

9 TO 13 FERN CREEK ROAD
WARRIEWOOD

PLAN OF SUBDIVISION OF
LOT 101 IN PROPOSED SUBDIVISION OF PART LOTS 11, 12
AND 13 DP 1092788 AND PART LOT 5 DP 736961

DA ENGINEERING DRAWINGS
REVISION E

GROUP DEVELOPMENT SERVICES PTY. LTD.
DEVELOPMENT PLANNERS - SURVEYORS - PLANNERS - ENGINEERS

Suite 3A 265-271 PENNANT HILLS ROAD, THORNLEIGH NSW 2120

PO BOX 498, PENNANT HILLS NSW 1715
Ph. (02) 9980-1000 Fax. (02) 9484-0355

 northern
beaches
council

**THIS PLAN IS TO BE READ IN
CONJUNCTION WITH
THE CONDITIONS OF DEVELOPMENT
CONSENT**

DA2018/1044



DA SUBMISSION
NOT FOR CONSTRUCTION

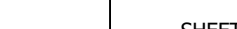
REVISION	DESCRIPTION	BY	DATE	SITE DESCRIPTION	BAR SCALES	SURVEY	HEIGHT DATUM	SHEET SIZE	 DEVELOPMENT PLANNERS • SURVEYORS • PLANNERS • ENGINEERS PO Box 498, Pennant Hills NSW 1715 Email: info@gdsland.com.au Phone: +61 2 9980 1000 www.gdsland.com.au Fax: +61 2 9484 0355 ABN: 86 064 110 809 THIS DRAWING IS SUBJECT TO COPYRIGHT AND MUST NOT BE REPRODUCED BY WHOLE OR PART WITHOUT PRIOR WRITTEN CONSENT OF GROUP DEVELOPMENT SERVICES PTY LTD. THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED BY PRINCIPAL CERTIFYING AUTHORITY. <th>PROJECT</th> <th colspan="4">9 FERN CREEK ROAD WARRIEWOOD</th> <th>SHEET</th>	PROJECT	9 FERN CREEK ROAD WARRIEWOOD				SHEET
E	DRAWING REFERENCE ADDED. RE-ISSUED FOR DA APPROVAL	W.M.	24/04/2019	-		-	AHD	A1		COVER SHEET	LGA NORTHERN BEACHES COUNCIL	AUTHORITY REF -	DATE OF ISSUE 24/04/2019	REVISION No. E	OF 17 SHEETS
D	ISSUED FOR DA APPROVAL	H.E.	01/04/2019	-		DESIGN	CHECKING	HORZ REDUCTION RATIO AS SHOWN							
C	LOT BOUNDARIES AMENDED. RE-ISSUED FOR DA APPROVAL	H.E.	20/02/2019	-		H.E.	-	VERT REDUCTION RATIO AS SHOWN							
B	LOT BOUNDARIES AMENDED. RE-ISSUED FOR DA APPROVAL	W.M.	13/08/2018	-		DRAWN	CHECKING	-							
A	ISSUED FOR DA APPROVAL	W.M.	19/06/2018	-											

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6. FERN CREEK ROAD - LONGITUDINAL SECTION AND CROSS SECTIONS
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SITE LOCALITY PLAN

N.T.S.

SUBDIVISION OF LOT 101 IN PROPOSED
SUBDIVISION OF PART LOTS 11, 12 AND 13
DP 1092788 AND PART LOT 5 DP 736961

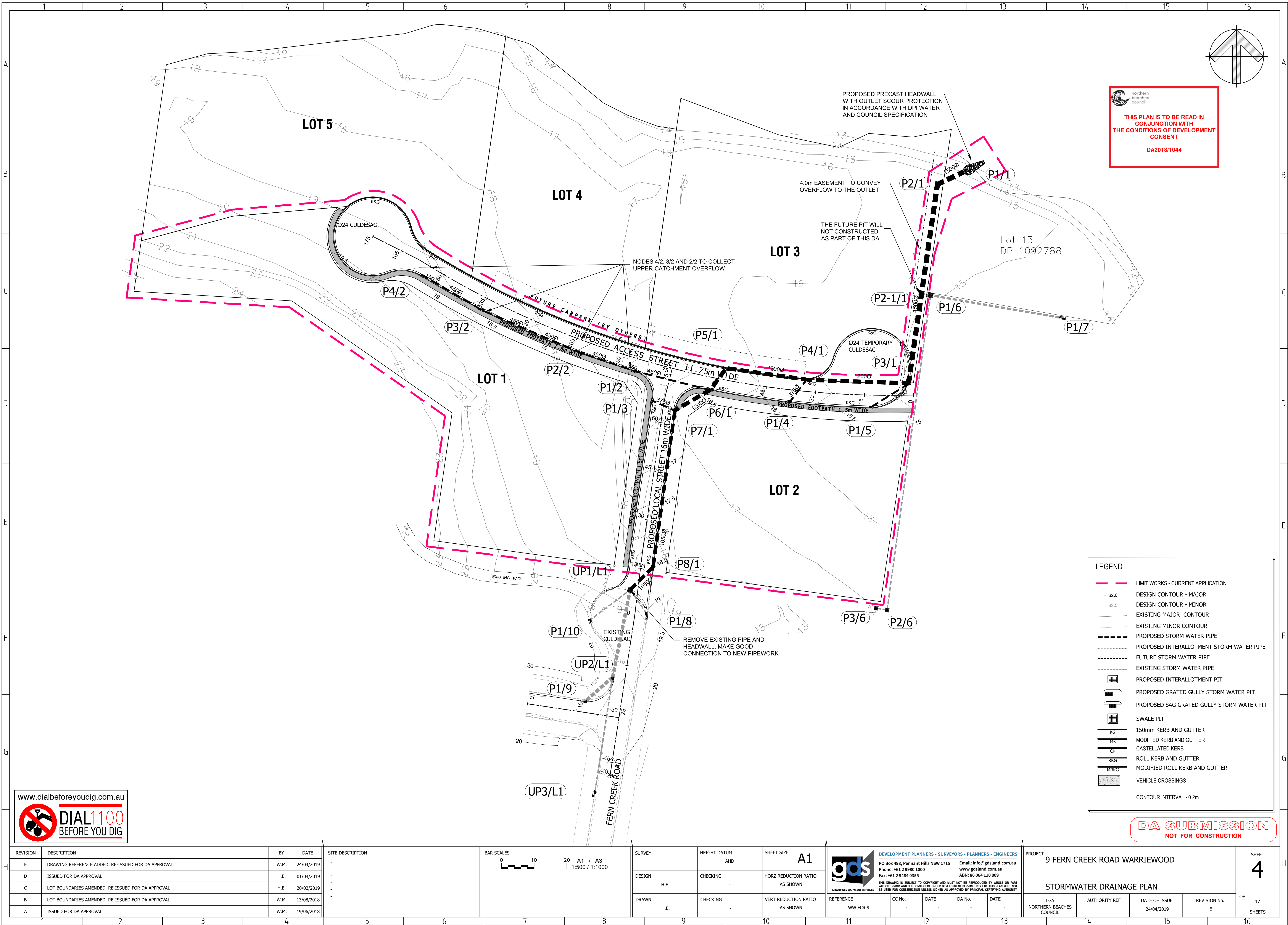
DATE: APRIL 2019



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REVISION	DESCRIPTION	BY	DATE	SITE DESCRIPTION	BAR SCALES	SURVEY	HEIGHT DATUM	SHEET SIZE	 DEVELOPMENT PLANNERS • SURVEYORS • PLANNERS • ENGINEERS PO Box 498, Pennant Hills NSW 1715 Email: info@gdsland.com.au Phone: +61 2 9980 1000 www.gdsland.com.au Fax: +61 2 9484 0355 ABN: 86 064 110 809 THIS DRAWING IS SUBJECT TO COPYRIGHT AND MUST NOT BE REPRODUCED BY WHOLE OR PART WITHOUT PRIOR WRITTEN CONSENT OF GROUP DEVELOPMENT SERVICES PTY LTD. THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED BY PRINCIPAL CERTIFYING AUTHORITY.	PROJECT	DRAWING SCHEDULE AND LOCALITY PLAN				SHEET
E	DRAWING REFERENCE ADDED. RE-ISSUED FOR DA APPROVAL	W.M.	24/04/2019	-	-	-	AHD	A1		9 FERN CREEK ROAD WARRIEWOOD	2				
D	ISSUED FOR DA APPROVAL	H.E.	01/04/2019	-	-	DESIGN	CHECKING	HORZ REDUCTION RATIO		LGA NORTHERN BEACHES COUNCIL	AUTHORITY REF -	DATE OF ISSUE 24/04/2019	REVISION No. E	OF 17 SHEETS	
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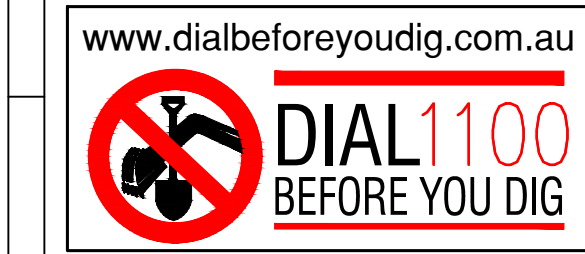
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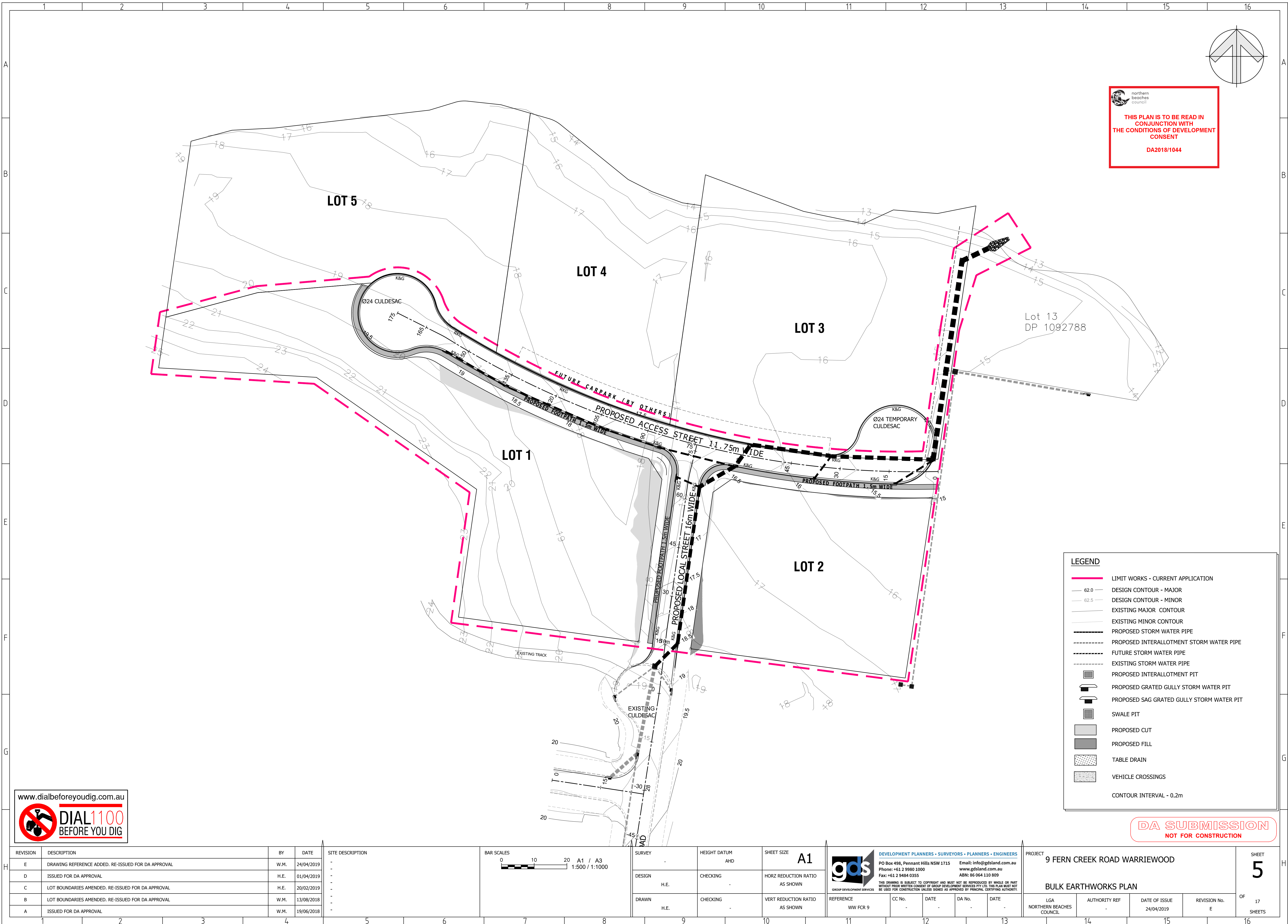
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	DESIGN CONTOUR - MAJOR
	DESIGN CONTOUR - MINOR
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED STORM WATER PIPE
	PROPOSED INTERALLOTMENT STORM WATER PIPE
	FUTURE STORM WATER PIPE
	EXISTING STORM WATER PIPE
	PROPOSED INTERALLOTMENT PIT
	PROPOSED GRATED GULLY STORM WATER PIT
	PROPOSED SAG GRATED GULLY STORM WATER PIT
	SWALE PIT
	150mm KERB AND GUTTER
	MODIFIED KERB AND GUTTER
	CASTELLATED KERB
	ROLL KERB AND GUTTER
	MODIFIED ROLL KERB AND GUTTER
	VEHICLE CROSSINGS
CONTOUR INTERVAL - 0.2m	

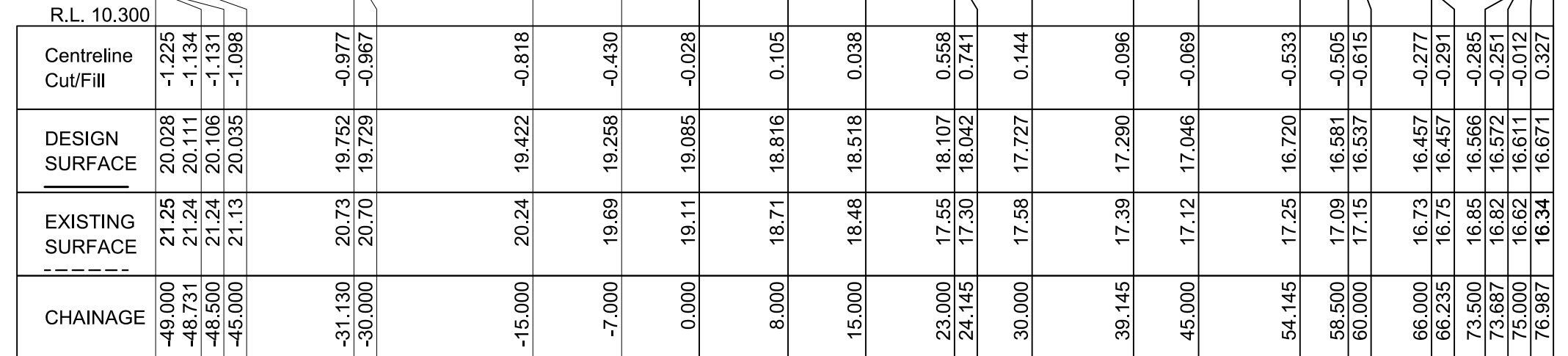
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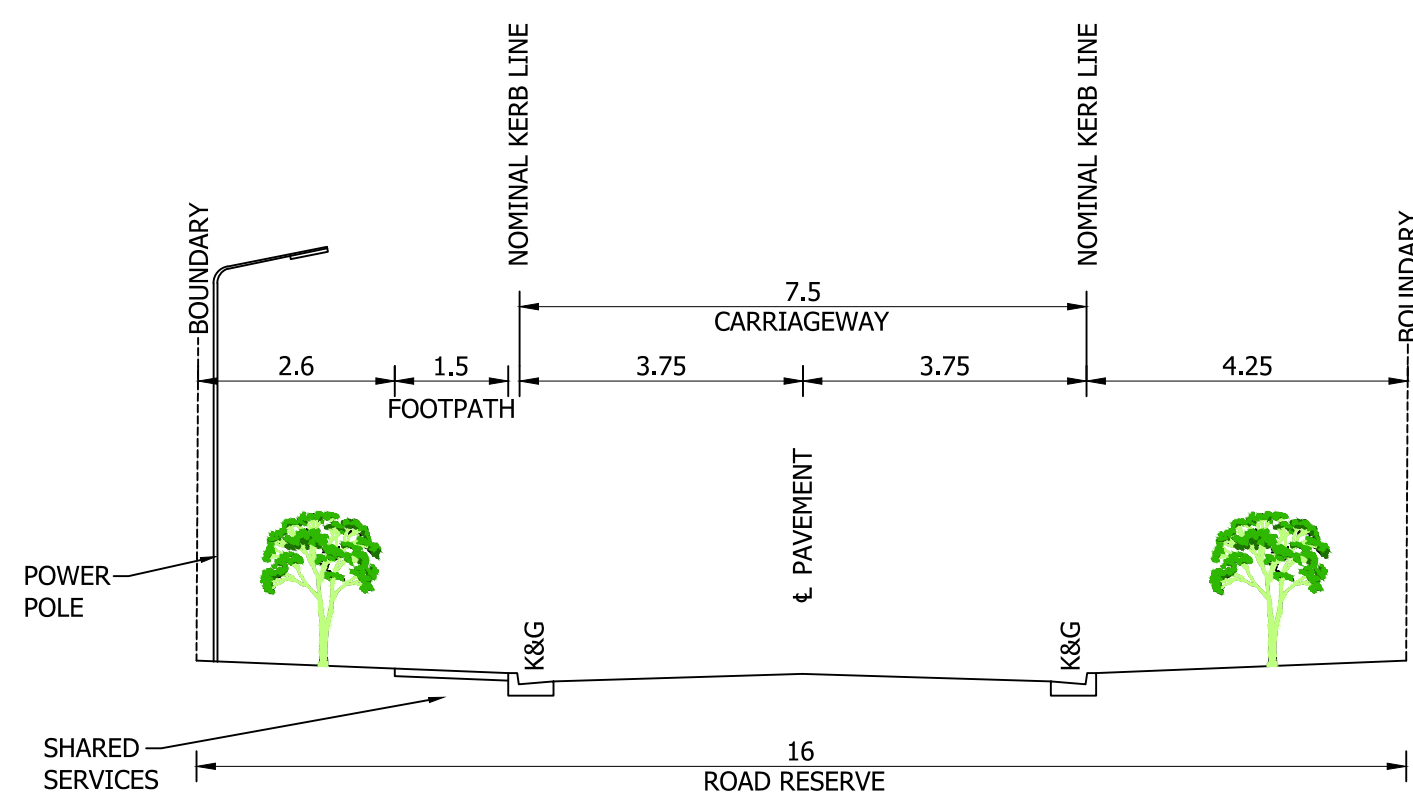
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D	ISSUED FOR DA APPROVAL	H.E.	01/04/2019	-		DESIGN	H.E.	CHECKING											
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A	ISSUED FOR DA APPROVAL	W.M.	19/06/2018	-															

FILE LOCATION: D:\DROBOX\GDS LAND\GDS TEAM FOLDER\PROJECTS\WARRIEWOOD FERN CREEK 9\DRAWINGS\DA ENGINEERING\WARRIEWOOD FERN CREEK ROAD 9-13 - DA ENG REV E.DWG -DWG NO: P4 STORMWATER PLAN -(Plot with-----) PLOT DATE: 4/24/2019 11:35 AM

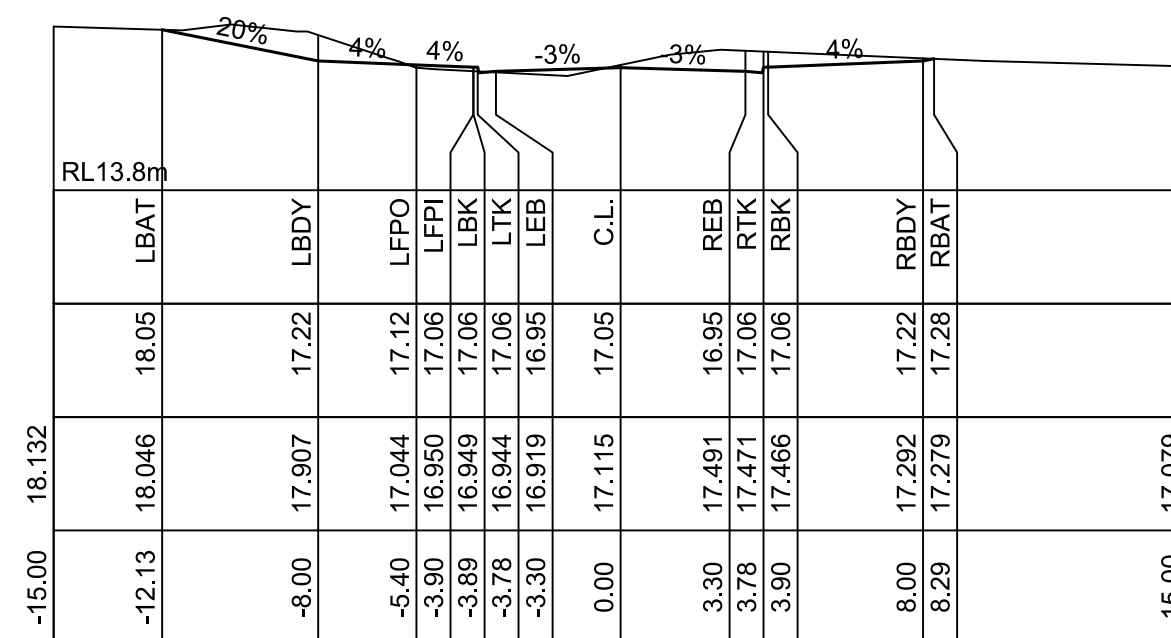




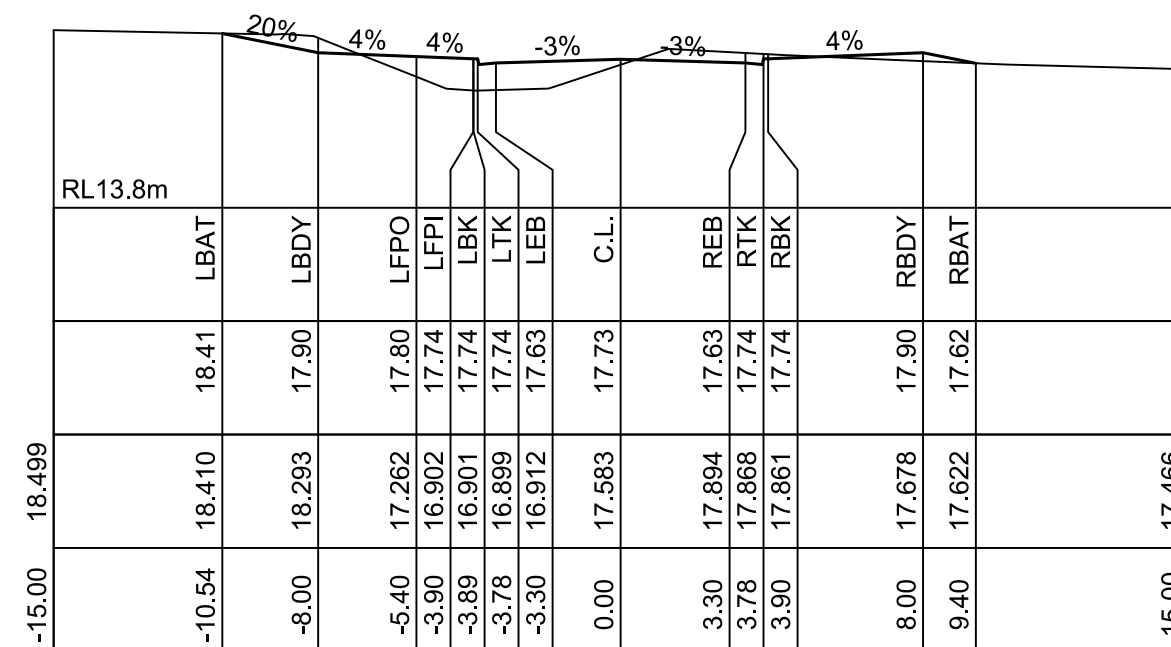
LONGITUDINAL SECTION
CL- Fern Creek Rd Ch -49.000 to Ch 76.987
SCALES: HORIZONTAL 1:500 VERTICAL 1:100



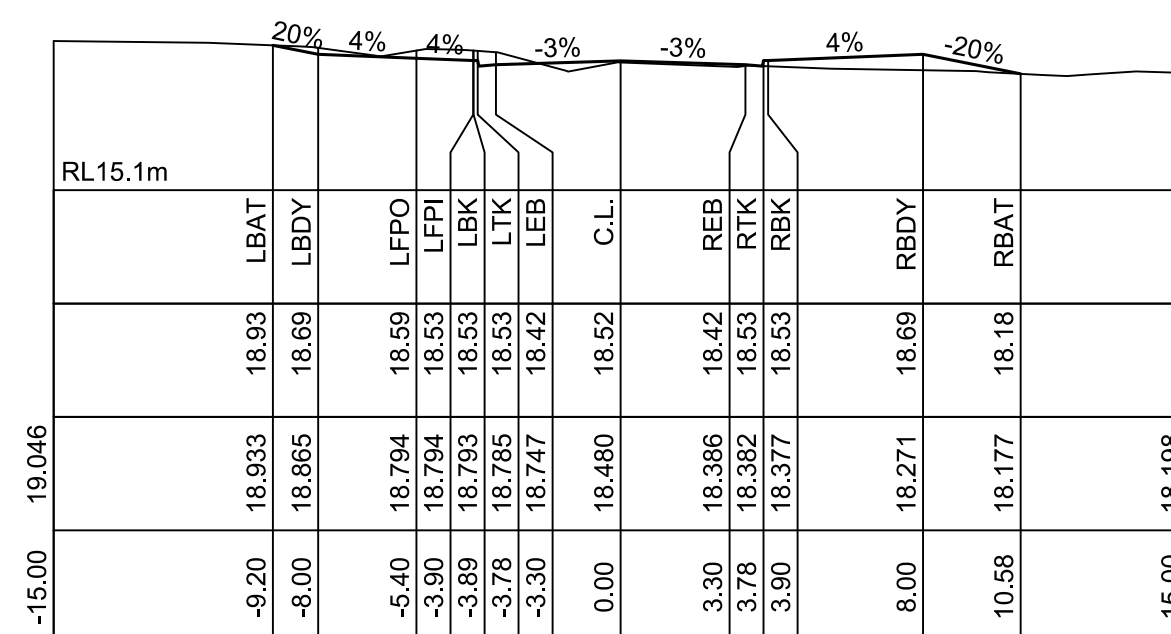
TYPICAL SECTION
LOCAL STREET
SCALE 1:100



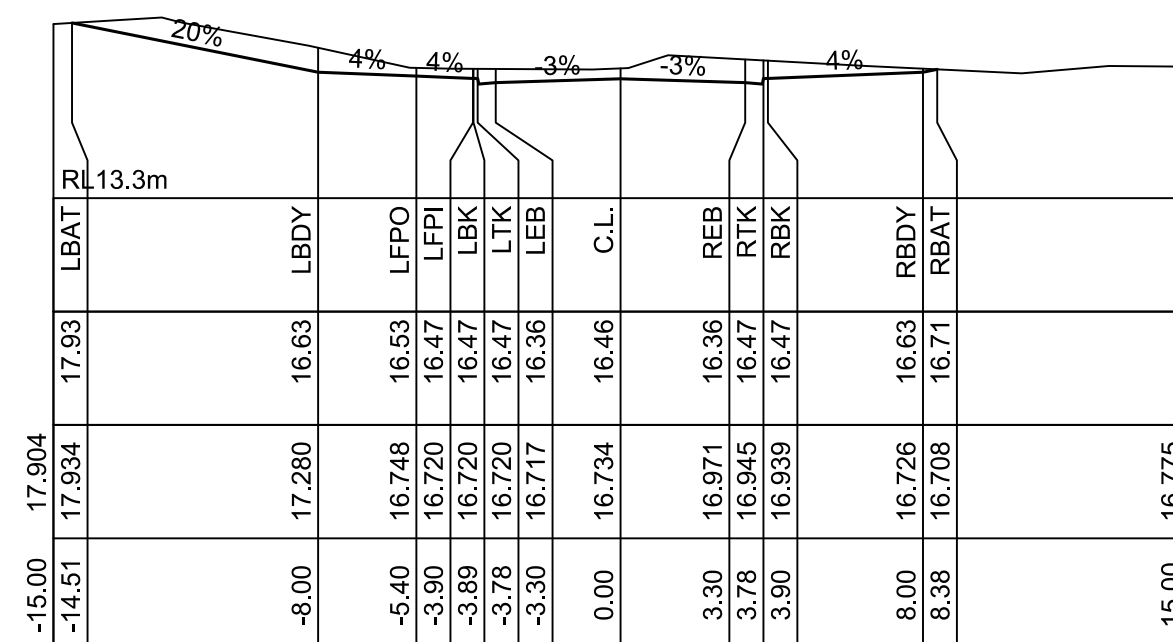
Ch 45.00 m



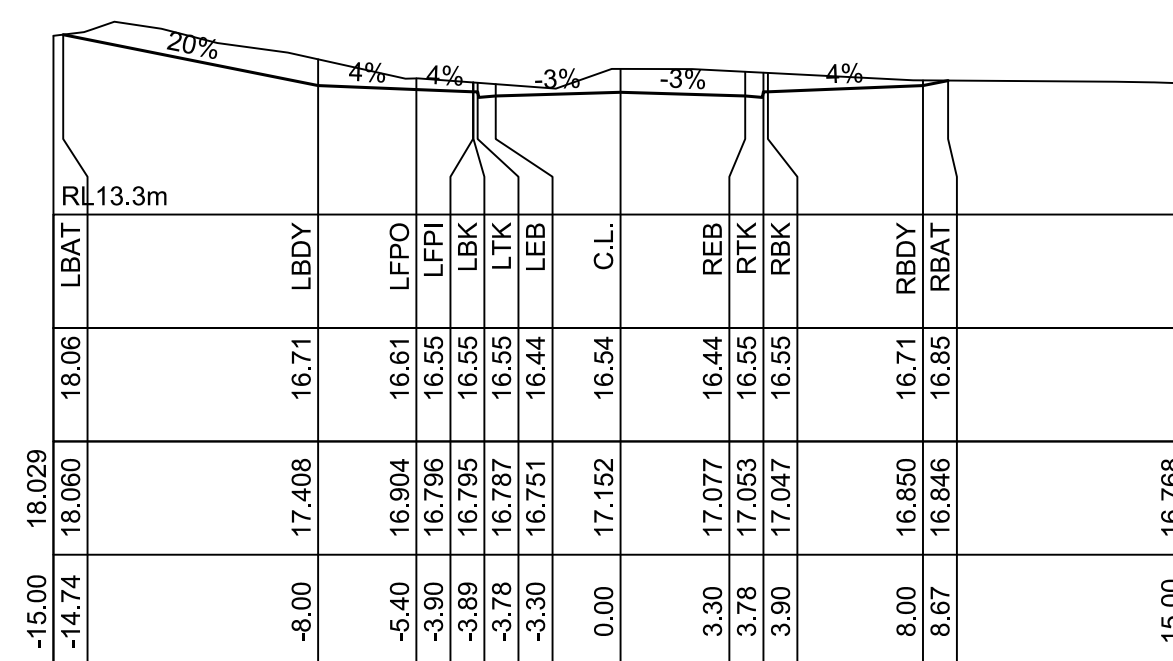
Ch 30.00 m



Ch 15.00 m



Ch 66.00 m



Ch 60.00 m

[illegible]

Ch -15.00 m

SURVEY	-	HEIGHT DATUM AHD	SHEET SIZE A1	
DESIGN	H.E.	CHECKING -	HORIZ REDUCTION RATIO AS SHOWN	
DRAWN	H.E.	CHECKING -	VERT REDUCTION RATIO AS SHOWN	
				REFERENCE WW FCR 9



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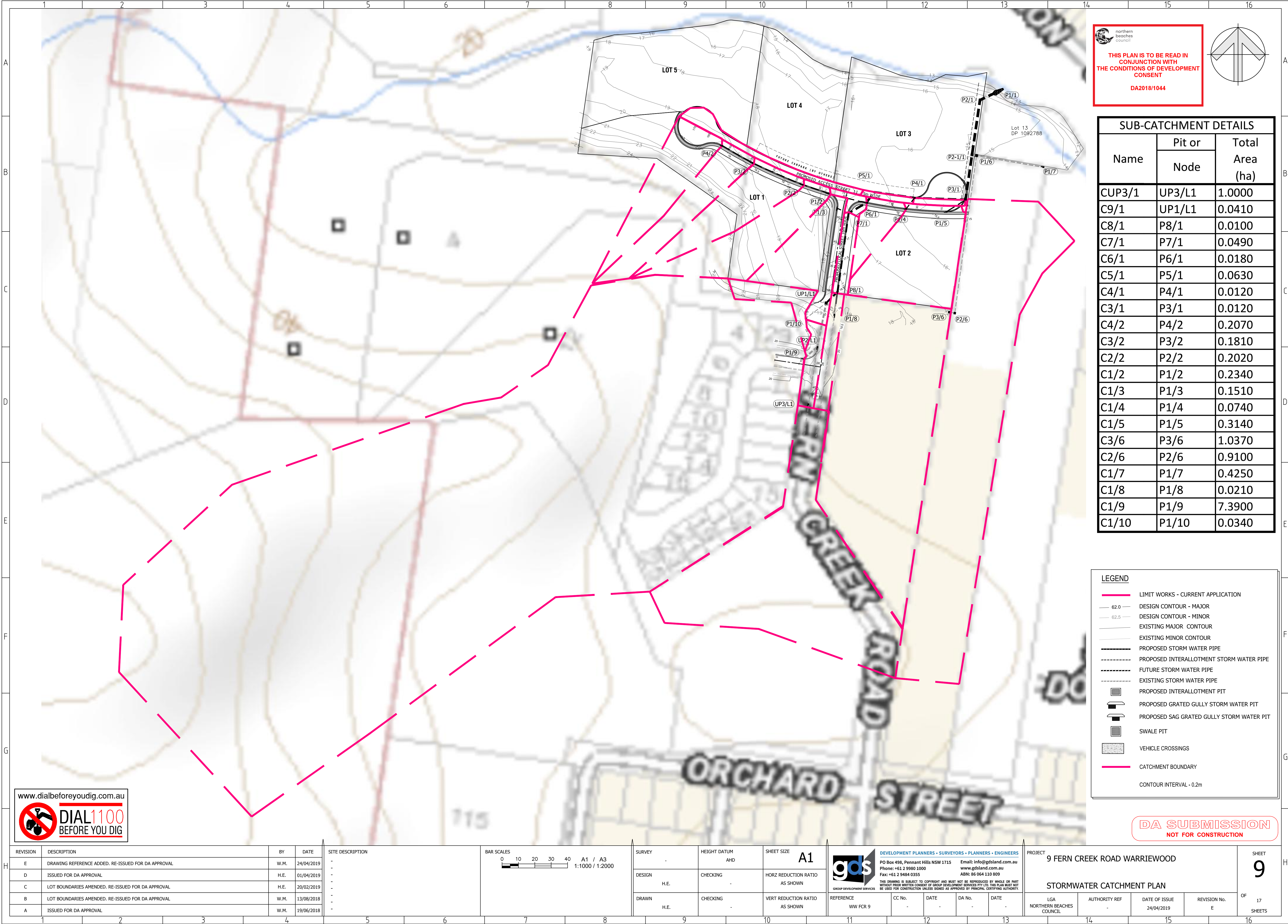
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 AUST: 86 064 110 809

REFERENCE	CC No.	DATE	DA No.	DATE
WW FCR 9	-	-	-	-

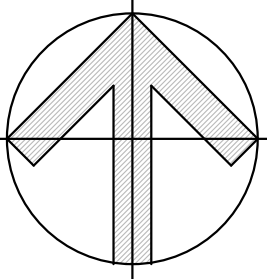
PROJECT 9 FERN CREEK ROAD WARRIEWOOD FERN CREEK ROAD LONGITUDINAL SECTION AND CROSS SECTIONS				SHEET 6
LGA NORTHERN BEACHES COUNCIL	AUTHORITY REF -	DATE OF ISSUE 24/04/2019	REVISION No. E	OF 17 SHEETS





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SUB-CATCHMENT DETAILS		
Name	Pit or Node	Total Area (ha)
CUP3/1	UP3/L1	1.0000
C9/1	UP1/L1	0.0410
C8/1	P8/1	0.0100
C7/1	P7/1	0.0490
C6/1	P6/1	0.0180
C5/1	P5/1	0.0630
C4/1	P4/1	0.0120
C3/1	P3/1	0.0120
C4/2	P4/2	0.2070
C3/2	P3/2	0.1810
C2/2	P2/2	0.2020
C1/2	P1/2	0.2340
C1/3	P1/3	0.1510
C1/4	P1/4	0.0740
C1/5	P1/5	0.3140
C3/6	P3/6	1.0370
C2/6	P2/6	0.9100
C1/7	P1/7	0.4250
C1/8	P1/8	0.0210
C1/9	P1/9	7.3900
C1/10	P1/10	0.0340

LEGEND

LIMIT WORKS - CURRENT APPLICATION

62.0 DESIGN CONTOUR - MAJOR

62.5 DESIGN CONTOUR - MINOR

EXISTING MAJOR CONTOUR

EXISTING MINOR CONTOUR

PROPOSED STORM WATER PIPE

PROPOSED INTERALLOTMENT STORM WATER PIPE

FUTURE STORM WATER PIPE

EXISTING STORM WATER PIPE

PROPOSED INTERALLOTMENT PIT

PROPOSED GRATED GULLY STORM WATER PIT

PROPOSED SAG GRATED GULLY STORM WATER PIT

SWALE PIT

VEHICLE CROSSINGS

CATCHMENT BOUNDARY

CONTOUR INTERVAL - 0.2m

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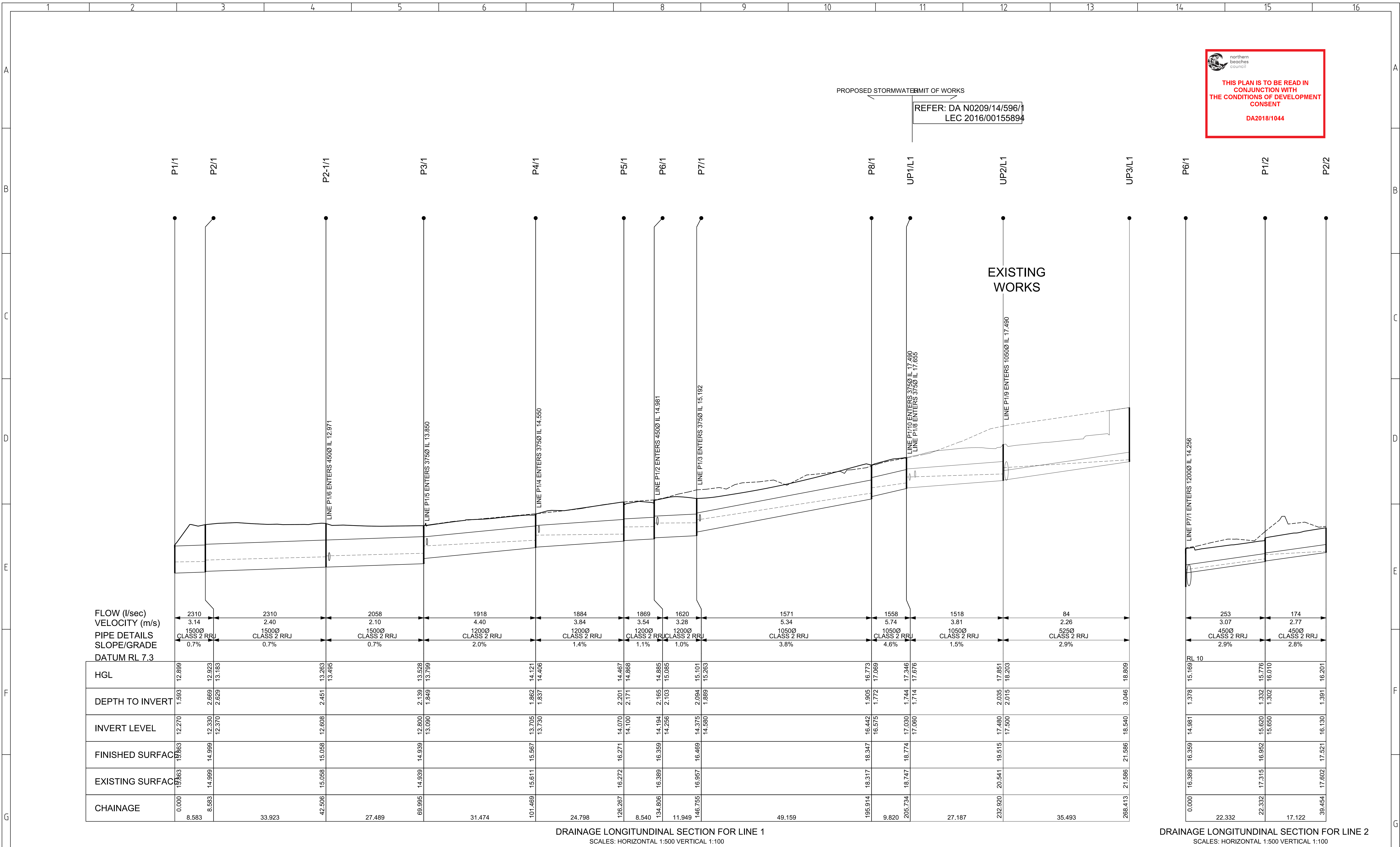
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DIAL 1100

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REVISION		DESCRIPTION	BY	DATE	SITE DESCRIPTION	BAR SCALES		SURVEY	HEIGHT DATUM	SHEET SIZE	gds GROUP DEVELOPMENT SERVICES DEVELOPMENT PLANNERS • SURVEYORS • PLANNERS • ENGINEERS PO Box 496, Pennant Hills NSW 1715 Phone: +61 2 9980 1000 Fax: +61 2 9484 0355 Email: info@gdsland.com.au www.gdsland.com.au ABN: 86 064 110 809 THIS DRAWING IS SUBJECT TO COPYRIGHT AND MUST NOT BE REPRODUCED BY WHOLE OR PART WITHOUT PRIOR WRITTEN CONSENT OF GROUP DEVELOPMENT SERVICES PTY LTD. THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED BY PRINCIPAL CERTIFYING AUTHORITY.				PROJECT	9 FERN CREEK ROAD WARRIEWOOD				SHEET	9										
E		DRAWING REFERENCE ADDED. RE-ISSUED FOR DA APPROVAL	W.M.	24/04/2019	-	0 10 20 30 40 A1 / A3 1:1000 / 1:2000		DESIGN	H.E.	CHECKING	HORZ REDUCTION RATIO	AS SHOWN				STORMWATER CATCHMENT PLAN				OF		17 SHEETS									
D		ISSUED FOR DA APPROVAL	H.E.	01/04/2019	-						REFERENCE	WW FCR 9	CC No.	-	DATE	-	DA No.	-	DATE	-			LGA	NORTHERN BEACHES COUNCIL	AUTHORITY REF	-	DATE OF ISSUE	24/04/2019	REVISION No.	E	
C		LOT BOUNDARIES AMENDED. RE-ISSUED FOR DA APPROVAL	H.E.	20/02/2019	-			DRAWN	H.E.	CHECKING	VERT REDUCTION RATIO	AS SHOWN																			
B		LOT BOUNDARIES AMENDED. RE-ISSUED FOR DA APPROVAL	W.M.	13/08/2018	-																										
A		ISSUED FOR DA APPROVAL	W.M.	19/06/2018	-																										
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16	



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REVISION	DESCRIPTION	BY	DATE	SITE DESCRIPTION
E	DRAWING REFERENCE ADDED. RE-ISSUED FOR DA APPROVAL	W.M.	24/04/2019	-
D	ISSUED FOR DA APPROVAL	H.E.	01/04/2019	-
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A	ISSUED FOR DA APPROVAL	W.M.	19/06/2018	-

BAR SCALES

0 10 20 A1 / A3
1:500 / 1:1000

0 1 2 3 4 A1 / A3
1:100 / 1:200

SURVEY	HEIGHT DATUM	SHEET SIZE	REFERENCE	CC No.	DATE	DA No.	DATE
-	AHD	A1	WW FCR 9	-	-	-	-
DESIGN	CHECKING	HORZ REDUCTION RATIO	THIS DRAWING IS SUBJECT TO COPYRIGHT AND MUST NOT BE REPRODUCED BY WHOLE OR PART WITHOUT PRIOR WRITTEN CONSENT OF GROUP DEVELOPMENT SERVICES PTY LTD. THIS PLAN MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS APPROVED BY PRINCIPAL CERTIFYING AUTHORITY.				
H.E.	-	AS SHOWN					
DRAWN	CHECKING	VERT REDUCTION RATIO					
H.E.	-	AS SHOWN					

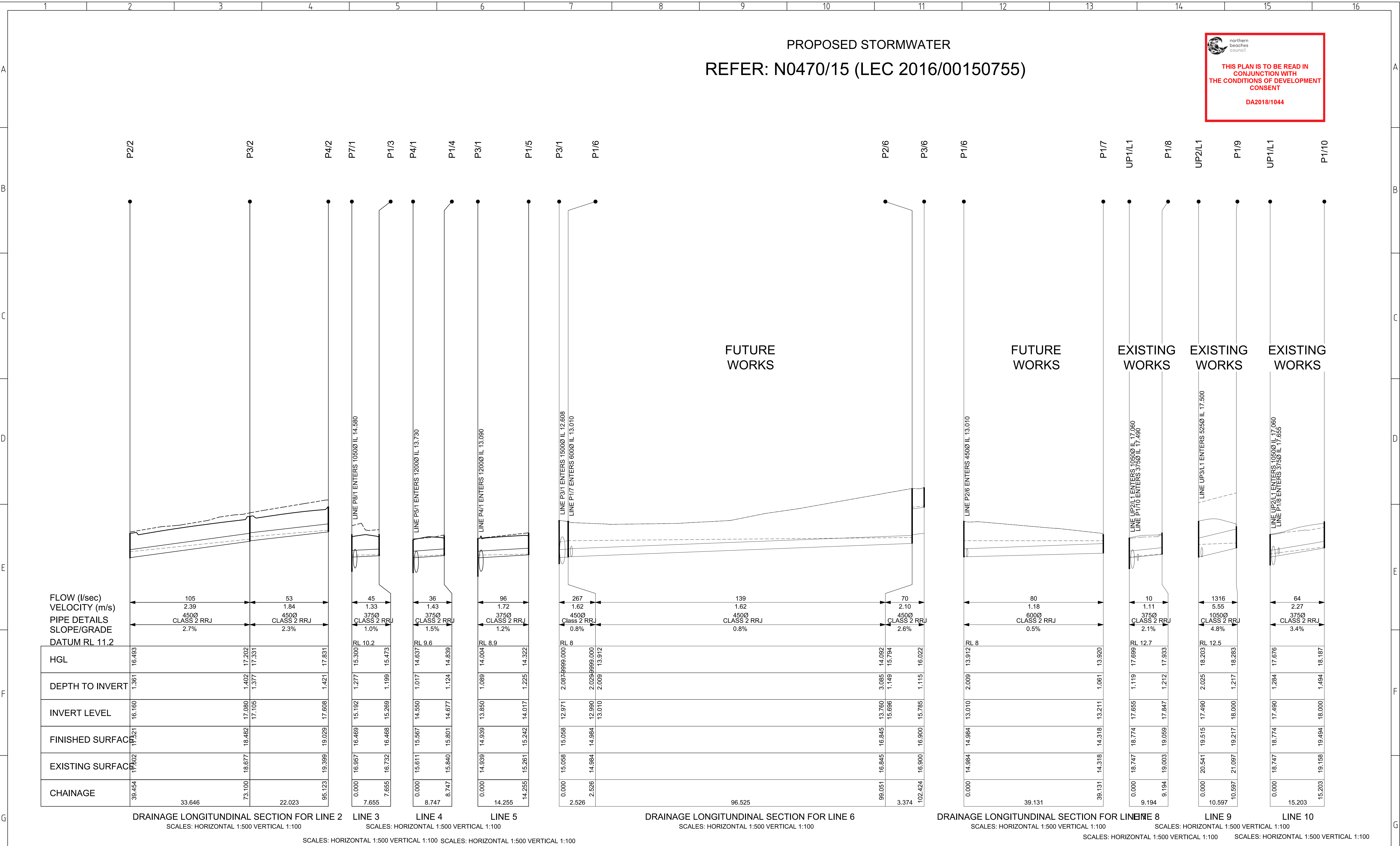
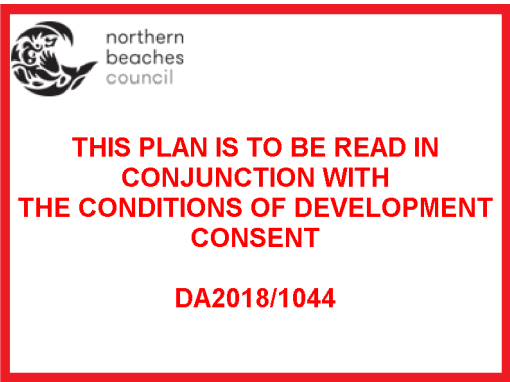
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PROJECT 9 FERN CREEK ROAD WARRIEWOOD				SHEET 12
DRAINAGE LONGITUDINAL SECTIONS - SHEET 1 OF 2				OF 17 SHEETS
LGA NORTHERN BEACHES COUNCIL	AUTHORITY REF -	DATE OF ISSUE 24/04/2019	REVISION No. E	

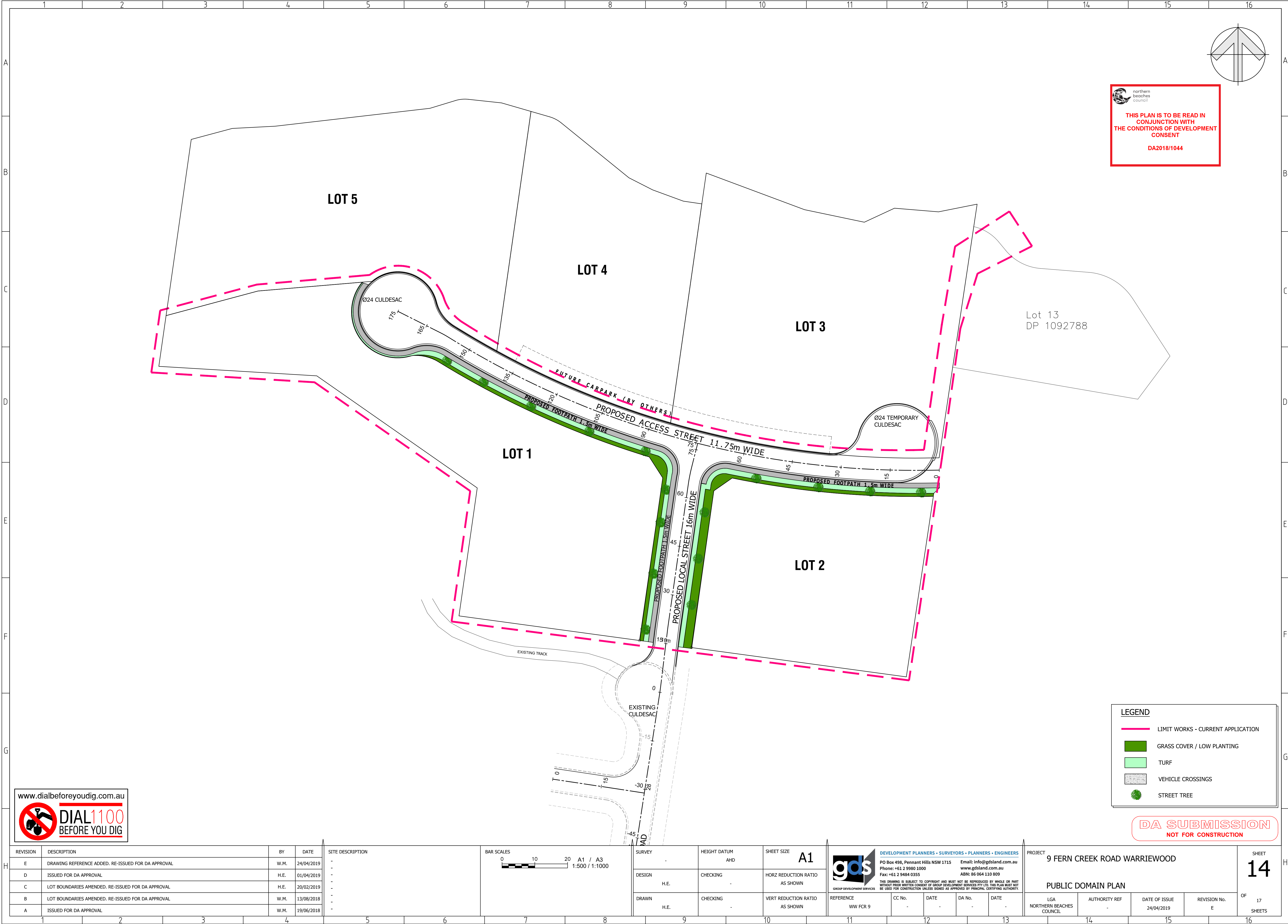
FILE LOCATION: D:\DROPBOX\GDS LAND\GDS TEAM FOLDER\PROJECTS\WARRIEWOOD FERN CREEK 9\DRAWINGS\DA ENGINEERING\WARRIEWOOD FERN CREEK ROAD 9-13 - DA ENG REV E.DWG -DWG ND: P12 DR LS -(Plot with:----)- PLOT DATE: 4/24/2019 11:36 AM

PROPOSED STORMWATER
REFER: N0470/15 (LEC 2016/00150755)



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D	ISSUED FOR DA APPROVAL	H.E.	01/04/2019		0 1 2 3 4 A1 / A3 1:100 / 1:200	H.E.	-	HORZ REDUCTION RATIO AS SHOWN							
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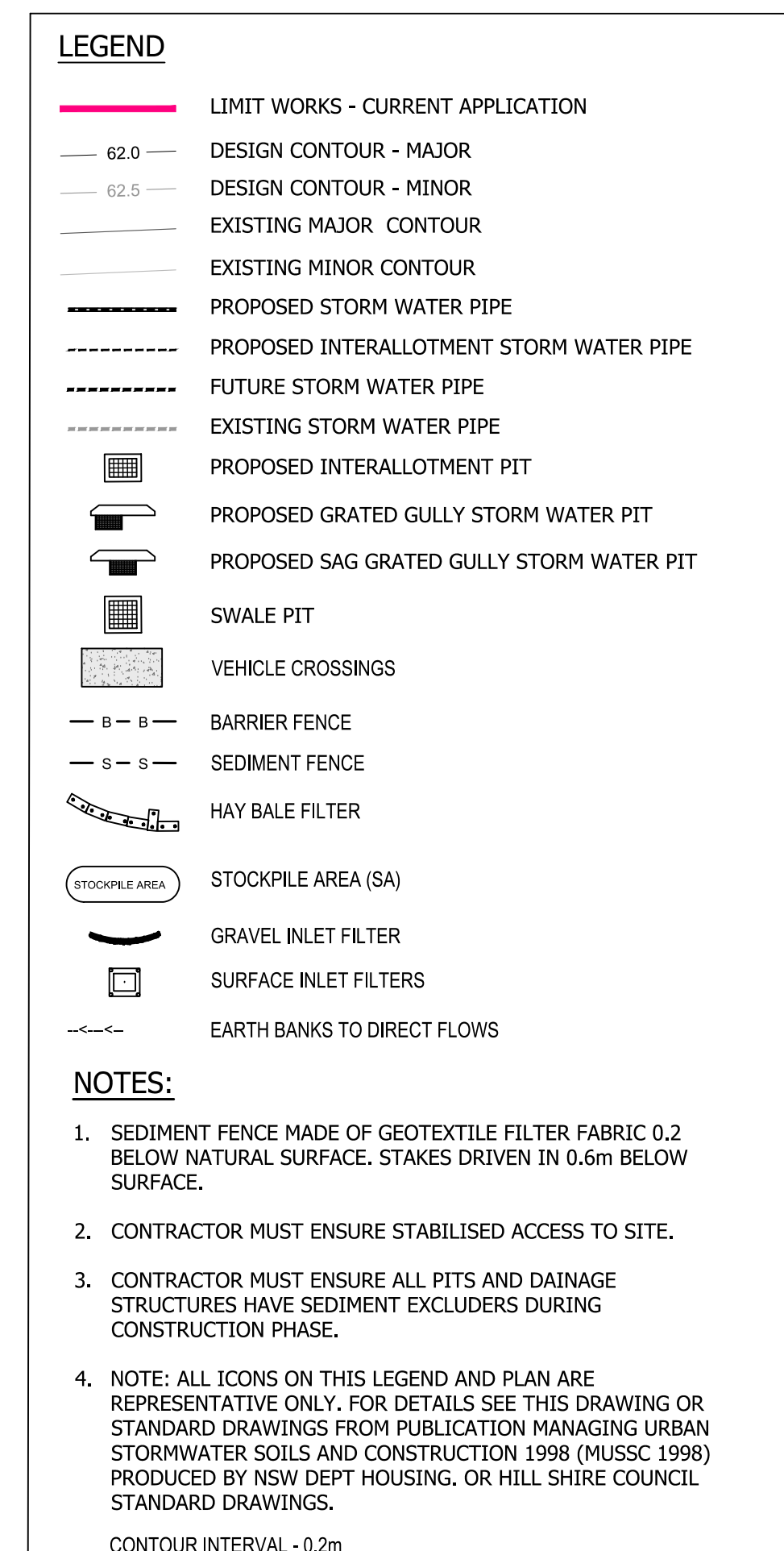
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LEGEND

-  LIMIT WORKS - CURRENT APPLICATION
-  GRASS COVER / LOW PLANTING
-  TURF
-  VEHICLE CROSSINGS
-  STREET TREE

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FILE LOCATION: D:\DROPBOX (GDS LAND)\GDS TEAM FOLDER\PROJECTS\WARRIEWOOD FERN CREEK 9\DRAWINGS\DA ENGINEERING\WARRIEWOOD FERN CREEK ROAD 9-13 - DA ENG REV E.DWG -DWG NO: P15 E & S -(Plot with----)- PLOT DATE: 4/24/2019 11:36 AM