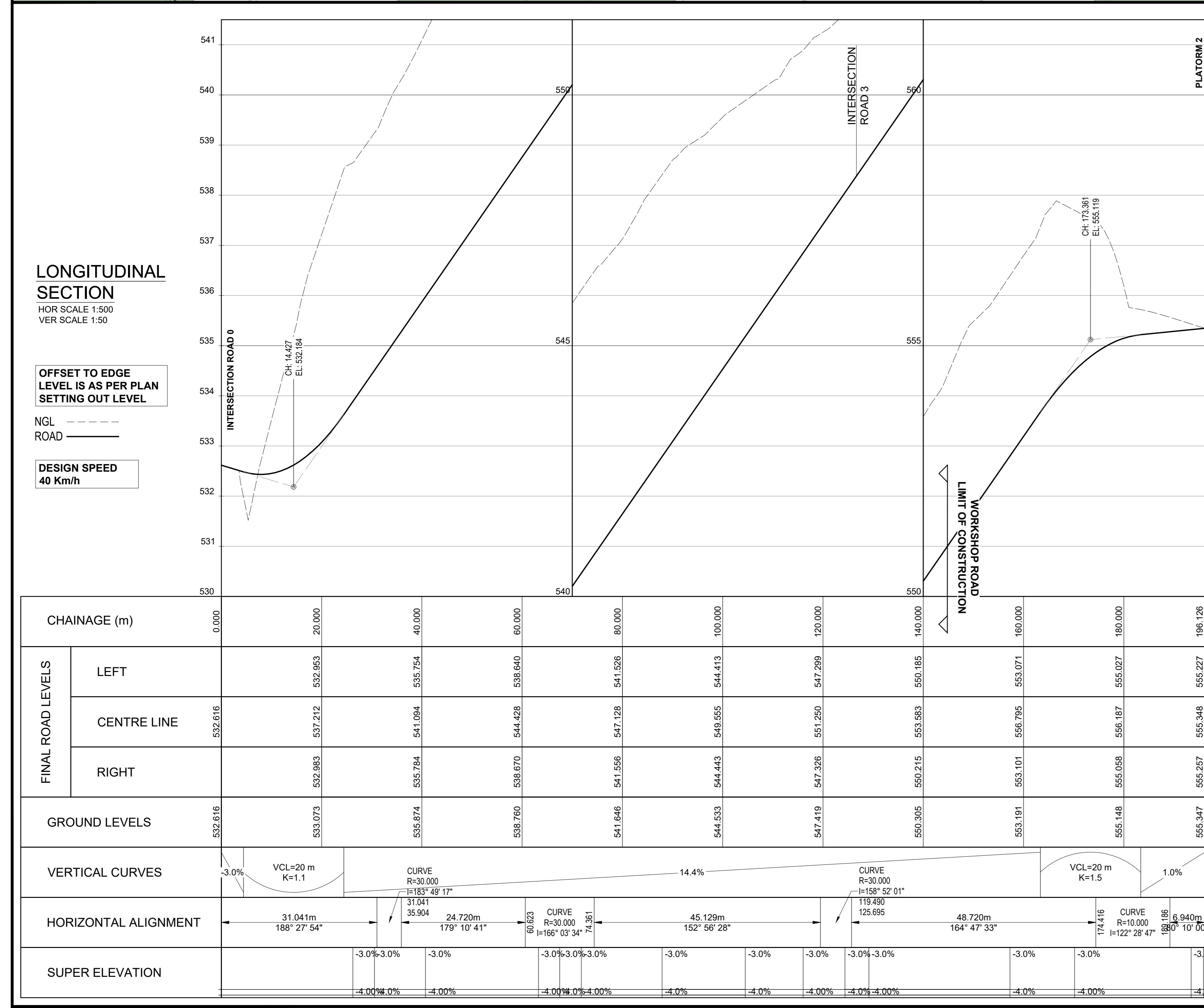
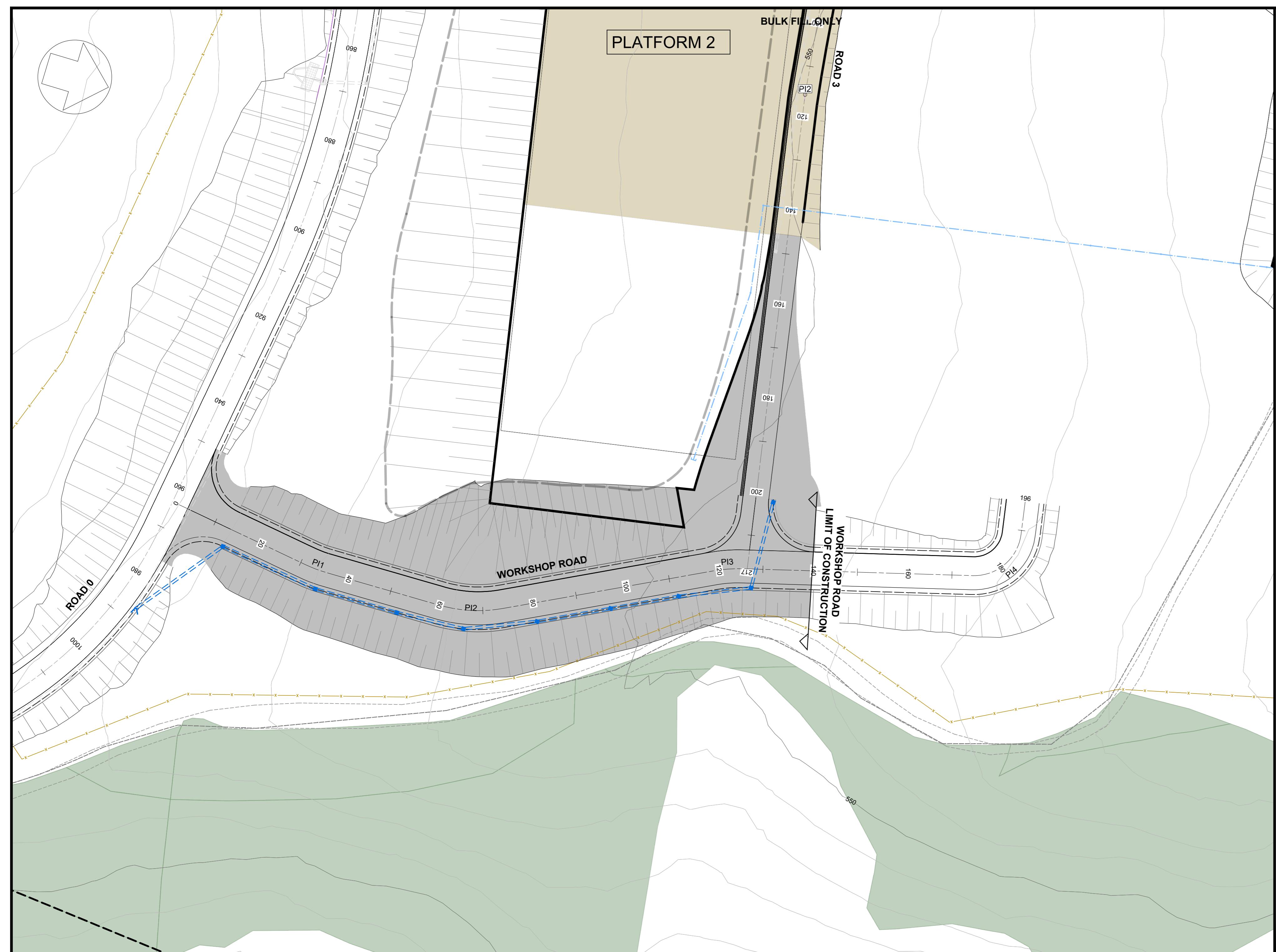


eThekweni Municipality CLEANING & SOLID WASTE	
DSW	
REDUCED PLAN USE SCALE BELOW 0 10 20 30 40 50 60 70 70mm ON ORIGINAL PLAN	
<b>LEGEND</b> STORMWATER CONTAMINATED STORMWATER SEWER DOMESTIC WATER FIRE WATER ELECTRICAL  TO BE CONSTRUCTED TO EARTHWORKS FORMATION LEVEL PLUS GRAVEL SURFACING WHERE INSTRUCTED BY ENGINEER TO BE CONSTRUCTED TO CONCRETE GRASSLANDS TO BE PRESERVED INTACT NOT TO BE ENCROACHED ON IN ANY WAY	
<b>NOTE:</b> AREAS NOT HATCHED TO BE CONSTRUCTED TO FINAL SURFACE AND FINISHES	
Design Consultants <b>iX / Wilson &amp; Pass Inc JV</b> iX engineers Eastwood Office Park   Protea House 270 Eastwood Drive, Umgeni Valley, Durban   3630 Pretoria   0081   Tel: +27 31 245 2000 Local Manager Tel: +27 31 254 5700 Date: 2023/10/06 Approved: 840114 PR No: 2023/10/06  <b>iX engineers</b> Infrastructure Excellence 011 555 2750   MULTIDISCIPLINARY CONSULTING ENGINEERS Westend Office Park   21 The Boulevard   Westville   Durban   3630 Tel: +27 31 254 5700   www.ingenieurs.co.za	
<b>Wilson &amp; Pass Inc</b> P.O. Box 641   Westville   3630   SA email: info@wilsonpass.co.za   Tel: +27 82 463 1127	
0 2023/10/06 ISSUED FOR TENDER Revision Date Description  NOTE: No construction work to commence until land and servitude acquisitions have been completed. Acquisitions completed NORTH POINT	
DATE Engineer UNDERGROUND SERVICES CHECKED SERVICE DATE SIGNATURE G.W.DRINK SEWERS G.P.O.CABLES WATER MAINS ELECTRIC CABLES S.A.CABLES E.S.C.CABLES OIL PIPE LINE  NOTE: Only underground services affected by new construction work are shown. Care must be taken during excavations for road formation. Avoid damage to existing underground services such as sewers, drains, cables, water mains and connectors. Wherever possible these must be located before work proceeds.	
L. Moodley Deputy Head: Cleaning & Solid Waste - DSW Contract No. PSC 2015/010 Status TENDER Project Title WESTERN WASTE MANAGEMENT FACILITY (SHONGWENI) CONTRACT B Drawing Title PLAN & LONGITUDINAL SECTION ROAD 3 CH0 - CH217.165 SHEET 1/1 Scales 1: 500 AS SHOWN Reference Designed J. BOHLER / P. ARMUGAM Date SEPTEMBER 2023 Checked M. RICHMOND Drawn by L. DU PLESSIS Drawing No. 301837-05-C-LL-206-001 Revision 0	



WESTERN DRAIN SETTING OUT DATA

NAME	CH	Y	X	DETAILS
START	0.000	24027.248	3301414.534	L 2.737m
L5	155.478	24177.310	3301455.084	L 16.452m
PI3	155.478 308.884	24177.310 24294.477 24272.894	3301455.084 3301473.196 3301561.826	R 120.675m DA 72°50'10" TL 13.69m AL 153.406m
PI4	927.978 966.943	24331.427 24333.335 24322.852	3302178.146 3302198.237 3302215.469	R 60.090m DA 36°47'10" TL 20.181m AL 38.966m
PI5	1028.239 1059.077	24090.932 24282.726 24282.188	3302267.810 3302281.273 3302297.030	R 10.893m DA 29°24'20" TL 15.767m AL 30.838m
PI6	1255.123 1273.355	24275.493 24275.182 24273.895	3302492.961 3302502.081 3302511.115	R 6.090m DA 61°00'07" TL 9.125m AL 18.233m
END	1337.309	24264.878	3302574.429	L 63.953m

NOTE: No construction work to commence until land and servitude acquisitions have been completed  
Acquisitions completed  
DATE: \_\_\_\_\_  
Engaged: \_\_\_\_\_  
NORTH POINT

UNDERGROUND SERVICES CHECKED  
SERVICE DATE SIGNATURE  
E.W.DRINK  
SEWERS  
WATER MAINS  
G.P.O.CABLES  
ELECTRIC CABLES  
S.A.CABLES  
E.S.C.CABLES  
OIL PIPE LINE

NOTE: Only underground services affected by new construction work are shown. Care must be taken during excavations for road, footpath and other underground services such as sewers, drains, cables, water mains and connectors. Wherever possible these must be located before work proceeds.

L. Moodley DATE  
Deputy Head: Cleaning & Solid Waste - DSW

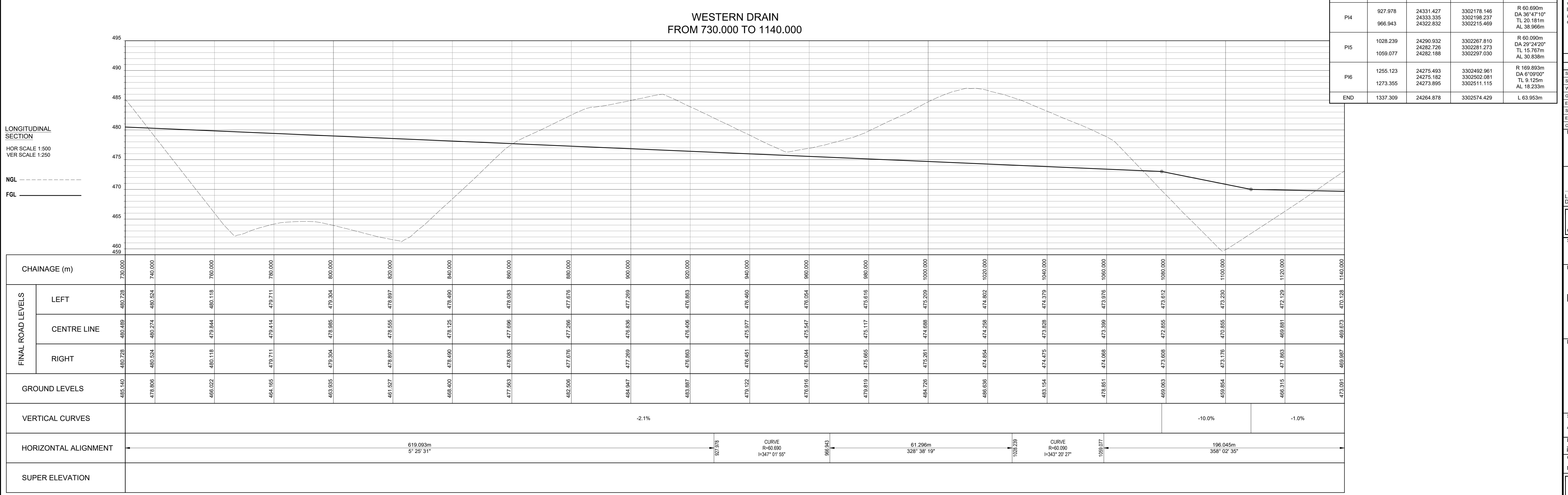
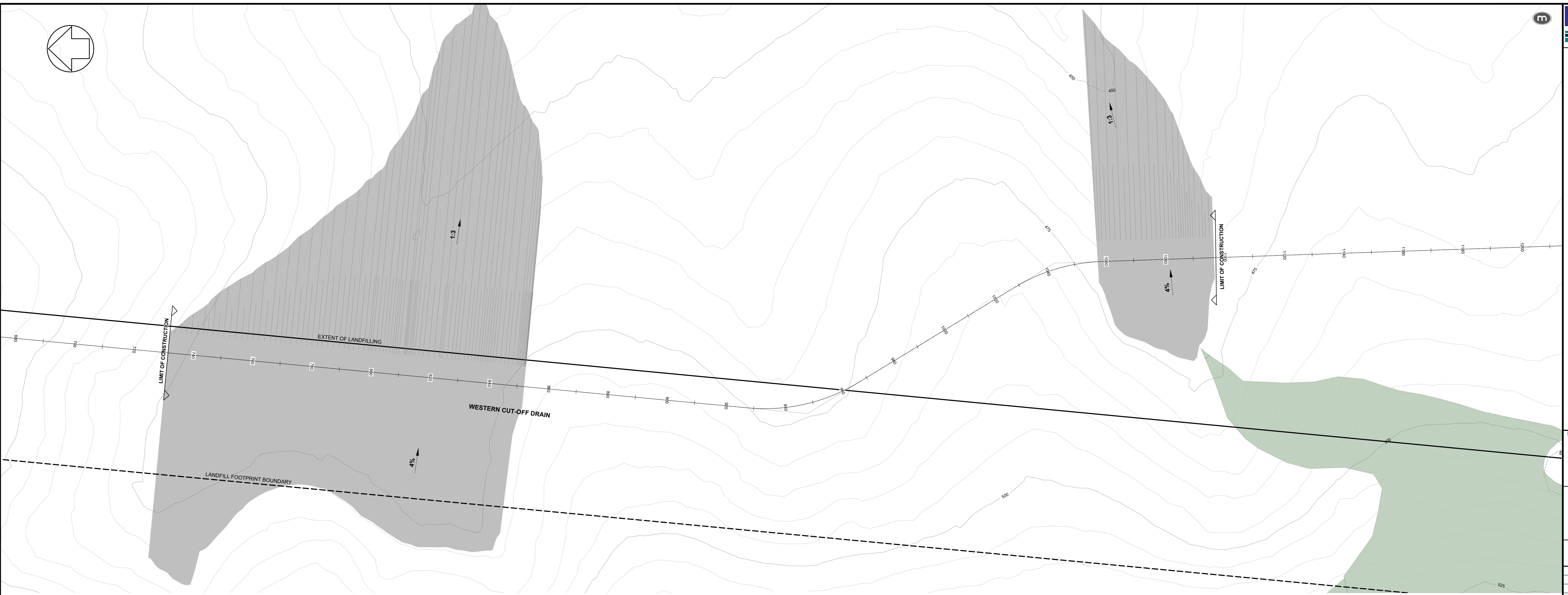
Contract No. PSC 2015/010

Status TENDER

Project Title WESTERN WASTE  
MANAGEMENT FACILITY  
(SHONGWENI)  
CONTRACT B

Drawing Title PLAN & LONGITUDINAL  
SECTION  
WESTERN CUT-OFF  
DRAIN

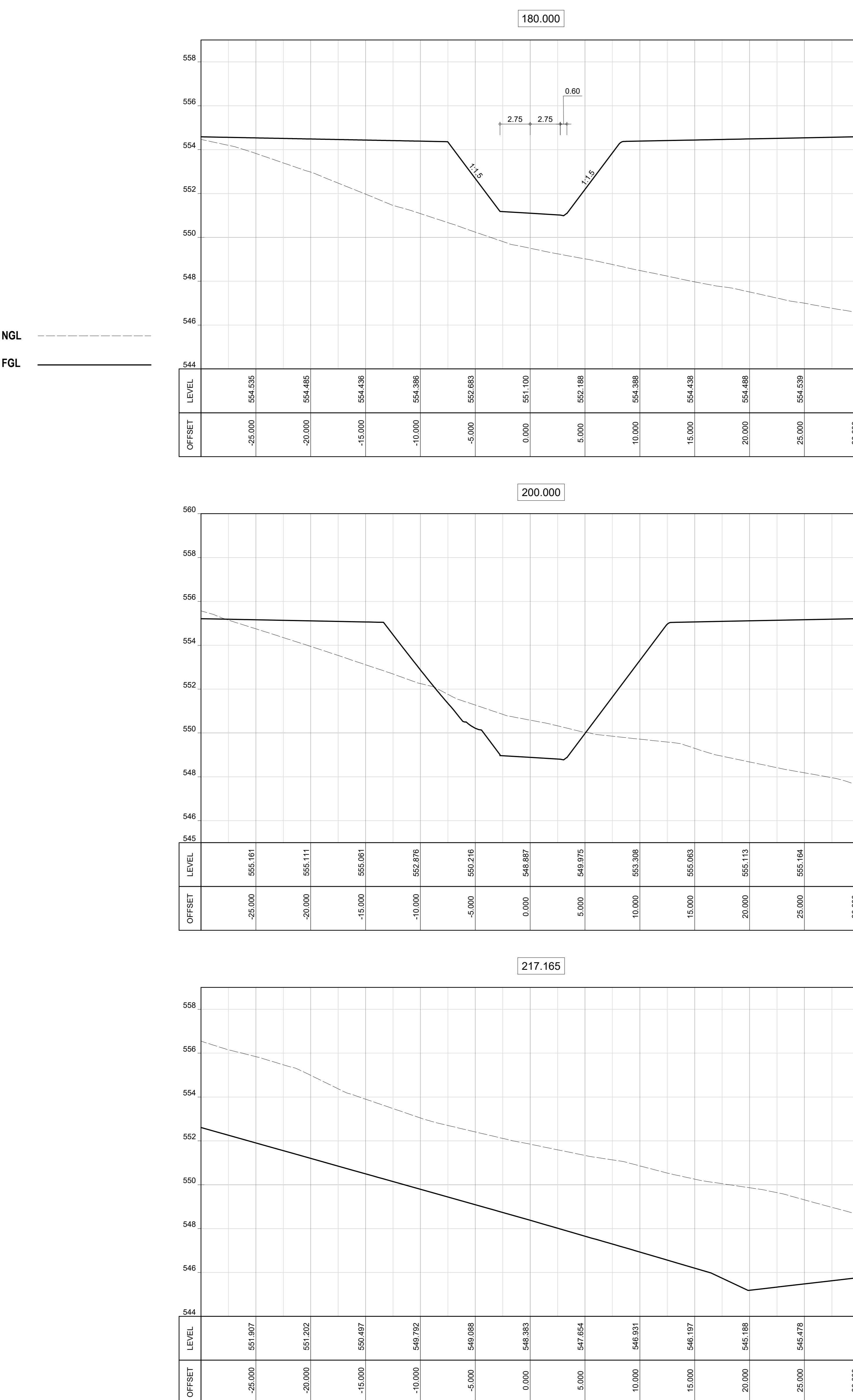
Scales AS SHOWN  
Designed J. BOHLER / P. ARMUGAM Date SEPTEMBER 2023  
Checked M. RICHMOND Drawn by L. DU PLESSIS  
Drawing No. 301837-06-C-LL-209-001 Revision 0







NOTES  
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH  
THE FOLLOWING LAYOUTS: 301837-05-C-LL-101-001,  
301837-05-C-LL-101-002, AND DETAILS:  
301837-08-C-DT-101-001



Design Consultants  
**iX / Wilson & Pass Inc JV**  
iX engineers Eastwood Office Park | Protea House  
270 Protea Road | Protea Glen | Durban | 3600  
Pretoria | 0001 | Tel: +27 12 425 2000  
Local Manager Tel: +27 31 254 5700  
*RH*  
Approved 840114 PR No. 203/1006 Date

**iX engineers**  
Infrastructure Excellence  
iX engineers Eastwood Office Park | Protea House  
270 Protea Road | Protea Glen | Durban | 3600  
Westend Office Park | 21 The Boulevard | Westville | Durban | 3600  
P.O. Box 641 | Westville | 3630 | SA  
Engineering Services Tel: +27 31 254 5700  
www.ingenieurs.co.za

**Wilson & Pass Inc**  
P.O. Box 641 | Westville | 3630 | SA  
Engineering Services Tel: +27 31 254 5700  
Tel: +27 82 463 1127

0 2023/10/06 ISSUED FOR TENDER  
Revision Date Description  
NOTE: No construction work to commence until land and servitude acquisitions have been completed  
Acquisitions completed  
NORTH POINT

DATE Engineer  
UNDERRGOUND SERVICES CHECKED  
SERVICE DATE SIGNATURE  
G.W.DRILLED  
SEWERS  
WATER MAINS  
G.P.O.CABLES  
ELECTRIC CABLES  
S.A.R. CABLES  
E.S.C. CABLES  
OIL PIPE LINE

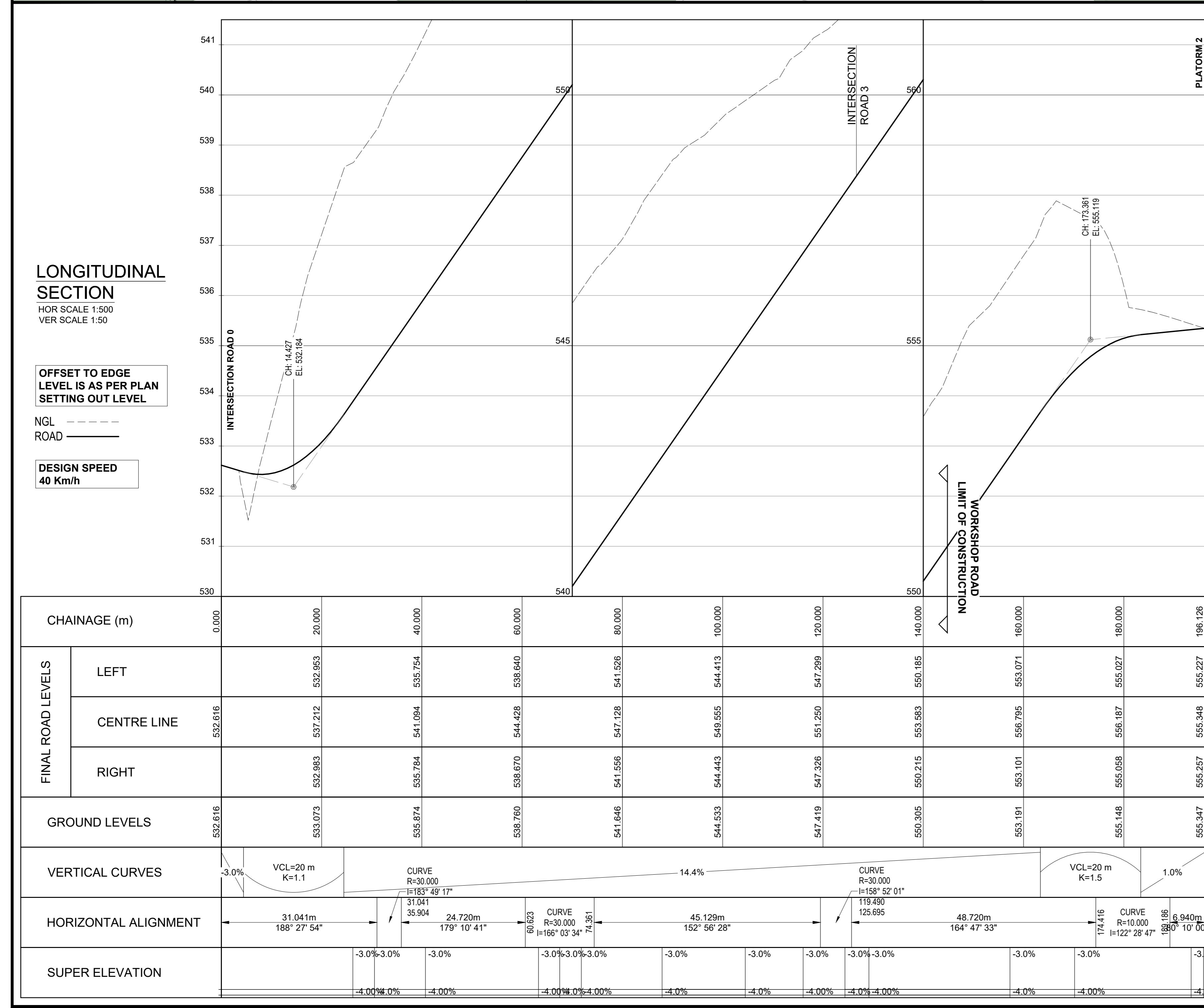
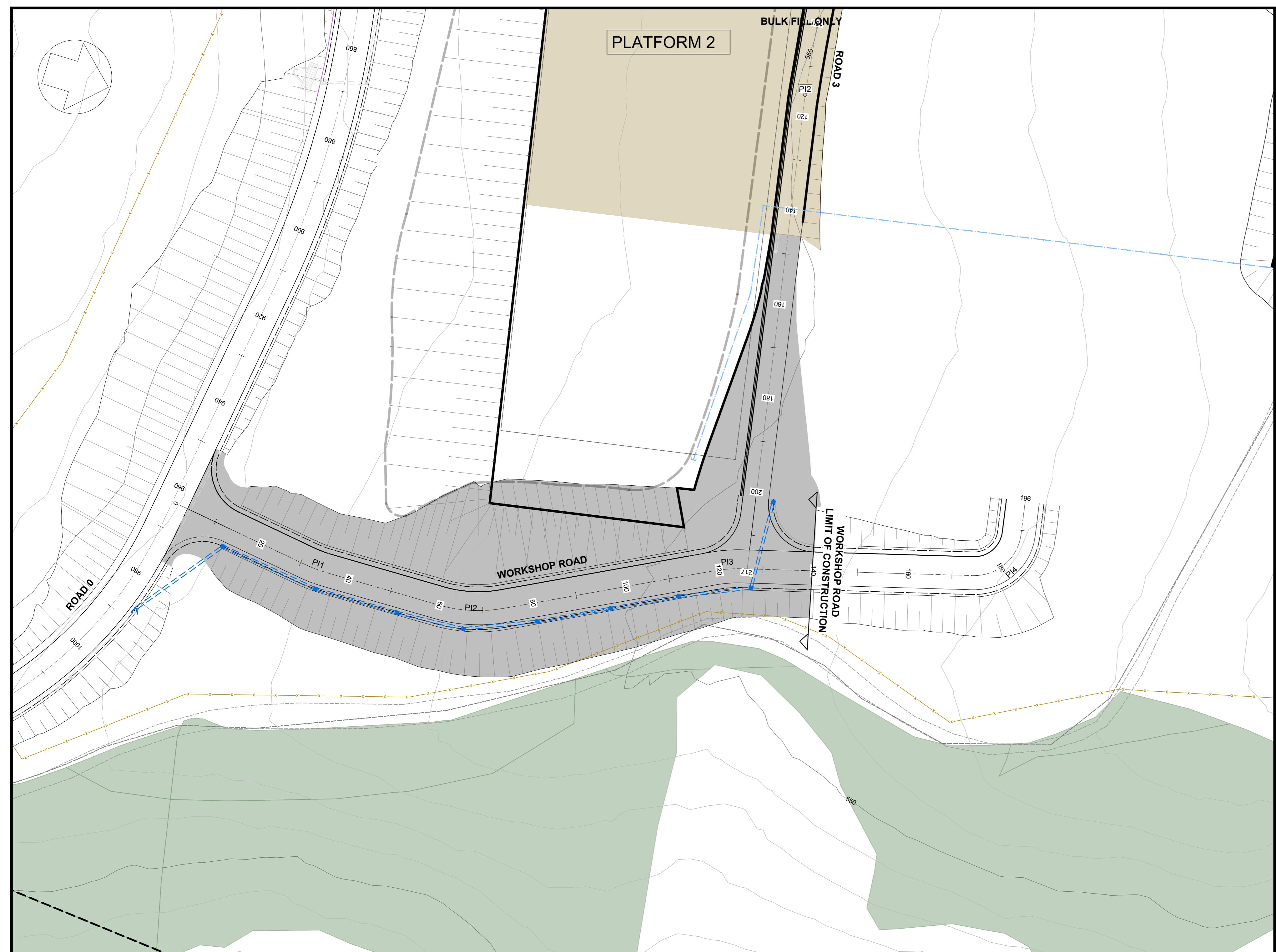
NOTE  
Only underground services affected by new construction work are shown. Care must be taken during excavations for road, footpath and other services. Avoid damage to underground services such as sewers, drains, cables, water mains and connectors. Wherever possible these must be located before work proceeds.

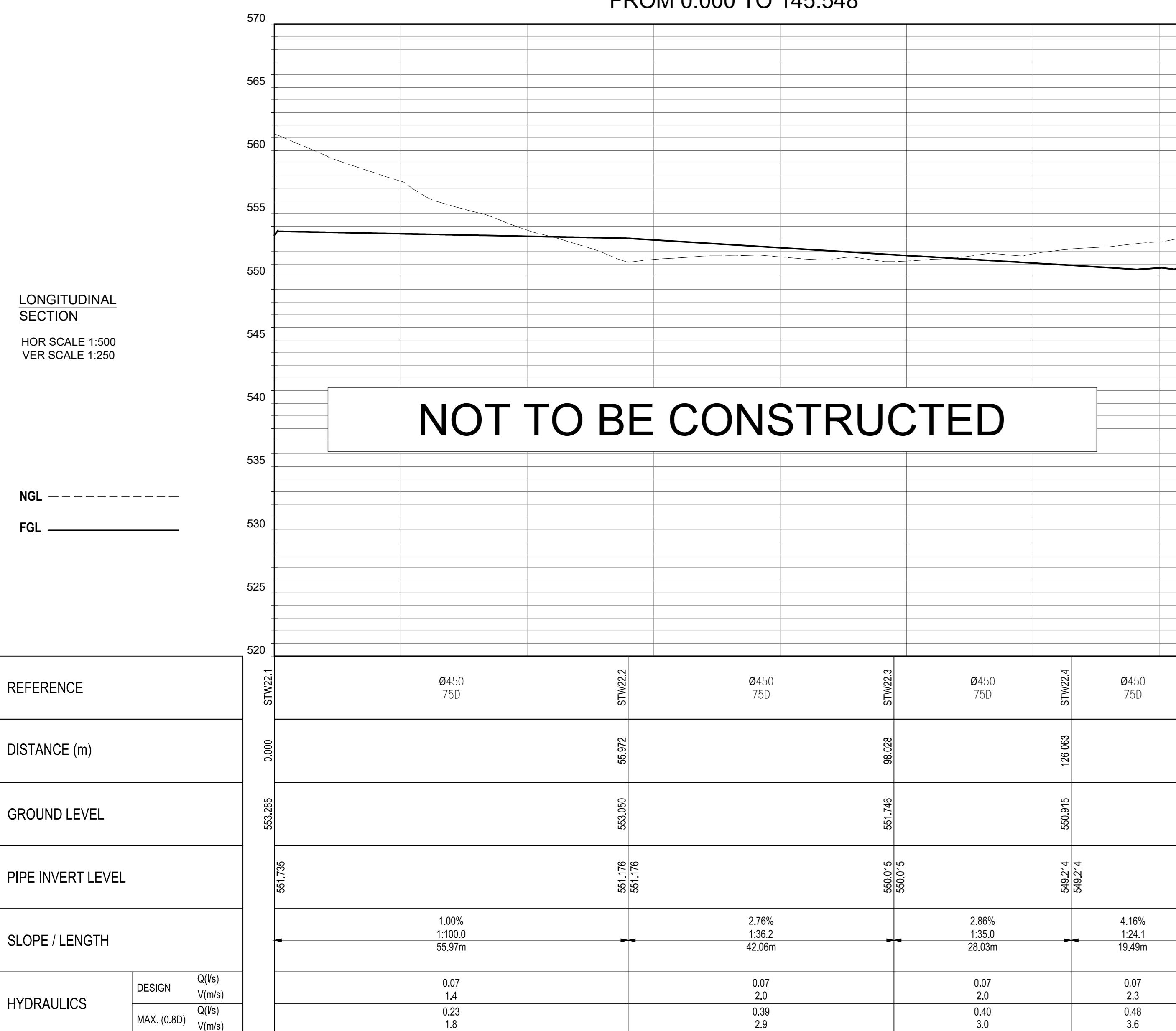
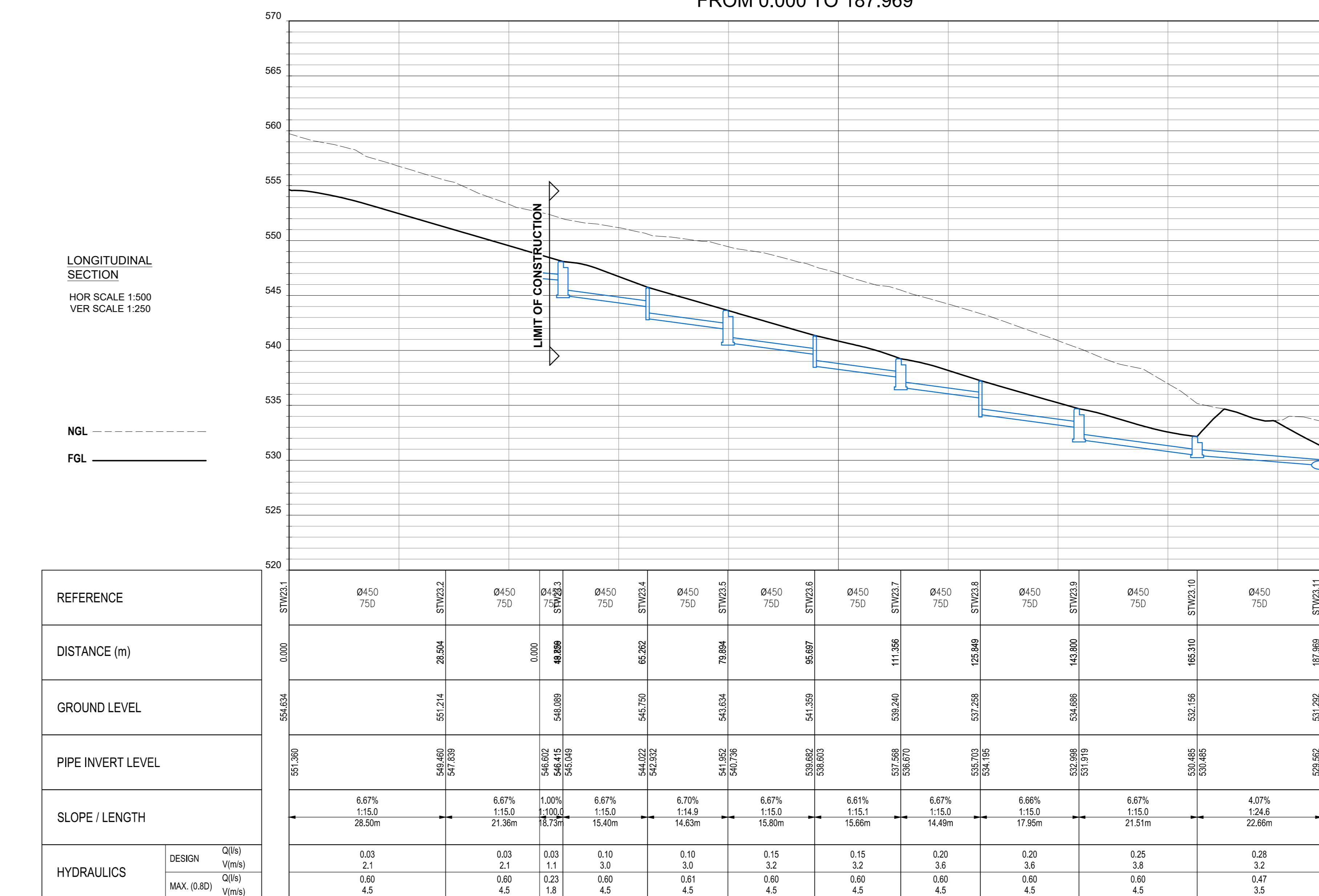
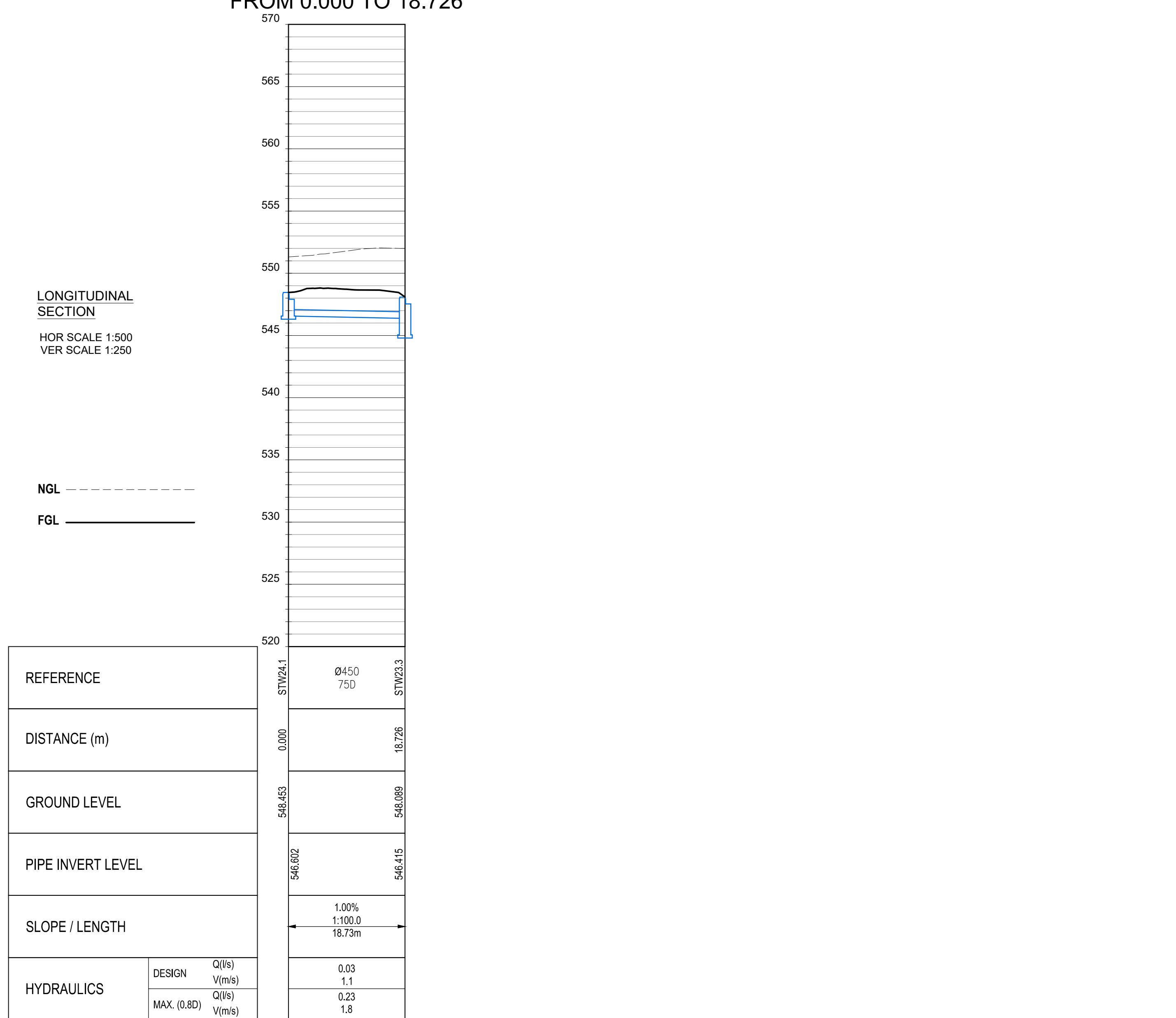
L. Moodley DATE  
Deputy Head: Cleaning & Solid Waste - DSW  
Contract No.

Status TENDER  
Project Title

WESTERN WASTE  
MANAGEMENT FACILITY  
(SHONGWENI)  
CONTRACT B  
Drawing Title  
CROSS SECTIONS  
ROAD 3  
CHAINAGES 160 TO  
217.165  
SHEET 2/2

Scales 1:500 AS SHOWN Reference  
Designed J. BOHLER, P. ARUMUGAM Date SEPTEMBER 2023  
Checked M. RICHMOND Drawn by L. DU PLESSIS  
Drawing No 301837-05-C-CS-206-002 Revision 0



CLEAN STORMWATER NETWORK 22  
FROM 0.000 TO 145.548CLEAN STORMWATER NETWORK 23  
FROM 0.000 TO 187.969CLEAN STORMWATER NETWORK 24  
FROM 0.000 TO 18.726

Design Consultants  
**iX / Wilson & Pass Inc JV**  
iX engineers Eastwood Office Park | Protea House  
270 Protea Road, Protea Glen, Westville, Durban | 3630  
Pretoria | 0081 | Tel: +27 12 245 2000  
Local Manager Tel: +27 31 254 5700  
www.ingeniers.co.za

Approved  
840114  
PH No. 203/1006  
Date

**iX engineers**  
Infrastructure Excellence  
OF THE 2017  
MULTIDISCIPLINARY CONSULTING ENGINEERS  
Westend Office Park | 21 The Boulevard | Westville | Durban | 3630  
Tel: +27 31 254 5700 | www.ingeniers.co.za

**Wilson & Pass Inc**  
P.O Box 641 | Westville | 3630 | SA  
engineering@wilsonpass.co.za  
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0 2023/10/06 ISSUED FOR TENDER

Revision Date Description

NOTE: No construction work to commence until land and servitude acquisitions have been completed  
Acquisitions completed

DATE Engineer

UNDERGROUND SERVICES CHECKED

WATER  
SEWERS  
G.P.CABLES  
WATER MAINS  
G.P.CABLES  
ELECTRIC CABLES  
S.A.CABLES  
E.S.CABLES  
OIL PIPE LINE

NOTE  
Only underground services affected by new construction work are shown. Care must be taken during excavations for road formation, drainage and other underground services such as sewers, drains, cables, water mains and connectors. Wherever possible these must be located before work proceeds.

L. Moodley  
Deputy Head: Cleaning & Solid Waste - DSW

Contract No.

PSC 2015/010

Status TENDER

Project Title

WESTERN WASTE  
MANAGEMENT FACILITY  
(SHONGWENI)  
CONTRACT B

Drawing Title

CLEAN STORMWATER  
LONGSECTIONS  
NETWORKS 22, 23 AND  
24

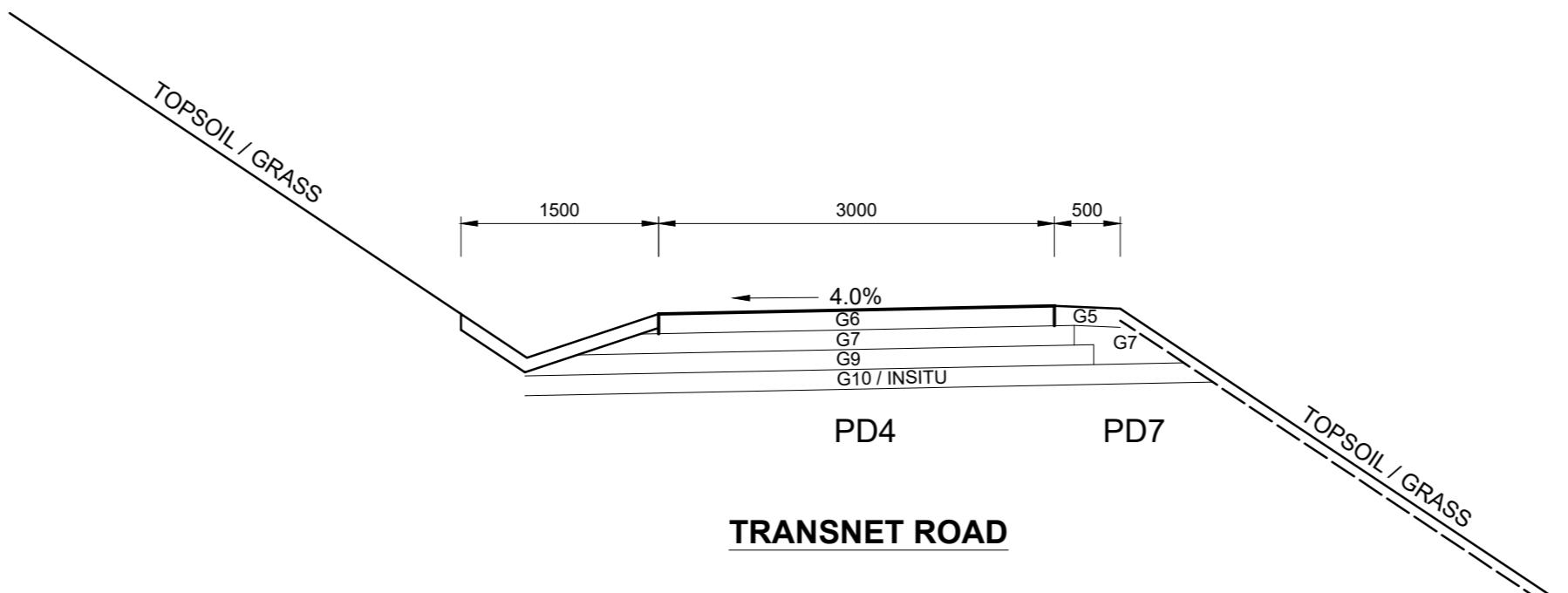
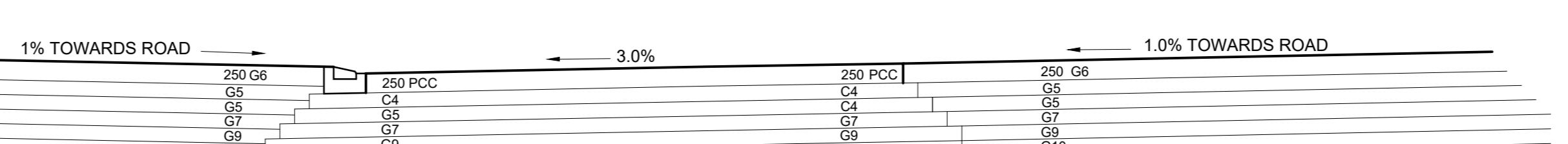
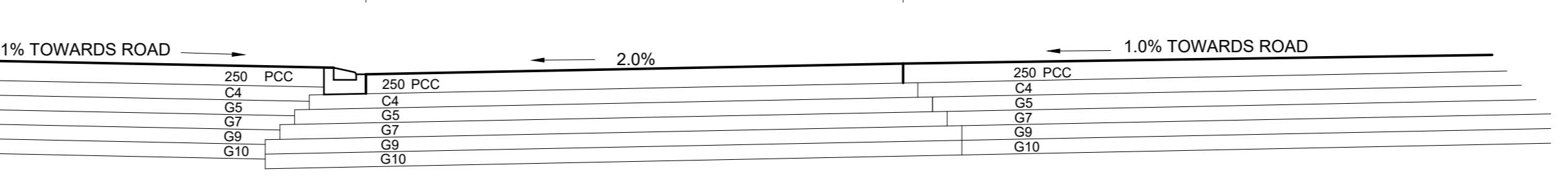
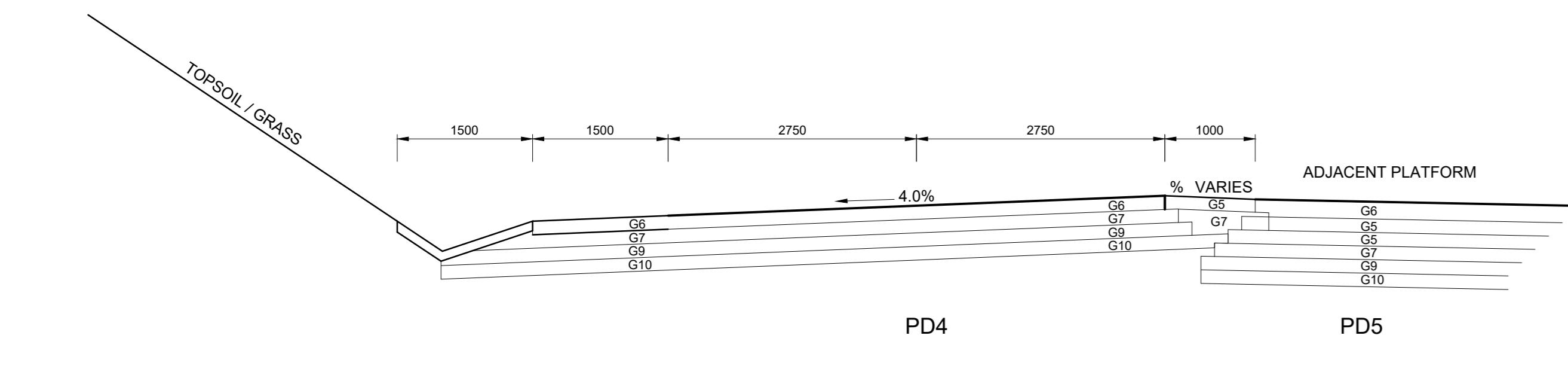
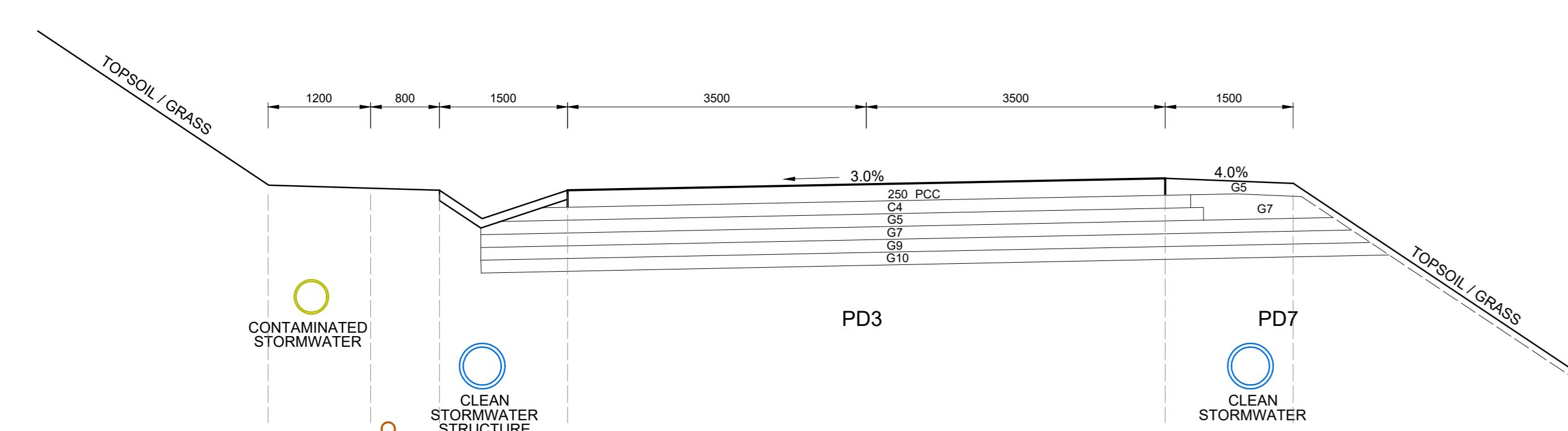
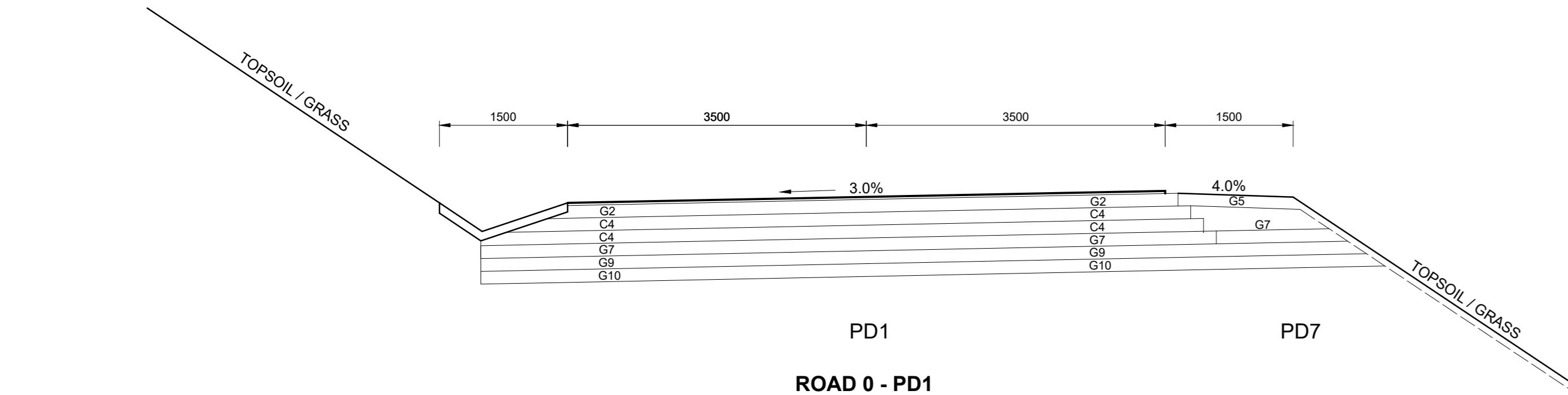
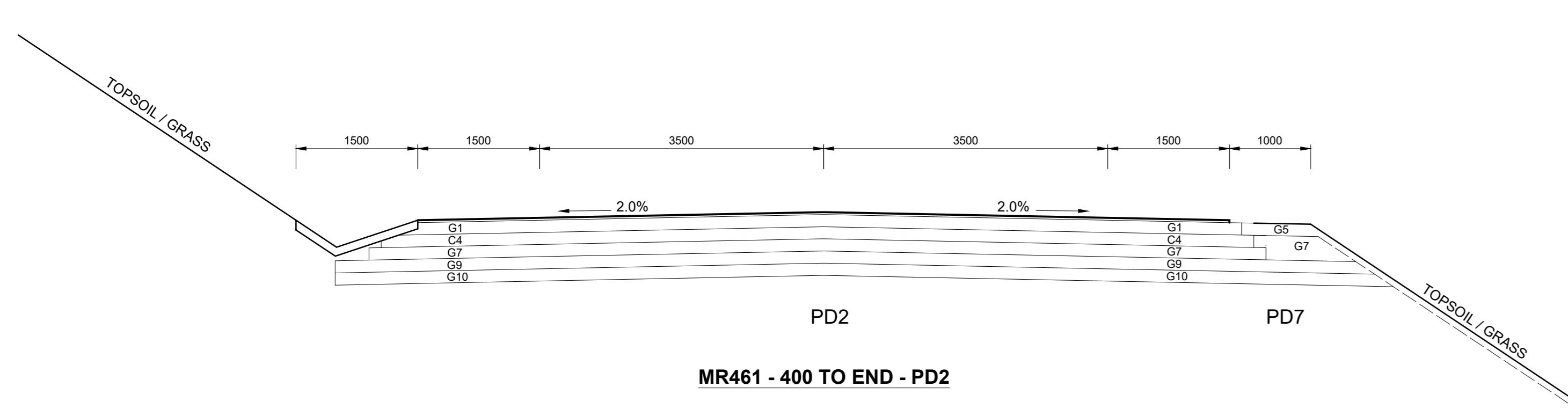
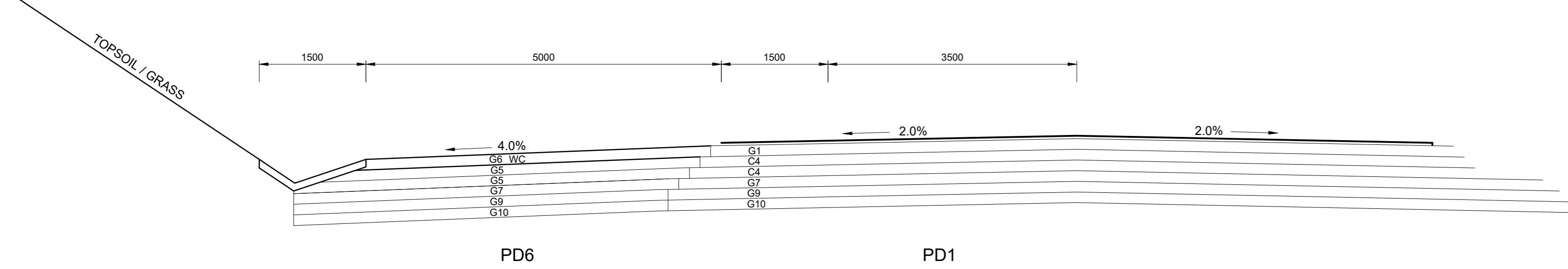
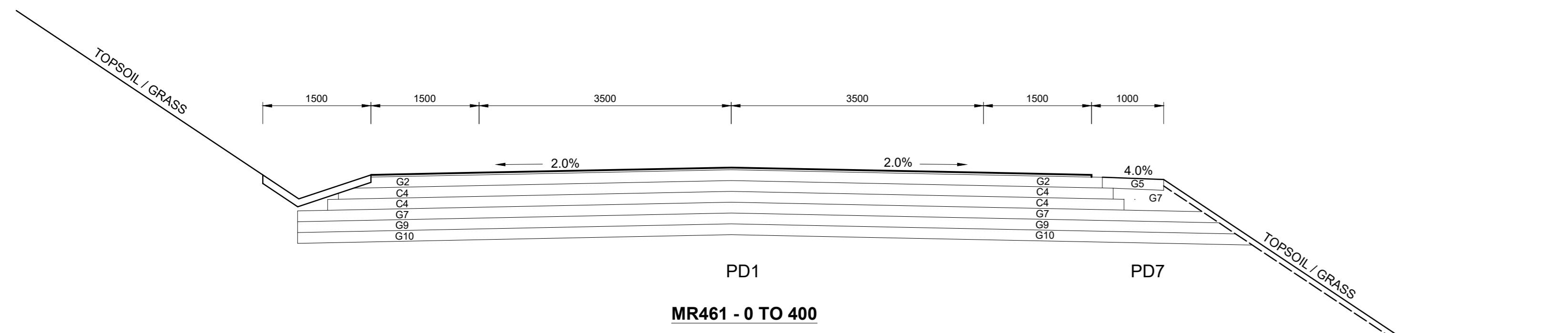
Scales AS SHOWN

Reference

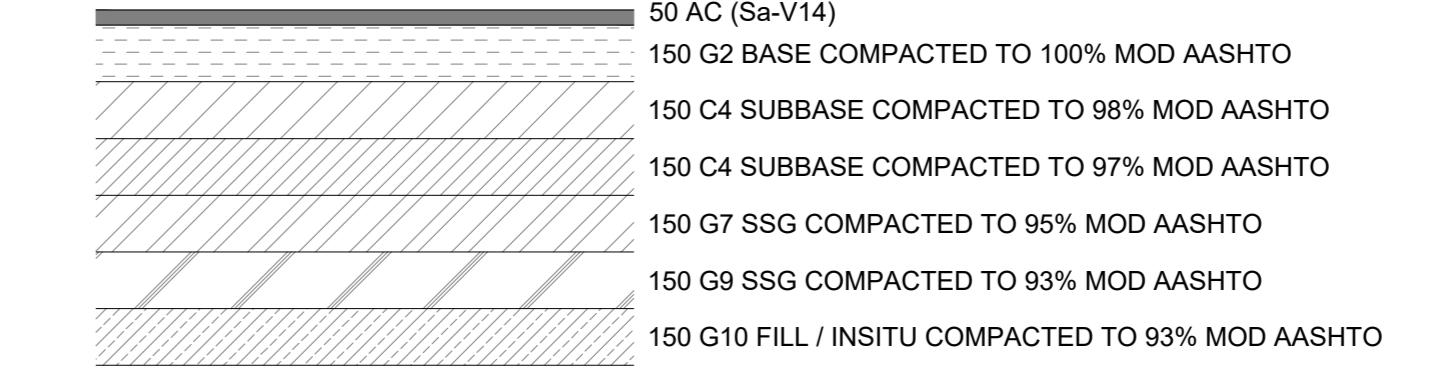
Designed J. BOHLER / P. ARMUGAM  
Checked M. RICHMOND  
Drawn by L. DU PLESSIS

Drawing No 301837-06-C-LS-203-001  
Revision 0

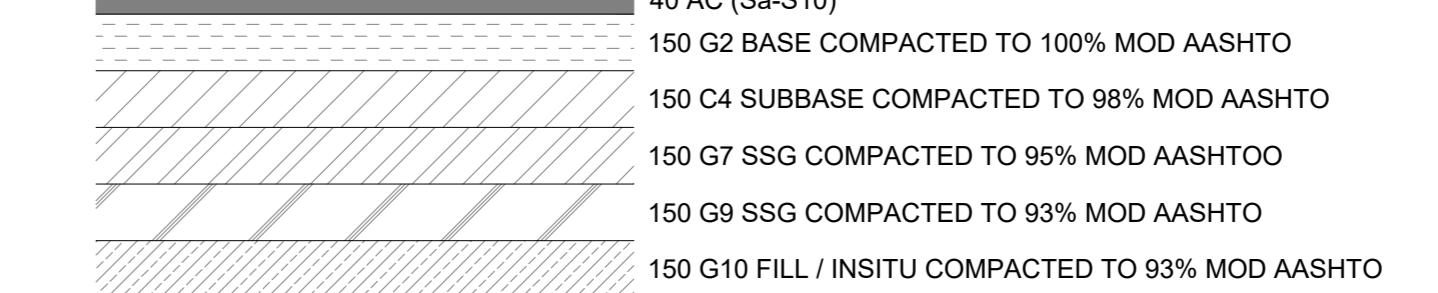
NOTES:  
1. LAYERS TO EXTEND 150mm BEYOND LAYER ABOVE OR TO EDGE OF BATTER (AS SHOWN)  
2. ALL BATTER SLOPES TO 1:1.5 UNLESS OTHERWISE INDICATED  
3. ALL LAYERWORKS MATERIALS TO BE TESTED AND SUBMITTED FOR APPROVAL PRIOR TO USE



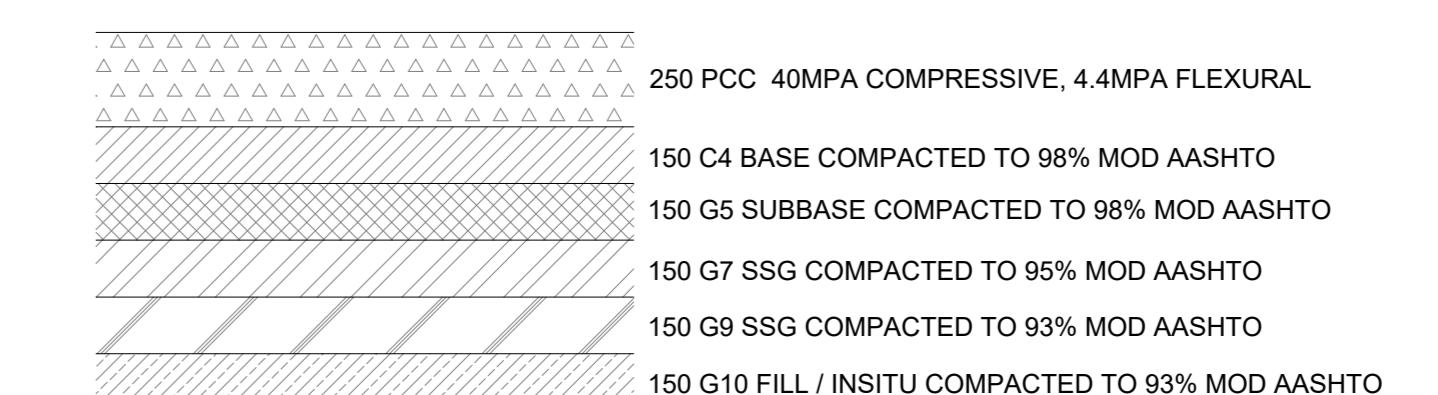
PD 1  
• MR461 (0 TO 400)  
• ROAD 0



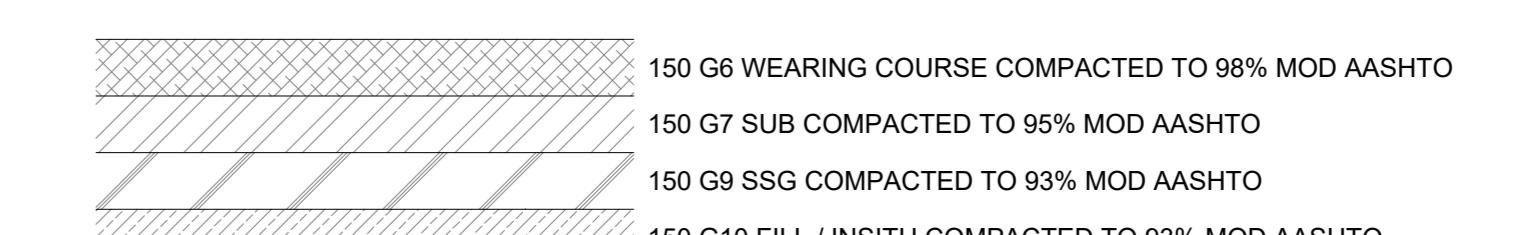
PD 2  
• MR461 (400 TO END)



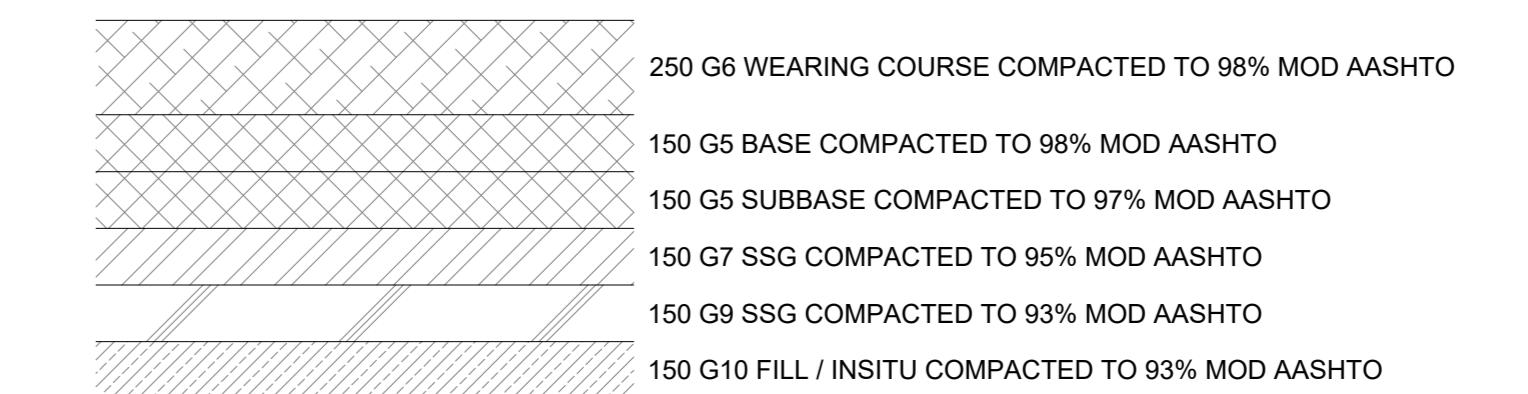
PD 3  
• WEIGHBRIDGE AREA  
• ROAD 0 (STEEP)  
• PLATFORMS (HARD STANDS)



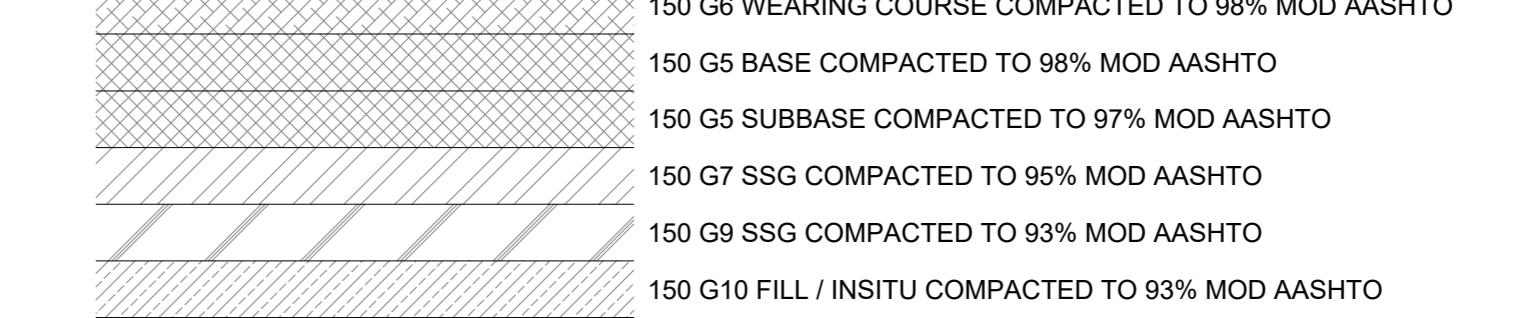
PD 4  
• GRAVEL (INTERNAL)



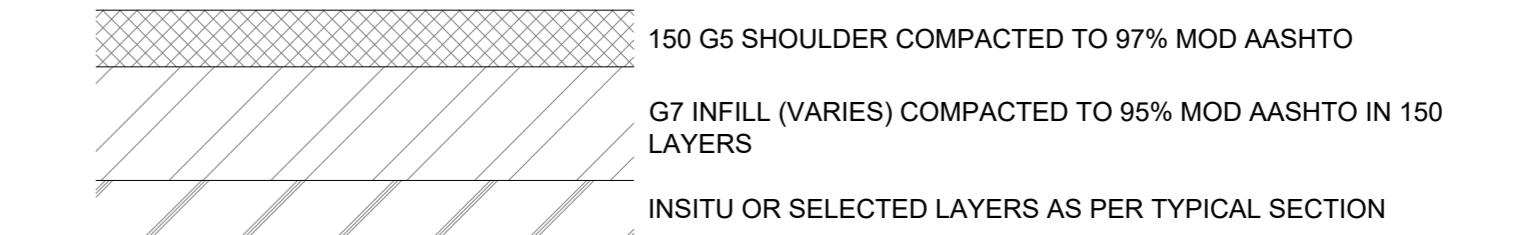
PD 5  
• ROAD 0 TEMP  
• PLATFORMS GRAVEL / FUTURE HARD STANDS



PD 6  
• MR461 WIDE SHOULDER (40mm BELOW ASPHALT EDGE)



PD 7  
• SHOULDER



Design Consultants  
iX / Wilson & Pass Inc JV  
iX engineers Eastwood Office Park | Protea House  
270 Eastwood Road | Eastwood | Johannesburg | 16900  
Pretoria | 01011 | Tel: +27 12 245 2000  
Local Manager Tel: +27 11 254 5700  
iX engineers Infrastructure Excellence  
iX engineers MULTIDISCIPLINARY CONSULTING ENGINEERS  
Westend Office Park | 21 The Boulevard | Westville | Durban | 3600  
Tel: +27 31 254 5700 | www.ingeniers.co.za

Wilson & Pass Inc JV  
P O Box 641 | Westville | 3600 | SA  
Engineering Services | Tel: +27 82 463 1127

0 06/10/2023 ISSUED FOR TENDER

Revision Date Description

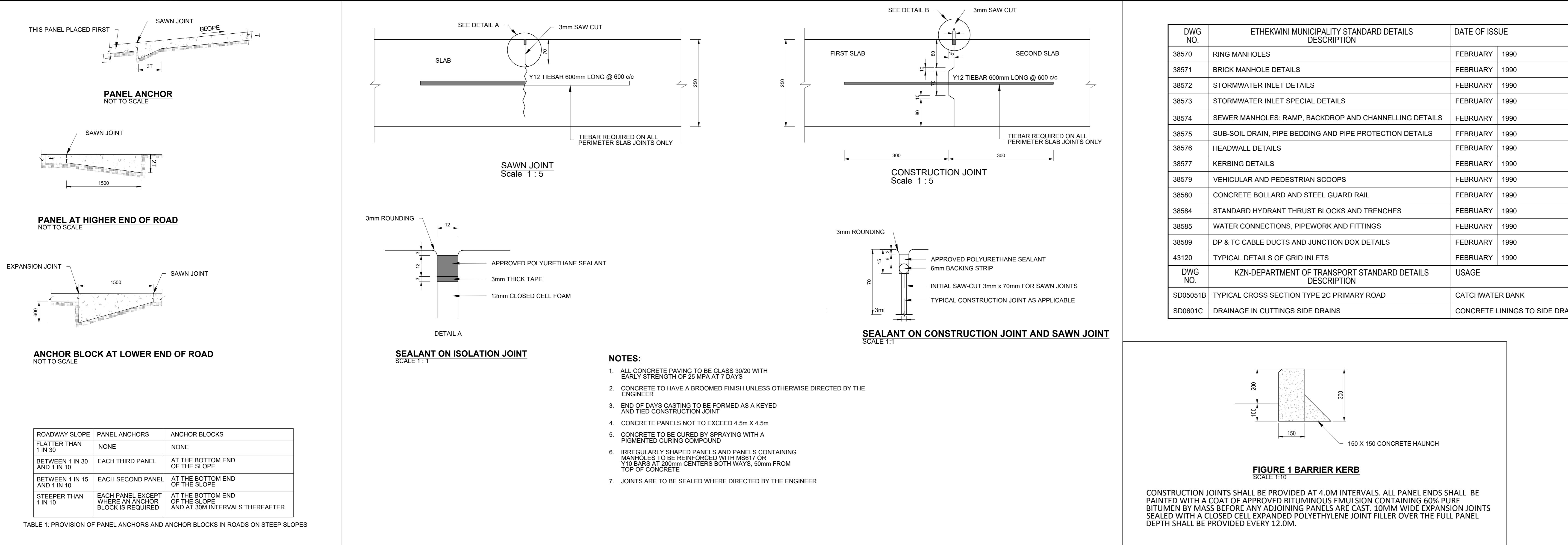
NOTE: No construction work to commence until land and servitude acquisitions have been completed

Acquisitions completed

DATE Engineer Signature

UNDERRGOUND SERVICES CHECKED

None



DWG NO.	ETHEKWINI MUNICIPALITY STANDARD DETAILS DESCRIPTION	DATE OF ISSUE
38570	RING MANHOLES	FEBRUARY 1990
38571	BRICK MANHOLE DETAILS	FEBRUARY 1990
38572	STORMWATER INLET DETAILS	FEBRUARY 1990
38573	STORMWATER INLET SPECIAL DETAILS	FEBRUARY 1990
38574	SEWER MANHOLES: RAMP, BACKDROP AND CHANNELLING DETAILS	FEBRUARY 1990
38575	SUB-SOIL DRAIN, PIPE BEDDING AND PIPE PROTECTION DETAILS	FEBRUARY 1990
38576	HEADWALL DETAILS	FEBRUARY 1990
38577	KERBING DETAILS	FEBRUARY 1990
38579	VEHICULAR AND PEDESTRIAN SCOOPS	FEBRUARY 1990
38580	CONCRETE BOLLARD AND STEEL GUARD RAIL	FEBRUARY 1990
38584	STANDARD HYDRANT THRUST BLOCKS AND TRENCHES	FEBRUARY 1990
38585	WATER CONNECTIONS, PIPEWORK AND FITTINGS	FEBRUARY 1990
38589	DP & TC CABLE DUCTS AND JUNCTION BOX DETAILS	FEBRUARY 1990
43120	TYPICAL DETAILS OF GRID INLETS	FEBRUARY 1990
DWG NO.	KZN-DEPARTMENT OF TRANSPORT STANDARD DETAILS DESCRIPTION	USAGE
SD05051B	TYPICAL CROSS SECTION TYPE 2C PRIMARY ROAD	CATCHWATER BANK
SD0601C	DRAINAGE IN CUTTINGS SIDE DRAINS	CONCRETE LININGS TO SIDE DRAINS

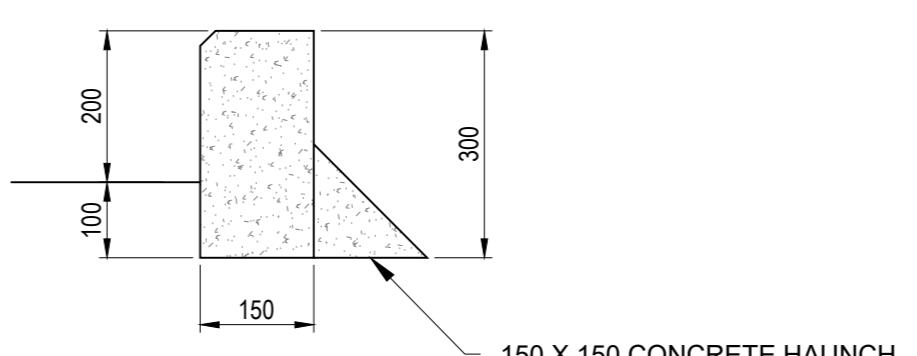


FIGURE 1 BARRIER KERB

SCALE 1:10

Design Consultants  
**iX / Wilson & Pass Inc JV**  
iX engineers Eastwood Office Park | Protea House  
270 Protea Road | Westville | Durban | 3630  
Pretoria (010) Tel: +27 12 245 2000  
Local Manager Tel: +27 31 254 5700  
www.ingeniers.co.za

Approved 840114 PH No. Date

06/10/2023

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