

LAND DYNAMICS AUSTRALIA SURVEYORS, ENGINEERS & PLANNERS

COAST ESTATE, STAGE 1 BELLE O'CONNOR STREET, SOUTH WEST ROCKS D.A T6-09-312



NOTES:
GENERAL

- G1 - All levels in metres to AHD. All coordinates in metres to Local MGA North.
- G2 - G2 - All works shall be carried out in accordance with Aspec Kemptree Shire Council Construction specifications current edition and relevant Australian standards and industry guidelines. Refer to Certifying Authority where differences exist between the plans and the Aspec requirements.
- G3 - No vegetation shall be removed without prior approval of Council unless noted on the drawings.
- G4 - The impact on the environment shall be minimised by observing the following construction practices: Areas disturbed by construction traffic and procedures shall be minimised. Hydroseeding (or alternative approved treatment) for slope stabilisation shall be carried out soon after the completion of topsoil placement. Diversion drains shall be formed to intercept and divert runoff from the road or track to stable outlets. Spacing of diversion drains shall not be greater than that required to maintain runoff at non-erosive velocities in accordance with C211. Sediment interception by the placement of temporary silt fencing and hay bale barriers across drainage lines and at interception points for both the construction and stockpile areas in accordance with D7. Temporary sediment-trapping devices shall be provided during construction to remove sediment from sediment-laden runoff before the runoff enters natural watercourses or adjacent land in accordance with C211.
- G5 - Setout and point information to be provided in electronic format to the construction surveyor at the time of construction under Memento to be determined.
- G6 - All survey marks and benchmarks shall be preserved except SSM 136656. A new state survey control mark will need to be placed and the required fieldwork completed just before SSM 136656 is destroyed. This will need to be undertaken by a registered surveyor. Damage to survey marks shall be reported to the superintendent.
- G7 - Contribute to control levels of existing services at all crossings and in the proximity of excavations prior to commencing excavation.
- G8 - All constructed details shall be recorded by a registered surveyor or approved engineering surveyor at the construction cost. As constructed details shall be submitted to the superintendent prior to practical completion. Work as executed files to be scaled to MGA55.

EROSION & SEDIMENT CONTROL

- E57 - All erosion and sedimentation control measures are to comply with this plan and guidelines detailed in the department of housing publication, "managing urban stormwater - soils and construction", (the blue book), 2004.
- E52 - Divert any surface runoff & stormwater flow away from stockpiles of erodible materials.
- E53 - Establish erosion, sediment control (ERSC) and runoff diversion measures before any works commence and retain in place until all surfaces have been fully restored and stabilised.
- E54 - Maintain & repair ERSC measures to ensure effectiveness for the duration of the works, daily inspections required.
- E55 - Remove any material collected in the sediment traps at the completion of works and dispose of at a licensed waste facility.
- E56 - Remove all fencing and any other materials used for silt-out from the works site at the completion of works and dispose of at a licensed waste facility.
- E57 - Upon completion of roadworks, disturbed areas of soil and vegetation will be adequately stabilised and restored in a manner that does not encourage further ponding, runoff, or soil erosion.
- E58 - Site stabilisation & restoration will include grass planting, turfing and planting of appropriate native species as determined onsite.
- E59 - Chemicals and fuels shall not be stored within or near any natural or stormwater drainage line.
- E59a - Work-related chemicals and fuel will be contained in sealed vessels of appropriate volumes and stored within bunded areas.
- E59b - Works will not take place in heavy rain-fall.
- E59c - Refer to D7 & C211 before commencement of works.

NOTES-STOCKPILES

- 1. Place stockpiles in locations more than 2 (preferably 5) metres from existing vegetation, concentrated water flow, roads and hatched areas.
- 2. Construct on the contour as low, flat, elongated mounds.
- 3. Where there is sufficient area, total stockpiles shall be less than 2 metres in height.
- 4. Where they are to be in place for more than 10 days, stabilise as per notes on this page.
- 5. Construct earth banks on the upslope side to divert water around stockpiles and sediment fences 1 to 2 metres downslope.

NOTES - SEDIMENT FENCE

- 1. Construct sediment fence as close as possible to being parallel to the contours of the site, with small runs to limit the catchment area of any one section.
- 2. Cut a 150mm deep trench along the upslope line of the fence for the bottom of the fabric to be anchored.
- 3. Drive 1.5m long star pickets into ground at 2.5m intervals (max) at the downslope edge of the trench. Ensure star pickets are fitted with safety caps.
- 4. Fix all supporting geotextile to the upslope side of the posts ensuring it goes to the base of the trench. Fix geotextile with wire ties or as recommended by manufacturer.
- 5. Join sections of fabric at a support post with 150mm overlap.
- 6. Backfill trench over the base of the fabric and compact over the geotextile.

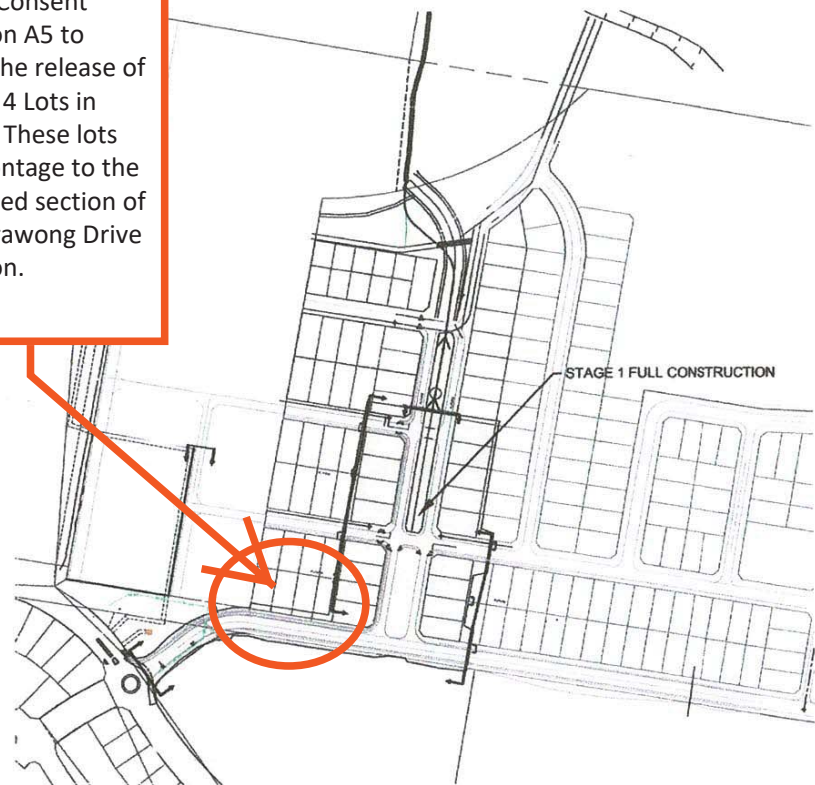
PAVEMENT & CULVERT DESIGN

- 1. Pavement design to be in accordance with Regional Geotech pavement report No. RGS20300.1-AB (dated 10th April 2015)
- 2. Pre-cast road culverts are to be constructed in accordance with Regional Geotech pavement report No. RGS20300.1-AB (dated 10th April 2015)

REFERENCES:

Kemptree Shire Council Development Control Plan 38 Current Edition.

Amend Consent Condition A5 to enable the release of the first 4 Lots in Stage 4. These lots have frontage to the completed section of the Burrawong Drive extension.



Locality Scale 1:2000

CONSTRUCTION CERTIFICATE

Certificate No. 181/0001231
 Date of Issue 10 April 2017
 Issuing Officer [Signature]
 Accreditation No. 676920

This plan and specifications form part of the certificate issued 10 April 2017

Sheet Number	Sheet Title
1	COVER SHEET
2	GENERAL LAYOUT
3	LONGITUDINAL SECTION OF ROAD NO.10
4	CROSS SECTIONS OF ROAD NO.10, CHG.15 TO CHG.75
5	CROSS SECTIONS OF ROAD NO.10, CHG.77 TO CHG.172
6	CROSS SECTIONS OF ROAD NO.10, CHG.191 TO CHG.262
7	CROSS SECTIONS OF ROAD NO.10, CHG.279 TO CHG.375
8	LONGITUDINAL SECTION OF ROAD NO.1 & TYPICAL BIO RETENTION CULVERT DETAILS
9	CROSS SECTIONS OF ROAD NO.1
10	LONGITUDINAL SECTION OF ROAD NO.2
11	CROSS SECTIONS OF ROAD NO.2, CHG.17 TO CHG.105
12	CROSS SECTIONS OF ROAD NO.2, CHG.120 TO CHG.225
13	LONGITUDINAL SECTION OF ROAD NO.3
14	CROSS SECTIONS OF ROAD NO.3, CHG.17 TO CHG.105
15	CROSS SECTIONS OF ROAD NO.3, CHG.120 TO CHG.195
16	CROSS SECTIONS OF ROAD NO.3, CHG.210 TO CHG.245
17	LONGITUDINAL SECTION OF ROAD NO.4
18	CROSS SECTIONS OF ROAD NO.4
19	LONGITUDINAL SECTION OF ROAD NO.6
20	CROSS SECTIONS OF ROAD NO.6
21	DETAIL PLAN & LONG SECTIONS OF KERB RETURN NOS. 1,2,3 & 4
22	DETAIL PLAN & LONG SECTIONS OF KERB RETURN NOS. 5,6,7 & 8
23	DETAIL PLAN & LONG SECTIONS OF KERB RETURN NOS. 9,10,11 & 12
24	DETAIL PLAN & LONG SECTIONS OF KERB RETURN NOS. 13, 14, 4A, 4B, 4C & 4D
25	DETAIL PLAN & LONG SECTIONS OF KERB RETURN NOS. A & B
26	EROSION CONTROL & SITE REGRADING AREA PLAN
27	EROSION CONTROL DETAILS
28	CATCHMENT PLAN
29	CATCHMENT CALCULATIONS 1
30	CATCHMENT CALCULATIONS 2
31	LONGITUDINAL SECTION OF DRAINAGE LINE NO.1
32	LONGITUDINAL SECTIONS OF DRAINAGE LINE NOS. 1,2,3,4 & 5
33	LONGITUDINAL SECTIONS OF DRAINAGE LINE NOS. 6,7,8 & 9
34	LONGITUDINAL SECTIONS OF DRAINAGE LINE NOS. 10,11 & 12
35	LONGITUDINAL SECTIONS OF DRAINAGE LINE NOS. 13, 14 & 20 & TYPICAL DETAILS
36	PRESSURE SEWER & WATERMANS LAYOUT PLAN
37	PRESSURE SEWER KEY PLAN
38	PRESSURE SEWER LAYOUT SHEET 1 OF 1
39	PRESSURE SEWER DETAILS SHEET 1 OF 3
40	PRESSURE SEWER DETAILS SHEET 2 OF 3
41	PRESSURE SEWER CULVERT DETAIL
42	PRESSURE SEWER LONG SECTIONS 1 OF 1
43	PRESSURE SEWER DETAILS SHEET 3 OF 3
44	LANDSCAPE LAYOUT PLAN
45	LANDSCAPE PLANTING PLAN
46	LONGITUDINAL SECTION OF NORTHERN SWALE
46A	CROSS SECTION OF NORTHERN SWALE
47	STANDARD DETAILS
48	PAVEMENT DESIGN SUMMARY SHEET
48	KERB TYPES & STANDARD DETAILS
50	TYPICAL PIT & HEADWALL STRUCTURAL DETAILS

Copyright of Land Dynamics Australia, to part of this drawing and the reproduction, storage in a retrieval system or transmission in any form, without the written approval of the copyright owner, is prohibited by the Copyright Act 1968.

Any printed drawing, electronic image, digital print, copy or reproduction of this drawing shall contain an alteration or addition to be arranged accordingly. This notice remains valid.





www.100.com.au

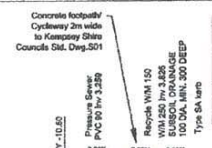
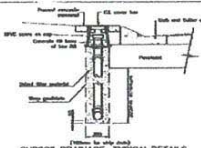
Contact DIAL BEFORE YOU DIG prior to commencing any excavation works.

NOTES: SUBSOIL DRAINAGE

1. Construction shall be in accordance with Aust Open P1 sections C229 and C230
2. Provide flashing points at man holes and outlets of man holes
3. Select the number of shafts to meet the requirements of Type A Bar material, Aust Open P1 C230.12
4. If the number of shafts is not specified, use 2 shafts per man hole
5. If the number of shafts is not specified, use 2 shafts per man hole
6. If the number of shafts is not specified, use 2 shafts per man hole
7. If the number of shafts is not specified, use 2 shafts per man hole
8. If the number of shafts is not specified, use 2 shafts per man hole
9. If the number of shafts is not specified, use 2 shafts per man hole
10. If the number of shafts is not specified, use 2 shafts per man hole

NOTE: SUBSOIL DRAINAGE

FLUSH POINT SHALL BE PLACED AT ANY 90° BENDS



CONSTRUCTION CERTIFICATE

Certificate No: H816084C201
 Date of Issue: 10 April 2017
 Issuing Office: [Signature]
 Accreditation No: 18002920

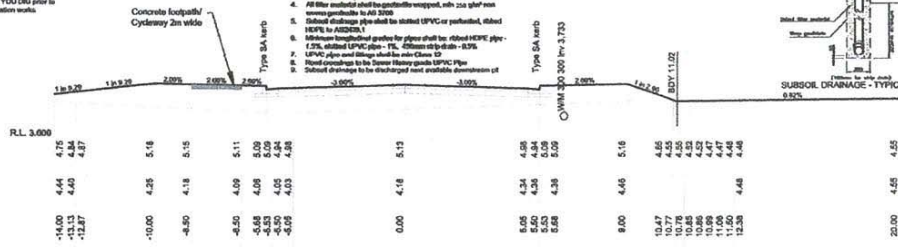
These stamp/signatures form part of the certificate issued 10 April 2017.

PAVEMENT DETAILS

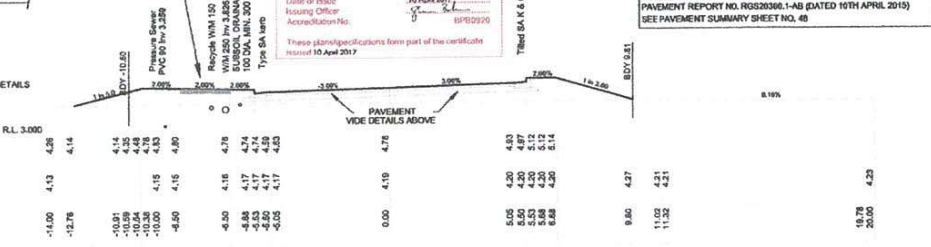
WEARING COURSE - 40MM AC
 BASE COURSE - 140MM DG308
 SUB-BASE - 150MM DG308 OR DG540

PAVEMENT DESIGN TO BE IN ACCORDANCE WITH REGIONAL GEOTECH PAVEMENT REPORT NO. RES03066-1-48 (DATED 15TH APRIL 2015)
 (SEE PAVEMENT SUMMARY SHEET NO. 48)

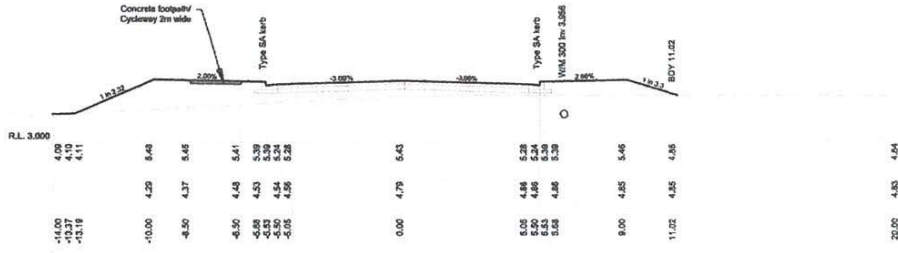
Ch 26.715



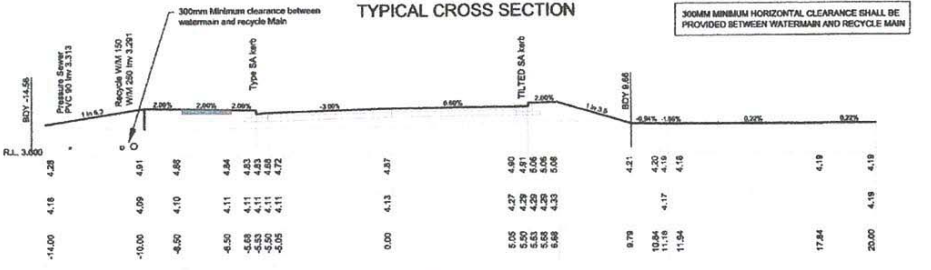
Ch 75.000



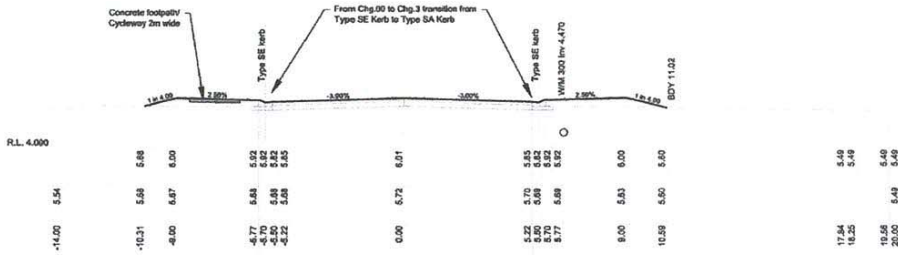
Ch 15.000



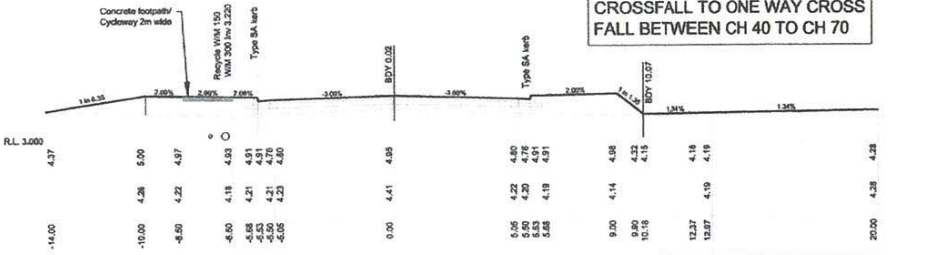
TYPICAL CROSS SECTION



Ch 0.000

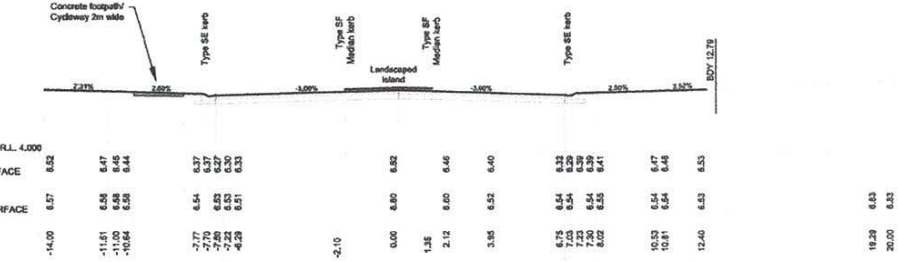


Ch 60.000

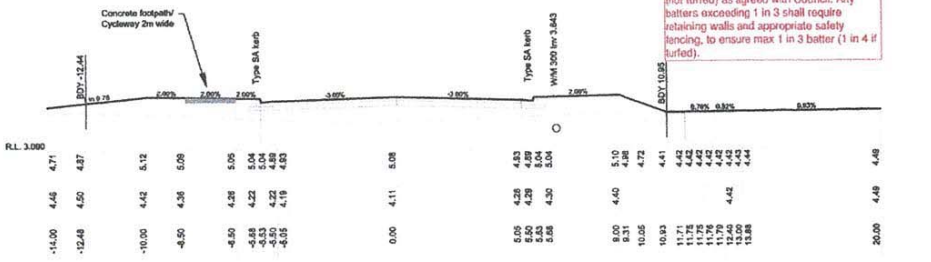


TRANSITION FROM TWO WAY CROSSFALL TO ONE WAY CROSS FALL BETWEEN CH 40 TO CH 70

Ch -15.000



Ch 45.000



Note: Any batters exceeding 1 in 4 must be planted with Mat Rush / Kangaroo Grass (not turfed) as agreed with Council. Any batters exceeding 1 in 3 shall require retaining walls and appropriate safety fencing, to ensure max 1 in 3 batter (1 in 4 if turfed).



Scale: 1:100 @ A1
1:200 @ A3

Issue	Date	Designed	Checked	Details	Issue	Date	Designed	Checked	Details
A	11.04.2013	P.J.	J.R.O.	Stage 1 CC submission	G	15.05.2016	P.J.	M.J.S.	Stage 1 redesign CC submission
B	31.05.2013	J.R.O.	J.R.O.	Stage 1 resubmission	J	26.11.2016	P.J.	M.J.S.	CC resubmission
C	09.03.2014	J.R.O.	J.R.O.	Stage 1 redesign CC submission	K	29.03.2017	P.J.	M.J.S.	CC resubmission
D	01.12.2014	J.R.O.	M.J.S.	Stage 1 redesign CC submission					
E	11.05.2015	P.J.	M.J.S.	Stage 1 redesign CC submission					
F	20.10.2016	P.J.	M.J.S.	Stage 1 redesign CC submission					

Copyright of Land Dynamics Australia, the part of this drawing may be reproduced, stored in a retrieval system or transmitted in any form, without the written permission of the copyright owner as provided by the Copyright Act 1968.

LAND DYNAMICS AUSTRALIA
 Consultants in the Development of Land & Property
 77 Lord St, PORT MACQUARIE NSW 2444
 Tel: (02) 6583 2677
 www.landynamics.com.au



Project Ref No:	4972
Drawing No.:	4 (to include revision to it)
Issue No.:	K
Status:	CC Submission
File Name:	4972P_1612012_FINAL_DESIGNING
Original Size:	A1 Sheet
Date:	AHD SSM 136636, R.L. 6.54

Project:	COAST ESTATE, STAGE 1
Drawing Title:	CROSS SECTIONS OF ROAD NO. 10 CHG.-15 TO CHG.75
Project Address:	Belle O'Connor Street, South West Rocks
Client:	MALREC

