TOWN OF MESILLA

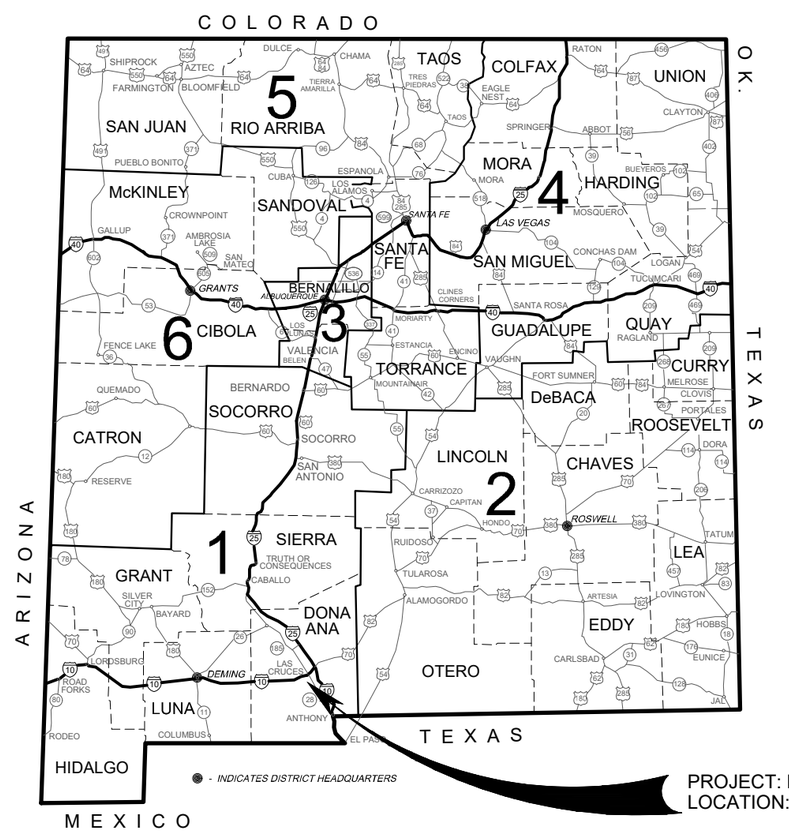
CONSTRUCTION PLANS

LA LLORONA TRAIL EXTENSION

DOÑA ANA COUNTY

CN - LC00320

July 2019



PROJECT: LC00320
LOCATION: NM359 MP 0.557 TO MP 1.832

ALONZO L. MARTINEZ
31-Jul-19

Drawing File: P:\9-CALLE DEL NORTE MULTI USE TRAIL (9327602)\PCN LC00320\PLANS\01_SHEETS\LC00320COVERSHEET01.DWG
12:52 AM

PROJECT CONTROL NUMBER: LC00320

NEW MEXICO PROJECT NO.	SHEET NO.
LC00320	1-2

Souder, Miller & Associates
Engineering ♦ Environmental ♦ Surveying

Length Of Project 1.275 Miles

PROJECT BEGINS WITHIN SECTION 35, TOWNSHIP 23 SOUTH, RANGE 1 EAST, N.M.P.M. &
PROJECT ENDS WITHIN SECTION 34, TOWNSHIP 23 SOUTH, RANGE 1 EAST, N.M.P.M.

CONVENTIONAL SIGNS

ON PLAN

N

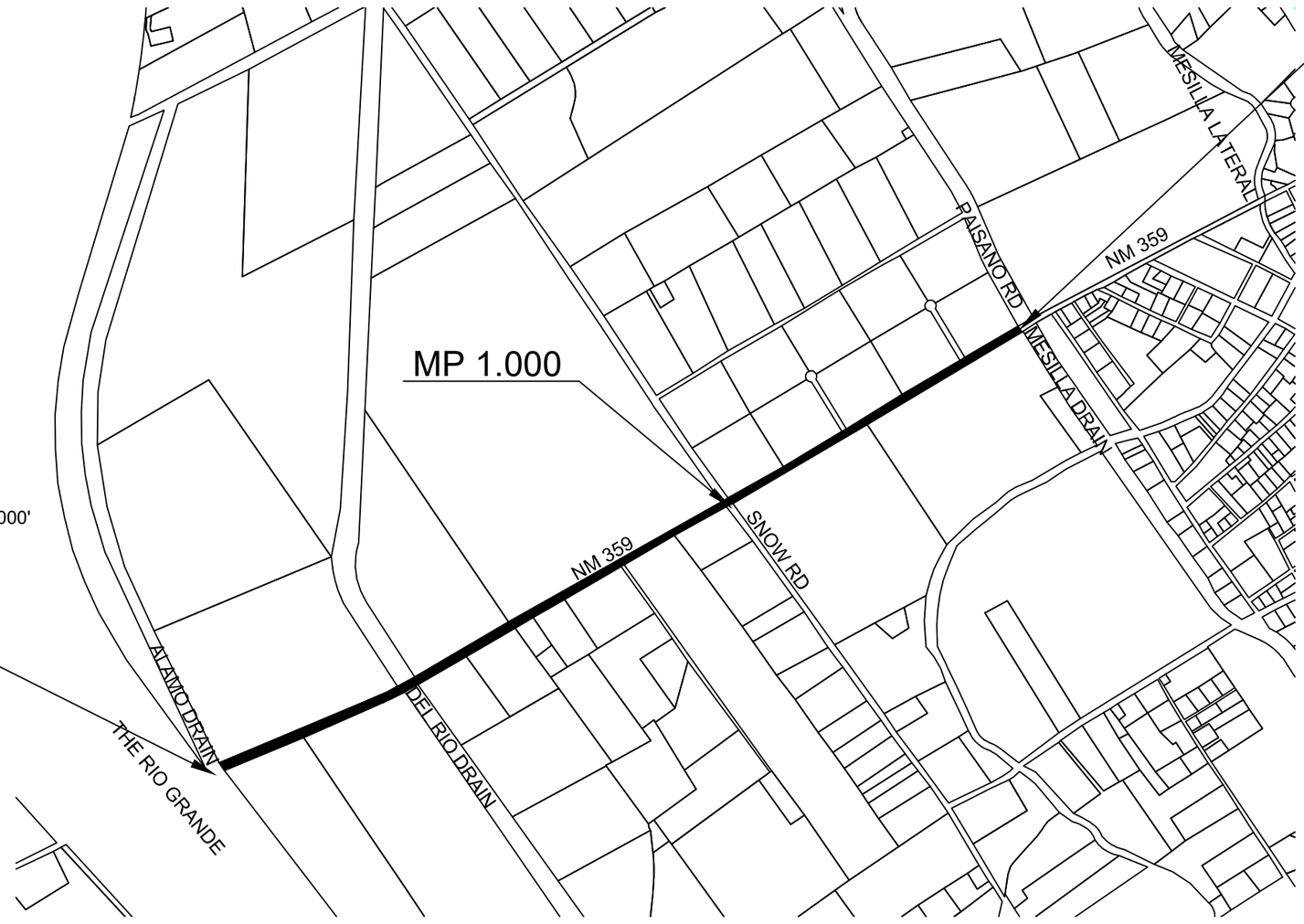
STATE LINE
COUNTY LINE
LAND GRANT LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
CITY OR TOWN LIMIT
UNFENCED PROPERTY LINE
REFERENCE LINE & POINT
WIRE FENCE
RAIL FENCE
STONE OR ADOBE FENCE
PICKET FENCE
TELEPHONE-TELEGRAPH LINE
PROTECTION DITCH & DIKE
RETAINING WALL
ARROYO
RIVER OF CREEK
IRRIGATION DITCH
CONCRETE SIDEWALK
PRESENT TRAVELED ROAD
TRAIL
RAILROAD-TITLE PAGE
RAILROAD-PLAN PAGE

RIGHT OF WAY LINE
P.C. 5+52.1
P.T. 6+73.4
SURVEY CENTER LINE
RAILROAD CATTLEGUARD
HIGHWAY CATTLEGUARD
BRIDGE
CULVERT
SPILLWAY
HOUSE/BUILDING
CHURCH CEMETERY SCHOOL
TOWN-TITLE PAGE
BLUFF OR HILLS
SURFACING PIT
TREE
WINDMILL
SECTION CORNER
B.M. 1235
BENCH MARK

ON PROFILE

BRIDGE
PIPE CULVERT
BOX CULVERT
VERTICAL CURVE
DATUM LINE GROUND ELEVATION 1137.000
DATUM LINE GRADE ELEVATION 1137.000

SCALE: 1"=1000'



B.O.P. MP 0.557
STA. 37+60.00

E.O.P. MP 1.832
STA. 104+90.93

VICINITY MAP

SOUDER MILLER DESIGN ENGINEER:
ALONZO L. MARTINEZ ALONZO.MARTINEZ@SOUDERMILLER.COM (575) 910-8400

TOWN OF MESILLA PUBLIC WORKS DIRECTOR
ROD MCGILLIVRAY RODM@MESILLANM.GOV (575) 524-3262

UTILITY CONTACTS
EL PASO ELECTRIC ISSA TOU (915) 487-1255
CENTURY LINK MANNY ALTAMIRANO (575) 640-0143
ZIA GAS SAL CORTEZ (575) 640-4166
MESILLA WATER ROD MCGILLIVRAY (575)-524-3262

SHIPPING POINTS

LAS CRUCES, NM

THE 2019 EDITION OF NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION AS WELL AS THE 2019 EDITION OF NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS FOR HIGHWAY AND BRIDGE CONSTRUCTION SHALL GOVERN CONSTRUCTION OF THIS PROJECT.

LEGEND

THIS CONTRACT _____
BITUMINOUS SURFACED _____
GRAVEL SURFACED _____
GRADED AND DRAINED _____
UNIMPROVED _____
PRIMITIVE _____
CONCRETE SURFACED _____

INTENT OF PROJECT

THE INTENT OF THIS PROJECT IS TO CONSTRUCT A SHARED-USED PATH, TURNOUT RECONSTRUCTION ALONG THE SHARED-USED PATH, AND PERMANENT SIGNING INCLUDING TRAFFIC CONTROL DURING CONSTRUCTION.

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

VICINITY SHEET

Souder, Miller & Associates
Engineering ◆ Environmental ◆ Surveying

INDEX OF SHEETS

SHEET NUMBER	SHEET DESCRIPTION	SHEET COUNT	REV DATE
SERIES 1			
1-1	COVER SHEET	1	
1-2	VICINITY SHEET	1	
1-3	INDEX OF SHEETS	1	
1-4	SUMMARY OF QUANTITIES	1	
1-5	GENERAL NOTES	1	
1-6	ENVIRONMENTAL COMMITMENTS	1	
	SHEET SUBTOTAL=	**6**	
SERIES 2			
2-1	EXISTING TYPICAL SECTION	1	
2-2	PROPOSED TYPICAL SECTIONS	1	
2-3	SURFACING SCHEDULE	1	
2-4 TO 2-5	MISCELLANEOUS QUANTITIES	2	
2-6	SURVEY CONTROL	1	
2-7	ALIGNMENT LINE AND CURVE DATA TABLES	1	
	SHEET SUBTOTAL=	**7**	
SERIES 3			
3-1 TO 3-11	PLAN & PROFILES	11	
	SHEET SUBTOTAL=	**11**	
SERIES 4			
4-1 TO 4-4	DRIVEWAY PLAN AND PROFILES	4	
4-5 TO 4-6	TURNOUT PLAN AND PROFILES	2	
	SHEET SUBTOTAL=	**6**	
SERIES 5	NOT USED		
SERIES 6			
6-1 TO 6-2	TEMPORARY TRAFFIC GENERAL NOTES	2	
6-3	TTC GENERAL NOTES CONTINUED & SUGGESTED SEQUENCE OF CONSTRUCTION	1	
6-4	CONSTRUCTION & MAINTENANCE SIGN FACE DETAILS	1	
6-5	CHANNELIZATION DEVICES FOR CONSTRUCTION, MAINTENANCE, UTILITY & INCIDENT MANAGEMENT OPERATIONS	1	
6-6	ONE LANE CLOSURE	1	
6-7	PCMS LOCATION MAP	1	
6-8	CONSTRUCTION SIGNING QUANTITIES	1	
	SHEET SUBTOTAL=	**8**	
SERIES 7			
7-1	PERMANENT SIGN FACE DETAILS	1	
7-2 TO 7-7	PERMANENT SIGNING & STRIPING PLAN	6	
7-8	PERMANENT SIGNING & STRIPING QUANTITIES	1	
	SHEET SUBTOTAL=	**8**	
SERIES 8	NOT USED		
SERIES 9	NOT USED		
SERIES 10			
10-1 TO 10-2	STRUCTURE SECTIONS	2	
	SHEET SUBTOTAL=	**2**	
SERIES 11			
11-1 TO 11-6	EXISTING UTILITIES & ADJUSTMENTS	6	
	SHEET SUBTOTAL=	**6**	
SERIES 12			
12-1 TO 12-40	STANDARD DRAWINGS (SEE LIST)	40	
	SHEET SUBTOTAL=	**40**	
SERIES 13			
13-1 TO 13-23	PROJECT CROSS SECTIONS	23	
	SHEET SUBTOTAL=	**23**	
	SHEET TOTAL =	**117**	

INDEX OF STANDARD SERIAL DRAWINGS

SHEET #	DRAWING #	DRAWING TITLE	REV. DATE
203-01	203-01-1/1	MISCELLANEOUS DRAINAGE STANDARD DITCH AND DYKE CONTOUR DITCH AND IRRIGATION	2019 STD DWG BOOK
206-01	206-01-1/1	FILL HEIGHT & BEDDING DETAILS FOR CIRCULAR CONCRETE PIPE CULVERTS	2019 STD DWG BOOK
206-02	206-02-1/1	FILL HEIGHT & BEDDING DETAILS FOR ELLIPTICAL CONCRETE PIPE AND CONCRETE ARCH PIPE	2019 STD DWG BOOK
206-03	206-03-1/1	MAX. AND MIN. COVER - STEEL - ROUND PIPES, HELICAL CORRUGATED METAL, AND STRUCTURAL	2019 STD DWG BOOK
206-04	206-04-1/3	MAX. & MIN. COVER - STEEL PIPE ARCHES, HELICAL CORRUGATED METAL AND STRUCTURAL	2019 STD DWG BOOK
206-05	206-04-2/3	MAX. & MIN. COVER - STEEL ROUND PIPES, CORRUGATED METAL AND STRUCTURAL PLATES	2019 STD DWG BOOK
206-06	206-04-3/3	MAX. & MIN. COVER - STEEL ROUND PIPES, CORRUGATED METAL AND STRUCTURAL PLATES	2019 STD DWG BOOK
206-07	206-05-1/1	MAX. & MIN. COVER – ALUMINUM ROUND, HELICAL CORRUGATED METAL AND STRUCTURAL	2019 STD DWG BOOK
206-08	206-06-1/1	MAX. & MIN. COVER – ALUMINUM PIPE ARCHES, HELICAL CORRUGATED METAL AND STRUCTURAL	2019 STD DWG BOOK
206-09	206-07-1/1	CORRUGATED METAL CULVERT AND PIPE ARCHES BEDDING AND BACKFILL DETAILS	2019 STD DWG BOOK
603-01	603-01-1/7	TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES	2019 STD DWG BOOK
603-02	603-01-2/7	TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES CHECK DAMS	2019 STD DWG BOOK
603-03	603-01-3/7	TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SILT FENCE	2019 STD DWG BOOK
603-04	603-01-4/7	TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES CULVERT AND DROP INLET	2019 STD DWG BOOK
603-05	603-01-5/7	T.E.S.C.M. SEDIMENT BASIN, SEDIMENT TRAP, & EARTH DIKE	2019 STD DWG BOOK
603-06	603-01-6/7	TEMPORARY EROSION & SEDIMENT CONTROL MEASURES PIPE SLOPE DRAIN & SURFACE	2019 STD DWG BOOK
603-07	603-01-7/7	T.E.S.C.M. OFFSITE TRACKING PREVENTION & DIVERSION DIKE	2019 STD DWG BOOK
607-20	607-20-1/4	PEDESTRIAN RAILING WITHOUT HANDRAIL	2019 STD DWG BOOK
607-21	607-20-2/4	PEDESTRIAN RAILING WITH HANDRAIL	2019 STD DWG BOOK
607-22	607-20-3/4	PEDESTRIAN RAILING FOUNDATION DETAILS	2019 STD DWG BOOK
607-23	607-20-4/4	PEDESTRIAN HANDRAIL TEMPLATE FOR RAIL BRACKET	2019 STD DWG BOOK
608-01	608-001-1	PEDESTRIAN ACCESS ROUTE GENERAL NOTES	2019 STD DWG BOOK
608-03	608-001-3	PARALLEL CURB RAMPS	2019 STD DWG BOOK
608-07	608-001-7	CURB RAMP AND SIDEWALK TRANSITION DETAILS	2019 STD DWG BOOK
608-08	608-001-8	DETECTABLE WARNING SURFACE	2019 STD DWG BOOK
608-10	608-001-10	DRIVEWAY APRONS	2019 STD DWG BOOK
608-11	608-001-11	PEDESTRIAN ACCESS DETAILS STAIRWAY AND HANDRAILS	2019 STD DWG BOOK
608-12	608-001-12	PEDESTRIAN ACCESS DETAILS PARKING AND PASSENGER LOADING ZONES	2019 STD DWG BOOK
667-01	667-01-1/2	MAILBOXES AND STYLE POSTS, MISCELLANEOUS DETAILS	2019 STD DWG BOOK
667-02	667-01-2/2	MAILBOX INSTALLATION DETAILS	2019 STD DWG BOOK
701-13	701-02-1/3	SMALL SIGN SUPPORT INSTALLATION DETAILS	2019 STD DWG BOOK
701-14	701-02-2/3	SMALL SIGN SUPPORT INSTALLATION DETAILS	2019 STD DWG BOOK
701-15	701-02-3/3	MULTI-DIRECTIONAL SLIP BASE POST DETAILS	2019 STD DWG BOOK
701-16	701-03-1/2	ALUMINUM SIGN PANEL DETAILS	2019 STD DWG BOOK
701-17	701-03-2/2	ALUMINUM PANEL SIGN DETAILS	2019 STD DWG BOOK
703-01	703-01-1/3	ROAD OBJECT MARKER DETAILS	2019 STD DWG BOOK
703-03	703-01-3/3	DELINEATORS & OBJECT MARKERS	2019 STD DWG BOOK
703-05	703-02-2/2	REFERENCE LOCATION SIGN DETAIL FOR NON-INTERSTATE HIGHWAYS	2019 STD DWG BOOK
704-04	704-03-1/2	PAVEMENT MARKINGS AND MESSAGES	2019 STD DWG BOOK
704-05	704-03-2/2	PAVEMENT MARKINGS AND MESSAGES	2019 STD DWG BOOK
		SHEET SUBTOTAL=	**40**

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

INDEX OF SHEETS

Souder, Miller & Associates
Engineering • Environmental • Surveying

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	UNIT	ROADWAY		CONSTRUCTION SIGNING		PERMANENT SIGNING		CONSTRUCTION ENGINEERING		PROJECT TOTAL	
			ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL
201000	CLEARING AND GRUBBING	L.S.	L.S.								1	
203000	UNCLASSIFIED EXCAVATION	CU.YD.	1730								1730	
207000	SUBGRADE PREPARATION	SQ.YD.	7100								7100	
303000	BASE COURSE	TON	1500								1500	
408100	PRIME COAT MATERIAL	TON	1.0								1.0	
417000	MISCELLANEOUS PAVING	SQ.YD.	6970								6970	
570036	36" CULVERT PIPE	LIN.FT.	22								22	
601000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.	L.S.								1	
601110	REMOVAL OF SURFACING	SQ.YD	300								300	
603100	TEMPORARY SOIL STABILANT	ACRE	3.24								3.24	
603281	SWPPP PLAN PREPARATION AND MAINTENANCE	L.S.							L.S.		1	
607079	PEDESTRIAN/BICYCLE RAILING	LIN.FT.	147								147	
608004	CONCRETE SIDEWALK 4"	SQ.YD.	15								15	
618000	TRAFFIC CONTROL MANAGEMENT	L.S.			L.S.						1	
618011	PUBLIC AWARENESS	L.S.							L.S.		1	
621000	MOBILIZATION	L.S.	L.S.								1	
632000	CLASS A SEEDING	ACRE	1.62								1.62	
667110	MAIL BOX INSTALLATION-SINGLE	EACH	7								7	
667130	MAIL BOX INSTALLATION-MULTIPLE	EACH	1								1	
701000	PANEL SIGNS	SQ.FT.									1	
701030	REMOVE AND RESET PANEL SIGN	EACH					8				8	
701100	STEEL POST AND BASE POST FOR ALUMINUM PANEL SIGNS	LIN.FT.					50				50	
702810	TRAFFIC CONTROL DEVICES FOR CONSTRUCTION	L.S.			L.S.						1	
703002	OBJECT MARKER TYPE 2	EACH					6				6	
703003	OBJECT MARKER TYPE 3	EACH					6				6	
704704	HOT THERMOPLASTIC PAVEMENT MARKINGS 24"	LIN.FT.					90				90	
704728	HOT THERMOPLASTIC PAVEMENT MARKING YIELD LINE	LIN.FT.					20				20	
801000	CONSTRUCTION STAKING BY THE CONTRACTOR	L.S.	L.S.								1	
802000	POST CONSTRUCTION PLANS	L.S.			L.S.						1	

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

SUMMARY OF QUANTITIES

GENERAL NOTES

1. **"R" VALUE:** THE DESIGN "R" VALUE FOR THIS PROJECT IS 9.

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

GENERAL NOTES

Sandler, Miller & Associates
Engineering • Environmental • Surveying

ENVIRONMENTAL COMMITMENTS

THE CONTRACTOR SHALL REFER TO SECTION 107 OF THE 2019 EDITION OF THE STANDARD SPECIFICATIONS, MAKING SPECIAL NOTE OF SUB-SECTION 107.14 CONTRACTOR'S RESPONSIBILITIES FOR ENVIRONMENTAL AND CULTURAL RESOURCE PROTECTION.

☒ NO ADDITIONAL PROJECT-SPECIFIC ENVIRONMENTAL REQUIREMENTS APPLY.

R. Blake Rodgers
NMDOT Environmental Bureau Manager

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

NM 359 SHARED-USE PATH

ENVIRONMENTAL COMMITMENTS

Souder, Miller & Associates
Engineering • Environmental • Surveying

PROJECT LENGTH

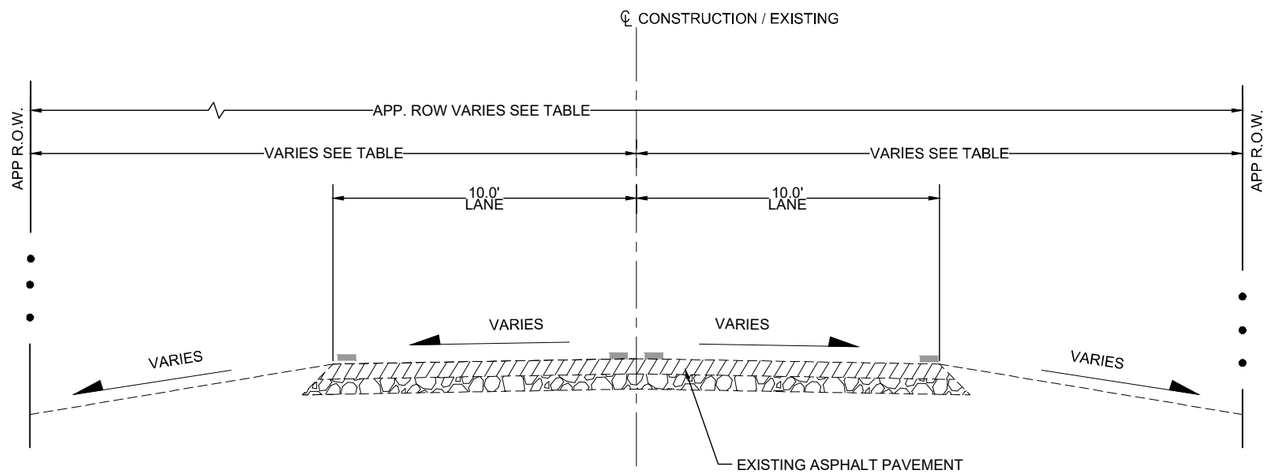
STATION	TO	STATION	DESCRIPTION	REMARKS	DIST. FT.	DIST. MILES
-		-	-			
37+60.00		104+27.00	NM 359 - SHARED-USE PATH	BUILD 8' WIDE SHARED-USE PATH ON SOUTH SIDE OF ROAD WITH 2.5" PAVEMENT OVER 4" OF BASE COURSE	6667.00	1.263
104+27.00		104+90.93	NM 359 - SHARED-USE PATH	BUILD 8' WIDE SHARED-USE PATH LANDING & TURNOUT ON NORTH SIDE OF ROAD WITH 2.5" PAVEMENT OVER 4" OF BASE COURSE	63.93	0.012
				PROJECT TOTAL =	**6730.93**	**1.275**
				B.O.P TO E.O.P =	**6730.93**	**1.275**

DESIGN PARAMETERS

			NM 359
POSTED SPEED			35
DESIGN SPEED			40
AADT (2017) ACTUAL			2,048
	CUM ESALS	SN	
20 YR	393,880	1.58	
1 YR	19,694	N/A	

CLEAR ZONE

SLOPE	40 MPH
	FT
6:1 OR FLATTER	12 TO 14
5:1 - 4:1	14 TO 16



ROW

START	END	WIDTH
BOP	89+20.00	50'
89+20.00	102+25.00	60'
102+25.00	103+60.00	TRANSITIONS
103+60.00	EOP	200'

EXISTING TYPICAL SECTION
SCALE: 1"=5'
STA. 37+60.00 TO STA. 104+90.93

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

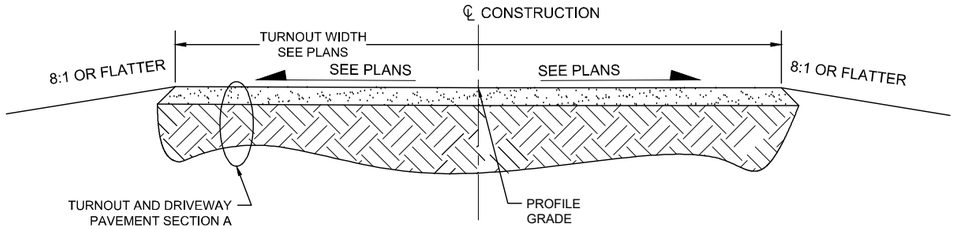
REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

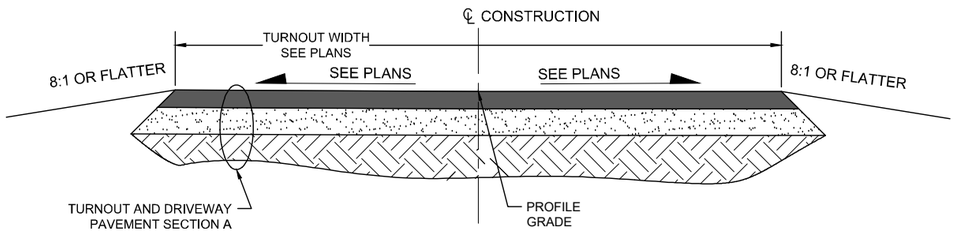
LC00320

LA LLORONA TRAIL EXTENSION

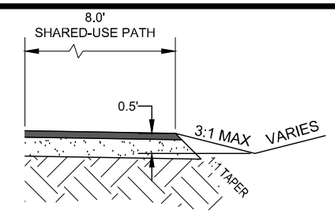
EXISTING TYPICAL SECTION



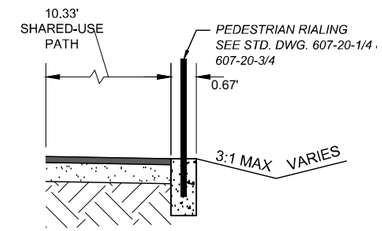
TURNOUT/DRIVEWAY TYPICAL SECTION B
SCALE: 1"=5'



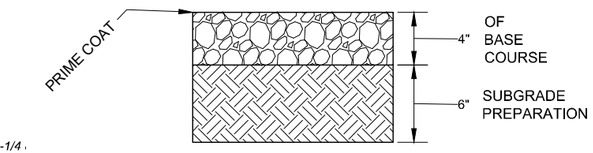
TURNOUT/DRIVEWAY TYPICAL SECTION A
SCALE: 1"=5'



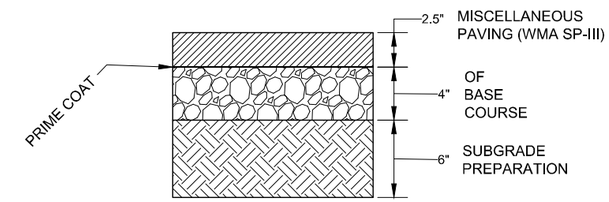
SURFACING TAPER DETAIL
SCALE: 1"=4'



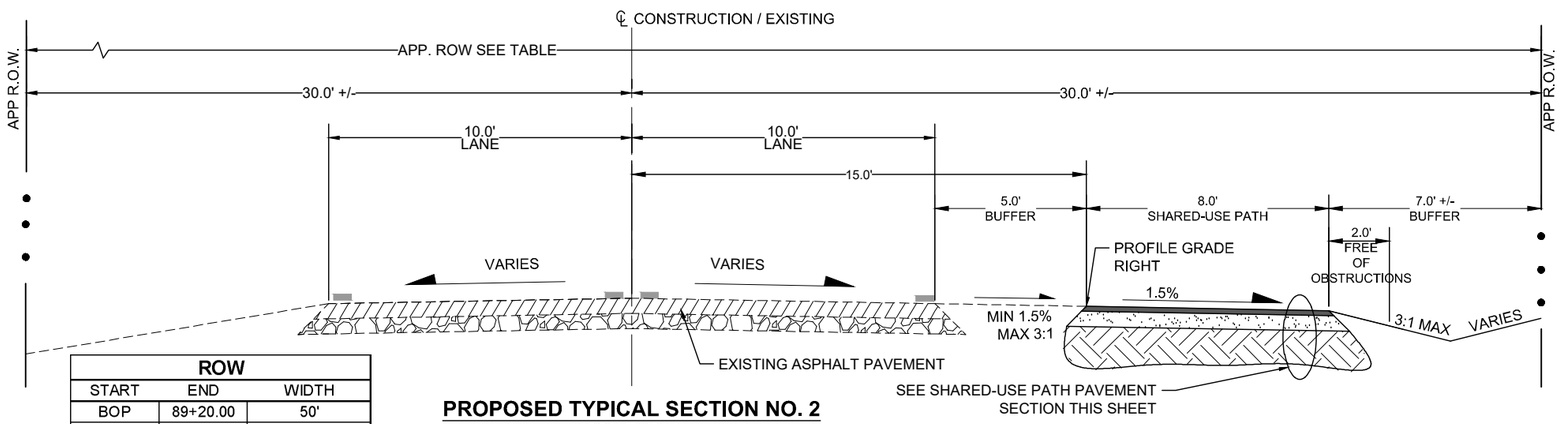
PEDESTRIAN RAILING
SCALE: 1"=4'
STA: 87+94.91 TO STA: 88+68.58
STA: 103+54.11 TO STA: 104+27.00



TURNOUT AND DRIVEWAY PAVEMENT SECTION A
N.T.S.

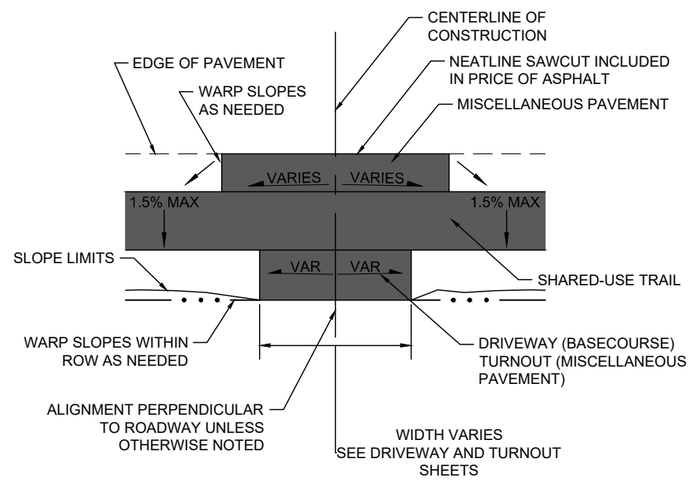


SHARED-USE PATH PAVEMENT SECTION & TURNOUT & DRIVEWAY PAVEMENT SECTION A
N.T.S.

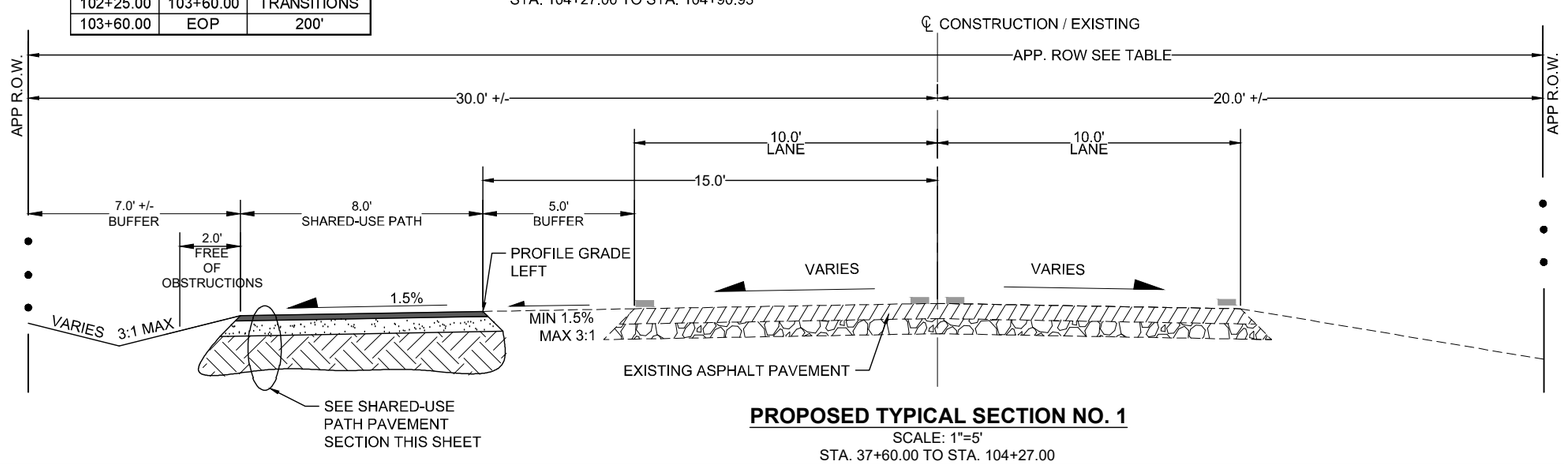


ROW		
START	END	WIDTH
BOP	89+20.00	50'
89+20.00	102+25.00	60'
102+25.00	103+60.00	TRANSITIONS
103+60.00	EOP	200'

PROPOSED TYPICAL SECTION NO. 2
SCALE: 1"=5'
STA. 104+27.00 TO STA. 104+90.93



TURNOUT AND DRIVEWAY DETAIL
N.T.S.



PROPOSED TYPICAL SECTION NO. 1
SCALE: 1"=5'
STA. 37+60.00 TO STA. 104+27.00

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

PROPOSED TYPICAL SECTIONS

Souder, Miller & Associates
Engineering ◆ Environmental ◆ Surveying

SURFACING / DRIVEWAY / TURNOUT SCHEDULE

STATION	TO STATION	TO-## STA DW-# STA	SIDE	DW-##	SKEW	TYPICAL SECTION	DESCRIPTION	LENGTH FT.	WIDTH FT.	ITEM No. 207000 SUBGRADE PREPARATION AVG. WIDTH FT.	AREA SQ.YD.	303000 BASE COURSE AVG. WIDTH FT.	DEPTH IN.	AREA SQ.YD.	WT. TON	417000 MISCELLANEOUS PAVING AVG. WIDTH FT.	DEPTH IN.	AREA SQ.YD.	AREA SQ.YD.	64-28 PG ASPHALT MAT'L WT. TON	HYD-RATED LIME (WMA) WT. TON	408100 PRIME COAT MATERIAL AVG. WIDTH FT.	AREA SQ.YD.	WT. TON	PROPERTY ADDRESS	PROPERTY OWNER	WORK PERMIT
							SHARED USED PATH																				
37+60.00	104+27.00					1	SHARED-USE PATH	6667.00	8.00	8.00	5926.22	8.00	4.00	5926.22	1251.09	8.00	2.50	5926.22	5926.22	47.96	8.13	8.00	5926.22	0.772			
104+27.00	104+35.00						LANDING PAD (RT)	8.00	13.00	13.00	11.56	13.00	4.00	11.56	2.44	13.00	2.50	11.56	11.56	0.09	0.02	13.00	11.56	0.002			
104+27.00	104+35.00						LANDING PAD (LT)	8.00	13.00	13.00	11.56	13.00	4.00	11.56	2.44	13.00	2.50	11.56	11.56	0.09	0.02	13.00	11.56	0.002			
87+94.91	88+68.58						PED RAIL WIDENING	73.67	3.00	3.00	24.56	3.00	4.00	24.56	5.18	3.00	2.50	24.56	24.56	0.20	0.03	3.00	24.56	0.003			
103+54.11	104+27.00						PED RAIL WIDENING	72.89	3.00	3.00	24.30	3.00	4.00	24.30	5.13	3.00	2.50	24.30	24.30	0.20	0.03	3.00	24.30	0.003			
							DRIVEWAYS																				
-0+43.88	-0+10.00	50+57.61	LT	DW-1	NORMAL	A	DRIVEWAY	20.88	24.00	24.00	55.68	24.00	4.00	55.68	11.75	24.00	2.50	55.68	55.68	0.45	0.08	24.00	55.68	0.007	2555 CALLE DEL NORTE	DAN LOWRY	
						A	PAVING BETWEEN PATH & ROAD	5.00	54.00	54.00	30.00	54.00	4.00	30.00	6.33	54.00	2.50	30.00	30.00	0.24	0.04	54.00	30.00	0.004			
-0+42.19	-0+10.00	51+54.30	LT	DW-2	NORMAL	A	DRIVEWAY	19.19	16.00	16.00	34.12	16.00	4.00	34.12	7.20	16.00	2.50	34.12	34.12	0.28	0.05	16.00	34.12	0.004	2711 CALLE DEL NORTE	SALLY CLAYSHULTE	SIGNED 6/3/19
						A	PAVING BETWEEN PATH & ROAD	5.00	46.00	46.00	25.56	46.00	4.00	25.56	5.40	46.00	2.50	25.56	25.56	0.21	0.04	46.00	25.56	0.003			
-0+30.00	-0+10.00	64+64.30	LT	DW-3	NORMAL	A	DRIVEWAY	7.00	20.00	20.00	15.56	20.00	4.00	15.56	3.28	20.00	2.50	15.56	15.56	0.13	0.02	20.00	15.56	0.002			
						A	PAVING BETWEEN PATH & ROAD	5.00	50.00	50.00	27.78	50.00	4.00	27.78	5.86	50.00	2.50	27.78	27.78	0.22	0.04	50.00	27.78	0.004			
-0+32.00	-0+10.00	66+49.00	LT	DW-4	NORMAL	A	DRIVEWAY	9.00	20.00	20.00	20.00	20.00	4.00	20.00	4.22	20.00	2.50	20.00	20.00	0.16	0.03	20.00	20.00	0.003	3001 CALLE DEL NORTE	ELAINE MITCHEL	SIGNED 6/3/19
						A	PAVING BETWEEN PATH & ROAD	5.00	50.00	50.00	27.78	50.00	4.00	27.78	5.86	50.00	2.50	27.78	27.78	0.22	0.04	50.00	27.78	0.004			
-0+40.61	-0+10.00	75+50.69	LT	DW-5	NORMAL	A	DRIVEWAY	17.61	12.00	12.00	23.48	12.00	4.00	23.48	4.96	12.00	2.50	23.48	23.48	0.19	0.03	12.00	23.48	0.003	3111 CALLE DEL NORTE	STEVEN & TRACY GOHRICK	
						A	PAVING BETWEEN PATH & ROAD	5.00	32.00	32.00	17.78	32.00	4.00	17.78	3.75	32.00	2.50	17.78	17.78	0.14	0.02	32.00	17.78	0.002			
-0+40.74	-0+10.00	78+41.95	LT	DW-6	NORMAL	A	DRIVEWAY	17.74	16.00	16.00	31.54	16.00	4.00	31.54	6.66	16.00	2.50	31.54	31.54	0.26	0.04	16.00	31.54	0.004	3211 CALLE DEL NORTE	JEROME GOHRICK	DECLINED 6/3/19
						A	PAVING BETWEEN PATH & ROAD	5.00	46.00	46.00	25.56	46.00	4.00	25.56	5.40	46.00	2.50	25.56	25.56	0.21	0.04	46.00	25.56	0.003			
-0+42.43	-0+10.00	79+86.00	LT	DW-7	NORMAL	A	DRIVEWAY	19.43	16.00	16.00	34.54	16.00	4.00	34.54	7.29	16.00	2.50	34.54	34.54	0.28	0.05	16.00	34.54	0.004	3463 CALLE DEL NORTE	DANIEL HOWARD	SIGNED 6/4/19
						A	PAVING BETWEEN PATH & ROAD	5.00	46.00	46.00	25.56	46.00	4.00	25.56	5.40	46.00	2.50	25.56	25.56	0.21	0.04	46.00	25.56	0.003			
-0+41.24	-0+10.00	83+62.62	LT	DW-8	NORMAL	A	DRIVEWAY	18.24	20.00	20.00	40.53	20.00	4.00	40.53	8.56	20.00	2.50	40.53	40.53	0.33	0.06	20.00	40.53	0.005	3463 CALLE DEL NORTE	DANIEL HOWARD	SIGNED 6/4/19
						A	PAVING BETWEEN PATH & ROAD	5.00	50.00	50.00	27.78	50.00	4.00	27.78	5.86	50.00	2.50	27.78	27.78	0.22	0.04	50.00	27.78	0.004			
-0+60.88	-0+10.00	88+98.92	LT	DW-9	NORMAL	B	DRIVEWAY	37.88	20.00	20.00	84.18	20.00	4.00	84.18	17.77												
						A	PAVING BETWEEN PATH & ROAD	5.00	50.00	50.00	27.78	50.00	4.00	27.78	5.86	50.00	2.50	27.78	27.78	0.22	0.04	50.00	27.78	0.004			
-0+44.91	-0+10.00	94+30.74	LT	DS-10	NORMAL	A	DRIVEWAY	21.91	16.00	16.00	38.95	16.00	4.00	38.95	8.22	16.00	2.50	38.95	38.95	0.32	0.05	16.00	38.95	0.005	3573 CALLE DEL NORTE	NELSON CLAYSHULTE	
						A	PAVING BETWEEN PATH & ROAD	5.00	46.00	46.00	25.56	46.00	4.00	25.56	5.40	46.00	2.50	25.56	25.56	0.21	0.04	46.00	25.56	0.003			
-0+45.78	-0+10.00	97+30.31	LT	DS-11	NORMAL	A	DRIVEWAY	22.78	16.00	16.00	40.50	16.00	4.00	40.50	8.55	46.00	2.50	25.56	25.56	0.21	0.04	46.00	25.56	0.003	3573 CALLE DEL NORTE	NELSON CLAYSHULTE	
						A	PAVING BETWEEN PATH & ROAD	5.00	46.00	46.00	25.56	46.00	4.00	25.56	5.40	46.00	2.50	25.56	25.56	0.21	0.04	46.00	25.56	0.003			
							TURNOUTS																				
-0+30.00	-0+10.00	62+03.00	LT	TO-1	NORMAL	A	TURNOUT (SNOW RD)	7.00	28.00	28.00	21.78	28.00	4.00	21.78	4.60	28.00	2.50	21.78	21.78	0.18	0.03	28.00	21.78	0.003			
						A	PAVING BETWEEN PATH & ROAD	5.00	76.50	76.50	42.50	76.50	4.00	42.50	8.97	76.50	2.50	42.50	42.50	0.34	0.06	76.50	42.50	0.006			
-0+30.00	-0+10.00	70+92.00	LT	TO-2	NORMAL	A	TURNOUT (CAMINO BODEGAS)	7.00	30.00	30.00	23.33	30.00	4.00	23.33	4.93	30.00	2.50	23.33	23.33	0.19	0.03	30.00	23.33	0.003			
						A	PAVING BETWEEN PATH & ROAD	5.00	60.00	60.00	33.33	60.00	4.00	33.33	7.04	60.00	2.50	33.33	33.33	0.27	0.05	60.00	33.33	0.004			
-0+65.11	-0+10.00	87+67.00	LT	TO-3	NORMAL	A	TURNOUT (SUN VALLEY RD)	42.11	26.00	26.00	121.65	26.00	4.00	121.65	25.68	26.00	2.50	121.65	121.65	0.98	0.17	26.00	121.65	0.016			
						A	PAVING BETWEEN PATH & ROAD	5.00	70.50	70.50	39.17	70.50	4.00	39.17	8.27	70.50	2.50	39.17	39.17	0.32	0.05	70.50	39.17	0.005			
0+10.00	0+30.00	104+60.57	RT	TO-4	SEE PLANS	A	TURNOUT (RIVER LEVEE RD)	20.00	24.00	24.00	53.33	24.00	4.00	53.33	11.26	24.00	2.50	53.33	53.33	0.43	0.07	24.00	53.33	0.007			
						A	PAVING BETWEEN PATH & ROAD	5.00	54.00	54.00	30.00	54.00	4.00	30.00	6.33	54.00	2.50	30.00	30.00	0.24	0.04	54.00	30.00	0.004			
							PROJECT TOTAL				7069.02				1492.35				6969.90	56.40	9.56			0.91			
							PROJECT USE				**7100**				**1500**				**6970**					**1.00**			

NOTE: FOR INFORMATION OF THE CONTRACTOR ONLY
PATHWAY CROSSES THRU DRIVEWAYS AND TURNOUTS - SEE TYPICAL SECTION DETAIL
DRIVEWAYS AND TURNOUTS REFERENCE TURNOUT ALIGNMENT

ESTIMATED SURFACING FACTORS

ITEM	64-28 PERFORMANCE GRADED ASPHALT MATERIAL (BY WEIGHT OF TOTAL MIX)	UNIT WEIGHT LBS./ CU. YD.	HYDRATED LIME (BY WEIGHT OF TOTAL MIX)	PRIME SECT. 408 GAL./ SQ.YD.	UNIT WEIGHT GAL/ TON
WMA SP III	5.90% *	3950 *	1.0% *		
PRIME COAT MATERIAL				0.45 **	240.00
BASE COURSE (TYPE I)		3800 *			

SURFACING NOTES:

* FOR ESTIMATING PURPOSES ONLY, ACTUAL WEIGHTS OR PERCENT SHALL BE DETERMINED BY APPROVED MIX DESIGN.

** FOR ESTIMATING PURPOSES ONLY, APPLICATION RATE SHALL BE DETERMINED BY THE PROJECT MANAGER.

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

SURFACING SCHEDULE

ESTIMATED STRUCTURE QUANTITIES

DS-#	STATION	STRUCTURE	SKEW	EMBANKMENT C.Y.	203000 UNCLASSIFIED EXCAVATION INLET CU.YD.	OUTLET CU.YD.	TOTAL CU.YD.	570036 36" CULVERT PIPE LIN.FT.
DS- 1	88+48.54	1 - 30" X 102' C.M.P. SKEW = NORMAL NO DRAINAGE WORK AT STRUCTURE	N					
DS- 2	103+98.29	1- 36" X 98' R.C.P. SKEW = NORMAL REMOVE 5' OF 36" R.C.P. LT. EXTEND LT. 22' W/ 1-36" R.C.P. CONNECT TO EXISTING R.C.P. W/ STD. DWD. 515-01-2/2	N					22
			SUBTOTAL				0.0	22
			PROJECT TOTAL					22
			PROJECT USE					**22**

PEDESTRIAN RAILING

STATION TO STATION		LOC.	OFFSET	607079 PEDESTRIAN/BICYCLE RAILING LIN.FT.	REMARKS
87+94.91	88+68.58	LT.	24.5	74	PED RAILING WITHOUT HANDRAIL
103+54.11	104+27.00	LT.	24.5	73	PED RAILING WITHOUT HANDRAIL
			PROJECT TOTAL	147	
			PROJECT USE	**147**	

SOIL STABILANT SCHEDULE

STATION TO STATION		LOC.	603100 TEMPORARY SOIL STABILANT ACRE
37+60.00	104+90.93	LT.	1.62
		PROJECT TOTAL	1.62
		(DOUBLE APPLICATION) **PROJECT USE**	**3.24**

SEEDING SCHEDULE

STATION TO STATION		LOC.	632000 CLASS A SEEDING ACRE
37+60.00	104+90.93	LT.	1.62
		PROJECT TOTAL	1.62
		PROJECT USE	**1.62**

EARTHWORK SUMMARY

STATION TO STATION		DW-## / TO-##	203000 UNCLASSIFIED EXCAVATION CU.YD.	EMBANKMENT CU.YD	NET CU.YD	REMARKS
37+60.00	104+90.93		1620.00	303.00	1317.00	SOUTH,SHARED-USE PATH
50+57.61		DW-1	29.66	0.00	29.66	
51+54.30		DW-2	6.44	0.07	6.37	
64+64.30		DW-3	4.62	0.00	4.62	
66+49.00		DW-4	6.00	0.00	6.00	
75+50.69		DW-5	2.30	0.02	2.28	
78+41.95		DW-6	4.11	0.00	4.11	
79+86.00		DW-7	3.09	0.26	2.83	
83+62.62		DW-8	6.57	0.00	6.57	
88+98.92		DW-9	8.16	14.93	-6.77	
94+30.74		DS-10	2.12	1.10	1.02	
97+30.31		DS-11	6.68	0.00	6.68	
62+03.00		TO-1	7.02	0.00	7.02	
70+92.00		TO-2	7.64	0.00	7.64	
87+67.00		TO-3	4.60	15.74	-11.14	
104+60.57		TO-4	2.24	0.66	1.58	NORTH,SHARED-USE PATH
PROJECT TOTAL			1721		1385.47	
PROJECT USE			**1730**			

NOTE:
1. CONTRACTOR TO SPEND EXCESS MATERIAL THROUGHOUT EXTENTS OF WORK ZONE TO FLATTEN SLOPES AS DIRECTED BY PROJECT MANAGER. THIS WORK SHALL BE KEPT WITHIN THE RIGHT OF WAY LIMITS.
2. THIS WORK WILL BE PAID FOR UNDER ITEM No. 203000 UNCLASSIFIED EXCAVATION.
3. NO PAYMENT WILL BE MADE FOR DOUBLE HANDLING FOR EXCESS MATERIAL USED AS EMBANKMENT.
5. EMBANKMENT SHALL BE MEASURED, AND BORROW SHALL BE MEASURED AND PAID BY THE FINAL COMPACTED IN PLACE VOLUME THEREFORE NO SHRINKAGE QUANTITY WILL BE MEASURED OR PAID.

CLEARING AND GRUBING SCHEDULE

STATION TO STATION		LOC.	LENGTH (FT)	AVG. WIDTH (FT)	201000 CLEARING AND GRUBBING *AREA (ACRE)
37+60.00	104+90.93	LT.	6730.93	11.00	1.70
				TOTAL	1.70
				USE	**L.S.**
				PROJECT TOTAL	L.S.
				PROJECT USE	**L.S.**

* CONTRACTOR INFORMATION ONLY

LUMP SUM ITEMS

ITEM NO.	DESCRIPTION	UNIT	CATEGORY
201000	CLEARING AND GRUBBING	L.S.	ROADWAY
601000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.	ROADWAY
603281	SWPPP PLAN PREPARATION AND MAINTENANCE	L.S.	CONSTR. ENG.
618000	TRAFFIC CONTROL MANAGEMENT	L.S.	CONSTR. SGN.
618011	PUBLIC AWARENESS	L.S.	CONSTR. ENG.
621000	MOBILIZATION	L.S.	ROADWAY
702810	TRAFFIC CONTROL DEVICES FOR CONSTRUCTION	L.S.	CONSTR. SGN.
801000	CONSTRUCTION STAKING BY THE CONTRACTOR	L.S.	ROADWAY
802000	POST CONSTRUCTION PLANS	L.S.	ROADWAY

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	BY
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REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

MISCELLANEOUS QUANTITIES

Souder, Miller & Associates
Engineering • Environmental • Surveying

REMOVAL OF STRUCTURES AND OBSTRUCTION

STATION	TO	STATION	LEFT	CENTER	RIGHT	601000 REMOVAL OF STRUCTURES AND OBSTRUCTIONS *EACH	*LF	*SF	STRUCTURE	DESCRIPTION
78+54.65			X			1			WOOD POST	REMOVE WOOD POST
79+71.54			X			1			WOOD POST	REMOVE WOOD POST
83+86.33			X			1			WOOD POST	REMOVE WOOD POST
83+93.44			X			1			WOOD POST	REMOVE WOOD POST
87+06.50			X			1			WOOD POST	REMOVE WOOD POST
87+27.07			X			1			WOOD POST	REMOVE WOOD POST
SUMMARY - QUANTITIES FOR LUMP SUM										
EXISTING WOOD POSTS						6	EACH			

* FOR CONTRACTOR INFORMATION ONLY

MAILBOX REMOVAL AND INSTALLATION

STATION	LOCATION	OFFSET FT	667110 MAIL BOX INSTALLATION-SINGLE EACH	667130 MAIL BOX INSTALLATION-MULTIPLE EACH	REMARKS
64+84.60	LT.	27.21	1		REMOVE EXISTING RELOCATE NEW OUT OF THE WAY OF CONSTRUCTION
70+58.10	LT.	21.8	3		REMOVE EXISTING RELOCATE NEW OUT OF THE WAY OF CONSTRUCTION
70+66.67	LT.	22.87		1	REMOVE EXISTING RELOCATE NEW OUT OF THE WAY OF CONSTRUCTION
83+44.64	LT.	24.26	1		REMOVE EXISTING RELOCATE NEW OUT OF THE WAY OF CONSTRUCTION
91+46.52	LT.	17.52	1		REMOVE EXISTING RELOCATE NEW OUT OF THE WAY OF CONSTRUCTION
94+51.62	LT.	27.97	1		REMOVE EXISTING RELOCATE NEW OUT OF THE WAY OF CONSTRUCTION
PROJECT TOTAL			7	1	
PROJECT USE			**7**	**1**	

REMOVAL OF SURFACING SCHEDULE

STATION	LANE	LOC.	LENGTH FT.	AVG. WIDTH FT.	601110 REMOVAL OF SURFACING AREA SQ.YD.	REMARKS
62+03.00	TURNOUT	LT.	16.00	VARIES	82.67	TURNOUT SURFACING ON SNOW RD.
70+92.00	TURNOUT	LT.	14.00	VARIES	119.78	TURNOUT SURFACING ON CAMINO BODEGAS
87+67.00	TURNOUT	LT.	18.00	VARIES	66.22	TURNOUT SURFACING ON HAPPY VALLEY LN.
				PROJECT TOTAL:	269	
				PROJECT USE:	**300**	

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	BY
4			
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REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

MISCELLANEOUS QUANTITIES

SURVEY NOTES:

1. PROJECT DATUM IS DOÑA ANA COUNTY REFERENCE NETWORK AND REFERENCED AT POINT NUMBER 6006.
2. CONTROL POINTS 6007, 6008, & 6009 COORDINATES DERIVED FROM GPS STATIC SURVEY AND NETWORK ADJUSTMENT ON 15/5/18.
3. ALL OTHER PROJECT CONTROL POINTS DERIVED FROM GPS-RTK SURVEY WITHIN THE REFERENCE NETWORK
4. PROJECT BENCHMARK IS CONTROL POINT 6007 & POINT 6008. ELEVATION 3887.91 &3884.07 RESPECTIVELY. PROJECT BENCHMARK TO BE UTILIZED FOR ALL CONSTRUCTION VERTICAL CONTROL OF THIS PLAN SET.
5. RIGHT-OF-WAY AS SHOWN IS APPROXIMATE.
6. CONTROL SHEET DERIVED FORM FIELD SURVEY, PREFORMED DURING THE MONTH OF DECEMBER, 2018
7. THE CENTERLINE USED IN THIS PROJECT IS CL OF SURVEY WHICH EXCLUDES REFERENCES TO AS-BUILTS, CL OF ROW ETC.

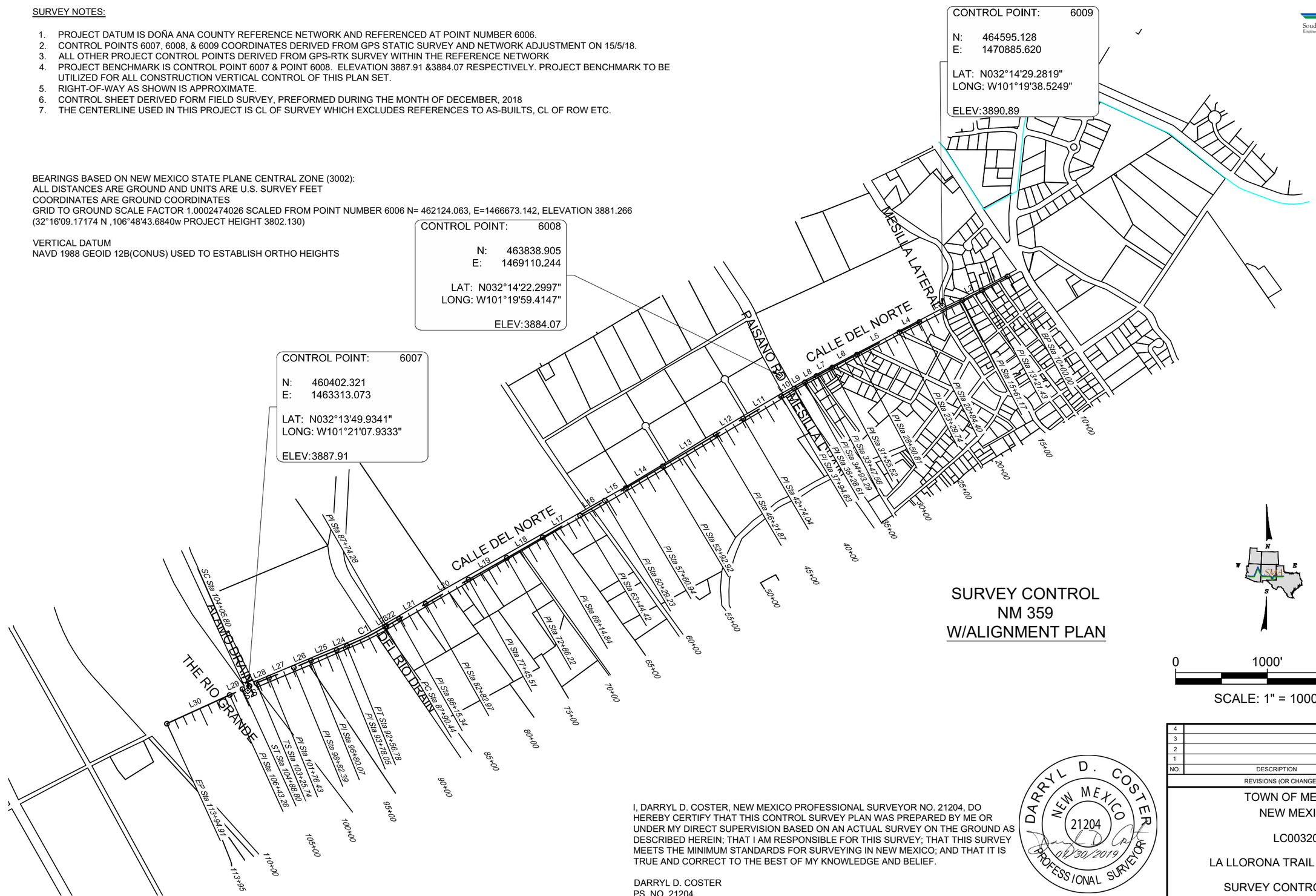
BEARINGS BASED ON NEW MEXICO STATE PLANE CENTRAL ZONE (3002):
ALL DISTANCES ARE GROUND AND UNITS ARE U.S. SURVEY FEET
COORDINATES ARE GROUND COORDINATES
GRID TO GROUND SCALE FACTOR 1.0002474026 SCALED FROM POINT NUMBER 6006 N= 462124.063, E=1466673.142, ELEVATION 3881.266
(32°16'09.17174 N ,106°48'43.6840w PROJECT HEIGHT 3802.130)

VERTICAL DATUM
NAVD 1988 GEOID 12B(CONUS) USED TO ESTABLISH ORTHO HEIGHTS

CONTROL POINT: 6009
N: 464595.128
E: 1470885.620
LAT: N032°14'29.2819"
LONG: W101°19'38.5249"
ELEV:3890.89

CONTROL POINT: 6008
N: 463838.905
E: 1469110.244
LAT: N032°14'22.2997"
LONG: W101°19'59.4147"
ELEV:3884.07

CONTROL POINT: 6007
N: 460402.321
E: 1463313.073
LAT: N032°13'49.9341"
LONG: W101°21'07.9333"
ELEV:3887.91



SURVEY CONTROL
NM 359
W/ALIGNMENT PLAN

0 1000' 2000'
SCALE: 1" = 1000'

I, DARRYL D. COSTER, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21204, DO HEREBY CERTIFY THAT THIS CONTROL SURVEY PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION BASED ON AN ACTUAL SURVEY ON THE GROUND AS DESCRIBED HEREIN; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DARRYL D. COSTER
PS. NO. 21204

DARRYL D. COSTER
NEW MEXICO
21204
07/30/2019
PROFESSIONAL SURVEYOR

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

SURVEY CONTROL SHEET

Souder, Miller & Associates
Engineering • Environmental • Surveying

Line Table

Line #	Alignment	Length	Bearing	Start Point	End Point	Start Station	End Station
L1	LC00320CL01	321.427	S61° 46' 47.83"W	(464915.7334,1471597.1410)	(464763.7436,1471313.9191)	10+00.00	13+21.43
L2	LC00320CL01	239.743	S62° 29' 38.40"W	(464763.7436,1471313.9191)	(464653.0203,1471101.2762)	13+21.43	15+61.17
L3	LC00320CL01	523.233	S63° 14' 09.79"W	(464653.0203,1471101.2762)	(464417.4004,1470634.0978)	15+61.17	20+84.40
L4	LC00320CL01	245.333	S63° 05' 30.65"W	(464417.4004,1470634.0978)	(464306.3721,1470415.3263)	20+84.40	23+29.74
L5	LC00320CL01	521.074	S62° 12' 42.85"W	(464306.3721,1470415.3263)	(464063.4462,1469954.3441)	23+29.74	28+50.81
L6	LC00320CL01	304.710	S62° 08' 35.61"W	(464063.4462,1469954.3441)	(463921.0664,1469684.9442)	28+50.81	31+55.52
L7	LC00320CL01	192.045	S61° 59' 29.98"W	(463921.0664,1469684.9442)	(463830.8819,1469515.3914)	31+55.52	33+47.56
L8	LC00320CL01	145.723	S61° 19' 38.64"W	(463830.8819,1469515.3914)	(463760.9632,1469387.5372)	33+47.56	34+93.29
L9	LC00320CL01	135.318	S59° 51' 58.37"W	(463760.9632,1469387.5372)	(463693.0307,1469270.5065)	34+93.29	36+28.61
L10	LC00320CL01	166.219	S59° 13' 12.10"W	(463693.0307,1469270.5065)	(463607.9694,1469127.7015)	36+28.61	37+94.83
L11	LC00320CL01	479.215	S59° 37' 03.17"W	(463607.9694,1469127.7015)	(463365.5971,1468714.2978)	37+94.83	42+74.04
L12	LC00320CL01	347.826	S59° 26' 23.04"W	(463365.5971,1468714.2978)	(463188.7467,1468414.7863)	42+74.04	46+21.87
L13	LC00320CL01	671.049	S59° 16' 20.92"W	(463188.7467,1468414.7863)	(462845.8702,1467837.9478)	46+21.87	52+92.92
L14	LC00320CL01	468.020	S59° 29' 56.74"W	(462845.8702,1467837.9478)	(462608.3257,1467434.6917)	52+92.92	57+60.94
L15	LC00320CL01	268.298	S59° 16' 21.09"W	(462608.3257,1467434.6917)	(462471.2374,1467204.0608)	57+60.94	60+29.23
L16	LC00320CL01	315.183	S58° 52' 40.72"W	(462471.2374,1467204.0608)	(462308.3311,1466934.2424)	60+29.23	63+44.42
L17	LC00320CL01	470.424	S59° 44' 38.94"W	(462308.3311,1466934.2424)	(462071.3021,1466527.8975)	63+44.42	68+14.84
L18	LC00320CL01	451.382	S60° 07' 45.71"W	(462071.3021,1466527.8975)	(461846.4942,1466136.4804)	68+14.84	72+66.22
L19	LC00320CL01	479.288	S60° 32' 07.76"W	(461846.4942,1466136.4804)	(461610.7399,1465719.1833)	72+66.22	77+45.51
L20	LC00320CL01	537.454	S60° 34' 43.17"W	(461610.7399,1465719.1833)	(461346.7271,1465251.0439)	77+45.51	82+82.97
L21	LC00320CL01	332.375	S60° 33' 11.47"W	(461346.7271,1465251.0439)	(461183.3264,1464961.6075)	82+82.97	86+15.34
L22	LC00320CL01	158.941	S60° 13' 08.56"W	(461183.3264,1464961.6075)	(461104.3829,1464823.6581)	86+15.34	87+74.28
L23	LC00320CL01	16.154	S59° 06' 48.11"W	(461104.3829,1464823.6581)	(461096.0904,1464809.7950)	87+74.28	87+90.44
L24	LC00320CL01	121.275	S67° 48' 59.29"W	(460887.9542,1464392.9776)	(460842.1638,1464280.6794)	92+56.78	93+78.05
L25	LC00320CL01	302.015	S67° 57' 06.34"W	(460842.1638,1464280.6794)	(460728.7911,1464000.7510)	93+78.05	96+80.07
L26	LC00320CL01	202.319	S67° 38' 43.16"W	(460728.7911,1464000.7510)	(460651.8412,1463813.6365)	96+80.07	98+82.39
L27	LC00320CL01	294.046	S67° 43' 31.00"W	(460651.8412,1463813.6365)	(460540.3838,1463541.5333)	98+82.39	101+76.43
L28	LC00320CL01	149.307	S67° 18' 54.93"W	(460540.3838,1463541.5333)	(460482.8018,1463403.7763)	101+76.43	103+25.74
L29	LC00320CL01	154.475	S65° 21' 12.74"W	(460417.3540,1463254.4383)	(460352.9352,1463114.0365)	104+88.80	106+43.28
L30	LC00320CL01	751.628	S65° 25' 38.66"W	(460352.9352,1463114.0365)	(460040.3737,1462430.4794)	106+43.28	113+94.91

Curve Data Table

Number	Length	Line/Chord Direction	Start Point	End Point	Start Station	End Station
C1	466.342	S63° 27' 53.70"W	(461096.0904,1464809.7950)	(460887.9542,1464809.7950)	87+90.44	92+56.78
S1	80.058	S67° 18' 54.93"W	(460482.8018,1463403.7763)	(460451.5209,1463403.7763)	103+25.74	104+05.80
C2	2.946	S66° 20' 03.83"W	(460451.5209,1463330.0834)	(460450.3382,1463330.0834)	104+05.80	104+08.75
S2	80.058	S66° 17' 58.48"W	(460450.3382,1463327.3847)	(460417.3540,1463327.3847)	104+08.75	104+88.80

I, DARRYL D. COSTER, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21204, DO HEREBY CERTIFY THAT THIS CONTROL SURVEY PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION BASED ON AN ACTUAL SURVEY ON THE GROUND AS DESCRIBED HEREIN; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DARRYL D. COSTER
PS. NO. 21204

DARRYL D. COSTER
NEW MEXICO
21204
07/30/2019
PROFESSIONAL SURVEYOR

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

ALIGNMENT LINE AND CURVE DATA TABLES

PROJECT CONTROL NUMBER:

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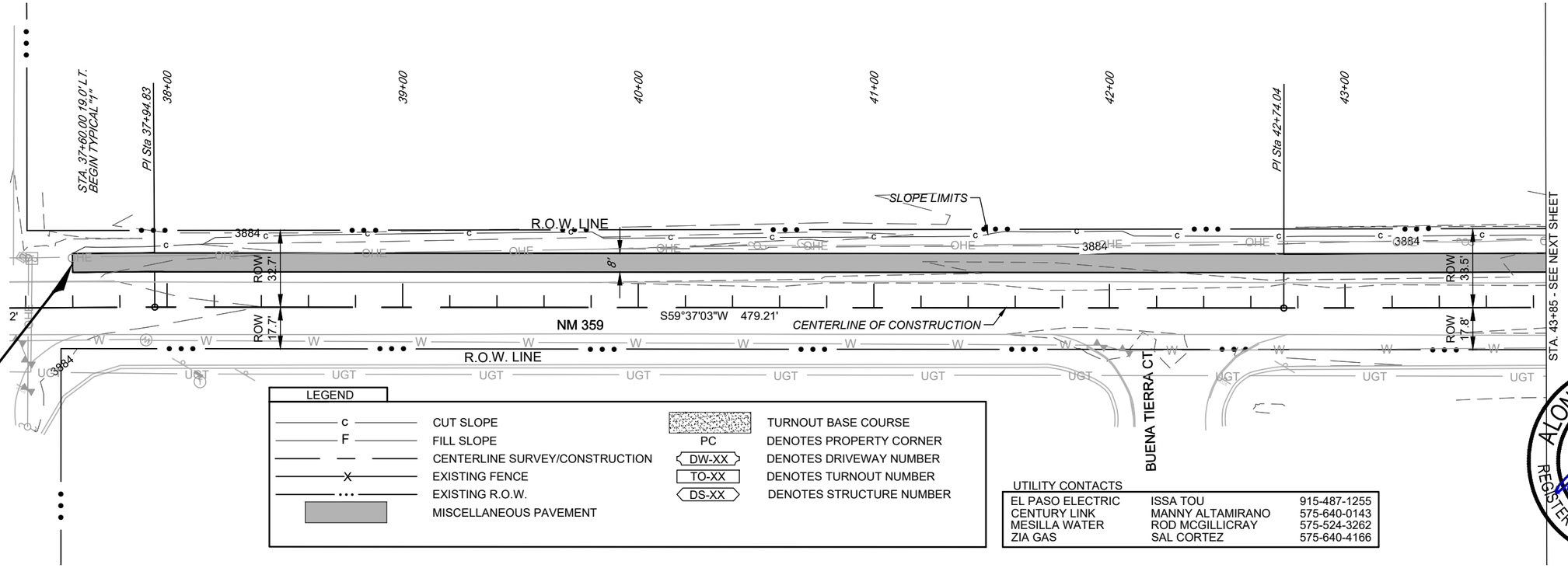


LEGEND

c	CUT SLOPE		TURNOUT BASE COURSE
F	FILL SLOPE	PC	DENOTES PROPERTY CORNER
	CENTERLINE SURVEY/CONSTRUCTION	DW-XX	DENOTES DRIVEWAY NUMBER
X	EXISTING FENCE	TO-XX	DENOTES TURNOUT NUMBER
...	EXISTING R.O.W.	DS-XX	DENOTES STRUCTURE NUMBER
	MISCELLANEOUS PAVEMENT		

UTILITY CONTACTS

EL PASO ELECTRIC	ISSA TOU	915-487-1255
CENTURY LINK	MANNY ALTAMIRANO	575-640-0143
MESILLA WATER	ROD MCGILLICRAY	575-524-3262
ZIA GAS	SAL CORTEZ	575-640-4166

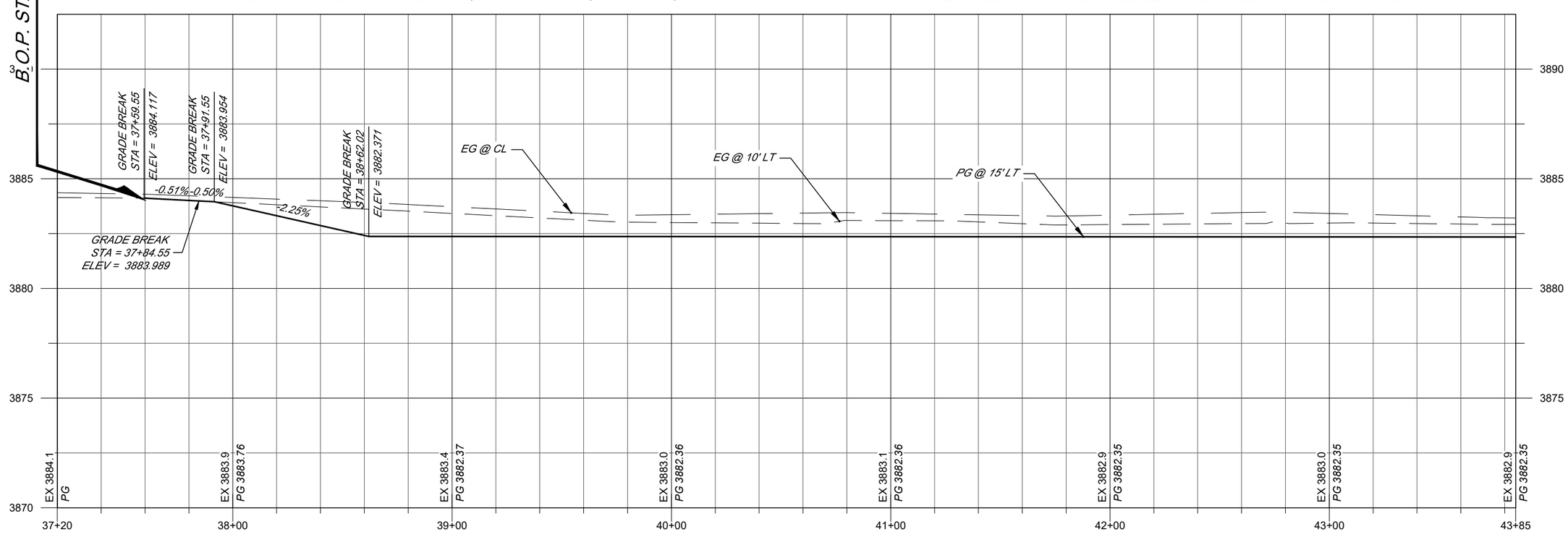
ALONZO LUIS MARTINEZ
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

PLAN DRAWING SCALE: 1"=50'

PROJECT BEGINS WITHIN SECTION 35 AND ENDS WITHIN SECTION 34, TOWNSHIP 23 SOUTH, RANGE 1 EAST, N.M.P.M.

"ALL CURVES ON THIS PROJECT ARE BASED ON THE ARC DEFINITION. RADIUS OF 1 - 5729.578."

HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1" = 5'



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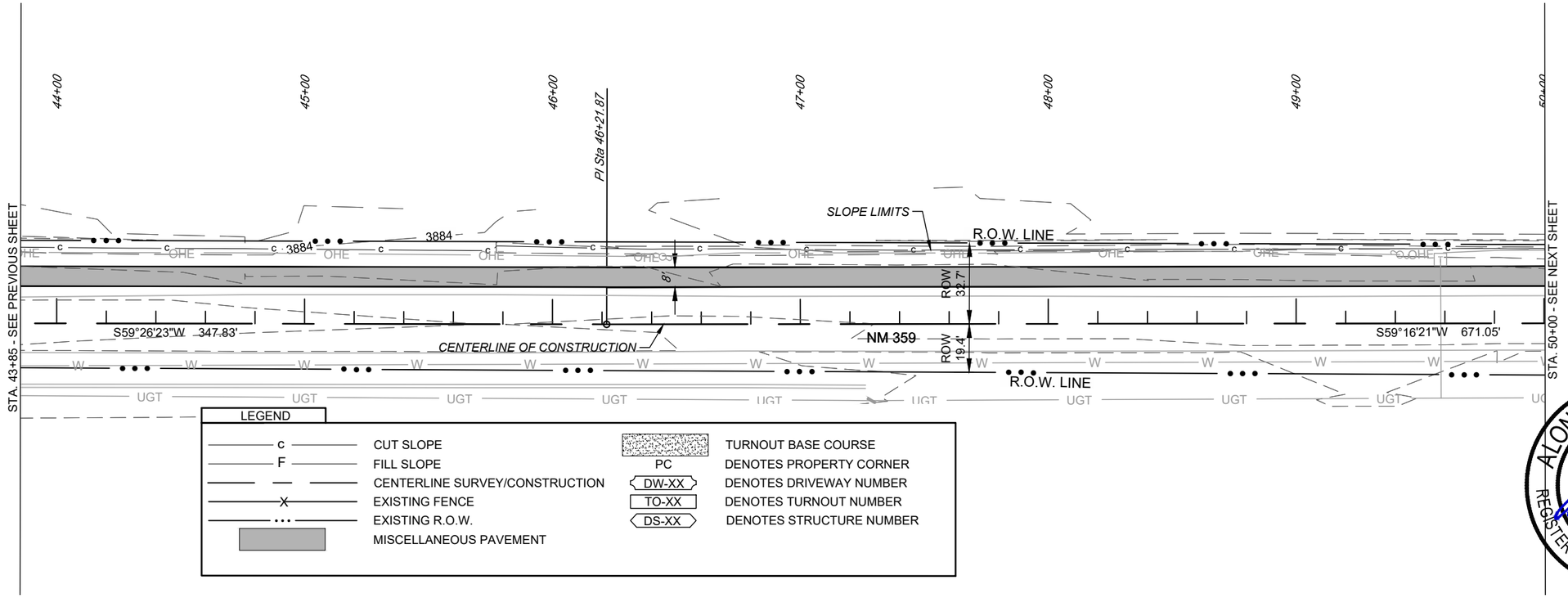

LEGEND

c	CUT SLOPE		TURNOUT BASE COURSE
F	FILL SLOPE	PC	DENOTES PROPERTY CORNER
	CENTERLINE SURVEY/CONSTRUCTION	DW-XX	DENOTES DRIVEWAY NUMBER
X	EXISTING FENCE	TO-XX	DENOTES TURNOUT NUMBER
...	EXISTING R.O.W.	DS-XX	DENOTES STRUCTURE NUMBER
	MISCELLANEOUS PAVEMENT		

ALONZO LUIS MARTINEZ
NEW MEXICO
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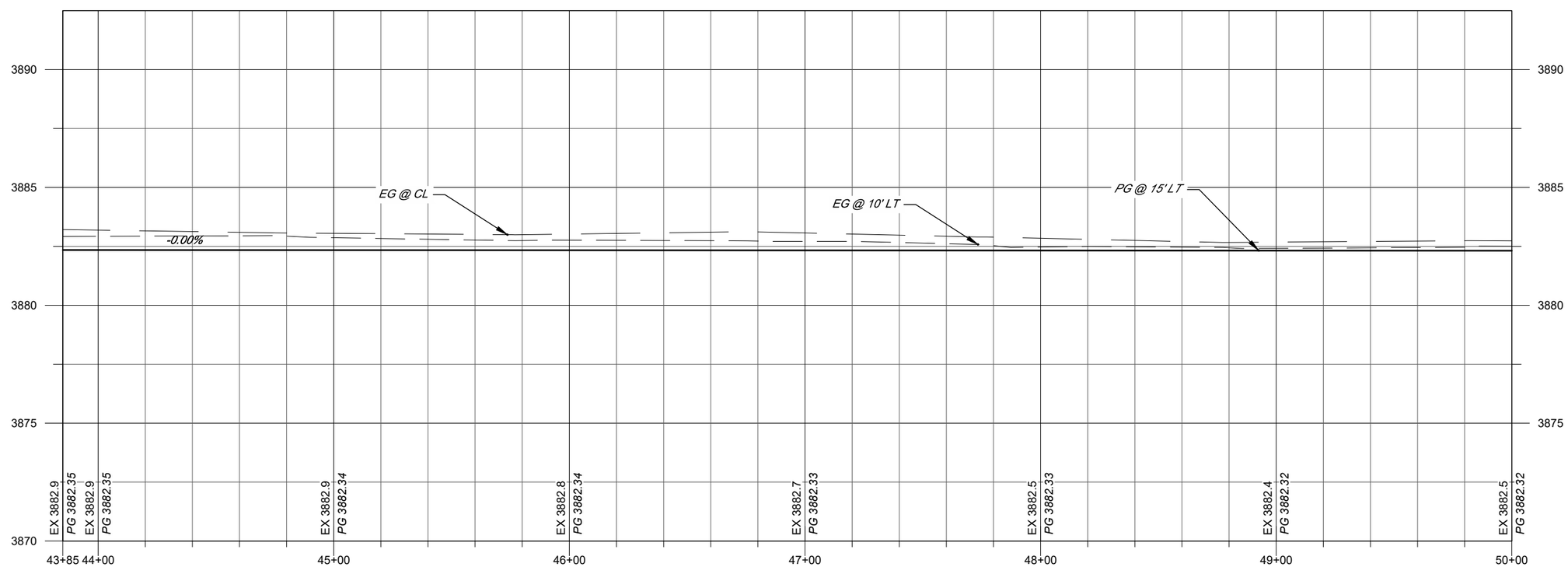
PLAN DRAWING SCALE: 1"=50'
HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1" = 5'



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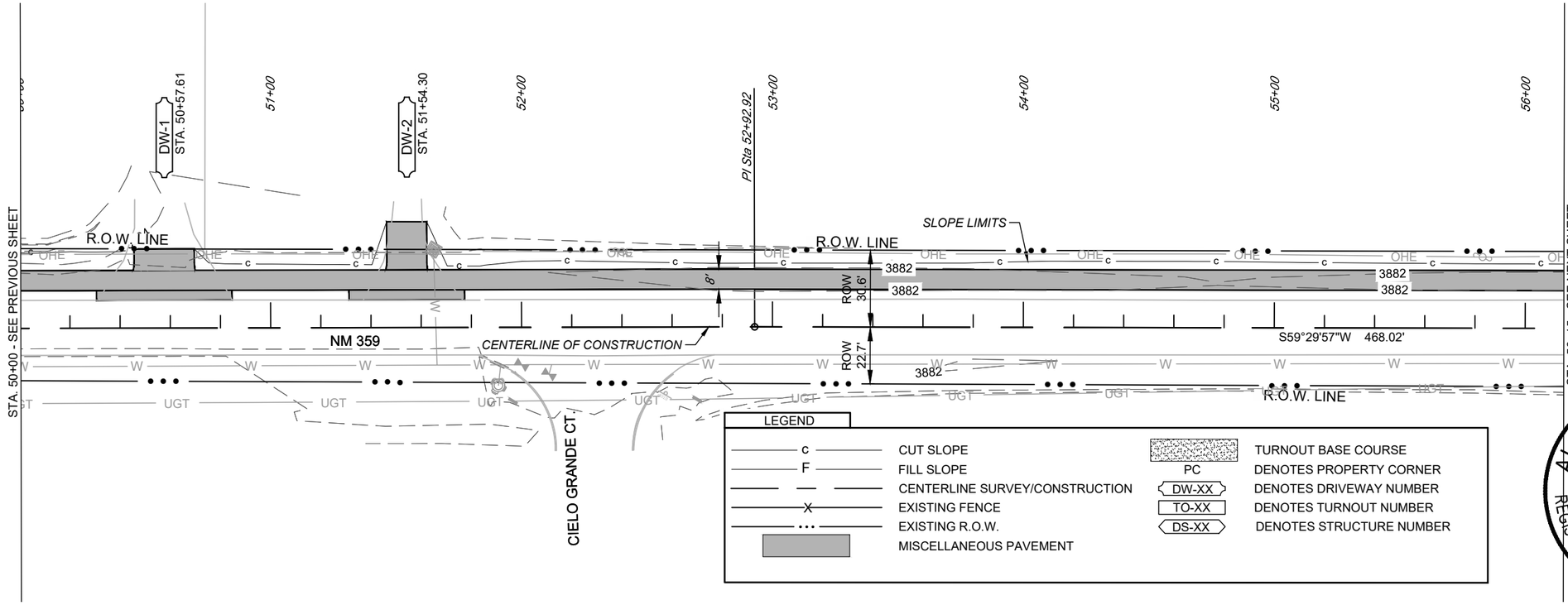

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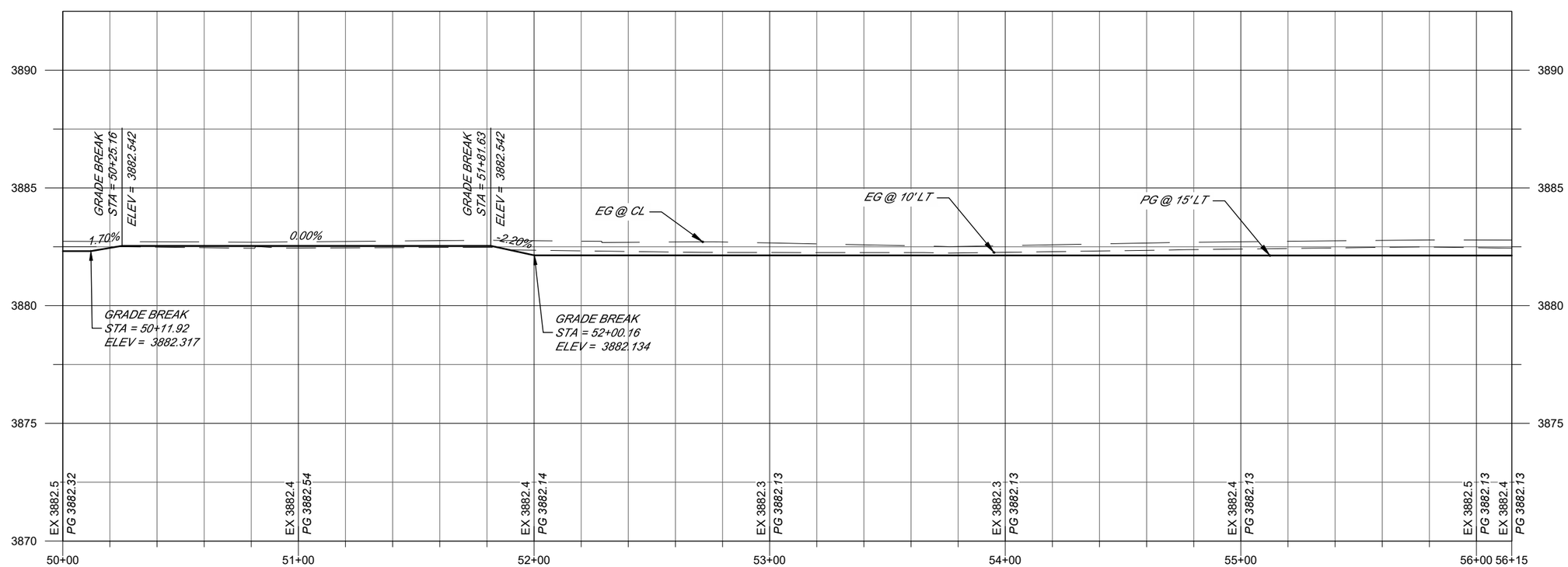
PLAN DRAWING SCALE: 1"=50'
HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1" = 5'



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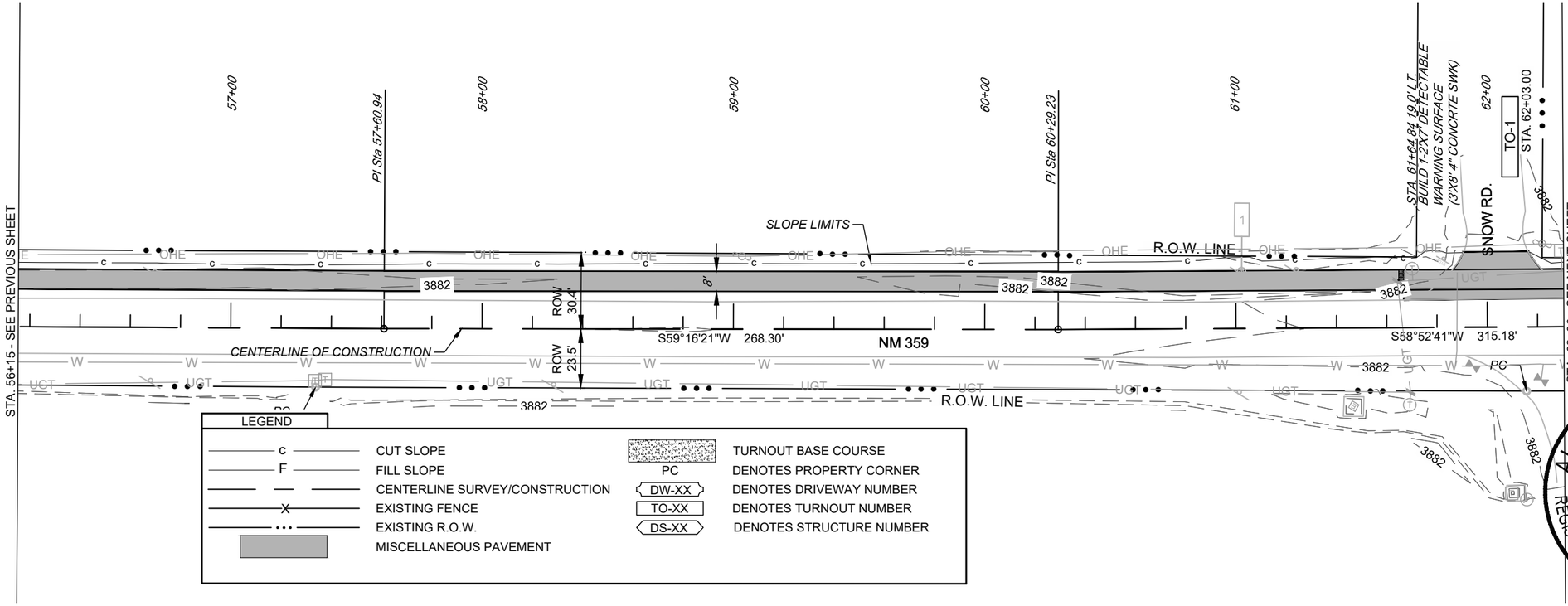

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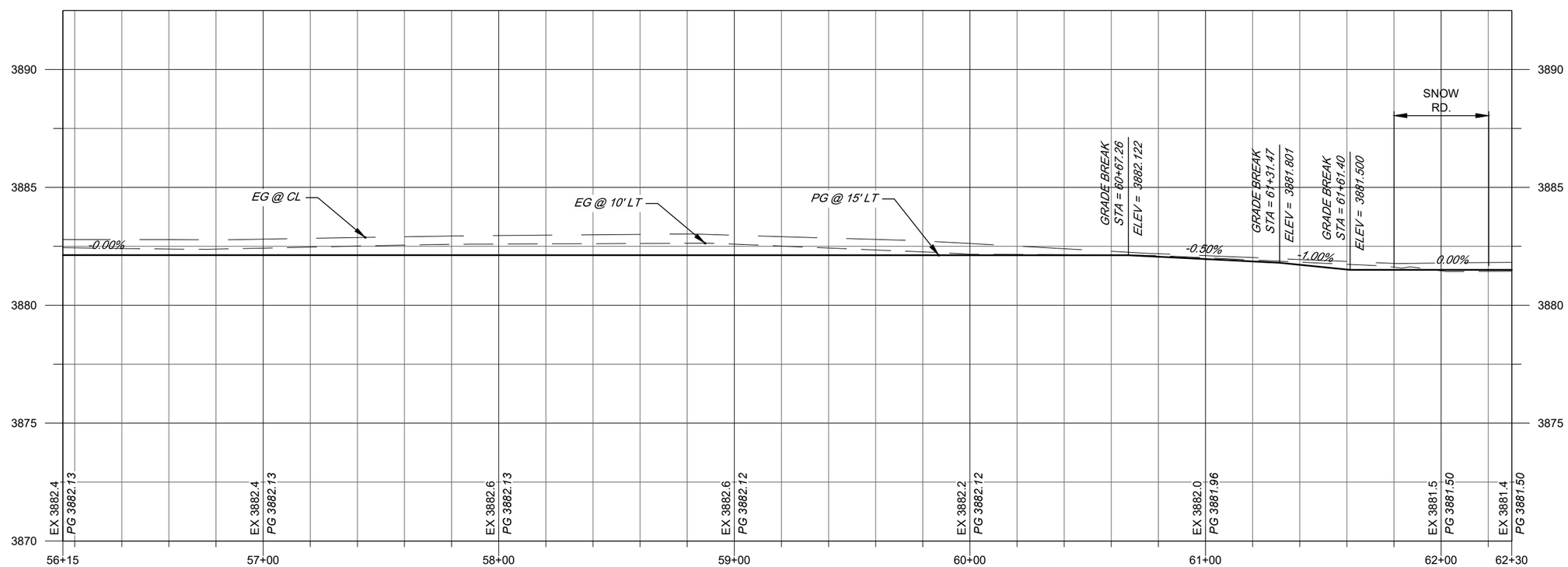
HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1" = 5'



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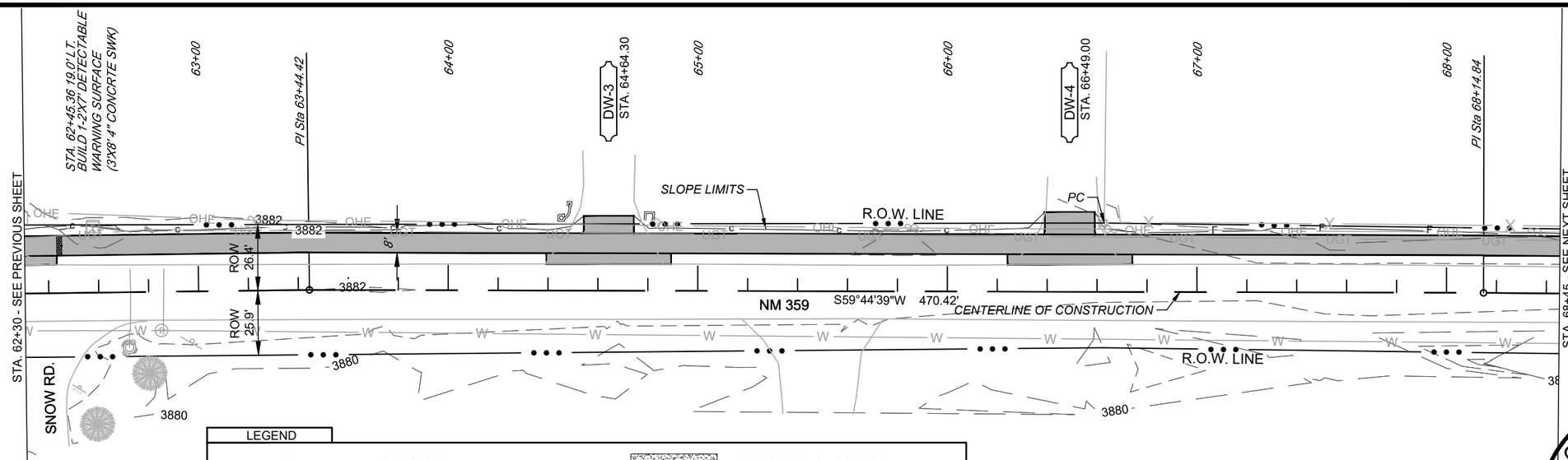

LEGEND

c	CUT SLOPE		TURNOUT BASE COURSE
F	FILL SLOPE	PC	DENOTES PROPERTY CORNER
	CENTERLINE SURVEY/CONSTRUCTION	DW-XX	DENOTES DRIVEWAY NUMBER
X	EXISTING FENCE	TO-XX	DENOTES TURNOUT NUMBER
...	EXISTING R.O.W.	DS-XX	DENOTES STRUCTURE NUMBER
	MISCELLANEOUS PAVEMENT		

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ALONZO LUIS MARTINEZ
NEW MEXICO
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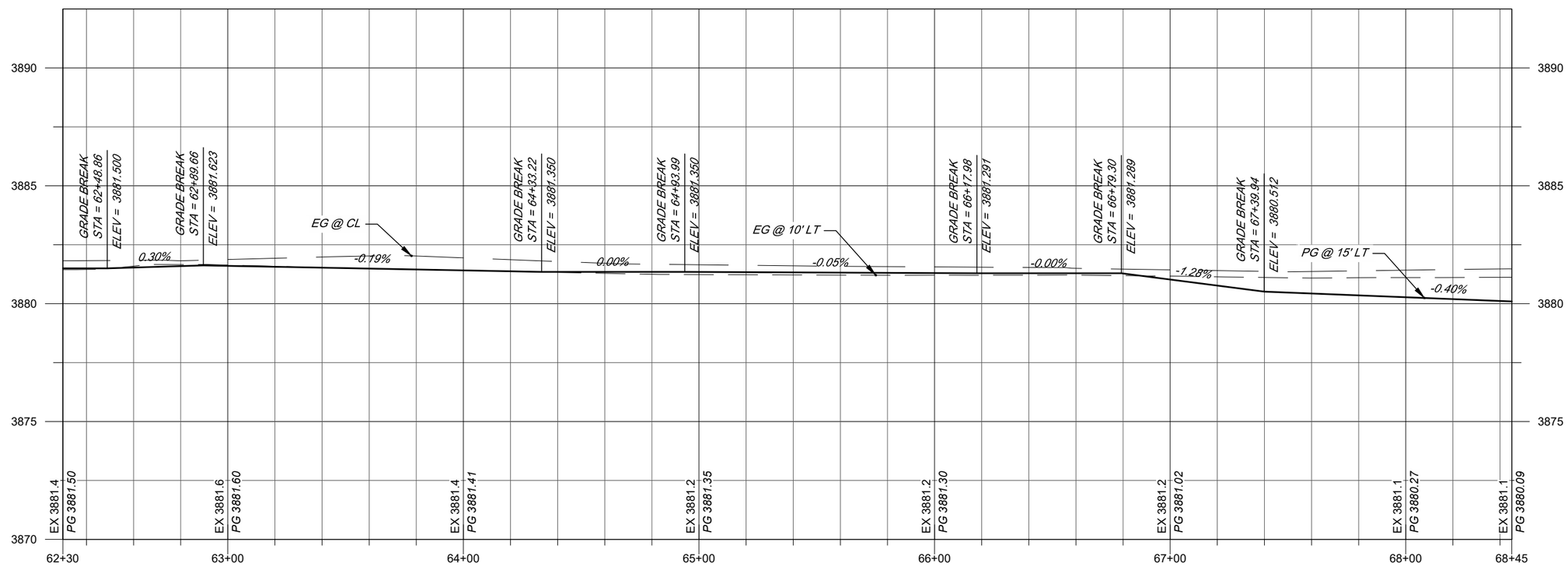
REGISTERED PROFESSIONAL ENGINEER
7/30/19

PLAN DRAWING SCALE: 1"=50'
HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1" = 5'



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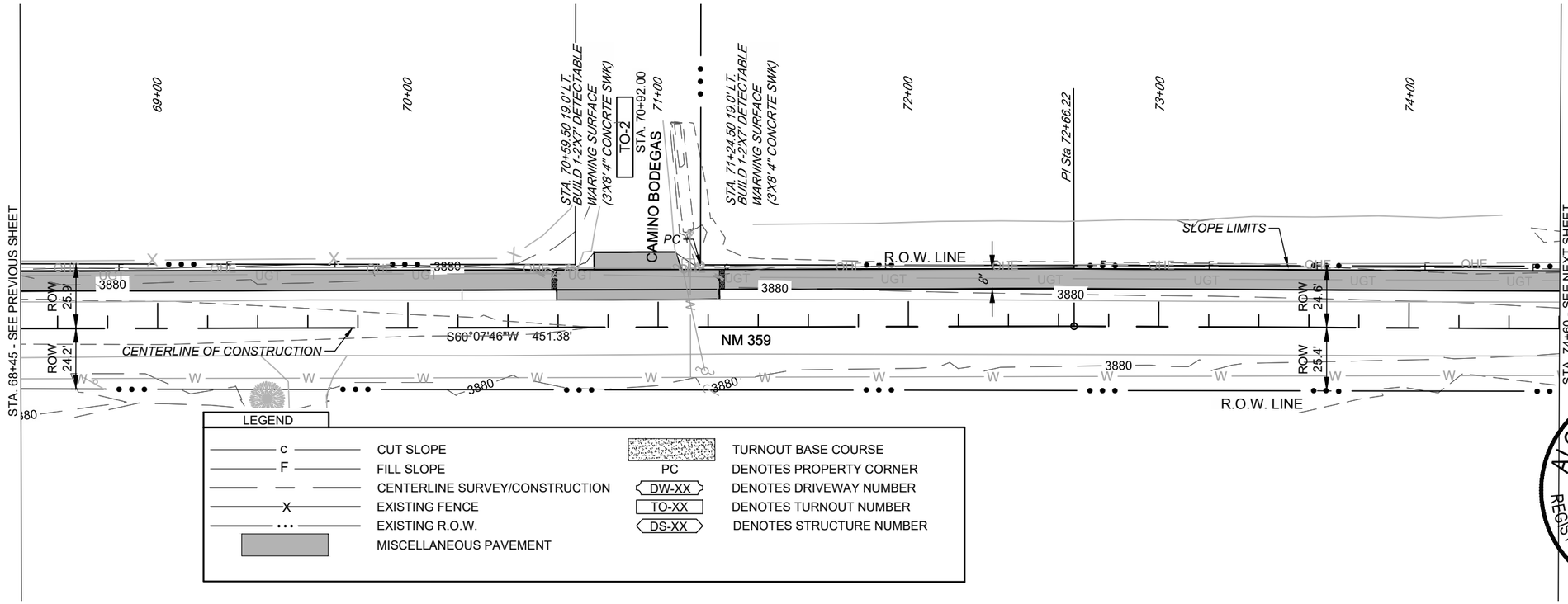
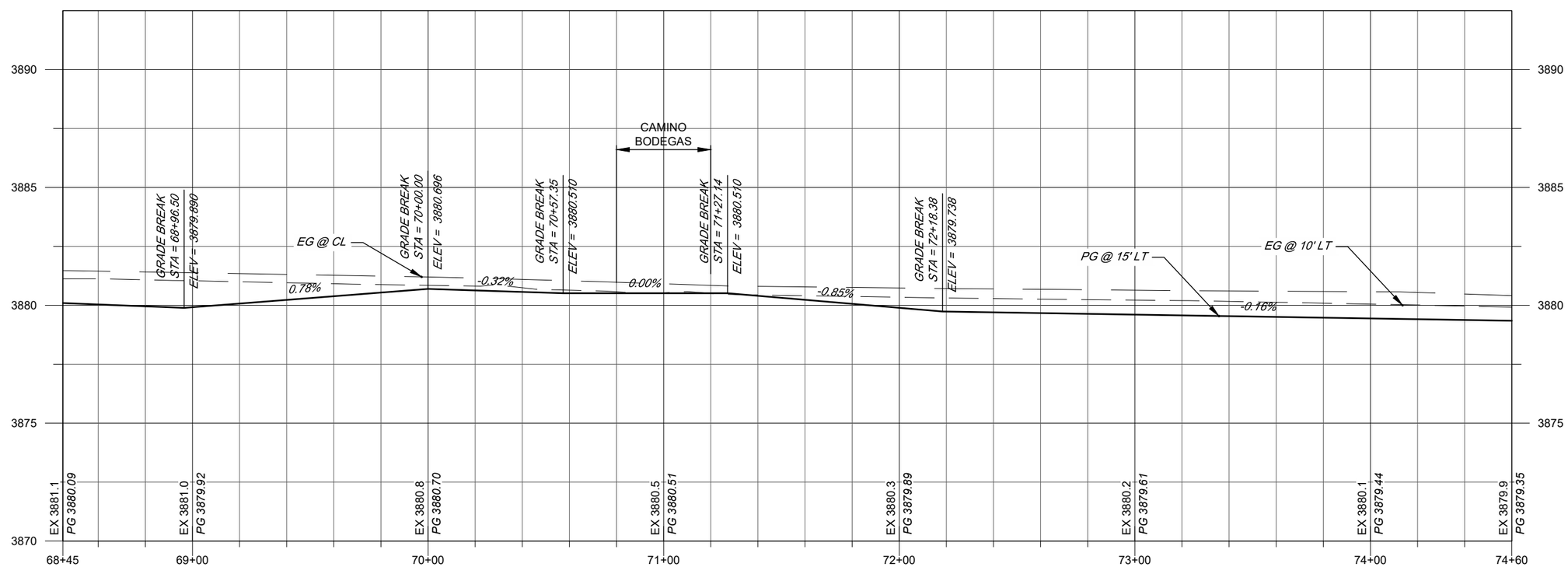


PLAN DRAWING SCALE: 1"=50'
HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1" = 5'



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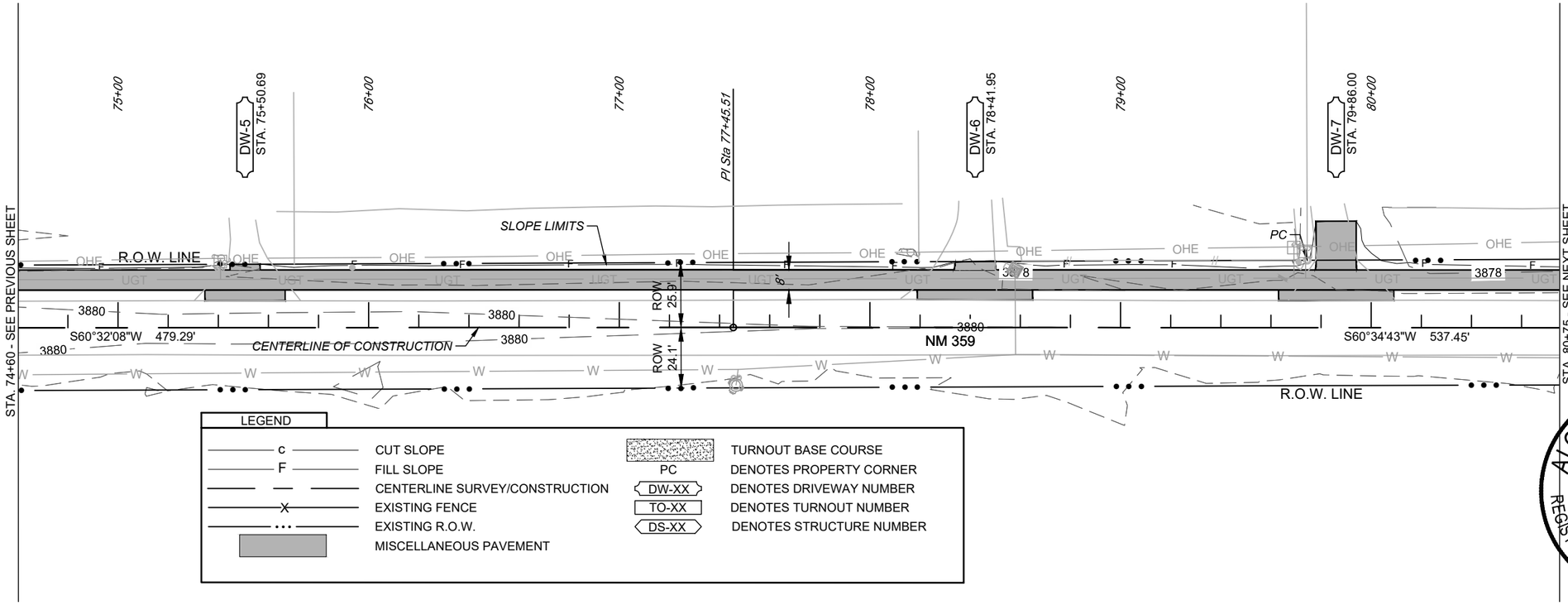

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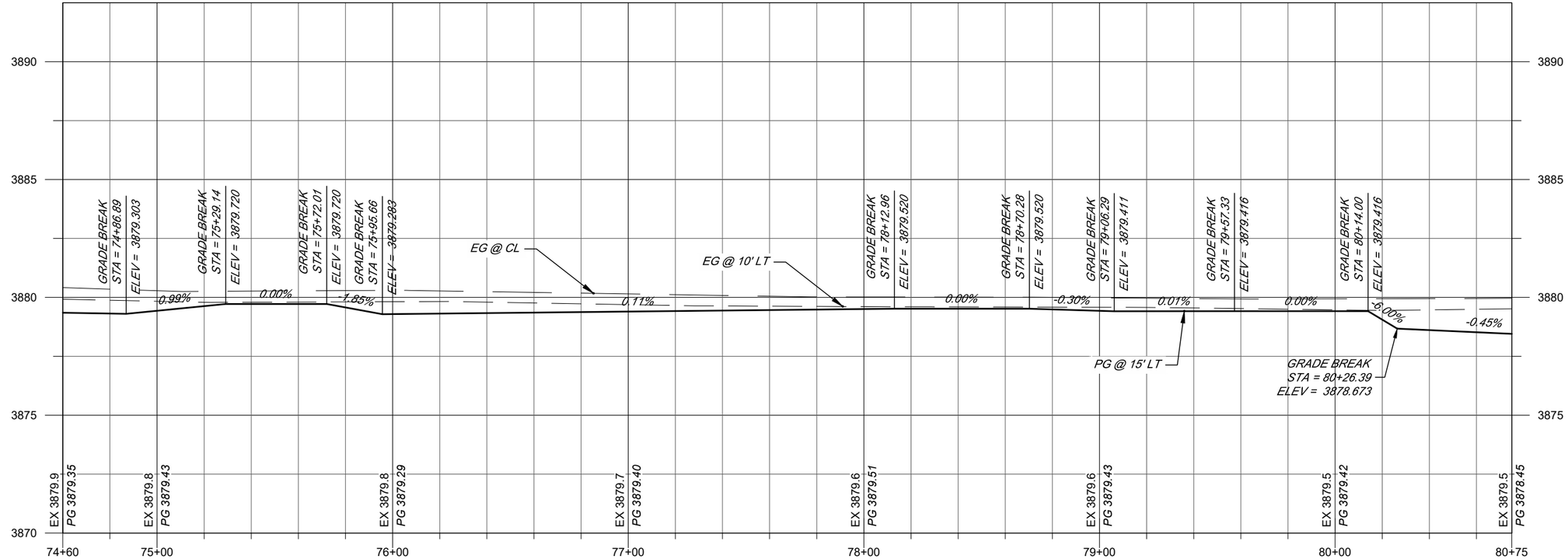
PLAN DRAWING SCALE: 1"=50'
HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1" = 5'



PROJECT CONTROL NUMBER:

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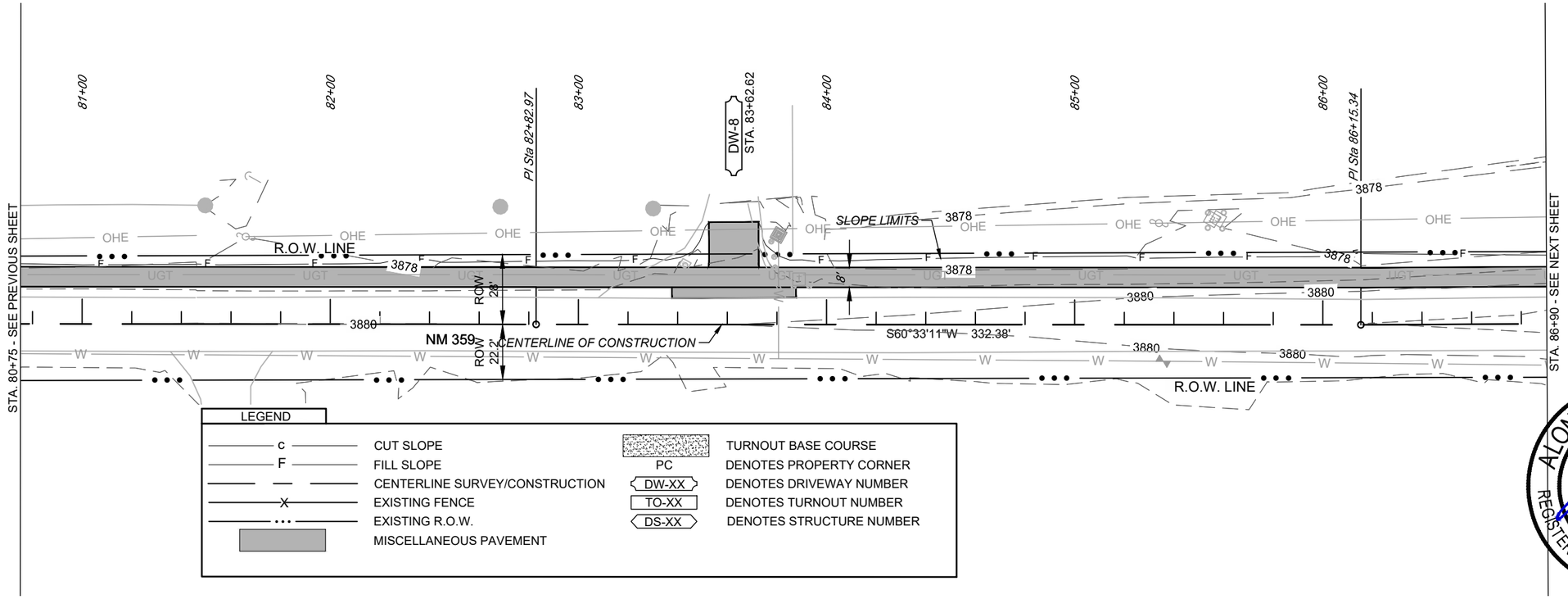

ALONZO LUIS MARTINEZ
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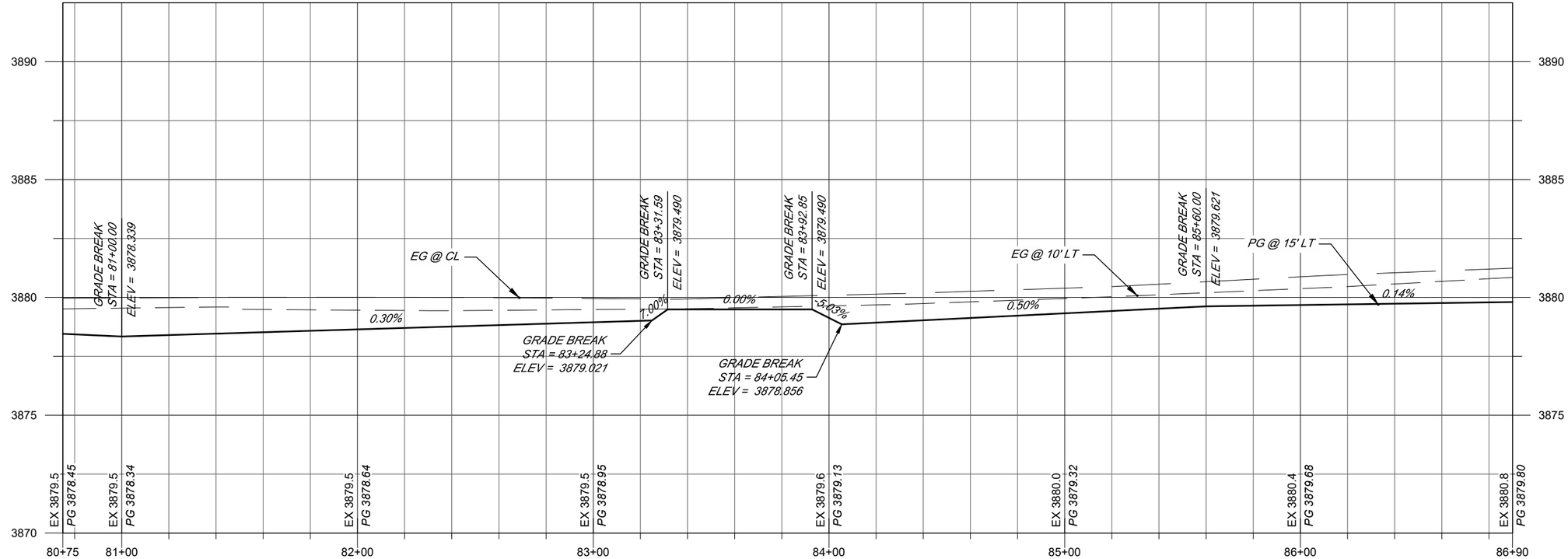
7/30/19

PLAN DRAWING SCALE: 1"=50'
HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1" = 5'



PROJECT CONTROL NUMBER:

SMA
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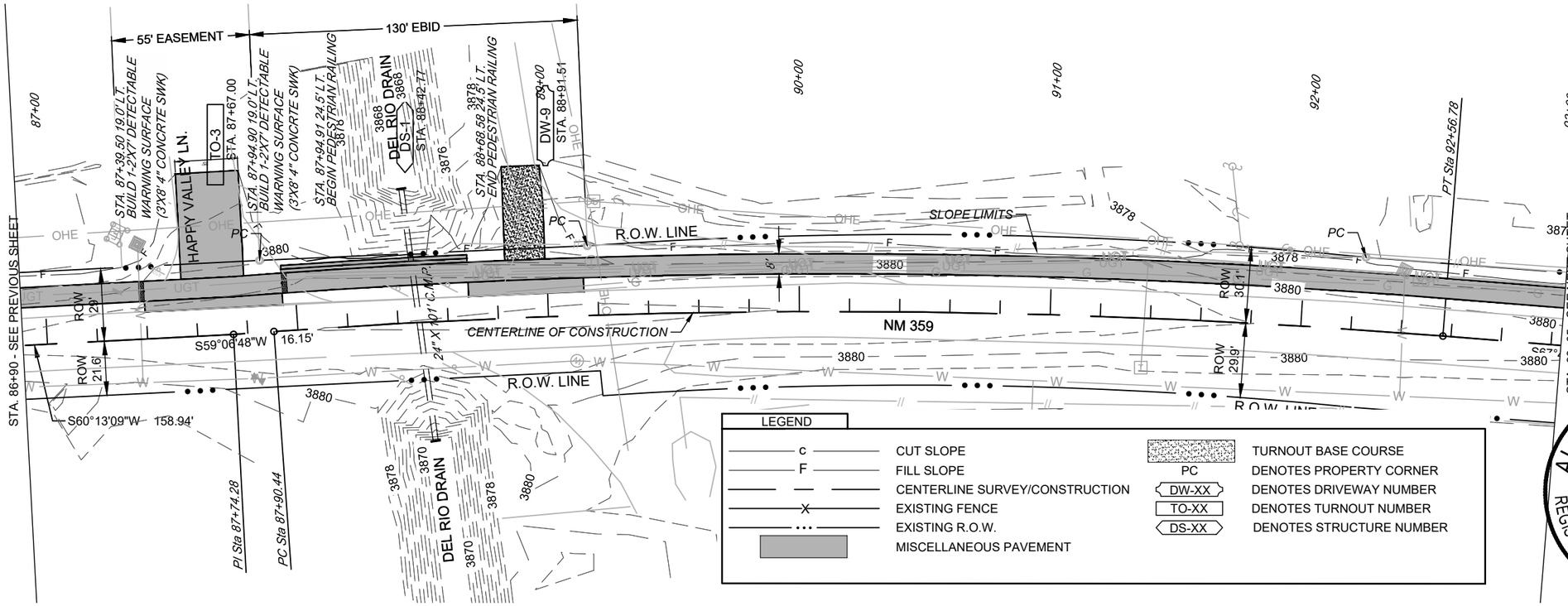

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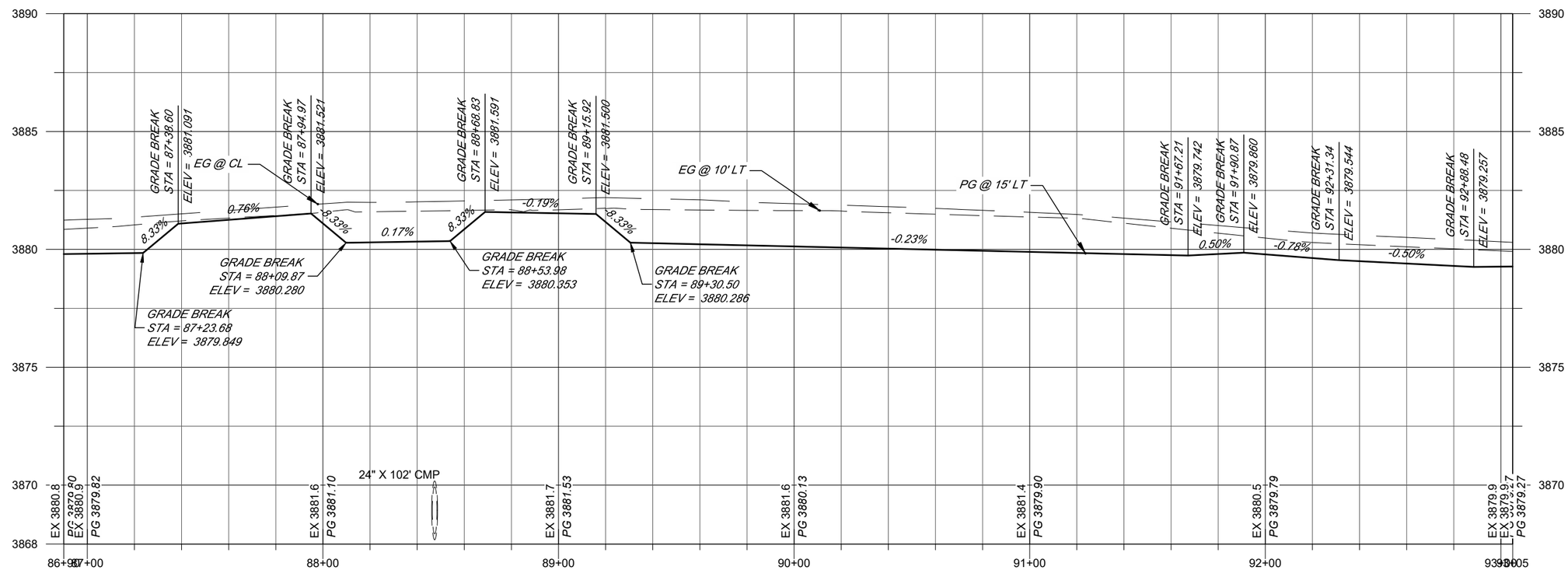
7/30/19

PLAN DRAWING SCALE: 1"=50'
HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1" = 5'



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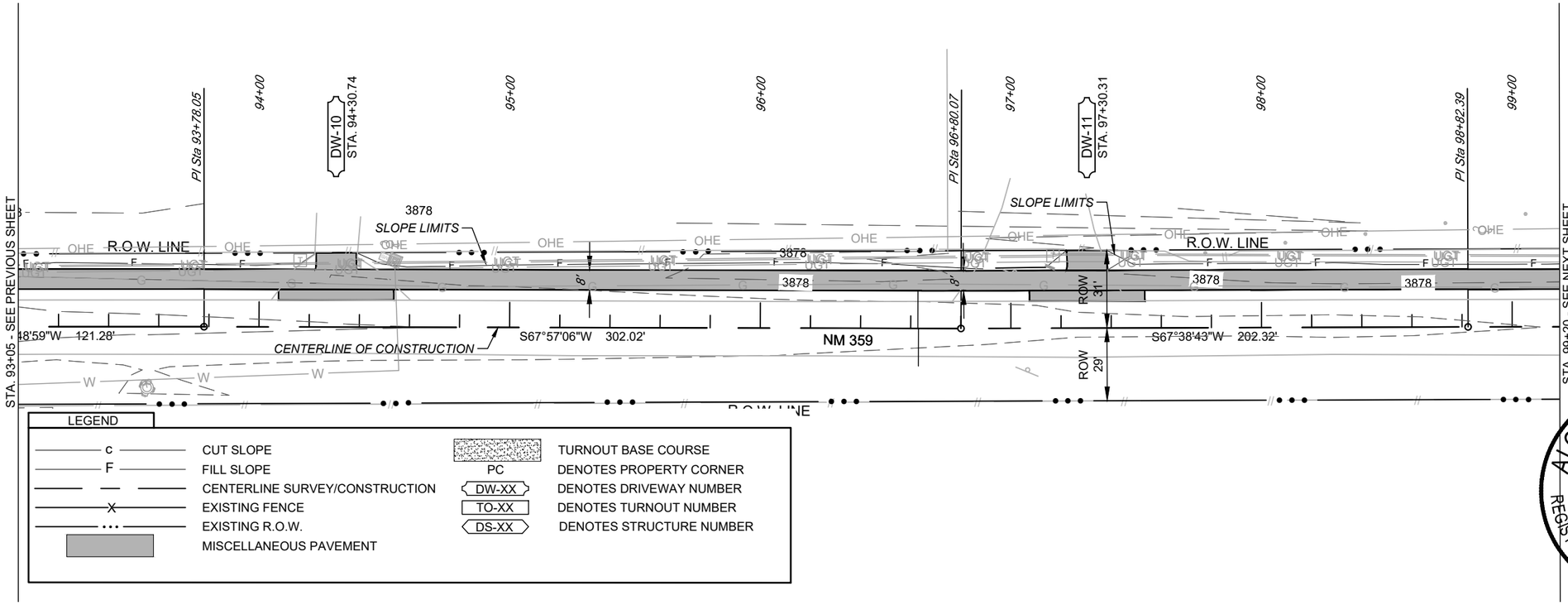

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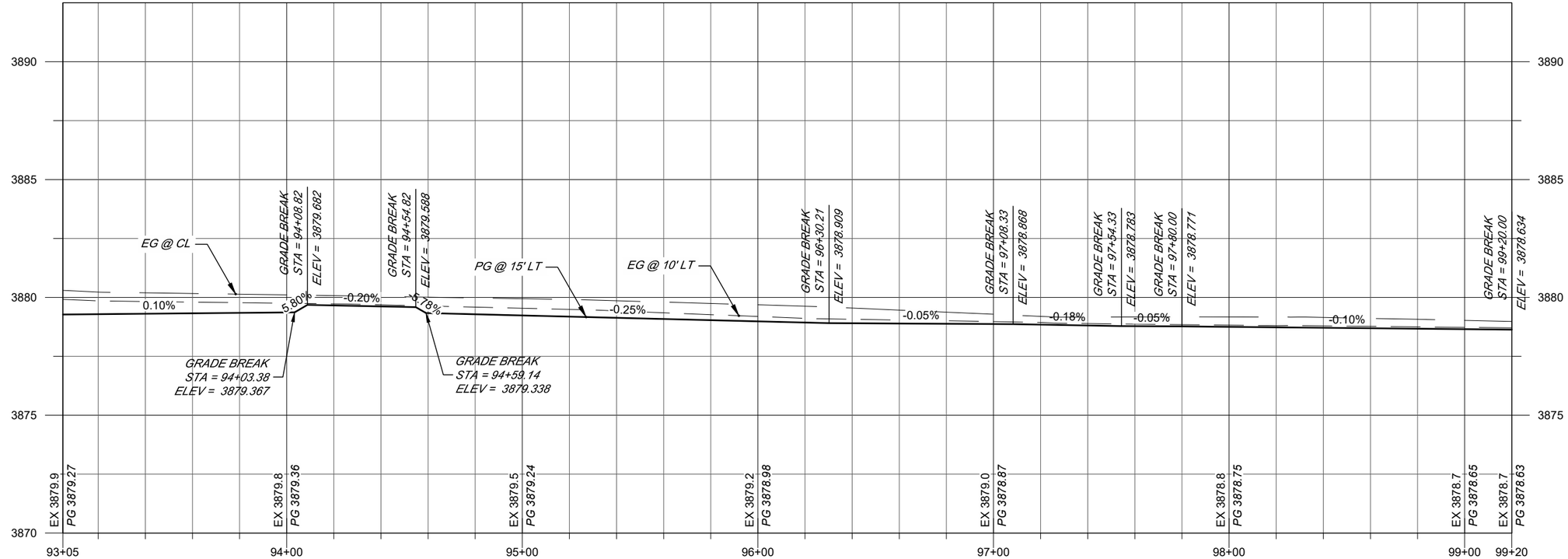
PLAN DRAWING SCALE: 1"=50'
HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1" = 5'



PROJECT CONTROL NUMBER:

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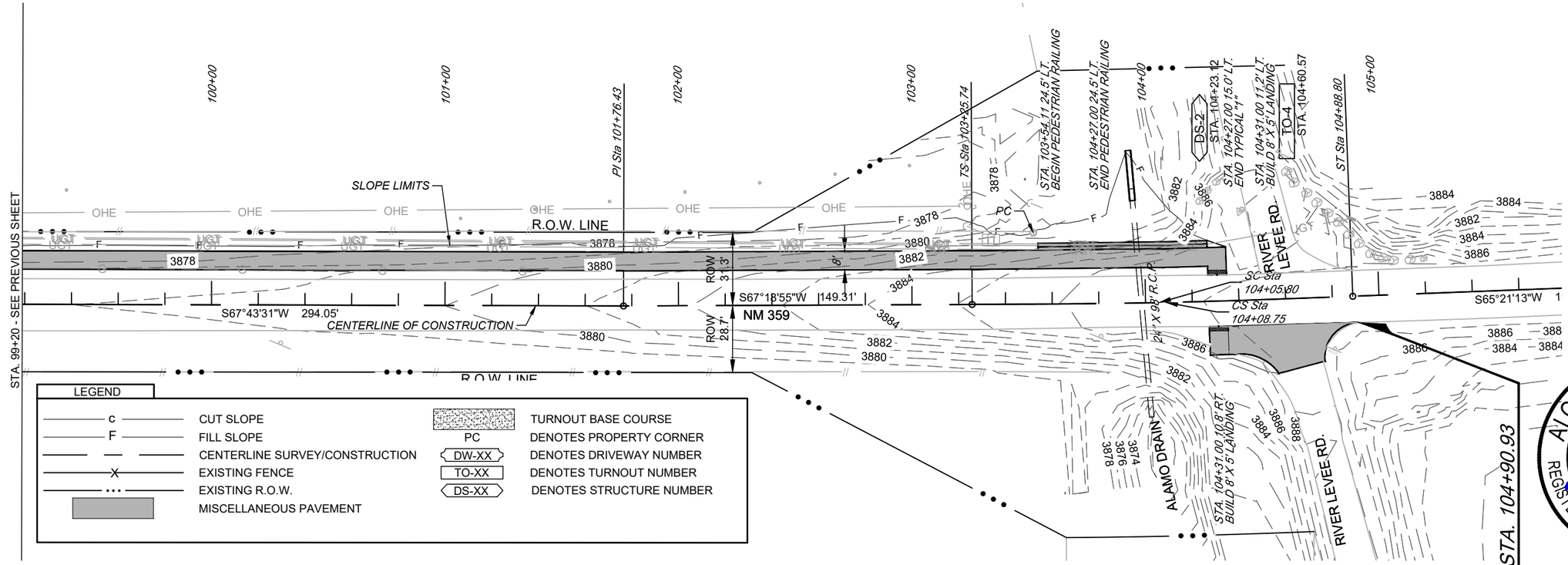

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
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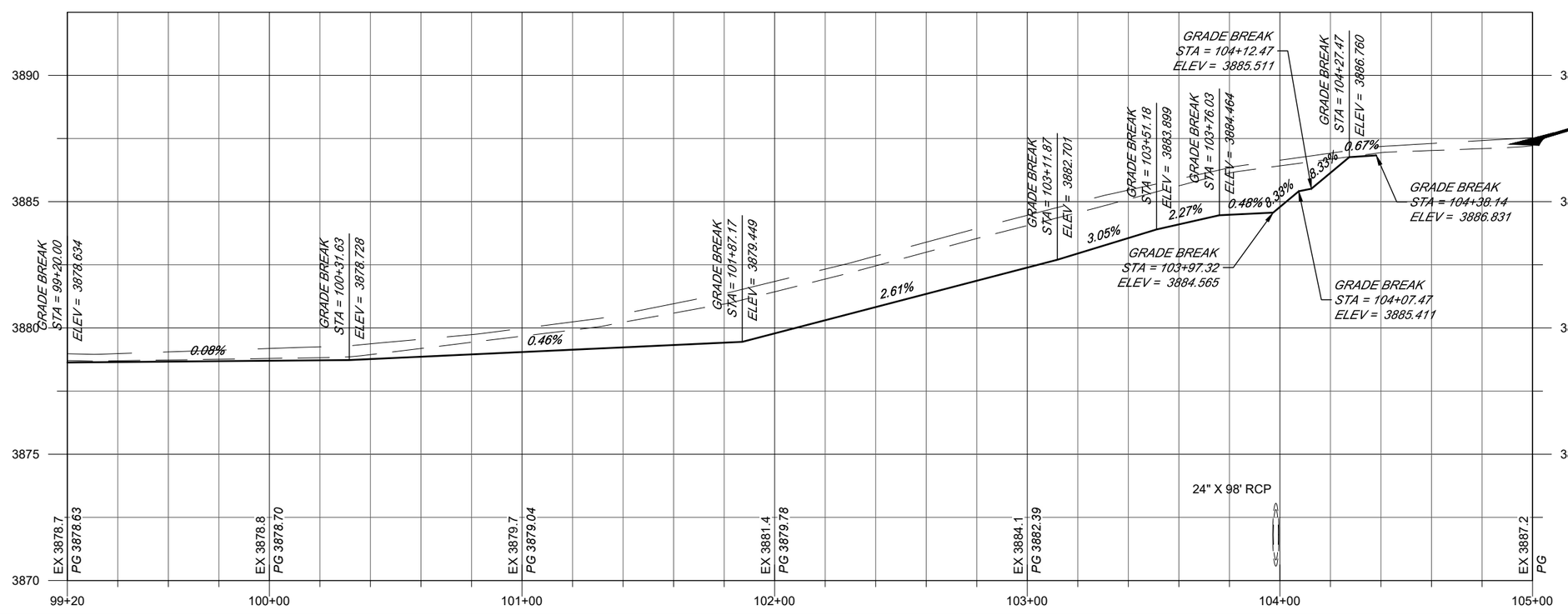
7/30/19

PLAN DRAWING SCALE: 1"=50'
HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1" = 5'



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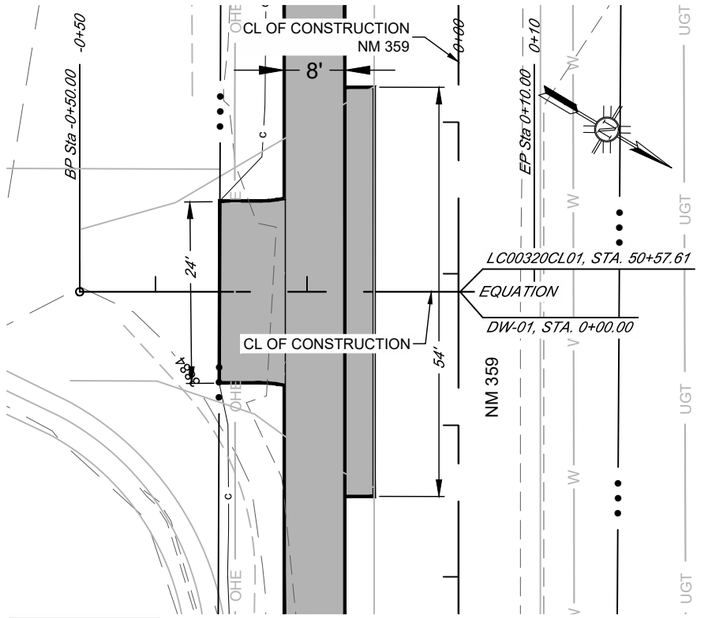

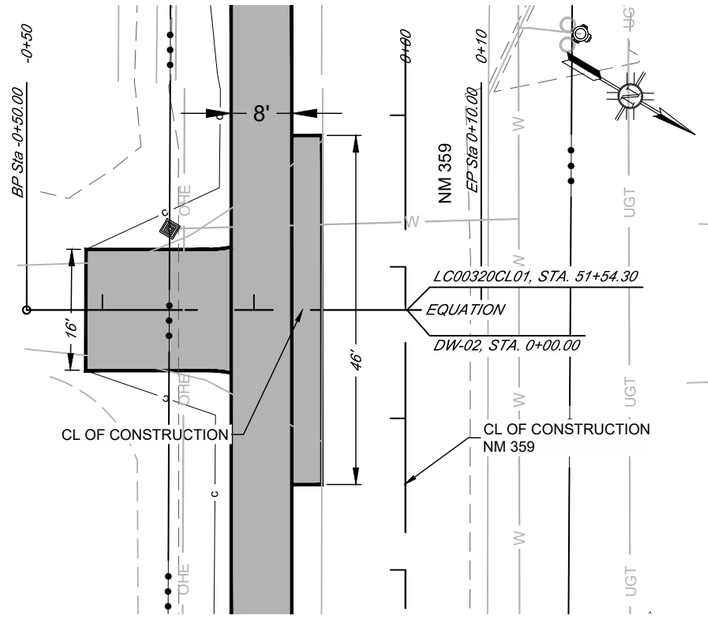

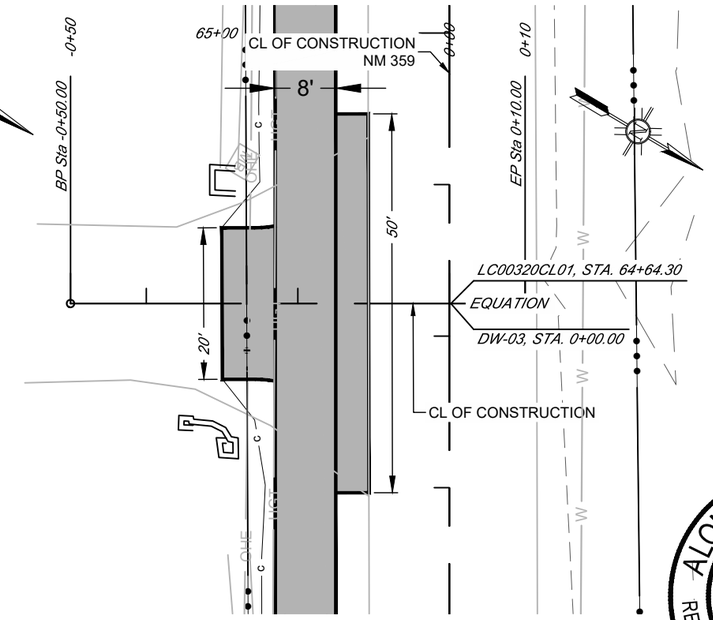

LEGEND

	MISCELLANEOUS PAVEMENT (TURNOUT & SHARED USE PATH)
	BASE COURSE DRIVE PAD

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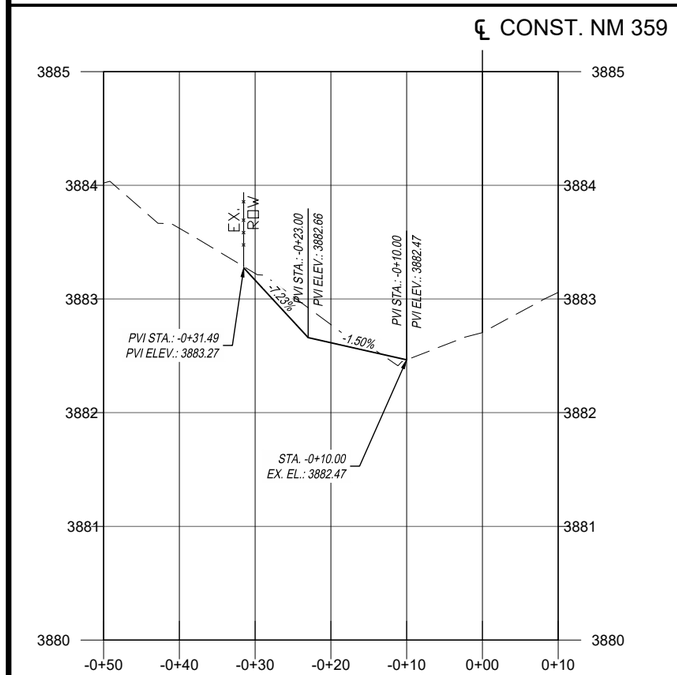
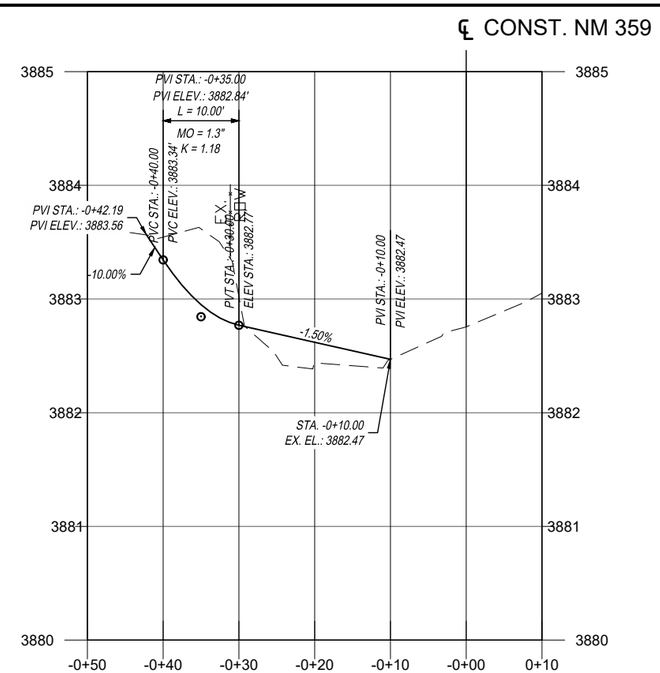
ALONZO LUIS MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

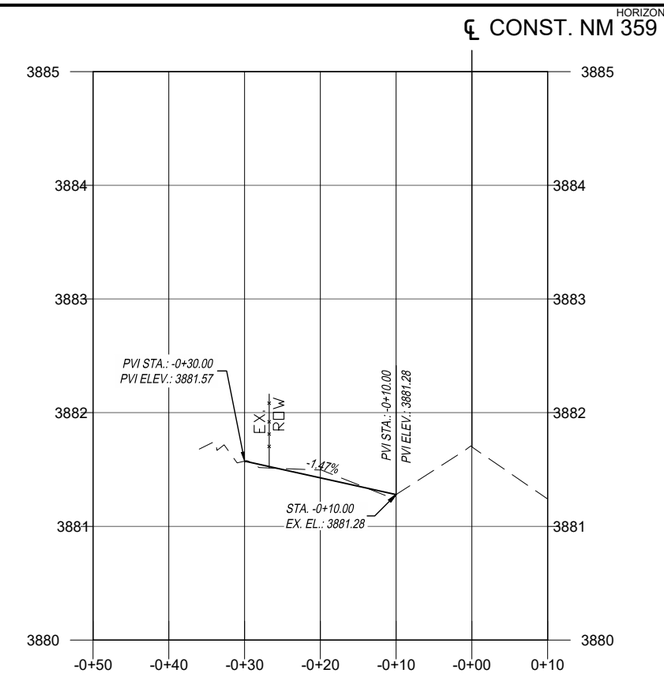
PLAN DRAWING SCALE: 1" = 30'
HORIZONTAL SCALE: 1" = 30' VERTICAL SCALE: 3/4" = 1'



DW-01
STA. 50+57.61, LT.
BUILD 1- 24' TURNOUT, 54' TOTAL WIDTH AT OPENING
PAVE TO R.O.W.

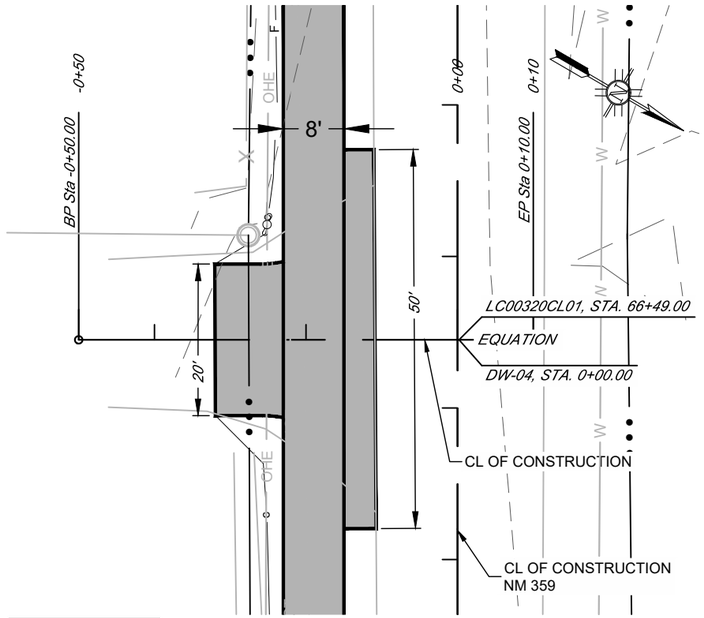


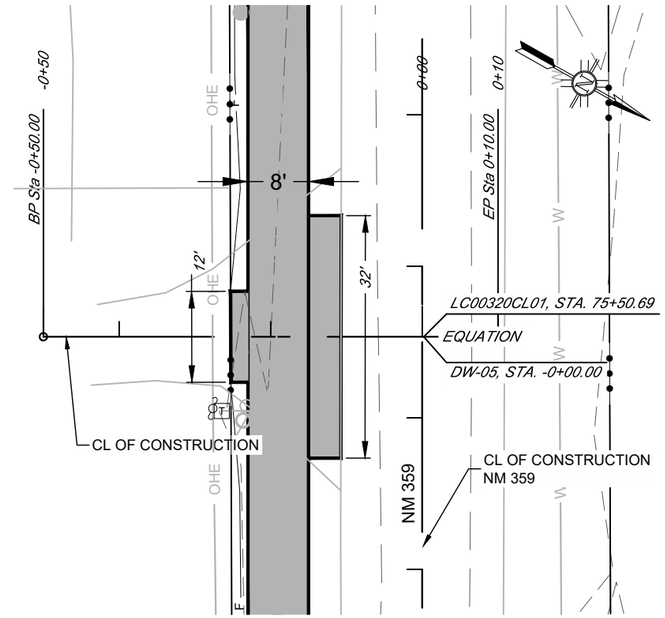
DW-02
STA. 51+54.30, LT.
BUILD 1- 16' TURNOUT, 46' TOTAL WIDTH AT OPENING
PAVE TO STA. -0+42.19

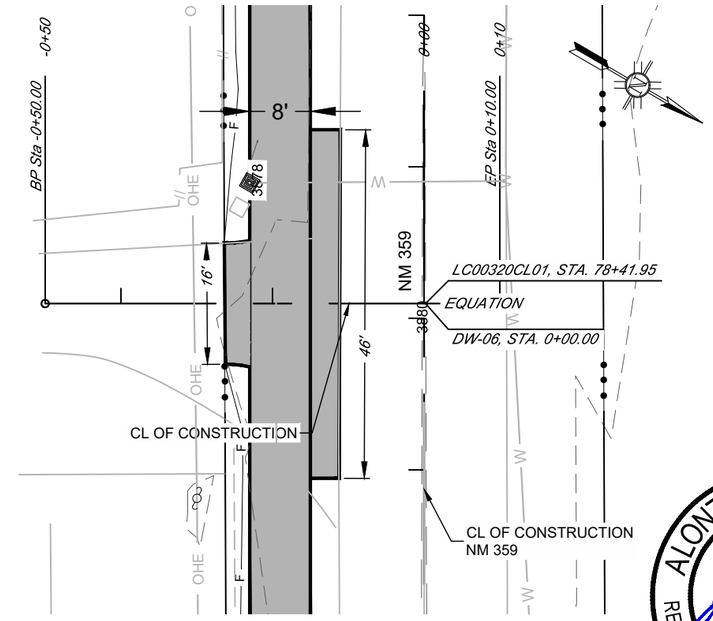


DW-03
STA. 64+64.30, LT.
BUILD 1- 20' TURNOUT, 50' TOTAL WIDTH AT OPENING
PAVE TO STA. -0+30.00

PROJECT CONTROL NUMBER:





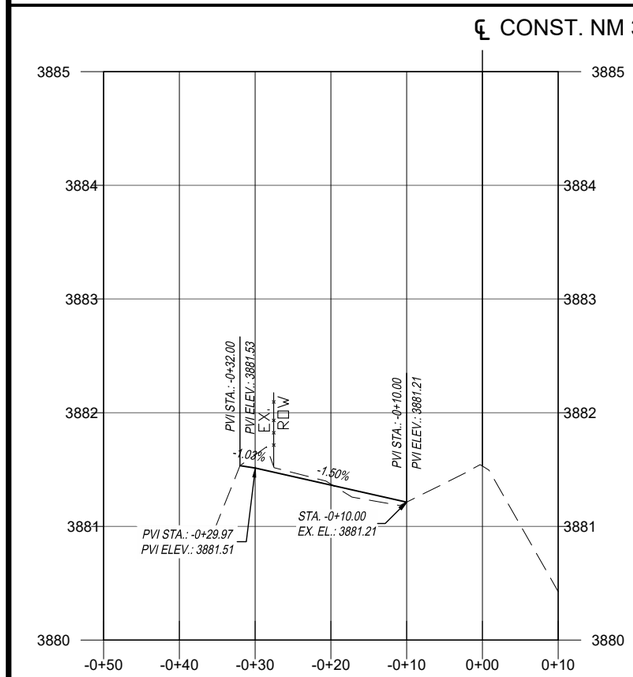


LEGEND

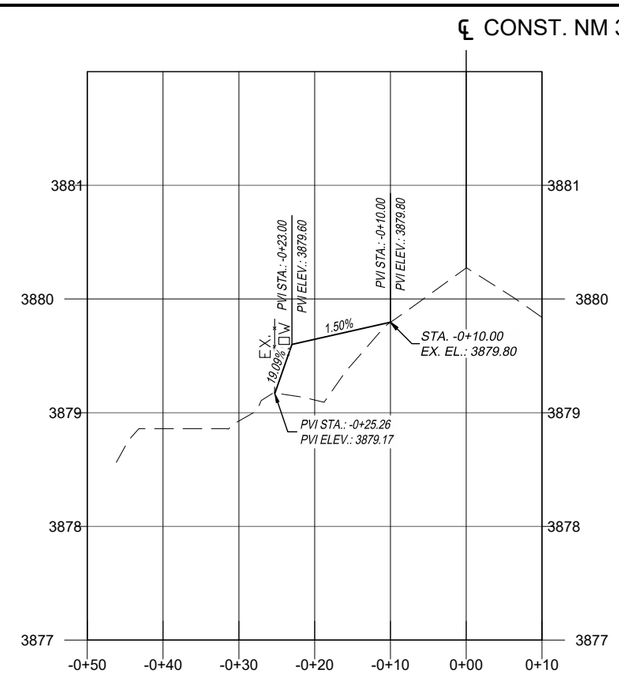
	MISCELLANEOUS PAVEMENT (TURNOUT & SHARED USE PATH)
	BASE COURSE DRIVE PAD

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

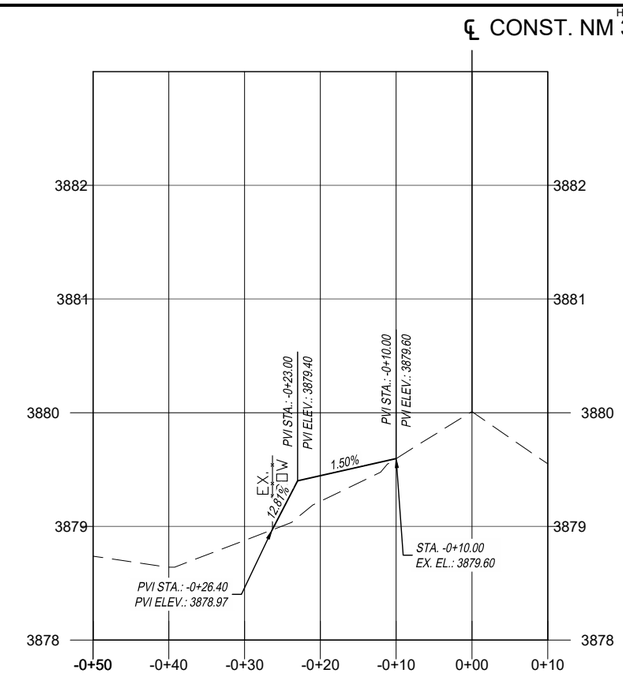
PLAN DRAWING SCALE: 1" = 30'
HORIZONTAL SCALE: 1" = 30' VERTICAL SCALE: 3/4" = 1'



DW-04
STA. 66+49.00, LT.
BUILD 1- 20' TURNOUT, 50' TOTAL WIDTH AT OPENING
PAVE TO STA. -0+32.00

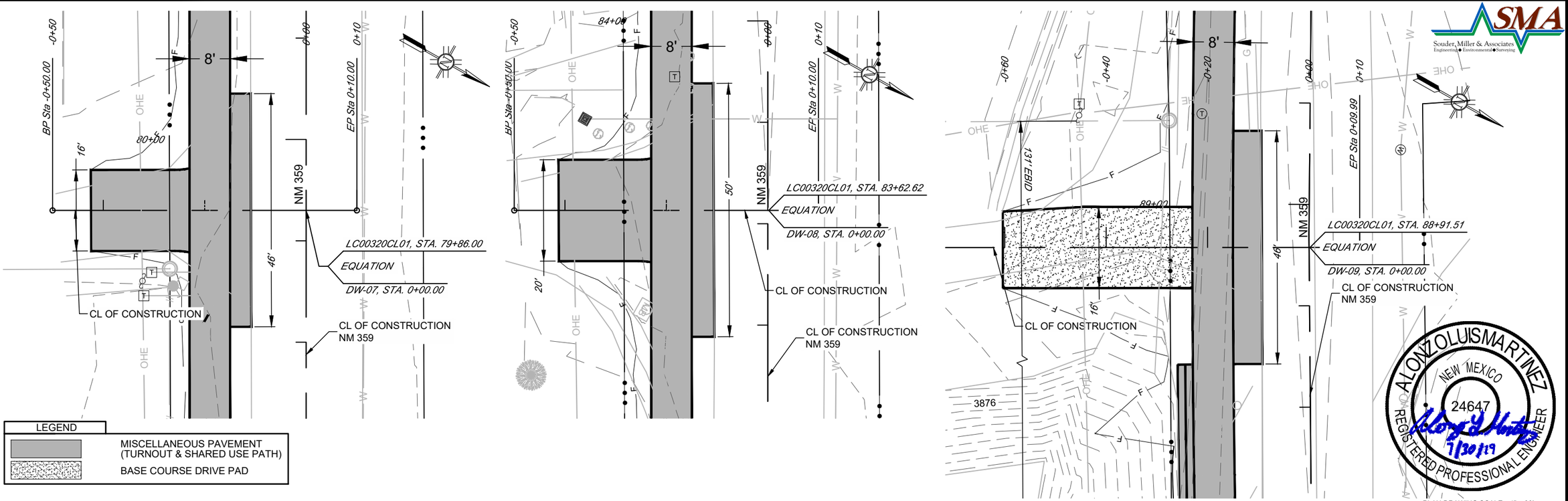


DW-05
STA. 75+50.69, LT.
BUILD 1- 12' TURNOUT, 32' TOTAL WIDTH AT OPENING
PAVE TO R.O.W.



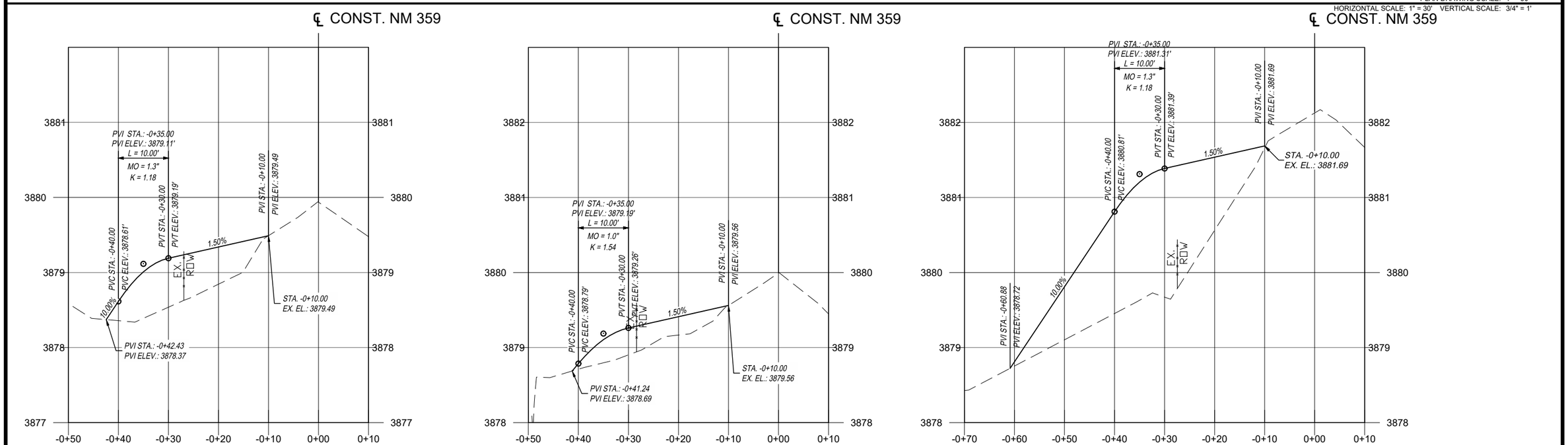
DW-06
STA. 78+41.95, LT.
BUILD 1- 16' TURNOUT, 46' TOTAL WIDTH AT OPENING
PAVE TO R.O.W.

PROJECT CONTROL NUMBER:



PLAN DRAWING SCALE: 1" = 30'

HORIZONTAL SCALE: 1" = 30' VERTICAL SCALE: 3/4" = 1'



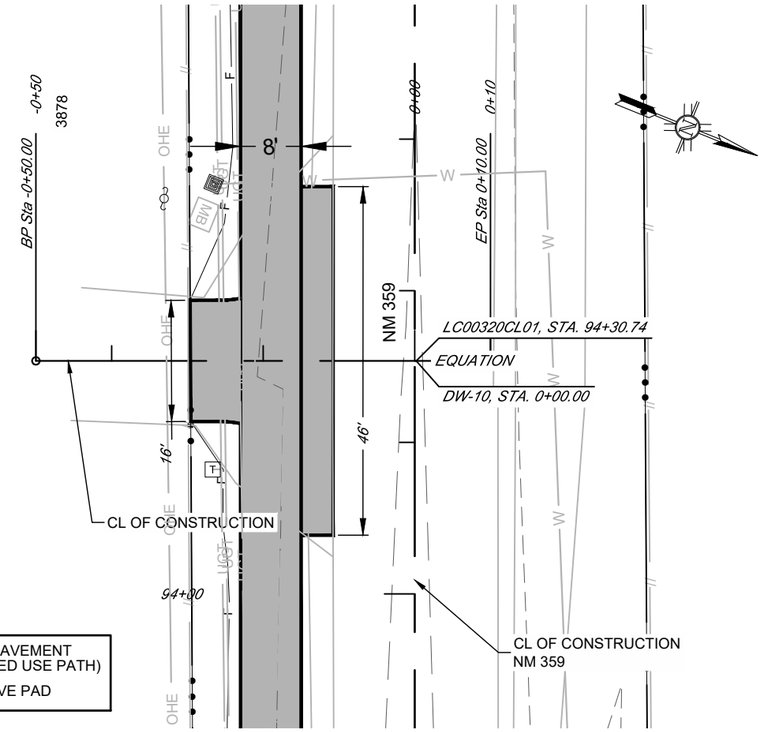
DW-07
STA. 79+86.00, LT.
BUILD 1- 16' TURNOUT, 46' TOTAL WIDTH AT OPENING
PAVE TO STA. -0+42.43

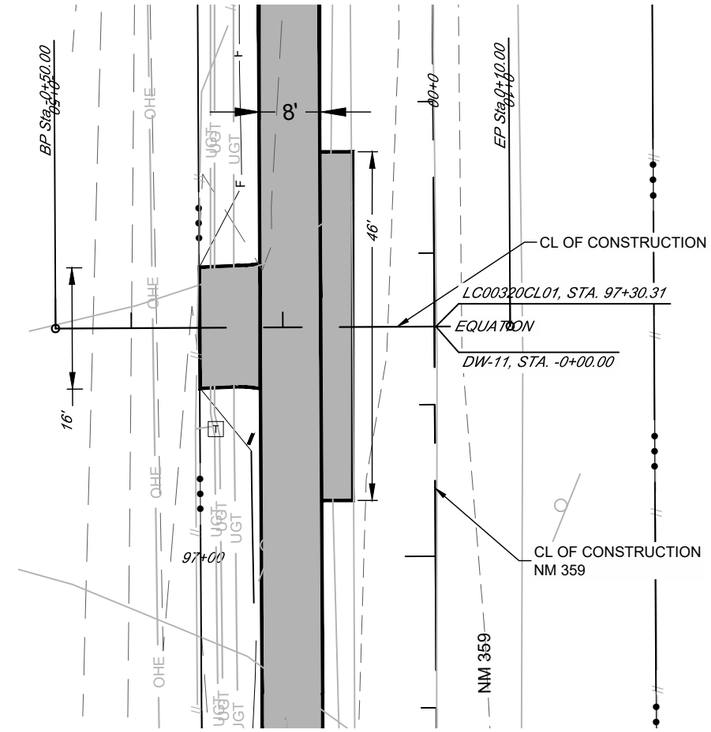
DW-08
STA. 83+62.62, LT.
BUILD 1- 20' TURNOUT, 30' TOTAL WIDTH AT OPENING
PAVE TO STA. -0+41.24

DW-09
STA. 88+91.51, LT.
BUILD 1- 20' TURNOUT, 50' TOTAL WIDTH AT OPENING
PAVE TO STA. -0+23.00,, BASE COURSE TO STA. -0+60.88

PROJECT CONTROL NUMBER:

Souder, Miller & Associates
Engineering • Environmental • Surveying



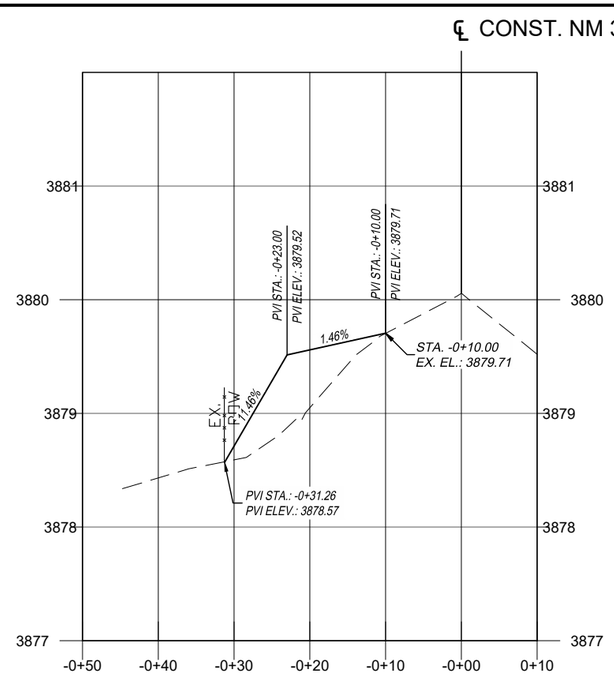


LEGEND

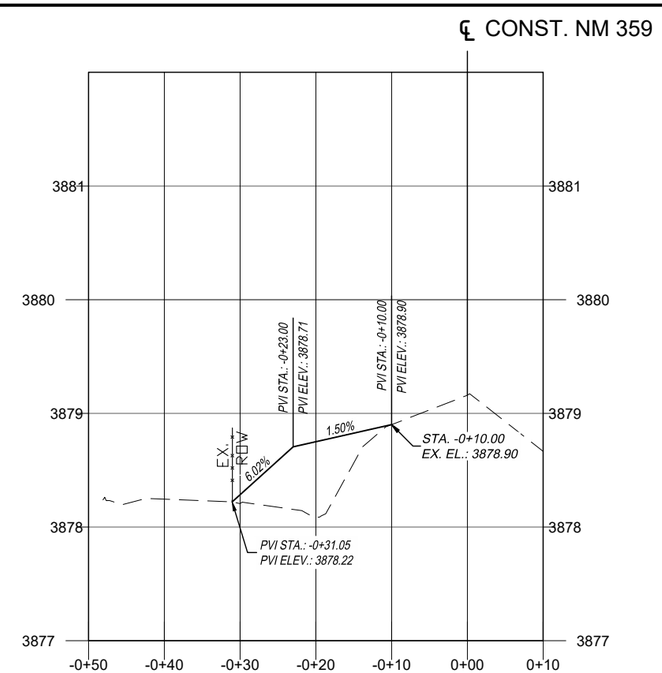
	MISCELLANEOUS PAVEMENT (TURNOUT & SHARED USE PATH)
	BASE COURSE DRIVE PAD

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

PLAN DRAWING SCALE: 1" = 30'
HORIZONTAL SCALE: 1" = 30' VERTICAL SCALE: 3/4" = 1'

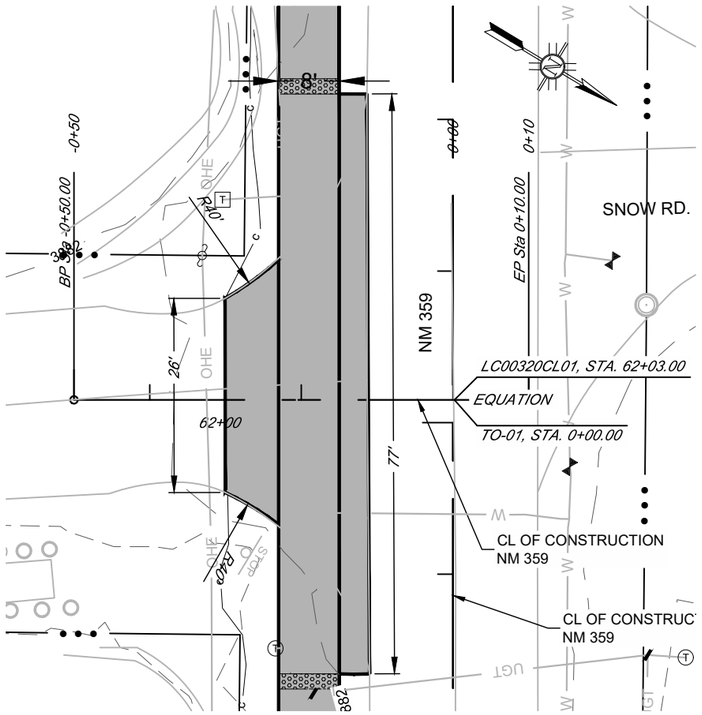


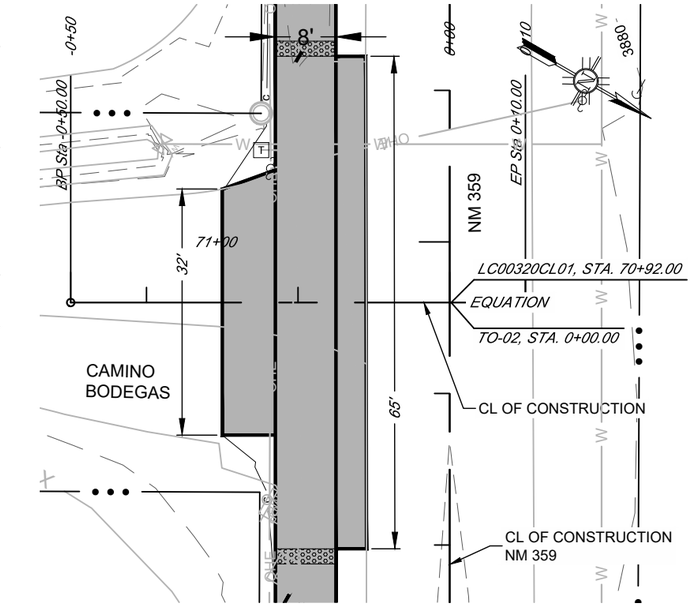
TO-10
STA. 94+30.74, LT.
BUILD 1- 16' TURNOUT, 46' TOTAL WIDTH AT OPENING
PAVE TO R.O.W.

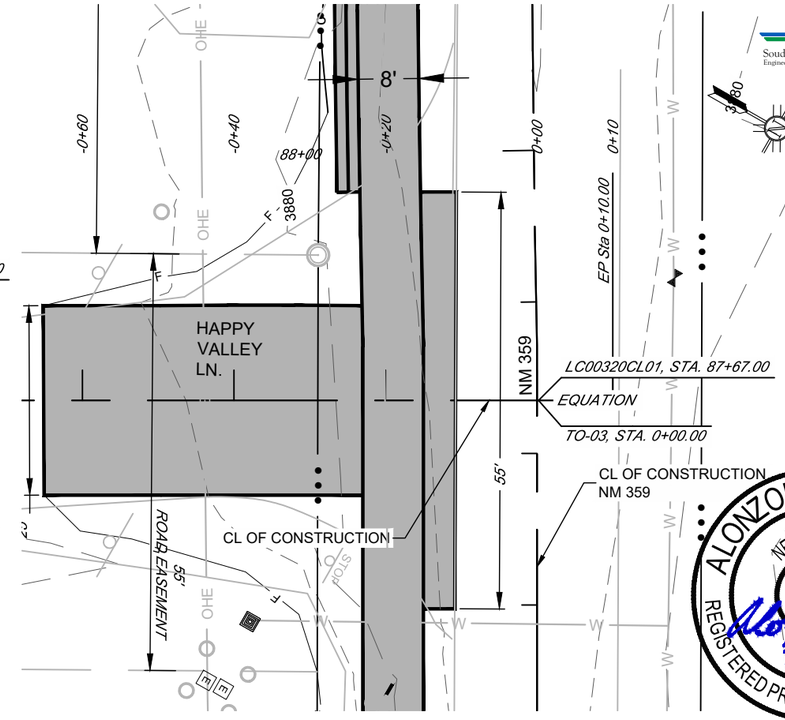


DW-11
STA. 97+30.31, LT.
BUILD 1- 16' TURNOUT, 46' TOTAL WIDTH AT OPENING
PAVE TO R.O.W.

PROJECT CONTROL NUMBER:







LEGEND

MISCELLANEOUS PAVEMENT (TURNOUT & SHARED USE PATH)

BASE COURSE DRIVE PAD

Souder, Miller & Associates
Engineering • Environmental • Surveying

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

PLAN DRAWING SCALE: 1" = 30'
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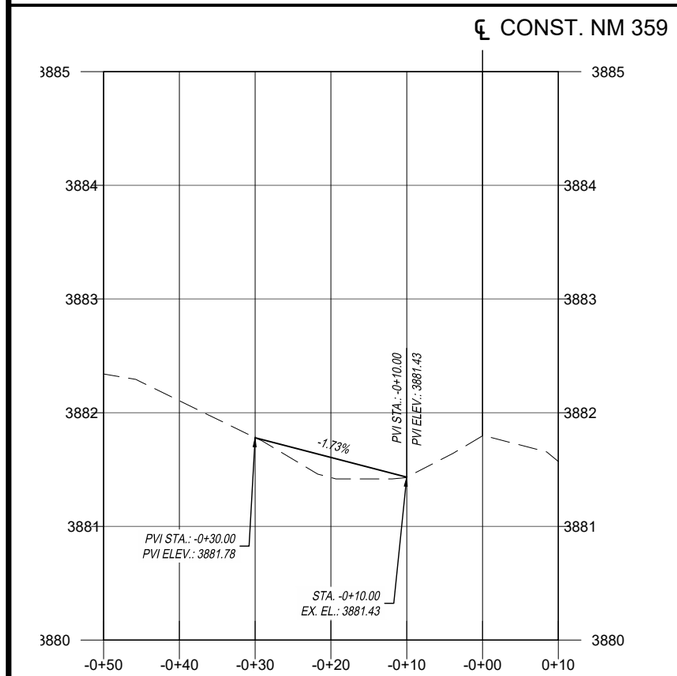
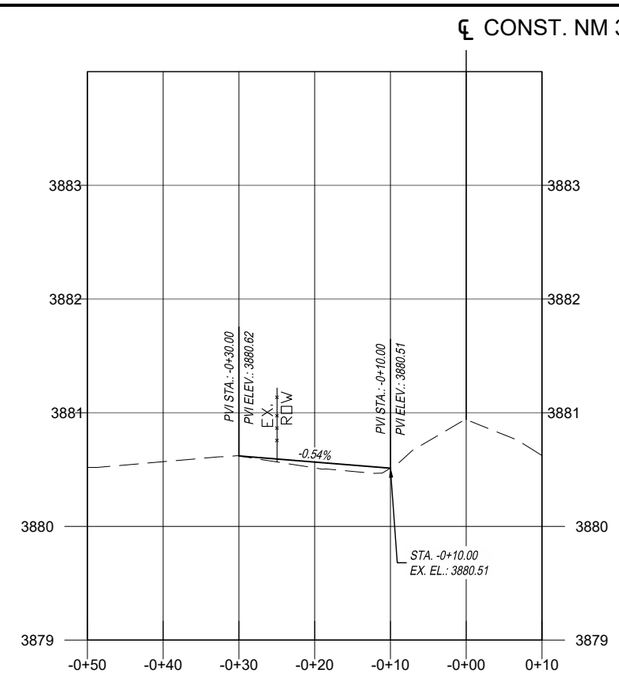
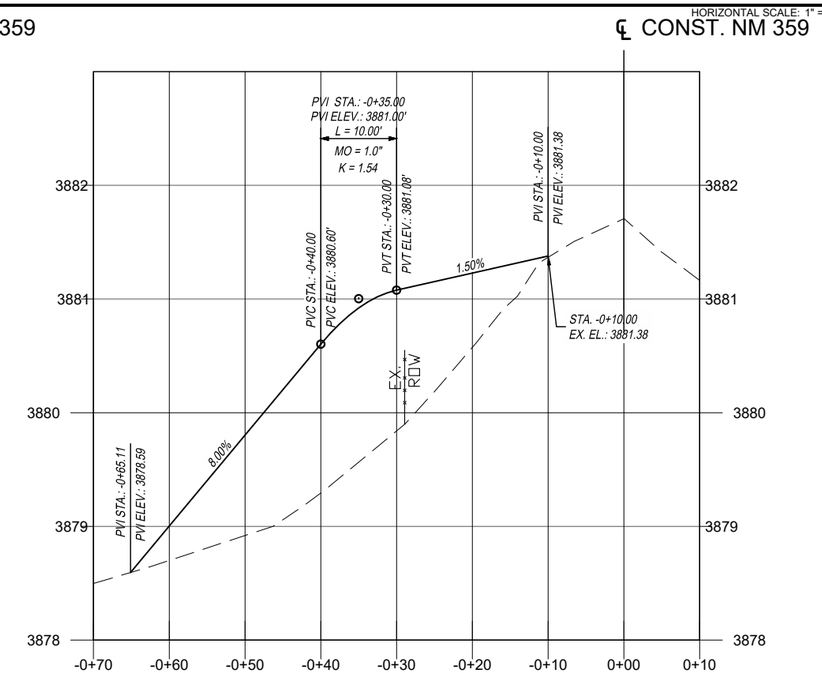


TO-01
STA. 62+03.00, LT.
BUILD 1- 26' TURNOUT, 77' AT OPENING
PAVE TO STA. -0+30.00 TIE TO EXISTING PAVEMENT

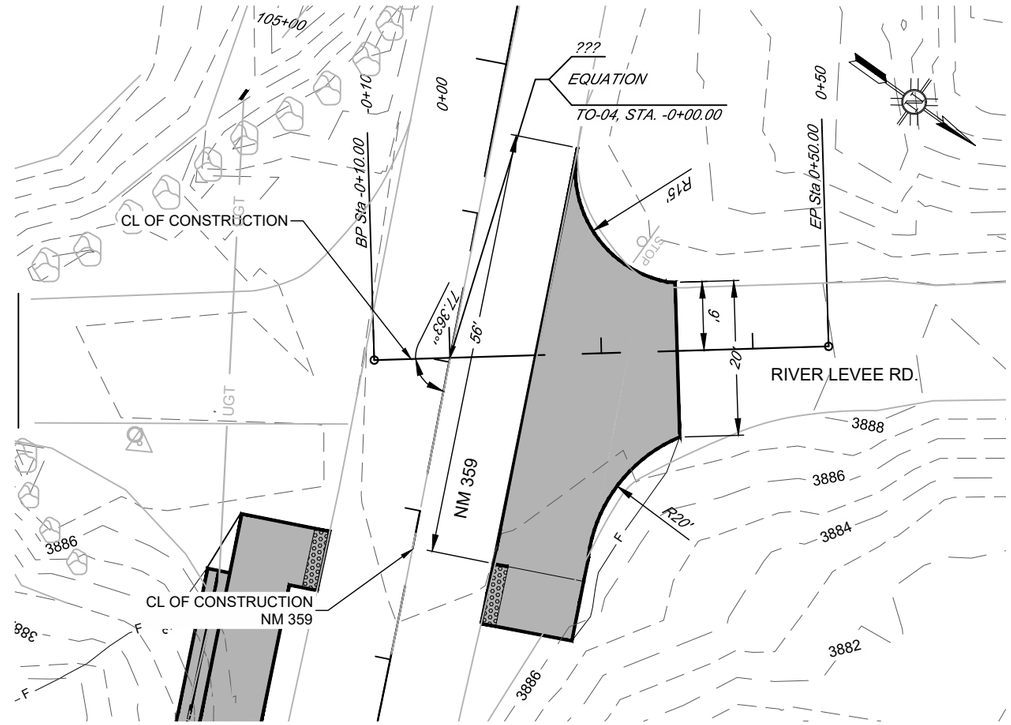


TO-02
STA. 70+92.00, LT.
BUILD 1- 32' TURNOUT, 65' AT OPENING
PAVE TO STA. -0+30.00 TIE TO EXISTING PAVEMENT



TO-03
STA. 87+67.00, LT.
BUILD 1- 25' TURNOUT, 55' AT OPENING
PAVE TO STA. -0+65.11 TIE TO EXISTING PAVEMENT

PROJECT CONTROL NUMBER:



LEGEND

	MISCELLANEOUS PAVEMENT (TURNOUT & SHARED USE PATH)
	BASE COURSE DRIVE PAD

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REGISTERED PROFESSIONAL ENGINEER
7/30/19

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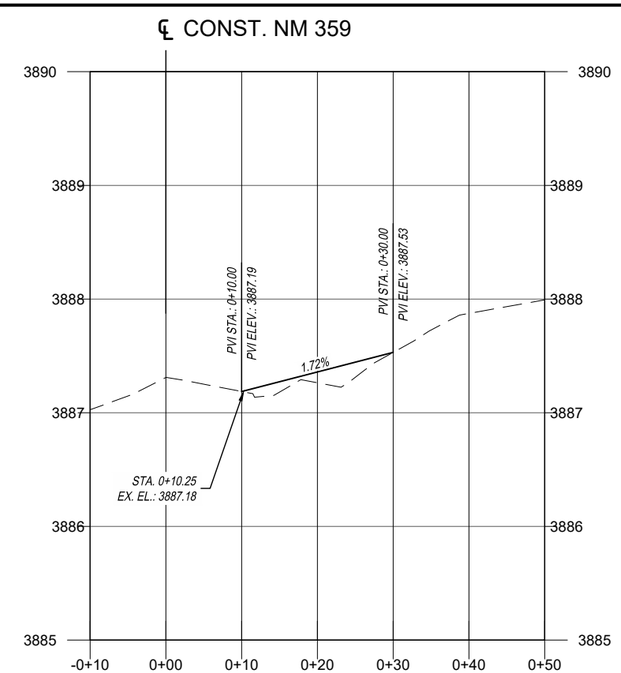


TO-04
STA. 104+60.57, RT.
BUILD 1- 20' TURNOUT, 56' TOTAL WIDTH AT OPENING
PAVE TO STA. 0+30.00

TRAFFIC CONTROL GENERAL NOTES:

1. **TRAFFIC CONTROL:** All Temporary Traffic Control (TTC) devices shall be placed in accordance with the NMDOT Standard Specifications for Highway and Bridge Construction (latest edition) and the Manual on Uniform Traffic Control Devices (latest edition) and current revisions with the following constraints:
   a. No substitutions will be allowed for channelization devices type drum unless otherwise noted in the plans.
   b. Temporary portable sign stands are an unnecessary hazard when not in use. Unused temporary sign stands shall be removed from the roadway. If temporary sign stands are staged for future use (approved by the project manager) they shall be folded up and stored away from the paved shoulder.
   c. Use of Type I or II barricades on roadways with speed limit greater than 40 mph is strictly prohibited.
   d. The work zone shall comply with, but not limited to, NCHRP 476 Guidelines for Design and Operation of Nighttime Traffic Control.

2. **BOP AND EOP SIGNING:** BOP and EOP signing in accordance with Standard Drawing 702-03-1/1 and/or 702-04-1/1 shall be placed at the project limits prior to construction operations commencing and shall remain in place throughout the duration of the project or as directed by the Project Manager. Advance warning signs shall be placed at all side streets.

3. **FLAGGING:** Flagging shall be provided for safety per the plan or as directed by the project manager and shall conform to the MUTCD latest edition. The flaggers, applicable signs and other related items shall be considered incidental to the completion of the project and no separate measurement or payment will be made.
   a. All flaggers shall be certified and shall have their certification available for review at all times when on duty.
   b. Flagging operations shall adhere to NCHRP 476 Guidelines for Design and Operation of Nighttime Traffic Control; Flaggers shall wear high-visibility safety apparel that meets Performance Class 2 or 3.

4. **INGRESS AND EGRESS:** The Contractor shall provide ingress and egress to local residences and businesses for the duration of the project. If access closure is required, the contractor shall request the closure through the Project Manager. Upon approval, the Contractor shall coordinate such closure with the property owners and the Project Manager at least 48 hours in advance. All work associated with this shall be considered incidental to the completion of the project and no separate payment or measurement will be made.

5. **PORTABLE CHANGEABLE MESSAGE SIGNS:** The Contractor shall supply Portable Changeable Message Signs (PCMS), which will be retained by the contractor. The message PCMS shall be utilized to convey messages, expected delays, and detours to motorists as required. Messages should be determined by the Contractor and approved by the Project Manager. Two (2) Weeks prior to start of construction: name locations, and number of PCMS to be placed.

6. **TRAFFIC CONTROL PLANS:** This traffic control plan (TCP) represents a suggested method for traffic control during construction. Adjustments to the details of this TCP and requirements within the plan may be necessary due to construction activities, or as directed by the Project Manager. If the contractor elects to make any changes to the TCP or sequence of construction, the Contractor shall submit four (4) 11" X 17" copies of the proposed TCP to the Project Manager at least two (2) weeks prior to implementation. The TCP shall conform to the current editions of the MUTCD, NMDOT Standard Specifications and AASHTO Roadside Design Guide. The TCP shall be in computer drafted format and shall be designed, stamped, and revised as necessary by a current New Mexico Licensed professional engineer and submitted to the Project Manager for approval. All costs associated with developing the TCP and any additional devices associated with the TCP shall be incidental to Item No. 618000, "Traffic Control Management," and no separate measurement or payment will be made, unless otherwise noted in the contract.

7. **PUBLIC INFORMATION:** The Contractor / TCP firm shall contact the Project Manager or District Public Information Officer, as preferred by the district through the district office, to confirm the actual start dates of the construction and the contractor's schedule a minimum of 48 hours before any work listed in the TCP is performed.

8. **REMOVAL OF CONSTRUCTION SIGNING:** All temporary traffic control signs, sign posts and post bases installed with the construction project shall be **REMOVED** by the Contractor at the completion of the project. **Removal shall consist of complete extraction of the bases from the ground.** This work shall be incidental to the completion of the project and no separate measurement or payment will be made.

9. **CONFLICTING SIGNS:** All conflicting signs within or in advance of the work zone shall be covered completely with an opaque non-light transmitting material so as not to damage the sign. The Contractor is to use an approved method of covering existing signs so as not to damage/distort the sign sheeting or markings. The Contractor shall not place tape directly on the face of the sign. Failure to adhere to this requirement will result in the Contractor replacing the sign at no cost to the NMDOT.

10. **TEMPORARY STRIPING:** The use of black paint to cover existing lane lines or symbols is strictly prohibited. All temporary striping shall be placed before opening any work zone or portion of a work zone in accordance with the MUTCD and the approved traffic control plan. This work shall be included in Item No. 704100, "Removable Marking Tape" and no separate measurement or payment will be made, unless otherwise noted in the contract.

11. **CONSTRUCTION SIGNING:** All construction signing shall meet retroreflectivity requirements listed in section 702.2.1 "Construction Signing" of the NMDOT Standard Specifications.
   a. All construction signing on the interstate and on high speed (greater or equal to 45 MPH) multilane divided facilities shall be double indicated (left and right shoulders).
   b. All signs that are part of work zone that are in place for more than 3 days shall be placed on breakaway posts. If there are physical restrictions at the site that prohibit the sign from being placed on posts, the Contractor shall notify the District Traffic Engineer and obtain a waiver.
   c. All warning and regulatory signs shall meet the following size requirements:

Interstate:	Warning sign 48"x48"	Regulatory 48"x60"
Non-Interstate:	Warning sign 36"x36"	Regulatory 36"x42"

   d. The following reflectivity material shall be used on all construction signing placed on NMDOT roadways.

SIGN	SIGN CODE	COLOR	LETTER SHEETING	BACKGROUND SHEETING
APPROACH SIGNS	W20-XX	BLK/FLUORESCENT ORANGE	——	TYPE VIII, IX, XI
CHEVRONS	W1-8	BLK/FLUORESCENT ORANGE	——	TYPE VIII, IX, XI
CURVES	W1-2	BLK/FLUORESCENT ORANGE	——	TYPE VIII, IX, XI
REVERSE CURVE	W1-4	BLK/FLUORESCENT ORANGE	——	TYPE VIII, IX, XI
MERGE	W4-1	BLK/FLUORESCENT ORANGE	——	TYPE VIII, IX, XI
NO PASSING ZONE	W14-3	BLK/FLUORESCENT ORANGE	——	TYPE VIII, IX, XI
FLAGGER PADDLE	——	BLK/FLUORESCENT ORANGE on Side 1with RED on Side 2	——	TYPE VIII, IX, XI Type IV White
ALL DRUMS	——	WHITE/ FLUORESCENT ORANGE	——	TYPE VIII, IX, XI Type IV white
All Other Const. Signs	——	BLK/FLUORESCENT ORANGE	——	TYPE VIII, IX, XI

12. **REMOVAL OF TEMPORARY STRIPING:** All relevant temporary striping shall be removed upon completion of each phase of construction. The only approved method of stripe removal is water blasting. The contractor is to ensure that there is no conflicting striping through the work zone or through detours. This work shall be included in Item No. 618000, "Traffic Control Management," and no separate measurement or payment will be made, unless otherwise noted in the contract.

13. **SATISFACTORY WORKING CONDITION:** All traffic control devices used on this project shall be in satisfactory working condition and shall function equivalently to new equipment in accordance with the MUTCD (latest edition). Traffic Control work zone shall comply with requirements of FHWA 23CFR 630 Subpart K for traffic control devices. At the beginning of the project 100% of signs/devices shall be in acceptable condition (new or like new). After 2 weeks at no time shall less than 75% of devices be in acceptable condition. All traffic devices shall be kept clean throughout the duration of the project. Any sign that is tagged by graffiti shall be cleaned (as long as it does not affect the reflective sheeting) within 24 hours or removed and replaced.

14. **TRAFFIC CONTROL FIELD ADJUSTMENTS:** Location of device spacing shall be field verified to account for existing roadway features which may obstruct placement and/or view of devices. Any changes to the traffic control plan should be approved by the District Traffic Engineer or his/her designee. All field adjustments of signs should be approved by the District Traffic Engineer. This work shall be considered incidental to Item No. 618000 "Traffic Control Management" and no additional measurement or payment will be made, unless noted in the contract.

15. **PEDESTRIANS:** Routes/paths shall not be closed without providing a detour. ADA requirements shall be adhered to; ADA compliant devices shall be used for channelization.

16. **BICYCLES:** Shall be accommodated or rerouted per MUTCD recommendations.

NO.	DATE	REV. BY	DESCRIPTION
2	3/2/2017	DRB	REVISE NOTE 2
1	3/2/2017	DRB	REVISE NOTE 7

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL
GENERAL NOTES

APPROVED: Afshin [illegible] 3/2/17
DESIGN ENGINEER DATE

DESIGNED BY: DRAWN BY: CHECKED BY:

702-01-1/5

TRAFFIC CONTROL GENERAL NOTES (CONTINUED):

17. **TEMPORARY CONCRETE WALL BARRIER (CWB):** When flaring the leading end of a Temporary Wall Barrier (CWB) within a construction work zone, the flare rate shall be done in accordance with the rates shown in the table below: (NMDOT Standard Drawing 606-20-5/5)

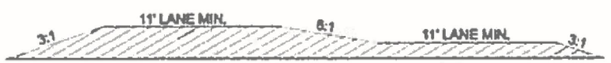
Roadway Speed Limit	Minimum Taper/ Flare Rate	Desirable Taper/ Flare Rate
Less than 45 MPH	8:1	18:1
Between 45 MPH and 55 MPH	10:1	24:1
Greater than 55 MPH	15:1	30:1

a. When temporary wall barrier is placed in a construction work zone, a 5' clear area is required between the CWB and the work zone to accommodate barrier deflection. When a 5' clear area is not attainable, CWB shall be anchored to the pavement surface.

b. Temporary CWB shall be provided with reflective barrier delineators as indicated in NMDOT standard drawing 606-21-1/1.

18. **CRASH ATTENUATORS:** The crash cushion attenuators shall be designed as per the District Traffic Engineer's recommendations. The District may elect to either utilize the pre-construction posted speed, or the 85% speed in the layout of the crash cushion attenuators within the work zone.

19. **DROP OFF POLICY:** In the areas of pavement operations or other activities within the traveled way and adjacent to the existing traveled lane, the contractor shall assure that no pavement drop-offs are left exposed during non-working hours. The contractor shall initiate corrective means as per "the New Mexico Department of Transportation Pavement Drop-off Guideline" to achieve a minimum 6:1 slope between traveled lanes and a minimum 3:1 slope adjacent to the existing traveled lane with two 11foot driving lanes as shown in the detail below. (AD241)



20. **Lane Closures:** The Contractor/TCP firm shall not place a lane closure taper along a horizontal curve. The taper shall be placed in advance of the horizontal curve so that it is visible to all oncoming traffic. On crest vertical curves, the Contractor/TCP firm shall place lane closures in advance of, or at the beginning of the curve to enhance visibility of the lane closure to oncoming traffic.

21. **Sequential Arrow Display:** Placement of the sequential arrow shall be at or near the beginning of the lane closure taper. In areas of insufficient pavement width, the sequential arrow may be placed within the taper, but not to exceed ½ the taper length. In all cases, the sequential arrow shall be placed behind the channelization devices. The shoulder shall be closed in advance of the merging taper to direct vehicular traffic to remain within the traveled way. (MUTCD 6F.61)

22. **ADDITIONAL SIGNS:** "BUMP", "LOOSE GRAVEL", "LANE DROP-OFF SIGN" sign placement: The contractor shall place W8-1 sign ("BUMP" - B/FO), W8-7 sign ("LOOSE GRAVEL" - B/FO) and/or W8-17 signs ("SHOULDER DROP-OFF" - B/FO) in advance of bridge approaches or other locations during cold milling and overlay operations as needed or as directed by the project manager.

23. **CLEAR ZONE:** All stationary objects within clear zone shall be properly shielded and outlined with drums mounted with Type "A" warning lights. Use of vertically mounted retro-reflective material in lieu of a Type A warning light is strictly prohibited.

a. Equipment, materials, or vehicles stored within Right -of-way (ROW) shall be outside of clear zone (based on existing posted speed).

b. Equipment, material or vehicles stored within clear zone shall be properly shielded.

c. Materials, work activities, equipment, and vehicles shall not be stored within the established buffer space of the project work zone.

d. All construction equipment, vehicles and materials shall remain behind traffic control devices.

24. **TRAFFIC CONTROL MANAGEMENT:** The contractor or the traffic Control Subcontractor shall provide a Traffic Control Supervisor on site during working hours for response within 1 hour to traffic control Issues/concerns.

25. **INCIDENT MANAGEMENT:** Contractor is required to comply with requirements of FHWA CFR 630 Subpart J for Work Zone Safety and Mobility which shall include an Incident Management Plan to be utilized for the entire duration of the project. The Incident Management Plan shall contain a method to address traffic flow through the work zone during incidents. The Incident Management Plan must be reviewed and approved by the District Traffic Engineer. The plan shall contain the following as a minimum:

a. Contacts for the contractor, local enforcement, safety agencies, municipal agencies, public information officer and NMDOT

b. Steps to be followed during incidents

c. Method of recording and reporting incidents

26. **LIST OF INCIDENTALS - No Additional Payment Associated**

LIST OF INCIDENTALS for Temporary Traffic ControlA.MAINTENANCE OF TEMPORARY PAVEMENT MARKINGS FOR PROJECT DURATION

	LIST OF INCIDENTALS for Temporary Traffic Control
A.	MAINTENANCE OF TEMPORARY PAVEMENT MARKINGS FOR PROJECT DURATION

NO.	DATE	REV. BY	DESCRIPTION

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL
GENERAL NOTES

APPROVED: Afshin Sigh 12/10/15
DESIGN ENGINEER DATE

DESIGNED BY: DRAWN BY: CHECKED BY:

702-01-2/5

Souder, Miller & Associates
Engineering ◆ Environmental ◆ Surveying

TRAFFIC CONTROL NOTES (CONTINUED)

27. CONSTRUCTION SIGNING ADJUSTED IN FIELD: CONSTRUCTION SIGNS SHALL BE ADJUSTED AS NEEDED IN ORDER TO AVOID CONFLICTS.

28. EXISTING SIGNS: THE CONTRACTOR SHALL REMOVE AND RESET ANY EXISTING PERMANENT SIGNS THAT MAY INTERFERE WITH CONSTRUCTION ACTIVITIES. ANY SIGNS DAMAGED DURING REMOVAL AND RESET SHALL BE REPLACED BY THE CONTRACTOR AT THEIR OWN EXPENSE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE.

29. NON-WORKING HOURS: THE CONTRACTOR SHALL OPEN ALL LANES TO TRAFFIC DURING NON-WORKING HOURS.

SUGGESTED SEQUENCE OF CONSTRUCTION

NOTE: THE TRAFFIC CONTROL PLAN REPRESENTS A SUGGESTED METHOD FOR TRAFFIC CONTROL DURING CONSTRUCTION. ADJUSTMENTS TO THE DETAILS OF THESE TRAFFIC CONTROL PLANS AND REQUIREMENTS MAY BE NECESSARY DUE TO CONSTRUCTION ACTIVITIES, AS DIRECTED BY THE PROJECT MANAGER. ANY ADDITIONAL TRAFFIC CONTROL PROPOSED BY TOWN OF MESILLA WILL BE PAID FOR USING THE BID UNIT PRICES. IF THE CONTRACTOR ELECTS TO DEVIATE FROM THE TRAFFIC CONTROL PLANS, THEN THE CONTRACTOR SHALL DEVELOP A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATION. THE PLAN MUST BE SIGNED AND SEALED BY A NM PROFESSIONAL ENGINEER. NO MEASUREMENT OR DIRECT PAYMENT WILL BE MADE FOR DEVELOPING THE PLAN, EXTRA COSTS ASSOCIATED WITH THE PLAN, OR ADDITIONAL DEVICES ASSOCIATED WITH THE PLAN, THE COST BEING CONSIDERED AS INCLUDED IN THE PRICE OF THE CONTRACT ITEMS. THE CONTRACTOR SHALL SUBMIT ANY PROPOSED CHANGES IN THE TRAFFIC CONTROL PLAN TWO WEEKS PRIOR TO USE. CONSTRUCTION SHALL NOT BEGIN UNLESS THE TRAFFIC CONTROL PLAN HAS BEEN APPROVED BY THE DISTRICT TRAFFIC ENGINEER.

PHASE I :

INSTALL ADVANCED WARNING AND BOP/EOP SIGNING.

PHASE II :

UTILIZING FLAGGER OPERATION FOR ONE LANE CLOSURE PER SHEET 6-06, ALLOW TRAFFIC TO FLOW ONLY ON WESTBOUND LANE. BUILD SOUTH SHARED-USE PATH IN SECTIONS SO AS TO NOT LEAVE PAVEMENT DROP-OFF'S EXPOSED AT THE END OF THE DAY. REFER TO GENERAL NOTE 6 ON SHEET 6-02 FOR DETAILS. SHIFT TRAFFIC CONTROL DEVICES AS NEEDED ALONG WORK PROGRESSION. STRIPE FOR CROSSWALK ON EAST BOUND LANE

PHASE III :

UTILIZING FLAGGER OPERATION FOR ONE LANE CLOSURE PER SHEET 6-06, ALLOW TRAFFIC TO FLOW ONLY ON EASTBOUND LANE. BUILD NORTH SHARED-USE PATH IN SECTIONS SO AS TO NOT LEAVE PAVEMENT DROP-OFF'S EXPOSED AT THE END OF THE DAY. REFER TO GENERAL NOTE 6 ON SHEET 6-02 FOR DETAILS. SHIFT TRAFFIC CONTROL DEVICES AS NEEDED ALONG WORK PROGRESSION. STRIPE FOR CROSSWALK ON WEST BOUND LANE.

PHASE IV :

INSTALL PERMANENT SIGNING AND REMOVE CONSTRUCTION SIGNING. OPEN ROADWAY TO TRAFFIC.

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION
TTC GENERAL NOTES CONTINUED &
SUGGESTED SEQUENCE OF CONSTRUCTION

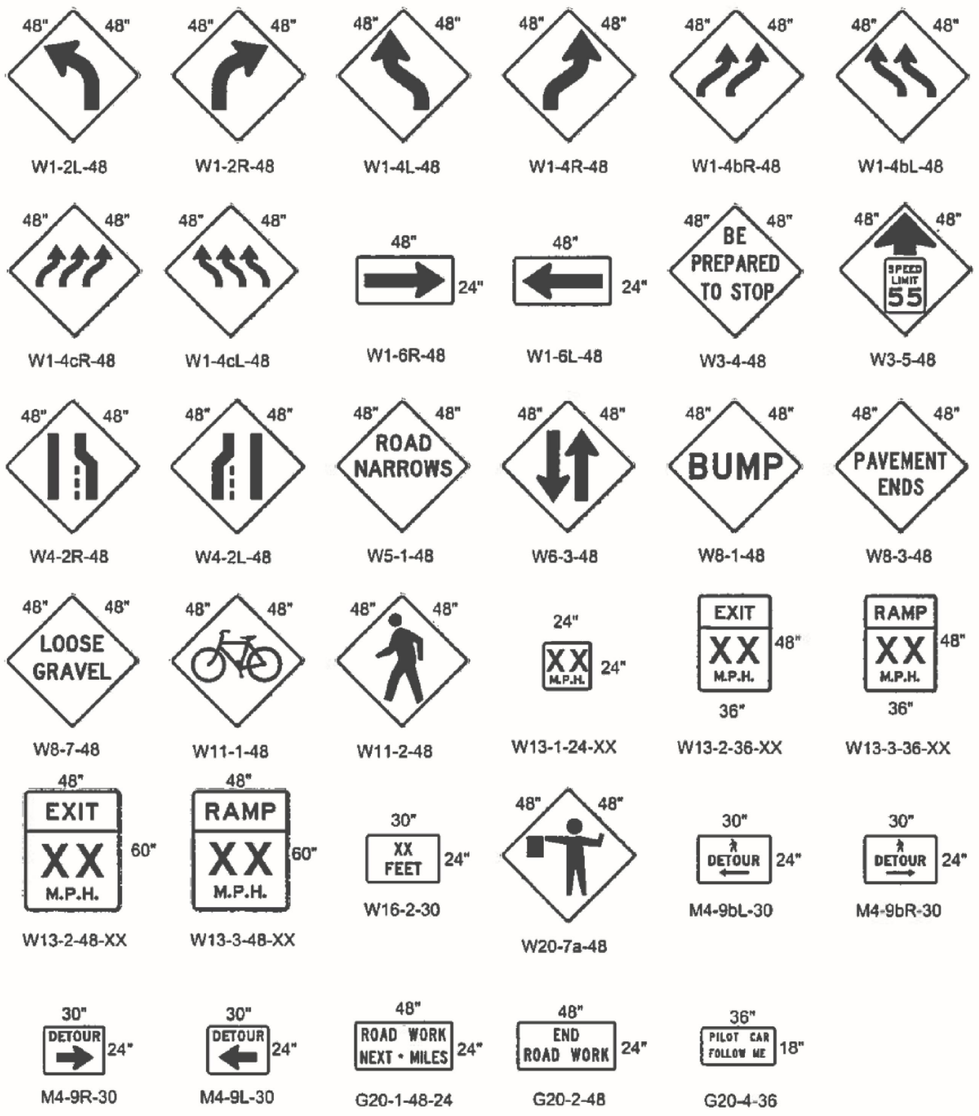
SIGN FACE DETAILS

FOR CONSTRUCTION / MAINTENANCE

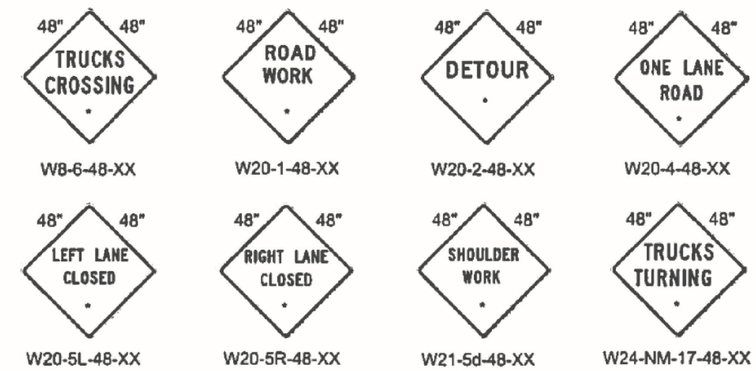
1. SIGNS SHALL MEET SPECIFICATIONS IN THE STANDARD HIGHWAY SIGNS MANUAL AND CURRENT EDITION OF THE MUTCD.
2. SEE CURRENT EDITION OF MUTCD FOR ADDITIONAL SIGNS.
3. ALL SIGNS SHALL COMPLY WITH SHEETING REQUIREMENTS AS SPECIFIED IN STANDARD DRAWING 702-01-3/3.
4. SIGN SIZES MAY BE ADJUSTED PER MUTCD RECOMMENDATIONS.

WARNING SIGNS:

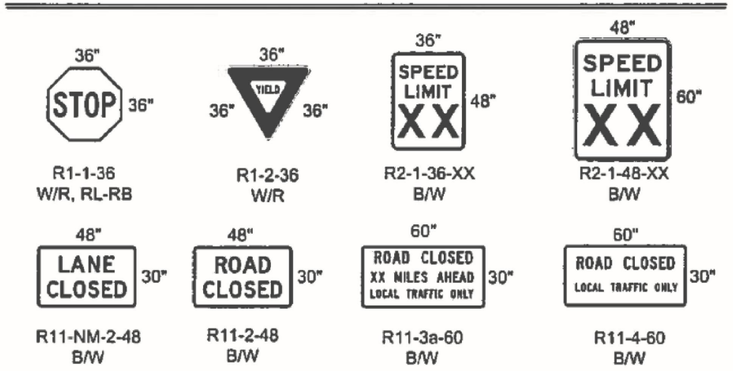
ALL WARNING SIGNS ARE BLACK/FLUORESCENT ORANGE UNLESS OTHERWISE SPECIFIED.



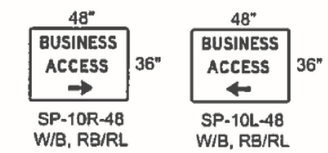
* THESE SIGNS REQUIRE APPROPRIATE DISTANCE INDICATION
(½ MILE, 1 MILE, 1500 FT., 750 FT., 500 FT., 350 FT.)



REGULATORY SIGNS:

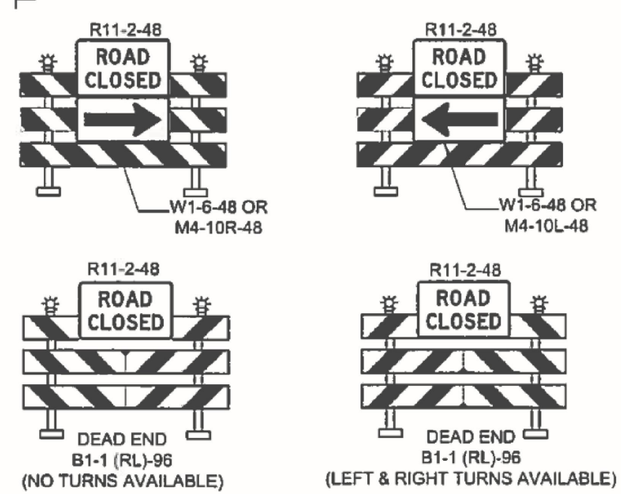


SPECIAL SIGNS:



8 FT. TYPE III BARRICADES

BARRICADE SYMBOL



NO.	DATE	REV. BY	DESCRIPTION

REVISIONS (OR CHANGE NOTICES)

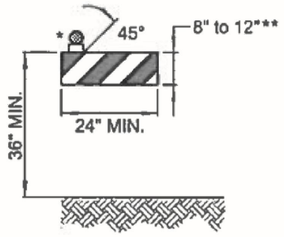
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

CONSTRUCTION & MAINTENANCE
SIGN FACE DETAILS

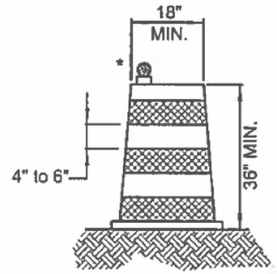
APPROVED: AFshin 12/10/15
DESIGN ENGINEER DATE

DESIGNED BY: DRAWN BY: CHECKED BY:

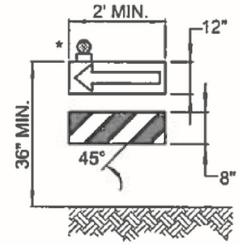
702-01-3/5



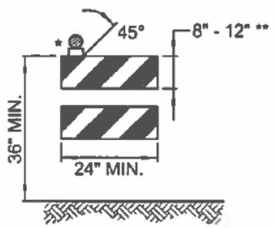
TYPE I BARRICADE *,**
LOW SPEED ROADWAY (≤ 40 MPH)



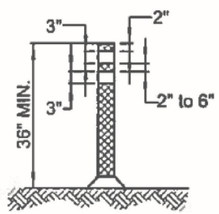
DRUM*



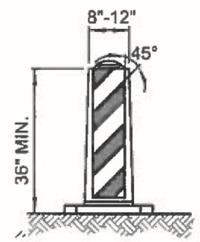
DIRECTION INDICATOR BARRICADE *,**



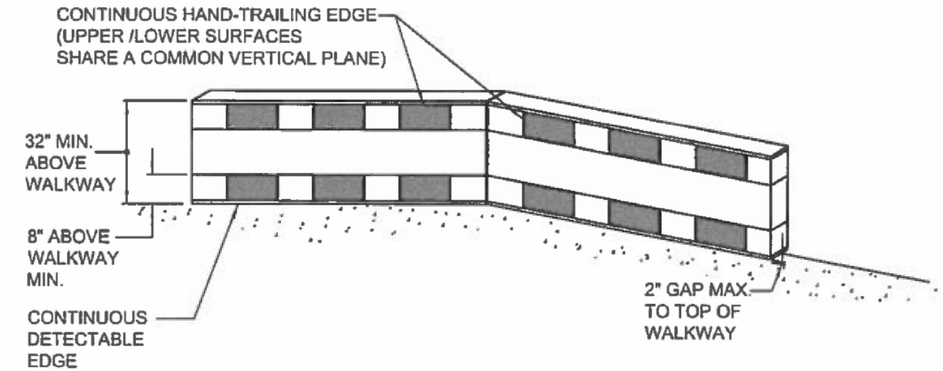
TYPE II BARRICADE ***
LOW SPEED ROADWAY (≤ 40 MPH)



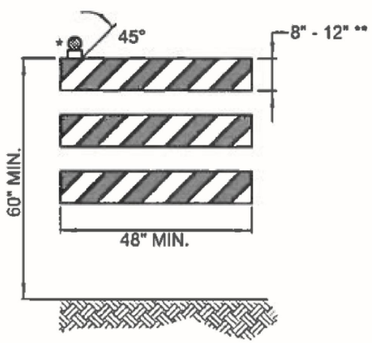
TUBULAR MARKERS



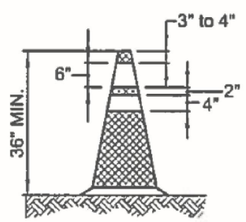
VERTICAL PANEL ***



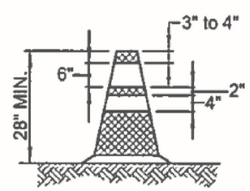
PEDESTRIAN CHANNELIZATION DEVICE (PCD)



TYPE III BARRICADE *,**

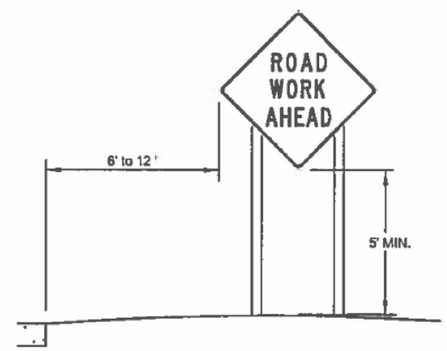


NIGHT AND/OR FREEWAY
HIGH SPEED ROADWAY
(≥ 45 MPH)

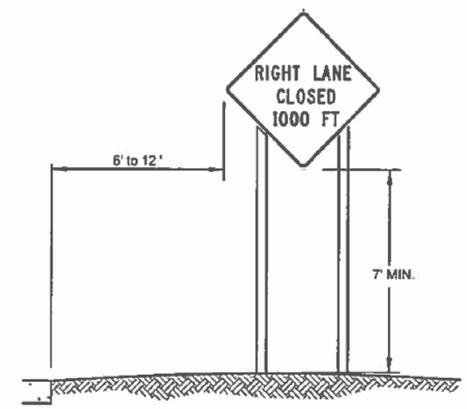


DAY AND LOW
SPEED ROADWAY
(≤ 40 MPH)

CONES



RURAL AREA



BUSINESS, COMMERCIAL, OR RESIDENTIAL AREA
(WITHOUT CURB)

HEIGHT AND LATERAL LOCATIONS OF SIGNS - TYPICAL INSTALLATIONS

NOTE:
ALL DEVICES USED ON NMDOT ROADWAYS SHALL BE ON THE APPROVED PRODUCTS LIST.

* WARNING LIGHT (OPTIONAL)
** NOMINAL LUMBER DIMENSIONS ARE SATISFACTORY FOR BARRICADE RAIL WIDTH DIMENSIONS.
*** RAIL STRIPE WIDTHS SHALL BE 6 INCHES. EXCEPTION: WHERE RAIL LENGTHS ARE LESS THAN 36 INCHES. THEN 4 INCH WIDE STRIPES MAY BE USED.

THE SIDES OF BARRICADES FACING TRAFFIC SHALL HAVE RETROREFLECTIVE RAIL FACES. VERTICAL PANELS AND BARRICADES USED ON HIGH-SPEED ROADWAYS, EXPRESSWAYS, AND FREEWAYS SHALL HAVE A MINIMUM OF 270 SQUARE INCHES OF RETROREFLECTIVE AREA FACING TRAFFIC.

	DATE	REV. BY	DESCRIPTION

REVISIONS (OR CHANGE NOTICES)

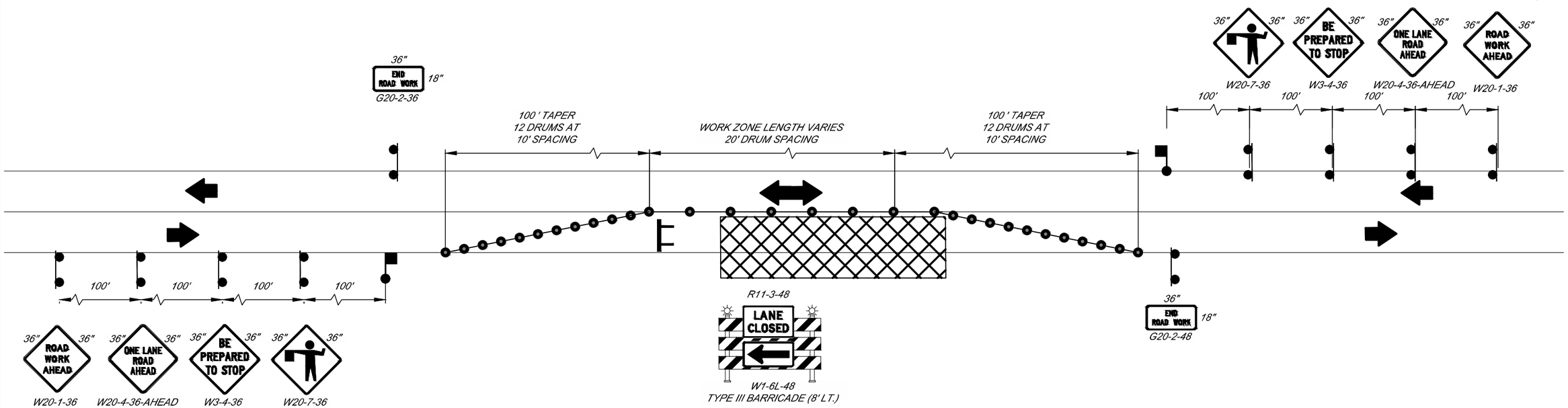
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

CHANNELIZATION DEVICES FOR CONSTRUCTION, MAINTENANCE, UTILITY & INCIDENT MANAGEMENT OPERATIONS

APPROVED: Ashin S. Patel 11/3/15
DESIGN ENGINEER DATE

DESIGNED BY: DRAWN BY: CHECKED BY:

702-01-4/5



ONE-LANE, TWO-WAY TRAFFIC CONTROL

WORKING HOURS

LEGEND:

- CONSTRUCTION WORK ZONE
- TTC - DEVICE TYPE III BARRICADE
- TTC PANEL SIGN
- FLAGGER STATION
- TTC DEVICE - DRUM
- TRAFFIC FLOW DIRECTION

NOTES

1. BUFFER SPACE SHALL BE ADDED AND ADJUSTED TO INCREASE VISIBILITY OF FLAGGER STATIONS.
2. CONTRACTOR SHALL MAINTAIN ACCESS TO DRIVEWAYS AND STREETS AT ALL TIMES.
3. ALL SIGNS TO BE MOUNTED ON TEMPORARY SIGN SUPPORTS.

ALONZO LUIS MARTINEZ
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24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

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REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

ONE LANE CLOSURE

PROJECT CONTROL NUMBER: LC00320

SMA
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PCMS-1,2,3
ALL HOURS

	C	A	L	L	E		
		D	E	L			
	N	O	R	T	E		

PANEL - 1

C	O	N	S	T	R	C	T
E	X	P	E	C	T		
D	E	L	A	Y	S		

PANEL - 2

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REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

PCMS LOCATION MAP

NOTES:

1. *CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS TO ALL BUSINESSES AND PRIVATE PROPERTIES AT ALL TIMES DURING CONSTRUCTION.*

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CONSTRUCTION SIGNING	CONSTRUCTION PHASING					* *	* *	* *	* *
	SIGN SIZE	NO. OF SIGNS			USE MAX	CONSTRUCTION SIGNING	PORTABLE SIGN SUPPORT	BARRICADE, TYPE III-8'	CHANNELIZATION DEVICES TYPE DRUM
		B.O.P/ E.O.P	SHEET 6-07	SHEET 6-08		AREA			
SIGN CODE	SQ. FT.				EA.	SQ.FT.	EACH	EACH	EACH
G20-2-36	4.50		2		2	9.00			
* W1-6L-48	8.00		1		1	8.00			
* R11-3-48	10.00		1		1	10.00			
W20-4-36-AHEAD	9.00		2	1	2	18.00			
W20-1-36	9.00		2		2	18.00			
W20-7-36	9.00		2		2	18.00			
W3-4-36	9.00		2		2	18.00			
PORTABLE SIGN SUPPORT			10		10		10		
BARRICADES			1		1			1	
DRUMS			37		37				37
SEQUENTIAL ARROW DISPLAY									
PORTABLE CHANGEABLE MESSAGE SIGN									
				PROJECT TOTAL		99	10	1	37
				PROJECT USE		**100**	**10**	**1**	**37**

* SIGN MOUNTED ON BARRICADE

* * FOR CONTRACTOR INFORMATION ONLY.

CONSTRUCTION SIGNING SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNITS	TOTAL
618000	TRAFFIC CONTROL MANAGEMENT	L.S.	L.S.
702810	TRAFFIC CONTROL DEVICES FOR CONSTRUCTION	L.S.	L.S.
*	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	3
*	CONSTRUCTION SIGNING	SQ. FT.	100
*	PORTABLE SIGN SUPPORT	EACH	10
*	BARRICADE, TYPE III-8'	EACH	1
*	CHANNELIZATION DEVICES, TYPE DRUM	EACH	37

*FOR CONTRACTOR INFORMATION ONLY

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

NO.	DESCRIPTION	DATE	BY
4			
3			
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REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

CONSTRUCTION SIGNING QUANTITIES

Souder, Miller & Associates
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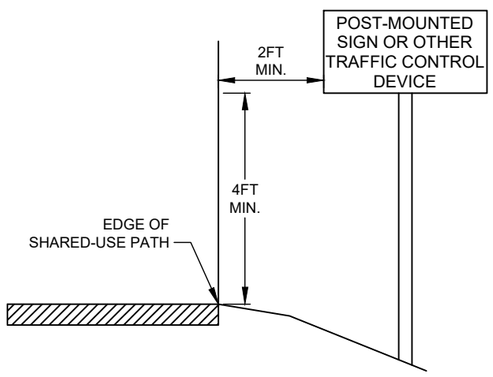
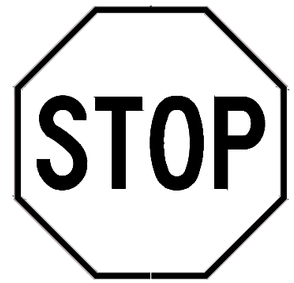
SIGN FACE DETAILS
FOR PERMANENT SIGNING
COLORS VARY

PERMANENT SIGNING GENERAL NOTES

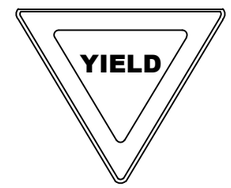
1. SIGN SUPPORT TO BE: NMDOT STANDARD OR APPROVED EQUAL
2. SIGN SHEETING TO BE "TYPE XI."
3. ALL STRIPING TO MEET CURRENT MUTCD STANDARDS
4. PERMANENT PAVEMENT MARKING MATERIALS TO BE USED PER NMDOT SPECIFICATIONS.
5. CONTRACTOR SHALL REFERENCE TO NMDOT STANDARD DRAWINGS FOR PEDESTRIAN CROSSWALK STRIPING



R9-7-18 (R)
12" X 18"
B/W



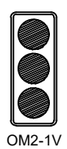
R1-1-36
36" X 36"
W/R



R1-2-36
36" X 36"
R/W

OM3-L
12" X 36"
B/Y

R9-7-18 (L)
12" X 18"
B/W


OM2-1V

W11-15-36
36" X 36"
B/Y

W16-9P-30
30" X 18"
B/FY

NO.	DESCRIPTION	DATE	BY
4			
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2			
1			

REVISIONS (OR CHANGE NOTICES)

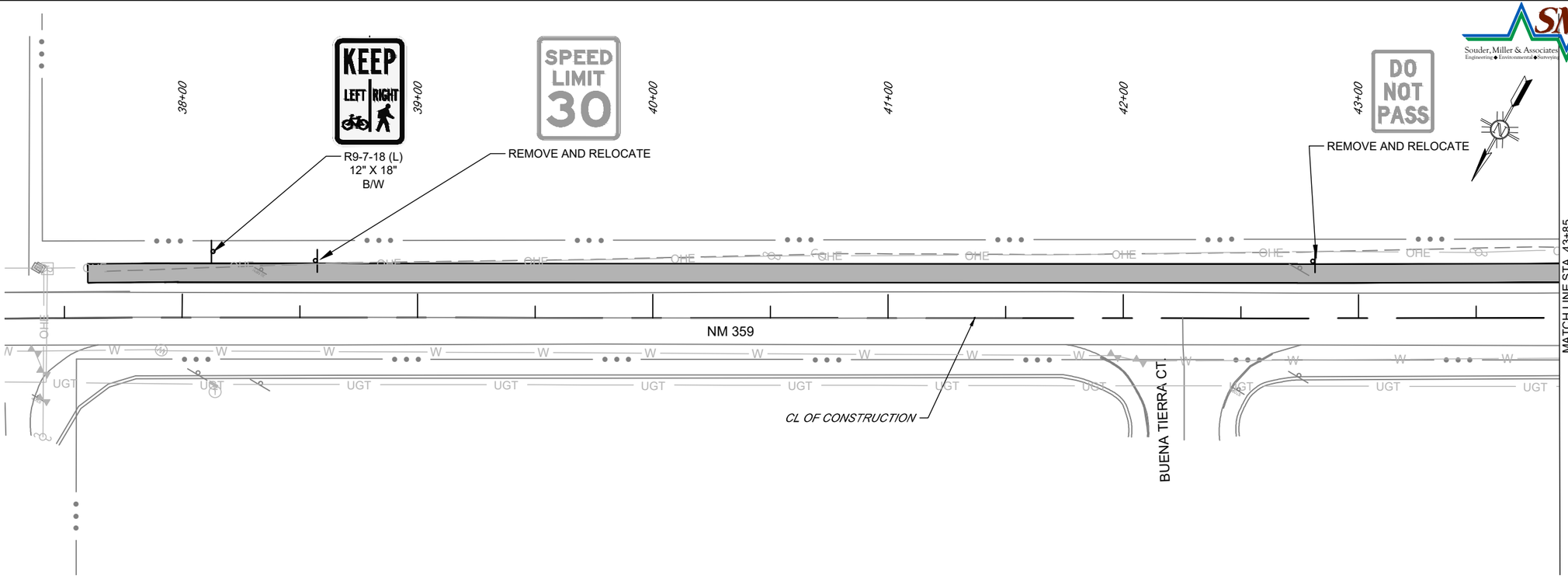
TOWN OF MESILLA
NEW MEXICO

LC00320

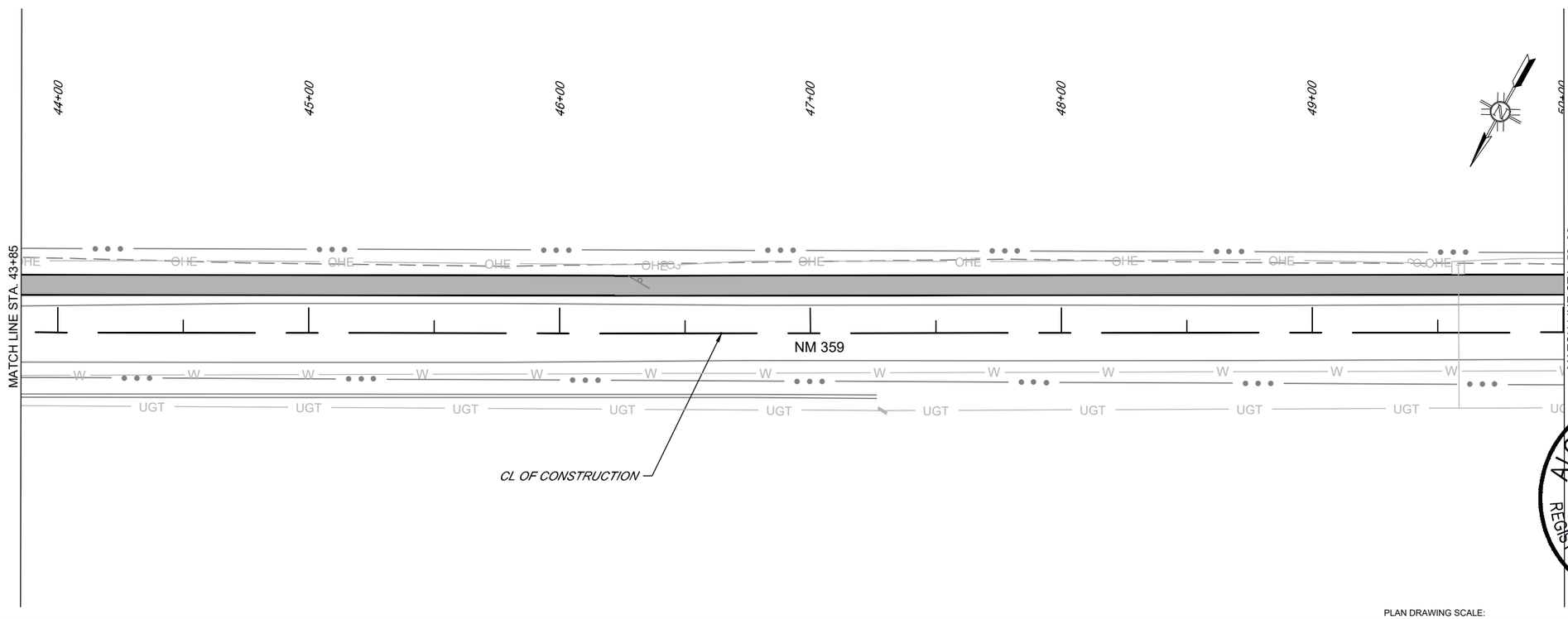
LA LLORONA TRAIL EXTENSION

PERMANENT SIGN FACE DETAILS

PROJECT CONTROL NUMBER:



PLAN DRAWING SCALE: 1"=50'



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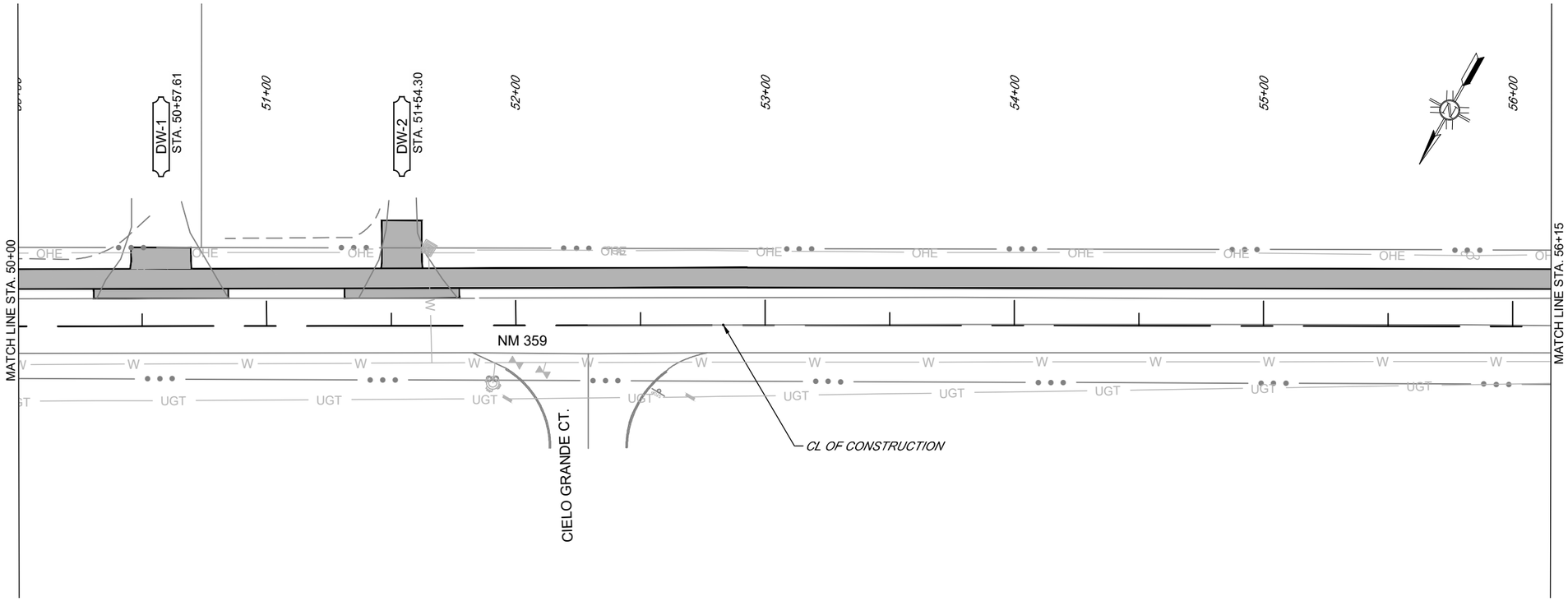
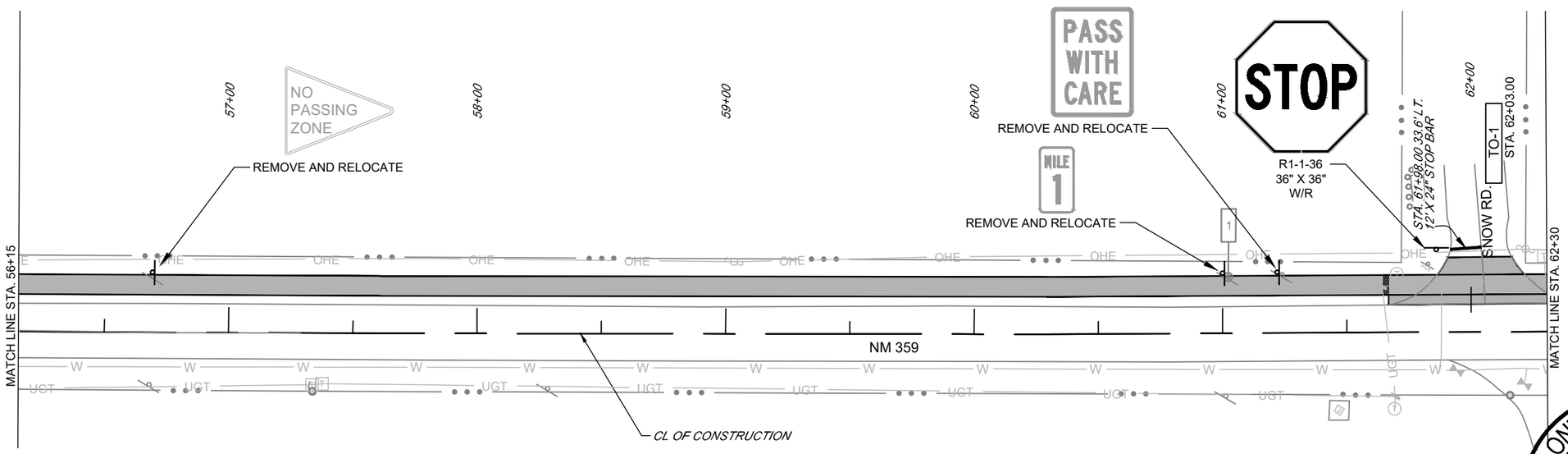
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

PLAN DRAWING SCALE:

PROJECT CONTROL NUMBER:



PLAN DRAWING SCALE: 1"=50'



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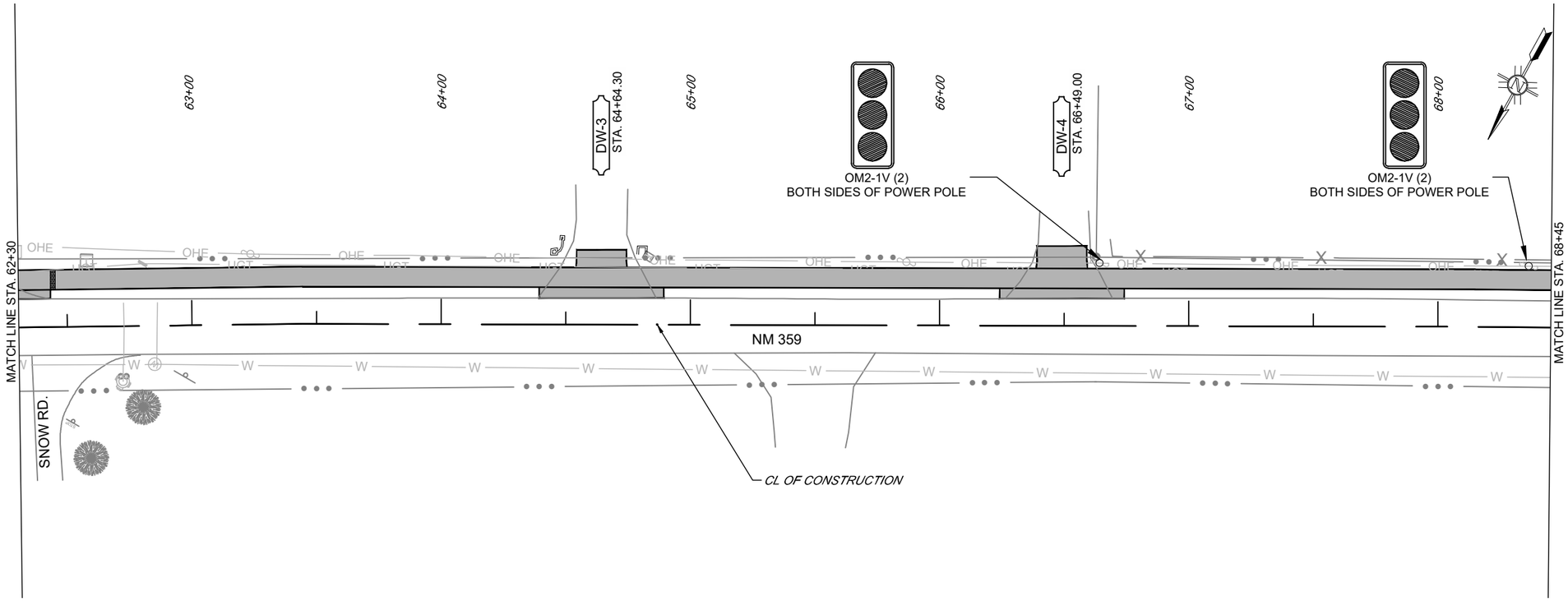
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

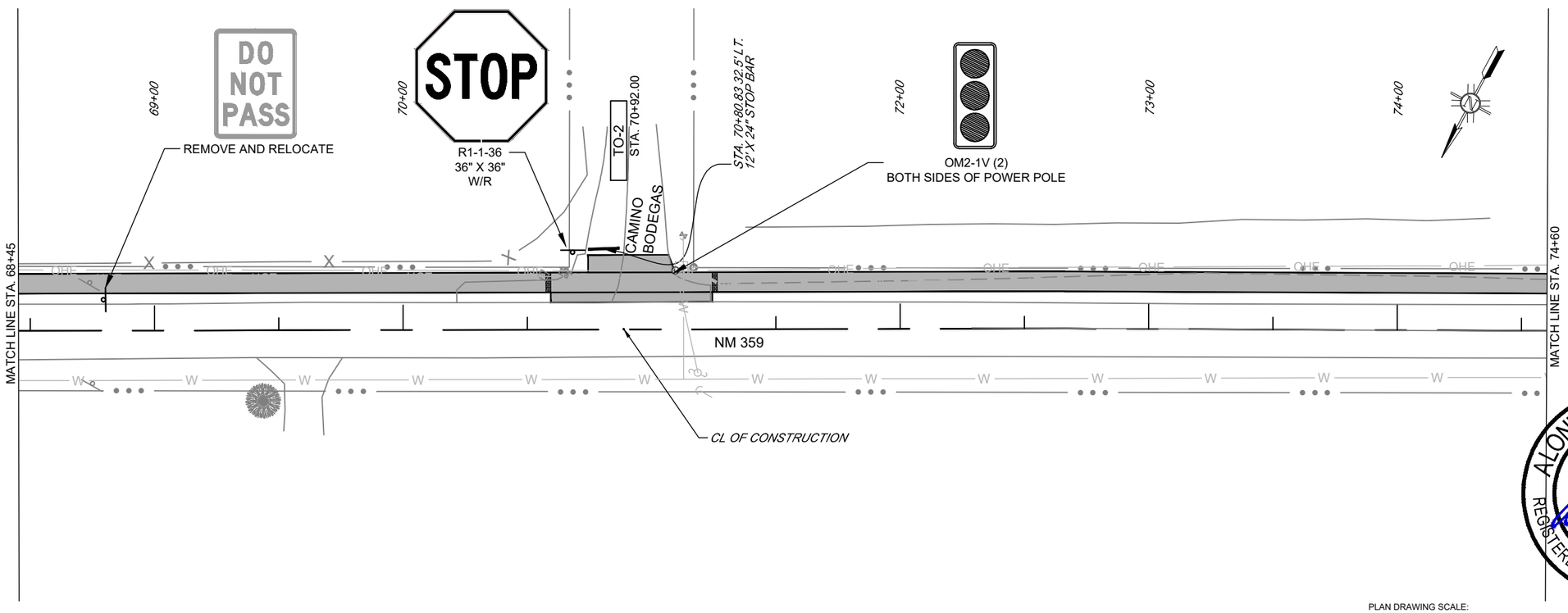
PLAN DRAWING SCALE:

PROJECT CONTROL NUMBER:

SMA
Souder, Miller & Associates
Engineering • Environmental • Surveying



PLAN DRAWING SCALE: 1"=50'

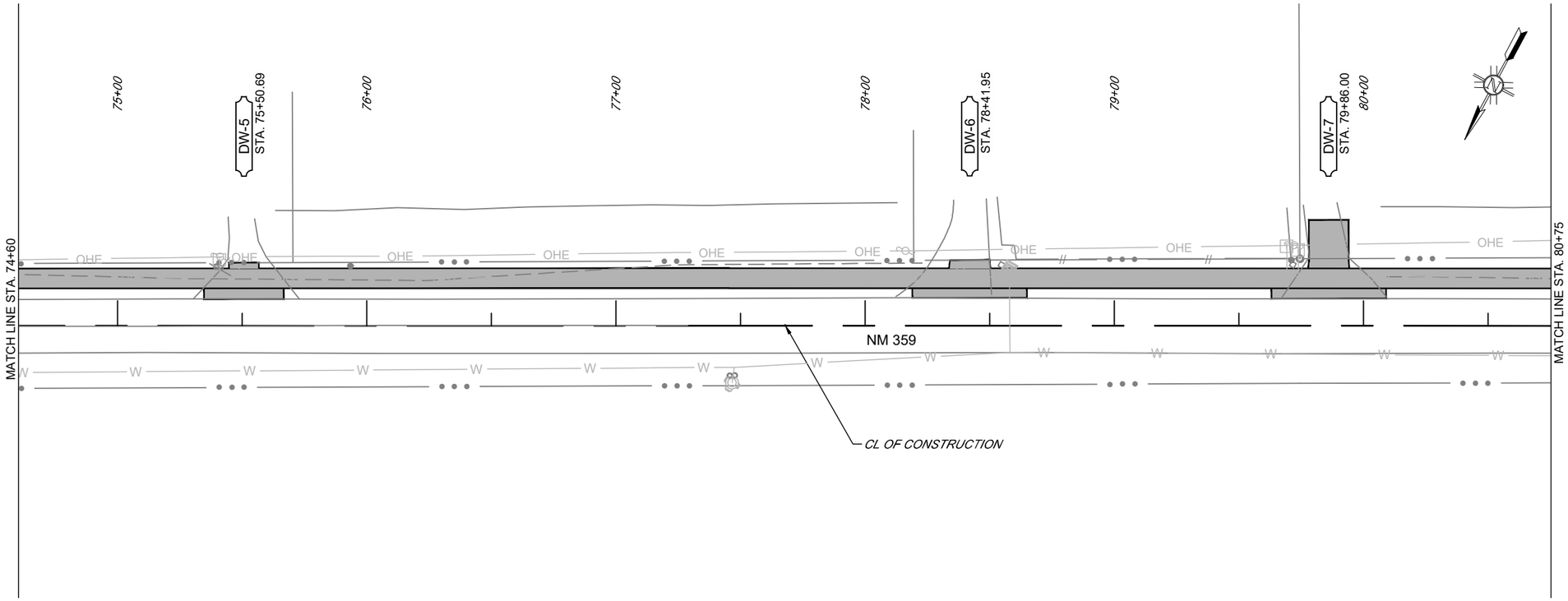


ALONZO LUIS MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

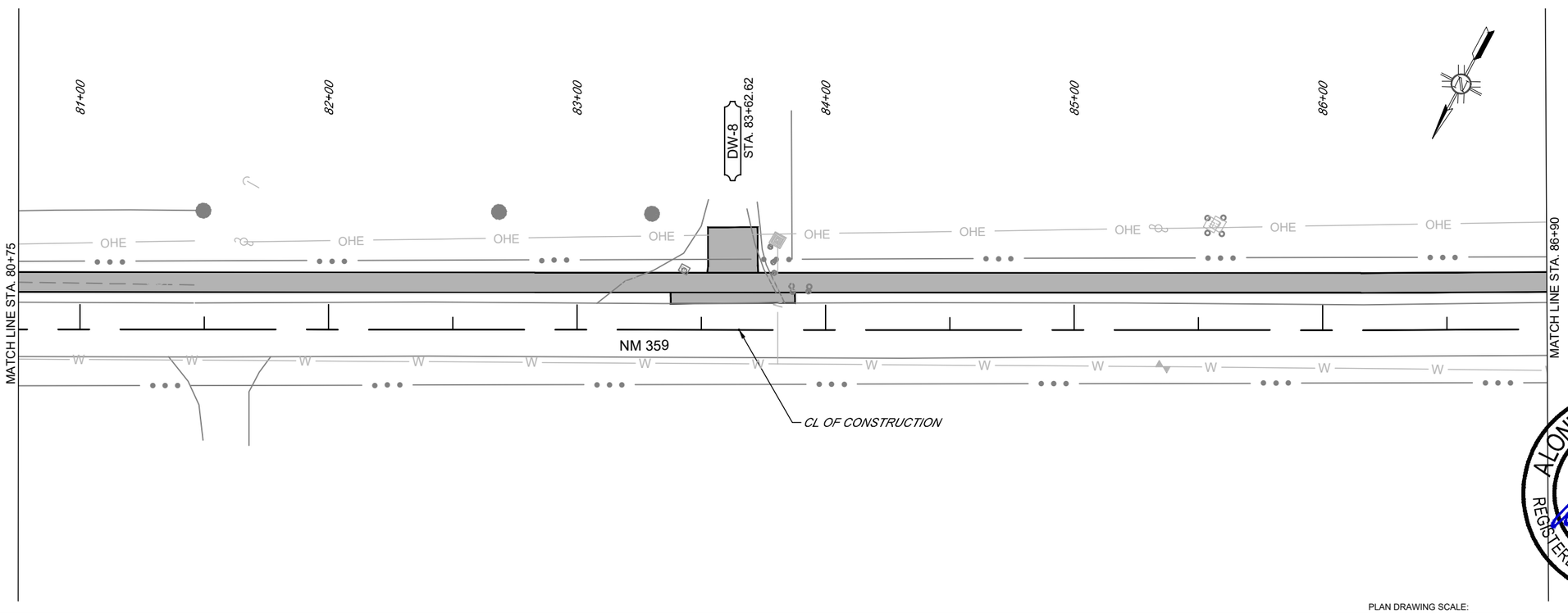
PLAN DRAWING SCALE:

PROJECT CONTROL NUMBER:

Souder, Miller & Associates
Engineering ◆ Environmental ◆ Surveying



PLAN DRAWING SCALE: 1"=50'



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24647
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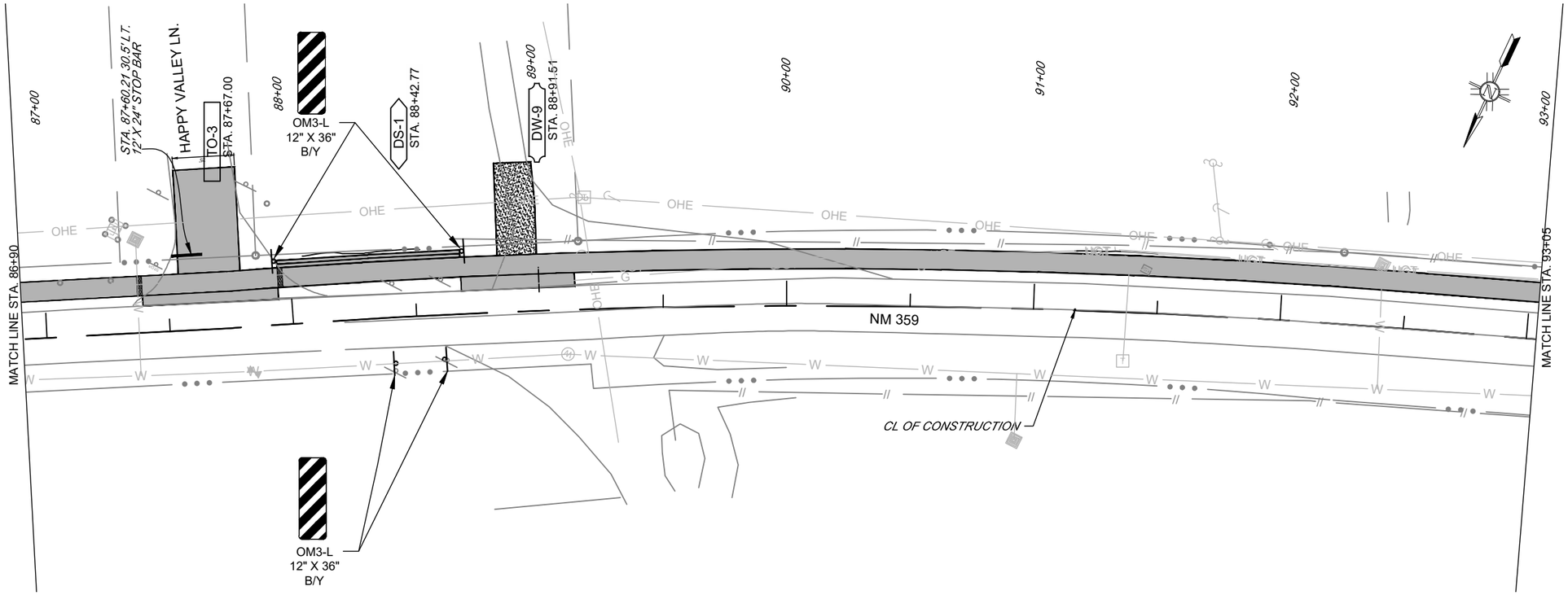
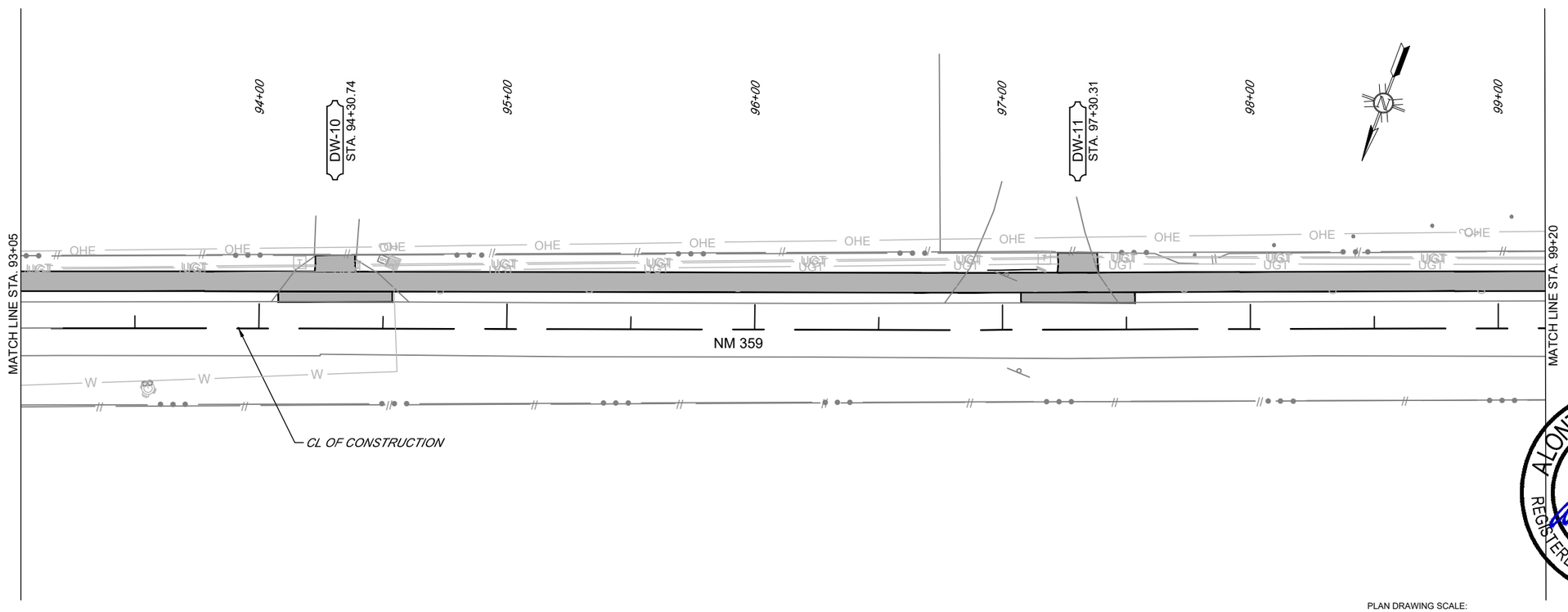
PLAN DRAWING SCALE:

PROJECT CONTROL NUMBER:



PLAN DRAWING SCALE: 1"=50'



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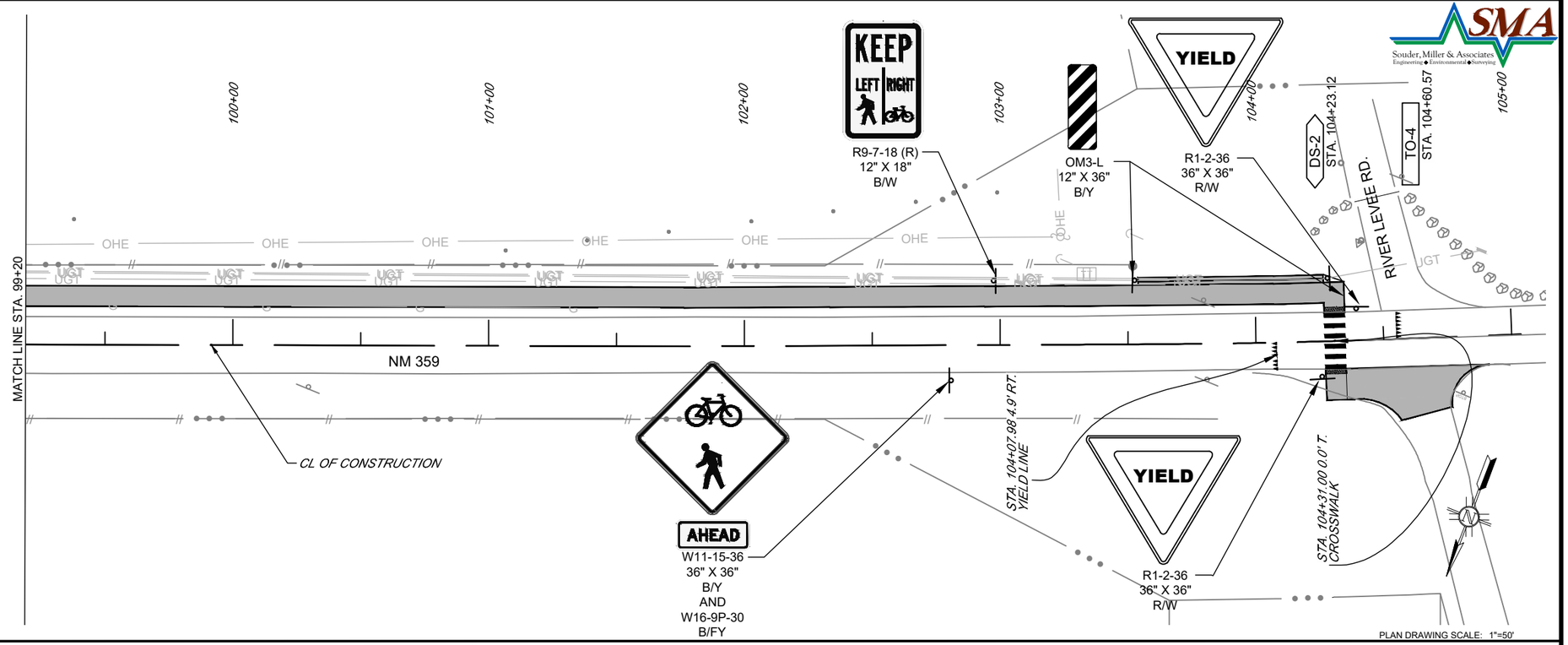
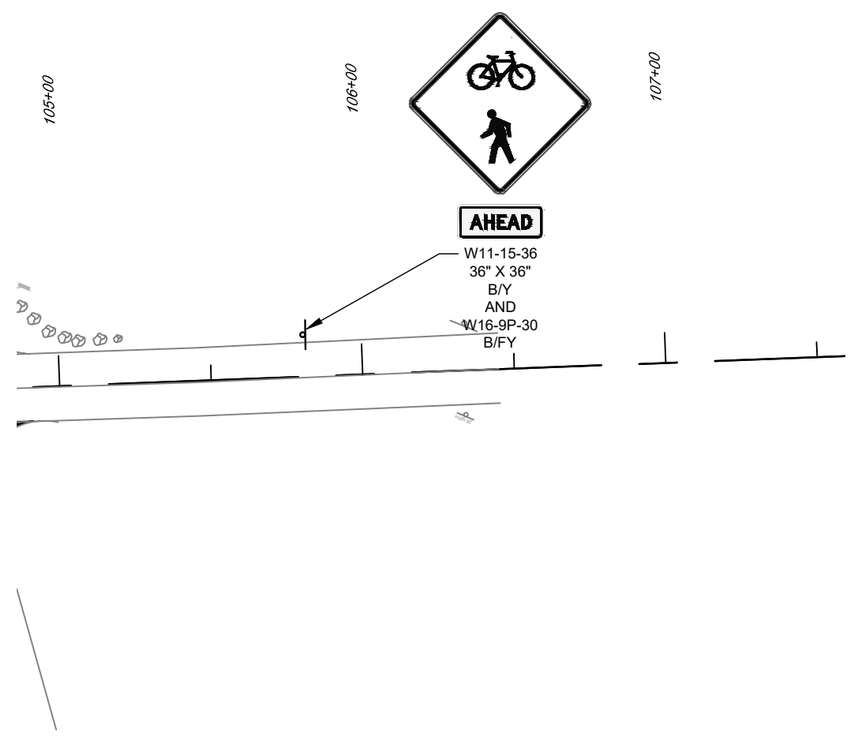
PLAN DRAWING SCALE:

PROJECT CONTROL NUMBER:



PLAN DRAWING SCALE: 1"=50'



ALONZO LUIS MARTINEZ
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

PLAN DRAWING SCALE:

ALONZO L. MARTINEZ
31-Jul-19

Drawing File: P:\9-CALLE DEL NORTE MULTI USE TRAIL (9327602)\PCN LC00320\PLANS\07_SHEETS\LC00320_07PSS01.DWG
1:30 AM

NEW MEXICO PROJECT NO. LC00320

SHEET NO. 7 -7

Souder, Miller & Associates
Engineering • Environmental • Surveying

PERMANENT SIGNING

	SIGN SIZE	No. OF SIGNS	701000 PANEL SIGNS AREA	MOUNTING REQUIREMENTS: POST LENGTHS (SQUARE TUBING-12 GA) LEFT	CENTER	RIGHT	TOTAL LIN. FT.	BASE POST (3' LONG EACH) No.	LIN FT	701100 STEEL POST AND BASE POST FOR ALUMINUM PANEL SIGNS LENGTH	703002 OBJECT MARKER TYPE 2	703003 OBJECT MARKER TYPE 3
SIGN CODE	SQ. FT.	EA.	SQ.FT.							LIN.FT.	EACH	EACH
R1-1-36	9.00	2	18.00		9		18	1.8	5.4	24.75		
R1-2-36	9.00	2	18.00		9		18	1.8	5.4	24.75		
W11-15-36	6.00	1	6.00		9		9	0.9	2.7	12.375		
* W16-9P-30	3.75	1	3.75									
R9-7-18 (L)	1.50	1	1.50		9		9	0.9	2.7	12.375		
R9-7-18 (R)	1.50	1	1.50		9		9	0.9	2.7	12.375		
OM2-1V		6									6	
OM-3L		6										6
		PROJECT TOTAL:	49							87	6	6
		PROJECT USE:	**50**							**90**	**6**	**6**

NOTE: POSTS FOR OBJECT MARKERS ARE TO BE INCLUDED IN UNIT BID PRICE FOR BID ITEM 703002 & 703003.

* SHARES POST WITH OTHER SIGN

PERMANENT STRIPING

DESCRIPTION	STATION	OFFSET	LENGTH	704704 HOT THERMOPLASTIC PAVEMENT MARKINGS 24"	704728 HOT THERMOPLASTIC PAVEMENT MARKING YIELD LINE
		-	FT	LIN.FT.	LIN.FT.
SNOW RD. STOP BAR (24 IN)	61+98.00	LT	12	12	
CALLE BODEGAS STOP BAR (24 IN)	70+80.83	LT	12	12	
SUN VALLEY LN. STOP BAR (24 IN)	87+60.21	LT	12	12	
CROSSWALK	104+31.00	LT./RT	48	48	
YIELD LINES	104+07.98	RT.	10		10
YIELD LINES	104+55.27	LT.	10		10
			SUBTOTAL:	84	20
			PROJECT USE:	**90**	**20**

REMOVE AND RESET EXISTING SIGNS

STATION	LOCATION	701030 REMOVE AND RESET PANEL SIGN EACH	DESCRIPTION
38+33.62	LT.	1	REMOVE AND RELOCATE EXISTING SIGN
42+75.14	LT.	1	REMOVE AND RELOCATE EXISTING SIGN
56+69.73	LT.	1	REMOVE AND RELOCATE EXISTING SIGN
61+02.36	LT.	1	REMOVE AND RELOCATE EXISTING SIGN
61+24.13	LT.	1	REMOVE AND RELOCATE EXISTING SIGN
61+82.81	LT.	1	REMOVE AND RELOCATE EXISTING SIGN
68+74.01	LT.	1	REMOVE AND RELOCATE EXISTING SIGN
75+41.57	LT.	1	REMOVE AND RELOCATE EXISTING SIGN
	PROJECT TOTAL:	**8**	
	PROJECT USE:	**8**	

CONTRACTOR SHALL RELOCATE SIGNS BEHIND SHARED PATH

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

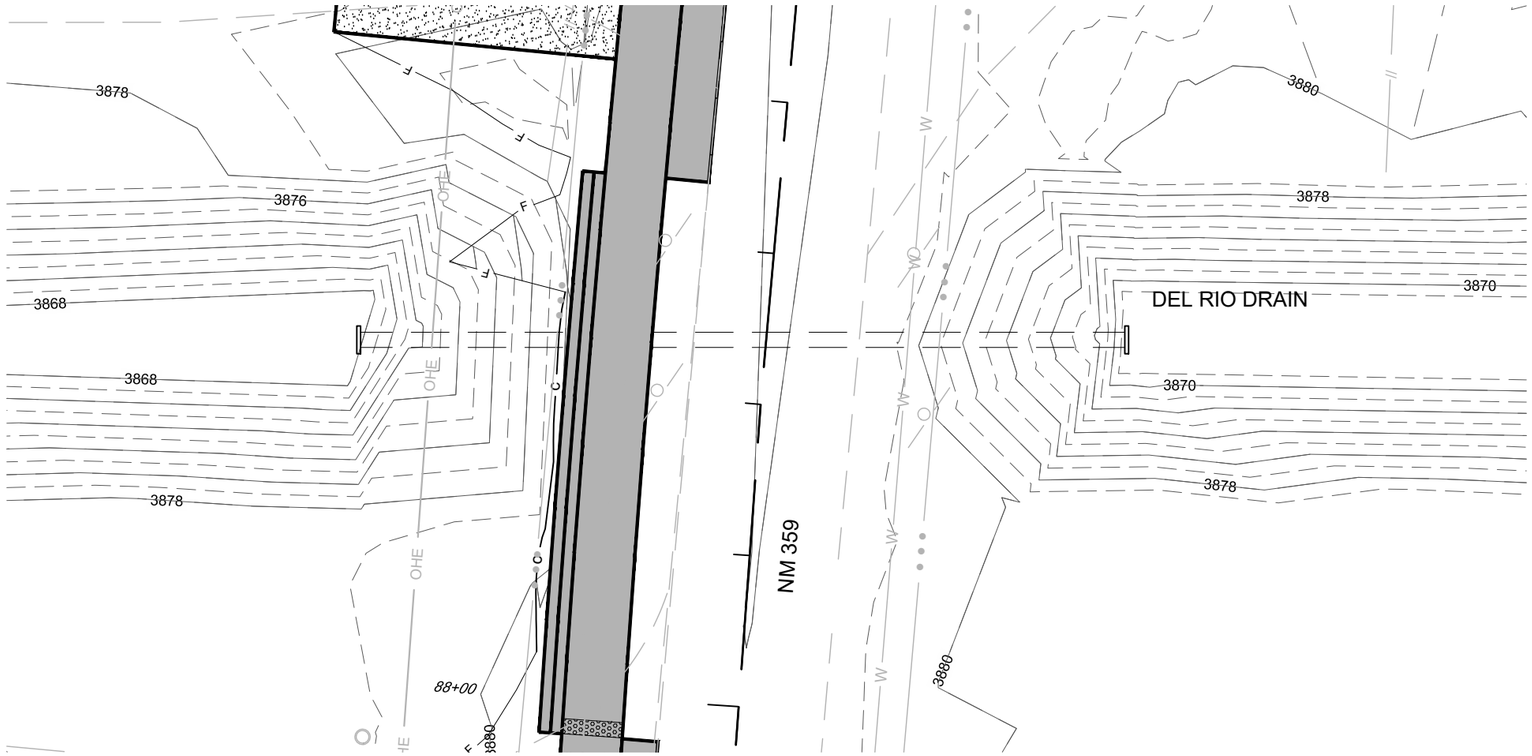
REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

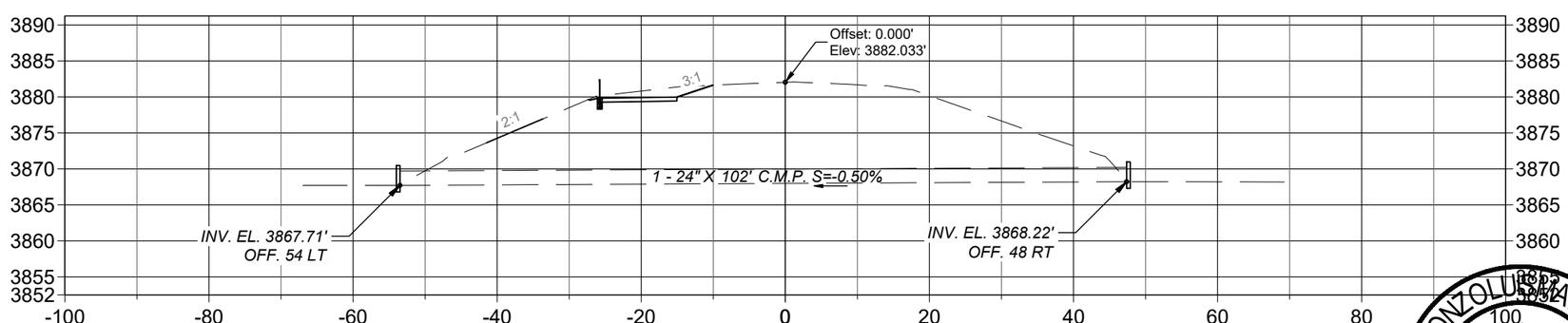
LC00320

LA LLORONA TRAIL EXTENSION
PERMANENT SIGNING & STRIPING QUANTITIES

Souder, Miller & Associates
Engineering ♦ Environmental ♦ Surveying



CL CONSTRUCTION
US 82



DS-1
STA. 88+48.54

1 - 30" X 102' C.M.P. SKEW = NORMAL
BUILD 74' OF PEDESTRIAN RAILING WITHOUT HANDRAIL
SEE STD. DWG. 607-20-1/4 607-20-3/4

ALONZO L. MARTINEZ
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

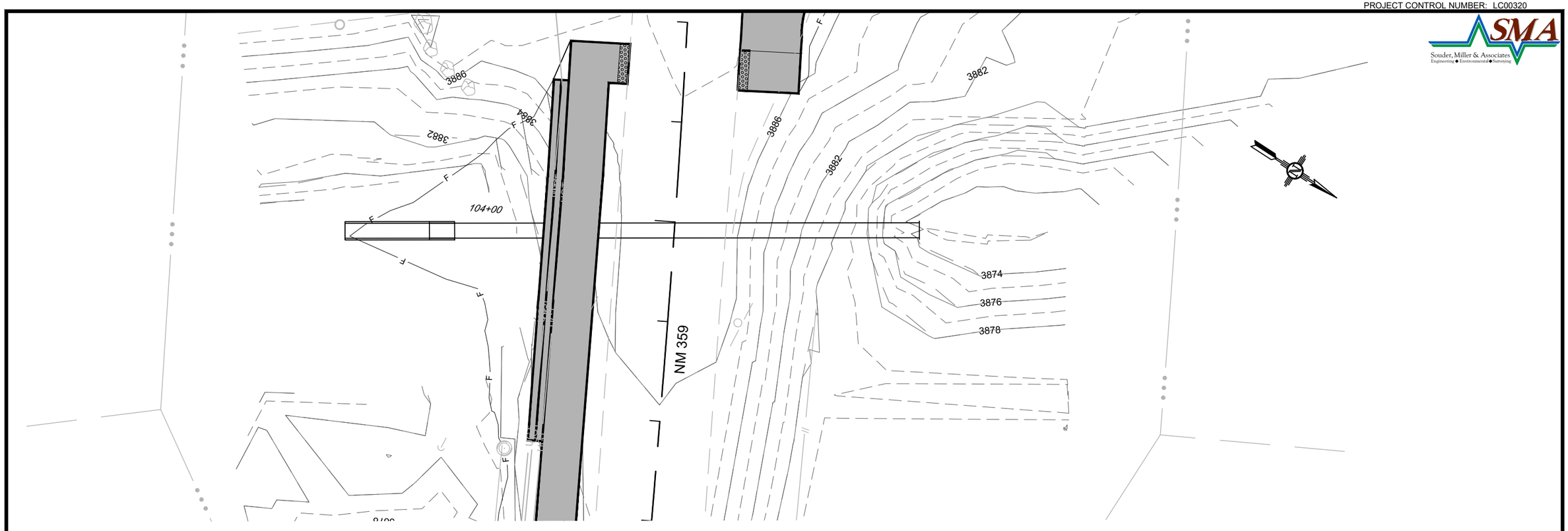
REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

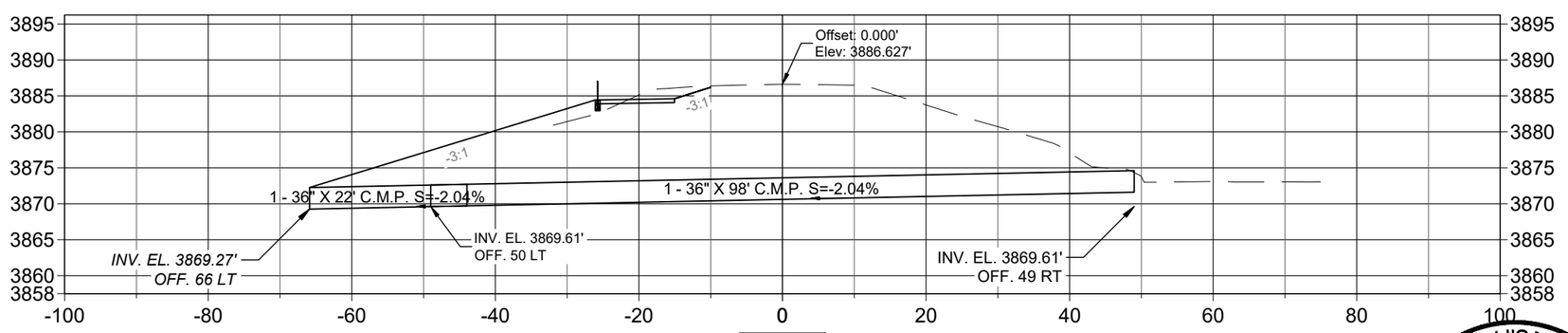
LC00320

LA LLORONA TRAIL EXTENSION

STRUCTURE SECTIONS



CL CONSTRUCTION
US 82



DS-2
STA. 103+98.29

1 - 36" X 98' C.M.P. SKEW = NORMAL
REMOVE 5' OF 36" C.M.P. LT.
EXTEND LT. 22' W/ 1 - 36" C.M.P
CONNECT TO EXSITING R.C.P. W/ STD. DWG. 515-01-2/2
BUILD 73' OF PEDESTRIAN RAILING WITHOUT HANDRAIL
SEE STD. DWG. 607-20-1/4 & 607-20-3/4

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

NO.	DESCRIPTION	DATE	BY
4			
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1			

REVISIONS (OR CHANGE NOTICES)

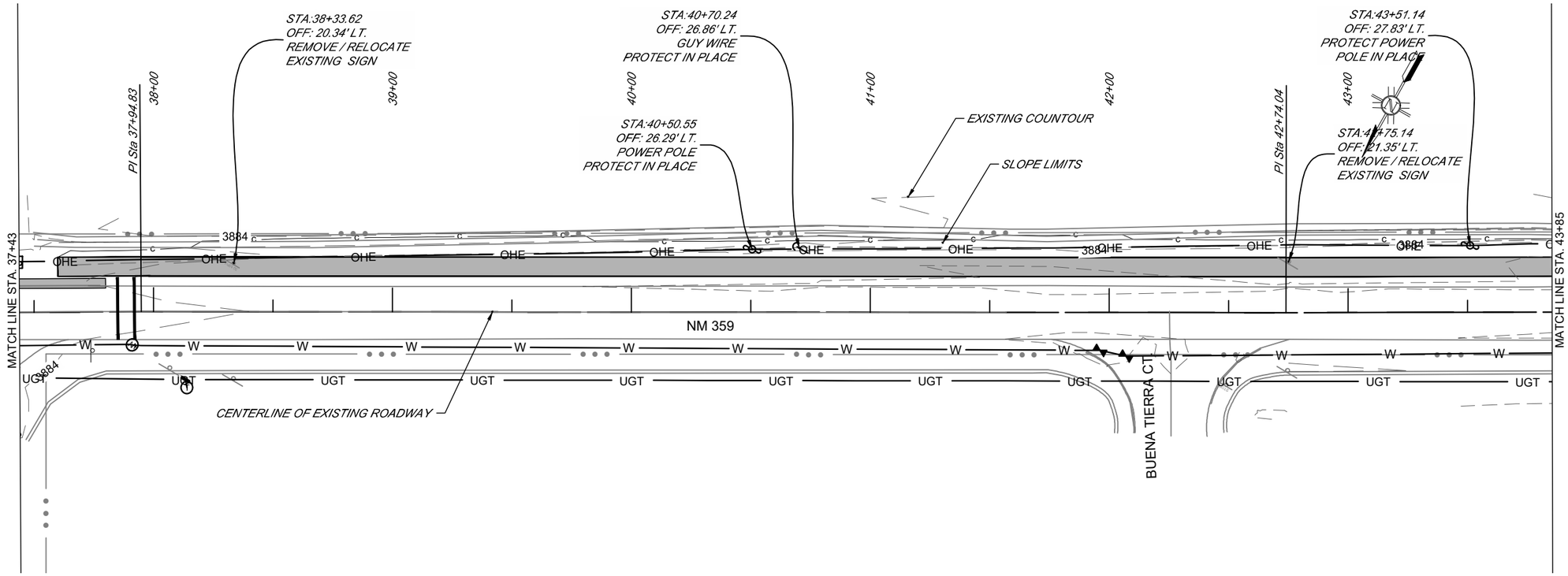
TOWN OF MESILLA
NEW MEXICO

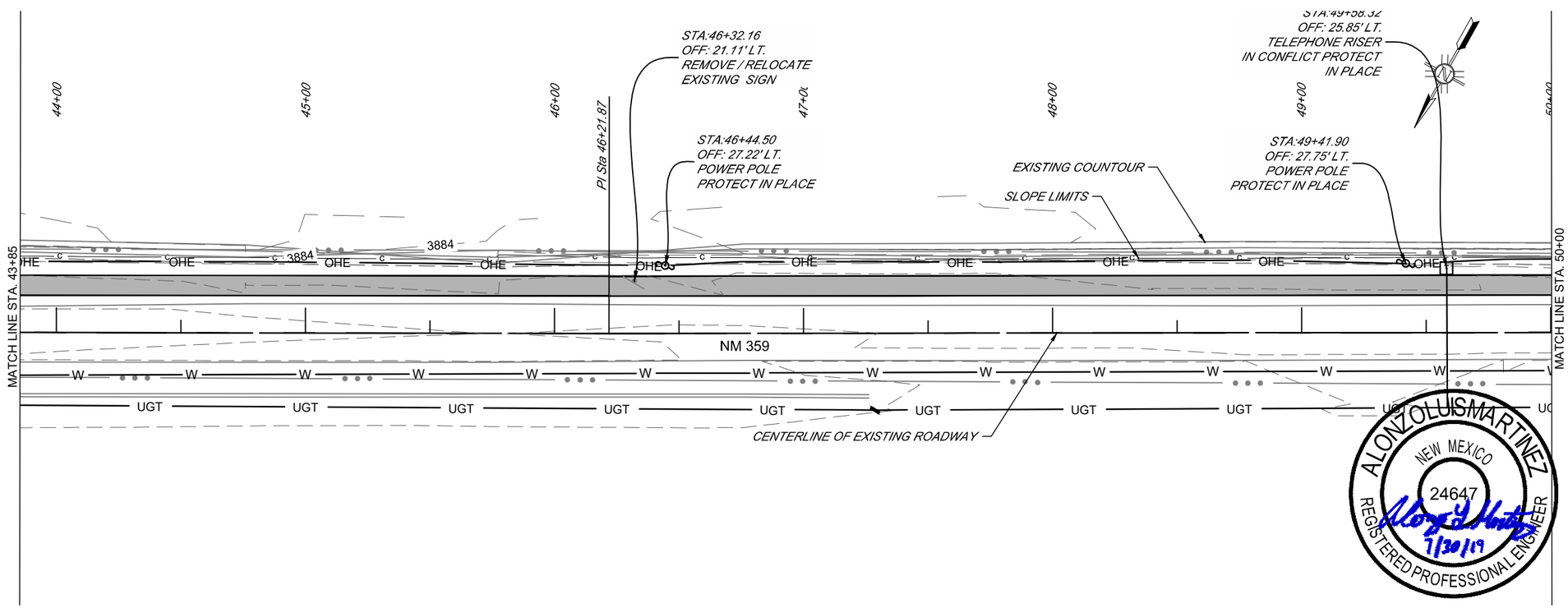
LC00320

LA LLORONA TRAIL EXTENSION

STRUCTURE SECTIONS

PROJECT CONTROL NUMBER: LC00320





LEGEND:

- TELEPHONE RISER
- TELEPHONE MANHOLE
- FIBER OPTIC MARKER
- ELECTRIC BOX
- GUY WIRE
- ELECTRIC POLE
- ELECTRIC METER
- WATER MANHOLE
- WATER METER
- WATER VALVE
- FIRE HYDRANT

ALONZO L. MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

NO.	DESCRIPTION	DATE	BY
4			
3			
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1			

REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

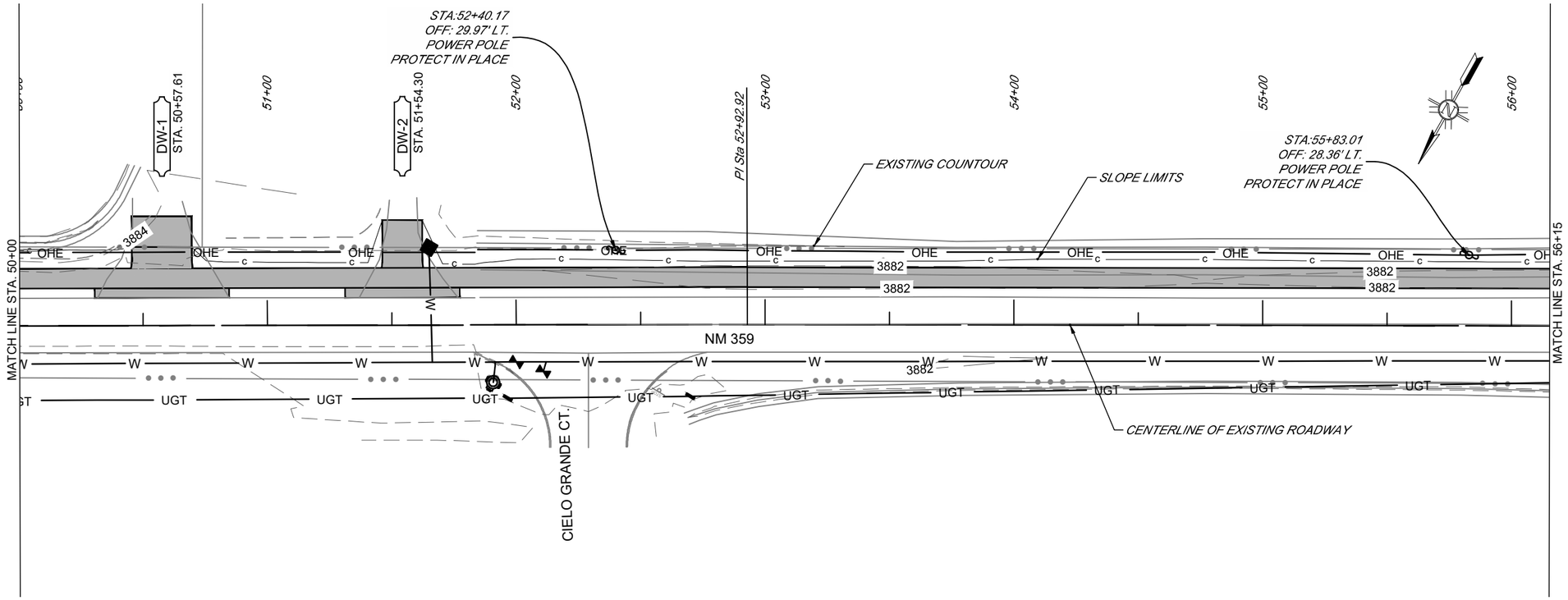
LC00320

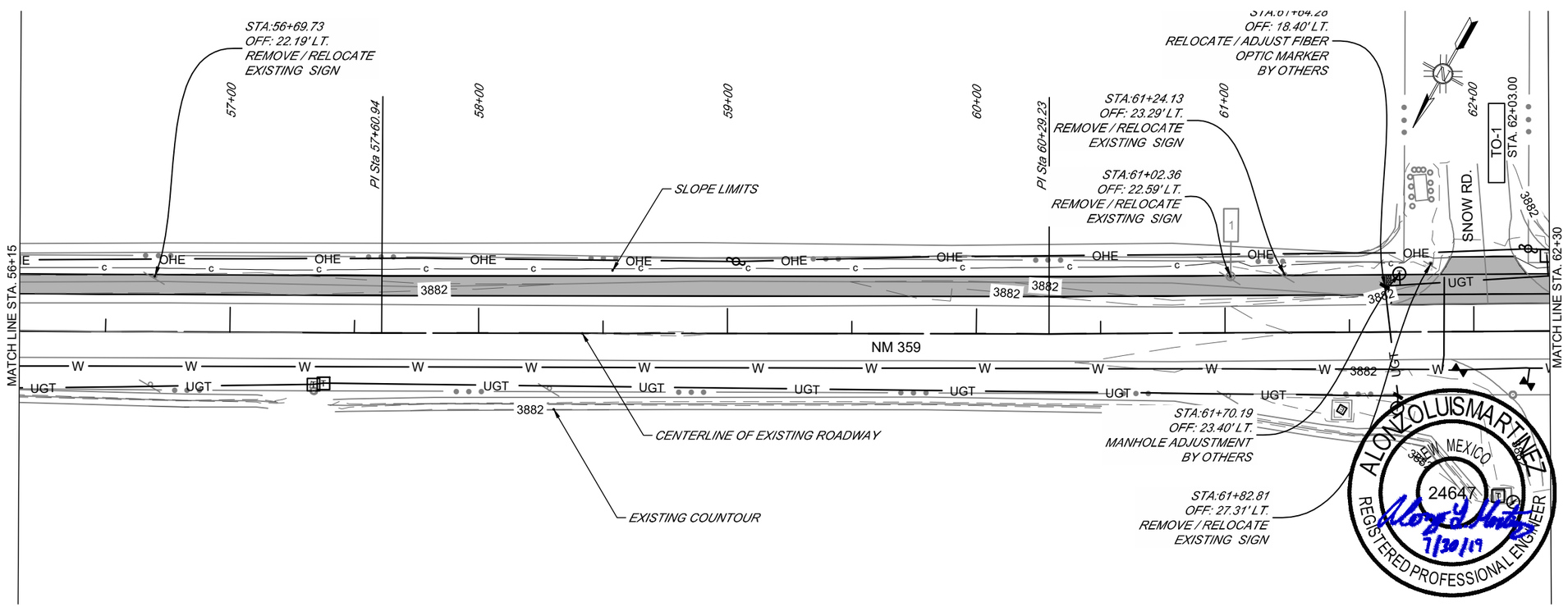
LA LLORONA TRAIL EXTENSION

EXISTING UTILITIES AND ADJUSTMENTS

PROJECT CONTROL NUMBER: LC00320

Souder, Miller & Associates
Engineering • Environmental • Surveying





ALONZO LUIS MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

NO.	DESCRIPTION	DATE	BY
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REVISIONS (OR CHANGE NOTICES)

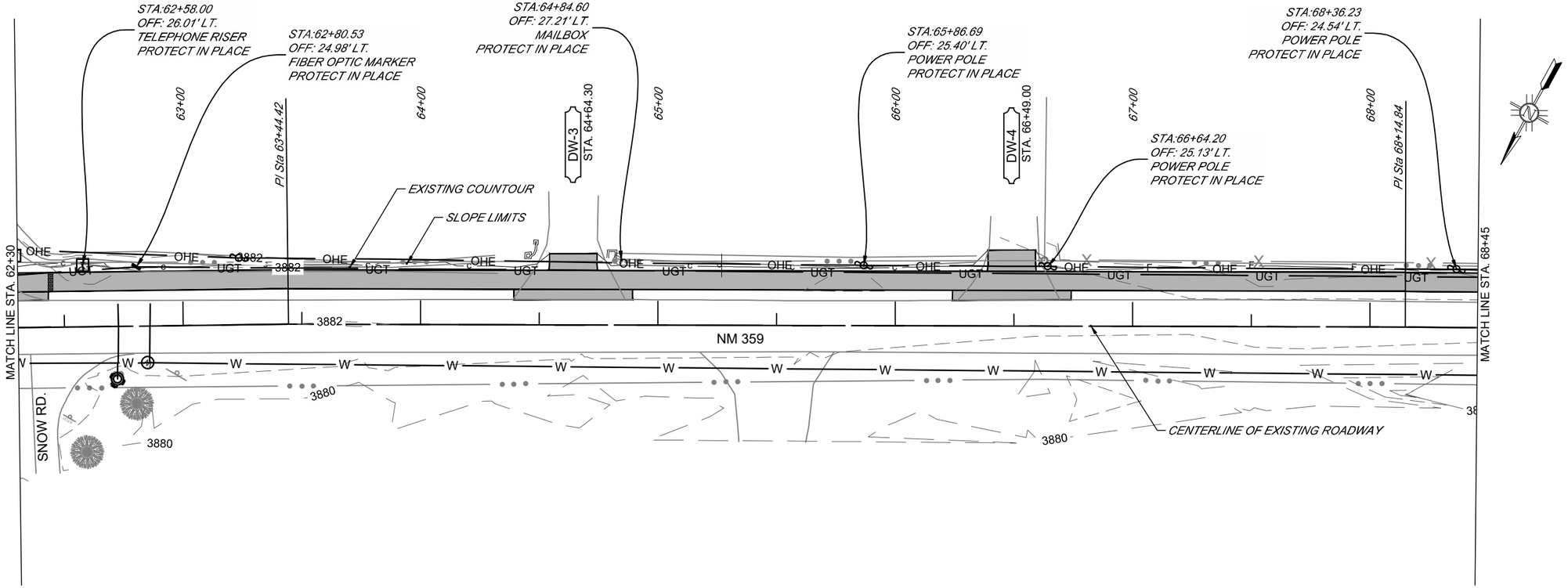
TOWN OF MESILLA
NEW MEXICO

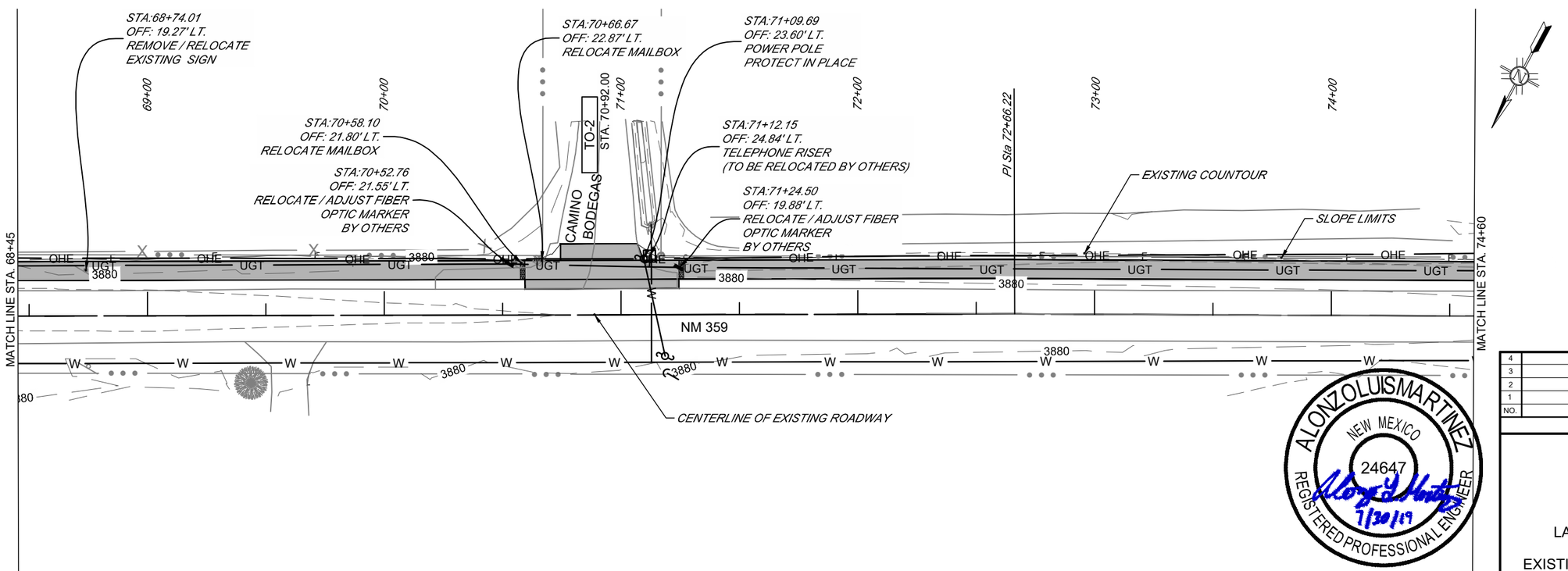
LC00320

LA LLORONA TRAIL EXTENSION

EXISTING UTILITIES AND ADJUSTMENTS

PROJECT CONTROL NUMBER: LC00320





ALONZO LUIS MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

NO.	DESCRIPTION	DATE	BY
4			
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REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

EXISTING UTILITIES AND ADJUSTMENTS

ALONZO L. MARTINEZ
31-Jul-19

Drawing File: P:\9-CALLE DEL NORTE MULTI USE TRAIL (9327602)\PCN LC00320\PLANS\11_SHEETS\LC00320_11UT01.DWG
1:31 AM

DESIGNED BY: PRJ DESIGNER

NEW MEXICO PROJECT NO. LC00320

DRAWING SCALE: 1"=50'

SHEET NO. 11 - 3

PROJECT CONTROL NUMBER: LC00320

Souder, Miller & Associates
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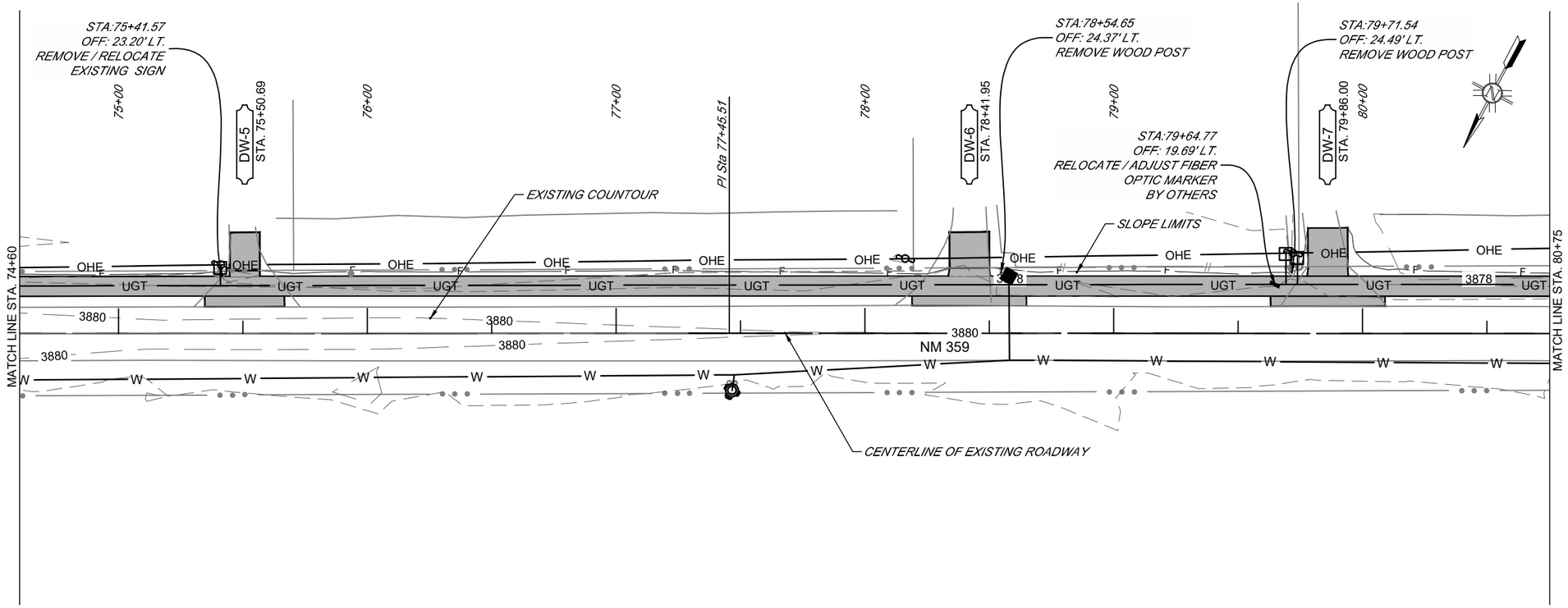

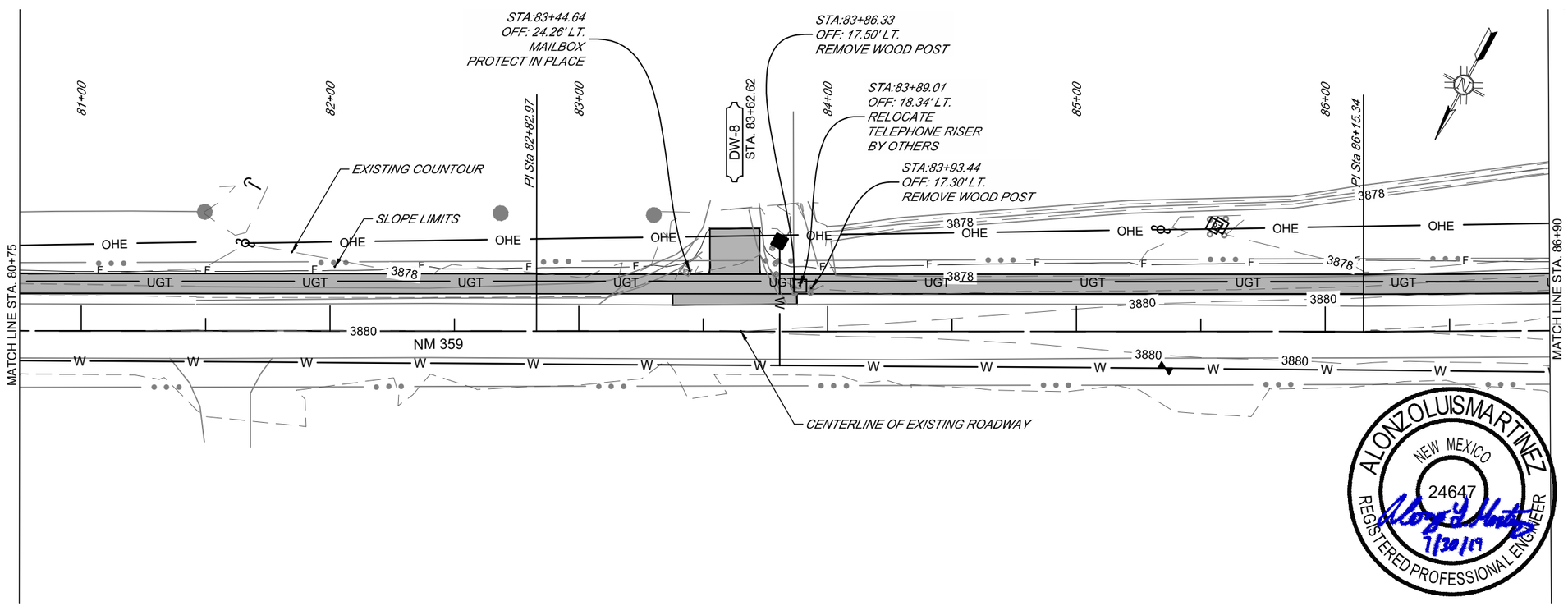

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

NO.	DESCRIPTION	DATE	BY
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REVISIONS (OR CHANGE NOTICES)

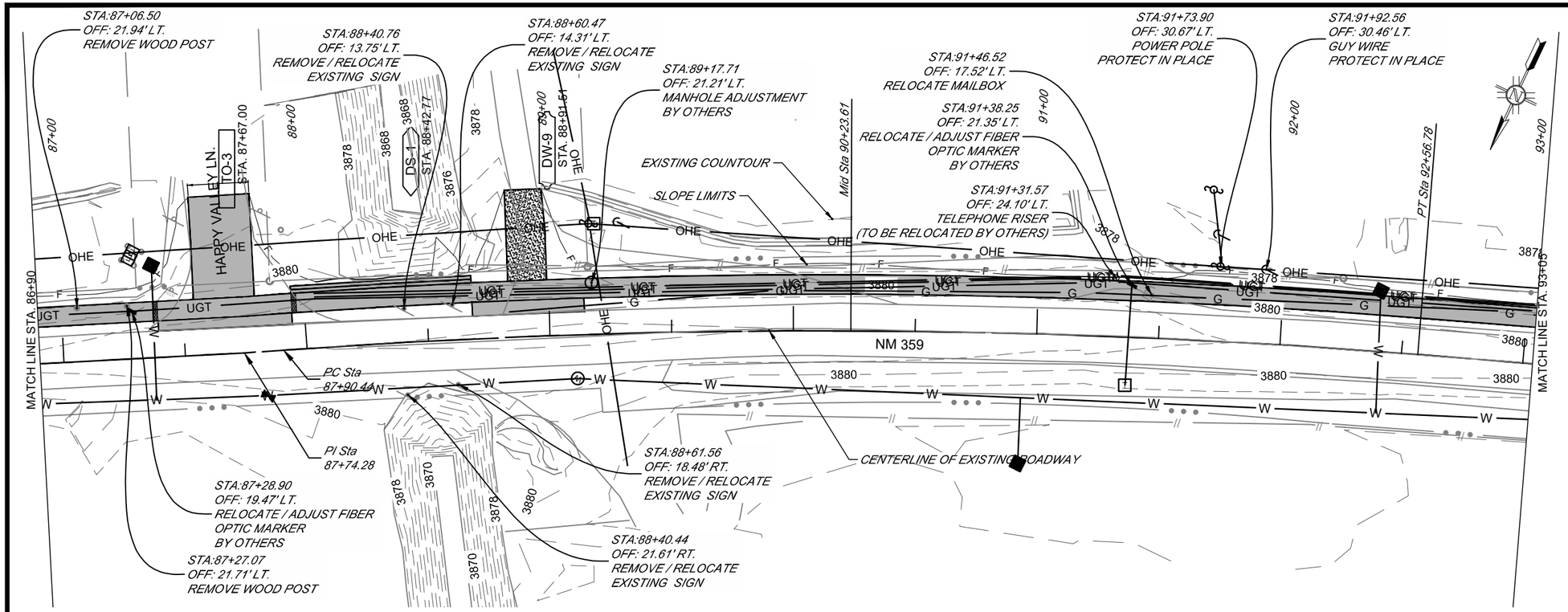
TOWN OF MESILLA
NEW MEXICO

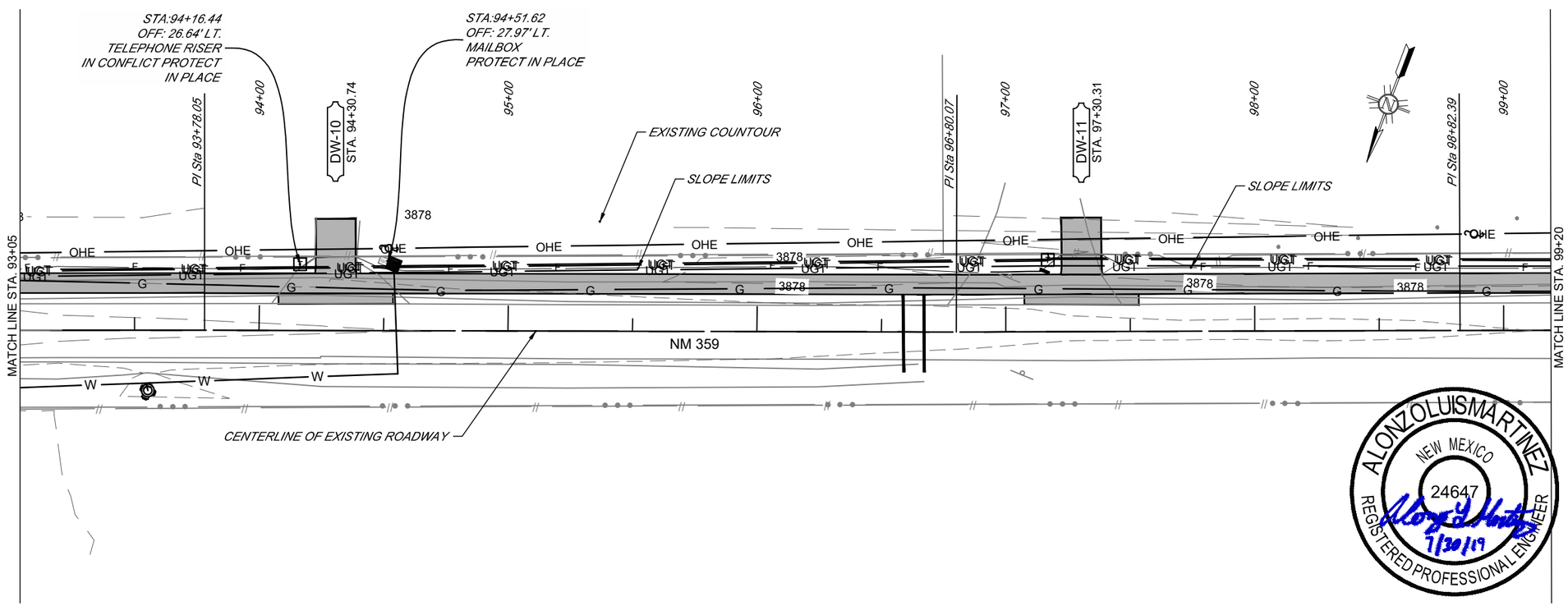
LC00320

LA LLORONA TRAIL EXTENSION

EXISTING UTILITIES AND ADJUSTMENTS

PROJECT CONTROL NUMBER: LC00320





NO.	DESCRIPTION	DATE	BY
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REVISIONS (OR CHANGE NOTICES)

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

EXISTING UTILITIES AND ADJUSTMENTS

ALONZO L. MARTINEZ
31-Jul-19

Drawing File: P:\9-CALLE DEL NORTE MULTI USE TRAIL (9327602)\PCN LC00320\PLANS\11_SHEETS\LC00320_11UT01.DWG
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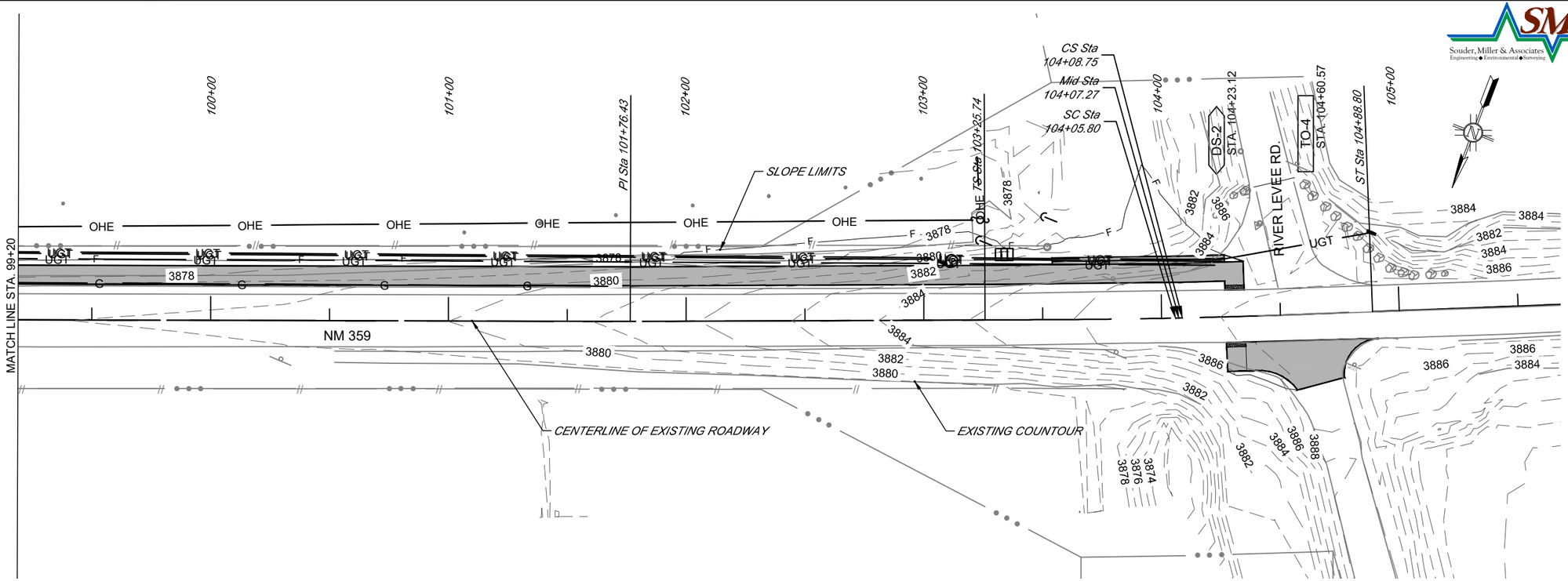
DESIGNED BY: PRJ DESIGNER

NEW MEXICO PROJECT NO. LC00320

DRAWING SCALE: 1"=50'

SHEET NO. 11 - 5



NO.	DESCRIPTION	DATE	BY
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1			

REVISIONS (OR CHANGE NOTICES)

ALONZO LUIS MARTINEZ
NEW MEXICO
24647
7/30/19
REGISTERED PROFESSIONAL ENGINEER

TOWN OF MESILLA
NEW MEXICO

LC00320

LA LLORONA TRAIL EXTENSION

EXISTING UTILITIES AND ADJUSTMENTS

TOWN OF MESILLA

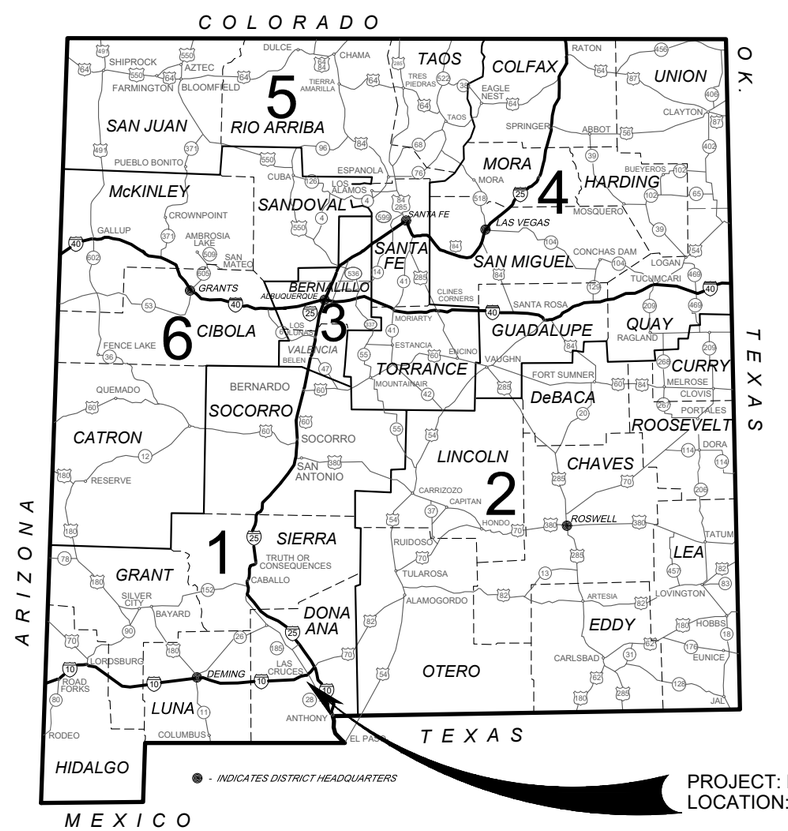
LA LLORONA TRAIL EXTENSION

NM 359 SHARED-USE PATH

DOÑA ANA COUNTY

CN - LC00320

July 2019



PROJECT: LC00320
LOCATION: NM359 MP 0.557 TO MP 1.832

ALONZO L. MARTINEZ
31-Jul-19

Drawing File: P:\9-CALLE DEL NORTE MULTI USE TRAIL (9327602)\PCN LC00320\PLANS\13_SHEETS\LC00320_13XSECS02.DWG
2:17 AM

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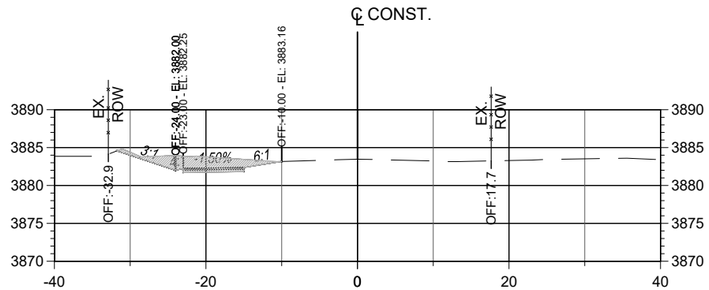
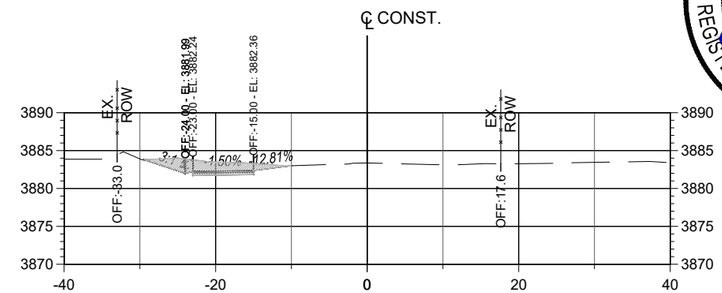
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

Total Volume at Station 39+50.00	
Cut Area	26.03
Fill Area	0.00
Cut Vol	48.88
Fill Vol	0.00
Cum Cut Vol	136.76
Cum Fill Vol	0.16
Net Vol	136.60



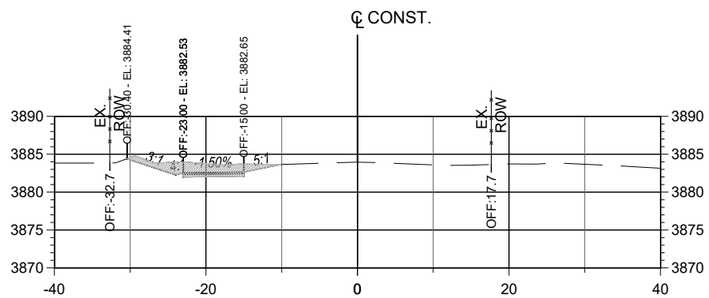
STA. 39+50

Total Volume at Station 40+00.00	
Cut Area	23.28
Fill Area	0.00
Cut Vol	45.65
Fill Vol	0.00
Cum Cut Vol	182.41
Cum Fill Vol	0.16
Net Vol	182.25



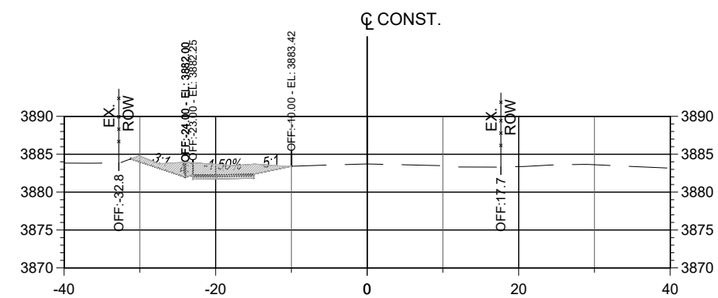
STA. 40+00

Total Volume at Station 38+50.00	
Cut Area	23.01
Fill Area	0.00
Cut Vol	28.83
Fill Vol	0.08
Cum Cut Vol	41.80
Cum Fill Vol	0.16
Net Vol	41.64



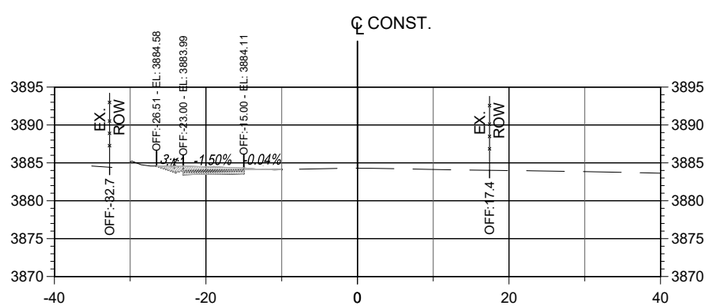
STA. 38+50

Total Volume at Station 39+00.00	
Cut Area	26.76
Fill Area	0.00
Cut Vol	46.08
Fill Vol	0.00
Cum Cut Vol	87.88
Cum Fill Vol	0.16
Net Vol	87.72



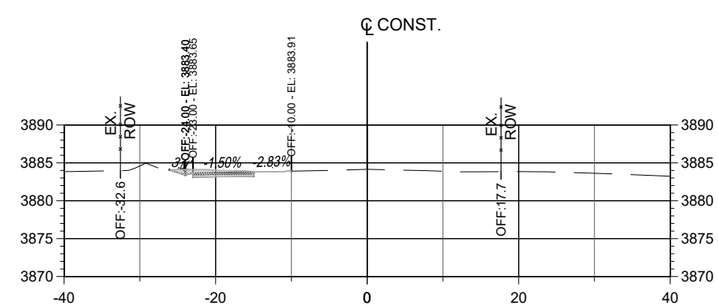
STA. 39+00

Total Volume at Station 37+60.45	
Cut Area	9.58
Fill Area	0.03
Cut Vol	0.00
Fill Vol	0.00
Cum Cut Vol	0.00
Cum Fill Vol	0.00
Net Vol	0.00



STA. 37+60

Total Volume at Station 38+00.00	
Cut Area	8.13
Fill Area	0.08
Cut Vol	12.97
Fill Vol	0.08
Cum Cut Vol	12.97
Cum Fill Vol	0.08
Net Vol	12.88



STA. 38+00

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

Station Range:17+50 THRU 103+52

Alignment: LC00320_CL01

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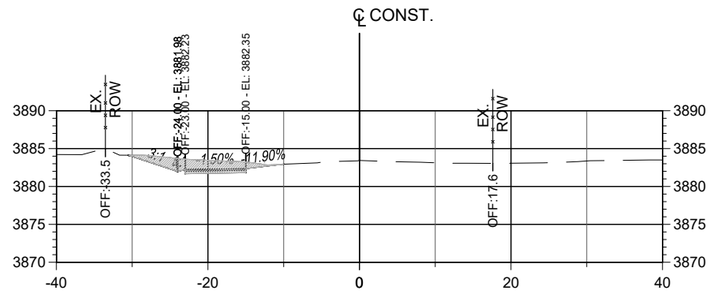
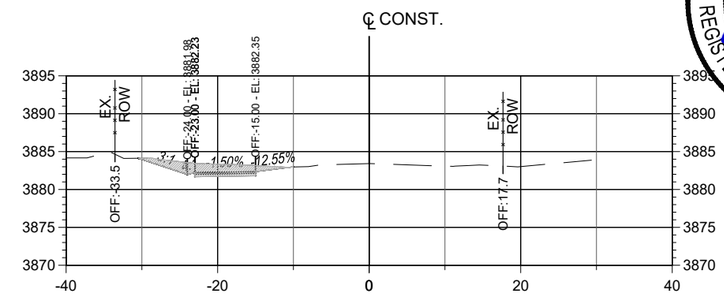
ALONZO LUIS MARTINEZ
NEW MEXICO
24647
REGISTERED PROFESSIONAL ENGINEER
7/30/19

Total Volume at Station 42+50.00	
Cut Area	22.54
Fill Area	0.00
Cut Vol	40.29
Fill Vol	0.00
Cum Cut Vol	381.55
Cum Fill Vol	0.20
Net Vol	381.35



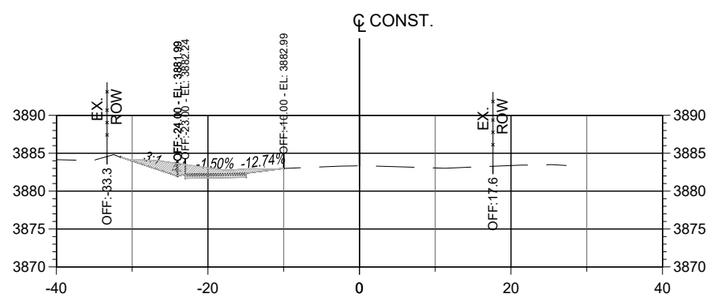
STA. 42+50

Total Volume at Station 43+00.00	
Cut Area	21.22
Fill Area	0.00
Cut Vol	40.52
Fill Vol	0.00
Cum Cut Vol	422.07
Cum Fill Vol	0.20
Net Vol	421.87



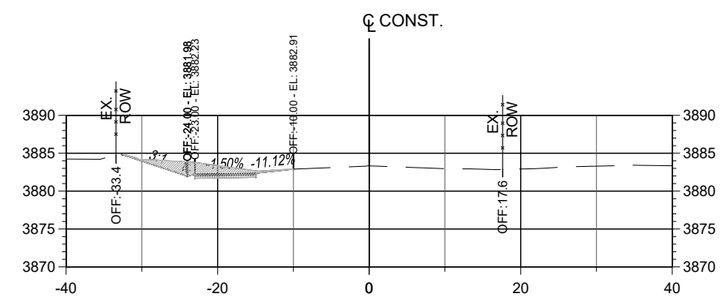
STA. 43+00

Total Volume at Station 41+50.00	
Cut Area	19.10
Fill Area	0.00
Cut Vol	36.37
Fill Vol	0.02
Cum Cut Vol	304.15
Cum Fill Vol	0.20
Net Vol	303.95



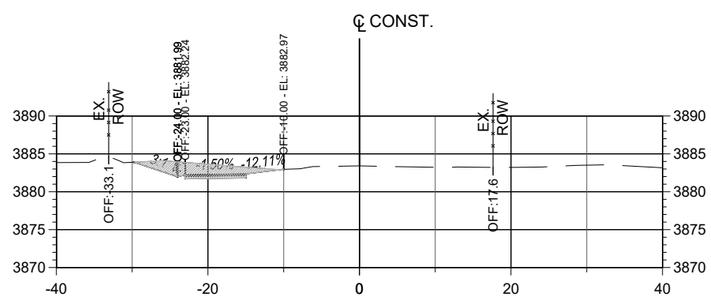
STA. 41+50

Total Volume at Station 42+00.00	
Cut Area	20.98
Fill Area	0.00
Cut Vol	37.11
Fill Vol	0.00
Cum Cut Vol	341.26
Cum Fill Vol	0.20
Net Vol	341.06



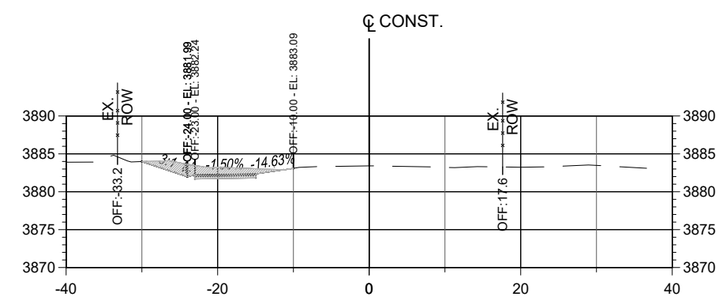
STA. 42+00

Total Volume at Station 40+50.00	
Cut Area	24.37
Fill Area	0.00
Cut Vol	44.12
Fill Vol	0.00
Cum Cut Vol	226.53
Cum Fill Vol	0.16
Net Vol	226.37



STA. 40+50

Total Volume at Station 41+00.00	
Cut Area	20.18
Fill Area	0.02
Cut Vol	41.25
Fill Vol	0.02
Cum Cut Vol	267.78
Cum Fill Vol	0.18
Net Vol	267.60



STA. 41+00

Station Range:17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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ALONZO LUIS MARTINEZ
NEW MEXICO
24647
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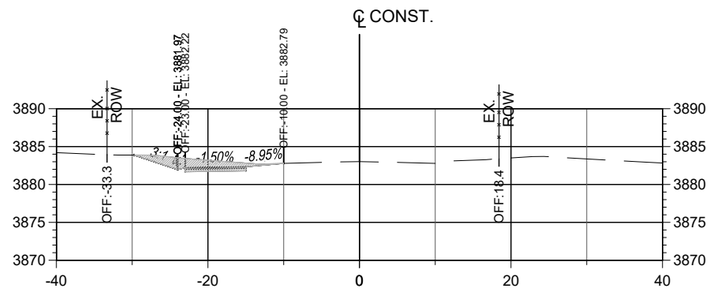
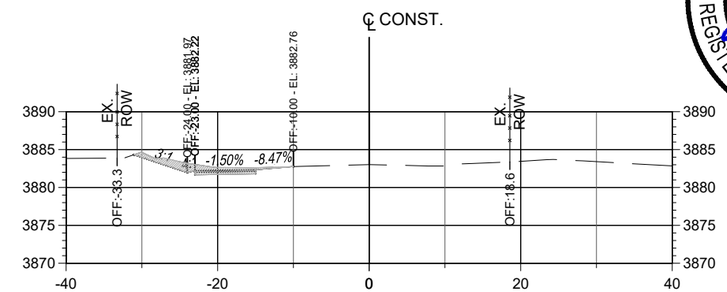
7/30/19

Total Volume at Station 45+50.00	
Cut Area	18.42
Fill Area	0.00
Cut Vol	33.37
Fill Vol	0.00
Cum Cut Vol	587.98
Cum Fill Vol	0.20
Net Vol	587.77



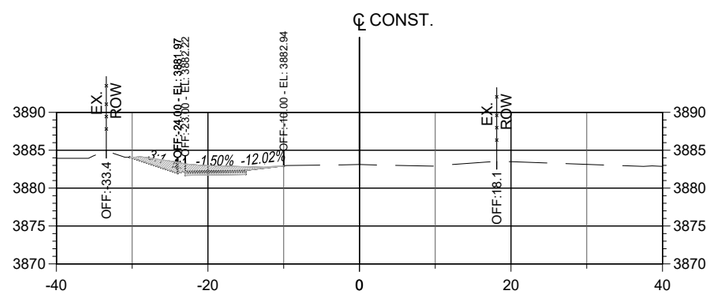
STA. 45+50

Total Volume at Station 46+00.00	
Cut Area	14.83
Fill Area	0.00
Cut Vol	30.79
Fill Vol	0.00
Cum Cut Vol	618.77
Cum Fill Vol	0.20
Net Vol	618.56



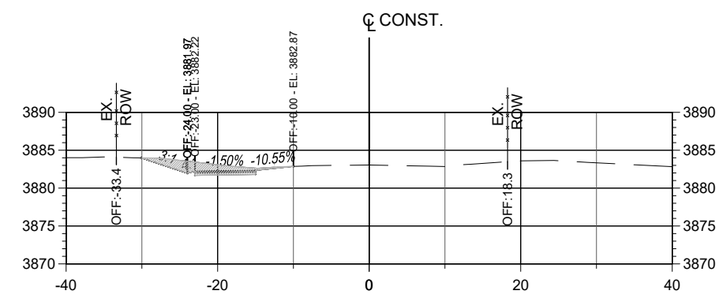
STA. 46+00

Total Volume at Station 44+50.00	
Cut Area	17.07
Fill Area	0.00
Cut Vol	28.58
Fill Vol	0.00
Cum Cut Vol	522.49
Cum Fill Vol	0.20
Net Vol	522.29



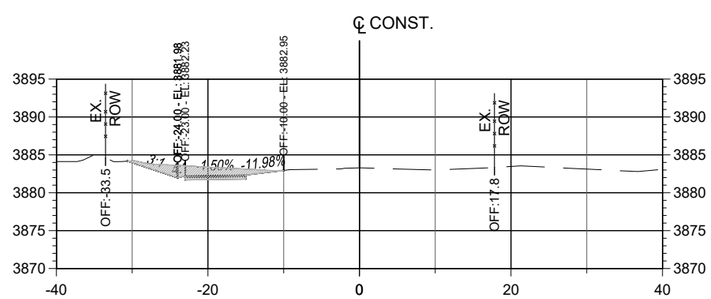
STA. 44+50

Total Volume at Station 45+00.00	
Cut Area	17.61
Fill Area	0.00
Cut Vol	32.12
Fill Vol	0.00
Cum Cut Vol	554.61
Cum Fill Vol	0.20
Net Vol	554.41



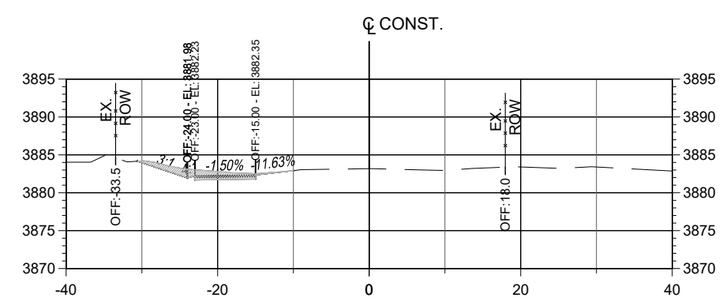
STA. 45+00

Total Volume at Station 43+50.00	
Cut Area	21.29
Fill Area	0.00
Cut Vol	39.36
Fill Vol	0.00
Cum Cut Vol	461.43
Cum Fill Vol	0.20
Net Vol	461.23



STA. 43+50

Total Volume at Station 44+00.00	
Cut Area	13.79
Fill Area	0.00
Cut Vol	32.48
Fill Vol	0.00
Cum Cut Vol	493.91
Cum Fill Vol	0.20
Net Vol	493.71



STA. 44+00

Station Range:17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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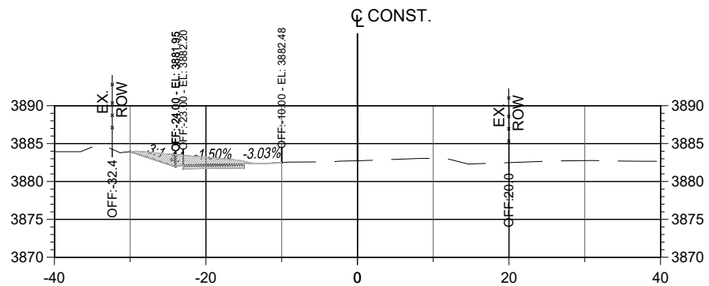
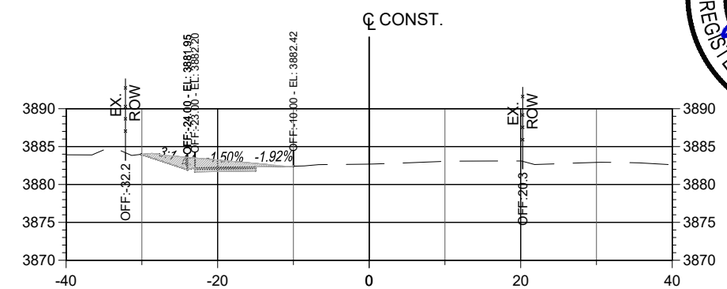
Total Volume at Station 48+50.00	
Cut Area	17.77
Fill Area	0.10
Cut Vol	28.93
Fill Vol	0.11
Cum Cut Vol	746.24
Cum Fill Vol	0.66
Net Vol	745.58



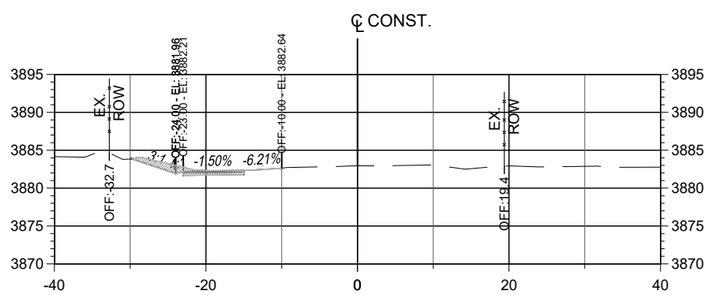
STA. 48+50

Total Volume at Station 49+00.00	
Cut Area	19.27
Fill Area	0.00
Cut Vol	34.30
Fill Vol	0.10
Cum Cut Vol	780.53
Cum Fill Vol	0.76
Net Vol	779.78



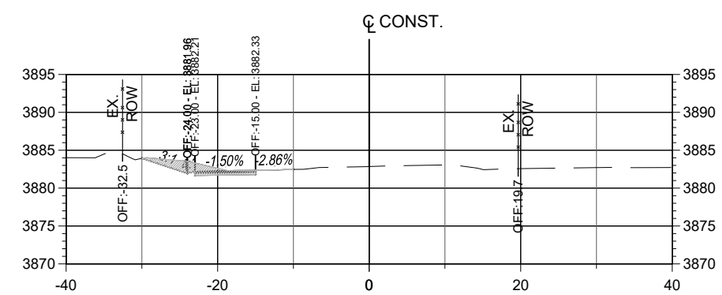
STA. 49+00

Total Volume at Station 47+50.00	
Cut Area	10.49
Fill Area	0.18
Cut Vol	20.32
Fill Vol	0.17
Cum Cut Vol	695.11
Cum Fill Vol	0.37
Net Vol	694.74



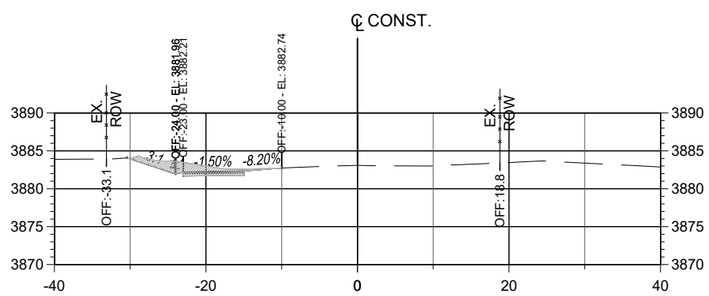
STA. 47+50

Total Volume at Station 48+00.00	
Cut Area	13.48
Fill Area	0.02
Cut Vol	22.19
Fill Vol	0.18
Cum Cut Vol	717.30
Cum Fill Vol	0.55
Net Vol	716.75



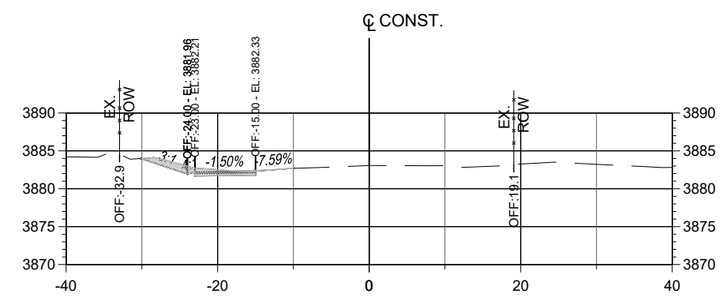
STA. 48+00

Total Volume at Station 46+50.00	
Cut Area	17.11
Fill Area	0.00
Cut Vol	29.57
Fill Vol	0.00
Cum Cut Vol	648.34
Cum Fill Vol	0.20
Net Vol	648.14



STA. 46+50

Total Volume at Station 47+00.00	
Cut Area	11.46
Fill Area	0.00
Cut Vol	26.45
Fill Vol	0.00
Cum Cut Vol	674.79
Cum Fill Vol	0.20
Net Vol	674.59



STA. 47+00

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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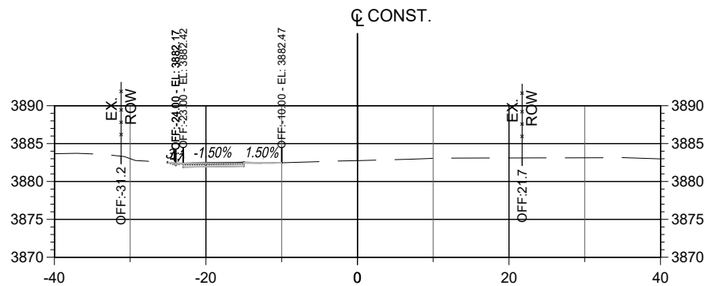
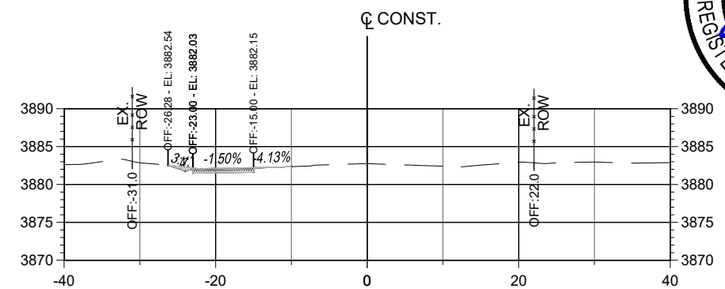
Total Volume at Station 51+50.00	
Cut Area	4.16
Fill Area	0.47
Cut Vol	8.07
Fill Vol	0.80
Cum Cut Vol	893.54
Cum Fill Vol	2.21
Net Vol	891.33



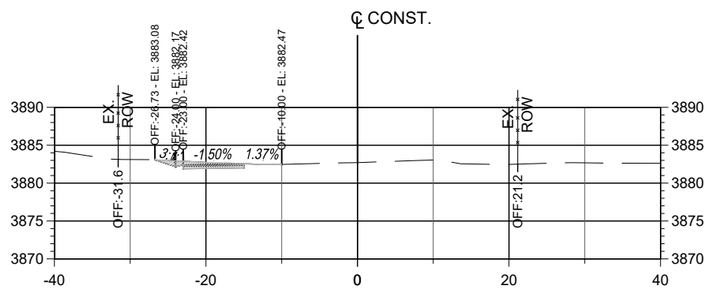
STA. 51+50

Total Volume at Station 52+00.00	
Cut Area	6.05
Fill Area	0.01
Cut Vol	9.45
Fill Vol	0.44
Cum Cut Vol	902.99
Cum Fill Vol	2.66
Net Vol	900.33



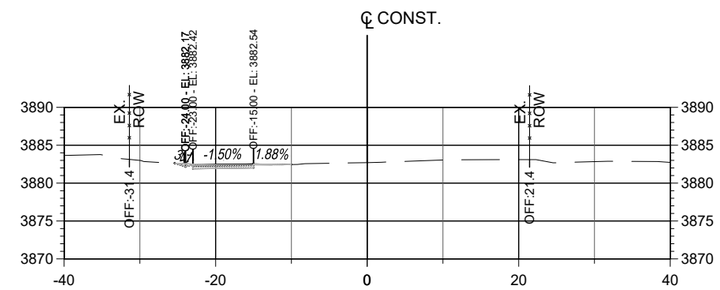
STA. 52+00

Total Volume at Station 50+50.00	
Cut Area	8.01
Fill Area	0.13
Cut Vol	22.56
Fill Vol	0.14
Cum Cut Vol	873.83
Cum Fill Vol	0.94
Net Vol	872.90



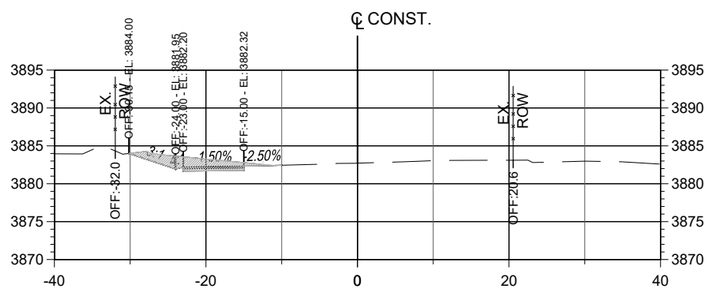
STA. 50+50

Total Volume at Station 51+00.00	
Cut Area	4.55
Fill Area	0.39
Cut Vol	11.64
Fill Vol	0.48
Cum Cut Vol	885.47
Cum Fill Vol	1.41
Net Vol	884.06



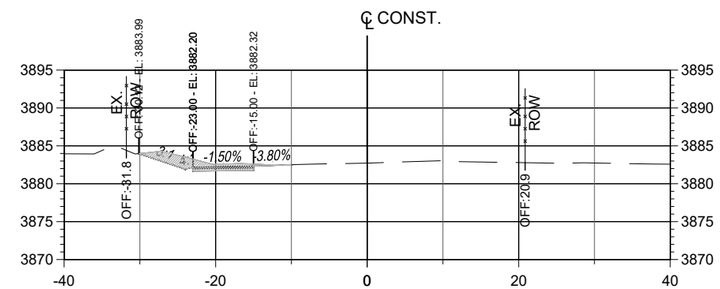
STA. 51+00

Total Volume at Station 49+50.00	
Cut Area	20.39
Fill Area	0.00
Cut Vol	36.72
Fill Vol	0.01
Cum Cut Vol	817.26
Cum Fill Vol	0.76
Net Vol	816.49



STA. 49+50

Total Volume at Station 50+00.00	
Cut Area	16.35
Fill Area	0.03
Cut Vol	34.02
Fill Vol	0.03
Cum Cut Vol	851.28
Cum Fill Vol	0.79
Net Vol	850.48



STA. 50+00

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01

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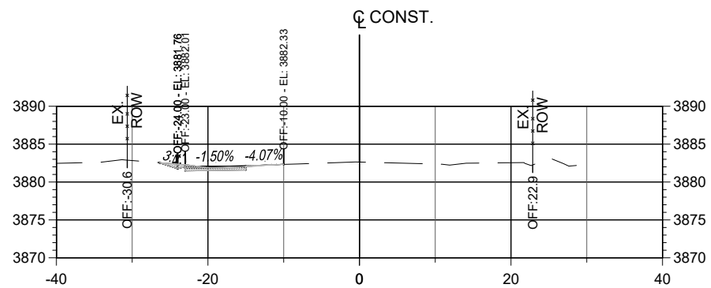
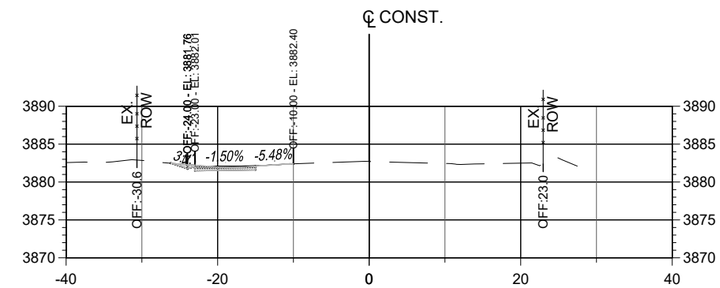
Total Volume at Station 54+50.00	
Cut Area	4.86
Fill Area	0.19
Cut Vol	7.19
Fill Vol	0.40
Cum Cut Vol	933.61
Cum Fill Vol	4.96
Net Vol	928.65



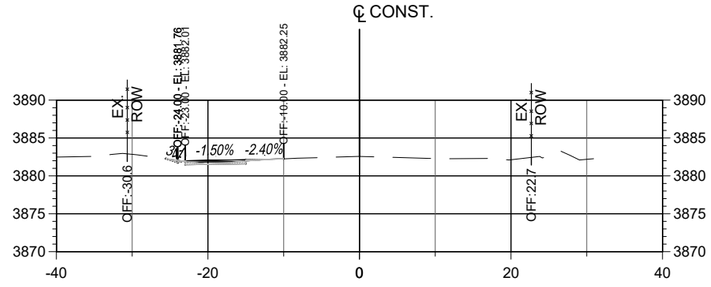
STA. 54+50

Total Volume at Station 55+00.00	
Cut Area	5.00
Fill Area	0.08
Cut Vol	9.13
Fill Vol	0.25
Cum Cut Vol	942.74
Cum Fill Vol	5.21
Net Vol	937.53



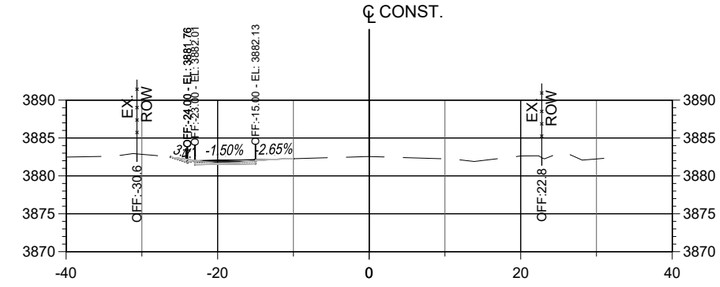
STA. 55+00

Total Volume at Station 53+50.00	
Cut Area	2.06
Fill Area	0.36
Cut Vol	4.00
Fill Vol	0.73
Cum Cut Vol	921.82
Cum Fill Vol	4.01
Net Vol	917.81



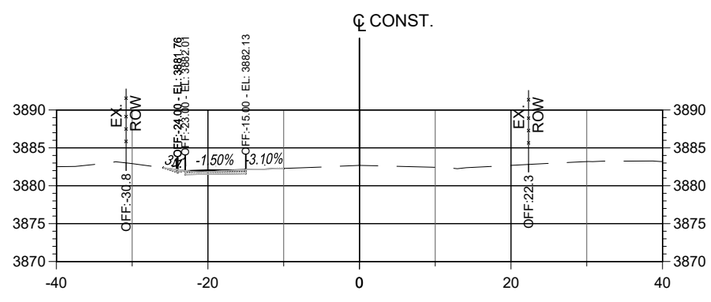
STA. 53+50

Total Volume at Station 54+00.00	
Cut Area	2.91
Fill Area	0.24
Cut Vol	4.59
Fill Vol	0.56
Cum Cut Vol	926.42
Cum Fill Vol	4.57
Net Vol	921.85



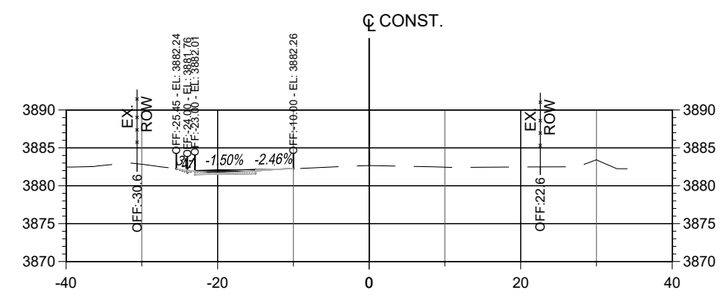
STA. 54+00

Total Volume at Station 52+50.00	
Cut Area	3.86
Fill Area	0.12
Cut Vol	9.17
Fill Vol	0.12
Cum Cut Vol	912.16
Cum Fill Vol	2.78
Net Vol	909.38



STA. 52+50

Total Volume at Station 53+00.00	
Cut Area	2.26
Fill Area	0.42
Cut Vol	5.67
Fill Vol	0.50
Cum Cut Vol	917.82
Cum Fill Vol	3.28
Net Vol	914.54



STA. 53+00

Station Range:17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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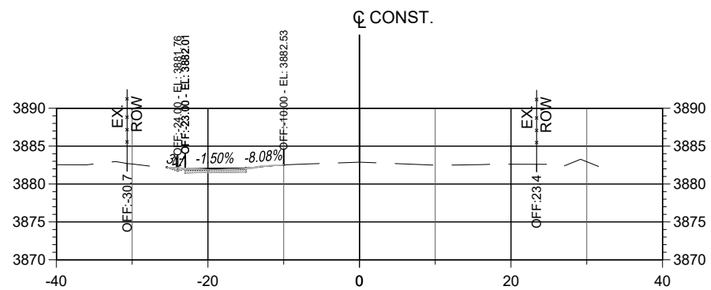
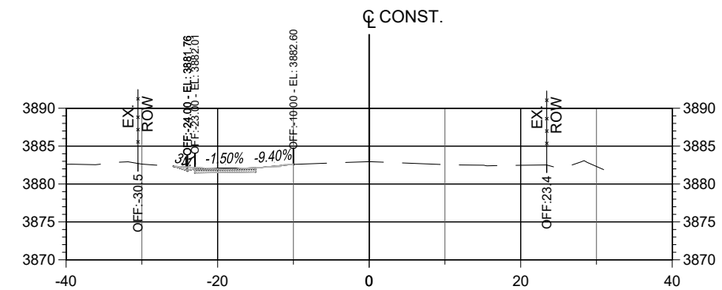
7/30/19

Total Volume at Station 57+50.00	
Cut Area	4.15
Fill Area	0.16
Cut Vol	6.54
Fill Vol	0.20
Cum Cut Vol	975.54
Cum Fill Vol	7.11
Net Vol	968.43



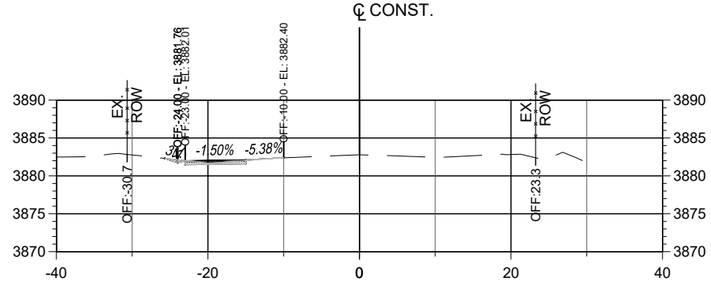
STA. 57+50

Total Volume at Station 58+00.00	
Cut Area	5.14
Fill Area	0.18
Cut Vol	8.60
Fill Vol	0.32
Cum Cut Vol	984.14
Cum Fill Vol	7.43
Net Vol	976.71



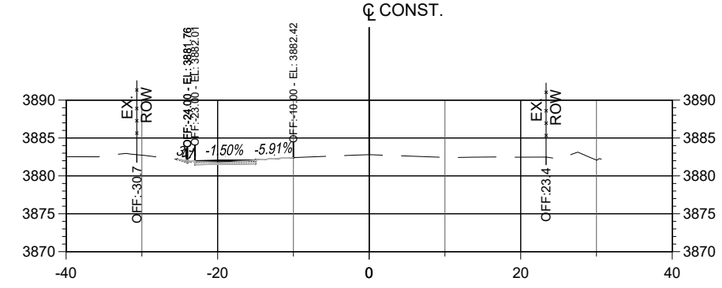
STA. 58+00

Total Volume at Station 56+50.00	
Cut Area	3.14
Fill Area	0.19
Cut Vol	5.95
Fill Vol	0.52
Cum Cut Vol	963.40
Cum Fill Vol	6.69
Net Vol	956.71



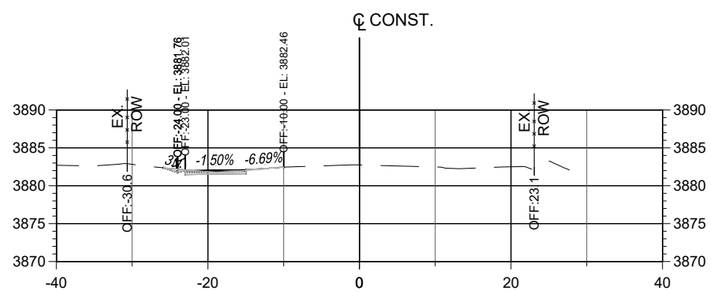
STA. 56+50

Total Volume at Station 57+00.00	
Cut Area	2.91
Fill Area	0.05
Cut Vol	5.60
Fill Vol	0.22
Cum Cut Vol	969.00
Cum Fill Vol	6.91
Net Vol	962.08



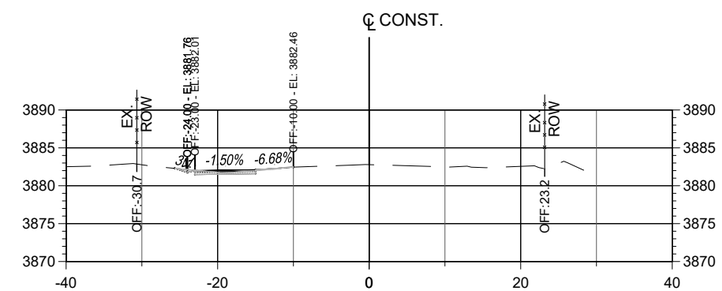
STA. 57+00

Total Volume at Station 55+50.00	
Cut Area	3.80
Fill Area	0.30
Cut Vol	8.15
Fill Vol	0.35
Cum Cut Vol	950.88
Cum Fill Vol	5.56
Net Vol	945.33



STA. 55+50

Total Volume at Station 56+00.00	
Cut Area	3.29
Fill Area	0.37
Cut Vol	6.56
Fill Vol	0.61
Cum Cut Vol	957.45
Cum Fill Vol	6.17
Net Vol	951.28



STA. 56+00

Station Range:17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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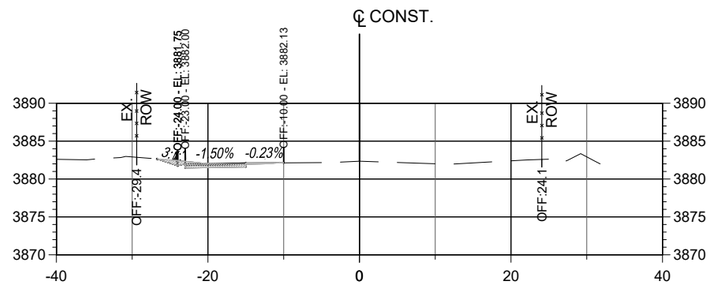
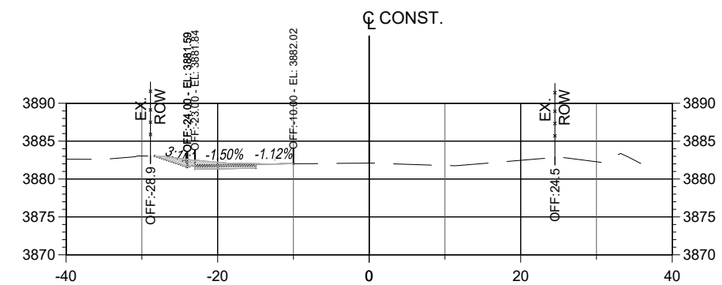
Total Volume at Station 60+50.00	
Cut Area	5.93
Fill Area	0.50
Cut Vol	10.20
Fill Vol	0.60
Cum Cut Vol	1034.39
Cum Fill Vol	9.26
Net Vol	1025.13



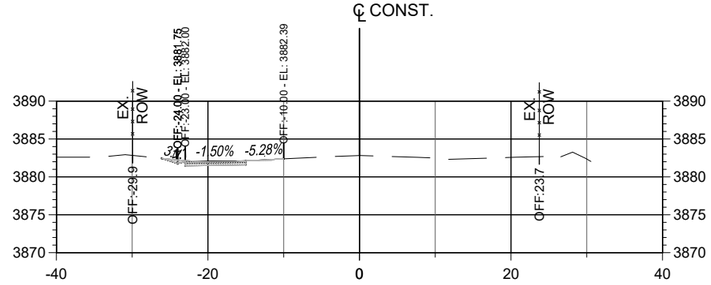
STA. 60+50

Total Volume at Station 61+00.00	
Cut Area	9.93
Fill Area	0.01
Cut Vol	14.69
Fill Vol	0.47
Cum Cut Vol	1049.08
Cum Fill Vol	9.72
Net Vol	1039.35



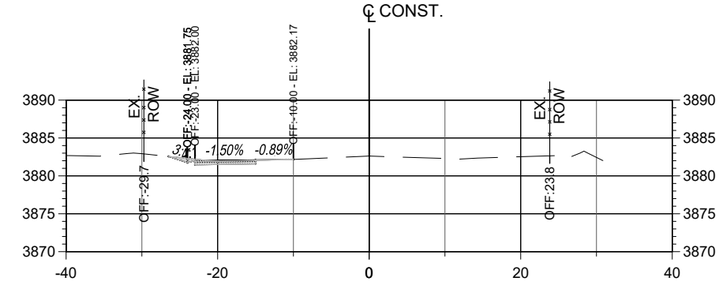
STA. 61+00

Total Volume at Station 59+50.00	
Cut Area	5.01
Fill Area	0.20
Cut Vol	10.04
Fill Vol	0.46
Cum Cut Vol	1014.85
Cum Fill Vol	8.34
Net Vol	1006.51



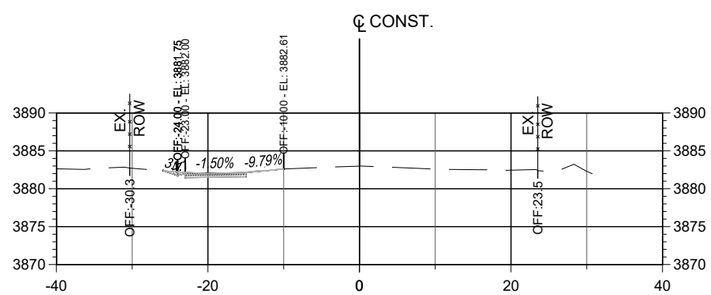
STA. 59+50

Total Volume at Station 60+00.00	
Cut Area	5.08
Fill Area	0.15
Cut Vol	9.34
Fill Vol	0.32
Cum Cut Vol	1024.19
Cum Fill Vol	8.66
Net Vol	1015.53



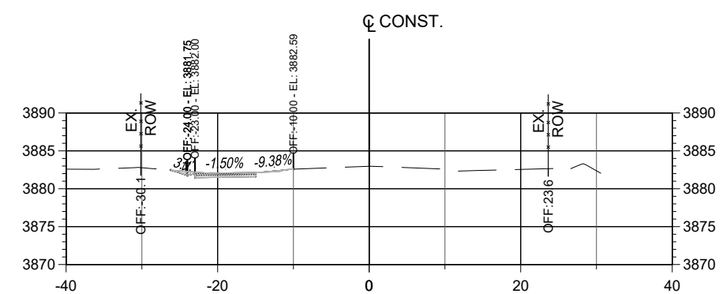
STA. 60+00

Total Volume at Station 58+50.00	
Cut Area	5.67
Fill Area	0.01
Cut Vol	10.01
Fill Vol	0.18
Cum Cut Vol	994.15
Cum Fill Vol	7.61
Net Vol	986.54



STA. 58+50

Total Volume at Station 59+00.00	
Cut Area	5.83
Fill Area	0.29
Cut Vol	10.65
Fill Vol	0.28
Cum Cut Vol	1004.80
Cum Fill Vol	7.88
Net Vol	996.92



STA. 59+00

Station Range:17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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24647
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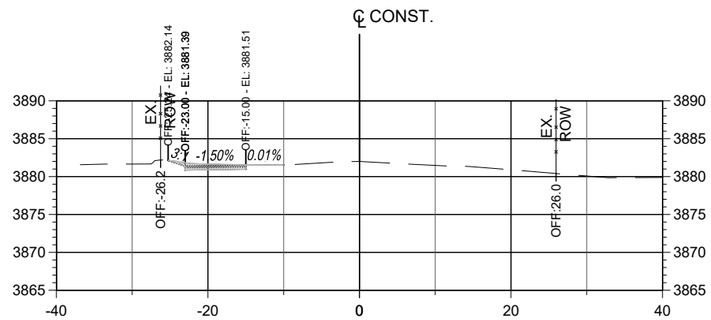
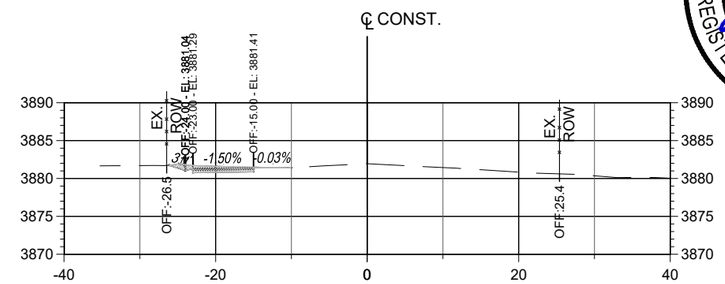
7/30/19

Total Volume at Station 63+50.00	
Cut Area	6.56
Fill Area	0.01
Cut Vol	11.49
Fill Vol	0.05
Cum Cut Vol	1132.82
Cum Fill Vol	10.13
Net Vol	1122.69



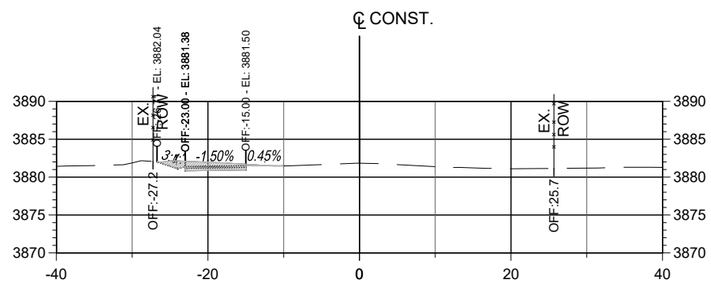
STA. 63+50

Total Volume at Station 64+00.00	
Cut Area	8.05
Fill Area	0.02
Cut Vol	13.53
Fill Vol	0.03
Cum Cut Vol	1146.35
Cum Fill Vol	10.16
Net Vol	1136.19



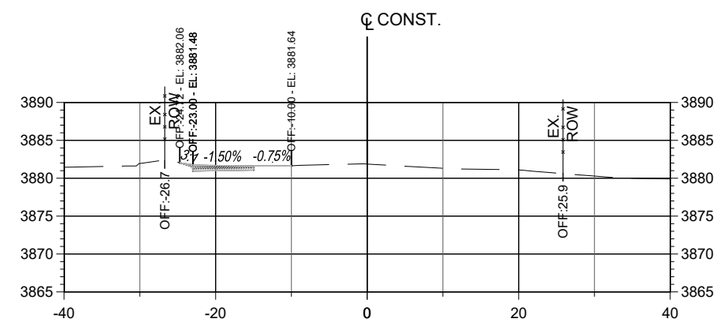
STA. 64+00

Total Volume at Station 62+50.00	
Cut Area	10.72
Fill Area	0.01
Cut Vol	14.76
Fill Vol	0.15
Cum Cut Vol	1105.99
Cum Fill Vol	10.02
Net Vol	1095.97



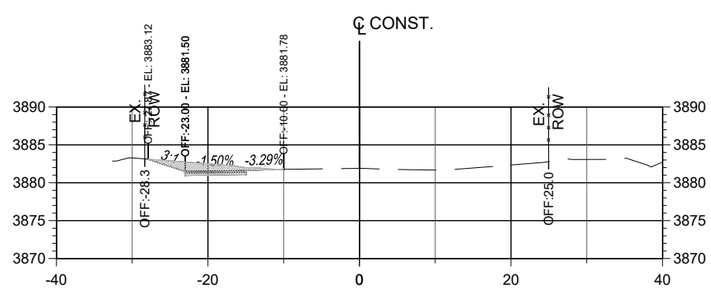
STA. 62+50

Total Volume at Station 63+00.00	
Cut Area	5.84
Fill Area	0.05
Cut Vol	15.34
Fill Vol	0.05
Cum Cut Vol	1121.33
Cum Fill Vol	10.07
Net Vol	1111.26



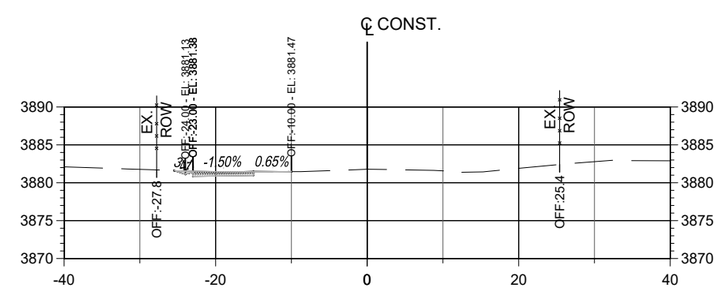
STA. 63+00

Total Volume at Station 61+50.00	
Cut Area	15.18
Fill Area	0.00
Cut Vol	23.26
Fill Vol	0.00
Cum Cut Vol	1072.33
Cum Fill Vol	9.73
Net Vol	1062.61



STA. 61+50

Total Volume at Station 62+00.00	
Cut Area	5.22
Fill Area	0.15
Cut Vol	18.89
Fill Vol	0.14
Cum Cut Vol	1091.23
Cum Fill Vol	9.87
Net Vol	1081.36



STA. 62+00

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01

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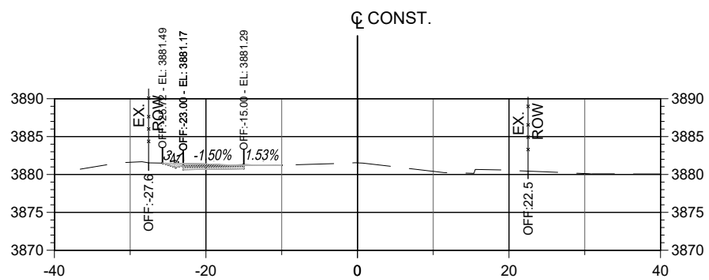
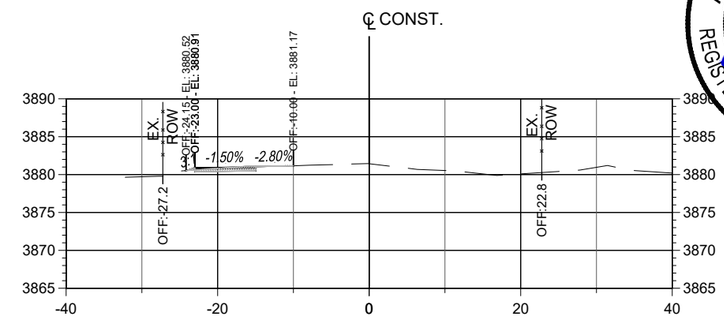
Total Volume at Station 66+50.00	
Cut Area	6.11
Fill Area	0.23
Cut Vol	8.68
Fill Vol	0.91
Cum Cut Vol	1193.81
Cum Fill Vol	13.73
Net Vol	1180.08



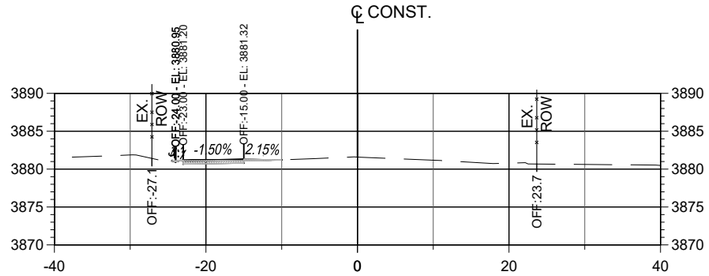
STA. 66+50

Total Volume at Station 67+00.00	
Cut Area	3.85
Fill Area	0.18
Cut Vol	9.22
Fill Vol	0.38
Cum Cut Vol	1203.04
Cum Fill Vol	14.11
Net Vol	1188.93



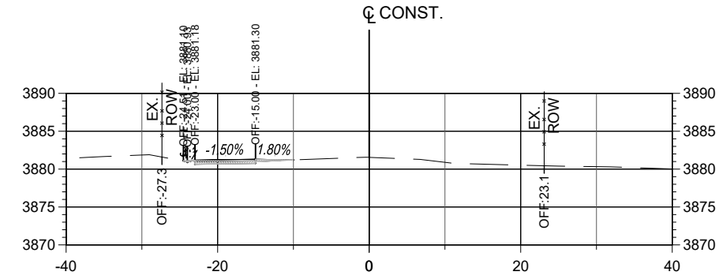
STA. 67+00

Total Volume at Station 65+50.00	
Cut Area	3.22
Fill Area	0.69
Cut Vol	7.38
Fill Vol	0.94
Cum Cut Vol	1179.13
Cum Fill Vol	11.50
Net Vol	1167.63



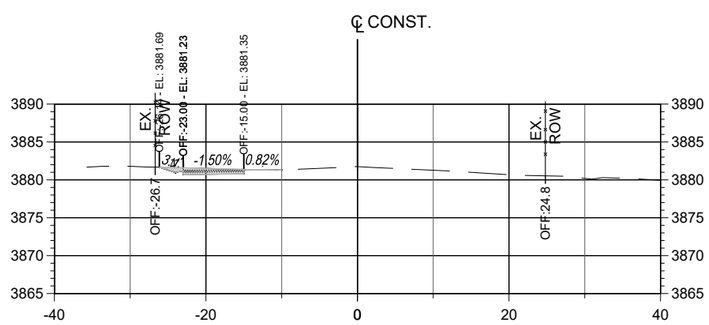
STA. 65+50

Total Volume at Station 66+00.00	
Cut Area	3.26
Fill Area	0.75
Cut Vol	6.00
Fill Vol	1.33
Cum Cut Vol	1185.14
Cum Fill Vol	12.83
Net Vol	1172.31



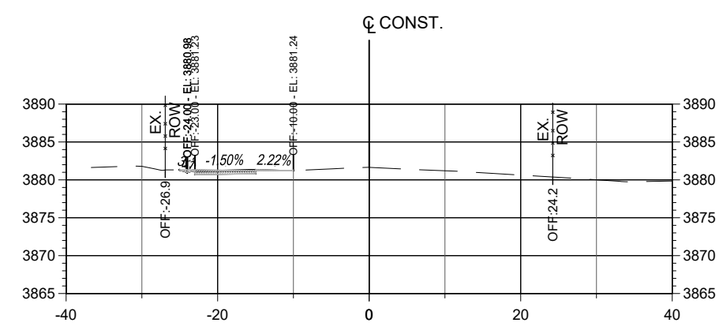
STA. 66+00

Total Volume at Station 64+50.00	
Cut Area	7.32
Fill Area	0.04
Cut Vol	14.23
Fill Vol	0.06
Cum Cut Vol	1160.58
Cum Fill Vol	10.22
Net Vol	1150.36



STA. 64+50

Total Volume at Station 65+00.00	
Cut Area	4.75
Fill Area	0.33
Cut Vol	11.17
Fill Vol	0.34
Cum Cut Vol	1171.75
Cum Fill Vol	10.56
Net Vol	1161.19



STA. 65+00

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01

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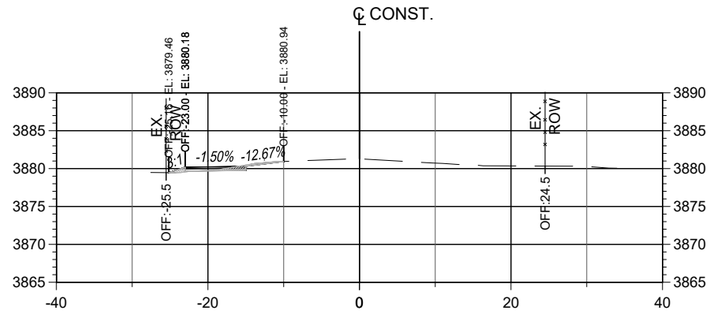
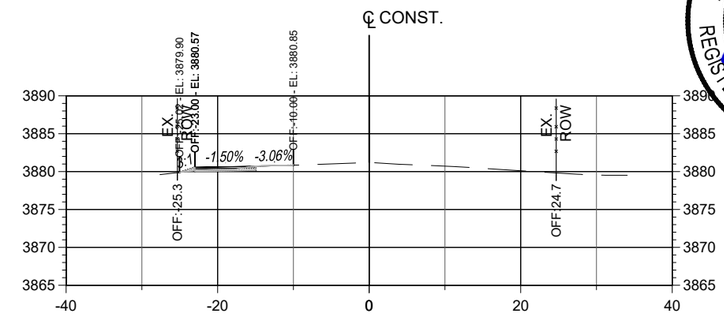
Total Volume at Station 69+50.00	
Cut Area	2.50
Fill Area	0.79
Cut Vol	8.15
Fill Vol	0.83
Cum Cut Vol	1247.43
Cum Fill Vol	17.59
Net Vol	1229.84



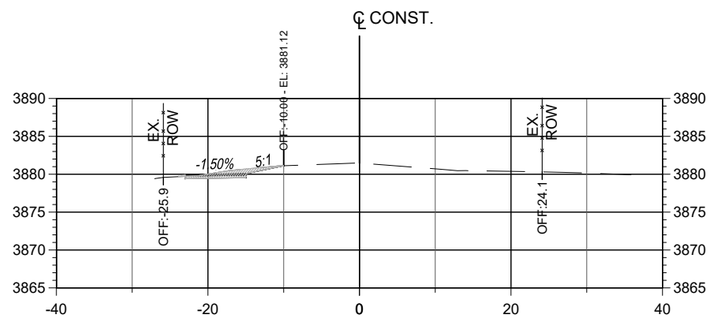
STA. 69+50

Total Volume at Station 70+00.00	
Cut Area	2.18
Fill Area	0.45
Cut Vol	4.33
Fill Vol	1.15
Cum Cut Vol	1251.76
Cum Fill Vol	18.74
Net Vol	1233.02



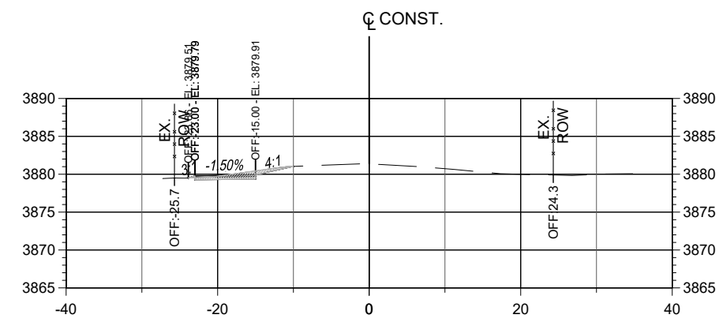
STA. 70+00

Total Volume at Station 68+50.00	
Cut Area	7.38
Fill Area	0.09
Cut Vol	12.30
Fill Vol	0.34
Cum Cut Vol	1226.60
Cum Fill Vol	16.58
Net Vol	1210.02



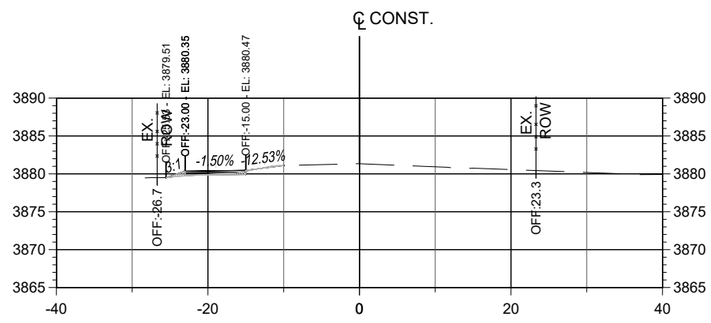
STA. 68+50

Total Volume at Station 69+00.00	
Cut Area	6.31
Fill Area	0.11
Cut Vol	12.67
Fill Vol	0.18
Cum Cut Vol	1239.28
Cum Fill Vol	16.77
Net Vol	1222.51



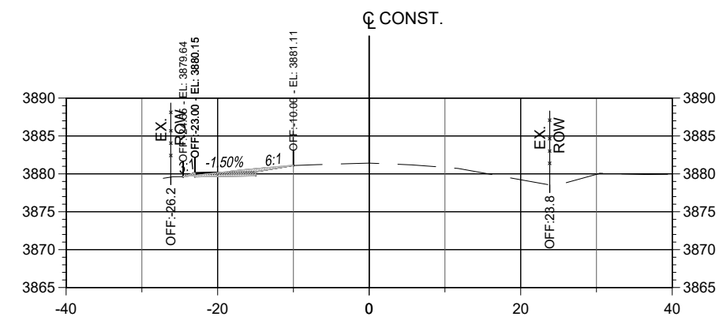
STA. 69+00

Total Volume at Station 67+50.00	
Cut Area	1.20
Fill Area	0.92
Cut Vol	4.68
Fill Vol	1.01
Cum Cut Vol	1207.72
Cum Fill Vol	15.13
Net Vol	1192.59



STA. 67+50

Total Volume at Station 68+00.00	
Cut Area	5.91
Fill Area	0.28
Cut Vol	6.58
Fill Vol	1.11
Cum Cut Vol	1214.30
Cum Fill Vol	16.24
Net Vol	1198.06



STA. 68+00

Horizontal Scale: 1"=20' Vertical Scale: 1"=5' PCN: LC00320 XSec

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01

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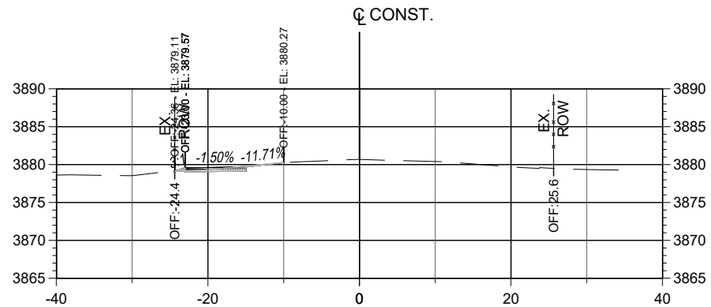
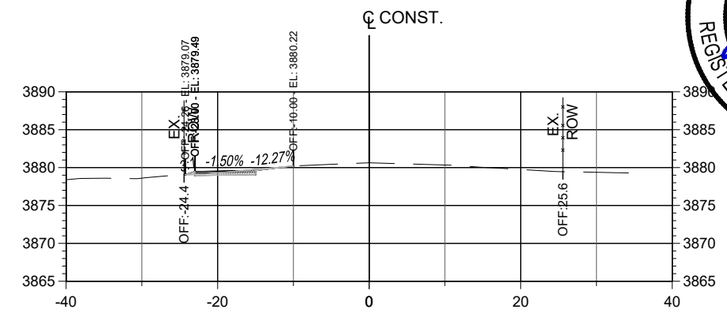
Total Volume at Station 72+50.00	
Cut Area	3.19
Fill Area	0.28
Cut Vol	5.05
Fill Vol	0.53
Cum Cut Vol	1284.31
Cum Fill Vol	21.59
Net Vol	1262.72



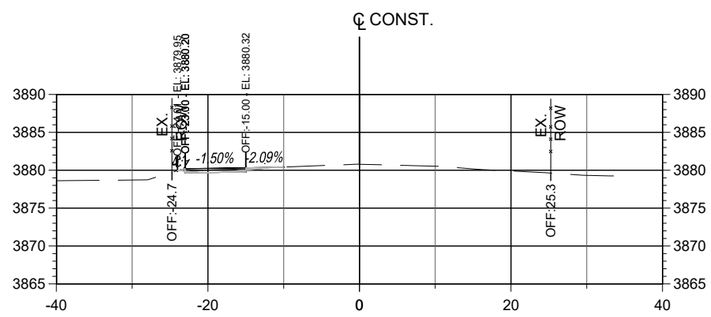
STA. 72+50

Total Volume at Station 73+00.00	
Cut Area	3.61
Fill Area	0.25
Cut Vol	6.30
Fill Vol	0.49
Cum Cut Vol	1290.62
Cum Fill Vol	22.08
Net Vol	1268.53



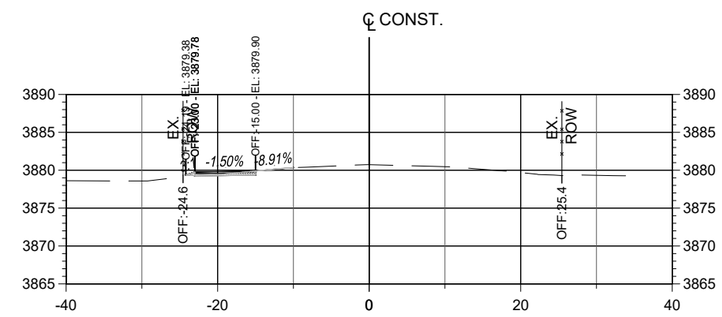
STA. 73+00

Total Volume at Station 71+50.00	
Cut Area	0.69
Fill Area	0.86
Cut Vol	5.92
Fill Vol	0.81
Cum Cut Vol	1276.54
Cum Fill Vol	20.00
Net Vol	1256.54



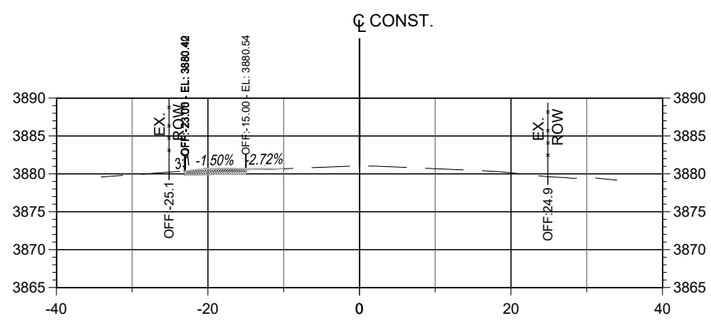
STA. 71+50

Total Volume at Station 72+00.00	
Cut Area	2.26
Fill Area	0.29
Cut Vol	2.73
Fill Vol	1.07
Cum Cut Vol	1279.26
Cum Fill Vol	21.06
Net Vol	1258.20



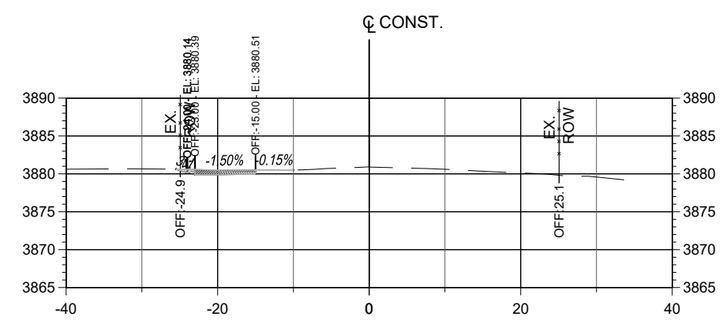
STA. 72+00

Total Volume at Station 70+50.00	
Cut Area	6.24
Fill Area	0.00
Cut Vol	7.79
Fill Vol	0.42
Cum Cut Vol	1259.55
Cum Fill Vol	19.16
Net Vol	1240.39



STA. 70+50

Total Volume at Station 71+00.00	
Cut Area	5.71
Fill Area	0.02
Cut Vol	11.06
Fill Vol	0.02
Cum Cut Vol	1270.61
Cum Fill Vol	19.18
Net Vol	1251.43



STA. 71+00

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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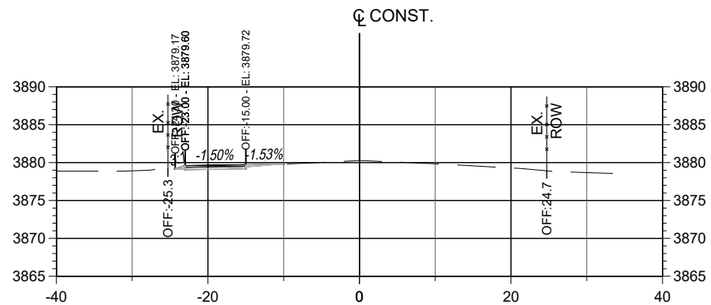
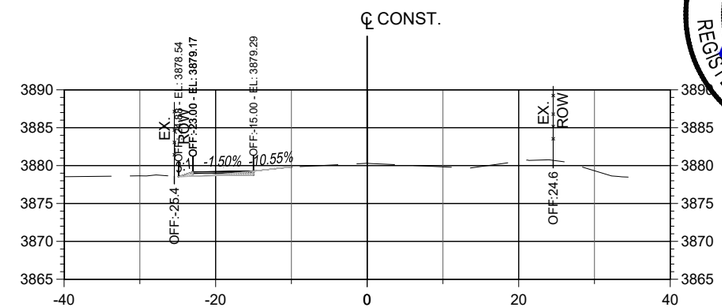
Total Volume at Station 75+50.00	
Cut Area	0.62
Fill Area	0.98
Cut Vol	3.71
Fill Vol	1.05
Cum Cut Vol	1323.57
Cum Fill Vol	24.47
Net Vol	1299.10



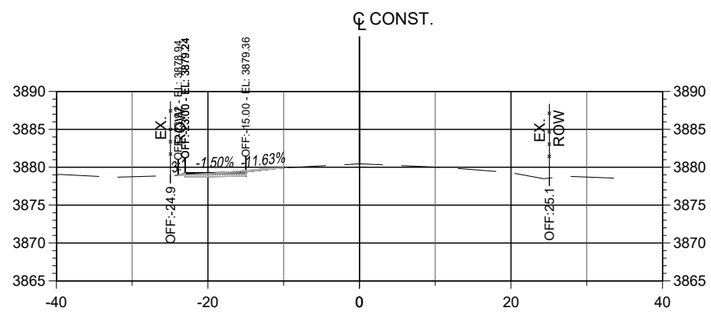
STA. 75+50

Total Volume at Station 76+00.00	
Cut Area	1.78
Fill Area	0.62
Cut Vol	2.23
Fill Vol	1.48
Cum Cut Vol	1325.79
Cum Fill Vol	25.95
Net Vol	1299.84



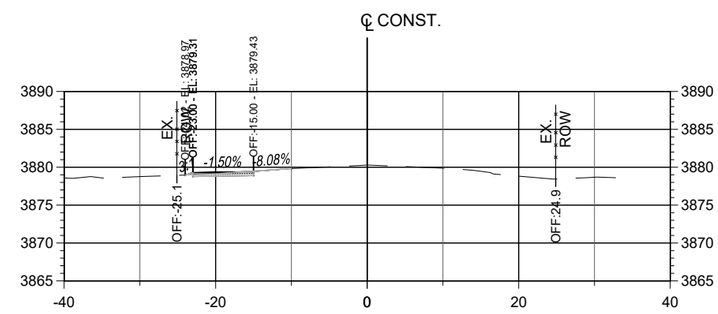
STA. 76+00

Total Volume at Station 74+50.00	
Cut Area	4.35
Fill Area	0.13
Cut Vol	7.71
Fill Vol	0.29
Cum Cut Vol	1312.70
Cum Fill Vol	23.16
Net Vol	1289.54



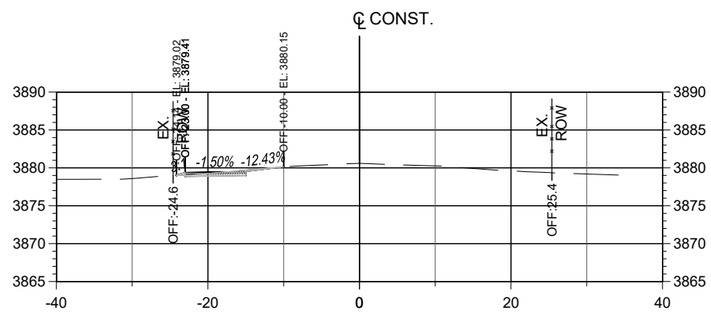
STA. 74+50

Total Volume at Station 75+00.00	
Cut Area	3.38
Fill Area	0.15
Cut Vol	7.16
Fill Vol	0.26
Cum Cut Vol	1319.86
Cum Fill Vol	23.42
Net Vol	1296.44



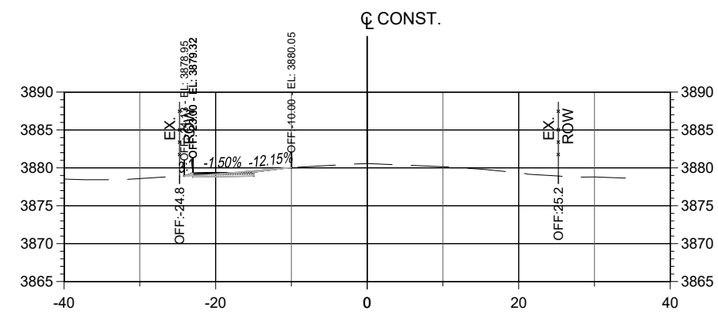
STA. 75+00

Total Volume at Station 73+50.00	
Cut Area	3.96
Fill Area	0.21
Cut Vol	7.02
Fill Vol	0.42
Cum Cut Vol	1297.63
Cum Fill Vol	22.50
Net Vol	1275.13



STA. 73+50

Total Volume at Station 74+00.00	
Cut Area	3.98
Fill Area	0.19
Cut Vol	7.36
Fill Vol	0.36
Cum Cut Vol	1304.99
Cum Fill Vol	22.87
Net Vol	1282.12



STA. 74+00

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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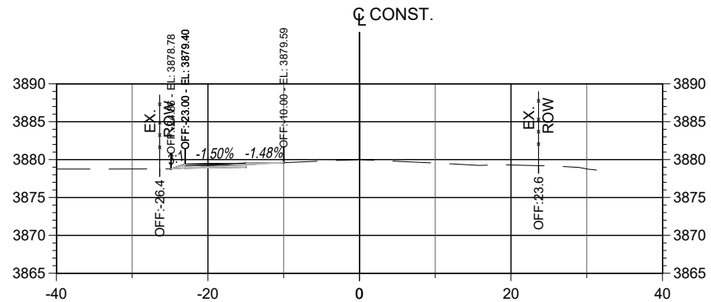
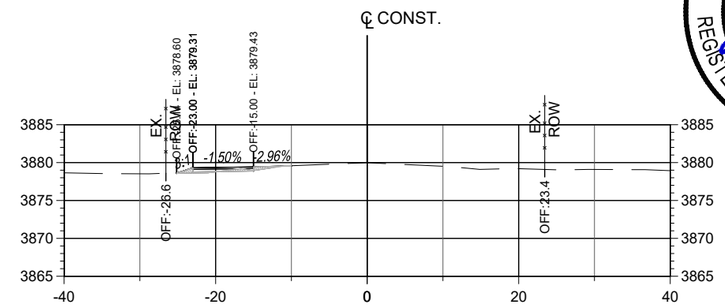
Total Volume at Station 78+50.00	
Cut Area	1.46
Fill Area	0.98
Cut Vol	2.42
Fill Vol	2.21
Cum Cut Vol	1336.29
Cum Fill Vol	36.67
Net Vol	1299.62



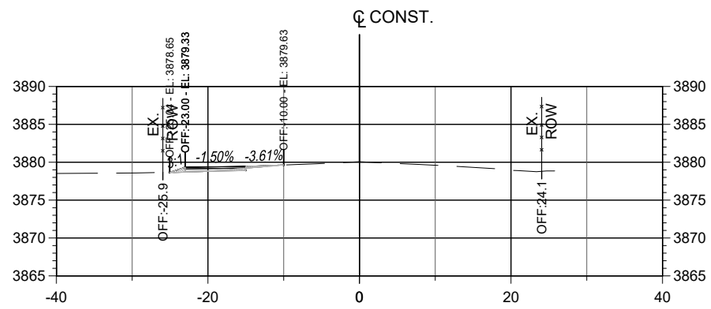
STA. 78+50

Total Volume at Station 79+00.00	
Cut Area	0.88
Fill Area	2.08
Cut Vol	2.16
Fill Vol	2.84
Cum Cut Vol	1338.45
Cum Fill Vol	39.51
Net Vol	1298.94



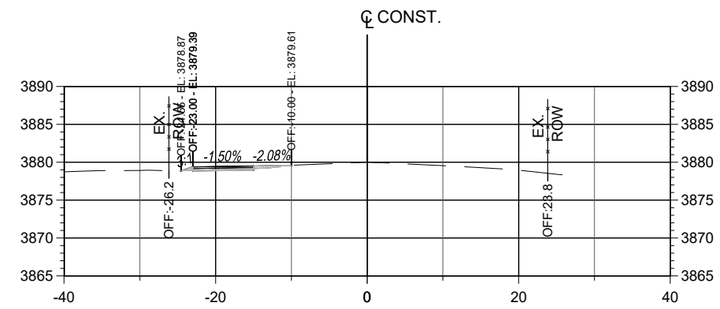
STA. 79+00

Total Volume at Station 77+50.00	
Cut Area	0.73
Fill Area	1.49
Cut Vol	1.71
Fill Vol	2.61
Cum Cut Vol	1332.13
Cum Fill Vol	31.79
Net Vol	1300.34



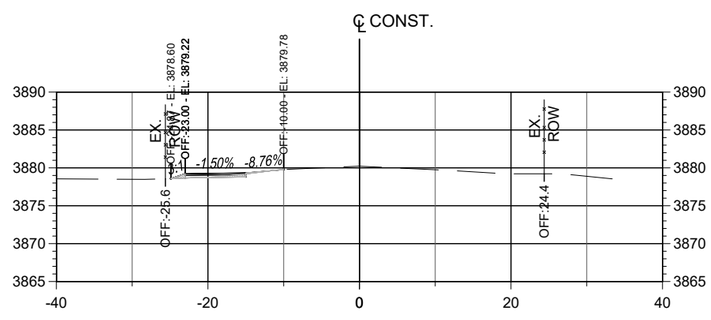
STA. 77+50

Total Volume at Station 78+00.00	
Cut Area	1.15
Fill Area	1.40
Cut Vol	1.74
Fill Vol	2.67
Cum Cut Vol	1333.87
Cum Fill Vol	34.46
Net Vol	1299.41



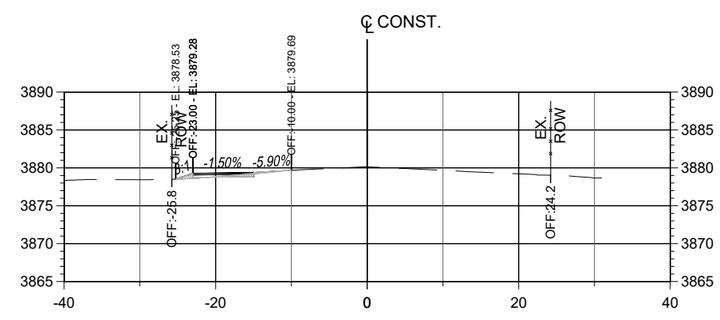
STA. 78+00

Total Volume at Station 76+50.00	
Cut Area	1.05
Fill Area	0.77
Cut Vol	2.62
Fill Vol	1.29
Cum Cut Vol	1328.41
Cum Fill Vol	27.24
Net Vol	1301.18



STA. 76+50

Total Volume at Station 77+00.00	
Cut Area	1.12
Fill Area	1.33
Cut Vol	2.01
Fill Vol	1.95
Cum Cut Vol	1330.43
Cum Fill Vol	29.18
Net Vol	1301.24



STA. 77+00

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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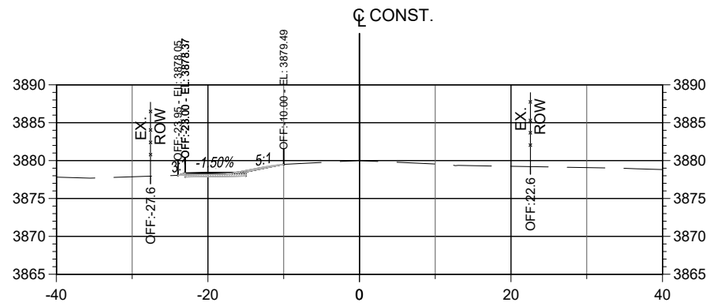
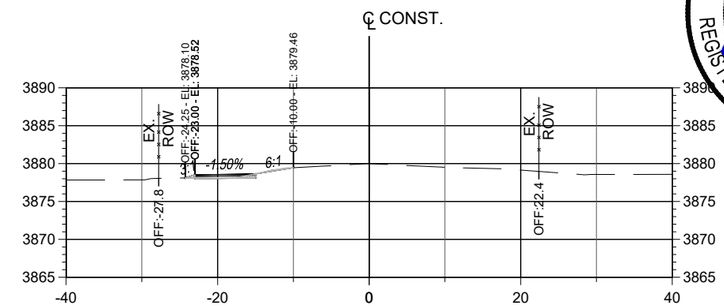
Total Volume at Station 81+50.00	
Cut Area	3.64
Fill Area	0.14
Cut Vol	8.74
Fill Vol	0.21
Cum Cut Vol	1361.51
Cum Fill Vol	50.45
Net Vol	1311.06



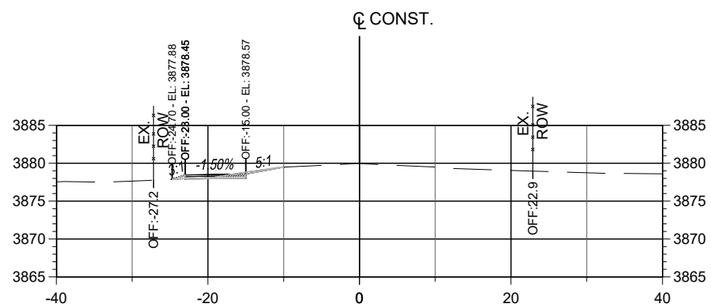
STA. 81+50

Total Volume at Station 82+00.00	
Cut Area	1.90
Fill Area	0.25
Cut Vol	5.13
Fill Vol	0.36
Cum Cut Vol	1366.64
Cum Fill Vol	50.81
Net Vol	1315.83



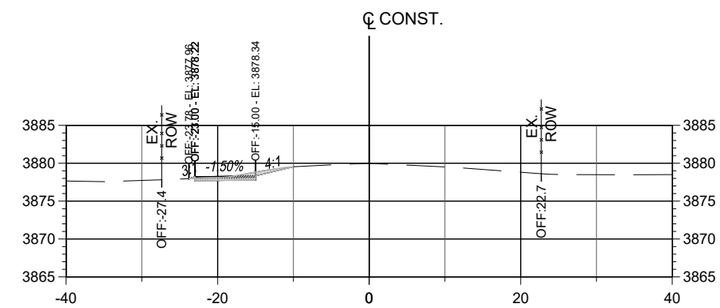
STA. 82+00

Total Volume at Station 80+50.00	
Cut Area	3.33
Fill Area	0.42
Cut Vol	3.13
Fill Vol	3.65
Cum Cut Vol	1344.31
Cum Fill Vol	49.77
Net Vol	1294.54



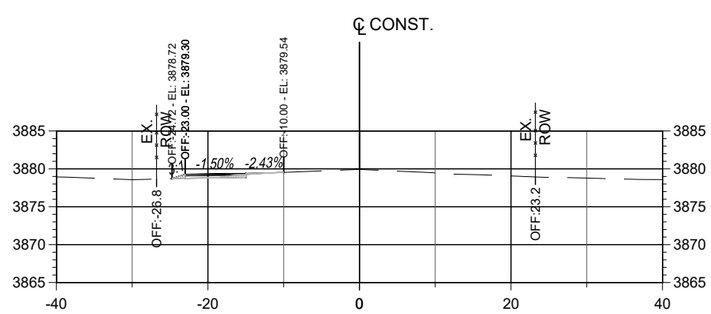
STA. 80+50

Total Volume at Station 81+00.00	
Cut Area	5.80
Fill Area	0.09
Cut Vol	8.46
Fill Vol	0.47
Cum Cut Vol	1352.77
Cum Fill Vol	50.24
Net Vol	1302.52



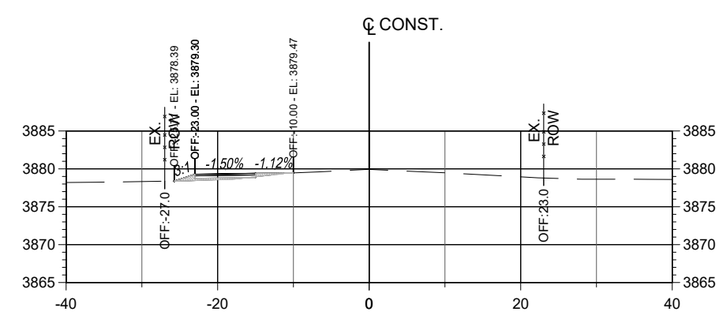
STA. 81+00

Total Volume at Station 79+50.00	
Cut Area	1.01
Fill Area	0.77
Cut Vol	1.75
Fill Vol	2.64
Cum Cut Vol	1340.20
Cum Fill Vol	42.15
Net Vol	1298.05



STA. 79+50

Total Volume at Station 80+00.00	
Cut Area	0.05
Fill Area	3.52
Cut Vol	0.98
Fill Vol	3.97
Cum Cut Vol	1341.18
Cum Fill Vol	46.12
Net Vol	1295.06



STA. 80+00

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01

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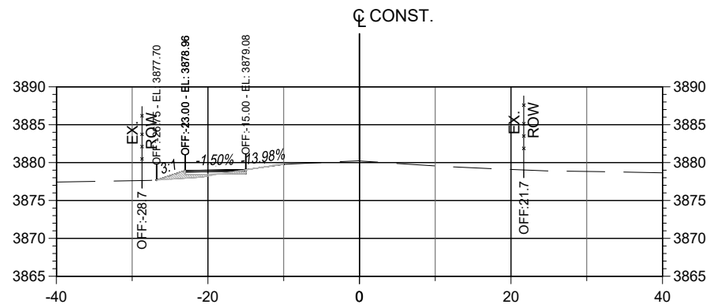
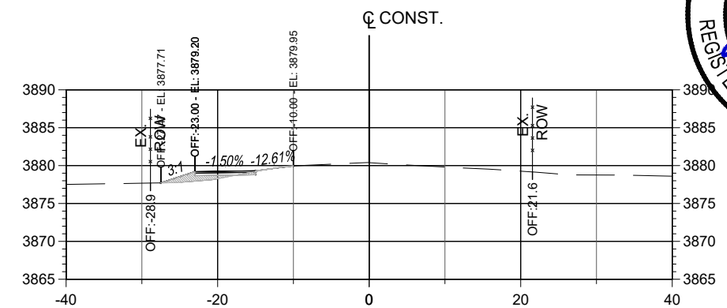
Total Volume at Station 84+50.00	
Cut Area	1.03
Fill Area	3.25
Cut Vol	3.35
Fill Vol	4.06
Cum Cut Vol	1380.52
Cum Fill Vol	64.24
Net Vol	1316.28



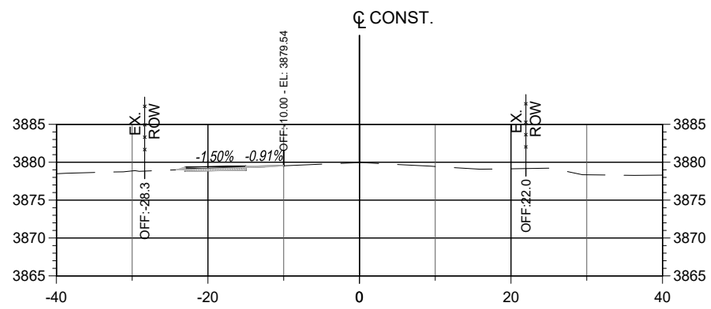
STA. 84+50

Total Volume at Station 85+00.00	
Cut Area	0.65
Fill Area	5.44
Cut Vol	1.56
Fill Vol	8.05
Cum Cut Vol	1382.08
Cum Fill Vol	72.29
Net Vol	1309.80



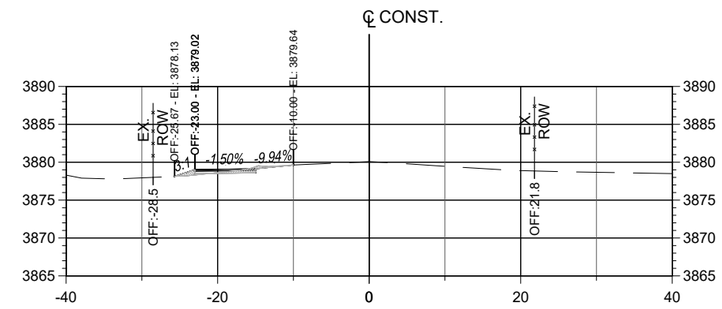
STA. 85+00

Total Volume at Station 83+50.00	
Cut Area	2.19
Fill Area	0.74
Cut Vol	2.53
Fill Vol	3.13
Cum Cut Vol	1372.75
Cum Fill Vol	58.45
Net Vol	1314.29



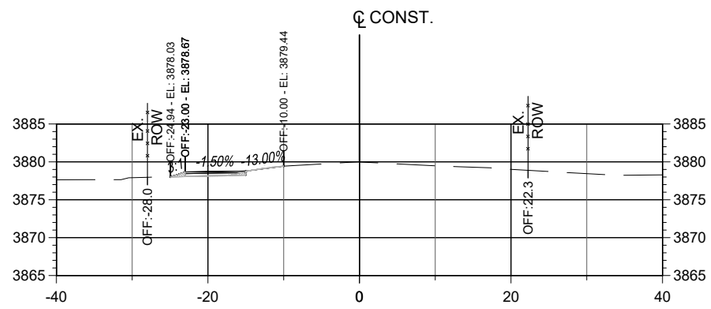
STA. 83+50

Total Volume at Station 84+00.00	
Cut Area	2.59
Fill Area	1.13
Cut Vol	4.42
Fill Vol	1.73
Cum Cut Vol	1377.17
Cum Fill Vol	60.18
Net Vol	1316.99



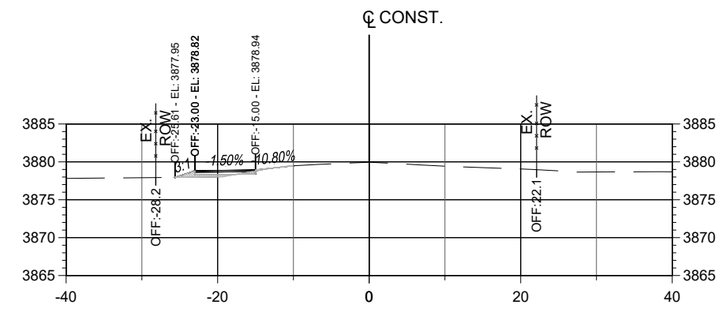
STA. 84+00

Total Volume at Station 82+50.00	
Cut Area	0.71
Fill Area	0.99
Cut Vol	2.42
Fill Vol	1.15
Cum Cut Vol	1369.05
Cum Fill Vol	51.96
Net Vol	1317.09



STA. 82+50

Total Volume at Station 83+00.00	
Cut Area	0.55
Fill Area	2.64
Cut Vol	1.16
Fill Vol	3.37
Cum Cut Vol	1370.21
Cum Fill Vol	55.33
Net Vol	1314.88



STA. 83+00

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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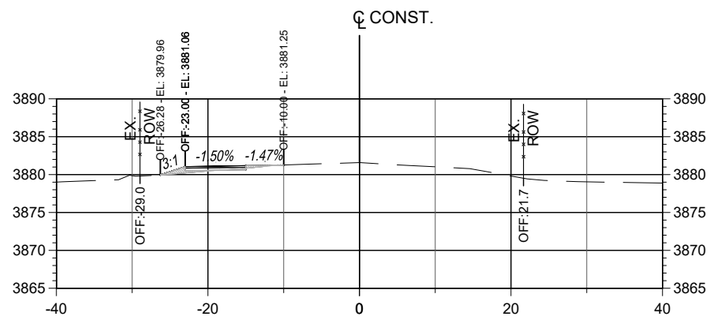
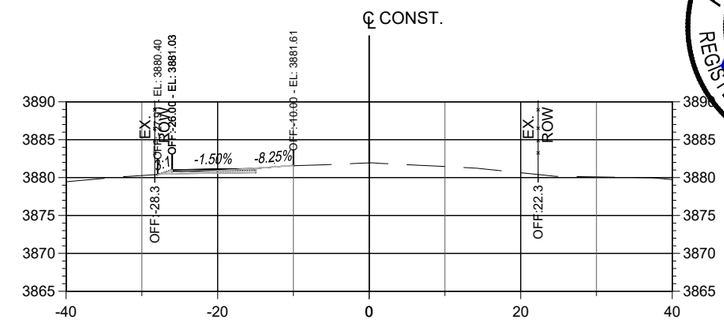
Total Volume at Station 87+50.00	
Cut Area	0.30
Fill Area	2.73
Cut Vol	5.15
Fill Vol	4.58
Cum Cut Vol	1399.70
Cum Fill Vol	116.37
Net Vol	1283.33



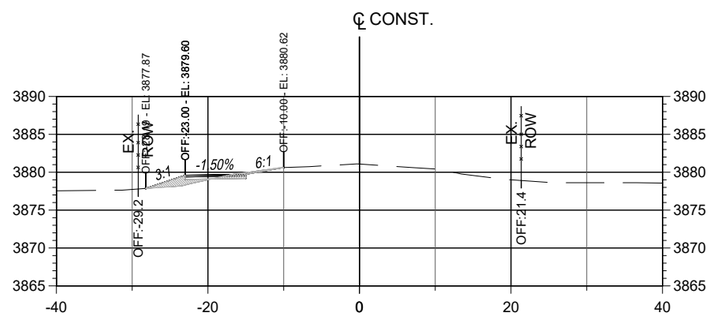
STA. 87+50

Total Volume at Station 88+00.00	
Cut Area	3.36
Fill Area	0.55
Cut Vol	3.39
Fill Vol	3.04
Cum Cut Vol	1403.09
Cum Fill Vol	119.41
Net Vol	1283.68



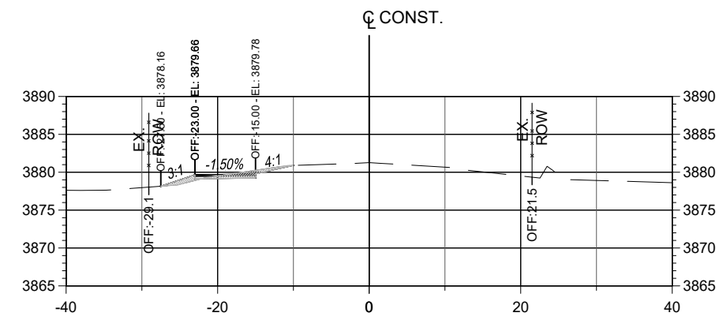
STA. 88+00

Total Volume at Station 86+50.00	
Cut Area	2.62
Fill Area	4.83
Cut Vol	3.18
Fill Vol	10.35
Cum Cut Vol	1387.24
Cum Fill Vol	105.27
Net Vol	1281.97



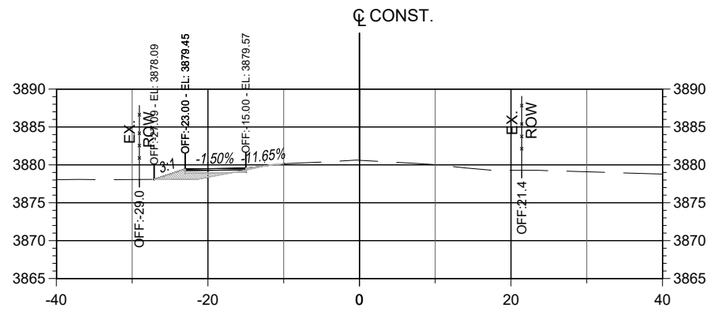
STA. 86+50

Total Volume at Station 87+00.00	
Cut Area	5.27
Fill Area	2.22
Cut Vol	7.31
Fill Vol	6.52
Cum Cut Vol	1394.55
Cum Fill Vol	111.79
Net Vol	1282.76



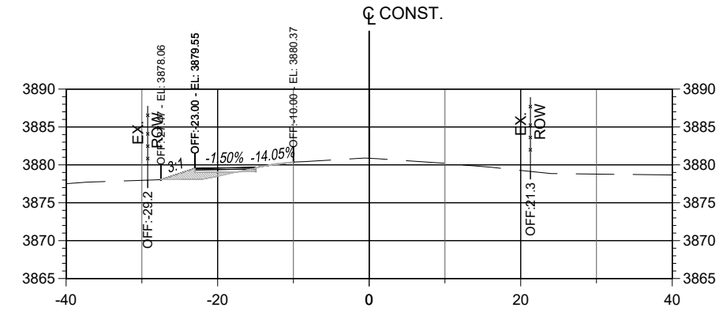
STA. 87+00

Total Volume at Station 85+50.00	
Cut Area	0.34
Fill Area	6.33
Cut Vol	0.92
Fill Vol	10.89
Cum Cut Vol	1383.00
Cum Fill Vol	83.18
Net Vol	1299.82



STA. 85+50

Total Volume at Station 86+00.00	
Cut Area	0.81
Fill Area	6.35
Cut Vol	1.06
Fill Vol	11.74
Cum Cut Vol	1384.06
Cum Fill Vol	94.92
Net Vol	1289.14



STA. 86+00

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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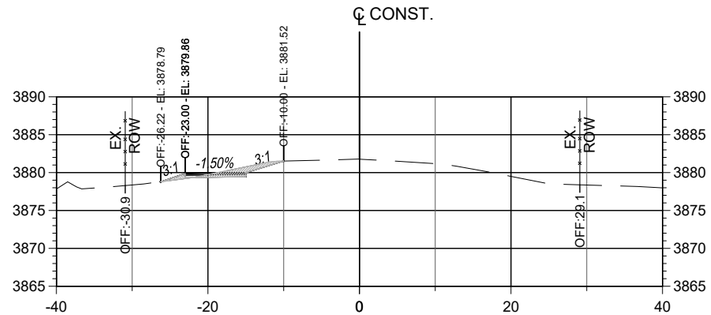
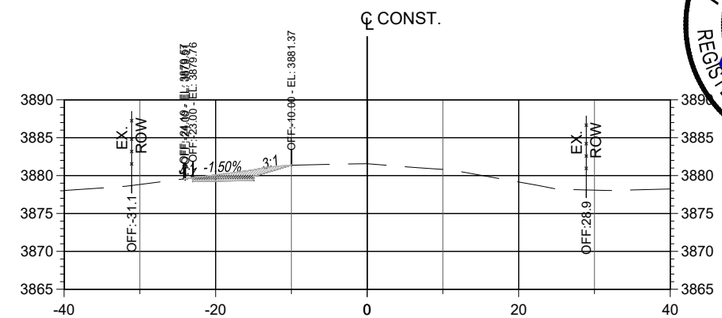
Total Volume at Station 90+50.00	
Cut Area	6.96
Fill Area	1.13
Cut Vol	11.81
Fill Vol	3.05
Cum Cut Vol	1466.94
Cum Fill Vol	144.80
Net Vol	1322.14



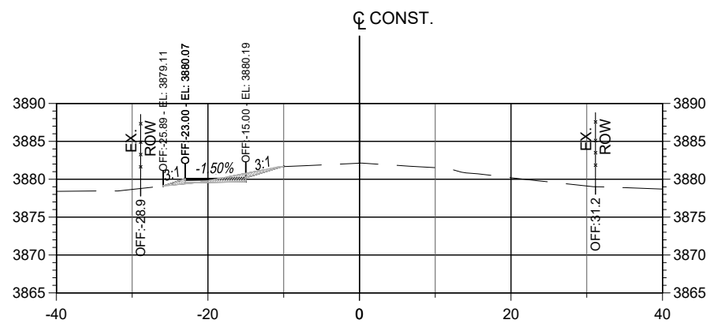
STA. 90+50

Total Volume at Station 91+00.00	
Cut Area	10.29
Fill Area	0.00
Cut Vol	15.98
Fill Vol	1.05
Cum Cut Vol	1482.92
Cum Fill Vol	145.85
Net Vol	1337.07



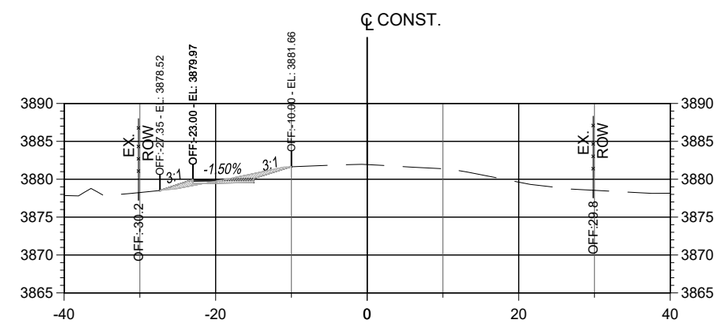
STA. 91+00

Total Volume at Station 89+50.00	
Cut Area	5.15
Fill Area	1.11
Cut Vol	4.77
Fill Vol	9.91
Cum Cut Vol	1445.00
Cum Fill Vol	138.71
Net Vol	1306.29



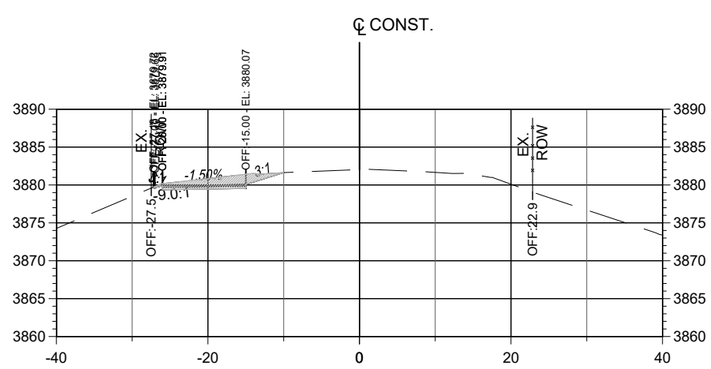
STA. 89+50

Total Volume at Station 90+00.00	
Cut Area	5.79
Fill Area	2.17
Cut Vol	10.13
Fill Vol	3.03
Cum Cut Vol	1455.13
Cum Fill Vol	141.75
Net Vol	1313.38



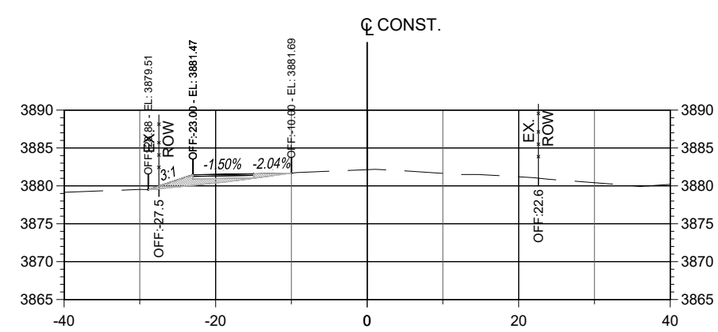
STA. 90+00

Total Volume at Station 88+50.00	
Cut Area	18.38
Fill Area	0.00
Cut Vol	20.13
Fill Vol	0.51
Cum Cut Vol	1423.22
Cum Fill Vol	119.92
Net Vol	1303.30



STA. 88+50

Total Volume at Station 89+00.00	
Cut Area	0.00
Fill Area	9.59
Cut Vol	17.02
Fill Vol	8.88
Cum Cut Vol	1440.24
Cum Fill Vol	128.81
Net Vol	1311.43



STA. 89+00

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

Alignment: LC00320_CL01 Station Range:17+50 THRU 103+52

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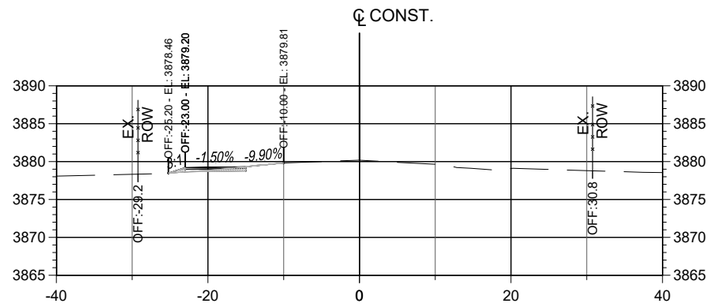
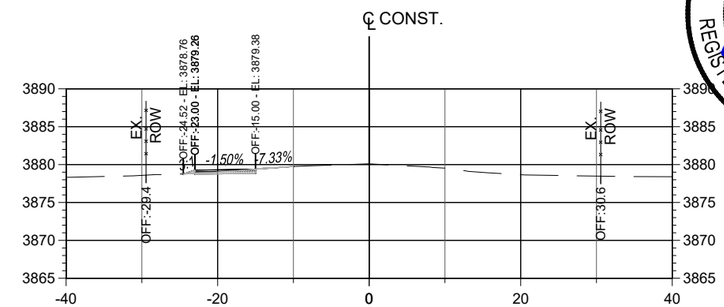
Total Volume at Station 93+50.00	
Cut Area	2.10
Fill Area	0.61
Cut Vol	4.91
Fill Vol	0.89
Cum Cut Vol	1527.86
Cum Fill Vol	155.90
Net Vol	1371.96



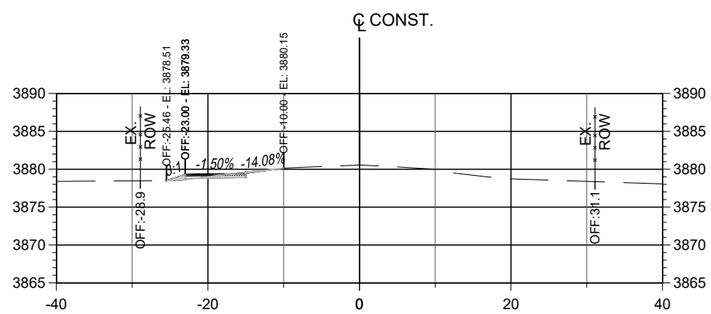
STA. 93+50

Total Volume at Station 94+00.00	
Cut Area	2.67
Fill Area	0.32
Cut Vol	4.42
Fill Vol	0.87
Cum Cut Vol	1532.28
Cum Fill Vol	156.77
Net Vol	1375.51



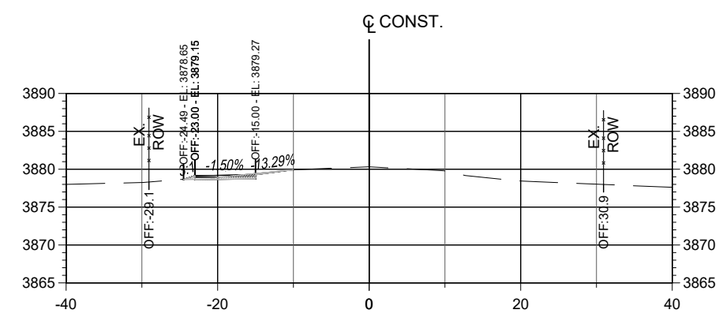
STA. 94+00

Total Volume at Station 92+50.00	
Cut Area	3.12
Fill Area	1.06
Cut Vol	3.90
Fill Vol	4.40
Cum Cut Vol	1517.09
Cum Fill Vol	153.71
Net Vol	1363.38



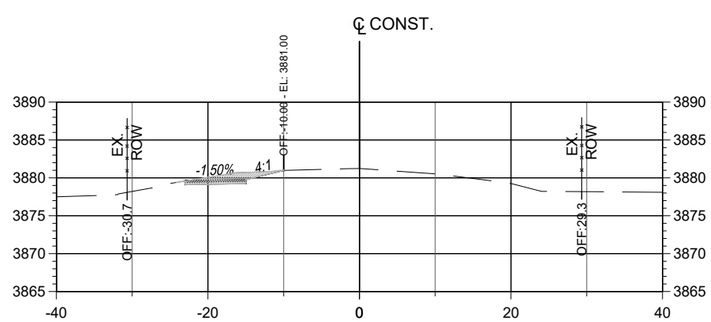
STA. 92+50

Total Volume at Station 93+00.00	
Cut Area	3.20
Fill Area	0.34
Cut Vol	5.86
Fill Vol	1.30
Cum Cut Vol	1522.95
Cum Fill Vol	155.02
Net Vol	1367.93



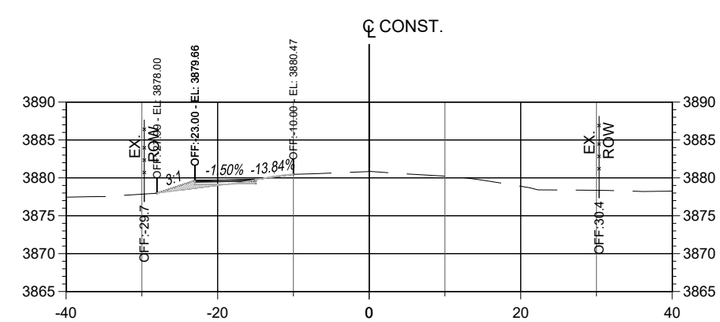
STA. 93+00

Total Volume at Station 91+50.00	
Cut Area	10.66
Fill Area	0.02
Cut Vol	19.40
Fill Vol	0.03
Cum Cut Vol	1502.32
Cum Fill Vol	145.88
Net Vol	1356.45



STA. 91+50

Total Volume at Station 92+00.00	
Cut Area	1.08
Fill Area	3.69
Cut Vol	10.88
Fill Vol	3.44
Cum Cut Vol	1513.20
Cum Fill Vol	149.31
Net Vol	1363.88



STA. 92+00

Station Range:17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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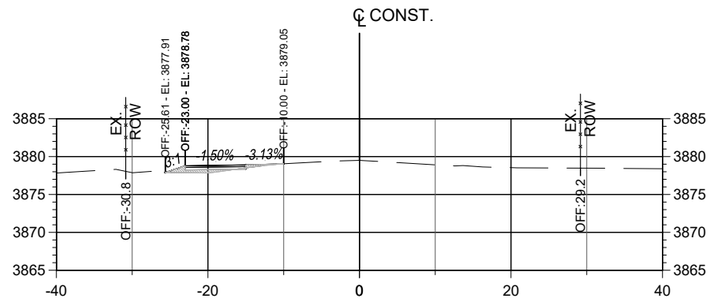
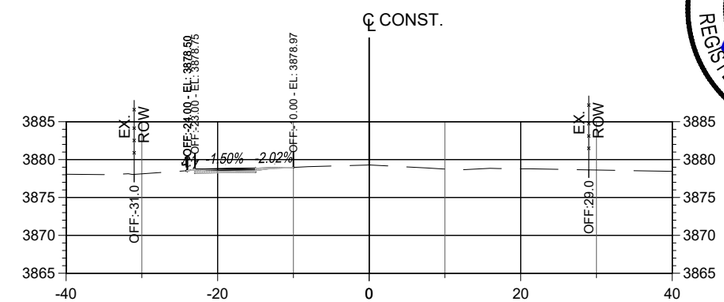
Total Volume at Station 96+50.00	
Cut Area	0.10
Fill Area	4.16
Cut Vol	0.12
Fill Vol	8.83
Cum Cut Vol	1537.43
Cum Fill Vol	183.23
Net Vol	1354.20



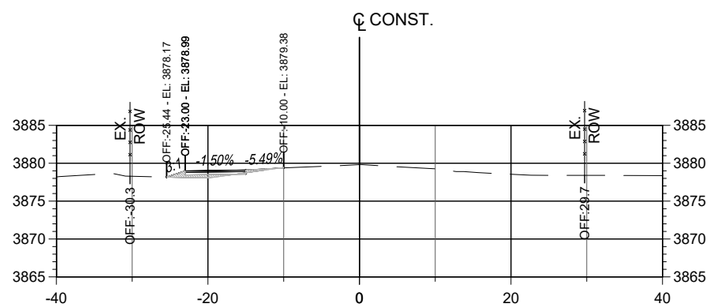
STA. 96+50

Total Volume at Station 97+00.00	
Cut Area	1.75
Fill Area	0.68
Cut Vol	1.72
Fill Vol	4.48
Cum Cut Vol	1539.15
Cum Fill Vol	187.71
Net Vol	1351.44



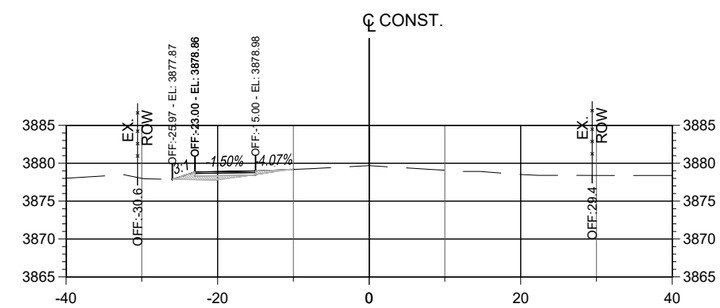
STA. 97+00

Total Volume at Station 95+50.00	
Cut Area	0.12
Fill Area	3.81
Cut Vol	0.67
Fill Vol	4.93
Cum Cut Vol	1537.17
Cum Fill Vol	165.90
Net Vol	1371.27



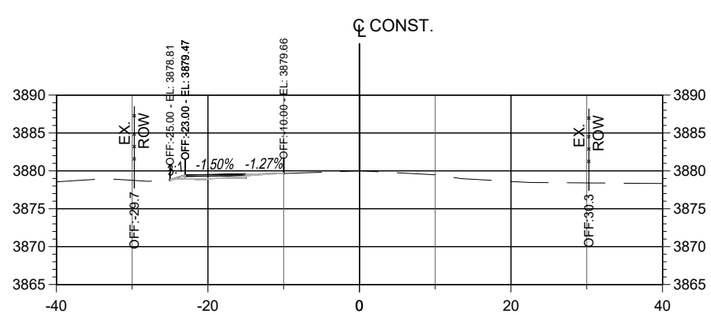
STA. 95+50

Total Volume at Station 96+00.00	
Cut Area	0.02
Fill Area	5.37
Cut Vol	0.14
Fill Vol	8.50
Cum Cut Vol	1537.31
Cum Fill Vol	174.40
Net Vol	1362.91



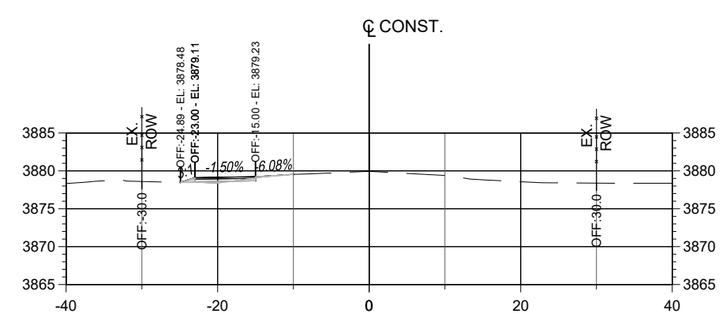
STA. 96+00

Total Volume at Station 94+50.00	
Cut Area	0.65
Fill Area	1.34
Cut Vol	3.07
Fill Vol	1.54
Cum Cut Vol	1535.35
Cum Fill Vol	158.31
Net Vol	1377.04



STA. 94+50

Total Volume at Station 95+00.00	
Cut Area	0.60
Fill Area	1.52
Cut Vol	1.15
Fill Vol	2.65
Cum Cut Vol	1536.51
Cum Fill Vol	160.96
Net Vol	1375.54



STA. 95+00

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01

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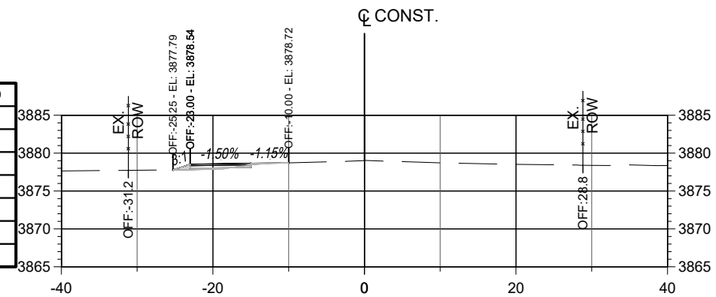
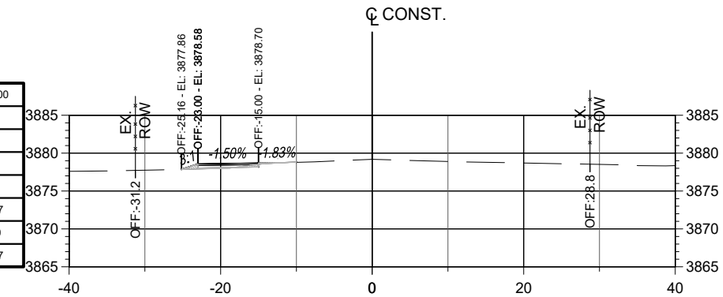
7/30/19

Total Volume at Station 99+50.00	
Cut Area	0.44
Fill Area	2.01
Cut Vol	0.73
Fill Vol	3.47
Cum Cut Vol	1543.02
Cum Fill Vol	206.04
Net Vol	1336.98



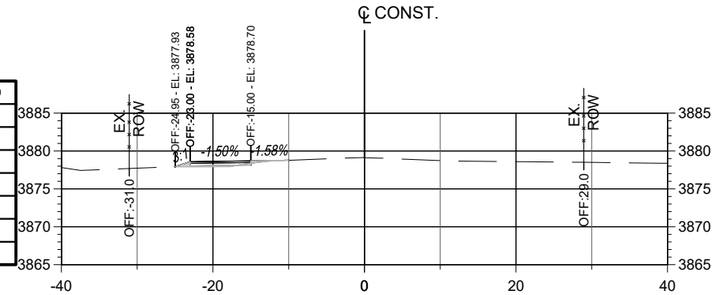
STA. 99+50

Total Volume at Station 100+00.00	
Cut Area	0.59
Fill Area	1.52
Cut Vol	0.96
Fill Vol	3.26
Cum Cut Vol	1543.97
Cum Fill Vol	209.30
Net Vol	1334.67



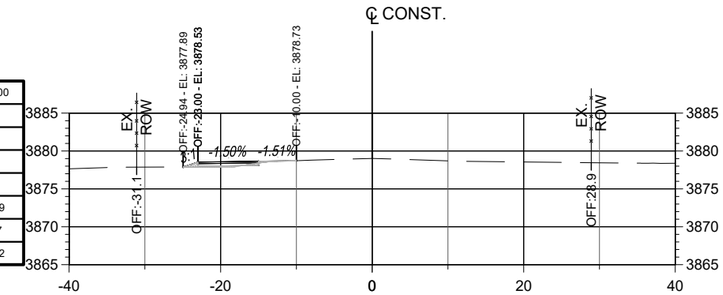
STA. 100+00

Total Volume at Station 98+50.00	
Cut Area	0.22
Fill Area	2.00
Cut Vol	0.32
Fill Vol	4.40
Cum Cut Vol	1541.77
Cum Fill Vol	199.10
Net Vol	1342.66



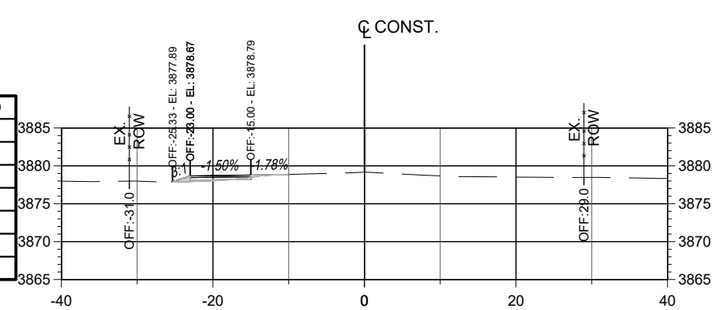
STA. 98+50

Total Volume at Station 99+00.00	
Cut Area	0.34
Fill Area	1.74
Cut Vol	0.52
Fill Vol	3.46
Cum Cut Vol	1542.29
Cum Fill Vol	202.57
Net Vol	1339.72



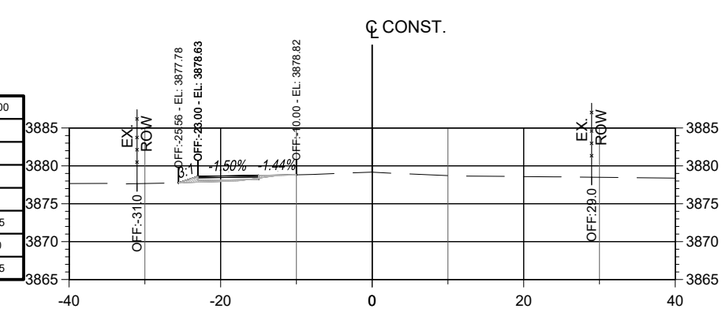
STA. 99+00

Total Volume at Station 97+50.00	
Cut Area	0.31
Fill Area	2.06
Cut Vol	1.91
Fill Vol	2.54
Cum Cut Vol	1541.05
Cum Fill Vol	190.24
Net Vol	1350.81



STA. 97+50

Total Volume at Station 98+00.00	
Cut Area	0.12
Fill Area	2.75
Cut Vol	0.40
Fill Vol	4.46
Cum Cut Vol	1541.45
Cum Fill Vol	194.70
Net Vol	1346.75



STA. 98+00

Station Range:17+50 THRU 103+52

Alignment: LC00320_CL01

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

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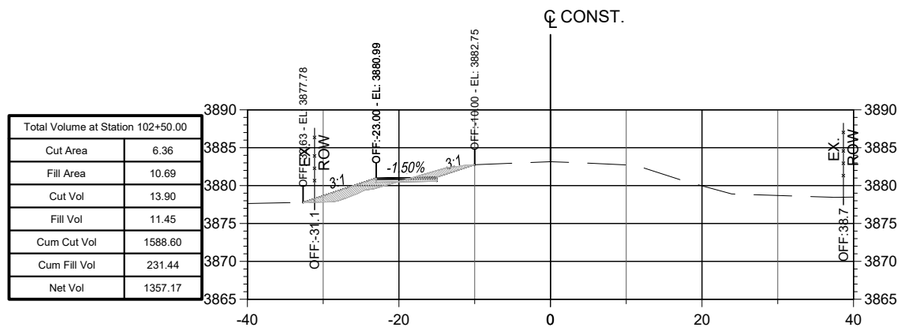
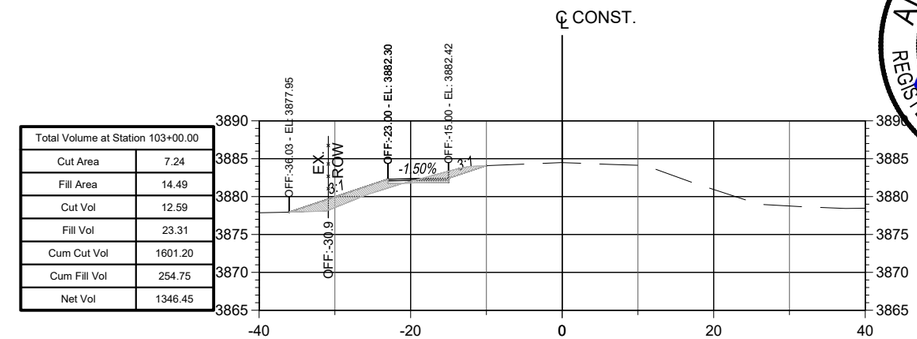


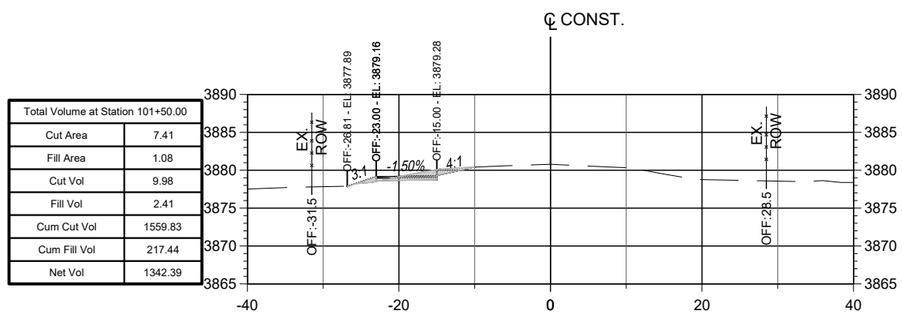
Total Volume at Station 102+50.00	
Cut Area	6.36
Fill Area	10.69
Cut Vol	13.90
Fill Vol	11.45
Cum Cut Vol	1588.60
Cum Fill Vol	231.44
Net Vol	1357.17

STA. 102+50



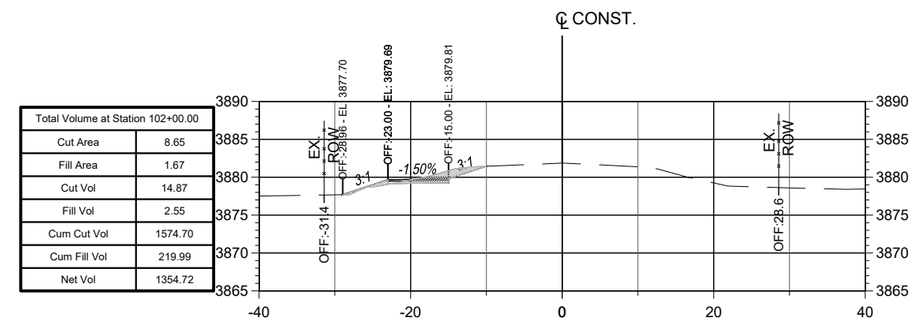
Total Volume at Station 103+00.00	
Cut Area	7.24
Fill Area	14.49
Cut Vol	12.59
Fill Vol	23.31
Cum Cut Vol	1601.20
Cum Fill Vol	254.75
Net Vol	1346.45

STA. 103+00



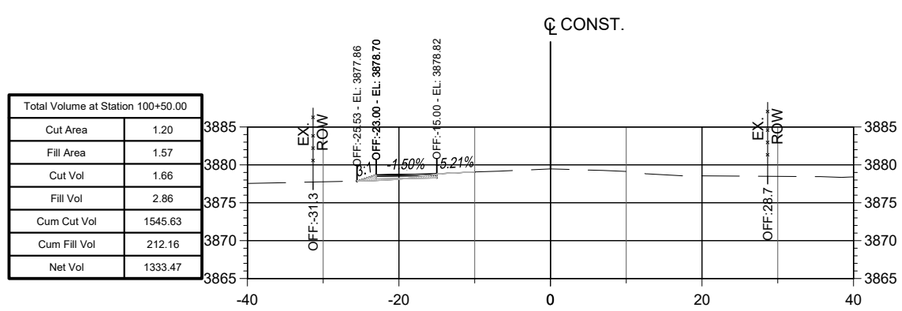
Total Volume at Station 101+50.00	
Cut Area	7.41
Fill Area	1.08
Cut Vol	9.98
Fill Vol	2.41
Cum Cut Vol	1559.83
Cum Fill Vol	217.44
Net Vol	1342.39

STA. 101+50

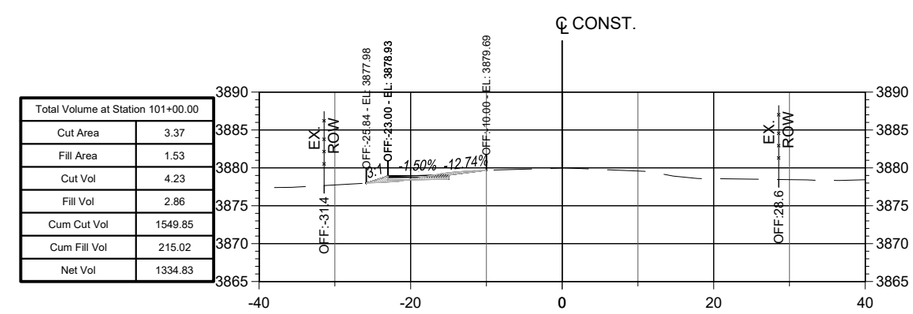


Total Volume at Station 102+00.00	
Cut Area	8.65
Fill Area	1.67
Cut Vol	14.87
Fill Vol	2.55
Cum Cut Vol	1574.70
Cum Fill Vol	219.99
Net Vol	1354.72

STA. 102+00



STA. 100+50



Total Volume at Station 101+00.00	
Cut Area	3.37
Fill Area	1.53
Cut Vol	4.23
Fill Vol	2.86
Cum Cut Vol	1549.85
Cum Fill Vol	215.02
Net Vol	1334.83

STA. 101+00

Horizontal Scale: 1"=20' Vertical Scale: 1"=5' PCN: LC00320 XSec

Station Range:17+50 THRU 103+52

Alignment: LC00320_CL01

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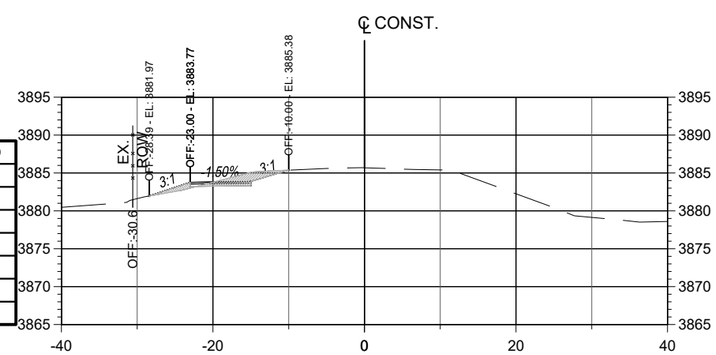
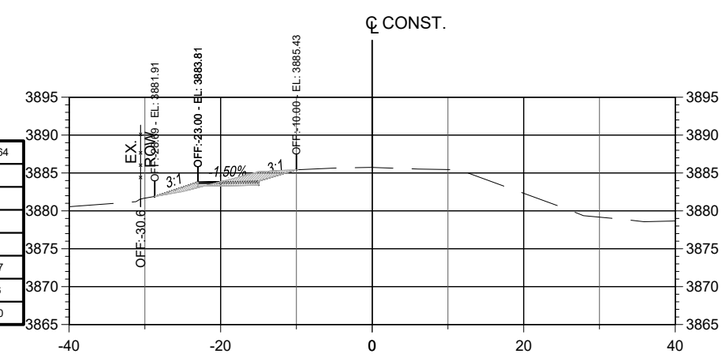


Total Volume at Station 103+50.00	
Cut Area	9.28
Fill Area	2.33
Cut Vol	15.30
Fill Vol	15.57
Cum Cut Vol	1616.50
Cum Fill Vol	270.32
Net Vol	1346.18

STA. 103+50



Total Volume at Station 103+51.64	
Cut Area	9.42
Fill Area	2.48
Cut Vol	0.57
Fill Vol	0.15
Cum Cut Vol	1617.07
Cum Fill Vol	270.46
Net Vol	1346.60

STA. 103+52

Horizontal Scale: 1"=20' | Vertical Scale: 1"=5' | PCN: LC00320 | XSec

Station Range: 17+50 THRU 103+52

Alignment: LC00320_CL01