

28 May 2020

**Enquiries:** Neil Beck  
**Our Ref:** OP 2019\_3370/1 (952341)  
**Your Ref:** Q184103

Administration Office  
64 - 66 Front St Mossman  
P 07 4099 9444  
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Port Douglas Land Developments Pty Ltd  
C/- Cardno (Qld) Pty Ltd  
PO Box 1619  
CAIRNS QLD 4870

Dear Sir

**Development Application for Operational Works (Stage 1A & 1B Craigie Subdivision)  
At Captain Cook Highway CRAIGLIE  
On Land Described as LOT: 2 TYP: SR PLN: 431**

Please find attached the Decision Notice for the above-mentioned development application.

Please quote Council's application number: OP 3370/2019 in all subsequent correspondence relating to this development application.

Also find attached a 'Pre-Start' meeting template, which identifies the information that must be provided for Council approval, prior to the commencement of works.

The template also provides the Consulting Engineer with a format for conducting the meeting. An invitation to attend the meeting must be sent to Council's representative Neil Beck on telephone number 07 4099 9451, giving at least five (5) working days notification if possible.

In addition to the Decision Notice, Council provides the following 'Advice Statement' which relates to issues that are relevant to the proposed works:

1. The design of lighting will be subject to separate agreement and must be submitted to Council, prior to the commencement of associated works; and
2. The Consulting Engineer is to present all contractors with a copy of this Decision Notice and the Council approved plans, prior to the commencement of works.

Should you require any clarification regarding this, please contact Neil Beck on telephone 07 4099 9451.

Yours faithfully



**For**  
**Paul Hoyer**  
**Manager Environment & Planning**

cc. State Assessment and Referral Agency (SARA) E: [CairnsSARA@dilgp.qld.gov.au](mailto:CairnsSARA@dilgp.qld.gov.au)

encl.

- Decision Notice
  - Approved Drawing(s) and/or Document(s)
  - Concurrence Agency Response
- Advice For Making Representations and Appeals



## Decision Notice

### Approval (with conditions)

*Given under section 63 of the Planning Act 2016*

#### Applicant Details

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**Name:** Port Douglas Land Developments Pty Ltd  
**Postal Address:** C/- Cardno (Qld) Pty Ltd  
PO Box 1619  
CAIRNS QLD 4870  
**Email:** or etp@etp.co.nz

#### Property Details

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**Street Address:** Captain Cook Highway CRAIGLIE  
**Real Property Description:** LOT: 2 TYP: SR PLN: 431  
**Local Government Area:** Douglas Shire Council

#### Details of Proposed Development

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Development Permit for Operational Works (Operational Works (Stage 1A & 1B Craiglie Subdivision))

#### Decision

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**Date of Decision:** 28 May 2020  
**Decision Details:** Approved (subject to conditions)

#### Approved Drawing(s) and/or Document(s)

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Copies of the following plans, specifications and/or drawings are enclosed.

#### Civil Works

<u>Drawing No.</u>	<u>Description</u>
Q184103-CI-1000	COVER SHEET
Q184103-CI-1001	DRAWING SCHEDULE AND LOCALITY PLAN
Q184103-CI-1002	NOTES
Q184103-CI-1003	OVERALL SITE PLAN SHEET 1 OF 2
Q184103-CI-1004	OVERALL SITE PLAN SHEET 2 OF 2

Q184103-CI-1005	SEDIMENT CONTROL DETAILS SHEET 1 OF 2
Q184103-CI-1006	SEDIMENT CONTROL DETAILS SHEET 2 OF 2
Q184103-CI-1100	BULK EARTHWORKS PLAN
Q184103-CI-1101	EXCESS CUT STOCKPILING PLAN
Q184103-CI-1102	SITE CROSS SECTIONS
Q184103-CI-1200	ROADWORKS PLAN
Q184103-CI-1201	ROADWORKS - TYPICAL CROSS SECTIONS
Q184103-CI-1202	WABUL STREET LONGITUDINAL SECTION & CROSS SECTIONS
Q184103-CI-1203	WABUL STREET CROSS SECTIONS
Q184103-CI-1204	ROAD 2 LONGITUDINAL SECTION
Q184103-CI-1205	ROAD 2 CROSS SECTIONS SHEET 1 OF 2
Q184103-CI-1206	ROAD 2 CROSS SECTIONS SHEET 2 OF 2
Q184103-CI-1207	ROAD 3 LONGITUDINAL SECTION & CROSS SECTIONS
Q184103-CI-1208	ROAD 4 LONGITUDINAL SECTION & CROSS SECTIONS
Q184103-CI-1209	ROAD 5 LONGITUDINAL SECTION
Q184103-CI-1210	ROAD 5 CROSS SECTIONS
Q184103-CI-1211	INTERSECTION PLAN SHEET 1 OF 6
Q184103-CI-1212	INTERSECTION PLAN SHEET 2 OF 6
Q184103-CI-1213	INTERSECTION PLAN SHEET 3 OF 6
Q184103-CI-1214	INTERSECTION PLAN SHEET 4 OF 6
Q184103-CI-1215	INTERSECTION PLAN SHEET 5 OF 6
Q184103-CI-1216	INTERSECTION PLAN SHEET 6 OF 6
Q184103-CI-1250	STORMWATER LAYOUT PLAN
Q184103-CI-1251	STORMWATER CATCHMENT PLAN
Q184103-CI-1252	STORMWATER LONGITUDINAL SECTIONS SHEET 1 OF 2
Q184103-CI-1253	STORMWATER LONGITUDINAL SECTIONS SHEET 2 OF 2
Q184103-CI-1260	STORMWATER CALCULATION TABLES SHEET 1 OF 2
Q184103-CI-1261	STORMWATER CALCULATION TABLES SHEET 2 OF 2
Q184103-CI-1262	CULVERT LAYOUT PLAN
Q184103-CI-1263	CULVERT SECTION PLAN
Q184103-CI-1264	DRAIN DESIGN SHEET 1 OF 2
Q184103-CI-1265	DRAIN DESIGN SHEET 2 OF 2
Q184103-CI-1266	SOUTHERN DIVERSION DRAIN
Q184103-CI-1267	EASTERN DIVERSION DRAIN
Q184103-CI-1268	EXISTING DRAIN CROSS SECTIONS SHEET 1 OF 3
Q184103-CI-1269	EXISTING DRAIN CROSS SECTIONS SHEET 2 OF 3
Q184103-CI-1270	EXISTING DRAIN CROSS SECTIONS SHEET 3 OF 3
Q184103-CI-1271	CULVERT DETAILS PLAN
Q184103-CI-1300	SEWER LAYOUT PLAN
Q184103-CI-1301	SEWER LONGITUDINAL SECTIONS SHEET 1 OF 2
Q184103-CI-1302	SEWER LONGITUDINAL SECTIONS SHEET 2 OF 2
Q184103-CI-1350	WATER LAYOUT PLAN
Rev A	
Q184103-CI-1400	EROSION AND SEDIMENT CONTROL STRATEGY
Q184103-CI-1401	VEGETATION MANAGEMENT PLAN
Q184103-CI-1402	MISCELLANEOUS DETAILS PLAN
Q184103-CI-1403	COMBINED SERVICES PLAN
Q184103-CI-1404	RETAINING WALL DETAILS PLAN



## Water & Sewer External

<u>Drawing No.</u>	<u>Description</u>
Q184103-CI-001	COVER SHEET
Q184103-CI-002	GENERAL NOTES
Q184103-CI-003	PUMP STATION SITE PLAN
Q184103-CI-004	PUMP STATION PLAN AND SECTION
Q184103-CI-005	FUTURE SEWERAGE RISING MAIN PLAN AND LONGITUDINAL SECTION SHEET 1
Q184103-CI-006	FUTURE SEWERAGE RISING MAIN PLAN AND LONGITUDINAL SECTION SHEET 2
Q184103-CI-007	FUTURE SEWERAGE RISING MAIN PLAN AND LONGITUDINAL SECTION SHEET 3
Q184103-CI-008	WATERMAIN CONNECTION DETAILS SHEET 1
Q184103-CI-009	WATERMAIN CONNECTION DETAILS SHEET 2
Q184103-CI-010	SEWERAGE RISING MAIN PLAN AND LONGITUDINAL SECTION
Q184103-CI-011	CULVERT CROSSING

## Landscape Plans

<u>Drawing No.</u>	<u>Description</u>
1902-016/CD/L0.01	COVER SHEET
1902-016/CD/L1.01	LANDSCAPE PLAN
1902-016/CD/L2.01	STANDARD DETAILS
1902-016/CD/L3.01	STANDARD SPECIFICATIONS

**Note** – The plans referenced above will require amending in order to comply with conditions of this Decision Notice.

## **Assessment Manager Conditions & Advices**

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### **1. General**

- a. Drawings must be submitted “for construction” and must be certified as approved by a registered professional engineer of Queensland (RPEQ).
- b. “For construction drawings” and/or product information and supplier warranties are required to be submitted for the following design elements:
  - i. FRP Packaged Sewerage pump station; and
  - ii. Sewerage pump station controls, SCADA and telemetry.

This information must be provided prior to the pre-start meeting (or such other timeframe agreed with Council) and the elements are not approved unless confirmed by Council in writing.

### **2. Earthworks**

- a. The applicant is to ensure that any earthworks undertaken as part of the works maintains a free draining surface with no ponding of standing water resulting. Any amendments proposed to the existing finished surface profiles are to be identified and reported to Council prior to being undertaken on site. Resultant amendments

shall be recorded on as constructed drawings to be submitted at the completion of the project.

- b. Earthworks areas outside the footprint of the stage for the drain and the fill area are to be clearly delineated at the prestart meeting and inspected with Council and the Contractor to ensure there is understanding on the allowable works area, haul routes etc.

### **3. Roads and Paths**

- a. "For Construction" drawings are to be provided prior to the prestart meeting and are to be generally in accordance with the drawings provided by Cardno on 21 May 2020, except as modified below.
  - i. Provide revised drawings for road grading at the intersection of Road 2 and Wabul Drive to minimise the potential ponding in Road 2 in high rainfall events.
  - ii. In accordance with discussions between Cardno and Council Officers, measures are to consider lowering the road crown at the tip out to below RL4.05m AHD by a combination of localised reduced crossfall to 2% on Wabul Drive and reducing the Road 2 levels at the sag point (Approximate Road chainage 16m).

Advice Note: the intent of this condition is to minimise ponding within Road 2 and Road 3. Accordingly, Road 3 levels and Road 2 levels from at the frontage of Lot 2 are not to be lowered in responding to this condition.

- b. Pavement design details are to be confirmed prior to pavement construction. Details provided to Council shall include subgrade CBR results for each pavement section, confirmation of traffic loadings adopted (as per FNQROC requirements) and final pavement design.
- c. Provide updated drawings showing additional detail including levels and set out for the proposed retaining walls on Wabul Drive between Ch 27 and the culvert crossing. Localised site plans of the works are to be provided and must include proposed height of the walls, offset to boundaries, existing pits, proposed pathway and horizontal and vertical clearances to services to confirm the constructability of the walls within the existing road reserve. Council recommends this detail be provided in advance of the prestart meeting to enable further review and discussion on site. The works in the existing verge must not be constructed until this element is approved.

### **4. Stormwater**

- a. Provide updated "For Construction" drawings generally in accordance with the drawings provided by Cardno on 21 May 2020, confirming stormwater Pits 5/1 and 6/1 have been amended from the verge to avoid clashing with water services.
- b. The proposed water supply crossing to Road 3 is to be reviewed following the required amendments to Pit 5/1 and revised drawings are to be provided confirming clearance between the water and stormwater assets.
- c. Revised drawings must be provided to demonstrate that the drainage system is free draining and does not create a ponding and vector control issue for the adjacent

new lots. Revisions are to be generally in accordance with the drawings provided by Cardno on 21 May 2020.

- d. Updated drawings are required to confirm that the level at the end of the Eastern Diversion Drain (Ch 93.802) is not lower than the level of the northern drain at Point 16.
- e. The Eastern Diversion Drain is to include concrete channel lining of sufficient width and depth to contain the peak flow from the rainfall event with an average recurrence interval of 3-months.
- f. The interface between drainage outlet 10/1 and the Eastern Diversion Drain is to be documented on revised drawings for Council's approval. The revised drawings must demonstrate that there is appropriate fall from the pipe system into the open drain and address the risk of ponding into the pipe system. The drain invert is to be concrete lined downstream from the headwall.

## 5. Sewer

- a. Confirmation of the services in the verge is required to confirm the location of the discharge manhole. Council's preference is that the manhole is not located in the traffic lane. Potholing of the existing services is to be undertaken and a site meeting convened with Council to confirm the final location of the manhole.
- b. The extent of the ultimate sewage rising main proposed to be constructed under the current works package is to be confirmed. Note: Council will not reimburse the costs of trunk infrastructure until such time that it is put into service and performing a trunk function.

For the proposed extent of the sewage rising main, detailed drawings for the construction limits are to be provided for review and Council approval prior to the prestart meeting. The drawings must include plan and longitudinal sections showing set out, grading and clearances horizontal and vertical. Air release locations, scour points, thrust blocks and any other design information must be clearly shown on the drawings as required per the FNQROC Development Manual.

- c. Subject to the extent determined in response to Condition 5b. above, there are some components of the future works that must be completed now to minimise disturbance of the road. In particular, the future sewage main road crossing of Wabul Drive must be resolved prior to completion of the road. If the sewage main is not being completed under Condition 5b. above, additional plans are to be provided showing either:
  - i. construction of the road crossing and other identified constrained section(s) now with capping of the completed pipe(s); or
  - ii. Provision of enveloper pipe for the future main.
- d. Sewage Pump Station: the proposed FRP Packaged Sewage Pump Station is accepted in principle, however the applicant must provide Council with a copy of the "For Construction" drawings for the pump station prior to placing the order with the supplier. Council approval of the "For Construction" plans will be a holdpoint on this item.
- e. Details of the pump station switchboard, SCADA and telemetry are to be confirmed with Council's Water and Sewerage department prior to construction. All requirements to provide consistent operating systems are to be included in the works at no cost to Council. The requirements of the Douglas Shire Council Specific

Clauses of FNQROC (D7.25 Telemetry Systems) must be included in the documentation. The applicant is advised to confirm these requirements with Council's Water and Sewer Officers at the earliest opportunity to avoid project delays.

- f. A commissioning plan for the sewage pump station is to be provided to Council for approval prior to the commissioning works commencing. The methodology should be submitted a minimum of 3 weeks prior to the commissioning to enable council to review and approve.

## **6. Water**

- a. The water reticulation layout is to be in accordance FNQROC Development Manual Guidelines which require the inclusion of a Rider Main on the opposite side of the street, (Design Guideline D6 Appendix A Clause 5.8 refers). The layout is to be generally as represented on Revision A of the Water Layout Plan shown on Cardno Drawing Q184103-CI-1350, except where modified below:
  - i. All road crossings are to be 100mm DICL,
  - ii. Hydrants are to be shown dimensionally correct and separate to the Tee fittings at junctions,
  - iii. All hose connection tapplings are to be completed by the developer and the individual water service connections extended into the property by 0.5m. The property connections are to be located in the mid-point of the lot frontages unless otherwise approved by Council.
- b. Include on the water reticulation plan the location of light pole footings and confirm the clearance between the footing and the water main. The revised drawing is to be endorsed by Council prior to commencement of water reticulation works.
- c. The minimum clearance between light pole footings and water mains are to be in accordance with WSA and verified and recorded by the consulting engineer during construction.

## **7. Erosion and Sediment Control**

- a. A copy of the Contractor's Erosion and Sediment Control (ESC) Plan is to be submitted to Council and endorsed by the Consulting Engineer, prior to commencement of any works. In particular, the ESC Plan must address the Institution of Engineers Australia Guidelines for Soil Erosion and Sediment Control and the Environment Protection (Water) Policy and Clauses CP1.05, CP1.13 and D5.10 of Council's FNQROC Development Manual.

## **8. Landscape Plan**

The use of Barringtonia species as street trees is not supported due to the size of seed produced. An amended Landscape Plan is required which nominates street trees as contained in the list which forms part of Attachment 1.

## **9. Miscellaneous**

- a. As required in Condition 12 a. of the Reconfiguration of a Lot Decision Notice, the applicant is to provide costing for the proposed culvert on Wabul Drive based on the approved drawings.

The costs are to be supported by Tenders received for these works to confirm rates, quantities and total cost represents value for money for Council.

Council will only consider work elements that have been identified in the Local Government Infrastructure Plans, (LGIP).

- b. The applicant is to provide a street lighting plan and show the locations of the street lights on the relevant civil plans prior to the pre-start meeting to confirm any conflicts between light pole locations and other services.
- c. Prior to the pre-start meeting, the applicant must provide written evidence from Ergon and Telstra confirming arrangements have been made for the provision of services to the stage.
- d. The applicant is to provide the acid sulphate report prior to the Prestart meeting and ensure that the Contractor is aware of the management measures and testing requirements where applicable.
- e. CCTV inspections are to be reviewed by the supervising engineer and the Engineering Report and Certification by an RPEQ provided to Council prior to Works Acceptance as required under FNQROC Development Manual CP1.25 Project Documentation.
- f. Advice Note: The Master Plans submitted to support the infrastructure locations and sizing of Stage 1A and 1B infrastructure are not approved as part of this operational works. The approval of Stage 1A and 1B does not imply approval of future layouts or lot yield, which will be subject to future applications and will be assessed at that time. Council notes that the layout for the southern intersection with the Captain Cook Highway and the absence of connectivity to Andreasson Road is not supported.

### Further Development Permits

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Not applicable

### Concurrence Agency Response

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Referral Agency	Referral Agency Reference	Date	Council Electronic Reference
State Assessment & Referral Agency (Department of Infrastructure, Local Government & Planning)	1912-14552 SRA	20 March 2020	946318

Refer to Attachment 2: Concurrence Agency Requirements. (Please note that these conditions / requirements may be superseded by subsequent negotiations with the relevant referral agencies).

**Note** – Concurrence Agency Response is attached. This Concurrence Agency Response maybe amended by agreement with the respective agency.

## **Currency Period for the Approval**

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This approval, granted under the provisions of the *Planning Act 2016*, shall lapse two (2) years from the day the approval takes effect in accordance with the provisions of Section 85 of the *Planning Act 2016*.

## **Rights to make Representations & Rights of Appeal**

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The rights of applicants to make representations and rights to appeal to a Tribunal or the Planning and Environment Court against decisions about a development application are set out in Chapter 6, Part 1 of the *Planning Act 2016*.

A copy of the relevant appeal provisions are attached.

# Attachment 1 - Approved Drawing(s) and/or Document(s)

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Cardno (QLD) Pty Ltd | ABN 57 051 074 992  
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PORT DOUGLAS LAND DEVELOPMENTS PTY LTD

PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGLIE

COVER SHEET

DISSEMINATED - 14/06/2019 11:41 AM BY: WBP/10224  
DOT File: C:\Users\j\Documents\COPYE\_DRAWING\PORT DOUGLAS\_AutoCAD\BDO188.dwg

Q184103-CI-1000  
Drawing Number

B  
Revision



DATE PLOTTED: 14/01/2019 09:51:50 USER: PWB - MAP COLOR

DRAWING: Q184103-CI-1001

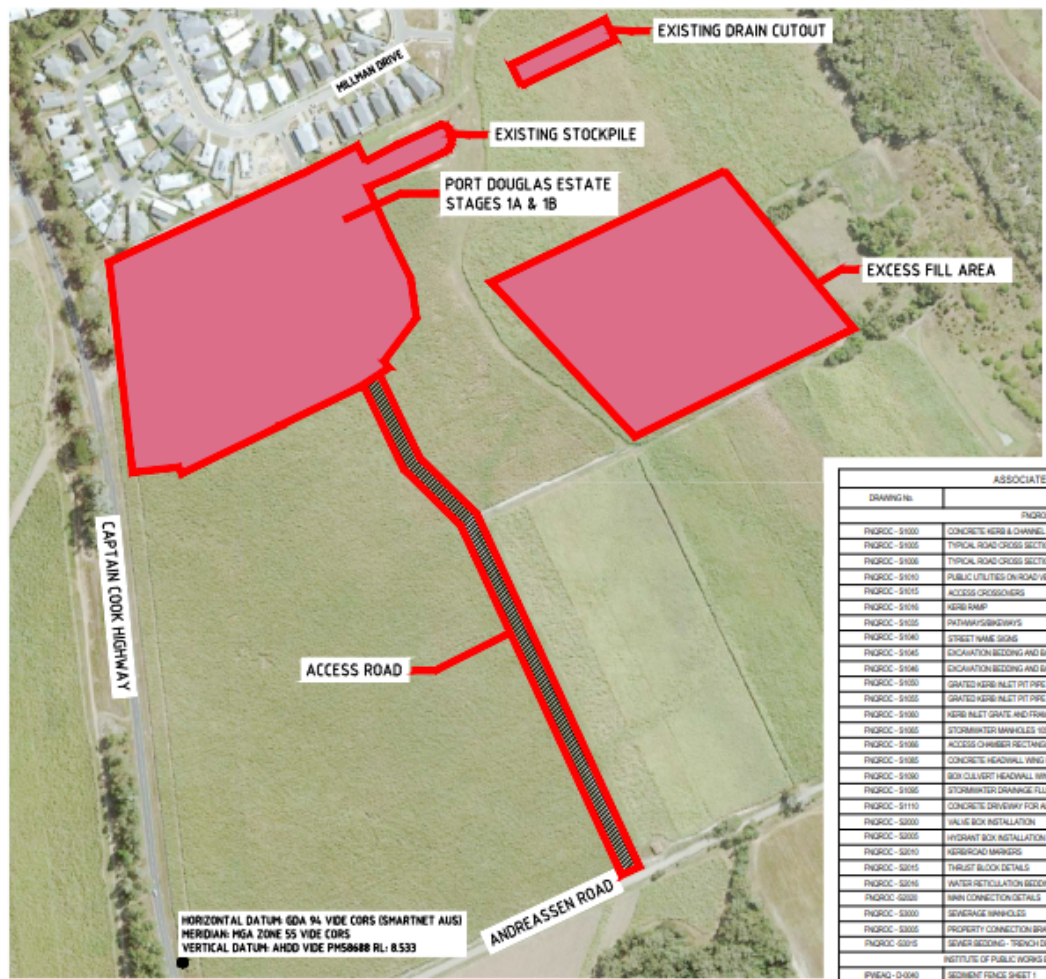
PROJECT: PORT DOUGLAS LAND DEVELOPMENTS PTY LTD

SCHEDULE OF DRAWINGS	
DRAWING No.	DESCRIPTION
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Q184103-CI-1002	NOTES
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Q184103-CI-1267	EASTERN DIVERSION DRAIN
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Q184103-CI-1302	SEWER LONGITUDINAL SECTIONS SHEET 2 OF 2
WATER	
Q184103-CI-1350	WATER LAYOUT PLAN
MISCELLANEOUS	
Q184103-CI-1400	EROSION AND SEDIMENT CONTROL STRATEGY
Q184103-CI-1401	VEGETATION MANAGEMENT PLAN
Q184103-CI-1402	MISCELLANEOUS DETAILS PLAN
Q184103-CI-1403	COMBINED SERVICES PLAN
Q184103-CI-1404	RETAINING WALL DETAILS PLAN

**LEGEND:**

EXTENT OF WORKS

SITE ACCESS



HORIZONTAL DATUM: GDA 94 VIDE CORS (SMARTNET AUS)  
 MERIDIAN: MGA ZONE 55 VIDE CORS  
 VERTICAL DATUM: AHDD VIDE PMS0688 RL: 8.533

**LOCALITY PLAN**  
 SCALE 1:3000m

ASSOCIATED DRAWINGS SCHEDULE	
DRAWING No.	DESCRIPTION
ENRCC DEVELOPMENT MANUAL	
ENRCC - 51000	CONCRETE KERB & CHANNEL PROFILES & DIMENSIONS
ENRCC - 51005	TYPICAL ROAD CROSS SECTIONS SHEET 1
ENRCC - 51008	TYPICAL ROAD CROSS SECTIONS SHEET 2
ENRCC - 51010	PUBLIC UTILITIES ON ROAD VERGES
ENRCC - 51015	ACCESS CROSSOVERS
ENRCC - 51016	KERB RAMP
ENRCC - 51020	INTERDRIVEWAYS
ENRCC - 51040	STREET NAME SIGNS
ENRCC - 51045	EDICATION BEDDING AND BACKFILLING OF PRECAST BOX CULVERTS
ENRCC - 51048	EDICATION BEDDING AND BACKFILLING OF CONCRETE PIPES
ENRCC - 51050	GRADED KERB ALLET PIT PIPE DIA. LESS THAN 600mm
ENRCC - 51052	GRADED KERB ALLET PIT PIPE DIA. GREATER THAN 600mm
ENRCC - 51060	KERB ALLET GRATE AND FRAME
ENRCC - 51062	STORMWATER MANHOLES 1000 TO 1500
ENRCC - 51066	ACCESS CHAMBER RECTANGULAR ROOF SLAB
ENRCC - 51082	CONCRETE HEADWALL WING WALLS AND APRON
ENRCC - 51090	BOX CULVERT HEADWALL WINGWALLS AND APRON
ENRCC - 51092	STORMWATER DRAINAGE FLASHING POINTS OUTLET
ENRCC - 51110	CONCRETE DRIVEWAY FOR ALLOTMENT ACCESS
ENRCC - 52000	VALVE BOX INSTALLATION
ENRCC - 52005	HYDRANT BOX INSTALLATION
ENRCC - 52010	KERBROAD MARKERS
ENRCC - 52015	THRUST BLOCK DETAILS
ENRCC - 52016	WATER RETICULATION BEDDING DETAILS
ENRCC - 52020	RAIN CONNECTION DETAILS
ENRCC - 52030	SEWERAGE MANHOLES
ENRCC - 52035	PROPERTY CONNECTION BRANCHES
ENRCC - 52035	SEWER BEDDING - TRENCH DETAILS
INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALIA (QUEENSLAND) (IPWEAQ)	
IPWEAQ - D-0540	SEDIMENT FENCE SHEET 1
IPWEAQ - D-0541	SEDIMENT CONTROL DEVICES SHEET 2
MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)	
DEPARTMENT OF TRANSPORT AND MAIN ROADS	
SE1200	RE: BOX CULVERTS & SLAB LINK CULVERTS - CULVERT HEIGHTS - 600

No.	Date	Description	Rev.	By	Appr.
1	07/04/2019	PROCESSED FOR OPERATIONAL WORKS APPROVAL	1	MS	MS
2	20/10/2019	EXCESS FILL AREA REVISED	MS	MS	MS
3	10/10/2019	FOR OPERATIONAL WORKS APPROVAL	1	MS	MS



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**Cardno**  
 Strategic Team

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<p>PORT DOUGLAS LAND DEVELOPMENTS PTY LTD</p> <p>PORT DOUGLAS ESTATE - STAGE 1A &amp; 1B          SUBDIVISION OF LOT 2 ON SR431          CAPTAIN COOK HIGHWAY, CRAIGLIE</p> <p>DRAWING SCHEDULE AND LOCALITY PLAN</p>	<p>DATE: 15/10/2019</p> <p>TIME: 15:10:20</p> <p>SCALE: AS SHOWN</p> <p>PROJECT: PORT DOUGLAS ESTATE - STAGE 1A &amp; 1B</p> <p>DATE: 15/10/2019</p> <p>TIME: 15:10:20</p> <p>SCALE: AS SHOWN</p> <p>PROJECT: PORT DOUGLAS ESTATE - STAGE 1A &amp; 1B</p>	<p><b>FOR APPROVAL</b></p> <p>NOT TO BE USED FOR CONSTRUCTION PURPOSES</p> <p>DATE: 15/10/2019</p> <p>TIME: 15:10:20</p> <p>SCALE: AS SHOWN</p> <p>PROJECT: PORT DOUGLAS ESTATE - STAGE 1A &amp; 1B</p> <p>DATE: 15/10/2019</p> <p>TIME: 15:10:20</p> <p>SCALE: AS SHOWN</p> <p>PROJECT: PORT DOUGLAS ESTATE - STAGE 1A &amp; 1B</p>
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GENERAL

- G1 IF IN DOUBT ASK.
G2 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATIONS INCLUDING FNOROC AND ALL INFORMATION ISSUED BY THE SUPERINTENDENT DURING THE COURSE OF THE CONTRACT AND INCLUDES THE DOUGLAS SHIRE COUNCIL DECISION NOTICE.
G3 ALL LEVELS ARE TO AHD.
G4 ALL CO-ORDINATES ARE TO MGA ZONE 55.
G5 ALL SET OUT SHALL BE RELATED TO ROAD CENTRE LINES.
G6 ALL DIMENSIONS AND RADII ARE EXPRESSED IN METRES (UNO).
G7 DRAWINGS SHALL NOT BE SCALED.
G8 EXISTING CONTOURS, LEVELS AND FEATURES SHOWN ON THE DRAWINGS ARE INDICATIVE ONLY AND ARE BASED ON SURVEY DRAWINGS AND DATA PROVIDED BY CARDNO (QLD) PTY LTD CONSULTING SURVEYORS.
G9 ALL DIMENSIONS RELEVANT TO SETTING OUT, SURFACE LEVELS AND INVERT LEVELS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE SUPERINTENDENT.
G10 THE CONTRACTOR SHALL ENSURE THAT ALL WORKS ARE MAINTAINED IN A SAFE AND STABLE CONDITION AND THAT ADEQUATE PROTECTION AGAINST EROSION AND SILTATION IS IN PLACE.
G11 WORKMANSHIP AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RELEVANT STANDARDS AND THE REQUIREMENTS OF DOUGLAS SHIRE COUNCIL AND OTHER AUTHORITIES SHALL BE MAINTAINED.
G12 GRADE EVENLY BETWEEN LEVELS SHOWN EXCEPT WHERE LEVELS INDICATE VERTICAL CURVES.
G13 THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION PROTECTION AND SEDIMENT CONTROL FOR THE WORKS AS SPECIFIED AND TO THE SATISFACTION OF DOUGLAS SHIRE COUNCIL.
G14 REFER FNOROC DEVELOPMENT MANUAL.

SITE CLEARANCE

- C1 THE SITE SHALL BE CLEARED ONLY TO THE EXTENT NECESSARY TO PERMIT CONSTRUCTION OF THE PERMANENT WORKS U.N.O.
C2 AREAS TO BE USED FOR STOCKPILING EXCESS EXCAVATED MATERIALS SHALL BE CLEARED AND STRIPPED OF TOPSOIL AND OTHER UNSUITABLE MATERIAL.
C3 ALL ITEMS NOMINATED ON THE DRAWINGS TO BE REMOVED ARE TO BE DISPOSED OF OFF SITE. REMOVED VEGETATION IS TO HAVE ALL ROOTS GRUBBED OUT AND DISPOSED OF OFF SITE. ALL OFFSITE DISPOSAL IS AT CONTRACTORS EXPENSE.

EARTHWORKS

- E1 DRY DENSITY RATIO AS REFERRED TO IN THESE NOTES IS THE RATIO DETERMINED IN ACCORDANCE WITH AS1289.5.4.1 OF COMPACTED DRY DENSITY IN ACCORDANCE WITH AS1289.5.3.1 OR AS1289.5.8.1 TO THE STANDARD MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH AS1259.5.1.11 (STANDARD COMPACTION).
E2 STRIP ALL VEGETAL MATTER, TOPSOIL AND OTHER UNSUITABLE MATERIAL FROM AREAS TO BE EXCAVATED OR FILLED. STOCKPILE SUITABLE TOPSOIL MATERIAL IN APPROVED LOCATIONS FOR SUBSEQUENT RE-USE.
E3 EXCAVATE AS REQUIRED AND DEPOSIT EXCAVATED MATERIAL AS NECESSARY. COMPACT SURFACES EXPOSED BY STRIPPING OR EXCAVATION TO 98% DRY DENSITY RATIO TO A DEPTH OF AT LEAST 250mm. SHOULD ANY SOFT OR UNSUITABLE MATERIAL BE IDENTIFIED SEEK THE ADVICE OF THE SUPERINTENDENT.
E4 COMPACT FILL TO 98% DRY DENSITY RATIO IN LAYERS OF THICKNESS APPROPRIATE TO THE COMPACTION PLANT EMPLOYED BUT NOT EXCEEDING 200mm.
E5 ALL MATERIALS WITHIN 300mm BELOW ROAD PAVEMENT/SUBGRADE INTERFACE SHALL BE COMPACTED TO 98% DRY DENSITY RATIO.
E6 IN PLACING FILL IN AND AROUND ROAD FOOTPATHS AND BATTERS ALLOW FOR TOPSOIL THICKNESS AS DETERMINED ON BASIS OF ACTUAL TOPSOIL MATERIALS BALANCE.
E7 ALL AREAS EXPOSED BY EARTHWORKS SHALL BE TOPSOILED AND GRASSED BY DRILL SEEDING EXCEPT THAT HYDROMULCHING IS REQUIRED ON BATTERS STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL. ALL AREAS TO BE GRASSED WILL HAVE 80% ROOT MAT AT THE END OF DEFECTS LIABILITY PERIOD AND SHALL BE FREE OF ROCK AND LOOSE STONE WHEN WORKS ARE TAKEN 'ON MAINTENANCE'.
E8 CONTROL TESTING OF BULK EARTHWORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH A.S.3798 - 2007.
E9 ALL EARTHWORKS ARE TO BE CONTROLLED BY LEVEL 1 INSPECTION AND TESTING BY A QUALIFIED GEOTECHNICAL TESTING AND INSPECTION AUTHORITY.
E10 COMPACTION TEST FREQUENCY FOR EARTHWORKS ARE TO BE IN ACCORDANCE WITH TABLE 8.1 OF AS3798-2007.
E11 MINIMUM RELATIVE COMPACTION STANDARDS FOR EARTHWORKS ARE TO BE IN ACCORDANCE WITH TABLE 5.1 OF AS3798-2007.
E12 FOR SETTING OUT DETAILS OF ROADS AND KERB REFER TO TYPICAL CROSS SECTIONS, ROAD SETTING OUT DETAILS AND INTERSECTION DETAILS.
E13 LOTS ARE TO BE GRADED EVENLY BETWEEN FINISHED SURFACE LEVELS SHOWN UNLESS OTHERWISE NOTED.
E14 EXCESS MATERIAL FROM EXCAVATION IS TO BE MOVED TO FUTURE STAGE.
E15 REFER VEGETATION MANAGEMENT PLAN FOR CLEARING DETAILS.
E16 ALL EXISTING SERVICES SHALL BE CHECKED FOR CLEARANCE PRIOR TO CONSTRUCTION.
E17 FINISHED SURFACE LEVELS SHOWN ON ALLOTMENTS (EXCLUDING VERGES) ARE AT COMPLETION OF EARTHWORKS AND TOPSOILING.
E18 ALL AREAS EXPOSED BY EARTHWORKS SHALL BE TOPSOILED AND GRASSED BY DRILL SEEDING EXCEPT THAT HYDROMULCHING IS REQUIRED ON BATTERS STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL. ALL AREAS TO BE GRASSED WILL HAVE 80% ROOT MAT AT THE END OF DEFECTS LIABILITY PERIOD AND SHALL BE FREE OF ROCK AND LOOSE STONE WHEN WORKS ARE TAKEN 'ON MAINTENANCE'.
E19 WHERE BATTERS FRONT A ROAD, ENSURE THERE IS AN EXTENSION OF VERGE GRADE INTO LOT WITH GRADE TO MATCH. REFER FNOROC STD. DWG. S1005 FOR DETAILS.

DRAINAGE

- D1 STORMWATER DRAINAGE PIPE SHALL BE RCP FJ CLASS 2 PIPE UNO. JOINTS TO HAVE MANUFACTURER APPROVED BANDS AT ALL JOINTS TO PREVENT MOVEMENT OF FINE MATERIAL THROUGH JOINT e.g. ROCLA SAND BANDS.
D2 BEDDING SHALL BE TYPE H2S AS SPECIFIED IN AS3798.
D3 PIPE LAYING SHALL COMMENCE AT THE DOWNSTREAM END OF THE WORKS AT ALL TIMES.
D4 STORMWATER HEADWALLS TO BE CONSTRUCTED AS DETAILED ON FNOROC STANDARD DRAWING S1080. SEEK SUPERINTENDENTS APPROVAL OF VARIATION PRIOR TO CONSTRUCTION. LIDS SHALL BE CAST AFTER COMPLETION OF ALL EARTHWORKS.
D5 STORMWATER KERB INLET PITS TO BE CONSTRUCTED AS DETAILED ON FNOROC STANDARD DRAWINGS S1050, S1055 AND S1090 U.N.O. REFER PLANS FOR POSITION OF LINTEL IN RELATION TO GRATE. THE NOTATIONS OF "SAG" AND "ON-GRADE" ON DRAINAGE LONG SECTIONS RELATES TO FLOW CHARACTERISTICS - NOT GRATE/INLET ARRANGEMENT.
D6 ALL "FINISHED SURFACE LEVELS" ON STORMWATER LONG SECTIONS ARE BASED ON TOP OF KERB FOR KERB INLETS OR TOP OF MANHOLE FOR MANHOLES AND GPT'S.
D7 SUBSOIL DRAIN MIN GRADE 0.5%. REFER FNOROC STD DWG S1095 FOR DETAILS.
D8 ALL STORMWATER DRAINAGE LINES SHALL HAVE CCTV SURVEY COMPLETED IN ACCORDANCE WITH THE FNOROC DEVELOPMENT MANUAL.
D9 ALL TOP OF PIT, INLETS AND GPT UNITS TO BE CONFIRMED BY CONTRACTOR ON SITE PRIOR TO ORDERING. ANY VARIATION IN LEVELS FROM THE DESIGN PLANS TO BE REPORTED TO THE SUPERINTENDENT.
D10 ALL TOP OF PIT, INLETS AND GPT UNITS TO BE CONFIRMED BY CONTRACTOR ON SITE PRIOR TO ORDERING. ANY VARIATION IN LEVELS FROM THE DESIGN PLANS TO BE REPORTED TO THE SUPERINTENDENT.
D11 STORMWATER INFRASTRUCTURE TESTING AND HOLD POINTS SHALL BE AS PER THE FNOROC "CONSTRUCTION PROCEDURES" MANUAL.

WATER

- W1 CONTRACTOR SHALL ADVISE DOUGLAS SHIRE COUNCIL PRIOR TO UNDERTAKING ANY SEWERAGE AND WATER RELATED WORK.
W2 COMPLY WITH FNOROC - STANDARD DRAWINGS.
W3 POTABLE WATER MAINS TO BE INSTALLED 2.80m FROM PROPERTY BOUNDARY U.N.O. GENERALLY IN ACCORDANCE WITH FNOROC STD. DWG S1010.
W4 CONNECTION TO EXISTING MAINS TO BE CARRIED OUT BY DOUGLAS SHIRE COUNCIL AT THE CONTRACTORS EXPENSE.
W5 ALL PVC WATER MAINS SHALL BE CLASS 18 PVC-M RUBBER RING JOINTED U.N.O. ALL DICL WATER MAINS SHALL BE PN35 DICL RUBBER RING JOINTED U.N.O. ALL 630 POLY PIPES SHALL BE MDPE CLASS 18.
W6 WATER MAINS 2250 OR GREATER SHALL HAVE 900mm MINIMUM COVER.
W7 BEDDING AND SURROUND TO PIPES AND FITTINGS SHALL BE IN ACCORDANCE WITH FNOROC STANDARD DRAWING S2016.
W8 HYDRANTS AND VALVES ARE TO BE NYLON POWDER COATED OR EQUIVALENT AND HYDRANTS ARE TO BE OF THE MAN-FLOW TYPE.
W9 HYDRANTS TO BE IDENTIFIED BY KERB MARKER PLATE AND BLUE RETRO-REFLECTIVE MARKER IN ACCORDANCE WITH FNOROC STANDARD DRAWING S2010 & S2009.
W10 VALVES TO BE IDENTIFIED BY KERB MARKER PLATE AND YELLOW RETRO-REFLECTIVE MARKER IN ACCORDANCE WITH FNOROC STANDARD DRAWING S2010.
W11 WATER MAINS CROSSING ROADS SHALL BE PN35 DICL FOR THE FULL ROAD CROSSING WIDTH, FINISHING 100mm BEHIND THE BACK OF KERB AND CHANNEL AT A MINIMUM AND AS SHOWN ON THE DRAWINGS.
W12 MINIMUM TEST PRESSURE OF WATER MAINS SHALL BE 1200kPa IN ACCORDANCE WITH DOUGLAS SHIRE COUNCIL AND FNOROC SPECIFICATION.
W13 EXISTING HYDRANTS OR VALVES SHALL BE PROVIDED WITH NEW COVER BOXES AND SURROUNDS AS PER FNOROC STD. DWGS. S2006 AND S2005.
W14 WHERE VALVE SURROUNDS ARE TO BE SET IN CONCRETE, A COMPRESSIBLE LAYER IS TO BE PROVIDED TO ALLOW FOR MAINTENANCE.
W15 LOWER WATER MAIN UNDER ROADS AS NECESSARY TO AVOID SUBGRADE IMPROVEMENT LAYER IF APPLICABLE.
W16 WATER INFRASTRUCTURE TESTING AND HOLD POINTS SHALL BE AS PER THE FNOROC "CONSTRUCTION PROCEDURES" MANUAL.

SEWER

- S1 PROPERTY CONNECTION BRANCHES SHALL BE 100 DIA. AND TERMINATE AT THE INLET END OF THE INSPECTION PIPE. THE END SHALL BE SEALED WITH PLUG AND CLIP AND THE INVERT LEVEL OF THE BEND SHALL BE AS DIRECTED BY THE SUPERINTENDENT.
S2 ALL SEWER MAINS SHALL BE 150 DIA. UPVC CLASS DRV S210 R.R.J. UNLESS NOTED OTHERWISE.
S3 MANHOLE LIDS TO BE CONSTRUCTED 50mm ABOVE GROUND LEVEL OR FLUSH WITH PATHWAYS, ROADWAYS AND PAVED SURFACES.
S4 ENSURE MANHOLES ARE 1.5m CLEAR ON 3 SIDES FROM BATTERS. STEEPEN BATTERS LOCALLY IF REQUIRED. MEASUREMENT TAKEN AS A RADIUS AROUND THE CENTRE OF LID.
S5 ENSURE MANHOLES ARE MIN 0.3m CLEAR FROM PROPERTY BOUNDARIES.
S6 ENSURE HCB'S ARE MIN 0.5m CLEAR FROM PROPERTY BOUNDARIES.
S7 WHERE SEWER IS IN VERGE, E2 HCB'S SHALL EXTEND PAST TOP OF BATTER MIN 1.0m.
S8 SEWER INFRASTRUCTURE TESTING AND HOLD POINTS SHALL BE AS PER THE FNOROC "CONSTRUCTION PROCEDURES" MANUAL.

GEOTECHNICAL

- G11 ETS GEOTECHNICAL HAVE PREPARED A GEOTECHNICAL INVESTIGATION REPORT DATED AUGUST 2019. THE CONTRACTOR IS TO COMPLY WITH THE REPORT OR NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
G12 ALL EARTHWORKS SHALL BE SUPERVISED IN ACCORDANCE WITH L1 OF AS3798. THE CONTRACTOR SHALL EMPLOY AN RPEQ GEOTECHNICAL CONSULTANT WHO SHALL PROVIDE A CERTIFICATE THAT THE WORKS HAVE BEEN COMPLETED SATISFACTORILY IN ACCORDANCE WITH THE SPECIFICATION AND TO LEVEL 1 OF AS 3798.
G13 ALL BATTERS STEEPER THAN 1 IN 2 AND HIGHER THAN 1.5m ARE TO BE CHECKED BY A GEOTECHNICAL ENGINEER AND CERTIFIED AS TO THEIR STABILITY TO SATISFY DOUGLAS SHIRE COUNCIL.
G14 ALL STRUCTURE DESIGN CRITERIA SHALL BE CONFIRMED ONCE A GEOTECHNICAL INVESTIGATION HAS BEEN COMPLETED. THIS INCLUDES PAVEMENT DESIGN.
G15 ALL BATTERS TO BE CONFIRMED BY GEOTECHNICAL INVESTIGATION RECOMMENDATIONS.

ROADWORKS

- R1 PAVEMENT DESIGN IS BASED ON SUBGRADE RESULTS AS PER GEOTECHNICAL REPORT AND IS SUBJECT TO REVISION ON THE BASIS OF CONFIRMATORY CBR TESTS OF THE SUBGRADE AT TIME OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE 7 No. CONFIRMATORY SUBGRADE SOAKED CBR TESTING TO THE SUPERINTENDENT AS SOON AS POSSIBLE LOCATIONS TO BE AGREED WITH THE SUPERINTENDENT.
R2 EXCAVATE OR FILL AS NECESSARY TO PAVEMENT/SUBGRADE INTERFACE AS DESCRIBED IN THE SPECIFICATION AND EARTHWORKS NOTES.
R3 PRIOR TO PLACING ROAD PAVEMENT MATERIAL THE SUBGRADE SHALL BE TESTED AND PROOF ROLLED IN THE PRESENCE OF THE SUPERINTENDENT AND DOUGLAS SHIRE COUNCIL'S INSPECTING OFFICER.
R4 PAVEMENT CONSTRUCTION DETAILS SHALL BE AS SHOWN ON DRAWINGS.
R5 SUBGRADE AND PAVEMENT TESTING AND HOLD POINTS SHALL BE AS PER THE FNOROC "CONSTRUCTION PROCEDURES" MANUAL.

SAFETY IN CONSTRUCTION
CONSTRUCTION ACTIVITY CAN BE HAZARDOUS. POTENTIAL SAFETY HAZARDS CONSIDERED BY THE DESIGNERS TO HAVE A HIGHER RISK THAN NORMAL. CONSTRUCTION ACTIVITY ARE IDENTIFIED WITH APPROPRIATE NOTES ON THESE DRAWINGS. IT SHOULD BE NOTED THAT DESIGNERS HAVE A LOWER UNDERSTANDING OF THE RISKS INVOLVED IN CONSTRUCTION COMPARED WITH THAT OF A COMPETENT CONTRACTOR. IT IS THEREFORE ESSENTIAL THAT AN ADEQUATE SAFETY PLAN FOR THE WORKS IS PREPARED BY THE CONTRACTOR. SAFETY PLANS ARE TO BE PREPARED IN COMPLIANCE WITH THE STATUTORY REQUIREMENTS. THE DESIGNERS MAY NOT BE AWARE OF ALL SAFETY RISKS AND HAZARDS INVOLVED IN THIS PROJECT AND THE ABSENCE OF COMMENT DOES NOT IMPLY THAT THERE ARE ONLY LOW LEVEL RISKS OF HAZARDS INVOLVED IN THE PROJECT. APPROPRIATE WORK METHOD STATEMENTS ARE TO BE PREPARED FOR ANY HIGH RISK ACTIVITY BY THE CONTRACTOR. THE DESIGNERS ARE AVAILABLE TO BE CONSULTED WHEN REQUIRED CONCERNING THEIR AREA OF CONTROL WITH REGARD TO SAFETY PLANS.

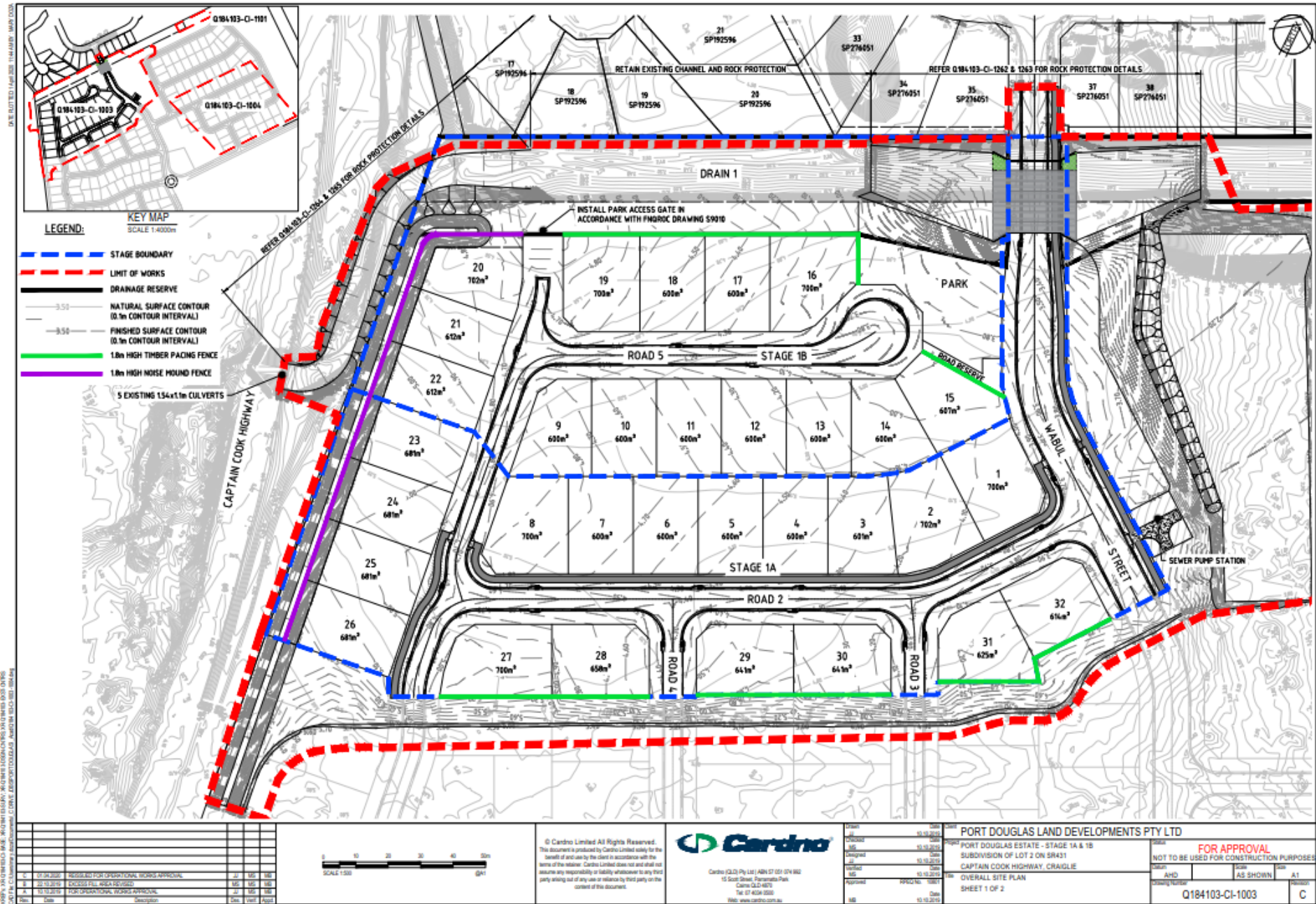
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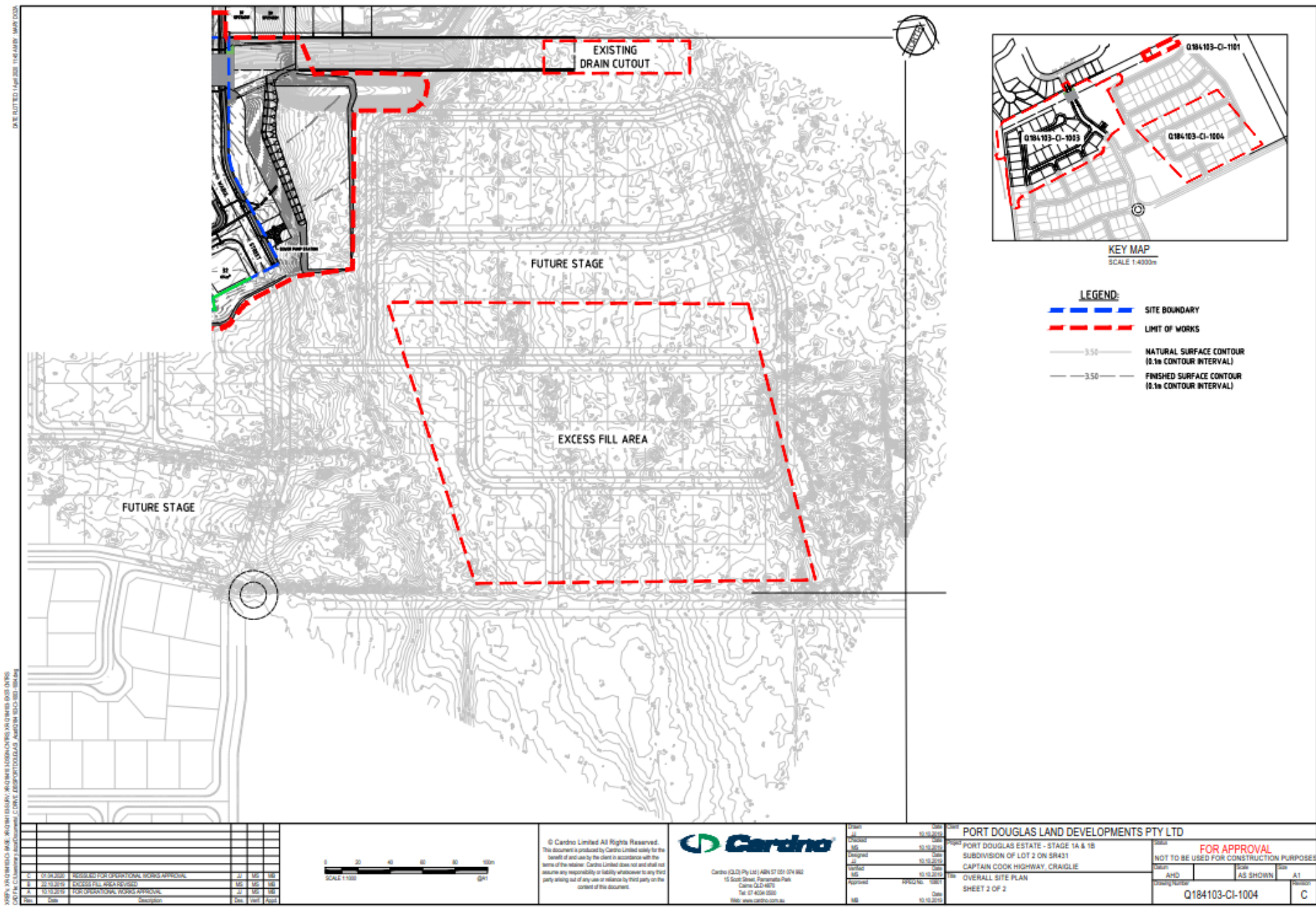


Table with 2 columns: Date, Status. Includes dates for 'Issued', 'Revised', 'Approved', and 'Released'.

PORT DOUGLAS LAND DEVELOPMENTS PTY LTD
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES
Q184103-CI-1002







DATE PLOTTED 14/06/2019 11:46:00 HWY COOL

PROJECT: PORT DOUGLAS LAND DEVELOPMENTS PTY LTD (SR431)  
CLIENT: CARDNO LAND DEVELOPMENTS PTY LTD  
DRAWN: JIMMY CHAN  
CHECKED: JIMMY CHAN  
DATE: 14/06/2019

Date	By	Description	Disc	Unit	Appr
12/11/2018	JC	PROVISIONAL WORKS APPROVAL	MIS	MIS	188
20/10/2019	MIS	EXCESS FILL AREA REVISION	MIS	MIS	188
11/10/2019	JC	FOR OPERATIONAL WORKS APPROVAL	JC	MIS	188



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Drawn	Checked	Designed	Revised	Approved	Date
JC	MIS	MIS	MIS	MIS	15/10/2019
JC	MIS	MIS	MIS	MIS	10/10/2019
JC	MIS	MIS	MIS	MIS	10/10/2019
JC	MIS	MIS	MIS	MIS	10/10/2019

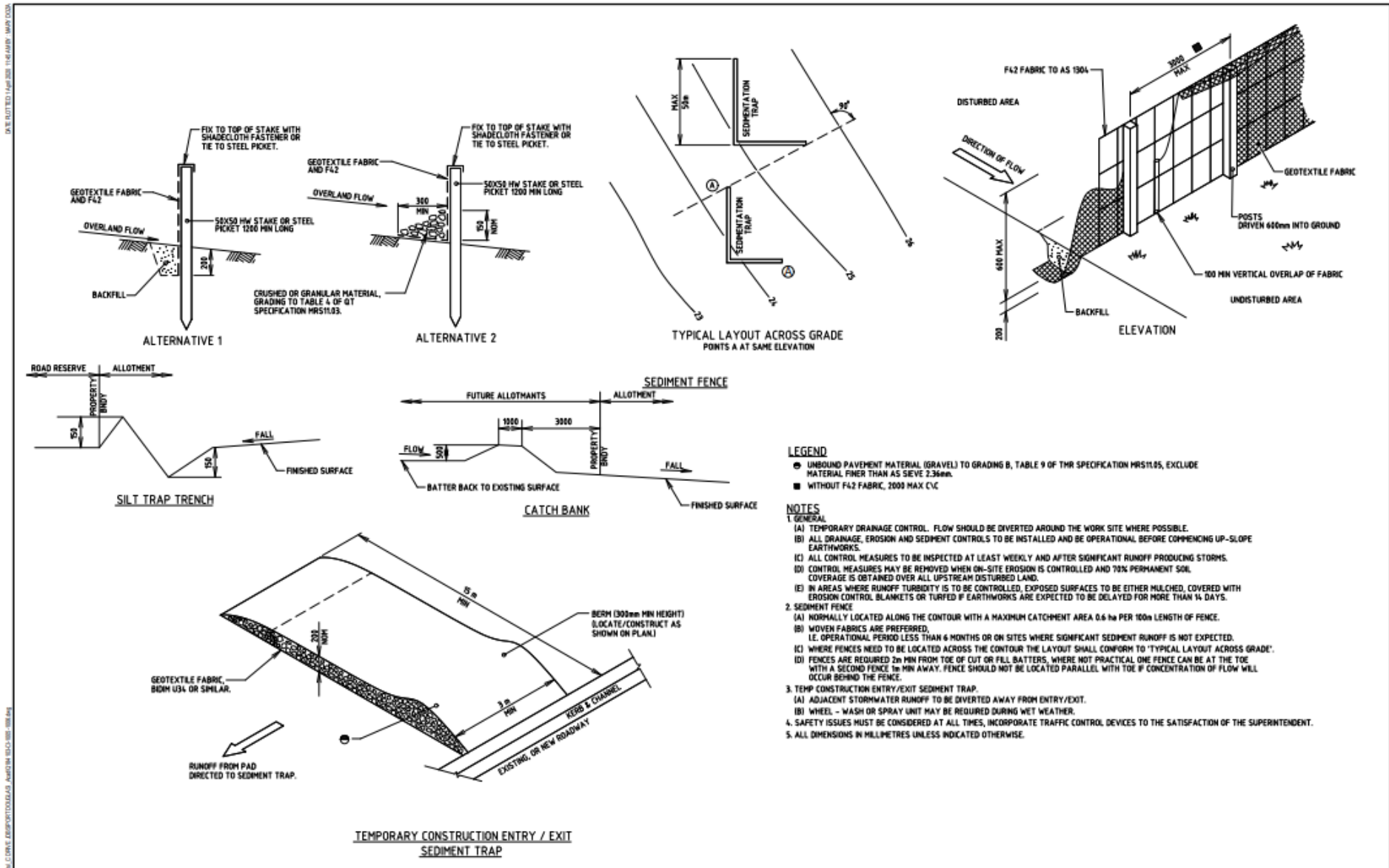
**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**

PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGLE

**FOR APPROVAL**  
NOT TO BE USED FOR CONSTRUCTION PURPOSES

Overall Site Plan  
SHEET 2 OF 2

Project No: Q184103-CI-1004  
Revision: C



- LEGEND**
- UNBOUND PAVEMENT MATERIAL (GRAVEL) TO GRADING B, TABLE 9 OF TMR SPECIFICATION MRS1105, EXCLUDE MATERIAL FINER THAN AS SIEVE 2.36mm.
  - WITHOUT F42 FABRIC, 2000 MAX C/C
- NOTES**
- 1. GENERAL**
- (A) TEMPORARY DRAINAGE CONTROL. FLOW SHOULD BE DIVERTED AROUND THE WORK SITE WHERE POSSIBLE.
  - (B) ALL DRAINAGE, EROSION AND SEDIMENT CONTROLS TO BE INSTALLED AND BE OPERATIONAL BEFORE COMMENCING UP-SLOPE EARTHWORKS.
  - (C) ALL CONTROL MEASURES TO BE INSPECTED AT LEAST WEEKLY AND AFTER SIGNIFICANT RUNOFF PRODUCING STORMS.
  - (D) CONTROL MEASURES MAY BE REMOVED WHEN ON-SITE EROSION IS CONTROLLED AND 70% PERMANENT SOIL COVERAGE IS OBTAINED OVER ALL UPSTREAM DISTURBED LAND.
  - (E) IN AREAS WHERE RUNOFF TURBIDITY IS TO BE CONTROLLED, EXPOSED SURFACES TO BE EITHER MULCHED, COVERED WITH EROSION CONTROL BLANKETS OR TURFED IF EARTHWORKS ARE EXPECTED TO BE DELAYED FOR MORE THAN 14 DAYS.
- 2. SEDIMENT FENCE**
- (A) NORMALLY LOCATED ALONG THE CONTOUR WITH A MAXIMUM CATCHMENT AREA 0.6 ha PER 100m LENGTH OF FENCE.
  - (B) WOVEN FABRICS ARE PREFERRED, I.E. OPERATIONAL PERIOD LESS THAN 6 MONTHS OR ON SITES WHERE SIGNIFICANT SEDIMENT RUNOFF IS NOT EXPECTED.
  - (C) WHERE FENCES NEED TO BE LOCATED ACROSS THE CONTOUR THE LAYOUT SHALL CONFORM TO 'TYPICAL LAYOUT ACROSS GRADE'.
  - (D) FENCES ARE REQUIRED 2m MIN FROM TOE OF CUT OR FILL BATTERS, WHERE NOT PRACTICAL ONE FENCE CAN BE AT THE TOE WITH A SECOND FENCE 1m MIN AWAY. FENCE SHOULD NOT BE LOCATED PARALLEL WITH TOE IF CONCENTRATION OF FLOW WILL OCCUR BEHIND THE FENCE.
- 3. TEMP CONSTRUCTION ENTRY/EXIT SEDIMENT TRAP.**
- (A) ADJACENT STORMWATER RUNOFF TO BE DIVERTED AWAY FROM ENTRY/EXIT.
  - (B) WHEEL - WASH OR SPRAY UNIT MAY BE REQUIRED DURING WET WEATHER.
- 4. SAFETY ISSUES MUST BE CONSIDERED AT ALL TIMES, INCORPORATE TRAFFIC CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT.**
- 5. ALL DIMENSIONS IN MILLIMETRES UNLESS INDICATED OTHERWISE.**

No.	Date	Description	Disc.	Drawn	Appr.
1	01.04.2022	ISSUED FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS
2	11.10.2019	FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS

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Drawn	Check	Date
MS	MS	15.10.2019
MS	MS	15.10.2019
MS	MS	15.10.2019
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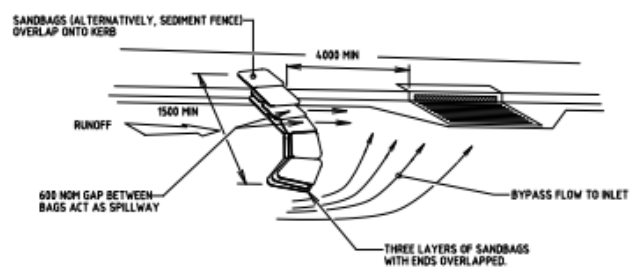
**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**

PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGLIE

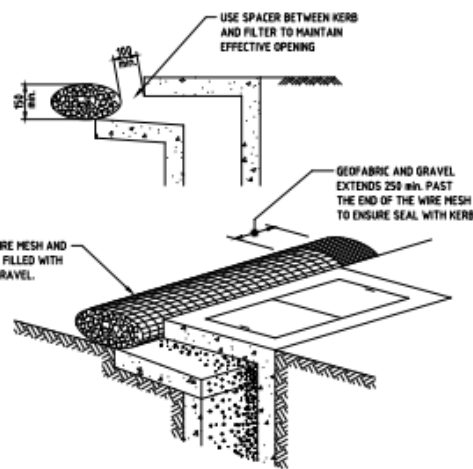
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Project No: Q184103-CI-1005  
 Revision: B

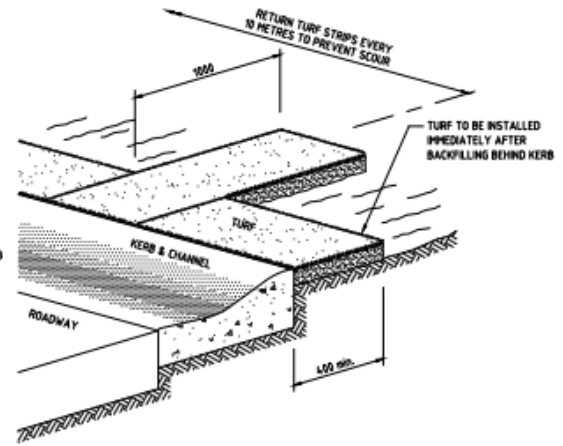
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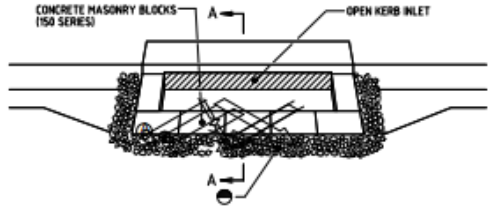
**ON GRADE KERB INLET SEDIMENT TRAP**



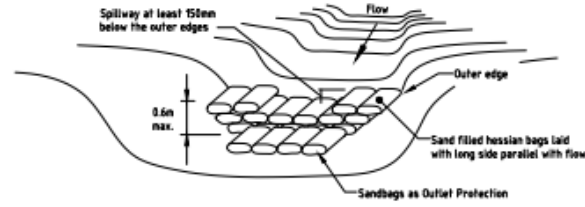
**FILTER TO SIDE INLET GULLY PIT**  
NOT TO SCALE



**TURF STRIPS TO KERBLINE**  
NOT TO SCALE



**SECTION A-A**  
**SAG INLET SEDIMENT TRAP, ST-1**  
A STABILISED BYPASS OVERLAND FLOW PATH SHOULD EXIST ADJACENT TO INLET IN GENUINE SAGS.



**SAND BAG CHECK DAM SECTION DETAIL**  
NOT TO SCALE

**NOTES**

1. FIELD INLET
  - A) A STABILISED BYPASS OVERLAND FLOW PATH SHOULD EXIST ADJACENT TO THE FIELD INLET.
  - B) WATER LEVEL CONTROL PERIMETER BANKS MAY BE REQUIRED.
  - C) BLOCKS TO BE RESTRAINED BY A HORIZONTAL TIMBER RAIL AT BLOCK JOINT HEIGHT FIXED TO TIMBER STAKES AT CORNERS.
2. CHECK DAMS
  - A) CATCHMENT AREA LIMITED TO 4 ha
  - B) USE IN MINOR OPEN DRAINS ONLY, VELOCITY CONTROL, SEDIMENT COLLECTION IS A SECONDARY PURPOSE.
3. STRAW BALE BANKS
  - A) BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
  - B) EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 100mm ON THE DOWNSTREAM SIDE AND PLACED SO THE BINDINGS ARE HORIZONTAL.
  - C) BALES SHALL BE SECURELY ANCHORED IN PLACE WITH EITHER TWO STAKES OR STEEL PICKETS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER.
  - D) INSPECTIONS SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED. REPLACE AT LEAST 3 MONTHLY.
4. SAFETY ISSUES MUST BE CONSIDERED AT ALL TIMES, INCORPORATE TRAFFIC CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT.
5. ALL DIMENSIONS IN MILLIMETRES UNLESS INDICATED OTHERWISE.

**LEGEND**

- GRAVEL FILTER, REFER GRADING B, TABLE 9 OF DT SPECIFICATION PART 10.5, EXCLUDE MATERIAL FINER THAN AS SIEVE 2.36mm.

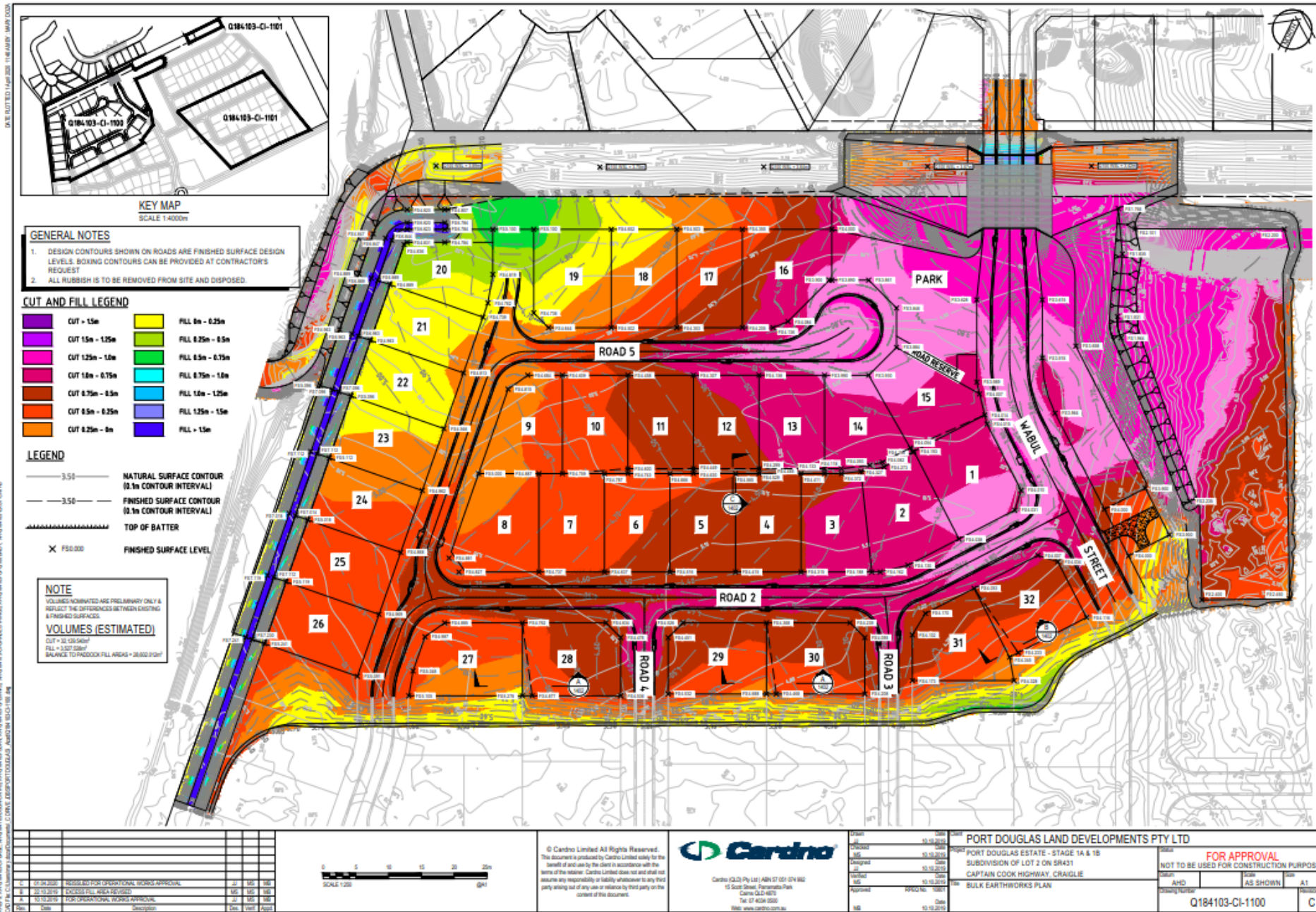
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1	01/04/2019	ISSUED FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS
2	11/10/2019	FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS

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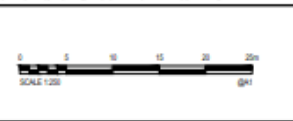
<p>DATE: 15/10/2019 TIME: 15:10:20 DRAWN: JL CHECKED: MS ISSUED: 15/10/2019 APPROVED: MS</p>	<p>PROJECT: PORT DOUGLAS ESTATE - STAGE 1A &amp; 1B SUBDIVISION OF LOT 2 ON SR431 CAPTAIN COOK HIGHWAY, CRAIGLIE</p>	<p>FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES</p>
<p>PROJECT NO: 184103</p>	<p>SCALE: AS SHOWN</p>	<p>REVISION: A1</p>
<p>SHEET 2 OF 2</p>	<p>Q184103-CI-1006</p>	<p>B</p>





DATE PLOTTED 14/03/2019 11:40:00 AM DRAWN BY: MARY COOK  
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Date	Description	By	Check	App'd
07/04/2018	PROVISIONAL WORKS APPROVAL	JL	MS	MS
22/10/2018	EXCESS FILL AREA REVISED	MS	MS	MS
11/10/2018	FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS
11/10/2018	FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS



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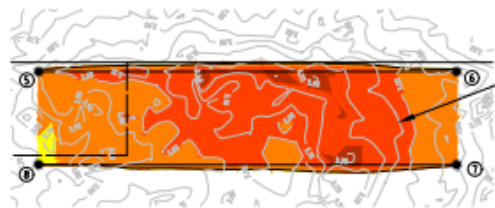
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002	15/10/2018	JL	MS	MS
003	15/10/2018	JL	MS	MS
004	15/10/2018	JL	MS	MS
005	15/10/2018	JL	MS	MS

PORT DOUGLAS LAND DEVELOPMENTS PTY LTD  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGLIE  
 BULK EARTHWORKS PLAN

FOR APPROVAL  
 NOT TO BE USED FOR CONSTRUCTION PURPOSES

Client	Scale	Sheet
AHD	AS SHOWN	A1
Drawing Number	Revision	
Q184103-CI-1100	C	





**DRAIN REQUIRES EXCAVATION TO IL 2.75m FOR Q100 FLOW AS PER FLOOD IMPACT ASSESSMENT.**

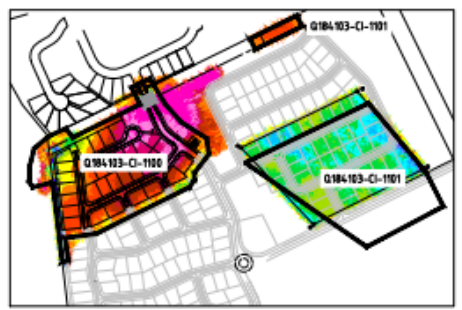
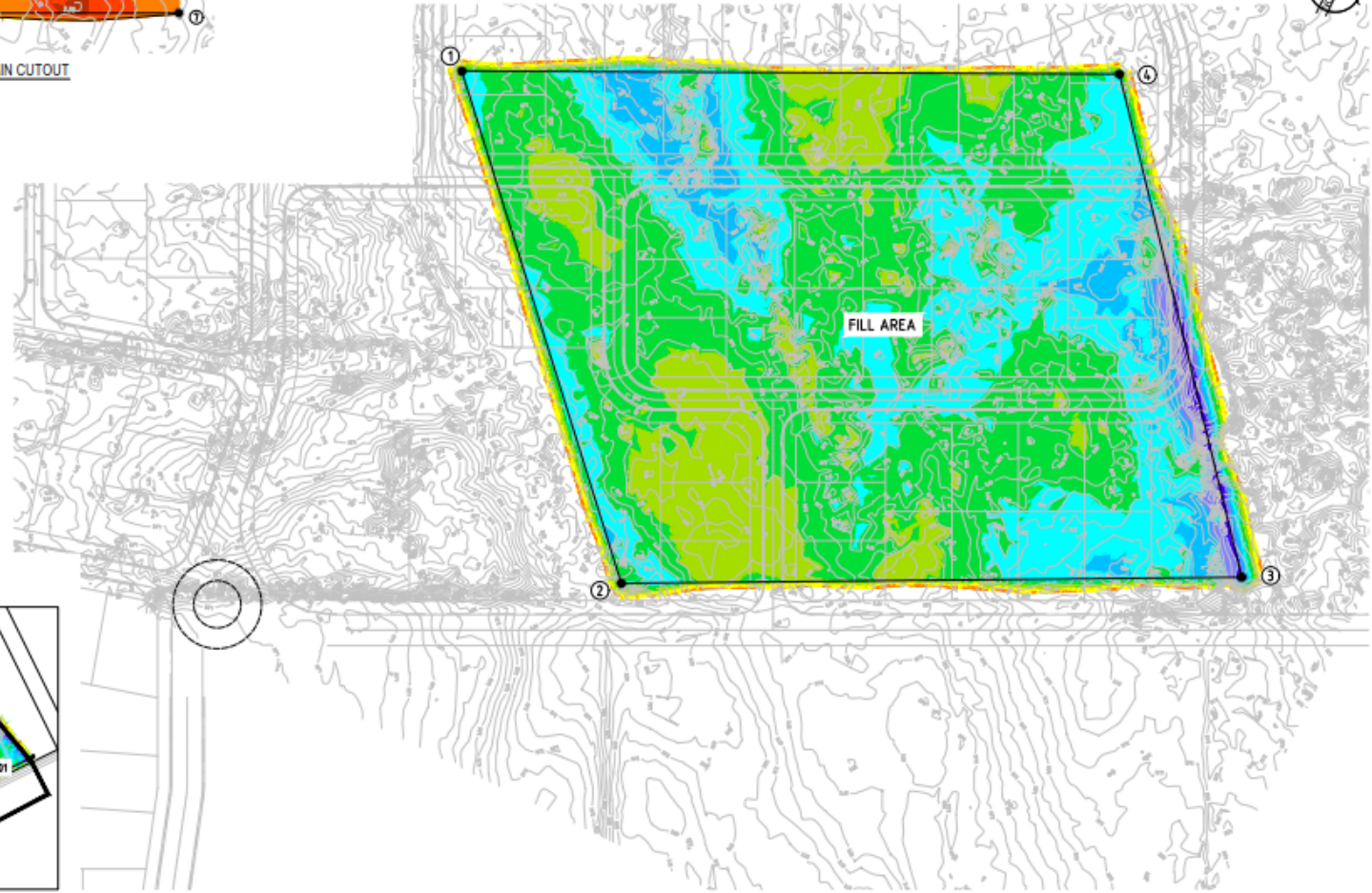
**NOTE**  
 VOLUMES NOMINATED ARE PRELIMINARY ONLY & REFLECT THE DIFFERENCES BETWEEN EXISTING & FINISHED SURFACES.  
**VOLUMES (ESTIMATED)**  
 FILL AREA = 27,915m<sup>3</sup>  
 CUT VOLUMES NOT PRESENTED FOR FILL AREA.  
 NO CUT REQUIRED.  
 RETAIN EXISTING LEVELS WHERE CUT IS NOMINATED.

**EXISTING DRAIN CUTOUT**  
 SCALE 1:500m

SETOUT POINTS			
PT No.	EASTING	NORTHING	RL
1	337214.779	8179535.089	4.100
2	337230.888	8179493.134	4.100
3	337237.407	8179487.307	3.400
4	337475.333	8179632.136	3.400
5	337230.888	8179722.293	2.750
6	337311.420	8179781.872	2.750
7	337330.224	8179743.959	2.750
8	337238.383	8179704.337	2.750

**CUT AND FILL LEGEND**

	CUT - 15m		FILL 0m - 0.25m
	CUT 15m - 125m		FILL 0.25m - 0.5m
	CUT 125m - 10m		FILL 0.5m - 0.75m
	CUT 10m - 0.75m		FILL 0.75m - 1.0m
	CUT 0.75m - 0.5m		FILL 1.0m - 1.25m
	CUT 0.5m - 0.25m		FILL 1.25m - 1.5m
	CUT 0.25m - 0m		FILL - 1.5m



**KEY MAP**  
 SCALE 1:4000m

Date	By	Description	Disc	Check	App'd
07/04/2019		PROCEEDING FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS
02/10/2019		EXCESS FILL AREA REVIEW	MS	MS	MS
11/10/2019		FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS



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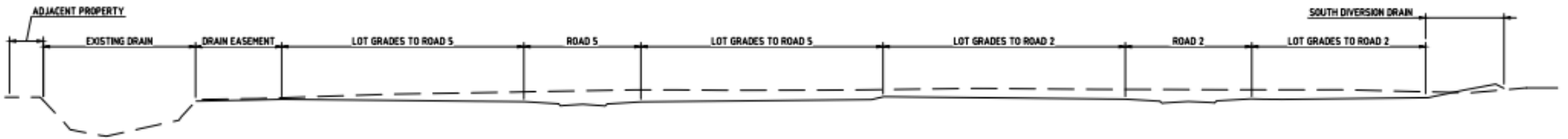
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MS	MS	10/10/2019
MS	MS	10/10/2019
MS	MS	10/10/2019
MS	MS	10/10/2019
MS	MS	10/10/2019

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGIE  
 EXCESS CUT STOCKPLING PLAN

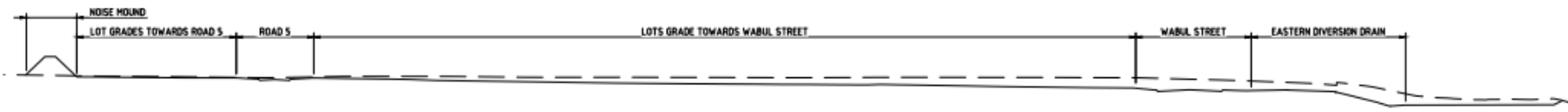
**FOR APPROVAL**  
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AHD	SCALE	DATE
	AS SHOWN	A1
Drawing Number	Revision	
Q184103-CI-1101	C	

DATE PLOTTED: 14/01/2019 11:07 AM BY: MARK COOK



SECTION 1  
SCALE 1:250m



SECTION 2  
SCALE 1:400m



LOCALITY PLAN  
SCALE 1:2000m

S:\WP\184103\CAD\184103\_CI-1102.dwg  
DATE PLOTTED: 14/01/2019 11:07 AM BY: MARK COOK

No.	Date	Description	By	Check	Appr.
1	01/04/2018	ISSUED FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS
2	11/10/2018	FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS



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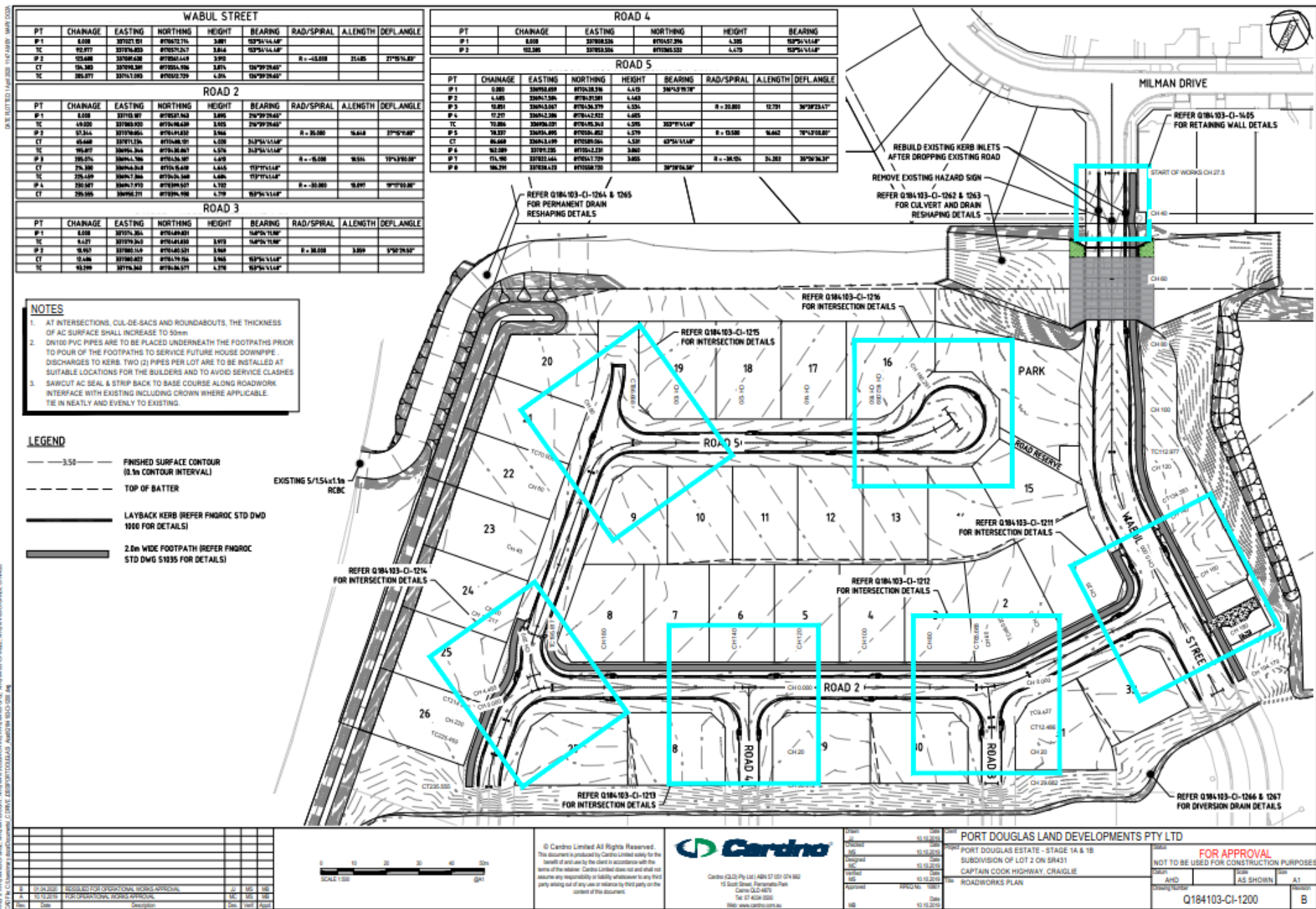
Cardno (NZ) Pty Ltd | ABN 57 051 074 802  
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Drawn	Scale	Date
MS	AS SHOWN	10/10/2018
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MS	AS SHOWN	10/10/2018

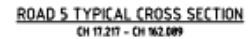
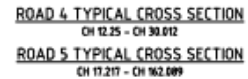
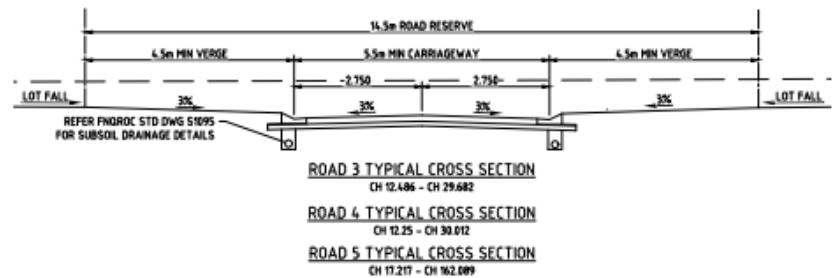
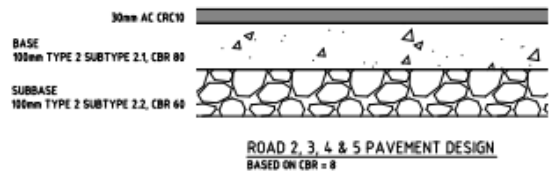
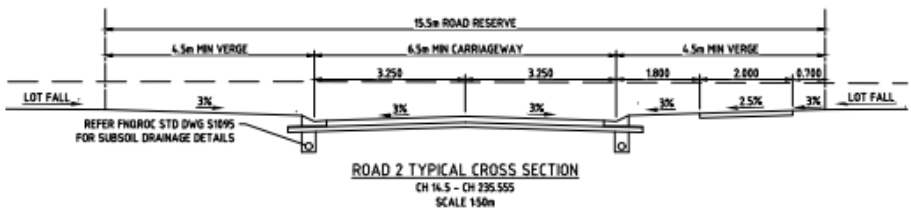
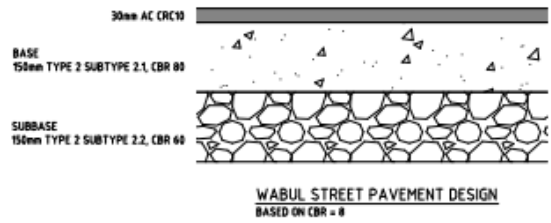
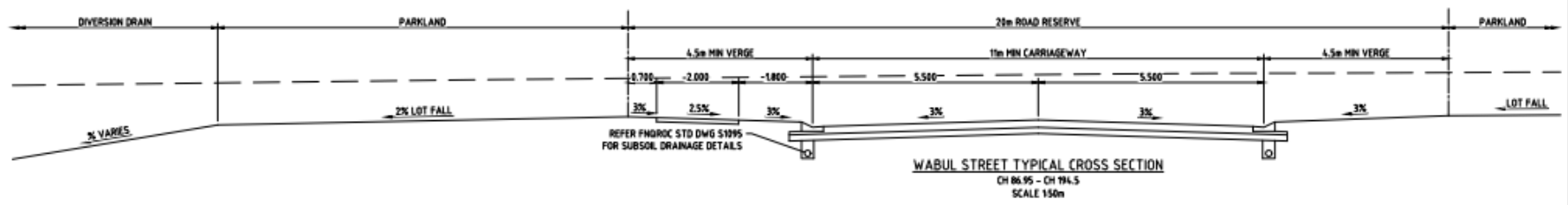
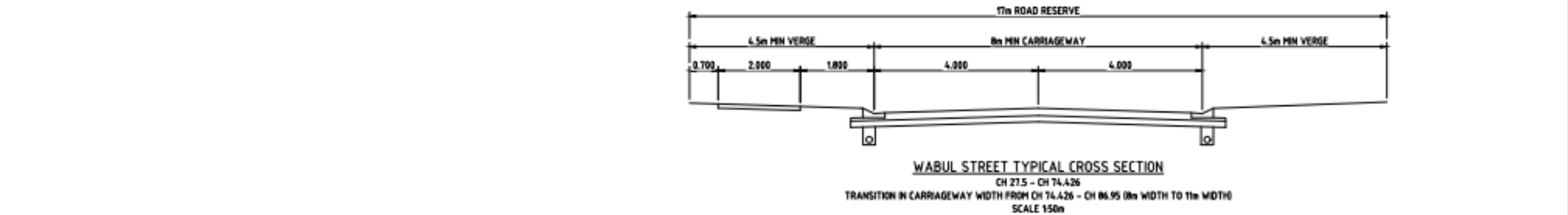
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PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGLIE

Client	Scale	Date
FOR APPROVAL	AS SHOWN	A1
Q184103-CI-1102		B





DATE PLOTTED 14/03/2019 11:07 AM BY: MARK COOK



No.	Date	Description	By	Check	Appr.
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2	11.10.2018	FOR OPERATIONAL WORKS APPROVAL	MS	MS	MS



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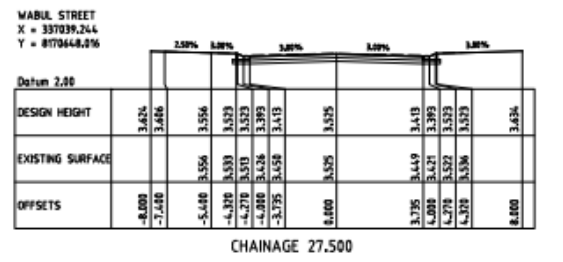
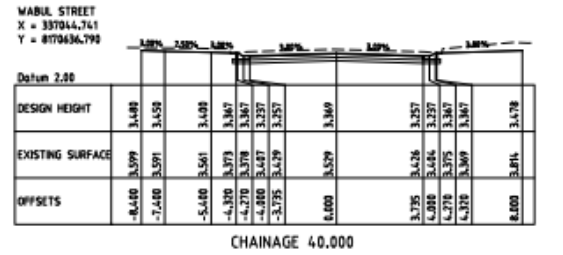
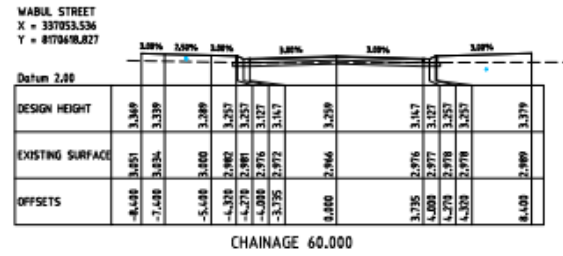
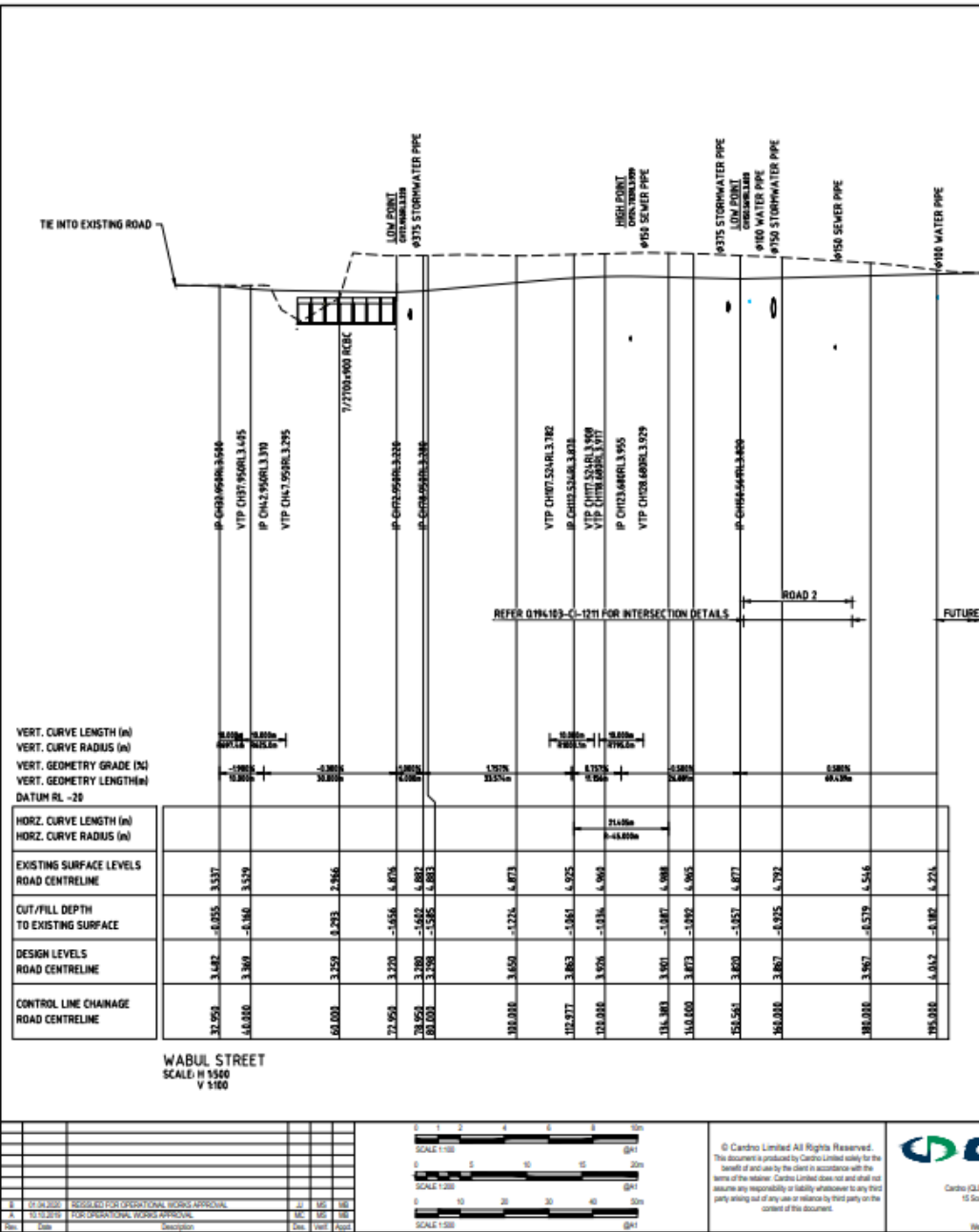
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MS	08/03/2018
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MS	15/03/2018
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PORT DOUGLAS LAND DEVELOPMENTS PTY LTD	
PROJECT	PORT DOUGLAS ESTATE - STAGE 1A & 1B
DESCRIPTION	SUBDIVISION OF LOT 2 ON SR431
LOCATION	CAPTAIN COOK HIGHWAY, CRAIGIE
DATE	15/03/2018
PROJECT NO.	18811
DATE	15/03/2018

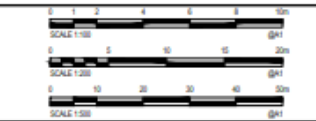
<b>FOR APPROVAL</b>	
NOT TO BE USED FOR CONSTRUCTION PURPOSES	
DATE	SCALE
AHD	AS SHOWN
Sheet No.	Person
Q184103-CI-1201	B

DATE PLOTTED 14/05/2019 11:57 AM BY: WARD COON

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2	12/12/2010	FOR OPERATIONAL REVIEW APPROVAL	W.C.	W.C.	W.C.
3	12/12/2010	FOR OPERATIONAL REVIEW APPROVAL	W.C.	W.C.	W.C.



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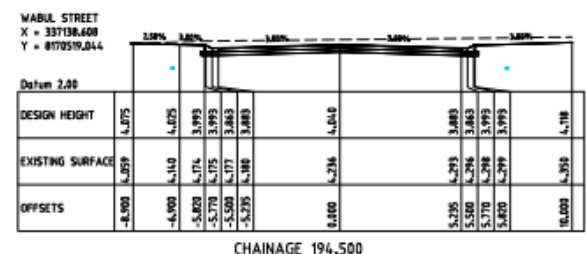
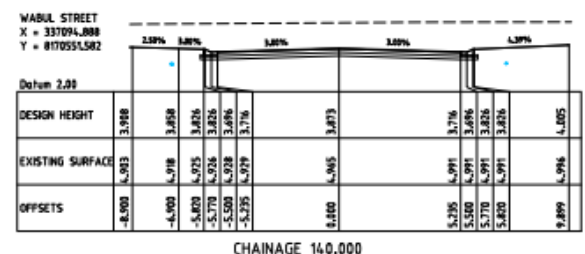
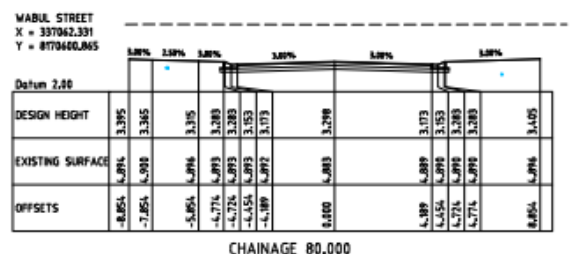
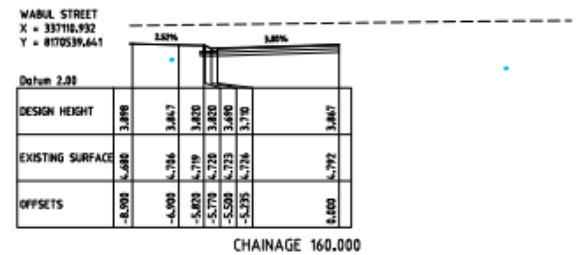
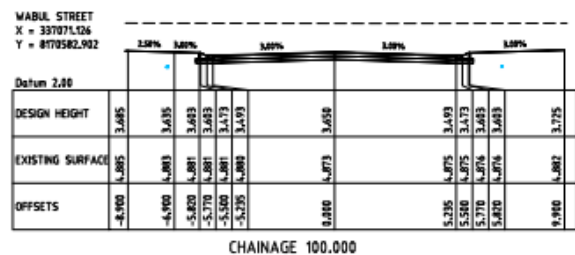
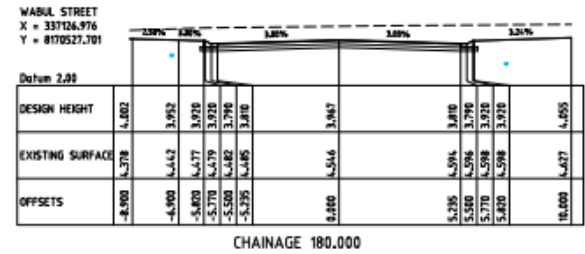
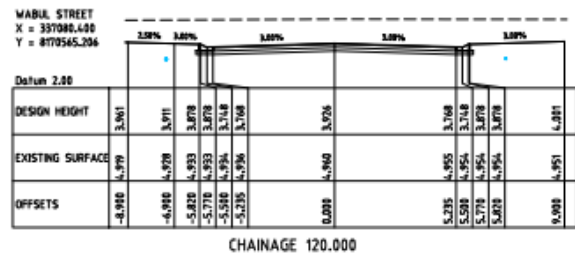
PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGIE

**FOR APPROVAL**  
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WABUL STREET LONGITUDINAL SECTION & CROSS SECTIONS

Q184103-CI-1202

W:\2019\201906\184103-CI-1203\184103-CI-1203-01.dwg (184103-CI-1203-01.dwg) - 184103-CI-1203-01.dwg  
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No.	Date	Description	By	Check	Appr.
1	01.04.2020	PROPOSED FOR OPERATIONAL WORKS APPROVAL			
2	10.10.2019	FOR OPERATIONAL WORKS APPROVAL			



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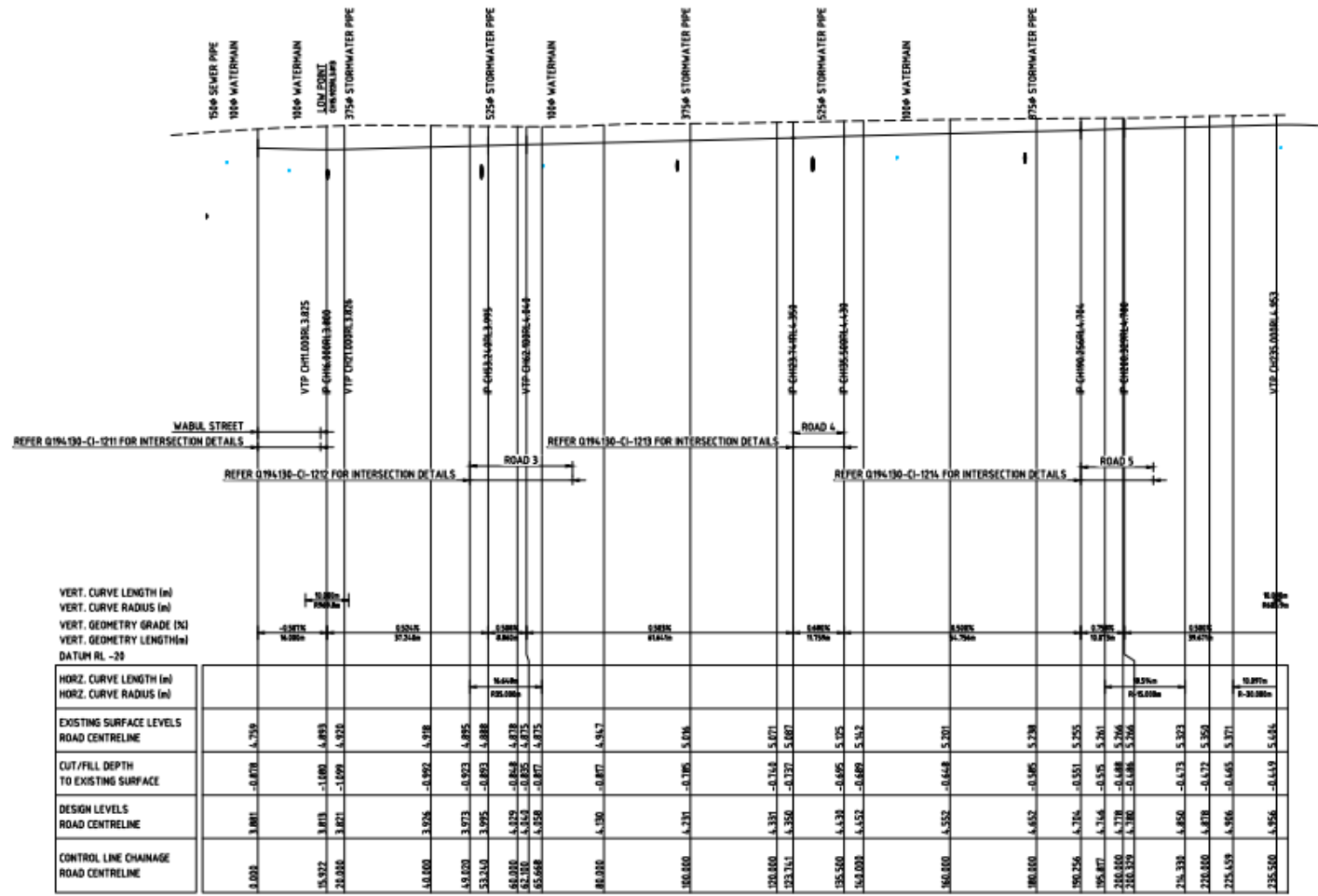
Drawn	Checked	Designed	Approved
15.10.2019	15.10.2019	15.10.2019	15.10.2019

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGIE  
 WABUL STREET CROSS SECTIONS

**FOR APPROVAL**  
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Client	Scale	Sheet
AHD	AS SHOWN	A1
Drawing Number	Q184103-CI-1203	
Revision	B	

DATE PLOTTED: 14/03/2019 11:47 AM BY: MARK COOK  
 V:\2019\PORT DOUGLAS\PORT DOUGLAS STAGE 1A & 1B\ROAD 2\ROAD 2 LONGITUDINAL.DWG  
 DATE: 14/03/2019 11:47 AM BY: MARK COOK



ROAD 2  
SCALE: H 1:500  
V 1:100

No.	Date	Description	By	Check	App'd
1	01.04.2019	ISSUED FOR OPERATIONAL WORKS APPROVAL	JC	MS	MS
2	11.10.2019	FOR OPERATIONAL WORKS APPROVAL	MS	MS	MS



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Drawn	Checked	Issue	Design	Issue	Approved
MS	MS	MS	MS	MS	MS

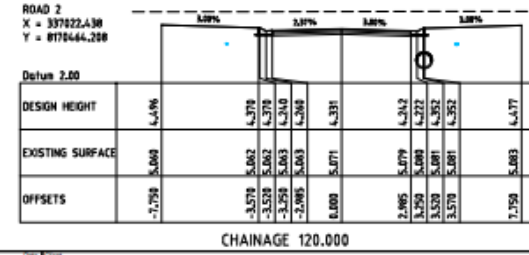
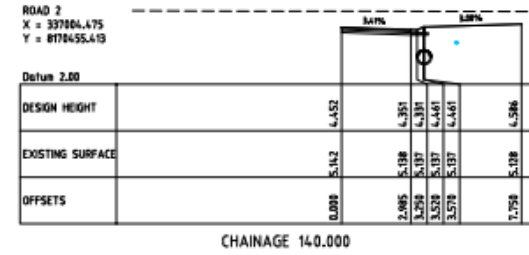
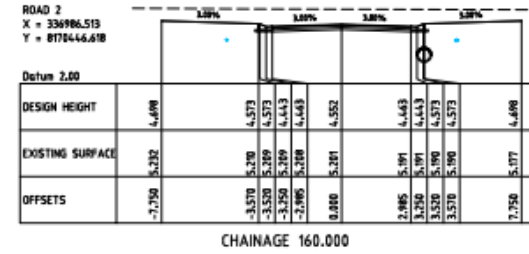
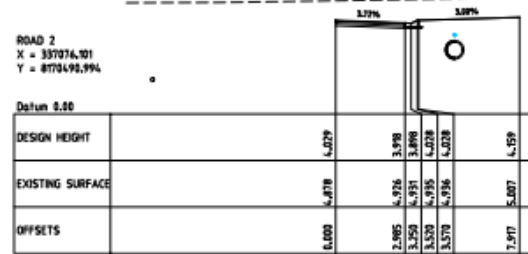
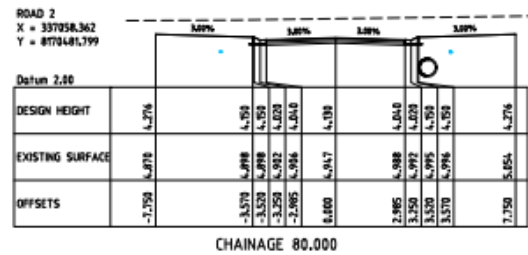
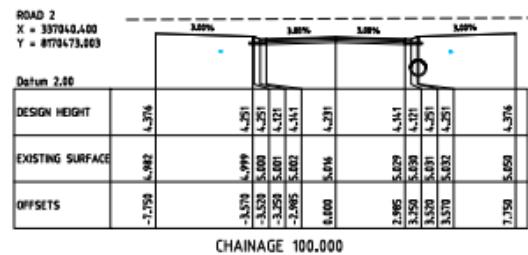
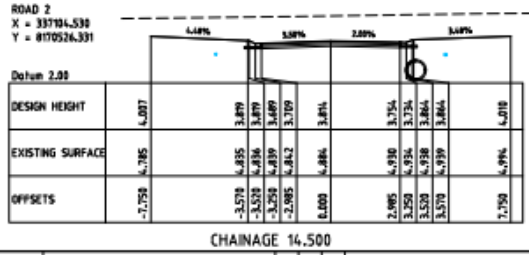
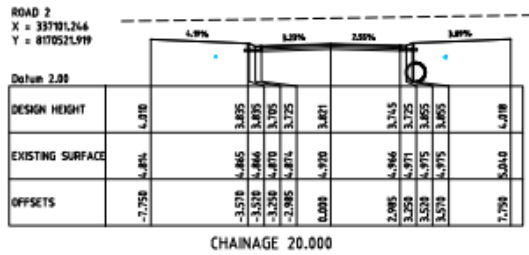
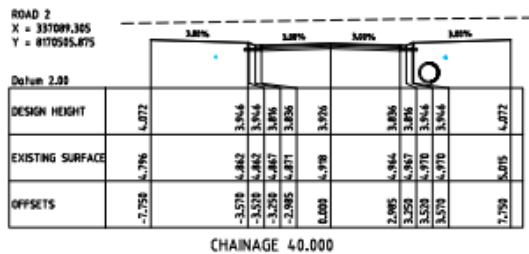
**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGLIE  
 ROAD 2 LONGITUDINAL SECTION

**FOR APPROVAL**  
 NOT TO BE USED FOR CONSTRUCTION PURPOSES

Client	Scale	Sheet
AHD	AS SHOWN	A1
Drawing Number	Q184103-CI-1204	
Revision	B	



DATE PLOTTED: 14/02/2019 11:47 AM BY: MARK COOK  
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 DATE PLOTTED: 14/02/2019 11:47 AM BY: MARK COOK



No.	Date	Description	Drawn	Check	App'd
1	01.04.2019	PROPOSED FOR OPERATIONAL WORKS APPROVAL			
2	11.10.2019	FOR OPERATIONAL WORKS APPROVAL			



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Date	By	Description
15.10.2019	MB	Checked
15.10.2019	MB	Drawn
15.10.2019	MB	Designed
15.10.2019	MB	Issued
15.10.2019	MB	Revised
15.10.2019	MB	Approved
15.10.2019	MB	Client

PORT DOUGLAS LAND DEVELOPMENTS PTY LTD

PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGIE

ROAD 2 CROSS SECTIONS  
SHEET 1 OF 2

FOR APPROVAL  
NOT TO BE USED FOR CONSTRUCTION PURPOSES

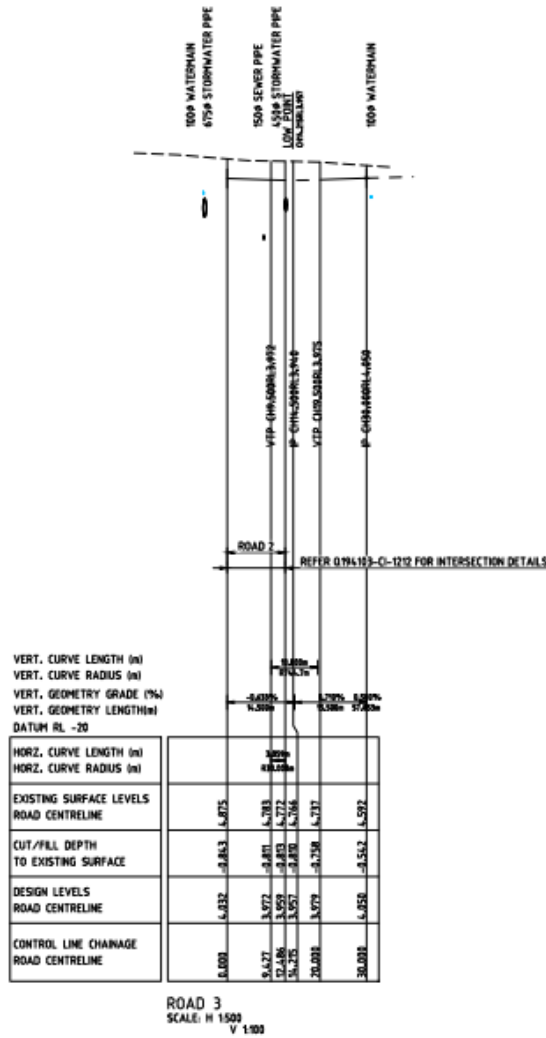
AS SHOWN  
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Q184103-CI-1205  
B



DATE PLOTTED 14/02/2019 11:07 AM BY: MARY COOKE

DRAWN BY: MARY COOKE; CHECKED BY: MARY COOKE; DESIGNED BY: MARY COOKE; PROJECT: PORT DOUGLAS ESTATE - STAGE 1A & 1B SUBDIVISION OF LOT 2 ON SR431 CAPTAIN COOK HIGHWAY, CRAIGLIE; ROAD 3 LONGITUDINAL SECTION & CROSS SECTIONS; Q184103-CI-1207; SCALE: H 1:500; V 1:100



**ROAD 3**  
X = 337080.524  
Y = 8178463.427

		1.00%	1.00%	1.00%	1.00%
<b>Datum 2.00</b>					
<b>DESIGN HEIGHT</b>		-4.211	-4.085	-3.975	-4.211
<b>EXISTING SURFACE</b>		-4.534	-4.577	-4.588	-4.627
<b>OFFSETS</b>		-7.250	-3.670	0.880	7.250

**CHAINAGE 30.000**

**ROAD 3**  
X = 337084.127  
Y = 8178472.408

		3.00%	3.00%	3.00%	3.00%
<b>Datum 2.00</b>					
<b>DESIGN HEIGHT</b>		-4.526	-4.400	-4.278	-4.526
<b>EXISTING SURFACE</b>		-4.715	-4.728	-4.729	-4.766
<b>OFFSETS</b>		-7.250	-3.670	0.880	7.250

**CHAINAGE 20.000**

**ROAD 3**  
X = 337080.822  
Y = 8178479.756

		3.00%	3.00%	3.00%	3.00%
<b>Datum 2.00</b>					
<b>DESIGN HEIGHT</b>		-4.095	-3.969	-3.859	-4.095
<b>EXISTING SURFACE</b>		-4.753	-4.746	-4.746	-4.780
<b>OFFSETS</b>		-7.250	-3.670	0.880	7.250

**CHAINAGE 12.486**

1	01.04.2020	PREPARED FOR OPERATIONAL WORKS APPROVAL	MC	100	100
2	11.10.2019	FOR OPERATIONAL WORKS APPROVAL	MC	100	100
Rev	Date	Description	By	Iss	Appr



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Drawn	MC	10/10/2019
Checked	MC	10/10/2019
ISS	MC	10/10/2019
Designed	MC	10/10/2019
Revised	MC	10/10/2019
Approved	MP/ML/MC	10/10/2019
Rev	By	Date

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**

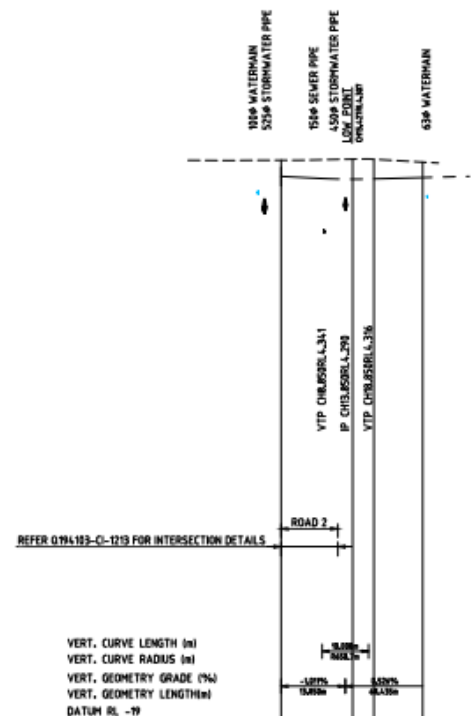
PROJECT: PORT DOUGLAS ESTATE - STAGE 1A & 1B SUBDIVISION OF LOT 2 ON SR431 CAPTAIN COOK HIGHWAY, CRAIGLIE

100: ROAD 3 LONGITUDINAL SECTION & CROSS SECTIONS

<b>FOR APPROVAL</b>	
<b>NOT TO BE USED FOR CONSTRUCTION PURPOSES</b>	
Author	Scale
Drawn	As Shown
Checked	Person
Drawing Number	
Q184103-CI-1207	B

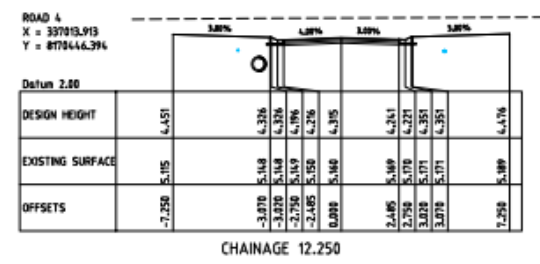
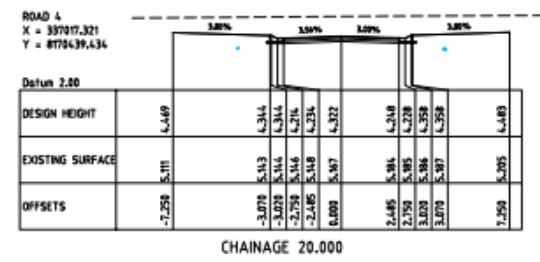
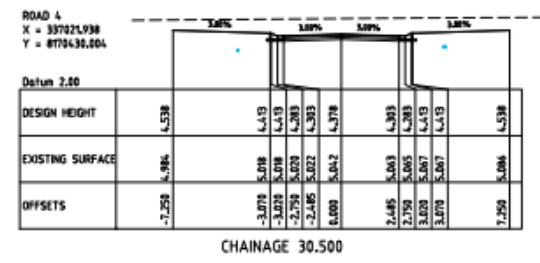


VERT. CURVE LENGTH (m) 15.427 20.000 30.500  
 VERT. CURVE RADIUS (m) 1542.7 2000.0 3050.0  
 VERT. GEOMETRY GRADE (%) -0.865 -0.865 -0.865  
 VERT. GEOMETRY LENGTH (m) 15.427 20.000 30.500  
 DATUM RL -79  
 HORIZ. CURVE LENGTH (m) 0.000 15.427 20.000 30.500  
 HORIZ. CURVE RADIUS (m) 1542.7 2000.0 3050.0  
 EXISTING SURFACE LEVELS ROAD CENTRELINE 5.305 5.373 5.307 5.312  
 CUT/FILL DEPTH TO EXISTING SURFACE -0.695 -0.695 -0.695 -0.695  
 DESIGN LEVELS ROAD CENTRELINE 6.430 6.430 6.430 6.430  
 CONTROL LINE CHAINAGE ROAD CENTRELINE 0.000 15.427 20.000 30.500



	VERT. CURVE LENGTH (m)	VERT. CURVE RADIUS (m)	VERT. GEOMETRY GRADE (%)	VERT. GEOMETRY LENGTH (m)	DATUM RL -79
	15.427	1542.7	-0.865	15.427	5.305
	20.000	2000.0	-0.865	20.000	5.373
	30.500	3050.0	-0.865	30.500	5.307

ROAD 4  
SCALE: H 1:500  
V 1:100



No.	Date	Description	By	Check	Appr.
1	01.04.2020	PROPOSED FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS
2	11.10.2019	FOR OPERATIONAL WORKS APPROVAL	MS	MS	MS



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Drawn	Checked	Designed	Verified	Approved	Date
MS	MS	MS	MS	MS	10.10.2019

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**

PROJECT: PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGIE

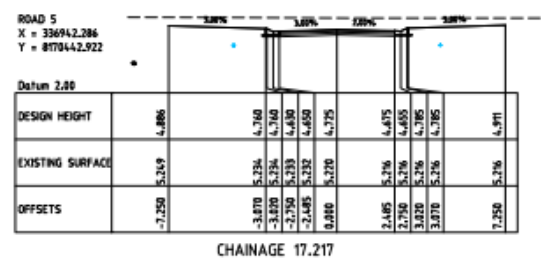
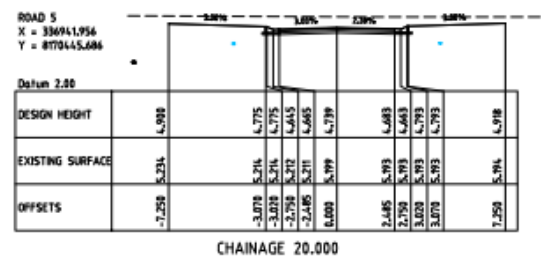
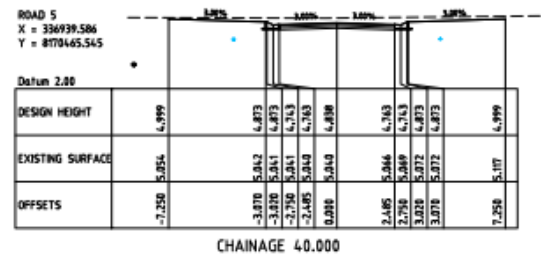
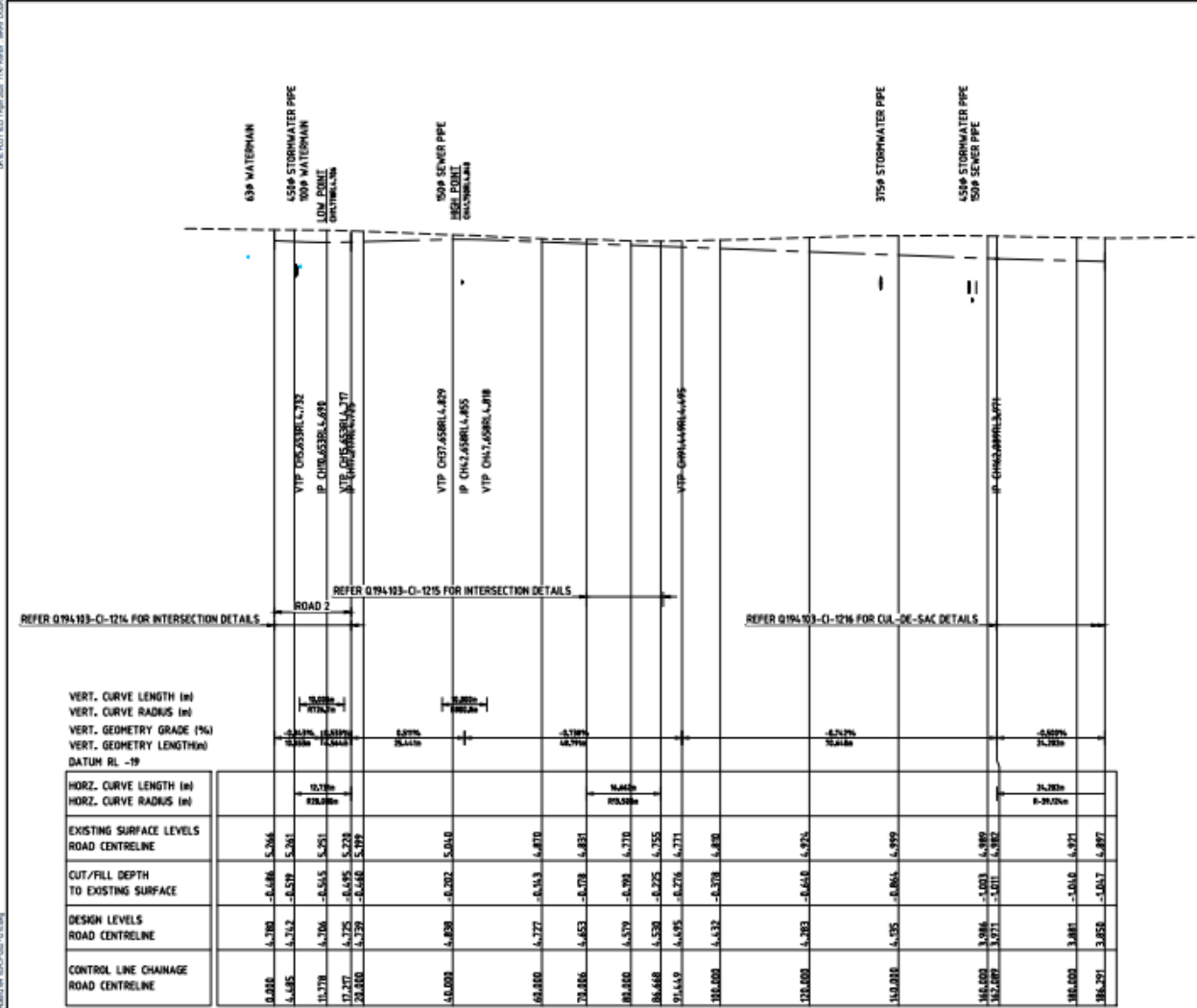
ROAD 4 LONGITUDINAL SECTION & CROSS SECTIONS

FOR APPROVAL  
NOT TO BE USED FOR CONSTRUCTION PURPOSES

AS SHOWN

Q184103-CI-1208

VERT. CURVE LENGTH (m) VERT. CURVE RADIUS (m) VERT. GEOMETRY GRADE (%) VERT. GEOMETRY LENGTH (m) DATUM RL -19  
 HORIZ. CURVE LENGTH (m) HORIZ. CURVE RADIUS (m)  
 EXISTING SURFACE LEVELS ROAD CENTRELINE  
 CUT/FILL DEPTH TO EXISTING SURFACE  
 DESIGN LEVELS ROAD CENTRELINE  
 CONTROL LINE CHAINAGE ROAD CENTRELINE  
 ROAD 5 SCALE: H 1:500 V 1:100



1	01.04.2020	PROPOSED FOR OPERATIONAL WORKS APPROVAL	23	145	188
2	10.10.2019	FOR OPERATIONAL WORKS APPROVAL	16	151	188
Rev	Date	Description	Disc	Drawn	Appr



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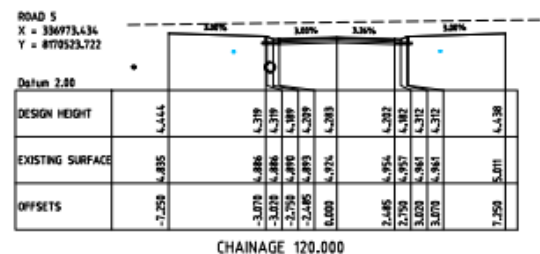
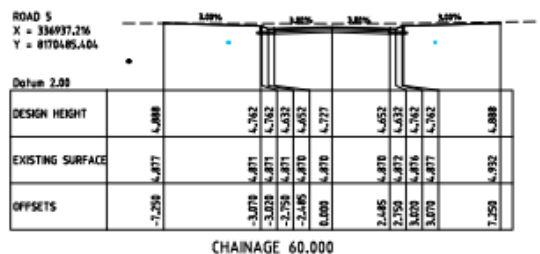
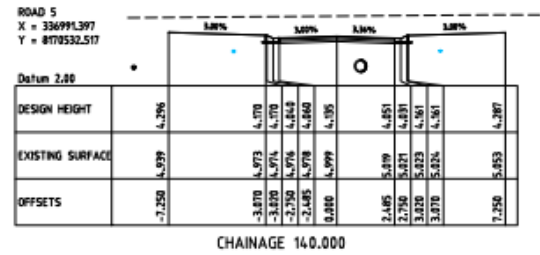
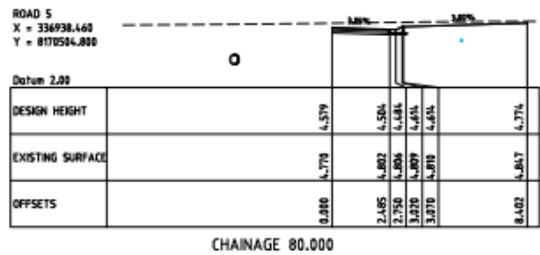
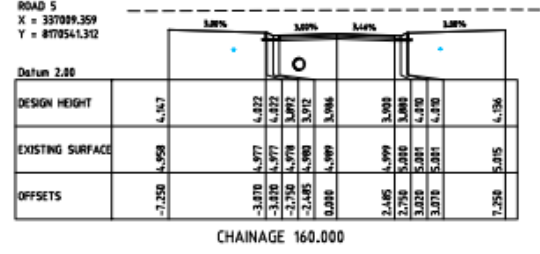
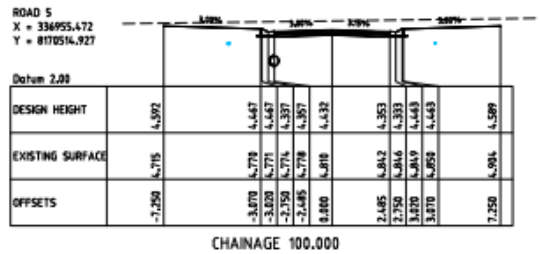
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Client	0380	0380
Contract No.	18.10.0010	18.10.0010
Job No.	18.10.0010	18.10.0010
Designed	18.10.2019	18.10.2019
Issued	18.10.2019	18.10.2019
Approved	18.10.2019	18.10.2019
Project	18.10.2019	18.10.2019
Drawn	18.10.2019	18.10.2019
Check	18.10.2019	18.10.2019
Date	18.10.2019	18.10.2019

PORT DOUGLAS LAND DEVELOPMENTS PTY LTD  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGIE  
 ROAD 5 LONGITUDINAL SECTION

FOR APPROVAL  
 NOT TO BE USED FOR CONSTRUCTION PURPOSES

AS SHOWN  
 A1  
 Q184103-CI-1209  
 B



No.	Date	Description	By	Check	Appr.
1	01.04.2019	ISSUED FOR OPERATIONAL WORKS APPROVAL	MC	MC	MC
2	11.10.2019	FOR OPERATIONAL WORKS APPROVAL	MC	MC	MC



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Issue	Date	By	Check	Appr.
1	15.09.2019	MC	MC	MC
2	15.10.2019	MC	MC	MC
3	15.10.2019	MC	MC	MC
4	15.10.2019	MC	MC	MC
5	15.10.2019	MC	MC	MC

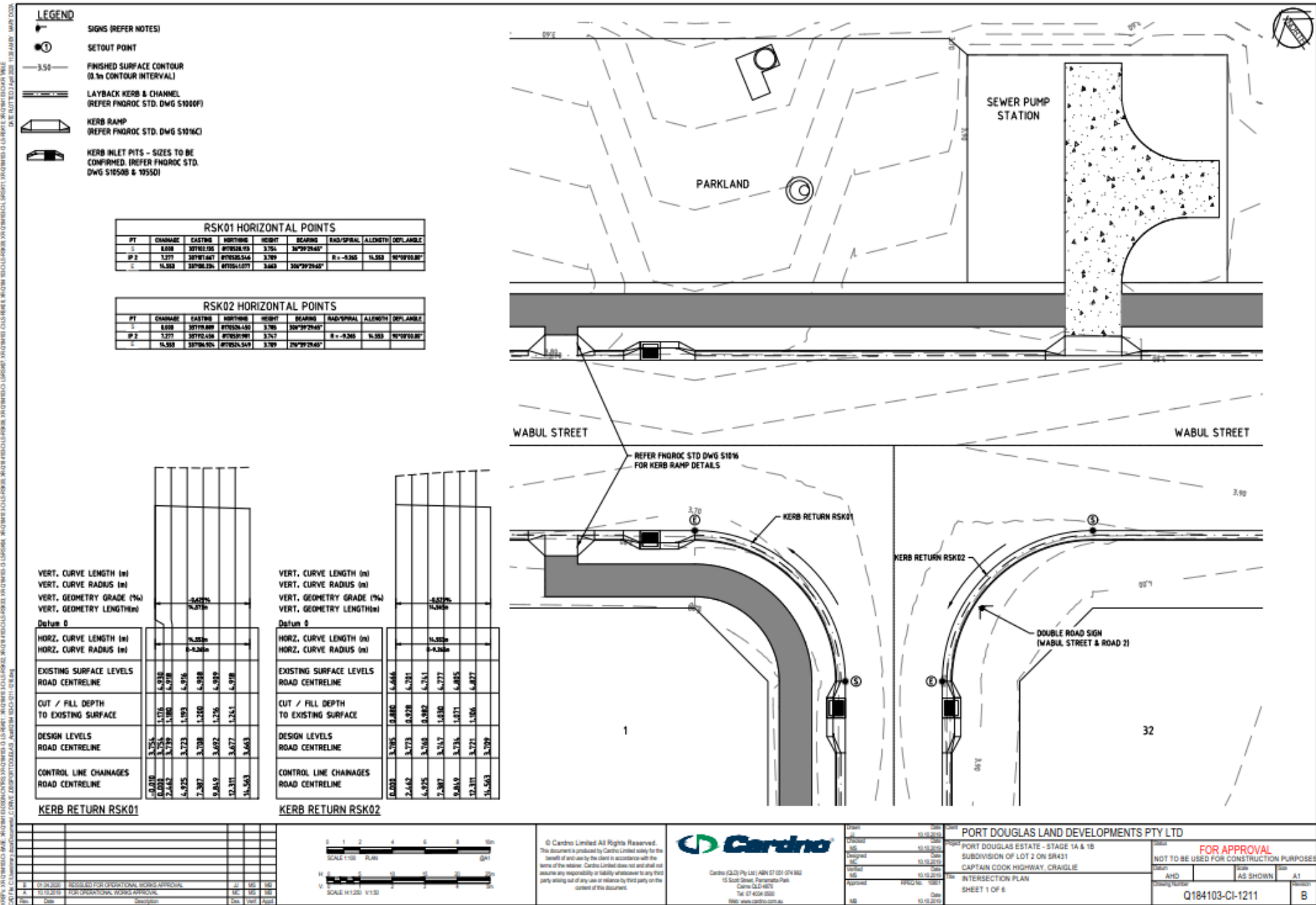
**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**

PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGIE

ROAD 5 CROSS SECTIONS

FOR APPROVAL  
NOT TO BE USED FOR CONSTRUCTION PURPOSES

AS SHOWN  
A1  
Q184103-CI-1210  
B



- LEGEND**
- SIGNS (REFER NOTES)
  - SETOUT POINT
  - FINISHED SURFACE CONTOUR  
(0.5m CONTOUR INTERVAL)
  - LAYBACK KERB & CHANNEL  
(REFER FNR00C STD. DWG S1000F)
  - KERB RAMP  
(REFER FNR00C STD. DWG S1014C)
  - KERB INLET PITS - SIZES TO BE  
CONFIRMED. (REFER FNR00C STD.  
DWG S1050B & 1055D)

**RSK01 HORIZONTAL POINTS**

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPRAL	LENGTH	DEFL ANGLE
S	6.00	30702.195	870528.93	3.764	30°29'29.40"			
IP 2	3.271	30707.667	870525.544	3.769		R = -5.505	14.553	90°00'00.00"
S	14.553	30706.524	870514.077	3.663	210°29'29.40"			

**RSK02 HORIZONTAL POINTS**

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPRAL	LENGTH	DEFL ANGLE
S	6.00	30719.889	870524.450	3.766	30°29'29.40"			
IP 2	3.271	30725.361	870521.061	3.771		R = -4.265	14.553	90°00'00.00"
S	14.553	30724.218	870512.594	3.769	210°29'29.40"			

**Datum 0**

VERT. CURVE LENGTH (m)	VERT. CURVE RADIUS (m)	VERT. GEOMETRY GRADE (%)	VERT. GEOMETRY LENGTH (m)
16.472	14.302	-0.571	16.472
16.472	14.302	-0.571	16.472

HORZ. CURVE LENGTH (m)	HORZ. CURVE RADIUS (m)
16.472	14.302
16.472	14.302

EXISTING SURFACE LEVELS ROAD CENTRELINE	CUT / FILL DEPTH TO EXISTING SURFACE	DESIGN LEVELS ROAD CENTRELINE	CONTROL LINE CHAINAGES ROAD CENTRELINE
6.484	1.156	5.328	0.000
6.478	1.162	5.334	3.271
6.472	1.168	5.340	6.542
6.425	1.053	5.373	9.813
6.308	1.200	5.428	13.084
6.226	1.256	5.490	16.355
6.210	1.272	5.506	19.626
6.163	1.413	5.663	22.897

**Datum 0**

VERT. CURVE LENGTH (m)	VERT. CURVE RADIUS (m)	VERT. GEOMETRY GRADE (%)	VERT. GEOMETRY LENGTH (m)
16.472	14.302	-0.571	16.472
16.472	14.302	-0.571	16.472

HORZ. CURVE LENGTH (m)	HORZ. CURVE RADIUS (m)
16.472	14.302
16.472	14.302

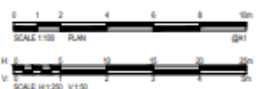
EXISTING SURFACE LEVELS ROAD CENTRELINE	CUT / FILL DEPTH TO EXISTING SURFACE	DESIGN LEVELS ROAD CENTRELINE	CONTROL LINE CHAINAGES ROAD CENTRELINE
6.484	1.156	5.328	0.000
6.478	1.162	5.334	3.271
6.472	1.168	5.340	6.542
6.425	1.053	5.373	9.813
6.308	1.200	5.428	13.084
6.226	1.256	5.490	16.355
6.210	1.272	5.506	19.626
6.163	1.413	5.663	22.897

**KERB RETURN RSK01**

CH	DATE	DESCRIPTION	BY	CHK	APP
1	10/04/2020	PROPOSED FOR OPERATIONAL WORKS APPROVAL	JJ	MS	MS
2	10/10/2019	FOR OPERATIONAL WORKS APPROVAL	MS	MS	MS

**KERB RETURN RSK02**

CH	DATE	DESCRIPTION	BY	CHK	APP
1	10/04/2020	PROPOSED FOR OPERATIONAL WORKS APPROVAL	JJ	MS	MS
2	10/10/2019	FOR OPERATIONAL WORKS APPROVAL	MS	MS	MS



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DATE	DESCRIPTION	BY	CHK	APP
10/04/2020	ISSUED	JJ	MS	MS
10/04/2020	FOR APPROVAL	JJ	MS	MS
10/10/2019	FOR APPROVAL	MS	MS	MS
10/10/2019	FOR APPROVAL	MS	MS	MS
10/10/2019	FOR APPROVAL	MS	MS	MS
10/10/2019	FOR APPROVAL	MS	MS	MS

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**

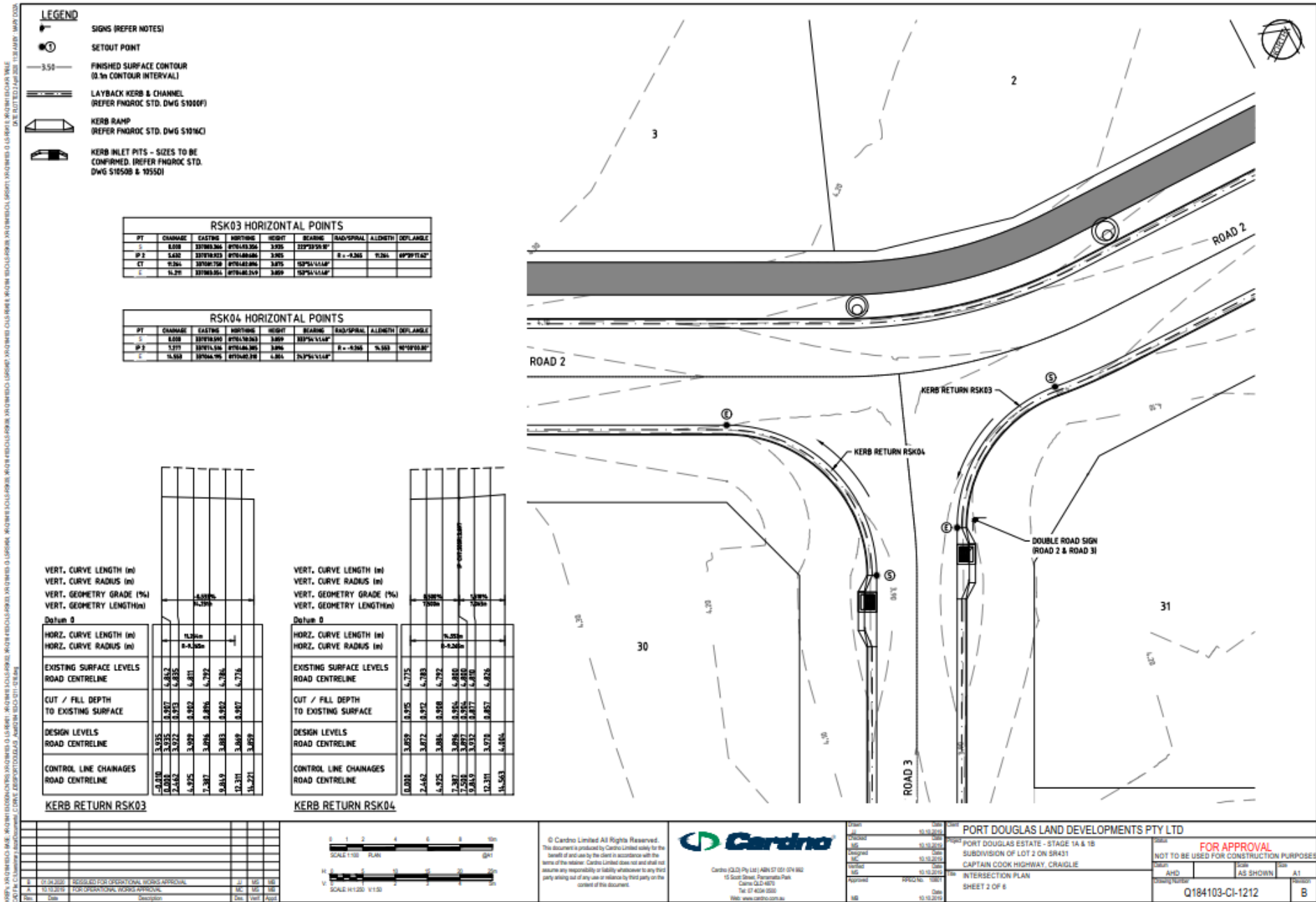
PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGIE

**FOR APPROVAL**  
NOT TO BE USED FOR CONSTRUCTION PURPOSES

AS SHOWN	AS SHOWN
----------	----------

INTERSECTION PLAN  
SHEET 1 OF 6

Q184103-CI-1211



- LEGEND**
- Signs (REFER NOTES)
  - SETOUT POINT
  - FINISHED SURFACE CONTOUR (0.5m CONTOUR INTERVAL)
  - LAYBACK KERB & CHANNEL (REFER FNR00C STD. DWG S1000F)
  - KERB RAMP (REFER FNR00C STD. DWG S1014C)
  - KERB INLET PITS - SIZES TO BE CONFIRMED. (REFER FNR00C STD. DWG S1050B & 1055D)

**RSK03 HORIZONTAL POINTS**

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	LENGTH	DEF/ANGLE
1	8.00	337883.366	6761483.356	3.935	232°33'55.8"		0.00	
IP 2	5.63	337878.933	6761489.086	3.905		R = -8.565	71.561	69°20'11.6"
CP	12.34	337887.758	6761483.855	3.875	102°54'14.0"			
2	16.24	337883.551	6761482.219	3.869	92°54'14.0"			

**RSK04 HORIZONTAL POINTS**

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	LENGTH	DEF/ANGLE
1	8.00	337878.000	6761483.363	3.869	102°54'14.0"			
IP 2	5.37	337871.546	6761486.385	3.896		R = -8.566	71.563	69°20'10.8"
2	16.58	337864.796	6761483.318	4.061	74°54'14.0"			

**KERB RETURN RSK03**

VERT. CURVE LENGTH (m)	VERT. CURVE RADIUS (m)	VERT. GEOMETRY GRADE (%)	VERT. GEOMETRY LENGTH(m)
11.20	11.20	0.000	11.20

EXISTING SURFACE LEVELS ROAD CENTRELINE
0.000
0.001
2.652
4.925
7.287
9.619
12.371
16.271

CUT / FILL DEPTH TO EXISTING SURFACE
0.000
0.001
2.652
4.925
7.287
9.619
12.371
16.271

DESIGN LEVELS ROAD CENTRELINE
3.935
3.935
3.932
3.929
3.926
3.893
3.869
3.869

CONTROL LINE CHAINAGES ROAD CENTRELINE
0.000
0.001
2.652
4.925
7.287
9.619
12.371
16.271

**KERB RETURN RSK04**

VERT. CURVE LENGTH (m)	VERT. CURVE RADIUS (m)	VERT. GEOMETRY GRADE (%)	VERT. GEOMETRY LENGTH(m)
11.20	11.20	0.000	11.20

EXISTING SURFACE LEVELS ROAD CENTRELINE
0.000
2.662
4.925
7.287
9.619
12.371
16.563

CUT / FILL DEPTH TO EXISTING SURFACE
0.000
2.662
4.925
7.287
9.619
12.371
16.563

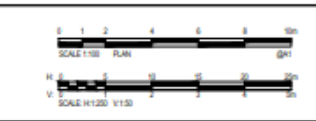
  

DESIGN LEVELS ROAD CENTRELINE
3.935
3.932
3.929
3.926
3.893
3.869
3.869

CONTROL LINE CHAINAGES ROAD CENTRELINE
0.000
2.662
4.925
7.287
9.619
12.371
16.563

Date	By	Description	Check	App'd
01.04.2020		PREPARED FOR OPERATIONAL WORKS APPROVAL		
10.10.2019		FOR OPERATIONAL WORKS APPROVAL		



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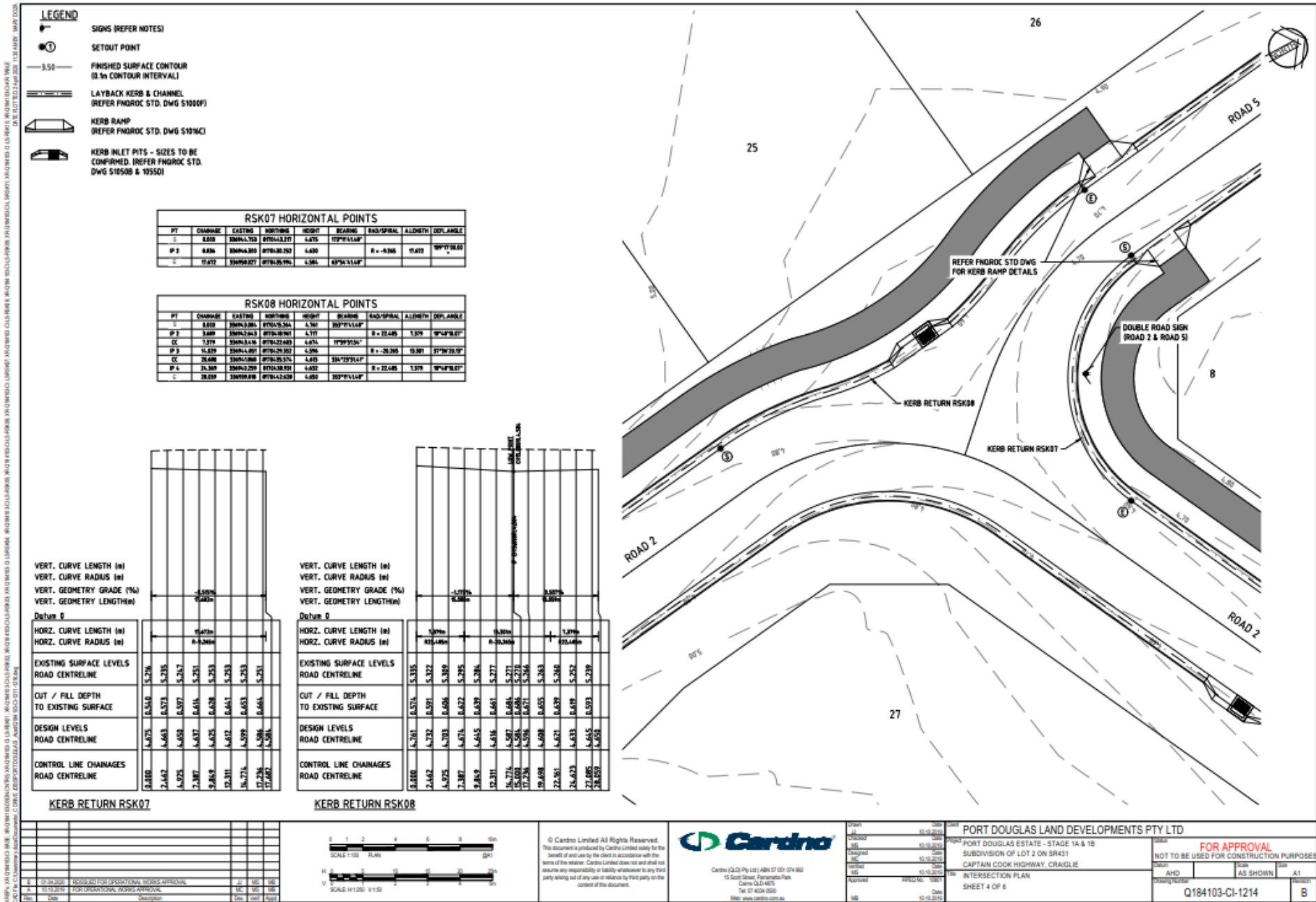
Date	By	Description
10.10.2019		DESIGNED
10.10.2019		APPROVED
10.10.2019		ISSUED
10.10.2019		DATE

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGLIE  
 INTERSECTION PLAN  
 SHEET 2 OF 6

Project	Scale	Sheet
FOR APPROVAL	AS SHOWN	A1
Q184103-CI-1212		B







- LEGEND**
- ⊕ SIGNS (REFER NOTES)
  - ⊙ SETOUT POINT
  - 3.50— FINISHED SURFACE CONTOUR (0.5m CONTOUR INTERVAL)
  - ▬▬▬ LAYBACK KERB & CHANNEL (REFER FNR00C STD. DWG S1000F)
  - ▬▬▬ KERB RAMP (REFER FNR00C STD. DWG S1014C)
  - ▬▬▬ KERB INLET PITS - SIZES TO BE CONFIRMED. (REFER FNR00C STD. DWG S1050B & 1055D)

**RSK07 HORIZONTAL POINTS**

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPRAL	ALIGNMENT	DEFL. ANGLE
1	0.000	300944.753	877044.327	4.675	109°11'14.0"			
IP 2	0.836	300946.800	877043.250	4.630		R = -4.506	11.622	189°17'38.00"
2	17.672	300928.027	877042.996	4.581	107°54'11.6"			

**RSK08 HORIZONTAL POINTS**

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPRAL	ALIGNMENT	DEFL. ANGLE
1	0.000	300943.884	877043.364	4.740	109°11'14.0"			
IP 2	3.609	300942.643	877043.870	4.711		R = 22.485	1.319	18°42'18.01"
CC	7.219	300943.618	877043.218	4.674	179°31'34.1"			
IP 3	14.039	300944.407	877042.932	4.596		R = -26.266	13.381	171°16'23.10"
CC	20.848	300945.088	877043.552	4.643	334°19'21.6"			
IP 4	24.369	300945.239	877043.873	4.632		R = 22.485	1.319	18°42'18.01"
2	28.039	300945.818	877044.243	4.650	109°11'14.0"			

**KERB RETURN RSK07**

VERT. CURVE LENGTH (m)	VERT. CURVE RADIUS (m)	VERT. GEOMETRY GRADE (%)	VERT. GEOMETRY LENGTH(m)
1.100	19.400	-1.100	19.400

Horz. Curve Length (m)	Horz. Curve Radius (m)
1.100	19.400

EXISTING SURFACE LEVELS ROAD CENTRELINE	CUT / FILL DEPTH TO EXISTING SURFACE	DESIGN LEVELS ROAD CENTRELINE	CONTROL LINE CHAINAGES ROAD CENTRELINE
5.276	0.516	4.761	0.800
5.235	0.523	4.683	2.662
5.217	0.507	4.658	4.975
5.251	0.415	4.837	7.387
5.233	0.428	4.825	9.819
5.233	0.441	4.797	12.311
5.233	0.463	4.599	14.774
5.251	0.466	4.581	17.236
			19.687

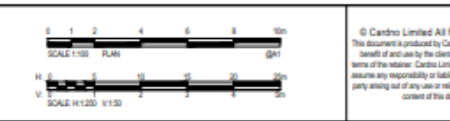
**KERB RETURN RSK08**

VERT. CURVE LENGTH (m)	VERT. CURVE RADIUS (m)	VERT. GEOMETRY GRADE (%)	VERT. GEOMETRY LENGTH(m)
1.100	19.400	-1.100	19.400

Horz. Curve Length (m)	Horz. Curve Radius (m)
1.100	19.400

EXISTING SURFACE LEVELS ROAD CENTRELINE	CUT / FILL DEPTH TO EXISTING SURFACE	DESIGN LEVELS ROAD CENTRELINE	CONTROL LINE CHAINAGES ROAD CENTRELINE
5.335	0.574	4.761	0.800
5.322	0.591	4.732	2.662
5.389	0.498	4.703	4.975
5.295	0.422	4.674	7.387
5.286	0.439	4.655	9.819
5.271	0.461	4.618	12.311
5.271	0.484	4.597	14.774
5.278	0.488	4.581	17.236
5.266	0.471	4.558	19.698
5.263	0.455	4.608	22.061
5.252	0.439	4.621	24.423
5.239	0.419	4.633	26.823
5.239	0.433	4.615	29.185
5.239	0.451	4.601	31.609

No.	Date	Description	By	Check	Appr.
1	01.04.2020	PROPOSED FOR OPERATIONAL WORKS APPROVAL			
2	10.10.2019	FOR OPERATIONAL WORKS APPROVAL			



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Drawn	Checked	Issue	Date

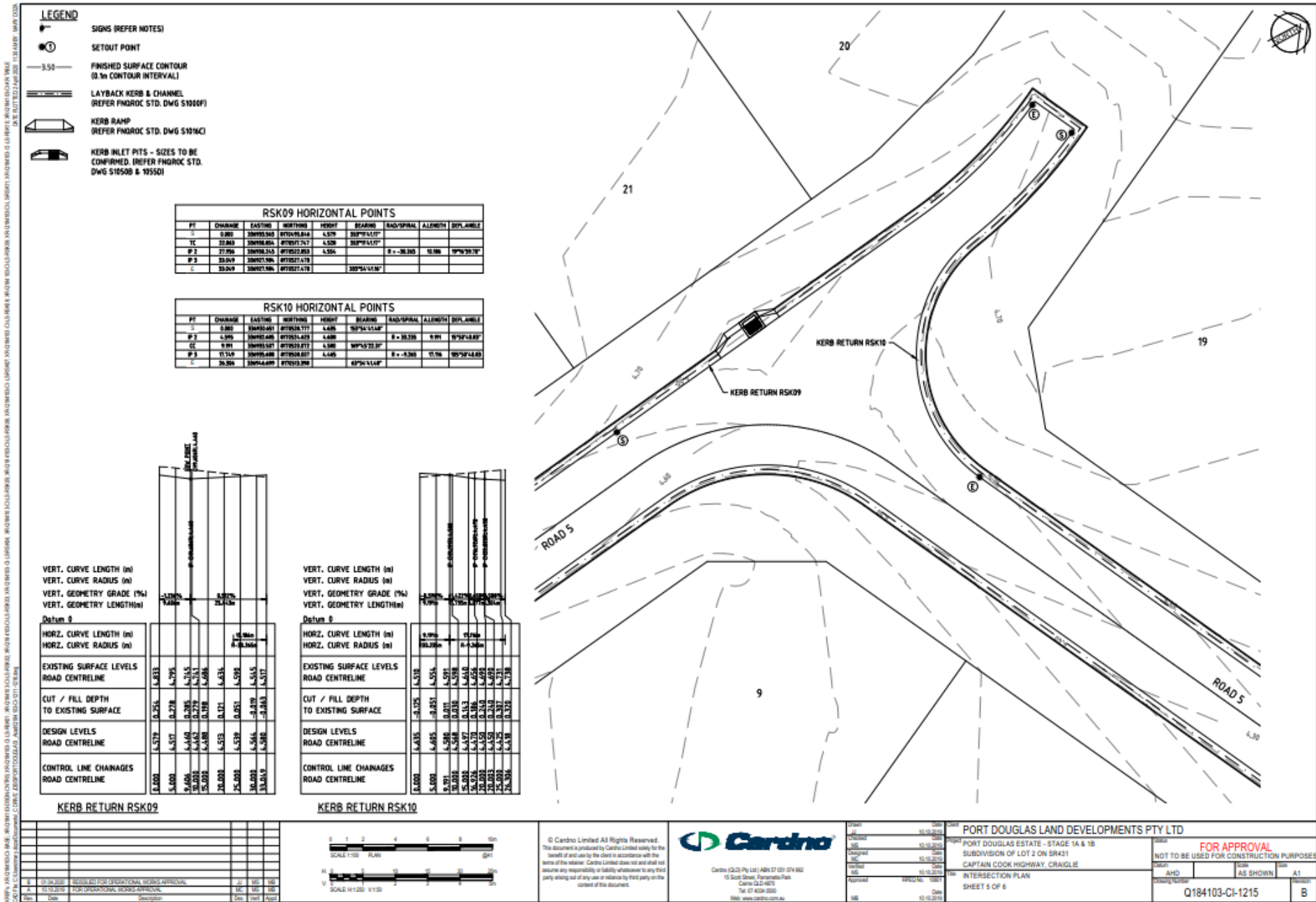
**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**

PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGLIE

INTERSECTION PLAN  
 SHEET 4 OF 6

**FOR APPROVAL**  
 NOT TO BE USED FOR CONSTRUCTION PURPOSES

Client: AHD  
 Scale: AS SHOWN  
 Sheet: A1  
 Drawing Number: Q184103-CI-1214  
 Revision: B



- LEGEND**
- SIGNS (REFER NOTES)
  - SETOUT POINT
  - FINISHED SURFACE CONTOUR (0.5m CONTOUR INTERVAL)
  - LAYBACK KERB & CHANNEL (REFER FNR00C STD. DWG S1000F)
  - KERB RAMP (REFER FNR00C STD. DWG S1014C)
  - KERB INLET PITS - SIZES TO BE CONFIRMED. (REFER FNR00C STD. DWG S1050B & 1050I)

**RSK09 HORIZONTAL POINTS**

PT	CHANGING	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	ALIGN/ST	DEFL. ANGLE
TC	0.000	309093.563	871049.844	4.579	309°41'17"			
P 1	22.889	309098.804	871051.747	4.538	309°41'17"			
P 2	27.004	309098.324	871052.853	4.504		R = -30.300	10.306	19°32'39.78"
P 3	33.049	309097.506	871053.478					
C	33.049	309097.506	871053.478		309°41'17"			

**RSK10 HORIZONTAL POINTS**

PT	CHANGING	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	ALIGN/ST	DEFL. ANGLE
TC	0.000	309093.491	871049.177	4.499	309°41'14"			
P 1	4.599	309093.499	871051.433	4.488		R = 30.300	9.991	19°32'48.82"
CC	9.991	309093.507	871053.017	4.388	199°42'31"			
P 2	17.129	309093.499	871054.017	4.149		R = -30.300	11.106	19°32'44.89"
C	18.309	309094.099	871053.596		87°34'11.64"			

VERT. CURVE LENGTH (m)  
 VERT. CURVE RADIUS (m)  
 VERT. GEOMETRY GRADE (%)  
 VERT. GEOMETRY LENGTH (m)

**Datum 9**

PT	CHANGING	EASTING	NORTHING	HEIGHT
TC	0.000	309093.563	871049.844	4.579
P 1	22.889	309098.804	871051.747	4.538
P 2	27.004	309098.324	871052.853	4.504
P 3	33.049	309097.506	871053.478	
C	33.049	309097.506	871053.478	

**KERB RETURN RSK09**

VERT. CURVE LENGTH (m)  
 VERT. CURVE RADIUS (m)  
 VERT. GEOMETRY GRADE (%)  
 VERT. GEOMETRY LENGTH (m)

**Datum 0**

PT	CHANGING	EASTING	NORTHING	HEIGHT
TC	0.000	309093.491	871049.177	4.499
P 1	4.599	309093.499	871051.433	4.488
CC	9.991	309093.507	871053.017	4.388
P 2	17.129	309093.499	871054.017	4.149
C	18.309	309094.099	871053.596	

**KERB RETURN RSK10**



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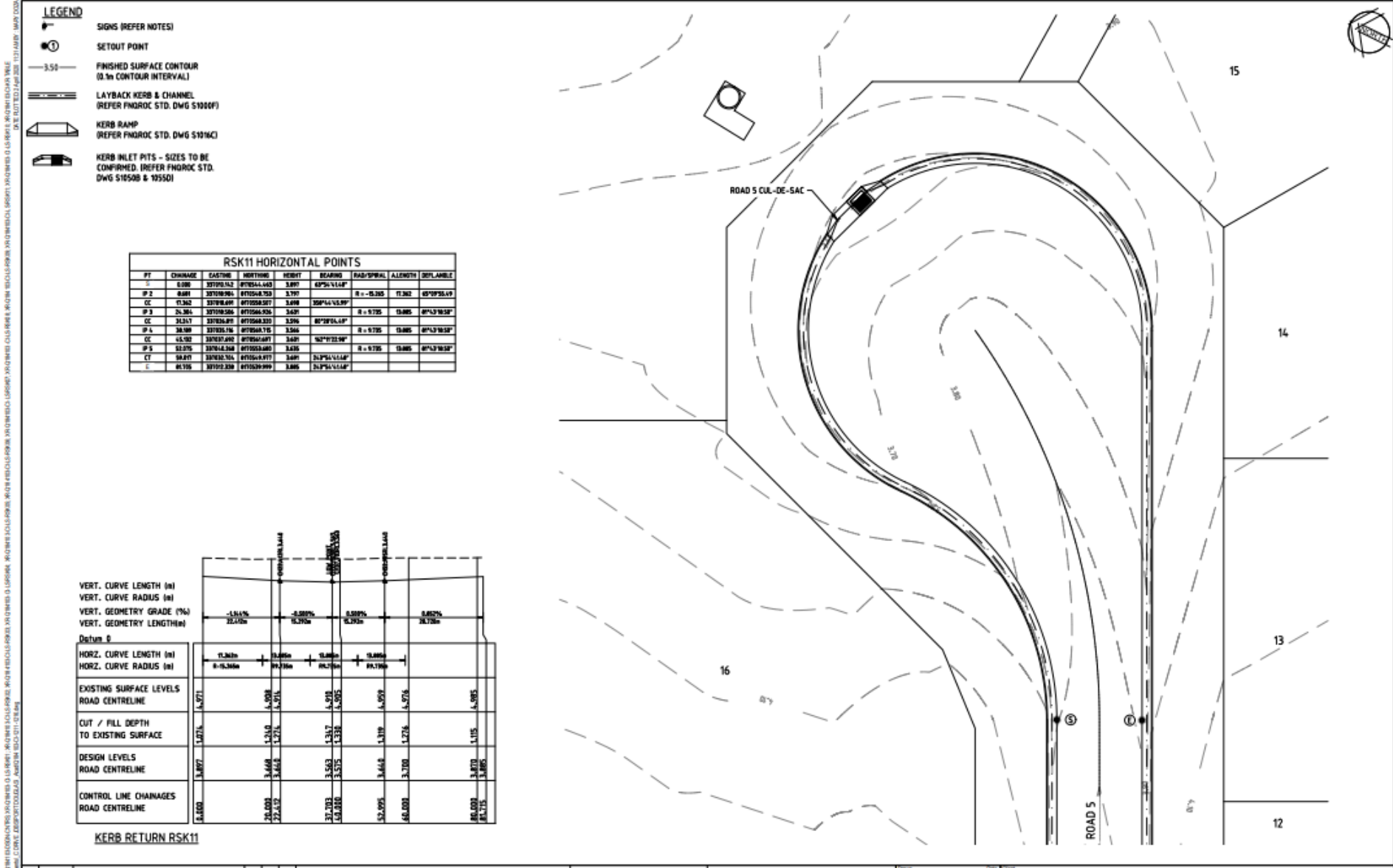
DATE	DESCRIPTION	BY	CHKD
15.10.2019	ISSUED		
15.10.2019	REVISED		
15.10.2019	REVISED		
15.10.2019	REVISED		
15.10.2019	REVISED		
15.10.2019	REVISED		

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGIE  
 INTERSECTION PLAN  
 SHEET 5 OF 6

**FOR APPROVAL**  
 NOT TO BE USED FOR CONSTRUCTION PURPOSES

Author	Scale	Sheet
CHKD	AS SHOWN	A1
Drawing Number	Revision	
Q184103-CI-1215		B





**LEGEND**

- Sign symbol: SIGNS (REFER NOTES)
- Circle with dot symbol: SETOUT POINT
- Dashed line symbol: FINISHED SURFACE CONTOUR (0.5m CONTOUR INTERVAL)
- Double line symbol: LAYBACK KERB & CHANNEL (REFER FNR00C STD. DWG S1000F)
- Triangle symbol: KERB RAMP (REFER FNR00C STD. DWG S1014C)
- Rectangular symbol: KERB INLET PITS - SIZES TO BE CONFIRMED. (REFER FNR00C STD. DWG S1050B & 1055D)

**RSK11 HORIZONTAL POINTS**

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	LENGTH	DEFLECT
IP 1	0.000	307050.142	870544.440	3.997	65°54'43.64"			
IP 2	0.001	307050.965	870544.753	3.997		R = 15.265	11.362	85°10'55.19"
OC	11.362	307050.691	870543.507	3.608	358°44'45.89"			
IP 3	26.363	307050.208	870544.935	3.607		R = 9.725	13.685	89°43'16.34"
OC	31.317	307050.491	870544.320	3.296	89°39'04.14"			
IP 4	36.369	307050.116	870544.715	3.266		R = 9.725	13.685	89°43'16.34"
OC	45.192	307051.490	870545.691	3.601	362°49'33.39"			
IP 5	52.275	307051.548	870545.690	3.635		R = 9.725	13.685	89°43'16.34"
CT	58.917	307051.765	870545.817	3.689	51°25'44.144"			
E	65.156	307052.228	870545.999	3.685	51°25'44.144"			

VERT. CURVE LENGTH (m)	VERT. CURVE RADIUS (m)	VERT. GEOMETRY GRADE (%)	VERT. GEOMETRY LENGTH (m)
		-1.511%	32.415m
		-0.500%	16.792m
		0.000%	9.292m
		0.825%	36.735m

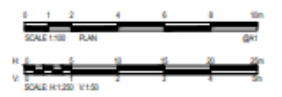
Horz. Curve Length (m)	Horz. Curve Radius (m)
11.362m	15.265m
13.685m	9.725m
13.685m	9.725m
13.685m	9.725m

EXISTING SURFACE LEVELS ROAD CENTRELINE	CUT / FILL DEPTH TO EXISTING SURFACE	DESIGN LEVELS ROAD CENTRELINE	CONTROL LINE CHAINAGES ROAD CENTRELINE
6.271	3.471	3.467	0.000
4.509	4.216	3.468	26.000
4.701	1.271	3.464	22.432
6.271	1.271	3.463	27.003
5.295	1.271	3.275	30.000
6.271	1.319	3.464	52.005
6.276	1.276	3.200	66.000
6.285	1.105	3.470	86.000
		3.485	84.715

**KERB RETURN RSK11**

Date	By	Description	Check	App'd
01.04.2020		ISSUED FOR OPERATIONAL WORKS APPROVAL		
10.10.2019		FOR OPERATIONAL WORKS APPROVAL		



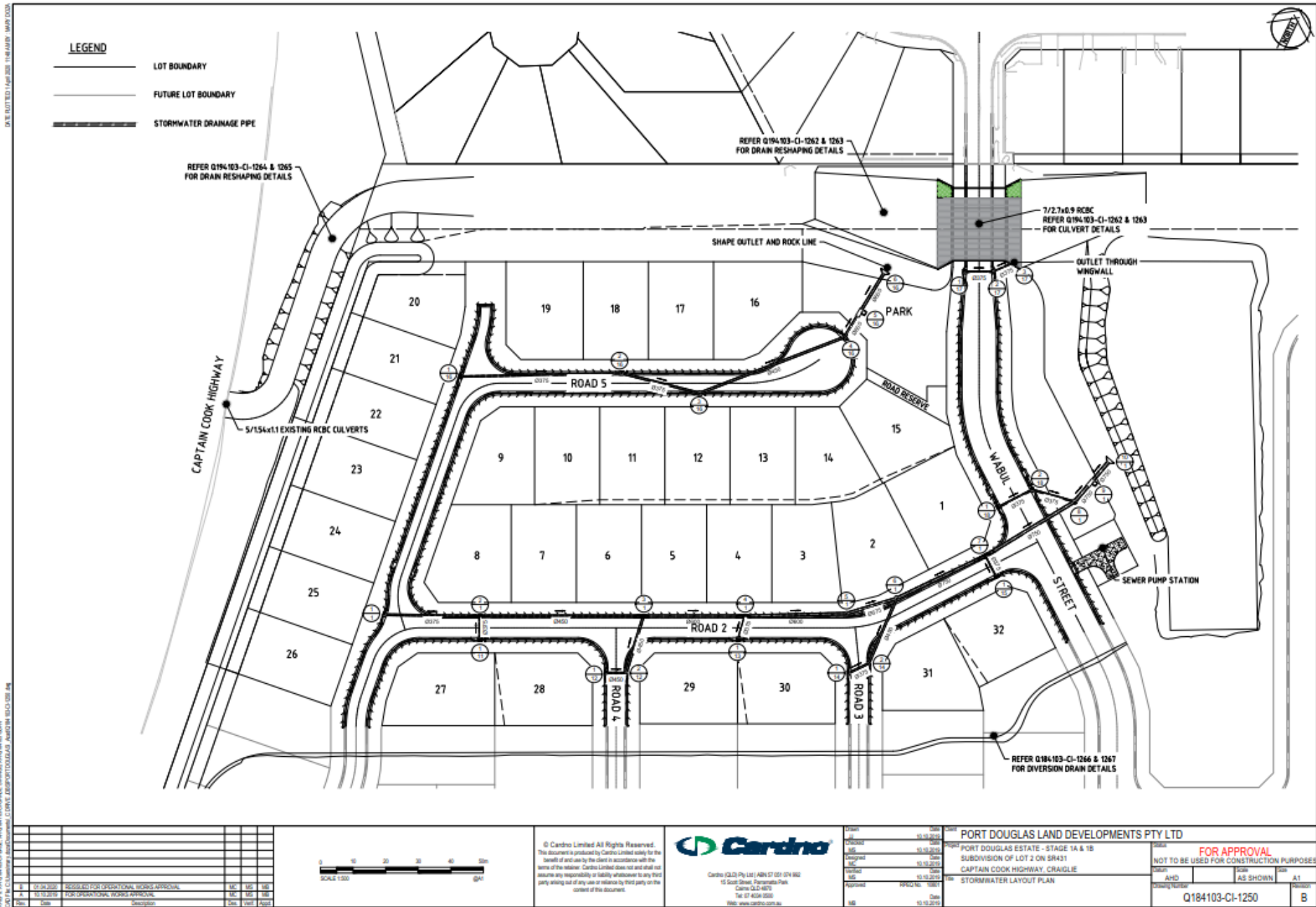
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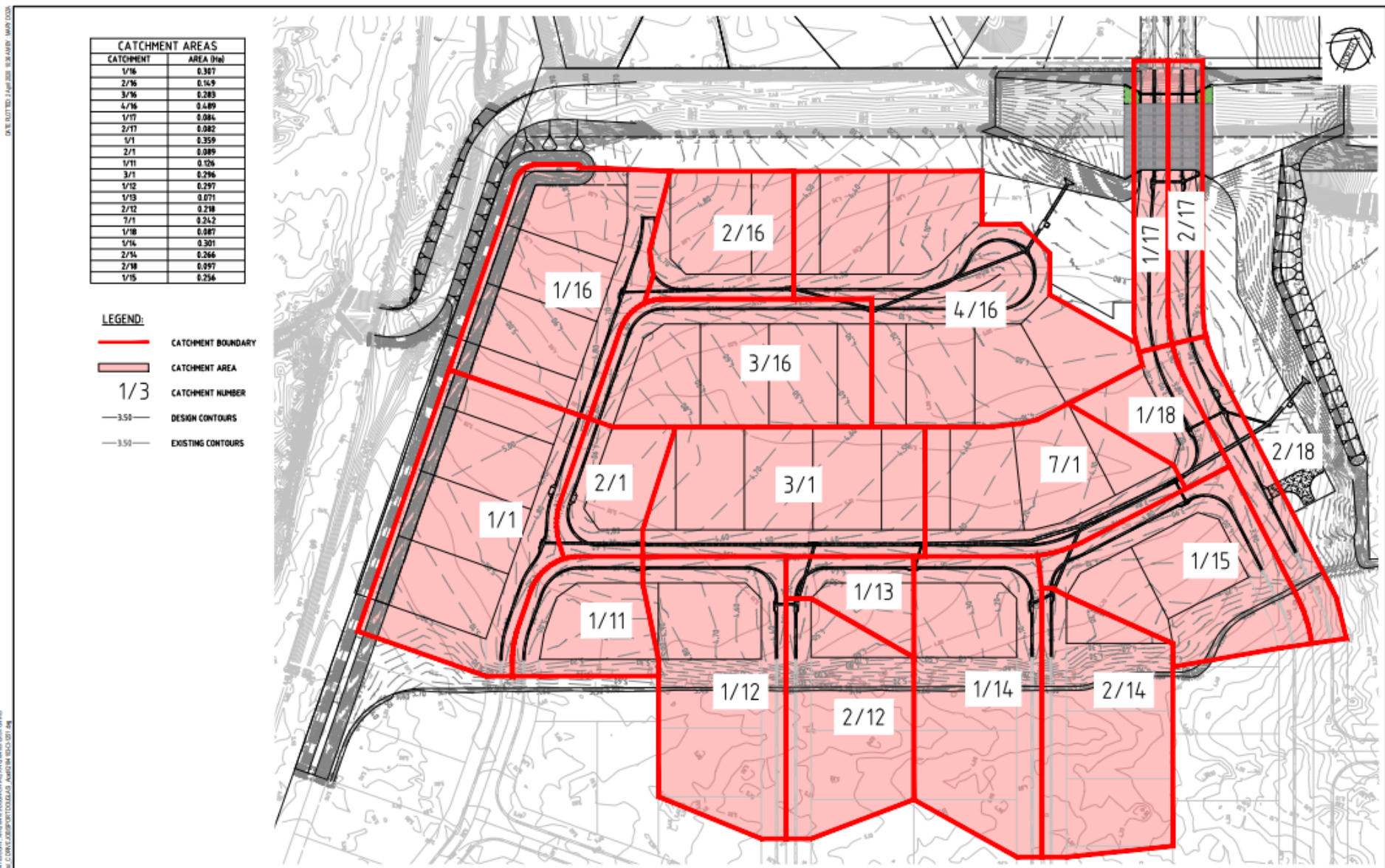
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Date	By	Description
15.10.2019		ISSUED
15.10.2019		DESIGNED
15.10.2019		CHECKED
15.10.2019		APPROVED
15.10.2019		ISSUED

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGLIE  
 INTERSECTION PLAN  
 SHEET 8 OF 8

FOR APPROVAL		NOT TO BE USED FOR CONSTRUCTION PURPOSES	
Author	Scale	Date	Revision
AHD	AS SHOWN		A1
Drawing Number			
Q184103-CI-1216			B





CATCHMENT AREAS	
CATCHMENT	AREA (ha)
1/16	0.397
2/16	0.169
3/16	0.283
4/16	0.489
1/17	0.084
2/17	0.082
1/1	0.359
2/1	0.089
1/11	0.126
3/1	0.296
1/12	0.297
1/13	0.071
2/12	0.218
7/1	0.242
1/18	0.087
1/14	0.301
2/14	0.266
2/18	0.097
1/15	0.256

- LEGEND:**
- CATCHMENT BOUNDARY
  - CATCHMENT AREA
  - 1/3 CATCHMENT NUMBER
  - 3.50 DESIGN CONTOURS
  - 3.50 EXISTING CONTOURS

100%: 1:500 (SCALE) 100%: 1:500 (SCALE) 100%: 1:500 (SCALE) 100%: 1:500 (SCALE)  
 DATE: 11/10/2019 11:45:00 AM 11/10/2019 11:45:00 AM 11/10/2019 11:45:00 AM 11/10/2019 11:45:00 AM

No.	Date	Description	By	Check	Appr.
1	01/24/2020	PROPOSED FOR OPERATIONAL WORKS APPROVAL	MC	MC	MC
2	11/10/2019	FOR OPERATIONAL WORKS APPROVAL	MC	MC	MC



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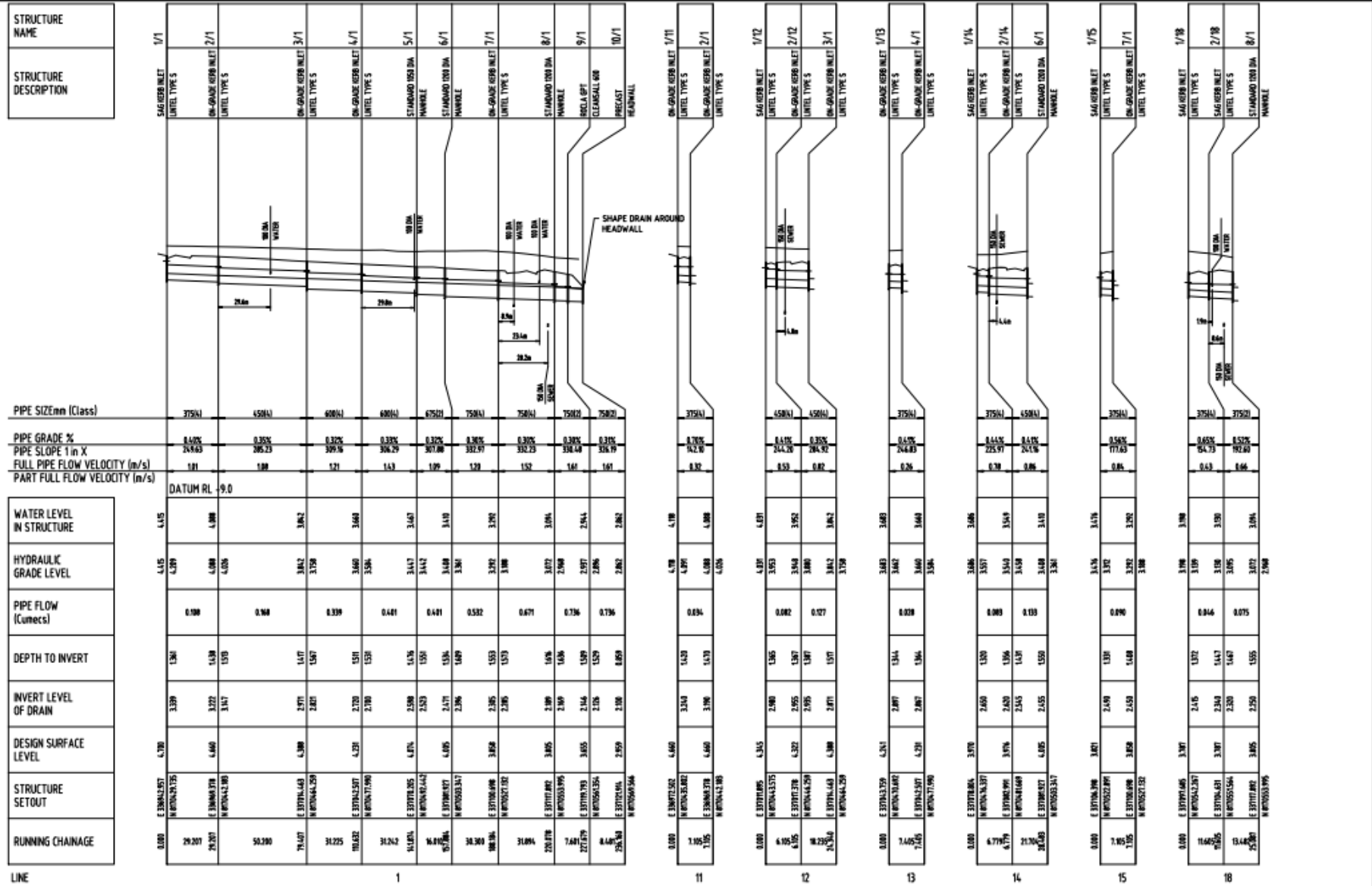
Task	Start	End
Design	15/10/2019	15/10/2019
Check	15/10/2019	15/10/2019
Issue	15/10/2019	15/10/2019
Approved	15/10/2019	15/10/2019
Revised	15/10/2019	15/10/2019
Drawn	15/10/2019	15/10/2019

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGIE  
 STORMWATER CATCHMENT PLAN

**FOR APPROVAL**

NOT TO BE USED FOR CONSTRUCTION PURPOSES

Client	Scale	Sheet
AS SHOWN	AS SHOWN	A1
Drawing Number	Revision	
Q184103-CI-1251		B



LINE	STRUCTURE NAME	STRUCTURE DESCRIPTION	PIPE SIZE (mm Class)	PIPE GRADE %	PIPE SLOPE 1 in X	FULL PIPE FLOW VELOCITY (m/s)	PART FULL FLOW VELOCITY (m/s)	WATER LEVEL IN STRUCTURE	HYDRAULIC GRADE LEVEL	PIPE FLOW (Cumecs)	DEPTH TO INVERT	INVERT LEVEL OF DRAIN	DESIGN SURFACE LEVEL	STRUCTURE SETOUT	RUNNING CHAINAGE
1	SAG KIEBER INLET	UNLTEL TYPE-S	375(N)	0.10%	24.843	1.01		4.15	4.15	0.108	1.34	3.39	4.70	E 33864.157 N 870544.175	0.00
	ON-GRADE KIEBER INLET	2/1 UNLTEL TYPE-S	450(N)	0.35%	265.23	1.08		4.08	4.08	0.168	1.53	3.22	4.60	E 33866.278 N 870544.180	29.20
	ON-GRADE KIEBER INLET	3/1 UNLTEL TYPE-S	600(N)	0.32%	309.16	1.21		3.82	3.82	0.339	1.53	2.87	4.38	E 33778.443 N 870544.159	50.30
	ON-GRADE KIEBER INLET	4/1 UNLTEL TYPE-S	600(N)	0.32%	306.29	1.13		3.58	3.58	0.441	1.53	2.87	4.29	E 33784.157 N 870544.190	31.25
	STANDARD 900 DIA	5/1 MANHOLE	675(O)	0.32%	307.06	1.09		3.43	3.43	0.441	1.63	2.88	4.21	E 33778.285 N 870544.442	31.24
	STANDARD 900 DIA	6/1 MANHOLE	750(N)	0.30%	332.23	1.28		3.40	3.40	0.582	1.53	2.87	4.05	E 33796.817 N 870553.317	16.81
	STANDARD 900 DIA	7/1 UNLTEL TYPE-S	750(N)	0.30%	332.23	1.52		3.20	3.20	0.671	1.53	2.86	3.68	E 33706.698 N 870521.182	30.30
	STANDARD 900 DIA	8/1 MANHOLE	750(O)	0.32%	332.23	1.41		3.04	3.04	0.736	1.63	2.89	3.65	E 33711.892 N 870553.996	31.04
	HEADWALL	9/1 HEADWALL		0.32%	336.19	1.61		2.94	2.94	0.736	1.59	2.87	3.65	E 33719.793 N 870554.354	27.87
	HEADWALL	10/1 HEADWALL		0.32%	336.19	1.61		2.82	2.82	0.736	1.59	2.86	3.59	E 33722.014 N 870555.546	25.54
11	ON-GRADE KIEBER INLET	1/1 UNLTEL TYPE-S	375(N)	0.70%	62.20	0.92		4.18	4.18	0.834	1.43	3.43	4.60	E 33867.152 N 870544.180	0.00
	ON-GRADE KIEBER INLET	2/1 UNLTEL TYPE-S	450(N)	0.14%	244.28	0.50		4.01	4.01	0.082	1.50	2.90	4.35	E 33778.185 N 870544.175	6.10
	ON-GRADE KIEBER INLET	2/1 UNLTEL TYPE-S	450(N)	0.25%	294.42	0.82		3.80	3.80	0.127	1.57	2.95	4.20	E 33771.278 N 870544.259	6.95
	ON-GRADE KIEBER INLET	3/1 UNLTEL TYPE-S	450(N)	0.25%	294.42	0.82		3.62	3.62	0.127	1.57	2.87	4.08	E 33778.443 N 870544.259	18.25
12	ON-GRADE KIEBER INLET	1/13 UNLTEL TYPE-S	375(N)	0.12%	244.83	0.26		3.68	3.68	0.028	1.54	2.87	4.24	E 33764.157 N 870544.190	0.00
	ON-GRADE KIEBER INLET	4/1 UNLTEL TYPE-S	450(N)	0.14%	244.28	0.26		3.62	3.62	0.028	1.54	2.87	4.20	E 33764.157 N 870544.190	7.40
	ON-GRADE KIEBER INLET	4/1 UNLTEL TYPE-S	450(N)	0.14%	244.28	0.26		3.58	3.58	0.028	1.54	2.87	4.20	E 33764.157 N 870544.190	11.65
	ON-GRADE KIEBER INLET	4/1 UNLTEL TYPE-S	450(N)	0.14%	244.28	0.26		3.48	3.48	0.028	1.54	2.87	4.20	E 33764.157 N 870544.190	17.85
13	ON-GRADE KIEBER INLET	1/14 UNLTEL TYPE-S	375(N)	0.14%	244.28	0.26		3.68	3.68	0.083	1.50	2.68	3.97	E 33778.185 N 870544.197	0.00
	ON-GRADE KIEBER INLET	2/14 UNLTEL TYPE-S	450(N)	0.14%	244.28	0.26		3.57	3.57	0.083	1.50	2.68	3.97	E 33778.185 N 870544.197	6.77
	ON-GRADE KIEBER INLET	2/14 UNLTEL TYPE-S	450(N)	0.14%	244.28	0.26		3.54	3.54	0.133	1.50	2.68	3.97	E 33780.896 N 870544.169	6.79
	ON-GRADE KIEBER INLET	2/14 UNLTEL TYPE-S	450(N)	0.14%	244.28	0.26		3.48	3.48	0.133	1.50	2.68	3.97	E 33786.807 N 870553.317	21.30
14	ON-GRADE KIEBER INLET	1/15 UNLTEL TYPE-S	375(N)	0.16%	177.63	0.84		3.47	3.47	0.890	1.48	2.49	3.81	E 33778.185 N 870552.899	0.00
	ON-GRADE KIEBER INLET	7/1 UNLTEL TYPE-S	450(N)	0.16%	177.63	0.84		3.32	3.32	0.890	1.48	2.49	3.81	E 33778.185 N 870552.899	7.05
	ON-GRADE KIEBER INLET	7/1 UNLTEL TYPE-S	450(N)	0.16%	177.63	0.84		3.20	3.20	0.890	1.48	2.49	3.81	E 33778.185 N 870552.899	11.95
	ON-GRADE KIEBER INLET	7/1 UNLTEL TYPE-S	450(N)	0.16%	177.63	0.84		3.08	3.08	0.890	1.48	2.49	3.81	E 33778.185 N 870552.899	17.85
15	ON-GRADE KIEBER INLET	1/18 UNLTEL TYPE-S	375(N)	0.45%	244.73	0.63		3.18	3.18	0.844	1.32	2.15	3.37	E 33777.466 N 870542.297	0.00
	ON-GRADE KIEBER INLET	2/18 UNLTEL TYPE-S	450(N)	0.45%	244.73	0.63		3.09	3.09	0.844	1.32	2.15	3.37	E 33777.466 N 870542.297	11.40
	ON-GRADE KIEBER INLET	2/18 UNLTEL TYPE-S	450(N)	0.45%	244.73	0.63		3.00	3.00	0.844	1.32	2.15	3.37	E 33778.481 N 870555.154	16.85
	ON-GRADE KIEBER INLET	2/18 UNLTEL TYPE-S	450(N)	0.45%	244.73	0.63		2.95	2.95	0.844	1.32	2.15	3.37	E 33777.466 N 870553.996	15.40
18	ON-GRADE KIEBER INLET	8/1 UNLTEL TYPE-S	375(O)	0.52%	192.60	0.66		3.04	3.04	0.075	1.55	2.59	3.85	E 33777.466 N 870553.996	25.30
	ON-GRADE KIEBER INLET	8/1 UNLTEL TYPE-S	375(O)	0.52%	192.60	0.66		2.87	2.87	0.075	1.55	2.59	3.85	E 33777.466 N 870553.996	25.30
	ON-GRADE KIEBER INLET	8/1 UNLTEL TYPE-S	375(O)	0.52%	192.60	0.66		2.80	2.80	0.075	1.55	2.59	3.85	E 33777.466 N 870553.996	25.30
	ON-GRADE KIEBER INLET	8/1 UNLTEL TYPE-S	375(O)	0.52%	192.60	0.66		2.70	2.70	0.075	1.55	2.59	3.85	E 33777.466 N 870553.996	25.30

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Drawn	15/03/2018
Checked	15/03/2018
Rev	15/03/2018
Designed	15/03/2018
Installed	15/03/2018
Approved	15/03/2018
Project	PORT DOUGLAS ESTATE - STAGE 1A & 1B
Client	PORT DOUGLAS ESTATE - STAGE 1A & 1B
Sheet	15 OF 15

PORT DOUGLAS LAND DEVELOPMENTS PTY LTD

FOR APPROVAL

NOT TO BE USED FOR CONSTRUCTION PURPOSES

AS SHOWN

Q184103-CI-1252



STRUCTURE NAME	STRUCTURE DESCRIPTION	PIPE SIZE (mm Class)	PIPE GRADE %	PIPE SLOPE 1 in X	FULL PIPE FLOW VELOCITY (m/s)	PART FULL FLOW VELOCITY (m/s)	WATER LEVEL IN STRUCTURE	HYDRAULIC GRADE LEVEL	PIPE FLOW (Cumecs)	DEPTH TO INVERT	INVERT LEVEL OF DRAIN	DESIGN SURFACE LEVEL	STRUCTURE SETOUT	RUNNING CHAINAGE
SAG KIEBER INLET	1/1	375(N)	0.10%	1:100	1.01	0.98	4.15	4.15	0.108	1.34	3.39	4.70	E 33864.157 N 87054.175	0.00
ON-GRADE KIEBER INLET	2/1	450(N)	0.35%	1:285	1.88	1.88	4.08	4.08	0.168	1.63	3.22	4.60	E 33868.278 N 87054.180	29.20
ON-GRADE KIEBER INLET	3/1	600(N)	0.32%	1:312	1.71	1.63	3.82	3.58	0.339	1.51	2.70	4.29	E 33794.597 N 87054.190	50.20
ON-GRADE KIEBER INLET	4/1	600(N)	0.32%	1:312	1.63	1.53	3.67	3.41	0.441	1.51	2.70	4.29	E 33794.597 N 87054.190	31.25
STANDARD 100 DIA	5/1	675(O)	0.32%	1:312	1.69	1.59	3.47	3.17	0.441	1.51	2.70	4.29	E 33794.597 N 87054.190	31.25
STANDARD 100 DIA	6/1	750(N)	0.30%	1:333	1.28	1.28	3.29	3.08	0.582	1.53	2.68	4.28	E 33794.597 N 87054.190	31.25
ON-GRADE KIEBER INLET	7/1	750(N)	0.30%	1:333	1.52	1.52	3.18	2.97	0.671	1.48	2.89	4.05	E 33794.597 N 87054.190	31.25
STANDARD 100 DIA	8/1	750(O)	0.30%	1:333	1.41	1.41	2.94	2.73	0.736	1.59	2.71	4.05	E 33794.597 N 87054.190	31.25
HEADWALL	10/1	750(O)	0.32%	1:312	1.61	1.61	2.82	2.61	0.736	1.69	2.59	3.99	E 33792.044 N 87050.546	4.00
ON-GRADE KIEBER INLET	1/11	375(N)	0.70%	1:143	0.92	0.94	4.18	4.18	0.094	1.43	3.43	4.60	E 33867.502 N 87054.180	0.00
ON-GRADE KIEBER INLET	2/11	450(N)	0.14%	1:714	0.50	0.48	4.07	3.92	0.082	1.95	2.80	4.31	E 33791.278 N 87054.175	6.10
ON-GRADE KIEBER INLET	3/1	450(N)	0.35%	1:285	0.82	0.77	3.82	3.59	0.127	1.97	2.95	4.29	E 33794.429 N 87054.175	18.25
ON-GRADE KIEBER INLET	4/1	375(N)	0.10%	1:100	0.76	0.76	3.68	3.68	0.028	1.94	2.87	4.29	E 33794.597 N 87054.190	0.00
ON-GRADE KIEBER INLET	1/13	375(N)	0.10%	1:100	0.76	0.76	3.68	3.68	0.028	1.94	2.87	4.29	E 33794.597 N 87054.190	0.00
ON-GRADE KIEBER INLET	1/14	375(N)	0.10%	1:100	0.76	0.76	3.68	3.68	0.028	1.94	2.87	4.29	E 33794.597 N 87054.190	0.00
ON-GRADE KIEBER INLET	2/14	450(N)	0.14%	1:714	0.50	0.48	4.07	3.92	0.082	1.95	2.80	4.31	E 33791.278 N 87054.175	6.10
ON-GRADE KIEBER INLET	3/14	450(N)	0.35%	1:285	0.82	0.77	3.82	3.59	0.127	1.97	2.95	4.29	E 33794.429 N 87054.175	18.25
ON-GRADE KIEBER INLET	4/14	375(N)	0.10%	1:100	0.76	0.76	3.68	3.68	0.028	1.94	2.87	4.29	E 33794.597 N 87054.190	0.00
ON-GRADE KIEBER INLET	1/15	375(N)	0.10%	1:100	0.76	0.76	3.68	3.68	0.028	1.94	2.87	4.29	E 33794.597 N 87054.190	0.00
ON-GRADE KIEBER INLET	7/1	375(N)	0.36%	1:278	0.84	0.79	3.72	3.42	0.090	1.81	2.49	3.81	E 33794.899 N 87055.317	0.00
ON-GRADE KIEBER INLET	1/18	375(N)	0.45%	1:222	0.63	0.63	3.18	3.18	0.044	1.92	2.45	3.81	E 33794.899 N 87055.317	0.00
ON-GRADE KIEBER INLET	2/18	450(N)	0.52%	1:192	0.66	0.66	3.04	2.86	0.075	1.95	2.59	3.81	E 33794.899 N 87055.317	0.00
STANDARD 100 DIA	8/1	750(O)	0.32%	1:312	1.61	1.61	2.82	2.61	0.736	1.69	2.59	3.99	E 33792.044 N 87050.546	4.00

LINE	1	11	12	13	14	15	18
DATE	01/04/2018	11/10/2018	11/10/2018	11/10/2018	11/10/2018	11/10/2018	11/10/2018
BY	...	...	...	...	...	...	...
CHK	...	...	...	...	...	...	...
APP	...	...	...	...	...	...	...

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DATE	DESCRIPTION	BY	CHK	APP
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11/10/2018	...	...	...	...
11/10/2018	...	...	...	...
11/10/2018	...	...	...	...
11/10/2018	...	...	...	...

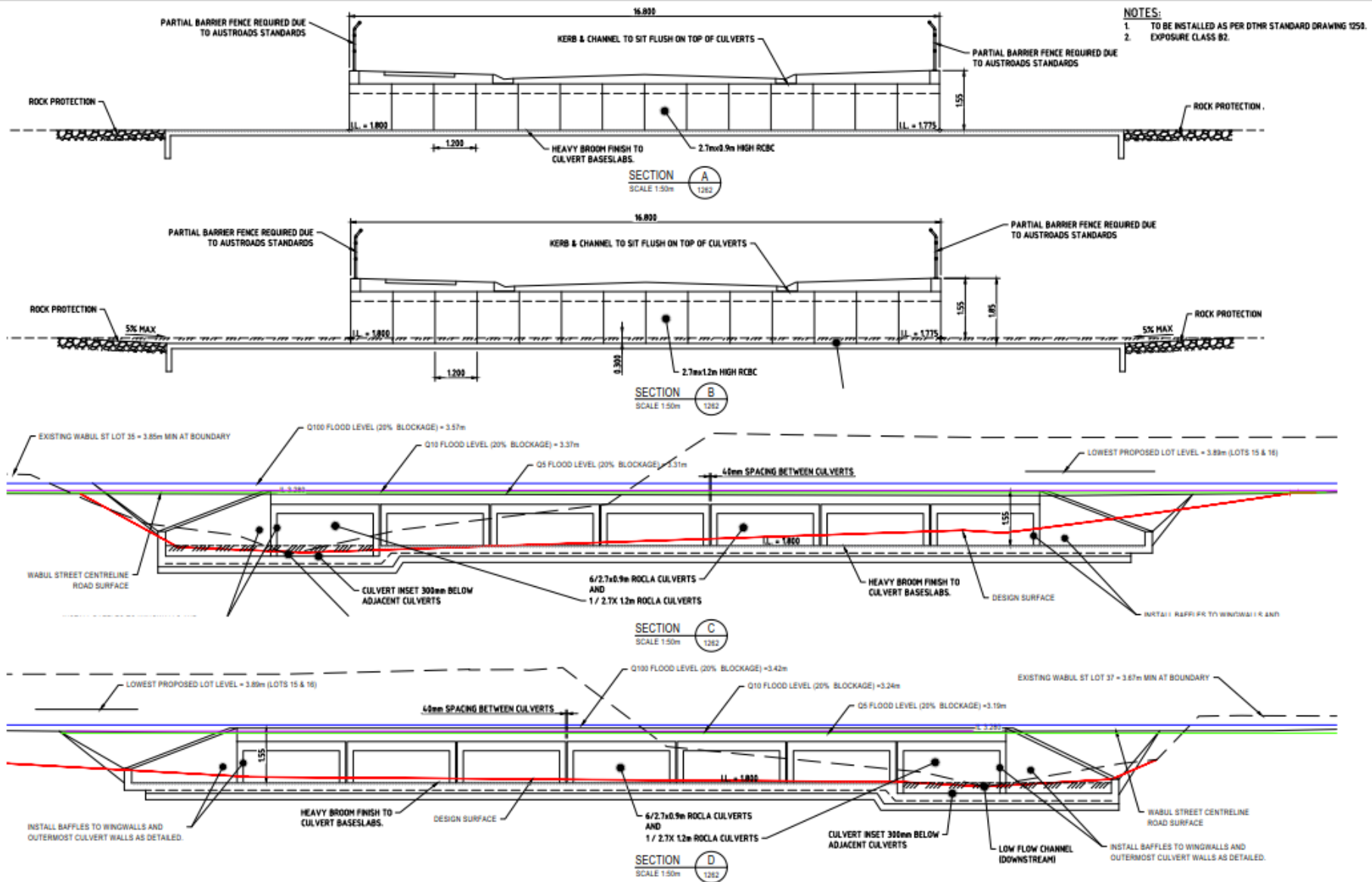
PORT DOUGLAS LAND DEVELOPMENTS PTY LTD  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGIE  
 STORMWATER LONGITUDINAL SECTIONS  
 SHEET 1 OF 2

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DATE: 11/10/2018  
 DRAWN: AS SHOWN  
 CHECKED: A1  
 PROJECT: Q184103-CI-1252  
 SHEET: B

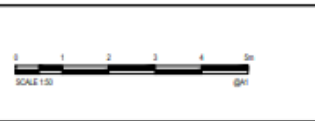


DATE PLOTTED: 14/03/2019 11:48:40 AM USER: MARK COOK



NO. 145 (REVISED) 14/03/2019 11:48:40 AM USER: MARK COOK DATE PLOTTED: 14/03/2019 11:48:40 AM USER: MARK COOK

No.	Date	Description	By	Appd.
1	01.04.2018	ISSUED FOR OPERATIONAL WORKS APPROVAL	MC	MS
2	10.10.2019	FOR OPERATIONAL WORKS APPROVAL	MC	MS



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Drawn	Checked	Scale
MS	MS	1:50
MS	MS	1:50
MS	MS	1:50
MS	MS	1:50
MS	MS	1:50

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**

PROJECT: PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGLIE

DRAWING: CULVERT SECTION PLAN

DATE: 15.10.2019

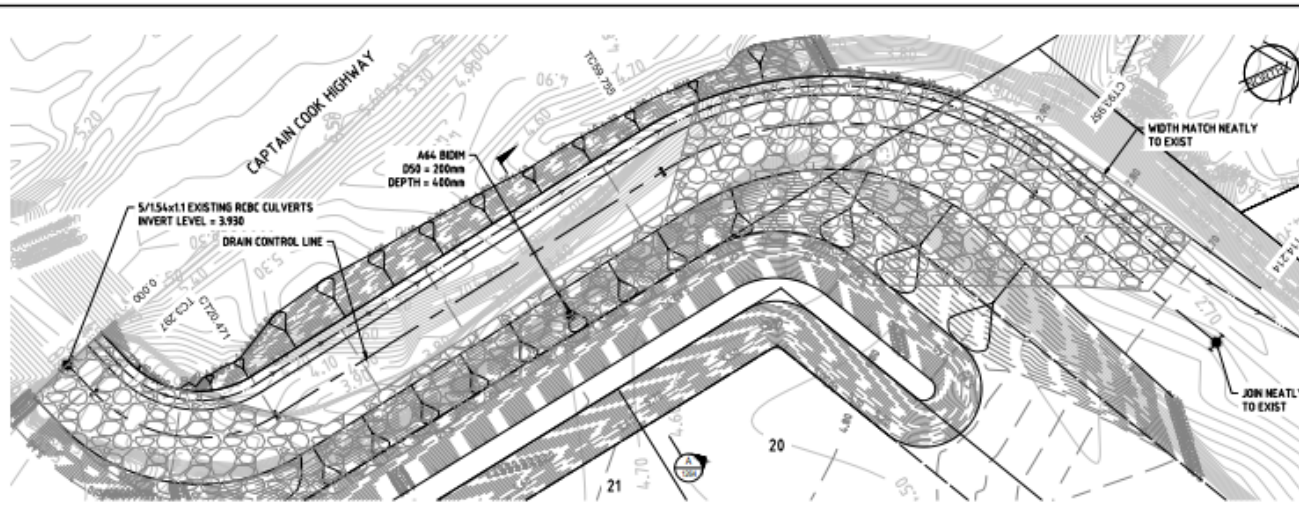
FOR APPROVAL  
 NOT TO BE USED FOR CONSTRUCTION PURPOSES

ISSUED BY: AHD  
 SCALE: AS SHOWN  
 SHEET: A1

DRAWING NUMBER: Q184103-CI-1263



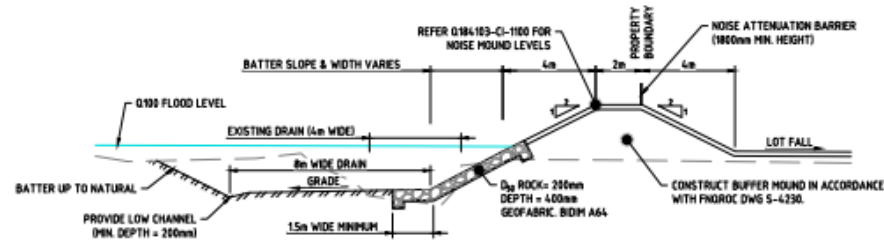
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DATUM RL 8											
HORZ. CURVE LENGTH (m)		17.07m					31.20m				
HORZ. CURVE RADIUS (m)		R=12.50m					R27.50m				
EXISTING SURFACE LEVELS		4.651	4.204	3.558	3.205	3.205	3.205	2.608	2.607	2.637	2.637
ROAD CENTRELINE		4.651	4.204	3.558	3.205	3.205	3.205	2.608	2.607	2.637	2.637
CUT/FILL DEPTH TO EXISTING SURFACE		0.030	0.031	0.046	0.031	0.031	0.031	0.031	0.031	0.031	0.031
DESIGN LEVELS		3.620	3.173	2.527	2.174	2.174	2.174	1.577	1.576	1.606	1.606
ROAD CENTRELINE		3.620	3.173	2.527	2.174	2.174	2.174	1.577	1.576	1.606	1.606
CONTROL LINE CHAINAGE		0+000	0+030	0+063	0+109	0+140	0+171	0+202	0+233	0+264	0+295
ROAD CENTRELINE		0+000	0+030	0+063	0+109	0+140	0+171	0+202	0+233	0+264	0+295

**WABUL STREET**  
 SCALE: H 1:200  
 V 1:200

DRAIN CONTROL LINE							
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPRAL	A.LENGTH
IP 1	0+000	326871.880	871946.196	3.930	79°22'04.62"		
TC	3+297	326871.239	871941.348	3.893	79°22'04.62"		
IP 2	19+884	326880.516	871941.625	3.795	79°22'04.62"	R = 12.500	11.173
CI	23+171	326882.823	871940.791	3.698	302°29'36.62"		
TC	26+725	326871.588	871939.753	3.253	302°29'36.62"		
IP 3	34+866	326875.067	871939.381	3.360	68°51'15.84"	R = 27.500	36.392
CI	39+957	326861.769	871934.769	2.866	68°51'15.84"		
IP 4	59+216	326859.262	871936.877	2.837	68°51'15.84"		



Rev	Date	Description	By	Check	App'd
1	01/04/2020	PROPOSED FOR OPERATIONAL WORKS APPROVAL	MC	MC	MC
2	12/10/2019	FOR OPERATIONAL WORKS APPROVAL	MC	MC	MC



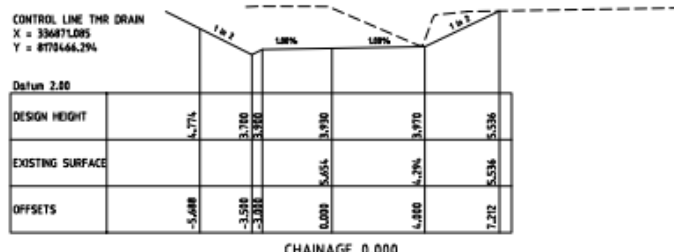
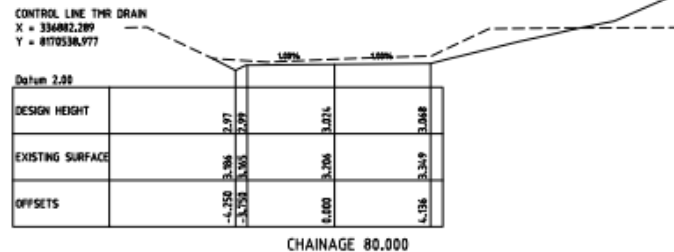
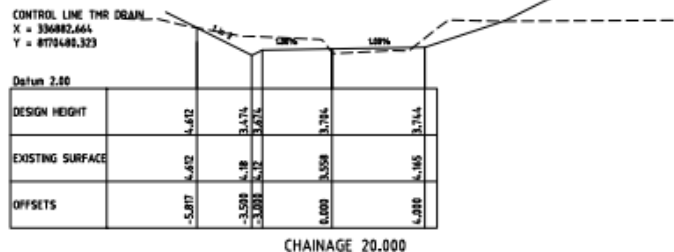
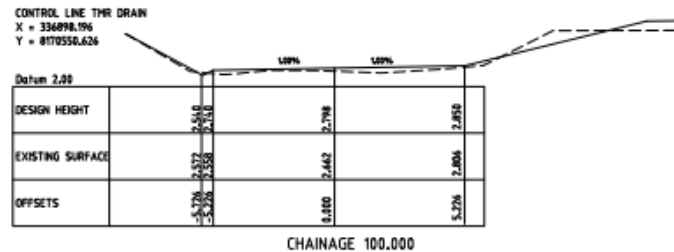
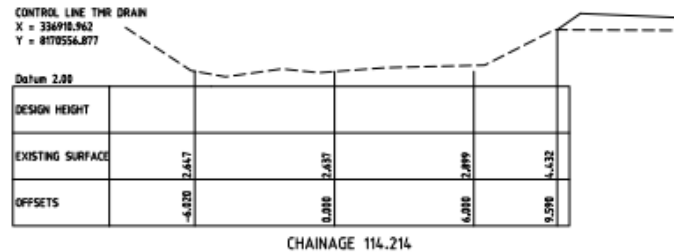
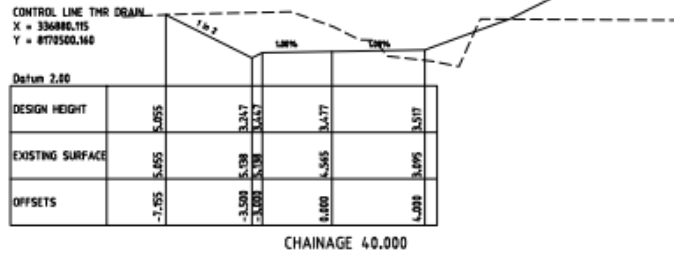
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Drawn	Checked	Issue	Date	Project	Sheet
			18/03/2019	PORT DOUGLAS ESTATE - STAGE 1A & 1B	1
			18/03/2019	SUBDIVISION OF LOT 2 ON SR431	1
			18/03/2019	CAPTAIN COOK HIGHWAY, CRAIGLIE	1
			18/03/2019		
			18/03/2019		
			18/03/2019		
			18/03/2019		

<b>PORT DOUGLAS LAND DEVELOPMENTS PTY LTD</b>			
PROJECT: PORT DOUGLAS ESTATE - STAGE 1A & 1B		SUBDIVISION OF LOT 2 ON SR431	
CAPTAIN COOK HIGHWAY, CRAIGLIE		DATE: 18/03/2019	
DRAWN: MC		SCALE: AS SHOWN	
SHEET 1 OF 2		PERSON: A1	
SHEET 1 OF 2		PROJECT NUMBER: Q184103-CI-1264	
		PERSON: B	

N:\05 - PORT DOUGLAS - PORT DOUGLAS LAND DEVELOPMENTS PTY LTD - STAGE 1A & 1B - SUBDIVISION OF LOT 2 ON SR431 - CAPTAIN COOK HIGHWAY - CRAIGLIE  
 DATE PLOTTED: 14/02/2019 11:58:40 AM - MAP CODE



No.	Date	Description	By	Check	App'd
1	01.04.2019	ISSUED FOR OPERATIONAL WORKS APPROVAL	MC	MC	MC
2	11.10.2019	FOR OPERATIONAL WORKS APPROVAL	MC	MC	MC



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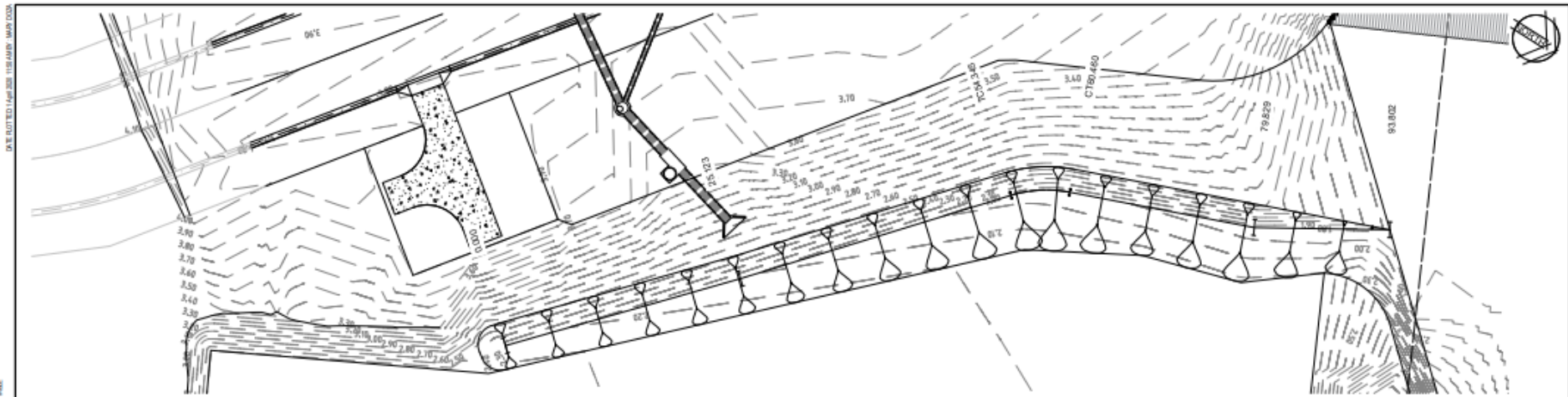
Date	By	Description
15.10.2019	MC	Checked
15.10.2019	MC	Designed
15.10.2019	MC	Issued
15.10.2019	MC	Approved
15.10.2019	MC	Drawn

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGLIE  
 DRAIN DESIGN  
 SHEET 2 OF 2

**FOR APPROVAL**  
 NOT TO BE USED FOR CONSTRUCTION PURPOSES

Client: AHD  
 Scale: AS SHOWN  
 Drawing Number: Q184103-CI-1265  
 Revision: B



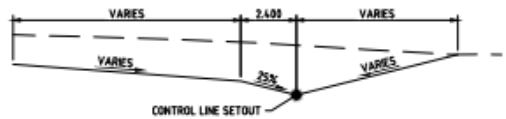


**EASTERN DIVERSION DRAIN**  
SCALE 1:200m



VERT. CURVE LENGTH (M)	VERT. CURVE RADIUS (M)	VERT. GEOMETRY GRADE (%)	VERT. GEOMETRY LENGTH (M)	DATUM RL -10
		-1.50%	28.94m	
		-2.50%	28.94m	
HORIZ. CURVE LENGTH (M)	HORIZ. CURVE RADIUS (M)			
		4.75m	83.40m	
EXISTING SURFACE LEVELS	ROAD CENTRELINE			
		26.000	2.035	2.035
		24.573	2.000	-2.015
		24.171	2.000	-2.201
		24.948	2.000	-2.381
		40.000	2.035	-2.516
		41.307	2.035	-2.651
		41.600	2.035	-2.811
		39.829	1.835	-2.576
		38.000	1.835	-2.577
		33.000	1.716	-2.052
CUT/FILL DEPTH TO EXISTING SURFACE				
DESIGN LEVELS	ROAD CENTRELINE			
CONTROL LINE CHAINAGE	ROAD CENTRELINE			
		0+000		
		26+000		
		34+573		
		34+171		
		34+948		
		40+000		
		41+307		
		41+600		
		39+829		
		38+000		
		33+000		

**EAST DIVERSION DRAIN**  
SCALE H 1:200  
V 1:200



**TYPICAL SECTION**  
SCALE 1:100m

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPRAL	ALLENGTH	DEF_ANGLE
P 1	0.000	38765.876	870256.887	2.295	38°17'04.4"			
P 2	25.000	38706.281	870179.628	2.200				
P 3	25.073	38706.343	870179.640	2.200				
P 4	54.307	38704.99	870182.621	1.943				
P 5	54.348	38704.982	870182.642	1.943				
P 6	37.000	38701.128	870184.476	1.943		R = 84.00	675	27°48'58"
CT	48.448	38706.586	870184.579	1.835	33°07'30.17"			
P 7	39.829	38706.145	870184.640	1.835				
P 8	38.000	38706.371	870182.541	1.766				
P 9	33.000	38706.371	870182.541	1.766	38°17'04.4"			

No.	Date	Description	Disc.	Drawn	App'd
1	01.04.2019	PROPOSED FOR OPERATIONAL WORKS APPROVAL	MC	MS	MS
2	10.10.2019	FOR OPERATIONAL WORKS APPROVAL	MC	MS	MS



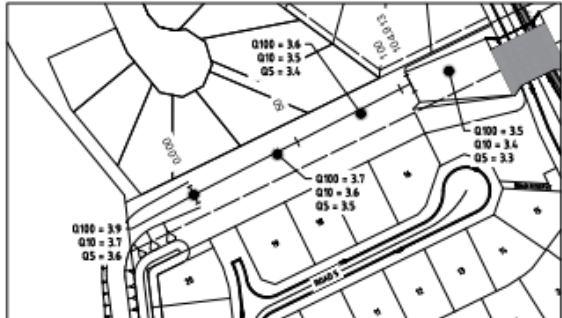
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<b>PORT DOUGLAS LAND DEVELOPMENTS PTY LTD</b> PORT DOUGLAS ESTATE - STAGE 1A & 1B SUBDIVISION OF LOT 2 ON SR431 CAPTAIN COOK HIGHWAY, CRAIGIE EASTERN DIVERSION DRAIN		DATE: 10.10.2019 TIME: 10:10:20 PROJECT: 10.10.2019 DRAWING: 10.10.2019 REVISION: 10.10.2019 APPROVED: 10.10.2019 CHECKED: 10.10.2019 DATE: 10.10.2019	<b>FOR APPROVAL</b> NOT TO BE USED FOR CONSTRUCTION PURPOSES AHD: [ ] SCALE: AS SHOWN SHEET: A1 DRAWING NUMBER: Q184103-CI-1267 POSITION: B
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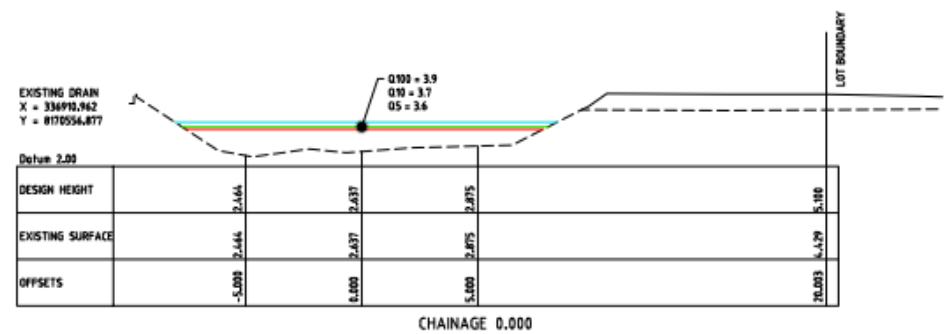
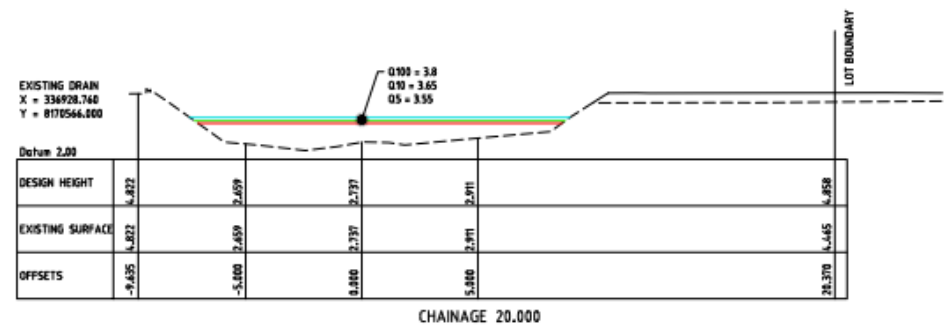
DATE PLOTTED 14/05/2019 11:58:40 AM - MAP 0034

DRAWN BY: J. GIBSON, CHECKED BY: J. GIBSON, DATE: 14/05/2019, PROJECT: PORT DOUGLAS ESTATE - STAGE 1A & 1B, SHEET: Q184103-CI-1268



**LEGEND:**

- Q100 FLOOD LEVEL
- Q10 FLOOD LEVEL
- Q5 FLOOD LEVEL



No.	Date	Description	By	Chk	Appd
1	01/04/2019	PREPARED FOR OPERATIONAL WORKS APPROVAL	MC	MS	MS
2	14/05/2019	FOR OPERATIONAL WORKS APPROVAL	MC	MS	MS



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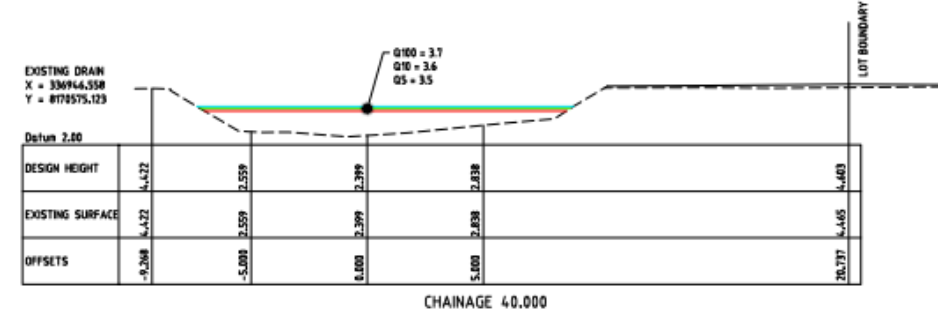
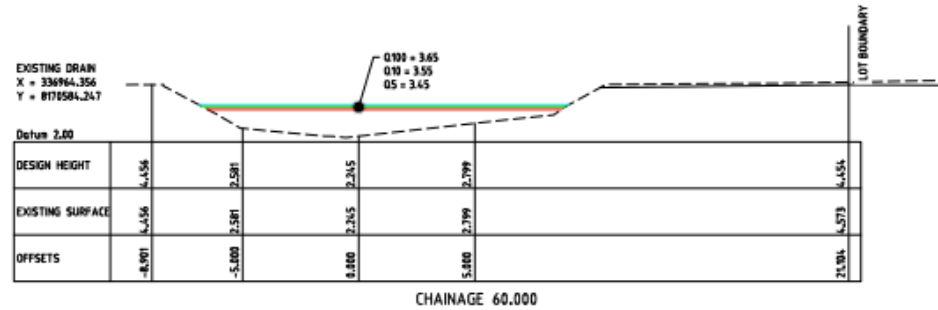
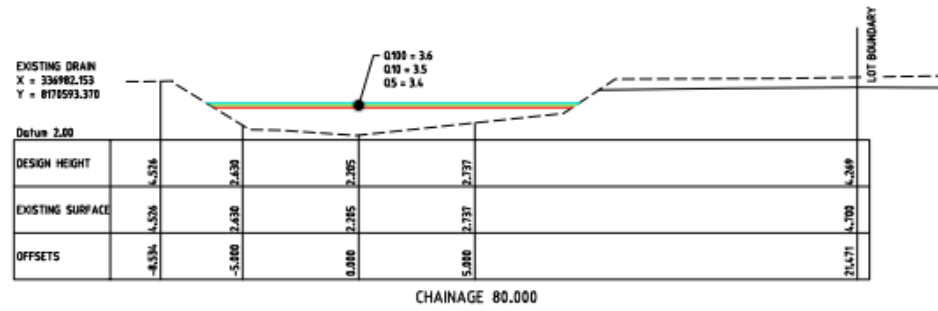
Drawn	MS
Checked	MS
Designed	MS
Verified	MS
Approved	MS

PORT DOUGLAS LAND DEVELOPMENTS PTY LTD  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGIE

**FOR APPROVAL**  
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Client: AHD  
Scale: AS SHOWN  
Sheet: A1  
Drawing Number: Q184103-CI-1268  
Revision: B

**LEGEND:**  
 Q100 FLOOD LEVEL  
 Q10 FLOOD LEVEL  
 Q5 FLOOD LEVEL



No.	Date	Description	Des.	Check	Appr.
1	01/04/2020	ISSUED FOR OPERATIONAL WORKS APPROVAL	MC	MS	MB
2	01/04/2020	FOR OPERATIONAL WORKS APPROVAL	MC	MS	MB



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Drawn	MS
Checked	MS
Designed	MS
Verified	MS
Approved	MS

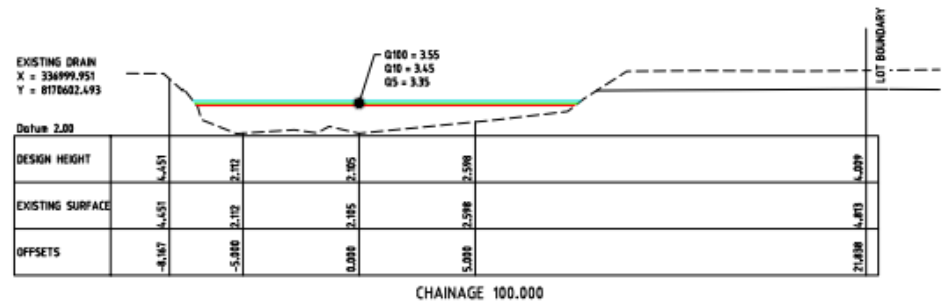
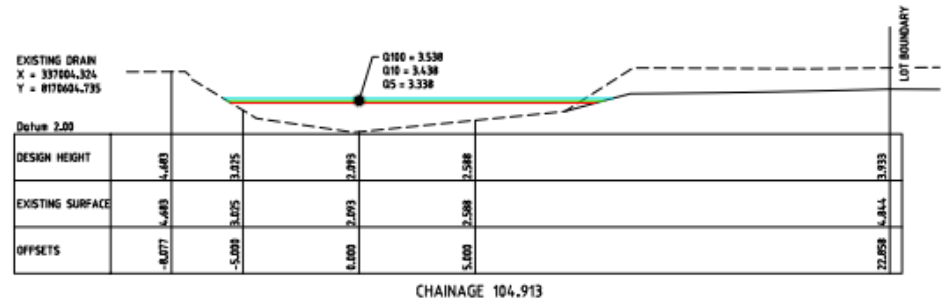
**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGIE

<b>FOR APPROVAL</b>	
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Author	A1
Checked	AS SHOWN
Drawing Number	Q184103-CI-1269
Revision	B



DATE PLOTTED 14/01/2021 11:58:40 AM DRAWN: MARY COOK

**LEGEND:**  
— Q100 FLOOD LEVEL  
— Q10 FLOOD LEVEL  
— Q5 FLOOD LEVEL



18/01/2021 11:58:40 AM DRAWN: MARY COOK  
 DATE PLOTTED 14/01/2021 11:58:40 AM DRAWN: MARY COOK

No.	Date	Description	Disc.	Drawn	Appr.
1	01/04/2020	ISSUED FOR OPERATIONAL WORKS APPROVAL	MC	MC	MC
2	01/04/2020	FOR OPERATIONAL WORKS APPROVAL	MC	MC	MC



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Drawn	MC
Checked	MC
Designed	MC
Verified	MC
Approved	MC

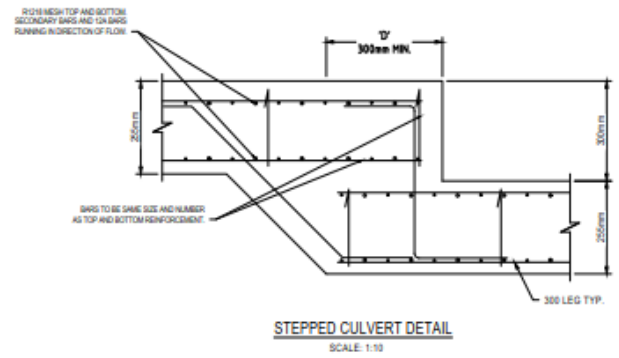
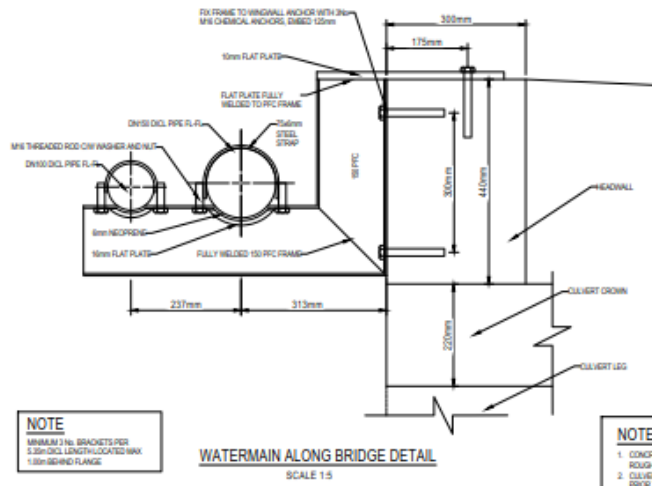
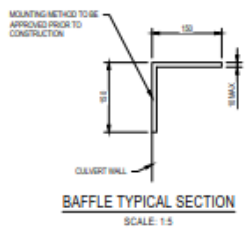
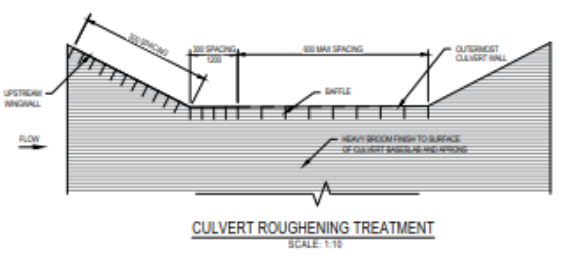
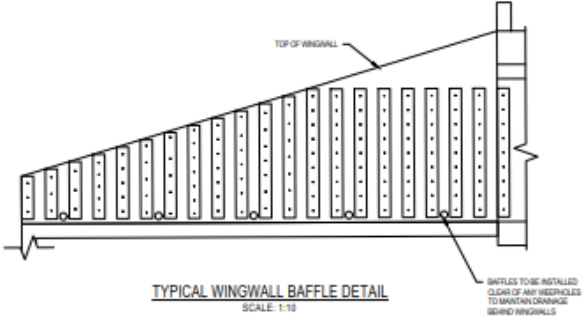
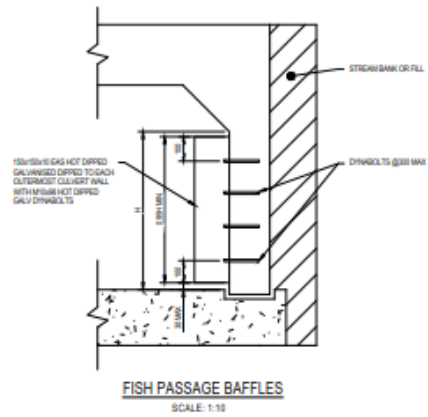
PORT DOUGLAS LAND DEVELOPMENTS PTY LTD  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGIE

**FOR APPROVAL**  
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Client	AS SHOWN	Scale	A1
Drawing Number	Q184103-CI-1270		Revision
			B

DATE PLOTTED: 14/02/2019 10:45:00 AM - MURPHYDESIGN

C:\Users\jordan\Desktop\Drawings\Port Douglas\Stage 1A & 1B\Port Douglas\Stage 1A & 1B\Drawings\CI-1271.dwg



**NOTE**  
MINIMUM 3 NO. BRACKETS PER 3.25m DI. LENGTH LOCATED MAX 1.0m BEHIND FLANGE

- NOTES**
1. CONCRETE APRONS AND BASE OF OUTER CULVERT CELLS TO BE ROUGHENED WITH CONCRETE PAVERS.
  2. CULVERT BASE AND HOOKS TO BE THOROUGHLY CLEANED AND DRIED PRIOR TO APPLICATION OF HAND PLACED PAVERS TREATMENT.
  3. FINAL LAYOUT TO BE APPROVED ON SITE BY THE ADMINISTRATOR.
- STEELWORK NOTES**
1. ALL STEELWORK SHALL CONFORM TO AS 4100 STEEL STRUCTURES.
  2. FABRICATION SHALL BE CARRIED OUT BY WELDERS WHO ARE QUALIFIED IN ACCORDANCE WITH THE REQUIREMENTS OF AS/NZS 1554.
  3. ALL STEELWORK SHALL BE BLAST CLEANED TO CLASS 2/3 AS SPECIFIED IN AS 1554.
  4. SHOP DRAWINGS, IF REQUIRED SHALL BE SUBMITTED BEFORE COMMENCEMENT OF FABRICATION.
  5. ALL BAFFLE PLATES SHALL BE PRE DRILLED AND HOT DIPPED GALVANIZED AND PASSED INTO A SODIUM DICHROMATE SOLUTION.
  6. DRILL HOLES TO ALLOW FOR GALVANIZING PROCESS.

No.	Date	Description	By	Chk	Appr
1	01.04.2020	ISSUED FOR OPERATIONAL WORKS APPROVAL	MC	MC	MC
2		FOR OPERATIONAL WORKS APPROVAL	MC	MC	MC

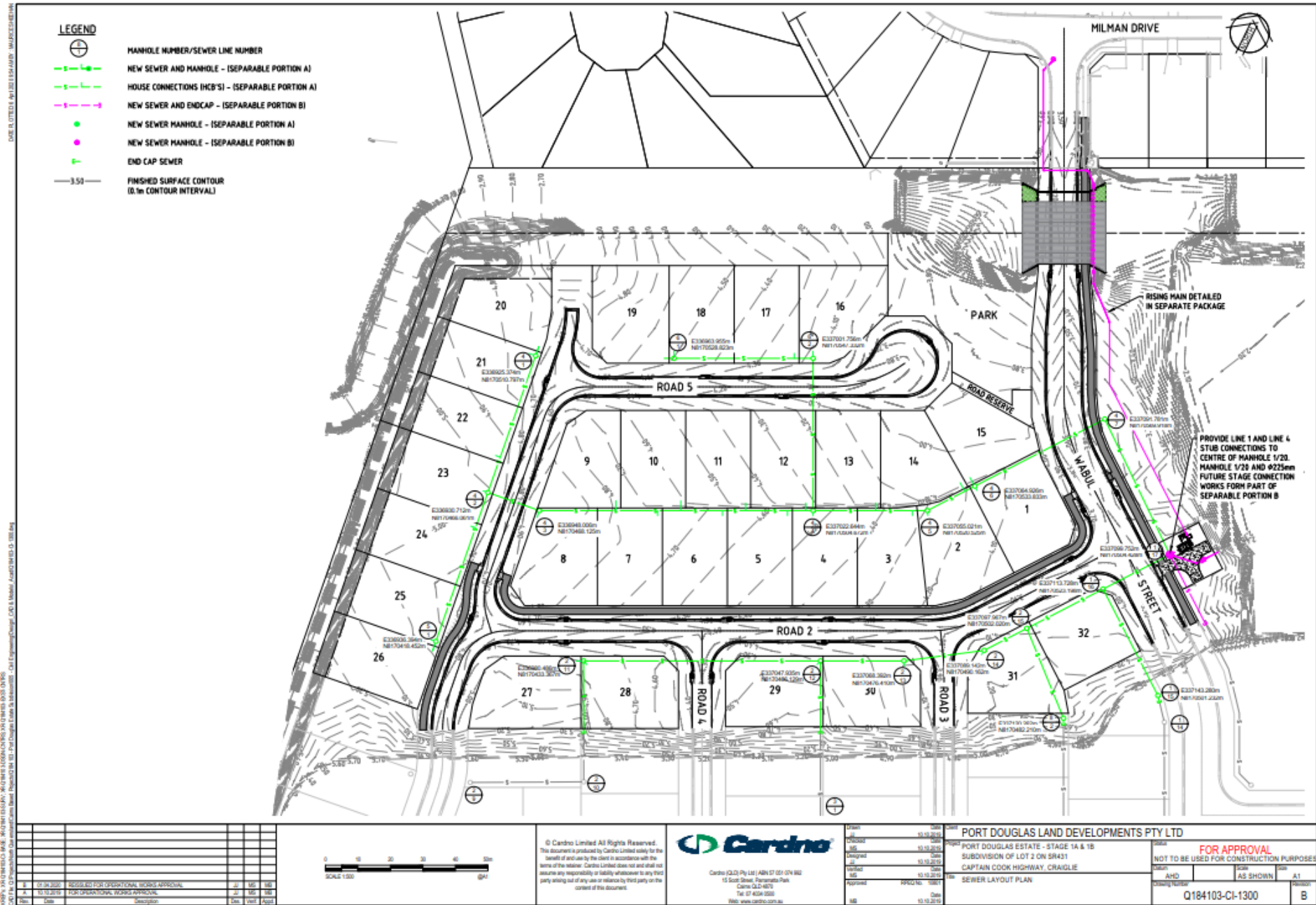
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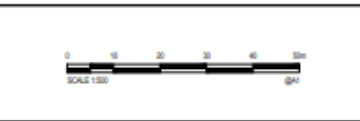
Drawn	1000
Checked	1000
Designed	1000
Verified	1000
Approved	1000
Issue	1000

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGLIE

<b>FOR APPROVAL</b>	
NOT TO BE USED FOR CONSTRUCTION PURPOSES	
DATE	SCALE
BY	AS SHOWN
PROJECT NUMBER	REVISION
Q184103-CI-1271	B



No.	Date	Description	By	Check	Appr.
1	01.04.2020	PROPOSED FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS
2	11.10.2019	FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS



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Task	Start	End
Design	15.10.2019	15.10.2019
Check	15.10.2019	15.10.2019
Issue	15.10.2019	15.10.2019
Approved	15.10.2019	15.10.2019
Drawn	15.10.2019	15.10.2019

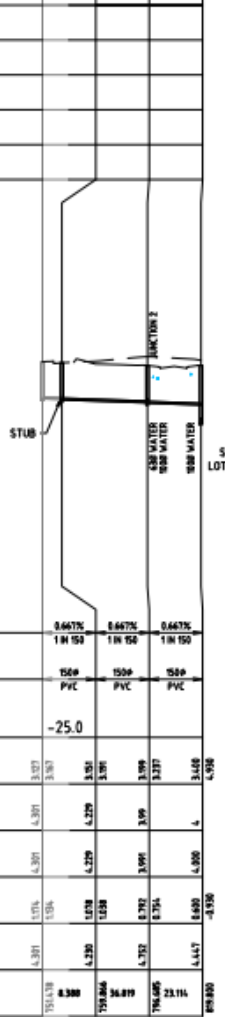
**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGLIE  
 SEWER LAYOUT PLAN

<b>FOR APPROVAL</b>	
NOT TO BE USED FOR CONSTRUCTION PURPOSES	
Client	Scale
AHD	AS SHOWN
Drawing Number	Revision
Q184103-CI-1300	B

HC DAMAGE	
HC DEPTH	
HC IL	
HC TYPE	
HC LOT No.	

GRADE (20)	0.667%	0.667%	0.667%
GRADE (10)	1 IN 150	1 IN 150	1 IN 150
PIPE DIAMETER	150#	150#	150#
PIPE TYPE	PVC	PVC	PVC
DATUM (m)	-25.0		
DEPTH BELOW F.S.L.			
TOP OF MANHOLE LEVEL			
FINISHED SURFACE LEVEL			
INVERT LEVEL			
NATURAL SURFACE LEVEL			
CHAINAGE			

1-14  
1-15  
1-16  
1-17



2-10



2-11



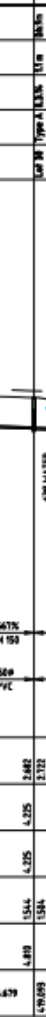
2-12



2-13



2-14



2-15



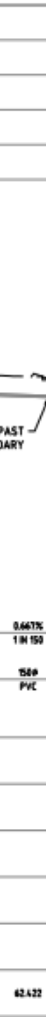
1-16



3-1



2-12



7-12



7-13



8-1



8-2



2-15



Rev	Date	Description	By	App
1	01.04.2019	ISSUED FOR OPERATIONAL WORKS APPROVAL	JL	MB
2	11.10.2019	FOR OPERATIONAL WORKS APPROVAL	JL	MB



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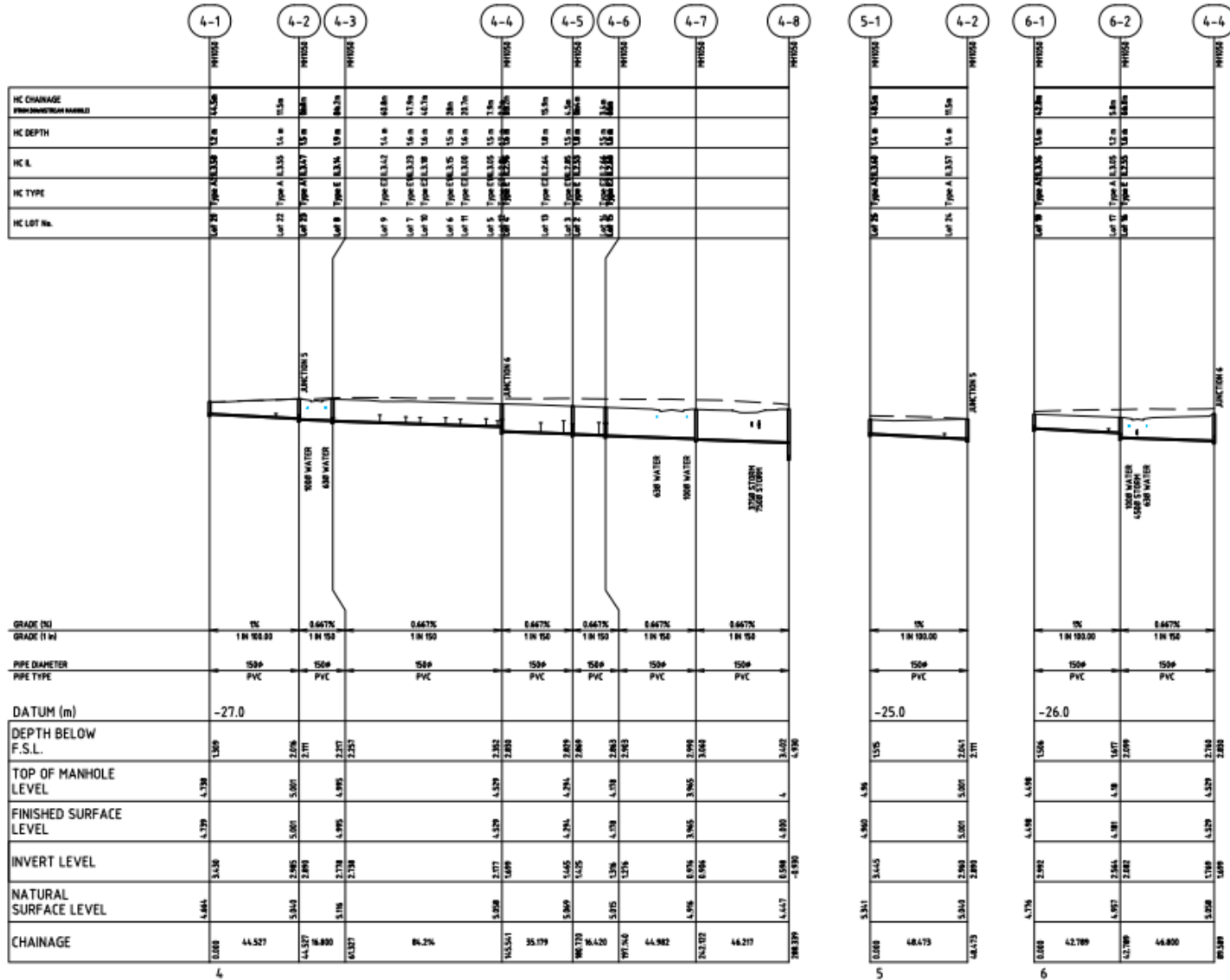
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Drawn	15.10.2019
Checked	15.10.2019
ISS	15.10.2019
Designed	15.10.2019
Revised	15.10.2019
Approved	15.10.2019
Client	15.10.2019

PORT DOUGLAS LAND DEVELOPMENTS PTY LTD  
PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGIE  
SEWER LONGITUDINAL SECTIONS  
SHEET 1 OF 2

FOR APPROVAL  
NOT TO BE USED FOR CONSTRUCTION PURPOSES

Client	AS SHOWN	Sheet	A1	
Drawing Number	Q184103-CI-1301		Revision	B



No.	Date	Description	By	Check	Appr.
1	01/04/2019	PRELIMINARY FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS
2	11/10/2019	FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS



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Date	By	Description
15/05/2019	JL	Issue
15/05/2019	JL	Check
15/05/2019	JL	Design
15/05/2019	JL	Issue
15/05/2019	JL	Check
15/05/2019	JL	Design
15/05/2019	JL	Issue

PORT DOUGLAS LAND DEVELOPMENTS PTY LTD  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGIE  
 SEWER LONGITUDINAL SECTIONS  
 SHEET 2 OF 2

FOR APPROVAL  
 NOT TO BE USED FOR CONSTRUCTION PURPOSES

Client	Scale	Sheet
AHD	AS SHOWN	A1
Drawing Number	Q184103-CI-1302	
Revision	B	

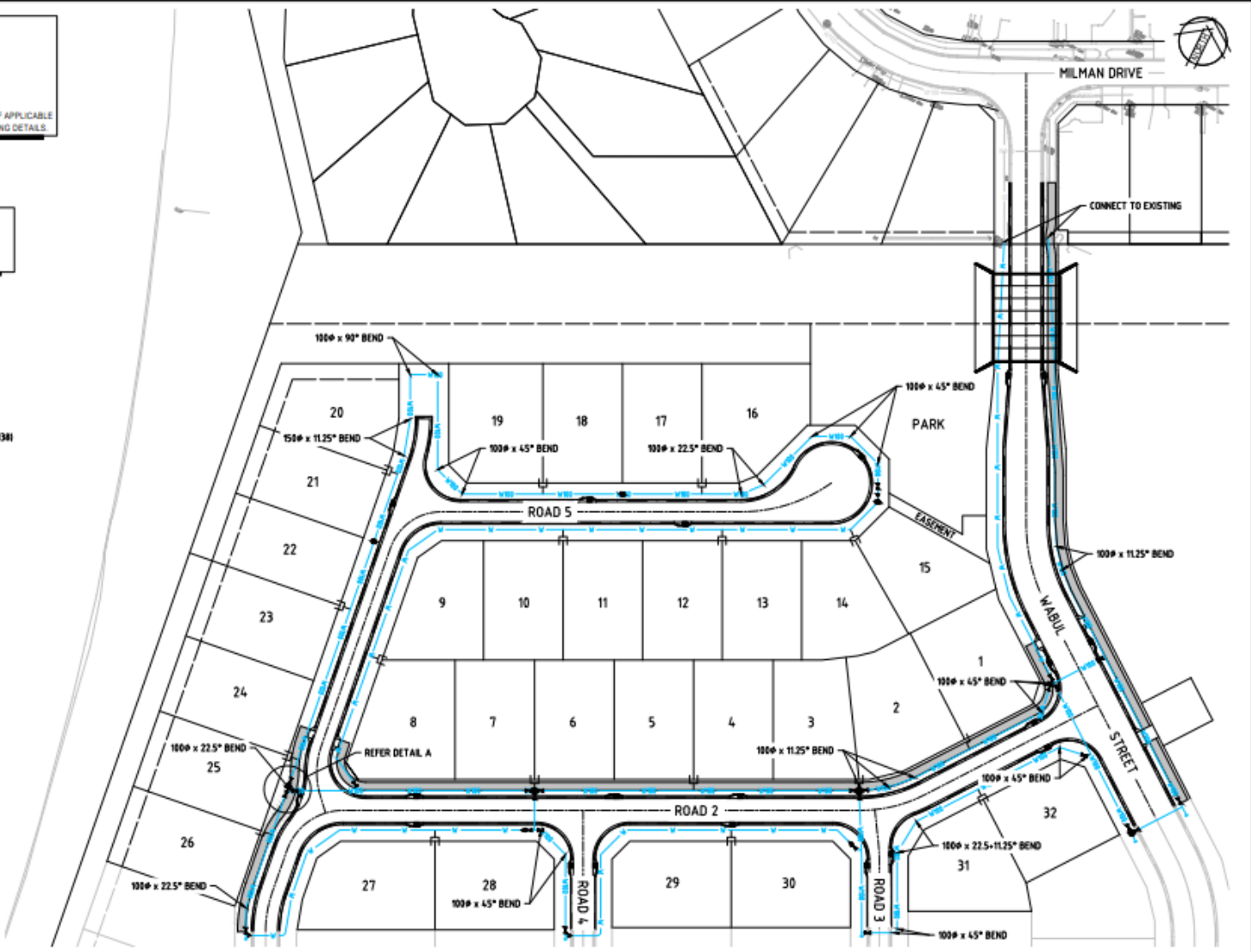
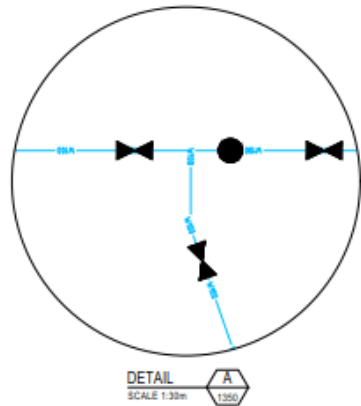


ONE PLOTTED 11/08/2019 9:53:00 AM - MURICE SHEKIN

- NOTES**
- WHERE POSSIBLE, HYDRANTS ARE TO BE LOCATED IN LINE WITH ALLOTMENT BOUNDARIES
  - EXISTING HYDRANTS OR VALVES SHALL BE PROVIDED WITH NEW COVER BOXES AND SURROUNDS AS PER FNRGROC STD. DWGS. S2000 AND S2005.
  - WHERE VALVE SURROUNDS ARE TO BE SET IN CONCRETE, A COMPRESSIBLE LAYER IS TO BE PROVIDED TO ALLOW FOR MAINTENANCE LOWER WATER MAIN UNDER ROAD TO AVOID SUBGRADE IMPROVEMENT IF APPLICABLE
  - REFER FNRGROC STANDARD DRAWING S2016 FOR TRENCH WIDTH & BEDDING DETAILS.

- NOTES**
- LOCATION OF EXISTING WATER MAIN TO BE LOCATED USING GROUND PENETRATING RADAR PRIOR TO EXCAVATION. ALIGNMENT SHOWN PLOTTED FROM COUNCIL RECORD.

- LEGEND**
- 430# WATERMAIN (HDPE RHW)
  - 1000# WATERMAIN (PVC-U PNH)
  - FIRE HYDRANT
  - VALVE
  - REDUCER
  - END CAP
  - HOUSE CONNECTION (REFER FNRGROC STD DWG 2038)



No.	Date	Description	By	Check	Appr.
1	10/10/2019	FOR OPERATIONAL WORKS APPROVAL	JL	MS	MS



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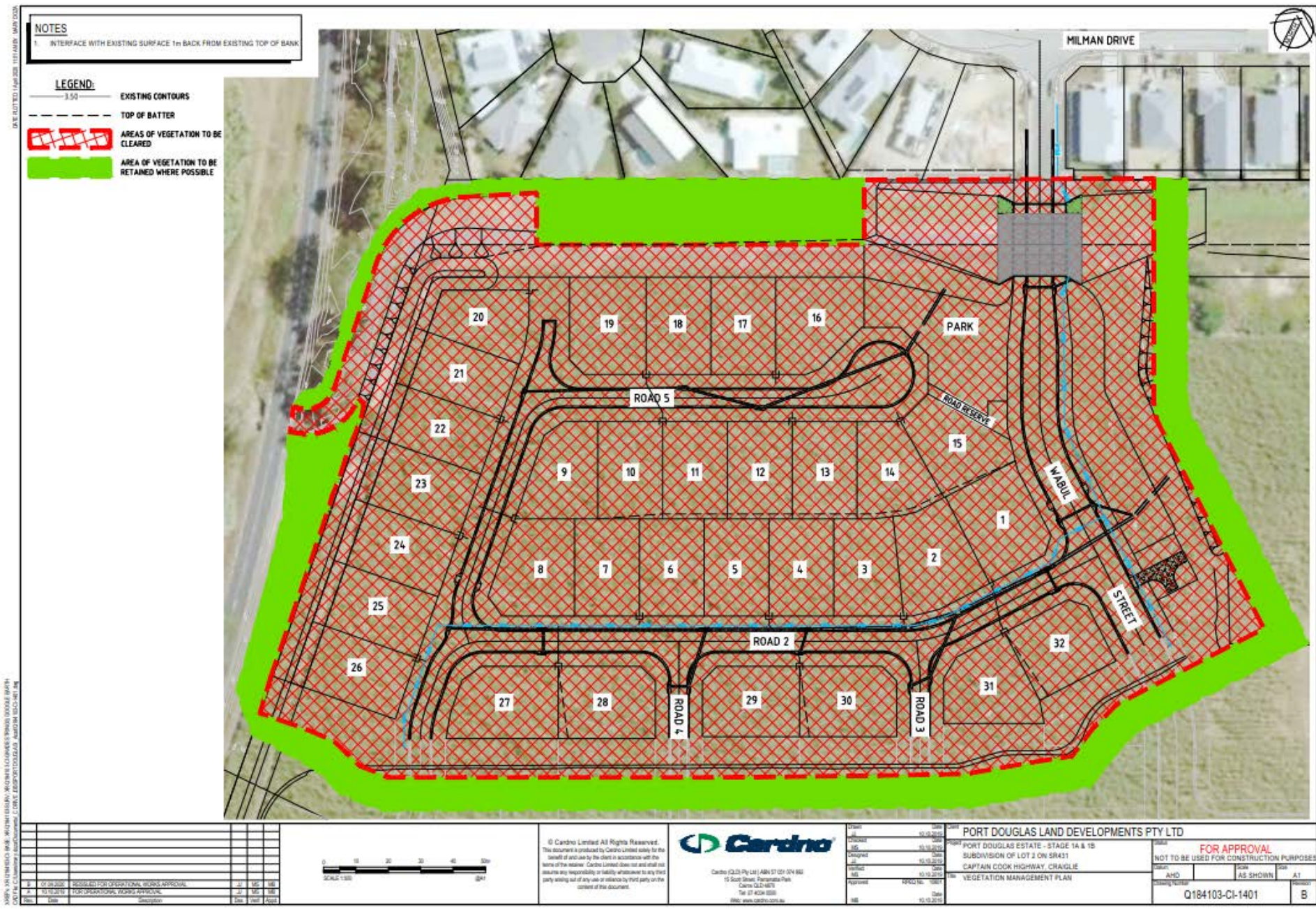
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Drawn	10/10/2019
Checked	10/10/2019
MS	10/10/2019
Designed	10/10/2019
MS	10/10/2019
Verified	10/10/2019
MS	10/10/2019
Approved	10/10/2019
MS	10/10/2019

PORT DOUGLAS LAND DEVELOPMENTS PTY LTD  
PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGLIE  
WATER LAYOUT PLAN

<b>FOR APPROVAL</b>	
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Client	AS SHOWN
Scale	A1
Drawing Number	Q184103-CI-1350
Revision	A





DATE PLOTTED: 14/01/2015 11:51:AM BY: MARK COOK



SECTION A  
SCALE 1:50m



SECTION B  
SCALE 1:50m



SECTION C  
SCALE 1:50m

DATE PLOTTED: 14/01/2015 11:51:AM BY: MARK COOK

No.	Date	Description	By	Check	Appr.
1	01/04/2012	PREPARED FOR OPERATIONAL WORKS APPROVAL	JJ	MS	MS
2	11/10/2015	FOR OPERATIONAL WORKS APPROVAL	JJ	MS	MS



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Drawn	Checked	Designed	Verified	Approved	Date
MS	MS	MS	MS	MS	15/10/2015

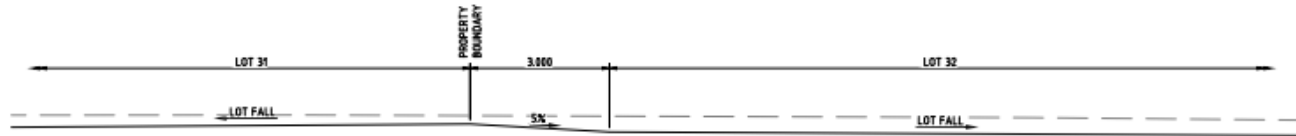
**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGIE  
MISCELLANEOUS DETAILS PLAN

<b>FOR APPROVAL</b>	
Client	Scale
AHD	AS SHOWN
Drawing Number	Revision
Q184103-CI-1402	B

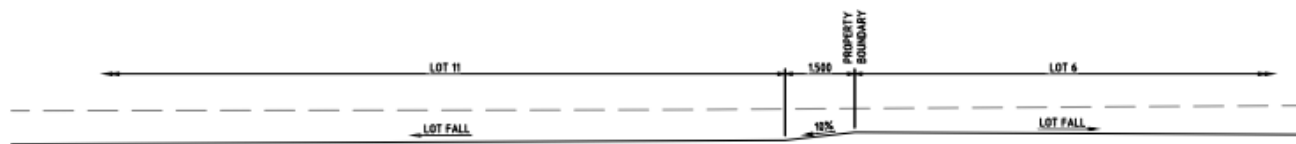
DATE PLOTTED: 14/01/2016 11:51:AM BY: MARK COOK



SECTION A  
SCALE 1:50m



SECTION B  
SCALE 1:50m



SECTION C  
SCALE 1:50m

DATE: 01/04/2010 10:00:00 AM PROJECT: PORT DOUGLAS LAND DEVELOPMENTS PTY LTD

No.	Date	Description	By	Check	Appr.
1	01/04/2010	PREPARED FOR OPERATIONAL WORKS APPROVAL	JC	MS	MS
2	11/10/2010	FOR OPERATIONAL WORKS APPROVAL	JC	MS	MS



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Drawn	Checked	Issue	Date
MS	MS	MS	10/10/2010
MS	MS	MS	10/10/2010
MS	MS	MS	10/10/2010
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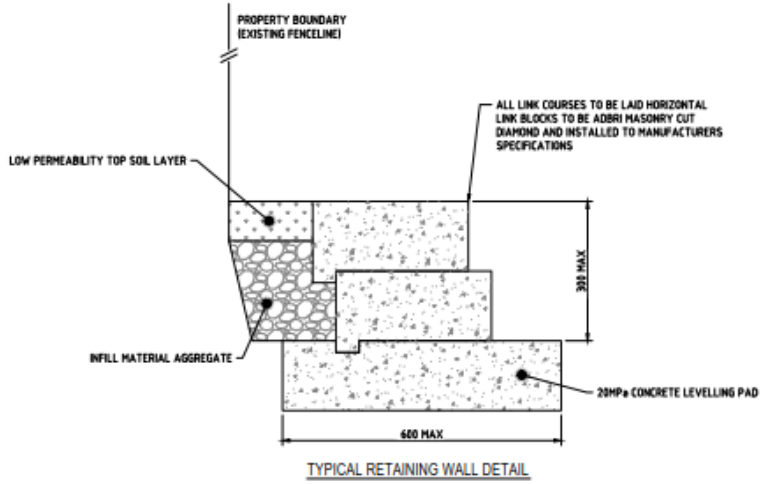
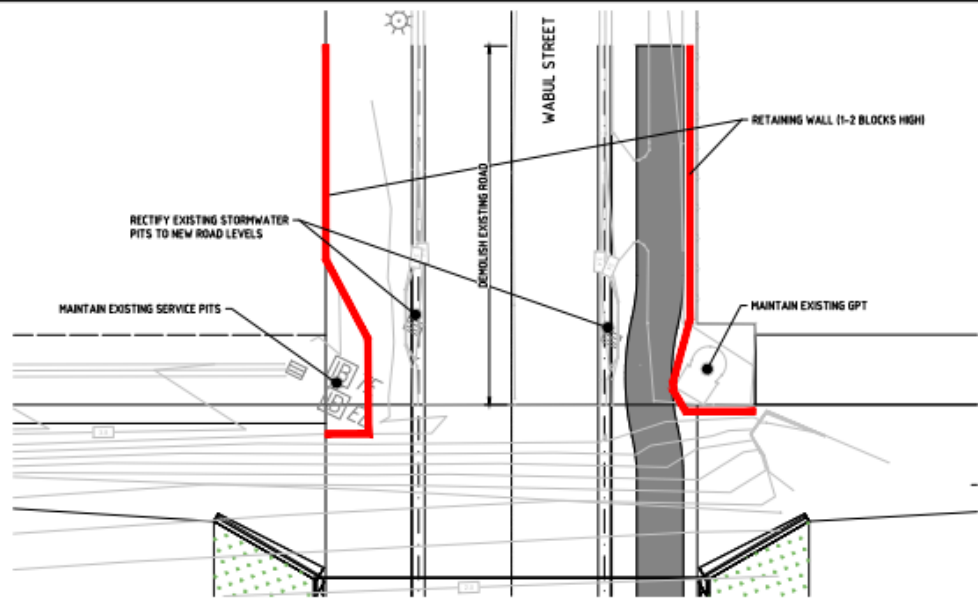
**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGIE  
MISCELLANEOUS DETAILS PLAN

FOR APPROVAL	
NOT TO BE USED FOR CONSTRUCTION PURPOSES	
Client: AHD	Scale: AS SHOWN
Drawing Number: Q184103-CI-1402	Revision: B



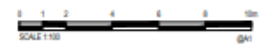
DATE PLOTTED 14/01/2019 11:52:AM BY: MARK COOK

S:\09 - PORT DOUGLAS LAND DEVELOPMENTS PTY LTD - PORT DOUGLAS ESTATE - STAGE 1A & 1B - SUBDIVISION OF LOT 2 ON SR431 - CAPTAIN COOK HIGHWAY, CRAIGLIE - PORT DOUGLAS - QLD 4217 - PORT DOUGLAS LAND DEVELOPMENTS PTY LTD - 15/10/2019



TYPICAL RETAINING WALL DETAIL

No.	Date	Description	By	Check	Appr.
1	01/04/2019	ISSUED FOR OPERATIONAL WORKS APPROVAL	JC	MS	MS
2	11/10/2019	FOR OPERATIONAL WORKS APPROVAL	JC	MS	MS



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Issue	Date	By	Check	Appr.
1	15/10/2019	JC	MS	MS
2	15/10/2019	JC	MS	MS
3	15/10/2019	JC	MS	MS
4	15/10/2019	JC	MS	MS
5	15/10/2019	JC	MS	MS

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGLIE

Project	Client	Scale	Sheet
PORT DOUGLAS ESTATE - STAGE 1A & 1B SUBDIVISION OF LOT 2 ON SR431 CAPTAIN COOK HIGHWAY, CRAIGLIE	FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES	AS SHOWN	A1
Retaining Wall Details Plan			B
Drawing Number	Q184103-CI-1404		



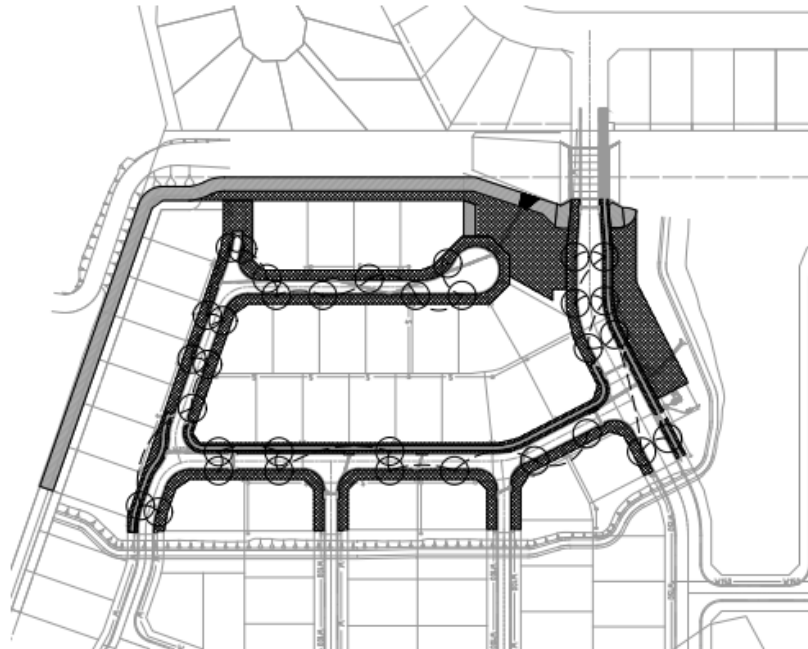
# PORT DOUGLAS ESTATE - STAGE 1A & 1B

## SUBDIVISION OF LOT 2 ON SR431ADDRESS CAPTAIN COOK HIGHWAY, CRAIGLIE

### LANDSCAPE DOCUMENTATION

Issue: OPERATIONAL WORKS  
Date: 08-11-2019

SHEET PLAN 1:1000@A1



#### DRAWING SCHEDULE

DRAWING NUMBER	TITLE	REVISION
1902-016CDL01	COVER SHEET	03
1902-016CDL1.01	LANDSCAPE PLAN	02
1902-016CDL2.01	STANDARD DETAILS	02
1902-016CDL3.01	STANDARD SPECIFICATIONS	03

#### PLANT SCHEDULE

CODE	SPECIES	COMMON NAME	POTSIZE	MAT HT	MAT SP	STAKE	QTY PER MODULE	TOTAL
<b>SHADE TREES</b>								
BAR.acu	BARRINGTONIA acutangula	Stream Barringtonia	45L					16
BAR.asi	BARRINGTONIA asiatica	Asian Barringtonia	45L					6
BAR.ca1	BARRINGTONIA caespitosa	Caseworky Pine	45L					9
<b>PT1</b>								
LOM.hya	LOMANDRA hyacinthifolia	Creek Mat-rush	140mm		3m <sup>2</sup>			362
<b>PT2</b>								
<b>SHADE TREES - S</b>								
DIL.sta	DILLERIA stala	Red Beach	140mm	15m	6m	No	1	20
<b>LARGE TREES / SHRUBS - C</b>								
PHY.cas	PHYLLANTHUS cauculifolius	Pink Phyllanthus	140mm	4m	3m	No	4	120
MEL.rub	MELICHOPE rubra	Little Evodia	140mm	6m	4m	No	2	60
ACM.ham	ACEMENA hemsleyana	Broad Leaf Lilly Pilly	140mm	8m	4m	No	2	60
GSE.sai	GREVILLEA salicifolia	White Oak	140mm	10m	6m	No	Max 2	48
SYZ.ava	SYZYGIUM australe	Scrub Cherry	200mm	10m	6m	No	Max 2	6
SYZ.res	SYZYGIUM resilience	Resilience Lilly Pilly	140mm	4m	2m	No	Max 2	6
<b>MEDIUM SHRUBS - B</b>								
LEE.ind	LEEA indica	Sandicott Berry	140mm	4m	3m	No	4	120
CAL.ent	CALLISTEMON "endeavour"	Bottlebrush	140mm	3m	3m	No	Max 2	6
CAL.gr	CALLISTEMON "gawson river"	Gawson River Waegeer	140mm	3m	3m	No	Max 2	6
CAL.cu	CALLISTEMON "candy pink"	Bottlebrush	140mm	3m	3m	No	Max 2	6
CAL.w.t	CALLISTEMON "wild fire"	Bottlebrush	140mm	3m	3m	No	Max 2	6
CAL.w.w	CALLISTEMON "wilderness white"	Bottlebrush	140mm	3m	3m	No	3	90
<b>SMALL SHRUBS - A</b>								
LOM.hya	LOMANDRA hyacinthifolia	Mat Rush	140mm	1m	1m	No	10	300
LAP.la	LEPTOSPERMUM laevigatum "Cardwell"	Leptospermum	140mm	2.5m	2m	No	4	120
PHY.gm	PHYLLANTHUS limprichtii	Passce Rover	140mm	1.5m	2m	No	4	120
KAN.ver	KANTHOSTEMON verticillatus	Little Prickles	140mm	2m	1m	No	2	60
<b>PT3</b>								
LOM.hya	LOMANDRA hyacinthifolia	Creek Mat-rush	140mm		3m <sup>2</sup>			158
PHY.cas	PHYLLANTHUS cauculifolius	Pink Phyllanthus	300mm					12
CUP.ana	CUPANIOPSIS anacardoides	Tuckeroo	45L					3

The Contractor shall review the plant schedule to ensure that drawings and schedules concur. Where insufficient detail or discrepancies may exist on either the plans or the schedule, it is the Contractor's responsibility to resolve immediately with the Landscape Architect and prior to providing Tender pricing, signing work contracts or commencement of works.

#### IMPORTANT NOTE

This plan was prepared for the sole purpose of - PORT DOUGLAS LAND DEVELOPMENT PTY LTD (Client) for the specific purpose of OPERATIONAL WORKS (Purpose). This plan is strictly limited to the Purpose and does not apply directly or indirectly and will not be used for any other application, purpose, use or matter. The plan is presented without the assumption of a duty of care to any other person (other than the Client) (Third Party) and may not be relied on by Third Party. Landplan LA will not be liable (in negligence or otherwise) for any direct or indirect loss, damage, liability or claim arising out of or incidental to:  
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e. lodgement of the plan with any local authority against the recommendation of Landplan LA;  
f. the accuracy, reliability, suitability or completeness of any estimates or approximations made or referred to by Landplan LA in this plan.

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Refer to - Civil Engineer's drawings for service locations. All services are to be verified on site prior to any excavation / construction. Trees to be located minimum 1m from services. All services are indicative only.

Final set-out for all landscape treatments to be confirmed on site by the Landscape Architect. Unless shown on the landscape drawings, refer to Structural Engineer's drawings for piling, reinforcement, structural frame etc for all walls and pavements. All trees marked within / adjacent to vehicle sightlines are to be set out on site prior to installation and approved by the Landscape Architect and Traffic Engineer. For Lighting requirements refer Electrical Engineer's drawings. The Contractor shall review the plant schedule to ensure that drawings and schedules concur. Where insufficient detail or discrepancies may exist on either the plans or the schedule, it is the Contractor's responsibility to resolve immediately with the Landscape Architect and prior to providing tender pricing, signing work contracts or commencement of works.

#### GENERAL NOTES:

1. Refer to Engineer's drawings for finished surface levels unless shown on Landscape drawings. Refer setting levels to buildings and adjacent surface except where instructed by the Engineer. All new finished surfaces are to align flush with existing surface levels.
2. Refer to Engineer's drawings for path and kerb crossover setting out service locations, piling and consulting in pavement, all structural frame and reinforcements to pavements and walls etc., lighting and hydraulic services.
3. Final set-out for all landscape treatments to be confirmed on site by the Engineer.

#### UNDERGROUND SERVICES:

The location of underground services are approximate only and their exact location should be determined on site. No guarantee is given that all existing services are shown.

#### TREE SETTING OUT PRINCIPLES:

- Trees are to be planted in accordance with ENGR/DC Design Guidelines D9-Landscaping at the following spacings:
- 4.0m min. from electricity or telecommunications poles or pylars
  - 7.5m min. from overheads
  - 4.0m radius from high voltage transmission lines
  - 2.0m from stormwater pits
  - 0.8 - 1.0m from back of kerb
  - 3.0m min. from driveway
  - 1.0m min. from the back of the kerb of the adjoining street

#### NOTE:

PLANS HAVE BEEN PREPARED WITHOUT ELECTRICAL DESIGN. TREES MAY NEED TO BE SITE LOCATED TO MEET ENGR/DC REQUIREMENTS REGARDING LIGHT POLES.

Rev. No.	Description	Date	Drawn
01	PRELIMINARY	23/08/2019	SM
02	OPERATIONAL WORKS	08/11/2019	SM
03	OPERATIONAL WORKS	08/11/2019	SM

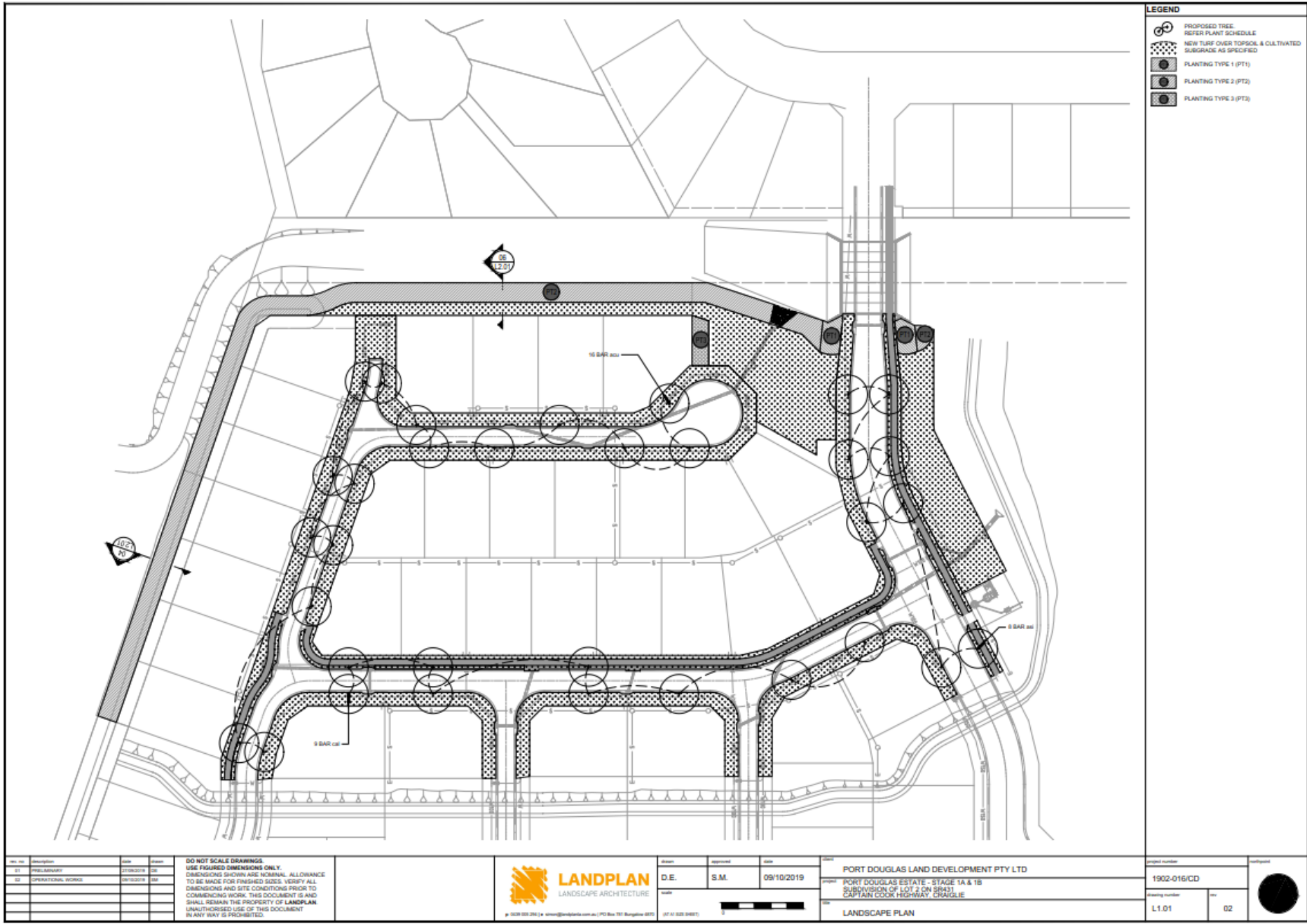
**DO NOT SCALE DRAWINGS.**  
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Author	Approved	Date	Sheet
D.E.	S.M.	08/11/2019	1902-016/CD

Project Number	Project Name
1902-016/CD	PORT DOUGLAS ESTATE - STAGE 1A & 1B SUBDIVISION OF LOT 2 ON SR431 CAPTAIN COOK HIGHWAY, CRAIGLIE

Project Number	Sheet Number
1902-016/CD	L.O.01 03



**LEGEND**

-  PROPOSED TREE  
REFER PLANT SCHEDULE
-  NEW TURF OVER TOPSOIL & CULTIVATED  
SUBGRADE AS SPECIFIED
-  PLANTING TYPE 1 (PT1)
-  PLANTING TYPE 2 (PT2)
-  PLANTING TYPE 3 (PT3)

Rev. No.	Description	Date	Drawn
01	PRELIMINARY	23/08/2019	DM
02	OPERATIONAL WORK	09/10/2019	DM

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1902 008 284 | e: [dm@landplan.com.au](mailto:dm@landplan.com.au) | PO Box 787 Bangholme 4872  
 07 47 028 0487

Author	Approved	Date
D.E.	S.M.	09/10/2019

PORT DOUGLAS LAND DEVELOPMENT PTY LTD  
 PROJECT: PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAGGIE  
 SHEET: LANDSCAPE PLAN

Project Number	Sheet Number
1902-016/CD	L1.01

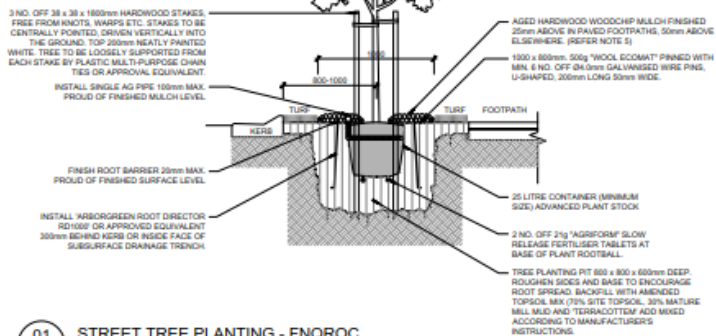
**NOTES:**

1. FOR LOCATION AND SPECIES OF TREES REFER PROJECT DRAWINGS.
2. PRIOR TO PLANTING ALL WEEDS SHALL BE KILLED BY SPRAYING A SUITABLE GLYPHOSATE BASED HERBICIDE. SPRAYED AREA SHALL REMAIN UNDISTURBED FOR TWO WEEKS.
3. EXCAVATED PLANTING HOLE SHALL ALLOW FOR A MINIMUM 100mm CLEARANCE AROUND THE ROOTBALL. BASE OF HOLE TO BE RIPPED TO 150mm DEPTH TO PROMOTE DRAINAGE.
4. TOP OF ROOTBALL TO BE FINISHED FLUSH WITH EXISTING GROUND LEVEL.
5. MULCH TO BE 75mm THICK IN PAVED FOOTPATHS, 125mm THICKNESS ELSEWHERE.
6. REFER STANDARDS SPECIFICATION FOR MAINTENANCE AND WATERING REQUIREMENTS.
7. ALL DIMENSIONS ARE IN MILLIMETRES.

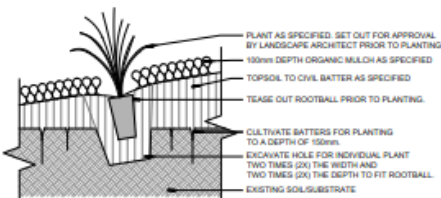
PROPOSED TREE AS SPECIFIED (REFER TO PLANT SCHEDULE) ENSURE TRUNK IS VERTICAL.



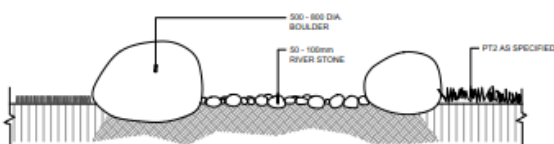
NOTE: VERIFY LOCATION OF SERVICES PRIOR TO EXCAVATION OF TREE HOLE



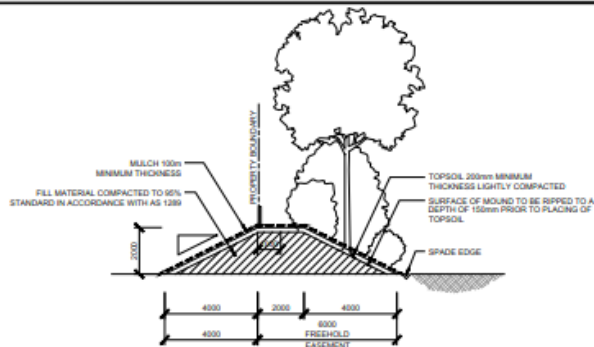
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SCALE 1:20



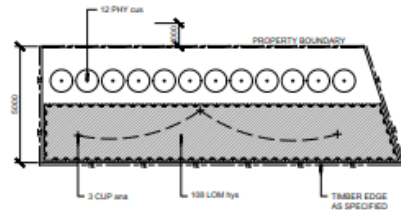
**02 PT2 PLANTING - BATTER PLANTING**  
SCALE 1:10



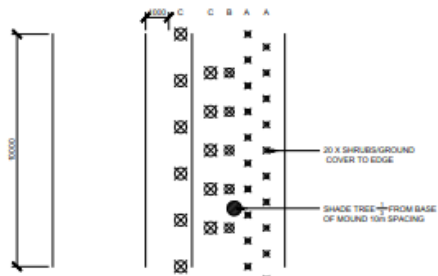
**03 STORM WATER - OUTLET DETAIL**  
SCALE 1:10



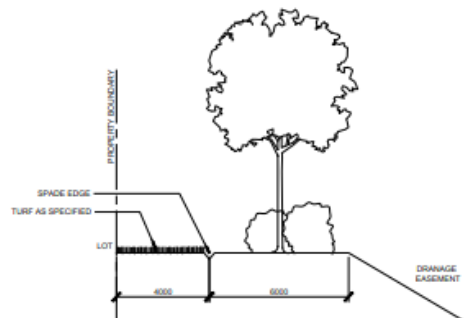
**04 BUFFER MOUND - SECTION 1**  
SCALE 1:100



**07 PLANTING DETAIL - PT3**  
SCALE 1:100



**05 PT 2 - PLANTING LAYOUT**  
SCALE 1:100



**06 SECTION - 2**  
SCALE 1:100

Rev. No.	Description	Date	By
01	PRELIMINARY	21/06/2019	SM
02	OPERATIONAL WORKS	09/10/2019	SM

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Author	Approved	Date
D.E.	S.M.	09/10/2019

PORT DOUGLAS LAND DEVELOPMENT PTY LTD  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRANGIE

Project Number	Sheet Number
1902-016/CD	L2.01



# SUITABLE STREET TREES. SHADE/Flower/SMALL FRUIT.

- ARCHIDENDRON GRANDIFLORUM
- BUCKINGHAMIA CELSISSIMA
- DARLINGIA DARLINGIANA
- DEPLANCHEA TETRAPHYLLA
- GREVILLEA BAILEYANA
- LEPIDORAMA SERICOLIGNIS
- MELALEUCA VIRIDIFLORA
- MIMOSOPS ELENGI - NOT SHOWY FLOWERS - BUT GREAT SHADE
- SYZYGIUM FIBROSUM ) SHOWY LEAVES.
- SYZYGIUM LUEHMANNII )
- TARENNA DALACHIANA



RA29-N



Department of  
**State Development,  
Manufacturing,  
Infrastructure and Planning**

Our reference: 1912-14552 SRA  
Your reference: OP2019\_3370/1  
Applicant reference: Q184103

20 March 2020

Chief Executive Officer  
Douglas Shire Council  
PO Box 723  
Mossman Qld 4873  
enquiries@douglas.qld.gov.au

Attention: Neil Beck

Dear Sir/Madam

## **Changed referral agency response (with conditions) — Captain Cook Highway, Operational Works – Stage 1A & 1B Craiglie Subdivision (Waterway Barrier Works)**

(Given under section 28 of the Development Assessment Rules)

On 17 March 2020 the department received notice of a change to the development application described below. The department has assessed the changes and now provides this changed referral agency response which replaces the response dated 19 February 2020.

### **Response**

---

Outcome:	Referral agency response – with conditions.
Date of response:	20 March 2020
Conditions:	The conditions in <b>Attachment 1</b> must be attached to any development approval.
Advice:	Advice to the applicant is in <b>Attachment 2</b> .
Reasons:	The reasons for the referral agency response are in <b>Attachment 3</b> .



## Development details

---

Description:	Development permit	Operational Works associated with Stage 1A & 1B of 32-lot Craiglie subdivision (waterway barrier works)
SARA role:	Referral Agency.	
SARA trigger:	<b>Schedule 10, Part 6, Division 4, Subdivision 3, Table 1, Item 1</b> (Planning Regulation 2017) - Operational work that is constructing or raising waterway barrier works	
SARA reference:	1912-14552 SRA	
Assessment Manager:	Douglas Shire Council	
Street address:	Captain Cook Highway, Craiglie	
Real property description:	Lot 2 on SR431	
Applicant name:	Port Douglas Land Developments Pty Ltd	
Applicant contact details:	C/- Cardno PO Box 1619 Parramatta Park QLD 4870 maurice.sheehan@cardno.com.au	

## Representations

---

An applicant may make representations to a concurrence agency, at any time before the application is decided, about changing a matter in the referral agency response (s.30 Development Assessment Rules) Copies of the relevant provisions are in **Attachment 4**.

A copy of this response has been sent to the applicant for their information.

For further information please contact Anthony Westbury, Planning Officer, on 0740373215 or via email CairnsSARA@dsmip.qld.gov.au who will be pleased to assist.

Yours sincerely



Brett Nancarrow  
Manager (Planning)

cc Port Douglas Land Developments Pty Ltd C/- Cardno, maurice.sheehan@cardno.com.au

enc Attachment 1 - Changed referral agency conditions  
Attachment 2 - Advice to the applicant  
Attachment 3 - Reasons for decision to impose conditions  
Attachment 4 - Change representation provision  
Attachment 5 - Approved plans and specifications

## Attachment 1—Changed referral agency conditions

(Under section 56(1)(b)(i) of the *Planning Act 2016* the following conditions must be attached to any development approval relating to this application) (Copies of the plans and specifications referenced below are found at Attachment 5)

No.	Conditions	Condition timing
<b>Operational Works</b>		
Schedule 10, Part 6, Division 4, Subdivision 3, Table 1, Item 1 – Operational work for waterway barrier works—The chief executive administering the <i>Planning Act 2016</i> nominates the Director-General of the Department of Agriculture and Fisheries to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following condition(s):		
1.	Maintain the development in accordance with the plans referenced in condition 2, and the requirements of any conditions included in this referral agency response.	At all times.
2.	<p>Development authorised under this approval is limited as follows:</p> <p>The operational works to raise or construct a waterway barrier works that is the formalisation of a drain, resulting in the permanent diversion of an amber waterway, including scour protection and construction of a permanent culvert crossing within Lot 2 on SR431 and shown in:</p> <ul style="list-style-type: none"> <li>• Port Douglas Estate – Stage 1A &amp; 1B Subdivision of Lot 2 on SR431 Captain Cook Highway, Craiglie – Culvert Plan, Cardno, 12 February 2020, Q184103-CI-SK01, revision 4 <u>2</u>.</li> <li>• Port Douglas Estate – Stage 1A &amp; 1B Subdivision of Lot 2 on SR431 Captain Cook Highway, Craiglie – Culvert Sections Sheet 1, Cardno, 12 February 2020, Q184103-CI-SK02, revision 4 <u>2</u>.</li> <li>• Port Douglas Estate – Stage 1A &amp; 1B Subdivision of Lot 2 on SR431 Captain Cook Highway, Craiglie – Culvert Sections Sheet 2, Cardno, 12 February 2020, Q184103-CI-SK03, revision 4 <u>2</u>.</li> <li>• Port Douglas Estate – Stage 1A &amp; 1B Subdivision of Lot 2 on SR431 Captain Cook Highway, Craiglie – Culvert Details, Cardno, 12 February 2020, Q184103-CI-SK04, revision 4 <u>2</u>.</li> <li>• Port Douglas Estate – Stage 1A &amp; 1B Subdivision of Lot 2 on SR431 Captain Cook Highway, Craiglie – Drain Design, Cardno, 12 February 2020, Q184103-CI-SK05, revision 1.</li> </ul>	At all times.
3.	<p>Provide written notice to notifications@daf.qld.gov.au, when the development authorised under this approval:</p> <p>(a) will start, and</p> <p>(b) when it has been completed.</p> <p>These notices must state this permit number 1912-14552 SRA.</p>	<p>At least 5 business days but no greater than 20 business days prior to the commencement of the works.</p> <p>Within 15 business days of the completion of the fisheries development works.</p>

4.	Spoil is not disposed of within waterways and is managed to prevent acid soil development.	At all times.
5.	This fisheries development (as defined by the Fisheries Act 1994) constitutes a place that is required to be open for inspection by an inspector at all times, pursuant to section 145 of the Fisheries Act 1994.	At all times.
6.	Up and downstream fish passage must be provided across the waterway barrier(s).	At all times.
7.	The waterway barrier(s) and any associated infrastructure are to be constructed and maintained to avoid fish injury, mortality and/or entrapment.	At all times.
8.	Works within the waterway must be avoided during times of elevated flows (Q1 events or higher).	At all times.

**Attachment 2—Advice to the applicant**

---

<b>General advice</b>	
1.	Terms and phrases used in this document are defined in the <i>Planning Act 2016</i> its regulation or the State Development Assessment Provisions (SDAP) [v2.5]. If a word remains undefined it has its ordinary meaning.

### **Attachment 3—Reasons for referral agency response**

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(Given under section 56(7) of the *Planning Act 2016*)

**The reasons for the department's decision are:**

- The department carried out an assessment of the development application against the State Development Assessment Provisions, State Code 18: Constructing or raising waterway barrier works in fish habitats, and has found that, with conditions, the proposed development complies with the relevant assessment benchmarks as follows:
  - o Adequate fish passage within the waterway is achieved by provision of a low flow channel for the length of the waterway, inclusion of a low flow culvert cell, baffles on bankside and wing walls, and roughening of all other culvert cells.
  - o Douglas Shire Council is to maintain the waterway barrier to ensure fish passage is retained for the life of the barrier.

**Material used in the assessment of the application:**

- The development application material and submitted plans
- *Planning Act 2016*
- Planning Regulation 2017
- The *State Development Assessment Provisions* (version [2.5]), as published by the department
- The Development Assessment Rules
- SARA DA Mapping system
- State Planning Policy mapping system



## **Attachment 4—Change representation provisions**

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(page left intentionally blank – attached separately)

## Development Assessment Rules—Representations about a referral agency response

The following provisions are those set out in sections 28 and 30 of the Development Assessment Rules<sup>1</sup> regarding **representations about a referral agency response**

### Part 6: Changes to the application and referral agency responses

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#### 28 Concurrence agency changes its response or gives a late response

- 28.1. Despite part 2, a concurrence agency may, after its referral agency assessment period and any further period agreed ends, change its referral agency response or give a late referral agency response before the application is decided, subject to section 28.2 and 28.3.
- 28.2. A concurrence agency may change its referral agency response at any time before the application is decided if—
- (a) the change is in response to a change which the assessment manager is satisfied is a change under section 26.1; or
  - (b) the Minister has given the concurrence agency a direction under section 99 of the Act; or
  - (c) the applicant has given written agreement to the change to the referral agency response.<sup>2</sup>
- 28.3. A concurrence agency may give a late referral agency response before the application is decided, if the applicant has given written agreement to the late referral agency response.
- 28.4. If a concurrence agency proposes to change its referral agency response under section 28.2(a), the concurrence agency must—
- (a) give notice of its intention to change its referral agency response to the assessment manager and a copy to the applicant within 5 days of receiving notice of the change under section 25.1; and
  - (b) the concurrence agency has 10 days from the day of giving notice under paragraph (a), or a further period agreed between the applicant and the concurrence agency, to give an amended referral agency response to the assessment manager and a copy to the applicant.

---

<sup>1</sup> Pursuant to Section 68 of the *Planning Act 2016*

<sup>2</sup> In the instance an applicant has made representations to the concurrence agency under section 30, and the concurrence agency agrees to make the change included in the representations, section 28.2(c) is taken to have been satisfied.

## Part 7: Miscellaneous

### 30 Representations about a referral agency response

30.1. An applicant may make representations to a concurrence agency at any time before the application is decided, about changing a matter in the referral agency response.<sup>3</sup>

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<sup>3</sup> An applicant may elect, under section 32, to stop the assessment manager's decision period in which to take this action. If a concurrence agency wishes to amend their response in relation to representations made under this section, they must do so in accordance with section 28.

## **Attachment 5—Approved plans and specifications**

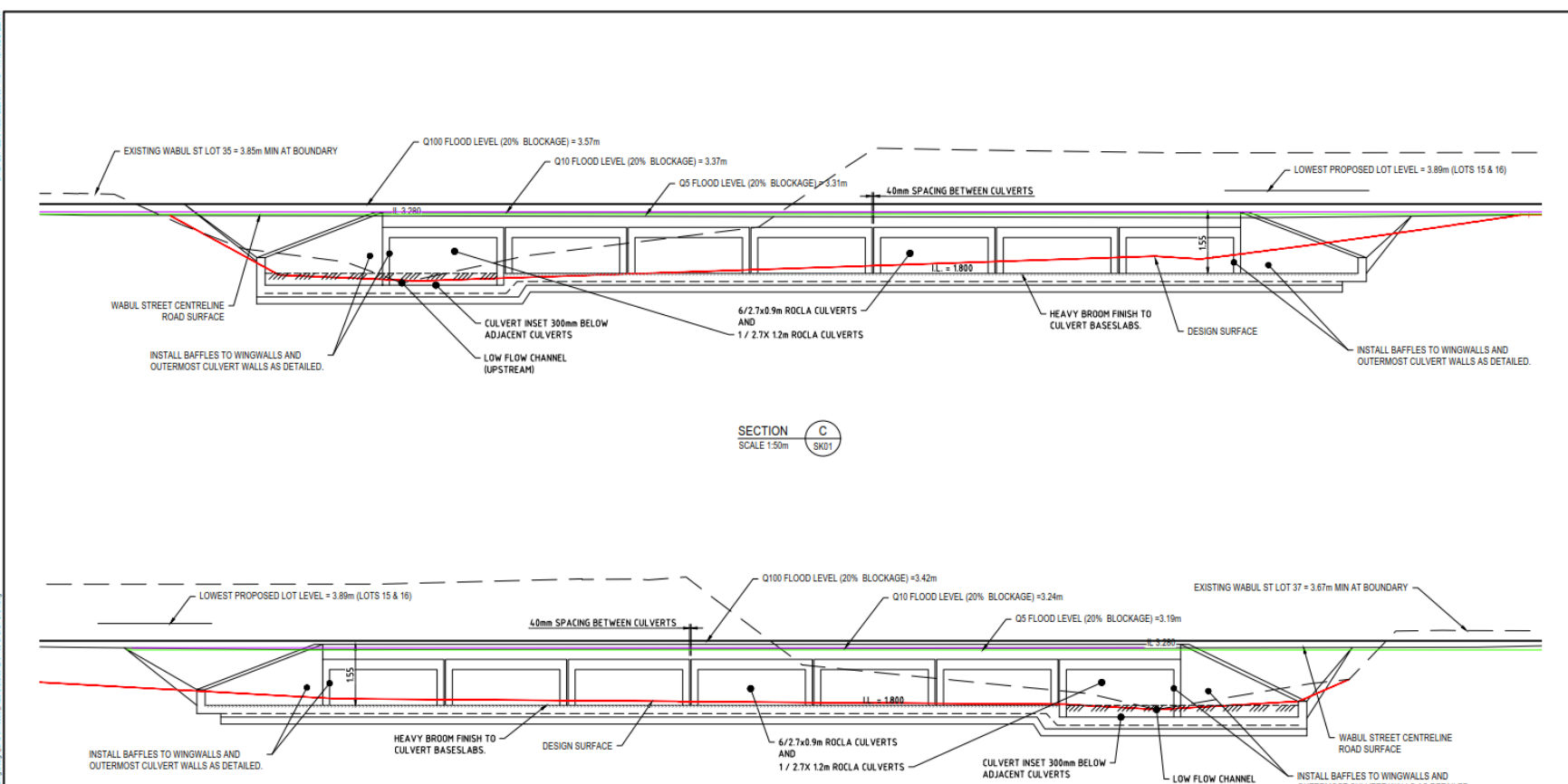
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(page left intentionally blank – attached separately)







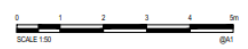


**PLANS AND DOCUMENTS referred to in the REFERRAL AGENCY RESPONSE**

SARA ref: 1912-14522 SRA  
 Date: 20 March 2020

- NOTES:
- TO BE INSTALLED AS PER DTMH STANDARD DRAWING 1250.
  - EXPOSURE CLASS B2.

Rev	Date	Description	Des	Verif	Appr
1	12.02.2020	ISSUED FOR INFORMATION			
2	18.03.2020	REVISED TO PROVIDE HEAVY BROOM FINISH	MB	MB	MB



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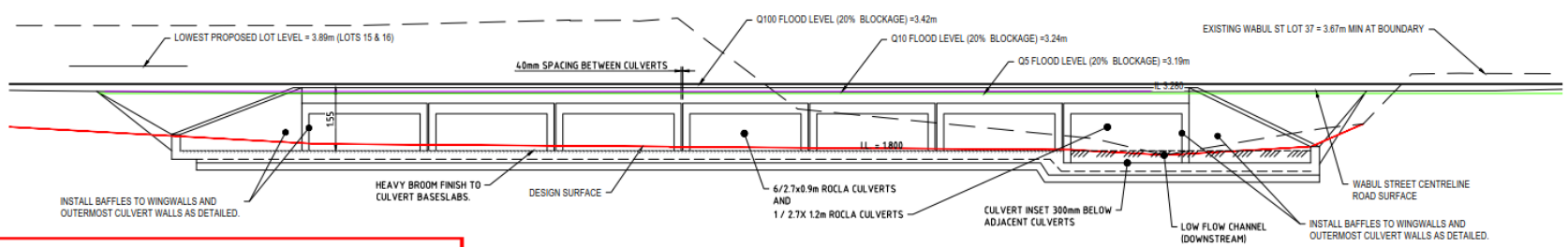
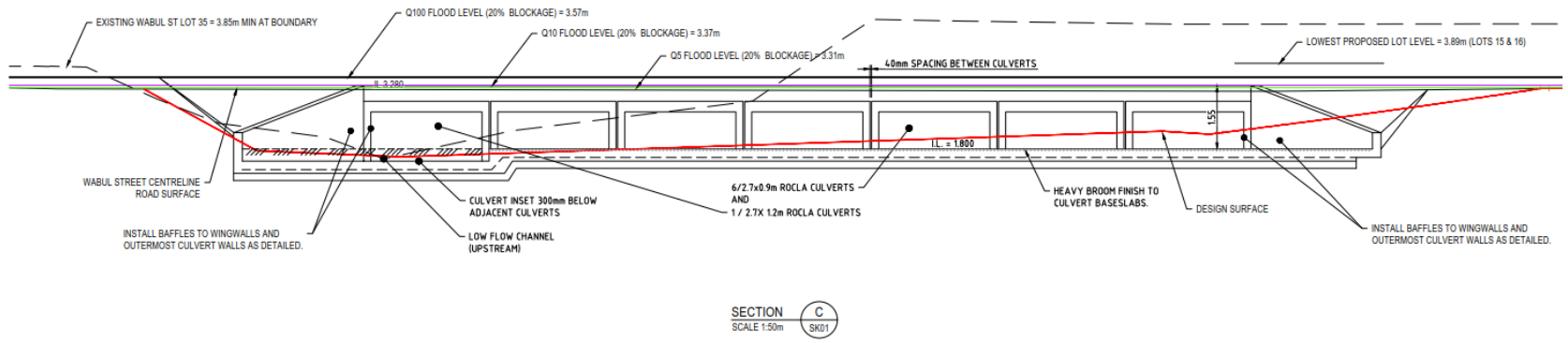
Cardno (QLD) Pty Ltd | ABN 57 051 054 992  
 15 Scott Street, Paramatta Park  
 Cairns QLD 4870  
 Tel: 07 4034 9900  
 Web: www.cardno.com.au

Drawn	12.02.2020	Checkd	12.02.2020	Appr'd	12.02.2020
MB	MB	MB	MB		

PORT DOUGLAS LAND DEVELOPMENTS PTY LTD  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGLIE

Scale	FOR INFORMATION ONLY NOT TO BE USED FOR CONSTRUCTION PURPOSES	
Author	Scale	Size
AHD	1:50	A1
Drawing Number	Q184103-CI-SK03	
		2

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**PLANS AND DOCUMENTS referred to in the REFERRAL AGENCY RESPONSE**  
 SARA ref: 1912-14522 SRA  
 Date: 20 March 2020



- NOTES:**
1. TO BE INSTALLED AS PER DTMH STANDARD DRAWING 1250.
  2. EXPOSURE CLASS B2.

Rev	Date	Description	Des	Verif	Appr
1	12.02.2020	ISSUED FOR INFORMATION	MC	MS	MB
2	18.03.2020	REVISED TO PROVIDE HEAVY BROOM FINISH	MC	MS	MB



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Drawn	Date
JJ	12.02.2020
Checked	Date
MS	12.02.2020
Designed	Date
MC	12.02.2020
Verified	Date
MB	12.02.2020
Approved	Date
MB	12.02.2020

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
 PORT DOUGLAS ESTATE - STAGE 1A & 1B  
 SUBDIVISION OF LOT 2 ON SR431  
 CAPTAIN COOK HIGHWAY, CRAIGLIE  
 CULVERT SECTIONS  
 SHEET 2

Scale	Size
1:50	A1

**FOR INFORMATION ONLY NOT TO BE USED FOR CONSTRUCTION PURPOSES**

Drawing Number: Q184103-CI-SK03  
 Revision: 2

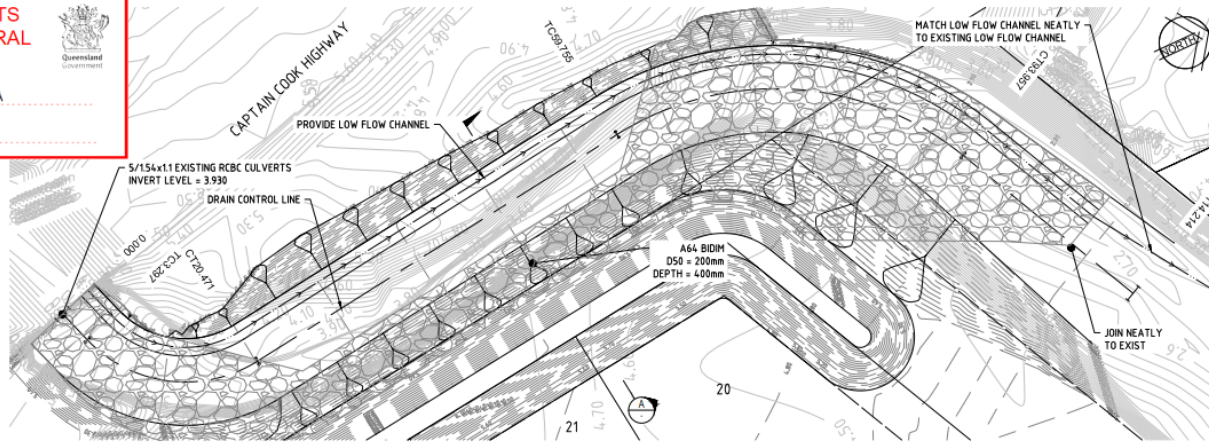


DATE PLOTTED: 17/04/2022 10:58:19 AM PROJECT: 1912-14522 SRA

**PLANS AND DOCUMENTS referred to in the REFERRAL AGENCY RESPONSE**

SARA ref: 1912-14522 SRA

Date: 20 March 2020

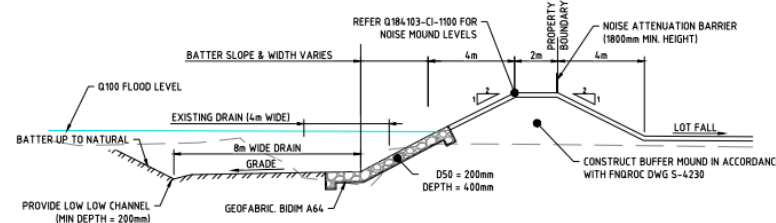


**DRAIN LAYOUT PLAN**  
SCALE 1:200m

DATUM RL 0		11.173m		34.231m		80.000		80.000		80.000		80.000		80.000	
HORZ. CURVE LENGTH (m)		R=12.580m		R21.580m											
HORZ. CURVE RADIUS (m)															
EXISTING SURFACE LEVELS		5.654	4.204	3.558	3.456	3.456	3.205	2.606	2.662	2.637					
ROAD CENTRELINE															
CUT/FILL DEPTH TO EXISTING SURFACE		-1.724	-0.311	0.145	-0.234	3.430									
DESIGN LEVELS															
ROAD CENTRELINE		3.930	3.893	3.704	3.678	3.477	3.456	3.205	2.866	2.738	2.637				
CONTROL LINE CHAINAGE		0.000	3.297	20.000	20.671	60.000	60.000	60.000	60.000	60.000	60.000	60.000	60.000	60.000	60.000
ROAD CENTRELINE															

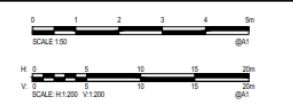
**WABUL STREET**  
SCALE: H 1:200  
V 1:200

DRAIN CONTROL LINE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	336871.095	8770446.296	3.990	71°22'34.62"			
TC	3.297	336876.129	8770447.348	3.893	71°22'34.62"			
IP 2	11.884	336883.924	8770476.623	3.195	71°22'34.62"	R = -12.500	11.173	78°43'00.00"
CT	20.471	336882.613	8770480.791	3.698	332°39'34.62"			
TL	39.158	336871.598	8770491.753	3.253	332°39'34.62"	R = 27.500	34.282	71°13'36.94"
IP 3	74.654	336873.807	8770519.301	3.860				
CT	93.957	336872.769	8770541.969	2.866	63°54'41.56"			
IP 4	116.216	336870.962	8770554.877	2.637	63°54'41.56"			



**SECTION A**  
SCALE 1:100m

Rev	Date	Description	MC	MS	MB
1	12.02.2020	ISSUED FOR INFORMATION			



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Drawn	Checkd	MS	MS	MS	MS	MS
12.02.2020	12.02.2020	12.02.2020	12.02.2020	12.02.2020	12.02.2020	12.02.2020

**PORT DOUGLAS LAND DEVELOPMENTS PTY LTD**  
PORT DOUGLAS ESTATE - STAGE 1A & 1B  
SUBDIVISION OF LOT 2 ON SR431  
CAPTAIN COOK HIGHWAY, CRAIGLIE  
DRAIN DESIGN

Status	Scale	Size
FOR INFORMATION ONLY NOT TO BE USED FOR CONSTRUCTION PURPOSES	AS SHOWN	A1

Drawing Number: Q184103-CI-SK05  
Revision: 1

## Division 2 Changing development approvals

### Subdivision 1 Changes during appeal period

#### 74 What this subdivision is about

- (1) This subdivision is about changing a development approval before the applicant's appeal period for the approval ends.
- (2) This subdivision also applies to an approval of a change application, other than a change application for a minor change to a development approval.
- (3) For subsection (2), sections 75 and 76 apply—
  - (a) as if a reference in section 75 to a development approval were a reference to an approval of a change application; and
  - (b) as if a reference in the sections to the assessment manager were a reference to the responsible entity; and
  - (c) as if a reference in section 76 to a development application were a reference to a change application; and
  - (d) as if the reference in section 76(3)(b) to section 63(2) and (3) were a reference to section 83(4); and
  - (e) with any other necessary changes.

#### 75 Making change representations

- (1) The applicant may make representations (*change representations*) to the assessment manager, during the applicant's appeal period for the development approval, about changing—
  - (a) a matter in the development approval, other than—
    - (i) a matter stated because of a referral agency's response; or

- 
- (ii) a development condition imposed under a direction made by the Minister under chapter 3, part 6, division 2; or
    - (b) if the development approval is a deemed approval—the standard conditions taken to be included in the deemed approval under section 64(8)(c).
  - (2) If the applicant needs more time to make the change representations, the applicant may, during the applicant's appeal period for the approval, suspend the appeal period by a notice given to the assessment manager.
  - (3) Only 1 notice may be given.
  - (4) If a notice is given, the appeal period is suspended—
    - (a) if the change representations are not made within a period of 20 business days after the notice is given to the assessment manager—until the end of that period; or
    - (b) if the change representations are made within 20 business days after the notice is given to the assessment manager, until—
      - (i) the applicant withdraws the notice, by giving another notice to the assessment manager; or
      - (ii) the applicant receives notice that the assessment manager does not agree with the change representations; or
      - (iii) the end of 20 business days after the change representations are made, or a longer period agreed in writing between the applicant and the assessment manager.
  - (5) However, if the assessment manager gives the applicant a negotiated decision notice, the appeal period starts again on the day after the negotiated decision notice is given.

## **76 Deciding change representations**

- (1) The assessment manager must assess the change representations against and having regard to the matters that

- must be considered when assessing a development application, to the extent those matters are relevant.
- (2) The assessment manager must, within 5 business days after deciding the change representations, give a decision notice to—
    - (a) the applicant; and
    - (b) if the assessment manager agrees with any of the change representations—
      - (i) each principal submitter; and
      - (ii) each referral agency; and
      - (iii) if the assessment manager is not a local government and the development is in a local government area—the relevant local government; and
      - (iv) if the assessment manager is a chosen assessment manager—the prescribed assessment manager; and
      - (v) another person prescribed by regulation.
  - (3) A decision notice (a *negotiated decision notice*) that states the assessment manager agrees with a change representation must—
    - (a) state the nature of the change agreed to; and
    - (b) comply with section 63(2) and (3).
  - (4) A negotiated decision notice replaces the decision notice for the development application.
  - (5) Only 1 negotiated decision notice may be given.
  - (6) If a negotiated decision notice is given to an applicant, a local government may give a replacement infrastructure charges notice to the applicant.

- (2) The person is taken to have engaged in the representative's conduct, unless the person proves the person could not have prevented the conduct by exercising reasonable diligence.
- (3) In this section—
  - conduct* means an act or omission.
  - representative* means—
    - (a) of a corporation—an executive officer, employee or agent of the corporation; or
    - (b) of an individual—an employee or agent of the individual.
  - state of mind*, of a person, includes the person's—
    - (a) knowledge, intention, opinion, belief or purpose; and
    - (b) reasons for the intention, opinion, belief or purpose.

## Chapter 6 Dispute resolution

### Part 1 Appeal rights

#### 229 Appeals to tribunal or P&E Court

- (1) Schedule 1 states—
  - (a) matters that may be appealed to—
    - (i) either a tribunal or the P&E Court; or
    - (ii) only a tribunal; or
    - (iii) only the P&E Court; and
  - (b) the person—
    - (i) who may appeal a matter (the *appellant*); and
    - (ii) who is a respondent in an appeal of the matter; and



- 
- (iii) who is a co-respondent in an appeal of the matter;  
and
  - (iv) who may elect to be a co-respondent in an appeal  
of the matter.
- (2) An appellant may start an appeal within the appeal period.
- (3) The *appeal period* is—
- (a) for an appeal by a building advisory agency—10  
business days after a decision notice for the decision is  
given to the agency; or
  - (b) for an appeal against a deemed refusal—at any time  
after the deemed refusal happens; or
  - (c) for an appeal against a decision of the Minister, under  
chapter 7, part 4, to register premises or to renew the  
registration of premises—20 business days after a notice  
is published under section 269(3)(a) or (4); or
  - (d) for an appeal against an infrastructure charges notice—  
20 business days after the infrastructure charges notice  
is given to the person; or
  - (e) for an appeal about a deemed approval of a development  
application for which a decision notice has not been  
given—30 business days after the applicant gives the  
deemed approval notice to the assessment manager; or
  - (f) for an appeal relating to the *Plumbing and Drainage Act  
2018*—
    - (i) for an appeal against an enforcement notice given  
because of a belief mentioned in the *Plumbing and  
Drainage Act 2018*, section 143(2)(a)(i), (b) or  
(c)—5 business days after the day the notice is  
given; or
    - (ii) for an appeal against a decision of a local  
government or an inspector to give an action notice  
under the *Plumbing and Drainage Act 2018*—5  
business days after the notice is given; or

- (iii) otherwise—20 business days after the day the notice is given; or
- (g) for any other appeal—20 business days after a notice of the decision for the matter, including an enforcement notice, is given to the person.

*Note—*

See the P&E Court Act for the court's power to extend the appeal period.

- (4) Each respondent and co-respondent for an appeal may be heard in the appeal.
- (5) If an appeal is only about a referral agency's response, the assessment manager may apply to the tribunal or P&E Court to withdraw from the appeal.
- (6) To remove any doubt, it is declared that an appeal against an infrastructure charges notice must not be about—
  - (a) the adopted charge itself; or
  - (b) for a decision about an offset or refund—
    - (i) the establishment cost of trunk infrastructure identified in a LGIP; or
    - (ii) the cost of infrastructure decided using the method included in the local government's charges resolution.

### **230 Notice of appeal**

- (1) An appellant starts an appeal by lodging, with the registrar of the tribunal or P&E Court, a notice of appeal that—
  - (a) is in the approved form; and
  - (b) succinctly states the grounds of the appeal.
- (2) The notice of appeal must be accompanied by the required fee.
- (3) The appellant or, for an appeal to a tribunal, the registrar, must, within the service period, give a copy of the notice of appeal to—

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- (a) the respondent for the appeal; and
  - (b) each co-respondent for the appeal; and
  - (c) for an appeal about a development application under schedule 1, section 1, table 1, item 1—each principal submitter for the application whose submission has not been withdrawn; and
  - (d) for an appeal about a change application under schedule 1, section 1, table 1, item 2—each principal submitter for the application whose submission has not been withdrawn; and
  - (e) each person who may elect to be a co-respondent for the appeal other than an eligible submitter for a development application or change application the subject of the appeal; and
  - (f) for an appeal to the P&E Court—the chief executive; and
  - (g) for an appeal to a tribunal under another Act—any other person who the registrar considers appropriate.
- (4) The *service period* is—
- (a) if a submitter or advice agency started the appeal in the P&E Court—2 business days after the appeal is started; or
  - (b) otherwise—10 business days after the appeal is started.
- (5) A notice of appeal given to a person who may elect to be a co-respondent must state the effect of subsection (6).
- (6) A person elects to be a co-respondent to an appeal by filing a notice of election in the approved form—
- (a) if a copy of the notice of appeal is given to the person—within 10 business days after the copy is given to the person; or
  - (b) otherwise—within 15 business days after the notice of appeal is lodged with the registrar of the tribunal or the P&E Court.

- (7) Despite any other Act or rules of court to the contrary, a copy of a notice of appeal may be given to the chief executive by emailing the copy to the chief executive at the email address stated on the department's website for this purpose.

## 231 Non-appealable decisions and matters

- (1) Subject to this chapter, schedule 1 and the P&E Court Act, unless the Supreme Court decides a decision or other matter under this Act is affected by jurisdictional error, the decision or matter is non-appealable.
- (2) The *Judicial Review Act 1991*, part 5 applies to the decision or matter to the extent it is affected by jurisdictional error.
- (3) A person who, but for subsection (1) could have made an application under the *Judicial Review Act 1991* in relation to the decision or matter, may apply under part 4 of that Act for a statement of reasons in relation to the decision or matter.
- (4) In this section—
- decision** includes—
- (a) conduct engaged in for the purpose of making a decision; and
  - (b) other conduct that relates to the making of a decision; and
  - (c) the making of a decision or the failure to make a decision; and
  - (d) a purported decision; and
  - (e) a deemed refusal.

**non-appealable**, for a decision or matter, means the decision or matter—

- (a) is final and conclusive; and
- (b) may not be challenged, appealed against, reviewed, quashed, set aside or called into question in any other way under the *Judicial Review Act 1991* or otherwise,

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whether by the Supreme Court, another court, any tribunal or another entity; and

- (c) is not subject to any declaratory, injunctive or other order of the Supreme Court, another court, any tribunal or another entity on any ground.

### **232 Rules of the P&E Court**

- (1) A person who is appealing to the P&E Court must comply with the rules of the court that apply to the appeal.
- (2) However, the P&E Court may hear and decide an appeal even if the person has not complied with rules of the P&E Court.

## **Part 2 Development tribunal**

### **Division 1 General**

#### **233 Appointment of referees**

- (1) The Minister, or chief executive, (the *appointer*) may appoint a person to be a referee, by an appointment notice, if the appointer considers the person—
  - (a) has the qualifications or experience prescribed by regulation; and
  - (b) has demonstrated an ability—
    - (i) to negotiate and mediate outcomes between parties to a proceeding; and
    - (ii) to apply the principles of natural justice; and
    - (iii) to analyse complex technical issues; and
    - (iv) to communicate effectively, including, for example, to write informed succinct and well-organised decisions, reports, submissions or other documents.