



SITE SPECIFIC CONSTRUCTION NOTE

- IT IS ACKNOWLEDGED THAT THERE IS RECENTLY CONSTRUCTED / COMPLETED INFRASTRUCTURE THROUGHOUT THE AREA OF PROPOSED WORKS, WITH OWNERSHIP SPREAD ACROSS SYDNEY WATER, COUNCIL AND REDBANK COMMUNITIES. THE CONTRACTOR IS AT ALL TIMES, TO UNDERTAKE WHATEVER TASKS NECESSARY TO MINIMIZE DISTURBANCE AND DAMAGE TO EXISTING ROAD, KERB & GUTTER, FOOTPATH AND VEGETATION ETC. WITH ALL REPAIR AND RECTIFICATION TO MATCH THAT WHICH EXISTED PRIOR TO THE WORKS BEING UNDERTAKEN. PHOTOS OF EXISTING CONDITION WILL BE SUPPLIED TO BOTH THE PRINCIPLE CIVIL CONTRACTOR, SYDNEY WATER ACCREDITED SUBCONTRACTOR AND SUPERINTENDENT, TO CONFIRM THE PRE-WORKS CONDITION.
- SYDNEY WATER ACCREDITED SUBCONTRACTOR AT ALL TIMES, IS TO CONSULT WITH THE PRINCIPLE CIVIL CONTRACTOR, TO ENSURE THAT THE DEVELOPER, REDBANK COMMUNITIES IS ADVISED AND APPROVES THE EXTENT OF REQUIRED DISTURBANCE PRE-WORKS, IS ADVISED AND APPROVES OF ANY CHANGES TO THIS EXTENT DURING THE WORKS, AND INSPECTS AND ACCEPTS THE COMPLETED WORKS, PRIOR TO THE SYDNEY WATER ACCREDITED SUBCONTRACTOR LOGGING THEIR PROJECT COMPLETION PACKAGE (PCP) WITH THE WATER SERVICE CO-ORDINATOR, WITH THIS ROLE UNDERTAKEN BY CALBRE PROFESSIONAL SERVICES. CALBRE PROFESSIONAL SERVICES ARE TO ONLY ACCEPT THE PCP FOR PROCESSING, PROVIDED THIS INSPECTION AND ACCEPTANCE BY REDBANK COMMUNITIES HAS BEEN RECEIVED IN WRITING WITH THE PCP.

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 MIX TO SUBGRADE LEVEL, THEN DOB20 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 DOP 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 DOP 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 DENSITY AND THE REQUIREMENTS 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 DOP PART II - CONSTRUCTION SPECIFICATION.
- ANY ERRORS, OMISSIONS OR QUERIES TO BE SUBMITTED TO THE PROJECT SUPERINTENDENT FOR INSTRUCTION.

- NOTES :
- WATER SERVICES COORDINATOR AND DESIGNER: CALBRE PROFESSIONAL SERVICES PTY LTD P.O BOX 8300, NORTHWEST BC, NSW 2153 Ph: (02) 8808 5000
 - FOR: REDBANK COMMUNITIES 76 ARTHUR PHILLIP DRIVE NORTH RICHMOND NSW 2754
 - EXISTING AND PROPOSED SERVICES ARE INDICATIVE ONLY. CURRENT SERVICES SEARCH & SITE CHECK OF ALL EXISTING & PROPOSED SERVICES COMPLETED PRIOR TO THE COMMENCEMENT OF WORK & APPROPRIATE PROCEDURES, PRECAUTIONS AND CARE TAKEN BY THE CONTRACTOR WHEN WORKING IN CLOSE PROXIMITY TO ALL SERVICES DURING CONSTRUCTION AND ANY DAMAGE TO EXISTING SERVICES WAS RECTIFIED AT THE CONSTRUCTORS EXPENSE.
 - MAIN LAID GENERALLY 2.6m P.L. AT 0.8m COVER TO TOP OF MAIN, EXCEPT WHERE OTHERWISE SHOWN, WHERE REQUIRED, LOCALLY RAISED MAIN TO STANDARD COVER TO ACHIEVE THE REQUIRED VERTICAL CLEARANCE TO UNDERGROUND SERVICES.
 - MAIN LAYING DID NOT PROCEED PRIOR TO FORMATION OF FOOTWAYS TO FINISHED SURFACE LEVELS.
 - MAIN LAID OVER STORMWATER & SEWER LINES UNLESS OTHERWISE INDICATED.
 - THRUST/ANCHOR BLOCKS CONSTRUCTED AT ALL BENDS, TEES, TAPERS, FITTINGS & PARTS OF PIPELINE WHERE UNBALANCED THRUST OCCURS.
 - THE ALLOWABLE HORIZONTAL BEARING PRESSURE (AHBP) OF UNDISTURBED NATURAL SOIL OR BACKFILL DETERMINED BY A SUITABLY EXPERIENCED GEOTECHNICAL ENGINEER PRIOR TO CASTING THRUST RESTRAINTS. CERTIFICATION PROVIDED TO W.S.C.
 - THRUST BLOCKS AT CONNECTION POINTS PREPARED AGAINST UNDISTURBED GROUND AND CURED FOR 7 DAYS BEFORE SUBJECT TO THRUST LOADINGS.
 - TRENCH STOPS USED IN LIEU OF BULKHEADS AT ROAD CROSSINGS. REFER WAT-1209.
 - BURIED FITTINGS & BENDS NOT BACKFILLED UNTIL W.A.C. DETAILS OBTAINED BY THE DESIGNER AND APPROVAL FOR BACKFILL GIVEN BY THE W.S.C.
 - AREA COVERED BY TREE PRESERVATION ORDER.
 - THE MINIMUM NUMBER OF FIELD COMPACTION TESTS REQUIRED TO SATISFY THE WATER SUPPLY CODE OF AUSTRALIA ARE:

- PIPE EMBEDMENT ZONE: - 8 TRENCH FILL ZONE: SEE NOTE 6
- TRAFFICABLE: NIL
 - NON-TRAFFICABLE: - 14
- NUMBER OF TESTS TO BE VERIFIED BY ACCREDITED FIELD TESTER. NUMBERS GIVEN ABOVE TO BE USED AS A GUIDE ONLY. ADDITIONAL TESTS MAY BE REQUIRED. PLEASE REFER TO SITE SPECIFIC COMPACTION SPECIFICATION.
- 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.
 - PRECAUTIONS ARE NECESSARY IN THE VICINITY OF SUB-STATION & OTHER ELECTRICAL EARTHING.
 - PRIOR TO THE USE OF INSULATING BUSHES OR NON CONDUCTIVE PIPE MATERIAL, CONTACTED THE SENIOR INSULATION INSPECTOR AT AUSGRID (PH: 13 15 25) OR ENDEAVOUR ENERGY (PH: 13 10 81), RE ELECTRICAL EARTHING OF PROPERTIES.
 - ALL SAFETY PRECAUTIONS TAKEN FOR ELECTRICAL EARTHING OF BUILDINGS WHEN DISCONNECTING/CONNECTING WATER PROPERTY CONNECTION SERVICES.
 - SAFETY WATER REQUIREMENTS FOR CONTRACTOR ELECTRICAL SAFETY DATED 19/12/2011 APPLIED, AND SITE SPECIFIC PROJECT SAFETY PLAN WITH APPROPRIATE WORK METHOD STATEMENT TO BE IMPLEMENTED.
 - RED MARKED UP DRAWING SHOWING WORK AS CONSTRUCTED DETAILS PROVIDED TO W.S.C.
 - MINIMUM CLEARANCES BETWEEN THE PROPOSED WATERMANS & OTHER UNDERGROUND SERVICES COMPLIED WITH THE WATER RETICULATION CODE OF AUSTRALIA - WSA 03-2011-3.1 SYDNEY WATER EDITION 2014, TABLE 5.5.
 - LIGHT DUTY STEEL SURFACE BOXES USED FOR HYDRANTS & STOP VALVES LOCATED IN CONCRETE PATHS.
 - WHERE A FITTING IS LOCATED IN A TRAFFICABLE AREA, INSTALLED TRAFFICABLE SURFACE BOX AS PER THE WATER SUPPLY CODE OF AUSTRALIA - WSA 03-2011-3.1 SYDNEY WATER EDITION 2014, DRG. NO. WAT-1303-V TO WAT-1306-V.
 - MAIN GRADE EXCEEDS 5% BETWEEN "A"- "B" & "C"- "D". TRENCHSTOPS CONSTRUCTED AT 8.5m INTERVALS BETWEEN "A"- "B" AND 16.3m INTERVALS BETWEEN "C"- "D" IN ACCORDANCE WITH TABLE 7.5 OF THE WATER SUPPLY CODE OF AUSTRALIA (SYDNEY WATER EDITION) (WSA 03-2011-3.1, 2014) AND DRG NO. WAT-1209.
 - MAPPING DATUM: GDA2020, MGA ZONE 56.

* PROPOSED ELECTRICAL SUBSTATION

WHERE REQUIRED, UTILISED HORIZONTAL BENDS AS PER DTC-1110 (Iss. A, 31/01/12) AND/OR DTC-1111 (Iss. B, 29/02/12) TO MAINTAIN GENERALLY 2.6m OFFSET TO P.L. REFER NOTES 3 AND 23

0 5 10 20 30 40 50 100 METRES

CONTACT DIAL BEFORE YOU DIG

CONSTRUCTION NOTES

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

THE CONTRACTOR HAD A COPY OF THESE DOCUMENTS ON SITE AT ALL TIMES.

| | | | |
|-----|---------------------------------|------|----------|
| 03 | WORKS AS CONSTRUCTED | A.S. | 3/02/23 |
| 02 | PRELIMINARY WORK AS CONSTRUCTED | A.S. | 20/10/22 |
| 01 | ISSUE FOR SYDNEY WATER APPROVAL | M.W. | 18/02/22 |
| 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. |
| PRIOR TO COMMENCEMENT OF EXCAVATION FOR PROPOSED AND EXISTING SERVICES CONTACT - DIAL BEFORE YOU DIG ELECTRICITY ENGINEER ENERGY Ph: 131 003 GAS, SEWER, NEW GAS Ph: 1300 880 908 TELECOMMUNICATIONS, TELSTRA Ph: 1800 114 918 SYDNEY WATER Ph: 132 999 GIVING AT LEAST 48 HOURS NOTICE. | STORMWATER: SMD | 02/02/22 | JWD | PROP STORMWATER: SMD | 02/02/22 | JWD |
| | SEWER: S | 08/02/22 | CALBRE | PROP SEWER: S | 08/02/22 | CALBRE |
| | | | | PROP ELECTRICITY: E | 07/07/21 | EPD |

| WORK AS CONSTRUCTED CERTIFICATION | |
|---|---|
| DEVELOPER | REDBANK COMMUNITIES |
| WATER SERVICE CO-ORDINATOR | CALBRE PROFESSIONAL SERVICES PTY LTD |
| CONSTRUCTOR | C.J. DOYLE CONTRACTING SERVICES PTY LTD |
| COMPLETED | 28/09/2022 W.A.C. PREPARED 3/02/2023 |
| DESIGNER | CALBRE PROFESSIONAL SERVICES PTY LTD |
| I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS. | |

| PIPE SCHEDULE | |
|---------------|---|
| SIZE DN | TYPE CLASS LENGTH PIPE JOINING METHOD / NOTES |
| DN100 | P.V.C. PN16 262.6 RUBBER RING JOINT |
| DN150 | P.V.C. PN16 427.5 RUBBER RING JOINT |

| AUSTRALIAN HEIGHT DATUM | |
|---------------------------------------|--|
| SCALES | |
| PLAN | 1:1000 SECTION { HOR : : : : : VERT : : : : : } |
| CROSS SECTIONS | NATURAL |
| LENGTH, DEPTH & 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, G16 (41st EDITION) |
| SHEET | 1 OF 1 |
| File No. | N/A |

REDBANK RIDGETOPS I

SYDNEY WATER CORPORATION

Case No. 186814PW

WATERMAIN EXTENSION
GROSE VALE ROAD
NORTH RICHMOND HAWKESBURY

PLAN DRAWN DATE: 3/02/2023
VERSION: 03
SHEET 1 OF 1
SHEETS