

- DESIGNER AND WATER SERVICING COORDINATOR:
QALCHEK PTY LTD (CERTIFIED No.289)
77 UNION RD. PENRITH NSW 2750
PH. No. (02) 4722 8181
FOR:
NRJV & RSL PTY LTD
C/- BULDEV NSW PTY LTD
ATTN. ANDREW FLAHERTY
SUITE 4, LEVEL 1, 8-10 CASTLEREAGH STREET, PENRITH NSW 2750
PH. NO.: 0419 474 960
- THE WORKS AND MATERIALS ARE IN ACCORDANCE WITH THE SEWER RETICULATION CODE OF AUSTRALIA (WSA 02-2002-2.2 VERSION 3) INCLUDING THE SYDNEY WATER SUPPLEMENT AND APPENDICES AS WELL AS THE TECHNICAL SPECIFICATION FOR LEAK TIGHT SEWER SYSTEMS (VERSION 1/17.12.14).
- ALL STRUCTURES ARE CONSTRUCTED TO SURFACE LEVELS.
- ALL INFORMATION TAKEN FROM THE FOLLOWING PLANS SUPPLIED BY NRJV:
DRAFTING BASE, 3D AND SWD: REDBANK-SEP3 MVG-BEW & ULT DRG DTM STRINGS 1504.10 (SUPPLIED 13.04.2015)
CIVIL SET PDF (95%): REDBANK-SEP3 MVG-C&R 1768 CC ULT CIVIL PLANS-150410 (SUPPLIED 13.04.2015)
- THE NUMBER OF FIELD COMPACTION TESTS CONDUCTED TO SATISFY THE SEWERAGE CODE OF AUSTRALIA ARE (INCL. PCS ROAD CROSSINGS):
SAND/CEMENT BACKFILL WAS USED AT ROAD CROSSINGS,
PIPE EMBEDMENT ZONE: 51 TESTS CONDUCTED
TRENCH FILL ZONE (TRAFFICABLE): 0 TESTS CONDUCTED
TRENCH FILL ZONE (NON TRAFFICABLE): 73 TESTS CONDUCTED
TRENCH FILL ZONE (MAINTENANCE STRUCTURES): 166 TESTS CONDUCTED
TRENCH FILL ZONE - TOTAL: 239 TESTS CONDUCTED
- BUILDING OVER/ADJACENT TO SEWER - CONDITIONS MAY APPLY. REFER TO QALCHEK FOR DETAILS.
- ALL EXCAVATION, SHORING EXCAVATION AND STABILITY OF ADJACENT STRUCTURES/SERVICES/DWELLINGS WAS THE RESPONSIBILITY OF THE CONSTRUCTOR.
- PIPES CONCRETE ENCASED SHOWN ACCORDINGLY:- REFER TO SEW-1205-V
- DENOTES PCS CONNECTION TO DTC-2120 (REV. A 18.03.15). ALL PCS ARE AT 90° TO MAIN UNLESS OTHERWISE INDICATED.
 DENOTES PCS CONCRETE ENCASED TO 3m EACH SIDE OF SWD CROSSING
- THE TOTAL LENGTH OF THE DN100 PCS'S EXCLUDING RISERS IS APPROXIMATELY 468.62m. PCS'S HAVE MINIMUM STIFFNESS RATING OF SN10. JOINTING SOLVENT WELDED.
- TEMPORARY LEVEL MARKS ARE FOR CONSTRUCTION PURPOSES ONLY. S.S.M.'S WILL BE PLACED ON THE KERB AND GUTTERS, LEVELED AND SHOWN AS BENCH MARKS ON THE W.A.C. DRAWINGS.
- FOR MH'S REFER TO THE FOLLOWING DTC DRAWINGS:
DTC-2000 (REV.C 18.03.15), DTC-2203 (REV.B 18.03.15), DTC-2220 (REV.D 18.03.15), DTC-2221 (REV.B 01.03.13), DTC-2222 (REV.C 18.03.15)

LOCALITY SKETCH AND BM DIAGRAM
NOT TO SCALE

No.	AMENDMENT DESCRIPTION	BY	DATE
0	WORK AS CONSTRUCTED	ST	22.07.16
G	L.4 AMENDED TO CLEAR RELOCATED SWD	A.P.	18.04.16
F	L5 & 6 AMENDED DUE TO STORMWATER CLASH	J.F.	09.12.15
E	L.1, L.5 AND L.13 AMENDED	A.P.	04.11.15
D	REISSUED FOR SYDNEY WATER APPROVAL	A.P.	02.11.15
C	ISSUED FOR SYDNEY WATER APPROVAL	A.P.	26.10.15
B	ISSUED FOR COMMENT	A.P.	22.10.15
A	ISSUED FOR REVIEW AND COMMENT	A.P.	20.10.15

PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS SYDNEY WATER CORPORATION

PRIOR TO COMMENCEMENT OF EXCAVATION FOR PROPOSED AND EXISTING SERVICES CONTACT:-

DIAL BEFORE YOU DIG Ph. 1100
ELECTRICITY ENDEAVOUR ENERGY Ph. 131 003
GAS JEMENA GAS Ph. 1300 880 906
TELECOMMUNICATIONS TELSTRA Ph. 1800 114 918
SYDNEY WATER Ph. 132 092
GIVING AT LEAST 48 HOURS NOTICE.

UTILITIES			
TYPE	DATE	REF.	
WATER: DN100 Water	18.04.15	WAC	
PROP WATER: DN100 Water	18.04.15	DESIGN	
STORMWATER: SWD	13.04.14	ENC.	
PROP STORMWATER: SWD	13.04.15	ENC.	
TELSTRA: TEL	23.04.14	DBYD	
ENDEAVOUR ENERGY: EE	23.04.14	DBYD	
OPTUS: OPTUS	23.04.14	DBYD	
SSM 58890 (ORIGIN)	11.11.14	CN136556	

WORK AS CONSTRUCTED CERTIFICATION			
DEVELOPER	WATER SERVICE CO-ORDINATOR	CONSTRUCTOR	COMPLETED
NRJV + RSL PTY LTD	QALCHEK PTY LTD	FLUID SERVICES PTY LTD	30.03.16
DESIGNER QALCHEK PTY LTD		W.A.C. PREPARED 22.07.16	
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS.			

PIPE SCHEDULE			
SIZE DN	TYPE	CLASS	LENGTH
150	UPVC	SN8	2088.90
100	UPVC	SN10	515.94
			SEE NOTE 17.
TOTAL			2616.44
DESIGN HEAD . . . m			
NO BOUNDARY TRAPS REQUIRED.			

AUSTRALIAN HEIGHT DATUM	
SCALES	
PLAN	1:500
SECTION	VERT. 1:125
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.

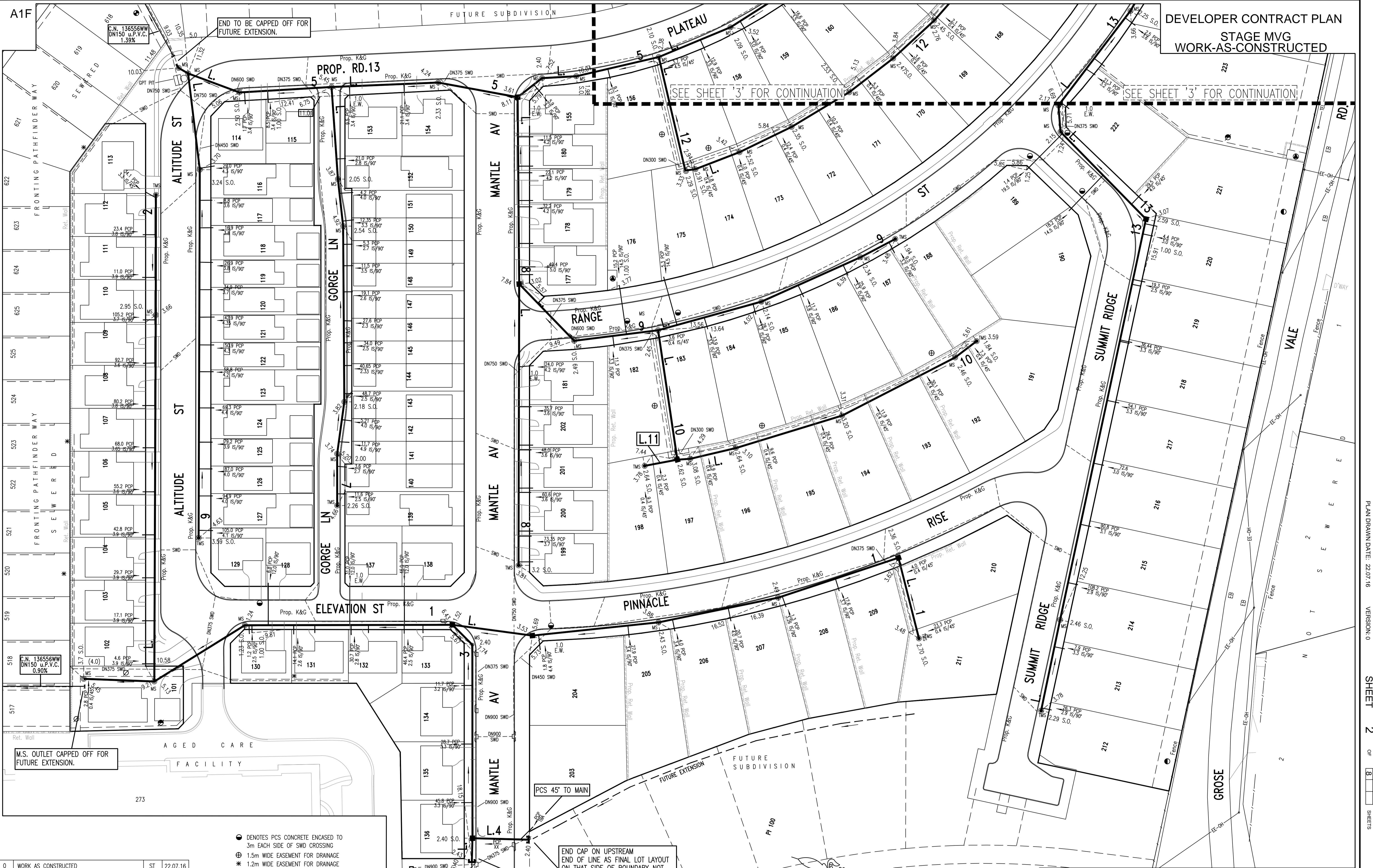
U.B. DIRECTORY MAP G3/J&K15&16 46th Edition

SHEET . 1 . OF . 8 . File No. N/A

Sydney WATER SYDNEY WATER CORPORATION

Case No. 149282WW

HAWKESBURY SEWERAGE DRAINS TO NORTH RICHMOND TREATMENT WORKS



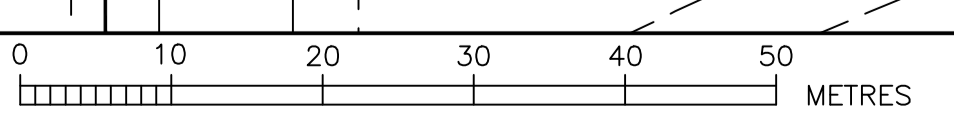
DEVELOPER CONTRACT PLAN
STAGE MVG
WORK-AS-CONSTRUCTED

SEE SHEET 3 FOR CONTINUATION

SEE SHEET 3 FOR CONTINUATION

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- DENOTES PCS CONCRETE ENCASED TO 3m EACH SIDE OF SWD CROSSING
- ⊕ 1.5m WIDE EASEMENT FOR DRAINAGE
- * 1.2m WIDE EASEMENT FOR DRAINAGE
- ⊗ 3m WIDE EASEMENT FOR DRAINAGE
- ⊙ 1m WIDE EASEMENT FOR ELECTRICITY
- 5m WIDE EASEMENT FOR BATTER
- 3m WIDE DRAINAGE EASEMENT EXISTING
- SUBSTATION EASEMENT



WORK AS CONSTRUCTED CERTIFICATION		Sydney WATER	
DEVELOPER	NRN+ RSL PTY LTD	SYDNEY WATER CORPORATION	
W.S.C.	QALCHEK PTY LTD	Case No. 149282WW SHT 2 OF 8 SHTS.	
CONSTRUCTOR	FLUID SERVICES PTY LTD	COMPLETED 30.03.16	
W.A.C. PREPARED	22.07.16	DESIGNER QALCHEK PTY LTD	
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		FOR DETAILS OF SERVICES SEE SHEET 1	

PLAN DRAWN DATE: 22.07.16
VERSION: 0
SHEET 2 OF 8 SHEETS

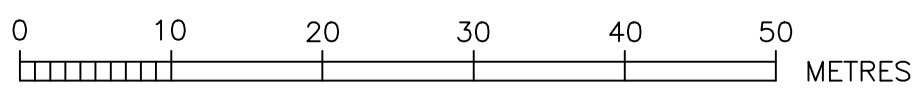


- DENOTES PCS CONCRETE ENCASED TO 3m EACH SIDE OF SWD CROSSING
- ⊕ 1.5m WIDE EASEMENT FOR DRAINAGE (PROPOSED)
- * 1.2m WIDE EASEMENT FOR DRAINAGE (PROPOSED)
- ⊗ 3m WIDE EASEMENT FOR DRAINAGE (PROPOSED)
- ⊙ 1m WIDE EASEMENT FOR ELECTRICITY (PROPOSED)
- ⊖ 5m WIDE EASEMENT FOR BATTER (PROPOSED)
- ⊕ 3m WIDE DRAINAGE EASEMENT EXISTING
- ⊙ SUBSTATION EASEMENT

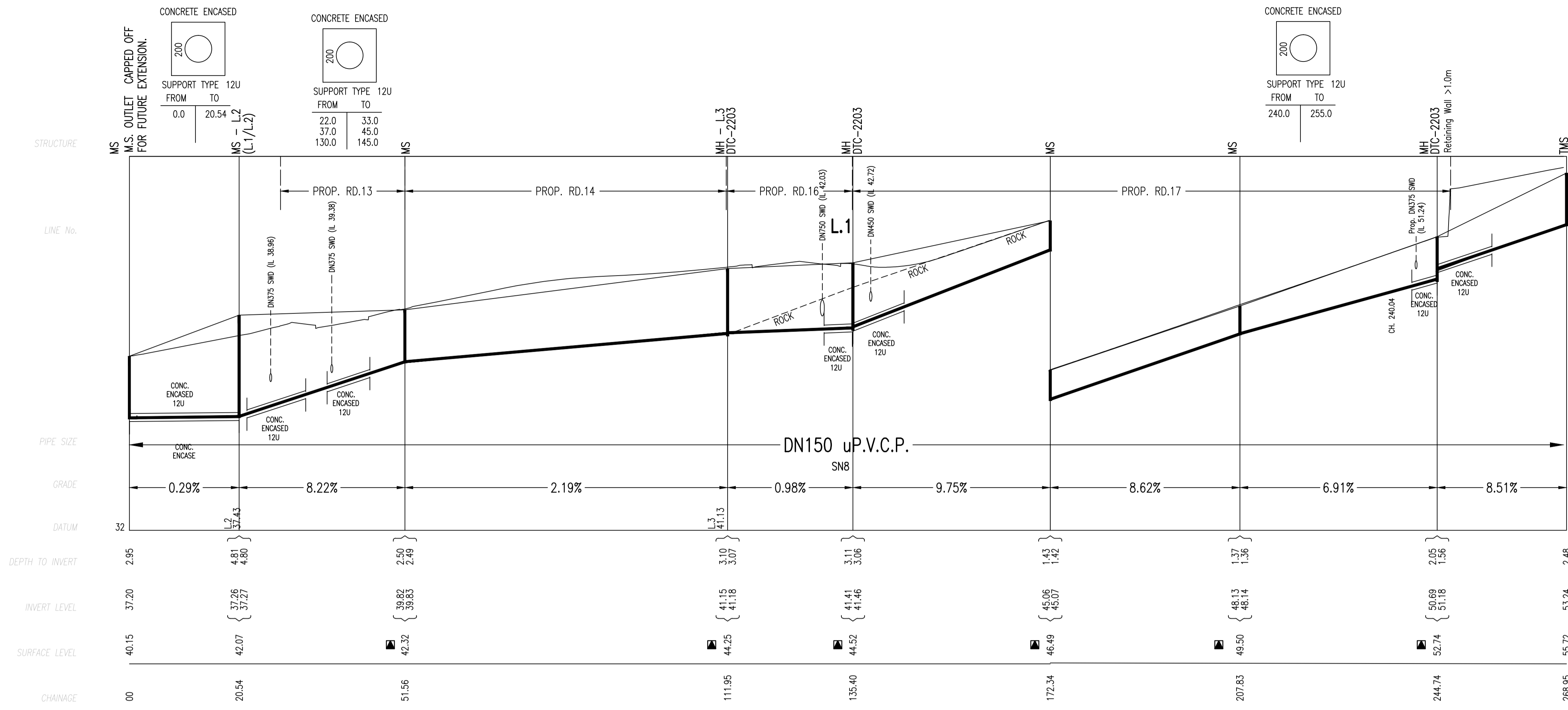
SEE SHEET '2' FOR CONTINUATION

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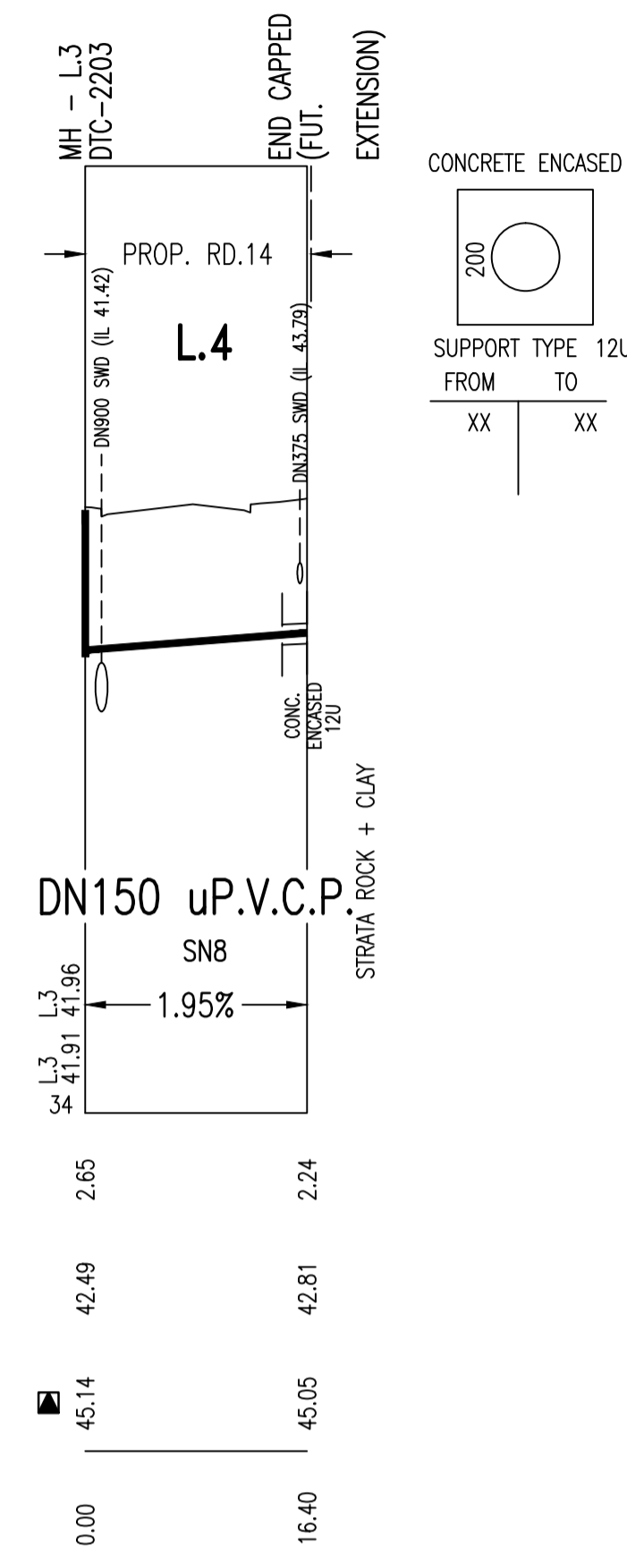
No.	AMENDMENT DESCRIPTION	BY	DATE
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WORK AS CREATED CERTIFICATION		Sydney WATER SYDNEY WATER CORPORATION	
DEVELOPER	NRJV+ RSL PTY. LTD.	Case No.	149282WW SHT 3 OF 8 SHTS.
W.S.C.	QALCHEK PTY. LTD.	COMPLETED	30.03.16
CONSTRUCTOR	FLUID SERVICES PTY. LTD.	W.A.C. PREPARED	22.07.16
DESIGNER	QALCHEK PTY. LTD.	SYDNEY WATER CORPORATION	
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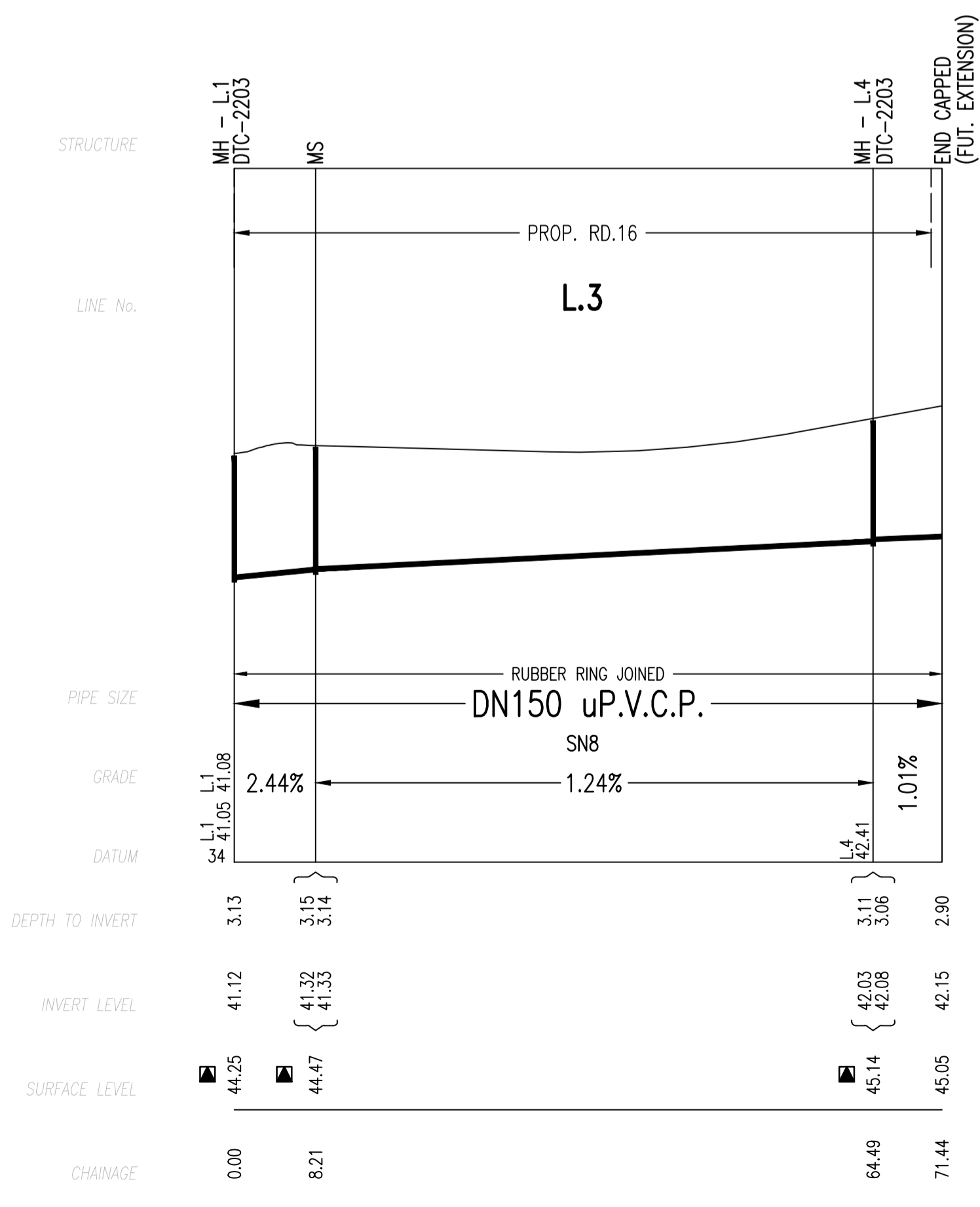
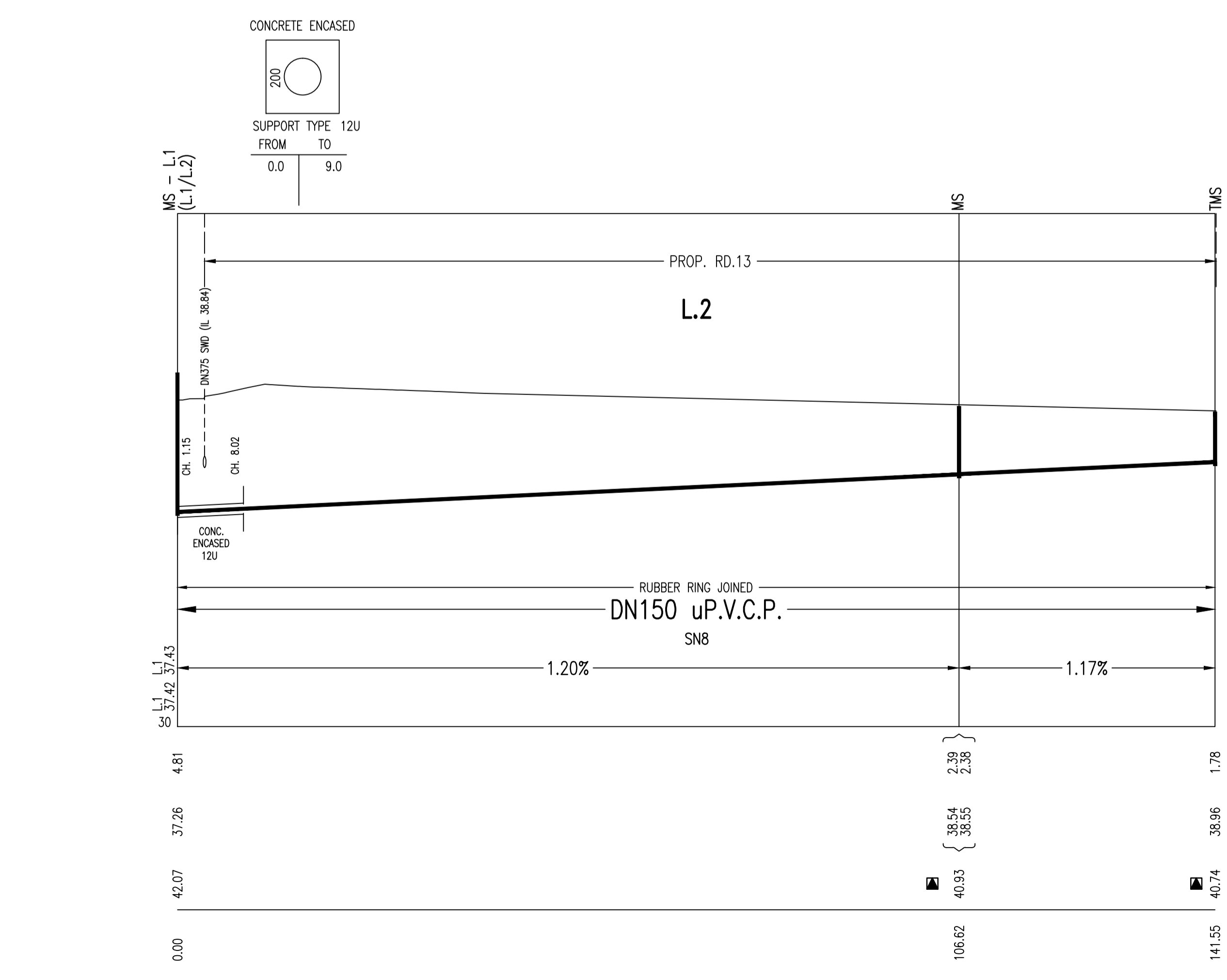


L.2 BELOW
L.3 BELOW



L.4 ABOVE

NOTE:
LEVELS HIGHLIGHTED WITH ■ REFER TO THE FUTURE FOOTPATH/ROAD LEVELS
REFER TO NOTE 3 ON SHEET 1. LIDS SHOULD BE CONSTRUCTED SO THAT
FUTURE AMENDMENTS NOT REQUIRED. CONSTRUCTOR TO LIAISE WITH SUPERINTENDENT
AND CIVIL CONTRACTOR.



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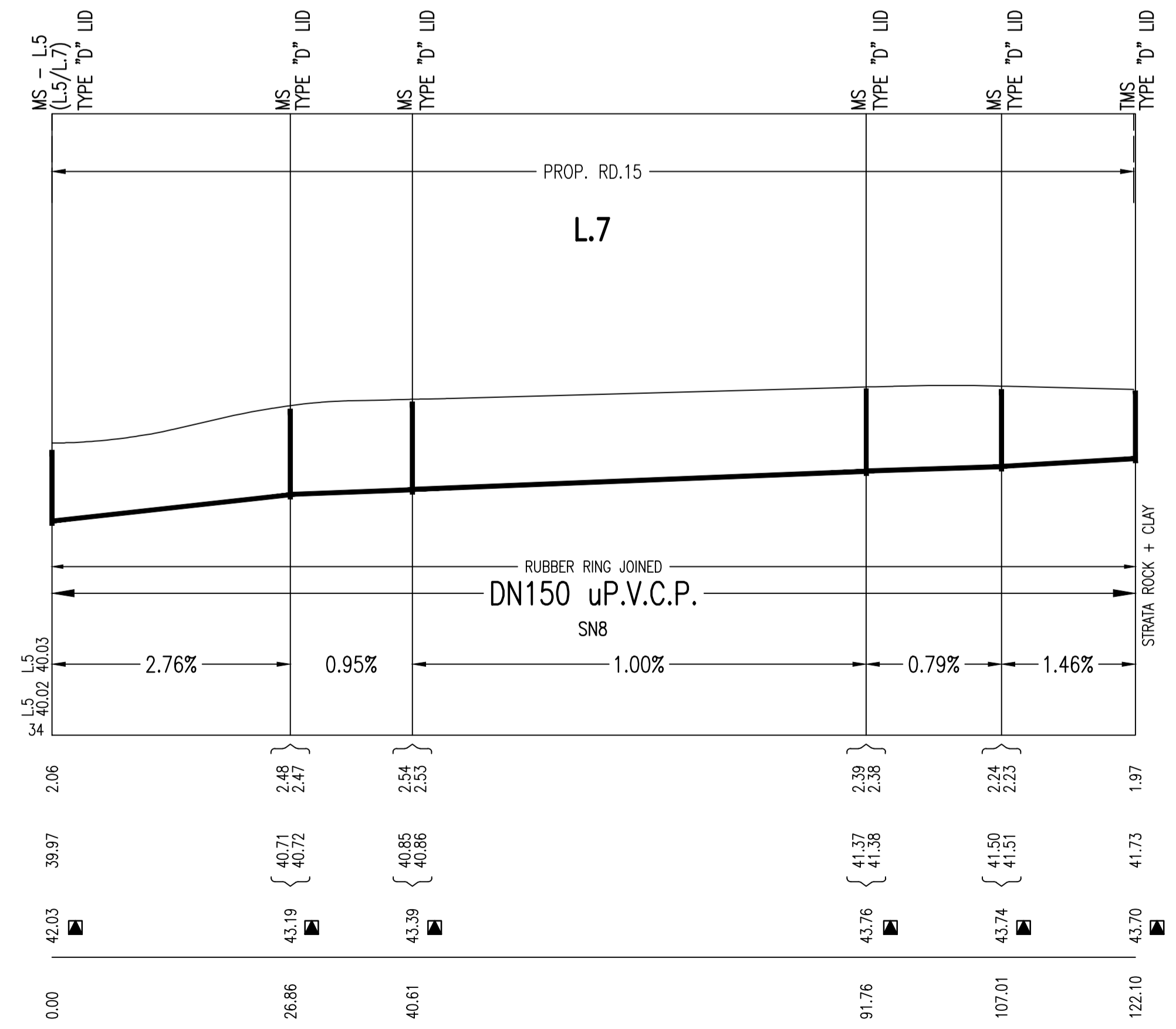
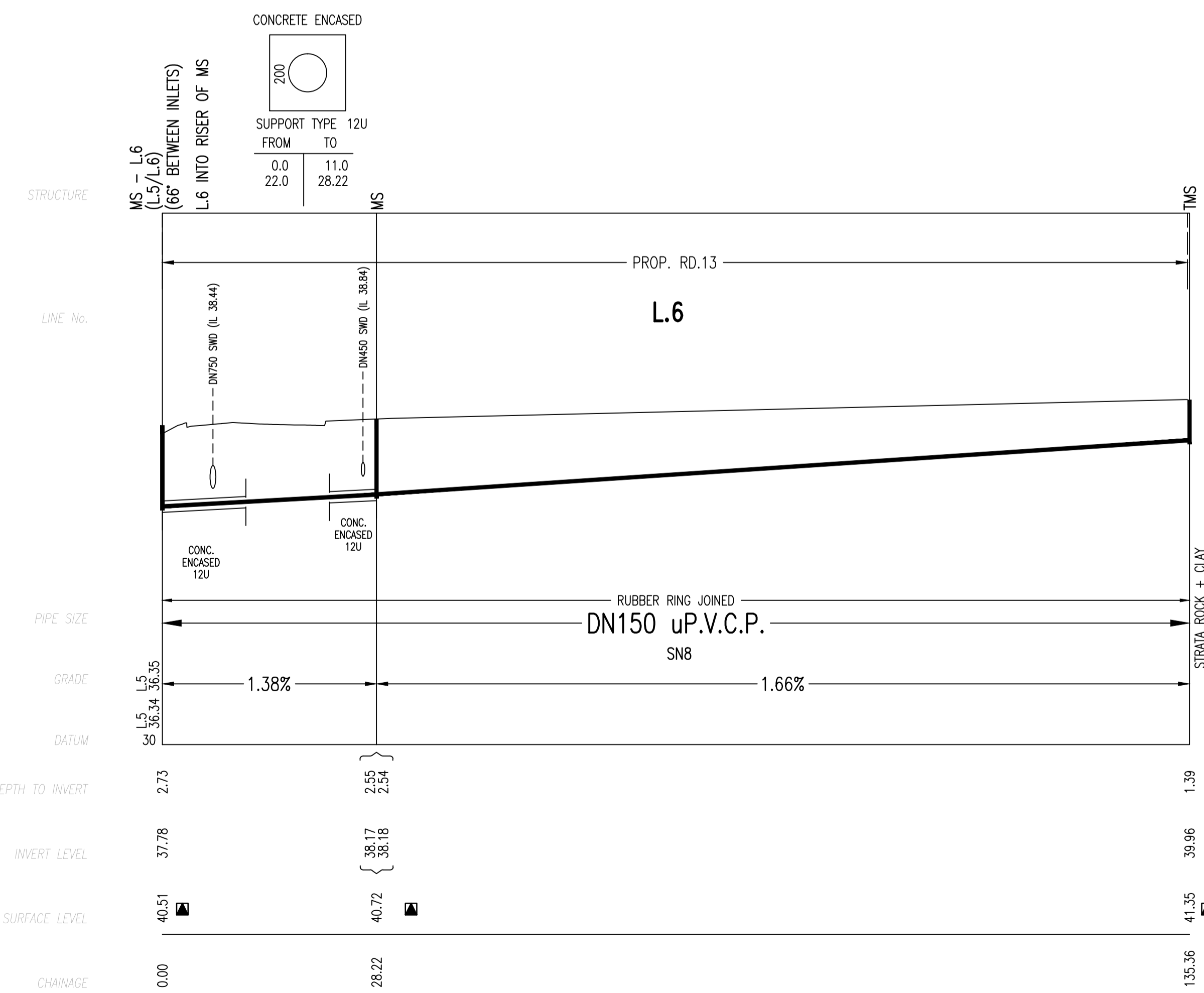
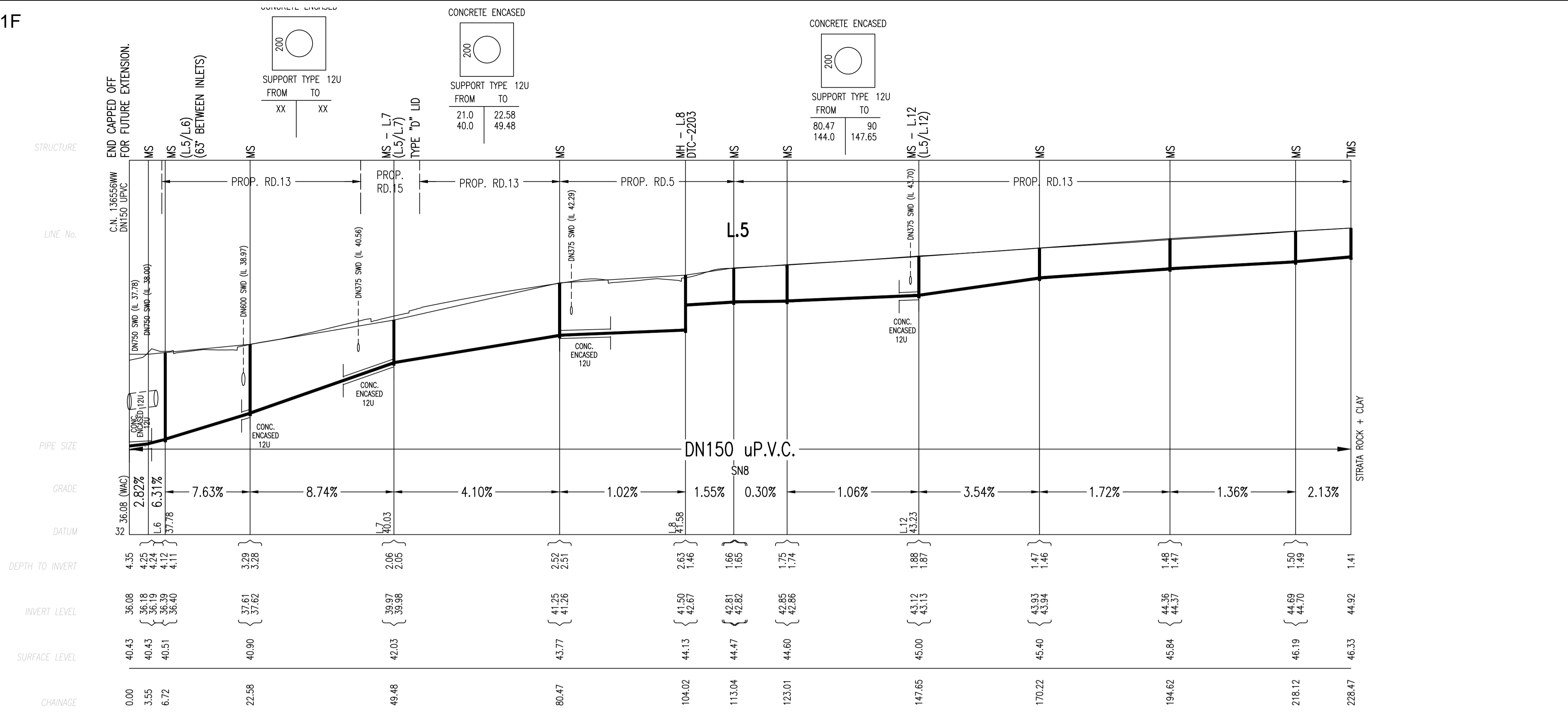
WORK AS CONSTRUCTED CERTIFICATION

DEVELOPER: NRMV+ RSL PTY. LTD.
W.S.C.: QALCHEK PTY. LTD.
CONSTRUCTOR: FLUID SERVICES PTY. LTD.
COMPLETED: 30.03.16
W.A.C. PREPARED: 22.07.16

Sydney WATER
Case No. 149282WW SHT 4 OF 8 SHTS.

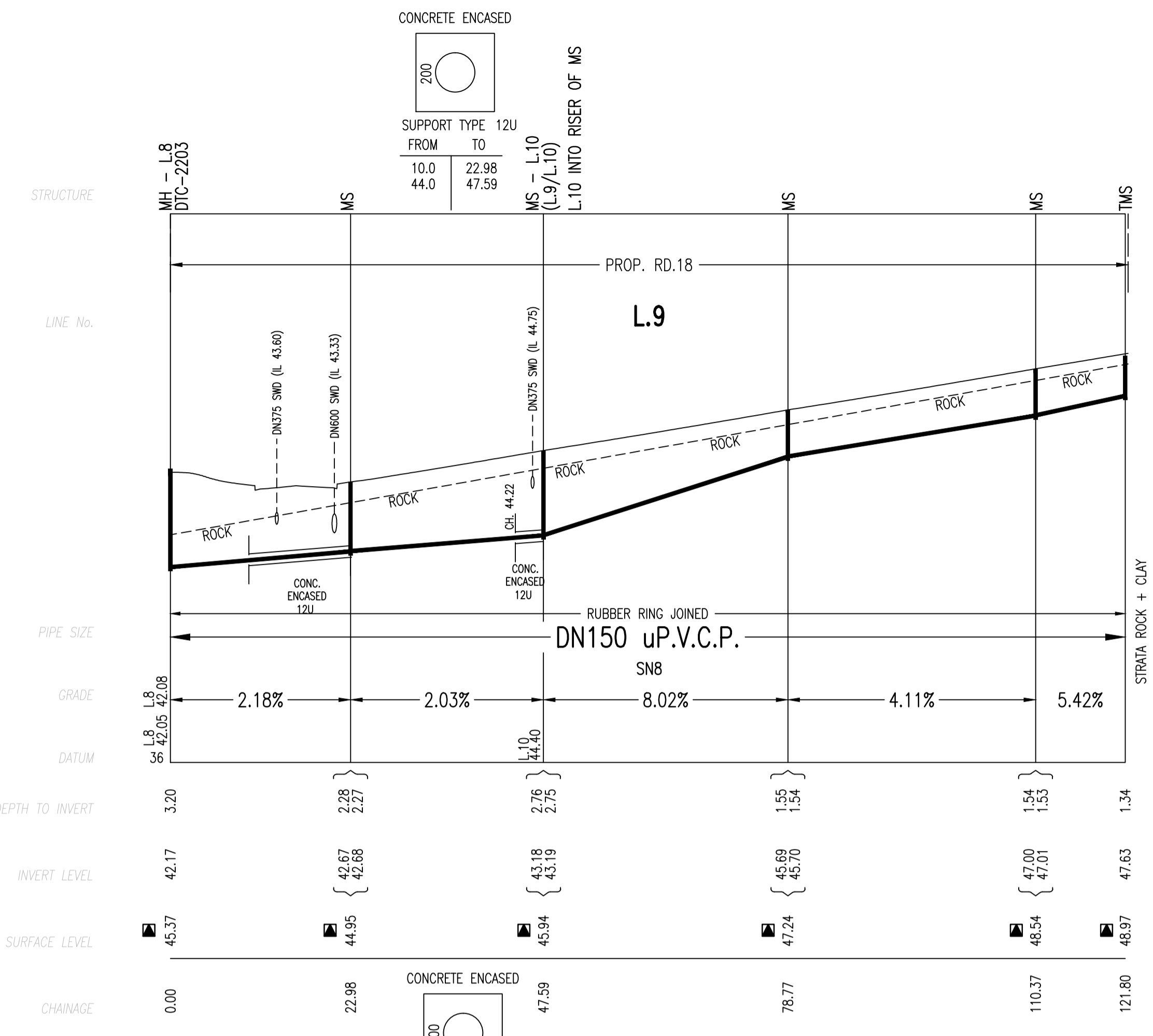
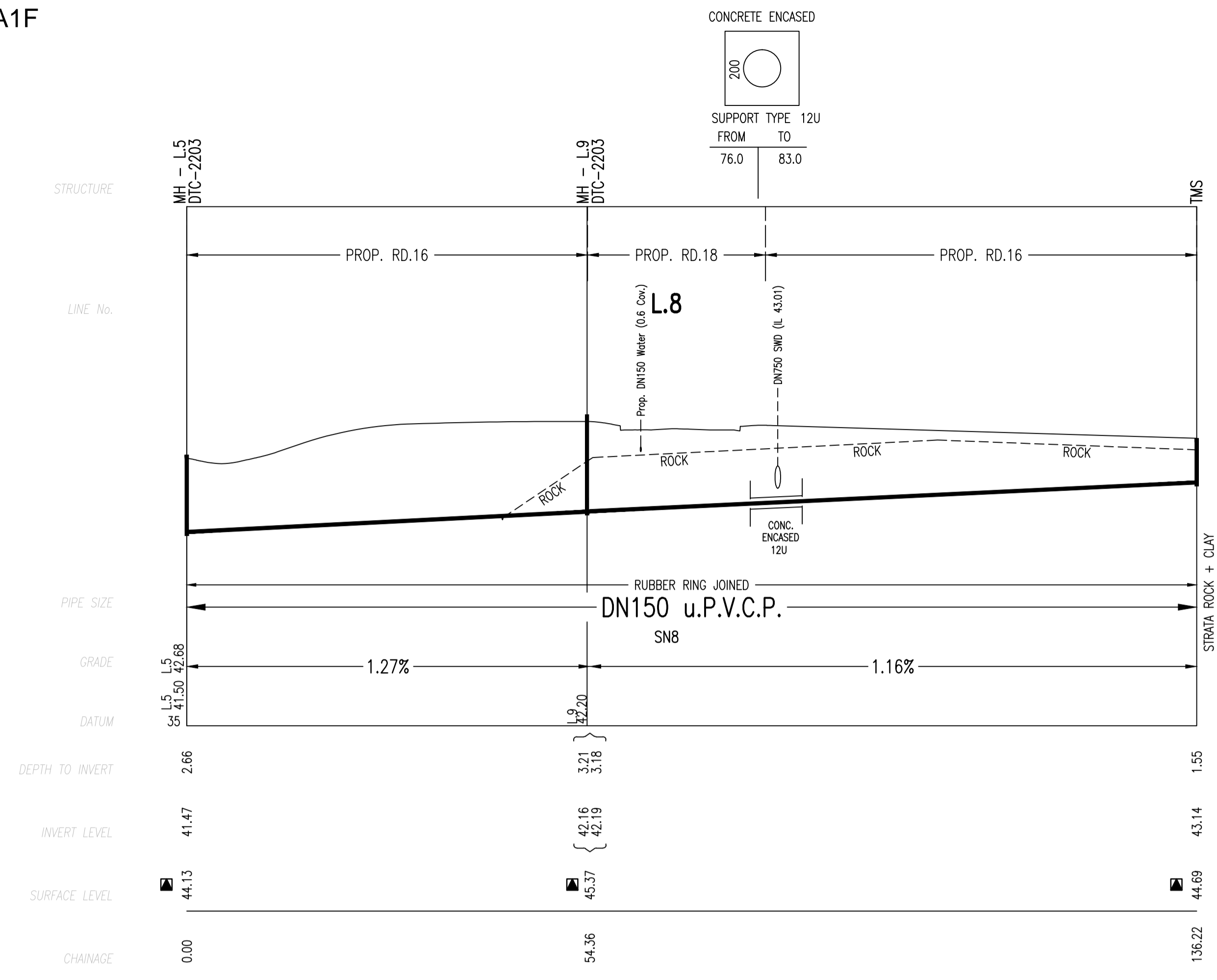
DESIGNER: QALCHEK PTY. LTD.
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS

SYDNEY WATER CORPORATION
FOR DETAILS OF SERVICES SEE SHEET 1

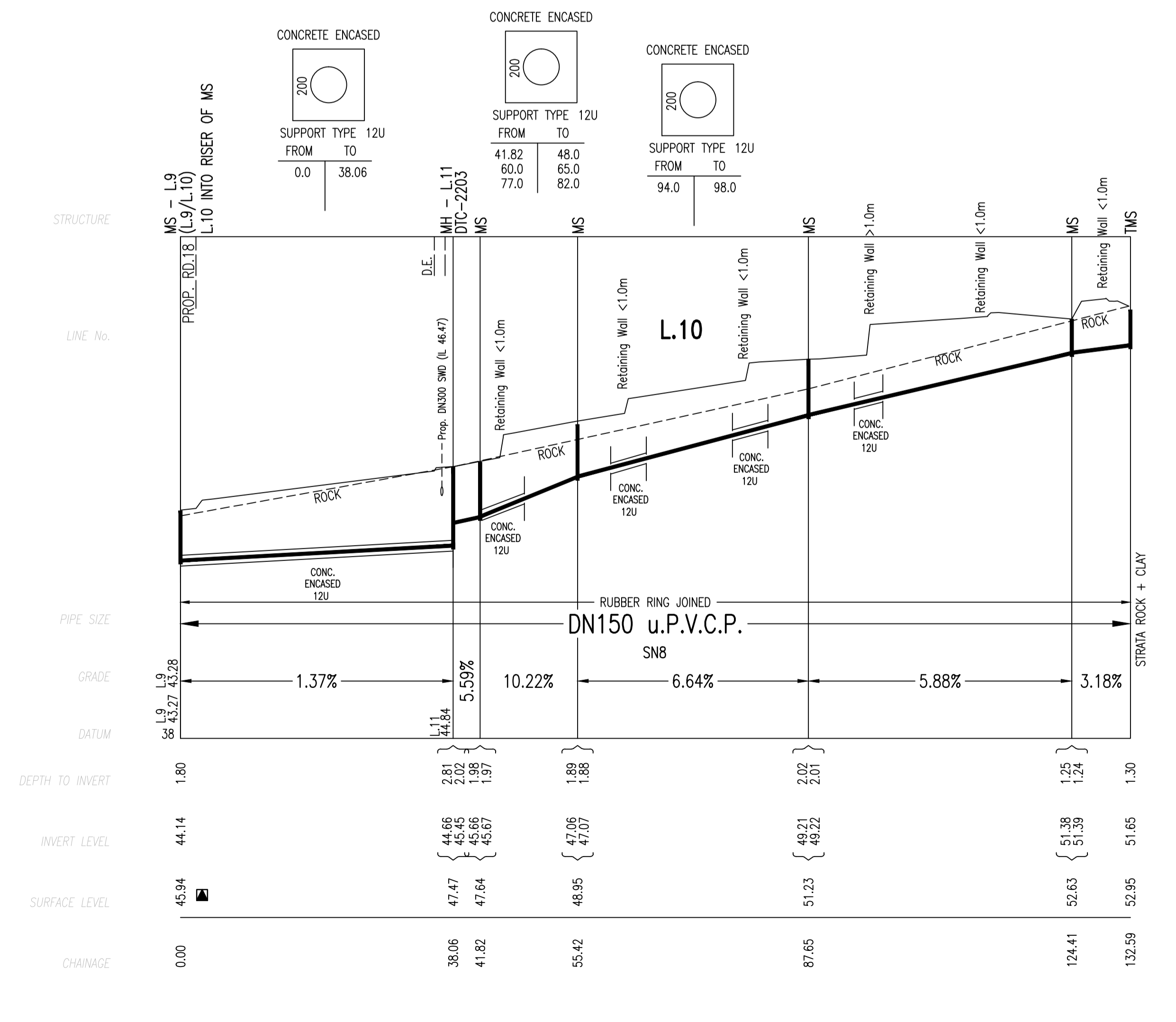
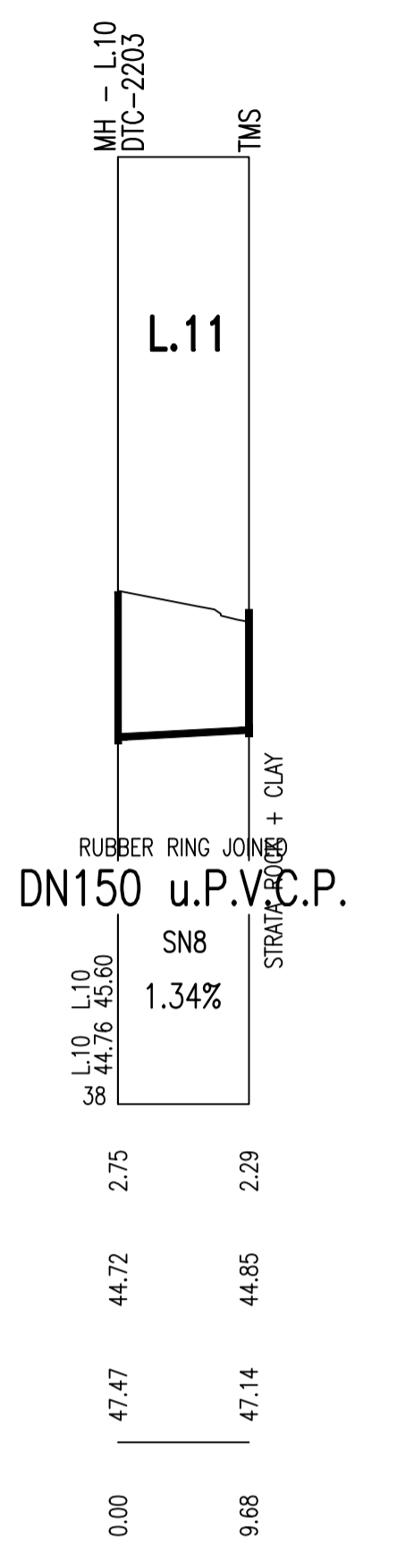


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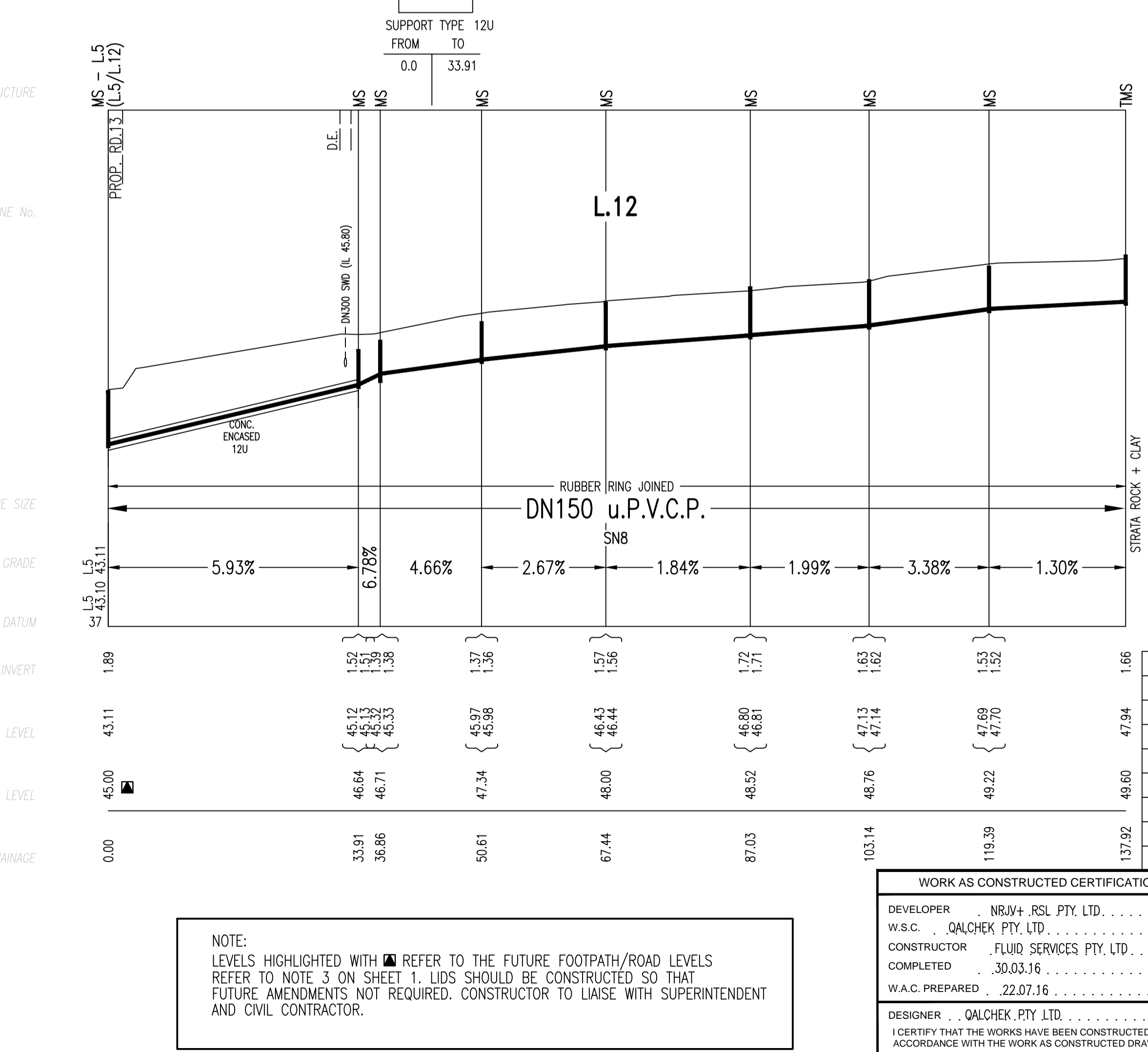
WORK AS CONSTRUCTED CERTIFICATION		Sydney WATER SYDNEY WATER CORPORATION	
DEVELOPER	NIRV+ RSL PTY. LTD.	Case No.	149282WW
W.S.C.	QALCHEK PTY. LTD.	SHT	5 OF 8 SHTS.
CONSTRUCTOR	FLUID SERVICES PTY. LTD.		
COMPLETED	30.03.16		
W.A.C. PREPARED	22.07.16		
DESIGNER	QALCHEK PTY. LTD.	SYDNEY WATER CORPORATION	
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L.10 BELOW



L.11 ABOVE



NOTE:
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WORK AS CONSTRUCTED CERTIFICATION

DEVELOPER: NRMV+ RSL PTY. LTD.

W.S.C.: QALCHEK PTY. LTD.

CONSTRUCTOR: FLUID SERVICES PTY. LTD.

COMPLETED: 30.03.16

W.A.C. PREPARED: 22.07.16

DESIGNER: QALCHEK PTY. LTD.

I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS

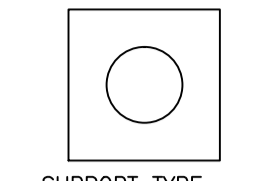
Sydney WATER

Case No. 149282WW SHT 6 OF 8 SHTS.

SYDNEY WATER CORPORATION

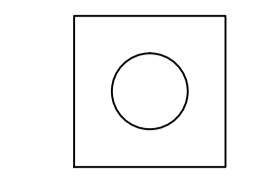
FOR DETAILS OF SERVICES SEE SHEET 1

CONCRETE ENCASED

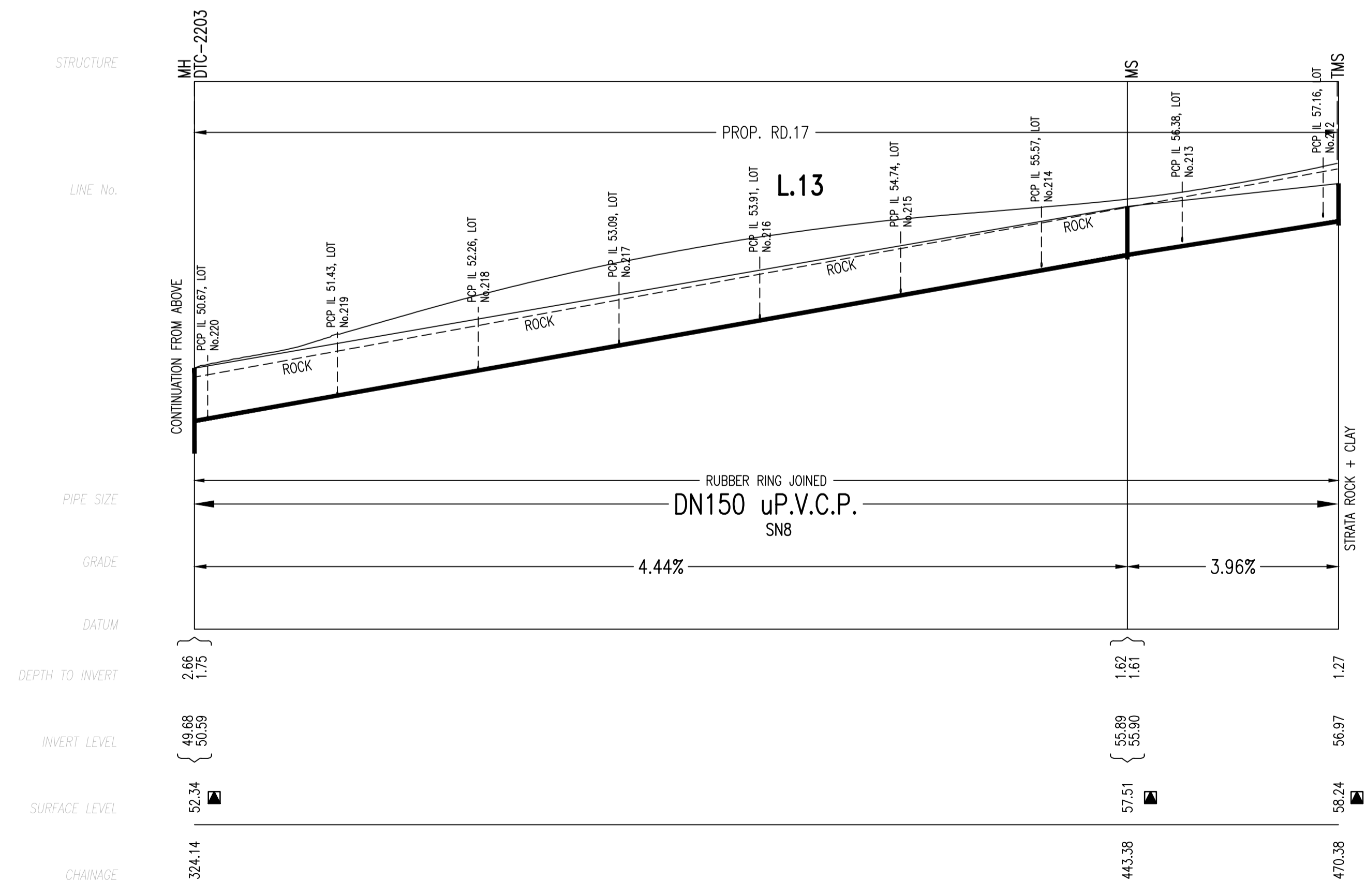
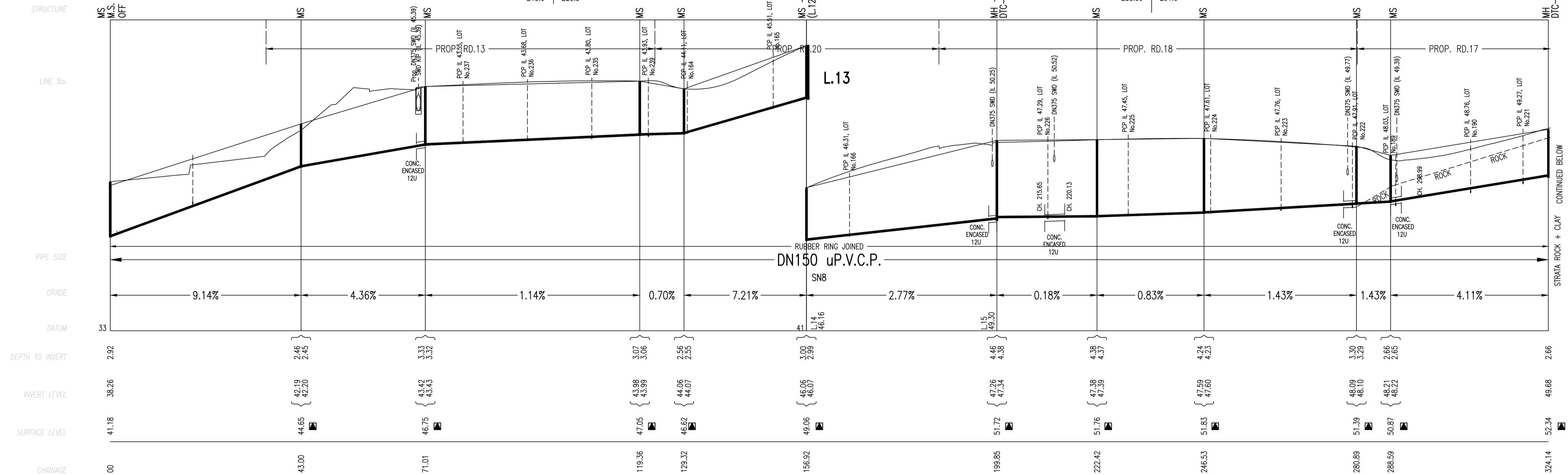


SUPPORT TYPE	
FROM	TO
69.0	71.01
198.0	199.85
215.0	220.5

CONCRETE ENCASED



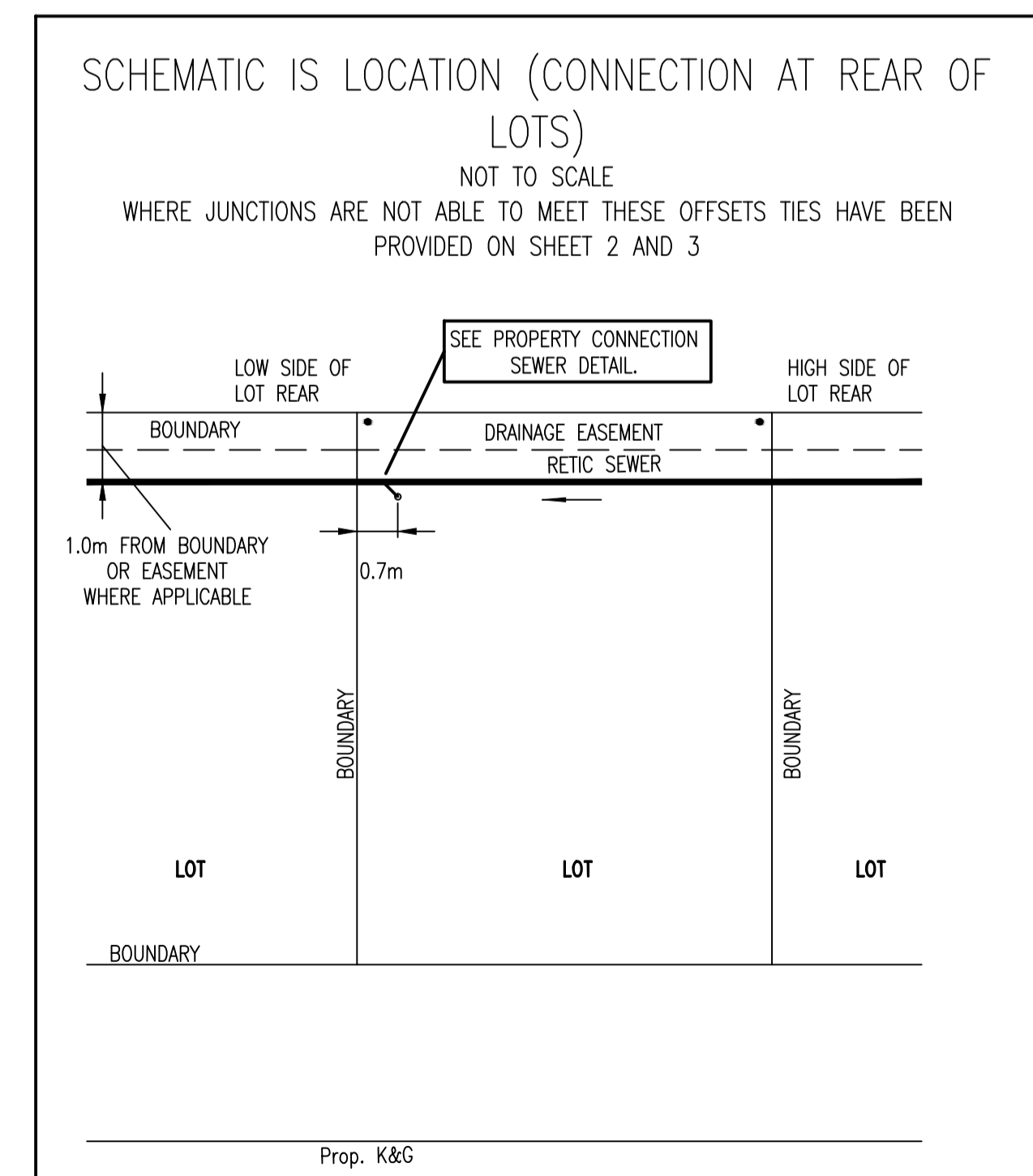
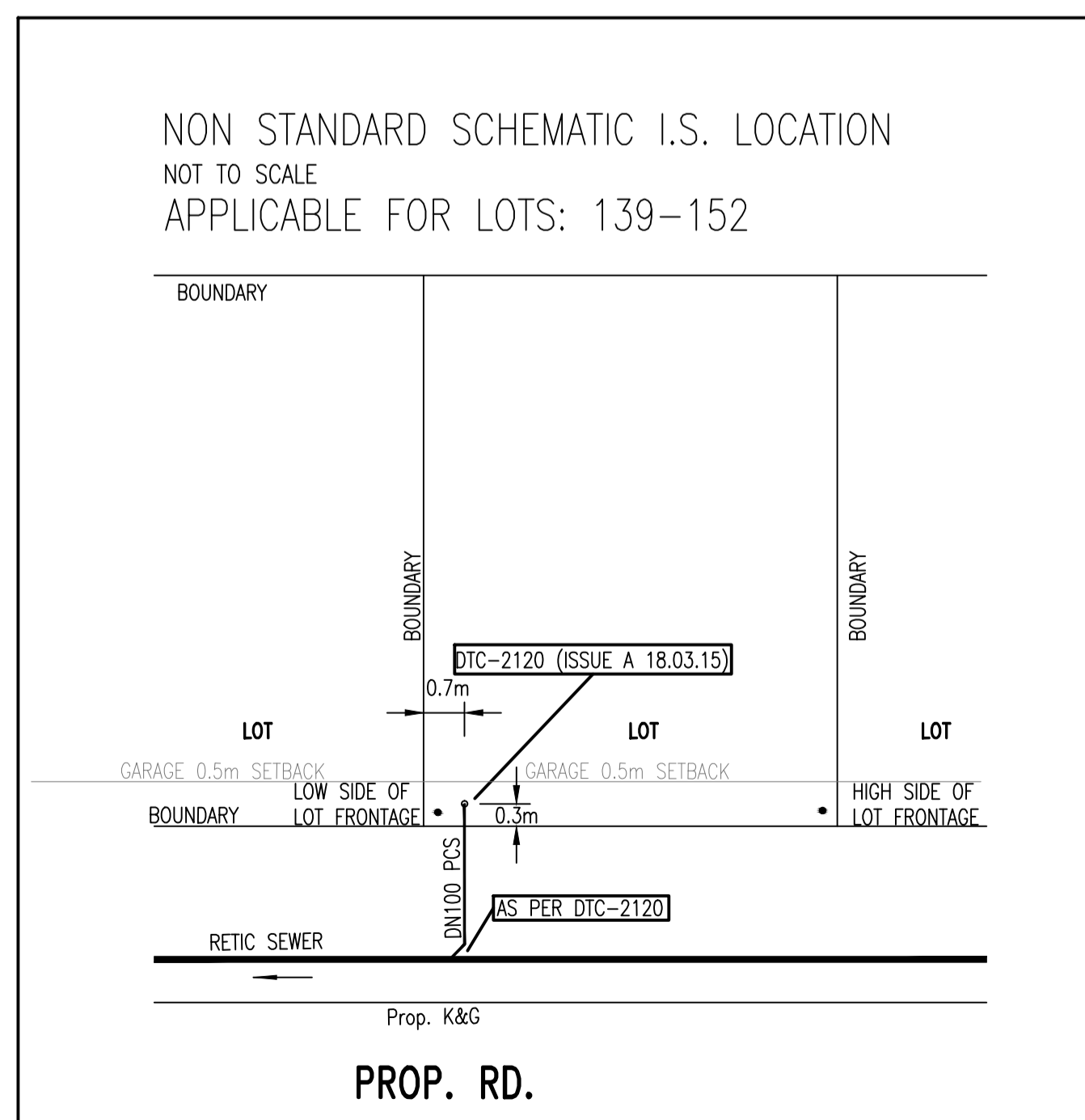
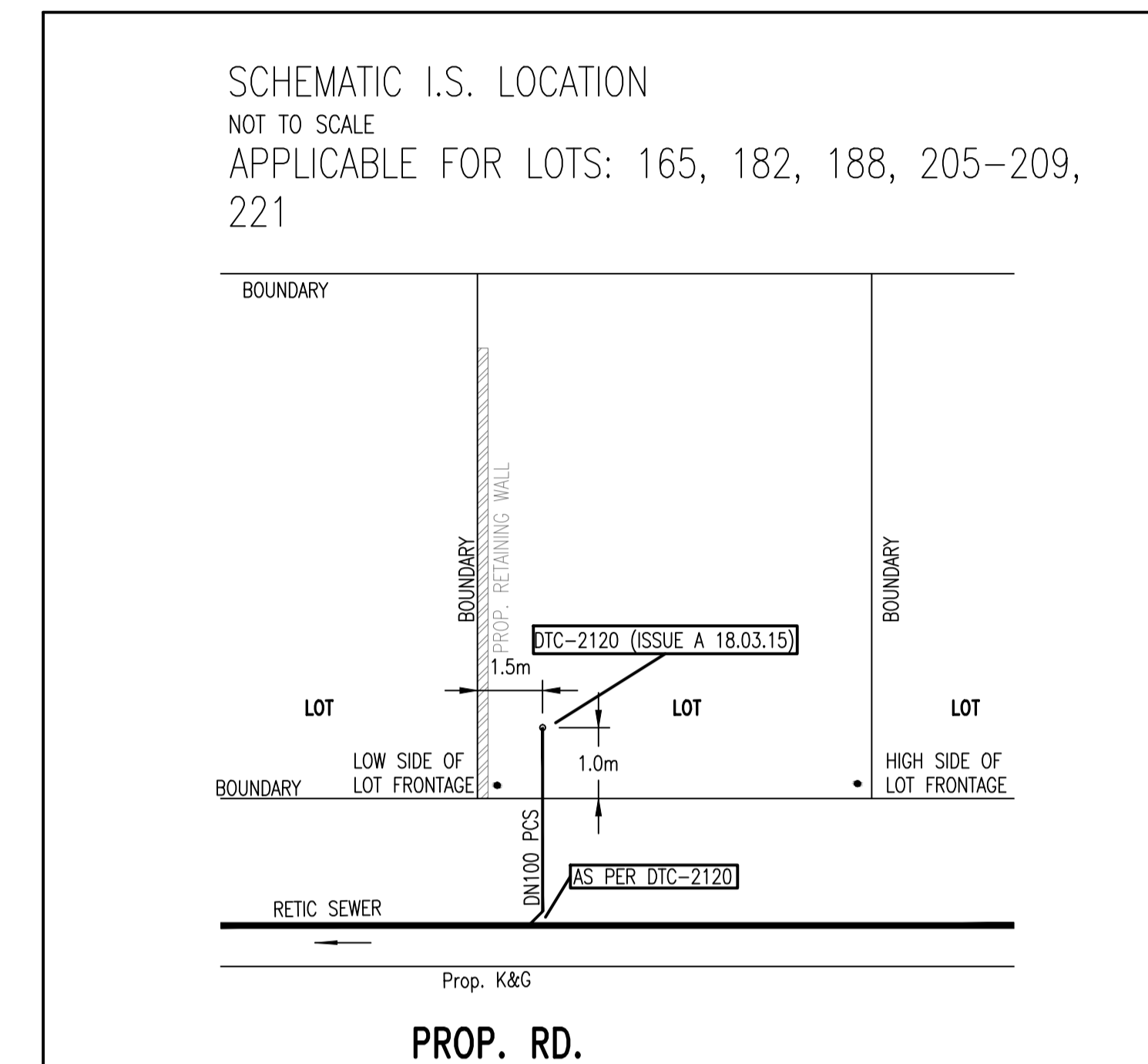
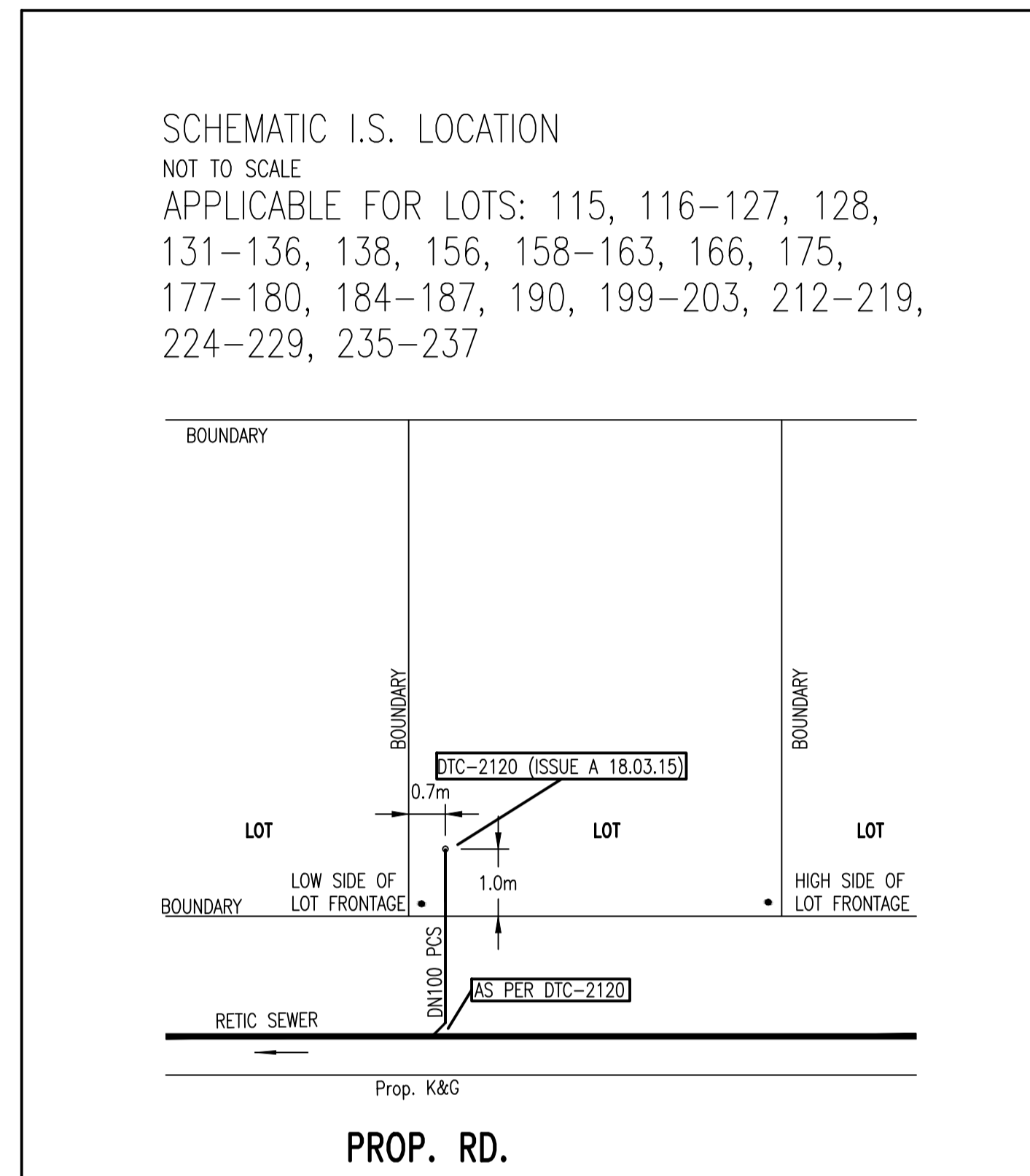
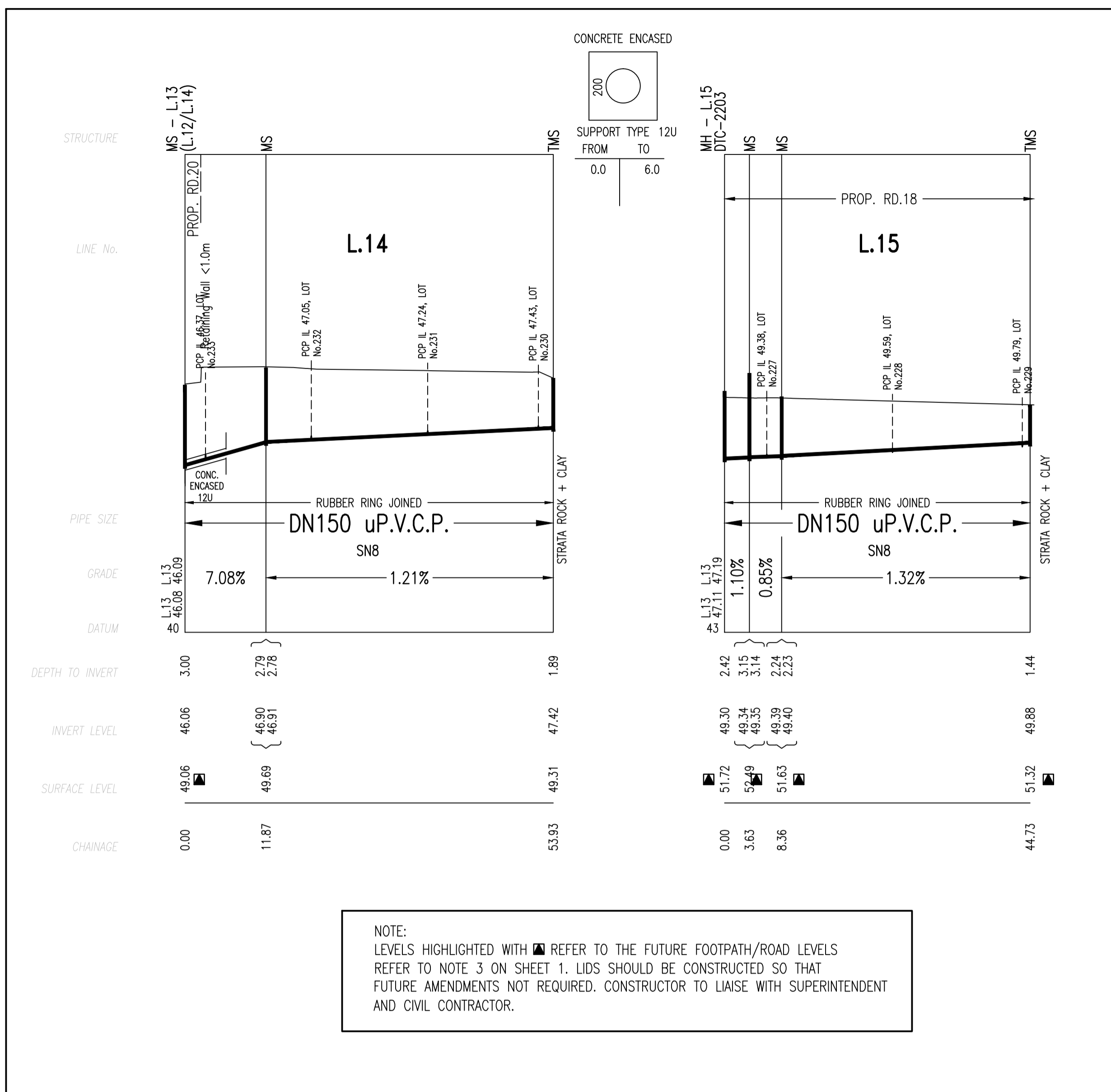
SUPPORT TYPE	
FROM	TO
278.0	280.89
288.59	291.0



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WORK AS CONSTRUCTED CERTIFICATION		Sydney WATER	
DEVELOPER	NRJV+ RSL PTY. LTD.	SYDNEY WATER CORPORATION	
W.S.C.	QALCHEK PTY. LTD.	Case No. 149282WW SHT 7 OF 8 SHEETS	
CONSTRUCTOR	FLUID SERVICES PTY. LTD.		
COMPLETED	30.03.16		
W.A.C. PREPARED	22.07.16		
DESIGNER	QALCHEK PTY. LTD.	SYDNEY WATER CORPORATION	
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DEVELOPER	NRJV+ RSL PTY. LTD.	Case No.	149282WW
W.S.C.	QALCHEK PTY. LTD.	SHT	8 OF 8 SHTS.
CONSTRUCTOR	FLUID SERVICES PTY. LTD.		
COMPLETED	30.03.16		
W.A.C. PREPARED	22.07.16		
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