

# COMPASS STATION DEVELOPMENT

## DA DOCUMENTS CIVIL ENGINEERING PACKAGE






LOCALITY PLAN

### DRAWING LIST

DWG No	DRAWING TITLE
C01.00DA	COVERSHEET, DRAWING LIST AND LOCALITY PLAN
C02.01DA	EROSION AND SEDIMENT CONTROL PLAN
C03.01DA	CONCEPT STORMWATER MANAGEMENT PLAN
C09.01DA	CIVIL DETAILS AND CONCEPT STORMWATER MANAGEMENT SUMMARY

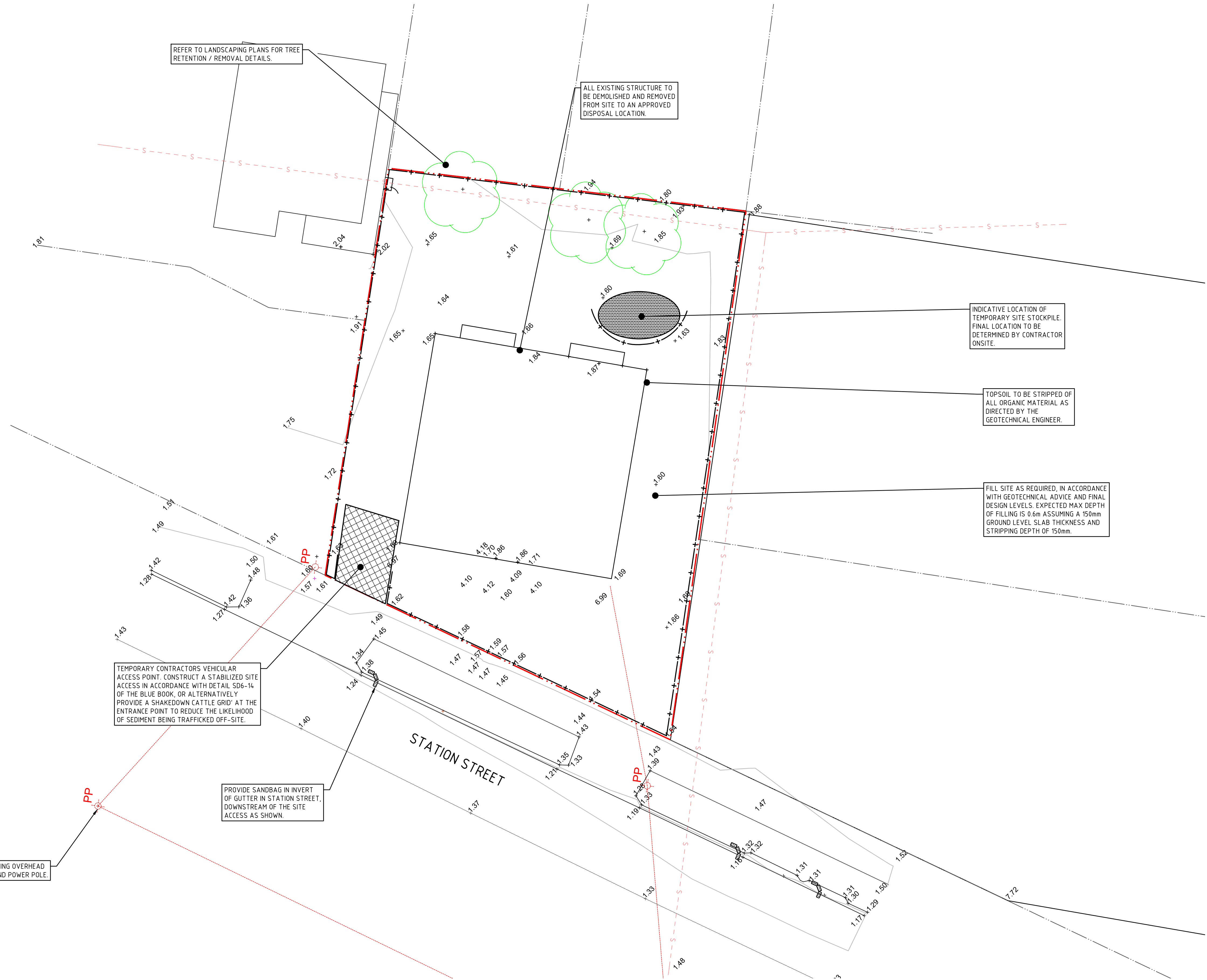
VERIFIER: C. PIPER  
JOB MANAGER: S. CROFT  
DESIGNED: S. CROFT  
DRAWN: J. LEWIS

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT		PROJECT	DRAWING TITLE	JOB NUMBER
1	ISSUED FOR APPROVAL	SC	CP	SC	6.06.19	 <b>BARR PROPERTY &amp; PLANNING</b> Continual Progress	 <b>CKDS ARCHITECTURE</b> 115 Wing Street Newcastle NSW 2290 Ph: 02 4943 1177 Fax: 02 4943 1577 Email: newcastle@northrop.com.au ABN 81 094 433 100	 <b>NORTHROP</b> Newcastle Suite 4, 215 Pacific Hwy, Charlestown NSW 2290 P.O. Box 180, Charlestown NSW 2290 Ph: (02) 4943 1177 Fax: (02) 4943 1577 Email: newcastle@northrop.com.au ABN 81 094 433 100	<b>COMPASS STATION DEVELOPMENT</b>  <b>43 STATION ST, WICKHAM</b>	<b>CIVIL ENGINEERING PACKAGE</b>  <b>COVERSHEET, DRAWING LIST AND LOCALITY PLAN</b>	<b>NL191163</b>  <b>C01.00DA</b> DRAWING SHEET SIZE = A1
2	ISSUED FOR D&C TENDER	CH	CP	SC	23.10.19						
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VERIFIER: CPIPER  
JOB MANAGER: S.CROFT  
DESIGNED: S.CROFT  
DRAWN: JLEWIS



LEGEND

SITE BOUNDARY LINE

NEIGHBOURING BOUNDARY LINE

SEDIMENT FENCE

SANDBAG SEDIMENT FILTER

STABILISED SITE ACCESS

STOCKPILE

- EROSION AND SEDIMENTATION CONTROL NOTES:
1.

ALL EROSION AND SEDIMENTATION CONTROL MEASURES MUST BE APPROPRIATE FOR THE SEDIMENT TYPE(S) OF THE SOILS ON-SITE, IN ACCORDANCE WITH THE 'BLUE BOOK' (MANAGING URBAN STORMWATER – SOILS AND CONSTRUCTION, LANDCOM, 2004), OR OTHER CURRENT RECOGNISED INDUSTRY STANDARDS FOR EROSION AND SEDIMENT CONTROL FOR AUSTRALIAN CONDITIONS. THIS INCLUDES SEDIMENT TRAPS AND LINING OF CHANNELS.
2.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING A DETAILED WRITTEN RECORD OF ALL EROSION AND SEDIMENT CONTROLS ON-SITE DURING THE CONSTRUCTION PERIOD. THIS RECORD SHALL BE UPDATED ON A DAILY BASIS AND SHALL CONTAIN DETAILS ON THE CONDITION OF CONTROLS AND ANY/ALL MAINTENANCE, CLEANING AND BREACHES. THIS RECORD SHALL BE KEPT ON-SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE FOR INSPECTION BY THE PRINCIPAL CERTIFYING AUTHORITY AND THE SUPERINTENDENT DURING NORMAL WORKING HOURS.
3.

INSTALL SEDIMENT PROTECTION FILTERS ON ALL NEW AND EXISTING STORMWATER INLET PITS IN ACCORDANCE WITH EITHER THE MESH AND GRAVEL INLET FILTER DETAIL SD6-11 OR THE GEOTEXTILE INLET FILTER DETAIL SD6-12 OF THE 'BLUE BOOK'.
4.

ESTABLISH ALL REQUIRED SEDIMENT FENCES IN ACCORDANCE WITH DETAIL SD6-8 OF THE 'BLUE BOOK'.
5.

INSTALL SEDIMENT FENCING, OR OTHER SEDIMENT CONTROL DEVICES, AROUND INDIVIDUAL BUILDING ZONES/AREAS AS REQUIRED AND AS DIRECTED BY THE SUPERINTENDENT OR APPROPRIATE COUNCIL OFFICER.
6.

ALL TRENCHES INCLUDING ALL SERVICE TRENCHES AND SWALE EXCAVATION SHALL BE SIDE-CAST TO THE HIGH SIDE AND CLOSED AT THE END OF EACH DAYS WORK.
7.

THE CONTRACTOR SHALL ENSURE THAT ALL VEGETATION (TREE, SHRUB AND GROUND COVER) WHICH IS TO BE RETAINED SHALL BE PROTECTED DURING THE DURATION OF CONSTRUCTION.
8.

ALL VEGETATION TO BE REMOVED SHALL BE MULCHED ON-SITE AND SPREAD/STOCKPILED AS DIRECTED BY THE SUPERINTENDENT.
9.

STRIP TOPSOIL IN AREAS DESIGNATED FOR STRIPPING AND STOCKPILE FOR RE-USE AS REQUIRED. ANY SURPLUS MATERIAL SHALL BE SPREAD ON-SITE AS DIRECTED BY THE SUPERINTENDENT OR REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH EPA GUIDELINES.
10.

CONSTRUCT AND MAINTAIN ALL MATERIAL STOCKPILES IN ACCORDANCE WITH DETAIL SD4-1 OF THE 'BLUE BOOK' (INCLUDING CUT-OFF SWALES TO THE HIGH SIDE AND SEDIMENT FENCES TO THE LOW SIDE).
11.

ENSURE STOCKPILES DO NOT EXCEED 2.0m HIGH. PROVIDE WIND AND RAIN EROSION PROTECTION AS REQUIRED IN ACCORDANCE WITH THE 'BLUE BOOK'.
12.

PROVIDE WATER TRUCKS OR SPRINKLER DEVICES DURING CONSTRUCTION AS REQUIRED TO SUPPRESS DUST.
13.

ONCE CUT/FILL OPERATIONS HAVE BEEN FINALIZED ALL DISTURBED AREAS THAT ARE NOT BEING WORKED ON SHALL BE RE-VEGETATED AS SOON AS IS PRACTICAL.

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BARR PROPERTY & PLANNING

Continual Progress

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CKDS ARCHITECTURE

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SCALE 1:100 @ A1

0 1 2 3 4 5m

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PROJECT

COMPASS STATION DEVELOPMENT

43 STATION ST, WICKHAM

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

EROSION AND SEDIMENT CONTROL PLAN

JOB NUMBER

NL191163

DRAWING NUMBER

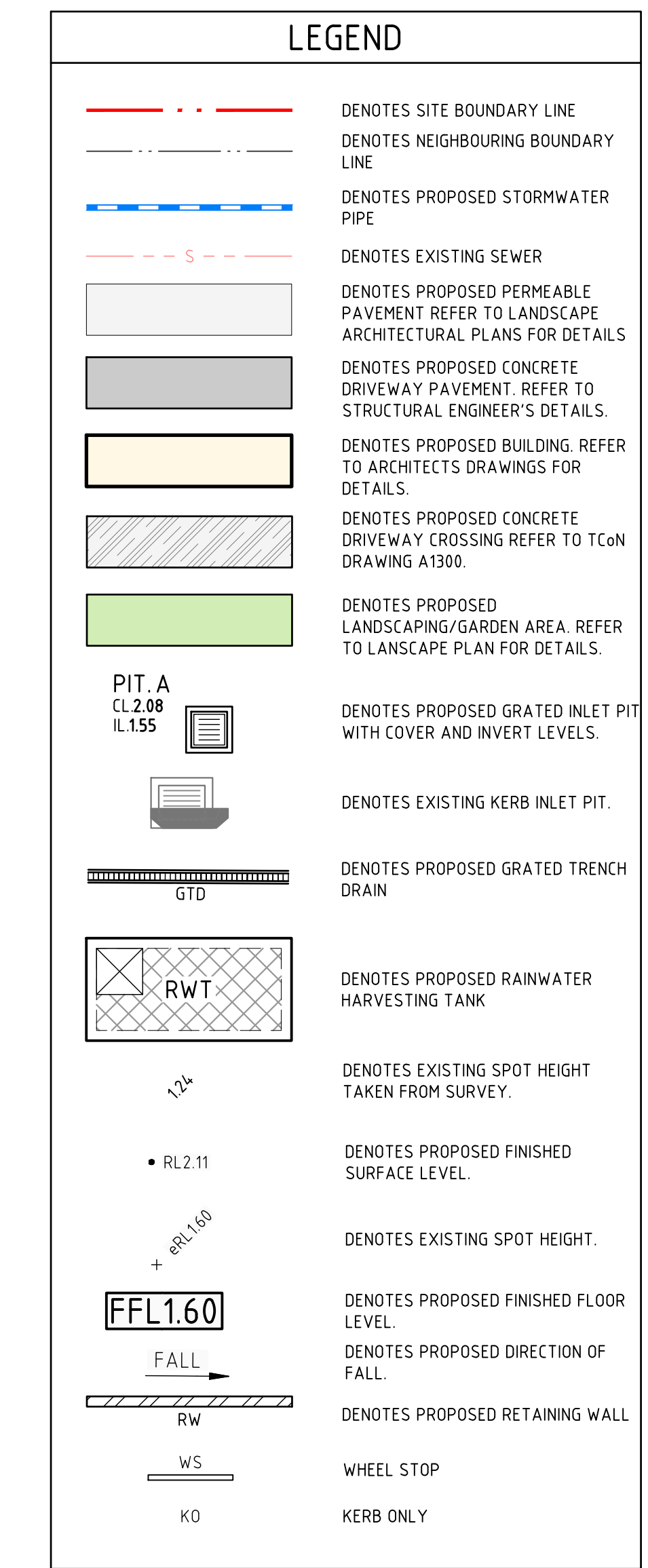
C02.01DA

REVISION

2






DRAWING SHEET SIZE = A1





STORMWATER PIT SCHEDULE				
PIT NO.	SIZE	GRATE CLASS	GRATE TYPE	DEPTH
A	450x450	D	GRATED INLET #	0.400
B	450x450	D	GRATED INLET #	0.470
C	450x450	D	GRATED INLET #	0.390
# - DENOTES GRATE TO BE HEELS/SAFE TYPE				

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1	ISSUED FOR APPROVAL	CH	CP	SC	6.06.19	 <b>BARR PROPERTY &amp; PLANNING</b> Continual Progress	 <b>CKOS ARCHITECTURE</b> <small>512 Minto Street Newcastle NSW 2260</small> Ph: 02 4943 1847 49431843@ckos.com.au 02 4943 1843	 <b>NORTHROP</b> Newcastle Suite 4, 215 Pacific Hwy, Charlestown NSW 2290 P.O. Box 180, Charlestown NSW 2290 Ph: (02) 4943 1777 Fax: (02) 4943 1577 Email newcastle@northrop.com.au ABN 81 084 433 100	<b>COMPASS STATION DEVELOPMENT</b>	<b>CIVIL ENGINEERING PACKAGE</b>	<b>NL191163</b>
2	ISSUED FOR D&C TENDER	SC	CP	SC	23.10.19						
3	ISSUED FOR D&C TENDER	JC	CP	JC	12.11.19						
4	ISSUED FOR APPROVAL	JC	CP	JC	27.11.19						
DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED						THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD	 SCALE 1:100 @ A1	 <b>NORTHROP</b> Newcastle 43 STATION ST, WICKHAM	<b>CONCEPT STORMWATER MANAGEMENT PLAN</b>	<b>C03.01DA</b>	<b>4</b>
DRAWING SHEET SIZE = A1											



NORTHROP CONSULTING ENGINEERS HAVE PREPARED A CONCEPT STORMWATER MANAGEMENT PLAN FOR THE PROPOSED DEVELOPMENT AT 43 STATION STREET, WICKHAM. THE PLAN HAS BEEN DEVELOPED IN ACCORDANCE WITH THE Tcōn's 2012 DEVELOPMENT CONTROL PLAN AND THE Tcōn's STORMWATER AND WATER EFFICIENCY FOR DEVELOPMENT TECHNICAL MANUAL.

THE SITE IS LOCATED ON LOT 1 DP131687 AND CURRENTLY CONTAINS A TWO STOREY RESIDENTIAL BUILDING. THE SITE HAS AN AREA OF 413m<sup>2</sup> AND IS RELATIVELY FLAT, GENERALLY FALLING FROM THE NORTHERN BOUNDARY TOWARDS NEWCASTLE DRIVE, FROM RL 194 TO RL 154.

THE DEVELOPMENT PROPOSES THE CONSTRUCTION OF A SEVEN STOREY RESIDENTIAL BUILDING AND THE ASSOCIATED DRIVEWAY, CAR PARKING AND LANDSCAPING. ONE ACCESS POINT IS PROPOSED TO THE SITE FROM STATION STREET.

- |                         |  |                      |
|-------------------------|--|----------------------|
| 1. STORAGE REQUIREMENTS |  |                      |
| TOTAL SITE AREA         |  | = 413 m <sup>2</sup> |
| ROOF AREA               |  | = 176 m <sup>2</sup> |
| PAVED AREA              |  | = 141 m <sup>2</sup> |
| LANDSCAPING             |  | = 31 m <sup>2</sup>  |
| PERMEABLE PAVING        |  | = 65 m <sup>2</sup>  |
| TOTAL IMPERVIOUS AREA   |  | = 317 m <sup>2</sup> |
| TOTAL PERVIOUS AREA     |  | = 96 m <sup>2</sup>  |
| PERCENTAGE IMPERVIOUS   |  | = 77%                |

IN ACCORDANCE WITH THE TCoN 2012 DCP, SECTION 7.06 (STORMWATER), FIGURE 1, A MINIMUM OF 19.02mm/m<sup>2</sup> OF RAINFALL IS TO BE CAPTURED FROM THE SITE'S IMPERVIOUS AREA TO MANAGE PEAK RUNOFF.

TOTAL SITE STORAGE REQUIREMENT = 19.02 mm/m<sup>2</sup> x 317 m<sup>2</sup>  
= 6.03 kL

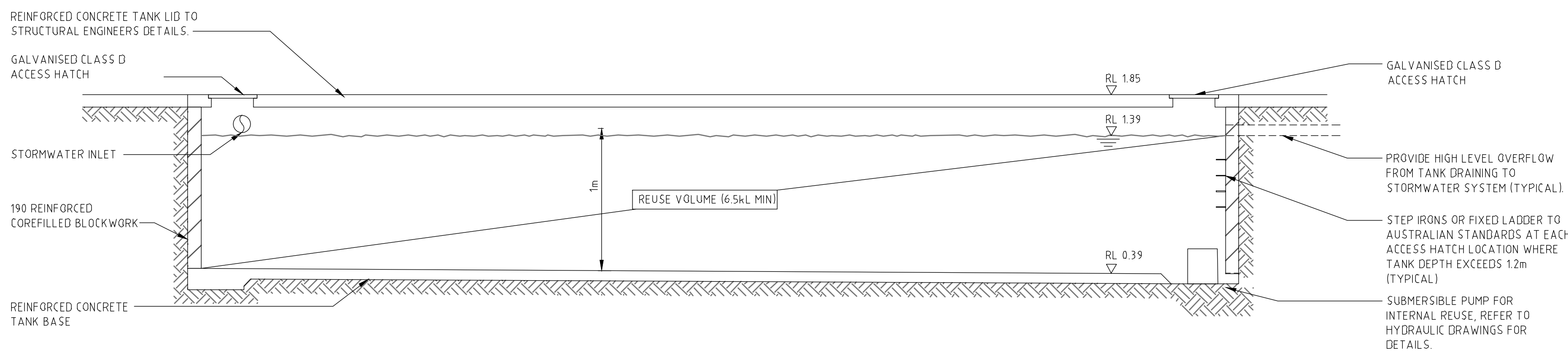
- ## 2. ONSITE HARVESTING/REUSE

A 65KL UNDERGROUND RAINWATER TANK IS TO BE INSTALLED TO SATISFY THE TOTAL SITE STORAGE REQUIREMENT. THE HARVESTED VOLUME IS TO BE REUSED AS IRRIGATION FOR LANDSCAPING AREAS AND RETICULATED INTERNALLY. ALL DOWN PIPES ARE TO BE CONNECTED TO A FIRST FLUSH DEVICE LOCATED PRIOR TO THE TANK INLET. OVERFLOW FROM THE TANK WILL CONNECT INTO THE PROPOSED PIT AND PIPE NETWORK.

- ### 3. SITE DISCHARGE

THE PROPOSED STORMWATER SYSTEM IS TO DISCHARGE TO THE BACK OF KERB IN STATION STREET VIA A RHS OUTLET, APPROXIMATE INVERT LEVEL 1.24m RL.

IT IS CONSIDERED THAT THE PROPOSED STORMWATER MANAGEMENT PLAN EFFECTIVELY MEETS THE DESIGN INTENT OF TCON'S DCP







**NOTES:**

1. REUSE TANK TO BE STRUCTURALLY DESIGNED TO SUIT EXPECTED TRAFFIC LOADING AND GROUND CONDITIONS.
2. PROPRIETARY PRODUCTS MAY BE CONSIDERED ON REVIEW BY CERTIFYING ENGINEER.

DRAWN: J.LEWIS      DESIGNED: S.CROFT      JOB MANAGER: S.CROFT      VERIFIER: C.PIPER

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2	ISSUED FOR D&C TENDER	CH	CP	SC	23.10.19							
3	ISSUED FOR D&C TENDER	CH	CP	SC	15.11.19							
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											DRAWING SHEET SIZE = A1	