUITABLE FUNGICIDE.

DUST CONTROL NOTES

THE CONTRACTOR SHALL ALTER WORK PRACTICES TO AVOID OR MINIMISE DUST GENERATION. THIS CAN INCLUDE BUT IS NOT LIMITED TO:

- SCHEDULING DUST-GENERATING ACTIVITIES FOR TIMES AND WEATHER CONDITIONS THAT WILL AVOID IMPACTS ON SENSITIVE USES.
- SPRAYING WATER ON UNPAVED ROADS, ACCESS TRACKS AND STOCKPILES AT A SUFFICIENT LEVEL TO SUPPRESS DUST GENERATION.
- REMOVING MATERIALS SPILLED OR TRACKED ONTO PAVED ROADS THAT MAY CREATE DUST.
- RESTRICTING VEHICLE MOVEMENTS AND/ OR VEHICLE SPEEDS ON UNPAVED ROADS.
- COVERING LOADS ON HAULAGE VEHICLES.
- WASHING TYRES OF VEHICLES LEAVING SITE.
- COVERING OR ENCLOSING STOCKPILES.
- USING DUST COLLECTION DEVICES ON RELEVANT EQUIPMENT.
- MINIMISING THE AREA DISTURBED, AND REVEGETATING EXPOSED AREAS AS SOON AS PRACTICAL.
- USING WINDBREAKS AND SCREENS TO RESTRICT DUST MOVEMENT.
- STREET CLEANING

LEGEND

- EXISTING CONTOURS
- BULK EARTHWORKS CONTOURS
- BULK EARTHWORKS LEVEL
- AREA CUT
- AREA FILL
- RETAINING WALL, D&C BY OTHERS

PRELIMINARY BULK EARTHWORK QUANTITIES

	VOLUME (m3)
CUT	-54776
FILL	23841
BALANCE	-30935

EARTHWORKS QUANTITIES BASED ON:

- 100mm STRIP FROM THE EXISTING
- PRELIMINARY PAVEMENT DESIGN

NO BULKING FACTORS HAVE BEEN APPLIED.

WARNING

NO GUARANTEE IS GIVEN THAT SERVICES SHOWN ARE COMPLETE AND CORRECT. CONTRACTOR SHALL VERIFY EXACT POSITION OF SERVICES ON SITE BY HAND DIGGING OR OTHER NON DESTRUCTIVE MEANS PRIOR TO CONSTRUCTION AND SHALL MAINTAIN AND PROTECT THE SAME FOR THE DURATION OF THE CONTRACT.

GCCC REF: xxxx



FOR COUNCIL APPROVAL

Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			
Project No.	Dwg. No.	Rev.	
17-209	C102-01	C	

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Engineers Certification:

Travis Smith MIE Aust. CPEng.
RPEQ 16400

Signature: *T.S.*

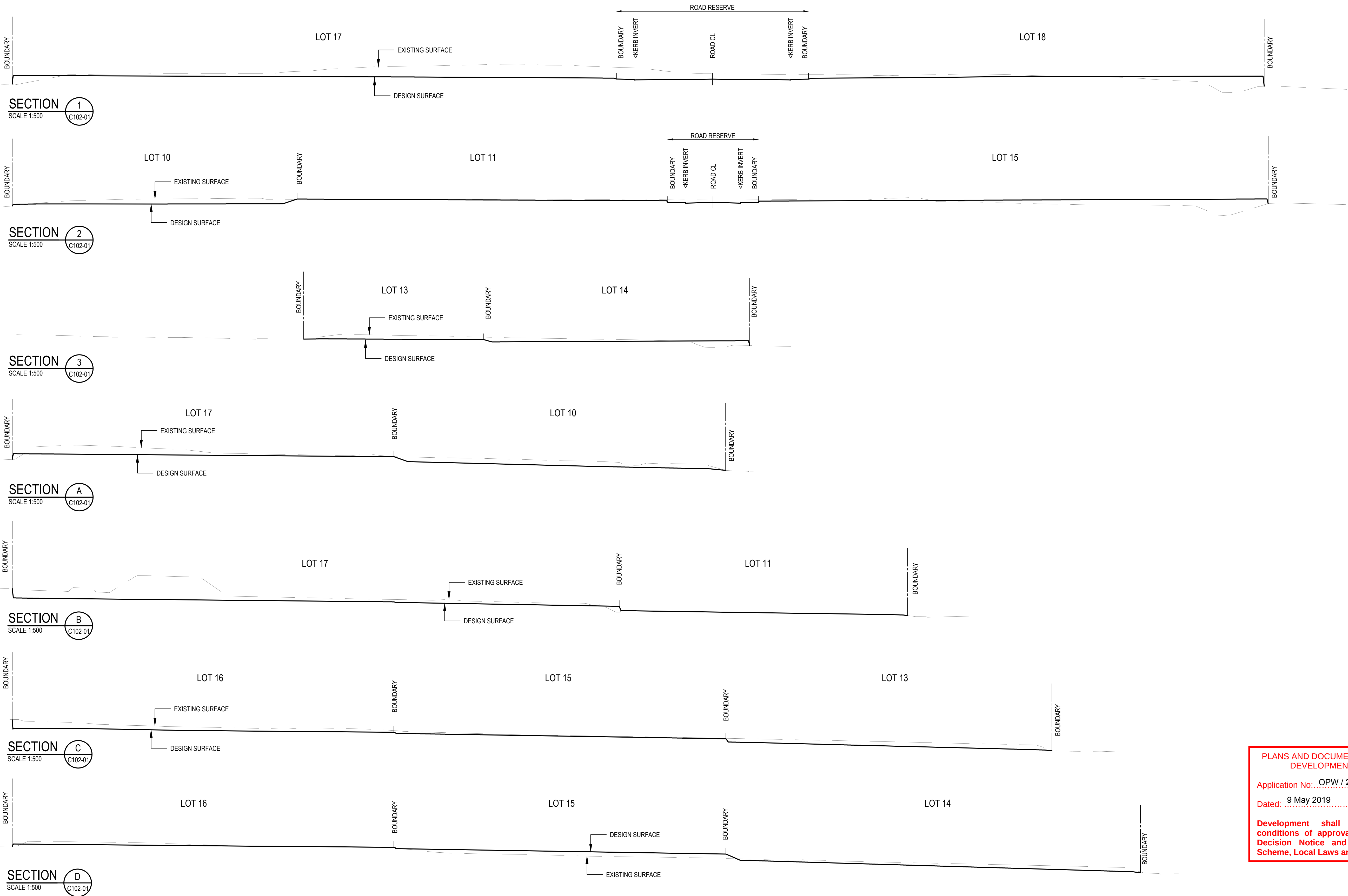
Date: 26 / 03 / 2019

Project
**PROPOSED SUBDIVISION AT
86-160 CHRISTENSEN ROAD
SOUTH, STAPYLTON**

for
**BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L**

Title
BULK EARTHWORKS PLAN

C	COUNCIL RFI RESPONSE	26.03.2019	K.J.L.
B	FOR COUNCIL APPROVAL	30.01.2019	K.J.L.
A	PRELIMINARY	07.12.2018	K.J.L.
REV	DESCRIPTION	DATE	BY



PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW / 2019 / 160

Dated: 9 May 2019

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

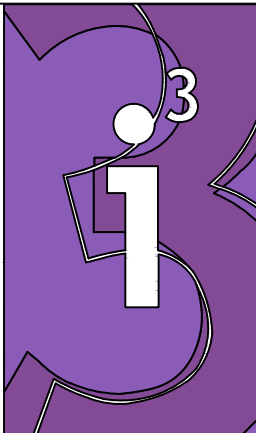
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REV	DESCRIPTION	DATE	BY
C	COUNCIL RFI RESPONSE	26.03.2019	K.J.L.
B	FOR COUNCIL APPROVAL	30.01.2019	K.J.L.
A	PRELIMINARY	07.12.2018	K.J.L.

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RPEQ 16400

Signature: 

Date: 26 / 03 / 2019

Project
PROPOSED SUBDIVISION AT
86-160 CHRISTENSEN ROAD
SOUTH, STAPYLTON
for
BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L

Title
BULK EARTHWORKS SECTIONS

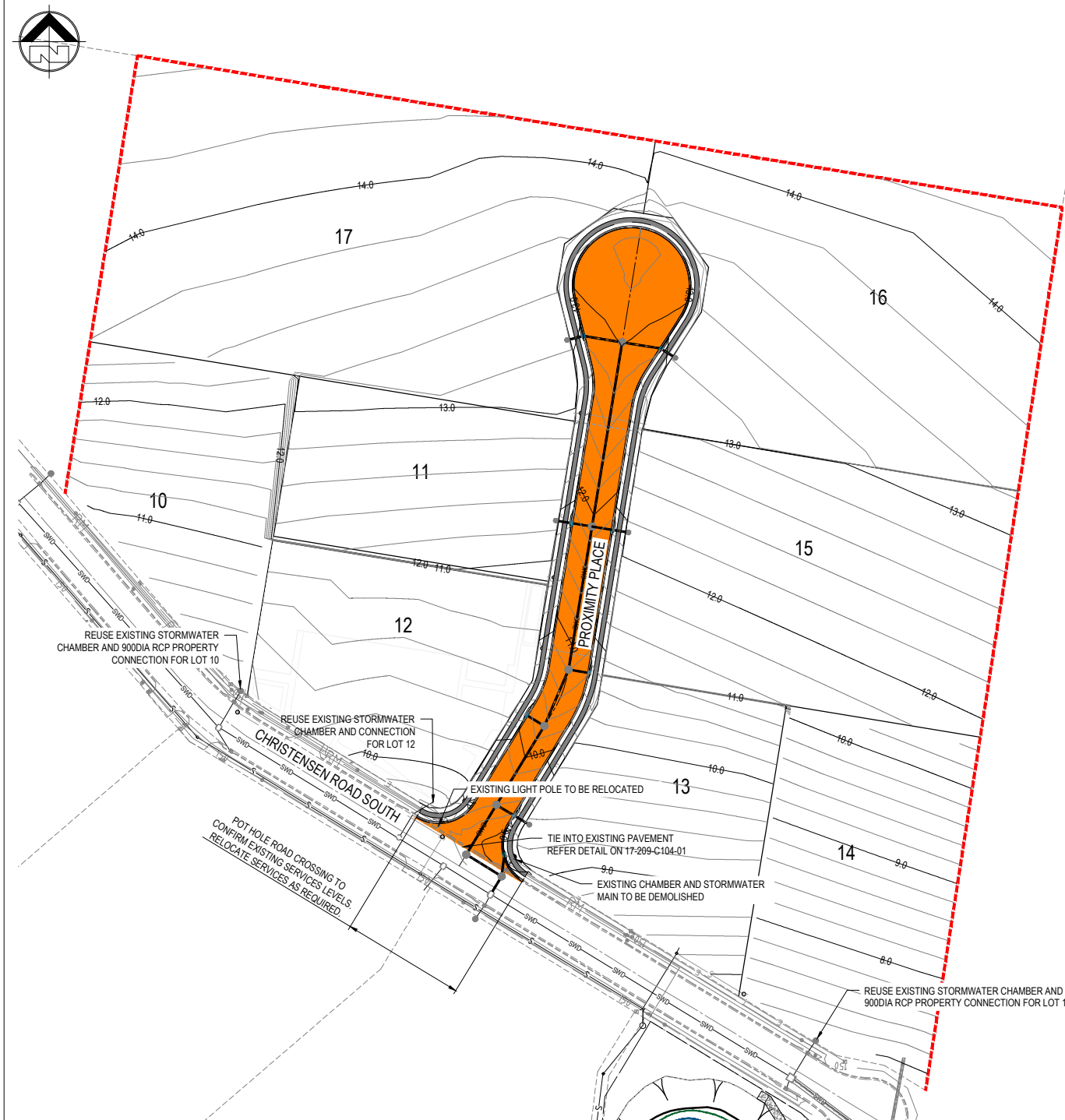
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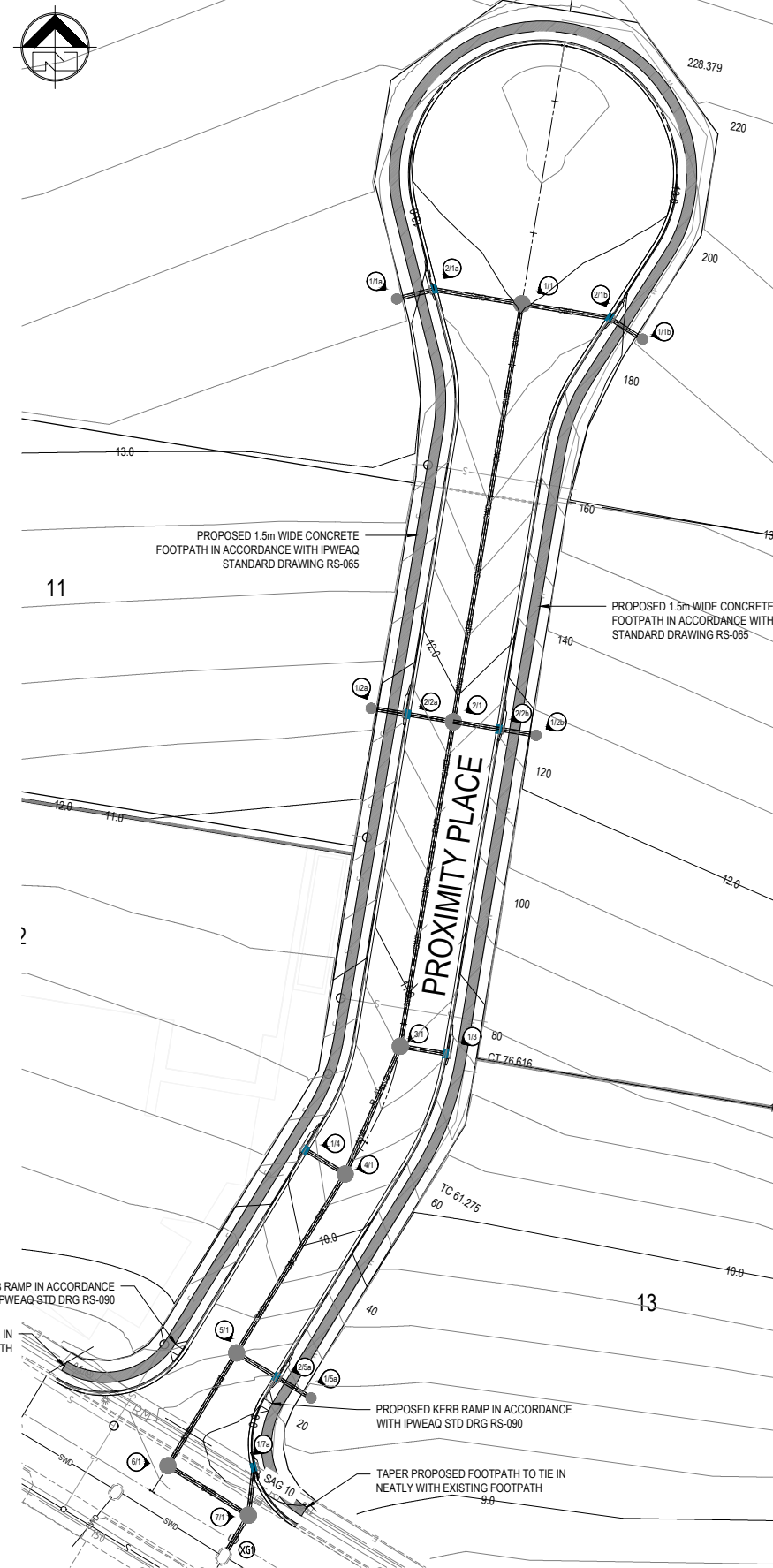
Status
FOR COUNCIL APPROVAL

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Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			
Project No.	Dwg. No.	Rev.	
17-209	C102-02	C	

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OVERALL ROADWORKS AND DRAINAGE PLAN
SCALE 1:1000 (A1)



DETAILED ROADWORKS AND DRAINAGE PLAN
SCALE 1:500 (A1)

LEGEND

- EXISTING**
- EXISTING PROPERTY BOUNDARY
 - SWD --- EXISTING STORMWATER MAIN
 - W --- EXISTING WATER MAIN
 - S --- EXISTING SEWER MAIN
 - E --- EXISTING ELECTRICAL
- PROPOSED**
- PROPOSED LOT BOUNDARY
 - FINISHED SURFACE CONTOURS
 - PROPOSED RETAINING WALL
 - PROPOSED STORMWATER MAIN
 - PROPOSED LIP IN LINE GULLY PIT
 - PROPOSED STORMWATER MANHOLE
 - STORMWATER STRUCTURE LABEL
 - EXISTING STORMWATER STRUCTURE LABEL
 - PROPOSED WATER MAIN
 - PROPOSED WATER SERVICE CONDUIT 150DIA uPVC PN12 SERIES 1 CONDUIT
 - PROPOSED SEWER MAIN
 - PROPOSED CONCRETE FOOTPATH
 - PROPOSED ASPHALT PAVEMENT AREA

JOB NOTES:

1. ALL CONCRETE KERB AND CHANNEL SHALL BE TYPE B1 IN ACCORDANCE WITH IPWEAQ STANDARD DRAWING RS-080, WITH 450 WIDE CHANNEL INVERT WIDTH
2. REFER ELECTRICAL DESIGN DRAWINGS FOR DETAILS OF ROAD CROSSINGS
3. REFER TO IPWEAQ STANDARD DRAWINGS RS-092 AND RS-093 FOR TGS'S ON KERB RAMP CROSSINGS

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW / 2019 / 160

Dated: 9 May 2019

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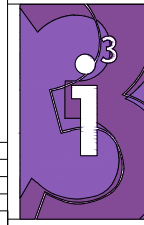
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GCCC REF: OPW/2019/160



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RPEQ 16400

Signature: *T.S.*

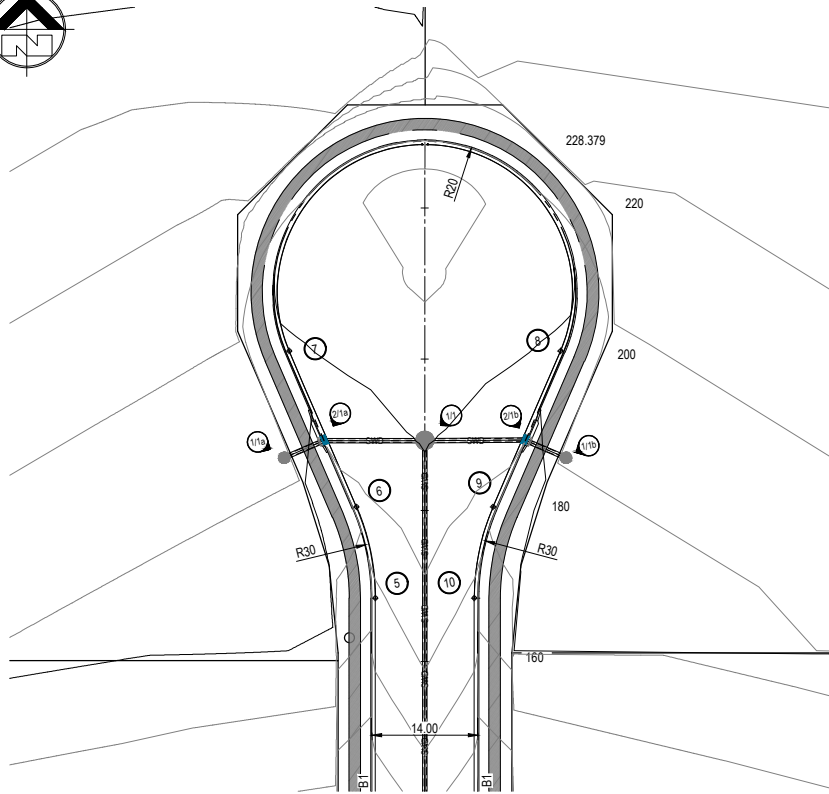
Date: 26 / 03 / 2019

Project: PROPOSED SUBDIVISION AT 86-160 CHRISTENSEN ROAD SOUTH, STAPYLTON
for BURNSIDE DEVELOPMENTS P/L & YELLOWSTONE INVESTMENTS P/L

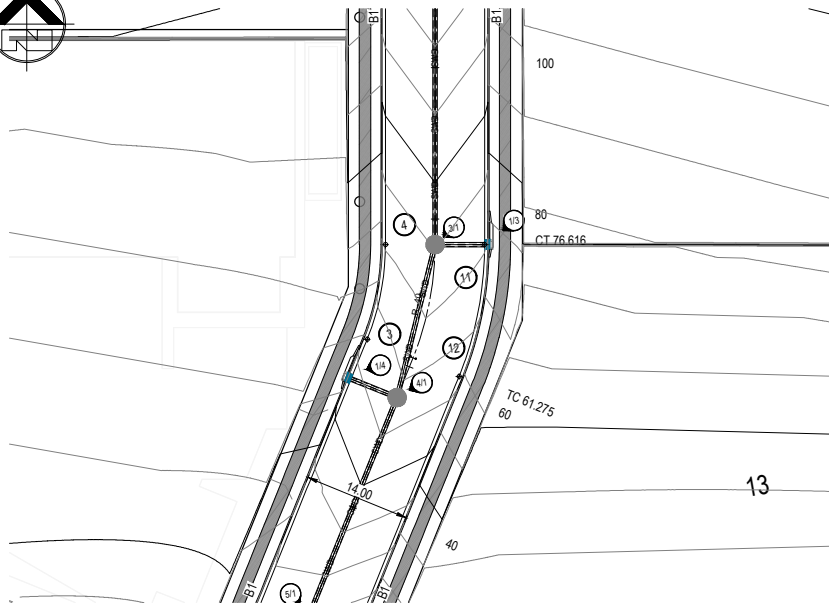
Title: ROADWORKS AND DRAINAGE PLAN - SHEET 1

FOR COUNCIL APPROVAL			
Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			
Project No.	Dwg. No.	Rev.	
17-209	C103-01	D	

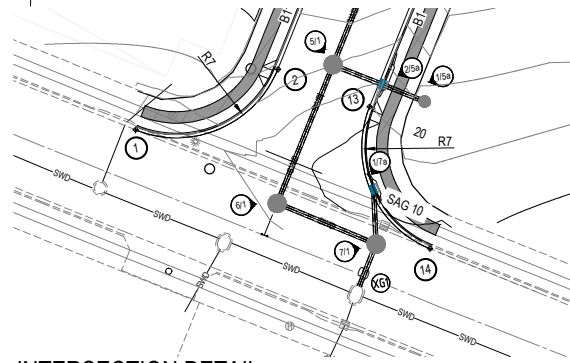
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CUL-DE-SAC DETAIL
SCALE 1:500 (A1)



BEND DETAIL
SCALE 1:500 (A1)



INTERSECTION DETAIL
SCALE 1:500 (A1)

KERB LIP SETOUT DATA

POINT	EASTING	NORTHING
1	524221.1073	6930997.8104
2	524240.9531	6931002.6584
3	524261.8884	6931037.1117
4	524266.3040	6931049.0574
5	524281.1508	6931139.6119
6	521280.6470	6931151.9074
7	524275.1965	6931173.7123
8	524310.6268	6931167.9323
9	524298.4990	6931149.0100
10	524294.0783	6931137.4927
11	524279.6792	6931046.8650
12	524273.0836	6931030.3090
13	524252.1519	6930995.8615
14	524256.9877	6930976.0149

LEGEND

EXISTING	EXISTING PROPERTY BOUNDARY
SWD	EXISTING STORMWATER MAIN
PROPOSED	PROPOSED LOT BOUNDARY
27.0	FINISHED SURFACE CONTOURS
	PROPOSED STORMWATER MAIN
	PROPOSED LIP IN LINE GULLY PIT
	PROPOSED STORMWATER MANHOLE
	KERB SETOUT POINT

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No.: OPW / 2019 / 160

Dated: 9 May 2019

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

GCCC REF: OPW/2019/160



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RPEQ 16400

Signature: *TJA*

Date: 26 / 03 / 2019

Project
PROPOSED SUBDIVISION AT
86-160 CHRISTENSEN ROAD
SOUTH, STAPYLTON
for
BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L

Title
ROADWORKS AND DRAINAGE
PLAN - SHEET 2

Status
FOR COUNCIL APPROVAL

Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			
Project No.	17-209	Dwg. No.	C103-02
		Rev.	D

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ROAD WORKS NOTES

- ALL DIMENSIONS IN DECIMALS IN METERS, THOSE WITHOUT ARE IN MILLIMETERS.
- ALL KERBS TO BE BARRIER KERB AND CHANNEL TYPE B1, IN ACCORDANCE WITH IPWEAQ STANDARD DRAWING RS-080.
- ALL FOOTPATHS TO BE IN ACCORDANCE WITH IPWEAQ STANDARD DRAWING RS-065.
- KERB RAMPS TO BE IN ACCORDANCE WITH IPWEAQ STANDARD DRAWING RS-090.
- GENERAL:
 - CBR TESTING SHALL BE CARRIED OUT ON THE SUBGRADE TO CONFIRM PAVEMENT DESIGN. THE NUMBER OF TESTS CARRIED OUT SHALL BE THE GREATER NUMBER OF THE FOLLOWING:
 - ROAD LENGTH $\leq 120m$ - NOT LESS THAN 2 TESTS FOR EACH SUBGRADE TYPE
 - ROAD LENGTH $\geq 120m$ - ONE TEST PER 60m OF ROAD OR PART THEREOF, BUT NOT LESS THAN 3 TESTS FOR EACH SUBGRADE TYPE
 - EACH PAVEMENT COURSE IS NOT TO BE COMMENCED UNTIL THE PREVIOUS COURSE (I.E. SUBGRADE, SUB-BASE, BASE OR EXISTING PAVEMENT) HAS BEEN INSPECTED, APPROVED AND CERTIFIED BY THE RPEQ WITH RESPECT TO COMPACTION, FINISHED LEVELS AND TEXTURE OF FINISH.
 - COMPACTION TESTS OF EACH LAYER ARE REQUIRED, AND THE RPEQ IS TO ENSURE THAT ALL TESTS MEET SPECIFICATION BEFORE PROCEEDING TO THE NEXT LAYER.
 - SUBGRADE AFFECTED BY RAINFALL AFTER FINAL TRIMMING IS NOT TO BE ACCEPTED UNTIL APPROPRIATE DRYING OUT, TESTING AND PROOF-ROLLING TREATMENT HAS BEEN EFFECTED.
 - UNBOUND PAVEMENT COURSE MATERIAL IS TO BE KEPT AT OPTIMUM MOISTURE CONTENT AT ALL TIMES.
 - MINIMUM COMPACTED LAYER THICKNESS IS TO BE 75 mm, WITH THE MAXIMUM COMPACTED THICKNESS NOT EXCEEDING 150 mm.
- COMPACTION TESTING:
 - DETERMINATION OF THE COMPACTION PERFORMANCE OF THE EARTHWORKS, SUBGRADE AND PAVEMENT GRAVEL MATERIALS (I.E. LABORATORY REFERENCE DENSITY, FIELD DENSITY, OPTIMUM MOISTURE CONTENT, FIELD MOISTURE CONTENT) IS TO BE CARRIED OUT IN ACCORDANCE WITH AS 1289 METHODS OF TESTING SOILS FOR ENGINEERING PURPOSES, IN PARTICULAR THE E SERIES TESTS.
 - THE MINIMUM FREQUENCY OF TESTING FOR ROADS IS TO BE AS FOLLOWS - 1 TEST PER LAYER PER 2 LANES OR 3 TESTS PER VISIT, WHICH EVER IS GREATER.
 - A LOT LAYOUT PLAN SHOWING THE LOCATION OF THE TESTS IS TO BE SUBMITTED TO THE COUNCIL WITH THE TEST RESULTS.
 - ALL TESTS ARE TO BE DISTRIBUTED REASONABLY EVENLY THROUGH THE FULL DEPTH AND AREA OF PAVEMENT.
 - THE TESTING FREQUENCIES ARE TO BE BASED ON A 'NOT ONE TO FAIL' BASIS.
 - FAILURE OF MATERIAL QUALITY TESTS WILL REQUIRE REMOVAL OF THE MATERIAL OR FURTHER IN SITU TESTING
 - FAILURE OF COMPACTION TESTS WILL REQUIRE:
 - RETESTING AT THE SAME DEPTH AND LOCATION IF THE FAILURE IS MINOR (E.G. LOCALISED SINGLE FAILURE BY 1% -3%)
 - REMOVAL OR REWORKING OF MATERIAL IF THE FAILURE IS SIGNIFICANT OR WIDESPREAD.
 - SUBGRADE AND BASE COURSES ARE TO BE COMPACTED TO THE FOLLOWING DENSITIES:
 - EARTHWORKS UP TO 300 mm BELOW SUBGRADE — 95% STD, THEN 100% STD
 - SUBGRADE — 100% STD
 - PAVEMENT COURSES
 - SUBBASE — 95% MODIFIED COMPACTION.
 - BASE — 98% MODIFIED COMPACTION.

SUB-SURFACE DRAINAGE NOTES

1. ALL SUB-SURFACE DRAINS SHALL BE IN ACCORDANCE WITH IPWEAQ STANDARD DRAWINGS RS-140 AND RS-142

STORMWATER DRAINAGE NOTES

1. GULLY PITS SHALL BE LIP IN-LINE , REFER GCCC STD DRG 03-001 (SECTION 10 OF LDG)
2. EXCAVATION, BEDDING AND BACKFILLING SHALL BE IN ACCORDANCE WITH GCCC STD DRG 03-201 (SECTION 10 OF LDG)

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

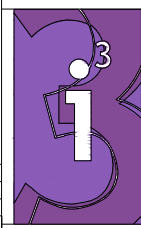
Application No: OPW / 2019 / 160

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RPEQ 16400

Signature: TJA

Date: 26 / 03 / 2019

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SOUTH, STAPYLTON
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BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L

Title	ROADWORKS AND DRAINAGE NOTES AND DETAILS
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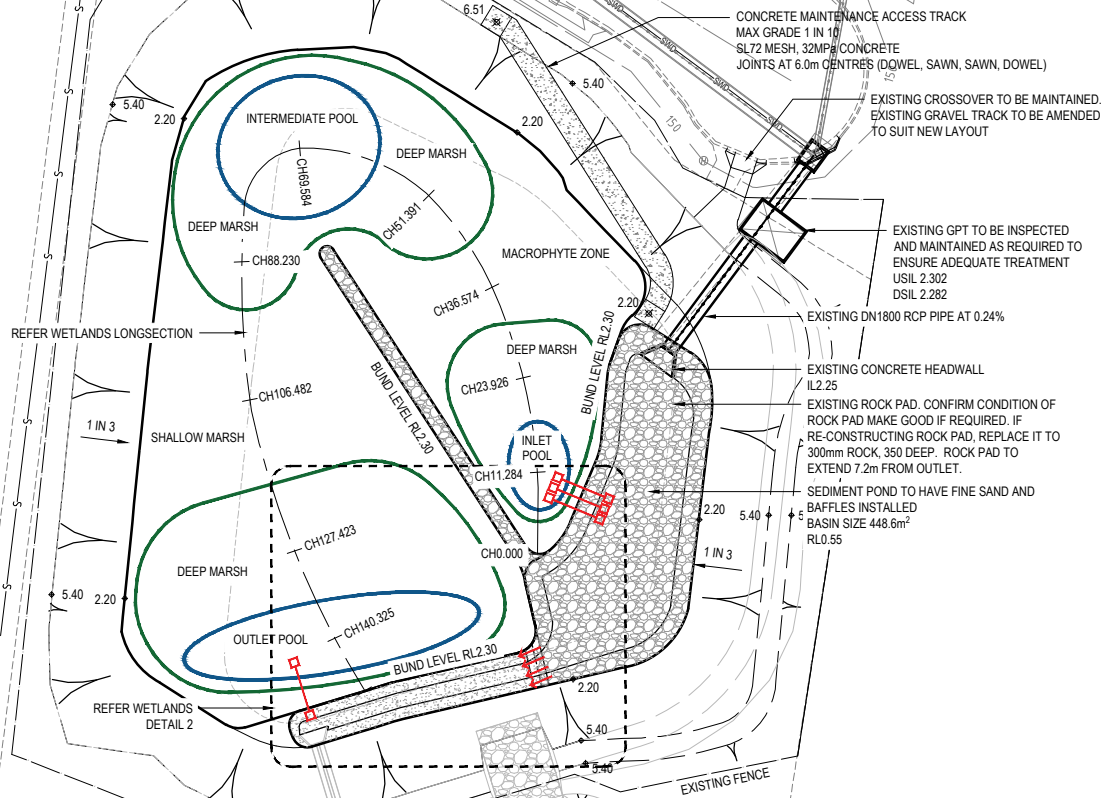
Status **FOR COUNCIL APPROVAL**

Drawn K.J.L.	Date 07.12.18	Chkd T.J.S.	Date 07.12.18
Design T.J.S.	Date 07.12.18	Apprd	Date
Scale AS SHOWN	A1	Certif	Date
Project No. 17-209	Dwg. No. C103-03	Rev. C	

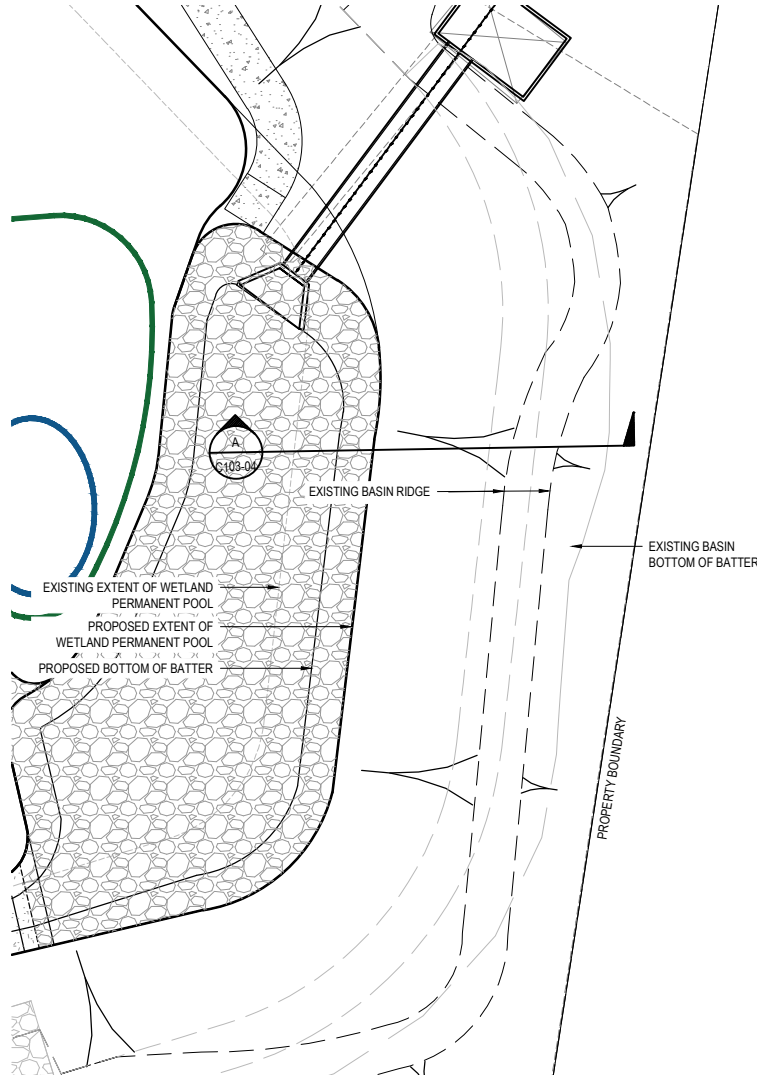
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DESIGNATED DE-WATERING AREA
WATER TO BE RELEASED OFF-SITE



OVERALL WETLANDS DETAIL
SCALE 1:500 (A1)



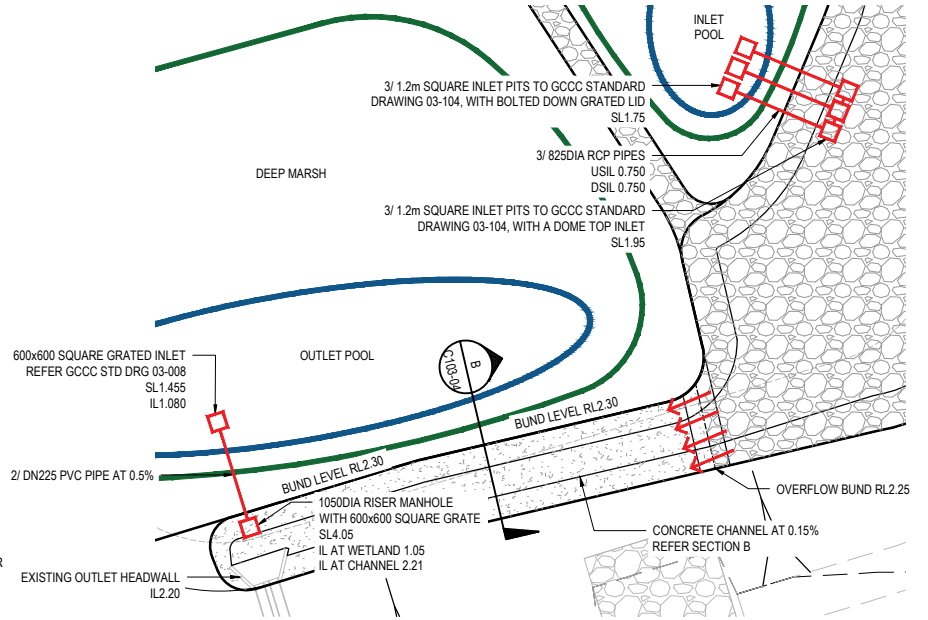
WETLANDS DETAIL 1
SCALE 1:250 (A1)

LONG SECTION NOTES:
1. REFER TO PLAN VIEW FOR HYDRAULIC CONNECTIONS
2. CREATE NATURAL PONDS AROUND RLS PROVIDED IN LONG SECTION
3. BATTERS BETWEEN MARSH, POOL AND MACROPHYTE ZONES TO BE MINIMUM 1:150, AND MAXIMUM 1:3

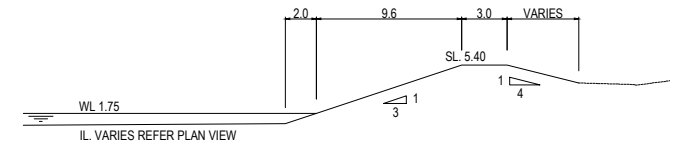
DEPTH TO BASE RL
BASE RL
NORMAL WATER LEVEL (NWL)
CHAINAGE

WETLANDS LONGSECTION
SCALE: HORIZONTAL 1:2000 (A3)
VERTICAL 1:200 (A3)

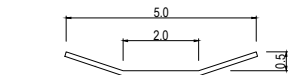
	INLET POOL	MACROPHYTE ZONE	INTERMEDIATE POOL	MACROPHYTE ZONE	OUTLET POOL
DATUM RL -2.0	1.200	0.400	0.100	0.400	1.200
0.550	1.350	1.650	1.350	1.650	1.350
1.750	1.750	1.750	1.750	1.750	1.750
11.284	23.926	36.574	51.391	69.584	88.230
12.642	12.648	14.817	18.193	18.646	18.252
20.941	12.902	18.022			



WETLANDS DETAIL 2
SCALE 1:250 (A1)



SECTION A
SCALE (A1): 1:250
SCALE (A3): 1:500



SECTION B
SCALE (A1): 1:100
SCALE (A3): 1:200

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW / 2019 / 160

Dated: 9 May 2019

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PLANTING SCHEDULE

LOCATION	SCIENTIFIC NAME	PLANTING DENSITY (QTY/m ²)
POOL	MYRIOPHYLLUM PAPILLOSUM	1.00
POOL	POTAMOGETON CRISPUS	1.00
POOL	RIBBONWEED	1.00
BATTER	CYPHERUS POLYSTACHYOS	6-8
BATTER	LOMANDRA LONGIFOLIA VAR. LONGIFOLIA	4-6
BATTER	VIOLA HEDERACEA	2-4

GCCC REF: OPW/2019/160



FOR COUNCIL APPROVAL

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17-209	C103-04	C	

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WETLAND NOTES

- WETLAND TO BE CONSTRUCTED AS PER WATER BY DESIGN WETLAND TECHNICAL DESIGN GUIDELINES 2017 AND IN ACCORDANCE WITH GOLD COAST CITY COUNCIL REQUIREMENTS
- BUNDS SEPARATING THE SEDIMENT POND, WETLAND AREA AND OVERFLOW CHANNEL ARE TO HAVE MAXIMUM 1:3 BATTERS. HIGH POINT OF BUNDING NOTED ON PLAN VIEW.

Engineers Certification:

Travis Smith MIE Aust. CPEng.
RPEQ 16400

Signature: *TJS*

Date: 26 / 03 / 2019

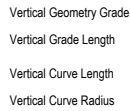
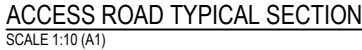
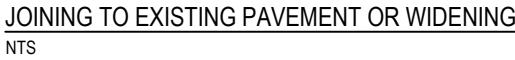
Project:
PROPOSED SUBDIVISION AT
86-160 CHRISTENSEN ROAD
SOUTH, STAPYLTON
for
BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L

Title
WETLANDS LAYOUT PLAN

C	COUNCIL RFI RESPONSE	26.03.2019	K.J.L.
B	FOR COUNCIL APPROVAL	05.02.2019	K.J.L.
A	PRELIMINARY	07.12.2018	K.J.L.
REV	DESCRIPTION	DATE	BY

PAVEMENT TYPE	LOCATION	SUBGRADE CBR	TRAFFIC ESA'S	ROAD CLASS	AC SURFACING 10mm MIX (mm)	PRIMER TYPE	BASE CLASS 1A CBR 80 (mm)	SUB-BASE CLASS 2 CBR 45 (mm)	LOWER SUB-BASE CLASS 3 CBR 15 (mm)	TOTAL BOX (mm)
A	PROXIMITY PLACE	5*	3.7 x 10 ⁶	INDUSTRIAL COLLECTOR STREET	40	PRIME	125	125	165	455

1. PAVEMENT THICKNESSES ABOVE REPRESENT MINIMUM DESIGN THICKNESS FOR EACH PAVEMENT SECTION. CONTRACTOR MAY INCREASE THICKNESS LAYERS OR REPLACE LOWER CLASS GRAVEL TYPE WITH HIGHER CLASS FOR EASE OF CONSTRUCTION IF REQUIRED AND AS INSTRUCTED BY THE SUPERINTENDENT. NOTE THAT THE MINIMUM AND MAXIMUM LAYER THICKNESSES FOR THE PLACEMENT OF EACH LAYER SHALL BE AS PER COUNCIL STANDARDS.
2. THE ACTUAL BOUNDARIES BETWEEN PAVEMENT SECTIONS OF VARYING DESIGN SUBGRADE CBRs ARE TO BE VERIFIED ON SITE BY THE SUPERVISING ENGINEER
3. ROAD CLASS AND EAS'S HAVE BEEN BASED ON CITY OF GOLD COAST DEVELOPMENT GUIDELINES
4. PAVEMENT DESIGN DEPTHS HAVE BEEN BASED ON CITY OF GOLD COAST DEVELOPMENT GUIDELINES
5. FULL DEPTH PAVEMENTS MUST BE UNDERLAIN BY A 100mm GRANULAR WORKING PLATFORM IN ACCORDANCE WITH CITY OF GOLD COAST DEVELOPMENT GUIDELINES



CHAINAGE	DESIGN C.L. SURFACE	DEPTH TO DESIGN	EXISTING SURFACE	LHS LIP OF KERB	RHS LIP OF KERB
0.000	9.261	-0.000	9.261		
6.227	9.083	0.000	9.083		
6.513	9.076	0.003	9.074		
10.433	9.033	-0.283	9.316		
11.513	9.036	-0.311	9.348		
16.513	9.137	-1.467	10.604		
20.000	9.256	-1.159	10.415		
28.034	9.530	-1.367	10.897		
40.000	9.914	-1.170	11.084		
45.534	10.075	-1.143	11.218		
60.000	10.447	-1.092	11.539		
61.275	10.477	-1.079	11.556		
63.034	10.516	-1.064	11.580		
76.616	10.818	-1.003	11.821		
80.000	10.893	-0.986	11.880		
100.000	11.338	-0.867	12.205		
120.000	11.783	-0.909	12.691		
138.314	12.212	-0.855	13.067		
140.000	12.227	-0.849	13.077		
160.000	12.620	-0.869	13.478		
164.314	12.692	-0.892	13.584		
180.000	12.914	-1.035	13.949		
189.314	13.018	-1.138	14.156		
200.000	13.125	-1.297	14.422		
220.000	13.325	-1.678	15.003		
228.379	13.409	-2.118	15.526		

SCALE HORIZ. 1:500
SCALE VERT. 1:100



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p 07 3870 8888

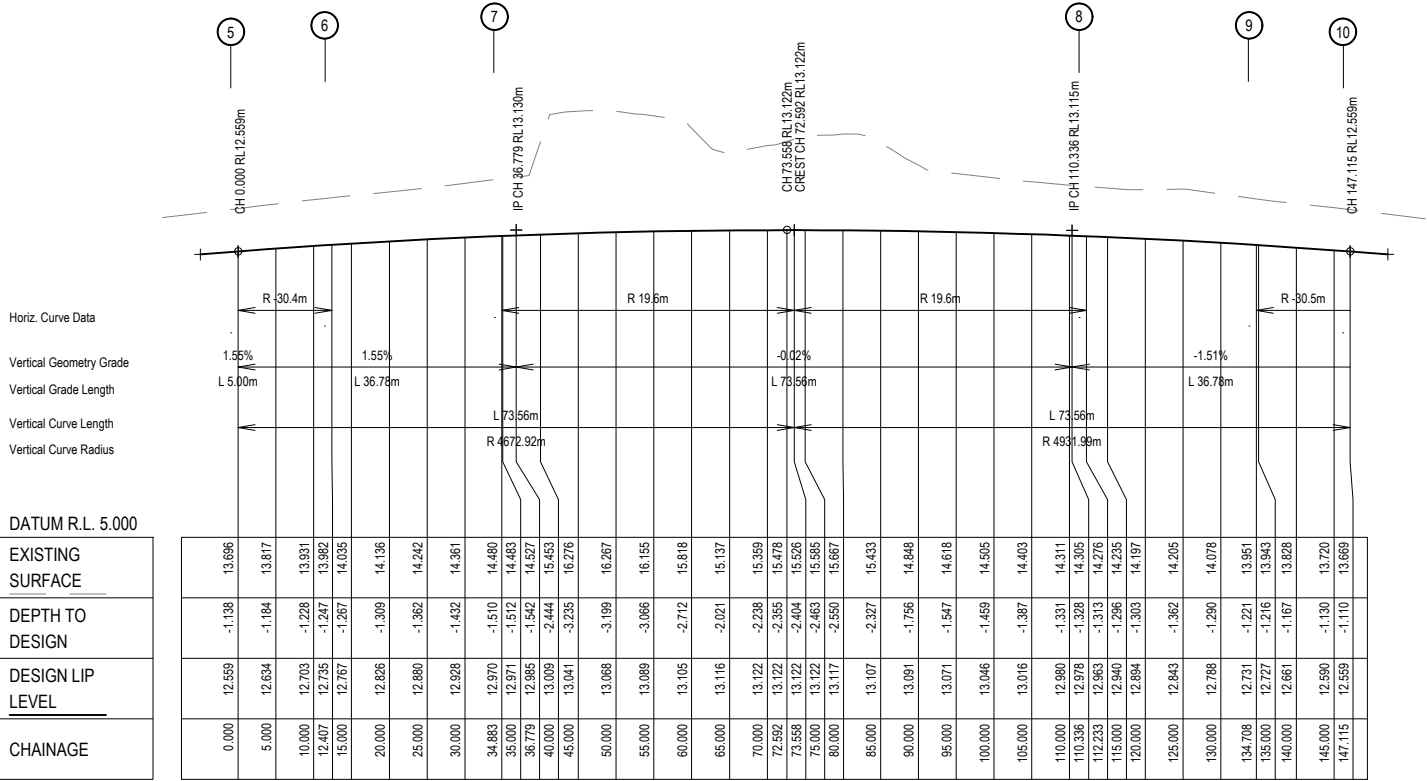
C	COUNCIL RFI RESPONSE	26.03.2019	K.J.L.
B	FOR COUNCIL APPROVAL	30.01.2019	K.J.L.
A	PRELIMINARY	07.12.2018	K.J.L.
REV	DESCRIPTION	DATE	BY

Date: 26 / 03 / 2019

Drawn K.J.L.	Date 07.12.18	Chkd T.J.S.	Date 07.12.18
Design T.J.S.	Date 07.12.18	Apprd	Date
Scale AS SHOWN	A1	Certf	Date
Project No. 17-209	Dwg. No. C104-01	Rev. C	

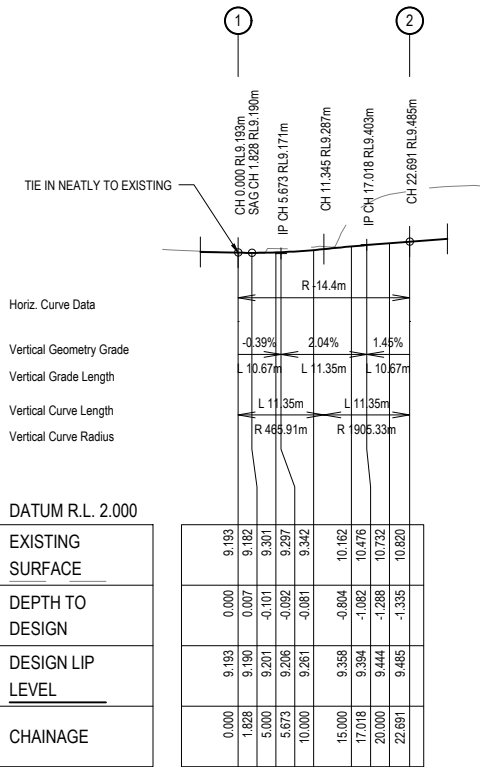
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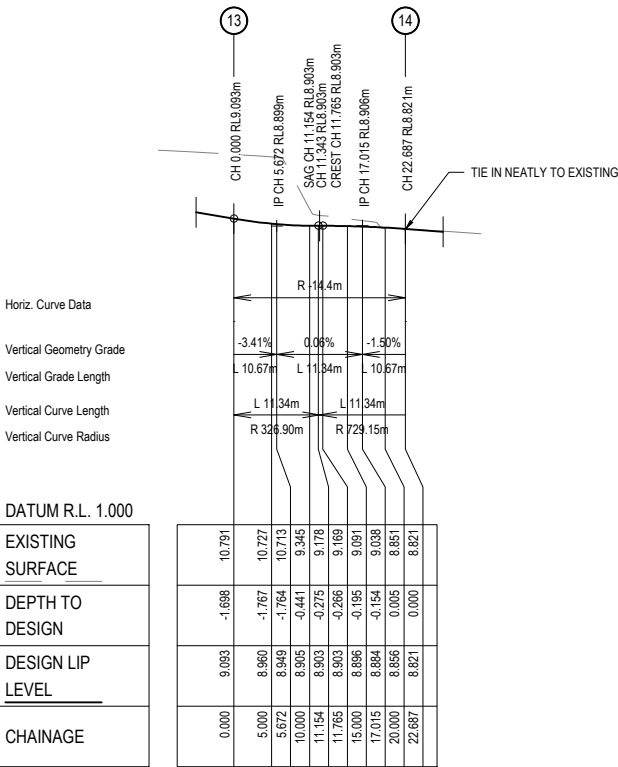
CUL-DE-SAC LONGITUDINAL SECTION

SCALE HORIZ. 1:500
SCALE VERT. 1:100



KERB RETURN - ENTRY - LEFT HAND SIDE

SCALE HORIZ. 1:500
SCALE VERT. 1:100



KERB RETURN - EXIT - RIGHT HAND SIDE

SCALE HORIZ. 1:500
SCALE VERT. 1:100

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No.: OPW / 2019 / 160

Dated: 9 May 2019

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

REV	DESCRIPTION	DATE	BY
C	COUNCIL RFI RESPONSE	26.03.2019	K.J.L.
B	FOR COUNCIL APPROVAL	30.01.2019	K.J.L.
A	PRELIMINARY	07.12.2018	K.J.L.

Consulting Engineer:

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mail@icubed.com.au
ACN 106 675 156

Engineers Certification:

Travis Smith MIE Aust. CPEng.
RPEQ 16400

Signature: *TJA*

Date: 26 / 03 / 2019

Project: PROPOSED SUBDIVISION AT 86-160 CHRISTENSEN ROAD SOUTH, STAPYLTON

for BURNSIDE DEVELOPMENTS P/L & YELLOWSTONE INVESTMENTS P/L

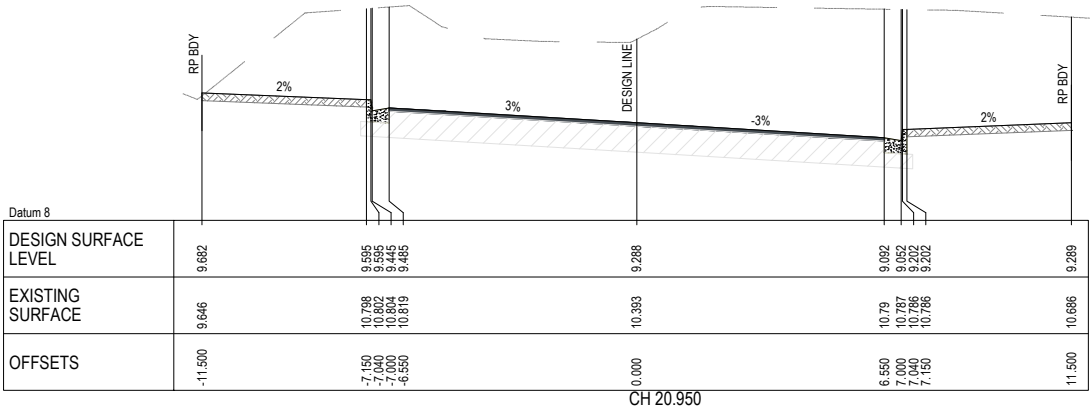
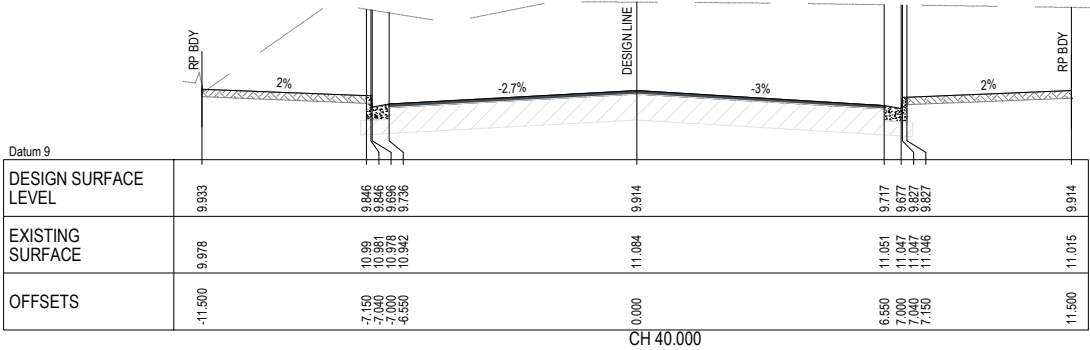
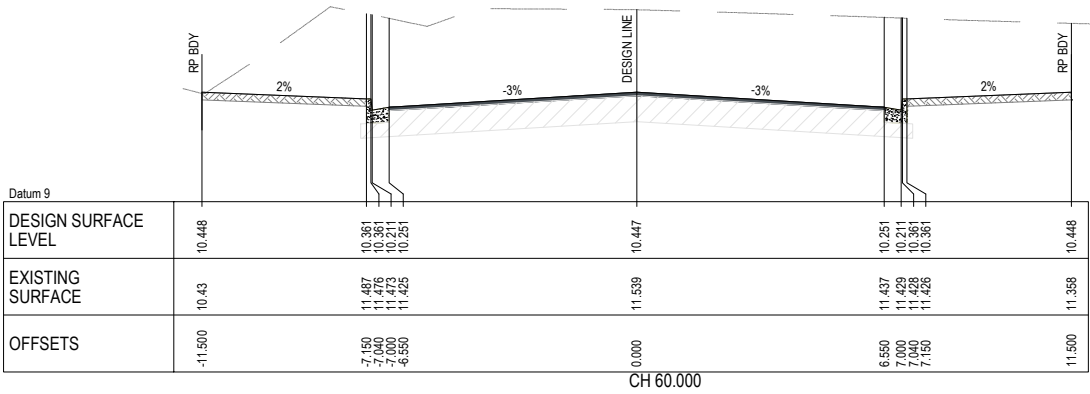
Title: PROXIMITY PLACE SECTIONS AND PAVEMENT DETAILS - SHEET 2

GCCC REF: OPW/2019/160

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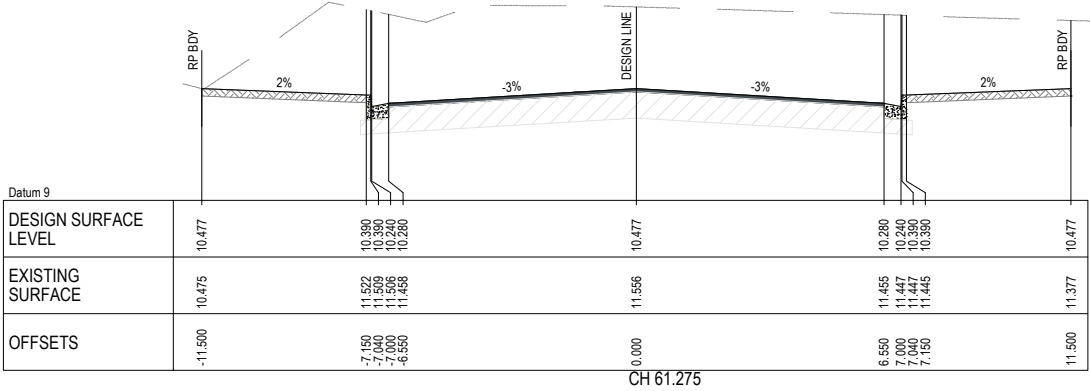
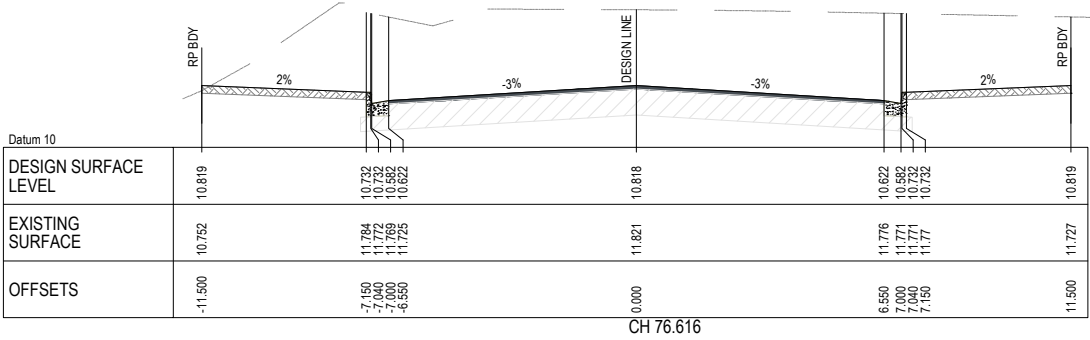
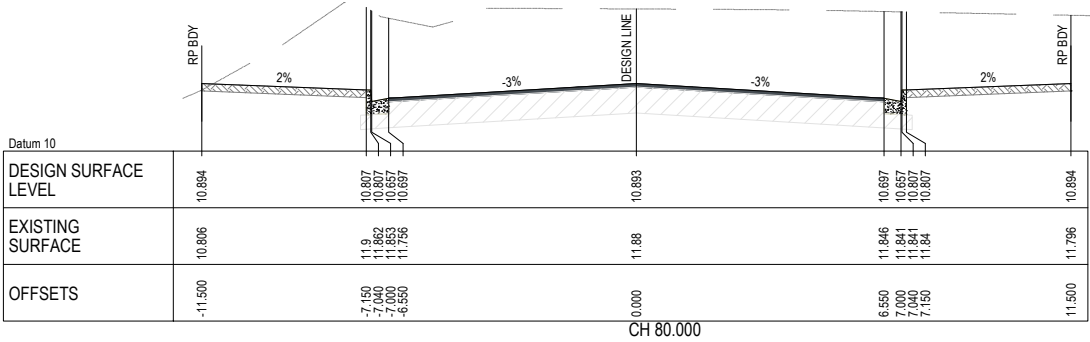
Status	PRELIMINARY		
Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			
Project No.	17-209	Dwg. No.	C104-02
		Rev.	C

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PROXIMITY PLACE CROSS SECTIONS

SCALE HORIZ. 1:100
SCALE VERT. 1:50



PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW / 2019 / 160

Dated: 9 May 2019

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GCCC REF: OPW/2019/160



Consulting Engineer:



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ABN 89 106 675 156 ACN 106 675 156
p 07 3870 8888

Engineers Certification:

Travis Smith MIE Aust. CP.Eng.
RPEQ 16400

Signature: *TJA*

Date: 26 / 03 / 2019

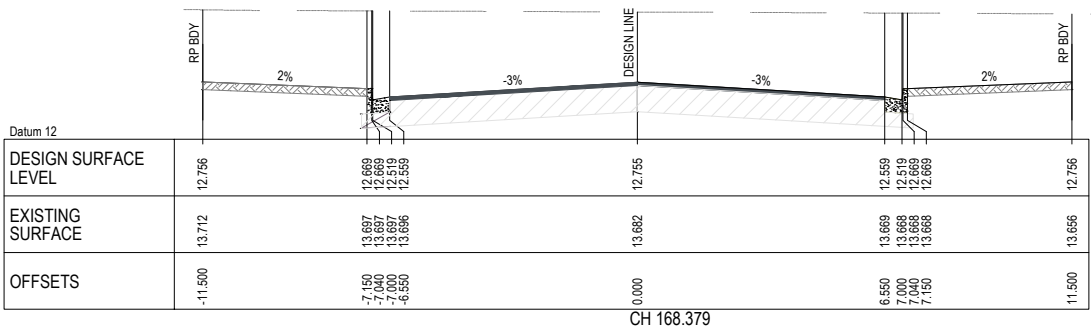
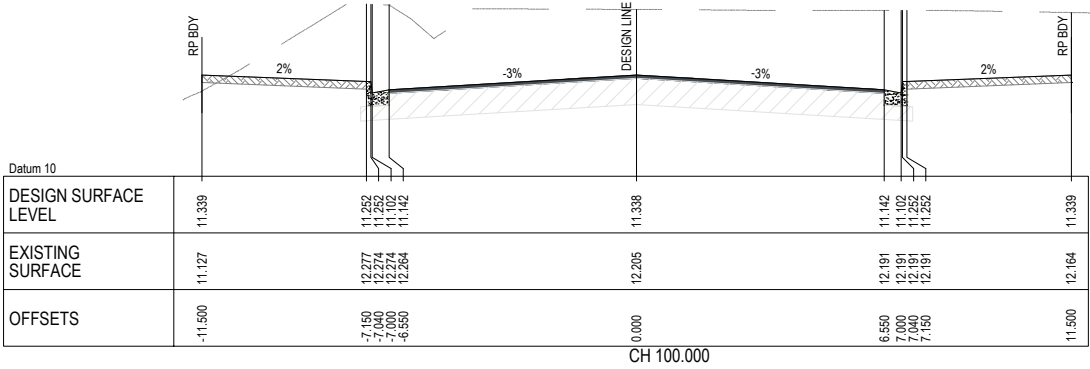
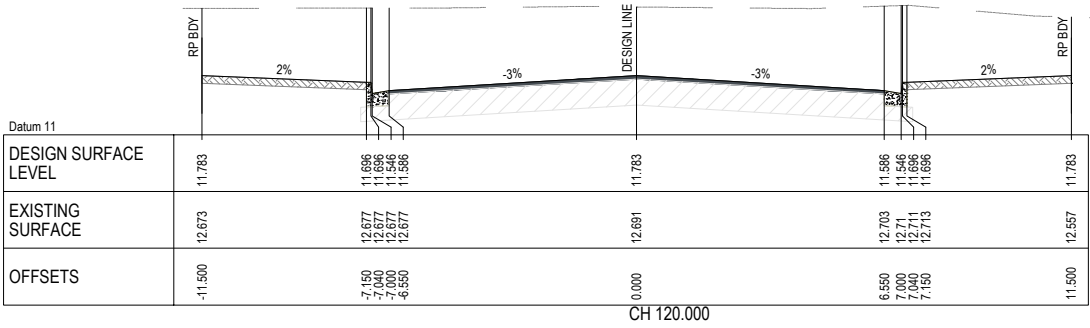
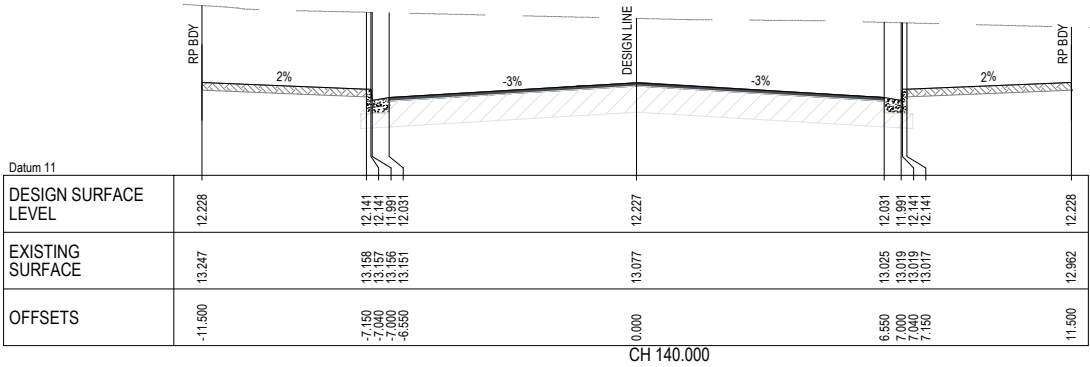
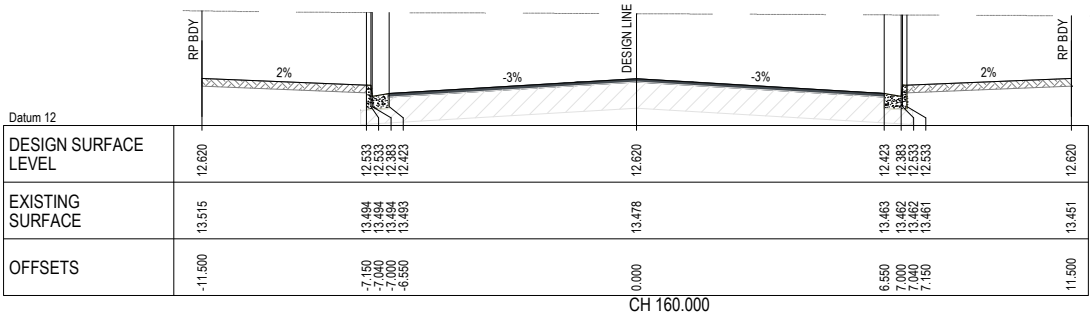
Project
PROPOSED SUBDIVISION AT
86-160 CHRISTENSEN ROAD
SOUTH, STAPYLTON
for
BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L

Title
PROXIMITY PLACE
CROSS SECTIONS - SHEET 1

Status
FOR COUNCIL APPROVAL

Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			
Project No.	Dwg. No.	Rev.	
17-209	C104-03	C	

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PROXIMITY PLACE CROSS SECTIONS

SCALE HORIZ 1:100
SCALE VERT. 1:50

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mail@icubed.com.au
ACN 106 675 156

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REV	DESCRIPTION	DATE	BY

Engineers Certification:

Travis Smith MIE Aust. CPEng.
RPEQ 16400

Signature: *T.S.*

Date: 26 / 03 / 2019

Project
PROPOSED SUBDIVISION AT
86-160 CHRISTENSEN ROAD
SOUTH, STAPYLTON
for
BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L

Title
PROXIMITY PLACE
CROSS SECTIONS - SHEET 2

GCCC REF: OPW/2019/160



PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW / 2019 / 160

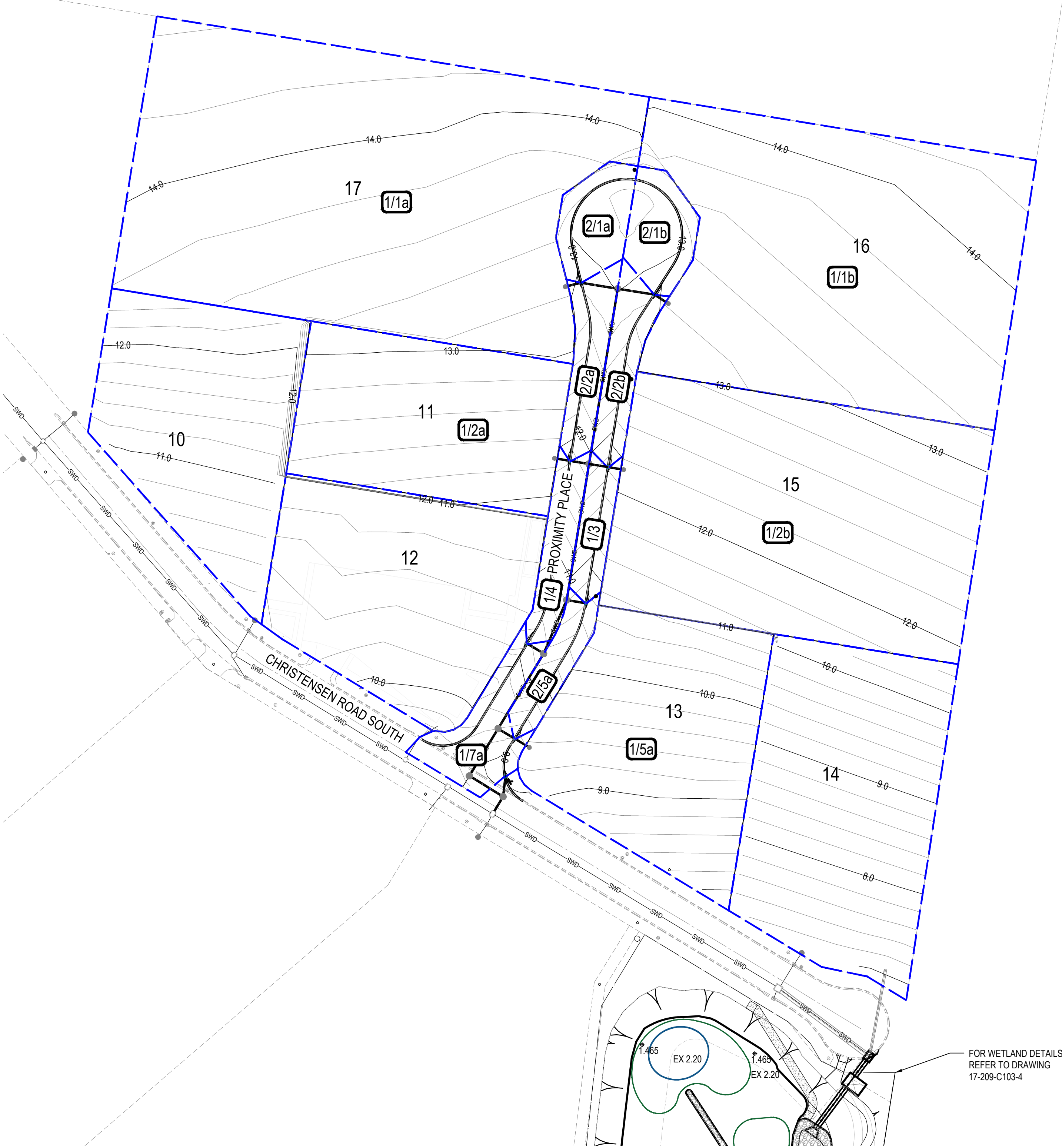
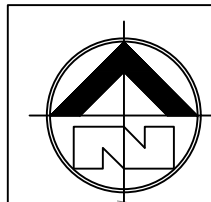
Dated: 9 May 2019

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

FOR COUNCIL APPROVAL

Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			
Project No.	Dwg. No.	Rev.	
17-209	C104-04	C	

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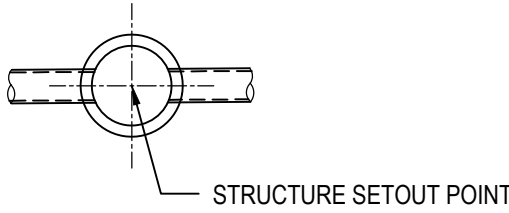
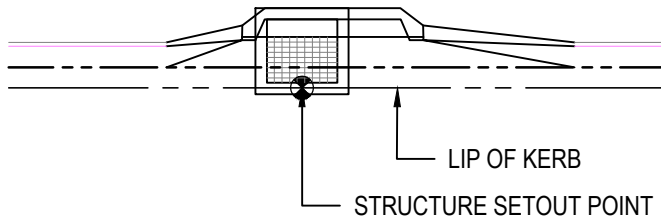


STORMWATER CATCHMENT PLAN
SCALE 1:1000 (A1)

CATCHMENT	AREA (ha)
1/1a	1.6040
2/1a	0.0871
1/1b	1.2350
2/1b	0.0868
1/2a	0.5431
2/2a	0.0846
1/2b	1.0970
2/2b	0.0848
1/3	0.0566
1/4	0.0775
1/5a	0.6230
2/5a	0.0622
1/7a	0.112

LEGEND

- EXISTING PROPERTY BOUNDARY
- PROPOSED LOT BOUNDARY
- FINISHED SURFACE CONTOURS
- PROPOSED STORMWATER MAIN
- EXISTING STORMWATER MAIN
- PROPOSED LIP IN LINE GULLY PIT
- PROPOSED STORMWATER MANHOLE
- STORMWATER CATCHMENT BOUNDARY
- STORMWATER CATCHMENT LABEL
- STORMWATER STRUCTURE LABEL
- EXISTING STORMWATER STRUCTURE LAI



STRUCTURE SETOUT POINT - DETAILS
NTS

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW / 2019 / 160

Dated: 9 May 2019

Development shall comply with the
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GCCC REF: OPW/2019/160



FOR COUNCIL APPROVAL

Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			
Project No.	Dwg. No.	Rev.	
17-209	C110-01	D	

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Engineers Certification:

Travis Smith MIE Aust. CPEng.
RPEQ 16400

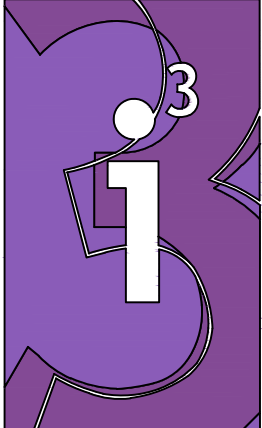
Signature: *T.S.*

Date: 26 / 03 / 2019

Project
PROPOSED SUBDIVISION AT
86-160 CHRISTENSEN ROAD
SOUTH, STAPYLTON
for
BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L

STORMWATER CATCHMENT PLAN
& DETAILS

Consulting Engineer:



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p 07 3870 8888
PO Box 878 Toowoong, Qld 4066
mail@icubed.com.au
ACN 106 675 156

D	COUNCIL RFI RESPONSE	26.03.2019	K.J.L.
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A	PRELIMINARY	07.12.2018	K.J.L.
REV	DESCRIPTION	DATE	BY

LINE

Application No: OPW / 2019 / 160
Dated: 9 May 2019



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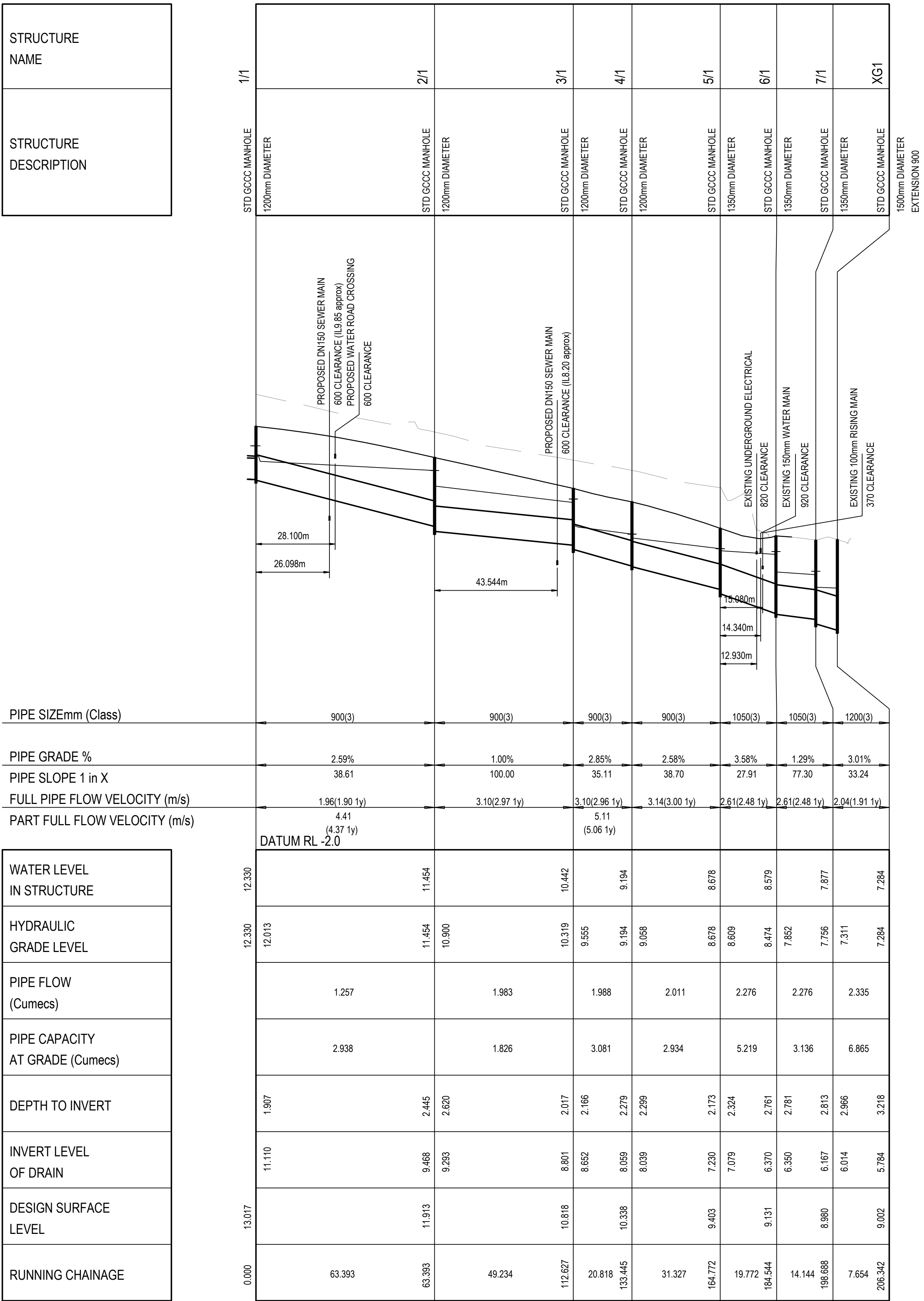
Date: 26 / 03 / 2019

STORMWATER LONGITUDINAL SECTIONS - SHEET 1

Status			
FOR COUNCIL APPROVAL			
Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			
Project No.	Dwg. No.	Rev.	
17-209	C110-02	D	

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STRUCTURE NAME
STRUCTURE DESCRIPTION



LINE

1

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

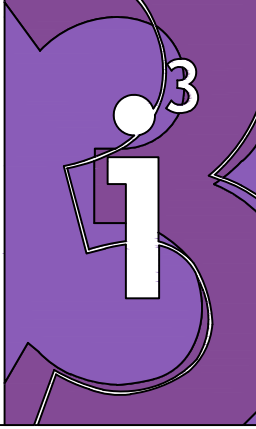
Application No.: OPW / 2019 / 160

Dated: 9 May 2019

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Consulting Engineer:				
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Engineers Certification:

Travis Smith MIE Aust. CPEng.
RPEQ 16400

Signature: 

Date: 26 / 03 / 2019

Project
PROPOSED SUBDIVISION AT
86-160 CHRISTENSEN ROAD
SOUTH, STAPYLTON
for
BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L

Title
STORMWATER LONGITUDINAL
SECTIONS - SHEET 2

Status
FOR COUNCIL APPROVAL

Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			
Project No.	Dwg. No.	Rev.	
17-209	C110-03	D	

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

Application No: **OPW / 2019 / 160**

Dated: **9 May 2019**

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Engineers Certification:

Date: 26 / 03 / 2019

STORMWATER CALCULATION
TABLES - SHEET 1

Status **FOR COUNCIL APPROVAL**

Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			
Project No.	Dwg. No.	Rev.	
17-209	C110-04	D	

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LEGEND

- PROPOSED LOT BOUNDARY
- EXISTING PROPERTY BOUNDARY
- EXISTING STORMWATER MAIN
- PROPOSED STORMWATER MAIN
- PROPOSED STORMWATER MANHOLE
- EXISTING ELECTRICAL
- PROPOSED LIP IN LINE GULLY PIT
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- PROPOSED WATER SERVICE AND METER
- PROPOSED WATER SERVICE CONDUIT 150DIA uPVC PN12 SERIES 1 CONDUIT
- EXISTING SEWER MAIN
- PROPOSED SEWER MAIN
- PROPOSED SEWER MAINTENANCE STRUCTURE
- PROPOSED SEWER HOUSE CONNECTION STUB
- SEWER CONNECTION FLOW ARROW
- PROPOSED SEWER STRUCTURE NUMBER
- EXISTING SEWER STRUCTURE NUMBER

NAME OF ESTATE	86-160 CHRISTENSEN ROAD SOUTH, STAPYLTON
APPLICATION NO.	
SP DELEGATE	
APPROVAL DATE	
DRAWING/PLAN NO.	
NO. OF ALLOTMENTS	8
AREA IN Ha.	7.6989 ha
LENGTH OF SEWERS	DN150 305.093 m

WARNING

NO GUARANTEE IS GIVEN THAT SERVICES SHOWN ARE COMPLETE AND CORRECT. CONTRACTOR SHALL VERIFY EXACT POSITION OF SERVICES ON SITE BY HAND DIGGING OR OTHER NON DESTRUCTIVE MEANS PRIOR TO CONSTRUCTION AND SHALL MAINTAIN AND PROTECT THE SAME FOR THE DURATION OF THE CONTRACT.

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

ALL CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE WORKPLACE HEALTH AND SAFETY LEGISLATION.

PROPERTY CONNECTIONS HAVE BEEN DESIGNED TO CONTROL THE REQUIRED SERVICE AREA OF EACH LOT AT A GRADE OF 1 IN 60 AND A MAXIMUM DEPTH OF PROPERTY CONNECTION OF 1.50m, UNLESS NOTED OTHERWISE.

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

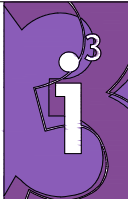
Application No.: OPW / 2019 / 160

Dated: 9 May 2019

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SEWERAGE RETICULATION LAYOUT
SCALE 1:500 (A1)

Consulting Engineer:



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Toowong, Qld 4066 Toowong, Qld 4066
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ABN 89 106 675 156 ACN 106 675 156
p 07 3870 8888

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Engineers Certification:

Travis Smith MIE Aust. CPEng.
RPEQ 16400

Signature: 

Date: 26 / 03 / 2019

Project
PROPOSED SUBDIVISION AT
86-160 CHRISTENSEN ROAD
SOUTH, STAPYLTON
for
BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L

Title
SEWER RETICULATION LAYOUT

GCCC REF: OPW/2019/160



FOR COUNCIL APPROVAL

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K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
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AS SHOWN			
Project No.	Dwg. No.	Rev.	
17-209	C120-01	D	

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GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH FOLLOWING CURRENT SPECIFICATIONS AND STANDARDS (IN ORDER OF PRIORITY):
- CITY OF GOLD COAST PLANNING SCHEME
 - SOUTH EAST QUEENSLAND SEWERAGE CODE (SEQ SEWER CODE)
 - SEWERAGE CODE OF AUSTRALIA WSA02-2002 V2.3.
2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
3. 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.
4. ALL WORK ASSOCIATED WITH LIVE SEWERS OR MAINTENANCE HOLES SHALL BE CARRIED OUT BY THE CONTRACTOR AT THE DEVELOPER'S COST, WITH A VALID NETWORK ACCESS PERMIT.
5. ALL PIPES AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE "ACCEPTED PRODUCTS AND MATERIALS" LIST.
6. PROPERTY CONNECTIONS SHALL BE LOCATED WITHIN THE PROPERTY AS SHOWN IN THE DRAWINGS.
7. PROPERTY CONNECTION BRANCHES SHALL EXTEND INTO THE PROPERTY A MINIMUM OF 300 mm AND A MAXIMUM OF 750 mm.
8. 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.
9. WHERE GRAVITY SEWERS HAVE A GRADE OF 1 IN 20 OR STEEPER,BULKHEADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SEQ SEWER CODE.
10. WHERE RISING SEWERS HAVE A GRADE BETWEEN 5-15% TRENCH STOPS SHALL BE INSTALLED AT A SPACING (S) OF S=100/GRADE% IN ACCORDANCE WITH THE SEQ WATER CODE.
11. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES BEFORE COMMENCING WORKS.
12. SEWERS SHALL BE DISUSED /ABANDONED IN ACCORDANCE WITH PROCEDURES SET OUT IN THE SEQ SEWER CODE.
13. BENCH MARK AND LEVELS TO AHD.
14. CONCRETE FOR MANHOLE CONSTRUCTION SHALL BE SPECIAL CLASS TO WSA PS-358 WITH THE REQUIREMENT FOR CALCAREOUS AGGREGATE.
15. DETECTABLE MARKER TAPE SHALL BE INSTALLED ON ALL SEWER MAINS.

SAFETY

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

REHABILITATION

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

CREEK CROSSINGS

1. SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
2. APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK.
3. NO SOIL SHALL BE STOCKPILED WITHIN 5 m OF THE CREEK.

SOIL

1. TOPSOIL AND SUBSOIL SHALL BE STOCKPILED SEPARATELY.
2. CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.
3. ACID SULPHATE SOILS EXIST IN THE WORKS AREA. THE OUTPUTS FROM THE RISK ASSESSMENT BASED ON THE QUEENSLAND ACID SULPHATE SOIL TECHNICAL MANUAL REQUIRES THAT ACID SULPHATE SOILS BE MANAGED AS FOLLOWS: (DELETE IF NO ACID SULPHATE SOILS)

VEGETATION PROTECTION

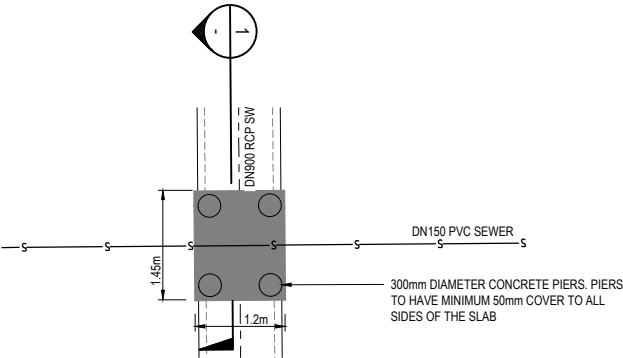
1. TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
2. WHEN WORKING WITHIN 4 m OF TREES, RUBBER OR HARDWOOD GIRDLES SHALL BE CONSTRUCTED WITH 1.8 m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES SHALL BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
3. 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.
4. ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.

TRENCH NOTES

1. BEARING PRESSURE AT THE BOTTOM OF EXCAVATION IS TO BE TESTED AS PER THE SEQ WATER SERVICE PROVIDERS CODE STANDARD DRAWING SEQ-SEW-1200-1.
2. WHERE THE BOTTOM OF AN EXCAVATION IS FOUND TO BE FIRM OR STRONGER TYPE 3 TRENCH (REFER SEQ-SEW-1201-1) IS TO BE USED.
3. WHERE THE BOTTOM OF AN EXCAVATION IS FOUND TO BE SOFT OR WEAKER, THE TYPE 7 (REFER SEQ-SEW-1202-1) IS TO BE USED.

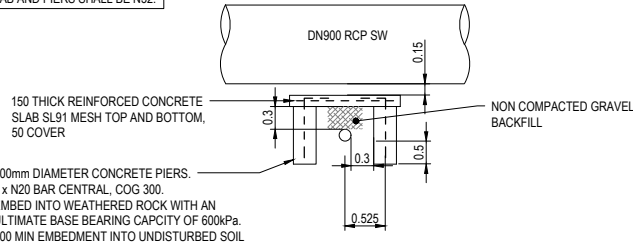
GOLD COAST WATER AND CONTRACTOR LIVE SEWER WORKS

NO.	DESCRIPTION	DIA SEWER	MH NO	MHMS TYPE	COVER TYPE	LOT NO	F.S.L	E.S.L	IL	DEPTH TO INVERT
1 (A)	CONTRACTOR TO LOCATE EXISTING LOT 12 CONNECTION AND STUB, AND CONFIRM AS CONSTRUCTED LEVELS.	150	2/1	-	-	-	-	-	-	-
1 (B)	CONTRACTOR TO CONSTRUCT NEW MANHOLE 2/1 OVER EXISTING SEWER, AND RECONNECT LOT 12 PROPERTY CONNECTION. CONTRACTOR TO CONSTRUCT 0.5m STUB FOR LINE 1 (TEMPORARILY END CAPPED). CONTRACTOR TO MAKE MANHOLE 2/1 LIVE.	-	2/1	P2	CLASS B / CI	-	9.624	-	-	-
1 (C)	CONTRACTOR TO LAY NEW LINE 1 AND PROPERTY CONNECTIONS. AFTER CLEANSING, TESTING AND INSPECTING, NOTIFY COUNCIL.	150	-	P2	CLASS B / CI	-	-	-	-	-
1 (D)	CONTRACTOR TO REMOVE END CAP FROM 0.5m STUB, AND COMPLETE THE CONNECTION TO THE LIVE MAIN AFTER SUCCESSFUL "ON MAINTENANCE" INSPECTION.	150	2/1	P2	CLASS B / CI	-	-	-	-	-
2 (A)	CONTRACTOR TO BREAK INTO EXISTING MAINTENANCE HOLE 1/2 AND CONSTRUCT THE STUB FOR LINE 2 (TEMPORARILY END CAPPED).	150	1/2	EX	-	13	8.224	-	6.280	1.944
2 (B)	CONTRACTOR TO LAY NEW LINE 2 AND PROPERTY CONNECTIONS. AFTER CLEANSING, TESTING AND INSPECTING, NOTIFY COUNCIL.	150	-	P2	CLASS B / CI	13 14	-	-	-	-
2 (C)	CONTRACTOR TO REMOVE TEMPORARY END CAP AND MODIFY MANHOLE COVER TO SUIT NEW SURFACE LEVELS (IF REQUIRED) AFTER SUCCESSFUL "ON MAINTENANCE" INSPECTION.	150	1/2	EX	-	13	-	-	-	-
3 (A)	CONTRACTOR TO BREAK INTO EXISTING SEWER LINE BETWEEN MANHOLES 2/1 AND EX/1 AND CONSTRUCT MANHOLE 1/1. CONTRACTOR TO CONSTRUCT 0.5m STUB FOR LINE 3 (TEMPORARILY END CAPPED). CONTRACTOR TO MAKE MANHOLE 1/1 LIVE.	150	1/1	P2	CLASS D / CI	-	-	-	-	-
3 (B)	CONTRACTOR TO LAY NEW LINE 3 AND PROPERTY CONNECTION TO LOT 10. AFTER CLEANSING, TESTING AND INSPECTING, NOTIFY COUNCIL.	150	-	P2	CLASS D / CI	-	-	-	-	-
3 (C)	CONTRACTOR TO REMOVE END CAP FROM 0.5m STUB, AND COMPLETE THE CONNECTION TO THE LIVE MAIN AFTER SUCCESSFUL "ON MAINTENANCE" INSPECTION.	150	1/1	P2	-	-	-	-	-	-



DETAIL B
SCALE 1:100 C120-03

NOTE:
CONCRETE FOR BRIDGING
SLAB AND PIERS SHALL BE N32.



SECTION 1
SCALE 1:50 C120-03

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW / 2019 / 160

Dated: 9 May 2019

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

GCCC REF: OPW/2019/160



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D	COUNCIL RFI RESPONSE	26.03.2019	K.J.L.
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B	FOR COUNCIL APPROVAL	30.01.2019	K.J.L.
A	PRELIMINARY	07.12.2018	K.J.L.
REV	DESCRIPTION	DATE	BY

Engineers Certification:

Travis Smith MIE Aust. CPEng.
RPEQ 16400

Signature:

Date: 26 / 03 / 2019

Project
PROPOSED SUBDIVISION AT
86-160 CHRISTENSEN ROAD
SOUTH, STAPYLTON
for
BURNSIDE DEVELOPMENTS P/L &
YELLOWSTONE INVESTMENTS P/L

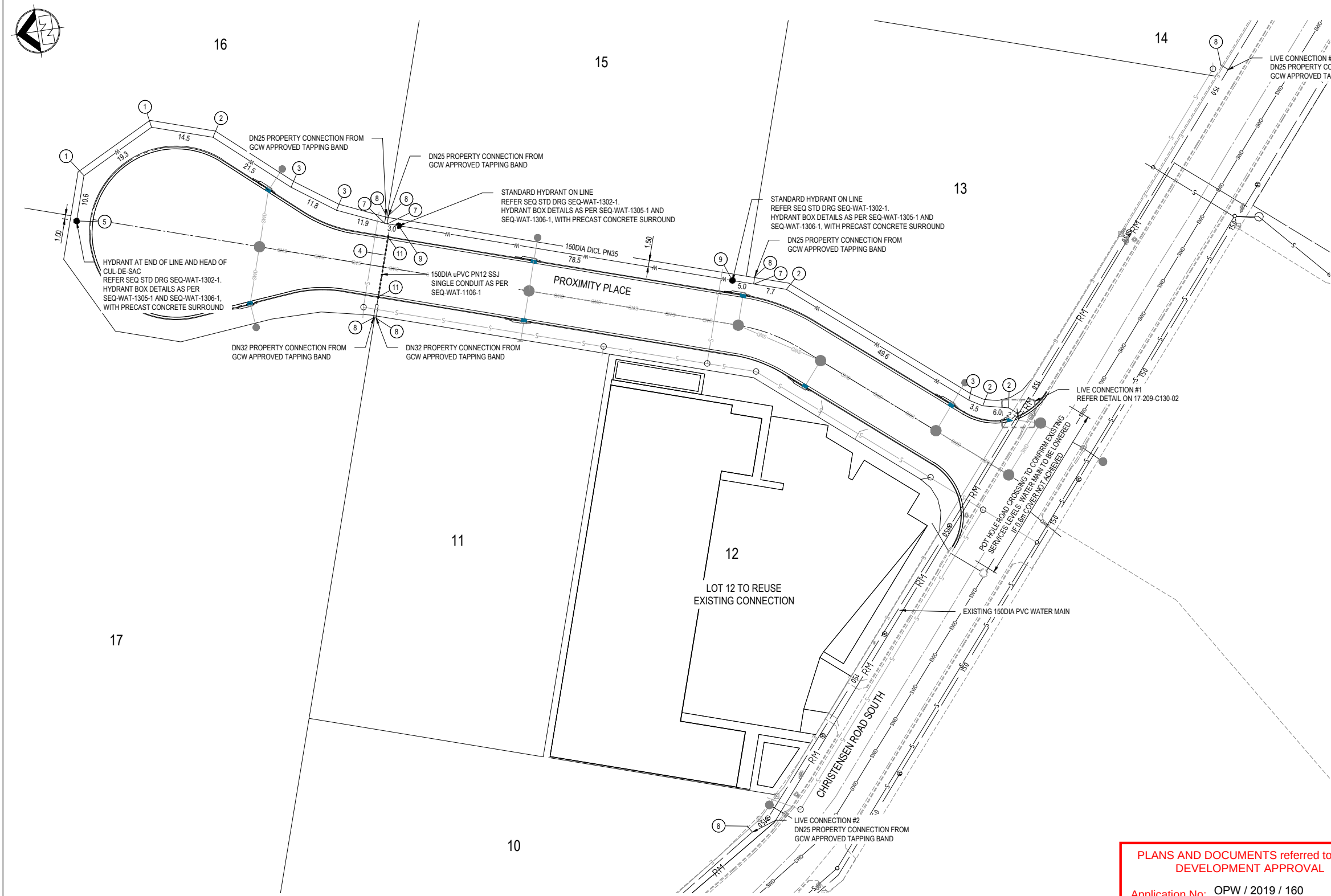
Title
SEWER NOTES AND DETAILS

Status
FOR COUNCIL APPROVAL

Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
T.J.S.	07.12.18		
Scale	A1	Certif	Date
AS SHOWN			

Project No.	Dwg. No.	Rev.
17-209	C120-03	D

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LEGEND

- PROPOSED LOT BOUNDARY
- EXISTING PROPERTY BOUNDARY
- EXISTING STORMWATER MAIN
- PROPOSED STORMWATER MAIN
- PROPOSED STORMWATER MANHOLE
- EXISTING ELECTRICAL
- PROPOSED LIP IN LINE GULLY PIT
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- PROPOSED WATER SERVICE AND METER
- PROPOSED WATER SERVICE CONDUIT 150DIA uPVC PN12 SERIES 1 CONDUIT
- PROPOSED HYDRANT
- PROPOSED VALVE
- WATER FITTING LABEL
- EXISTING HYDRANT
- EXISTING SEWER MAIN
- PROPOSED SEWER MAIN

WARNING
NO GUARANTEE IS GIVEN THAT SERVICES SHOWN ARE COMPLETE AND CORRECT. CONTRACTOR SHALL VERIFY EXACT POSITION OF SERVICES ON SITE BY HAND DIGGING OR OTHER NON DESTRUCTIVE MEANS PRIOR TO CONSTRUCTION AND SHALL MAINTAIN AND PROTECT THE SAME FOR THE DURATION OF THE CONTRACT.

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

ALL WATER AND SEWER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE WORKPLACE HEALTH AND SAFETY LEGISLATION

FITTING NO.	FITTING DESCRIPTION	QTY
1	150DIA DICL PN35 45° BEND	2
2	150DIA DICL PN35 22.5° BEND	4
3	150DIA DICL PN35 11.25° BEND	3
4	150DIA uPVC PN12 CONDUIT	1
5	150DIA HYDRANT AT END OF LINE AND HEAD OF CUL-DE-SAC	1
6	150DIA x 150DIA DICL TEE	1
7	TAPPING BAND	3
8	20mm WATER METER (DRINKING WATER ONLY SYSTEM)	7
9	150DIA STANDARD HYDRANT ON-LINE	2
10	150DIA SLUICE VALVE	1
11	BRASS ROAD CROSSING PLATE	2
12	150DIA GIBALT JOINT	2

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL
Application No: OPW / 2019 / 160
Dated: 9 May 2019
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WATER RETICULATION LAYOUT
SCALE 1:500 (A1)

File Location P:\17-209-Christensen Road Development\CD
Printed by Katherine Leggett
Print Date 2:13 PM

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A	PRELIMINARY	07.12.2018	K.J.L.
REV	DESCRIPTION	DATE	BY

Engineers Certification:
Travis Smith M/E Aust. CPEng.
RPEQ 16400

Signature: *T. Smith*

Date: 17.04.2019

Project
PROPOSED SUBDIVISION AT 86-160 CHRISTENSEN ROAD SOUTH, STAPYLTON
for
BURNSIDE DEVELOPMENTS P/L & YELLOWSTONE INVESTMENTS P/L

Title
WATER RETICULATION PLAN

GCCC REF: OPW/2019/160

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Status
FOR COUNCIL APPROVAL

Drawn	Date	Chkd	Date
K.J.L.	07.12.18	T.J.S.	07.12.18
Design	Date	Apprd	Date
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Project No.	Dwg. No.	Rev.	
17-209	C130-01	E	

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VEGETATION PROTECTION

- A. TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
- B. 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.
- C. TREE ROOTS SHALL BE TUNNELED 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.
- D. ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.

SOIL

- A. TOPSOIL AND SUBSOIL SHALL BE STOCKPILED SEPARATELY.
- B. CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.

CREEK CROSSINGS

- A. SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
- B. APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK.
- C. NO SOIL SHALL BE STOCKPILED WITHIN 5m OF THE CREEK.

REHABILITATION

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

GENERAL NOTES

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 WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
3. ADOPT LIP 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. CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS.
6. 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.
7. 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.
8. ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS.
9. TEST/CHLORINATION POINTS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NO SEQ-WAT-1410-1.
10. 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.

TRENCH NOTES

1. BEARING PRESSURE AT THE BOTTOM OF EXCAVATION IS TO BE TESTED AS PER THE SEQ WATER SERVICE PROVIDERS CODE, AND STANDARD DRAWING SEQ-WAT-1200-2.
2. WATER MAINS SHALL BE BEDDED AND BACKFILLED IN ACCORDANCE WITH SEQCODE STD DRG SEQ-WAT-1201-1 TYPE 'C' SUPPORT, IF THE EXCAVATION IS FOUND TO BE FIRM OR STRONGER.
3. WATER MAINS SHALL BE BEDDED AND BACKFILLED IN ACCORDANCE WITH SEQCODE STD DRG SEQ-WAT-1201-1 TYPE 'G' SUPPORT, IF THE EXCAVATION IS FOUND TO BE SOFT OR WEAKER.

BEDDING, THRUST BLOCKS, HYDRANTS, VALVES AND MARKERS

1. THRUST BLOCKS SHALL BE PROVIDED TO ALL BENDS (HORIZONTAL AND VERTICAL); TEES; REDUCERS; DEAD ENDS; VALVES; ETC. REFER SEQCODE STD DWG SEQ-WAT-1205-1 AND SEQ-WAT-1206-1.
2. BLUE RRPMS SHALL BE PLACED ALONG THE ROADWAY CENTRELINE, OPPOSITE ALL HYDRANTS. REFER SEQCODE STD DRG NO SEQ-WAT-1300-1.
3. WATER SERVICE KERB & CHANNEL CONDUIT MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH SEQCODE STD DRG NO SEQ-WAT-1300-1.

LIVE WATER WORKS TABLE

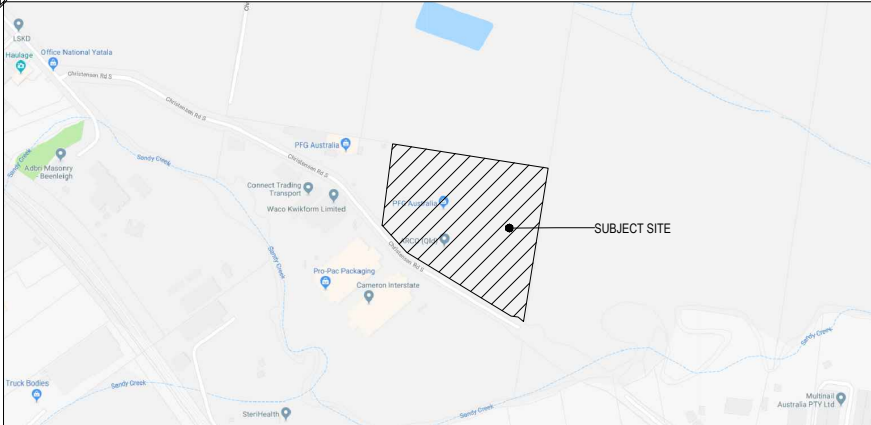
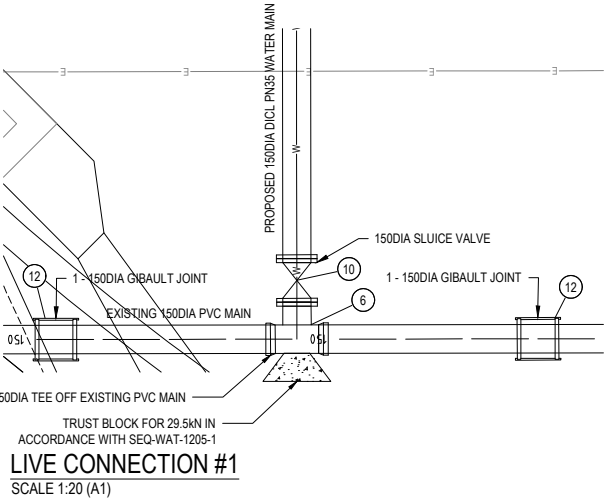
NO	DESCRIPTION	DIA OF MAIN	MATERIAL	LOT NO.
1A	CONTRACTOR TO LAY NEW WATER MAIN AND PROPERTY CONNECTIONS IN THE NEW SUBDIVISION. CONTRACTOR TO CHLORINATE AND PRESSURE TEST THE NEW MAIN, AND ARRANGE FOR BIOLOGICAL TESTING OF THE WATER IN THE NEW MAIN.	150	DICL	-
1B	AFTER A SUCCESSFUL ON-MAINTENANCE INSPECTION, UNDER SUPERVISION OF GOLD COAST WATER, THE CONTRACTOR SHALL ISOLATE THE SECTION OF THE EXISTING MAIN IN CHRISTENSEN ROAD SOUTH, PROVIDE THE APPROPRIATE LENGTH OF PIPE, CONNECT THE NEW WATER MAIN TO THE EXISTING AND PRESSURISE THE LINE.	150	DICL	-

LIVE WATER WORKS PROPERTY SERVICE CONNECTION TABLE

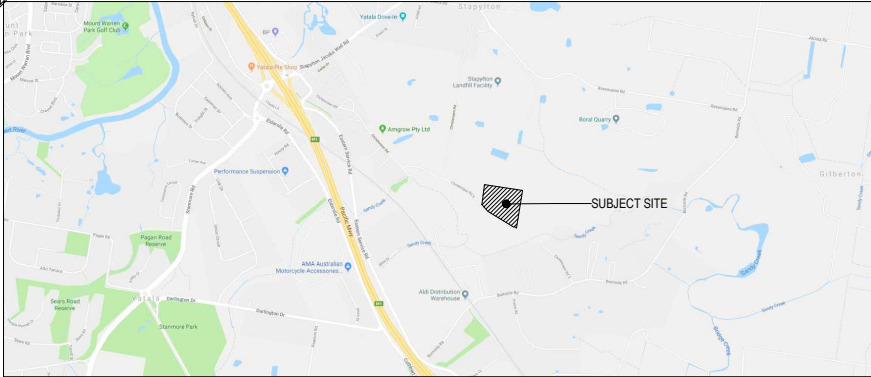
NO	DESCRIPTION	DIA OF MAIN	MATERIAL	LOT NO.
2	CONTRACTOR SHALL INSTALL NEW PROPERTY SERVICE CONNECTIONS, UNDER THE SUPERVISION OF GOLD COAST WATER, ON EXISTING WATER MAIN TO LOTS ALONG CHRISTENSEN ROAD SOUTH.	25 32	PE	10 14

MINIMUM COVER TO WATER		
TYPE	LOCATION	COVER (m)
SERVICE	VERGE	0.3
ROAD CONDUIT	ROAD	0.6
MAIN	CARRIAGE WAY OF SEALED LOCAL ROADS	0.6 *
MAIN	NON-TRAFFICABLE AREAS, DRIVEWAYS, VERGES/FOOTWAYS	0.6 *

* COVER IS MEASURED FROM THE LIP OF KERB



LOCALITY PLAN
NTS



REGIONAL PLAN
NTS

JOB NOTES:

1. ALL PROPERTY CONNECTIONS SHALL BE FOR A NOMINAL DN25 OR DN32 PE PROPERTY SERVICE U.N.O.
2. ALL WATER METERS TO BE 20mm FOR DRINKING WATER ONLY, AND IN ACCORDANCE WITH GCW STD DRGS 11-133 AND 11-134.
3. WATER SERVICES SHALL BE LOCATED 1000mm CLEAR OF ENERGEX SERVICES.
4. 20mm METER BOXES TO BE SUPPLIED BY RETAIN REPRESENTATIVES LISTED IN THE SEQ CIVIL IPAM PRODUCT LIST.

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW / 2019 / 160

Dated: 9 May 2019

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conditions of approval as detailed in the
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Title
WATER RETICULATION NOTES
AND DETAILS

GCCC REF: OPW/2019/160



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Project No.	17-209	Dwg. No.	C130-02
		Rev.	E

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