

# THE REPUBLIC OF SOUTH SUDAN

WESTERN EQUATORIA STATE

## MARIDI - EMBAI ACCESS ROAD DESIGN

EMPLOYER:



CONSULTANT:



FEBRUARY, 2023

**LEGEND / ABBREVIATION :**

	-RIVER		-REINFORCED CONCRETE PIPE CULVERT
	-PROJECTED ROAD	E	-EASTING, EXTERNAL DISTANCE
	-CONTROL POINTS	RCPC	-REINFORCED CONCRETE PIPE CULVERT
	-SLAB CULVERT/FORD	RCSC	-REINFORCED CONCRETE SLAB CULVERT
	-CENTER LINE	LM	-LINEAR METER
	-HOUSE/HUT	m	-METER/METERS
AZIM	-AZIMUTH	PI	-POINT OF INTERSECTION
BM	-BENCH MARK	PC	-POINT OF CURVATURE
mm	-MILLIMETER	PT	-POINT OF TANGENCY
Da	-DEGREE OF CURVE	PVI	-POINT OF VERTICAL INTERSECTION
∅	-DIAMETER	PVC	-POINT OF VERTICAL CURVATURE
e	-SUPER ELEVATION	PVT	-POINT OF VERTICAL TANGENCY
EL,ELE	-ELEVATION	R	-RADIUS OF CURVATURE
g	-GRADE	WW	-WING WALL
I	-DEFLECTION ANGLE	CB	-CATCHMENT BASIN
KPH	-KILOMETER PER HOUR	M	-MIDDLE ORDINATE
KM	-KILOMETER		-ELECTRIC POLE
LC	-LENGTH OF CURVE		-WATER PIPE MARKS

**GENERAL NOTES**

**DIMENSIONING**

- a) UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS WHICH INCLUDE DISTANCE BETWEEN CONTROL POINTS AND DIMENSION OF DRAINAGE STRUCTURE ARE MEASURED AND EXPRESSED IN METERS

**STATIONING**

- a) THE ROAD STATIONS AND ELEMENTS ARE REFERRED TO THE CENTER LINE OF THE ROAD
- b) STATION OF THE PROJECT ROADS ARE IN KMS WITH OR WITHOUT DECIMALS

**ELEVATION AND GRADES**

- a) FINISHED GRADE ELEVATIONS SHOWN IN THE PLAN AND PROFILE SHEETS, REFER TO THE FINISHED ROAD ELEVATION AS SHOWN ON THE TYPICAL ROAD WAY SECTION
- b) ORIGINAL GROUND ELEVATION SHOWN IN THE PLAN AND PROFILE SHEETS, REFERS TO THE ELEVATION OF EXISTING GROUND ALONG THE CENTER LINE OF THE PROFILE OF THE ROAD

**HORIZONTAL CONTROL**

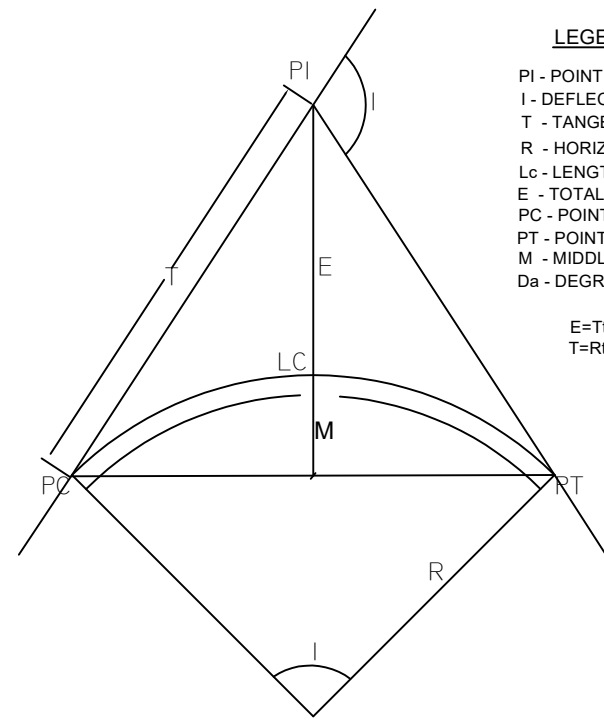
- a) HORIZONTAL CONTROLS ARE CONCRETE MONUMENTS WITH 10mm REINFORCING BARS OR BOULDER USUALLY MARKED CP (CONTROL POINTS)
- c) ALL COORDINATES WERE MEASURED FROM THE ASSUMED ELEVATION ASSUMED TO BM-1

**VERTICAL CONTROL**

- a) VERTICAL CONTROLS WERE ESTABLISHED APPROXIMATELY EVERY 500m ALONG THE ROAD . THESE WERE LOCATED MOSTLY ON CONCRETE MONUMENTS WITH REINFORCING BAR AT MIDDLE OR BOULDER USUALLY MARKED CP (CONTROL POINTS)
- b) ELEVATIONS ARE BASED ON ASSUMED READING

**CROSS DRAINAGE AND SLOPE PROTECTION WORKS**

- a) EXACT LOCATION POSITION AND ELEVATION OF THE DRAINAGE STRUCTURES MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER TO SUIT ACTUAL FIELD CONDITION.
- b) PROVISION OF HEADWALLS, WING WALLS AND OTHER STRUCTURAL COMPONENTS FOR REINFORCED CONCRETE CULVERTS (RCPC & RCBC) ARE DISTINCTLY SPECIFIED ON THE PLAN AND DRAWING SCHEDULE.
- c) LIMITS OF SLOPE PROTECTION WORKS MAY BE ADJUSTED BY THE ENGINEER TO SUIT ACTUAL FIELD CONDITION. THE ENGINEER MAY ALSO PROPOSE ADDITIONAL SLOPE PROTECTION WORKS IF HE/SHE THINKS NECESSARY.



HORIZONTAL CIRCULAR CURVE

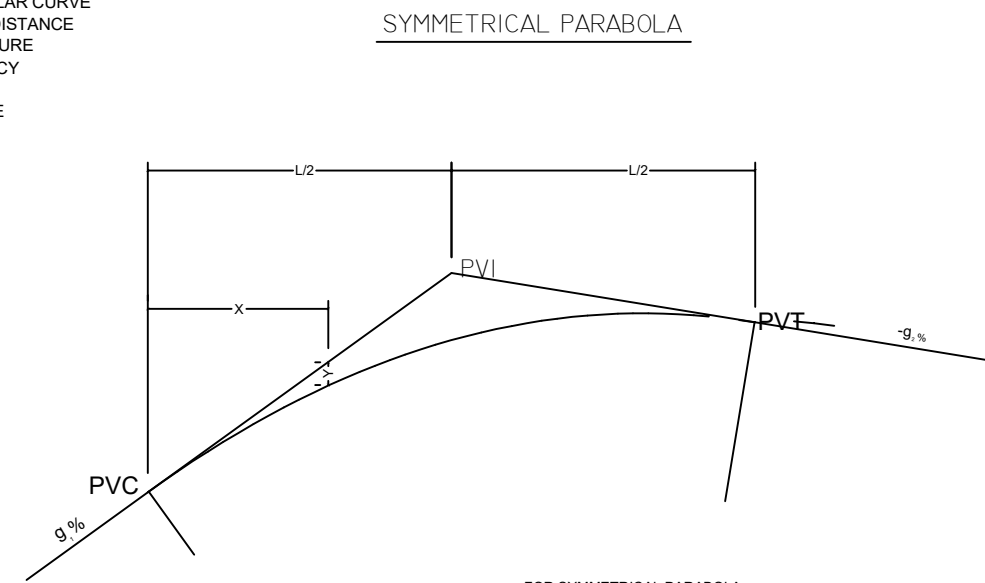
NOTE : NO HORIZONTAL CURVE IS REQUIRED WHEN THE DEFLECTION ANGLE IS LESS THAN ONE (1) DEGREE

**LEGEND**

- PI - POINT OF INTERSECTION
- I - DEFLECTION ANGLE (CENTRAL ANGLE)
- T - TANGENT LENGTH
- R - HORIZONTAL RADIUS
- Lc - LENGTH OF CIRCULAR CURVE
- E - TOTAL EXTERNAL DISTANCE
- PC - POINT OF CURVATURE
- PT - POINT OF TANGENCY
- M - MIDDLE ORDINATE
- Da - DEGREE OF CURVE

$$E = T \tan(I/4)$$

$$T = R \tan(I/2)$$



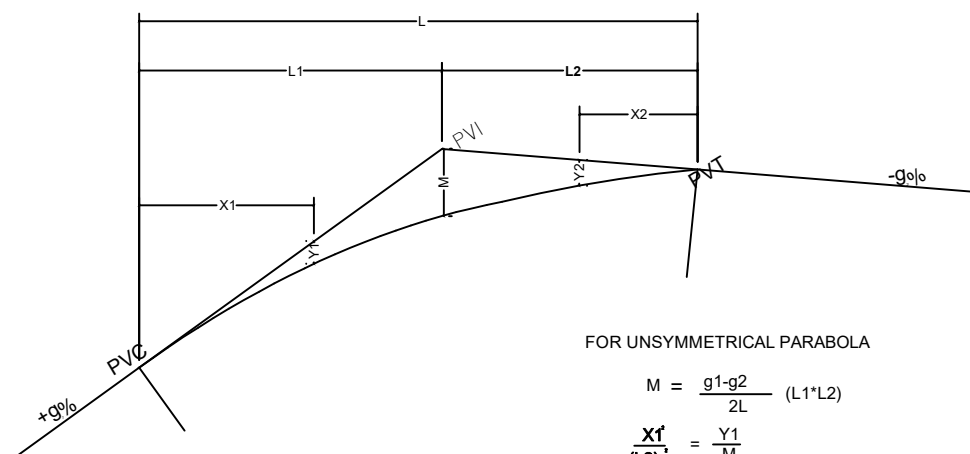
SYMMETRICAL PARABOLA

FOR SYMMETRICAL PARABOLA

$$M = \frac{g_1 - g_2}{8} L$$

$$\frac{X'}{(L/2)} = \frac{Y}{M}$$

UNSYMMETRICAL PARABOLA



FOR UNSYMMETRICAL PARABOLA

$$M = \frac{g_1 - g_2}{2L} (L_1 * L_2)$$

$$\frac{X_1'}{(L_2)} = \frac{Y_1}{M}$$

$$\frac{X_2'}{(L_1)} = \frac{Y_2}{M}$$

NOTE: NO VERTICAL CURVE IS REQUIRED WHEN THE ALGEBRAIC DIFFERENCE IN GRADES IS LESS THAN 0.50%

**LEGEND**

- PVI - POINT OF VERTICAL INTERSECTION
- PVC - POINT OF VERTICAL CURVATURE
- PVT - POINT OF VERTICAL TANGENCY
- L - LENGTH OF VERTICAL CURVATURE
- g - GRADE IN PERCENT
- M - MIDDLE ORDINATE
- X - DISTANCE FROM PVC/PVT TO ANY POINT OF CURVE
- Y - VERTICAL OFFSET FROM CURVE TO TANGENT

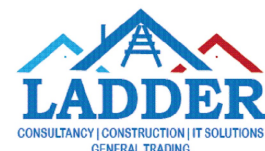
**LENGTH OF VERTICAL CURVATURE:**

FOR ALGEBRAIC GRADE DIFFERENCES OF 2.00% AND GREATER, AND THE DESIGN SPEED EQUAL TO OR GREATER THAN 60KPH THE MINIMUM LENGTH OF VERTICAL CURVATURE IN METER SHOULD BE EQUAL TO 2V.WHERE V=DESIGN SPEED.  
FOR ALGEBRAIC DIFFERENCE OF LESS THAN 2.00% OR THE DESIGN SPEED LESS THAN 60KPH THE VERTICAL CURVE LENGTH SHOULD NOT BE A MINIMUM OF 80m

EMPLOYER:



DESIGNED/PREPARED BY:



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Juba, The Republic of South Sudan

APPROVED BY:

PROJECT TITLE:

MARIDI - EMBAI ACCESS ROAD

SHEET CONTENT:

GENERAL NOTES

REVISIONS:

CAD/DRAWN BY:

DWG. Scale: AS SHOWN

DATE: FEBRUARY 2023

DWG. NO.

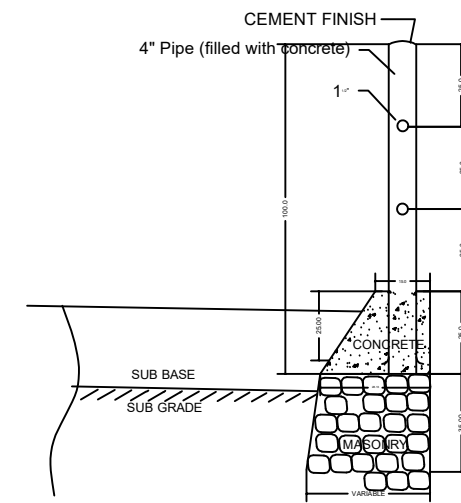
02

SHEET 1\_OF\_2\_SHEETS

### SLOPE RATIO TABLE (HOR:VER)

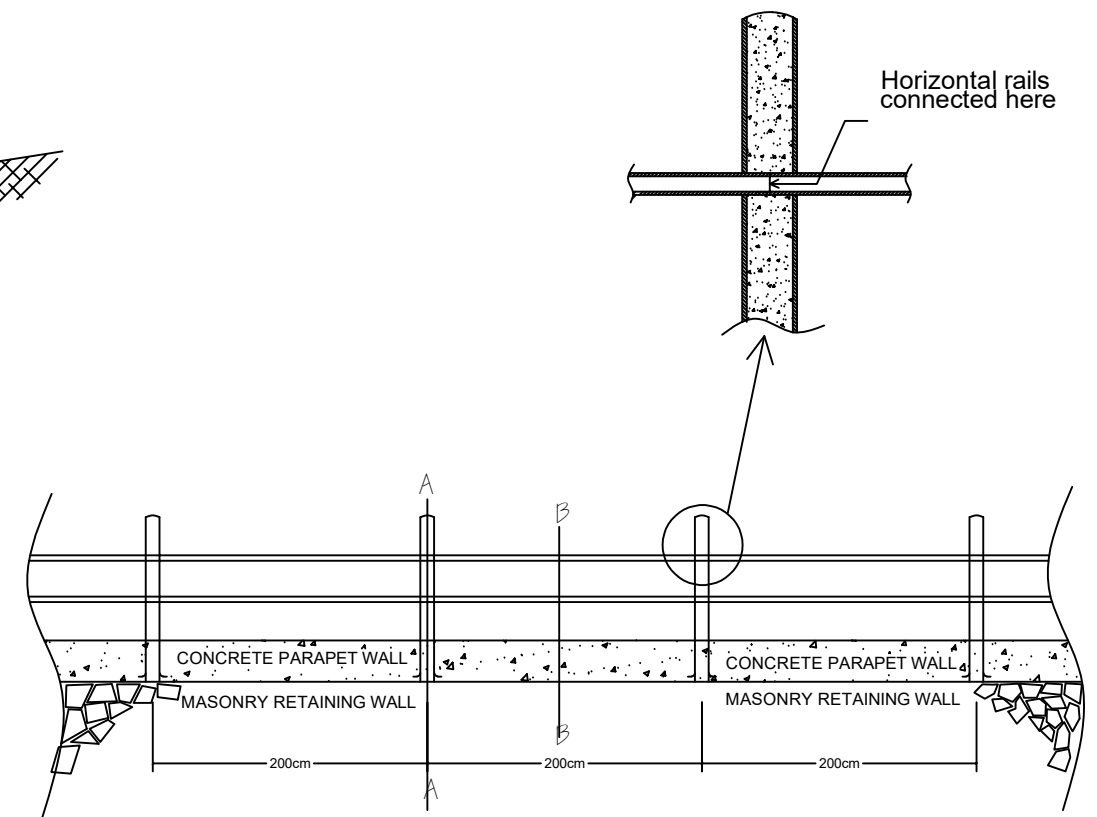
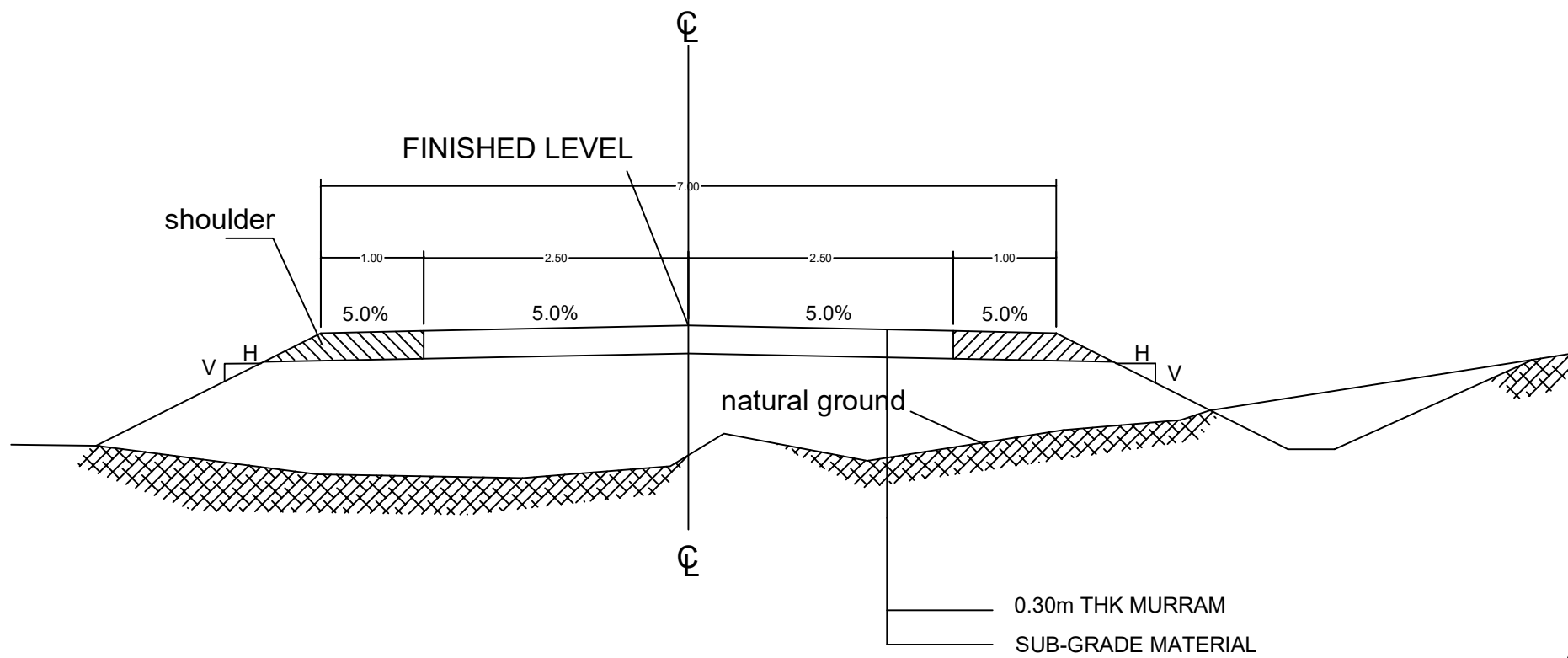
	HEIGHT OF SLOPE	CUT	FILL
EARTH OR SOIL	0.0M - 1.0M	3:1	3:1
	1.0M - 2.0M	2:1	2:1
	OVER 2.0M	3:2	3:2
ROCK	0.0M - 2.0M	1:2	
	OVER 2.0M	1:4	

### DETAIL OF GUARD RAIL



**NOTE:**  
 A - 4" Pipe, 4mm thickness, vertical Posts filled with cement concrete and top cover finished with cement screed (length and shape as shown in the drawing), - and painted with Black and White paint strips.  
 B - 1 1/2" Pipe, 3mm thickness, Two parallel horizontal rails (length and shape as shown in the drawing)

SECTION A - A  
 TYPICAL GUARD RAIL SECTION  
 All dimensions are in cm.



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PROJECT TITLE:

MARIDI - EMBAI ACCESS ROAD

SHEET CONTENT:

TYPICAL SECTION AND DETAILS

REVISIONS:

CAD/DRAWN BY:

DWG. Scale: AS SHOWN

DATE: FEBRUARY 2023

DWG. NO.

02

SHEET 2 OF 2 SHEETS

**SUPERELEVATION & RUN-OFF LENGTH**

No	RADIUS	V=30KPH	V=40KPH	V=50KPH	V=60KPH	V=70KPH	V=80KPH	V=90KPH	V=100KPH	V=110KPH	V=120KPH
	R	e	L	e	L	e	L	e	L	e	L
1	7000	NC	0	NC	0	NC	0	NC	0	NC	0
2	5000	NC	0	NC	0	NC	0	NC	0	0.0	0
3	3000	NC	0	NC	0	NC	0	NC	0	0.0	0
4	2500	NC	0	NC	0	NC	0	RC	56	RC	61
5	2000	NC	0	NC	0	RC	44	RC	50	RC	56
6	1500	NC	0	NC	0	RC	39	RC	44	RC	50
7	1400	NC	0	NC	0	RC	39	RC	44	RC	50
8	1300	NC	0	NC	0	RC	33	RC	39	RC	44
9	1200	NC	0	NC	0	RC	33	RC	39	RC	44
10	1000	NC	0	RC	28	RC	33	RC	39	RC	44
11	900	NC	0	RC	28	RC	33	RC	39	3.7	4.4
12	800	NC	0	RC	28	RC	33	RC	39	4.1	4.4
13	700	NC	0	RC	22	RC	33	3.8	3.9	4.5	4.4
14	600	NC	0	RC	22	RC	33	4.3	3.9	5.1	4.4
15	500	RC	0	RC	22	RC	33	4.9	3.9	5.8	4.4
16	400	RC	17	RC	22	3.6	28	RC	33	5.7	3.9
17	300	RC	17	RC	22	4.5	28	RC	33	6.7	4.4
18	250	RC	17	4.0	22	5.1	28	3.9	33	7.3	4.8
19	200	RC	17	4.6	24	5.8	31	4.7	33	7.9	5.2
20	175	RC	17	5.0	26	6.2	33	5.6	34	8.0	5.2
21	150	3.8	17	5.4	28	6.7	36	6.2	37	R min=175	
22	140	4.0	18	5.6	29	6.9	37	7.0	42		
23	130	4.2	19	5.8	30	7.1	38	7.4	44		
24	120	4.4	20	6.0	31	7.3	39	7.8	47		
25	110	4.7	23	6.3	32	7.6	41	7.9	47		
26	100	4.9	23	6.5	33	7.8	42	8.0	48		
27	90	5.2	25	6.9	36	7.9	43	R min=125			
28	80	5.5	26	7.2	37	8.0	43				
29	70	5.90	28	7.5	39	R min=80					
30	60	6.4	31	7.8	40						
31	50	6.9	33	8.0	41						
32	40	7.5	36	R min=50							
33	30	8.0	38								

$e_{max} = 8\%$   
 R = Radius of curvature  
 v = assumed design speed  
 e = rate of super elevation  
 L = minimum length of runoff (does not include tangent runoff)  
 NC = normal crown  
 RC = remove adverse crown super elevation at normal crown slope.

REF. AASHTO—GEOMETRIC DESIGN OF HIGHWAYS AND STREETS

**RELATIONSHIP OF DESIGN SPEED TO MAXIMUM RELATIVE PROFILE GRADIENT**

DESIGN SPEED (KPH)	MAXIMUM RELATIVE GRADIENTS (AND EQUIVALENT MAXIMUM RELATIVE SLOPES) FOR PROFILES BETWEEN THE EDGE OF TRAVELLED WAY AND THE CENTERLINE (X)
30	0.75 (1:133)
40	0.70 (1:143)
50	0.65 (1:150)
60	0.60 (1:1.67)
70	0.55 (1:182)
80	0.50 (1:200)
90	0.48 (1:210)
100	0.45 (1:222)
110	0.42 (1:238)
120	0.48 (1:250)

REF. AASHTO—GEOMETRIC DESIGN OF HIGHWAYS & STREETS (1994, Page 178)

**WIDENING FOR CURVATURE**

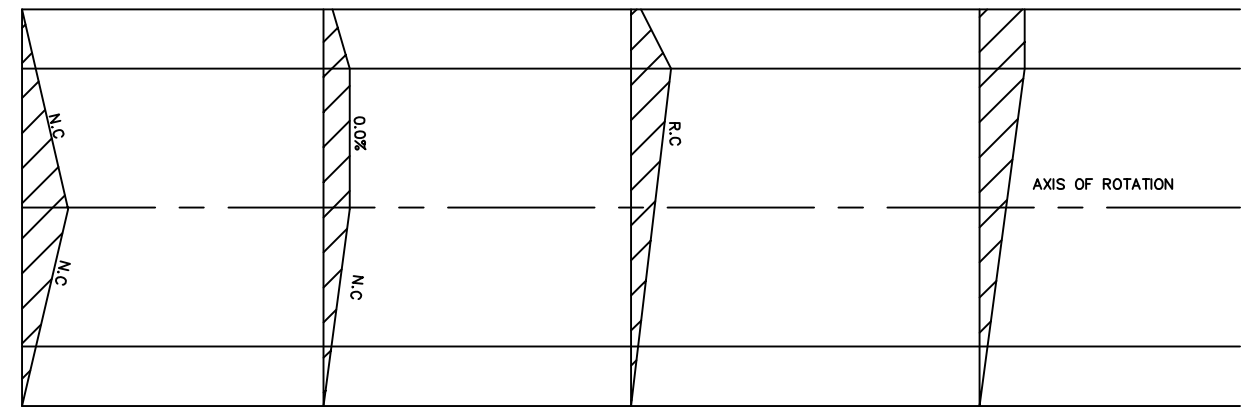
DEGREE OF CURVE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28-30
WIDENING	NIL	NIL	NIL	NIL	NIL	0.60	0.8	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.5

REF. ETHIOPIAN STANDARD

**MAXIMUM ALLOWABLE FRICTION**

DESIGN SPEED (KPH)	FRICTION (f)
30	0.17
40	0.17
50	0.16
60	0.15
70	0.14
80	0.14
90	0.13
100	0.12
110	0.11
120	0.09

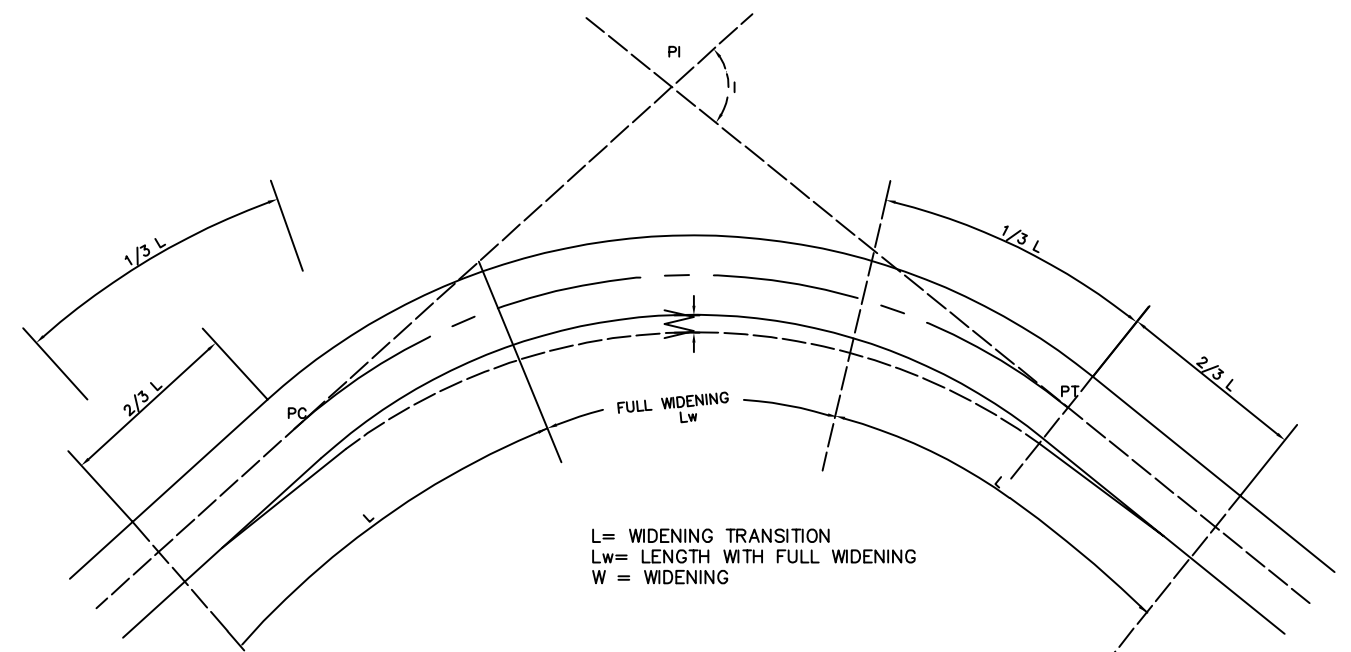
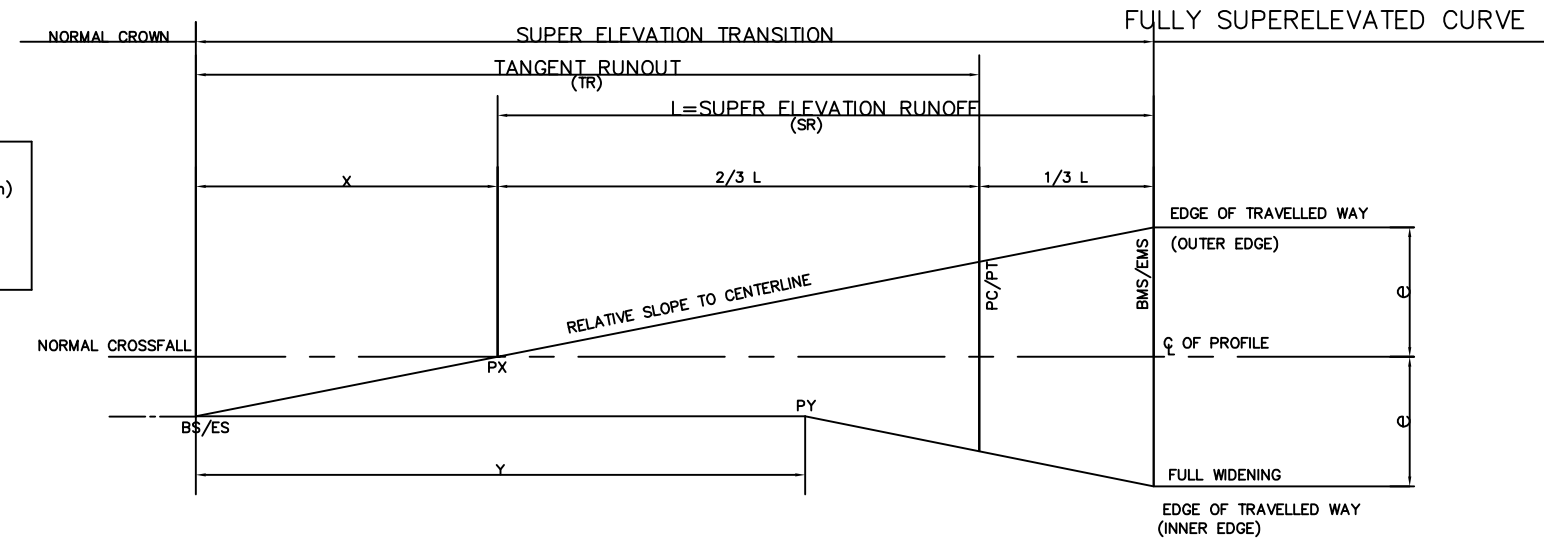
REF. CALTRANS HIGHWAY DESIGN MANUAL FIFTH EDITION



**SUPERELEVATION FORMULA**

$$e + f = \frac{v^2}{127R}$$

e = SUPERELEVATION RATES (m/m)  
 f = COEFFICIENT OF FRICTION  
 v = DESIGN SPEED  
 R = RADIUS OF CURVATURE



WIDENING WHEN TRANSITION IS NOT USED

EMPLOYER:



DESIGNED/PREPARED BY:



APPROVED BY:

PROJECT TITLE:

MARIDI - EMBAI ACCESS ROAD

SHEET CONTENT:

SUPER ELEVATION AND CURVE WIDENING DETAILS

REVISIONS:

CAD/DRAWN BY:

DWG. NO.

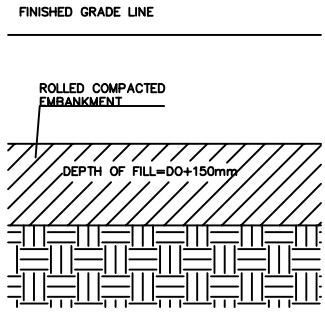
03

DWG. Scale: AS SHOWN

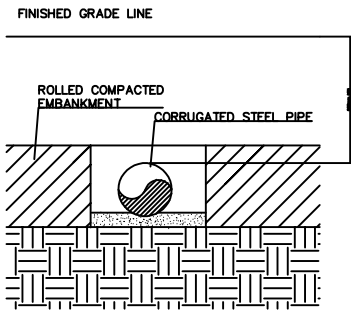
DATE: FEBRUARY 2023

SHEET 1 OF 1 SHEETS

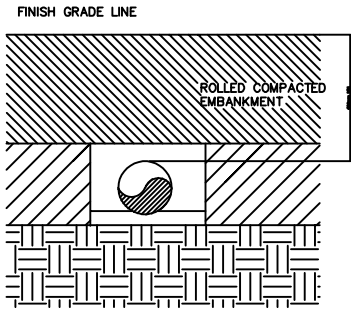




STEP 1  
CONSTRUCT COMPACTED EMBANKMENT TO AN ELEVATION 150mm ABOVE TOP OF PROPOSED PIPE

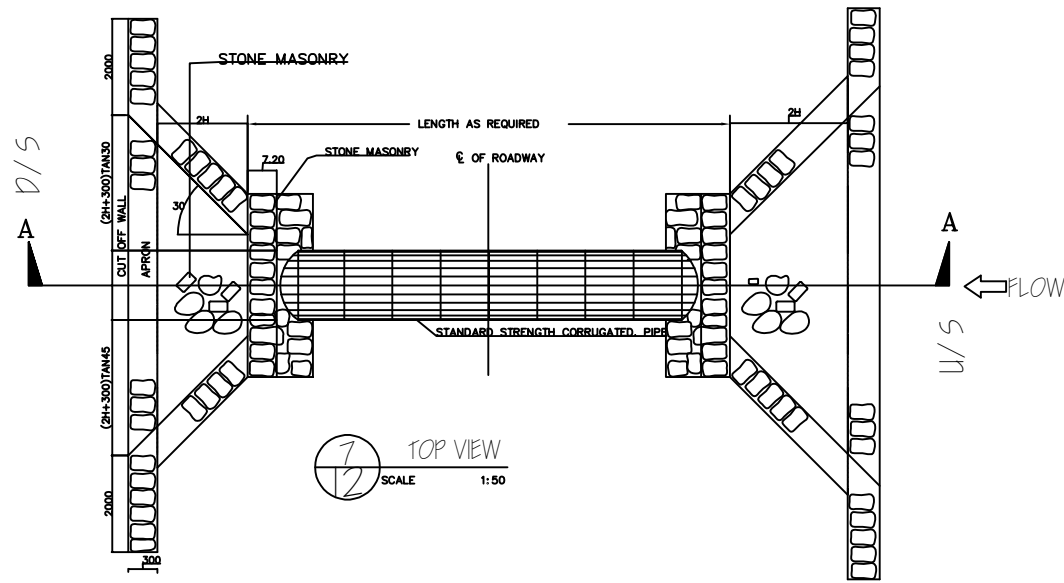


STEP 2  
TRENCH THROUGH THIS COMPACTED EMBANKMENT AND INSTALL PIPE OVER GRANULAR BEDDING BACK FILL WITH COMPACTED GRANULAR MATERIAL

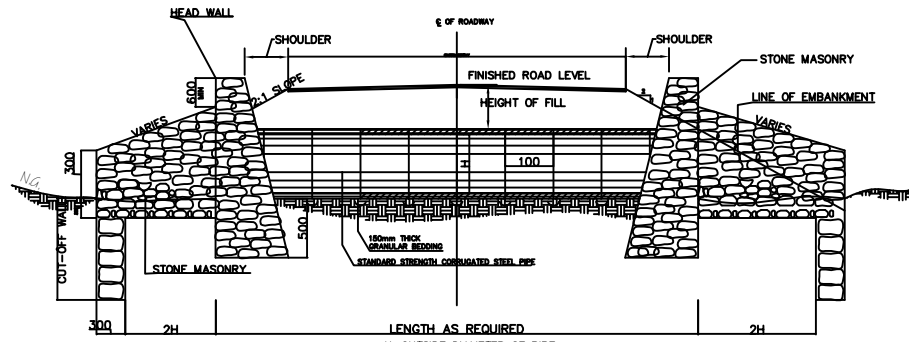


STEP 3  
COMPLETE EMBANKMENT IN NORMAL MANNER

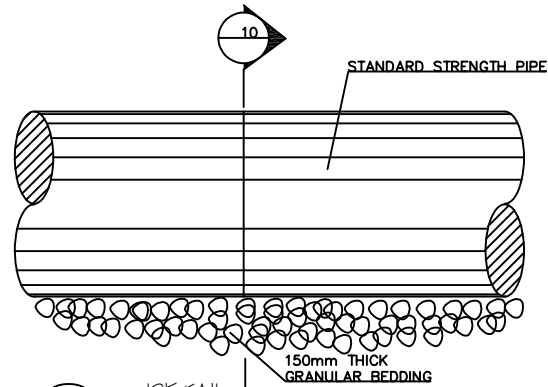
6 METHODS OF PIPE INSTALLATION  
12 NOT TO SCALE



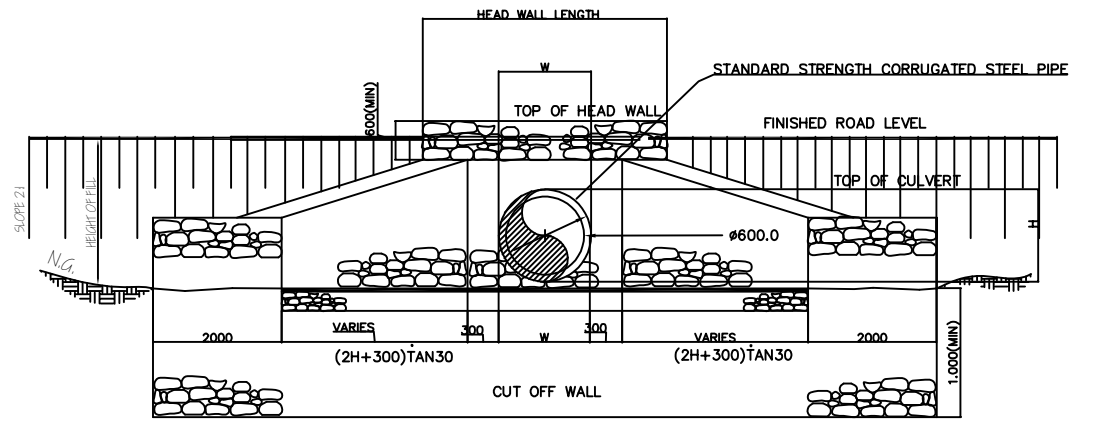
7 TOP VIEW  
SCALE 1:50



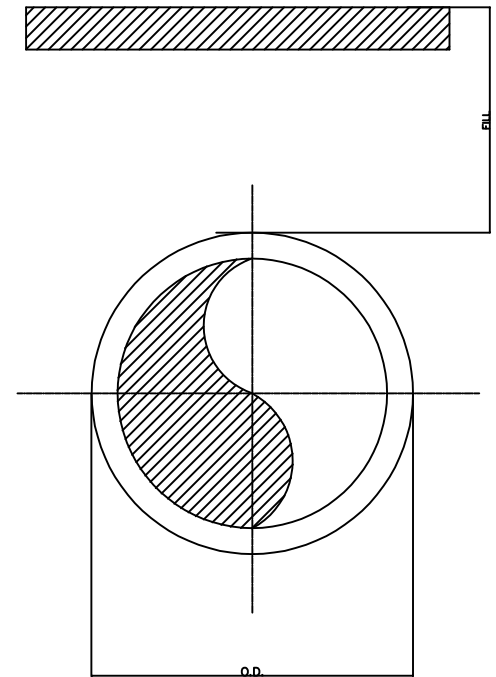
8 SECTION A-A  
SCALE 1:50





9 DETAIL  
SCALE 1:25

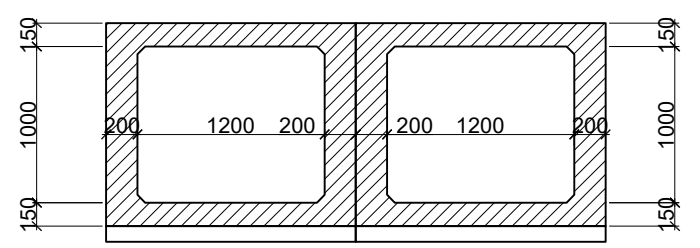
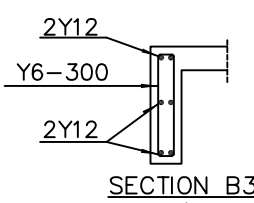
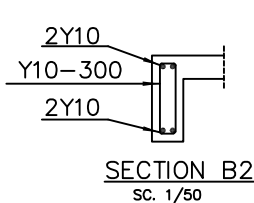
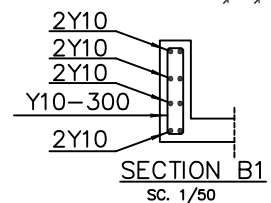
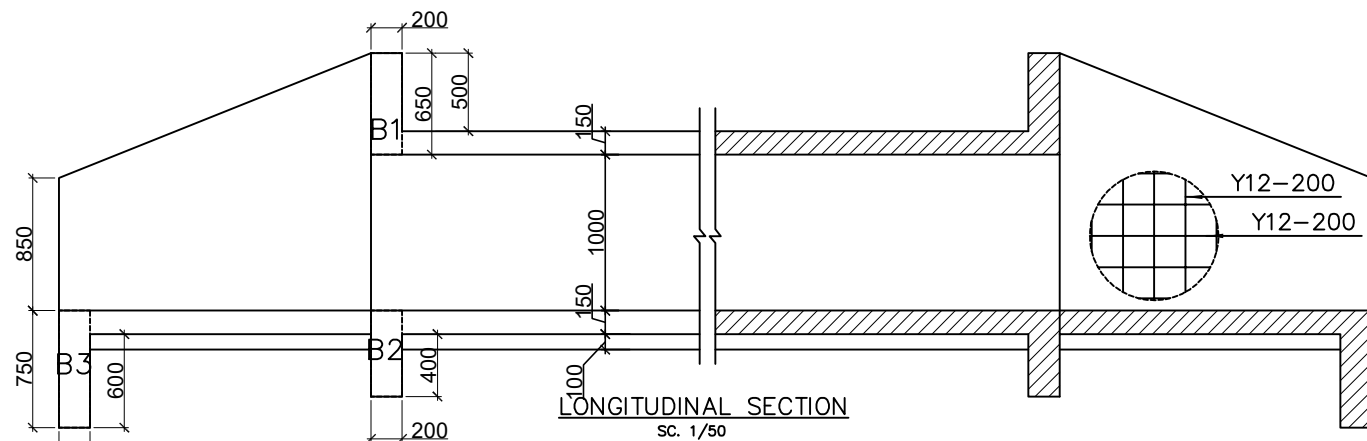


11a ELEVATION  
SCALE 1:50

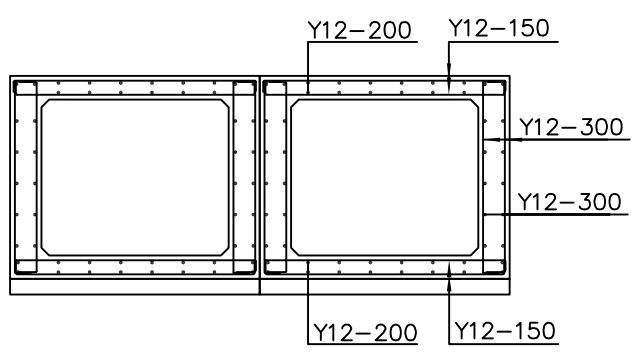


NOTE:  
- THIS IS FOR SINGLE PIPE,  
- THE SAME APPLIES TRUE FOR DOUBLE PIPES AS WELL

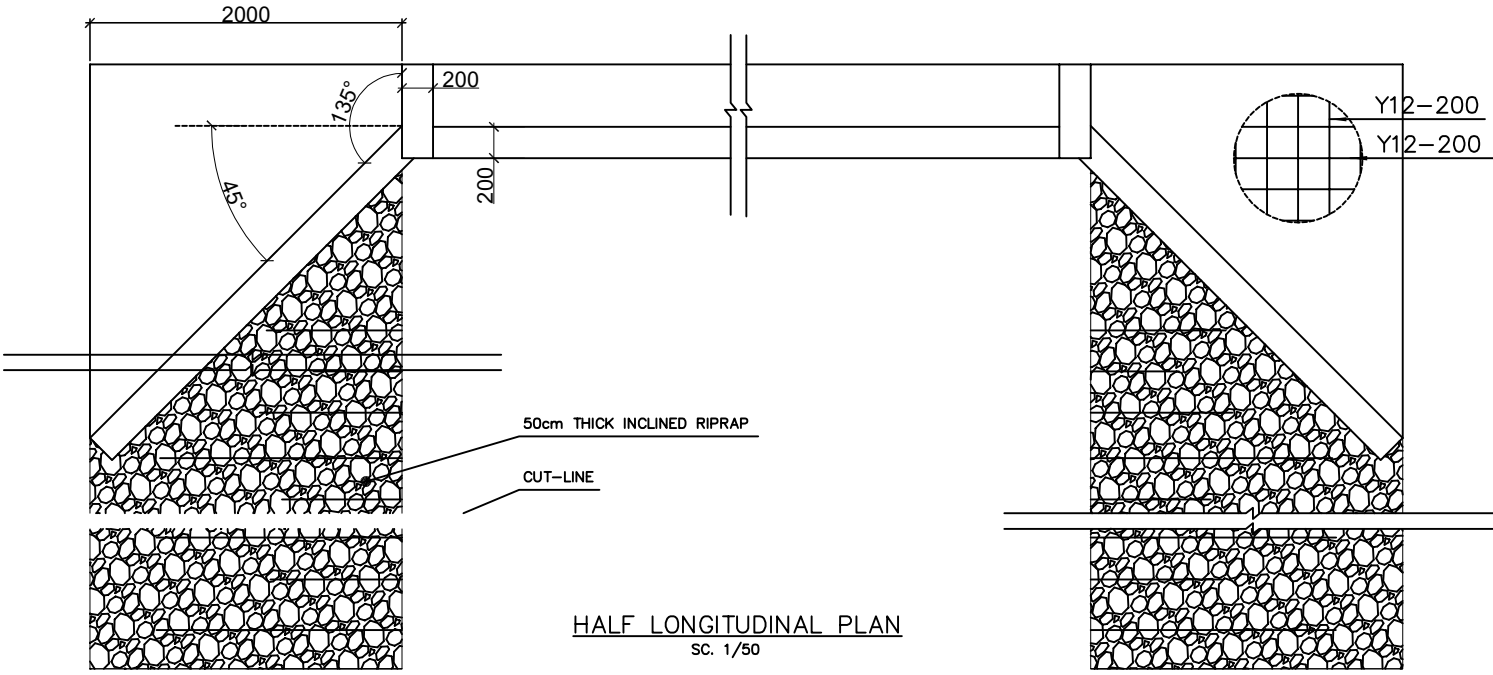
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	DWG. NO.
 <b>ACTED</b> South Sudan Western Equatoria State The Republic of South Sudan	 <b>LADDER</b> CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan		MARIDI - EMBAI ACCESS ROAD			04  DWG. Scale: AS SHOWN DATE: FEBRUARY 2023 SHEET 1 OF 1 SHEETS
			SHEET CONTENT:			
			CORRUGATED STEEL PIPE DETAILS			



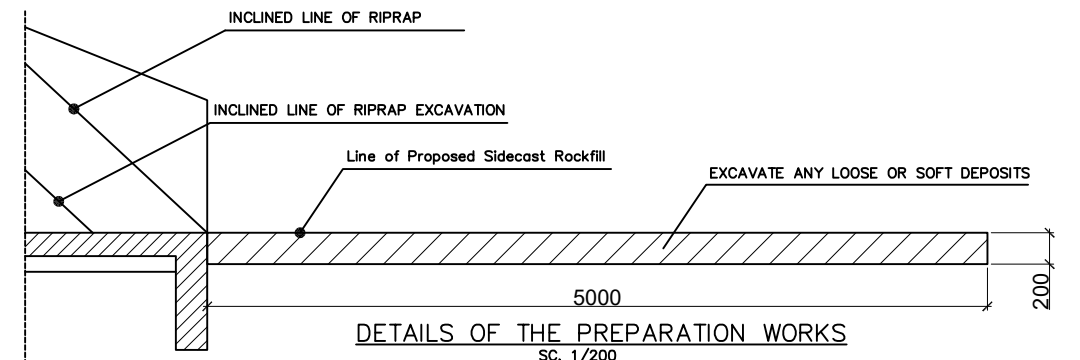
2 CELL-CONCRETE  
sc. 1/50



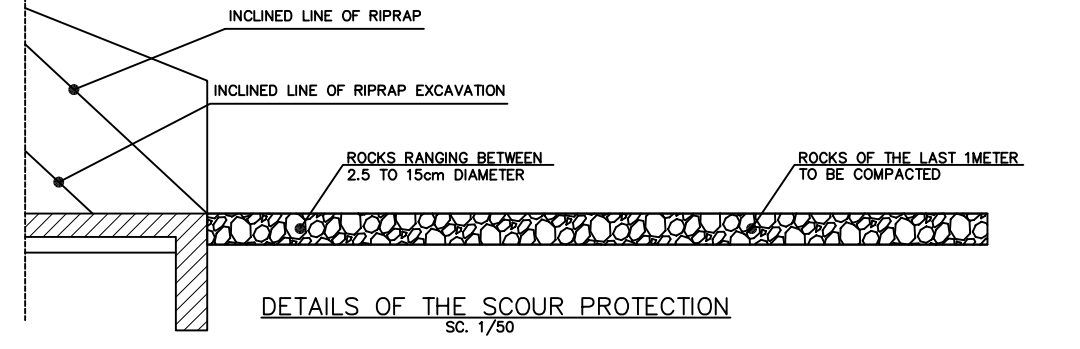
2 CELLS-SECTION REINFORCEMENT  
sc. 1/50





HALF LONGITUDINAL PLAN  
sc. 1/50

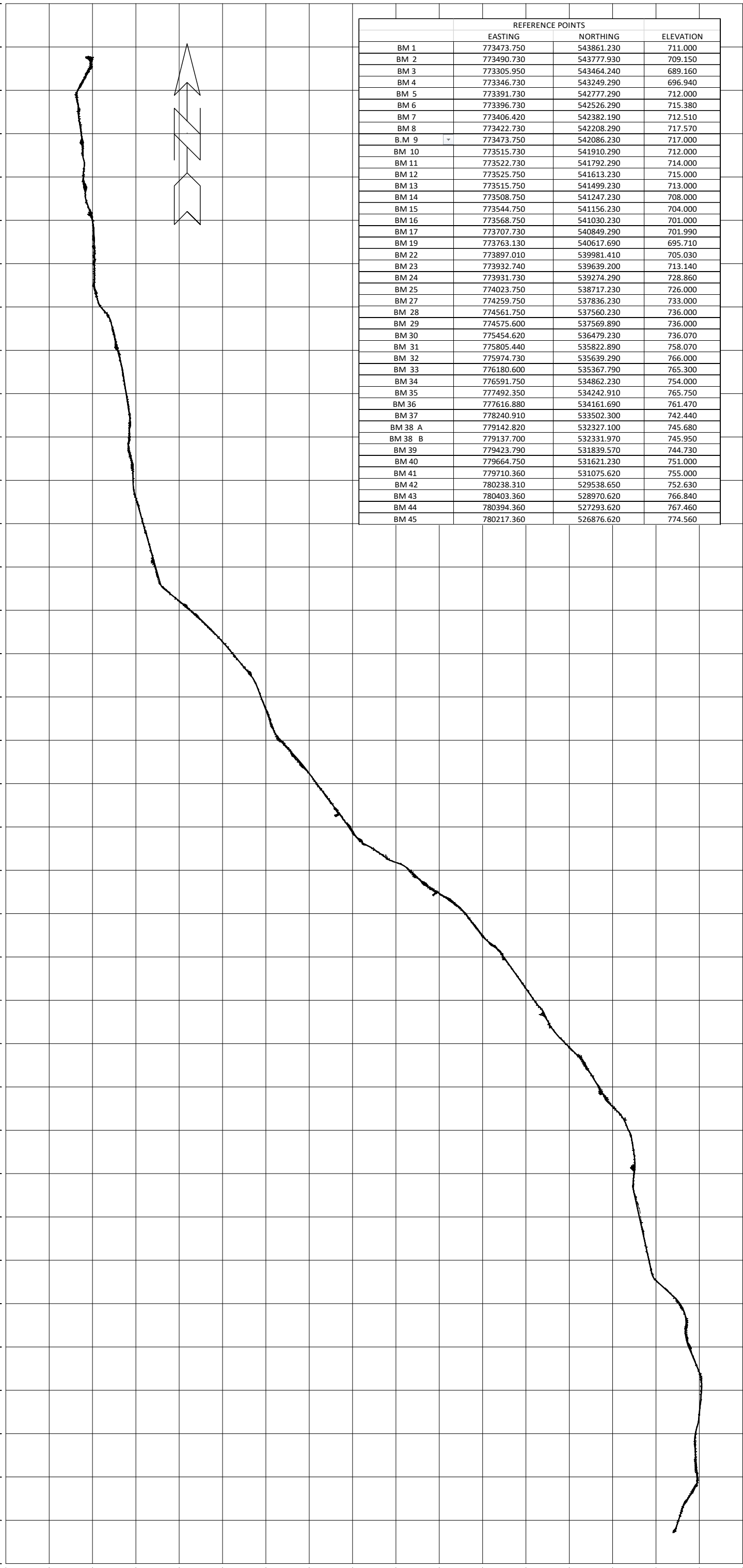


DETAILS OF THE PREPARATION WORKS  
sc. 1/200

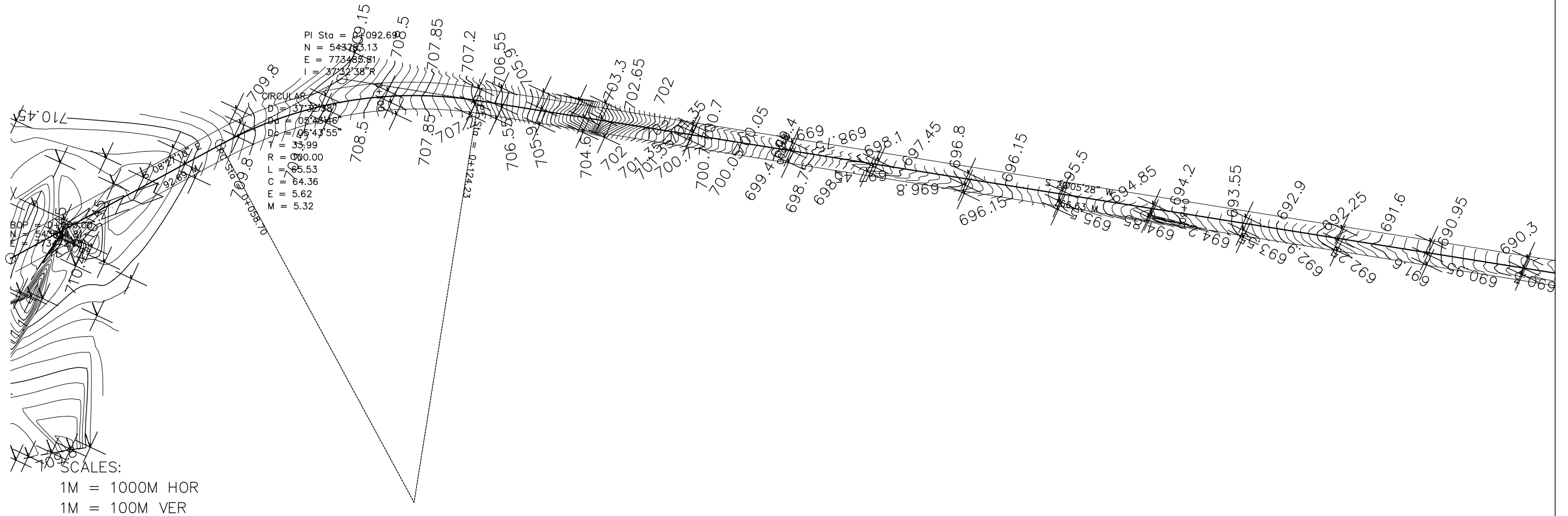


DETAILS OF THE SCOUR PROTECTION  
sc. 1/50

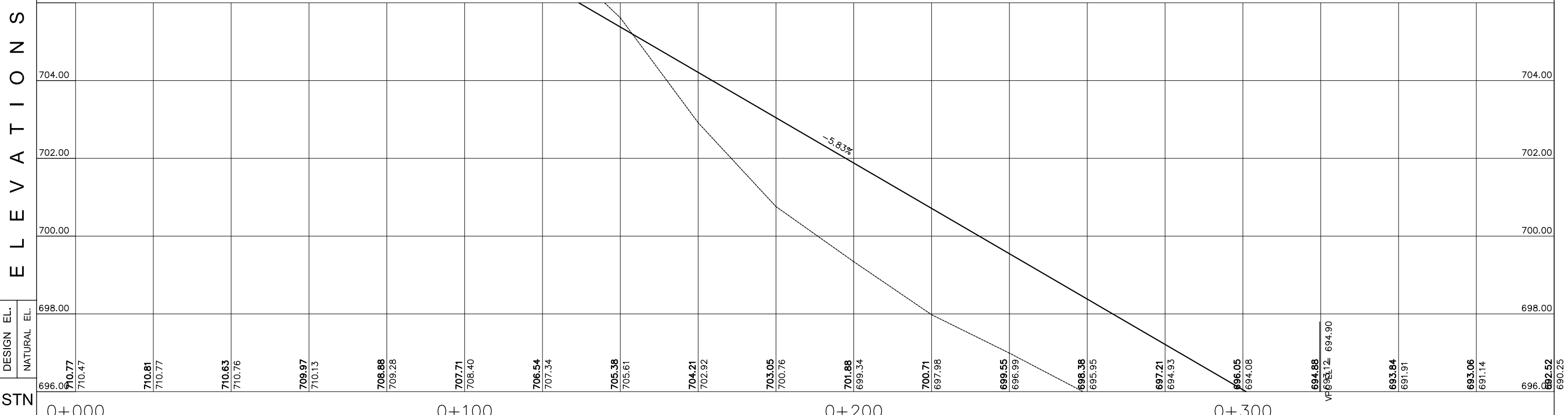
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	DWG. NO.	
 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p>		MARIDI - EMBAI ACCESS ROAD			<p>05</p>	
			SHEET CONTENT:				
			DOUBLE CELL BOX CULVERT DETAILS				
				DWG. Scale: AS SHOWN			
				DATE: FEBRUARY 2023		SHEET 1 OF 1 SHEETS	



REFERENCE POINTS			
	EASTING	NORTHING	ELEVATION
BM 1	773473.750	543861.230	711.000
BM 2	773490.730	543777.930	709.150
BM 3	773305.950	543464.240	689.160
BM 4	773346.730	543249.290	696.940
BM 5	773391.730	542777.290	712.000
BM 6	773396.730	542526.290	715.380
BM 7	773406.420	542382.190	712.510
BM 8	773422.730	542208.290	717.570
B.M 9	773473.750	542086.230	717.000
BM 10	773515.730	541910.290	712.000
BM 11	773522.730	541792.290	714.000
BM 12	773525.750	541613.230	715.000
BM 13	773515.750	541499.230	713.000
BM 14	773508.750	541247.230	708.000
BM 15	773544.750	541156.230	704.000
BM 16	773568.750	541030.230	701.000
BM 17	773707.730	540849.290	701.990
BM 19	773763.130	540617.690	695.710
BM 22	773897.010	539981.410	705.030
BM 23	773932.740	539639.200	713.140
BM 24	773931.730	539274.290	728.860
BM 25	774023.750	538717.230	726.000
BM 27	774259.750	537836.230	733.000
BM 28	774561.750	537560.230	736.000
BM 29	774575.600	537569.890	736.000
BM 30	775454.620	536479.230	736.070
BM 31	775805.440	535822.890	758.070
BM 32	775974.730	535639.290	766.000
BM 33	776180.600	535367.790	765.300
BM 34	776591.750	534862.230	754.000
BM 35	777492.350	534242.910	765.750
BM 36	777616.880	534161.690	761.470
BM 37	778240.910	533502.300	742.440
BM 38 A	779142.820	532327.100	745.680
BM 38 B	779137.700	532331.970	745.950
BM 39	779423.790	531839.570	744.730
BM 40	779664.750	531621.230	751.000
BM 41	779710.360	531075.620	755.000
BM 42	780238.310	529538.650	752.630
BM 43	780403.360	528970.620	766.840
BM 44	780394.360	527293.620	767.460
BM 45	780217.360	526876.620	774.560

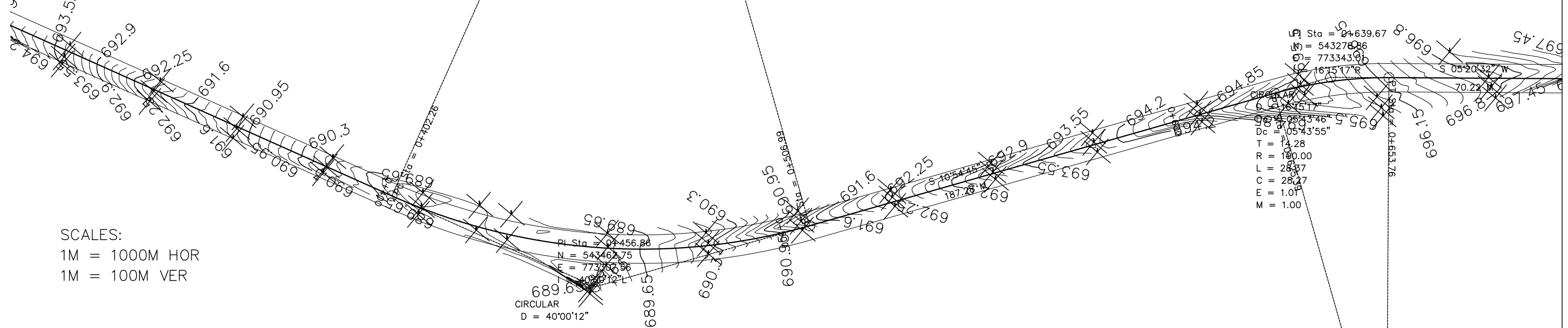
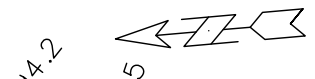


ELEVATIONS



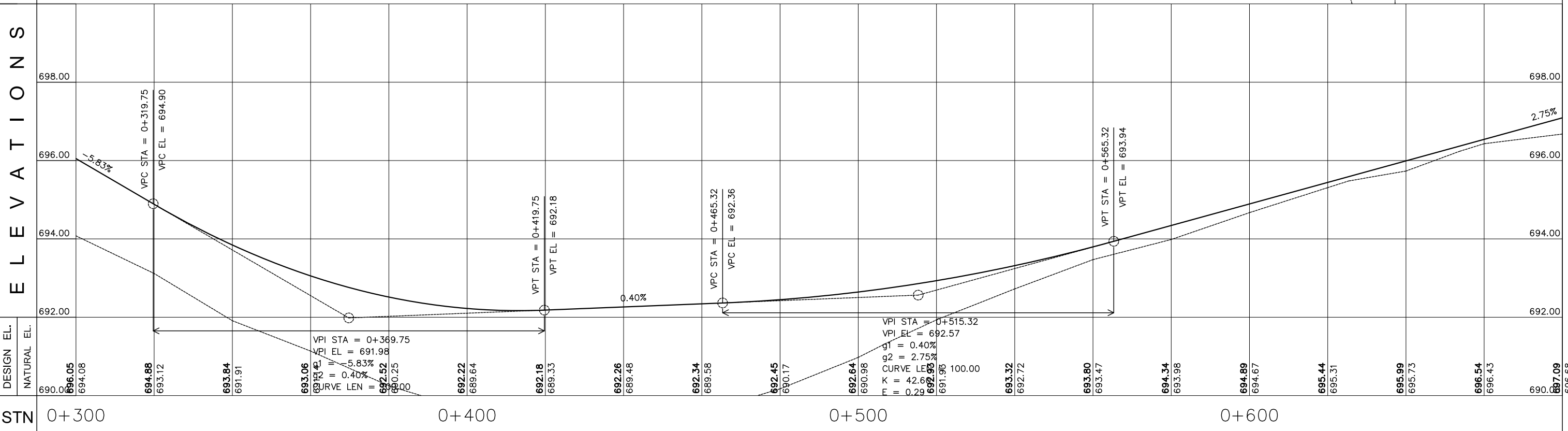
STN 0+000 0+100 0+200 0+300



EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
			MARIDI - EMBAI - ACCESS ROAD			01
ACTED South Sudan Western Equatoria State The Republic of South Sudan	Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan		SHEET CONTENT: PLAN AND PROFILE		DWG. Scale:	AS SHOWN
			STATION LIMITS:		DATE:	FEBRUARY 2023



SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p>	<p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:				
			STATION LIMITS				
				DWG. Scale:	AS SHOWN		
				DATE:	FEBRUARY 2023		





**ACTED**

ACTED South Sudan  
Western Equatoria State  
The Republic of South Sudan

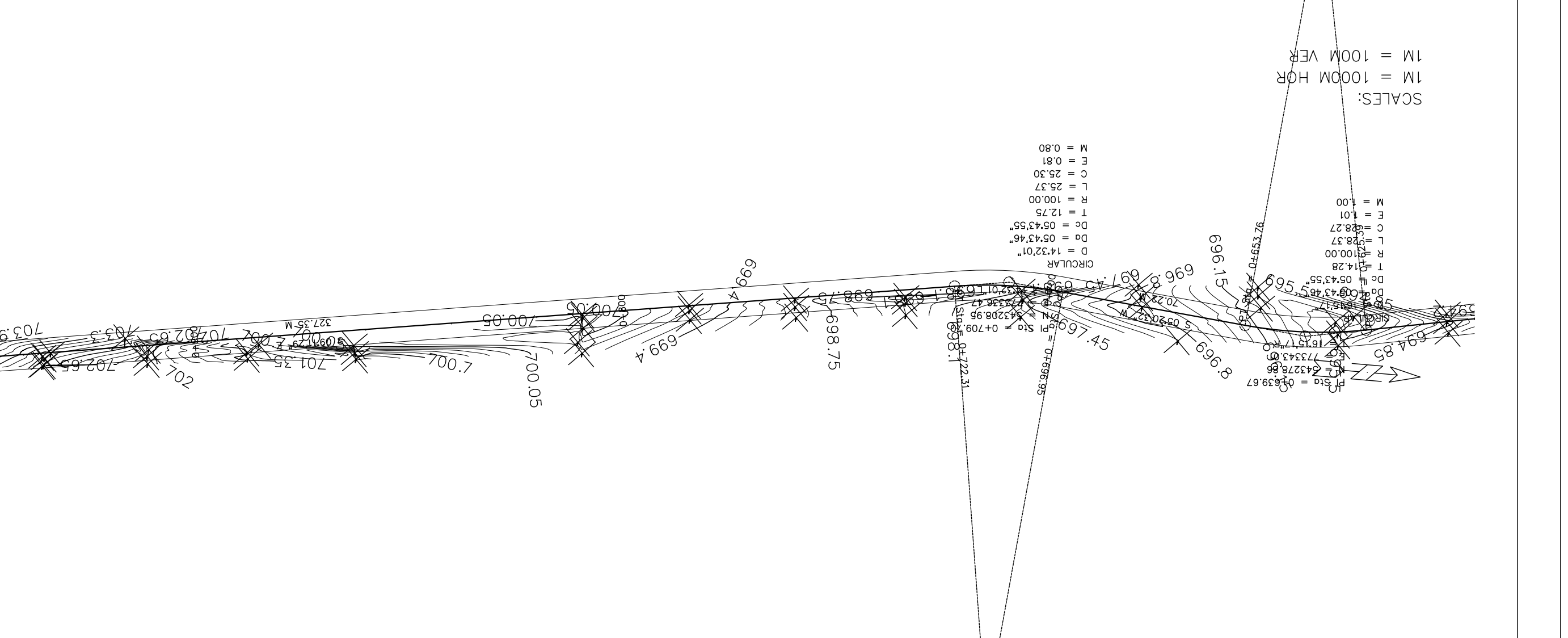
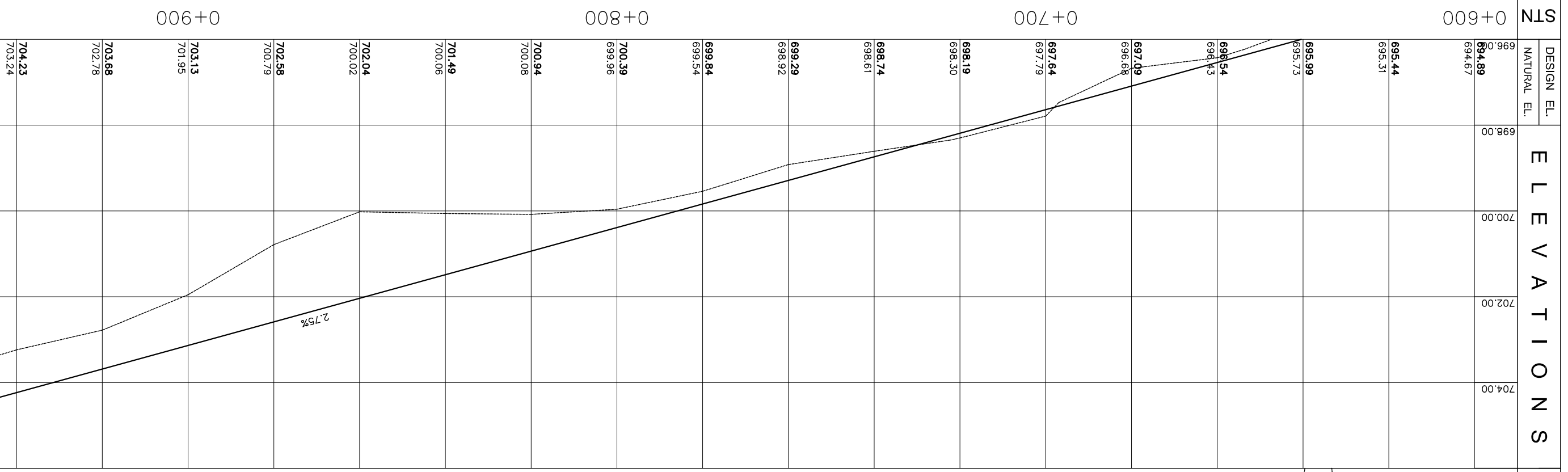


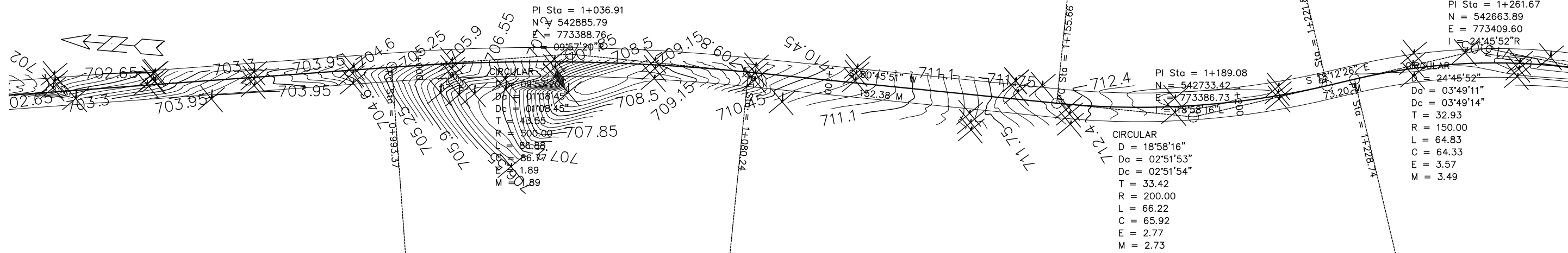
LADDER  
CONSULTANCY | CONSTRUCTION | IT SOLUTIONS  
GENERAL TRADING  
Juba, The Republic of South Sudan  
Email: ladderl@gmail.com  
Tel: +211920105359

EMPLOYER:  
DESIGNED/PREPARED BY:  
APPROVED BY:  
PROJECT TITLE:  
REVISIONS:  
CAD/DRAWN BY:  
SHEET NO.

DATE: FEBRUARY 2023  
DWG. Scale: AS SHOWN

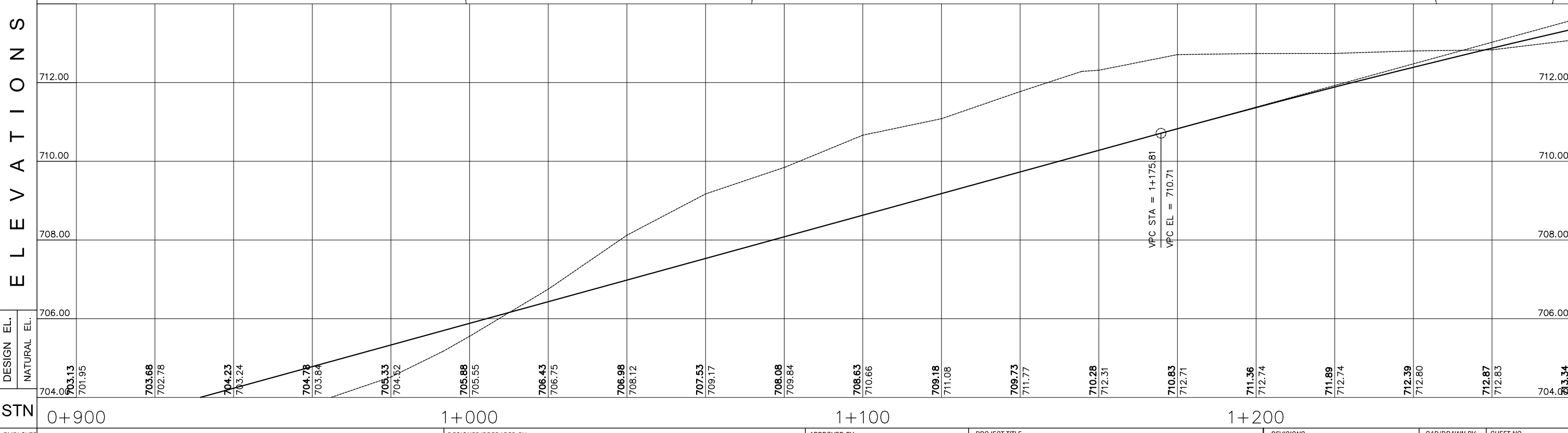
STATION LIMITS  
PLAN AND PROFILE  
SHEET CONTENT:  
MARI DI - EMBAI - ACCESS ROAD







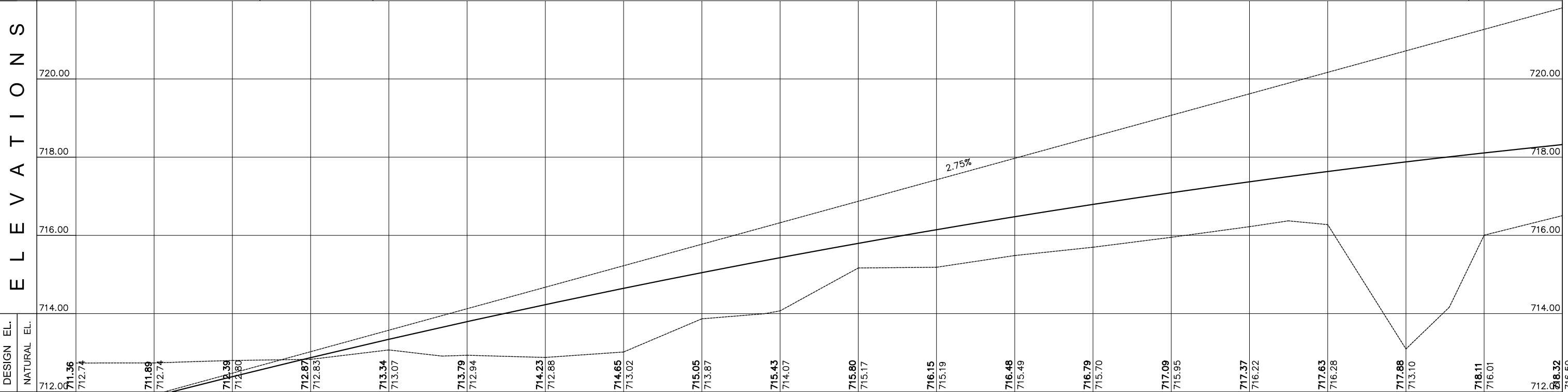
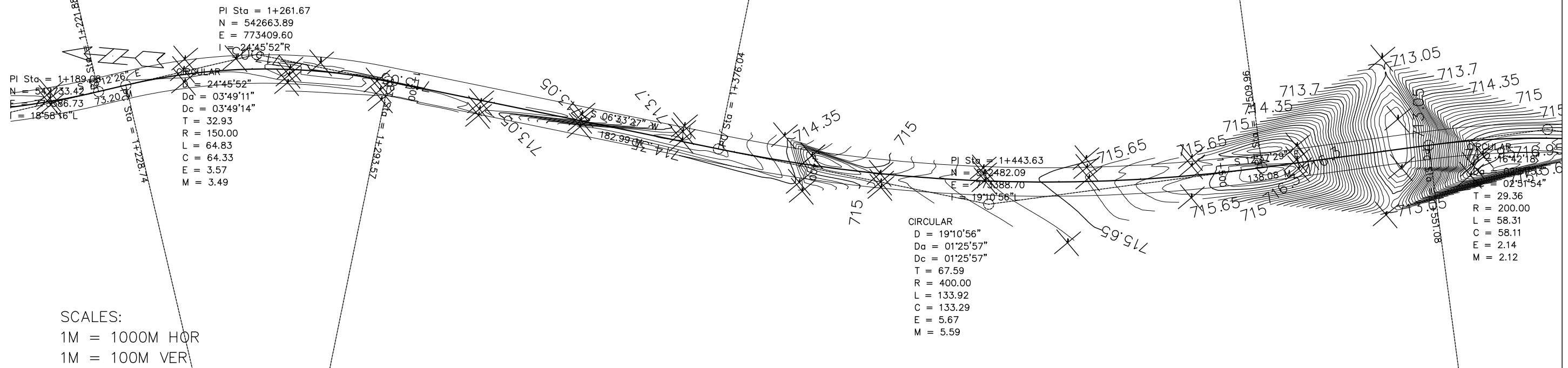
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



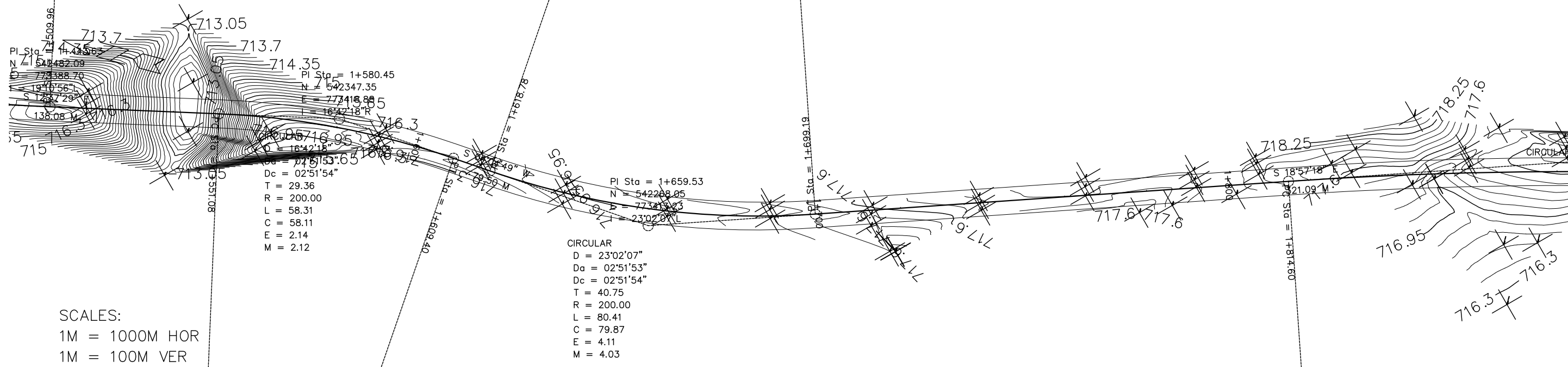
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704.00	703.68	0+920
704.00	702.78	0+930
704.00	704.23	0+940
704.00	703.24	0+950
704.00	704.78	0+960
704.00	703.84	0+970
704.00	705.33	0+980
704.00	704.52	0+990
704.00	705.88	1+000
704.00	705.55	1+010
704.00	706.43	1+020
704.00	706.75	1+030
704.00	706.98	1+040
704.00	708.12	1+050
704.00	707.53	1+060
704.00	709.17	1+070
704.00	708.08	1+080
704.00	709.84	1+090
704.00	708.63	1+100
704.00	710.66	1+110
704.00	709.18	1+120
704.00	711.08	1+130
704.00	709.73	1+140
704.00	711.77	1+150
704.00	710.28	1+160
704.00	712.31	1+170
704.00	710.83	1+180
704.00	712.71	1+190
704.00	711.36	1+200
704.00	712.74	1+210
704.00	711.89	1+220
704.00	712.74	1+230
704.00	712.39	1+240
704.00	712.80	1+250
704.00	712.87	1+260
704.00	712.83	1+270
704.00	713.34	1+280
704.00	713.07	1+290

EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
 ACTED South Sudan Western Equatoria State The Republic of South Sudan	 LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING	Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan	MARIDI - EMBAI - ACCESS ROAD			
SHEET CONTENT:				DWG. Scale: AS SHOWN		
STATION LIMITS:				DATE: FEBRUARY 2023		



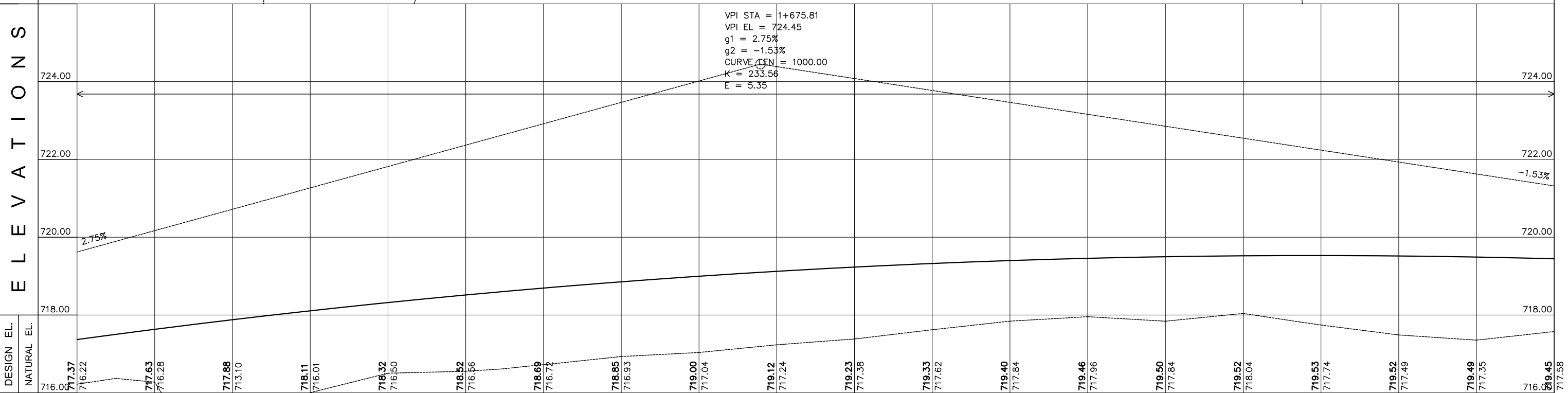
STN	1+200	1+300	1+400	1+500
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ACTED South Sudan Western Equatoria State The Republic of South Sudan	LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan	APPROVED BY:	PROJECT TITLE: MARIDI - EMBAI - ACCESS ROAD	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
			SHEET CONTENT: PLAN AND PROFILE			DWG. Scale: AS SHOWN
			STATION LIMITS			DATE: FEBRUARY 2023


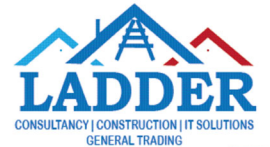


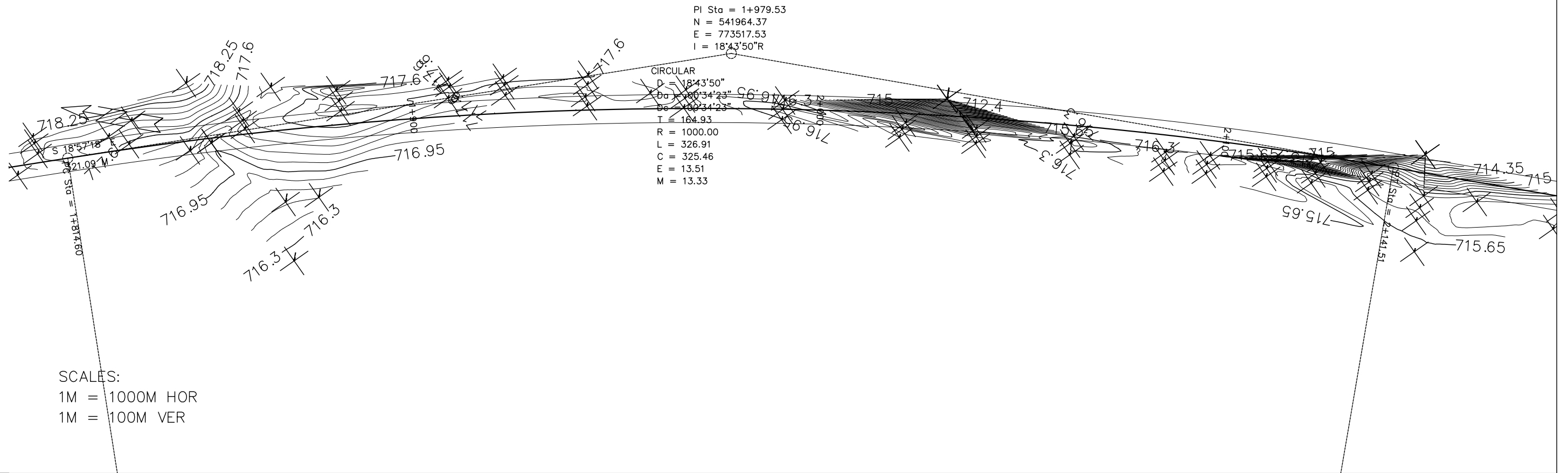
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



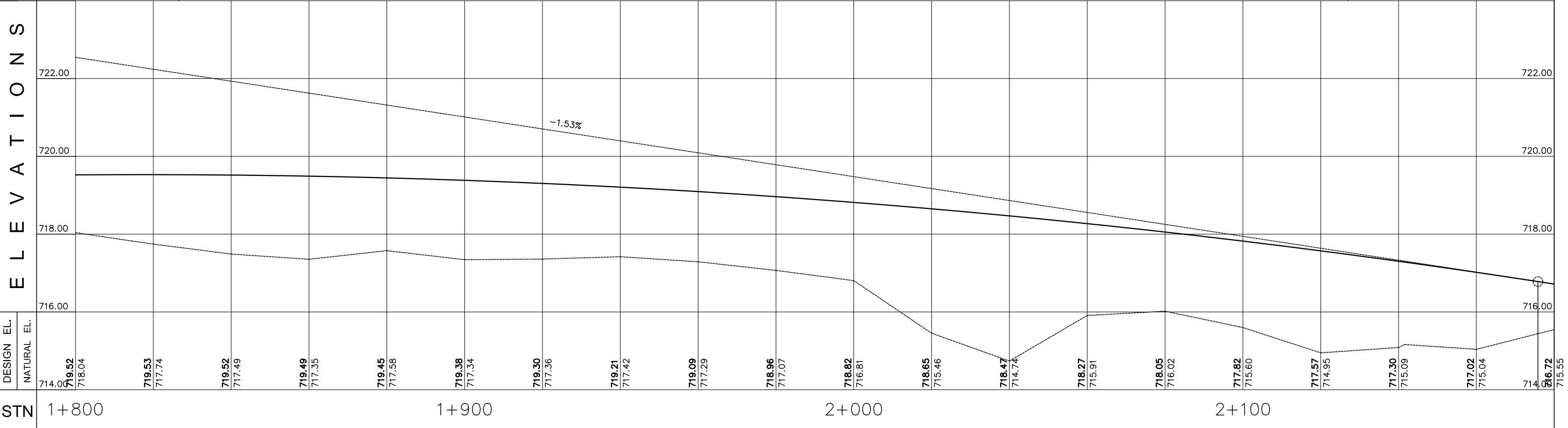
STN	1+500	1+600	1+700	1+800
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EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.		
 ACTED South Sudan Western Equatoria State The Republic of South Sudan	 LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING	Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan	MARIDI - EMBAI - ACCESS ROAD					
			SHEET CONTENT:				DWG. Scale:	AS SHOWN
			STATION LIMITS				DATE:	FEBRUARY 2023



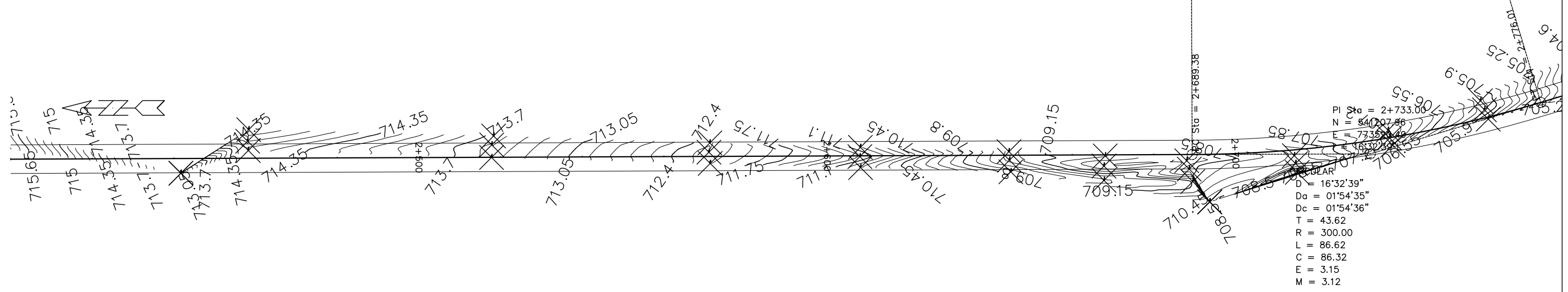
SCALES:  
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 1M = 100M VER

ELEVATIONS



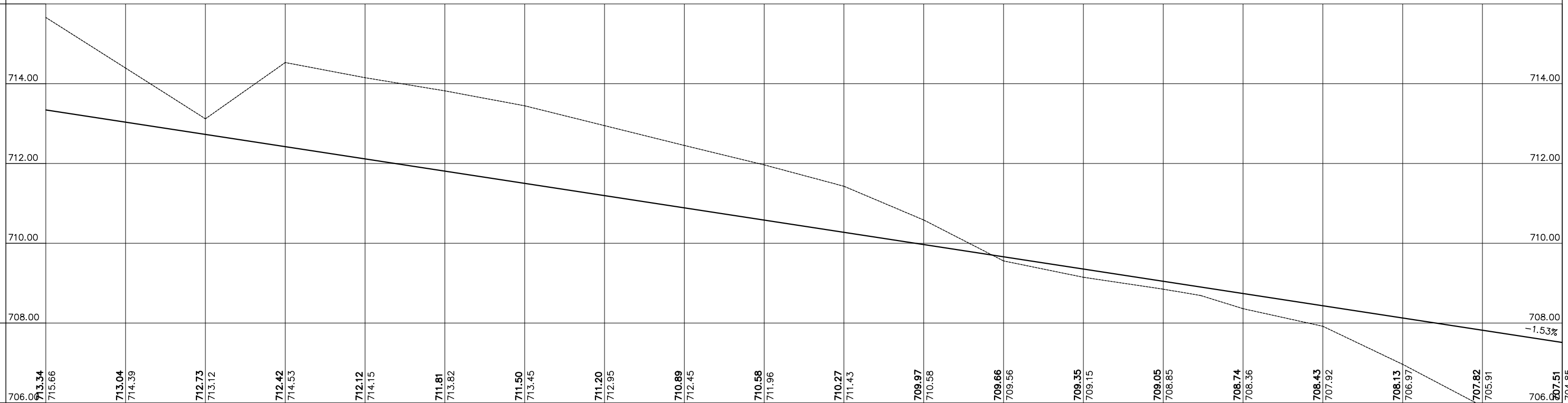
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.		
<p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	<p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p>	<p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD					
			SHEET CONTENT:				DWG. Scale:	AS SHOWN
			STATION LIMITS				DATE:	FEBRUARY 2023





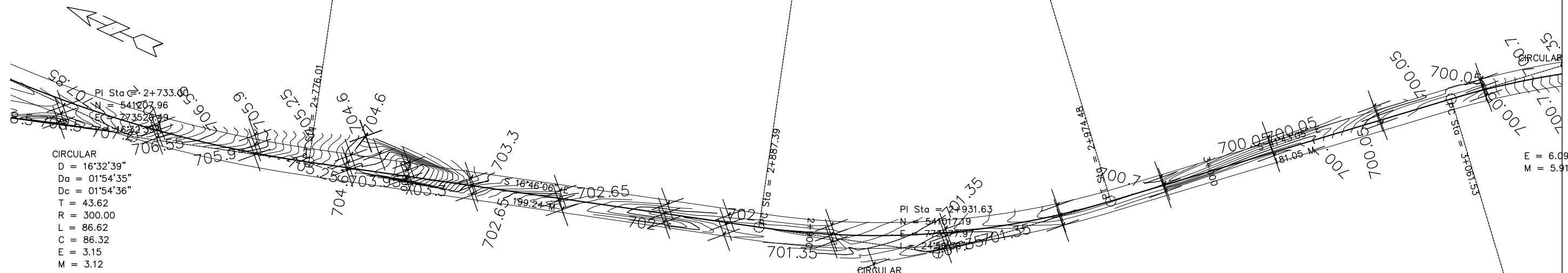
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E L E V A T I O N S



STN	2+400	2+500	2+600	2+700
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<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	<p>PROJECT TITLE:</p> <p>MARIDI - EMBAI - ACCESS ROAD</p>	<p>REVISIONS:</p>	<p>CAD/DRAWN BY:</p>	<p>SHEET NO.</p>
			<p>SHEET CONTENT:</p> <p>PLAN AND PROFILE</p>	<p>DWG. Scale:</p> <p>AS SHOWN</p>	<p>DATE:</p> <p>FEBRUARY 2023</p>	



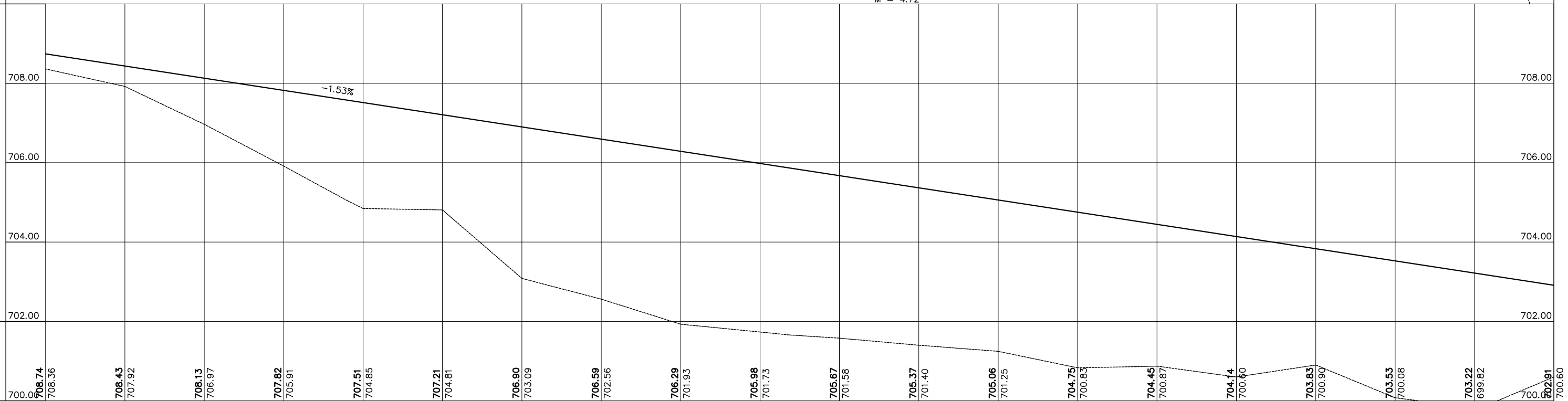
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 Da = 01°54'35"  
 Dc = 01°54'36"  
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 R = 300.00  
 L = 86.62  
 C = 86.32  
 E = 3.15  
 M = 3.12

SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

CIRCULAR  
 D = 24°56'58"  
 Da = 02°51'53"  
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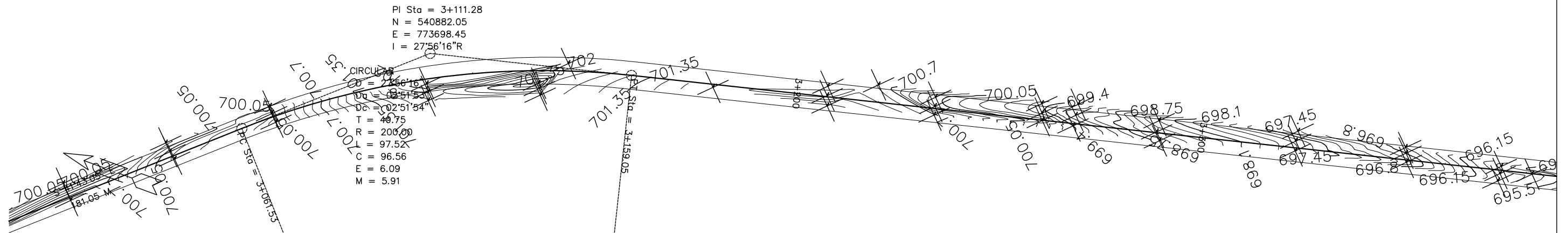
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ELEVATIONS



DESIGN EL.	NATURAL EL.	STN
708.74	708.36	2+700
708.43	707.92	2+710
708.13	706.97	2+720
707.82	705.91	2+730
707.51	704.85	2+740
707.21	704.81	2+750
706.90	703.09	2+760
706.59	702.56	2+770
706.29	701.93	2+780
705.98	701.73	2+790
705.67	701.58	2+800
705.37	701.40	2+810
705.06	701.25	2+820
704.75	700.83	2+830
704.45	700.87	2+840
704.14	700.60	2+850
703.83	700.90	2+860
703.53	700.08	2+870
703.22	699.82	2+880
702.91	700.00	2+890
702.60	700.60	2+900

<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
			MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS:						
			DWG. Scale:	AS SHOWN		
			DATE:	FEBRUARY 2023		

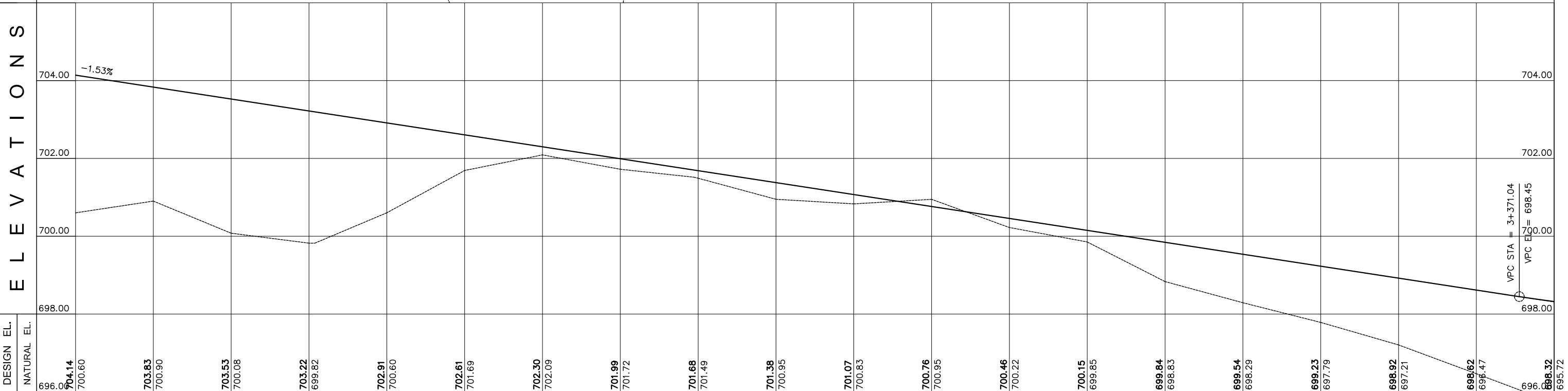


PI Sta = 3+111.28  
 N = 540882.05  
 E = 773698.45  
 I = 27°56'16\"/>

CIRCULAR  
 ΔI = 27°56'16\"/>

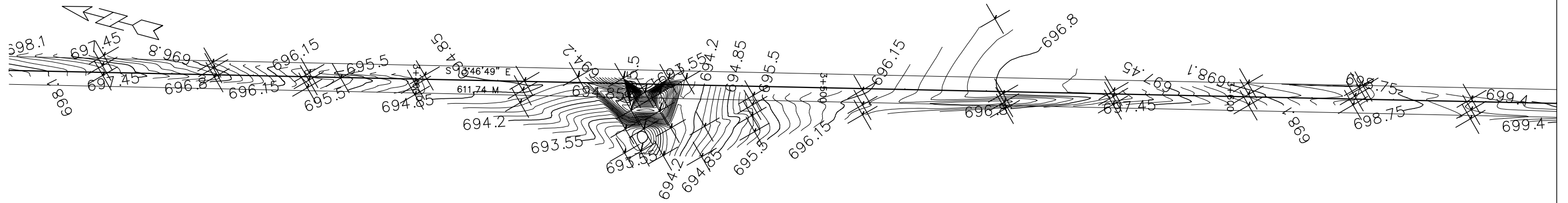
SCALES:  
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ELEVATIONS



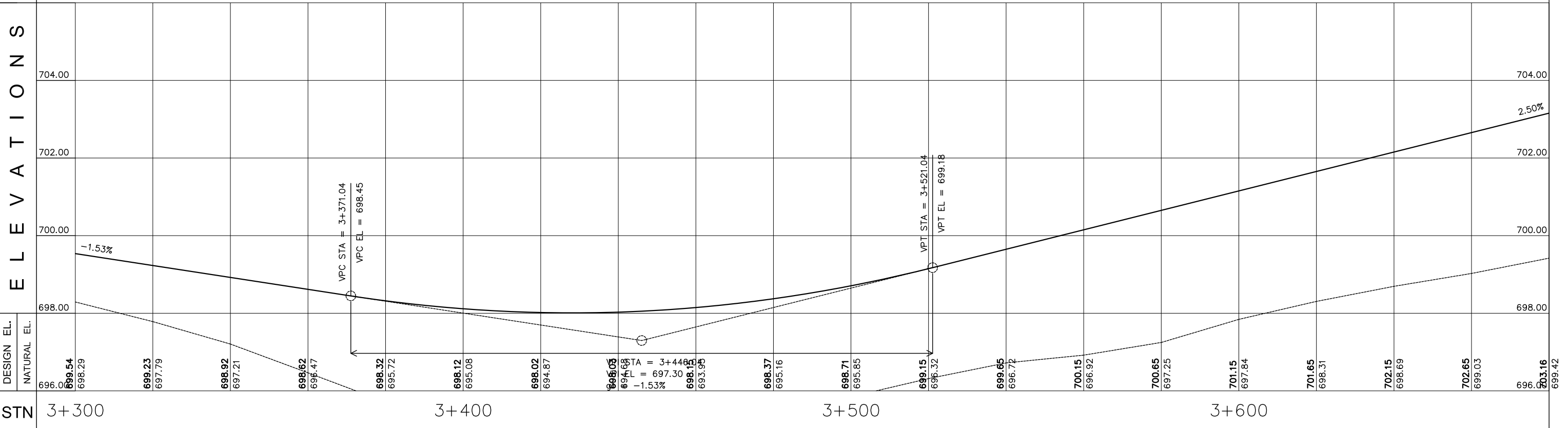
DESIGN EL.	NATURAL EL.	STN
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704.14	704.14	
700.60	700.60	
703.83	703.83	3+100
700.90	700.90	
703.53	703.53	
700.08	700.08	
703.22	703.22	
699.82	699.82	
702.91	702.91	
700.60	700.60	
702.61	702.61	
701.69	701.69	
702.30	702.30	3+200
702.09	702.09	
701.99	701.99	
701.72	701.72	
701.68	701.68	
701.49	701.49	
701.38	701.38	
700.95	700.95	
701.07	701.07	
700.83	700.83	
700.76	700.76	
700.95	700.95	
700.46	700.46	
700.22	700.22	
700.15	700.15	
699.85	699.85	
699.84	699.84	
698.83	698.83	
699.54	699.54	
698.29	698.29	
699.23	699.23	
697.79	697.79	
698.92	698.92	
697.21	697.21	
698.62	698.62	
696.47	696.47	
698.32	698.32	3+300
695.72	695.72	



<p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	<p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p>	Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
			MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:		DWG. Scale:	AS SHOWN
			PLAN AND PROFILE		DATE:	FEBRUARY 2023
STATION LIMITS:						

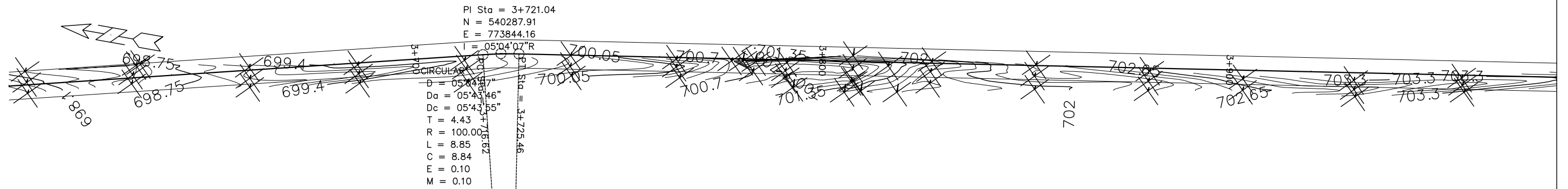


SCALES:  
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 1M = 100M VER

ELEVATIONS

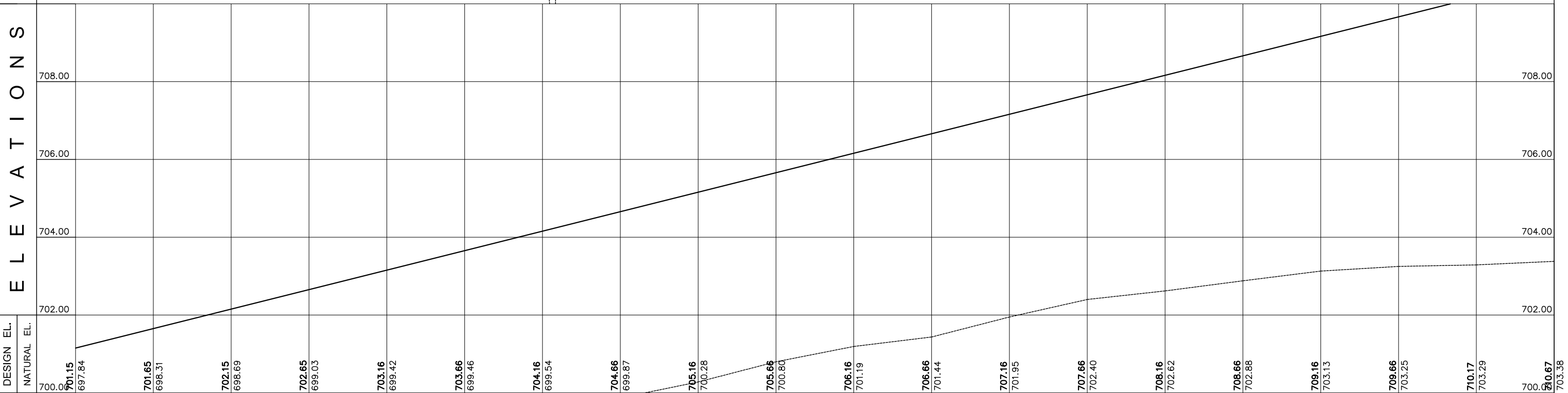


EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>		MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			STATION LIMITS			
				DWG. Scale:	AS SHOWN	
				DATE:	FEBRUARY 2023	





SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

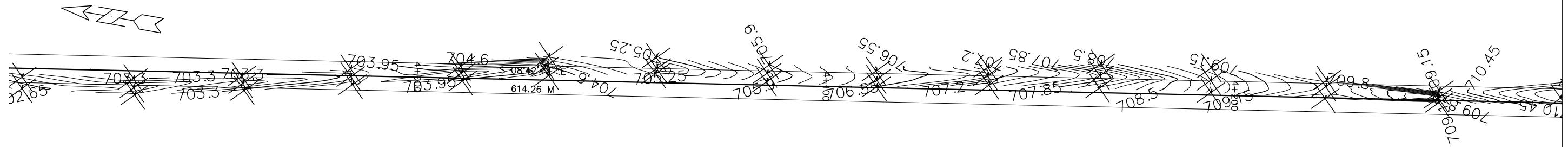
E L E V A T I O N S



DESIGN EL.	NATURAL EL.	STN
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701.65	698.31	
702.15	698.69	
702.65	699.03	
703.16	699.42	
703.66	699.46	
704.16	699.54	
704.66	699.87	
705.16	700.28	
705.66	700.80	
706.16	701.19	
706.66	701.44	
707.16	701.95	
707.66	702.40	
708.16	702.62	
708.66	702.88	
709.16	703.13	
709.66	703.25	
710.17	703.29	
710.67	703.38	3+900

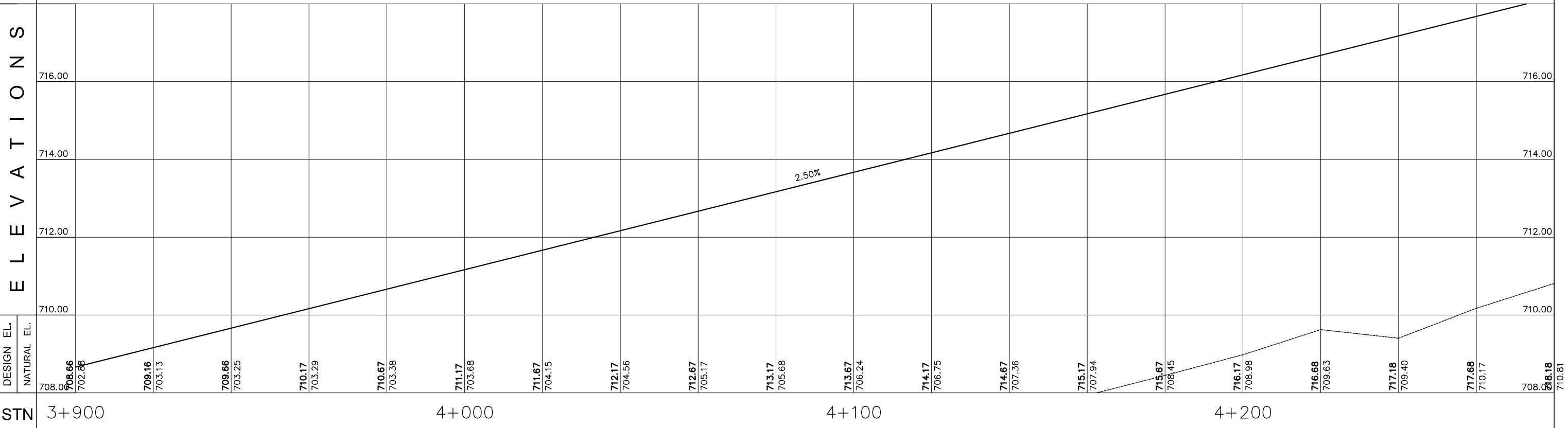
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
 ACTED South Sudan Western Equatoria State The Republic of South Sudan	 LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING	Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan	MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:			DWG. Scale:	AS SHOWN
			STATION LIMITS			DATE:	FEBRUARY 2023





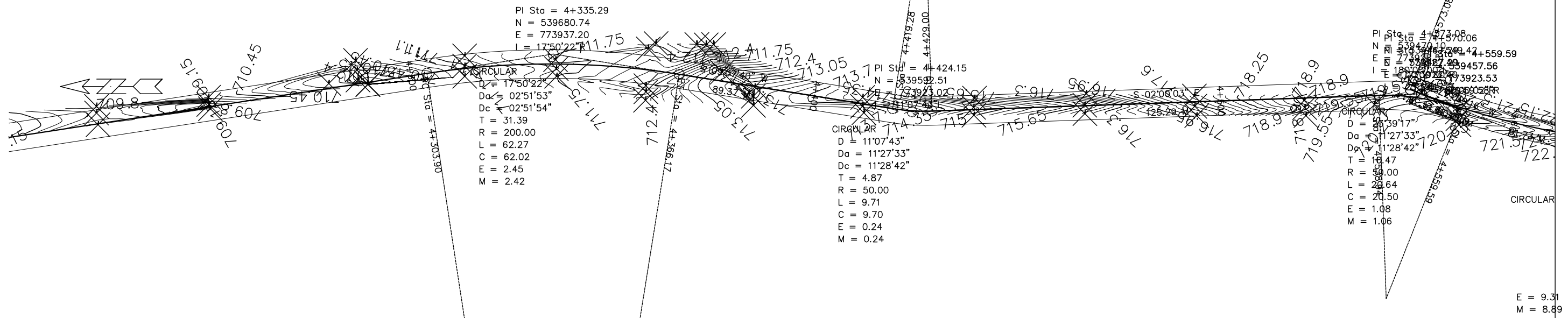


SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E L E V A T I O N S

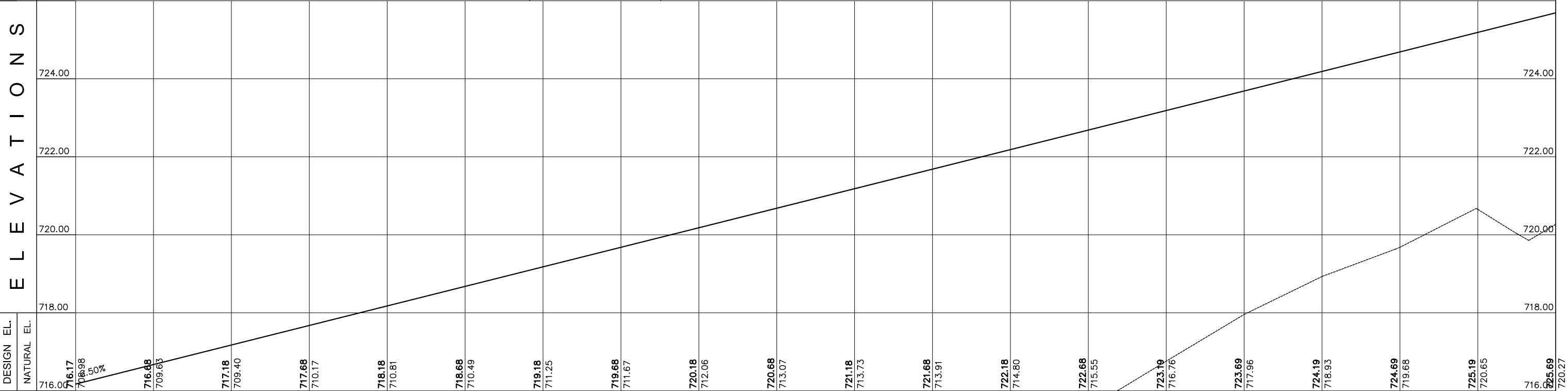


EMPLOYER:		DESIGNED/PREPARED BY:		APPROVED BY:		PROJECT TITLE:		REVISIONS:		CAD/DRAWN BY:		SHEET NO.	
 ACTED South Sudan Western Equatoria State The Republic of South Sudan		 LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING		Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan		MARIDI - EMBAI - ACCESS ROAD				DWG. Scale: AS SHOWN DATE: FEBRUARY 2023			
						SHEET CONTENT:							
						STATION LIMITS							





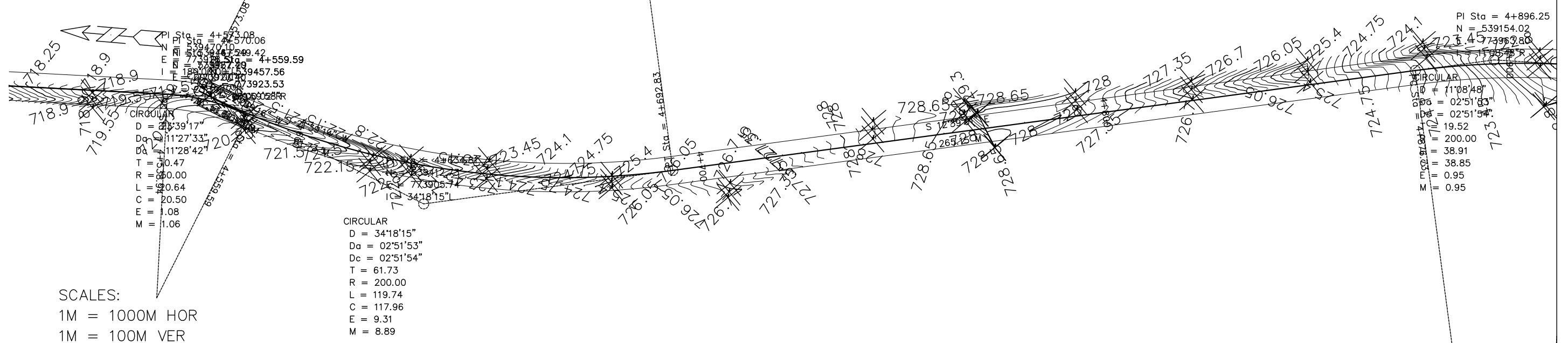
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS

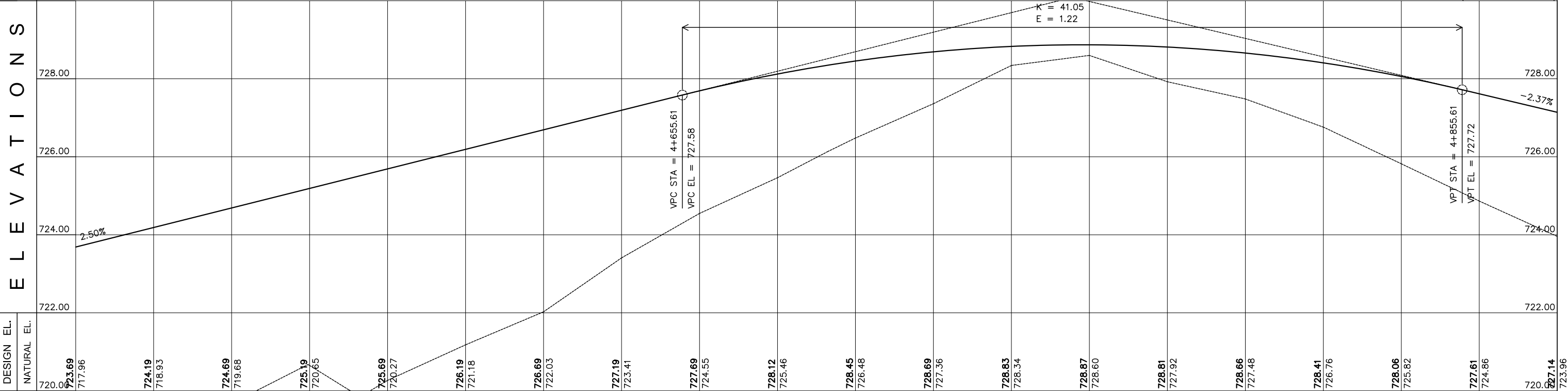


STN	4+200	4+300	4+400	4+500
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EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p>		MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
			STATION LIMITS			
					DWG. Scale:	AS SHOWN
					DATE:	FEBRUARY 2023

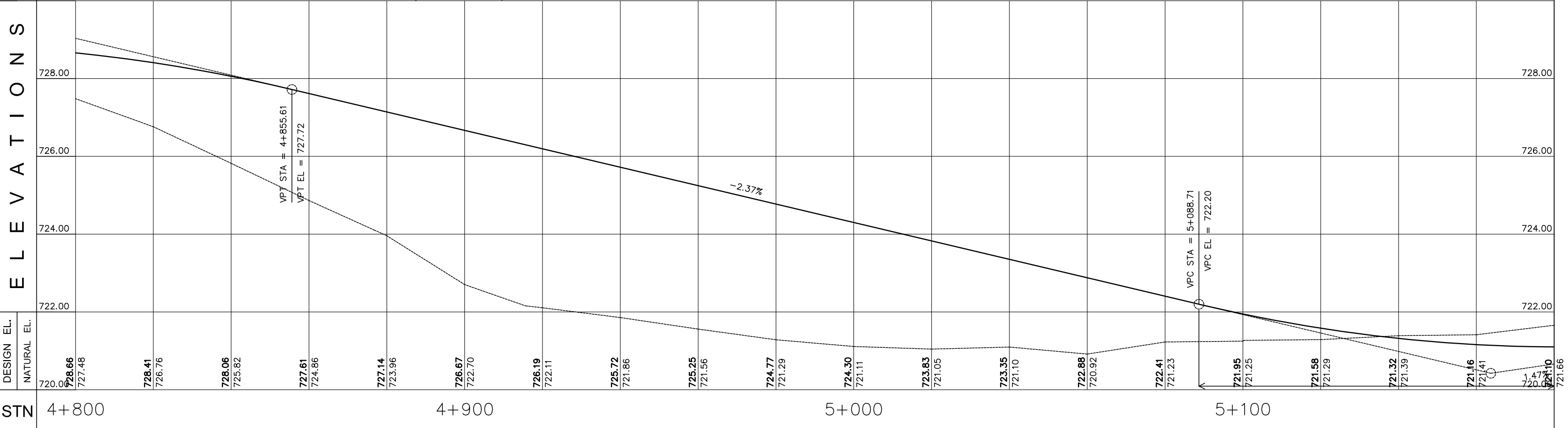
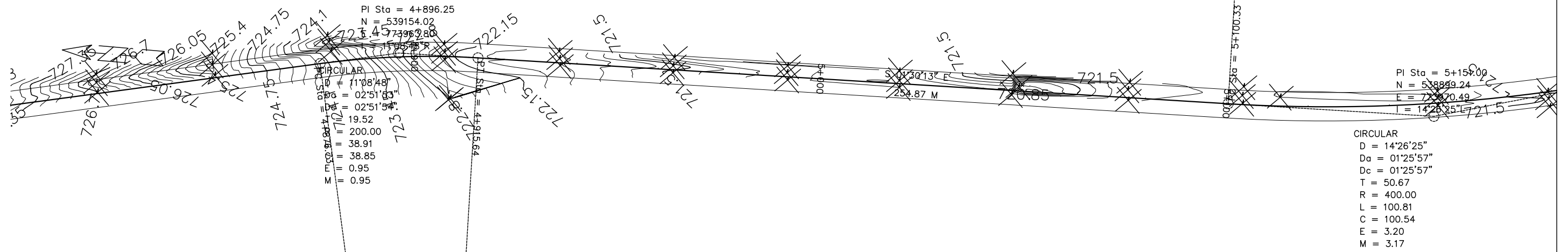


ELEVATIONS

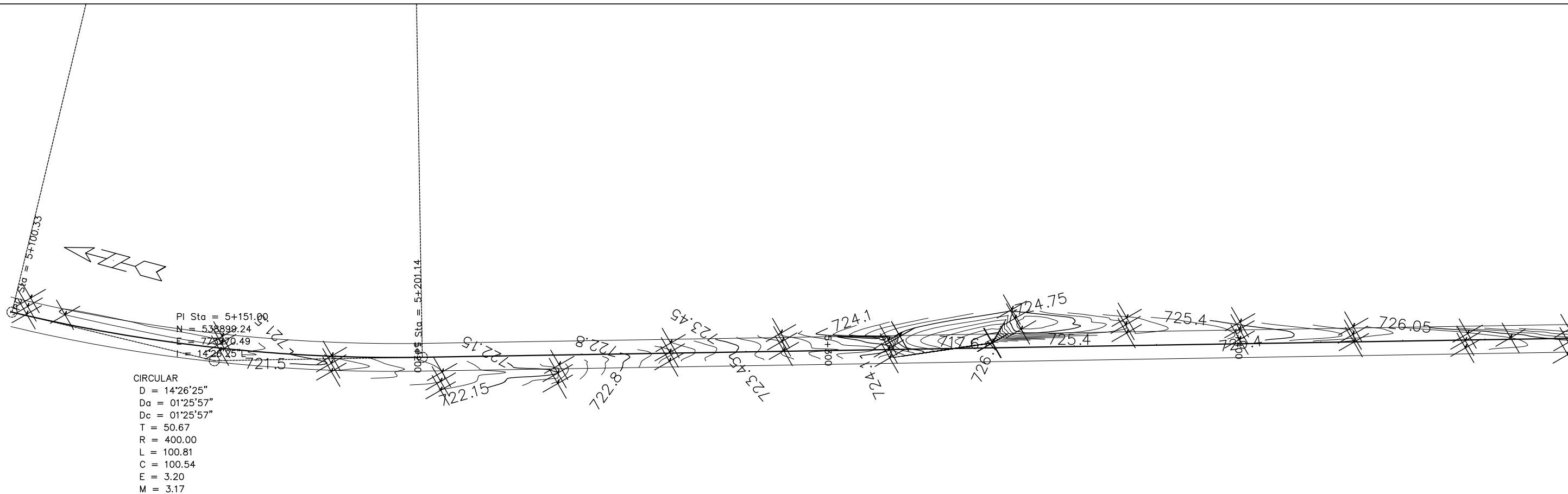


DESIGN EL.	NATURAL EL.	STN
723.69	717.96	4+500
724.19	718.93	4+550
724.69	719.68	4+600
725.19	720.65	4+650
725.69	720.27	4+700
726.19	721.18	4+750
726.69	722.03	4+800
727.19	723.41	4+850
727.69	724.55	4+896.25
728.12	725.46	
728.45	726.48	
728.69	727.36	
728.83	728.34	
728.87	728.60	
728.81	727.92	
728.66	727.48	
728.41	726.76	
728.06	725.82	
727.61	724.86	
727.14	723.96	

EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>		MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS					DWG. Scale:	AS SHOWN
					DATE:	FEBRUARY 2023

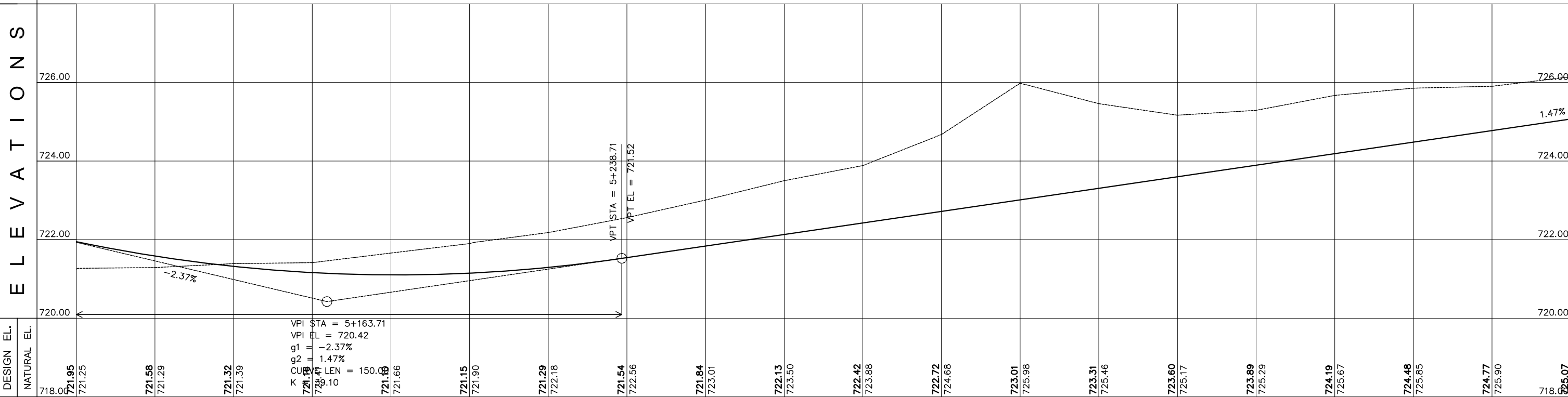


EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.		
 <b>ACTED</b> ACTED South Sudan Western Equatoria State The Republic of South Sudan	 <b>LADDER</b> CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING	Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan	MARIDI - EMBAI - ACCESS ROAD					
			SHEET CONTENT:				DWG. Scale:	AS SHOWN
			STATION LIMITS				DATE:	FEBRUARY 2023



SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

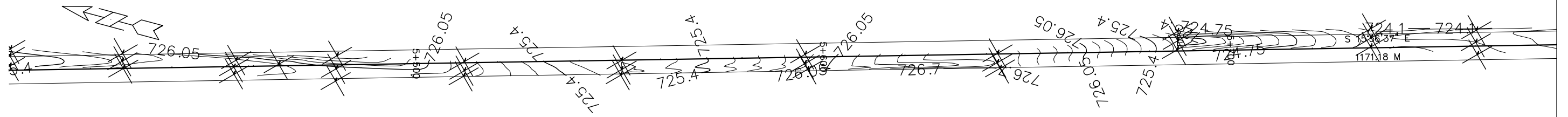
ELEVATIONS



DESIGN EL.	718.00	721.95	721.25	721.58	721.29	721.32	721.39	721.19	721.10	721.66	721.15	721.90	721.29	722.18	721.54	722.56	721.84	723.01	722.13	723.50	722.42	723.88	722.72	724.68	723.01	725.98	723.31	725.46	723.60	725.17	723.89	725.29	724.19	725.67	724.48	725.85	724.77	725.90	718.00	725.07	726.14			
NATURAL EL.																																												
STN	5+100										5+200									5+300																								

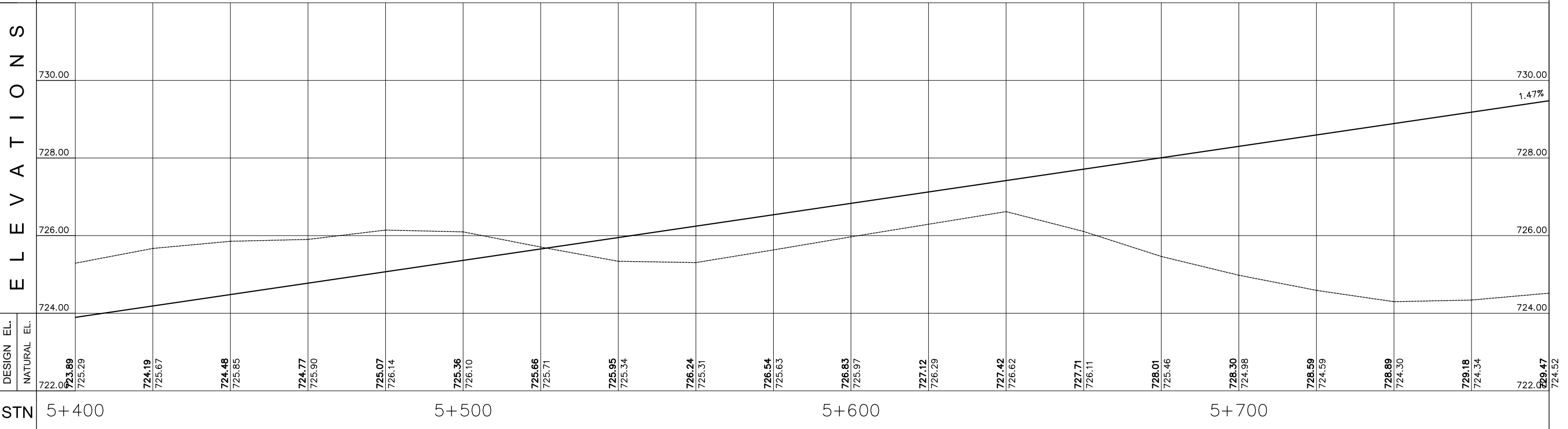
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
ACTED South Sudan Western Equatoria State The Republic of South Sudan	LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan		MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			STATION LIMITS			
				DWG. Scale:	AS SHOWN	
				DATE:	FEBRUARY 2023	





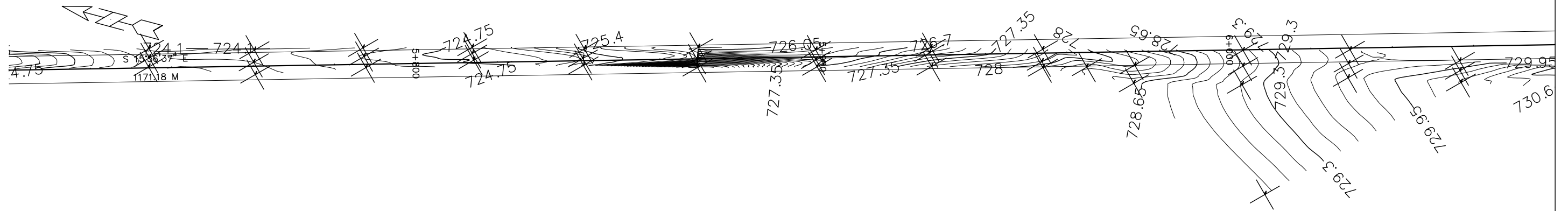


SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E L E V A T I O N S

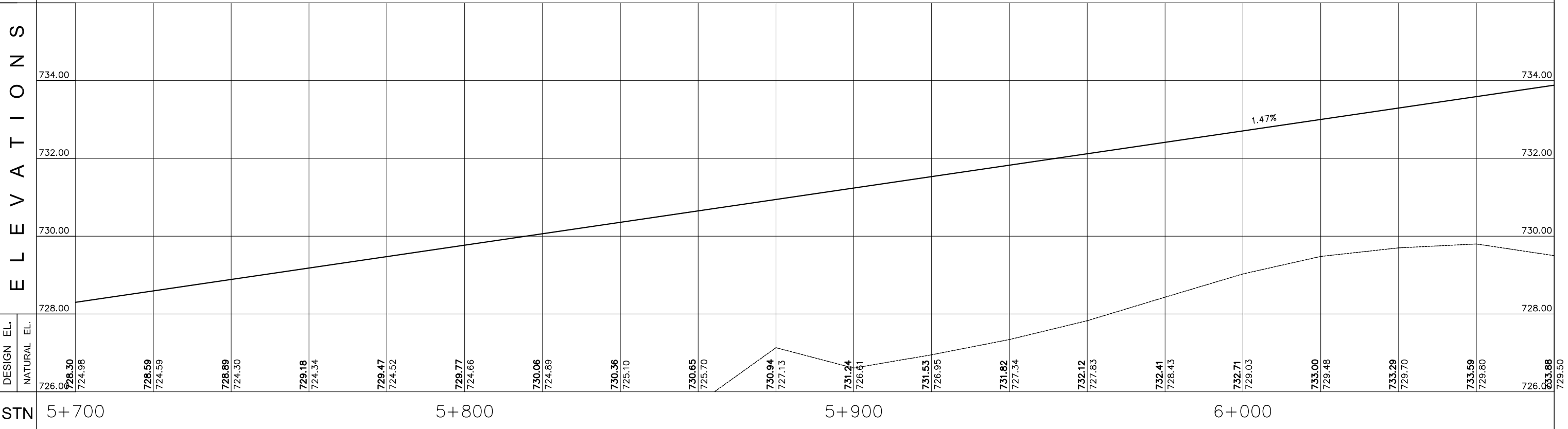


EMPLOYER:		DESIGNED/PREPARED BY:		APPROVED BY:		PROJECT TITLE:		REVISIONS:		CAD/DRAWN BY:		SHEET NO.	
 ACTED South Sudan Western Equatoria State The Republic of South Sudan		 LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING		Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan		MARIDI - EMBAI - ACCESS ROAD							
						SHEET CONTENT:				DWG. Scale:		AS SHOWN	
						STATION LIMITS				DATE:		FEBRUARY 2023	

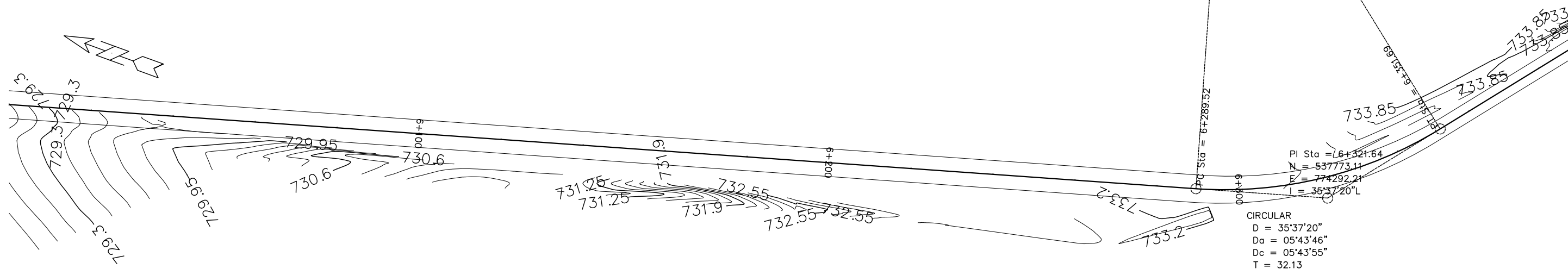


SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E L E V A T I O N S

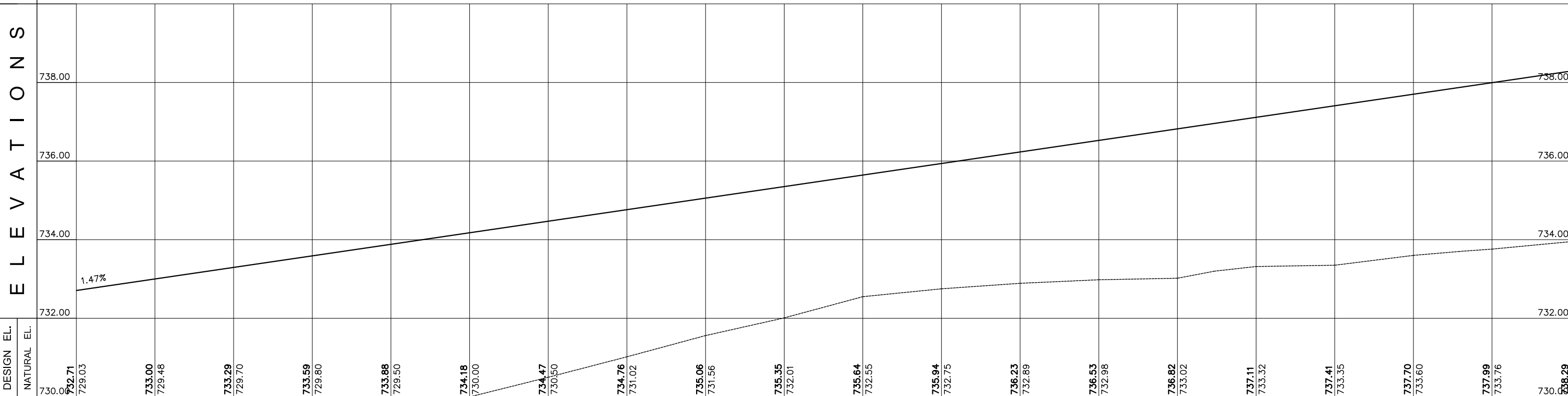


<p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	<p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p> <p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
			MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:		DWG. Scale:	AS SHOWN
			PLAN AND PROFILE		DATE:	FEBRUARY 2023
STATION LIMITS:						



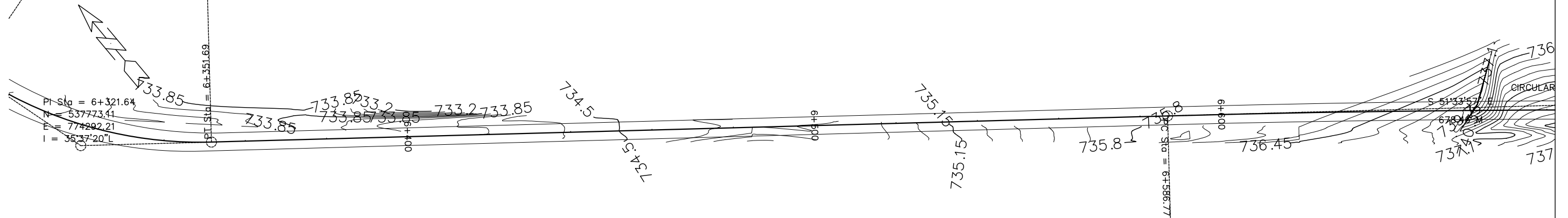
SCALES:  
 1M = 100M HOR  
 1M = 100M VER

E L E V A T I O N S



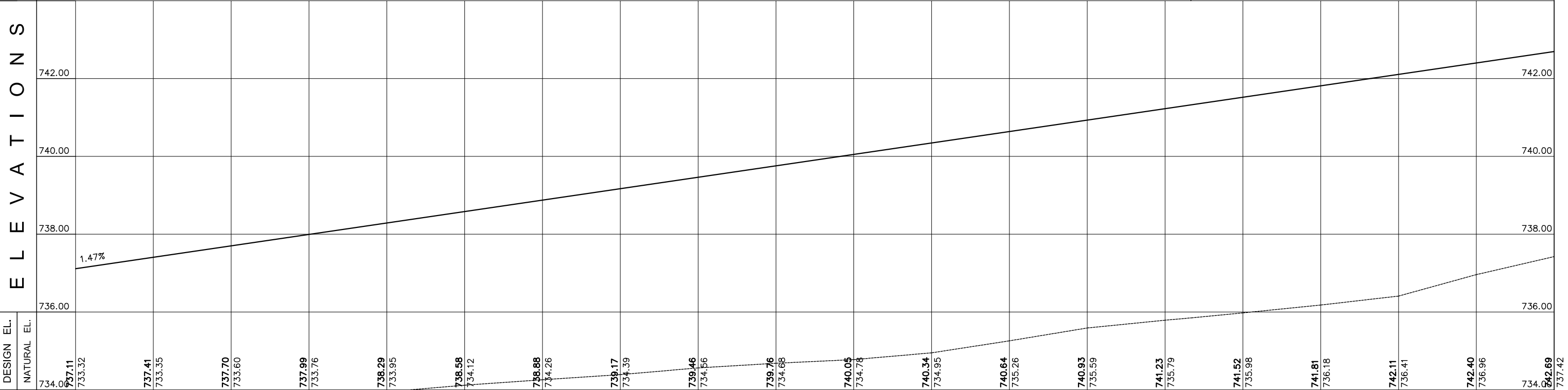
STN	6+000	6+100	6+200	6+300
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EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
ACTED South Sudan Western Equatoria State The Republic of South Sudan	LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan		MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS:					DWG. Scale:	AS SHOWN
					DATE:	FEBRUARY 2023





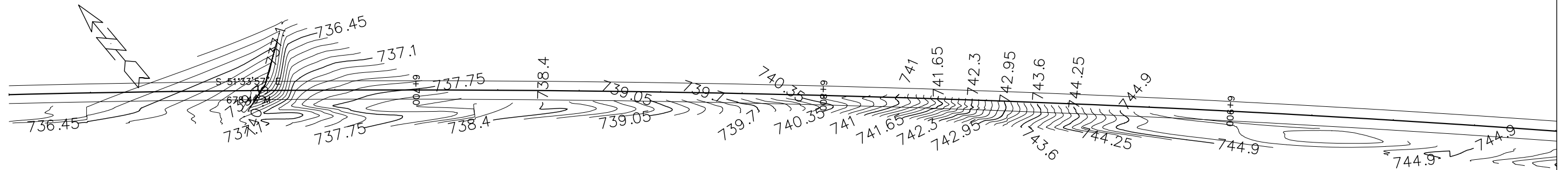
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



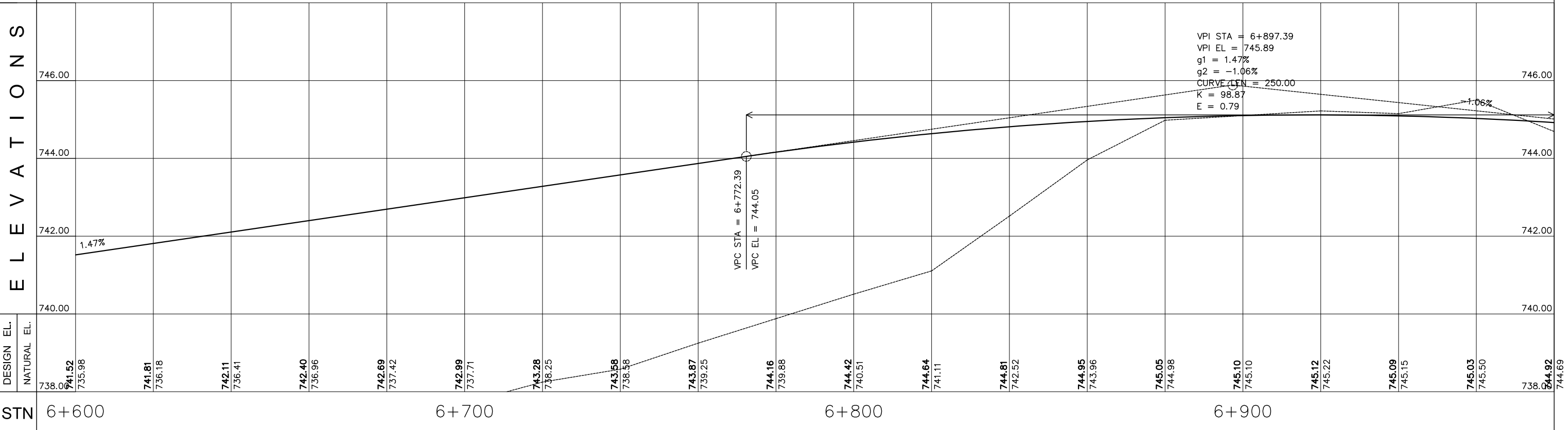
STN	6+300	6+400	6+500	6+600
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 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	<p>PROJECT TITLE: MARIDI - EMBAI - ACCESS ROAD</p> <p>SHEET CONTENT: PLAN AND PROFILE</p> <p>STATION LIMITS:</p>	<p>REVISIONS:</p>	<p>CAD/DRAWN BY:</p> <p>DWG. Scale: AS SHOWN</p> <p>DATE: FEBRUARY 2023</p>
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SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

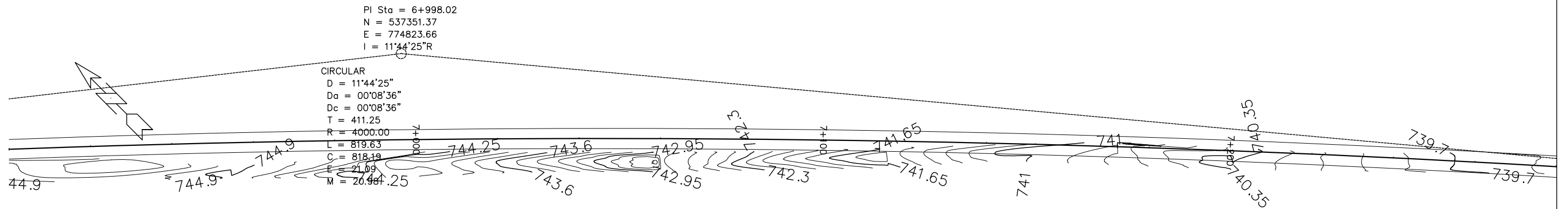
ELEVATIONS



VPI STA = 6+897.39  
 VPI EL = 745.89  
 g1 = 1.47%  
 g2 = -1.06%  
 CURVE LEN = 250.00  
 K = 98.87  
 E = 0.79

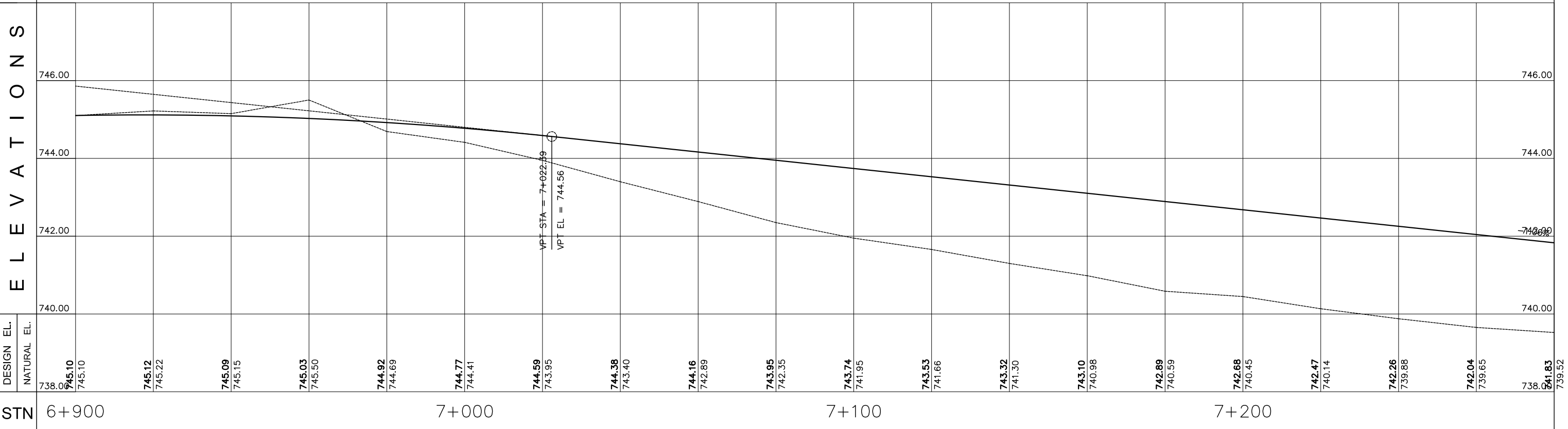
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p>	<p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:				
			PLAN AND PROFILE				
STATION LIMITS							
				DWG. Scale:	AS SHOWN		
				DATE:	FEBRUARY 2023		





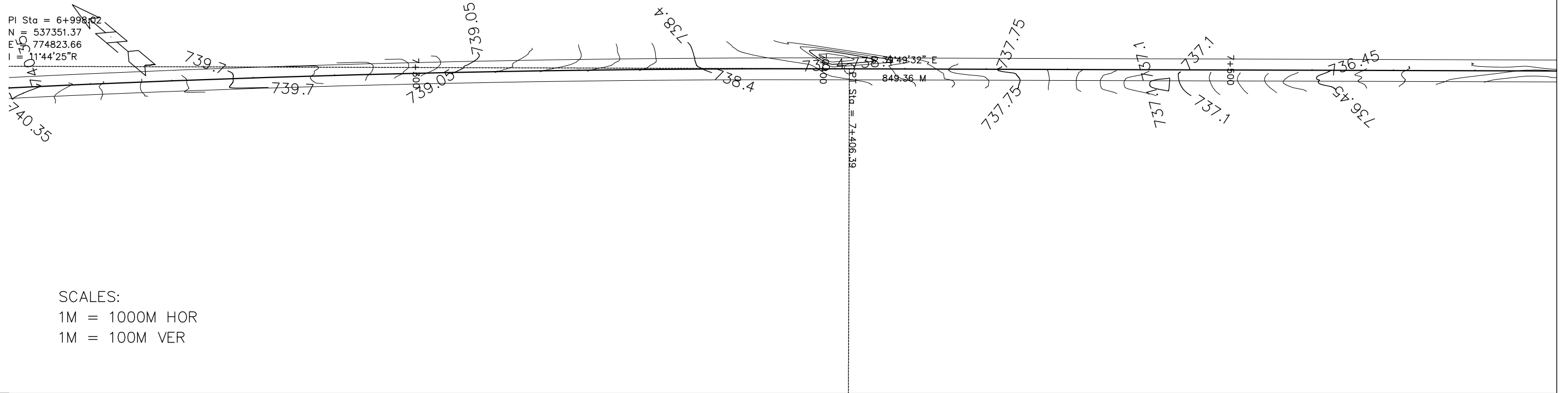
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



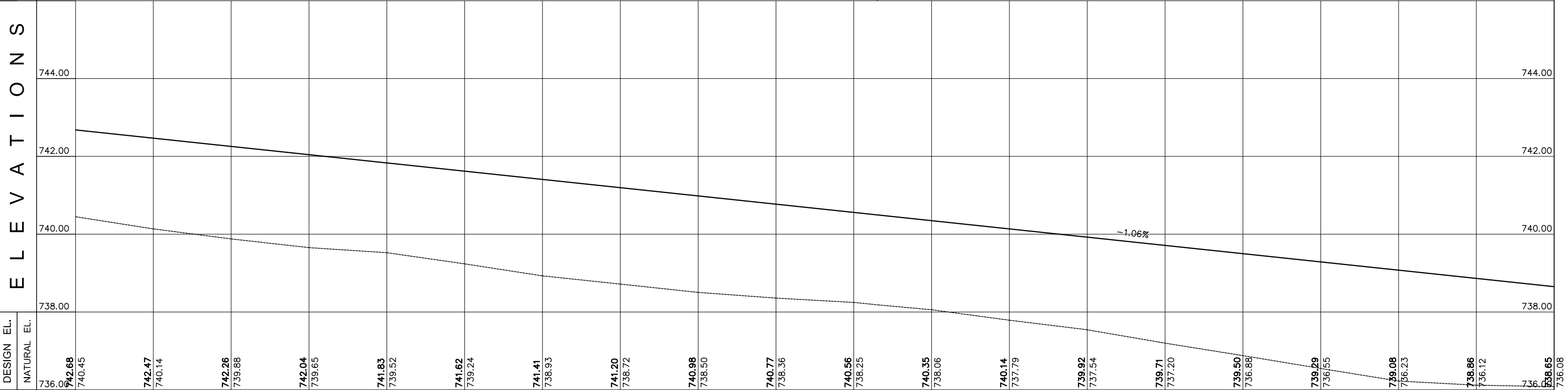
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
ACTED South Sudan Western Equatoria State The Republic of South Sudan	LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan		MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:			DWG. Scale:	AS SHOWN
			STATION LIMITS			DATE:	FEBRUARY 2023

PI Sta = 6+998.02  
 N = 537351.37  
 E = 774823.66  
 I = 11°44'25"R





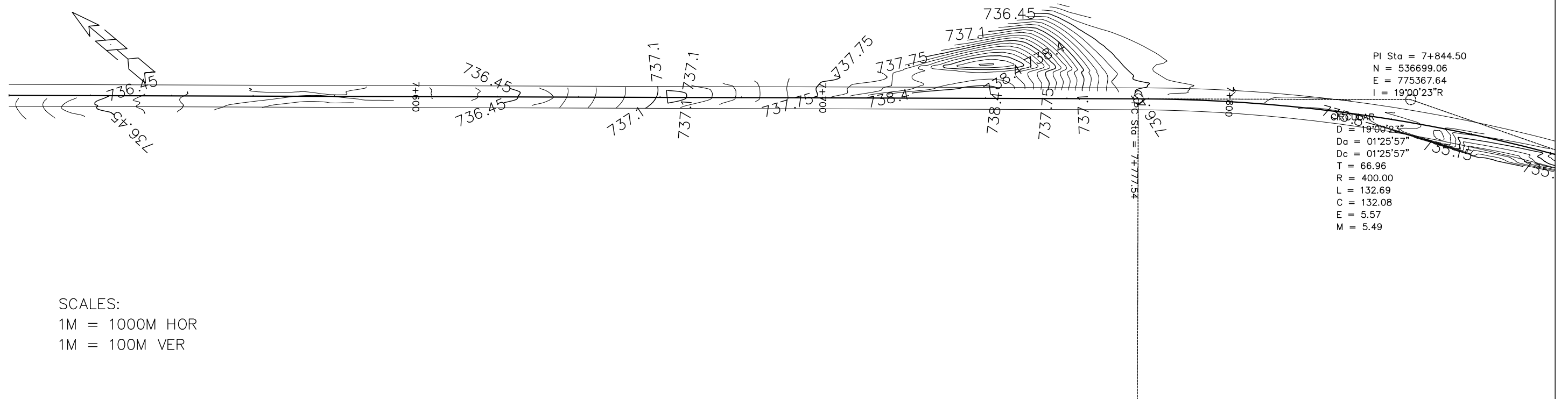
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



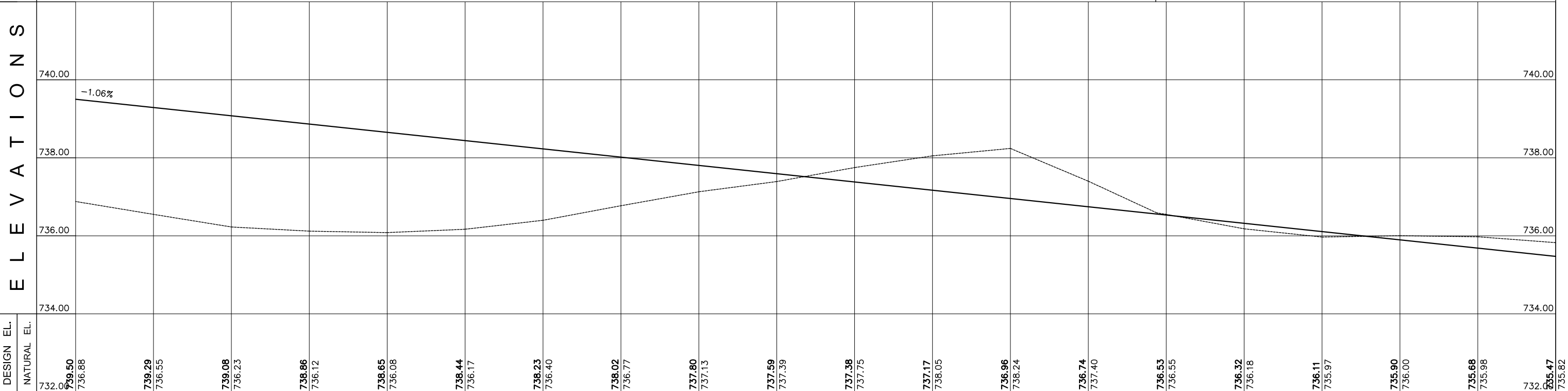
STN	7+200	7+300	7+400	7+500
DESIGN EL.	742.68	741.83	740.35	736.55
NATURAL EL.	736.00	739.52	738.06	736.00

EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p>	<p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS:					DWG. Scale:	AS SHOWN
					DATE:	FEBRUARY 2023



SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

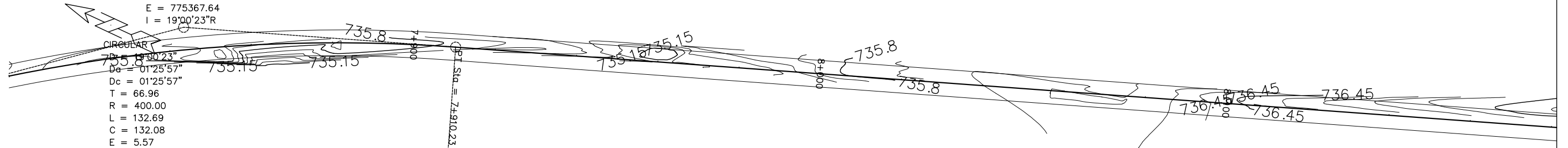
ELEVATIONS



STN	7+500	7+600	7+700	7+800
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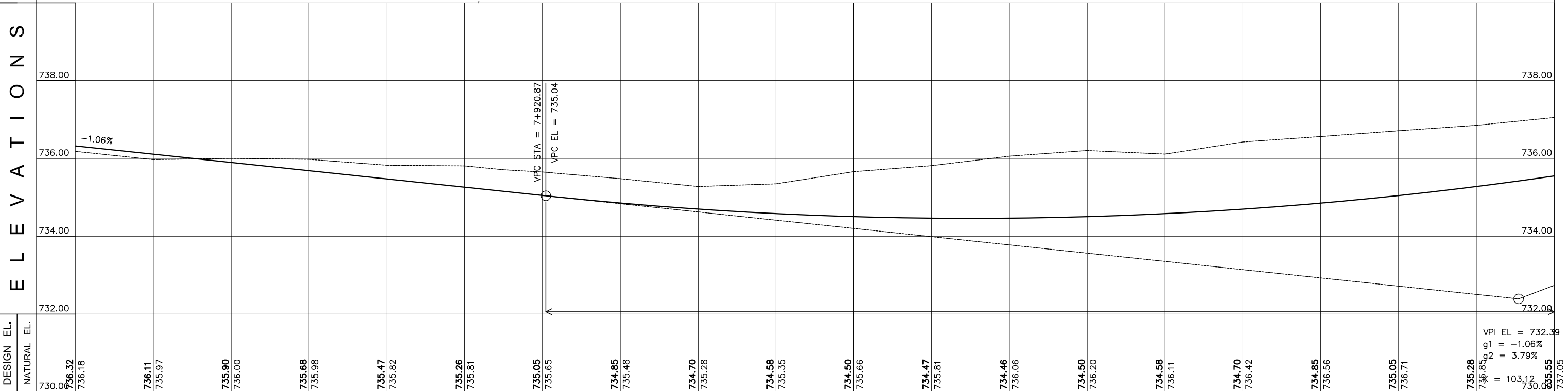
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
<p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	<p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p>	<p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:				
			PLAN AND PROFILE				
STATION LIMITS:							
					DWG. Scale:	AS SHOWN	
					DATE:	FEBRUARY 2023	

PI Sta = 7+844.50  
 N = 536699.06  
 E = 775367.64  
 I = 19°00'23"R



SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

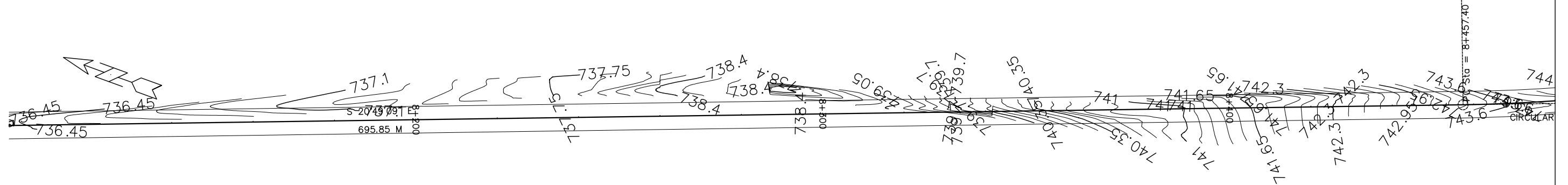
ELEVATIONS



DESIGN EL.	NATURAL EL.	STN
736.32	736.18	7+800
736.11	735.97	7+810
735.90	736.00	7+820
735.68	735.98	7+830
735.47	735.82	7+840
735.26	735.81	7+850
735.05	735.65	7+860
734.85	735.48	7+870
734.70	735.28	7+880
734.58	735.35	7+890
734.50	735.66	7+900
734.47	735.81	7+910
734.46	736.06	7+920
734.50	736.20	7+930
734.58	736.11	7+940
734.70	736.42	7+950
734.85	736.56	7+960
735.05	736.71	7+970
735.28	736.85	7+980
735.55	737.05	7+990

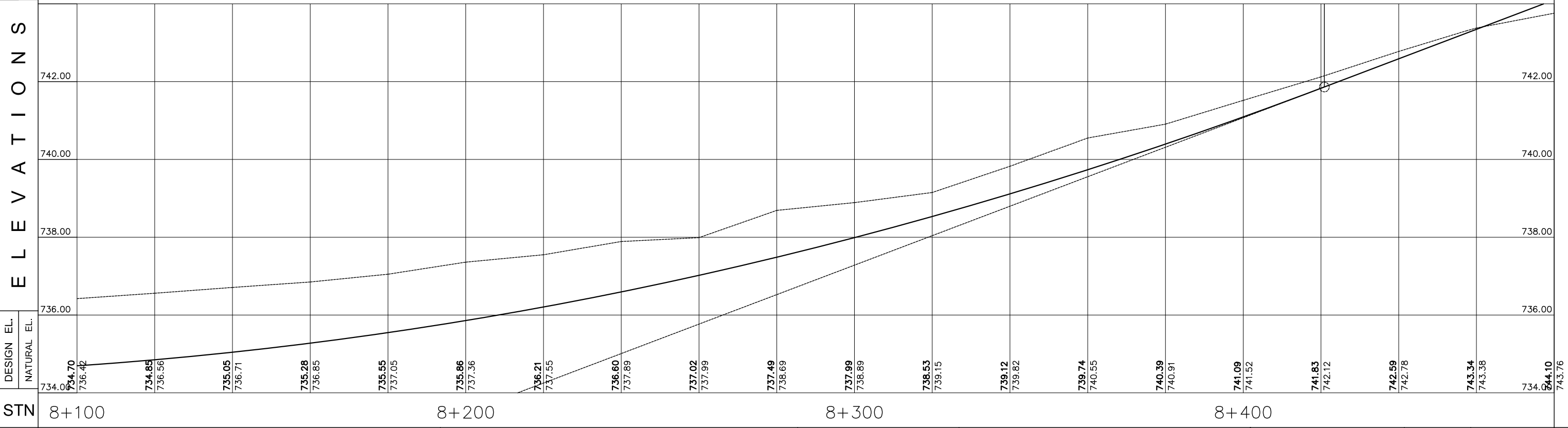
VPI EL = 732.39  
 g1 = -1.06%  
 g2 = 3.79%  
 L = 103.12



<p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	<p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p> <p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	APPROVED BY:	PROJECT TITLE: MARIDI - EMBAI - ACCESS ROAD	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
		SHEET CONTENT: PLAN AND PROFILE	DWG. Scale: AS SHOWN			
		STATION LIMITS:	DATE: FEBRUARY 2023			



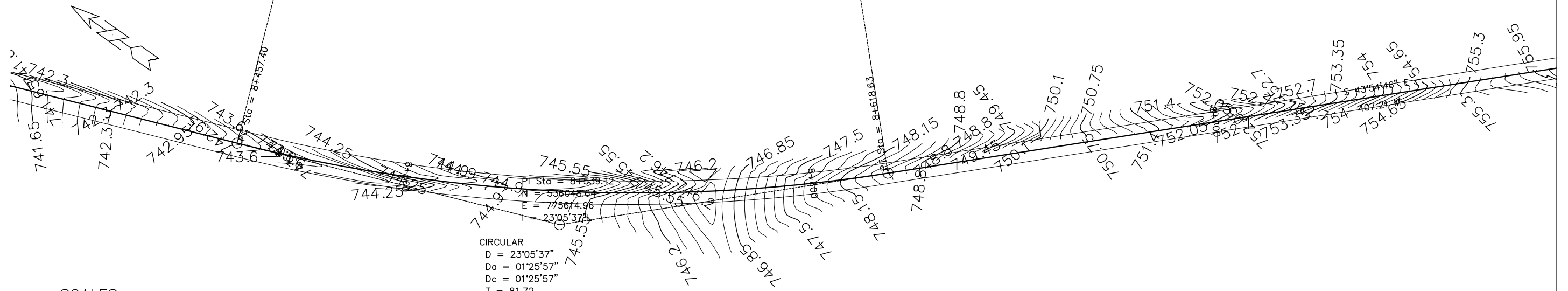
E = 8.25  
M = 8.10

SCALES:  
1M = 1000M HOR  
1M = 100M VER



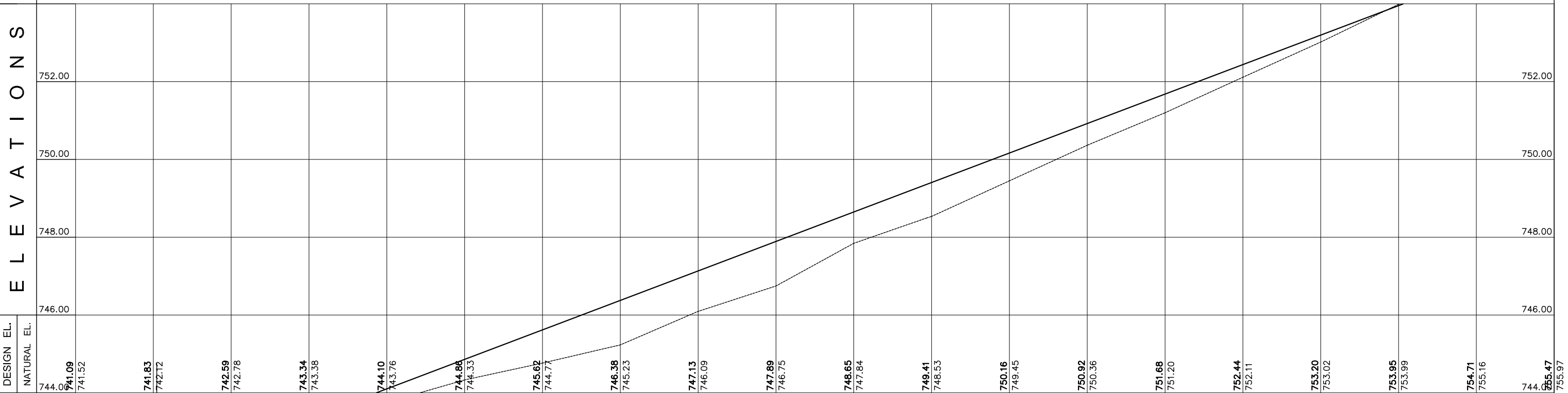
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p>	<p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS						
					DWG. Scale:	AS SHOWN
					DATE:	FEBRUARY 2023







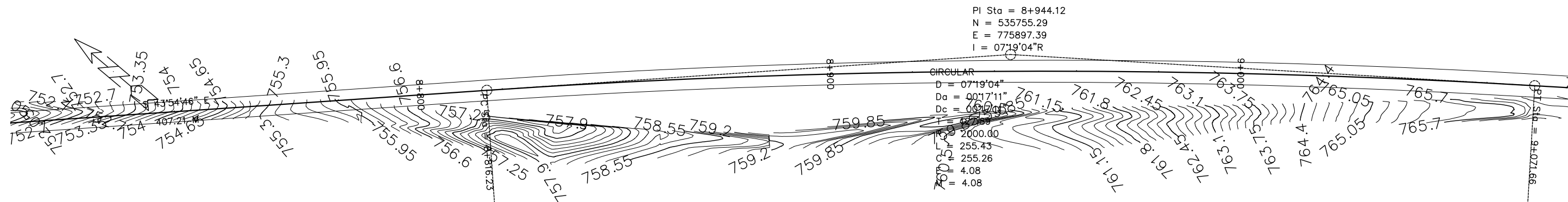
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



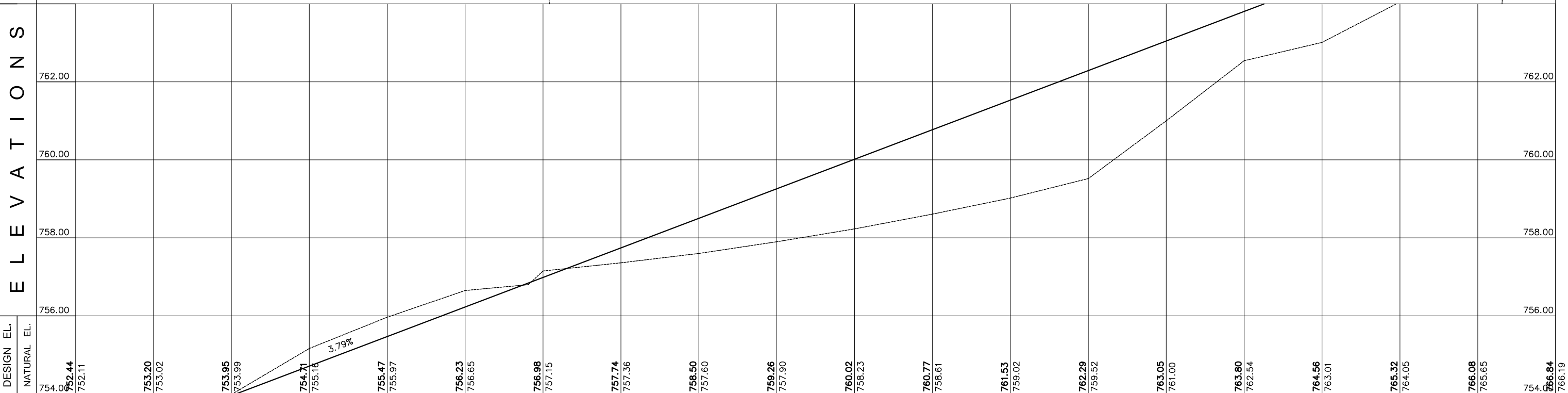
DESIGN EL.	NATURAL EL.	STN
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744.0	741.52	
744.0	741.83	
744.0	742.12	
744.0	742.59	
744.0	742.78	
744.0	743.34	
744.0	743.38	
744.0	744.10	
744.0	743.76	
744.0	744.86	
744.0	744.33	
744.0	745.62	
744.0	744.77	
744.0	746.38	
744.0	745.23	
744.0	747.13	
744.0	746.09	
744.0	747.89	
744.0	746.75	
744.0	748.65	
744.0	747.84	
744.0	749.41	
744.0	748.53	
744.0	750.16	
744.0	749.45	
744.0	750.92	
744.0	750.36	
744.0	751.68	
744.0	751.20	
744.0	752.44	
744.0	752.11	
744.0	753.20	
744.0	753.02	
744.0	753.95	
744.0	753.99	
744.0	754.71	
744.0	755.16	
744.0	755.47	
744.0	755.97	

EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
 ACTED South Sudan Western Equatoria State The Republic of South Sudan	 LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING	Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan	MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:				
			PLAN AND PROFILE				
STATION LIMITS:							
				DWG. Scale:	AS SHOWN		
				DATE:	FEBRUARY 2023		



SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

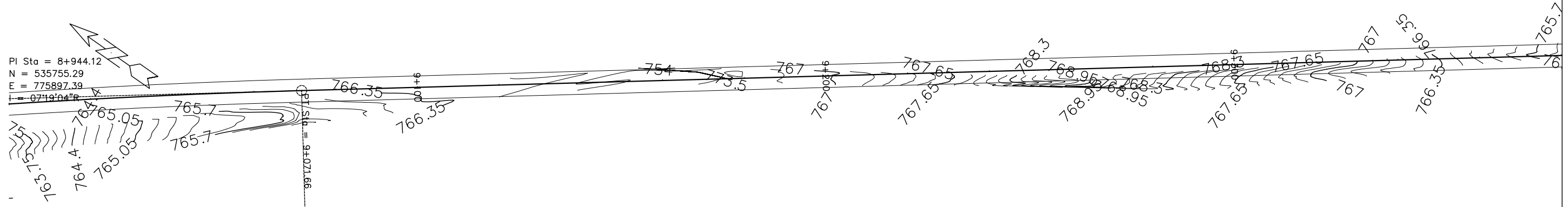
ELEVATIONS



STN	8+700	8+800	8+900	9+000
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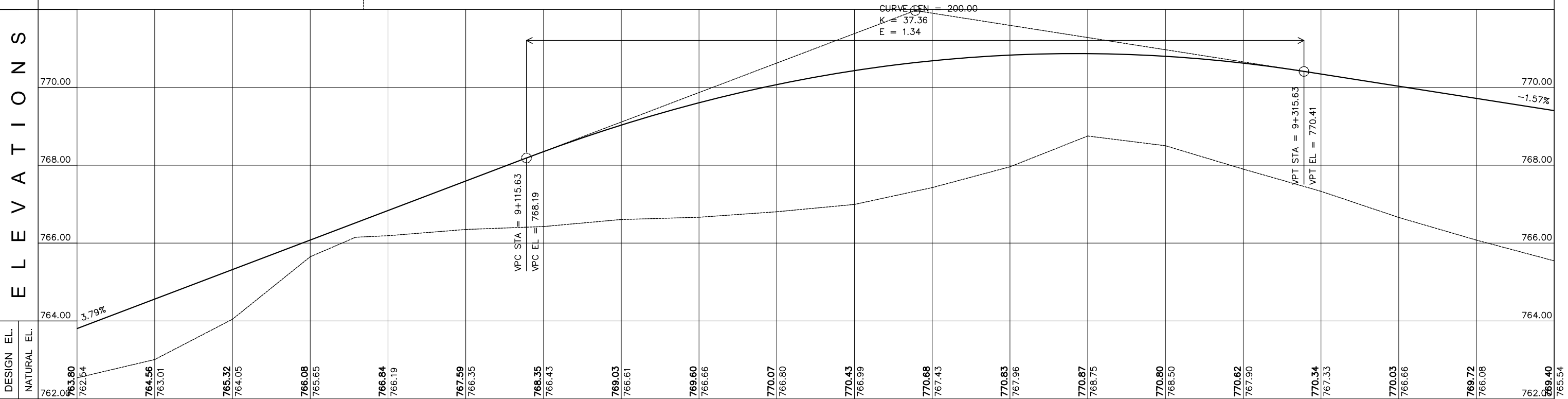
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>		MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS:					DWG. Scale:	AS SHOWN
					DATE:	FEBRUARY 2023

PI Sta = 8+944.12  
 N = 535755.29  
 E = 775897.39  
 I = 07°19'04"R



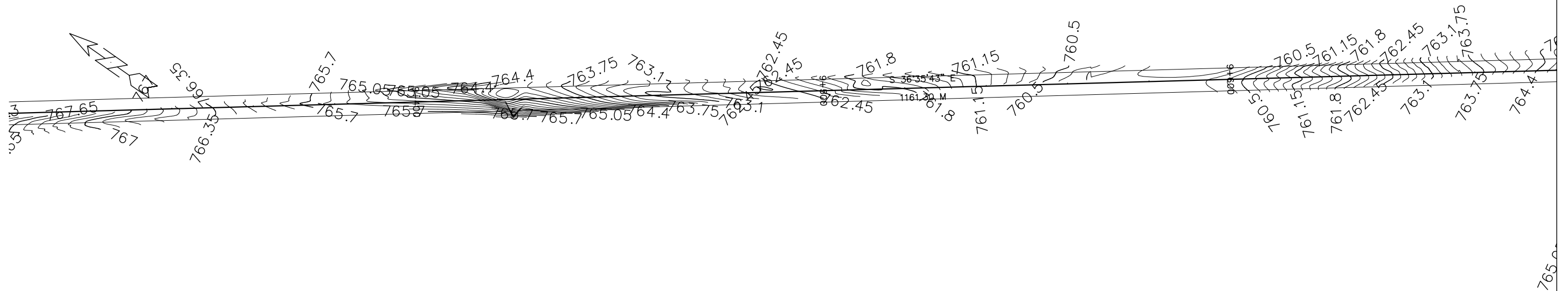
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E L E V A T I O N S



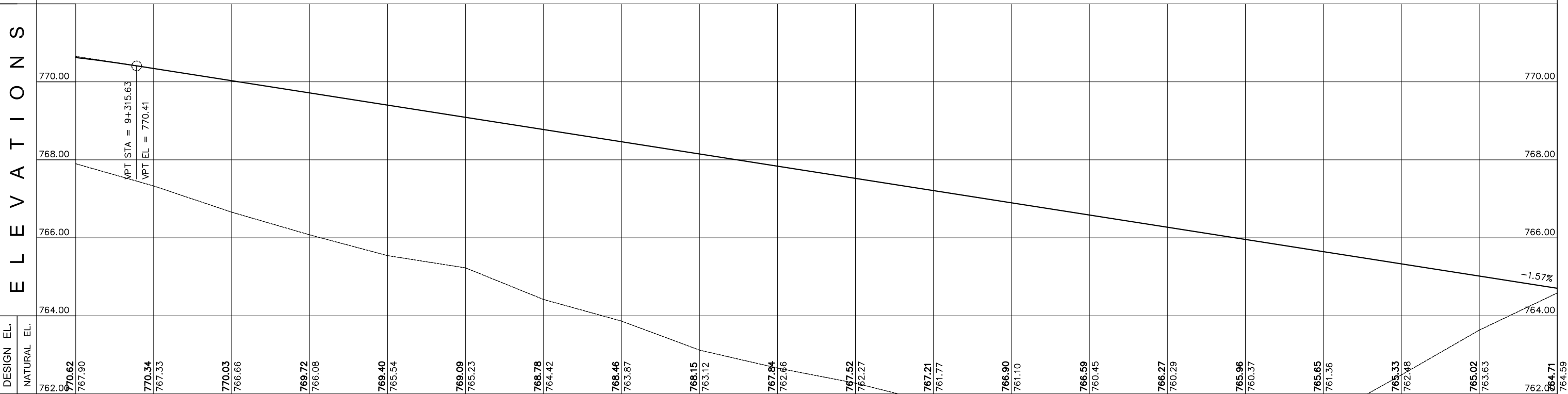
STN	9+000	9+100	9+200	9+300
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<p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	<p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p> <p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
			MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:	DWG. Scale: AS SHOWN DATE: FEBRUARY 2023		
			PLAN AND PROFILE			
			STATION LIMITS:			





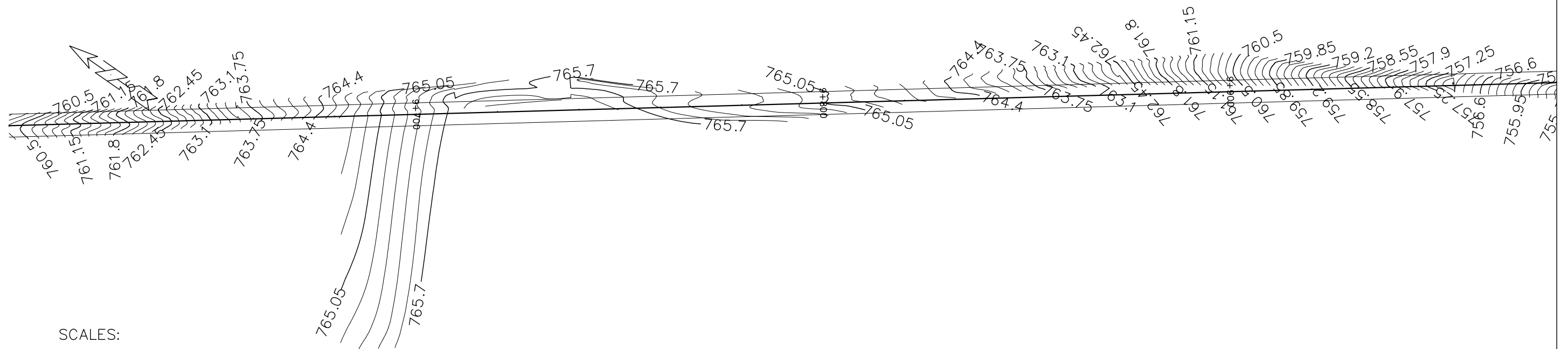
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E L E V A T I O N S



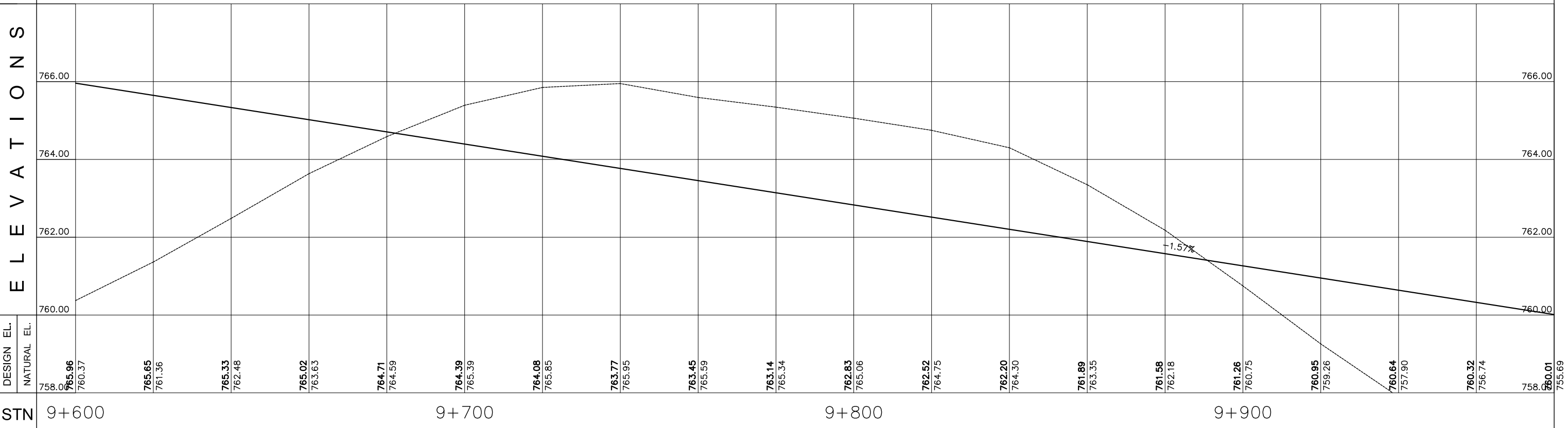
STN	9+300	9+400	9+500	9+600
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EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p>		MARIDI - EMBAI - ACCESS ROAD		DWG. Scale: AS SHOWN	
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS:					DATE: FEBRUARY 2023	



SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

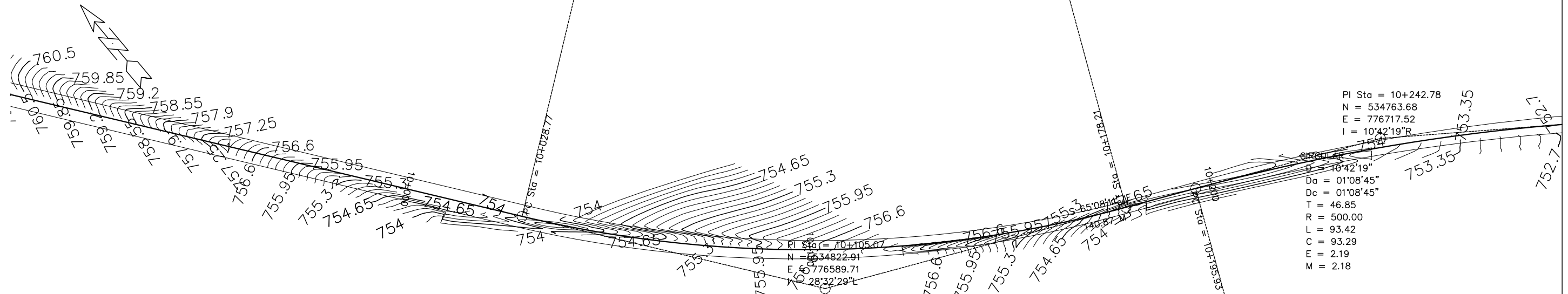
ELEVATIONS



DESIGN EL.	NATURAL EL.	STN
758.0	765.96	9+600
760.37	760.37	
765.65	761.36	
765.33	762.48	
765.02	763.63	
764.71	764.59	
764.39	765.39	
764.08	765.85	
763.77	765.95	
763.45	765.59	
763.14	765.34	
762.83	765.06	
762.52	764.75	
762.20	764.30	
761.89	763.35	
761.58	762.18	
761.26	760.75	
760.95	759.26	
760.64	757.90	
760.32	756.74	
758.01	755.69	

<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
			MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS:			DWG. Scale: AS SHOWN			
			DATE: FEBRUARY 2023			



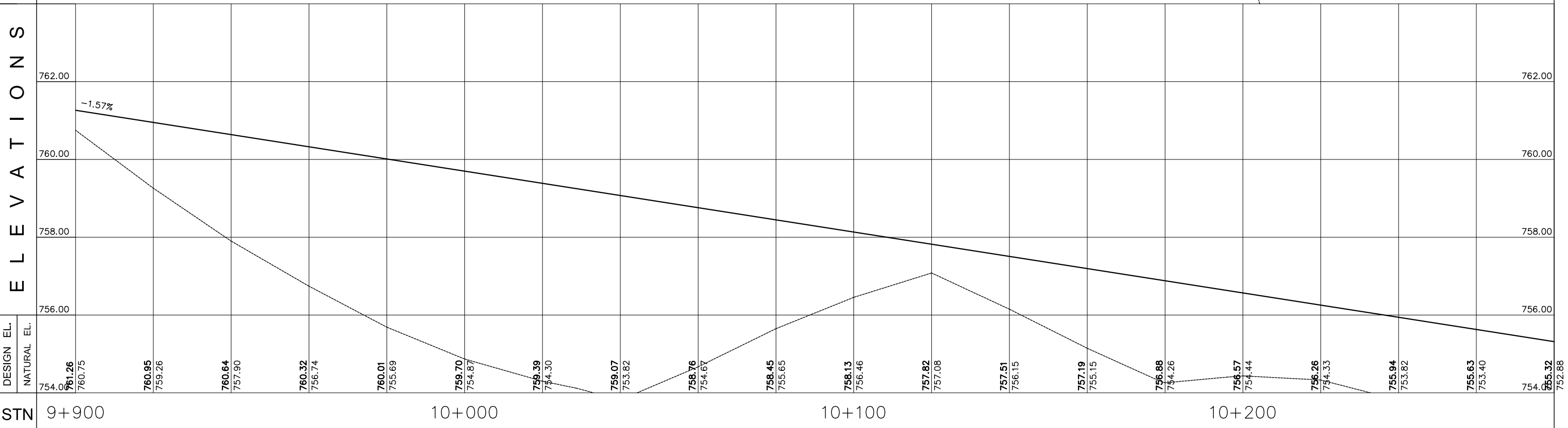




SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

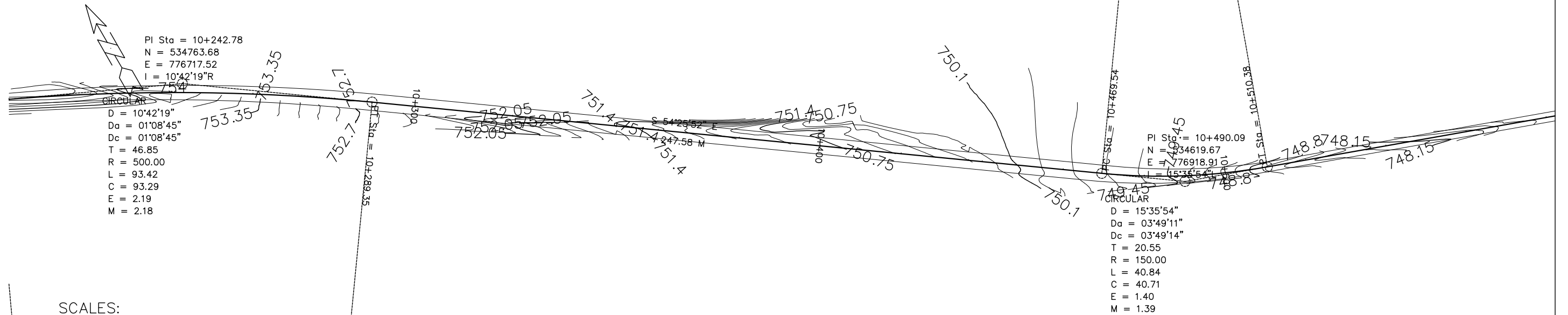
CIRCULAR  
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 Da = 01°54'35"  
 Dc = 01°54'36"  
 T = 76.31  
 R = 300.00  
 L = 149.44  
 C = 147.90

PI Sta = 10+242.78  
 N = 534763.68  
 E = 776717.52  
 I = 10°42'19"R  
 D = 10°42'19"  
 Da = 01°08'45"  
 Dc = 01°08'45"  
 T = 46.85  
 R = 500.00  
 L = 93.42  
 C = 93.29  
 E = 2.19  
 M = 2.18

ELEVATIONS

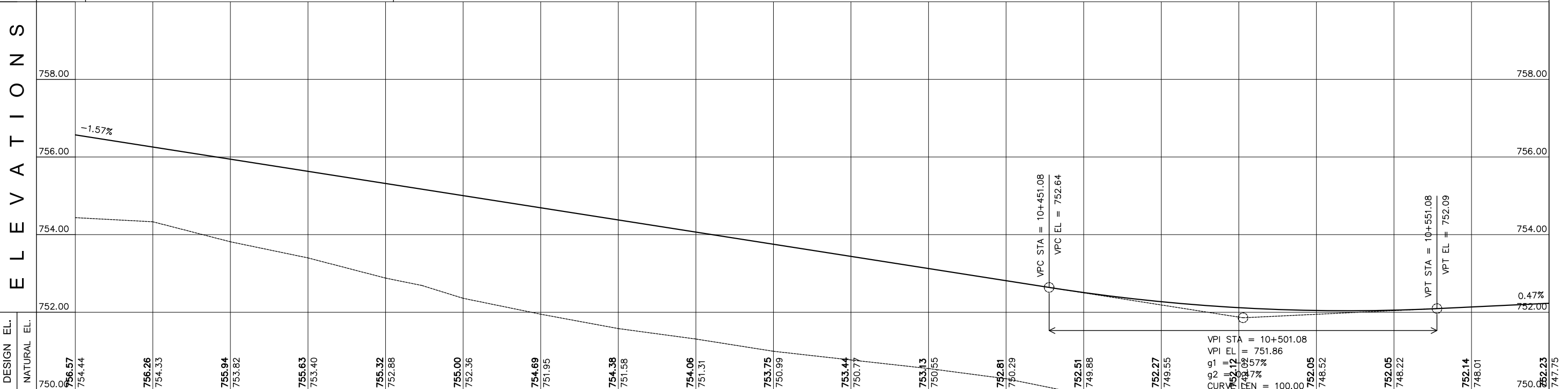


EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
 <p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	 <p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p>	<p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:				
			STATION LIMITS				
				DWG. Scale:	AS SHOWN		
				DATE:	FEBRUARY 2023		





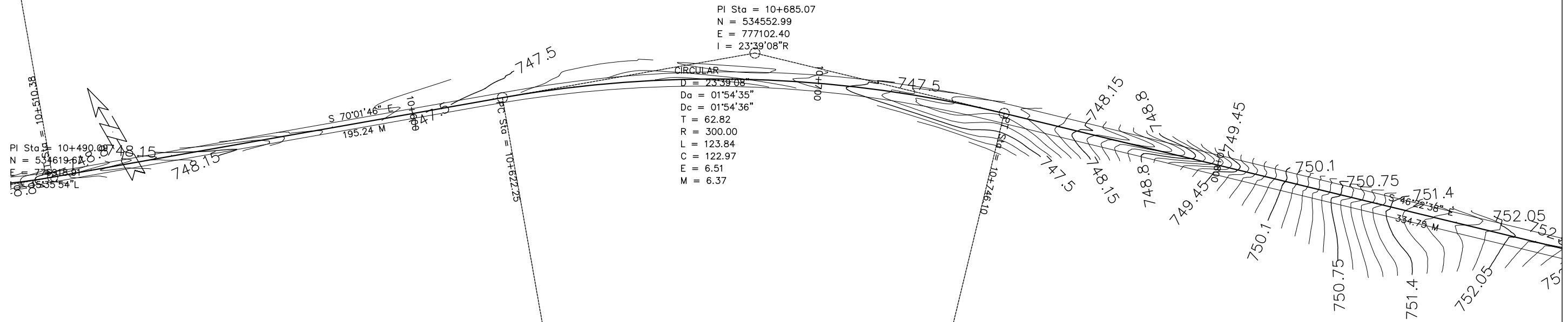
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



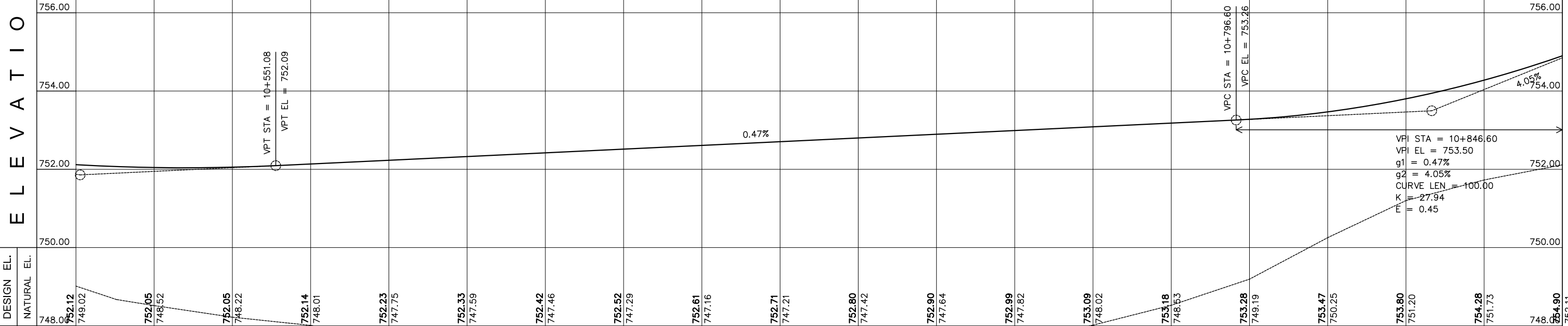
DESIGN EL.	756.57	756.26	755.94	755.63	755.32	755.00	754.69	754.38	754.06	753.75	753.44	753.13	752.81	752.51	752.27	752.05	752.05	752.14	752.23
NATURAL EL.	754.44	754.33	753.92	753.40	752.88	752.36	751.95	751.58	751.31	750.99	750.77	750.55	750.29	749.88	749.55	748.52	748.22	748.01	750.00
STN	10+200					10+300				10+400									10+500

EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.		
 <p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	 <p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p>	<p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD					
			SHEET CONTENT:				DWG. Scale:	AS SHOWN
			STATION LIMITS:				DATE:	FEBRUARY 2023



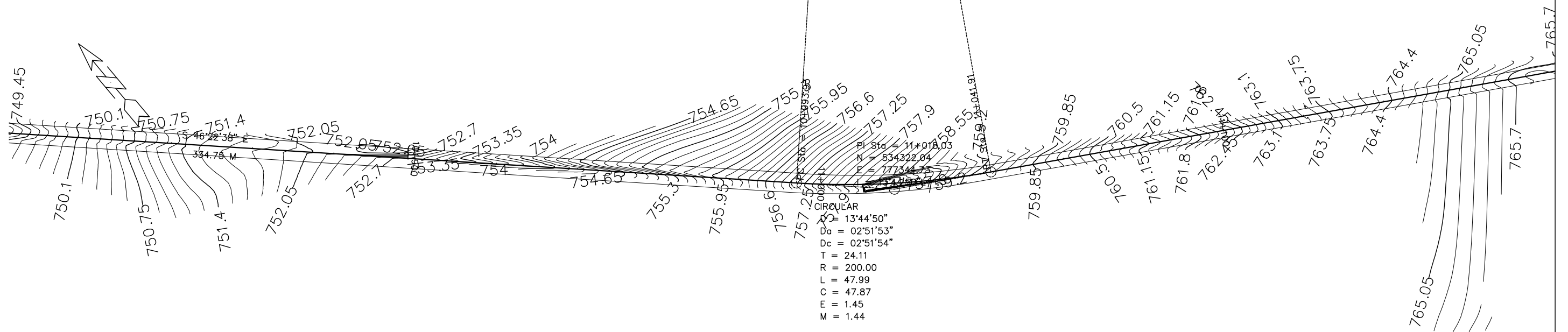
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



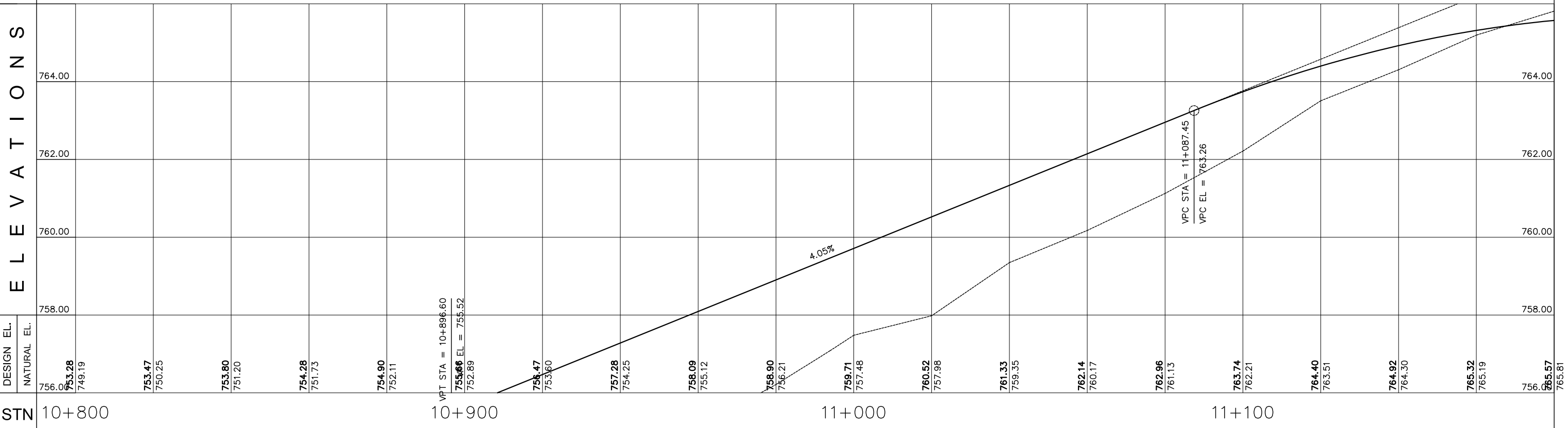
STN	10+500	10+600	10+700	10+800
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<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	PROJECT TITLE:	MARIDI - EMBAI - ACCESS ROAD	<p>REVISIONS:</p>	<p>CAD/DRAWN BY:</p>	<p>SHEET NO.</p>
			SHEET CONTENT:	PLAN AND PROFILE			
			STATION LIMITS:				
			DWG. Scale:	AS SHOWN			
DATE:	FEBRUARY 2023						



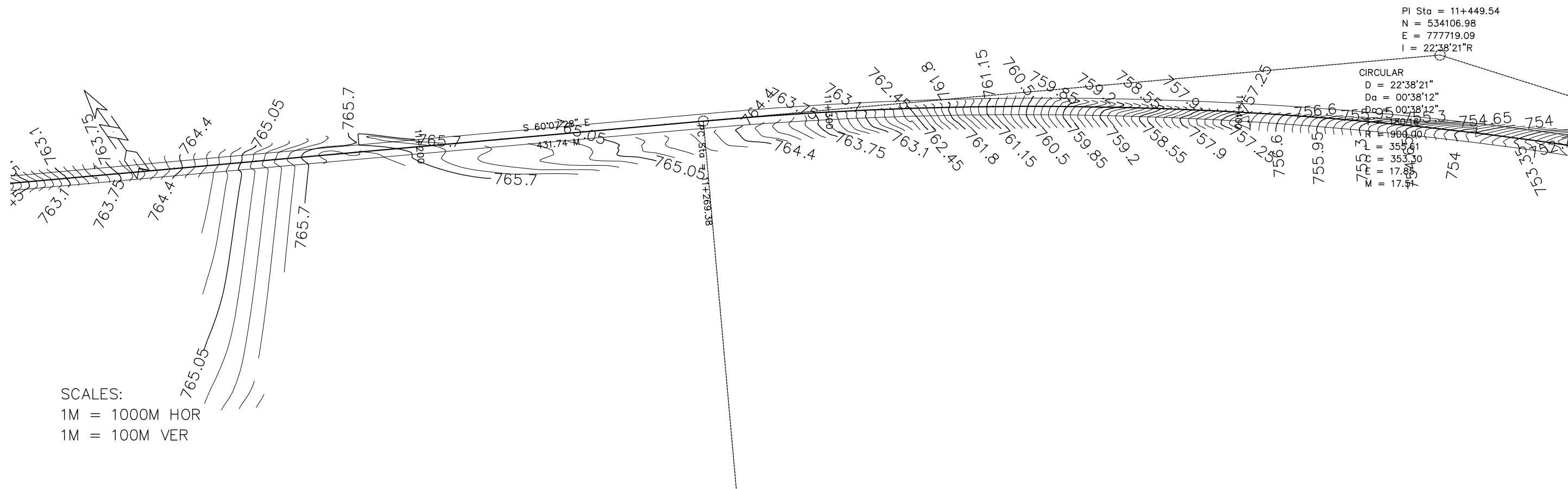
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E L E V A T I O N S

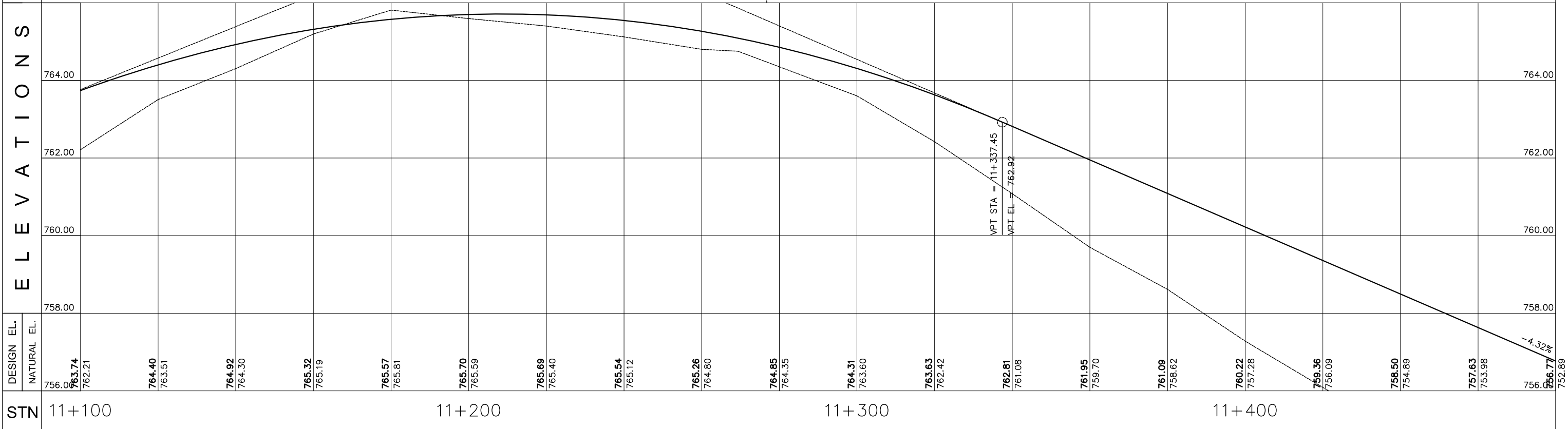


DESIGN EL.	NATURAL EL.	STN
756.00	753.28	10+800
749.19	749.19	
753.47	750.25	
753.80	751.20	
754.28	751.73	
754.90	752.11	
755.66	752.89	
755.47	753.60	
757.28	754.25	
758.09	755.12	
758.90	756.21	
759.71	757.48	
760.52	757.98	
761.33	759.35	
762.14	760.17	
762.96	761.13	
763.74	762.21	
764.40	763.51	
764.92	764.30	
765.32	765.19	
765.57	765.81	11+100

<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	<p>PROJECT TITLE: MARIDI - EMBAI - ACCESS ROAD</p>	<p>REVISIONS:</p>	<p>CAD/DRAWN BY:</p>	<p>SHEET NO.</p>
			<p>SHEET CONTENT: PLAN AND PROFILE</p>	<p>DWG. Scale: AS SHOWN</p>	<p>DATE: FEBRUARY 2023</p>	

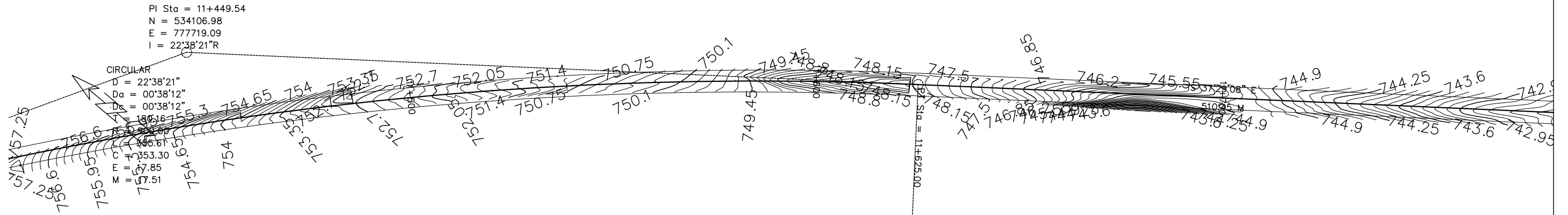


ELEVATIONS



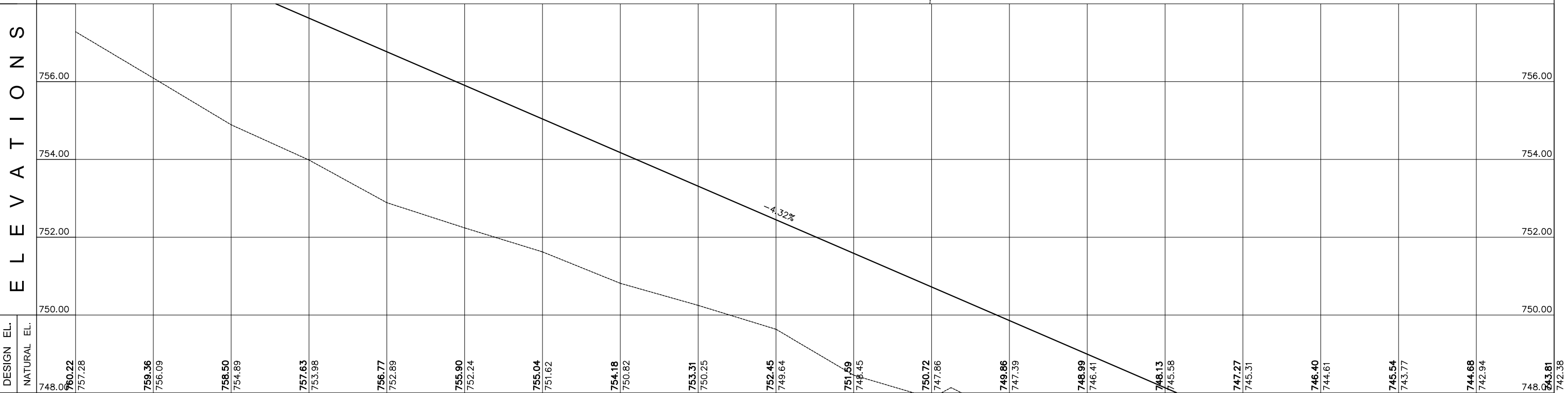
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
 ACTED South Sudan Western Equatoria State The Republic of South Sudan	 LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan		MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:			DWG. Scale:	AS SHOWN
			STATION LIMITS			DATE:	FEBRUARY 2023





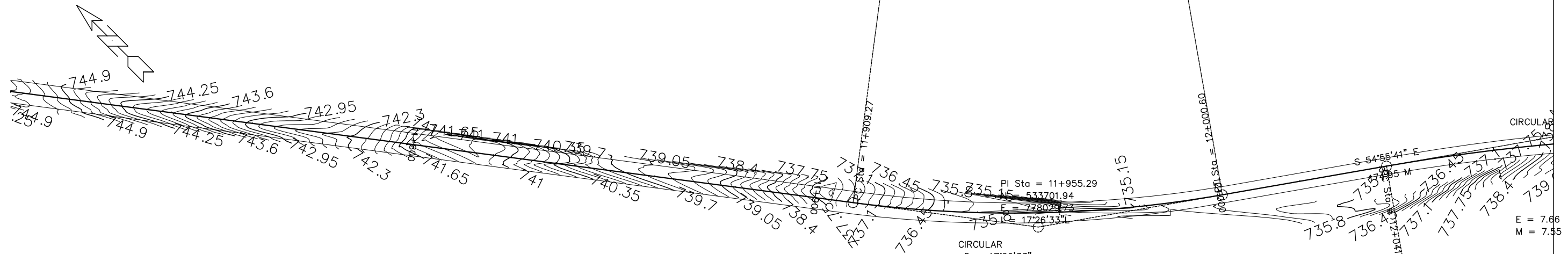
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



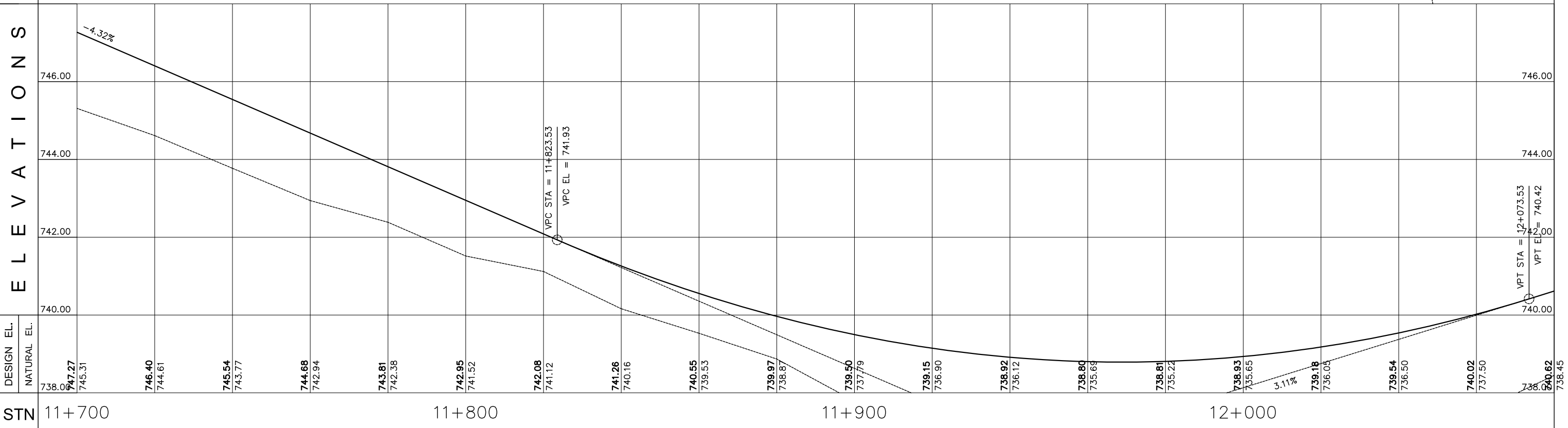
STN	11+400	11+500	11+600	11+700
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<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	PROJECT TITLE:	MARIDI - EMBAI - ACCESS ROAD	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
			SHEET CONTENT:	PLAN AND PROFILE	DWG. Scale:	AS SHOWN	
			STATION LIMITS:		DATE:	FEBRUARY 2023	

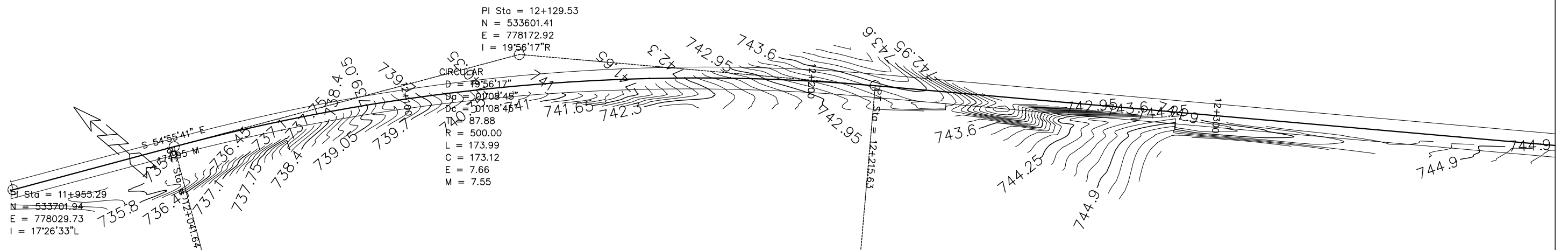


SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

CIRCULAR  
 D = 17'26'33"  
 Da = 01'54'35"  
 Dc = 01'54'36"  
 T = 46.02  
 R = 300.00  
 L = 91.33  
 C = 90.98  
 E = 3.51  
 M = 3.47

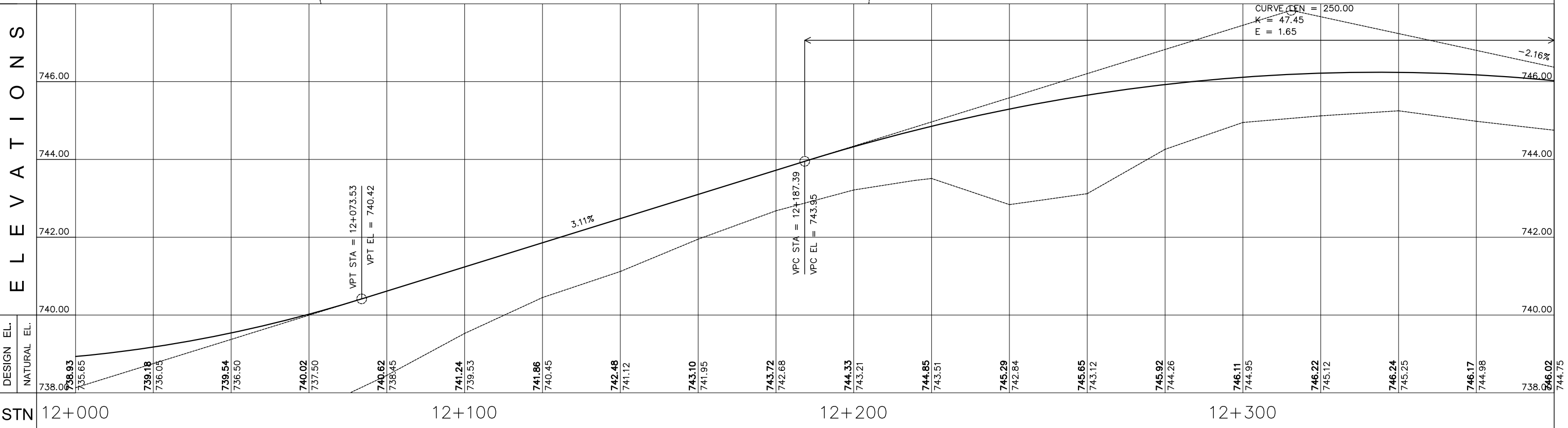


EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
 ACTED South Sudan Western Equatoria State The Republic of South Sudan	 LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING	Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan	MARIDI - EMBAI - ACCESS ROAD		DWG. Scale: AS SHOWN DATE: FEBRUARY 2023	
			SHEET CONTENT:			
			STATION LIMITS			



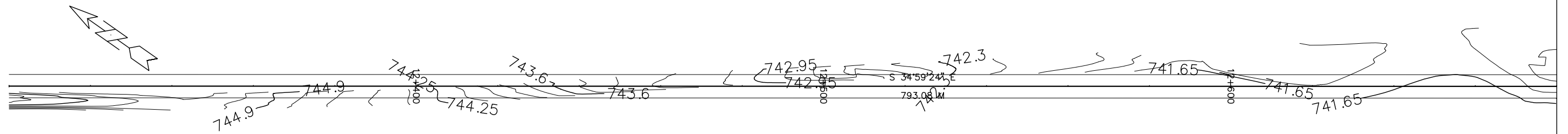
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



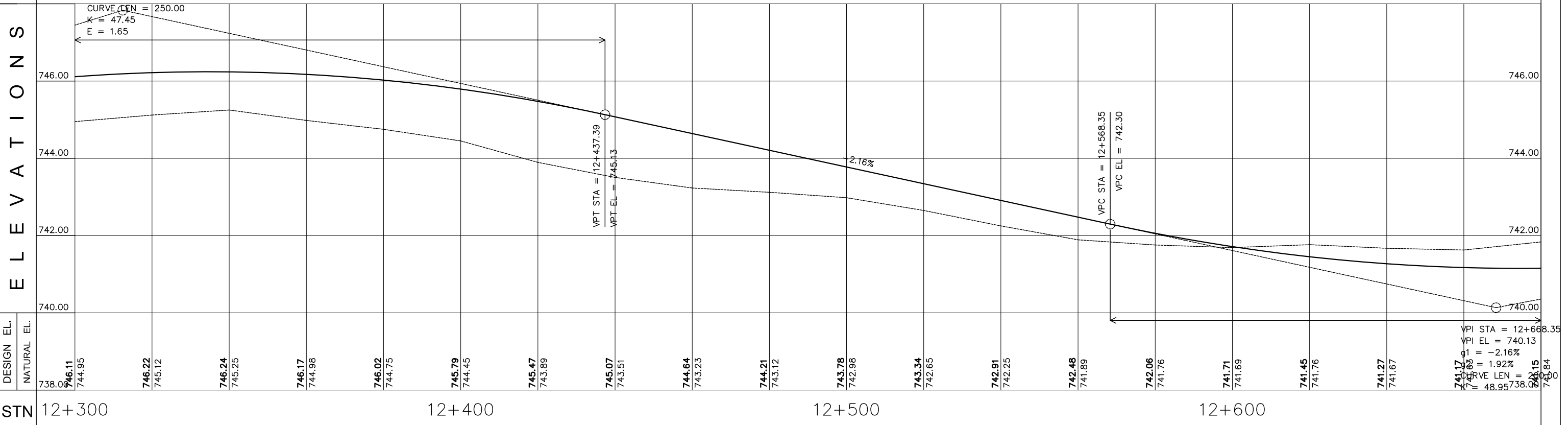
DESIGN EL.	NATURAL EL.	STN
738.93	738.93	12+000
735.65	735.65	
739.18	736.05	12+100
739.54	736.50	
740.02	737.50	
740.62	738.45	
741.24	739.53	
741.86	740.45	
742.48	741.12	
743.10	741.95	
743.72	742.68	
744.33	743.21	
744.85	743.51	
745.29	742.84	
745.65	743.12	
745.92	744.26	
746.11	744.95	
746.22	745.12	
746.24	745.25	
746.17	744.98	
746.02	744.75	12+300



EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>		MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			STATION LIMITS			
				DWG. Scale:	AS SHOWN	
				DATE:	FEBRUARY 2023	

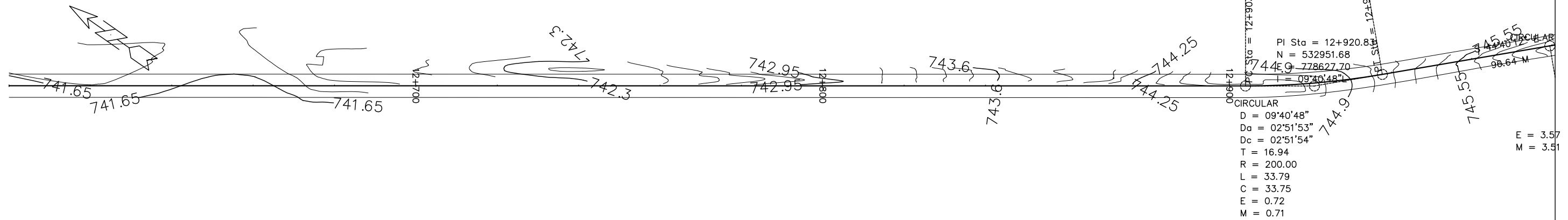


SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS

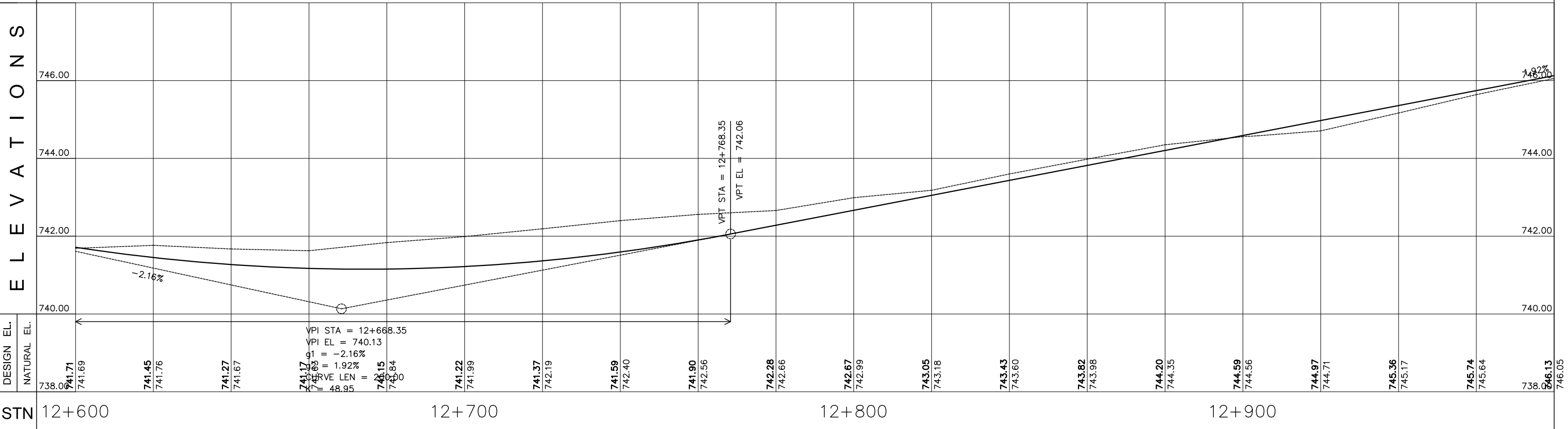


EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p>	<p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:			DWG. Scale:	AS SHOWN
			STATION LIMITS			DATE:	FEBRUARY 2023



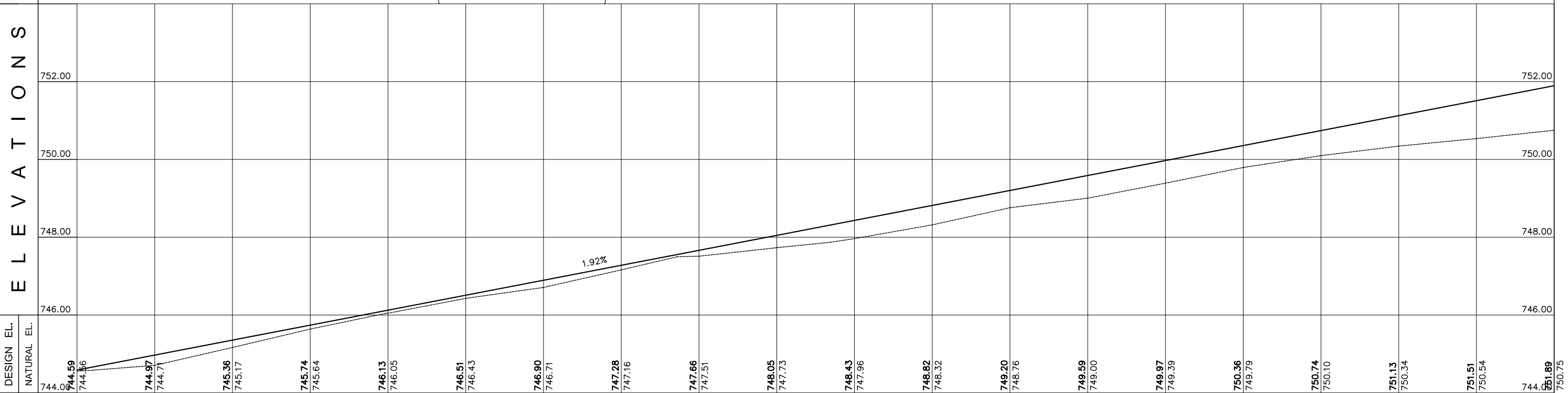
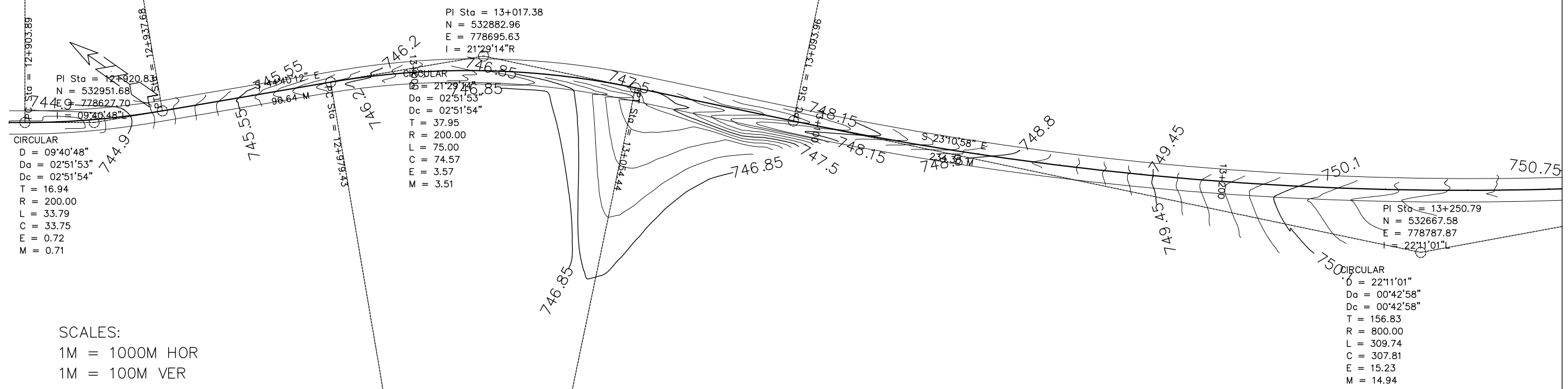
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER



ELEVATIONS

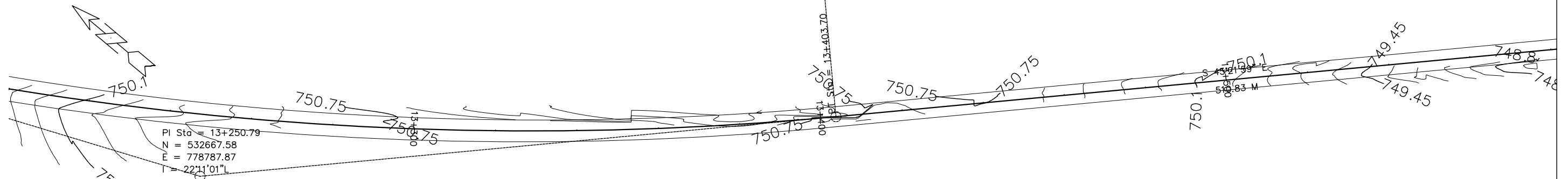


EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
<p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	<p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p>	<p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			STATION LIMITS			
				DWG. Scale:	AS SHOWN	
				DATE:	FEBRUARY 2023	





EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
 ACTED South Sudan Western Equatoria State The Republic of South Sudan	 LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan		MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:				
			STATION LIMITS				
				DWG. Scale:	AS SHOWN		
				DATE:	FEBRUARY 2023		

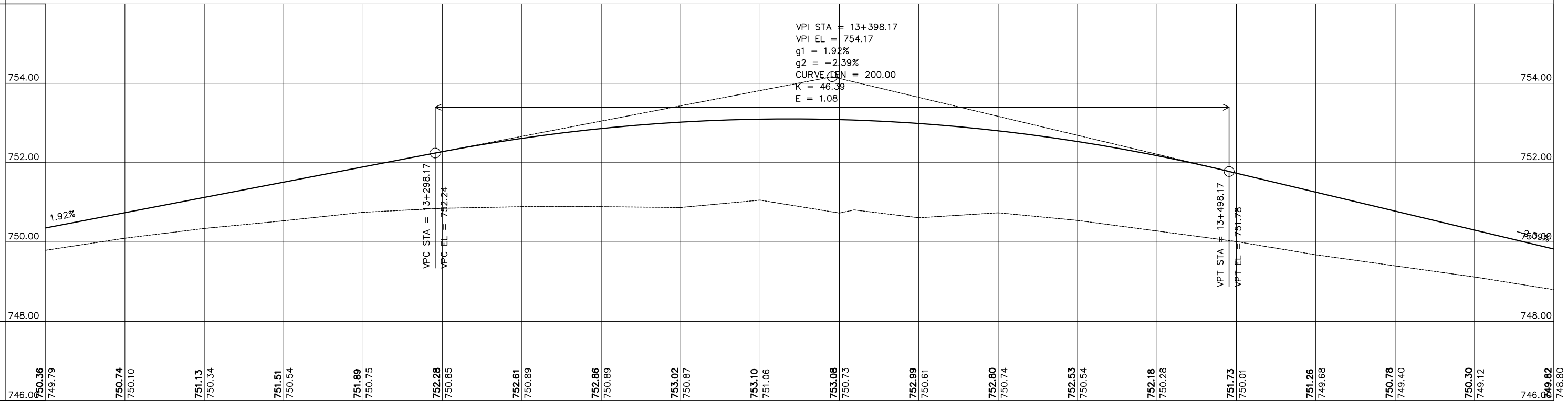


PI Sta = 13+250.79  
 N = 532667.58  
 E = 778787.87  
 I = 22'11'01" L

CIRCULAR  
 D = 22'11'01"  
 Da = 00'42'58"  
 Dc = 00'42'58"  
 T = 156.83  
 R = 800.00  
 L = 309.74  
 C = 307.81  
 E = 15.23  
 M = 14.94

SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

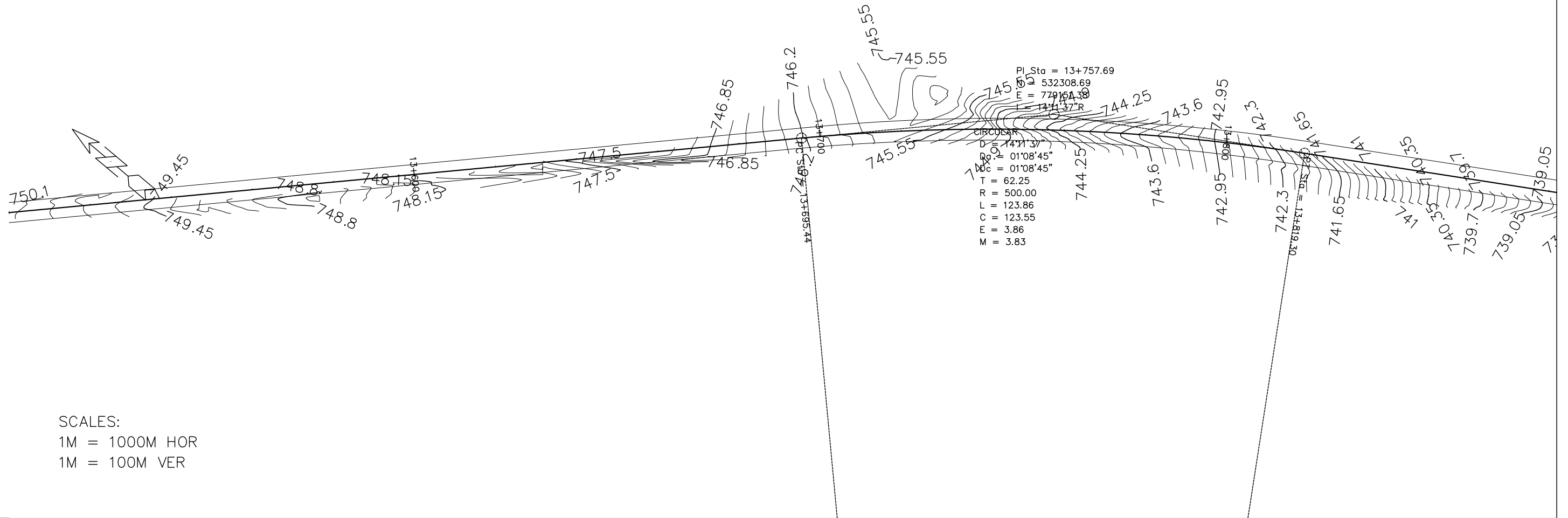
ELEVATIONS



VPI STA = 13+398.17  
 VPI EL = 754.17  
 g1 = 1.92%  
 g2 = -2.39%  
 CURVE LEN = 200.00  
 K = 46.39  
 E = 1.08

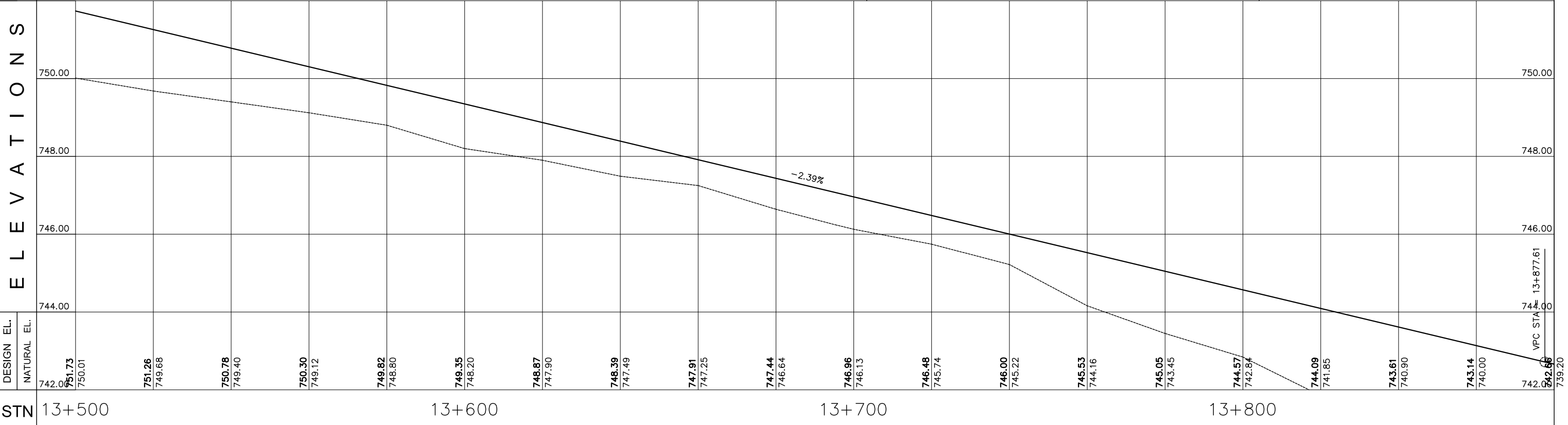
DESIGN EL.	NATURAL EL.	STN
746.00	750.36	13+200
749.79	749.79	
750.74	750.10	
751.13	750.34	
751.51	750.54	
751.89	750.75	
752.28	750.85	13+300
752.61	750.89	
752.86	750.89	
753.02	750.87	
753.10	751.06	13+400
753.08	750.73	
752.99	750.61	
752.80	750.74	
752.53	750.54	
752.18	750.28	
751.73	750.01	13+500
751.26	749.68	
750.78	749.40	
750.30	749.12	
746.00	748.82	

<p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	<p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p> <p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
			MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS			DWG. Scale: AS SHOWN			
			DATE: FEBRUARY 2023			

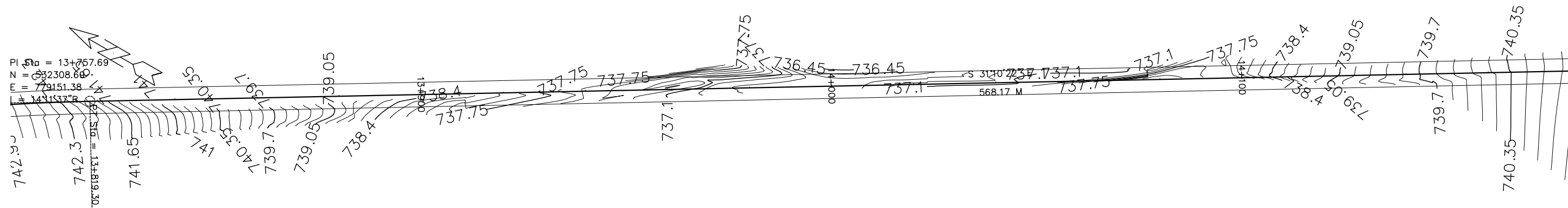


SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E L E V A T I O N S

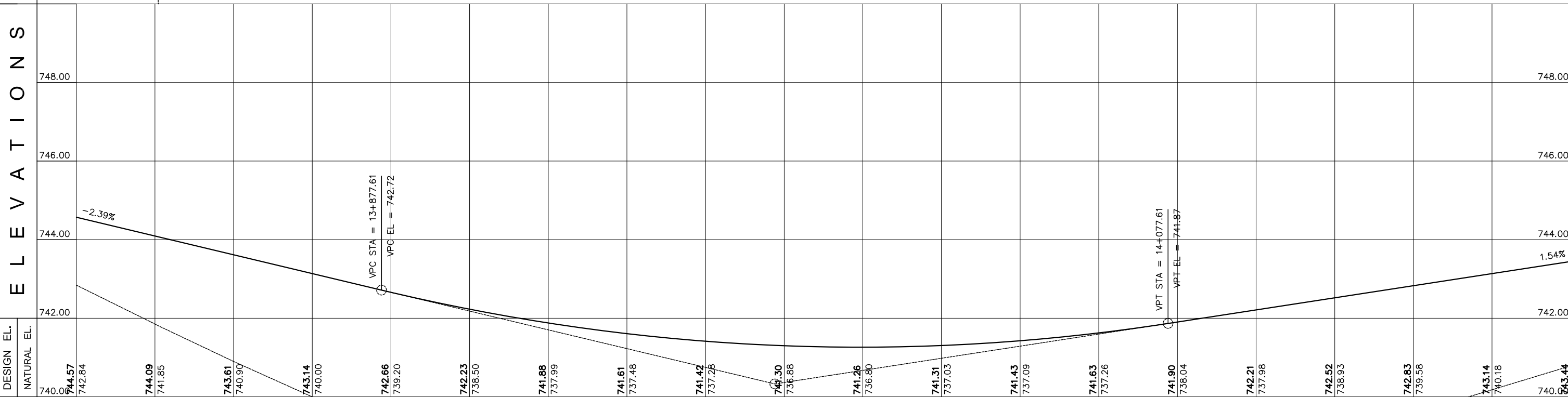


EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
<p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	<p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p>	<p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:			DWG. Scale:	AS SHOWN
			STATION LIMITS:			DATE:	FEBRUARY 2023



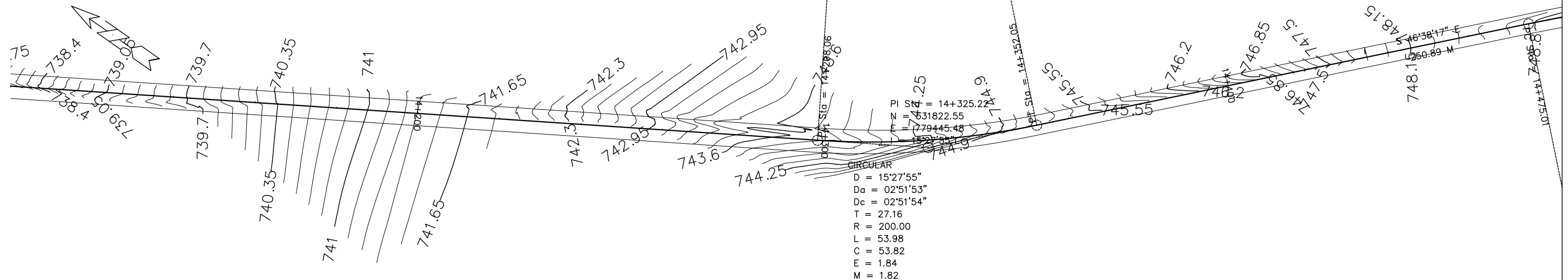
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



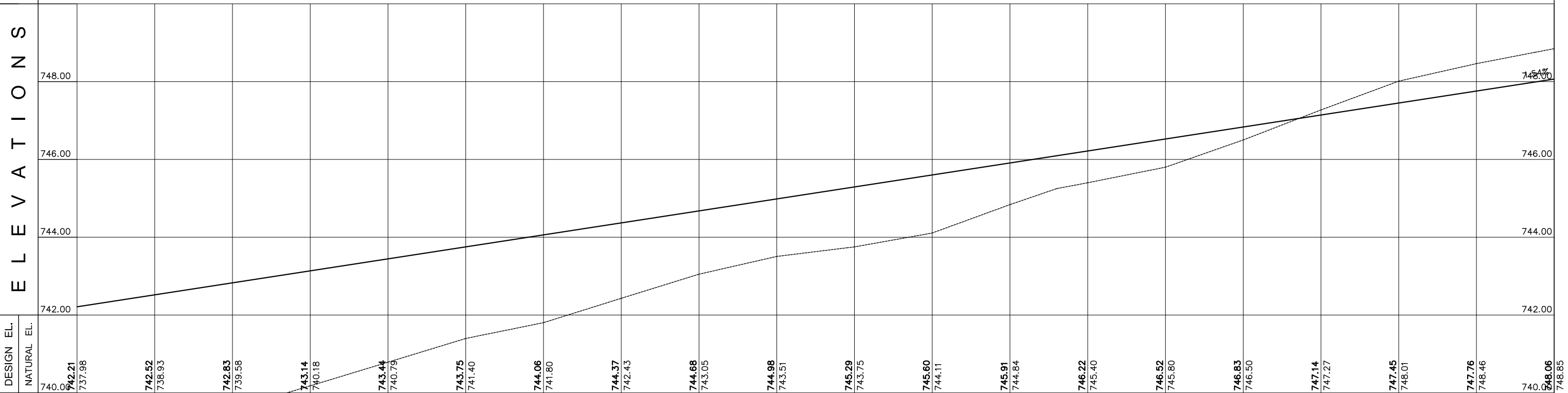
STN 13+800 13+900 14+000 14+100

EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>		MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			STATION LIMITS			
				DWG. Scale:	AS SHOWN	
				DATE:	FEBRUARY 2023	



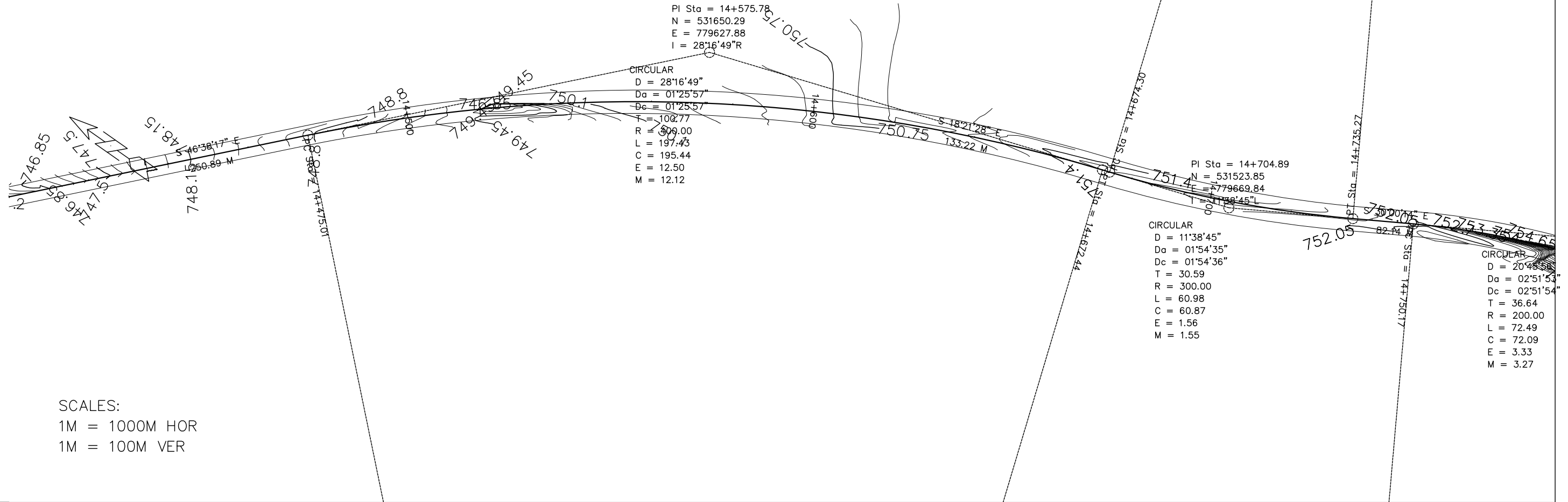
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS

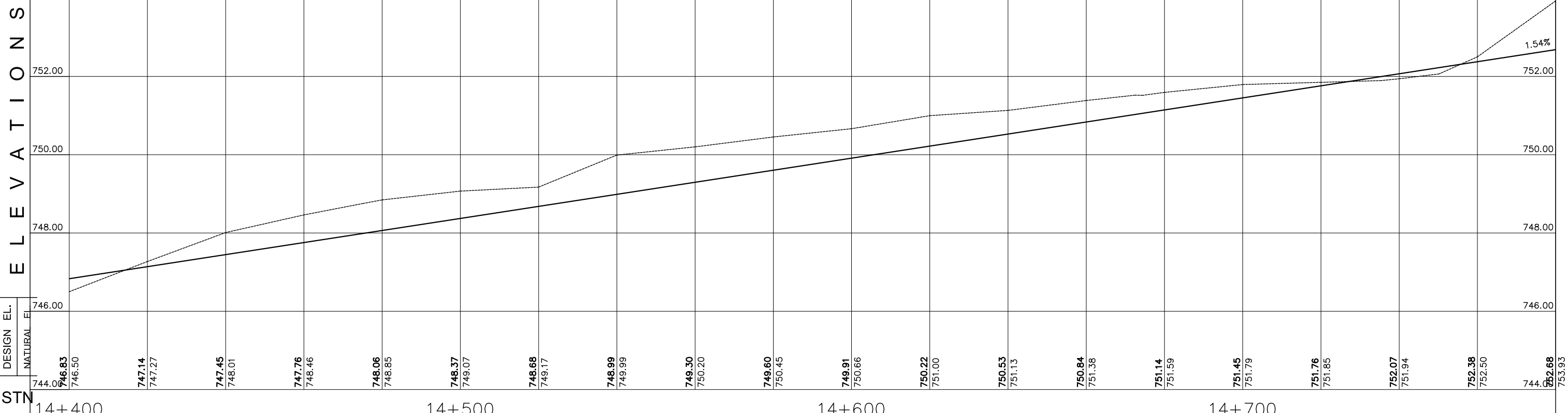




DESIGN EL.	NATURAL EL.	STN
740.00	742.21	14+00
737.98	737.98	
742.52	738.93	
742.83	739.58	
743.14	740.18	
743.44	740.78	
743.75	741.40	
744.06	741.80	
744.37	742.43	
744.68	743.05	
744.98	743.51	
745.29	743.75	
745.60	744.11	
745.91	744.84	
746.22	745.40	
746.52	745.80	
746.83	746.50	
747.14	747.27	
747.45	748.01	
747.76	748.46	
748.06	748.85	14+50

EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
ACTED South Sudan Western Equatoria State The Republic of South Sudan	LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan		MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS					DWG. Scale:	AS SHOWN
					DATE:	FEBRUARY 2023

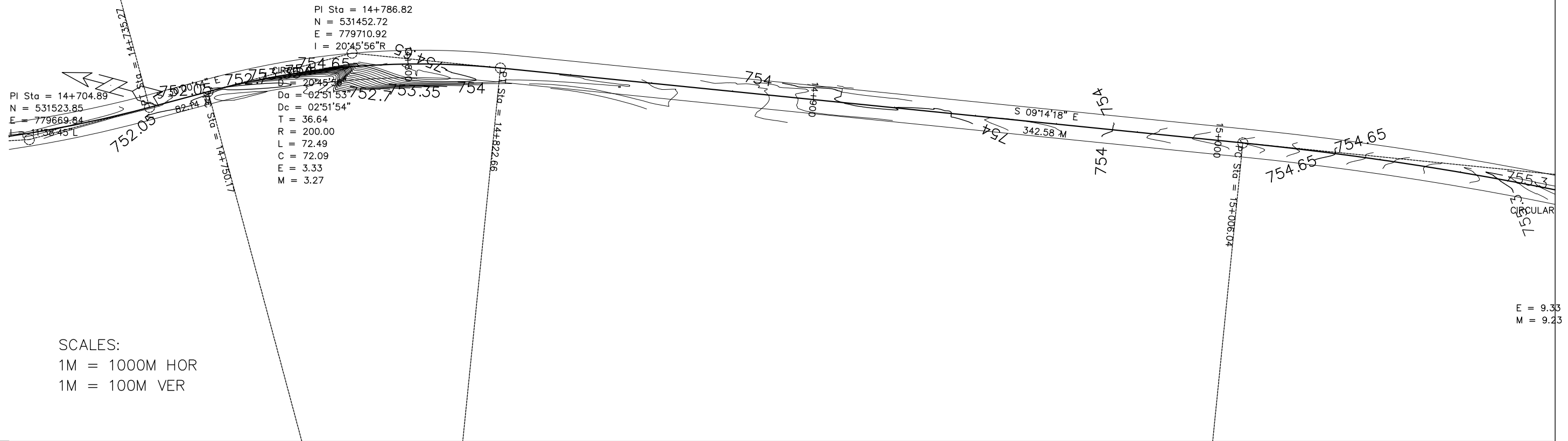


SCALES:  
 1M = 1000M HOR  
 1M = 100M VER



EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p>	<p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS						
				DWG. Scale:	AS SHOWN	
				DATE:	FEBRUARY 2023	

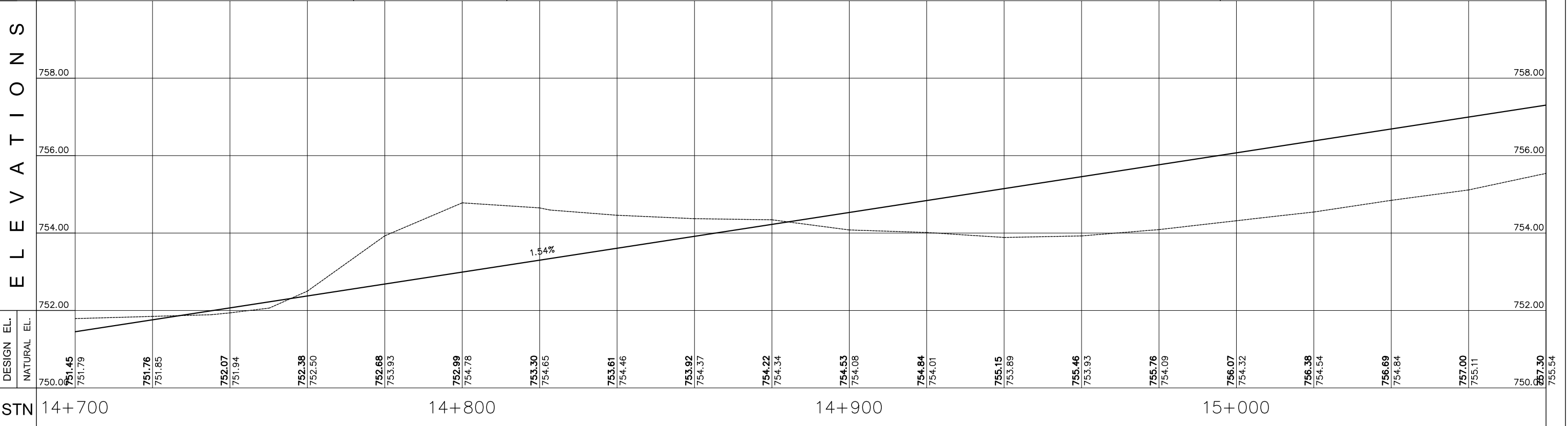




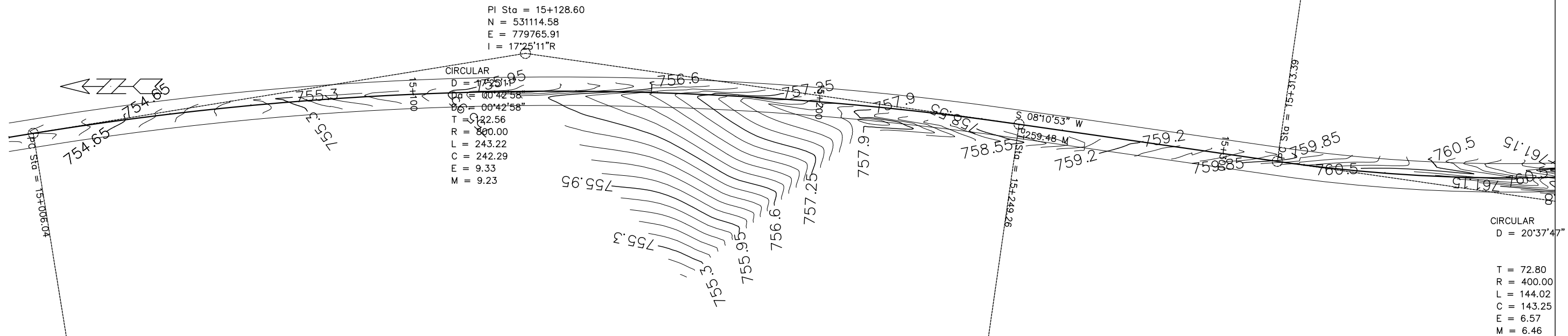
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E = 9.33  
 M = 9.23

ELEVATIONS

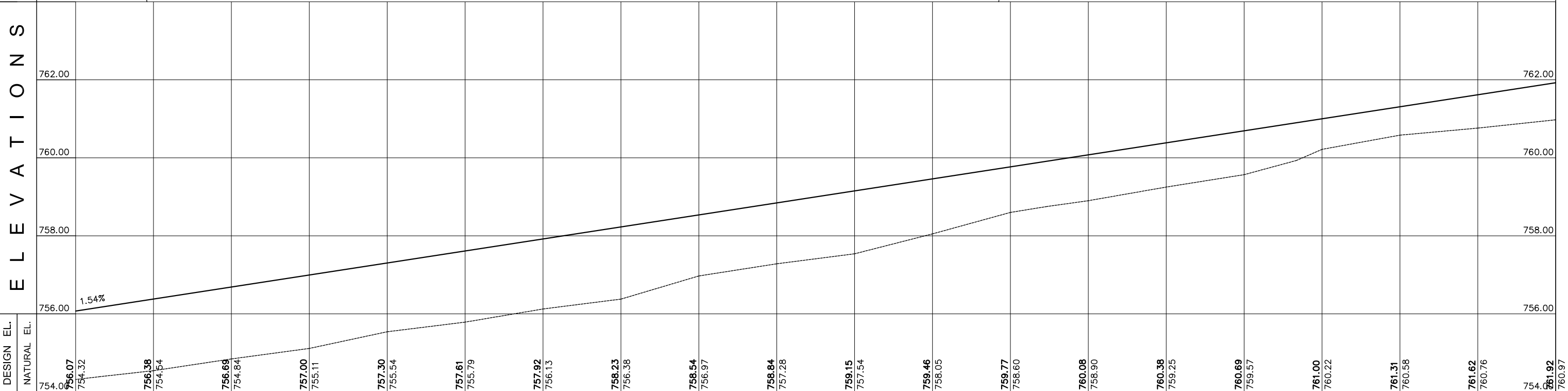


EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
<b>ACTED</b> ACTED South Sudan Western Equatoria State The Republic of South Sudan	<b>LADDER</b> CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan		MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:			DWG. Scale:	AS SHOWN
			STATION LIMITS			DATE:	FEBRUARY 2023





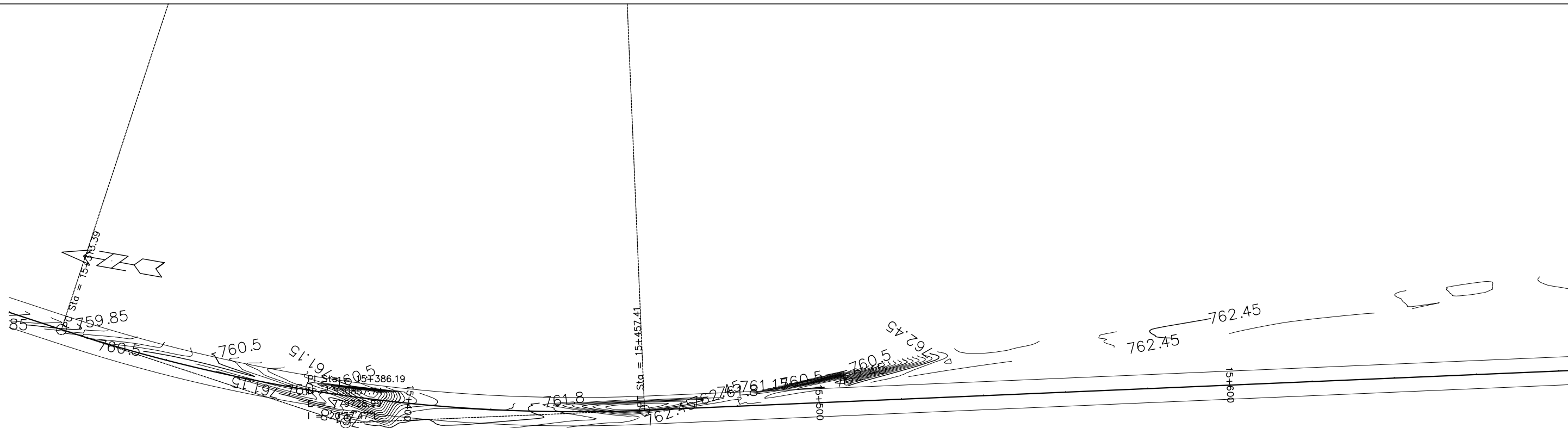
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



STN	15+000	15+100	15+200	15+300
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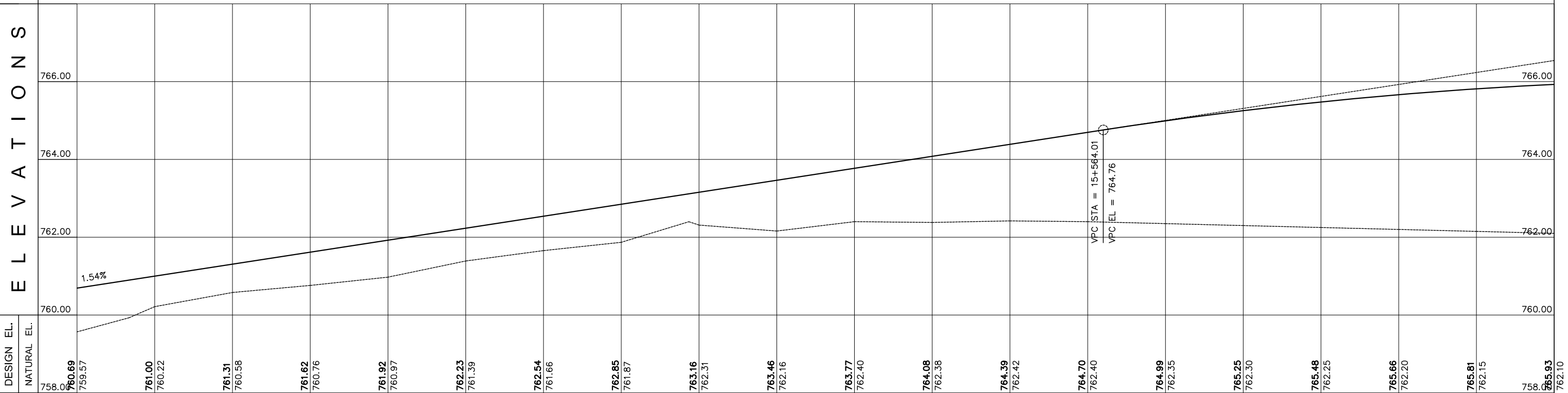
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
 ACTED South Sudan Western Equatoria State The Republic of South Sudan	 LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING	Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan	MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:			DWG. Scale:	AS SHOWN
			STATION LIMITS:			DATE:	FEBRUARY 2023





CIRCULAR  
 D = 20°37'47"  
 Da = 01°25'57"  
 Dc = 01°25'57"  
 T = 72.80  
 R = 400.00  
 L = 144.02  
 C = 143.25  
 E = 6.57  
 M = 6.46

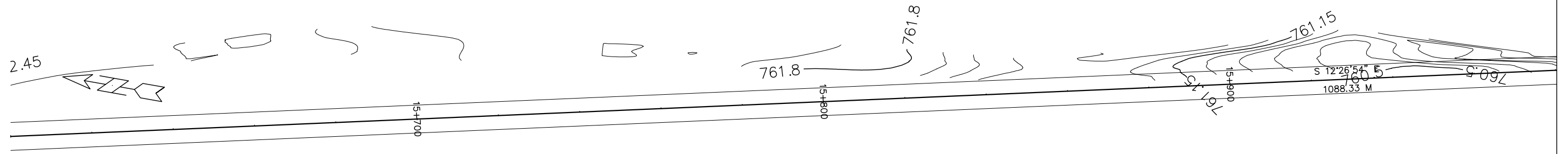
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E L E V A T I O N S



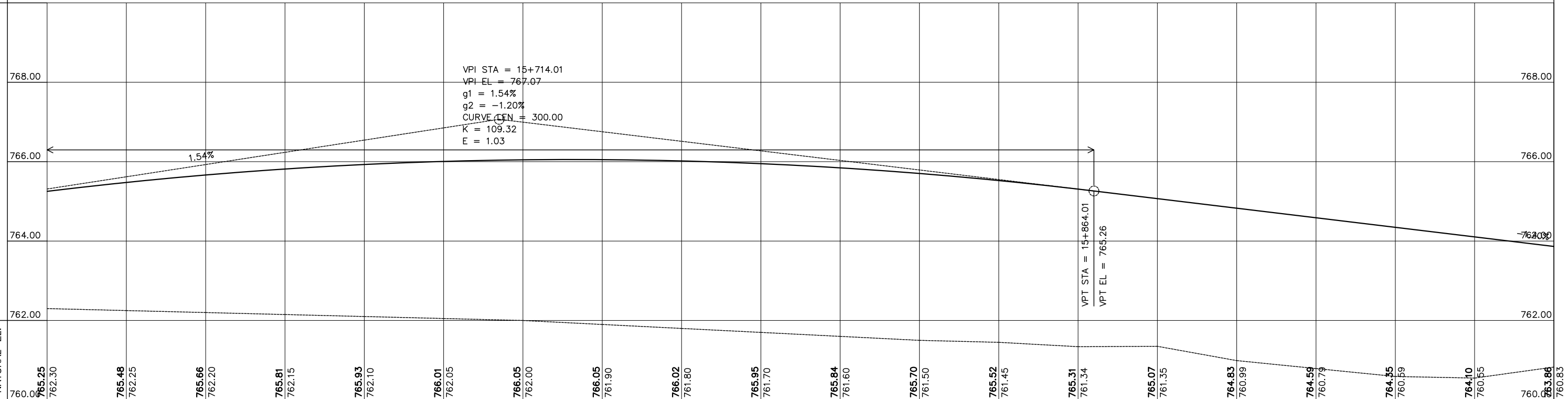
STN 15+300 15+400 15+500 15+600

EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.		
 <p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	 <p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p>	<p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD					
			SHEET CONTENT:				DWG. Scale:	AS SHOWN
			STATION LIMITS:				DATE:	FEBRUARY 2023



SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

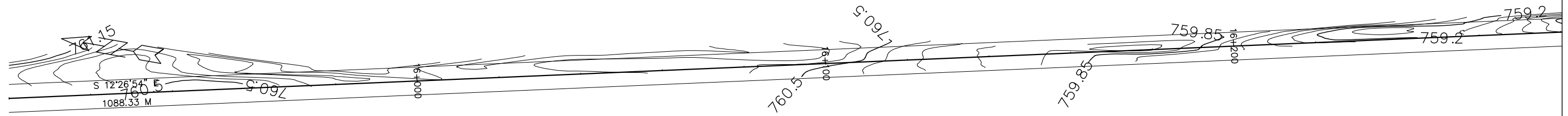
E L E V A T I O N S



DESIGN EL.	NATURAL EL.	STN
765.25	762.30	15+600
765.48	762.25	
765.66	762.20	
765.81	762.15	
765.93	762.10	
766.01	762.05	15+700
766.05	762.00	
766.05	761.90	
766.02	761.80	
765.95	761.70	15+800
765.84	761.60	
765.70	761.50	
765.52	761.45	
765.31	761.34	
765.07	761.35	15+900
764.83	760.99	
764.59	760.79	
764.45	760.59	
764.10	760.55	
763.86	760.38	

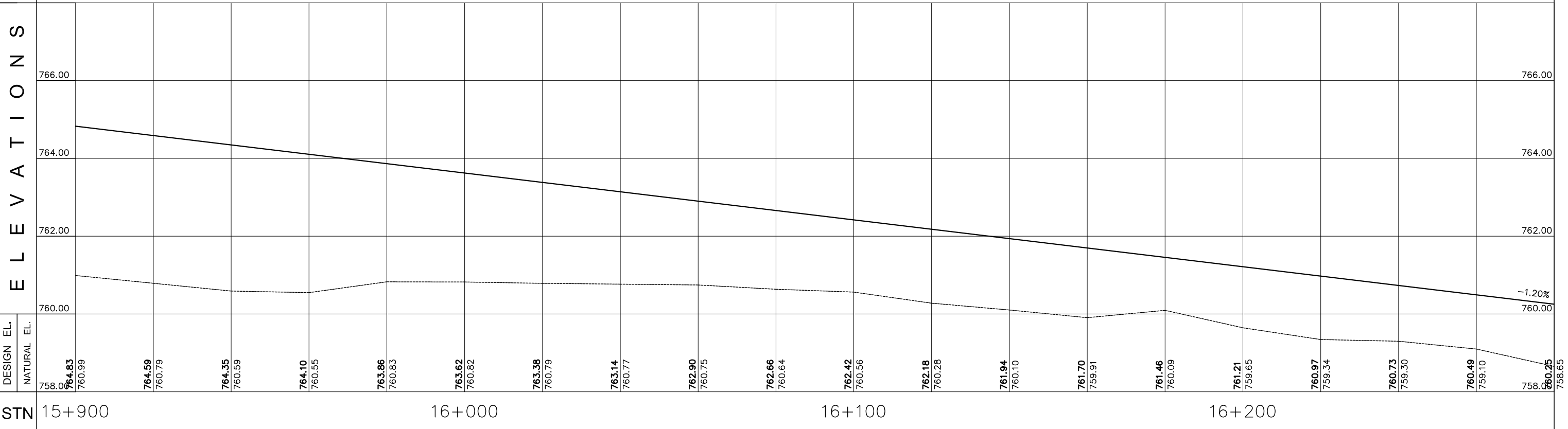
STN 15+600 15+700 15+800 15+900

<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
			MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS:			DWG. Scale: AS SHOWN			
			DATE: FEBRUARY 2023			

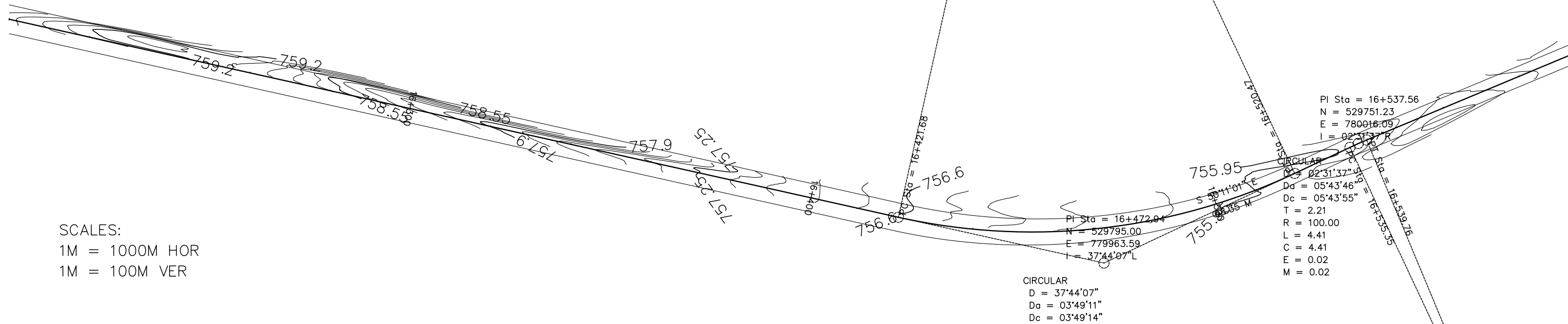
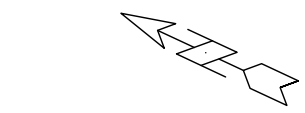


SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E L E V A T I O N S



<b>EMPLOYER:</b>	<b>DESIGNED/PREPARED BY:</b>	<b>APPROVED BY:</b>	<b>PROJECT TITLE:</b>	<b>REVISIONS:</b>	<b>CAD/DRAWN BY:</b>	<b>SHEET NO.</b>
<b>ACTED</b> ACTED South Sudan Western Equatoria State The Republic of South Sudan	<b>LADDER</b> <small>CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</small> Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan		MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS						
				DWG. Scale:	AS SHOWN	
				DATE:	FEBRUARY 2023	

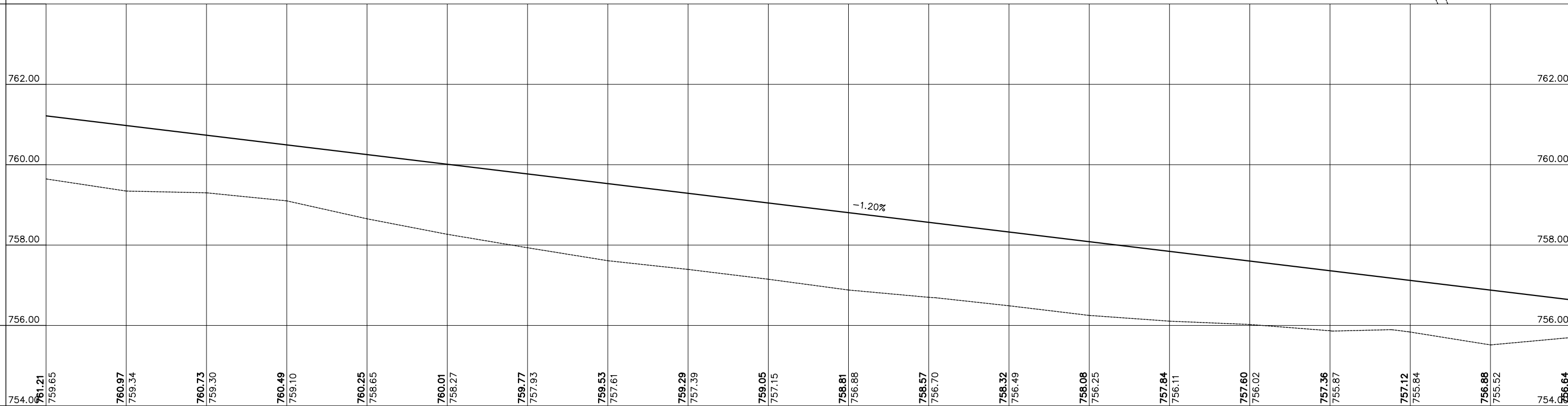


SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

CIRCULAR  
 D = 37'44'07"  
 Da = 03'49'11"  
 Dc = 03'49'14"

PI Sta = 16+537.56  
 N = 529751.23  
 E = 780016.09  
 I = 02'37'37" R  
 D = 02'31'37"  
 Da = 05'43'46"  
 Dc = 05'43'55"  
 T = 2.21  
 R = 100.00  
 L = 4.41  
 C = 4.41  
 E = 0.02  
 M = 0.02

E L E V A T I O N S



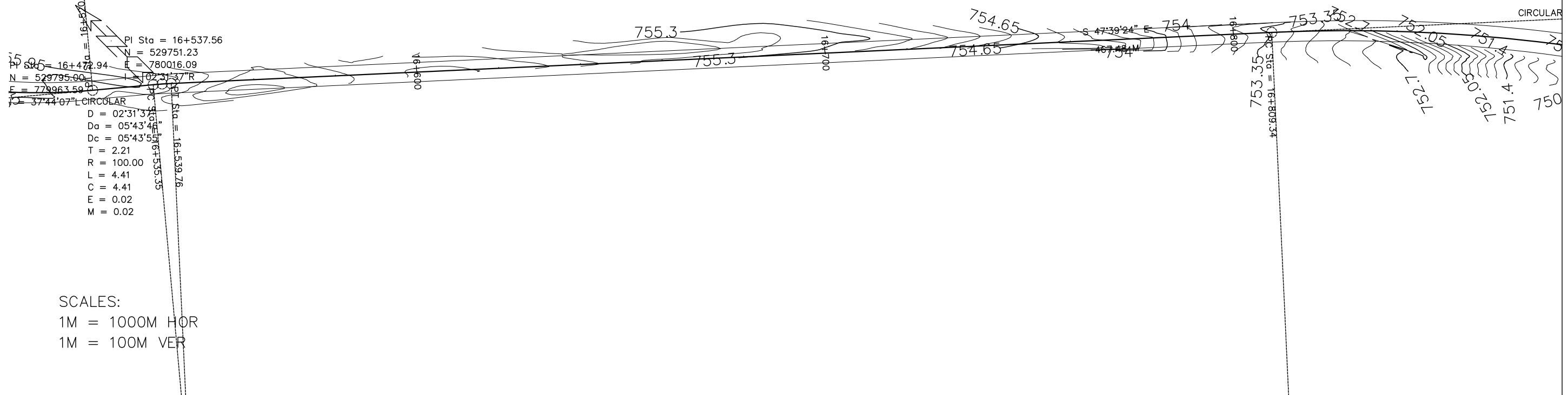
DESIGN EL.	NATURAL EL.	STN
754.00	754.00	16+200
759.21	759.65	
759.34		
760.97		
759.30		
760.73		
759.10		
760.49		
758.65		
760.25		
758.27		
760.01		
757.93		
759.77		
757.61		
759.53		
757.39		
759.29		
757.15		
759.05		
756.88		
758.81		
756.70		
758.57		
756.49		
758.32		
756.25		
758.08		
756.11		
757.84		
756.02		
757.60		
755.87		
757.36		
755.84		
757.12		
755.52		
756.88		
754.00		
756.64		
756.70		

<p>EMPLOYER:</p> <p><b>ACTED</b>        ACTED South Sudan        Western Equatoria State        The Republic of South Sudan</p>	<p>DESIGNED/PREPARED BY:</p> <p><b>LADDER</b>        CONSULTANCY   CONSTRUCTION   IT SOLUTIONS        GENERAL TRADING</p> <p>Tel: +211920105359        Email: ladderedi@gmail.com        Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	<p>PROJECT TITLE:</p> <p>MARIDI - EMBAI - ACCESS ROAD</p> <p>SHEET CONTENT:</p> <p>PLAN AND PROFILE</p> <p>STATION LIMITS</p>	<p>REVISIONS:</p>	<p>CAD/DRAWN BY:</p> <p>DWG. Scale: AS SHOWN</p> <p>DATE: FEBRUARY 2023</p>
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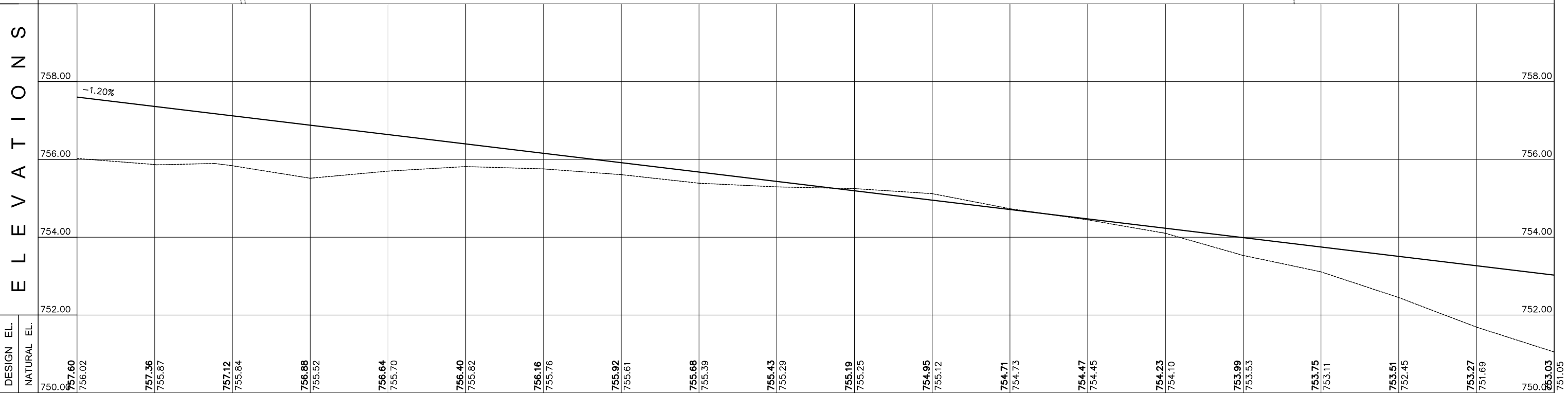


PI Sta = 16+537.56  
 N = 529751.23  
 E = 780016.09  
 N = 529795.00  
 E = 779963.50  
 D = 02°31'37" R  
 D = 02°31'37" R  
 Dc = 05°43'55" R  
 T = 2.21  
 R = 100.00  
 L = 4.41  
 C = 4.41  
 E = 0.02  
 M = 0.02

SCALES:  
 1M = 1000M HOR  
 1M = 100M VER



ELEVATIONS

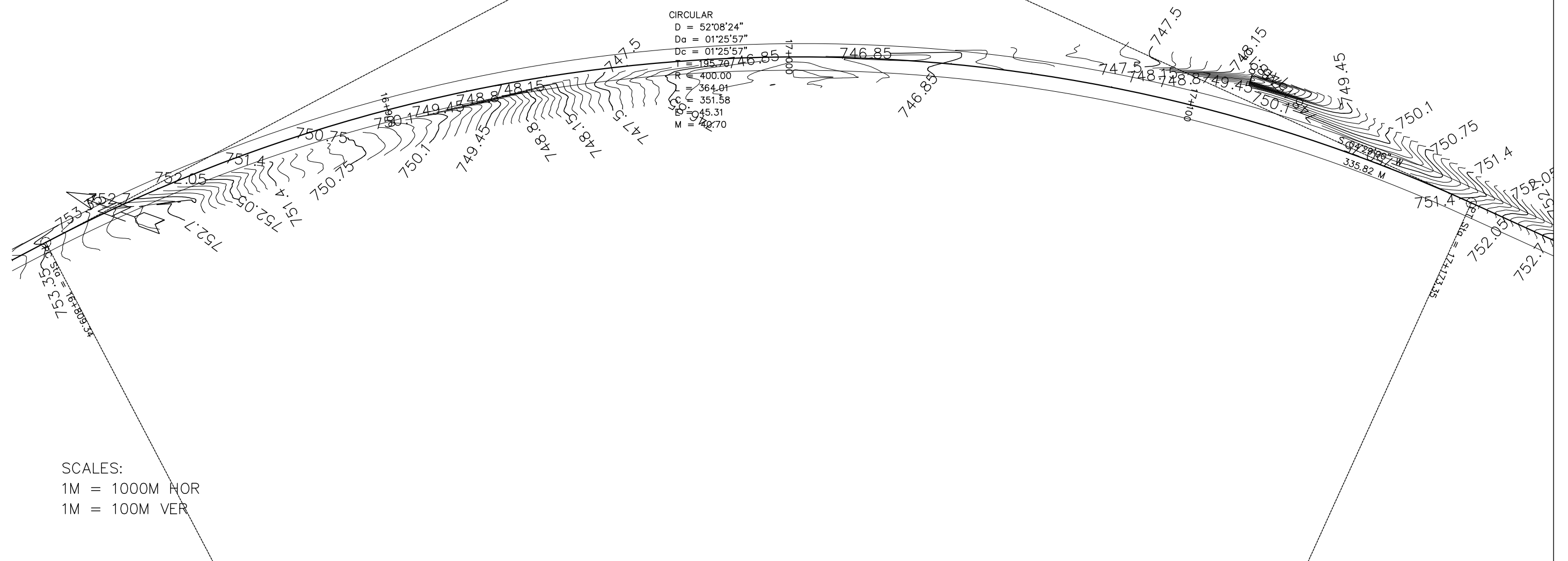


STN	16+500	16+600	16+700	16+800
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<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	<p>PROJECT TITLE:</p> <p>MARIDI - EMBAI - ACCESS ROAD</p>	<p>REVISIONS:</p>	<p>CAD/DRAWN BY:</p>	<p>SHEET NO.</p>
			<p>SHEET CONTENT:</p> <p>PLAN AND PROFILE</p>	<p>DWG. Scale:</p> <p>AS SHOWN</p>	<p>DATE:</p> <p>FEBRUARY 2023</p>	

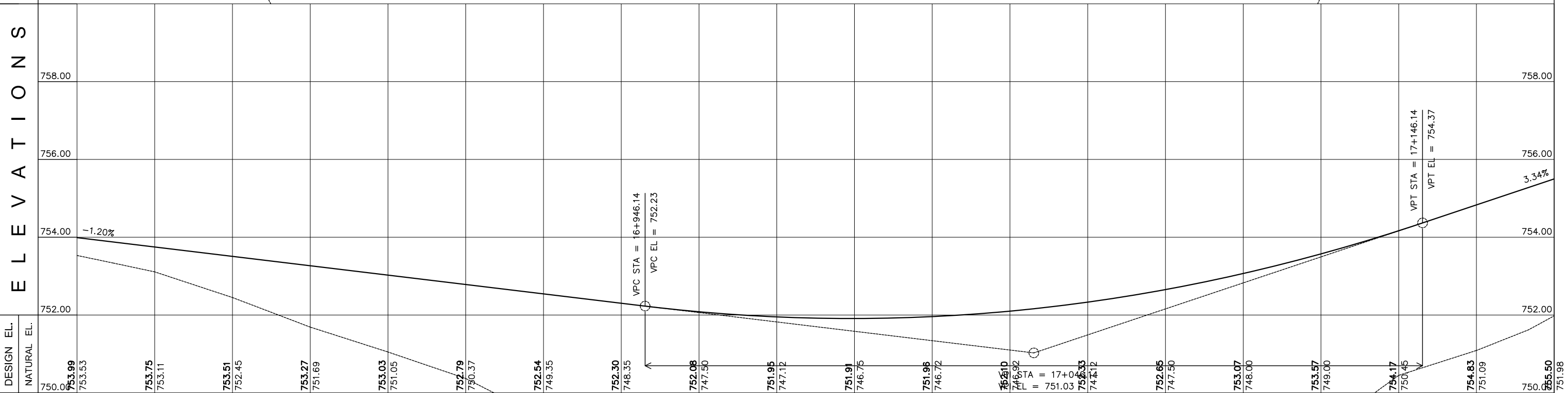
N = 529436.35  
 E = 780361.61  
 I = 52°08'24"R

CIRCULAR  
 D = 52°08'24"  
 D<sub>a</sub> = 01°25'57"  
 D<sub>c</sub> = 01°25'57"  
 T = 195.70  
 R = 400.00  
 L = 364.01  
 E = 351.58  
 M = 45.31  
 M = 42.70




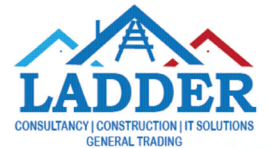
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS

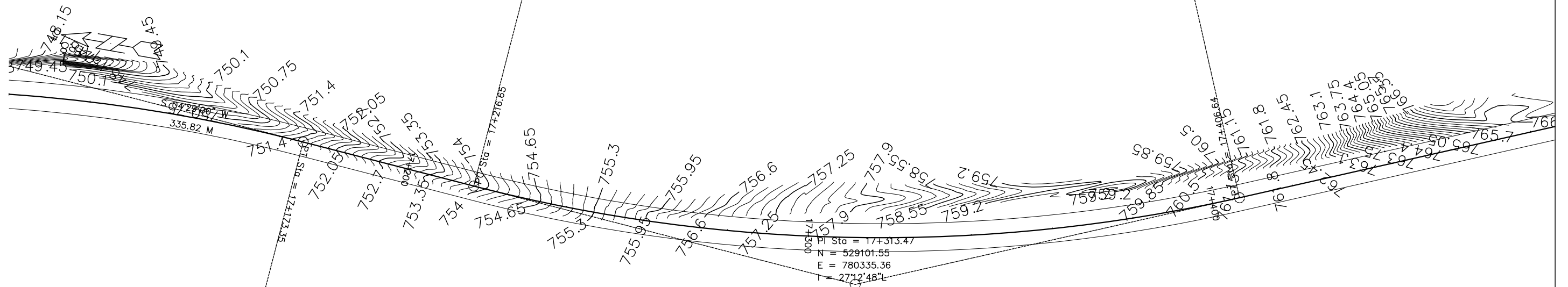


DESIGN EL.	750.00	753.99	753.53	753.75	753.11	753.51	752.45	753.27	751.69	753.03	751.05	752.79	750.37	752.54	749.35	752.30	748.35	752.08	747.50	751.96	747.12	751.91	746.75	751.96	746.72	752.65	747.50	753.07	748.00	753.57	749.00	754.17	750.45	754.83	751.09	750.00	755.50	751.98
NATURAL EL.	750.00	753.99	753.53	753.75	753.11	753.51	752.45	753.27	751.69	753.03	751.05	752.79	750.37	752.54	749.35	752.30	748.35	752.08	747.50	751.96	747.12	751.91	746.75	751.96	746.72	752.65	747.50	753.07	748.00	753.57	749.00	754.17	750.45	754.83	751.09	750.00	755.50	751.98

STN 16+800 16+900 17+000 17+100

EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
 ACTED South Sudan Western Equatoria State The Republic of South Sudan	 LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING	Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan	MARIDI - EMBAI - ACCESS ROAD			
SHEET CONTENT:				DWG. Scale:		AS SHOWN
STATION LIMITS				DATE:		FEBRUARY 2023

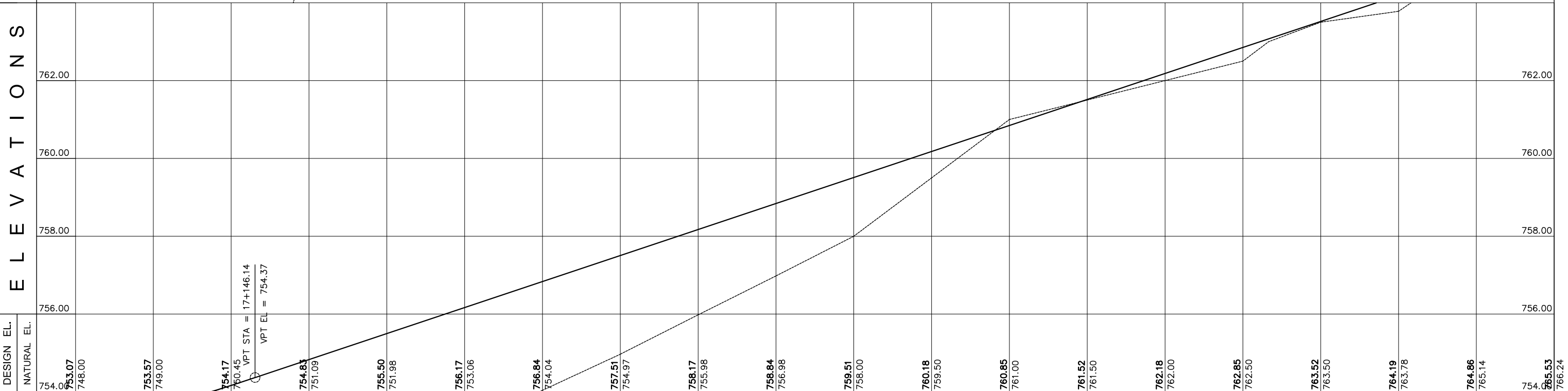
PI Sta = 17+005.04  
 N = 529436.35  
 E = 780361.61  
 I = 52°08'24"R





SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

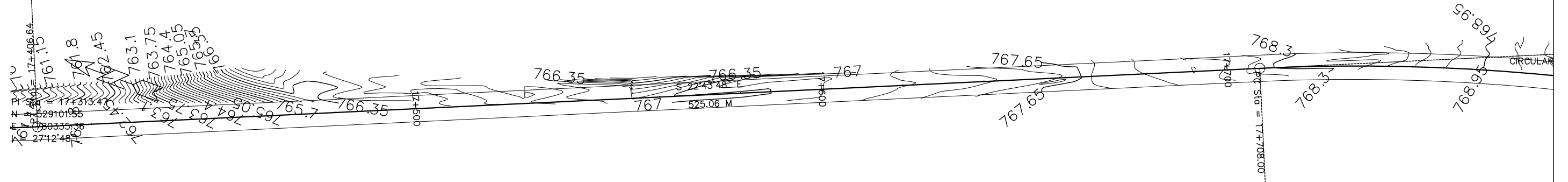
CIRCULAR  
 D = 27°12'48"  
 Da = 01°25'57"  
 Dc = 01°25'57"  
 T = 96.82  
 R = 400.00  
 L = 189.98  
 C = 188.20

ELEVATIONS



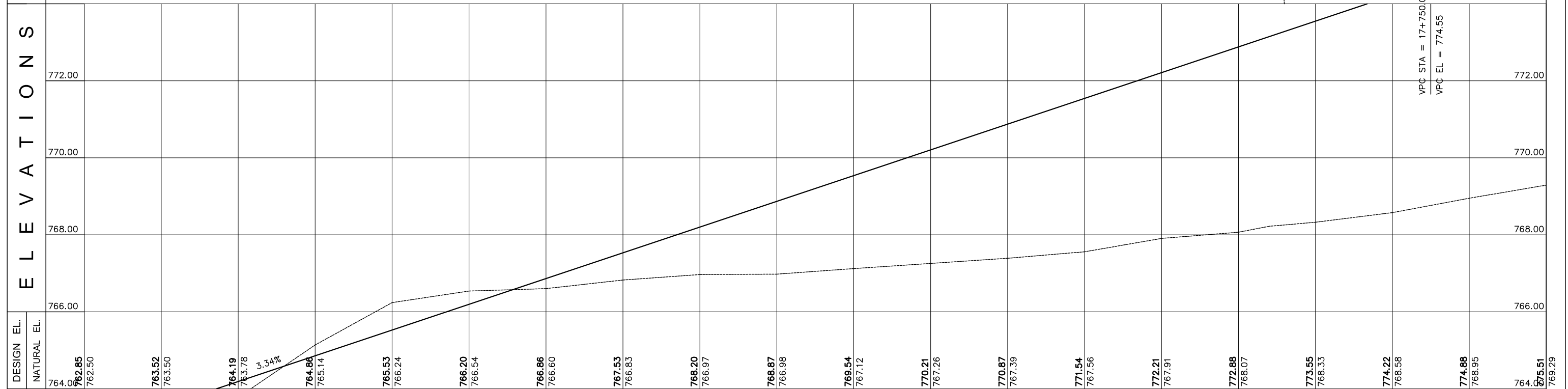
STN	17+100	17+200	17+300	17+400
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EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
 <p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	 <p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p>	<p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:				
			PLAN AND PROFILE				
STATION LIMITS:					DWG. Scale:	AS SHOWN	
					DATE:	FEBRUARY 2023	



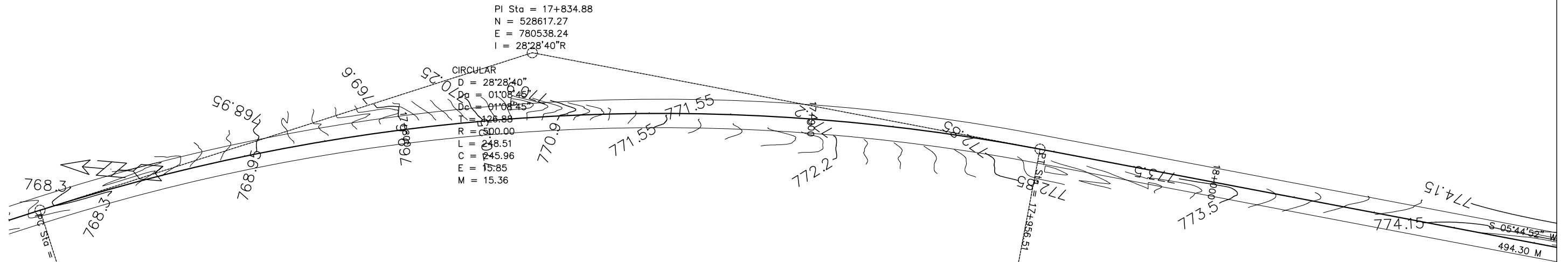
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



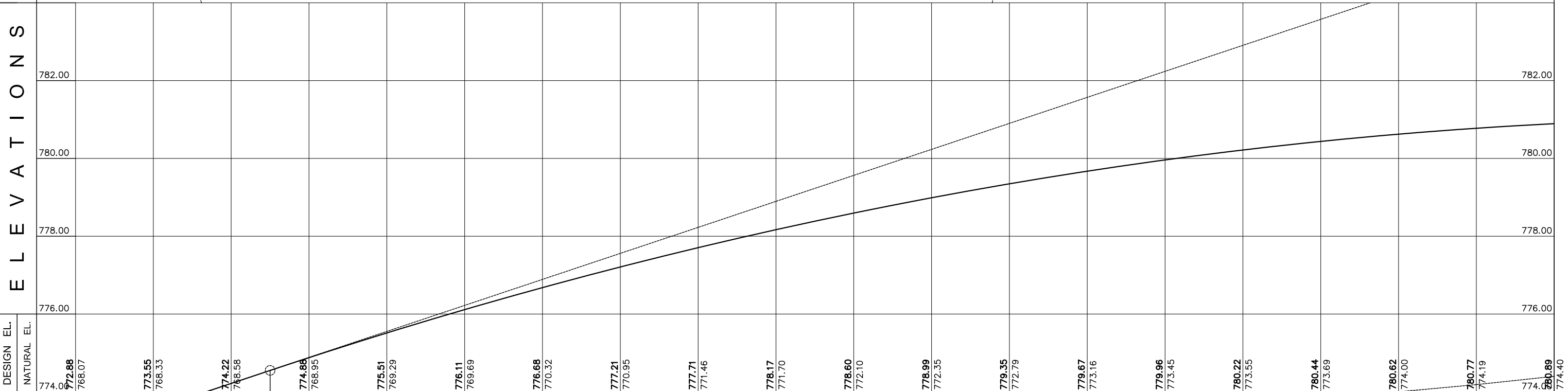
STN	17+400	17+500	17+600	17+700
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<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	<p>PROJECT TITLE:</p> <p>MARIDI - EMBAI - ACCESS ROAD</p>	<p>REVISIONS:</p>	<p>CAD/DRAWN BY:</p>	<p>SHEET NO.</p>
			<p>SHEET CONTENT:</p> <p>PLAN AND PROFILE</p>	<p>DWG. Scale:</p> <p>AS SHOWN</p>	<p>DATE:</p> <p>FEBRUARY 2023</p>	



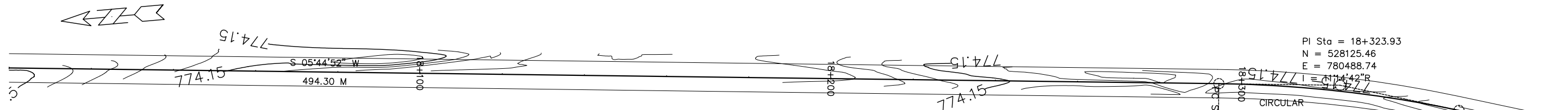
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS



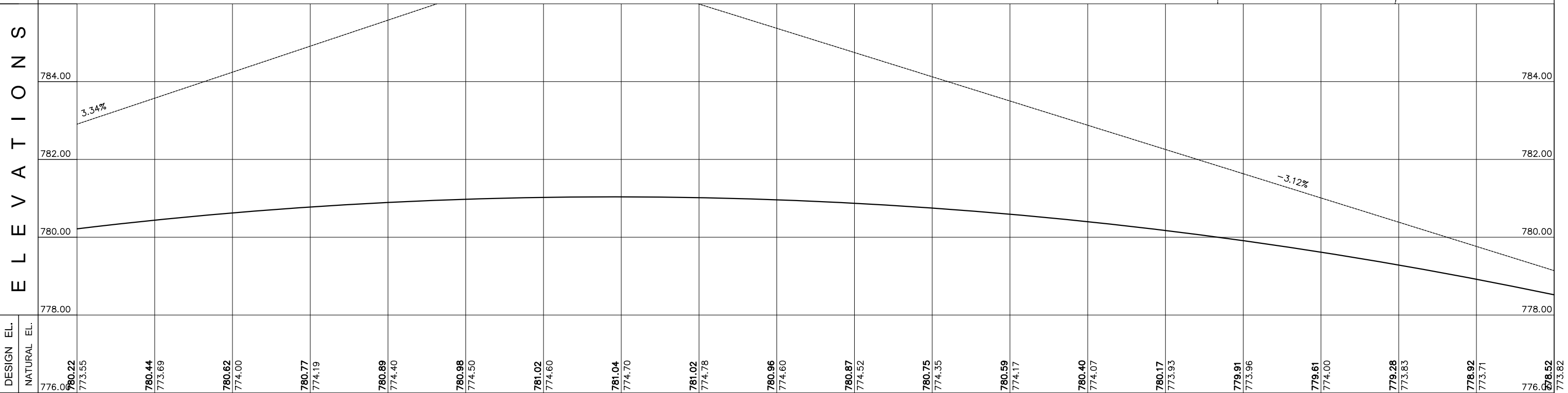
STN 17+700 17+800 17+900 18+000

EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
<p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	<p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p>	<p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:			DWG. Scale:	AS SHOWN
			STATION LIMITS			DATE:	FEBRUARY 2023



PI Sta = 18+323.93  
 N = 528125.46  
 E = 780488.74  
 I = 1.11442°R  
 CIRCULAR  
 D = 11'14'42"  
 Da = 01'54'35"  
 Dc = 01'54'36"  
 T = 29.53  
 R = 300.00  
 L = 58.88  
 C = 58.78  
 E = 1.45  
 M = 1.44

SCALES:  
 1M = 1000M HOR  
 1M = 100M VER



STN	18+000	18+100	18+200	18+300
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<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE: MARIDI - EMBAI - ACCESS ROAD	REVISIONS:	CAD/DRAWN BY:	SHEET NO.:		
		SHEET CONTENT: PLAN AND PROFILE				DWG. Scale: AS SHOWN			
		STATION LIMITS:				DATE: FEBRUARY 2023			



PI- Sta = 18+323.93  
 N = 528125.46  
 E = 780488.74

CIRCULAR  
 D = 11°14'42"  
 Da = 01°54'35"  
 Dc = 01°54'36"  
 T = 29.53  
 R = 300.00  
 L = 58.88  
 C = 58.78  
 E = 1.45  
 M = 1.44

SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

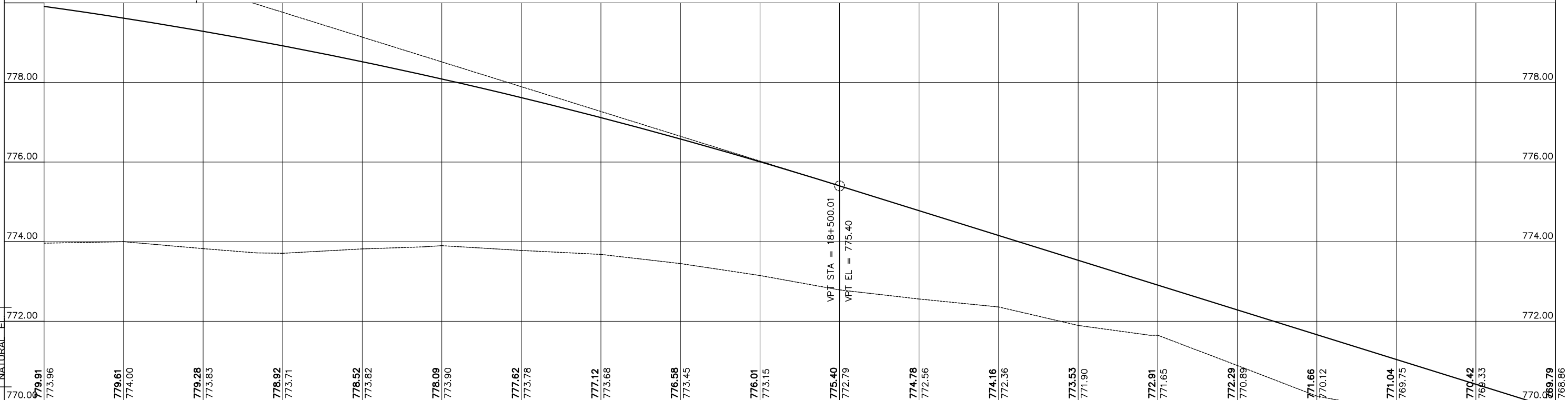
PI- Sta = 18+487.88  
 N = 527968.53  
 E = 780440.78  
 I = 20°54'13"

CIRCULAR  
 D = 20°54'13"  
 Da = 01°08'45"  
 Dc = 01°08'45"  
 T = 92.23  
 R = 500.00  
 L = 182.42  
 C = 181.41  
 E = 8.44  
 M = 8.30

ELEVATIONS

DESIGN EL.  
 NATURAL EL.

STN

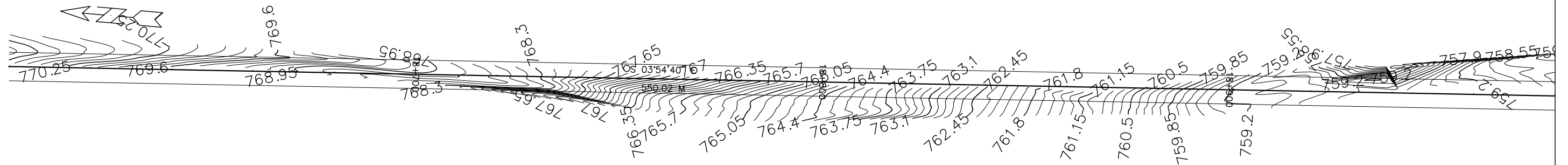


EMPLOYER: DESIGNED/PREPARED BY: APPROVED BY: PROJECT TITLE: REVISIONS: CAD/DRAWN BY: SHEET NO.

**ACTED**  
 ACTED South Sudan  
 Western Equatoria State  
 The Republic of South Sudan

**LADDER**  
 CONSULTANCY | CONSTRUCTION | IT SOLUTIONS  
 GENERAL TRADING  
 Tel: +211920105359  
 Email: ladderedi@gmail.com  
 Juba, The Republic of South Sudan

PROJECT TITLE:	MARIDI - EMBAI - ACCESS ROAD
SHEET CONTENT:	PLAN AND PROFILE
STATION LIMITS:	
DWG. Scale:	AS SHOWN
DATE:	FEBRUARY 2023



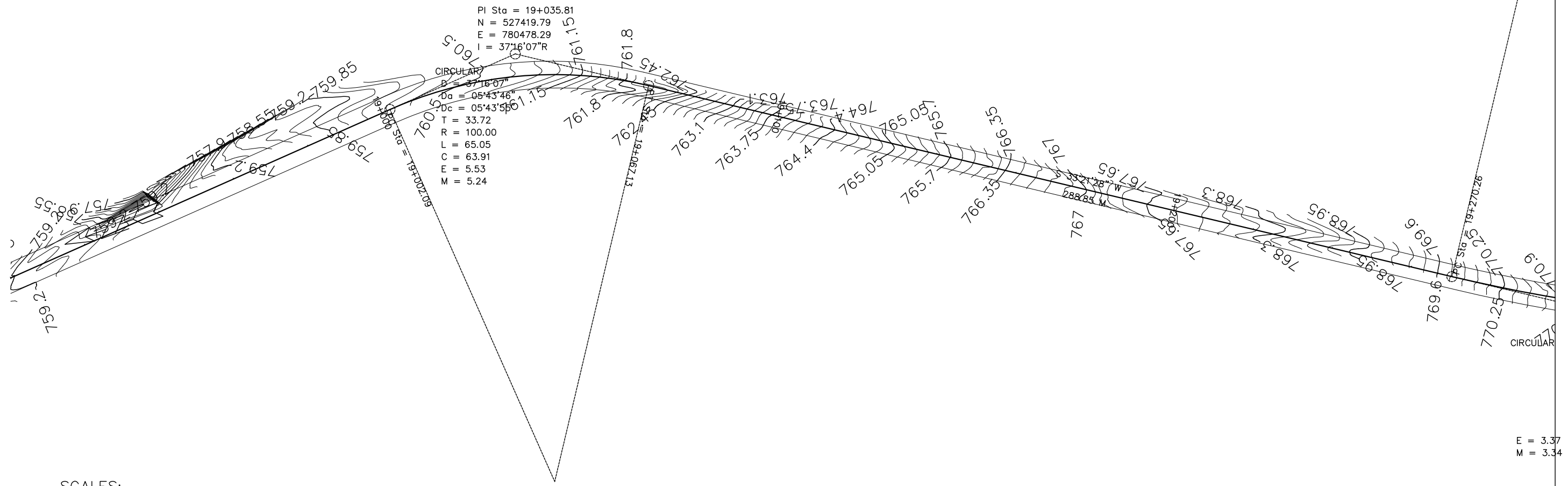
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

ELEVATIONS

DESIGN EL.	NATURAL EL.
762.0	772.29
770.89	770.89
771.66	770.12
769.75	771.04
769.33	770.42
768.86	769.79
768.64	769.17
768.53	768.55
767.92	767.92
766.94	767.30
765.92	766.68
764.79	766.05
763.69	765.43
762.49	764.81
761.56	764.19
760.47	763.56
759.27	762.94
759.00	762.47
758.87	762.23
762.20	762.18
759.25	762.14
759.75	759.75

STN	18+600	18+700	18+800	18+900
VPC STA = 18+897.18 VPT STA = 18+947.18				

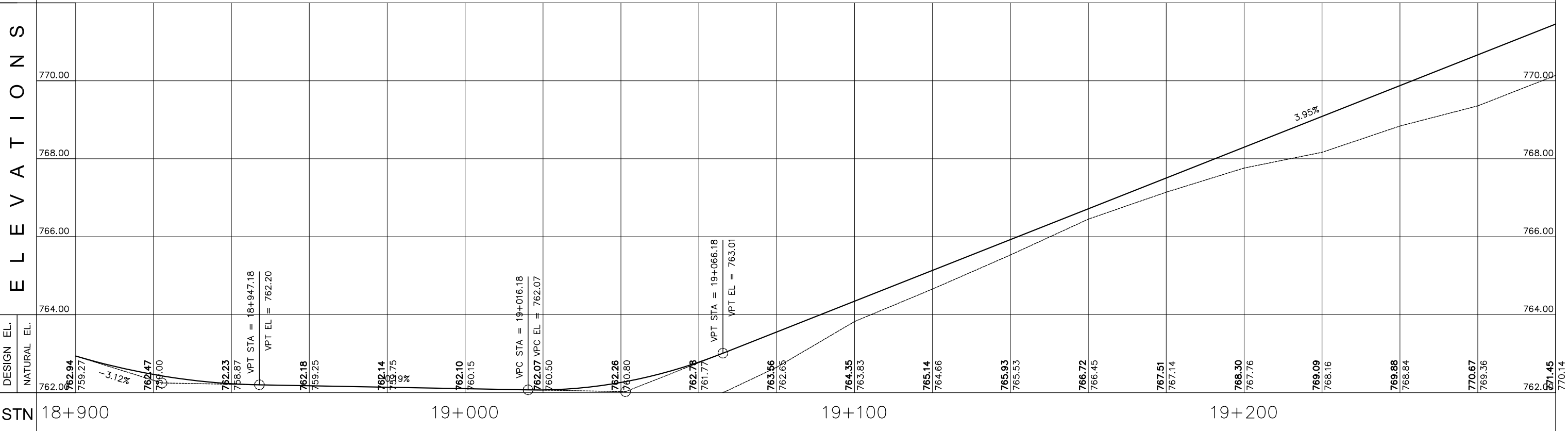
<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	<p>APPROVED BY:</p>	<p>PROJECT TITLE: MARIDI - EMBAI - ACCESS ROAD</p> <p>SHEET CONTENT: PLAN AND PROFILE</p> <p>STATION LIMITS:</p>	<p>REVISIONS:</p>	<p>CAD/DRAWN BY:</p> <p>DWG. Scale: AS SHOWN</p> <p>DATE: FEBRUARY 2023</p> <p>SHEET NO.</p>
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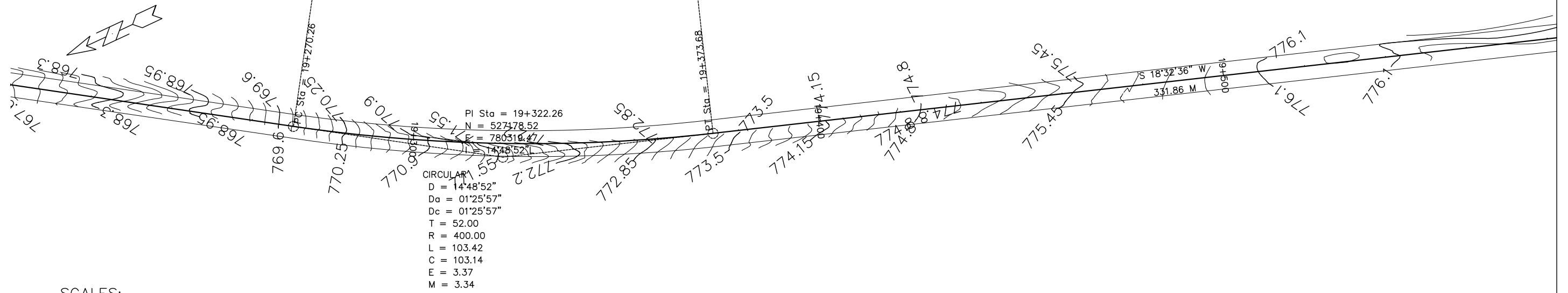
SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E = 3.37  
 M = 3.34

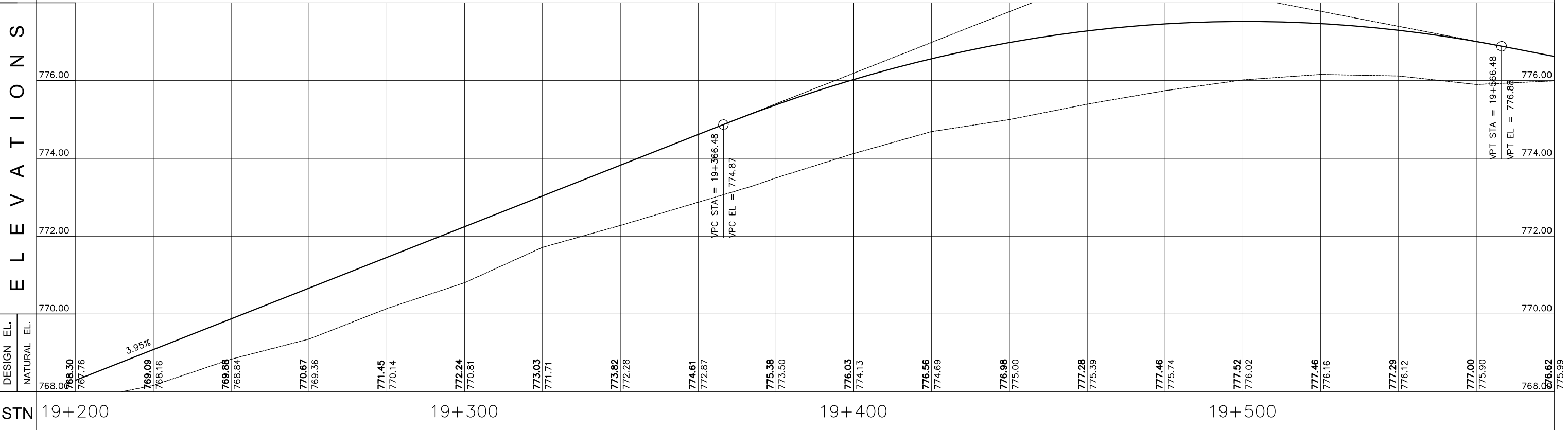
ELEVATIONS



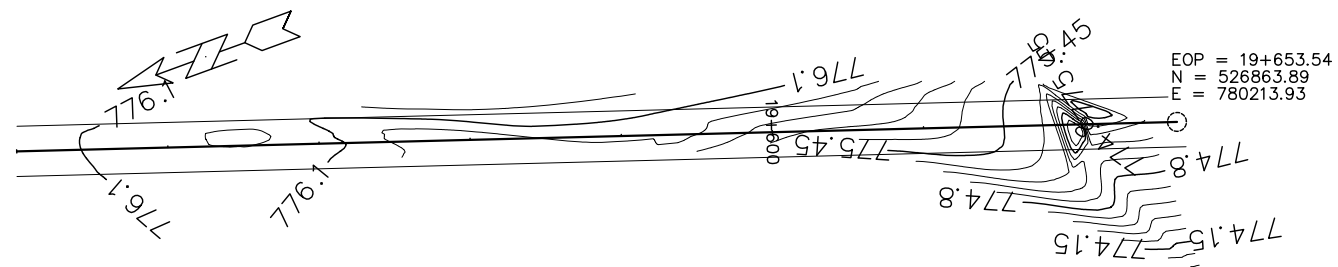
EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
 <p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	 <p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p>	<p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>	MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:			DWG. Scale:	AS SHOWN
			STATION LIMITS			DATE:	FEBRUARY 2023



ELEVATIONS

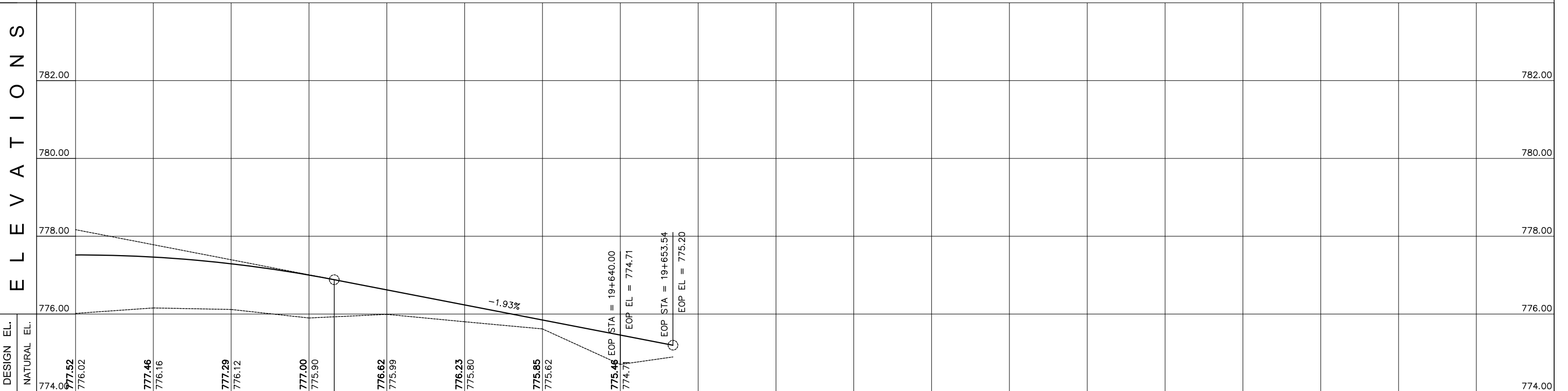


EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.
<p>ACTED South Sudan Western Equatoria State The Republic of South Sudan</p>	<p>LADDER CONSULTANCY   CONSTRUCTION   IT SOLUTIONS GENERAL TRADING</p> <p>Tel: +211920105359 Email: ladderedi@gmail.com Juba, The Republic of South Sudan</p>		MARIDI - EMBAI - ACCESS ROAD			
			SHEET CONTENT:			
			PLAN AND PROFILE			
STATION LIMITS:					DWG. Scale:	AS SHOWN
					DATE:	FEBRUARY 2023



SCALES:  
 1M = 1000M HOR  
 1M = 100M VER

E L E V A T I O N S



STN 19+500 19+600 19+700 19+800

EMPLOYER:	DESIGNED/PREPARED BY:	APPROVED BY:	PROJECT TITLE:	REVISIONS:	CAD/DRAWN BY:	SHEET NO.	
<p>ACTED South Sudan          Western Equatoria State          The Republic of South Sudan</p>	<p>LADDER          CONSULTANCY   CONSTRUCTION   IT SOLUTIONS          GENERAL TRADING</p> <p>Tel: +211920105359          Email: ladderedi@gmail.com          Juba, The Republic of South Sudan</p>		MARIDI - EMBAI - ACCESS ROAD				
			SHEET CONTENT:			DWG. Scale:	AS SHOWN
			STATION LIMITS			DATE:	FEBRUARY 2023