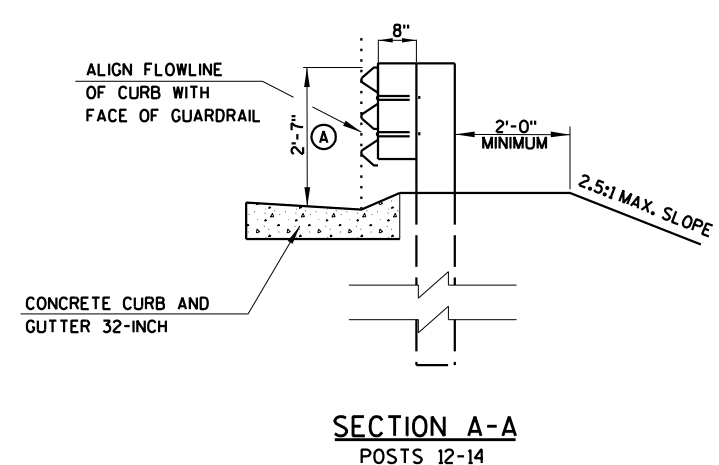


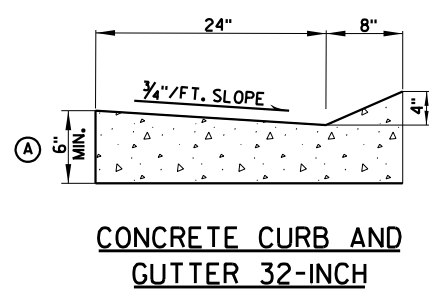
Ⓐ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1".

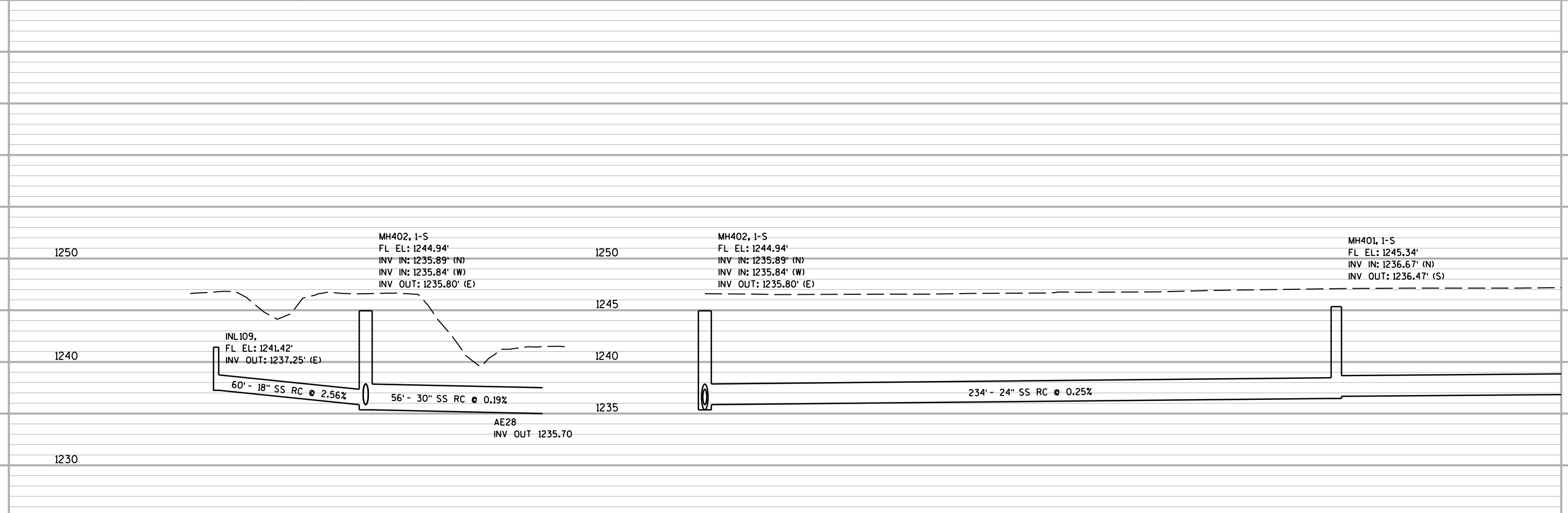
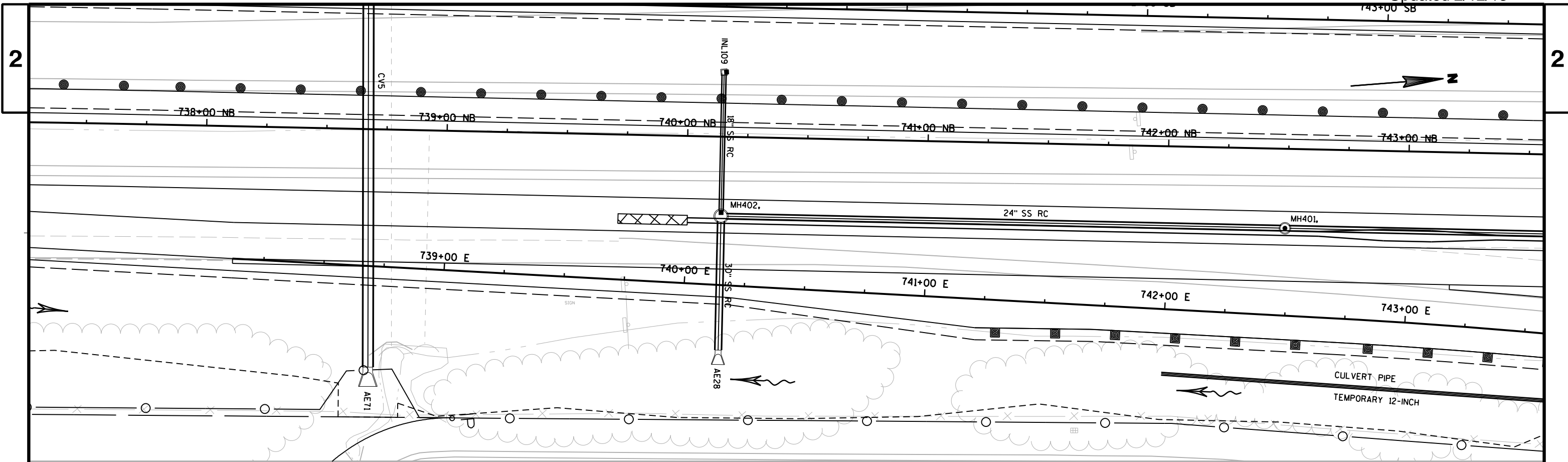
UTILIZE INLET COVER TYPE V, PLACED ON INLETS 2X2.5 FT. LOCATION FOR THE DRAINAGE STRUCTURE IS WHERE THE POST SPACING IS 3'-1/2" BETWEEN POSTS 13 AND 12.

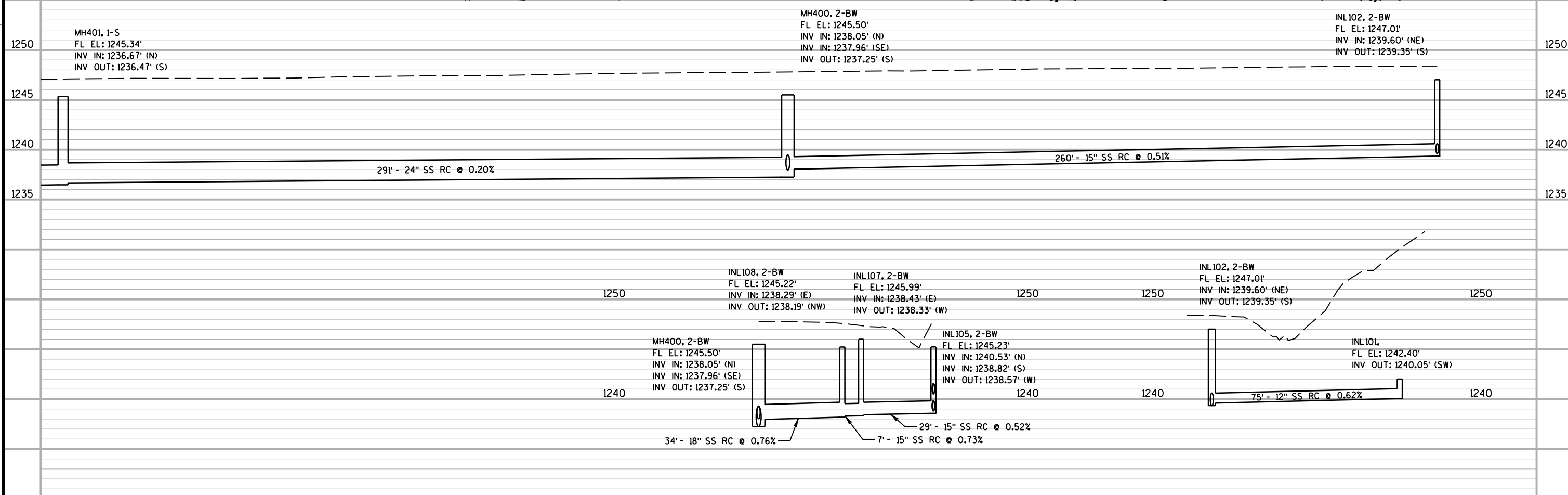
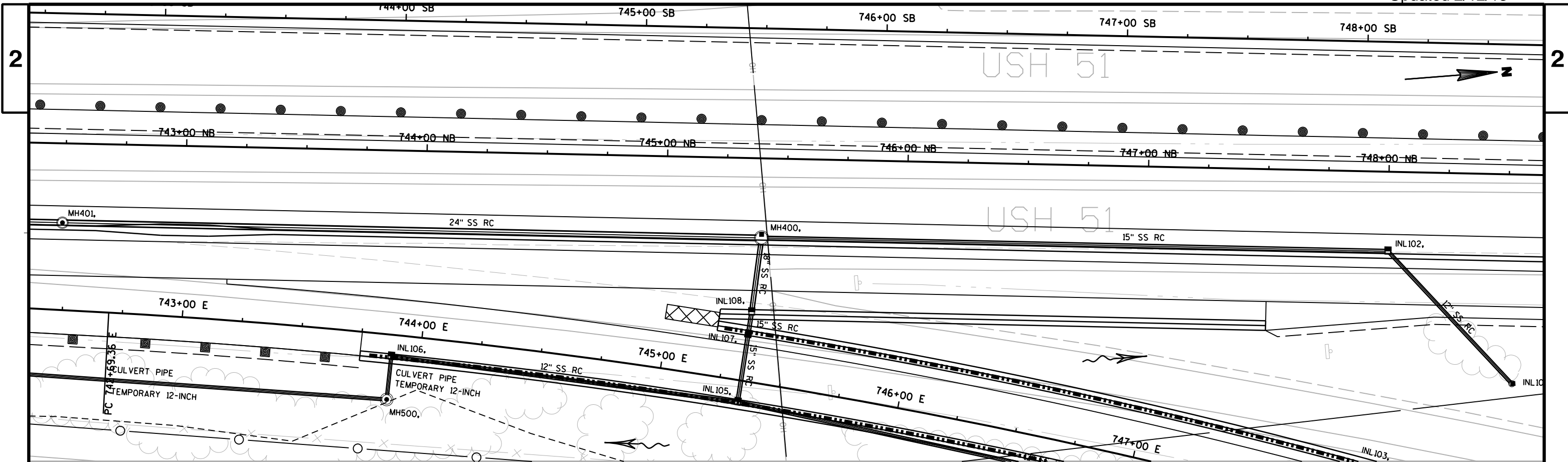
SEE MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL AND MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS) DETAILS WHEN NECESSARY

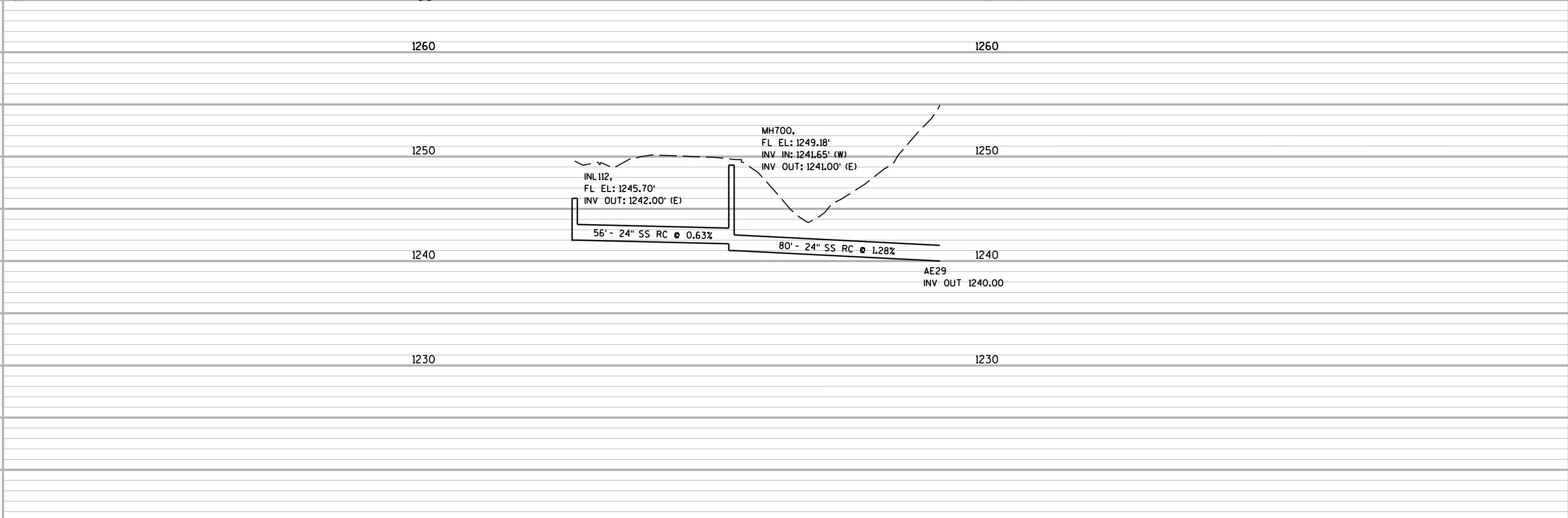
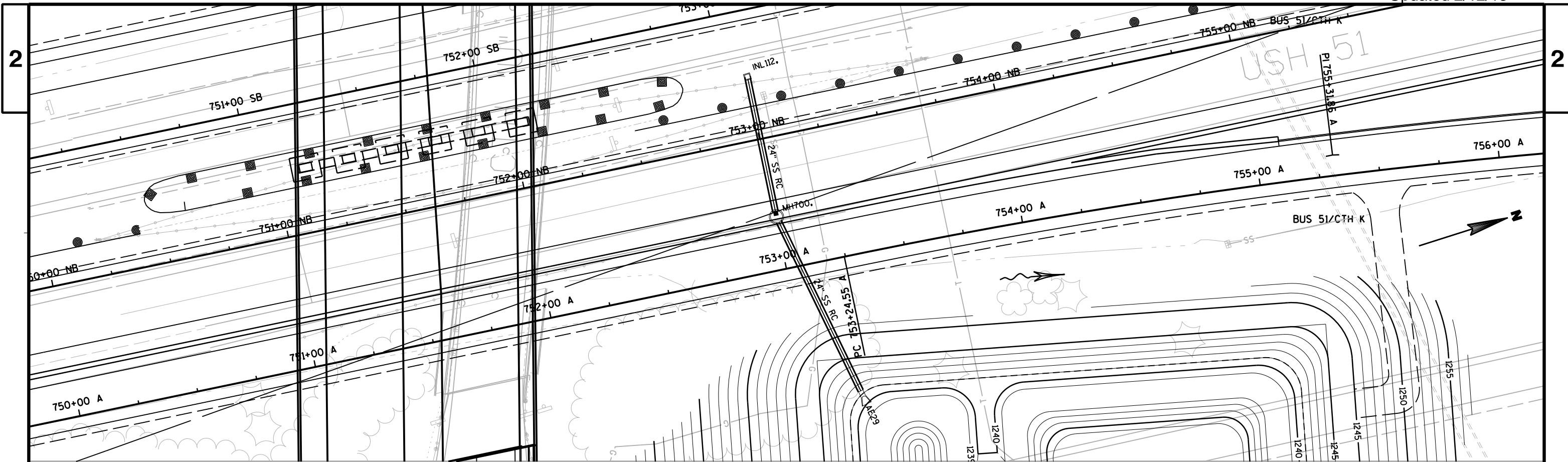


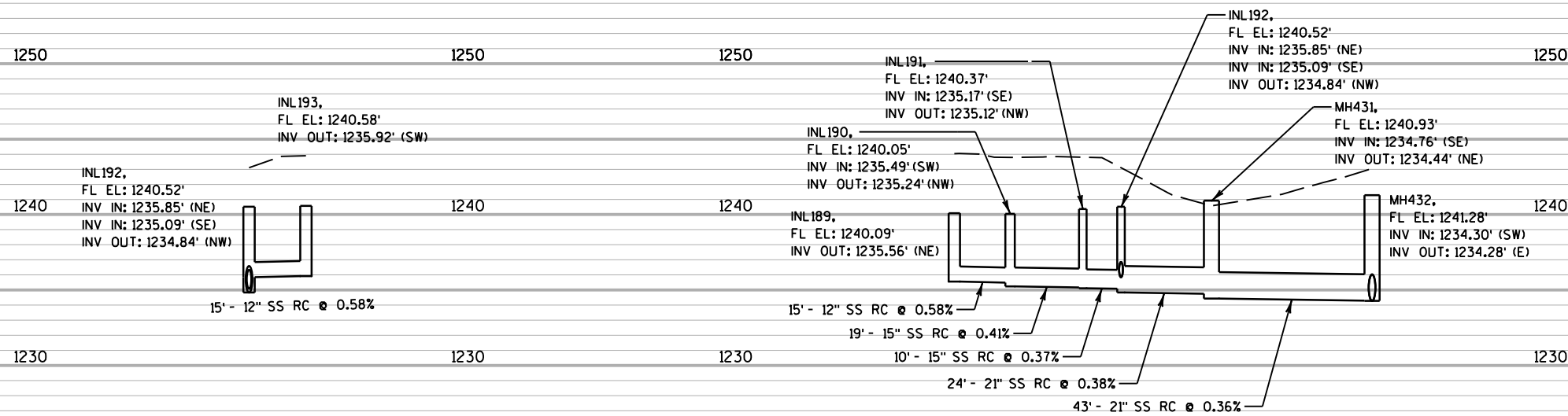
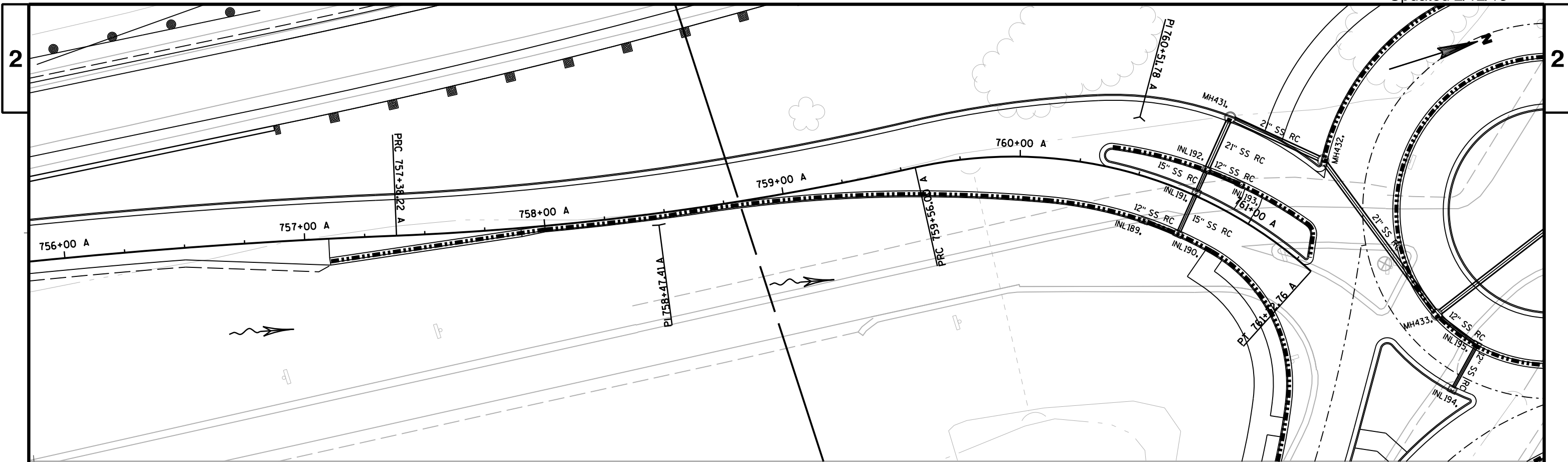
Ⓐ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

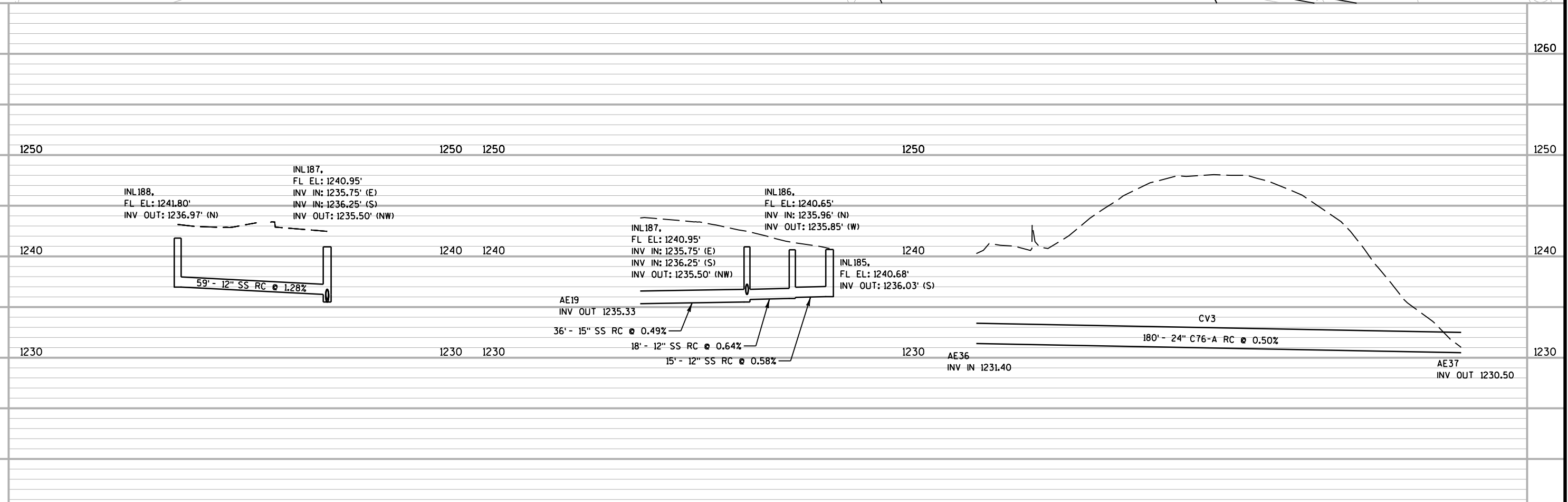
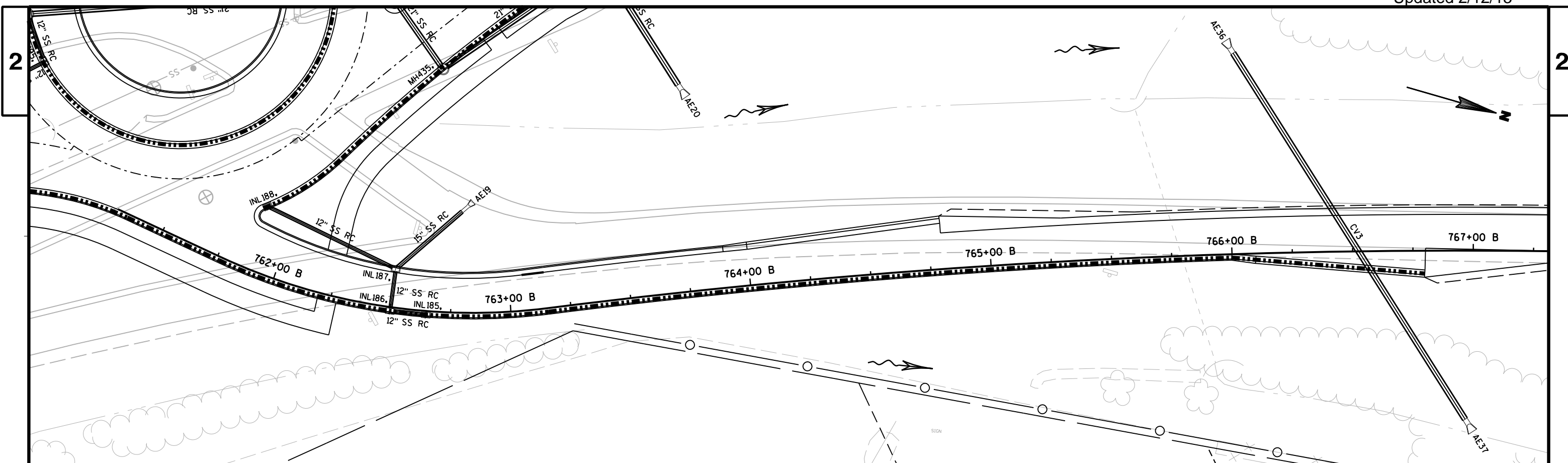


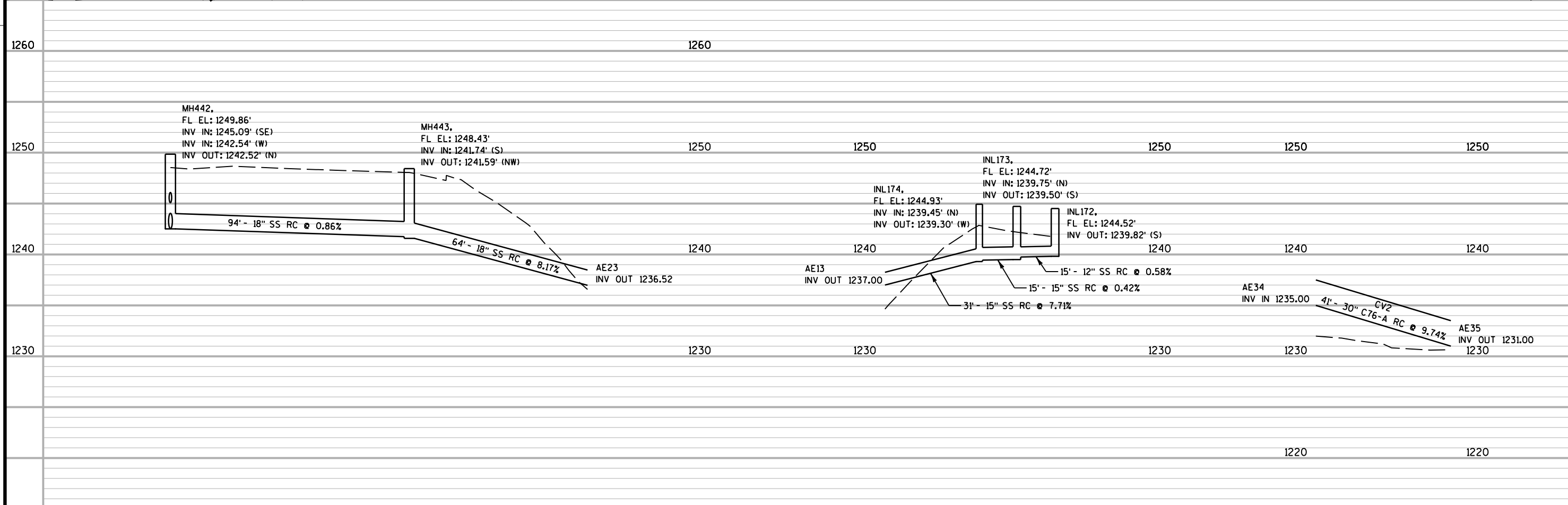
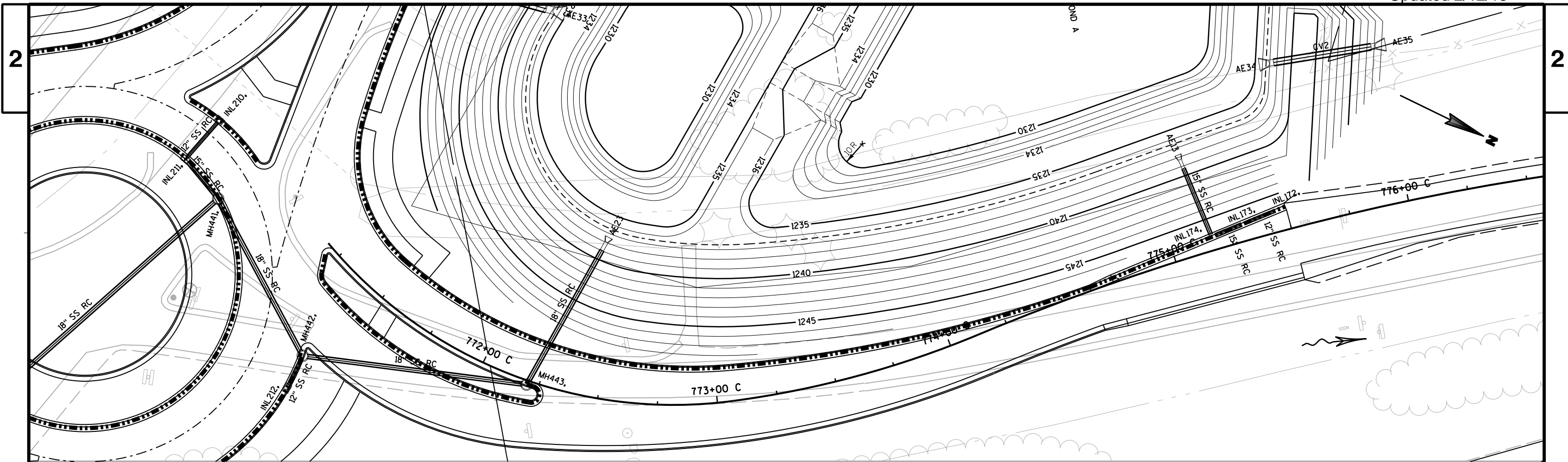




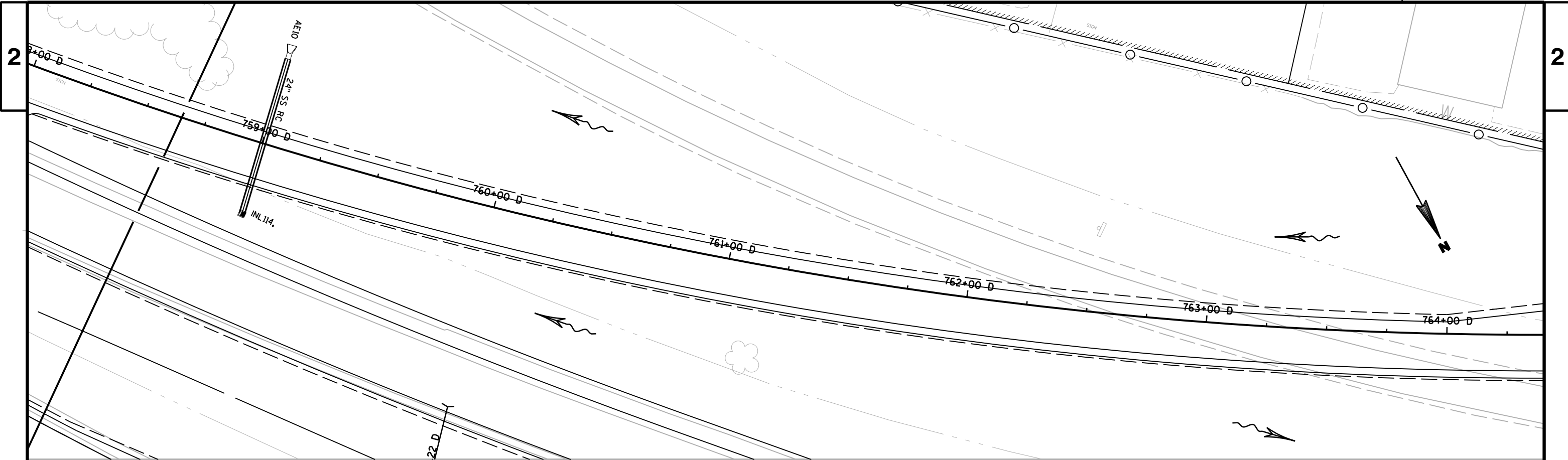




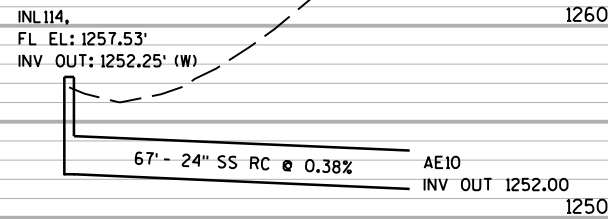


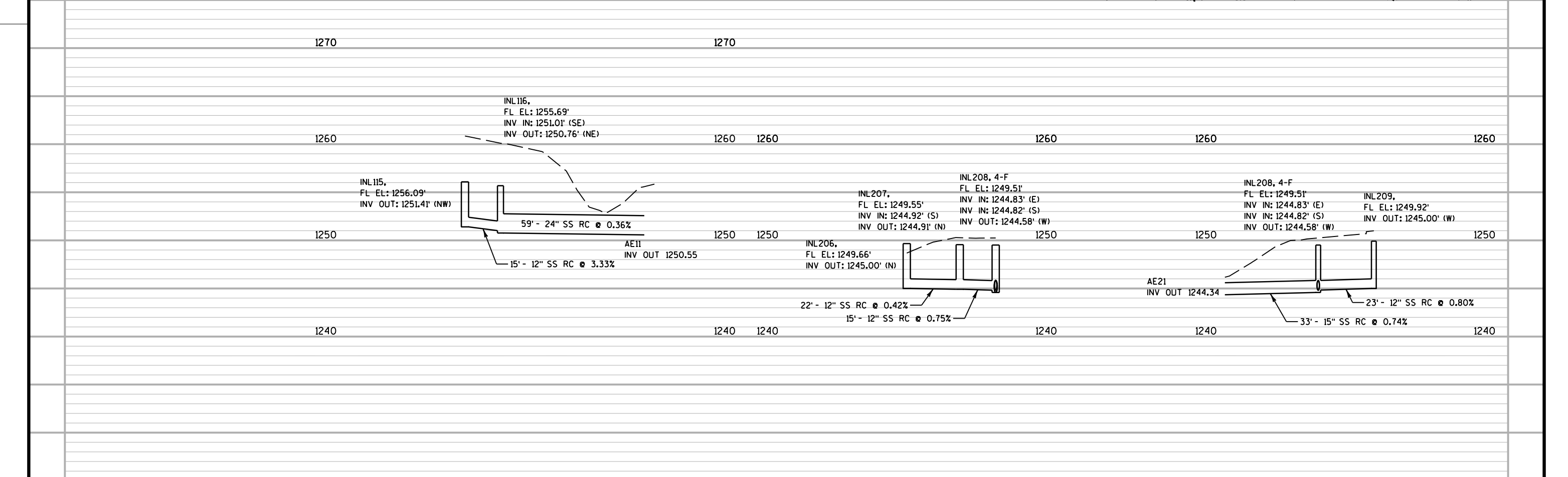
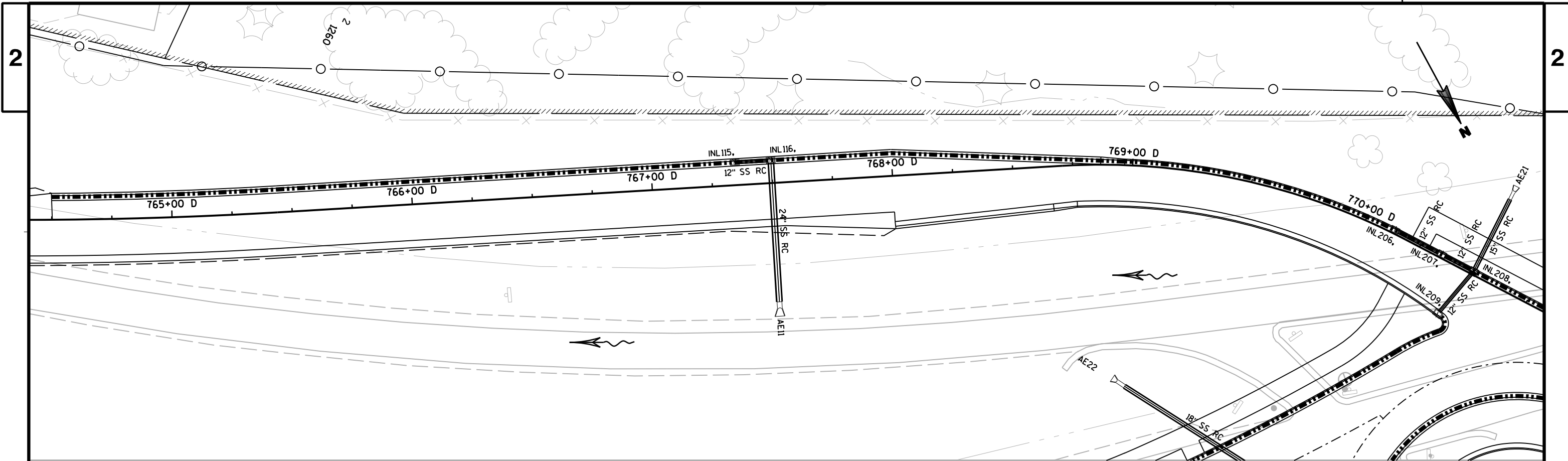


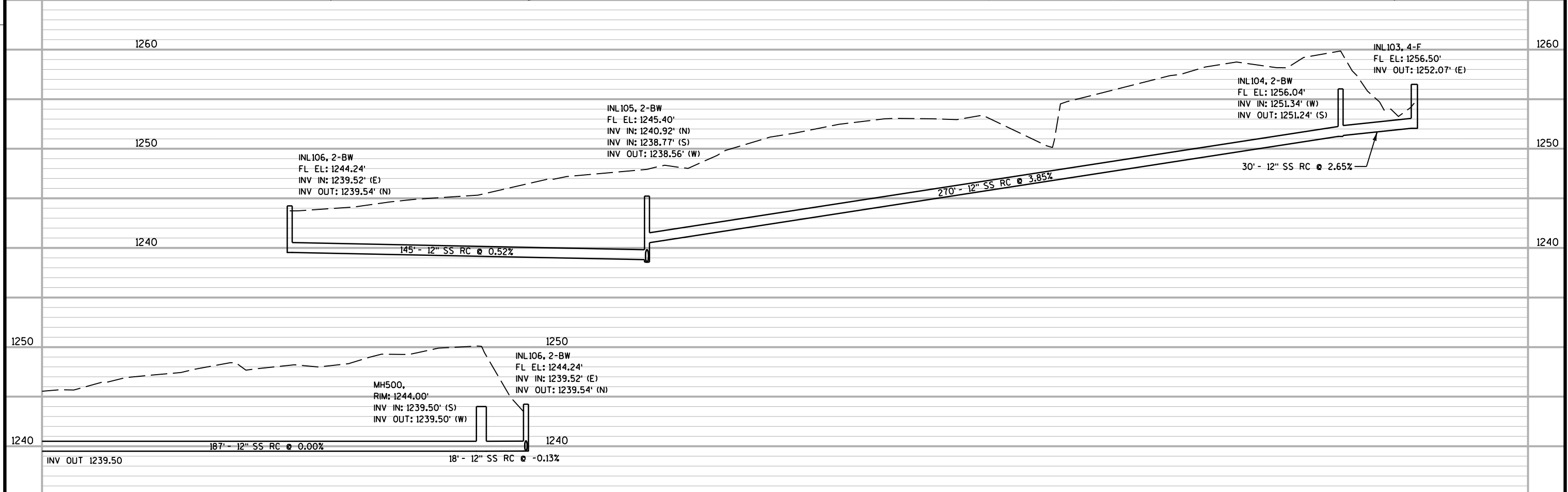
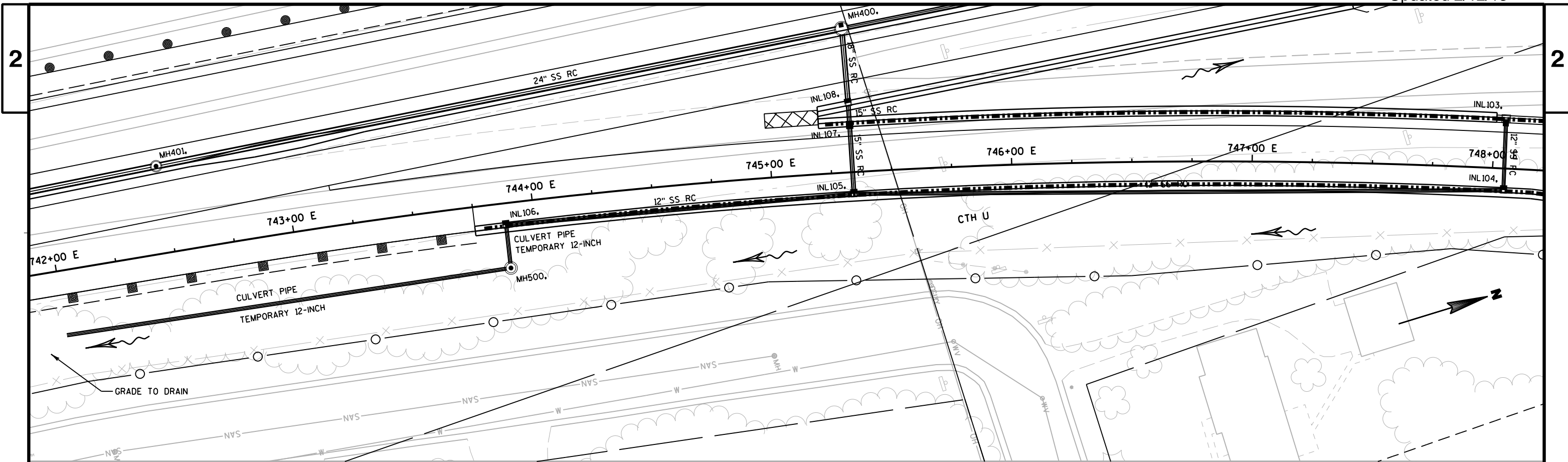


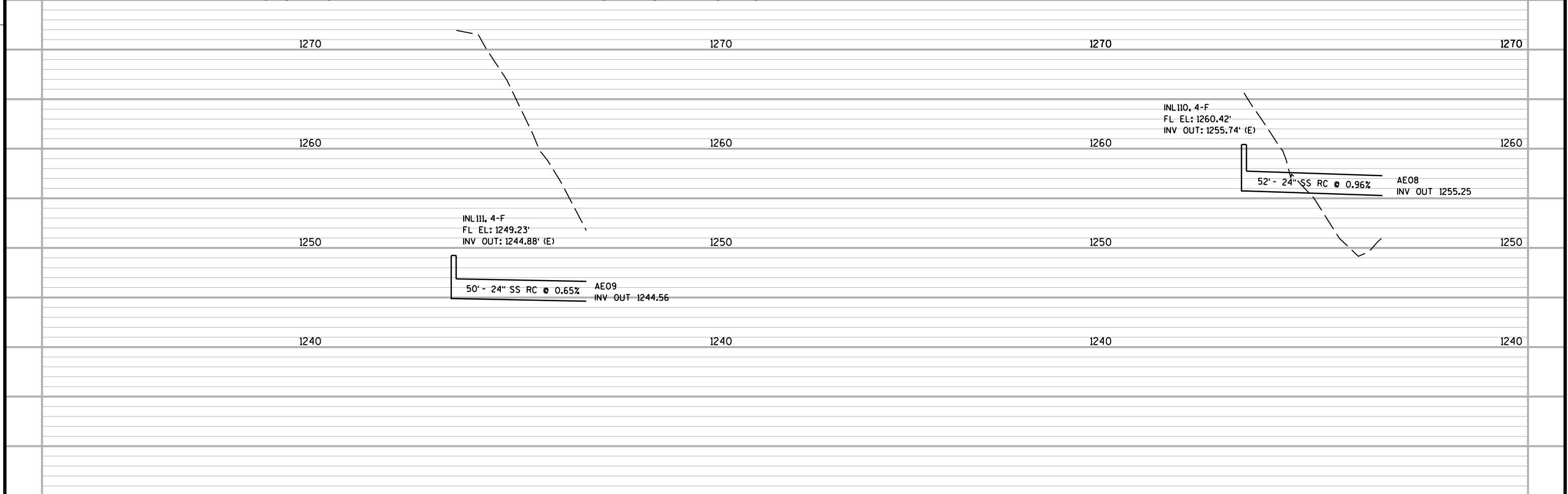
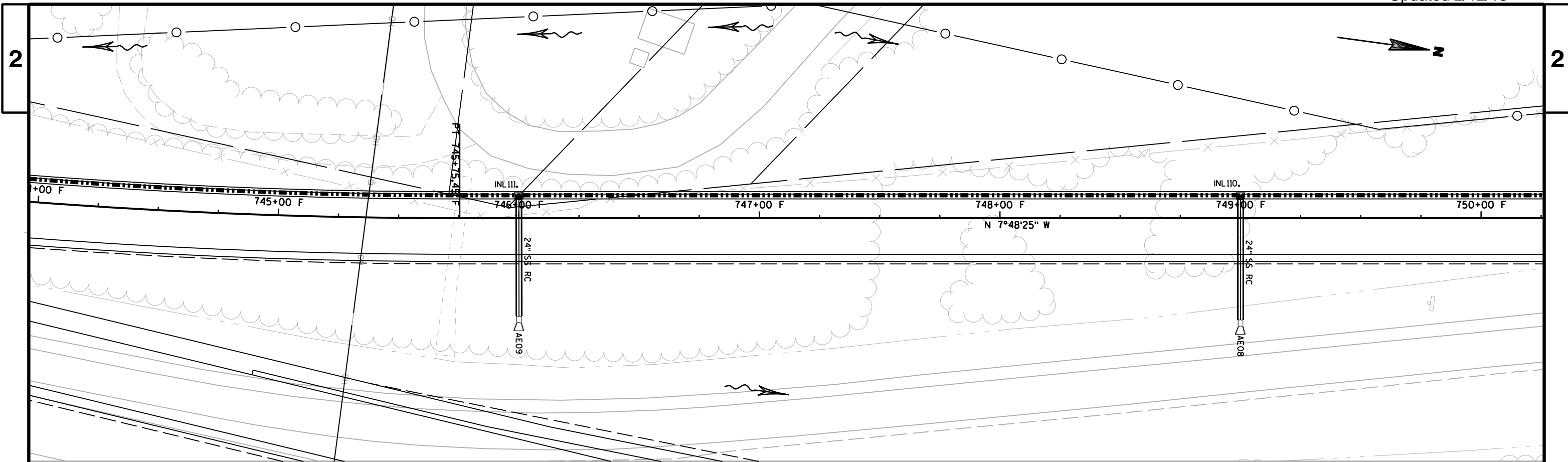


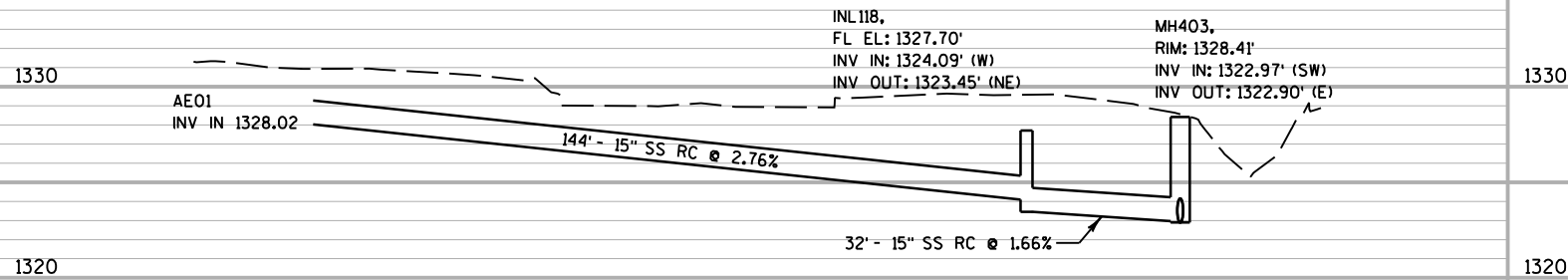
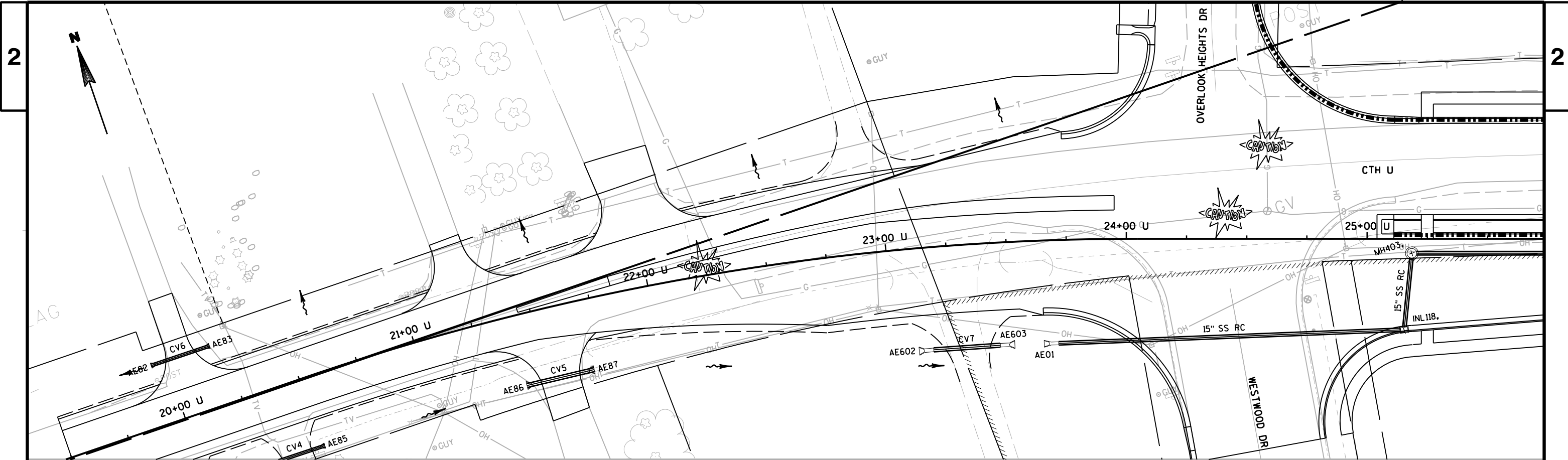
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1250	1250

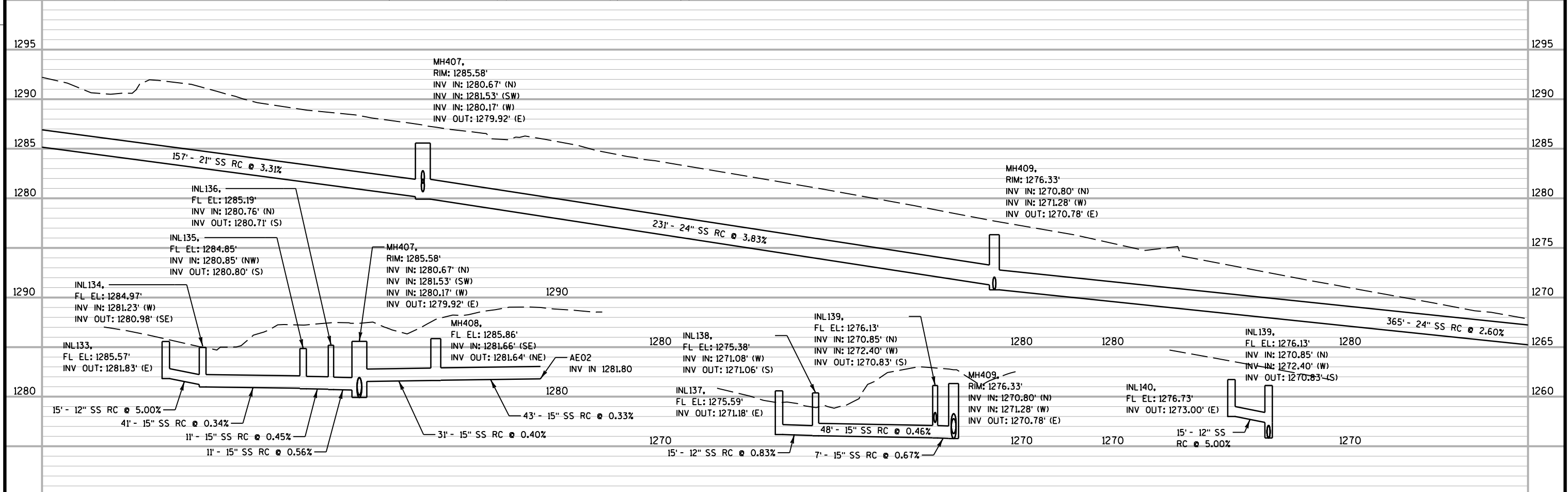
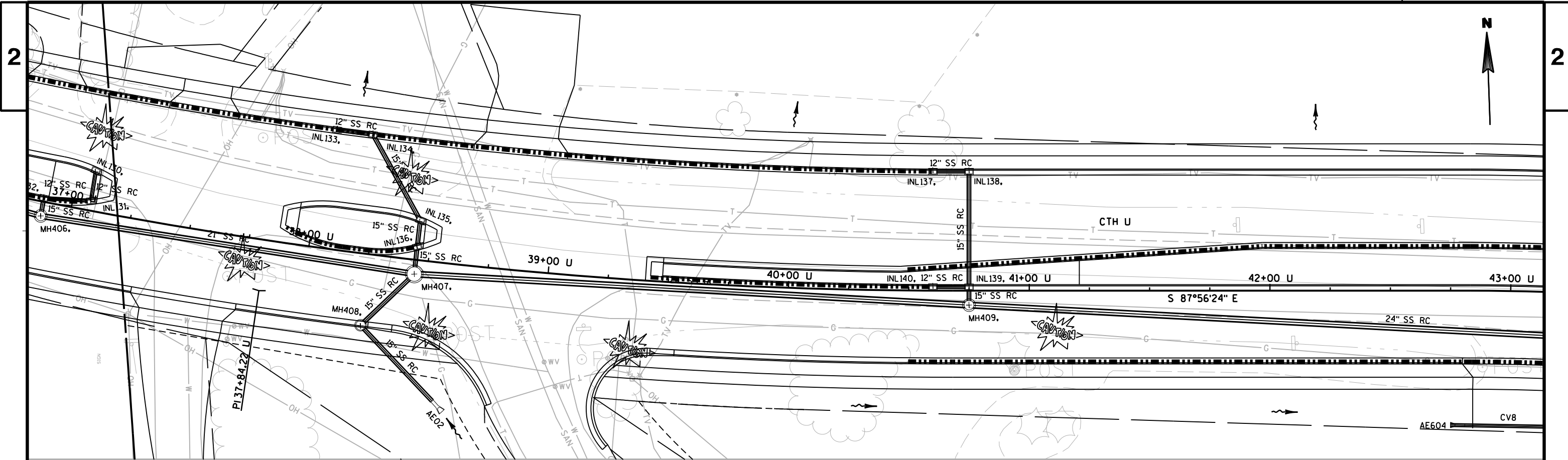


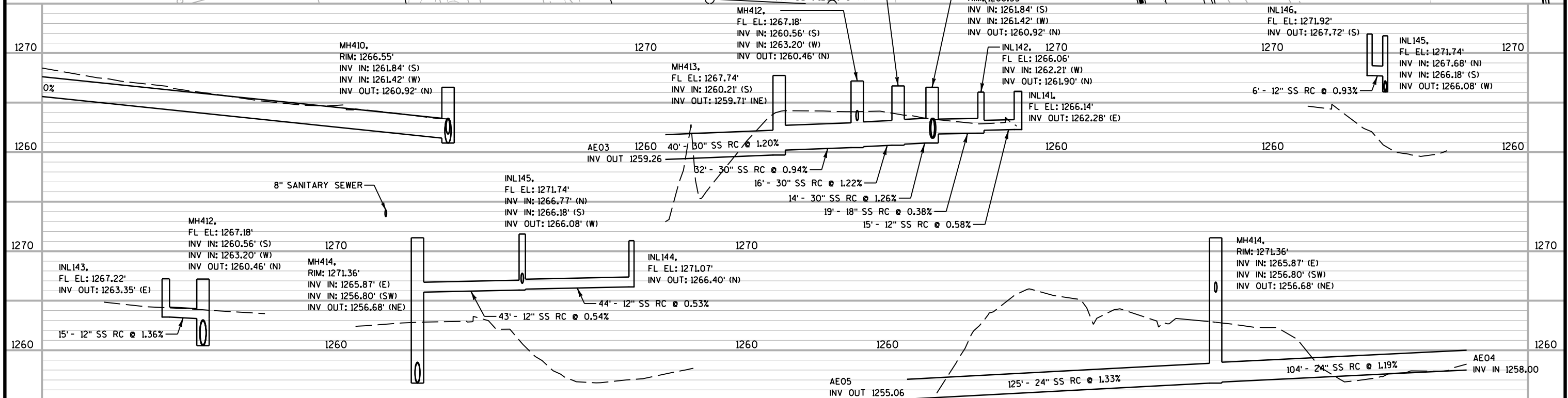
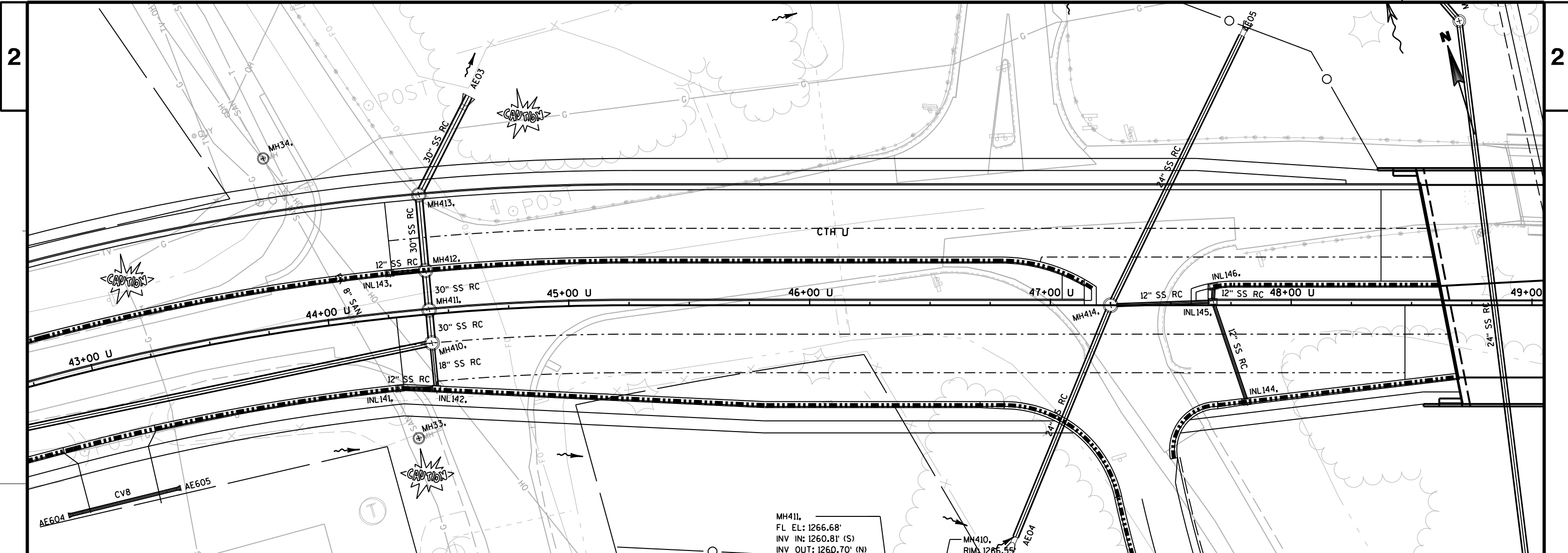


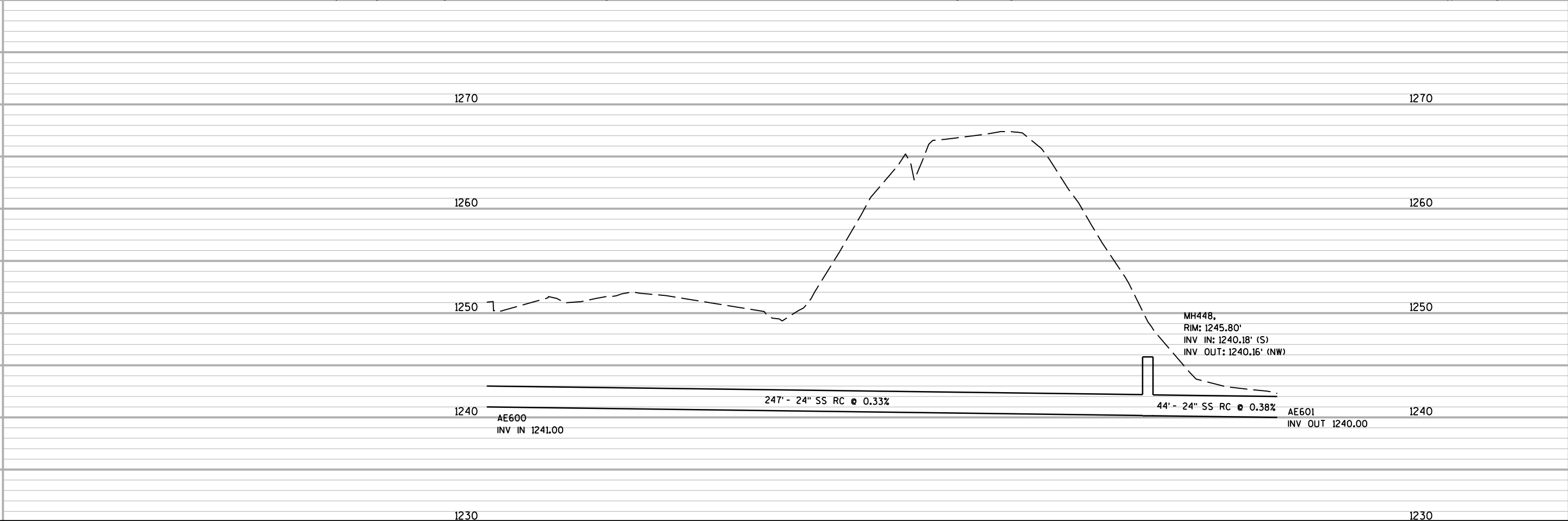
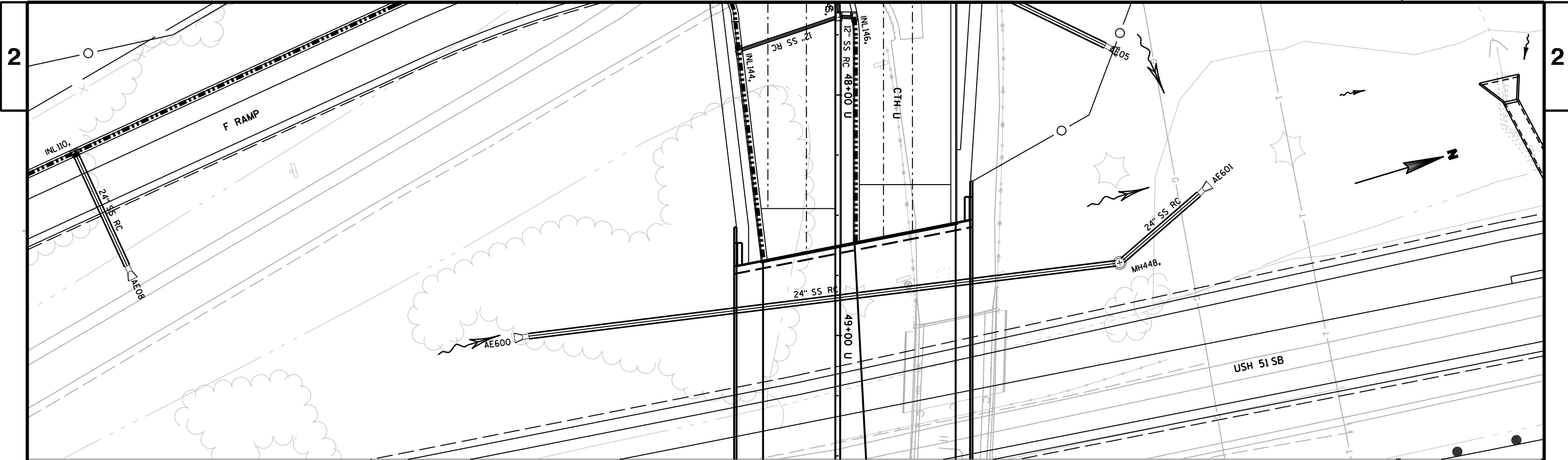


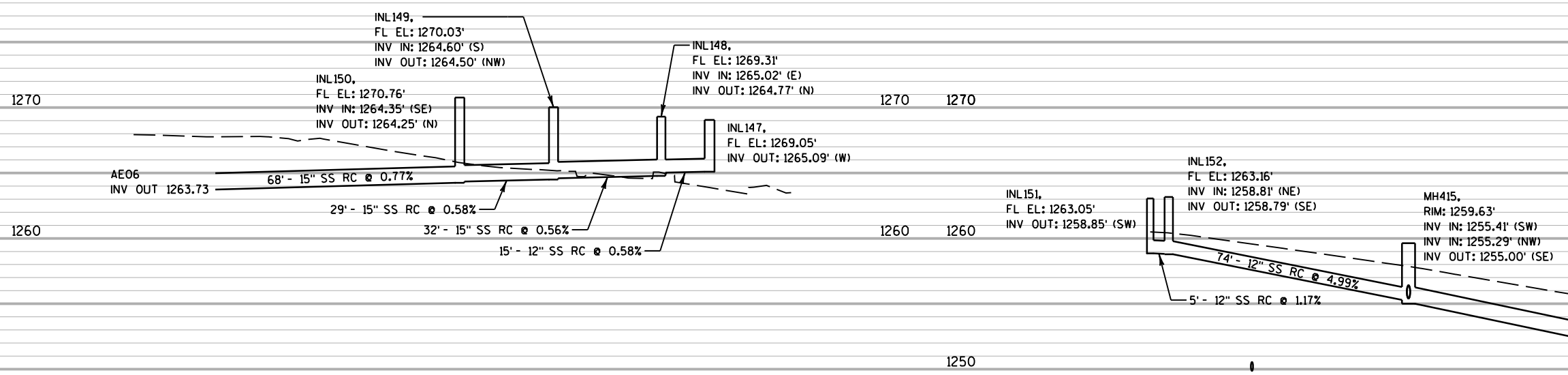
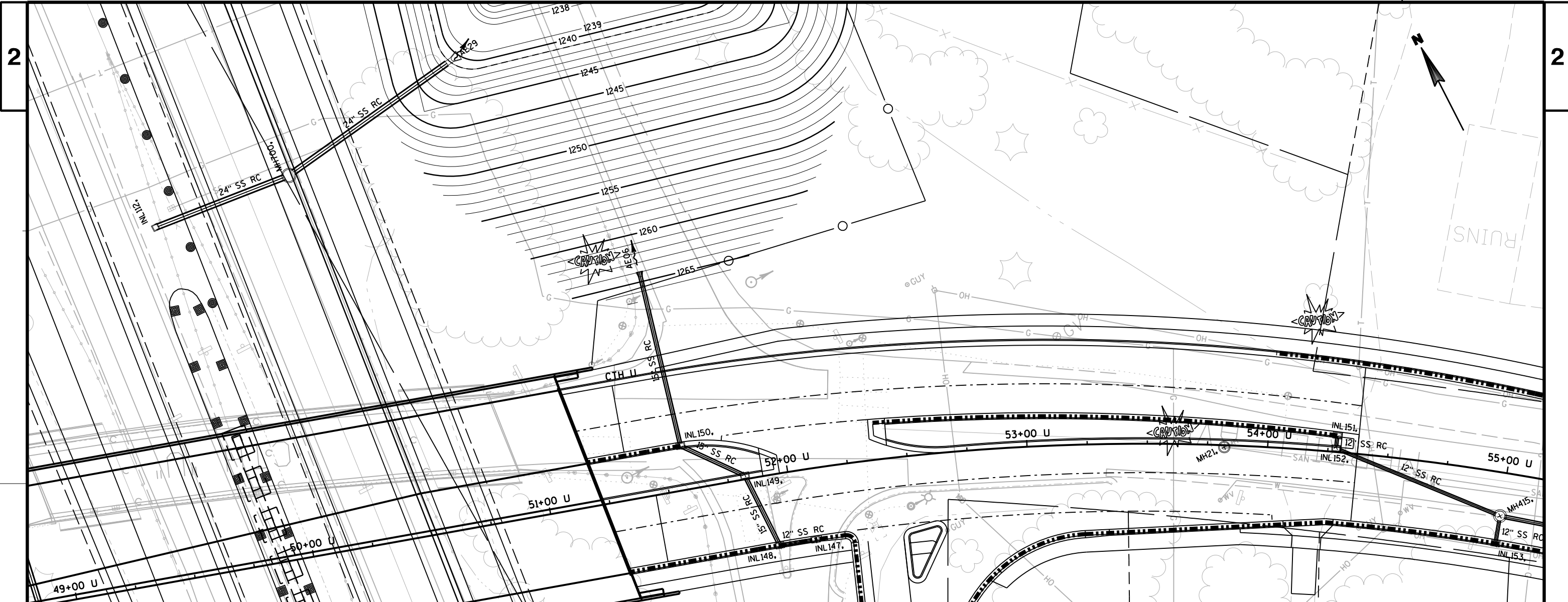


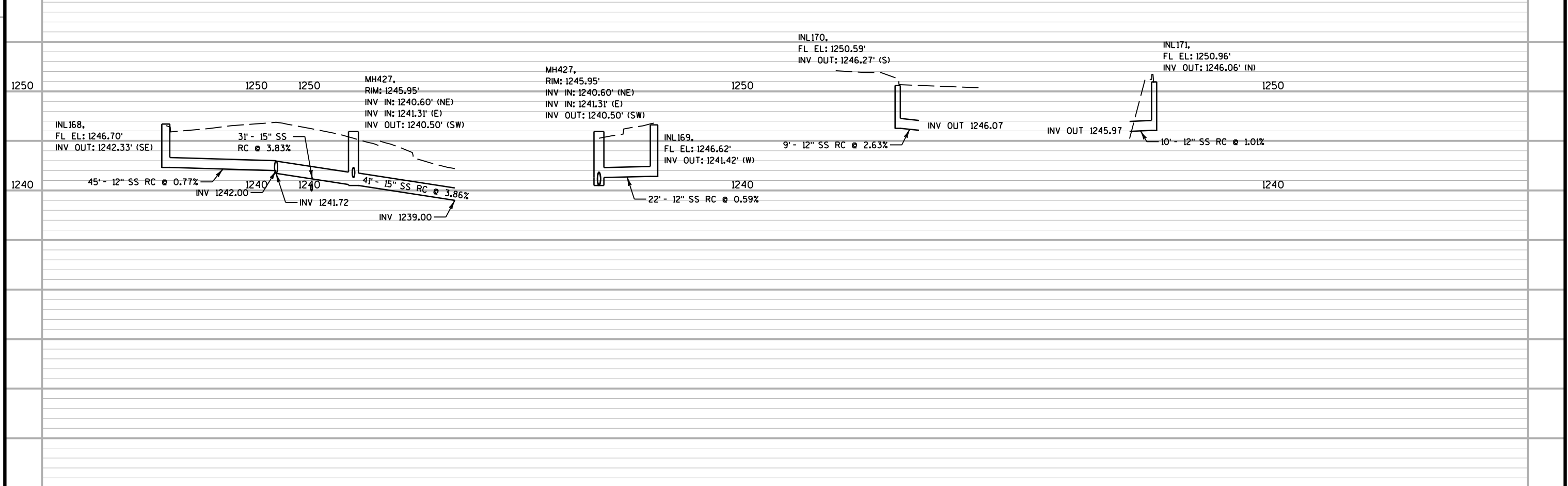
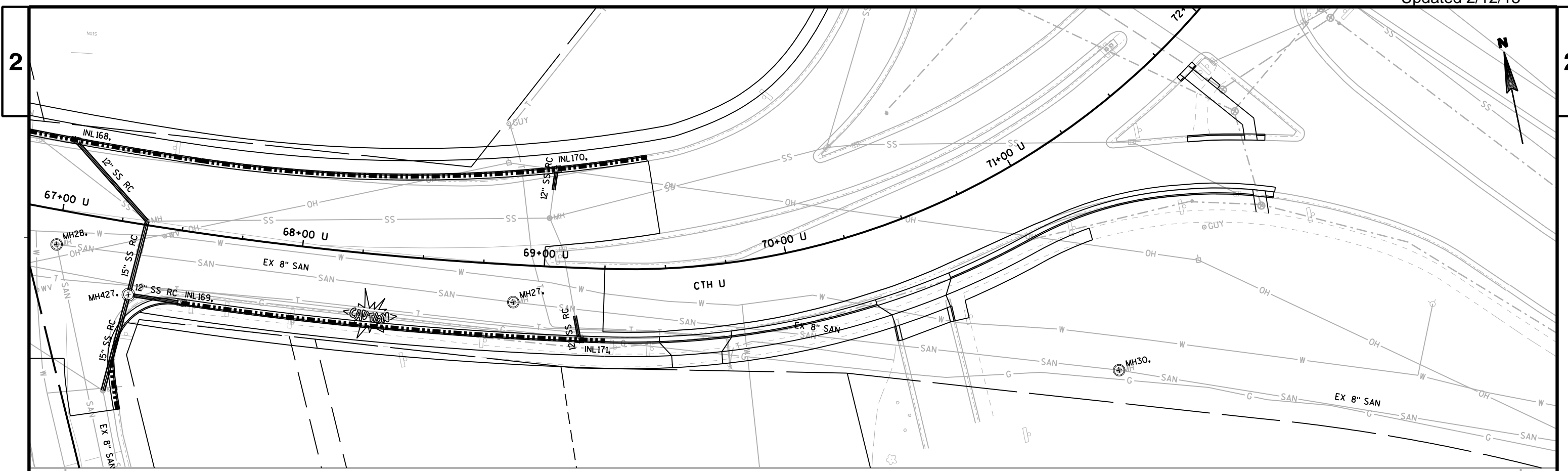


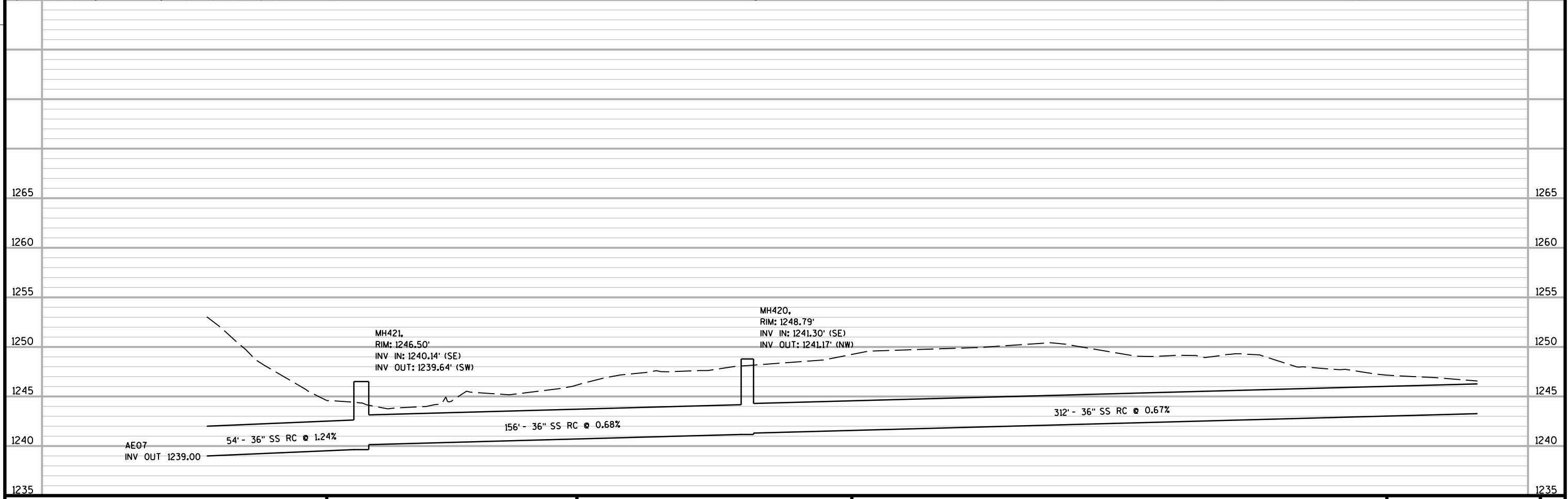
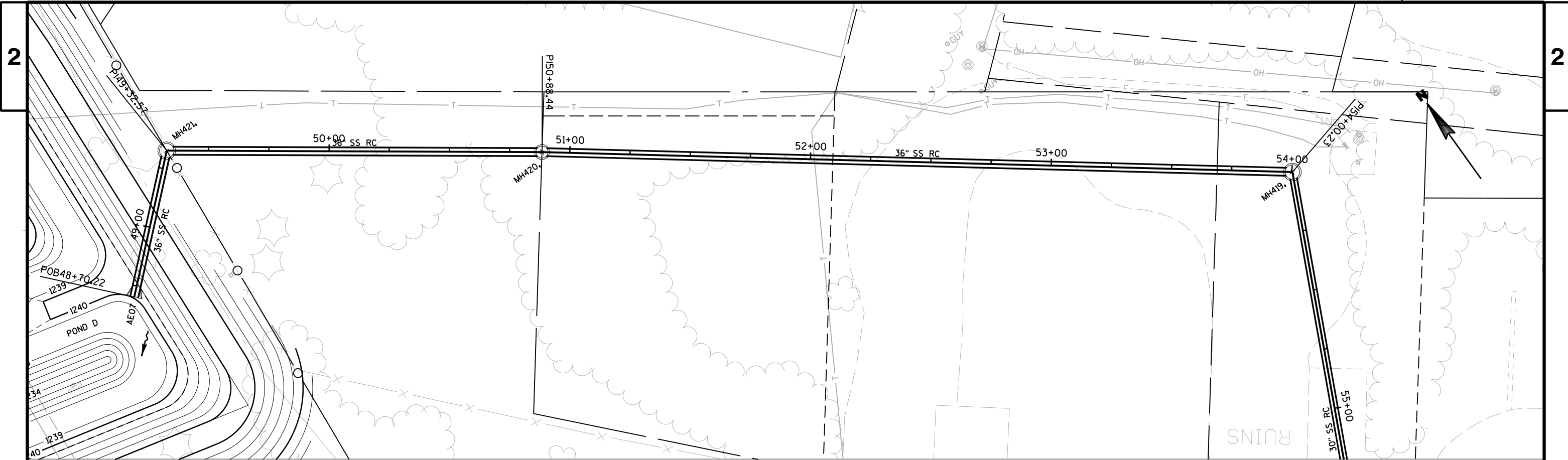


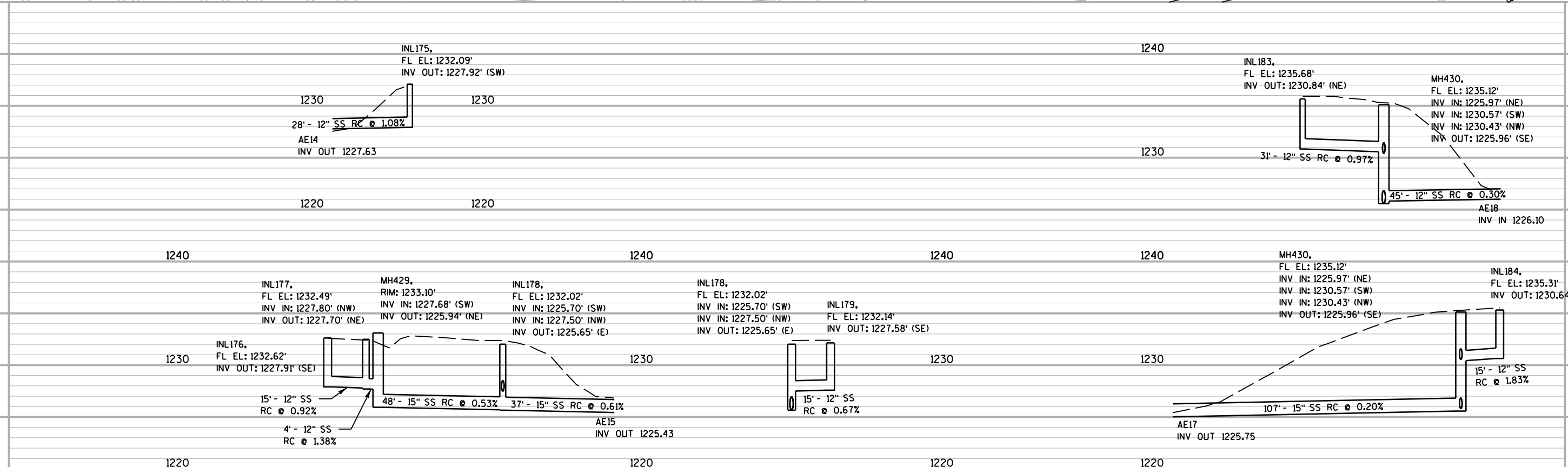
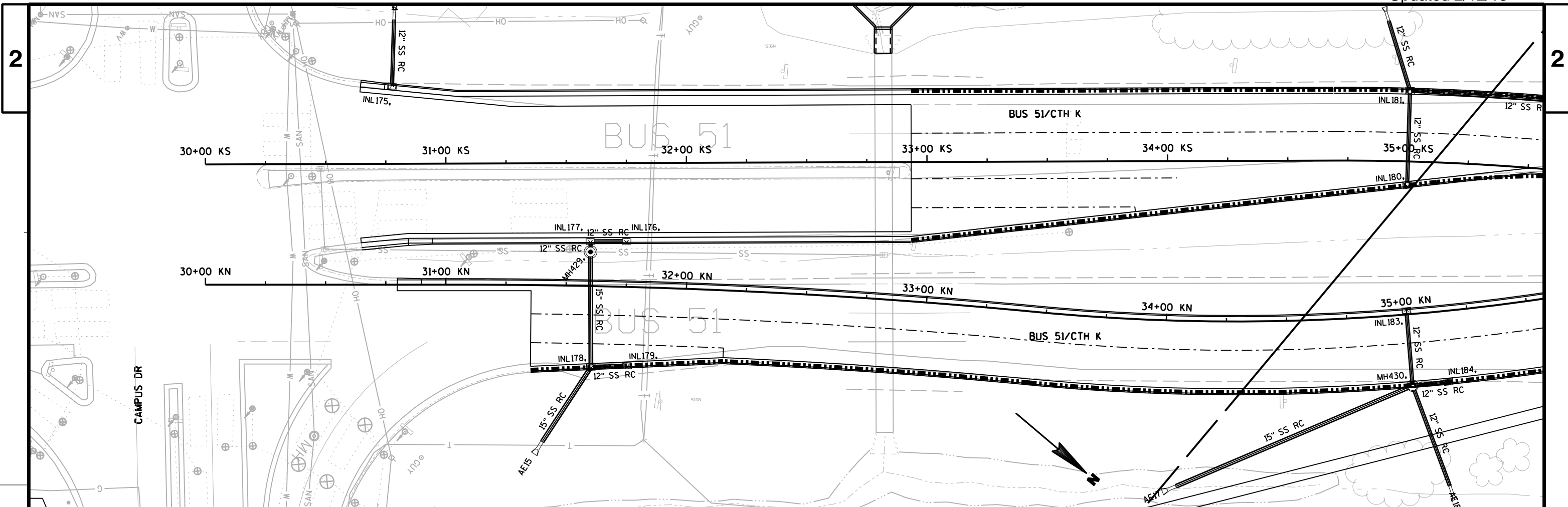




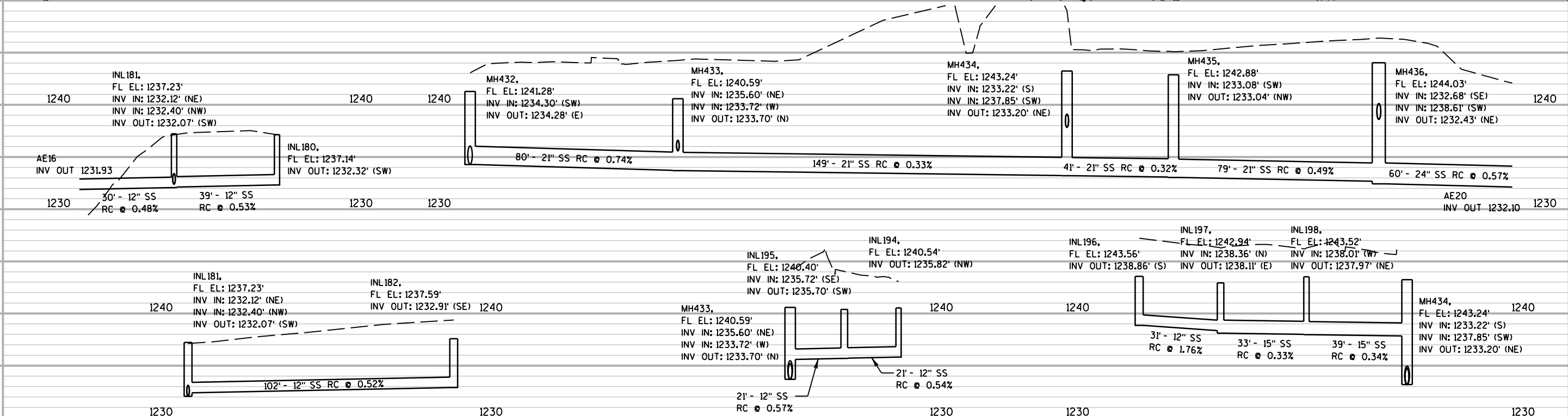
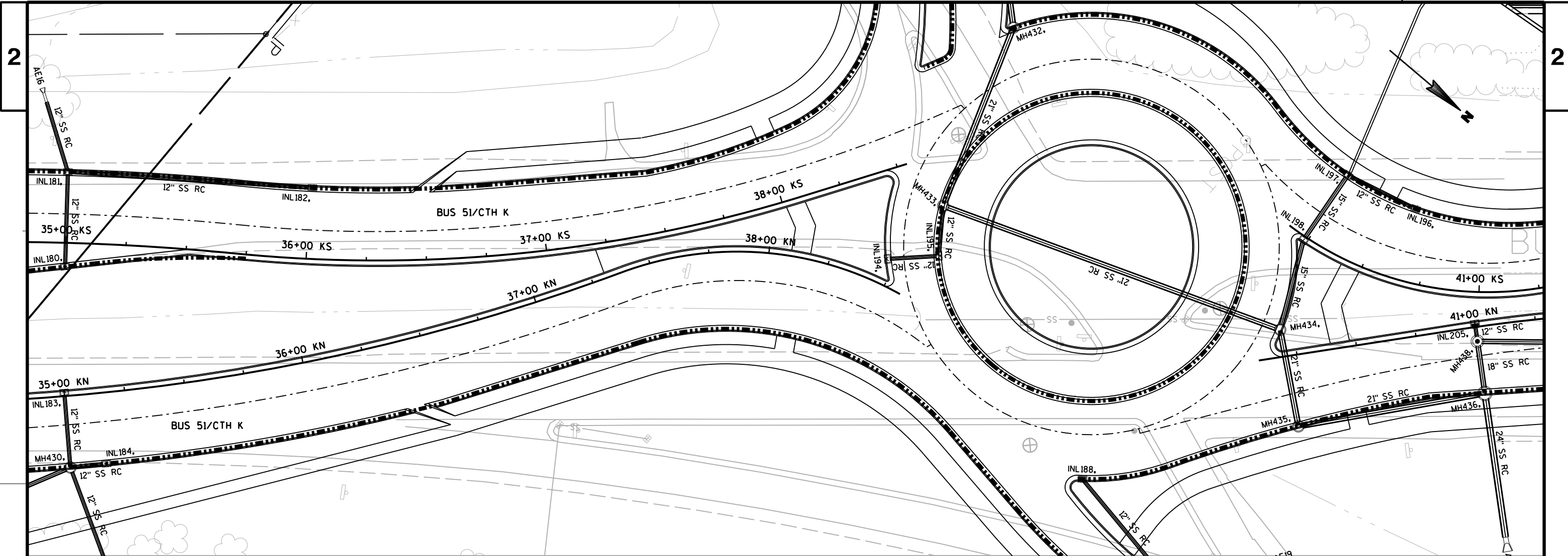


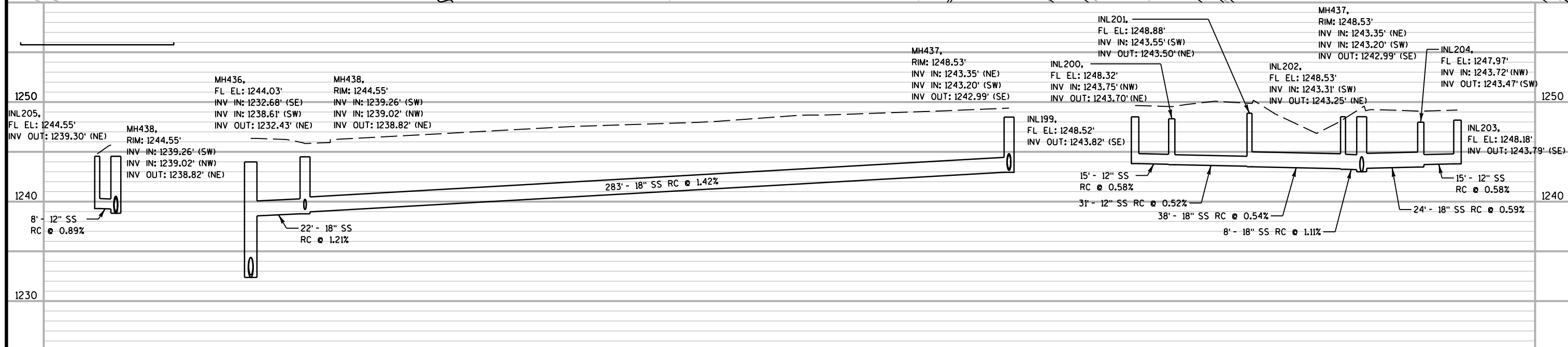
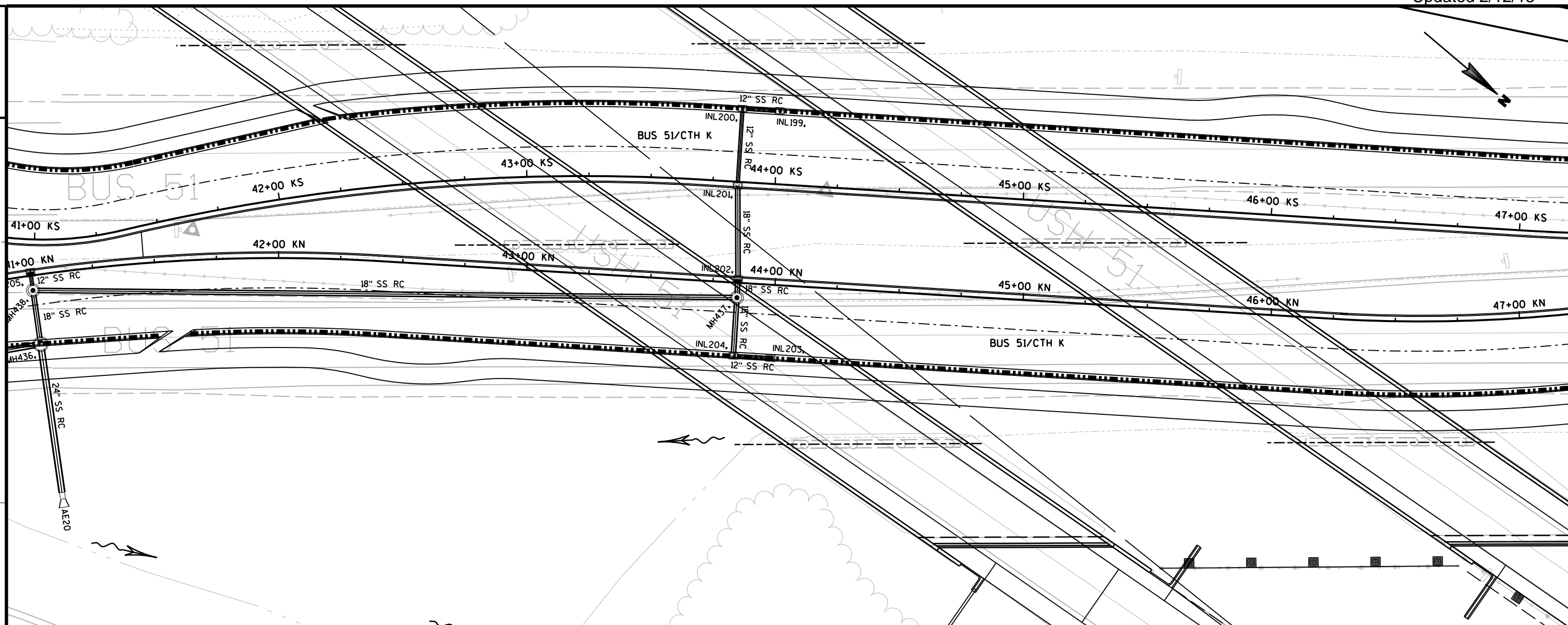


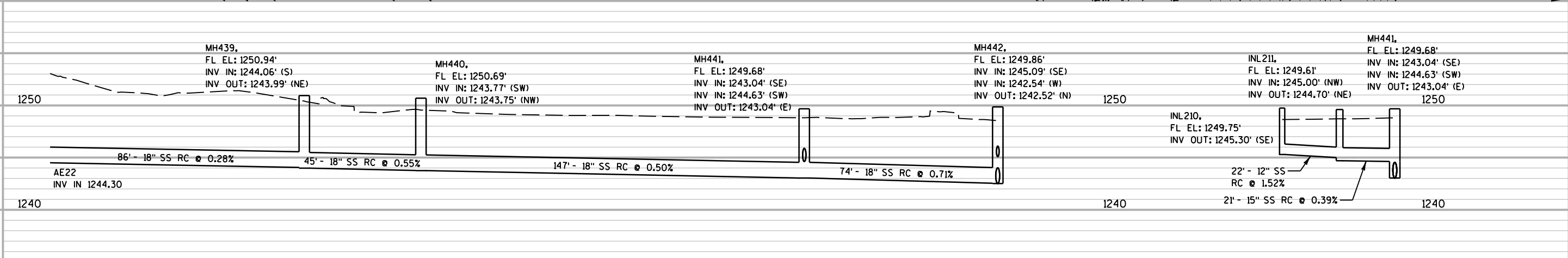
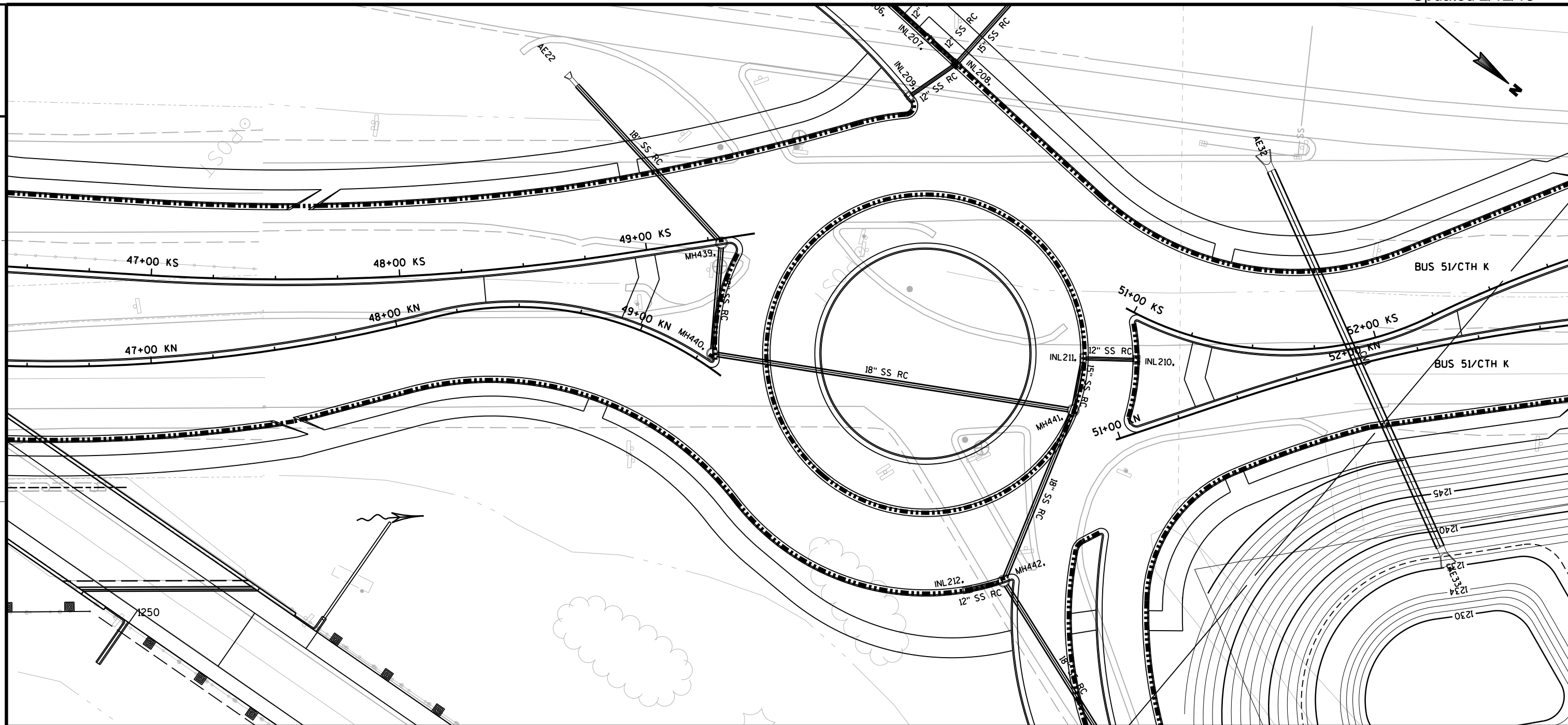


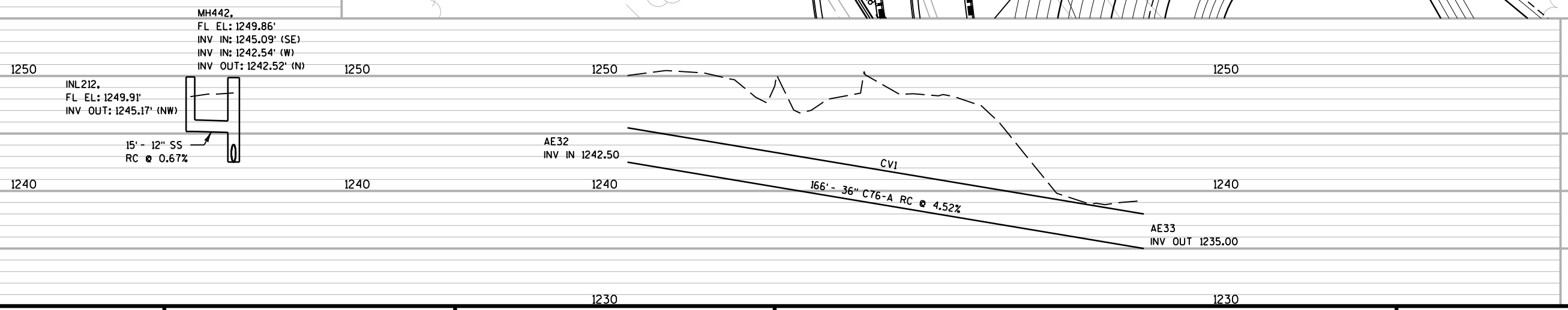
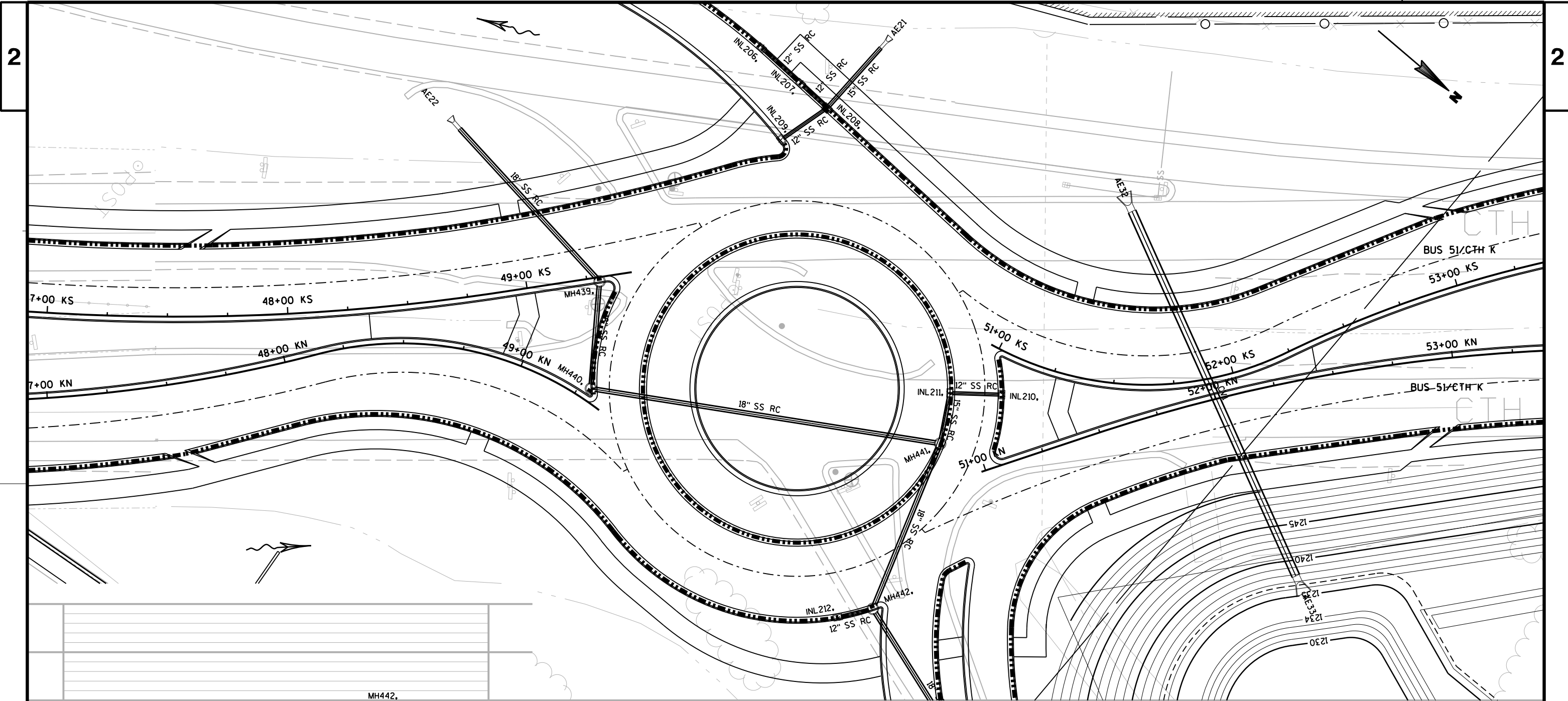


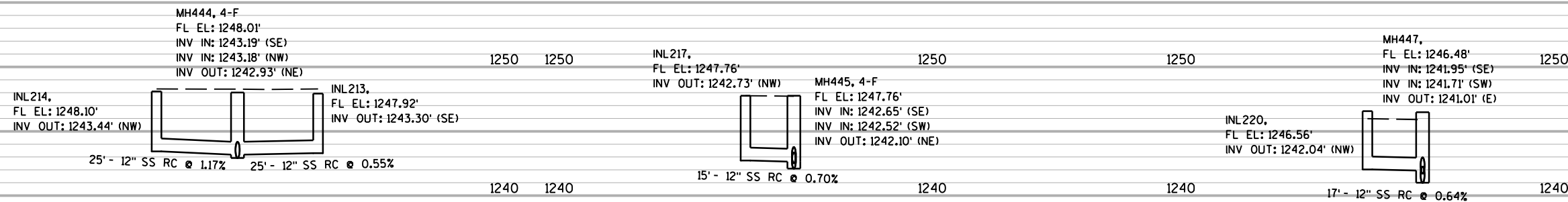
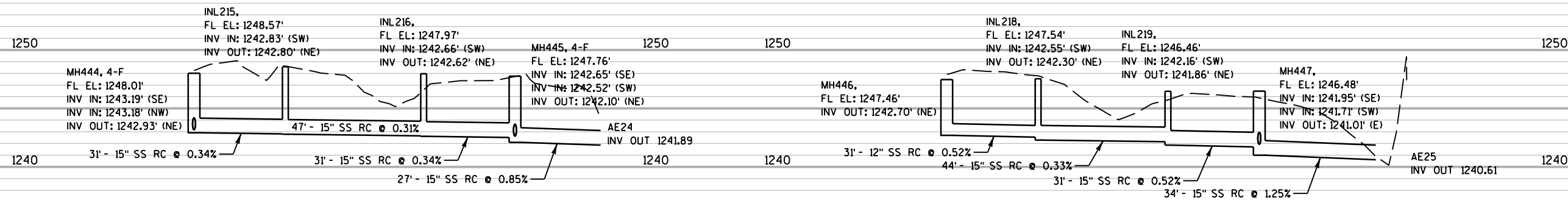
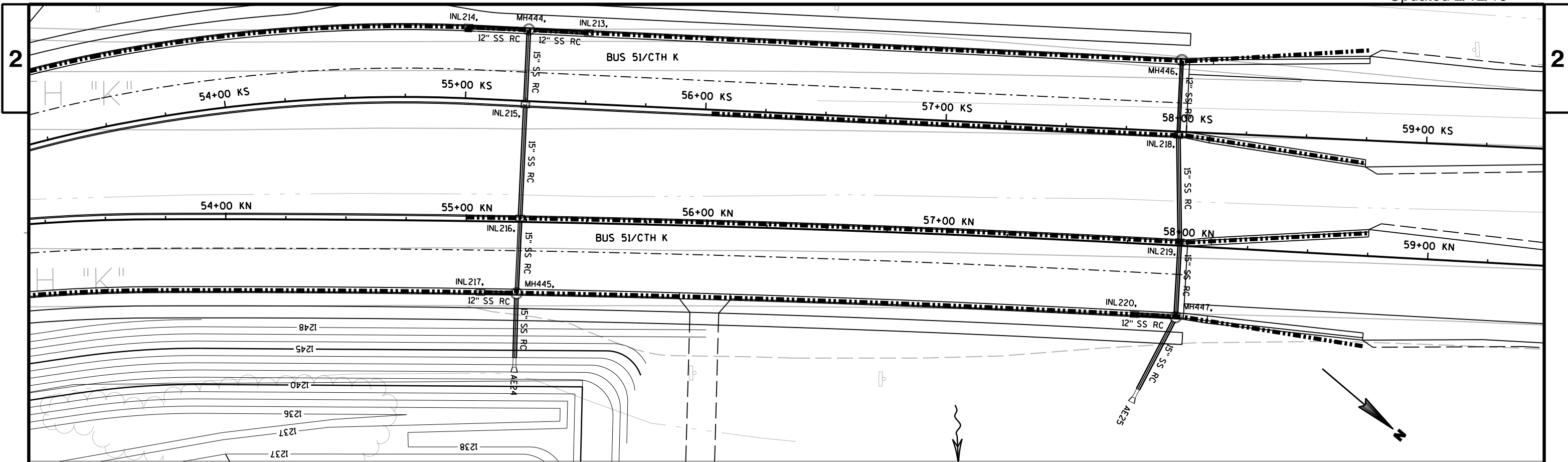
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET 176	E
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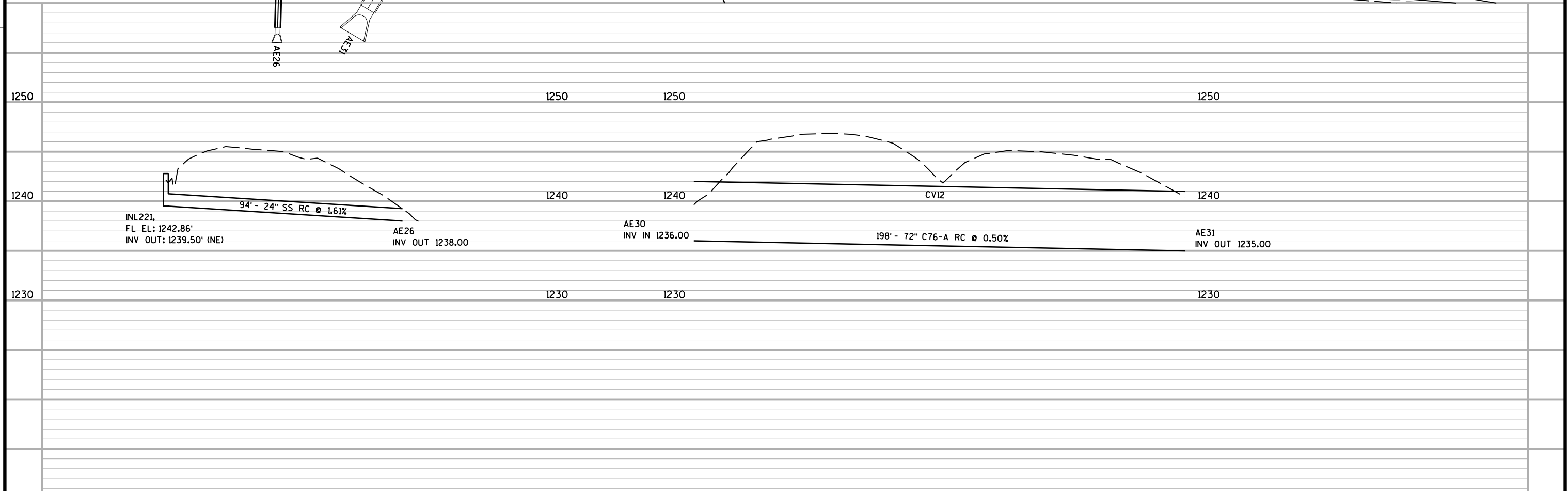
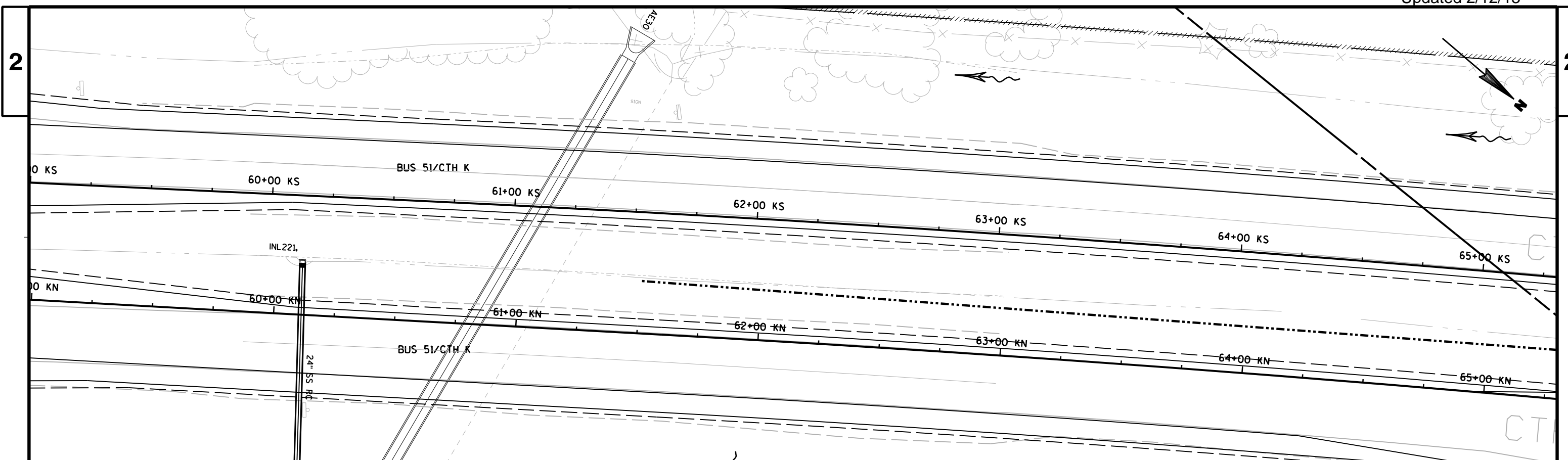


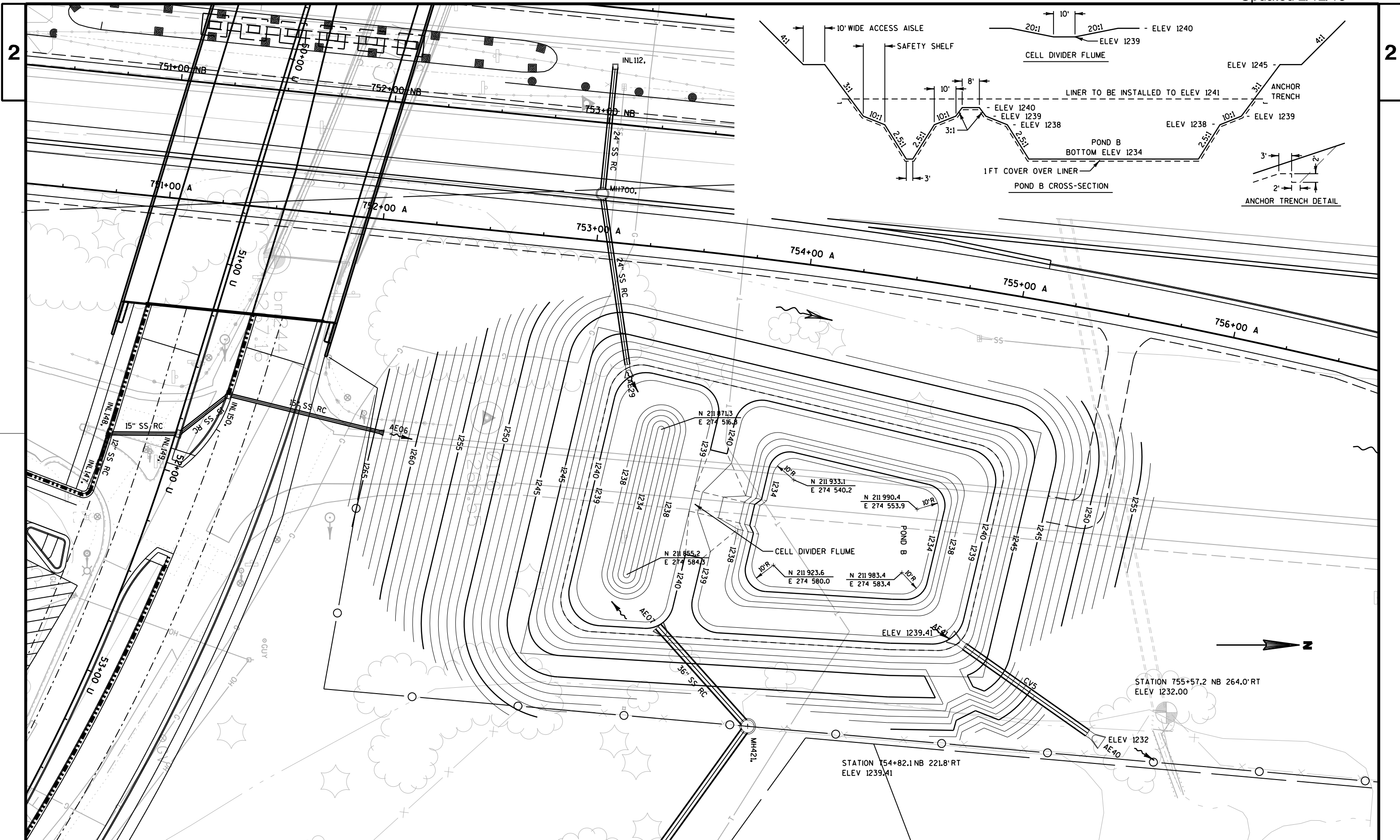












**STORM SEWER SCHEDULE**

STRUCTURE NUMBER	STATION	**** OFFSET	INLETS			INLET COVERS								MANHOLES		MANHOLE COVERS		FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE		SLOPE %			
			2x2-FT EACH	2x2.5-FT EACH	2x3-FT EACH	MEDIAN 1		TYPE BW	TYPE H	TYPE HM	TYPE HM-GJ	TYPE MS	TYPE T	TYPE V	4-FT DIA	5-FT DIA	TYPE J					*	**		FROM	ELEV	TO
						611.3220	611.3225																				
INL110	749+00 F	9.4 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1260.42	1259.59	3.85	---	---	1255.74	AE08	0.96%	
AE08	749+00 F	48.3 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1255.25	INL110	---	
INL111	746+00 F	9.4 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1249.23	1248.40	3.52	---	---	1244.88	AE09	0.65%	
AE09	746+00 F	46.8 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.56	INL111	---	---	---	
INL114	759+00 D	30.4 RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	1257.53	1256.86	4.61	---	---	1252.25	AE10	0.38%	
AE10	759+00 D	42.6 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1252.00	INL114	---	
INL115	767+34.6 D	9.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1256.09	1255.26	3.85	---	---	1251.41	INL116	3.33%	
INL116	767+50 D	9.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1255.69	1254.86	4.10	1251.01	INL115	1250.76	AE11	0.36%	
AE11	767+50 D	55.4 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1250.57	INL116	---	---	---	
INL222	783+00 C	30.3 RT	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	1233.55	1233.55	1.96	---	---	1231.59	INL117	0.40%	
INL117	781+00.8 C	32.6 RT	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	1236.00	1235.33	4.66	1230.80	INL222	1230.67	AE12	0.33%	
AE12	780+99.5 C	50.3 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
INL172	775+46.7 C	9 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1244.52	1243.69	3.87	---	---	1239.82	INL173	0.58%	
INL173	775+32 C	7.1 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1244.72	1243.89	4.39	1239.75	INL172	1239.50	INL174	0.42%	
INL174	775+17.2 C	5.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1244.93	1244.10	4.80	1239.45	INL173	1239.30	AE13	7.71%	
AE13	775+13.5 C	42.2 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
INL175	30+77.8 KS	32.7 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1232.09	1231.26	3.34	---	---	1227.92	AE14	1.08%	
AE14	30+78.8 KS	66 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1227.63	INL175	---	---	---	
INL176	31+74.6 KN	18.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1232.62	1231.79	3.88	---	---	1227.91	INL177	0.92%	
INL177	31+59.7 KN	18.1 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1232.49	1231.66	3.96	1227.80	INL176	1227.70	MH429	1.38%	
MH429	31+59.7 KN	14.2 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
INL178	31+61 KN	34.3 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1232.02	1231.19	5.54	1225.70	MH429	1225.65	AE15	0.61%	
INL179	31+76.2 KN	33.2 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	1227.50	INL179	---	---	---	
AE15	31+37.5 KN	70.3 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
INL180	35+00 KS	10.4 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1237.14	1236.31	3.99	---	---	1232.32	INL181	0.53%	
INL181	35+00 KS	30 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1237.23	1236.40	4.33	1232.12	INL180	1232.07	AE16	0.52%	
INL182	36+01.2 KS	30 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	1232.40	INL182	---	---	---	
AE16	34+89.2	64.0 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
INL183	35+00 KN	1.4 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1235.68	1234.85	4.01	---	---	1230.84	MH430	0.97%	
MH430	35+00 KN	29.5 RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1235.12	1234.29	---	1230.57	INL183	1225.96	AE17	0.20%	
INL184	35+14.5 KN	29.5 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
AE17	34+01 KN	71.4 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
AE18	35+12.4 KN	78.5 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
INL185	762+65 B	1.5 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1240.68	1239.85	3.82	---	---	1236.03	INL186	0.58%	
INL186	762+50 B	1.5 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1240.65	1239.82	3.97	1235.96	INL185	1235.85	INL187	0.64%	
INL187	762+50 B	16 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1240.95	1240.12	4.62	1235.75	INL186	1235.50	AE19	0.41%	
INL188	101+46.5 KE	31 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
AE19	762+84.4 B	45.9 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
INL189	760+58.3 A	17.5 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1240.09	1239.26	3.70	---	---	1235.56	INL190	0.58%	
INL190	760+74.9 A	17.5 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1240.05	1239.22	3.98	1235.49	INL189	1235.24	INL191	0.49%	
INL191	760+74.9 A	1.5 LT	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1240.37	1239.54	4.42	1235.17	INL190	1235.12	INL192	0.37%	
INL192	760+74.9 A	11.6 LT	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1240.52	1239.69	4.85	1235.09	INL191	1234.84	MH431	0.38%	
INL193	760+89 A	12.6 LT	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
MH431	760+74.9 A	35.3 LT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1240.93	1240.10	5.66	1234.76	INL192	1234.44	MH432	0.36%	
MH432	103+77.2 KE	31 RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1241.28	1240.45	6.17	1234.30	MH431	1234.28	MH433	0.74%	
MH433	100+28.5 KE	1.7 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1240.59	1239.51	5.81	1233.72	MH432	1233.70	MH434	0.33%	

**STORM SEWER SCHEDULE**

STRUCTURE NUMBER	STATION	**** OFFSET	INLETS			INLET COVERS								MANHOLES		MANHOLE COVERS		* FLOWLINE ELEV	** BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE		SLOPE %									
			2x2-FT	2x2.5-FT	2x3-FT	MEDIAN 1		MEDIAN 2		TYPE BW	TYPE H	TYPE HM	TYPE HM-GJ	TYPE MS	TYPE T	TYPE V	4-FT DIA					5-FT DIA	TYPE J		FROM	ELEV	TO						
			611.3220	611.3225	611.3230	GRATE	GRATE	611.0610	611.0624	611.0627	611.0630	611.0642	611.0652	611.0654	611.2004	611.2005	611.0530					ELEV	ELEV		DEPTH	ELEV	ELEV	TO					
INL194	100+49.3 KE	19.3 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1240.54	1239.71	3.89	---	---	1235.82	INL195	---	---	1235.72	INL194	1235.70	MH433	0.54%	
INL195	100+50 KE	1.7LT	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1240.40	1239.32	3.62	---	---	1235.72	INL194	1235.70	MH433	0.57%	---	---	---	---	
MH434	102+25 KE	29 RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1243.24	1242.41	9.21	---	---	1233.22	MH433	1233.20	MH435	0.32%	---	---	---	---	
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1237.85	INL198	---	---	---	---	---	---		
INL196	40+64.5 KS	30.3 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1243.56	1242.73	3.87	---	---	1238.86	INL197	---	---	1238.86	INL197	1.76%	---	---	
INL197	40+23.8 KS	31.1 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1242.94	1242.11	4.00	---	---	1238.36	INL196	1238.11	INL198	0.33%	---	---	---	---	
INL198	40+23.4 KS	1.5 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1243.52	1242.69	4.72	---	---	1238.01	INL197	1237.97	MH434	0.34%	---	---	---	---	
MH435	40+21 KN	29.3 RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1242.88	1242.05	9.01	---	---	1233.08	MH434	1233.04	MH436	0.49%	---	---	---	---	
MH436	41+00 KN	27.5 RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1244.03	1243.20	10.77	---	---	1232.68	MH435	1232.43	AE20	0.57%	---	---	---	---	
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1238.61	MH438	---	---	---	---	---	---		
INL199	44+00 KS	29.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1248.52	1247.69	3.87	---	---	1243.82	INL200	---	---	1243.82	INL200	0.58%	---	---	
INL200	43+86 KS	29.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1248.32	1247.49	3.79	---	---	1243.75	INL199	1243.70	INL201	0.52%	---	---	---	---	
INL201	43+86 KS	1.5 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1248.88	1248.05	4.55	---	---	1243.55	INL200	1243.50	INL202	0.54%	---	---	---	---	
INL202	43+85 KN	1.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1248.53	1247.70	4.45	---	---	1243.31	INL201	1243.25	MH437	1.11%	---	---	---	---	
MH437	43+85 KN	6 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1248.53	1247.28	4.29	---	---	1243.20	INL202	1242.99	MH438	1.42%	---	---	---	---	
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1243.35	INL204	---	---	---	---	---	---		
INL203	44+00 KN	29.5 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1248.18	1247.35	3.56	---	---	---	---	---	1243.79	INL204	0.58%	---	---	---	---
INL204	43+85 KN	29.5 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1247.97	1247.14	3.67	---	---	1243.72	INL203	1243.47	MH437	0.59%	---	---	---	---	
MH438	41+00 KN	6 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.55	1243.30	4.48	---	---	1239.02	MH437	1238.82	MH436	1.21%	---	---	---	---	
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1239.26	INL205	---	---	---	---	---	---		
INL205	41+00 KN	1.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1244.55	1243.72	4.42	---	---	---	---	---	1239.30	MH438	0.89%	---	---	---	---
AE20	41+00 KN	94.2 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1232.10	MH436	---	---	---	---	---	---			
INL206	770+12.7 D	1.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1249.66	1248.83	3.83	---	---	---	---	---	1245.00	INL207	0.42%	---	---	---	---
INL207	770+34.7 D	1.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1249.55	1248.72	3.81	---	---	1244.92	INL206	1244.91	INL208	0.75%	---	---	---	---	
INL208	770+49.7 D	1.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1249.51	1248.68	4.10	---	---	1244.82	INL207	1244.58	AE21	0.74%	---	---	---	---	
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.83	INL209	---	---	---	---	---	---		
INL209	770+44.6 D	21.1 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1249.92	1249.09	4.09	---	---	---	---	---	1245.00	INL208	0.80%	---	---	---	---
AE21	770+49.2 D	40.9 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
AE22	48+78.2 KS	74.7 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
MH439	49+30.2 KS	1.5 RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1250.94	1250.11	6.12	---	---	1244.06	AE22	1243.99	MH440	0.55%	---	---	---	---	
MH440	200+46 KW	19.5 RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1250.69	1249.86	6.11	---	---	1243.77	MH439	1243.75	MH441	0.50%	---	---	---	---	
MH441	202+28.1 KW	1.7 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1249.68	1248.60	5.56	---	---	1243.04	MH440	1243.04	MH442	0.71%	---	---	---	---	
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.63	INL211	---	---	---	---	---	---		
INL210	202+50 KW	20 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1249.75	1248.92	3.62	---	---	---	---	---	1245.30	INL211	1.52%	---	---	---	---
INL211	202+50 KW	1.7 LT	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1249.61	1248.78	4.08	---	---	1245.00	INL210	1244.70	MH441	0.39%	---	---	---	---	
MH442	201+70.7 KW	31 RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1249.86	1249.03	6.51	---	---	1242.54	MH441	1242.52	MH443	0.86%	---	---	---	---	
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
INL212	201+60.6 KW	31 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1249.91	1249.08	3.91	---	---	---	---	---	1245.17	MH442	0.67%	---	---	---	---
MH443	772+20 C	1.5 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1248.43	1247.60	6.01	---	---	1241.74	MH442	1241.59	AE23	8.17%	---	---	---	---	
AE23	772+39.7 C	66.5 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
INL213	55+50 KS	29.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1247.92	1247.09	3.79	---	---	---	---	---	1243.30	MH444	0.55%	---	---	---	---
MH444	55+25 KS	29.5 LT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1248.01	1247.18	4.25	---	---	1243.18	INL213	1242.93	INL215	0.34%	---	---	---	---	
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
INL214	55+00 KS	29.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1248.10	1247.27	3.83	---	---	---	---	---	1243.44	MH444	1.17%	---	---	---	---
INL215	55+25 KS	1.5 RT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1248.57	1247.74	4.94	---	---	1242.83	MH444	1242.80	INL216	0.31%	---	---	---	---	
INL216	55+22.3 KN	1.8 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	---	1247.97	1247.14	4.52	---	---	1242.66	INL215	1242.62	MH445	0.34%					



**STORM SEWER SCHEDULE**

STRUCTURE NUMBER	STATION	OFFSET	611.3225 611.3230		611.3901		611.3902	611.061	611.0627	611.0642	611.0654	611.2004	611.2005	611.0530	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE FROM	DISCHARGE ELEV	TO	SLOPE %
			2x2.5-FT EACH	2x3-FT EACH	Median 1 Grate EACH	Median 2 Grate EACH	TYPE BW EACH	TYPE HM EACH	TYPE MS EACH	TYPE V EACH	4-FT Diameter EACH	5-FT Diameter EACH	MANHOLE COVERS	MANHOLE COVERS								
INL100	725+49.2 NB	27.7 LT	---	---	1	---	---	---	1	---	---	---	---	---	1249.28	1249.28	4.78	---	---	1244.50	AE27	0.72%
AE27	725+49.2 NB	82 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1243.70	INL100	---	---	---
INL112	753+00.6 NB	26.5 LT	---	---	---	1	---	---	2	---	---	---	---	---	1245.70	1245.70	3.70	---	---	1242.00	INL113	0.63%
MH700	753+00.6 NB	33 RT	---	---	---	---	---	---	---	1	---	---	1	---	1249.18	1247.93	6.93	1241.65	INL112	1241.00	AE29	1.28%
AE29	753+21 NB	116.8 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1240.00	MH700	---	---	---
INL223	801+29 SB	34 RT	---	---	1	---	---	---	1	---	---	---	---	---	1265.30	1265.30	3.00	---	---	1262.30	AE95	---
AE95	801+29 SB	76.2 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1260.50	INL223	---	---	1.65%
AE600	750+47.4 SB	84 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1241.00	MH448	0.33%
MH448	753+00.5 D	25.2 LT	---	---	---	---	---	---	---	---	---	1	---	1	1245.80	1244.55	4.39	1240.18	AE600	1240.16	AE601	0.38%
AE601	753+44 D	48.9 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1240.00	MH448	---	---	---

- 1.) ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.
- 2.) CALCULATED DEPTH = DISTANCE FROM TOP OF BOX TO DISCHARGE ELEVATION.
- 3.) PIPE LENGTHS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- 4.) STORM SEWER PIPE IS REINFORCED, CLASS III, UNLESS NOTED OTHERWISE.
- 5.) ALL STRUCTURES HAVE THE STATUS "NEW".
- 6.) SLOPE IS CALCULATED BETWEEN INSIDE WALLS OF STRUCTURES. LENGTH LISTED IS BETWEEN CENTER OF STRUCTURES OR BEGINNING OF APRON ENDWALL

**STORM SEWER SCHEDULE**

STRUCTURE NUMBER	STATION	OFFSET	611.3220 611.3230		611.0612 611.0624		611.2004	611.2006	611.2005	611.0530	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE FROM	DISCHARGE ELEV	TO	SLOPE %
			2x2-FT EACH	2x3-FT EACH	INLETS	INLET COVERS	MANHOLES	MANHOLES	MANHOLES	MANHOLE COVERS								
AE01	23+64.2 U	42.7 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	1328.02	INL118	2.76%
INL118	25+15.7 U	37.8 RT	---	1	---	1	---	---	---	---	1327.70	1326.87	3.42	1324.09	AE01	1323.45	MH403	1.66%
MH403	25+18.6 U	6 RT	---	---	---	---	1	---	---	1	1328.41	1327.16	4.26	1322.97	INL118	1322.90	MH404	2.47%
MH404	29+81.6 U	6 RT	---	---	---	---	1	---	---	1	1315.69	1314.44	4.98	1311.55	MH403	1309.46	MH405	3.20%
			---	---	---	---	---	---	---	---	---	---	---	1309.96	INL122	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	1311.35	INL124	---	---	---
INL119	29+66.5 U	49.5 LT	---	1	---	1	---	---	---	---	1314.91	1314.08	3.03	---	---	1311.05	INL120	3.92%
INL120	29+81.5 U	49.5 LT	---	1	---	1	---	---	---	---	1314.44	1313.61	3.28	1310.58	INL119	1310.33	INL121	0.34%
INL121	29+81.5 U	18.5 LT	---	1	---	1	---	---	---	---	1315.04	1314.21	4.08	1310.23	INL120	1310.13	INL122	0.33%
INL122	29+81.5 U	1.5 LT	---	1	---	1	---	---	---	---	1315.46	1314.63	4.65	1310.08	INL121	1309.98	MH404	0.45%
			---	---	---	---	---	---	---	---	---	---	---	1311.63	INL123	---	---	---
INL123	29+66.7 U	1.5 LT	---	1	---	1	---	---	---	---	1315.93	1315.10	3.00	---	---	1312.10	INL122	3.92%
INL124	29+81.5 U	29.5 RT	---	1	---	1	---	---	---	---	1316.02	1315.19	3.37	---	---	1311.82	MH404	2.29%
MH405	33+00 U	6 RT	---	---	---	---	1	---	---	1	1305.46	1304.21	6.75	1299.39	MH404	1297.46	MH406	3.16%
			---	---	---	---	---	---	---	---	---	---	---	1299.53	INL127	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	1301.11	INL129	---	---	---
INL125	32+85 U	49.5 LT	---	1	---	1	---	---	---	---	1304.69	1303.86	3.37	---	---	1300.49	INL126	4.17%
INL126	33+00 U	49.5 LT	---	1	---	1	---	---	---	---	1304.20	1303.37	3.63	1299.99	INL125	1299.74	INL127	0.33%
INL127	33+00 U	1.5 LT	---	1	---	1	---	---	---	---	1305.22	1304.39	4.82	1299.59	INL126	1299.57	MH405	0.89%
			---	---	---	---	---	---	---	---	---	---	---	1301.01	INL128	---	---	---
INL128	32+85 U	1.5 LT	---	1	---	1	---	---	---	---	1305.71	1304.88	3.37	---	---	1301.51	INL127	4.17%
INL129	33+00 U	29.5 RT	---	1	---	1	---	---	---	---	1305.78	1304.95	3.37	---	---	1301.58	MH405	2.29%
MH406	36+88.2 U	6 RT	---	---	---	---	1	---	---	1	1291.64	1290.39	5.19	1285.31	MH405	1285.20	MH407	3.31%
			---	---	---	---	---	---	---	---	---	---	---	1285.81	INL132	---	---	---
INL130	37+07.2 U	16.8 LT	---	1	---	1	---	---	---	---	1290.20	1289.37	3.08	---	---	1286.29	INL131	0.56%
INL131	37+07.5 U	4.1 LT	---	1	---	1	---	---	---	---	1290.55	1289.72	3.55	1286.23	INL130	1286.17	INL132	0.54%
INL132	36+88 U	1.5 LT	---	1	---	1	---	---	---	---	1291.36	1290.53	4.70	1286.08	INL131	1285.83	MH406	0.44%
MH407	38+44.8 U	6 RT	---	---	---	---	---	1	---	1	1285.58	1284.33	4.41	1280.17	MH406	1279.92	MH409	3.83%
			---	---	---	---	---	---	---	---	---	---	---	1280.67	INL136	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	1281.53	MH408	---	---	---
INL133	38+05.1 U	49.5 LT	---	1	---	1	---	---	---	---	1285.57	1284.74	2.91	---	---	1281.83	INL134	5.00%
INL134	38+20.5 U	49.5 LT	---	1	---	1	---	---	---	---	1285.97	1285.14	4.16	1281.23	INL133	1280.98	INL135	0.34%
INL135	38+44.8 U	16.5 LT	---	1	---	1	---	---	---	---	1284.85	1284.02	3.22	1280.85	INL134	1280.80	INL136	0.45%
INL136	38+44.8 U	5.5 LT	---	1	---	1	---	---	---	---	1285.19	1284.36	3.65	1280.76	INL135	1280.71	MH407	0.56%
AE02	38+62.7 U	61.6 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	1281.80	MH408	0.33%
MH408	38+25.4 U	29.8 RT	---	---	---	1	1	---	---	---	1285.86	1285.03	3.39	1281.66	AE02	1281.64	MH407	0.40%
MH409	40+75 U	6 RT	---	---	---	---	1	---	---	1	1276.33	1275.08	4.30	1271.28	MH407	1270.78	MH410	2.60%
			---	---	---	---	---	---	---	---	---	---	---	1270.80	INL139	---	---	---
INL137	40+60 U	49.5 LT	---	1	---	1	---	---	---	---	1275.59	1274.76	3.58	---	---	1271.18	INL138	5.00%
INL138	40+75 U	49.5 LT	---	1	---	1	---	---	---	---	1275.38	1274.55	3.49	1271.08	INL137	1271.06	INL139	0.44%
INL139	40+75 U	1.5 LT	---	1	---	1	---	---	---	---	1276.13	1275.30	4.47	1270.85	INL138	1270.83	MH409	0.44%
			---	---	---	---	---	---	---	---	---	---	---	1272.40	INL140	---	---	---
INL140	40+60 U	1.5 LT	---	1	---	1	---	---	---	---	1276.73	1275.90	2.90	---	---	1273.00	INL139	0.67%
MH410	44+42 U	12 RT	---	---	---	---	---	---	1	1	1266.55	1265.30	4.38	1261.42	MH409	1260.92	MH411	1.26%
			---	---	---	---	---	---	---	---	---	---	---	1261.84	INL142	---	---	---
INL141	44+26.5 U	29.5 RT	---	1	---	1	---	---	---	---	1266.14	1265.31	3.03	---	---	1262.28	INL142	0.58%
INL142	44+42.2 U	31 RT	---	1	---	1	---	---	---	---	1266.06	1265.23	3.33	1262.21	INL141	1261.90	MH410	0.38%
MH411	44+42 U	1.8 LT	---	---	---	1	---	---	1	---	1266.68	1265.85	5.15	1260.81	MH410	1260.70	MH412	1.22%
MH412	44+42 U	18.2 LT	---	---	---	1	---	---	1	---	1267.18	1266.35	5.89	1260.56	MH411	1260.46	MH413	0.94%
			---	---	---	---	---	---	---	---	---	---	---	1263.20	INL143	---	---	---
INL143	44+27.3 U	18.2 LT	---	1	---	1	---	---	---	---	1267.22	1266.39	3.04	---	---	1263.35	MH412	1.36%
MH413	44+42 U	49.7 LT	---	---	---	1	---	---	1	---	1267.74	1266.91	7.20	1260.21	MH412	1259.71	AE03	1.20%
AE03	44+64.3 U	89 LT	---	---	---	---	---	---	---	---	---	---	---	1259.26	MH413	---	---	---
AE04	46+83 U	101.7 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	1258.00	MH414	1.19%
MH414	47+25 U	0	---	---	---	---	---	---	1	1	1271.36	1270.11	13.43	1256.80	AE04	1256.68	AE05	1.33%

**STORM SEWER SCHEDULE**

STRUCTURE NUMBER	STATION	OFFSET	611.3220 INLETS		611.0612 INLET COVERS		611.0624	611.2004	611.2006	611.2005	611.0530	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE FROM	DISCHARGE ELEV	TO	SLOPE %
			2x2-FT EACH	2x3-FT EACH	TYPE C EACH	TYPE H EACH	4-FT Diameter EACH	6-FT Diameter EACH	5-FT Diameter EACH	MANHOLE COVERS TYPE J EACH									
INL144	47+81.6 U	40 RT	---	1	---	1	---	---	---	---	---	1271.07	1270.24	3.84	1265.87	INL145	---	---	---
INL145	47+67.5 U	1.5 LT	---	1	---	1	---	---	---	---	---	1271.74	1270.91	4.83	1266.18	INL144	1266.08	MH414	0.53%
INL146	47+67.8 U	7.8 LT	---	1	---	1	---	---	---	---	---	1271.92	1271.09	3.37	1267.68	INL146	---	---	---
AE05	47+82.2 U	117.4 LT	---	---	---	---	---	---	---	---	---	---	---	---	1255.06	MH414	---	---	---
INL147	52+07.2 U	29.5 RT	---	1	---	1	---	---	---	---	---	1269.05	1268.22	3.13	---	---	1265.09	INL148	0.58%
INL148	51+91.7 U	29.5 RT	---	1	---	1	---	---	---	---	---	1269.31	1268.48	3.71	1265.02	INL147	1264.77	INL149	0.56%
INL149	51+82.2 U	1.5 LT	---	1	---	1	---	---	---	---	---	1270.03	1269.20	4.70	1264.60	INL148	1264.50	INL150	0.58%
INL150	51+59.1 U	18.5 LT	---	1	---	1	---	---	---	---	---	1270.76	1269.93	5.68	1264.35	INL149	1264.25	AE06	0.77%
AE06	51+54.1 U	92.7 LT	---	---	---	---	---	---	---	---	---	---	---	---	1263.73	INL150	---	---	---
INL151	54+28.4 U	6.9 LT	---	1	---	1	---	---	---	---	---	1263.05	1262.22	3.37	---	---	1258.85	INL152	0.87%
INL152	54+28.4 U	1.5 LT	---	1	---	1	---	---	---	---	---	1263.16	1262.33	3.54	1258.81	INL151	1258.79	MH415	7.58%
MH415	55+00 U	18 RT	---	---	---	---	1	---	---	---	1	1259.63	1258.38	3.38	1255.29	INL152	1255.00	MH416	5.25%
INL153	55+00 U	29.5 RT	---	1	---	1	---	---	---	---	---	1259.31	1258.48	3.01	---	---	1255.47	MH415	0.71%
MH416	56+48 U	18 RT	---	---	---	---	---	---	---	1	1	1252.09	1250.84	5.21	1247.47	MH415	1245.63	MH418	0.64%
STUB			---	---	---	---	---	---	---	---	---	---	---	---	---	---	1245.65	MH417	---
MH417	56+47.6 U	29.8 RT	---	---	---	1	---	---	---	1	---	1251.77	1250.94	5.24	1246.27	STUB	1245.70	MH416	0.74%
INL154	56+33.5 U	29.5 RT	---	1	---	1	---	---	---	---	---	1252.41	1251.58	3.32	---	---	1247.65	INL154	---
MH418	56+47.6 U	32 LT	---	---	---	1	---	---	---	1	---	1251.76	1250.93	5.64	1245.34	MH416	1245.29	MH419	0.59%
MH419	54+00	0	---	---	---	---	---	---	---	1	---	1249.75	1248.50	5.14	1244.04	MH418	1243.36	MH420	0.67%
MH420	50+88.4	0	---	---	---	---	---	---	---	1	---	1248.79	1247.54	6.37	1241.30	MH419	1241.17	MH421	0.68%
MH421	49+33	0	---	---	---	---	---	1	---	1	---	1246.50	1245.25	5.61	1240.14	MH420	1239.64	AE07	1.24%
AE07	48+71	0	---	---	---	---	---	---	---	---	---	---	---	---	1239.00	MH421	---	---	---
INL155	57+36.5 U	29.5 RT	---	1	---	1	---	---	---	---	---	1248.71	1247.88	3.49	---	---	1244.39	MH422	2.48%
MH422	58+00.5 U	19 LT	---	---	---	---	1	---	---	---	---	1247.50	1246.25	4.25	1242.50	INL155	1242.00	MH423	0.63%
MH423	60+25 U	18 LT	---	---	---	---	1	---	---	---	---	1245.01	1243.76	3.16	1240.60	MH422	1240.60	MH424	0.92%
INL156	60+84.7 U	44.6 RT	---	1	---	1	---	---	---	---	---	1245.36	1244.53	3.05	1241.10	INL160	---	---	---
INL157	60+33.3 U	45.9 RT	---	1	---	1	---	---	---	---	---	1246.22	1245.39	3.97	1241.44	INL156	1241.42	INL158	0.57%
INL158	60+26.5 U	29.5 RT	---	1	---	1	---	---	---	---	---	1245.79	1244.96	3.65	1241.33	INL157	1241.31	MH423	0.47%
INL159	60+10 U	29.5 LT	---	1	---	1	---	---	---	---	---	1244.84	1244.01	2.66	---	---	1241.35	INL160	0.67%
INL160	60+25 U	29.5 LT	---	1	---	1	---	---	---	---	---	1244.69	1243.86	2.61	1241.27	INL159	1241.25	MH423	1.77%
MH424	62+00 U	18.2 LT	---	---	---	---	1	---	---	---	---	1243.43	1242.18	3.18	1239.03	MH423	1239.00	MH425	0.92%
INL161	61+70 U	29.5 LT	---	1	---	1	---	---	---	---	---	1243.28	1242.45	3.05	---	---	1238.96	INL162	---
INL162	62+00 U	29.5 LT	---	1	---	1	---	---	---	---	---	1243.05	1242.22	3.22	1239.25	INL161	1239.00	MH424	0.48%
MH425	62+99.9 U	18 LT	---	---	---	---	1	---	---	---	---	1243.83	1242.58	4.48	1238.12	MH424	1238.10	MH426	2.17%
INL163	63+08 U	49 LT	1	---	1	---	---	---	---	---	---	1243.48	1242.23	2.82	---	---	1239.25	INL163	---
MH426	63+25.5 U	35 RT	---	---	---	---	---	---	---	1	1	1241.77	1240.52	3.64	1236.92	MH425	1236.88	EX MH	3.65%

**STORM SEWER SCHEDULE**

STRUCTURE NUMBER	STATION	OFFSET	611.3220 611.3230		611.0612 611.0624		611.2004	611.2006	611.2005	611.0530	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE FROM	DISCHARGE ELEV	TO	SLOPE %
			INLETS 2x2-FT EACH	INLETS 2x3-FT EACH	INLET COVERS TYPE C EACH	INLET COVERS TYPE H EACH	4-FT Diameter EACH	6-FT Diameter EACH	5-FT Diameter EACH	MANHOLES MANHOLES TYPE J EACH								
			---	---	---	---	---	---	---	---	---	---	---	1237.40	INL165	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	1237.41	INL167	---	---	---
INL165	62+83.2 U	29.5 RT	---	1	---	1	---	---	---	---	1242.59	1241.76	4.13	---	---	1237.63	MH426	0.57%
INL166	63+94.5 U	29.5 RT	---	1	---	1	---	---	---	---	1242.69	1241.86	3.55	---	---	1238.31	INL167	1.42%
INL167	63+79.8 U	29.5 RT	---	1	---	1	---	---	---	---	1242.59	1241.76	3.87	1238.14	INL166	1237.89	MH426	0.93%
INL168	66+99.9 U	29.5 LT	---	1	---	1	---	---	---	---	1246.70	1245.87	3.54	---	---	1242.33	EX MH	0.77%
EX MH	67+35 U	1.6 LT	---	---	---	---	---	---	---	---	---	---	---	1242.00	INL168	1241.72	MH427	3.83%
MH427	67+32.2 U	29.5 RT	---	---	---	---	1	---	---	1	1245.95	1244.70	4.20	1240.60	EX MH	1240.50	EX MH	3.86%
			---	---	---	---	---	---	---	---	---	---	---	1241.31	INL169	---	---	---
INL169	67+54 U	29.5 RT	---	1	---	1	---	---	---	---	1246.62	1245.79	4.37	---	---	1241.42	MH427	0.59%
INL170	69+03.3 U	40.1 LT	---	1	---	1	---	---	---	---	1250.59	1249.76	3.49	---	---	1246.27	EX PIPE	2.63%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
INL171	69+15.5 U	29.5 RT	---	1	---	1	---	---	---	---	1250.96	1250.13	4.07	---	---	1246.06	EX PIPE	1.01%

- 1.) ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.
- 2.) CALCULATED DEPTH = DISTANCE FROM TOP OF BOX TO DISCHARGE ELEVATION.
- 3.) PIPE LENGTHS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- 4.) STORM SEWER PIPE IS REINFORCED, CLASS III, UNLESS NOTED OTHERWISE.
- 5.) ALL STRUCTURES HAVE THE STATUS "NEW".
- 6.) SLOPE IS CALCULATED BETWEEN INSIDE WALLS OF STRUCTURES. LENGTH LISTED IS BETWEEN CENTER OF STRUCTUR

**ENDWALLS AND CULVERT PIPES REINFORCED CONCRETE**

STATION TO STATION	LOCATION	522.1012	522.1015	522.1018	522.1024	522.1030	522.1036	522.1072	522.0124	522.0130	522.0136	522.0172	611.9800.S	(1)
		12-INCH EACH	15-INCH EACH	18-INCH EACH	24-INCH EACH	30-INCH EACH	36-INCH EACH	72-INCH EACH	24-INCH LF	30-INCH LF	36-INCH LF	72-INCH LF	PIPE GRATES EACH	JOINT TIES EACH
60+82 KN	LT & RT	---	---	---	---	---	---	2	---	---	---	198	---	12
52+00 KN	LT & RT	---	---	---	---	---	2	---	---	---	166	---	---	12
775+79 C	LT	---	---	---	---	2	---	---	---	42	---	---	---	12
766+53 B	LT & RT	---	---	---	2	---	---	---	180	---	---	---	---	12
755+20 NB	RT	---	---	---	---	---	2	---	---	---	70	---	---	12
740+05 NB - 748+53 NB	LT & RT	---	---	---	---	1	---	---	---	---	---	---	1	6
746+00 F - 749+00 F	LT & RT	2	---	---	---	---	---	---	---	---	---	---	2	12
759+00 D - 767+50 D	LT & RT	1	1	---	---	---	---	---	---	---	---	---	2	12
775+12 C - 783+00 C	LT & RT	---	2	---	---	---	---	---	---	---	---	---	2	12
30+76 KS - 30+79 KS	LT & RT	1	---	---	---	---	---	---	---	---	---	---	1	6
31+35 KN - 31+78 KN	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
34+90 KS - 36+02 KS	LT & RT	1	---	---	---	---	---	---	---	---	---	---	---	6
34+00 KN - 35+15 KN	LT & RT	1	1	---	---	---	---	---	---	---	---	---	2	12
761+85 B - 763+85 B	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
38+00 KN - 44+00 KN	LT & RT	---	---	---	1	---	---	---	---	---	---	---	1	6
770+10 D - 770+50 D	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
48+75 KN - 51+00 KN	LT & RT	---	---	2	---	---	---	---	---	---	---	---	2	12
54+95 KN - 55+50 KN	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
57+80 KN - 57+98 KN	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
60+12 KS - 60+12 KS	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
<b>TOTALS</b>		<b>6</b>	<b>10</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>180</b>	<b>42</b>	<b>236</b>	<b>198</b>	<b>19</b>	
<b>*CATEGORY TOTALS</b>		<b>6</b>	<b>10</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>196</b>	<b>42</b>	<b>236</b>	<b>198</b>	<b>19</b>	
<b>*PROJECT ID TOTALS</b>		<b>6</b>	<b>10</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>352</b>	<b>90</b>	<b>236</b>	<b>198</b>	<b>19</b>	

(1) FOR INFORMATION ONLY. NOT A BID ITEM.

**ENDWALLS AND CULVERT PIPES CORRUGATED STEEL**

STATION	LOCATION	521.1012	521.1015	521.1018	521.1024	521.1030	521.0112	521.0115	521.0118	521.0124	521.0130	THICKNESS INCHES
		12-INCH EACH	15-INCH EACH	18-INCH EACH	24-INCH EACH	30-INCH EACH	12-INCH LF	15-INCH LF	18-INCH LF	24-INCH LF	30-INCH LF	
230+38 V	LT & RT	---	---	---	2	---	---	---	---	130	---	0.064
228+00 V	RT	---	---	2	---	---	---	---	52	---	---	0.064
226+50 V	RT	---	2	---	---	---	---	48	---	---	---	0.064
222+75 V	LT & RT	---	---	2	---	---	---	---	76	---	---	0.064
222+67 V	LT & RT	---	---	2	---	---	---	---	76	---	---	0.064
221+03 V	LT	---	---	2	---	---	---	---	28	---	---	0.064
214+00 V	RT	2	---	---	---	---	42	---	---	---	---	0.064
208+94 V	LT	2	---	---	---	---	29	---	---	---	---	0.064
208+94 V	RT	2	---	---	---	---	104	---	---	---	---	0.064
205+31 V	LT & RT	---	---	---	---	2	---	---	---	94	---	0.079
205+24 V	LT & RT	---	---	---	---	2	---	---	---	94	---	0.079
203+30 V	LT	---	2	---	---	---	---	25	---	---	---	0.064
202+29 V	LT	2	---	---	---	---	27	---	---	---	---	0.064
<b>CATEGORY TOTALS</b>		<b>8</b>	<b>4</b>	<b>8</b>	<b>2</b>	<b>4</b>	<b>202</b>	<b>73</b>	<b>232</b>	<b>130</b>	<b>188</b>	

**\* OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET  
ARE CATEGORY 0010  
UNLESS OTHERWISE NOTED

CULVERT PIPE TEMPORARY

STATION TO STATION	LOCATION	520.4012	520.4024
		12-INCH LF	24-INCH LF
350+50 AT - 352+00 AT	AT RAMP RT	---	150
370+90 CT	CT RAMP	54	---
372+25 CT	CT RAMP	---	88
373+00 CU	CU RAMP	---	74
<b>TOTALS</b>		<b>54</b>	<b>312</b>
<b>CATEGORY TOTALS</b>		<b>259</b>	<b>470</b>

CULVERT PIPE REINFORCED CONCRETE TYPE III 24-INCH

STATION	LOCATION	522.0124	REMARKS
		LF	
359+40 AT	AT RAMP LT	16	EXTEND EXISTING PIPE
<b>TOTAL</b>		<b>16</b>	
<b>CATEGORY TOTAL</b>		<b>196</b>	
<b>*PROJECT ID TOTAL</b>		<b>352</b>	

STORM SEWER PIPE REINFORCED CONCRETE CLASS III

STATION TO STATION	LOCATION	608.0312	608.0315	608.0318	608.0321	608.0324	608.0330
		12-INCH LF	15-INCH LF	18-INCH LF	21-INCH LF	24-INCH LF	30-INCH LF
746+00 F - 749+00 F	LT & RT	102	---	---	---	---	---
759+00 D - 767+50 D	LT & RT	15	---	---	---	126	---
775+12 C - 783+00 C	LT & RT	214	46	---	---	77	---
740+05 NB - 748+53 NB	LT & RT	520	298	91	---	525	56
30+76 KS - 30+79 KS	LT & RT	28	---	---	---	---	---
31+35 KN - 31+78 KN	LT & RT	34	85	---	---	---	---
34+90 KS - 36+02 KS	LT & RT	171	---	---	---	---	---
34+00 KN - 35+15 KN	LT & RT	91	107	---	---	---	---
761+85 B - 763+85 B	LT & RT	92	36	---	---	---	---
38+00 KN - 44+00 KN	LT & RT	172	101	375	416	60	---
770+10 D - 770+50 D	LT & RT	60	33	---	---	---	---
48+75 KN - 51+00 KN	LT & RT	37	21	516	---	---	---
54+95 KN - 55+50 KN	LT & RT	65	136	---	---	---	---
57+80 KN - 57+98 KN	LT & RT	48	109	---	---	---	---
60+12 KN - 60+12 KN	LT & RT	---	94	---	---	---	---
<b>CATEGORY TOTALS</b>		<b>1649</b>	<b>1066</b>	<b>982</b>	<b>416</b>	<b>788</b>	<b>56</b>

STORM SEWER SCHEDULE TEMPORARY DRAINAGE

STRUCTURE NUMBER	STATION	OFFSET	611.2004	611.2005	611.3902	611.0642	611.0612	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE FROM	DISCHARGE ELEV	TO	520.4012	520.4018	520.4024	SLOPE %	SPV.0060.03
			MANHOLES 4-FT EACH	DIAMETER 5-FT EACH	INLETS MEDIAN 2 GRATE EACH	INLET COVERS TYPE MS EACH	TYPE C EACH								CULVERT PIPE TEMPORARY 12-INCH LF	18-INCH LF	24-INCH LF		CONNECTION TO EXISTING INLETS EACH
	743+78 E	10' RT	---	---	---	---	---	---	---	---	1239.52	INLET (106)	1239.50	MANHOLE (500)	18	---	---	0.1	---
	742+00 E	26.9' RT	---	---	---	---	---	---	---	---	1239.50	MANHOLE (500)	1239.50	DITCH	187	---	---	0.0	---
900	354+20 AT	37' RT	---	---	1	2	---	1242.46	1242.46	4.00	1238.46	INLET	1238.00	EX. INLET	---	28	---	1.6	1
901	358+50 AT	19' RT	---	---	1	2	---	1244.64	1244.64	3.00	1241.64	INLET	1241.00	DITCH	---	76	---	0.8	---
	364+00 BT	46' LT	---	---	---	---	---	---	---	---	1241.00	PIPE END	1239.44	902	---	---	158	1.0	---
902	365+58 BT	24' LT	---	1	---	---	1	1248.46	1247.71	8.27	1239.44	INLET	---	EX. ENDWALL	---	---	---	---	---
903	380+25 CT	26.4' RT	---	---	1	2	---	1238.85	1238.85	2.50	1236.35	INLET	1230.72	EX. INLET	---	347	---	1.6	1
904	359+50 DT	23.4' RT	1	---	---	---	1	1261.06	1260.31	2.50	1257.81	INLET	1256.35	DITCH	---	34	---	4.3	---
<b>TOTALS</b>			<b>1</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>2</b>								<b>205</b>	<b>485</b>	<b>158</b>		<b>2</b>
<b>*CATEGORY TOTALS</b>			<b>23</b>	<b>3</b>	<b>7</b>	<b>16</b>	<b>2</b>								<b>259</b>	<b>485</b>	<b>470</b>		<b>2</b>
<b>*PROJECT ID TOTALS</b>			<b>23</b>	<b>3</b>	<b>9</b>	<b>20</b>	<b>2</b>								<b>259</b>	<b>485</b>	<b>470</b>		<b>2</b>

Eliminated Inlets 2x2 - FT from this table

- 1.) ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.
- 2.) CALCULATED DEPTH = DISTANCE FROM TOP OF BOX TO DISCHARGE ELEVATION.
- 3.) PIPE LENGTHS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- 4.) ALL STRUCTURES HAVE THE STATUS "NEW".

\* OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

**STORM SEWER MANHOLES, INLETS, AND COVERS**

STATION - STATION	LOCATION	INLETS					INLET COVERS							MANHOLES		MANHOLE	COVER
		2x2-FT EACH	2x2.5-FT EACH	2x3-FT EACH	MEDIAN 1 GRATE EACH	MEDIAN 2 GRATE EACH	TYPE BW EACH	TYPE H EACH	TYPE HM EACH	TYPE HM-GJ EACH	TYPE MS EACH	TYPE T EACH	TYPE V EACH	4-FT EACH	5-FT EACH	COVERS TYPE J EACH	PLATES TEMPORARY EACH
745+25 A - 760+90 A	LT & RT	---	1	5	---	---	1	3	---	3	---	---	---	---	---	---	---
746+00 F - 749+00 F	LT & RT	---	---	2	---	---	---	---	2	---	---	---	---	---	---	---	---
759+00 D - 767+50 D	LT & RT	---	---	2	---	1	---	---	2	---	---	---	---	---	---	---	---
772+20 C - 783+00 C	LT & RT	---	---	3	1	1	---	---	3	1	3	---	---	---	---	---	3
740+05 NB - 748+53 NB	LT & RT	---	6	1	1	1	5	---	1	---	3	---	4	2	2	1	2
30+76 KS - 30+79 KS	LT & RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	---
31+35 KN - 31+78 KN	LT & RT	---	---	4	---	---	---	4	---	---	---	---	---	1	---	1	---
34+90 KS - 36+02 KS	LT & RT	---	---	3	---	---	---	3	---	---	---	---	---	---	---	---	---
34+00 KN - 35+15 KN	LT & RT	---	---	2	---	---	---	3	---	---	---	---	---	1	---	---	---
761+85 B - 763+85 B	LT & RT	---	---	4	---	---	---	4	---	---	---	---	---	---	---	---	---
38+00 KN - 44+00 KN	LT & RT	1	---	16	---	---	---	21	---	---	---	2	---	8	---	2	---
770+10 D - 770+50 D	LT & RT	---	---	4	---	---	---	4	---	---	---	---	---	---	---	---	---
48+75 KN - 51+00 KN	LT & RT	---	---	3	---	---	---	6	---	---	---	2	---	5	---	---	---
54+95 KN - 55+50 KN	LT & RT	---	---	5	---	---	---	7	---	---	---	---	---	2	---	---	---
57+80 KN - 57+98 KN	LT & RT	---	---	3	---	---	---	5	---	---	---	---	---	2	---	---	---
60+12 KS - 60+12 KS	LT & RT	---	---	---	---	1	---	---	---	---	2	---	---	---	---	---	---
<b>TOTALS</b>		1	7	58	2	4	6	61	8	4	10	4	4	22	2	4	5
<b>*CATEGORY TOTALS</b>		2	7	58	2	7	6	61	8	4	16	4	4	23	3	4	5
<b>*PROJECT ID TOTALS</b>		2	7	58	2	9	6	61	8	4	20	4	4	23	3	4	5

**PIPE UNDERDRAIN 6-INCH ITEMS**

STATION TO STATION	LOCATION	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE				645.0111 GEOTEXTILE FABRIC
		612.0106 6-INCH LF	612.0206 UNPERFORATED 6-INCH LF	612.0806 6-INCH EACH	645.0111 TYPE DF SCHEDULE A SY	
31+61 KN - 58+00 KN	RT	2600	---	---	1806	
55+00 KN - 58+75 KN	LT	375	---	---	260	
32+93 KS - 35+75 KS	RT	283	---	---	197	
32+93 KS - 58+75 KS	LT	2554	---	---	1774	
56+00 KS - 58+75 KS	RT	275	---	---	191	
100+00 KE - 104+14 KE	LT	414	---	---	288	
200+00 KW - 204+14 KW	LT	414	---	---	288	
757+10 A - 761+33 A	RT	423	---	---	294	
760+37 A - 761+29 A	LT	104	---	---	72	
761+29 B - 766+80 B	RT	551	---	---	383	
771+18 C - 775+47 C	LT	414	---	---	288	
771+21 C - 772+26 C	RT	127	---	---	88	
764+50 D - 771+05 D	LT	655	---	---	455	
768+00 D - 770+47 D	RT	247	---	---	172	
743+79 E - 750+78 E	RT	699	---	---	485	
743+00 F - 751+96 F	LT	896	---	---	622	
751+64 F - 751+84 F	RT	33	---	---	23	
201+10 V - 230+24 V	LT/RT, OVERLOOK DR	4028	264	24	---	
<b>CATEGORY TOTALS</b>		15092	264	24	7686	
<b>*PROJECT ID TOTALS</b>		16042	264	24	8346	

**STORM SEWER ROCK EXCAVATION**

STATION TO STATION	607.5000 CY	REMARKS
762+00 B - 766+50 B	290	RAMP B AT USH 51-CTH K STM SEWER
738+00 - 748+50 NB	530	USH 51 MAINLINE STM SEWER
746+00 F - 749+00 F	50	RAMP F AT USH 51-CTH U STM SEWER
31+00 K - 44+00 K	740	CTH K, EAST OF USH 51, STM SEWER
44+00 K - 58+00 K	40	CTH K, WEST OF USH 51, STM SEWER
<b>CATEGORY TOTAL</b>	<b>1650</b>	

**\* OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

**STORM SEWER ENDWALLS AND CULVERT PIPES - CORRUGATED STEEL**

STATION	LOCATION	THICKNESS INCHES	18-INCH LF	10 TO 1 EACH
721+25 NB	LT	0.064	48	2
<b>CATEGORY TOTALS</b>			<b>48</b>	<b>2</b>

STATION	CULVERT PIPE TEMPORARY				
	520.4012 12-INCH LF	520.4018 18-INCH LF	520.4024 24-INCH LF	520.4036 36-INCH LF	520.4042 42-INCH LF
723+59 NS	---	6	---	---	---
333+22 NR	---	---	---	---	12
338+55 NR	22	---	---	---	---
361+84 NR	---	223	---	---	---
364+56 NR	---	---	132	---	---
338+40 NR	---	---	---	---	18
723+40 SB	---	---	---	6	---
733+67 SB	---	---	---	---	50
738+85 SB	---	---	---	---	50
<b>TOTALS</b>	<b>22</b>	<b>229</b>	<b>132</b>	<b>6</b>	<b>130</b>
<b>*CATEGORY TOTALS</b>	<b>1657</b>	<b>1346</b>	<b>132</b>	<b>6</b>	<b>130</b>

**STORM SEWER ENDWALLS AND CULVERT PIPES - REINFORCED CONCRETE**

STATION TO STATION	LOCATION	24-INCH EACH	36-INCH EACH	42-INCH EACH	48-INCH EACH	24-INCH LF	36-INCH LF	42-INCH LF	48-INCH LF	611.9800.S PIPE GRATES EACH	(1) JOINT TIES EACH
723+36 NB	LT & RT	---	2	---	---	---	212	---	---	---	12
733+50 NB	LT & RT	---	---	2	---	---	---	230	---	---	12
738+67 NB	LT & RT	---	---	---	2	---	---	---	241	---	12
774+00 NB	LT & RT	2	---	---	---	105	---	---	---	---	12
787+66 NB	LT & RT	2	---	---	---	123	---	---	---	---	12
789+40 SB	LT & RT	2	---	---	---	109	---	---	---	---	12
725+49 NB	RT	1	---	---	---	---	---	---	---	---	6
753+20 NB	RT	1	---	---	---	---	---	---	---	1	6
801+29 SB	LT	1	---	---	---	---	---	---	---	1	6
750+46 SB - 753+45 D	LT	2	---	---	---	---	---	---	---	2	12
<b>CATEGORY TOTALS</b>		<b>11</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>337</b>	<b>212</b>	<b>230</b>	<b>241</b>	<b>4</b>	

(1) FOR INFORMATION ONLY. NOT A BID ITEM.

Eliminated 18-Inch and 21-Inch pipes and endwalls from this table

**APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH**

STATION	LOCATION	522.1018 EACH
418+55 NR	RT	1
<b>CATEGORY TOTAL</b>		<b>1</b>

**CULVERT PIPE REINFORCED CONCRETE TYPE III 18-INCH**

STATION	522.0118 LF	REMARKS
352+66 NR	12	
387+75 NR	30	
374+76 SR	18	
743+00 SB	140	CONNECT TO INLET 920
356+50 SR	106	CONNECT TO INLET 919
723+00 SB	106	CONNECT TO INLET 921
732+00 SB	108	CONNECT TO INLET 922
738+00 SB	132	CONNECT TO INLET 923
<b>CATEGORY TOTAL</b>	<b>652</b>	

**STORM SEWER MANHOLES, INLETS, AND COVERS**

STATION	LOCATION	611.3902 INLET MEDIAN 2 GRATE EACH	611.0642 INLET TYPE MS EACH	611.0654 INLET TYPE V EACH	611.2004 4-FT DIA EACH	611.2005 5-FT DIA EACH	611.0530 MANHOLE COVERS TYPE J EACH
725+49 NB	LT	1	2	---	---	---	---
753+00 NB	LT & RT	1	2	1	---	1	---
801+29 SB	RT	1	2	---	---	---	---
753+00 D	LT	---	---	---	1	---	1
<b>TOTALS</b>		<b>3</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>*CATEGORY TOTALS</b>		<b>17</b>	<b>28</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>

Eliminated Inlets Median 1 Grate and Inlets 2x2.5 - FT from this table

**\* OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

**STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH**

STATION TO STATION	LOCATION	608.0324 LF
725+48 NB - 725+49 NB	LT & RT	106
753+00 NB - 753+20 NB	LT & RT	136
801+29 SB	LT & RT	104
750+46 SB - 753+45 D	LT	291

CATEGORY TOTAL

637

Eliminated 18-Inch pipes from this table

**APRON ENDWALLS FOR CULVERT PIPE (TEMPORARY)**

STATION	LOCATION	521.1518 SLOPED SIDE	521.1012 STEEL
		DRAIN STEEL 6 TO 1 18-INCH	12-INCH
		EACH	EACH
389+50 NR	53' LT	1	---
391+00 NR	58.1' LT	---	1
<b>TOTALS</b>		<b>1</b>	<b>1</b>
<b>*CATEGORY TOTALS</b>		<b>6</b>	<b>1</b>

**STORM SEWER SCHEDULE (TEMPORARY DRAINAGE)**

STRUCTURE NUMBER	STATION	OFFSET	611.2004 MANHOLES	611.3220 2x2-FT	611.3902 GRATE	611.0606 TYPE B	611.0642 TYPE MS	611.0612 TYPE C	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE FROM ELEV	TO	520.4012 CULVERT PIPE	520.4018 TEMPORARY	SLOPE %	SPV.0060.03 CONNECTION	611.8120.S COVER	
			4-FT DIA EACH	EACH	EACH	EACH	EACH	EACH							EACH	12-INCH LF		18-INCH LF	TO EXIST EACH	TEMPORARY EACH
905	419+00 NR		---	---	---	---	---	---	---	---	---	1337.90	DITCH	1334.13	905	---	60	6.3	---	---
	418+55 NR	20' RT	---	---	1	---	---	---	1336.63	1336.63	5.00	1331.63	INLET	1331.63	EX EW	---	---	---	---	1
	385+00 NR	44.7' LT	---	---	---	---	---	---	---	---	---	1226.77	DITCH	1224.64	906	---	225	0.0	---	---
906	387+75 NR	57' LT	---	---	1	---	2	---	1227.94	1227.94	3.30	1224.64	INLET	---	EX PIPE	---	30	---	---	---
907	712+00 NS	0' RT	---	1	---	1	---	---	1260.08	1259.25	4.00	1255.25	INLET	1254.50	EX INLET	12	---	6.3	1	---
908	717+00 NS	0' RT	---	1	---	1	---	---	1256.38	1255.55	2.82	1252.73	INLET	1251.08	DITCH	550	---	0.3	---	---
909	332+39 NR	24.5' LT	---	---	1	---	---	---	1245.89	1245.89	2.00	1243.89	INLET	---	EX PIPE	---	---	---	---	1
910	331+00 NR	48' LT	---	---	1	---	2	---	1247.67	1247.67	3.00	1244.67	INLET	1243.89	909	142	---	0.5	---	---
911	334+00 NR	38.4' LT	---	---	1	---	2	---	1245.55	1245.55	2.00	1243.55	INLET	1243.20	912	455	---	0.1	---	---
912	338+55 NR	35.8' LT	---	1	---	1	---	---	1246.24	1245.42	2.00	1243.42	INLET	1243.11	EX PIPE	6	---	5.2	---	---
913	343+00 NR	34.3' LT	---	---	1	---	2	---	1245.64	1245.64	2.00	1243.64	INLET	1243.42	912	445	---	0.0	---	---
914	356+50 NR	27' LT	1	---	---	---	---	1	1255.19	1254.36	2.86	1251.50	INLET	1249.98	DITCH	---	78	1.9	---	---
915	374+74 NR	29' LT	1	---	---	---	---	1	1254.58	1253.75	3.00	1250.75	INLET	1250.17	DITCH	---	374	0.2	---	---
	385+50 NR	44.7' LT	---	---	---	---	---	---	---	---	---	1226.77	DITCH	1224.64	916	---	225	0.9	---	---
916	387+75 NR	56.7' LT	---	---	1	---	2	---	1227.94	1227.94	3.30	1224.64	INLET	1224.16	EX PIPE	---	---	---	---	---
	389+50 NR	53' LT	---	---	---	---	---	---	---	---	---	1229.28	DITCH	1226.33	917	25	---	11.8	---	---
917	389+75 NR	47' LT	---	---	1	---	---	---	1228.83	1228.83	2.50	1226.33	INLET	1226.33	EX PIPE	---	---	---	---	1
	391+00 NR	58.1' LT	---	---	---	---	---	---	---	---	---	1231.39	DITCH	1226.33	917	---	125	4.0	---	---
918	402+76 NR	53.8' LT	---	---	1	---	2	---	1271.48	1271.45	2.50	1268.95	INLET	1268.95	EX PIPE	---	---	---	---	---
919	356+50 SR	12.5' LT	---	---	1	---	2	---	1252.17	1252.17	2.50	1249.67	INLET	1246.95	DITCH	---	---	---	---	---
920	743+00 SB	35' RT	---	---	1	---	2	---	1242.40	1242.40	3.00	1239.40	INLET	1238.97	DITCH	---	---	---	---	---
921	723+00 SB	30.5' RT	---	---	1	---	2	---	1251.93	1251.93	3.00	1248.93	INLET	1246.83	DITCH	---	---	---	---	---
922	732+00 SB	32' RT	---	---	1	---	2	---	1246.91	1246.91	3.00	1243.91	INLET	1243.37	DITCH	---	---	---	---	---
923	738+00 SB	42.5' RT	---	---	1	---	2	---	1241.91	1241.91	3.00	1238.91	INLET	1237.00	DITCH	---	---	---	---	---
<b>TOTALS</b>			2	3	14	3	22	2							1635	1117			1	3
<b>*CATEGORY TOTALS</b>			3	3	17	3	28	2							1657	1346			1	3

- 1.) ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.
- 2.) CALCULATED DEPTH = DISTANCE FROM TOP OF BOX TO DISCHARGE ELEVATION.
- 3.) PIPE LENGTHS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- 4.) ALL STRUCTURES HAVE THE STATUS "NEW".

**\* OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

**STORM SEWER ENDWALLS AND CULVERT PIPES - CORRUGATED STEEL**

STATION	LOCATION	THICKNESS INCHES	521.1012 521.1018 521.1036 APRON ENDWALLS FOR CULVERT PIPE CORRUGATED STEEL			521.0112 521.0118 521.0136 CULVERT PIPE CORRUGATED STEEL			520.8000 CONCRETE	611.9800.S PIPE GRATES	520.8000 COLLARS FOR PIPES
			12-INCH EACH	18-INCH EACH	36-INCH EACH	12-INCH LF	18-INCH LF	36-INCH LF	EACH	EACH	
19+92 U	RT	0.064	2	---	---	29	---	---	---	---	
20+06 U	LT	0.064	2	---	---	26	---	---	---	---	
20+39 U	RT	0.064	2	---	---	25	---	---	---	---	
21+56 U	RT	0.064	---	2	---	---	29	---	---	---	
23+31 U	RT	0.064	---	2	---	---	40	---	---	---	
43+00 U	RT	0.064	2	---	---	48	---	---	---	---	
254+04 M	RT	0.079	---	---	1	---	---	77	1	1	
254+68 M	RT	0.064	---	2	---	---	180	---	---	---	
<b>TOTALS</b>			<b>8</b>	<b>6</b>	<b>1</b>	<b>127</b>	<b>249</b>	<b>77</b>	<b>1</b>	<b>1</b>	
<b>*CATEGORY TOTALS</b>			<b>8</b>	<b>6</b>	<b>1</b>	<b>127</b>	<b>249</b>	<b>77</b>	<b>8</b>	<b>1</b>	

**STORM SEWER ROCK EXCAVATION**

STATION TO STATION	607.5000 CY	REMARKS
23+50 U - 50+00 U	830	CTH U, WEST OF USH 51, STM SEWER
<b>CATEGORY TOTAL</b>	<b>830</b>	
<b>*PROJECT ID TOTAL</b>	<b>977</b>	

**STORM SEWER ENDWALLS AND CULVERT PIPES - REINFORCED CONCRETE**

STATION TO STATION	LOCATION	522.1015 522.1024 522.1030 522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE				611.9800.S PIPE GRATES	(1) JOINT TIES
		15-INCH EACH	24-INCH EACH	30-INCH EACH	36-INCH EACH	EACH	EACH
23+50 U - 45+00 U	LT & RT	2	---	1	---	3	18
46+85 U - 47+80 U	LT & RT	---	2	---	---	2	12
51+50 U - 52+10 U	LT & RT	1	---	---	---	1	6
48+70 U - 56+50 U	LT & RT	---	---	---	1	1	6
<b>TOTALS</b>		<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>7</b>	
<b>*CATEGORY TOTALS</b>		<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>8</b>	

**STORM SEWER PIPE REINFORCED CONCRETE ITEMS**

STATION TO STATION	LOCATION	608.0312 608.0315 608.0318 608.0321 608.0324 608.0330 608.0336 STORM SEWER PIPE REINFORCED CONCRETE, CLASS III						
		12-INCH LF	15-INCH LF	18-INCH LF	21-INCH LF	24-INCH LF	30-INCH LF	36-INCH LF
23+50 U - 45+00 U	LT & RT	216	950	337	546	596	102	---
46+85 U - 47+80 U	LT & RT	93	---	---	---	229	---	---
51+50 U - 52+10 U	LT & RT	15	129	---	---	---	---	---
48+70 U - 56+50 U	LT & RT	91	163	---	---	18	278	522
57+35 U - 63+95 U	LT & RT	345	292	435	---	---	---	---
66+95 U - 67+54 U	LT & RT	67	72	---	---	---	---	---
69+00 U - 69+16 U	LT & RT	19	---	---	---	---	---	---
<b>CATEGORY TOTALS</b>		<b>846</b>	<b>1606</b>	<b>772</b>	<b>546</b>	<b>843</b>	<b>380</b>	<b>522</b>

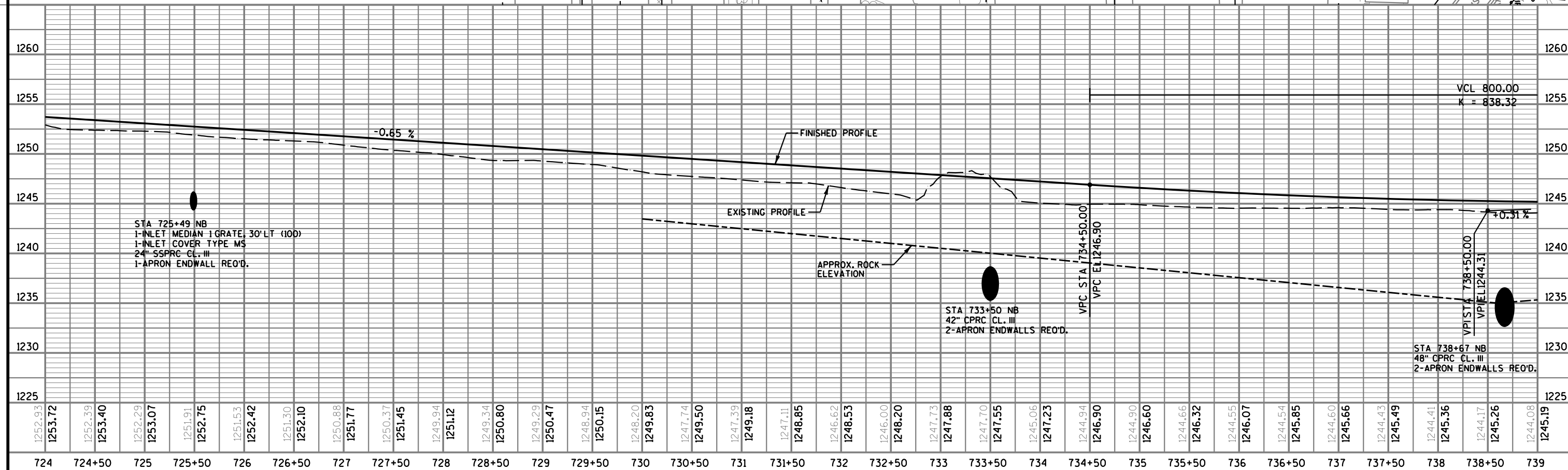
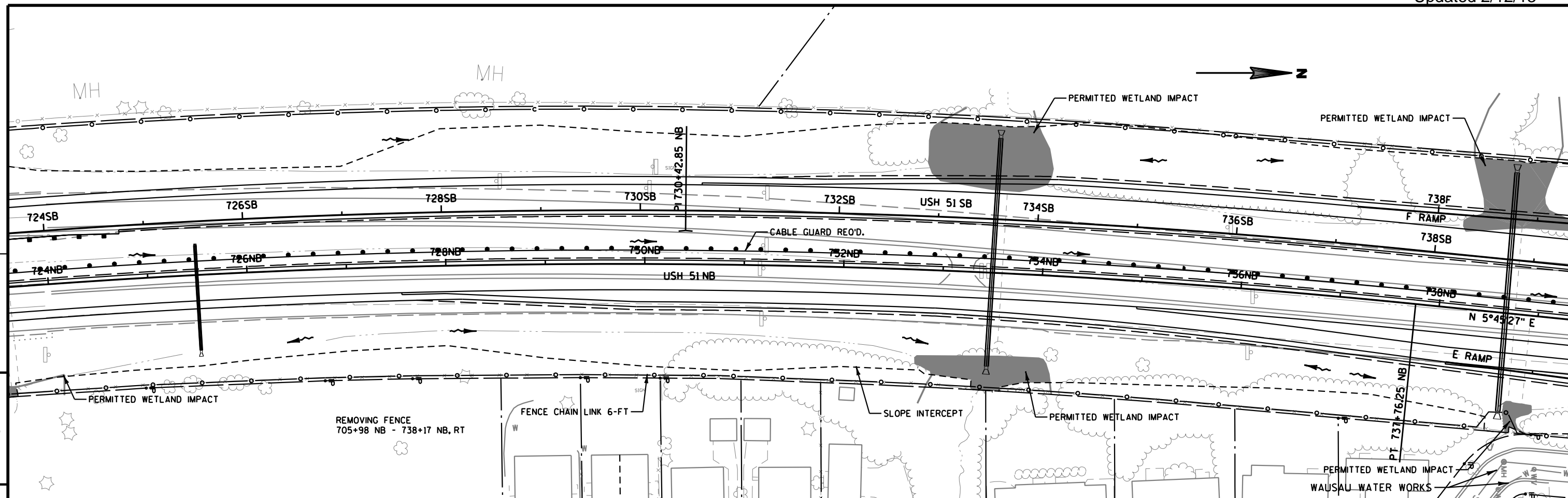
(1) FOR INFORMATION ONLY. NOT A BID ITEM.

**STORM SEWER MANHOLES, INLETS, AND COVERS**

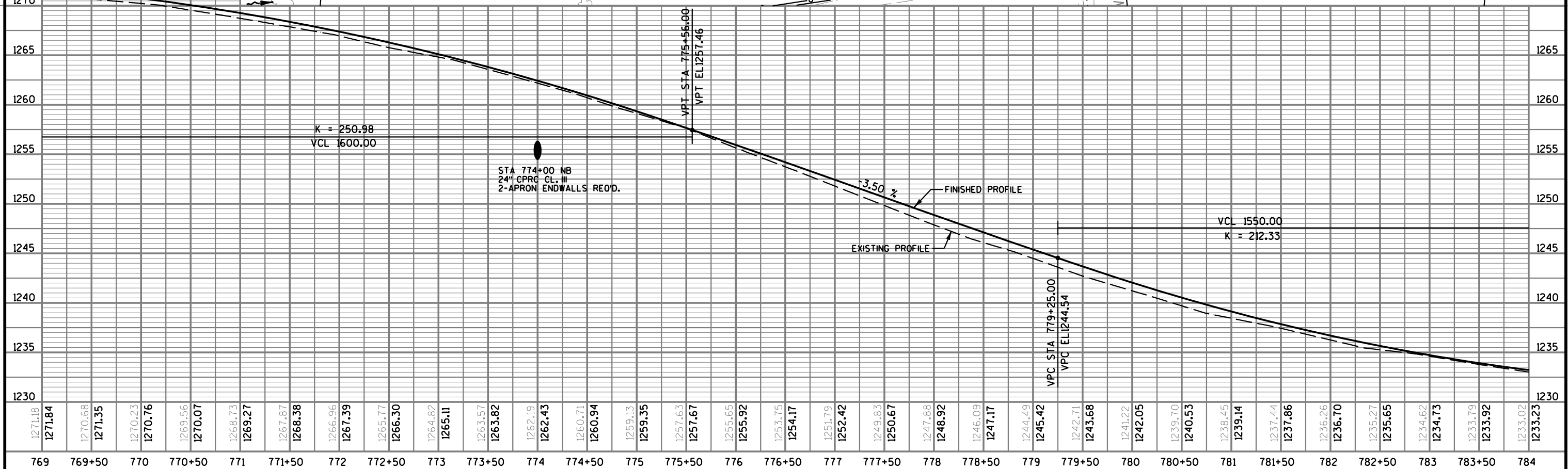
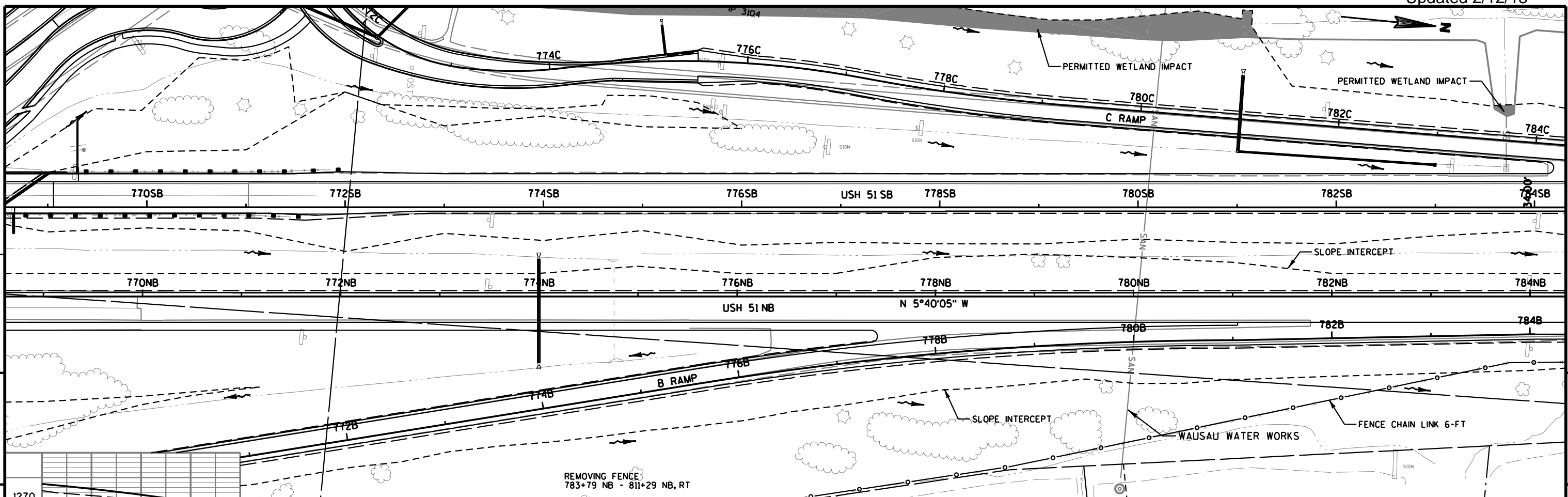
STATION TO STATION	LOCATION	611.3220 611.3230 INLETS		611.0612 611.0624 INLET COVERS		611.2004 4-FT DIAMETER	611.2005 5-FT DIAMETER	611.2006 6-FT DIAMETER	611.0530 MANHOLE COVERS TYPE J
		2x2-FT EACH	2x3-FT EACH	TYPE C EACH	TYPE H EACH	EACH	EACH	EACH	EACH
23+50 U - 45+00 U	LT & RT	---	26	---	30	6	4	1	7
46+85 U - 47+80 U	LT & RT	---	3	---	3	---	1	---	1
51+50 U - 52+10 U	LT & RT	---	4	---	4	---	---	---	---
48+70 U - 56+50 U	LT & RT	---	4	---	6	1	4	2	5
57+35 U - 63+95 U	LT & RT	1	11	1	11	4	1	---	5
66+95 U - 67+54 U	LT & RT	---	2	---	2	1	---	---	1
69+00 U - 69+16 U	LT & RT	---	2	---	2	---	---	---	---
<b>CATEGORY TOTALS</b>		<b>1</b>	<b>52</b>	<b>1</b>	<b>58</b>	<b>12</b>	<b>10</b>	<b>3</b>	<b>19</b>

**\* OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET  
ARE CATEGORY 0010  
UNLESS OTHERWISE NOTED

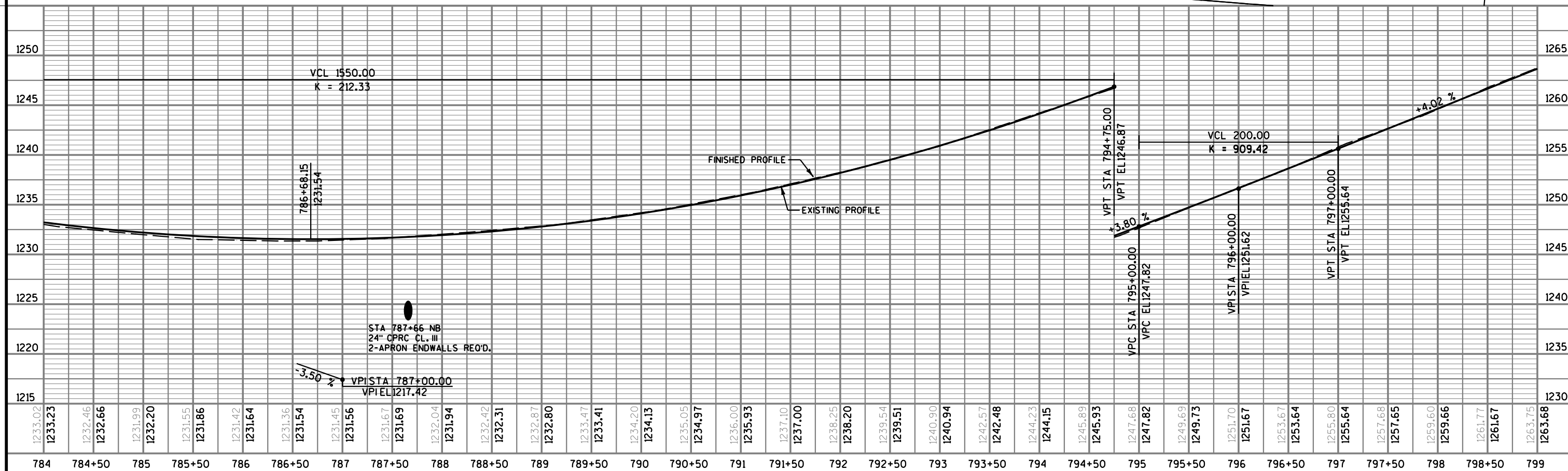
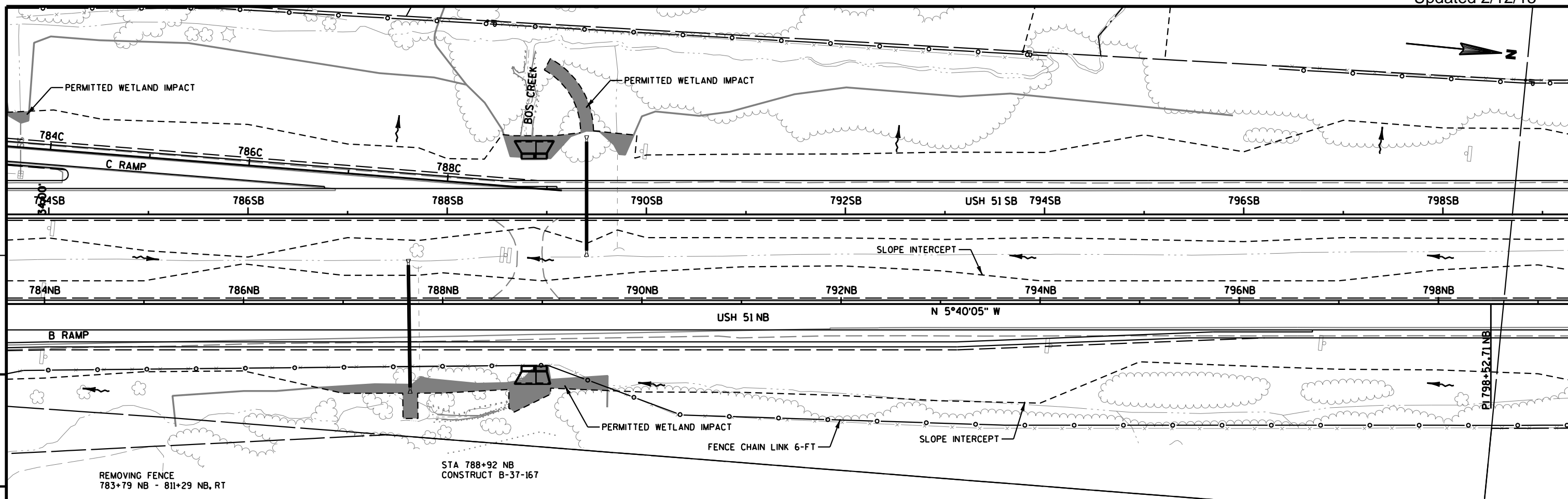


PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - USH 51 NB	SHEET 663	E
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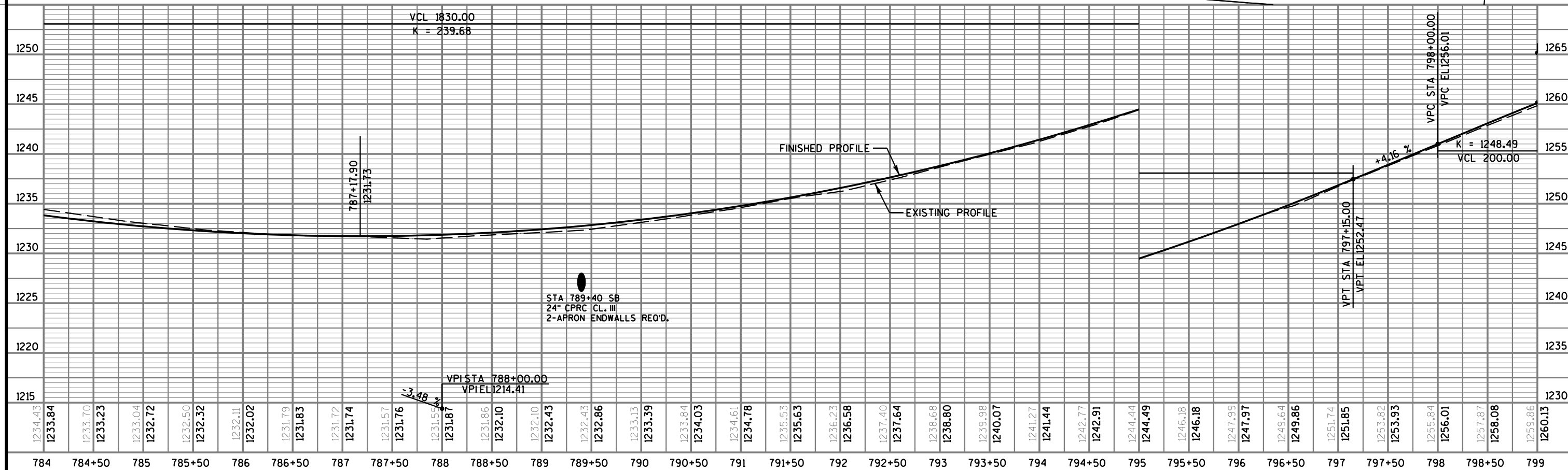
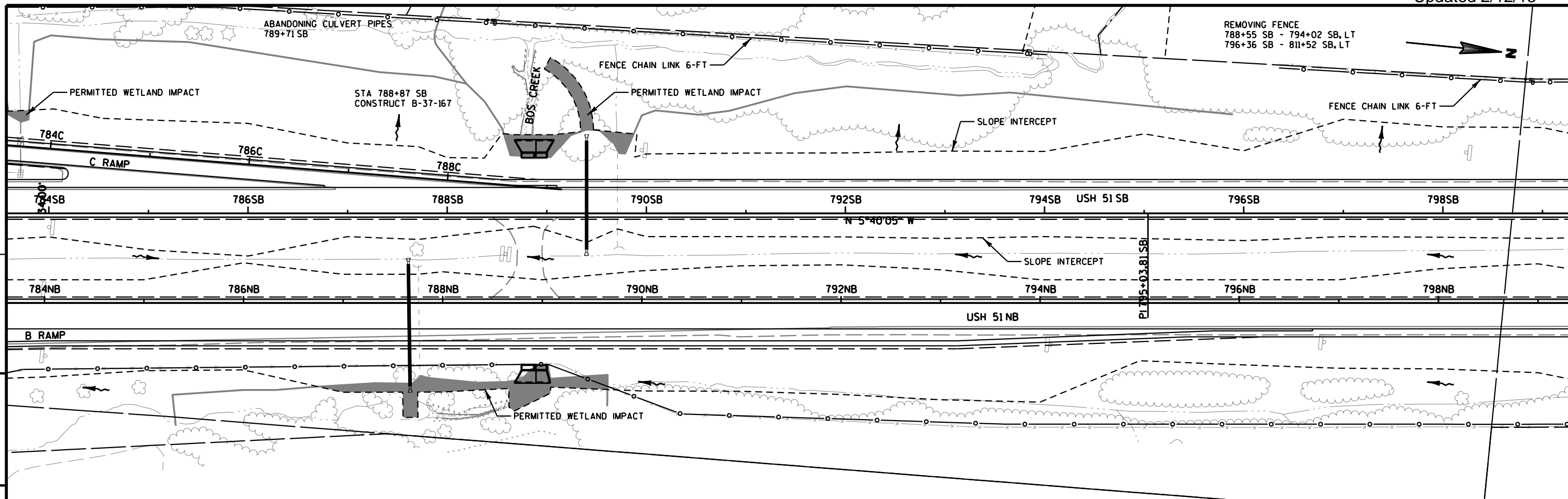


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769	769+50	770	770+50	771	771+50	772	772+50	773	773+50	774	774+50	775	775+50	776	776+50	777	777+50	778	778+50	779	779+50	780	780+50	781	781+50	782	782+50	783	783+50	784																															

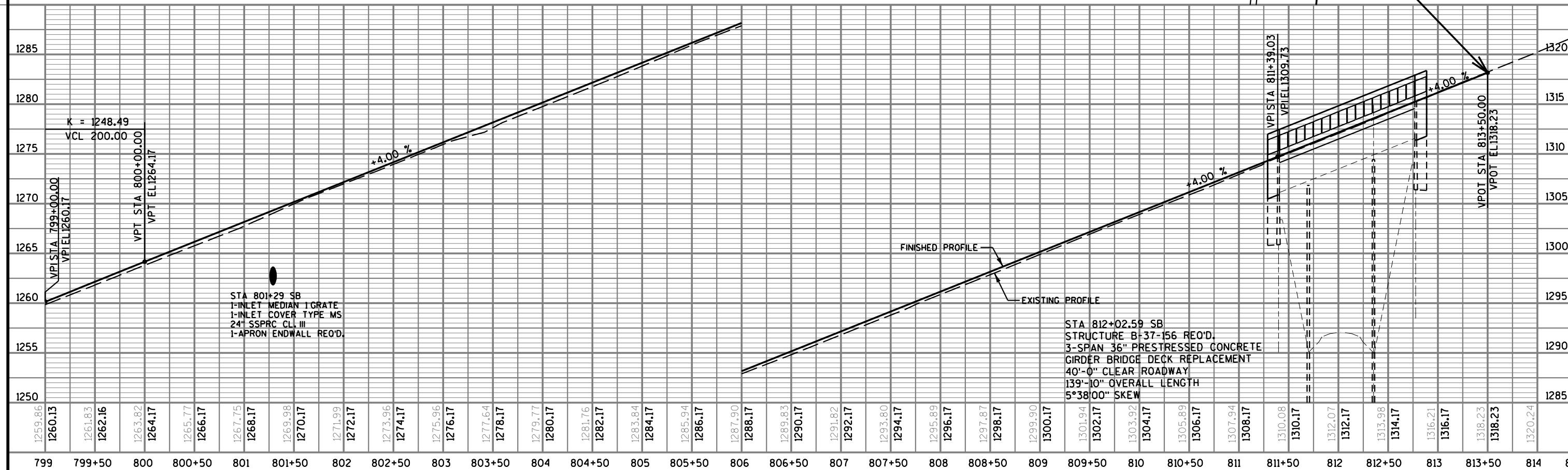
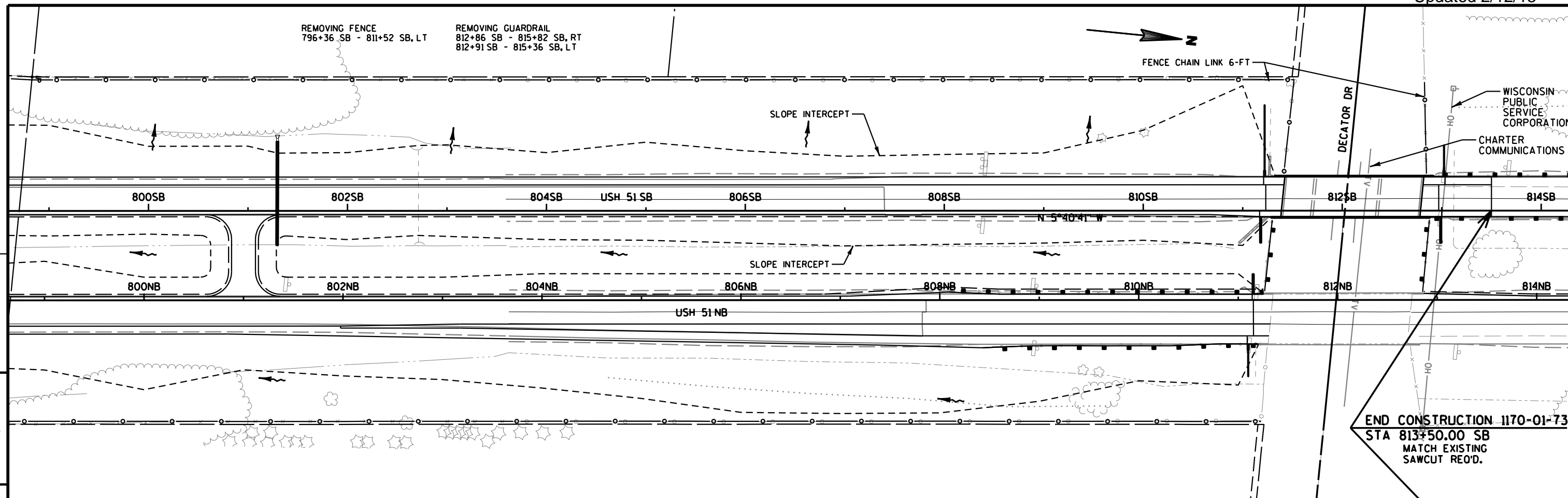
PROJECT NO: 1170-01-73      HWY: USH 51      COUNTY: MARATHON      PLAN & PROFILE - USH 51 NB      SHEET 666      E

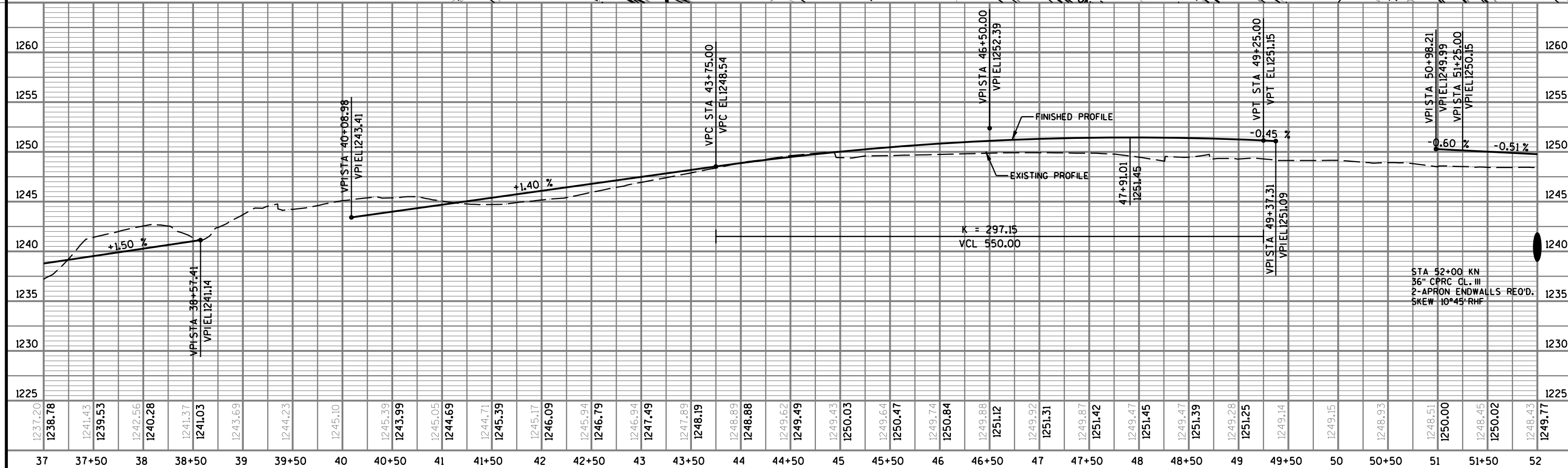
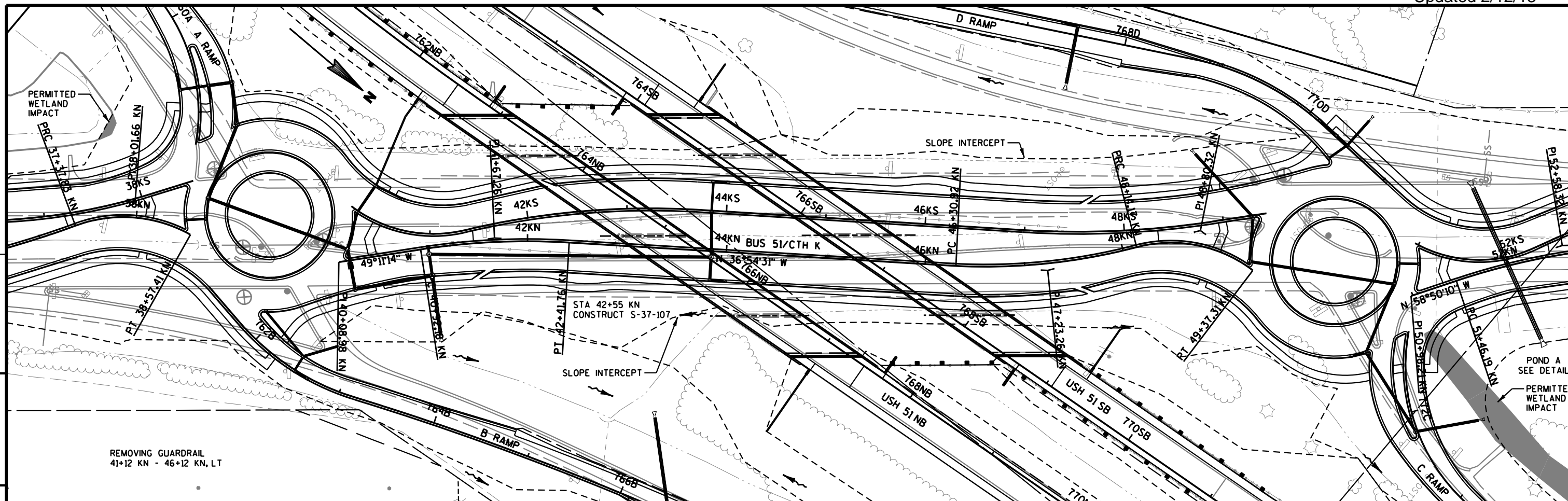


PROJECT NO: 1170-01-73      HWY: USH 51      COUNTY: MARATHON      PLAN & PROFILE - USH 51 NB      SHEET 667      E

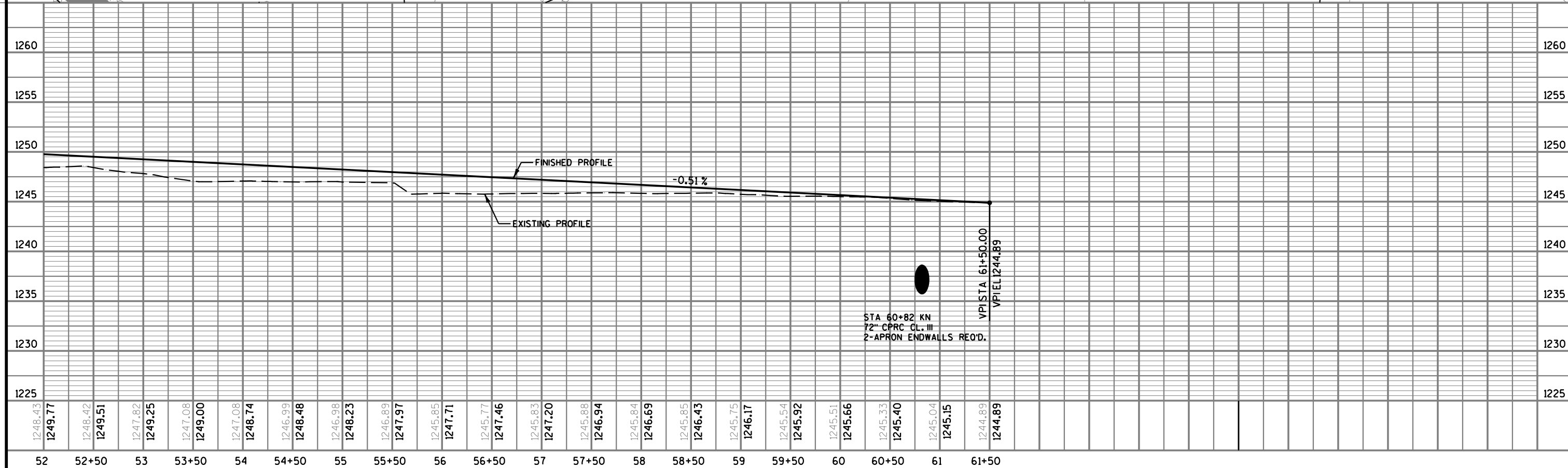
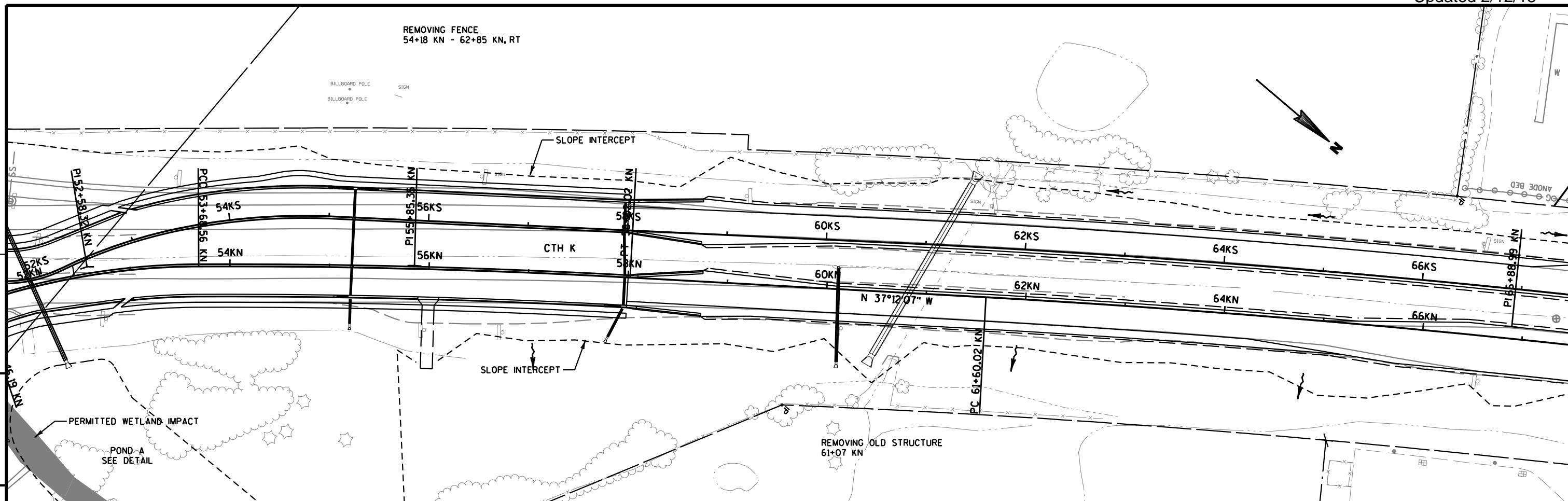


PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - USH 51 SB	SHEET 674	E
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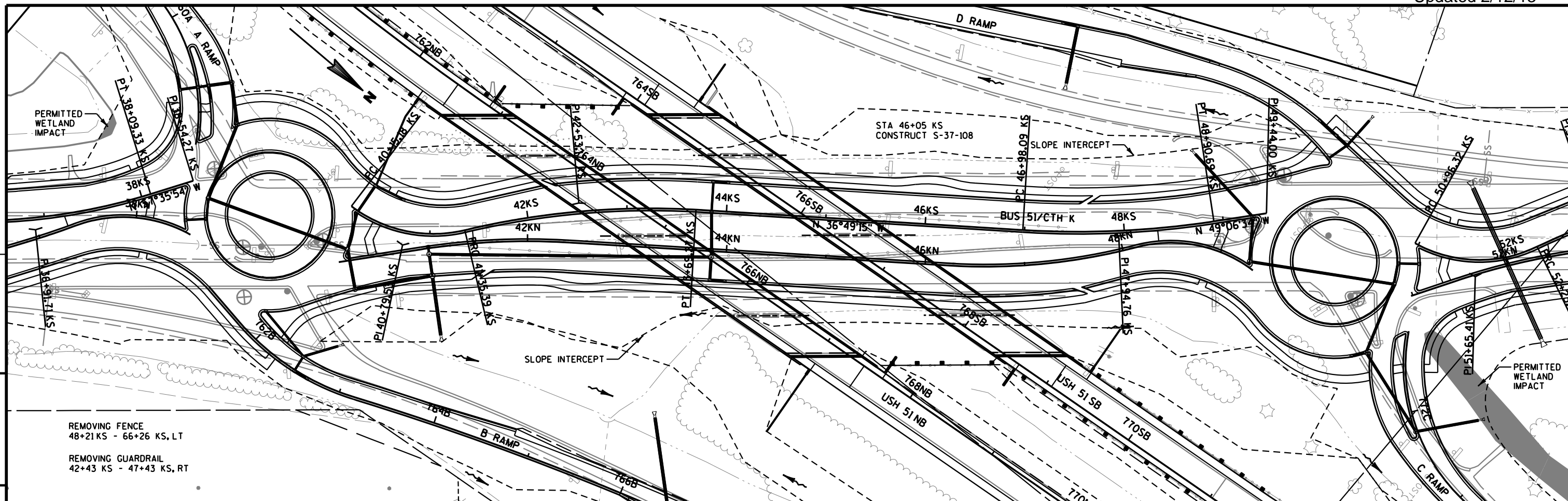




1237.20	1238.78	1241.43	1239.53	1242.56	1240.28	1241.37	1241.03	1243.69	1244.23	1245.10	1245.39	1243.99	1245.05	1244.69	1244.71	1245.39	1245.17	1246.09	1245.94	1246.79	1246.94	1247.49	1247.89	1248.19	1248.89	1248.88	1249.62	1249.49	1249.43	1250.03	1249.64	1250.47	1249.74	1250.84	1249.88	1251.12	1249.92	1251.31	1249.87	1251.42	1249.47	1251.45	1249.47	1251.39	1249.28	1251.25	1249.14	1249.15	1248.93	1248.51	1250.00	1248.45	1250.02	1248.43	1249.77
37	37+50	38	38+50	39	39+50	40	40+50	41	41+50	42	42+50	43	43+50	44	44+50	45	45+50	46	46+50	47	47+50	48	48+50	49	49+50	50	50+50	51	51+50	52																									



PROJECT NO: 1170-01-70      HWY: USH 51      COUNTY: MARATHON      PLAN & PROFILE - CTH K (NORTHBOUND)      SHEET 697      E

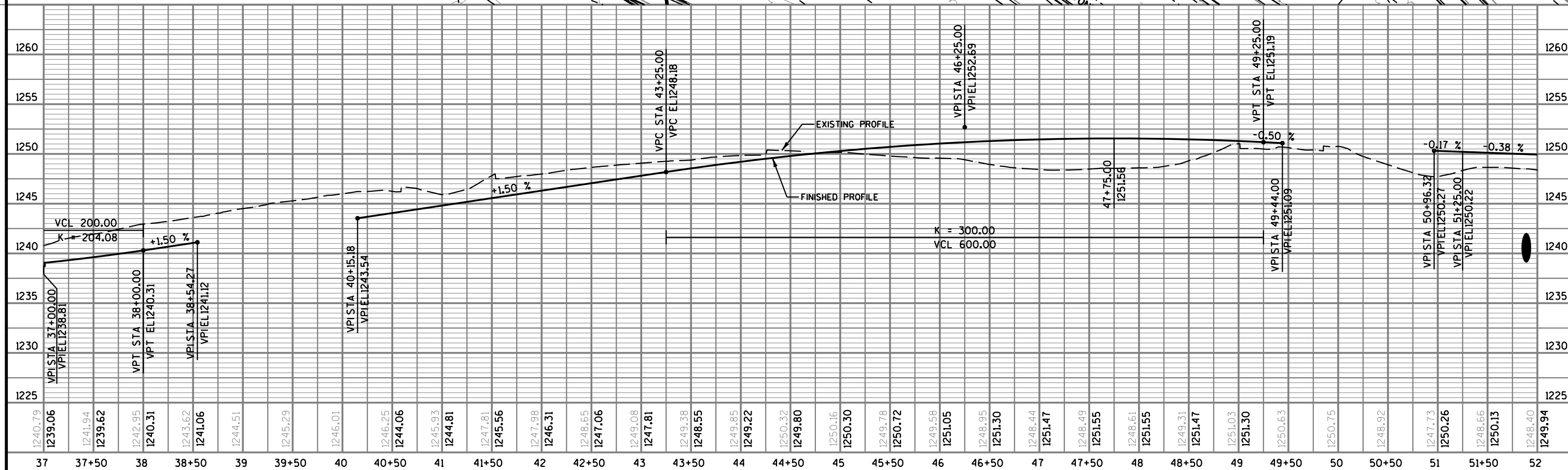


5

5

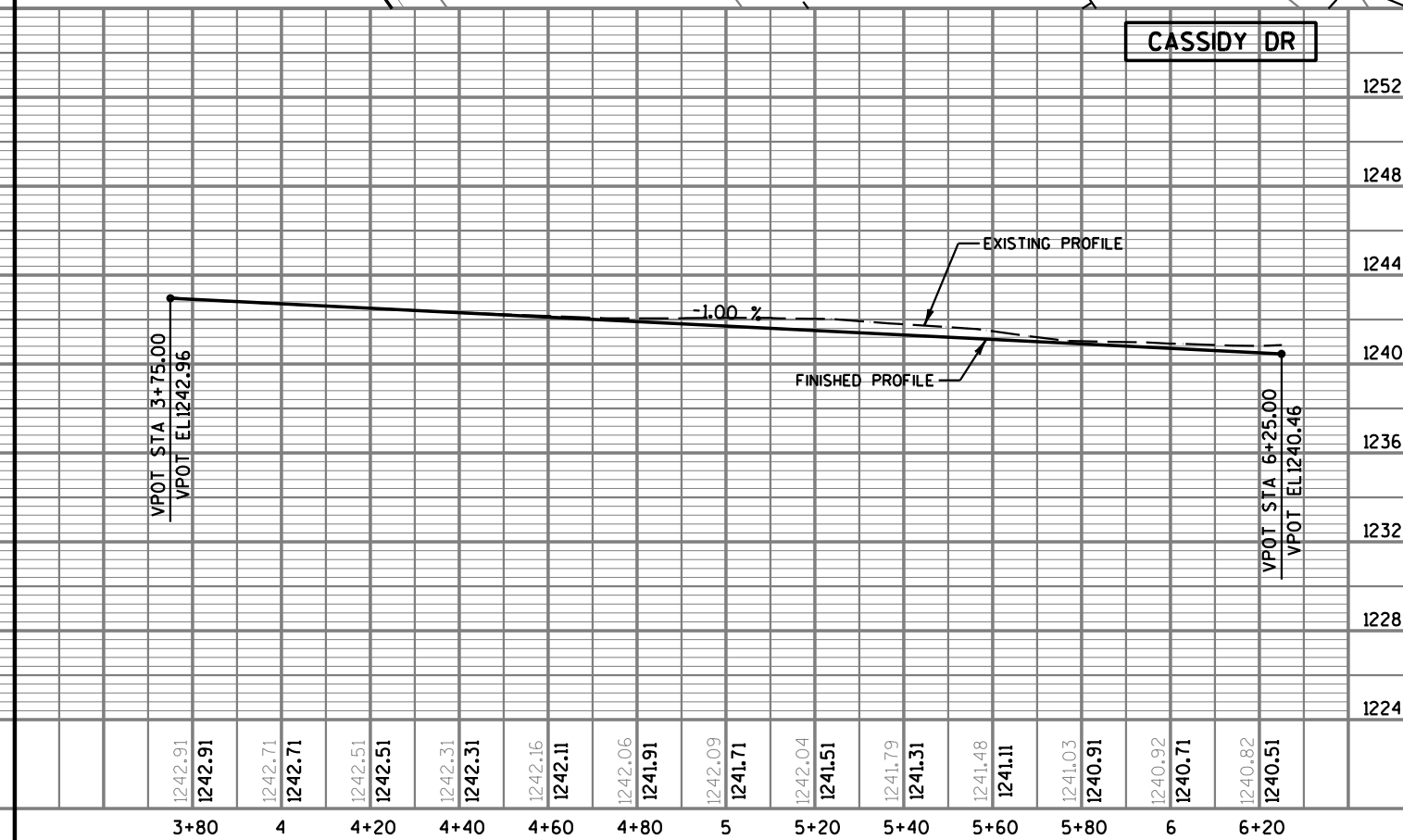
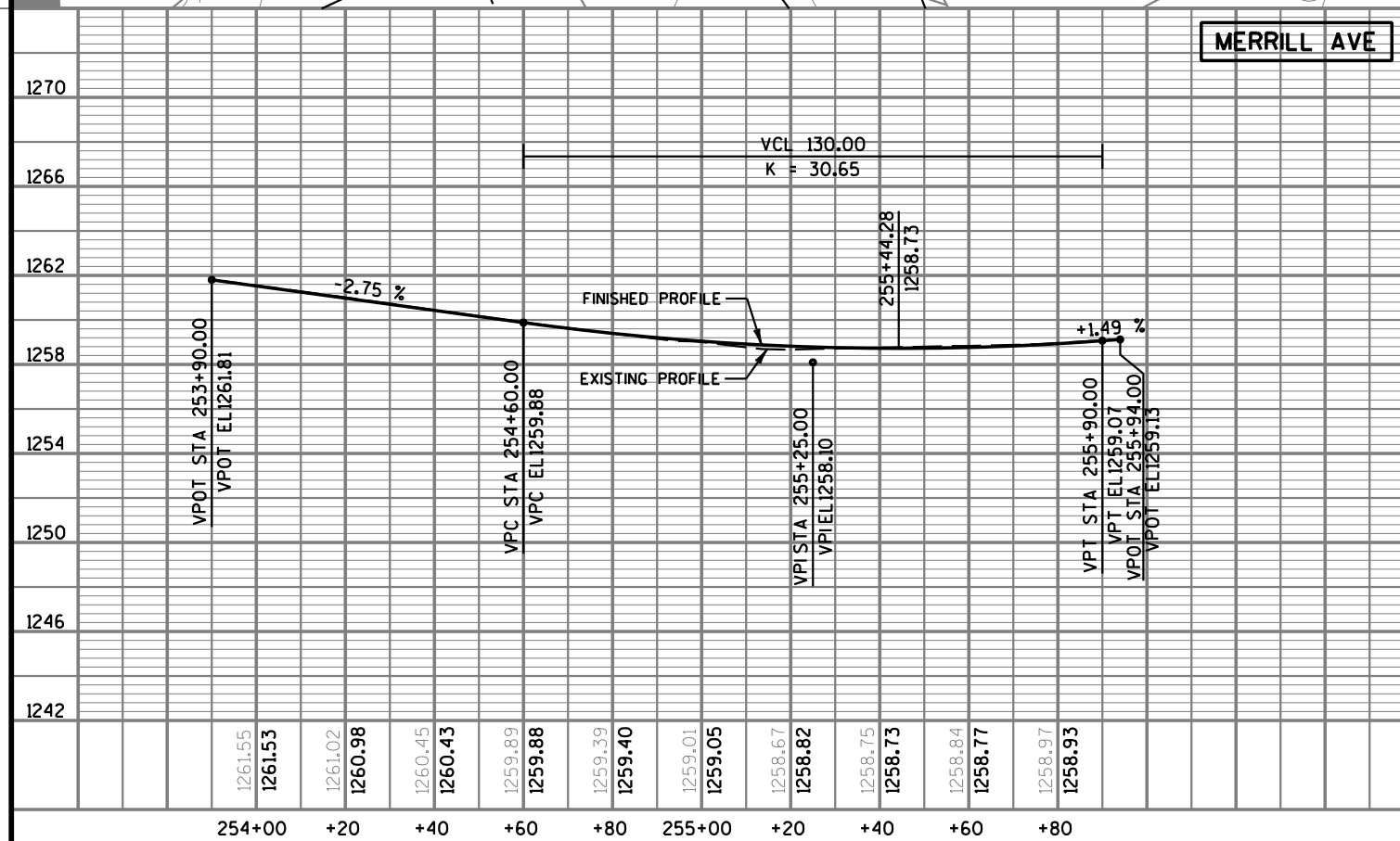
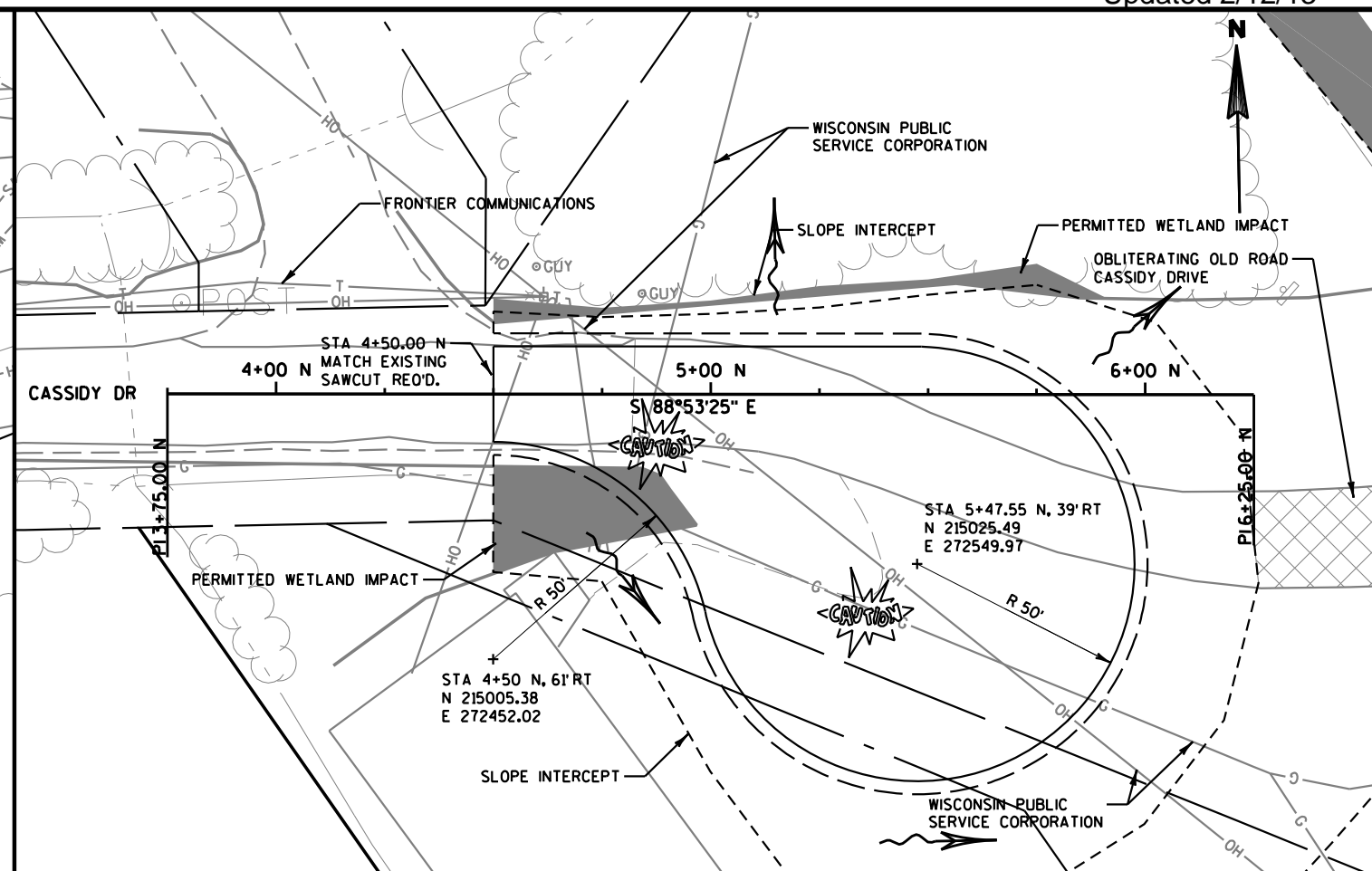
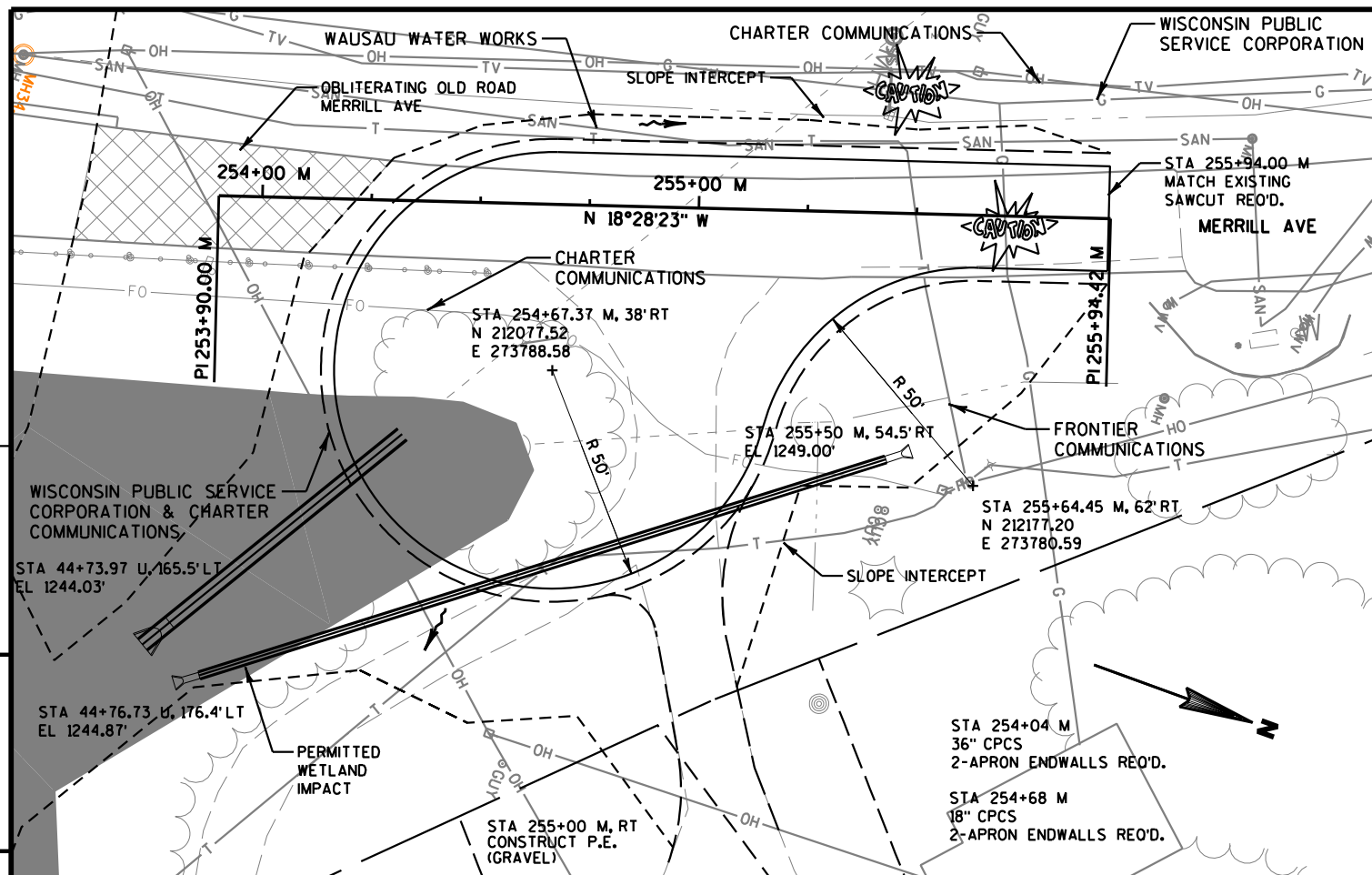
REMOVING FENCE  
48+21 KS - 66+26 KS, LT

REMOVING GUARDRAIL  
42+43 KS - 47+43 KS, RT

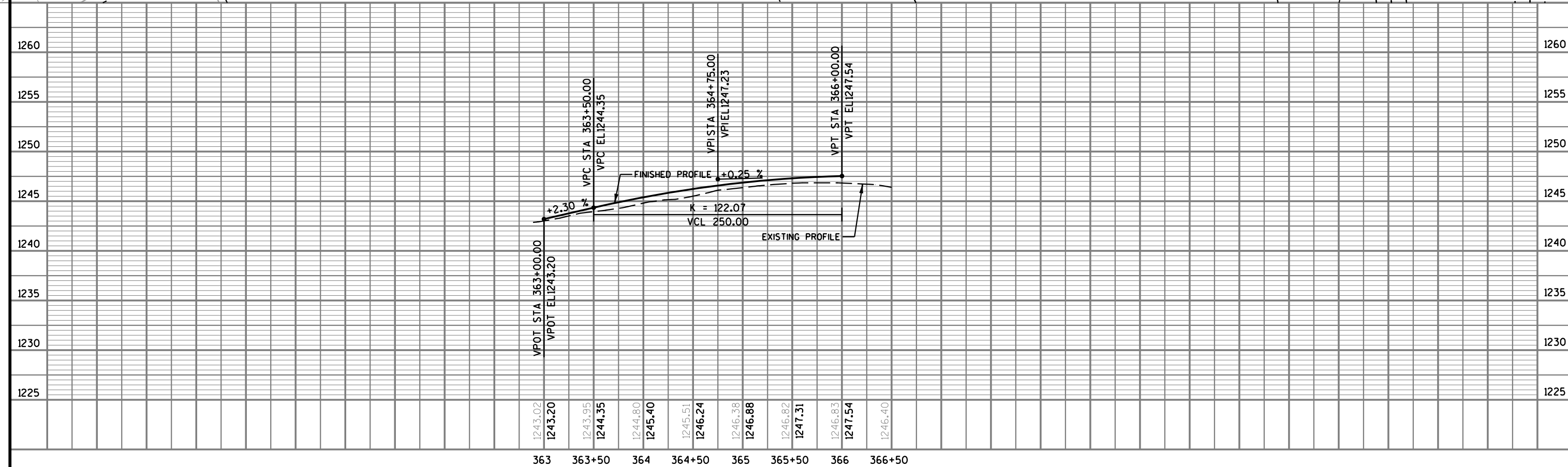
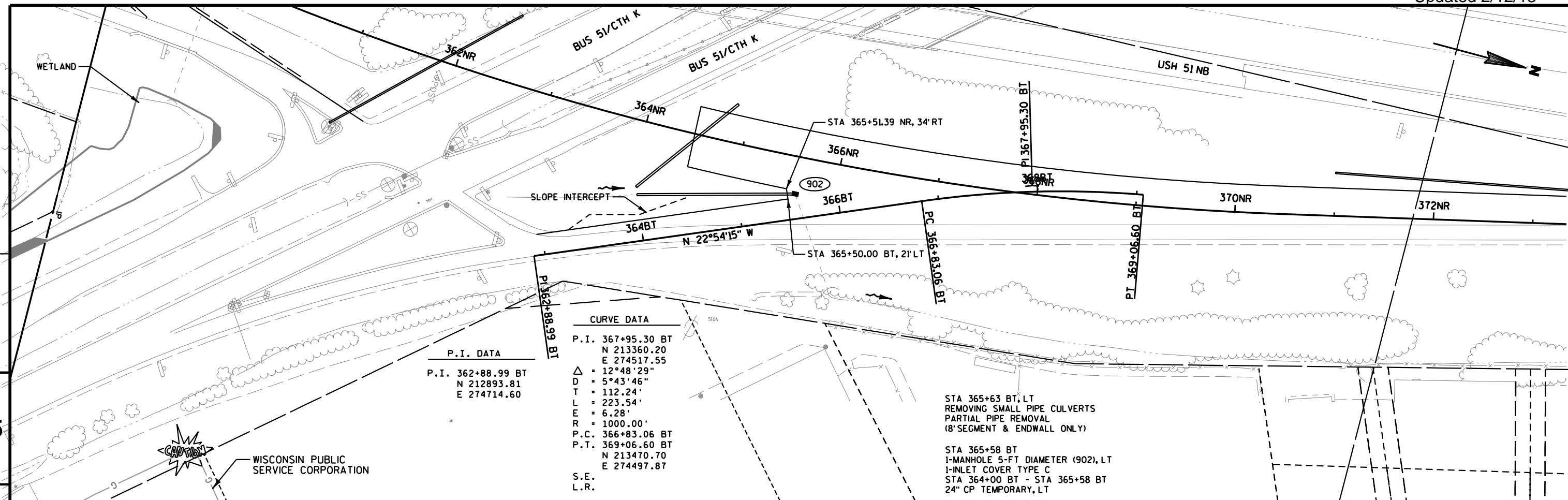


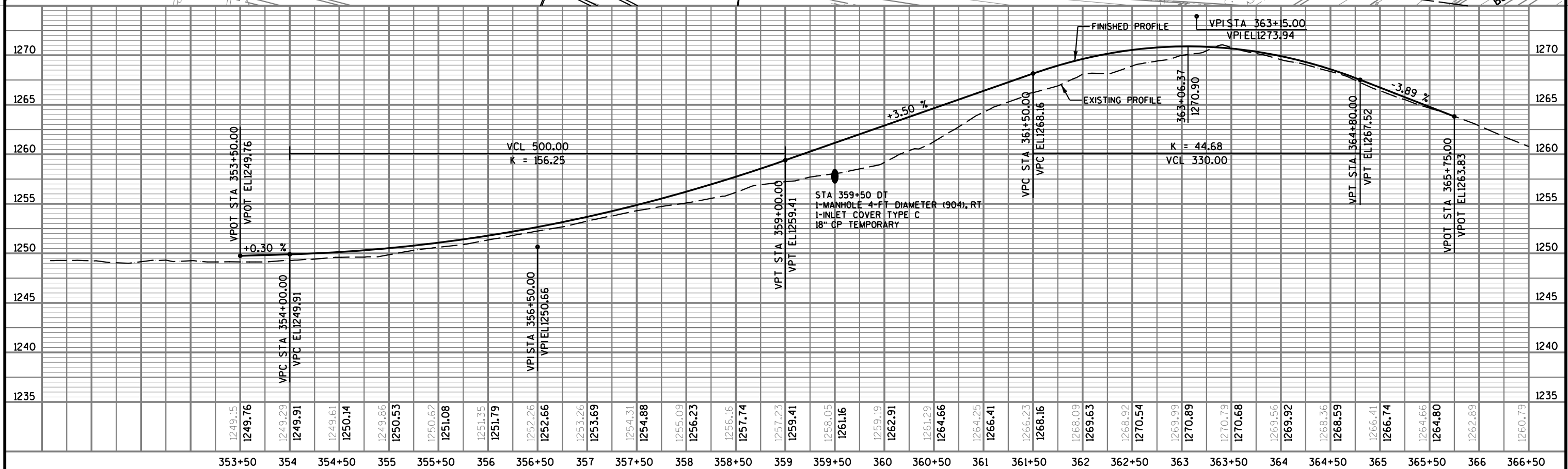
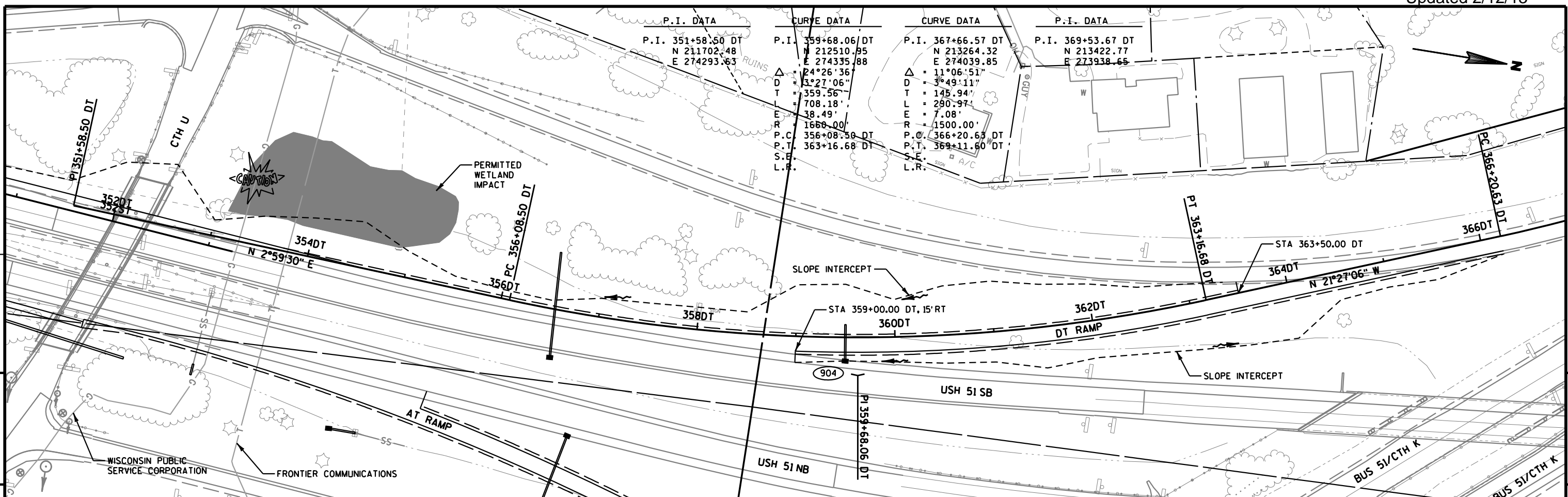
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH K (SOUTHBOUND)	SHEET 700	E
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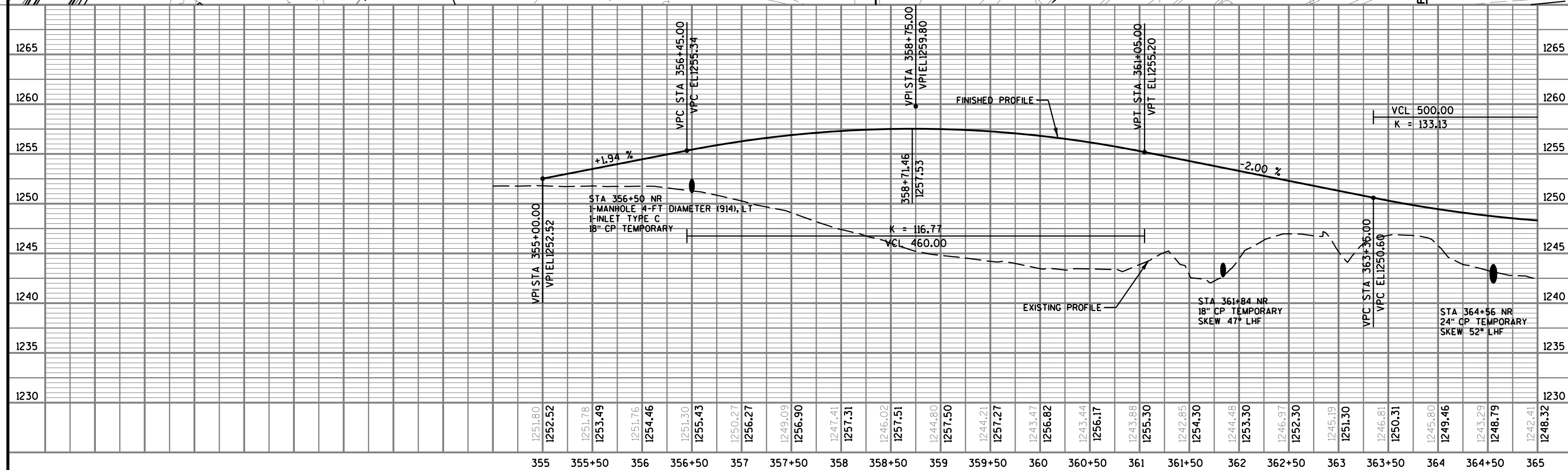
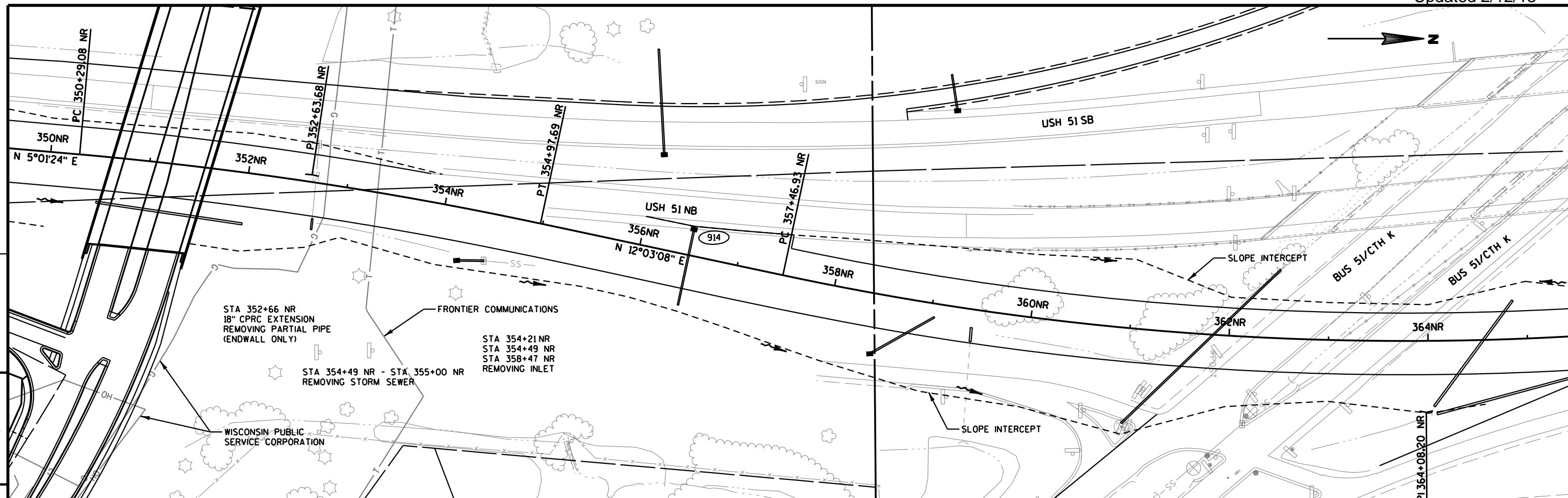


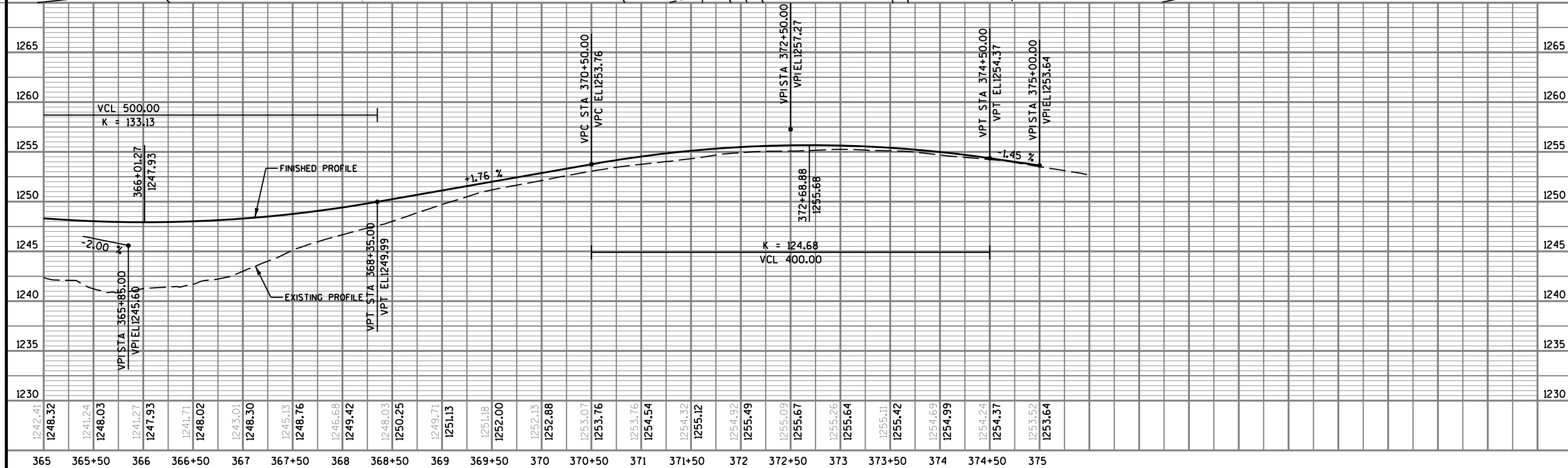
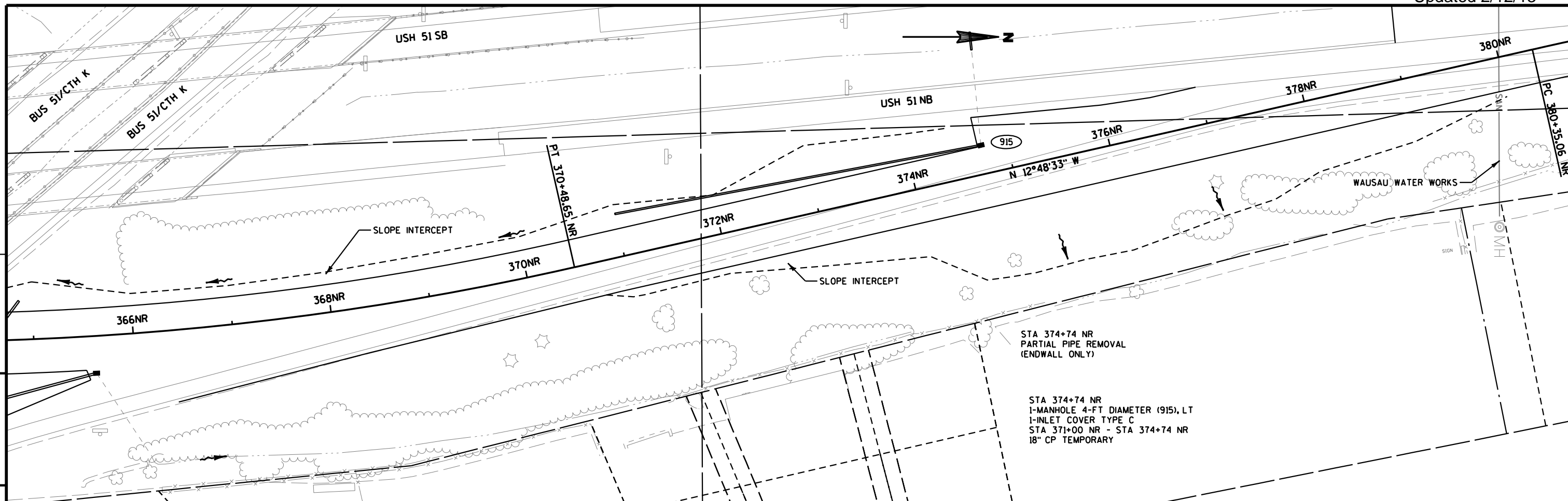
PROJECT NO: 1170-01-70/6999-18-70    HWY: USH 51    COUNTY: MARATHON    PLAN & PROFILE - MERRILL AVE/CASSIDY DR CUL-DE-SACS    SHEET 707



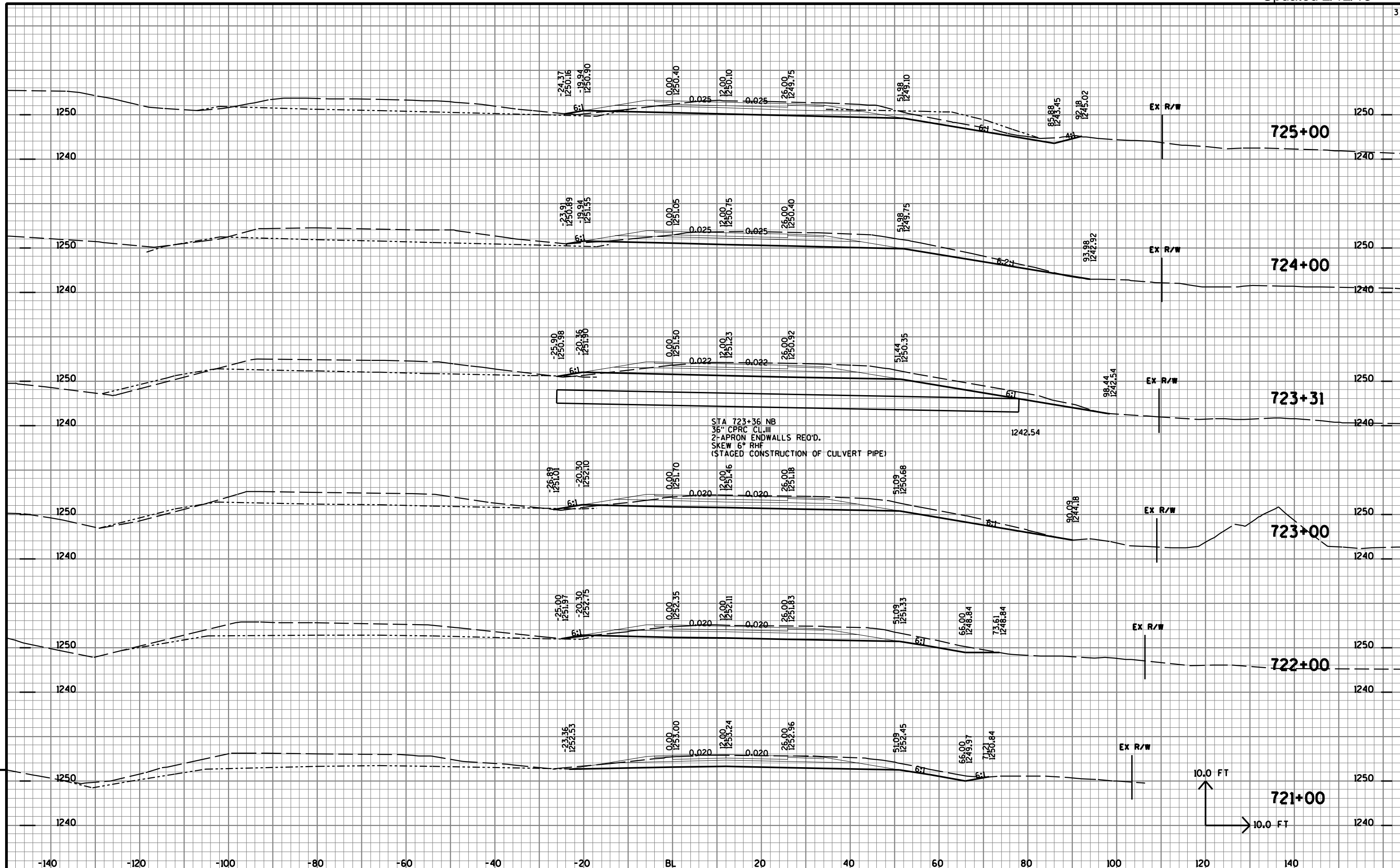


1249.15	1249.76	1249.29	1249.91	1249.61	1250.14	1249.86	1250.53	1250.62	1251.08	1251.35	1251.79	1252.26	1252.66	1253.26	1253.69	1254.31	1254.88	1255.09	1256.23	1256.16	1257.74	1257.23	1259.41	1258.05	1261.16	1259.19	1262.91	1261.29	1264.66	1264.25	1266.41	1266.23	1268.16	1268.09	1269.63	1268.92	1270.54	1269.99	1270.89	1270.79	1270.68	1269.56	1269.92	1268.36	1268.59	1266.41	1266.74	1264.66	1264.80	1262.89	1260.79
353+50	354	354+50	355	355+50	356	356+50	357	357+50	358	358+50	359	359+50	360	360+50	361	361+50	362	362+50	363	363+50	364	364+50	365	365+50	366	366+50																									

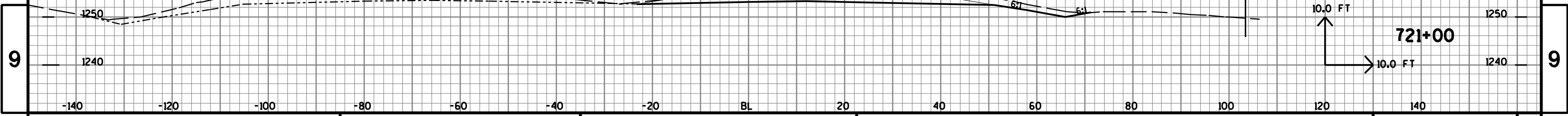


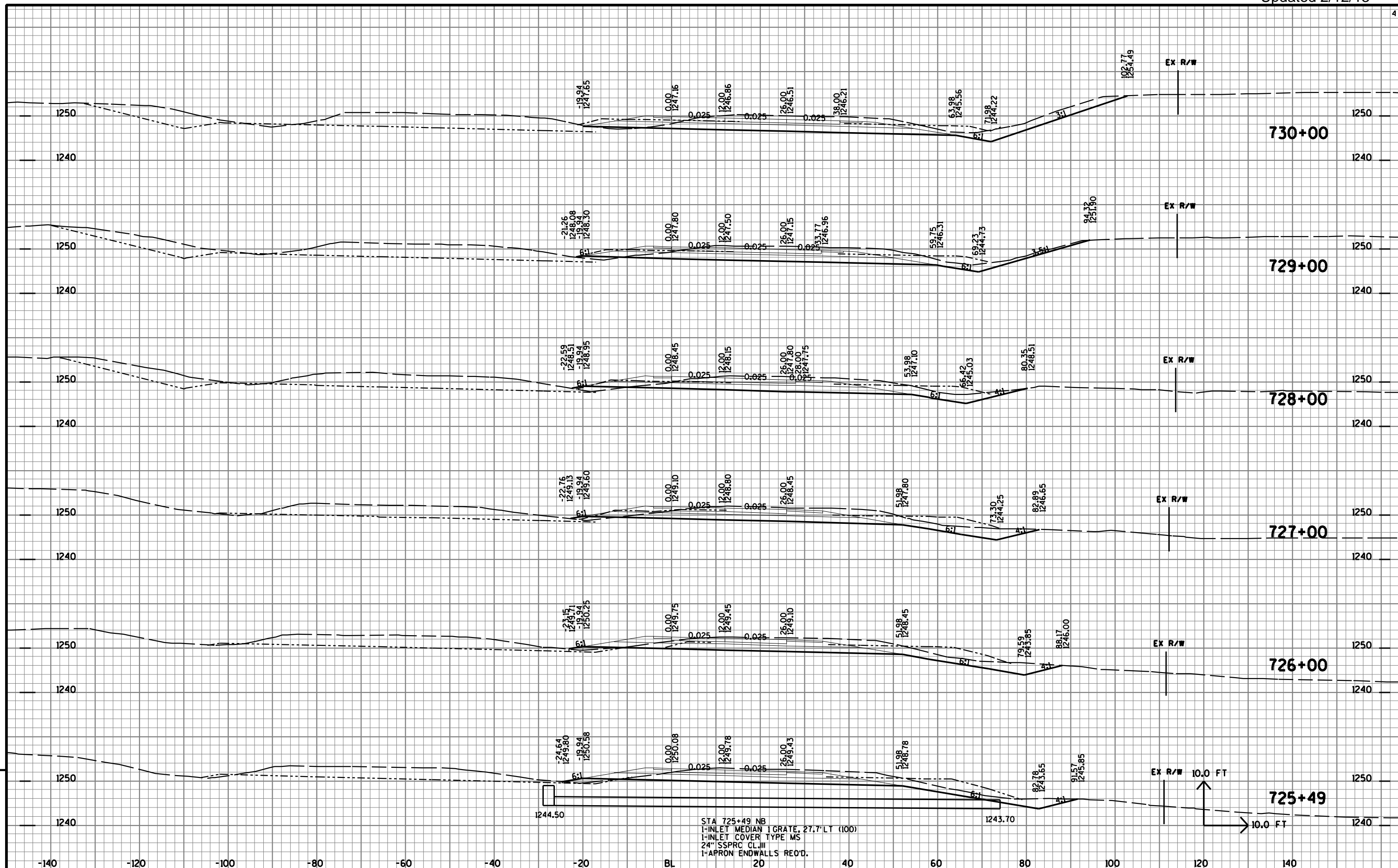


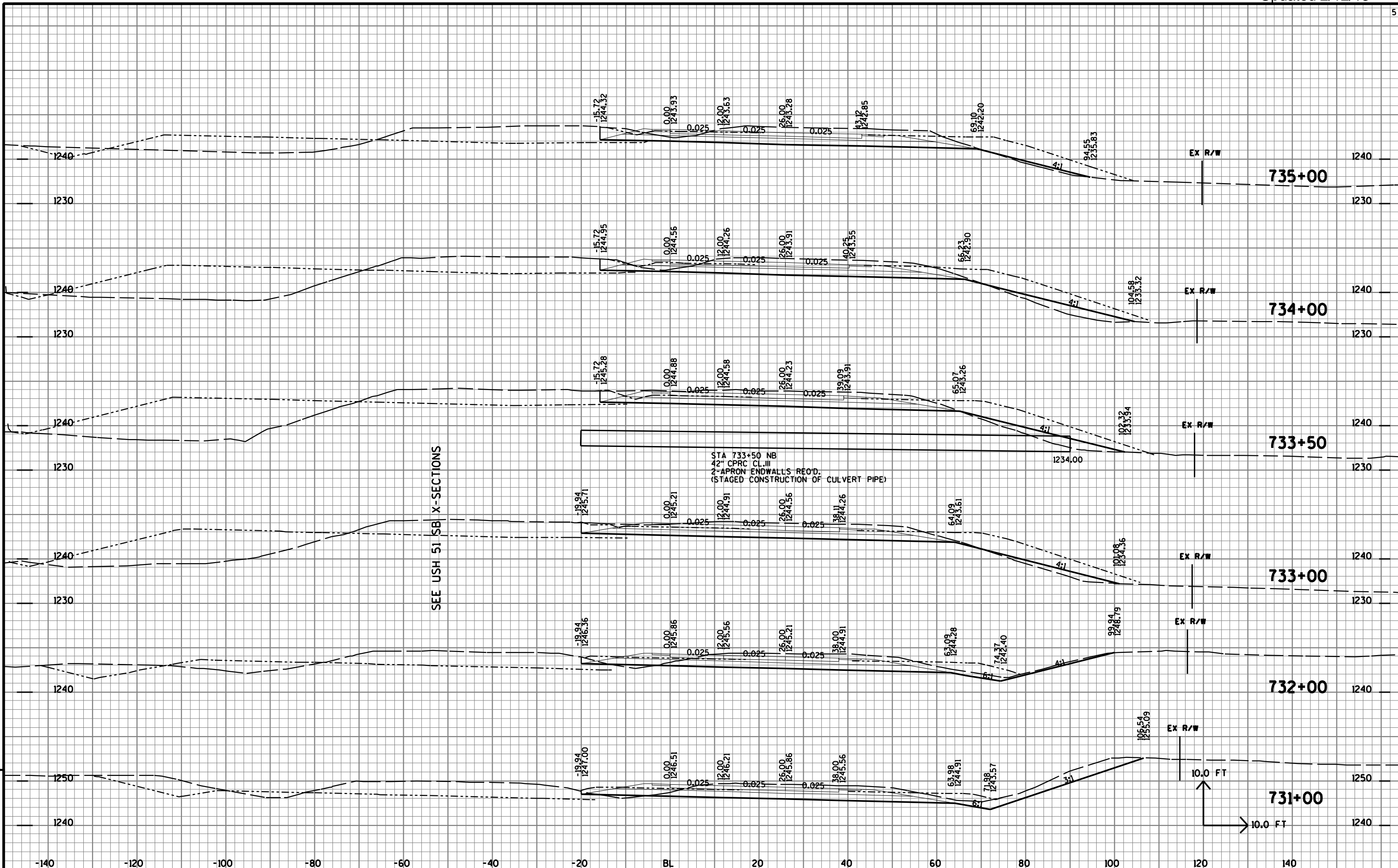
PROJECT NO: 1170-01-73      HWY: USH 51      COUNTY: MARATHON      PLAN & PROFILE - TEMPORARY NR LINE      SHEET 720      E

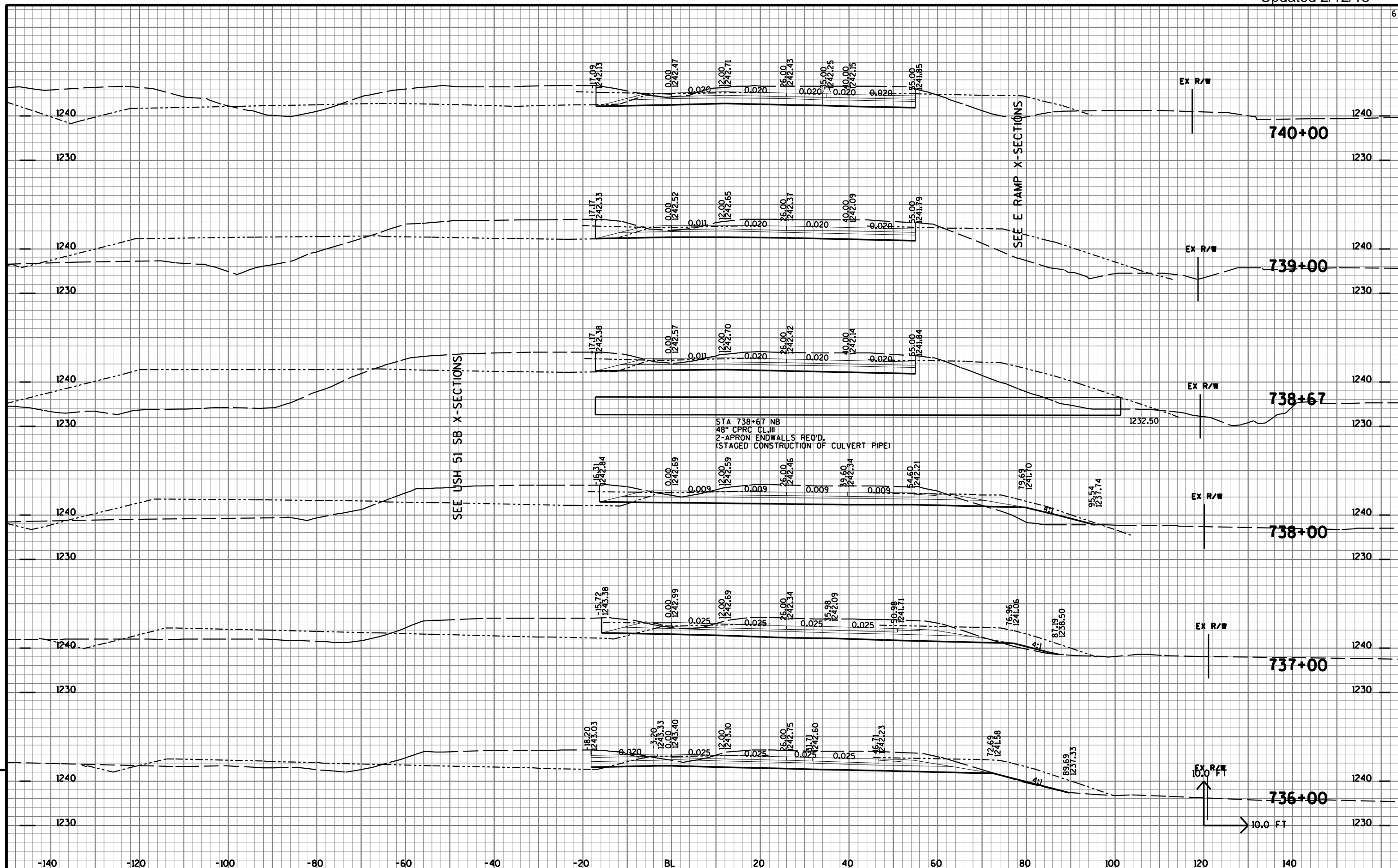


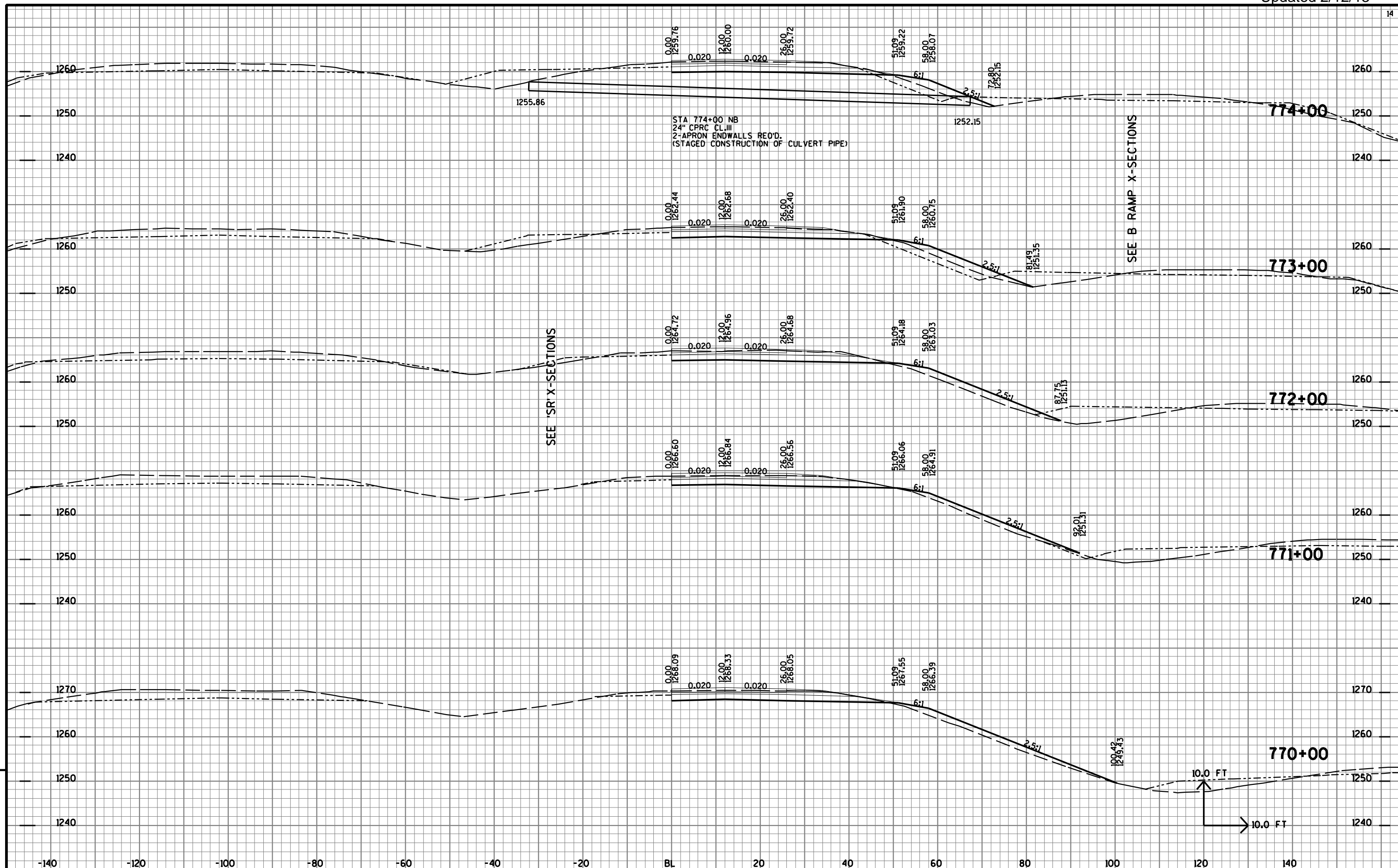
STA 723+36 NB  
 36" CPRC CL, III  
 2' APRON ENDWALLS REQ'D.  
 SKEW 6° RHF  
 (STAGED CONSTRUCTION OF CULVERT PIPE)

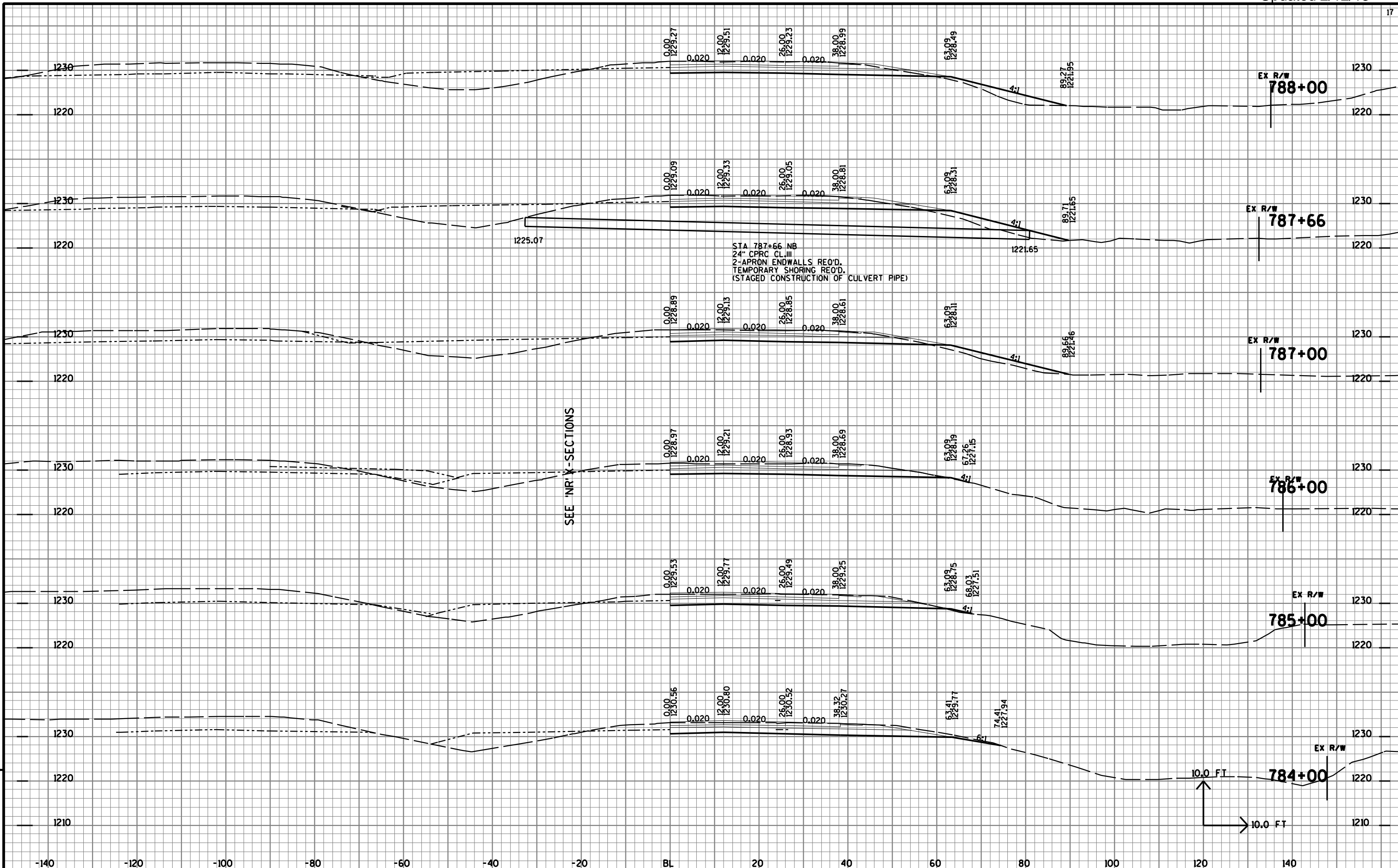






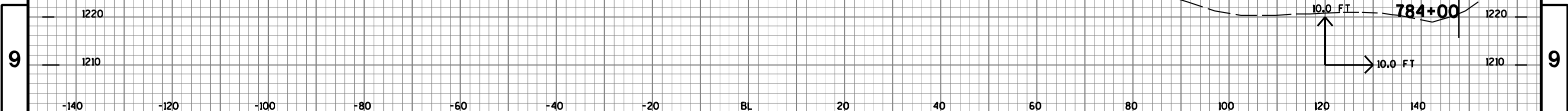
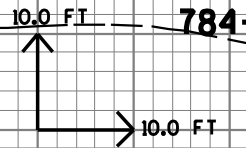


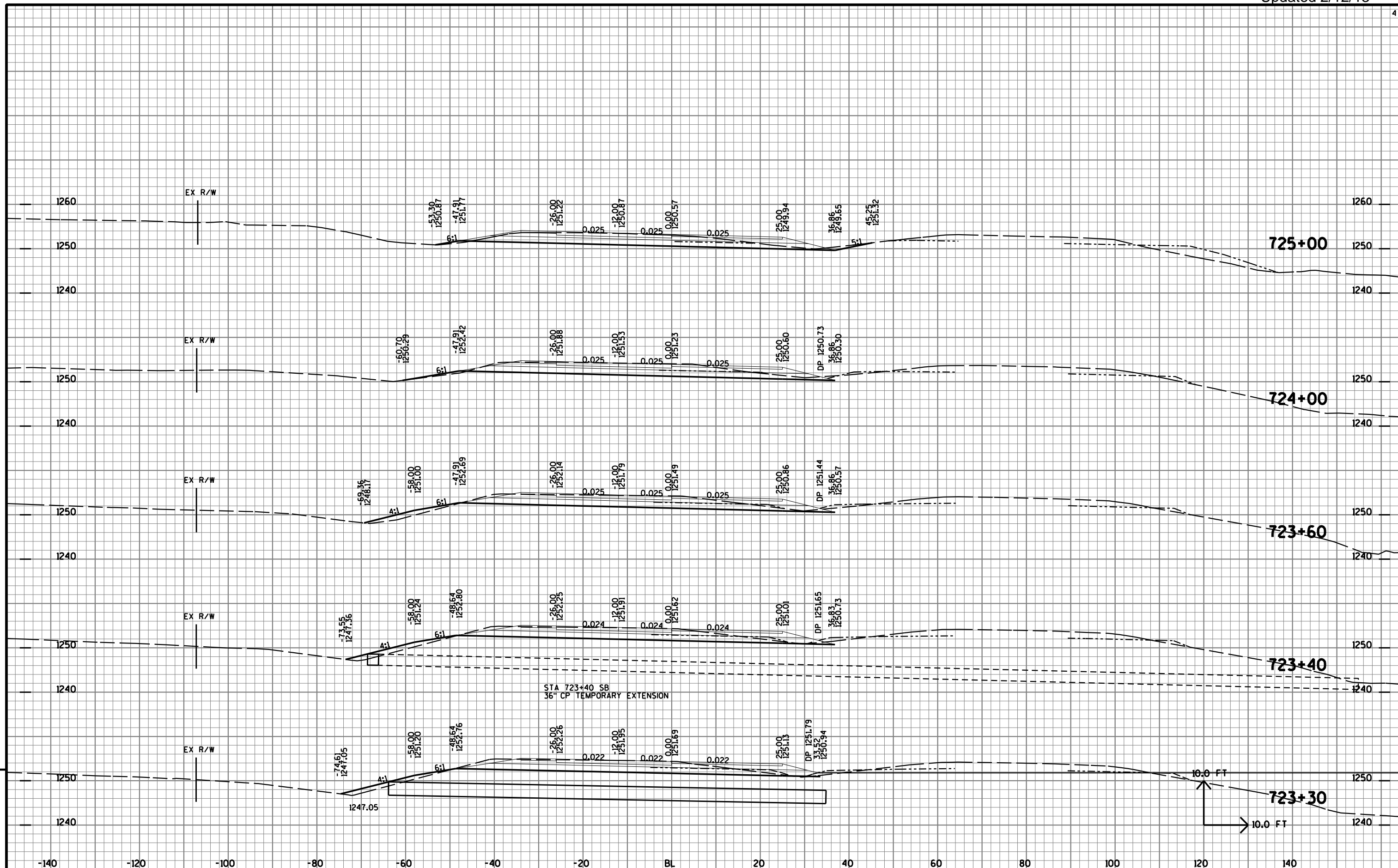




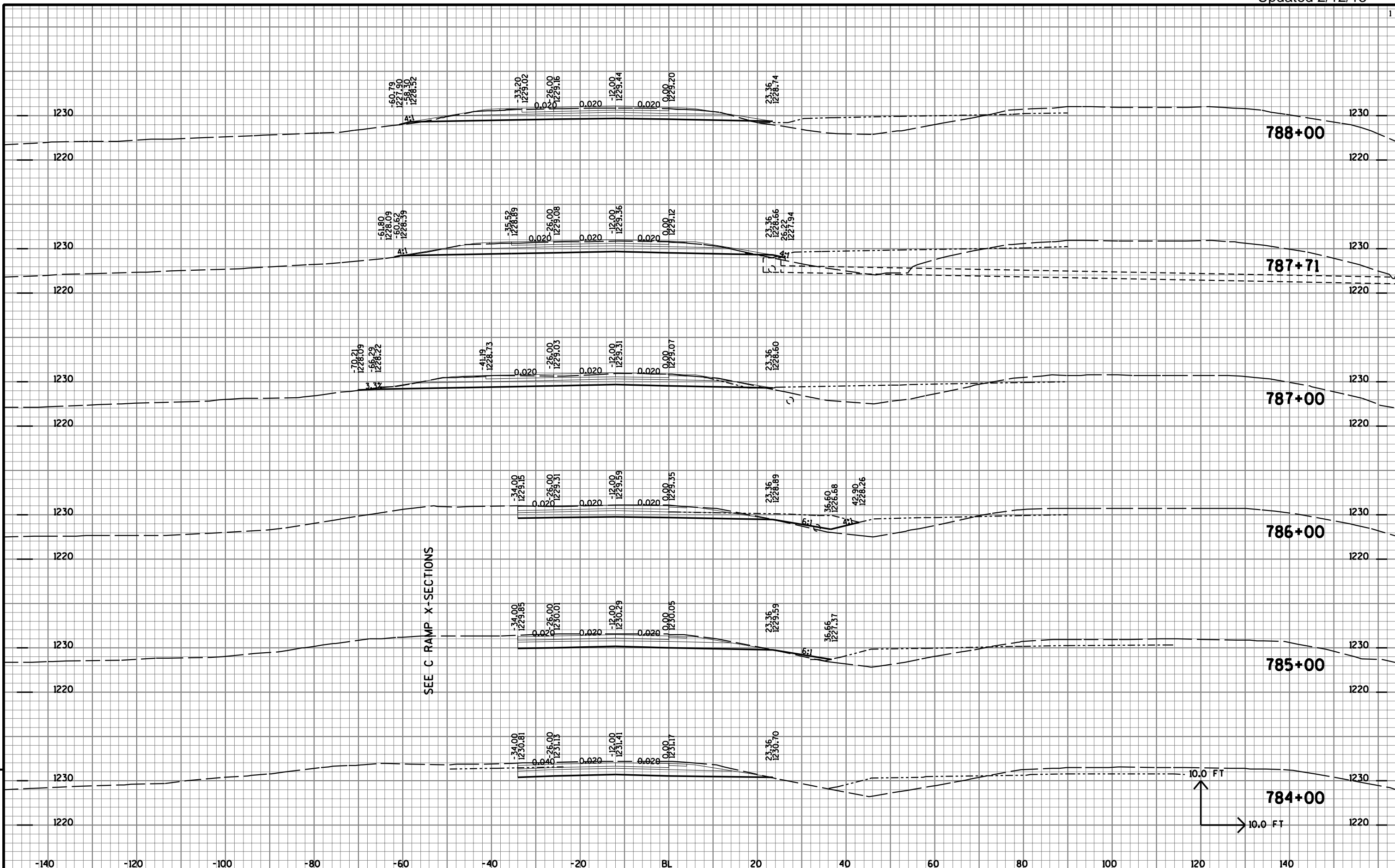
SEE 'NR' X-SECTIONS

STA 787+66 NB  
24" CPVC CL III  
2- APRON ENDWALLS RE'OD.  
TEMPORARY SHORING RE'OD.  
(STAGED CONSTRUCTION OF CULVERT PIPE)

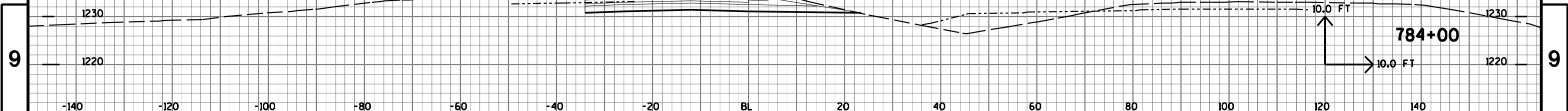
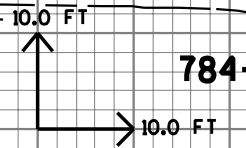


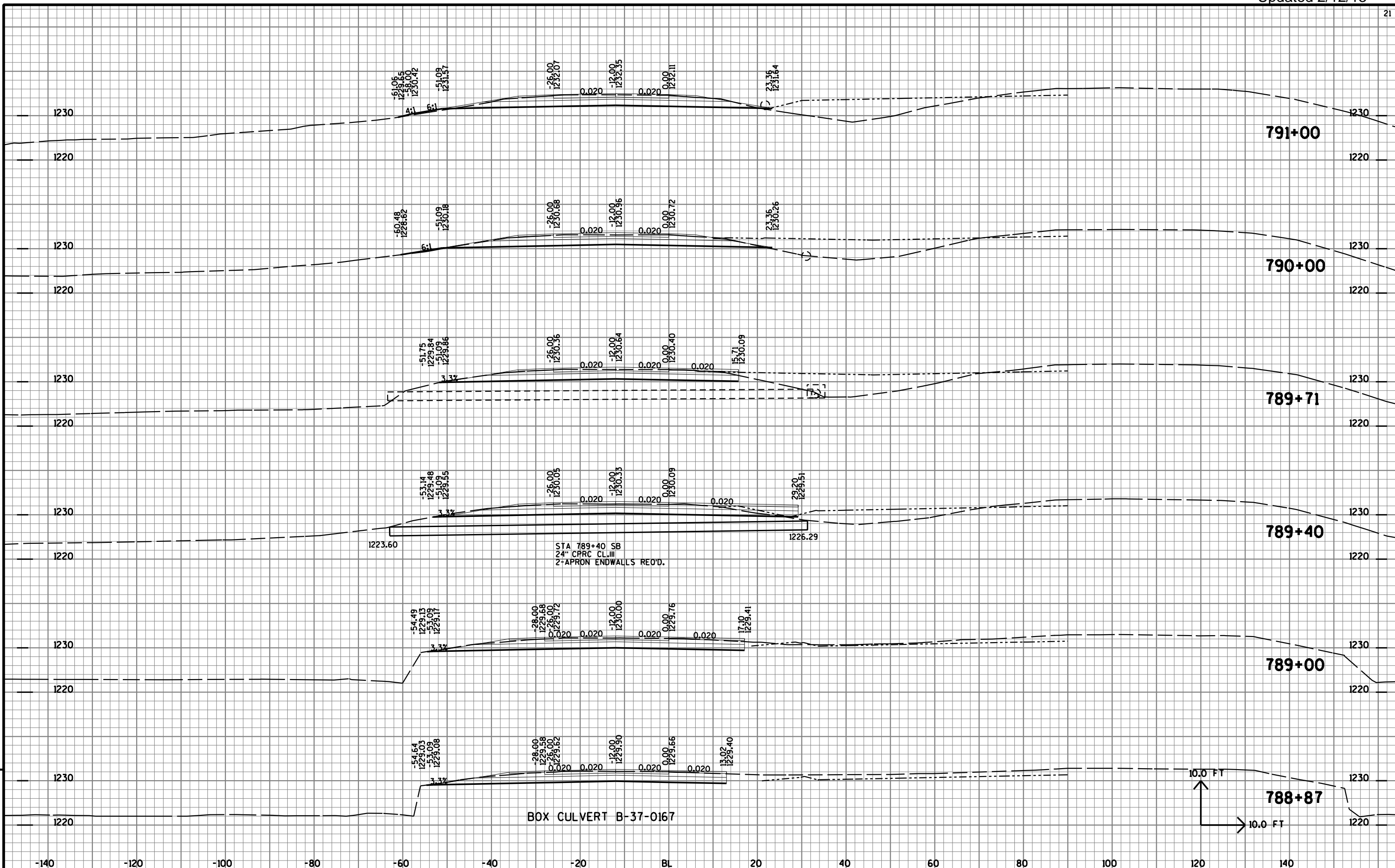


PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1115
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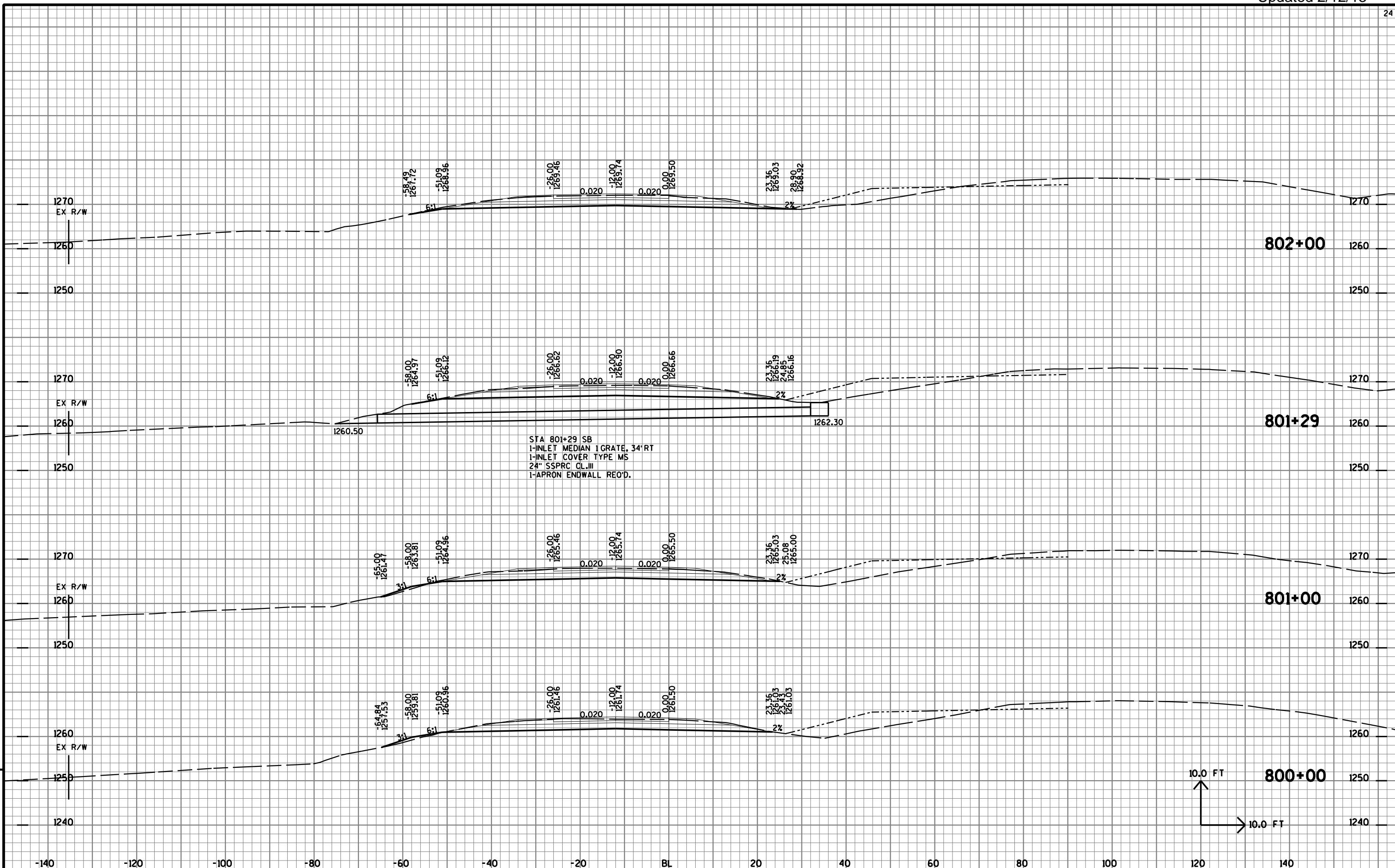
SEE C RAMP X-SECTIONS



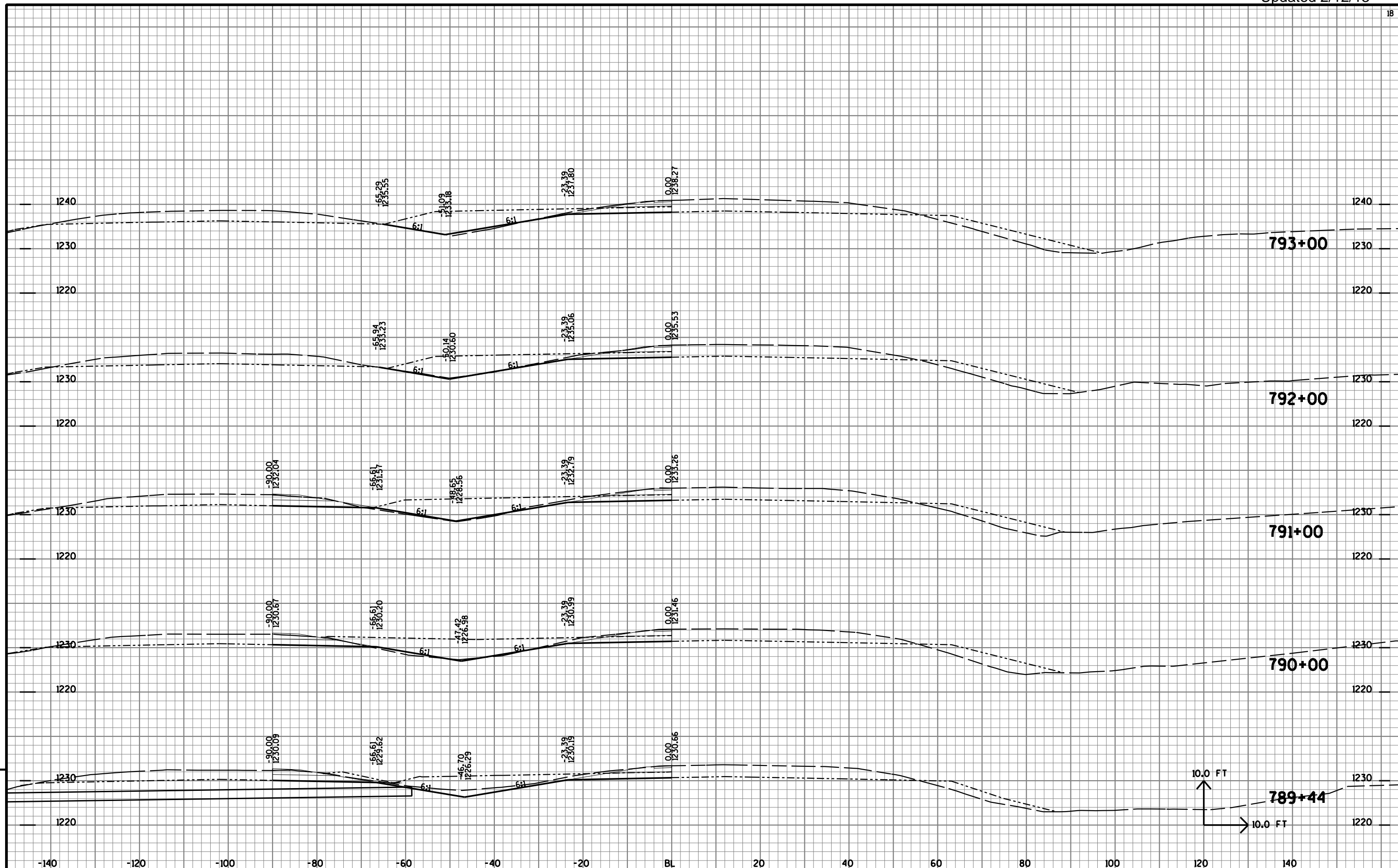


9

9



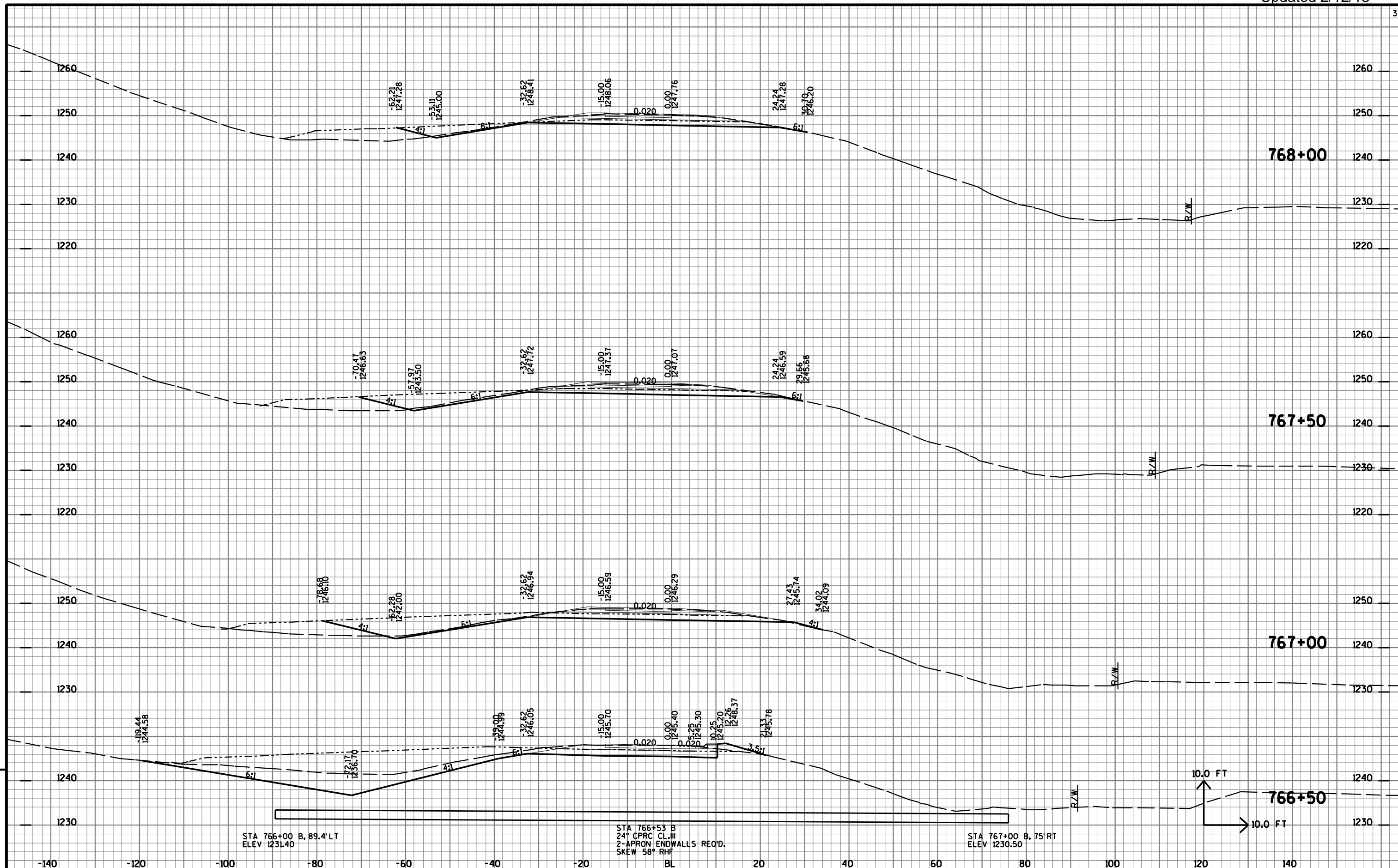
PROJECT NO: 1170-01-73      HWY: USH 51      COUNTY: MARATHON      CROSS SECTIONS: USH 51 SB      SHEET NO: 1135 E



9

9

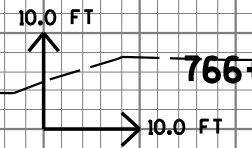
PROJECT NO: 1170-01-73      HWY: USH 51      COUNTY: MARATHON      CROSS SECTIONS: USH 51 MEDIAN (NB)      SHEET NO: 1156      E

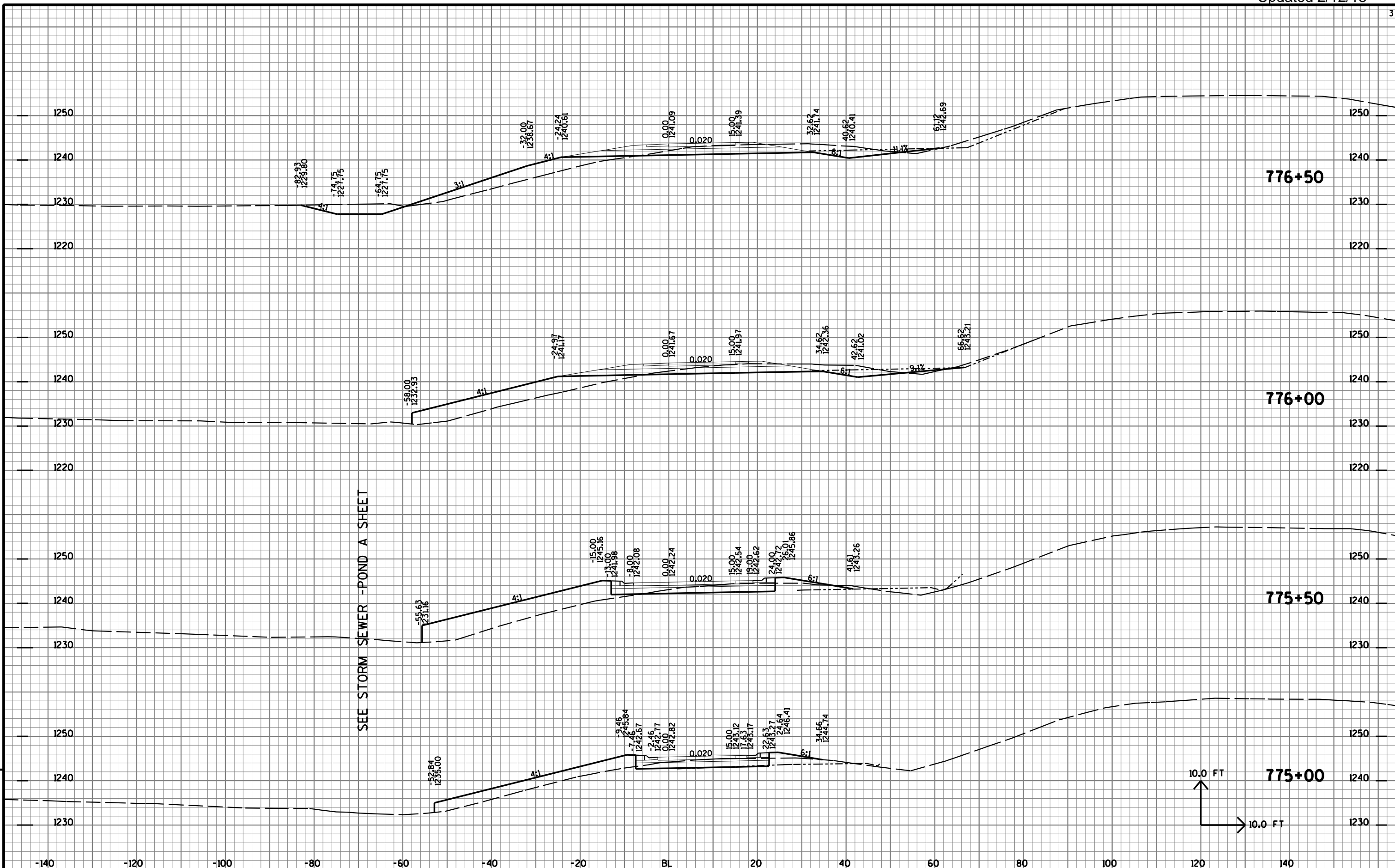


STA 766+00 B. 89.4' LT  
ELEV 1231.40

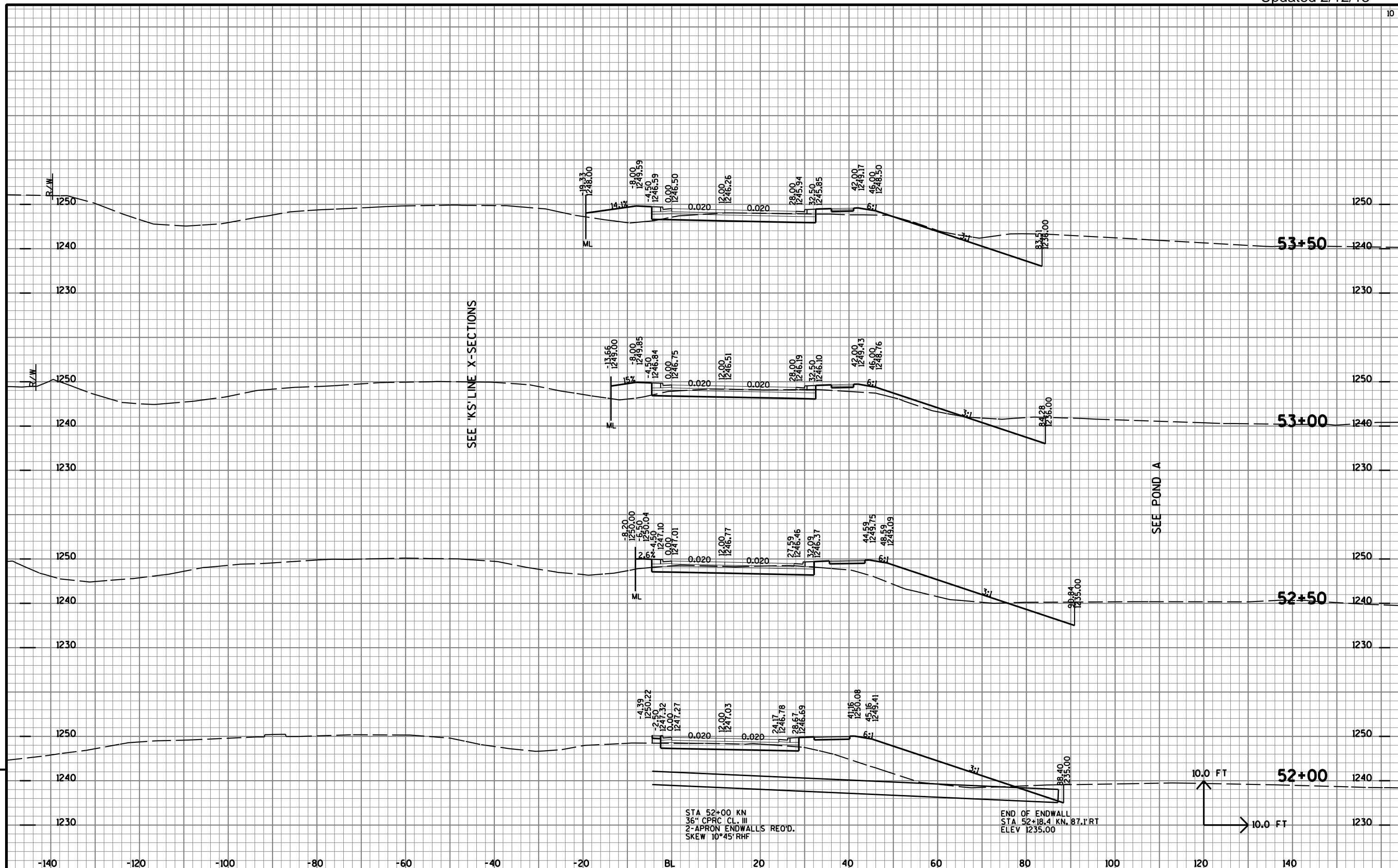
STA 766+53 B  
24' CPCR CL. III  
2' APRON ENDWALLS REQ'D.  
SKEW 58° RHF

STA 767+00 B. 75' RT  
ELEV 1230.50





SEE STORM SEWER - POND A SHEET

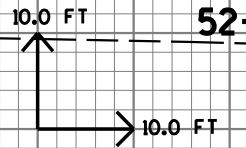


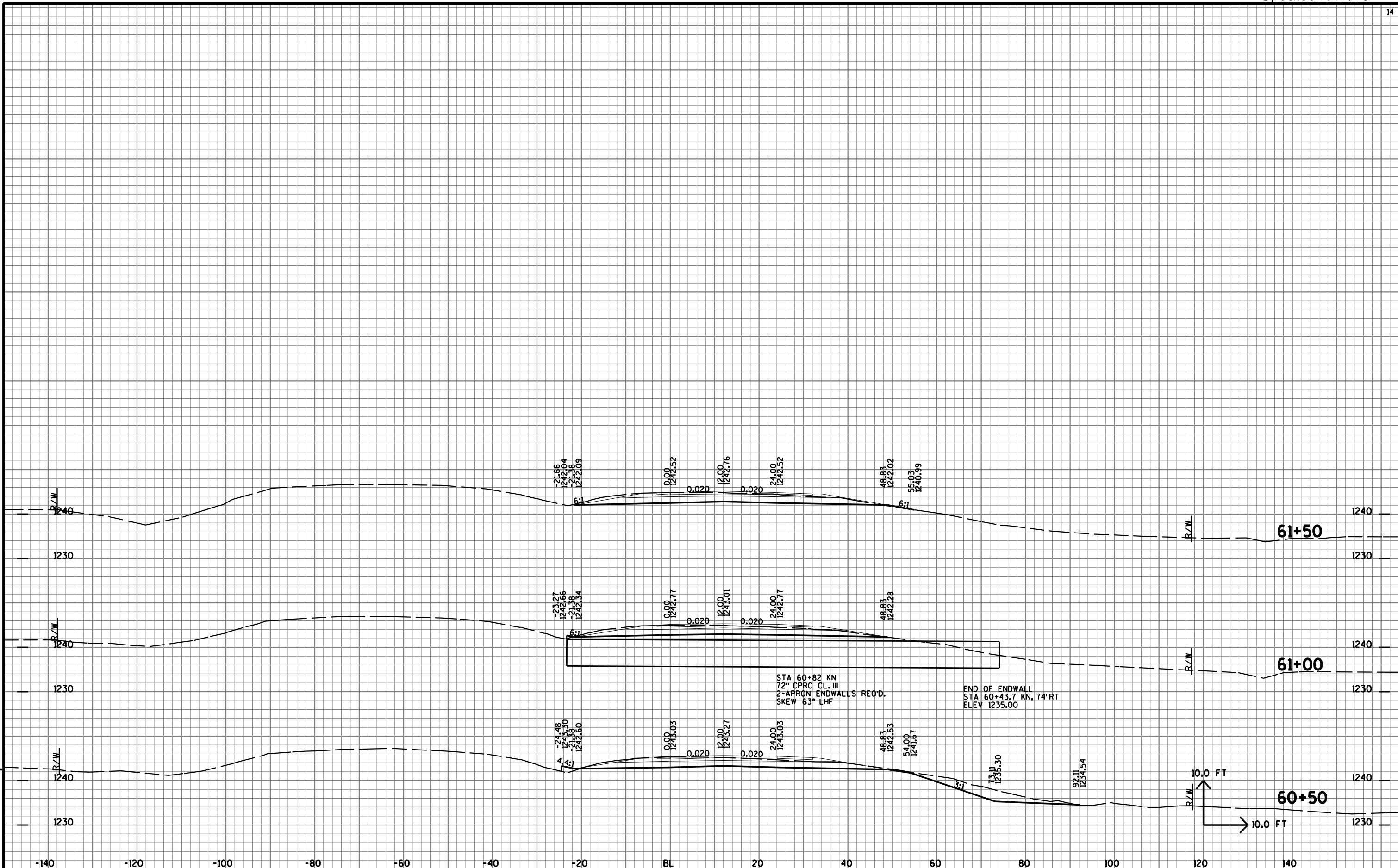
SEE 'K'S' LINE X-SECTIONS

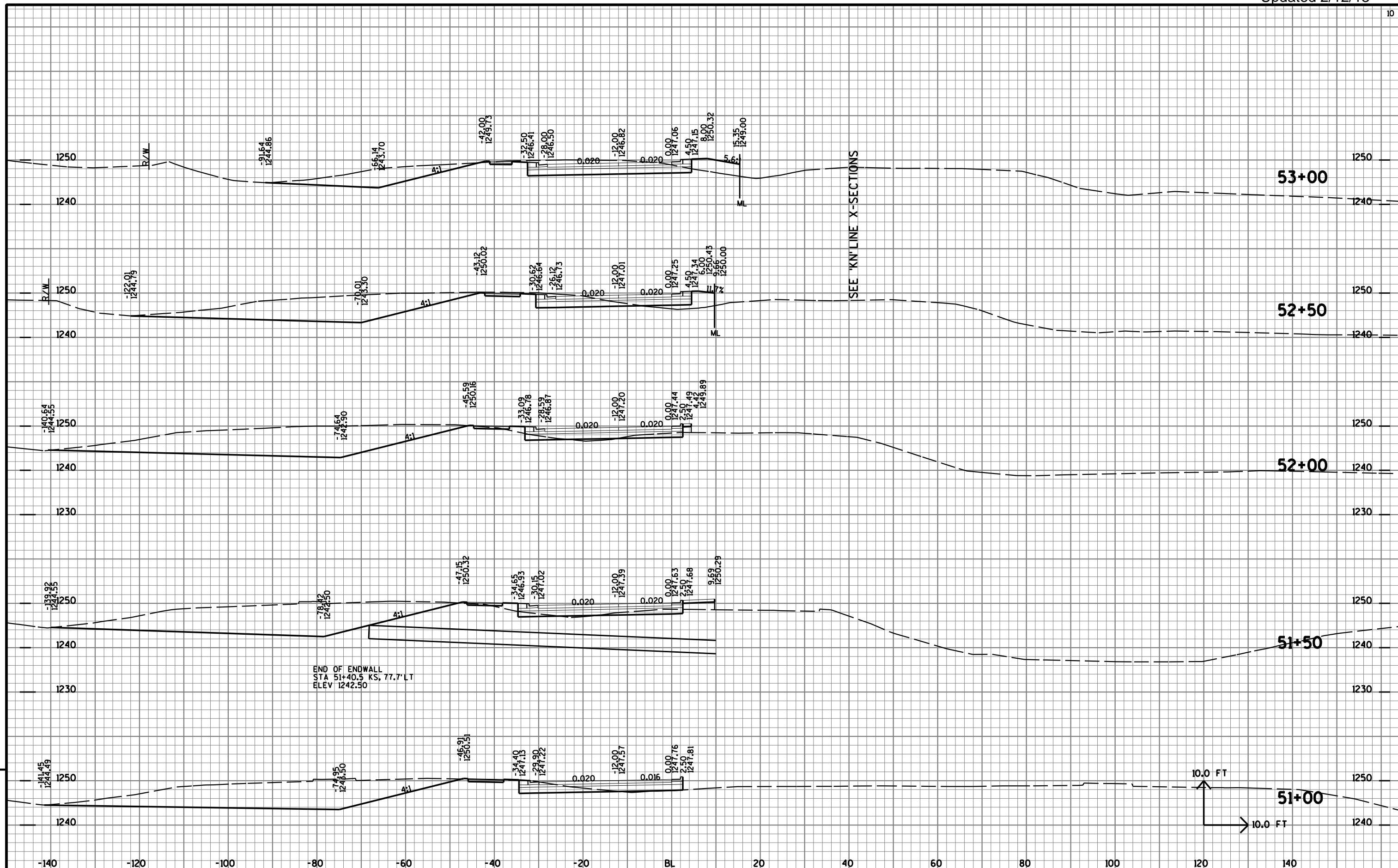
SEE POND A

STA 52+00 KN  
 36" C/P/C CL. III  
 2" APRON ENDWALLS REO'D.  
 SKEW 10°45' RHF

END OF ENDWALL  
 STA 52+18.4 KN, 87.1' RT  
 ELEV 1235.00

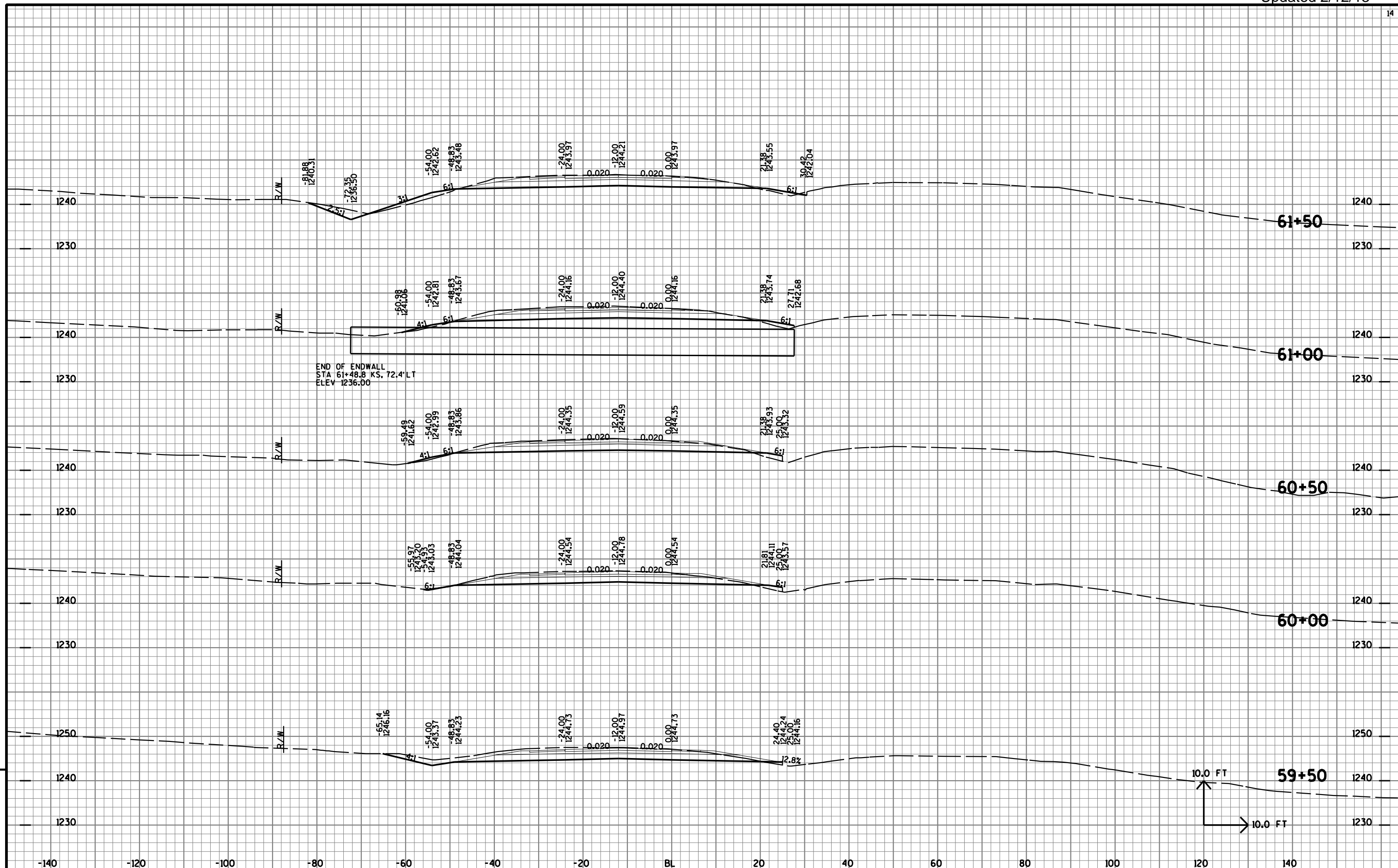






SEE 'KN'LINE X-SECTIONS

END OF ENDWALL  
STA 51+40.5 KS, 77.7' LT  
ELEV 1242.50



PROJECT NO: 1170-01-70

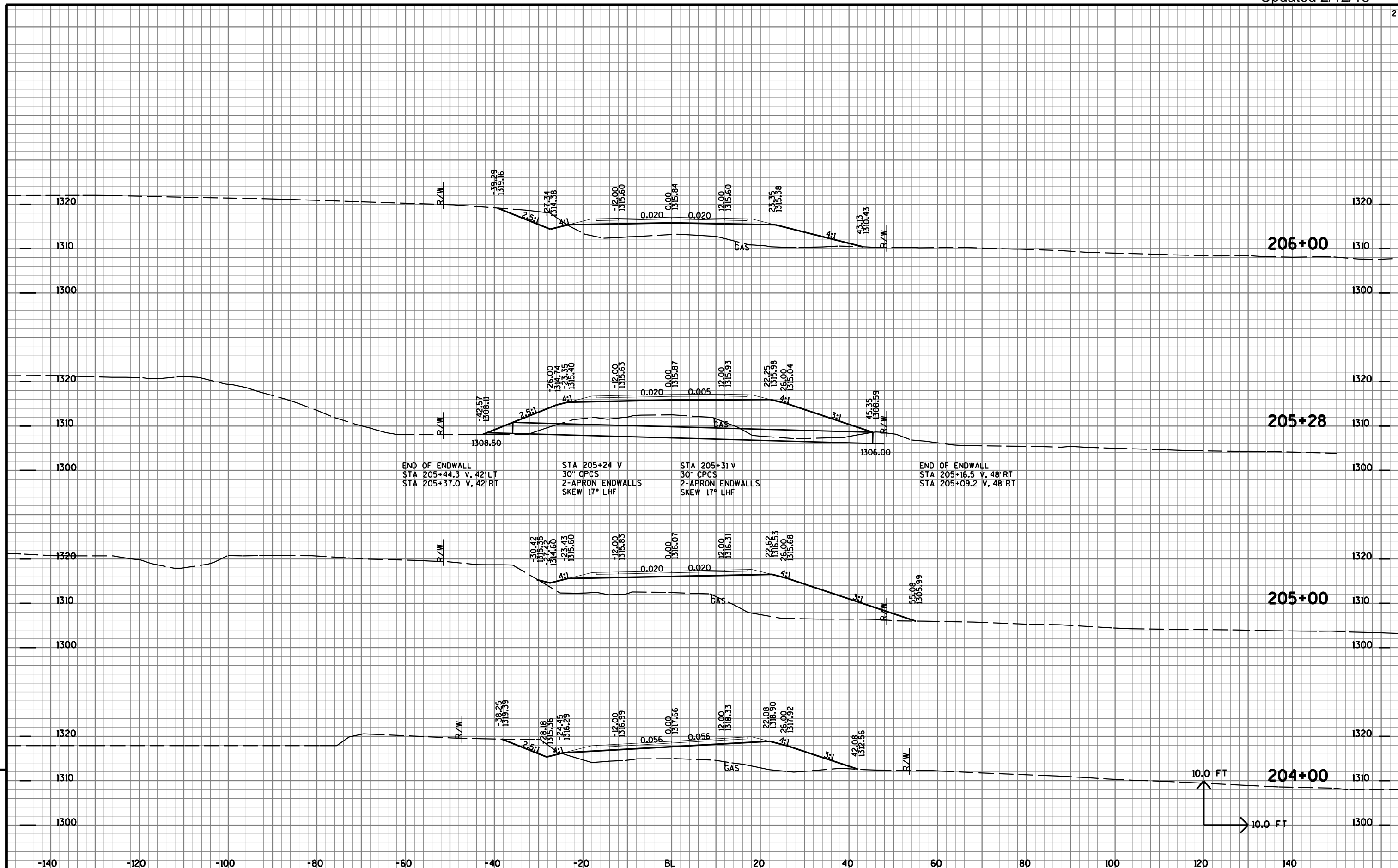
HWY: USH 51

COUNTY: MARATHON

CROSS SECTIONS: CTH K SOUTHBOUND

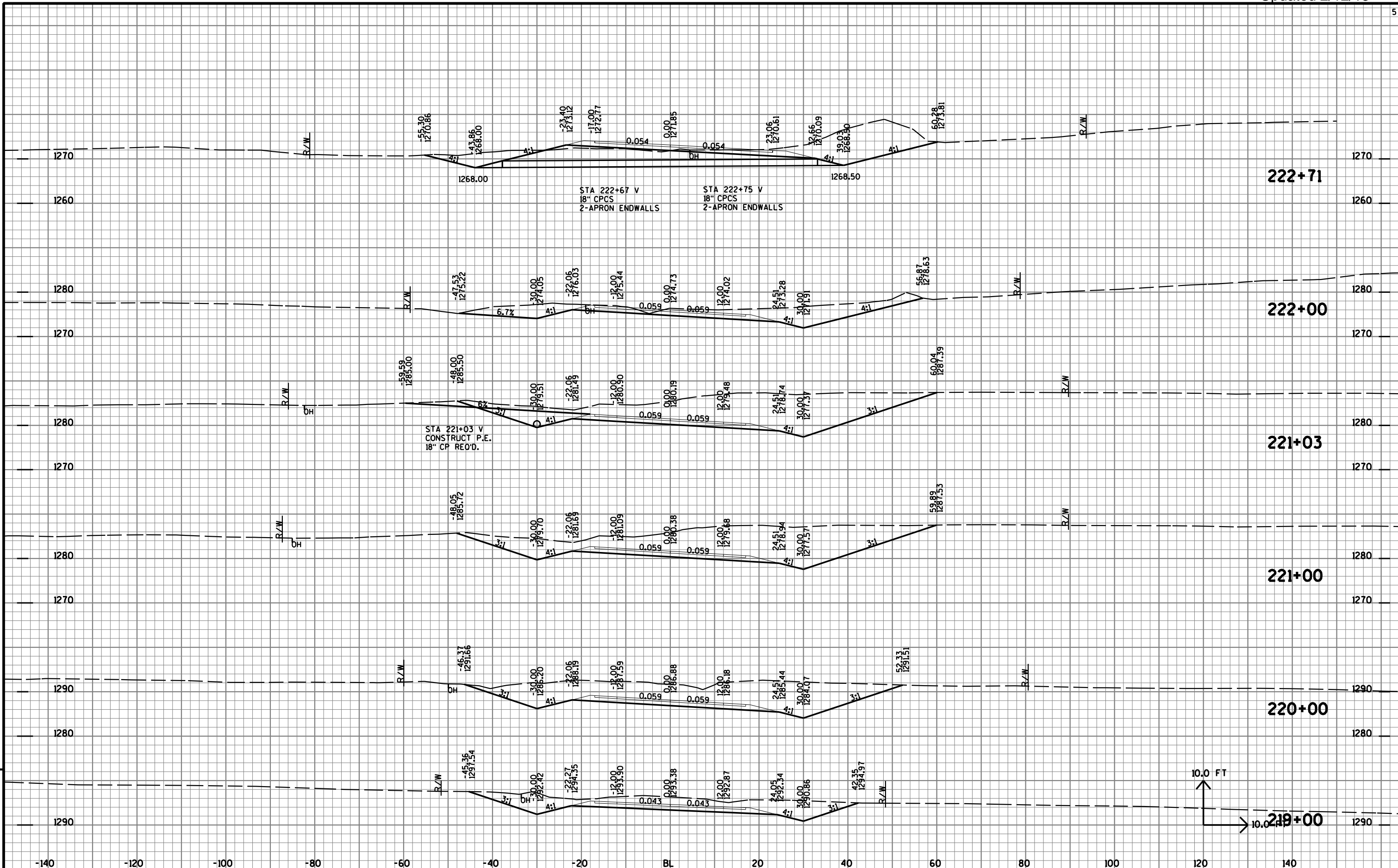
SHEET NO: 1271

E

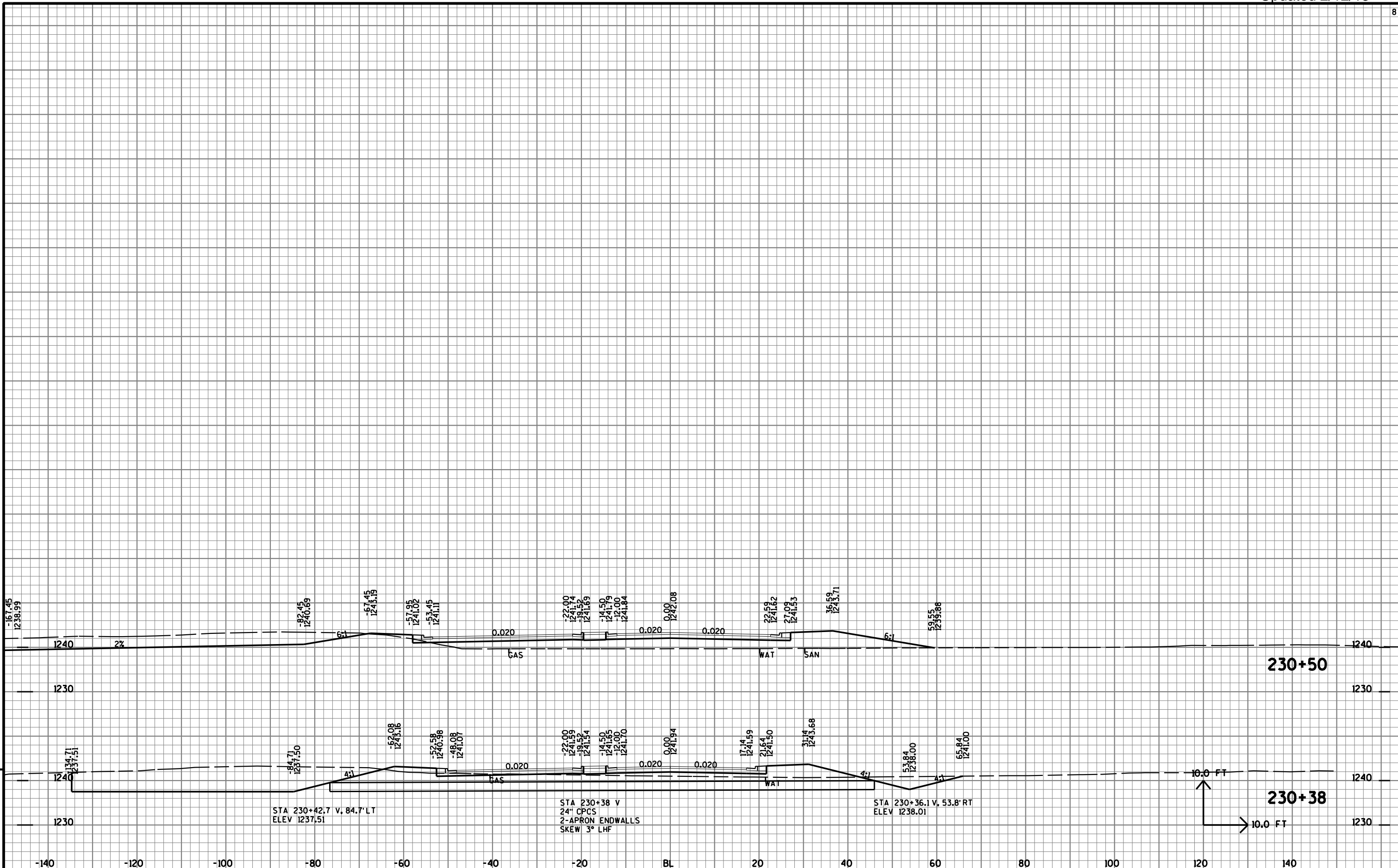


9

9



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: OVERLOOK DR	SHEET NO: 1284 E
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PROJECT NO: 1170-01-70

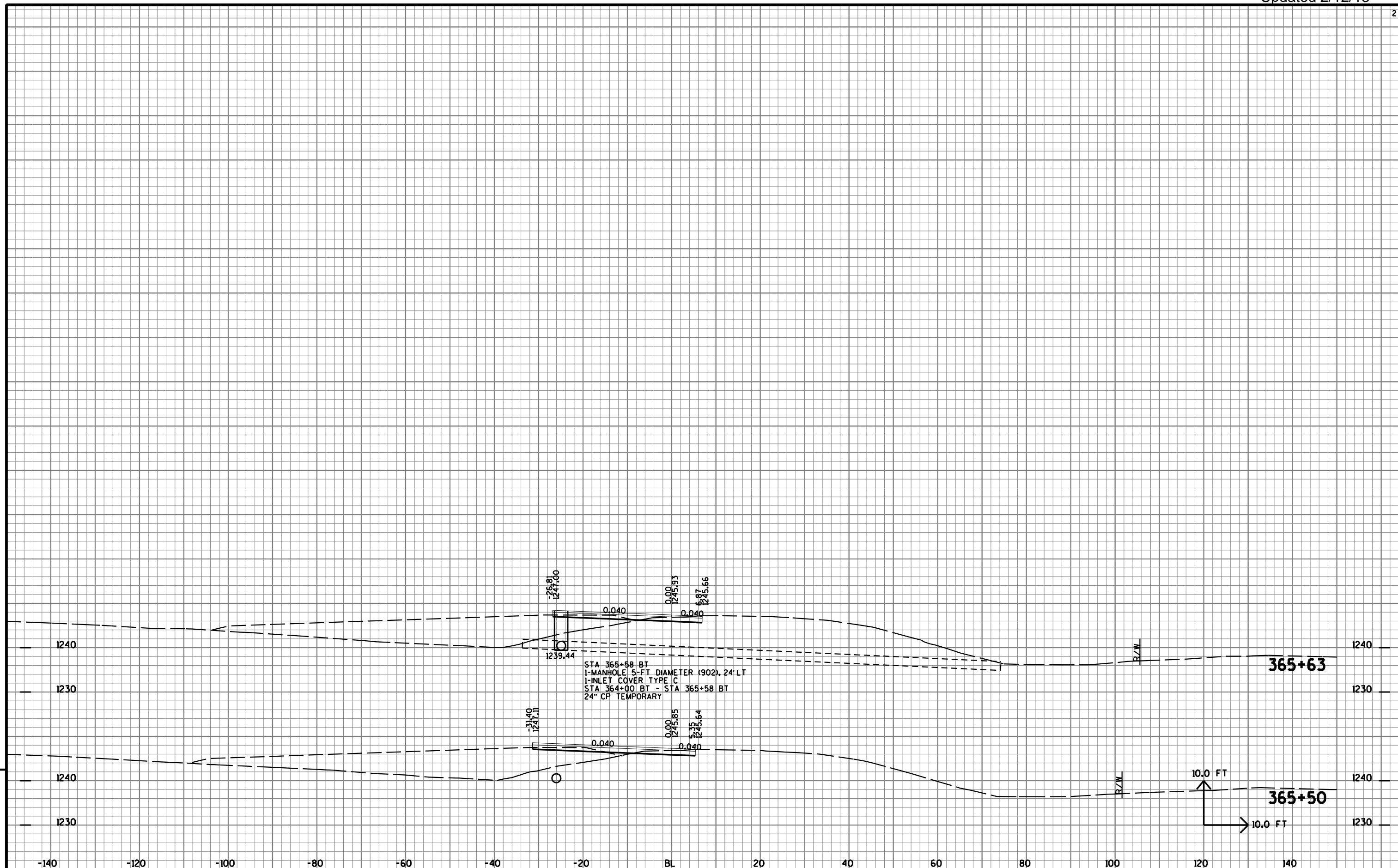
HWY: USH 51

COUNTY: MARATHON

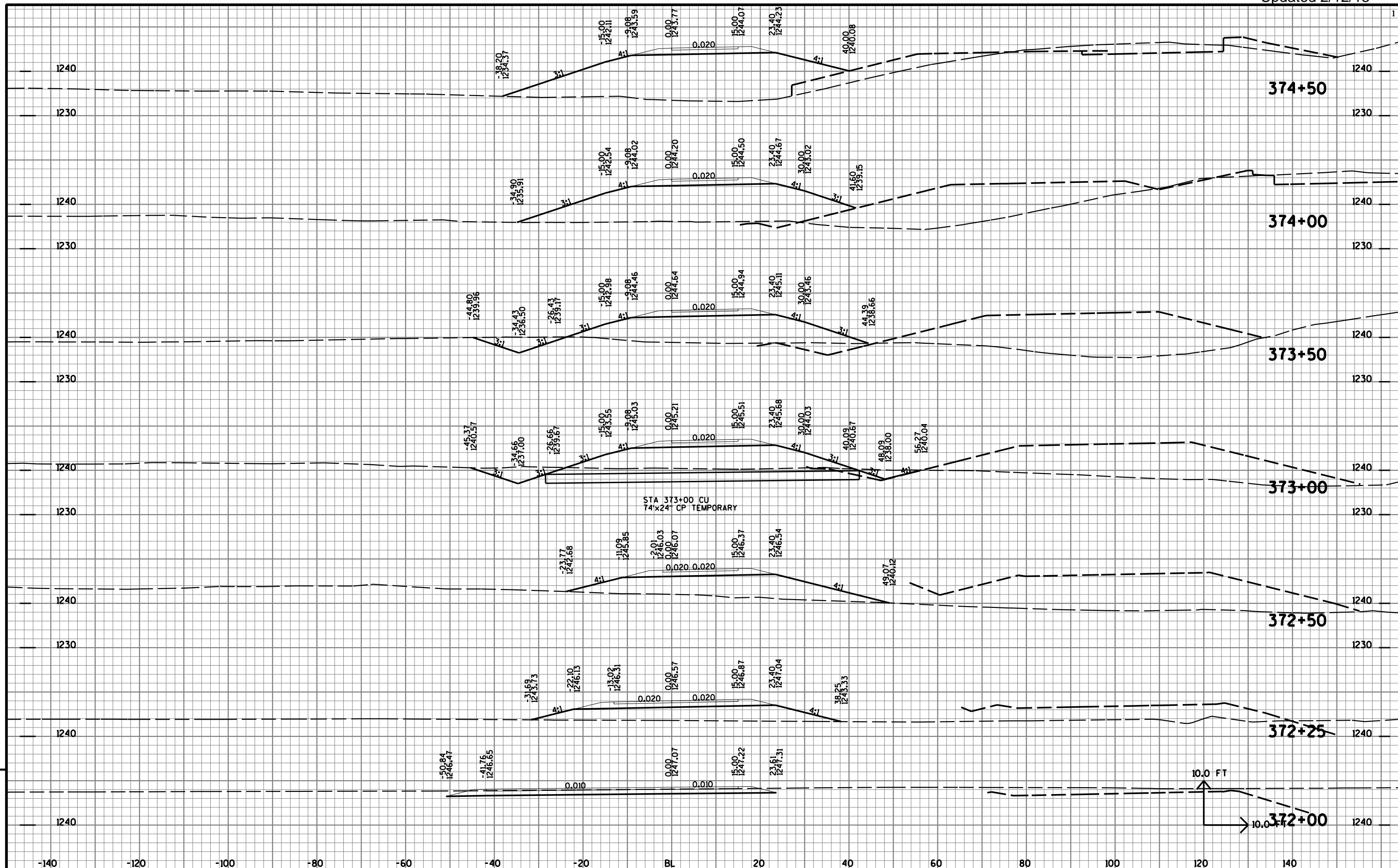
CROSS SECTIONS: OVERLOOK DR

SHEET NO: 1287

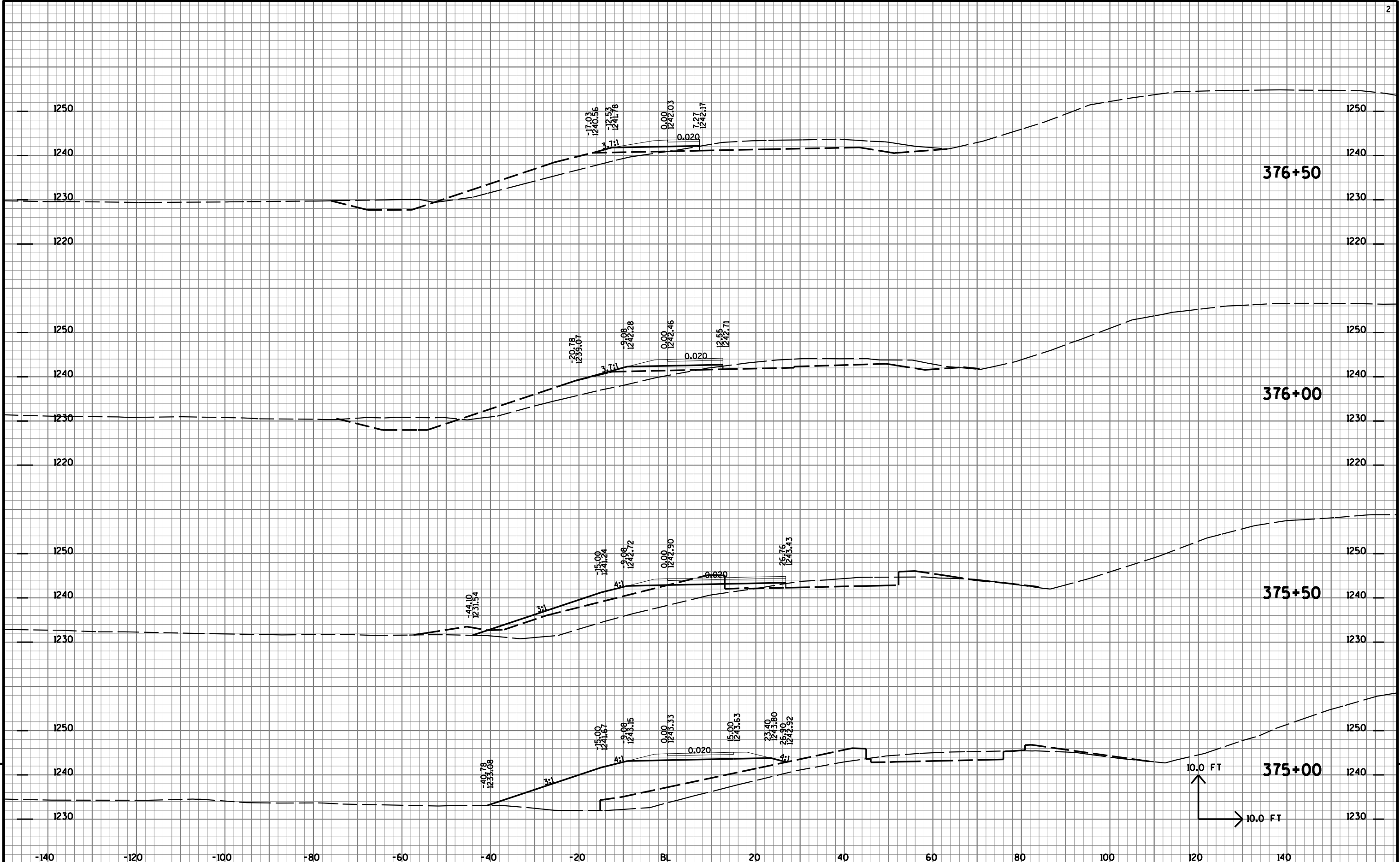
E

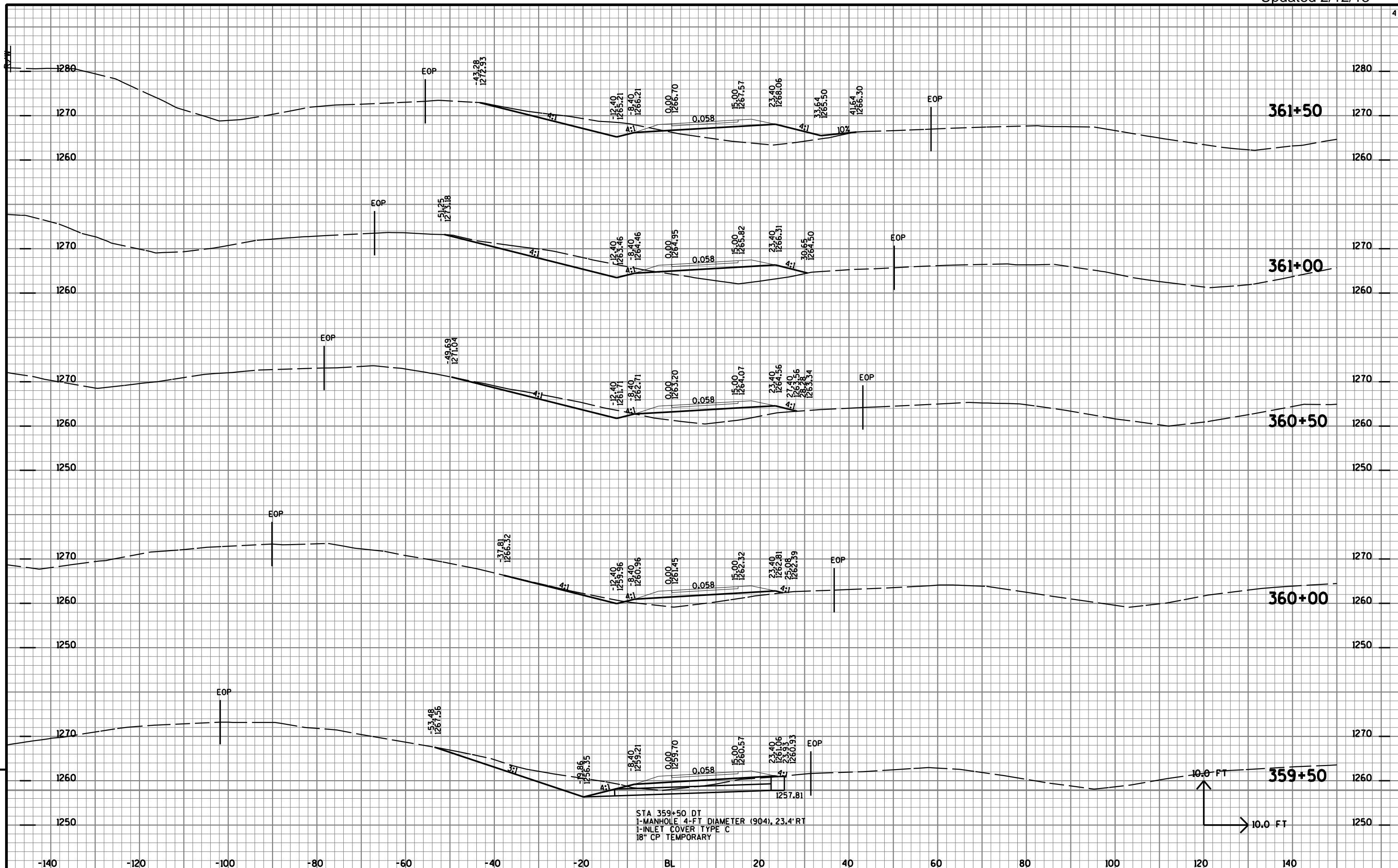


STA 365+58 BT  
 1-MANHOLE 5-FT DIAMETER (902), 24' LT  
 1-INLET COVER TYPE C  
 STA 364+00 BT - STA 365+58 BT  
 24" CP TEMPORARY



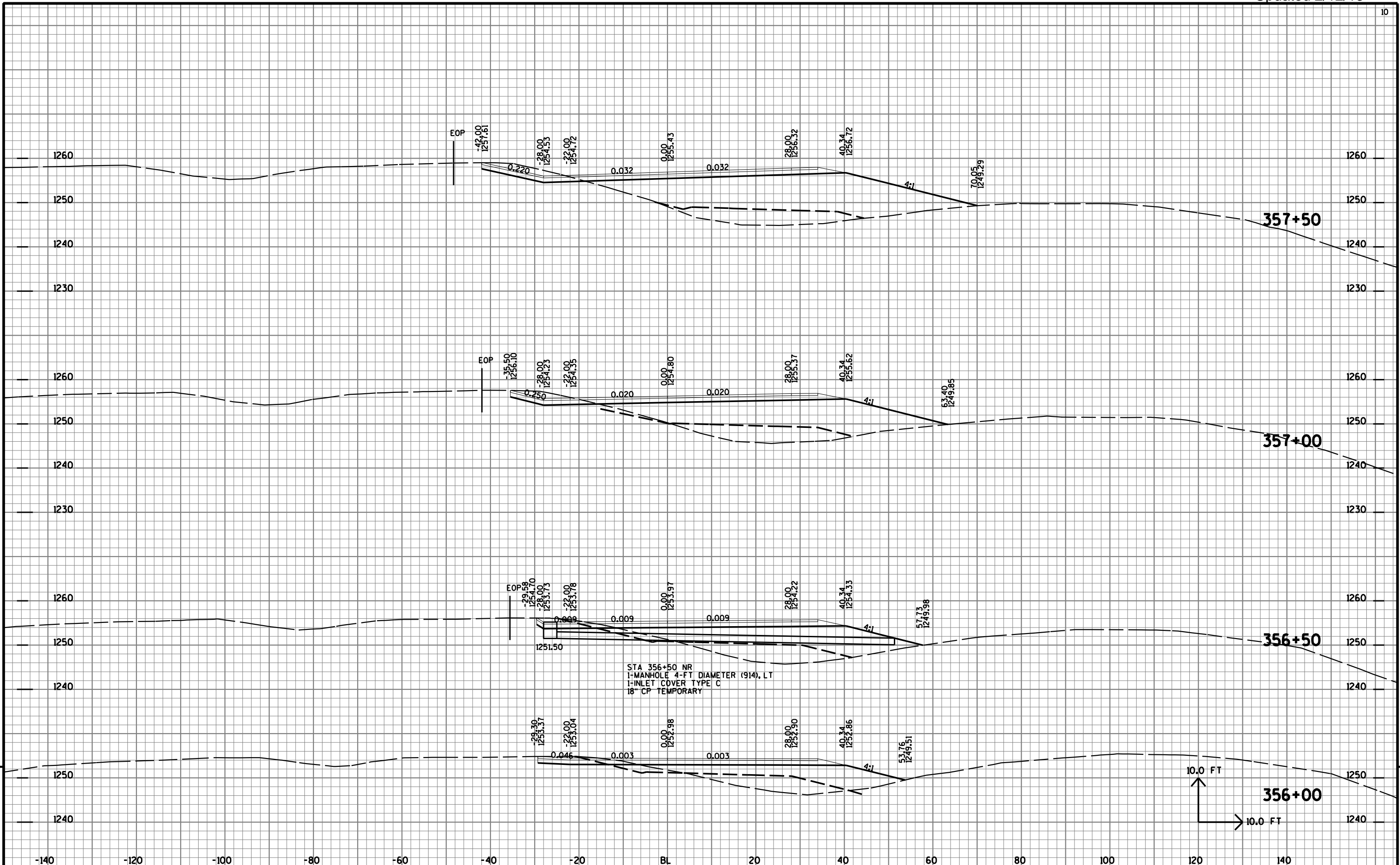
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP CU	SHEET NO: 1327A E
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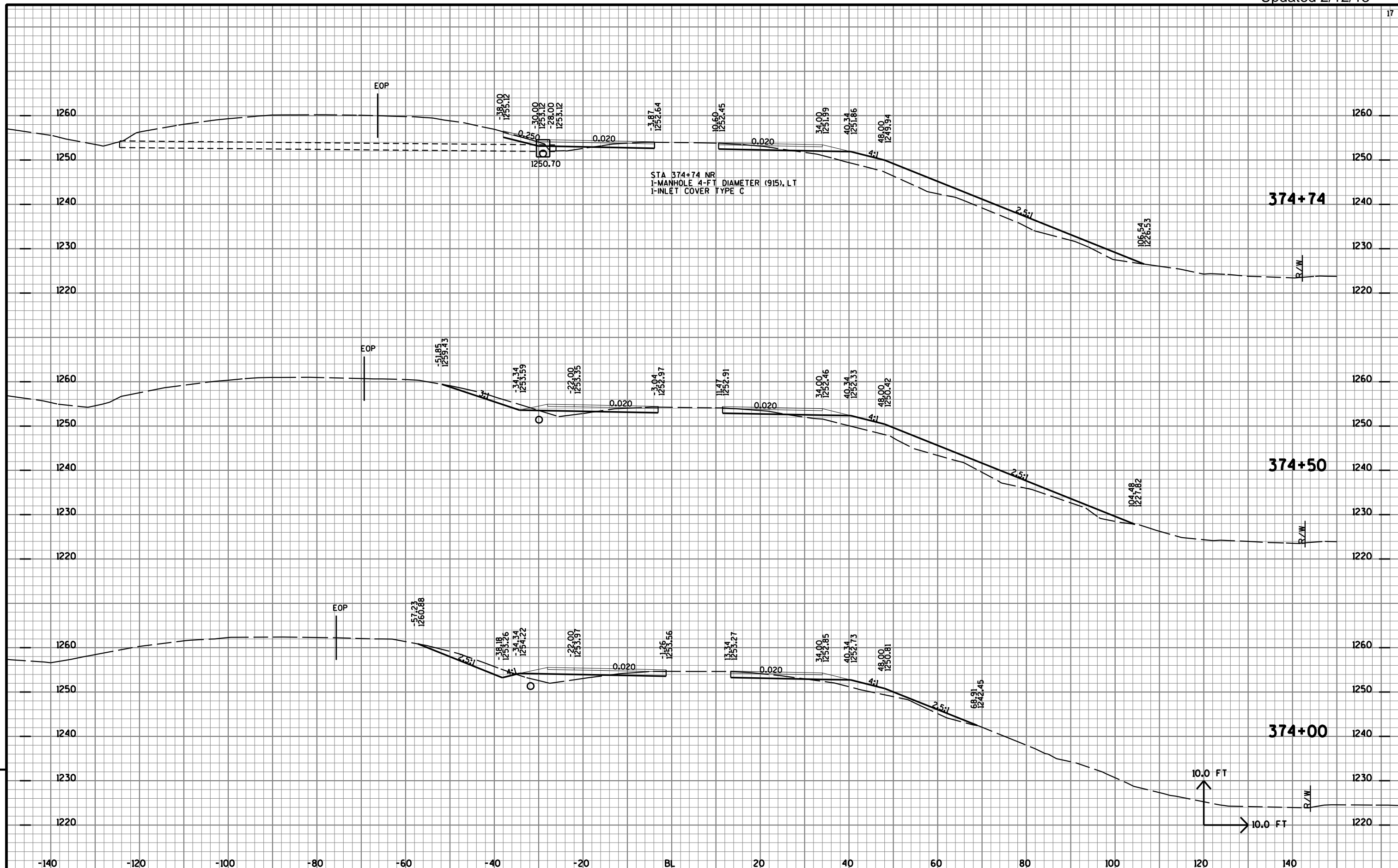




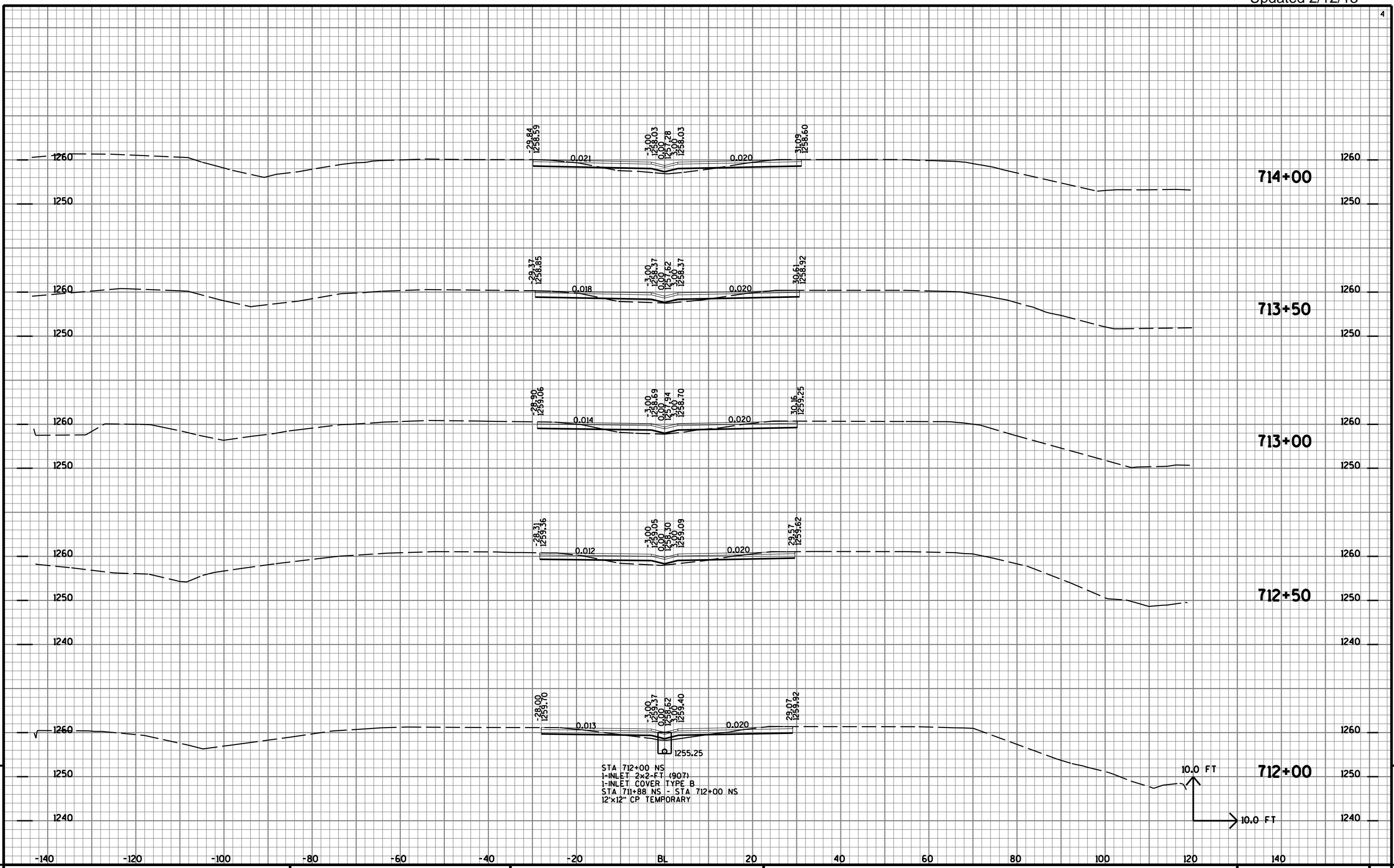
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9





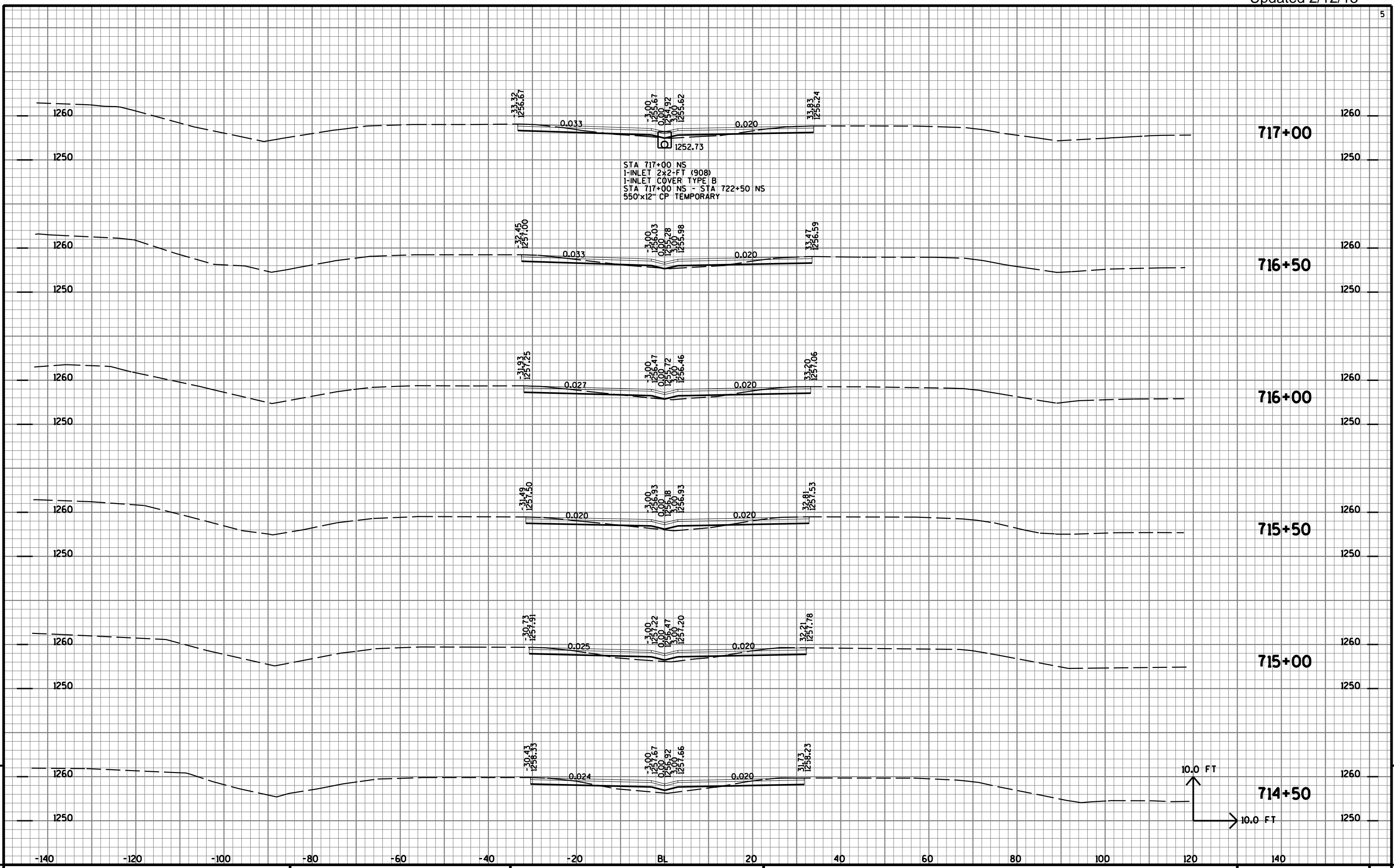
PROJECT NO: 1170-01-70      HWY: USH 51      COUNTY: MARATHON      CROSS SECTIONS: TEMP 'NR' LINE      SHEET NO: 1355      E



STA 712+00 NS  
 1-INLET 2x2-FT (907)  
 1-INLET COVER TYPE B  
 STA 711+88 NS - STA 712+00 NS  
 12"x12" CP TEMPORARY

9

9



STA 717+00 NS  
 1-INLET 2x2-FT (908)  
 1-INLET COVER TYPE B  
 STA 717+00 NS - STA 722+50 NS  
 550'x12" CP TEMPORARY

