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CIVIL EAST CONSTRUCTION

VOLUME 3 TRACKWORK

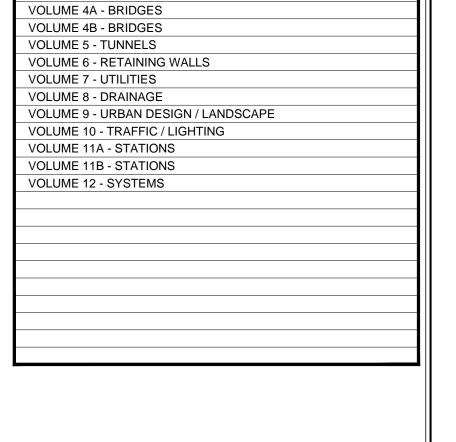
THE PROPOSED SOUTHWEST LRT PROJECT IS NOT FINAL BUT IS STILL UNDER ENVIRONMENTAL REVIEW AND THE PROJECT IS SUBJECT TO CHANGE. THESE PLANS ARE NOT FINAL.

THE COUNCIL, THROUGH THE DEVELOPMENT OF THESE PLANS, DOES NOT INTEND THAT THEY WILL PREJUDICE OR COMPROMISE ANY STATE OR FEDERAL ENVIRONMENTAL REVIEW OR OTHER LEGAL REQUIREMENTS. THESE PLANS DO NOT LIMIT THE PROJECT DESIGN ALTERNATIVES OR MITIGATIVE MEASURES THAT THE COUNCIL MAY UNDERTAKE IF THE PROPOSED SWLRT PROJECT PROCEEDS TO CONSTRUCTION.

THE COUNCIL WILL NOT TAKE FINAL ACTION ON THIS MATTER UNLESS THE COUNCIL PROCEEDS WITH THE PROJECT AFTER THE FTA'S RECORD OF DECISION AND THE COUNCIL'S DETERMINATION OF ADEQUACY.

WARNING: THIS RECORD MAY CONTAIN SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 CFR PARTS 15 AND 1520. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A "NEED TO KNOW", AS DEFINED IN 49 CFR PARTS 15 AND 1520, EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATIOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTY OR OTHER ACTION. FOR U.S. GOVERNMENT AGENCIES, PUBLIC DISCLOSURE IS GOVERNED BY 5 U.S.C. 552 AND 49 CFR PARTS 15 AND 1520.

60% SUBMISSION DATE: 09/28/15



PLAN PACKAGE INDEX / DESCRIPTION

CIVIL EAST CONSTRUCTION

VOLUME 1 - EXISTING CONDITIONS

VOLUME 2 - CIVIL

VOLUME 3 - TRACKWORK



		CIVIL EAST	CIVIL EAST							CIVIL EAST	CIVIL EAST	
SHT#	SHEET NAME	SHEET DESCRIPTION	STATION STATION REV	SHT# SHEET NA	ME SI	HEET DESCRIPTION STATION	STATION REV	/ SHT#	SHEET NAME	SHEET DESCRIPTION	STATION	STATION REV
		VOLUME 3 - TRACKWORK		73 E2-TRK-TYF				146	E4-TRK-TYP-011	TRACK TYPICAL SECTIONS		
1	E0-TRK-CVR-001	COVER SHEET		74 E2-TRK-TYF				147	E4-TRK-TYP-012	TRACK TYPICAL SECTIONS		'
2	E0-TRK-IDX-001	VOLUME INDEX OF PLAN SHEETS SHEET 1		75 E2-TRK-TYF				148	E4-TRK-TYP-013	TRACK TYPICAL SECTIONS		
3 4	E0-TRK-IDX-002 E0-GEN-KEY-001	VOLUME INDEX OF PLAN SHEETS SHEET 2 GENERAL KEY MAP		76 E2-TRK-TYF				149 150	E4-TRK-TYP-014 E4-TRK-TYP-015	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		
5	E0-GEN-NTS-001	GENERAL LEGEND AND ABBREVIATIONS SHEET 1		78 E2-TRK-TYF				151	E4-TRK-TYP-016	TRACK TYPICAL SECTIONS		
6	E0-GEN-NTS-002	GENERAL LEGEND AND ABBREVIATIONS SHEET 2		79 E2-TRK-TYF				152	E4-TRK-TYP-017	TRACK TYPICAL SECTIONS	-	+
7	E0-TRK-NTS-001	TRACK TRACK NOTES		80 E2-TRK-TYF				153	E4-TRK-TYP-018	TRACK TYPICAL SECTIONS		
8	E1-TRK-TYP-001	TRACK TYPICAL SECTIONS		81 E2-TRK-TYF	2-045 TRACK TYPICAL SEC	CTIONS		154	E4-TRK-TYP-019	TRACK TYPICAL SECTIONS		
9	E1-TRK-TYP-002	TRACK TYPICAL SECTIONS		82 E2-TRK-TYF	P-046 TRACK TYPICAL SEC	CTIONS		155	E4-TRK-TYP-020	TRACK TYPICAL SECTIONS		
10	E1-TRK-TYP-003	TRACK TYPICAL SECTIONS		83 E2-TRK-TYF				156	E4-TRK-TYP-021	TRACK TYPICAL SECTIONS		<u> </u>
11	E1-TRK-TYP-004	TRACK TYPICAL SECTIONS		84 E2-TRK-TYF				157	E4-TRK-TYP-022	TRACK TYPICAL SECTIONS		
12	E1-TRK-TYP-005 E1-TRK-TYP-006	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		85 E2-TRK-TYF 86 E2-TRK-TYF				158 159	E4-TRK-TYP-023 E4-TRK-TYP-024	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		+
14	E1-TRK-TYP-007	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		87 E2-TRK-TY				160	E4-TRK-TYP-025	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		+
15	E1-TRK-TYP-008	TRACK TYPICAL SECTIONS		88 E2-TRK-TYF				161	E4-TRK-TYP-026	TRACK TYPICAL SECTIONS		-
16	E1-TRK-TYP-009	TRACK TYPICAL SECTIONS		89 E2-TRK-TYF	2-053 TRACK TYPICAL SEC	CTIONS		162	E4-TRK-TYP-027	TRACK TYPICAL SECTIONS		
17	E1-TRK-TYP-010	TRACK TYPICAL SECTIONS		90 E2-TRK-TYF	P-054 TRACK TYPICAL SEC	CTIONS		163	E4-TRK-TYP-028	TRACK TYPICAL SECTIONS		
18	E1-TRK-TYP-011	TRACK TYPICAL SECTIONS		91 E2-TRK-TYF	P-055 TRACK TYPICAL SEC	CTIONS		164	E4-TRK-TYP-029	TRACK TYPICAL SECTIONS		
19	E1-TRK-TYP-012	TRACK TYPICAL SECTIONS		92 E2-TRK-TYF				165	E4-TRK-TYP-030	TRACK TYPICAL SECTIONS		
20	E1-TRK-TYP-013	TRACK TYPICAL SECTIONS		93 E2-TRK-TYF				166	E4-TRK-TYP-031	TRACK TYPICAL SECTIONS		
21	E1-TRK-TYP-014	TRACK TYPICAL SECTIONS		94 E3-TRK-TYI				167 168	E4-TRK-TYP-032	TRACK TYPICAL SECTIONS		+
22	E1-TRK-TYP-015 E1-TRK-TYP-016	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		95 E3-TRK-TYF 96 E3-TRK-TYF				168	E4-TRK-TYP-033 E4-TRK-TYP-034	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		+
24	E1-TRK-TYP-017	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		97 E3-TRK-TYF				170	E4-TRK-TYP-035	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS	$\overline{}$	+
25	E1-TRK-TYP-018	TRACK TYPICAL SECTIONS		98 E3-TRK-TYF				171	E4-TRK-TYP-036	TRACK TYPICAL SECTIONS		
26	E1-TRK-TYP-019	TRACK TYPICAL SECTIONS		99 E3-TRK-TYF				172	E4-TRK-TYP-037	TRACK TYPICAL SECTIONS		
27	E1-TRK-TYP-020	TRACK TYPICAL SECTIONS		100 E3-TRK-TYF	2-007 TRACK TYPICAL SEC	CTIONS		173	E4-TRK-TYP-038	TRACK TYPICAL SECTIONS		
28	E1-TRK-TYP-021	TRACK TYPICAL SECTIONS		101 E3-TRK-TYF				174	E4-TRK-TYP-039	TRACK TYPICAL SECTIONS		
29	E1-TRK-TYP-022	TRACK TYPICAL SECTIONS		102 E3-TRK-TYF				175	E4-TRK-TYP-040	TRACK TYPICAL SECTIONS		
30	E1-TRK-TYP-023	TRACK TYPICAL SECTIONS		103 E3-TRK-TYF				176	E4-TRK-TYP-041	TRACK TYPICAL SECTIONS		
31	E1-TRK-TYP-024 E1-TRK-TYP-025	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		104 E3-TRK-TYI 105 E3-TRK-TYI				177 178	E4-TRK-TYP-042 E4-TRK-TYP-043	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		
33	E1-TRK-TYP-026	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		105 E3-TRK-TYF				179	E4-TRK-TYP-043	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		+
34	E1-TRK-TYP-027	TRACK TYPICAL SECTIONS		107 E3-TRK-TYF				180	E4-TRK-TYP-045	TRACK TYPICAL SECTIONS		
35	E1-TRK-TYP-028	TRACK TYPICAL SECTIONS		108 E3-TRK-TYF				181	E4-TRK-TYP-046	TRACK TYPICAL SECTIONS	-	1
36	E1-TRK-TYP-029	TRACK TYPICAL SECTIONS		109 E3-TRK-TYF	P-016 TRACK TYPICAL SEC	CTIONS		182	E4-TRK-TYP-047	TRACK TYPICAL SECTIONS		
37	E2-TRK-TYP-001	TRACK TYPICAL SECTIONS		110 E3-TRK-TYF	2-017 TRACK TYPICAL SEC	CTIONS		183	E4-TRK-TYP-048	TRACK TYPICAL SECTIONS		
38	E2-TRK-TYP-002	TRACK TYPICAL SECTIONS		111 E3-TRK-TYF				184	E4-TRK-TYP-049	TRACK TYPICAL SECTIONS		
39	E2-TRK-TYP-003	TRACK TYPICAL SECTIONS		112 E3-TRK-TYF				185	E4-TRK-TYP-050	TRACK TYPICAL SECTIONS		
40	E2-TRK-TYP-004 E2-TRK-TYP-005	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		113 E3-TRK-TYF 114 E3-TRK-TYF				186	E4-TRK-TYP-051 E4-TRK-TYP-052	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		+
42	E2-TRK-TYP-006	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		115 E3-TRK-TYF				188	E4-TRK-TYP-053	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		+
43	E2-TRK-TYP-007	TRACK TYPICAL SECTIONS		116 E3-TRK-TYF				189	E4-TRK-TYP-054	TRACK TYPICAL SECTIONS		-
44	E2-TRK-TYP-008	TRACK TYPICAL SECTIONS		117 E3-TRK-TYF				190	E4-TRK-TYP-055	TRACK TYPICAL SECTIONS		1
45	E2-TRK-TYP-009	TRACK TYPICAL SECTIONS		118 E3-TRK-TYF	P-025 TRACK TYPICAL SEC	CTIONS		191	E1-TRK-LAY-001	TRACK PLAN SHEET LAYOUT SHEET 1		
46	E2-TRK-TYP-010	TRACK TYPICAL SECTIONS		119 E3-TRK-TYF	P-026 TRACK TYPICAL SEC	CTIONS		192	E2-TRK-LAY-001	TRACK PLAN SHEET LAYOUT SHEET 2		
47	E2-TRK-TYP-011	TRACK TYPICAL SECTIONS		120 E3-TRK-TYF				193	E2-TRK-LAY-002	TRACK PLAN SHEET LAYOUT SHEET 3		
48	E2-TRK-TYP-012	TRACK TYPICAL SECTIONS		121 E3-TRK-TYF				194	E3-TRK-LAY-001	TRACK PLAN SHEET LAYOUT SHEET 4		
49 50	E2-TRK-TYP-013 E2-TRK-TYP-014	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		122 E3-TRK-TYF 123 E3-TRK-TYF				195 196	E4-TRK-LAY-001 E4-TRK-LAY-002	TRACK PLAN SHEET LAYOUT SHEET 5 TRACK PLAN SHEET LAYOUT SHEET 6		+
51	E2-TRK-TYP-014	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		124 E3-TRK-TYI				197	E1-TRK-PRF-001	TRACK PLAN AND PROFILE	2496+00.21	1 2502+50
52	E2-TRK-TYP-016	TRACK TYPICAL SECTIONS		125 E3-TRK-TYF				198	E1-TRK-PRF-001A	TRACK PLAN AND PROFILE	1497+00.00	
53	E2-TRK-TYP-017	TRACK TYPICAL SECTIONS		126 E3-TRK-TYF				199	E1-TRK-PRF-002	TRACK PLAN AND PROFILE	2502+50	
54	E2-TRK-TYP-018	TRACK TYPICAL SECTIONS		127 E3-TRK-TYF	2-034 TRACK TYPICAL SEC	CTIONS		200	E1-TRK-PRF-002A	TRACK PLAN AND PROFILE	1502+50.00	
55	E2-TRK-TYP-019	TRACK TYPICAL SECTIONS		128 E3-TRK-TYF				201	E1-TRK-PRF-003	TRACK PLAN AND PROFILE	2509+50	
56	E2-TRK-TYP-020	TRACK TYPICAL SECTIONS		129 E3-TRK-TYF				202	E1-TRK-PRF-004	TRACK PLAN AND PROFILE	2516+50	
57	E2-TRK-TYP-021	TRACK TYPICAL SECTIONS		130 E3-TRK-TYF				203	E1-TRK-PRF-005	TRACK PLAN AND PROFILE	2523+50	2529+50
58	E2-TRK-TYP-022	TRACK TYPICAL SECTIONS		131 E3-TRK-TYF				204	E1-TRK-PRF-006	TRACK PLAN AND PROFILE	2529+50	
59 60	E2-TRK-TYP-023 E2-TRK-TYP-024	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		132 E3-TRK-TYF 133 E3-TRK-TYF				205	E1-TRK-PRF-007 E1-TRK-PRF-008	TRACK PLAN AND PROFILE TRACK PLAN AND PROFILE	2536+00 2542+00	2542+00 2546+50
61	E2-TRK-TYP-025	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		134 E3-TRK-TY				200	E1-TRK-PRF-009	TRACK PLAN AND PROFILE	2546+50	2553+00
62	E2-TRK-TYP-026	TRACK TYPICAL SECTIONS		135 E3-TRK-TYF				208	E1-TRK-PRF-010	TRACK PLAN AND PROFILE	2553+00	
63	E2-TRK-TYP-027	TRACK TYPICAL SECTIONS		136 E4-TRK-TY				209	E1-TRK-PRF-011	TRACK PLAN AND PROFILE	2559+50	
64	E2-TRK-TYP-028	TRACK TYPICAL SECTIONS		137 E4-TRK-TYF	2-002 TRACK TYPICAL SEC	CTIONS		210	E1-TRK-PRF-012	TRACK PLAN AND PROFILE	2566+50	2573+50
65	E2-TRK-TYP-029	TRACK TYPICAL SECTIONS		138 E4-TRK-TYF				211	E1-TRK-PRF-013	TRACK PLAN AND PROFILE	2573+50	2580+50
66	E2-TRK-TYP-030	TRACK TYPICAL SECTIONS		139 E4-TRK-TYF				212	E1-TRK-PRF-014	TRACK PLAN AND PROFILE	2580+50	2587+50
67 68	E2-TRK-TYP-031	TRACK TYPICAL SECTIONS		140 E4-TRK-TYF				213	E1-TRK-PRF-015	TRACK PLAN AND PROFILE	2587+50	2596+50
68 69	E2-TRK-TYP-032 E2-TRK-TYP-033	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		141 E4-TRK-TYF 142 E4-TRK-TYF				214	E2-TRK-PRF-001 E2-TRK-PRF-002	TRACK PLAN AND PROFILE TRACK PLAN AND PROFILE	2596+50 2602+00	2602+00 2609+00
70	E2-TRK-TYP-034	TRACK TYPICAL SECTIONS TRACK TYPICAL SECTIONS		142 E4-TRK-TYF				216	E2-TRK-PRF-002	TRACK PLAN AND PROFILE TRACK PLAN AND PROFILE	2609+00	
71	E2-TRK-TYP-035	TRACK TYPICAL SECTIONS		144 E4-TRK-TYF				217	E2-TRK-PRF-004	TRACK PLAN AND PROFILE	2616+00	2623+00
72	E2-TRK-TYP-036	TRACK TYPICAL SECTIONS		145 E4-TRK-TYF				218	E2-TRK-PRF-005	TRACK PLAN AND PROFILE	2623+00	
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TRACKWORK VOLUME INDEX OF PLAN SHEETS SHEET 1

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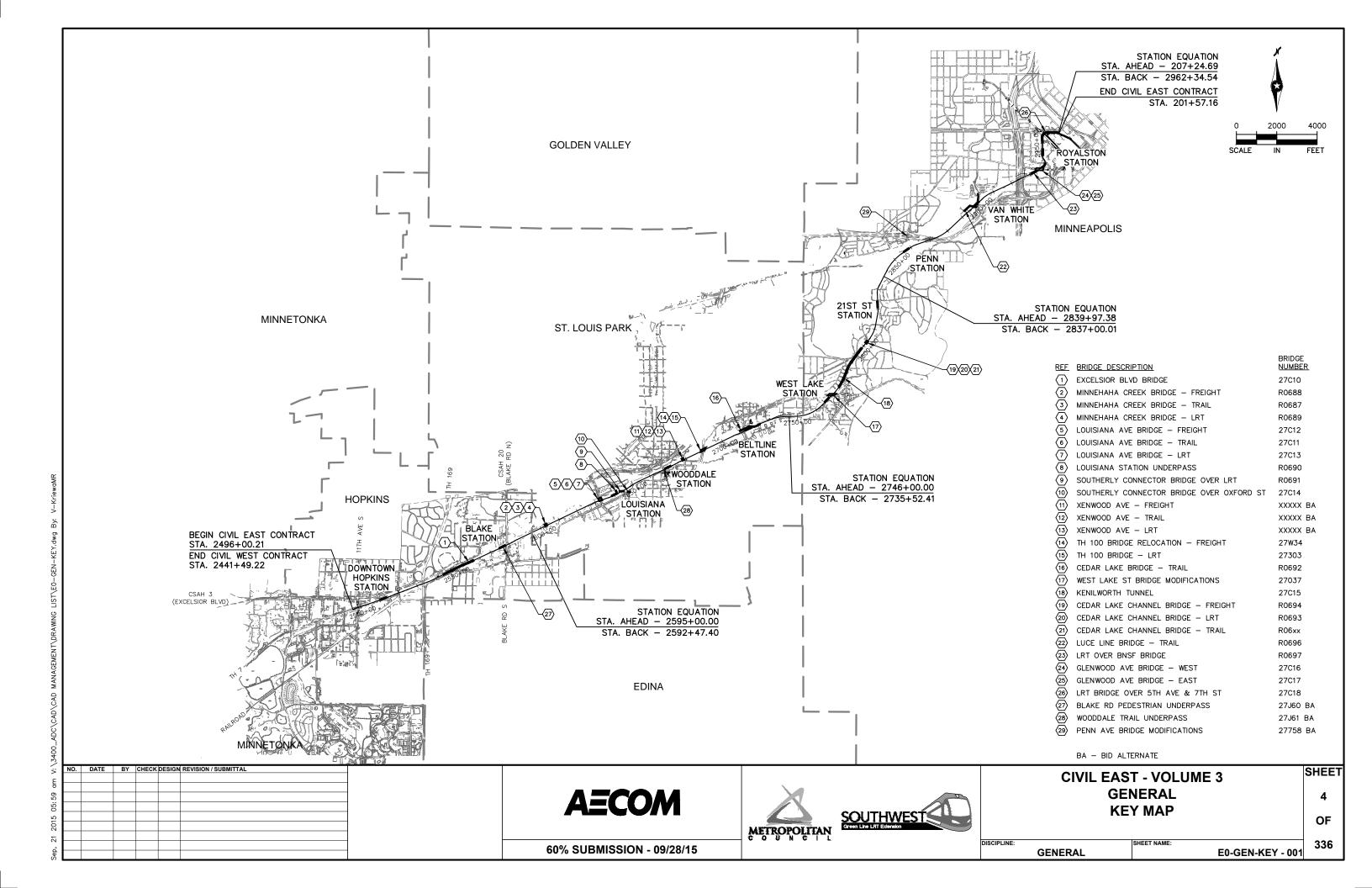
		CIVIL EAST		CIVIL EAST				CIVIL EAST				
SHT#	SHEET NAME	SHEET DESCRIPTION	STATION STATION	N REV SH	TT# SHEET NAME	SHEET DESCRIPTION	STATION	STATION REV	SHT# SHE	ET NAME	SHEET DESCRIPTION	STATION STATION REV
		VOLUME 3 - TRACKWORK (cont'd)			91 E1-FRT-PRF-009	FREIGHT PLAN AND PROFILE	89+00	96+00				
219	E2-TRK-PRF-006 E2-TRK-PRF-007	TRACK PLAN AND PROFILE TRACK PLAN AND PROFILE	2630+00 2637+00 2637+00 2644+00		92 E1-FRT-PRF-010 93 E2-FRT-PRF-001	FREIGHT PLAN AND PROFILE FREIGHT PLAN AND PROFILE	96+00 99+40.62	99+40.62 103+00				
221	E2-TRK-PRF-007	TRACK PLAN AND PROFILE TRACK PLAN AND PROFILE	2644+00 2649+50		94 E2-FRT-PRF-001	FREIGHT PLAN AND PROFILE	103+00	110+00				
222	E2-TRK-PRF-009	TRACK PLAN AND PROFILE	2649+50 2655+00		95 E2-FRT-PRF-003	FREIGHT PLAN AND PROFILE	110+00	117+00				
223	E2-TRK-PRF-010	TRACK PLAN AND PROFILE	2655+00 2660+50) 2	96 E2-FRT-PRF-004	FREIGHT PLAN AND PROFILE	117+00	124+00				
224	E2-TRK-PRF-011	TRACK PLAN AND PROFILE	2660+50 2666+00		97 E2-FRT-PRF-005	FREIGHT PLAN AND PROFILE	124+00	131+00				
225	E2-TRK-PRF-012	TRACK PLAN AND PROFILE	2666+00 2673+00		98 E2-FRT-PRF-006	FREIGHT PLAN AND PROFILE	131+00	138+00				
226	E2-TRK-PRF-013	TRACK PLAN AND PROFILE	2673+00 2680+00		99 E2-FRT-PRF-007	FREIGHT PLAN AND PROFILE	138+00	145+00				
227 228	E2-TRK-PRF-014 E2-TRK-PRF-015	TRACK PLAN AND PROFILE TRACK PLAN AND PROFILE	2680+00 2687+00 2687+00 2694+00		00 E2-FRT-PRF-008 01 E2-FRT-PRF-009	FREIGHT PLAN AND PROFILE FREIGHT PLAN AND PROFILE	145+00 152+00	152+00 159+00				
229	E2-TRK-PRF-016	TRACK PLAN AND PROFILE	2694+00 2699+00		02 E2-FRT-PRF-010	FREIGHT PLAN AND PROFILE	159+00	166+00				
230	E2-TRK-PRF-017	TRACK PLAN AND PROFILE	2699+00 2704+00		03 E2-FRT-PRF-011	FREIGHT PLAN AND PROFILE	166+00	173+00				
231	E2-TRK-PRF-018	TRACK PLAN AND PROFILE	2704+00 2710+00) 3	04 E2-FRT-PRF-012	FREIGHT PLAN AND PROFILE	173+00	180+00				
232	E2-TRK-PRF-019	TRACK PLAN AND PROFILE	2710+00 2717+00) 3	05 E2-FRT-PRF-013	FREIGHT PLAN AND PROFILE	180+00	187+00				
233	E2-TRK-PRF-020	TRACK PLAN AND PROFILE	2717+00 2724+00		06 E2-FRT-PRF-014	FREIGHT PLAN AND PROFILE	187+00	194+00				
234	E2-TRK-PRF-021	TRACK PLAN AND PROFILE	2724+00 2731+00		07 E2-FRT-PRF-015	FREIGHT PLAN AND PROFILE	194+00	201+00				
235	E2-TRK-PRF-022	TRACK PLAN AND PROFILE	2731+00 2747+00		08 E2-FRT-PRF-016	FREIGHT PLAN AND PROFILE	201+00	208+00				
236	E3-TRK-PRF-001 E3-TRK-PRF-002	TRACK PLAN AND PROFILE TRACK PLAN AND PROFILE	2747+00 2751+00 2751+00 2758+00		09 E2-FRT-PRF-017 10 E2-FRT-PRF-018	FREIGHT PLAN AND PROFILE FREIGHT PLAN AND PROFILE	208+00 215+00	215+00 222+00				
238	E3-TRK-PRF-003	TRACK PLAN AND PROFILE	2758+00 2755+00		11 E2-FRT-PRF-019	FREIGHT PLAN AND PROFILE	222+00	229+00				
239	E3-TRK-PRF-004	TRACK PLAN AND PROFILE	2765+00 2771+00		12 E2-FRT-PRF-020	FREIGHT PLAN AND PROFILE	229+00	234+00				
240	E3-TRK-PRF-005	TRACK PLAN AND PROFILE	2771+00 2778+00		13 E2-FRT-PRF-021	FREIGHT PLAN AND PROFILE	136+61.08	143+00				
241	E3-TRK-PRF-005A	TRACK PLAN AND PROFILE	1772+50 1778+00) 3	14 E2-FRT-PRF-022	FREIGHT PLAN AND PROFILE	143+00	148+50				
242	E3-TRK-PRF-006	TRACK PLAN AND PROFILE	2778+00 2785+00		15 E2-FRT-PRF-023	FREIGHT PLAN AND PROFILE	148+50	154+00				
243	E3-TRK-PRF-006A	TRACK PLAN AND PROFILE	1778+00 1785+00		16 E2-FRT-PRF-024	FREIGHT PLAN AND PROFILE	154+00	160+83.67				
244	E3-TRK-PRF-007 E3-TRK-PRF-007A	TRACK PLAN AND PROFILE	2785+00 2791+50		17 E3-FRT-PRF-001	FREIGHT PLAN AND PROFILE FREIGHT PLAN AND PROFILE	300+00	306+00				I
245 246	E3-TRK-PRF-007A E3-TRK-PRF-008	TRACK PLAN AND PROFILE	1785+00 1791+50		18 E3-FRT-PRF-002		306+00	313+00				
246	E3-TRK-PRF-008A	TRACK PLAN AND PROFILE TRACK PLAN AND PROFILE	2791+50 2798+00 1791+50 1798+00		19 E3-FRT-PRF-003 20 E3-FRT-PRF-004	FREIGHT PLAN AND PROFILE FREIGHT PLAN AND PROFILE	313+00 319+50	319+50 326+50				I
248	E3-TRK-PRF-009	TRACK PLAN AND PROFILE	2798+00 2805+00		21 E3-FRT-PRF-005	FREIGHT PLAN AND PROFILE	326+50	333+50				I
249	E3-TRK-PRF-009A	TRACK PLAN AND PROFILE	1798+00 1801+20		22 E3-FRT-PRF-006	FREIGHT PLAN AND PROFILE	333+50	340+00				
250	E3-TRK-PRF-010	TRACK PLAN AND PROFILE	2805+00 2812+00) 3	23 E3-FRT-PRF-007	FREIGHT PLAN AND PROFILE	340+00	343+42				
251	E3-TRK-PRF-011	TRACK PLAN AND PROFILE	2812+00 2819+00		24 E4-FRT-PRF-001	FREIGHT PLAN AND PROFILE	92+39.06	98+50				
252	E3-TRK-PRF-012	TRACK PLAN AND PROFILE	2819+00 2826+00		25 E4-FRT-PRF-002	FREIGHT PLAN AND PROFILE	98+50	105+50				
253	E3-TRK-PRF-013	TRACK PLAN AND PROFILE	2826+00 2833+00		26 E4-FRT-PRF-003	FREIGHT PLAN AND PROFILE	105+50	112+00				
254 255	E3-TRK-PRF-014 E4-TRK-PRF-001	TRACK PLAN AND PROFILE TRACK PLAN AND PROFILE	2833+00 2842+00 2842+00 2848+00		27 E4-FRT-PRF-004 28 E4-FRT-PRF-005	FREIGHT PLAN AND PROFILE FREIGHT PLAN AND PROFILE	112+00 118+50	118+50 125+00				
256	E4-TRK-PRF-002	TRACK PLAN AND PROFILE	2848+00 2854+00		29 E4-FRT-PRF-006	FREIGHT PLAN AND PROFILE	125+00	128+31.10				
257	E4-TRK-PRF-003	TRACK PLAN AND PROFILE	2854+00 2860+00		30 E0-TRK-DTL-001	TRACK DETAILS TYPICAL SECTIONS INSETS	120.00	120.01.10				
258	E4-TRK-PRF-004	TRACK PLAN AND PROFILE	2860+00 2865+50		31 E0-TRK-DTL-002	TRACK DETAILS TYPICAL SECTIONS INSETS						
259	E4-TRK-PRF-005	TRACK PLAN AND PROFILE	2865+50 2871+50) 3	32 E0-TRK-DTL-010	TRACK DETAILS SIMPLE CURVE DIAGRAM						
260	E4-TRK-PRF-006	TRACK PLAN AND PROFILE	2871+50 2879+00		33 E0-TRK-DTL-011	TRACK DETAILS SPIRAL CURVE DIAGRAMS						
261	E4-TRK-PRF-007	TRACK PLAN AND PROFILE	2879+00 2886+50		34 E0-TRK-DTL-012	TRACK DETAILS COMPOUND CURVE WITH SPIRALS						
262	E4-TRK-PRF-008	TRACK PLAN AND PROFILE	2886+50 2891+50		35 E0-TRK-DTL-013	TRACK DETAILS VERTICAL CURVE GEOMETRY						
263	E4-TRK-PRF-009 E4-TRK-PRF-010	TRACK PLAN AND PROFILE TRACK PLAN AND PROFILE	2891+50 2897+00 2897+00 2904+00		36 E0-TRK-DTL-014	TRACK DETAILS BASSETT CREEK TUNNEL BURIED DISTRIBUTION SLAB						
265	E4-TRK-PRF-011	TRACK PLAN AND PROFILE	2904+00 2911+00			DIGHT (BETTELL)						
266	E4-TRK-PRF-012	TRACK PLAN AND PROFILE	2911+00 2918+00									
267	E4-TRK-PRF-013	TRACK PLAN AND PROFILE	2918+00 2925+00)								
268	E4-TRK-PRF-014	TRACK PLAN AND PROFILE	2925+00 2932+00)								
269	E4-TRK-PRF-014A	TRACK PLAN AND PROFILE	1930+40 1932+00									
270	E4-TRK-PRF-015	TRACK PLAN AND PROFILE	2932+00 2937+00									
271	E4-TRK-PRF-015A E4-TRK-PRF-016	TRACK PLAN AND PROFILE TRACK PLAN AND PROFILE	1932+00 1937+00 2937+00 2943+50									
272	E4-TRK-PRF-016 E4-TRK-PRF-016A	TRACK PLAN AND PROFILE TRACK PLAN AND PROFILE	2937+00 2943+50 1937+00 1941+69.0									I
274	E4-TRK-PRF-017	TRACK PLAN AND PROFILE	2943+50 2950+00									
275	E4-TRK-PRF-018	TRACK PLAN AND PROFILE	2950+00 2955+50									
276	E4-TRK-PRF-019	TRACK PLAN AND PROFILE	2955+50 2962+34.3									
277	E0-FRT-LAY-001	FREIGHT PLAN SHEET LAYOUT SHEET 1										
278	E0-FRT-LAY-002	FREIGHT PLAN SHEET LAYOUT SHEET 2		$\perp \!\!\! \perp \!\!\! \perp$								
279	E0-FRT-LAY-003	FREIGHT PLAN SHEET LAYOUT SHEET 3		+								I
280 281	E0-FRT-LAY-004 E1-FRT-PRF-001	FREIGHT PLAN SHEET LAYOUT SHEET 4 FREIGHT PLAN AND PROFILE	33+00 40+00	+								
281	E1-FRT-PRF-001A	FREIGHT PLAN AND PROFILE	33+00 40+00									
283	E1-FRT-PRF-001B	FREIGHT PLAN AND PROFILE	36+83.90 41+16.21									I
284	E1-FRT-PRF-002	FREIGHT PLAN AND PROFILE	40+00 47+00									
285	E1-FRT-PRF-003	FREIGHT PLAN AND PROFILE	47+00 54+00									
286	E1-FRT-PRF-004	FREIGHT PLAN AND PROFILE	54+00 61+00									
287	E1-FRT-PRF-005	FREIGHT PLAN AND PROFILE	61+00 68+00									
288	E1-FRT-PRF-006	FREIGHT PLAN AND PROFILE	68+00 75+00									
289	E1-FRT-PRF-007 E1-FRT-PRF-008	FREIGHT PLAN AND PROFILE	75+00 82+00 82+00 89+00									
290	E1-FK1-FKF-UU8	FREIGHT PLAN AND PROFILE	82+00 89+00									
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60% SUBMISSION - 09/28/15

GENERAL

E0-TRK-IDX - 002

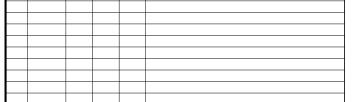
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TRACK LINETYPES TRACK SYMBOLS — — — — ROADWAY Q PROPOSED DIRECTIONAL LANE USE * - TRACK € (LRT) — TRACK € (FRT) EXISTING DIRECTIONAL LANE USE **₩** RETAINING WALL BALLAST CURB PEDESTRIAN FLASHER ---- TUNNEL WALL AUTOMATIC GATE RAIL TURNOUT RAIL CROSSOVER (DOUBLE) FENCE / RAILING RAIL CROSSOVER (SINGLE) —— ID ——— ID ——— INTRUSION DETECTION φ POINT OF SWITCH (PS) CIVIL LINETYPES OCS POLE FOUNDATION - ---- - ROADWAY C RAIL LUBRICATOR - TRACK € (LRT) — TRACK ℚ (FRT) POINT OF INTERSECTION (PI) OF TURNOUT (TO) - RETAINING WALL (W2-200)RAILROAD CURVE NUMBER ---- BALLAST CURB ---- TUNNEL WALL ALL TURNOUTS AND CROSSOVERS TO BE EQUIPPED WITH POWER CONCRETE CURB AND GUTTER SWITCH MACHINES AND SWITCH HEATERS - SIDEWALK - DRIVEWAY CIVIL SYMBOLS - BRIDGE ----- SAWCUT ACCESSIBLE PEDESTRIAN CURB RAMP _x ____x ____ FENCE (DESIGN VARIES) PROPOSED DIRECTIONAL LANE USE - · - · · - · - · - WATER EDGE — – – — EX ROW 2₽ EXISTING DIRECTIONAL LANE USE — - - - - - PROP ROW ---- PROP TCE AUTOMATIC GATE HANDICAP PARKING STALL STOP BAR TACTILE WARNING STRIP \Box MEDIAN NOSE TPSS BUILDING (TPSS-SW###)

SURVEY NOTES

- 1. THE HORIZONTAL DATUM OF THIS MAP IS BASED ON THE HENNEPIN COUNTY COORDINATE SYSTEM WHICH IS RELATED TO THE MINNESOTA STATE PLANE COORDINATE SYSTEM NAD 83 (2007) ADJUSTMENT SOUTH ZONE.
- 2. THE PLANIMETRIC FEATURES SHOWN ON THIS MAP ARE AS PREPARED BY AERO-METRIC, INC. FROM AERIAL DATA AND IMAGERY COLLECTED IN APRIL 2012, AS SUPPLEMENTED BY FIELD SURVEYS COMPLETED BY
- 3. HORIZONTAL POSITIONAL ACCURACY: USING THE NATIONAL STANDARD FOR SPATIAL DATA ACCURACY, THE DATA SET TESTED 0.14 FEET HORIZONTAL ACCURACY AT A 95% CONFIDENCE LEVEL.
- 4. VERTICAL POSITIONAL ACCURACY: USING THE NATIONAL STANDARD FOR SPATIAL DATA ACCURACY, THE DATA SET TESTED 0.10 FEET VERTICAL ACCURACY AT 95% CONFIDENCE LEVEL.



AECOM

60% SUBMISSION - 09/28/15

SIGNAL OR INTERMEDIATE OR PLATFORM OR XING OR TUNNEL HOUSE OR ANY COMBINATION OF THESE





CIVIL EAST - VOLUME 3 GENERAL LEGEND AND ABBREVIATIONS

SHEET 1

SHEET NAME **GENERAL** E0-GEN-NTS - 001

SHEET

5

OF

336

ABBREVIATIONS

NIC NO

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SIG-COMM

ALGEBRAIC DIFFERENCE AVE AVENUE BGN BP BEGIN BEGINNING POINT BVCE BEGINNING VERTICAL CURVE ELEVATION BEGINNING VERTICAL CURVE STATION RI VD **ROULEVARD** BURLINGTON NORTHERN SANTA FE RAILWAY BNSF CURB AND GUTTER C&G CENTERI INF € CIR CIRCLE CANADIAN PACIFIC CPRAIL CANADIAN PACIFIC RAILWAY CURVE TO SPIRAL
COUNTY STATE AID HIGHWAY CS CSAH D&U DF DRAINAGE AND UTILITY DIRECT FIXATION DR DRIVE DTL DETAIL DRIVEWAY ACTUAL SUPERELEVATION (INCHES) Εa ĒΒ EAST BOUND $\mathsf{EL} \ \mathsf{or} \ \mathsf{ELEV}$ **ELEVATION** FP FND POINT ESMT FASEMENT UNBALANCED SUPERELEVATION (INCHES) **EVCE** ENDING VERTICAL CURVE ELEVATION ENDING VERTICAL CURVE STATION **EVCS** ΕX **HCRRA** HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY LEFT HAND ΙN LANF LRT LIGHT RAIL TRANSIT CURVE LENGTH (FEET) SPIRAL LENGTH (FEET) Lc L_S MIN MINIMUM MILES PER HOUR MPI S CITY OF MINNEAPOLIS MINNEAPOLIS PARK AND RECREATION BOARD **MPRB** NORTH NORTH BOUND

NOT IN CONTRACT

POINT ON TANGENT POINT OF SWITCH POINT OF TANGENT

RADIUS (FEET)

RIGHT HAND

RIGHT OF WAY SOUTH SOUTH BOUND SPIRAL TO CURVE SIGNAL COMMUNICATION

RAIL LUBRICATOR

SPIRAL TO TANGENT

TANGENT TO SPIRAL

VERTICAL CURVE

WEST BOUND

DESIGN VELOCITY (MPH)

TRUNK HIGHWAY

OVERHEAD CONTACT SYSTEM

OPERATIONS AND MAINTENANCE FACILITY

POINT OF INTERSECTION OF TURNOUT

POINT OF VERTICAL INTERSECTION

RATE OF CHANGE VERTICAL CURVE

TEMPORARY CONSTRUCTION EASEMENT

TRACTION POWER SUBSTATION

NUMBER

OVERHEAD POINT OF CURVE PERMANENT EASEMENT

PARKWAY

ROAD

STREET

NOITATE

THROUGH TOP OF RAIL

TYPICAL UNDERGROUND

TRAIL INDEX

TRAIL W

ABBREVIATED NAME TRAIL 1 FULL NAME / LOCATION UNDER RED CIRCLE DR, LRT, AND YELLOW CIRCLE DR TRAIL 2 FROM TRAIL 1 TO GREEN CIRCLE DR OPUS STATION ACCESS FROM BREN RD E FROM BREN RD W TO TRAIL 5 TRAIL 3 TRAIL 4 FROM OPUS STATION TO GREEN CIRCLE DR TRAIL 5 TRAIL 6 FROM TRAIL 5 TO SMETANA RD CEDAR LAKE TRAIL CEDAR LAKE LRT REGIONAL TRAIL/FROM SHADY OAK STATION TO 11TH AVE CEDAR LAKE TRAIL CEDAR LAKE LRT REGIONAL TRAIL/WEST OF EXCELSIOR CEDAR LAKE TRAIL CEDAR LAKE LRT REGIONAL LRT TRAIL/BETWEEN EXCELSIOR AND KENILWORTH TRAIL CONNECTION MIDTOWN GREENWAY MIDTOWN GREENWAY/EAST OF KENILWORTH TRAIL CONNECTION TRAIL A KENILWORTH TRAIL (SECONDARY)/BETWEEN CEDAR-ISLES CHANNEL AND 21ST STREET STATION TRAIL B KENILWORTH TRAIL (SECONDARY)/BETWEEN 21ST STREET STATION AND PENN STATION TRAIL B CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION TRAIL C 10' CONNECTOR TRAÎL FROM CEDAR LAKE LRT REGIONAL TRAIL TO TYLER AVE. 10' CONNECTOR TRAIL/BELTLINE STATION TO CEDAR LAKE LRT REGIONAL TRAIL TRAIL D KENILWORTH TRAIL KENILWORTH TRAIL (MAIN)/W LAKE ST TO PENN STATION CEDAR LAKE TRAIL CEDAR LAKE TRAIL (MAIN)/PENN STATION TO TH 394 KENILWORTH TRAIL (SECONDARY)/EAST OF W LAKE ST TRAIL E TRAIL F KENILWORTH TRAIL (SECONDARY)/WEST OF CEDAR LAKE PKWY KENILWORTH TRAIL (SECONDARY)/WEST OF PENN STATION TRAIL G CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION

10' CONNECTOR TRAIL/EAST OF PENN STATION TO KENWOOD PKWY TRAIL G TRAIL H TRAIL CEDAR LAKE TRAIL (MAIN)/AT-GRADE CROSSING AT PENN STATION CEDAR LAKE TRAIL CEDAR LAKE TRAIL (SECONDARY)/NORTHWEST OF PENN STATION CEDAR LAKE TRAIL (SECONDARY)/NORTHWEST OF PENN STATION TRAIL J TRAIL K TRAIL L CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION TRAIL N 8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO EDGEBROOOK DRIVE TRAIL O 8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO W LAKE STREET 8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO LOUISIANA AVE TRAIL P 10' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO TH 7 SERVICE ROAD TRAIL Q TRAIL R 20' CONNECTOR TRAIL FROM VAN WHITE STATION TO CEDAR LAKE TRAIL TRAIL S TRAIL T 8' CONNECTOR TRAIL FROM VAN WHITE STATION TO VAN WHITE MEMORIAL BLVD TRAIL U 10' TRAIL PARALLEL TO CEDAR LAKE PKWY LUCE LINE TRAIL LUCE LINE REGIONAL TRAIL/ON BRIDGE OVER LIGHT RAIL

CONNECTOR TRAIL TO LUCE LINE REGIONAL TRAIL WEST OF LIGHT RAIL CONNECTOR TRAIL TO LUCE LINE REGIONAL TRAIL WEST OF LIGHT RAIL

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CIVIL EAST - VOLUME 3 GENERAL LEGEND AND ABBREVIATIONS SHEET 2

GENERAL

60% SUBMISSION - 09/28/15

SHEET 6 OF

336

E0-GEN-NTS - 002

TRACK GENERAL NOTES

- THE EASTBOUND (EB) TRACK IS THE RIGHT TRACK AND IS USED FOR HORIZONTAL ALIGNMENT CONTROL FOR THE PROJECT. THIS TRACK ALIGNMENT IS REFERENCED AS TRACK 2. PROFILE AND CROSS SECTION STATIONING FOR THIS PROJECT ARE BASED ON STATIONS ESTABLISHED FOR THE TRACK 2 CENTER LINE. TRACK 2 STATION EQUATIONS OCCUR AT SEGMENT LIMITS AND AT THE CIVIL
- WEST/CIVIL EAST MATCH POINT.
 2. THE WESTBOUND (WB) TRACK IS THE LEFT TRACK AND HAS A SEPARATELY DEFINED GEOMETRY WITH STATION EQUALITIES, TO THE TRACK 2 CENTER LINE, AT SPIRAL-TO-TANGENT (ST) POINTS. THIS
- TRACK ALIGNMENT IS REFERENCED AS TRACK 1.

 3. TRACK CENTER DISTANCES ARE MEASURED PERPENDICULAR TO THE TRACK 2 CENTER LINE AND ARE LABELED AT ENDS OF DOUBLE TANGENT TRACKS, AT THE MAXIMUM TRACK SPACING IN HORIZONTAL CURVES, AND AT SELECT CARDINAL POINTS IN TRACK WIDENING AND NARROWING SEGMENTS.
- 4. SUPERELEVATION IS ATTAINED (AND REMOVED) LINEARLY THROUGH THE FULL LENGTH OF THE SPIRAL TRANSITION CURVES BY MAINTAINING TOP OF INSIDE (LOW) RAIL AT PROFILE GRADE AND BY RAISING (AND LOWERING) OUTSIDE RAIL AN AMOUNT EQUAL TO THE
- ACTUAL SUPERELEVATION (Ea).

 5. OCS POLES ARE NOT IN CONTRACT (NIC) AND ARE SHOWN FOR REFERENCE ONLY.
- 6. TRACK PLANS AND TYPICAL SECTIONS INCLUDE ELEMENTS SUCH AS, BUT NOT LIMITED TO, FENCING, TRAILS, BRIDGES, RETAINING WALLS, TUNNELS, ROADWAYS, DRAINAGE, STATIONS AND SYSTEMS. DETAILS FOR THESE ITEMS ARE INCLUDED IN THEIR RESPECTIVE VOLUMES.
- 7. WORK IN AREAS PARALLEL TO ACTIVE FREIGHT RAILROAD SHALL MAINTAIN SAFE WORKING DISTANCES FROM ACTIVE FREIGHT TRACK. IF SAFE WORKING DISTANCES ARE NOT POSSIBLE, WORK SHALL BE DONE WITH THE FULL KNOWLEDGE AND APPROVAL OF THE OPERATING RAILROAD AND UTILIZE AN OPERATING RAILROAD FLAGMAN AS REQUIRED. REFER TO THE CONTRACT SPECIFICATIONS REGARDING RESTRICTIONS FOR PERFORMANCE WORK NEAR ACTIVE

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CIVIL EAST - VOLUME 3 TRACK **TRACK NOTES**

TRACK

OF SHEET NAME:

60% SUBMISSION - 09/28/15

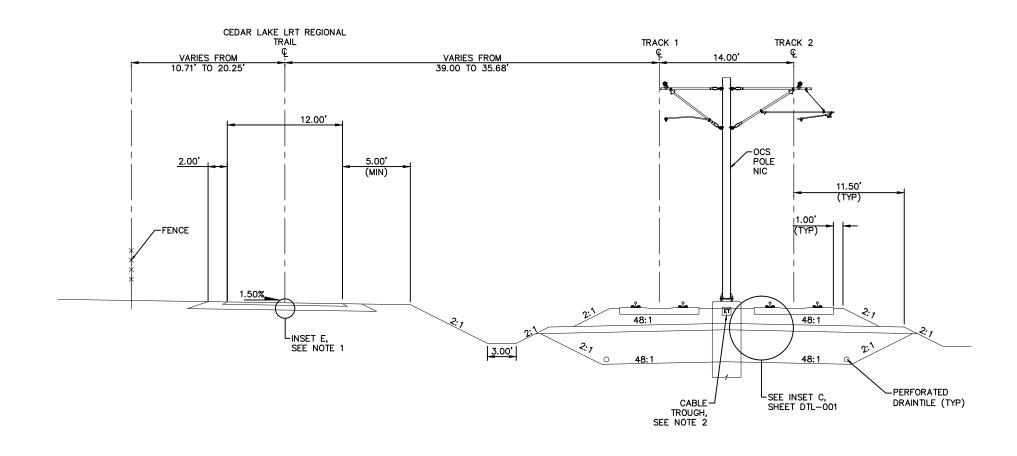
336 E0-TRK-NTS-001

SHEET

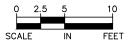
7

NOTE:

1. FOR INSETS SEE CIVIL PLANS.
2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2496+00.00 TO STA 2497+50.00



SHEET **CIVIL EAST - VOLUME 3 AECOM TRACK** 8 **TYPICAL SECTIONS** SOUTHWEST Green Line Little Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-001 **TRACK**

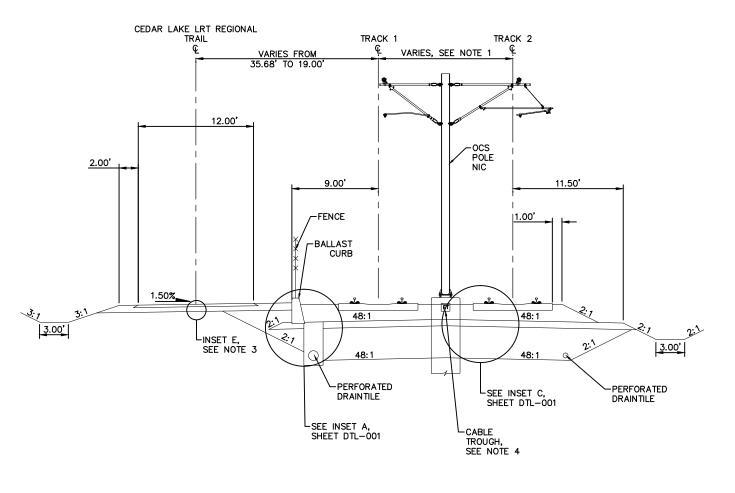
- NOTE:

 1. TRACK CENTERS WIDEN FROM 14.00' TO 20.00' BETWEEN STA 2501+94.00 AND STA 2505+10.57.

 2. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT 11TH AVE S. SEE TRACK PLANS AND DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2497+50 TO STA 2505+10.57



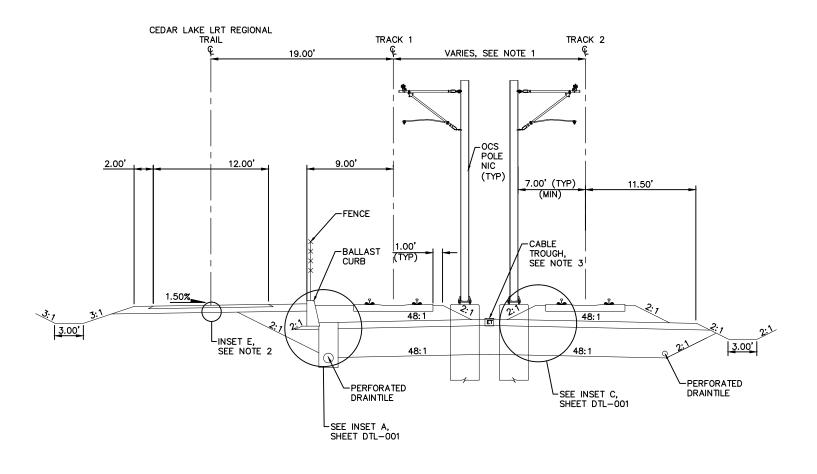
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16 an				- -	A=COM	X	TRACK	9
0				-	AECOM	SOLITHIA/EST	TYPICAL SECTIONS	
2015						METROPOLITAN Green Line Litt Extendion		OF
Sep, 21				-	60% SUBMISSION - 09/28/15	CABNELL	DISCIPLINE: SHEET NAME: E1-TRK-TYP-002	336

- NOTE:

 1. TRACK CENTERS WIDEN FROM 20.00' TO 30.02' BETWEEN 2505+10.57 AND STA 2508+50.00.

 2. FOR INSETS SEE CIVIL PLANS.

 3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2505+10.57 TO STA 2508+50.21



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 10 **TYPICAL SECTIONS** SOUTHWEST Green Line Little Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-003 **TRACK**

- NOTE:

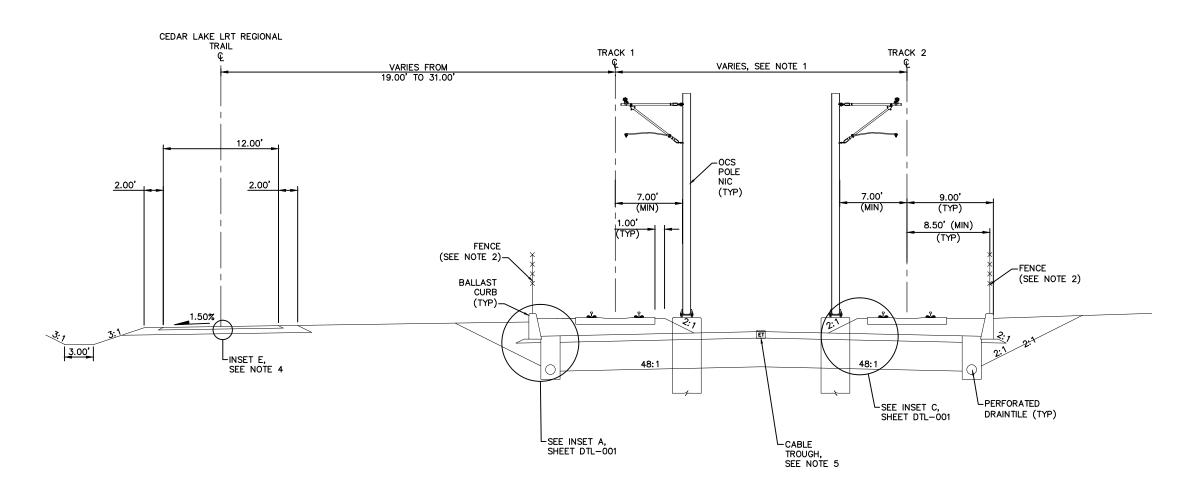
 1. TRACK CENTERS WIDEN FROM 30.02' TO 30.38' BETWEEN STA 2508+50.21 AND STA 2509+53.19.

 2. FENCE STARTS AT STA 2510+45.17.

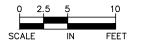
 3. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT 8TH AVE S. SEE TRACK PLANS AND DETAILS.

 4. FOR INSETS SEE CIVIL PLANS.

 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



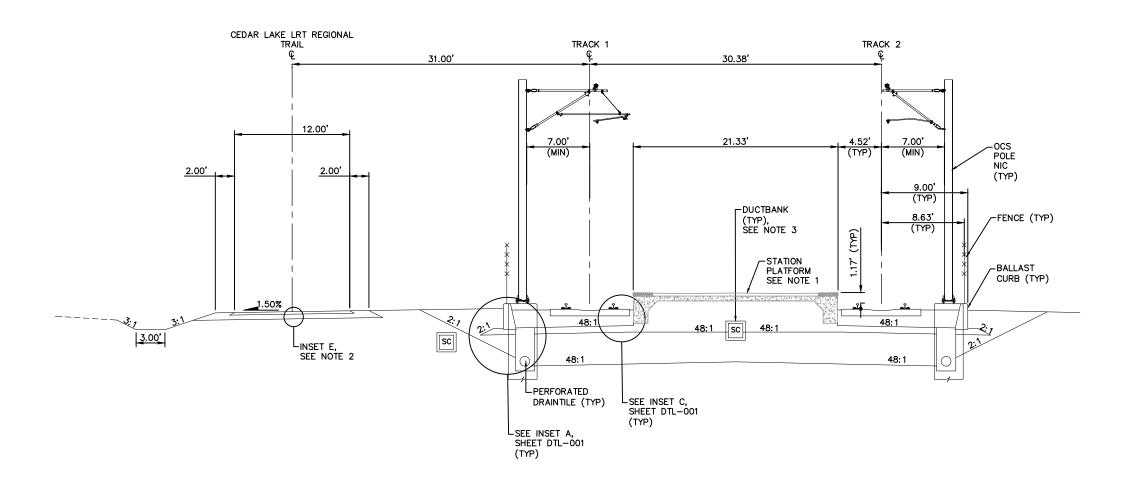
TYPICAL SECTION STA 2508+50.00 TO STA 2510+77.19



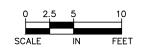
۳. \	NO. DATE BY CHECK DESIGN REVISION / SUBMITTAL		CIVIL EAST - VOLUME 3	SHEET
47 ai		A=COM	TRACK	11
5 01:		A=COIVI SOUTHWEST	TYPICAL SECTIONS	OF
.1 201		METROPOLITAN Green Line Litt Extension		
sep, 2		60% SUBMISSION - 09/28/15	DISCIPLINE: SHEET NAME: TRACK E1-TRK-TYP-004	336

- NOTE:

 1. SEE STATION PLANS FOR STATION PLATFORM DETAILS.
- 2. FOR INSETS SEE CIVIL PLANS.
 3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION- DOWNTOWN HOPKINS STATION STA 2510+77.19 TO STA 2513+47.19



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 12 **TYPICAL SECTIONS** SOUTHWEST Green Line Little Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-005 **TRACK**

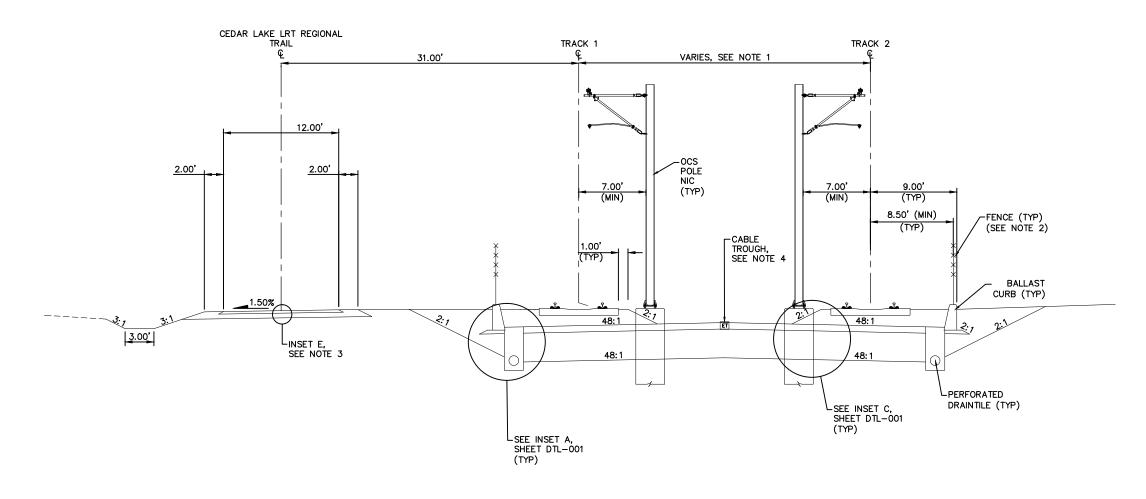
- NOTE:

 1. TRACK CENTERS NARROW FROM 30.38' TO 20.00' BETWEEN STA 2514+22.19 AND STA 2517+24.46.

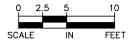
 2. FENCE IS ON BALLAST CURB FROM 2513+47.19 TO 2514+80 (+/-).

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2513+47.19 TO STA 2517+24.46



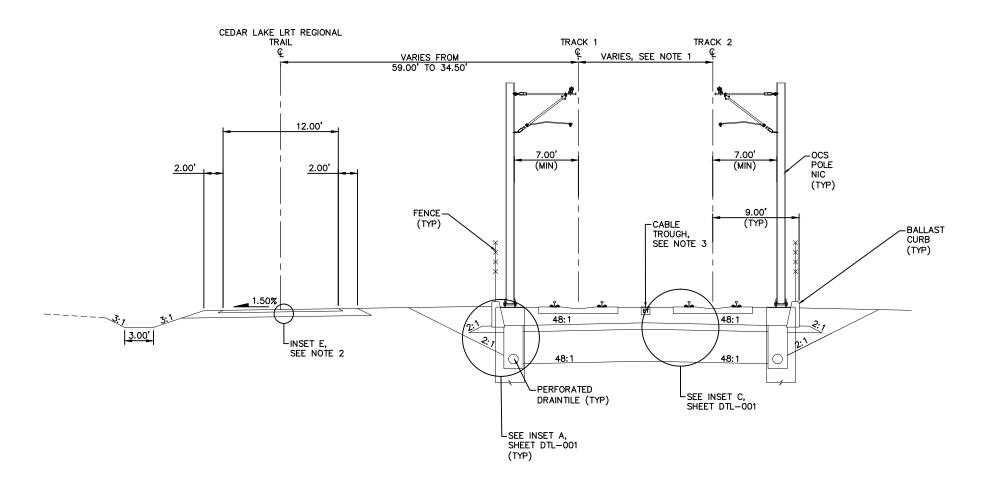
SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 13 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-006 **TRACK**

- NOTE:

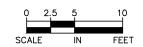
 1. TRACK CENTERS NARROW FROM 20.00' TO 14.00' BETWEEN STA 2517+24.46 AND STA 2519+42.12.

 2. FOR INSETS SEE CIVIL PLANS.

 3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2517+24.46 TO STA 2519+42.12



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 14 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-007 **TRACK**

- NOTE:

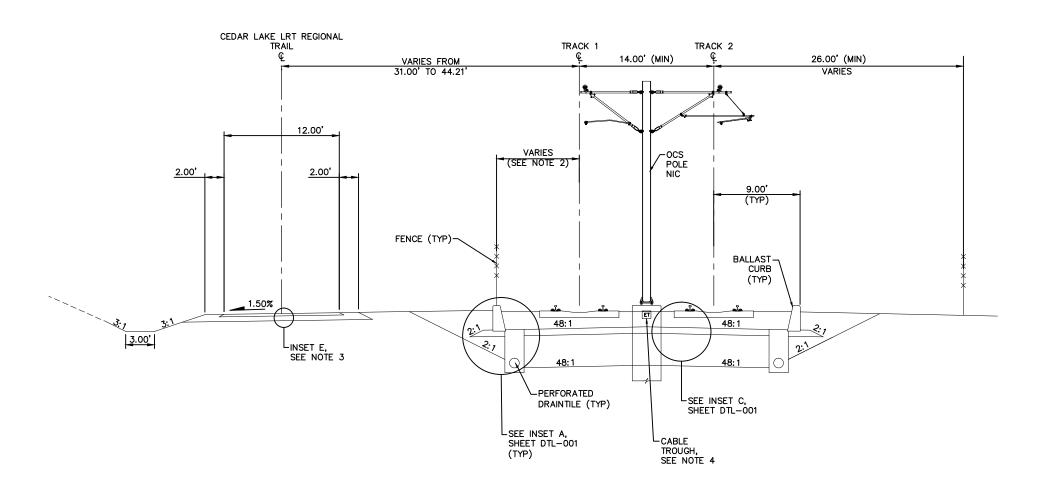
 1. SECTION DOES NOT ILLUSTRATE GRADE
 CROSSING AT 5TH AVE S. SEE TRACK PLANS
 AND DETAILS.

- AND DETAILS.

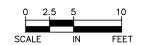
 2. FENCE IS ON BALLAST CURB FROM STA 2519+42.12 TO 2521+50.00 (+/-).

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

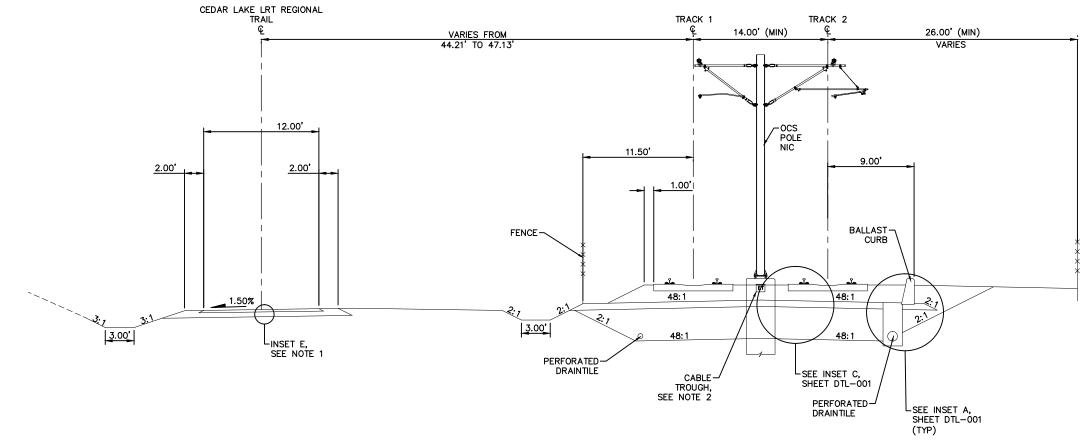


TYPICAL SECTION STA 2519+42.12 TO STA 2522+50.00



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 15 **TYPICAL SECTIONS** SOUTHWEST Green Line Little Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-008 **TRACK**

- NOTE:
 1. FOR INSETS SEE CIVIL PLANS.
 2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

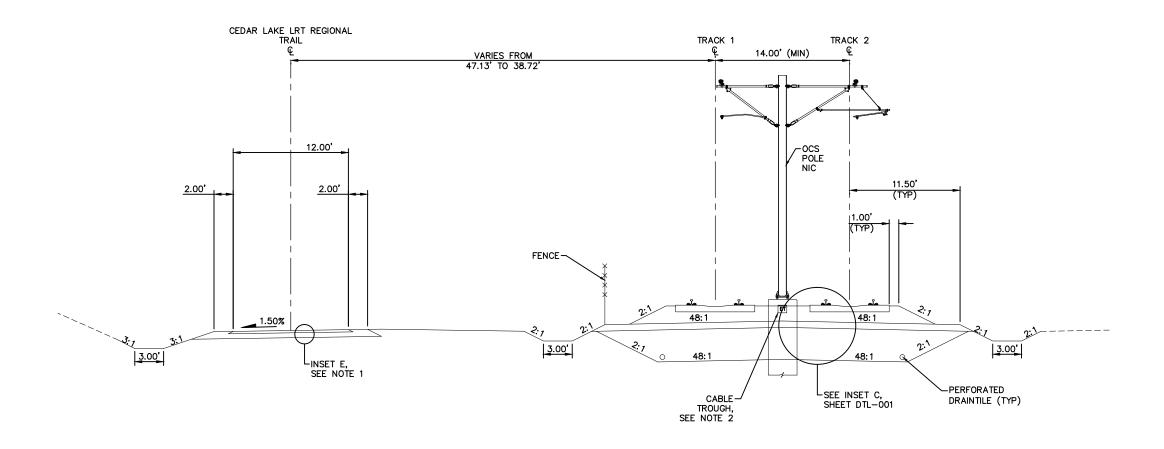


TYPICAL SECTION STA 2522+50.00 TO STA 2524+00.00

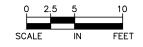


SHEET **CIVIL EAST - VOLUME 3 AECOM TRACK** 16 **TYPICAL SECTIONS** SOUTHWEST Green Line Little Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-009 **TRACK**

- NOTE:
 1. FOR INSETS SEE CIVIL PLANS.
 2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2524+00.00 TO STA 2527+61.17



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1 201					METROPOLITAN	Green Line LRT Extension			0
Sep, 2				60% SUBMISSION	09/28/15		DISCIPLINE: TRACK	SHEET NAME: E1-TRK-TYP-010	336

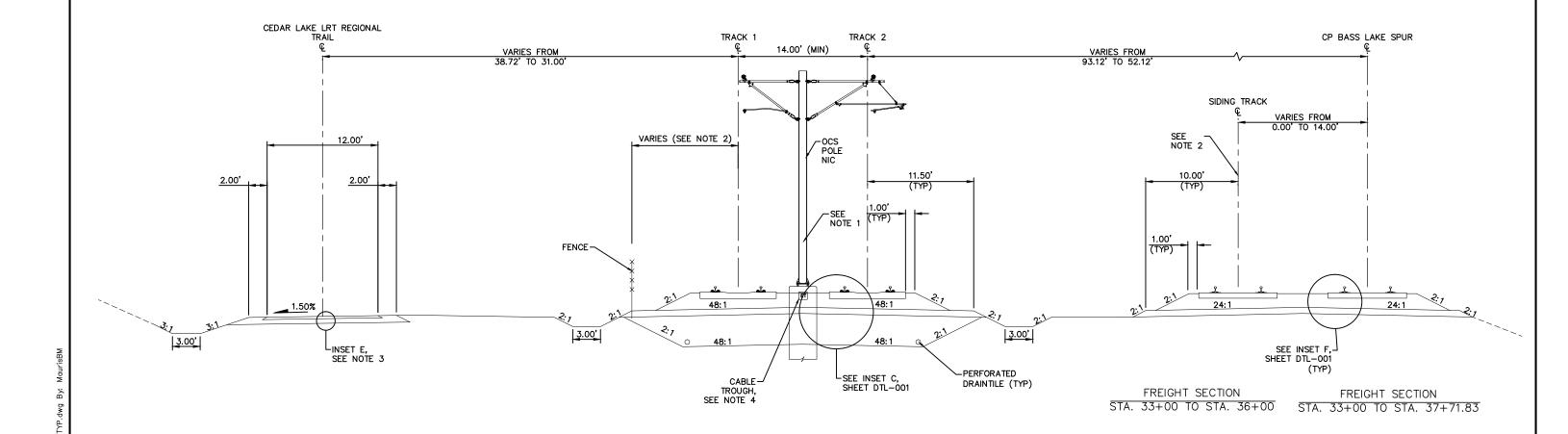
- NOTE:

 1. OCS POLE CONFIGURATION AT STA
 2529+69.88 IS TWO SINGLE POLES LOCATED
 OUTSIDE OF TRACKS.

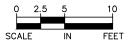
 2. SIDING TRACK IS FROM STA 2527+61.17 TO
 STA 2530+61.05. PS IS LOCATED AT STA.
 2531+01.18.

 3. FOR INSETS SEE CIVIL PLANS.

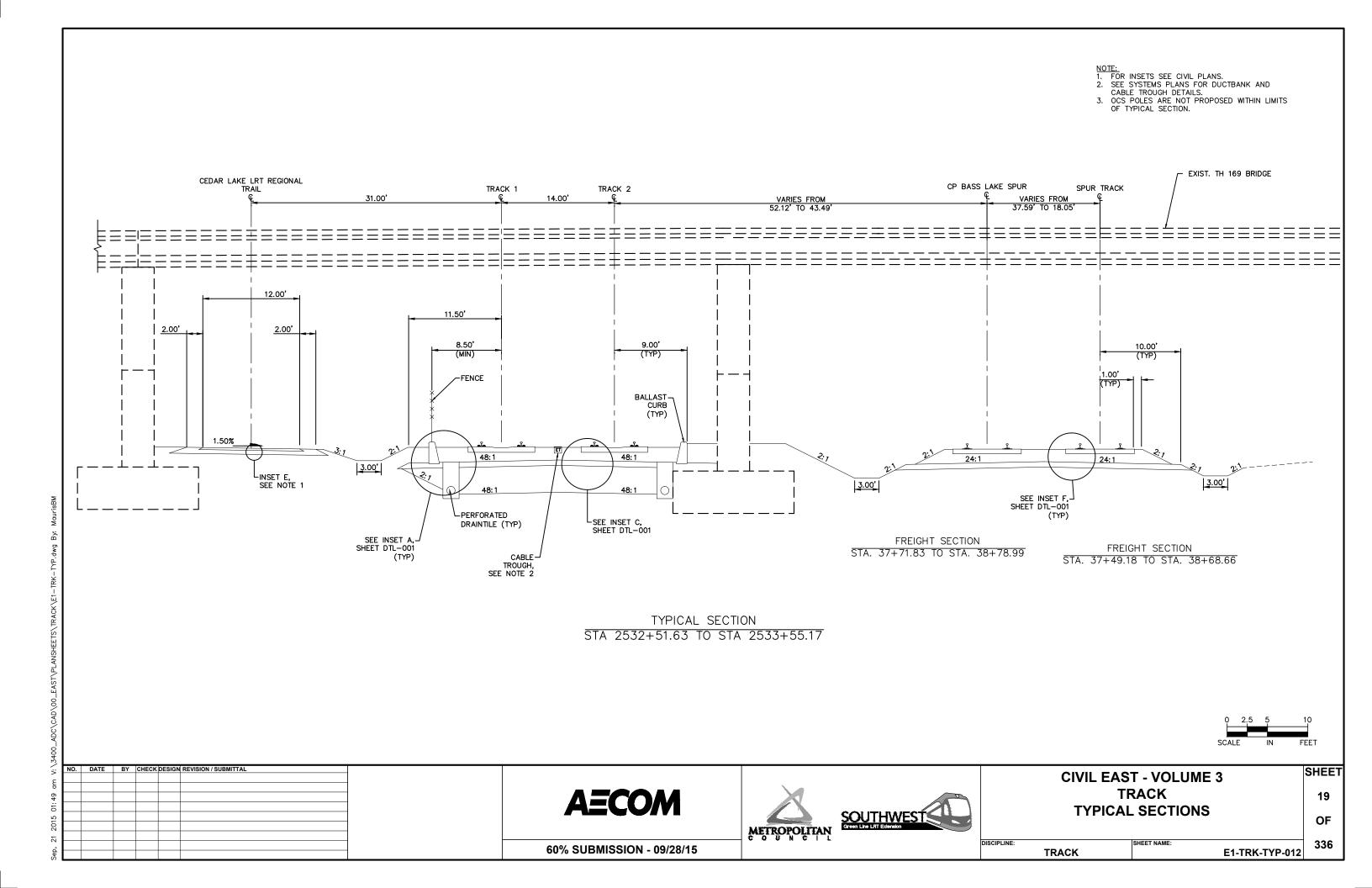
 4. SEE SYSTEMS PLANS FOR DUCTBANK AND
 CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2527+61.17 TO STA 2532+51.63

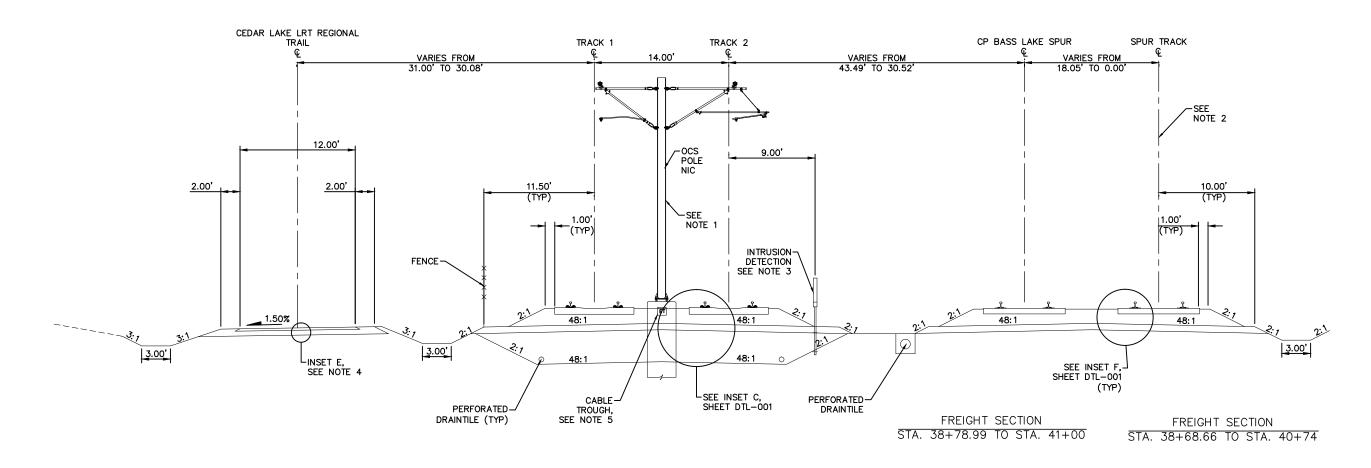


SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 18 **TYPICAL SECTIONS** SOUTHWEST. OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-011 TRACK

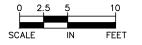


- NOTE:

 1. OCS POLE CONFIGURATION CHANGES TO OUTSIDE POLES. TRACK 1 OUTSIDE POLE IS LOCATED AT STA 2534+50.00 AND TRACK 2 OUTSIDE POLE IS LOCATED AT STA 2534+39.88. 2. SPUR TRACK IS FROM STA 2531+54.28 TO STA 2535+33.94. PS IS LOCATED AT STA
- 2535+75.81.
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
- 4. FOR INSETS SEE CIVIL PLANS.
 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



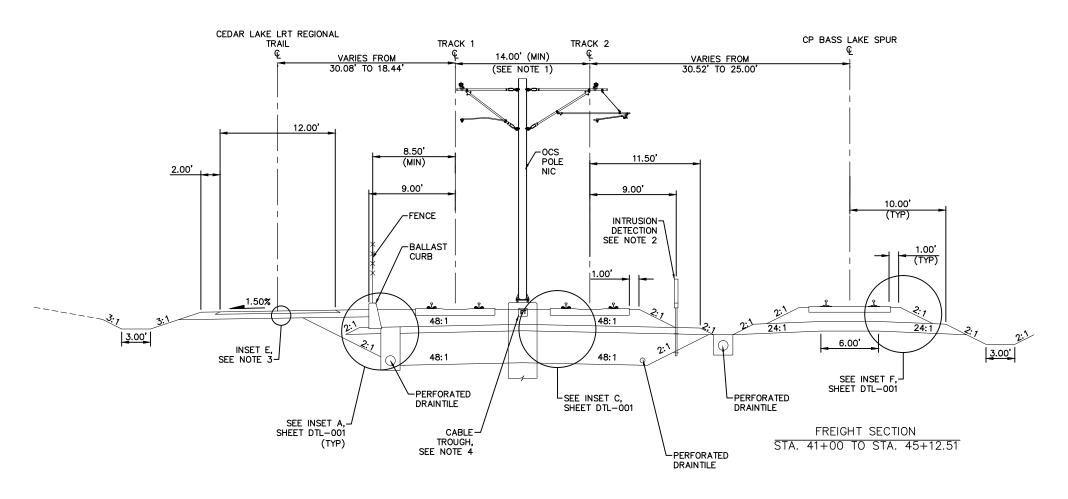
TYPICAL SECTION STA 2533+55.17 STA TO 2535+59.91



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 20 **TYPICAL SECTIONS** SOUTHWEST: Green Line LRT Extension OF METROPOLITAN DISCIPLINE: SHEET NAME: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-013 TRACK

- NOTE:

 1. TRACK CENTERS VARY IN CURVE E1-206. SEE TRACK PLANS.
- 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 3. FOR INSETS SEE CIVIL PLANS.
 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2535+59.91 TO STA 2539+70.00



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 21 **TYPICAL SECTIONS** SOUTHWEST: OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-014 **TRACK**

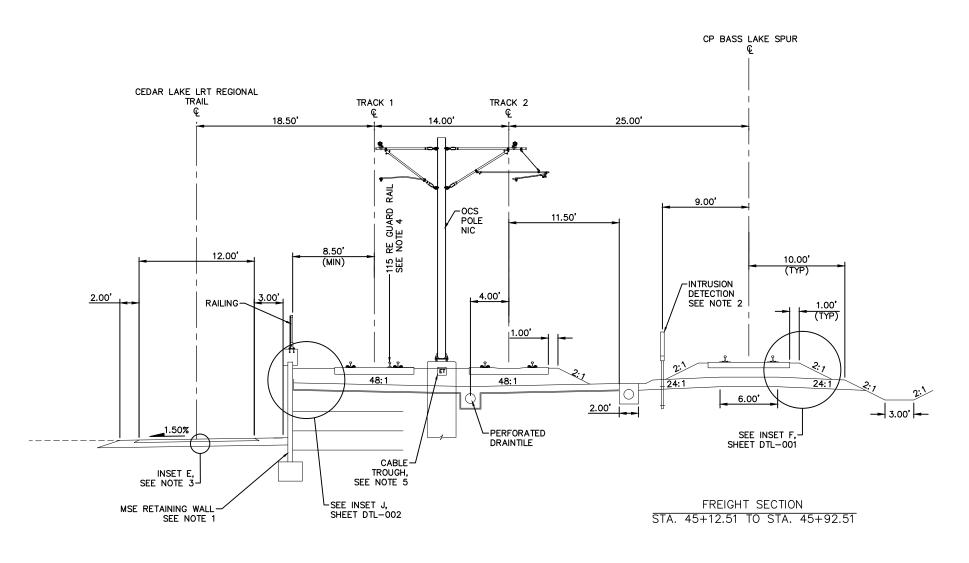
- NOTE:

 1. SEE RETAINING WALL PLANS FOR DETAILS.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION
- DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2539+70.00 TO STA 2540+50.00



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 22 **TYPICAL SECTIONS** SOUTHWEST Green Line Little Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 TRACK E1-TRK-TYP-015

- NOTE:

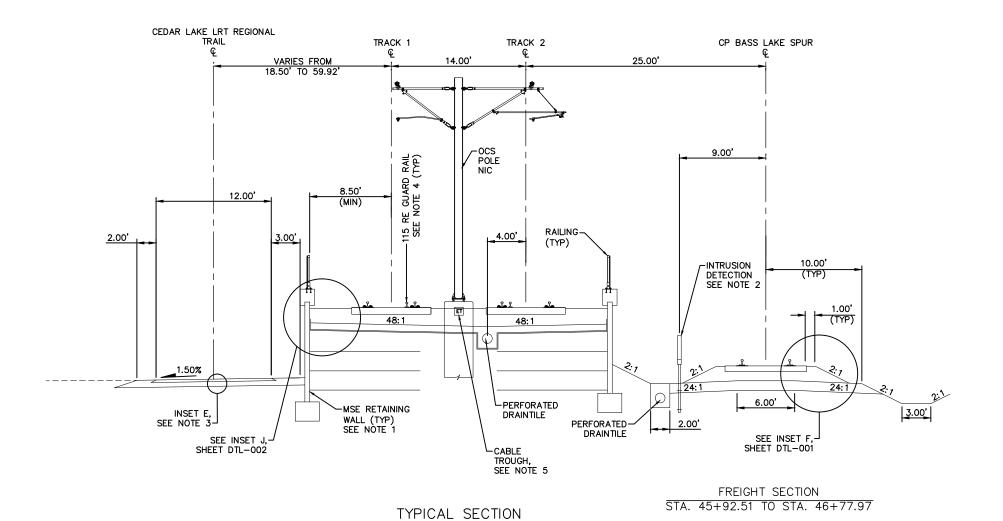
 1. SEE RETAINING WALL PLANS FOR DETAILS.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION
- DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

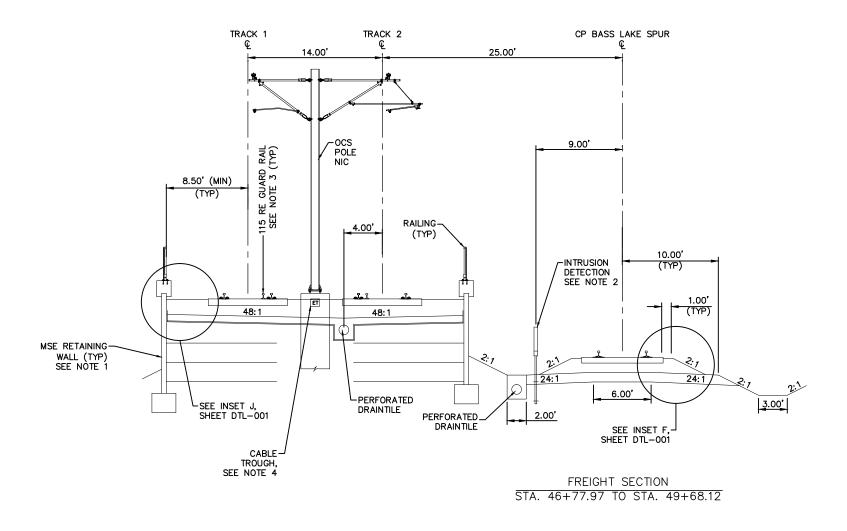
 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 23 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 **TRACK** E1-TRK-TYP-016

STA 2540+50 TO STA 2541+41.46

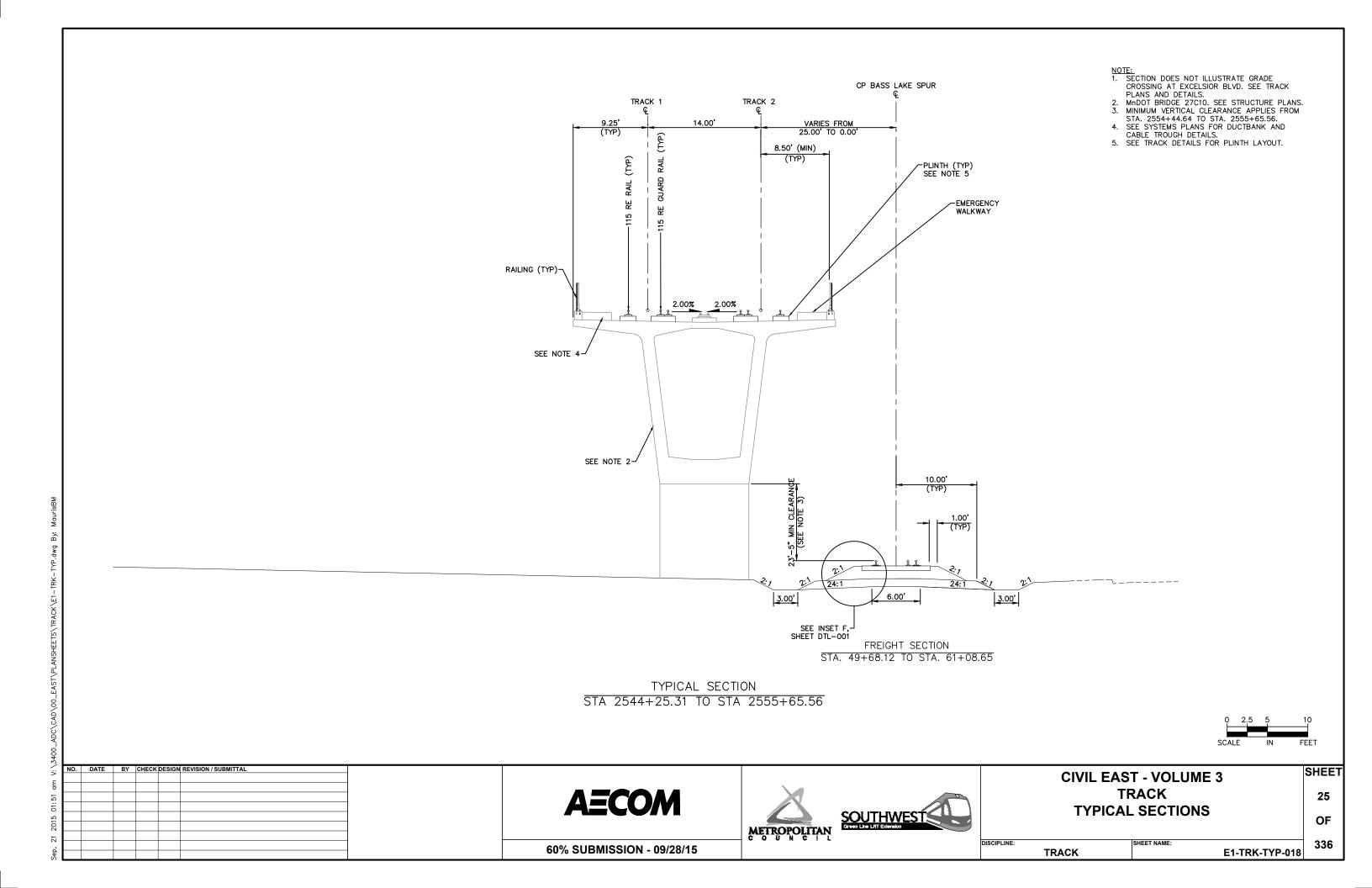
- NOTE:
 1. SEE RETAINING WALL PLANS FOR DETAILS.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

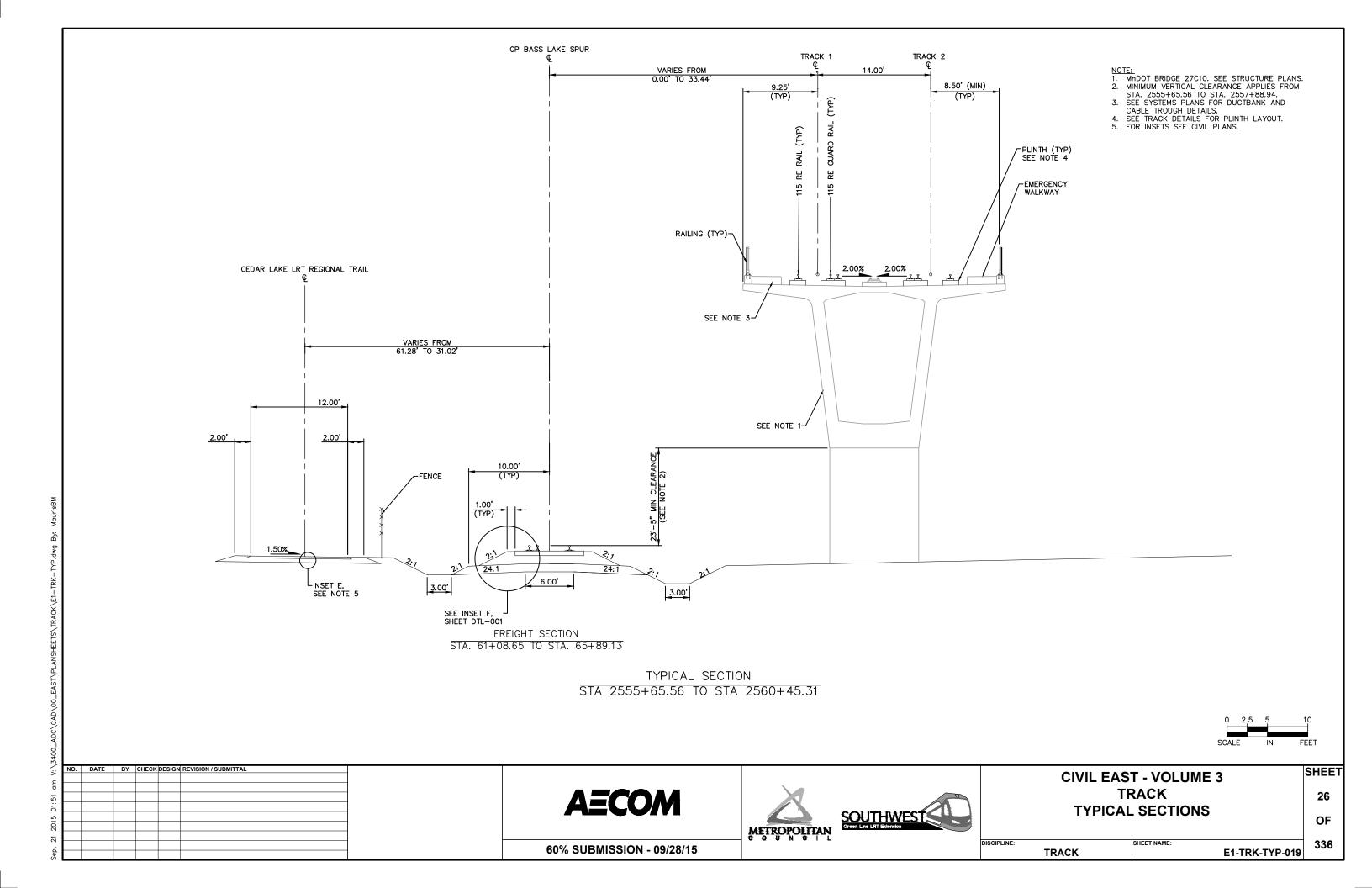


TYPICAL SECTION STA 2541+41.46 TO STA 2544+25.31



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 24 **TYPICAL SECTIONS** SOUTHWEST: OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-017 **TRACK**





- NOTE:

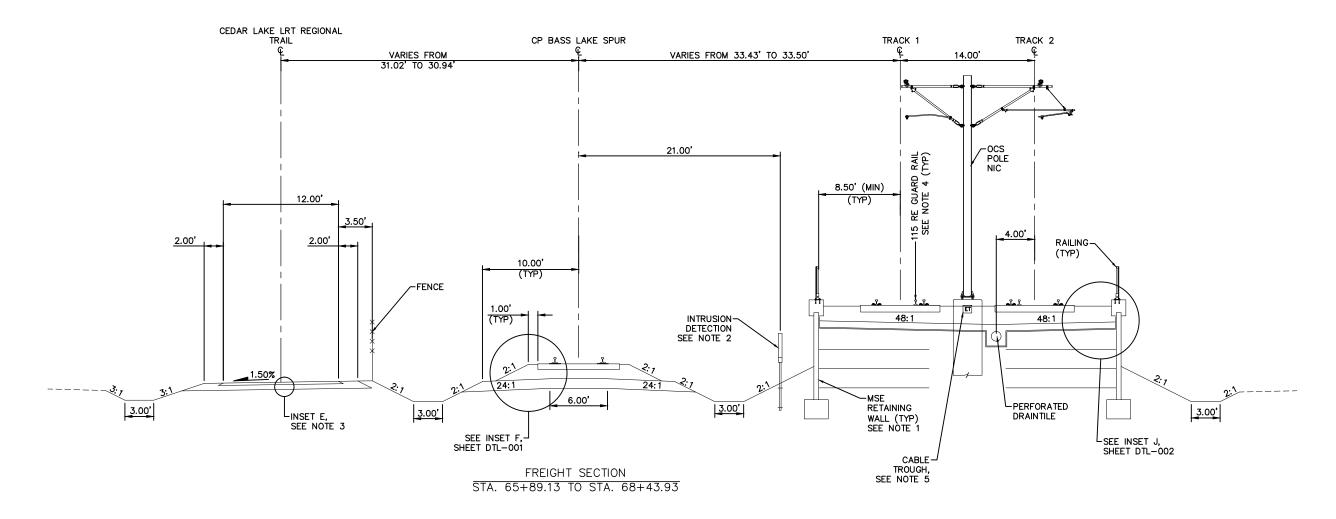
 1. SEE RETAINING WALL PLANS FOR DETAILS.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

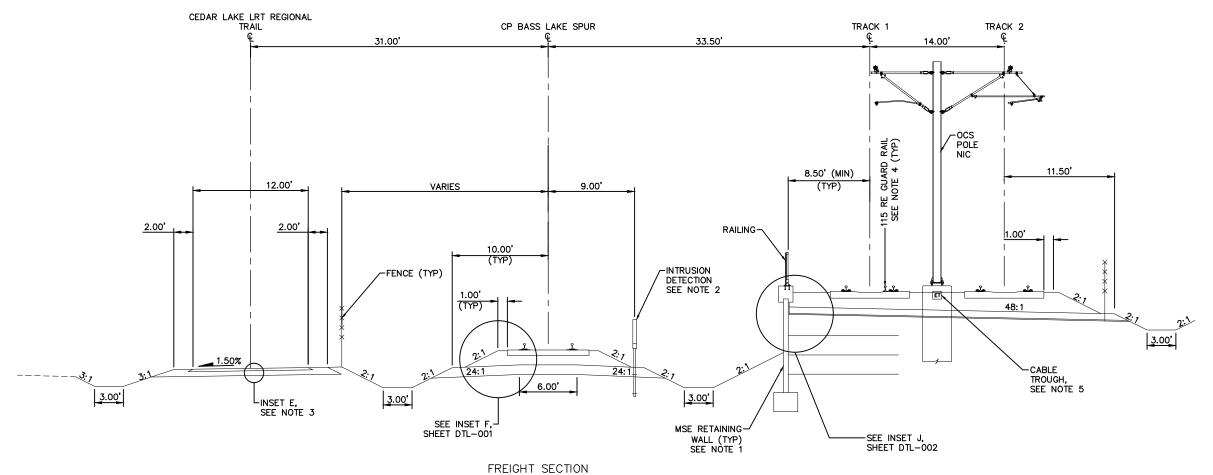


TYPICAL SECTION STA 2560+45.31 TO STA 2563+00.00



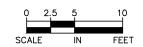
SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 27 **TYPICAL SECTIONS** SOUTHWEST: OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 **TRACK** E1-TRK-TYP-020

- NOTE:
 1. SEE RETAINING WALL PLANS FOR DETAILS.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 3. FOR INSETS SEE CIVIL PLANS.
 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



STA. 68+43.93 TO STA. 71+58.93

TYPICAL SECTION STA 2563+00.00 TO STA 2566+15.00



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 28 **TYPICAL SECTIONS** SOUTHWEST. OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-021 **TRACK**

- NOTE:

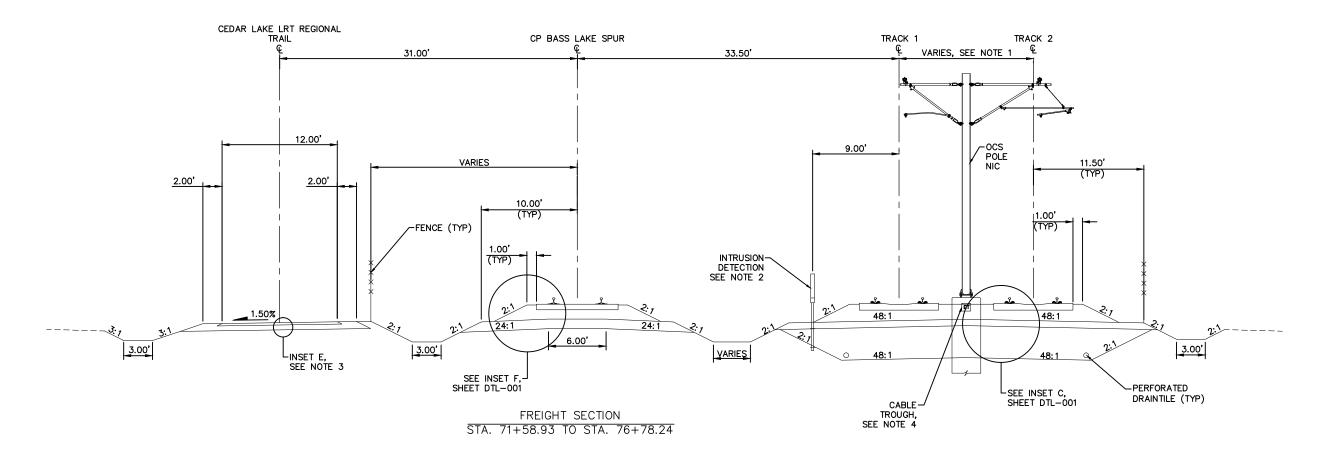
 1. TRACK CENTERS WIDEN FROM 14.00' TO 20.00' BETWEEN STA 2569+13.97 AND STA 2571+31.62.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS

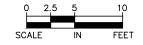
- JETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2566+15.00 TO STA 2571+31.62



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 29 **TYPICAL SECTIONS** SOUTHWEST: OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-022 **TRACK**

- NOTE:

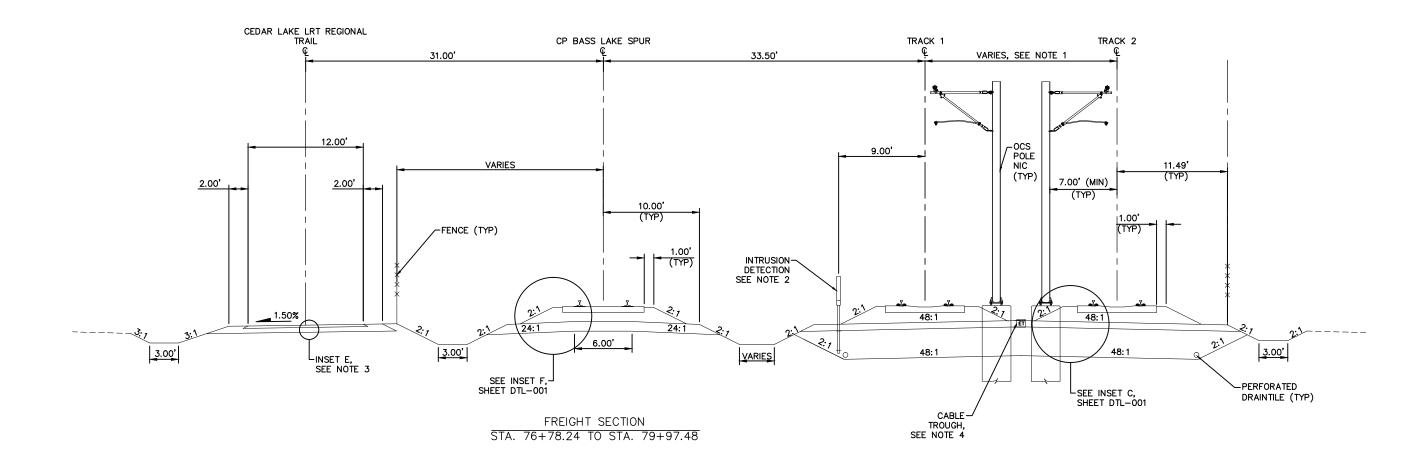
 1. TRACK CENTERS WIDEN FROM 20.00' TO 30.38' BETWEEN STA 2571+31.62 AND STA 2574+33.90.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS

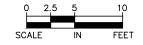
- JETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



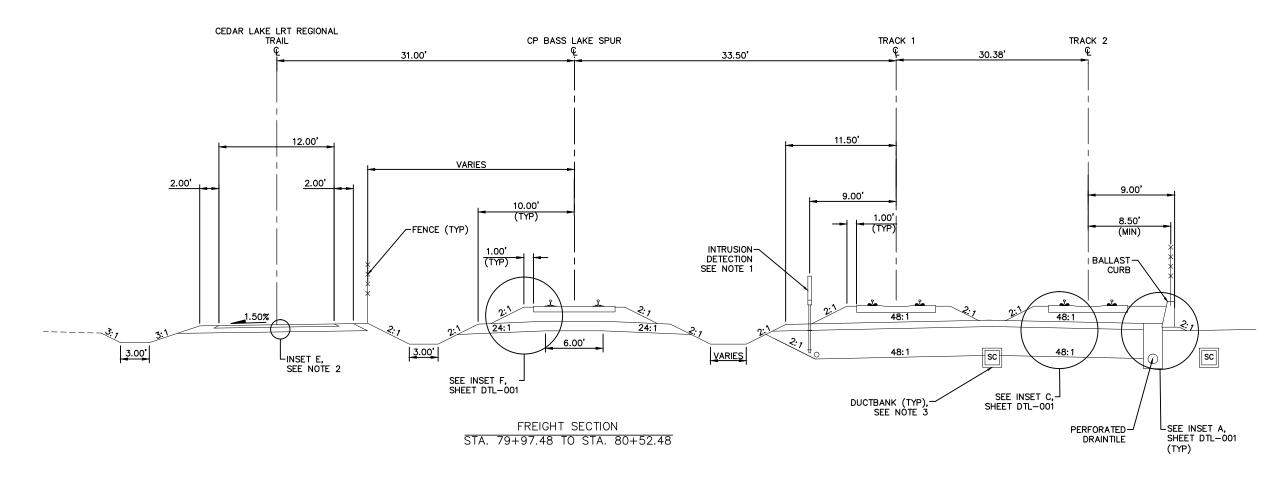
TYPICAL SECTION STA 2571+31.62 TO STA 2574+53.90



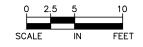
SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 30 **TYPICAL SECTIONS** SOUTHWEST Green Line Little Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-023 **TRACK**

- NOTE:

 1. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
- 2. FOR INSETS SEE CIVIL PLANS.
 3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



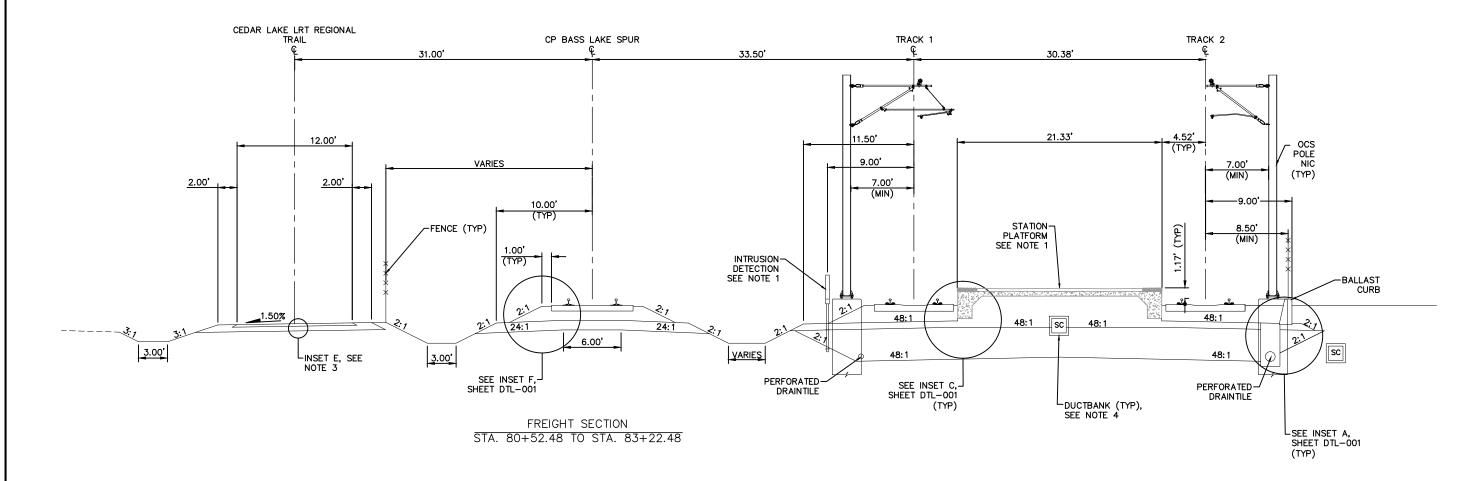
TYPICAL SECTION STA 2574+53.90 TO STA 2575+08.90



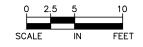
SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 31 **TYPICAL SECTIONS** SOUTHWEST Green Line Litt Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-024 **TRACK**

- NOTE:

 1. SEE STATION PLANS FOR STATION PLATFORM DETAILS.
- DETAILS.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 3. FOR INSETS SEE CIVIL PLANS.
 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION - BLAKE STATION STA 2575+08.90 TO STA 2577+78.90



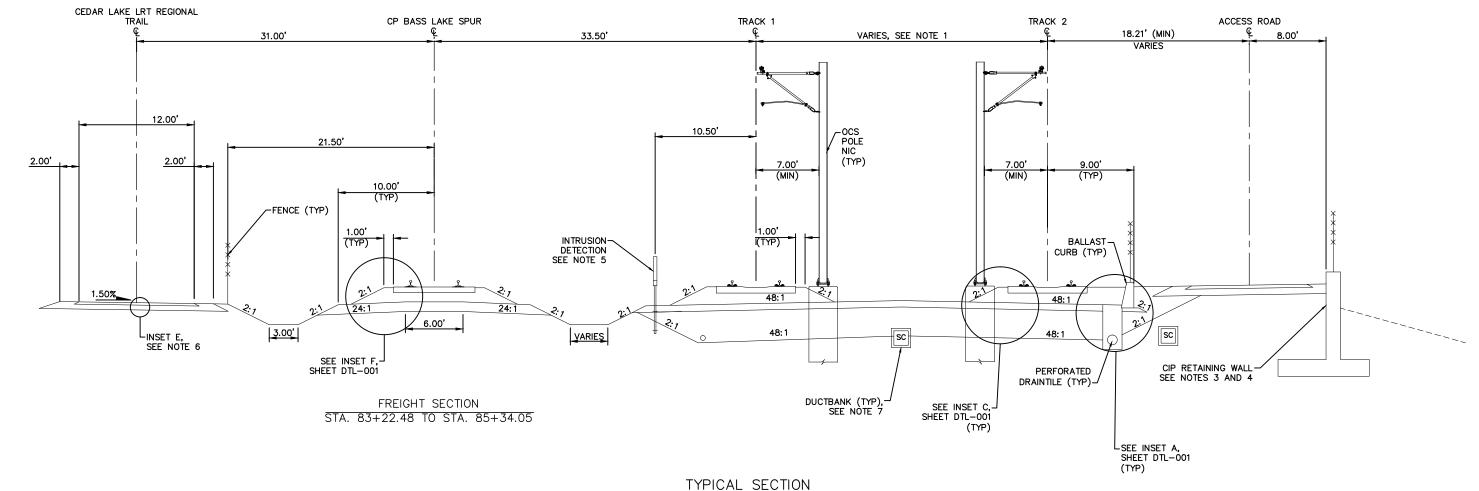
SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line Litt Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-025 TRACK

- NOTE:
 1. TRACK CENTERS NARROW FROM 30.38' TO 30.37' BETWEEN STA 2579+73.90 AND STA 2579+90.53.
 2. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT BLAKE ROAD. SEE TRACK PLANS AND DETAILS.
 3. SEE RETAINING WALL PLANS FOR DETAILS.
 4. CIP WALL STARTS AT STA. 2579+04.20.
 5. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

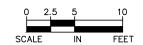
- DETAILS.

 6. FOR INSETS SEE CIVIL PLANS.

 7. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



STA 2577+78.90 TO STA 2579+90.53



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336

CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS SOUTHWEST: METROPOLITAN DISCIPLINE: 60% SUBMISSION - 09/28/15 E1-TRK-TYP-026 TRACK

- NOTE:

 1. TRACK CENTERS NARROW FROM 30.38' TO 26.57' BETWEEN STA 2579+90.53 AND STA 2581+50.00.

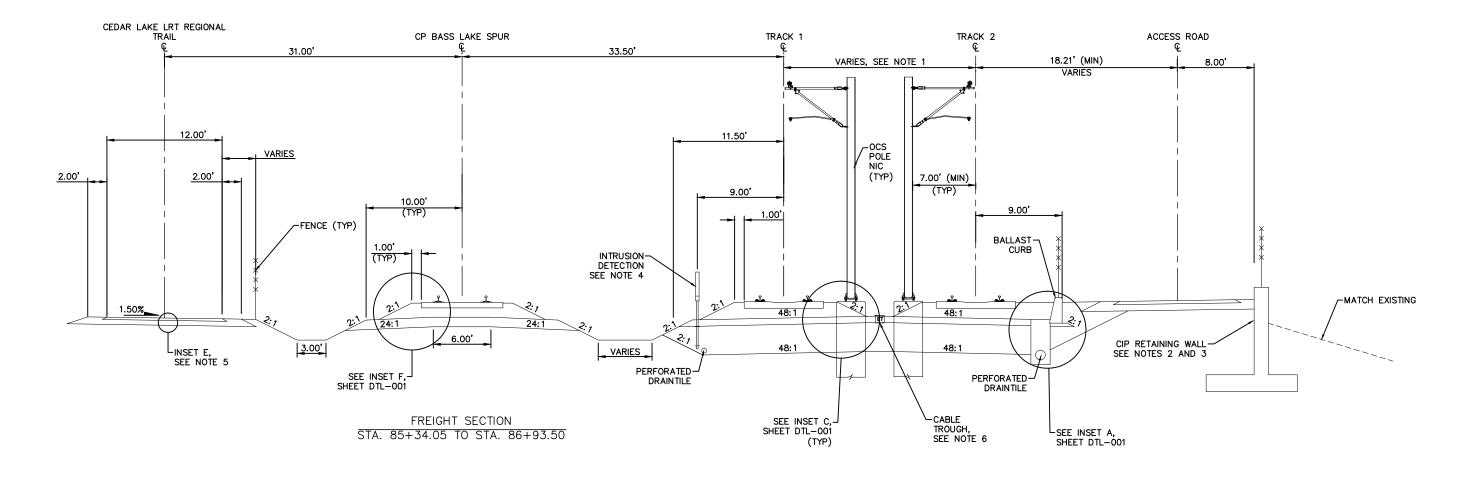
 2. SEE RETAINING WALL PLANS FOR DETAILS.

 3. CIP WALL ENDS AT STA. 2580+23.64.

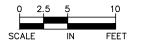
 4. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

 5. FOR INSETS SEE CIVIL PLANS.

 6. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2579+90.53 TO STA 2581+50.00



<u>`</u> ز	IO. DATE	BY	CHECK DESIGN REVISION / SUBMITTAL			CIVIL EAS	ST - VOLUME 3	SHEET
54 ar				A =COAA		Т	RACK	34
5 01:				AECOM	SOUTHWEST	TYPICA	L SECTIONS	OF
1 201					METROPOLITAN Green Live Lift Extension			
Sep, 2				60% SUBMISSION - 09/28/15		DISCIPLINE: TRACK	SHEET NAME: E1-TRK-TYP-	027 336

- NOTE:

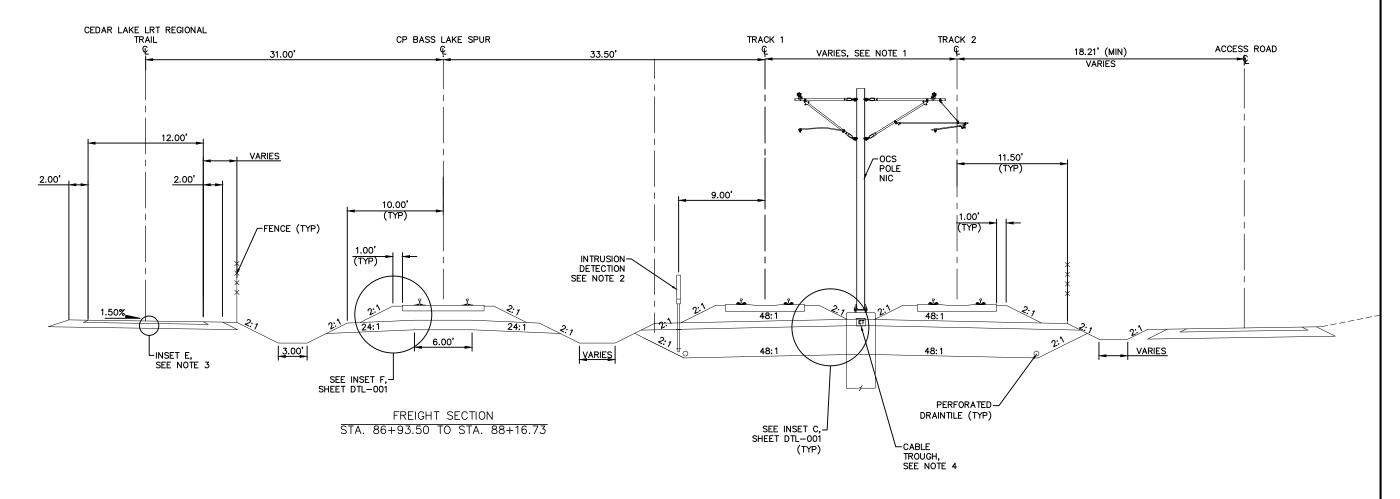
 1. TRACK CENTERS NARROW FROM 26.57' TO 20.00' BETWEEN STA 2581+50.00 AND STA 2582+76.12.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS

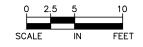
- JETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2581+50.00 TO STA 2582+76.12



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST. OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E1-TRK-TYP-028 **TRACK**

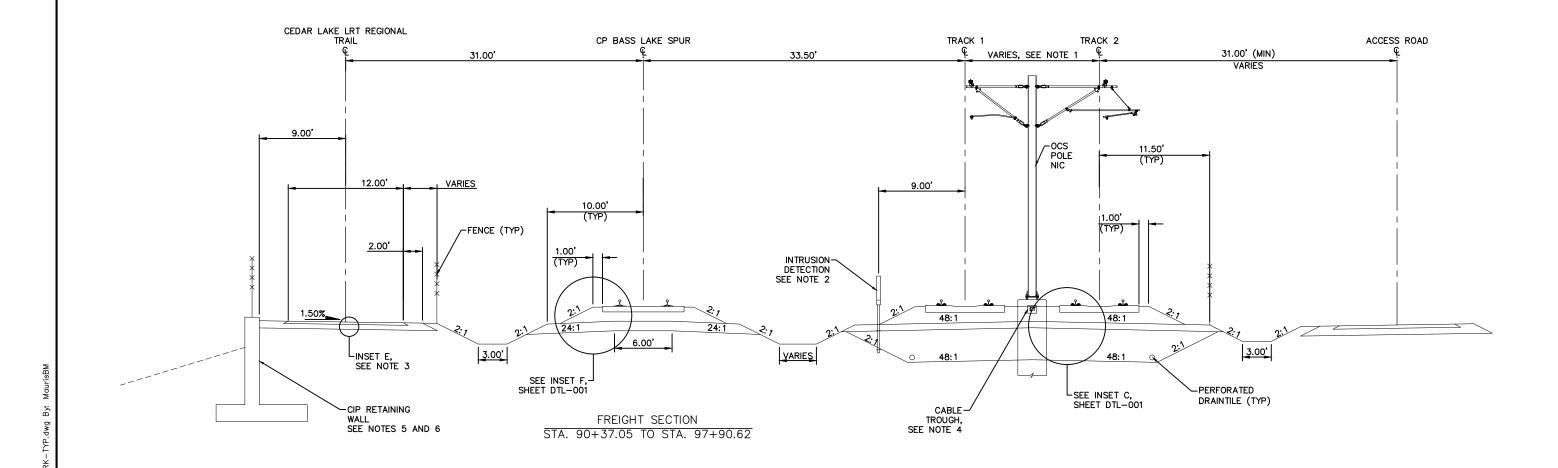
- NOTE:

 1. TRACK CENTERS NARROW FROM 20.00' TO 14.00' BETWEEN STA 2582+76.12 AND STA 2584+93.82.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION

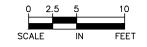
- JETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
- 5. SEE RETAINING WALL PLANS FOR DETAILS.
 6. CIP WALL STARTS AT STA 2595+18.96.



TYPICAL SECTION STA 2582+76.12 TO STA 2592+47.40 STA 2595+00.00 TO STA 2596+50.00



E1-TRK-TYP-029

SHEET

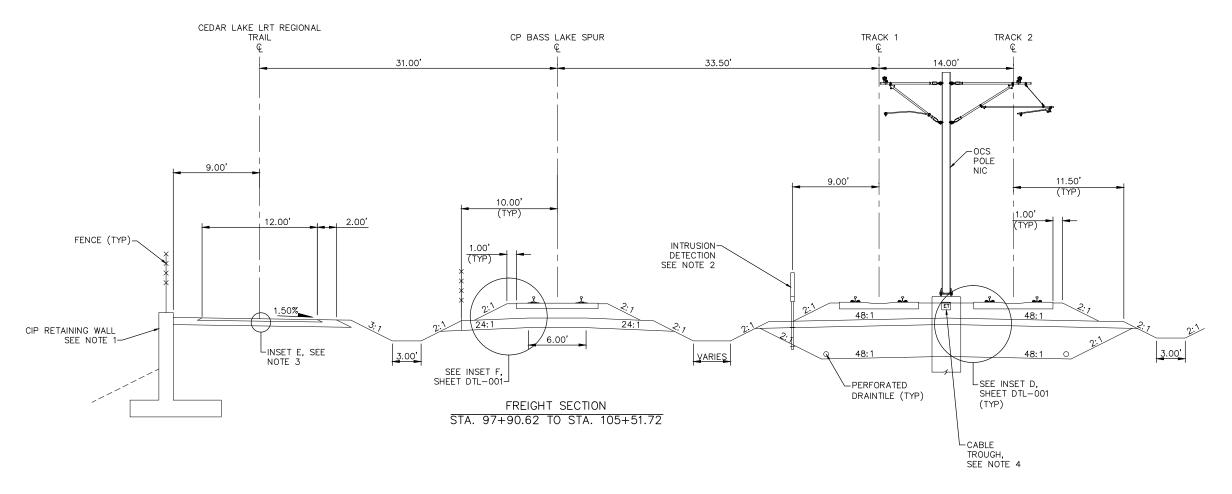
OF

336

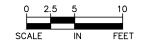
CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS SOUTHWEST: DISCIPLINE: 60% SUBMISSION - 09/28/15 TRACK

- NOTE:

 1. SEE RETAINING WALL PLANS FOR DETAILS.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 3. FOR INSETS SEE CIVIL PLANS.
 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

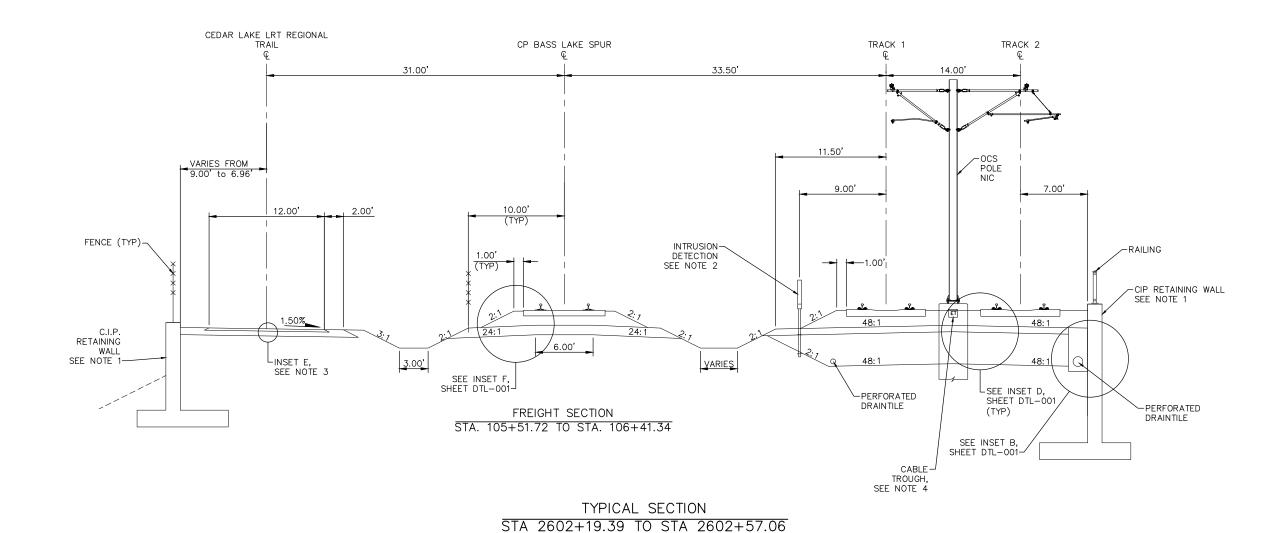


TYPICAL SECTION STA 2596+50.00 TO STA 2602+19.39



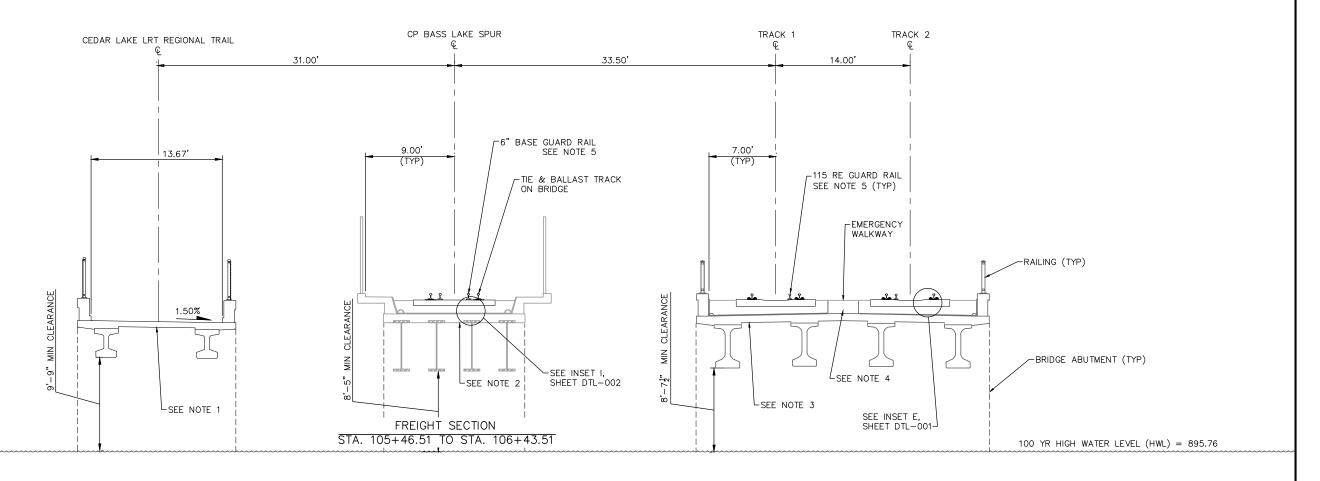
Έ	IO. DATE	BY CHECK DESIGN REVISION / SUBMITTAL			CIVIL EAS	T - VOLUME 3	SHEET
:56 a			A=COM			RACK	37
15 01			A=COM	SOUTHWEST	TYPICA	SECTIONS	OF
21 20				METROPOLITAN CONTROL OF THE STREET		In.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
, des			60% SUBMISSION - 09/28/15		DISCIPLINE: TRACK	SHEET NAME: E2-TRK-	TYP - 001 336

- NOTE:
 1. SEE RETAINING WALL PLANS FOR DETAILS.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 3. FOR INSETS SEE CIVIL PLANS.
 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

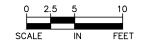


SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-002 **TRACK**

- NOTE:
 1. MnDOT BRIDGE R0687. SEE STRUCTURAL PLANS.
 2. MnDOT BRIDGE R0688. SEE STRUCTURAL PLANS.
 3. MnDOT BRIDGE R0689. SEE STRUCTURAL PLANS.
- 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
 5. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

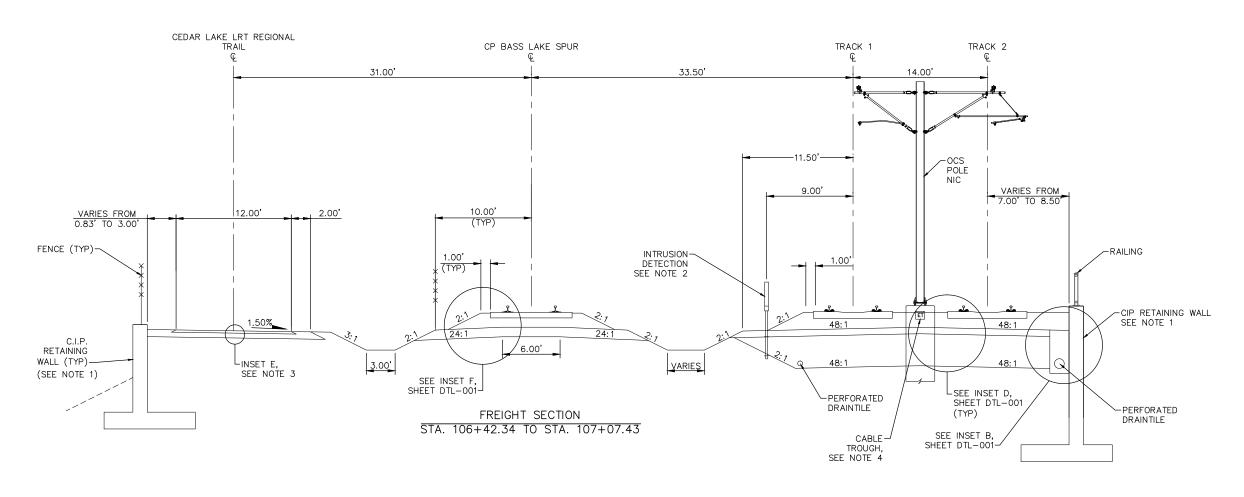


TYPICAL SECTION STA 2602+57.06 TO STA 2603+51.72

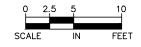


SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-003 **TRACK**

- NOTE:
 1. SEE RETAINING WALL PLANS FOR DETAILS.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 3. FOR INSETS SEE CIVIL PLANS.
 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



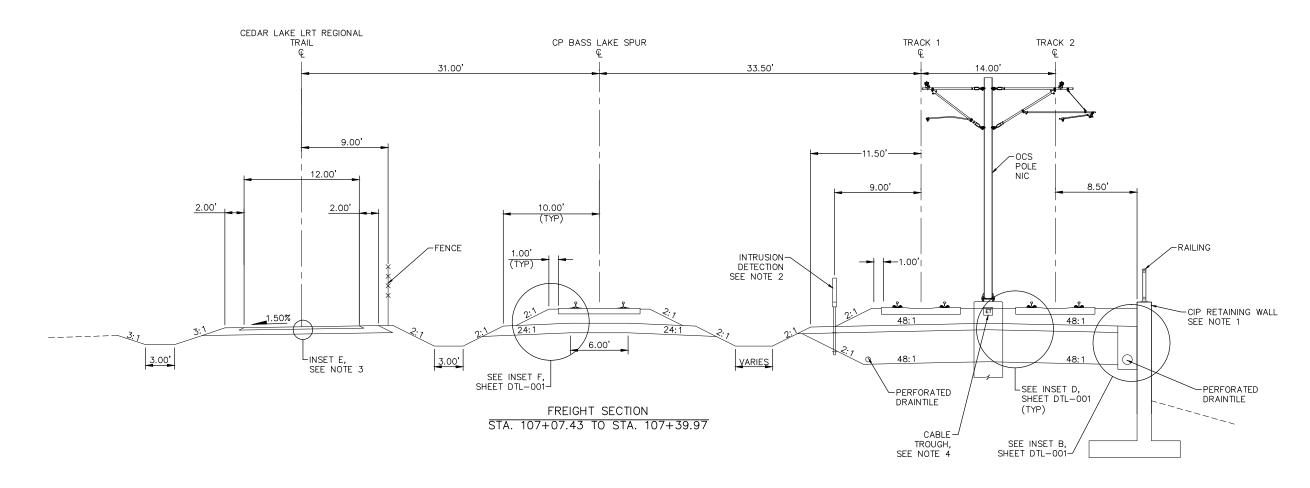
TYPICAL SECTION STA 2603+51.72 TO STA 2604+16.81



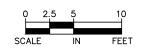
SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line LFIT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 TRACK E2-TRK-TYP-004

- NOTE:

 1. SEE RETAINING WALL PLANS FOR DETAILS.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 3. FOR INSETS SEE CIVIL PLANS.
 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

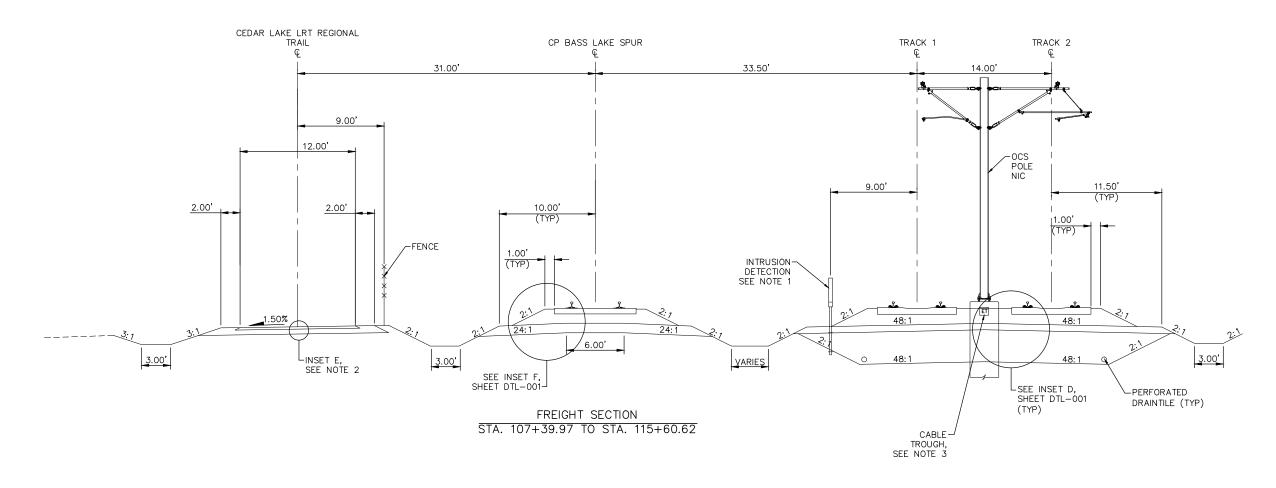


TYPICAL SECTION STA 2604+16.81 TO STA 2604+49.35

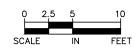


Έ	IO. DATE	E BY CHECK DESIGN REVISION / SUBMITTAL			CIVIL EAS	T - VOLUME 3	SHEET
:58 g			A=COM			RACK	41
15 01			A=COM	SOUTHWEST	TYPICAI	. SECTIONS	OF
21 20				METROPOLITAN COOR LINE LITT Extension			
geb,			60% SUBMISSION - 09/28/15		DISCIPLINE: TRACK	SHEET NAME: E2-TRK-	TYP-005 336

- NOTE:
 1. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 2. FOR INSETS SEE CIVIL PLANS.
 3. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2604+49.35 TO STA 2612+70.00



έ E	NO. DATE BY CHECK DESIGN REVISION / SUBMITTAL			CIVIL EAST - VOLUME 3	SHEET
.59 a		AECOM		TRACK	42
015 01		ALCOM	SOUTHWEST Grant Ha Left Enterain	TYPICAL SECTIONS	OF
, 21 2		60% SUBMISSION - 09/28/15	METROPOLITAN C Let Creen Line Lift Estension	DISCIPLINE: SHEET NAME: TRACK E2-TRK-TYP-006	336

- NOTE:

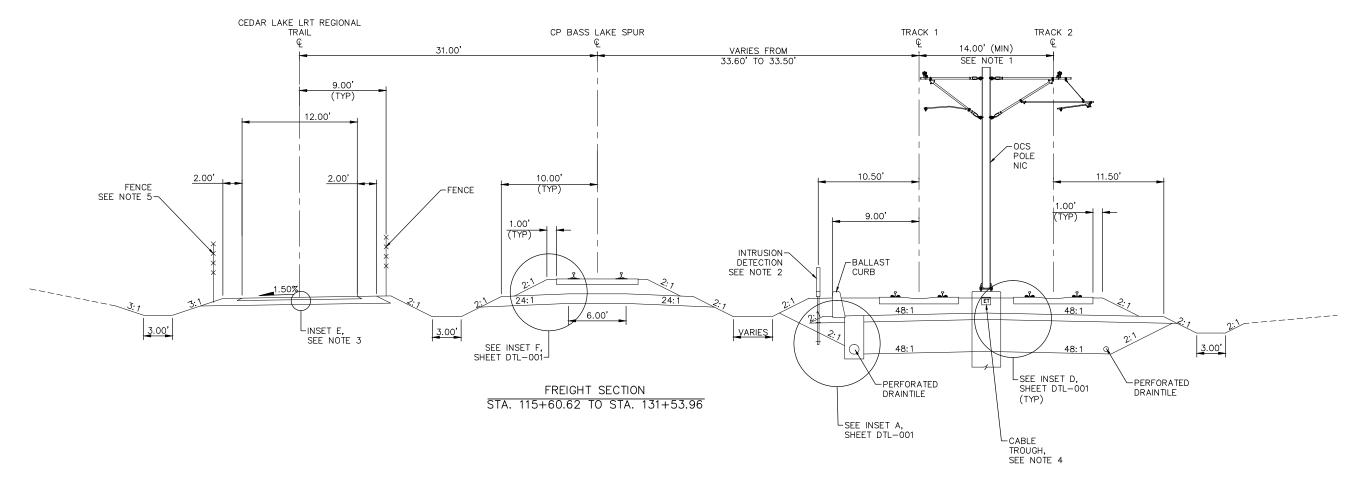
 1. TRACK CENTERS VARY IN CURVE E2-200. SEE TRACK PLANS.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
- DETAILS.

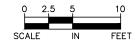
 5. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

 5. FENCE BEGINS AT STA 2621+95.57.

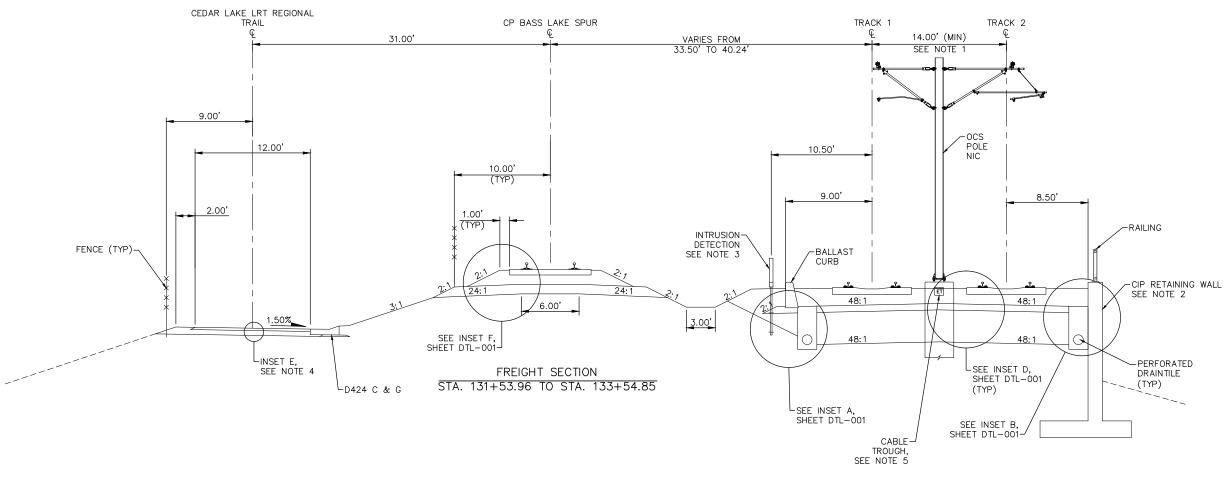


TYPICAL SECTION STA 2612+70.00 TO STA 2628+63.33

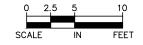


SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 TRACK E2-TRK-TYP-007

- NOTE:
 1. TRACK CENTERS VARY IN CURVE E2-200. SEE TRACK PLANS.
 2. SEE RETAINING WALL PLANS FOR DETAILS.
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 4. FOR INSETS SEE CIVIL PLANS.
 5. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

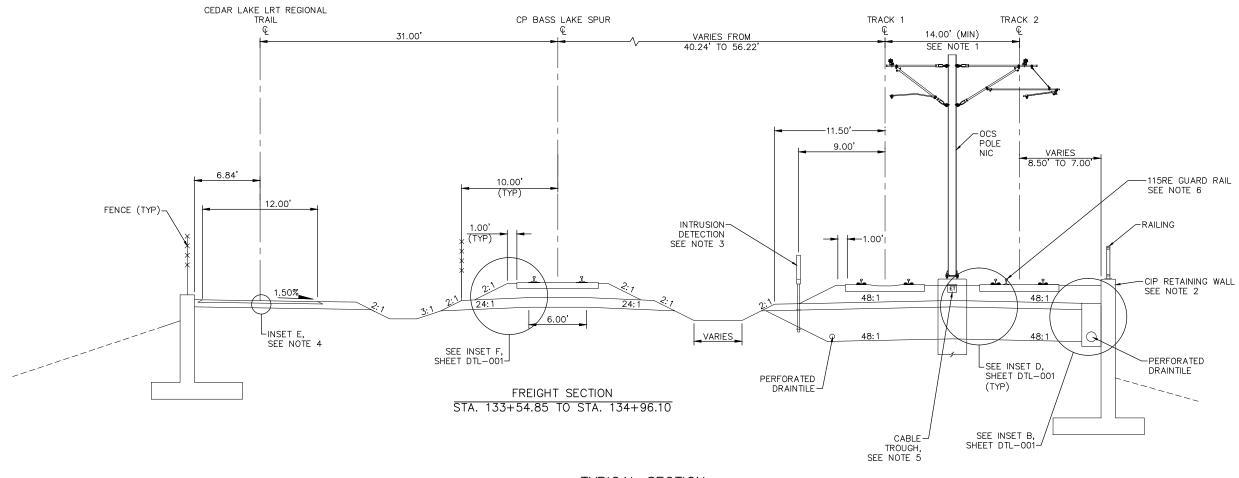


TYPICAL SECTION STA 2628+63.33 TO STA 2630+60.00

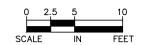


SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-008 TRACK

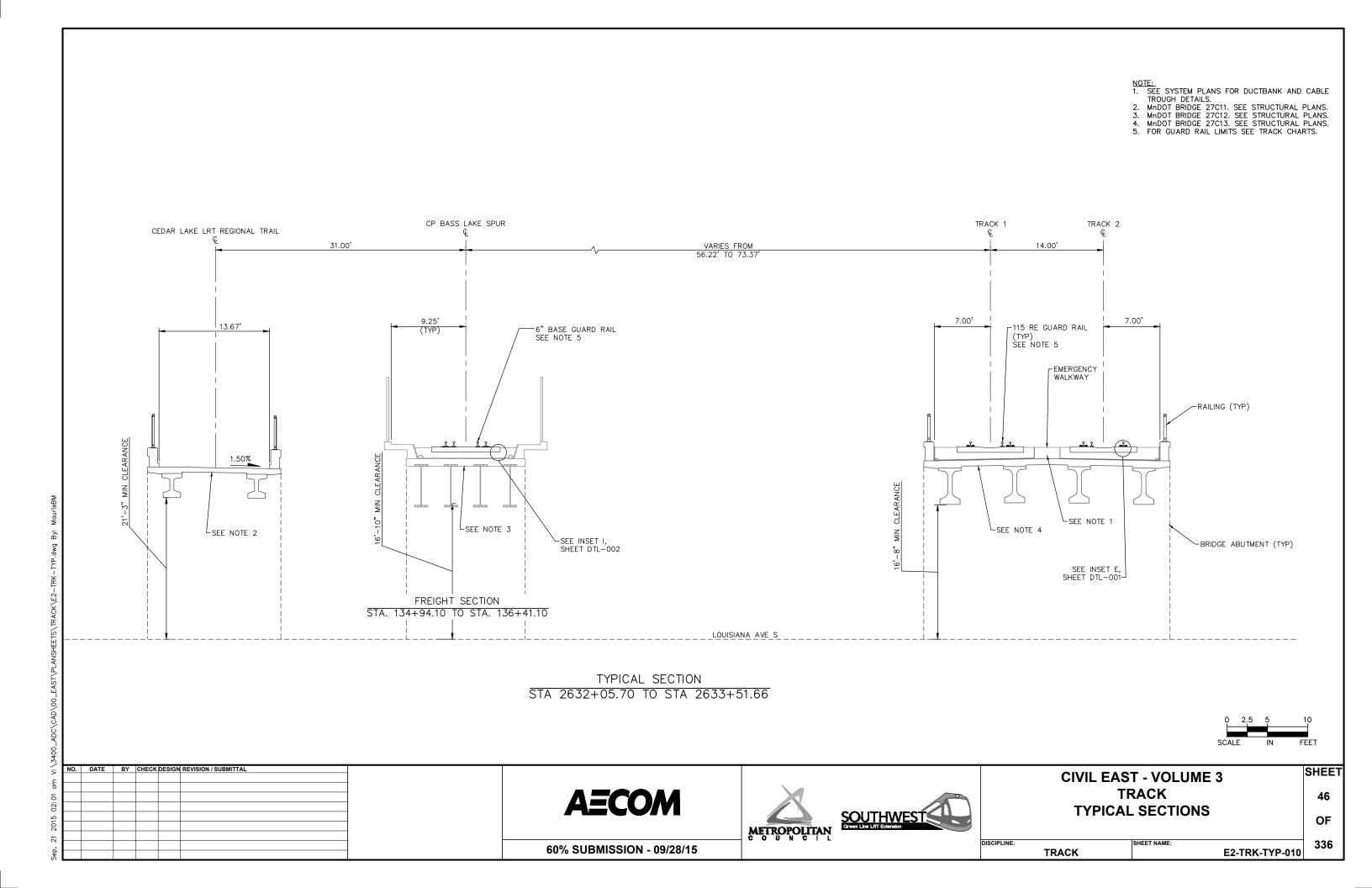
- NOTE:
 1. TRACK CENTERS VARY IN CURVE E2-200. SEE TRACK PLANS.
 2. SEE RETAINING WALL PLANS FOR DETAILS.
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 4. FOR INSETS SEE CIVIL PLANS.
 5. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
 6. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



TYPICAL SECTION STA 2630+60.00 TO STA 2632+05.70



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-009 TRACK



- NOTE:

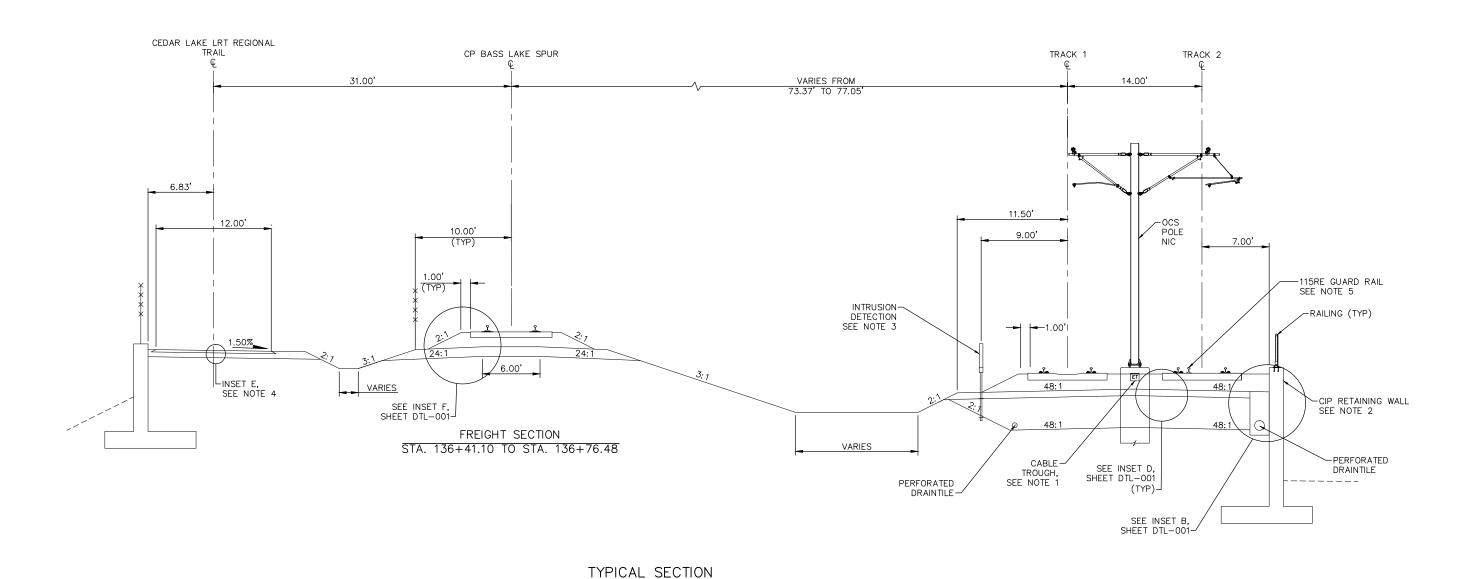
 1. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

 2. SEE RETAINING WALL PLANS FOR DETAILS.

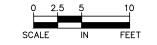
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

 4. FOR INSETS SEE CIVIL PLANS.

 5. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



STA 2633+51.66 TO STA 2633+72.27



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST: Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-011 TRACK

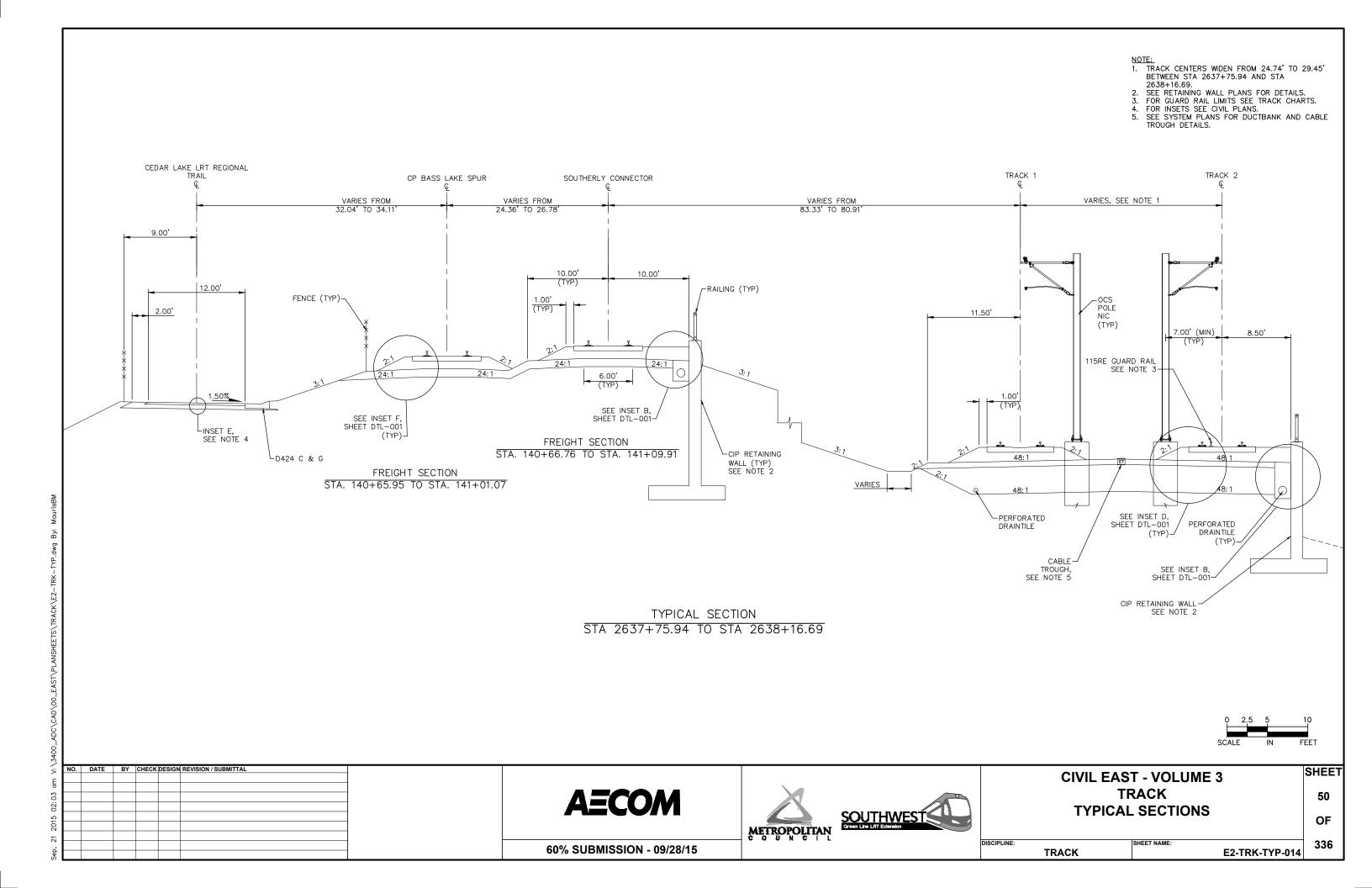
NOTE: 1. TRACK CENTERS WIDEN FROM 14.00' TO 20.00' BETWEEN STA 2634+99.26 AND STA 2. SEE RETAINING WALL PLANS FOR DETAILS. 3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS. 4. FOR INSETS SEE CIVIL PLANS. 5. SPECIAL TRACKWORK NOT ILLUSTRATED. 6. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS. CEDAR LAKE LRT REGIONAL TRAIL CP BASS LAKE SPUR SOUTHERLY CONNECTOR TRACK 1 TRACK 2 VARIES, SEE NOTE 1 31.00' VARIES VARIES FROM 0.00' TO 17.60' 77.30' TO 89.81 9.00' 10.00' (TYP) 12.00' FENCE (TYP)-2.00' 11.50' (TYP) -OCS POLE NIC -115RE GUARD RAIL SEE NOTE 3 6.00 -RAILING SEE INSET F, SHEET DTL-001 1.00' L_{INSET} E, SEE NOTE 4 FREIGHT SECTION FREIGHT SECTION 48:1 48:1 STA. 136+76.48 TO STA. 139+66.69 STA. 136+61.08 TO STA. 139+65.10 LD424 C & G -CIP RETAINING WALL SEE NOTE 2 -PERFORATED DRAINTILE SEE INSET D, SHEET DTL-001 (TYP) -PERFORATED DRAINTILE CABLE-TROUGH, SEE NOTE 6 SEE INSET B, SHEET DTL-001-TYPICAL SECTION STA 2633+72.27 TO STA 2636+64.94 SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF DISCIPLINE: 336

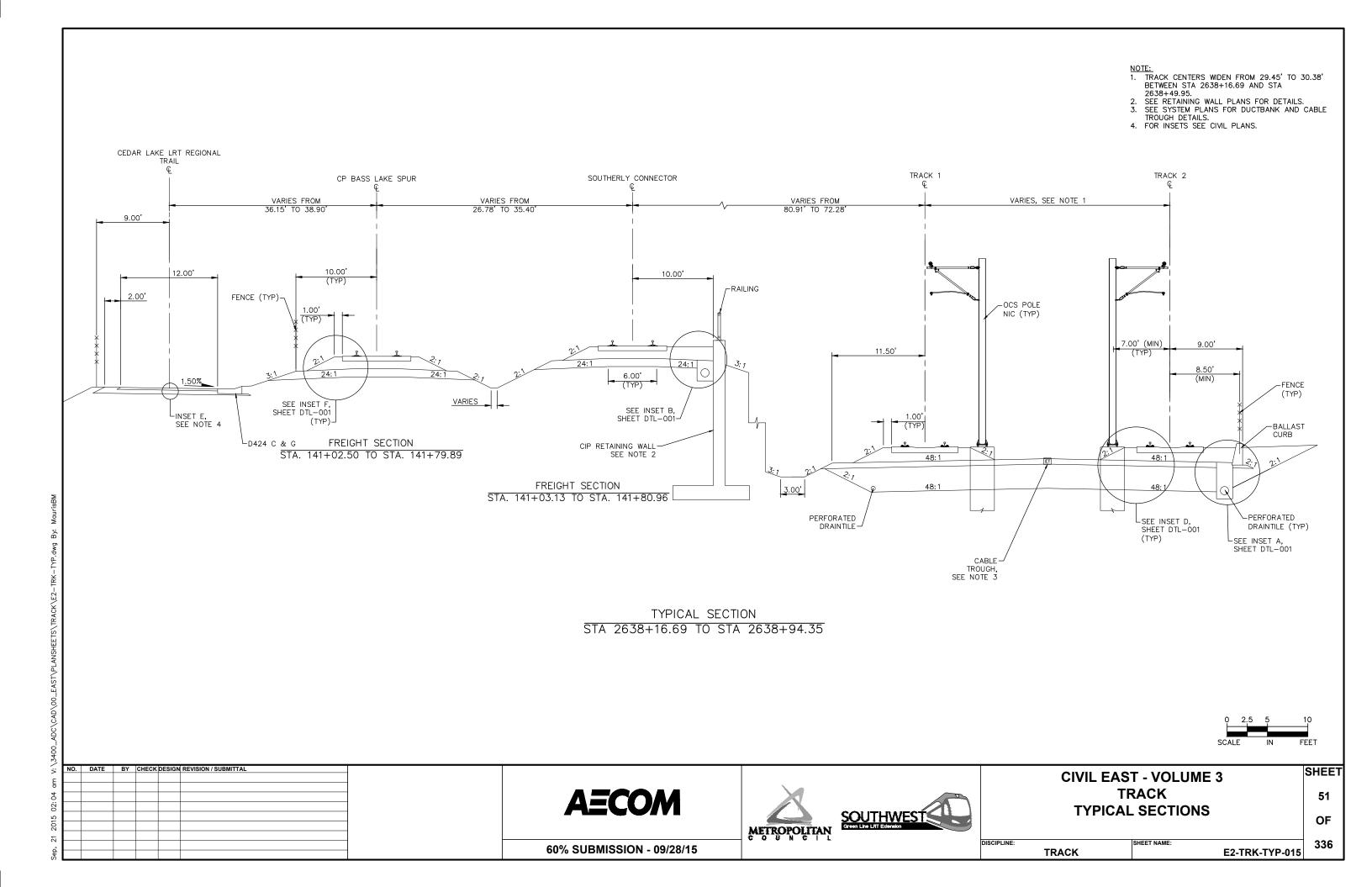
60% SUBMISSION - 09/28/15

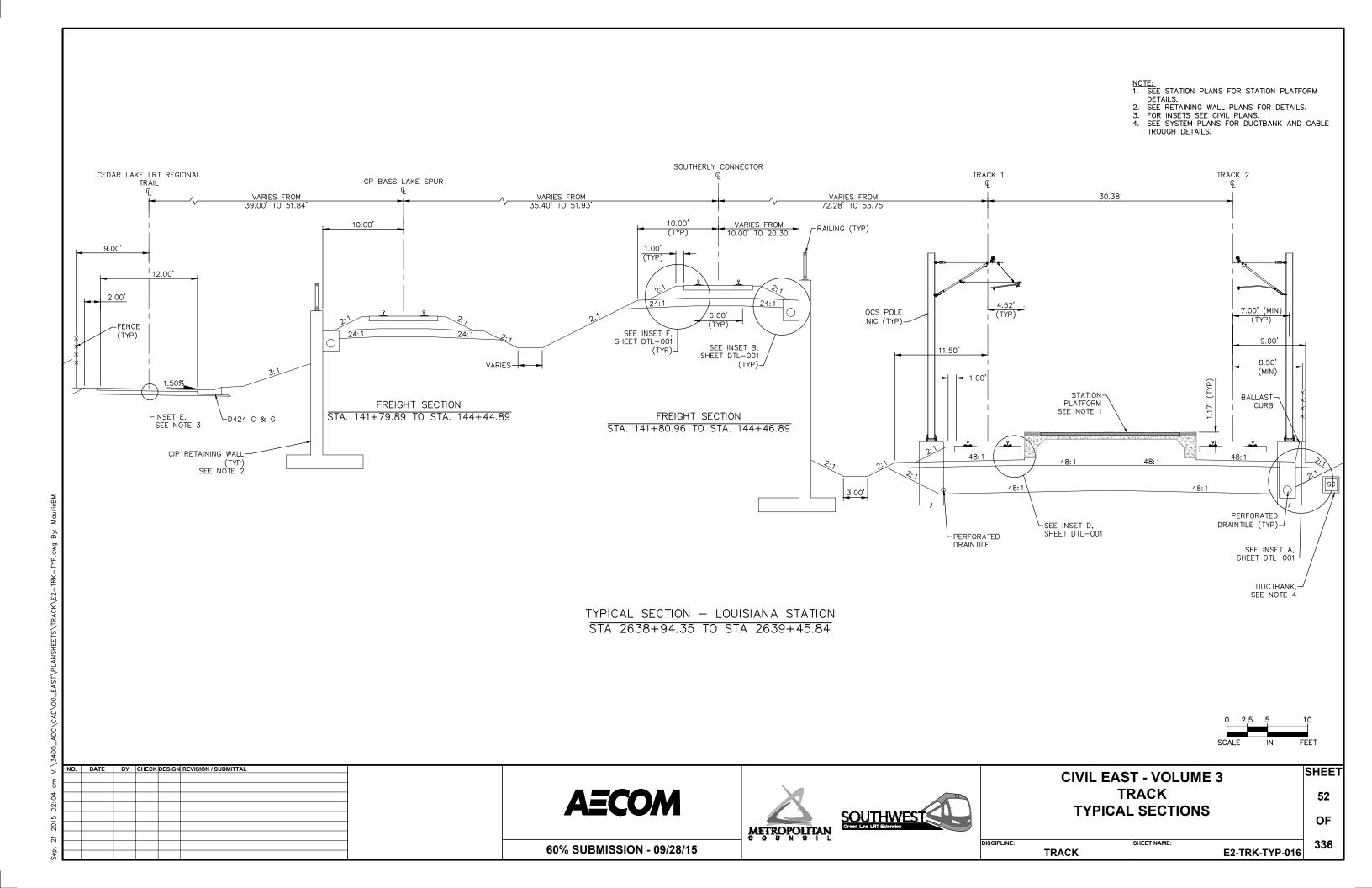
E2-TRK-TYP-012

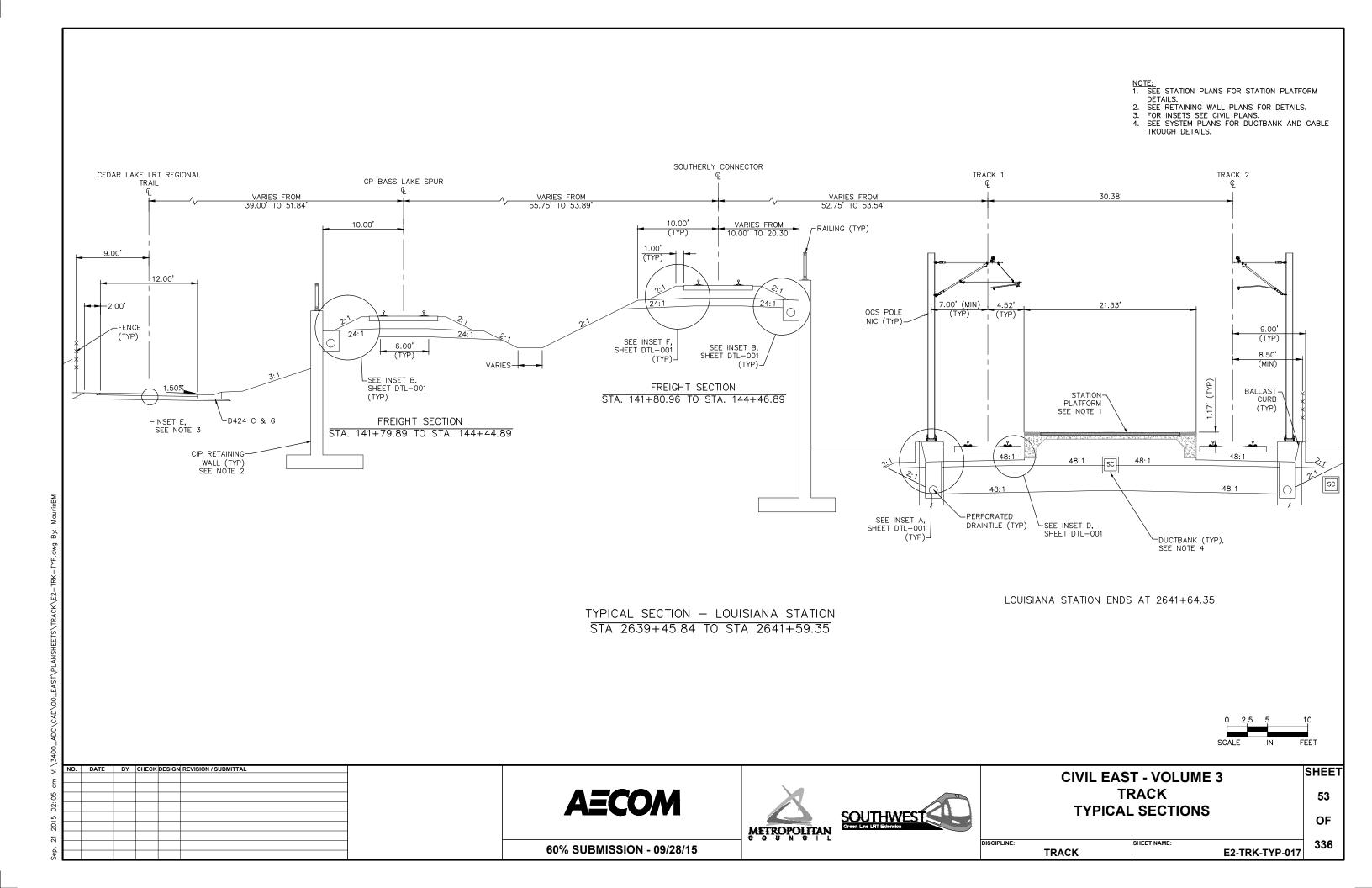
TRACK

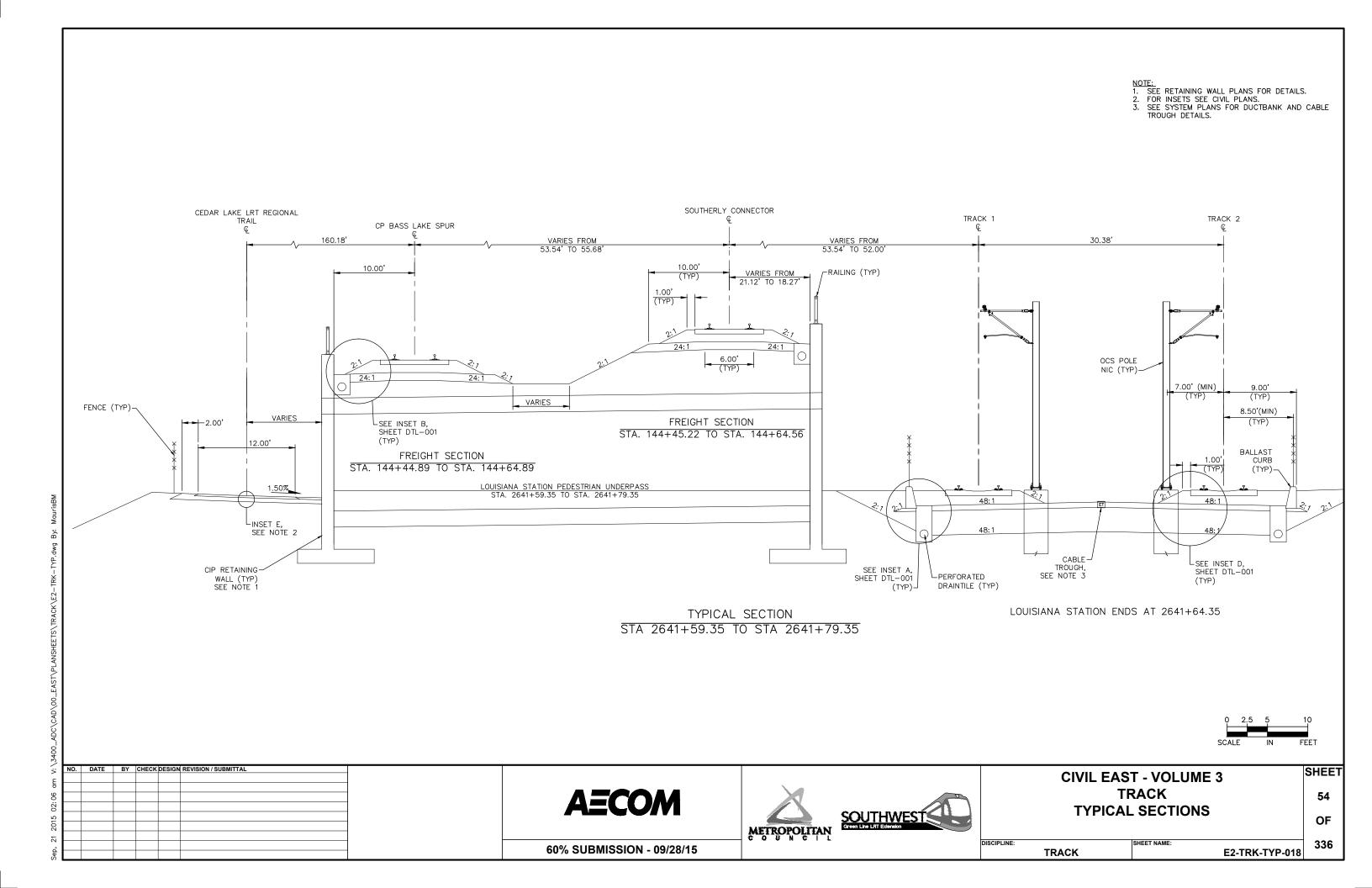
NOTE: 1. TRACK CENTERS WIDEN FROM 20.00' TO 24.74' BETWEEN STA 2636+64.94 AND STA 2637+75.94. 2. SEE RETAINING WALL PLANS FOR DETAILS. 3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS. 4. FOR INSETS SEE CIVIL PLANS. 5. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS. CEDAR LAKE LRT REGIONAL TRAIL CP BASS LAKE SPUR SOUTHERLY CONNECTOR TRACK 1 TRACK 2 VARIES FROM 89.81' TO 83.33' VARIES 17.60' TO 24.36' VARIES, SEE NOTE 1 31.00' 9.00' 10.00 (TYP) 12.00' FENCE (TYP)--OCS POLE NIC 2.00' 11.50 (TYP) (TYP) 7.00' (MIN) 115RE GUARD RAIL SEE NOTE 3 6.00' (TYP) -RAILING SEE INSET F, **--**1.00'l SHEET DTL-001 (TYP)--CIP RETAINING LINSET E, SEE NOTE 4 WALL SEE NOTE 2 FREIGHT SECTION FREIGHT SECTION STA. 139+65.10 TO STA. 140+66.76 48:1 48:1 STA. 139+66.69 TO STA. 140+65.95 LD424 C & G VARIES 3.00' (MIN) 48:1 PERFORATED DRAINTILE -PERFORATED DRAINTILE SEE INSET D, SHEET DTL-001 (TYP) SEE INSET B, SHEET DTL-001-CABLE TROUGH, SEE NOTE 5 TYPICAL SECTION STA 2636+64.94 TO STA 2637+75.94 SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST: OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-013 **TRACK**







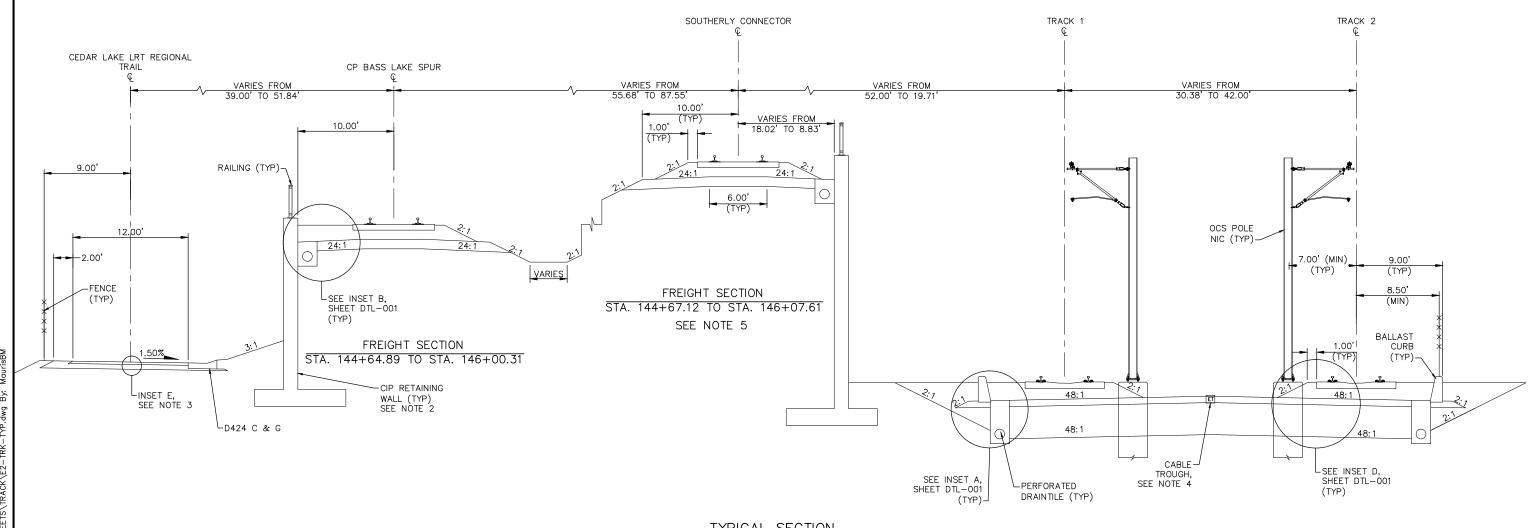




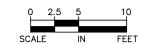


- 1. TRACK CENTERS WIDEN FROM 30.38' TO 42.00' BETWEEN STA 2641+79.35 AND STA 2643+42.28.
- SEE RETAINING WALL PLANS FOR DETAILS.

- SEE RETAINING WALL PLANS FOR DETAILS.
 FOR INSETS SEE CIVIL PLANS.
 SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
 SEE SHEET 85 E2-TRK-TYP-049 THRU 89 E2-TRK-TYP-053 FOR SOUTHERLY CONNECTOR TYPICAL SECTIONS.



TYPICAL SECTION STA 2641+79.35 TO STA 2643+42.28



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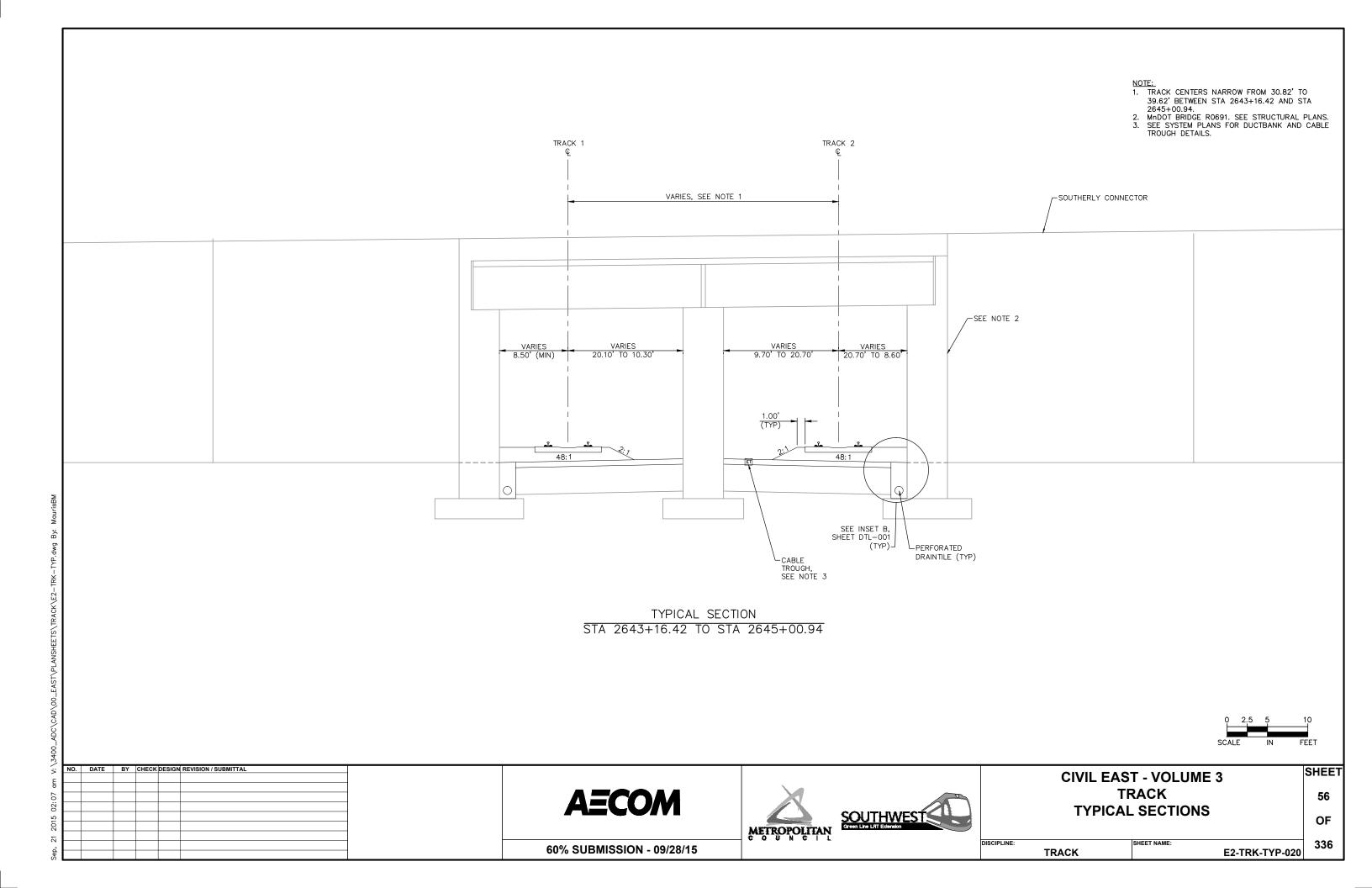
CIVIL EAST - VOLUME 3
TRACK
TYPICAL SECTIONS

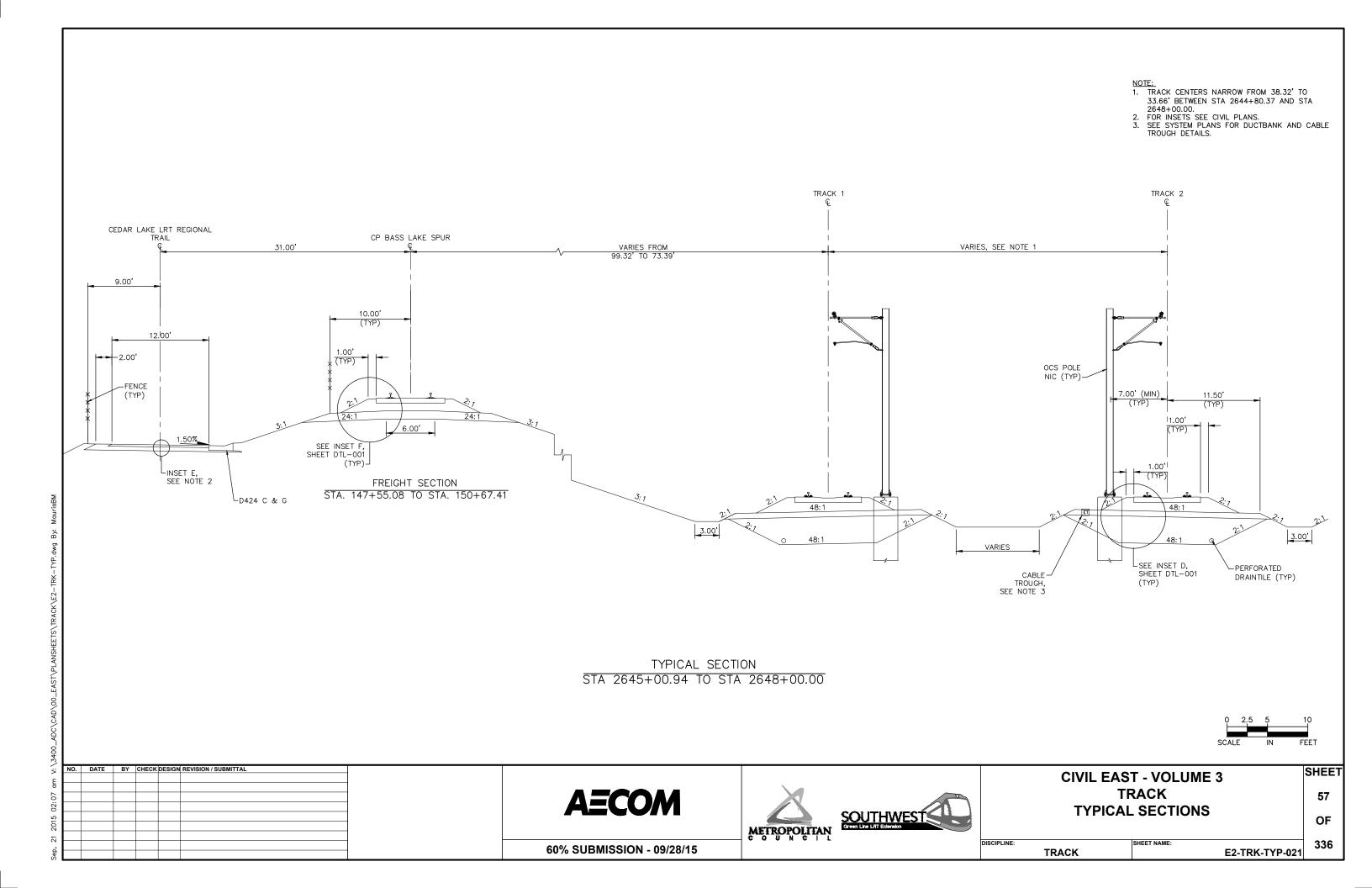
OF 336

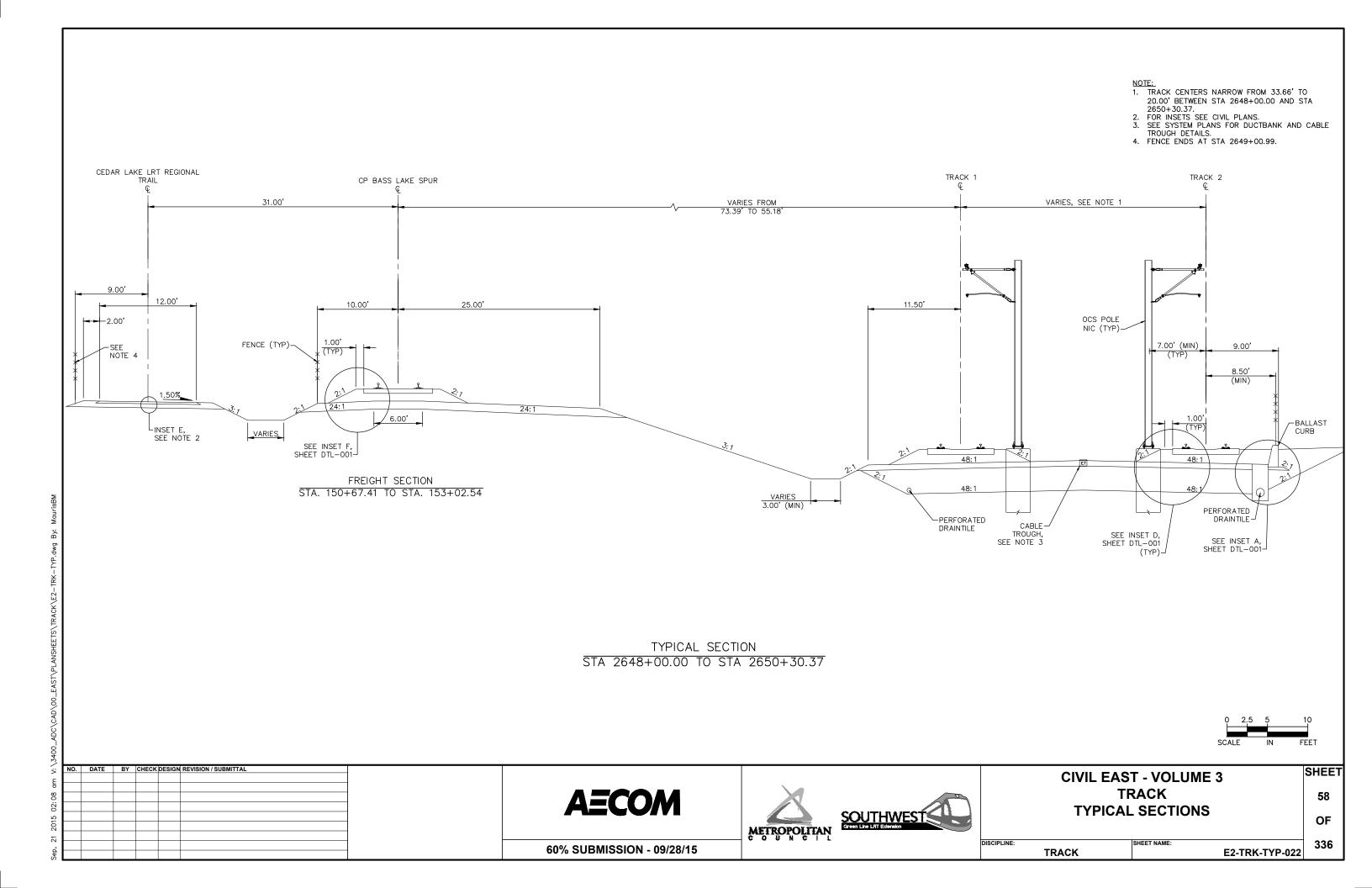
DISCIPLINE: SHEET NAME: TRACK

E2-TRK-TYP-019

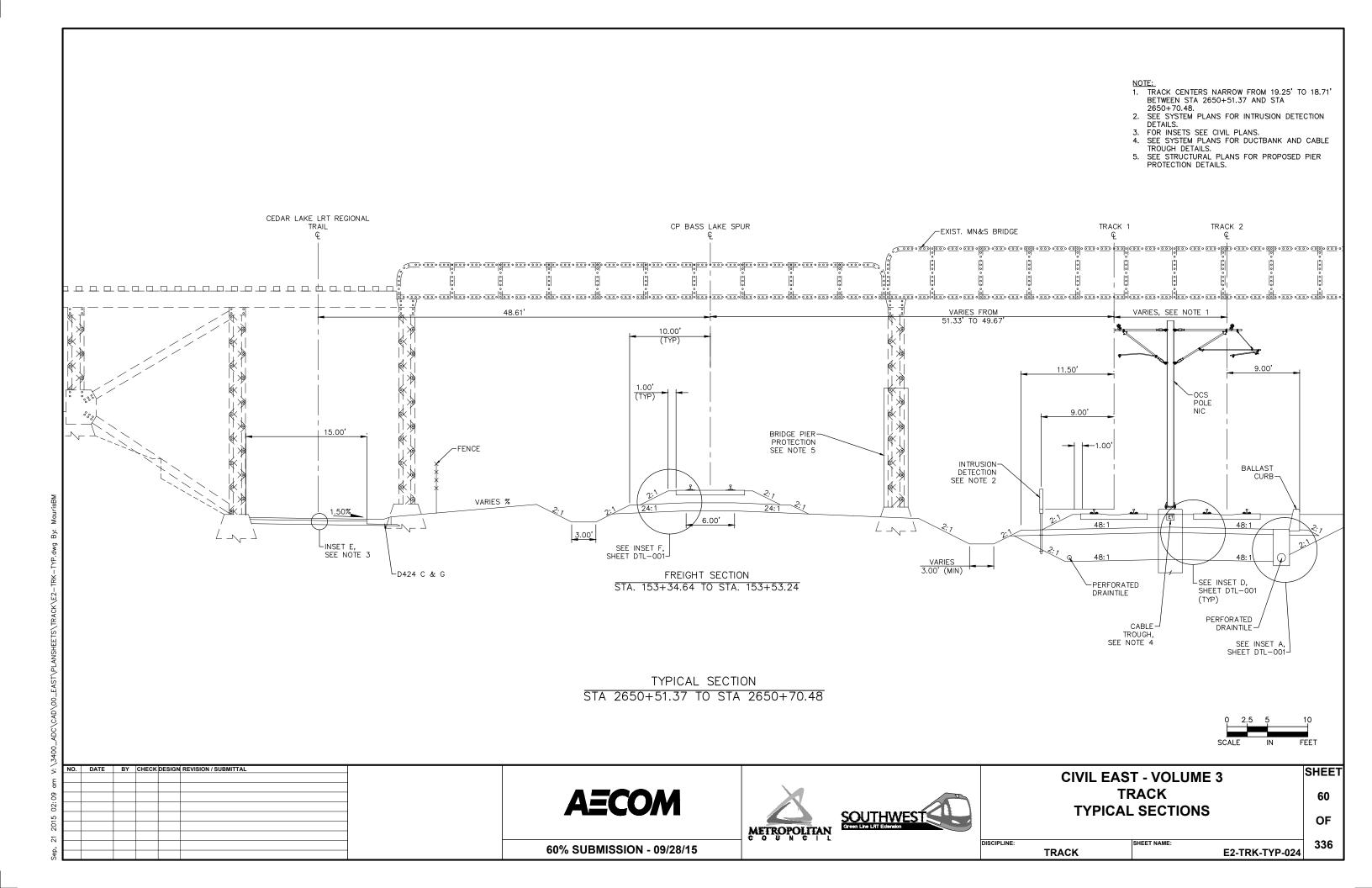
60% SUBMISSION - 09/28/15

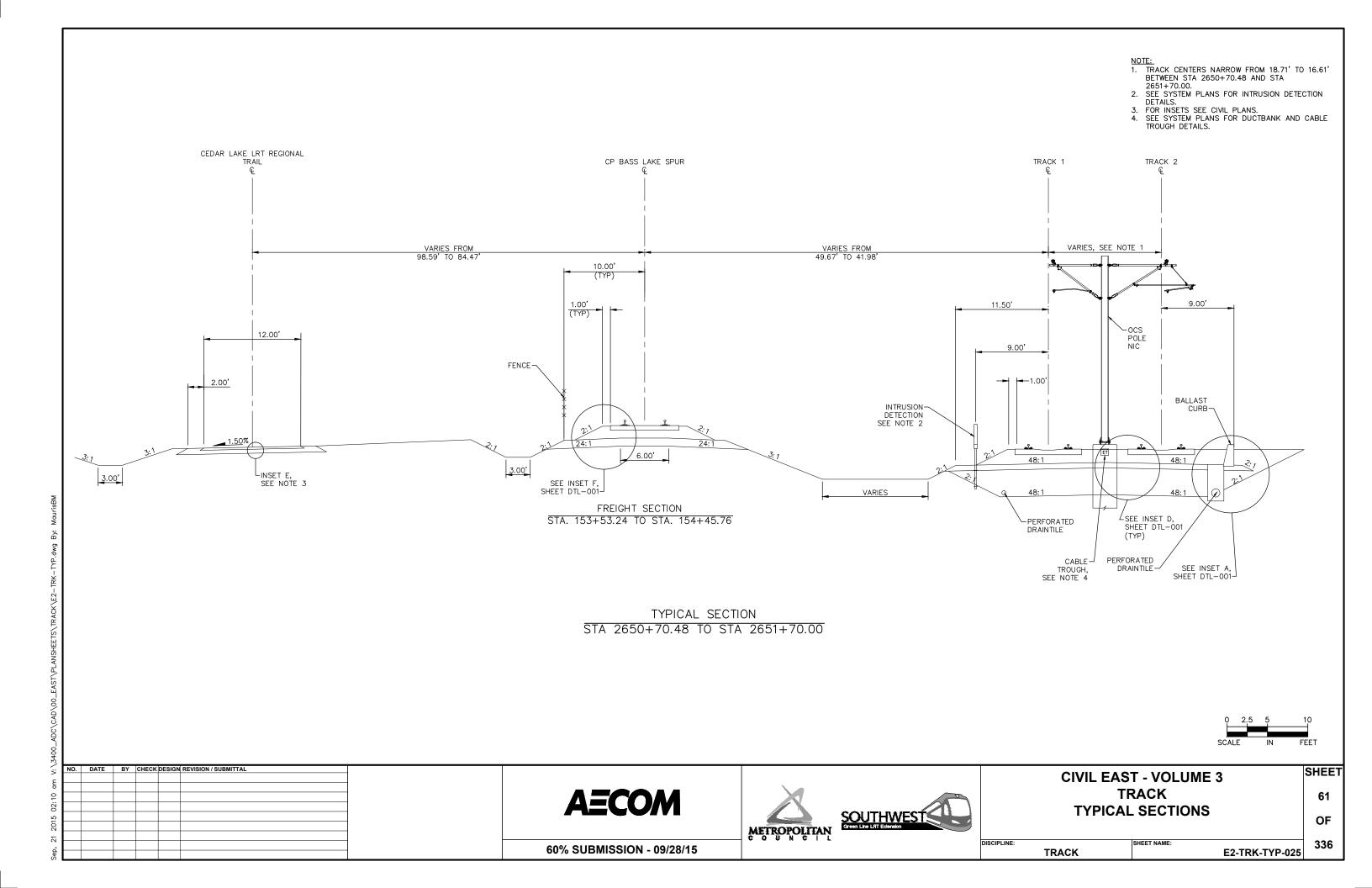






NOTE: 1. TRACK CENTERS NARROW FROM 20.00' TO 19.25' BETWEEN STA 2650+30.37 AND STA 2650+51.37. 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS. 3. FOR INSETS SEE CIVIL PLANS. 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS. CEDAR LAKE LRT REGIONAL TRAIL TRACK 1 TRACK 2 CP BASS LAKE SPUR VARIES FROM 53.10' TO 51.33' VARIES, SEE NOTE 1 31.00' 10.00' (TYP) 11.50' 12.00' 2.00' -OCS POLE NIC -FENCE 9.00' 1.50% INTRUSION— DETECTION SEE NOTE 2 6.00 LINSET E, SEE NOTE 3 ∕-BALLAST CURB SEE INSET F, SHEET DTL-001-48:1 48:1 FREIGHT SECTION STA. 153+02.54 TO STA. 153+34.64 VARIES LSEE INSET D, SHEET DTL-001 (TYP) -PERFORATED DRAINTILE ∽PERFORATED DRAINTILE SEE INSET A, SHEET DTL-001-CABLE TROUGH, SEE NOTE 4 TYPICAL SECTION STA 2650+30.37 TO STA 2650+51.37 SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST: OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 **TRACK** E2-TRK-TYP-023





- NOTE:

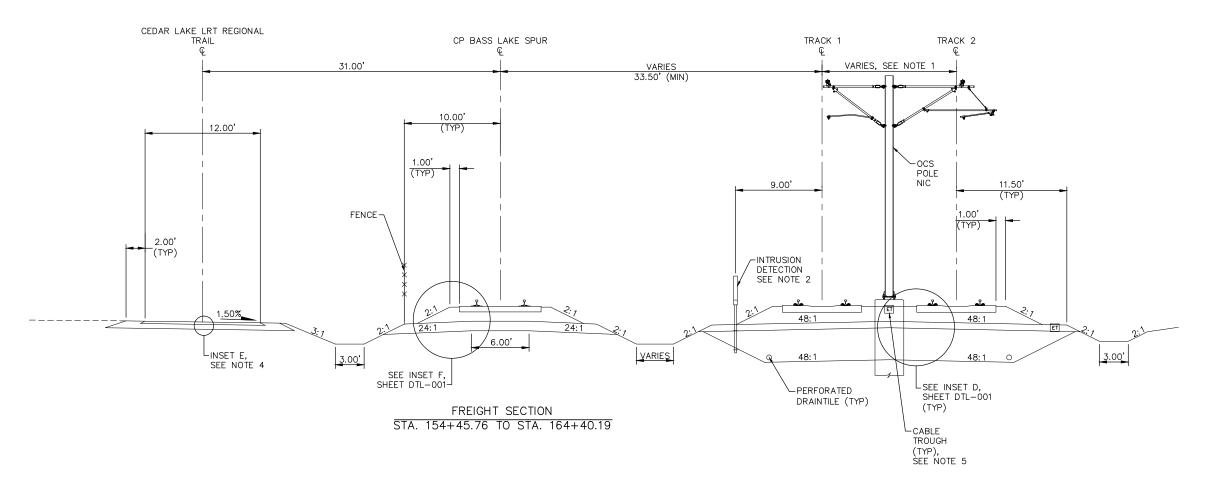
 1. TRACK CENTERS NARROW FROM 16.61' TO 14.00'
 BETWEEN STA 2651+70.00 AND STA
 2655+08.66.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION
 DETAILS.

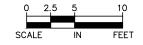
 3. SPECIAL TRACKWORK NOT ILLUSTRATED.

 4. FOR INSETS SEE CIVIL PLANS.

 5. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE
 TROUGH DETAILS.



TYPICAL SECTION STA 2651+70.00 TO STA 2661+60.00



015 02:10 am V:`	NO. DATE BY CHECK DESIGN REVISION / SUBMITTAL	AECOM SOUTHWEST Green Lett Edension	CIVIL EAST - VOLUME 3 TRACK TYPICAL SECTIONS	SHEET 62 OF	
p, 21 20		MEI ROPUGIAN	ISCIPLINE: SHEET NAME: TRACK E2-TRK-TYP-026	336	

- NOTE:

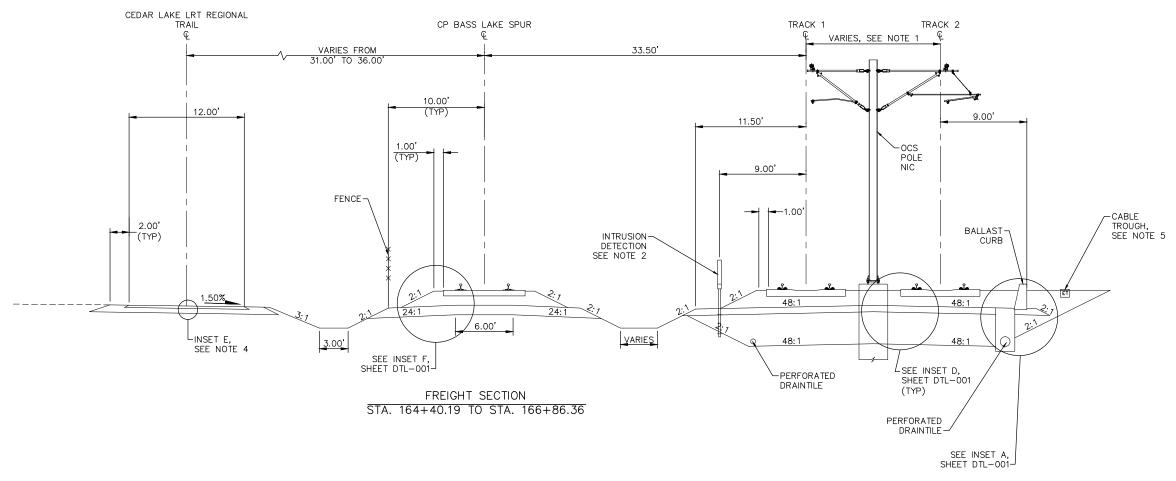
 1. TRACK CENTERS WIDEN FROM 14.00' TO 20.00'
 BETWEEN STA 2661+85.84 AND STA
 2664+03.49.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION
 DETAILS.

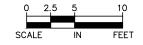
 3. SPECIAL TRACKWORK NOT ILLUSTRATED.

 4. FOR INSETS SEE CIVIL PLANS.

 5. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE
 TROUGH DETAILS.



TYPICAL SECTION STA 2661+60.00 TO STA 2664+03.49



2015 02:11 am V:^	NO. DATE BY CHECK DESIGN REVISION / SUBMITTAL	AECOM SOUTHWEST COREN LITE ENGINEER	CIVIL EAST - VOLUME 3 TRACK TYPICAL SECTIONS	SHEET 63 OF	
ep, 21 2		60% SUBMISSION - 09/28/15	SCIPLINE: SHEET NAME: E	2-TRK-TYP-027 336	

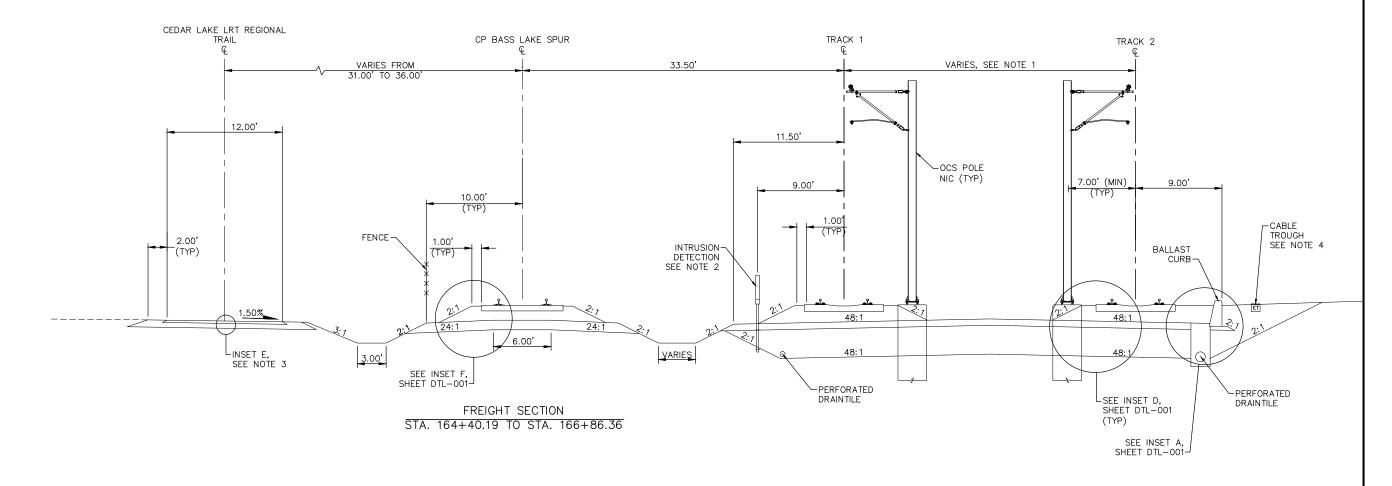
- NOTE:

 1. TRACK CENTERS WIDEN FROM 20.00' TO 30.37'
 BETWEEN STA 2664+03.49 AND STA
 2666+90.00.

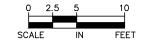
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION
 DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

- 3. FOR INSETS SEE CIVIL PLANS.
 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2664+03.49 TO STA 2666+90.00



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-028 TRACK

- NOTE:

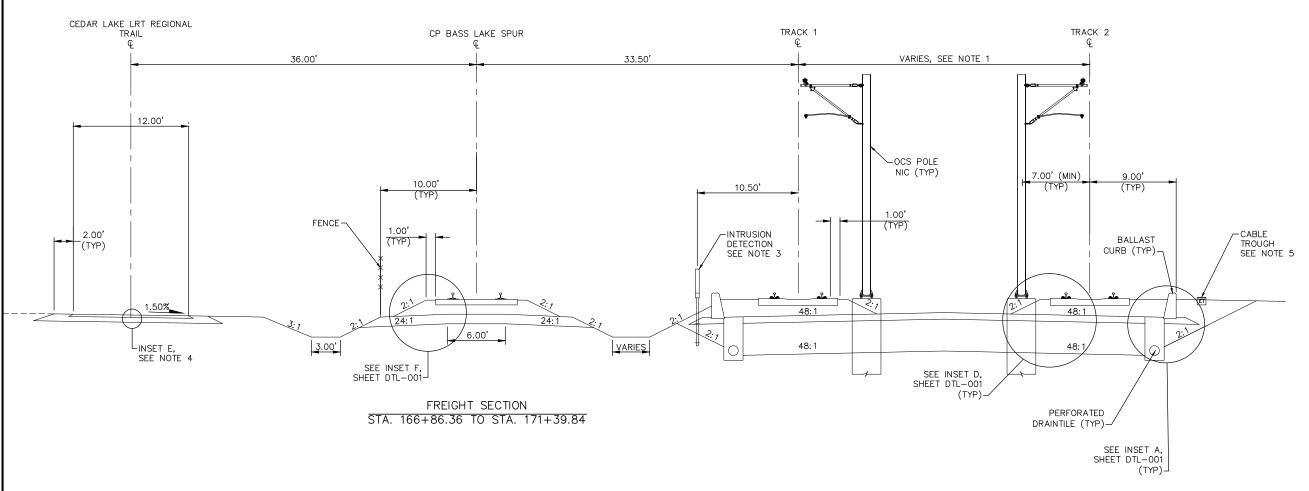
 1. TRACK CENTERS WIDEN FROM 30.37' TO 30.38'
 BETWEEN STA 2666+90.00 AND STA
 2667+05.77.

 2. SECTION DOES NOT ILLUSTRATE GRADE
 CROSSING AT WOODDALE AVE S. SEE TRACK
 PLANS AND DETAILS.

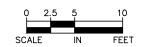
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION
 DETAILS.

 4. FOR INSETS SEE CIVIL PLANS.

 5. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE
 TROUGH DETAILS.



TYPICAL SECTION STA 2666+90.00 TO STA 2668+60.00

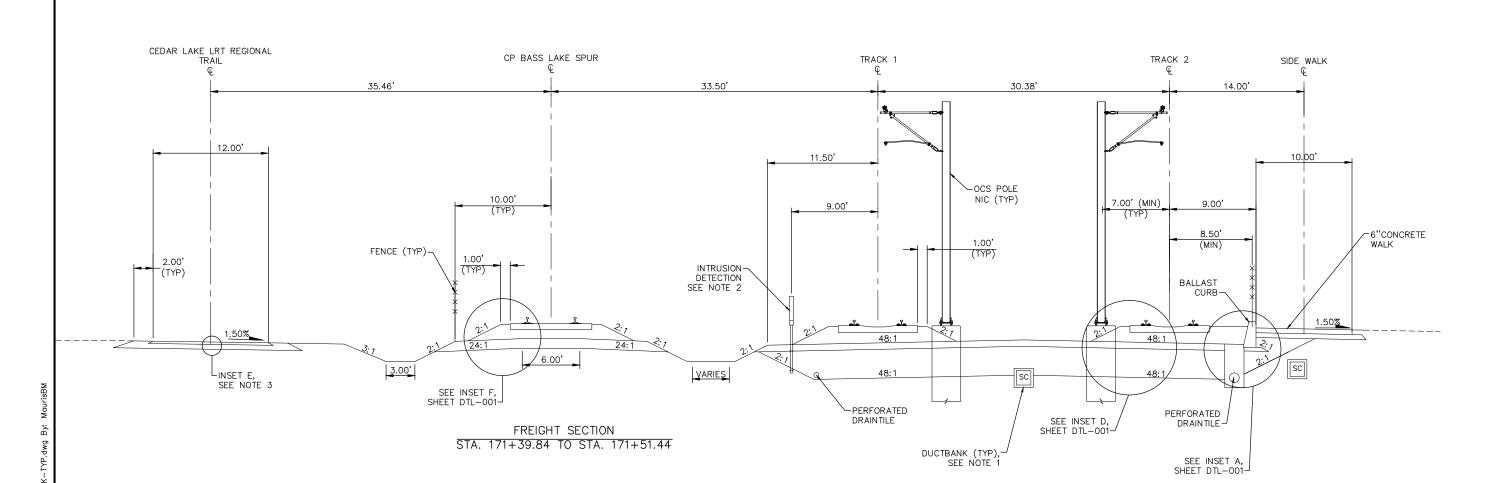


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							7			SOUTHWEST		I I PICAL SECTIONS	
	_								METROPOLITAN	Green Line LRT Extension			
	+								CORNCIT		DISCIPLINE:	SHEET NAME:	
-	+		-				60% SUBMISS	ION - 09/28/15			DISCIPLINE.	TRACK	E2-TRK-TYP-029

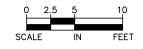
- NOTE:

 1. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
- 3. FOR INSETS SEE CIVIL PLANS.



TYPICAL SECTION STA 2668+60.00 TO STA 2668+71.60



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line Little Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-030 **TRACK**

- NOTE:

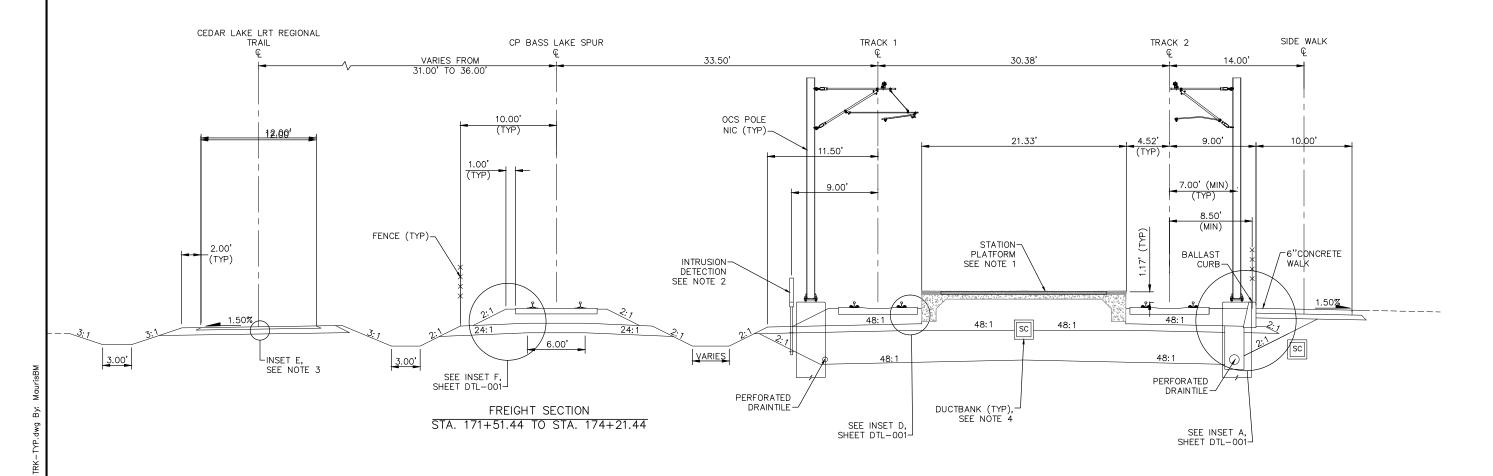
 1. SEE STATION PLANS FOR STATION PLATFORM DETAILS.

- DETAILS.

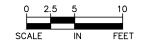
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

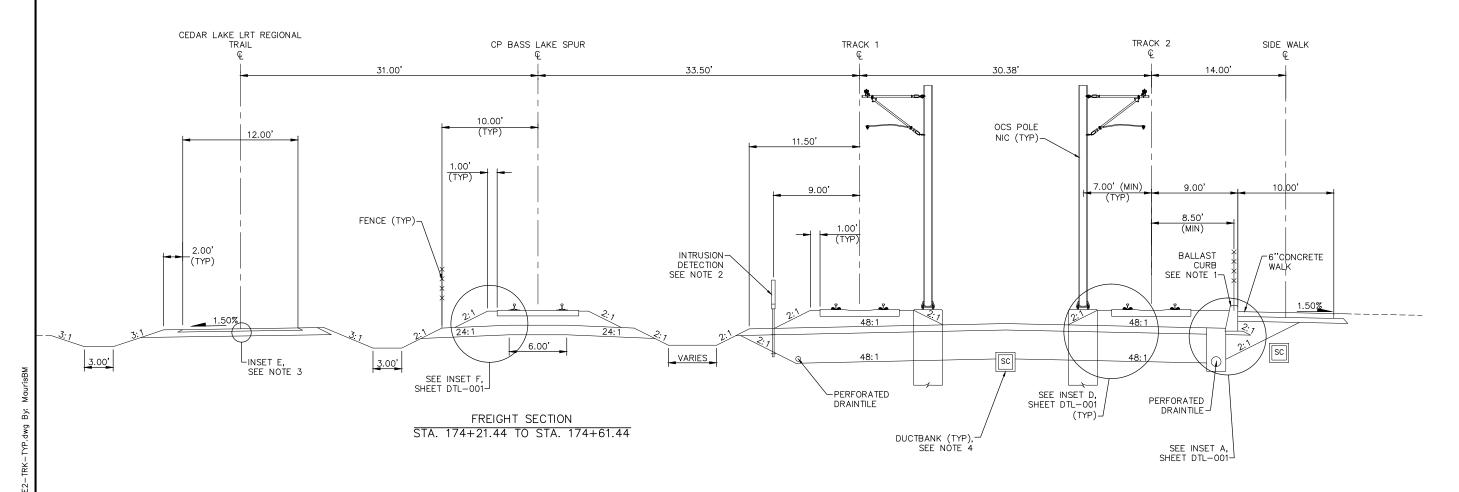


TYPICAL SECTION - WOODDALE STATION STA 2668+71.60 TO STA 2671+41.60

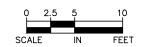


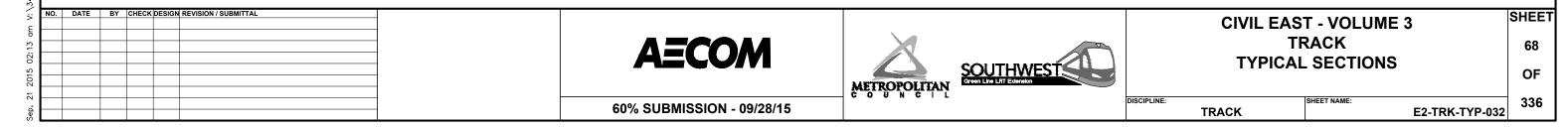
SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 67 **TYPICAL SECTIONS** SOUTHWEST: OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-031 TRACK

- NOTE:
 1. BALLAST CURB ENDS AT STA. 2671+71.60
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 3. FOR INSETS SEE CIVIL PLANS.
 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

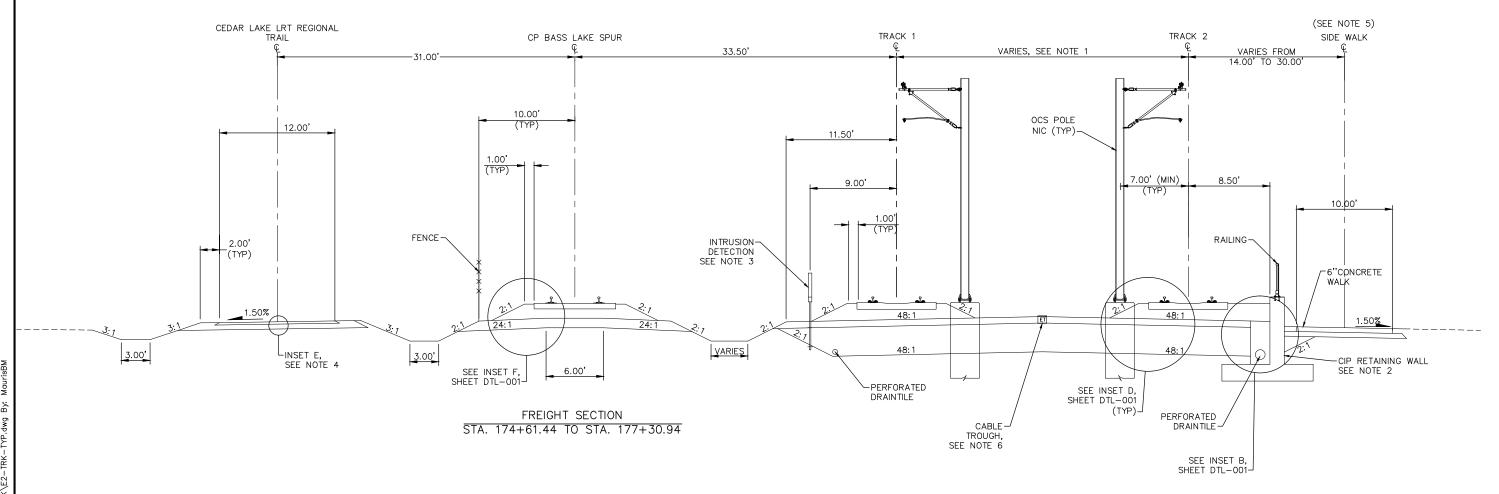


TYPICAL SECTION STA 2671+41.60 TO STA 2671+81.60

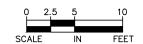




- NOTE:
 1. TRACK CENTERS NARROW FROM 30.38' TO 23.05' BETWEEN STA 2672+10.77 AND STA 2674+54.81.
- SEE RETAINING WALL PLANS FOR DETAILS.
 SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
- 4. FOR INSETS SEE CIVIL PLANS.
 5. SIDE WALK ENDS AT STA 2674+53.31.
 6. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



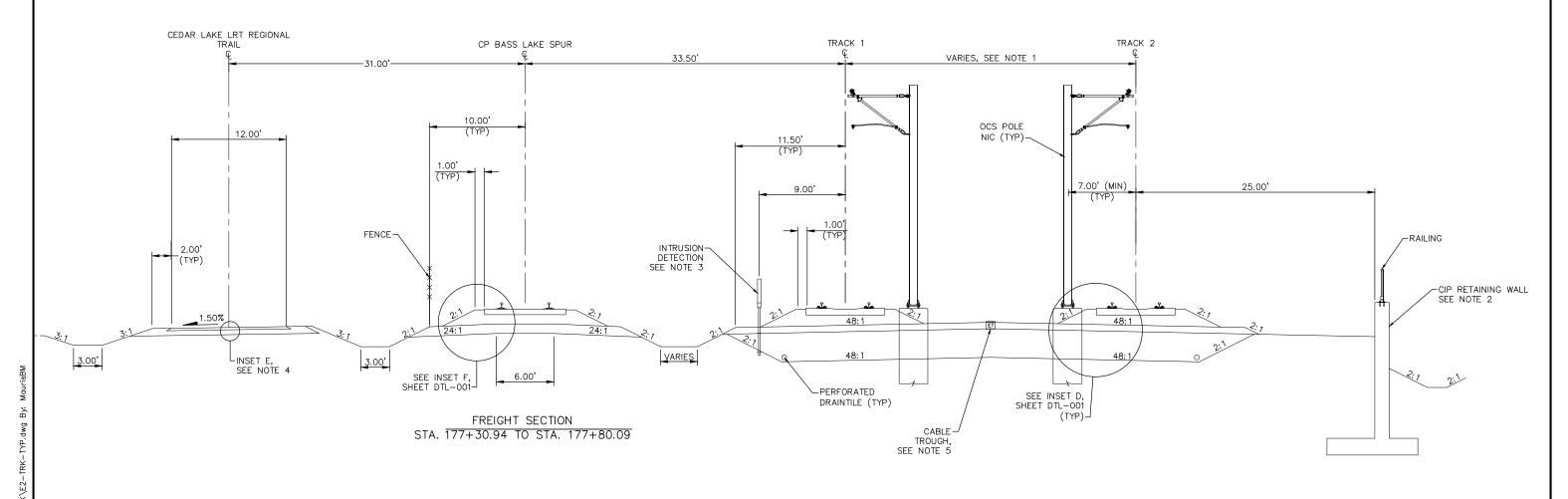
TYPICAL SECTION STA 2671+81.60 TO STA 2674+54.81



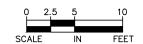
SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST: Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-033 TRACK

- NOTE:
 1. TRACK CENTERS NARROW FROM 23.05' TO 20.48' BETWEEN STA 2674+54.81 AND STA 2675+03.31.
 2. SEE RETAINING WALL PLANS FOR DETAILS.
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

- 4. FOR INSETS SEE CIVIL PLANS.
 5. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
- 6. TPSS NOT ILLUSTRATED.



TYPICAL SECTION STA 2674+54.81 TO STA 2675+03.31



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60% SUBMISSION - 09/28/						





CIVIL EAST - VOLUME 3
TRACK
TYPICAL SECTIONS

DISCIPLINE: SHEET NAME: **TRACK**

336 E2-TRK-TYP-034

- NOTE:

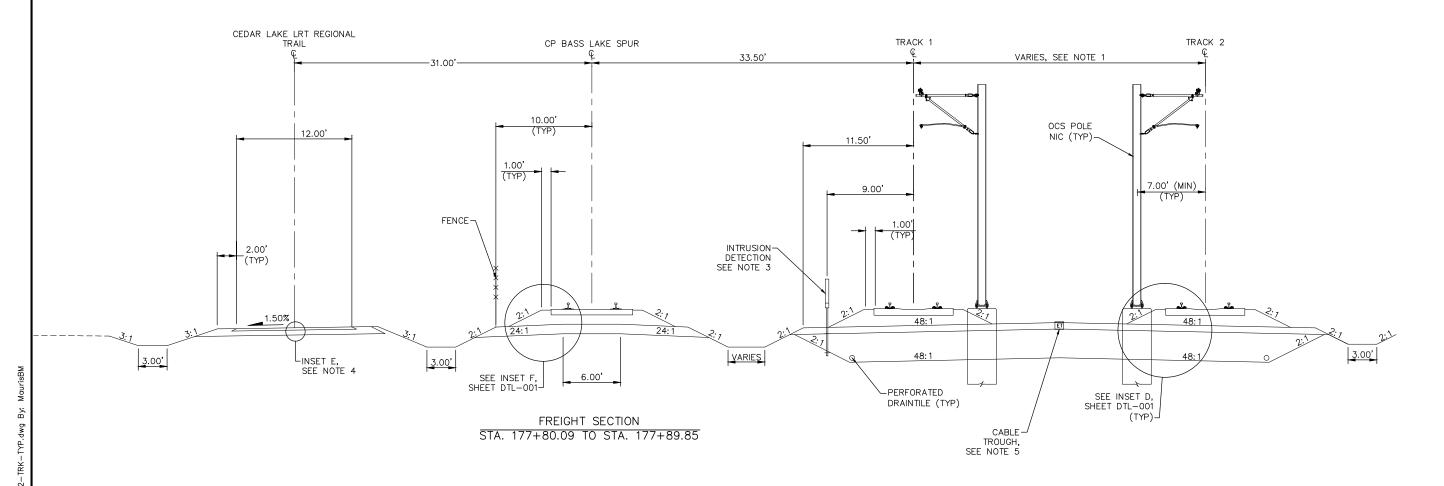
 1. TRACK CENTERS NARROW FROM 20.48' TO 20.00' BETWEEN STA 2675+03.31 AND STA 2675+13.05.

 2. SEE RETAINING WALL PLANS FOR DETAILS.

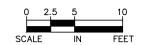
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

 4. FOR INSETS SEE CIVIL PLANS.

 5. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

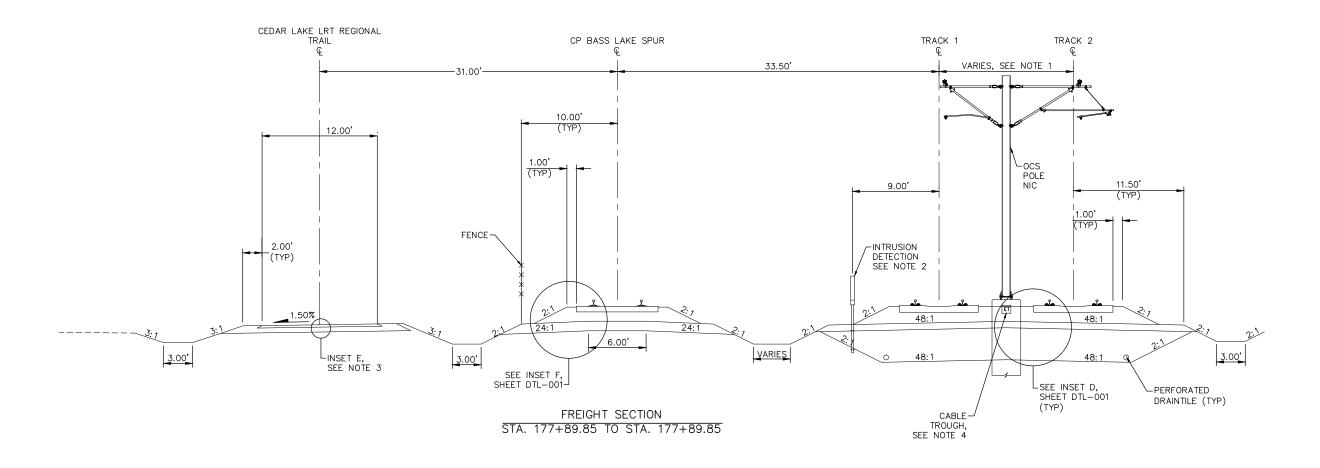


TYPICAL SECTION STA 2675+03.31 TO STA 2675+13.05

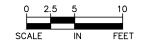


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15 02			AECOM	SOUTHWEST	TYPICA	_ SECTIONS	OF
1 201				METROPOLITAN COUNTRY OF THE LITT Extension			
Sep, 2			60% SUBMISSION - 09/28/15		DISCIPLINE: TRACK	SHEET NAME: E2-TRK-TYP-0	336

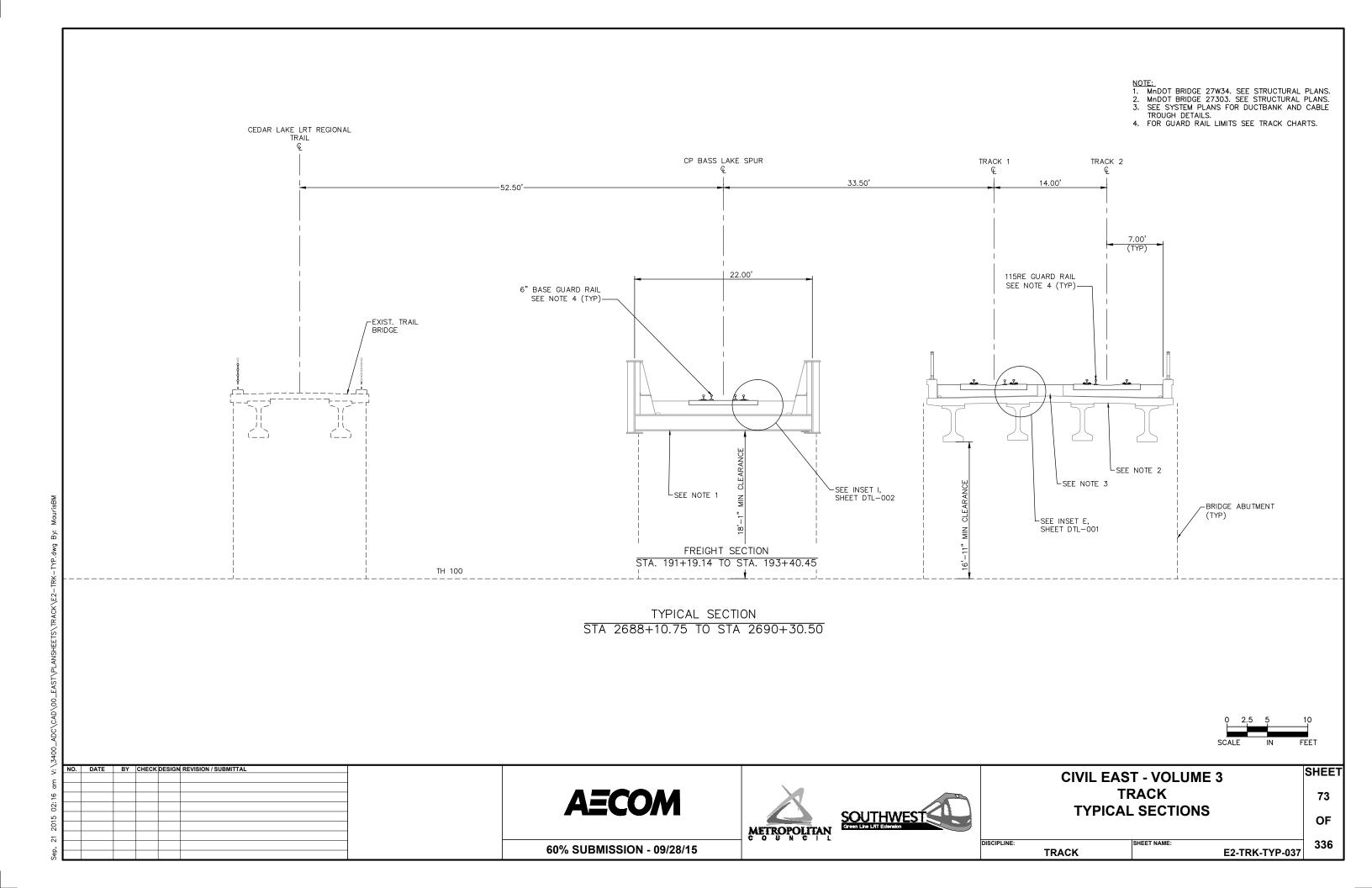
- NOTE:
 1. TRACK CENTERS NARROW FROM 20.00' TO 14.00' BETWEEN STA 2675+13.05 AND STA
- 2677+30.69.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
- 3. FOR INSETS SEE CIVIL PLANS.
 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2675+13.05 TO STA 2688+10.75



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 72 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-036 **TRACK**



- NOTE:

 1. TRACK CENTERS WIDEN FROM 14.00' TO 20.00' BETWEEN STA 2705+85.84 AND STA 2708+03.49.

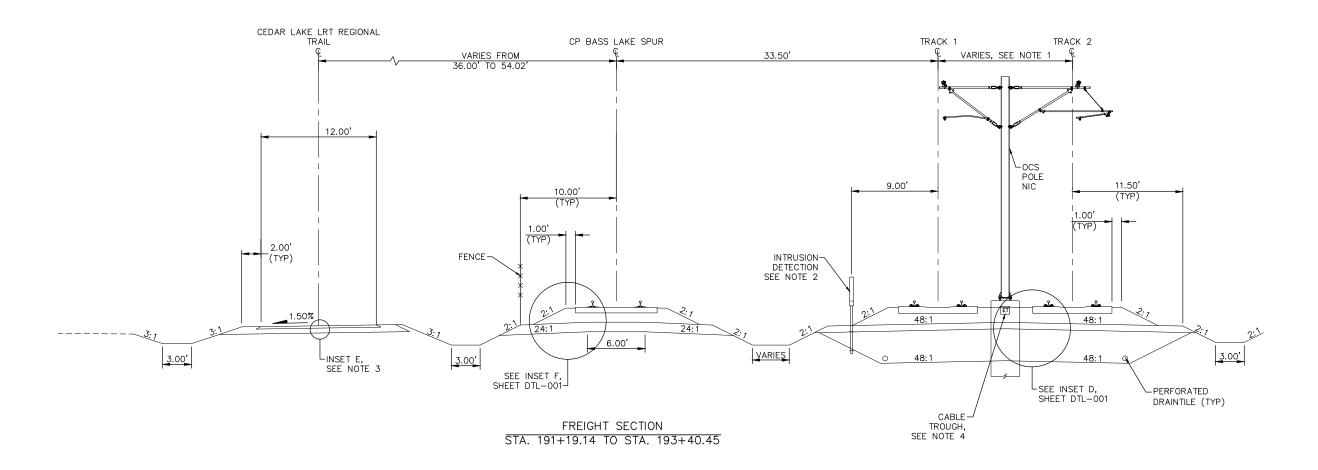
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

 3. FOR INSERS SEE CIVIL PLANS.

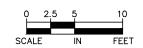
- JETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2690+30.50 TO STA 2708+03.49



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 74 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-038 **TRACK**

- NOTE:

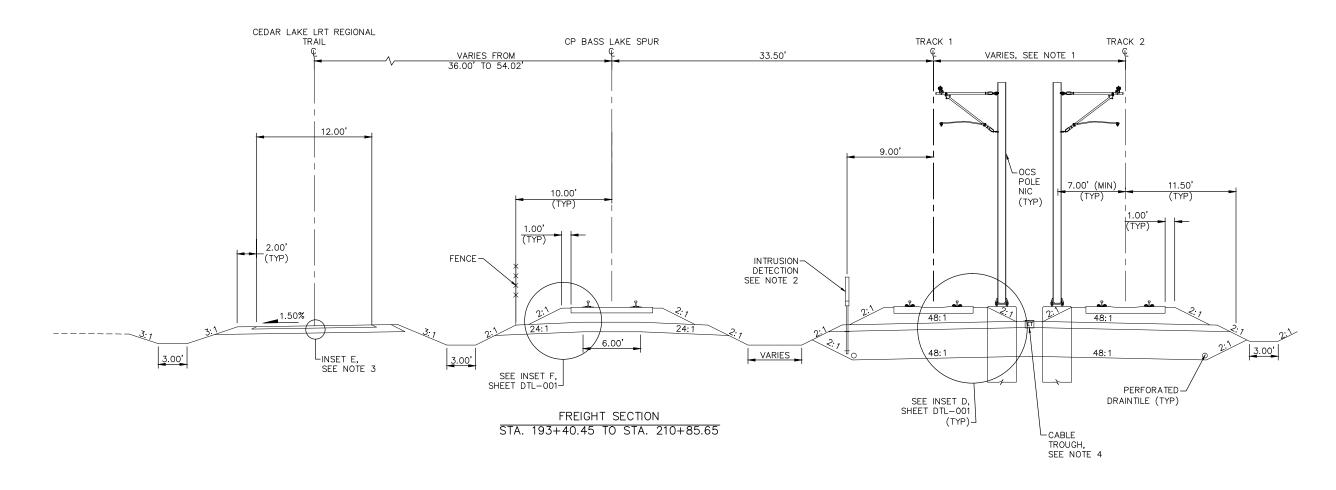
 1. TRACK CENTERS WIDEN FROM 20.00' TO 30.38'
 BETWEEN STA 708+03.49 AND STA 2711+05.77.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

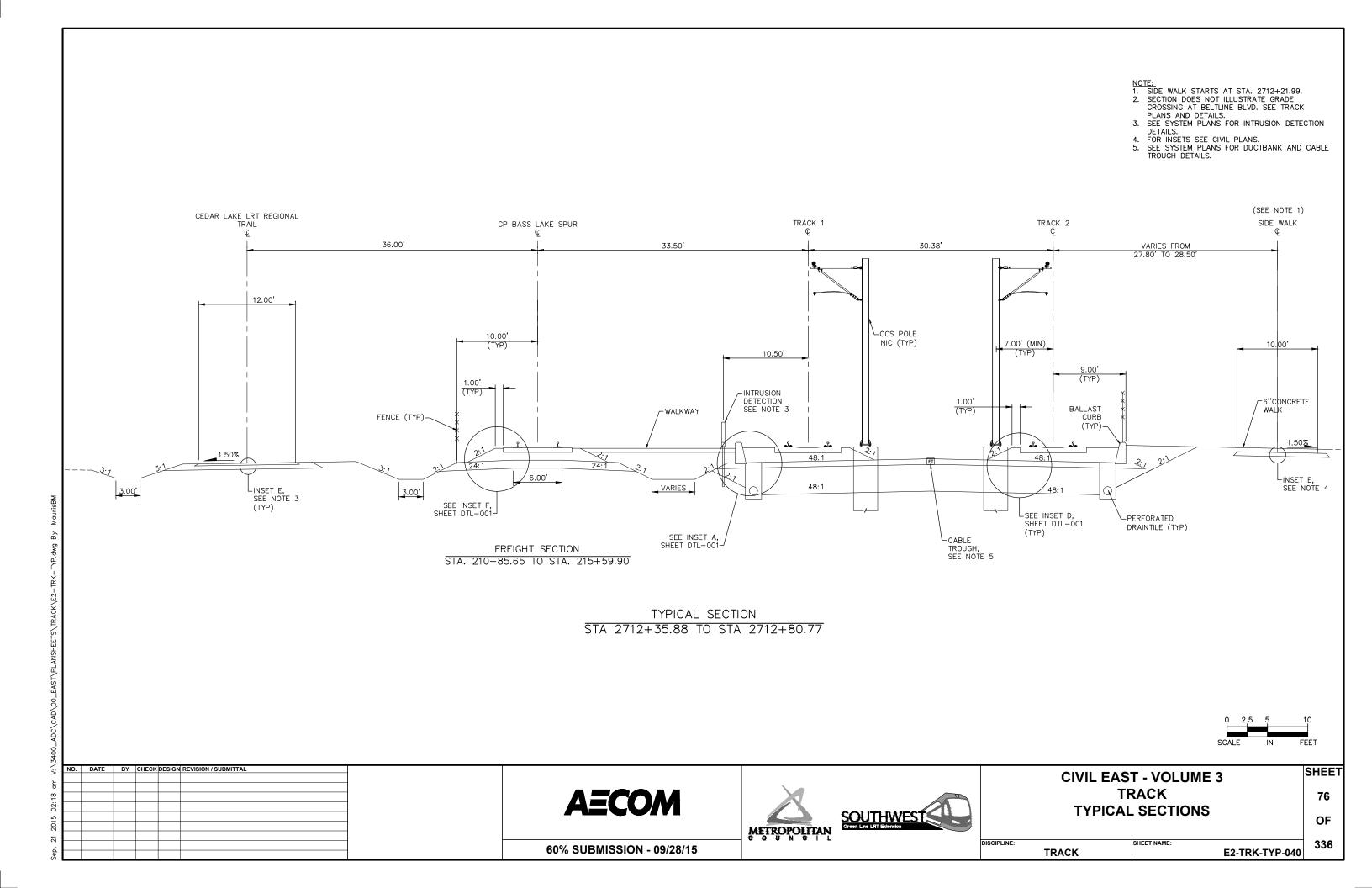
 5. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT BELTLINE BLVD. SEE TRACK PLANS AND DETAILS.

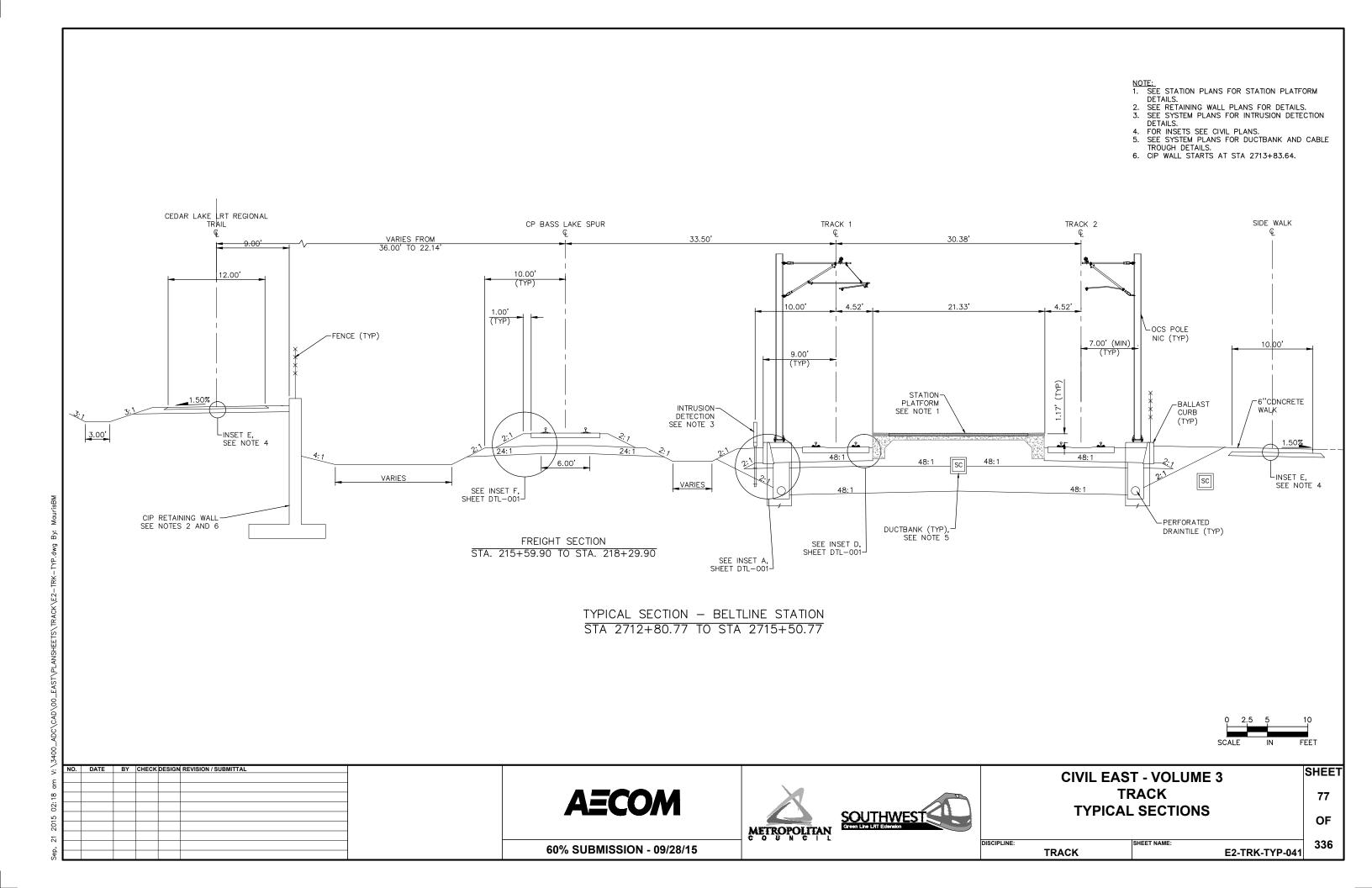


TYPICAL SECTION STA 2708+03.49 TO STA 2712+35.88

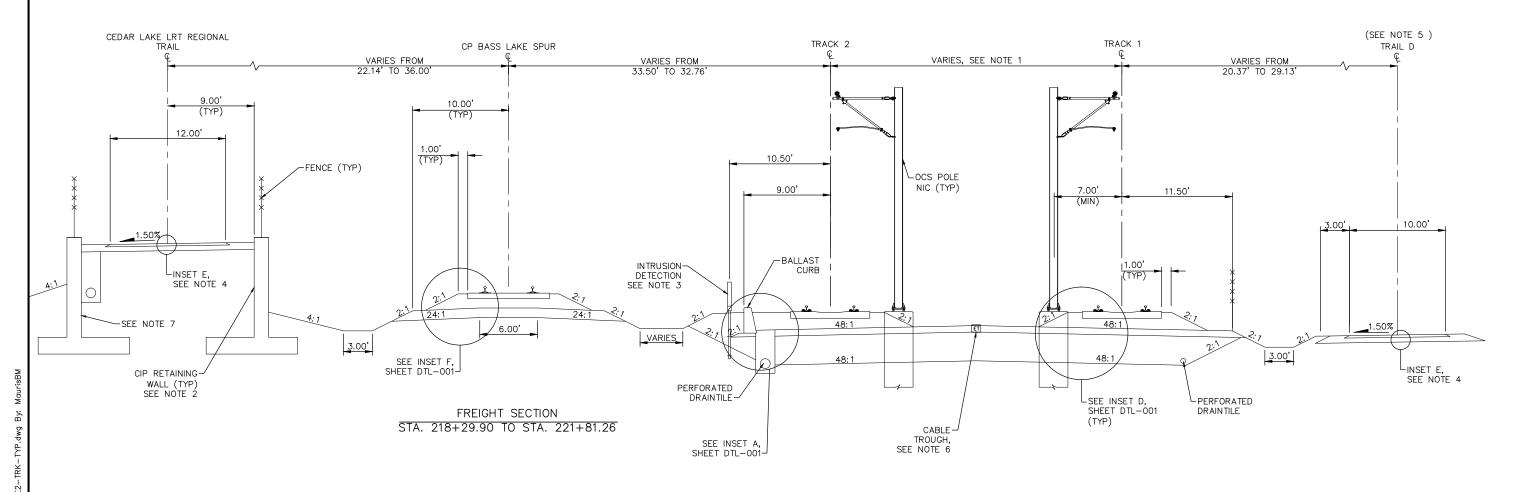


2015 02:17 am V:\	NO.	DATE	BY CHECK DESIGN REVISION / SUBMITTAL	AECOM	METROPOLITAN SOUTHWEST Green Line Little Extension		CIVIL EAST - VOLUME TRACK TYPICAL SECTIONS	3	SHEET 75 OF
Sep, 2				60% SUBMISSION - 09/28/15		DISCIPLINE:	TRACK	E2-TRK-TYP-039	336

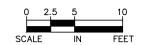




- NOTE:
 1. TRACK CENTERS NARROW FROM 30.38' TO 20.00' BETWEEN STA 2716+22.40 AND STA 2719+00.00.
- 2. SEE RETAINING WALL PLANS FOR DETAILS.
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
- 4. FOR INSETS SEE CIVIL PLANS.
 5. SIDE WALK ENDS AT 2715+90.77 AND BECOMES TRAIL D.
- 6. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
 7. RETAINING WALL STARTS AT STA 2717+23.23.



TYPICAL SECTION STA 2715+50.77 TO STA 2719+00.00



AECOM





CIVIL EAST - VOLUME 3 TRACK TYPICAL SECTIONS

78 OF

SHEET

336

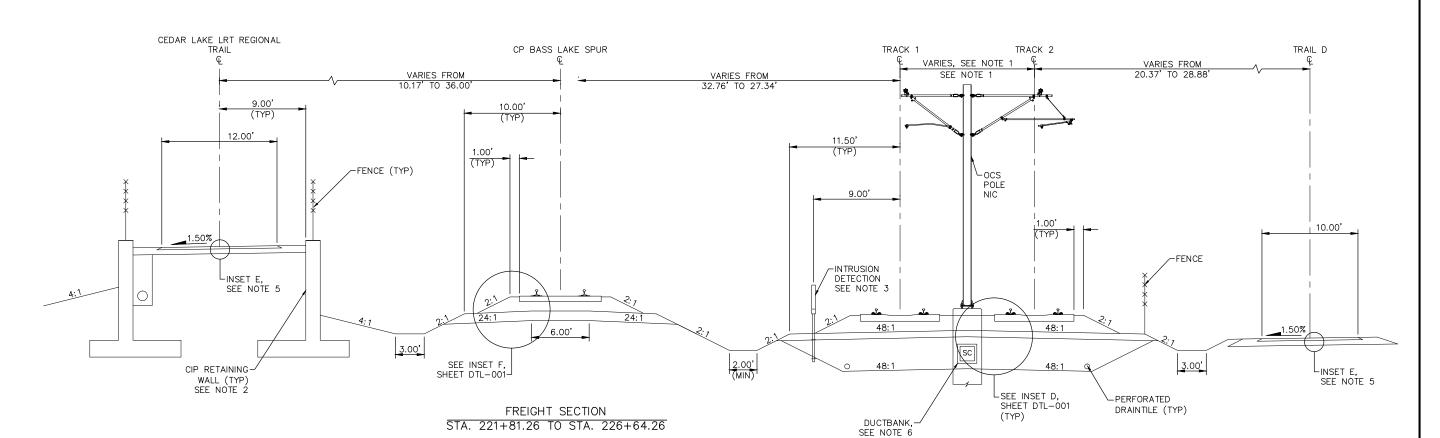
DISCIPLINE: E2-TRK-TYP-042 TRACK

60% SUBMISSION - 09/28/15

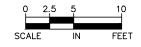
- NOTE:
 1. TRACK CENTERS NARROWS FROM 20.00' TO 14.00' BETWEEN STA 2719+00.00 AND STA 2720+98.21.
- 2. SEE RETAINING WALL PLANS FOR DETAILS.
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

- 4. SPECIAL TRACKWORK NOT ILLUSTRATED.
 5. FOR INSETS SEE CIVIL PLANS.
 6. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE
- TROUGH DETAILS.

 7. RETAINING WALL ENDS AT STA



TYPICAL SECTION STA 2719+00.00 TO STA 2719+52.69

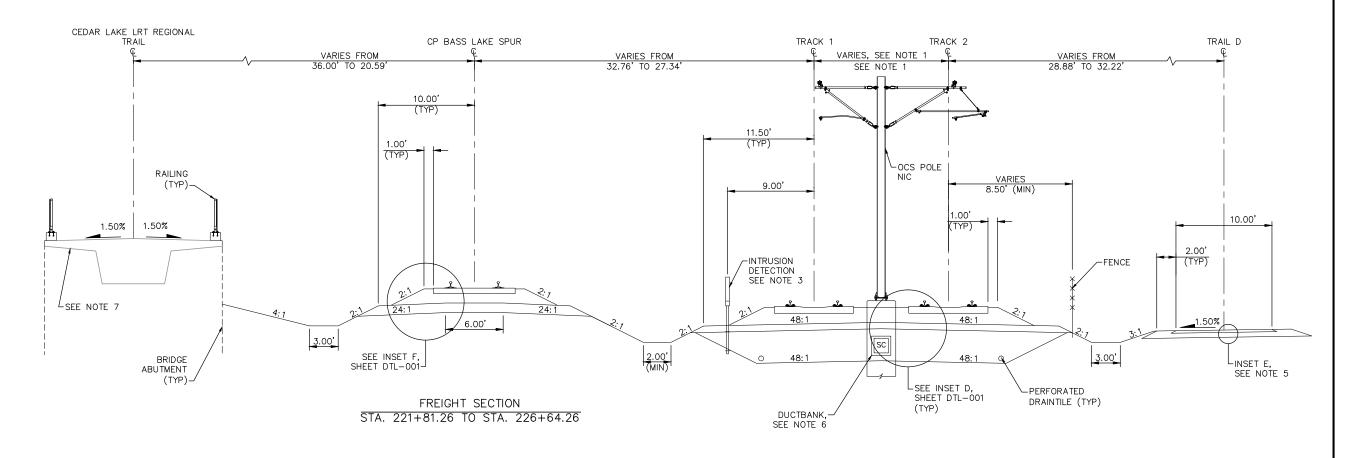


SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 79 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-043 TRACK

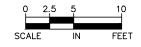
- NOTE:
 1. TRACK CENTERS NARROWS FROM 20.00' TO 14.00' BETWEEN STA 2719+00.00 AND STA 2720+98.21.
- 2. SEE RETAINING WALL PLANS FOR DETAILS.
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

- 4. SPECIAL TRACKWORK NOT ILLUSTRATED.
 5. FOR INSETS SEE CIVIL PLANS.
 6. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE
- TROUGH DETAILS.

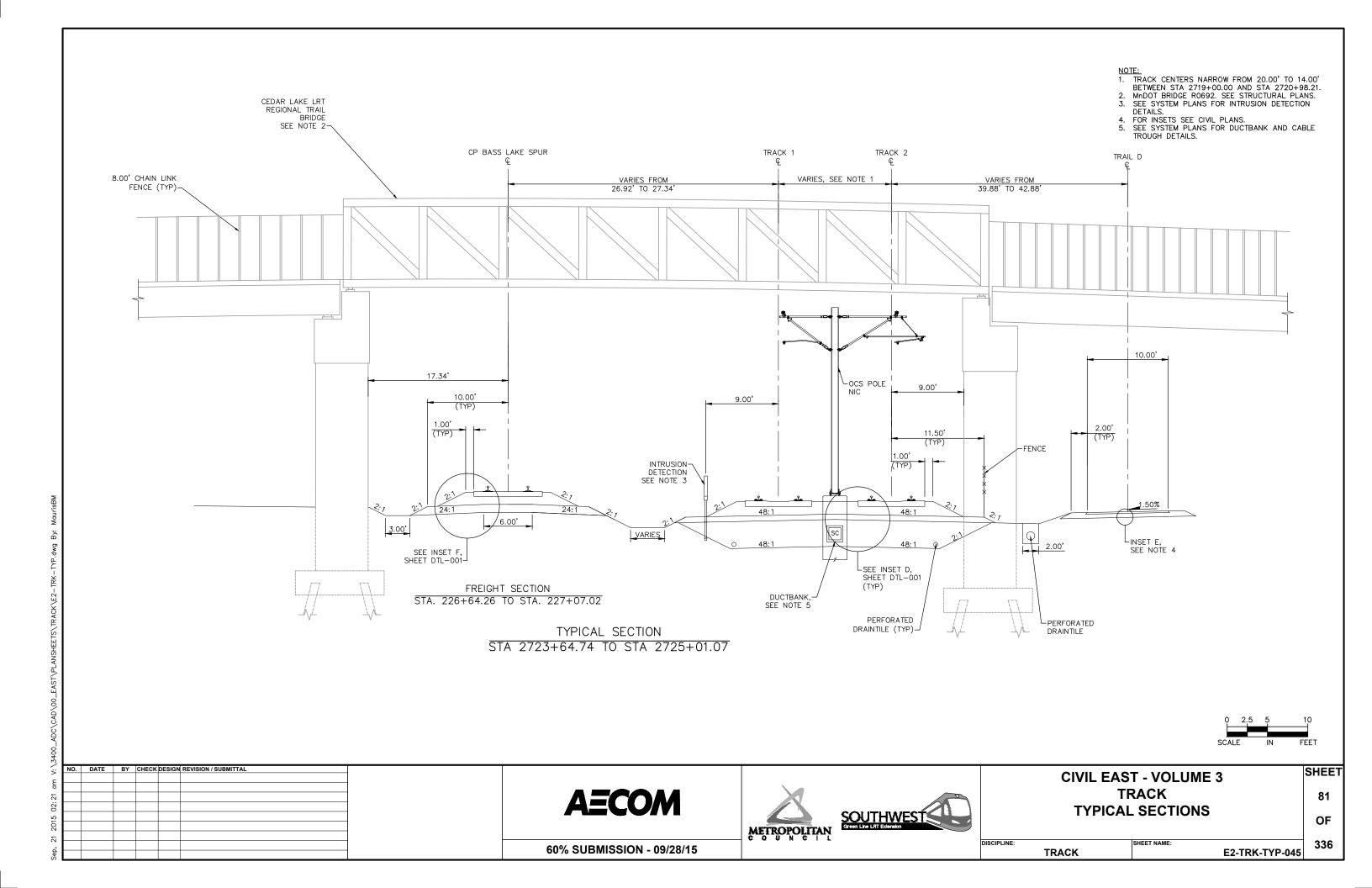
 7. MnDOT BRIDGE R0692. SEE STRUCTURAL PLANS.



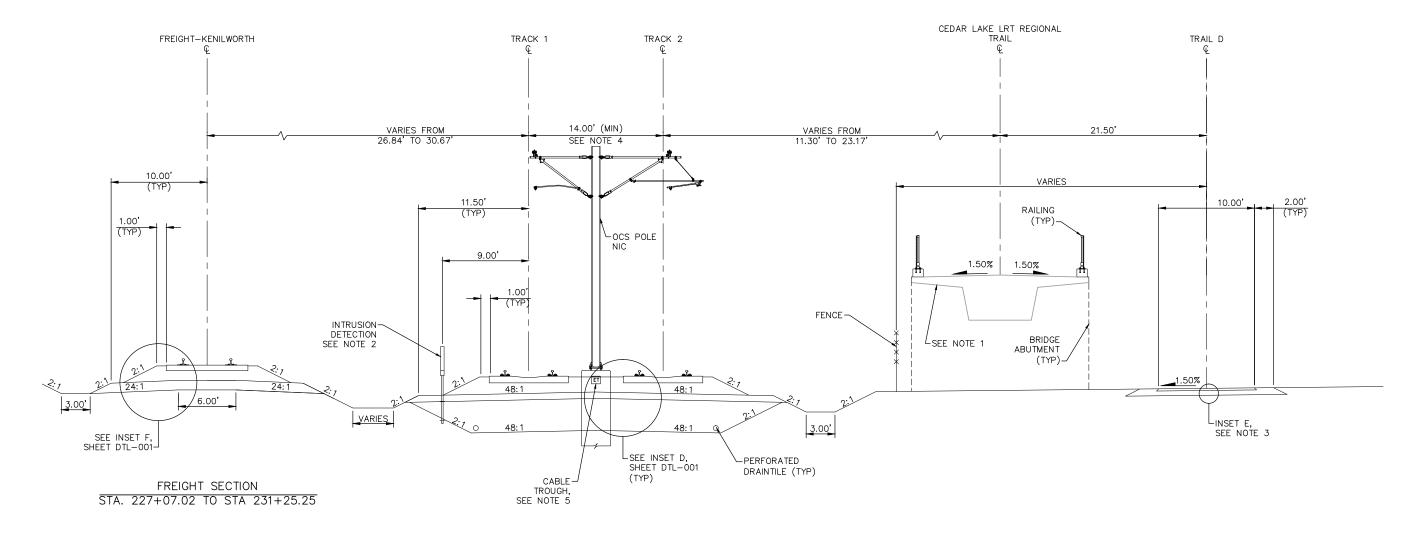
TYPICAL SECTION STA 2719+52.69 TO STA 2723+64.74



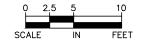
SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-044 TRACK



- NOTE:
 1. MnDOT BRIDGE R0692. SEE STRUCTURAL PLANS.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 3. FOR INSETS SEE CIVIL PLANS.
 4. TRACK CENTERS VARY IN CURVE E2—211. SEE TRACK PLANS.
 5. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

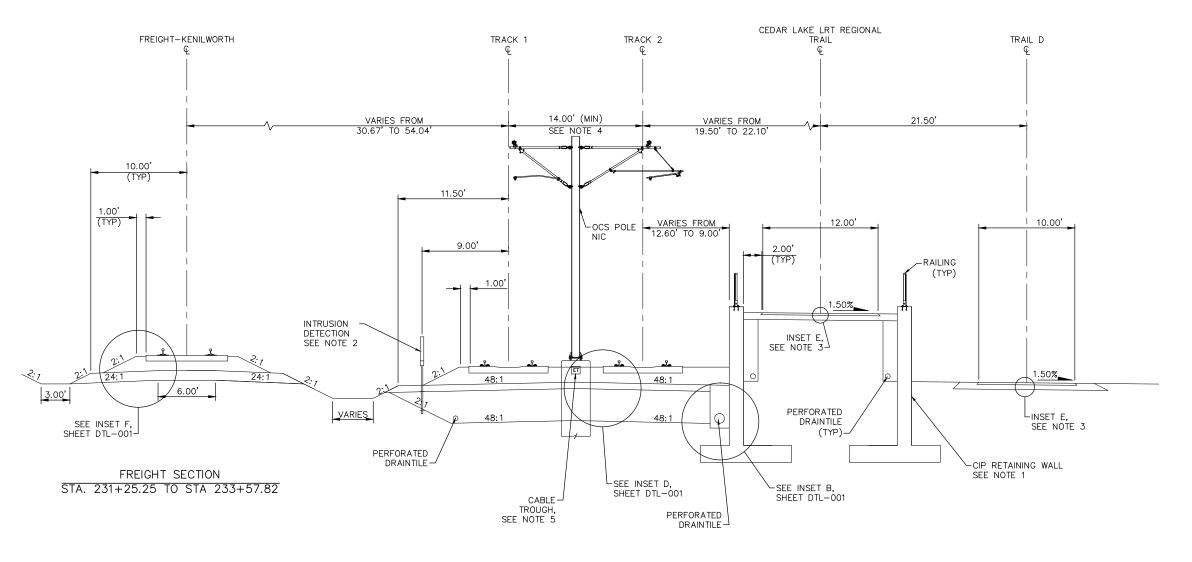


TYPICAL SECTION STA 2725+01.07 TO STA 2728+51.83

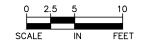


SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-046 TRACK

- NOTE:
 1. SEE RETAINING WALL PLANS FOR DETAILS.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 3. FOR INSETS SEE CIVIL PLANS.
 4. TRACK CENTERS VARY IN CURVE E2—211. SEE TRACK PLANS.
 5. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2728+51.83 TO STA 2730+64.35



; E	NO. D	DATE BY CHECK DESIGN REVISION / SUBMITTAL			CIVIL EAS	ST - VOLUME 3	SHEET
: 22 a			AECOM			RACK	83
15 02			AECOM	SOUTHWEST	TYPICA	L SECTIONS	OF
21 20				METROPOLITAN Creen Line Lift Extension		1	
de de			60% SUBMISSION - 09/28/15		TRACK	SHEET NAME: E2-TRK-TYP-04	7 336

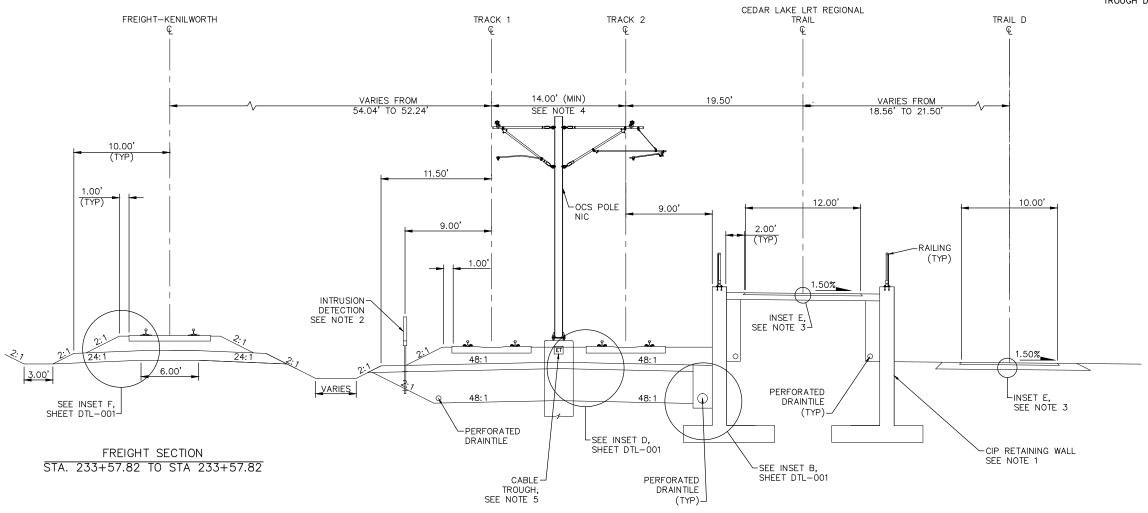
- NOTE:

 1. SEE RETAINING WALL PLANS FOR DETAILS.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
- JE FAILS.

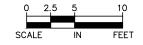
 3. FOR INSETS SEE CIVIL PLANS.

 4. TRACK CENTERS VARY IN CURVE E2—211. SEE TRACK PLANS.

 5. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE
- TROUGH DETAILS.



TYPICAL SECTION STA 2730+64.35 TO STA 2731+05.50



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST Green Line Little Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-048 **TRACK**

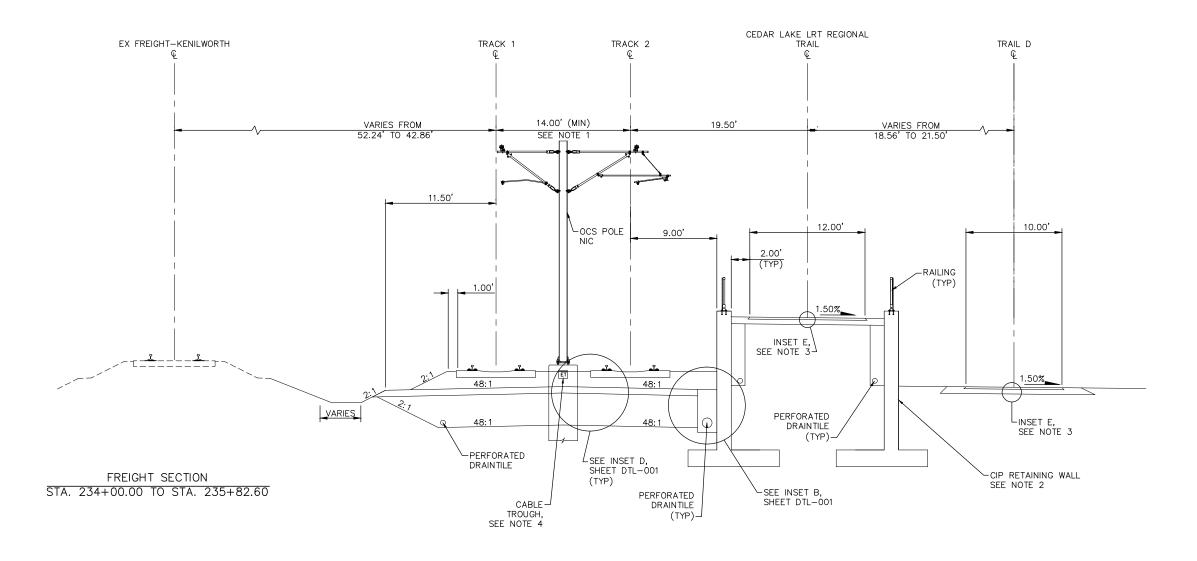
- NOTE:

 1. TRACK CENTERS VARY IN CURVE E2-211. SEE TRACK PLANS.

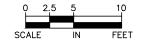
 2. SEE RETAINING WALL PLANS FOR DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2731+05.50 TO STA 2732+83.73



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST: OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-049 **TRACK**

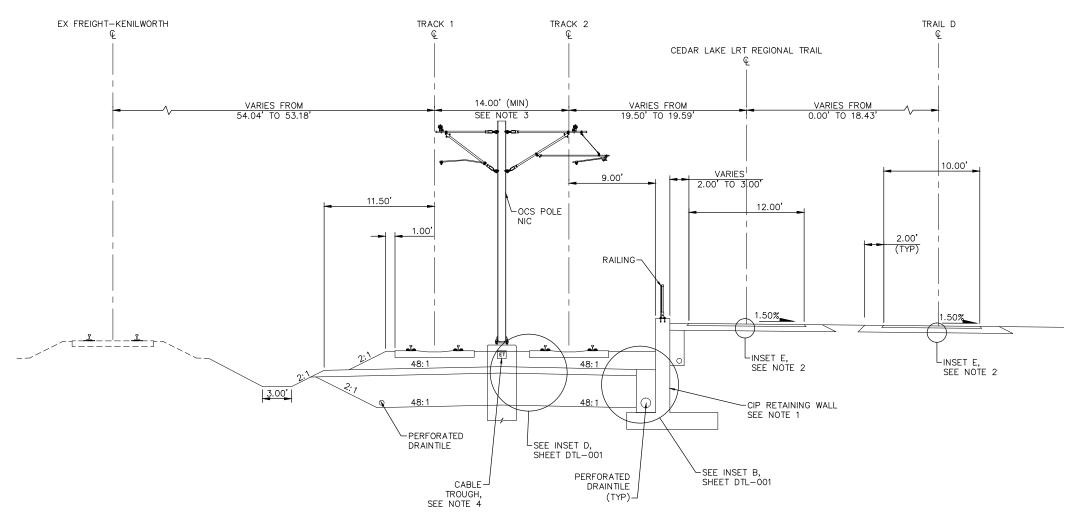
- NOTE:

 1. SEE RETAINING WALL PLANS FOR DETAILS.

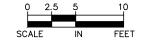
 2. FOR INSETS SEE CIVIL PLANS.

 3. TRACK CENTERS VARY IN CURVE E2-211. SEE TRACK PLANS.

 4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2732+83.73 TO STA 2734+28.28

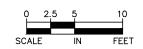


; <u>№</u> E	IO. DATE BY CHECK DESIGN REVISION / SUBMITTAL			CIVIL EAST - VOLUME 3	SHEET
2:24 a		AECOM		TRACK	86
015 02		ALCOM	SOUTHWEST Green to Left Entergen	TYPICAL SECTIONS	OF
, 21 2		60% SUBMISSION - 09/28/15	METROPOLITAN C 0 U N C 1 L	DISCIPLINE: SHEET NAME: TRACK SHEET NAME: E2-TRK-TYP-050	336

EX FREIGHT-KENILWORTH TRACK 1 TRACK 2 CEDAR LAKE LRT REGIONAL TRAIL 14.00' (MIN) VARIES FROM 52.90' TO 51.40' VARIES FROM 18.15' TO 18.10' SEE NOTE 3 VARIES FROM 9.10' TO 11.71' 11.50' 12.00' OCS POLE 9.00' 2.00' RAILING-INTRUSION— DETECTION SEE NOTE 5 1.50%___ L_{INSET E,} SEE NOTE 2 48:1 48:1 -CIP RETAINING WALL SEE NOTE 1 3.00' 48:1 LSEE INSET D, SHEET DTL-001 PERFORATED DRAINTILE --SEE INSET B, SHEET DTL-001 PERFORATED DRAINTILE (TYP) CABLE — TROUGH, SEE NOTE 4

TYPICAL SECTION

STA 2734+28.28 TO STA 2734+80.00



NOTE:

1. SEE RETAINING WALL PLANS FOR DETAILS.

2. FOR INSETS SEE CIVIL PLANS.

3. TRACK CENTERS VARY IN CURVE E2—211. SEE TRACK PLANS.

4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

5. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

AECOM

CIVIL EAST - VOLUME 3
TRACK
TYPICAL SECTIONS

OF

ON SUBMISSION - 09/28/15

CIVIL EAST - VOLUME 3
TRACK
TYPICAL SECTIONS

OF

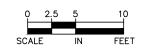
336

EX FREIGHT-KENILWORTH TRACK 1 TRACK 2 CEDAR LAKE LRT REGIONAL TRAIL VARIES FROM 51.40' TO 48.85' 14.00' (MIN) VARIES FROM 18.10' TO 21.16' SEE NOTE 3 11.50' OCS POLE 9.00' 12.00' BALLAST CURB-INTRUSION— DETECTION SEE NOTE 5 1.50%__ 48:1 48:1 LINSET E, SEE NOTE 2 3.00' 48:1 LSEE INSET D, SHEET DTL-001 PERFORATED DRAINTILE --SEE INSET A, SHEET DTL-001 CABLE — TROUGH, SEE NOTE 4 PERFORATED DRAINTILE

TYPICAL SECTION

STA 2734+80.00 TO STA 2735+52.41

STA 2746+00.00 TO STA 2747+00.00



NOTE:

1. SEE RETAINING WALL PLANS FOR DETAILS.

2. FOR INSETS SEE CIVIL PLANS.

3. TRACK CENTERS VARY IN CURVE E2—211. SEE TRACK PLANS.

4. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

5. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

AECOM

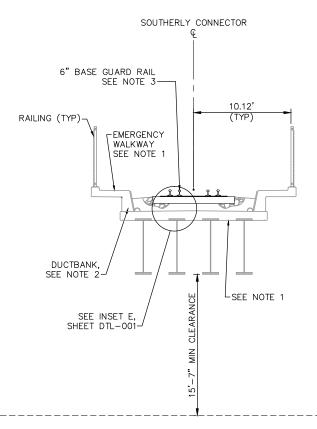
CIVIL EAST - VOLUME 3
TRACK
TYPICAL SECTIONS

60% SUBMISSION - 09/28/15

CIVIL EAST - VOLUME 3
TRACK
TYPICAL SECTIONS

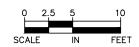
OF
336

- NOTE:
 1. MnDOT BRIDGE R0691. SEE STRUCTURAL PLANS.
 2. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
 3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



LRT REGIONAL TRACK

FREIGHT SECTION STA 147+55.32 TO STA 147+99.17



SHEET

AECOM





CIVIL EAST - VOLUME 3
TRACK
TYPICAL SECTIONS

OF SHEET NAME: 336

60% SUBMISSION - 09/28/15

DISCIPLINE: **TRACK**

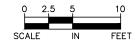
E2-TRK-TYP-053

NOTE:

1. SEE RETAINING WALL PLANS FOR DETAILS.
2. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

SOUTHERLY CONNECTOR 6" BASE GUARD RAIL SEE NOTE 2— VARIES 8.50' (MIN) 10.00 ∕-RAILING 24: 1 6.00' (TYP) PERFORATED --DRAINTILE -CIP RETAINING WALL SEE NOTE 1 SEE INSET B, SHEET DTL-001-

> FREIGHT SECTION STA 147+99.17 TO STA 150+21.52



AECOM





CIVII	LEAST - VOLUME 3
	TRACK
TY	PICAL SECTIONS

OF

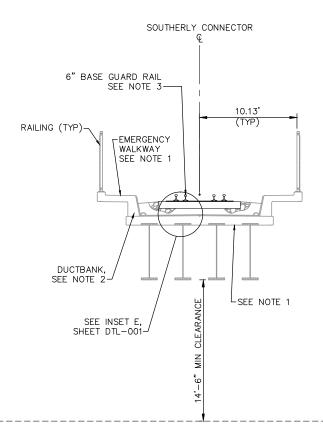
SHEET

336

DISCIPLINE: SHEET NAME: E2-TRK-TYP-054 **TRACK**

60% SUBMISSION - 09/28/15

- NOTE:
 1. MnDOT BRIDGE 27C14. SEE STRUCTURAL PLANS.
 2. SEE SYSTEM PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
 3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



OXFORD STREET

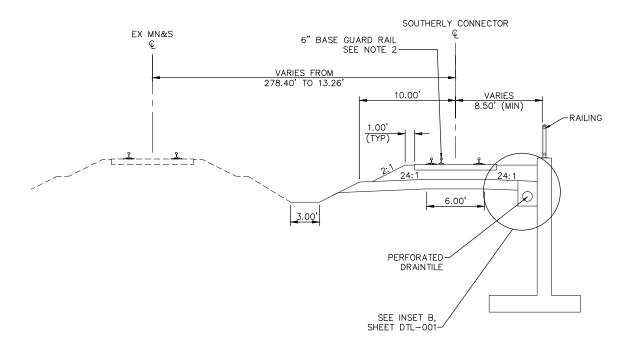
FREIGHT SECTION STA 150+21.52 TO STA 151+27.65



SHEET **CIVIL EAST - VOLUME 3 AECOM TRACK TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E2-TRK-TYP-055 **TRACK**

NOTE:

1. SEE RETAINING WALL PLANS FOR DETAILS.
2. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



FREIGHT SECTION STA 151+27.65 TO STA 158+48.62



AECOM





CIVIL EAST - VOLUME 3
TRACK
TYPICAL SECTIONS

DISCIPLINE: SHEET NAME: E2-TRK-TYP-056 **TRACK**

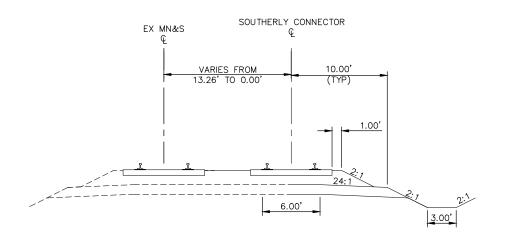
60% SUBMISSION - 09/28/15

336

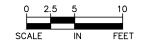
SHEET

OF

NOTE: 1. SPECIAL TRACKWORK IS NOT ILLUSTRATED.



FREIGHT SECTION STA 158+48.62 TO STA 160+83.67



SHEET

336

AECOM



CIVIL EAST - VOLUME 3 TRACK TYPICAL SECTIONS

93 OF

DISCIPLINE:

E2-TRK-TYP-057 **TRACK**

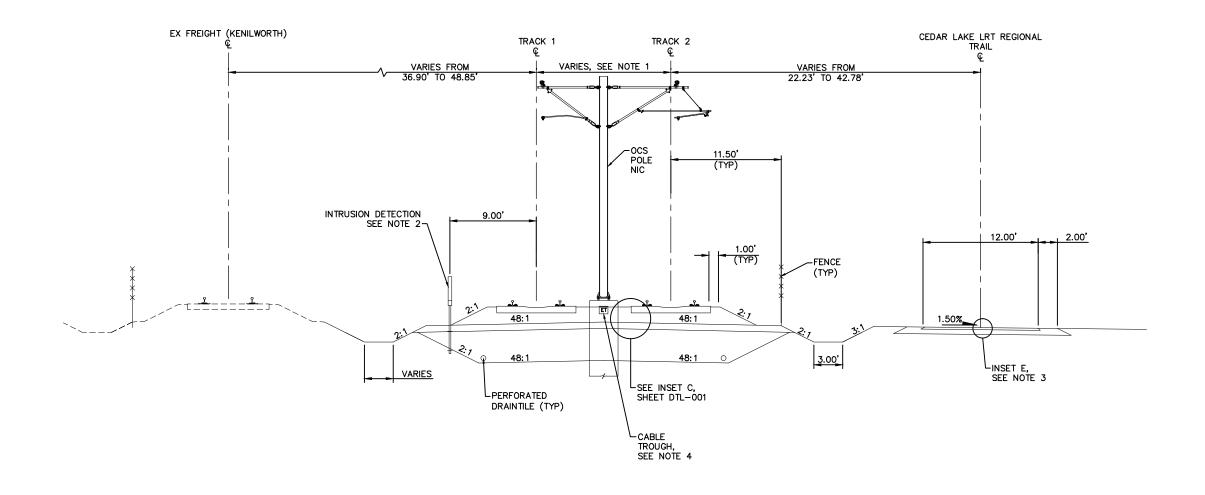
- NOTE:

 1. TRACK CENTERS WIDEN FROM 14.00' TO 14.82' BETWEEN STA 2748+98.18 AND STA 2753+50.00 .

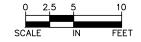
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2746+00.00 TO STA 2753+50.00



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST: OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E3-TRK-TYP - 001 **TRACK**

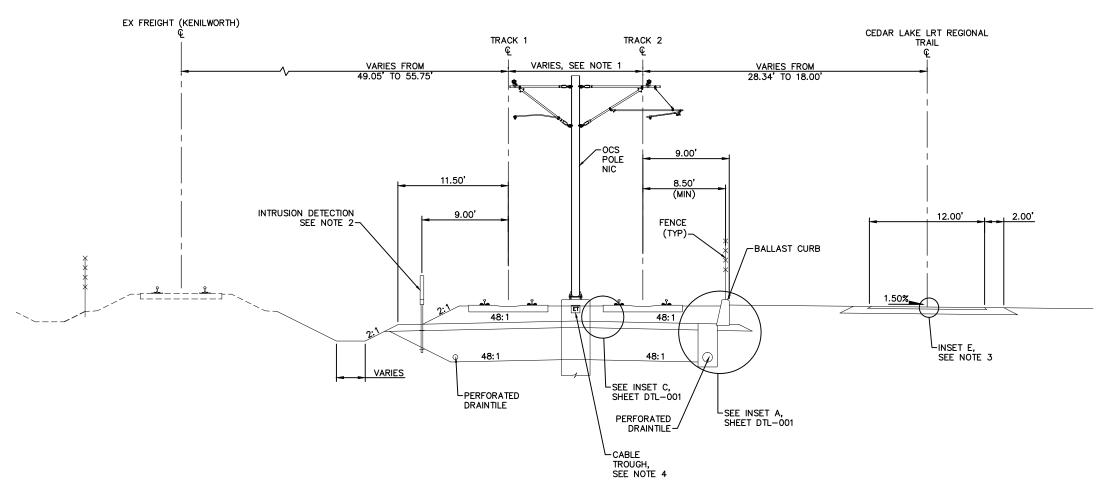
- NOTE:

 1. TRACK CENTERS WIDEN FROM 14.82' TO 17.83' BETWEEN STA 2753+50.00 AND STA 2760+77.23 .

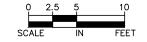
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2753+50.00 TO STA 2760+77.23



ź:	NO.	DATE I	BY CHEC	DESIGN	REVISION / SUBMITTAL					CIVIL EAST - VOLUME 3	SHEE
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29							A=COM	X		TRACK	95
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15	\rightarrow						2 — 4 4 2 1 1 1	SOUTHWEST		THIOAL OLOHOU	OF
50								METROPOLITAN Green Line Litt Extension			
21	_						000/ 01/04/00/04/	EGRNEIT	DISCIPLINE:	SHEET NAME:	336
ge							60% SUBMISSION - 09/28/15			TRACK E3-TRK-TY	P - 002

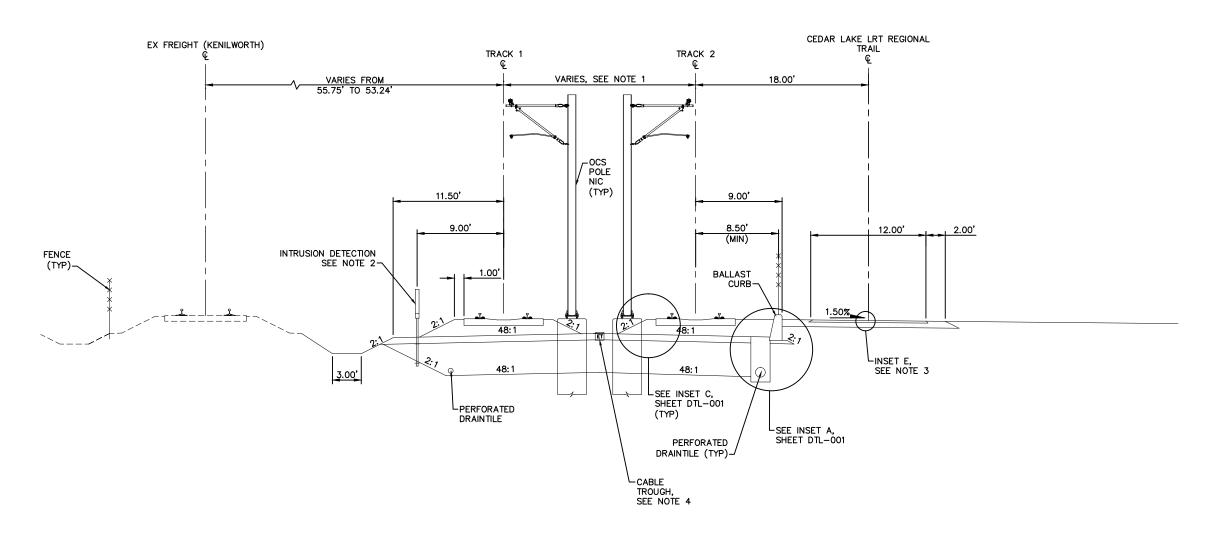
- NOTE:

 1. TRACK CENTERS WIDEN FROM 17.83' TO 20.00' BETWEEN STA 2760+77.23 AND STA 2761+33.64.

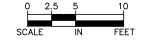
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



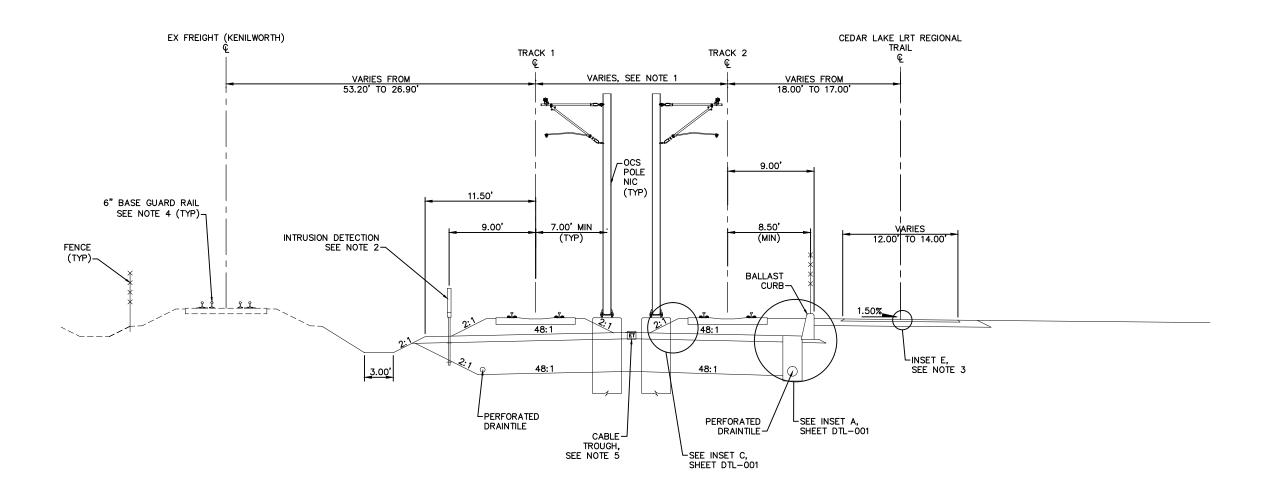
TYPICAL SECTION STA 2760+77.23 TO STA 2761+33.64



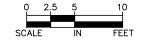
1 2015 02:29 am V:\	NO.	DATE BY CHECK DESIGN REVISION / SUBMITTAL	AECOM	WETROPOLITAN SOUTHWEST Green Line Litt Extension	Т	T - VOLUME 3 RACK L SECTIONS	SHEET 96 OF
Sep, 2			60% SUBMISSION - 09/28/15		DISCIPLINE: TRACK	SHEET NAME: E3-TRK-TYP - 003	336

- 1. TRACK CENTERS WIDEN FROM 20.00' TO 30.38' BETWEEN STA 2761+33.64 AND STA 2764+29.35.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

- SEE STSTEM PLANS FOR INTROSION DETECTION DETAILS.
 FOR INSETS SEE CIVIL PLANS.
 FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
 SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2761+33.64 TO STA 2765+95.03



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 97 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E3-TRK-TYP - 004 **TRACK**

- NOTE:

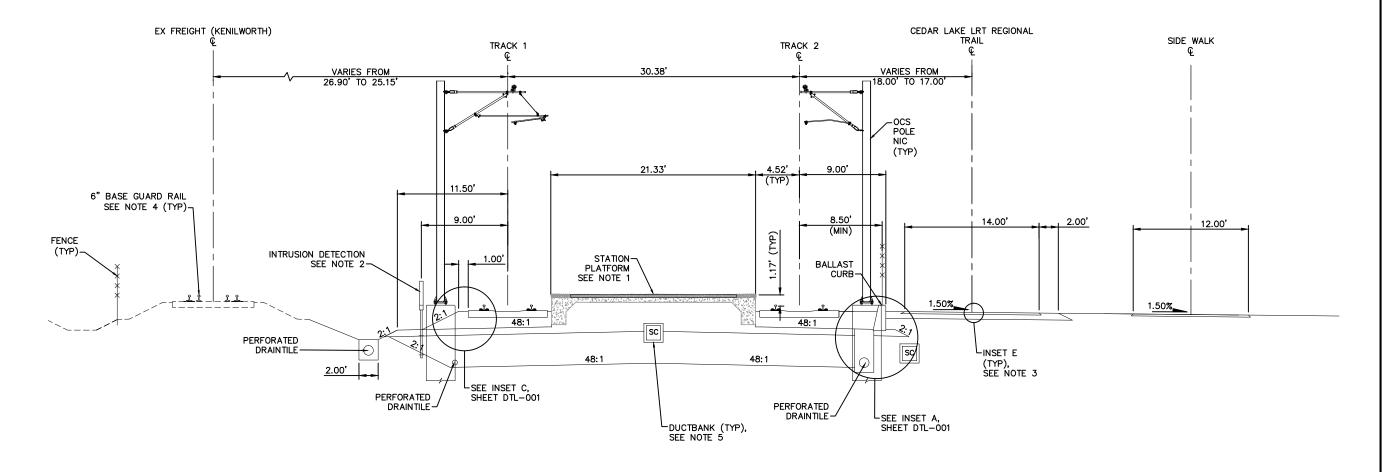
 1. SEE STATION PLANS FOR STATION PLATFORM DETAILS.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



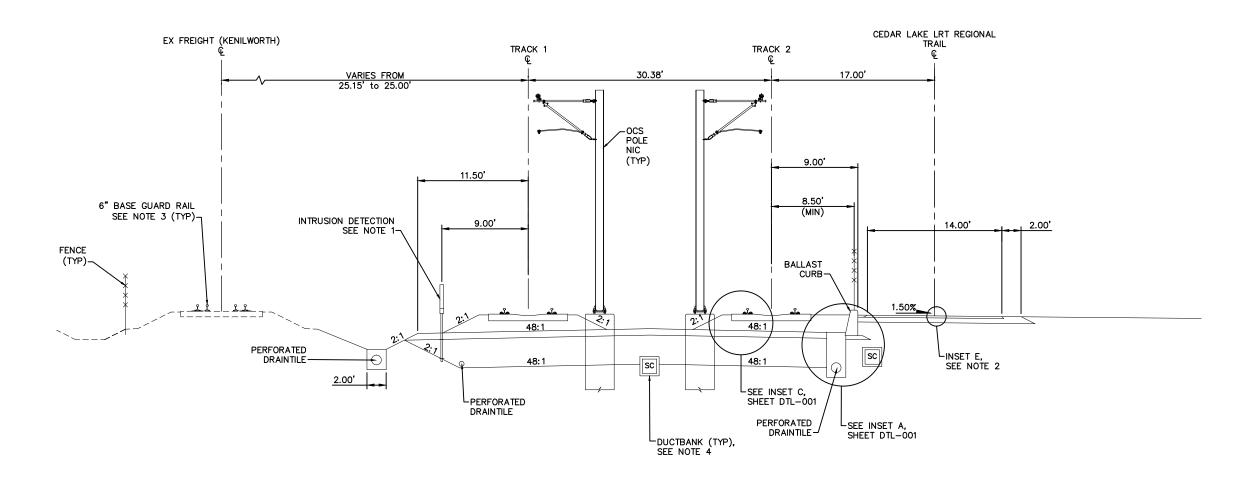
TYPICAL SECTION - WEST LAKE STATION STA 2765+95.03 TO STA 2768+65.03



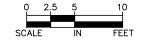
SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST: OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E3-TRK-TYP - 005 TRACK

- NOTE:

 1. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 2. FOR INSETS SEE CIVIL PLANS.
 3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



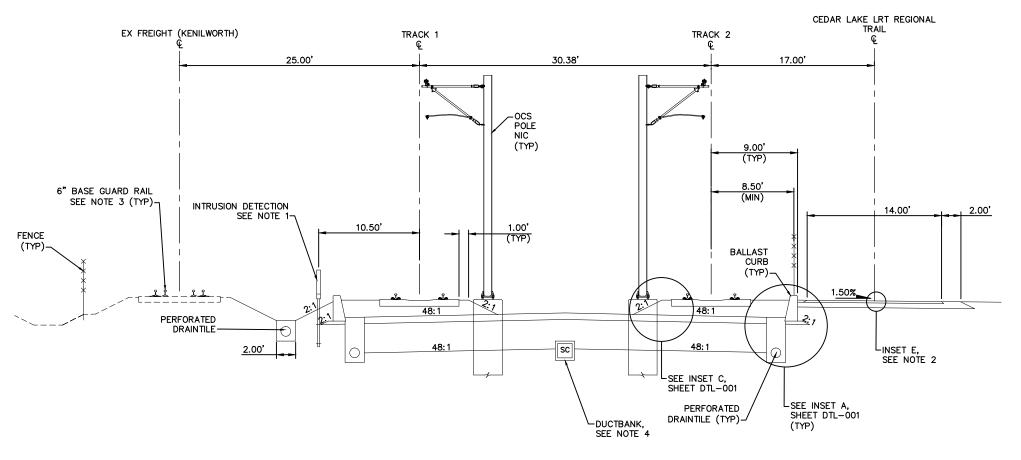
TYPICAL SECTION STA 2768+65.03 TO STA 2769+50.00



.΄ Έ	NO.	D.	DATE BY CHECK DESIGN REVISION / SUBMIT	AL			CI	VIL EAST - VOLUME	3 SHEET
30 a					A=COM			TRACK	99
015 02					AECOM	SOUTHWEST	-	TYPICAL SECTIONS	OF
21 20						METROPOLITAN C O U N C 1	DISCIPLINE:	SHEET NAME:	
Sep,					60% SUBMISSION - 09/28/15		TRACK		E3-TRK-TYP - 006

- NOTE:

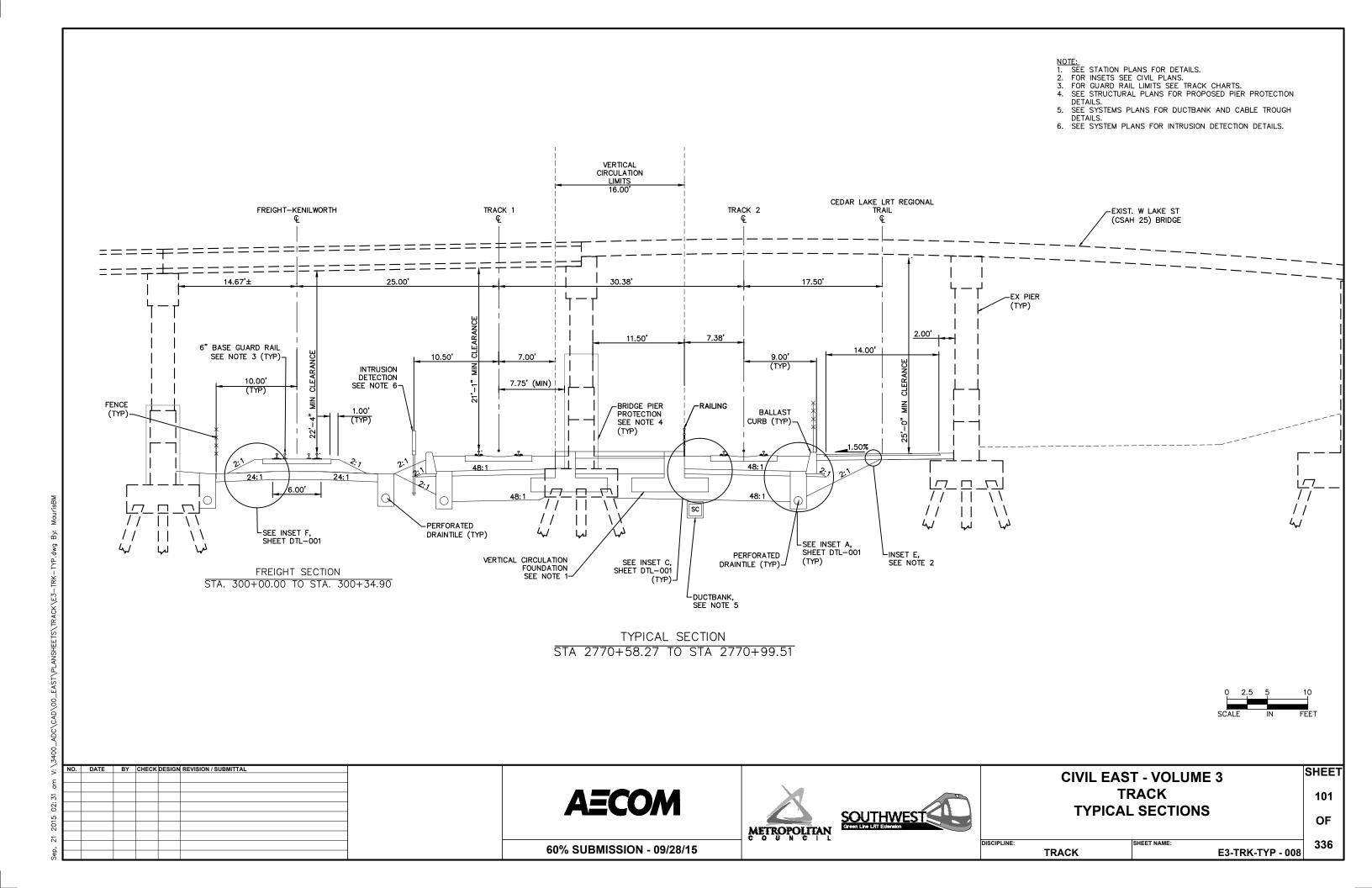
 1. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 2. FOR INSETS SEE CIVIL PLANS.
 3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

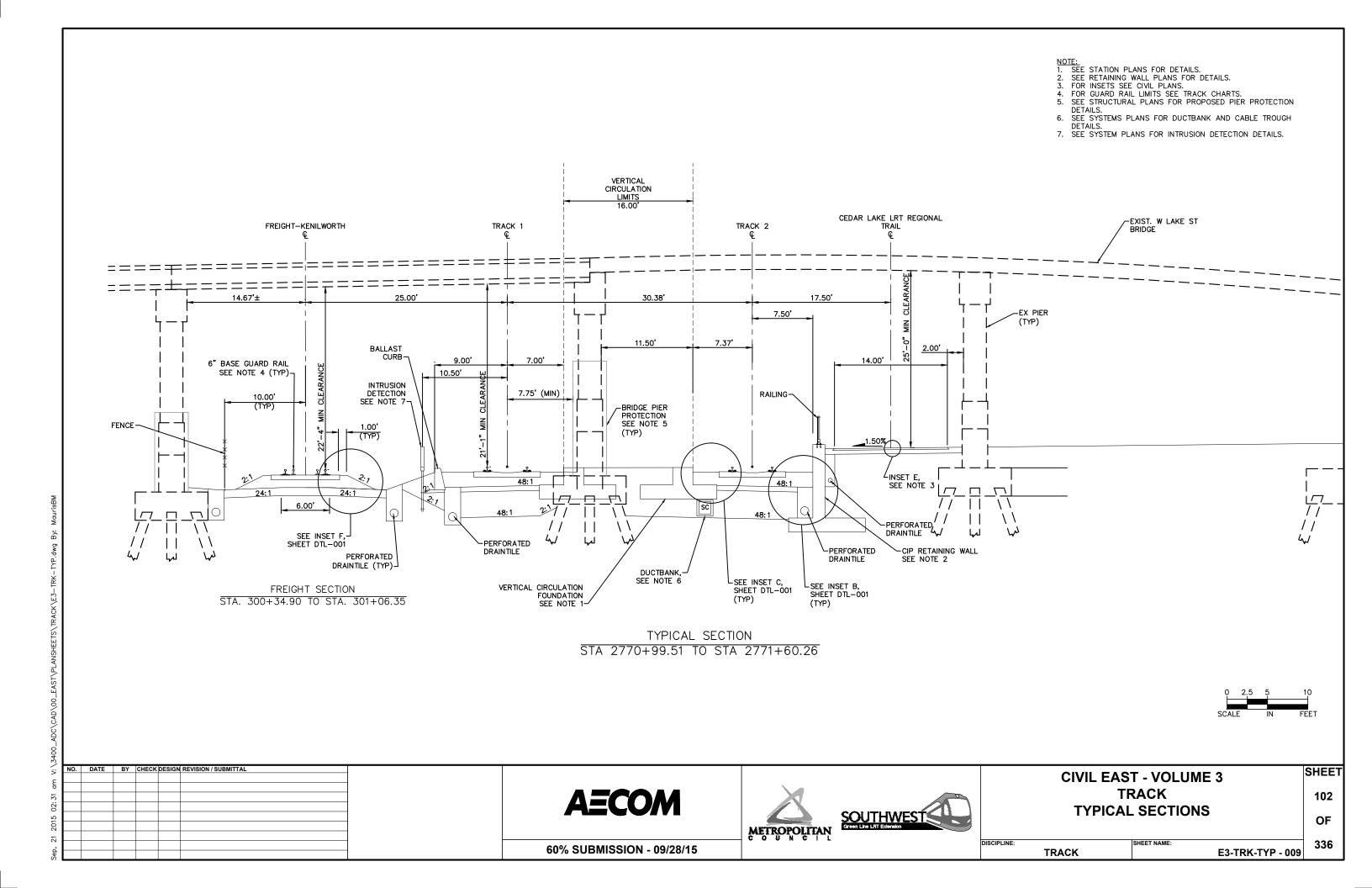


TYPICAL SECTION STA 2769+50.00 TO STA 2770+58.27



≶ N	NO.	DATE	BY C	HECK DES	IGN REVISION / SUBMITTAL			CIVIL EAST - VOLUME :	3 SHI
31 am						Δ=COM	X	TRACK	10
15 02:						AECOM	SOUTHWEST	TYPICAL SECTIONS	C
21 20							METROPOLITAN C O U N C I I	SCIPLINE: SHEET NAME:	
Sep,						60% SUBMISSION - 09/28/15	DIS		E3-TRK-TYP - 007





- NOTE:

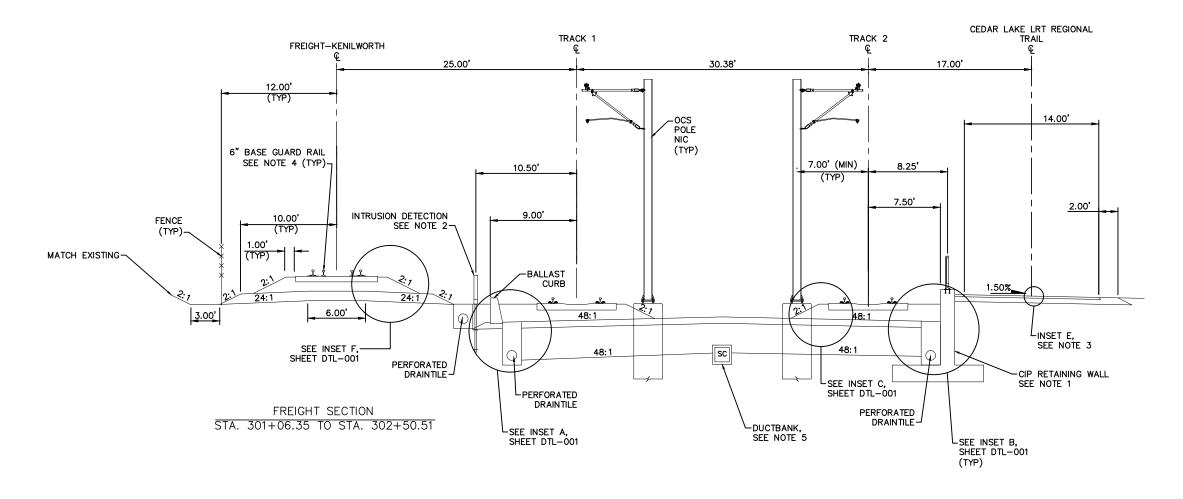
 1. SEE RETAINING WALL PLANS FOR DETAILS.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

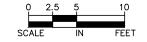
 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2771+60.26 TO STA 2772+00.00



\;;	O. DATE	BY CHECK DESIGN REVISION / SUBMITTAL				1 - VOLUME 3	SHEET
2: 32			A=COM			RACK	103
5 02				SOUTHWEST	TYPICA	L SECTIONS	05
201				METROPOLITAN Green Line Little Extension			OF
- 21				COUNCIL	DISCIPLINE:	SHEET NAME:	336
Sep,			60% SUBMISSION - 09/28/15		TRACK	E3-TRK-TYP - 010	, 330

- NOTE:

 1. TRACK CENTERS NARROWS FROM 30.38' TO 30.37' BETWEEN STA 2772+00.00 AND STA 2772+50.00.

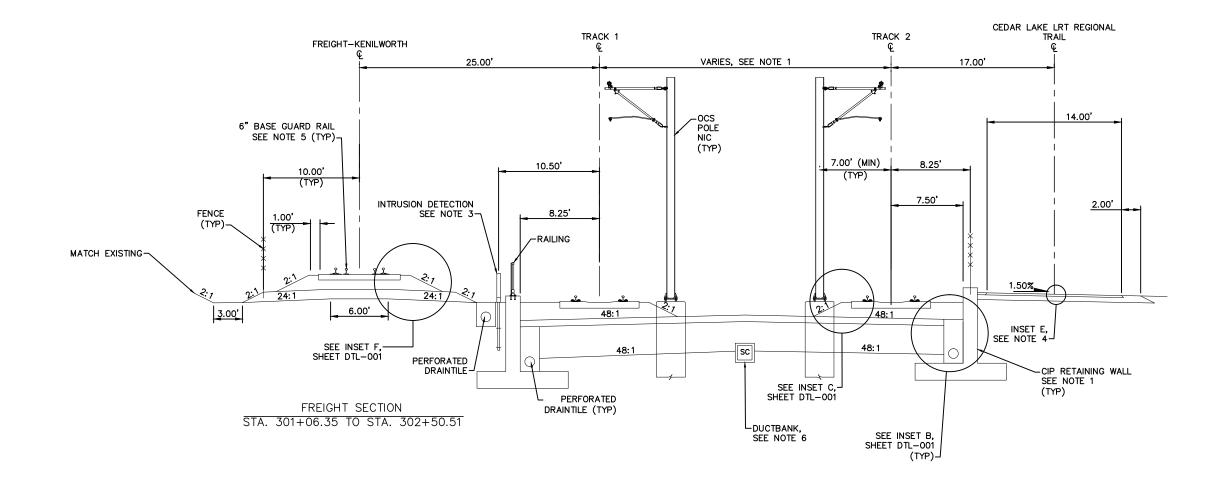
 2. SEE RETAINING WALL PLANS FOR DETAILS.

 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

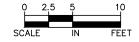
 4. FOR INSETS SEE CIVIL PLANS.

 5. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

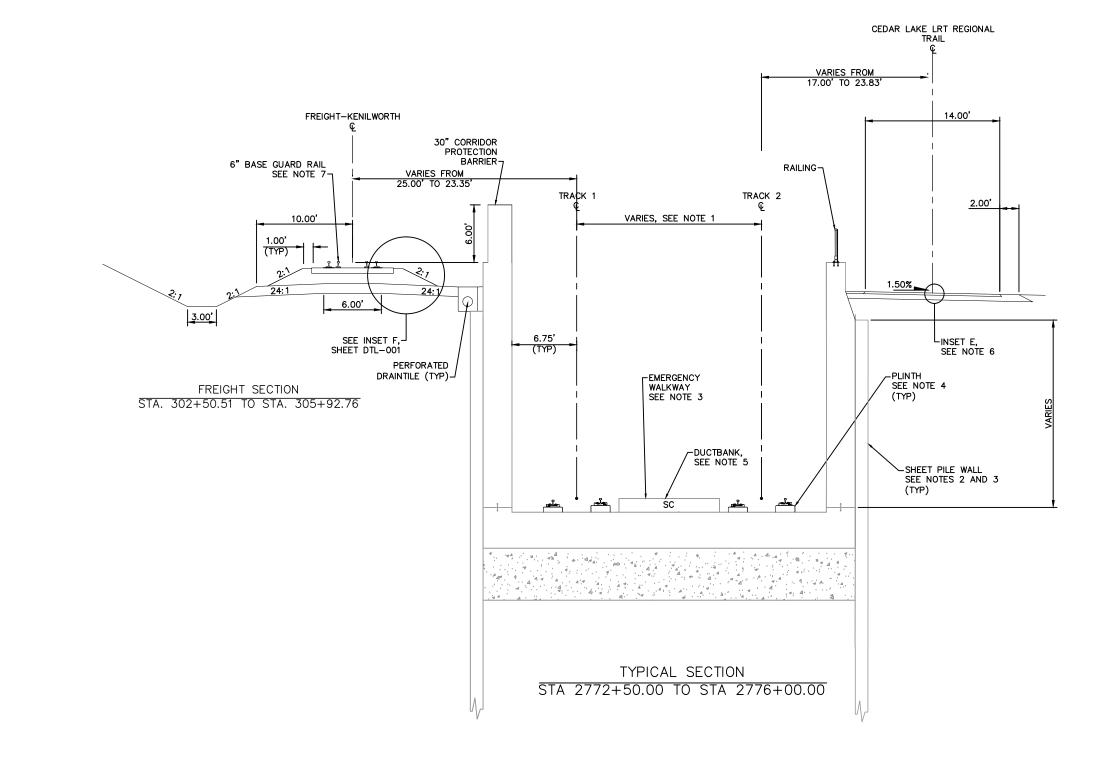
 6. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2772+00.00 TO STA 2772+50.00



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM TYPICAL SECTIONS** SOUTHWEST. OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 TRACK E3-TRK-TYP - 011



- NOIE:

 1. TRACK CENTERS NARROW FROM 30.38' TO 19.92' BETWEEN STA 2772+50.00 AND STA 2775+99.92.

 2. MADOT BRIDGE 27C15. SEE STRUCTURAL PLANS.

 3. FOR TEMPORARY SUPPORT OF EXCAVATION AND FINAL STRUCTURE, SEE TUNNEL STRUCTURE DRAWNGS.

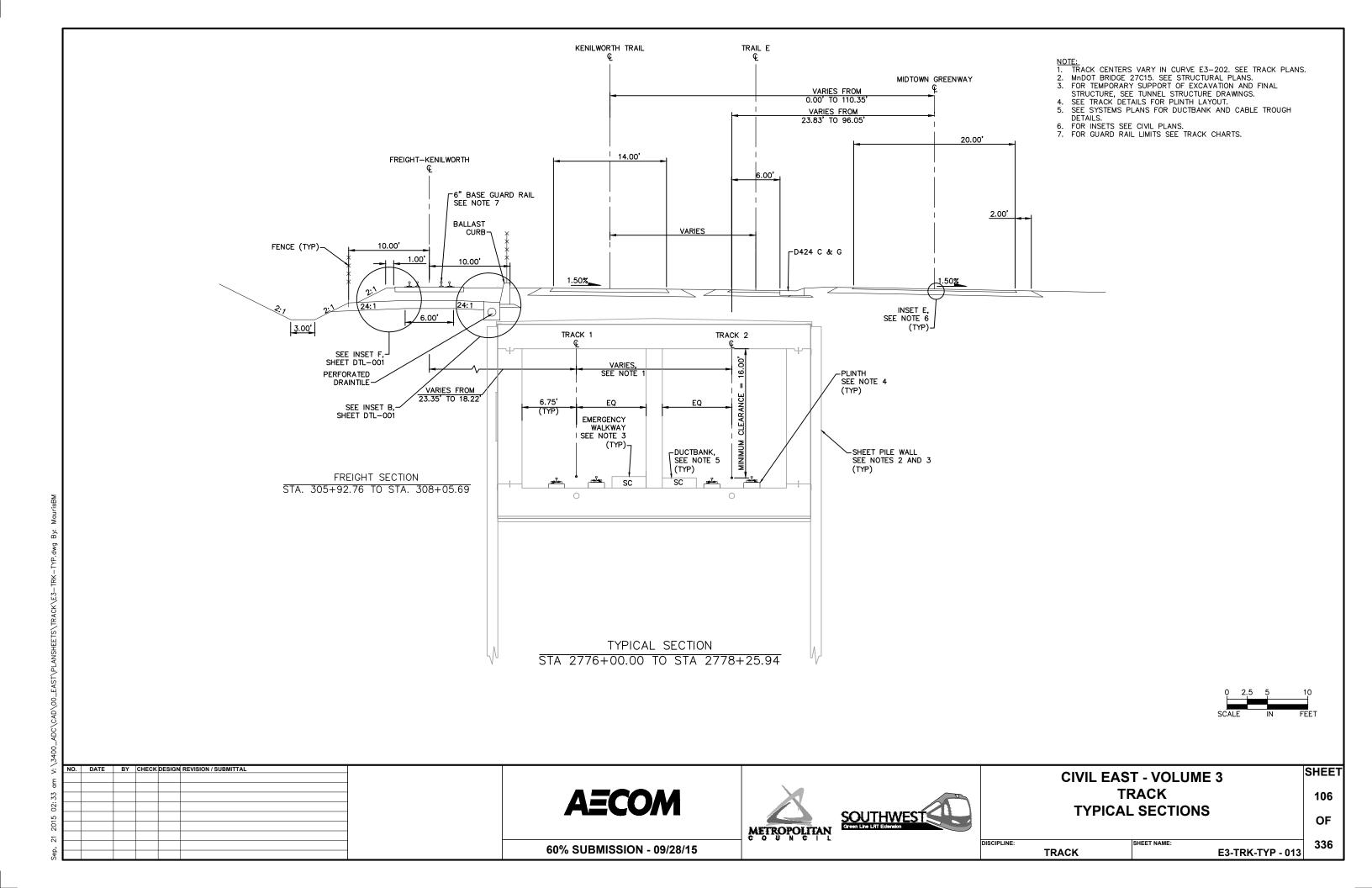
 4. SEE TRACK DETAILS FOR PLINTH LAYOUT.

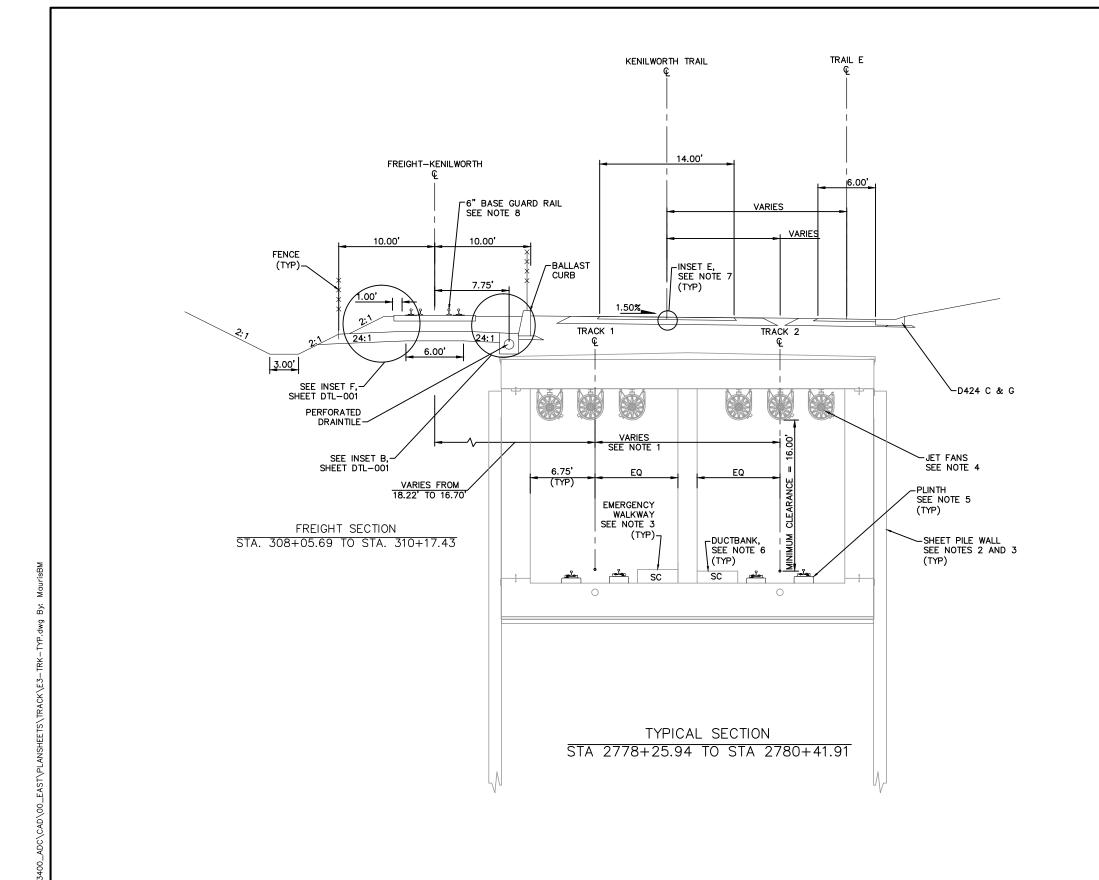
 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS

- 6. FOR INSETS SEE CIVIL PLANS.
 7. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 105 **TYPICAL SECTIONS** SOUTHWEST Green Line Litt Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E3-TRK-TYP - 012 TRACK





NOTE:
1. TRACK CENTERS VARY IN CURVE E3-202. SEE TRACK PLANS.
2. MnDOT BRIDGE 27C15. SEE STRUCTURAL PLANS.
3. FOR TEMPORARY SUPPORT OF EXCAVATION AND FINAL STRUCTURE, SEE TUNNEL STRUCTURE DRAWNGS.
4. SEE TUNNEL SYSTEMS AND ELECTRICAL PLANS FOR DETAILS.
5. SEE TRACK DETAILS FOR PLINTH LAYOUT.

SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH

DETAILS.

7. FOR INSETS SEE CIVIL PLANS.

8. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



AECOM

60% SUBMISSION - 09/28/15



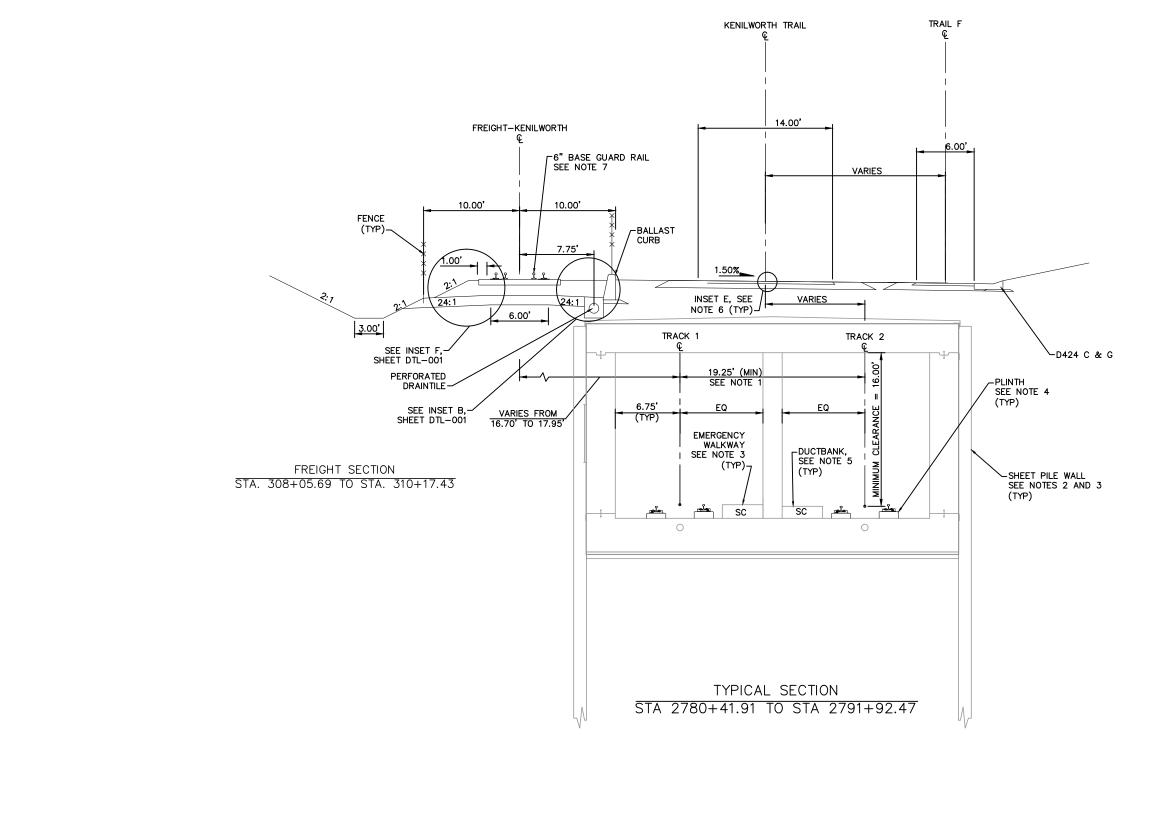
CIVIL EAST - VOLUME 3 TRACK TYPICAL SECTIONS

107 OF

SHEET

DISCIPLINE: SHEET NAME: TRACK

336 E3-TRK-TYP - 014



- NOTE:
 1. TRACK CENTERS VARY IN CURVES E3-202 AND E3-203 . SEE TRACK PLANS.
 2. MINDOT BRIDGE 27C15. SEE STRUCTURAL PLANS.
 3. FOR TEMPORARY SUPPORT OF EXCAVATION AND FINAL STRUCTURE, SEE TUNNEL STRUCTURE DRAWNGS.
 4. SEE TRACK DETAILS FOR PLINTH LAYOUT.
 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS

- DETAILS.

 6. FOR INSETS SEE CIVIL PLANS.

 7. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

AECOM





CIVIL EAST - VOLUME 3
TRACK
TYPICAL SECTIONS

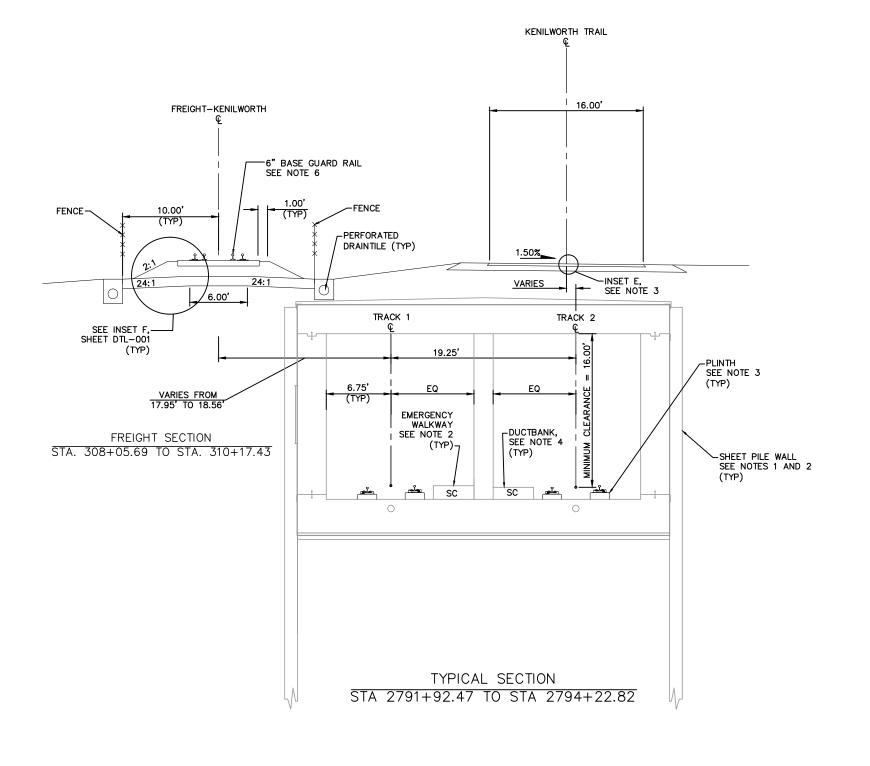
108 OF

SHEET

336

DISCIPLINE: SHEET NAME: E3-TRK-TYP - 015 TRACK

60% SUBMISSION - 09/28/15



- NOTE:

 1. MnDOT BRIDGE 27C15. SEE STRUCTURAL PLANS.

 2. FOR TEMPORARY SUPPORT OF EXCAVATION AND FINAL STRUCTURE, SEE TUNNEL STRUCTURE DRAWNGS.

 3. SEE TRACK DETAILS FOR PLINTH LAYOUT.

 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.
- 5. FOR INSETS SEE CIVIL PLANS.
 6. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

AECOM

60% SUBMISSION - 09/28/15





CIVIL EAST - VOLUME 3 TRACK TYPICAL SECTIONS

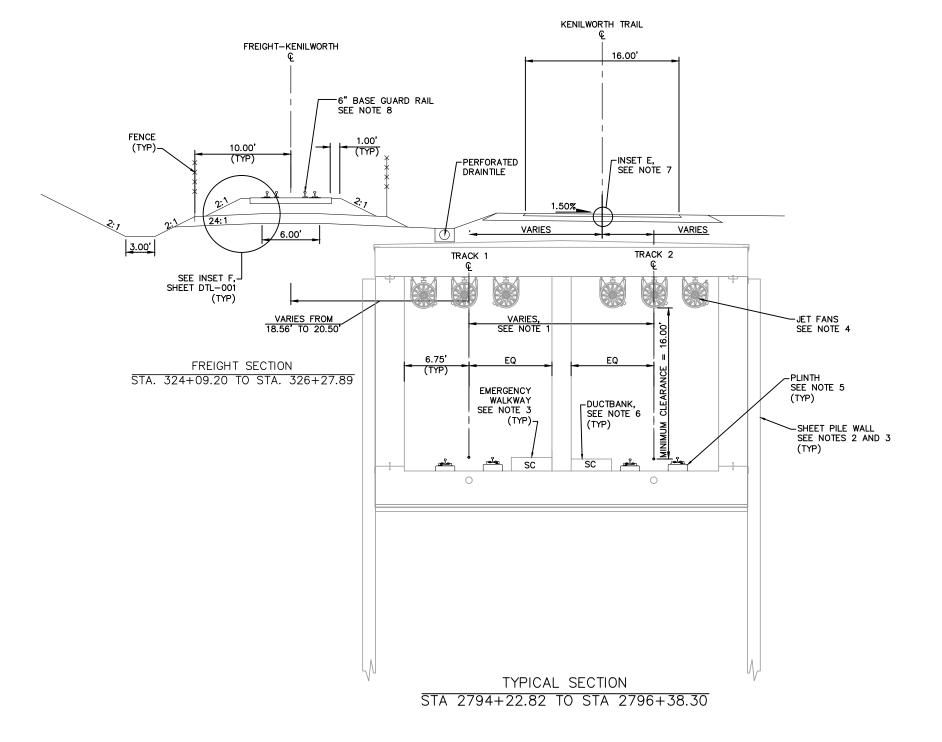
OF

SHEET

336

DISCIPLINE: TRACK

E3-TRK-TYP - 016



NOTE:
1. TRACK CENTERS VARY IN CURVE E3-204. SEE TRACK PLANS.
2. MnDOT BRIDGE 27C15. SEE STRUCTURAL PLANS.
3. FOR TEMPORARY SUPPORT OF EXCAVATION AND FINAL STRUCTURE, SEE TUNNEL STRUCTURE DRAWNGS.
4. SEE TUNNEL SYSTEMS AND ELECTRICAL PLANS FOR DETAILS.
5. SEE TRACK DETAILS FOR PLINTH LAYOUT.

SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH

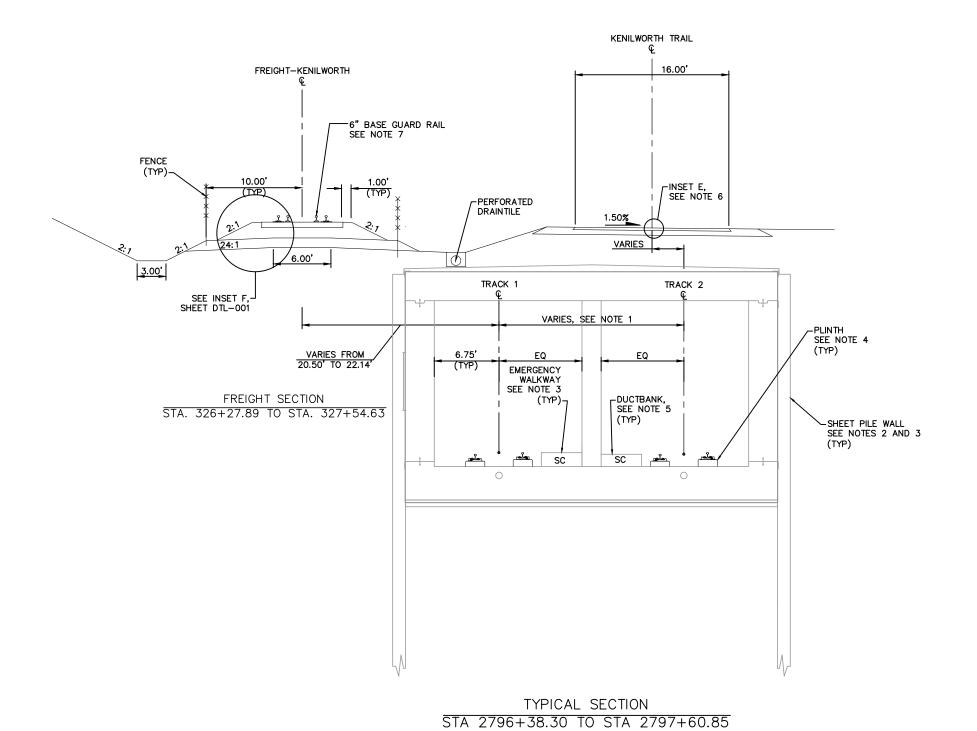
DETAILS.

7. FOR INSETS SEE CIVIL PLANS.

8. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 110 **TYPICAL SECTIONS** SOUTHWEST: OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E3-TRK-TYP - 017 TRACK



- NOIE:

 1. TRACK CENTERS WIDEN FROM 19.38' TO 19.62' BETWEEN STA 2796+35.14 AND STA 2798+36.06.

 2. MnDOT BRIDGE 27C15. SEE STRUCTURAL PLANS.

 3. FOR TEMPORARY SUPPORT OF EXCAVATION AND FINAL STRUCTURE, SEE TUNNEL STRUCTURE DRAWNGS.

 4. SEE TRACK DETAILS FOR PLINTH LAYOUT.

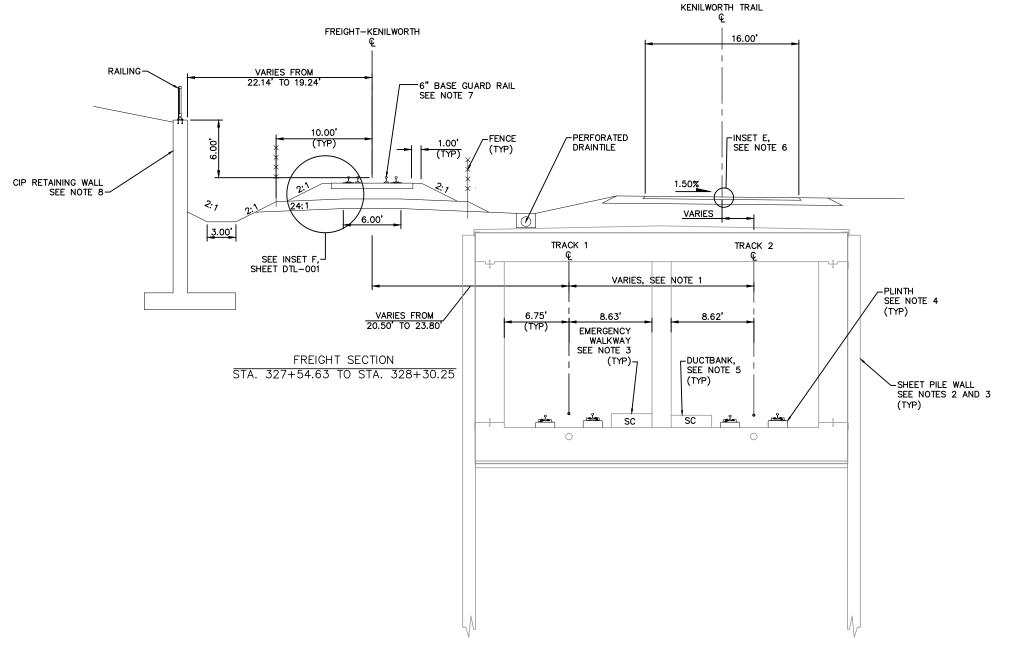
 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

- DETAILS.

 6. FOR INSETS SEE CIVIL PLANS.

 7. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 111 **TYPICAL SECTIONS** SOUTHWEST: OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E3-TRK-TYP - 018 TRACK



TYPICAL SECTION STA 2797+60.85 TO STA 2798+36.06

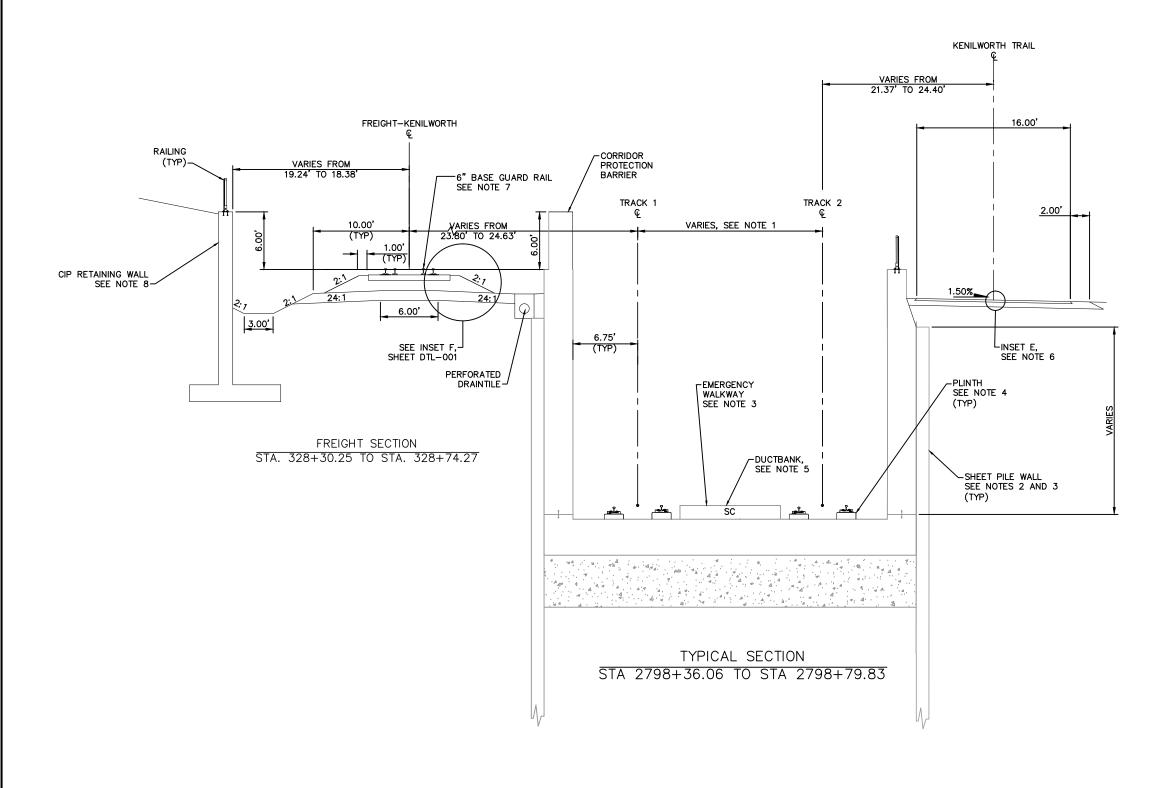
- 1. TRACK CENTERS NARROW FROM 19.62' TO 18.34' BETWEEN STA 2797+60.85 AND STA 2798+36.06.
 2. MnDOT BRIDGE 27C15. SEE STRUCTURAL PLANS.
- 3. FOR TEMPORARY SUPPORT OF EXCAVATION AND FINAL STRUCTURE, SEE TUNNEL STRUCTURE DRAWINGS.
 4. SEE TRACK DETAILS FOR PLINTH LAYOUT.
- SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

 6. FOR INSETS SEE CIVIL PLANS.

 7. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 8. SEE RETAINING WALL PLANS FOR DETAILS.

SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 112 **TYPICAL SECTIONS** SOUTHWEST: OF METROPOLITAN DISCIPI INF: 336 60% SUBMISSION - 09/28/15 E3-TRK-TYP - 019 TRACK



60% SUBMISSION - 09/28/15

- 1. TRACK CENTERS NARROW FROM 18.34' TO 16.10' BETWEEN STA 2798+36.06 AND STA 2799+89.84.
 2. MnDOT BRIDGE 27C15. SEE STRUCTURAL PLANS.
- 3. FOR TEMPORARY SUPPORT OF EXCAVATION AND FINAL
- STRUCTURE, SEE TUNNEL STRUCTURE DRAWINGS. SEE TRACK DETAILS FOR PLINTH LAYOUT.
- SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH
- 6. FOR INSETS SEE CIVIL PLANS.
 7. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
 8. SEE RETAINING WALL PLANS FOR DETAILS.



AECOM

METROPOLITAN



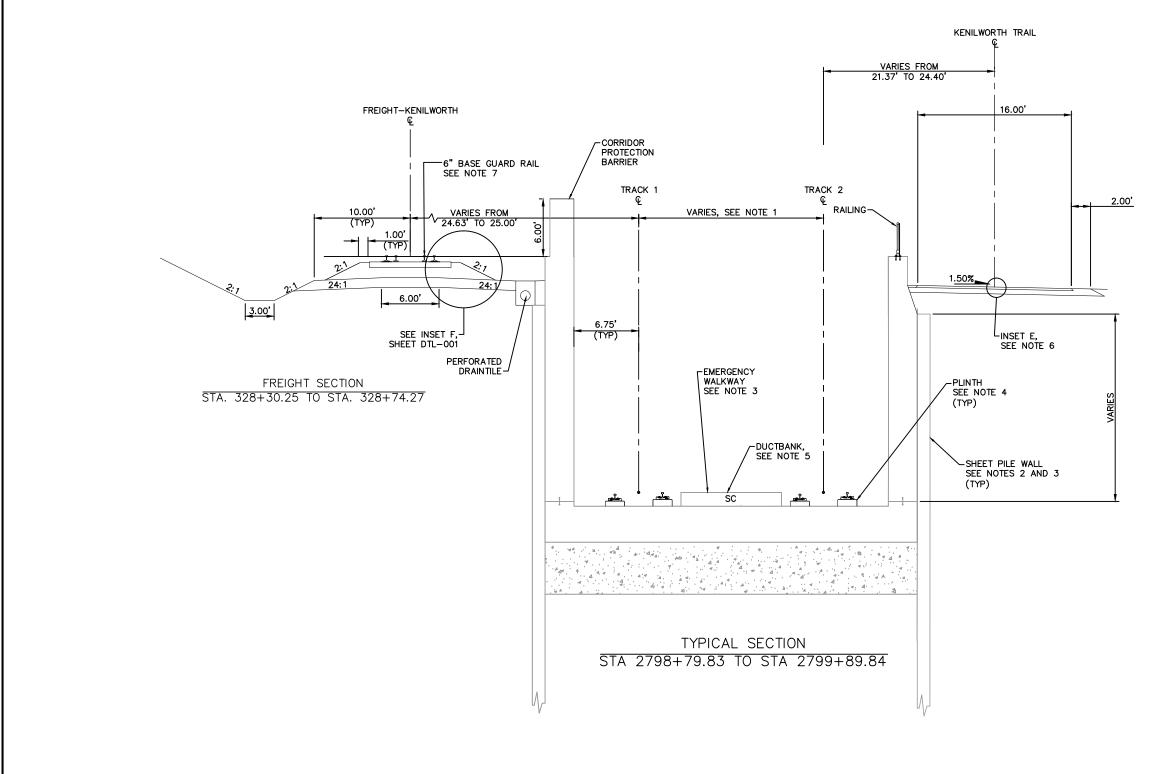
CIVIL EAST - VOLUME 3 TRACK **TYPICAL SECTIONS**

113 OF

336

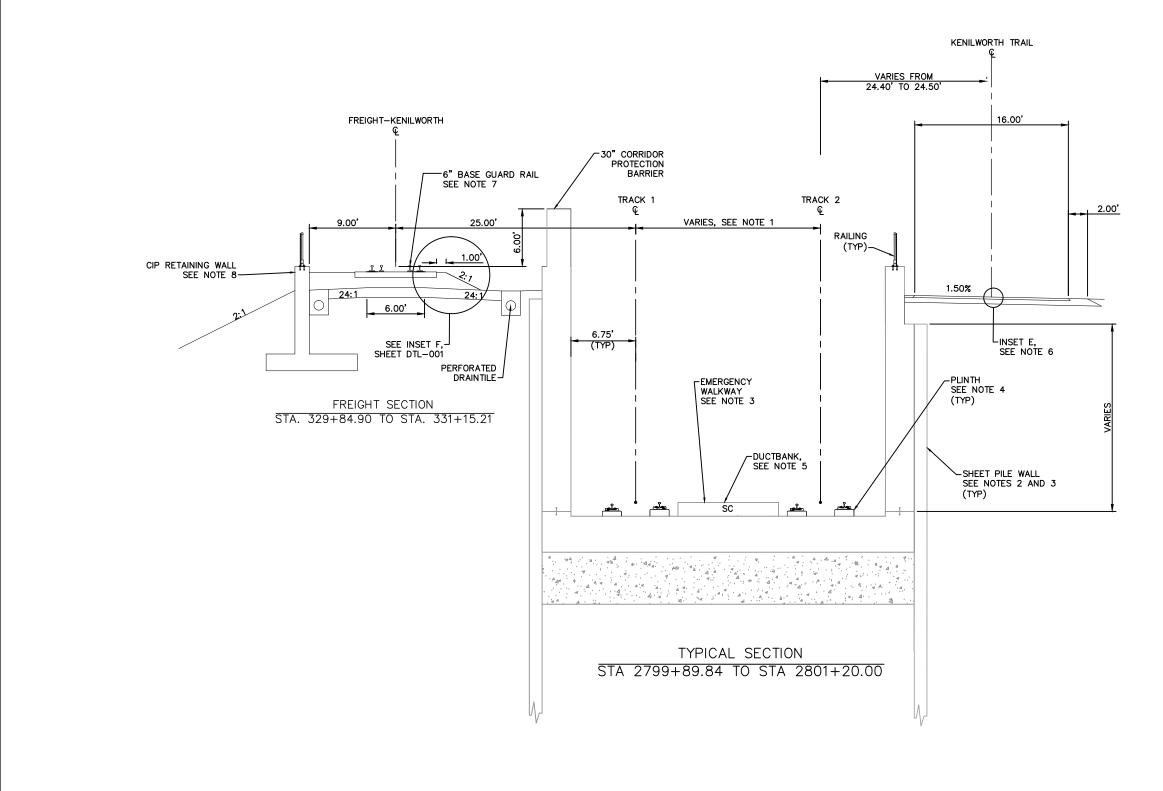
SHEET

DISCIPLINE: E3-TRK-TYP - 020 TRACK



- 1. TRACK CENTERS NARROW FROM 18.34' TO 16.10' BETWEEN STA 2798+36.06 AND STA 2799+89.84.
 2. MnDOT BRIDGE 27C15. SEE STRUCTURAL PLANS.
- 3. FOR TEMPORARY SUPPORT OF EXCAVATION AND FINAL STRUCTURE, SEE TUNNEL STRUCTURE DRAWINGS.
 4. SEE TRACK DETAILS FOR PLINTH LAYOUT.
- SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH
- DETAILS.
 6. FOR INSETS SEE CIVIL PLANS.
 7. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 114 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E3-TRK-TYP - 021 TRACK



- 1. TRACK CENTERS NARROW FROM 16.10' TO 16.00' BETWEEN STA 2799+89.84 AND STA 2800+54.30.
 2. MnDOT BRIDGE 27C15. SEE STRUCTURAL PLANS.
- 3. FOR TEMPORARY SUPPORT OF EXCAVATION AND FINAL STRUCTURE, SEE TUNNEL STRUCTURE DRAWINGS.
 4. SEE TRACK DETAILS FOR PLINTH LAYOUT.
- SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH
- 6. FOR INSETS SEE CIVIL PLANS.
 7. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
 8. SEE RETAINING WALL PLANS FOR DETAILS.



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 115 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E3-TRK-TYP - 022 TRACK

- NOTE:

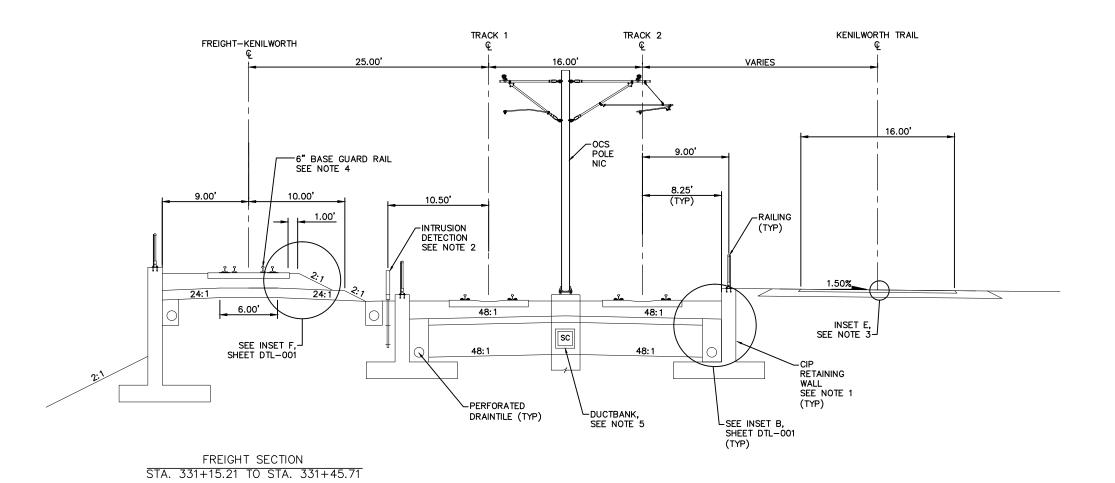
 1. SEE RETAINING WALL PLANS FOR DETAILS.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

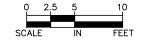
 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2801+20.00 TO STA 2801+87.83

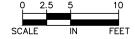


SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 116 **TYPICAL SECTIONS** SOUTHWEST: Green Line LRT Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E3-TRK-TYP - 023 **TRACK**

KENILWORH CHANNEL XING PENDING

SEE TRAIL PLAN FOR TRAILS LOCATION

TYPICAL SECTION
STA 2801+87.83 TO STA 2802+93.83



NO. DATE BY CHECK DESIGN REVISION / SUBMITTAL

AECOM





CIVIL EAST - VOLUME 3
TRACK
TYPICAL SECTIONS

117

SHEET

OF

DISCIPLINE: TRACK

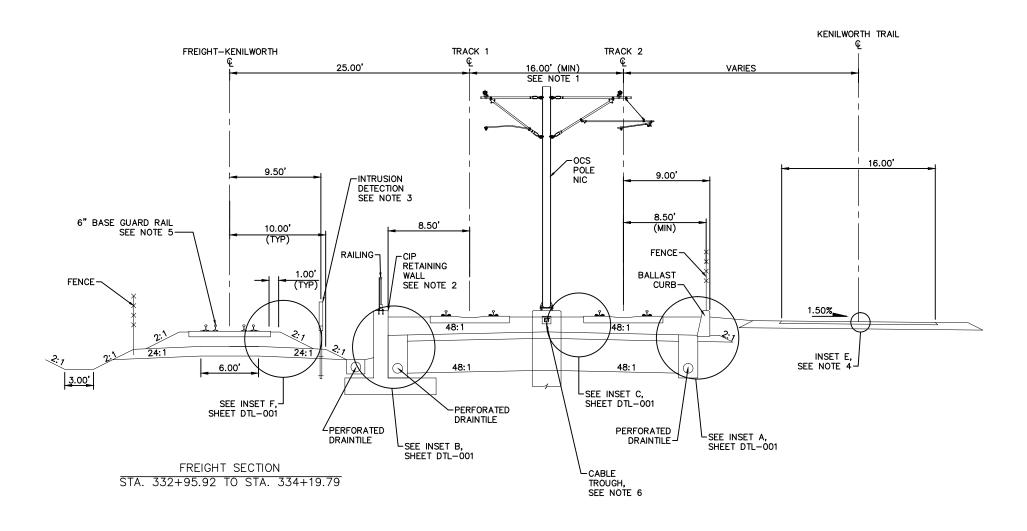
HEET NAME:

E3-TRK-TYP - 024

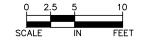
Sep, 21 2015 02:37 am V:\3400

60% SUBMISSION - 09/28/15

- NOTE:
 1. TRACK CENTERS VARY IN CURVE E3-205. SEE TRACK PLANS.
 2. SEE RETAINING WALL PLANS FOR DETAILS.
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 4. FOR INSETS SEE CIVIL PLANS.
 5. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
 6. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2802+93.83 TO STA 2804+24.91



2015 02:37 am V:\	IO. DAT	ATE BY CHECK DESIGN REVISION / SUBMITTAL	AECOM	METROPOLITAN SOUTHWEST Green Line Little Elements	TI	T - VOLUME 3 RACK L SECTIONS	SHEET 118 OF
Sep, 21			60% SUBMISSION - 09/28/15	COUNCIL	DISCIPLINE: TRACK	SHEET NAME: E3-TRK-TYP - 02	336

- NOTE:

 1. TRACK CENTERS NARROWS FROM 16.00' TO 15.91' BETWEEN STA 2804+24.91 AND STA 2805+99.96.

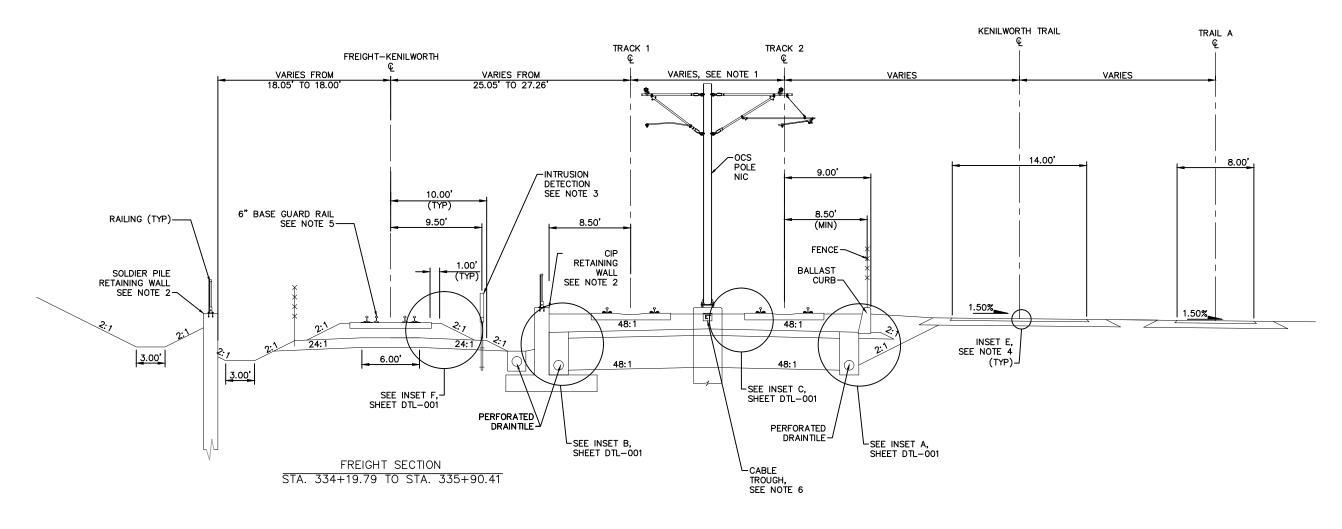
 2. SEE RETAINING WALL PLANS FOR DETAILS.

 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

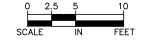
 4. FOR INSETS SEE CIVIL PLANS.

 5. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 6. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



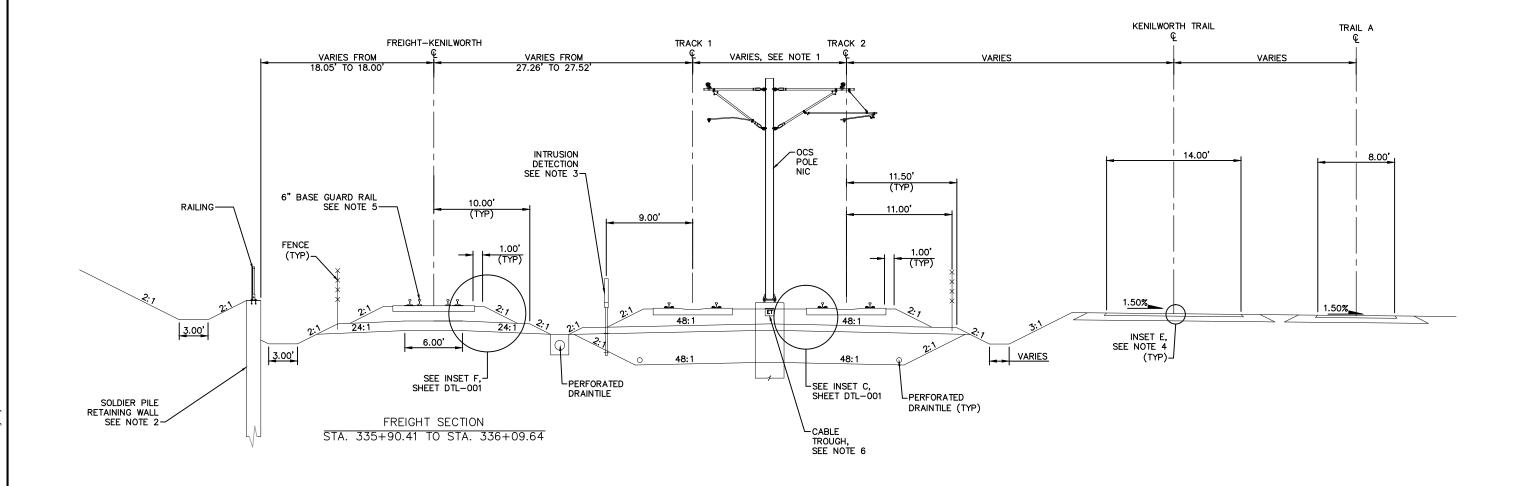
TYPICAL SECTION STA 2804+24.91 TO STA 2805+99.96



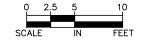
;; E	IO. DATE	BY CHECK DESIGN REVISION / SUBMITTAL			CIVIL EAS	T - VOLUME 3	SHEET
2:38 a			AECOM			RACK	119
015 02			AECOM	SOUTHWEST STEEL AND LOT ENGAGE	TYPICA	_ SECTIONS	OF
21 2				METROPOLITAN ———	DISCIPLINE:	SHEET NAME:	336
deć,			60% SUBMISSION - 09/28/15		TRACK	E3-TRK-TYP - 026	ار اد

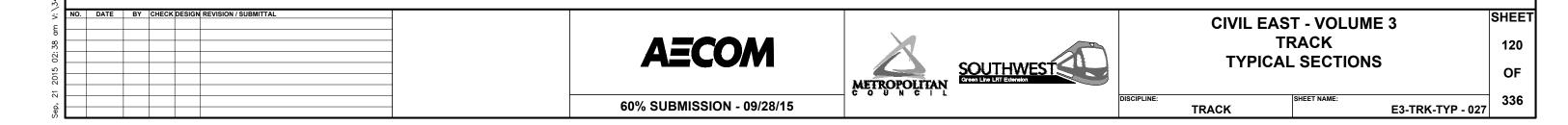
- 1. TRACK CENTERS NARROW FROM 15.90' TO 15.88' BETWEEN STA. 2805+99.96 AND STA. 2806+19.80.
 2. SEE RETAINING WALL PLANS FOR DETAILS.
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

- SEE STSTEM PLANS FOR INTROSION DETECTION DETAILS.
 FOR INSETS SEE CIVIL PLANS.
 FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
 SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



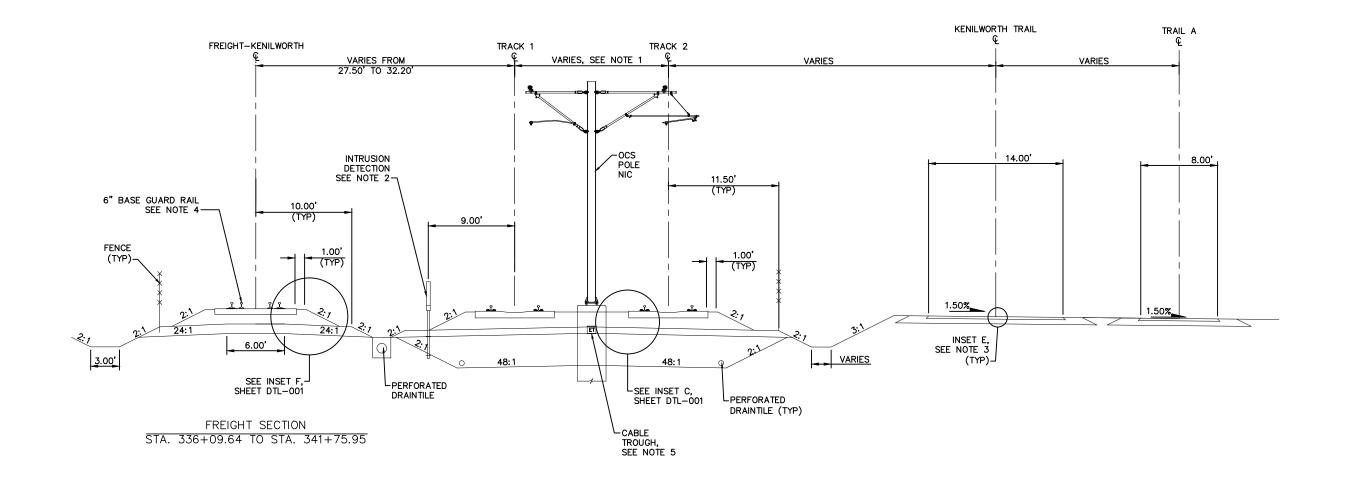
TYPICAL SECTION STA 2805+99.96 TO STA 2806+19.80



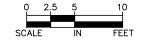


- 1. TRACK CENTERS NARROW FROM 15.88' TO 14.01' BETWEEN STA. 2806+19.80 AND STA. 2812+10.15.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

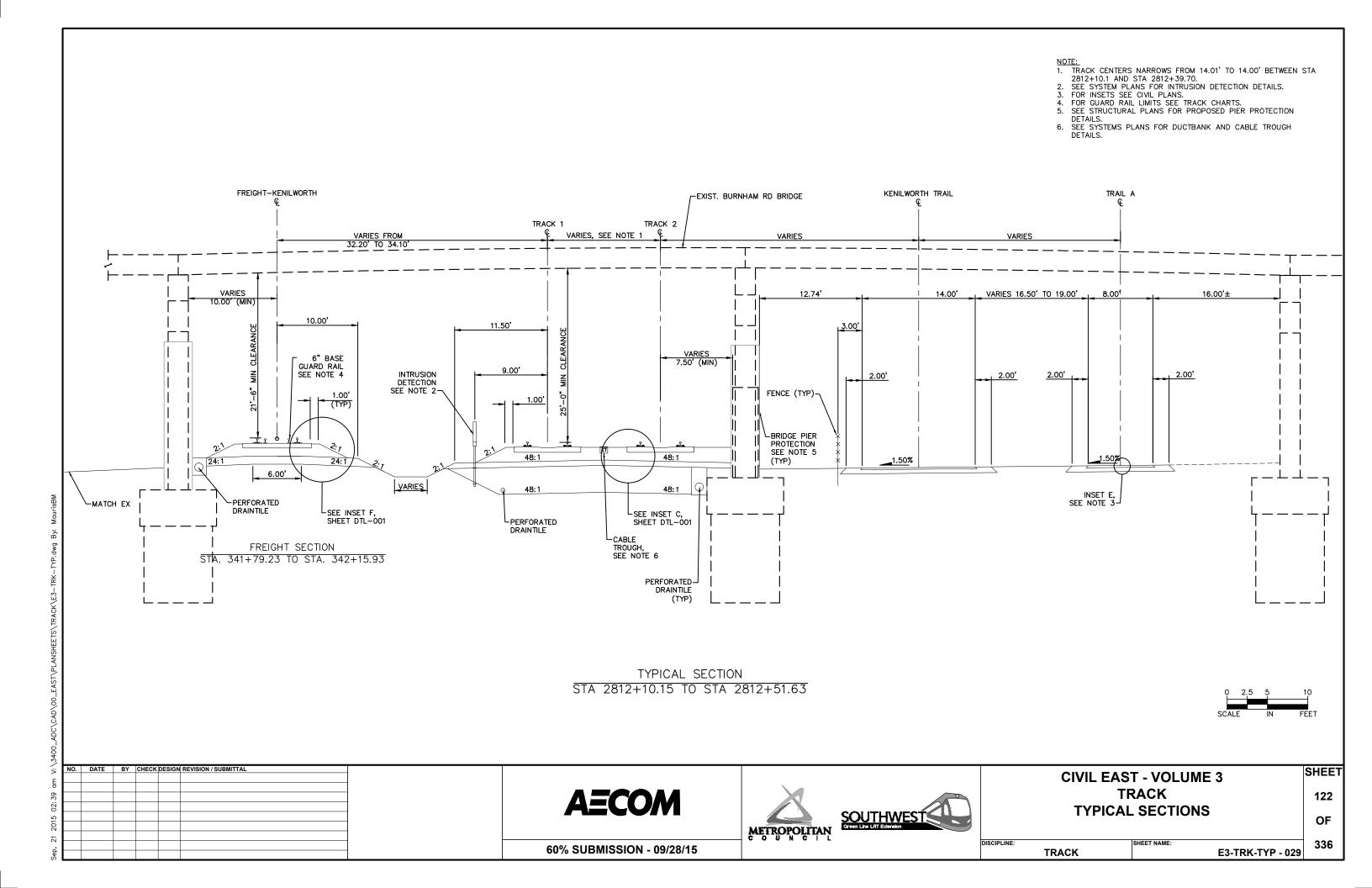
- SEE STSTEM PLANS FOR INTROSION DETECTION DETAILS.
 FOR INSETS SEE CIVIL PLANS.
 FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
 SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2806+19.80 TO STA 2812+10.15



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 121 **TYPICAL SECTIONS** SOUTHWEST: OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E3-TRK-TYP - 028 TRACK



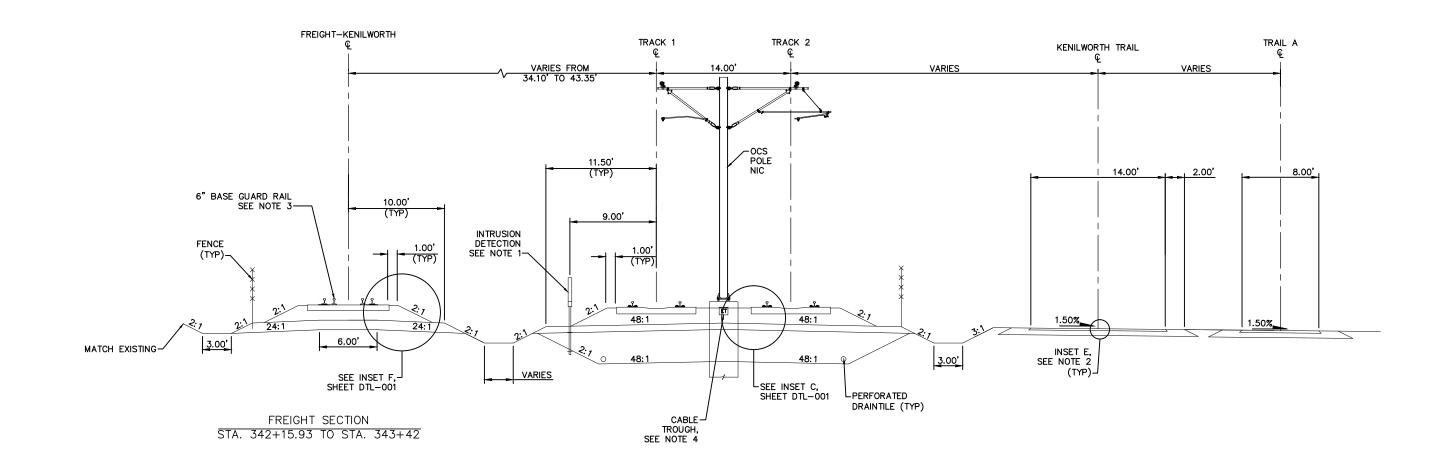
- NOTE:

 1. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

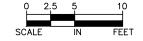
 2. FOR INSETS SEE CIVIL PLANS.

 3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



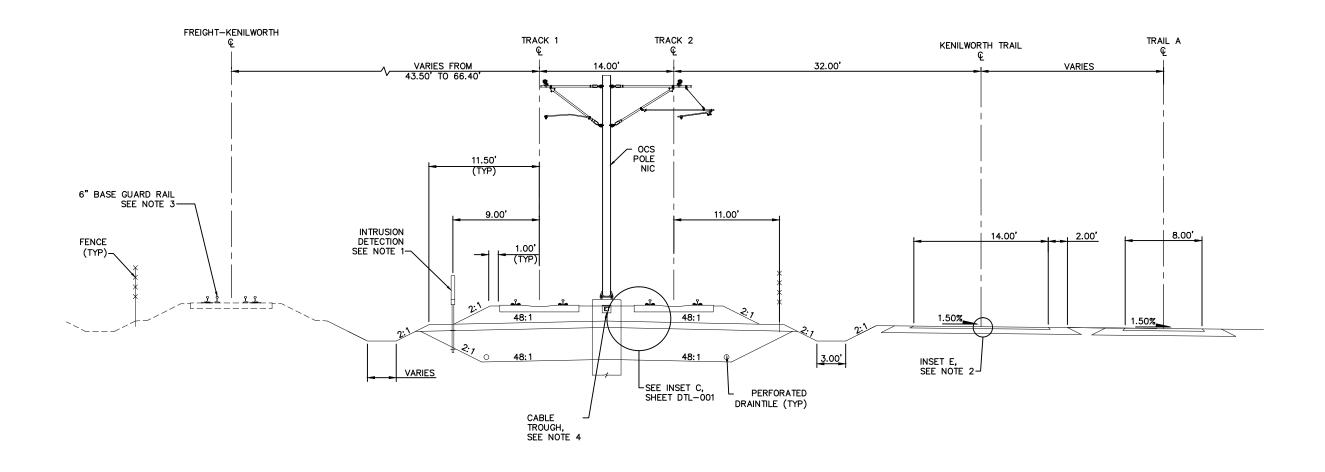
TYPICAL SECTION STA 2812+51.63 TO STA 2813+68.99



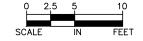
ź.	NO.	DATE	BY CHE	CK DESIGN	REVISION / SUBMITTAL				CIVIL EAST - VOLUME 3	(SHEET
9 arr									TRACK		123
02: 3						A=COM			TYPICAL SECTIONS		123
015 (<i>7</i> .	SOUTHWEST		ITPICAL SECTIONS		OF
21 20							METROPOLITAN				
eb,	_					60% SUBMISSION - 09/28/15		DISCIPLINE:	TRACK SHEET NAME: E3-T	TRK-TYP - 030	336

- NOTE:

 1. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 2. FOR INSETS SEE CIVIL PLANS.
 3. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
 4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2813+68.99 TO STA 2816+35.67



/; -	NO. D	DATE BY CHECK DESIGN REVISION / SUBMITTAL			CIVIL EAS	ST - VOLUME 3	SHEET
:39 a			A=COM		Т	RACK	124
15 02			AECOM	SOUTHWEST	TYPICA	L SECTIONS	OF
51 20.				METROPOLITAN Green Line Little Extension			
Sep, 3			60% SUBMISSION - 09/28/15		DISCIPLINE: TRACK	SHEET NAME: E3-TRI	K-TYP - 031

- NOTE:

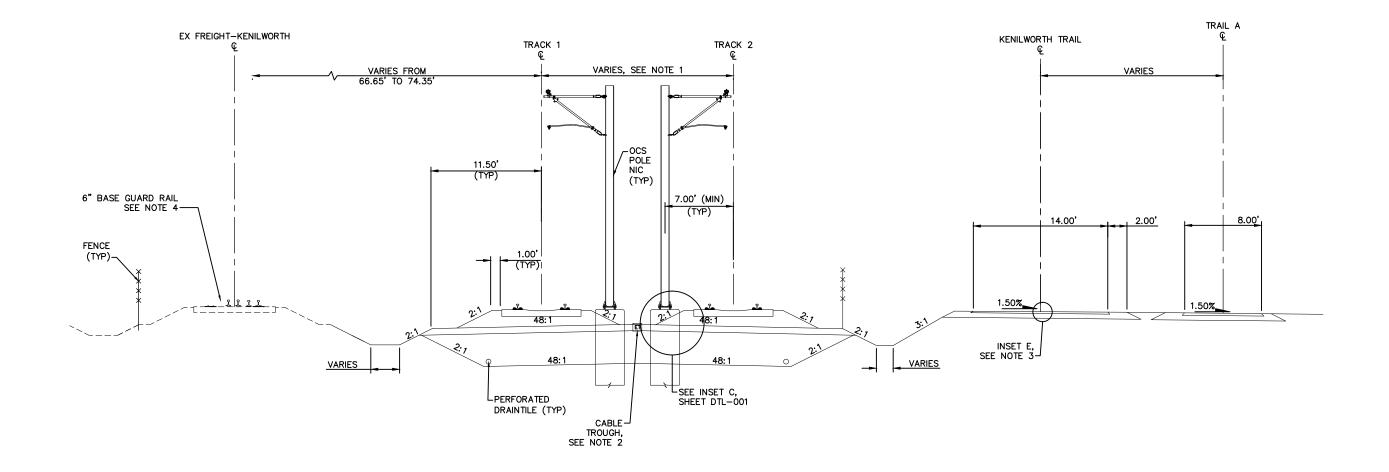
 1. TRACK CENTERS WIDEN FROM 14.00' TO 20.00' BETWEEN STA 2816+35.67 AND STA 2818+01.44.

 2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH

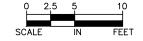
- DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



TYPICAL SECTION STA 2816+35.67 TO STA 2818+01.44



≶ N	NO.	DATE	BY CHE	CK DESIGN	REVISION / SUBMITTAL				ON/II EAOT \//	SI LIME O	SHEET
€ _									CIVIL EAST - VO	OLUME 3	
<u>و</u> –			-			-	A=COM		TRACK		125
22:4						1	A=COM				125
2								SOUTHWEST	TYPICAL SEC	TIONS	OF
201								METROPOLITAN Green Line Litt Extension			O.
2	_		_						ISCIPLINE: SHEET NAM	ΛΕ·	226
de —			_			-	60% SUBMISSION - 09/28/15		TRACK	E3-TRK-TYP - 032	336

- NOTE:

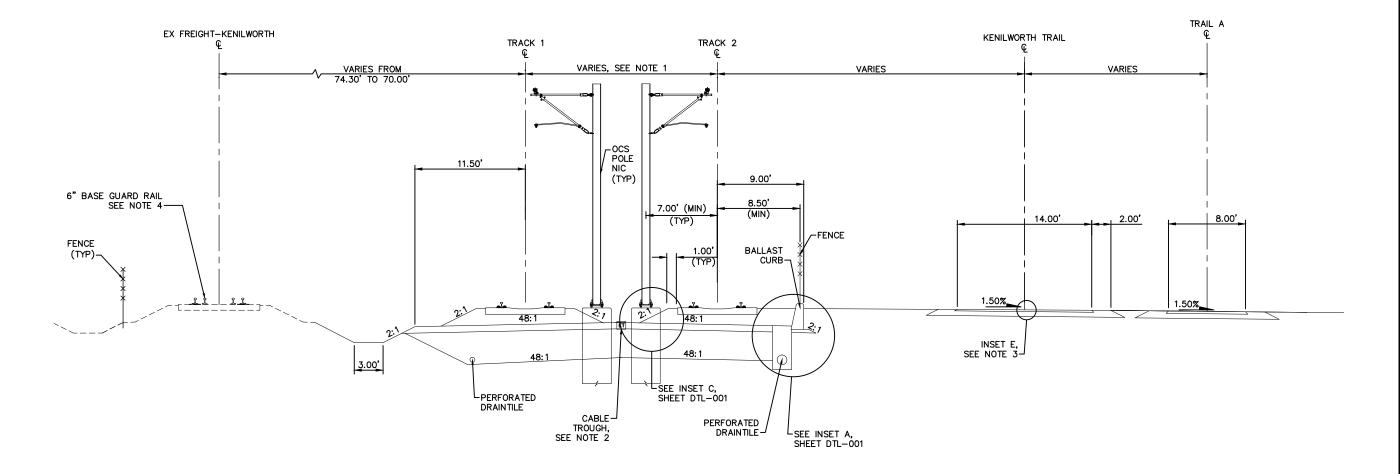
 1. TRACK CENTERS WIDEN FROM 20.00' TO 26.32' BETWEEN STA 2818+01.44 AND STA 2818+99.96.

 2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH

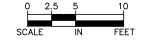
- DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.



TYPICAL SECTION STA 2818+01.44 TO STA 2818+99.96



ź	NO.	DATE I	BY CHEC	DESIGN	REVISION / SUBMITTAL				CIVIL EAST - VOLUME 3	5	SHEET
am									TRACK		400
2: 40						A=COM					126
5 0							SOUTHWEST		TYPICAL SECTIONS		OF
201							METROPOLITAN Green Line Litt Entension				Oi
- 21						000/ 011041001011 00100/45	COBNCIL	DISCIPLINE:	SHEET NAME:		336
, de						60% SUBMISSION - 09/28/15			TRACK E3-T	TRK-TYP - 033	

- NOTE:

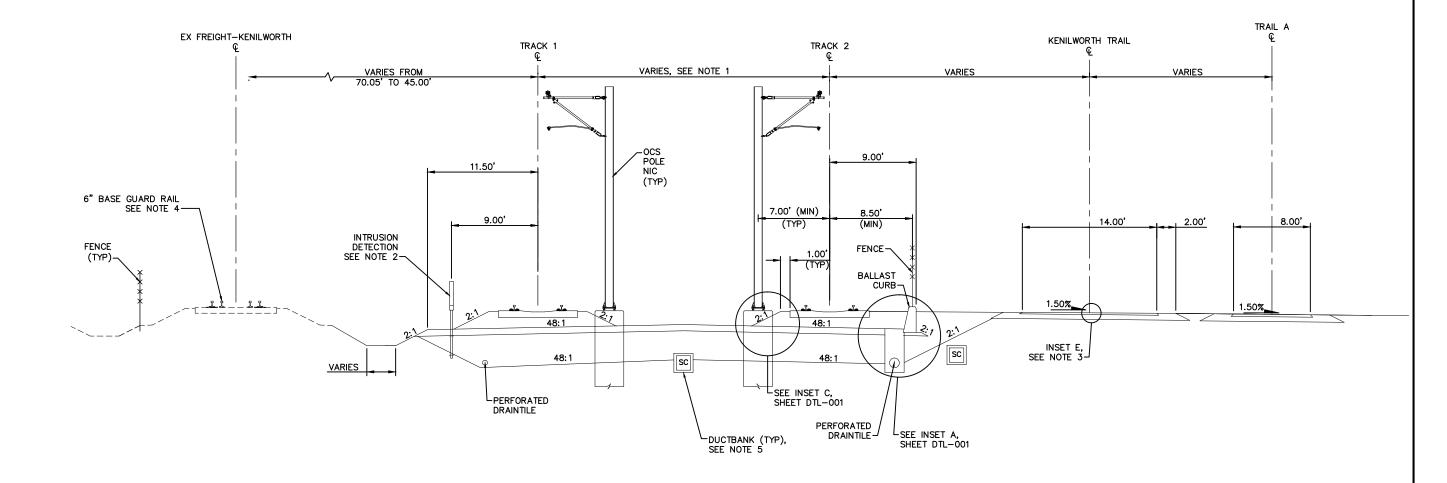
 1. TRACK CENTERS WIDEN FROM 26.32' TO 30.38' BETWEEN STA 2818+99.96 AND STA 2820+68.77.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

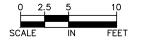
 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2818+99.96 TO STA 2821+02.51



DATE DV CUE									-
DATE BY CHE	ECK DESIGN	REVISION / SUBMITTAL				CIVIL E	AST - VOLUME	3	SHE
			A = CO A	A			TRACK		12 ⁻
			AEÇUM		SOLITHIA/EST	TYPI	CAL SECTIONS		
				MEIKUPULIIAN	Green Line LRT Extension				OF
			60% SURMISSION - 09/28/15	CORNCIT	DISCIPI		SHEET NAME:	E0 TDV TVD	336
				AECOM	AECOM	AECOM METROPOLITAN COMMITTED COMMITTED SOUTHWEST COMMITTED NISCIR	AECOM WETROPOLITAN DISCIPLINE:	AECOM WETROPOLITAN SOUTHWEST DISCIPLINE: SHEET NAME:	AECOM SOUTHWEST TRACK TYPICAL SECTIONS

- NOTE:

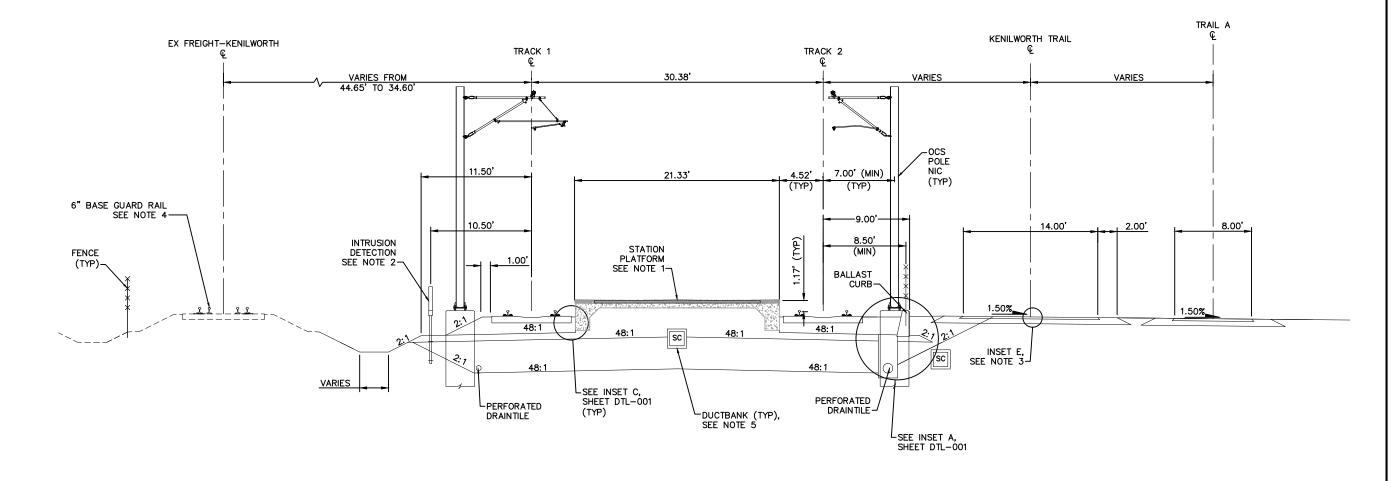
 1. SEE STATION PLANS FOR STATION PLATFORM DETAILS.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

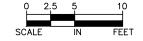
 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION - 21ST STREET STATION STA 2821+02.51 TO STA 2822+00.00



÷ I	NO.	DATE	BY	CHECK D	SIGN R	REVISION / SUBMITTAL		CIVIL EAST VOLUME 2	SHEE
Ę –	-							CIVIL EAST - VOLUME 3	
14							A=COM	TRACK	128
02:	\perp						A=CU/VI	TYPICAL SECTIONS	
215							2 — 4 4 2	SOUTHWEST STATE OF THE STATE OF	OF
2								METROPOLITAN Green Line Lift Extension	
2							60% SUBMISSION - 09/28/15	DISCIPLINE: SHEET NAME:	336
Sep							60 /6 30BIVII33ION - 09/20/13	TRACK E3-TRK-TYP - (J35

- NOTE:

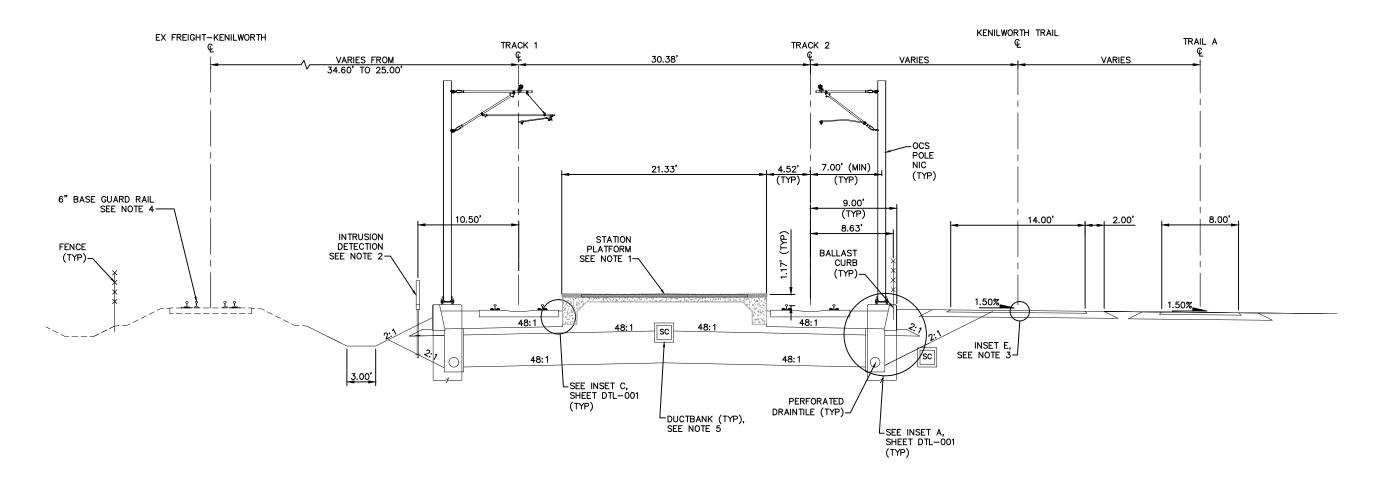
 1. SEE STATION PLANS FOR STATION PLATFORM DETAILS.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

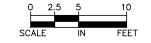
 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION - 21ST STREET STATION STA 2822+00.00 TO STA 2823+72.51



2015 02:41 am V:\	NO. DA	ATE BY CHECK DESIGN REVISION / SUBMITTAL	AECOM	METROPOLITAN SOUTHWEST Green Line Little Stension	Т	T - VOLUME 3 RACK L SECTIONS	SHEET 129 OF
Sep, 21			60% SUBMISSION - 09/28/15	COUNCIL	DISCIPLINE: TRACK	SHEET NAME: E3-TRK-TYP - 036	336

- NOTE:

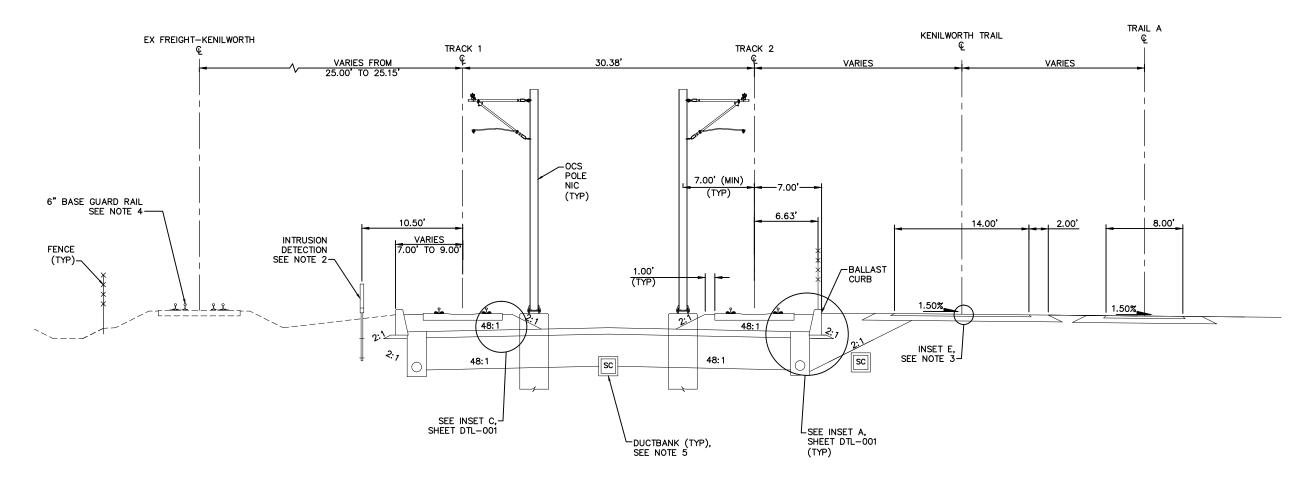
 1. SECTION DOES NOT ILLUSTRATE GRADE CROSSING AT W 21ST ST. SEE TRACK PLANS AND DETAILS.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

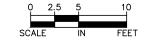
 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2823+72.51 TO STA 2825+00.00



2015 02:42 am V:\	NO. D	DATE	BY CHECK DESIGN REVISION / SUBMITTAL	AECOM	METROPOLITAN SOUTHWEST		TR	T - VOLUME ACK SECTIONS	3	SHEET 130 OF
Sep, 21				60% SUBMISSION - 09/28/15	COBNEIL	DISCIPLINE:	rack s	SHEET NAME:	E3-TRK-TYP - 037	336

- NOIE:

 1. TRACK CENTERS NARROW FROM 30.38' TO 30.37' FROM STA. 2825+00.00 TO 2826+32.56.

 2. SEE RETAINING WALL PLANS FOR DETAILS.

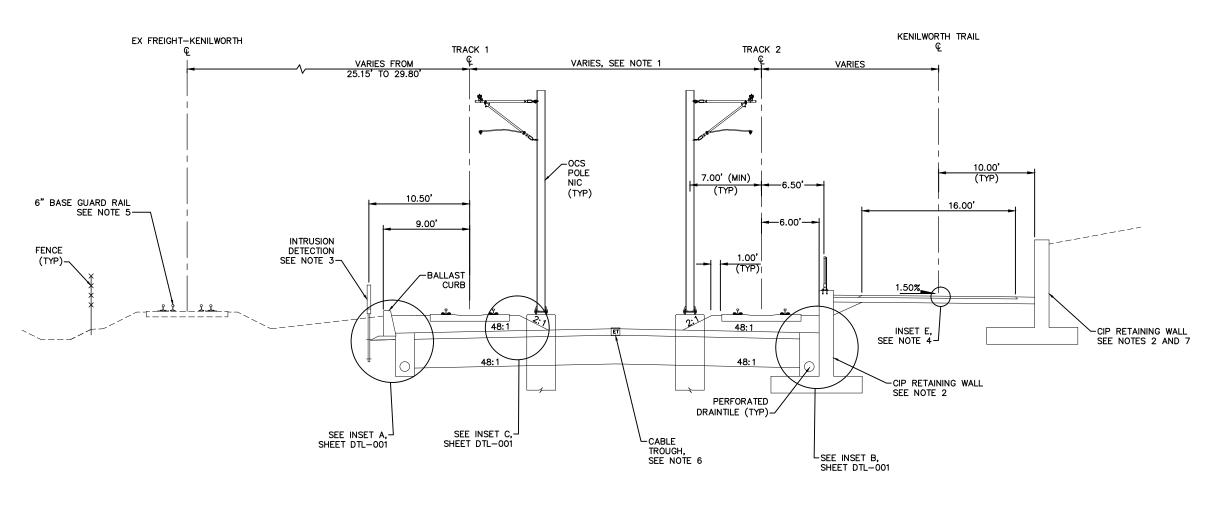
 3. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

 4. FOR INSETS SEE CIVIL PLANS.

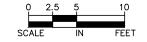
 5. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 6. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

- 7. RETAINING WALL FROM STA 2825+26.23 TO STA 2825+91.50.



TYPICAL SECTION STA 2825+00.00 TO STA 2826+40.00



SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 131 **TYPICAL SECTIONS** SOUTHWEST: OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E3-TRK-TYP - 038 TRACK

- NOTE:

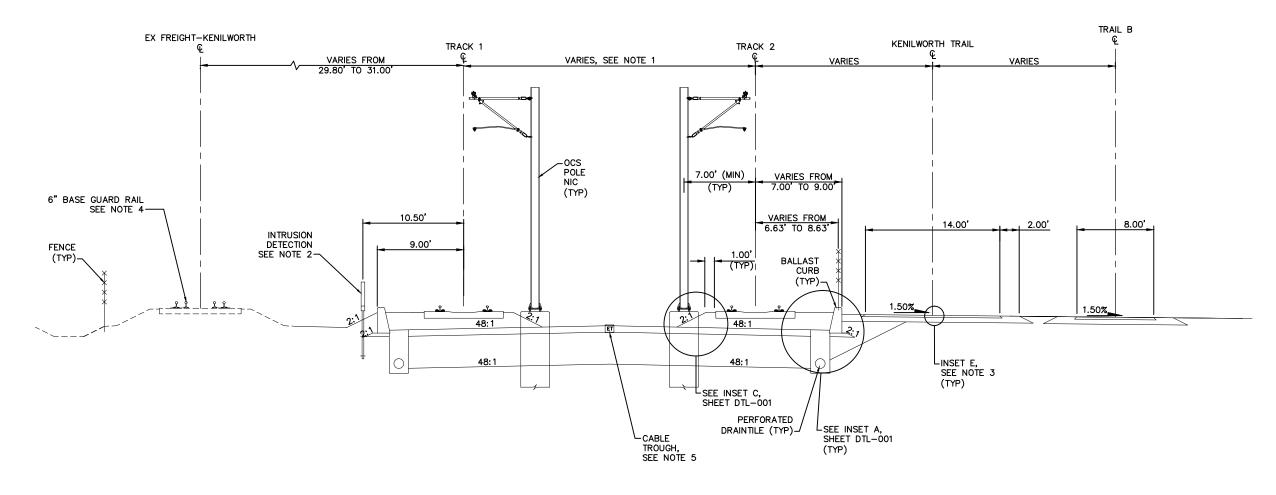
 1. TRACK CENTERS NARROW FROM 30.37' TO 26.67' BETWEEN STA 2826+56.61 AND STA 2628+50.00.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

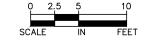
 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

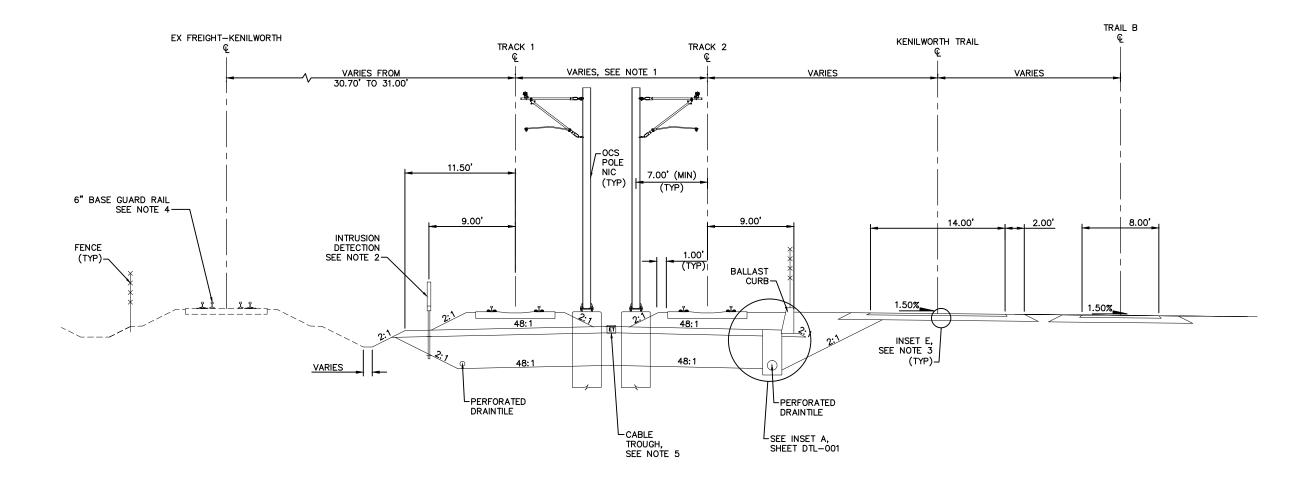


TYPICAL SECTION STA 2826+40.00 TO STA 2828+50.00

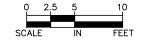


am K:	IO. DATE	BY CHECK DESIGN REVISION / SUBMITTAL				SI - VOLUME 3	SHEET
2: 42			AECOM			RACK	132
5 02				SOUTHWEST	TYPICA	L SECTIONS	OF
201				METROPOLITAN COUNTY Extension			01
ep, 2.			60% SUBMISSION - 09/28/15	CORCIL	DISCIPLINE: TRACK	SHEET NAME: E3-TRK-TYP - 039	336 9

- NOTE:
 1. TRACK CENTERS NARROWS FROM 26.67' TO 21.30' BETWEEN STA 2628+50.00 AND STA 2830+00.00.
 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.
 3. FOR INSETS SEE CIVIL PLANS.
 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.
 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2828+50.00 TO STA 2830+00.00



/; ε	NO.	DATE BY CHECK DESIGN REVISION / SUBMITTAL			CIVIL EAST - VOLUME 3	SHEET
: 43 ai			A=COM		TRACK	133
115 02			AECOM	SOUTHWEST	TYPICAL SECTIONS	OF
21 20				METROPOLITAN C U N C I L	DISCIDING.	
Sep,			60% SUBMISSION - 09/28/15		DISCIPLINE: SHEET NAME: E3-TRK-TYP - 040	336

- NOTE:

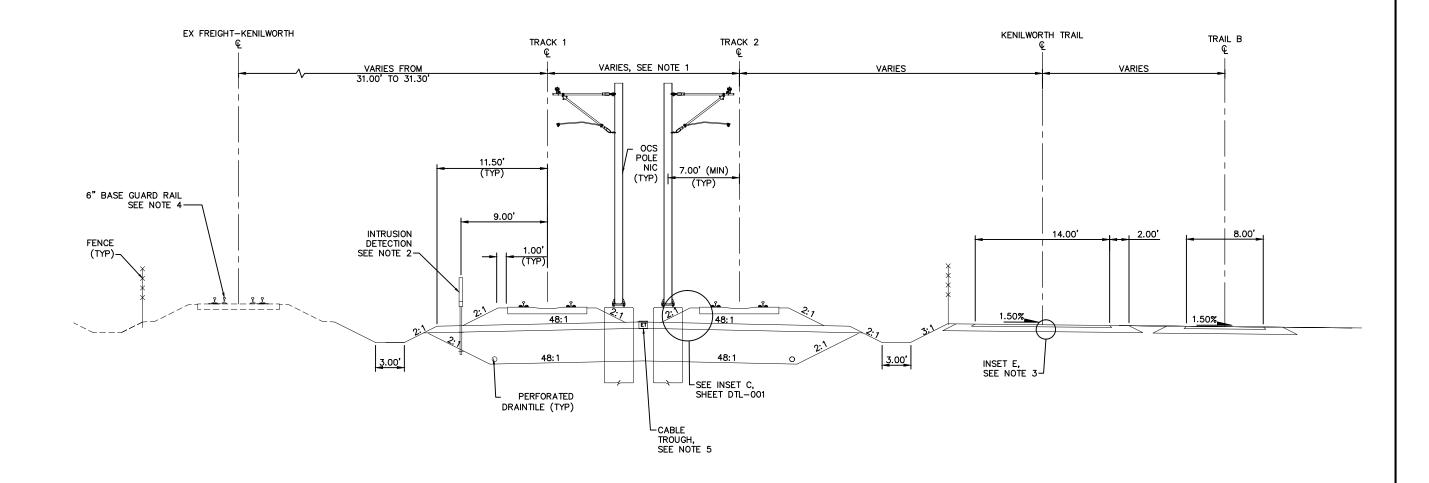
 1. TRACK CENTERS NARROWS FROM 26.67' TO 20.00' BETWEEN STA 2630+00.00 AND STA 2830+33.74.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

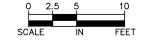
 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA 2830+00.00 TO STA 2830+33.74



:	NO.	DATE	BY CHEC	KDESIGN	REVISION / SUBMITTAL					CIVIL EAST - VOLUME 3		SHEET
-3 an	_						A=COM	M G		TRACK		134
02: 4							AECOM	COLUTINATECT		TYPICAL SECTIONS		134
2015	+			+		•	7 — 0 0 2 1 1	SOUTHWEST		THIOAE GEOTIONS		OF
21.2								METROPOLITAN C U N C I	DISCIPLINE:	SHEET NAME:		200
,dəc							60% SUBMISSION - 09/28/15		DISCIPLINE.		E3-TRK-TYP-041	336

- NOTE:

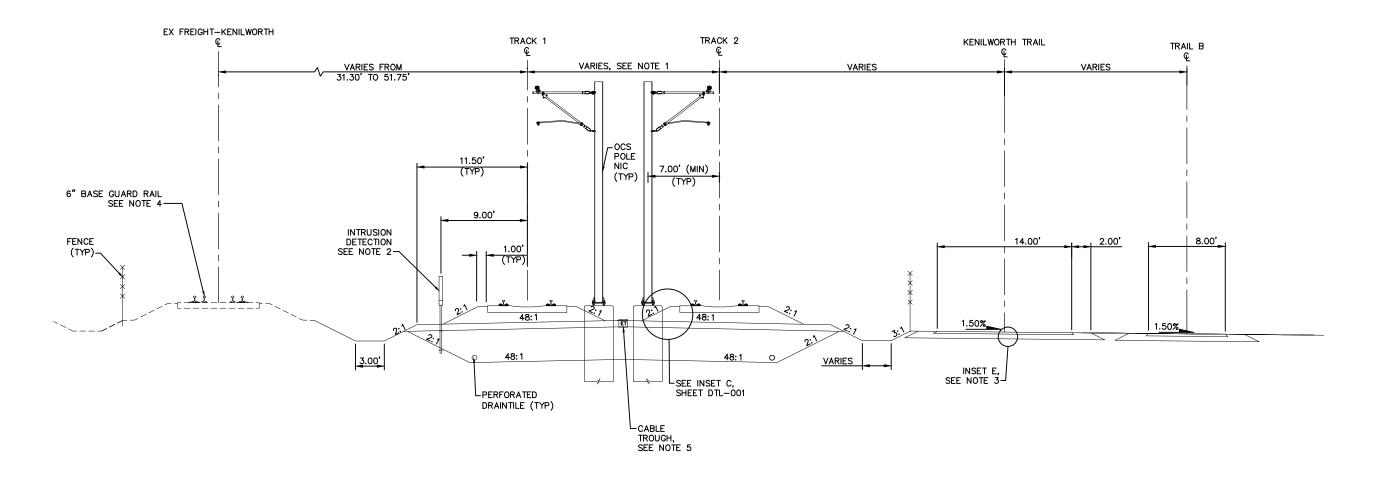
 1. TRACK CENTERS NARROWS FROM 20.00' TO 14.00' BETWEEN STA 2830+33.74 AND STA 2832+83.58.

 2. SEE SYSTEM PLANS FOR INTRUSION DETECTION DETAILS.

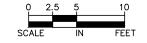
 3. FOR INSETS SEE CIVIL PLANS.

 4. FOR GUARD RAIL LIMITS SEE TRACK CHARTS.

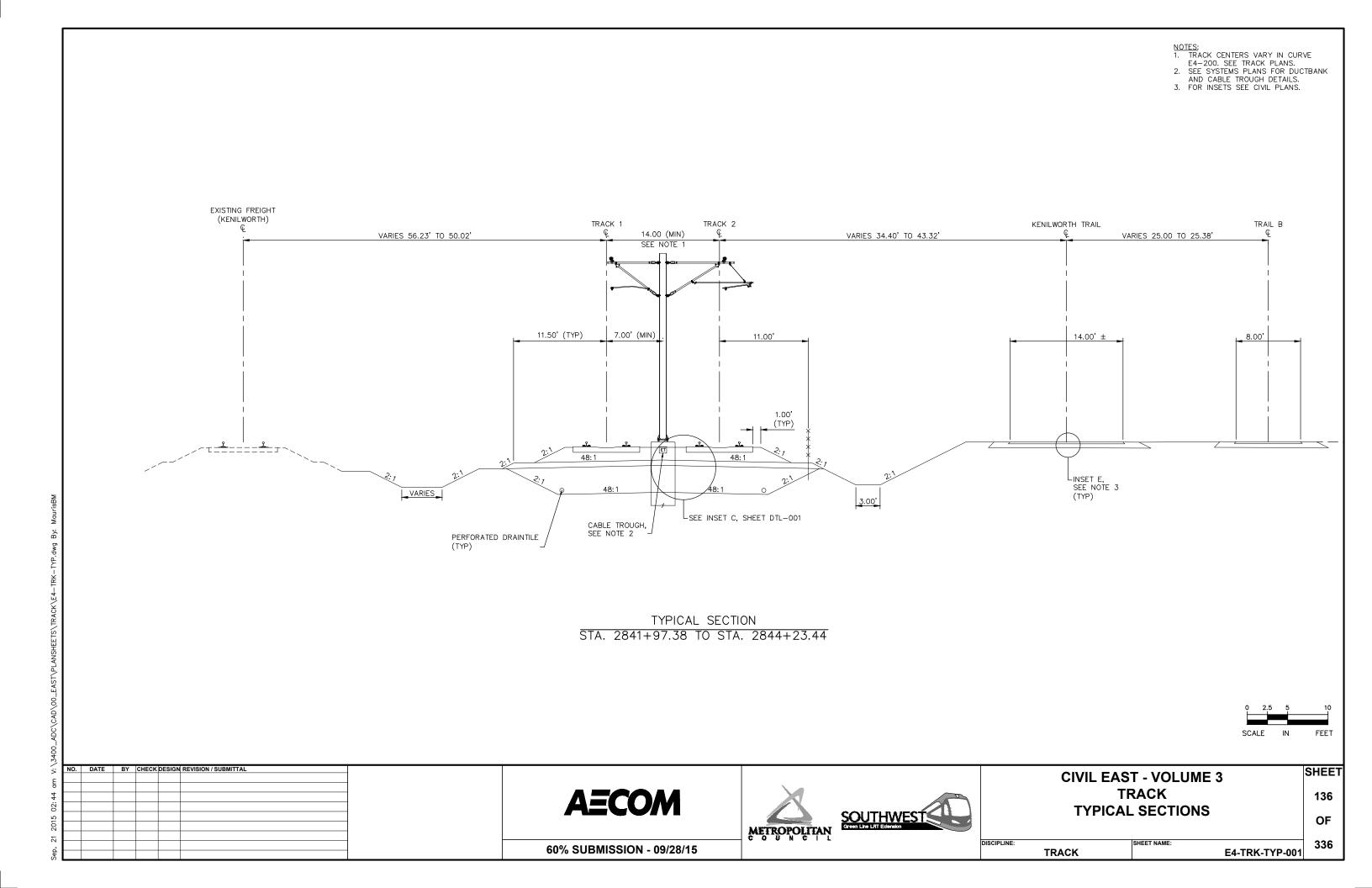
 5. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

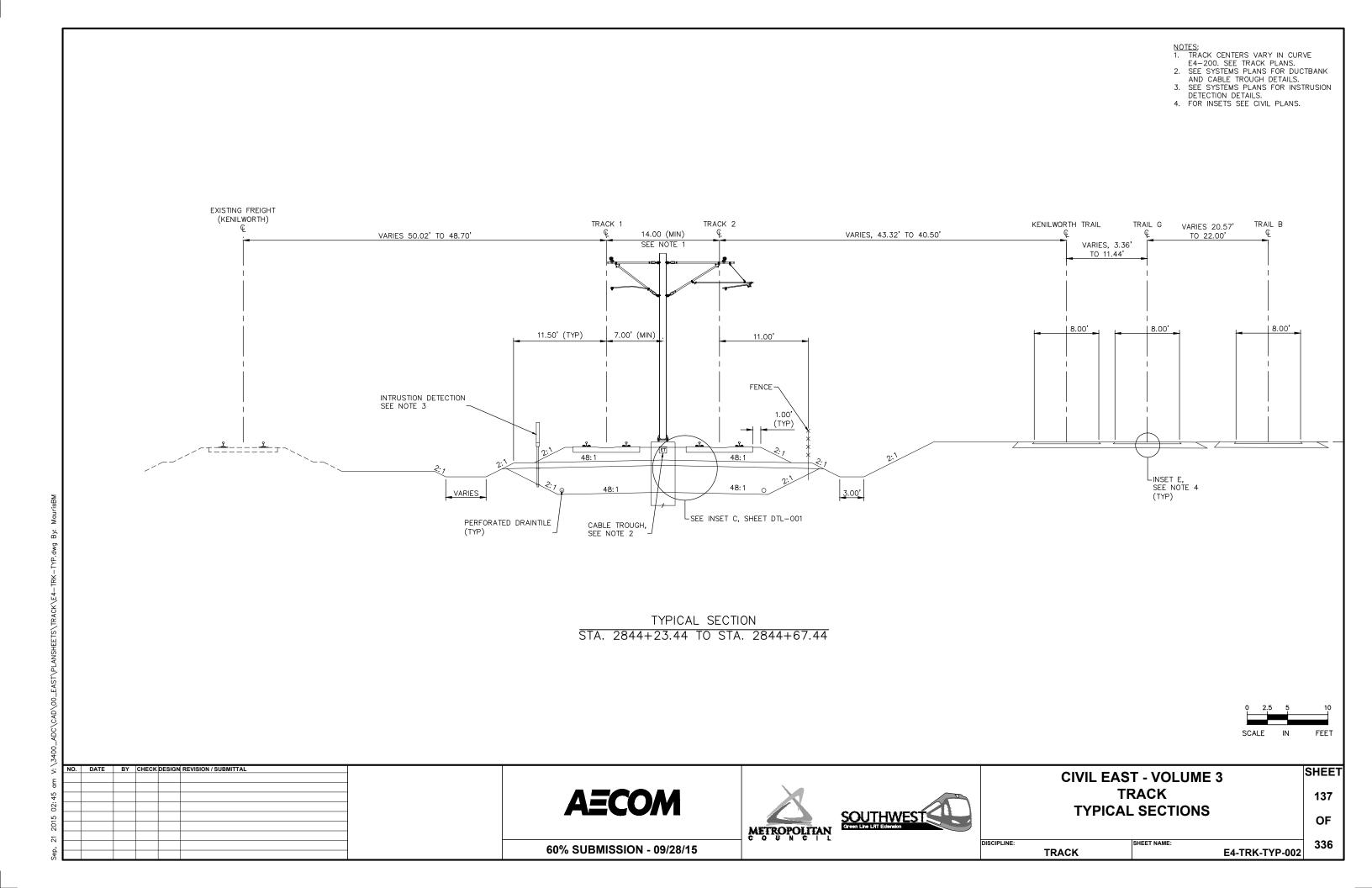


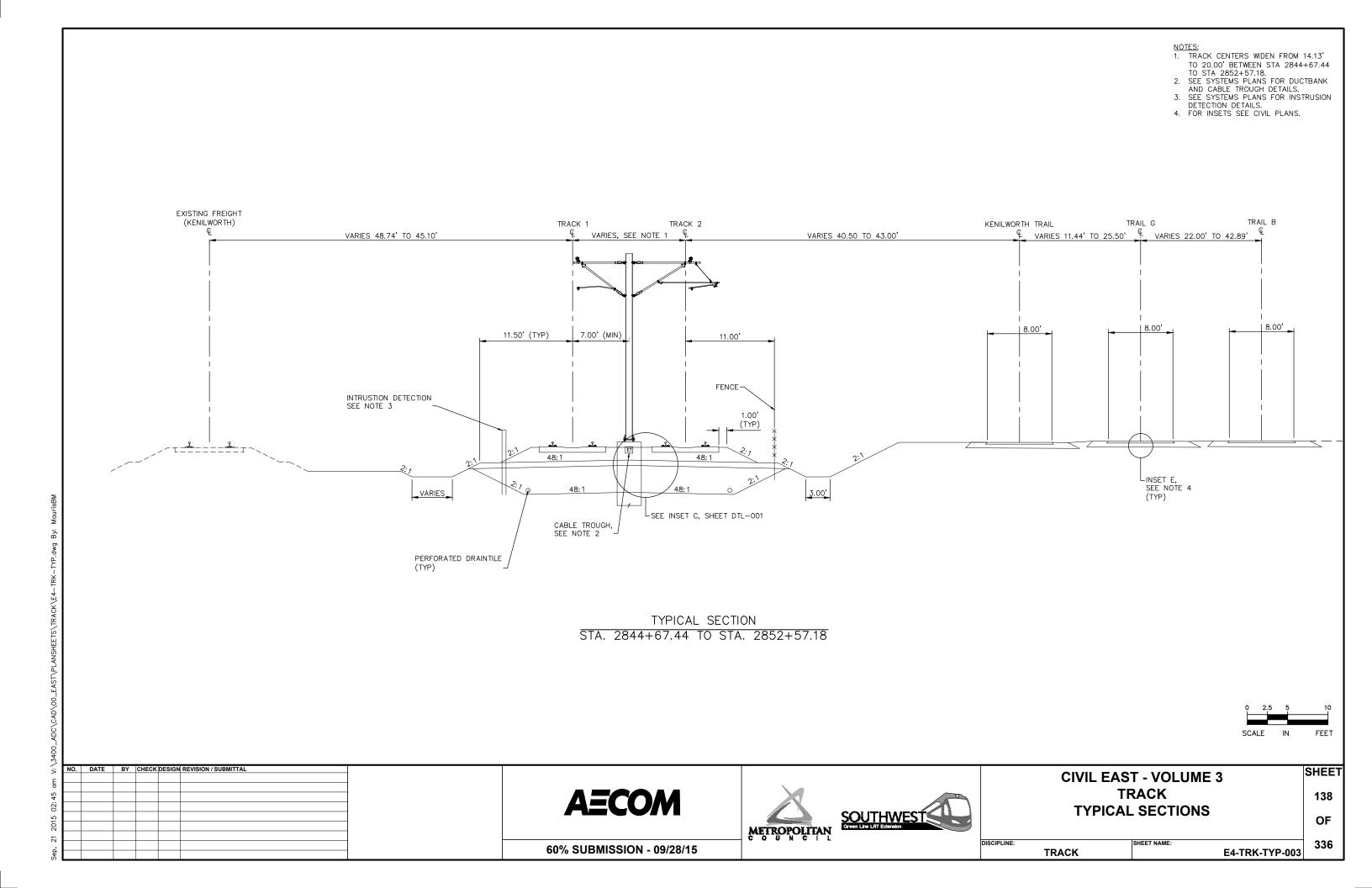
TYPICAL SECTION STA 2830+33.74 TO STA 2837+00.01 STA 2837+00.01 TO STA 2842+00.00

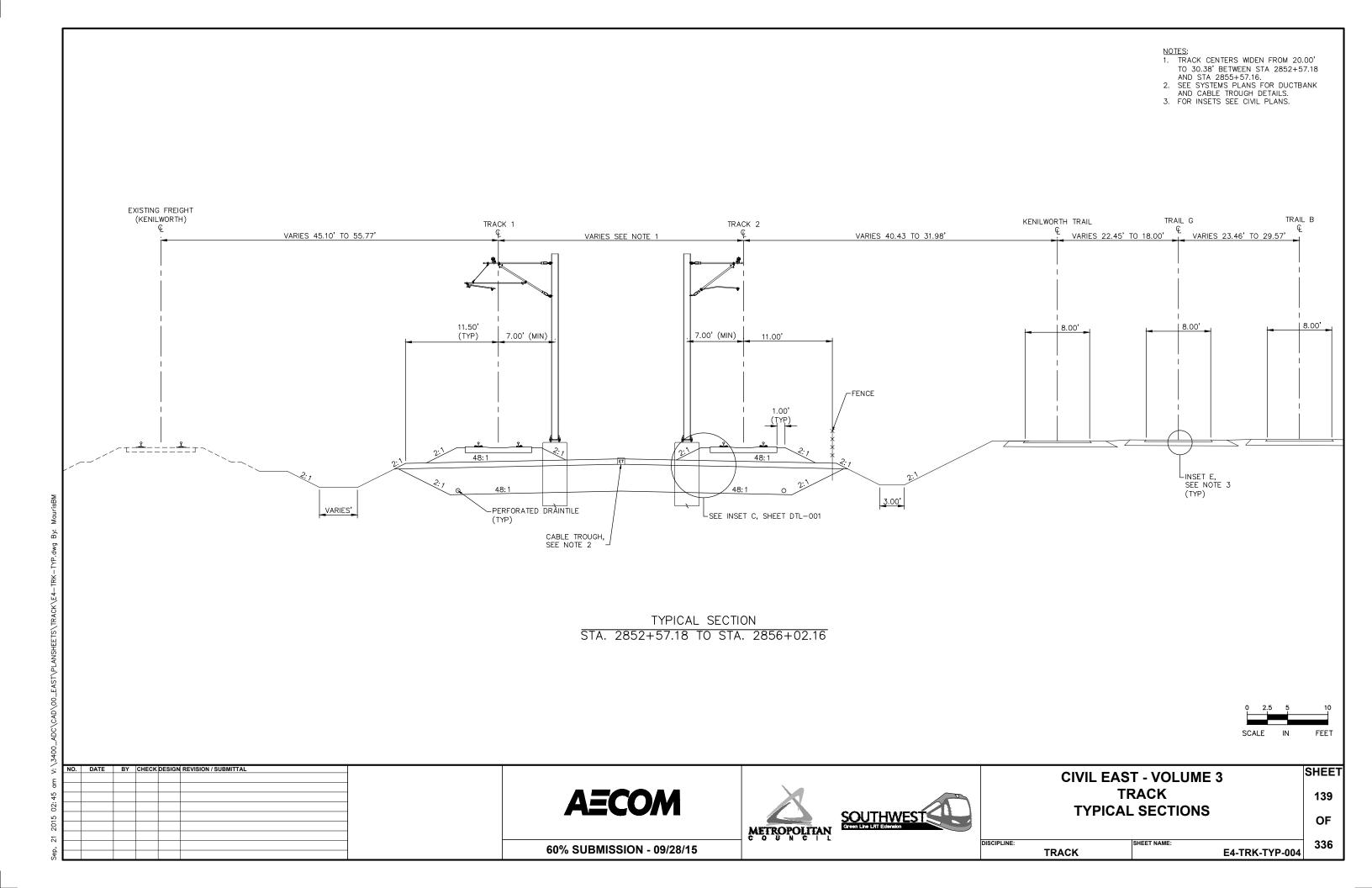


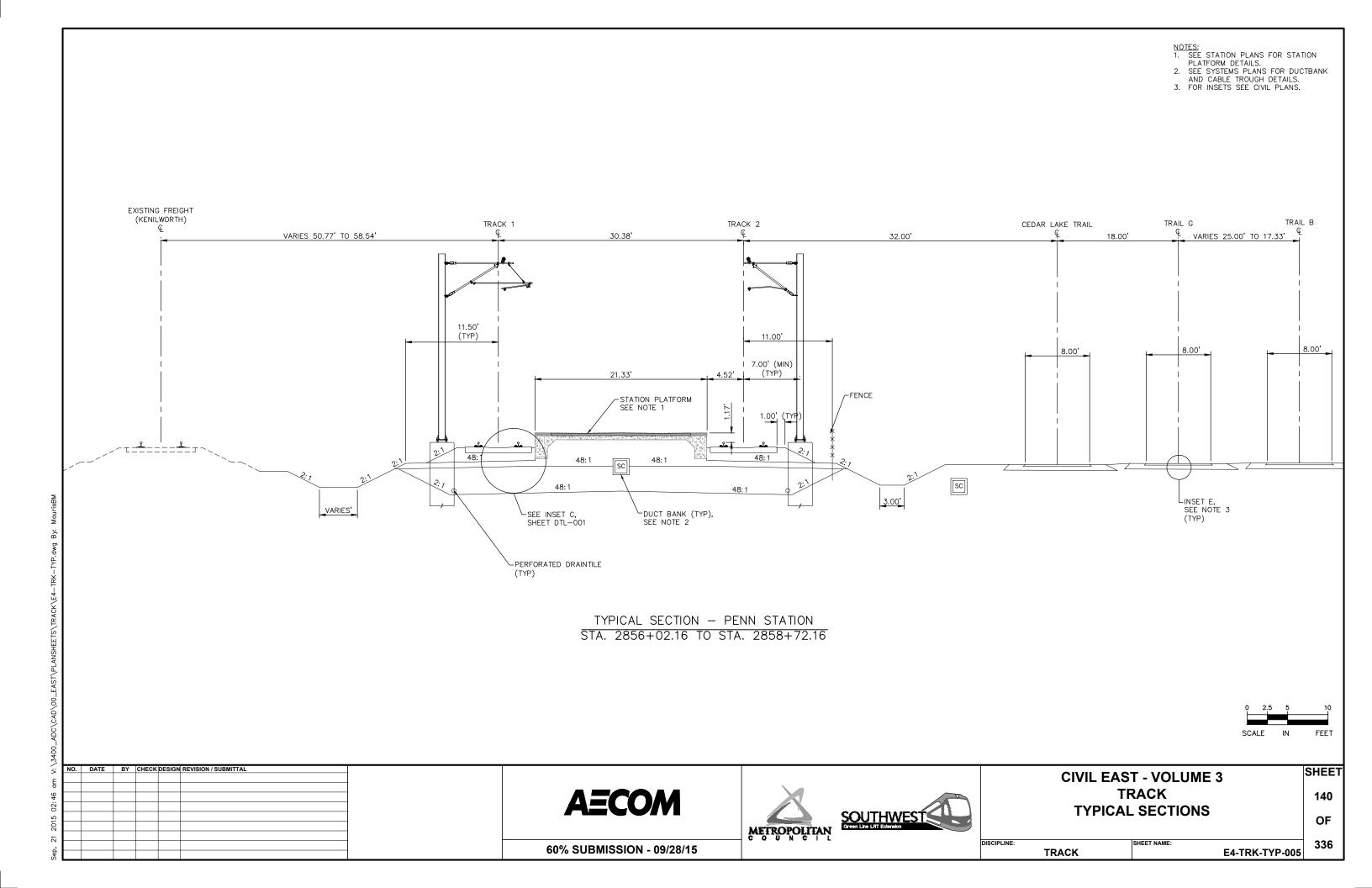
÷	NO.	DATE	BY CHI	ECK DESI	GN REVISION / SUBMITTAL		CIVIL EAST - VOLUME 3	SHEET
2:43 am						A=COM	TRACK	135
2015 0						AECOM	METROPOLITAN SOUTHWEST TYPICAL SECTIONS	OF
Sep, 21						60% SUBMISSION - 09/28/15	DISCIPLINE: TRACK SHEET NAME: E3-TRK-TYF	336

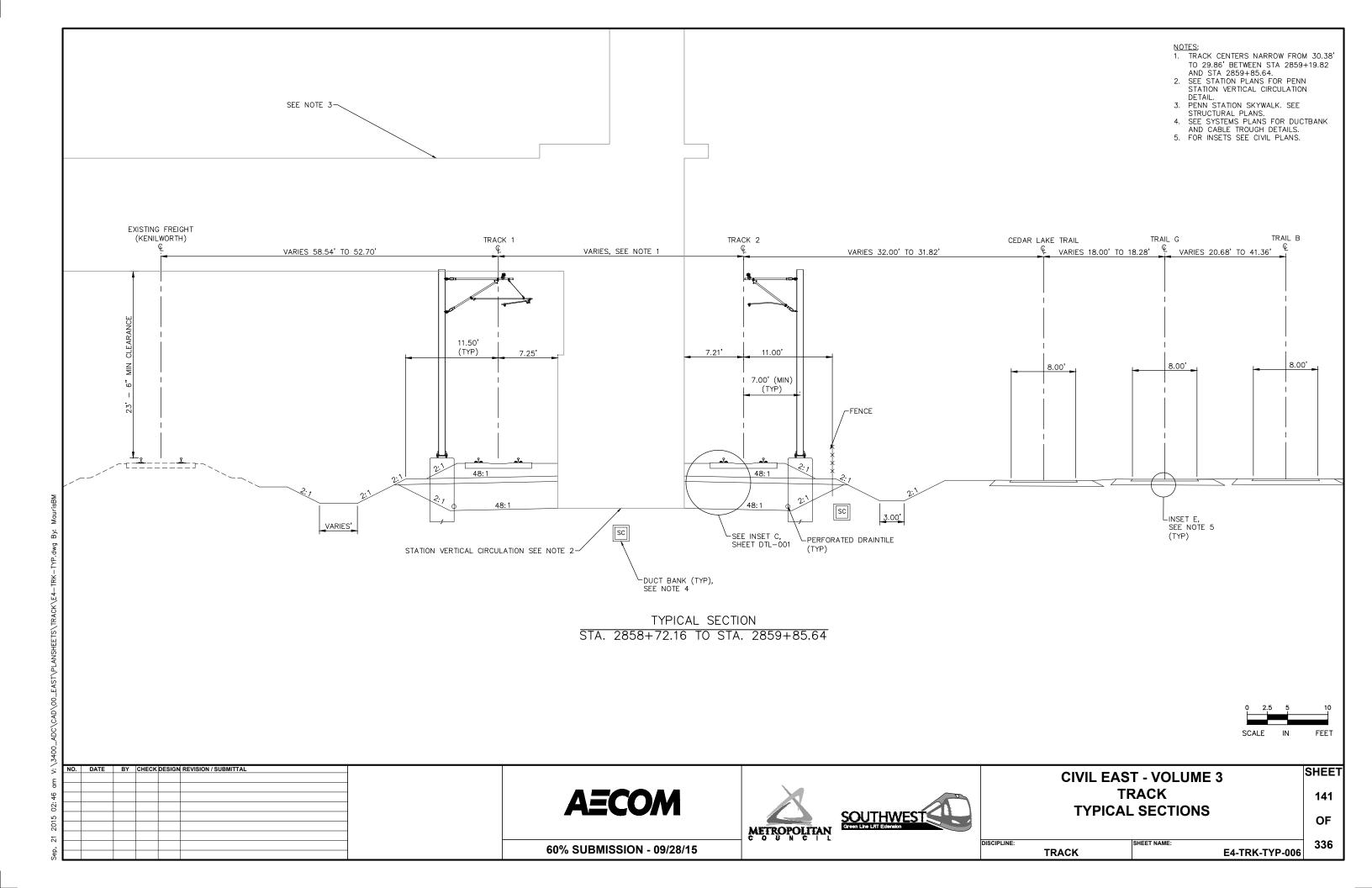


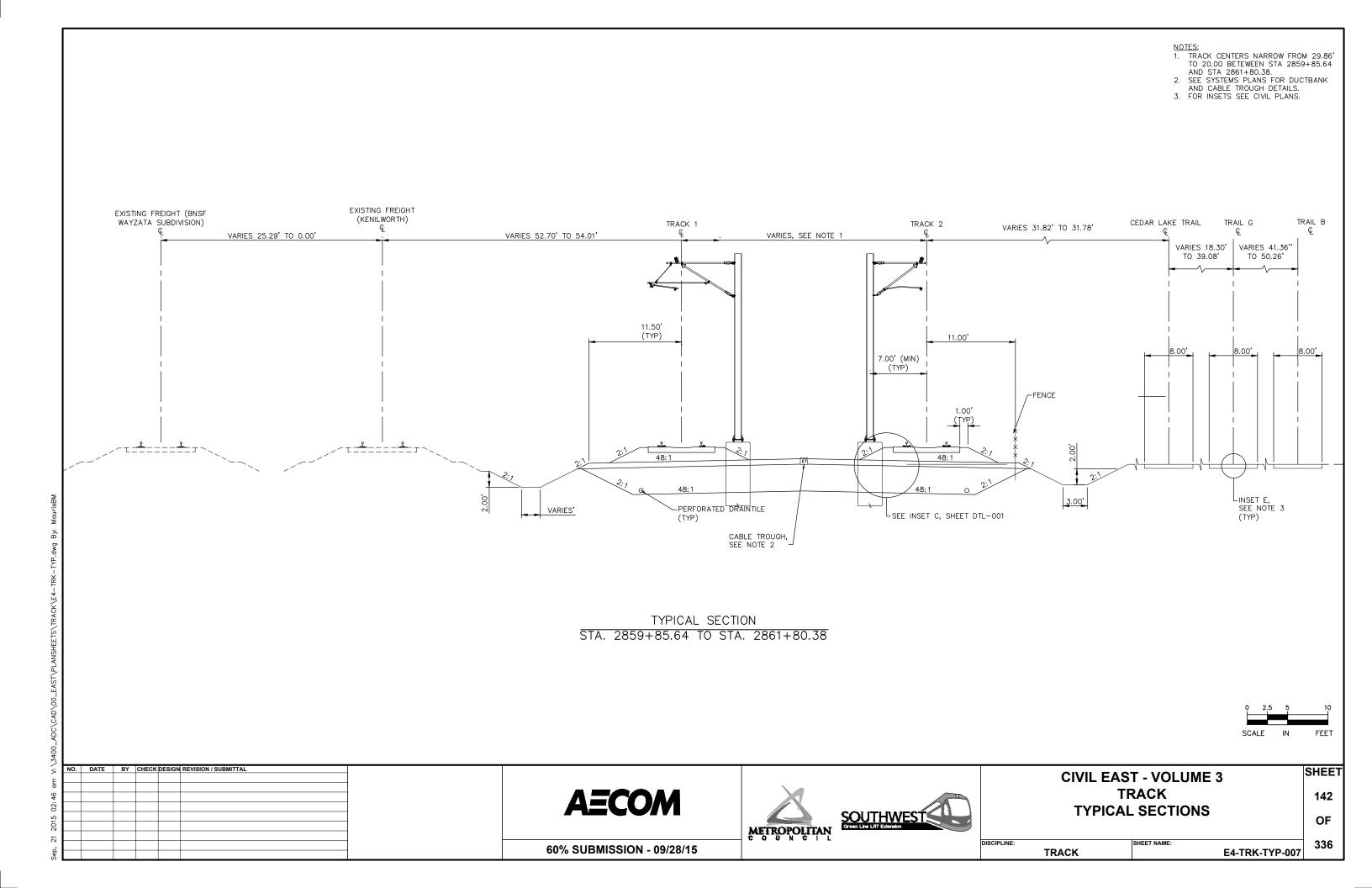


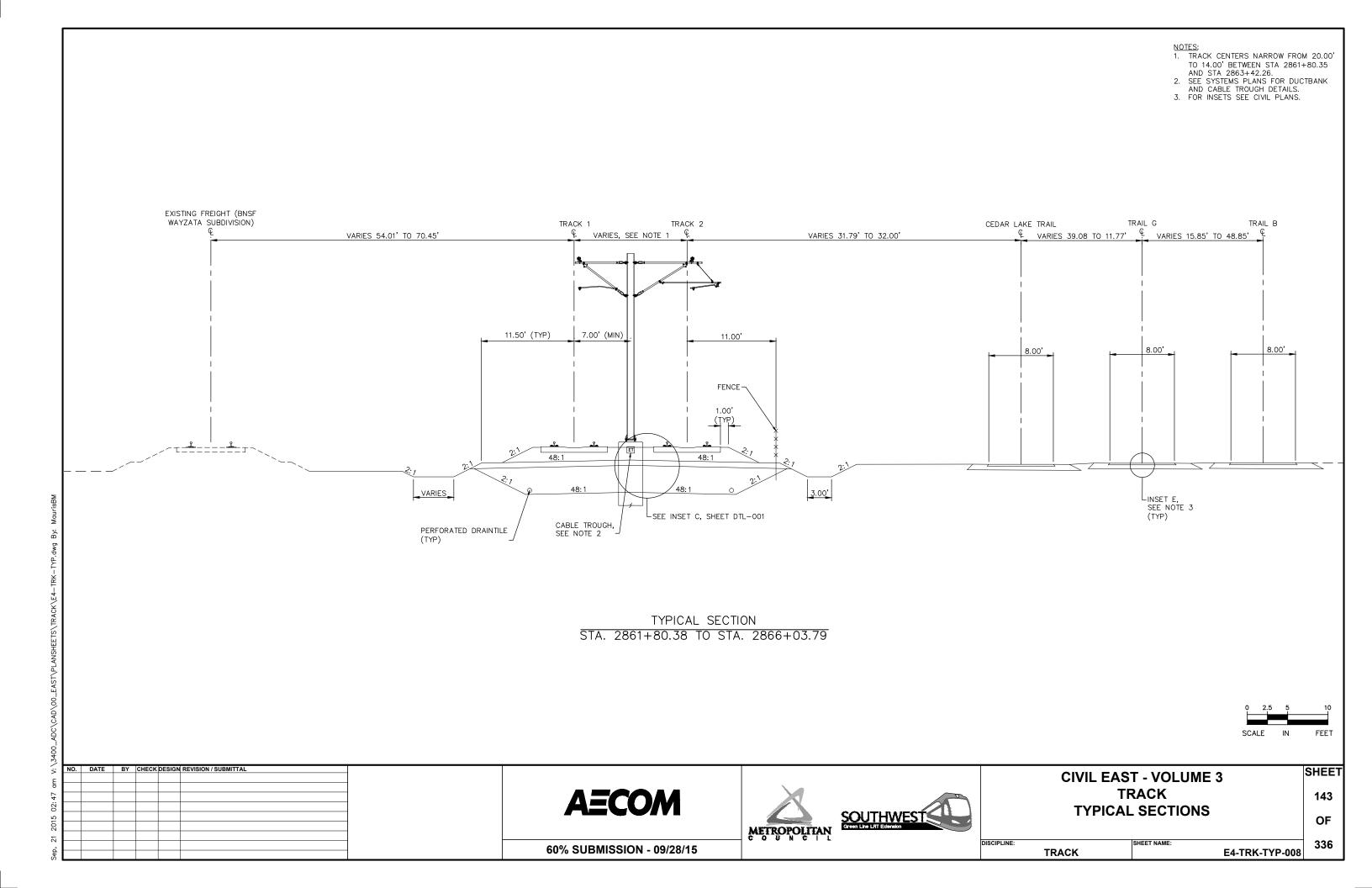






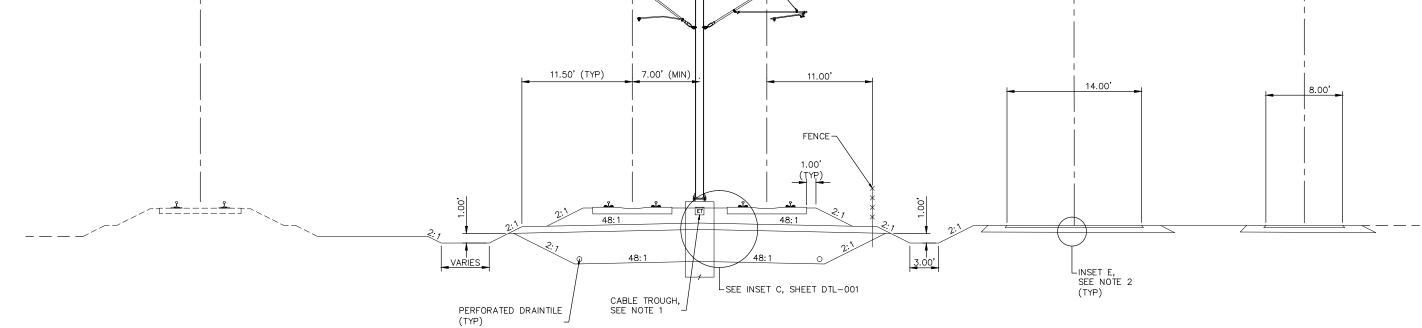






CEDAR LAKE TRAIL

VARIES, 32.00' TO 31.86'



14.00'

TRACK 2

TRACK 1

VARIES 70.45' TO 70.47'

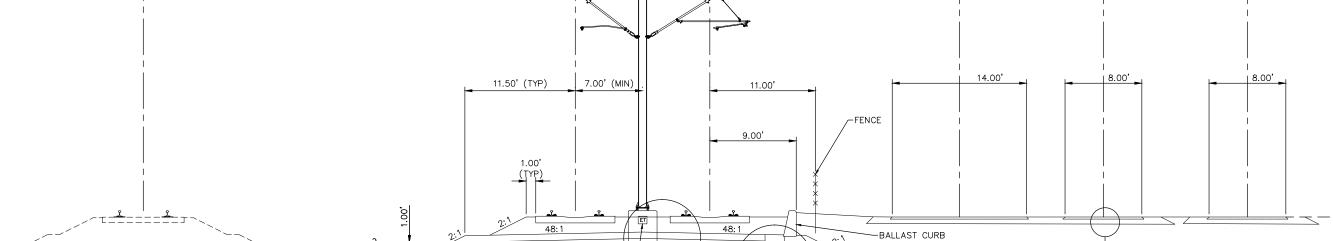
EXISTING FREIGHT (BNSF WAYZATA SUBDIVISION)

TYPICAL SECTION
STA. STA. 2866+03.79 TO STA. 2867+00.24



TRAIL B

CEDAR LAKE TRAIL



L SEE INSET C, SHEET DTL-001

14.00'

TRACK 2

VARIES 31.86' TO 25.23'

PERFORATED DRAINTILE

SEE INSET A, SHEET DTL-001

TRACK 1

70.47

VARIES

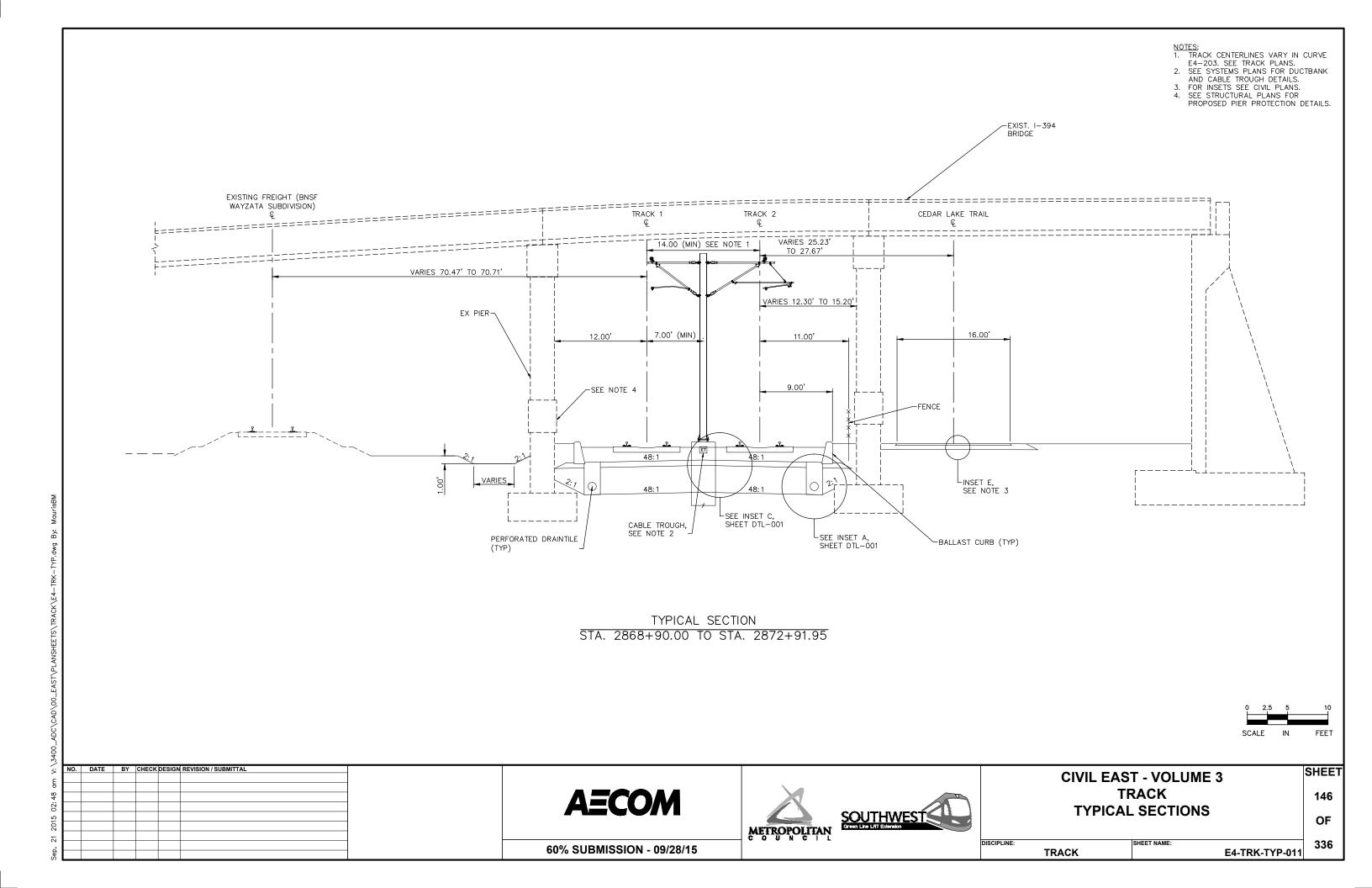
PERFORATED DRAINTILE

EXISTING FREIGHT (BNSF WAYZATA SUBDIVISION)

> TYPICAL SECTION STA. 2867+00.24 TO STA. 2868+90.00

CABLE TROUGH, SEE NOTE 1



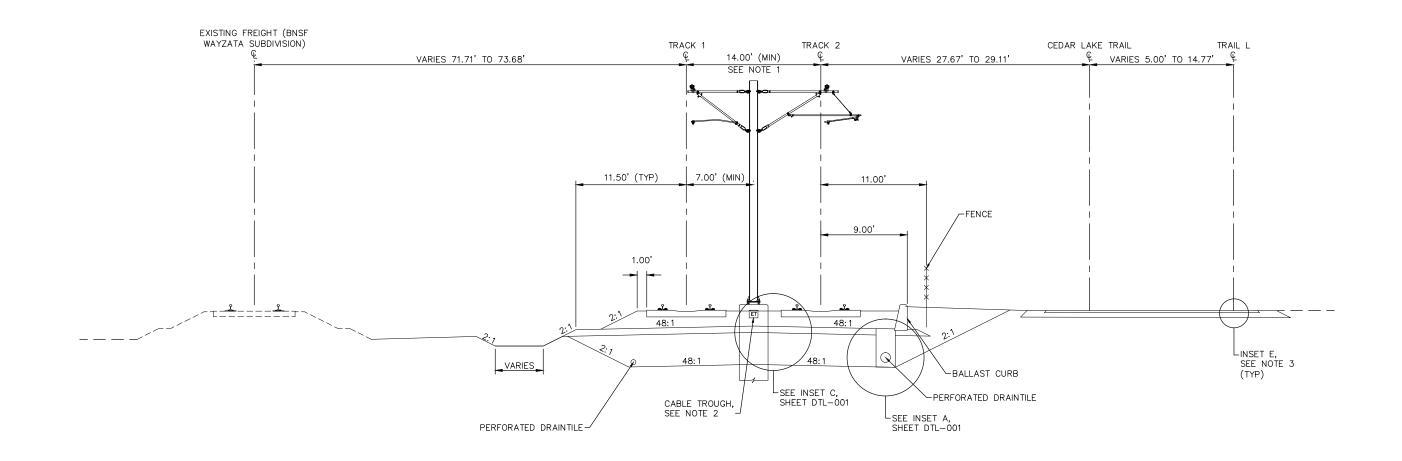


- NOTES:

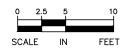
 1. TRACK CENTERS VARY IN CURVE
 E4-203. SEE TRACK PLANS.

 2. SEE SYSTEMS PLANS FOR DUCTBANK
 AND CABLE TROUGH DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.



TYPICAL SECTION STA. 2872+91.95 TO STA. 2875+12.79



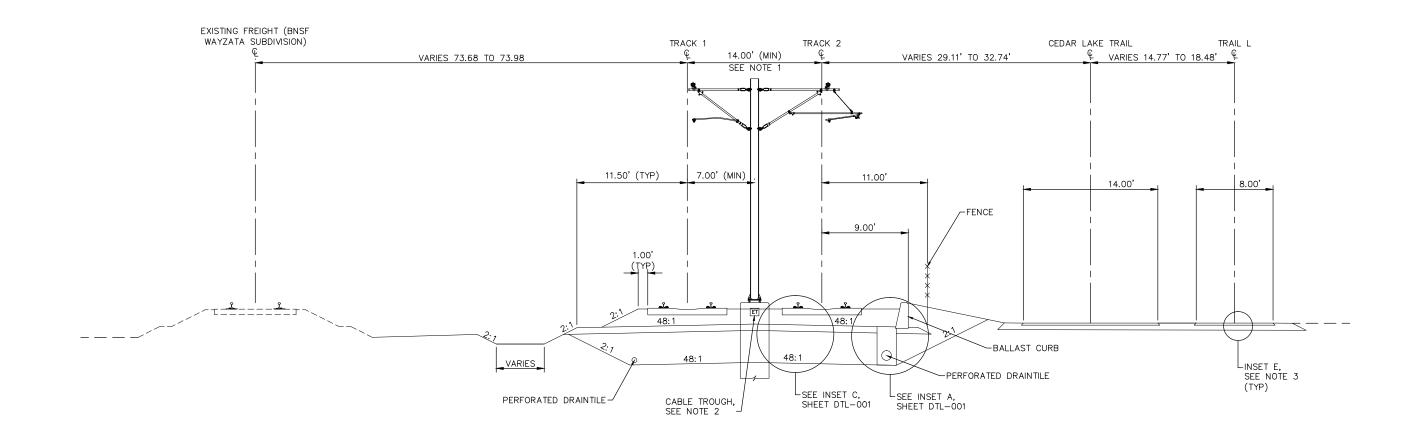
NO	IO.	DATE	BY (CHECK	DESIGN	REVISION / SUBMITTAL	AECOM	METROPOLITAN	SOUTHWEST Green Line LRTI Extension		TI	T - VOLUME RACK L SECTIONS	3	SHEI 147 OF
F							60% SUBMISSION - 09/28/15	COONCIL		DISCIPLINE:	TRACK	SHEET NAME:	E4-TRK-TYP-012	33

- NOTES:

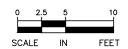
 1. TRACK CENTERS VARY IN CURVE E4-203. SEE TRACK PLANS.

 2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.



TYPICAL SECTION STA. 2875+12.79 TO STA. 2876+00.00



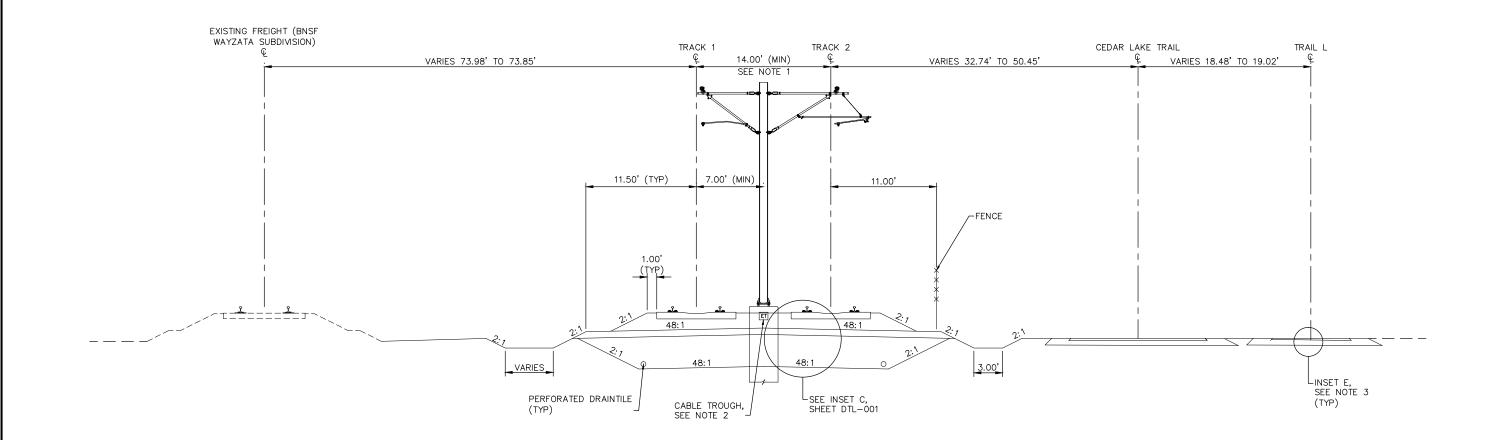
NO.	0.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	AECOM	METROPOLITAN	SOUTHWEST Green Live Litt Extension		TI	T - VOLUME RACK ND PROFILE	3	SHE 148 OF
							60% SUBMISSION - 09/28/15			DISCIPLINE:	TRACK	SHEET NAME:	E4-TRK-TYP-013	3

- NOTES:

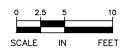
 1. TRACK CENTERS VARY IN CURVE
 E4-203. SEE TRACK PLANS.

 2. SEE SYSTEMS PLANS FOR DUCTBANK
 AND CABLE TROUGH DETAILS.

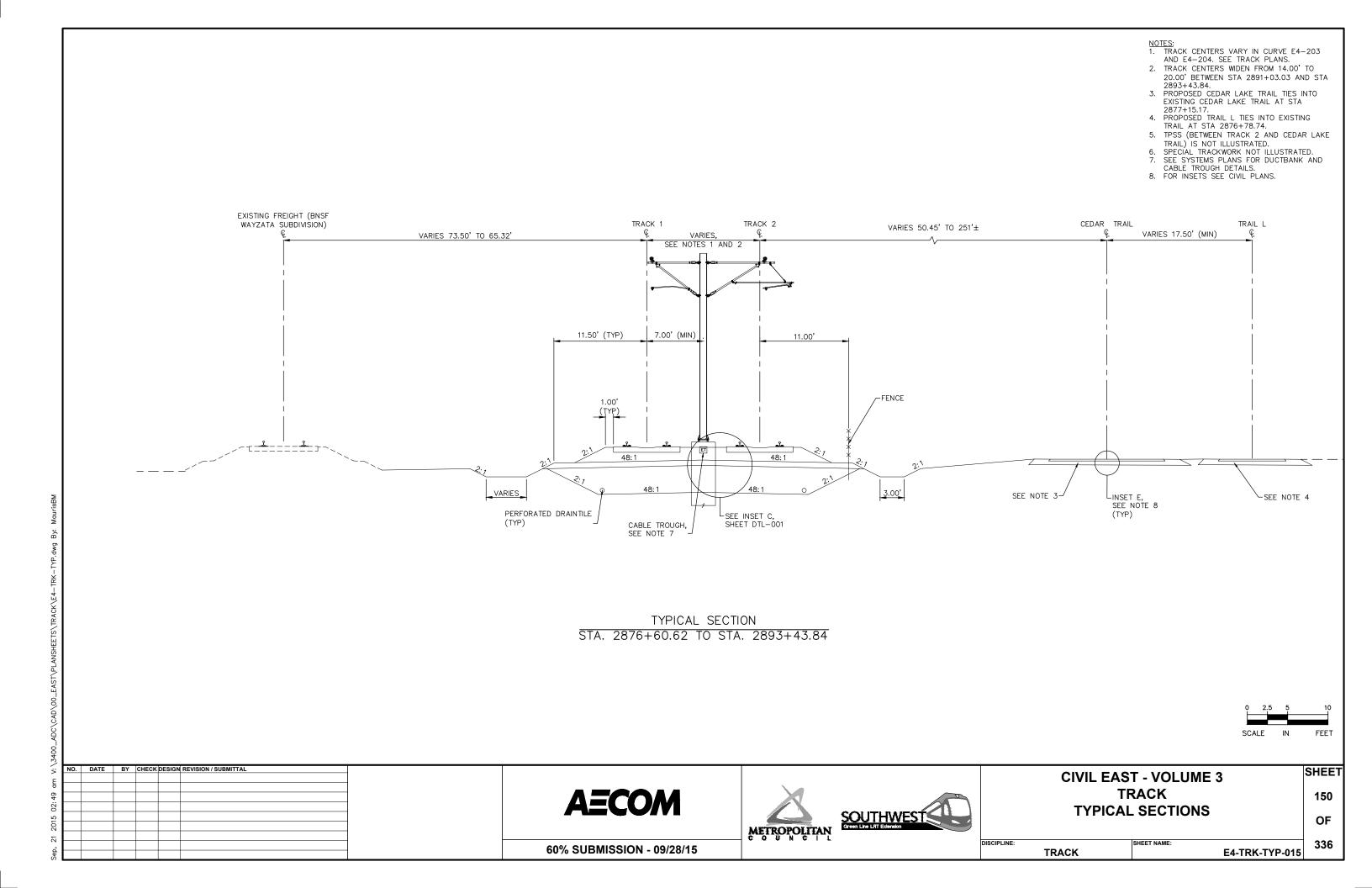
 3. FOR INSETS SEE CIVIL PLANS.

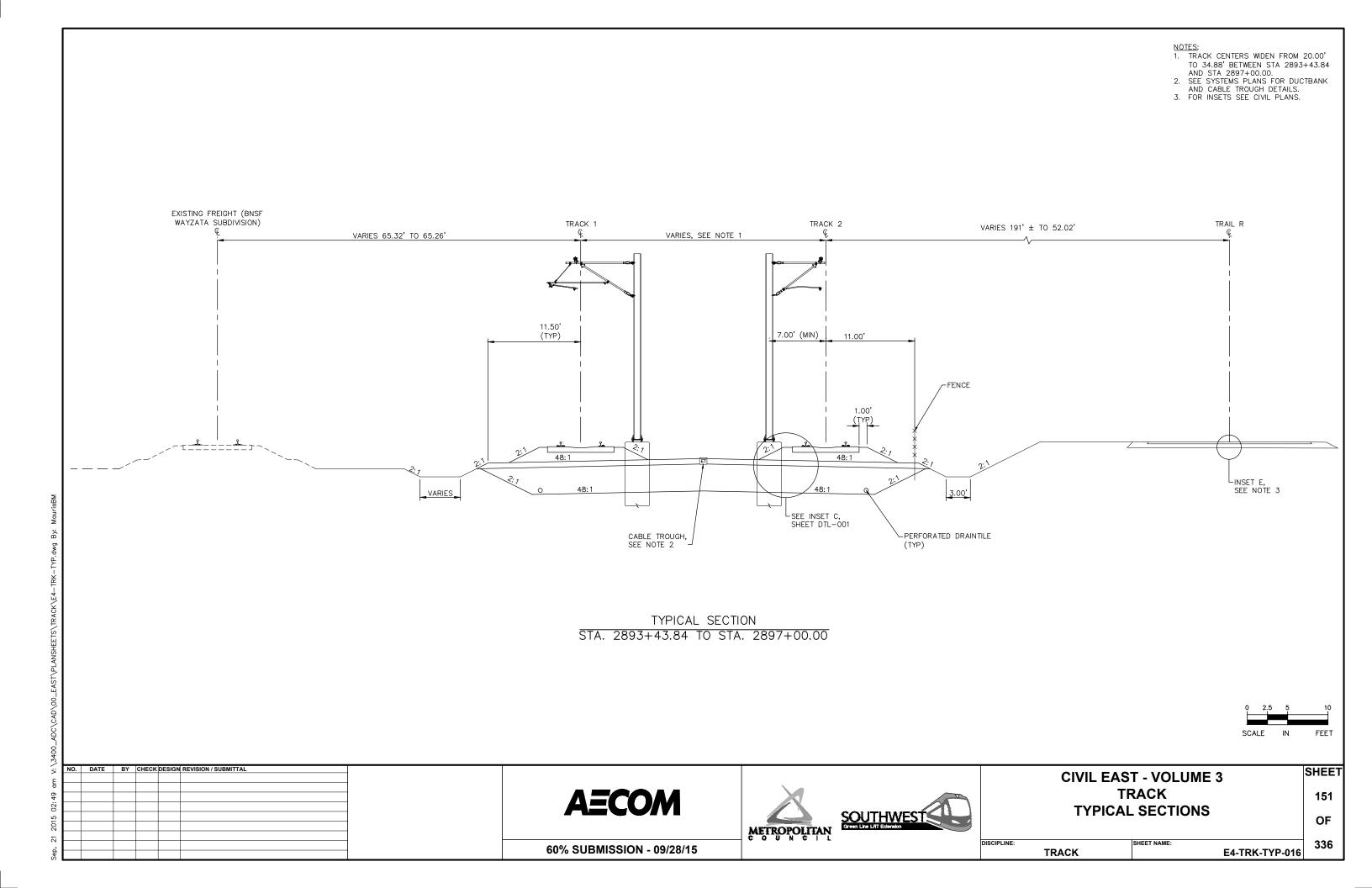


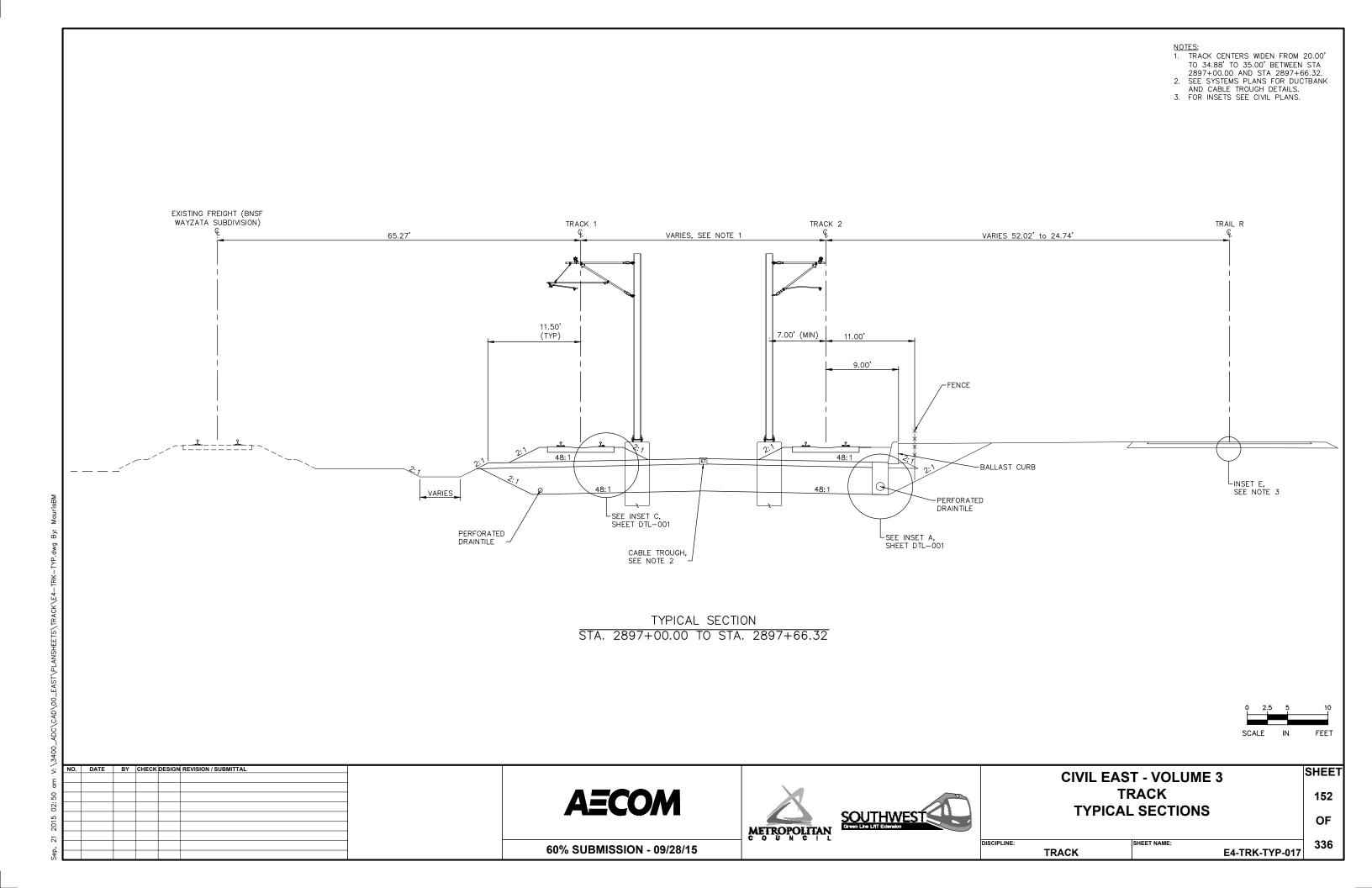
TYPICAL SECTION STA. 2876+00.00 TO STA. 2876+60.62

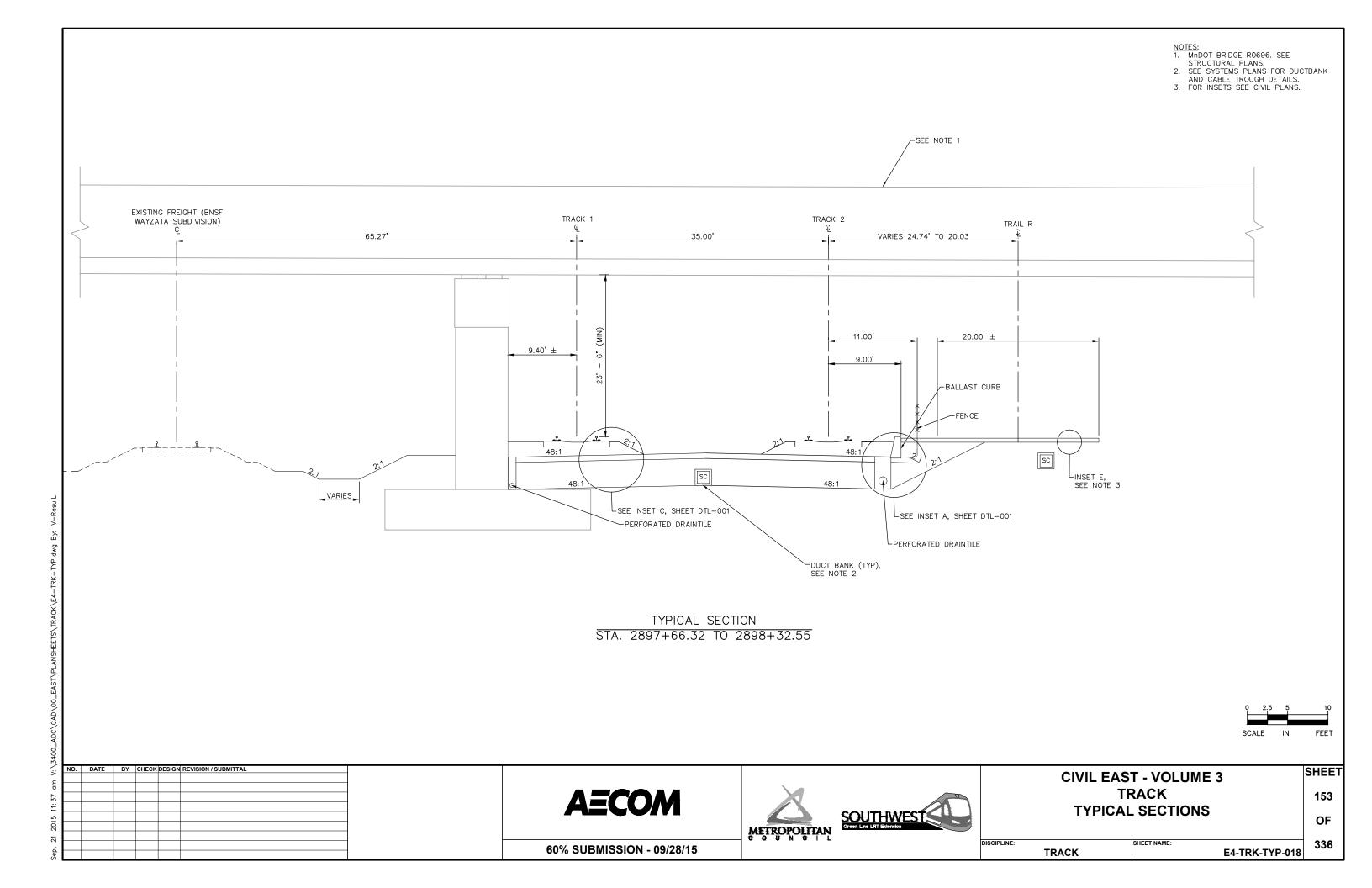


N	NO.	. D.	ATE	BY	CHECK	DESIG	REVISION /	SUBMITTAL	AECOM	METROPOLITAN	SOUTHWEST Green Line Little Extension		T	T - VOLUME RACK L SECTIONS	3	SH 1
.									60% SUBMISSION - 09/28/15	— GOOD N GILL		DISCIPLINE:	TRACK	SHEET NAME:	E4-TRK-TYP-014	; ;







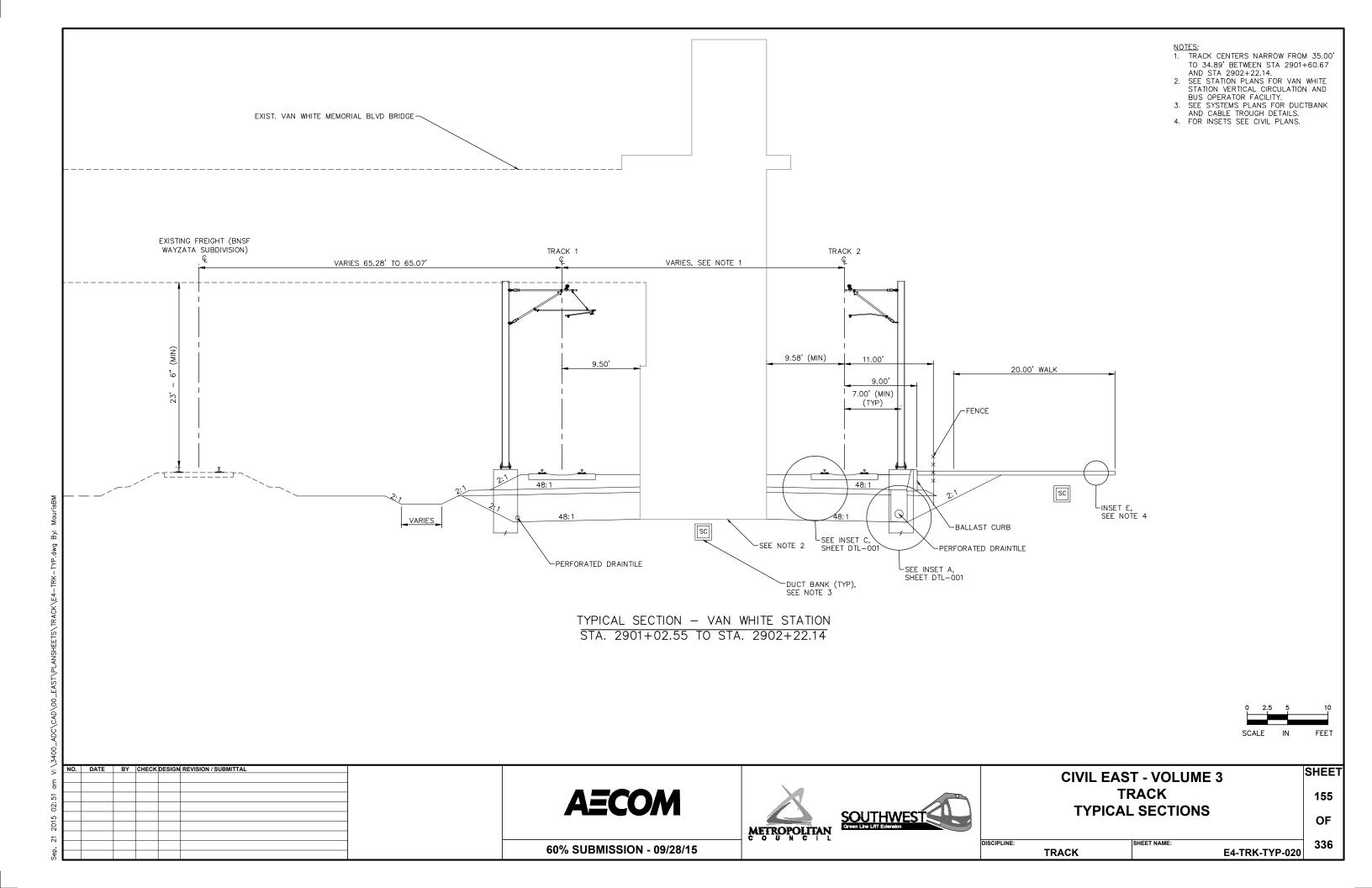


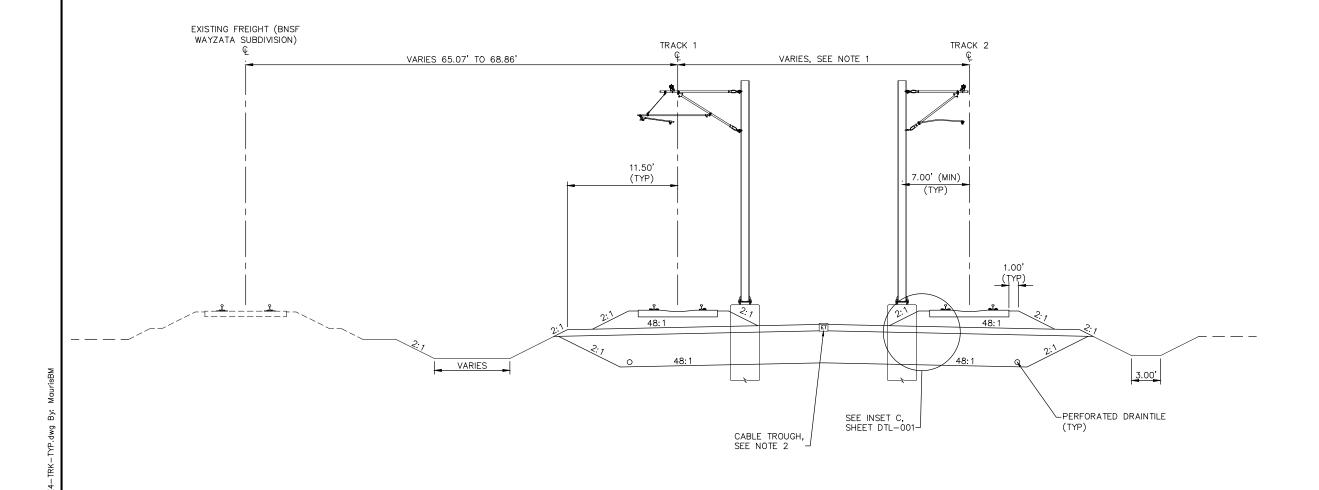
NOTES:

1. SEE STATION PLANS FOR STATION PLATFORM DETAILS.

2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

3. FOR INSETS SEE CIVIL PLANS. EXISTING FREIGHT (BNSF WAYZATA SUBDIVISION) TRACK 2 TRACK 1 65.27 35.00' 25.96' 20.00' WALK 9.00' 7.00' (MIN) STATION PLATFORM, SEE NOTE 1 (TYP) -FENCE 48:1 sc LINSET E, SEE NOTE 3 VARIES ∽BALLAST CURB LSEE INSET C, SHEET DTL-001 PERFORATED DRAINTILE -PERFORATED DRAINTILE SEE INSET A, SHEET DTL-002 DUCT BANK (TYP), SEE NOTE 2 TYPICAL SECTION - VAN WHITE STATION STA. 2898+32.55 TO STA. 2901+02.55 SCALE IN SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 154 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E4-TRK-TYP-019 **TRACK**

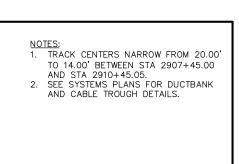


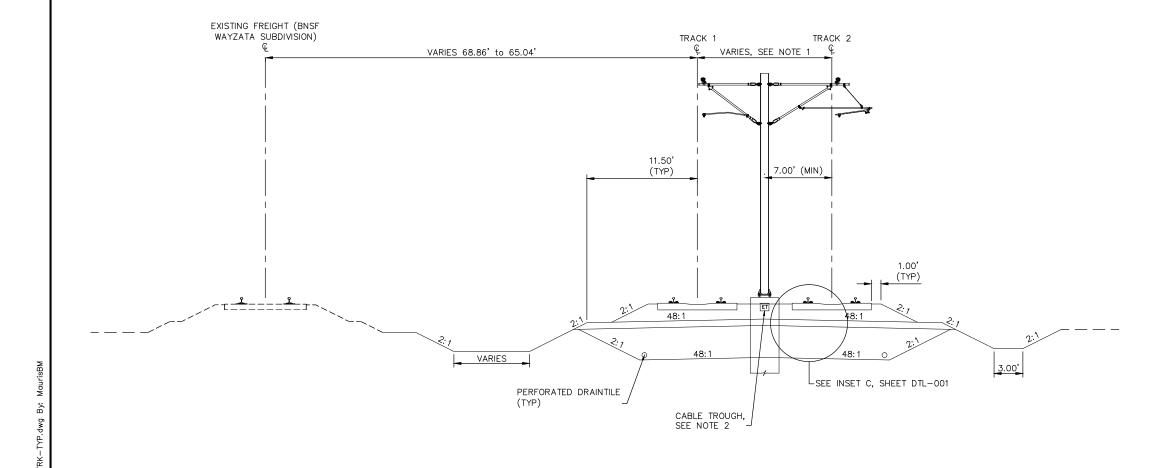




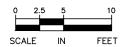
CIVIL EAST - VOLUME 3 AECOM TRACK 156 **TYPICAL SECTIONS** SOUTHWEST Green Line Little Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E4-TRK-TYP-021 **TRACK**

TYPICAL SECTION STA. 2902+22.14 TO STA. 2907+45.00





TYPICAL SECTION
STA. 2907+45.00 TO STA. 2914+87.96

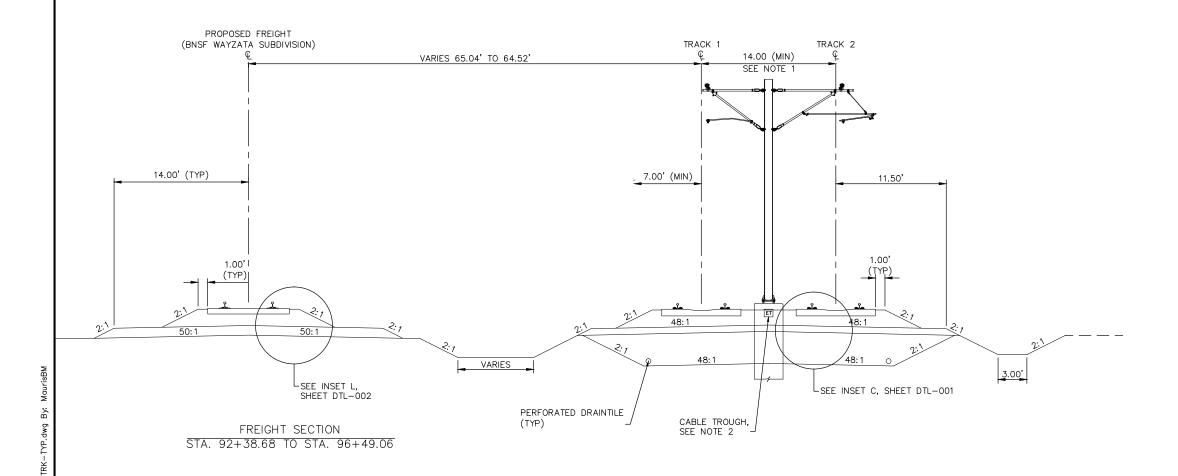


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05	_						_	A=COM	TYPICAL SECTIONS	
<u> ۱</u>	_		_		-		-		SOUTHWEST STATE OF THE STATE OF	OI
7	-						-		METROPOLITAN Green Line Litt Extension	
7, [60% SUBMISSION - 09/28/15	DISCIPLINE: SHEET NAME:	33
								00 /0 GODINIIOOIOI4 - 03/20/10	TRACK E4-TRK-TYP-022	2

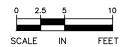
- NOTES:

 1. TRACK CENTERS VARY IN CURVE
 E4-207. SEE TRACK PLANS.

 2. SEE SYSTEMS PLANS FOR DUCTBANK
 AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA. 2914+87.96 TO STA. 2919+00.00

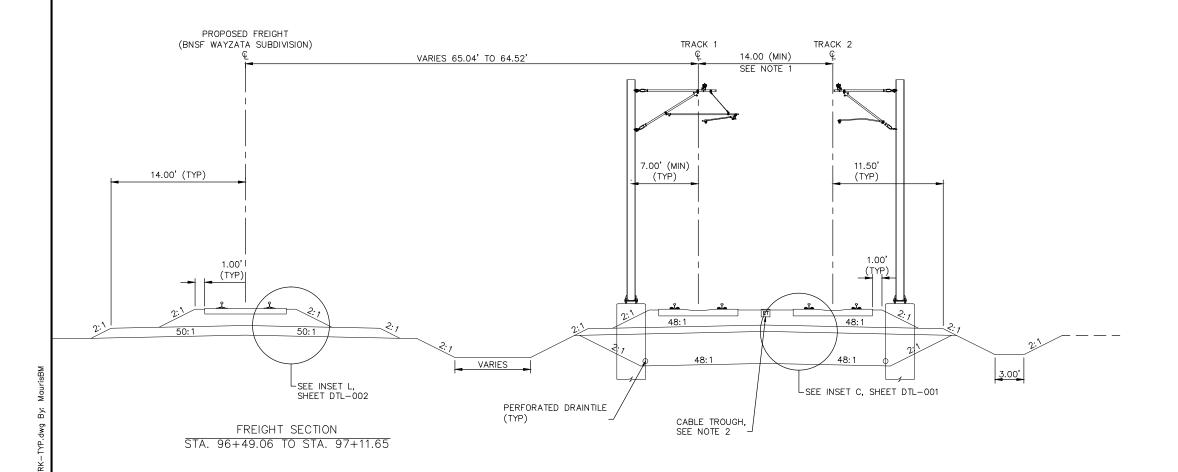


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ź:	NO.	DATE	BY CH	ECK DES	IGN REV	/ISION / SUBMITTAL					CIVIL EAST - VOLUME	: 3	SHEE
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52							A = COA	> </td <td></td> <td></td> <td>TRACK</td> <td></td> <td>158</td>			TRACK		158
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015	-							SOU Green line lin	HWE51				OF
2								METROPOLITAN COMUNICALIS	TI EMAISON				
2, 2							60% SUBMISSION - 09/28/15			DISCIPLINE:	SHEET NAME:	E4 TDV TVD 000	336
Ψ					1		00 /0 00 Billio 00 10				TRACK	E4-TRK-TYP-023	

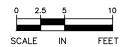
- NOTES:

 1. TRACK CENTERS VARY IN CURVE
 E4-207. SEE TRACK PLANS.

 2. SEE SYSTEMS PLANS FOR DUCTBANK
 AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA. 2919+00.00 TO STA. 2919+63.78



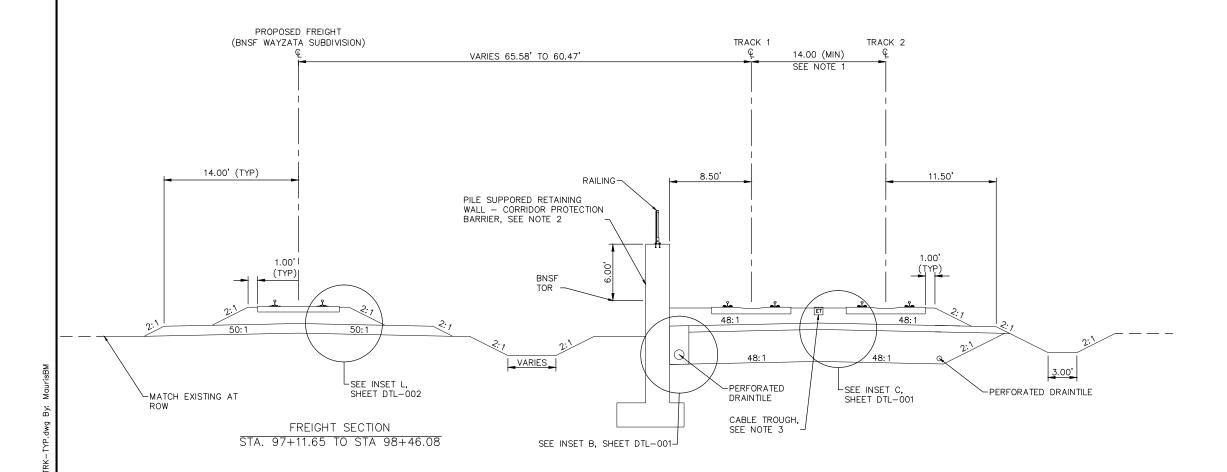
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ź □	NO.	DATE	BY CHI	CK DESI	IGN REVISION / SUBMITTAL			CIVIL EAST - VOLUME 3	SHEE
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52							A = COA	TRACK	159
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2	-					_		METROPOLITAN Green Line Litt Extension	
.2							CON CLIDMICCION DO/20/4E	DISCIPLINE: SHEET NAME:	336
e –							60% SUBMISSION - 09/28/15	TRACK E4-TRK-TYP-0	24

- NOTES:

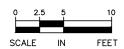
 1. TRACK CENTERS VARY IN CURVE E4-207. SEE TRACK PLANS.

 2. SEE RETAINING WALL PLANS FOR DETAILS.

 3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA. 2919+63.78 TO STA. 2921+00.00



í; [NO.	DATE	BY CHEC	KDESIGN	REVISION / SUBMITTAL		0000 - 100 -	SHEET
٤							CIVIL EAST - VOLUME 3	O L L .
ō							TRACK	
: 52						A=COM	IRACK	160
02						AELUN	TYPICAL SECTIONS	
2						<i>7</i> —	SOUTHWEST 11 I TO	OF
50.							METROPOLITAN Green Line Litt Extension	O.
21 L								
`L						60% SUBMISSION - 09/28/15	DISCIPLINE: SHEET NAME:	336
je b						00 /0 00DWIIOOION - 03/20/13	TRACK E4-TRK-TYP-025	

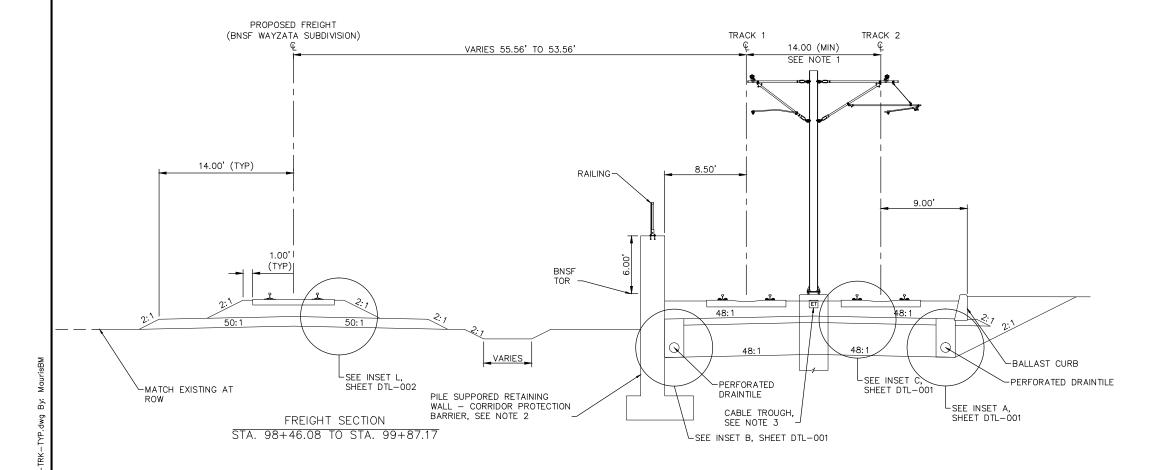
- NOTES:

 1. TRACK CENTERS VARY IN CURVE E4-207. SEE TRACK PLANS.

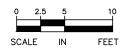
 2. SEE RETAINING WALL PLANS FOR DETAILS.

 3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

 4. TPSS IS NOT ILLUSTRATED.

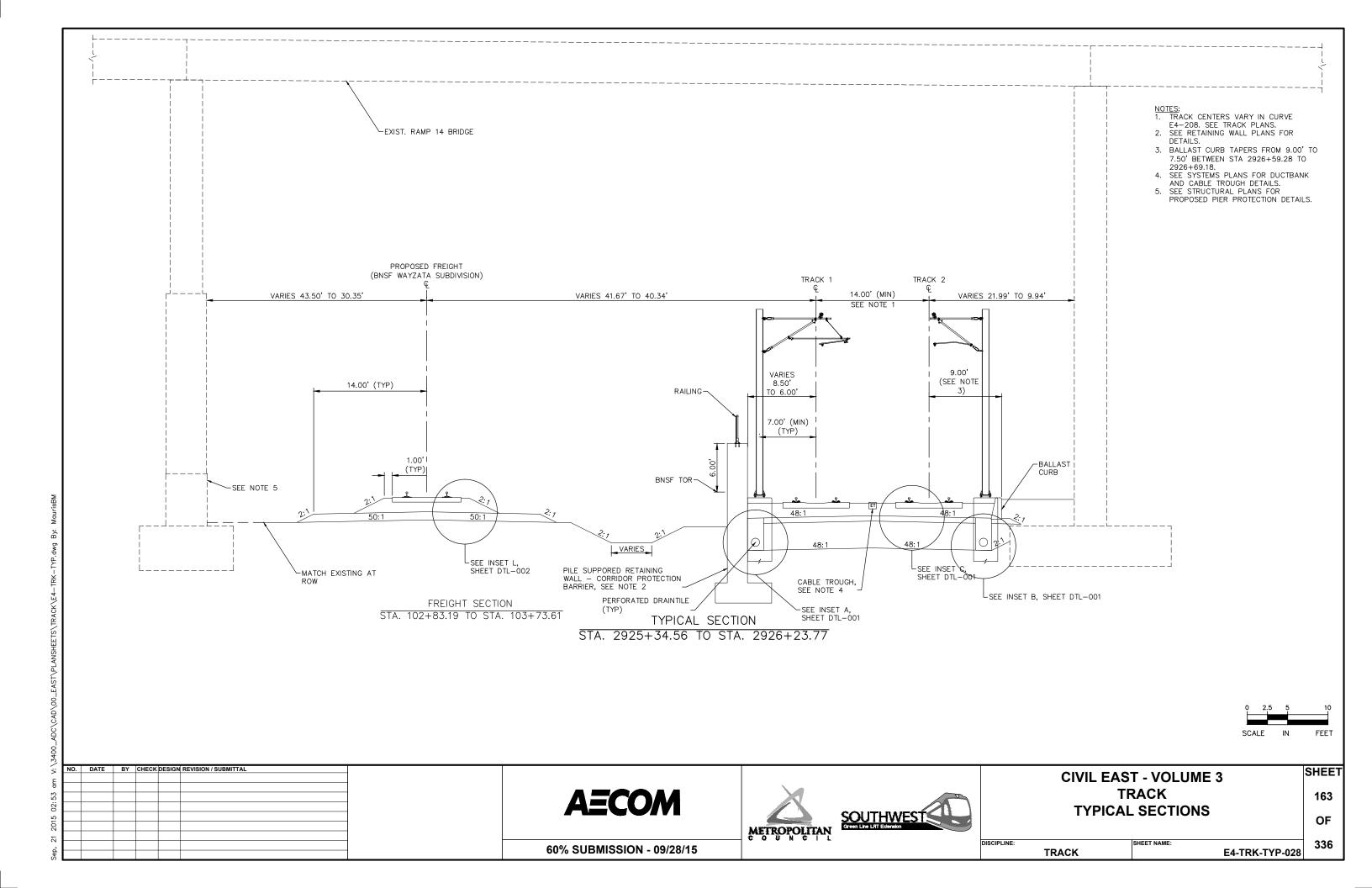


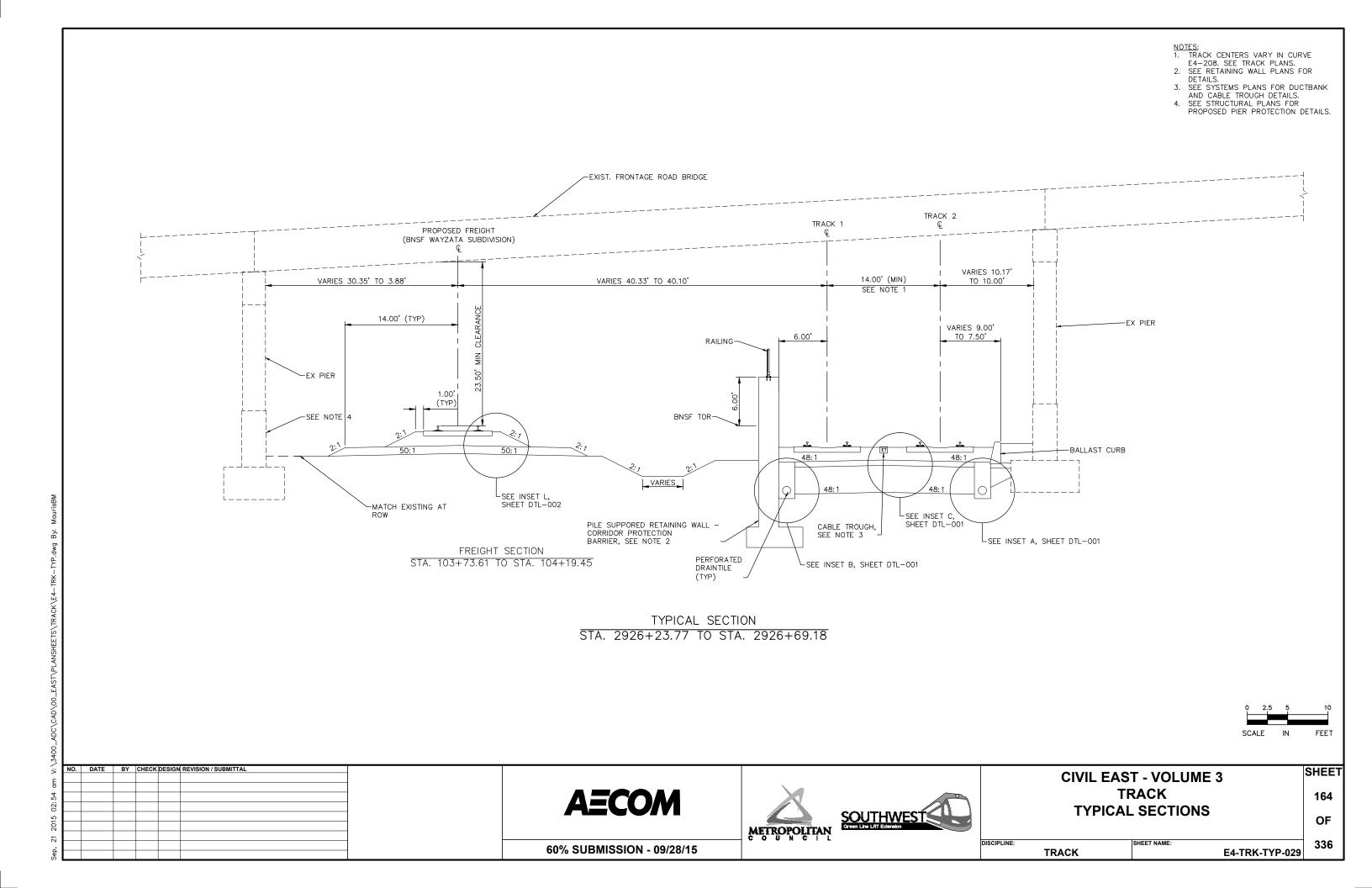
TYPICAL SECTION STA. 2921+00.00 TO STA. 2922+41.00

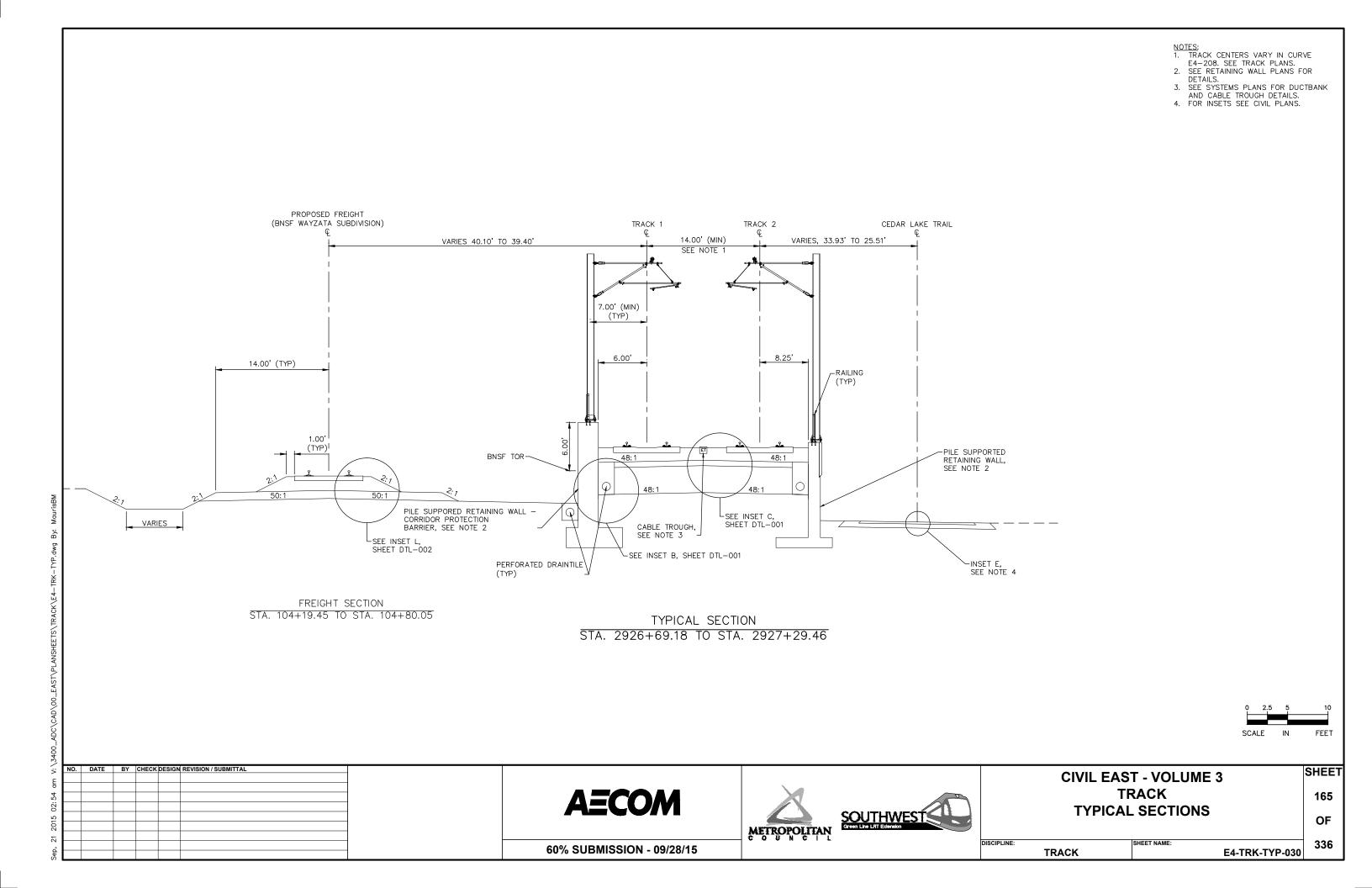


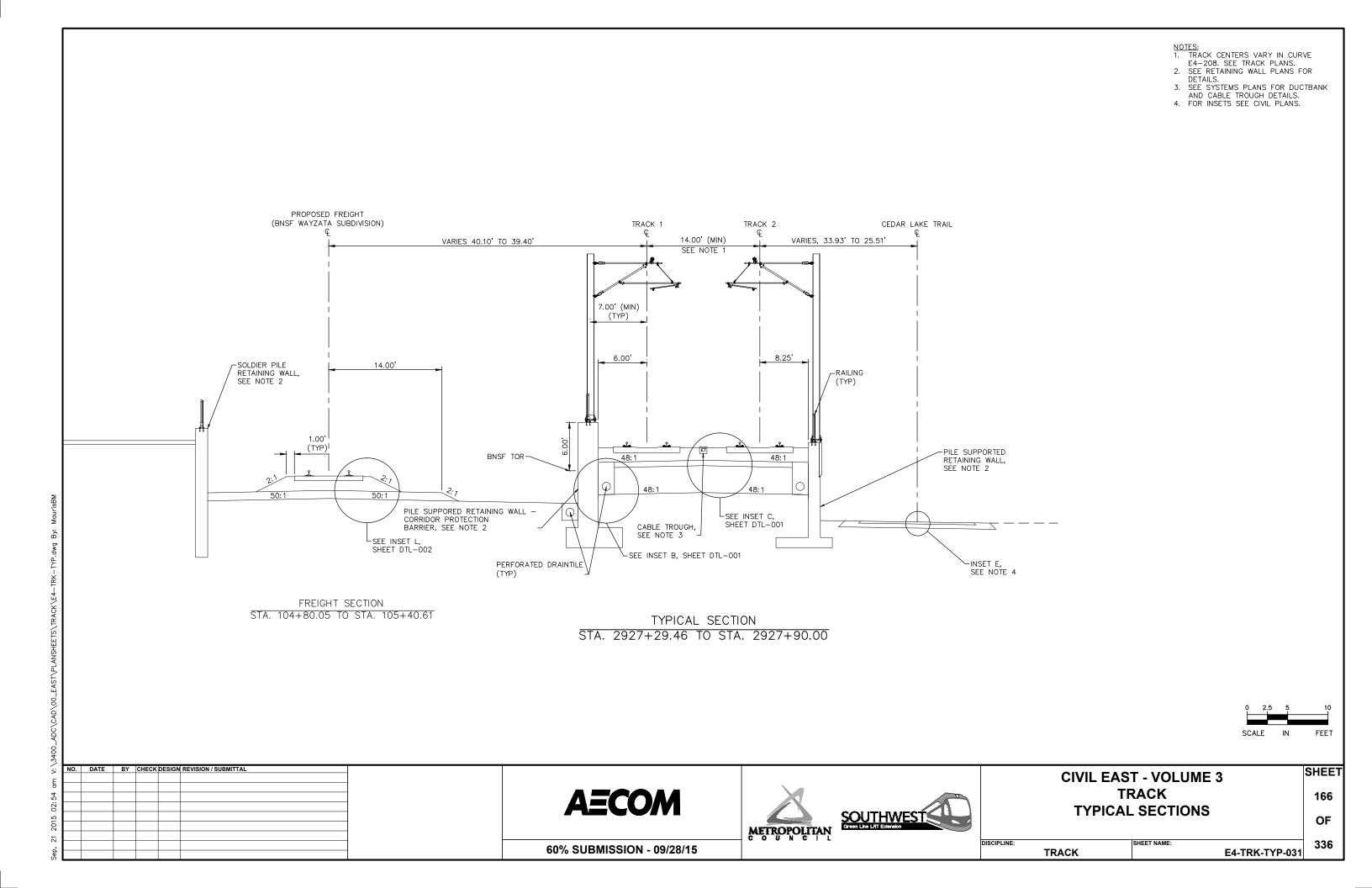
NO	10.	DATE	BY C	CHECK	ESIGN R	EVISION / SUBMITTAL			S
								CIVIL EAST - VOLUME 3	
							A = CO A A	TRACK	
								IRACK	
							AECUN	TYPICAL SECTIONS	
							7	SOUTHWEST TYPICAL SECTIONS	
								METROPOLITAN Green Life Lift Extension	
						<u> </u>	60% SUBMISSION - 09/28/15	DISCIPLINE: SHEET NAME:	
							00 /0 30 DIVI 33 ION - 09/20/13	TRACK E4-TRK-TYP-	J26

NOTES:
1. TRACK CENTERS VARY IN CURVE E4-208. SEE TRACK PLANS.
2. SEE RETAINING WALL PLANS FOR DETAILS.
3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS. EXIST. Mn/DOT BRIDGES: 27725, 27726, 27727. PROPOSED FREIGHT (BNSF WAYZATA SUBDIVISION) 14.22' (MIN) VARIES 53.56' TO 41.67' SEE NOTE 1 34.25 TO 21.99' VARIES 24.06' TO 38.64' 14.00' (TYP) -EX PIER RAILING--EX PIER 9.00' 1.00' l (TYP) -BALLAST CURB 48:1 48:1 VARIES SEE INSET L, SHEET DTL-002 SEE INSET C, SHEET DTL-001 PILE SUPPORED RETAINING WALL — CORRIDOR PROTECTION BARRIER, SEE NOTE 2 -MATCH EXISTING AT CABLE TROUGH, SEE NOTE 3 -ROW -SEE INSET A, SHEET DTL-001 FREIGHT SECTION -SEE INSET B, SHEET DTL-001 STA. 99+87.17 TO STA. 102+83.19 PERFORATED DRAINTILE (TYP) TYPICAL SECTION STA. 2922+41.00 TO STA. 2925+34.56 SCALE SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 162 **TYPICAL SECTIONS** SOUTHWEST: OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E4-TRK-TYP-027 **TRACK**









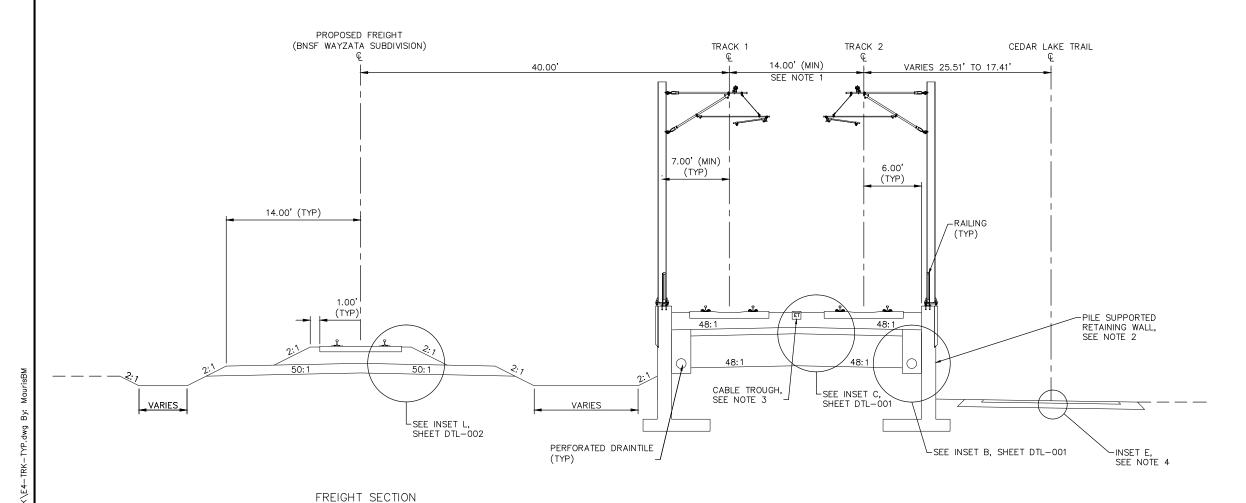
NOTES:

1. TRACK CENTERS VARY IN CURVE E4-209A. SEE TRACK PLANS.

2. SEE RETAINING WALL PLANS FOR DETAILS.

3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

4. FOR INSETS SEE CIVIL PLANS. PROPOSED FREIGHT (BNSF WAYZATA SUBDIVISION) TRACK 1 TRACK 2 CEDAR LAKE TRAIL 14.00' (MIN) VARIES 25.51' TO 17.41' 40.00' SEE NOTE 1 7.00' (MIN) (TYP) 6.00' (TYP) 14.00' (TYP) -SOLDIER PILE RETAINING WALL, SEE NOTE 2 -RAILING (TYP) -PILE SUPPORTED RETAINING WALL, SEE NOTE 2 48:1 48:1 48:1 CABLE TROUGH, SEE INSET C, SHEET DTL-001 SEE NOTE 3 VARIES -SEE INSET L, SHEET DTL-002 PERFORATED DRAINTILE SEE INSET B, SHEET DTL-001 SEE NOTE 4 FREIGHT SECTION STA. 105+40.61 TO STA. 106+63.05 TYPICAL SECTION STA. 2927+90.00 TO STA. 2929+12.13 SCALE IN SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 167 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E4-TRK-TYP-032 **TRACK**



TYPICAL SECTION STA. 2929+12.43 TO STA. 2931+01.96

AECOM

STA. 106+63.05 TO STA. 108+51.87

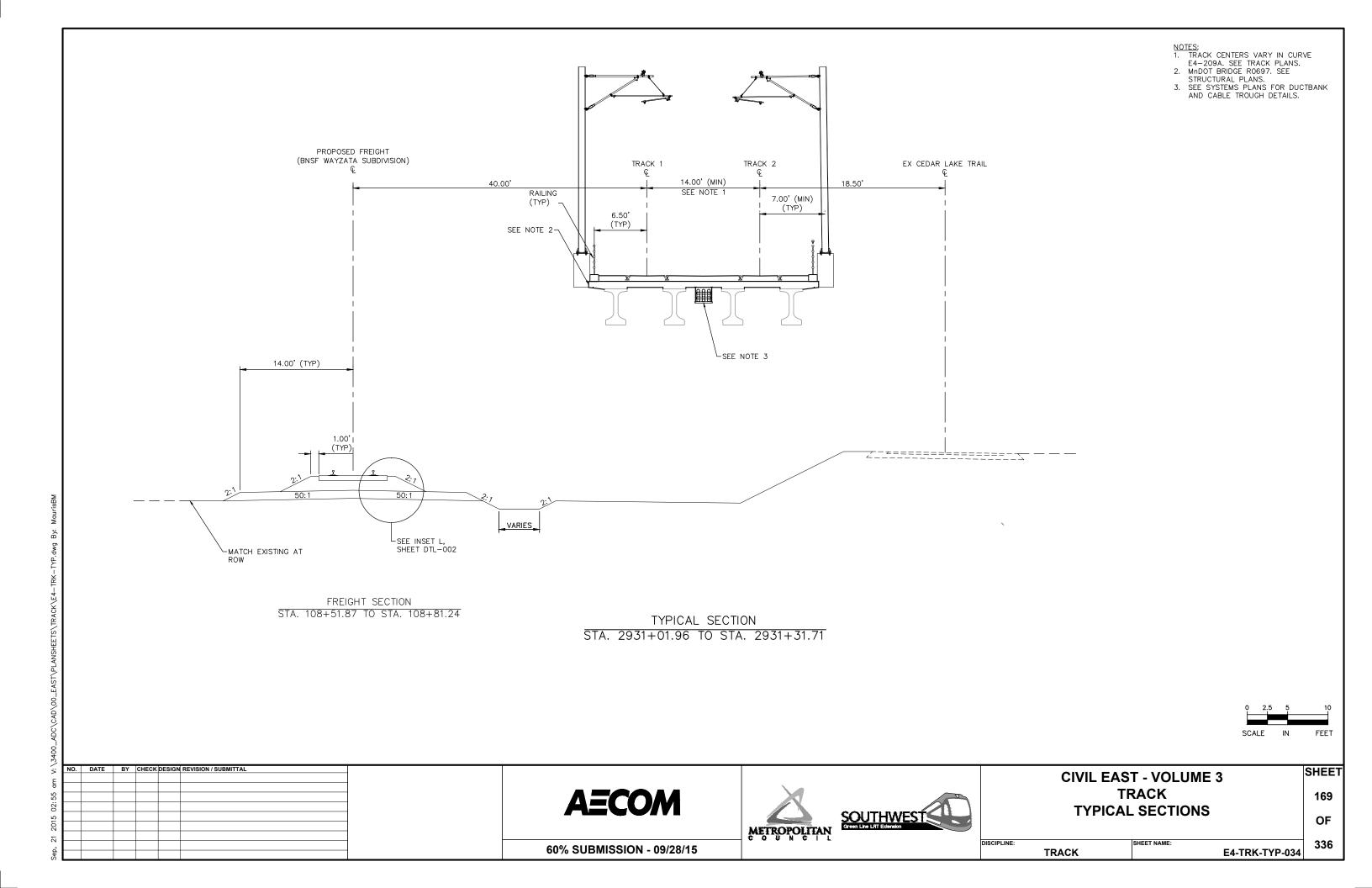


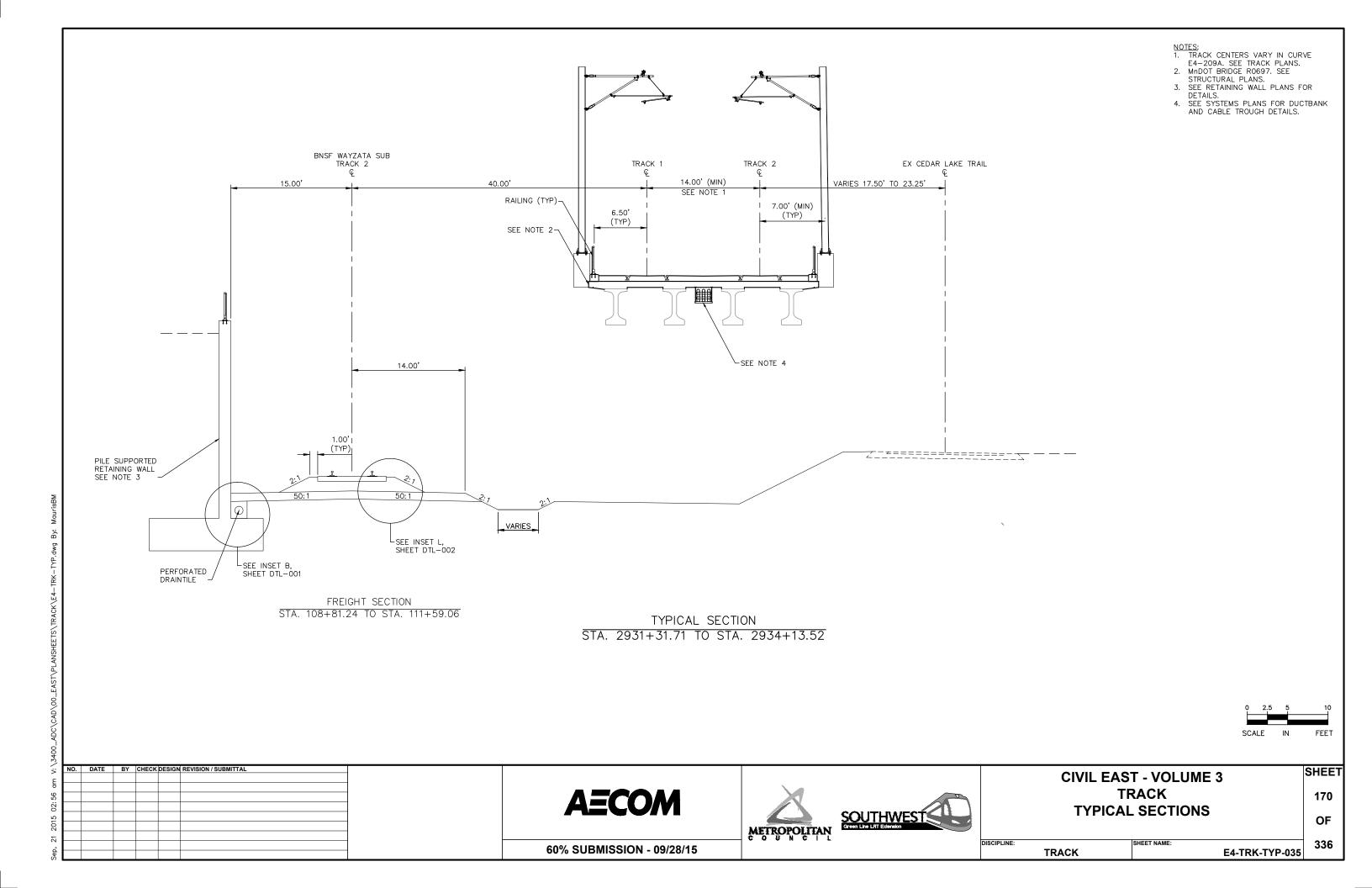
CIVIL EAST - VOLUME 3 TYPICAL SECTIONS

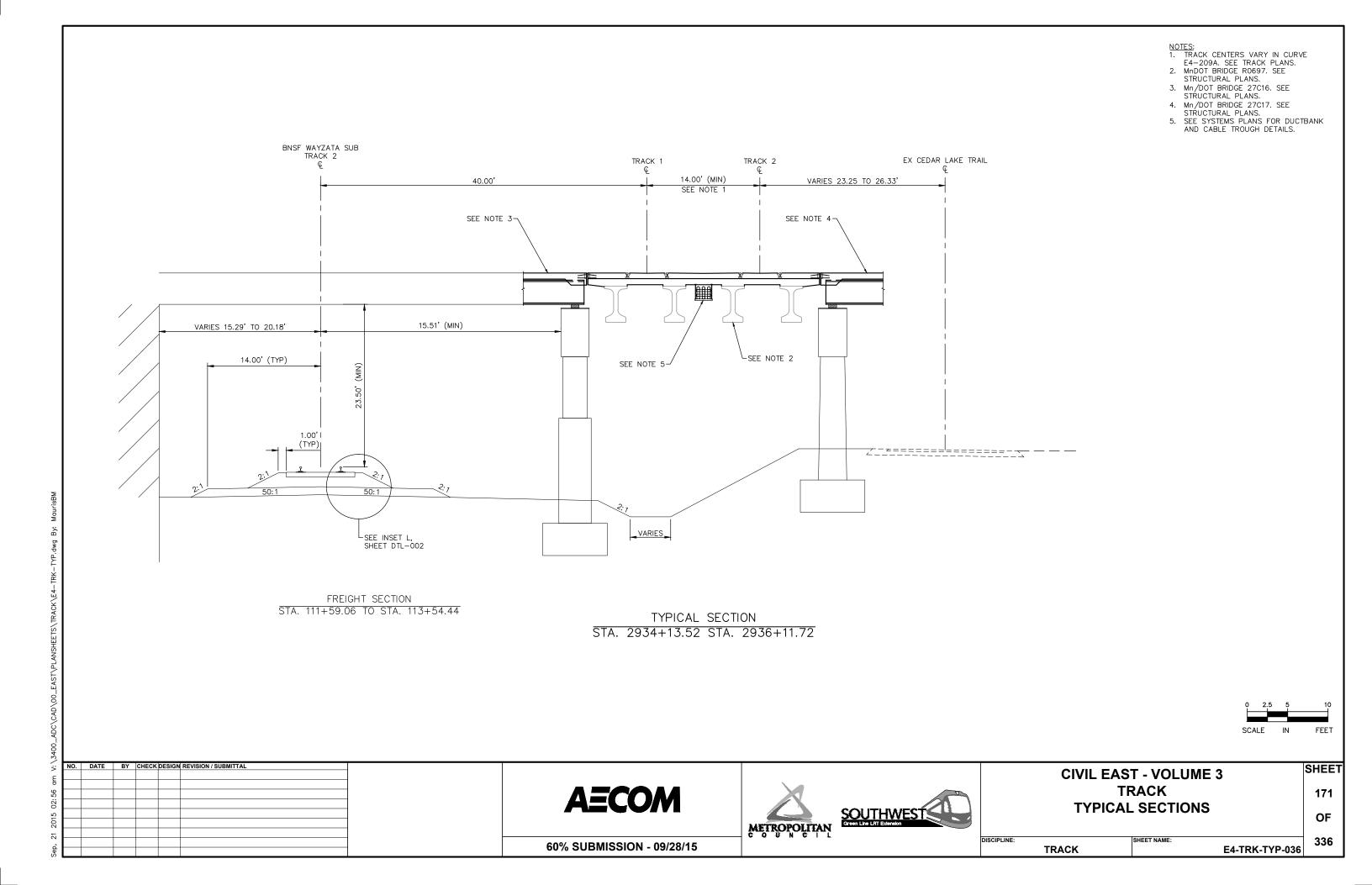
336

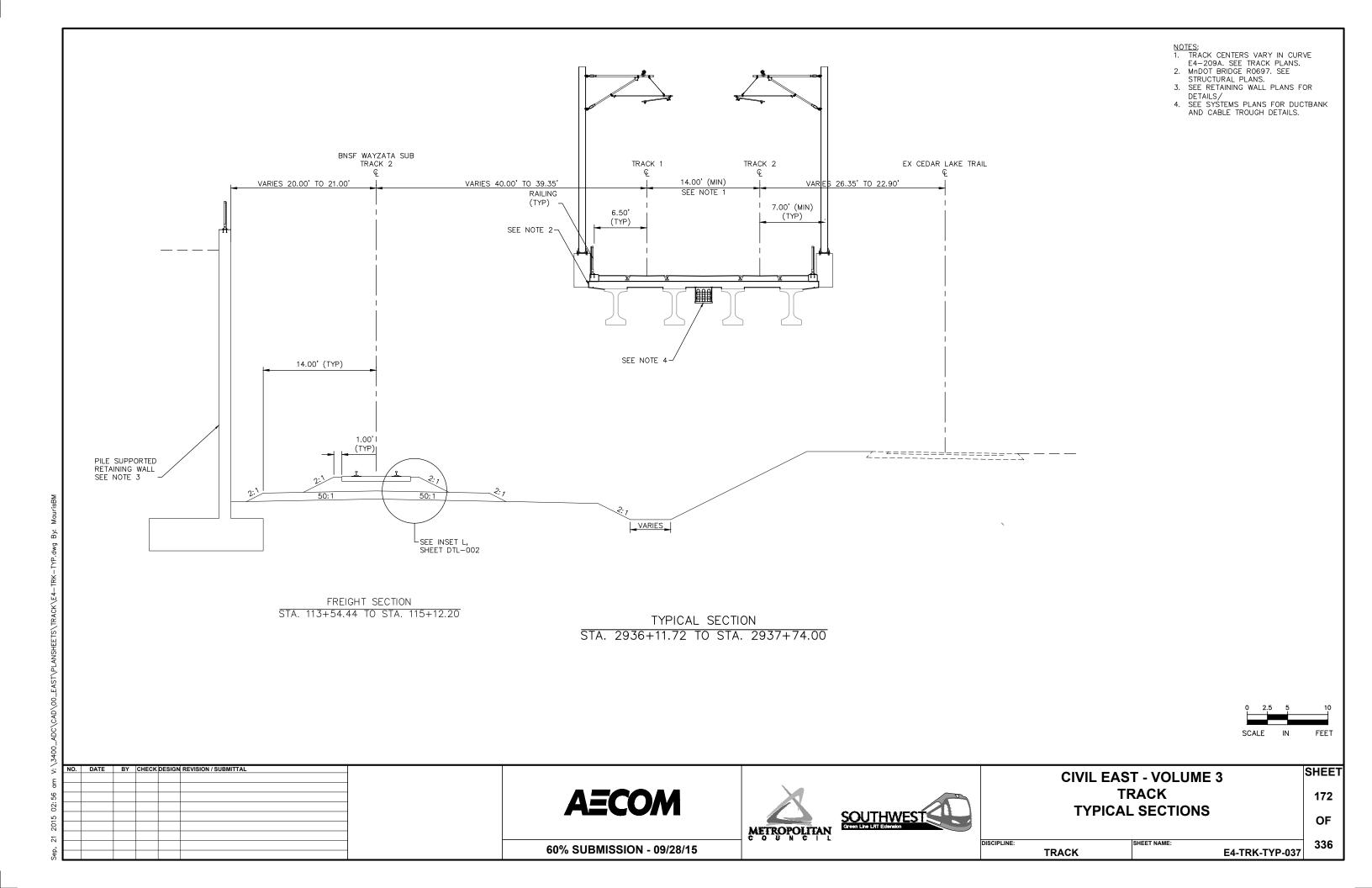
TRACK

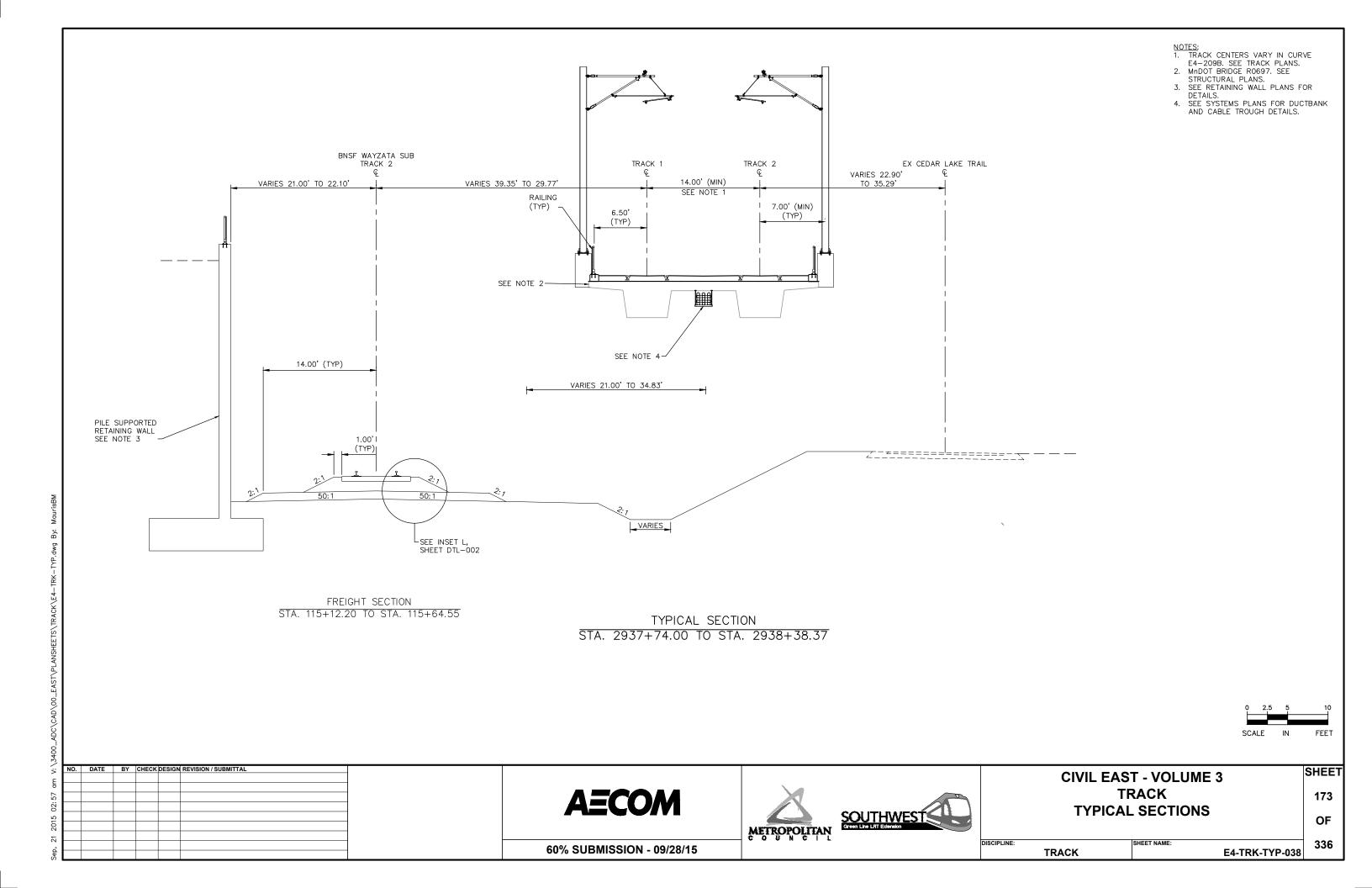
E4-TRK-TYP-033

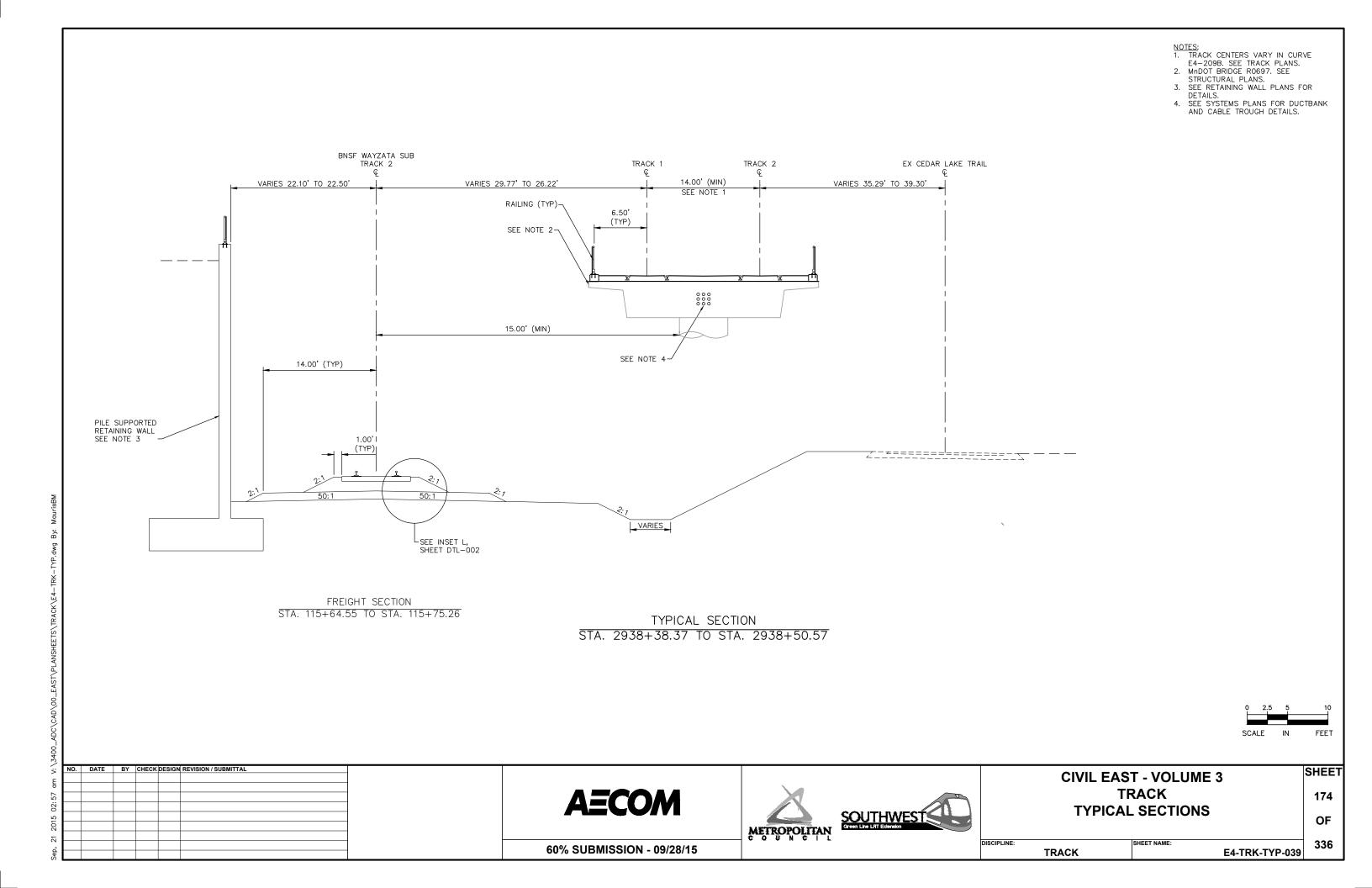


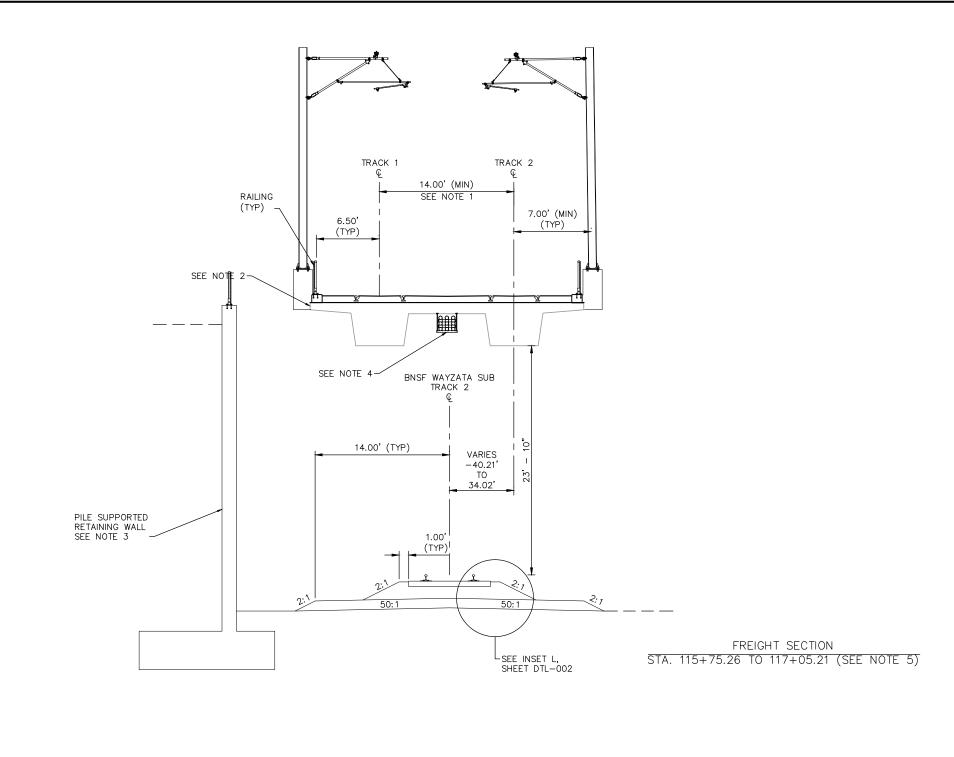






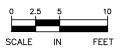






TYPICAL SECTION

STA. 2938+50.57 TO STA. 2939+60.85



NOTES:

1. TRACK CENTERS VARY IN CURVE E4-209B. SEE TRACK PLANS.

2. MnDOT BRIDGE R0697. SEE STRUCTURAL PLANS.

3. SEE RETAINING WALL PLANS FOR DETAILS.

4. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

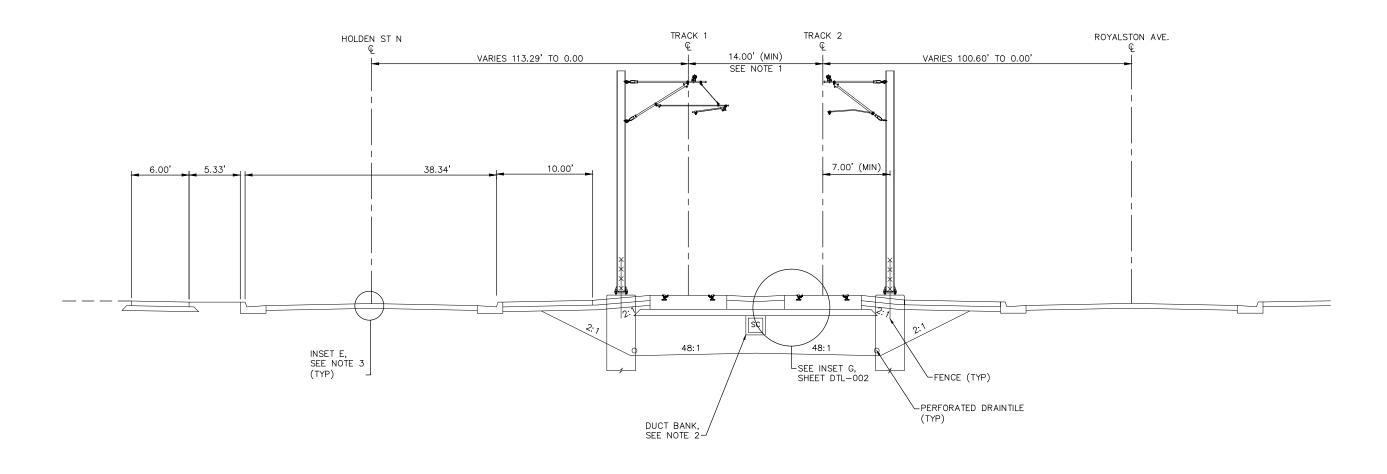
5. FOR CONTINUATION OF BNSF TYPICAL SECTIONS, SEE SHEETS TYP-050 TO TYP-053.

- NOTES:

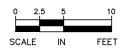
 1. TRACK CENTERS VARY IN CURVE
 E4-209B. SEE TRACK PLANS.

 2. SEE SYSTEMS PLANS FOR DUCTBANK
 AND CABLE TROUGH DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.



TYPICAL SECTION STA. 2939+60.85 TO STA. 2940+57.20



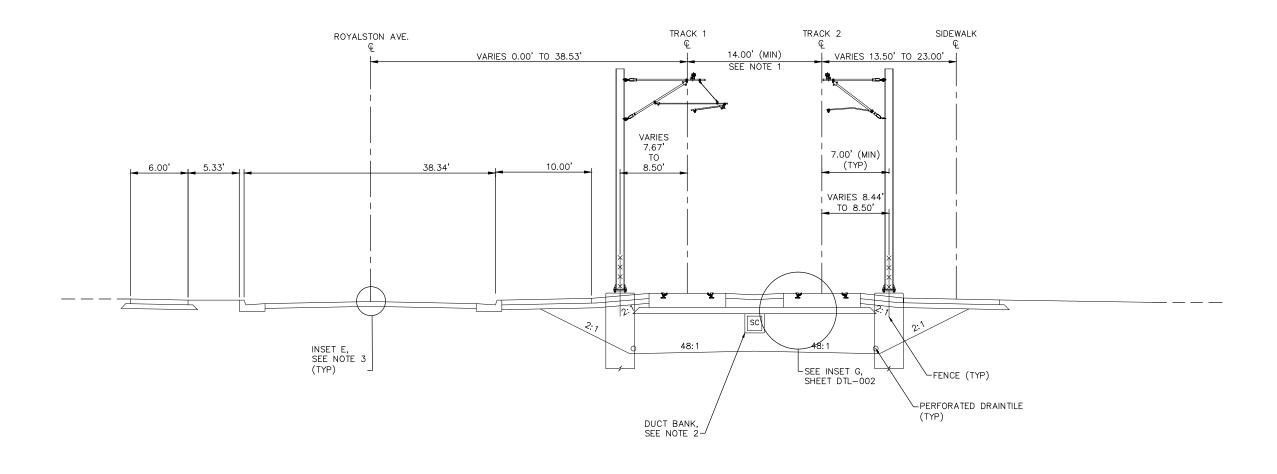
, ;	NO.	DATE B	Y CHEC	CDESIGN	REVISION / SUBMITTAL				CIVIL EAS	T - VOLUME	3	SHEET
58 an						A=COM	X			RACK		176
5 02:						AECOM	SOUTHWEST		TYPICAI	L SECTIONS		
201							METROPOLITAN Green Line Lift Extension					OF
sep, 21						60% SUBMISSION - 09/28/15	_ coencil	DISCIPLINE:	TRACK	SHEET NAME:	E4-TRK-TYP-041	336

- NOTES:

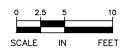
 1. TRACK CENTERS VARY IN CURVE
 E4-209B. SEE TRACK PLANS.

 2. SEE SYSTEMS PLANS FOR DUCTBANK
 AND CABLE TROUGH DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.



TYPICAL SECTION STA. 2940+57.20 TO STA. 2943+71.52



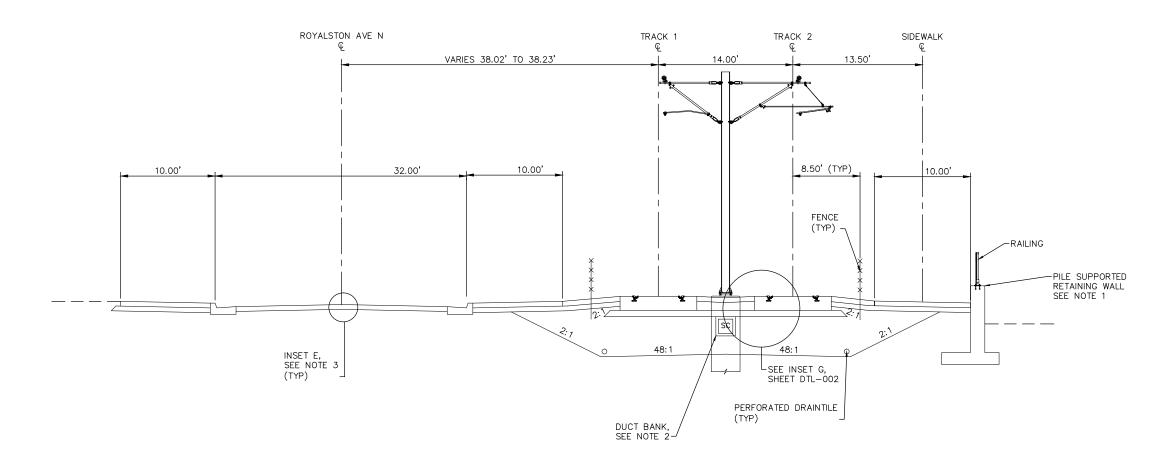
<u></u>	NO.	DATE I	BY CHEC	K DESIGN	REVISION / SUBMITTAL		9	SHEET
٤							CIVIL EAST - VOLUME 3	"· ·
8	\rightarrow						TRACK	477
2: 5	-					A=COM		177
9	-						TYPICAL SECTIONS	
903							Creen Life Life Enterelon	OF
- 5							METROPOLITAN COOR Line Lift Extension	1
5						60% SUBMISSION - 09/28/15	DISCIPLINE: SHEET NAME:	336
ě						00 /0 30DWII33ION - 03/20/13	TRACK E4-TRK-TYP-042	

- NOTES:

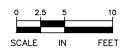
 1. SEE REATINING WALL PLANS FOR DETAILS.

 2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

 3. FOR INSETS SEE CIVIL PLANS.



TYPICAL SECTION STA. 2943+71.52 TO STA. 2344+28.50



_ ⊱	NO.	DATE	BY CHEC	K DESIGN	REVISION / SUBMITTAL			SHEET
٤							CIVIL EAST - VOLUME 3	0
ō ~							TRACK	4=0
. 25						A=COM	TRACK	178
02						A=CU/VI	TYPICAL SECTIONS	
5						<i>-</i> — • • • • • • • • • • • • • • • • • •	SOUTHWEST	OF
20							METROPOLITAN Green Line Lift Extension	0.
72								
						60% SUBMISSION - 09/28/15	DISCIPLINE: SHEET NAME:	336
ğ						00 /0 00 DIVINOCION - 03/20/10	TRACK E4-TRK-TYP-04:	3

NOTES:

1. SEE REATINING WALL PLANS FOR DETAILS.

2. SEE STATION PLANS FOR STATION PLATFORM DETAILS.

3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

4. FOR INSETS SEE CIVIL PLANS. ROYALSTON AVE N TRACK 1 TRACK 2 VARIES 38.23' TO 39.18' VARIES 25.00' TO 27.20' VARIES 10.00' 19.00' 7.37' to 8.23' 7.00' (MIN) 4.52' 12.71 10.00' 1.50 -SEE NOTE 2 -SEE NOTE 2 FENCE ~RAILING -6"CONCRETE WALK 6"CONCRETE CONCRETE WALK-WALK 1.00% 1.00% -PILE SUPPORTED RETAINING WALL, SEE NOTE 1 48:1 48:1 sc 48:1 48:1 48:1 INSET E, SEE NOTE 4 (TYP) -L_{SEE INSET G,} SHEET DTL-002 PERFORATED
DRAINTILE (TYP)--матсн EXISTING DUCT BANK (TYP), SEE NOTE 3 TYPICAL SECTION - ROYALSTON STATION STA. 2944+28.50 TO STA. 2946+98.50 SCALE IN SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 179 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E4-TRK-TYP-044 **TRACK**

NOTES:

1. SEE REATINING WALL PLANS FOR DETAILS.

2. SEE RETAINING WALL PLANS FOR DETAILS.

3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

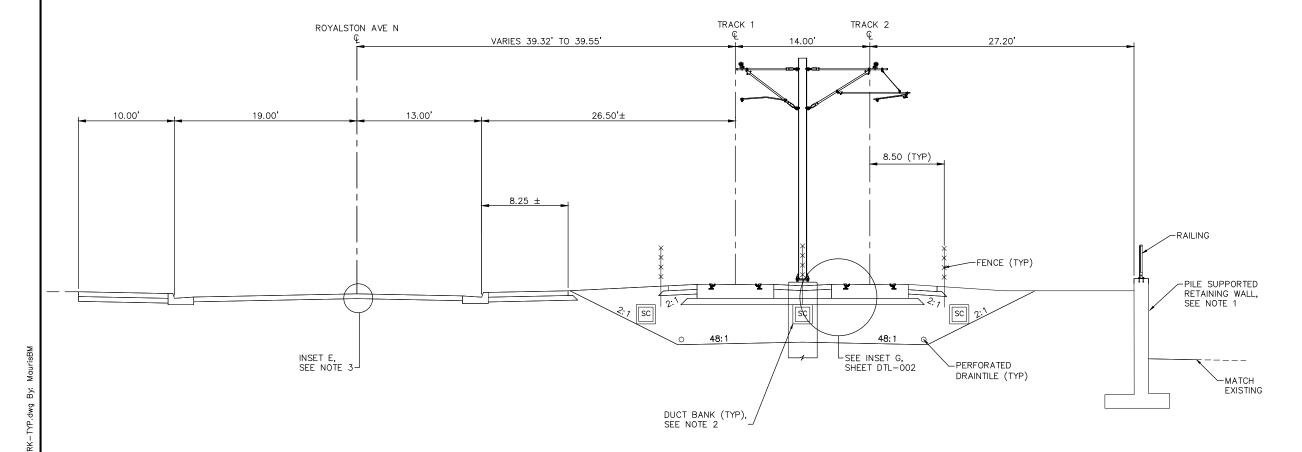
4. FOR INSETS SEE CIVIL PLANS. TRACK 1 TRACK 2 ROYALSTON AVE N 14.00 VARIES 39.18' TO 39.32' 27.20' 10.00 19.00' 13.00' 26.50'± -RAILING CONCRETE WALK -PILE SUPPORTED RETAINING WALL, SEE NOTE 1 INSET E, SEE NOTE 4 (TYP) LSEE INSET G, SHEET DTL-002 -PERFORATED DRAINTILE (TYP) -MATCH **EXISTING** DUCT BANK (TYP), SEE NOTE 3 TYPICAL SECTION STA. 2946+98.50 TO STA. 2947+38.50 SCALE IN SHEET **CIVIL EAST - VOLUME 3 AECOM TRACK** 180 **TYPICAL SECTIONS** SOUTHWEST Green Line Litt Extension OF DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E4-TRK-TYP-045 **TRACK**

NOTES:

1. SEE REATINING WALL PLANS FOR DETAILS.

2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

3. FOR INSETS SEE CIVIL PLANS. SCALE IN



TYPICAL SECTION
STA. 2947+38.50 TO STA. 2948+00.00

AECOM WETROPOLITAN SOUTHWEST DISCIPLINE: SHEET NAME:	NC	NO.	DATE E	ву Сне	CK DESIG	N REVISION / SUBMITTAL					CIVIL EAS	ST - VOLUME	3
METROPOLITAN C Q U N C L		+					A=COM						
								METROPOLYTAN	SOUTHWEST Green Line LRT Extension		TYPICA	L SECTIONS	
							60% SUBMISSION - 09/28/15	MEIROPOLIIAN		DISCIPLINE:		SHEET NAME:	E4-TRK-TYP-046

NOTES:

1. TRACK CENTERS VARY IN CUVE E4-211. SEE TRACK PLANS.

2. SEE REATINING WALL PLANS FOR DETAILS.

3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

4. FOR INSETS SEE CIVIL PLANS. ROYALSTON AVE N TRACK 1 TRACK 2 14.00' (MIN) VARIES 39.55' TO 31.85' SEE NOTE 10.00' 19.00' 10.50' ± 7.00' VARIES 18.70 TO 27.32' ←RAILING (TYP) 48:1 1.00% 1.00% L_{SEE INSET G,} SHEET DTL-002 PERFORATED -PILE SUPPORTED RETAINING WALL, SEE NOTE 2 DRAINTILE (TYP) -PILE SUPPORTED RETAINING WALL (TYP), SEE NOTE DUCT BANK, SEE NOTE 3-INSET E, SEE NOTE 4--матсн TYPICAL SECTION STA. 2948+00.00 TO STA. 2950+64.43 SCALE IN SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 182 **TYPICAL SECTIONS** SOUTHWEST: Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15

E4-TRK-TYP-047

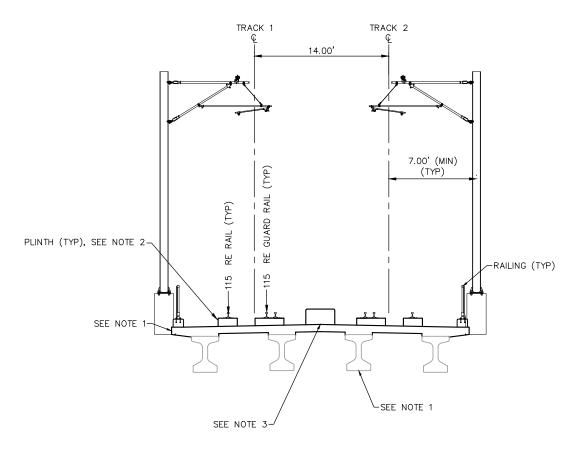
TRACK

- NOTES:

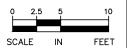
 1. MnDOT BRIDGE 27C18. SEE STRUCTURAL PLANS.

 2. SEE TRACK DETAILS FOR PLINTH LAYOUT.

 3. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA. 2950+64.43 TO STA. 2951+50.00



; ε	NO. DAT	DATE BY CHECK DESIGN REVISION / SUBMITTAL			CIVIL EAST - VOLUME 3	SHEET
00 :			A=COM		TRACK	183
15 03			AECOM	SOUTHWEST	TYPICAL SECTIONS	OF
21 20				METROPOLITAN Green Line Little Entersion		
geb'			60% SUBMISSION - 09/28	15	DISCIPLINE: SHEET NAME: E4-TRK-TYP-048	336

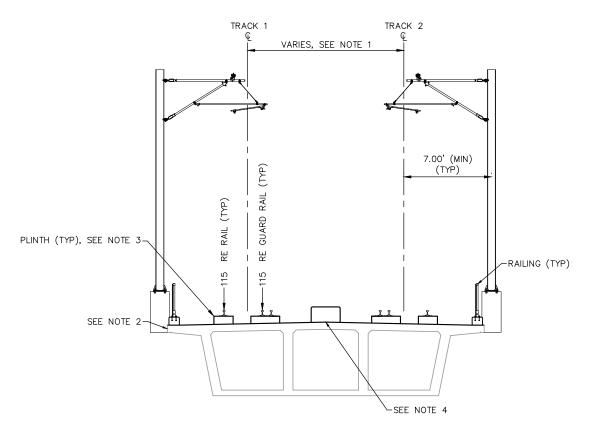
- NOTES:

 1. TRACK CENTERS WIDEN FROM 14.00'
 TO 16.00' BETWEEN STA 2952+01.07
 TO STA 2957+39.26.

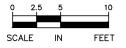
 2. MnDOT BRIDGE 27C18. SEE
 STRUCTURAL PLANS.

 3. SEE TRACK DETAIL FOR PLINTH
 LAYOUT.

 4. SEE SYSTEMS PLANS FOR DUCTBANK
 AND CABLE TROUGH DETAILS.



TYPICAL SECTION STA. 2951+50.00 TO STA. 2957+53.50



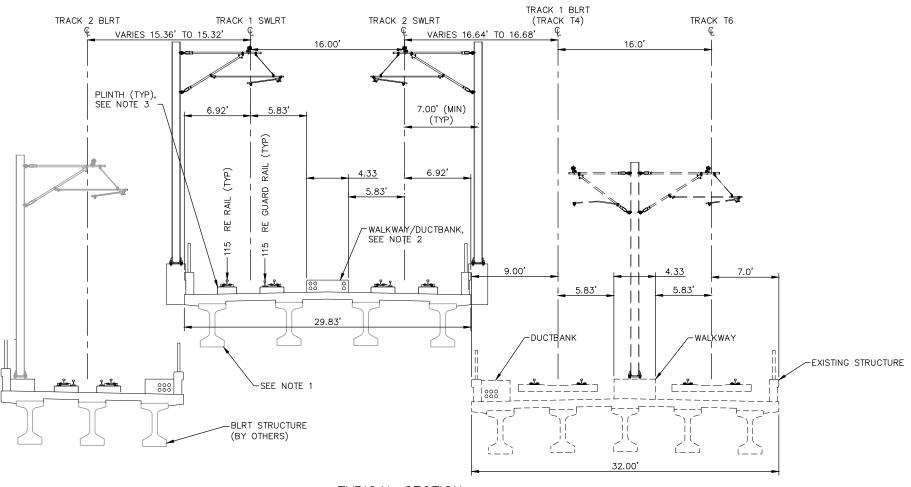
·:	NO. I	DATE E	BY CHECK DESIGN REVISION / SUBMITTAL						SHEET
۶							CIVIL EAST - VO	LUME 3	OI ILL I
p									
8					AECOM		TRACK		184
33:							TYPICAL SECT	IONS	
2						SOUTHWEST	I TPICAL SECT	IONS	05
501						Green Line LRT Extension			OF
-				1		METROPOLITAN Green Line Little Extension			
. 2				1	COOK CUIDMICCION COMONIAE	o e o n o i L	DISCIPLINE: SHEET NAME:		336
deb				1	60% SUBMISSION - 09/28/15		TRACK	E4-TRK-TYP-049	

- NOTES:

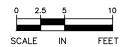
 1. MnDOT BRIDGE 27C18. SEE STRUCTURES PLANS.

 2. SEE SYSTEMS PLANS FOR DUCTBANK AND CABLE TROUGH DETAILS.

 3. SEE TRACK DETAILS FOR PLINTH LAYOUT.

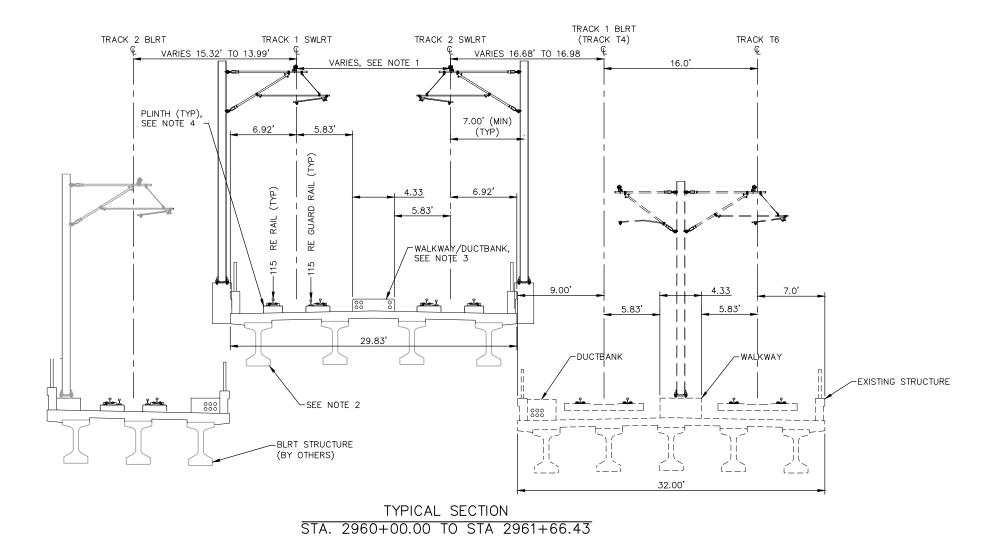


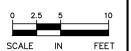
TYPICAL SECTION STA. 2957+53.50 TO 2960+00.00



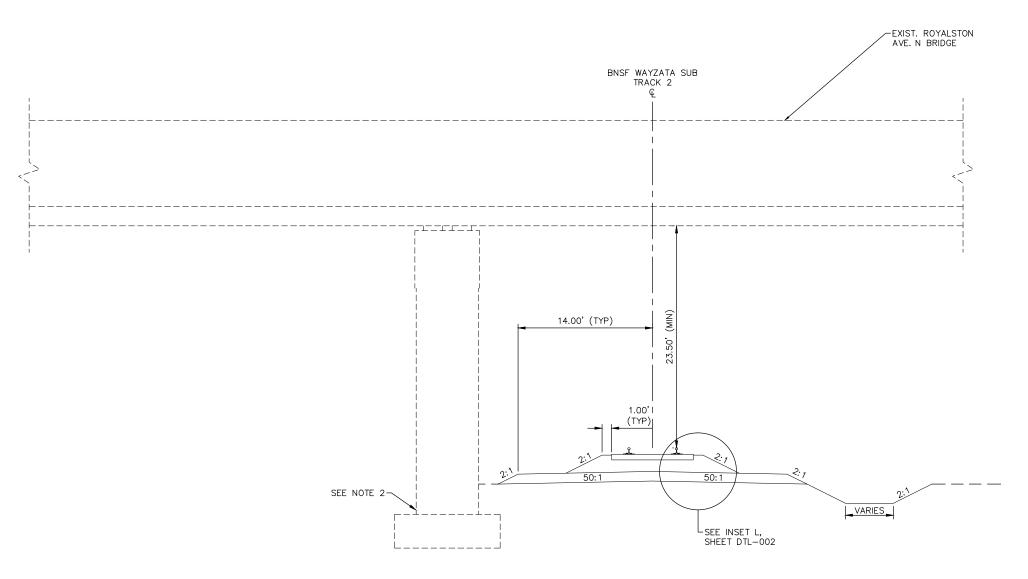
/:/ /:	NO. DATE BY CHECK DESIGN REVISION / SUBMITTAL		CIVIL EAST - VOLUME 3	SHEET
38 ar		A=COM	TRACK	185
15 11:		SOUTHWEST	TYPICAL SECTIONS	OF
21 20		METROPOLITAN CONTROL OF THE Extension		
Sep, 2		60% SUBMISSION - 09/28/15	DISCIPLINE: SHEET NAME: TRACK E4-TRK-TYP-050	336

- NOTES: 1. TRACK CENTERS NARROW FROM 16.00' TRACK CENTERS NARROW FROM 16.00'
 TO 15.36' BETWEEN STA 2960+59.33
 TO STA 2961+66.43.
 MnDOT BRIDGE 27C18. SEE
 STRUCTURES PLANS.
 SEE SYSTEMS PLANS FOR DUCTBANK
 AND CABLE TROUGH DETAILS.
 SEE TRACK DETAILS FOR PLINTH
 LAYOUT.

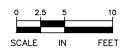




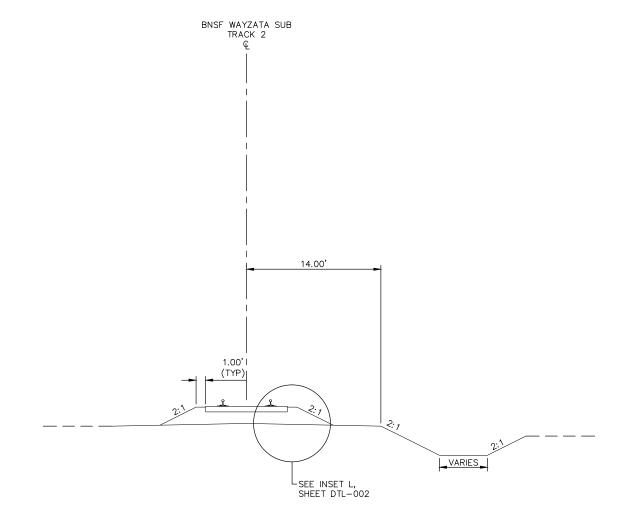
SHEET **CIVIL EAST - VOLUME 3 TRACK AECOM** 186 **TYPICAL SECTIONS** SOUTHWEST Green Line LRT Extension OF METROPOLITAN DISCIPLINE: 336 60% SUBMISSION - 09/28/15 E4-TRK-TYP-051 **TRACK**



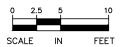
FREIGHT SECTION
STA. 117+05.21 TO STA. 118+00.00 (SEE NOTE 1)



1 2015 11:38 am V:\:	NO.	DATE	BY CHECK DESIGN REVISION / SUBMITTAL	AECOM	WETROPOLITAN SOUTHWEST Creen Line Litt Entenden	TI	T - VOLUME 3 RACK L SECTIONS	SHEET 187 OF
Sep, 2	-			60% SUBMISSION - 09/28/15		DISCIPLINE: TRACK	SHEET NAME: E4-TRK-TYP-052	336



FREIGHT SECTION STA. 125+81.60 TO STA. 125+81.60 STA. 118+00.00 TO STA. 125+18.53 STA. 126+99.67 TO STA. 128+00.00



AECOM





CIVIL EAST - VOLUME 3						
TRACK						
PLAN AND PROFILE						

189 OF

SHEET

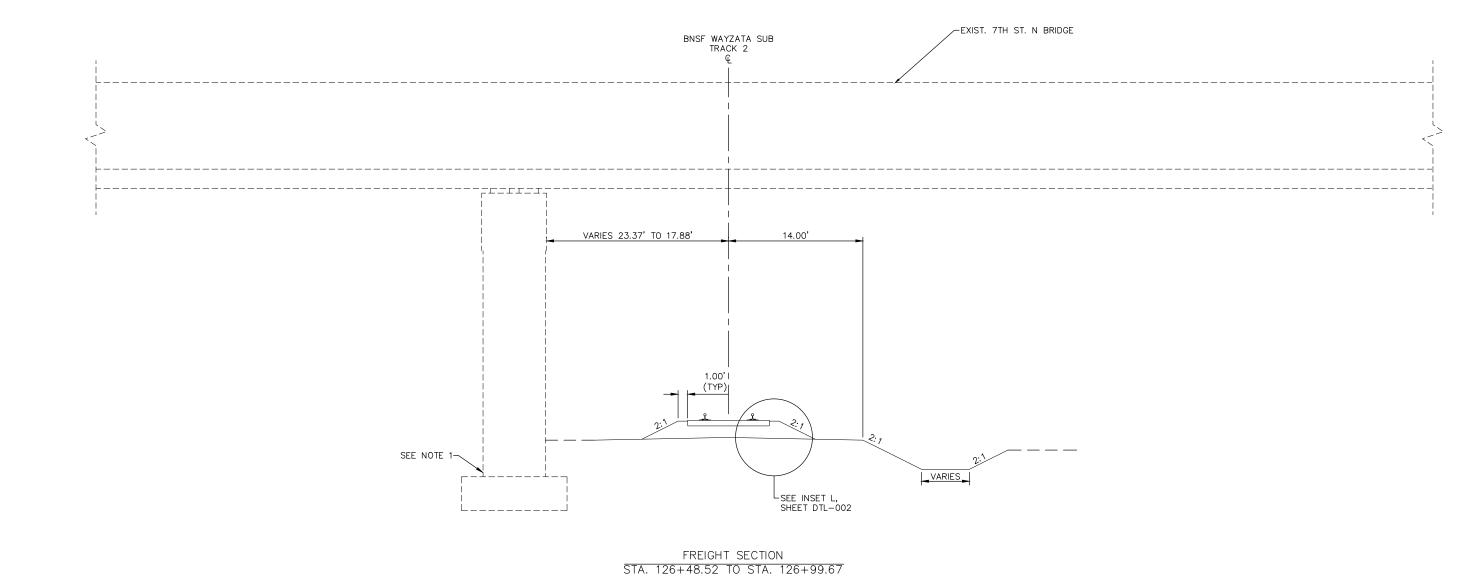
DISCIPLINE:

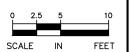
336

60% SUBMISSION - 09/28/15

TRACK

E4-TRK-TYP-054





SHEET

190

OF

·:	NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL		
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AECOM

60% SUBMISSION - 09/28/15

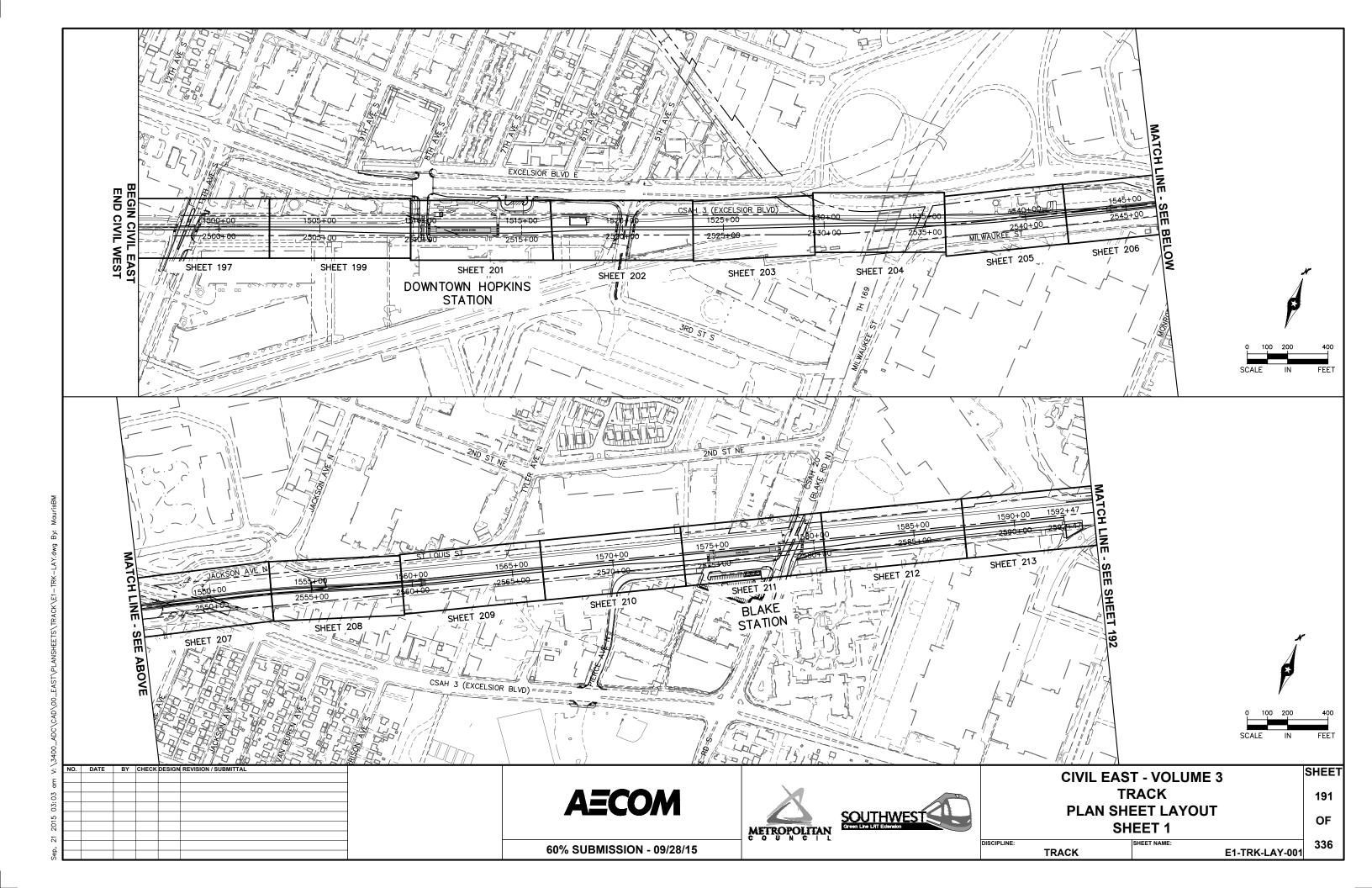


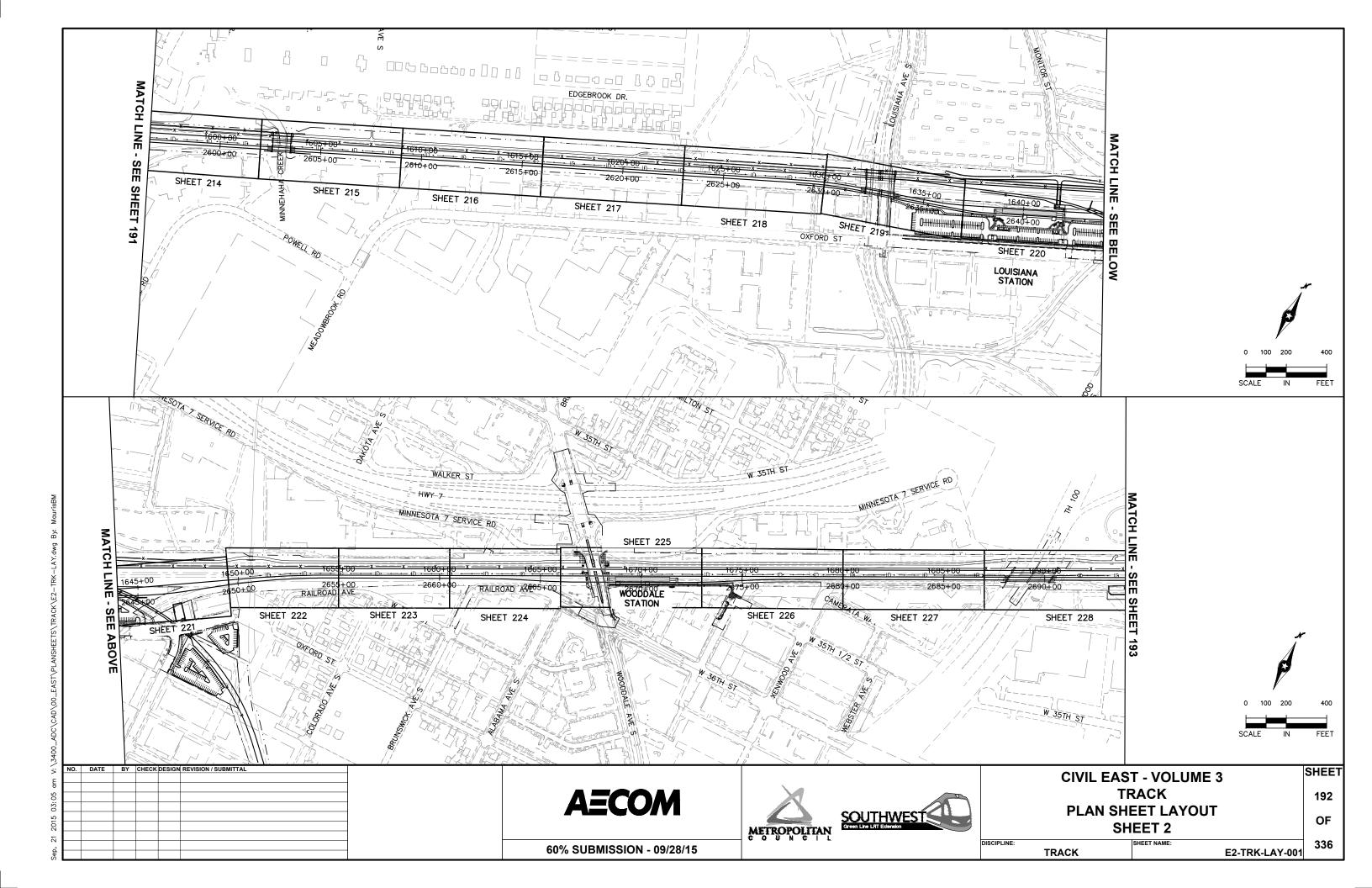


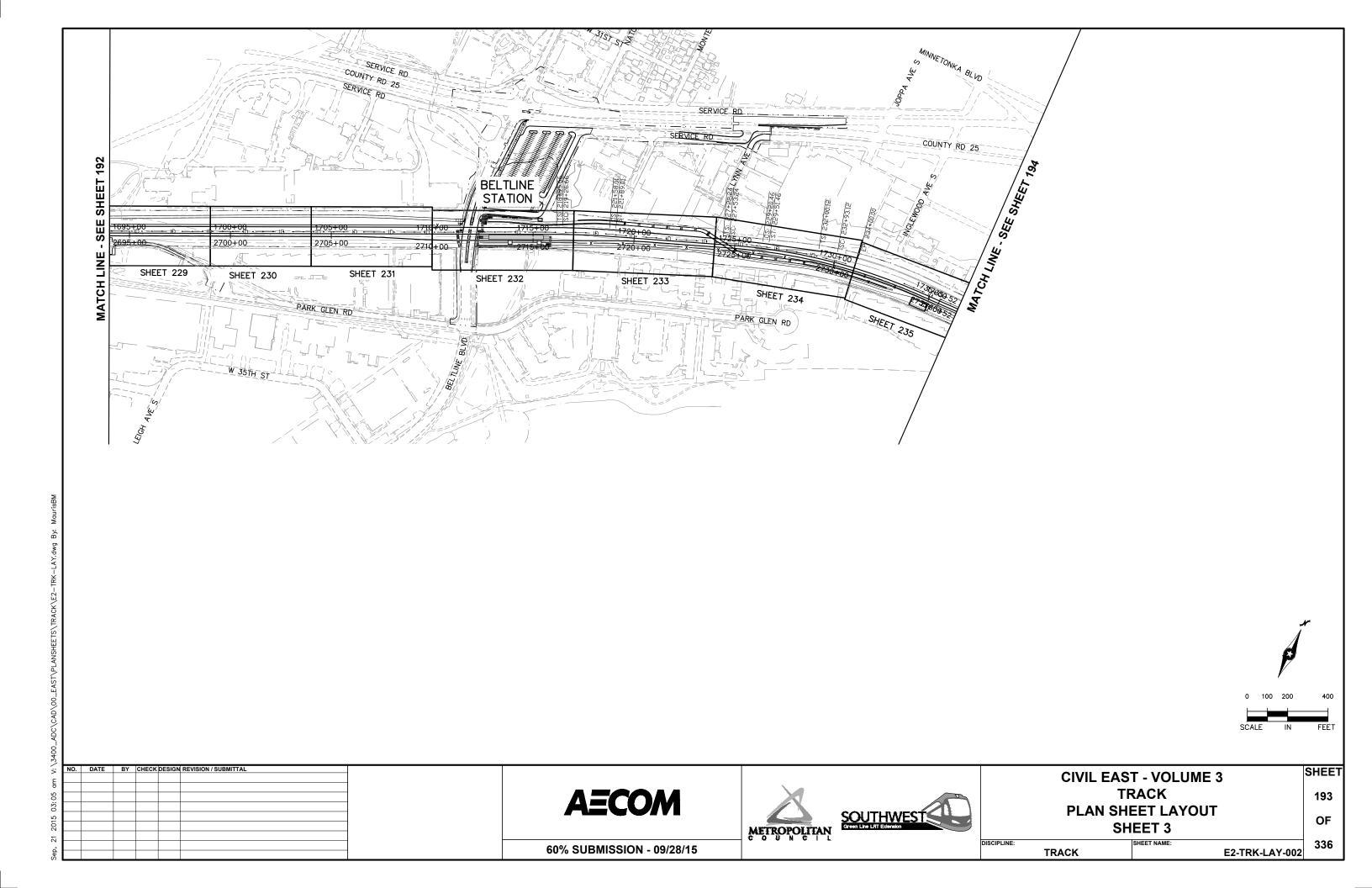
CIVIL EAST - VOLUME	3
TRACK	
PLAN AND PROFILE	

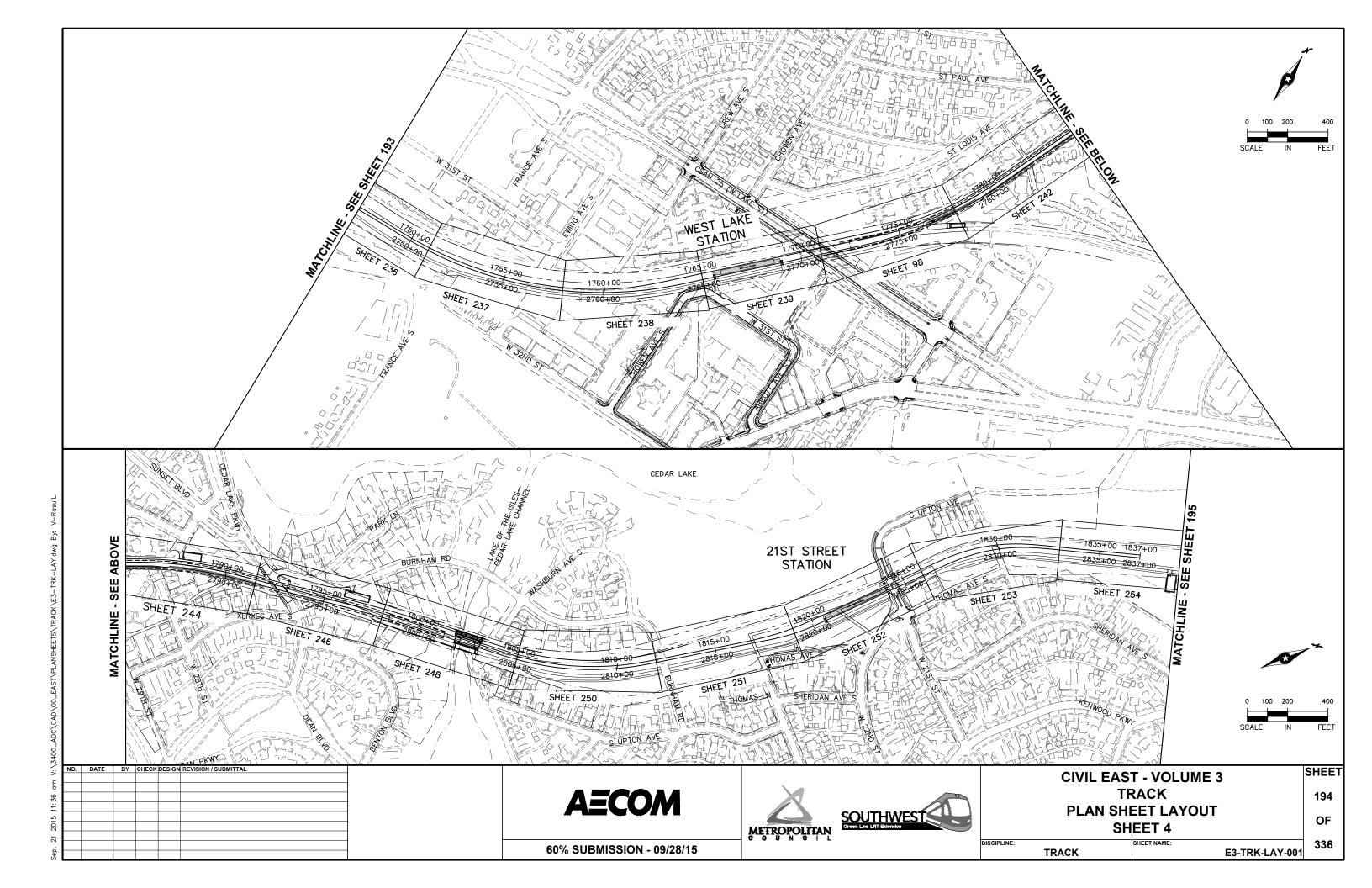
RACK	
ND PROFILE	

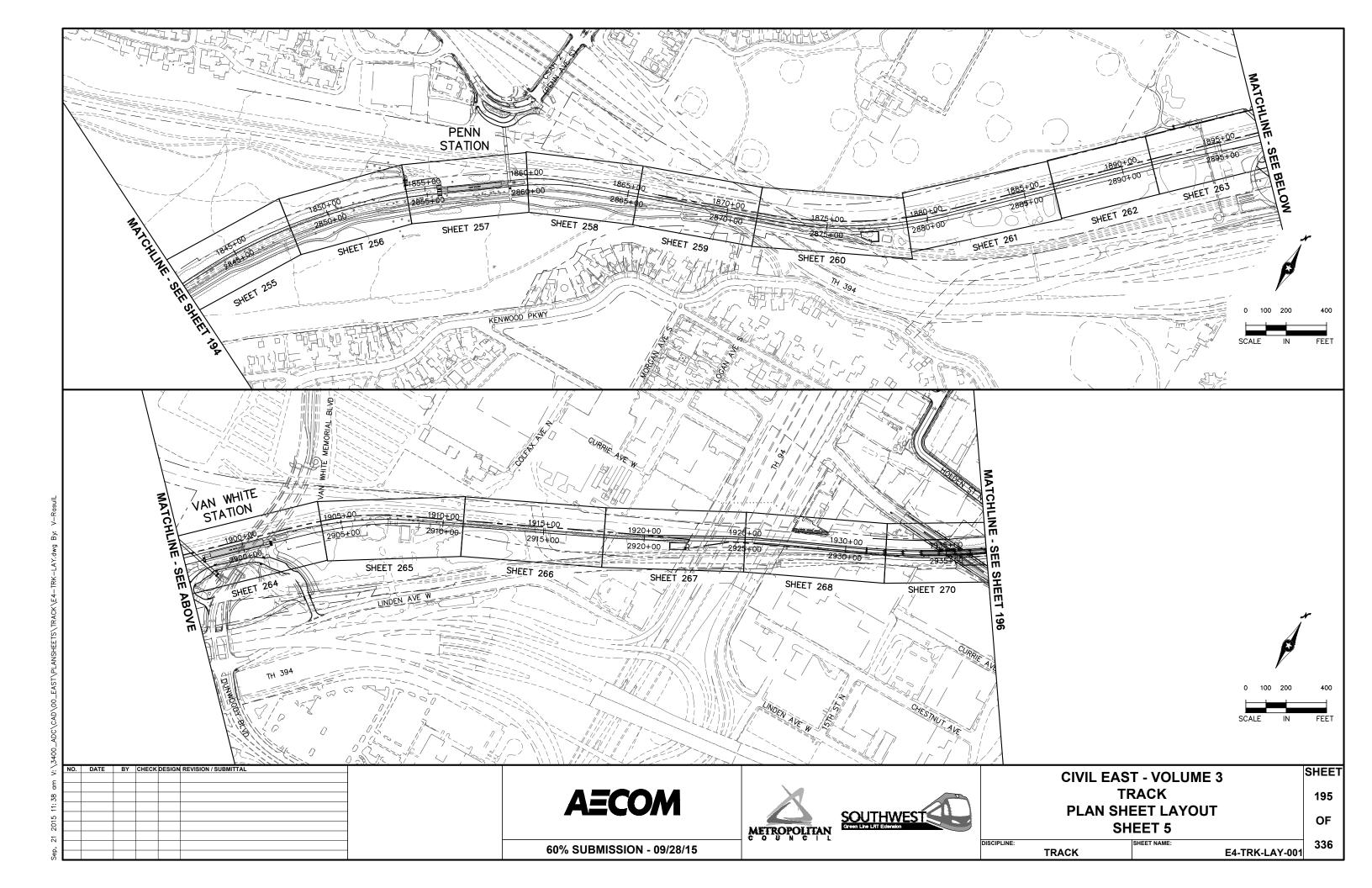
PLINE:	SHEET NAME:		33
TRACK		E4-TRK-TYP-055	50

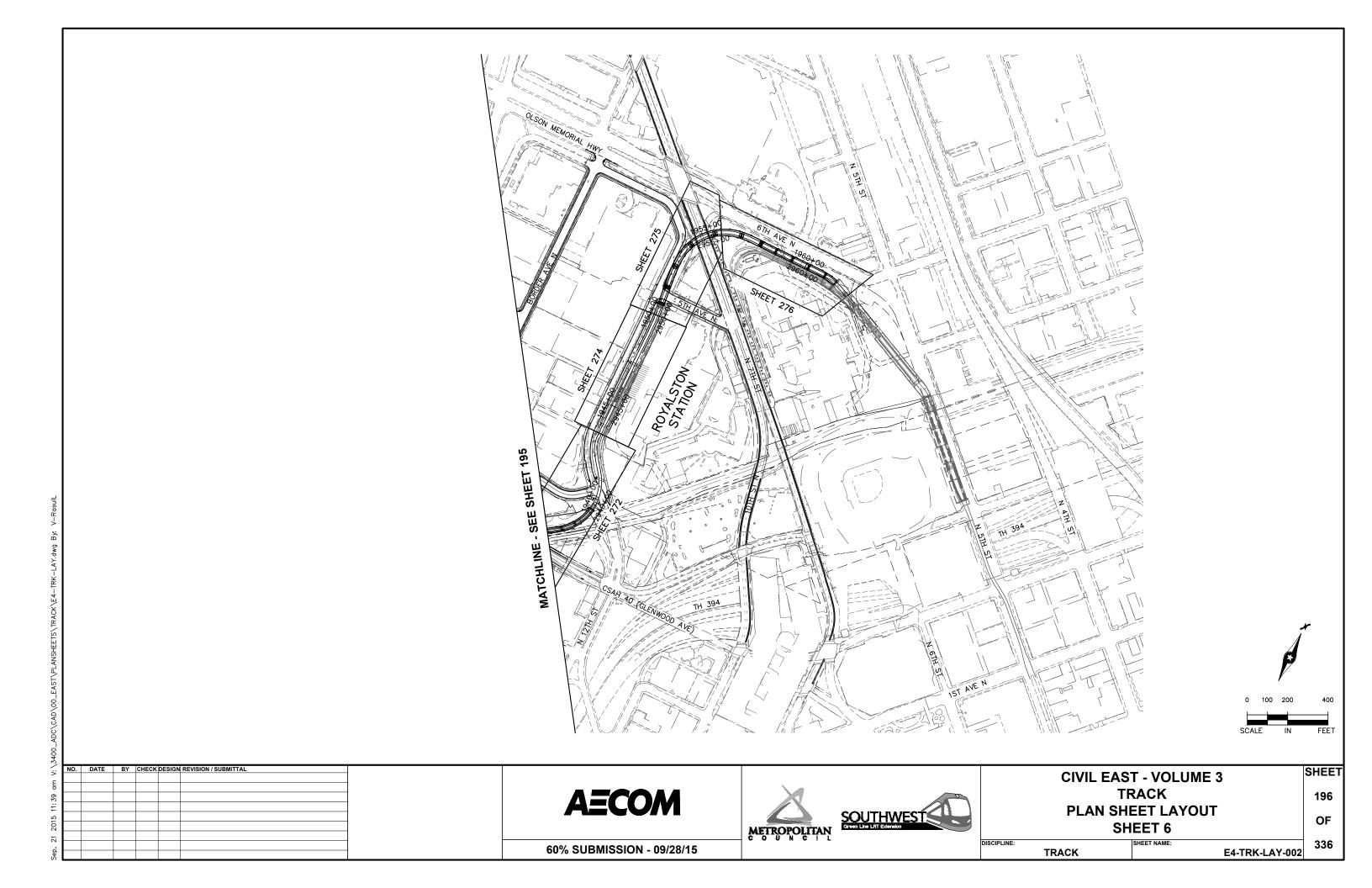


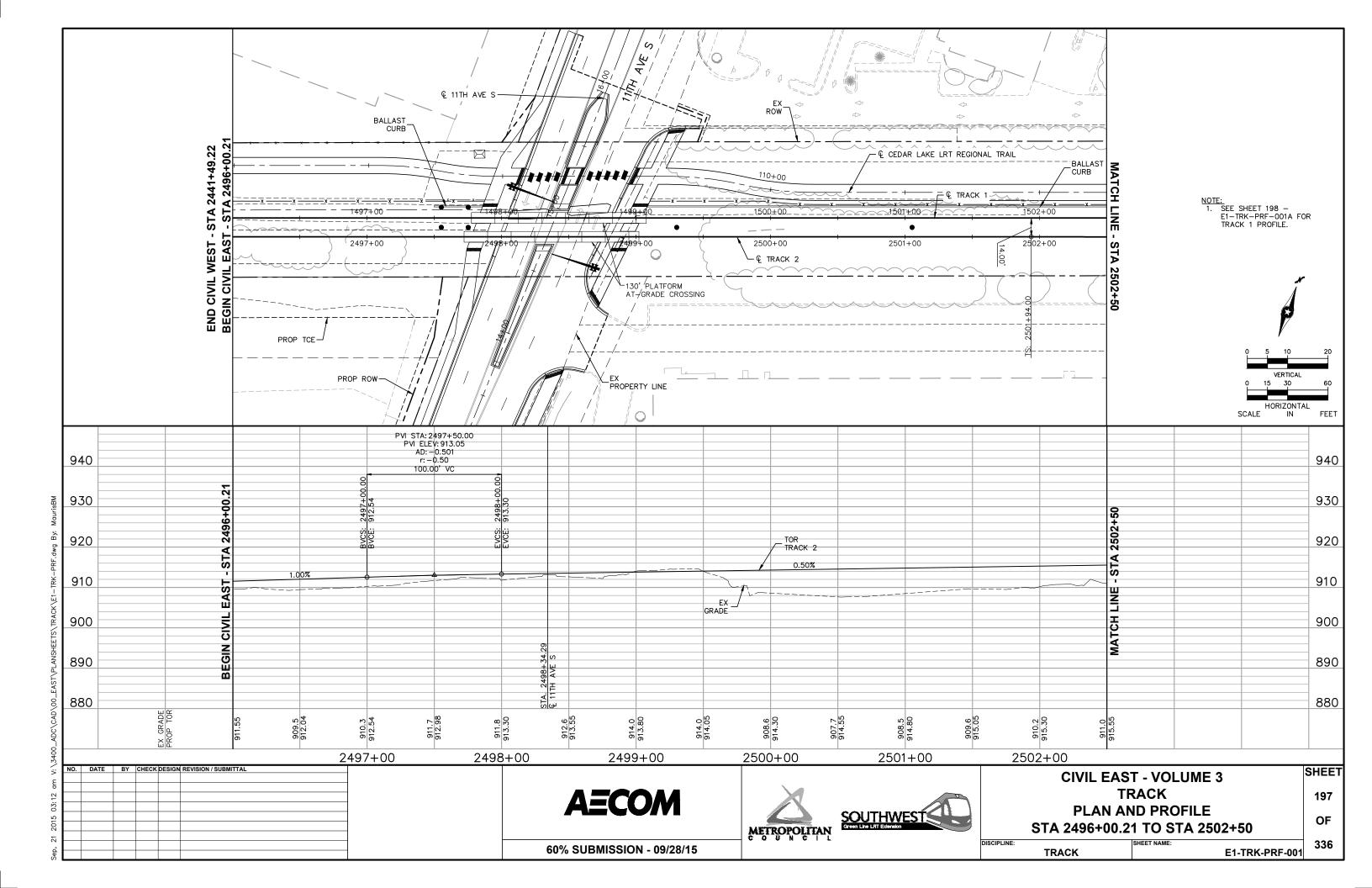




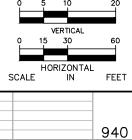


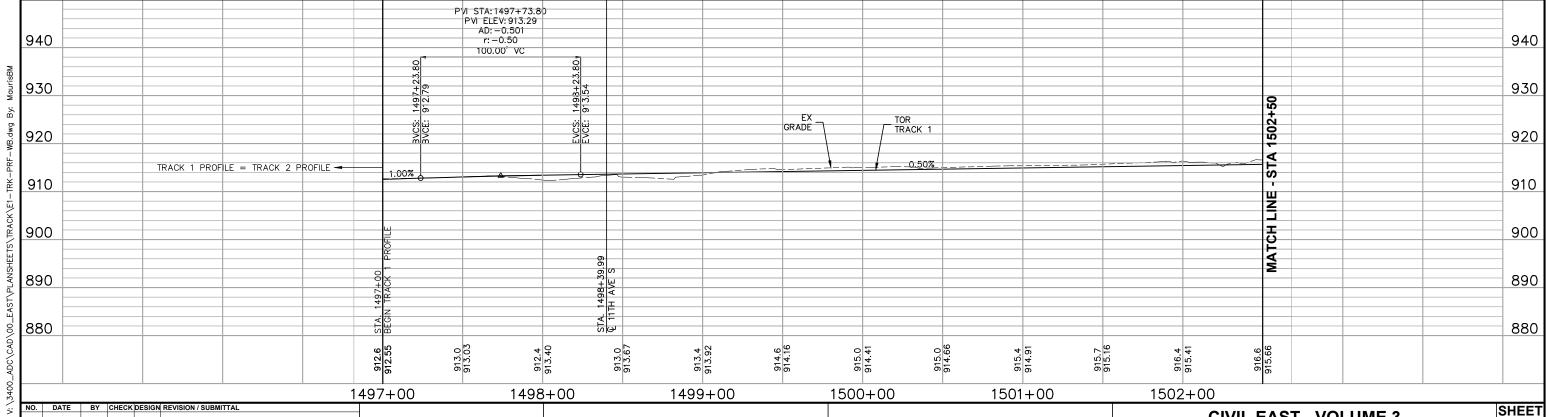






SEE SHEET E1-TRK-PRF-001 FOR PLAN VIEW





NO. DATE BY CHECK DESIGN REVISION / SUBMITTAL

AECOM

60% SUBMISSION - 09/28/15

METROPOLITAN W N CTAN



CIVIL EAST - VOLUME 3 TRACK PLAN AND PROFILE STA 1497+00 TO STA 1502+50

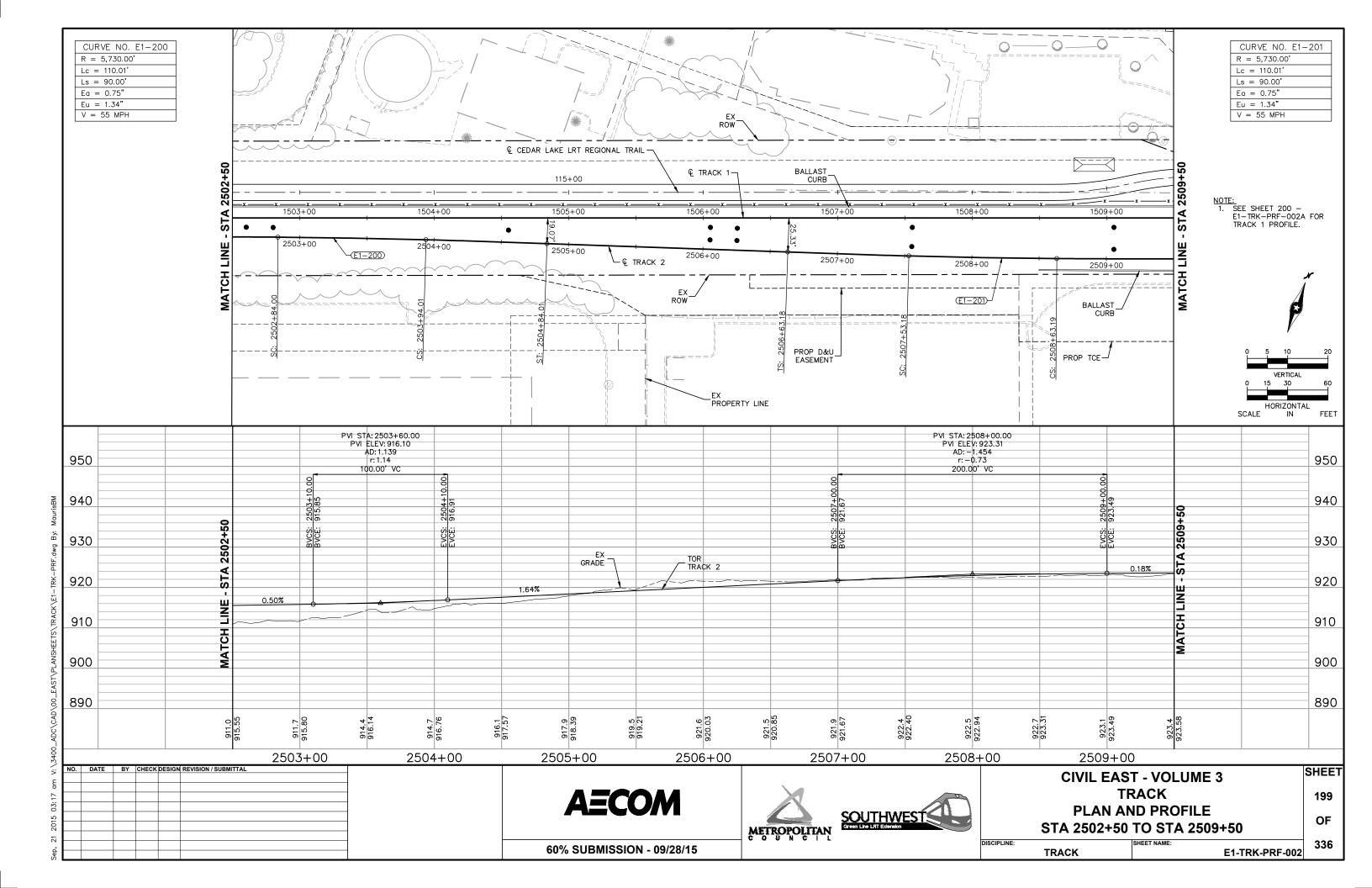
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TRACK

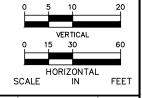
SHEET NAME:

E1-TRK-PRF-001A

336



SEE SHEET E1-TRK-PRF-002 FOR PLAN VIEW



SHEET



AECOM

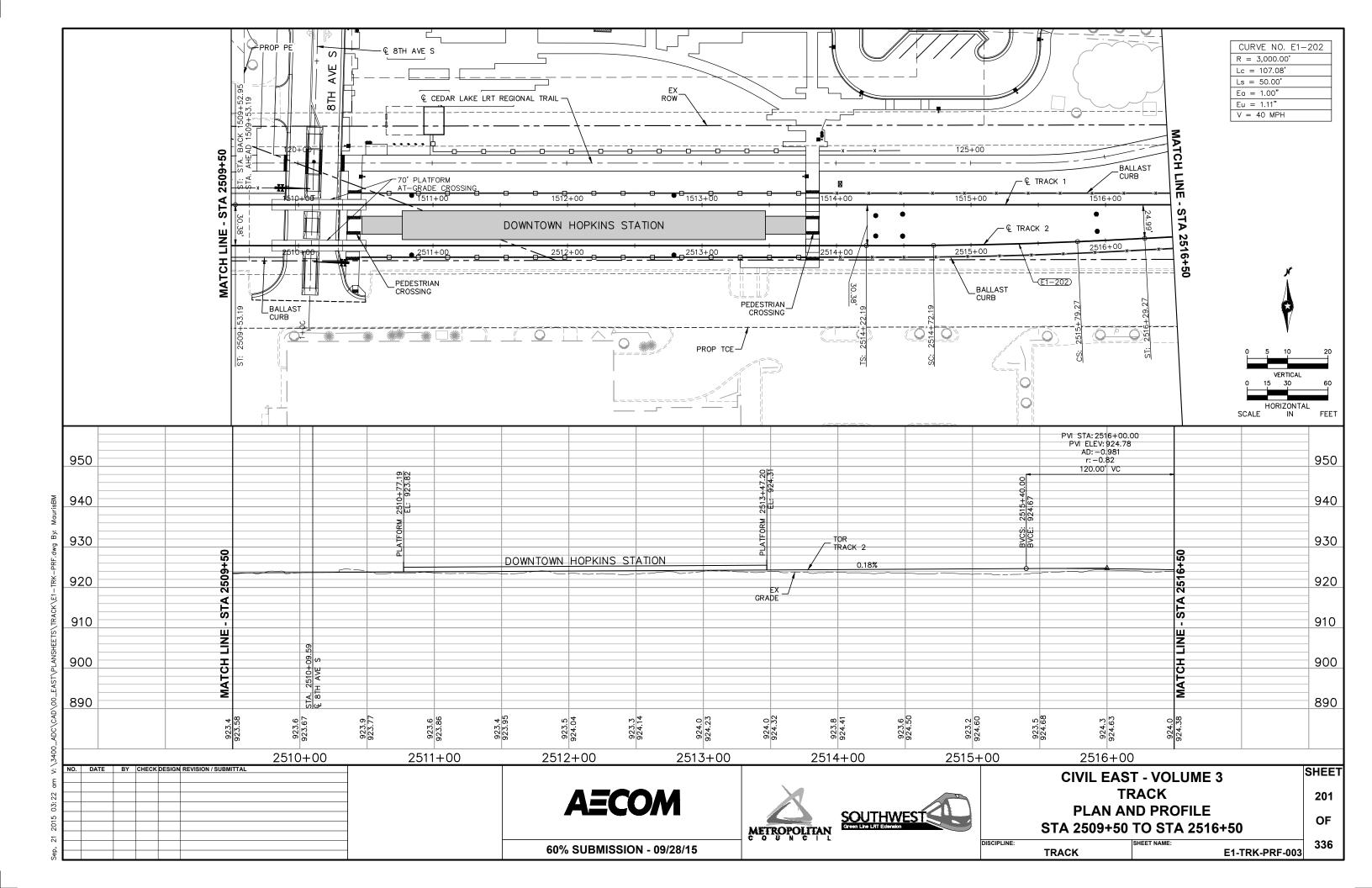


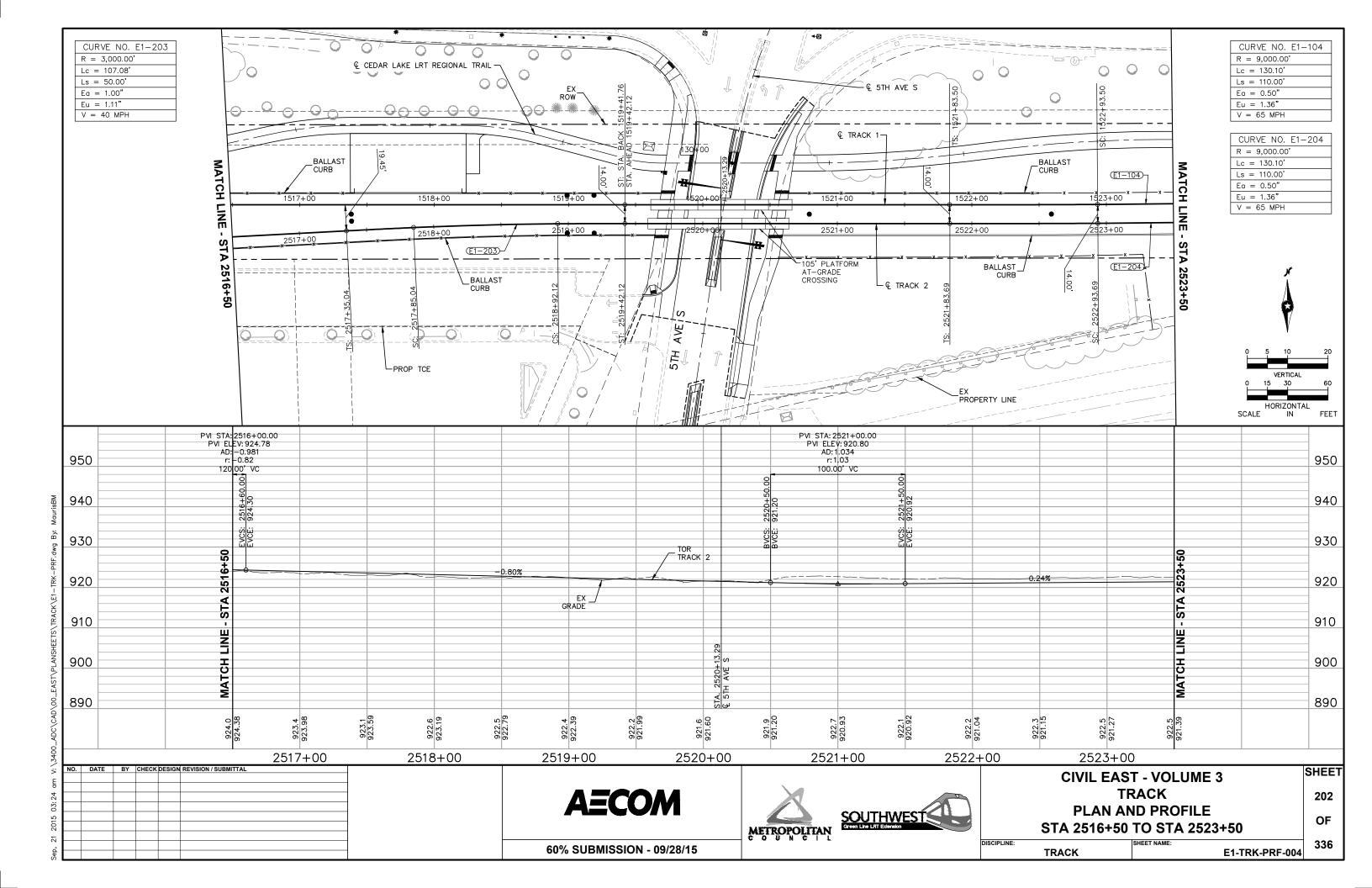


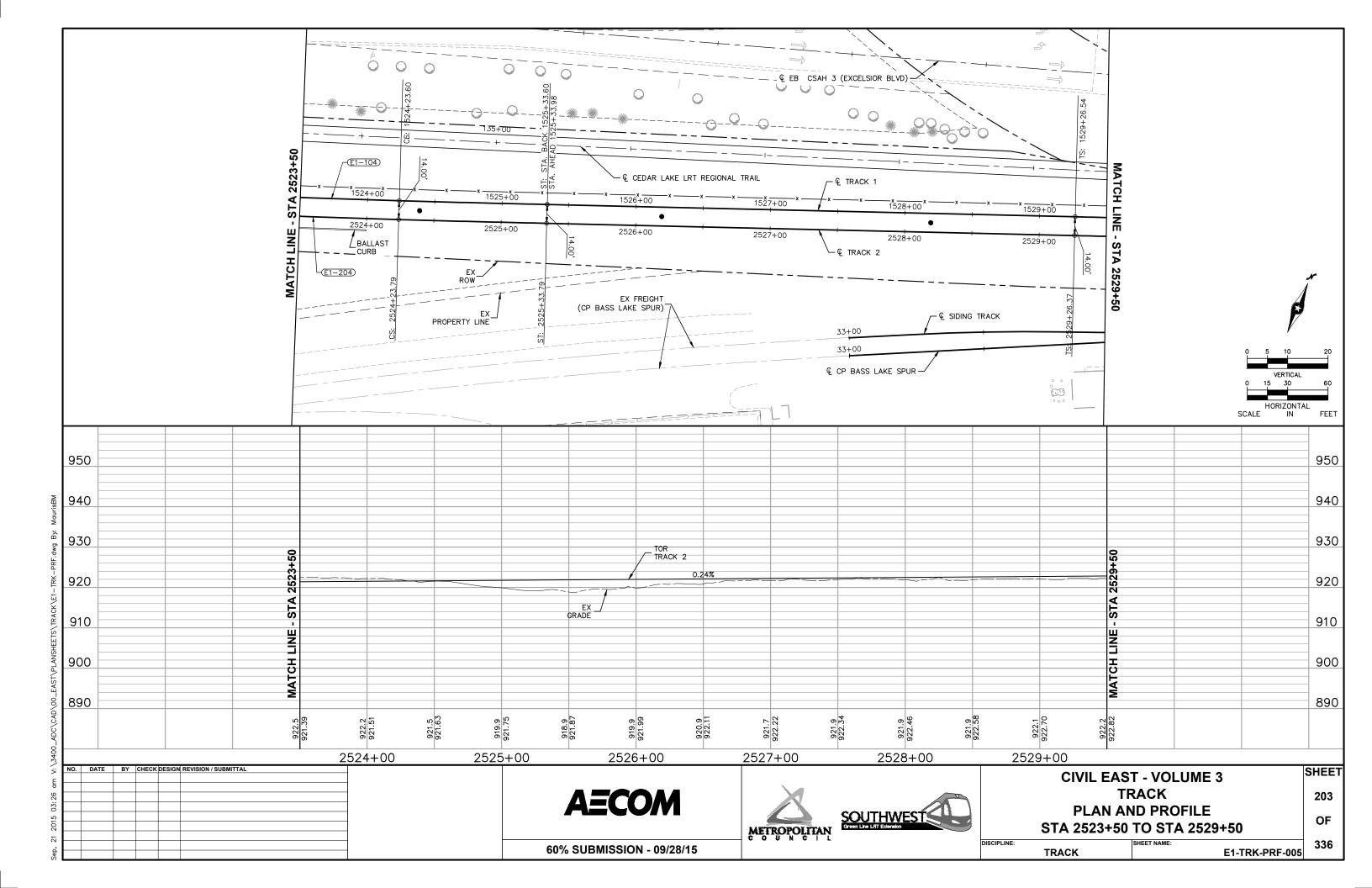
CIVIL EAST - VOLUME 3 TRACK PLAN AND PROFILE STA 1502+50 TO STA 1504+20

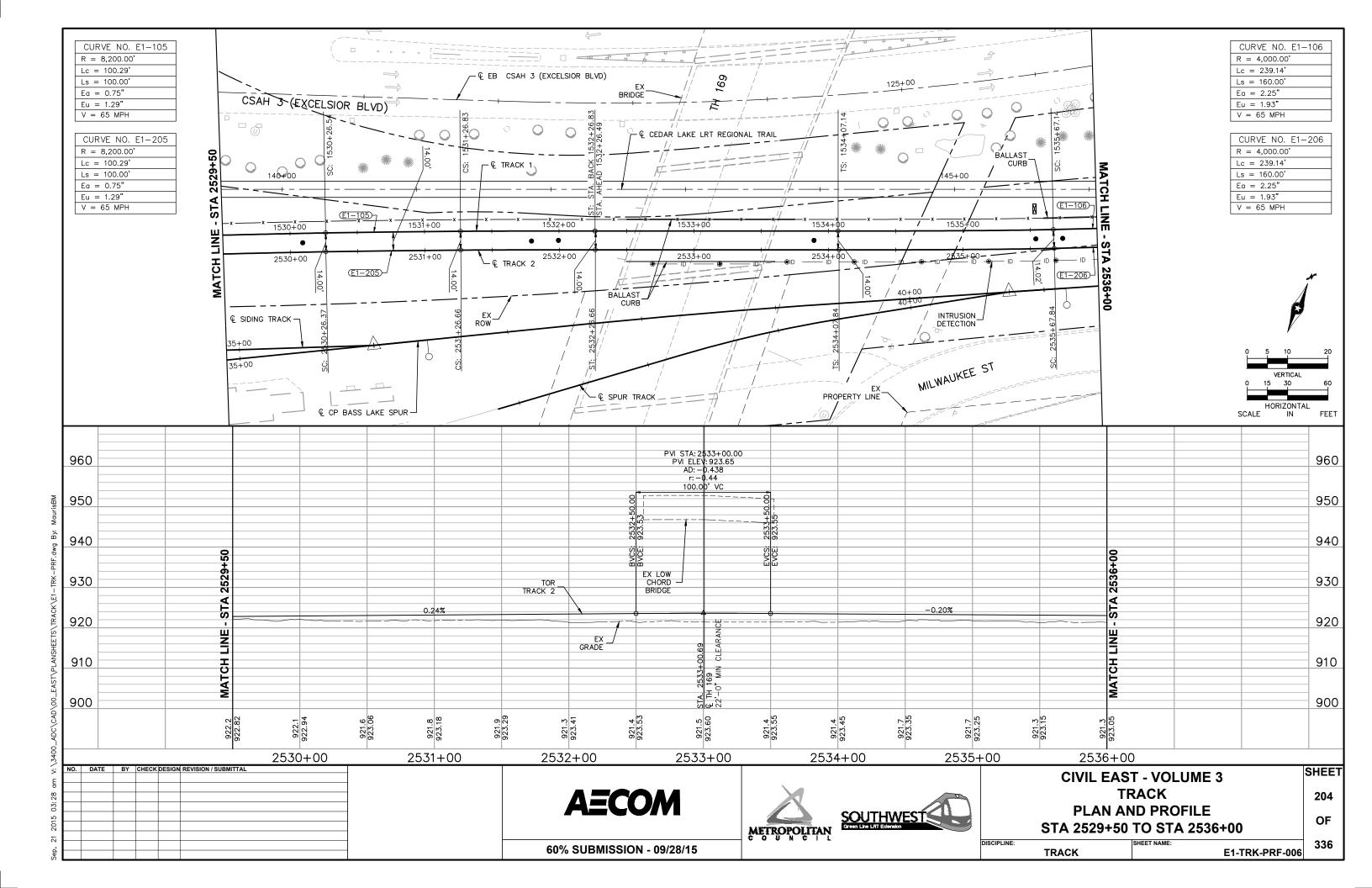
OF 336 E1-TRK-PRF-002A **TRACK**

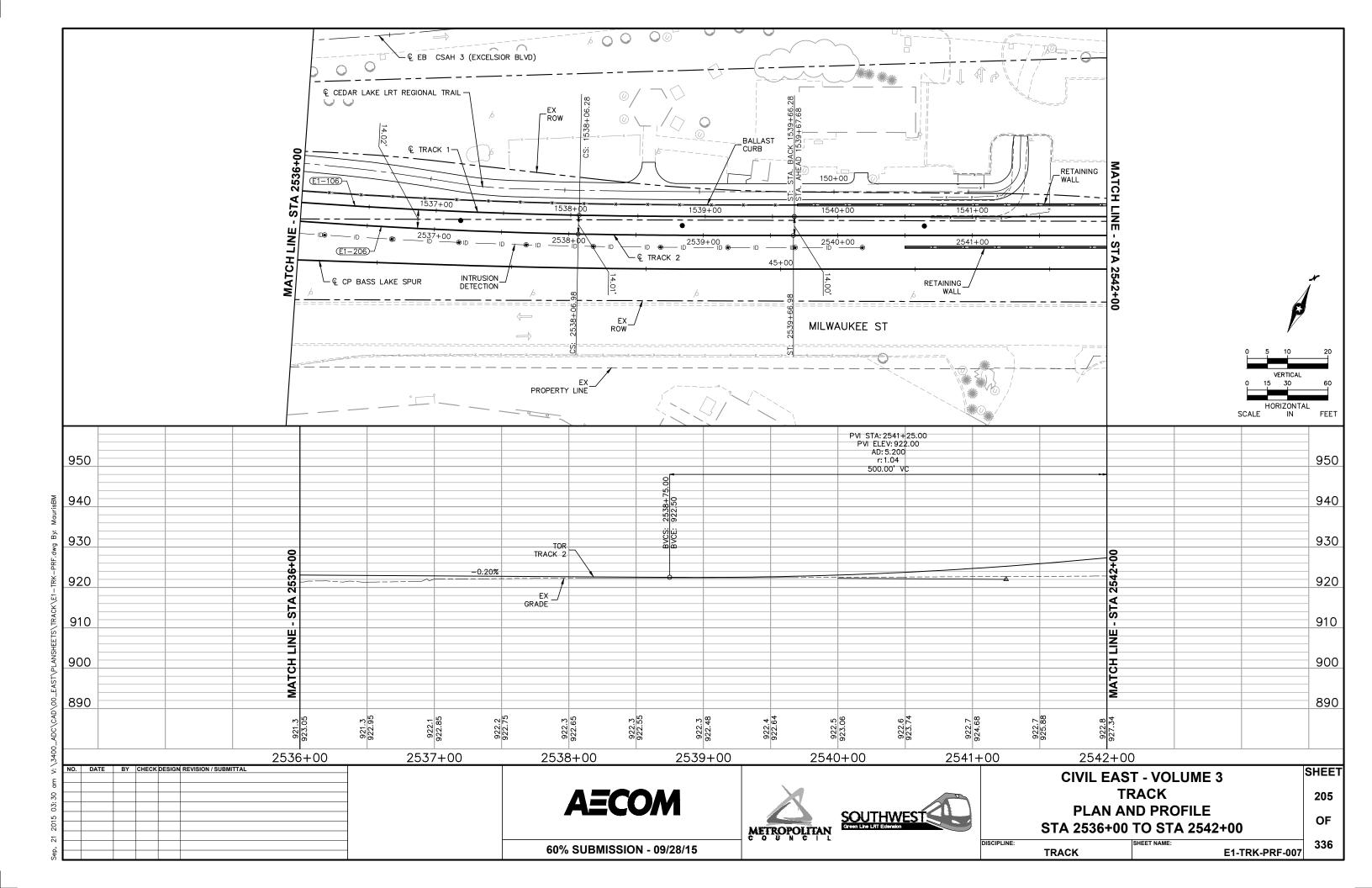
60% SUBMISSION - 09/28/15

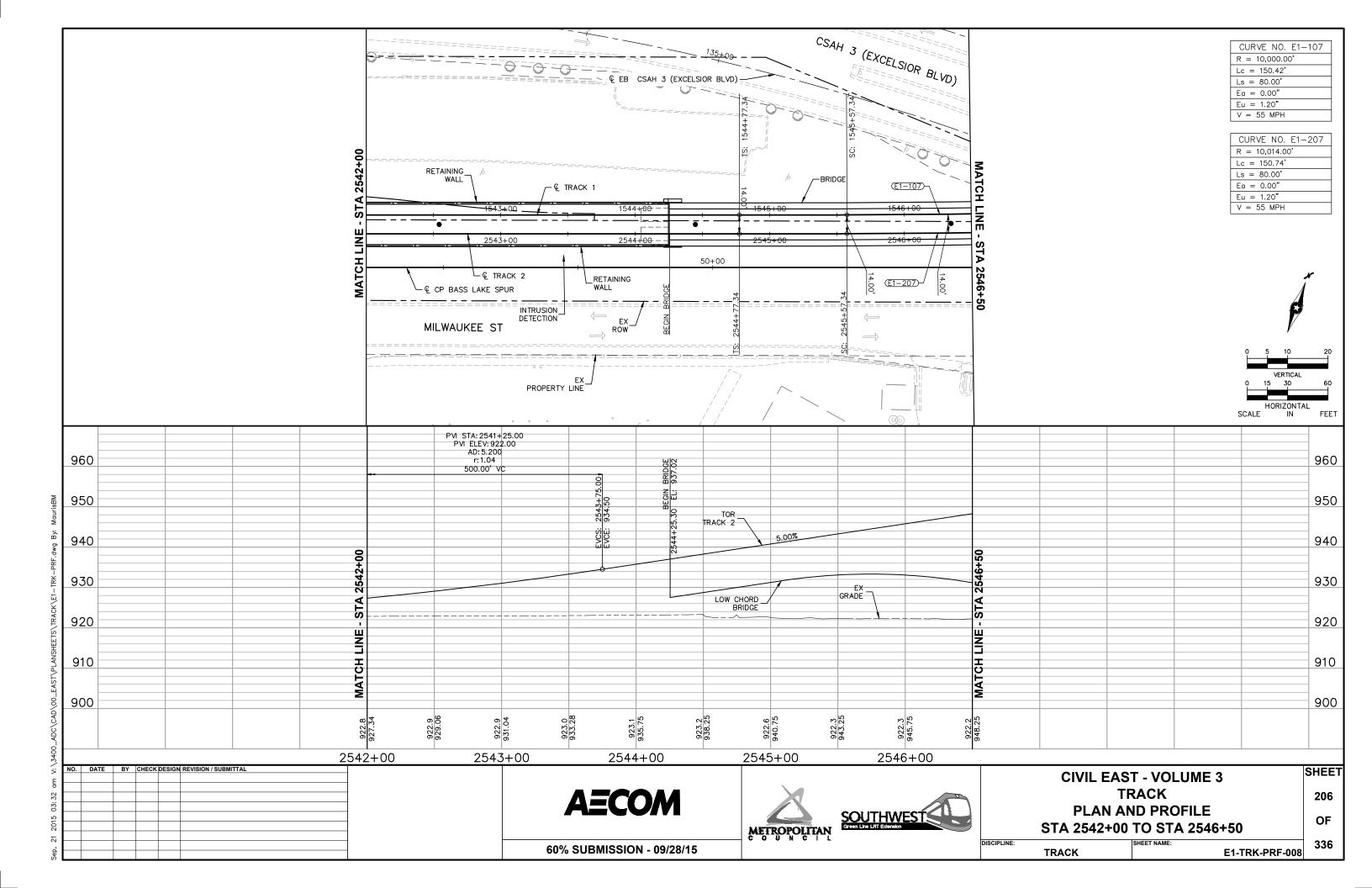


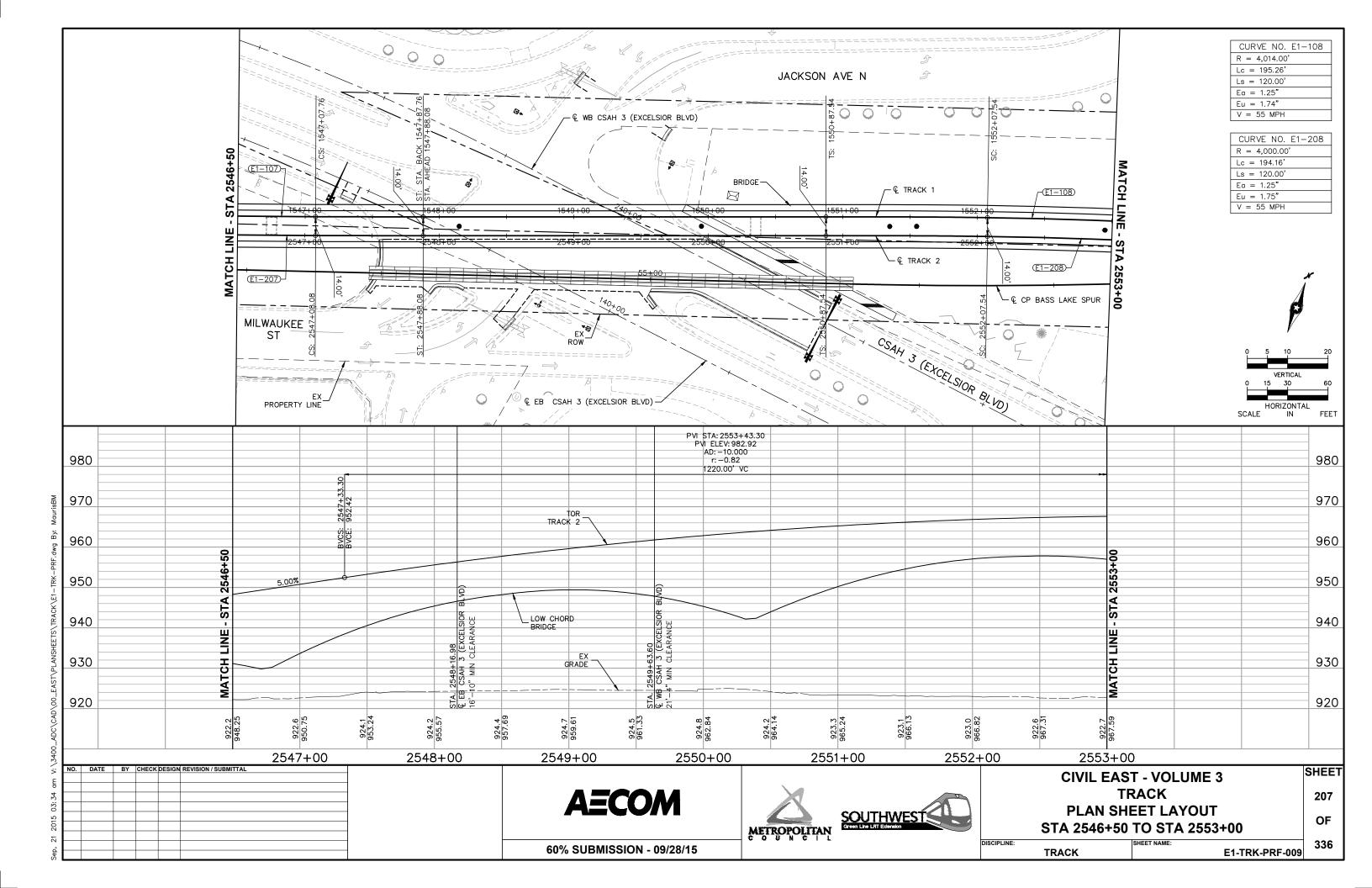


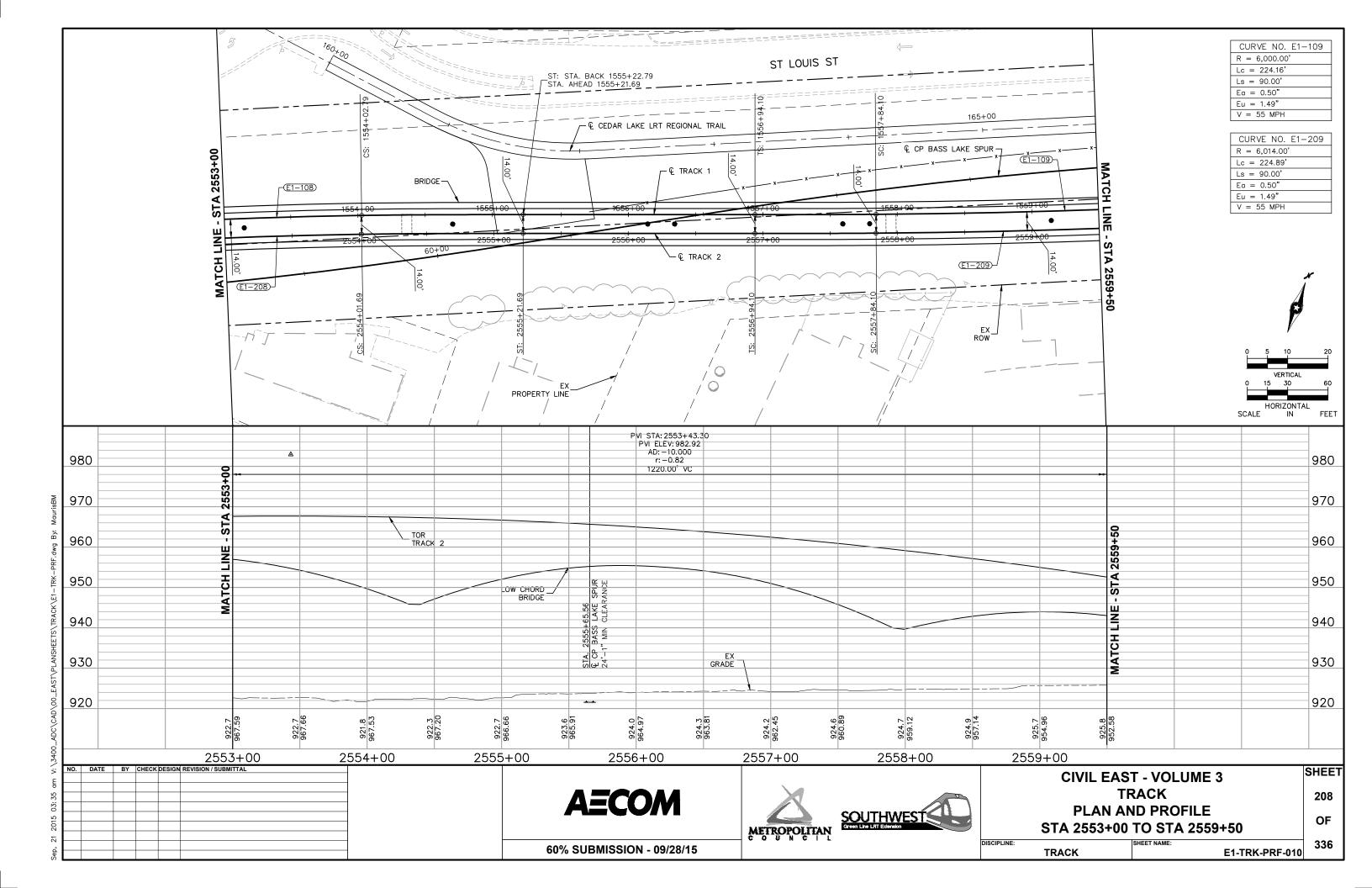


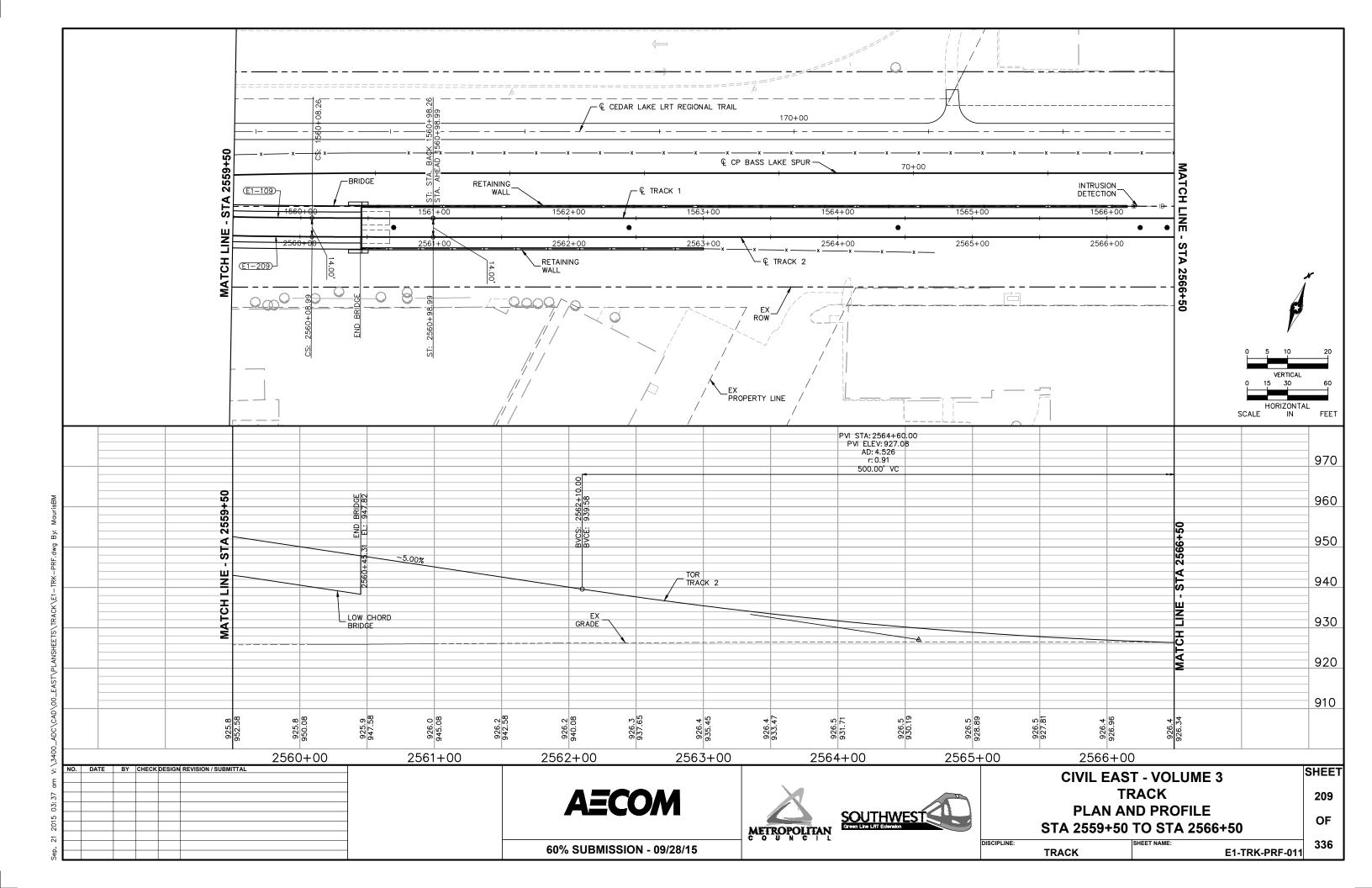


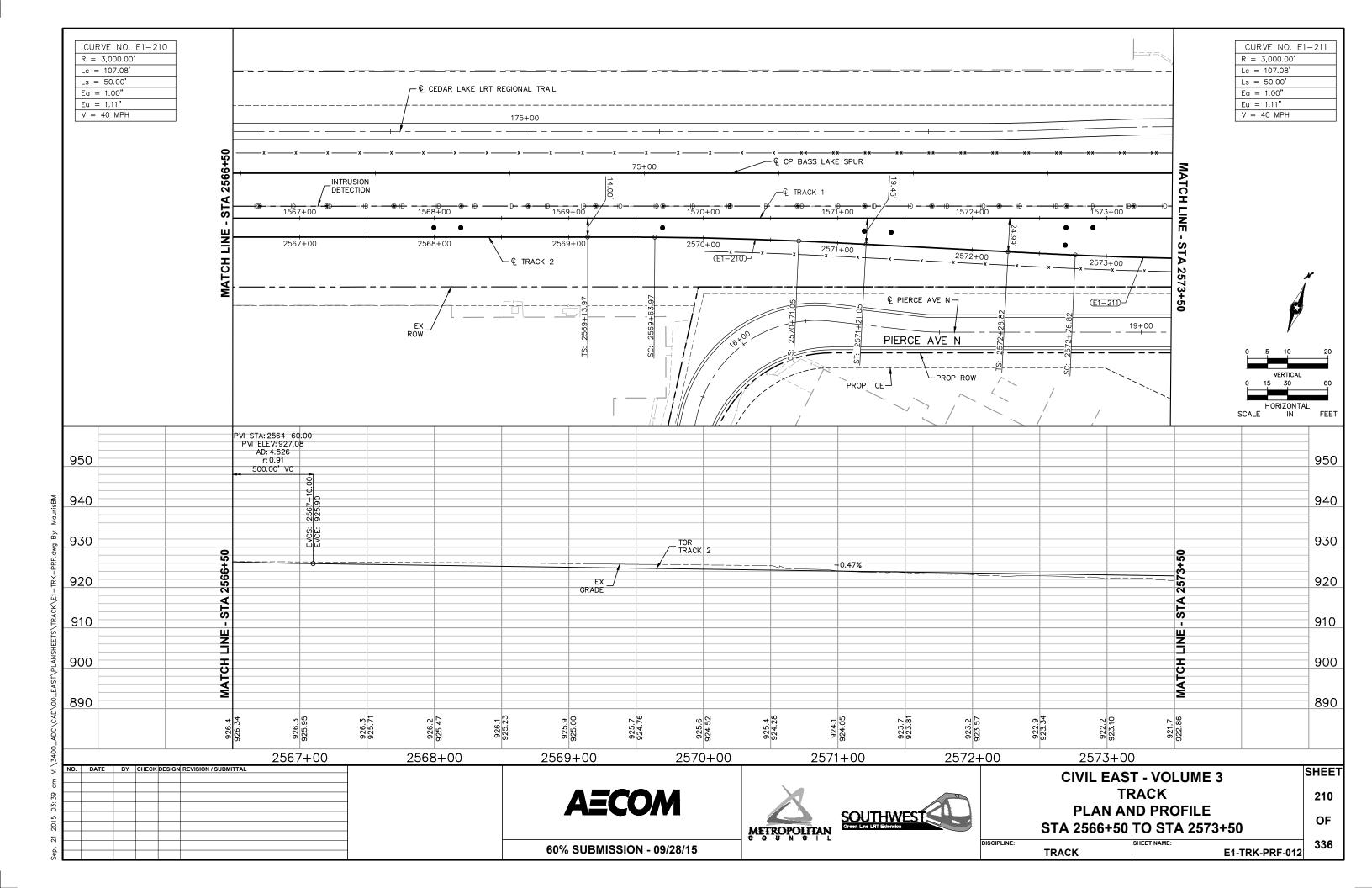


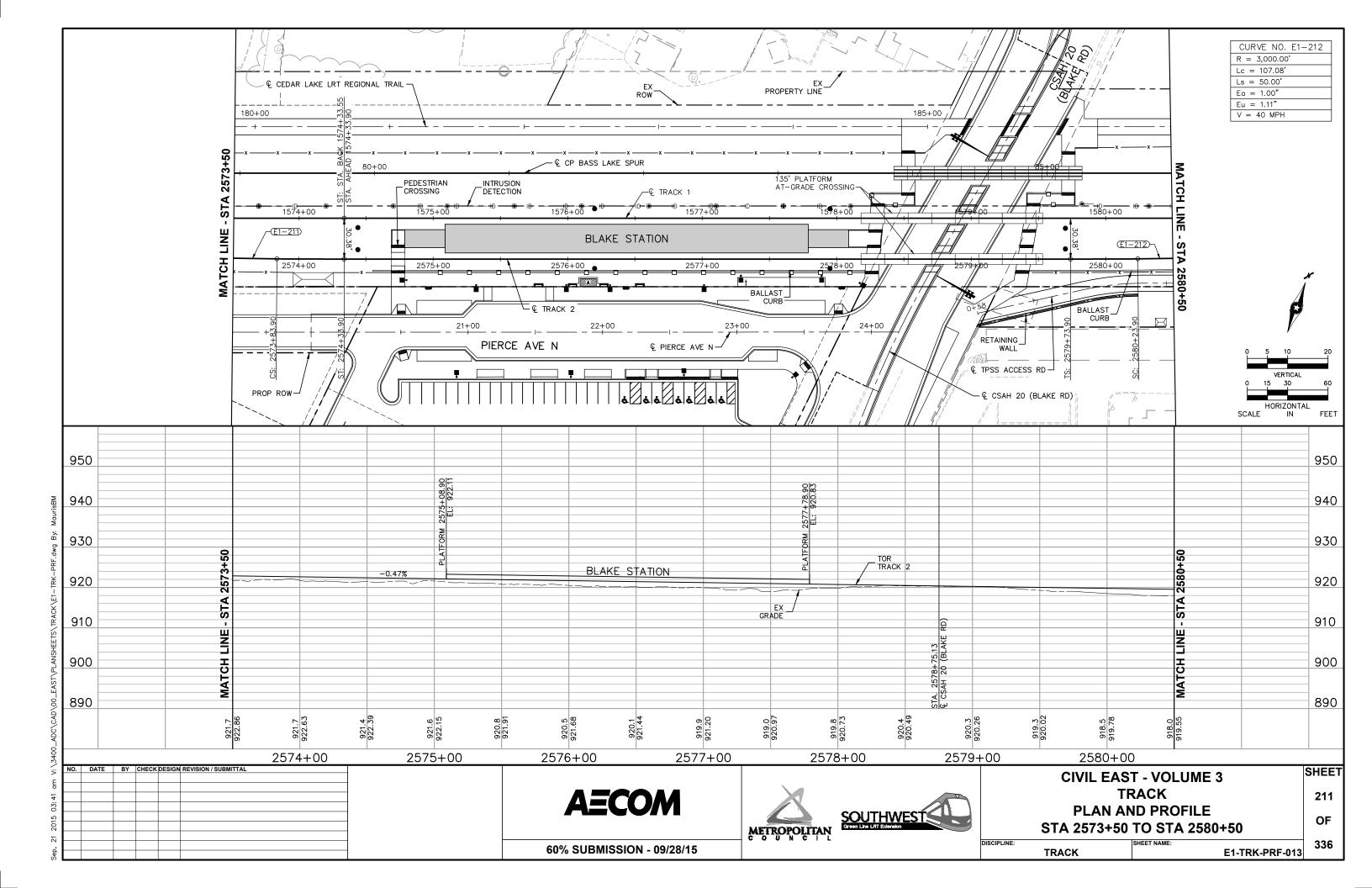


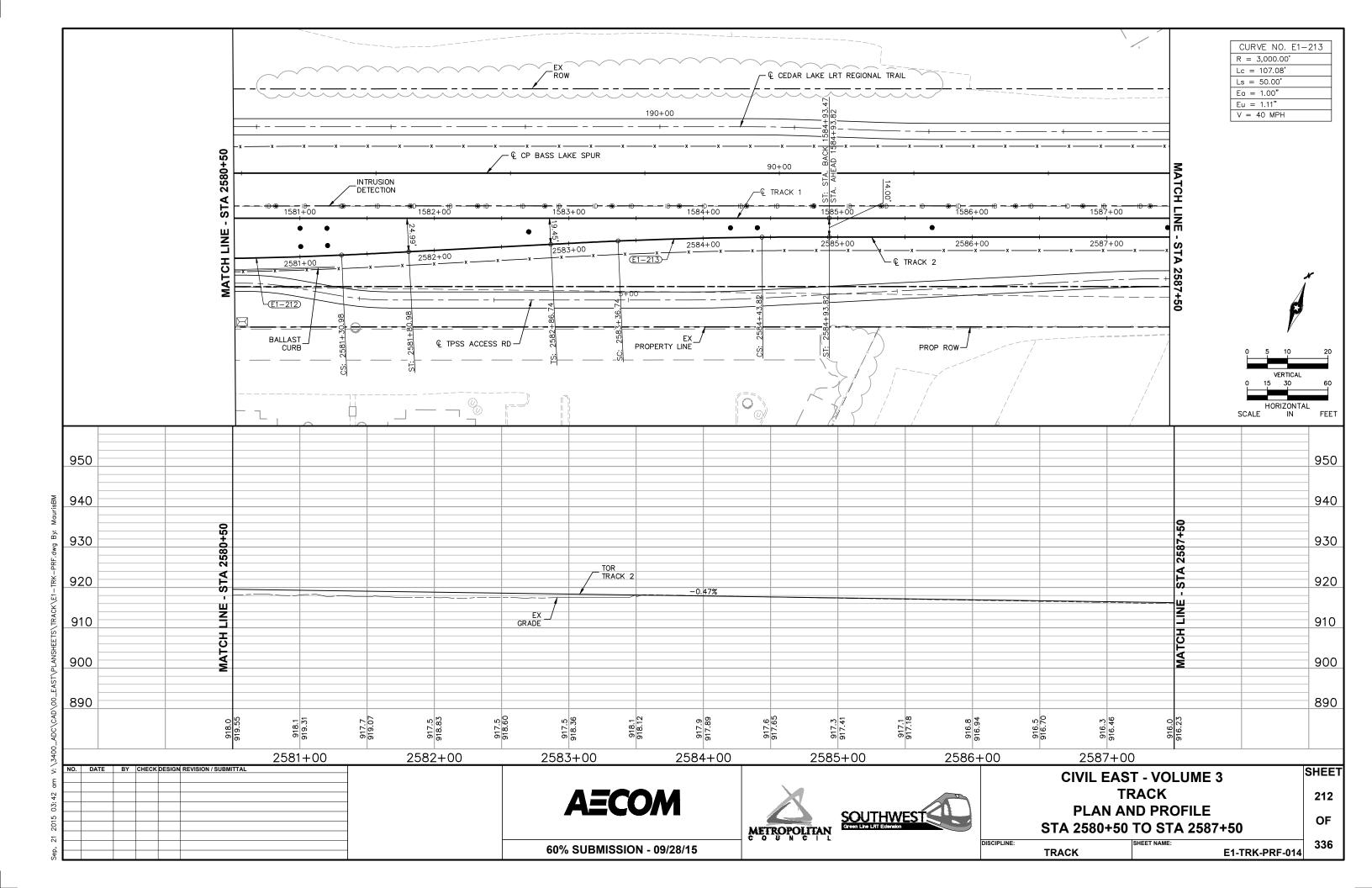


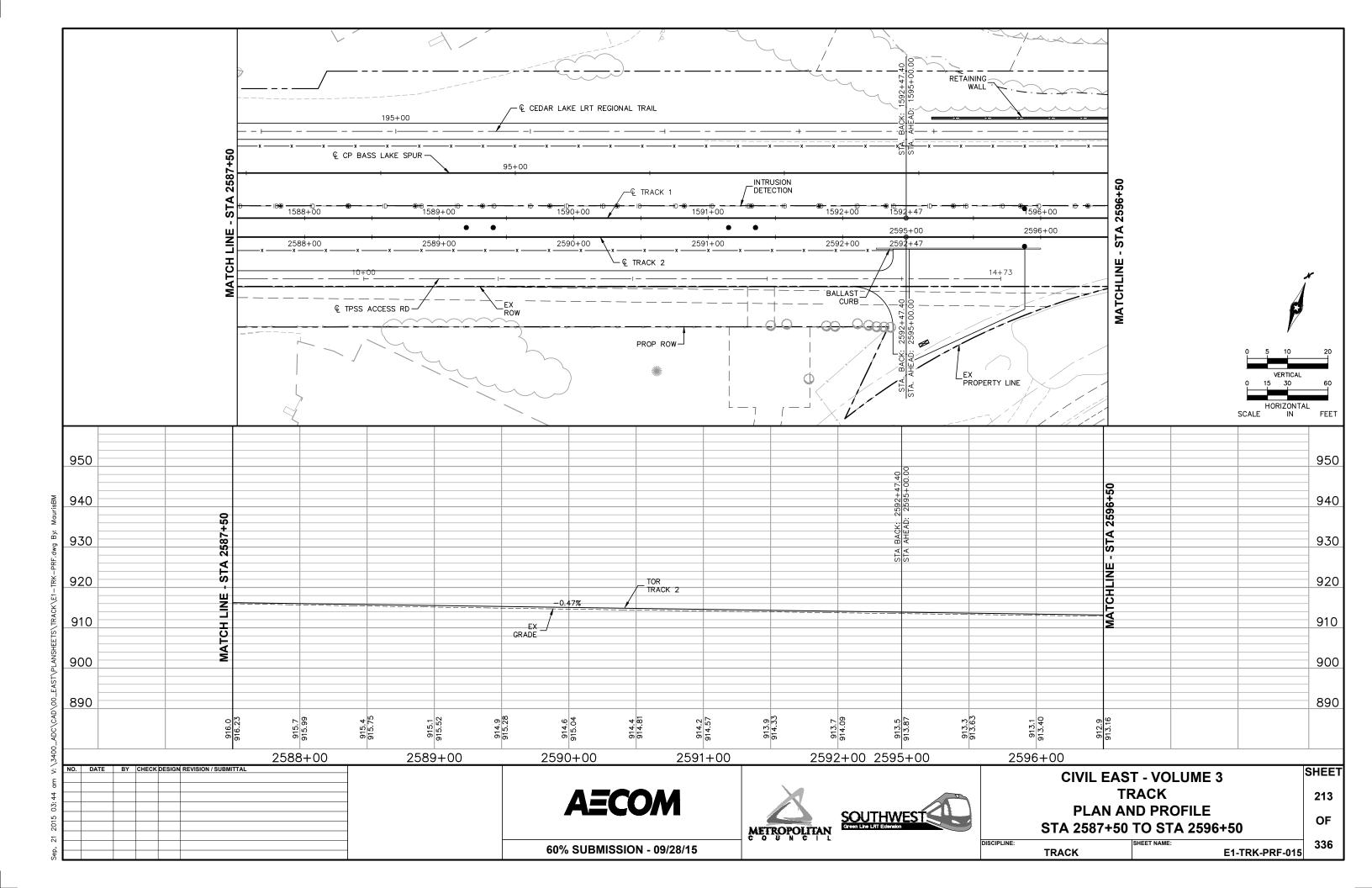


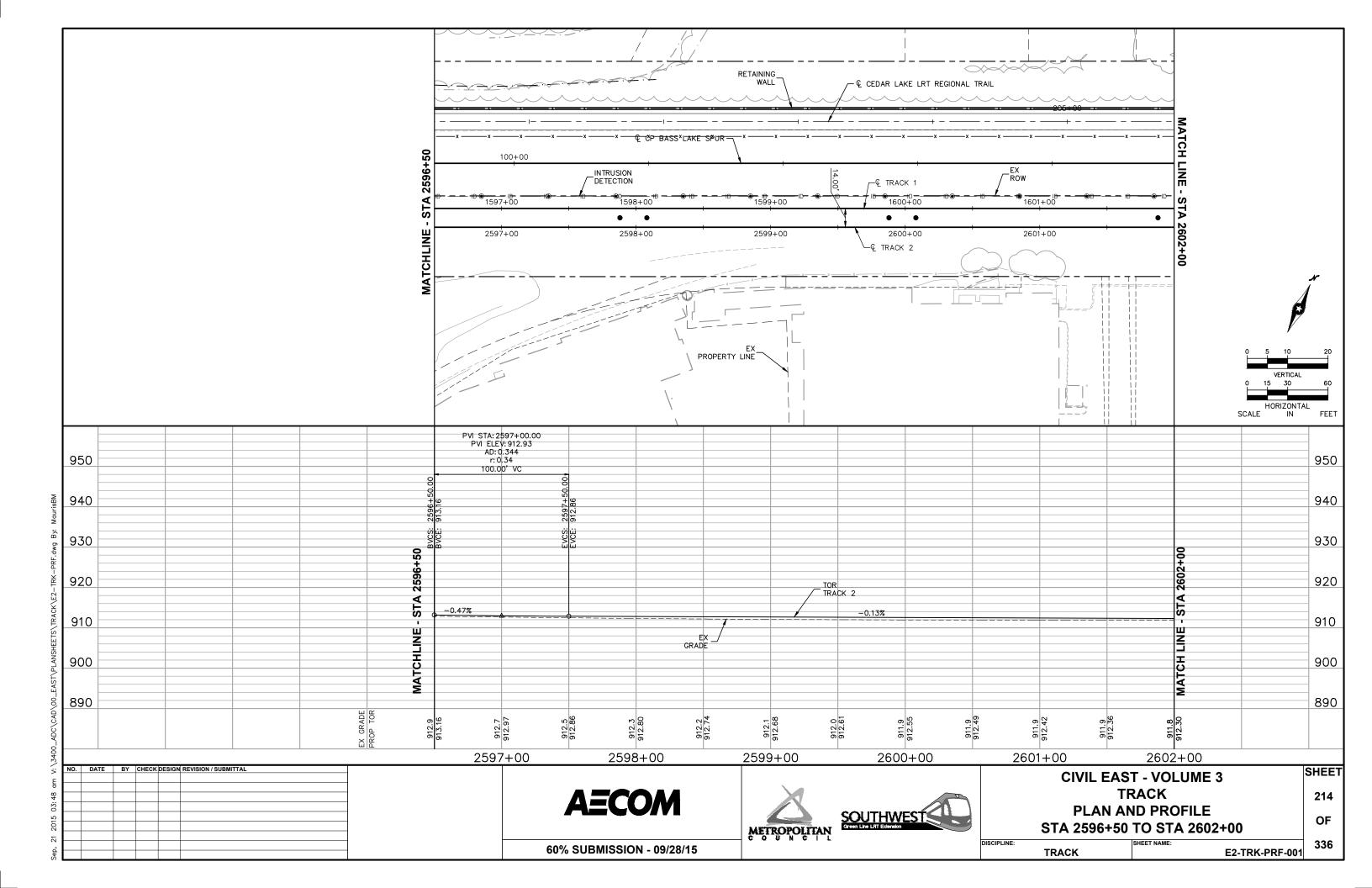


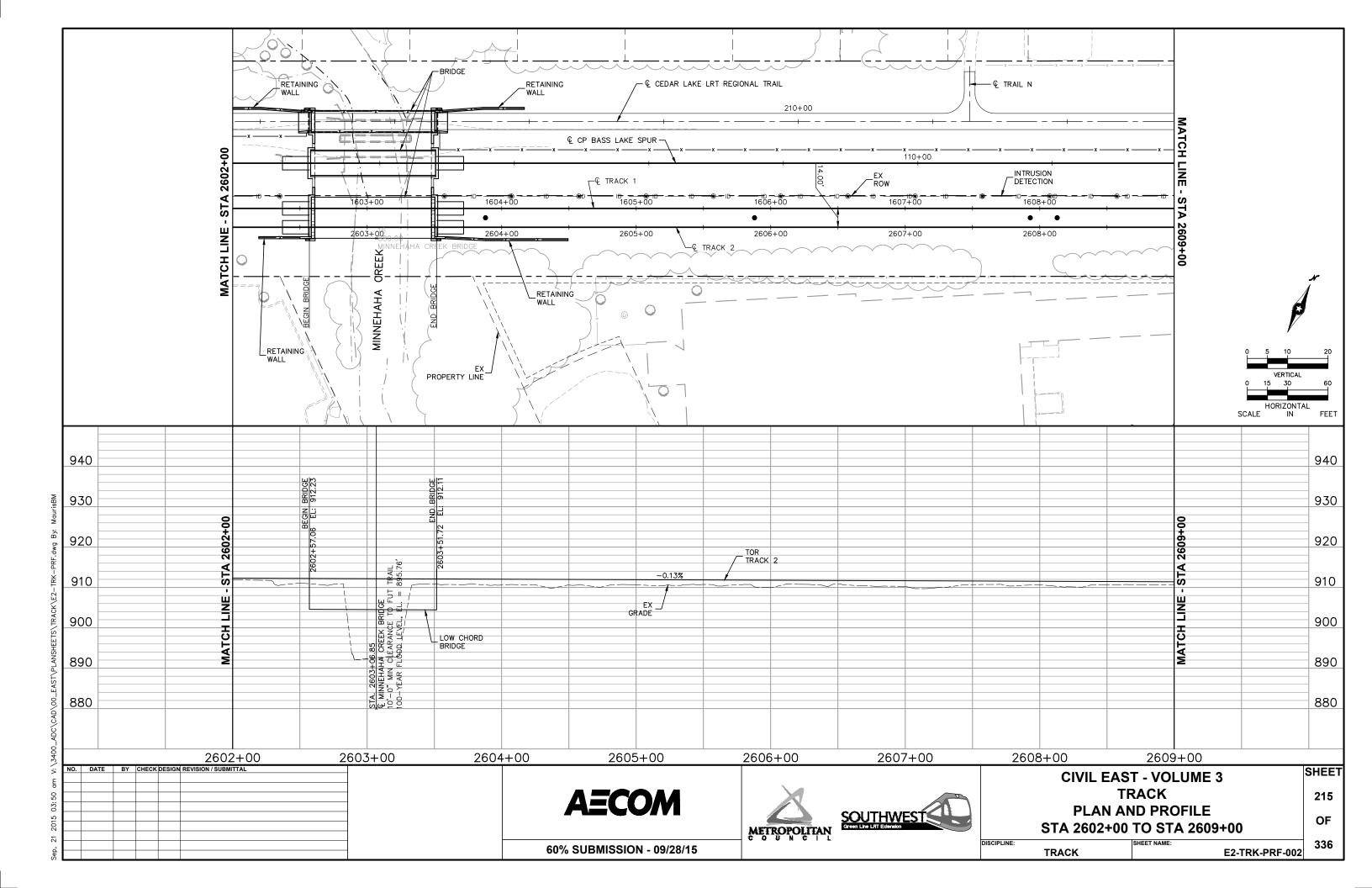


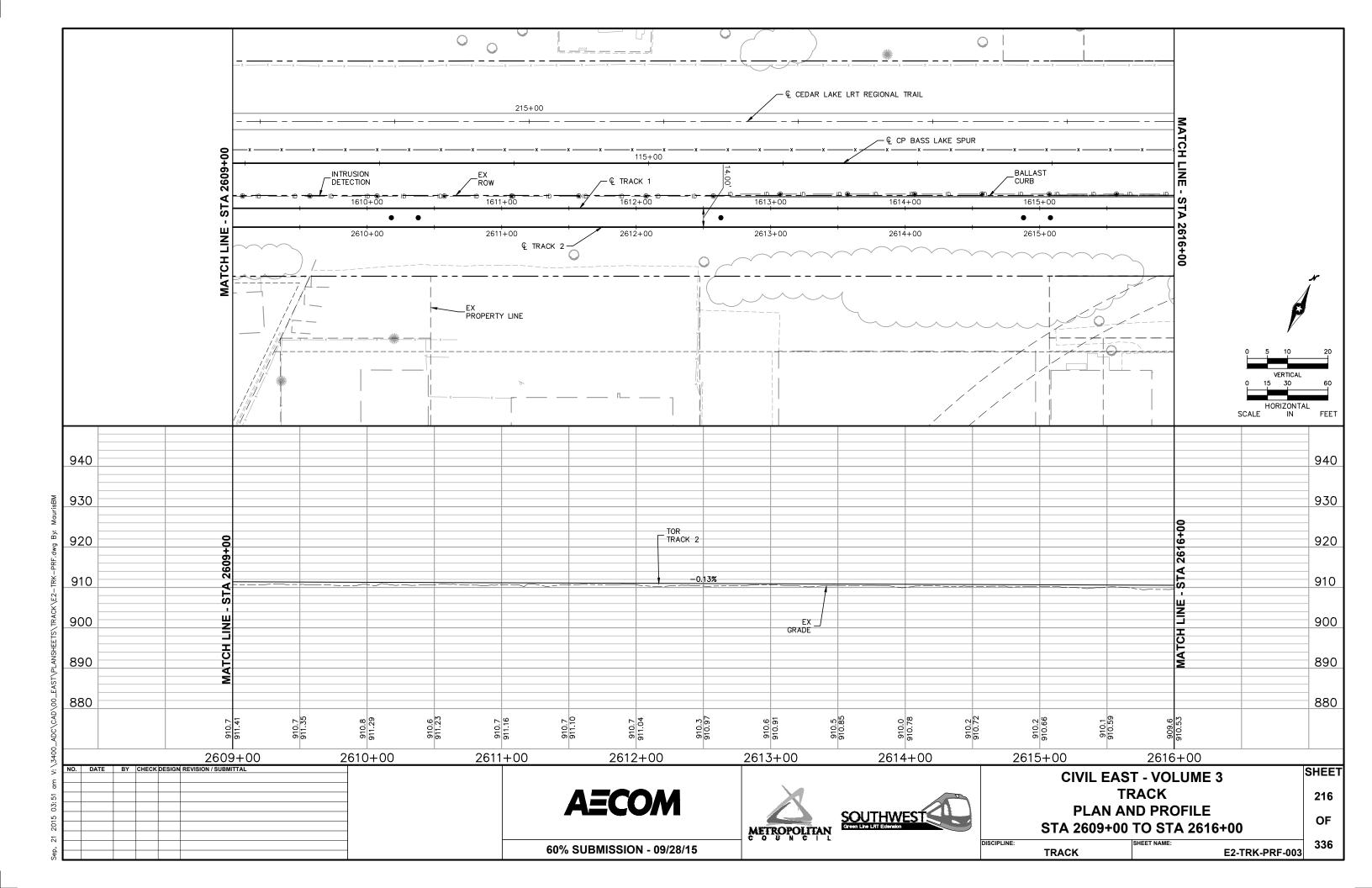


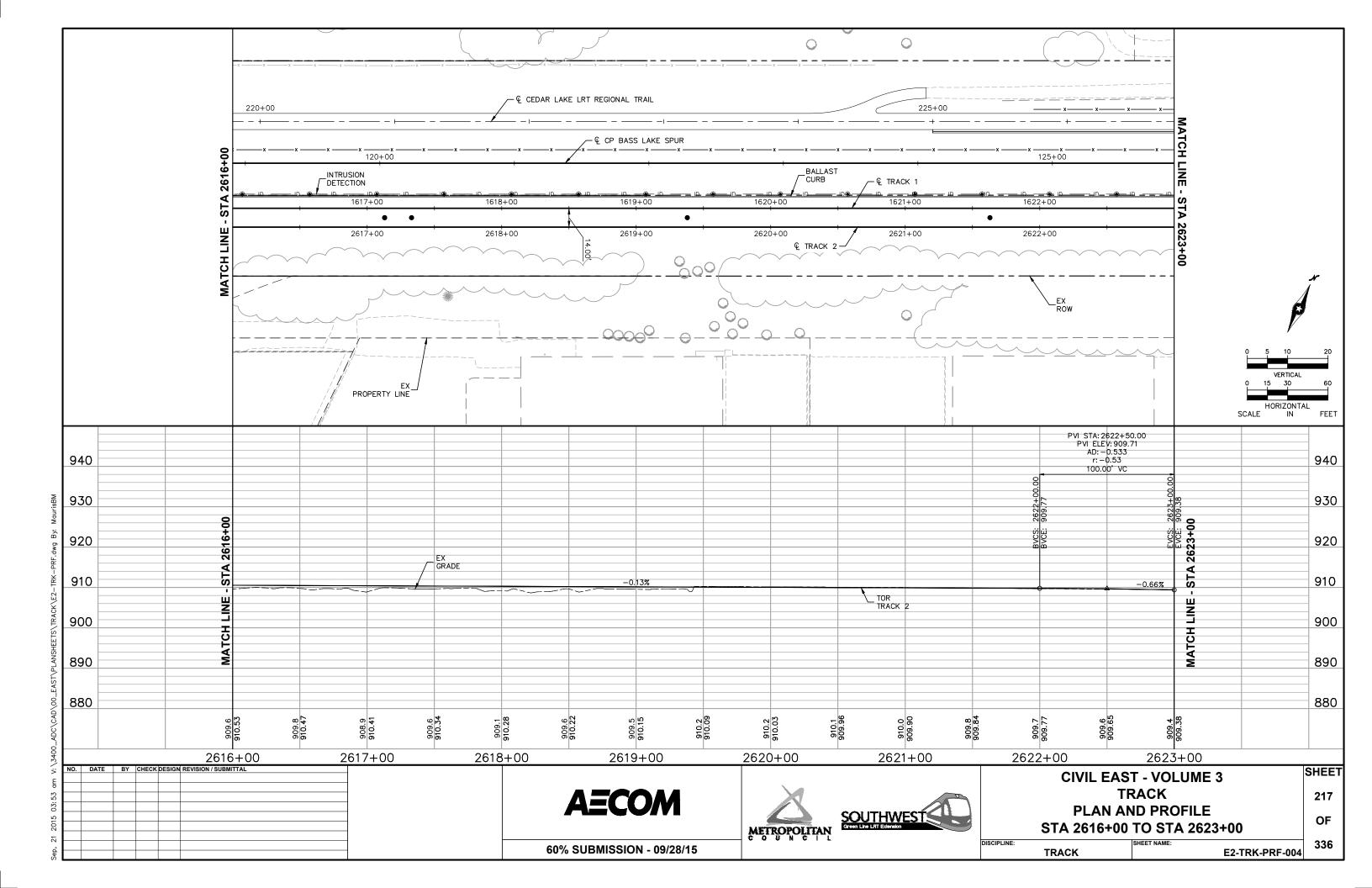


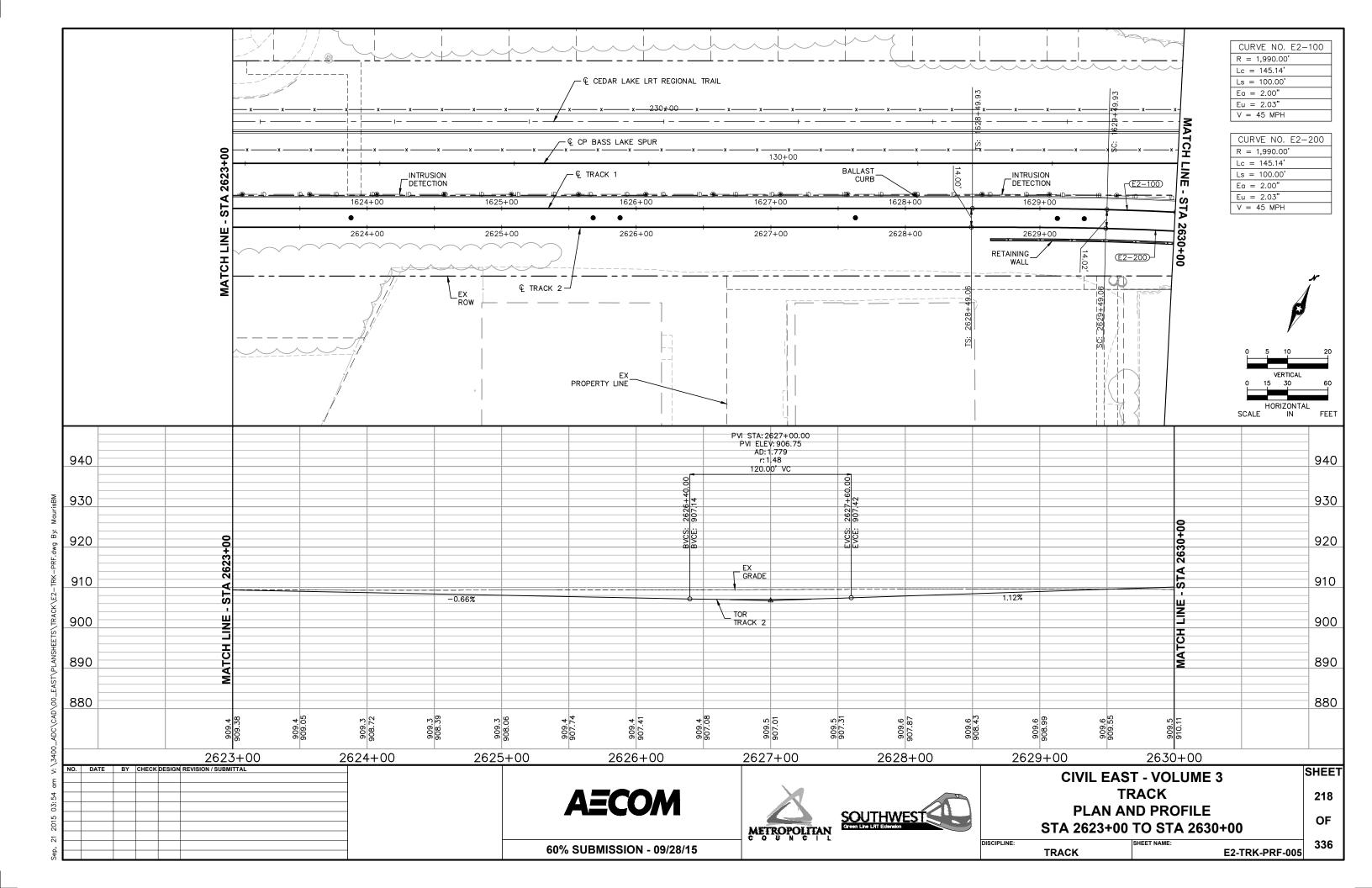


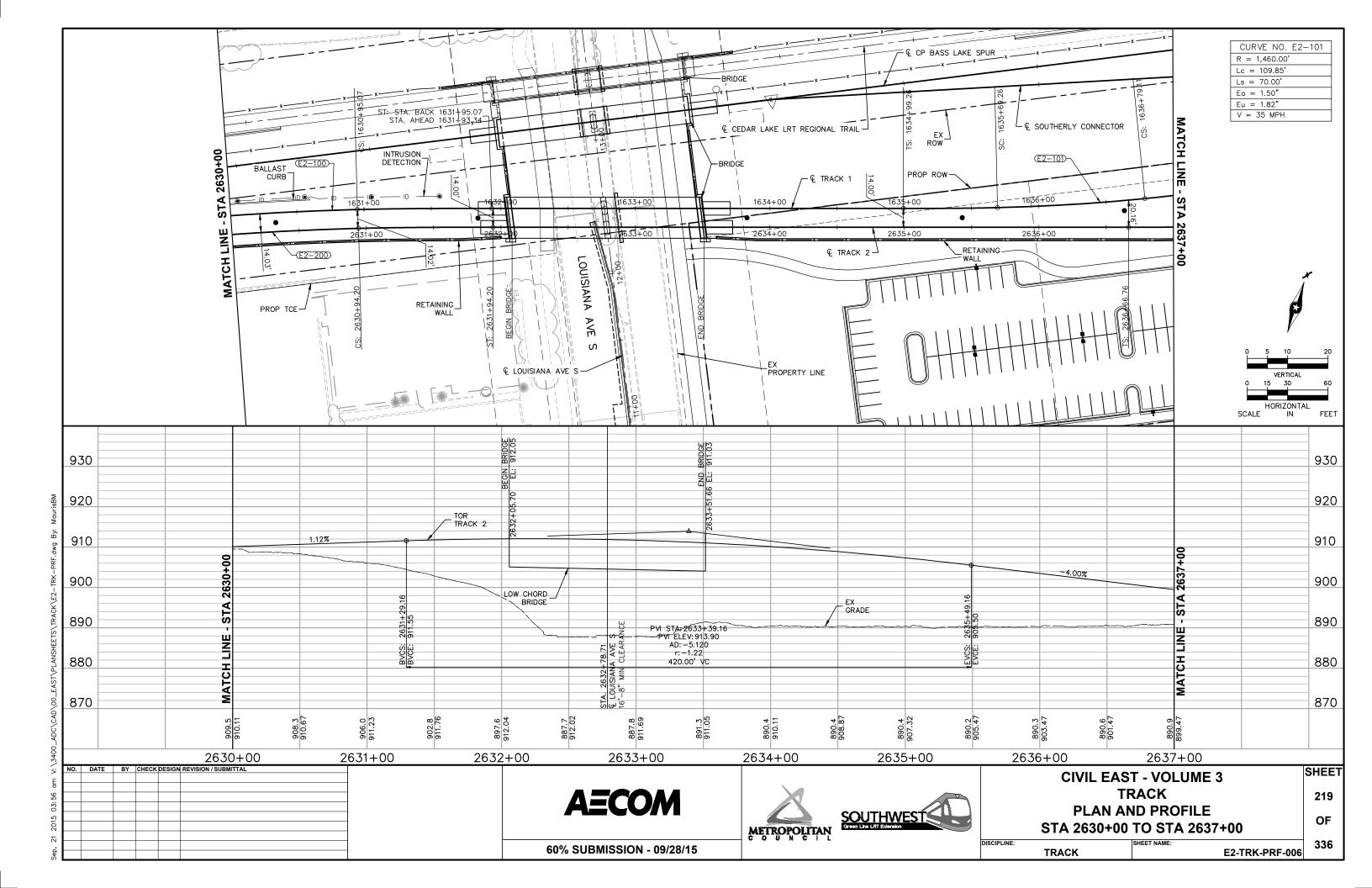


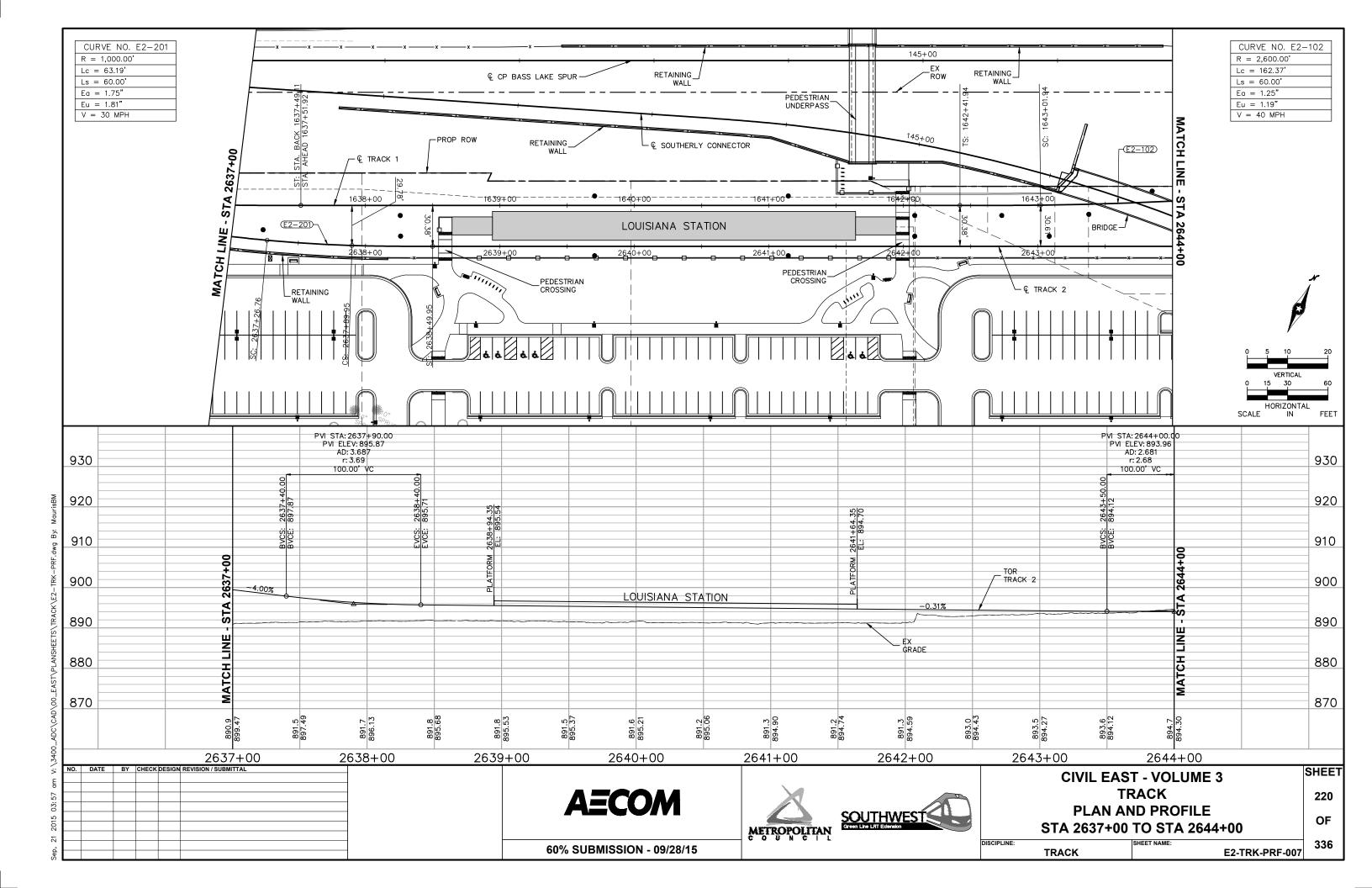


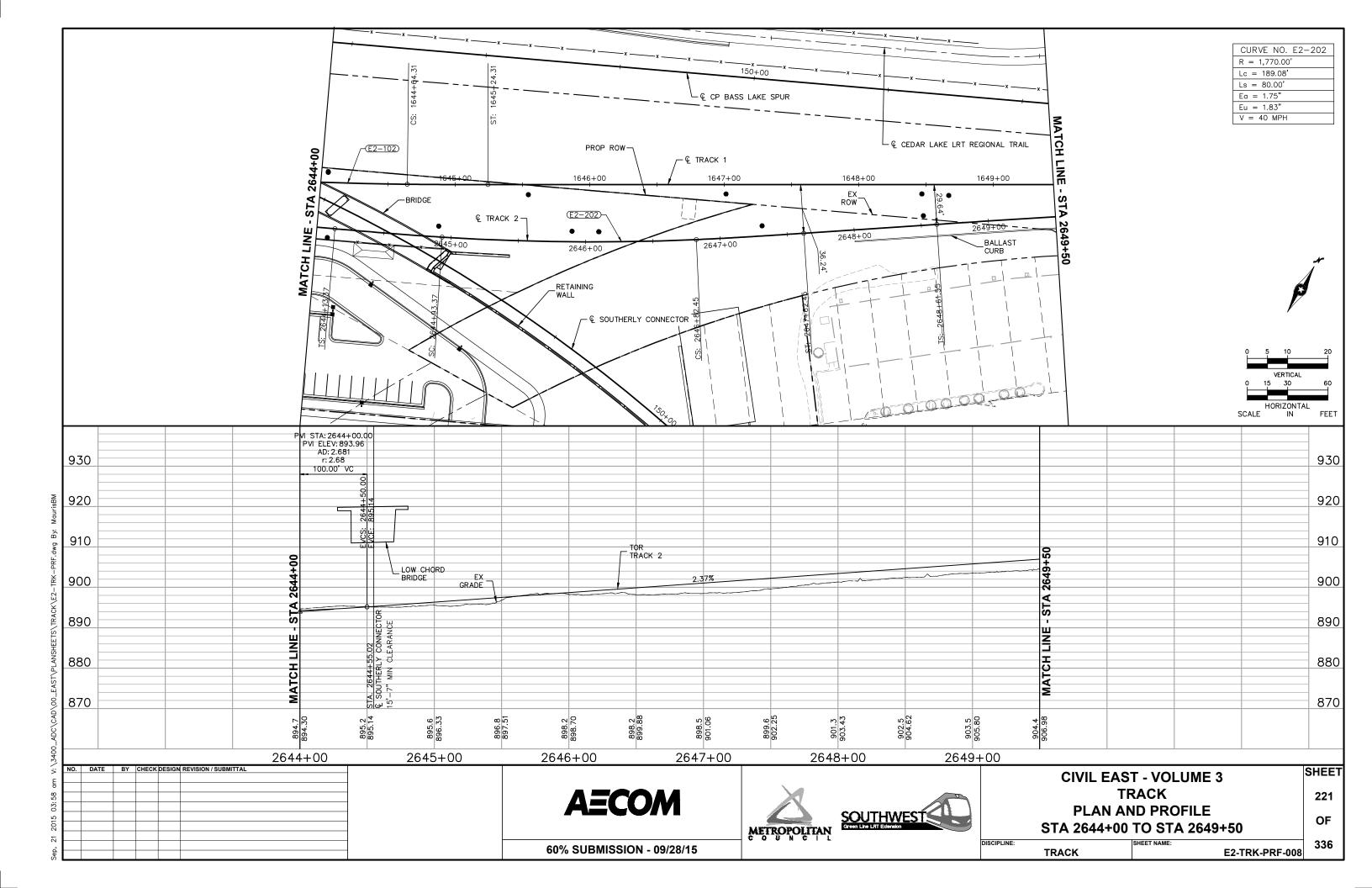


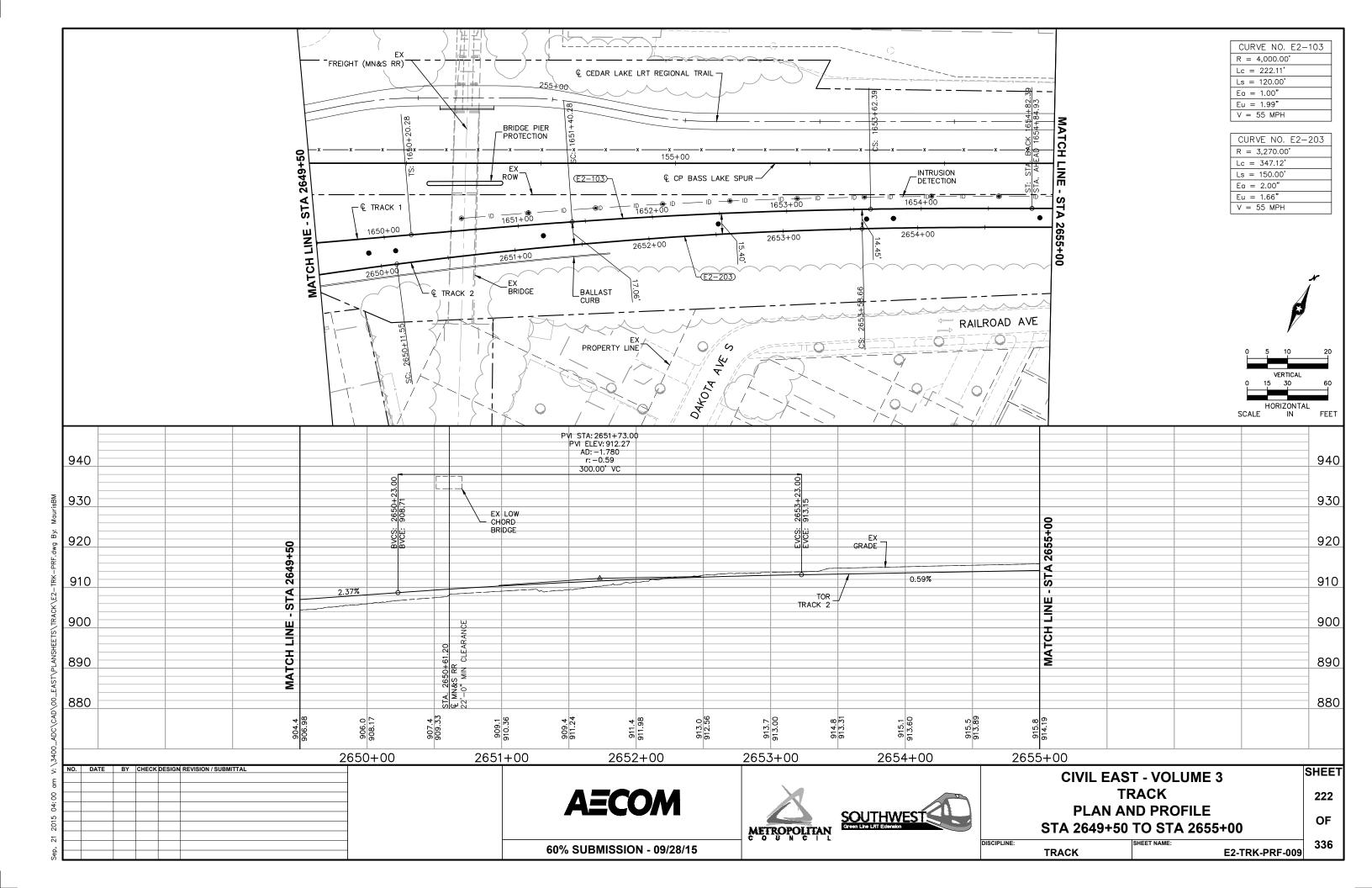


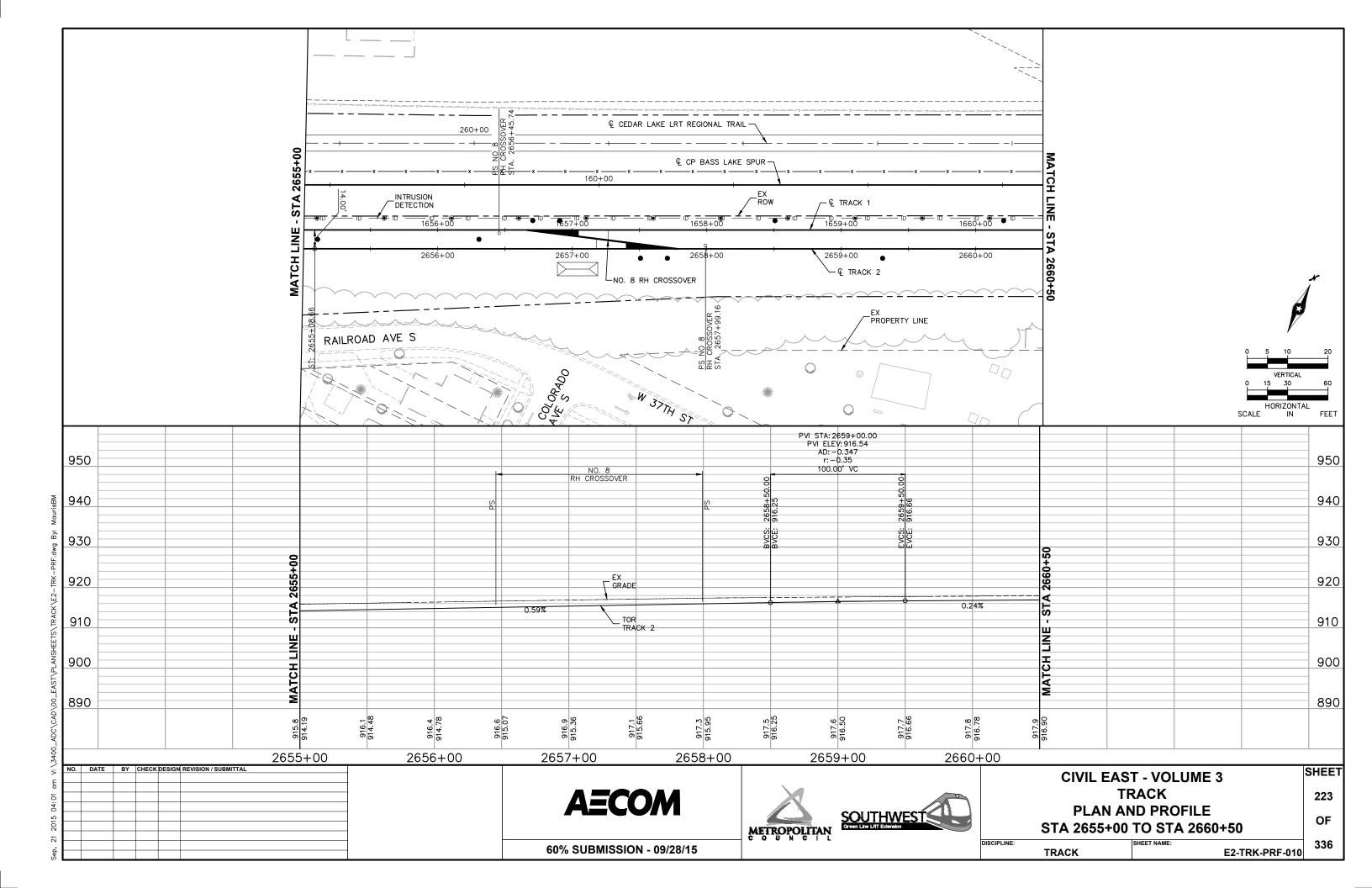


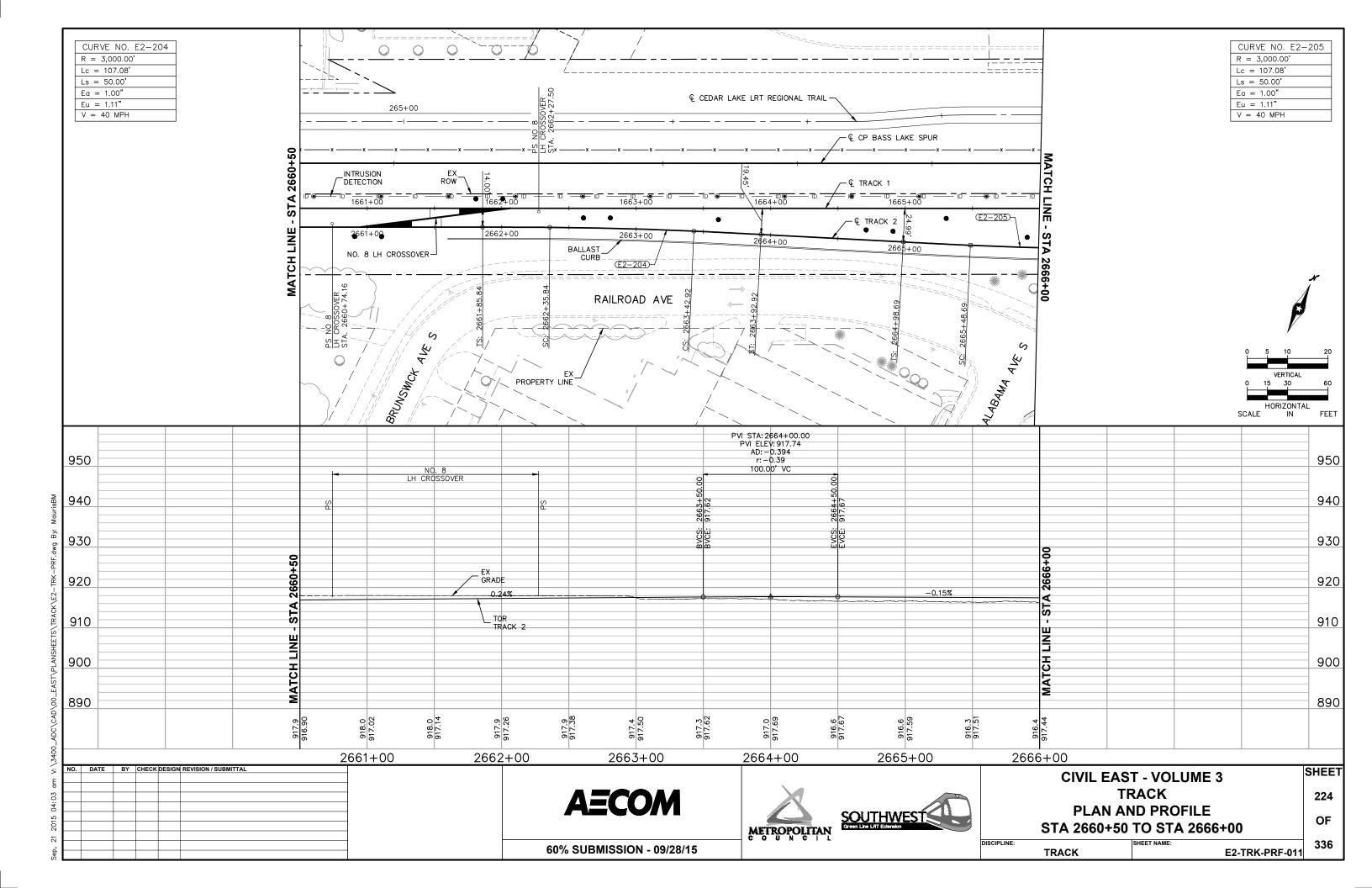


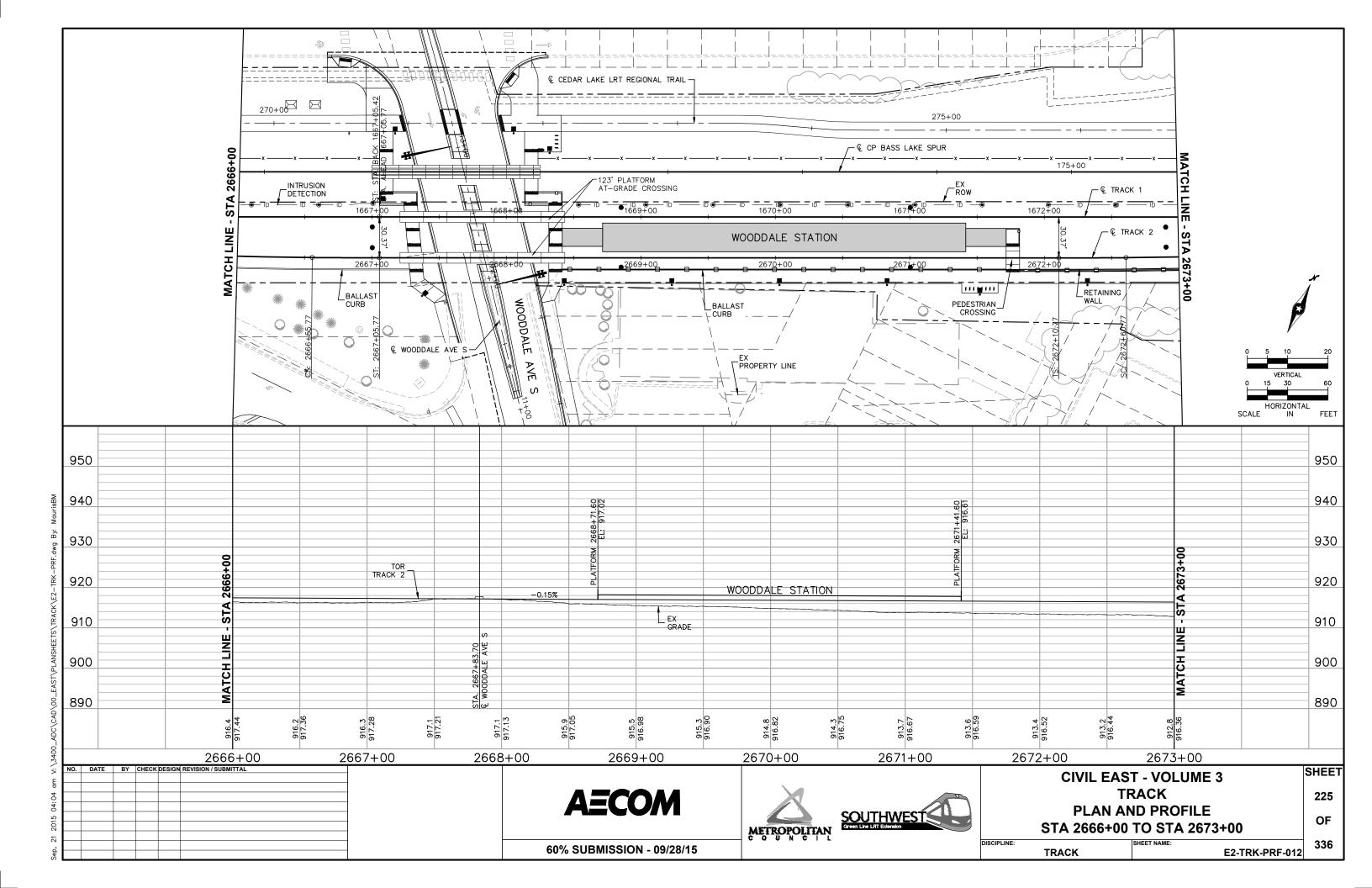


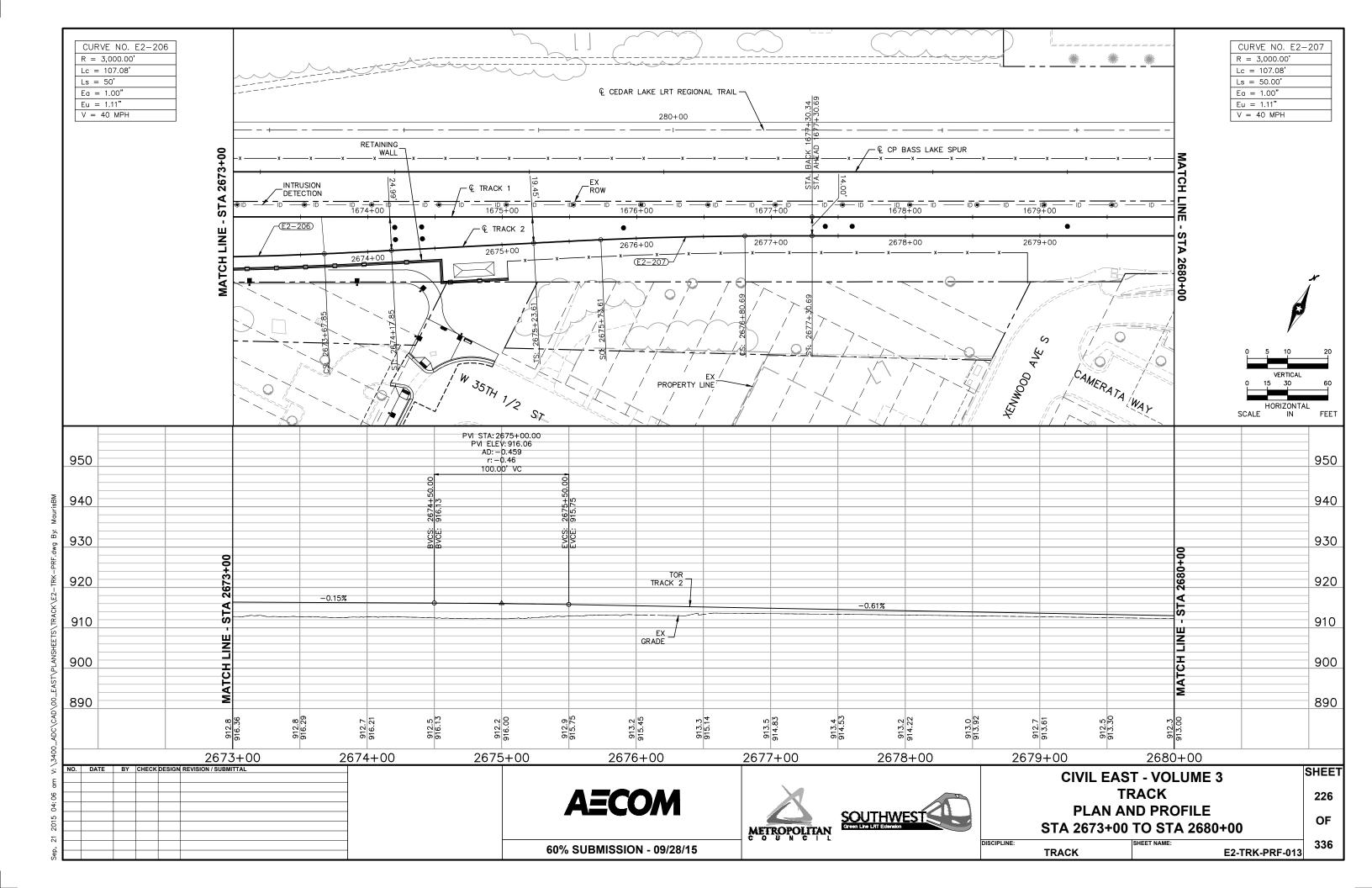


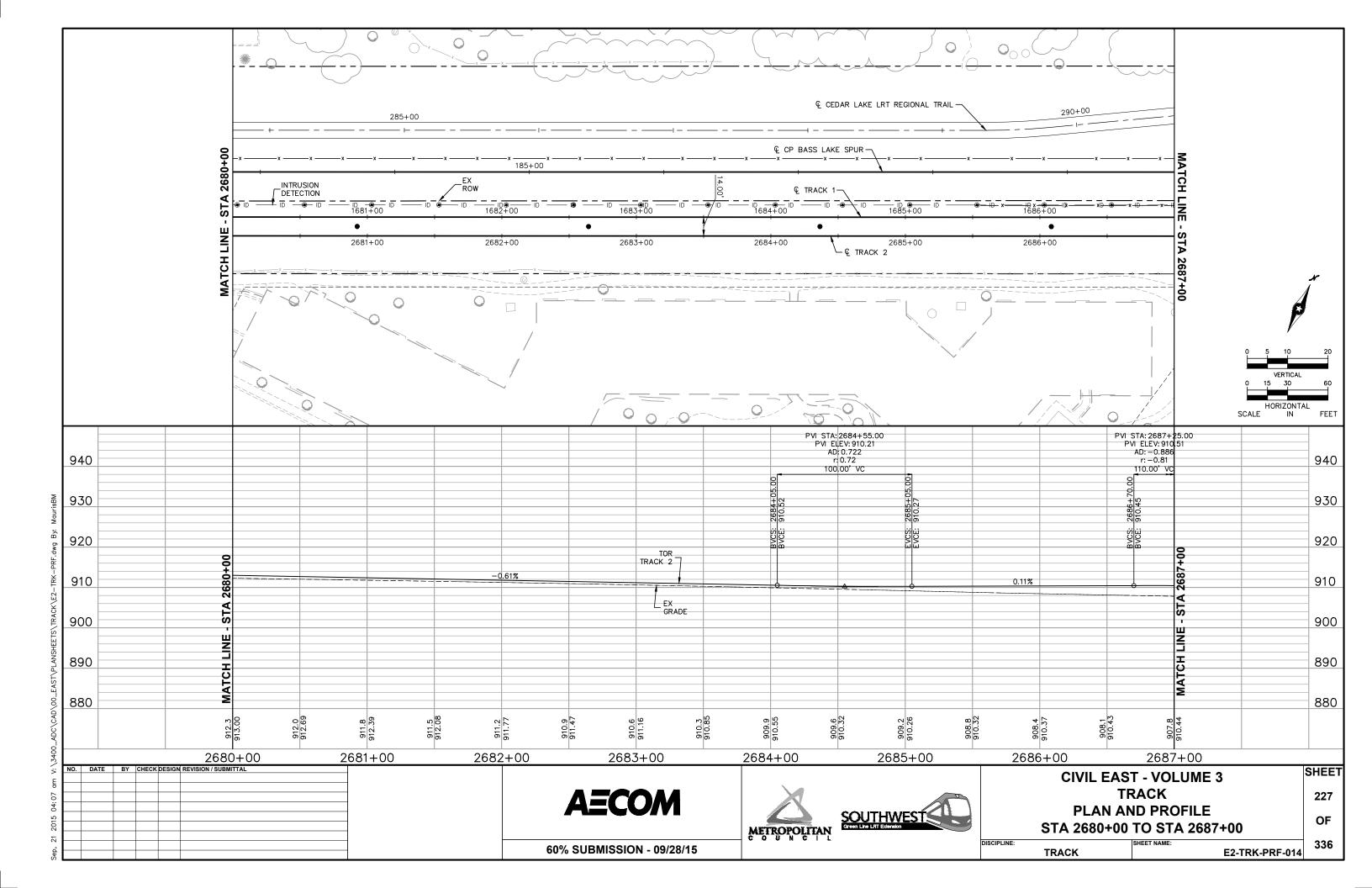


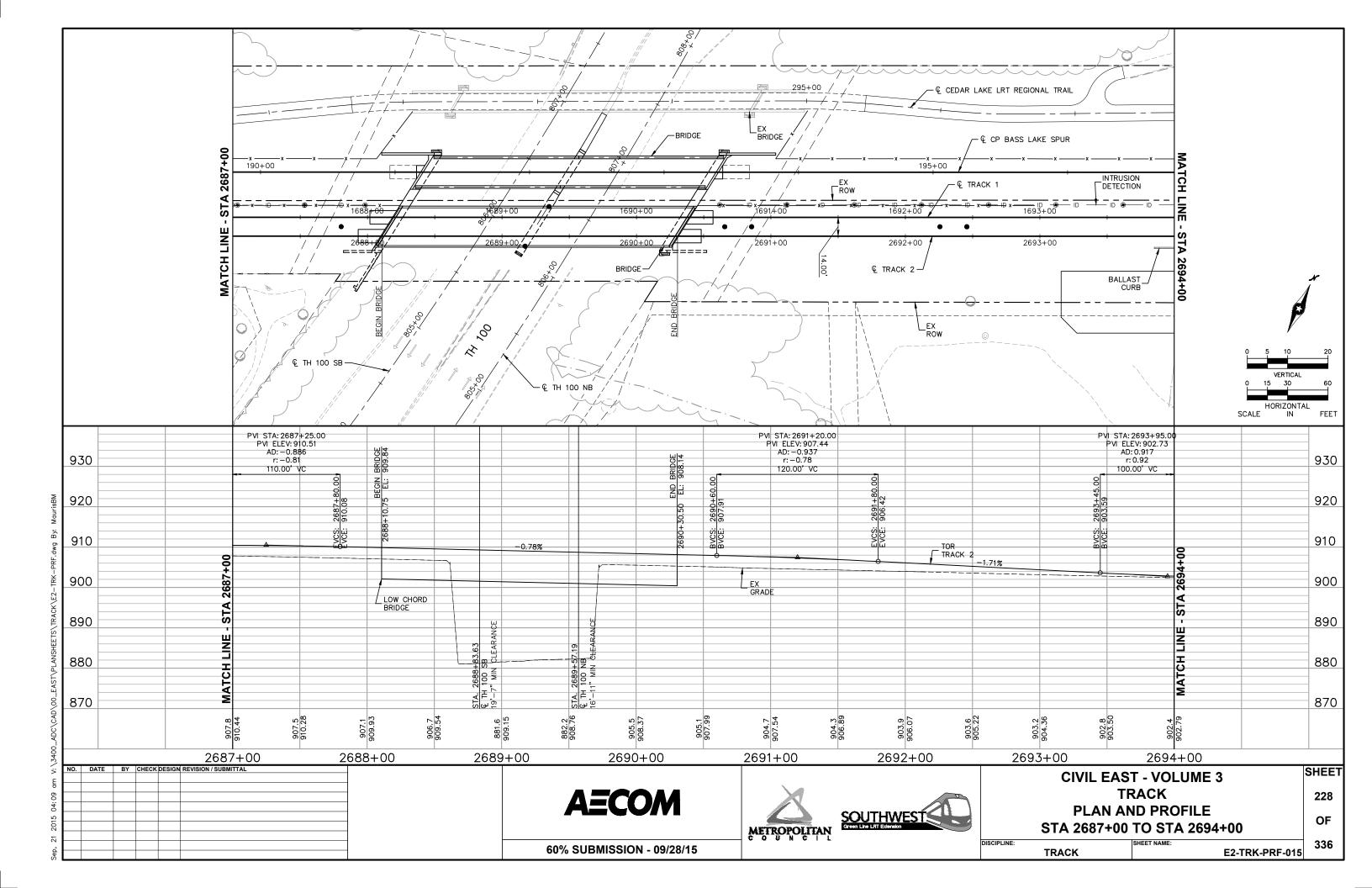


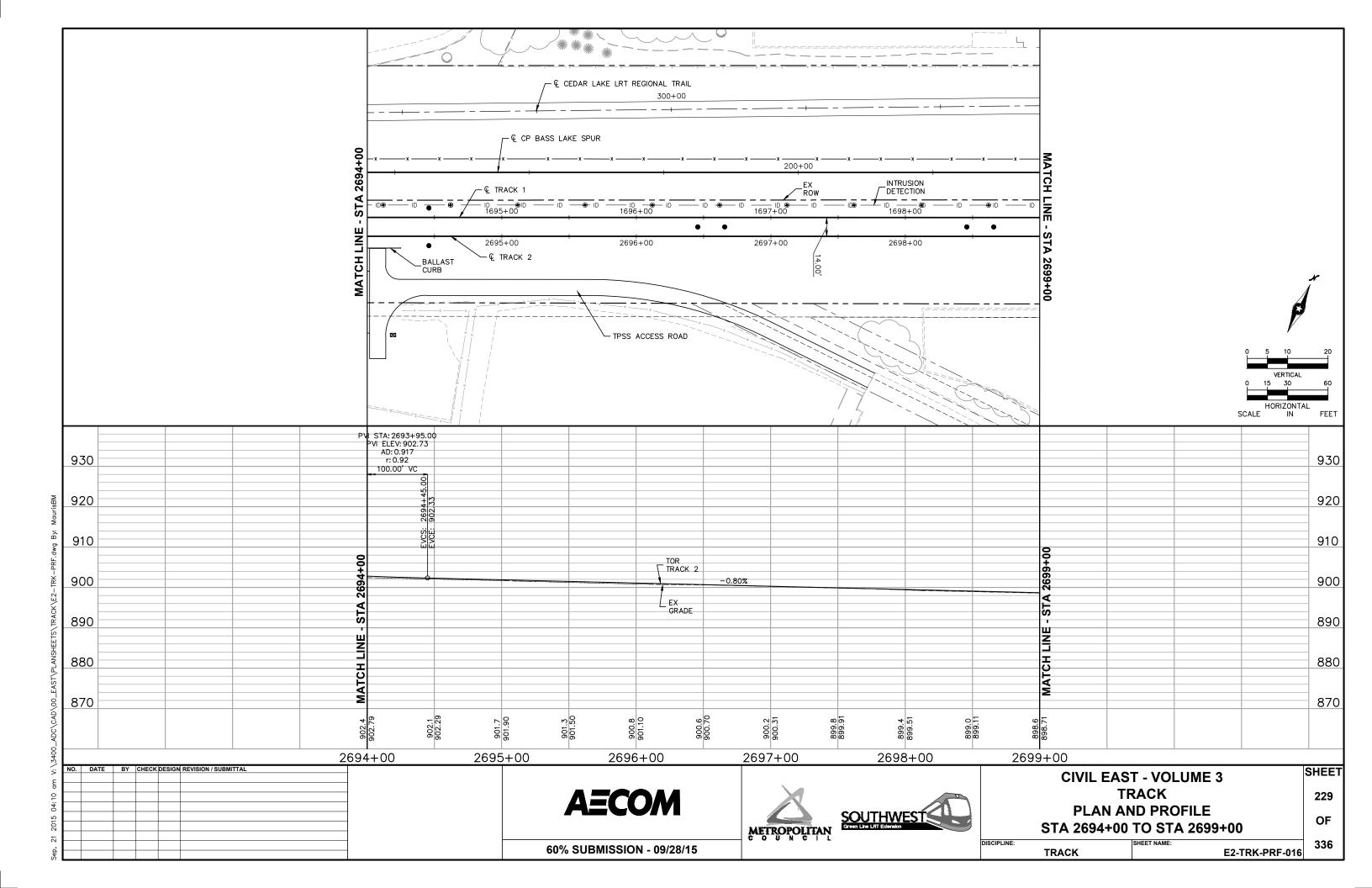


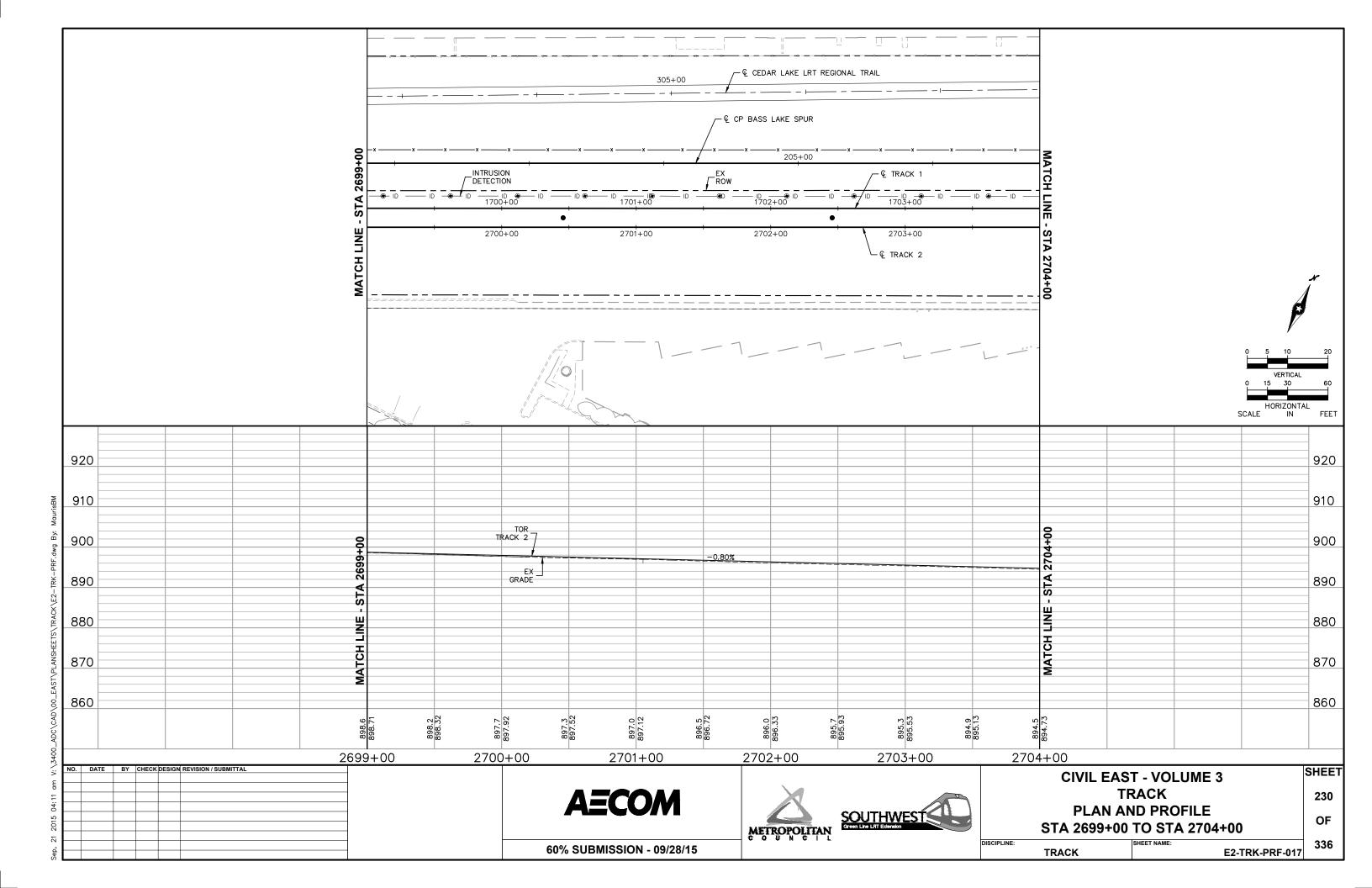


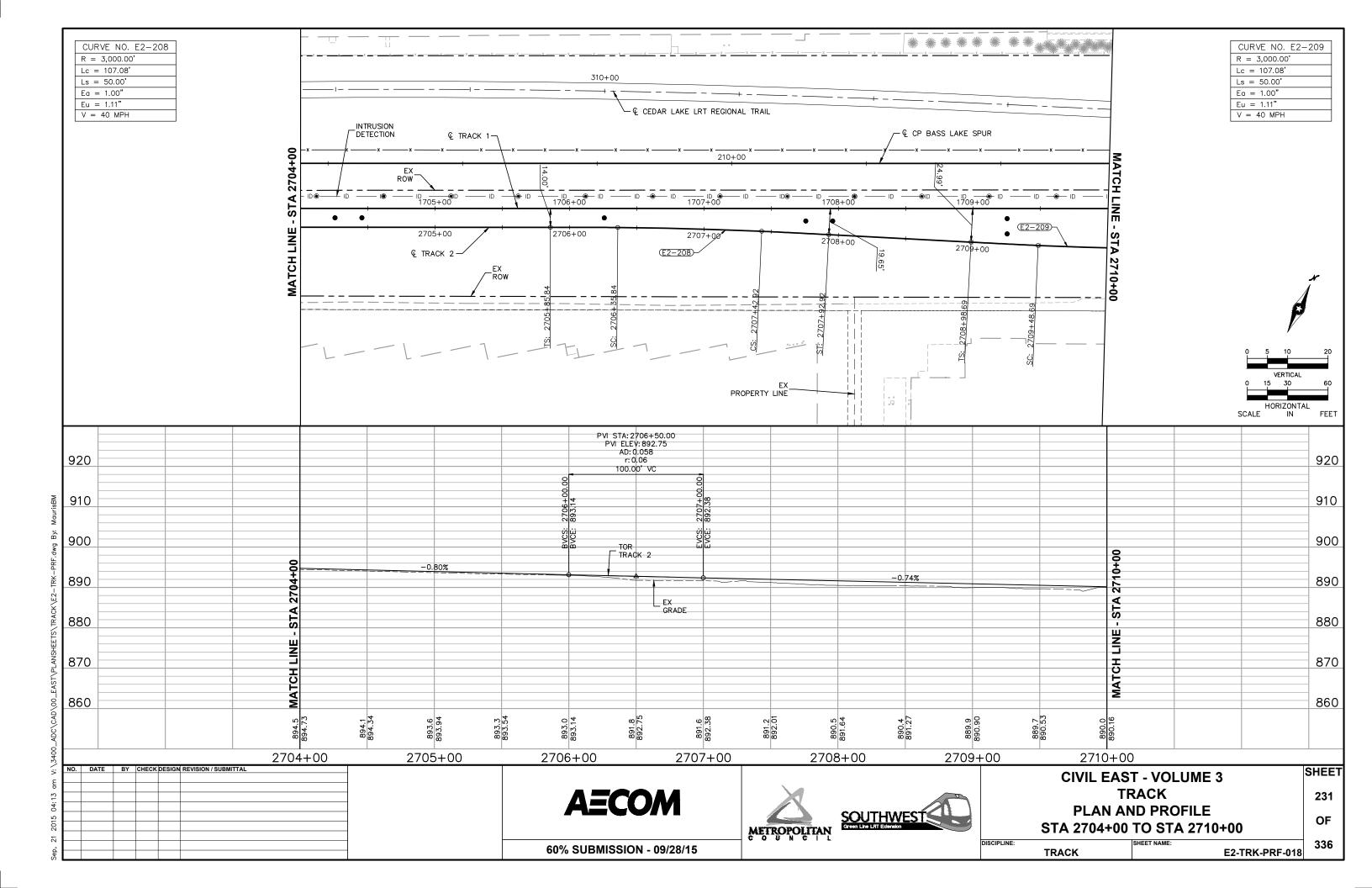


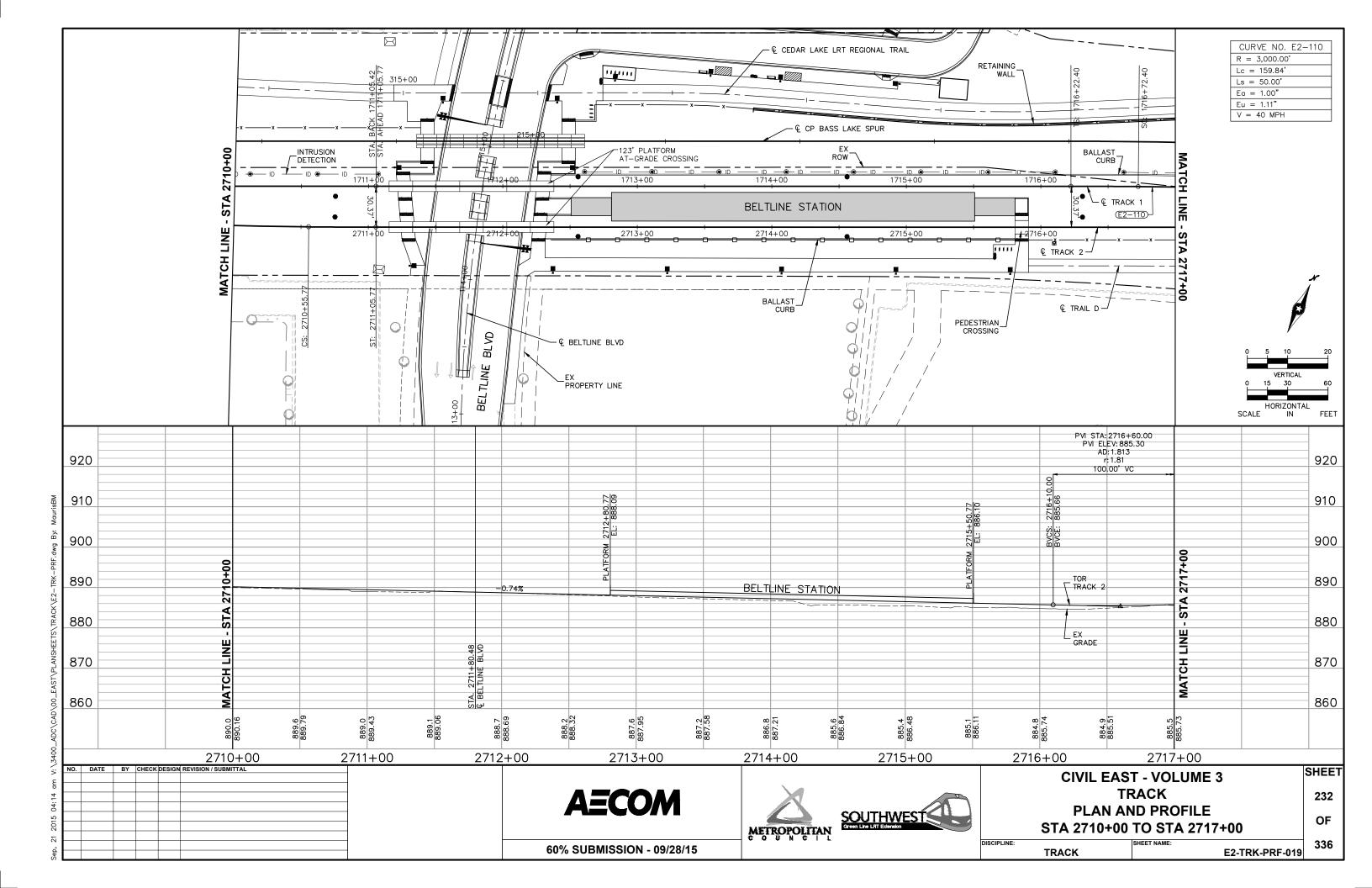


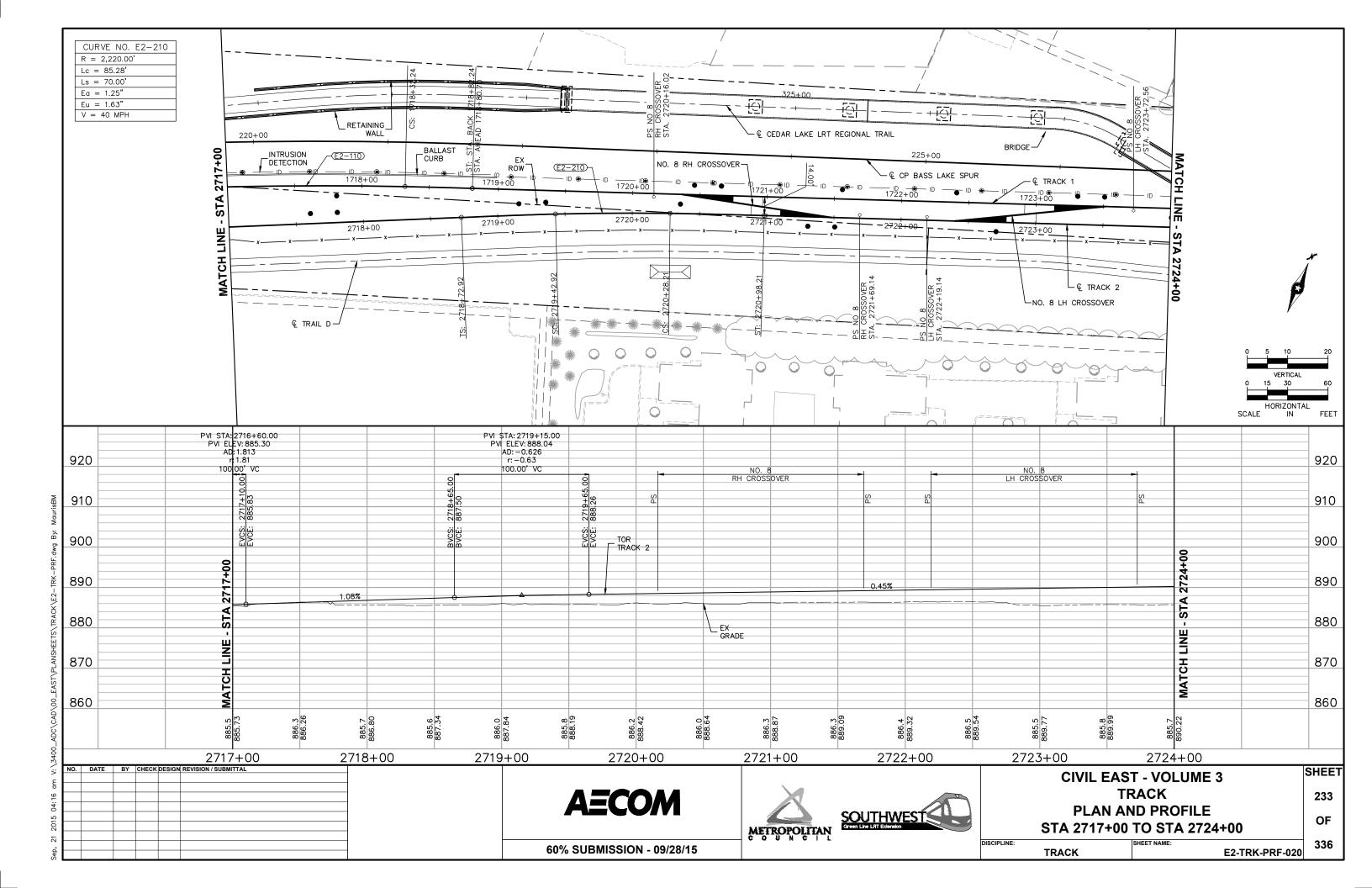


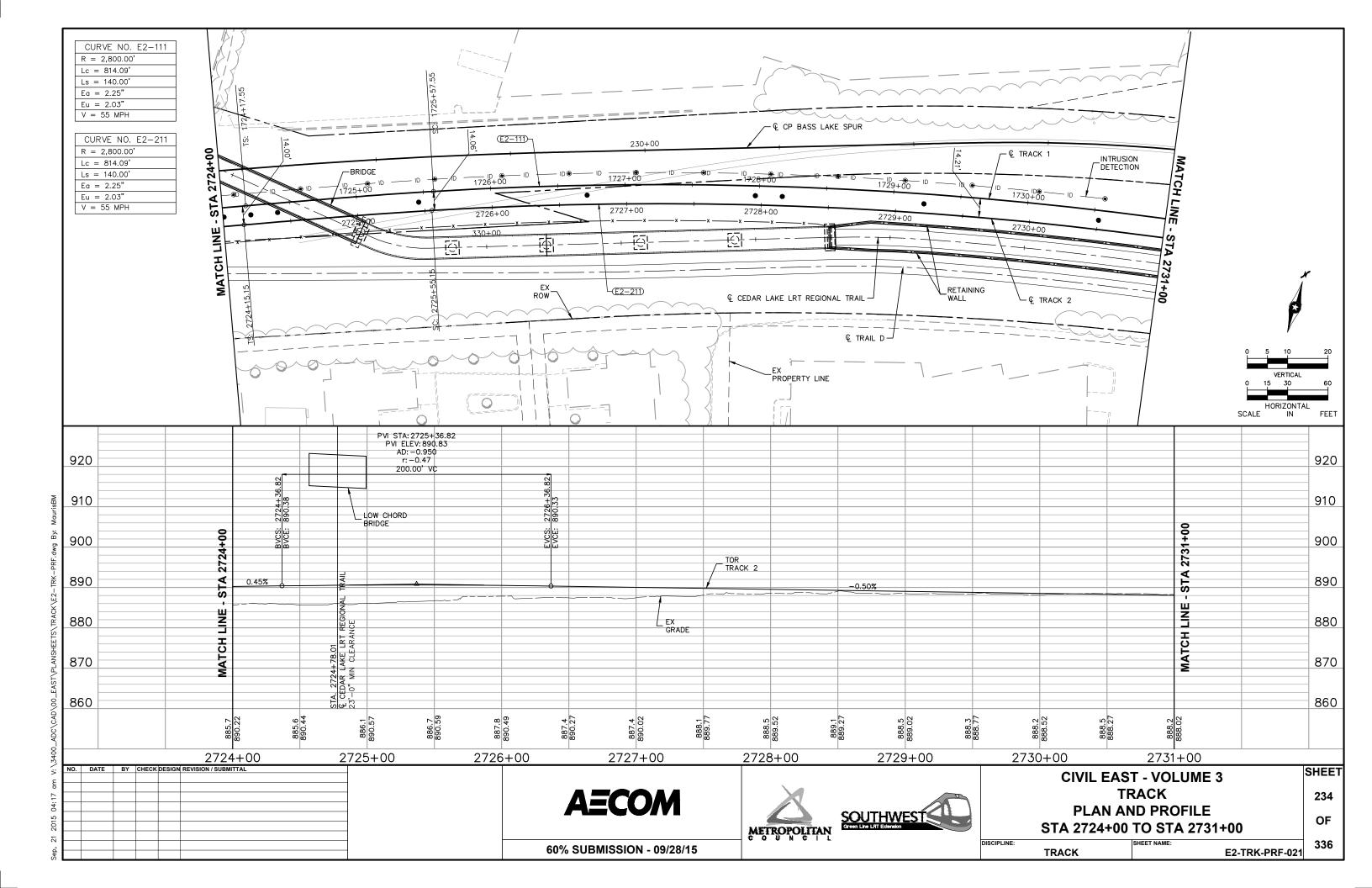


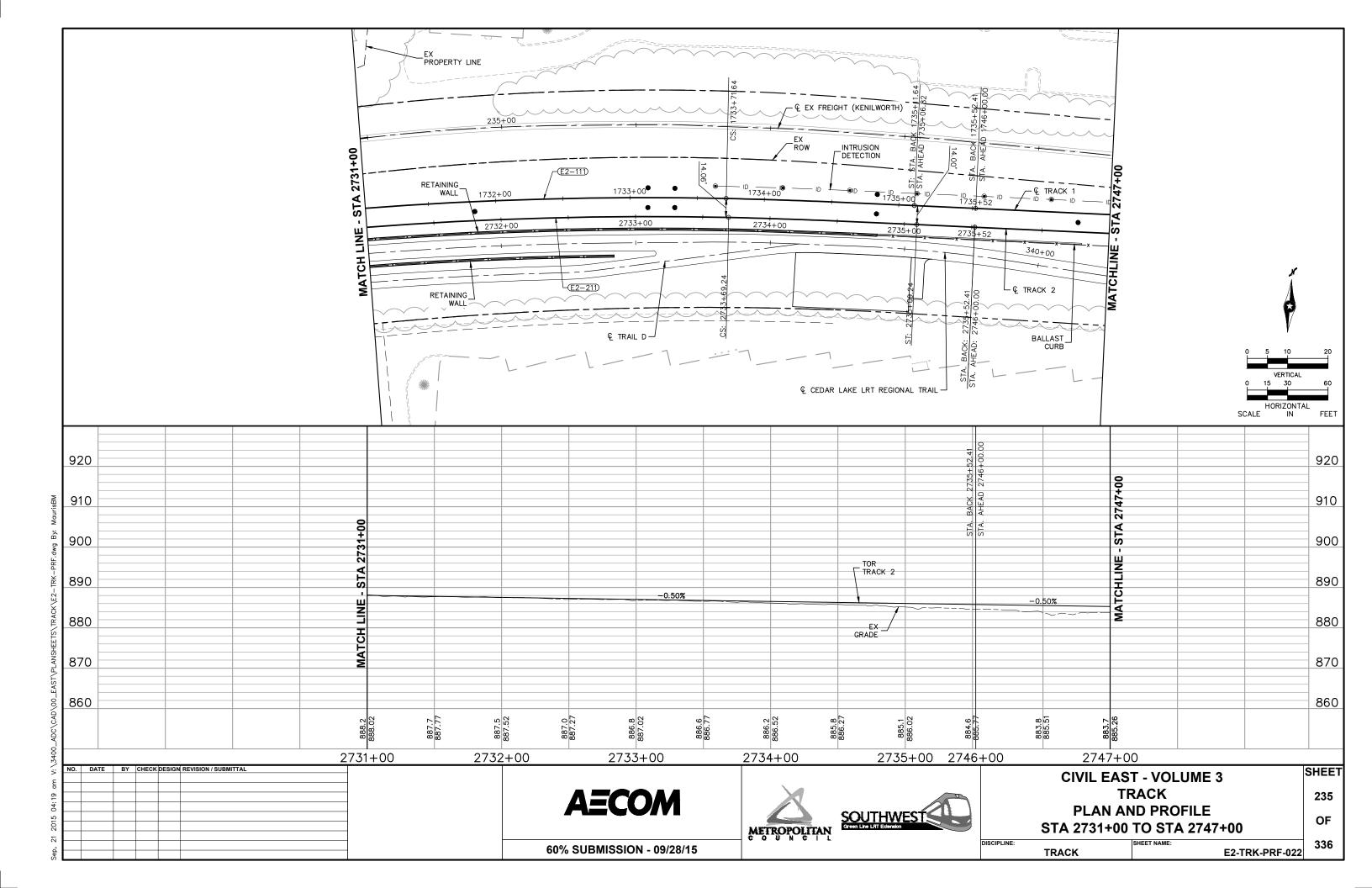


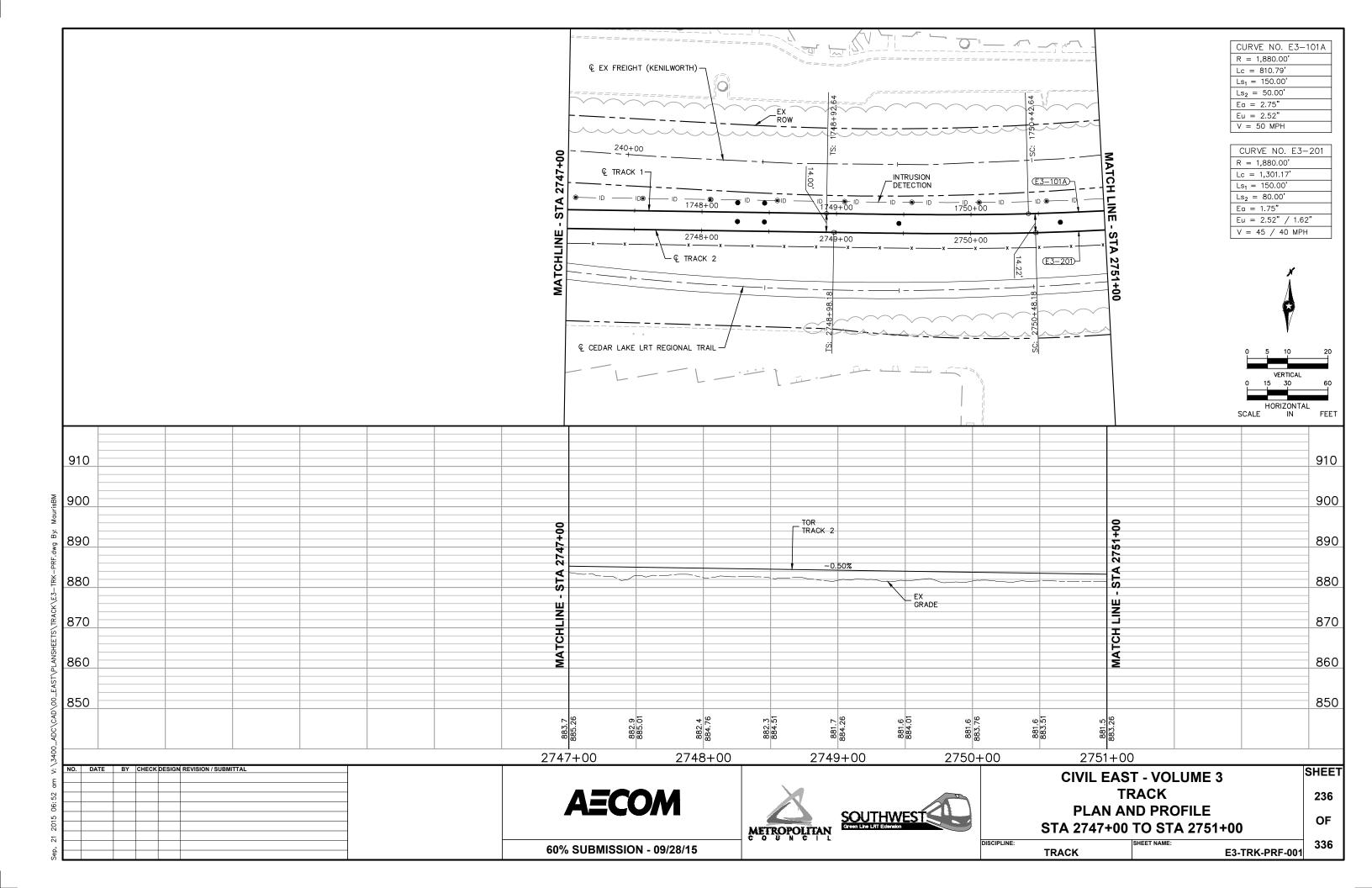


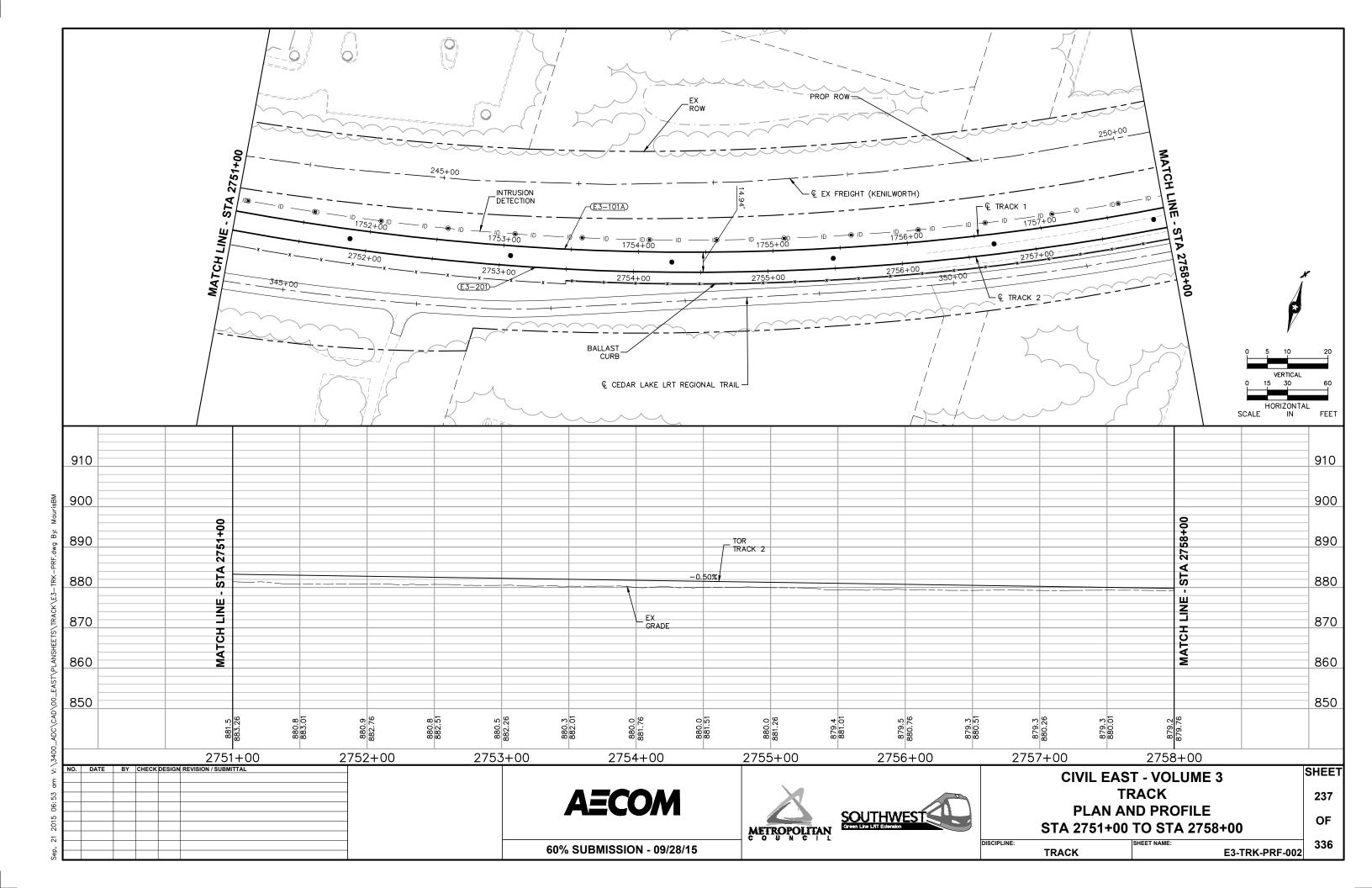


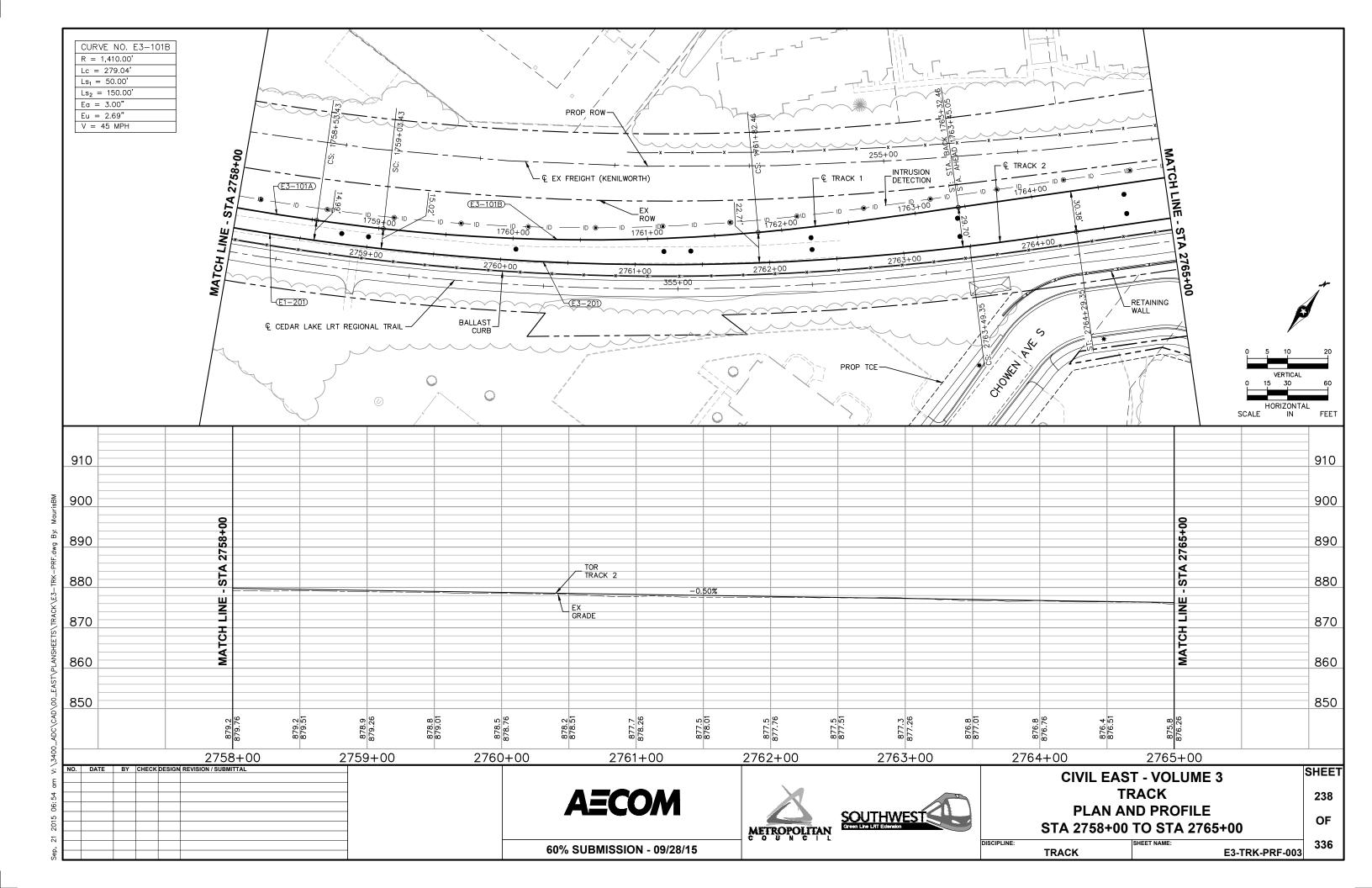


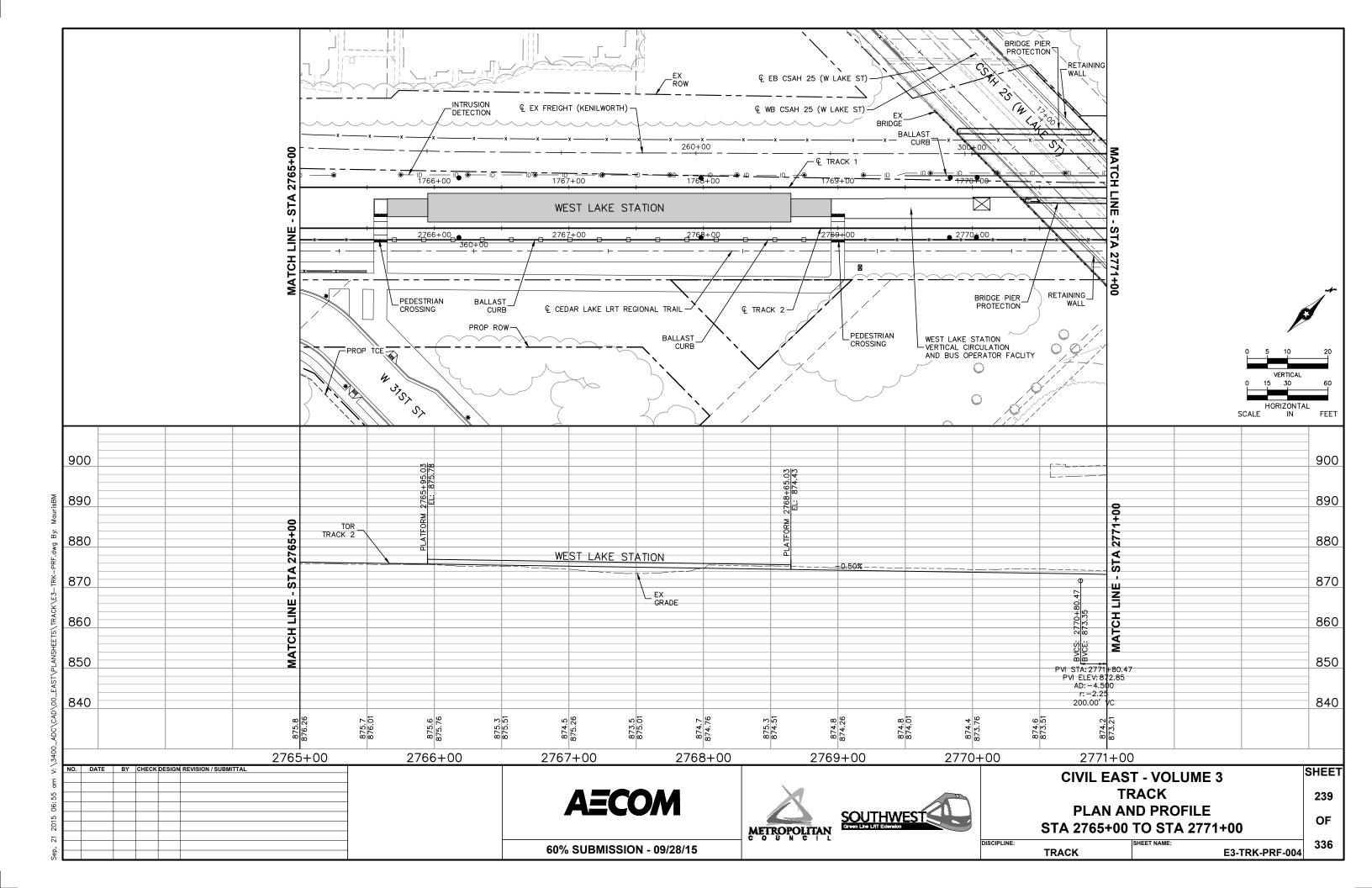


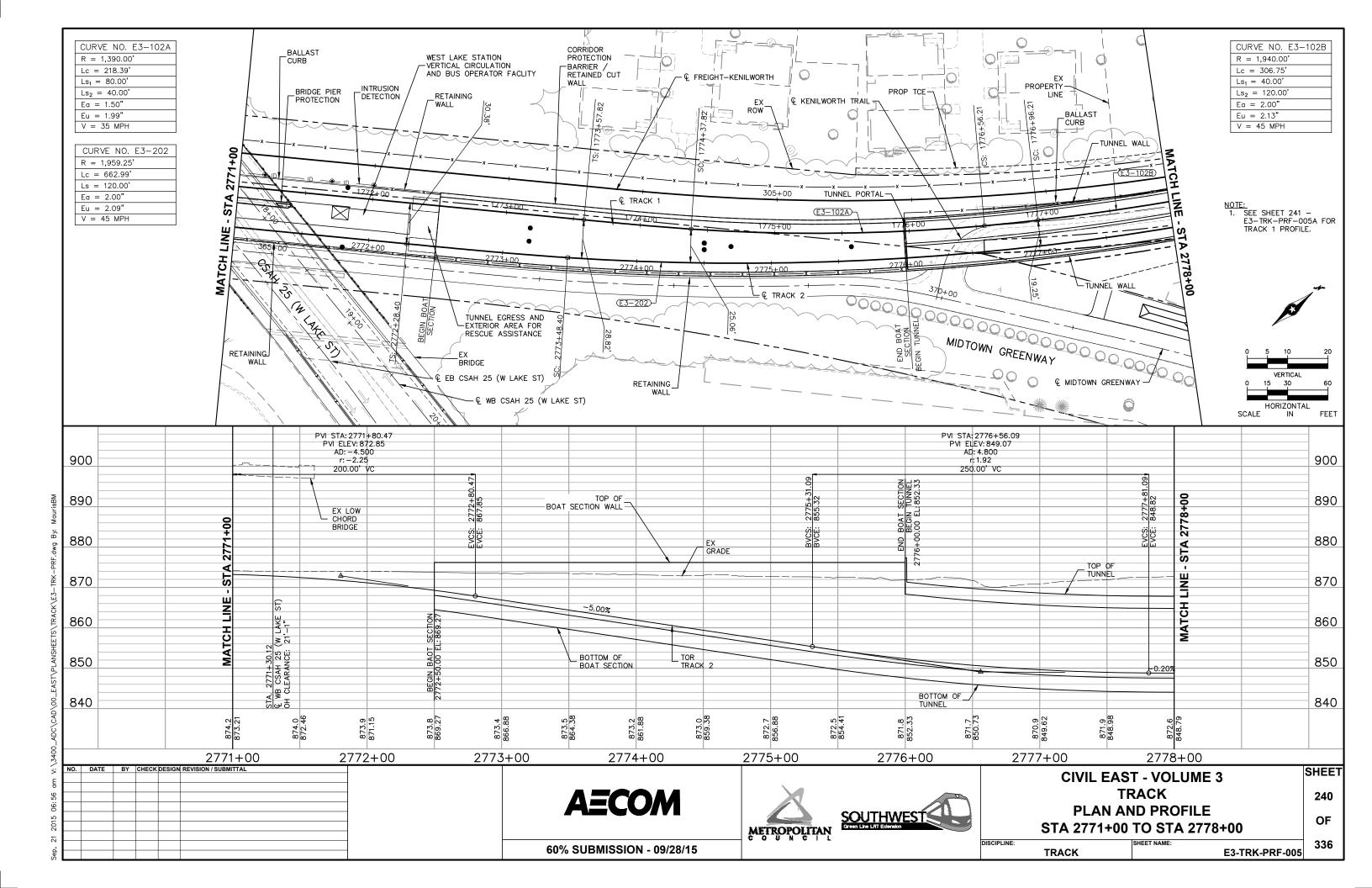




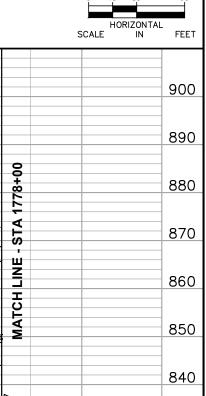








SEE SHEET E3-TRK-PRF-005 FOR PLAN VIEW



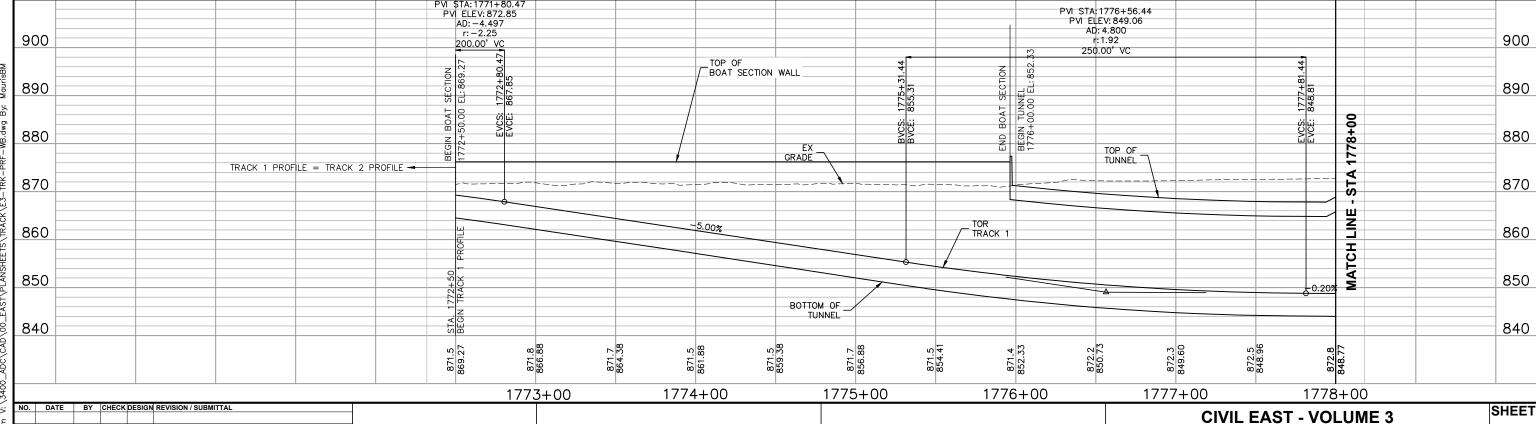
E3-TRK-PRF-005A

336

TRACK

PLAN AND PROFILE

STA 1772+50 TO STA 1778+00

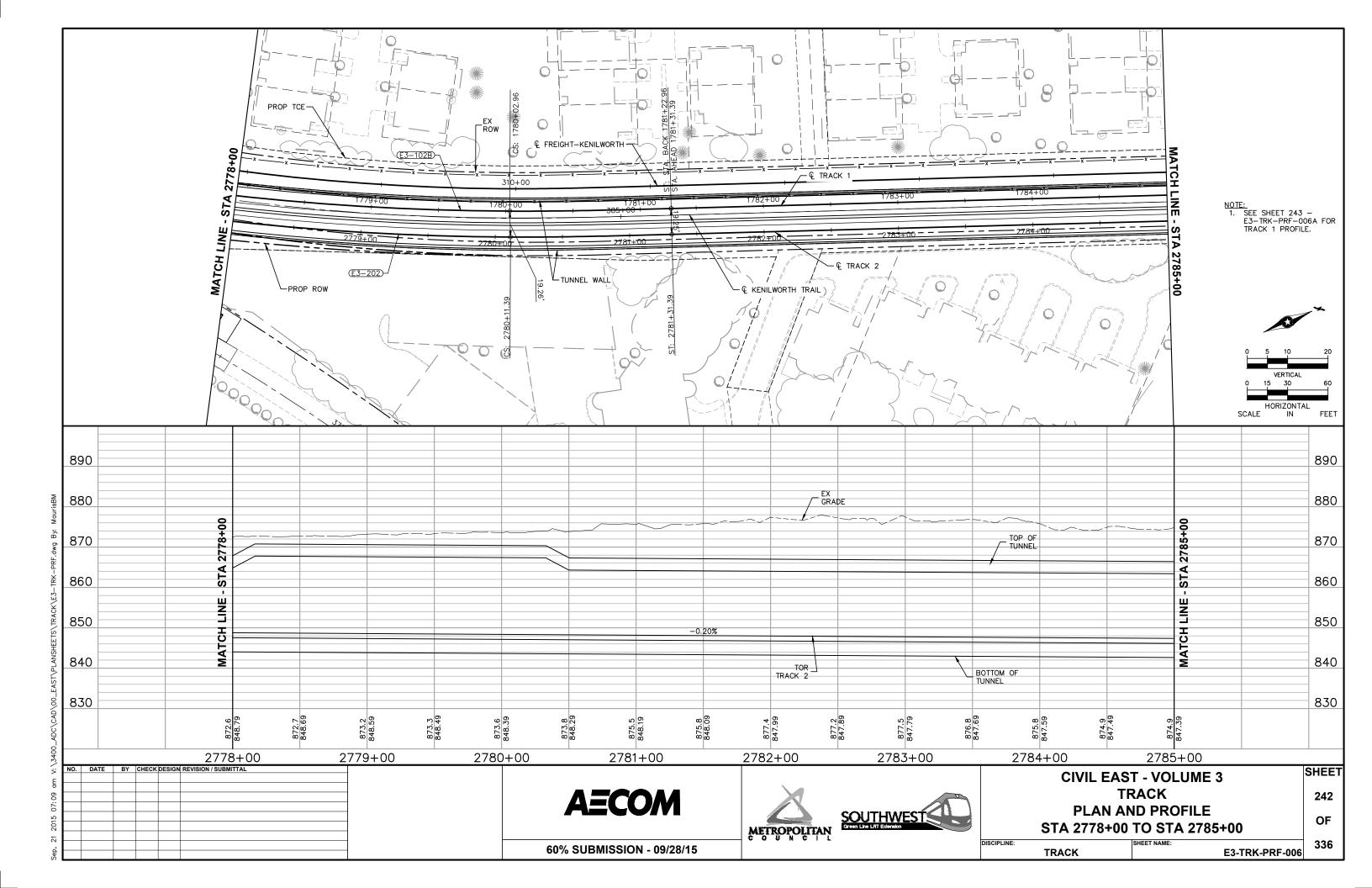


SOUTHWEST Green Line LATT Extendion

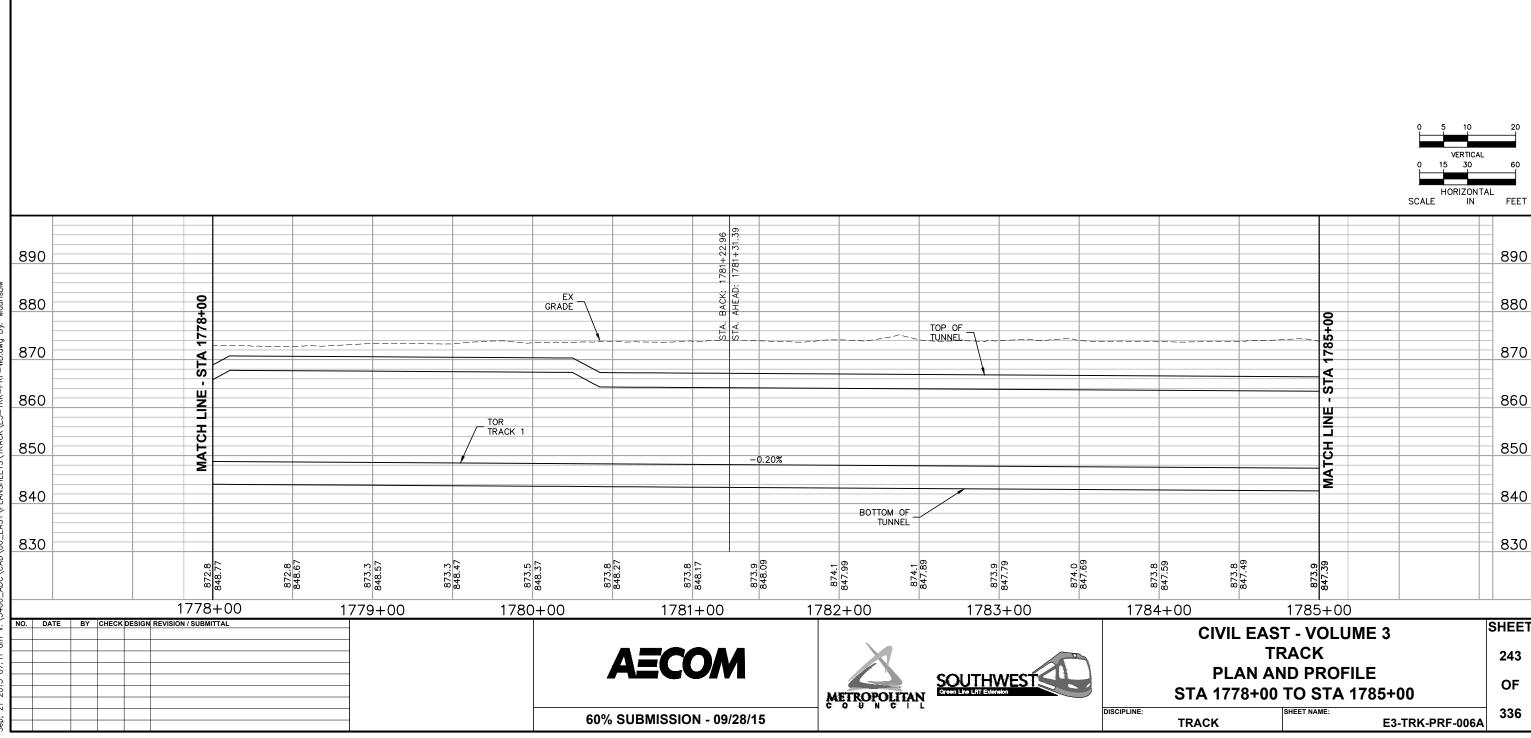
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AECOM

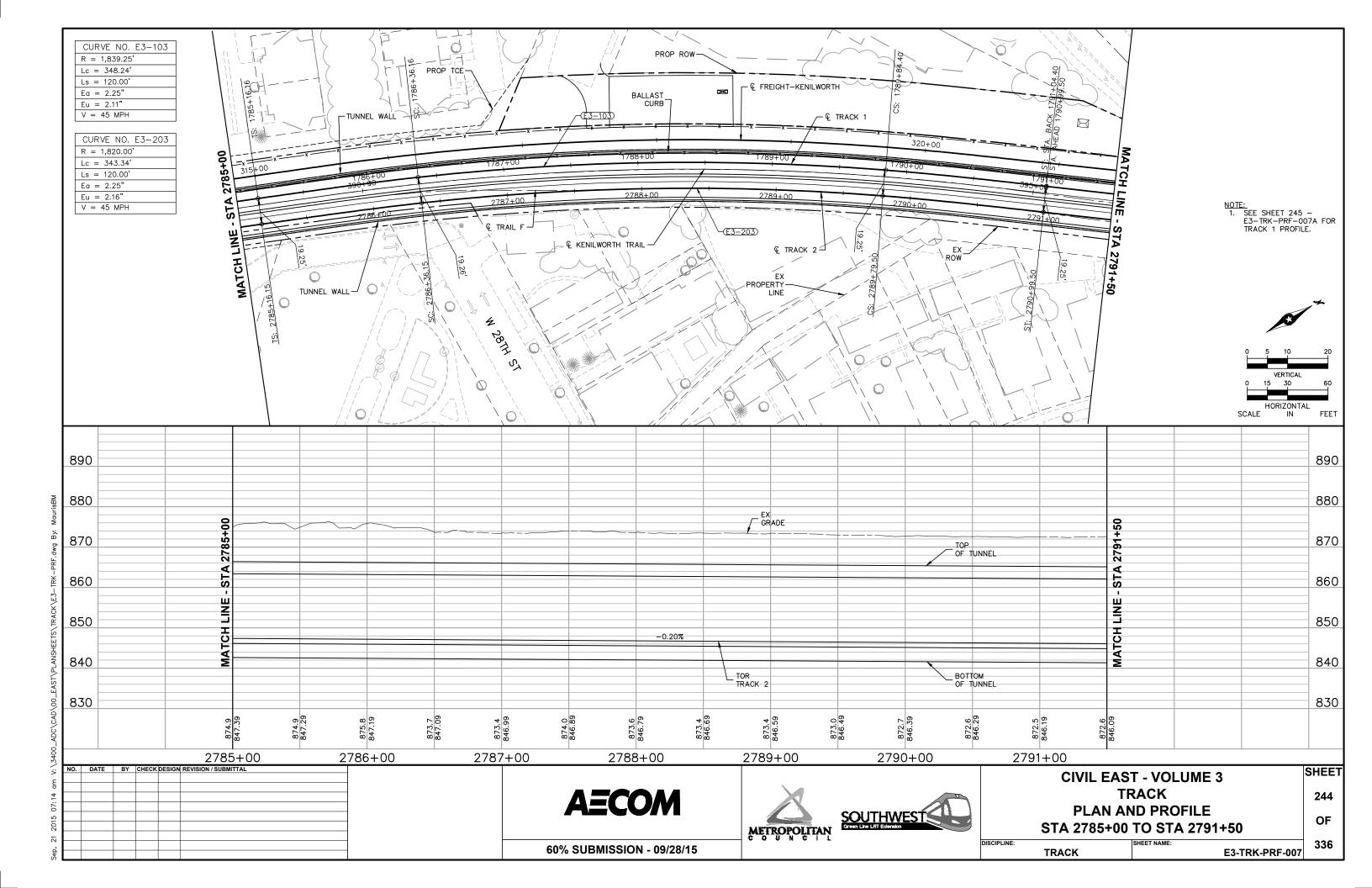
60% SUBMISSION - 09/28/15



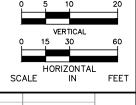
SEE SHEET E3-TRK-PRF-006 FOR PLAN VIEW



Sep. 21 2015 07:11 gm V:\3400



SEE SHEET E3-TRK-PRF-007 FOR PLAN VIEW



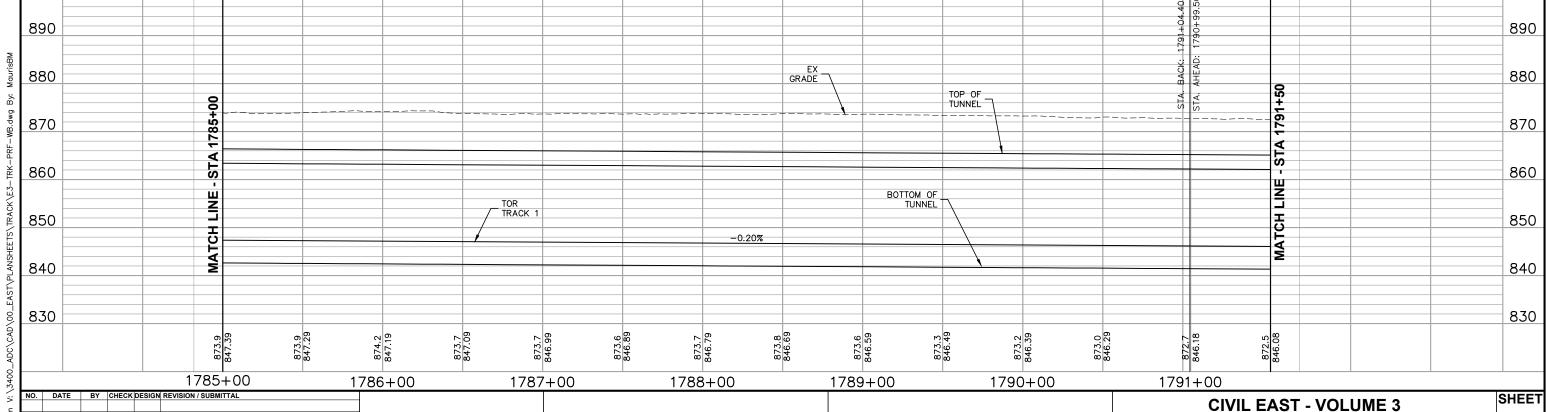
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E3-TRK-PRF-007A

TRACK

PLAN AND PROFILE

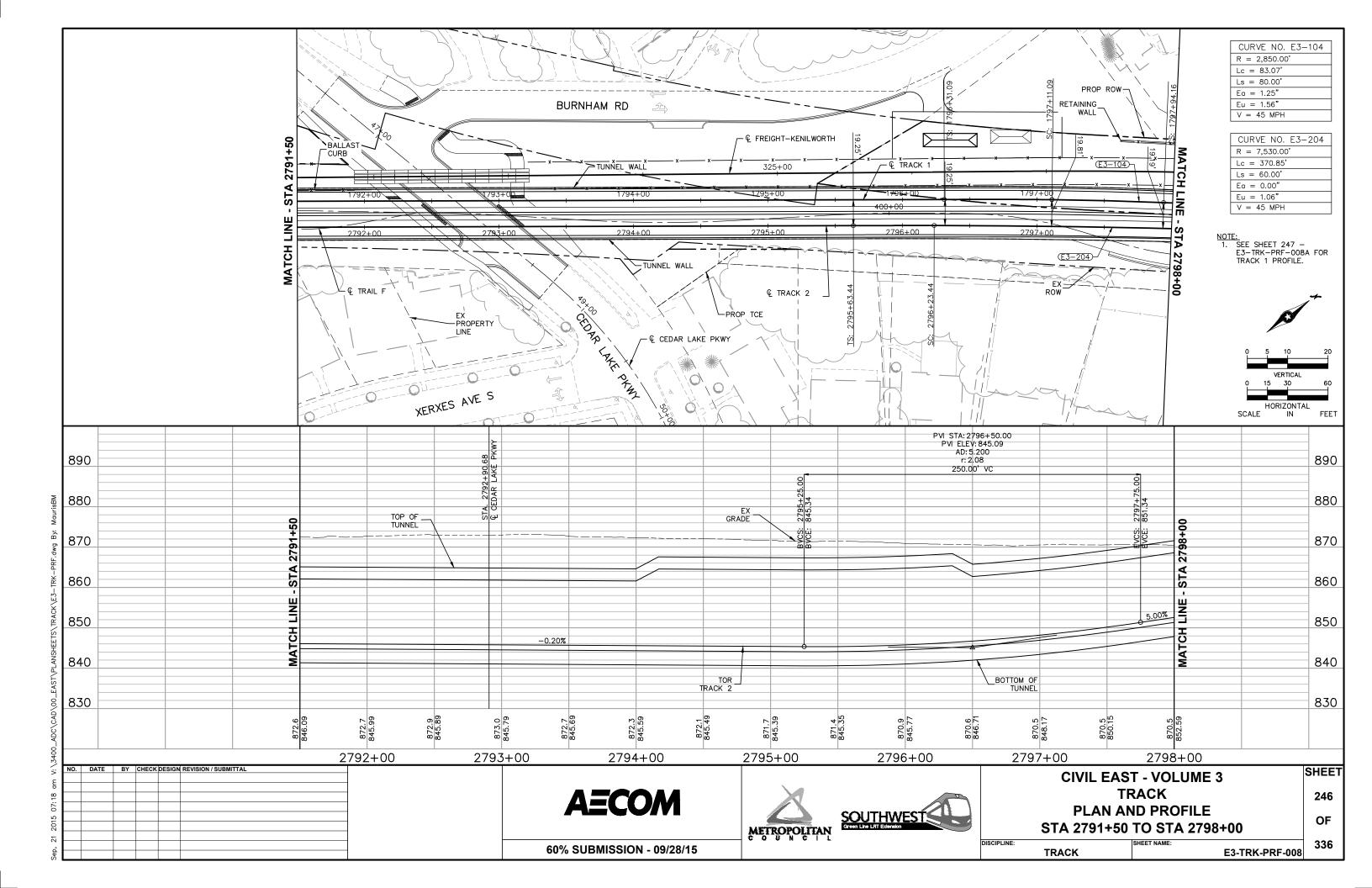
STA 1785+00 TO STA 1791+50



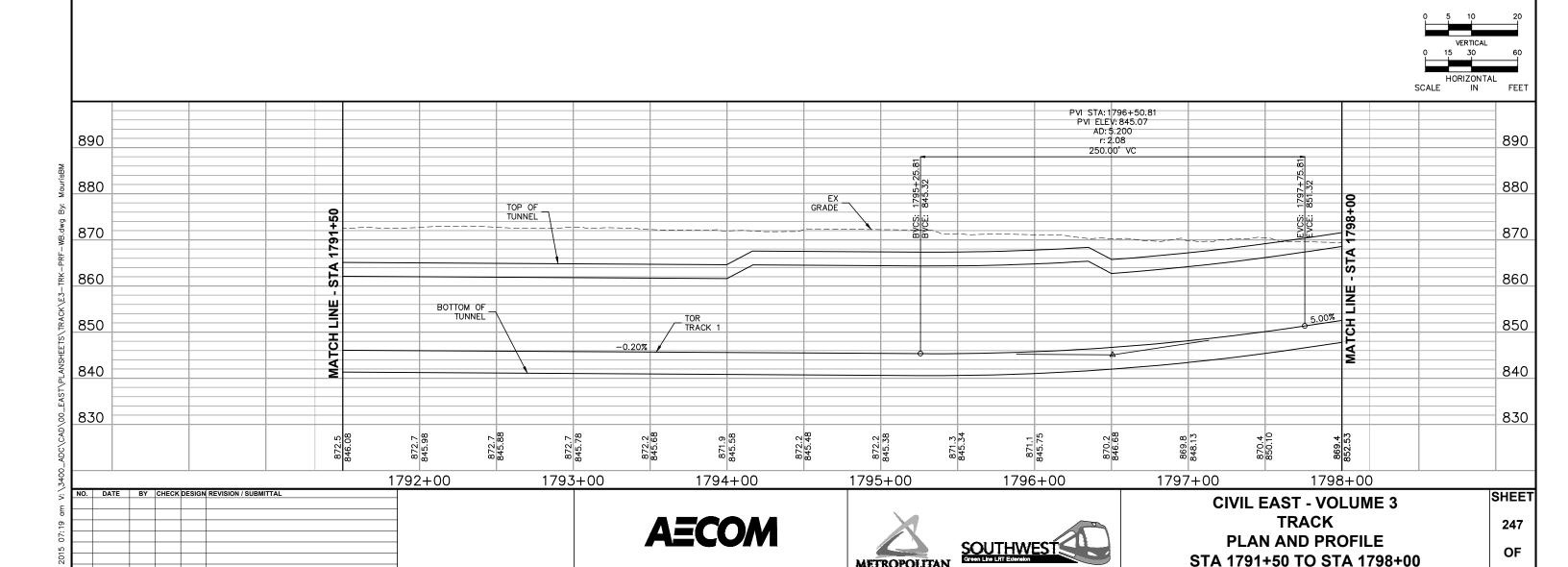
SOUTHWEST Green Line LRT Extension

AECOM

60% SUBMISSION - 09/28/15



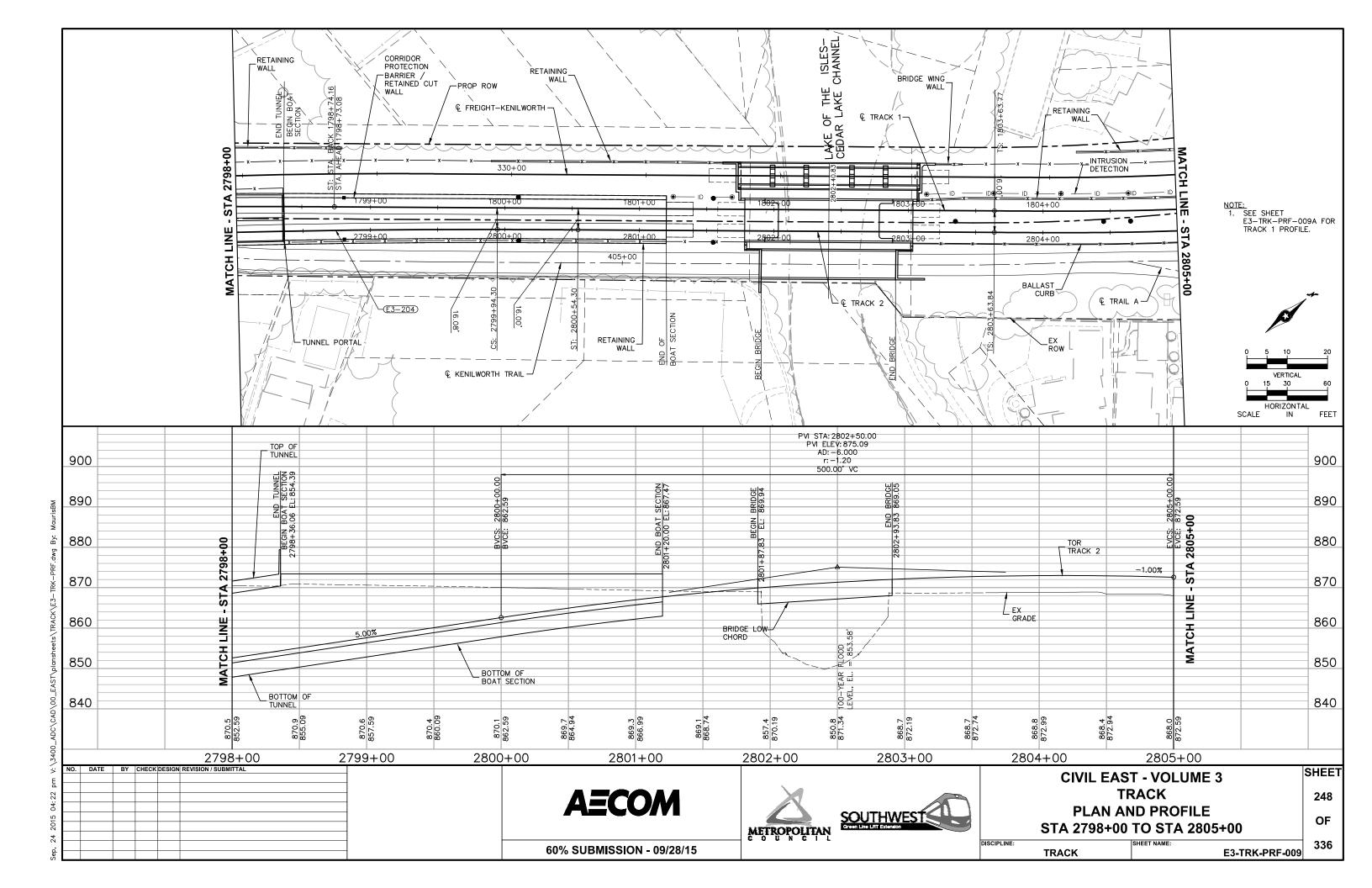
SEE SHEET E3-TRK-PRF-008 FOR PLAN VIEW



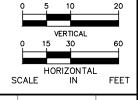
60% SUBMISSION - 09/28/15

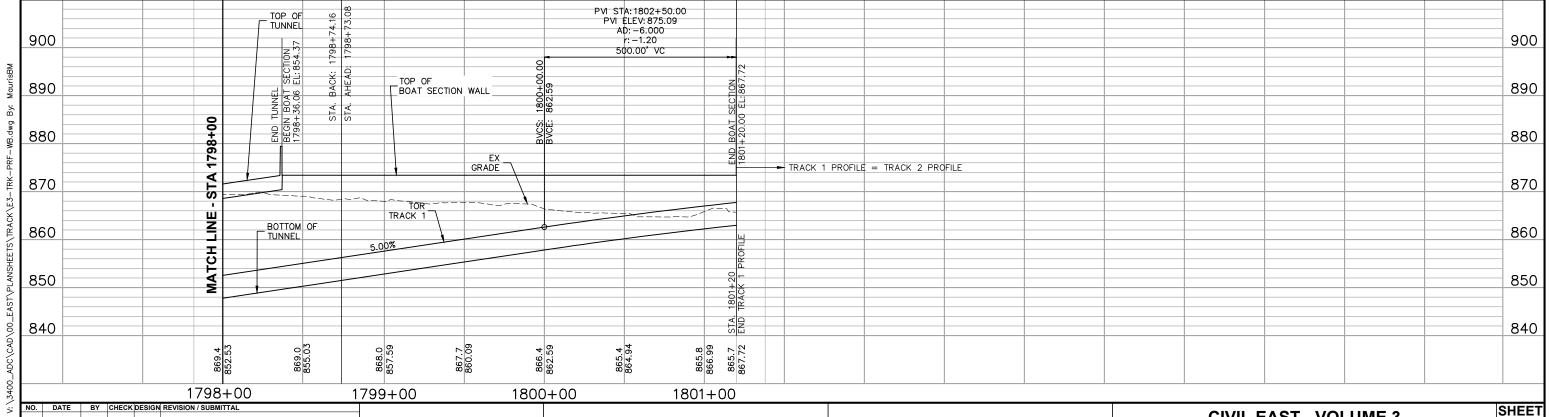
336

E3-TRK-PRF-008A



SEE SHEET E3-TRK-PRF-009 FOR PLAN VIEW





NO. DATE BY CHECK DESIGN REVISION / SUBMITTAL

AECOM

60% SUBMISSION - 09/28/15

METROPOLITAN

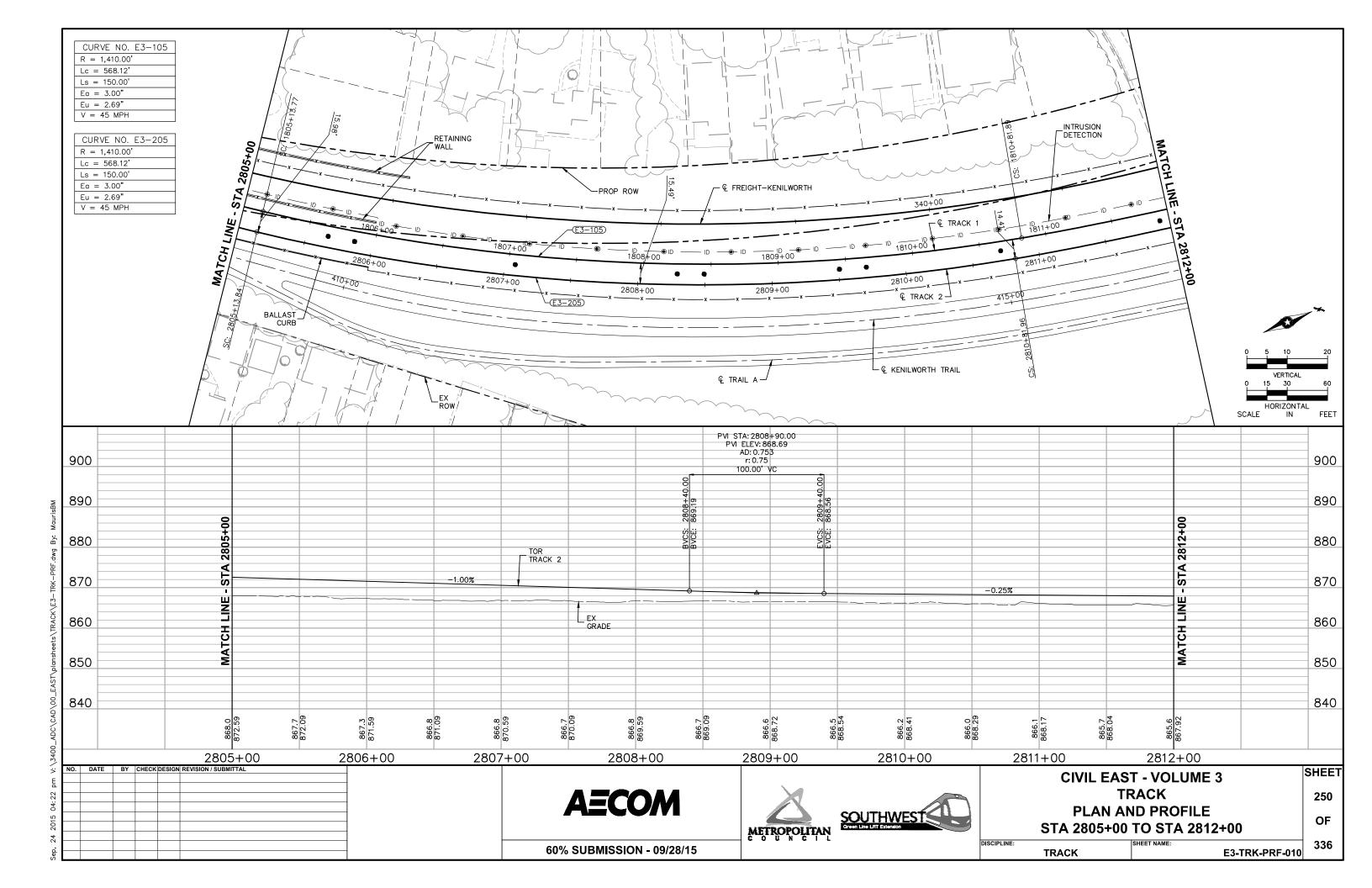


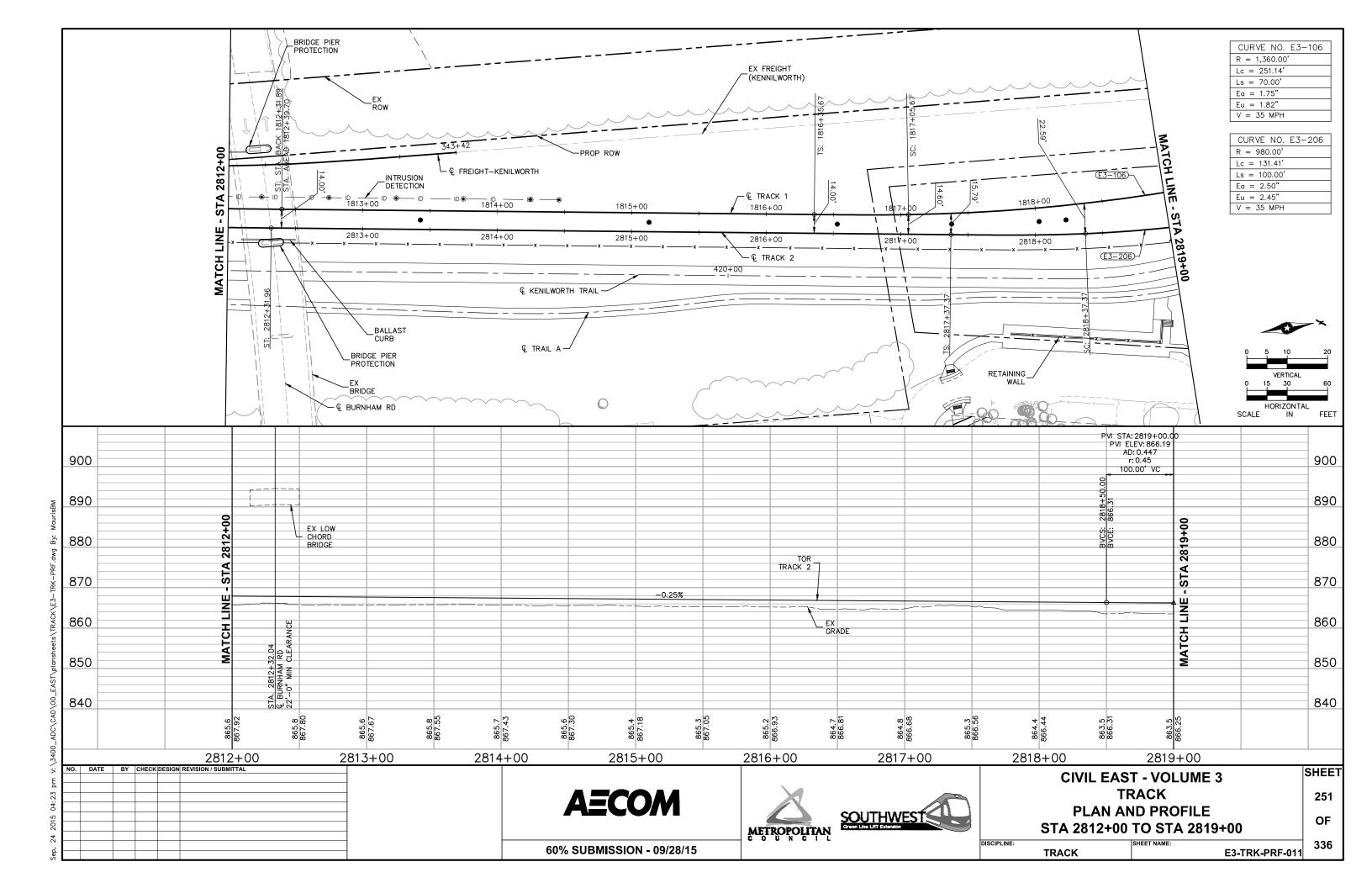
CIVIL EAST - VOLUME 3 TRACK PLAN AND PROFILE STA 1798+00 TO STA 1801+20

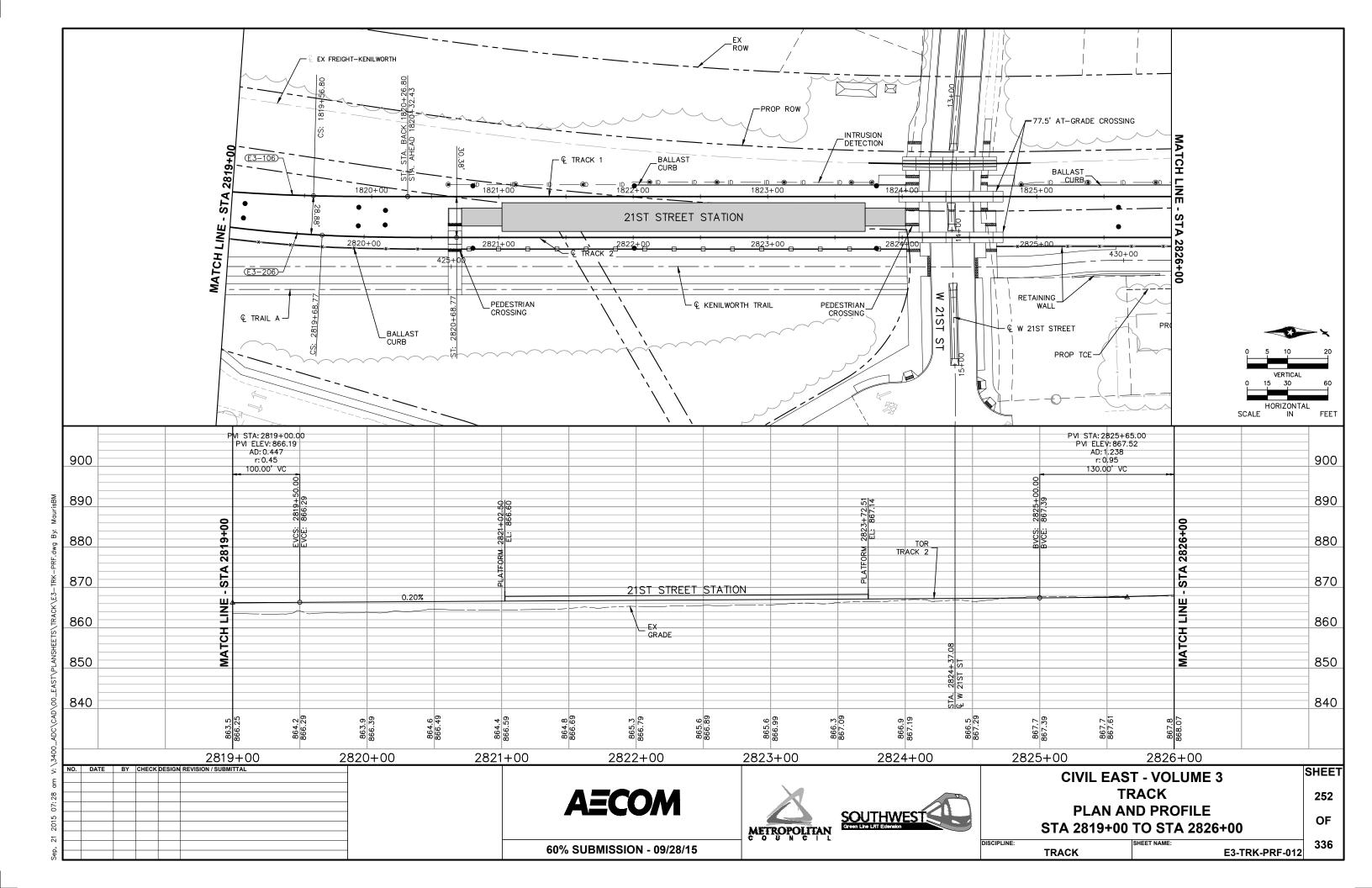
0 OF 336

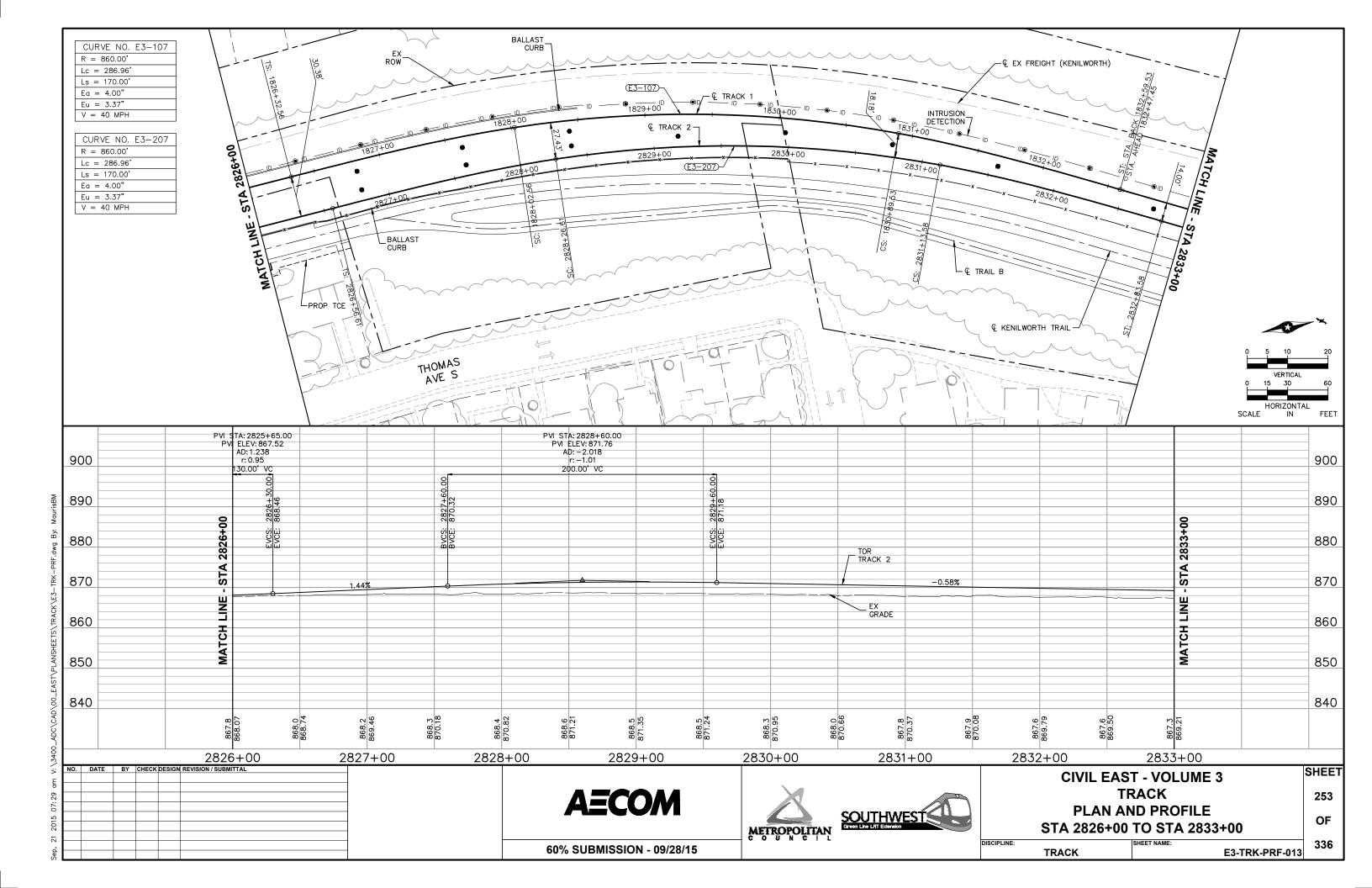
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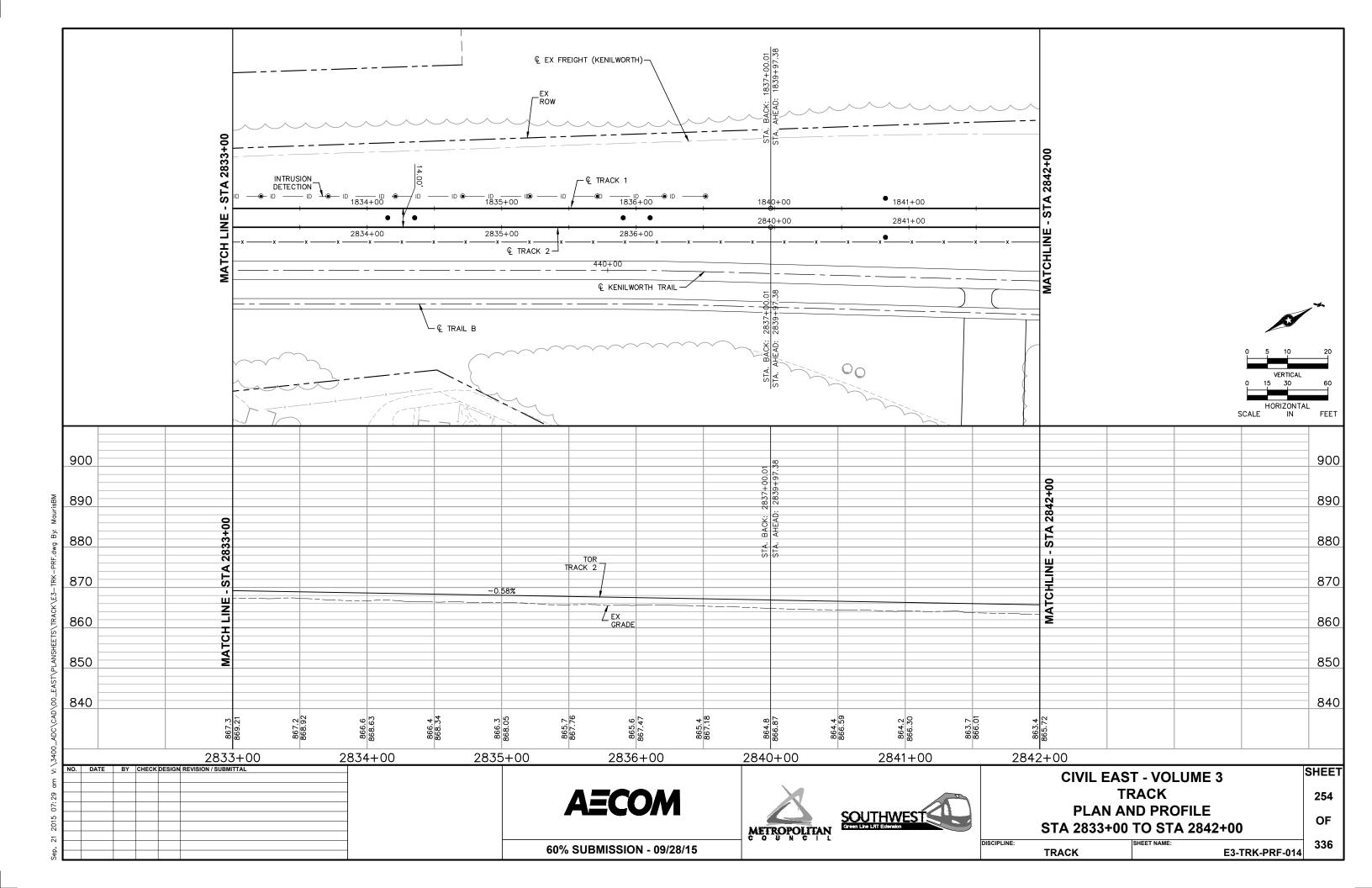
TRACK
E3-TRK-PRF-009A

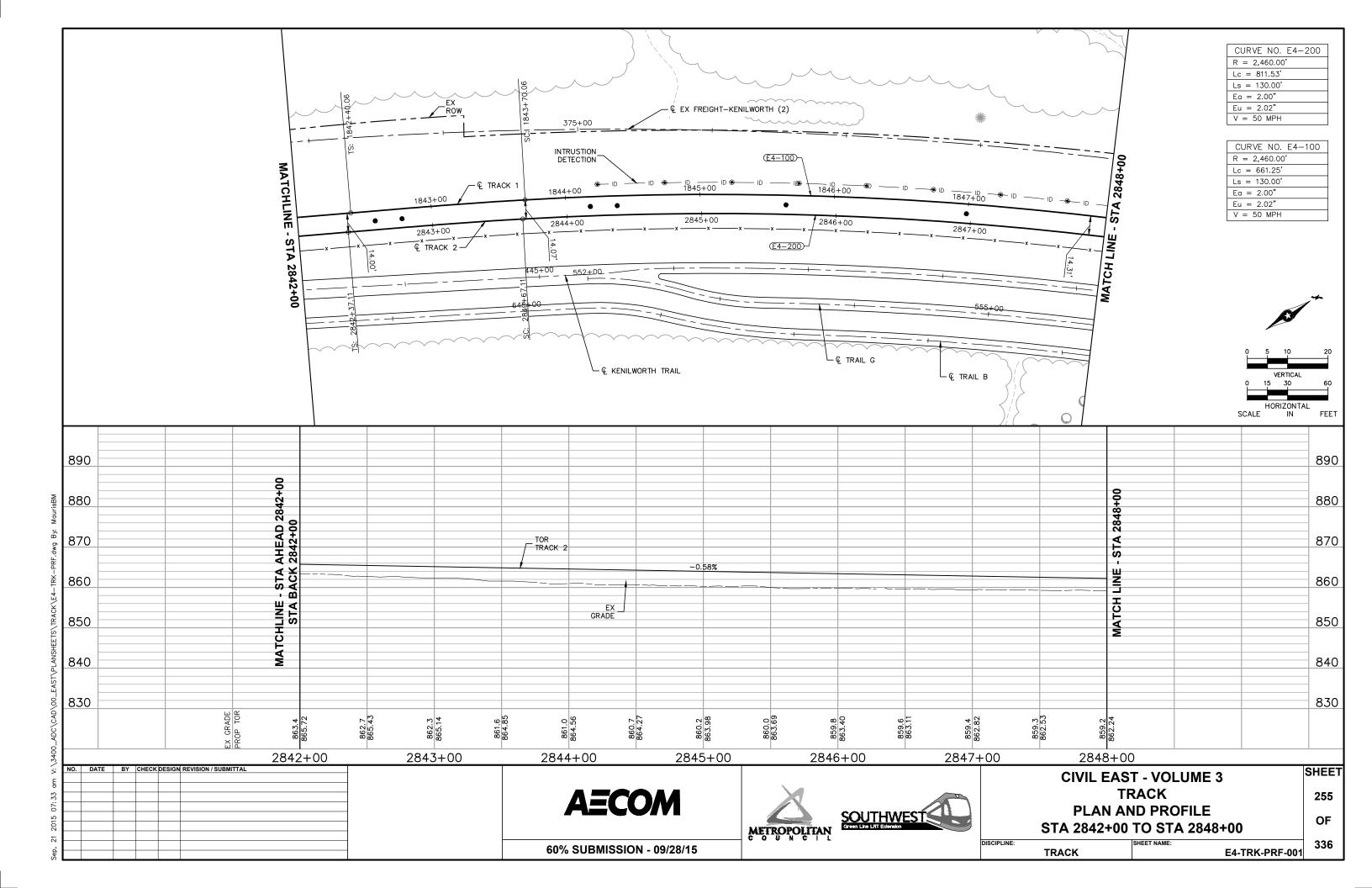


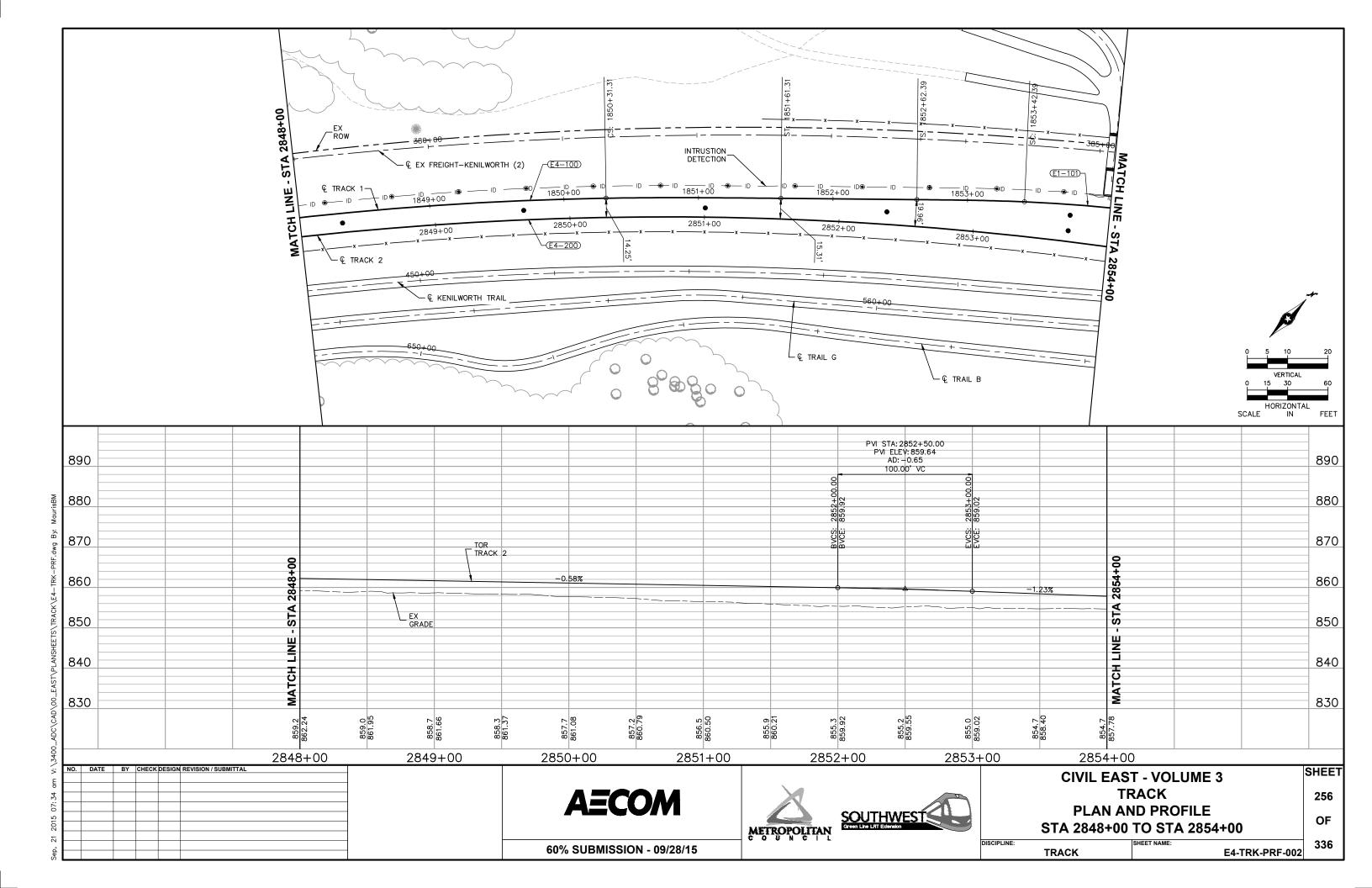


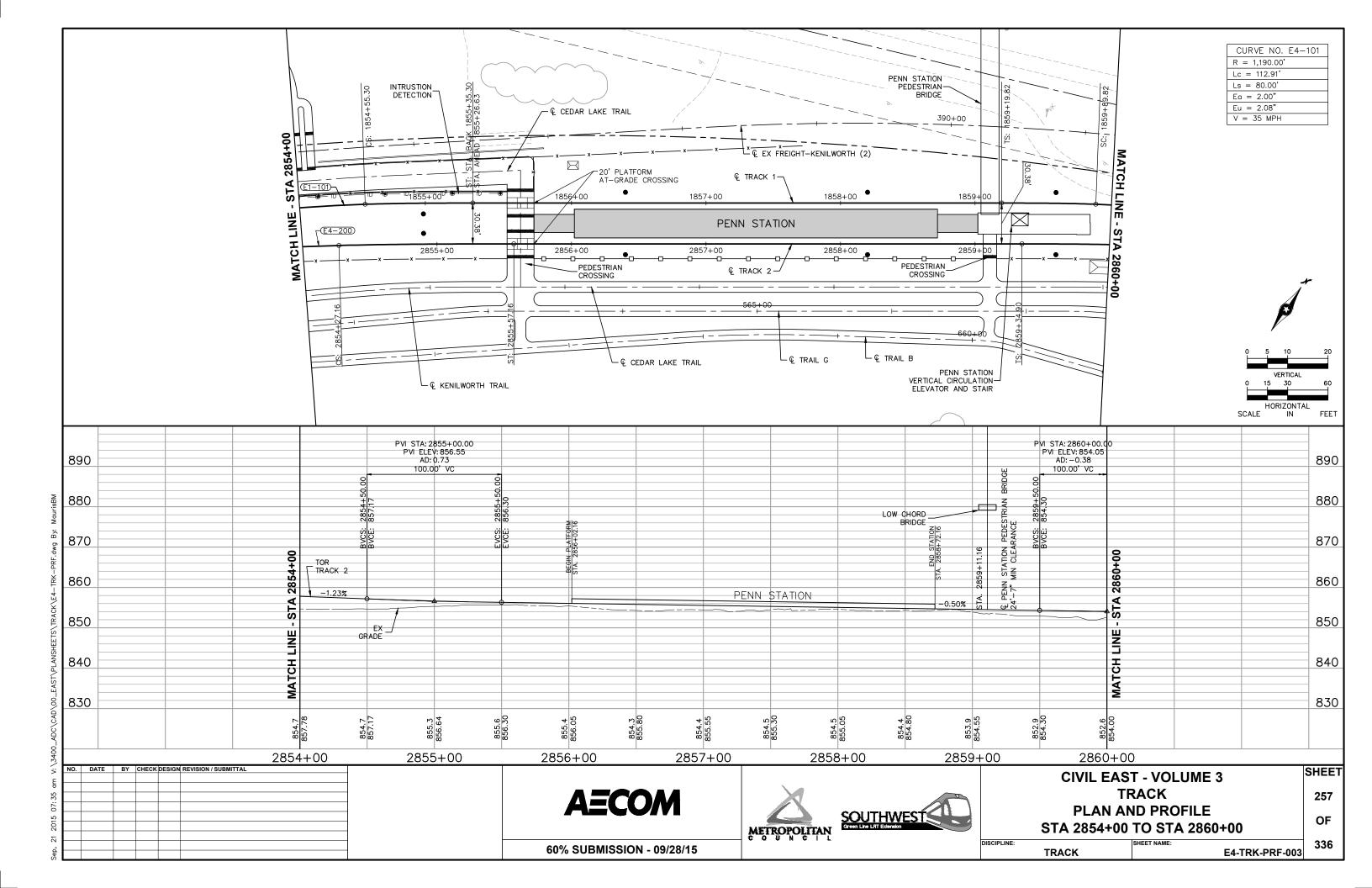


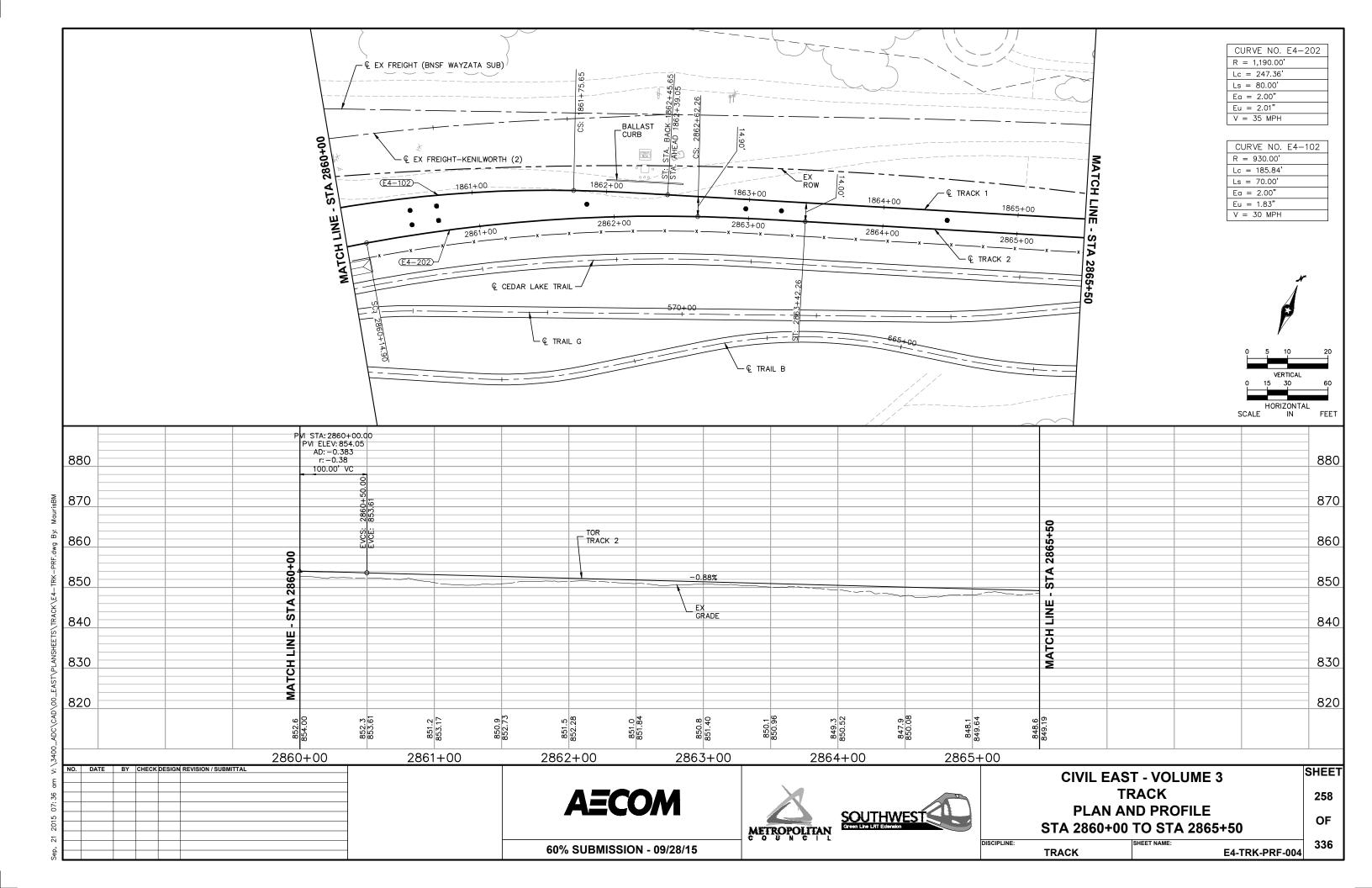


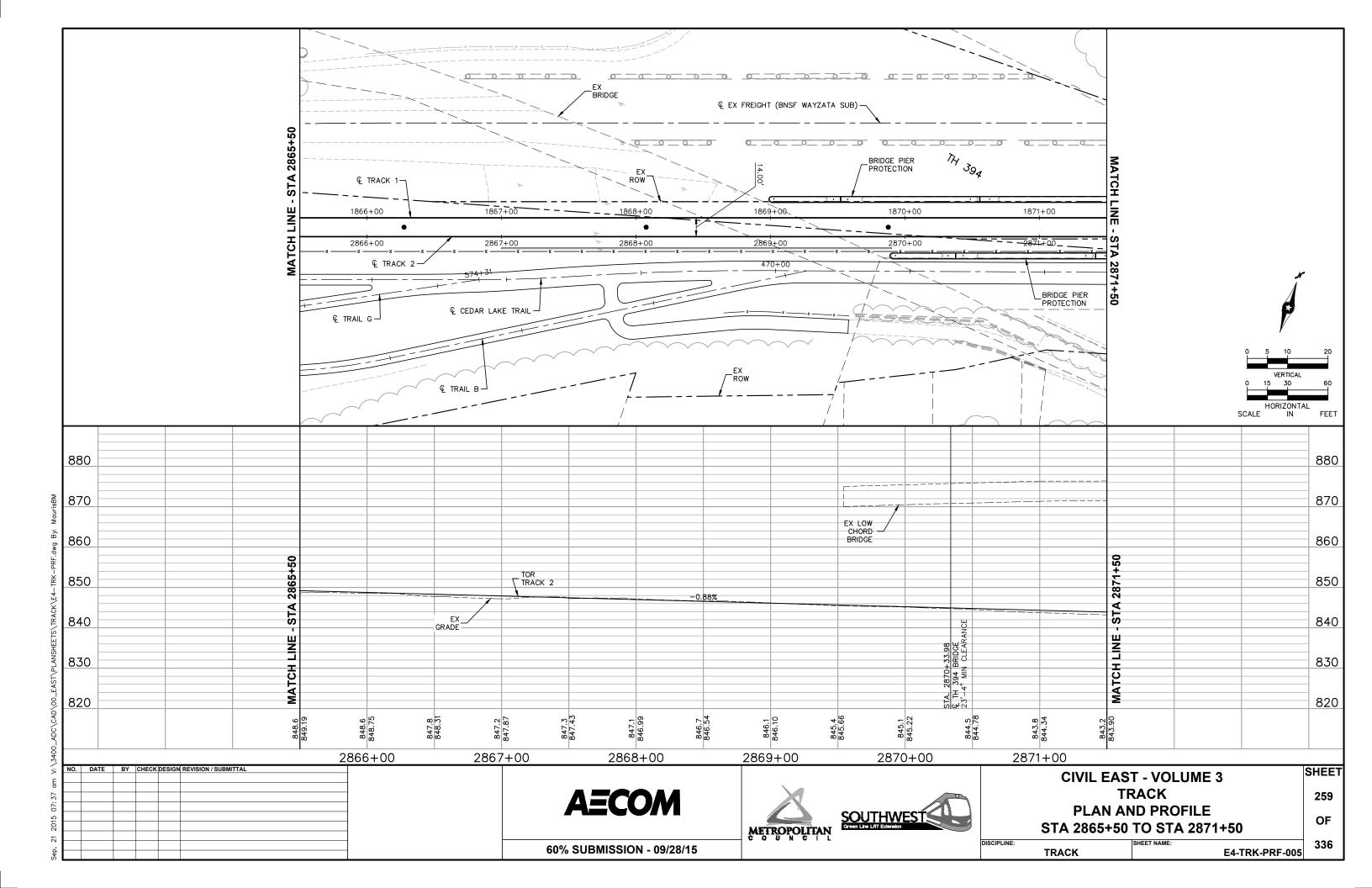


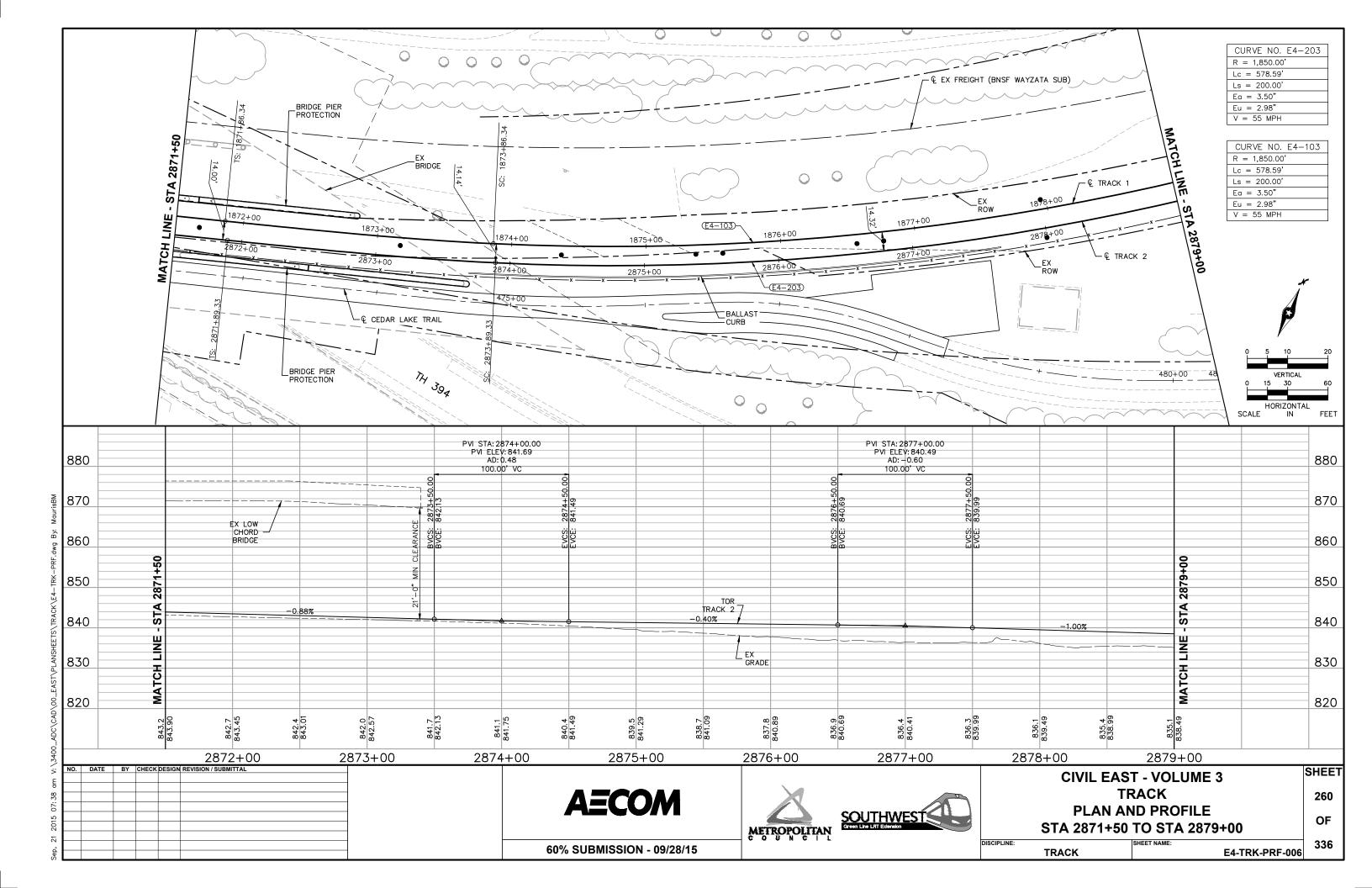


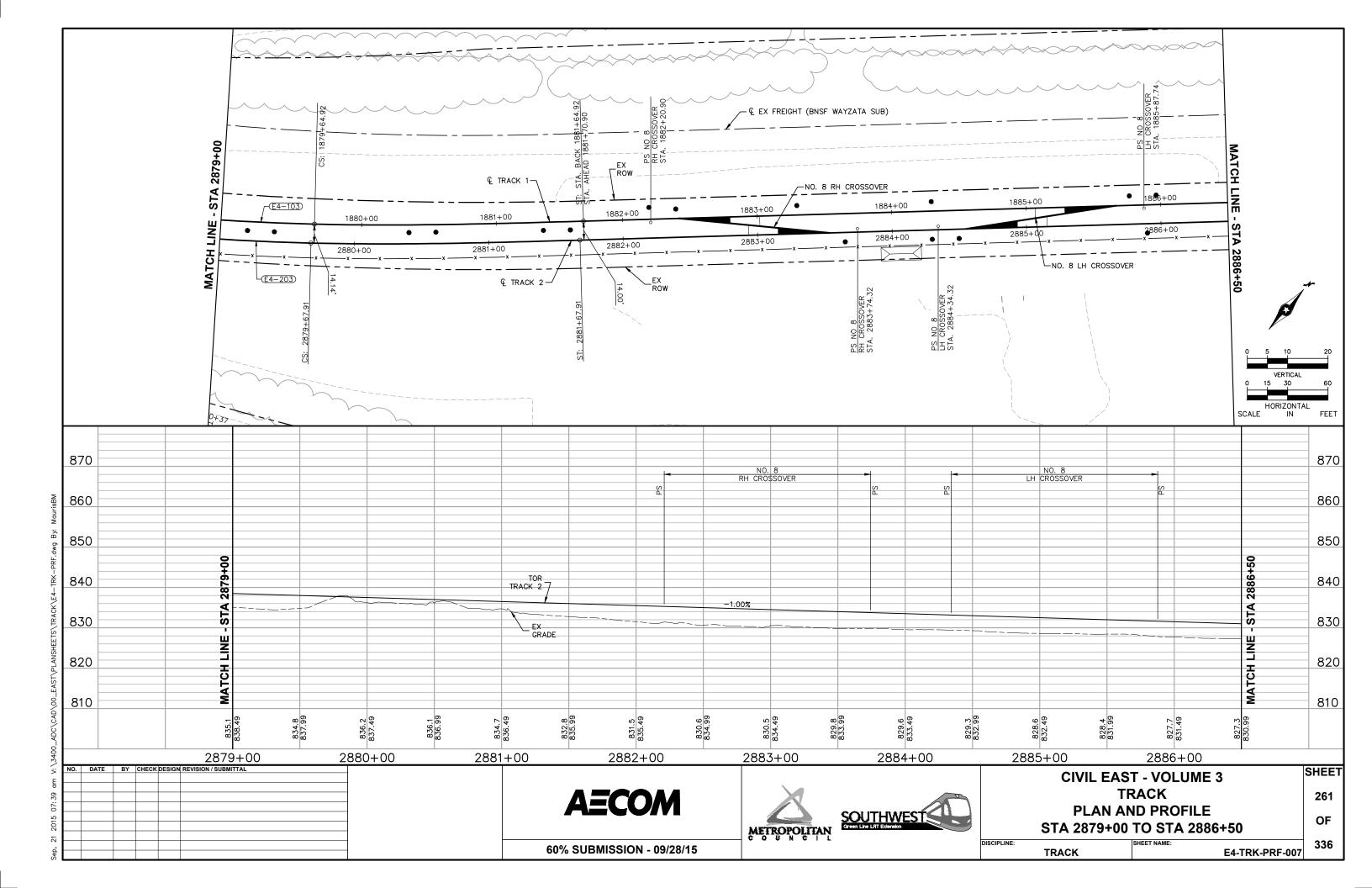


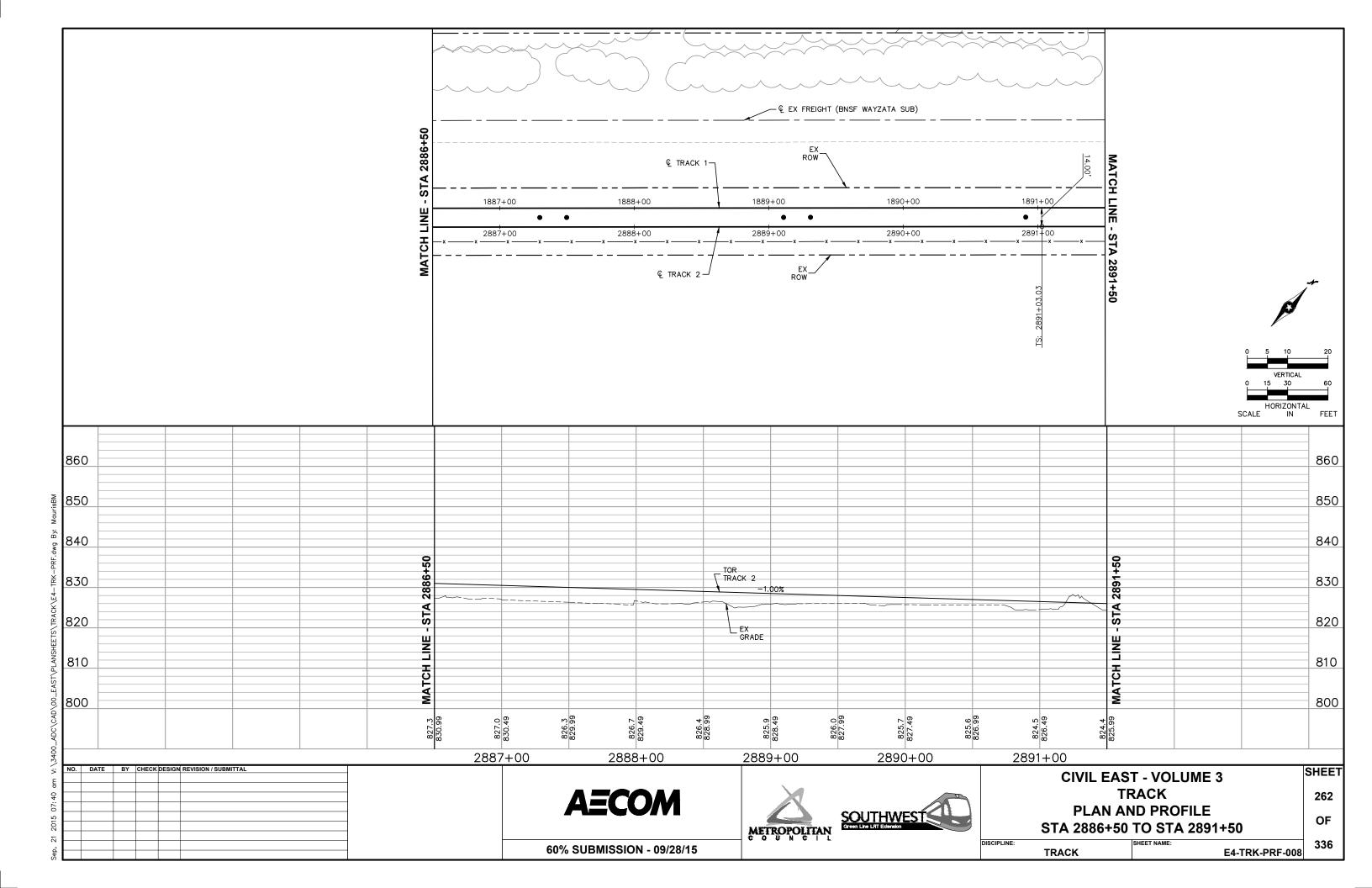


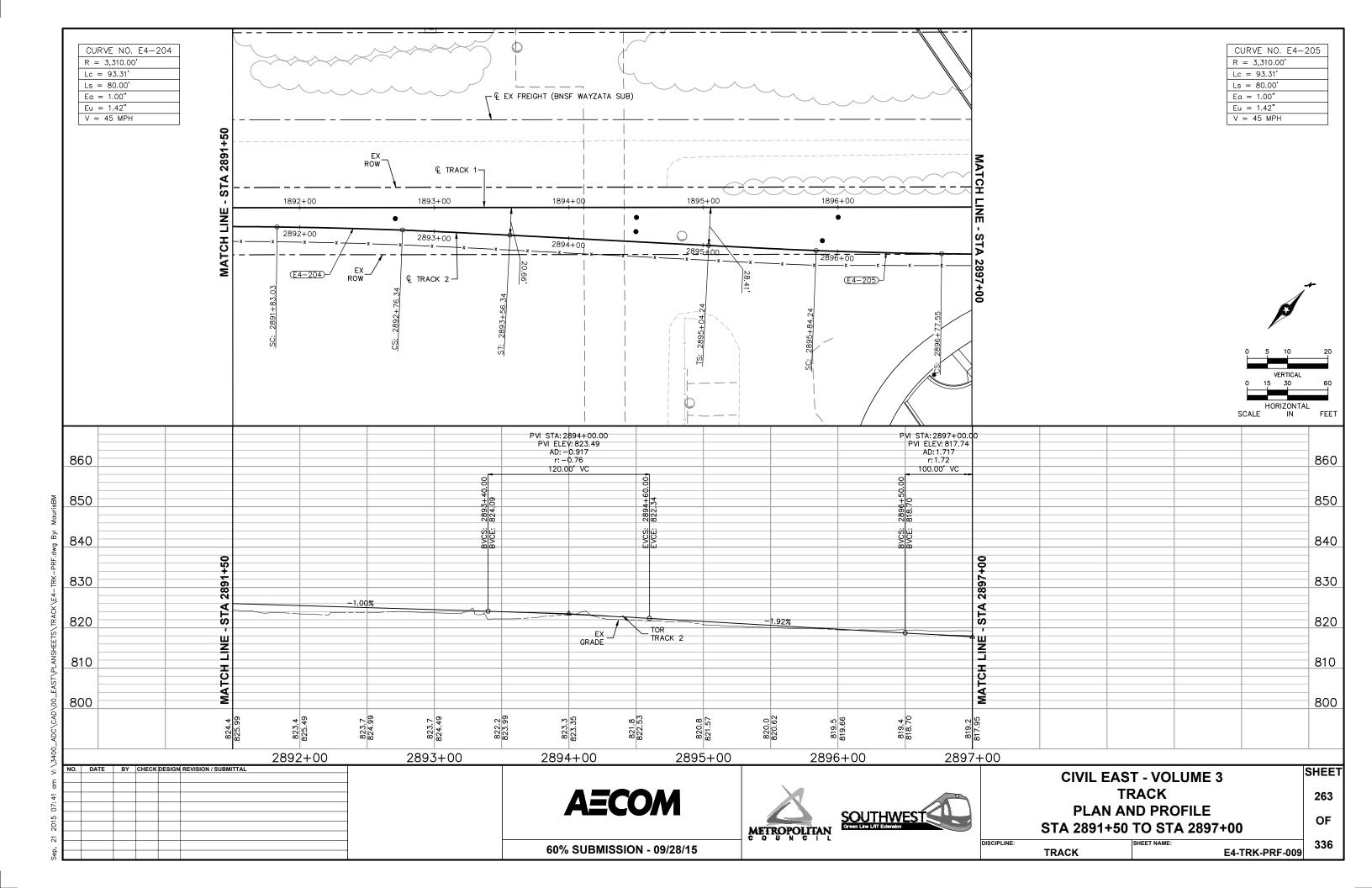


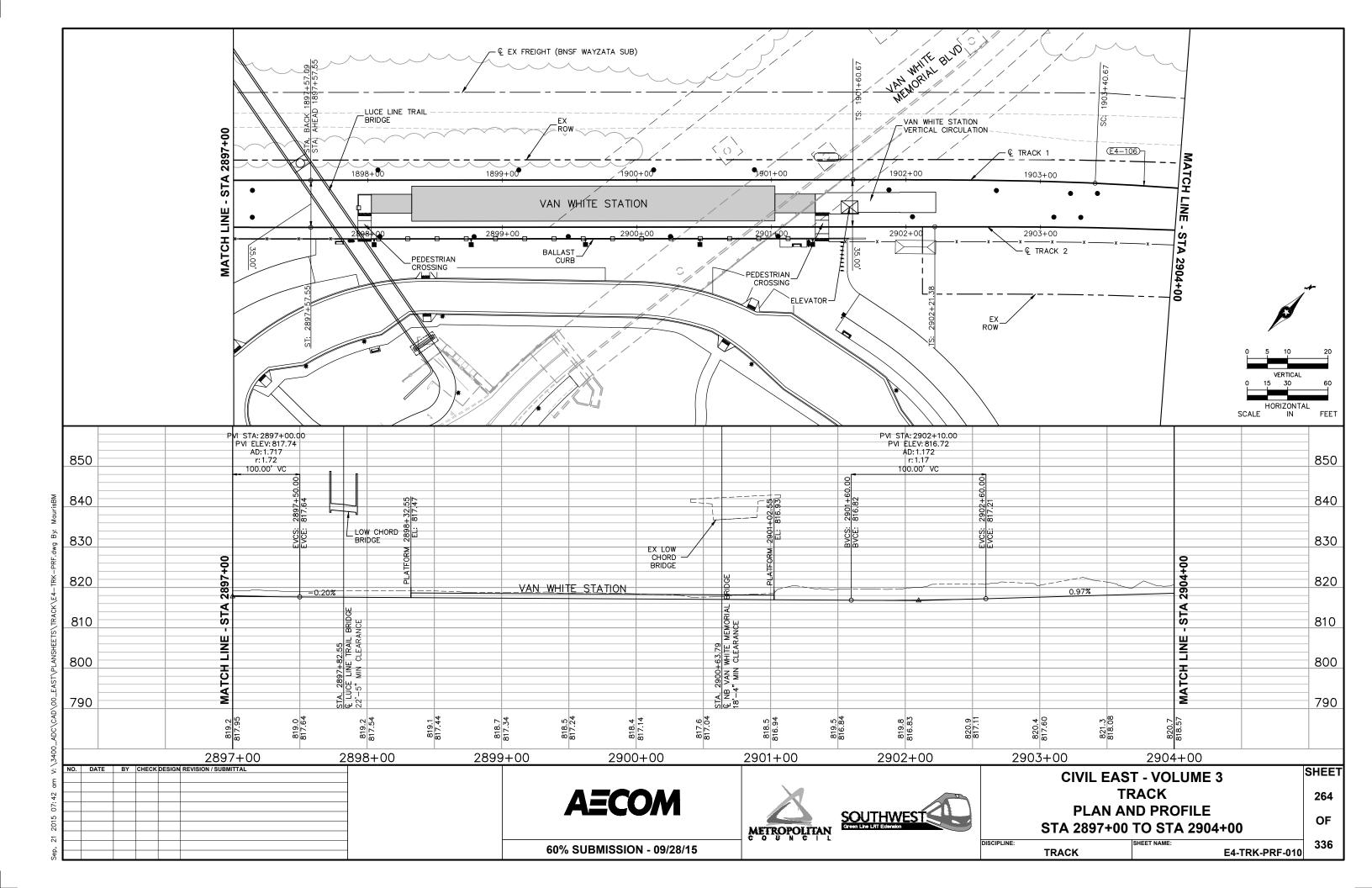


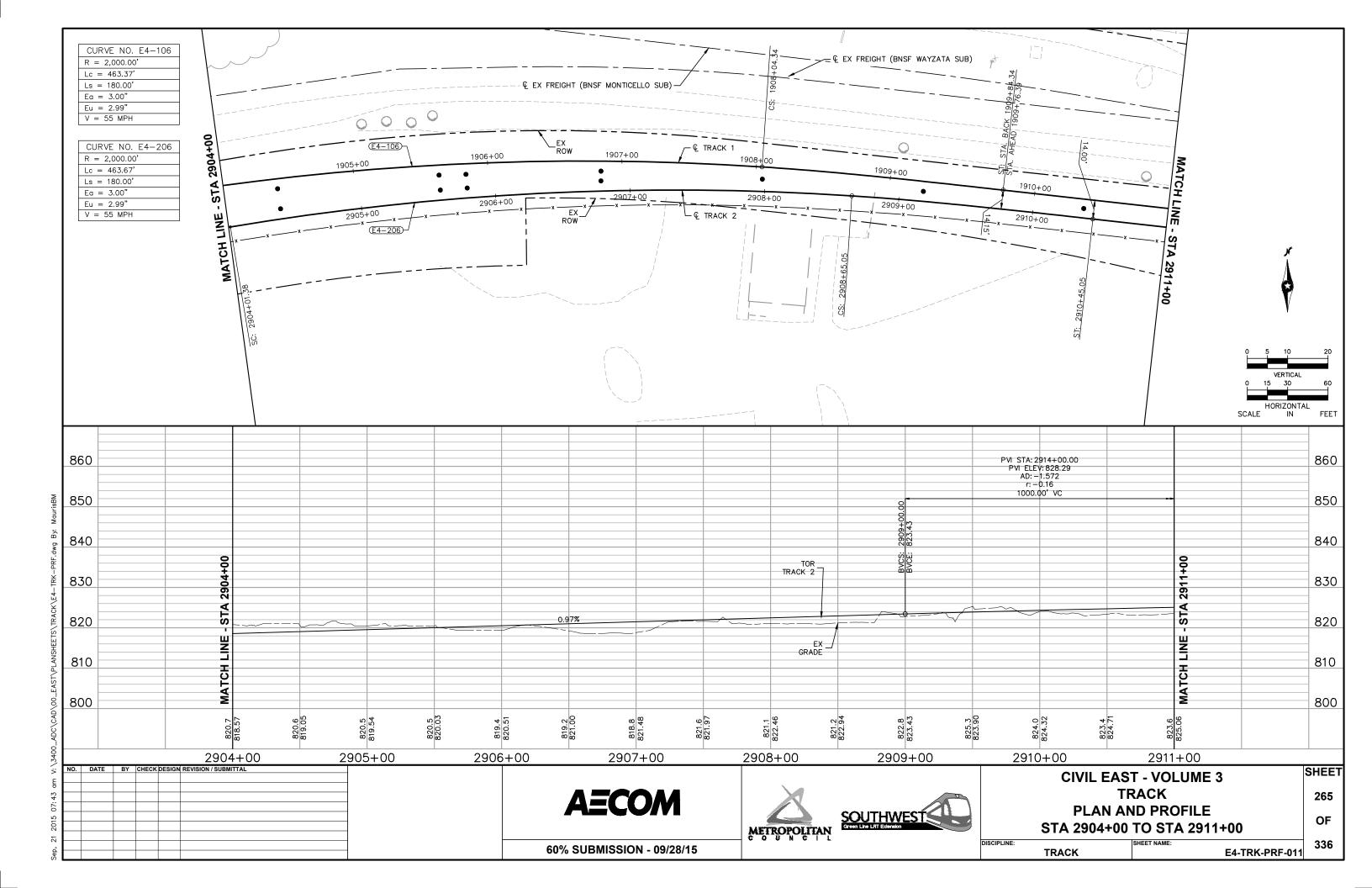


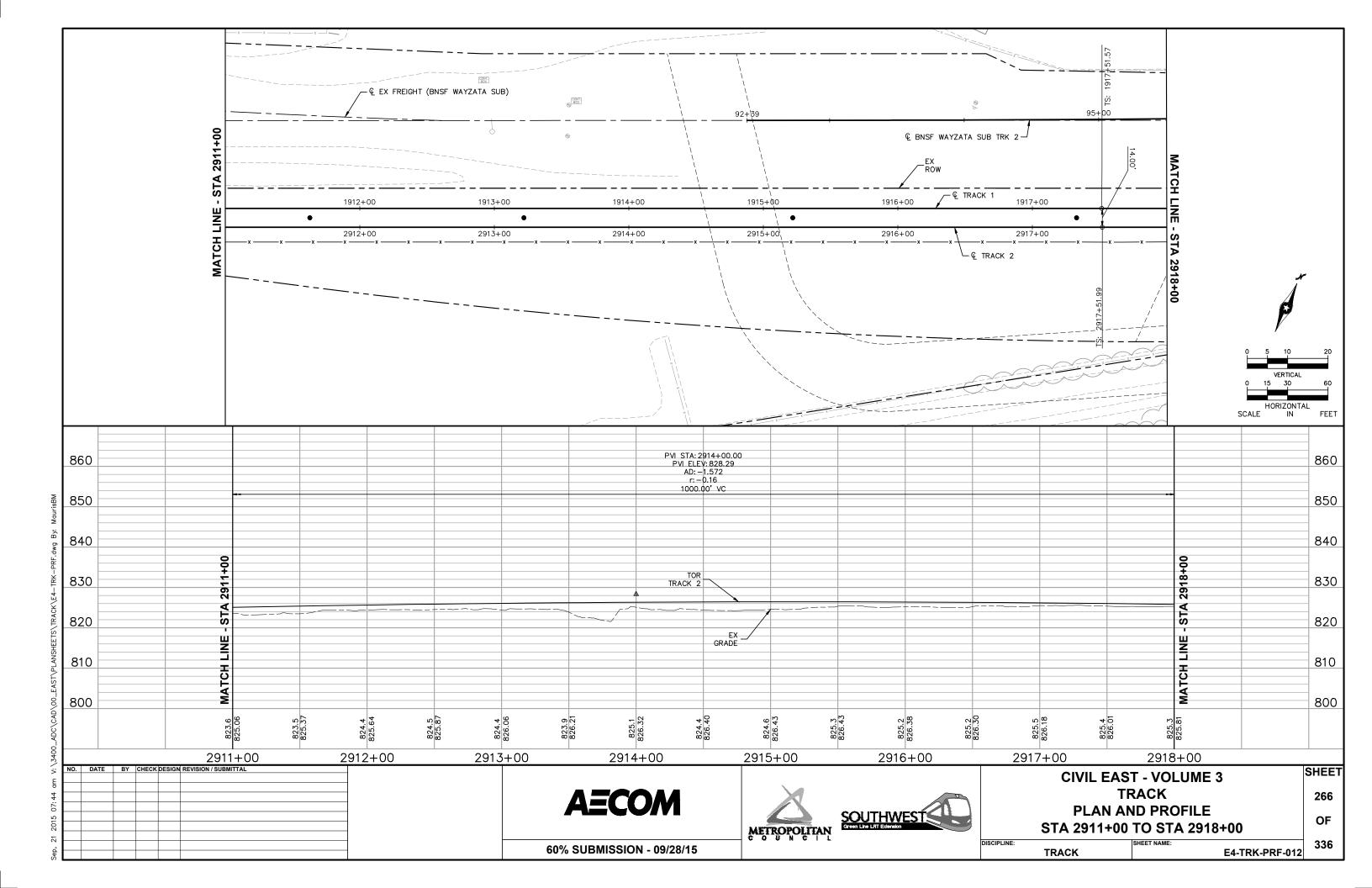


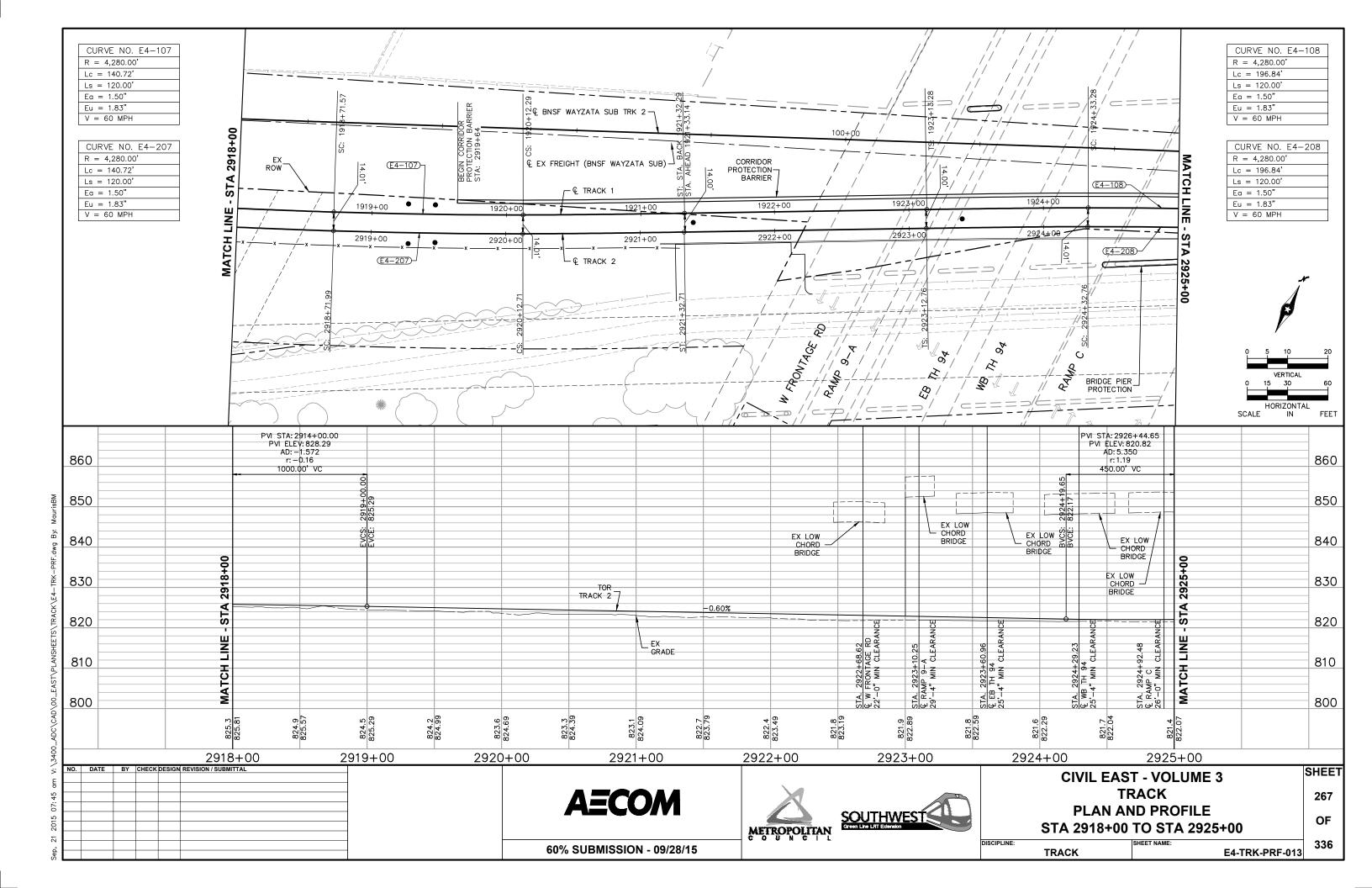


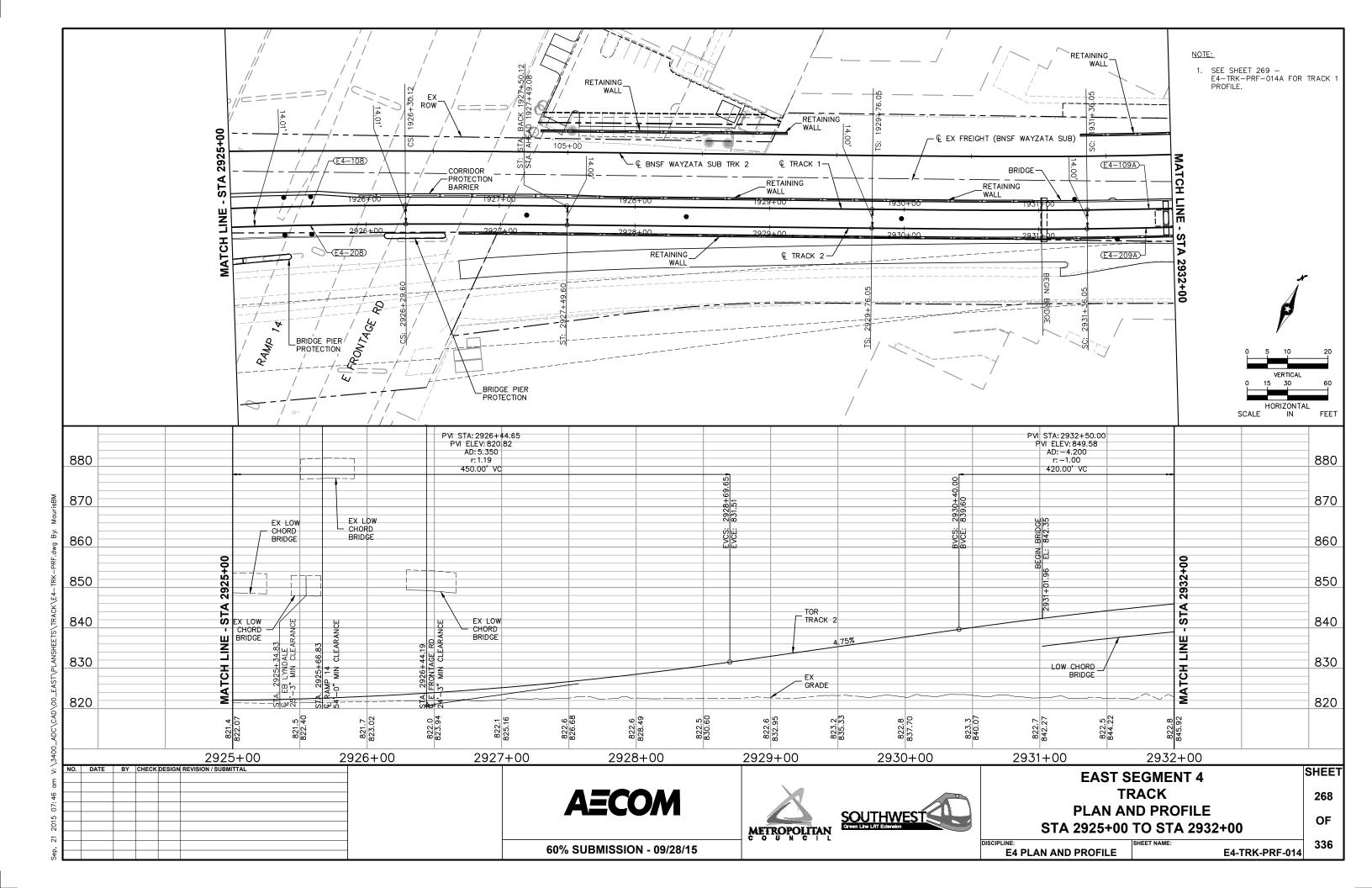




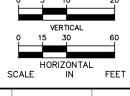








SEE SHEET E4-TRK-PRF-014 FOR PLAN VIEW



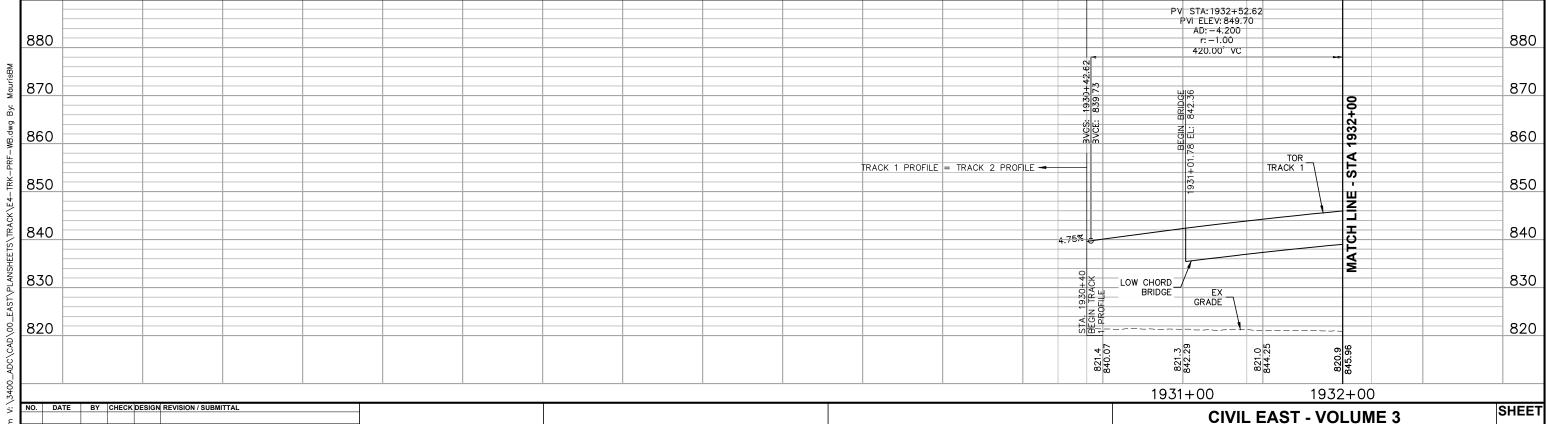
336

E4-TRK-PRF-014A

TRACK

PLAN AND PROFILE

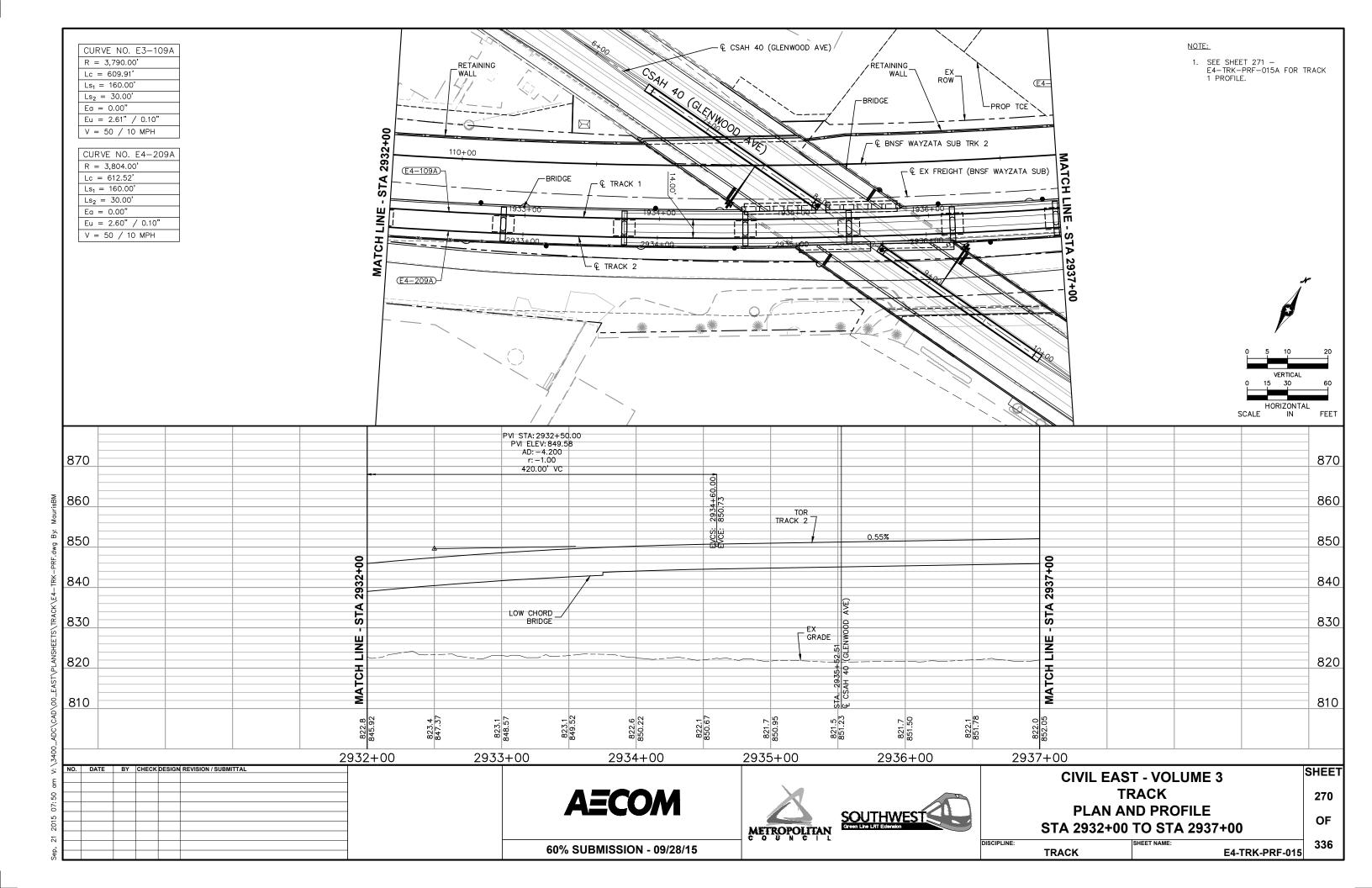
STA 1930+40 TO STA 1932+00



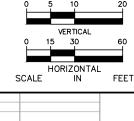
SOUTHWEST Green Line Little Extension

DISCIPLINE:

AECOM



SEE SHEET E4-TRK-PRF-015 FOR PLAN VIEW

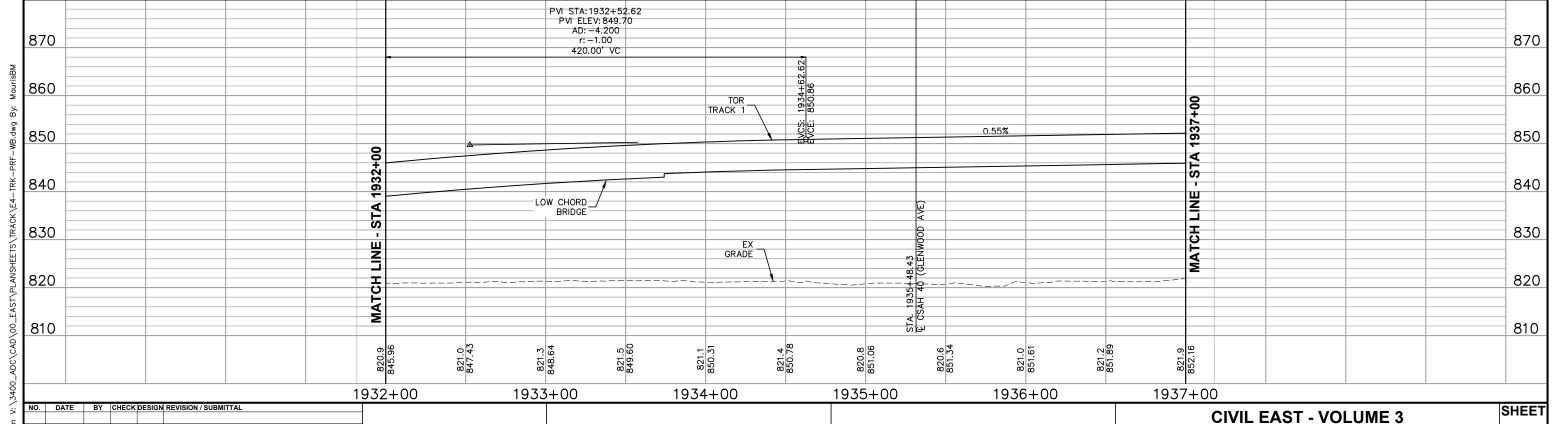


E4-TRK-PRF-015A

TRACK

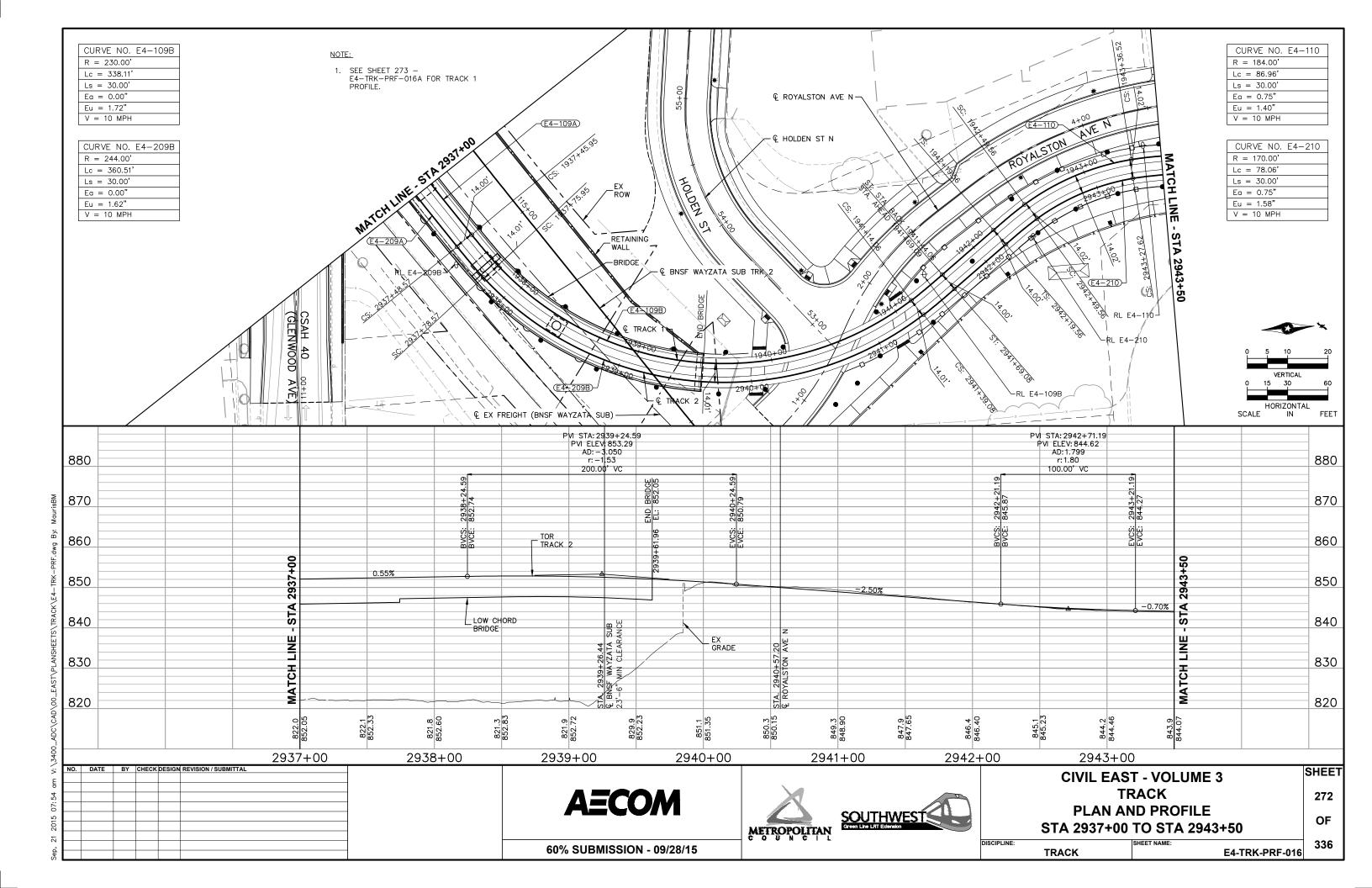
PLAN AND PROFILE

STA 1932+00 TO STA 1937+00

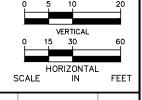


SOUTHWEST Green Line LRT Extension

AECOM



SEE SHEET E4-TRK-PRF-016 FOR PLAN VIEW



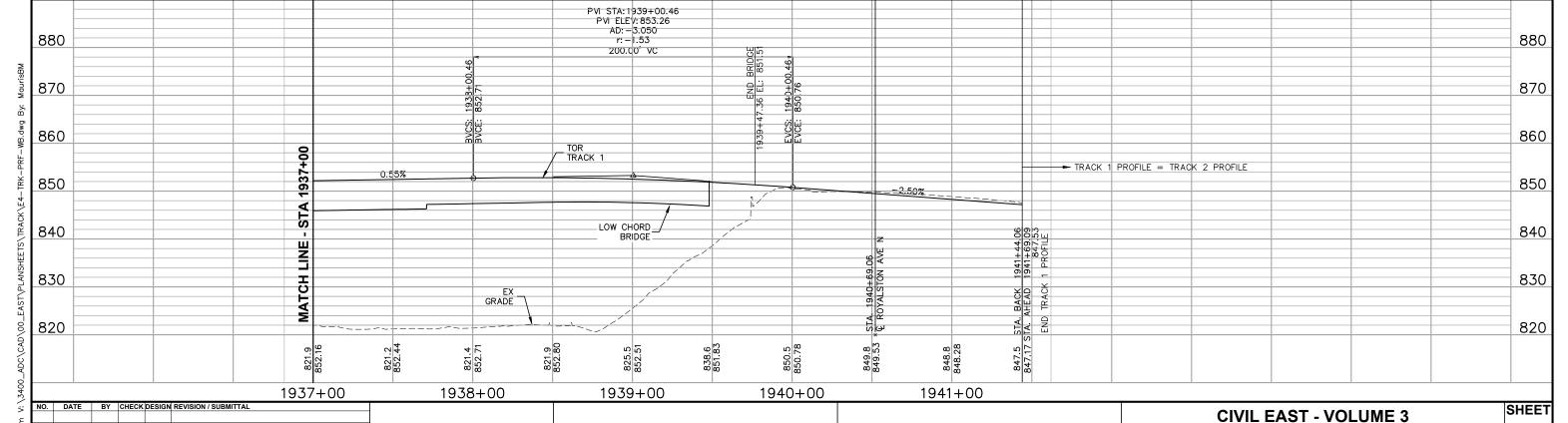
336

E4-TRK-PRF-016A

TRACK

PLAN AND PROFILE

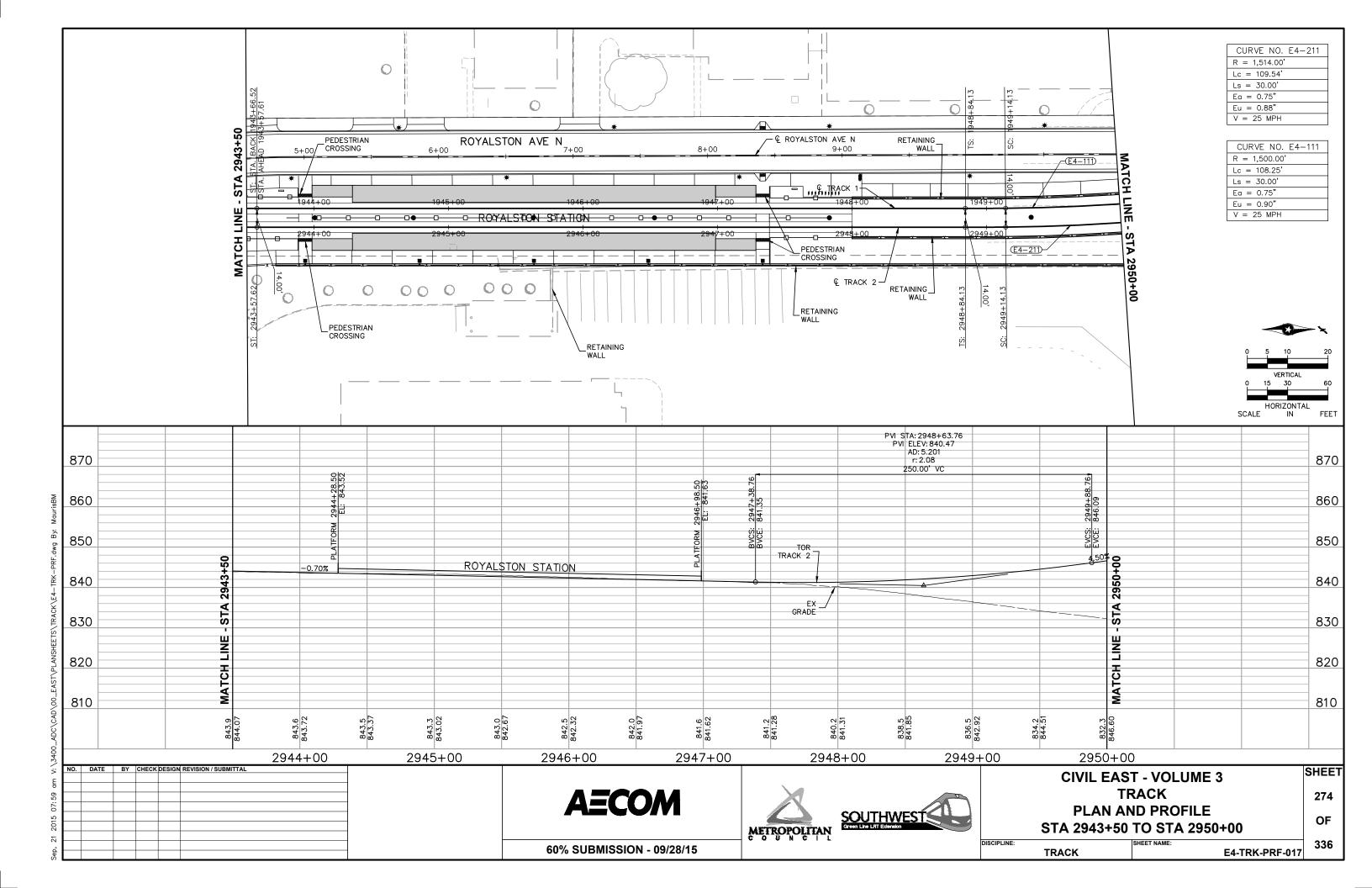
STA 1937+00 TO STA 1941+69

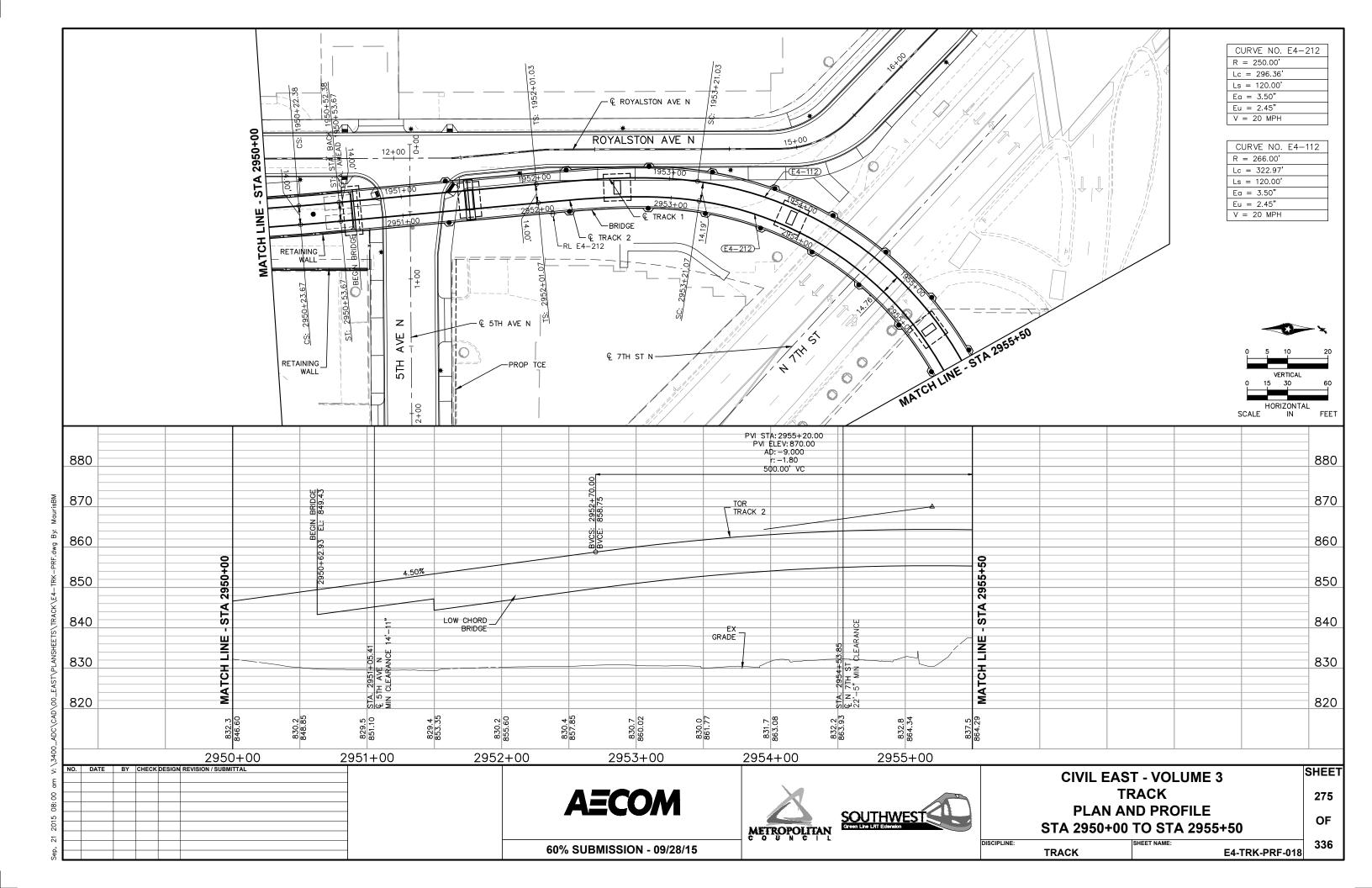


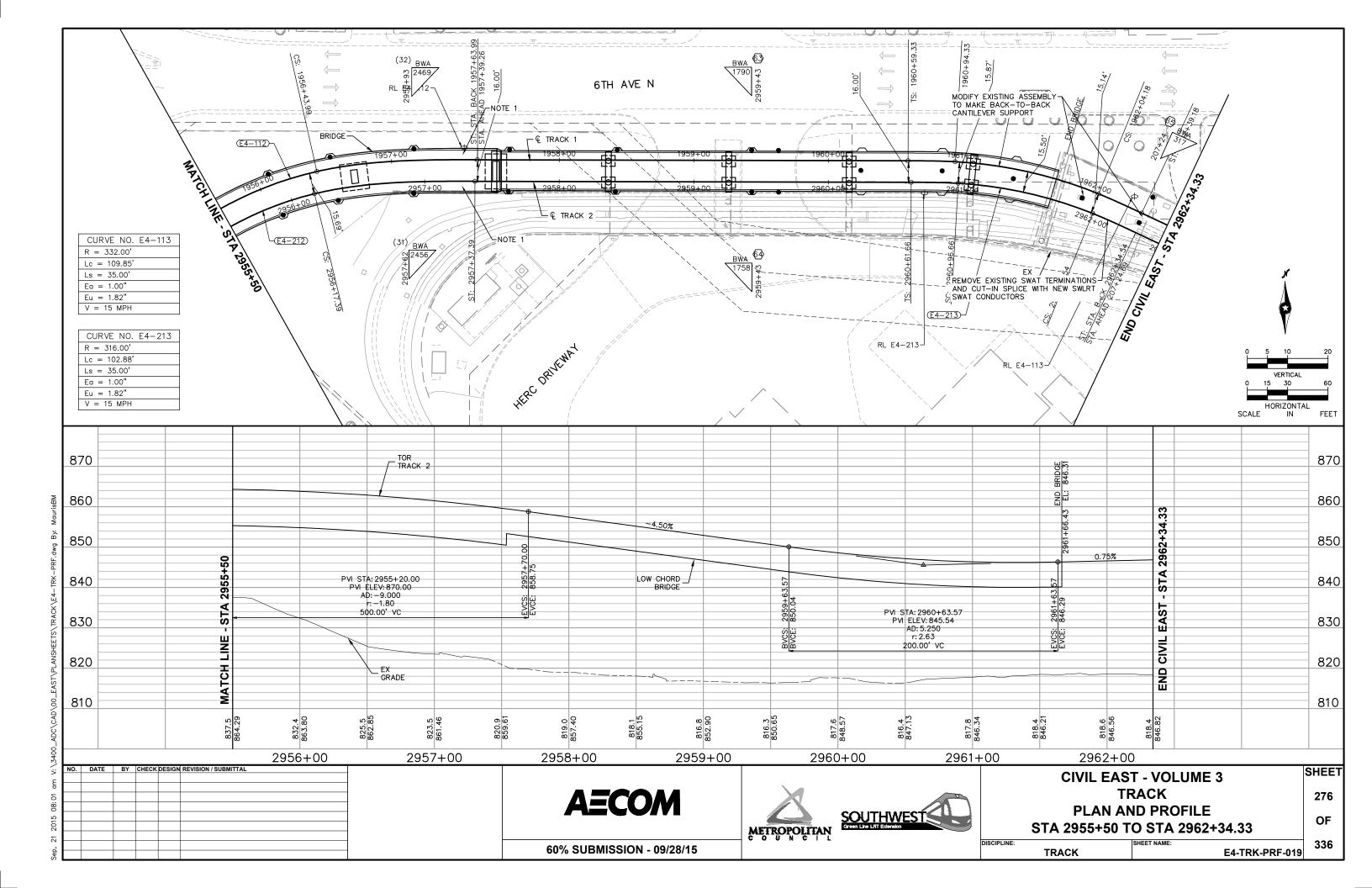
SOUTHWEST Green Line LRT Extension

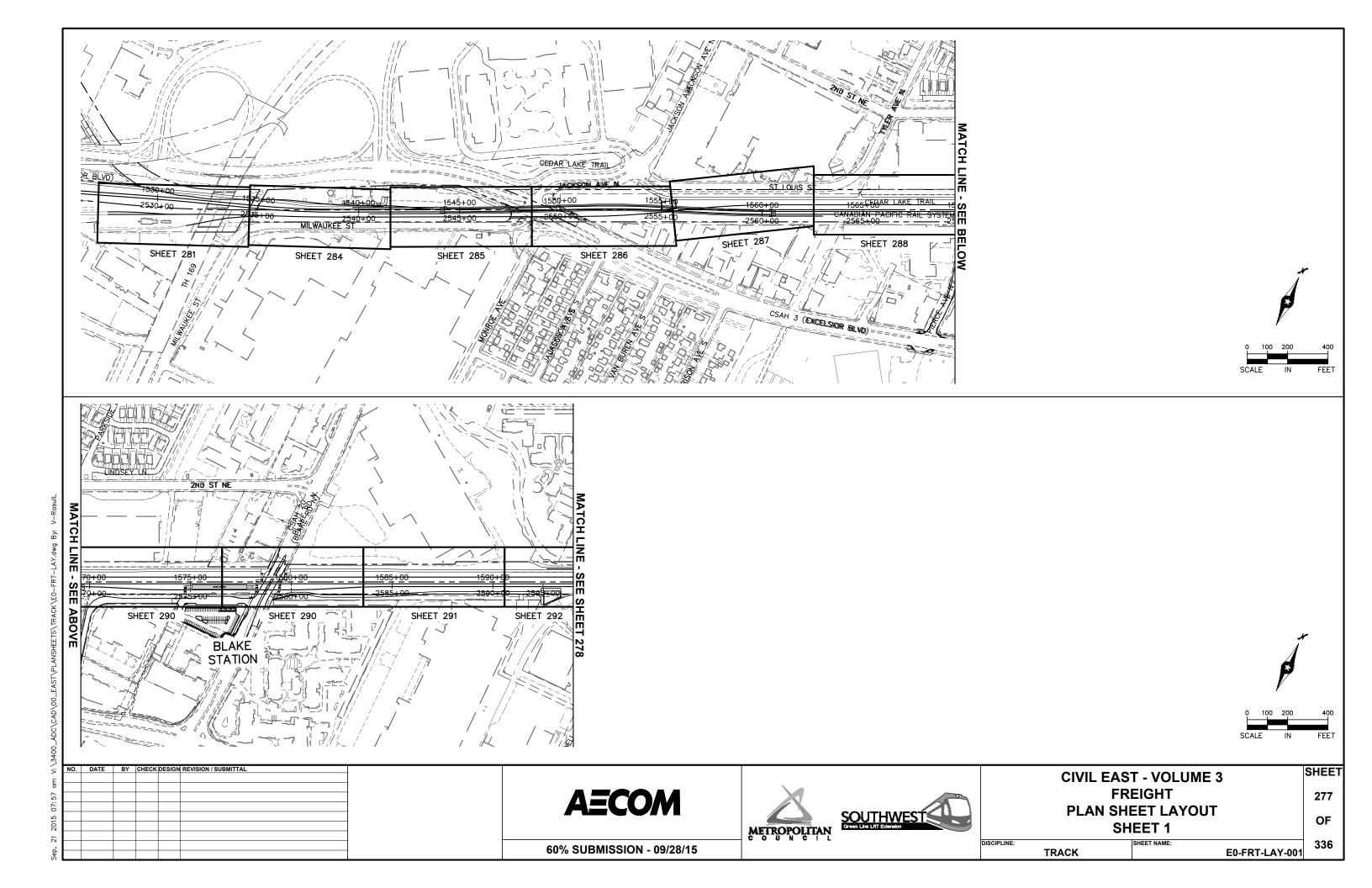
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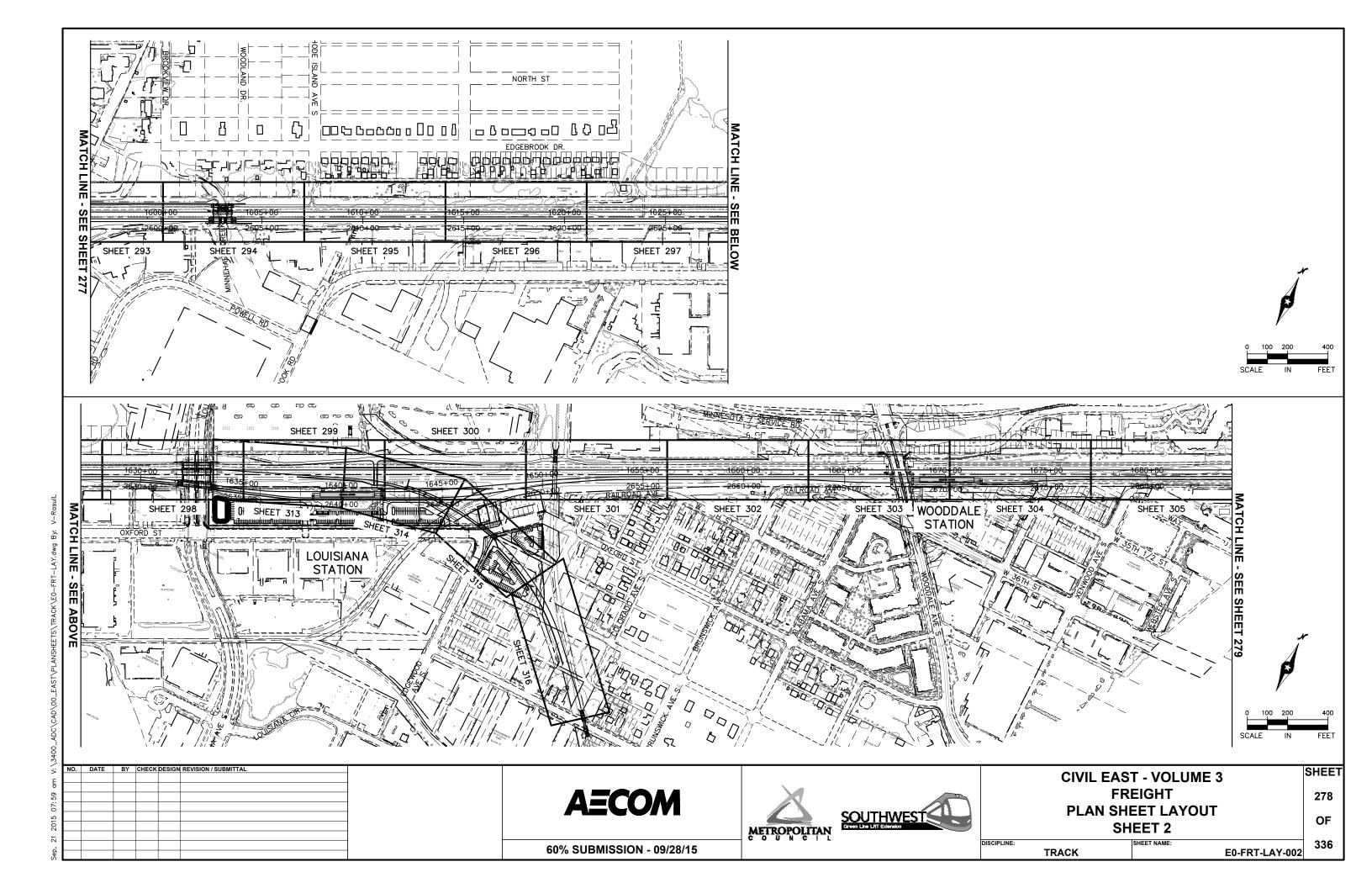
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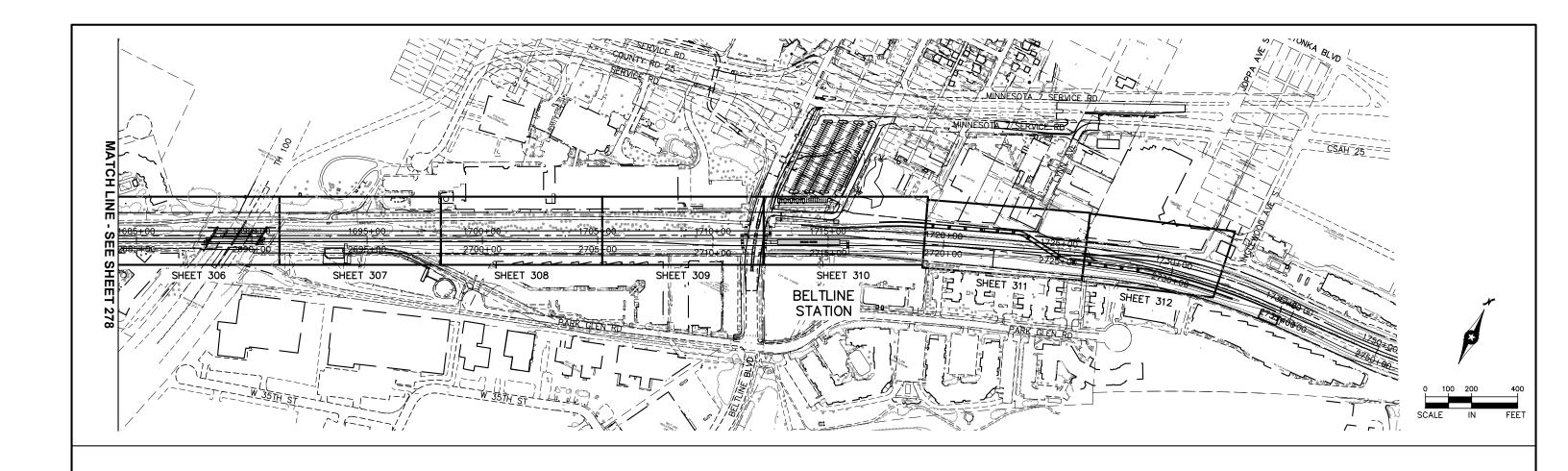












NO. DATE BY CHECK DESIGN REVISION / SUBMITTAL

AECOM

METROPOLITAN!



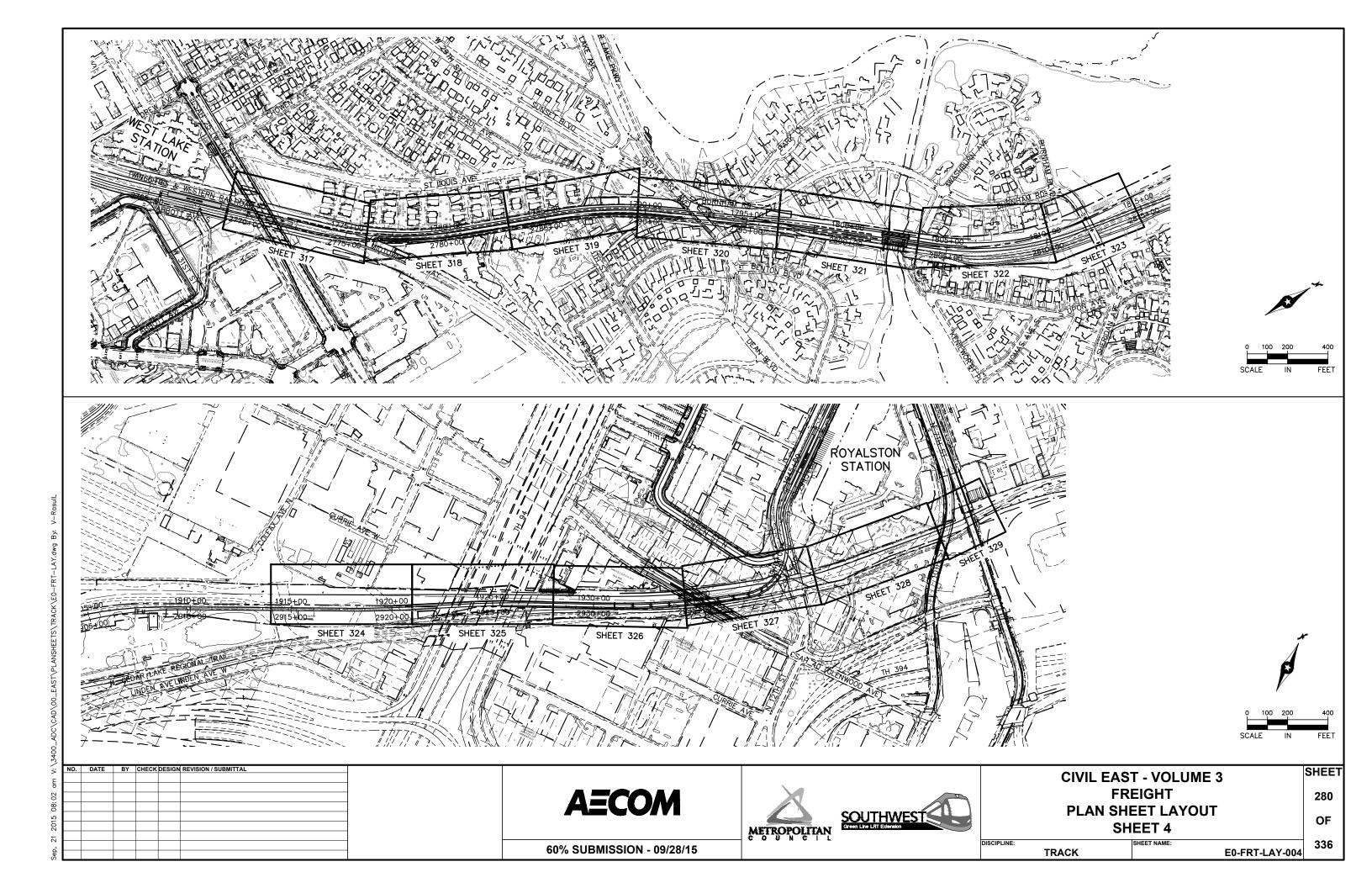
CIVIL EAST - VOLUME 3 FREIGHT PLAN SHEET LAYOUT SHEET 3

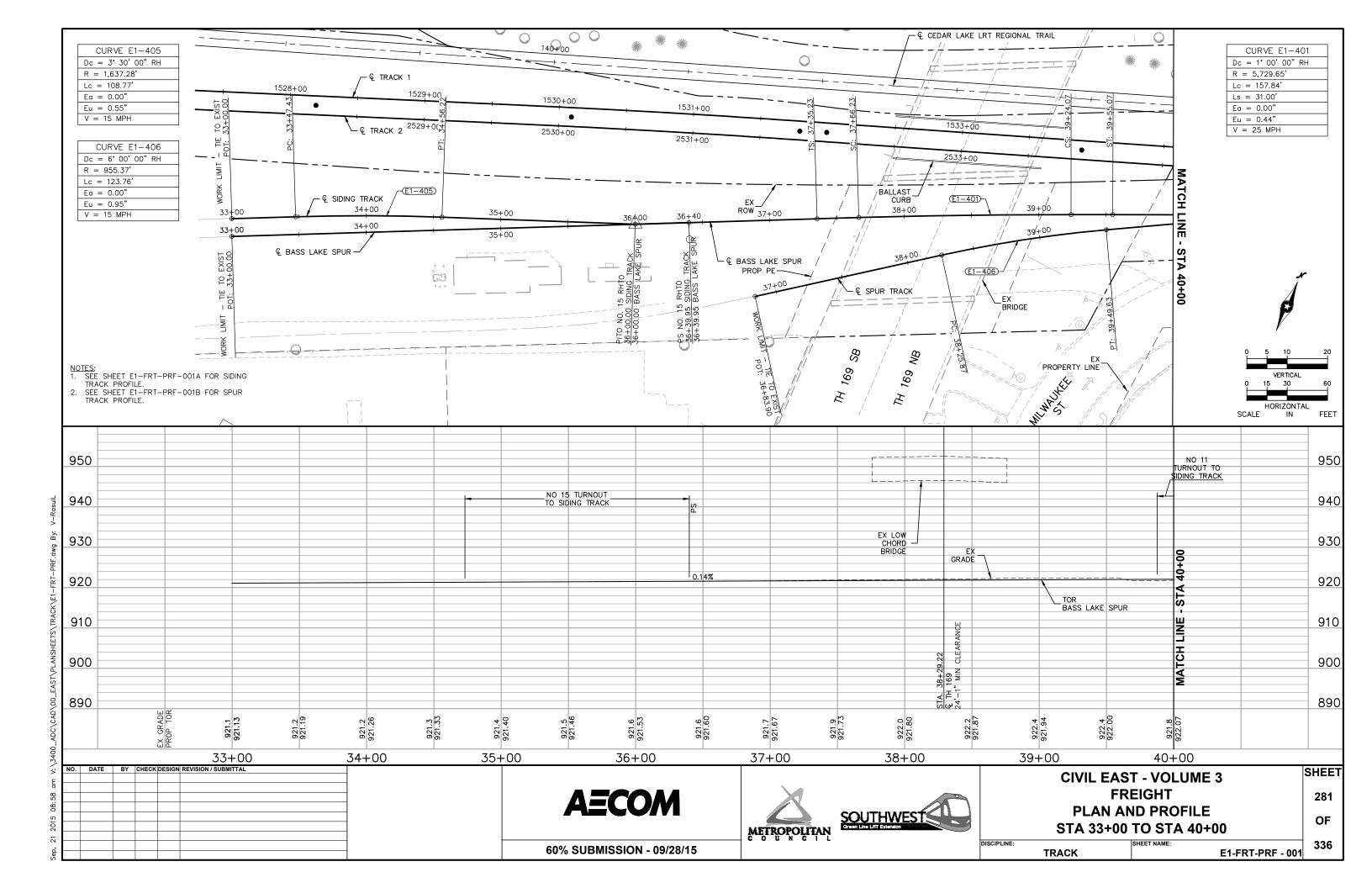
279 OF

SHEET

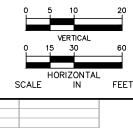
TRACK

E0-FRT-LAY-003 336





SEE SHEET E1-FRT-PRF - 001 FOR PLAN VIEW



336

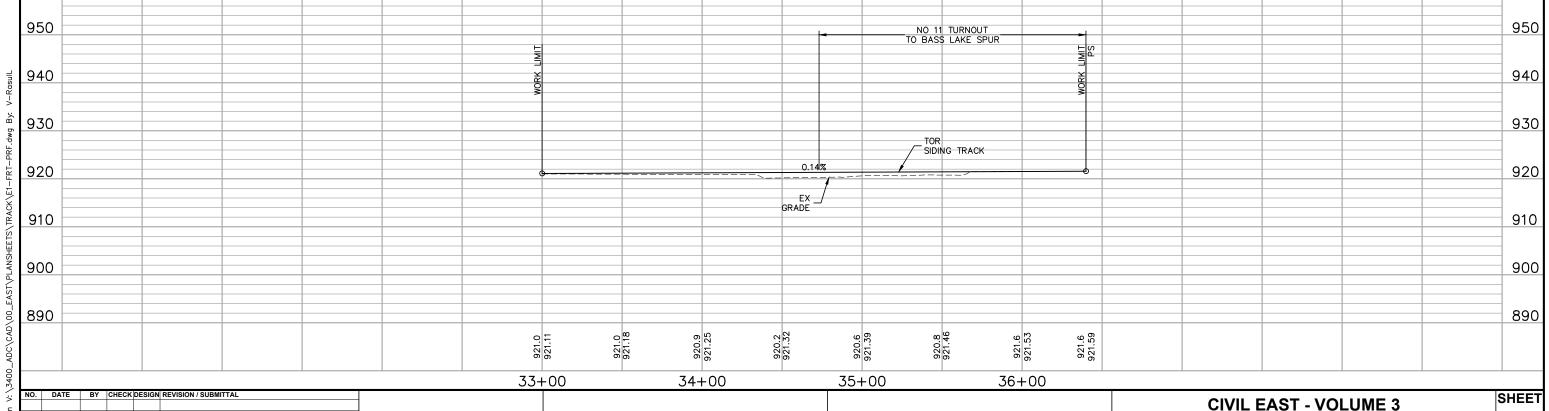
E1-FRT-PRF-001A

FREIGHT

PLAN AND PROFILE

STA 33+00 TO STA 36+39.95

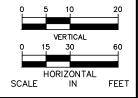
TRACK



SOUTHWEST Green Line LRT Extension

AECOM

SEE SHEET E1-FRT-PRF - 001 AND E1-FRT-PRF - 002 FOR PLAN VIEW



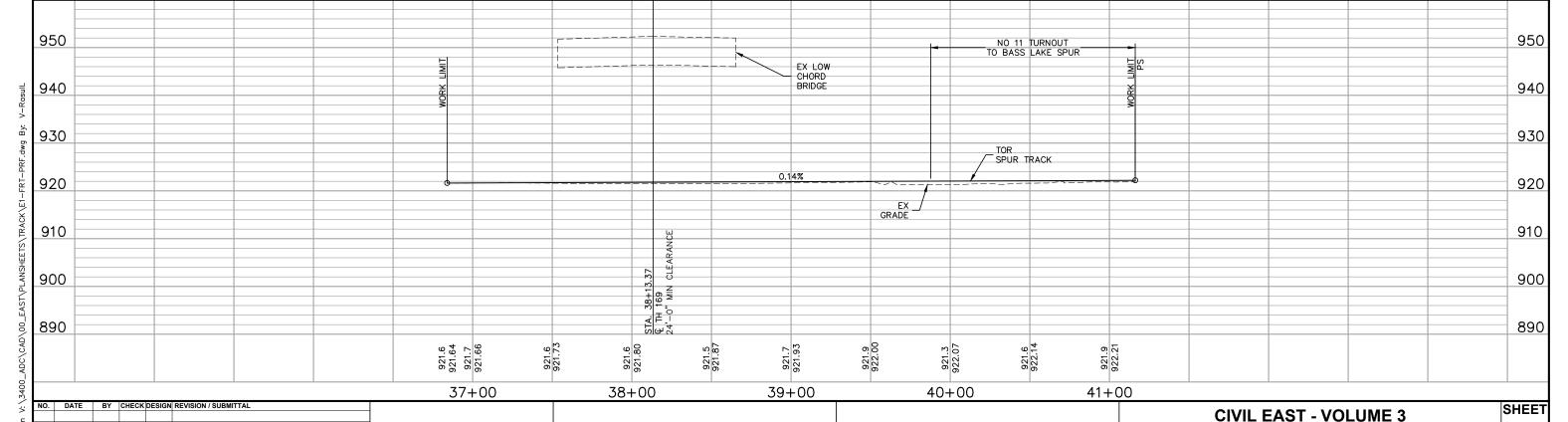
E1-FRT-PRF-001B

FREIGHT

PLAN AND PROFILE

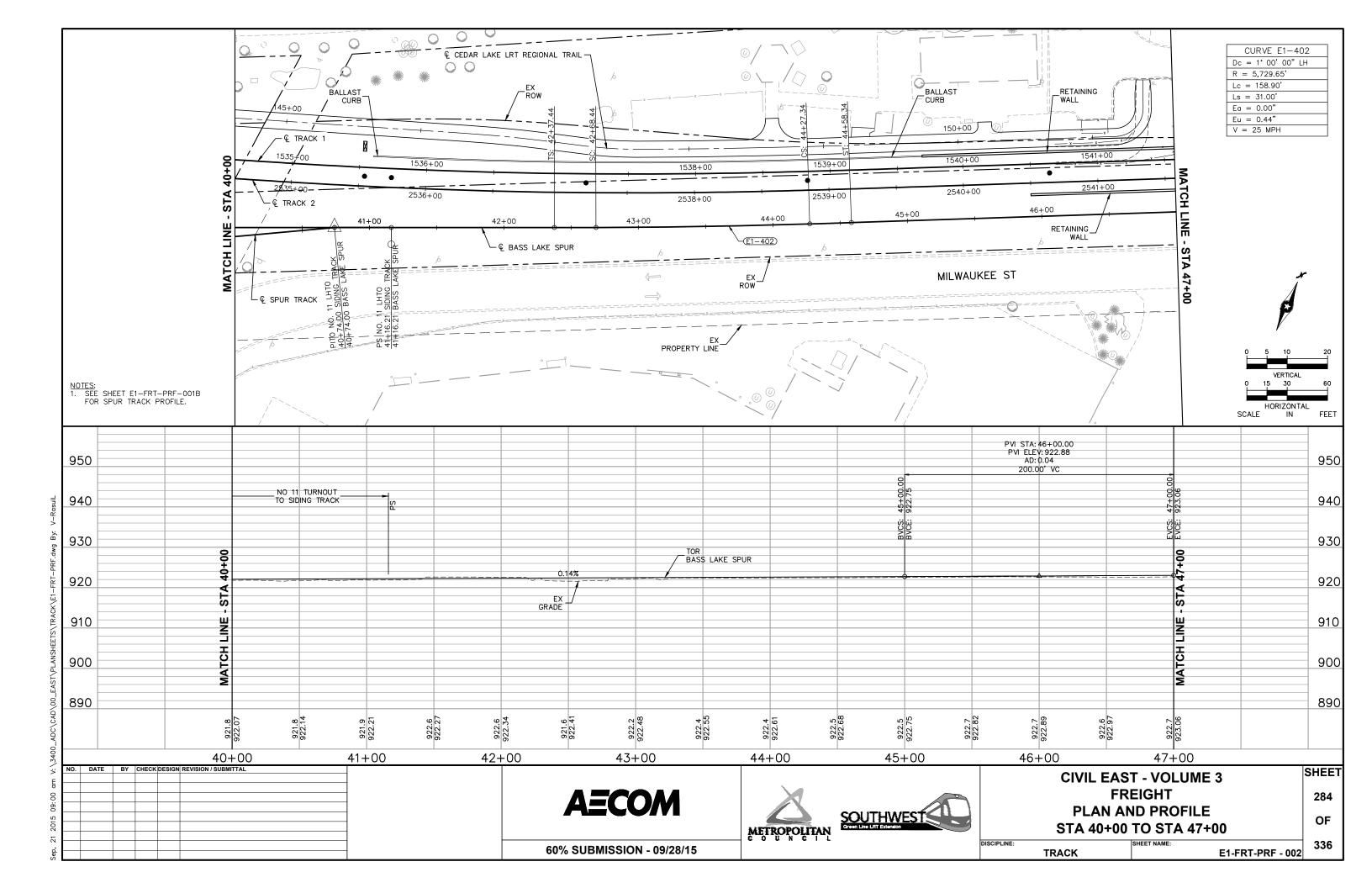
STA 36+83.90 TO STA 41+16.21

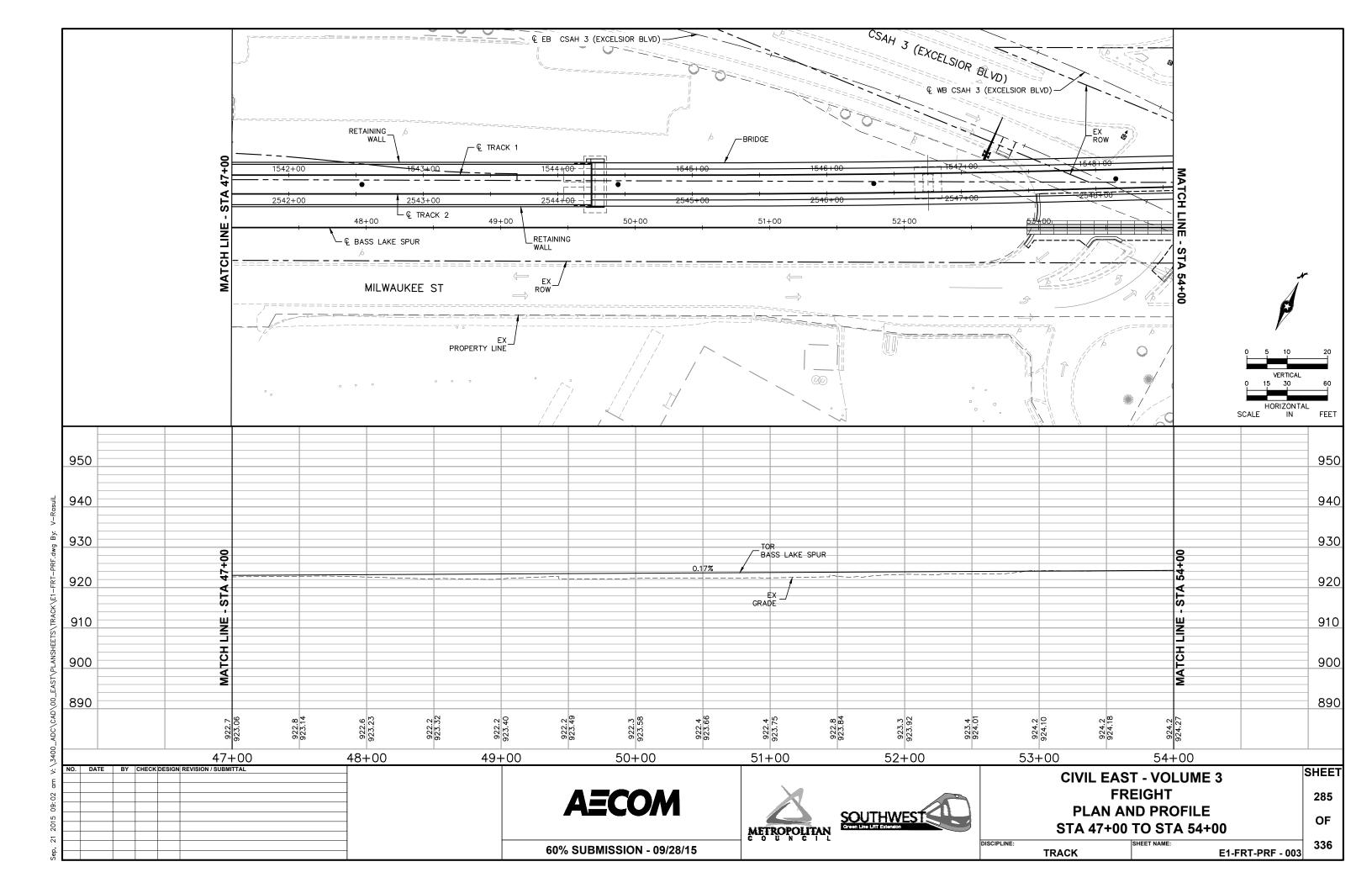
TRACK

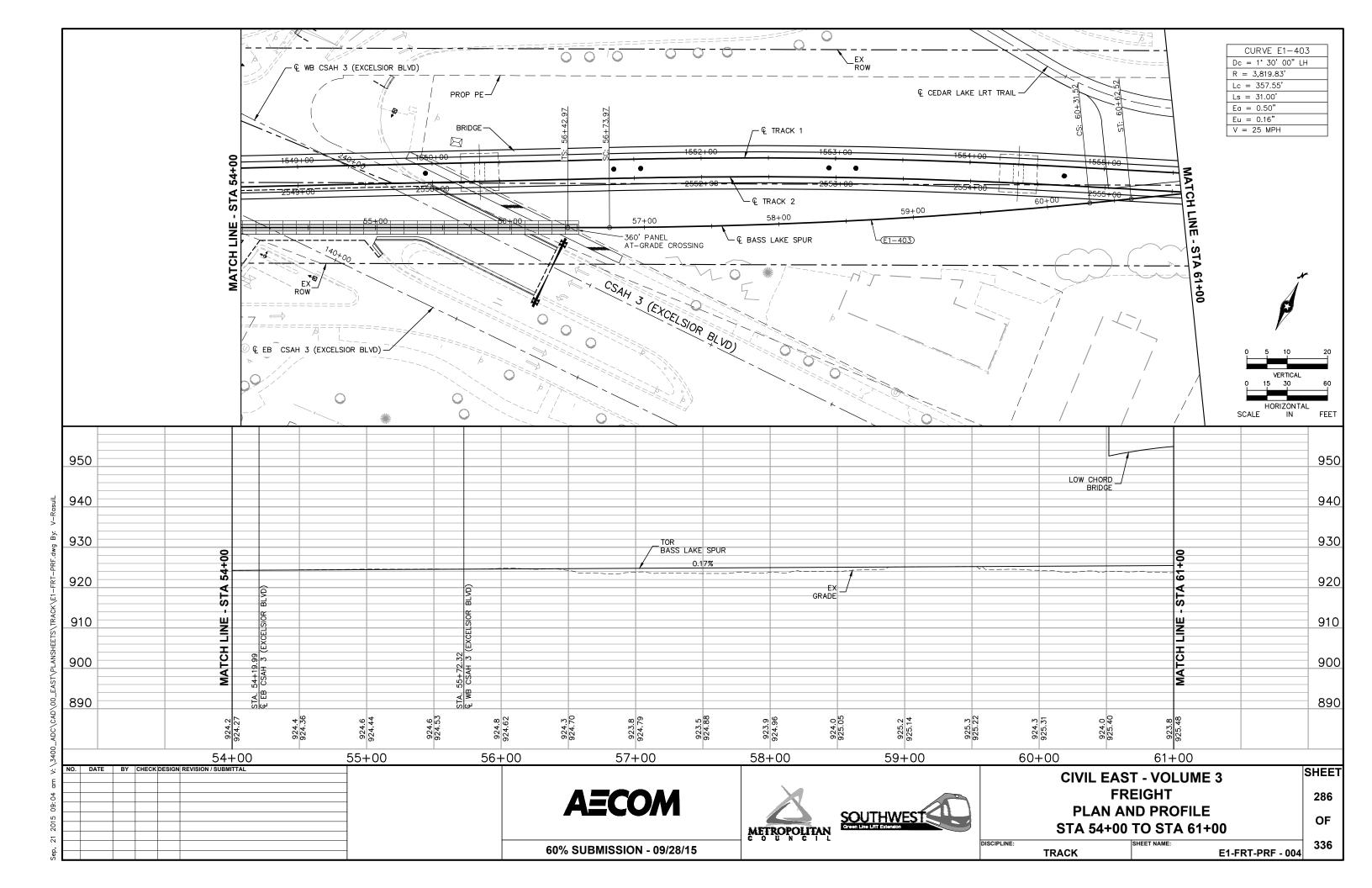


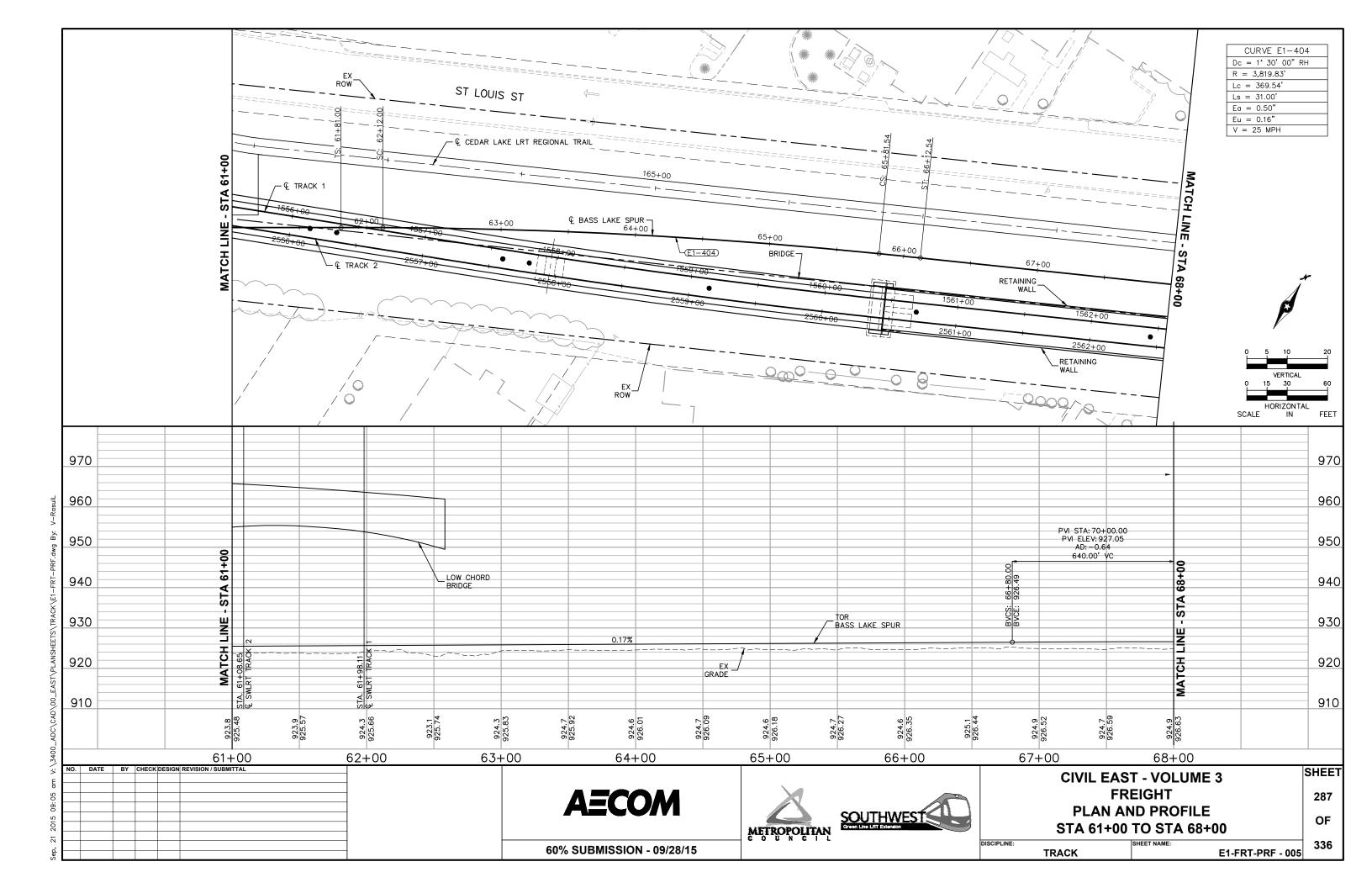
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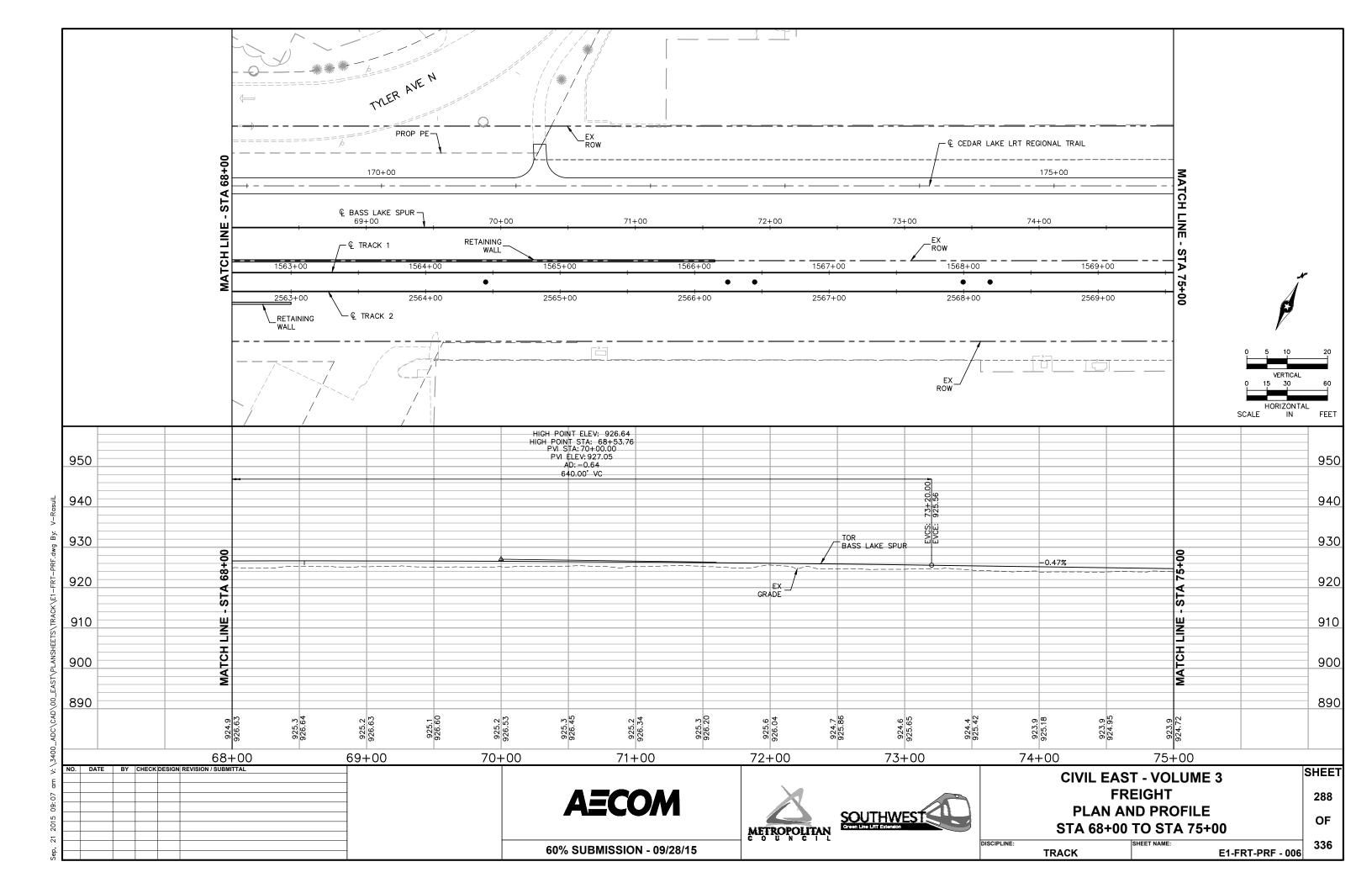
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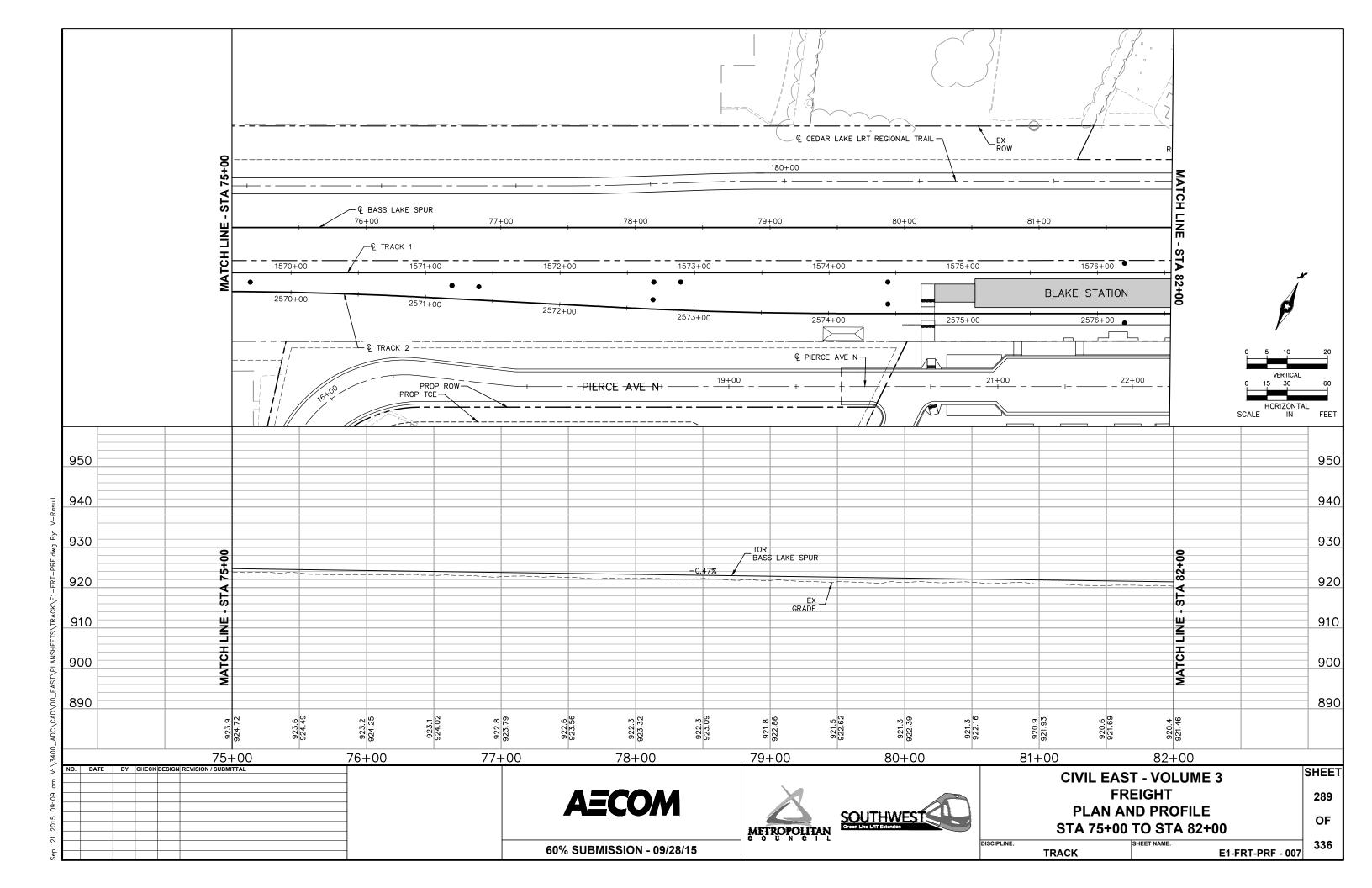


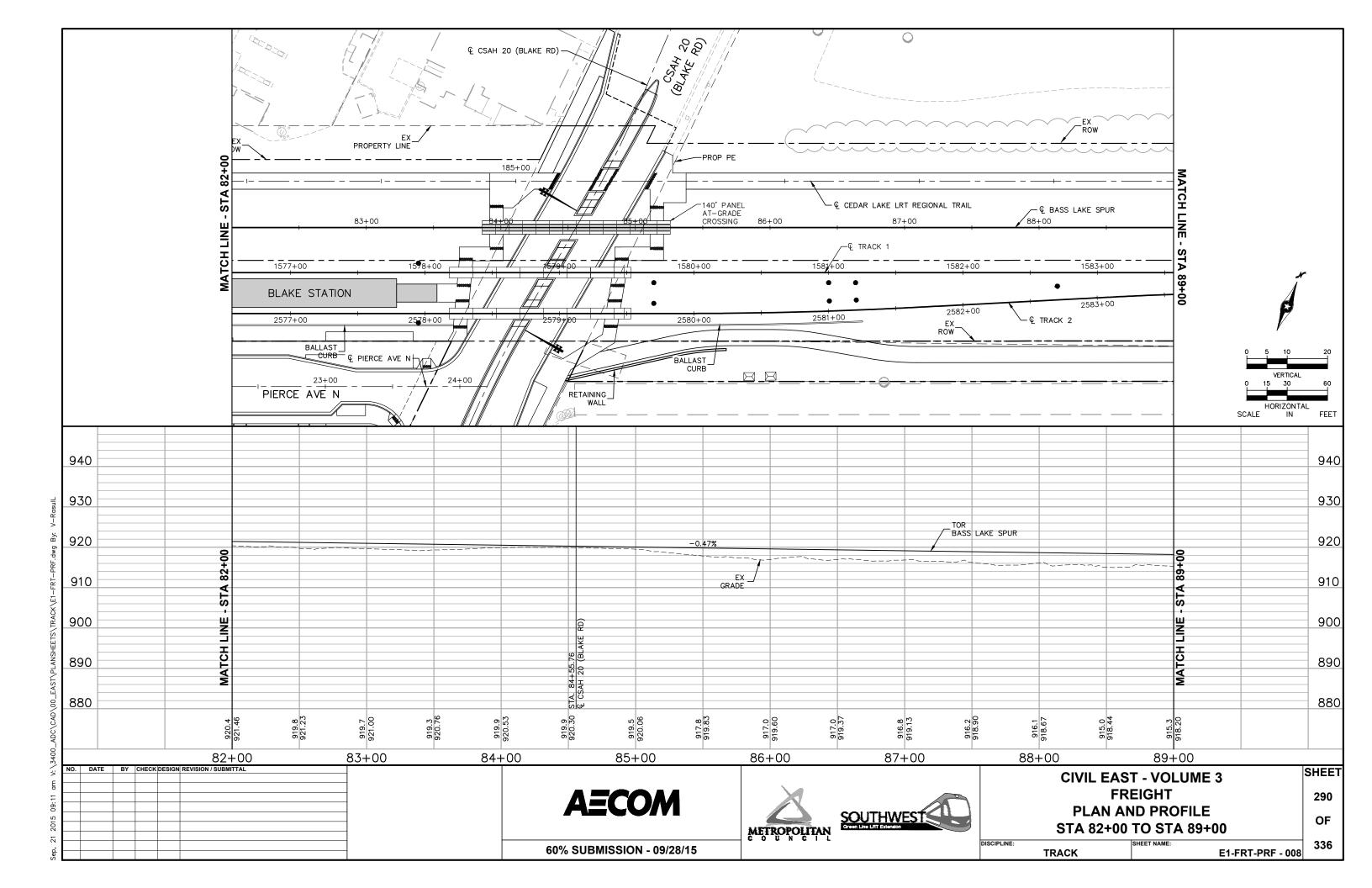


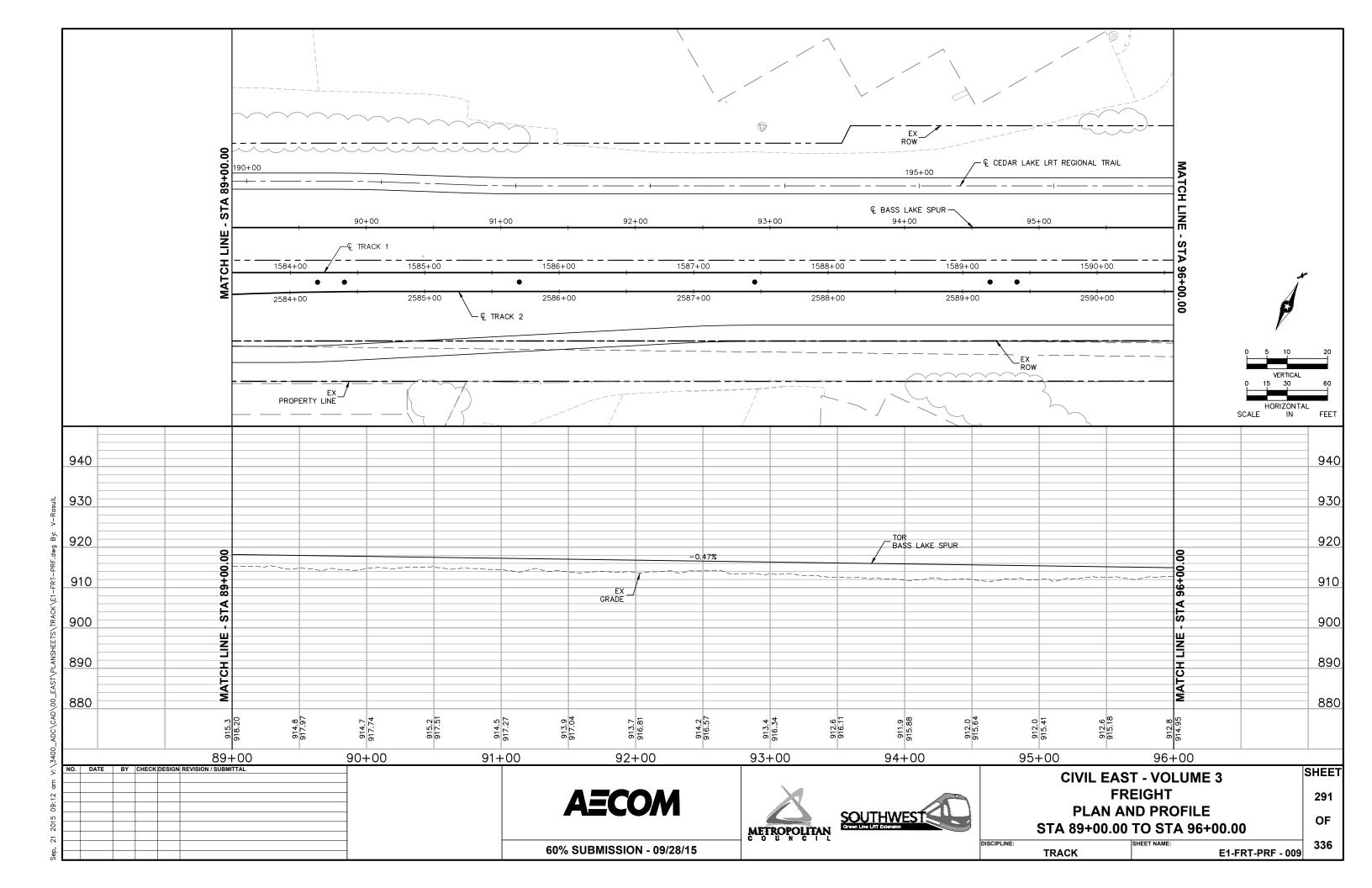


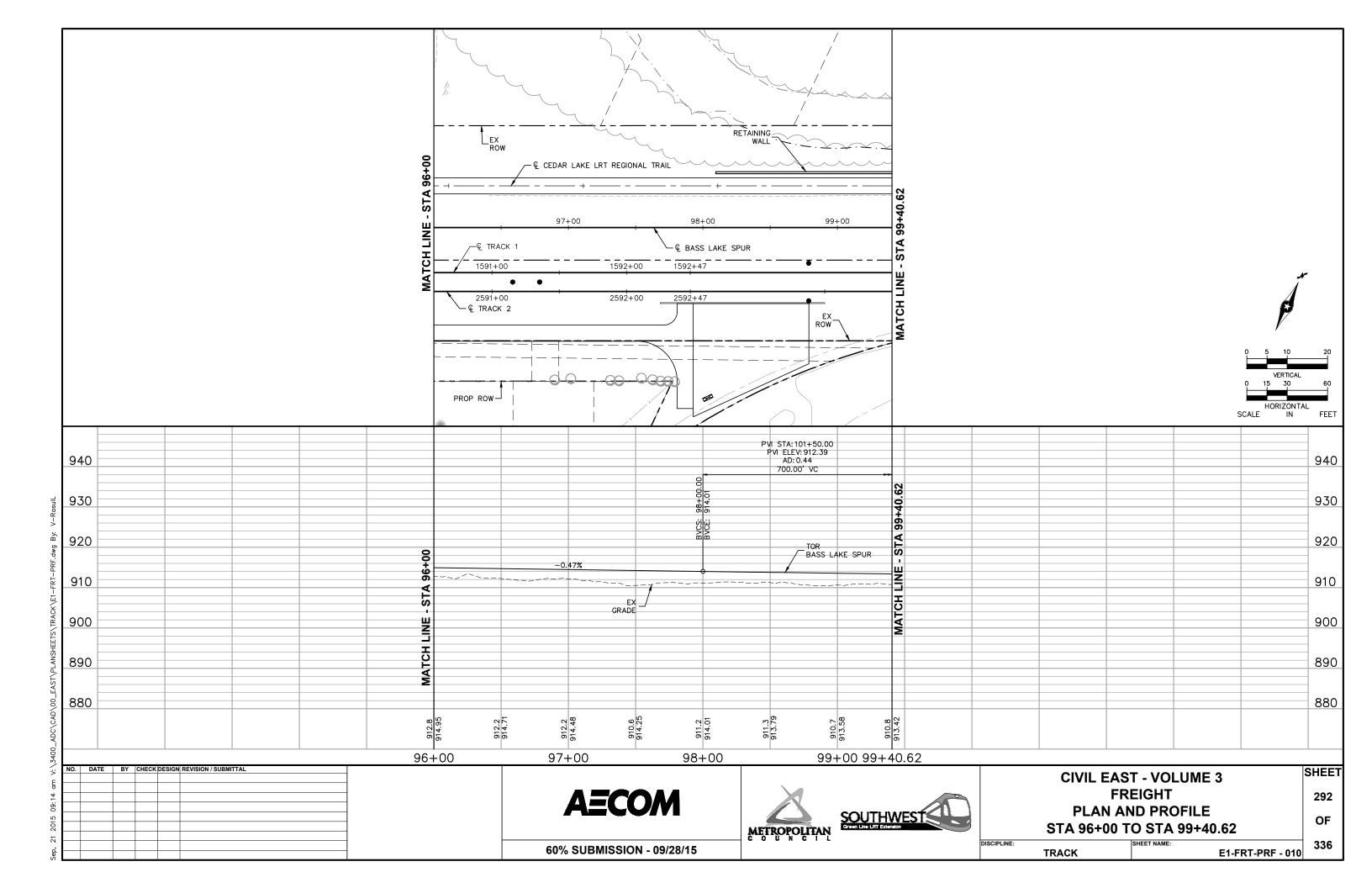


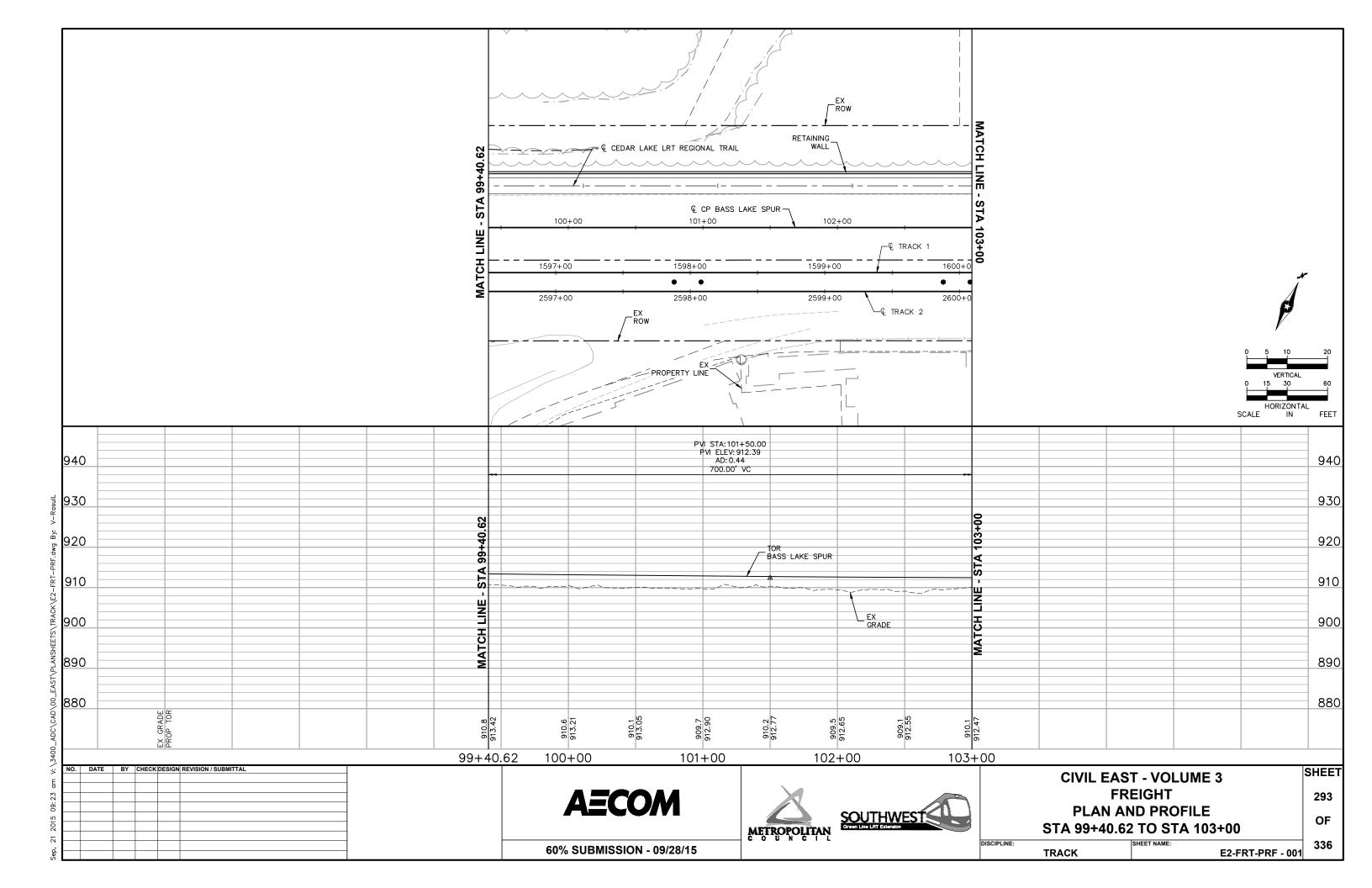


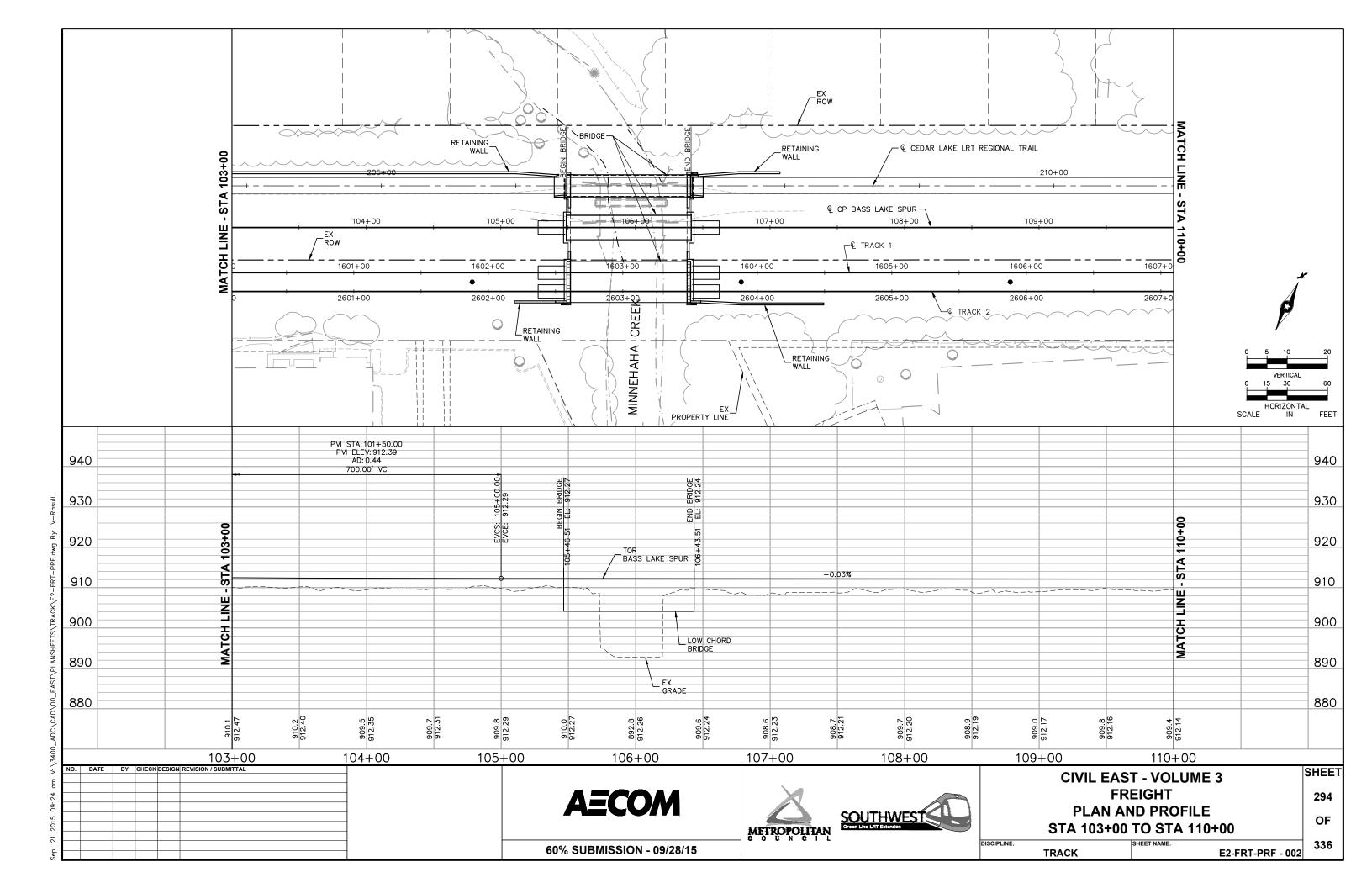


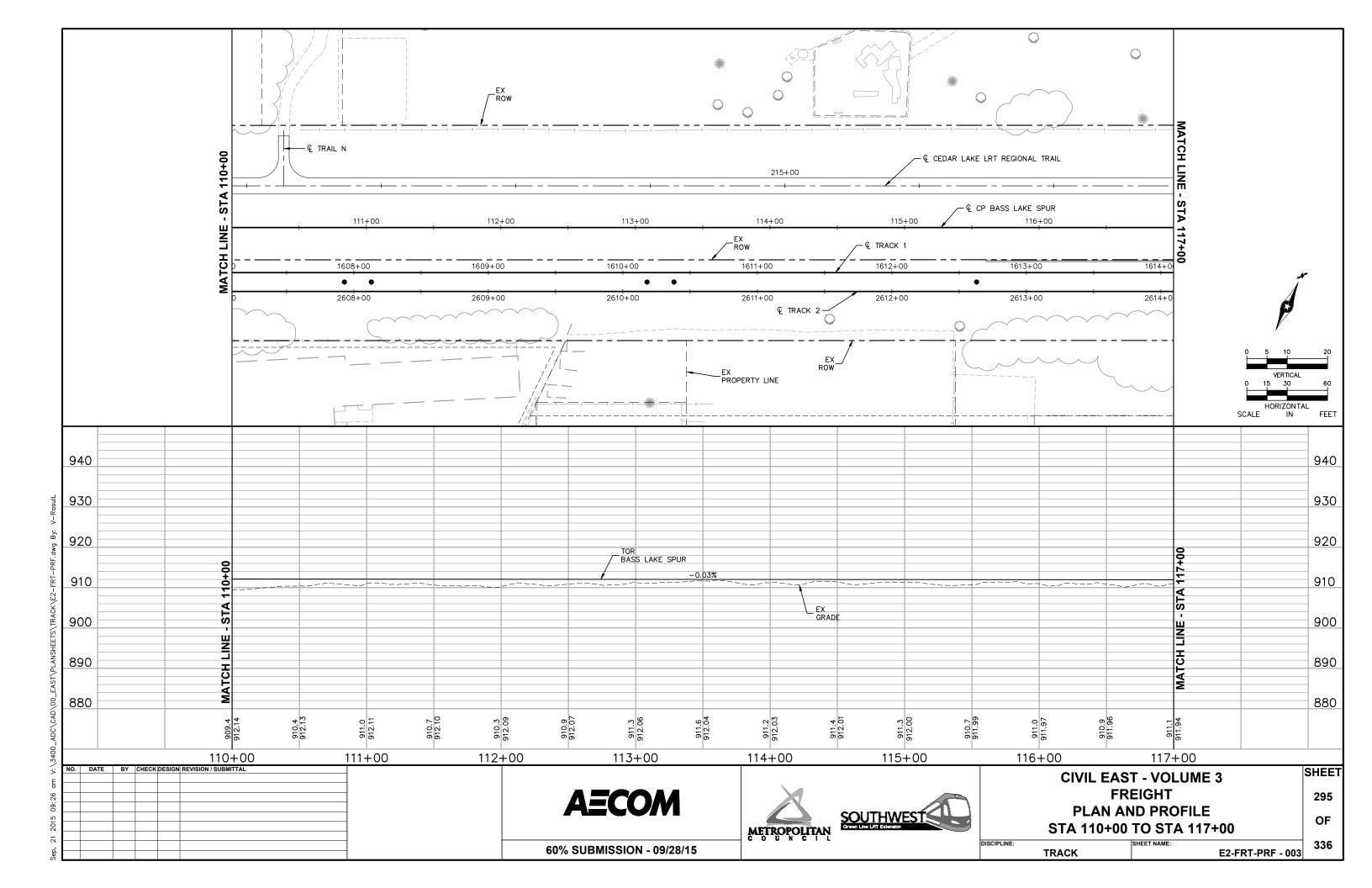


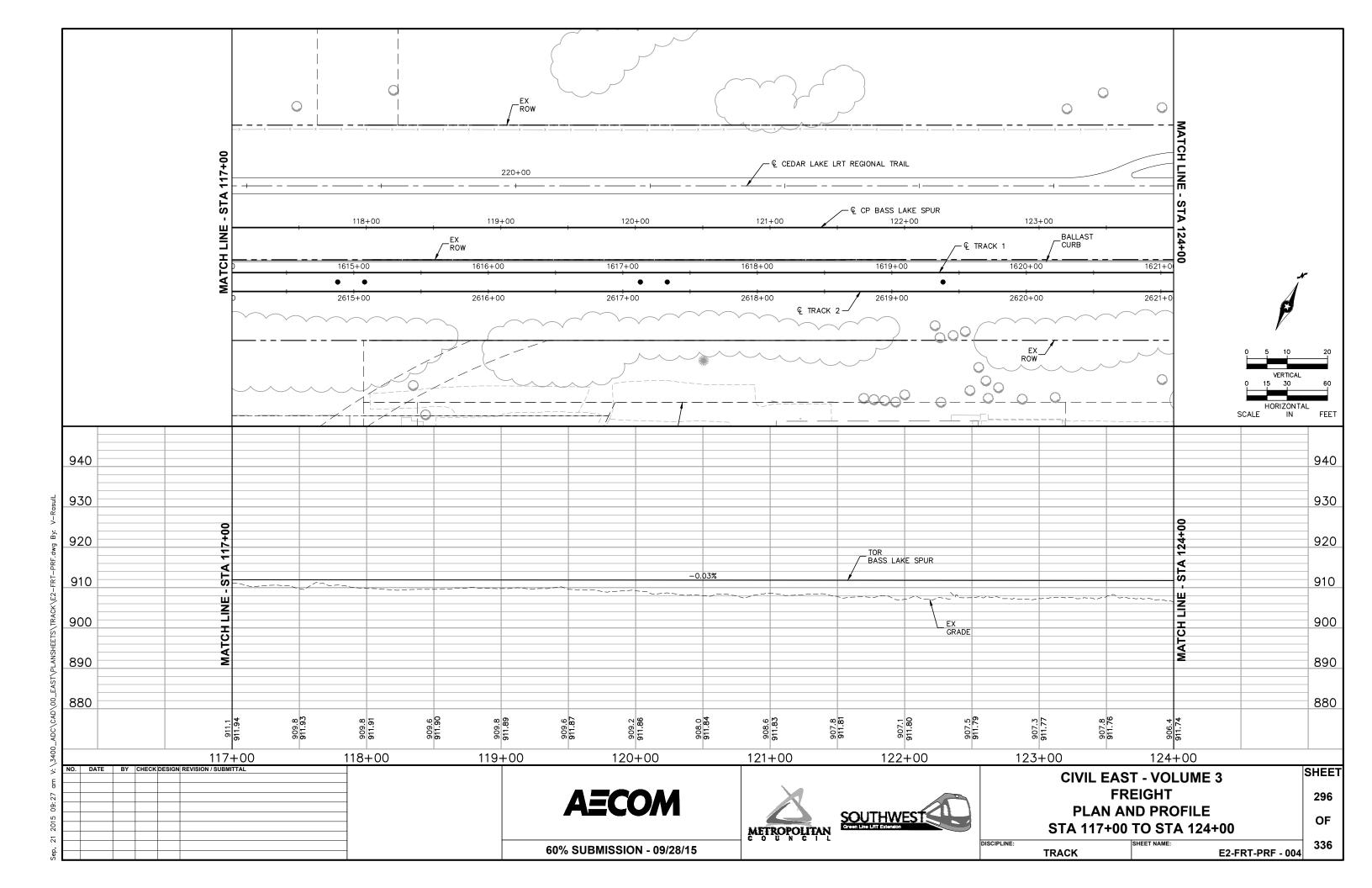


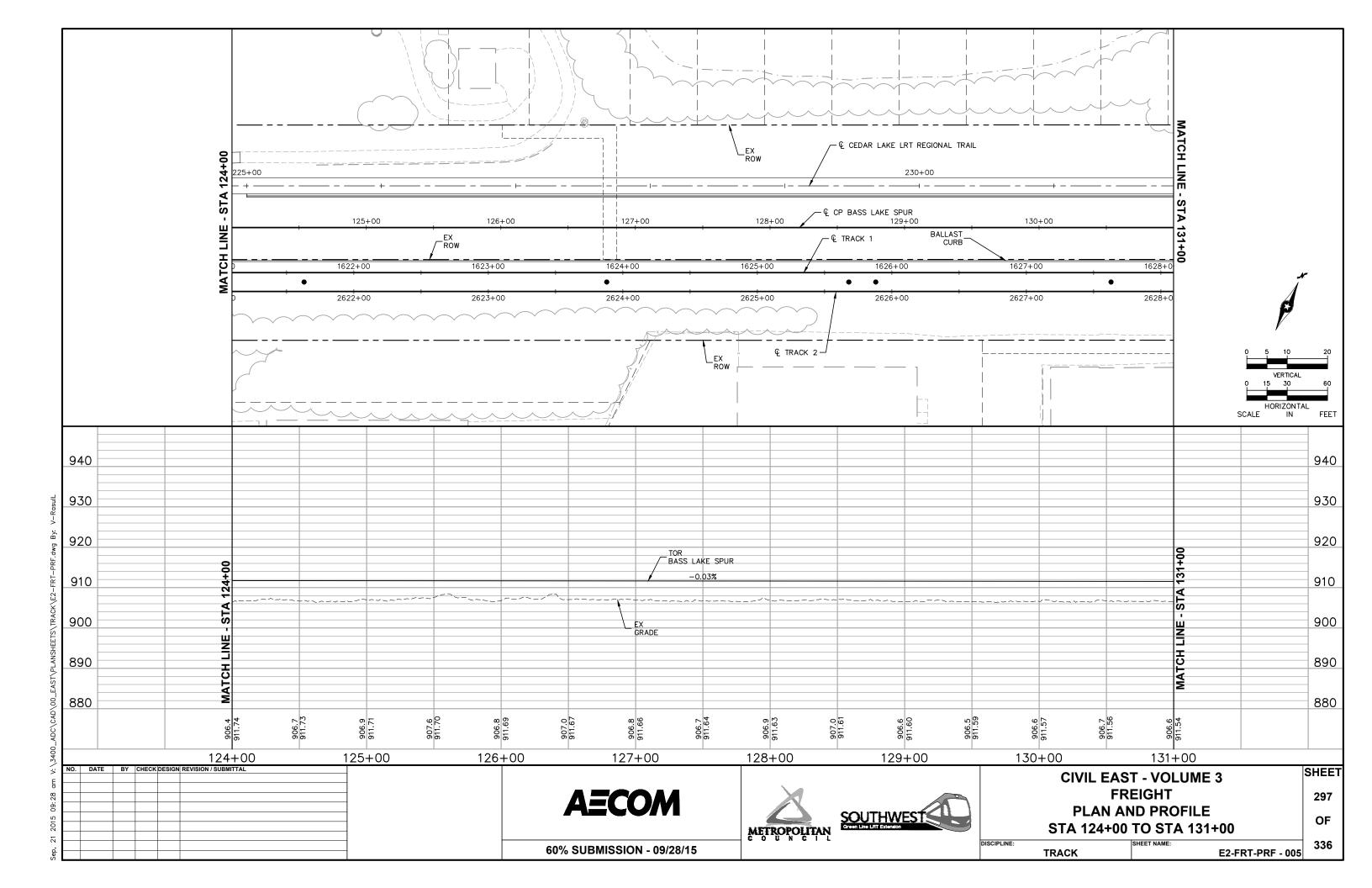


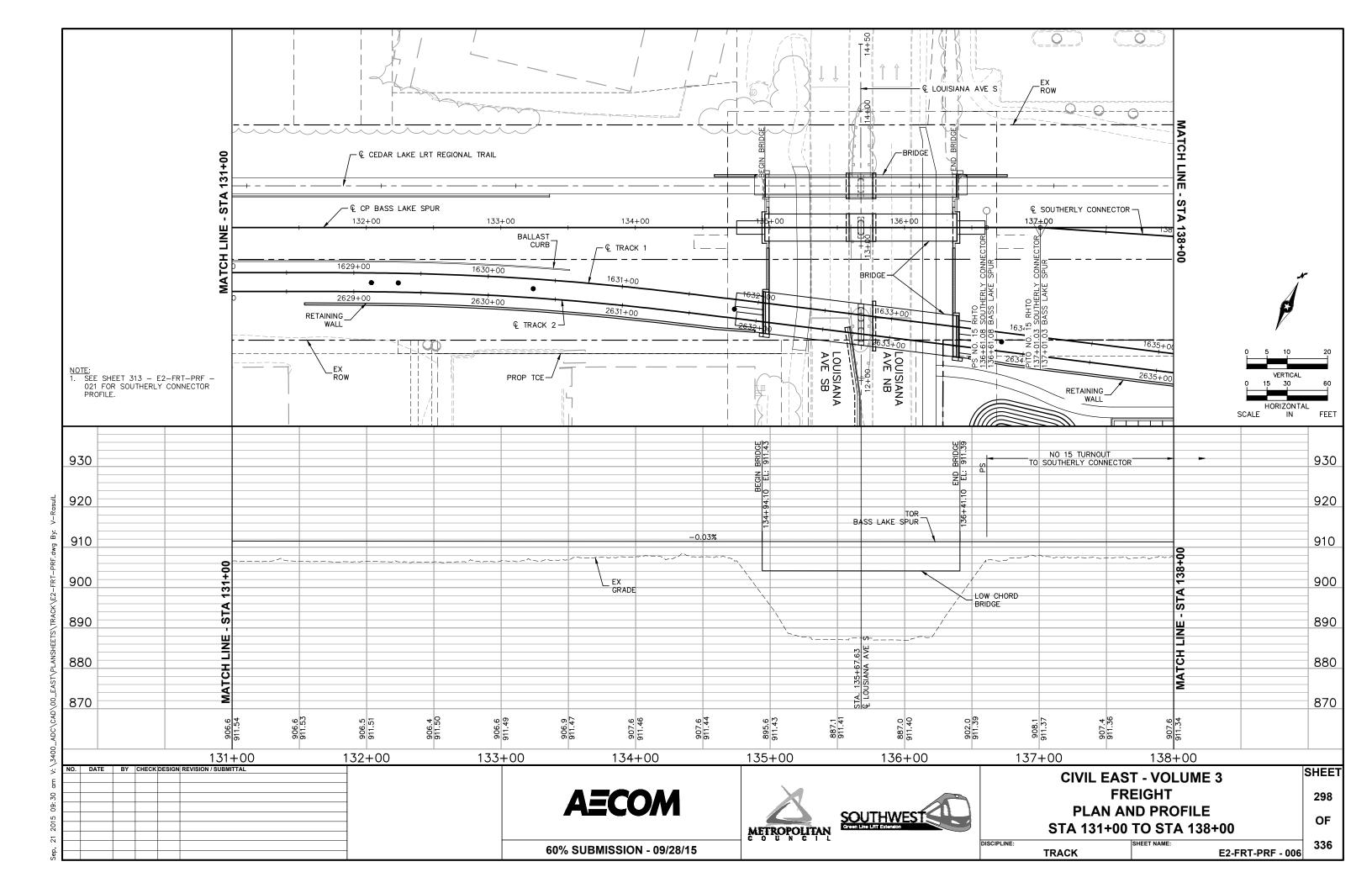


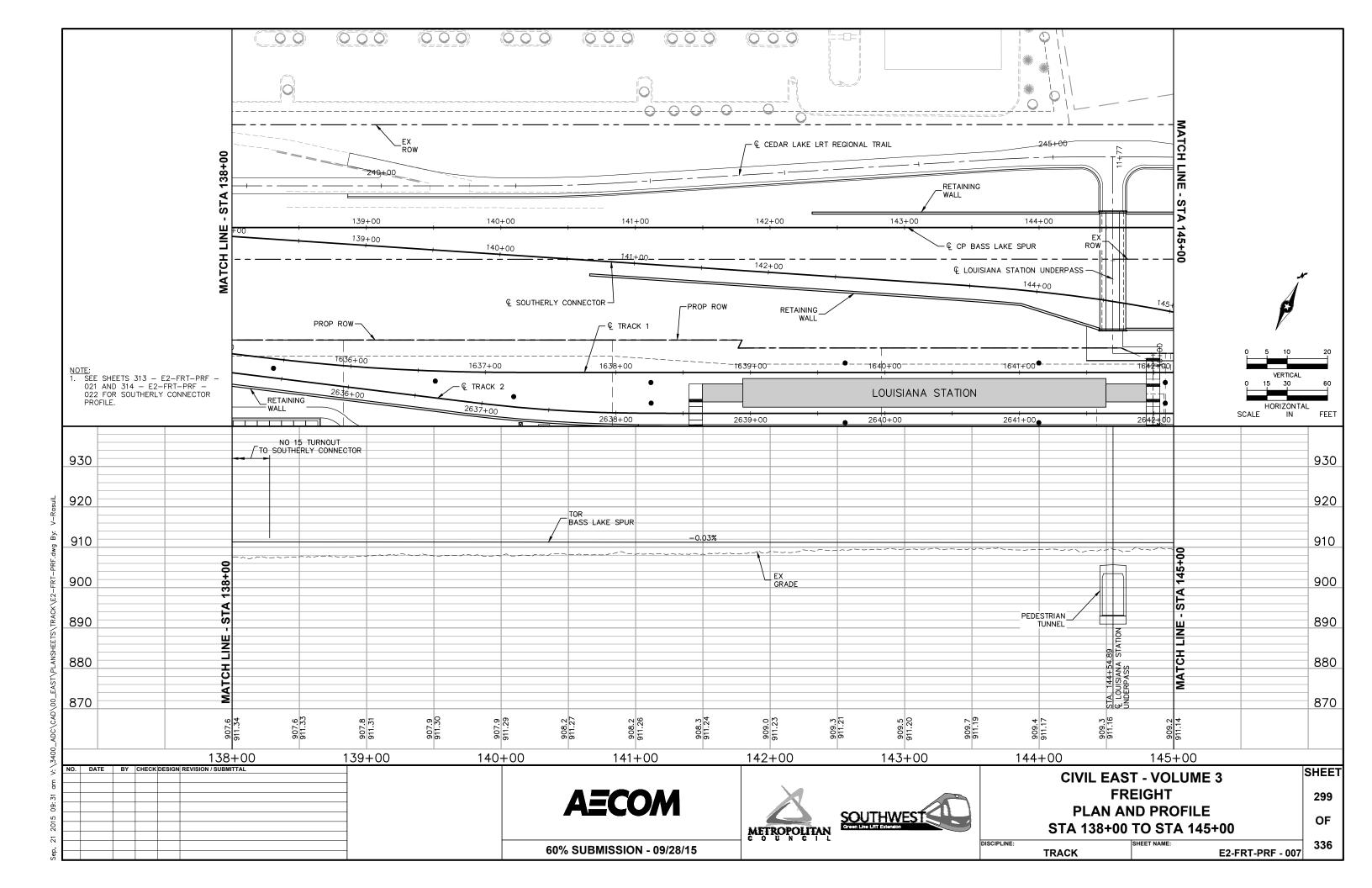


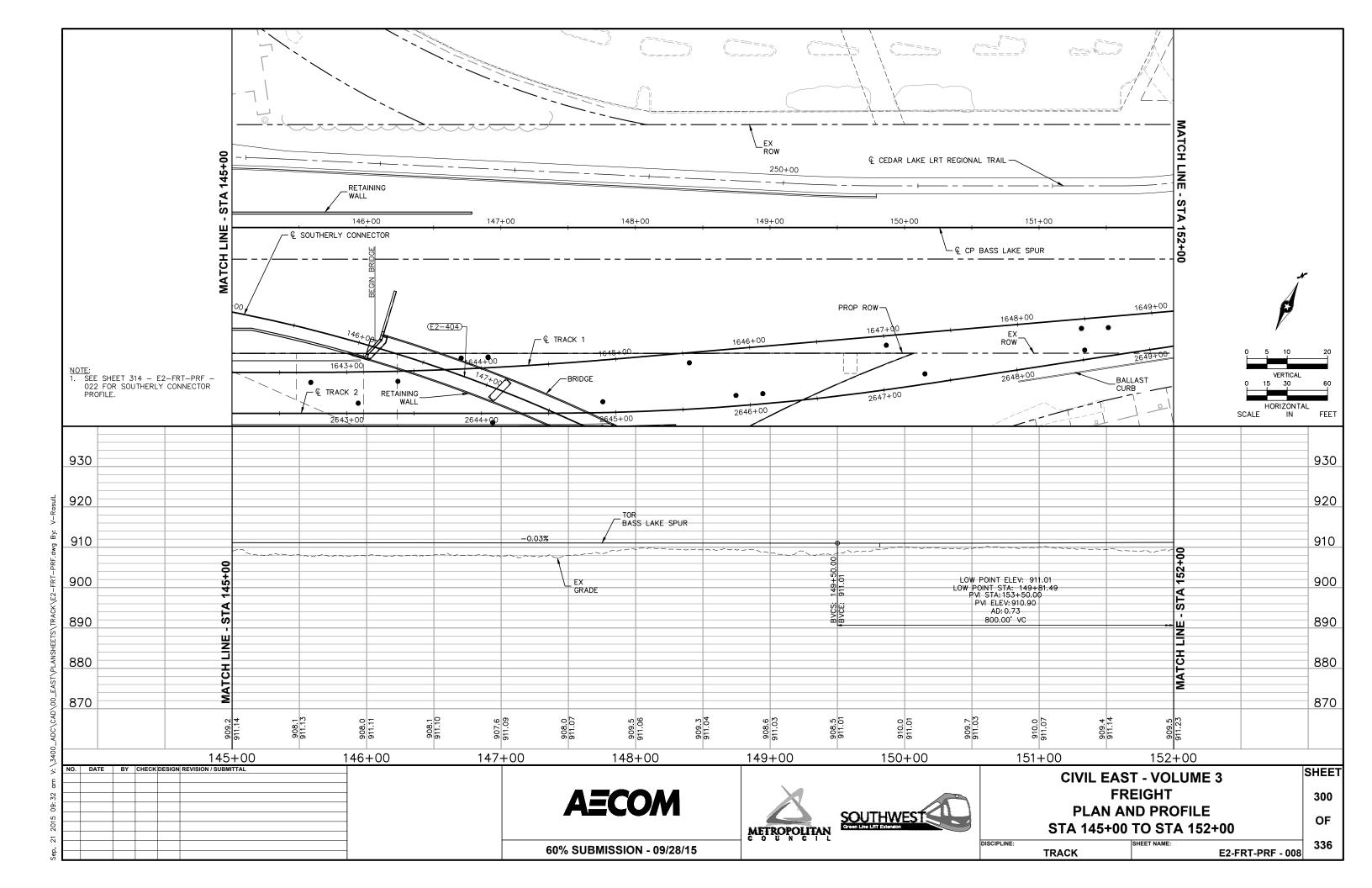


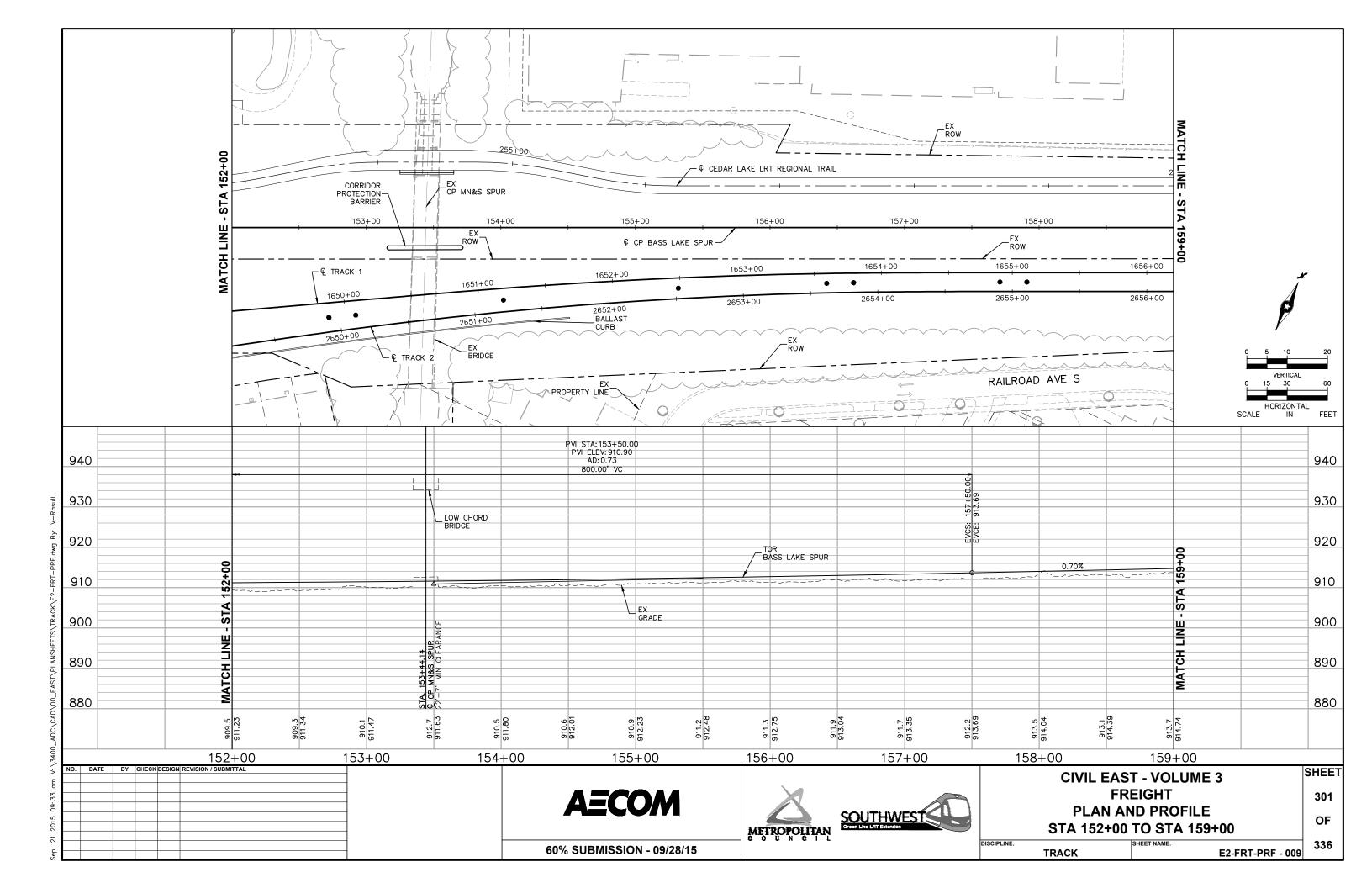


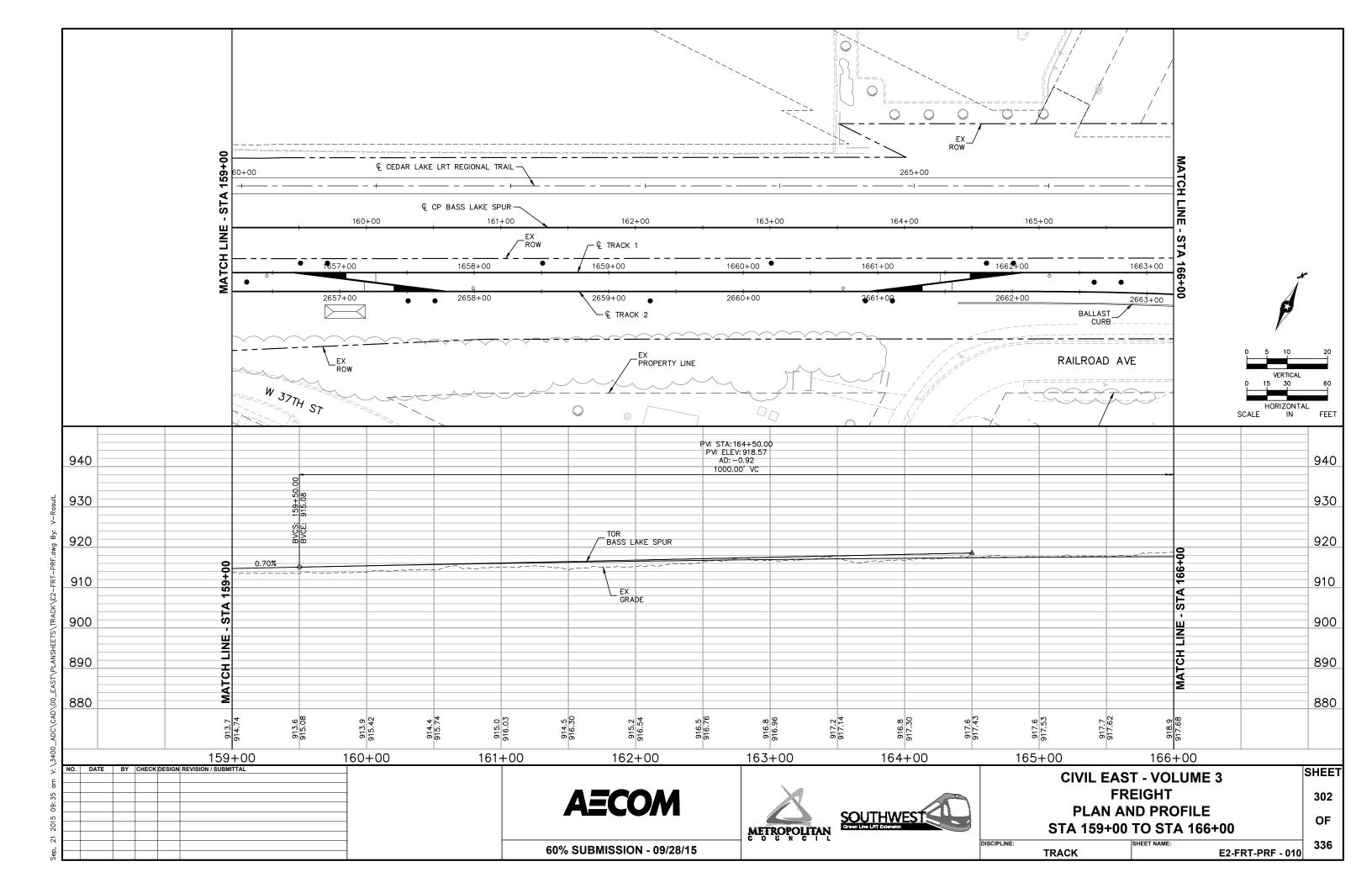


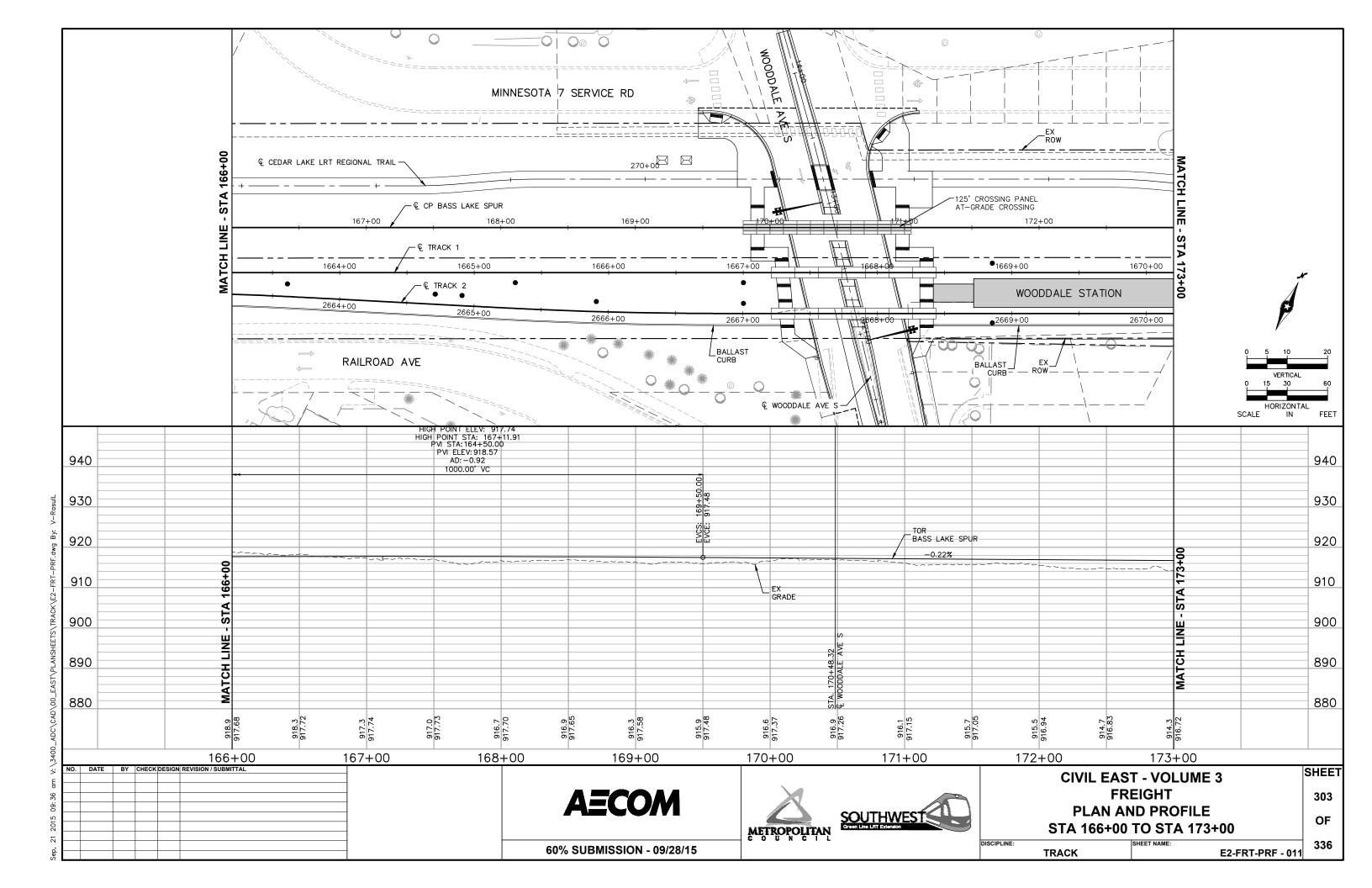


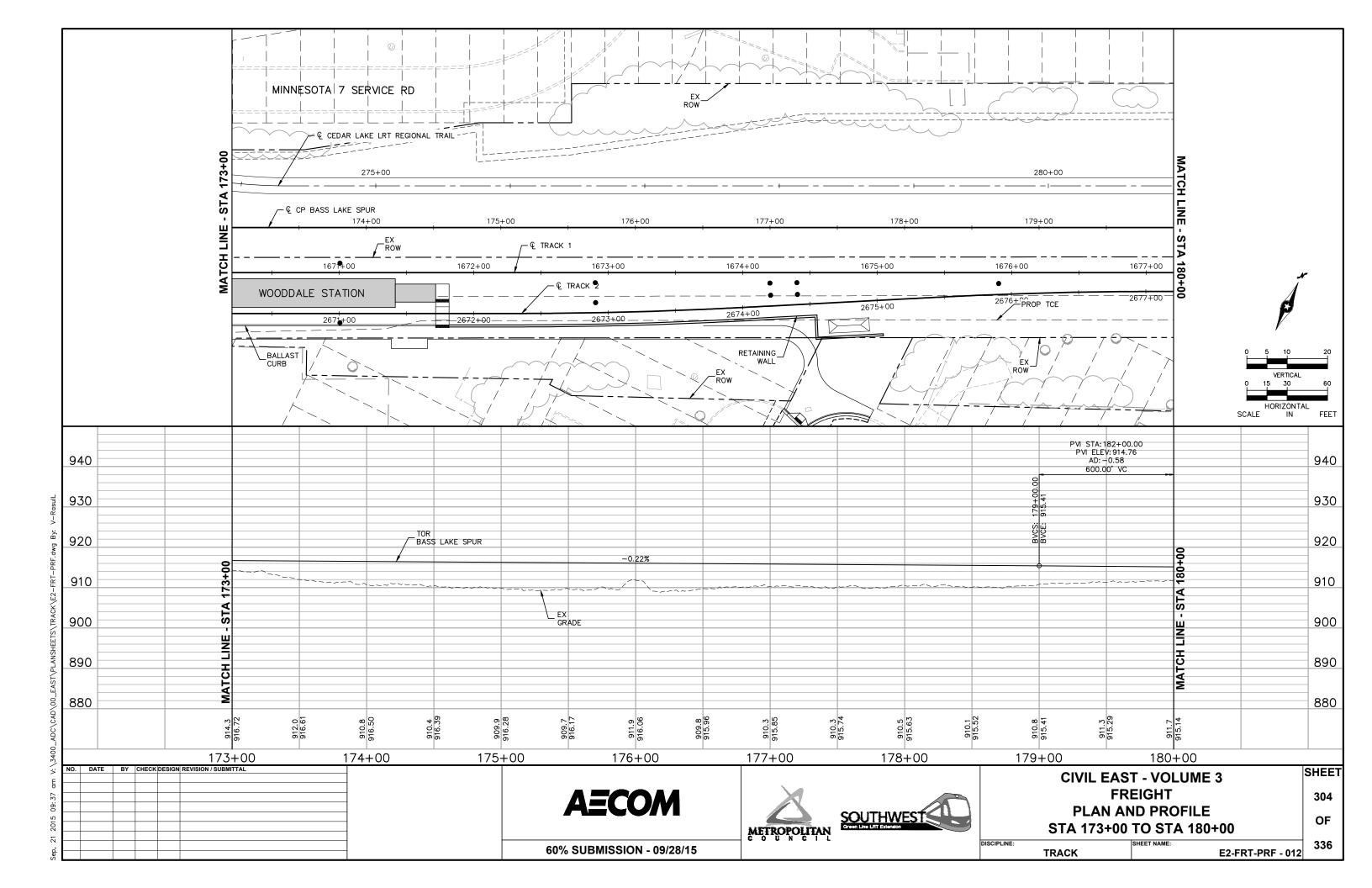


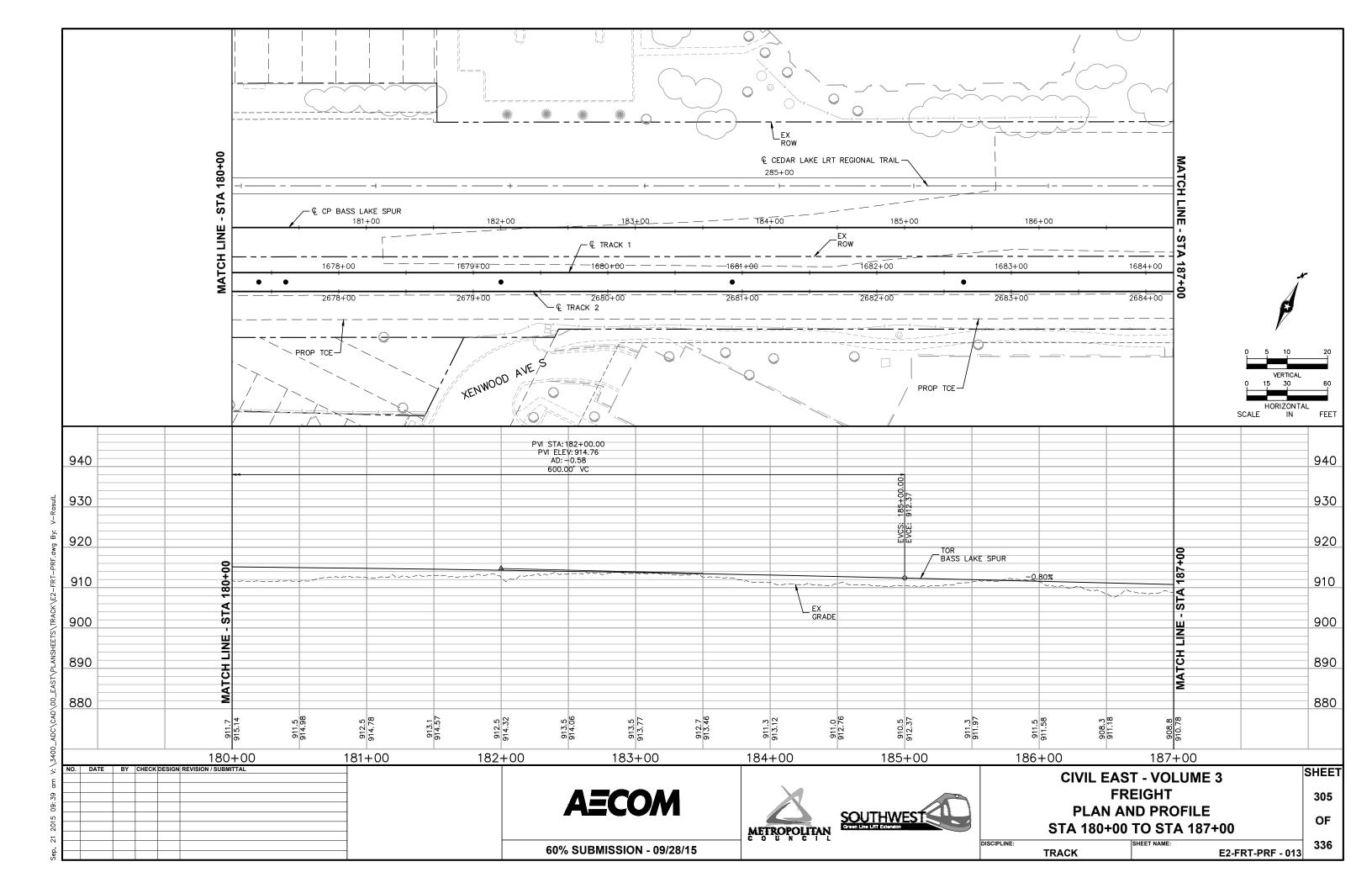


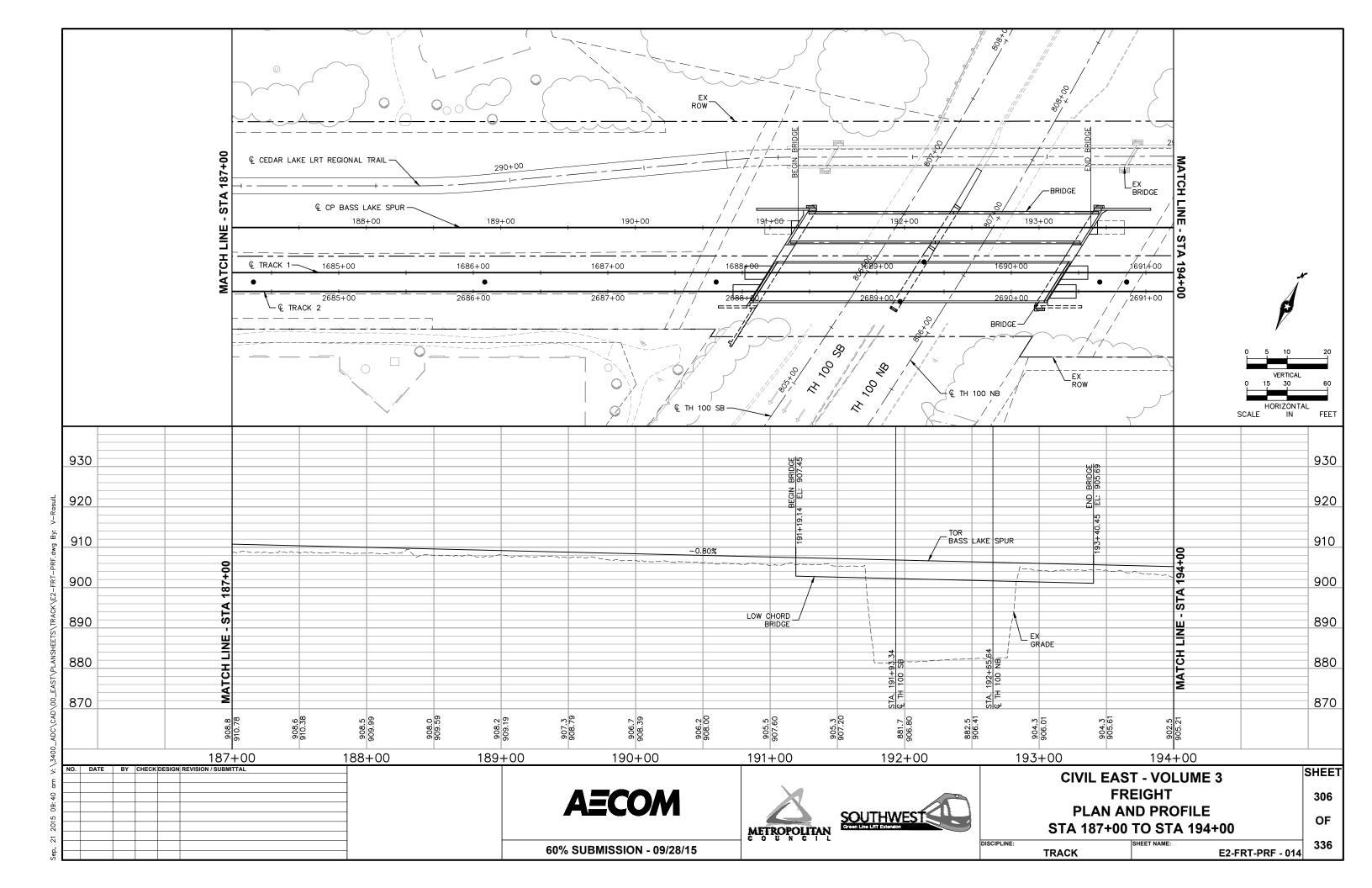


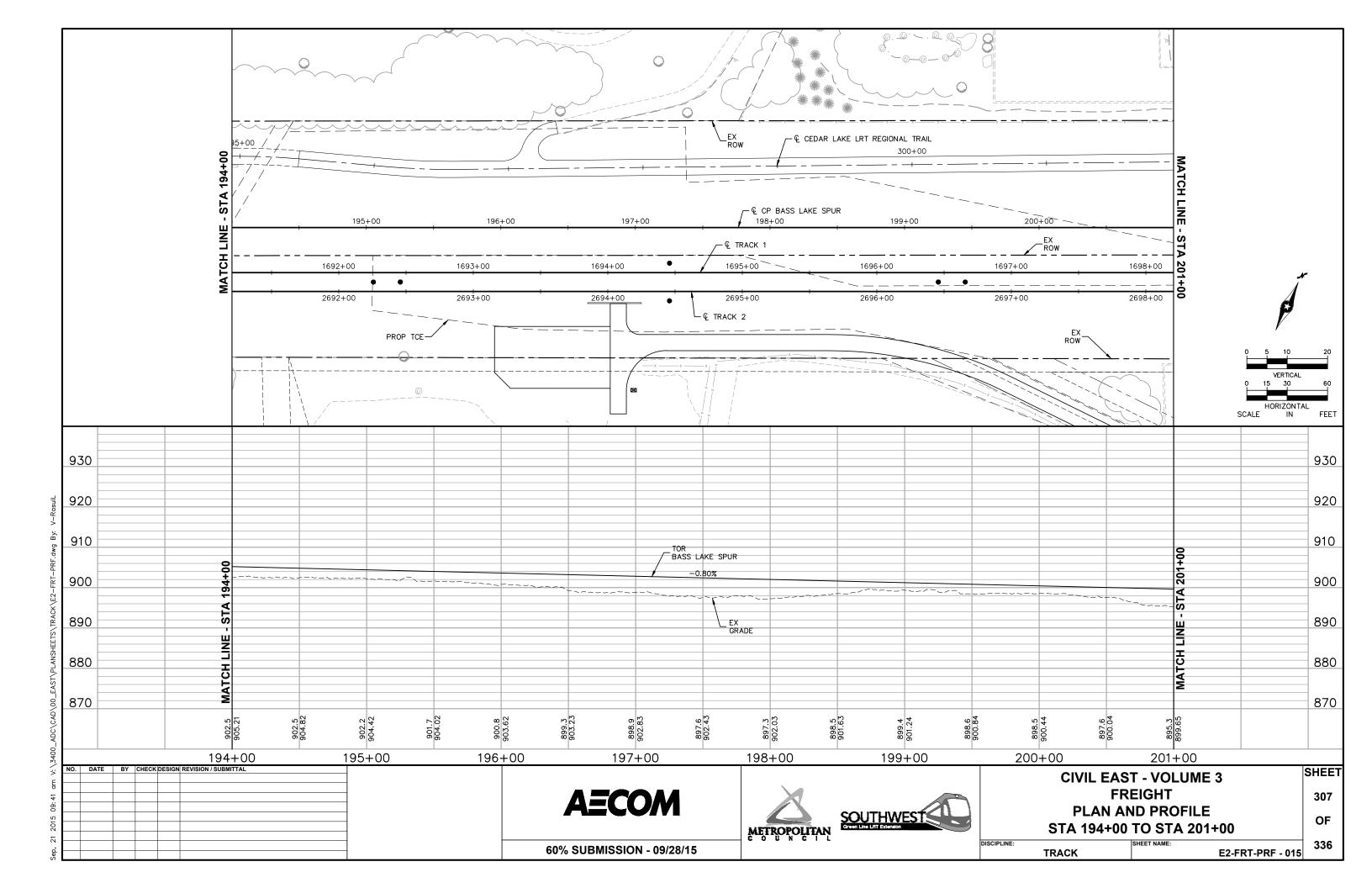


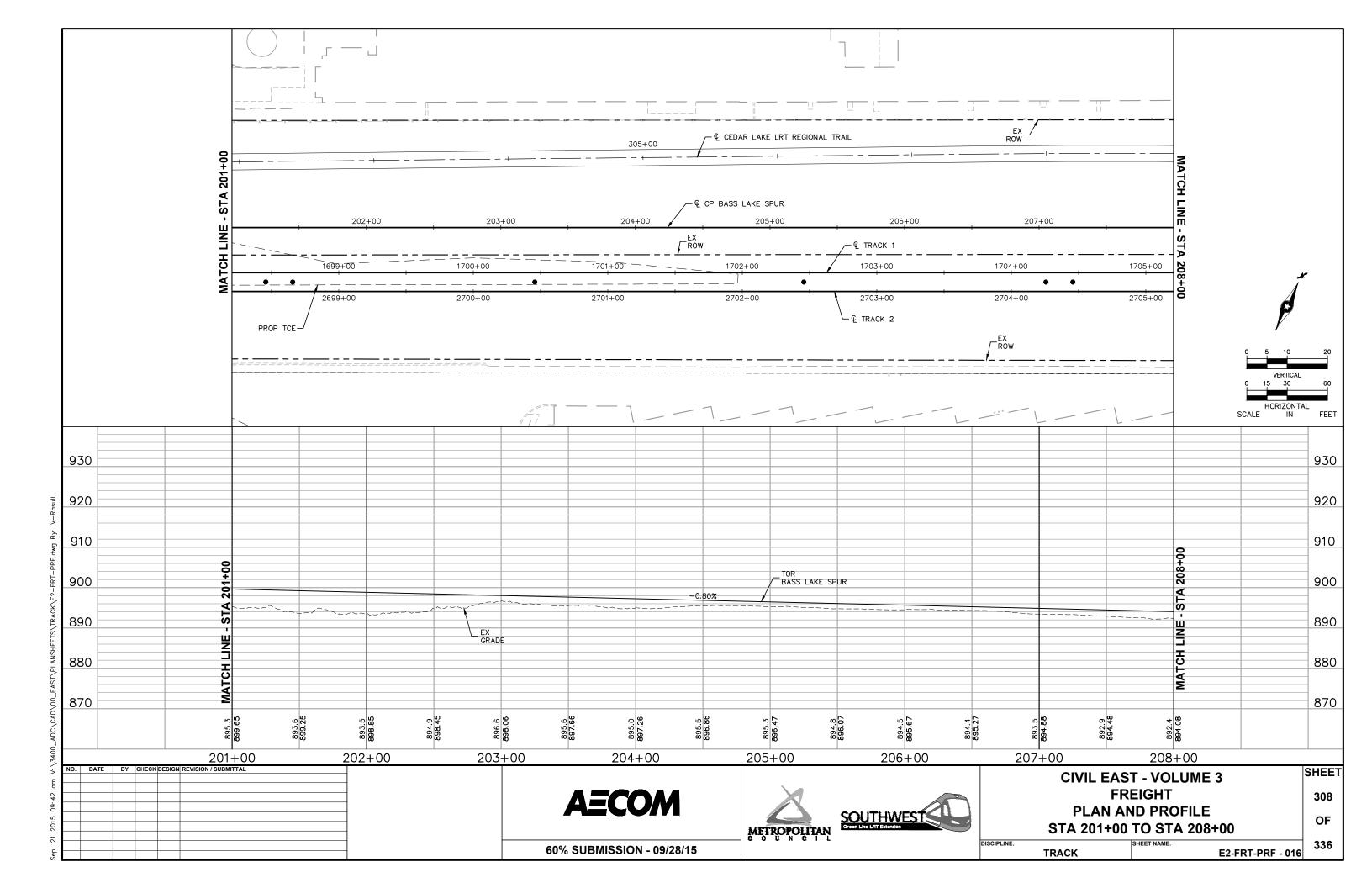


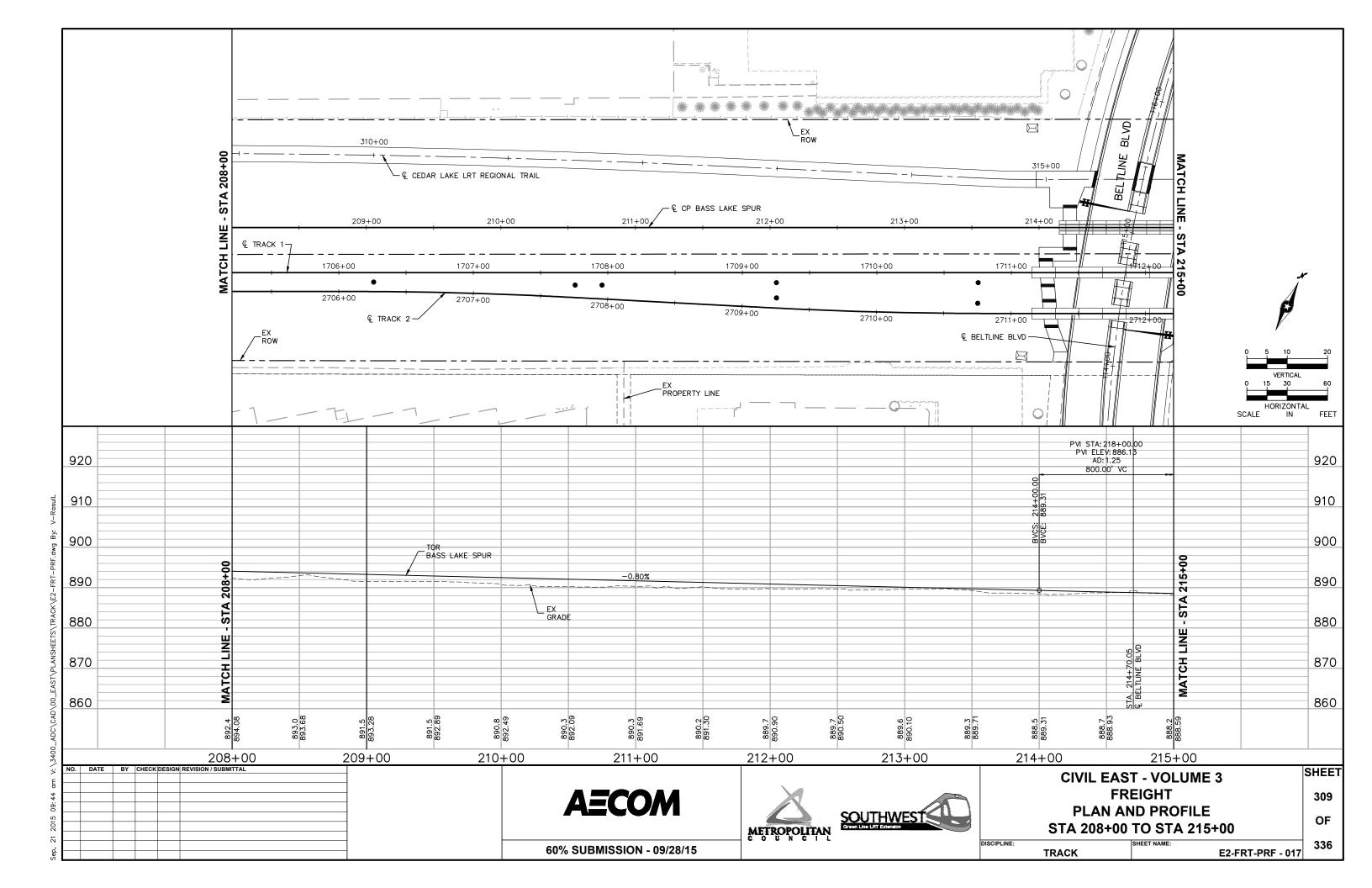


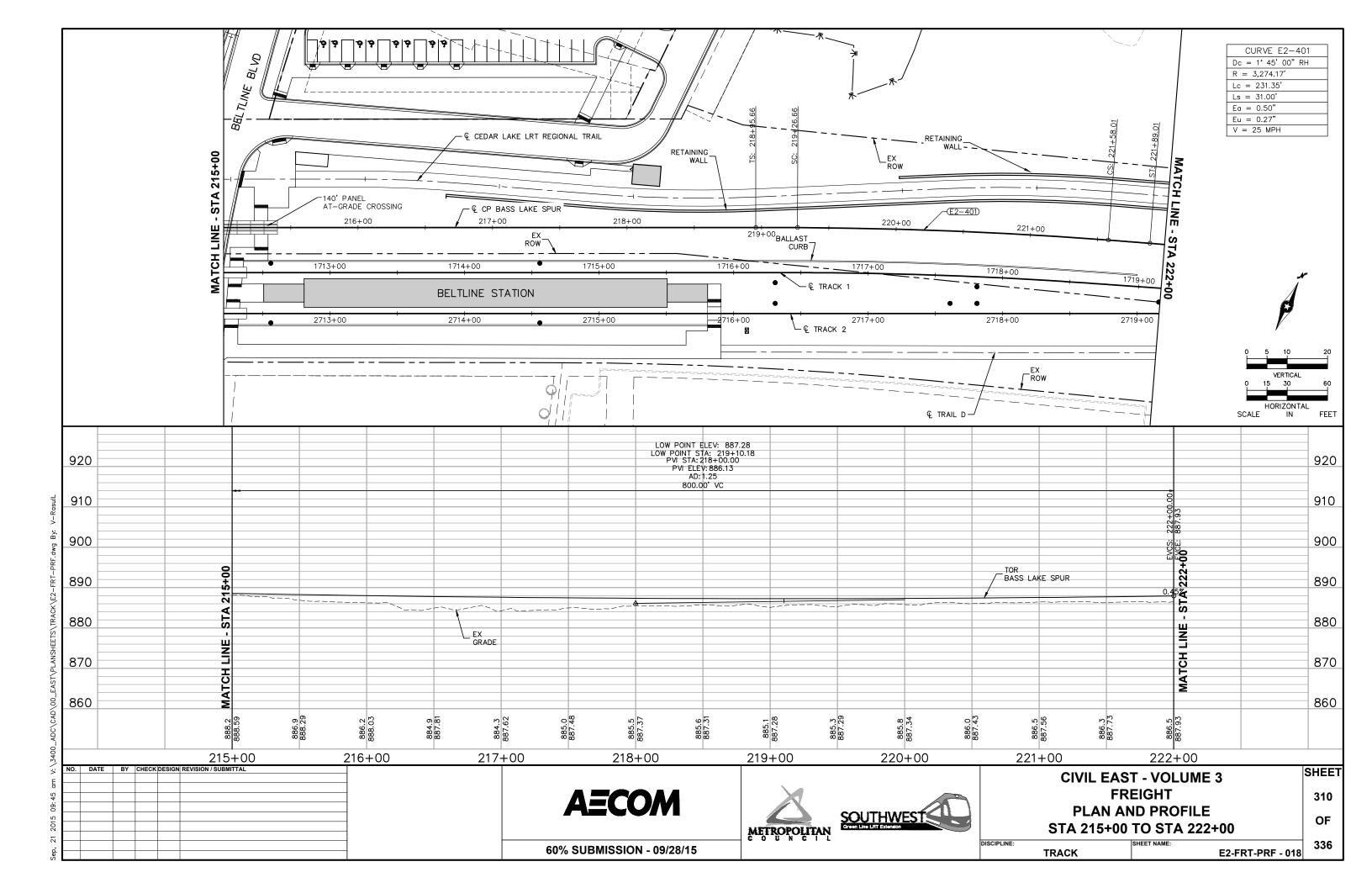


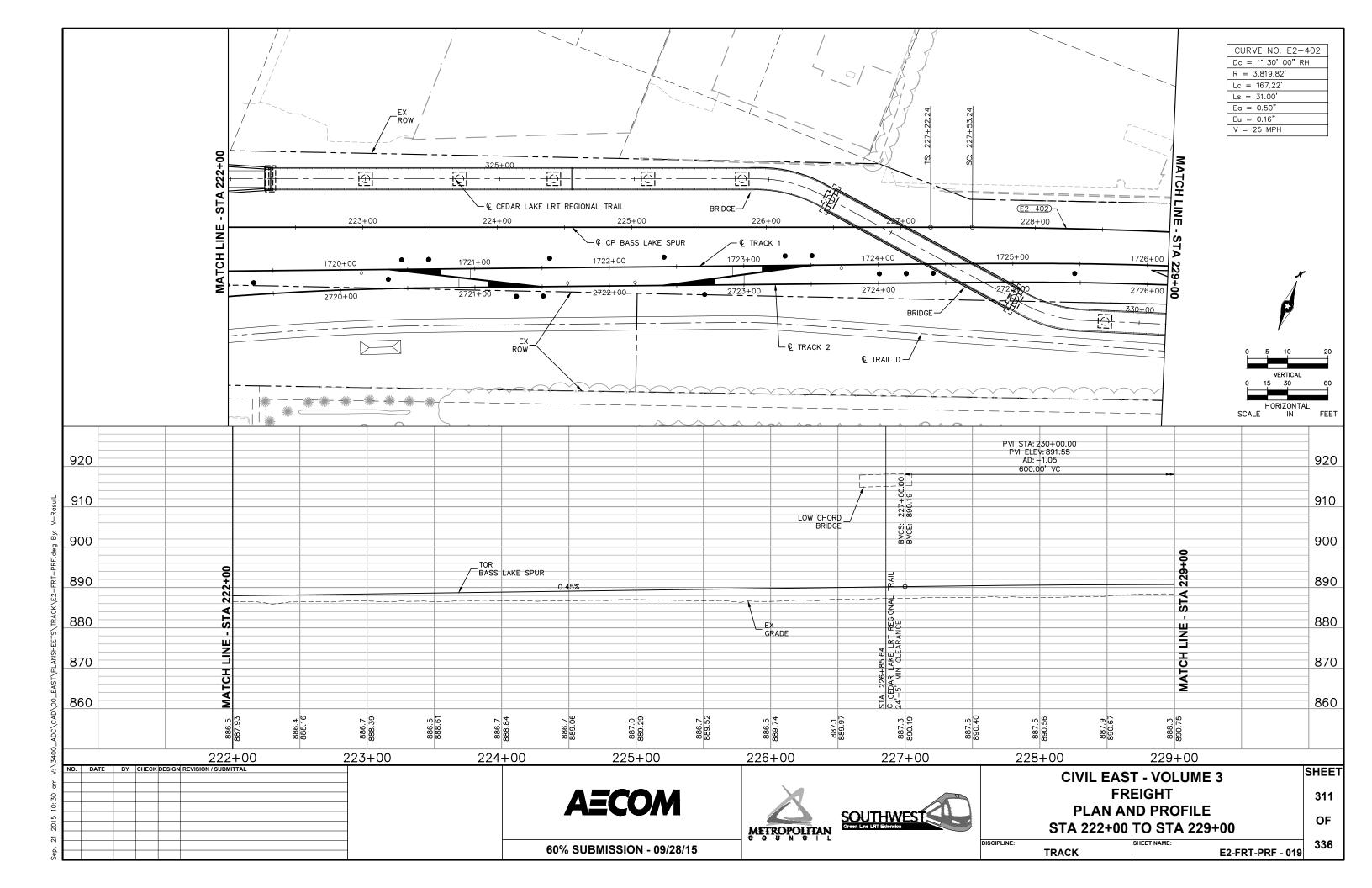


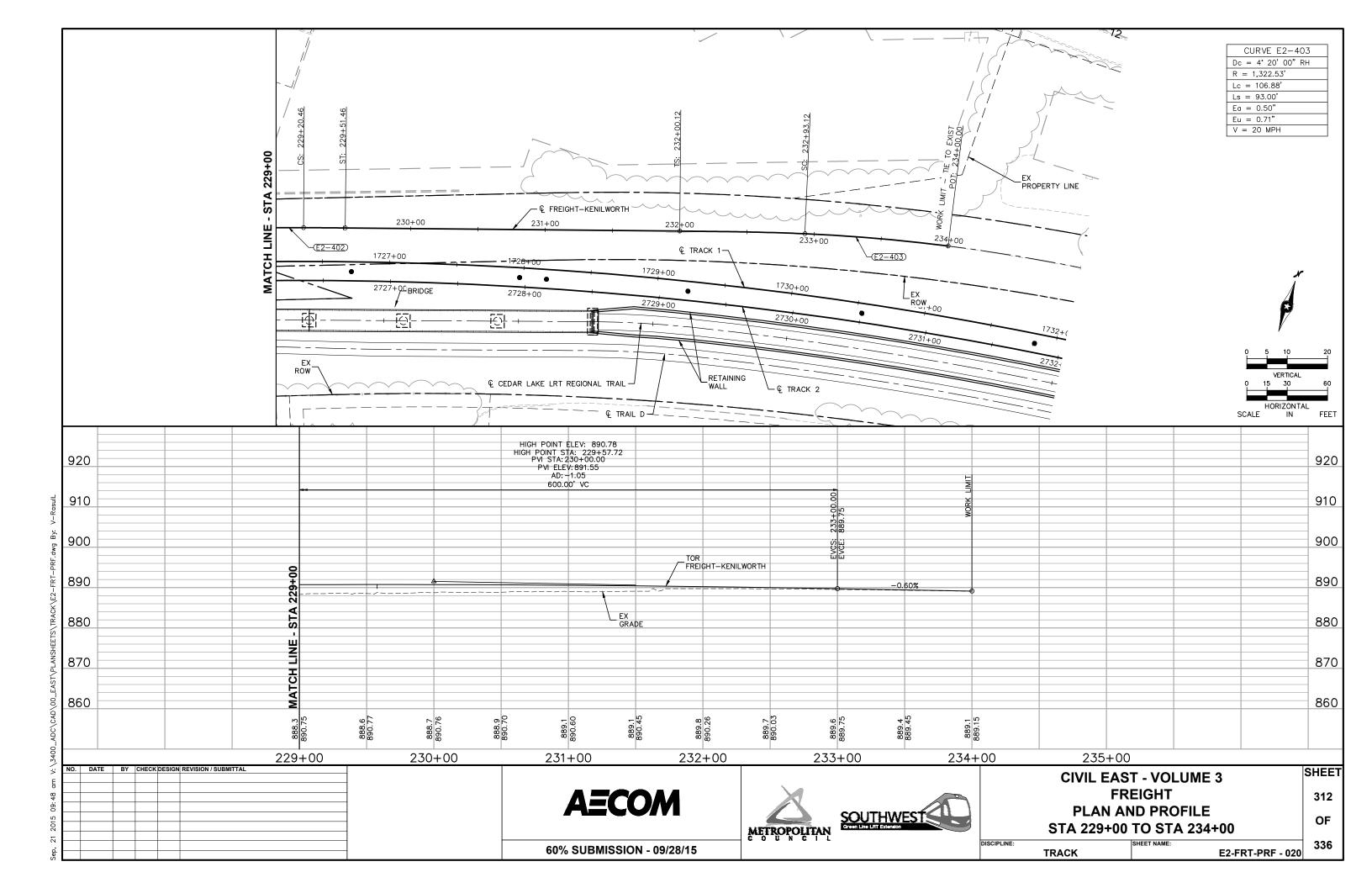


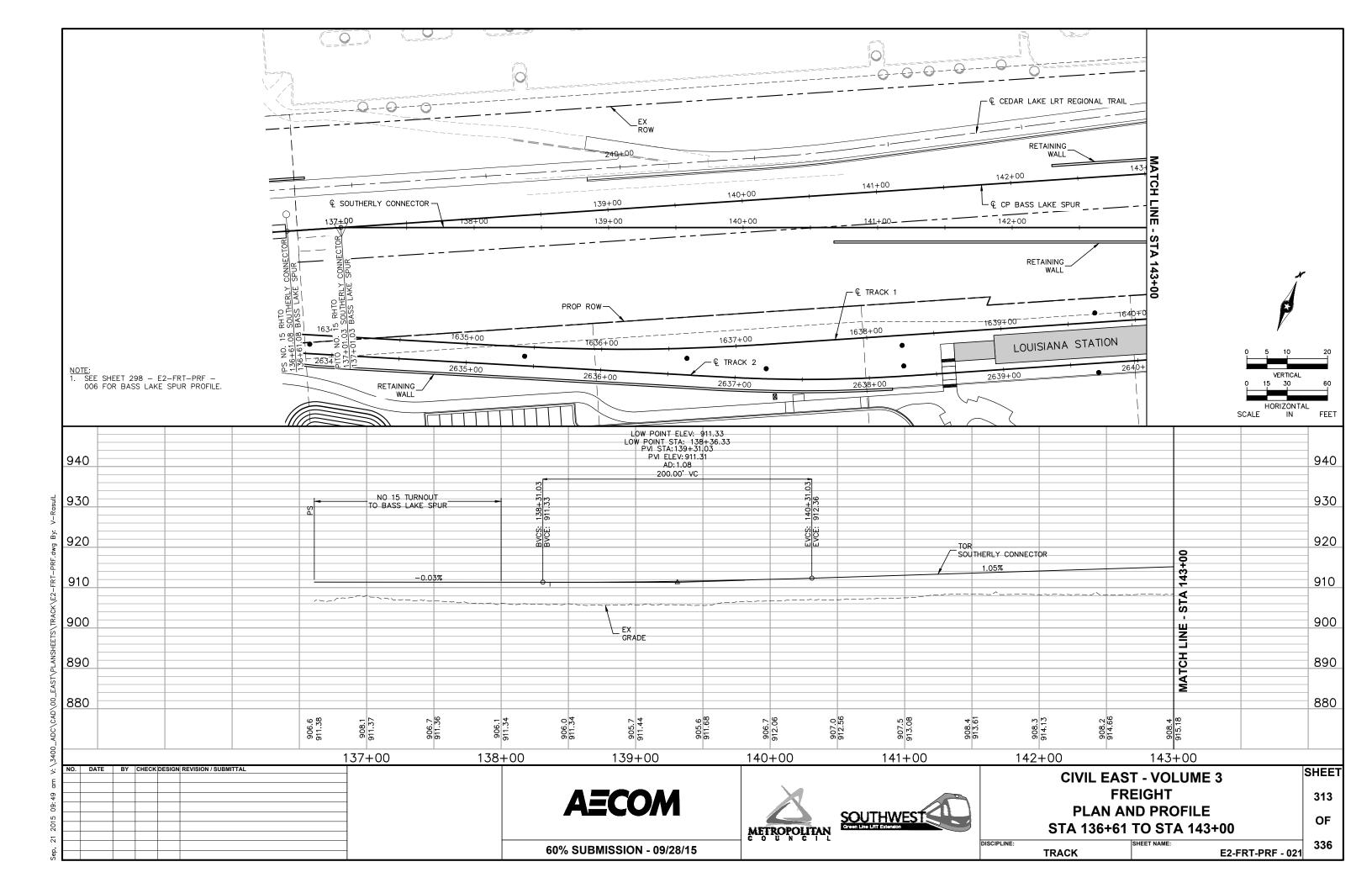


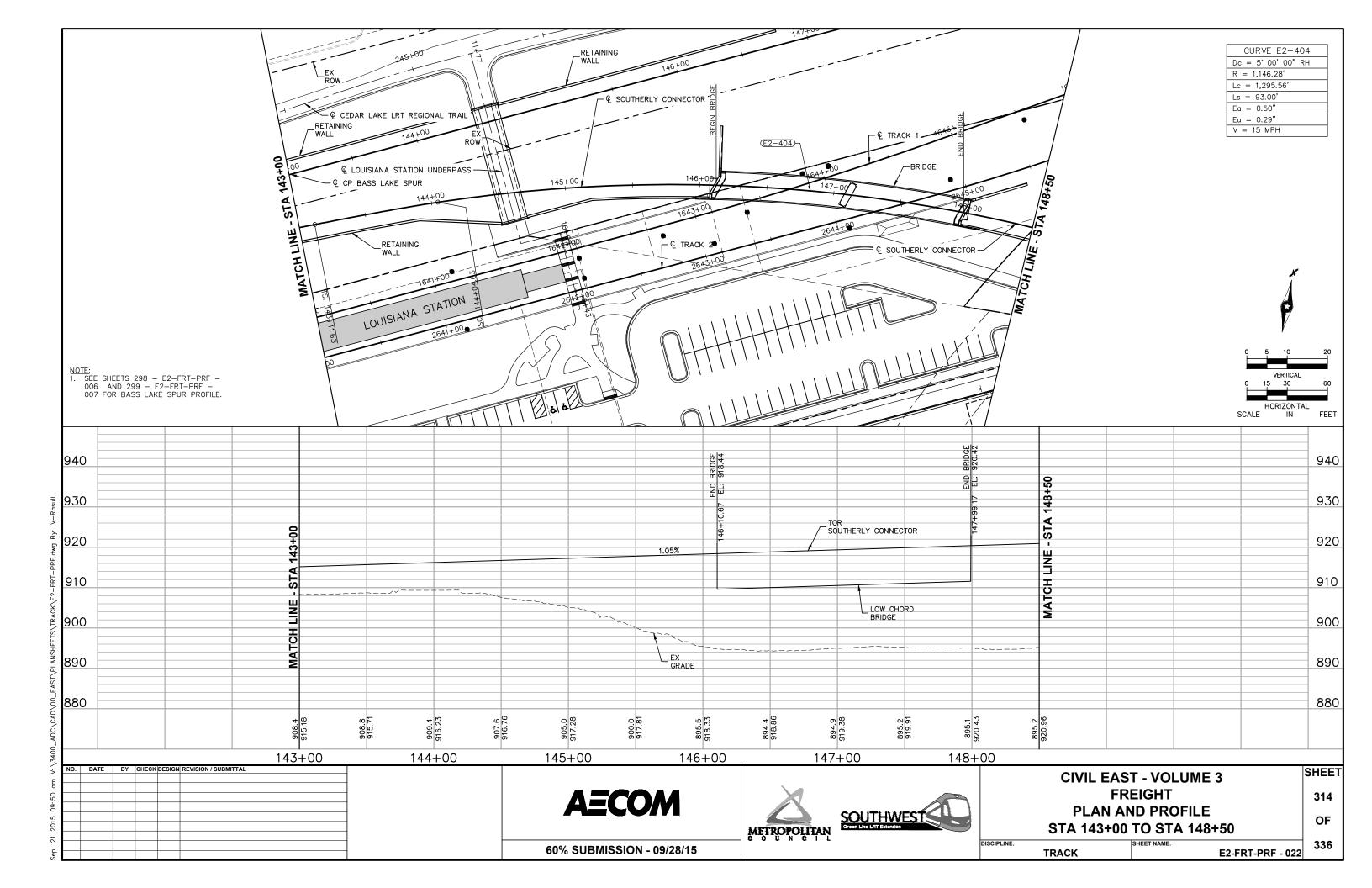


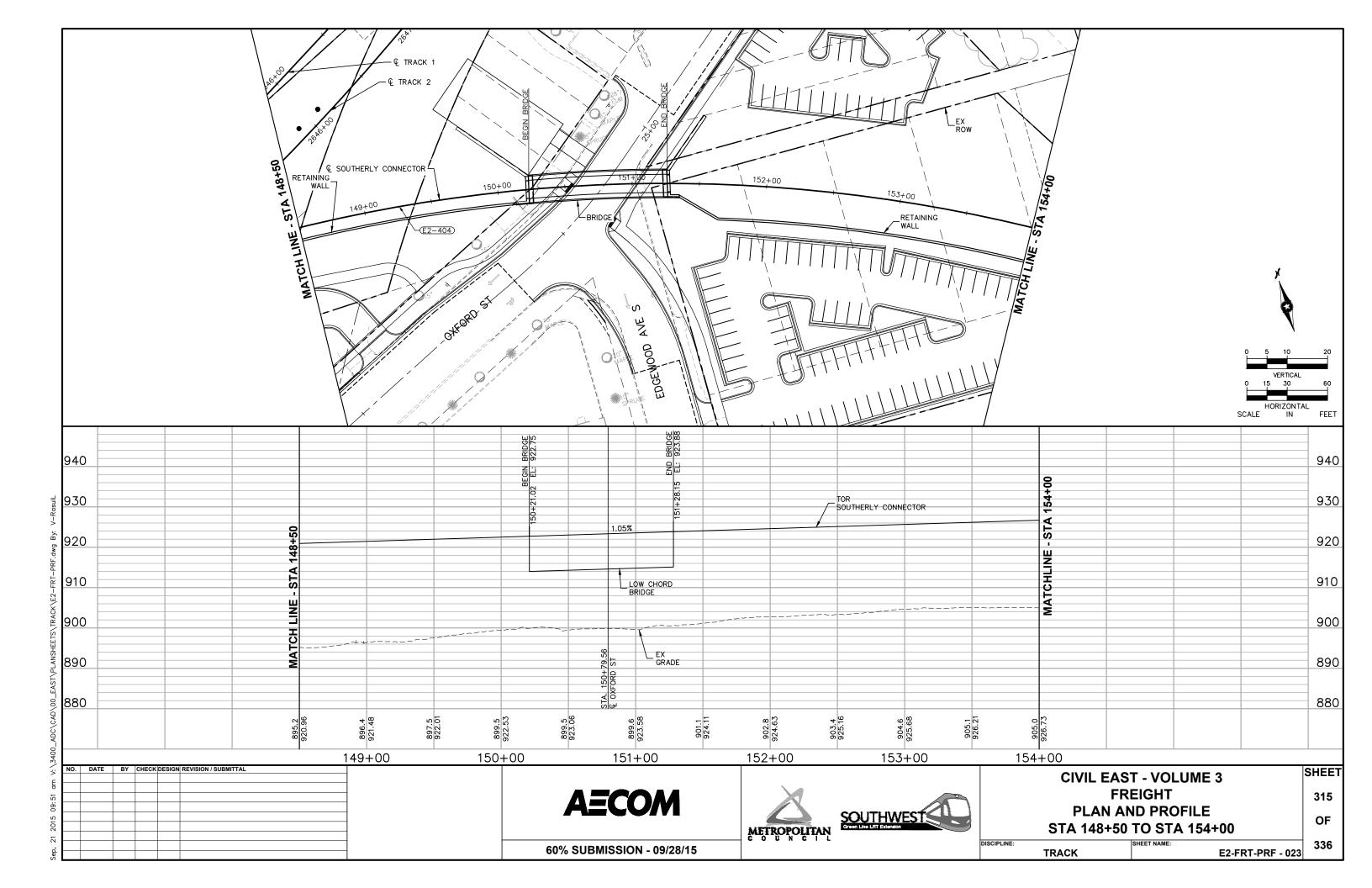


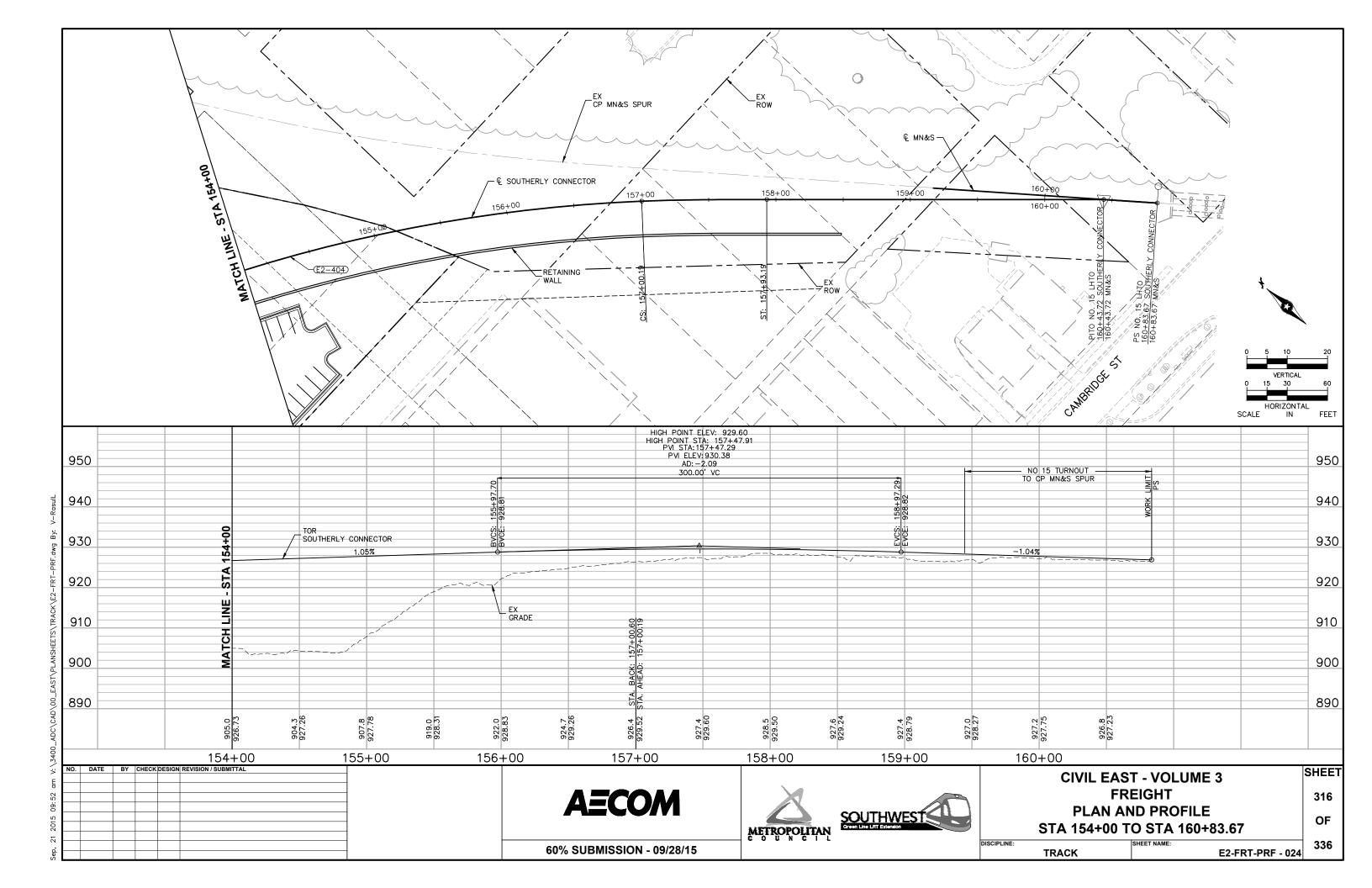


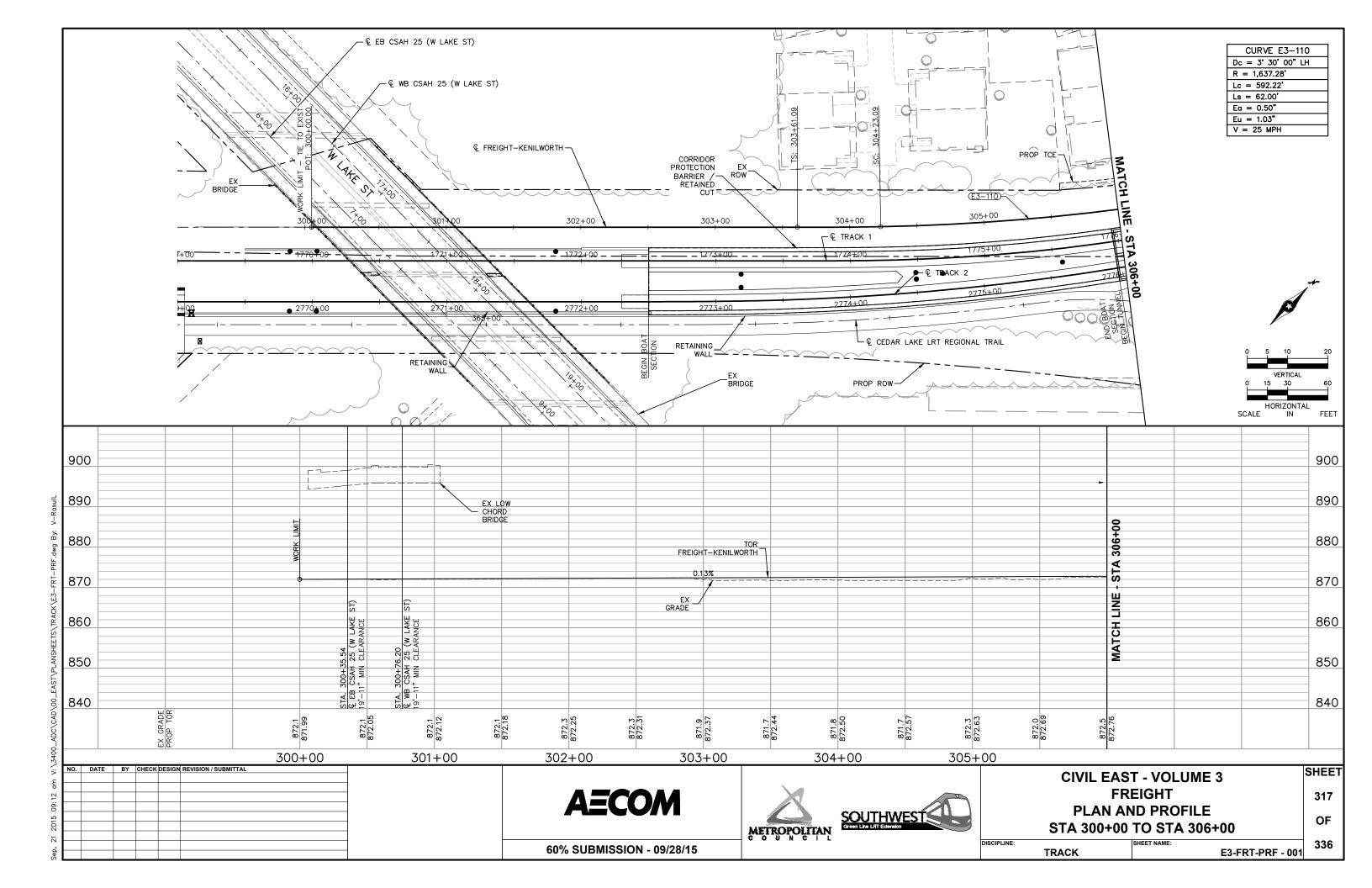


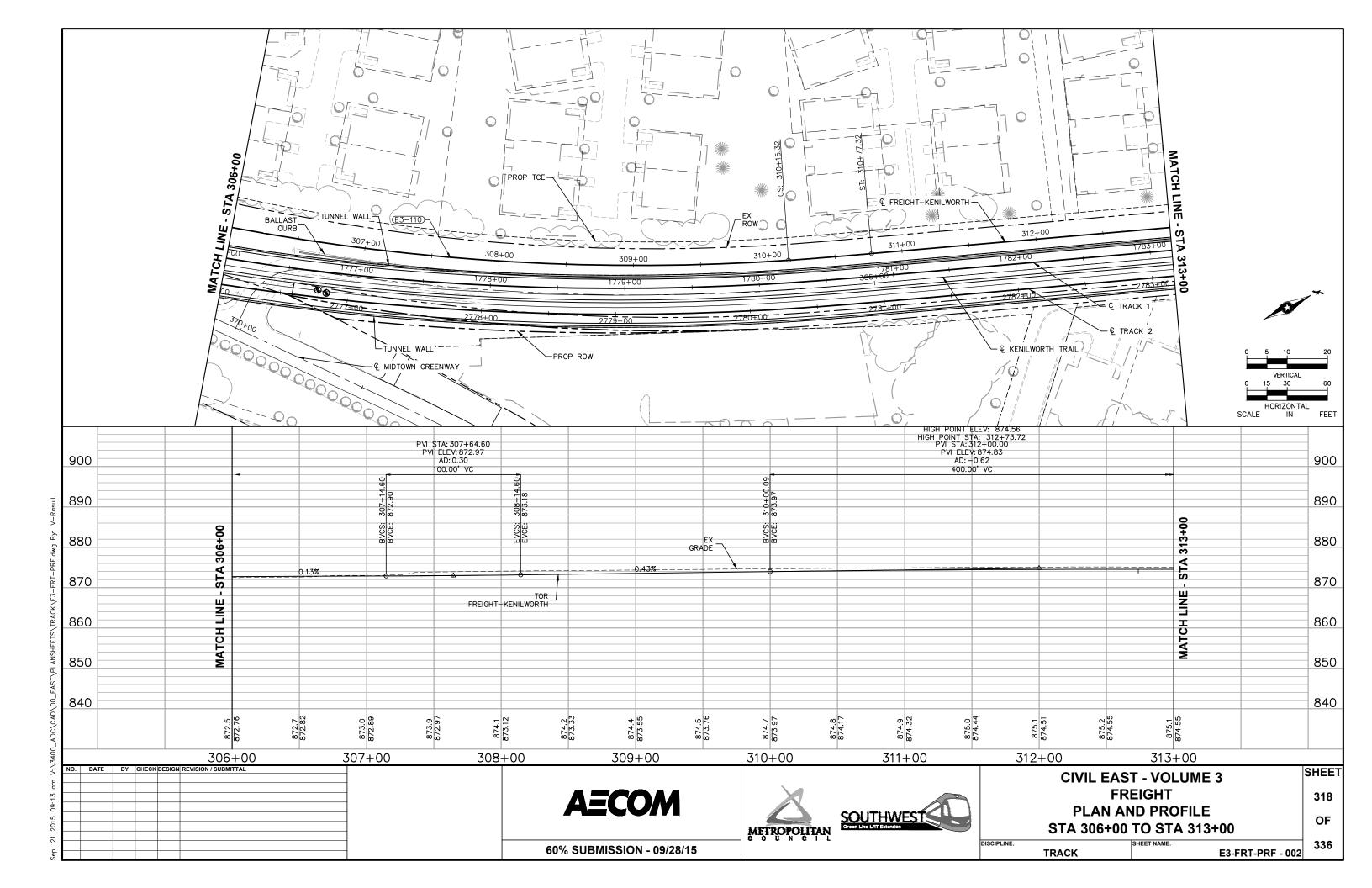


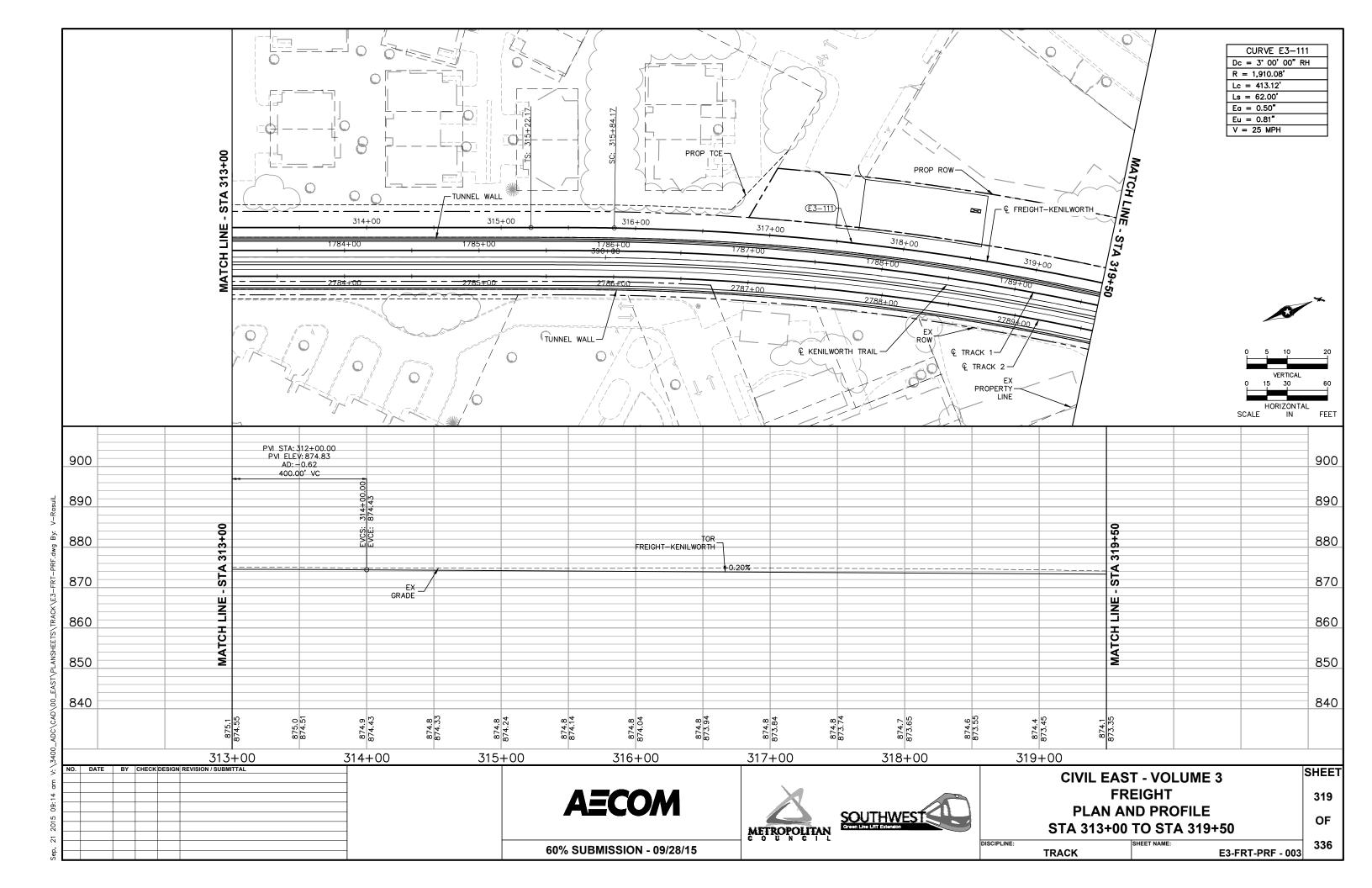


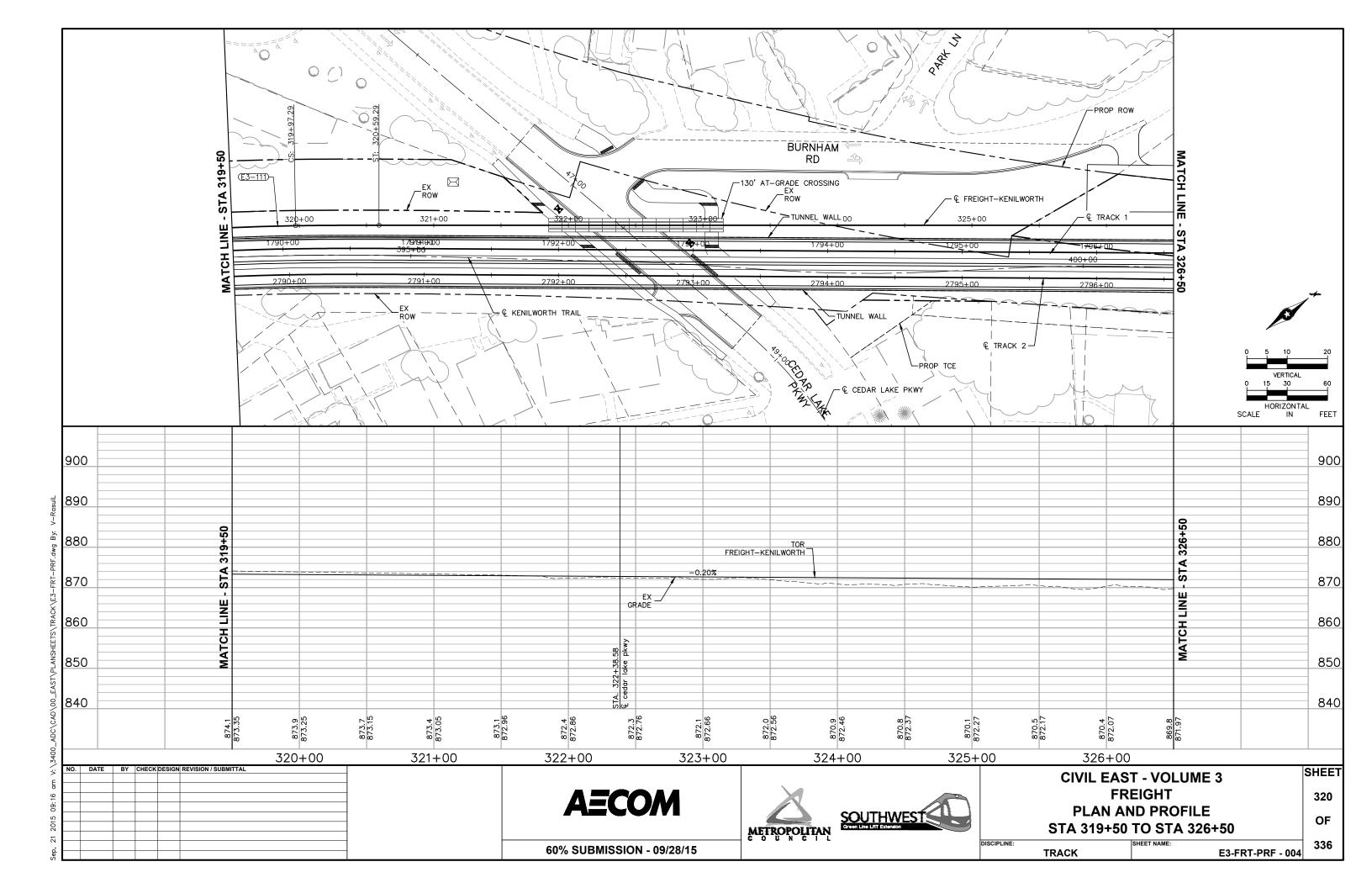


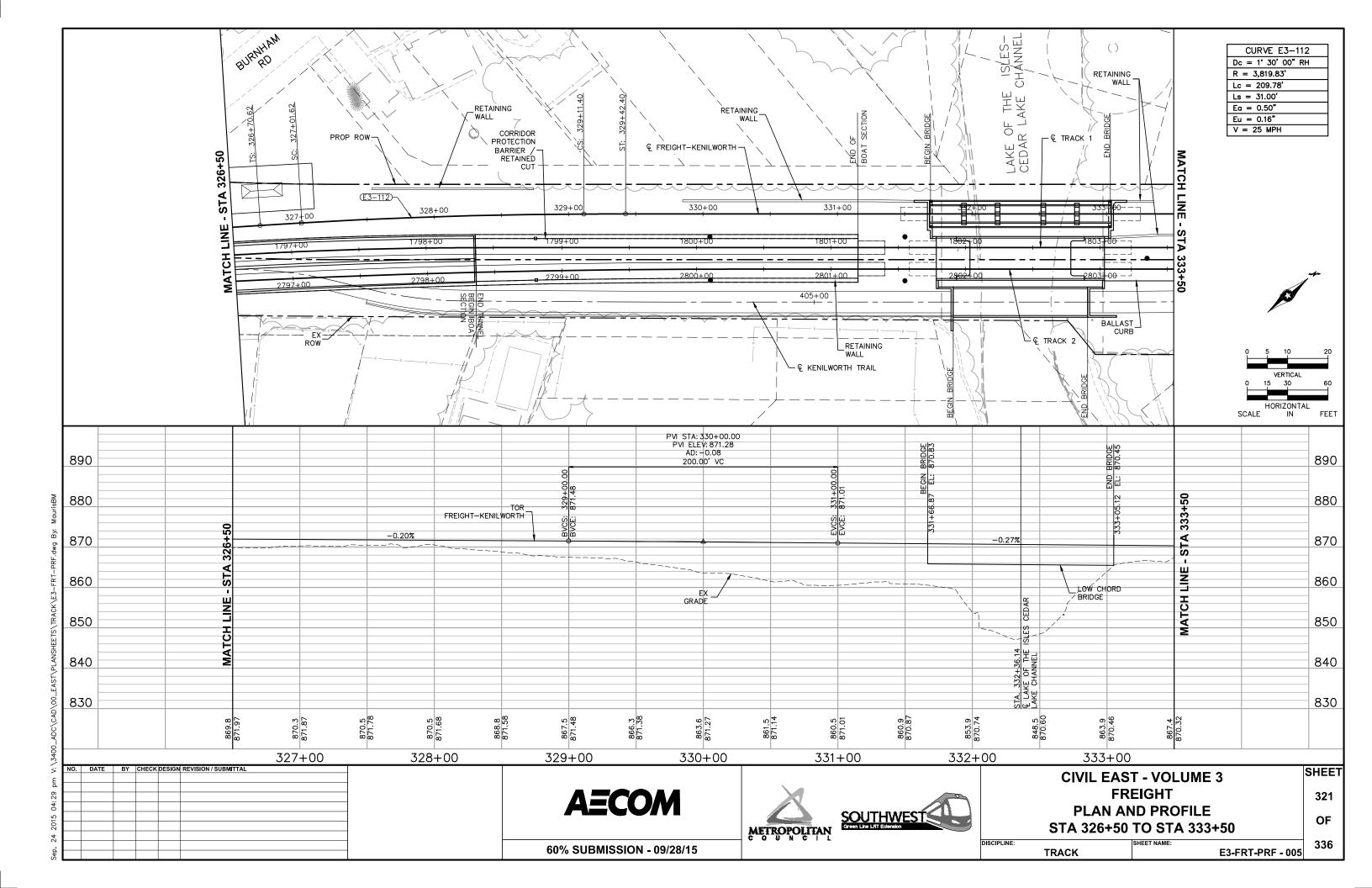


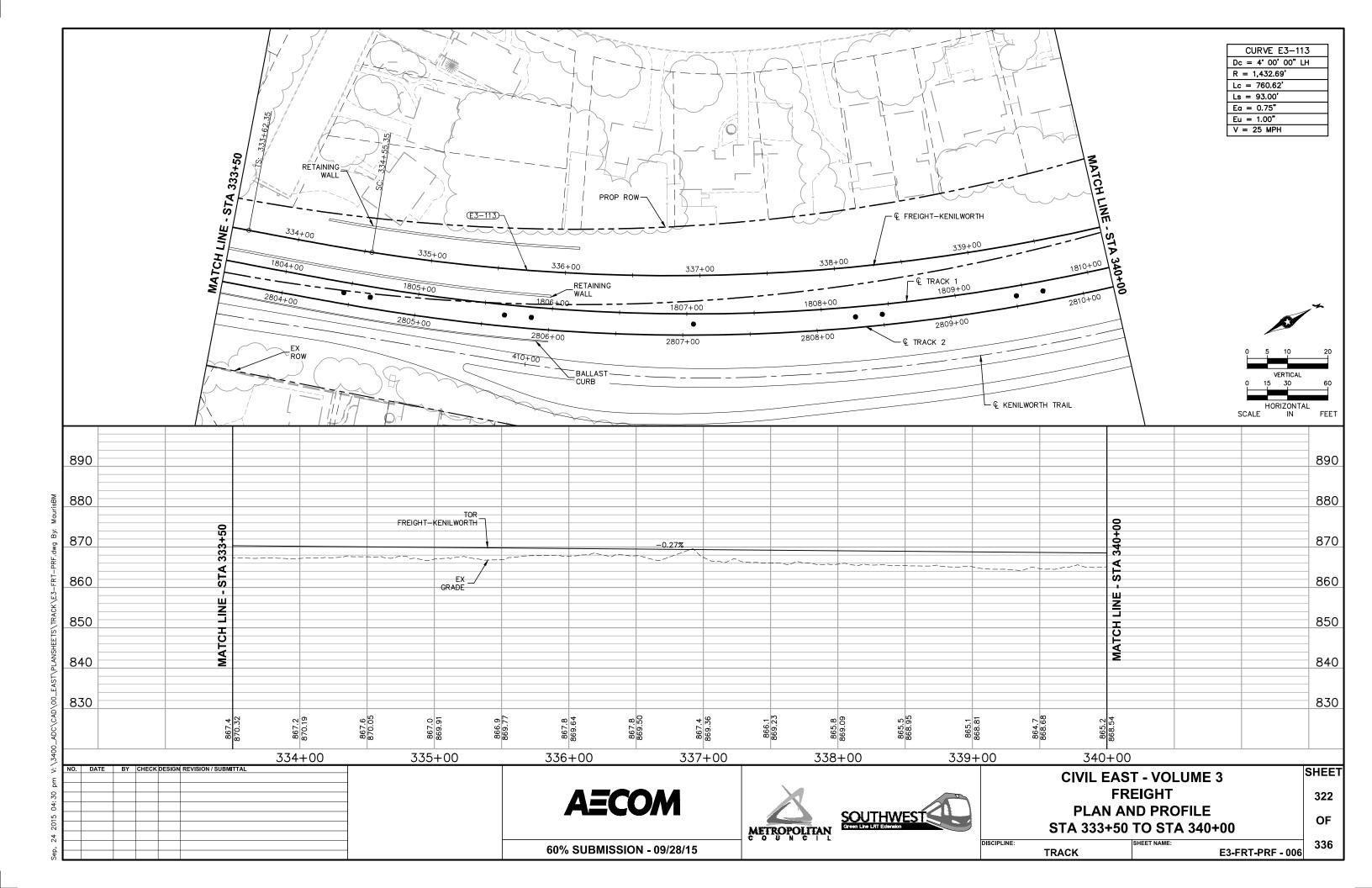


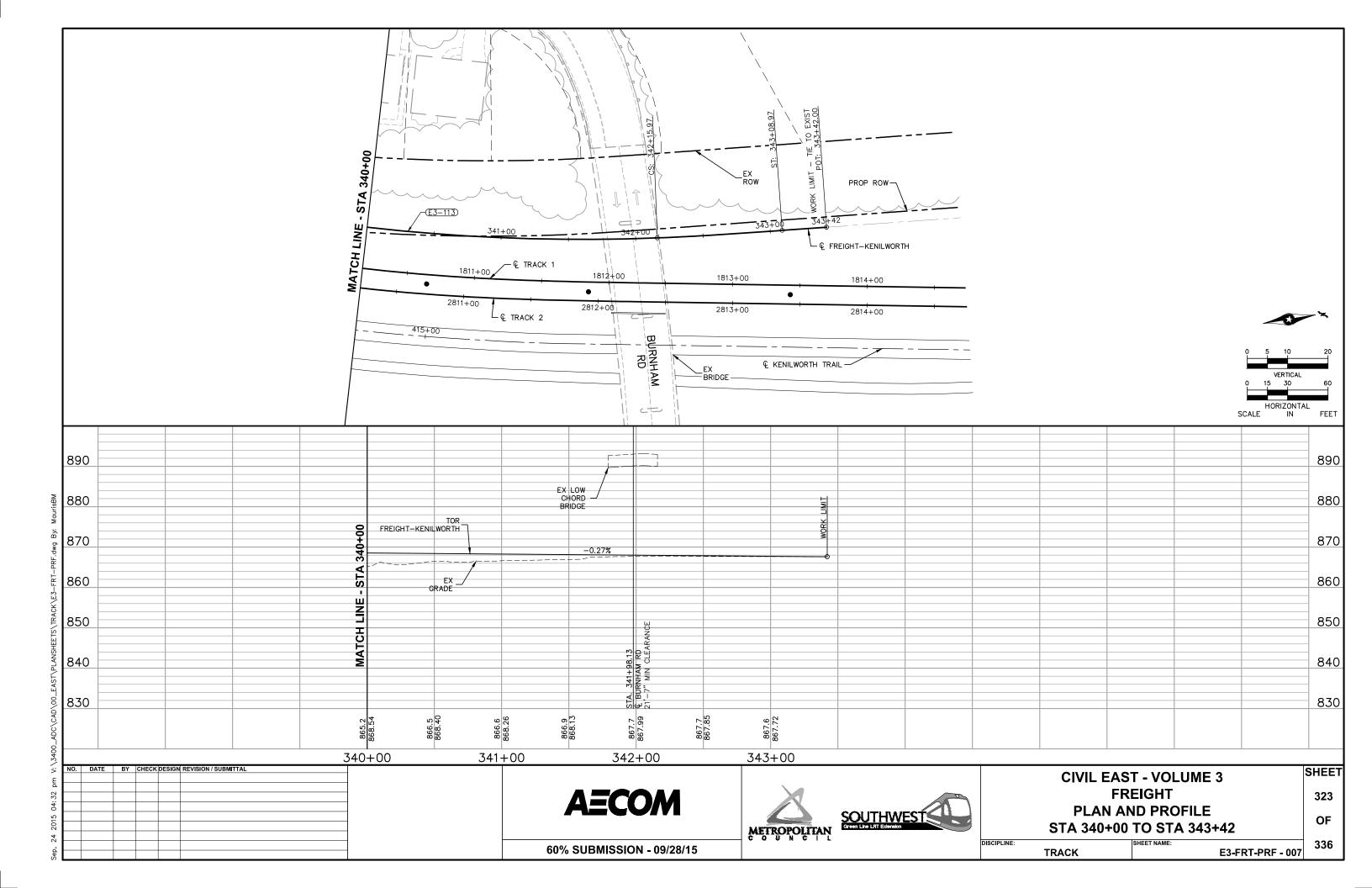


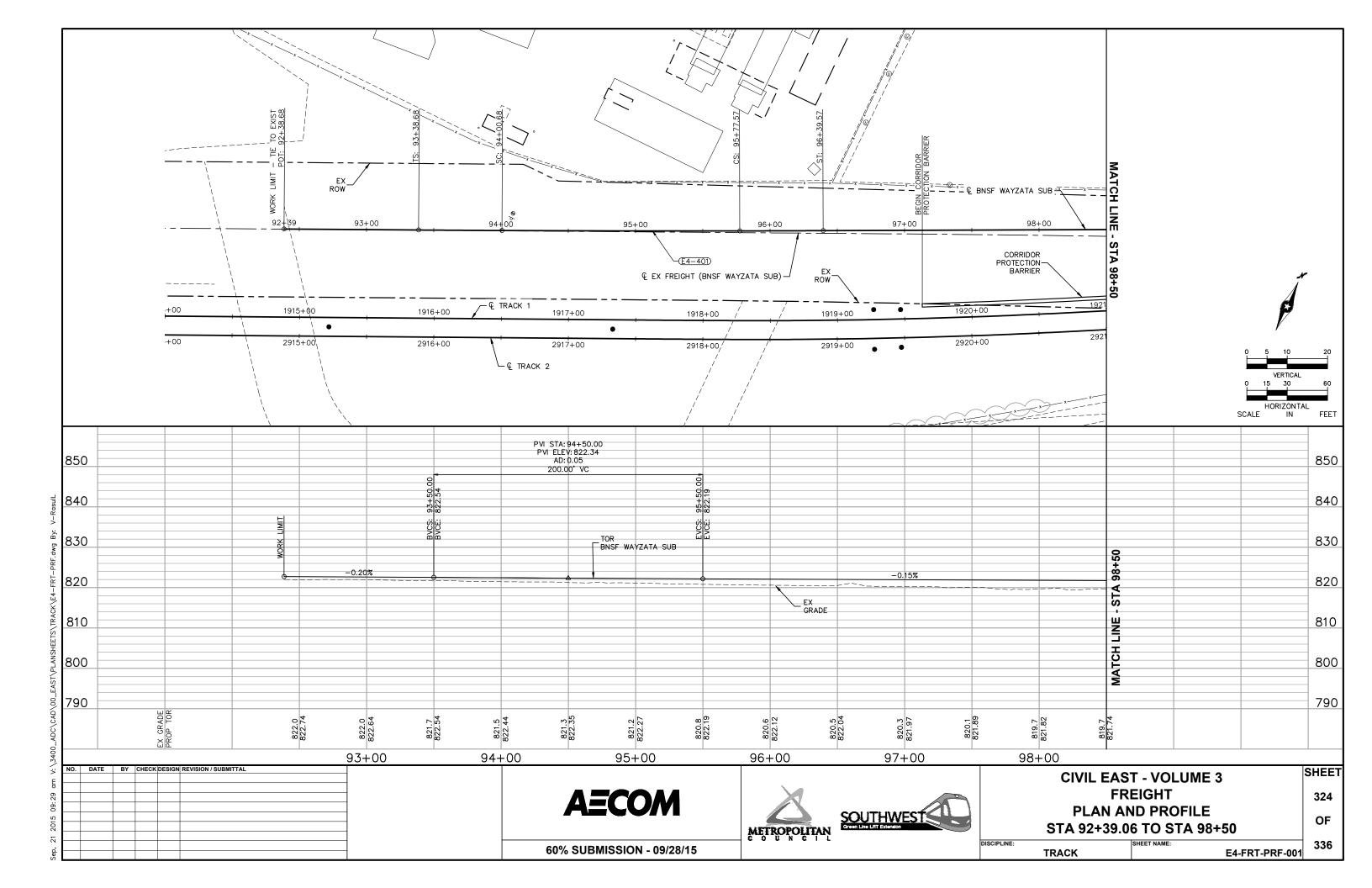


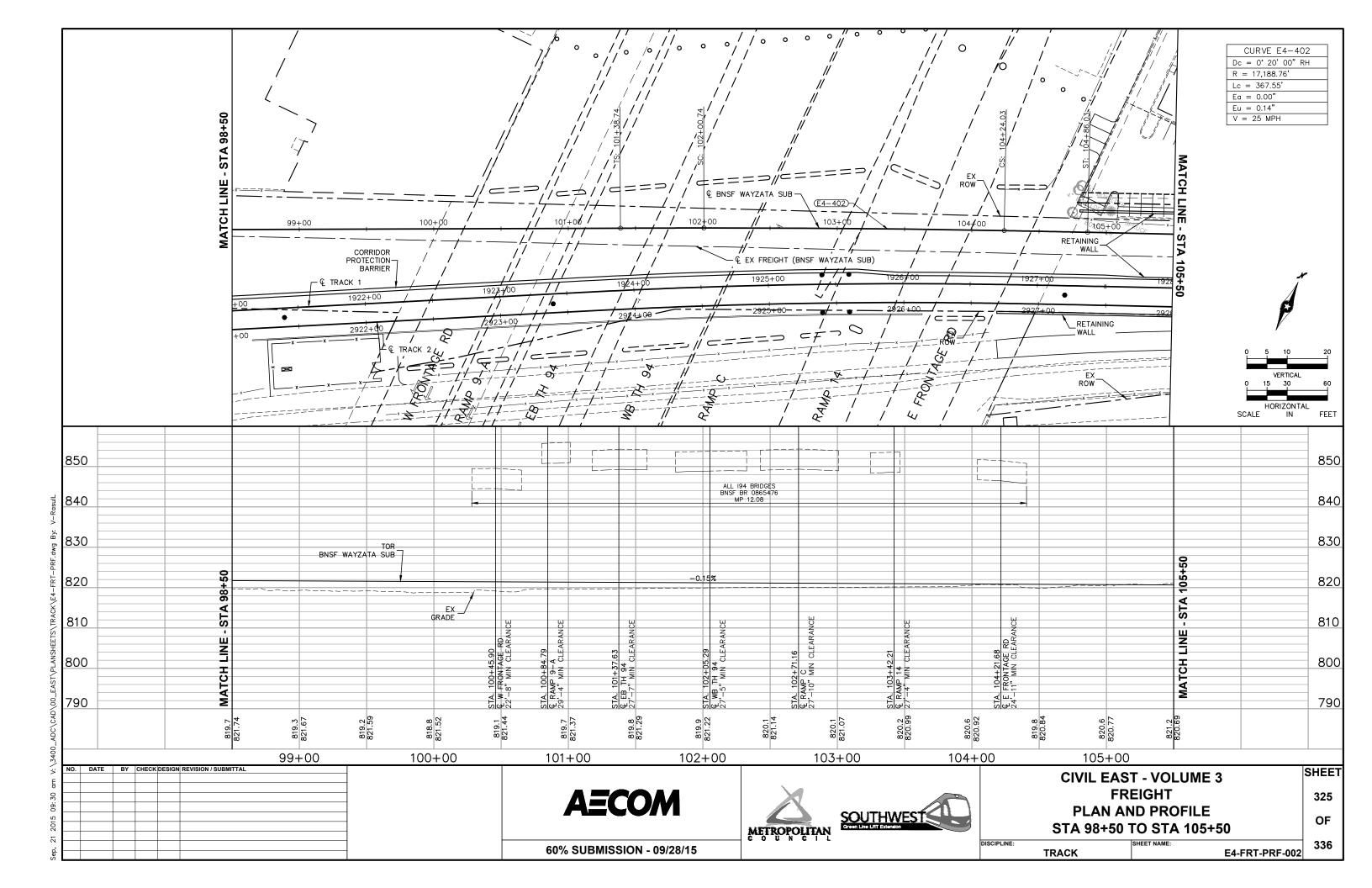


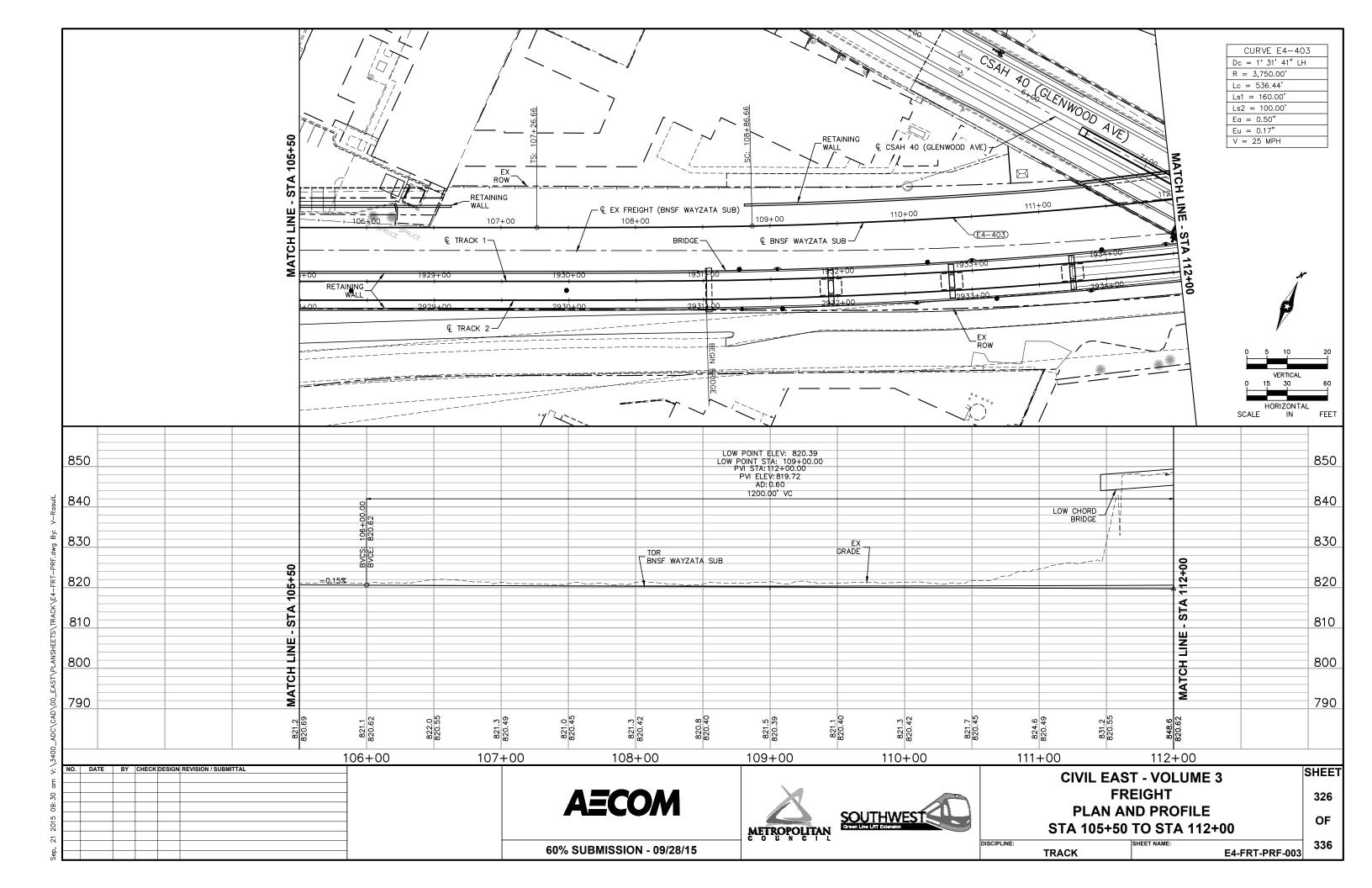


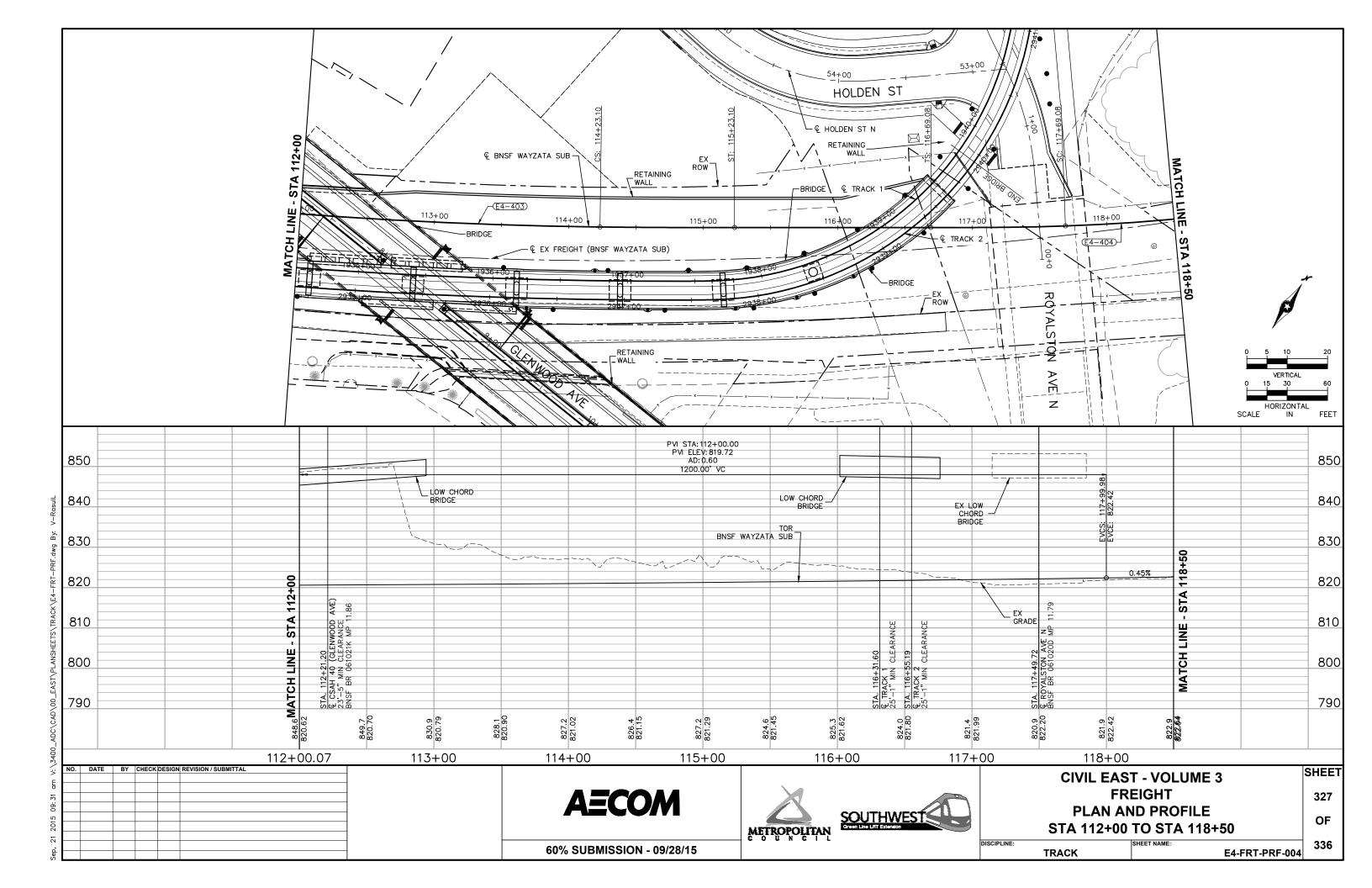


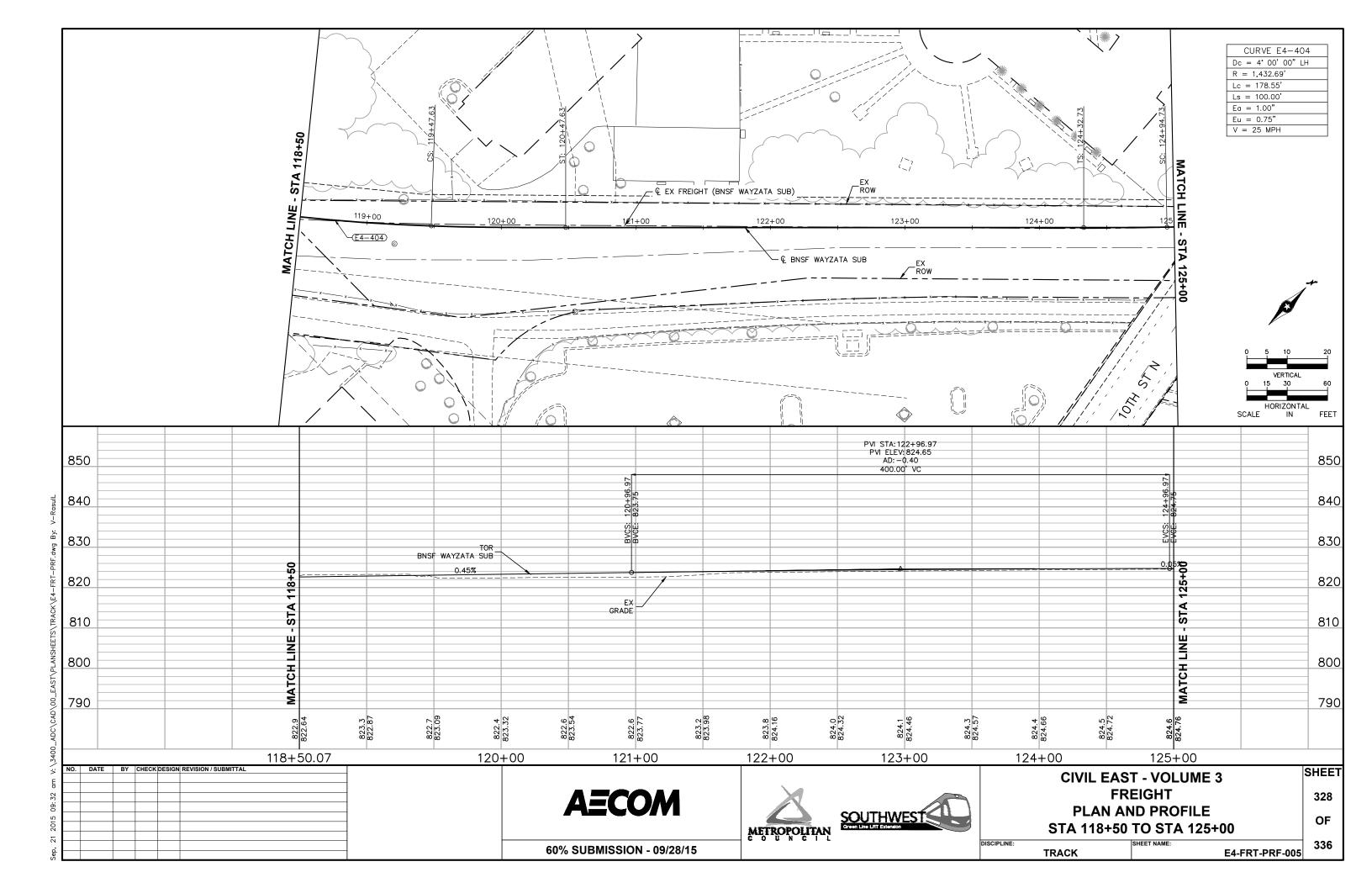


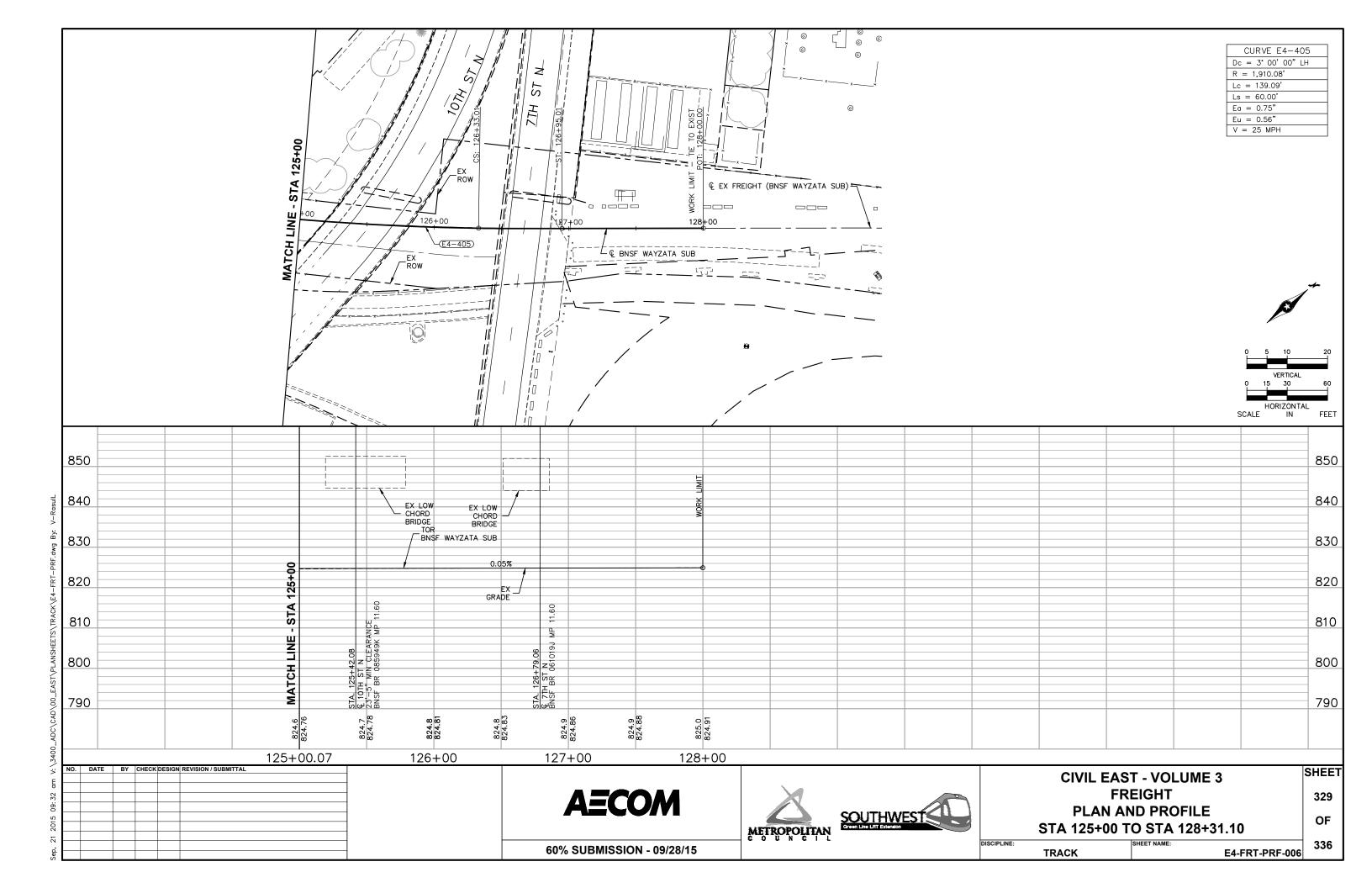






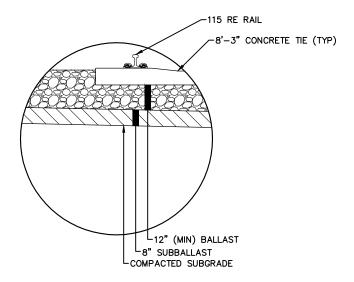




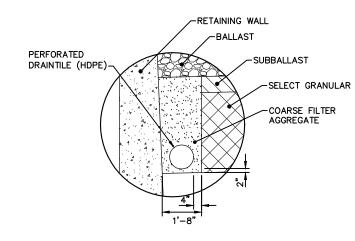


INSET A - BALLAST CURB INTERFACE

NOTE: LEFT SIDE DRAINAGE TRENCH ILLUSTRATED. FOR RIGHT SIDE, MIRROR SECTION.

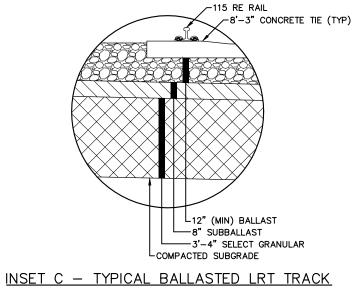


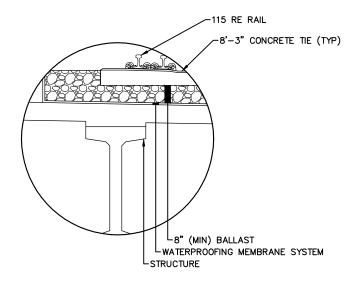
INSET D — TYPICAL BALLASTED LRT TRACK ON EXISTING SUBGRADE



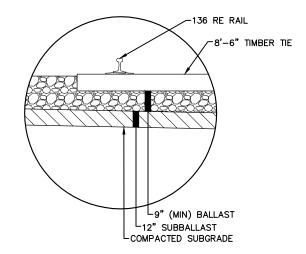
INSET B — CIP RETAINING WALL INTERFACE

NOTE: LEFT SIDE DRAINAGE TRENCH ILLUSTRATED. FOR RIGHT SIDE, MIRROR SECTION.





INSET E - BALLASTED LRT TRACK ON STRUCTURE



INSET F - TYPICAL BALLASTED FREIGHT TRACK - A

AECOM

METROPOLITAN



CIVIL EAST - VOLUME 3 TRACK DETAILS TYPICAL SECTIONS INSETS

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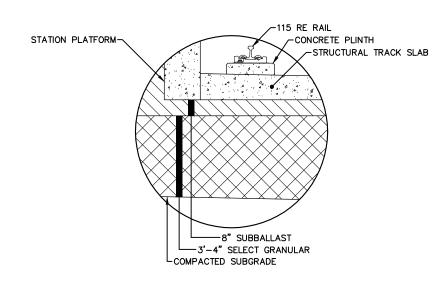
SHEET

DISCIPLINE: TRACK

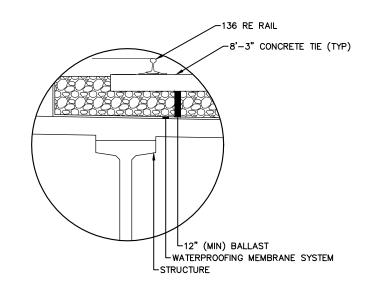
E0-TRK-INS-001

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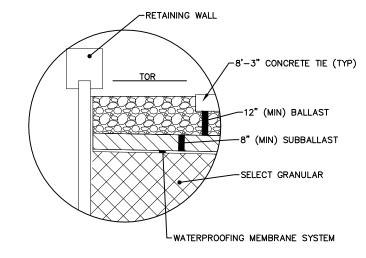
INSET G - TYPICAL EMBEDDED TRACK



INSET H - TYPICAL DIRECT FIXATION INTERFACE
AT STATION PLATFORM

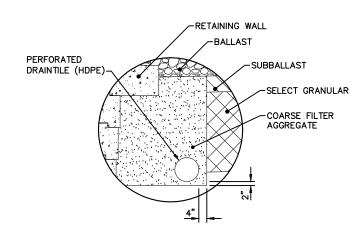


INSET I - BALLASTED FREIGHT TRACK ON STRUCTURE



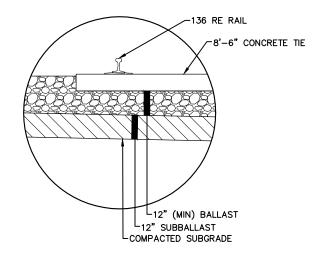
INSET J - MSE RETAINING WALL INTERFACE

NOTE: LEFT SIDE DRAINAGE TRENCH ILLUSTRATED. FOR RIGHT SIDE, MIRROR SECTION.



INSET K - PMBW RETAINING WALL INTERFACE

NOTE: LEFT SIDE DRAINAGE TRENCH ILLUSTRATED. FOR RIGHT SIDE, MIRROR SECTION.



INSET L - TYPICAL BALLASTED FREIGHT TRACK - B

AECOM





CIVIL EAST - VOLUME 3
TRACK DETAILS
TYPICAL SECTIONS INSETS

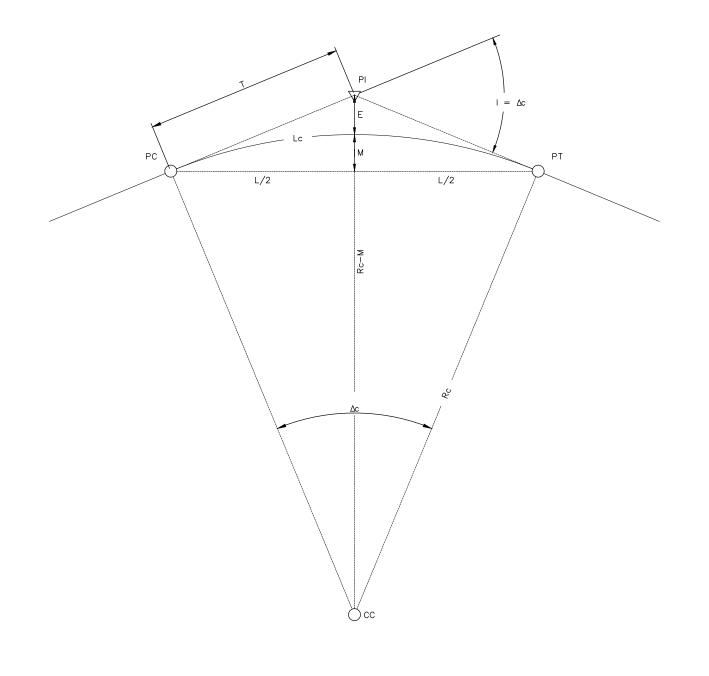
331 OF

SHEET

DISCIPLINE: SHEET NAME: E0-TRK-IN

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E0-TRK-INS-002



SIMPLE CURVE DIAGRAM N.T.S.

NOTES:

- THIS DRAWING IS APPLICABLE TO SIMPLE CURVES WITHOUT TRANSITION SPIRALS AND SHALL ONLY BE USED ON NON-REVENUE TRACK.
- 2. ALL HORIZONTAL DISTANCES ARE IN FEET AND/OR DECIMALS OF A FOOT EXCEPT AS NOTED OTHERWISE ON PLANS.

 $\mbox{Dc} = \mbox{DEGREE}$ OF CURVE IN ARC DEFINITION (DECIMAL DEGREES) $\mbox{Rc} = \mbox{RADIUS}$ OF CURVE $\mbox{Lc} = \mbox{LENGTH}$ OF CURVE ALONG THE ARC

AC = CENTRAL ANGLE OF CURVE (DECIMAL DEGREES)
E = EXTERNAL DISTANCE
T = TANGENT DISTANCE
M = MIDDLE ORDINATE

L = CHORD LENGTH

I = DEFLECTION ANGLE (DECIMAL DEGREES)
PC = POINT OF CURVE
PT = POINT OF TANGENT

PI = POINT OF INTERSECTION

CC = CENTER OF CURVE

SIMPLE CURVE FORMULAS:

Dc = 5729.58'

 $Lc = \frac{\pi Rc\Delta c}{180}$

 $T = Rc TAN \frac{1}{2}$

 $E = Rc SEC_2^1 - Rc$ $M = Rc - Rc COS_{\frac{1}{2}}$

 $L = 2 Rc SIN_2^{1}$

AECOM

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CIVIL EAST - VOLUME 3 TRACK DETAILS SIMPLE CURVE DIAGRAM

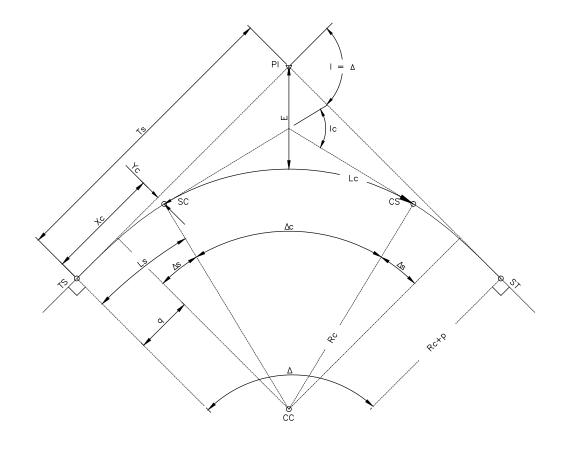
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SHEET

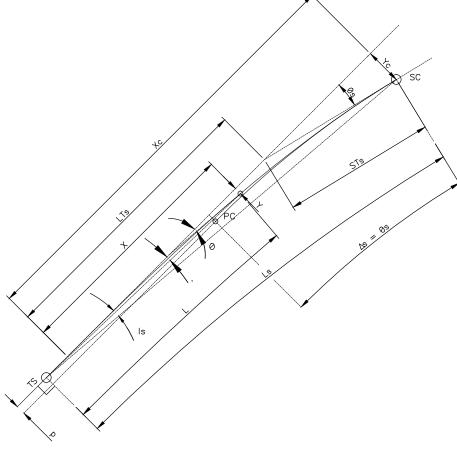
DISCIPLINE: TRACK

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E0-TRK-DTL-010



SPIRAL CURVE DIAGRAM N.T.S.



SPIRAL DIAGRAM N.T.S.

NOTES:

- 1. SPIRALS ARE TALBOT (CLOTHOID) SPIRALS.
- 2. ALL HORIZONTAL DISTANCES ARE IN FEET AND/OR DECIMALS OF A FOOT EXCEPT AS NOTED OTHERWISE ON PLANS.

<u>DEFINITIONS</u>:

 $\mbox{Dc} = \mbox{DEGREE}$ OF SIMPLE CURVE IN ARC DEFINITION (DEGREES) $\mbox{Rc} = \mbox{RADIUS}$ OF CURVE

 Δ = TOTAL CENTRAL ANGLE OF CURVE (DEGREES) $\Delta c = CENTRAL$ ANGLE OF SIMPLE CURVE (DEGREES)

AS = CENTRAL ANGLE OF SIMPLE CURVE (DEGREES

AS = CENTRAL ANGLE OF SPIRAL (RADIANS)

E = EXTERNAL DISTANCE OF THE SIMPLE CURVE

TS = TOTAL TANGENT DISTANCE

LS = LENGTH OF SPIRAL

LC = LENGTH OF THE SIMPLE CURVE ARC

L = LENGTH FROM TS TO ANY POINT ALONG THE SPIRAL

I = TOTAL DEFLECTION ANGLE (DEGREES)

Ic = DEFLECTION ANGLE OF THE SIMPLE CURVE (DEGREES)

Is = DEFLECTION ANGLE OF THE SPIRAL (DEGREES)

i = DEFLECTION ANGLE FROM TS TO ANY POINT ON THE SPIRAL

p = LENGTH OF THROW, OFFSET DISTANCE FROM TANGENT TO

q = DISTANCE FROM TS/ST TO THE OFFSET TC/CT
Xc = DISTANCE ALONG TANGENT FROM TS/ST TO THE SC/CS
Yc = OFFSET DISTANCE FROM TANGENT TO SC/CS

X = DISTANCE ALONG TANGENT FROM TS/ST TO ANY POINT ON

Y = OFFSET DISTANCE FROM TANGENT TO ANY POINT ON THE SPIRAL $\Theta s = SPIRAL$ angle from tangent to SC $\Theta = SPIRAL$ angle from tangent to any point on the

SPIRAL
LTS = LONG TANGENT OF SPIRAL
STS = SHORT TANGENT OF SPIRAL

TS = POINT OF TANGENT TO SPIRAL CURVE
SC = POINT OF SPIRAL CURVE TO SIMPLE CURVE
CS = POINT OF SIMPLE CURVE TO SPIRAL CURVE

ST = POINT OF SPIRAL CURVE TO TANGENT

PC = POINT OF CURVE PT = POINT OF TANGENT

PI = POINT OF INTERSECTION

CC = CENTER OF CURVE

SPIRAL CURVE FORMULAS

$$\Delta = \Delta c + 2\Delta s$$
 Yc

$$STs = \underline{Yc}$$
 $SIN\Delta s$

$$\Delta s = Ls$$
 $2Rc$

$$\frac{Dc}{360^{\circ}} = \frac{100}{2\pi}$$

$$p = \frac{1}{4}Yc = \underline{Ls^2}$$

$$24Rc$$

$$Ts = (Rc +p) TAN^{\frac{1}{2}} + q$$

$$Dc = \frac{5729.58'}{Rc}$$

$$X = L - L^{5}$$

$$40Rc^{2} Ls^{2}$$

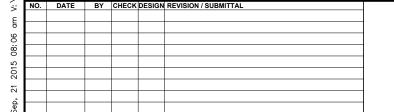
$$E = \frac{Rc + p}{COS_2^{\Delta}} - Rc$$

$$Lc = \frac{\pi Rc \Delta c}{180}$$

$$Y = L^{3}$$
6RcLs

LTs =
$$Xc - \underline{Yc}$$

TAN Δs



AECOM

METROPOLITAN



CIVIL EAST - VOLUME 3 TRACK DETAILS SPIRAL CURVE DIAGRAMS

OF

SHEET

DISCIPLINE:

TRACK

E0-TRK-DTL-011

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PC₂

TWO CENTERED COMPOUND CURVES WITH SPIRALS N.T.S.

<u>NOTES</u>:

- SPIRALS ARE TALBOT (CLOTHOID) SPIRALS.
 ALL HORIZONTAL DISTANCES ARE IN FEET
 AND/OR DECIMALS OF A FOOT EXCEPT AS
- NOTÉD OTHERWISE ON PLANS.

<u>DEFINITIONS</u>:

TS = POINT OF TANGENT TO SPIRAL CURVE
SC = POINT OF SPIRAL CURVE TO SIMPLE CURVE
CS = POINT OF SIMPLE CURVE TO SPIRAL CURVE
ST = POINT OF SPIRAL CURVE TO TANGENT
PC = POINT OF CURVE
PT = POINT OF TANGENT
PI = POINT OF INTERSECTION
CC = CONTER OF CURVE

CC = CENTER OF CURVE

AECOM





CIVIL EAST - VOLUME 3 TRACK DETAILS COMPOUND CURVE WITH SPIRALS

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SHEET

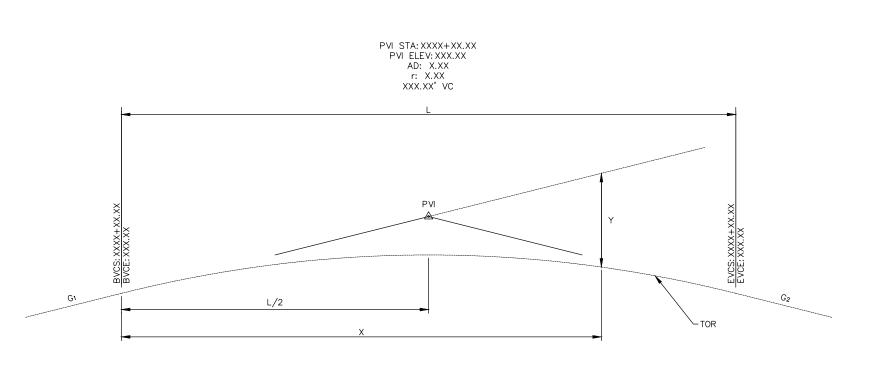
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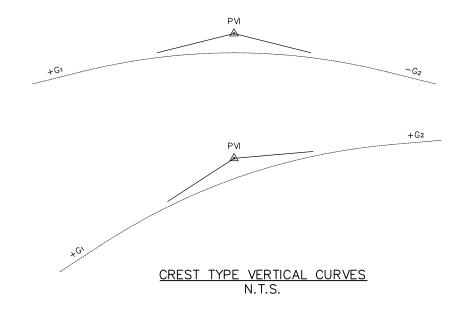
60% SUBMISSION - 09/28/15

TRACK

E0-TRK-DTL-012



STANDARD VERTICAL CURVE N.T.S.



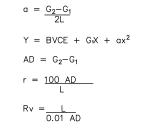
NOTES:

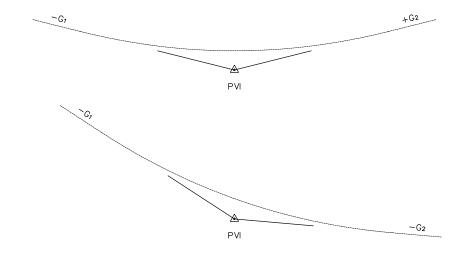
 ALL HORIZONTAL DISTANCES ARE IN FEET AND/OR DECIMALS OF A FOOT EXCEPT AS NOTED OTHERWISE ON PLANS.

<u>DEFINITIONS</u>:

G1 = ENTRY GRADE %
G2 = DEPARTING GRADE %
PVI = POINT OF VERTICAL INTERSECTION
AD = ALGEBRAIC DIFFERENCE
r = RATE OF CHANGE OF GRADE
L = LENGTH OF VERTICAL CURVE
BVCS = BEGIN VERTICAL CURVE STATION
BVCE = BEGIN VERTICAL CURVE STATION
EVCS = END VERTICAL CURVE STATION
EVCS = END VERTICAL CURVE STATION
EVCE = END VERTICAL CURVE ELEVATION
X = HORIZONTAL DISTANCE FROM BVC
Y = ELEVATION OF PARABOLA BELOW G1
RV = EQUIVALENT RADIUS OF VERTICAL CURVE

<u>VERTICAL CURVE FORMULAS</u>:





SAG TYPE VERTICAL CURVES N.T.S.

ı	NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL	
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ı							
ı							

AECOM

60% SUBMISSION - 09/28/15

METROPOLITAN METROPOLITAN



CIVIL EAST - VOLUME 3 TRACK DETAILS VERTICAL CURVE GEOMETRY

RTICAL CURVE GEOMETRY

SHEET

335

OF

336

DISCIPLINE: SHEET NAME:

TRACK SHEET NAME:

E0-TRK-DTL-013

Sep. 21 2015 08:08 am V:\3400 ADC\CAD\00 E

