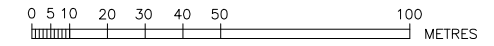
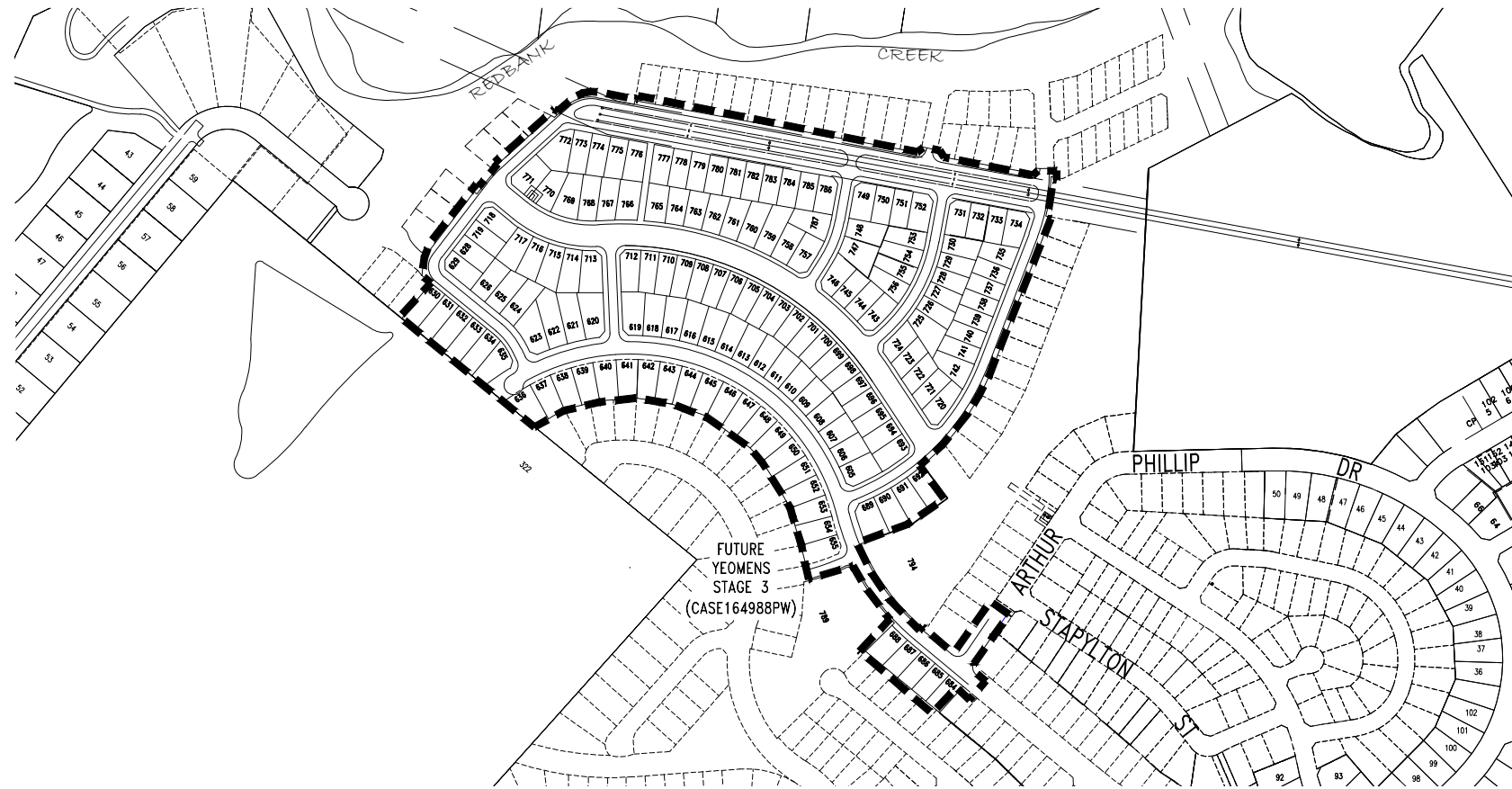


DEVELOPER CONTRACT PLAN
WORK-AS-CREATED
PRELIMINARY



- NOTES :
- WATER SERVICING COORDINATOR AND DESIGNER:
CALIBRE CONSULTING (NSW) PTY LTD
P.O. BOX 8300 BALUKHAM HILLS BC NSW 2153
Ph: (02) 8808 5000
FOR:
NORTH RICHMOND JOINT VENTURE REDBANK
SUITE 4 LEVEL 1 8-10 CASTLEREAGH ST PENRITH NSW 2750
Ph: (02) 4760 1400
 - MAIN LAID GENERALLY 2.6m P.L. AT STANDARD DEPTH BELOW TOP OF KERB EXCEPT WHERE OTHERWISE SHOWN.
 - MAIN LAID OVER STORMWATER & SEWER LINES UNLESS OTHERWISE INDICATED.
 - BACKFILL FOR MAINS LAID IN EXISTING OR PROPOSED ROAD CARRIAGEWAYS - REFER SITE SPECIFIC COMPACTION SPECIFICATION.
 - THRUST/ANCHOR BLOCKS CONSTRUCTED AT ALL BENDS, TEES, TAPERS, FITTINGS & PARTS OF PIPELINE WHERE UNBALANCED THRUST OCCURS. REFER SYDNEY WATER DEEMED TO COMPLY DRAWING DTC-1110 (BENDS), DTC-1111(TYPE 2 BENDS- IF REQUIRED), DTC-1113 (TEES) & DTC-1114 (HYDRANT BENDS).
 - AREA COVERED BY TREE PRESERVATION ORDER.
 - ALL PROPERTY (MAIN TO METER) SERVICES CONSTRUCTED TO SYDNEY WATER'S INSTALLATION REQUIREMENTS BY A LICENSED PLUMBER. THE WORKS WERE INSTALLED IN ACCORDANCE WITH THE CURRENT SYDNEY WATER PROPERTY (MAIN TO METER) SERVICE INSTALLATIONS TECHNICAL REQUIREMENTS, NSW CODE OF PRACTICE FOR PLUMBING AND DRAINAGE AND AS/NZS3500.
 - THE MINIMUM NUMBER OF FIELD COMPACTION TESTS REQUIRED TO SATISFY THE WATER SUPPLY CODE OF AUSTRALIA ARE:
PIPE EMBEDMENT ZONE: - 35 TRENCH FILL ZONE:
- TRAFFICABLE: NIL SEE NOTE 4
- NON-TRAFFICABLE: - 35
(PLEASE REFER TO SITE SPECIFIC COMPACTION SPECIFICATION.)
NUMBER OF TESTS TO BE VERIFIED BY ACCREDITED FIELD TESTER. NUMBERS GIVEN ABOVE TO BE USED AS A GUIDE ONLY.
 - DI.CL PIPES & FITTINGS WRAPPED IN BLUE POLYETHYLENE SLEEVING



LOCALITY SKETCH
N.T.S.

SITE SPECIFIC COMPACTION SPECIFICATION

WITHIN FULL WIDTH OF ROAD CARRIAGEWAY PLUS 1.0M EITHER SIDE -

- ALL SUBGRADE SHALL BE CARRIED UP IN HORIZONTAL LAYERS, OF NOT MORE THAN 300MM THICK LOOSE MEASUREMENT, IF REQUIRED, AND SHALL HAVE EACH LAYER COMPACTED TO A 100% STANDARD DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 'COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO'.
- ALL SUB-BASE COURSE SHALL BE PLACED AND COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 'COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO'.
- ALL BASE COURSE SHALL BE PLACED AND COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 'COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO'.
- ALL ROAD CROSSINGS TO BE PROVIDED IN EXISTING ROADS, THE TRENCHES SHALL BE BACKFILLED AND COMPACTED WITH A SAND/CEMENT BLEND 20:1 MAX TO SUBGRADE LEVEL, THEN DORZO TO WITHIN 50MM OF THE ROAD SURFACE, OR IF REQUIRED TO A HIGHER SPECIFICATION BY A SPECIFIC UTILITY AUTHORITY, TO THAT SPECIFICATION AS INSTRUCTED BY THE PROJECT SUPERINTENDENT.
- ALL TESTS TO BE TAKEN EVERY 50 METRE LENGTH OF PAVEMENT, TAKEN 1.0M FROM ALTERNATE SIDES OF PAVEMENT, BY A NATA REGISTERED LABORATORY.
- THESE AND ALL OTHER REQUIREMENTS TO BE COMPLIED WITH, TO BE READ IN CONJUNCTION WITH HAWKESBURY CITY COUNCIL DCP PART II - CONSTRUCTION SPECIFICATION.
- ANY ERRORS, OMISSIONS OR QUERIES TO BE SUBMITTED TO THE PROJECT SUPERINTENDENT FOR INSTRUCTION.

WITHIN FULL WIDTH OF ROAD FOOTPATH / VERGE EXCLUDING 1.0M BESIDE ROAD CARRIAGEWAY EITHER SIDE -

- ALL FILL SHALL BE CARRIED OUT IN HORIZONTAL LAYERS, EXTENDING THE FULL WIDTH OF THE AREA BEING FILLED, OF NOT MORE THAN 300MM CONSOLIDATED THICKNESS. EACH LAYER SHALL BE COMPACTED TO AT LEAST 98% STANDARD DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 'COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO'.
- ALL TESTS TO BE TAKEN EVERY 50 METRE LENGTH OF ROAD FOOTPATH / VERGE ON CENTRELINE, BY A NATA REGISTERED LABORATORY.
- ALL TRENCHES TO BE BACKFILLED TO HAVE THE SAME COMPACTION AS THE SURROUNDING ROAD FOOTPATH / VERGE.
- ALL TRENCH TESTS TO BE TAKEN IN EACH 300MM LAYER AND EVERY 50 METRES OF TRENCH, BY A NATA REGISTERED LABORATORY.
- THESE AND ALL OTHER REQUIREMENTS TO BE COMPLIED WITH, TO BE READ IN CONJUNCTION WITH HAWKESBURY CITY COUNCIL DCP PART II - CONSTRUCTION SPECIFICATION.
- ANY ERRORS, OMISSIONS OR QUERIES TO BE SUBMITTED TO THE PROJECT SUPERINTENDENT FOR INSTRUCTION.

WITHIN LOTS -

- ALL FILL SHALL BE CARRIED OUT IN HORIZONTAL LAYERS, EXTENDING THE FULL WIDTH OF THE AREA BEING FILLED, OF NOT MORE THAN 300MM CONSOLIDATED THICKNESS. EACH LAYER SHALL BE COMPACTED TO A DENSITY OF AT LEAST 98% STANDARD DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 'COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO'. THE DEPTHS OF FILL AND THE COMPACTION THEREOF ARE TO BE VERIFIED BY THE SUBMISSION OF COMPACTION CERTIFICATES AND A PLAN SHOWING CONTOURED DEPTHS OF FILL IN RELATION TO LOT BOUNDARIES.
- ALL TESTS TO BE A MINIMUM OF TWO COMPACTION TESTS PER LOT PER LAYER ARE TO BE CARRIED OUT, BY A NATA REGISTERED LABORATORY.
- ALL TRENCHES TO BE BACKFILLED TO HAVE THE SAME COMPACTION AS THE SURROUNDING LOTS.
- ALL TRENCH TESTS TO BE TAKEN IN EACH 300MM LAYER AND EVERY 50 METRES OF TRENCH, BY A NATA REGISTERED LABORATORY.
- THESE AND ALL OTHER REQUIREMENTS TO BE COMPLIED WITH, TO BE READ IN CONJUNCTION WITH HAWKESBURY CITY COUNCIL DCP PART II - CONSTRUCTION SPECIFICATION.
- ANY ERRORS, OMISSIONS OR QUERIES TO BE SUBMITTED TO THE PROJECT SUPERINTENDENT FOR INSTRUCTION.

CONTACT DIAL BEFORE YOU DIG

CONSTRUCTION NOTES

THE PROPOSED WORKS AS DETAILED HEREON CONSTRUCTED IN ACCORDANCE WITH THE WATER RETICULATION CODE OF AUSTRALIA - NSR 03-2011-3.1 SYDNEY WATER EDITION 2014 AND SYDNEY WATER DEEMED TO COMPLY DRAWINGS INCLUDING DTC-1110 (ISS. A, 31/01/12) (DTC-1111 (ISS. B, 29/02/12) IF REQUIRED), DTC-1112 (ISS. B, 29/02/12), DTC-1113 (ISS. B, 29/02/12), DTC-1114 (ISS. A, 31/01/12) & DTC-1115 (ISS. B, 29/02/12) - SITE SPECIFIC COMPACTION SPECIFICATION.

06	PRELIMINARY WORK AS CONSTRUCTED	A.S.	22/02/18
05	ARTHUR PHILLIP DRIVE SIZING UPDATE	A.S.	28/02/18
04	ISSUE FOR SYDNEY WATER APPROVAL	D.Y.	21/11/17
03	ISSUE FOR REVIEW	D.Y.	04/09/17
02	ISSUE FOR TENDER	F.R.	23/08/17
01	ISSUE FOR REVIEW	D.Y.	12/05/17
No.	AMENDMENT DESCRIPTION	BY	DATE

PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS SYDNEY WATER CORPORATION	UTILITIES					
	TYPE	DATE	REF.	TYPE	DATE	REF.
PROP SEWER: S	30.03.17	CALIBRE				
PROP STORMWATER: SWD	30.03.17	CALIBRE				
ELECTRICAL: E	29.05.17	D.B.Y.D.				

WORK AS CREATED CERTIFICATION	
DEVELOPER	NORTH RICHMOND JOINT VENTURE PTY LTD
WATER SERVICE CO-ORDINATOR	CALIBRE CONSULTING (NSW) PTY LTD
CONSTRUCTOR	JONISHAN PTY LTD
COMPLETED	W.A.C. PREPARED 17/07/18
DESIGNER	CALIBRE CONSULTING (NSW) PTY LTD
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CREATED DRAWINGS.	

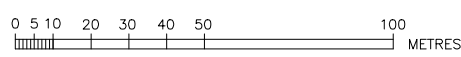
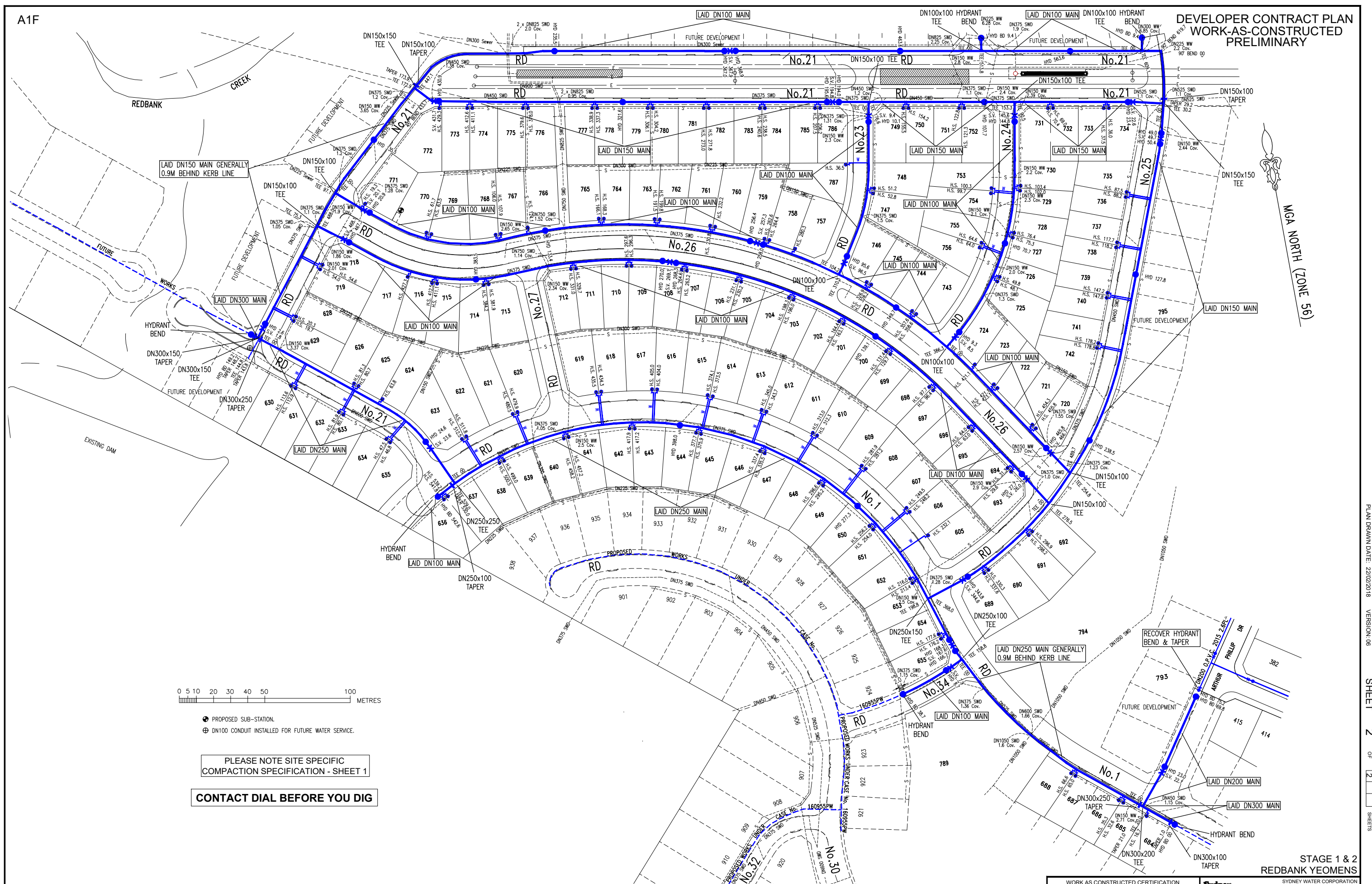
PIPE SCHEDULE					
SIZE DN	TYPE	CLASS	LENGTH	PIPE JOINING METHOD / NOTES	
100	O.P.V.C.	PN16	1780.3	RUBBER RING	
150	O.P.V.C.	PN16	959.8	RUBBER RING	
200	O.P.V.C.	PN16	75.2	RUBBER RING	
250	O.P.V.C.	PN16	652.8	RUBBER RING	
300	D.I.C.L.	PN35	26.4	RUBBER RING	

AUSTRALIAN HEIGHT DATUM	
PLAN	1:1000
SECTION	VERT. 1:1000
CROSS SECTIONS: NATURAL	
LENGTHS, DEPTHS & LEVELS ARE IN METRES.	

NO AMENDMENTS ARE TO BE MADE TO THIS PLAN WITHOUT REFERENCE TO SYDNEY WATER. THIS PLAN IS NOT NECESSARILY UP TO DATE OR CORRECT AND SYDNEY WATER ACCEPTS NO RESPONSIBILITY.	
U.B. DIRECTORY	MAP 63/J14 (41st ED)
SHEET	1 OF 2
File No.	N/A

SYDNEY WATER CORPORATION	
Case No. 164471PW	
WATERMAIN EXTENSION OFF ARTHUR PHILLIP DRIVE NORTH RICHMOND HAWKESBURY	

STAGE 1 & 2
REDBANK YEOMENS



- PROPOSED SUB-STATION.
- ⊕ DN100 CONDUIT INSTALLED FOR FUTURE WATER SERVICE.

PLEASE NOTE SITE SPECIFIC
COMPACTION SPECIFICATION - SHEET 1

CONTACT DIAL BEFORE YOU DIG

No.	AMENDMENT DESCRIPTION	BY	DATE
06	PRELIMINARY WORK AS CONSTRUCTED	A.S.	17/07/18
05	ARTHUR PHILLIP DRIVE SIZING UPDATE	A.S.	28/02/18
04	ISSUE FOR SYDNEY WATER APPROVAL	D.Y.	21/11/17
03	ISSUE FOR REVIEW	D.Y.	04/09/17
02	ISSUE FOR TENDER	F.R.	23/08/17
01	ISSUE FOR REVIEW	D.Y.	12/05/17

<p>WORK AS CONSTRUCTED CERTIFICATION</p> <p>DEVELOPER NORTH RICHMOND JOINT VENTURE PTY LTD W.S.C. CALIBRE CONSULTING (NSW) PTY LTD</p> <p>CONSTRUCTOR JONSHAN PTY LTD</p> <p>COMPLETED</p> <p>W.A.C. PREPARED 17/07/18</p>		<p>SYDNEY WATER CORPORATION</p>
<p>DESIGNER CALIBRE CONSULTING (NSW) PTY LTD</p> <p>I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS</p>		
<p>Case No. 164471PW</p>		<p>SHT 2 OF 2 SHTS.</p>
<p>FOR DETAILS OF SERVICES SEE SHEET 1</p>		<p>SYDNEY WATER CORPORATION</p>