METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

CIVIL CONSTRUCTION

VOLUME 11D
STATIONS

PLAN PACKAGE INDEX / DESCRIPTION	
CIVIL CONSTRUCTION	BID ALTERNATES
VOLUME 1 - EXISTING CONDITIONS & REMOVALS	VOLUME A - NOT USED
VOLUME 2A - CIVIL	VOLUME B - NOT USED
VOLUME 2B - CIVIL	VOLUME C - BID ALTERNATE 3 (LRCI 5) ▲
VOLUME 3A - TRACKWORK	VOLUME D - BID ALTERNATE 4 (LRCI 6) ▲
VOLUME 3B - TRACKWORK	VOLUME E - BID ALTERNATE 5 (LRCI 7) ▲
VOLUME 3C - TRACKWORK DETAILS	VOLUME F - BID ALTERNATE 6 (LRCI 8) ▲
VOLUME 4A - BRIDGES	VOLUME G - BID ALTERNATE 7 (LRCI 4) ▲
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VOLUME 11A - STATIONS ▲	
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VOLUME 12 - SYSTEMS	

* TO BE SUBMITTED AT A LATER DATE
▲ SUBMITTED AT 75%, NOT INCLUDED IN 90%

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 ADMINISTRATOR 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.

90% SUBMISSION
DATE : 01/22/16

AECOM

CIVIL CONSTRUCTION

SHT #	SHEET NAME	SHEET DESCRIPTION	STATION	STATION	REV
		VOLUME 11D - STATIONS			
1	00-GEN-CVR-001	COVER SHEET			
2	00-GEN-IDX-001	VOLUME INDEX OF PLAN SHEETS SHEET 1			
3	00-GEN-IDX-002	VOLUME INDEX OF PLAN SHEETS SHEET 2			
4	W0-GEN-KEY-001	GENERAL KEY MAP SHEET 1			
5	E0-GEN-KEY-002	GENERAL KEY MAP SHEET 2			
6	00-GEN-NTS-001	GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS SHEET 1			
7	00-GEN-NTS-002	GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS SHEET 2			
8	E0-ARC-ABR-020	ARCHITECTURAL ABBREVIATIONS, SYMBOLS, AND DRAWING CODES			
9	E0-STR-GEN-001	STRUCTURAL GENERAL NOTES			
10	E0-PLM-GEN-002	PLUMBING SYMBOLS AND ABBREVIATIONS			
11	E0-PLM-SCH-002	PLUMBING SCHEDULES			
12	E0-MEC-GEN-002	MECHANICAL SYMBOLS AND ABBREVIATIONS			
13	E0-MEC-SCH-002	MECHANICAL SCHEDULES			
14	E0-MEC-SCH-004	MECHANICAL CONTROL SEQUENCES			
		21ST STREET STATION			
15	E3-21S-ARC-COD-010	CODE SUMMARY/ FINISH SCHEDULE			
16	E3-21S-ARC-PLN-101	PLATFORM PLAN			
17	E3-21S-ARC-PLN-110	SOUTH PARTIAL PLATFORM PLAN			
18	E3-21S-ARC-PLN-111	MIDDLE PARTIAL PLATFORM PLAN			
19	E3-21S-ARC-PLN-112	NORTH PARTIAL PLATFORM PLAN			
20	E3-21S-ARC-PLN-130	SOUTH PARTIAL PAVEMENT PLAN			
21	E3-21S-ARC-PLN-131	MIDDLE PARTIAL PAVEMENT PLAN			
22	E3-21S-ARC-PLN-132	NORTH PARTIAL PAVEMENT PLAN			
23	E3-21S-ARC-PLN-150	ROOF PLANS			
24	E3-21S-ARC-RCP-180	REFLECTED CEILING PLANS			
25	E3-21S-ARC-ELV-200	ELEVATIONS			
26	E3-21S-ARC-ELV-210	SOUTH PARTIAL ELEVATIONS			
27	E3-21S-ARC-ELV-211	MIDDLE PARTIAL ELEVATIONS			
28	E3-21S-ARC-ELV-212	NORTH PARTIAL ELEVATIONS			
29	E3-21S-ARC-ELV-216	SIDE ELEVATIONS			
30	E3-21S-ARC-SCT-300	TYPICAL PLATFORM SECTION			
31	E3-21S-ARC-SGN-800	SIGNAGE PLANS AND ELEVATIONS			
32	E3-21S-STR-PLN-101	PLATFORM FOUNDATION PLAN			
33	E3-21S-STR-SCH-102	STATION REFERENCE TABLE			
34	E3-21S-STR-PLN-110	SOUTH PARTIAL FOUNDATION PLAN			
35	E3-21S-STR-PLN-111	MIDDLE PARTIAL FOUNDATION PLAN			
36	E3-21S-STR-PLN-112	NORTH PARTIAL FOUNDATION PLAN			
37	E3-21S-STR-PLN-140	INTERMEDIATE FRAMING PLAN			
38	E3-21S-STR-PLN-150	ROOF FRAMING PLANS			
39	E3-21S-STR-ELV-201	ELEVATIONS – FRAMING			
40	E3-21S-STR-ELV-210	SOUTH PARTIAL ELEVATIONS – FRAMING			
41	E3-21S-STR-ELV-211	MIDDLE PARTIAL ELEVATIONS – FRAMING			
42	E3-21S-STR-ELV-212	NORTH PARTIAL ELEVATIONS -- FRAMING			
43	E3-21S-STR-SCT-300	TYPICAL PLATFORM SECTION			
44	E3-21S-STR-SCT-301	TYPICAL PLATFORM SECTION			
45	E3-21S-STR-SCT-302	TYPICAL PLATFORM SECTION			
46	E3-21S-PLM-PLN-100	SOUTH AND MIDDLE PARTIAL UNDERFLOOR PLUMBING PLAN			
47	E3-21S-PLM-PLN-101	NORTH PARTIAL UNDERFLOOR PLUMBING PLAN			
48	E3-21S-PLM-PLN-110	SOUTH AND MIDDLE PARTIAL PLUMBING PLAN			
49	E3-21S-PLM-PLN-111	NORTH PARTIAL PLUMBING PLAN AND RISER DIAGRAMS			
50	E2-21S-PLM-PLN-120	ROOF PLUMBING PLAN			
51	E2-21S-PLM-SCT-201	TYPICAL PLUMBING SECTION			
52	E3-21S-ELE-PLN-201	ELECTRICAL GROUNDING PLAN			
53	E3-21S-ELE-ELV-202	ELECTRICAL GROUNDING ELEVATION			
54	E3-21S-ELE-PLN-301	ELECTRICAL UNDERSLAB CONDUIT PLAN (1 OF 2)			
55	E3-21S-ELE-PLN-302	ELECTRICAL UNDERSLAB CONDUIT PLAN (2 OF 2)			
56	E3-21S-ELE-PLN-303	ELECTRICAL CANOPY PLAN			
57	E3-21S-ELE-PLN-311	ELECTRICAL HEAT TRACE PLAN			
58	E3-21S-ELE-ELV-321	ELECTRICAL HEAT TRACE ELEVATION			
59	E3-21S-ELE-PLN-411	COMMUNICATIONS UNDERSLAB CONDUIT PLAN (1 OF 2)			
60	E3-21S-ELE-PLN-412	COMMUNICATIONS UNDERSLAB CONDUIT PLAN (2 OF 2)			
61	E3-21S-ELE-PLN-421	COMMUNICATIONS CANOPY PLAN			
62	E3-21S-ELE-SCH-461	COMMUNICATIONS CONDUIT SCHEDULE (1 OF 2)			
63	E3-21S-ELE-SCH-462	COMMUNICATIONS CONDUIT SCHEDULE (2 OF 2)			

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SHT #	SHEET NAME	SHEET DESCRIPTION	STATION	STATION	REV
64	E3-21ST-ELE-SCH-501	ELECTRICAL SCHEDULES			
		PENN STATION			
65	E4-PEN-ARC-COD-010	CODE SUMMARY/ FINISH SCHEDULE			
66	E4-PEN-ARC-PLN-101	PLATFORM PLAN			
67	E4-PEN-ARC-PLN-102	VERTICAL CIRCULATION PLAN			
68	E4-PEN-ARC-PLN-110	WEST PARTIAL PLATFORM PLAN			
69	E4-PEN-ARC-PLN-111	MIDDLE PARTIAL PLATFORM PLAN			
70	E4-PEN-ARC-PLN-112	EAST PARTIAL PLATFORM PLAN			
71	E4-PEN-ARC-PLN-120	VC PLATFORM LEVEL PLAN			
72	E4-PEN-ARC-PLN-121	VC INTERMEDIATE LEVEL PLAN			
73	E4-PEN-ARC-PLN-122	VC BRIDGE LEVEL PLAN			
74	E4-PEN-ARC-PLN-125	PEDESTRIAN BRIDGE BRIDGE LEVEL PLAN			
75	E4-PEN-ARC-PLN-126	PEDESTRIAN BRIDGE BRIDGE LEVEL PLAN			
76	E4-PEN-ARC-PLN-130	WEST PARTIAL PAVEMENT PLAN			
77	E4-PEN-ARC-PLN-131	MIDDLE PARTIAL PAVEMENT PLAN			
78	E4-PEN-ARC-PLN-132	EAST PARTIAL PAVEMENT PLAN			
79	E4-PEN-ARC-PLN-135	VC PAVEMENT PLANS			
80	E4-PEN-ARC-PLN-136	VC PAVEMENT PLANS			
81	E4-PEN-ARC-PLN-140	VC ENLARGED PLANS			
82	E4-PEN-ARC-PLN-150	ROOF PLANS			
83	E4-PEN-ARC-PLN-160	VC ROOF PLAN			
84	E4-PEN-ARC-PLN-165	PEDESTRIAN BRIDGE ROOF PLAN			
85	E4-PEN-ARC-PLN-166	PEDESTRIAN BRIDGE ROOF PLAN			
86	E4-PEN-ARC-RCP-180	REFLECTED CEILING PLANS			
87	E4-PEN-ARC-RCP-185	VC RCP PLATFORM LEVEL			
88	E4-PEN-ARC-RCP-186	VC RCP BRIDGE LEVEL			
89	E4-PEN-ARC-RCP-187	PEDESTRIAN BRIDGE RCP BRIDGE LEVEL			
90	E4-PEN-ARC-RCP-188	PEDESTRIAN BRIDGE RCP BRIDGE LEVEL			
91	E4-PEN-ARC-RCP-189	PEDESTRIAN BRIDGE RCP INTERMEDIATE LEVEL			
92	E4-PEN-ARC-RCP-190	PEDESTRIAN BRIDGE RCP INTERMEDIATE LEVEL			
93	E4-PEN-ARC-ELV-200	ELEVATIONS			
94	E4-PEN-ARC-ELV-201	VC ELEVATIONS			
95	E4-PEN-ARC-ELV-210	WEST PARTIAL ELEVATIONS			
96	E4-PEN-ARC-ELV-211	MIDDLE PARTIAL ELEVATIONS			
97	E4-PEN-ARC-ELV-212	EAST PARTIAL ELEVATIONS			
98	E4-PEN-ARC-ELV-216	SIDE ELEVATIONS			
99	E4-PEN-ARC-ELV-220	VC TRACK 1 ELEVATION			
100	E4-PEN-ARC-ELV-221	VC SIDE ELEVATIONS			
101	E4-PEN-ARC-ELV-226	VC TRACK 2 ELEVATION			
102	E4-PEN-ARC-ELV-230	PEDESTRIAN BRIDGE SOUTH PARTIAL ELEVATIONS			
103	E4-PEN-ARC-ELV-231	PEDESTRIAN BRIDGE MIDDLE PARTIAL ELEVATIONS			
104	E4-PEN-ARC-ELV-232	PEDESTRIAN BRIDGE NORTH PARTIAL ELEVATIONS			
105	E4-PEN-ARC-ELV-233	PEDESTRIAN BRIDGE SIDE ELEVATIONS			
106	E4-PEN-ARC-SCT-300	TYPICAL PLATFORM SECTION			
107	E4-PEN-ARC-SCT-310	VC LONGITUDINAL SECTION			
108	E4-PEN-ARC-SCT-311	VC LONGITUDINAL SECTION			
109	E4-PEN-ARC-SCT-312	VC SECTIONS			
110	E4-PEN-ARC-SCT-313	VC SECTIONS			
111	E4-PEN-ARC-SCT-316	PEDESTRIAN BRIDGE SECTIONS			
112	E4-PEN-ARC-SCT-317	PEDESTRIAN BRIDGE SECTIONS			
113	E4-PEN-ARC-SCT-318	PEDESTRIAN BRIDGE SECTIONS			
114	E4-PEN-ARC-DTL-570	ROOF DETAILS			
115	E4-PEN-ARC-DTL-571	ROOF DETAILS			
116	E4-PEN-ARC-SCH-590	DOOR AND FRAME SCHEDULE			
117	E4-PEN-ARC-DTL-592	VC WINDOW TYPES			
118	E4-PEN-ARC-DTL-593	VC WINDOW TYPES			
119	E4-PEN-ARC-DTL-594	PEDESTRIAN BRIDGE WINDOW TYPES			
120	E4-PEN-ARC-SCH-650	VC ARCHITECTURAL WOVEN METAL MESH SCHEDULE-1			
121	E4-PEN-ARC-DTL-651	VC ARCHITECTURAL WOVEN METAL MESH TYPES			
122	E4-PEN-ARC-DTL-652	VC ARCHITECTURAL WOVEN METAL MESH TYPES			
123	E4-PEN-ARC-ELV-700	VC INTERIOR ELEVATIONS			
124	E4-PEN-ARC-ELV-701	ELEVATOR LOBBY ENLARGED ELEVATIONS			
125	E4-PEN-ARC-DTL-710	STAIR DETAILS			
126	E4-PEN-ARC-SGN-800	SIGNAGE PLANS AND ELEVATIONS			
127	E4-PEN-STR-PLN-101	PLATFORM FOUNDATION PLAN			
128	E4-PEN-STR-SCH-102	STATION REFERENCE TABLE			
129	E4-PEN-STR-PLN-110	WEST PARTIAL FOUNDATION PLAN			
130	E4-PEN-STR-PLN-111	MIDDLE PARTIAL FOUNDATION PLAN			
131	E4-PEN-STR-PLN-112	EAST PARTIAL FOUNDATION PLAN			
132	E4-PEN-STR-PLN-140	INTERMEDIATE FRAMING PLAN			
133	E4-PEN-STR-PLN-150	ROOF FRAMING PLANS			
134	E4-PEN-STR-ELV-201	ELEVATIONS – FRAMING			

CIVIL CONSTRUCTION

SHT #	SHEET NAME	SHEET DESCRIPTION	STATION	STATION	REV
135	E4-PEN-STR-ELV-210	WEST PARTIAL ELEVATIONS -- FRAMING			
136	E4-PEN-STR-ELV-211	MIDDLE PARTIAL ELEVATIONS – FRAMING			
137	E4-PEN-STR-ELV-212	EAST PARTIAL ELEVATIONS – FRAMING			
138	E4-PEN-STR-SCT-300	TYPICAL PLATFORM SECTION			
139	E4-PEN-STR-SCT-301	TYPICAL PLATFORM SECTION			
140	E4-PEN-STR-SCT-302	TYPICAL PLATFORM SECTION			
141	E4-PEN-STR-PLN-401	VC FOUNDATION PLAN			
142	E4-PEN-STR-PLN-402	VC PLATFORM PLAN			
143	E4-PEN-STR-PLN-411	VC INTERMEDIATE LEVEL FRAMING PLAN			
144	E4-PEN-STR-PLN-412	VC BRIDGE LEVEL FRAMING PLAN			
145	E4-PEN-STR-PLN-413	VC PARTIAL ROOF FRAMING PLAN			
146	E4-PEN-STR-PLN-414	VC MAIN ROOF FRAMING PLAN			
147	E4-PEN-STR-PLN-415	PEDESTRIAN BRIDGE GENERAL PLANS AND ELEVATION			
148	E4-PEN-STR-SCT-501	VC TRACK 1 SECTION VIEW			
149	E4-PEN-STR-SCT-502	VC TRACK 2 SECTION VIEW			
150	E4-PEN-STR-SCT-503	VC SECTION VIEWS			
151	E4-PEN-STR-SCT-504	PEDESTRIAN BRIDGE PIER AT VC STRUCTURE			
152	E4-PEN-STR-DTL-505	PEDESTRIAN BRIDGE VC STRUCTURE PIER DETAILS			
153	E4-PEN-STR-DTL-506	PEDESTRIAN BRIDGE CENTER PIER			
154	E4-PEN-STR-DTL-507	PEDESTRIAN BRIDGE CENTER PIER DETAILS			
155	E4-PEN-STR-DTL-508	PEDESTRIAN BRIDGE NORTH ABUTMENT DETAILS			
156	E4-PEN-PLM-PLN-100	WEST AND MIDDLE PARTIAL UNDERFLOOR PLUMBING PLAN			
157	E4-PEN-PLM-PLN-101	EAST PARTIAL UNDERFLOOR PLUMBING PLAN			
158	E4-PEN-PLM-PLN-110	WEST AND MIDDLE PARTIAL PLUMBING PLAN			
159	E4-PEN-PLM-PLN-111	EAST PARTIAL PLUMBING PLAN AND PLUMBING RISER DIAGRAMS			
160	E4-PEN-PLM-PLN-120	ROOF PLUMBING PLAN			
161	E4-PEN-PLM-PLN-130	VC UNDERFLOOR PLATFORM LEVEL PLUMBING PLAN			
162	E4-PEN-PLM-PLN-131	VC PLATFORM LEVEL PLUMBING PLAN			
163	E4-PEN-PLM-PLN-132	VC WEST INTERMEDIATE AND BRIDGE LEVEL PLUMBING PLAN			
164	E4-PEN-PLM-PLN-133	VC WEST ROOF PLUMBING PLAN			
165	E4-PEN-PLM-SCT-201	TYPICAL PLATFORM PLUMBING SECTION			
166	E4-PEN-PLM-DTL-300	VC STORM DRAINAGE RISER			
167	E4-PEN-PLM-ELV-400	PEDESTRIAN BRIDGE PLUMBING ELEVATIONS			
168	E4-PEN-PLM-ELV-401	PEDESTRIAN BRIDGE PLUMBING ELEVATIONS AND SECTIONS			
169	E4-PEN-PLM-ELV-402	PEDESTRIAN BRIDGE PLUMBING ELEVATION			
170	E4-PEN-MEC-PLN-130	VC PLATFORM LEVEL HVAC PLAN			
171	E4-PEN-MEC-PLN-131	VC BRIDGE LEVEL HVAC PLAN			
172	E4-PEN-MEC-SCT-300	TYPICAL MECHANICAL SECTIONS			
173	E4-PEN-ELE-PLN-201	ELECTRICAL GROUNDING PLAN			
174	E4-PEN-ELE-ELV-202	ELECTRICAL GROUNDING ELEVATION			
175	E4-PEN-ELE-PLN-301	ELECTRICAL UNDERSLAB CONDUIT PLAN (1 OF 2)			
176	E4-PEN-ELE-PLN-302	ELECTRICAL UNDERSLAB CONDUIT PLAN (2 OF 2)			
177	E4-PEN-ELE-PLN-303	ELECTRICAL CANOPY PLAN			
178	E4-PEN-ELE-PLN-304	ELECTRICAL LIGHTING PLAN - VC PLATFORM LEVEL			
179	E4-PEN-ELE-PLN-305	ELECTRICAL LIGHTING PLAN - VC BRIDGE LEVEL			
180	E4-PEN-ELE-PLN-306	ELECTRICAL LIGHTING PLAN - PED WALKWAY (1 OF 2)			
181	E4-PEN-ELE-PLN-307	ELECTRICAL LIGHTING PLAN - PED WALKWAY (2 OF 2)			
182	E4-PEN-ELE-PLN-308	ELECTRICAL PLAN - VC PLATFORM LEVEL			
183	E4-PEN-ELE-PLN-309	ELECTRICAL POWER PLAN - VC INTERMEDIATE LEVEL			
184	E4-PEN-ELE-PLN-310	ELECTRICAL POWER PLAN - VC BRIDGE LEVEL			
185	E4-PEN-ELE-PLN-321	ELECTRICAL HEAT TRACE PLAN			
186	E4-PEN-ELE-PLN-322	ELECTRICAL HEAT TRACE ELEVATION			
187	E4-PEN-ELE-ELV-350	ELECTRICAL VC TRACK 1 ELEVATION			
188	E4-PEN-ELE-ELV-351	ELECTRICAL VC SIDE ELEVATIONS			
189	E4-PEN-ELE-ELV-352	ELECTRICAL VC TRACK 2 ELEVATION			
190	E4-PEN-ELE-PLN-411	COMMUNICATIONS UNDERSLAB CONDUIT PLAN (1 OF 2)			
191	E4-PEN-ELE-PLN-412	COMMUNICATIONS UNDERSLAB CONDUIT PLAN (2 OF 2)			
192	E4-PEN-ELE-PLN-421	COMMUNICATIONS CANOPY PLAN			
193	E4-PEN-ELE-PLN-431	COMMUNICATIONS VC PLATFORM LEVEL PLAN			
194	E4-PEN-ELE-PLN-432	COMMUNICATIONS VC BRIDGE LEVEL PLAN			
195	E4-PEN-ELE-PLN-433	COMMUNICATIONS VC PED WALKWAY PLAN (1 OF 2)			
196	E4-PEN-ELE-PLN-434	COMMUNICATIONS VC PED WALKWAY PLAN (2 OF 2)			
197	E4-PEN-ELE-ELV-441	COMMUNICATIONS VC TRACK 1 ELEVATION			
198	E4-PEN-ELE-ELV-442	COMMUNICATIONS VC TRACK 2 ELEVATION			
199	E4-PEN-ELE-SCH-461	COMMUNICATIONS CONDUIT SCHEDULE (1 OF 2)			
200	E4-PEN-ELE-SCH-462	COMMUNICATIONS CONDUIT SCHEDULE (2 OF 2)			
201	E4-PEN-ELE-SCH-501	ELECTRICAL SCHEDULES (1 OF 2)			

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
GENERAL
VOLUME INDEX OF PLAN SHEETS
SHEET 1

DISCIPLINE: GENERAL

SHEET NAME: 00-GEN-IDX-001

SHEET 2 OF 394

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CIVIL CONSTRUCTION

SHT #	SHEET NAME	SHEET DESCRIPTION	STATION	STATION	REV
		VOLUME 11D - STATIONS (cont'd)			
202	E4-PEN-ELE-SCH-502	ELECTRICAL SCHEDULES (2 OF 2)			
		VAN WHITE STATION			
203	E4-VWT-ARC-COD-010	CODE SUMMARY/ FINISH SCHEDULE			
204	E4-VWT-ARC-PLN-101	PLATFORM PLAN			
205	E4-VWT-ARC-PLN-102	VERTICAL CIRCULATION PLAN			
206	E4-VWT-ARC-PLN-110	WEST PARTIAL PLATFORM PLAN			
207	E4-VWT-ARC-PLN-111	MIDDLE PARTIAL PLATFORM PLAN			
208	E4-VWT-ARC-PLN-112	EAST PARTIAL PLATFORM PLAN			
209	E4-VWT-ARC-PLN-120	VC PLATFORM LEVEL PLAN			
210	E4-VWT-ARC-PLN-121	VC INTERMEDIATE LEVEL PLAN			
211	E4-VWT-ARC-PLN-122	VC BRIDGE LEVEL PLAN			
212	E4-VWT-ARC-PLN-130	WEST PARTIAL PAVEMENT PLAN			
213	E4-VWT-ARC-PLN-131	MIDDLE PARTIAL PAVEMENT PLAN			
214	E4-VWT-ARC-PLN-132	EAST PARTIAL PAVEMENT PLAN			
215	E4-VWT-ARC-PLN-135	VC PAVEMENT PLANS			
216	E4-VWT-ARC-PLN-136	VC PAVEMENT PLANS			
217	E4-VWT-ARC-PLN-140	VC ENLARGED PLANS			
218	E4-VWT-ARC-PLN-141	VC ENLARGED PLANS			
219	E4-VWT-ARC-PLN-150	ROOF PLANS			
220	E4-VWT-ARC-PLN-160	VC ROOF PLAN			
221	E4-VWT-ARC-PLN-161	VC ROOF PLAN			
222	E4-VWT-ARC-RCP-180	REFLECTED CEILING PLANS			
223	E4-VWT-ARC-RCP-185	VC RCP INTERMEDIATE AND PLATFORM LEVEL			
224	E4-VWT-ARC-RCP-186	VC RCP INTERMEDIATE AND BRIDGE LEVEL			
225	E4-VWT-ARC-ELV-200	ELEVATIONS			
226	E4-VWT-ARC-ELV-201	VC ELEVATIONS			
227	E4-VWT-ARC-ELV-210	WEST PARTIAL ELEVATIONS			
228	E4-VWT-ARC-ELV-211	MIDDLE PARTIAL ELEVATIONS			
229	E4-VWT-ARC-ELV-212	EAST PARTIAL ELEVATIONS			
230	E4-VWT-ARC-ELV-216	SIDE ELEVATIONS			
231	E4-VWT-ARC-ELV-220	VC TRACK 1 - PARTIAL ELEVATION			
232	E4-VWT-ARC-ELV-221	VC TRACK 1 - PARTIAL ELEVATION			
233	E4-VWT-ARC-ELV-222	VC SIDE ELEVATIONS			
234	E4-VWT-ARC-ELV-226	VC TRACK 2 - PARTIAL ELEVATION			
235	E4-VWT-ARC-ELV-227	VC TRACK 2 - PARTIAL ELEVATION			
236	E4-VWT-ARC-SCT-300	TYPICAL PLATFORM SECTION			
237	E4-VWT-ARC-SCT-301	PLATFORM SECTION			
238	E4-VWT-ARC-SCT-310	VC LONGITUDINAL SECTION			
239	E4-VWT-ARC-SCT-311	VC LONGITUDINAL SECTION			
240	E4-VWT-ARC-SCT-312	VC SECTIONS			
241	E4-VWT-ARC-SCT-313	VC SECTIONS			
242	E4-VWT-ARC-SCH-590	DOOR AND FRAME SCHEDULE			
243	E4-VWT-ARC-DTL-592	VC WINDOW TYPES			
244	E4-VWT-ARC-DTL-593	VC WINDOW TYPES			
245	E4-VWT-ARC-SCH-650	VC ARCHITECTURAL WOVEN METAL MESH SCHEDULE-1			
246	E4-VWT-ARC-DTL-651	VC ARCHITECTURAL WOVEN METAL MESH TYPES			
247	E4-VWT-ARC-DTL-652	VC ARCHITECTURAL WOVEN METAL MESH TYPES			
248	E4-VWT-ARC-ELV-700	VC INTERIOR ELEVATIONS			
249	E4-VWT-ARC-ELV-701	ELEVATOR LOBBY ENLARGED ELEVATIONS			
250	E4-VWT-ARC-DTL-710	STAIR DETAILS			
251	E4-VWT-ARC-SGN-800	SIGNAGE PLANS AND ELEVATIONS			
252	E4-VWT-STR-PLN-101	PLATFORM FOUNDATION PLAN			
253	E4-VWT-STR-SCH-102	STATION REFERENCE TABLE			
254	E4-VWT-STR-PLN-110	WEST PARTIAL FOUNDATION PLAN			
255	E4-VWT-STR-PLN-111	MIDDLE PARTIAL FOUNDATION PLAN			
256	E4-VWT-STR-PLN-112	EAST PARTIALFOUNDATION PLAN			
257	E4-VWT-STR-PLN-140	INTERMEDIATE FRAMING PLAN			
258	E4-VWT-STR-PLN-150	ROOF FRAMING PLANS			
259	E4-VWT-STR-ELV-201	ELEVATIONS – FRAMING			
260	E4-VWT-STR-ELV-210	WEST PARTIAL ELEVATIONS – FRAMING			
261	E4-VWT-STR-ELV-211	MIDDLE PARTIAL ELEVATIONS – FRAMING			
262	E4-VWT-STR-ELV-212	EAST PARTIAL ELEVATIONS – FRAMING			
263	E4-VWT-STR-SCT-300	TYPICAL PLATFORM SECTION			
264	E4-VWT-STR-SCT-301	TYPICAL PLATFORM SECTION			
265	E4-VWT-STR-SCT-302	TYPICAL PLATFORM SECTION			
266	E4-VWT-STR-SCT-303	TYPICAL PLATFORM SECTION			
267	E4-VWT-STR-PLN-401	VC FOUNDATION PLAN			
268	E4-VWT-STR-PLN-402	VC PLATFORM PLAN			
269	E4-VWT-STR-PLN-411	VC INTERMEDIATE LEVEL FRAMING PLAN			
270	E4-VWT-STR-PLN-412	VC BRIDGE LEVEL FRAMING PLAN			
271	E4-VWT-STR-PLN-413	VC PARTIAL ROOF FRAMING PLAN			

CIVIL CONSTRUCTION

SHT #	SHEET NAME	SHEET DESCRIPTION	STATION	STATION	REV
272	E4-VWT-STR-PLN-414	VC PARTIAL ROOF FRAMING PLAN			
273	E4-VWT-STR-PLN-415	VC MAIN ROOF FRAMING PLAN			
274	E4-VWT-STR-SCT-501	VC TRACK 1 SECTION VIEW			
275	E4-VWT-STR-SCT-502	VC TRACK 2 SECTION VIEW			
276	E4-VWT-STR-SCT-503	VC SECTION VIEWS			
277	E4-VWT-PLM-PLN-100	WEST AND MIDDLE PARTIAL UNDERFLOOR PLUMBING PLAN			
278	E4-VWT-PLM-PLN-101	EAST PARTIAL UNDERFLOOR PLUMBING PLAN			
279	E4-VWT-PLM-PLN-110	WEST AND MIDDLE PARTIAL PLUMBING PLAN			
280	E4-VWT-PLM-PLN-111	EAST PARTIAL PLUMBING PLAN AND PLUMBING RISER DIAGRAMS			
281	E4-VWT-PLM-PLN-120	ROOF PLUMBING PLAN			
282	E4-VWT-PLM-PLN-130	VC UNDERFLOOR PLATFORM LEVEL PLUMBING PLAN			
283	E4-VWT-PLM-PLN-131	VC PLATFORM LEVEL PLUMBING PLAN			
284	E4-VWT-PLM-PLN-132	VC BRIDGE LEVEL PLUMBING PLAN			
285	E4-VWT-PLM-PLN-133	VC INTERMEDIATE LEVEL PLUMBING PLAN			
286	E4-VWT-PLM-PLN-134	VC ROOF PLANS			
287	E4-VWT-PLM-SCT-201	TYPICAL PLATFORM PLUMBING SECTION			
288	E4-VWT-PLM-DTL-300	VC STORM DRAINAGE RISER			
289	E4-VWT-MEC-PLN-130	VC PLATFORM LEVEL HVAC PLAN			
290	E4-VWT-MEC-PLN-131	VC INTERMEDIATE LEVEL HVAC PLAN			
291	E4-VWT-MEC-PLN-132	VC BRIDGE LEVEL HVAC PLAN			
292	E4-VWT-MEC-SCT-300	TYPICAL HVAC SECTION			
293	E4-VWT-ELE-PLN-201	ELECTRICAL GROUNDING PLAN (1 OF 2)			
294	E4-VWT-ELE-PLN-202	ELECTRICAL GROUNDING PLAN (2 OF 2)			
295	E4-VWT-ELE-ELV-203	ELECTRICAL GROUNDING ELEVATIONS			
296	E4-VWT-ELE-PLN-301	ELECTRICAL UNDERSLAB CONDUIT PLAN (1 OF 2)			
297	E4-VWT-ELE-PLN-302	ELECTRICAL UNDERSLAB CONDUIT PLAN (2 OF 2)			
298	E4-VWT-ELE-PLN-303	ELECTRICAL PLAN - VC PLATFORM AND WALKWAY			
299	E4-VWT-ELE-PLN-304	ELECTRICAL CANOPY PLAN			
300	E4-VWT-ELE-PLN-305	ELECTRICAL LIGHTING PLAN - VC PLATFORM LEVEL			
301	E4-VWT-ELE-PLN-306	ELECTRICAL LIGHTING PLAN - VC BRIDGE LEVEL			
302	E4-VWT-ELE-PLN-307	ELECTRICAL POWER PLAN - VC INTERMEDIATE LEVEL			
303	E4-VWT-ELE-PLN-308	ELECTRICAL POWER PLAN - VC BRIDGE LEVEL			
304	E4-VWT-ELE-PLN-311	ELECTRICAL HEAT TRACE PLAN			
305	E4-VWT-ELE-ELV-321	ELECTRICAL HEAT TRACE ELEVATION			
306	E4-VWT-ELE-ELV-350	ELECTRICAL VC TRACK 1 - PARTIAL ELEVATION			
307	E4-VWT-ELE-ELV-351	ELECTRICAL VC TRACK 1 - PARTIAL ELEVATION			
308	E4-VWT-ELE-ELV-352	ELECTRICAL VC SIDE ELEVATIONS			
309	E4-VWT-ELE-ELV-353	ELECTRICAL VC TRACK 2 - PARTIAL ELEVATION			
310	E4-VWT-ELE-ELV-354	ELECTRICAL VC TRACK 2 - PARTIAL ELEVATION			
311	E4-VWT-ELE-PLN-411	COMMUNICATIONS UNDERSLAB CONDUIT PLAN (1 OF 2)			
312	E4-VWT-ELE-PLN-412	COMMUNICATIONS UNDERSLAB CONDUIT PLAN (2 OF 2)			
313	E4-VWT-ELE-PLN-421	COMMUNICATIONS CANOPY PLAN			
314	E4-VWT-ELE-PLN-431	COMMUNICATIONS VC PLATFORM LEVEL PLAN			
315	E4-VWT-ELE-PLN-432	COMMUNICATIONS VC BRIDGE LEVEL PLAN			
316	E4-VWT-ELE-ELV-441	COMMUNICATIONS VC TRACK 1 ELEVATION			
317	E4-VWT-ELE-ELV-442	COMMUNICATIONS VC TRACK 2 ELEVATION			
318	E4-VWT-ELE-SCH-461	COMMUNICATIONS CONDUIT SCHEDULE (1 OF 2)			
319	E4-VWT-ELE-SCH-462	COMMUNICATIONS CONDUIT SCHEDULE (2 OF 2)			
320	E4-VWT-ELE-SCH-501	ELECTRICAL SCHEDULES (1 OF 2)			
321	E4-VWT-ELE-SCH-502	ELECTRICAL SCHEDULES (2 OF 2)			
322	E4-VWT-ELE-DTL-601	ELECTRICAL DETAILS ONE LINE DIAGRAM (1 OF 2)			
323	E4-VWT-ELE-DTL-602	ELECTRICAL DETAILS ONE LINE DIAGRAM (2 OF 2)			
324	E4-VWT-ELE-DTL-603	ELECTRICAL PLATFORM CONTROL WIRING DETAIL			
		ROYALSTON STATION			
325	E4-ROY-ARC-COD-010	CODE SUMMARY/ FINISH SCHEDULE			
326	E4-ROY-ARC-PLN-101	PLATFORM PLAN			
327	E4-ROY-ARC-PLN-110	SOUTH PARTIAL PLATFORM PLANS			
328	E4-ROY-ARC-PLN-111	MIDDLE PARTIAL PLATFORM PLANS			
329	E4-ROY-ARC-PLN-112	NORTH PARTIAL PLATFORM PLANS			
330	E4-ROY-ARC-PLN-130	SOUTH PARTIAL PAVEMENT PLANS			
331	E4-ROY-ARC-PLN-131	MIDDLE PARTIAL PAVEMENT PLANS			
332	E4-ROY-ARC-PLN-132	NORTH PARTIAL PAVEMENT PLANS			
333	E4-ROY-ARC-PLN-150	TRACK 1 - ROOF PLANS			
334	E4-ROY-ARC-PLN-151	TRACK 2 - ROOF PLANS			
335	E4-ROY-ARC-RCP-180	TRACK 1 - REFLECTED CEILING PLANS			
336	E4-ROY-ARC-RCP-181	TRACK 2 - REFLECTED CEILING PLANS			
337	E4-ROY-ARC-ELV-200	ELEVATIONS			
338	E4-ROY-ARC-ELV-210	TRACK 1 - SOUTH PARTIAL ELEVATIONS			

CIVIL CONSTRUCTION

SHT #	SHEET NAME	SHEET DESCRIPTION	STATION	STATION	REV
339	E4-ROY-ARC-ELV-211	TRACK 1 - MIDDLE PARTIAL ELEVATIONS			
340	E4-ROY-ARC-ELV-212	TRACK 1 - NORTH PARTIAL ELEVATIONS			
341	E4-ROY-ARC-ELV-213	TRACK 2 - SOUTH PARTIAL ELEVATIONS			
342	E4-ROY-ARC-ELV-214	TRACK 2 - MIDDLE PARTIAL ELEVATIONS			
343	E4-ROY-ARC-ELV-215	TRACK 2 - NORTH PARTIAL ELEVATIONS			
344	E4-ROY-ARC-ELV-216	SIDE ELEVATIONS			
345	E4-ROY-ARC-SCT-300	TYPICAL PLATFORM SECTION			
346	E4-ROY-ARC-SGN-800	SIGNAGE PLANS AND ELEVATIONS			
347	E4-ROY-STR-PLN-101	PLATFORM FOUNDATION PLAN			
348	E4-ROY-STR-SCH-102	STATION REFERENCE TABLE			
349	E4-ROY-STR-PLN-110	SOUTH PARTIAL FOUNDATION PLAN			
350	E4-ROY-STR-PLN-111	MIDDLE PARTIAL FOUNDATION PLAN			
351	E4-ROY-STR-PLN-112	NORTH PARTIAL FOUNDATION PLAN			
352	E4-ROY-STR-PLN-140	TRACK 1- INTERMEDIATE FRAMING PLAN			
353	E4-ROY-STR-PLN-141	TRACK 2 -INTERMEDIATE FRAMING PLAN			
354	E4-ROY-STR-PLN-150	TRACK 1 - ROOF FRAMING PLANS			
355	E4-ROY-STR-PLN-151	TRACK 2 - ROOF FRAMING PLANS			
356	E4-ROY-STR-ELV-201	ELEVATIONS – FRAMING			
357	E4-ROY-STR-ELV-210	TRACK 1 - SOUTH PARTIAL ELEVATIONS -- FRAMING			
358	E4-ROY-STR-ELV-211	TRACK 1 - MIDDLE PARTIAL ELEVATIONS – FRAMING			
359	E4-ROY-STR-ELV-212	TRACK 1 - NORTH PARTIAL ELEVATIONS – FRAMING			
360	E4-ROY-STR-ELV-213	TRACK 2 - SOUTH PARTIAL ELEVATIONS -- FRAMING			
361	E4-ROY-STR-ELV-214	TRACK 2 - MIDDLE PARTIAL ELEVATIONS – FRAMING			
362	E4-ROY-STR-ELV-215	TRACK 2 - NORTH PARTIAL ELEVATIONS -- FRAMING			
363	E4-ROY-STR-SCT-300	TYPICAL PLATFORM SECTION			
364	E4-ROY-STR-SCT-301	TYPICAL PLATFORM SECTION			
365	E4-ROY-STR-SCT-302	TYPICAL PLATFORM SECTION			
366	E4-ROY-PLM-PLN-100	SOUTH PARTIAL UNDERFLOOR PLUMBING PLAN			
367	E4-ROY-PLM-PLN-101	MIDDLE PARTIAL UNDERFLOOR PLUMBING PLAN			
368	E4-ROY-PLM-PLN-102	NORTH PARTIAL UNDERFLOOR PLUMBING PLAN			
369	E4-ROY-PLM-PLN-110	SOUTH PARTIAL PLUMBING PLAN			
370	E4-ROY-PLM-PLN-111	MIDDLE PARTIAL PLUMBING PLAN			
371	E4-ROY-PLM-PLN-112	NORTH PARTIAL PLUMBING PLAN			
372	E4-ROY-PLM-PLN-113	PLUMBING RISER DIAGRAMS			
373	E4-ROY-PLM-PLN-120	ROOF PLUMBING PLAN			
374	E4-ROY-PLM-SCT-201	TYPICAL PLATFORM PLUMBING SECTION			
375	E4-ROY-ELE-PLN-201	ELECTRICAL GROUNDING PLAN, TRACK 1 SIDE			
376	E4-ROY-ELE-PLN-202	ELECTRICAL GROUNDING PLAN, TRACK 2 SIDE			
377	E4-ROY-ELE-ELV-203	ELECTRICAL GROUNDING ELEVATION, TRACK 1 SIDE			
378	E4-ROY-ELE-ELV-204	ELECTRICAL GROUNDING ELEVATION, TRACK 2 SIDE			
379	E4-ROY-ELE-PLN-301	ELECTRICAL UNDERSLAB CONDUIT PLAN - TRACK 1			
380	E4-ROY-ELE-PLN-302	ELECTRICAL UNDERSLAB CONDUIT PLAN - TRACK 2			
381	E4-ROY-ELE-PLN-303	ELECTRICAL CANOPY PLAN - TRACK 1 SIDE			
382	E4-ROY-ELE-PLN-304	ELECTRICAL CANOPY PLAN - TRACK 2 SIDE			
383	E4-ROY-ELE-PLN-311	ELECTRICAL HEAT TRACE PLAN - TRACK 1			
384	E4-ROY-ELE-PLN-312	ELECTRICAL HEAT TRACE PLAN - TRACK 2			
385	E4-ROY-ELE-ELV-321	ELECTRICAL HEAT TRACE ELEVATION			
386	E4-ROY-ELE-PLN-411	COMMUNICATIONS UNDERSLAB CONDUIT PLAN - TRACK 1 (1 OF 2)			
387	E4-ROY-ELE-PLN-412	COMMUNICATIONS UNDERSLAB CONDUIT PLAN - TRACK 1 (2 OF 2)			
388	E4-ROY-ELE-PLN-413	COMMUNICATIONS UNDERSLAB CONDUIT PLAN - TRACK 2 (1 OF 2)			
389	E4-ROY-ELE-PLN-414	COMMUNICATIONS UNDERSLAB CONDUIT PLAN - TRACK 2 (2 OF 2)			
390	E4-ROY-ELE-PLN-421	COMMUNICATIONS CANOPY PLAN - TRACK 1 SIDE			
391	E4-ROY-ELE-PLN-422	COMMUNICATIONS CANOPY PLAN - TRACK 2 SIDE			
392	E4-ROY-ELE-SCH-461	COMMUNICATIONS CONDUIT SCHEDULE (1 OF 2)			
393	E4-ROY-ELE-SCH-462	COMMUNICATIONS CONDUIT SCHEDULE (2 OF 2)			
394	E4-ROY-ELE-SCH-501	ELECTRICAL SCHEDULES			

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

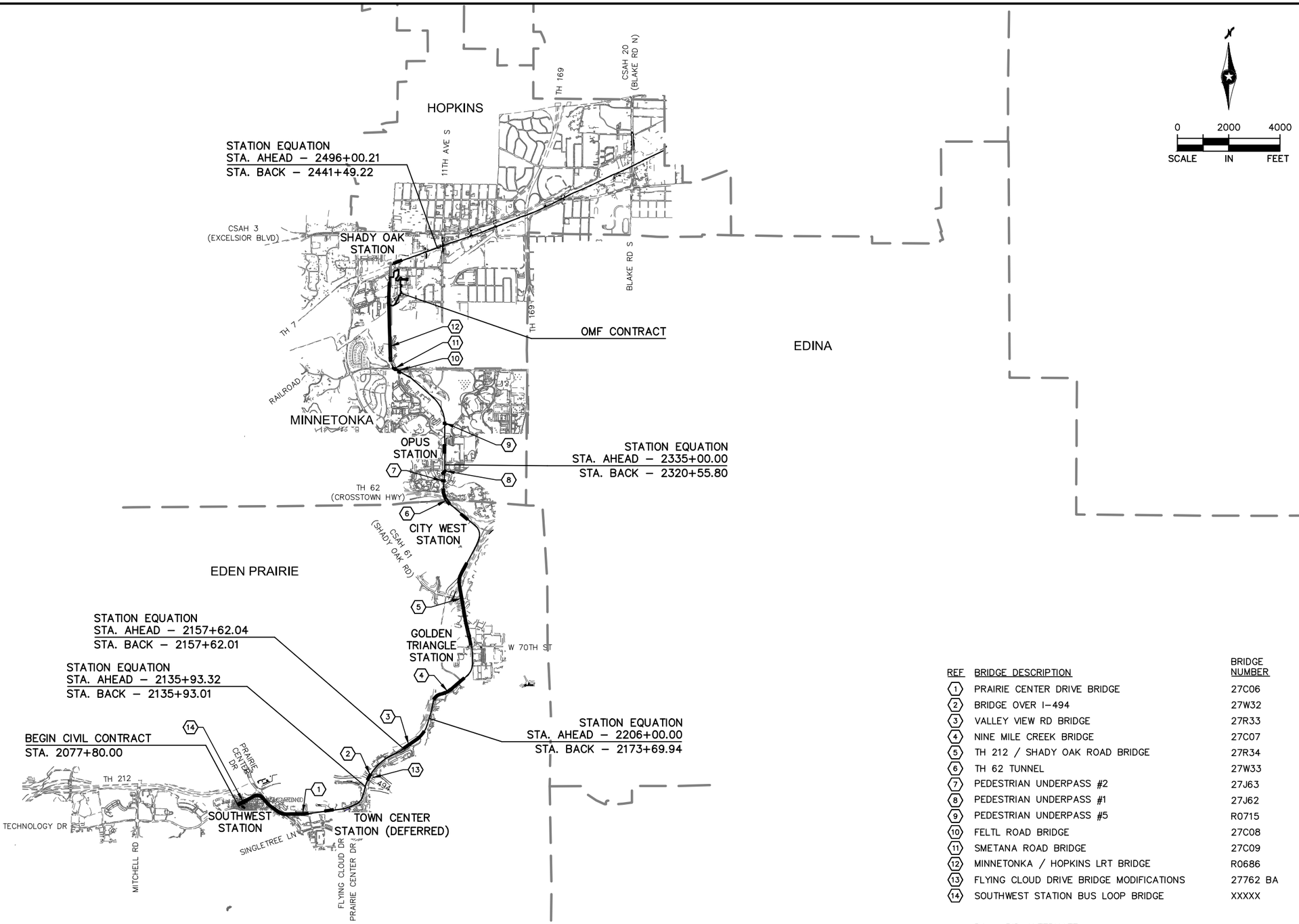
CIVIL - VOLUME 11D
GENERAL
VOLUME INDEX OF PLAN SHEETS
SHEET 2

DISCIPLINE: GENERAL

SHEET NAME: 00-GEN-IDX-002

SHEET 3 OF 394

Jan, 21 2016 07:30 pm v:\3400_ADC\CAD\CAD MANAGEMENT\DRAWING LIST\COVER SHEETS 90%\90% GEN-IDX_VOL_11.dwg By: v-kriewamr



REF	BRIDGE DESCRIPTION	BRIDGE NUMBER
1	PRAIRIE CENTER DRIVE BRIDGE	27C06
2	BRIDGE OVER I–494	27W32
3	VALLEY VIEW RD BRIDGE	27R33
4	NINE MILE CREEK BRIDGE	27C07
5	TH 212 / SHADY OAK ROAD BRIDGE	27R34
6	TH 62 TUNNEL	27W33
7	PEDESTRIAN UNDERPASS #2	27J63
8	PEDESTRIAN UNDERPASS #1	27J62
9	PEDESTRIAN UNDERPASS #5	R0715
10	FELTL ROAD BRIDGE	27C08
11	SMETANA ROAD BRIDGE	27C09
12	MINNETONKA / HOPKINS LRT BRIDGE	R0686
13	FLYING CLOUD DRIVE BRIDGE MODIFICATIONS	27762 BA
14	SOUTHWEST STATION BUS LOOP BRIDGE	XXXXX

BA – BID ALTERNATE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

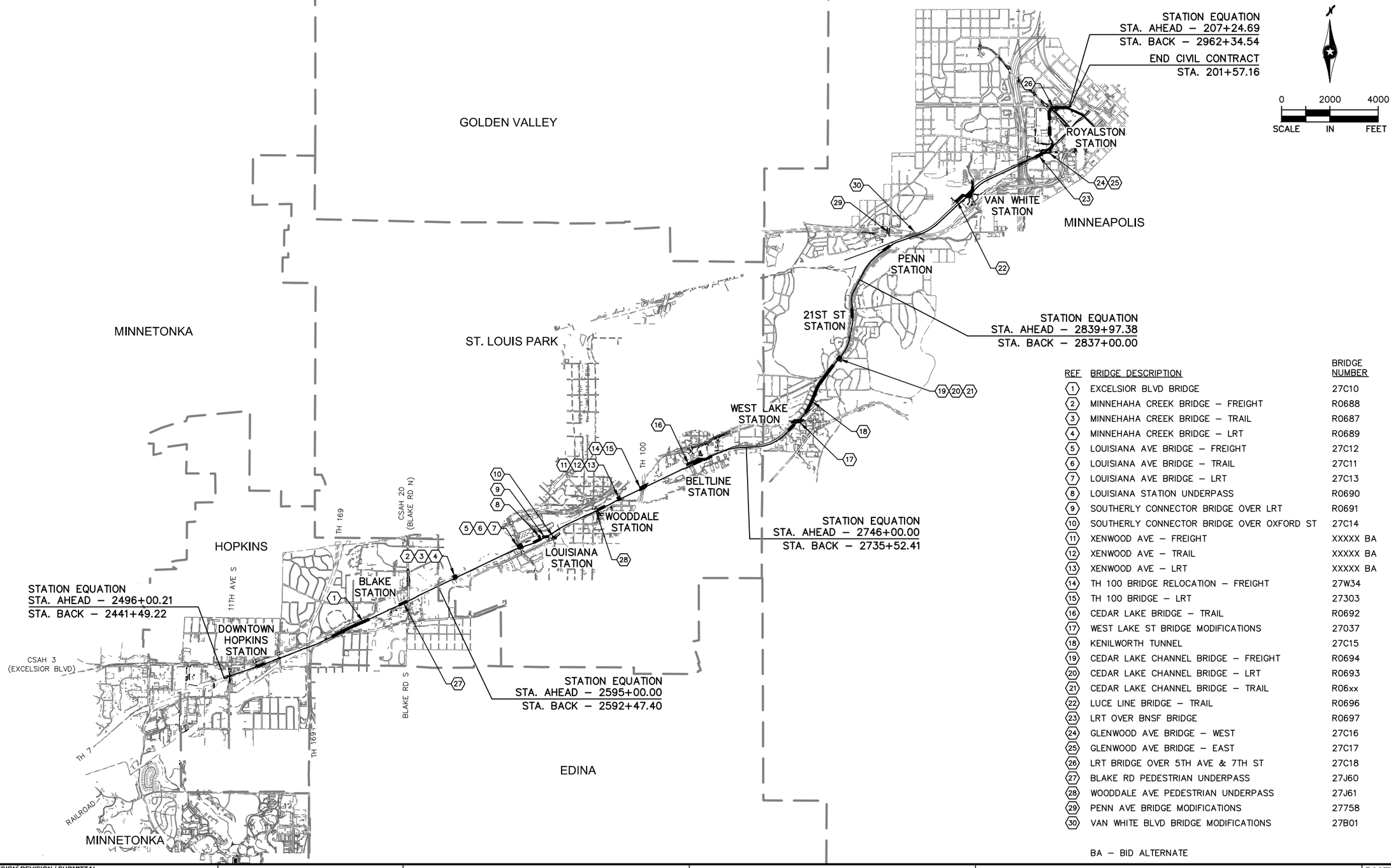
CIVIL - VOLUME 11D
GENERAL
KEY MAP
SHEET 1

DISCIPLINE: GENERAL

SHEET NAME: W0-GEN-KEY-001

SHEET 4 OF 394

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REF	BRIDGE DESCRIPTION	BRIDGE NUMBER
1	EXCELSIOR BLVD BRIDGE	27C10
2	MINNEHAHA CREEK BRIDGE – FREIGHT	R0688
3	MINNEHAHA CREEK BRIDGE – TRAIL	R0687
4	MINNEHAHA CREEK BRIDGE – LRT	R0689
5	LOUISIANA AVE BRIDGE – FREIGHT	27C12
6	LOUISIANA AVE BRIDGE – TRAIL	27C11
7	LOUISIANA AVE BRIDGE – LRT	27C13
8	LOUISIANA STATION UNDERPASS	R0690
9	SOUTHERLY CONNECTOR BRIDGE OVER LRT	R0691
10	SOUTHERLY CONNECTOR BRIDGE OVER OXFORD ST	27C14
11	XENWOOD AVE – FREIGHT	XXXXX BA
12	XENWOOD AVE – TRAIL	XXXXX BA
13	XENWOOD AVE – LRT	XXXXX BA
14	TH 100 BRIDGE RELOCATION – FREIGHT	27W34
15	TH 100 BRIDGE – LRT	27303
16	CEDAR LAKE BRIDGE – TRAIL	R0692
17	WEST LAKE ST BRIDGE MODIFICATIONS	27037
18	KENILWORTH TUNNEL	27C15
19	CEDAR LAKE CHANNEL BRIDGE – FREIGHT	R0694
20	CEDAR LAKE CHANNEL BRIDGE – LRT	R0693
21	CEDAR LAKE CHANNEL BRIDGE – TRAIL	R06xx
22	LUCE LINE BRIDGE – TRAIL	R0696
23	LRT OVER BNSF BRIDGE	R0697
24	GLENWOOD AVE BRIDGE – WEST	27C16
25	GLENWOOD AVE BRIDGE – EAST	27C17
26	LRT BRIDGE OVER 5TH AVE & 7TH ST	27C18
27	BLAKE RD PEDESTRIAN UNDERPASS	27J60
28	WOODDALE AVE PEDESTRIAN UNDERPASS	27J61
29	PENN AVE BRIDGE MODIFICATIONS	27758
30	VAN WHITE BLVD BRIDGE MODIFICATIONS	27B01

BA – BID ALTERNATE

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
GENERAL
KEY MAP
SHEET 2

DISCIPLINE: GENERAL

SHEET NAME: E0-GEN-KEY-002

SHEET 5 OF 394

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SYMBOLS

- PROPOSED DIRECTIONAL LANE USE
- EXISTING DIRECTIONAL LANE USE
- FLASHER (FREIGHT & PEDESTRIAN)
- CROSSING GATE (FREIGHT & LRT)
- CANTILEVER SIGNAL
- RAIL TURNOUT
- RAIL CROSSOVER (DOUBLE)
- RAIL CROSSOVER (SINGLE)
- POINT OF SWITCH (PS)
- OCS POLE FOUNDATION
- RAIL LUBRICATOR
- POINT OF INTERSECTION (PI)
- W2–200 — RAILROAD CURVE NUMBER
- ACCESSIBLE PEDESTRIAN CURB RAMP (DESIGN VARIES)
- HANDICAP PARKING STALL
- TACTILE WARNING STRIP
- TPSS BUILDING (TPSS–SW###) – NIC
  TUNNEL SYSTEMS HOUSE (TSY–SW###) – NIC
- SIGNAL / COMMUNICATION HOUSE – NIC
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN
- STORM SEWER FLARED END SECTION
- STORM SEWER CLEAN–OUT
- STORM SEWER PUMP STATION
- DTXX
  INV XXX.XX — DRAINTILE ID
- XXXX – ST — STORM SEWER STRUCTURE ID
- C / E — BUS SHELTER
- ROADWAY / PEDESTRIAN LIGHT

LINETYPES

- ROADWAY ℄
- TRACK ℄ (LRT)
- TRACK ℄ (FRT)
- RETAINING WALL
- BALLAST CURB
- TUNNEL WALL
- FENCE
- EX ROW
- PROP ROW
- PROP TCE
- PROP PE
- FENCE / RAILING
- ID – ID — FREIGHT INTRUSION DETECTION
- CONCRETE CURB AND GUTTER
- TRAIL (WIDTH VARIES)
- SIDEWALK
- DRIVEWAY
- BRIDGE
- SAWCUT
- DELINEATED WETLAND
- BMP (NWL) WATER EDGE
- PROPOSED FLOODPLAIN MITIGATION AREA
- SILT FENCE
- BALE BARRIER
- STORM SEWER
- CASING PIPE
- PIPE REMOVAL
- STRUCTURE REMOVAL
- FLOATING SILT FENCE
- SUPER DUTY SILT FENCE
- CONSTRUCTION LIMITS
- ROCK WEEPER
- DIVERSION DITCH
- OVERLAND FLOW
- CROSSWALK
- STOP BAR
- MEDIAN NOSE
- EP-EP-18 — WETLAND ID

CONSTRUCTION PACKAGE NOTE

NOTE: THE SWLRT CONSTRUCTION IS BEING IMPLEMENTED THROUGH THREE MAIN CONSTRUCTION PACKAGES; CIVIL, SYSTEMS & TUNNEL FACILITIES (SYS), AND OPERATIONS & MAINTENANCE FACILITY (OMF). CERTAIN SYS AND OMF SYMBOLS ARE SHOWN ON THE CIVIL CONTRACT PLANS FOR INFORMATION ONLY AND CERTAIN FACILITIES ARE NOT PART OF THE CIVIL CONTRACT.

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
GENERAL
NOTES, ABBREVIATIONS, AND SYMBOLS
SHEET 1

DISCIPLINE: GENERAL

SHEET NAME: 00-GEN-NTS-001

SHEET 6 OF 394

ABBREVIATIONS

3-2 (EG)	SIGNAL HEAD NUMBER (PHASE 3, NO. 2)
AD	ALGEBRAIC DIFFERENCE
AVE	AVENUE
AWF	ADVANCE WARNING FLASHER
BA	BID ALTERNATE
BGN	BEGIN
BP	BEGINNING POINT
BVCE	BEGINNING VERTICAL CURVE ELEVATION
BVCS	BEGINNING VERTICAL CURVE STATION
BLVD	BOULEVARD
BMP	BEST MANAGEMENT PRACTICE
BNSF	BURLINGTON NORTHERN SANTA FE RAILWAY
C&G	CURB AND GUTTER
℄	CENTERLINE
CB	CATCH BASIN
CE	CLEARANCE ENVELOPE
CIR	CIRCLE
CO	DRAINTILE CLEANOUT STRUCTURE
CP	CANADIAN PACIFIC
CPRAIL	CANADIAN PACIFIC RAILWAY
CS	CURVE TO SPIRAL
CSAH	COUNTY STATE AID HIGHWAY
D&U	DRAINAGE AND UTILITY
DF	DIRECT FIXATION
DR	DRIVE
DT	DRAINTILE
DTL	DETAIL
DWY	DRIVEWAY
E	EAST
Ea	ACTUAL SUPERELEVATION (INCHES)
EB	EAST BOUND
EL or ELEV	ELEVATION
EP	ENDING POINT
ESMT	EASEMENT
Eu	UNBALANCED SUPERELEVATION (INCHES)
EVCE	ENDING VERTICAL CURVE ELEVATION
EVCS	ENDING VERTICAL CURVE STATION
EVP	EMERGENCY VEHICLE PRE-EMPTION
EX	EXISTING
FES	FLARED END SECTION
FYA	FLASHING YELLOW ARROW
GR RD	GROUND ROD
GRN	GREEN INDICATION
HCRRA	HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY
INL	BRIDGE DRAIN INLET
INS GR	INSULATED GROUND
IP	INPLACE
LED	LIGHT EMITTING DIODE
LH	LEFT HAND
LN	LANE
LRCI	LOCALLY REQUESTED CAPITAL INVESTMENT
LRT	LIGHT RAIL TRANSIT
LRV	LIGHT RAIL VEHICLE
LT	LEFT
LUM	LUMINAIRE
L_c	CURVE LENGTH (FEET)
L_s	SPIRAL LENGTH (FEET)
MIN	MINIMUM
MPH	MILES PER HOUR
MPLS	CITY OF MINNEAPOLIS
MPRB	MINNEAPOLIS PARK AND RECREATION BOARD
N	NORTH
NB	NORTH BOUND
NIC	NOT IN CONTRACT
NO	NUMBER
NWL	NORMAL WATER LINE
OCS	OUTLET CONTROL SYSTEM
OCS	OVERHEAD CONTACT SYSTEM
OMF	OPERATIONS AND MAINTENANCE FACILITY
OH	OVERHEAD
P1-1 (EG)	PEDESTRIAN HEAD (PHASE 1, NO. 1)
PB2-1 (EG)	PUSHBUTTON (PHASE 2, NO. 1)
PC	POINT OF CURVE
PE	PERMANENT EASEMENT
PED	PEDESTRIAN
PITO	POINT OF INTERSECTION OF TURNOUT
PKWY	PARKWAY
POB	POINT OF BEGINNING
POE	POINT OF ENDING
POT	POINT ON TANGENT
PROP	PROPOSED
PS	POINT OF SWITCH
PT	POINT OF TANGENT
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS (FEET)
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RL	RAIL LUBRICATOR
r	RATE OF CHANGE VERTICAL CURVE
RH	RIGHT HAND
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
SB	SOUTH BOUND
SC	SPIRAL TO CURVE
SIG-COMM	SIGNAL COMMUNICATION
SOP	SOURCE OF POWER
ST	STREET
ST	SPIRAL TO TANGENT
ST	STORM MANHOLE STRUCTURE
STA	STATION
TCE	TEMPORARY CONSTRUCTION EASEMENT
TH	TRUNK HIGHWAY
THRU	THROUGH
TOR	TOP OF RAIL
TPSS	TRACTION POWER SUBSTATION
TRK	TRACK
TS	TANGENT TO SPIRAL
TYP	TYPICAL
UG	UNDERGROUND
V	DESIGN VELOCITY (MPH)
VC	VERTICAL CURVE
VDE	VEHICLE DYNAMIC ENVELOPE
W	WEST
WB	WEST BOUND
WLK	WALK INDICATION

TRAIL INDEX

ABBREVIATED NAME	FULL NAME / LOCATION
TRAIL 1	UNDER RED CIRCLE DR, LRT, AND YELLOW CIRCLE DR
TRAIL 2	FROM TRAIL 1 TO GREEN CIRCLE DR
TRAIL 3	OPUS STATION ACCESS FROM BREN RD E
TRAIL 4	FROM BREN RD W TO TRAIL 5
TRAIL 5	FROM OPUS STATION TO GREEN CIRCLE DR
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 TRAIL FROM CEDAR LAKE LRT REGIONAL TRAIL TO TYLER AVE.
TRAIL D	10' CONNECTOR TRAIL/BELTLINE STATION TO CEDAR LAKE LRT REGIONAL TRAIL
KENILWORTH TRAIL	KENILWORTH TRAIL (MAIN)/W LAKE ST TO PENN STATION
CEDAR LAKE TRAIL	CEDAR LAKE TRAIL (MAIN)/PENN STATION TO TH 394
TRAIL E	KENILWORTH TRAIL (SECONDARY)/EAST OF W LAKE ST
TRAIL F	KENILWORTH TRAIL (SECONDARY)/WEST OF CEDAR LAKE PKWY
TRAIL G	NOT USED
TRAIL H	10' CONNECTOR TRAIL/EAST OF PENN STATION TO KENWOOD PKWY
TRAIL I	10' CONNECTOR TRAIL FROM CEDAR LAKE REGIONAL TRAIL TO CSAH 20 (BLAKE RD)
CEDAR LAKE TRAIL	CEDAR LAKE TRAIL (MAIN)/AT-GRADE CROSSING AT PENN STATION
TRAIL J	CEDAR LAKE TRAIL (SECONDARY)/NORTHWEST OF PENN STATION
TRAIL K	CEDAR LAKE TRAIL (SECONDARY)/NORTHWEST OF PENN STATION
TRAIL L	CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION
TRAIL M	10' CONNECTOR TRAIL FROM CEDAR LAKE REGIONAL TRAIL TO CSAH 20 (BLAKE RD)
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
TRAIL P	8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO LOUISIANA AVE
TRAIL Q	10' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO TH 7 SERVICE ROAD
TRAIL R	20' CONNECTOR TRAIL FROM VAN WHITE STATION TO CEDAR LAKE TRAIL
TRAIL S	10' CONNECTOR TRAIL FROM CEDAR LAKE REGIONAL TRAIL TO BELTLINE BLVD
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
TRAIL V	CONNECTOR TRAIL TO LUCE LINE REGIONAL TRAIL WEST OF LIGHT RAIL
TRAIL W	CONNECTOR TRAIL TO LUCE LINE REGIONAL TRAIL WEST OF LIGHT RAIL
TRAIL X	NOT USED
TRAIL Y	12' CONNECTOR TRAIL FROM CEDAR LAKE REGIONAL TRAIL TO WOODDALE AVE S
TRAIL Z	12' CONNECTOR TRAIL FROM CEDAR LAKE REGIONAL TRAIL TO WOODDALE AVE S
TRAIL AA	8' PEDESTRIAN CONNECTOR TRAIL FROM TRAIL B TO PENN STATION
TRAIL BB	8' PEDESTRIAN CONNECTOR TRAIL FROM TRAIL B TO PENN STATION
TRAIL CC	10' CONNECTOR TRAIL FROM KENILWORTH TRAIL (MAIN) TO PENN STATION

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
GENERAL
NOTES, ABBREVIATIONS, AND SYMBOLS
SHEET 2

DISCIPLINE: GENERAL

SHEET NAME: 00-GEN-NTS-002

SHEET 7 OF 394

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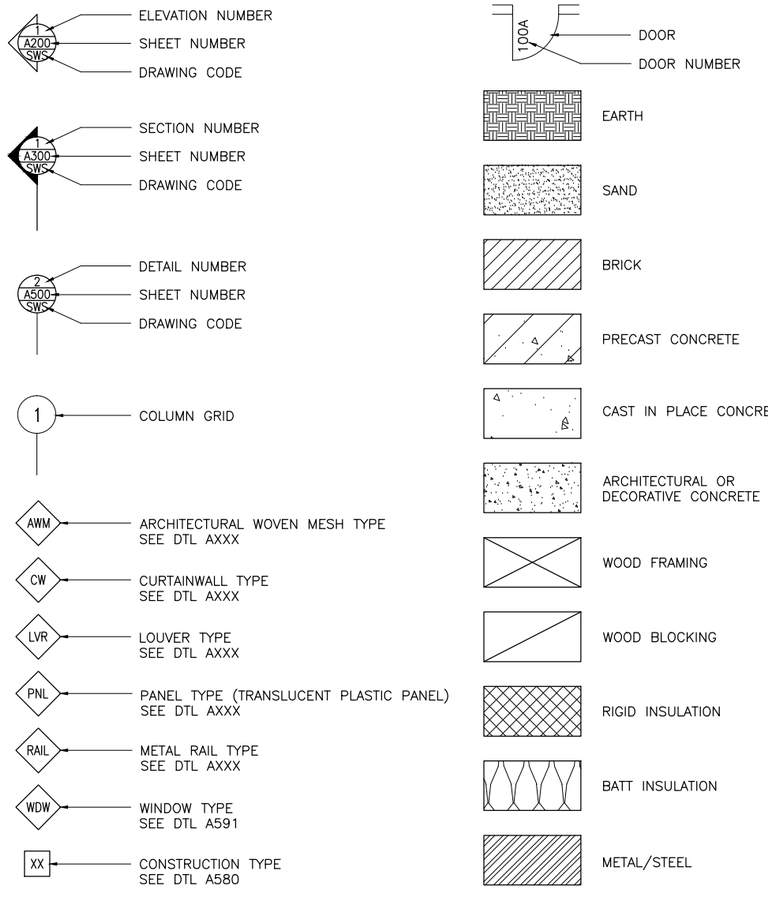
ABBREVIATIONS

@	AT
℄	BASELINE
℄	CENTERLINE
Ø	DIAMETER
ℙ	PLATE
#	POUND/ NUMBER
A/C	AIR CONDITIONING
ACS	ACCESS
AD	AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT
ADDL	ADDITIONAL
ADJ	ADJACENT
AESS	ARCHITECTURALLY EXPOSED STRUCT STL
AFF	ABOVE FINISH FLOOR
ALUM	ALUMINUM
ANC	ANCILLARY
ANOD	ANODIZED
ANT	ANTENNA(E)
APPROX	APPROXIMATE
ARCH	ARCHITECT(URAL)
ATS	AUTOMATIC TRANSFER SWITCH
AVE	AVENUE
AWM	ARCHITECTURAL WOVEN MESH
BATT	BATTERY
BD	BOARD
BL	BASELINE
BLDG	BUILDING
BLKG	BLOCK(ING)
BLVD	BOULEVARD
BM	BENCH MARK
BNDRY	BOUNDARY
B.O.	BASE OF/ BOTTOM OF
BRK	BRICK
BTW	BETWEEN
CAB	CABINET
CAR	COUNCIL AUTHORIZED REPRESENTATIVE
CCTV	CCTV CAMERA
CEM	CEMENT(ITIOUS)
CI	CAST IRON
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONARY UNIT
CO	COUNTY
COL	COLUMN
COMM	COMMUNICATION(S)
CONC	CONCRETE
CONST	CONSTANT
CONSTR JT	CONSTRUCTION JOINT
CONT	CONTINUE(OUS)
COORD	COORDINATE
CSK	COUNTERSUNK
CT	CERAMIC TILE
CTG	COATING
D	DEEP
DEC	DECORATIVE
DIA	DIAMETER
DIM(S)	DIMENSION(S)
DIP	DUCTILE IRON PIPE
DIR	DIRECTIVE
DISP	DISPLAY
DIV	DIVISION
DN	DOWN
DR	DOOR
DRN	DRAIN
DTL	DETAIL
DWG	DRAWING
E	EAST
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC(AL)
ELEV	ELEVATOR/ ELEVATION
EMR	ELEVATOR MACHINE ROOM
ENCL	ENCLOSURE
ENGR(ING)	ENGINEER(ING)
ENT	ENTRANCE/ ENTRY
EP	EDEN PRAIRIE
EQ	EQUAL
EQUIP	EQUIPMENT
ETL	EMERGENCY TELEPHONE
EXIST	EXISTING
EXT	EXTERIOR
FC	FACE
FCO	FLOOR CLEANOUT
FF	FINISHED FLOOR
FIN	FINISH
FIXT	FIXTURE
FL	FLOOR
FLASH	FLASHING
FLUOR	FLUORESCENT
FO	FACE/ FRONT OF
FRP	FIBERGLASS REINFORCED PANEL
FT	FOOT/ FEET
FTG	FOOTING
FUTR	FUTURE
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GL	GLASS/ GLAZING
GPM	GALLONS PER MINUTE
GR	GRADE
GS	GROUND SURFACE
GYP	GYPSUM
H	HIGH
HH	HAND HOLE
HSS	HOLLOW STRUCTURAL SECTION
HT	HEIGHT
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HP	HIGH PERFORMANCE
HOP	HOPKINS
HR	HOUR
HTR	HEATER
HVAC	HEATING, VENTLATION AND AIR CONDITIONING
ID	IDENTIFICATION/INSIDE DIAMETER
IN	INCH(ES)
INCL	INCLUDING
INF	INFILL
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
J-BOX	JUNCTION BOX
JT	JOINT
LDR	LEADER
LG	LONG
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION
LVR(S)	LOUVER(S)
MACH	MACHINE
MAINT	MAINTENANCE
MAS	MASONRY
MAT	MATERIAL
MAX	MAXIMUM
MCP	METAL CEILING PANEL
MECH	MECHANICAL
MED	MEDIUM
MEMB	MEMBRANE
MFR	MANUFACTURER(ED)
MH	MANHOLE
MID	MIDDLE
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MN	MINNESOTA
MN/DOT	MINNESOTA DEPARTMENT OF TRANSPORTATION
MO	MASONRY OPENING
MPLS	MINNEAPOLIS
MT	METRO TRANSIT
MTD	MOUNT(ED)
MTKA	MINNETONKA
MTL	METAL
N/A	NOT APPLICABLE
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OCS	OVERHEAD CONTACT SYSTEM
OH	OVERHEAD
OMF	OPERATIONS AND MAINTENANCE FACILITY
OPER	OPERABLE
OPNG	OPENING
OPP	OPPOSITE
PA	PUBLIC ADDRESS
PART	PARTIAL
PERP	PERPENDICULAR
PL	PLATE
PLBG	PLUMBING
PLWD	PLYWOOD
PNL(S)	PANEL(S)
PRCST/PC	PRECAST
PRE-FAB	PRE-FABRICATED
PSI	POUND PER SQUARE INCH
PT	POINT
PTD	PAINT(ED)
PVC	POLYVINYL CHLORIDE
PROP	PROPOSED/PROPERTY
QTY	QUANTITY(IES)
R	REVEAL
RAD	RADIUS
RD	ROOF DRAIN
REF	REFERENCE
REINF	REINFORCE(MENT)(ING)
REQD	REQUIRED
REQS	REQUIREMENTS
REV	REVISE (REVISION)
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT-OF-WAY
RSV	RAIL SMARTCARD VALIDATOR
RVS	REVERSE
RWL	RAIN WATER LEADER
S	SOUTH
SCHED	SCHEDULE
SCC	STATION COMMUNICATION CABINET
SEC	STATION ELECTRICAL CABINET
SF	SQUARE FEET
SHTHG	SHEATHING
SIG	SIGNAL
SIM	SIMILAR
SLP	ST. LOUIS PARK
SLNT	SEALANT
SHT	SHEET
SK	SKYLIGHT
SPEC	SPECIFICATION
SPKR	SPEAKER
SPO	SOUTHWEST PROJECT OFFICE
SQ	SQUARE
SS	STAINLESS STEEL
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURE(AL)
SUSP	SUSPENDED
SWLRT	SOUTHWEST CORRIDOR LIGHT RAIL TRANSIT
SYS	SYSTEM
T	TREAD
TEMP	TEMPORARY
T/E	TRACTION/ELECTRIC
TH	THICK(NESS)
THRES	THRESHOLD
THRU	THROUGH
T.O.	TOP OF
TOW	TOP OF WALL
TPSS	TRACTION POWER SUBSTATION
TUNN	TUNNEL
TVM	TICKET VENDING MACHINE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VMS	VARIABLE MESSAGE SIGN
VS	VENT SHAFT
W/	WITH
W/O	WITHOUT
W	WEST/WIDTH
WCO	WALL CLEANOUT
WP	WORKING POINT
WD	WOOD
WDW	WINDOW

DRAWING CODES

HOP	DOWNTOWN HOPKINS STATION
BLK	BLAKE STATION
LOU	LOUISIANA STATION
WDL	WOODDALE STATION
BLT	BELTLINE STATION
WST	WEST LAKE STATION
21S	21ST STREET STATION
PEN	PENN STATION
VWT	VAN WHITE STATION
ROY	ROYALSTON STATION
DTL	COMMON DETAILS IN VOLUME 11E

SYMBOLS



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
STATIONS
ARCHITECTURAL ABBREVIATIONS, SYMBOLS, AND DRAWING CODES

DISCIPLINE: ARCHITECTURE

SHEET NAME: E0-ARC-ABR-020

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1. CODES AND SPECIFICATIONS

1. 2015 MINNESOTA STATE BUILDING CODE.
2. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (AISC-360-10).
3. AMERICAN CONCRETE INSTITUTE (ACI) "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318-11).
4. AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" ASCE 7-10.

2. GENERAL

1. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, ELEVATIONS AND DIMENSIONS. CHANGES REQUIRED DUE TO EXISTING CONDITIONS SHALL BE SUBJECT TO A/E APPROVAL PRIOR TO ANY CONSTRUCTION.
2. CONTRACTOR SHALL SUBMIT ALL REQUIRED SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION OR DELIVERY OF MATERIALS TO THE SITE.
3. NOTES, TYPICAL DETAILS AND SCHEDULES APPLY TO ALL STRUCTURAL WORK UNLESS NOTED OTHERWISE. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS OF A SIMILAR NATURE. VERIFY APPLICABILITY BY SUBMITTING SHOP DRAWINGS.
4. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS, CIVIL, ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS. IF THERE IS A DISCREPANCY BETWEEN DRAWINGS AND SPECIFICATIONS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE C.A.R. PRIOR TO PERFORMING WORK.
5. AT ALL TIMES THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF PERSONS AND PROPERTY. THE ENGINEER'S PRESENCE OR REVIEW OF WORK DOES NOT INCLUDE THE ADEQUACY OF THE CONTRACTOR'S MEANS OR METHODS OF CONSTRUCTION.
6. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SUPPORT, BRACING, SHORING, ETC. OF BOTH EXISTING AND NEW CONSTRUCTION, INCLUDING UTILITIES, AS WILL BE REQUIRED FOR THE SAFE INSTALLATION OF NEW CONSTRUCTION AND THE COMPLETE PROTECTION OF PUBLIC, WORKMEN AND PROPERTY. TOTAL RESPONSIBILITY IN THIS REGARD SHALL REST WITH THE CONTRACTOR.

3. FOUNDATION

1. PLATFORMS AND VC STRUCTURES SHALL BE PLACED ON SELECT GRANULAR MATERIAL OR OTHER FOUNDATION SYSTEMS AS OUTLINED IN THE PROJECT GEOTECHNICAL REPORTS.
2. MINIMUM FROST DEPTH AND FOOTING DEPTH SHALL BE 5'-0" FEET BELOW FINISHED GRADE FOR UNHEATED STRUCTURES.
3. PILE SUPPORTED FOOTINGS SHALL BE SUPPORTED BY 12" CIP PILES OR MICROPILES AS SHOWN ON THE PLANS.

4. CONCRETE

1. ALL CONCRETE SHALL CONFORM TO CURRENT EDITION OF THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE ACI 318-11.
2. CONCRETE FOR FOOTINGS, PIERS, WALLS BEAMS AND SLAB ON GRADE SHALL BE STONE CONCRETE AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
3. CONSTRUCTION JOINTS SHALL BE PROVIDED AS INDICATED ON THE DRAWINGS OR AS APPROVED BY THE ENGINEER.
4. SIZE OF CONCRETE PLACEMENT SHALL NOT EXCEED THE FOLLOWING, UNLESS OTHERWISE NOTED: SLABS ON GRADE: PLACE IN LONG STRIPS AS SHOWN ON THE DRAWINGS. WALL SECTIONS: 40'-0" IN LENGTH BUT NOT FURTHER THAN 15 FEET FROM ANY CORNERS.
5. SURFACE OF ALL CONSTRUCTION JOINTS SHALL BE ROUGHENED BEFORE CONCRETE SETS. CONCRETE SURFACE SHALL BE PREPARED BEFORE A NEW POUR AS SPECIFIED IN THE "ACI MANUAL OF CONCRETE INSPECTION" SP-2.
6. SLEEVES, MECHANICAL OPENINGS, CONDUITS, PIPES, RECESSES, DEPRESSIONS, CURBS AND ALL EMBEDDED ITEMS SHALL BE PROVIDED FOR AS SHOWN ON THE ARCHITECTURAL AND MECHANICAL DRAWINGS AND AS REQUIRED BY EQUIPMENT MANUFACTURERS. MINIMUM CONCRETE BETWEEN SLEEVES SHALL BE 6 INCHES.
7. NOT ALL ITEMS EMBEDDED IN CONCRETE ARE INDICATED ON THE STRUCTURAL DRAWINGS. SEE ARCHITECTURAL WITH MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL EMBEDDED ITEMS.
8. CONCRETE FLOORS SHALL BE CONSTRUCTED TO THE FLATNESS TOLLERANCES INDICATED IN SPECIFICATIONS.

5. REINFORCING STEEL

1. ALL REINFORCING STEEL SHALL CONFORM TO THE CURRENT ASTM SPECIFICATIONS A615 GRADE 60 UNLESS OTHERWISE NOTED ON THE DRAWINGS. REINFORCING STEEL, EXCEPT FOR FOOTING REINFORCEMENT, SHALL BE EPOXY COATED.
2. REINFORCEMENT DETAILS SHALL CONFORM TO THE MANUAL OF STANDARDS FOR DETAILING OF CONCRETE REINFORCEMENT ACI 315.
3. REINFORCEMENT SHALL BE CONTINUOUS THROUGH ALL CONSTRUCTION JOINTS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
4. ALL BARS SHALL BE CONTINUOUS UNLESS NOTED OTHERWISE. BARS SHALL BE RUN CONTINUOUSLY AROUND CORNERS AND LAPPED IF NECESSARY AND HOOKED AT DISCONTINUOUS ENDS.
5. ALL STEEL WELDED FABRIC SHALL CONFORM TO ASTM A185, WITH MINIMUM ULTIMATE TENSILE STRENGTH OF 70,000 PSI.
6. REINFORCING BARS SHALL BE SECURELY HELD IN PROPER POSITION WHILE PLACING CONCRETE. REBAR SPLICE LENGTH SHALL CONFORM TO THE LATEST EDITION OF BUILDING CODE REQUIREMENTS, FOR REINFORCED CONCRETE, ACI 318. SPLICE ALL REBARS AWAY FROM THE TENSION ZONE. TOP BARS SHALL BE SPLICED AT MIDSPANS AND BOTTOM BARS OVER SUPPORTS U.O.N.
7. REINFORCEMENT IN ALL SLABS-ON-GRADE SHALL NOT BE CONTINUOUS THROUGH EXPANSION AND ISOLATION JOINTS. AT THE CONTRACTION OR CONSTRUCTION JOINTS ONLY ALTERNATE BARS SHALL BE CONTINUOUS.
8. ALL REINFORCEMENT INCLUDING WELDED WIRE MESH IN SLABS ON GRADE SHALL BE SUPPORTED TO PREVENT DISPLACEMENT BY CONSTRUCTION LOADS OR PLACING OF CONCRETE. SUPPORT REINFORCEMENT ON CONCRETE BLOCKS 4" SQUARE HAVING COMPRESSIVE STRENGTH EQUAL TO THAT OF THE SLAB. PROVIDE WELDED WIRE MESH IN FLAT SHEETS ONLY.
9. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS AND LOCATIONS OF ALL OPENINGS, PIPE SLEEVES, ETC. AS REQUIRED BY ALL TRADES, BEFORE THE CONCRETE IS POURED, THE CONTRACTOR SHALL CONSULT MECHANICAL AND ELECTRICAL DRAWINGS, AS WELL AS THE STRUCTURAL DRAWINGS FOR THE LOCATION, NUMBER, AND SIZE OF ALL OPENINGS, SLEEVES, ETC. HOWEVER, OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS, SHALL BE INSTALLED ONLY AFTER APPROVAL BY THE STRUCTURAL ENGINEER IS OBTAINED.

6. STRUCTURAL STEEL

1. UNLESS OTHERWISE NOTED, STRUCTURAL STEEL SHAPES SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:
   i. WIDE FLANGES, A.S.T.M. A992
   ii. CHANNELS, A.S.T.M. A36
   iii. STRUCTURAL TUBES, A.S.T.M. A500 (Gr. B)
   iv. PLATES, A.S.T.M. A36
2. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATION FOR DESIGN.
3. ANCHOR RODS SHALL CONFORM TO A.S.T.M. A307.
4. TEMPLATES SHALL BE PROVIDED FOR ALL ANCHOR RODS CAST IN PLACE.
5. HIGH STRENGTH BOLTS SHALL CONFORM TO A.S.T.M. A325. NON-HIGH STRENGTH BOLTS SHALL CONFORM TO A.S.T.M. A307. WASHERS SHALL CONFORM TO A.S.T.M. F436 AND NUTS TO A.S.T.M. A583.
6. ALL AVAILABLE STRENGTHS FOR BOLTS SHALL BE THOSE GIVEN IN THE AISC SPECIFICATIONS.
7. STRUCTURAL STEEL CONNECTIONS SHALL BE AS SHOWN ON THE DRAWINGS.
8. ALL STEEL SURFACES NOT SHOP PRIMED SHALL BE FIELD PRIMED OR TOUCHED-UP PRIMED. EXCEPT AS MODIFIED BY THE SPECIFICATIONS.
9. GALVANIZING WHEN REQUIRED AS CALLED ON PLANS SHALL BE HOT-DIP GALVANIZNING IN ACCORDANCE WITH A.S.T.M. A123 & A155.
10. CONTRACTOR SHALL SUBMIT, FOR REVIEW, STRUCTURAL STEEL SHOP DRAWINGS PREPARED BY AN AISC CERTIFIED FABRICATOR.

7. WELDING

1. WELDING OF STRUCTURAL STEEL SHALL CONFORM TO THE STRUCTURAL WELDING CODE AWS D1.1. ELECTRODES SHALL BE E70XX, LOW HYDROGEN.
2. ALL FILLET WELD SIZES NOT SHOWN ON THE DRAWING SHALL NOT BE LESS THAN THE MINIMUM SIZE AS PER AISC SPECIFICATIONS.
3. ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER AND SHALL BE SUBJECT TO QUALITY CONTROL INSPECTION AS REQUIRED BY THE STATE OF MINNESOTA BUILDING CODE.

8. GROUT

1. UNLESS OTHERWISE NOTED ON THE DRAWINGS, GROUT SHALL BE CEMENTITIOUS GROUT CONFORMING TO SPECIFICATIONS.
2. FOR ANCHOR BOLTS AND DOWELS, USE EPOXY GROUT, SUCH AS MASTER BUILDERS, INC. BRUTEM AB OR EQUAL.
3. GROUT SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTRUCTIONS.

9. DESIGN LOADS

1.

	STATION PLATFORMS		VIRTICAL CIRCULATION		PEDESTRIAN SKYWALK	
	PLATFORM	ROOF	LANDINGS	ROOF	DECK	ROOF
LIVE LOAD (PSF)	125	35	100	20	90	20
SNOW LOAD (PSF)	–	35	–	42	–	35
STRUCTURE DEAD LOAD (PSF)	VARIES	S.W.	125	S.W.	140	S.W.
SUPERIMPOSED DEAD LOAD (PSF)	–	10	5	10	5	10

NOTE: STEEL SELF WEIGHT WILL BE CALCULATED IN STRUCTURAL ANALYSIS PROGRAM

PLATFORMS

2. ROOF SNOW LOAD:
   GROUND SNOW LOAD: Pg = 50 PSF
   SNOW EXPOSURE FACTOR: Ce = 0.9
   SNOW IMPORTANCE FACTOR: I = 1.0
   THERMAL FACTOR: Ct = 1.2
   FLAT ROOF SNOW LOAD: Pf = 35 PSF
   SNOW DRIFT HAS BEEN CONSIDERED WHERE APPLICABLE.
3. WIND LOADS:
   RISK CATEGORY: II
   ULTIMATE DESIGN WIND SPEED: 115 MPH
   WIND EXPOSURE CATEGORY: B
   INTERNAL PRESSURE COEFFICIENT: 0.18
   COMPONENTS & CLADDING MINIMUM PRESSURE AS PER ASCE 7-10
4. SEISMIC LOADS:
   SEISMIC USE GROUP 1
   SPECTRAL RESPONSE COEFFICIENTS:
   S_{DS} = 0.064g, S_{D1} = .0438g
   SITE CLASS: D
   BASIC SEISMIC-FORCE-RESISTING SYSTEM:
   ORDINARY STEEL MOMENT FRAMES
   DESIGN BASE SHEAR: 0.018W
   SEISMIC DESIGN CATEGORY A
   MODIFICATION FACTOR, R = 3.5
5. DEFLECTION CRITERIA:
   ALLOWABLE DESIGN FLOOR DEFLECTIONS ARE AS FOLLOWS:
   DL+LL = L/240
   LL = L/360 TYPICAL
   LL+SDL = L/600 OR 3/8" CMU SUPPORTING SPANDREL BEAMS
6. BUILDING ALLOWABLE LATERAL DRIFT = L/400

VERTICAL CIRCULATION

2. ROOF SNOW LOAD:
   GROUND SNOW LOAD: Pg = 50 PSF
   SNOW EXPOSURE FACTOR: Ce = 1.0
   SNOW IMPORTANCE FACTOR: I = 1.0
   THERMAL FACTOR: Ct = 1.2
   FLAT ROOF SNOW LOAD: Pf = 42 PSF
   SNOW DRIFT HAS BEEN CONSIDERED WHERE APPLICABLE.
3. WIND LOADS:
   RISK CATEGORY: II
   BASIC DESIGN WIND SPEED: 115 MPH
   WIND EXPOSURE CATEGORY: C
   INTERNAL PRESSURE COEFFICIENT: 0.18
   COMPONENTS & CLADDING MINIMUM PRESSURE: 20 PSF
4. SEISMIC LOADS:
   SEISMIC USE GROUP 1
   SPECTRAL RESPONSE COEFFICIENTS:
   S_{DS} = 0.064g, S_{D1} = .0438g
   SITE CLASS: D
   BASIC SEISMIC-FORCE-RESISTING SYSTEM:
   ORDINARY STEEL MOMENT FRAMES
   DESIGN BASE SHEAR: 0.02W
   SEISMIC DESIGN CATEGORY A
   MODIFICATION FACTOR, R = 3.5
5. DEFLECTION CRITERIA:
   ALLOWABLE DESIGN FLOOR DEFLECTIONS ARE AS FOLLOWS:
   DL+LL = L/240
   LL = L/360 TYPICAL
   LL+SDL = L/600 OR 3/8" CMU SUPPORTING SPANDREL BEAMS
6. BUILDING ALLOWABLE LATERAL DRIFT = L/400

PENN STATION PEDESTRIAN BRIDGE

2. ROOF SNOW LOAD:
   GROUND SNOW LOAD: Pg = 50 PSF
   SNOW EXPOSURE FACTOR: Ce = 1.0
   SNOW IMPORTANCE FACTOR: I = 1.0
   THERMAL FACTOR: Ct = 1.2
   FLAT ROOF SNOW LOAD: Pf = 42 PSF
   SNOW DRIFT HAS BEEN CONSIDERED WHERE APPLICABLE.
3. WIND LOADS:
   RISK CATEGORY: II
   BASIC DESIGN WIND SPEED: 115 MPH
   WIND EXPOSURE CATEGORY: C
   INTERNAL PRESSURE COEFFICIENT: 0.18
   COMPONENTS & CLADDING MINIMUM PRESSURE: 20 PSF
4. SEISMIC LOADS:
   SEISMIC USE GROUP 1
   SPECTRAL RESPONSE COEFFICIENTS:
   S_{DS} = 0.064g, S_{D1} = .0438g
   SITE CLASS: D
   BASIC SEISMIC-FORCE-RESISTING SYSTEM:
   ORDINARY STEEL MOMENT FRAMES
   DESIGN BASE SHEAR: 0.018W
   SEISMIC DESIGN CATEGORY A
   MODIFICATION FACTOR, R = 3.5
5. DEFLECTION CRITERIA:
   ALLOWABLE DESIGN FLOOR DEFLECTIONS ARE AS FOLLOWS:
   DL+LL = L/240
   LL = L/360 TYPICAL
   LL+SDL = L/600 OR 3/8" CMU SUPPORTING SPANDREL BEAMS
6. BUILDING ALLOWABLE LATERAL DRIFT = L/400

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
STATIONS
STRUCTURAL GENERAL NOTES

DISCIPLINE: STRUCTURES

SHEET NAME: E0-STR-GEN-001

SHEET 9 OF 111

Jan, 14 2016 11:35 am K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\OVERALL\PLAN SHEETS\STRUCTURES\E0-STR-GEN-001_VOL 11D.dwg By: jordanl

PIPING SYMBOLS

- F — FIRE PROTECTION WATER SERVICE
- FS — FIRE SPRINKLER
- SW — SANITARY WASTE (BELOW GRADE)
- SW — SANITARY WASTE (ABOVE GRADE)
- SD — STORM DRAIN (BELOW GRADE)
- RWL — RAINWATER CONDUCTOR/LEADER OR STORM DRAIN (ABOVE GRADE)
- CD — CONDENSATE DRAIN
- D — DRAIN
- PD — PUMPED DRAIN
- V — ABOVE FLOOR VENT
- V — VENT
- DW — DOMESTIC WATER
- CW — COLD WATER
- HW — HOT WATER
- RCW — RECIRCULATING HOT WATER
- TW — TEMPERED WATER
- RLL — REFRIGERANT LIQUID
- RSL — REFRIGERANT SUCTION
- RHG — REFRIGERANT HOT GAS

VALVES FITTINGS APPURTENANCES

- UNION
- SHUT OFF VALVE
- GATE VALVE
- OUTSIDE STEM YOKE VALVE
- CHECK VALVE
- BALANCING VALVE
- SOLENOID VALVE
- 2 WAY CONTROL VALVE
- 3 WAY CONTROL VALVE
- THERMOSTATIC MIXING VALVE
- PRESSURE REGULATING VALVE
- WATER REGULATING VALVE
- BALL VALVE
- BUTTERFLY VALVE
- TEMPERATURE PRESSURE RELIEF VALVE
- BACKFLOW PREVENTER
- REDUCED PRESSURE BACKFLOW PREVENTER
- PIPE ANCHOR
- PIPE GUIDE
- FLOW MEASURING STATION
- STRAINER
- FLEXIBLE PIPE CONNECTOR
- SHOCK ABSORBER

- PRESSURE GAUGE
- THERMOMETER
- FLOOR SINK
- AREA DRAIN, FLOOR DRAIN, ROOF DRAIN
- CD — CEILING WALL CLEANOUT
- CD — FLOOR CLEANOUT
- CAPPED PIPE
- DIRECTION OF FLOW
- TOP TAKE OFF
- RISER
- BOTTOM TAKE OFF
- PIPE DROP
- PIPE RISE
- TRENCH DRAIN

CODE MANUALS AND STANDARDS AS THEY APPLY

1. AMERICAN NATIONAL STANDARD INSTITUTE (ANSI);
2. AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE);
3. AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME);
4. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) PUBLICATIONS;
5. CITY CODES;
6. COUNTY ORDINANCES;
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8. INTERNATIONAL BUILDING CODE (IBC) PUBLICATIONS;
9. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE), ADDITIONAL ELECTRICAL SAFETY CODE (NESC) STANDARDS;
10. INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO);
11. MINNESOTA STATE BUILDING CODE (MSBC);
12. MINNESOTA PLUMBING CODE 2012;
13. MINNESOTA MECHANICAL CODE 2015;
14. MINNESOTA ENERGY CODE 2015;
15. NATIONAL ELECTRICAL CODE (NEC);
16. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATIONS (NEMA) STANDARDS;
17. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) PUBLICATIONS

PLUMBING GENERAL NOTES:

1. NEW/RELOCATED, BURIED, PRESSURIZED FERROUS PIPING SYSTEMS REQUIRE CATHODIC PROTECTION.
2. ALL CATHODICALLY PROTECTED MAINS SHALL HAVE A DIELECTRIC EXTERNAL COATING SYSTEM MADE FOR BELOW GRADE APPLICATIONS.
3. POLYWRAP SHALL NOT BE USED ON CATHODICALLY PROTECTED MAINS.
4. ALL CASINGS SHALL BE ISOLATED FROM THE CARRIER PIPE.
5. ALL CATHODICALLY PROTECTED PIPE SHALL BE ELECTRICALLY ISOLATED FROM NON-CATHODICALLY PROTECTED MAINS AT ALL TIE-INS INCLUDING SERVICE CONNECTIONS.
6. ALL CATHODICALLY PROTECTED PIPE SHALL BE ELECTRICALLY ISOLATED FROM PIPING INSIDE NEW STRUCTURES BY INSTALLATION OF INSULATED FITTINGS INSIDE THE STRUCTURE AS CLOSE AS PRACTICAL TO THE POINT OF ENTRY OF THE PIPE INTO THE STRUCTURE.

ABBREVIATIONS

ABV	ABOVE	FRP	FIBERGLASS REINFORCED PIPE	S	SOUTH
AC	AIR CONDITIONING	FT	FOOT OR FEET	SP	SUMP PUMP
ACU	AIR CONDITIONING UNIT	FUT	FUTURE	SPLY	SUPPLY
AFC	ABOVE FINISHED CEILING	GA	GAUGE GAGE	SPEC	SPECIFICATION
AFF	ABOVE FINISHED FLOOR	GEN	GENERAL	SQ	SQUARE
AHU	AIR HANDLING UNIT	GFCI	GROUND-FAULT CIRCUIT INTERRUPTER	SS	STAINLESS STEEL
APPROX	APPROXIMATE	GPM	GALLONS PER MINUTE	ST	SUMP TANK
ARCH	ARCHITECT ARCHITECTURAL	GR	GRADE GROUND	STD	STANDARD
BFF	BELOW FINISHED FLOOR	H	HIGH, HEIGHT	SYS	SYSTEM
BFV	BUTTERFLY VALVE	HC	HEATING COIL	T	THERMOSTAT
BG	BELOW GRADE	HORIZ	HORIZONTAL	TD	TEMPERATURE DIFF AND TRENCH DRAIN
BHP	BRAKE HORSEPOWER	ID	INSIDE DIMENSION	TEMP	TEMPERATURE
BEL, BLW	BELOW	IBS	IN BEAM SPACE	XFR	TRANSFER
BOD	BOTTOM OF DUCT ELEVATION A F F	IJS	IN JOIST SPACE	THRU	THROUGH
BOP	BOTTOM OF PIPE ELEVATION A F F	I E	INVERT ELEVATION	TO	TAKE OFF, TOP OF
BOT	BOTTOM	L AV	LAVATORY	TOD	TOP OF DUCT ELEVATION A F F
CA	COMPRESSED AIR	L B	POUND	TOP	TOP OF PIPE ELEVATION A F F
CC	COOLING COIL	LF	LINEAL FEET	T & P	TEMPERATURE AND PRESSURE
CFH	CUBIC FEET PER HOUR	LG	LONG OR LENGTH	T STAT	THERMOSTAT
CFM	CUBIC FEET PER MINUTE	MAX	MAXIMUM	TYP	TYPICAL
CI	CAST IRON	MBH	1000 BTU PER HOUR	U F	UNDERFLOOR
CL	CENTER LINE	MFG	MANUFACTURER	UG	UNDERGROUND
CLG	CEILING	MIN	MINIMUM	UR	URINAL
CPRSR	COMPRESSOR	MS	MOP SINK	V	VENT
CO	CLEANOUT	MTR	MOTORIZED, MOTOR	VERT	VERTICAL
COND	CONDENSATE	N	NORTH	VFD	VARIABLE FREQUENCY DRIVE
CONN	CONNECTION	NO.	NUMBER	VTR	VENT THRU ROOF
CONSTR	CONSTRUCTION	NTS	NOT TO SCALE	W	WEST
CONT	CONTINUED, CONTINUOUS	OA	OUTSIDE AIR	WC	WATER CLOSET
CONTR	CONTRACTOR	O.C.	ON CENTER	WH	WALL HYDRANT
COOL	COOLING	OD	OUTSIDE DIMENSION	WT	WEIGHT
CU	CONDENSING UNIT	OPNG	OPENING	W/	WITH
CW	COLD WATER	ORD	OVERFLOW ROOF DRAIN	W /O	WITHOUT
DR	DRAIN	P	PUMP, PUMPED		
DT	DRIP TRAP	PD	PRESSURE DIFFERENCE		
DEMO	DEMOLITION	PRV	PRESSURE REGULATING VALVE		
D	DIAMETER	PSI	POUNDS PER SQUARE INCH		
DN	DOWN	PSIG	PSI GAUGE		
E	EAST	PVC	POLYVINYL CHLORIDE		
EA	EACH	RA	RETURN AIR		
ELEC	ELECTRIC	RAD	RADIATOR, RADIUS		
EL	ELEVATION	RCVR	RECEIVER		
ENCL	ENCLOSURE	RET	RETURN		
EWH	ELECTRIC WATER HEATER/ ELECTRIC WALL HEATER	RD	ROOF DRAIN		
		RECIRC	RECIRCULATING		
EXP T	EXPANSION TANK	REQD	REQUIRED		
EXP	EXPANSION	RHW	RECIRCULATING HOT WATER		
EXST	EXISTING	RL	REFRIGERANT LIQUID		
FD	FLOOR DRAIN	RND	ROUND		
F.F. EL	FINISHED FLOOR ELEVATION	RPM	REVOLUTIONS PER MINUTE		
FLR	FLOOR	RWL	RAIN WATER LEADER		
FPM	FEET PER MINUTE				

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
STATIONS
PLUMBING SYMBOLS AND ABBREVIATIONS

DISCIPLINE: PLUMBING

SHEET NAME: E0-PLM-GEN-002

SHEET 10 OF 394

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DRAINAGE FIXTURE UNITS

	LAV	TOILET	MOP SINK	FD	URINAL
QUANTITY	1	1	1	1	1
D.F.U.	1	6	3	4	6
TOTAL D.F.U.	1	6	3	4	6
TOTAL DRAINAGE FIXTURE UNITS: 20 D.F.U.					

SUPPLY FIXTURE UNITS

	LAV	TOILET	MOP SINK	WH	URINAL
QUANTITY	1	1	1	1	1
FIXTURE UNIT	1.5 1.5	10	1.5 1.5	5	6
TOTAL FIXTURE UNITS	1	10	1	5	6
TOTAL DEMAND: CW = 23 F.U. ; HW = 3 F.U.					

ELECTRIC POINT OF USE WATER HEATER

UNIT NO.	LOCATION	MANUFACTURER MODEL NO.	WATTS	TANK GAL.	ELECTRICAL VOLTS	ELECTRICAL PH	FULL LOAD AMPS	REMARKS
EWH-1	RESTROOM	RHEEM, EGSP2	2000	6	120	1	16.7	5 GAL ACCEPTABLE

AREA AND ROOF DRAIN SCHEDULE

TAG	DESCRIPTION	DRAIN SIZE	STRAINER MATERIAL	LOCATION	BASIS OF DESIGN	REMARKS
AD-1	FLOOR DRAIN	VARIES	NICKEL BRONZE	VARIOUS	JAY R SMITH MODEL 2010	ROUND STRAINER; HEEL PROOF; UNDER DECK CLAMP.
RD	ROOF DRAIN	VARIES	ROUGH BRONZE	ROOF	JAY R SMITH MODEL 1310	VANDAL PROOF.
ORD	OVERFLOW ROOF DRAIN	VARIES	ROUGH BRONZE	ROOF	JAY R SMITH MODEL 1310	VANDAL PROOF; 2-INCH WATER DAM.
SRD	SCUPPER ROOF DRAIN	VARIES	NICKEL BRONZE	ROOF	JAY R SMITH MODEL 1510T	ANGLE GRATE
SORD	SCUPPER OVERFLOW ROOF DRAIN	VARIES	NICKEL BRONZE	ROOF	JAY R SMITH MODEL 1510T	ANGLE GRATE
TD-1	TRENCH DRAIN	4"	STAINLESS STEEL	PLATFORM	JAY R SMITH MODEL 9814	6" WIDE, PRECAST POLYMER CONCRETE TRENCH. PROVIDE WITH HEEL PROOF GRATES.
PD-1	PROMENADE DECK DRAIN	4"	NICKEL BRONZE	PLATFORM	JAY R SMITH MODEL 1470	8-INCH SQUARE STRAINER; HEEL PROOF; UNDER DECK CLAMP.

PLUMBING FIXTURE SCHEDULE

TAG	TYPE	WASTE	VENT	CW	HW	BASIS OF DESIGN	REMARKS
WH-1	WALL HYDRANT	--	--	¾"	--	WOODFORD MODEL B65	
LAV-1	LAVATORY	11/2"	11/2"	¾"	¾"	AMERICAN STANDARD - LUCERNE	WALL HUNG; AMERICAN STANDARD RELIANT FAUCET
MS-1	MOP SINK	3"	11/2"	¾"	¾"	MUSTEE MODEL 62M	FLOOR MOUNT, 24x24x8 1/4"; CHICAGO FAUCET 835-CP
WC-1	WATER CLOSET	4"	2"	1 1/2"	--	AMERICAN STANDARD - AFWALL	WALL HUNG; SLOAN 110-111 FLUSHOMETER
UR-1	URINAL	2"	11/2"	¾"	--	AMERICAN STANDARD - TRIMBROOK	WALL HUNG; SLOAN ROYAL 186 FLUSHOMETER
FD-1	FLOOR DRAIN	3"	11/2"	--	--	JAY R SMITH 2010	ROUND NICKEL BRONZE STRAINER
--	TRAP PRIMER	--	--	--	--	JAY R SMITH 2699	
--	STANDPIPE	3"	11/2"	--	--		6" PIPE; 24" LONG CONNECTED TO 3" TRAP AND DRAIN

DIA. OF STORM DRAIN, INCHES	DRAINAGE AREA
3	822
4	1,880
5	3,340
6	5,350
8	11,500
10	20,700

SUMP TANK

ITEM NO.	LOCATION	SERVING	TYPE	BASIN MATERIAL	SIZE DIA. IN.	SIZE DEPTH IN.	INLETS NO.	INLETS SIZE IN.	INLETS ABV. BOT. IN.	OUTLETS NO.	OUTLETS SIZE IN.	OUTLETS ABV. BOT. IN.	COVER MATERIAL	REMARKS
ST-1	OUTSIDE ELEVATOR PIT	ELEV PIT DRAINAGE	PREFABRICATED	FIBERGLASS	24	90	1	4	30	1	2	48	NON-CORROSIVE	
ST-2	OUTSIDE ELEVATOR PIT	ELEV PIT DRAINAGE	PREFABRICATED	FIBERGLASS	24	90	1	4	30	1	2	48	NON-CORROSIVE	PROVIDE A-PAK II ALARM SYSTEM ZOELLER MODEL 10-0126.

SUMP PUMP

BASIS OF DESIGN: ZOELLER

ITEM NO.	LOCATION	SERVING	MODEL	TYPE	PUMP GPM EACH	PUMP DISCH. HD FT	PUMP DISCH. SIZE IN	MOTOR HP	MOTOR RPM	MOTOR ELECTRICAL CHARACTERISITCS	ACCESSORIES	REMARKS
SP-1	ELEVATOR SUMP	ELEV PIT DRAINAGE	F4186	SIMPLEX	50	25	2	1 1/2	3450	230/3/60	(3) 10-0743 FLOATS, HIGH WATER ALARM MODEL 10-1082 CONTROL PANEL	(1) ELECTRICAL CIRCUIT; SINGLE SEAL PUMP

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
STATIONS
PLUMBING SCHEDULES

DISCIPLINE: PLUMBING

SHEET NAME: E0-PLM-SCH-002

SHEET 11 OF 394

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DUCTWORK SYMBOLS

- FD — FIRE DAMPER
- FSD — COMBINATION SMOKE FIRE DAMPER
- SUPPLY DUCT UP
- RETURN OR EXHAUST DUCT UP
- SUPPLY DUCT DOWN
- RETURN OR EXHAUST DUCT DOWN
- M — MOTORIZED DAMPER
- B — BACKDRAFT DAMPER
- OPPOSED BLADE
- PARALLEL BLADE
- VOLUME DAMPER
- SUPPLY AIR DIFFUSER
- RETURN OR EXHAUST AIR GRILLE
- 10ø — ROUND DUCT
- 10 12 — RECTANGULAR DUCT FIRST FIG IS SIDE SHOWN
- MANUAL BALANCING DAMPER
- FLEXIBLE DUCT CONNECTION
- AP — ACCESS PANEL SIZE AS REQUIRED
- SQUARE TURN DUCT ELBOW WITH TURNING VANES
- RADIUS DUCT ELBOW WITH RADIUS 1 5 X WIDTH OF SIDE SHOWN
- CONICAL BRANCH TAKE OFF CONNECTION
- 45 D ENTRY BRANCH TAKE OFF CONNECTION WITH FILLER PIECES AT CORNERS
- RIGID SHEET METAL BRANCH DUCT WITH FLEXIBLE AIR DUCT EXTENSION TO DIFFUSER
- TRANSITION 20 D MAXIMUM ANGLE
- ACOUSTICALLY LINED DUCT

DIFFUSER DESIGNATION CODE

D
24x24
1000

- INDICATES DIFFUSER OR GRILLE TYPE
- INDICATES NECK SIZE DIAMETER IN INCHES OR SQUARE DIFFUSER SIZE IN INCHES
- INDICATES CFM

GENERAL SYMBOLS

- 3 — NUMBERED NOTE
- KEY NOTE
- 103 — ROOM NUMBER
- 1 — REVISION NO 1
- ø — DIAMETER OR ROUND
- @ — AT
- ∠ — ANGLE

CONTROL SYMBOLS

- T — THERMOSTAT OR TEMPERATURE SENSOR
- H — HUMIDISTAT OR HUMIDITY SENSOR
- S — TEMPERATURE SENSOR
- CO — CARBON MONOXIDE SENSOR
- $ — TIMER SWITCH
- SP — STATIC PRESSURE SENSOR

CODE MANUALS AND STANDARDS AS THEY APPLY

1. AMERICAN NATIONAL STANDARD INSTITUTE (ANSI);
2. AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE);
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12. MINNESOTA PLUMBING CODE 2012;
13. MINNESOTA MECHANICAL CODE 2015;
14. MINNESOTA ENERGY CODE 2015;
15. NATIONAL ELECTRICAL CODE (NEC);
16. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATIONS (NEMA) STANDARDS;
17. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) PUBLICATIONS

DESIGN CONDITIONS

DESIGN AREA	DESIGN TEMPERATURE (DEGREE F)			
	SUMMER		WINTER	
	DB	WB	DB	WB
INDOOR	75	XX	68	XX
AMBIENT	108	88	-40	XX

ABBREVIATIONS

ABV	ABOVE
AC	AIR CONDITIONING
ACU	AIR CONDITIONING UNIT
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
APPROX	APPROXIMATE
ARCH	ARCHITECT ARCHITECTURAL
AS	AIR SEPARATOR
BD	BLOWDOWN
BFF	BELOW FINISHED FLOOR
BFV	BUTTERFLY VALVE
BG	BELOW GRADE
BHP	BRAKE HORSEPOWER
BEL, BLW	BELOW
BOD	BOTTOM OF DUCT ELEVATION A F F
BOP	BOTTOM OF PIPE ELEVATION A F F
BOT	BOTTOM
BTU	BRITISH THERMAL UNIT
BTUH	BTU PER HOUR
CA	COMPRESSED AIR
CC	COOLING COIL
CLG DIFF	CEILING DIFFUSER
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CL	CENTER LINE
CLG	CEILING
CPRSR	COMPRESSOR
COND	CONDENSATE
CONN	CONNECTION
CONSTR	CONSTRUCTION
CONT	CONTINUED, CONTINUOUS
CONTR	CONTRACTOR
COOL	COOLING
CU	CONDENSING UNIT
CUH	CABINET UNIT HEATER
DIFF	DIFFUSER
DR	DRAIN
DT	DRIP TRAP
DEMO	DEMOLITION
D	DIAMETER
DMPR	DAMPER
DN	DOWN
E	EAST
EA	EACH
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
ELEC	ELECTRIC
EL	ELEVATION
EUH	ELECTRIC UNIT HEATER
ENCL	ENCLOSURE
EXH RG	EXHAUST REGISTER
ESP	EXTERNAL STATIC PRESSURE
EXP T	EXPANSION TANK
EXH	EXHAUST
EXP	EXPANSION
EXST	EXISTING
FA	FREE AREA
FDMPR	FIRE DAMPER
F.F. EL	FINISHED FLOOR ELEVATION
FLR	FLOOR
FPM	FEET PER MINUTE
FRP	FIBERGLASS REINFORCED PIPE
FT	FOOT OR FEET
FUT	FUTURE
GA	GAUGE GAGE
GEN	GENERAL
GFCI	GROUND-FAULT CIRCUIT INTERRUPTER
GPM	GALLONS PER MINUTE
GR	GRADE GROUND
GRL	GRILLE
GV	GRAVITY VENT
H	HIGH, HEIGHT
HC	HEATING COIL
HD GR	HEAVY DUTY GRILLE
RHG	REFRIGERANT HOT GAS
HORIZ	HORIZONTAL
HTR	HEATER
H STAT	HUMIDISTAT
HVAC	HEAT VENTILLATION & AIR CONDITIONER
ID	INSIDE DIMENSION
IBS	IN BEAM SPACE
IJS	IN JOIST SPACE
I E	INVERT ELEVATION
RL	REFRIGERANT LIQUID
LAT	LEAVING AIR TEMPERATURE
L AV	LAVATORY
L B	POUND
L D	LINEAR DIFFUSER
LF	LINEAL FEET
LG	LONG OR LENGTH
LSD	LINEAR SLOT DIFFUSER
MAU	MAKE UP AIR UNIT
MAX	MAXIMUM
MBH	1000 BTU PER HOUR
MFG	MANUFACTURER
MIN	MINIMUM
MTR	MOTORIZED, MOTOR
N	NORTH
NO.	NUMBER
NTS	NOT TO SCALE
OA	OUTSIDE AIR
O.C.	ON CENTER
OD	OUTSIDE DIMENSION
OPNG	OPENING
ORD	OVERFLOW ROOF DRAIN
P	PUMP, PUMPED
PD	PRESSURE DIFFERENCE
PRV	POWER ROOF VENTILATOR
PRV	PRESSURE REGULATING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	PSI GAUGE
PVC	POLYVINYL CHLORIDE
RA	RETURN AIR
RAD	RADIATOR, RADIUS
RCP	REFLECTED CEILING PLAN
RCVR	RECEIVER
RET	RETURN
RD	ROOF DRAIN
RECIRC	RECIRCULATING
REQD	REQUIRED
RH	RELATIVE HUMIDITY
RHW	RECIRCULATING HOT WATER
RND	ROUND
RPM	REVOLUTIONS PER MINUTE
RTU	ROOFTOP UNIT
S	SOUTH
SA	SUPPLY AIR
SAD	SUPPLY AIR DUCT
SD	SLOT DIFFUSER
SF	SUPPLY FAN
SPLY	SUPPLY
SP	STATIC PRESSURE
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
SYS	SYSTEM
T	THERMOSTAT, TEMPERATURE DIFF
TD	TEMPERATURE DIFF
TEMP	TEMPERATURE
XFR	TRANSFER
THRU	THROUGH
TO	TAKE OFF, TOP OF
TOD	TOP OF DUCT ELEVATION A F F
TOP	TOP OF PIPE ELEVATION A F F
T & P	TEMPERATURE AND PRESSURE
T STAT	THERMOSTAT
TST PR	TOTAL STATIC PRESSURE
TYP	TYPICAL
U F	UNDERFLOOR
UH	UNIT HEATER
UG	UNDERGROUND
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
W	WEST
WT	WEIGHT
W/	WITH
W /O	WITHOUT

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
STATIONS
MECHANICAL SYMBOLS AND ABBREVIATIONS

DISCIPLINE: MECHANICAL

SHEET NAME: E0-MEC-GEN-002

SHEET 12 OF 394

BASIS OF DESIGN: CARRIER

AIR CONDITIONING UNIT

UNIT NO	SERVES	MFR.	MODEL NO	SUPPLY CFM	OUTSIDE AIR CFM	TSP. INCHES WG	ESP. INCHES WG	SUPPLY FAN		SUPPLY MOTOR		DX COOLING							FILTERS	WEIGHT (LB.)	NOTES:
								BHP	HP	ELECTRICAL	RPM	REFRIG. TYPE	TOTAL MBH	SENS. MBH	E.A.T. DB	E.A.T. WB	L.A.T. DB	L.A.T. WB			
ACU -1VW	HOIST WAY	CARRIER	42BHE162D4L61516DE	1500	N/A	.91	.5	.55	.75	208 V	1086	410A	62.85	35.13	75	67	53.6	53.3	MERV8	293	1,2,3
ACU -2VW	EMR	CARRIER	40GV018/38GVC018	471	N/A	N/A	.5	FRAC	FRAC	208 V	1400	410A	N/A	18	XX	XX	XX	XX	CLEANABLE	26.4	1,2,3
ACU -1P	HOIST WAY	CARRIER	42BHE162D4L61516DE	1500	N/A	.91	.5	.55	.75	208 V	1086	410A	62.85	35.13	75	67	53.6	53.3	MERV8	293	1,2,3
ACU -2P	EMR	CARRIER	40GV018/38GVC018	471	N/A	N/A	.5	FRAC	FRAC	208 V	1400	410A	N/A	18	XX	XX	XX	XX	CLEANABLE	26.4	1,2,3

NOTES:
1. HUNG FROM DECK WITH VIBRATION ISOLATION.
2. FUSED DISCONNECT BY DIV 16
3. FILTERS MUST BE EASILY ACCESSIBLE

BASIS OF DESIGN: TITUS

GRILLE, REGISTER & DIFFUSER SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	BORDER	SIZE	NECK SIZE	USE	REMARKS
A-VW	TITUS	355R	GRILLE	TYPE 1	SEE DWG	SEE DWG	RETURN	
B-VW	TITUS	355R	GRILLE	TYPE 1	SEE DWG	SEE DWG	RETURN	ALUMINUM
C-VW	TITUS	TMS	DIFFUSER	N/A	SEE DWG	SEE DWG	SUPPLY	
D-VW	TITUS	301RL	REGISTER	TYPE 1	SEE DWG	SEE DWG	SUPPLY	
A-P	TITUS	355R	GRILLE	TYPE 1	SEE DWG	SEE DWG	RETURN	
D-P	TITUS	301RL	GRILLE	TYPE 1	SEE DWG	SEE DWG	SUPPLY	

BASIS OF DESIGN: CARRIER

AIR CONDITIONING CONDENSER

UNIT NO.	LOCATION	MFR/MODEL NO.	CAPACITY		REFRIGERANT TYPE	AMB. TEMP. °F	COND. FAN HP	MINIMUM CIRCUIT AMPACITY	ELECTRICAL		WEIGHT (LB.)	NOTES
			TOTAL MBH	NOM. TONS					VOLTS	PH		
CU -1VW	UNDER STAIR	CARRIER 24AHA448A005	48	4	R-410a	108	FRAC	XX	208	3	213	1,3,4
CU -2VW	HUNG UNDER STAIR	CARRIER 38GVC018	18	1.5	R-410a	108	FRAC	15	208	3	112.2	1,2,3
CU -1P	UNDER STAIR	24AHA448A005	48	4	R-410a	108	FRAC	XX	208	3	213	1,3,4
CU -2P	HUNG UNDER STAIR	CARRIER 38GVC018	18	1.5	R-410a	108	FRAC	15	208	3	112.2	1,2,3

NOTES:
1. STAND ALONE FUSED DISCONNECT BY DIVISION 16
2. MOUNT ABOVE TRANSFORMER.
3. HORIZONTAL CONFIGURATION
4. MOUNTED ON 4-INCH HOUSEKEEPING PAD

BASIS OF DESIGN: DIVERSITECH

CONDENSATE PUMPS

ITEM NO.	DESCRIPTION	LOCATION	MANUFACTURER	MODEL	FLUID	GPM EACH	TOTAL HD FT	MOTOR HP	RPM	TYPE	VOLTS/PH	WEIGHT (LB.)	REMARKS
CP-1VW	CLEAR VUE PUMP	LOBBY	DIVERSITECH	IQP120	WATER	1.6	< 1	FRAC	XX	XX	120/3	5.43	1,2,3
CP-1P	CLEAR VUE PUMP	LOBBY	DIVERSITECH	IQP120	WATER	1.6	< 1	FRAC	XX	XX	120/3	5.43	1,2,3

NOTES:
1. VARIABLE SPEED.
2. SELF CLEANING
3. FLOATLESS

ELECTRIC HEATERS

UNIT NO.	LOCATION	MANUFACTURER MODEL	TYPE	ELECTRICAL DATA				WEIGHT (LB.)	REMARKS
				VOLTS	PHASE	AMPS	KW		
EUH -1VW	ELEV MACH RM	BERKO HUHAA320	UNIT HEATER	208	1	14.5	3	24	1,2,3
EDH -1VW	AMENITY	INDEECO	DUCT HEATER	208	1	XX	4	XX	OPEN COIL
EUH -1P	ELEV MACH RM	BERKO HUHAA320	UNIT HEATER	208	1	14.5	3	24	1,2,3
CUH -1	ELEVATOR PIT	INDEECO,922U12000U		480	3	17.2	8-12	146	RECESSED

NOTES:
1. STAND ALONE FUSED DISCONNECT BY DIVISION 16
2. UNIT HEATER HUNG AT X FT AFF
3. HORIZONTAL CONFIGURATION

BASIS OF DESIGN: LOREN COOK

EXHAUST FANS

FAN NO.	LOCATION	SERVES	MANUFACTURER MODEL NO	CFM	TOTAL STATIC PRESS	FAN RPM	OUTLET VELOCITY	TYPE	DRIVE	BHP	HP	ELECTRICAL			WEIGHT (LB.)	NOTES
												VOLTS	PH	FLA		
EF -1VW	BRIDGE LOBBY	BRIDGE LOBBY	COOK 60SQN-B	150	.5	1919	171	INLINE	BELT	0.12	1/4	115	1	5.8	50	1,2
EF -2VW	PLATFORM LOBBY	PLATFORM LOBBY	COOK 60SQN-B	100	.5	1625	XX	INLINE	BELT	0.08	1/4	115	1	5.8	50	1,2,3
EF -1P	LOBBY-BRIDGE LVL	LOBBY-BRIDGE LVL	60SQN-B	150	.5	1919	171	INLINE	BELT	0.12	1/4	115	1	5.8	50	1,2
EF -2P	LOBBY-PLTFM LVL	LOBBY-PLTFM LVL	60SQN-B	100	.5	1625	XX	INLINE	BELT	0.08	1/4	115	1	5.8	50	1,2,3

NOTES:
1. STAND ALONE FUSED DISCONNECT BY DIVISION 16
2. MOUNTED FROM DECK
3. MOUNTED ON BRACKET STAND.

BASIS OF DESIGN: RENEW AIRE

ENERGY RECOVERY VENTILATORS

UNIT NO.	LOCATION	SERVING	TYPE	MODEL NO. *	OUT. AIR TEMP. F°		EXH. AIR TEMP. F°		% EFFECTIVENESS			AIRFLOW CFM	PRESS. DROP " W.G.	NO. OF MOTORS	H.P. EACH	BLOWER DRIVE	ELECTRICAL		FILTER TYPE	WEIGHT (LB.)	ACCESSORIES	REMARKS
					ENT.	LVG.	ENT.	LVG.	SENSIBLE	WINTER ENTHALPIC	SUMMER ENTHALPIC						VOLTS	PH.				
ERV -1VW	DRIVER AMENITY	DRIVER AMENITY	STATIC PLATE	EV200	-40	43.5	68	X	77	72	58	180	.3	1	.1	X	120	1	MERV 8	70	BACKDRAFT DAMPER	FILTER: SPUN POLYESTER

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
STATIONS
MECHANICAL SCHEDULES

DISCIPLINE: MECHANICAL

SHEET NAME: E0-MEC-SCH-002

SHEET 13 OF 394

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HVAC CONTROL SEQUENCES

ELEVATOR LOBBY EXHAUST (EF)CONTROL SEQUENCE

EXHAUST FAN (EF–) IS CONTROLLED BY TEMPERATURE SENSOR LOCATED AT EXHAUST GRILL.

UPON SENSOR READING 800°F, THE EXHAUST FAN ENGAGES. WHEN THE TEMPERATURE SENSOR READS LESS THAN 800/F, THE EXHAUST FAN SHUTS OFF.

ELEVATOR HOISTWAY CONTROL SEQUENCE

THE AIR–CONDITIONING UNIT FAN IS CONTINUOUSLY ENGAGED.

AIR–CONDITIONING UNIT (ACU–) COOLING IS CONTROLLED BY A TEMPERATURE SENSOR IN THE HOISTWAY RETURN GRILL.

WHEN THE TEMPERATURE SENSOR SENSES A RETURN TEMPERATURE GREATER THAN 750°F, THE AIR–CONDITIONING UNIT ENGAGES THE DX COOLING. WHEN THE TEMPERATURE IS SATISFIED, THE DX COOLING STOPS AND THE ACU FAN STOPS.

THE ELEVATOR HOISTWAY HEATING IS PROVIDED BY ELECTRIC CABINET UNIT HEATER LOCATED IN THE ELEVATOR PIT. THE HEATING ENGAGES WHEN THE INTERNAL TEMPERATURE SENSOR SENSES TEMPERATURE OF 550°F OR LESS. WHEN THE TEMPERATURE IS SATISFIED, THE ELECTRIC CABINET UNIT HEATER WILL DISENGAGE.

THE ELECTRIC CABINET UNIT HEATER AND ACU–1 ARE INTERLOCKED TO PREVENT SIMULTANEOUS HEATING AND COOLING. WHEN ONE IS ENGAGED THE OTHER IS LOCKED OUT.

ELEVATOR MACHINE ROOM CONTROL SEQUENCE

WHEN THE INTERNAL SENSOR OF THE AIR–CONDITIONING UNIT (ACU–) IN THE ELEVATOR MACHINE ROOM SENSES 750°F OR GREATER, THE ACU DX COOLING AND FAN WILL ENGAGE. WHEN THE TEMPERATURE IS SATISFIED, THE DX COOLING AND FAN WILL ENGAGE. THE DX COOLING IS INTERLOCKED WITH THE ELECTRIC UNIT HEATER TO PREVENT SIMULTANEOUS HEATING AND COOLING. WHEN THE ELECTRIC HEAT OR COOLING IS ENGAGED THE OTHER IS LOCKED OUT.

WHEN THE ELECTRIC UNIT HEATER TEMPERATURE SENSOR SENSES TEMPERATURE LESS THAN 500°F, THE ELECTRIC UNIT HEATER WILL ENGAGE THE HEAT COIL AND THE FAN AND THE ACU WILL BE LOCKED OFF.

BREAKROOM EXHAUST AND ERV CONTROL SEQUENCE

THE EXHAUST FAN IN THE DRIVER AMENITY RESTROOM IN THE VERTICAL CIRCULATION IS CONTROLLED BY THE LIGHT SWITCH. WHEN THE LIGHT SWITCH FOR THE BREAKROOM IS ENGAGED, THE EERV WILL ENGAGE. THE EXHAUST MOTOR AND VENTILATION MOTOR WILL ENGAGE AND STAY ENGAGED UNTIL THE LIGHT SWITCH IS OFF. THE EXHAUST MOTOR AND VENTILATION MOTOR WITHIN THE ERV WILL REMAIN ENGAGED VIA A TIMER UNTIL 15 MINUTES AFTER THE LIGHTS DISENGAGE.

CONTROL SEQUENCE FOR STAND ALONE DRIVER AMENITY BUILDINGS

THE EXHAUST FAN ENGAGES WHEN THE LIGHTS SWITCH ON. THE EXHAUST FAN DISENGAGES WHEN A TIMER COMPLETES 15 MINUTES AFTER THE OVERHEAD LIGHTS SWITCH OFF.

THE BUILDINGS ARE HEATED WITH ELECTRIC BASEBOARD HEATERS CONTROLLED BY A TEMPERATURE SENSOR. WHEN THE TEMPERATURE SENSOR SENSES 550°F OR LESS, THE ELECTRIC BASEBOARD HEATERS WILL ENGAGE. WHEN THE TEMPERATURE IS SATISFIED, THE HEATERS WILL DISENGAGE.

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CIVIL - VOLUME 11D
STATIONS
MECHANICAL CONTROL SEQUENCE

DISCIPLINE: MECHANICAL

SHEET NAME: E0-MEC-SCH-004

SHEET 14 OF 394

CODE SUMMARY - CENTER PLATFORM
21ST STREET STATION

CODE REFERENCES

MINNESOTA STATE BUILDING CODE	2015
NFPA 130 – STANDARD FOR FIXED GUIDEWAY TRANSIT AND PASSENGER RAIL SYSTEMS	2014

IBC REVIEW

A. DESCRIPTION
LOCATION: MINNEAPOLIS, MN

THE LIGHT RAIL TRANSIT STATION IS A PARTIALLY CANOPIED PLATFORM AREA. IT CONSISTS OF A PLATFORM 270' LONG BY 21'–4" ACCESSED BY A SLOPED WALK AT EACH END OF PLATFORM. PLATFORM IS OPEN TO EXTERIOR ON ALL FOUR SIDES.

TYPICAL PLATFORM AREA: 5760 SQUARE FEET (GROSS AREA)
4264 SQUARE FEET (NET AREA AFTER STRUCTURAL ELEMENTS, FIXTURES AND PERMANENTLY INSTALLED FURNISHINGS ARE REMOVED)

CANOPY COVERAGE AREA AT PLATFORM: = 2928 SQUARE FEET
732 SQUARE FEET (1 @ 36'–0" X 20'–4") SOUTH CANOPY
732 SQUARE FEET (1 @ 36'–0" X 20'–4") MIDDLE CANOPY
732 SQUARE FEET (1 @ 36'–0" X 20'–4") MIDDLE CANOPY
732 SQUARE FEET (1 @ 36'–0" X 20'–4") NORTH CANOPY

B. OCCUPANCY CLASSIFICATION (IBC 2015 SECTION 303.1)

WAITING AREAS IN TRANSPORTATION TERMINALS: GROUP 'A' DIVISION 3
(15 S.F. PER PERSON)

C. OCCUPANCY SEPARATIONS

NONE ARE REQUIRED

D. TYPE OF CONSTRUCTION (IBC 2015 TABLE 601)

TYPE IIB CONSTRUCTION

E. ALLOWABLE BUILDING AREA AND BUILDING HEIGHT (IBC 2015 TABLE 503)

2 STORIES AT 9,500 SQUARE FEET PER STORY

F. IBC EXITING SUMMARY

NO. OF OCCUPANTS = 4264 S.F. / 15 S.F./OCC = 285
REQUIRED EGRESS WIDTH = 285 X 0.2 = 57" (PER 1005.3.2)
WIDTH PROVIDED = 2 RAMPS AT 145" = 290"
2 MEANS OF EGRESS PROVIDED

PLATFORM COLOR AND FINISH SCHEDULE

PRODUCTS AND COLORS LISTED ARE THE BASIS OF DESIGN FOR AESTHETIC/ARCHITECTURAL INTENT. SEE SPECIFICATIONS FOR MATERIAL/PRODUCT REQUIREMENTS.

PLATFORM COLOR AND FINISH SCHEDULE

TYPE	STATION	STRUCTURAL STEEL PAINT COLOR	PLATFORM CONC COLOR	PLATFORM CONC FINISH	CONC WALL COLOR	CONC WALL FINISH	RAILING INFILL MATERIAL	ALUM WDW FRAME FINISH	EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA FINISH	ALUM COMP CANOPY SOFFIT AND FASCIA COLOR
CENTER	21ST STREET STATION	PPG 513–7 COFFEE BEAN	CEMSTONE MENDOTA BUFF	LIGHT BROOM	CEMSTONE MENDOTA BUFF	TBD	GALV STL CABLE	LIGHT BRONZE ANODIZED	HUNTER DOUGLAS WOODWRIGHT 8443 GREY BARNWOOD CEDAR	ALUCOBOND GLADE GREEN COOL

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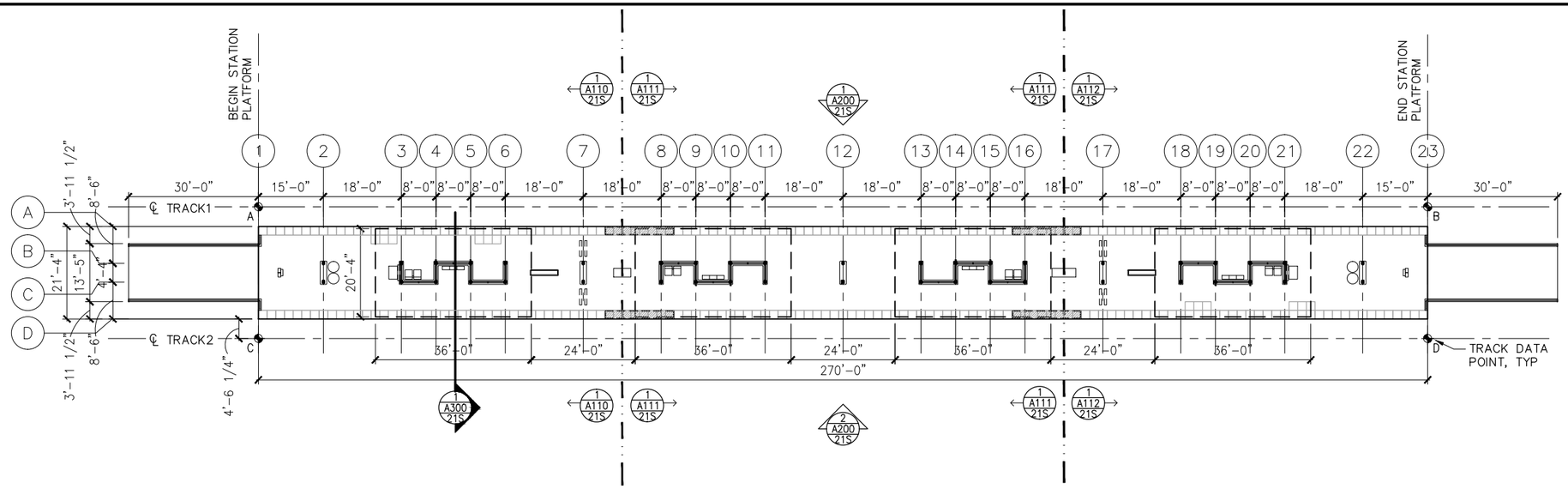
CIVIL - VOLUME 11D
21ST STREET STATION
CODE SUMMARY / FINISH SCHEDULE

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-COD-010

SHEET 15 OF 394

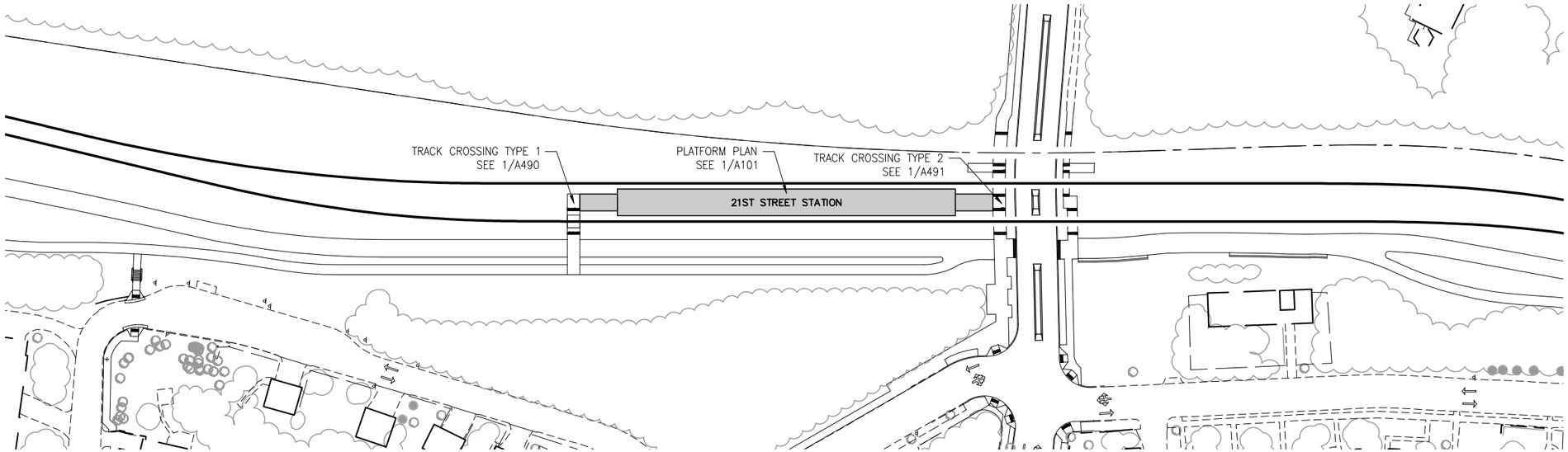
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1 PLATFORM PLAN

SCALE: 1"=30'

SCALE: 0 7.5 15 30



2 STATION AREA PLAN

SCALE: 1"=100'

SCALE: 0 25 50 100

TRACK DATA

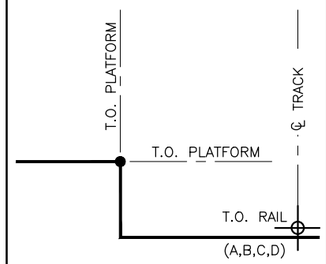
ELEV 100'-0" (LOCATION ON PLAN)

TRACK 1 EL 100'-0"= 866.60 (PT 'A')

POINT	T.O. RAIL ELEVATION	TRACK 1 STATIONING	
A	866.60	1821+02.51	
B	867.14	1823+72.51	

TRACK 2 EL 100'-0"= 866.60 (PT 'C')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
C	866.60	2821+02.51	
D	867.14	2823+72.51	



SECTION DIAGRAM AT PLATFORM EDGE
SEE DTL 1/A520
FOR DETAIL AND DIMENSIONS

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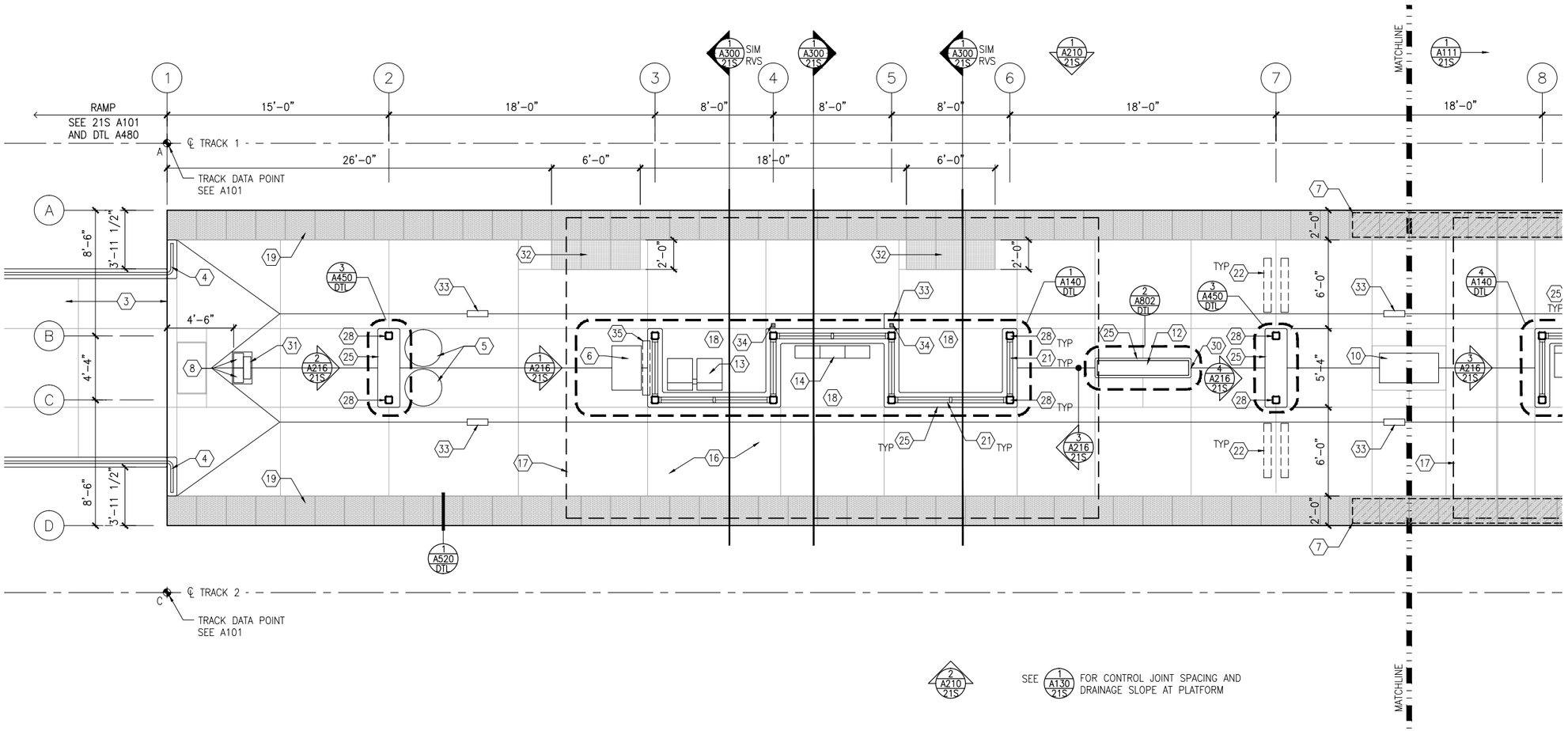
CIVIL - VOLUME 11D
21ST STREET STATION
PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-PLN-101

SHEET 16 OF 394

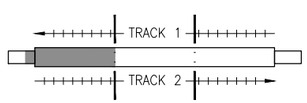
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1 SOUTH PARTIAL PLATFORM PLAN

SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



KEYPLAN

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN-CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

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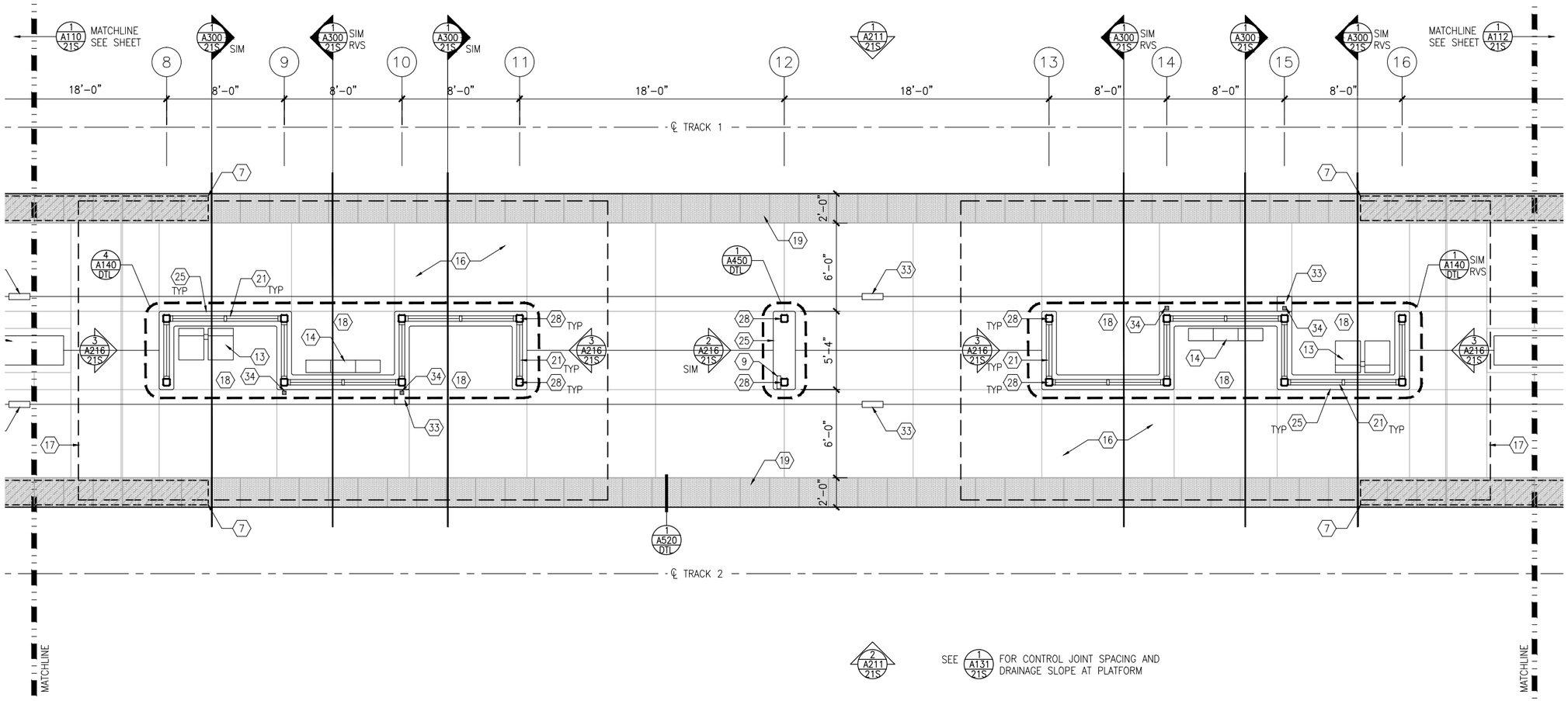
CIVIL - VOLUME 11D
21ST STREET STATION
SOUTH PARTIAL PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-PLN-110

SHEET 17 OF 394

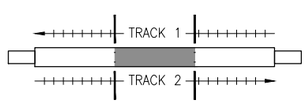
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SEE A211 21S FOR CONTROL JOINT SPACING AND DRAINAGE SLOPE AT PLATFORM

1 MIDDLE PARTIAL PLATFORM PLAN
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE



KEYPLAN

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN–CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

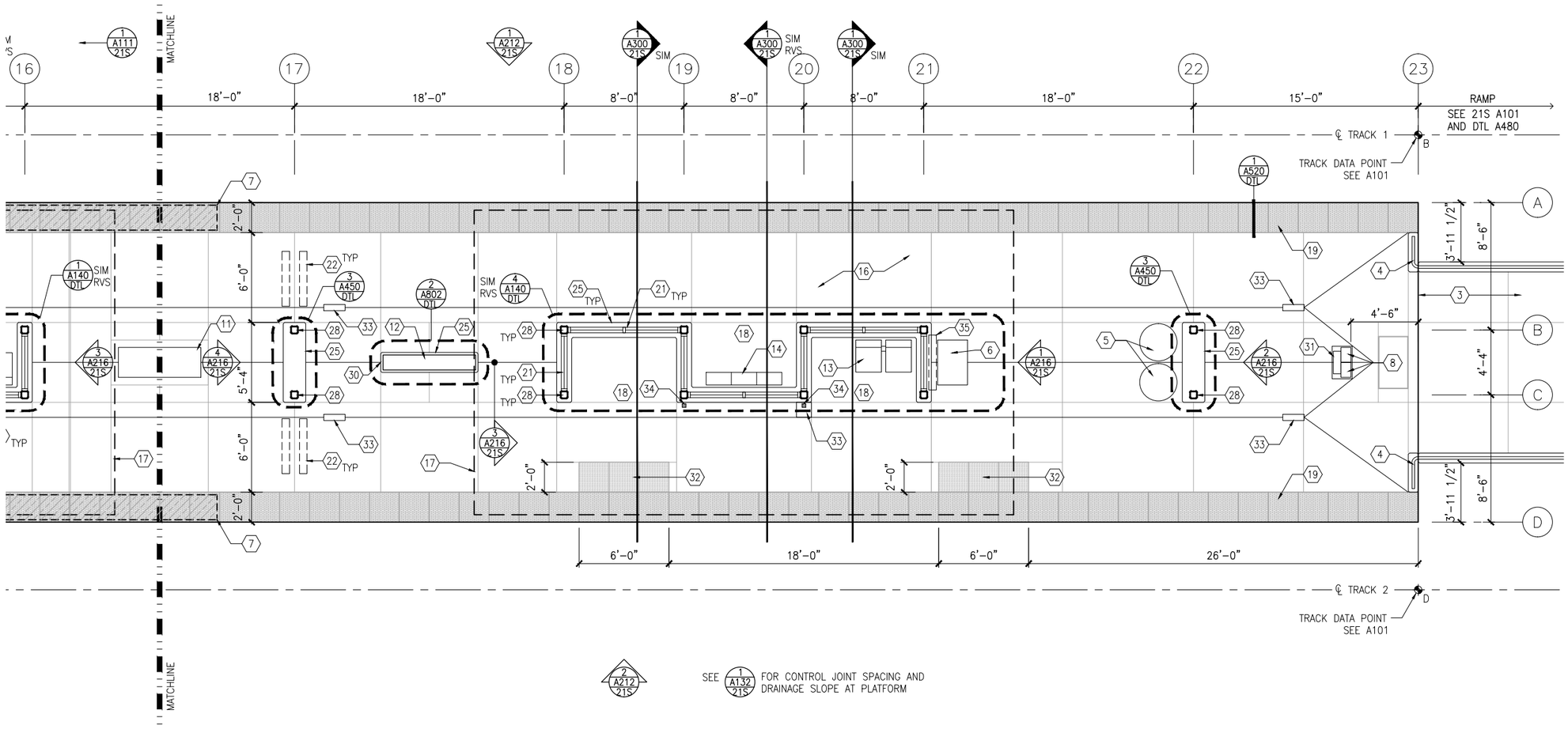
CIVIL - VOLUME 11D
21ST STREET STATION
MIDDLE PARTIAL PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-PLN-111

SHEET 18 OF 394

Jan, 18 2016 11:17 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-PLN-111.dwg By: V-TroutPD

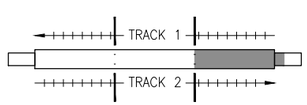


SEE (2/A212 21S) FOR CONTROL JOINT SPACING AND DRAINAGE SLOPE AT PLATFORM

1 NORTH PARTIAL PLATFORM PLAN

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



KEYPLAN

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN-CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
NORTH PARTIAL PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-PLN-112

SHEET 19 OF 394

Jan, 18 2016 11:18 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-PLN-112.dwg By: V-TroutPD

PAVEMENT NOTES

SLOPE TRANSITIONS ARE SHOWN FOR REFERENCE. BLEND/EASE TRANSITIONS TO DRAIN AND SO THAT NO ABRUPT CHANGE IN SLOPE IS VISIBLE ON PLATFORM SURFACE

LEGEND

- – – – – – SLOPES
- ——— CUT JOINTS

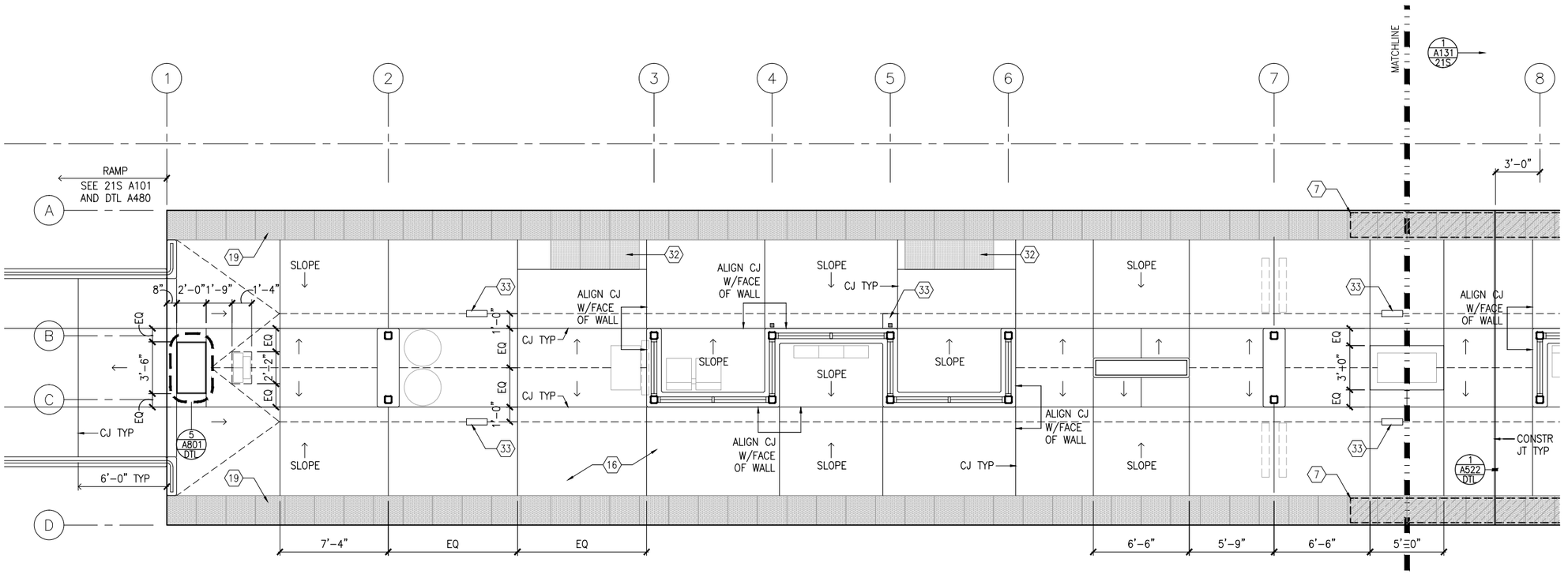
GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

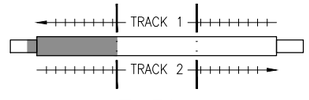
NOTE: ALL KEYNOTES MAY NOT BE USED

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35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL



1 SOUTH PARTIAL PAVEMENT PLAN
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
SOUTH PARTIAL PAVEMENT PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-PLN-130

SHEET 20 OF 394

Jan, 18 2016 11:18 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-PLN-130.dwg By: V-TroutPD

PAVEMENT NOTES

SLOPE TRANSITIONS ARE SHOWN FOR REFERENCE. BLEND/EASE TRANSITIONS TO DRAIN AND SO THAT NO ABRUPT CHANGE IN SLOPE IS VISIBLE ON PLATFORM SURFACE

LEGEND

- – – – – – SLOPES
- ——————— CUT JOINTS

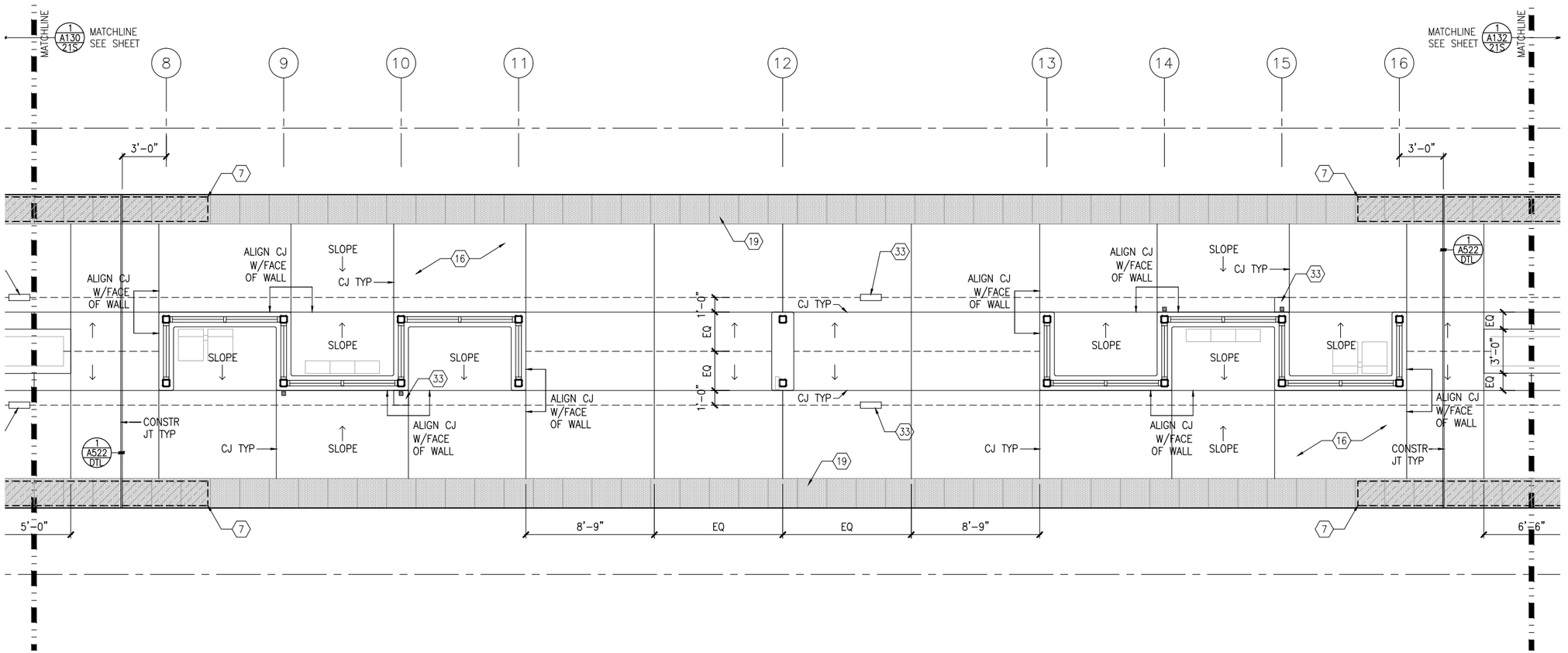
GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

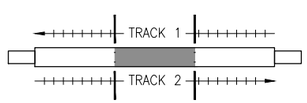
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35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL



1 MIDDLE PARTIAL PAVEMENT PLAN
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
MIDDLE PARTIAL PAVEMENT PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-PLN-131

SHEET 21 OF 394

Jan, 18 2016 11:19 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-PLN-131.dwg By: V-TroutPD

PAVEMENT NOTES

SLOPE TRANSITIONS ARE SHOWN FOR REFERENCE. BLEND/EASE TRANSITIONS TO DRAIN AND SO THAT NO ABRUPT CHANGE IN SLOPE IS VISIBLE ON PLATFORM SURFACE

LEGEND

- – – – – – – SLOPES
- ———— CUT JOINTS

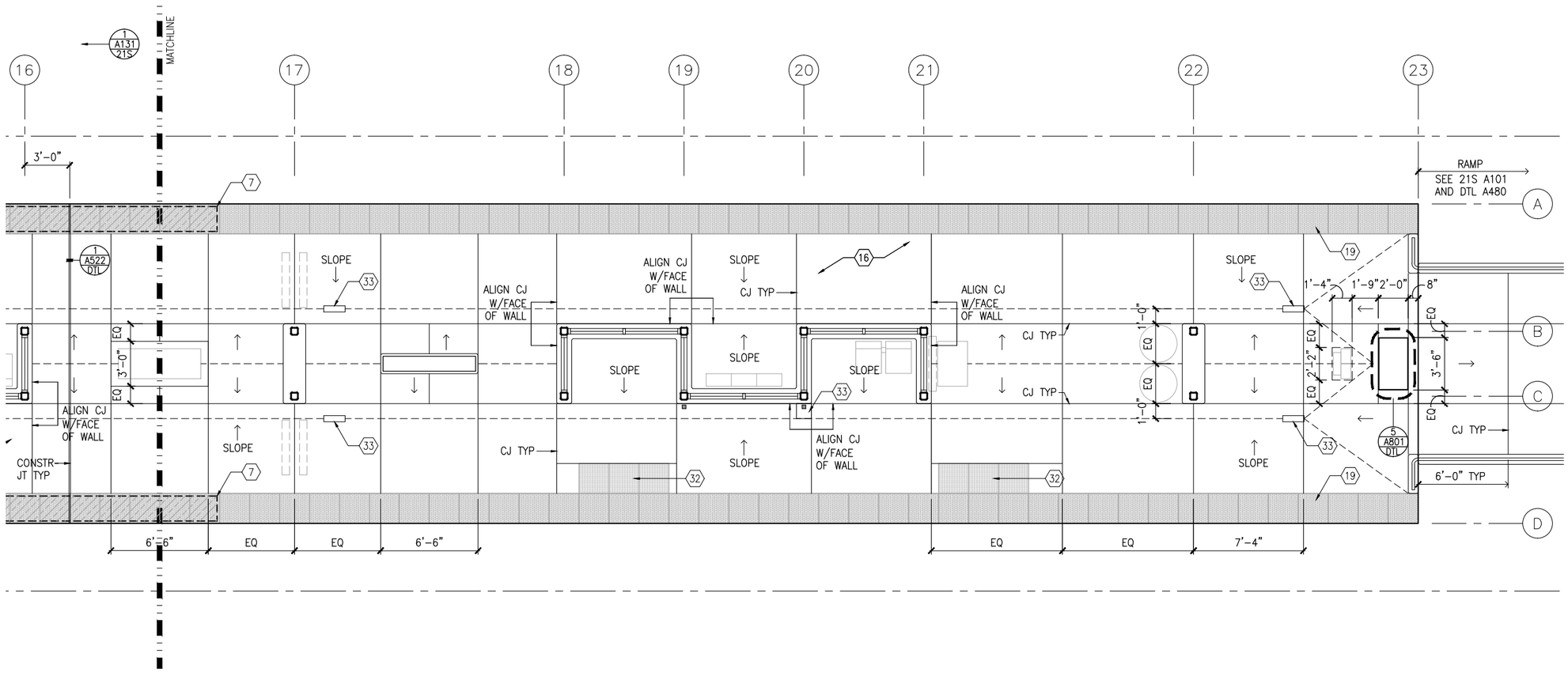
GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

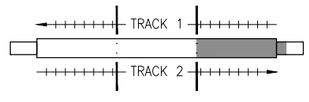
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34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL



1 NORTH PARTIAL PAVEMENT PLAN
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

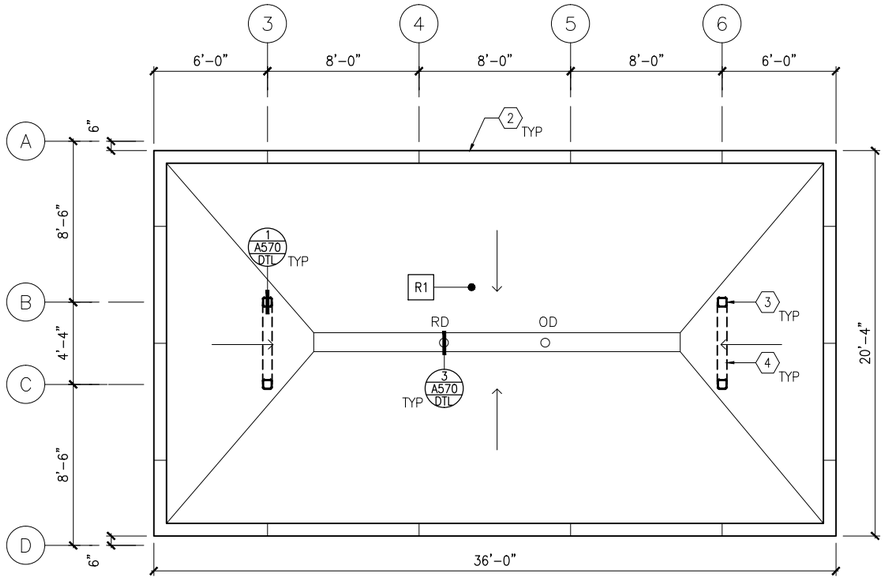
CIVIL - VOLUME 11D
21ST STREET STATION
NORTH PARTIAL PAVEMENT PLAN

DISCIPLINE: ARCHITECTURE

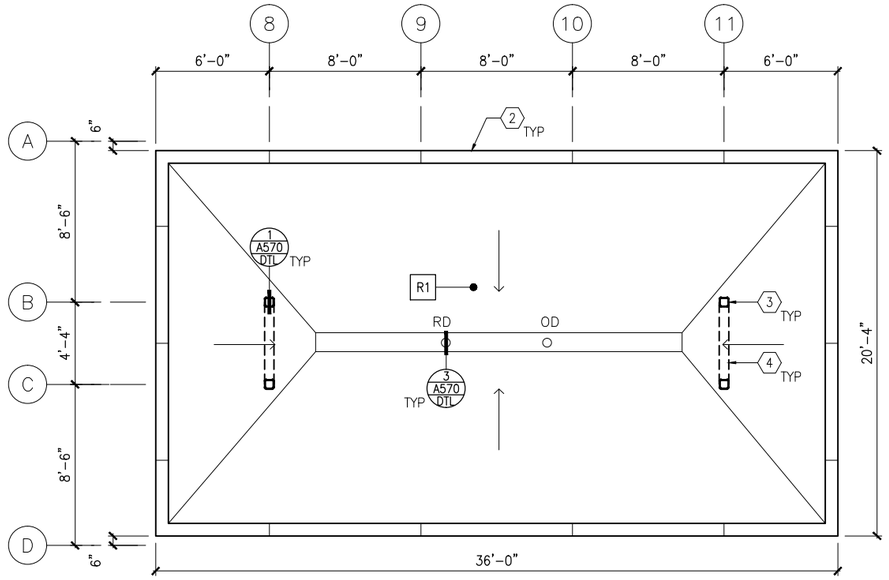
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SHEET 22 OF 394

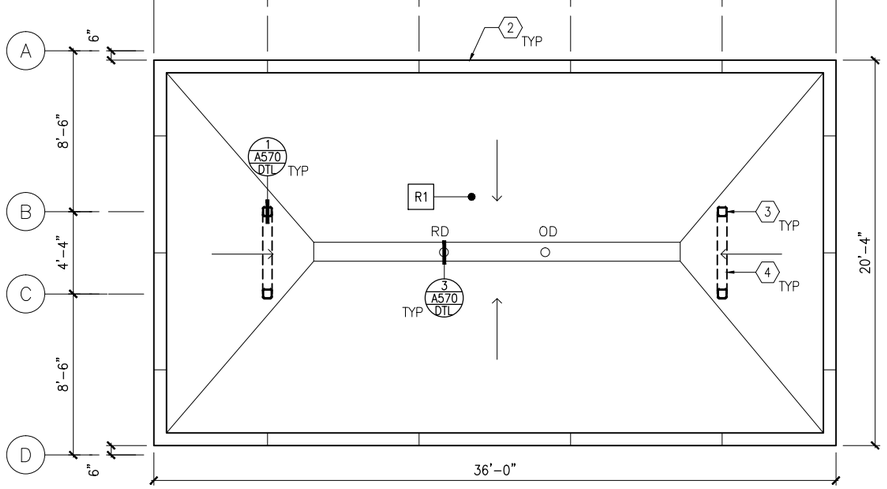
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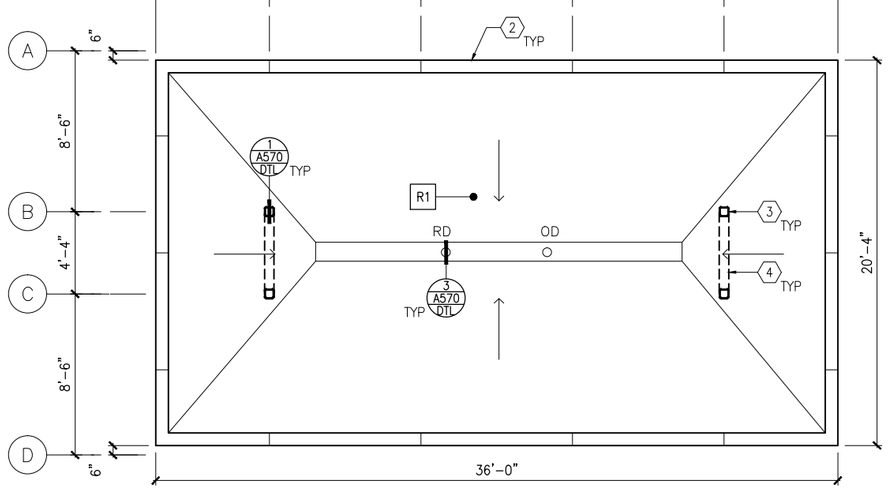
1 ROOF PLAN – SOUTH CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



2 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



3 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



4 ROOF PLAN – NORTH CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. ROOF SLOPE IS 1/4" PER FT UNO
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ALUMINUM STOREFRONT AND TRANSLUCENT GLAZING SYSTEM
2. ALUMINUM COMPOSITE PANEL COPING
3. STEEL COLUMN – SEE STRUCTURAL
4. STEEL BEAM ABOVE – SEE STRUCTURAL
5. PREFINISHED METAL SCUPPER
6. PREFINISHED METAL GUTTER, SLOPE TO DOWNSPOUTS
7. ROOF BASE FLASHING
8. SUMP
9. CONCRETE SPLASH BLOCK
10. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
11. ROOF EXPANSION JOINT
12. BUILDING EXPANSION JOINT
13. VENT THROUGH ROOF – SEE PLUMB
14. INTEGRAL ROOF GUTTER – SLOPE TO DOWNSPOUTS BELOW
15. MECHANICAL EQUIP – SEE MECH

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- STEEL COLUMN
- OVERHEAD SUPPORT
- RD OD — ROOF DRAIN AND OVERFLOW ROOF DRAIN
- R1 — ROOF ASSEMBLY TYPE 1 BALLASTED EPDM
- R2 — ROOF ASSEMBLY TYPE 2 PRECAST PAVER OVER EPDM
- R3 — ROOF ASSEMBLY TYPE 3 SAME AS TYPE 2 WITH R_ INSULATION

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

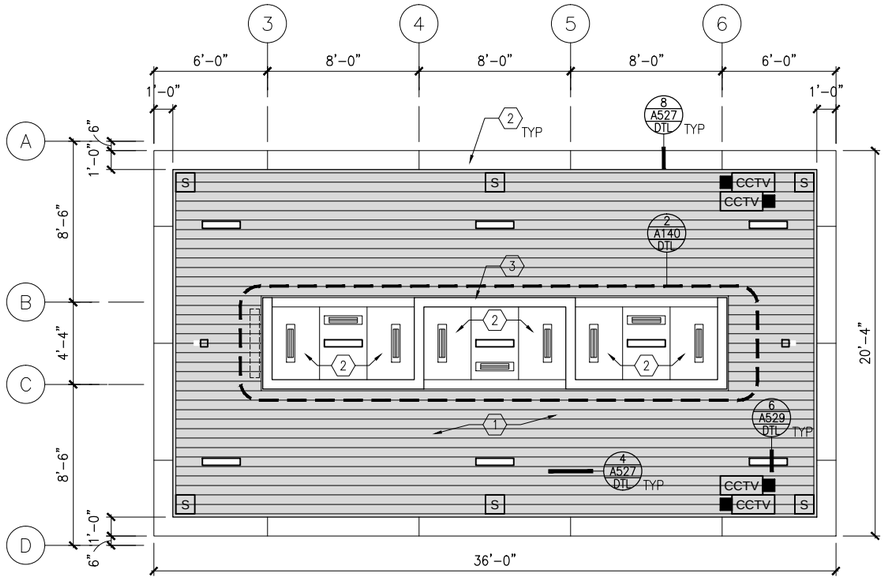
CIVIL - VOLUME 11D
21ST STREET STATION
ROOF PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-PLN-150

SHEET 23 OF 394

Jan. 18 2016 11:19 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-PLN-150.dwg By: V-TroutPD

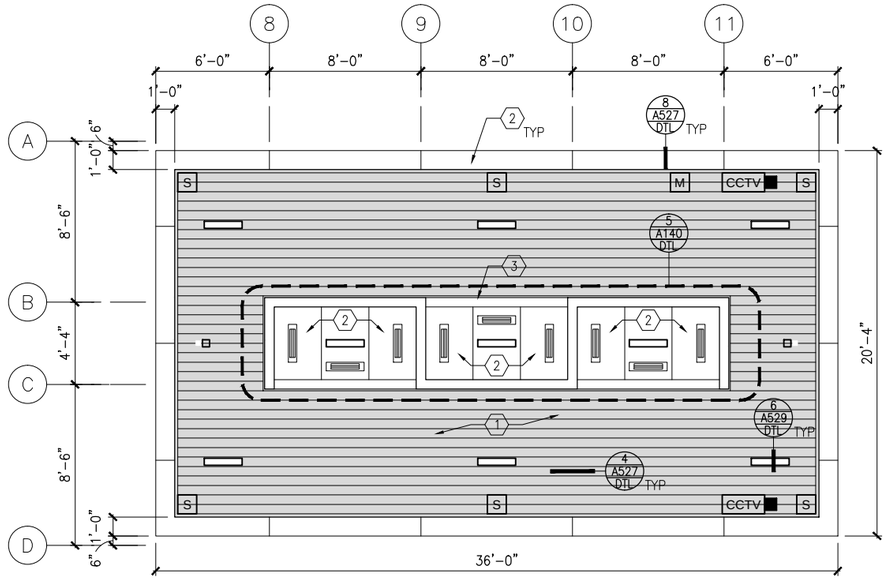


1 REFLECTED CEILING PLAN – SOUTH CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

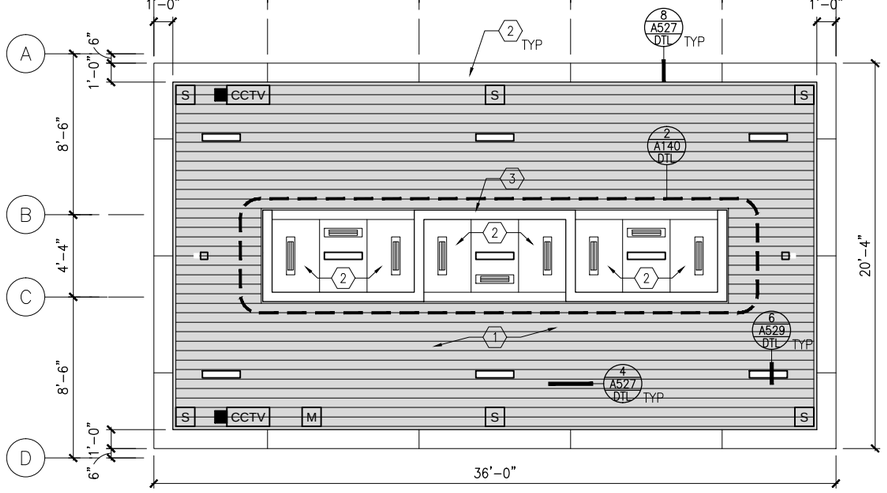


2 REFLECTED CEILING PLAN – MIDDLE CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

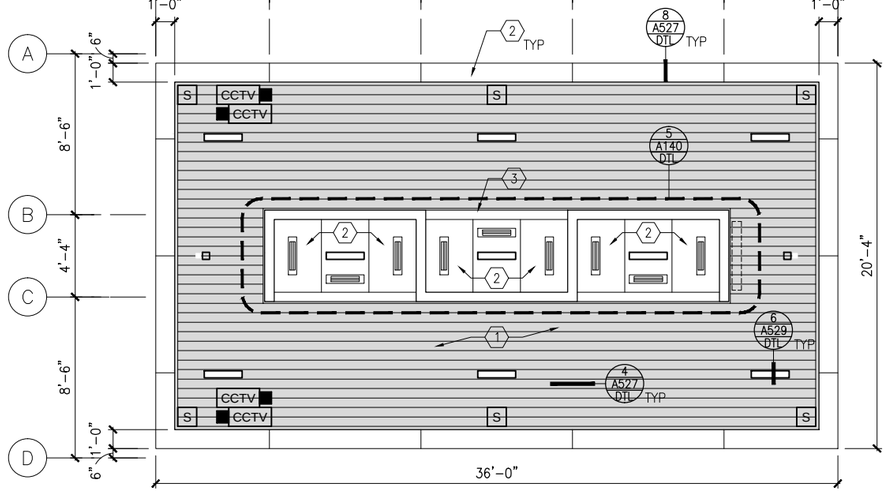


3 REFLECTED CEILING PLAN – MIDDLE CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE



4 REFLECTED CEILING PLAN – NORTH CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. EXTERIOR LINEAR METAL CEILING SOFFIT IN SHADED AREA
2. ALUMINUM COMPOSITE PANEL SOFFIT
3. PROVIDE MATCHING CEILING TRIM AROUND STEEL COLUMN AND/OR SHELTERS
4. PC CONC WALKWAY – SEE STRUCT
5. PC CONC STAIR – SEE STRUCT
6. EXPOSED STRUCTURE – SEE STRUCTURAL
7. ACOUSTIC CEILING
8. ACCESS PANELS FOR EQUIPMENT ACCESS
9. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- SHELTER HEATER
- S SPEAKER
- M MICROPHONE
- C SECURITY CAMERA
- ELECT/COMM JUNCTION BOX
- LED LINEAR LIGHT FIXTURE
- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY-IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

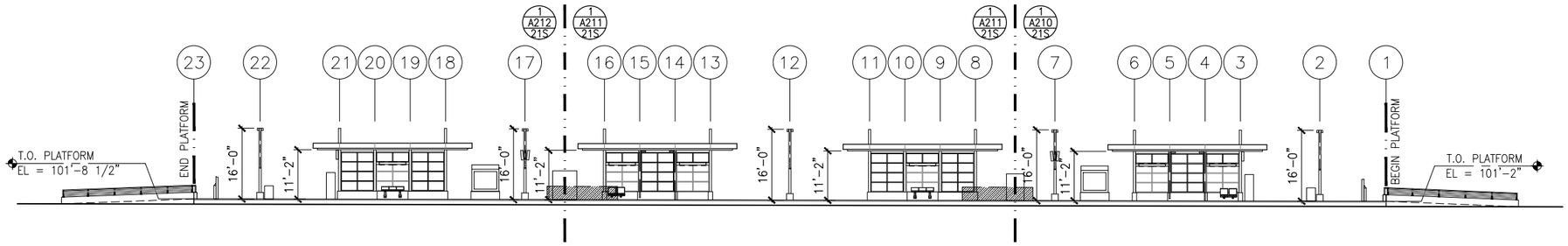
CIVIL - VOLUME 11D
21ST STREET STATION
REFLECTED CEILING PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-RCP-180

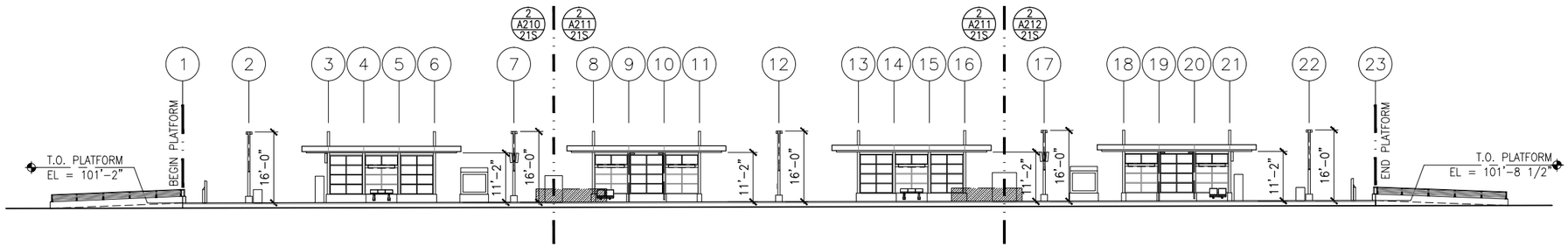
SHEET 24 OF 394

Jan, 18 2016 11:20 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-RCP-180.dwg By: V-TroutPD



1 TRACK 1 ELEVATION
SCALE: 1"=30' (0.20% SLOPE)*

0 7.5 15 30
SCALE



2 TRACK 2 ELEVATION
SCALE: 1"=30' (0.20% SLOPE)*

0 7.5 15 30
SCALE

*VERIFY W/ TRACK PROFILE, ADJUST ELEVATIONS ACCORDINGLY

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

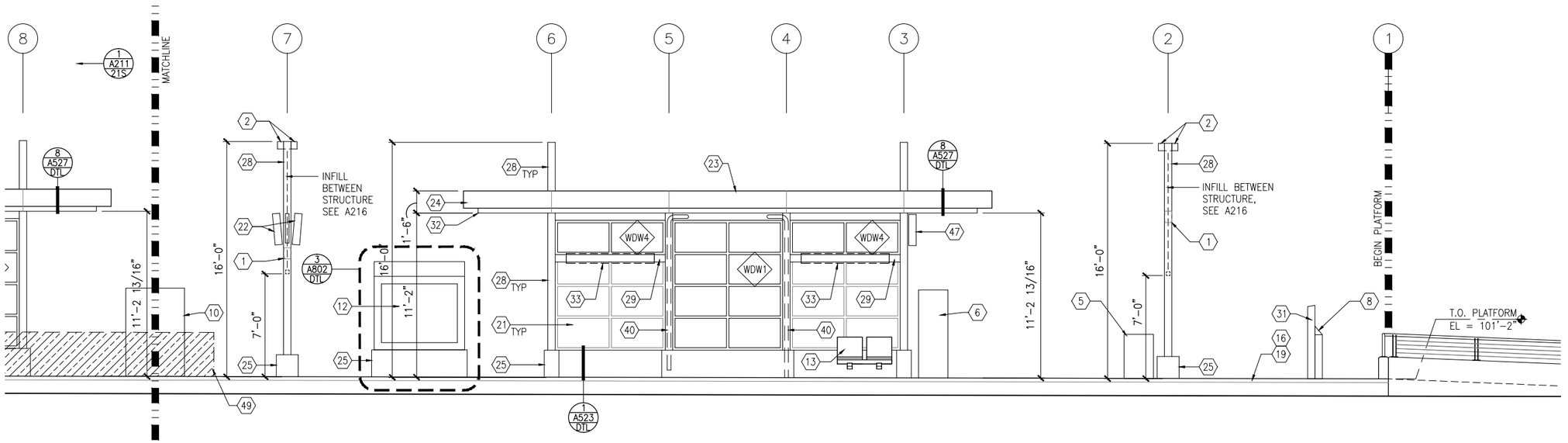
CIVIL - VOLUME 11D
21ST STREET STATION
ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-ELV-200

SHEET 25 OF 394

Jan, 18 2016 11:20 am v:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-ELV-200.DWG By: V-TroutPD

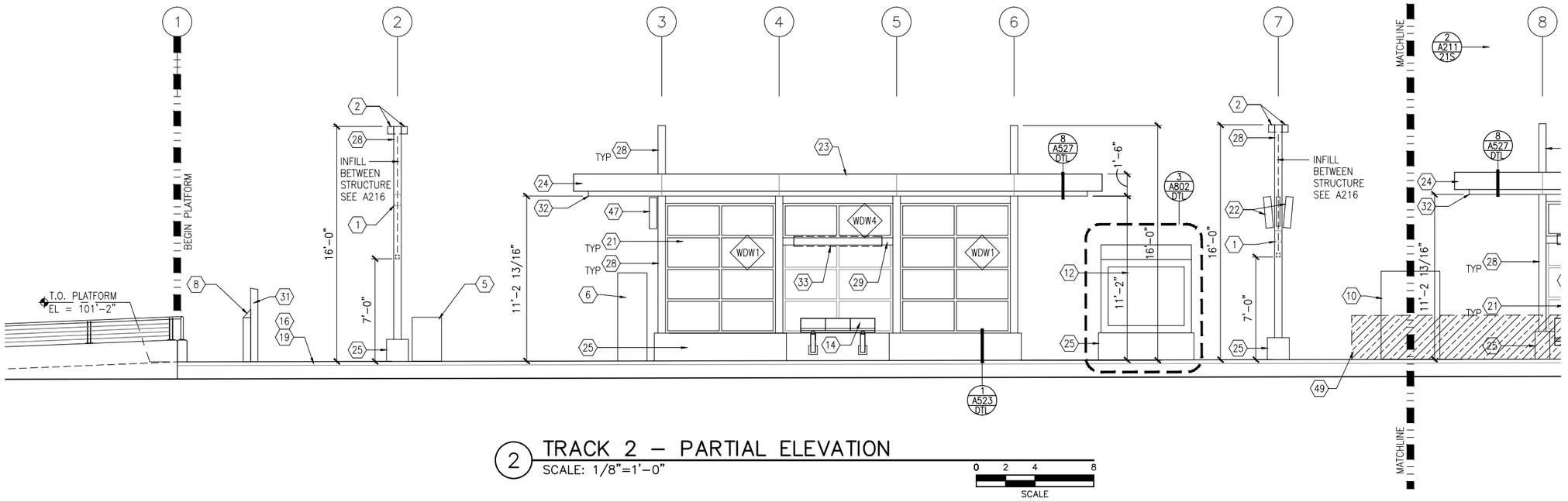


1 TRACK 1 – PARTIAL ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE



2 TRACK 2 – PARTIAL ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

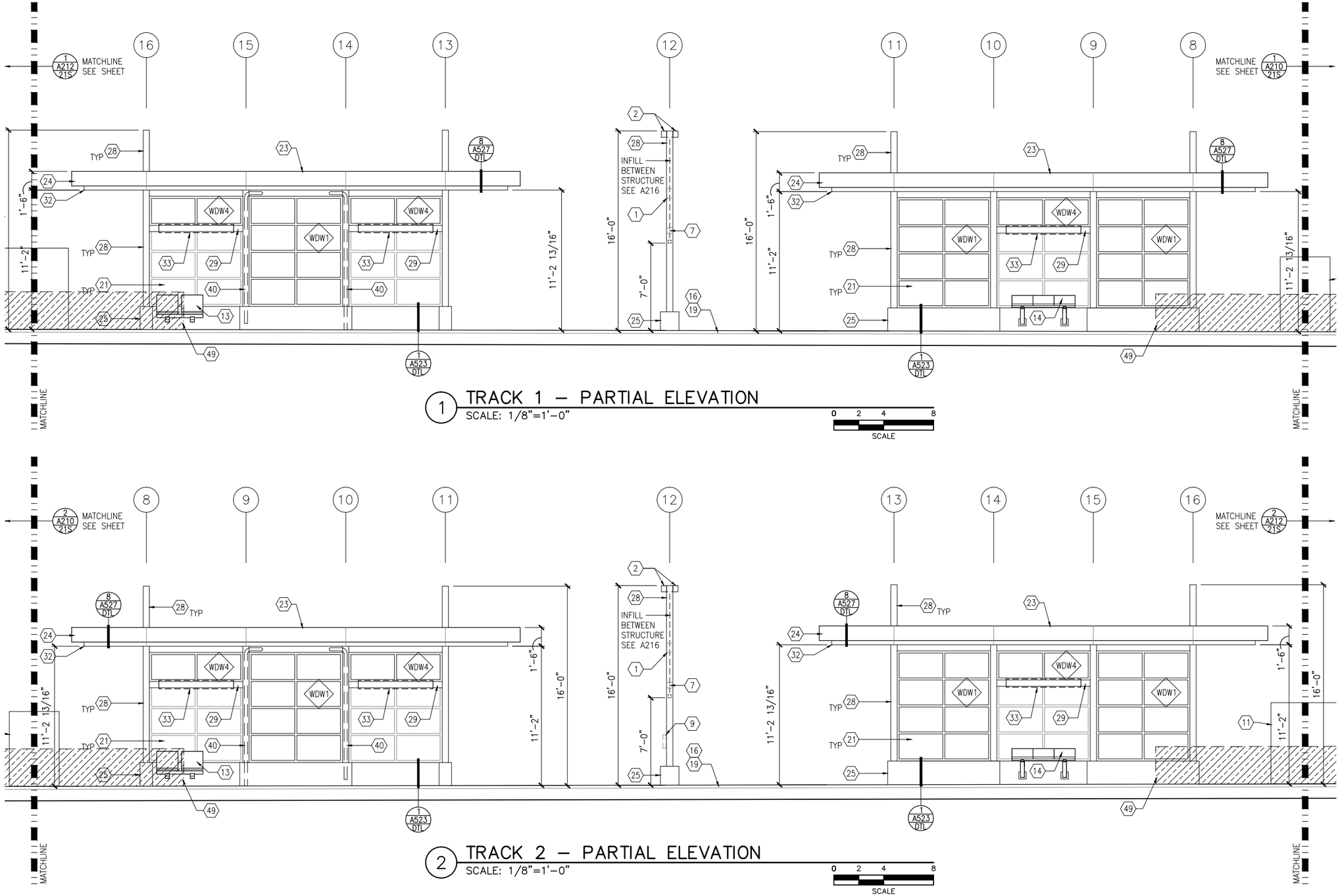
CIVIL - VOLUME 11D
21ST STREET STATION
SOUTH PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-ELV-210

SHEET 26 OF 394

Jan, 18 2016 11:21 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-ELV-210.dwg By: V-TroutPD



1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

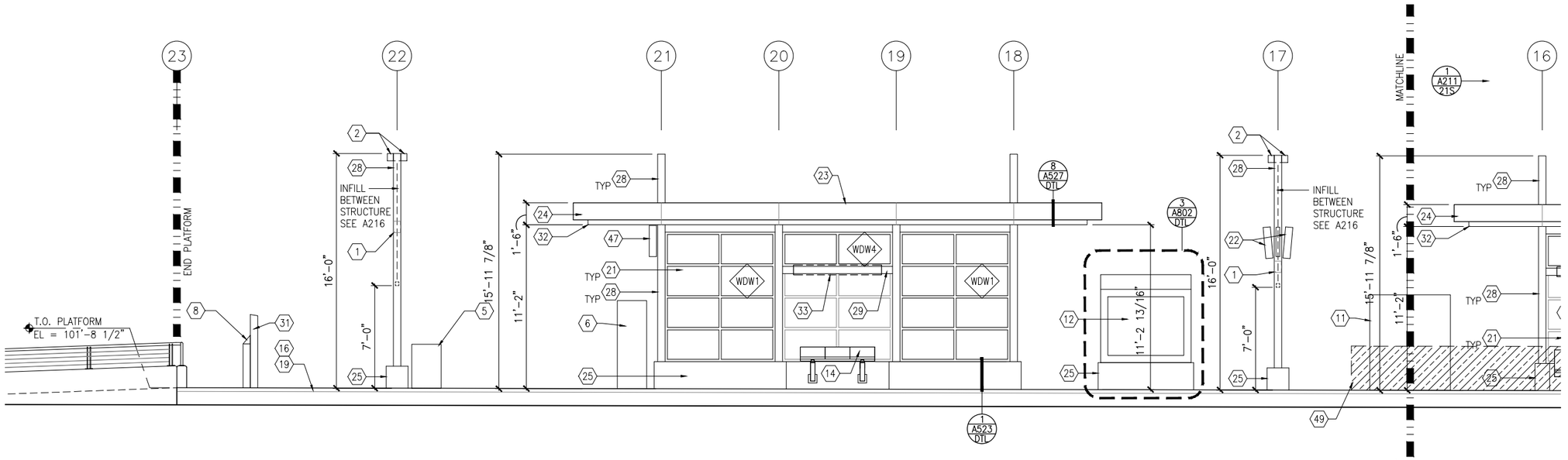
CIVIL - VOLUME 11D
21ST STREET STATION
MIDDLE PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-ELV-211

SHEET 27 OF 394

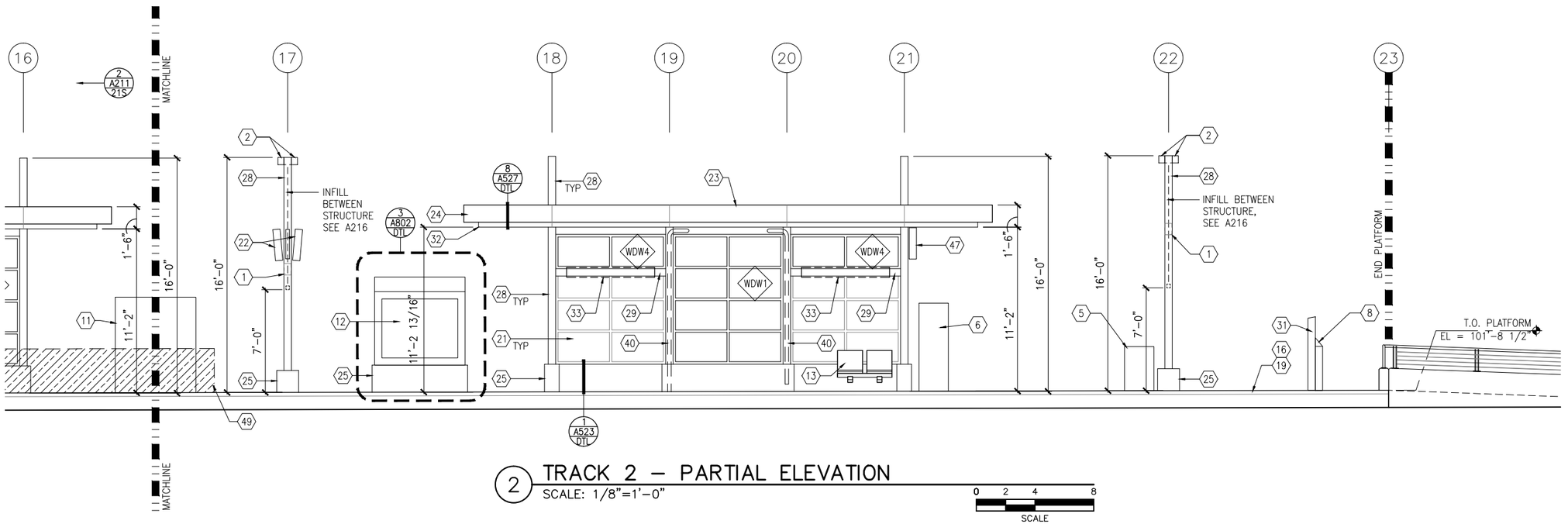
Jan, 18 2016 11:21 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-ELV-211.dwg By: V-TroutPD



1 TRACK 1 – PARTIAL ELEVATION

SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



2 TRACK 2 – PARTIAL ELEVATION

SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

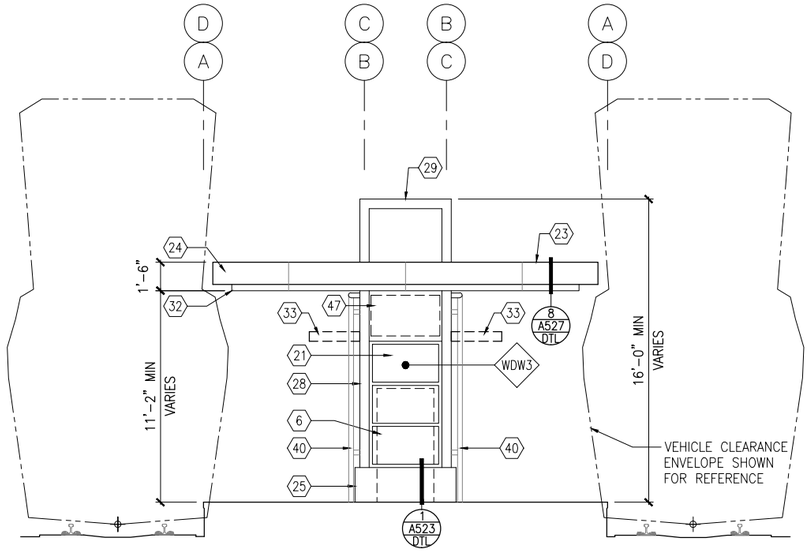
CIVIL - VOLUME 11D
21ST STREET STATION
NORTH PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-ELV-212

SHEET 28 OF 394

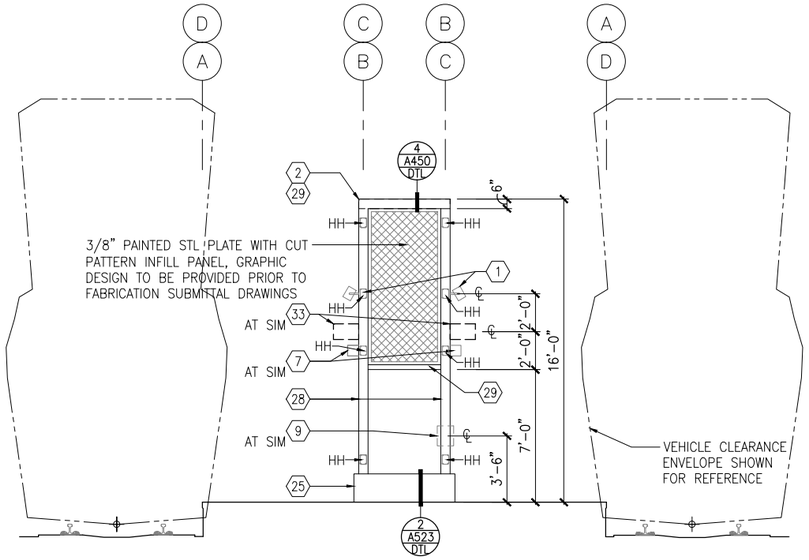
Jan, 18 2016 11:22 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-ELV-212.dwg By: V-TroutPD



1 SIDE ELEVATION

SCALE: 1/8"=1'-0"

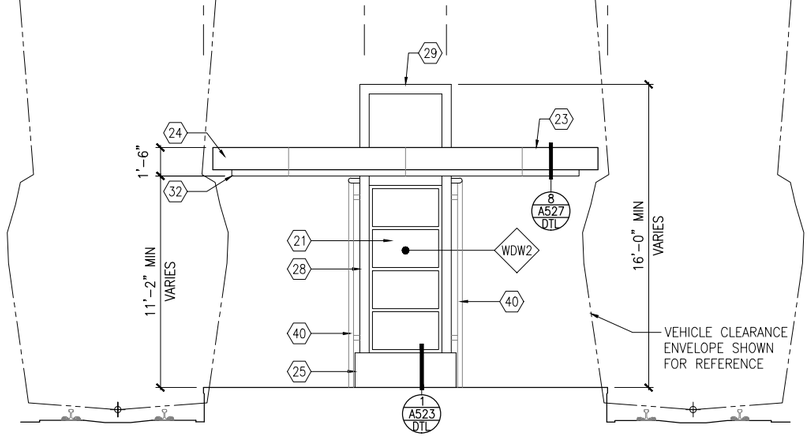
SCALE 0 2 4 8



2 SIDE ELEVATION

SCALE: 1/8"=1'-0"

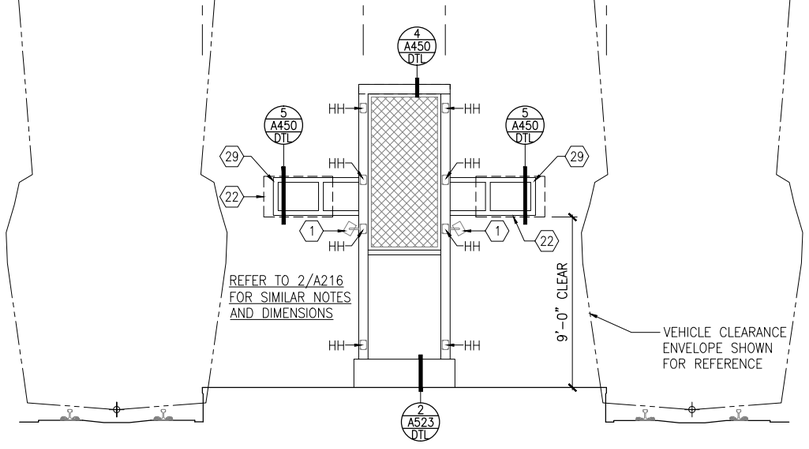
SCALE 0 2 4 8



3 SIDE ELEVATION

SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



4 SIDE ELEVATION

SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

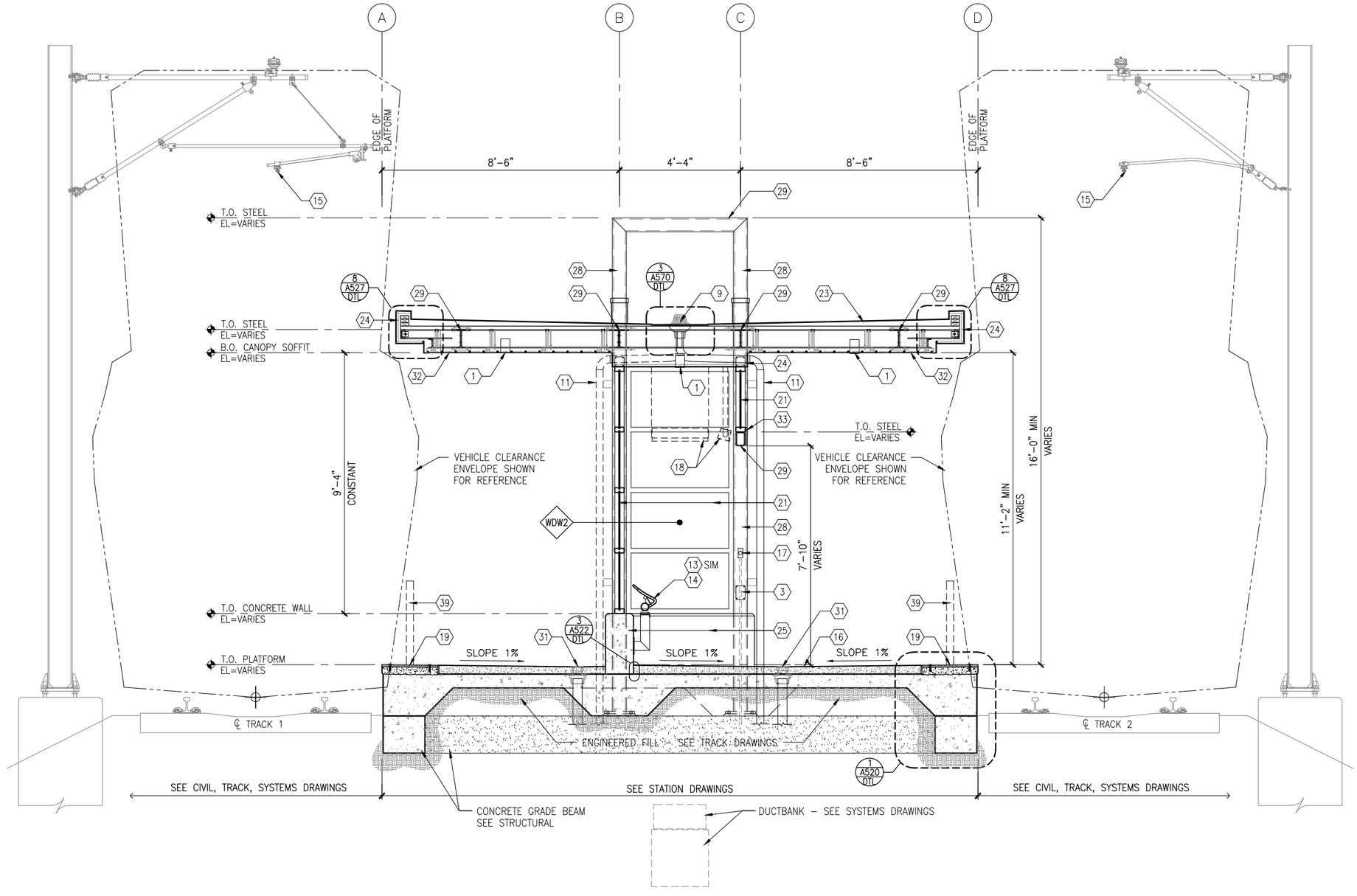
CIVIL - VOLUME 11D
21ST STREET STATION
SIDE ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-ELV-216

SHEET 29 OF 394

Jan. 18 2016 11:22 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-ELV-216.dwg By: V-TroutPD



1 TYPICAL PLATFORM SECTION
SCALE: 1/4"=1'-0"

0 1 2 4
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES - ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. LIGHT RECESSED IN SOFFIT - SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE - SEE ELECTRICAL
3. HAND HOLE IN STEEL STRUCTURE
4. HAND RAIL
5. SECURITY CAMERA - SEE ELEC
6. TICKET VENDING MACHINE - SEE ELEC
7. EMERGENCY TELEPHONE LIGHT - SEE ELECTRICAL
8. EMERGENCY TELEPHONE - SEE ELEC
9. ROOF DRAIN - SEE PLUMBING
10. PRE-FINISHED METAL GUTTER
11. PAINTED CAST IRON RAIN WATER LEADER - SEE PLUMBING
12. PRE-FINISHED METAL SCUPPER
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM - SEE SYSTEMS (NIC)
16. CONCRETE PLATFORM
17. HEATER CONTROL - SEE ELEC
18. INFRARED HEATER - SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN - SEE ELEC
23. ROOFING - REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN - SEE STRUCTURAL
29. STEEL BEAM - SEE STRUCTURAL
30. WALL HYDRANT - SEE PLUMBING
31. AREA DRAIN - SEE PLUMBING
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. PC CONC WALKWAY - SEE STRUCT
35. PC CONC STAIR - SEE STRUCT
36. PC CONC WALL PANEL
37. SECONDARY STEEL FRAMING - SEE STRUCTURAL
38. COMPOSITE ALUM PANEL
39. ADA BETWEEN-CAR BARRIER
40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R- ROOF TYPE - SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

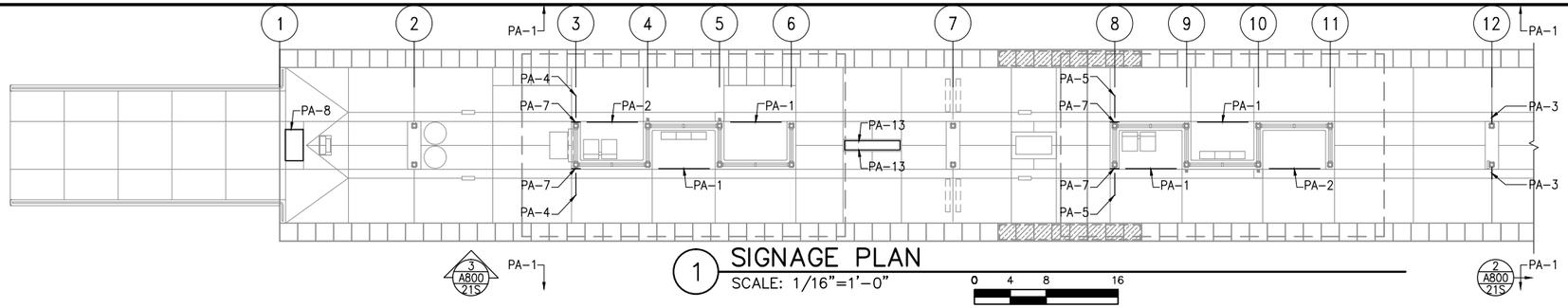
CIVIL - VOLUME 11D
21ST STREET STATION
TYPICAL PLATFORM SECTION

DISCIPLINE: ARCHITECTURE

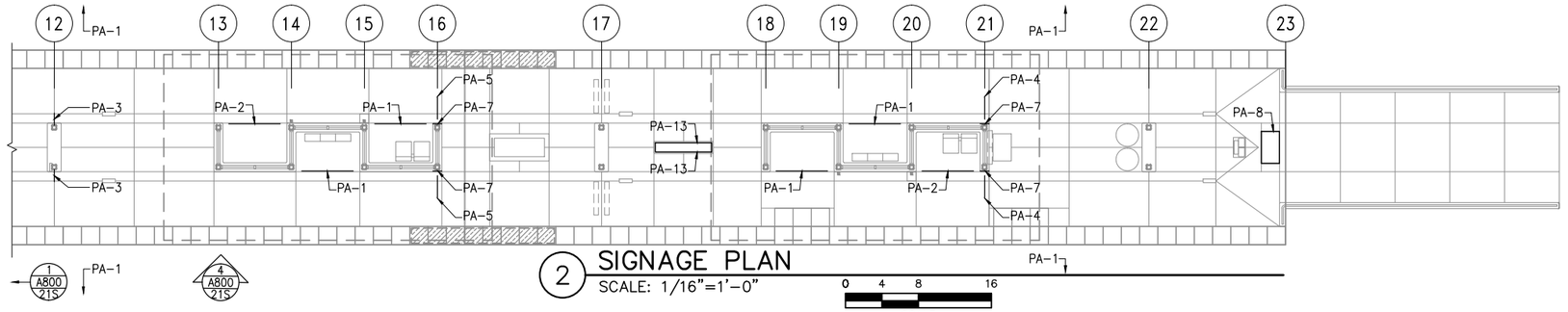
SHEET NAME: E3-21S-ARC-SCT-300

SHEET 30 OF 394

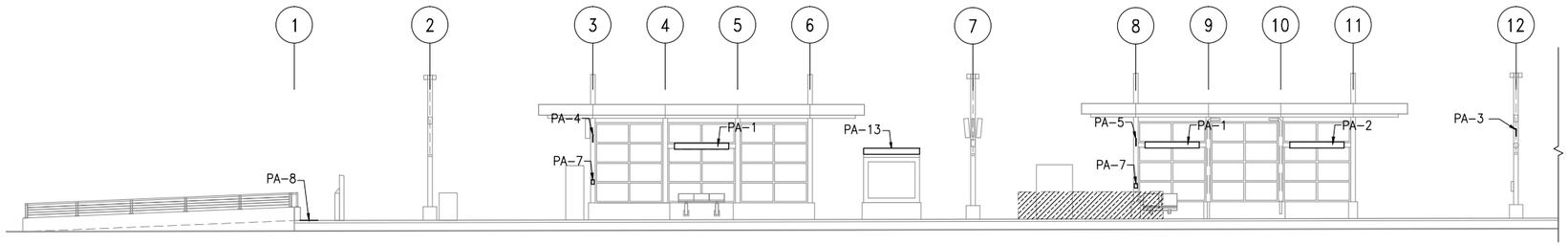
Jan, 18 2016 11:23 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-SCT-300.dwg By: V-TroutPD



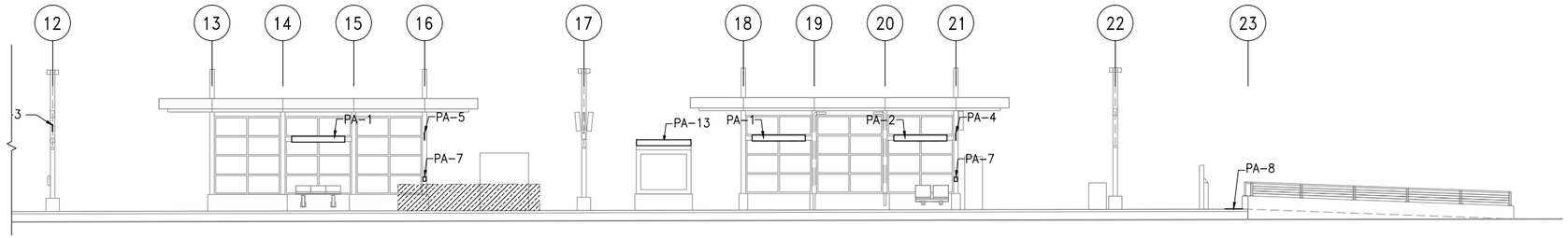
1 SIGNAGE PLAN
SCALE: 1/16"=1'-0"
0 4 8 16
SCALE



2 SIGNAGE PLAN
SCALE: 1/16"=1'-0"
0 4 8 16
SCALE



3 SIGNAGE ELEVATION
SCALE: 1/16"=1'-0"
0 4 8 16
SCALE



4 SIGNAGE ELEVATION
SCALE: 1/16"=1'-0"
0 4 8 16
SCALE

GENERAL SHEET NOTES

1. ALL SIGNAGE MOUNTING HEIGHTS ARE FROM CENTER LINE AT BOTTOM EDGE TO TOP OF PLATFORM
2. FOR SIGNS PA-1, PA-4, PA-5 SEE SHEET DTL A801 FOR MOUNTING
3. FOR SIGNS PA-6, PA-12, PA-13, PA-14, PA-15, PA-16 SEE KIOSK AND CABINET DETAILS FOR MOUNTING
4. SEE VOLUME 11E FOR COMMON DETAILS

SIGNAGE KEY

PA-1 PA-2	1 A801 DTL
PA-3 PA-4 PA-5	2 A801 DTL
PA-6	3 A801 DTL
PA-7	4 A801 DTL
PA-8	5 A801 DTL
PA-12	6 A801 DTL
PA-13 PA-14	7 A801 DTL
PA-15	3 A803 DTL
PA-16	2 A803 DTL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

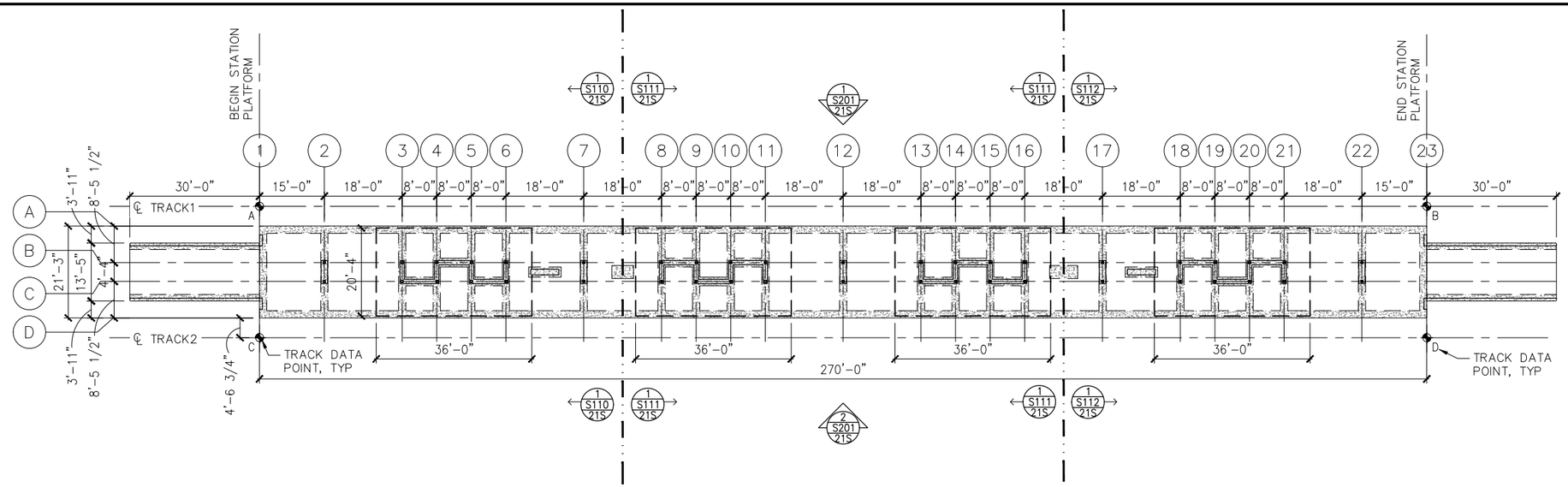
CIVIL - VOLUME 11D
21ST STREET STATION
SIGNAGE PLANS AND ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E3-21S-ARC-SGN-800

SHEET 31 OF 394

Jan. 18 2016 11:24 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ARCH\21ST STREET STATION\E3-21S-ARC-SGN-800.dwg By: V-TroutPD



1 PLATFORM FOUNDATION PLAN

SCALE: 1:30

0 7.5 15 30

SCALE

TRACK DATA

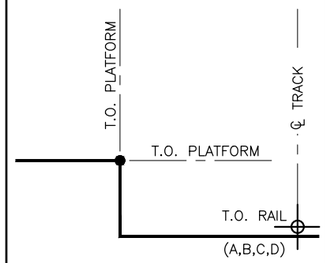
ELEV 100'-0" (LOCATION ON PLAN)

TRACK 1 EL 100'-0"= 866.60 (PT 'A')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
A	866.60	1821+02.51	
B	867.14	1823+72.51	

TRACK 2 EL 100'-0"= 866.60 (PT 'C')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
C	866.60	2821+02.51	
D	867.14	2823+72.51	



SECTION DIAGRAM AT PLATFORM EDGE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
PLATFORM FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E3-21S-STR-PLN-101

SHEET 32 OF 394

Jan, 14 2016 05:36 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E3\PLAN SHEETS\STRUCTURES\21ST STREET STATION\E3-21S-STR-PLN-101.dwg By: jordanl

21ST STREET

21ST STREET STATION PLATFORM

REFERENCE GRID	DISTANCE FROM BEGIN PLATFORM (FT)	T.O. TOPPING ELEVATION	T.O. STR. SLAB ELEVATION	T.O. TOPPING ELEVATION AT "L7"	B.O. BASEPLATE ELEVATION	T.O. WALL ELEVATION	T.O. HSS4X6 ELEVATION	T.O. W8X31 ELEVATION	T.O. HSS6X6X1/2 ELEVATION	H1 (T.O. SLAB TO T.O. WALL) (FT)
1	0	867.77	867.43	867.70						
2	15	867.80	867.46	867.73	866.05	869.30			883.80	1.83
3	33	867.83	867.50	867.76	866.08	869.72	876.22	879.89	883.89	2.22
4	41	867.85	867.52	867.78	866.10	869.72	876.22	879.89		2.21
5	49	867.86	867.53	867.79	866.11	869.72	876.22	879.89		2.19
6	57	867.88	867.55	867.81	866.13	869.72	876.22	879.89	883.89	2.18
WALL TRANSITION POINT 1	**62.75**	**867.89**	**867.56**	**867.82**		**869.74**				**2.18**
WALL TRANSITION POINT 2	**69.25**	**867.91**	**867.57**	**867.84**		**869.74**				**2.17**
7	75	867.92	867.58	867.85	866.17	869.42			883.92	1.83
8	93	867.95	867.62	867.88	866.20	869.84	876.34	880.01	884.01	2.22
9	101	867.97	867.64	867.90	866.22	869.84	876.34	880.01		2.21
10	109	867.98	867.65	867.91	866.23	869.84	876.34	880.01		2.19
11	117	868.00	867.67	867.93	866.25	869.84	876.34	880.01	884.01	2.18
12	135	868.04	867.70	867.97	866.29	869.54			884.04	1.83
13	153	868.07	867.74	868.00	866.32	869.96	876.46	880.13	884.13	2.22
14	161	868.09	867.76	868.02	866.34	869.96	876.46	880.13		2.21
15	169	868.10	867.77	868.03	866.35	869.96	876.46	880.13		2.19
16	177	868.12	867.79	868.05	866.37	869.96	876.46	880.13	884.13	2.18
17	195	868.16	867.82	868.09	866.41	869.66			884.16	1.83
WALL TRANSITION POINT 3	**200.75**	**868.17**	**867.83**	**868.10**		**870.01**				**2.18**
WALL TRANSITION POINT 4	**207.25**	**868.18**	**867.85**	**868.11**		**870.01**				**2.17**
18	213	868.19	867.86	868.12	866.44	870.08	876.58	880.25	884.25	2.22
19	221	868.21	867.88	868.14	866.46	870.08	876.58	880.25		2.21
20	229	868.22	867.89	868.15	866.47	870.08	876.58	880.25		2.19
21	237	868.24	867.91	868.17	866.49	870.08	876.58	880.25	884.25	2.18
22	255	868.28	867.94	868.21	866.53	869.78			884.28	1.83
23	270	868.31	867.97	868.24						

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.

REFERENCE TABLE NOTES

1. TOP OF PLATFORM ELEVATION (TOPPING SLAB) SHALL BE 4"(±) ABOVE TOP OF STRUCTURAL SLAB ELEVATION AS INDICATED IN TABLE.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

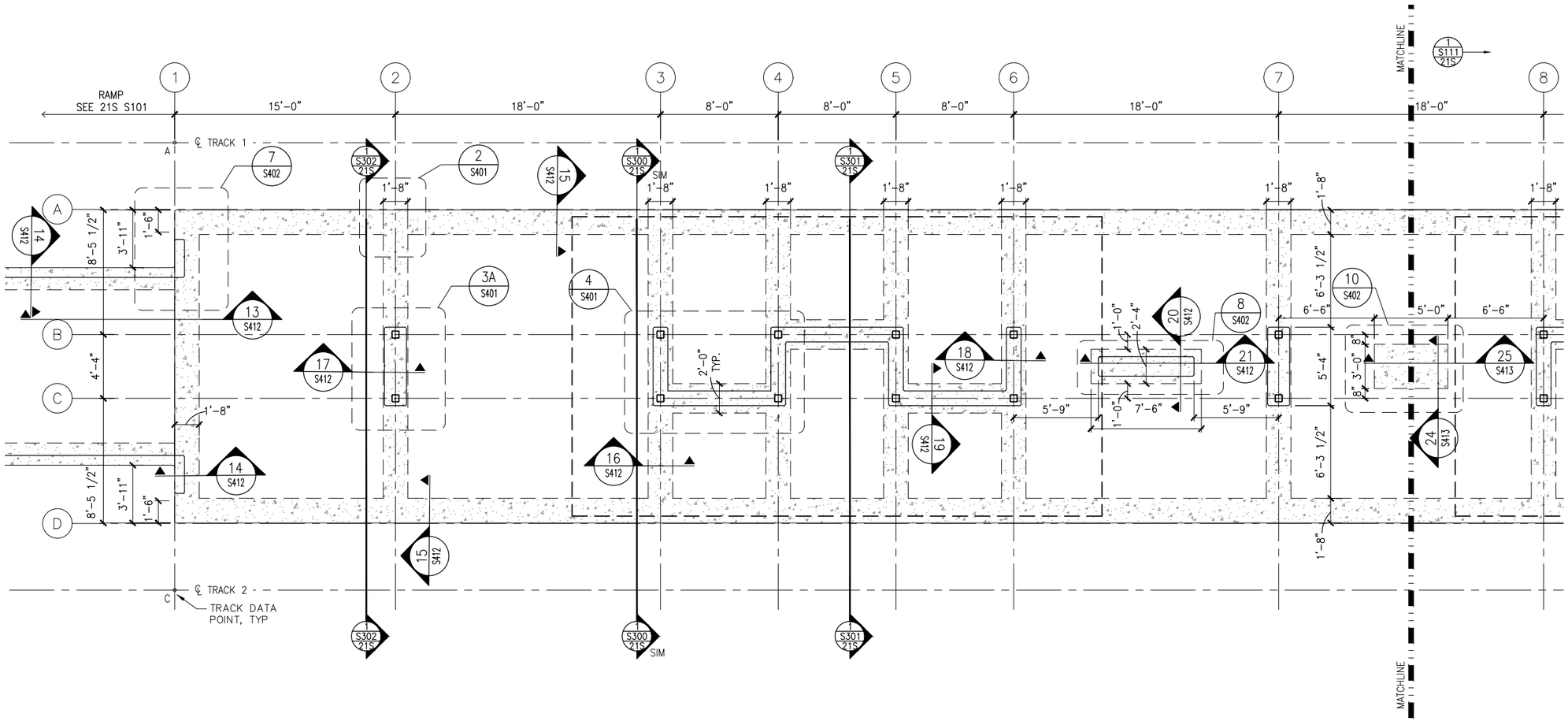
CIVIL - VOLUME 11D
21ST STREET STATION
STATION REFERENCE TABLE

DISCIPLINE: STRUCTURES

SHEET NAME: E3-21S-STR-SCH-102

SHEET 33 OF 394

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1 SOUTH PARTIAL FOUNDATION PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

FLOOR PLAN NOTES

1. FOR HEIGHTS AND LOCATIONS OF KNEE WALLS, SEE ARCH. DWGS.
2. FOR TYPICAL COLUMN BASE PLATE DETAILS SEE DWG. XXXXXX.
3. "GB-X" INDICATES GRADE BEAM MARK.
4. SLAB ON GRADE SHALL BEAR ON ENGINEERED FILL, REINF. W/ 4x4-W4.0xW4.0 W.W.F. TOP, W/ 1" CLR. COVER.

SCHEDULES or LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

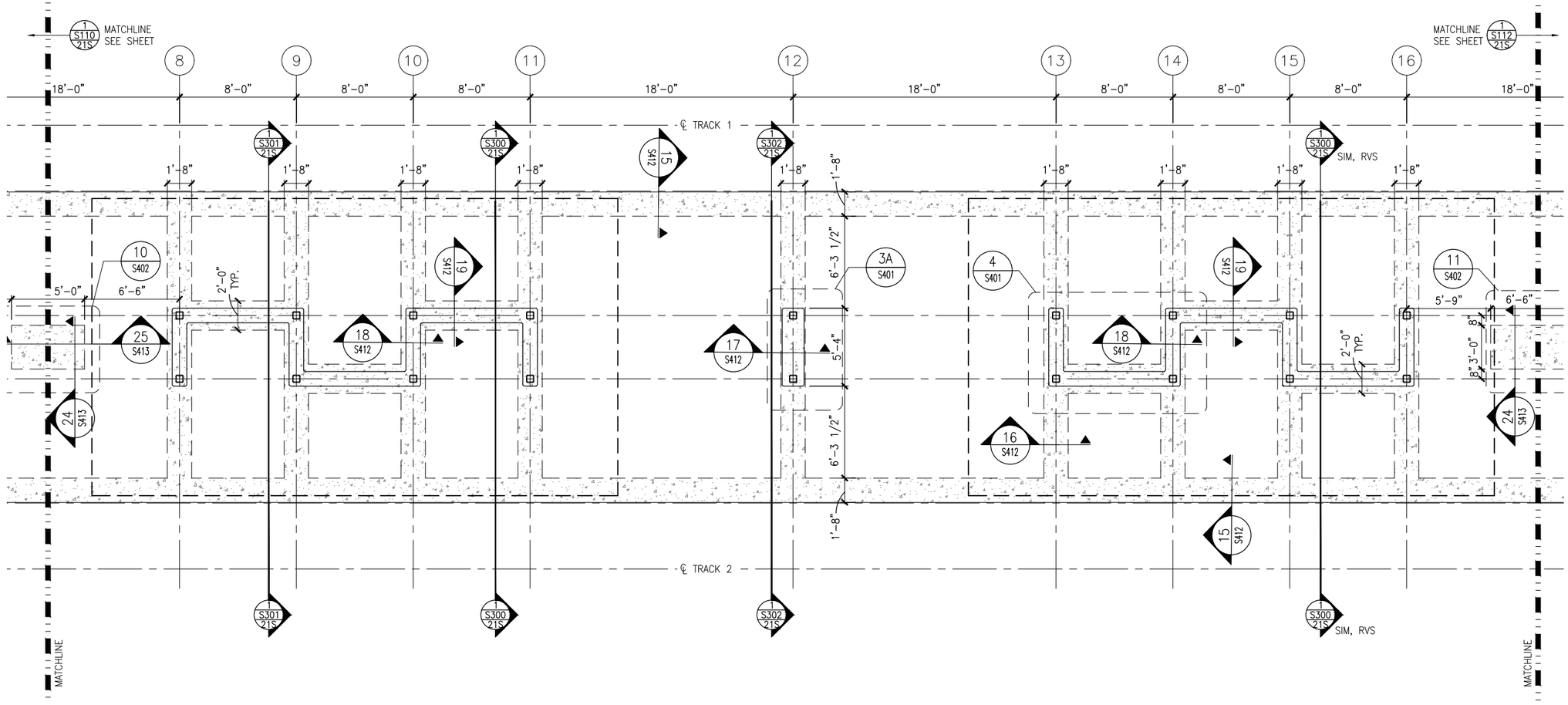
CIVIL - VOLUME 11D
21ST STREET STATION
SOUTH PARTIAL FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E3-21S-STR-PLN-110

SHEET 34 OF 394

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1 MIDDLE PARTIAL FOUNDATION PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

FLOOR PLAN NOTES

1. FOR HEIGHTS AND LOCATIONS OF KNEE WALLS, SEE ARCH. DWGS.
2. FOR TYPICAL COLUMN BASE PLATE DETAILS SEE DWG. XXXXXX.
3. "GB–X" INDICATES GRADE BEAM MARK.
4. SLAB ON GRADE SHALL BEAR ON ENGINEERED FILL, REINF. W/ 4x4–W4.0xW4.0 W.W.F. TOP, W/ 1" CLR. COVER.

SCHEDULES or LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

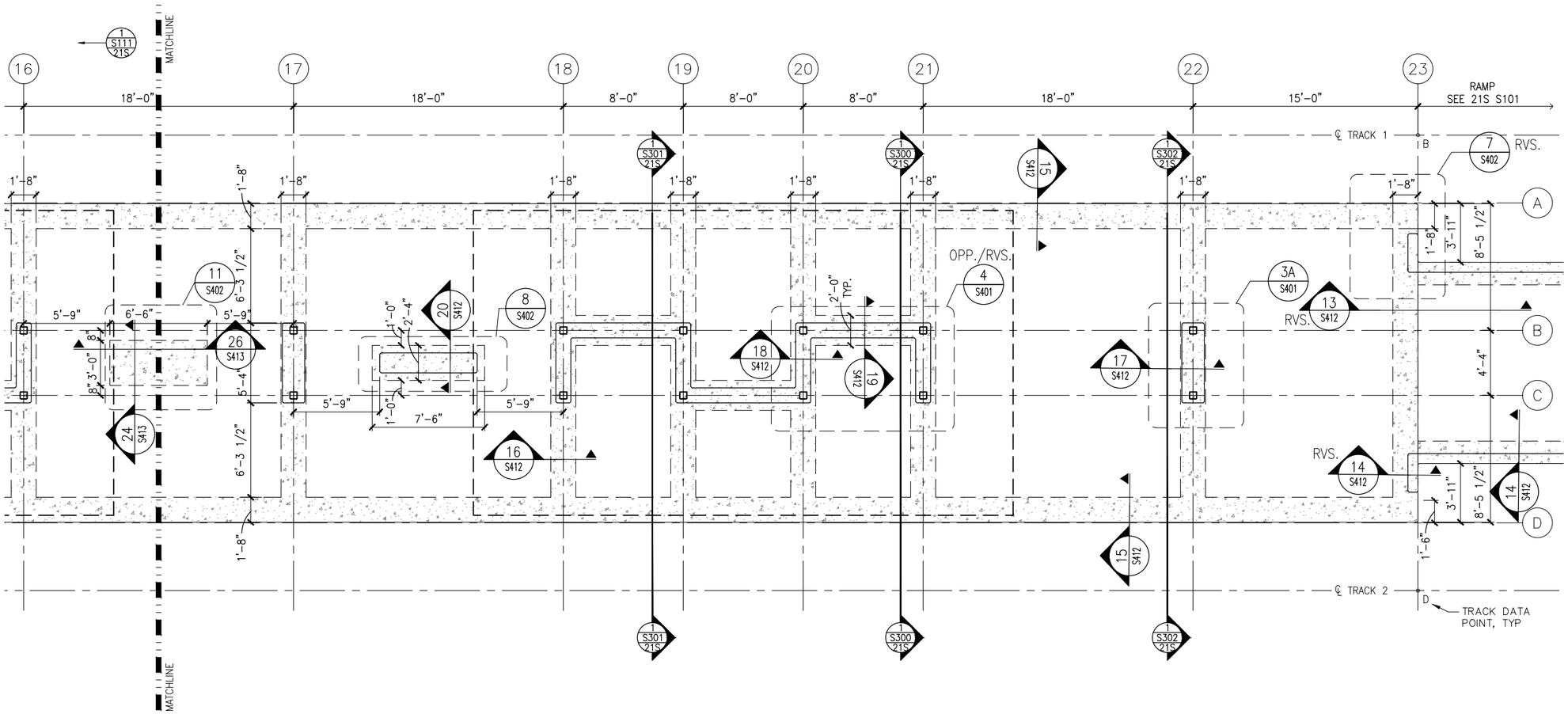
CIVIL - VOLUME 11D
21ST STREET STATION
MIDDLE PARTIAL FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E3-21S-STR-PLN-111

SHEET 35 OF 394

Jan, 14 2016 05:40 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E3\PLAN SHEETS\STR



1 NORTH PARTIAL FOUNDATION PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

FLOOR PLAN NOTES

1. FOR HEIGHTS AND LOCATIONS OF KNEE WALLS, SEE ARCH. DWGS.
2. FOR TYPICAL COLUMN BASE PLATE DETAILS SEE DWG. XXXXXX.
3. "GB-X" INDICATES GRADE BEAM MARK.
4. SLAB ON GRADE SHALL BEAR ON ENGINEERED FILL, REINF. W/ 4x4-W4.0xW4.0 W.W.F. TOP, W/ 1" CLR. COVER.

SCHEDULES or LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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SOUTHWEST Green Line LRT Extension

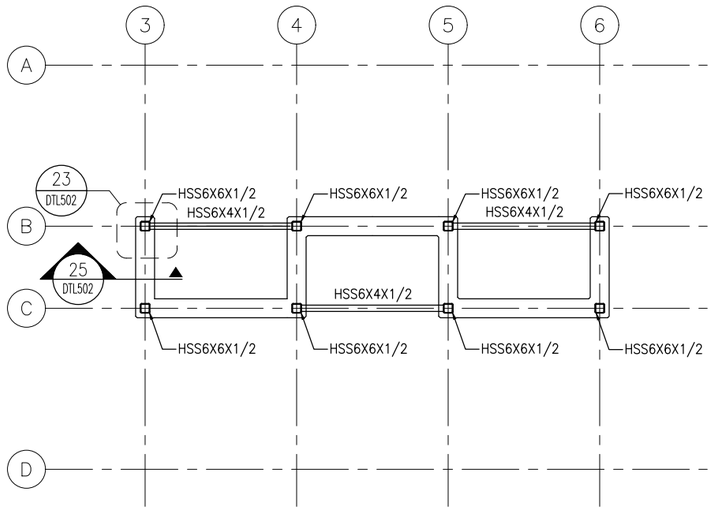
CIVIL - VOLUME 11D
21ST STREET STATION
NORTH PARTIAL FOUNDATION PLAN

DISCIPLINE: STRUCTURES

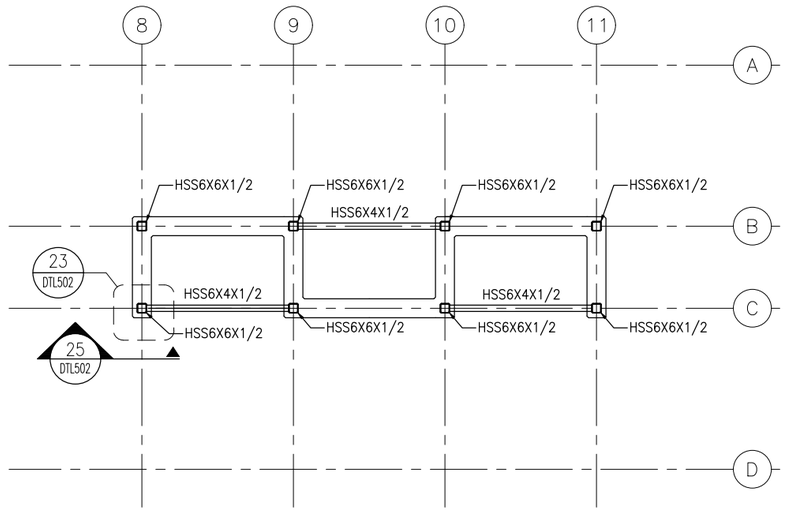
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SHEET 36 OF 394

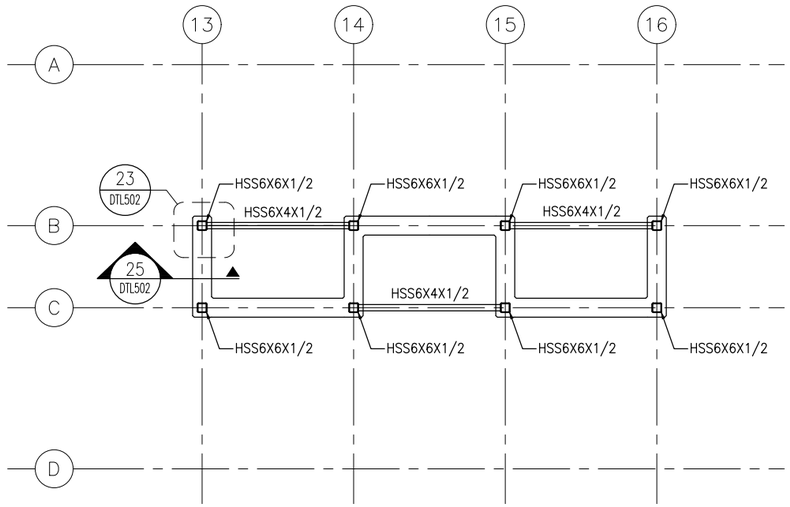
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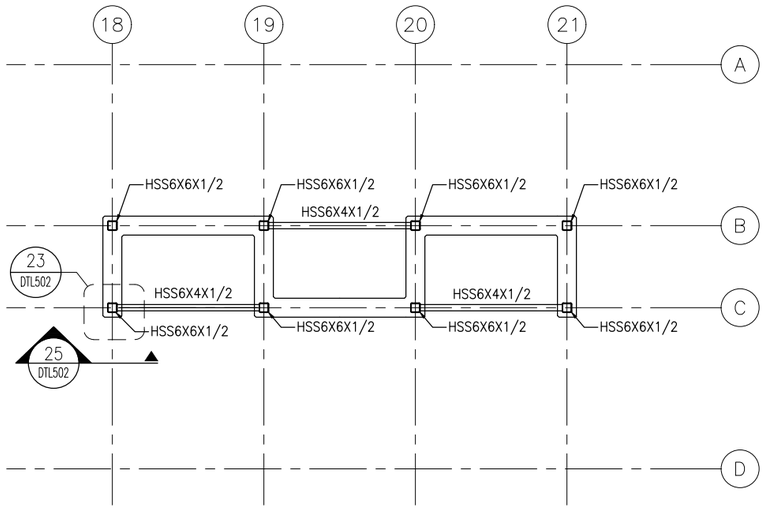
1 INTERMEDIATE FRAMING PLAN – SOUTH CANOPY
SCALE: 1/8"=1'-0"



2 INTERMEDIATE FRAMING PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



3 INTERMEDIATE FRAMING PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



4 INTERMEDIATE FRAMING PLAN – NORTH CANOPY
SCALE: 1/8"=1'-0"

SHEET NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

KEY NOTES

1. [ ] INDICATES SPAN DIRECTION OF ROOF METAL DECK. SEE ARCH. DWGS.
2. [ ] DENOTES PREQUALIFIED SHOP OR FIELD WELDED CONNECTION.
3. BC DENOTES BOLTED CONNECTION, FOR TYPICAL BEAM TO BEAM BOLTED CONNECTIONS AND SIMILAR DETAILS SEE DWG. XXXXXXX & XXXXXXX

LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

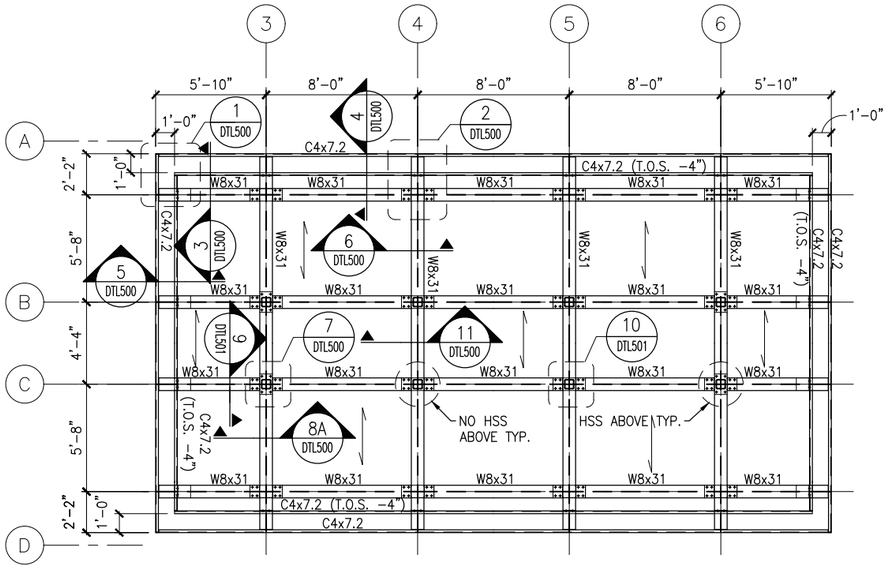
CIVIL - VOLUME 11D
21ST STREET STATION
INTERMEDIATE FRAMING PLANS

DISCIPLINE: STRUCTURES

SHEET NAME: E3-21S-STR-PLN-140

SHEET 37 OF 394

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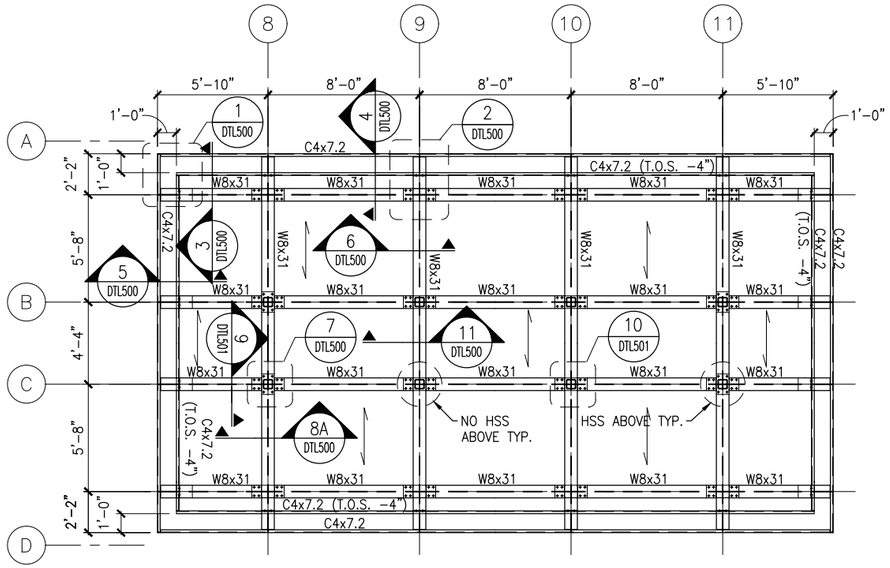


1 FRAMING PLAN – SOUTH CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

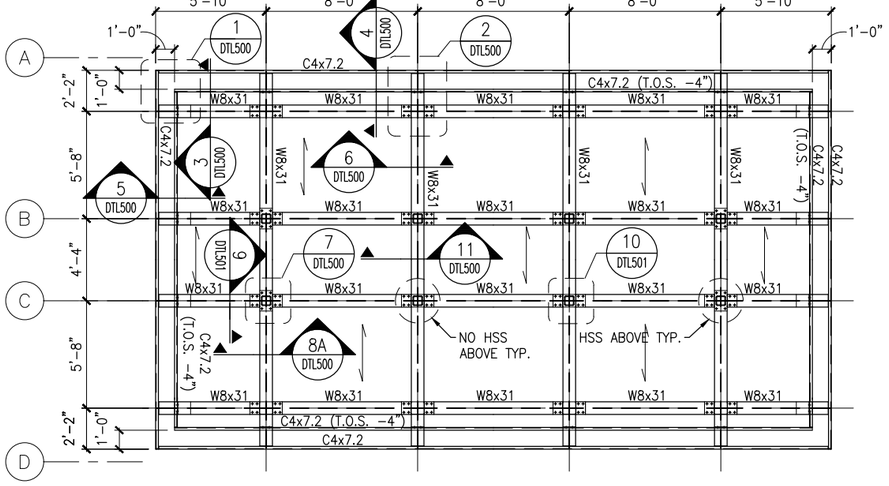


2 FRAMING PLAN – MIDDLE CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

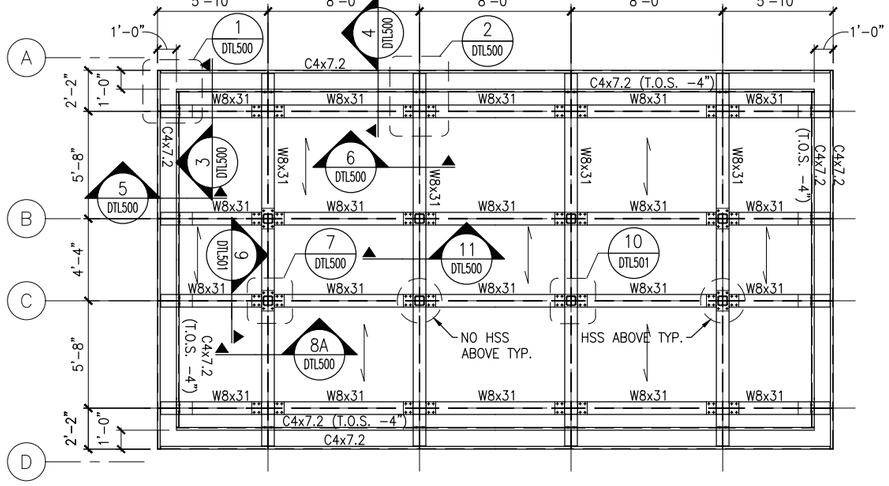


3 FRAMING PLAN – MIDDLE CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE



4 FRAMING PLAN – NORTH CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

SHEET NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

KEY NOTES

1. [ ] INDICATES SPAN DIRECTION OF ROOF METAL DECK. SEE ARCH. DWGS.
2. [ ] DENOTES PREQUALIFIED SHOP OR FIELD WELDED CONNECTION.
3. BC DENOTES BOLTED CONNECTION, FOR TYPICAL BEAM TO BEAM BOLTED CONNECTIONS AND SIMILAR DETAILS SEE DWG. XXXXXXX & XXXXXXX

LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

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SOUTHWEST Green Line LRT Extension

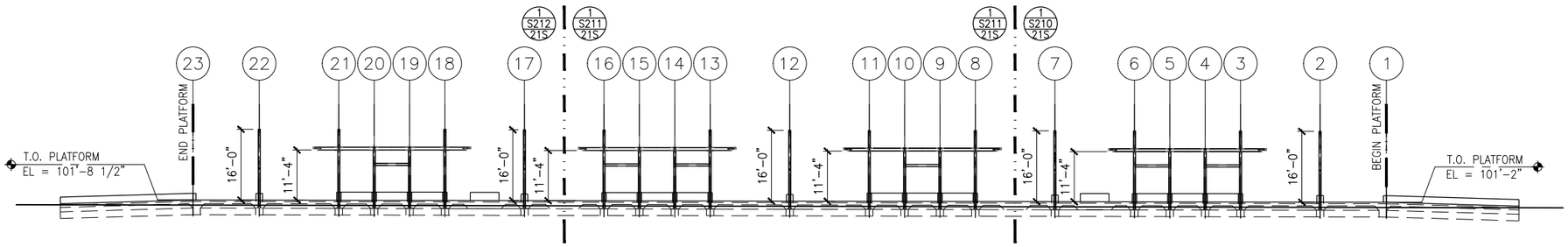
CIVIL - VOLUME 11D
21ST STREET STATION
ROOF FRAMING PLANS

SHEET 38 OF 394

DISCIPLINE: STRUCTURES

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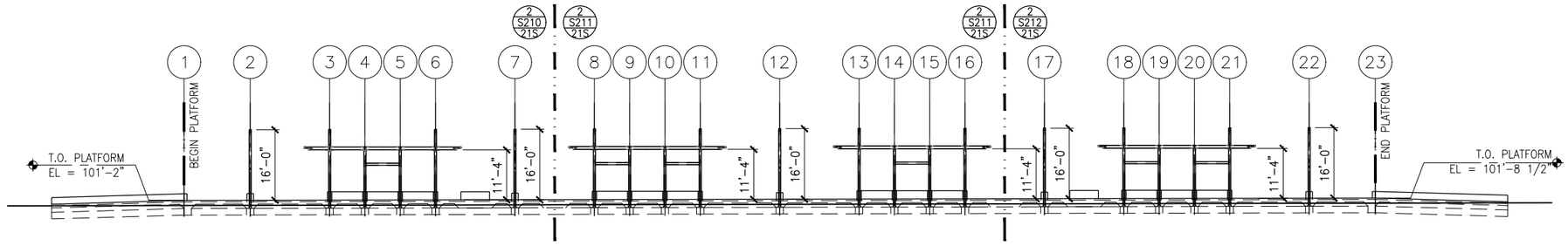
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1 TRACK 1 ELEVATION – FRAMING

SCALE: 1:30 (0.20% SLOPE)*

0 7.5 15 30
SCALE



2 TRACK 2 ELEVATION – FRAMING

SCALE: 1:30 (0.20% SLOPE)*

0 7.5 15 30
SCALE

*VERIFY W/ TRACK PROFILE, ADJUST ELEVATIONS ACCORDINGLY

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

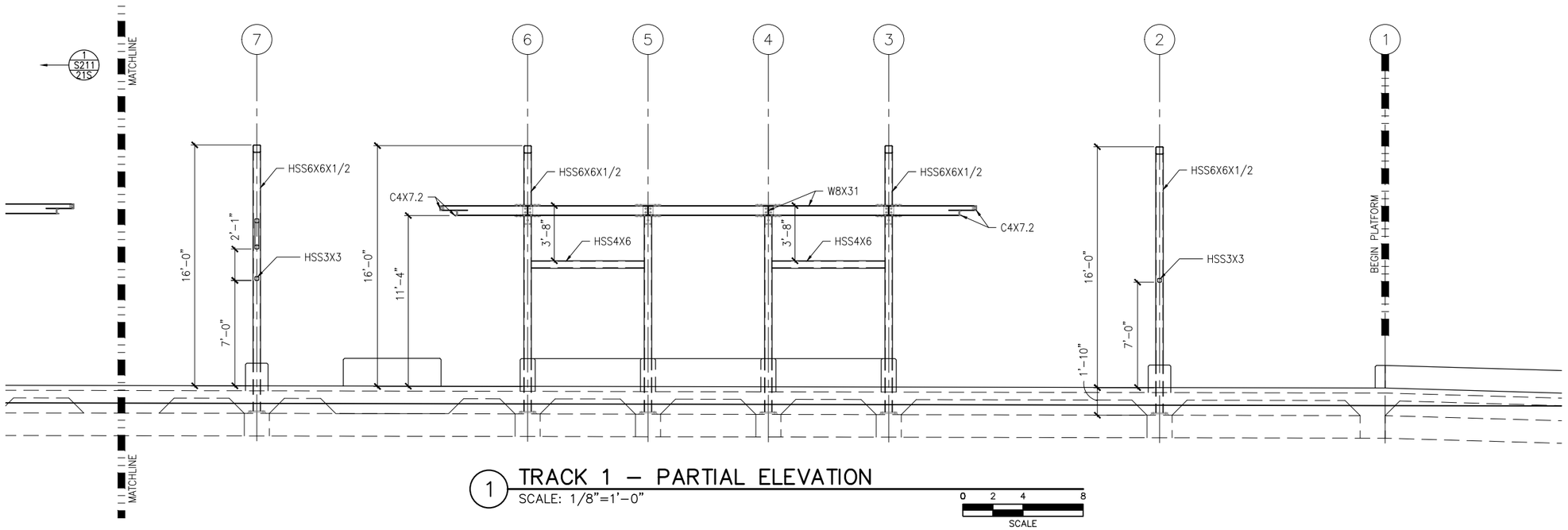
CIVIL - VOLUME 11D
21ST STREET STATION
ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E3-21S-STR-ELV-201

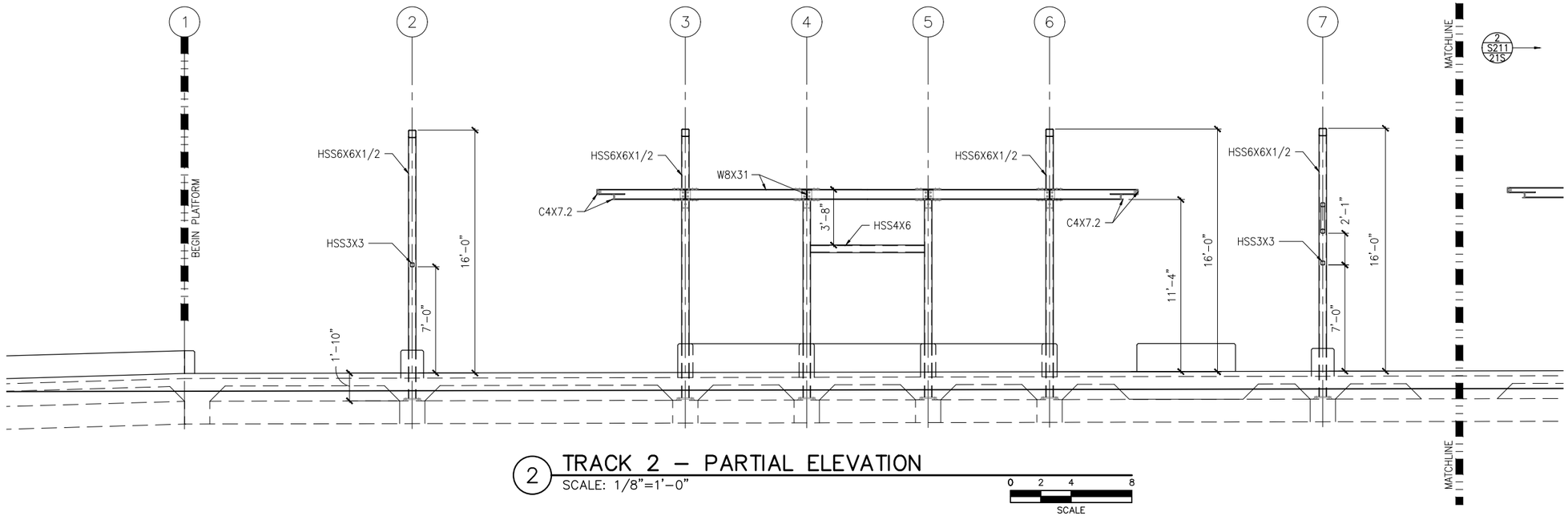
SHEET 39 OF 394

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1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

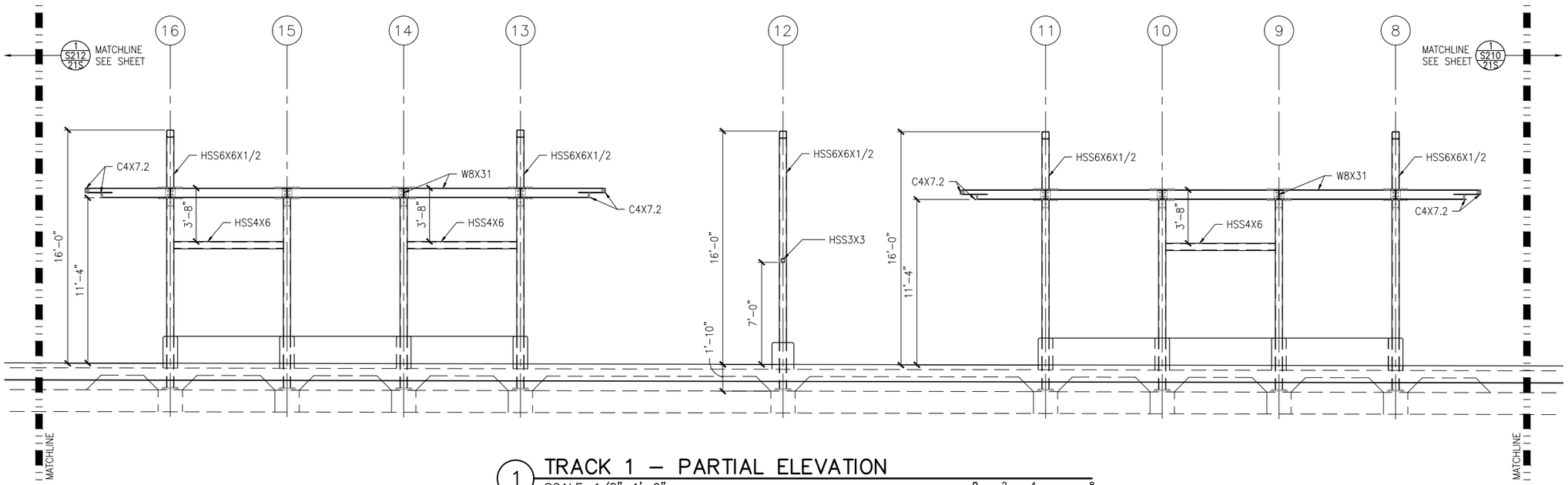
CIVIL - VOLUME 11D
21ST STREET STATION
SOUTH PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E3-21S-STR-ELV-210

SHEET 40 OF 394

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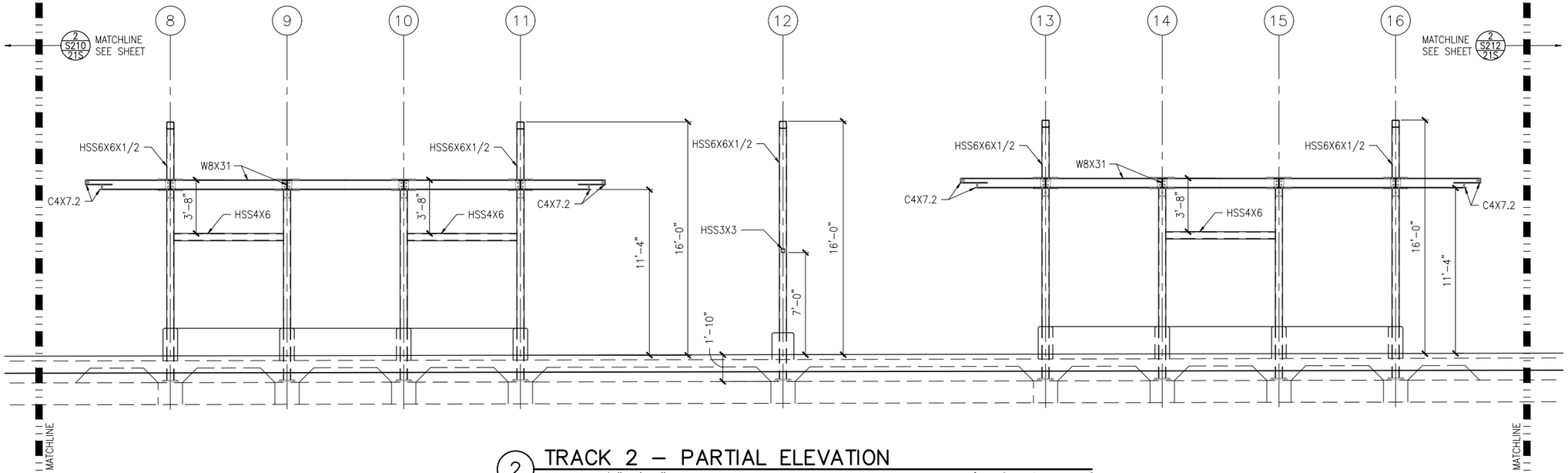


1 TRACK 1 – PARTIAL ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE



2 TRACK 2 – PARTIAL ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

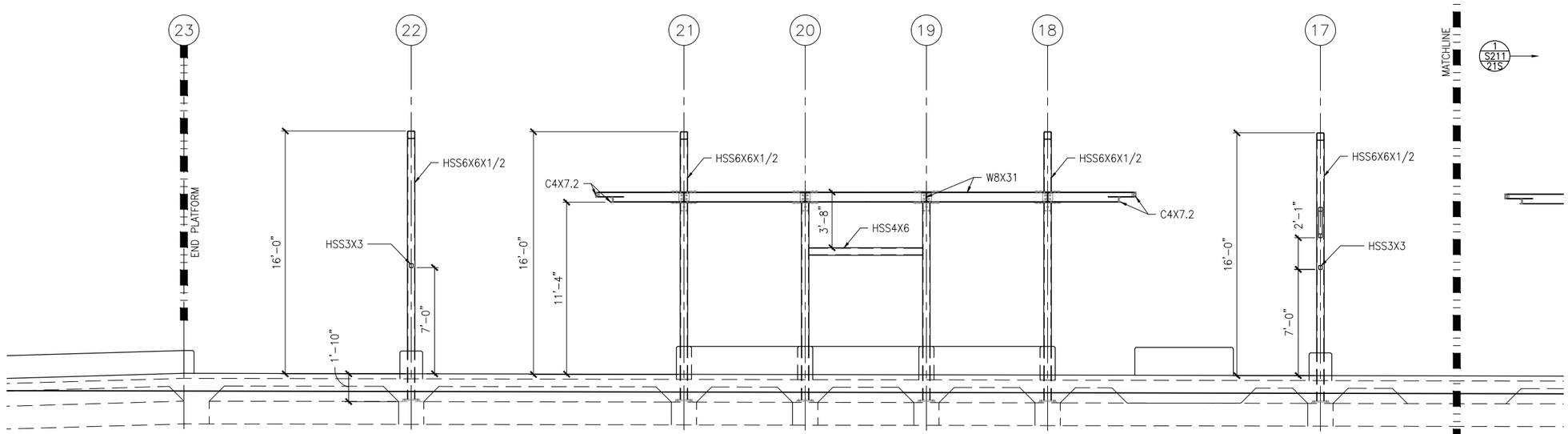
CIVIL - VOLUME 11D
21ST STREET STATION
MIDDLE PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E3-21S-STR-ELV-211

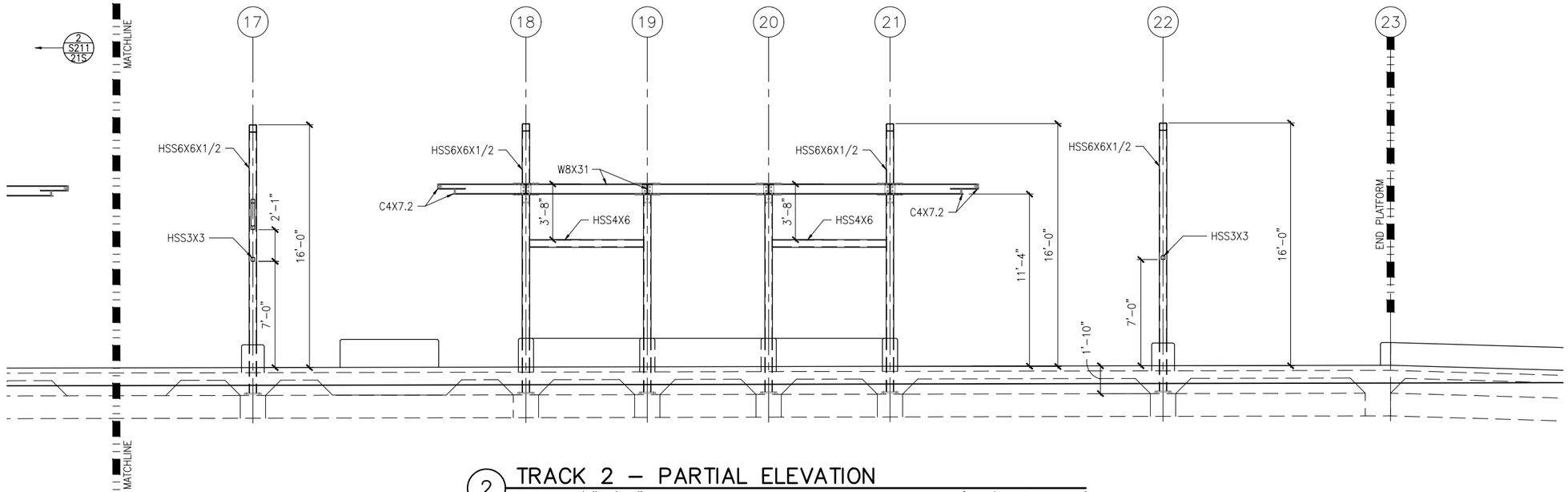
SHEET 41 OF 394

Jan, 14 2016 05:43 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E3\PLAN SHEETS\STRUCTURES\E3-21S-STR-ELV-211.dwg By: jordanl



1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

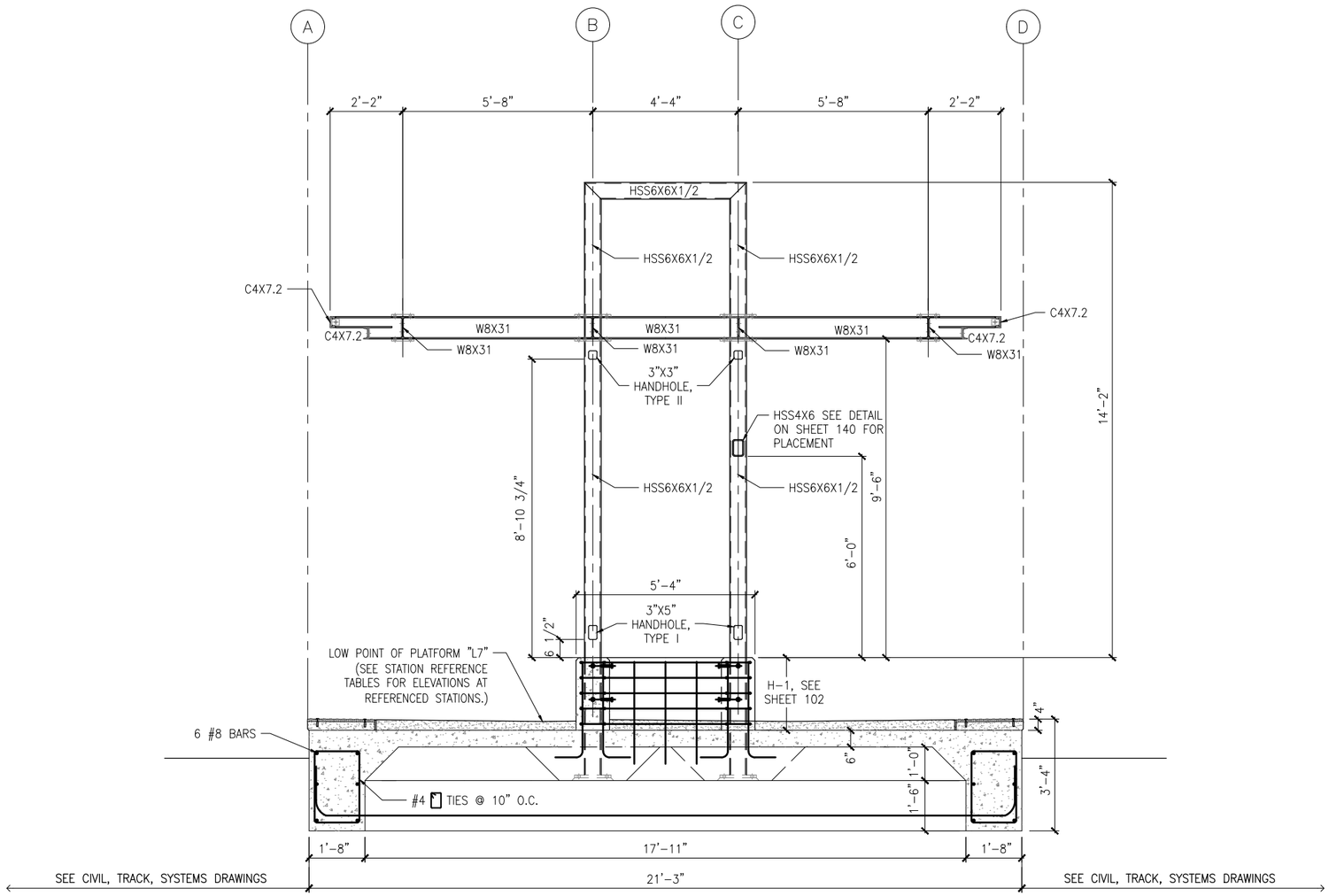
CIVIL - VOLUME 11D
21ST STREET STATION
NORTH PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E3-21S-STR-ELV-212

SHEET 42 OF 394

Jan, 14 2016 05:43 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E3\PLAN SHEETS\STRUCTURES\E3-21S-STR-ELV-212.dwg By: jordanl



1 TYPICAL PLATFORM SECTION

SCALE:1/4"=1'-0"
TYPICAL AT COL. LINES 3, 6, 8, 11, 13, 16, 18, 21
HSS4X6 LOCATED ON COL. LINE B BETWEEN COLUMNS 3-4, 5-6, 9-10, 13-14, 15-16, 19-20
HSS4X6 LOCATED ON COL. LINE C BETWEEN COLUMNS 4-5, 8-9, 10-11, 14-15, 18-19, 20-21
SEE PLN FOR LOCATION OF CONC FDN WALL

0 1 2 4
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

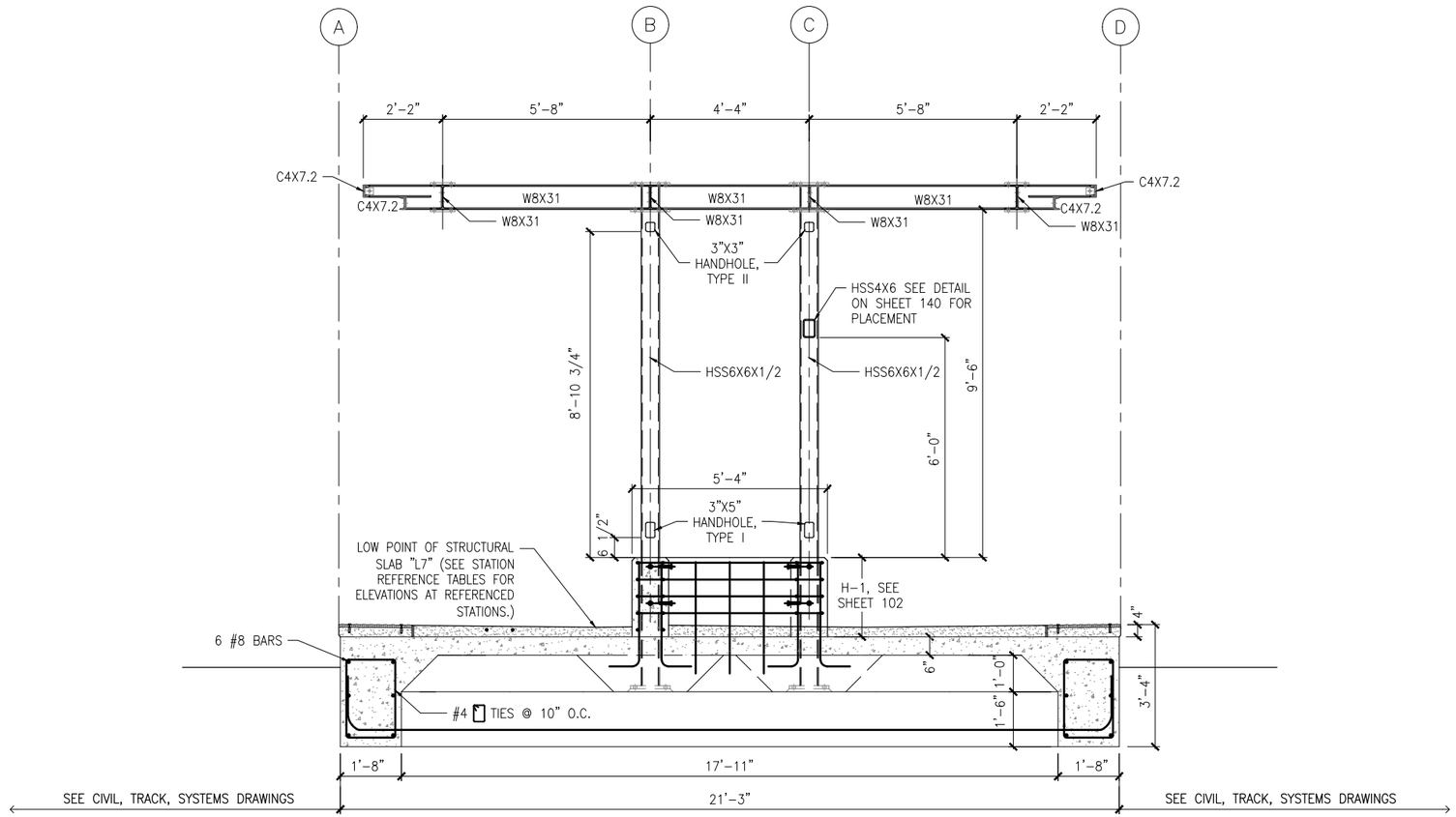
CIVIL - VOLUME 11D
21ST STREET STATION
TYPICAL PLATFORM SECTION

SHEET 43 OF 394

DISCIPLINE: STRUCTURES

SHEET NAME: E3-21S-STR-SCT-300

Jan. 14 2016 05:43 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E3\PLAN SHEETS\STRUCTURES\21ST STREET STATION\E3-21S-STR-SCT-300.dwg By: jordanl



1 TYPICAL PLATFORM SECTION

SCALE:1/4"=1'-0"
TYPICAL AT COL. LINES 4, 5, 9, 10, 14, 15, 19, 20
HSS4X6 LOCATED ON COL. LINE B BETWEEN COLUMNS 3-4, 5-6, 9-10, 13-14, 15-16, 19-20
HSS4X6 LOCATED ON COL. LINE C BETWEEN COLUMNS 4-5, 8-9, 10-11, 14-15, 18-19, 20-21
SEE PLN FOR LOCATION OF CONC FDN WALL

0 1 2 4
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

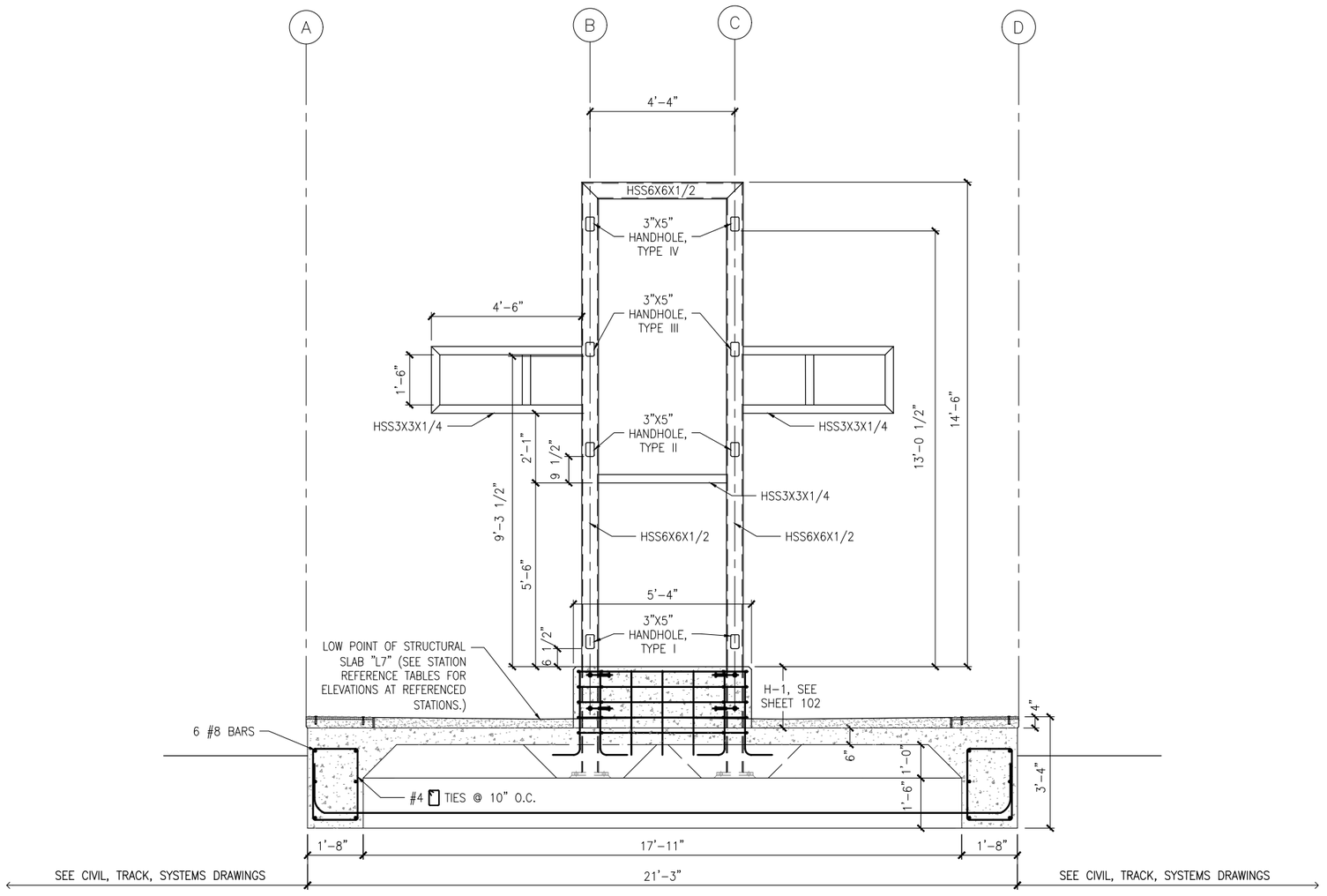
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
TYPICAL PLATFORM SECTION

DISCIPLINE: STRUCTURES
SHEET NAME: E3-21S-STR-SCT-301

SHEET 44 OF 394

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1 TYPICAL PLATFORM SECTION AT WICKET

SCALE:1/4"=1'-0"
TYPICAL AT COL. LINES 2,7,12,17,22
VMS SUPPORTS AT COL LINES 7 & 17

0 1 2 4
SCALE

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SOUTHWEST
Green Line LRT Extension

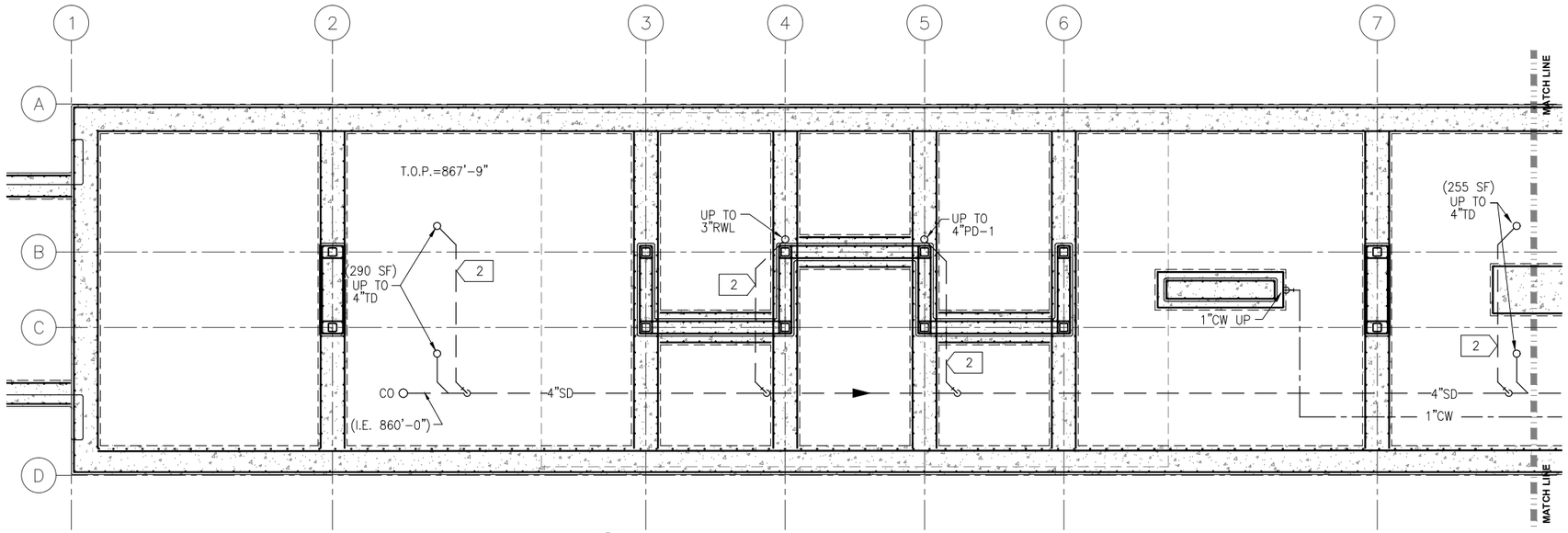
CIVIL - VOLUME 11D
21ST STREET STATION
TYPICAL PLATFORM SECTION

DISCIPLINE: STRUCTURES

SHEET NAME: E3-21S-STR-SCT-302

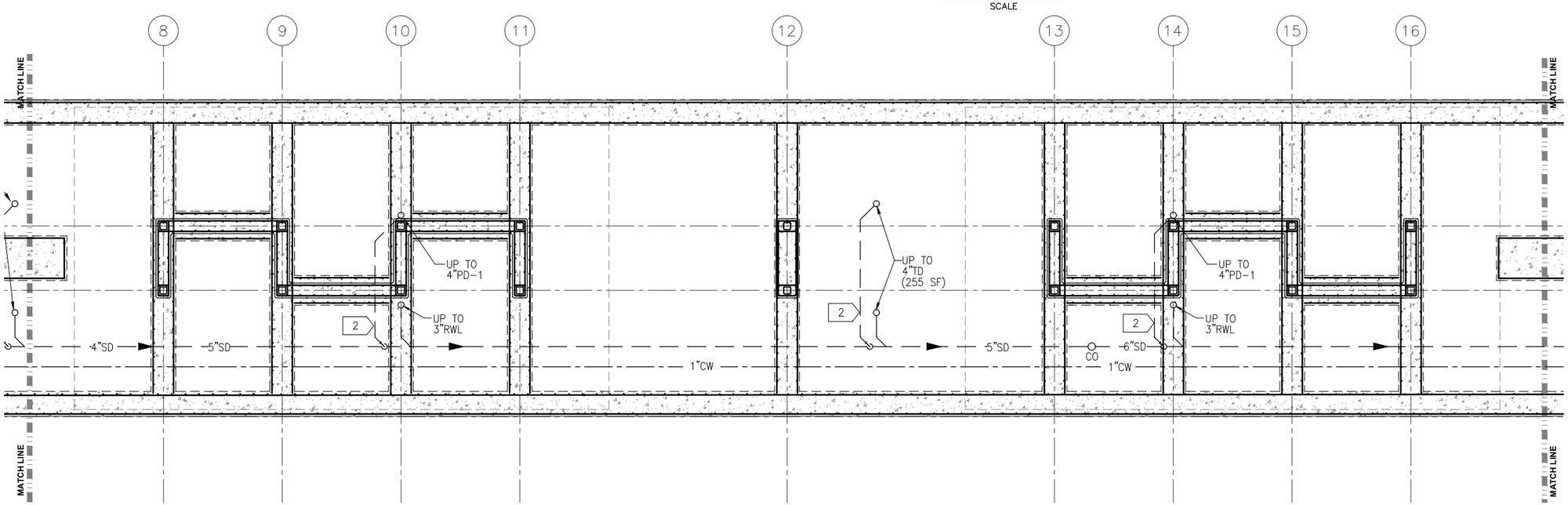
SHEET 45 OF 394

Jan. 14 2016 05:44 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E3\PLAN SHEETS\STRUCTURES\21ST STREET STATION\E3-21S-STR-SCT-302.dwg By: jordanl



1 SOUTH UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 MIDDLE UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES:

1 EXTEND WATER AND STORM OUTSIDE GUIDEWAY. CONNECTION BY OUTDOOR UTILITY CONTRACTOR.

2 ROUTE PIPING ABOVE DUCT BANK. DROP DOWN TO CONNECT TO MAIN.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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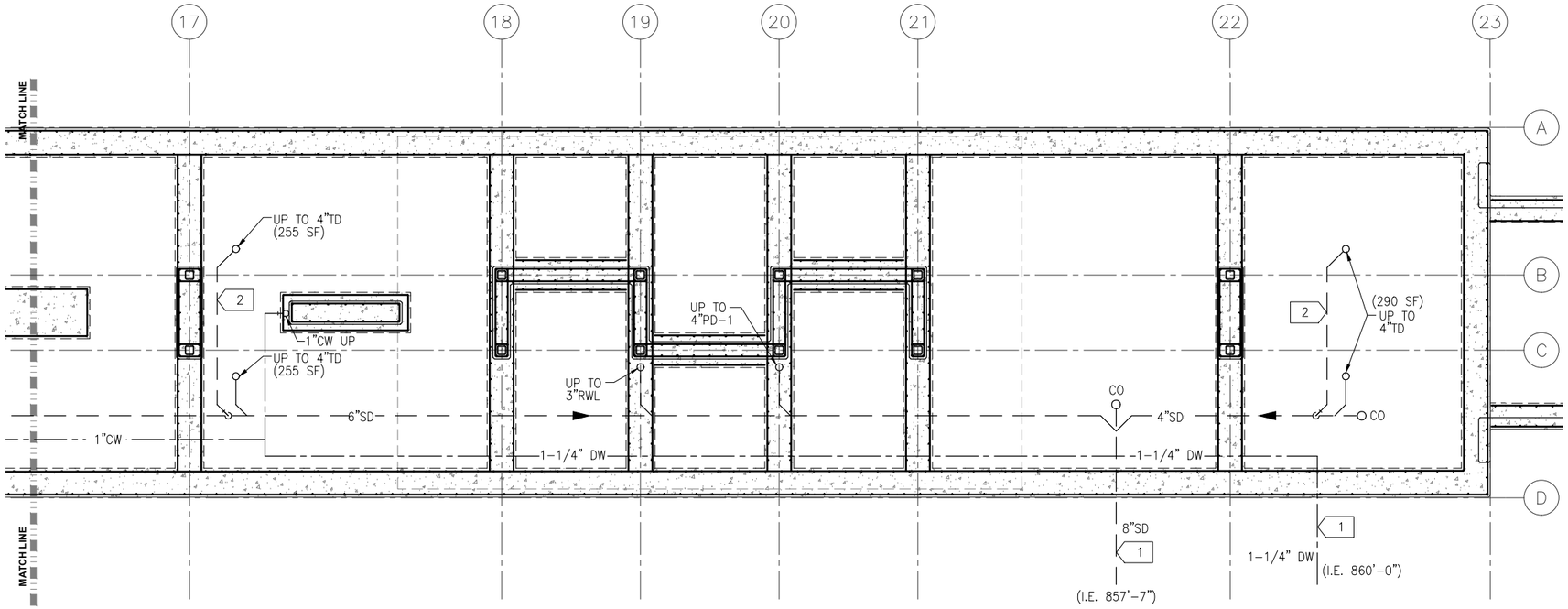
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
SOUTH AND MIDDLE PARTIAL UNDERFLOOR PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E3-21S-PLM-PLN-100

SHEET 46 OF 394

Jan, 16 2016 03:01 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\MECHANICAL\21ST STREET STATION\E3-21S-PLM-PLN-100.dwg By: craig



1 NORTH UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
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2 ROUTE PIPING ABOVE DUCT BANK. DROP DOWN TO CONNECT TO MAIN.

Jan, 16 2016 03:01 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\MECHANICAL\21ST STREET STATION\E3-21S-PLM-PLN-101.dwg By: craig

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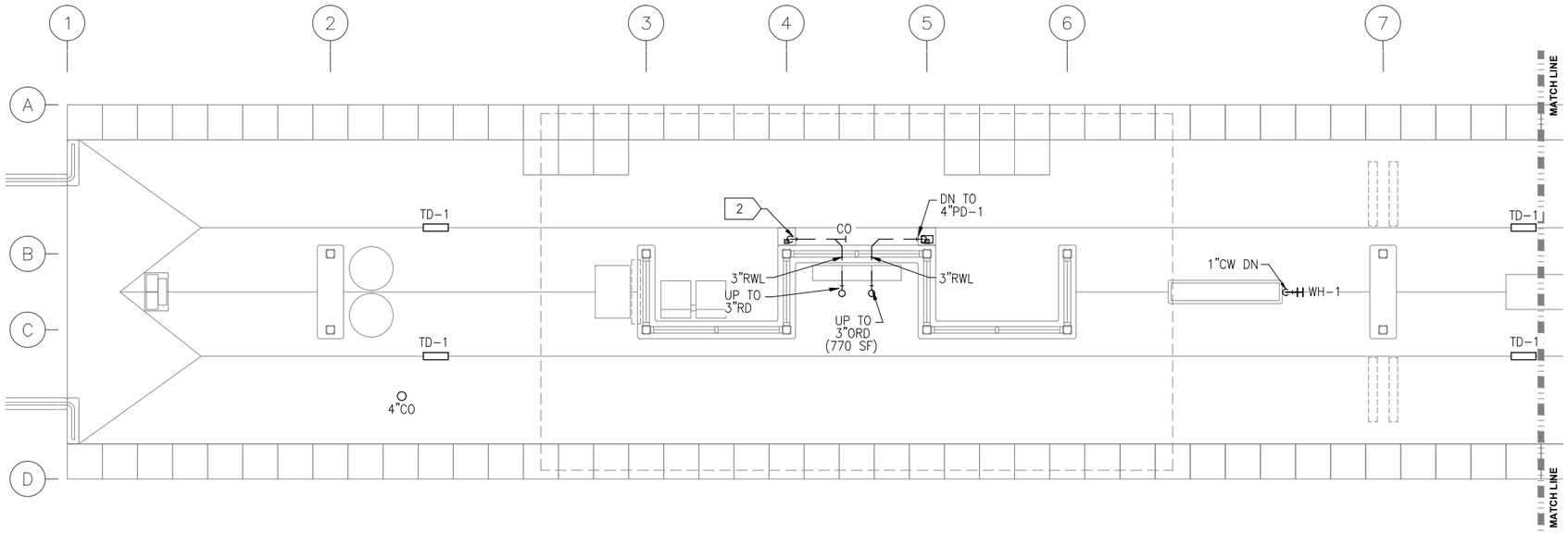
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METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
NORTH PARTIAL UNDERFLOOR PLUMBING PLAN

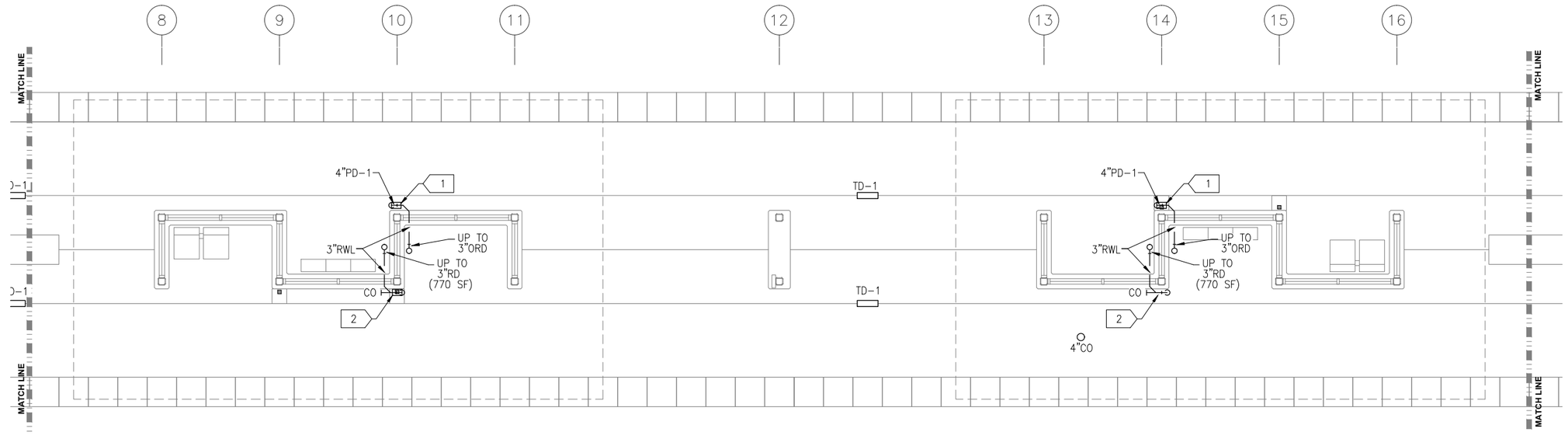
DISCIPLINE: PLUMBING
SHEET NAME: E3-21S-PLM-PLN-101

SHEET 47 OF 394



1 SOUTH PLATEFORM PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 MIDDLE PLATEFORM PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
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H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES

1 3" ORD RWL'S DOWN TO 4" PD-1.

2 3"ø RWL DOWN TO BELOW PLATFORM.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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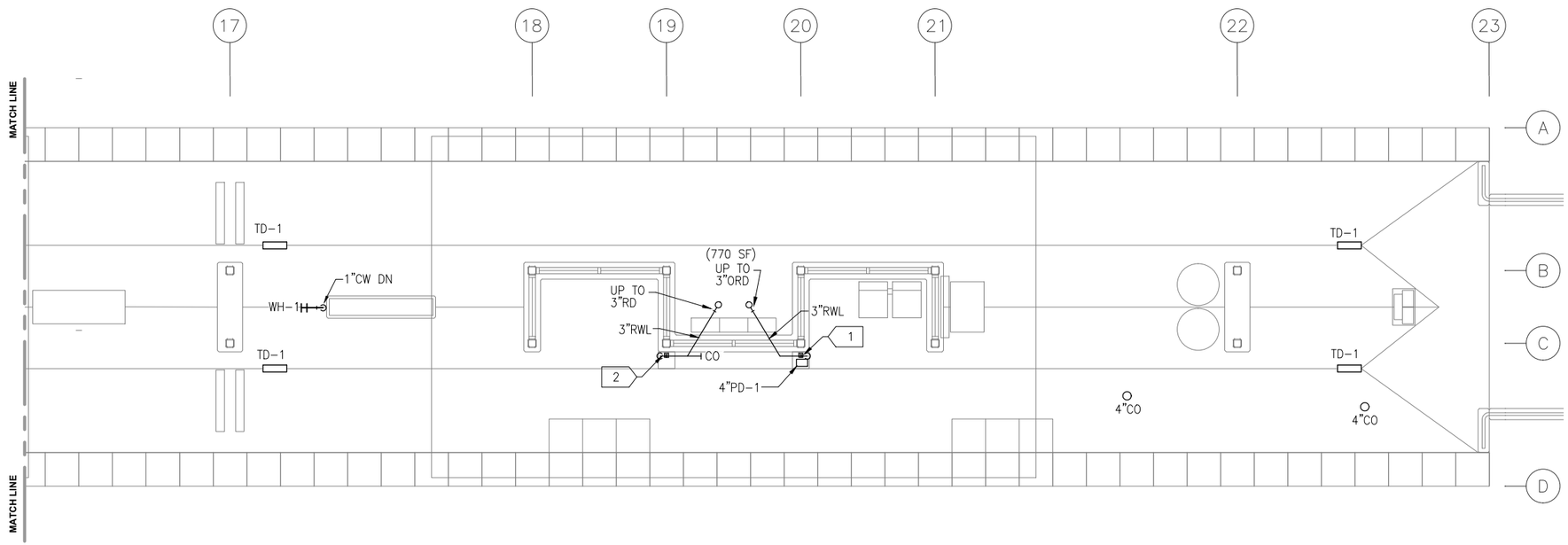
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
SOUTH AND MIDDLE PARTIAL PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E3-21S-PLM-PLN-110

SHEET 48 OF 394

Jan, 16 2016 03:01 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\MECHANICAL\21ST STREET STATION\E3-21S-PLM-PLN-110.dwg By: craig



1 NORTH PLATFORM PLUMBING PLAN

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

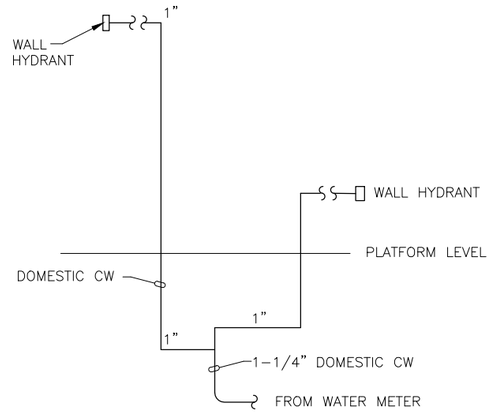
PLUMBING GENERAL NOTES

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H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES

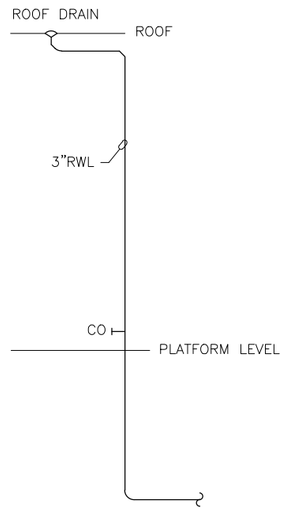
1 3" ORD RWL'S DOWN TO 4" PD-1.

2 3"ø RWL DOWN TO BELOW PLATFORM.



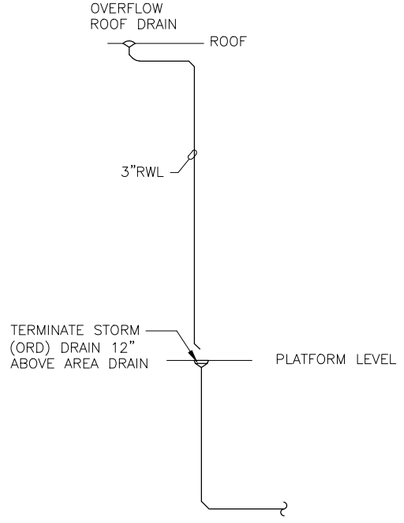
2/111 DOMESTIC WATER RISER DIAGRAM

NO SCALE



1/111 TYPICAL ROOF DRAIN DIAGRAM

NO SCALE



2/111 TYPICAL OVERFLOW ROOF DRAIN DIAGRAM

NO SCALE

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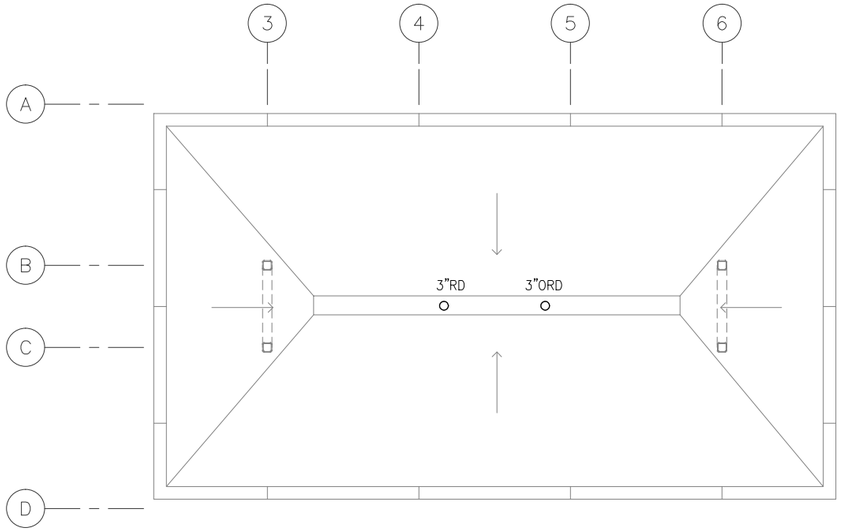
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
NORTH PARTIAL PLUMBING PLAN AND RISER DIAGRAMS

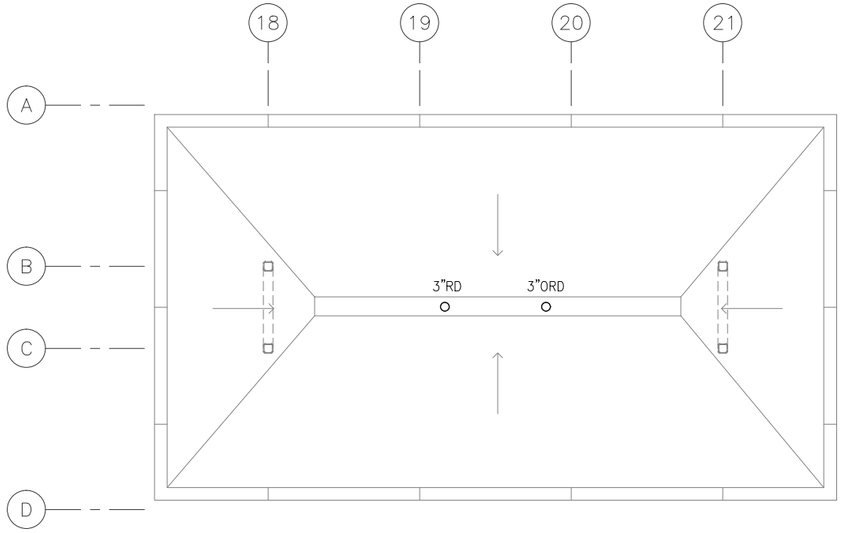
DISCIPLINE: PLUMBING
SHEET NAME: E3-21S-PLM-PLN-111

SHEET 49 OF 394

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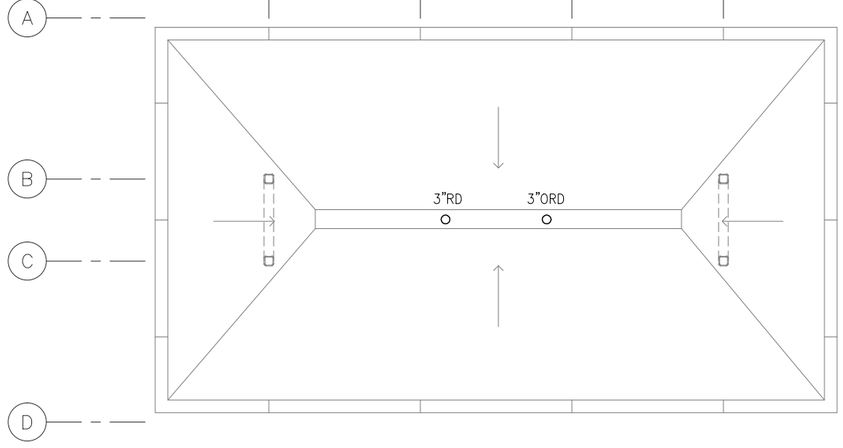
1 SOUTH ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"

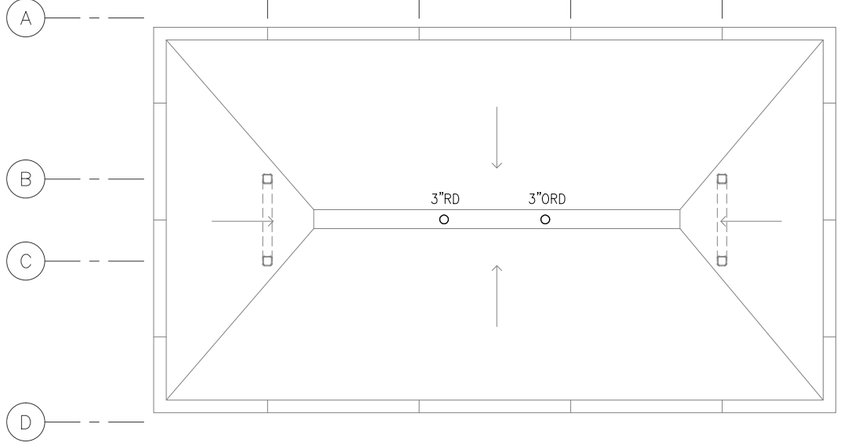


2 NORTH ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
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E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
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G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.





3 MIDDLE ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"

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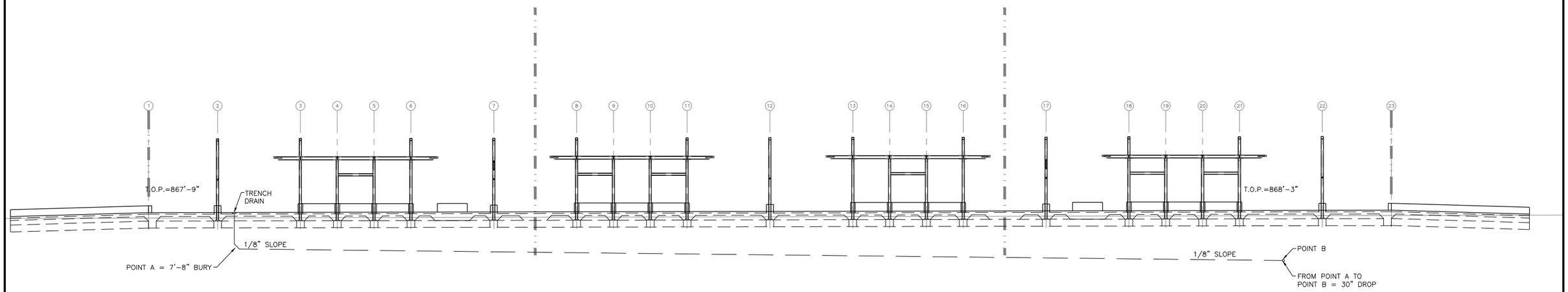
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATIION
ROOF PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E3-21S-PLM-PLN-120

SHEET 50 OF 394

Jan, 16 2016 03:01 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\MECHANICAL\21ST STREET STATION\E3-21S-PLM-PLN-120.dwg By: craig



1 PLUMBING SECTION
SCALE: 3/64"=1'-0"

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

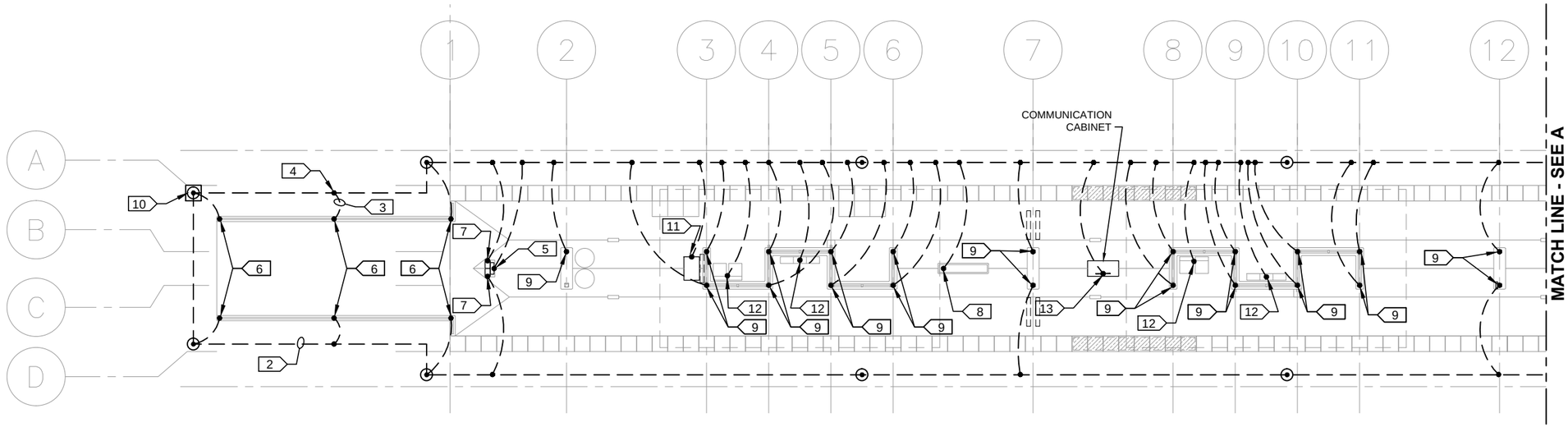
CIVIL - VOLUME 11D
21ST STREET STATION
TYPICAL PLATFORM PLUMBING SECTION

DISCIPLINE: PLUMBING

SHEET NAME: E3-21S-PLM-SCT-201

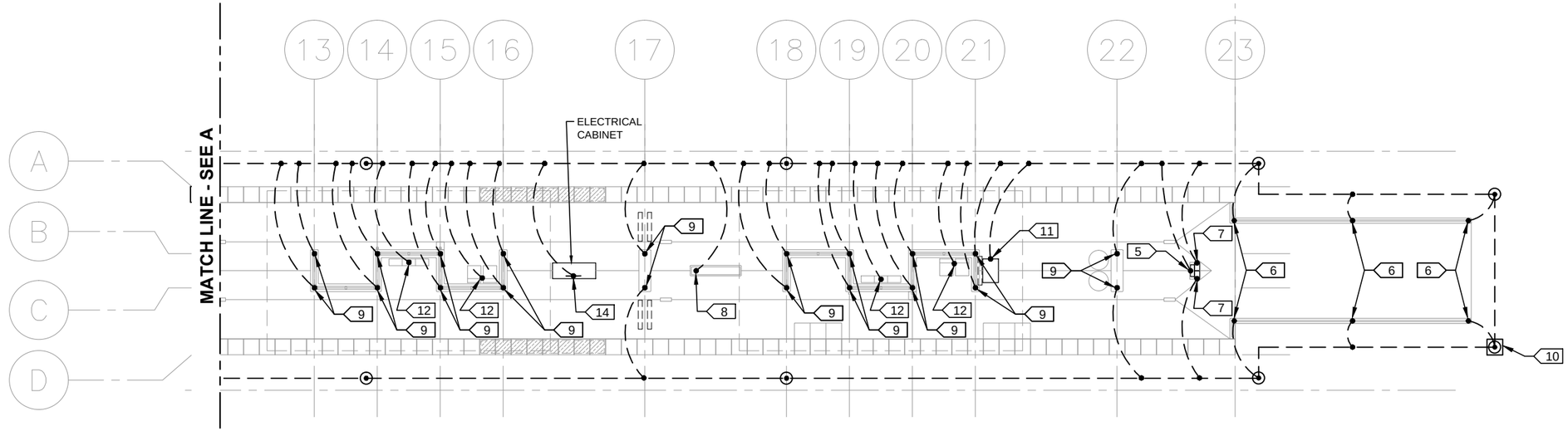
SHEET 51 OF 394

Jan, 16 2016 03:02 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\MECHANICAL\21ST STREET STATION\E3-21S-PLM-SCT-201.dwg By: craig



1 PARTIAL PLATFORM PLAN

SCALE: 1/16"=1'-0"



2 PARTIAL PLATFORM PLAN

SCALE: 1/16"=1'-0"

KEYNOTES:

1. GROUND ROD, TYPICAL.
2. GROUND LOOP, TYPICAL.
3. GEC, TYPICAL.
4. EXOTHERMIC WELD, TYPICAL.
5. GEC CONNECTION TO RIDER ALERT PANEL.
6. GEC CONNECTION TO RAILING POST.
7. GEC CONNECTION TO RSV.
8. GEC CONNECTION TO KIOSK.
9. GEC CONNECTION TO COLUMN.
10. GROUND TEST WELL.
11. GEC CONNECTION TO TVM.
12. GEC CONNECTION TO SEAT OR LEAN RAIL.
13. GEC CONNECTION TO COMMUNICATIONS CABINET GROUND BUS.
14. #3/0 GEC CONNECTION TO ELECTRICAL ENCLOSURE GROUND BUS.

GENERAL NOTES:

1. ALL METALLIC OBJECTS SHALL BE GROUNDED AND THE GROUNDING PLAN IS INTENDED TO DEMONSTRATE THE GROUNDING OF THE PLATFORM, GUIDEWAY AND EQUIPMENT WITHIN THE VICINITY. OBJECTS NOT SHOWN GROUNDED DOES RELIEVE THE CONTRACTOR FROM THE DESIGN INTENT.
2. GROUND LOOP SHALL BE #3/0 BARE COPPER. LOOP SHALL BE INSTALLED 48" BELOW GRADE OR 6" BELOW THE FROST LINE, WHICHEVER IS GREATER. GROUND LOOP IS SHOWN DIAGRAMMATICALLY. INSTALL GROUND LOOP UNDER PLATFORM PERIMETER TO PROTECT FROM WORK PERFORMED OUTSIDE THE PLATFORM LIMITS BY OTHER TRADES. GROUND TEST WELLS SHALL REMAIN ACCESSIBLE AS SHOWN.
3. GROUNDING ELECTRODE CONDUCTORS (GEC) SHALL BE #2/0 BARE COPPER UNLESS NOTED OTHERWISE.
4. ALL EXOTHERMIC WELDS TO COLUMNS, TVM'S, RSV'S, SEATS, LEAN RAILS AND EQUIPMENT CABINETS SHALL BE ABOVE GRADE AND VISIBLE. PAINT WELDS TO MATCH SURFACE COLOR. VERIFY COLOR WITH CAR.
5. INSTALL GROUND ROD SO THAT 8-FT IS BELOW THE FROST LINE.
6. IF RAILING HAS AN ISOLATION GAP, JUMPER BETWEEN GAPS WITH GEC.

0 4 8 16

HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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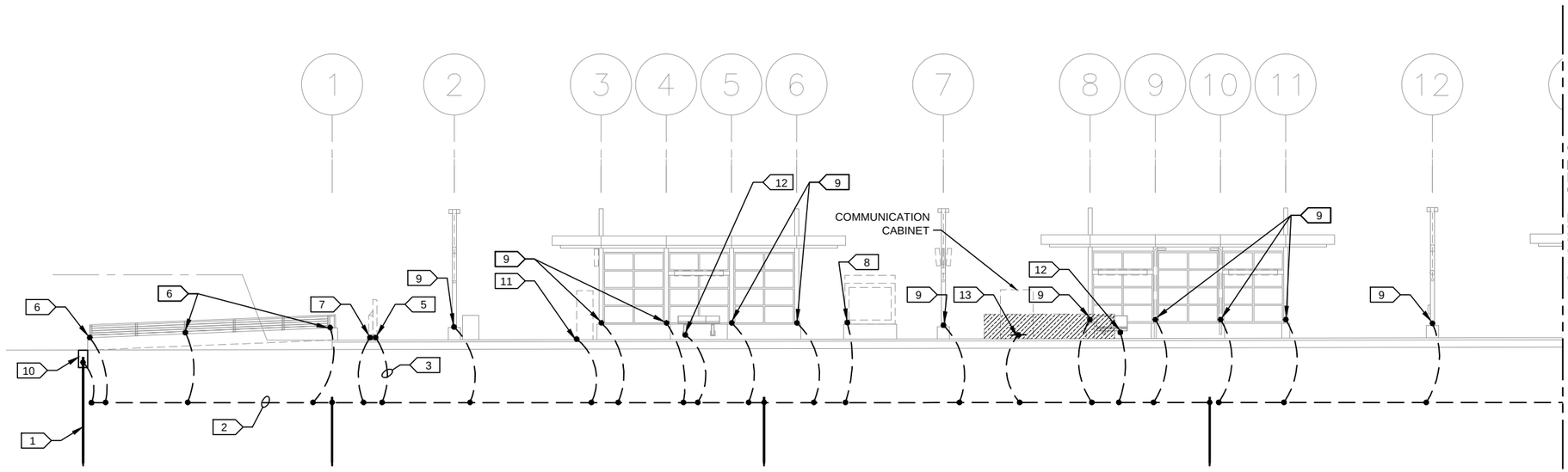
CIVIL - VOLUME 11D
21ST STREET STATION
ELECTRICAL
GROUNDING PLAN

DISCIPLINE: ELECTRICAL

SHEET NAME: E3-21S-ELE-PLN-201

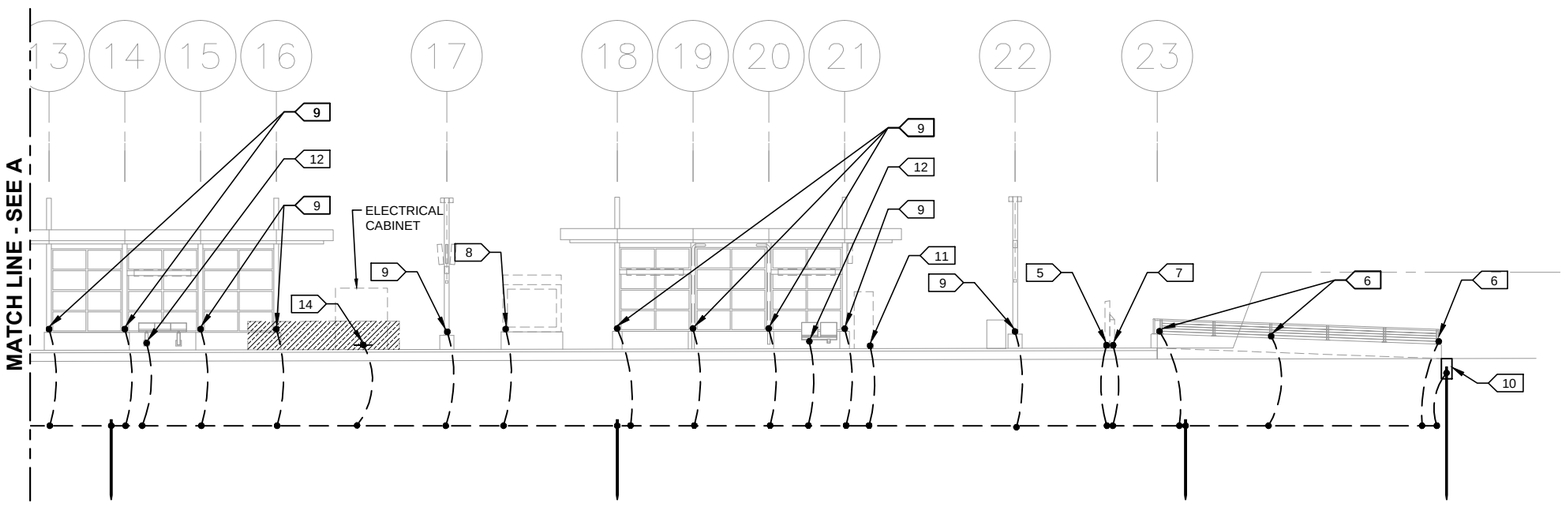
SHEET 52 OF 394

Jan, 18 2016 10:56 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ELECTRICAL\E3-21S-ELE-PLN-201.dwg By: V-BegeJB



1 PARTIAL PLATFORM ELEVATION

SCALE: 1/16"=1'-0"



2 PARTIAL PLATFORM ELEVATION

SCALE: 1/16"=1'-0"

KEYNOTES:

1. GROUND ROD, TYPICAL.
2. GROUND LOOP, TYPICAL.
3. GEC, TYPICAL.
4. EXOTHERMIC WELD, TYPICAL.
5. GEC CONNECTION TO RIDER ALERT PANEL.
6. GEC CONNECTION TO RAILING POST.
7. GEC CONNECTION TO RSV.
8. GEC CONNECTION TO KIOSK.
9. GEC CONNECTION TO COLUMN.
10. GROUND TEST WELL.
11. GEC CONNECTION TO TVM.
12. GEC CONNECTION TO SEAT OR LEAN RAIL.
13. GEC CONNECTION TO COMMUNICATIONS CABINET GROUND BUS.
14. #3/0 GEC CONNECTION TO ELECTRICAL ENCLOSURE GROUND BUS.

GENERAL NOTES:

1. ALL METALLIC OBJECTS SHALL BE GROUNDED AND THE GROUNDING PLAN IS INTENDED TO DEMONSTRATE THE GROUNDING OF THE PLATFORM, GUIDEWAY AND EQUIPMENT WITHIN THE VICINITY. OBJECTS NOT SHOWN GROUNDED DOES RELIEVE THE CONTRACTOR FROM THE DESIGN INTENT.
2. GROUND LOOP SHALL BE #3/0 BARE COPPER. LOOP SHALL BE INSTALLED 48" BELOW GRADE OR 6" BELOW THE FROST LINE, WHICHEVER IS GREATER. GROUND LOOP IS SHOWN DIAGRAMMATICALLY. INSTALL GROUND LOOP UNDER PLATFORM PERIMETER TO PROTECT FROM WORK PERFORMED OUTSIDE THE PLATFORM LIMITS BY OTHER TRADES. GROUND TEST WELLS SHALL REMAIN ACCESSIBLE AS SHOWN.
3. GROUNDING ELECTRODE CONDUCTORS (GEC) SHALL BE #2/0 BARE COPPER UNLESS NOTED OTHERWISE.
4. ALL EXOTHERMIC WELDS TO COLUMNS, TVM'S, RSV'S, SEATS, LEAN RAILS AND EQUIPMENT CABINETS SHALL BE ABOVE GRADE AND VISIBLE. PAINT WELDS TO MATCH SURFACE COLOR. VERIFY COLOR WITH CAR.
5. INSTALL GROUND ROD SO THAT 8-FT IS BELOW THE FROST LINE.
6. IF RAILING HAS AN ISOLATION GAP, JUMPER BETWEEN GAPS WITH GEC.

0 4 8 16

HORIZONTAL SCALE IN FEET

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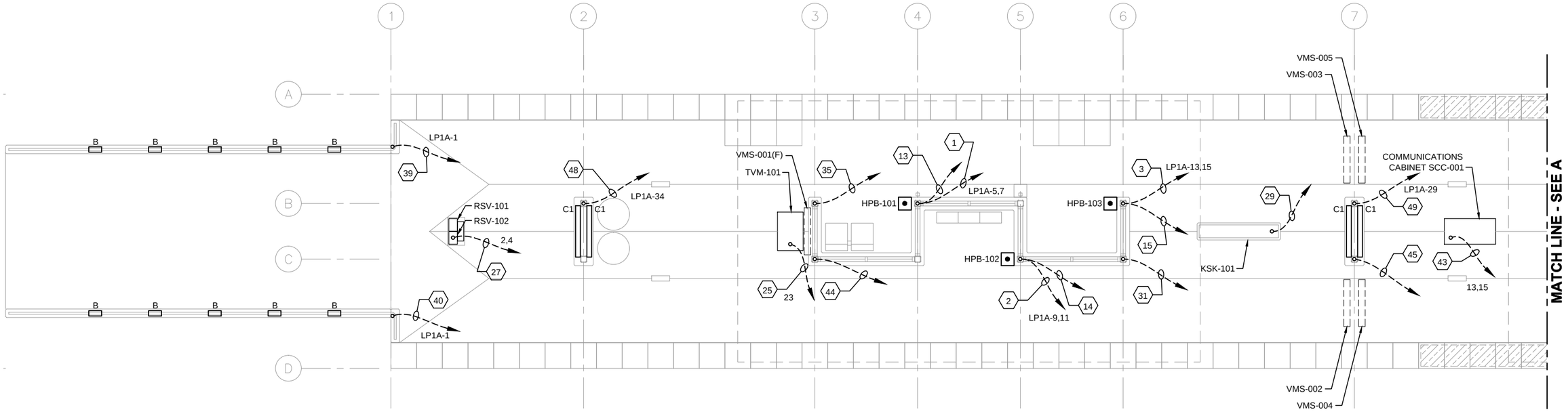
CIVIL - VOLUME 11D
21ST STREET STATION
ELECTRICAL
GROUNDING ELEVATION

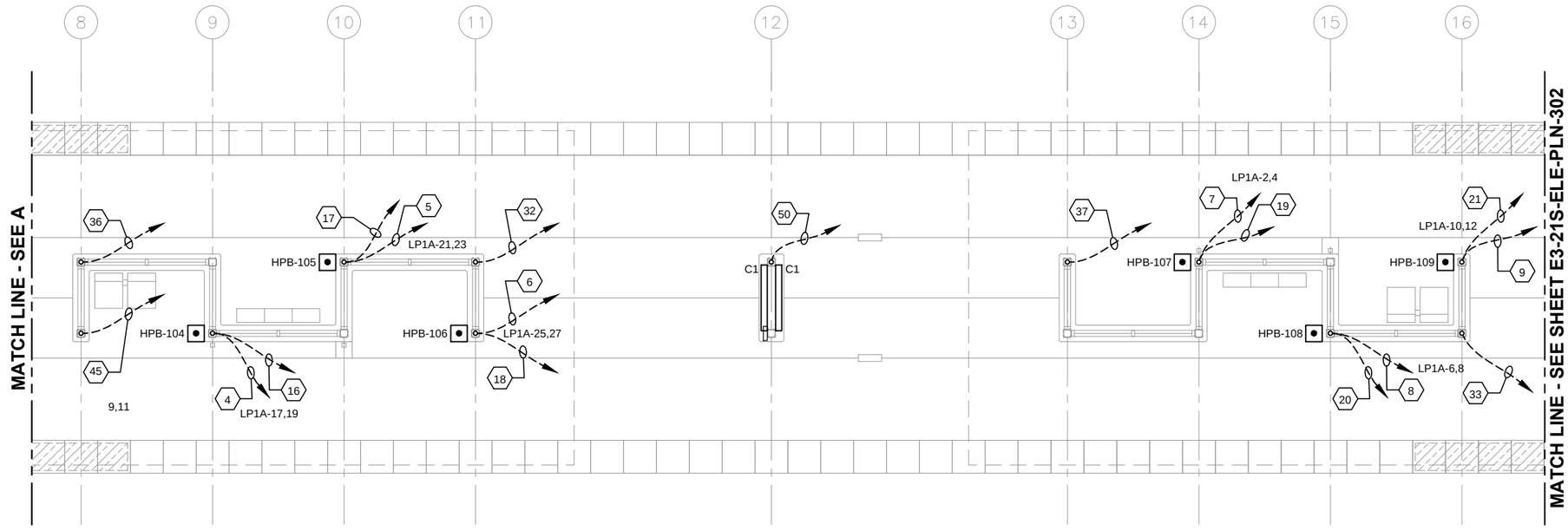
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SHEET NAME: E3-21S-ELE-ELV-202

SHEET 53 OF 394

Jan, 18 2016 10:57 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ELECTRICAL\E3-21S-ELE-ELV-202.dwg By: V-Bege.dB





GENERAL NOTES:

1. ALL IN SLAB CONDUITS SHALL BE STUBBED UP A MINIMUM OF 8" AFF INTO COLUMNS, POSTS, BOTTOM OF TVM'S AND BOTTOM OF RSV'S.
2. AT CONDUIT STUB-UPS TRANSITION TO 1/2" LFMC FOR PUSH BUTTON CONTROL WIRING AND 3/4" LFMC FOR THE REMAINING.
3. SEE CONDUIT AND WIRE SCHEDULE FOR FROM/TO ROUTING OF CONDUITS.
4. UNLESS OTHERWISE NOTED, CIRCUITS WILL BE FED FROM PANEL LP1B.

0 2 4 8
HORIZONTAL SCALE IN FEET

1 PLATFORM PLAN
SCALE: 1/8"=1'-0"

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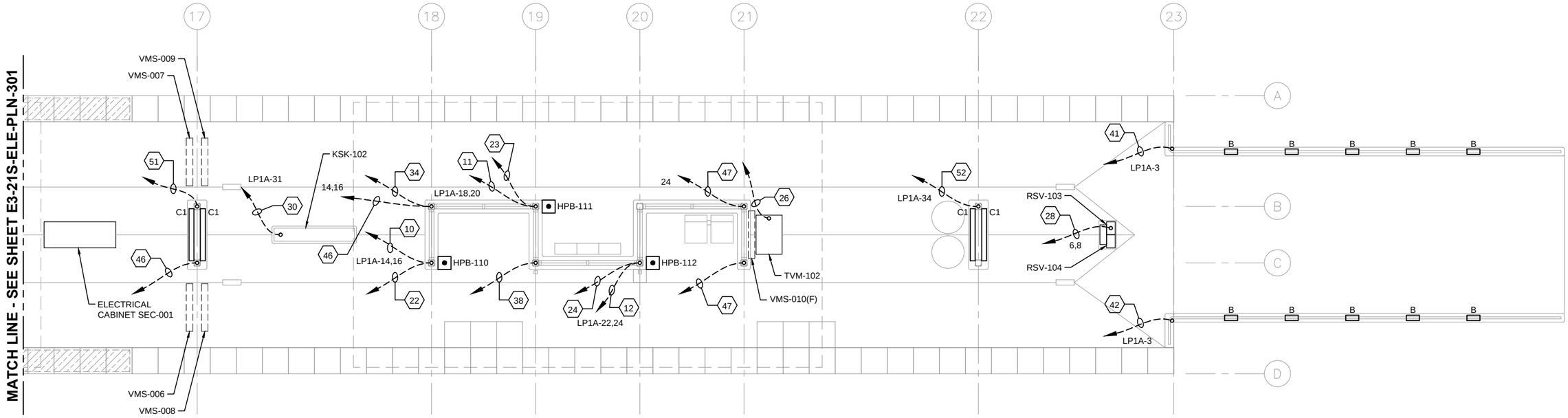
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SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
ELECTRICAL
UNDERSLAB CONDUIT PLAN (1 OF 2)

DISCIPLINE: ELECTRICAL
SHEET NAME: E3-21S-ELE-PLN-301

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1 PLATFORM PLAN

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. ALL IN SLAB CONDUITS SHALL BE STUBBED UP A MINIMUM OF 8" AFF INTO COLUMNS, POSTS, BOTTOM OF TVM'S AND BOTTOM OF RSV'S.
2. AT CONDUIT STUB-UPS TRANSITION TO 1/2" LFMC FOR PUSH BUTTON CONTROL WIRING AND 3/4" LFMC FOR THE REMAINING.
3. SEE CONDUIT AND WIRE SCHEDULE FOR FROM/TO ROUTING OF CONDUITS.
4. UNLESS OTHERWISE NOTED, CIRCUITS WILL BE FED FROM PANEL LP1B.

KEYNOTES:

1.

0 2 4 8
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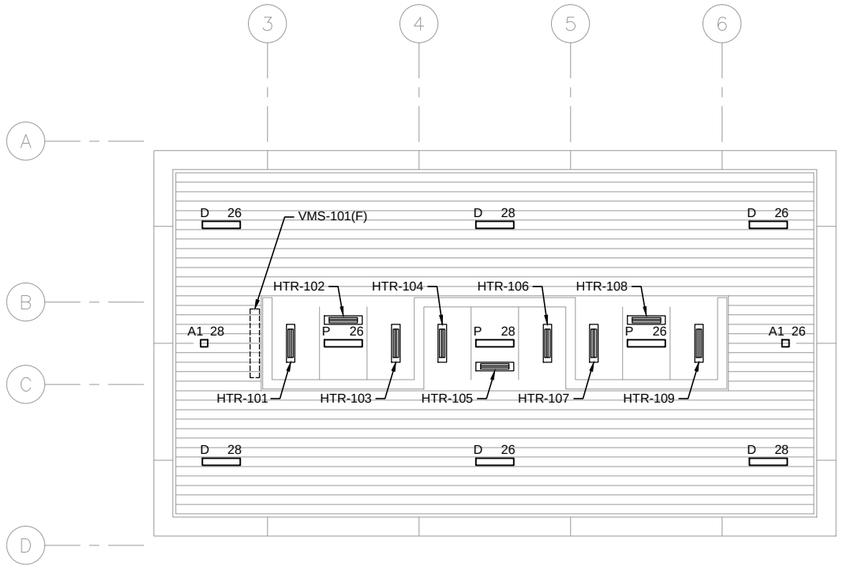
CIVIL - VOLUME 11D
21ST STREET STATION
ELECTRICAL
UNDERSLAB CONDUIT PLAN (2 OF 2)

DISCIPLINE: ELECTRICAL

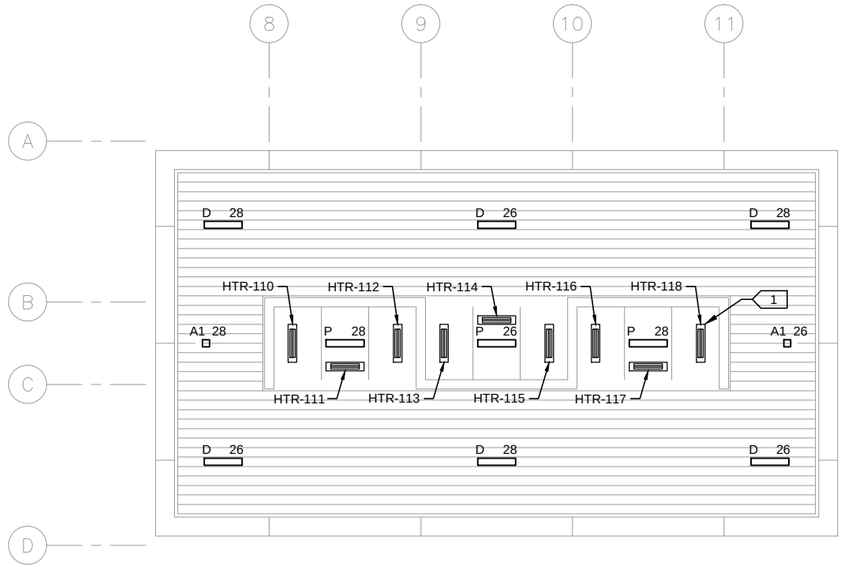
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SHEET 55 OF 394

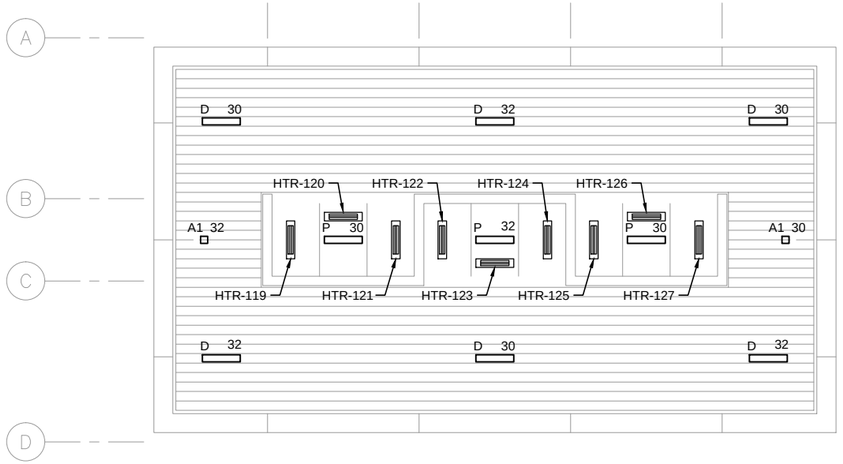
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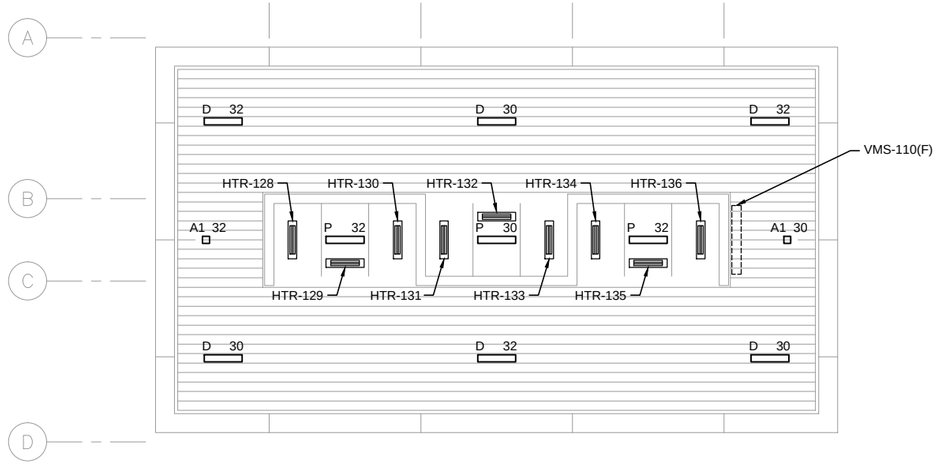
1 CANOPY PLAN – WEST END
SCALE: 1/8"=1'–0"



2 CANOPY PLAN – WEST MIDDLE
SCALE: 1/8"=1'–0"



3 CANOPY PLAN – EAST MIDDLE
SCALE: 1/8"=1'–0"



4 CANOPY PLAN – EAST END
SCALE: 1/8"=1'–0"

GENERAL NOTES:

1. ALL LIGHTING SHOWN ON THIS SHEET SHALL BE RECESSED MOUNTED IN SOFFIT. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.
2. ALL CONDUIT FOR LIGHTING AND TO VMS'S SHALL BE RUN CONCEALED WITHIN SOFFIT AREA.

KEYNOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR HEATER MOUNTING DETAILS.

0 2 4 8
HORIZONTAL SCALE IN FEET

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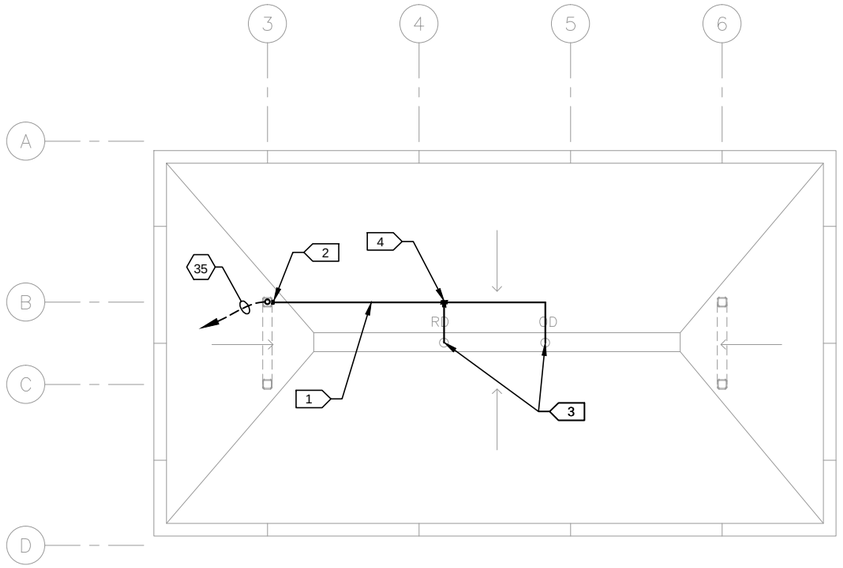
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SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
ELECTRICAL
CANOPY PLAN

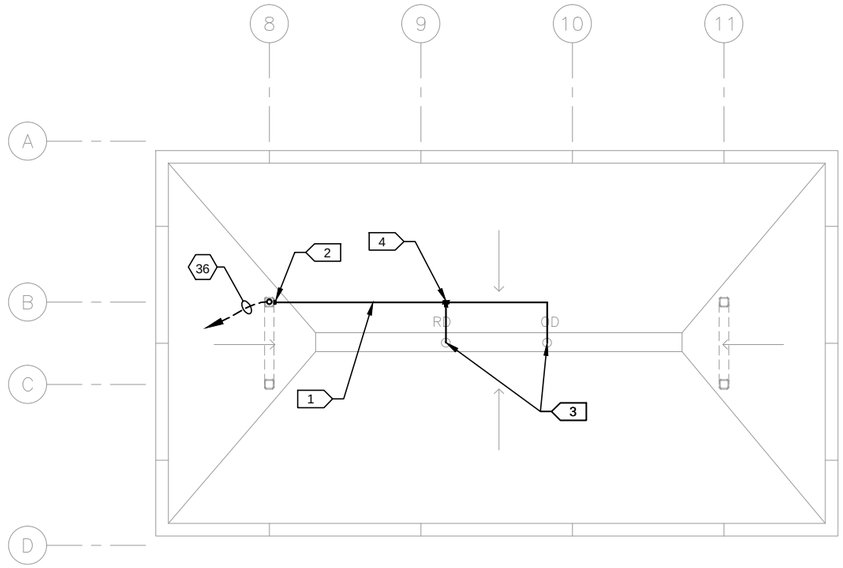
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SHEET 56 OF 394

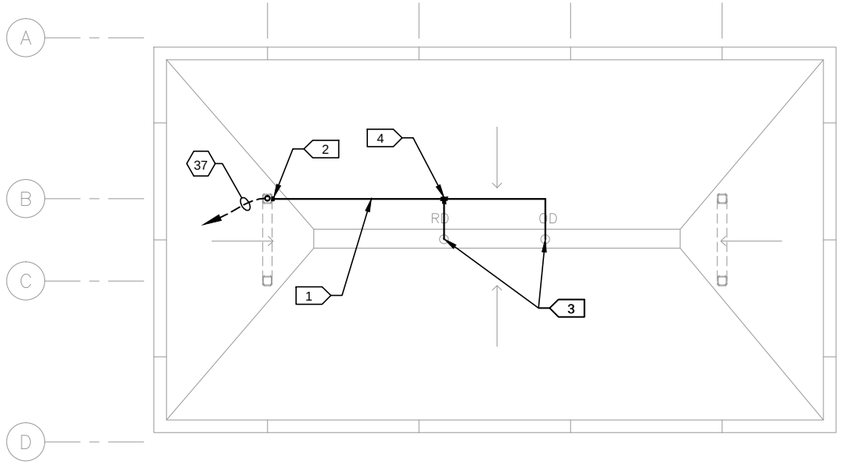
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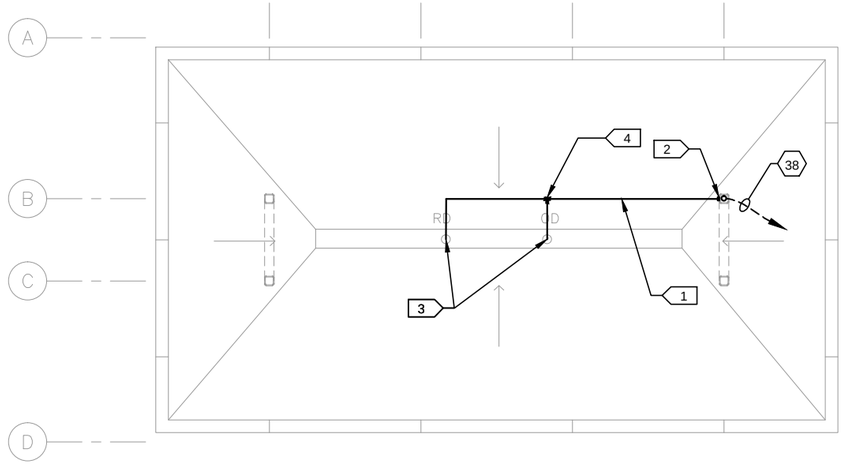
1 ROOF PLAN – SOUTH CANOPY
SCALE: 1/8"=1'-0"



2 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



3 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



4 ROOF PLAN – NORTH CANOPY
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. HEAT TRACE CONTROL PANEL LOCATED IN SEC-001.

KEYNOTES:

1. SELF REGULATING HEAT TRACE CABLE. ATTACH CABLE TO ROOF WITH CLIPS. COORDINATE CLIP REQUIREMENTS WITH ROOFING CONTRACTOR.
2. POWER CONNECTION KIT WITH DOUBLE HEAT TRACE CABLE CONNECTION. COORDINATE MOUNTING REQUIREMENTS WITH STRUCTURAL STEEL CONTRACTOR.
3. RUN HEAT TRACE DOWN RAIN WATER LEADER 6' BELOW FINISHED FLOOR. PROVIDE CABLE PROTECTION WHERE CABLE ENTERS ROOF DRAIN STRAINERS.
4. HEAT TRACE TEE SPLICE KIT.

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CIVIL - VOLUME 11D
21ST STREET STATION
ELECTRICAL
HEAT TRACE PLAN

DISCIPLINE: ELECTRICAL
SHEET NAME: E3-21S-ELE-PLN-311

SHEET 57 OF 394

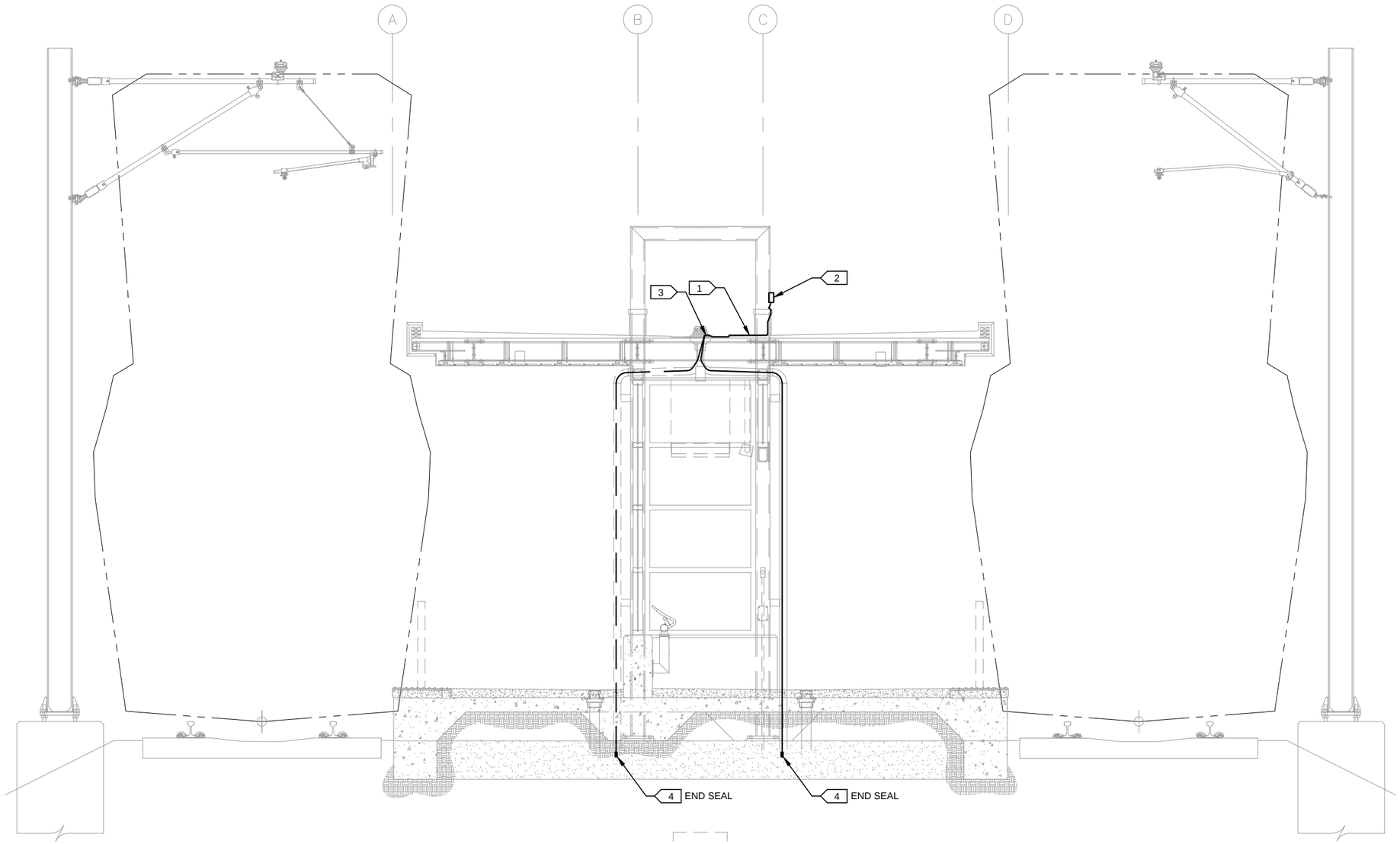
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GENERAL NOTES:

1. HEAT TRACE CONTROL PANEL LOCATED IN SEC-001.
2. SEE HEAT TRACE PLAN FOR HEAT TRACE AT CANOPY ROOFS.

KEYNOTES:

1. SELF REGULATING HEAT TRACE CABLE. ATTACH CABLE TO ROOF WITH CLIPS. COORDINATE CLIP REQUIREMENTS WITH ROOFING CONTRACTOR.
2. POWER CONNECTION KIT WITH DOUBLE HEAT TRACE CABLE CONNECTION. COORDINATE MOUNTING REQUIREMENTS WITH STRUCTURAL STEEL CONTRACTOR.
3. PROVIDE CABLE PROTECTION WHERE CABLE ENTERS ROOF DRAIN STRAINERS.
4. RUN HEAT TRACE DOWN WATER LEADER. ADD END SEALS AT DOWNSPOUT.



1 TYPICAL PLATFORM SECTION
SCALE: 1/4"=1'-0"

0 1 2 4
SCALE

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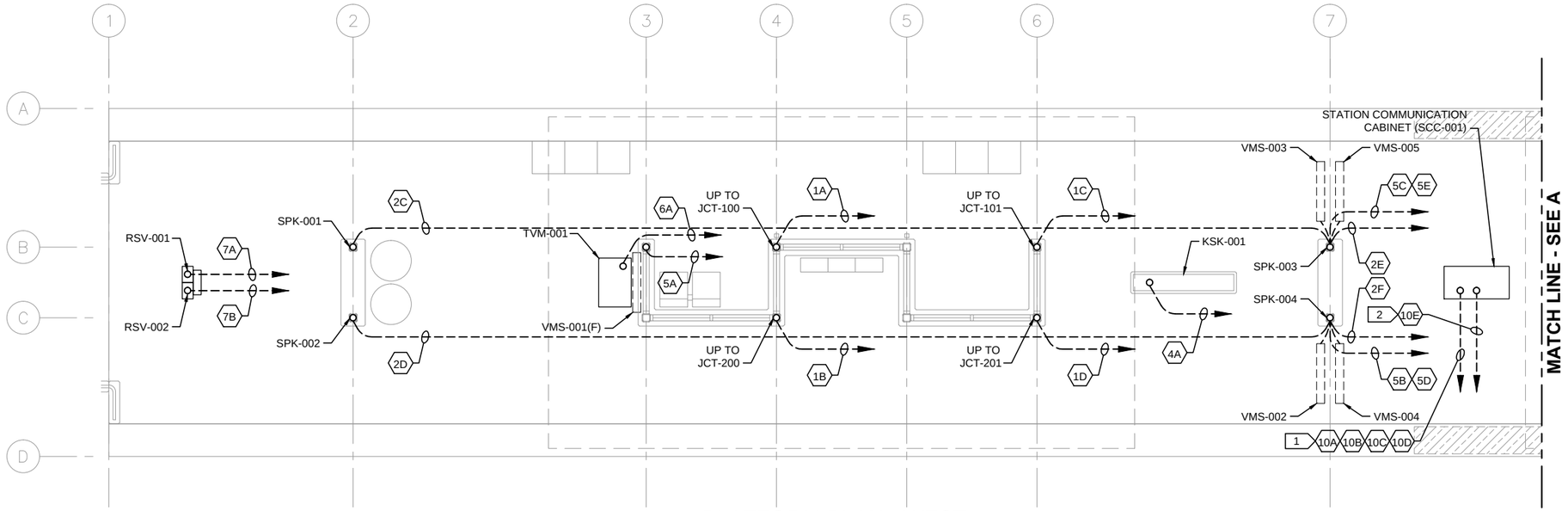
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CIVIL - VOLUME 11D
21ST STREET STATION
ELECTRICAL
HEAT TRACE ELEVATION

DISCIPLINE: ELECTRICAL
SHEET NAME: E3-21S-ELE-ELV-321

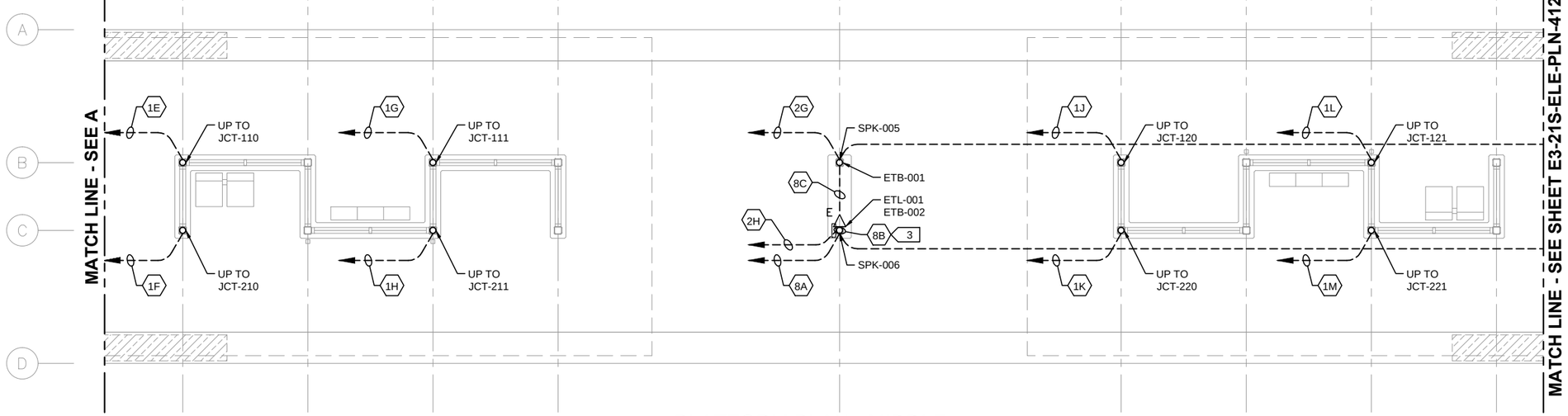
SHEET 58 OF 394

Jan, 18 2016 10:59 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ELECTRICAL\E3-21S-ELE-ELV-321.dwg By: V-BegeJB



1 PLATFORM PLAN - WEST

SCALE: 1/8"=1'-0"



2 PLATFORM PLAN - MIDDLE

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. DASHED LINES WITH AN ARROWHEAD DENOTE HOMERUN TO SCC-001, UNLESS OTHERWISE NOTED.
2. FOR CONDUITS AND DEVICES MOUNTED TO CANOPY, SEE COMMUNICATIONS CANOPY PLAN.
3. SEE SHEETS E3-21S-ELE-SCH-461 AND E3-21S-ELE-462 FOR CONDUIT SCHEDULES.
4. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
5. ALL UNDERSLAB CONDUIT SHALL BE PVC, ALL CONDUIT ABOVE PLATFORM SURFACE SHALL BE GRS.
6. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
7. TVMs, RSVs, SPEAKERS, ETELS AND COMMUNICATION CABINET TO BE PROVIDED BY OTHERS; SHOWN FOR REFERENCE ONLY.

KEYNOTES:

1. COMMUNICATIONS CONDUITS TO/FROM STATION SIGNAL-COMMUNICATIONS HOUSE VIA MH-XXXX.
2. CONDUIT TO/FROM STATION-COMMUNICATIONS HOUSE FOR UPS POWER FEED TO SCC-001.
3. CONDUIT AND CABLE FOR ETEL BEACON LIGHT SHALL BE INSTALLED ENTIRELY WITHIN COLUMN.

0 2 4 8

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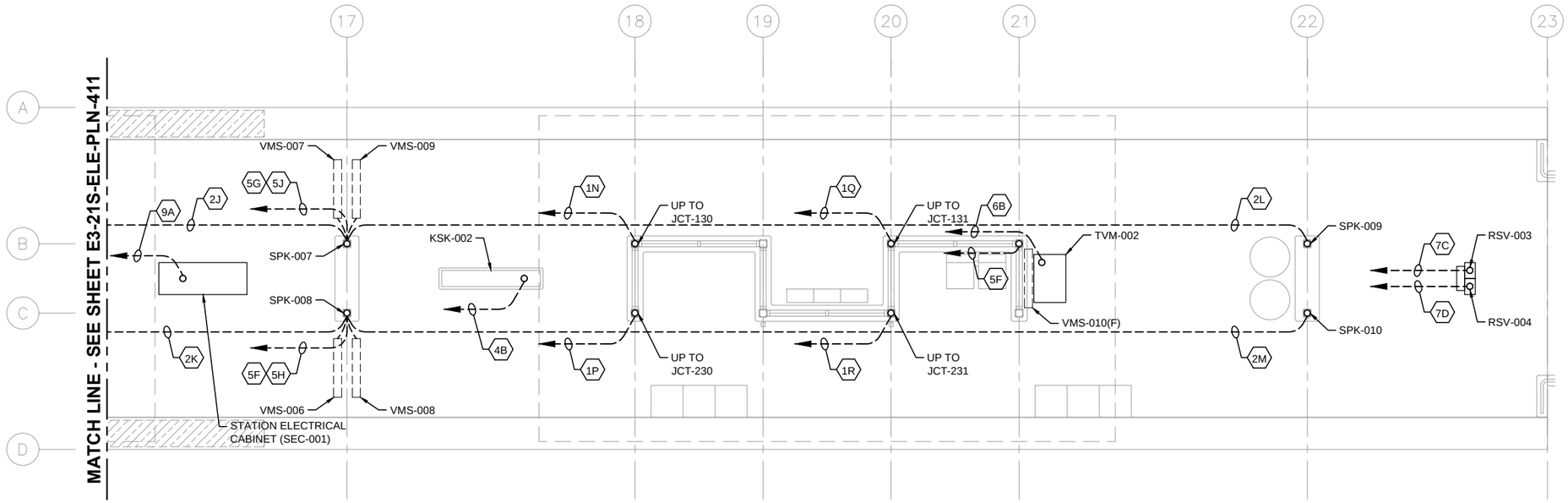
CIVIL - VOLUME 11D
21ST STREET STATION
COMMUNICATIONS
UNDERSLAB CONDUIT PLAN (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E3-21S-ELE-PLN-411

SHEET 59 OF 394

Jan, 18 2016 11:00 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ELECTRICAL\E3-21S-ELE-PLN-411.dwg By: V-BegeJB



1 PLATFORM PLAN - EAST

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. DASHED LINES WITH AN ARROWHEAD DENOTE HOMERUN TO SCC-001, UNLESS OTHERWISE NOTED.
2. FOR CONDUITS AND DEVICES MOUNTED TO CANOPY, SEE COMMUNICATIONS CANOPY PLAN.
3. SEE SHEETS E3-21S-ELE-SCH-461 AND E3-21S-ELE-462 FOR CONDUIT SCHEDULES.
4. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
5. ALL UNDERSLAB CONDUIT SHALL BE PVC, ALL CONDUIT ABOVE PLATFORM SURFACE SHALL BE GRS.
6. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
7. TVMs, RSVs, SPEAKERS, ETELS AND COMMUNICATION CABINET TO BE PROVIDED BY OTHERS; SHOWN FOR REFERENCE ONLY.

KEYNOTES:

1.

0 2 4 8

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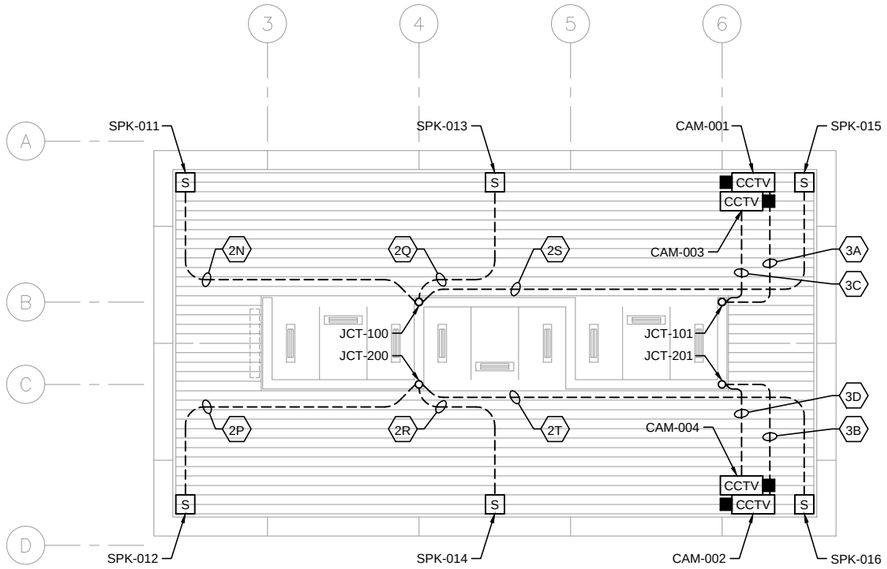
CIVIL - VOLUME 11D
21ST STREET STATION
COMMUNICATIONS
UNDERSLAB CONDUIT PLAN (2 OF 2)

DISCIPLINE: ELECTRICAL

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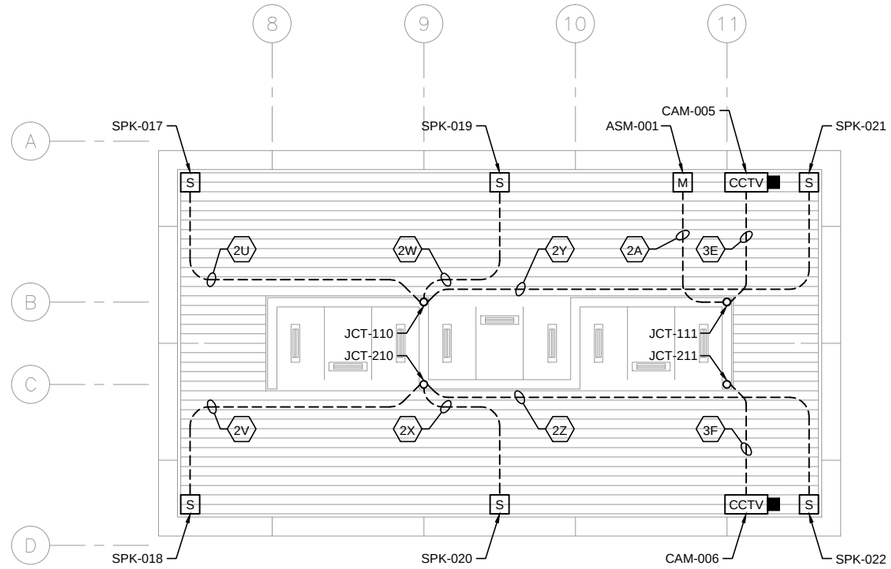
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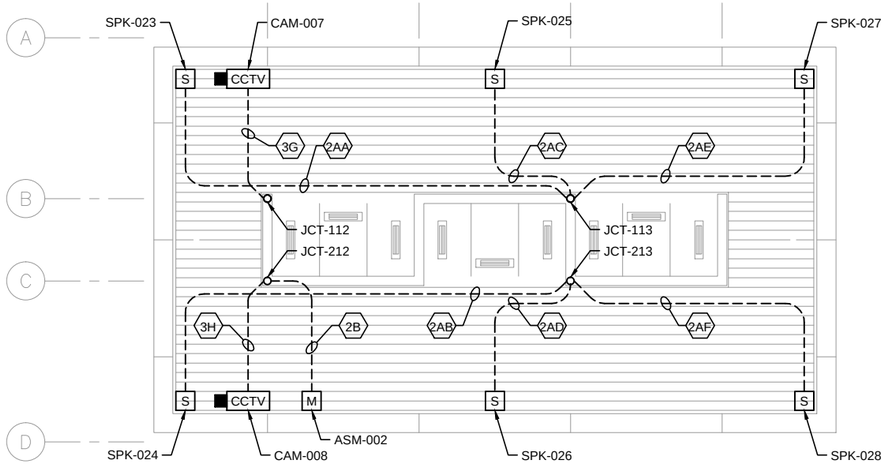
1 CANOPY PLAN – WEST END

SCALE: 1/8"=1'–0"



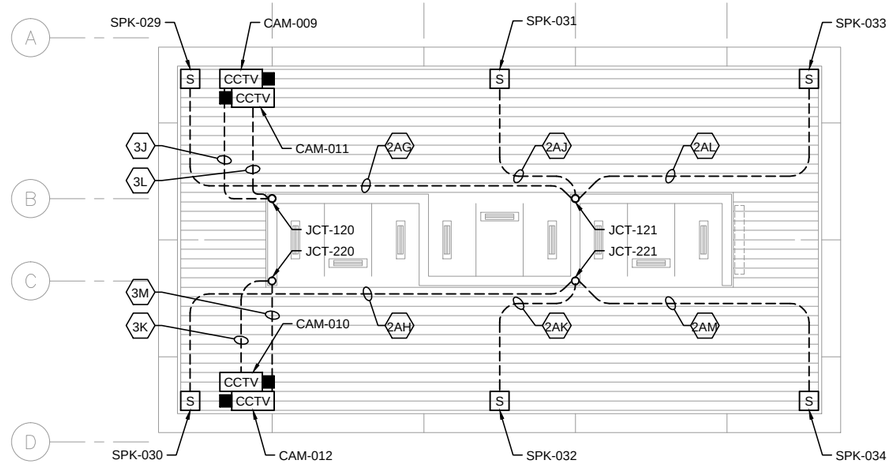
2 CANOPY PLAN – WEST MIDDLE

SCALE: 1/8"=1'–0"



3 CANOPY PLAN – EAST MIDDLE

SCALE: 1/8"=1'–0"



4 CANOPY PLAN – EAST END

SCALE: 1/8"=1'–0"

GENERAL NOTES:

1. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
2. SEE SHEETS E3-21S-ELE-SCH-461 AND E3-21S-ELE-462 FOR CONDUIT SCHEDULES.
3. ALL CONDUITS SHOWN SHALL BE GRS.
4. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
5. SPEAKERS, CCTV CAMERAS AND MICROPHONES SHOWN FOR REFERENCE ONLY; WILL BE PROVIDED BY OTHERS.

KEYNOTES:

1.

0 2 4 8
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METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
COMMUNICATIONS
CANOPY PLAN

DISCIPLINE: ELECTRICAL
SHEET NAME: E3-21S-ELE-PLN-421

SHEET 61 OF 394

Jan. 18 2016 11:00 am V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\ELECTRICAL\E3-21S-ELE-PLN-421.dwg By: V-BegeJB

21ST STREET STATION COMMUNICATION CONDUIT AND CABLE SCHEDULE

CONDUIT NO.	DEVICE ID	DESCRIPTION/USE	FROM	TO	CONDUIT SIZE
10A	21S -CON-0001	S/C HOUSE TO SCC-001	S/C MANHOLE	21S -SCC-001	3"
10B	21S -CON-0002	S/C HOUSE TO SCC-001	S/C MANHOLE	21S -SCC-001	3"
10C	21S -CON-0003	S/C HOUSE TO SCC-001	S/C MANHOLE	21S -SCC-001	3"
10D	21S -CON-0004	S/C HOUSE TO SCC-001	S/C MANHOLE	21S -SCC-001	3"
10E	21S -CON-0005	UPS POWER FEED: SCH TO SCC	21S -SCH-001	21S -SCC-001	3"
1A	21S -CON-0101	SCC TO JUNCTION 100	21S -SCC-001	21S -JCT-100	2"
1B	21S -CON-0102	SCC TO JUNCTION 200	21S -SCC-001	21S -JCT-200	2"
1C	21S -CON-0103	SCC TO JUNCTION 101	21S -SCC-001	21S -JCT-101	2"
1D	21S -CON-0104	SCC TO JUNCTION 201	21S -SCC-001	21S -JCT-201	2"
1E	21S -CON-0105	SCC TO JUNCTION 110	21S -SCC-001	21S -JCT-110	2"
1F	21S -CON-0106	SCC TO JUNCTION 210	21S -SCC-001	21S -JCT-210	2"
1G	21S -CON-0107	SCC TO JUNCTION 111	21S -SCC-001	21S -JCT-111	2"
1H	21S -CON-0108	SCC TO JUNCTION 211	21S -SCC-001	21S -JCT-211	2"
1J	21S -CON-0109	SCC TO JUNCTION 112	21S -SCC-001	21S -JCT-112	2"
1K	21S -CON-0110	SCC TO JUNCTION 212	21S -SCC-001	21S -JCT-212	2"
1L	21S -CON-0111	SCC TO JUNCTION 113	21S -SCC-001	21S -JCT-113	2"
1M	21S -CON-0112	SCC TO JUNCTION 213	21S -SCC-001	21S -JCT-213	2"
1N	21S -CON-0113	SCC TO JUNCTION 120	21S -SCC-001	21S -JCT-120	2"
1P	21S -CON-0114	SCC TO JUNCTION 220	21S -SCC-001	21S -JCT-220	2"
1Q	21S -CON-0115	SCC TO JUNCTION 121	21S -SCC-001	21S -JCT-121	2"
1R	21S -CON-0116	SCC TO JUNCTION 221	21S -SCC-001	21S -JCT-221	2"
2A	21S -CON-0201	MICROPHONE 1 - NOISE SENSING	21S -JCT-111	21S -ASM-001	1"
2B	21S -CON-0202	MICROPHONE 2 - NOISE SENSING	21S -JCT-211	21S -ASM-002	1"
2C	21S -CON-0203	SPEAKER 1 - POLE	21S -SPK-003	21S -SPK-001	1-1/2"
2D	21S -CON-0204	SPEAKER 2 - POLE	21S -SPK-004	21S -SPK-002	1-1/2"
2E	21S -CON-0205	SPEAKER 3 - POLE	21S -SCC-001	21S -SPK-003	1-1/2"
2F	21S -CON-0206	SPEAKER 4 - POLE	21S -SCC-001	21S -SPK-004	1-1/2"
2G	21S -CON-0207	SPEAKER 5 - POLE	21S -SCC-001	21S -SPK-005	1-1/2"
2H	21S -CON-0208	SPEAKER 6 - POLE	21S -SCC-001	21S -SPK-006	1-1/2"
2J	21S -CON-0209	SPEAKER 7 - POLE	21S -SPK-005	21S -SPK-007	1-1/2"
2K	21S -CON-0210	SPEAKER 8 - POLE	21S -SPK-006	21S -SPK-008	1-1/2"
2L	21S -CON-0211	SPEAKER 9 - POLE	21S -SPK-007	21S -SPK-009	1-1/2"
2M	21S -CON-0212	SPEAKER 10 - POLE	21S -SPK-008	21S -SPK-010	1-1/2"
2N	21S -CON-0211	SPEAKER 11 - CANOPY	21S -JCT-100	21S -SPK-011	1"
2P	21S -CON-0212	SPEAKER 12 - CANOPY	21S -JCT-200	21S -SPK-012	1"
2Q	21S -CON-0213	SPEAKER 13 - CANOPY	21S -JCT-100	21S -SPK-013	1"
2R	21S -CON-0214	SPEAKER 14 - CANOPY	21S -JCT-200	21S -SPK-014	1"
2S	21S -CON-0215	SPEAKER 15 - CANOPY	21S -JCT-100	21S -SPK-015	1"
2T	21S -CON-0216	SPEAKER 16 - CANOPY	21S -JCT-200	21S -SPK-016	1"
2U	21S -CON-0217	SPEAKER 17 - CANOPY	21S -JCT-110	21S -SPK-017	1"
2V	21S -CON-0218	SPEAKER 18 - CANOPY	21S -JCT-210	21S -SPK-018	1"
2W	21S -CON-0219	SPEAKER 19 - CANOPY	21S -JCT-110	21S -SPK-019	1"
2X	21S -CON-0220	SPEAKER 20 - CANOPY	21S -JCT-210	21S -SPK-020	1"
2Y	21S -CON-0221	SPEAKER 21 - CANOPY	21S -JCT-110	21S -SPK-021	1"
2Z	21S -CON-0222	SPEAKER 22 - CANOPY	21S -JCT-210	21S -SPK-022	1"
2AA	21S -CON-0223	SPEAKER 23 - CANOPY	21S -JCT-112	21S -SPK-023	1"
2AB	21S -CON-0224	SPEAKER 24 - CANOPY	21S -JCT-212	21S -SPK-024	1"
2AC	21S -CON-0225	SPEAKER 25 - CANOPY	21S -JCT-112	21S -SPK-025	1"
2AD	21S -CON-0226	SPEAKER 26 - CANOPY	21S -JCT-212	21S -SPK-026	1"
2AE	21S -CON-0227	SPEAKER 27 - CANOPY	21S -JCT-112	21S -SPK-027	1"
2AF	21S -CON-0228	SPEAKER 28 - CANOPY	21S -JCT-212	21S -SPK-028	1"
2AG	21S -CON-0229	SPEAKER 29 - CANOPY	21S -JCT-121	21S -SPK-029	1"
2AH	21S -CON-0230	SPEAKER 30 - CANOPY	21S -JCT-221	21S -SPK-030	1"
2AJ	21S -CON-0231	SPEAKER 31 - CANOPY	21S -JCT-121	21S -SPK-031	1"
2AK	21S -CON-0232	SPEAKER 32 - CANOPY	21S -JCT-221	21S -SPK-032	1"
2AL	21S -CON-0233	SPEAKER 33 - CANOPY	21S -JCT-121	21S -SPK-033	1"
2AM	21S -CON-0234	SPEAKER 34 - CANOPY	21S -JCT-221	21S -SPK-034	1"

GENERAL NOTES:

1. CONDUIT NUMBERS CORRELATE TO ⬡ NUMBERS ON PLAN SHEETS AND ELEVATIONS.
2. SEE PLAN AND ELEVATION SHEETS FOR LOCATIONS OF CONDUITS.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION COMMUNICATIONS CONDUIT SCHEDULE (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E3-21S-ELE-SCH-461

SHEET 62 OF 394

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21ST STREET STATION COMMUNICATION CONDUIT AND CABLE SCHEDULE

CONDUIT NO.	DEVICE ID	DESCRIPTION/USE	FROM	TO	CONDUIT SIZE
3A	21S -CON-0301	CAMERA 1	21S -JCT-101	21S CAM-001	1"
3B	21S -CON-0302	CAMERA 2	21S -JCT-201	21S CAM-002	1"
3C	21S -CON-0303	CAMERA 3	21S -JCT-101	21S CAM-003	1"
3D	21S -CON-0304	CAMERA 4	21S -JCT-201	21S CAM-004	1"
3E	21S -CON-0305	CAMERA 5	21S -JCT-111	21S CAM-005	1"
3F	21S -CON-0306	CAMERA 6	21S -JCT-211	21S CAM-006	1"
3G	21S -CON-0307	CAMERA 7	21S -JCT-111	21S CAM-007	1"
3H	21S -CON-0308	CAMERA 8	21S -JCT-211	21S CAM-008	1"
3J	21S -CON-0309	CAMERA 9	21S -JCT-120	21S CAM-009	1"
3K	21S -CON-0310	CAMERA 10	21S -JCT-220	21S CAM-010	1"
3L	21S -CON-0311	CAMERA 11	21S -JCT-120	21S CAM-011	1"
3M	21S -CON-0312	CAMERA 12	21S -JCT-220	21S CAM-012	1"
4A	21S -CON-0401	KIOSK 1 (F)	21S -SCC-001	21S -KSK-001	2"
4B	21S -CON-0402	KIOSK 2 (F)	21S -SCC-001	21S -KSK-002	2"
5A	21S -CON-0501	VMS 1 (F)	21S -SCC-001	21S -VMS-001	1"
5B	21S -CON-0502	VMS 2, VMS 3	21S -SCC-001	21S -VMS-002, -VMS-003	1-1/2"
5C	21S -CON-0503	VMS 4, VMS 5	21S -SCC-001	21S -VMS-004, -VMS-005	1-1/2"
5D	21S -CON-0504	VMS 6, VMS 7	21S -SCC-001	21S -VMS-006, -VMS-007	1-1/2"
5E	21S -CON-0505	VMS 8, VMS 9	21S -SCC-001	21S -VMS-008, -VMS-009	1-1/2"
5F	21S -CON-0506	VMS 10 (F)	21S -SCC-001	21S -VMS-010	1"
6A	21S -CON-0601	TVM 1	21S -SCC-001	21S -TVM-001	2"
6B	21S -CON-0602	TVM 2	21S -SCC-001	21S -TVM-002	2"
7A	21S -CON-0701	VALIDATOR 1	21S -SCC-001	21S -RSV-001	1-1/2"
7B	21S -CON-0702	VALIDATOR 2	21S -SCC-001	21S -RSV-002	1-1/2"
7C	21S -CON-0703	VALIDATOR 3	21S -SCC-001	21S -RSV-003	1-1/2"
7D	21S -CON-0704	VALIDATOR 4	21S -SCC-001	21S -RSV-004	1-1/2"
8A	21S -CON-0801	EMERGENCY TELEPHONE 1 - PHONE	21S -SCC-001	21S -ETL-001	1-1/2"
8B	21S -CON-0802	EMERGENCY TELEPHONE 1 - BEACON LIGHT 1	21S -ETL-001	21S -ETB-001	1"
8C	21S -CON-0803	EMERGENCY TELEPHONE 1 - BEACON LIGHT 2	21S -ETL-001	21S -ETB-002	1"
9A	21S -CON-0901	STATION ELECTRICAL CABINET	21S -SCC-001	21S -SEC-001	2"

GENERAL NOTES:

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2. SEE PLAN AND ELEVATION SHEETS FOR LOCATIONS OF CONDUITS.

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
COMMUNICATIONS
CONDUIT SCHEDULE (2 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E3-21S-ELE-SCH-462

21ST CONDUIT AND WIRE SCHEDULE

CONDUIT NUMBER	SIZE	WIRE	FROM	TO	REMARKS	NOTES
1	1"	2#8, 1#10G	HEATERS HTR-101, 102, 103	PANELBOARD LP1A	POWER TO HEATERS	
2	1"	2#8, 1#10G	HEATERS HTR-104, 105, 106	PANELBOARD LP1A	POWER TO HEATERS	
3	1"	2#8, 1#10G	HEATERS HTR-107, 108, 109	PANELBOARD LP1A	POWER TO HEATERS	
4	1"	2#8, 1#10G	HEATERS HTR-110, 111, 112	PANELBOARD LP1A	POWER TO HEATERS	
5	1"	2#8, 1#10G	HEATERS HTR-113, 114, 115	PANELBOARD LP1A	POWER TO HEATERS	
6	1"	2#8, 1#10G	HEATERS HTR-116, 117, 118	PANELBOARD LP1A	POWER TO HEATERS	
7	1"	2#8, 1#10G	HEATERS HTR-119, 120, 121	PANELBOARD LP1A	POWER TO HEATERS	
8	1"	2#8, 1#10G	HEATERS HTR-122, 123, 124	PANELBOARD LP1A	POWER TO HEATERS	
9	1"	2#8, 1#10G	HEATERS HTR-125, 126, 127	PANELBOARD LP1A	POWER TO HEATERS	
10	1"	2#8, 1#10G	HEATERS HTR-128, 129, 130	PANELBOARD LP1A	POWER TO HEATERS	
11	1"	2#8, 1#10G	HEATERS HTR-131, 132, 133	PANELBOARD LP1A	POWER TO HEATERS	
12	1"	2#8, 1#10G	HEATERS HTR-134, 135, 136	PANELBOARD LP1A	POWER TO HEATERS	
13	1"	2#14, 1#14G	HPB-101	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
14	1"	2#14, 1#14G	HPB-102	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
15	1"	2#14, 1#14G	HPB-103	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
16	1"	2#14, 1#14G	HPB-104	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
17	1"	2#14, 1#14G	HPB-105	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
18	1"	2#14, 1#14G	HPB-106	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
19	1"	2#14, 1#14G	HPB-107	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
20	1"	2#14, 1#14G	HPB-108	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
21	1"	2#14, 1#14G	HPB-109	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
22	1"	2#14, 1#14G	HPB-110	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
23	1"	2#14, 1#14G	HPB-111	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
24	1"	2#14, 1#14G	HPB-112	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
25	1"	2#10, 1#10G	TVM-101	PANELBOARD LP1B	POWER TO TVM	
26	1"	2#10, 1#10G	TVM-102	PANELBOARD LP1B	POWER TO TVM	
27	1"	4#12, 2#12G	RSV-101, RSV-102	PANELBOARD LP1B	POWER TO RSVs	
28	1"	4#12, 2#12G	RSV-103, RSV-104	PANELBOARD LP1B	POWER TO RSVs	
29	1"	2#12, 1#12G	KSK-101	PANELBOARD LP1A	POWER TO KIOSK	
30	1"	2#12, 1#12G	KSK-102	PANELBOARD LP1A	POWER TO KIOSK	
31	1"	2#12, 1#12G	CANOPY LUMINAIRES	PANELBOARD LP1A	POWER TO LUMINAIRES	
32	1"	2#12, 1#12G	CANOPY LUMINAIRES	PANELBOARD LP1A	POWER TO LUMINAIRES	
33	1"	2#12, 1#12G	CANOPY LUMINAIRES	PANELBOARD LP1A	POWER TO LUMINAIRES	
34	1"	2#12, 1#12G	CANOPY LUMINAIRES	PANELBOARD LP1A	POWER TO LUMINAIRES	
35	1"	2#10, 1#10G	HEAT TAPE	HTCP	POWER TO HEAT TAPE	2
36	1"	2#10, 1#10G	HEAT TAPE	HTCP	POWER TO HEAT TAPE	2
37	1"	2#10, 1#10G	HEAT TAPE	HTCP	POWER TO HEAT TAPE	2
38	1"	2#10, 1#10G	HEAT TAPE	HTCP	POWER TO HEAT TAPE	2
39	1"	2#10, 1#10G	RAMP LIGHTING	PANELBOARD LP1A	POWER TO RAMP LIGHTING	
40	1"	2#10, 1#10G	RAMP LIGHTING	PANELBOARD LP1A	POWER TO RAMP LIGHTING	
41	1"	2#10, 1#10G	RAMP LIGHTING	PANELBOARD LP1A	POWER TO RAMP LIGHTING	
42	1"	2#10, 1#10G	RAMP LIGHTING	PANELBOARD LP1A	POWER TO RAMP LIGHTING	
43	1"	4#10, 1#10G	COMMUNICATIONS CABINET SCC-001	PANELBOARD LP1B	POWER TO COMMUNICATIONS CABINET	
44	1"	EMPTY W/ PULL CORD	VMS-001 (F)	PANELBOARD LP1B	POWER TO VMS (F)	
45	1"	4#10, 2#10G	VMS-002, VMS-003	PANELBOARD LP1B	POWER TO VMS	
46	1"	4#10, 2#10G	VMS-008, VMS-009	PANELBOARD LP1B	POWER TO VMS	
47	1"	EMPTY W/ PULL CORD	VMS-010 (F)	PANELBOARD LP1B	POWER TO VMS (F)	
48	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
49	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
50	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
51	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
52	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
53						
54						
55						

ELECTRICAL NOTES

1. NOT USED
2 3/C#18 CABLE FOR AMBIENT AIR TEMPERATURE SENSOR IS ALSO RUN IN THE CONDUIT.

PANELBOARD SCHEDULE 21S-LP1A

400 AMP BUS RATING
120/208 VOLTS
MLO
3 PHASE
4 WIRE 60Hz
42 POLES
SURFACE MOUNTED
LOCATION

DESCRIPTION	kVA	AMPS/POLES	CKT	AØ	BØ	CØ	CKT	AMPS/POLES	kVA	DESCRIPTION
RAMP LIGHTING	0.4	20/1	1	X			2	30/2	2.4	HTR-119, 120, 121
RAMP LIGHTING	0.4	20/1	3		X		4		2.4	
HTR-101, 102, 103	2.4	30/2	5			X	6	30/2	2.4	HTR-122, 123, 124
	2.4		7	X			8		2.4	
HTR-104, 105, 106	2.4	30/2	9		X		10	30/2	2.4	HTR-125, 126, 127
	2.4		11			X	12		2.4	
HTR-107, 108, 109	2.4	30/2	13	X			14	30/2	2.4	HTR-128, 129, 130
	2.4		15		X		16		2.4	
HTR-110, 111 112	2.4	30/2	17			X	18	30/2	2.4	HTR-131, 132, 133
	2.4		19	X			20		2.4	
HTR-113, 114, 115	2.4	30/2	21		X		22	30/2	2.4	HTR-134, 135, 136
	2.4		23			X	24		2.4	
HTR-116, 117, 118	2.4	30/2	25	X			26	20/1	0.17	SHELTER LUMINAIRES
	2.4		27		X		28	20/1	0.17	SHELTER LUMINAIRES
KSK-101	0.3	20/1	29			X	30	20/1	0.17	SHELTER LUMINAIRES
KSK-102	0.3	20/1	31	X			32	20/1	0.17	SHELTER LUMINAIRES
HTRCP-101	1.0	30/2	33		X		34	20/1	1.0	POLE LUMINAIRES
	1.0		35			X	36	20/1		SPARE
HTRCP-102	1.0	30/2	37	X			38	20/1		SPARE
	1.0		39		X		40			SPACE
SPACE			41			X	42			SPACE
		kVA		26.5	28.0	26.7	kVA		5.3	
		AMPS		221.2	233.1	222.3	AMPS		5.2	
									6.0	FEED THROUGH LUGS LP1B

PANELBOARD SCHEDULE 21S-LP1B

400 AMP BUS RATING
120/208 VOLTS
400 MLO
3 PHASE
4 WIRE 60Hz
30 POLES
SURFACE MOUNTED
LOCATION

DESCRIPTION	kVA	AMPS/POLES	CKT	AØ	BØ	CØ	CKT	AMPS/POLES	kVA	DESCRIPTION
SPD		60/2	1	X			2	20/1	0.3	RSV-101
			3		X		4	20/1	0.3	RSV-102
SEC-001	0.5	20/1	5			X	6	20/1	0.3	RSV-103
VMS-001 (FUTURE)	1.0	20/1	7	X			8	20/1	0.3	RSV-104
VMS-002	1.0	20/1	9		X		10	20/1		SPARE
VMS-003	1.0	20/1	11			X	12	20/1		SPARE
SCC-001	2.7	30/2	13	X			14	20/1	1.0	VMS-008
	2.7		15		X		16	20/1	1.0	VMS-009
SPARE		20/1	17			X	18	20/1	1.0	VMS-010 (FUTURE)
SPARE		20/1	19	X			20	30/1		SPARE
HTG AND LTG CONTROL SYSTEM	0.2	15/1	21		X		22	30/1		SPARE
TVM-101	1.6	30/1	23			X	24	30/1	1.6	TVM-102
SPACE			25	X			26			SPACE
SPACE			27		X		28			SPACE
SPACE			29			X	30			SPACE
		kVA		5.3	5.2	6.0	kVA			
		AMPS		44.2	43.3	50.0	AMPS			

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL
SOUTHWEST
Green Line LRT Extension

CIVIL - VOLUME 11D
21ST STREET STATION
ELECTRICAL
SCHEDULES

DISCIPLINE: ELECTRICAL
SHEET NAME: E3-21S-ELE-SCH-501

SHEET 64 OF 319

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CODE SUMMARY - CENTER PLATFORM
PENN STATION

CODE REFERENCES

MINNESOTA STATE BUILDING CODE	2015
NFPA 130 – STANDARD FOR FIXED GUIDEWAY TRANSIT AND PASSENGER RAIL SYSTEMS	2014

IBC REVIEW

A. DESCRIPTION
LOCATION: MINNEAPOLIS, MN

THE LIGHT RAIL TRANSIT STATION IS A PARTIALLY CANOPIED PLATFORM AREA. IT CONSISTS OF A PLATFORM 270' LONG BY 21'–4" ACCESSED BY A SLOPED WALK AT EACH END OF PLATFORM. PLATFORM IS OPEN TO EXTERIOR ON ALL FOUR SIDES.

THE STATION IS LOCATED WITHIN AN EXISTING RAILROAD CORRIDOR. A PASSENGER ELEVATOR AND OPEN STAIR (VERTICAL CIRCULATION) ARE PROVIDED FOR PEDESTRIAN STATION ACCESS FROM PENN AVENUE NORTH.

TYPICAL PLATFORM AREA: 5760 SQUARE FEET (GROSS AREA)
4264 SQUARE FEET (NET AREA AFTER STRUCTURAL ELEMENTS, FIXTURES AND PERMANENTLY INSTALLED FURNISHINGS ARE REMOVED)

CANOPY COVERAGE AREA AT PLATFORM: = 2928 SQUARE FEET
732 SQUARE FEET (1 @ 36'–0" X 20'–4") WEST CANOPY
732 SQUARE FEET (1 @ 36'–0" X 20'–4") MIDDLE CANOPY
732 SQUARE FEET (1 @ 36'–0" X 20'–4") MIDDLE CANOPY
732 SQUARE FEET (1 @ 36'–0" X 20'–4") EAST CANOPY

B. OCCUPANCY CLASSIFICATION (IBC 2015 SECTION 303.1)

WAITING AREAS IN TRANSPORTATION TERMINALS: GROUP 'A' DIVISION 3
(15 S.F. PER PERSON)

C. OCCUPANCY SEPARATIONS

NONE ARE REQUIRED.
ELEVATOR HOIST WAY DOES NOT PENETRATE FLOOR/CEILING OR ROOF/CEILING ASSEMBLIES – NO RATING REQUIRED
ELEVATOR MACHINE ROOM DOES NOT ABUT, OR OPEN TO, THE ELEVATOR HOIST WAY – NO RATING REQUIRED

D. TYPE OF CONSTRUCTION (IBC 2015 TABLE 601)

TYPE IIB CONSTRUCTION

E. ALLOWABLE BUILDING AREA AND BUILDING HEIGHT (IBC 2015 TABLE 503)

2 STORIES AT 9,500 SQUARE FEET PER STORY

F. IBC EXITING SUMMARY

NO. OF OCCUPANTS = 4264 S.F. / 15 S.F./OCC = 285
REQUIRED EGRESS WIDTH = 285 X 0.2 = 57" (PER 1005.3.2)
WIDTH PROVIDED = 2 RAMPS AT 145" = 290"
2 MEANS OF EGRESS PROVIDED
THE VERTICAL CIRCULATION IS NOT CONSIDERED A MEANS OF EGRESS FROM THE STATION, AND IT IS CONSIDERED UNOCCUPIED

PLATFORM COLOR AND FINISH SCHEDULE

PRODUCTS AND COLORS LISTED ARE THE BASIS OF DESIGN FOR AESTHETIC/ARCHITECTURAL INTENT. SEE SPECIFICATIONS FOR MATERIAL/PRODUCT REQUIREMENTS.

PLATFORM COLOR AND FINISH SCHEDULE

TYPE	STATION	STRUCTURAL STEEL PAINT COLOR	PLATFORM CONC COLOR	PLATFORM CONC FINISH	CONC WALL COLOR	CONC WALL FINISH	RAILING INFILL MATERIAL	ALUM WDW FRAME FINISH	EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA FINISH	ALUM COMP CANOPY SOFFIT AND FASCIA COLOR
CENTER	PENN STATION	PPG 517–4 GRAY STONE	CEMSTONE SPLIT ROCK	LIGHT BROOM	CEMSTONE SPLIT ROCK	TBD	GALV STL CABLE	CLEAR ANODIZED	HUNTER DOUGLAS WOODWRIGHT 8449 WINDJAMMER TEAK	ALUCOBOND NATURAL RUSTED METAL

VERTICAL CIRCULATION COLOR AND FINISH SCHEDULE

PRECAST WALL COLOR	PRECAST FLOOR COLOR	STRUCTURAL STEEL PAINT COLOR	PLATFORM CONC COLOR	PLATFORM CONC FINISH	CONC WALL COLOR	CONC WALL FINISH	ARCH WOVEN MESH	ALUM WDW FRAME FINISH	EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA FINISH	ALUM COMP CANOPY SOFFIT AND FASCIA COLOR	TRANSLUCENT PLASTIC PANEL
TBD	TBD	PPG 517–4 GRAY STONE	CEMSTONE SPLIT ROCK	TBD	CEMSTONE SPLIT ROCK	TBD	GKD OMEGA DIVERGENCE	CLEAR ANODIZED	HUNTER DOUGLAS WOODWRIGHT 8449 WINDJAMMER TEAK	ALUCOBOND NATURAL RUSTED METAL	3FORM KODA XT NATURAL N–03

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

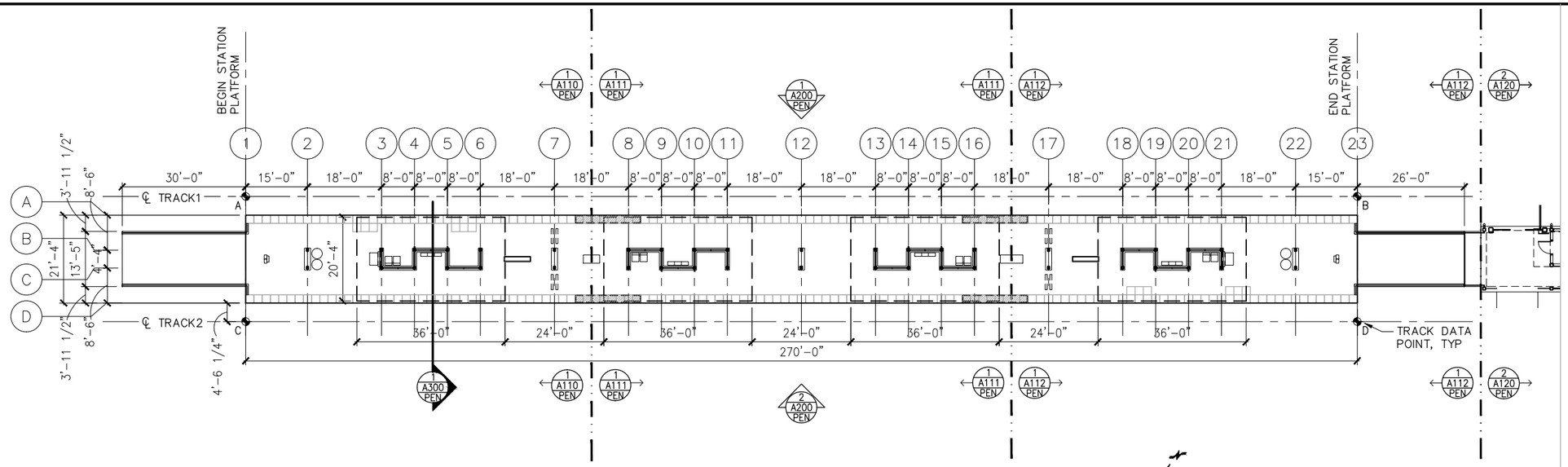
CIVIL - VOLUME 11D
PENN STATION
CODE SUMMARY / FINISH SCHEDULE

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-COD-010

SHEET 65 OF 394

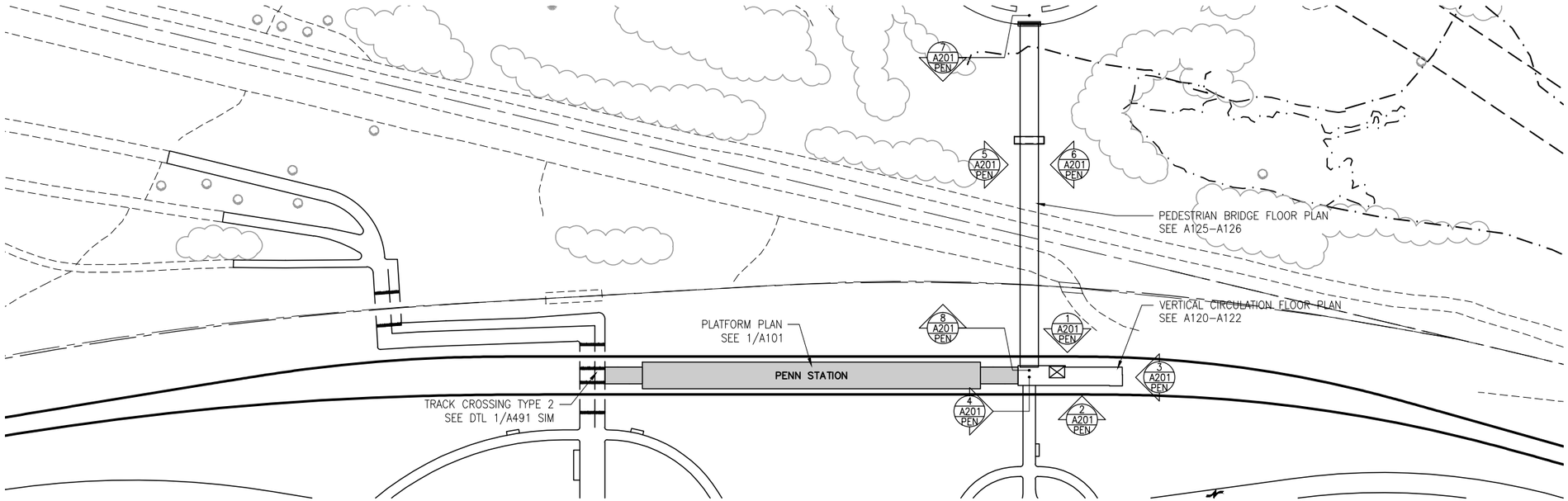
Jan, 18 2016 12:39 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-COD-010.dwg By: v-mccarrtp



1 PLATFORM PLAN
SCALE: 1"=30'

SCALE 0 7.5 15 30

SEE SHEET A102 FOR VERTICAL CIRCULATION
TRACK DATA POINT LOCATIONS



2 STATION AREA PLAN
SCALE: 1"=100'

SCALE 0 25 50 100

TRACK DATA

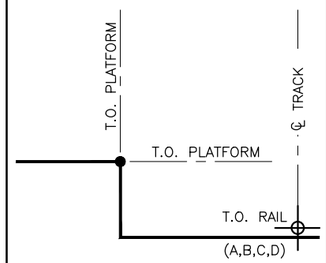
◆ ELEV 100'-0" (LOCATION ON PLAN)

TRACK 1 EL 100'-0"= 854.69 (PT 'B')

POINT	T.O. RAIL ELEVATION	TRACK 1 STATIONING	
A	856.04	1856+02.16	
B	854.69	1858+72.16	

TRACK 2 EL 100'-0"= 854.69 (PT 'D')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
C	856.04	2856+02.16	
D	854.69	2858+72.16	



SECTION DIAGRAM AT PLATFORM EDGE
SEE DTL 1/A520
FOR DETAIL AND DIMENSIONS

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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SOUTHWEST Green Line LRT Extension

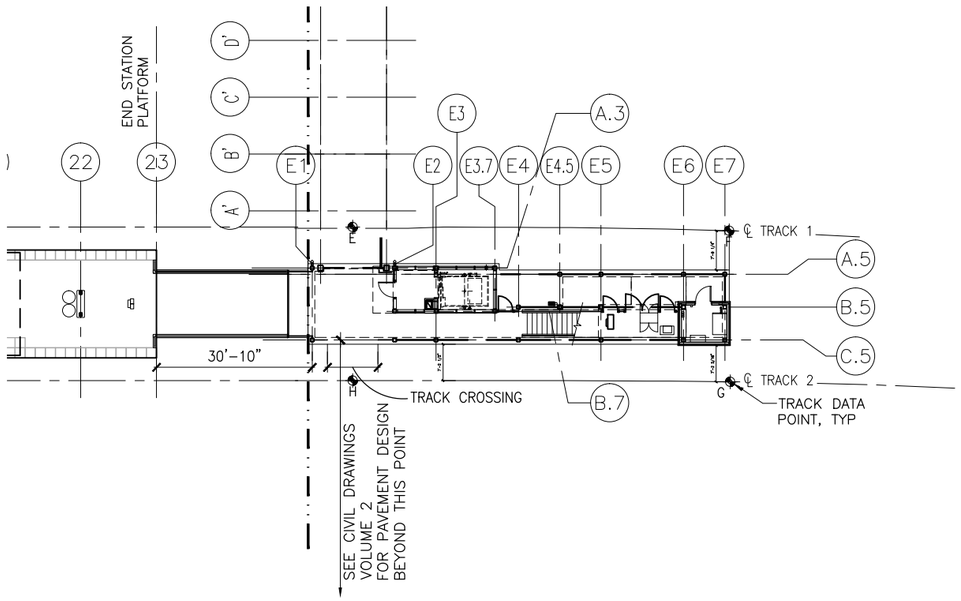
CIVIL - VOLUME 11D
PENN STATION
PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-101

SHEET 66 OF 394

Jan, 18 2016 12:41 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-PLN-101.DWG By: v-mccarrtp



1 VERTICAL CIRCULATION PLAN

SCALE: 1"=30'

0 7.5 15 30

SCALE



SEE SHEET A101 FOR STATION PLATFORM TRACK DATA POINT LOCATIONS

SEE SHEET A101 FOR STATION AREA PLAN

TRACK DATA

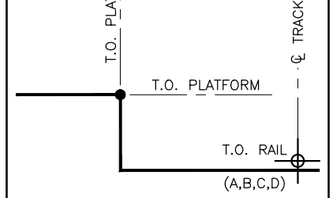
ELEV 100'-0" (LOCATION ON PLAN)

TRACK 1 EL 100'-0"= 854.69 (PT 'B')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
A	–	–	SEE A101
B	–	–	SEE A101
E	854.50	1859+11.00	
F	854.10	1859+85.78	

TRACK 2 EL 100'-0"= 854.69 (PT 'D')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
C	–	–	SEE A101
D	–	–	SEE A101
G	854.10	2859+85.64	
H	854.50	2859+11.00	



SECTION DIAGRAM AT PLATFORM EDGE
SEE DTL 1/A520
FOR DETAIL AND DIMENSIONS

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

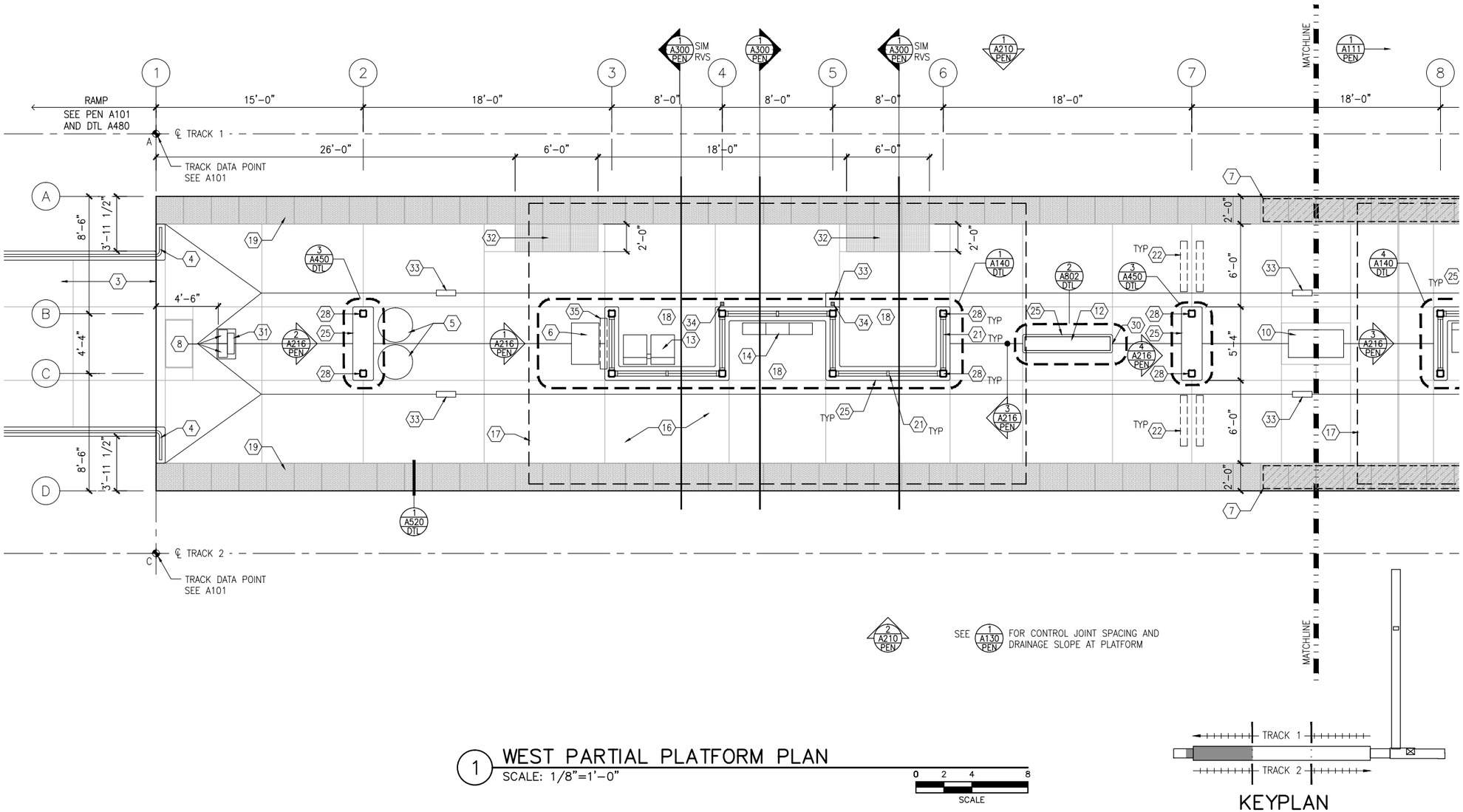
CIVIL - VOLUME 11D
PENN STATION
VERTICAL CIRCULATION PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-102

SHEET 67 OF 394

Jan. 18 2016 12:42 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-PLN-102.DWG By: v-mccartp



1 WEST PARTIAL PLATFORM PLAN
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN-CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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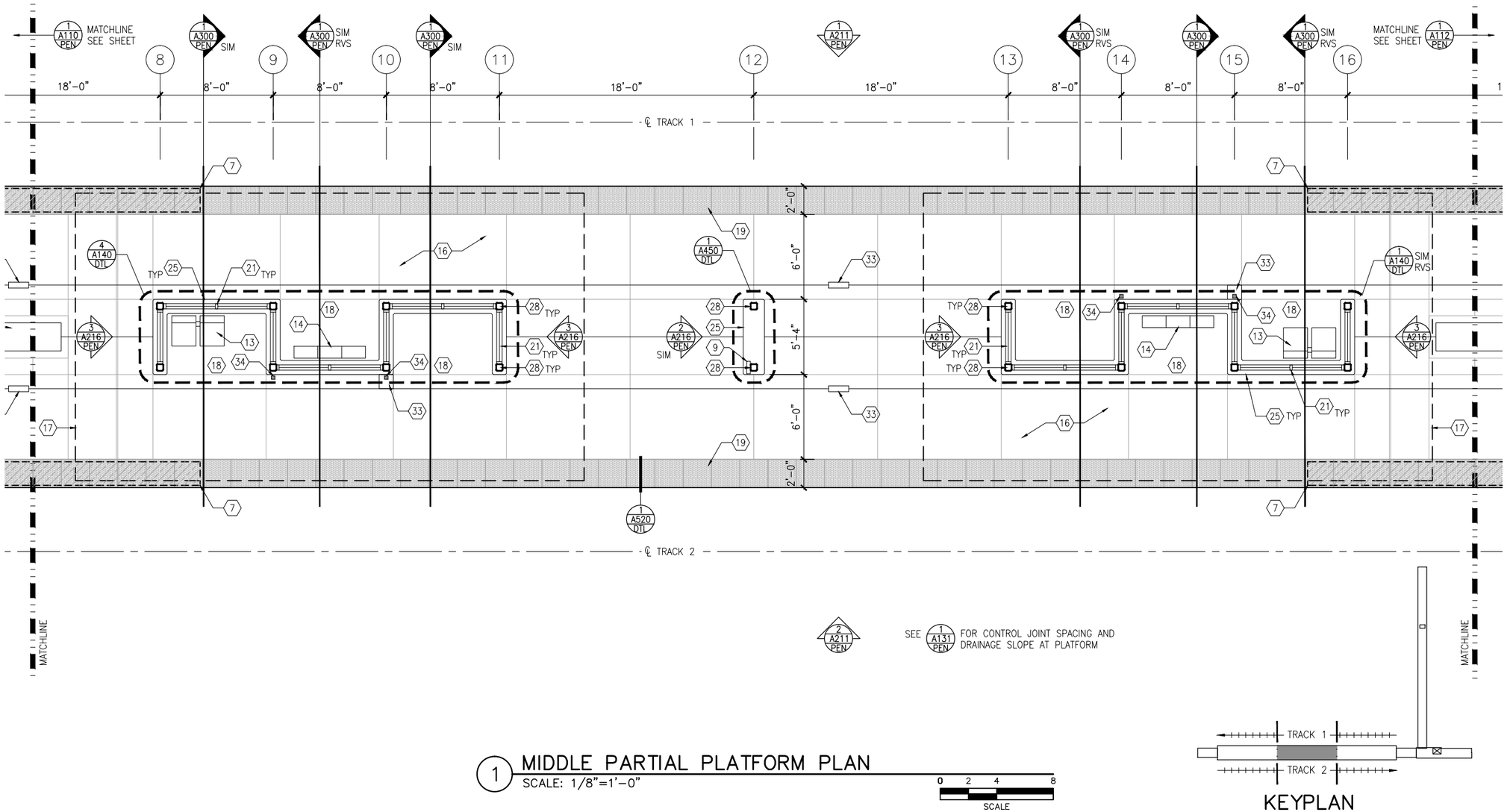
CIVIL - VOLUME 11D
PENN STATION
WEST PARTIAL PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-110

SHEET 68 OF 394

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SEE (1 A131 PEN) FOR CONTROL JOINT SPACING AND DRAINAGE SLOPE AT PLATFORM

(2 A211 PEN)

(1) MIDDLE PARTIAL PLATFORM PLAN

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

KEYPLAN

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN-CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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SOUTHWEST Green Line LRT Extension

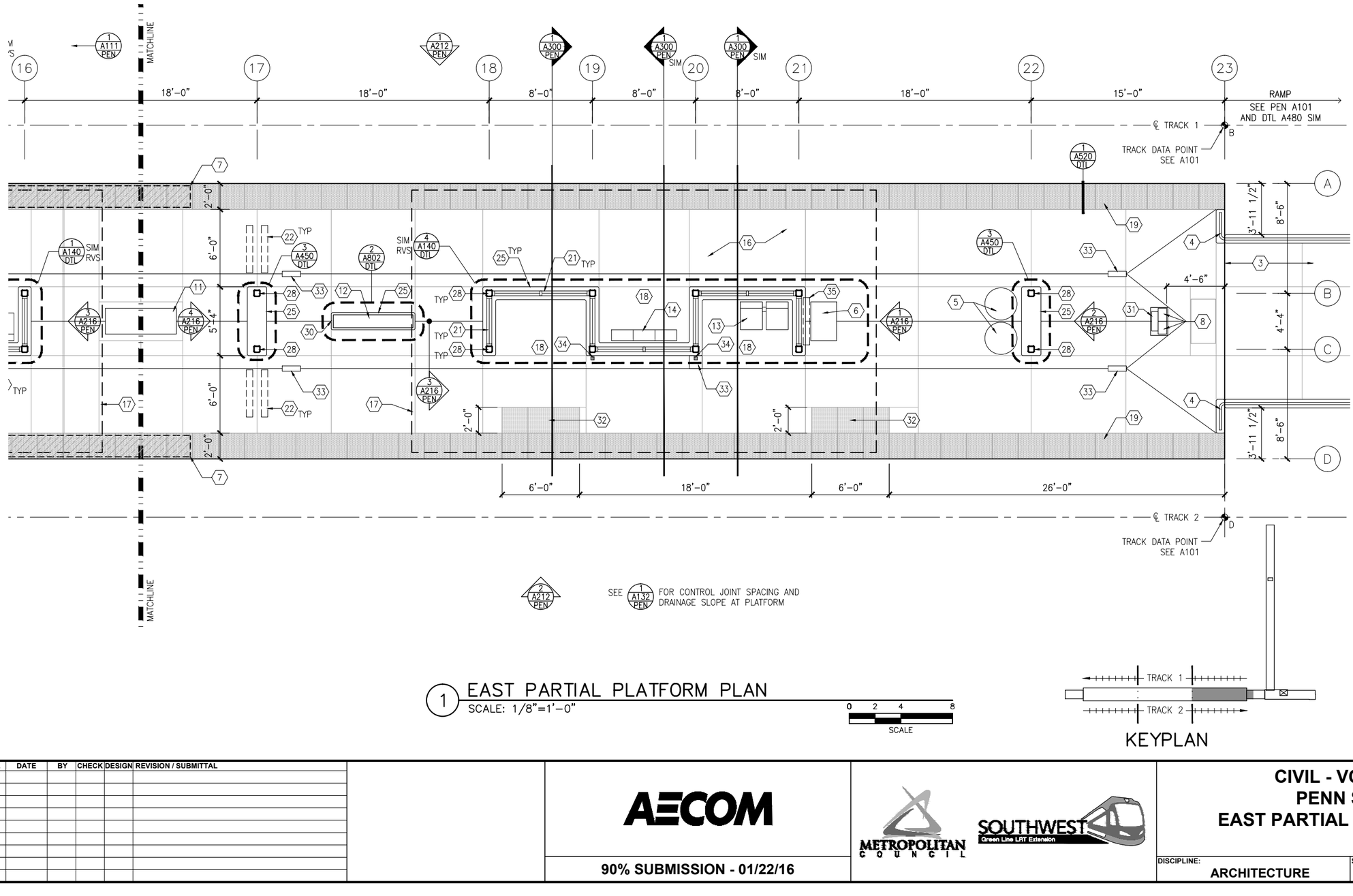
CIVIL - VOLUME 11D
PENN STATION
MIDDLE PARTIAL PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-111

SHEET 69 OF 394

Jan, 18 2016 12:43 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-PLN-111.dwg By: v-mccarrtp



1 EAST PARTIAL PLATFORM PLAN

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN-CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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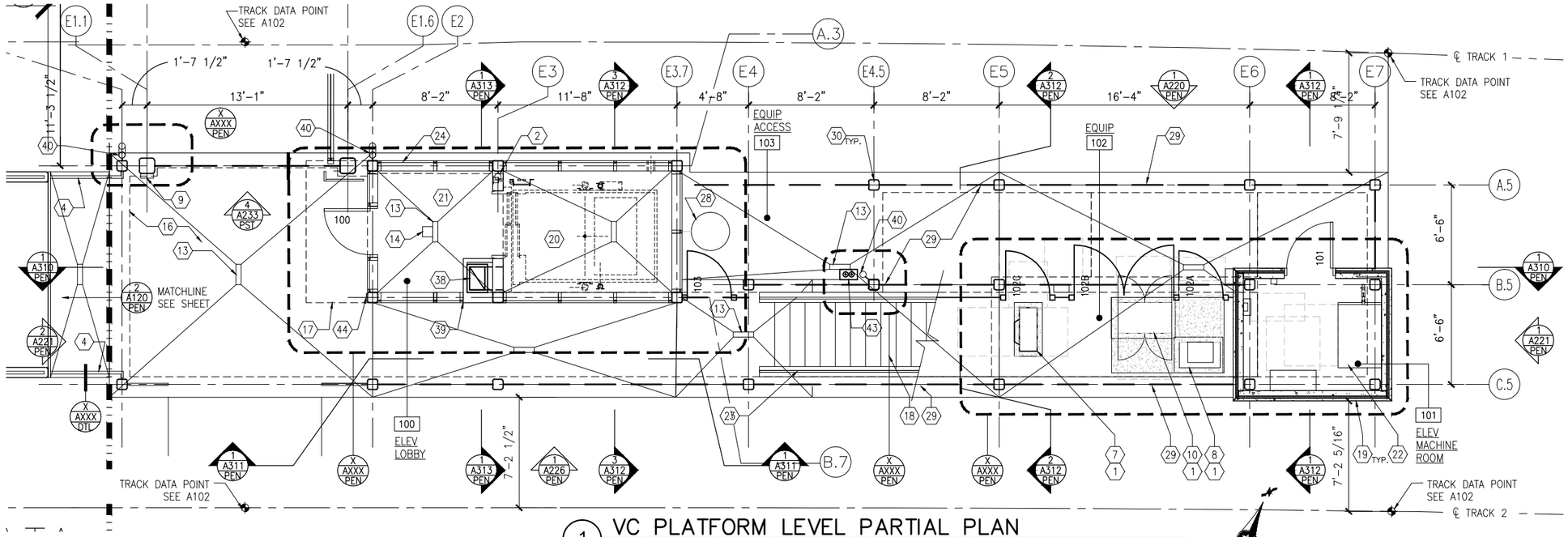
CIVIL - VOLUME 11D
PENN STATION
EAST PARTIAL PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-112

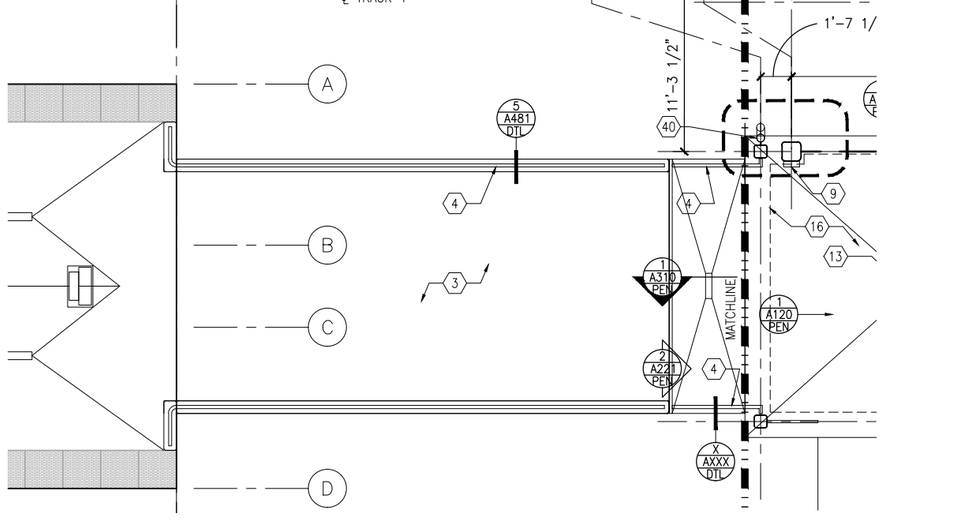
SHEET 70 OF 394

Jan, 18 2016 12:43 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-PLN-112.dwg By: v-mccarrtp



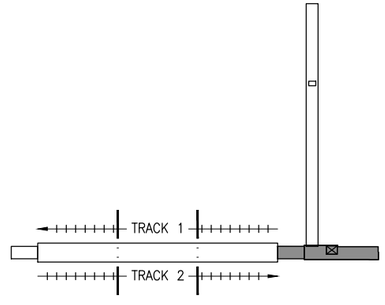
1 VC PLATFORM LEVEL PARTIAL PLAN
SCALE:1/8"=1'-0"

0 2 4 8
SCALE



2 VC PLATFORM LEVEL PARTIAL PLAN
SCALE:1/8"=1'-0"

0 2 4 8
SCALE



KEYPLAN

SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. CONCRETE HOUSEKEEPING PAD
2. RAINWATER LEADER – SEE PLUMB
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE
7. CONDENSING UNIT – SEE MECH
8. TRANSFORMER – SEE ELEC
9. EMERGENCY CALL BOX
10. COMMUNICATION CABINET
11. ELECTRICAL CABINET
12. CMU WALL
13. AREA DRAIN
14. SNOW MELT SYSTEM
15. PRCST CONC WALKWAY
16. CONCRETE PLATFORM
17. CANOPY ABOVE
18. PRCST CONC STAIR – SEE STRUCT
19. PRCST CONC WALL PANEL–SEE STRUCT
20. ELEVATOR
21. ELEVATOR LOBBY
22. ELEVATOR MACHINE ROOM
23. GUARD RAIL
24. ALUM & GLASS FRAMING SYSTEM
25. VARIABLE MESSAGE SIGN
26. METAL SOFFIT AND FASCIA
27. GUARD RAIL
28. SUMP PIT
29. ARCHITECTURAL WOVEN MESH
30. STEEL COLUMN – SEE STRUCTURAL
31. STEEL BEAM – SEE STRUCTURAL
32. CONNECTION WALL HYDRANT
33. EXPANSION JOINT
34. EXISTING CRASH BARRIER
35. CRASH BARRIER/GUARD RAIL
36. EXISTING BARRIER / SIDEWALK
37. ROOF BELOW – SEE ROOF PLAN
38. CHASE – SEE MECH FOR DUCT WORK
39. COMPOSITE ALUM WALL PANEL
40. PAINTED CAST IRON (AP CTG) METAL DOWNSPOUT
41. LIGHT MOUNTED TO STRUCTURE
42. NOT USED
43. REFRIGERANT LINE ENCLOSURE– SEE MECHANICAL FOR REFRIGERANT LINES
44. DOOR OPERATOR PUSH BUTTON

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

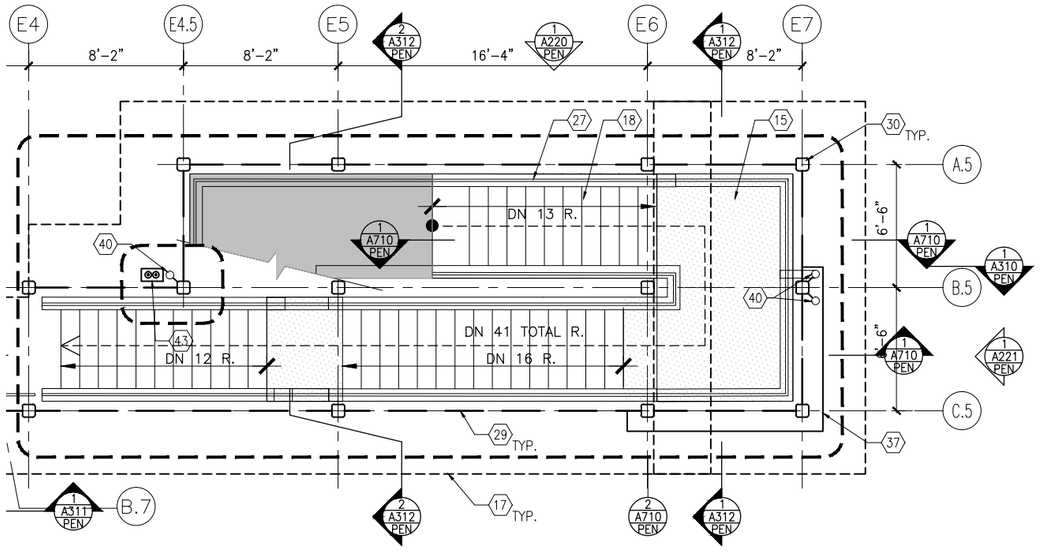
CIVIL - VOLUME 11D
PENN STATION
VC PLATFORM LEVEL PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-120

SHEET 71 OF 394

Jan, 18 2016 12:44 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-PLN-120.dwg By: v-mccarrtp



1 VC INTERMEDIATE LEVEL PLAN

SCALE:1/8"–1'–0"

0 2 4 8

SCALE

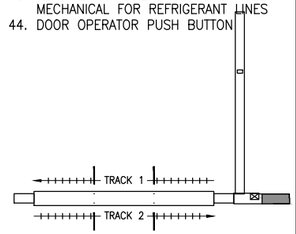
SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. CONCRETE HOUSEKEEPING PAD
2. RAINWATER LEADER – SEE PLUMB
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE
7. CONDENSING UNIT – SEE MECH
8. TRANSFORMER – SEE ELEC
9. EMERGENCY CALL BOX
10. COMMUNICATION CABINET
11. ELECTRICAL CABINET
12. CMU WALL
13. AREA DRAIN
14. SNOW MELT SYSTEM
15. PRCST CONC WALKWAY
16. CONCRETE PLATFORM
17. CANOPY ABOVE
18. PRCST CONC STAIR – SEE STRUCT
19. PRCST CONC WALL PANEL–SEE STRUCT
20. ELEVATOR
21. ELEVATOR LOBBY
22. ELEVATOR MACHINE ROOM
23. GUARD RAIL
24. ALUM & GLASS FRAMING SYSTEM
25. VARIABLE MESSAGE SIGN
26. METAL SOFFIT AND FASCIA
27. GUARD RAIL
28. SUMP PIT
29. ARCHITECTURAL WOVEN MESH
30. STEEL COLUMN – SEE STRUCTURAL
31. STEEL BEAM – SEE STRUCTURAL
32. CONNECTION WALL HYDRANT
33. EXPANSION JOINT
34. EXISTING CRASH BARRIER
35. CRASH BARRIER/GUARD RAIL
36. EXISTING BARRIER / SIDEWALK
37. ROOF BELOW – SEE ROOF PLAN
38. CHASE – SEE MECH FOR DUCT WORK
39. COMPOSITE ALUM WALL PANEL
40. PAINTED CAST IRON (AP CTG) METAL DOWNSPOUT
41. LIGHT MOUNTED TO STRUCTURE
42. NOT USED
43. REFRIGERANT LINE ENCLOSURE– SEE MECHANICAL FOR REFRIGERANT LINES
44. DOOR OPERATOR PUSH BUTTON



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

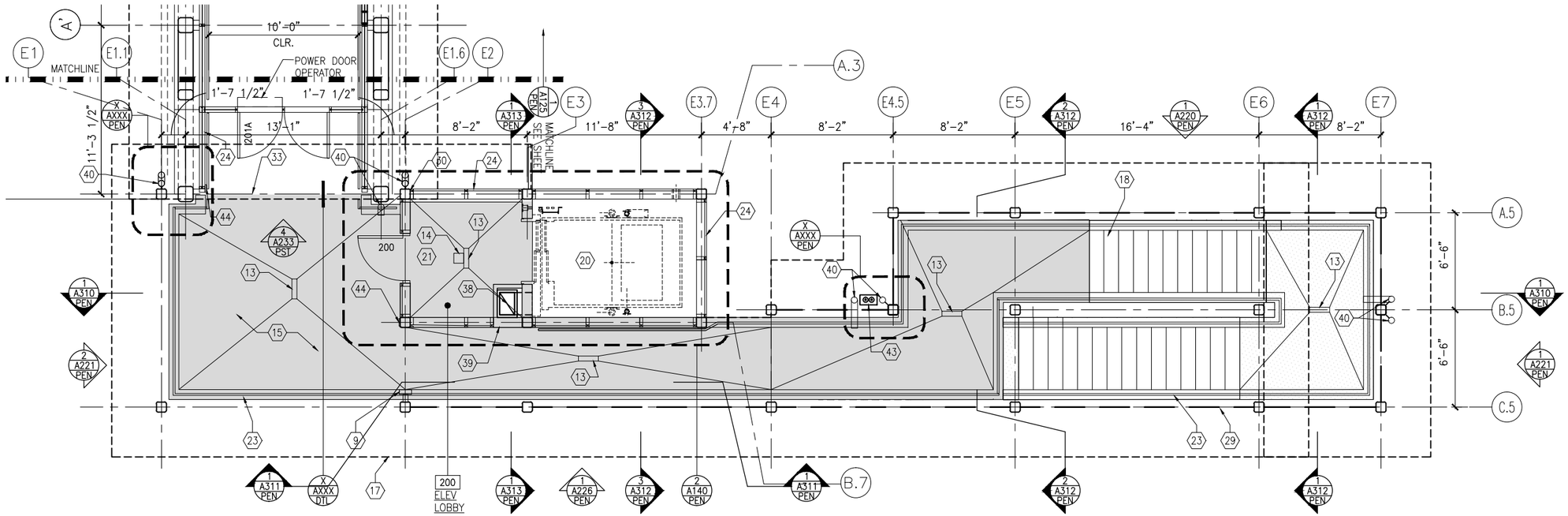
CIVIL - VOLUME 11D
PENN STATION
VC INTERMEDIATE LEVEL PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-121

SHEET 72 OF 394

Jan. 18 2016 12:44 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-PLN-121.dwg By: v-mccarrtp

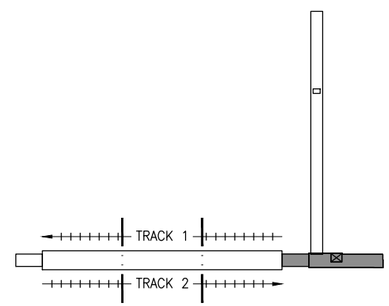


1 VC BRIDGE LEVEL PLAN

SCALE:1/8"=1'-0"

0 2 4 8

SCALE



KEYPLAN

SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. CONCRETE HOUSEKEEPING PAD
2. RAINWATER LEADER – SEE PLUMB
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE
7. CONDENSING UNIT – SEE MECH
8. TRANSFORMER – SEE ELEC
9. EMERGENCY CALL BOX
10. COMMUNICATION CABINET
11. ELECTRICAL CABINET
12. CMU WALL
13. AREA DRAIN
14. SNOW MELT SYSTEM
15. PRCST CONC WALKWAY
16. CONCRETE PLATFORM
17. CANOPY ABOVE
18. PRCST CONC STAIR – SEE STRUCT
19. PRCST CONC WALL PANEL–SEE STRUCT
20. ELEVATOR
21. ELEVATOR LOBBY
22. ELEVATOR MACHINE ROOM
23. GUARD RAIL
24. ALUM & GLASS FRAMING SYSTEM
25. VARIABLE MESSAGE SIGN
26. METAL SOFFIT AND FASCIA
27. GUARD RAIL
28. SUMP PIT
29. ARCHITECTURAL WOVEN MESH
30. STEEL COLUMN – SEE STRUCTURAL
31. STEEL BEAM – SEE STRUCTURAL
32. CONNECTION WALL HYDRANT
33. EXPANSION JOINT
34. EXISTING CRASH BARRIER
35. CRASH BARRIER/GUARD RAIL
36. EXISTING BARRIER / SIDEWALK
37. ROOF BELOW – SEE ROOF PLAN
38. CHASE – SEE MECH FOR DUCT WORK
39. COMPOSITE ALUM WALL PANEL
40. PAINTED CAST IRON (AP CTG) METAL DOWNSPOUT
41. LIGHT MOUNTED TO STRUCTURE
42. NOT USED
43. REFRIGERANT LINE ENCLOSURE– SEE MECHANICAL FOR REFRIGERANT LINES
44. DOOR OPERATOR PUSH BUTTON

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

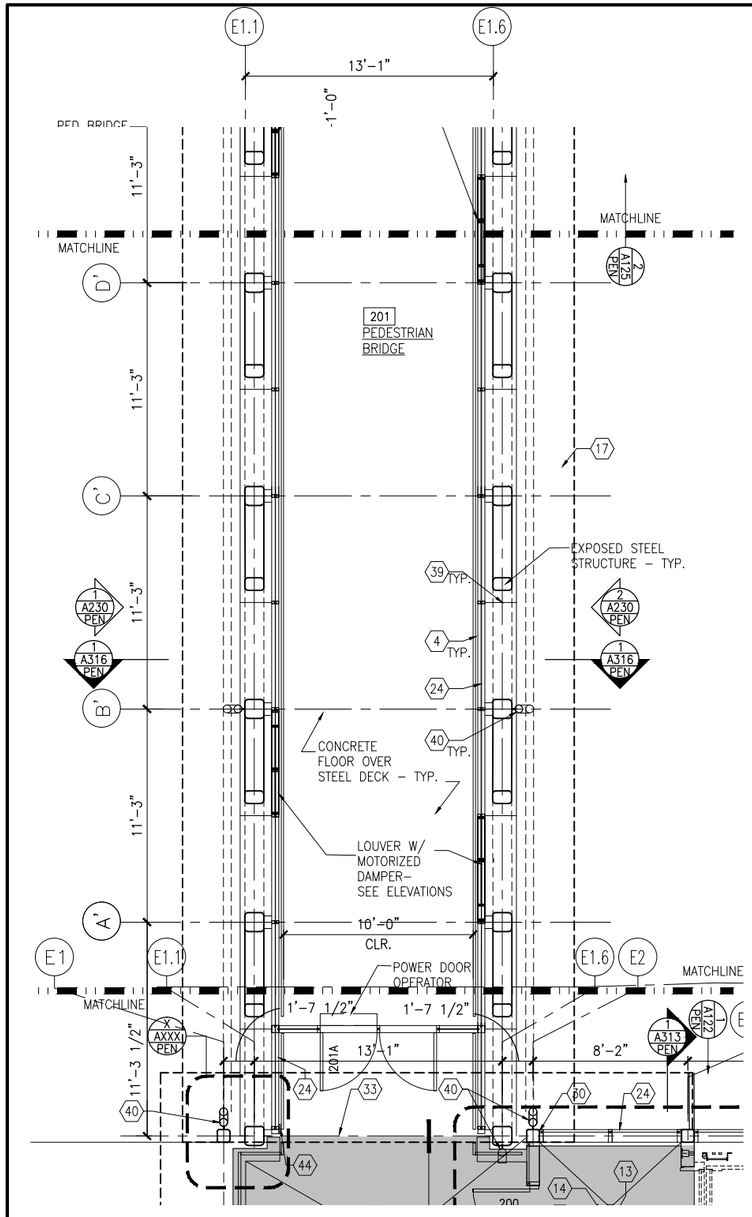
CIVIL - VOLUME 11D
PENN STATION
VC BRIDGE LEVEL PLAN

DISCIPLINE: ARCHITECTURE

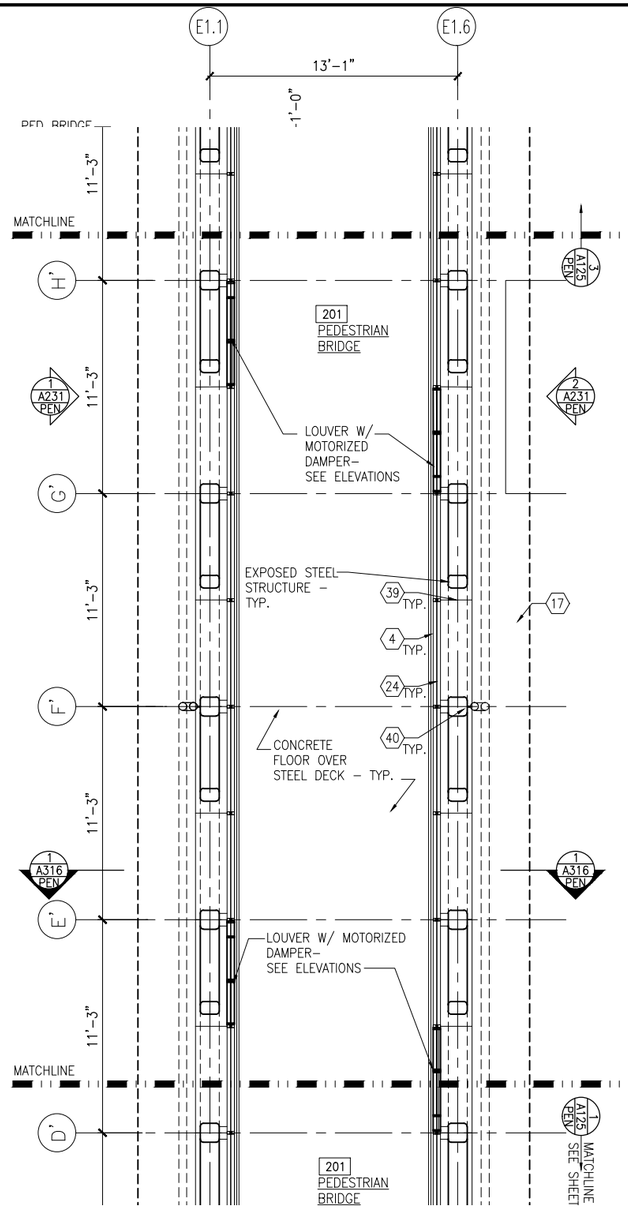
SHEET NAME: E4-PEN-ARC-PLN-122

SHEET 73 OF 394

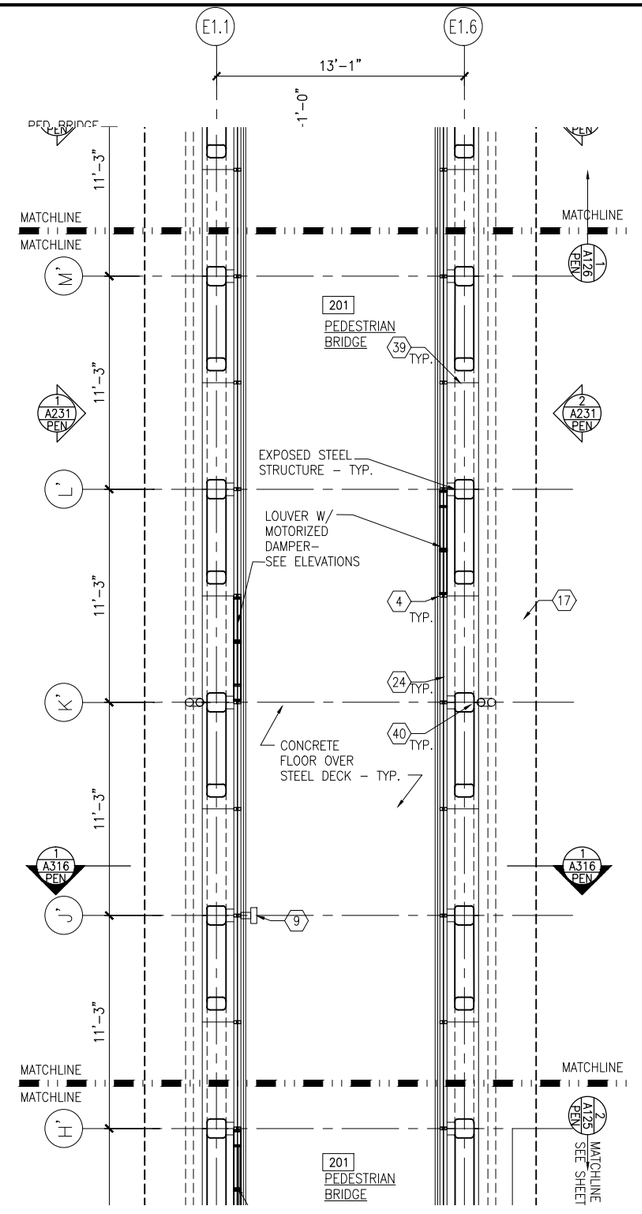
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1 PB BRIDGE LEVEL PLAN PART 1
SCALE:1/8"=1'-0"
0 2 4 8
SCALE



2 PB BRIDGE LEVEL PLAN PART 2
SCALE:1/8"=1'-0"
0 2 4 8
SCALE



3 PB BRIDGE LEVEL PLAN PART 3
SCALE:1/8"=1'-0"
0 2 4 8
SCALE

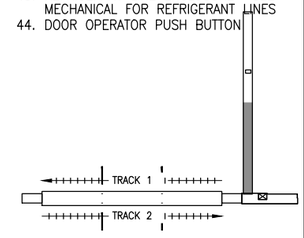
SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. CONCRETE HOUSEKEEPING PAD
2. RAINWATER LEADER – SEE PLUMB
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE
7. CONDENSING UNIT – SEE MECH
8. TRANSFORMER – SEE ELEC
9. EMERGENCY CALL BOX
10. COMMUNICATION CABINET
11. ELECTRICAL CABINET
12. CMU WALL
13. AREA DRAIN
14. SNOW MELT SYSTEM
15. PRCST CONC WALKWAY
16. CONCRETE PLATFORM
17. CANOPY ABOVE
18. PRCST CONC STAIR – SEE STRUCT
19. PRCST CONC WALL PANEL–SEE STRUCT
20. ELEVATOR
21. ELEVATOR LOBBY
22. ELEVATOR MACHINE ROOM
23. GUARD RAIL
24. ALUM & GLASS FRAMING SYSTEM
25. VARIABLE MESSAGE SIGN
26. METAL SOFFIT AND FASCIA
27. GUARD RAIL
28. SUMP PIT
29. ARCHITECTURAL WOVEN MESH
30. STEEL COLUMN – SEE STRUCTURAL
31. STEEL BEAM – SEE STRUCTURAL
32. CONNECTION WALL HYDRANT
33. EXPANSION JOINT
34. EXISTING CRASH BARRIER
35. CRASH BARRIER/GUARD RAIL
36. EXISTING BARRIER / SIDEWALK
37. ROOF BELOW – SEE ROOF PLAN
38. CHASE – SEE MECH FOR DUCT WORK
39. COMPOSITE ALUM WALL PANEL
40. PAINTED CAST IRON (AP CTG) METAL DOWNSPOUT
41. LIGHT MOUNTED TO STRUCTURE
42. NOT USED
43. REFRIGERANT LINE ENCLOSURE– SEE MECHANICAL FOR REFRIGERANT LINES
44. DOOR OPERATOR PUSH BUTTON



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

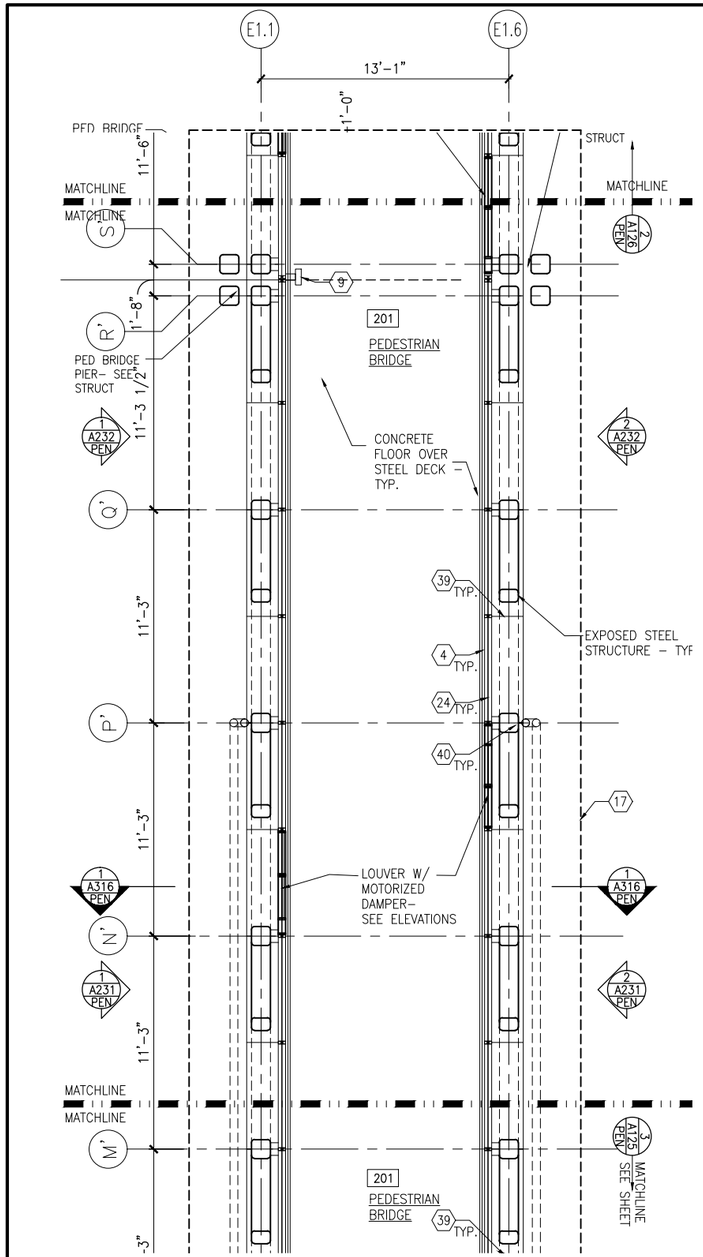
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE
BRIDGE LEVEL PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-125

SHEET 74 OF 394

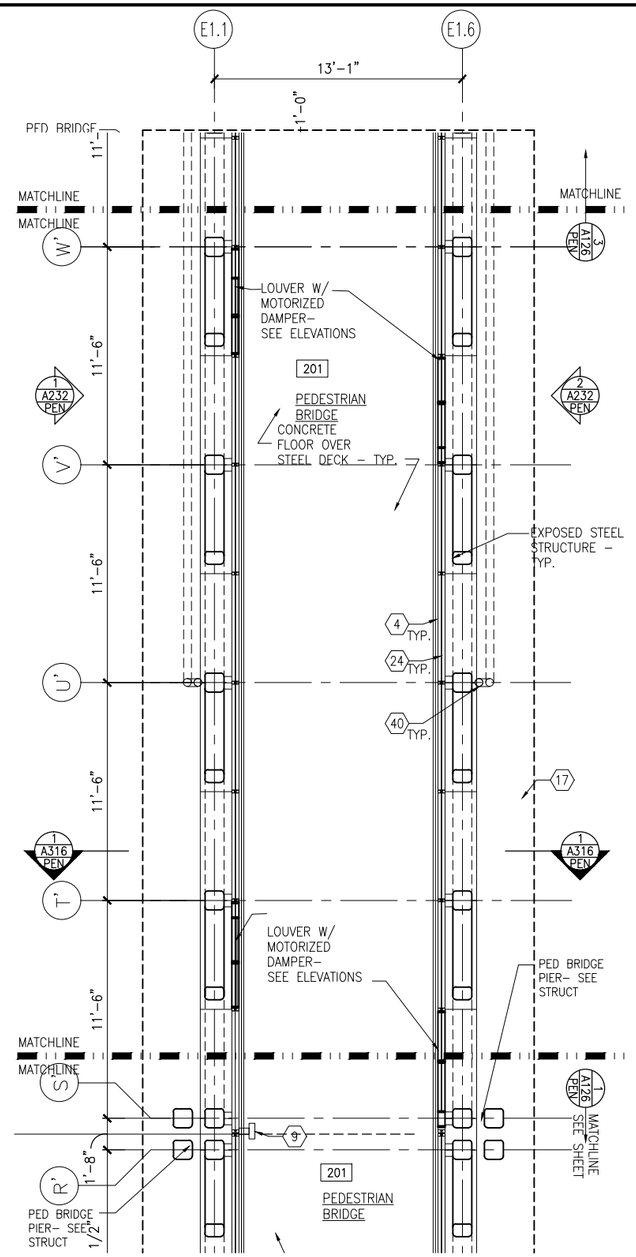
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1 PB BRIDGE LEVEL PLAN PART 4

SCALE:1/8"=1'-0"

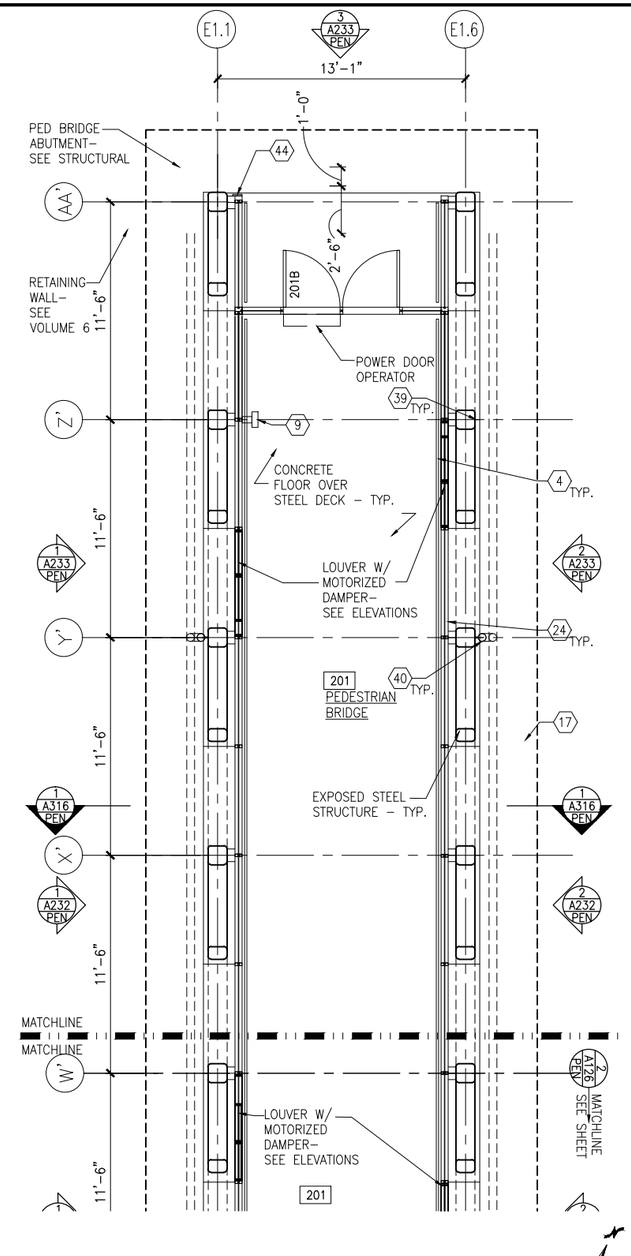
SCALE 0 2 4 8



2 PB BRIDGE LEVEL PLAN PART 5

SCALE:1/8"=1'-0"

SCALE 0 2 4 8



3 PB BRIDGE LEVEL PLAN PART 6

SCALE:1/8"=1'-0"

SCALE 0 2 4 8

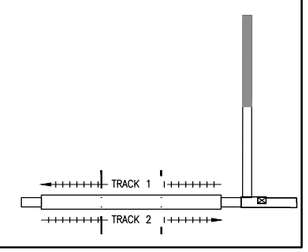
SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. CONCRETE HOUSEKEEPING PAD
2. RAINWATER LEADER – SEE PLUMB
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE
7. CONDENSING UNIT – SEE MECH
8. TRANSFORMER – SEE ELEC
9. EMERGENCY CALL BOX
10. COMMUNICATION CABINET
11. ELECTRICAL CABINET
12. CMU WALL
13. AREA DRAIN
14. SNOW MELT SYSTEM
15. PRCST CONC WALKWAY
16. CONCRETE PLATFORM
17. CANOPY ABOVE
18. PRCST CONC STAIR – SEE STRUCT
19. PRCST CONC WALL PANEL–SEE STRUCT
20. ELEVATOR
21. ELEVATOR LOBBY
22. ELEVATOR MACHINE ROOM
23. GUARD RAIL
24. ALUM & GLASS FRAMING SYSTEM
25. VARIABLE MESSAGE SIGN
26. METAL SOFFIT AND FASCIA
27. GUARD RAIL
28. SUMP PIT
29. ARCHITECTURAL WOVEN MESH
30. STEEL COLUMN – SEE STRUCTURAL
31. STEEL BEAM – SEE STRUCTURAL
32. CONNECTION WALL HYDRANT
33. EXPANSION JOINT
34. EXISTING CRASH BARRIER
35. CRASH BARRIER/GUARD RAIL
36. EXISTING BARRIER / SIDEWALK
37. ROOF BELOW – SEE ROOF PLAN
38. CHASE – SEE MECH FOR DUCT WORK
39. COMPOSITE ALUM WALL PANEL
40. PAINTED CAST IRON (AP CTG) METAL DOWNSPOUT
41. LIGHT MOUNTED TO STRUCTURE
42. NOT USED
43. REFRIGERANT LINE ENCLOSURE– SEE MECHANICAL FOR REFRIGERANT LINES
44. DOOR OPERATOR PUSH BUTTON



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE
BRIDGE LEVEL PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-126

SHEET 75 OF 394

Jan, 18 2016 12:46 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-PLN-126.dwg By: v-mccartlp

PAVEMENT NOTES	LEGEND
SLOPE TRANSITIONS ARE SHOWN FOR REFERENCE. BLEND/EASE TRANSITIONS TO DRAIN AND SO THAT NO ABRUPT CHANGE IN SLOPE IS VISIBLE ON PLATFORM SURFACE	– – – – – – SLOPES ——— CUT JOINTS

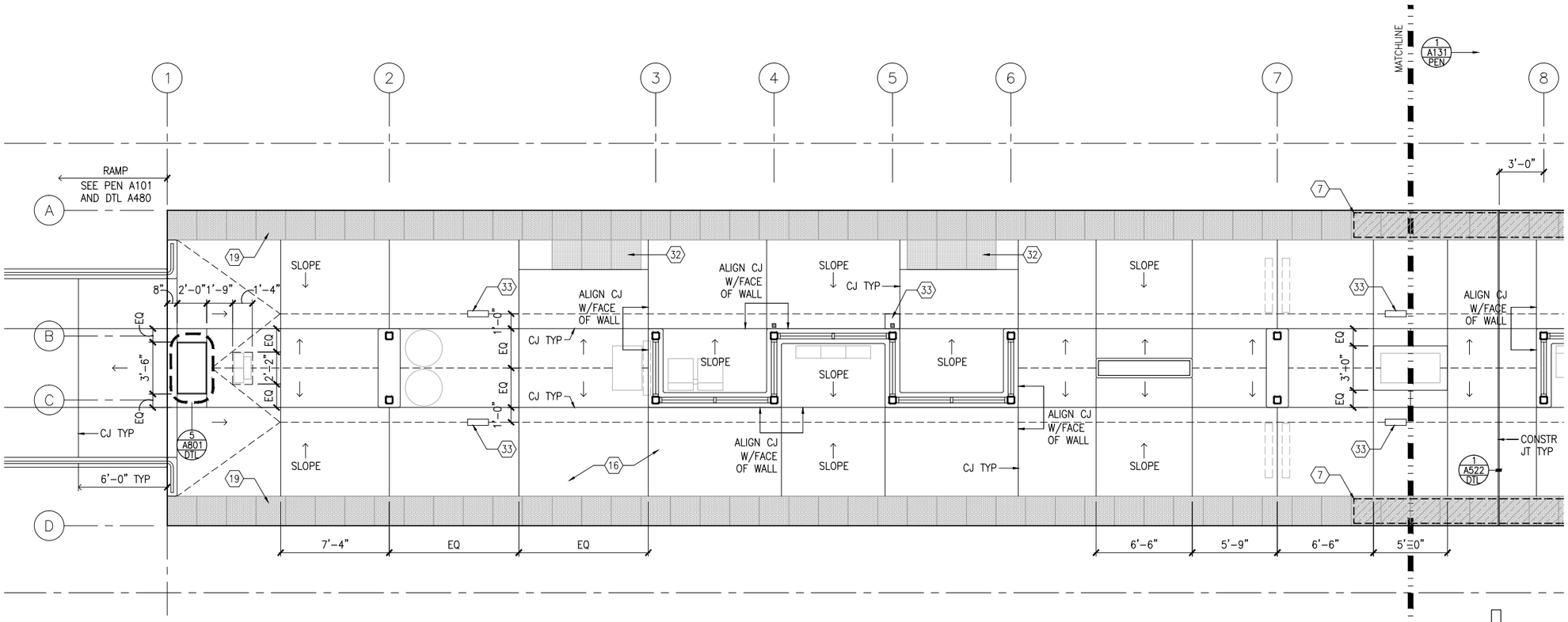
GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN–CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL



1 WEST PARTIAL PAVEMENT PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
WEST PARTIAL PAVEMENT PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-130

SHEET 76 OF 394

Jan, 18 2016 12:47 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-PLN-130.dwg By: v-mccarrtp

PAVEMENT NOTES	LEGEND
SLOPE TRANSITIONS ARE SHOWN FOR REFERENCE. BLEND/EASE TRANSITIONS TO DRAIN AND SO THAT NO ABRUPT CHANGE IN SLOPE IS VISIBLE ON PLATFORM SURFACE	– – – – – – SLOPES ——— CUT JOINTS

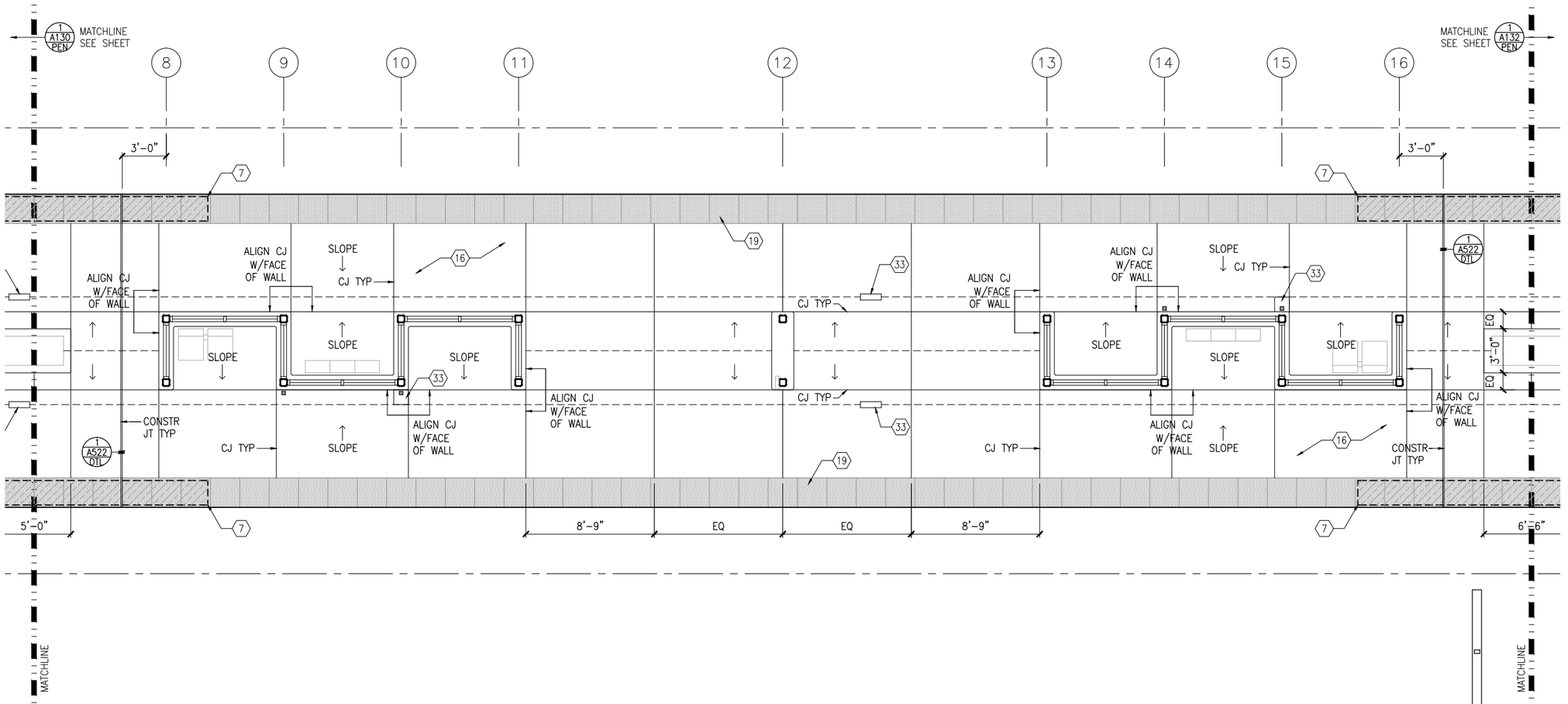
GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN–CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL



1 MIDDLE PARTIAL PAVEMENT PLAN
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE

KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
MIDDLE PARTIAL PAVEMENT PLAN

SHEET 77 OF 394

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-131

Jan, 18 2016 12:47 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-PLN-131.dwg By: v-mccarrtp

PAVEMENT NOTES	LEGEND
SLOPE TRANSITIONS ARE SHOWN FOR REFERENCE. BLEND/EASE TRANSITIONS TO DRAIN AND SO THAT NO ABRUPT CHANGE IN SLOPE IS VISIBLE ON PLATFORM SURFACE	– – – – – – SLOPES ———— CUT JOINTS

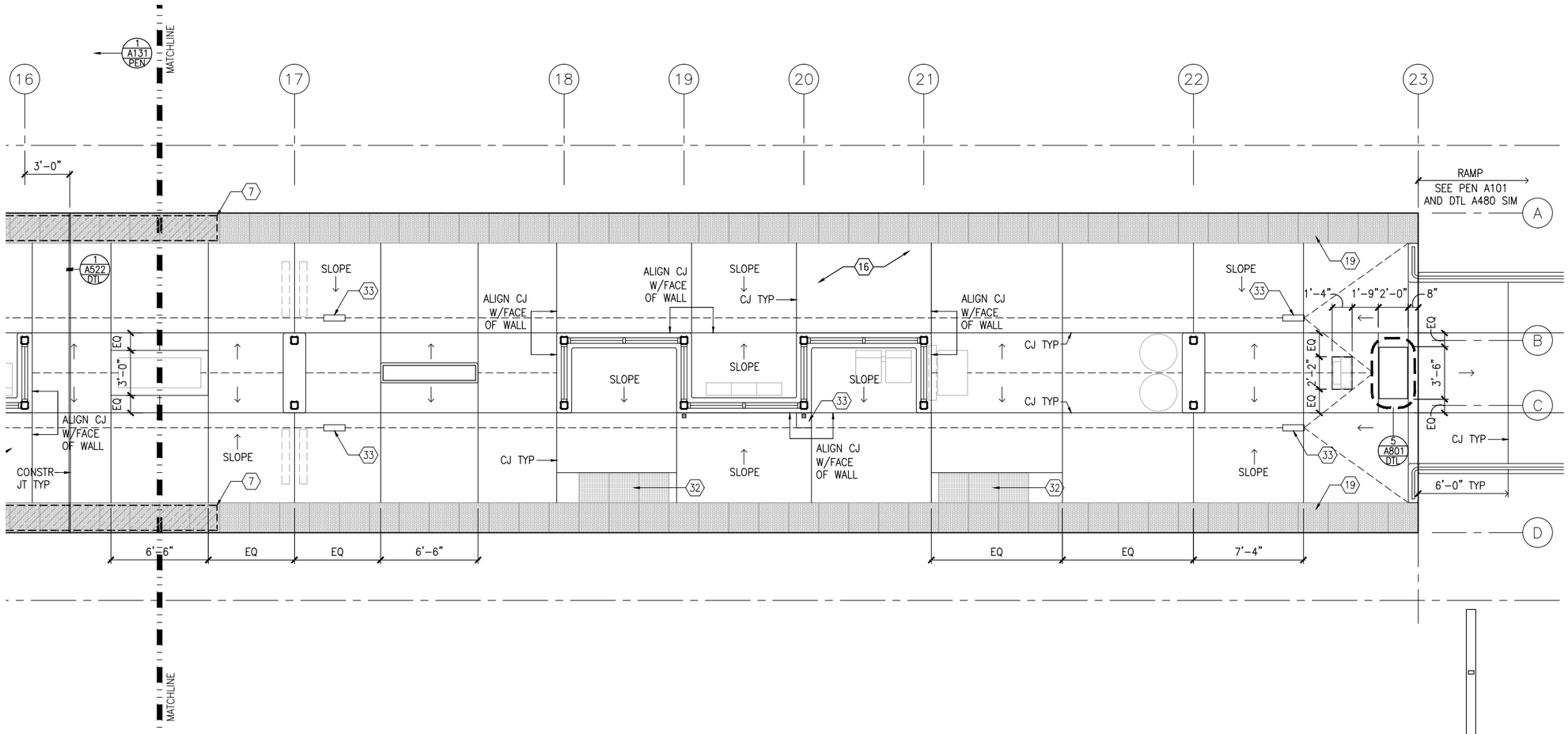
GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN–CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL



1 EAST PARTIAL PAVEMENT PLAN
SCALE: 1/8"=1'–0"

SCALE 0 2 4 8

KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

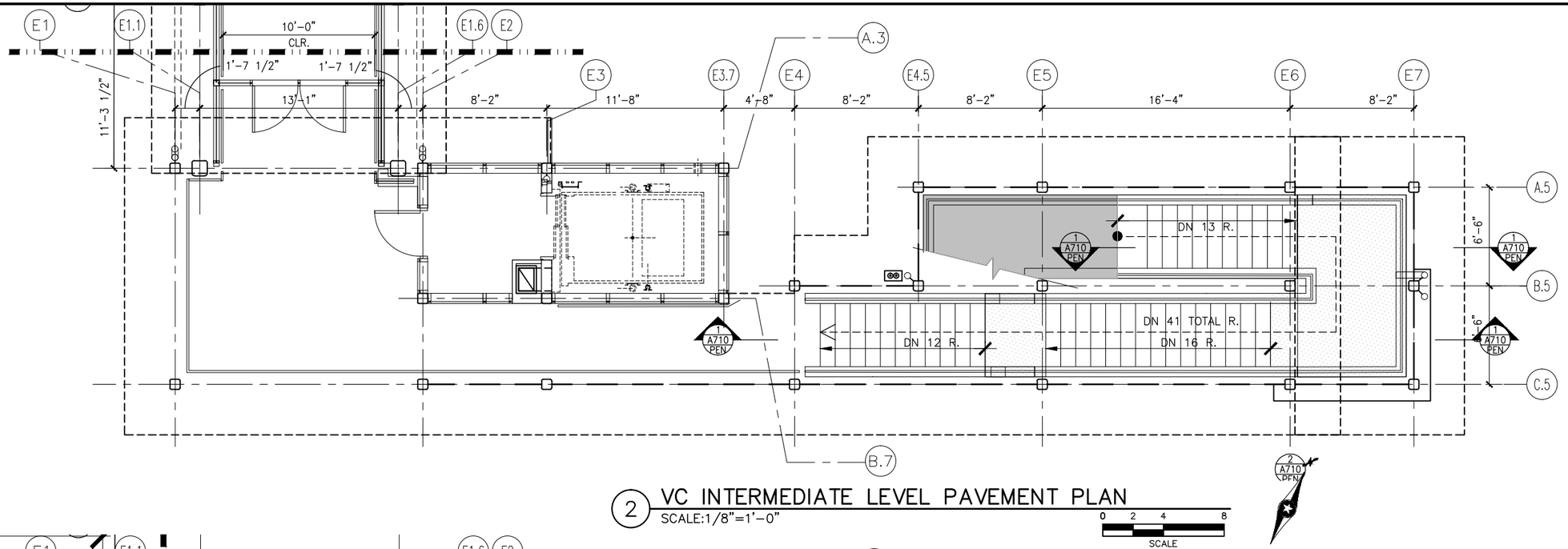
CIVIL - VOLUME 11D
PENN STATION
EAST PARTIAL PAVEMENT PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-132

SHEET 78 OF 394

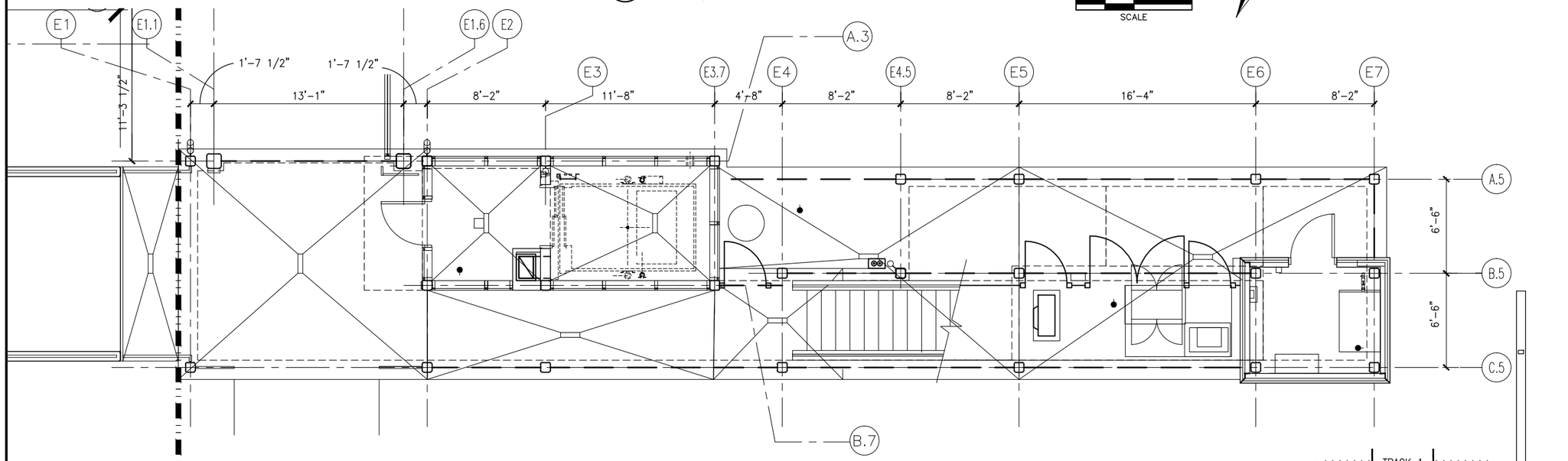
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2 VC INTERMEDIATE LEVEL PAVEMENT PLAN

SCALE:1/8"=1'-0"

0 2 4 8
SCALE



1 VC PLATFORM LEVEL PAVEMENT PLAN

SCALE:1/8"=1'-0"

0 2 4 8
SCALE

KEYPLAN

SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. CONCRETE HOUSEKEEPING PAD
2. RAINWATER LEADER – SEE PLUMB
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE
7. CONDENSING UNIT – SEE MECH
8. TRANSFORMER – SEE ELEC
9. EMERGENCY CALL BOX
10. COMMUNICATION CABINET
11. ELECTRICAL CABINET
12. CMU WALL
13. AREA DRAIN
14. SNOW MELT SYSTEM
15. PRCST CONC WALKWAY
16. CONCRETE PLATFORM
17. CANOPY ABOVE
18. PRCST CONC STAIR – SEE STRUCT
19. PRCST CONC WALL PANEL–SEE STRUCT
20. ELEVATOR
21. ELEVATOR LOBBY
22. ELEVATOR MACHINE ROOM
23. GUARD RAIL
24. ALUM & GLASS FRAMING SYSTEM
25. VARIABLE MESSAGE SIGN
26. METAL SOFFIT AND FASCIA
27. GUARD RAIL
28. SUMP PIT
29. ARCHITECTURAL WOVEN MESH
30. STEEL COLUMN – SEE STRUCTURAL
31. STEEL BEAM – SEE STRUCTURAL
32. CONNECTION WALL HYDRANT
33. EXPANSION JOINT
34. EXISTING CRASH BARRIER
35. CRASH BARRIER/GUARD RAIL
36. EXISTING BARRIER / SIDEWALK
37. ROOF BELOW – SEE ROOF PLAN
38. CHASE – SEE MECH FOR DUCT WORK
39. COMPOSITE ALUM WALL PANEL
40. PAINTED CAST IRON (AP CTG) METAL DOWNSPOUT
41. LIGHT MOUNTED TO STRUCTURE
42. NOT USED
43. REFRIGERANT LINE ENCLOSURE– SEE MECHANICAL FOR REFRIGERANT LINES
44. DOOR OPERATOR PUSH BUTTON

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

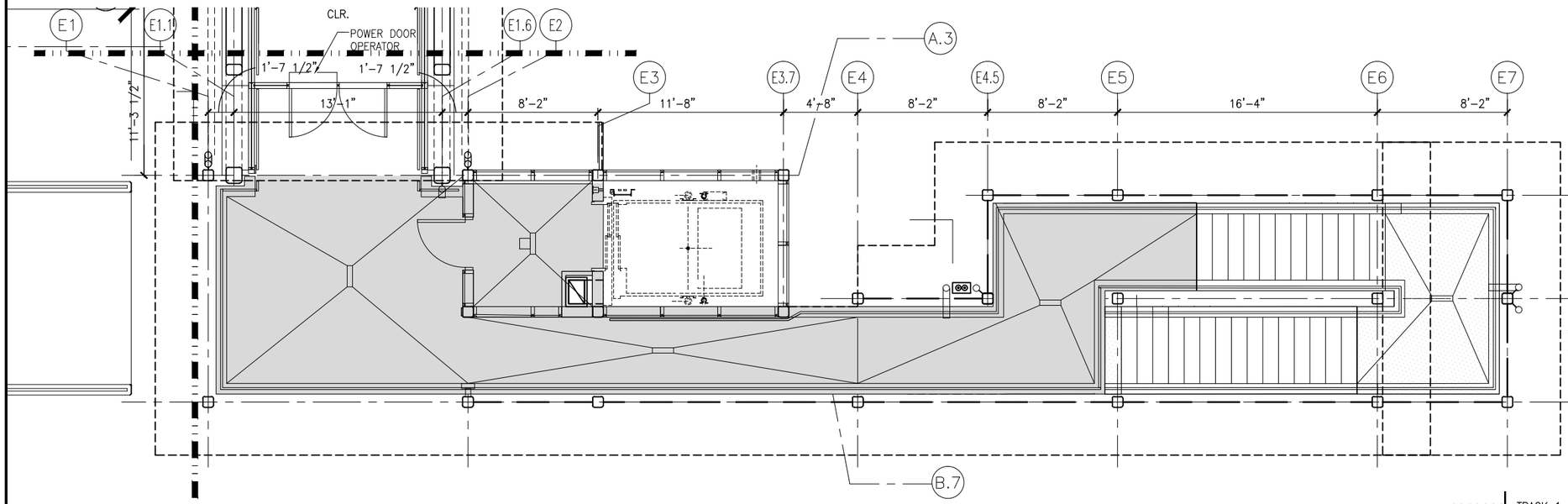
CIVIL - VOLUME 11D
PENN STATION
VC PAVEMENT PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-135

SHEET 79 OF 394

Jan, 18 2016 12:48 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-PLN-135.dwg By: v-mccartp



1 VC BRIDGE LEVEL PAVEMENT PLAN
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

KEYPLAN

SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. CONCRETE HOUSEKEEPING PAD
2. RAINWATER LEADER – SEE PLUMB
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE
7. CONDENSING UNIT – SEE MECH
8. TRANSFORMER – SEE ELEC
9. EMERGENCY CALL BOX
10. COMMUNICATION CABINET
11. ELECTRICAL CABINET
12. CMU WALL
13. AREA DRAIN
14. SNOW MELT SYSTEM
15. PRCST CONC WALKWAY
16. CONCRETE PLATFORM
17. CANOPY ABOVE
18. PRCST CONC STAIR – SEE STRUCT
19. PRCST CONC WALL PANEL–SEE STRUCT
20. ELEVATOR
21. ELEVATOR LOBBY
22. ELEVATOR MACHINE ROOM
23. GUARD RAIL
24. ALUM & GLASS FRAMING SYSTEM
25. VARIABLE MESSAGE SIGN
26. METAL SOFFIT AND FASCIA
27. GUARD RAIL
28. SUMP PIT
29. ARCHITECTURAL WOVEN MESH
30. STEEL COLUMN – SEE STRUCTURAL
31. STEEL BEAM – SEE STRUCTURAL
32. CONNECTION WALL HYDRANT
33. EXPANSION JOINT
34. EXISTING CRASH BARRIER
35. CRASH BARRIER/GUARD RAIL
36. EXISTING BARRIER / SIDEWALK
37. ROOF BELOW – SEE ROOF PLAN
38. CHASE – SEE MECH FOR DUCT WORK
39. COMPOSITE ALUM WALL PANEL
40. PAINTED CAST IRON (AP CTG) METAL DOWNSPOUT
41. LIGHT MOUNTED TO STRUCTURE
42. NOT USED
43. REFRIGERANT LINE ENCLOSURE– SEE MECHANICAL FOR REFRIGERANT LINES
44. DOOR OPERATOR PUSH BUTTON

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

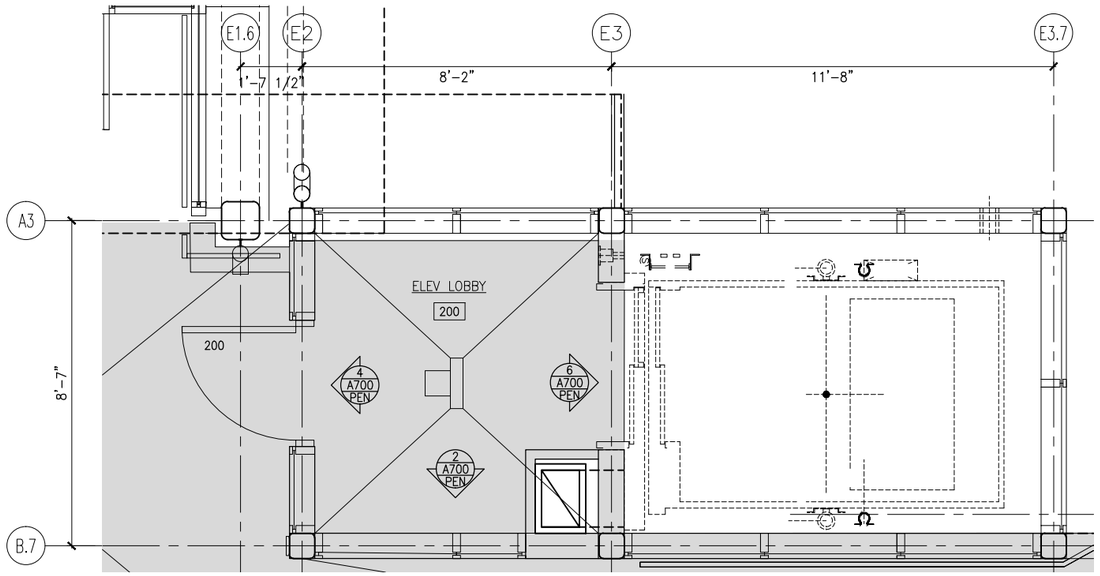
CIVIL - VOLUME 11D
PENN STATION
VC PAVEMENT PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-136

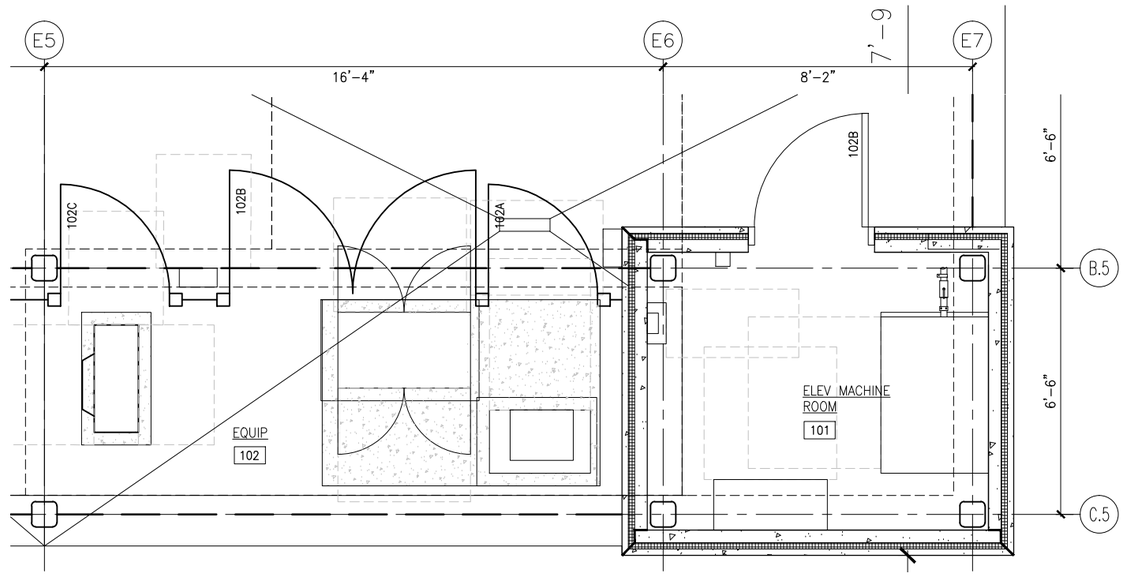
SHEET 80 OF 394

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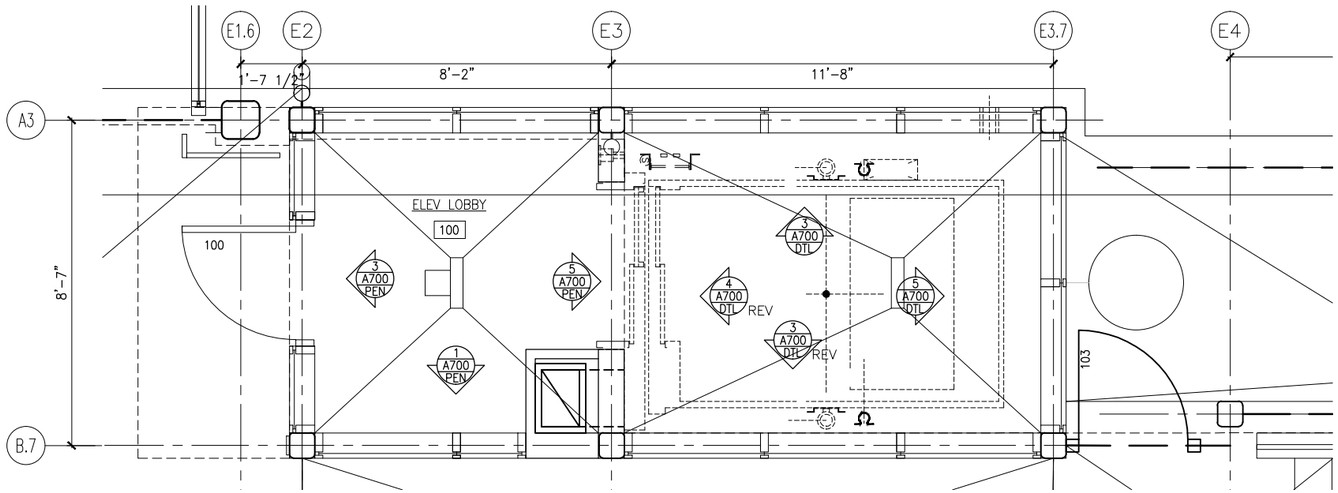
2 VC BRIDGE LEVEL ENLARGED PLAN
SCALE:1/4"=1'-0"

SCALE 0 1 2 4



3 VC PLATFORM LEVEL ENLARGED PLAN
SCALE:1/4"=1'-0"

SCALE 0 1 2 4



1 VC PLATFORM LEVEL ENLARGED PLAN
SCALE:1/4"=1'-0"

SCALE 0 1 2 4

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

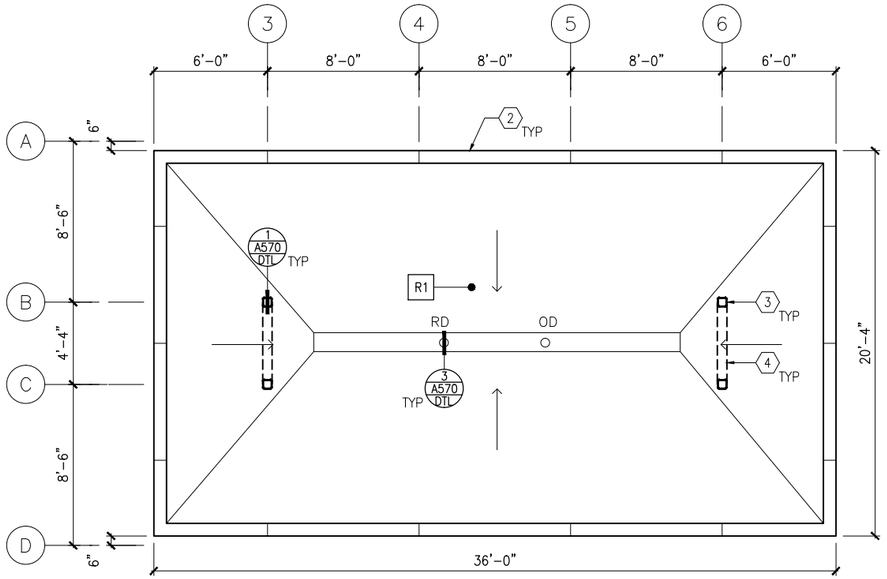
CIVIL - VOLUME 11D
PENN STATION
VC ENLARGED PLANS

DISCIPLINE: ARCHITECTURE

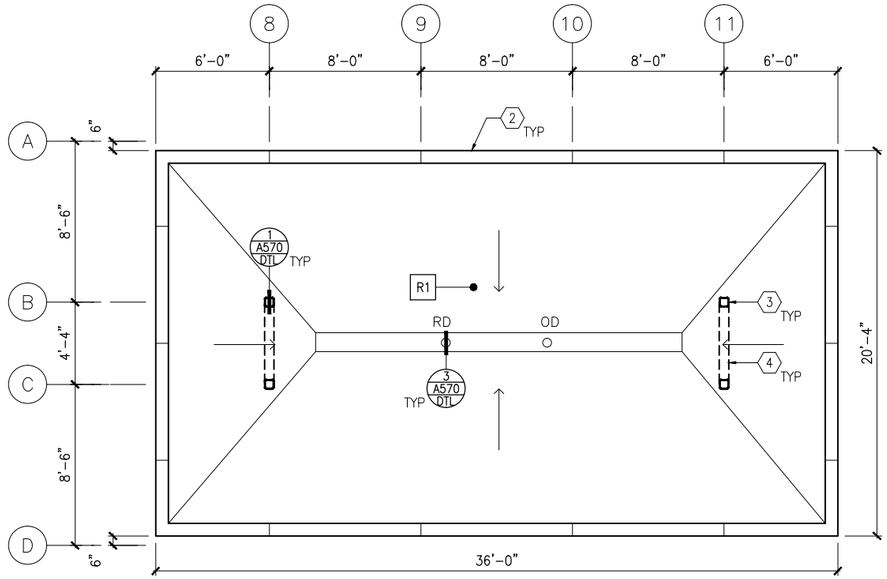
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SHEET 81 OF 394

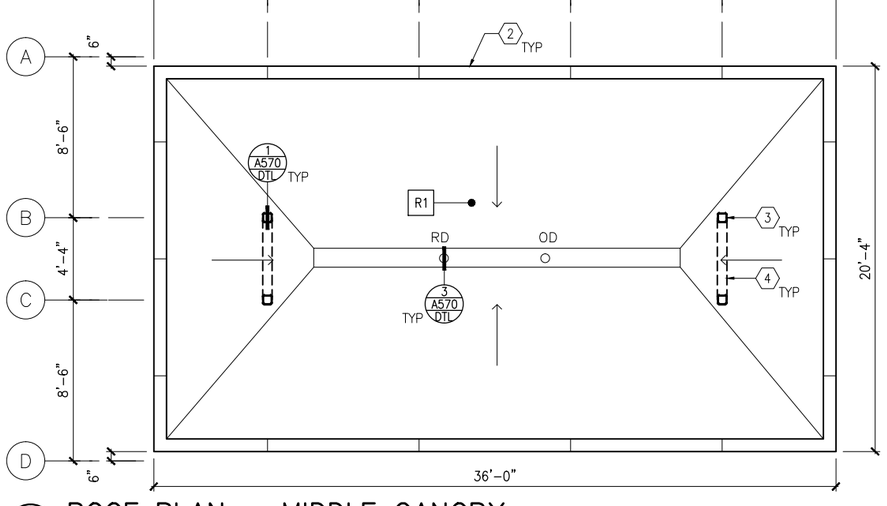
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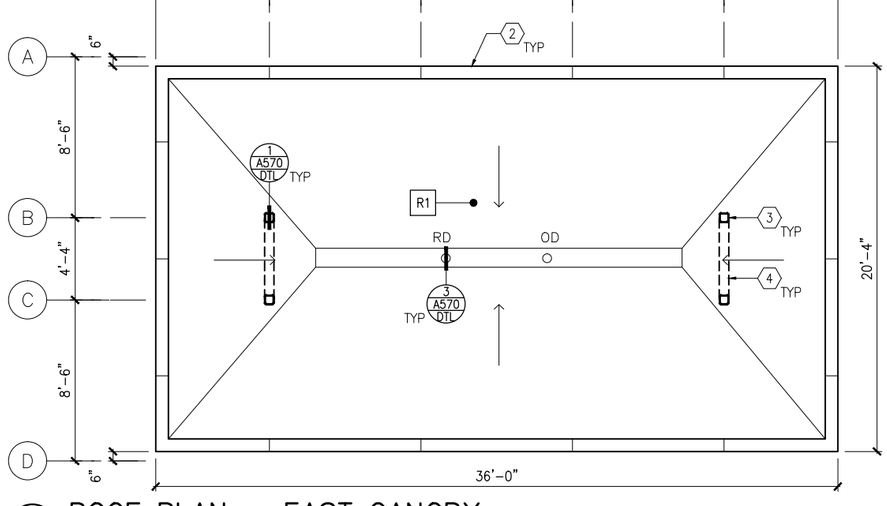
1 ROOF PLAN – WEST CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



2 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



3 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



4 ROOF PLAN – EAST CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. ROOF SLOPE IS 1/4" PER FT UNO
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ALUMINUM STOREFRONT AND TRANSLUCENT GLAZING SYSTEM
2. ALUMINUM COMPOSITE PANEL COPING
3. STEEL COLUMN – SEE STRUCTURAL
4. STEEL BEAM ABOVE – SEE STRUCTURAL
5. PREFINISHED METAL SCUPPER
6. PREFINISHED METAL GUTTER, SLOPE TO DOWNSPOUTS
7. ROOF BASE FLASHING
8. SUMP
9. CONCRETE SPLASH BLOCK
10. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
11. ROOF EXPANSION JOINT
12. BUILDING EXPANSION JOINT
13. VENT THROUGH ROOF – SEE PLUMB
14. INTEGRAL ROOF GUTTER – SLOPE TO DOWNSPOUTS BELOW
15. MECHANICAL EQUIP – SEE MECH

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- STEEL COLUMN
- OVERHEAD SUPPORT
- RD OD ROOF DRAIN AND OVERFLOW ROOF DRAIN
- R1 ROOF ASSEMBLY TYPE 1 BALLASTED EPDM
- R2 ROOF ASSEMBLY TYPE 2 PRECAST PAVER OVER EPDM
- R3 ROOF ASSEMBLY TYPE 3 SAME AS TYPE 2 WITH R_ INSULATION

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

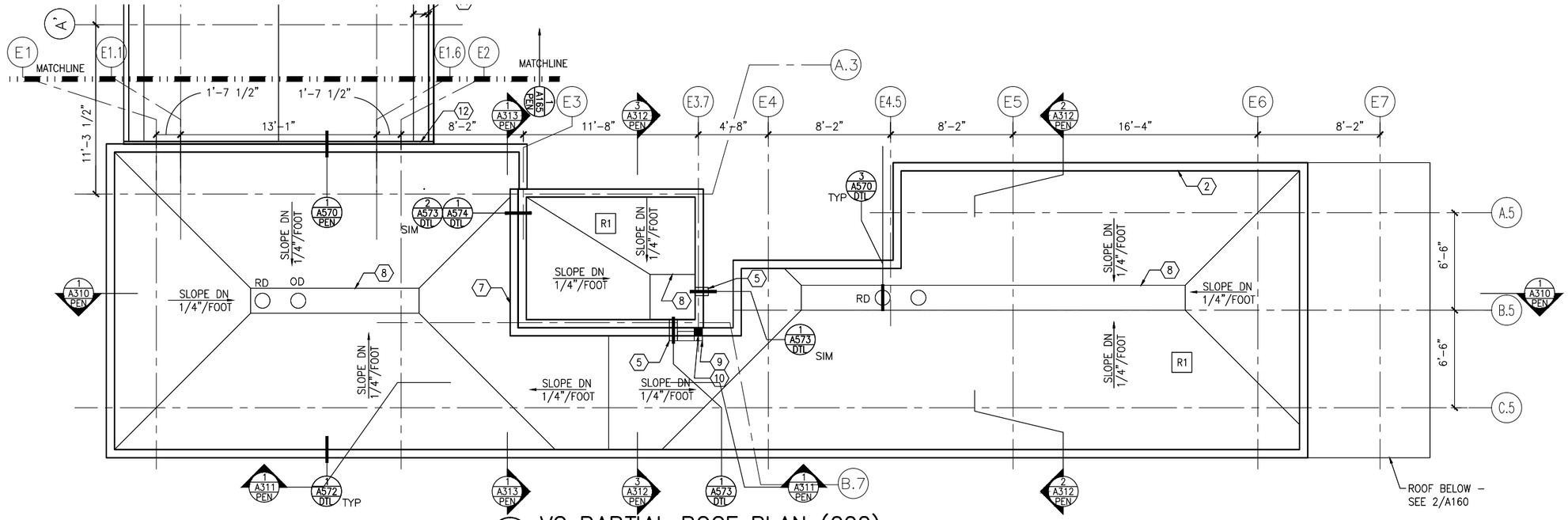
CIVIL - VOLUME 11D
PENN STATION
ROOF PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-150

SHEET 82 OF 394

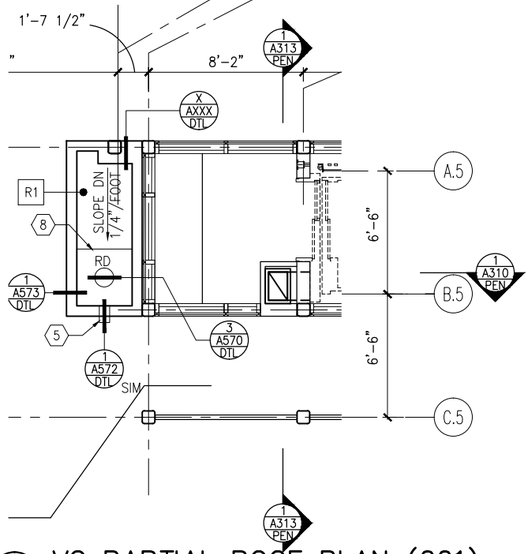
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1 VC PARTIAL ROOF PLAN (002)

SCALE:1/8"=1'-0"

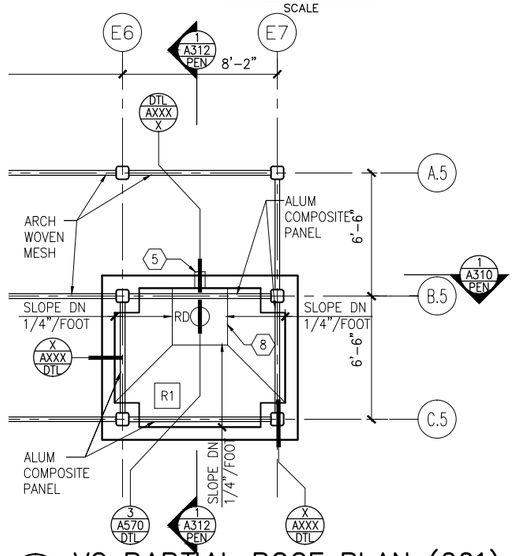
SCALE 0 2 4 8



4 VC PARTIAL ROOF PLAN (001)

SCALE:1/8"=1'-0"

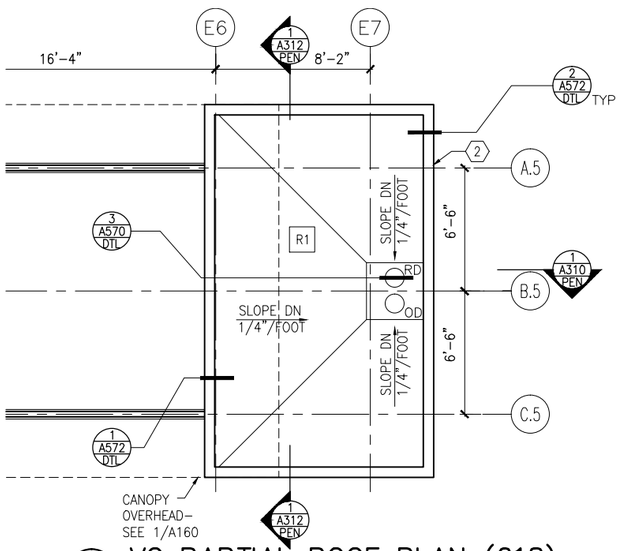
SCALE 0 2 4 8



3 VC PARTIAL ROOF PLAN (001)

SCALE:1/8"=1'-0"

SCALE 0 2 4 8



2 VC PARTIAL ROOF PLAN (018)

SCALE:1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. ROOF SLOPE IS 1/4" PER FT UNO
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ALUMINUM STOREFRONT AND TRANSLUCENT GLAZING SYSTEM
2. ALUMINUM COMPOSITE PANEL COPING
3. STEEL COLUMN – SEE STRUCTURAL
4. STEEL BEAM ABOVE – SEE STRUCTURAL
5. PREFINISHED METAL SCUPPER
6. PREFINISHED METAL GUTTER, SLOPE TO DOWNSPOUTS
7. ROOF BASE FLASHING
8. SUMP
9. CONCRETE SPLASH BLOCK
10. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
11. ROOF EXPANSION JOINT
12. BUILDING EXPANSION JOINT
13. VENT THROUGH ROOF – SEE PLUMB
14. INTEGRAL ROOF GUTTER – SLOPE TO DOWNSPOUTS BELOW
15. MECHANICAL EQUIP – SEE MECH

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- STEEL COLUMN
- OVERHEAD SUPPORT
- RD OD — ROOF DRAIN AND OVERFLOW ROOF DRAIN
- R1 — ROOF ASSEMBLY TYPE 1 BALLASTED EPDM
- R2 — ROOF ASSEMBLY TYPE 2 PRECAST PAVER OVER EPDM
- R3 — ROOF ASSEMBLY TYPE 3 SAME AS TYPE 2 WITH R_ INSULATION

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

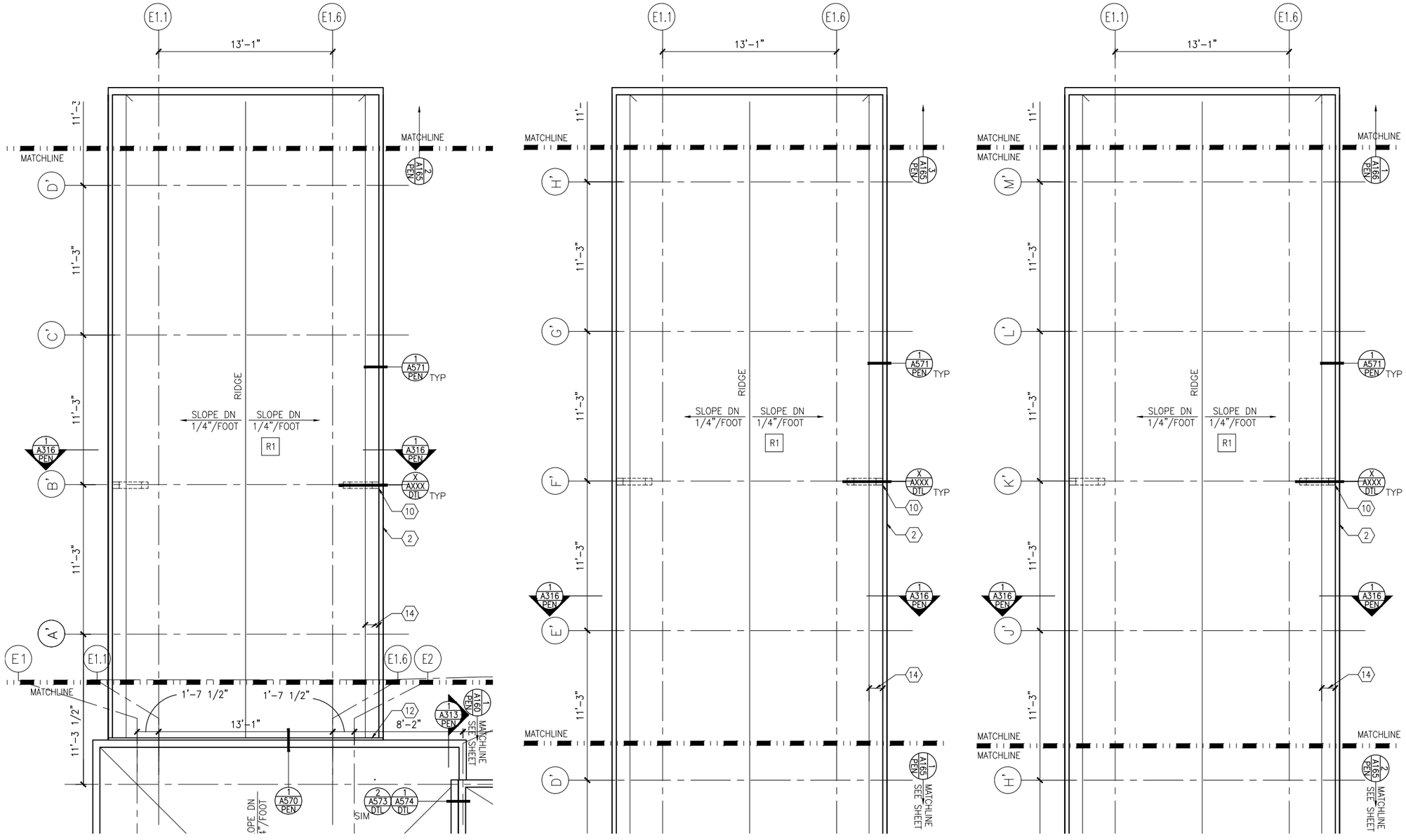
CIVIL - VOLUME 11D
PENN STATION
VC ROOF PLAN

SHEET 83 OF 394

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-160

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1 PED BRIDGE ROOF PLAN PART 1
SCALE:1/8"=1'-0"

2 PED BRIDGE ROOF PLAN PART 2
SCALE:1/8"=1'-0"

3 PED BRIDGE ROOF PLAN PART 3
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. ROOF SLOPE IS 1/4" PER FT UNO
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ALUMINUM STOREFRONT AND TRANSLUCENT GLAZING SYSTEM
2. ALUMINUM COMPOSITE PANEL COPING
3. STEEL COLUMN – SEE STRUCTURAL
4. STEEL BEAM ABOVE – SEE STRUCTURAL
5. PREFINISHED METAL SCUPPER
6. PREFINISHED METAL GUTTER, SLOPE TO DOWNSPOUTS
7. ROOF BASE FLASHING
8. SUMP
9. CONCRETE SPLASH BLOCK
10. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
11. ROOF EXPANSION JOINT
12. BUILDING EXPANSION JOINT
13. VENT THROUGH ROOF – SEE PLUMB
14. INTEGRAL ROOF GUTTER – SLOPE TO DOWNSPOUTS BELOW
15. MECHANICAL EQUIP – SEE MECH

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- STEEL COLUMN
- OVERHEAD SUPPORT
- RD OD — ROOF DRAIN AND OVERFLOW ROOF DRAIN
- R1 — ROOF ASSEMBLY TYPE 1 BALLASTED EPDM
- R2 — ROOF ASSEMBLY TYPE 2 PRECAST PAVER OVER EPDM
- R3 — ROOF ASSEMBLY TYPE 3 SAME AS TYPE 2 WITH R_ INSULATION

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

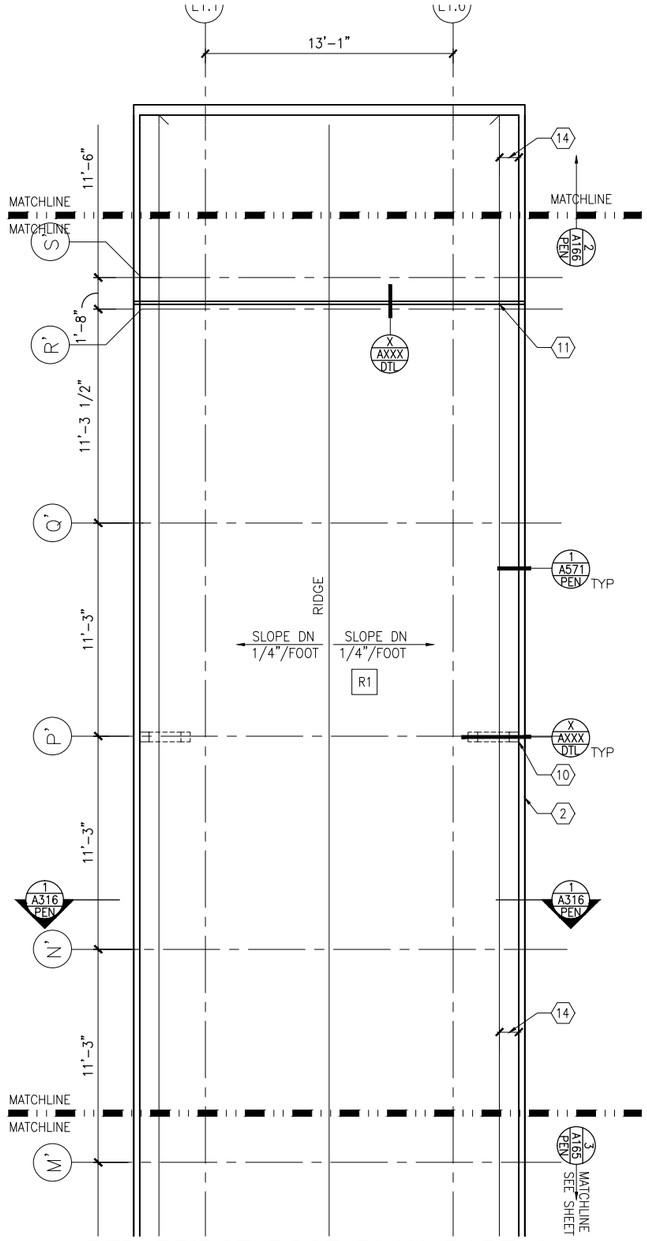
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE
ROOF PLAN

DISCIPLINE: ARCHITECTURE

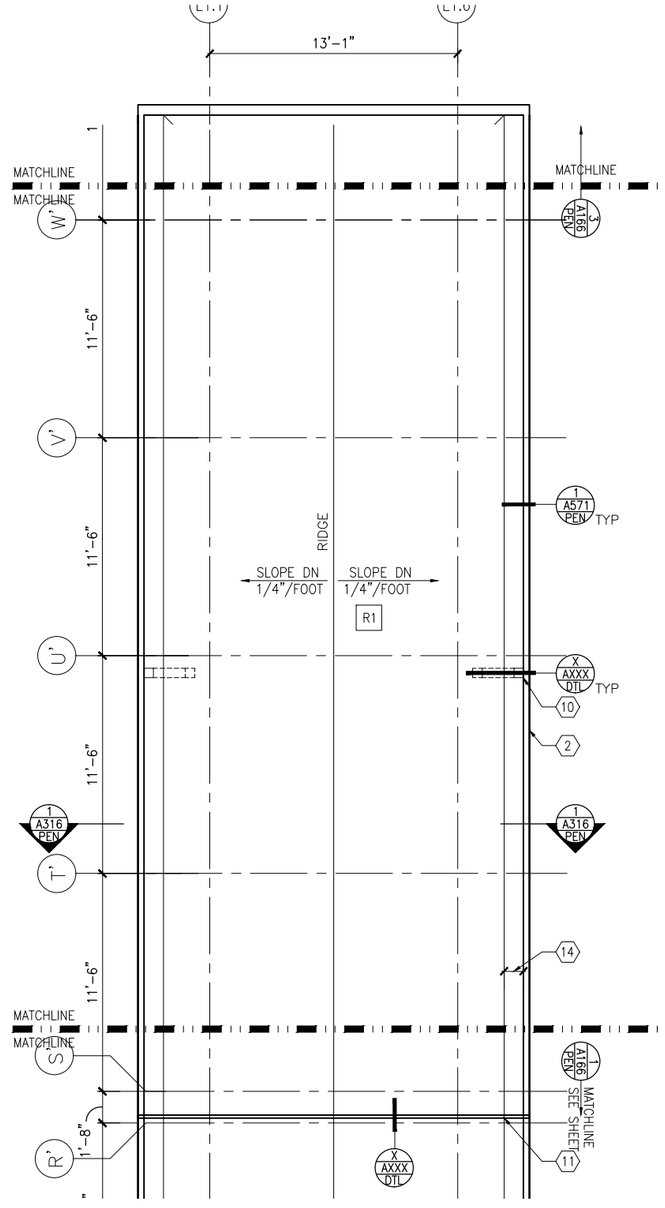
SHEET NAME: E4-PEN-ARC-PLN-165

SHEET 84 OF 394

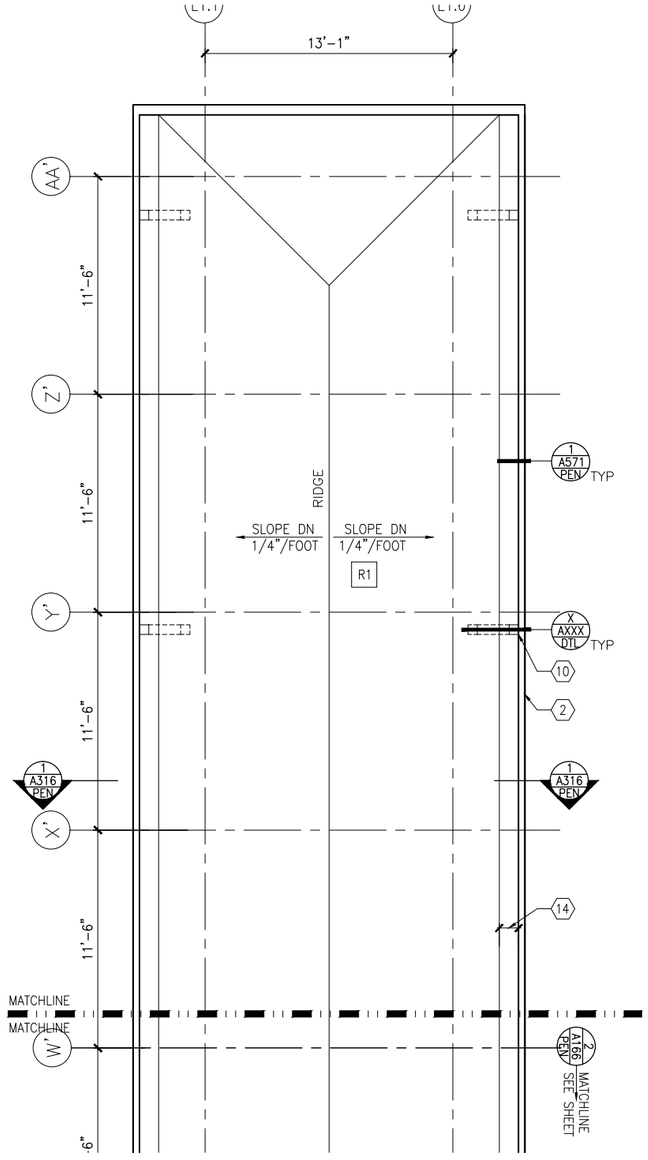
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1 PED BRIDGE ROOF PLAN PART 4
SCALE:1/8"=1'-0"
0 2 4 8
SCALE



2 PED BRIDGE ROOF PLAN PART 5
SCALE:1/8"=1'-0"
0 2 4 8
SCALE



3 PED BRIDGE ROOF PLAN PART 6
SCALE:1/8"=1'-0"
0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. ROOF SLOPE IS 1/4" PER FT UNO
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ALUMINUM STOREFRONT AND TRANSLUCENT GLAZING SYSTEM
2. ALUMINUM COMPOSITE PANEL COPING
3. STEEL COLUMN – SEE STRUCTURAL
4. STEEL BEAM ABOVE – SEE STRUCTURAL
5. PREFINISHED METAL SCUPPER
6. PREFINISHED METAL GUTTER, SLOPE TO DOWNSPOUTS
7. ROOF BASE FLASHING
8. SUMP
9. CONCRETE SPLASH BLOCK
10. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
11. ROOF EXPANSION JOINT
12. BUILDING EXPANSION JOINT
13. VENT THROUGH ROOF – SEE PLUMB
14. INTEGRAL ROOF GUTTER – SLOPE TO DOWNSPOUTS BELOW
15. MECHANICAL EQUIP – SEE MECH

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- STEEL COLUMN
- OVERHEAD SUPPORT
- RD OD — ROOF DRAIN AND OVERFLOW ROOF DRAIN
- R1 — ROOF ASSEMBLY TYPE 1 BALLASTED EPDM
- R2 — ROOF ASSEMBLY TYPE 2 PRECAST PAVER OVER EPDM
- R3 — ROOF ASSEMBLY TYPE 3 SAME AS TYPE 2 WITH R_ INSULATION

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

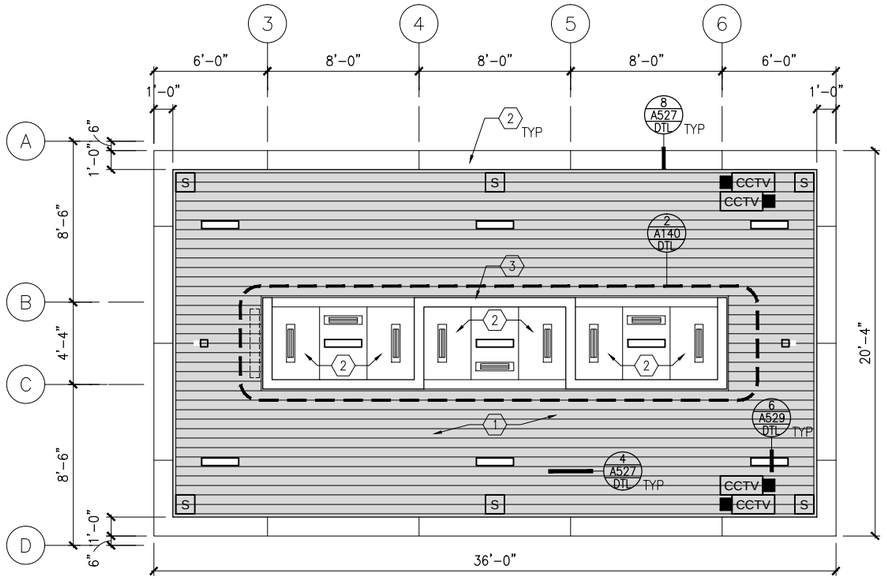
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE
ROOF PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-PLN-166

SHEET 85 OF 394

Jan, 18 2016 12:52 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-PLN-166.dwg By: v-mccarrtp

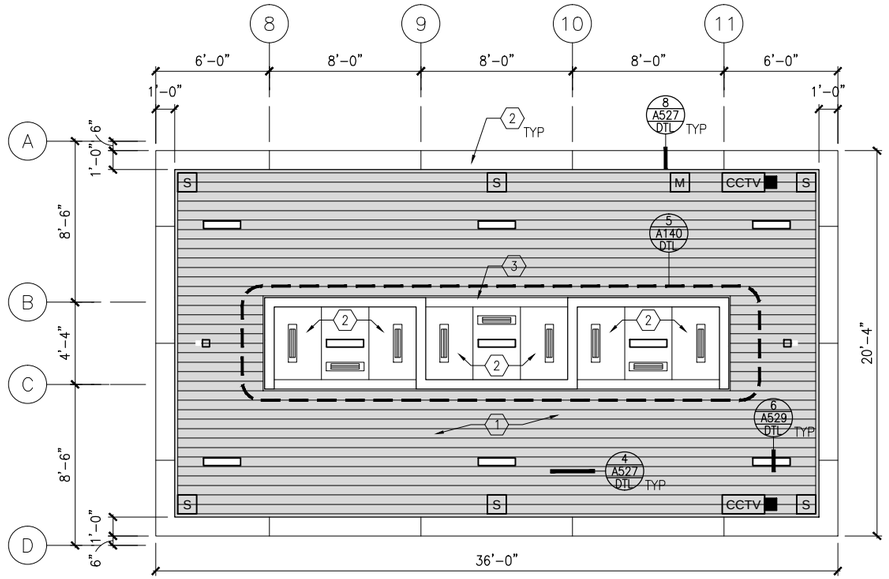


1 REFLECTED CEILING PLAN – WEST CANOPY

SCALE: 1/8"=1'–0"

0 2 4 8

SCALE

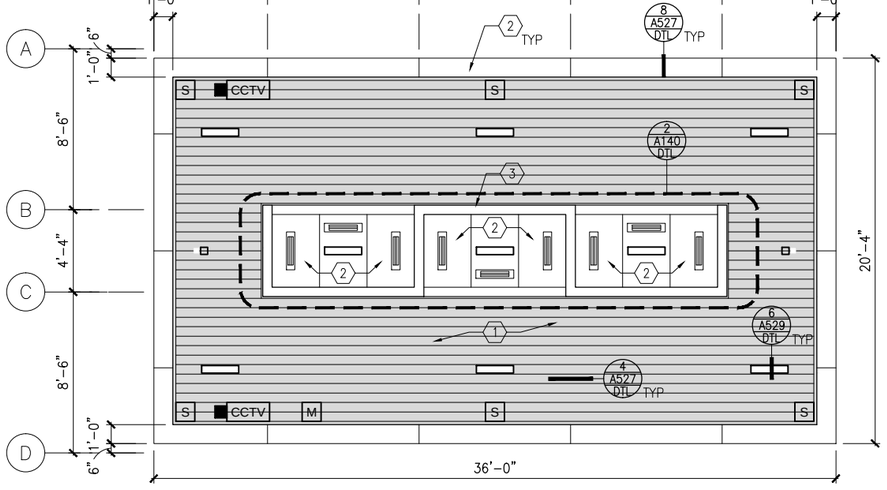


2 REFLECTED CEILING PLAN – MIDDLE CANOPY

SCALE: 1/8"=1'–0"

0 2 4 8

SCALE

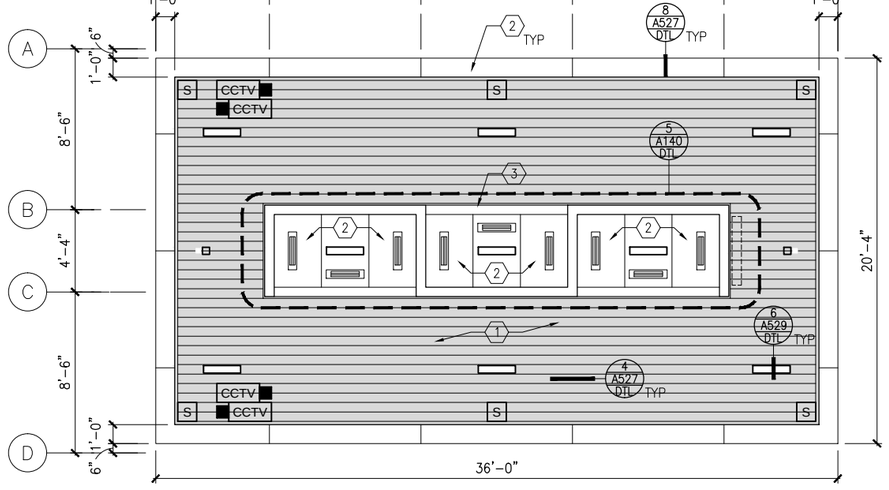


3 REFLECTED CEILING PLAN – MIDDLE CANOPY

SCALE: 1/8"=1'–0"

0 2 4 8

SCALE



4 REFLECTED CEILING PLAN – EAST CANOPY

SCALE: 1/8"=1'–0"

0 2 4 8

SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. EXTERIOR LINEAR METAL CEILING SOFFIT IN SHADED AREA
2. ALUMINUM COMPOSITE PANEL SOFFIT
3. PROVIDE MATCHING CEILING TRIM AROUND STEEL COLUMN AND/OR SHELTERS
4. PC CONC WALKWAY – SEE STRUCT
5. PC CONC STAIR – SEE STRUCT
6. EXPOSED STRUCTURE – SEE STRUCTURAL
7. ACOUSTIC CEILING
8. ACCESS PANELS FOR EQUIPMENT ACCESS
9. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- SHELTER HEATER
- S SPEAKER
- M MICROPHONE
- C SECURITY CAMERA
- ELECT/COMM JUNCTION BOX
- LED LINEAR LIGHT FIXTURE
- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY–IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

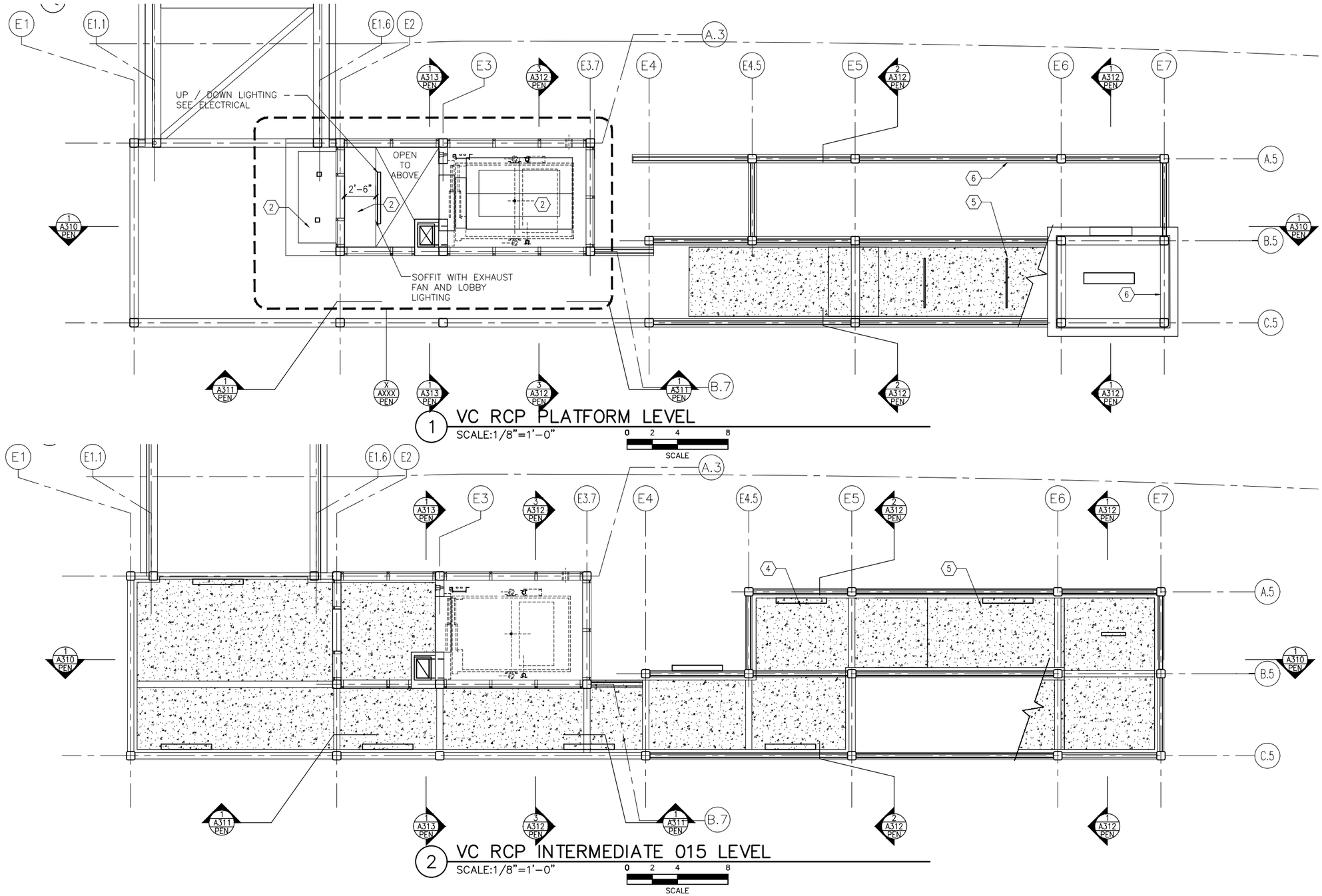
CIVIL - VOLUME 11D
PENN STATION
REFLECTED CEILING PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-RCP-180

SHEET 86 OF 394

Jan. 18 2016 12:53 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-RCP-180.dwg By: v-mccartp



1 VC RCP PLATFORM LEVEL
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

2 VC RCP INTERMEDIATE 015 LEVEL
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. EXTERIOR LINEAR METAL CEILING SOFFIT IN SHADED AREA
2. ALUMINUM COMPOSITE PANEL SOFFIT
3. PROVIDE MATCHING CEILING TRIM AROUND STEEL COLUMN AND/OR SHELTERS
4. PC CONC WALKWAY – SEE STRUCT
5. PC CONC STAIR – SEE STRUCT
6. EXPOSED STRUCTURE – SEE STRUCTURAL
7. ACOUSTIC CEILING
8. ACCESS PANELS FOR EQUIPMENT ACCESS
9. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- SHELTER HEATER
- [S] SPEAKER
- [M] MICROPHONE
- [C] SECURITY CAMERA
- ELECT/COMM JUNCTION BOX
- LED LINEAR LIGHT FIXTURE
- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY-IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

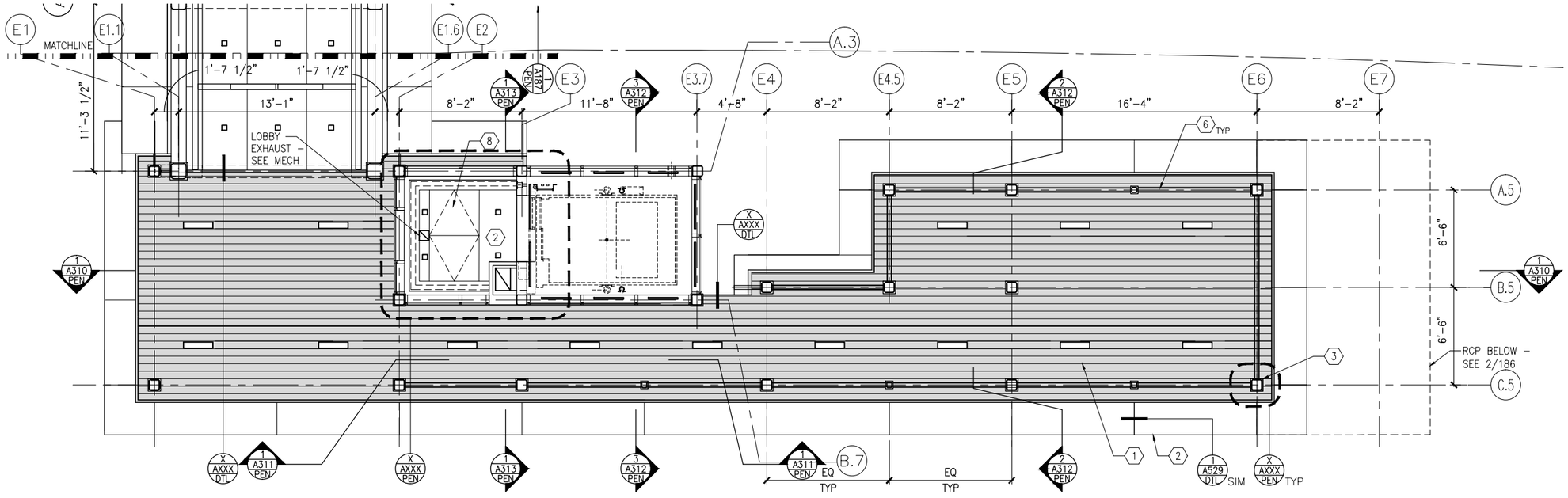
CIVIL - VOLUME 11D
PENN STATION
VC RCP PLATFORM LEVEL

DISCIPLINE: ARCHITECTURE

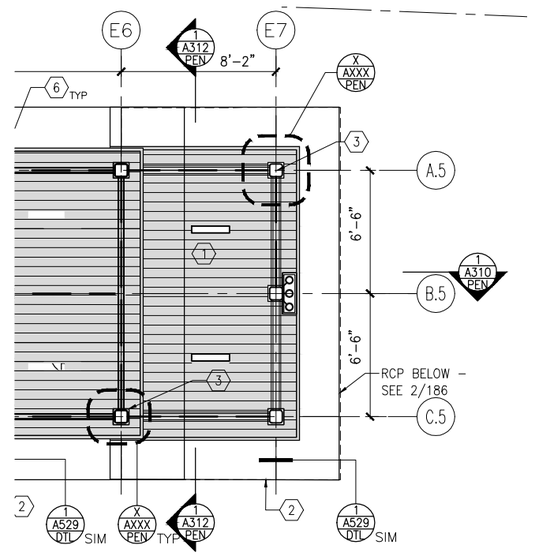
SHEET NAME: E4-PEN-ARC-RCP-185

SHEET 87 OF 394

Jan, 18 2016 12:54 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-RCP-185.dwg By: v-mccartp



1 VC RCP BRIDGE LEVEL
SCALE:1/8"=1'-0"



2 VC RCP INTERMEDIATE 017 LEVEL
SCALE:1/8"=1'-0"

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. EXTERIOR LINEAR METAL CEILING SOFFIT IN SHADED AREA
2. ALUMINUM COMPOSITE PANEL SOFFIT
3. PROVIDE MATCHING CEILING TRIM AROUND STEEL COLUMN AND/OR SHELTERS
4. PC CONC WALKWAY – SEE STRUCT
5. PC CONC STAIR – SEE STRUCT
6. EXPOSED STRUCTURE – SEE STRUCTURAL
7. ACOUSTIC CEILING
8. ACCESS PANELS FOR EQUIPMENT ACCESS
9. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- SHELTER HEATER
- S SPEAKER
- M MICROPHONE
- C SECURITY CAMERA
- ELECT/COMM JUNCTION BOX
- LED LINEAR LIGHT FIXTURE
- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY-IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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SOUTHWEST Green Line LRT Extension

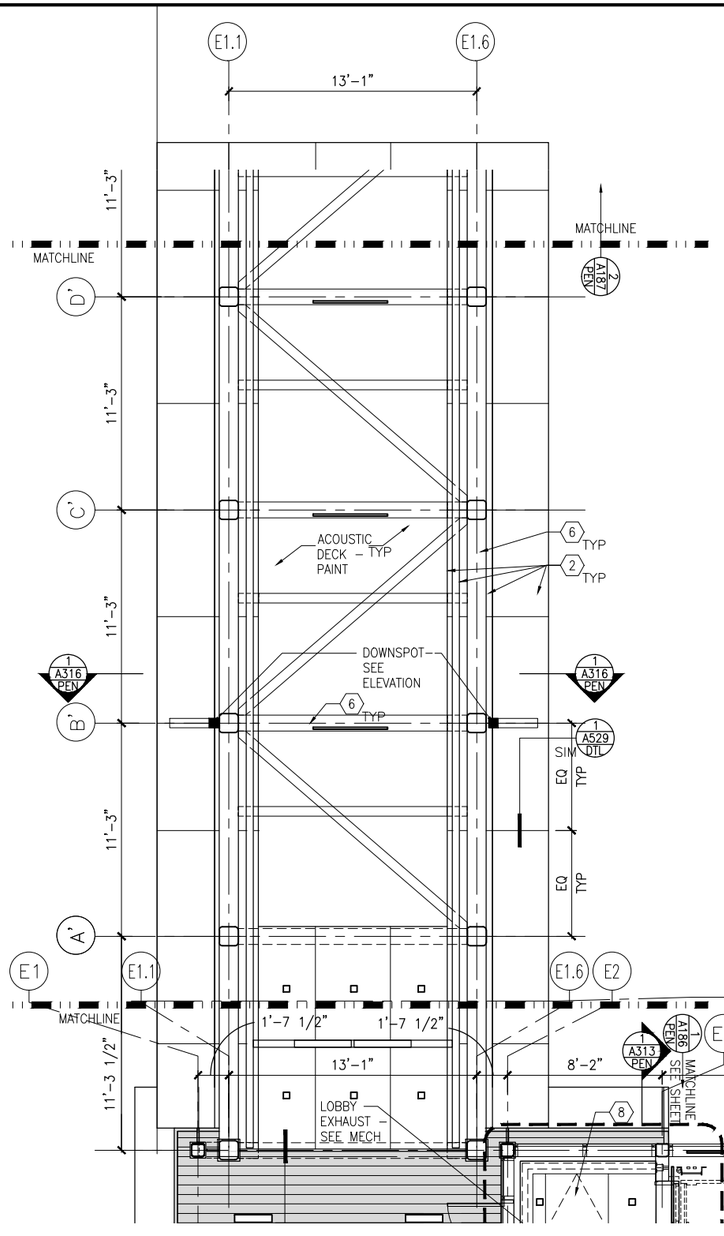
CIVIL - VOLUME 11D
PENN STATION
VC RCP BRIDGE LEVEL

DISCIPLINE: ARCHITECTURE

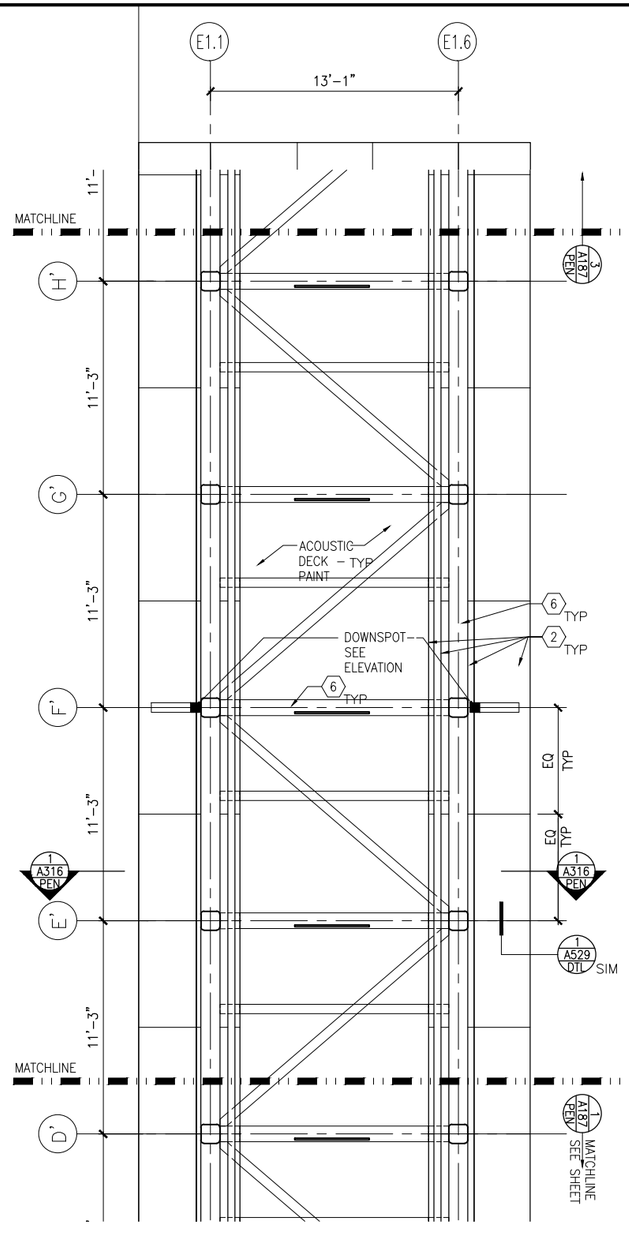
SHEET NAME: E4-PEN-ARC-RCP-186

SHEET 88 OF 394

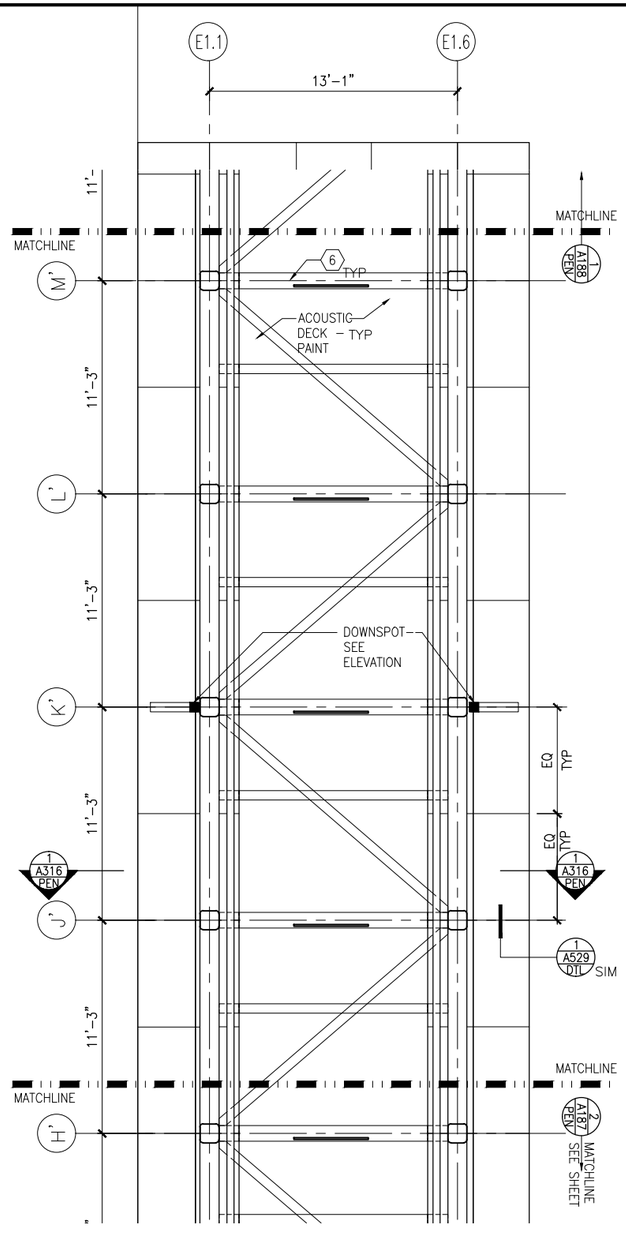
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1 PB RCP BRIDGE LEVEL PART 1
SCALE:1/8"=1'-0"
0 2 4 8
SCALE



2 PB RCP BRIDGE LEVEL PART 2
SCALE:1/8"=1'-0"
0 2 4 8
SCALE



3 PB RCP BRIDGE LEVEL PART 3
SCALE:1/8"=1'-0"
0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

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7. ACOUSTIC CEILING
8. ACCESS PANELS FOR EQUIPMENT ACCESS
9. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- SHELTER HEATER
- S SPEAKER
- M MICROPHONE
- C SECURITY CAMERA
- ELECT/COMM JUNCTION BOX
- LED LINEAR LIGHT FIXTURE
- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY-IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

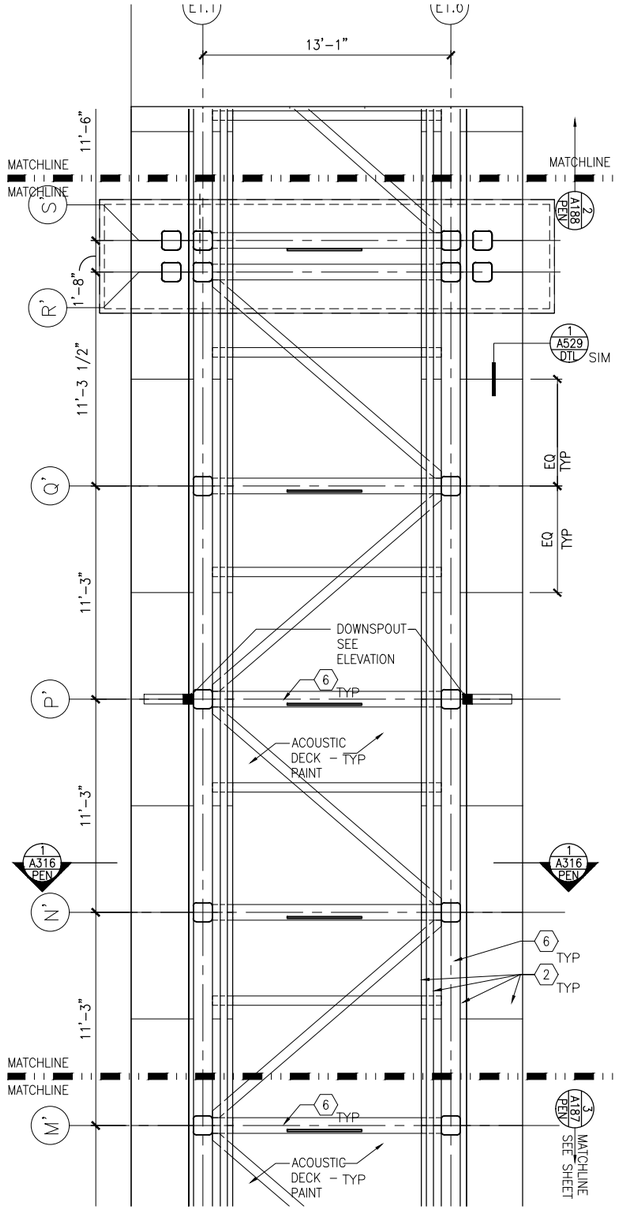
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE RCP
BRIDGE LEVEL

DISCIPLINE: ARCHITECTURE

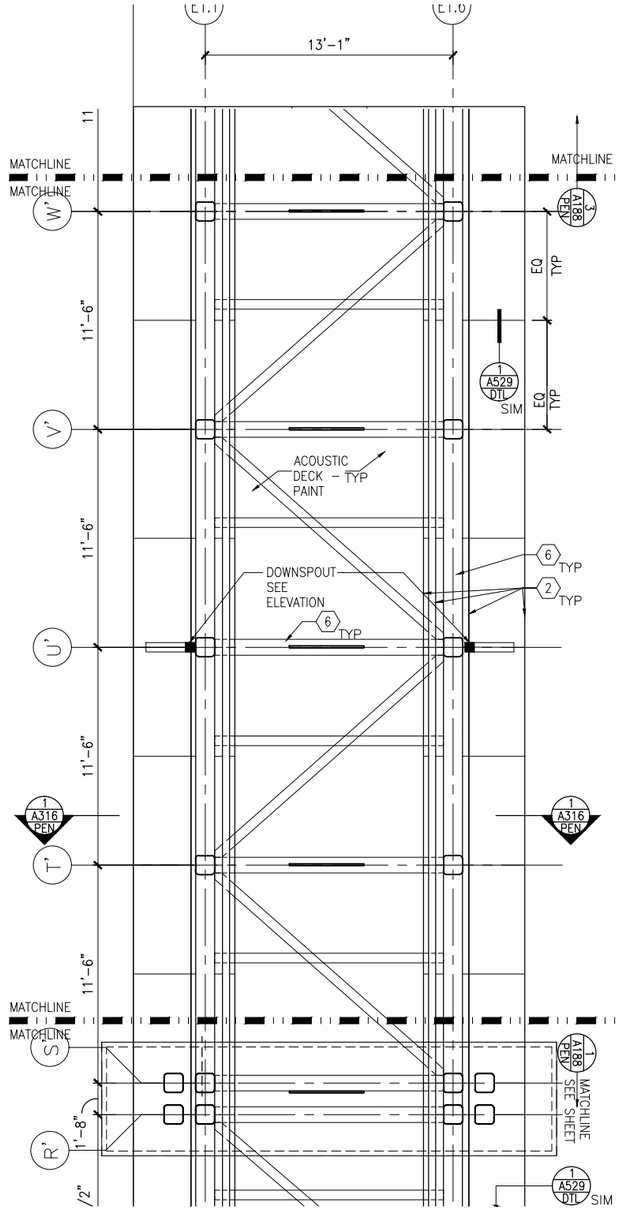
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SHEET 89 OF 394

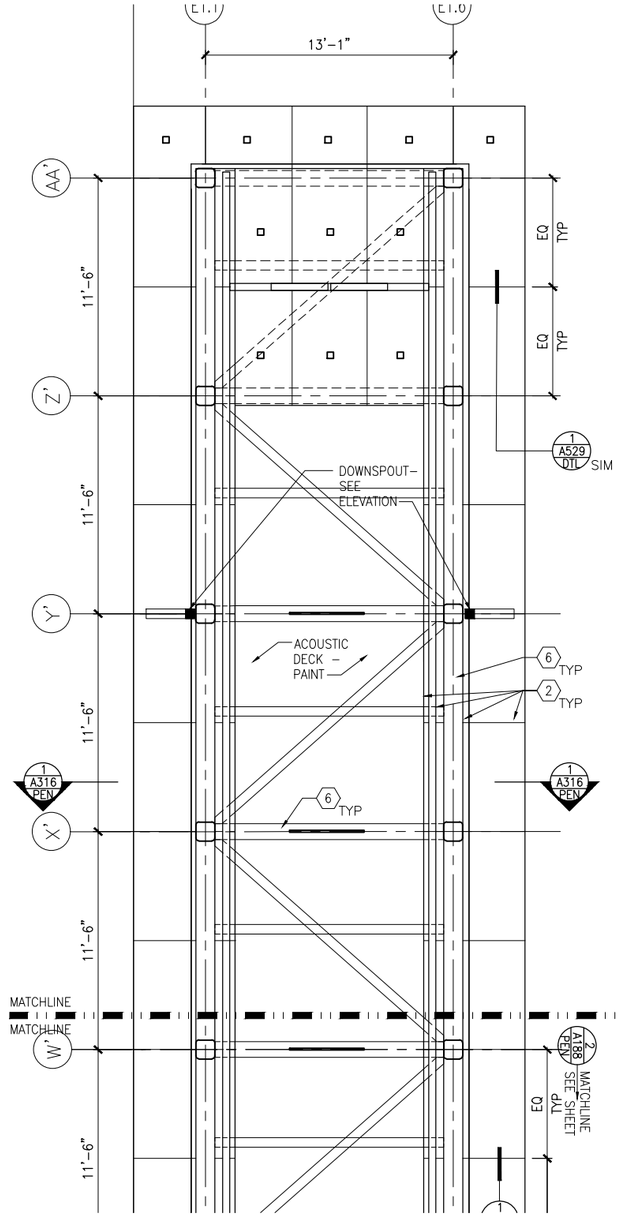
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1 PB RCP BRIDGE LEVEL PART 4
SCALE:1/8"=1'-0"
0 2 4 8
SCALE



2 PB RCP BRIDGE LEVEL PART 5
SCALE:1/8"=1'-0"
0 2 4 8
SCALE



3 PB RCP BRIDGE LEVEL PART 6
SCALE:1/8"=1'-0"
0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
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3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

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LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

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- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY-IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

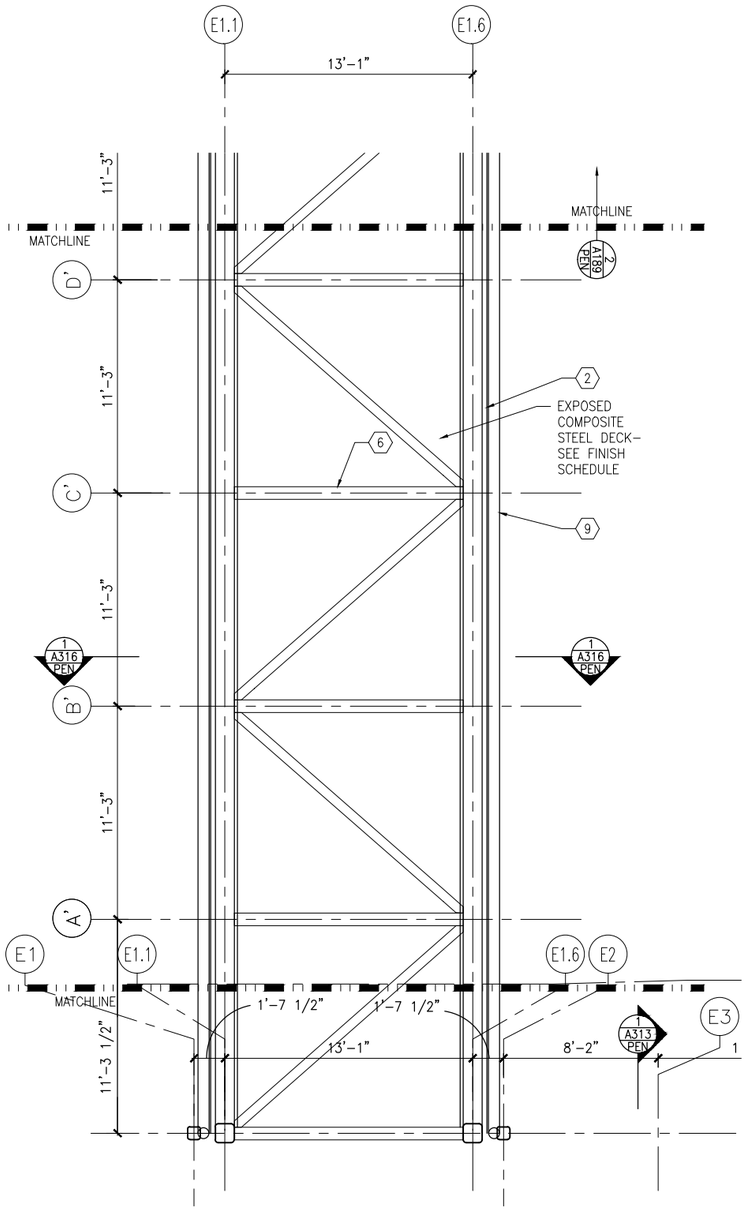
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE RCP
BRIDGE LEVEL

DISCIPLINE: ARCHITECTURE

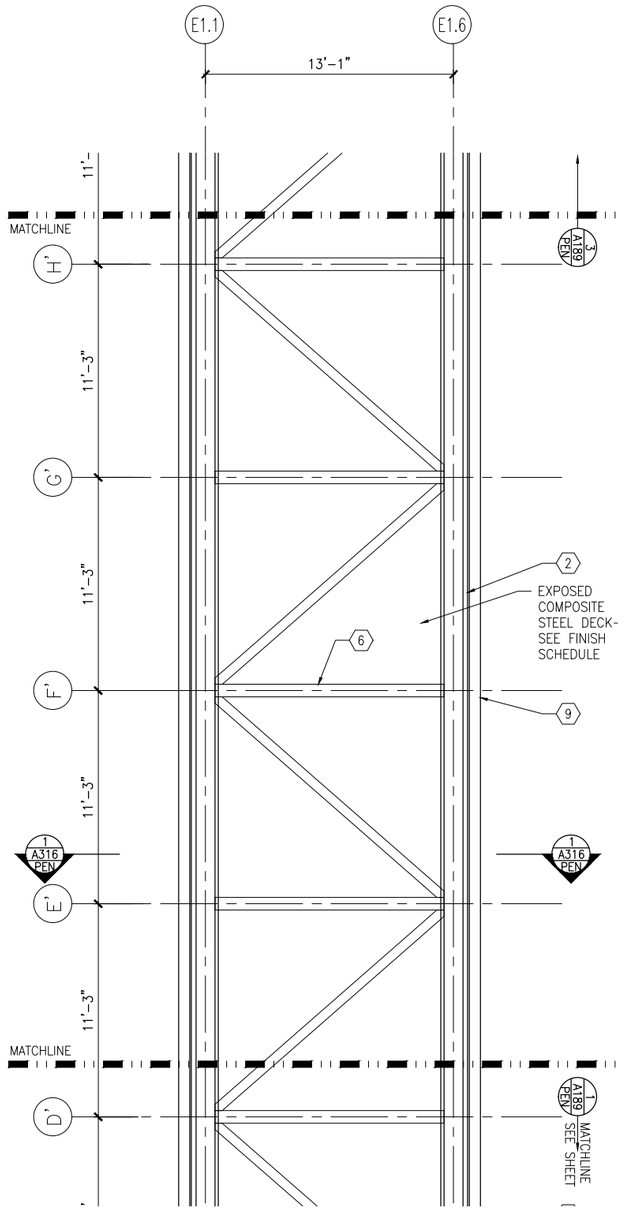
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SHEET 90 OF 394

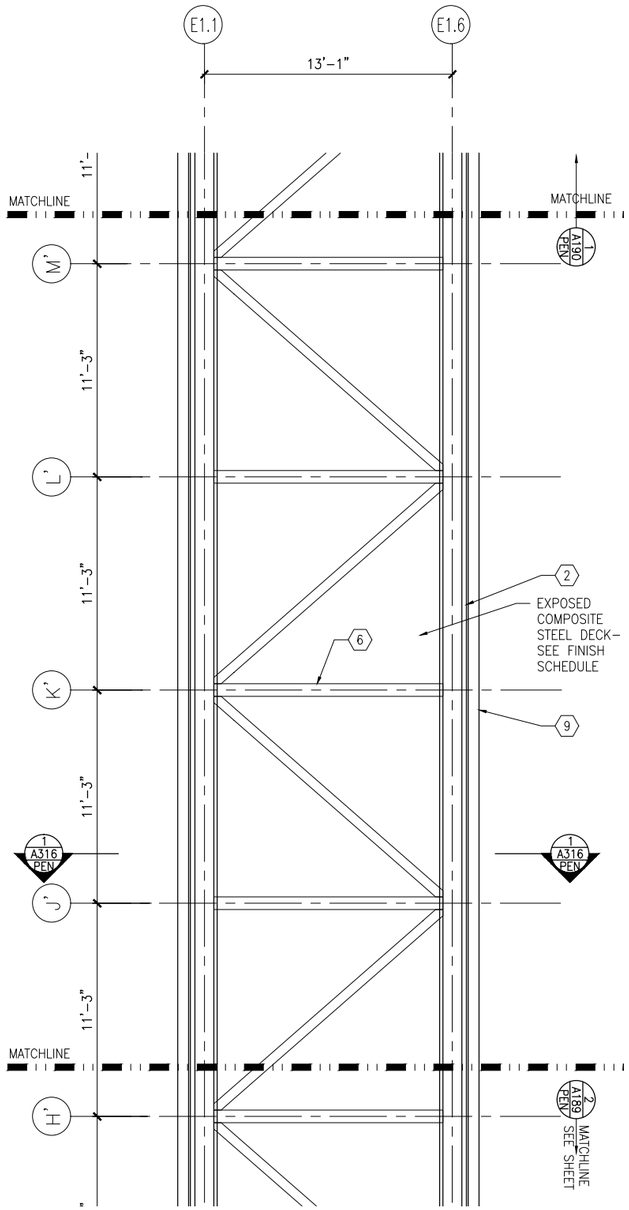
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1 PB RCP INTERMEDIATE LEVEL PART 1
SCALE:1/8"=1'-0"
0 2 4 8
SCALE



2 PB RCP INTERMEDIATE LEVEL PART 2
SCALE:1/8"=1'-0"
0 2 4 8
SCALE



3 PB RCP INTERMEDIATE LEVEL PART 3
SCALE:1/8"=1'-0"
0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
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KEY NOTES – (#)

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9. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

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- C SECURITY CAMERA
- ELECT/COMM JUNCTION BOX
- LED LINEAR LIGHT FIXTURE
- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY-IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

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AECOM

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SOUTHWEST Green Line LRT Extension

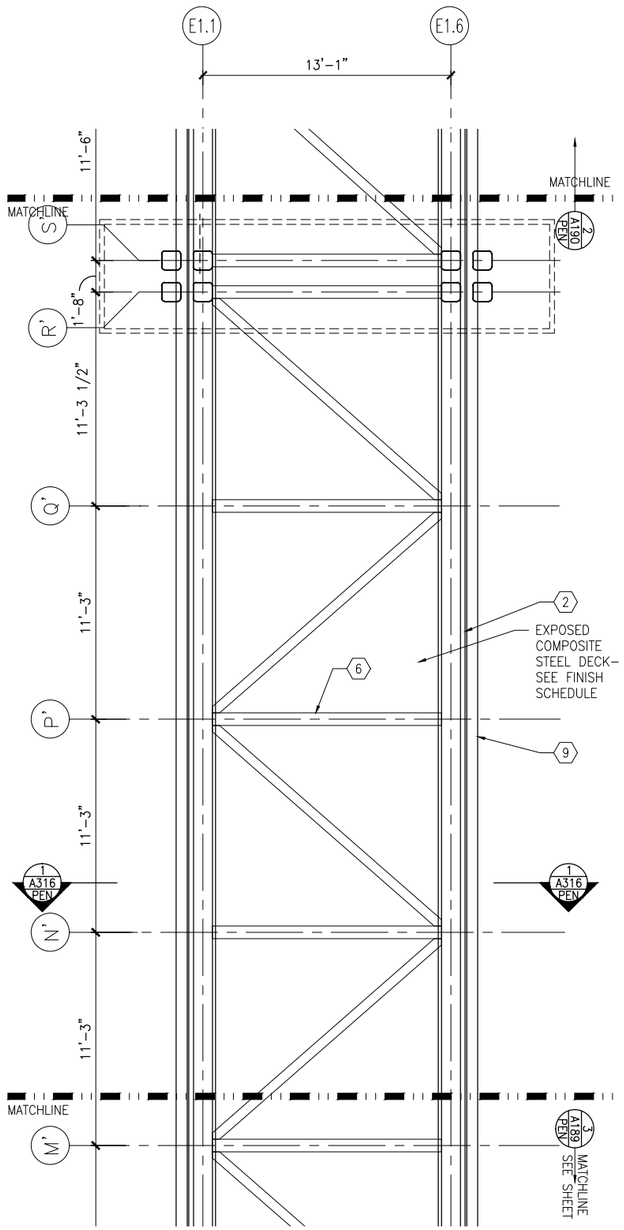
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE RCP
INTERMEDIATE LEVEL

DISCIPLINE: ARCHITECTURE

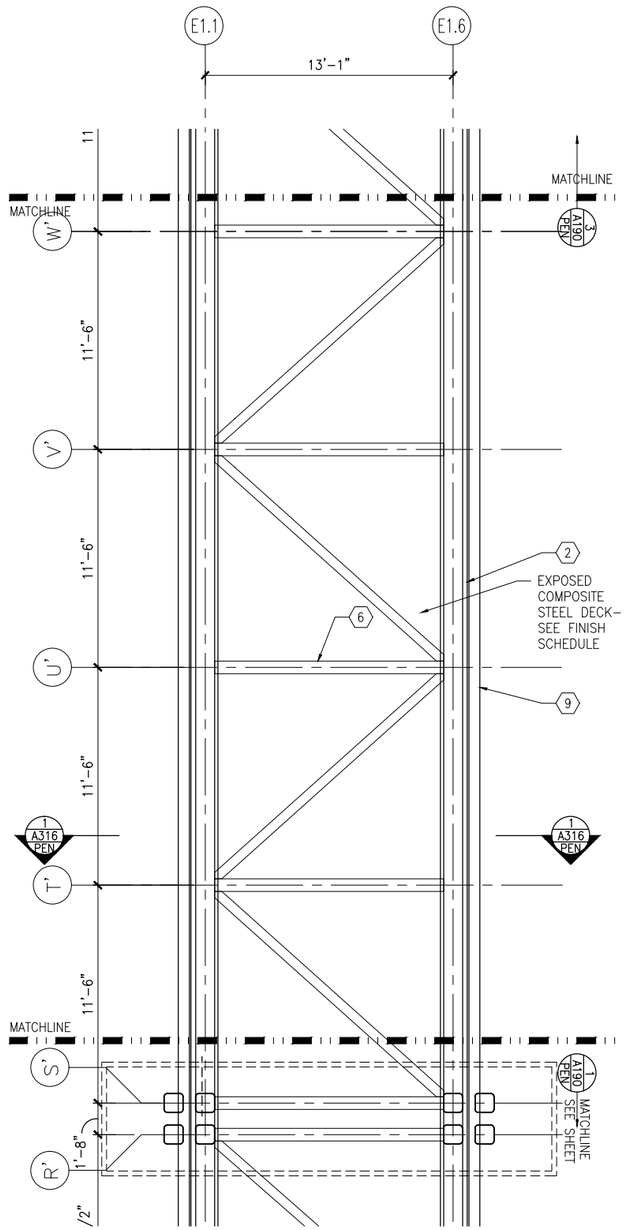
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SHEET 91 OF 394

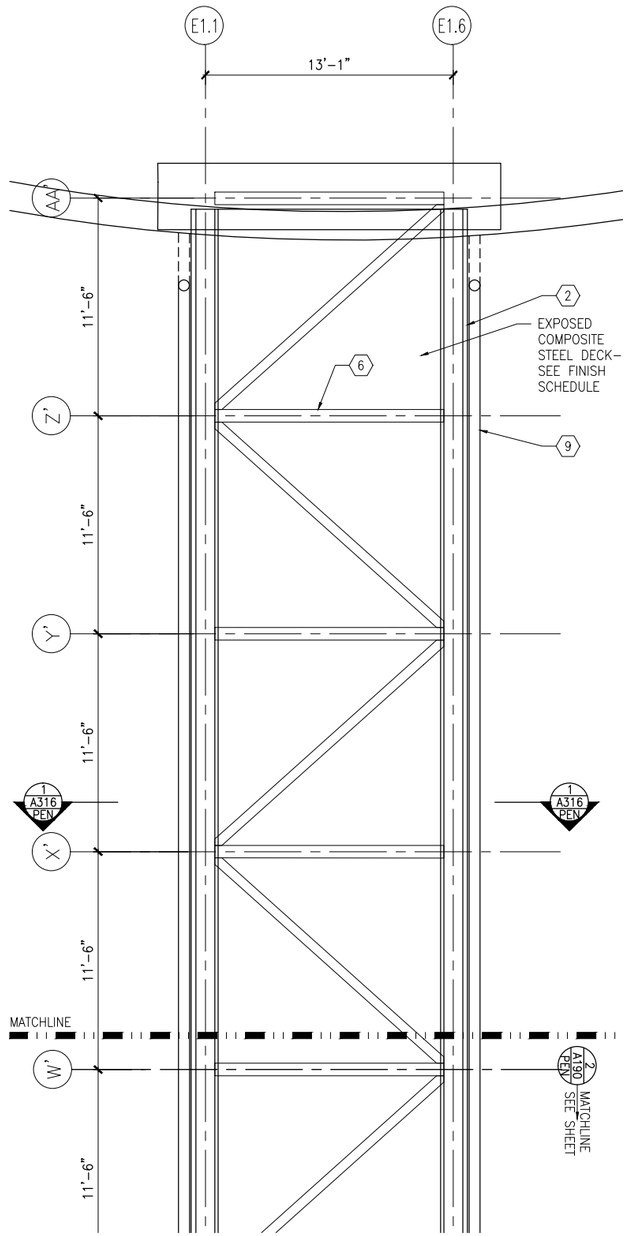
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1 PB RCP INTERMEDIATE LEVEL PART 4
SCALE:1/8"=1'-0"



2 PB RCP INTERMEDIATE LEVEL PART 5
SCALE:1/8"=1'-0"



3 PB RCP INTERMEDIATE LEVEL PART 6
SCALE:1/8"=1'-0"

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

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4. PC CONC WALKWAY – SEE STRUCT
5. PC CONC STAIR – SEE STRUCT
6. EXPOSED STRUCTURE – SEE STRUCTURAL
7. ACOUSTIC CEILING
8. ACCESS PANELS FOR EQUIPMENT ACCESS
9. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- SHELTER HEATER
- S SPEAKER
- M MICROPHONE
- C SECURITY CAMERA
- ELECT/COMM JUNCTION BOX
- LED LINEAR LIGHT FIXTURE
- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY-IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

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SOUTHWEST Green Line LRT Extension

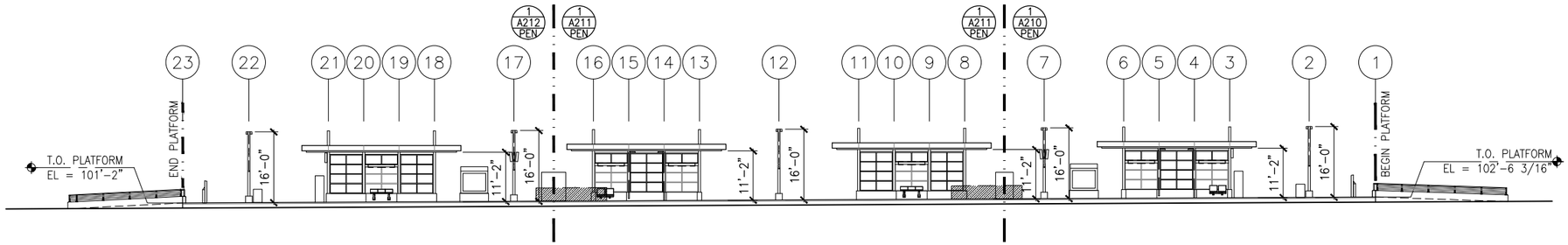
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE RCP
INTERMEDIATE LEVEL

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-RCP-190

SHEET 92 OF 394

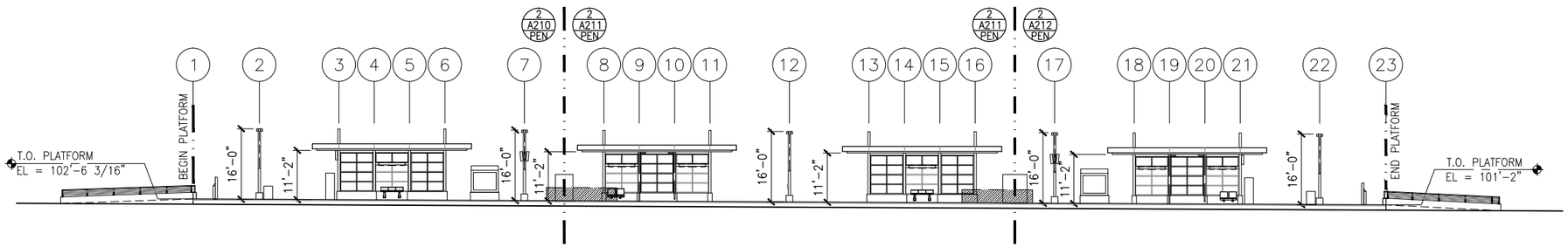
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1 TRACK 1 ELEVATION
SCALE: 1"=30'

0 7.5 15 30
SCALE

(-0.50% SLOPE)*



2 TRACK 2 ELEVATION
SCALE: 1"=30'

0 7.5 15 30
SCALE

(-0.50% SLOPE)*

*VERIFY W/ TRACK PROFILE, ADJUST ELEVATIONS ACCORDINGLY

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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SOUTHWEST Green Line LRT Extension

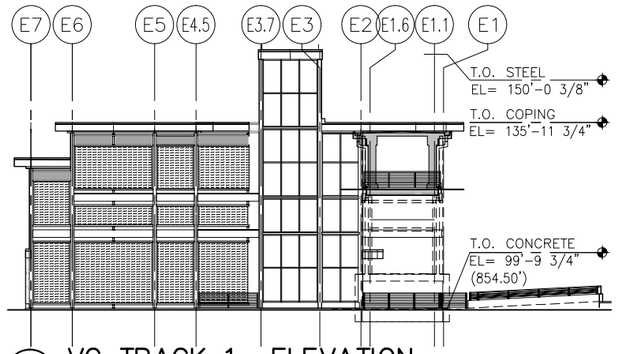
CIVIL - VOLUME 11D
PENN STATION
ELEVATIONS

DISCIPLINE: ARCHITECTURE

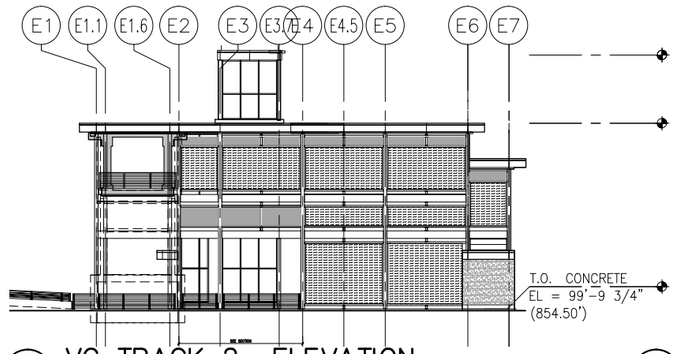
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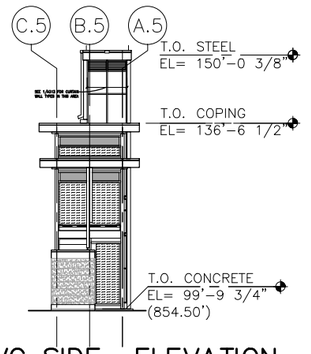
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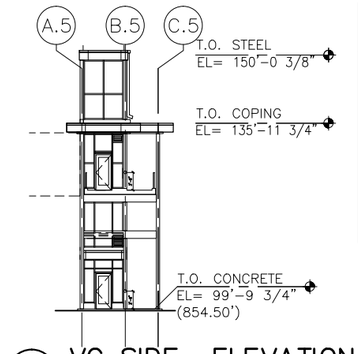
1 VC TRACK 1 ELEVATION
SCALE: 1"=30'
0 7.5 15 30
SCALE



2 VC TRACK 2 ELEVATION
SCALE: 1"=30'
0 7.5 15 30
SCALE



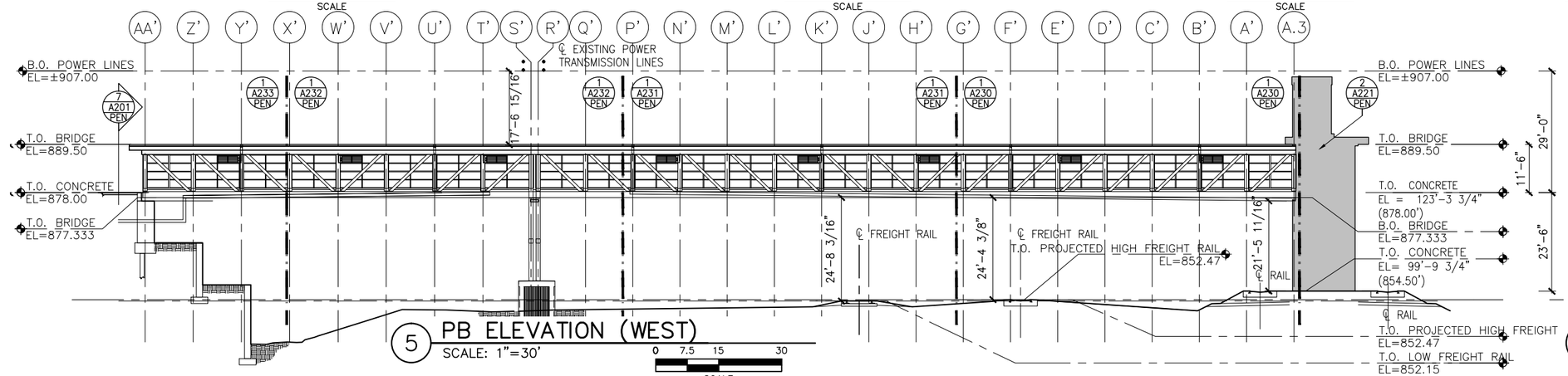
3 VC SIDE ELEVATION
SCALE: 1"=30'
0 7.5 15 30
SCALE



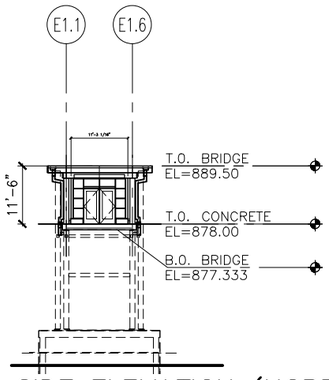
4 VC SIDE ELEVATION
SCALE: 1"=30'
0 7.5 15 30
SCALE

GENERAL SHEET NOTES

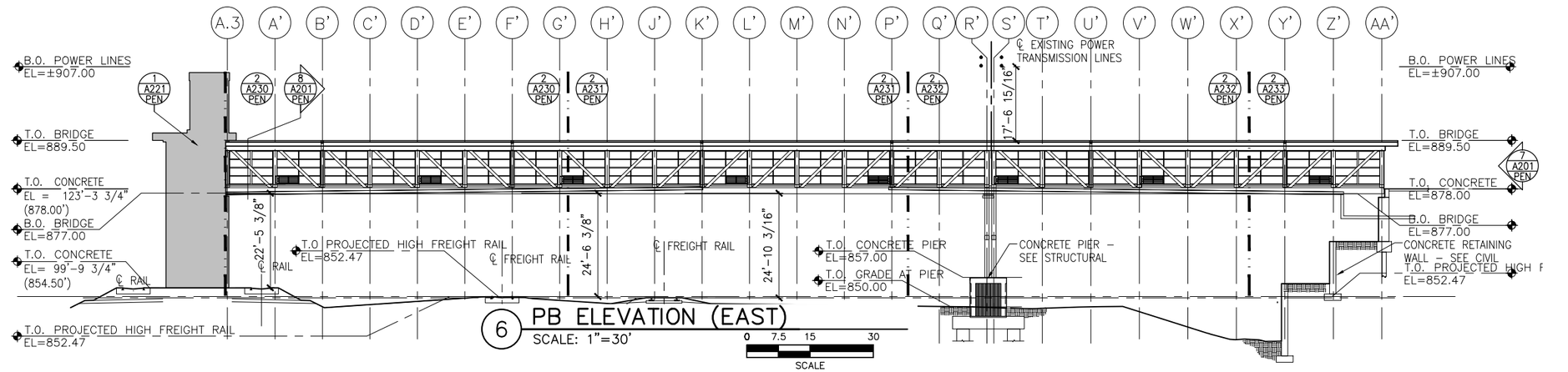
1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS



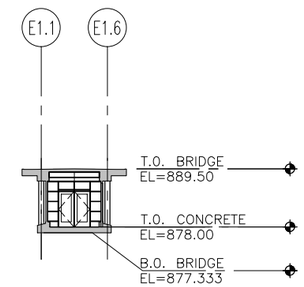
5 PB ELEVATION (WEST)
SCALE: 1"=30'
0 7.5 15 30
SCALE



7 PB SIDE ELEVATION (NORTH)
SCALE: 1"=30'
0 7.5 15 30
SCALE



6 PB ELEVATION (EAST)
SCALE: 1"=30'
0 7.5 15 30
SCALE



8 PB SIDE SECTION (SOUTH)
SCALE: 1"=30'
0 7.5 15 30
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

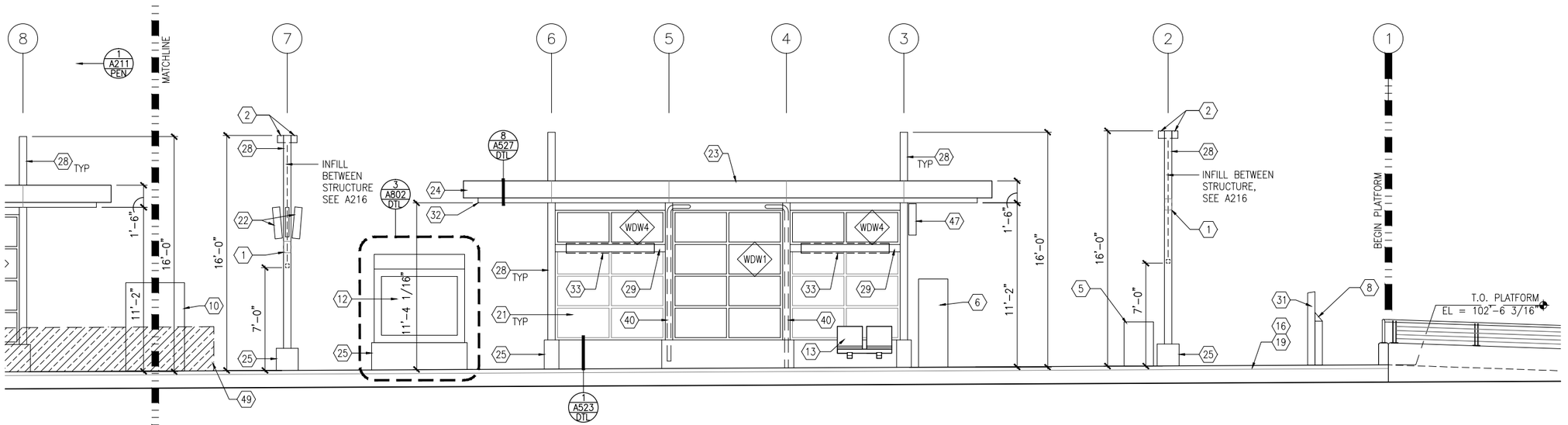
CIVIL - VOLUME 11D
PENN STATION
VC ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-201

SHEET 94 OF 394

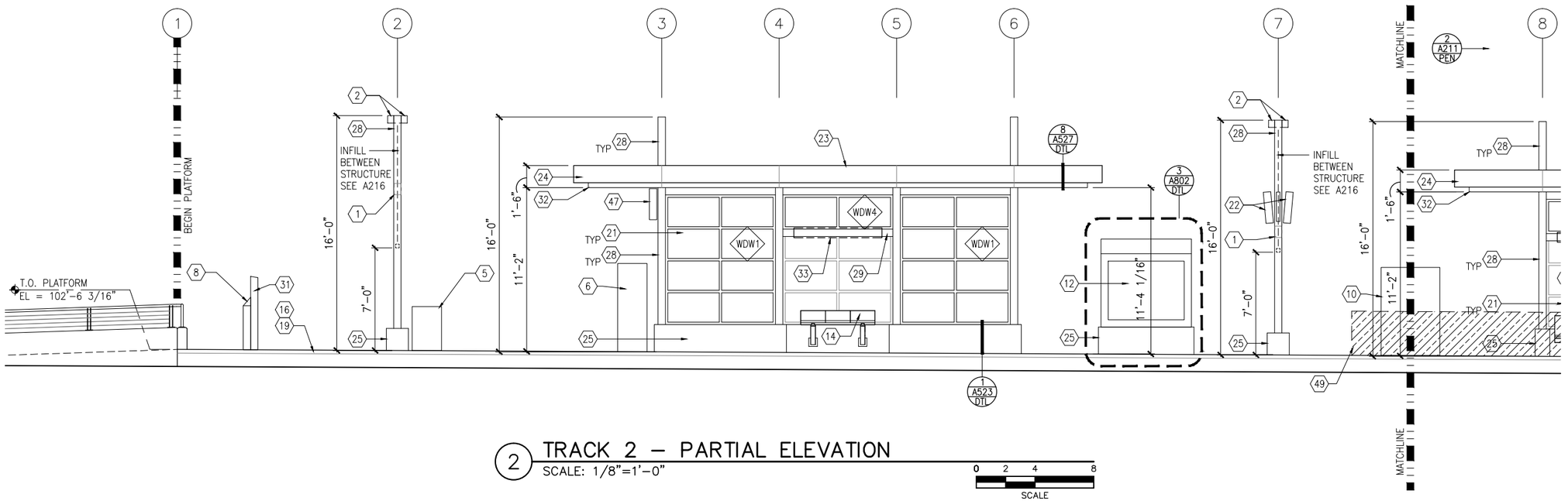
Jan, 18 2016 12:59 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-ELV-201.dwg By: v-mccarrtp



1 TRACK 1 – PARTIAL ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

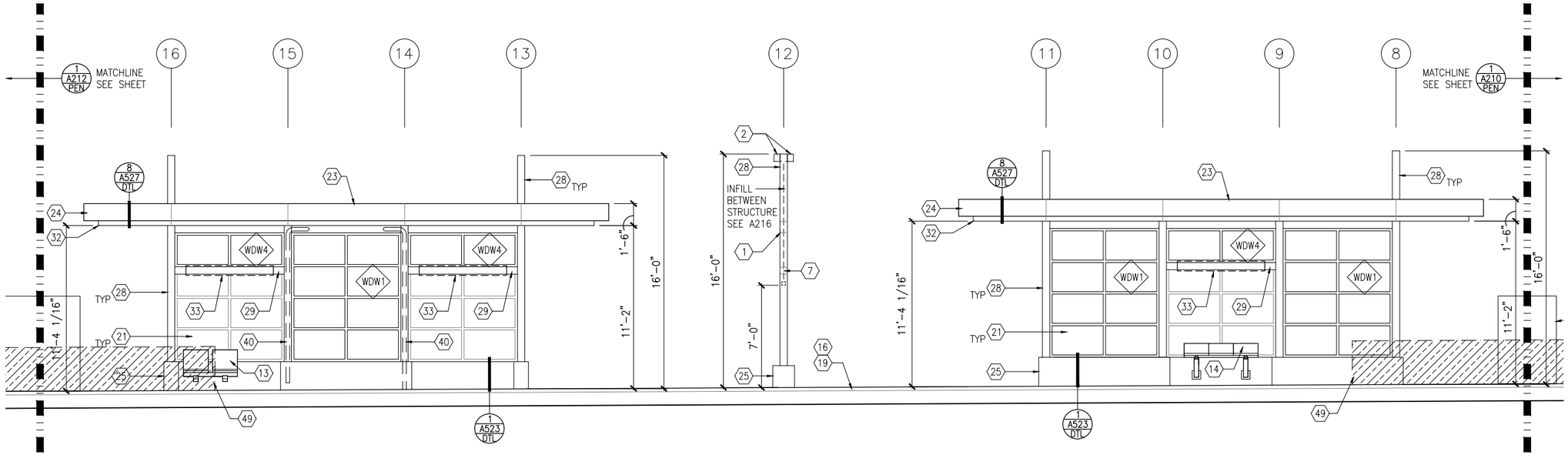
CIVIL - VOLUME 11D
PENN STATION
WEST PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-210

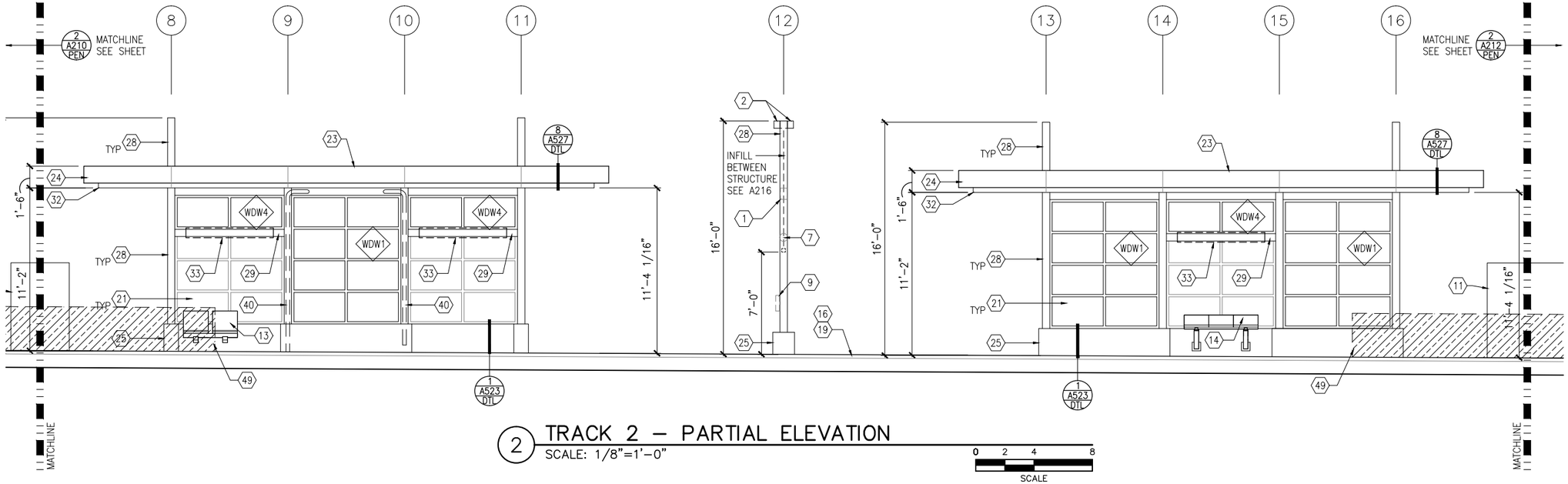
SHEET 95 OF 394

Jan, 18 2016 01:00 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-ELV-210.dwg By: v-mccarrtp



1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

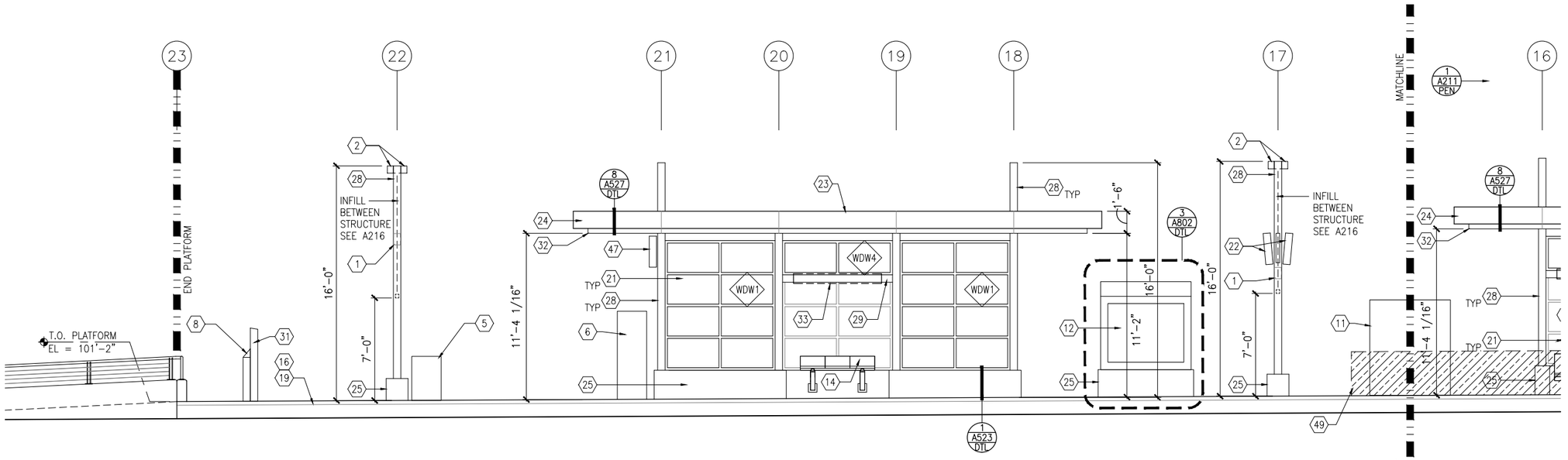
CIVIL - VOLUME 11D
PENN STATION
MIDDLE PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-211

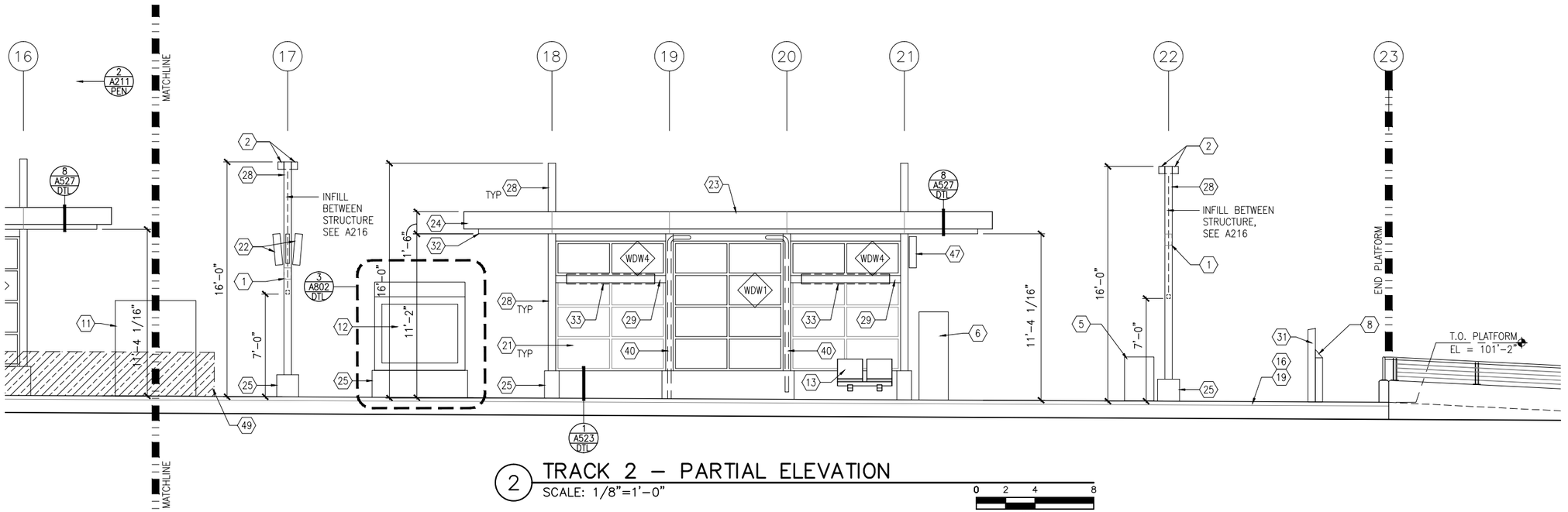
SHEET 96 OF 394

Jan, 18 2016 01:00 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-ELV-211.dwg By: v-mccarrtp



1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

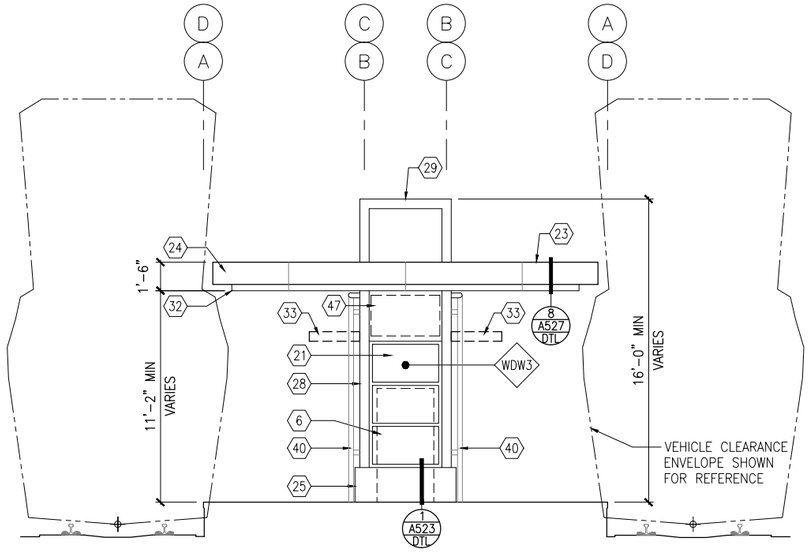
CIVIL - VOLUME 11D
PENN STATION
EAST PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-212

SHEET 97 OF 394

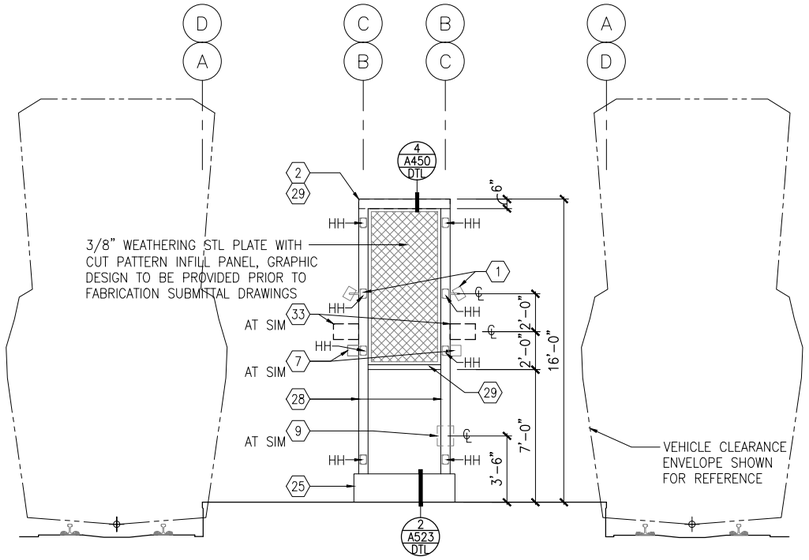
Jan, 18 2016 01:00 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-ELV-212.dwg By: v-mccarrtp



1 SIDE ELEVATION

SCALE: 1/8"=1'-0"

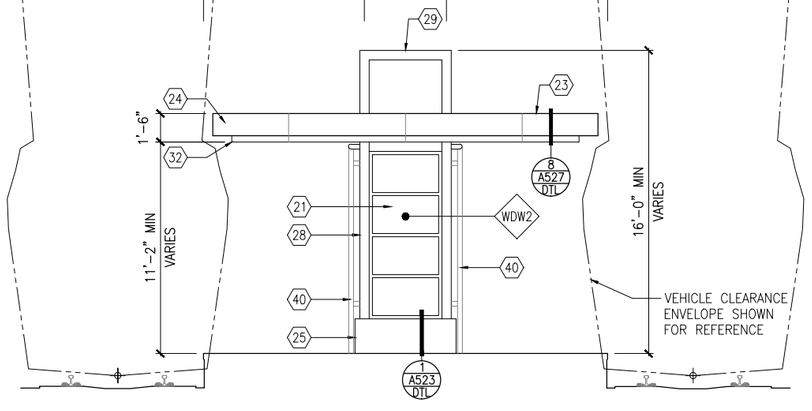
0 2 4 8
SCALE



2 SIDE ELEVATION

SCALE: 1/8"=1'-0"

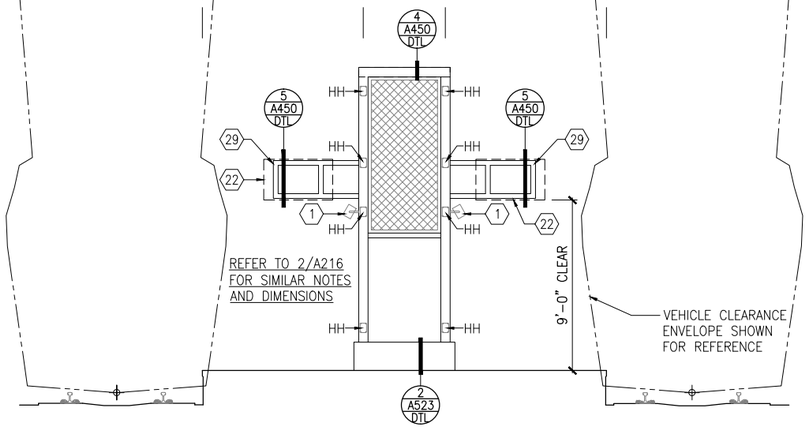
0 2 4 8
SCALE



3 SIDE ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



4 SIDE ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

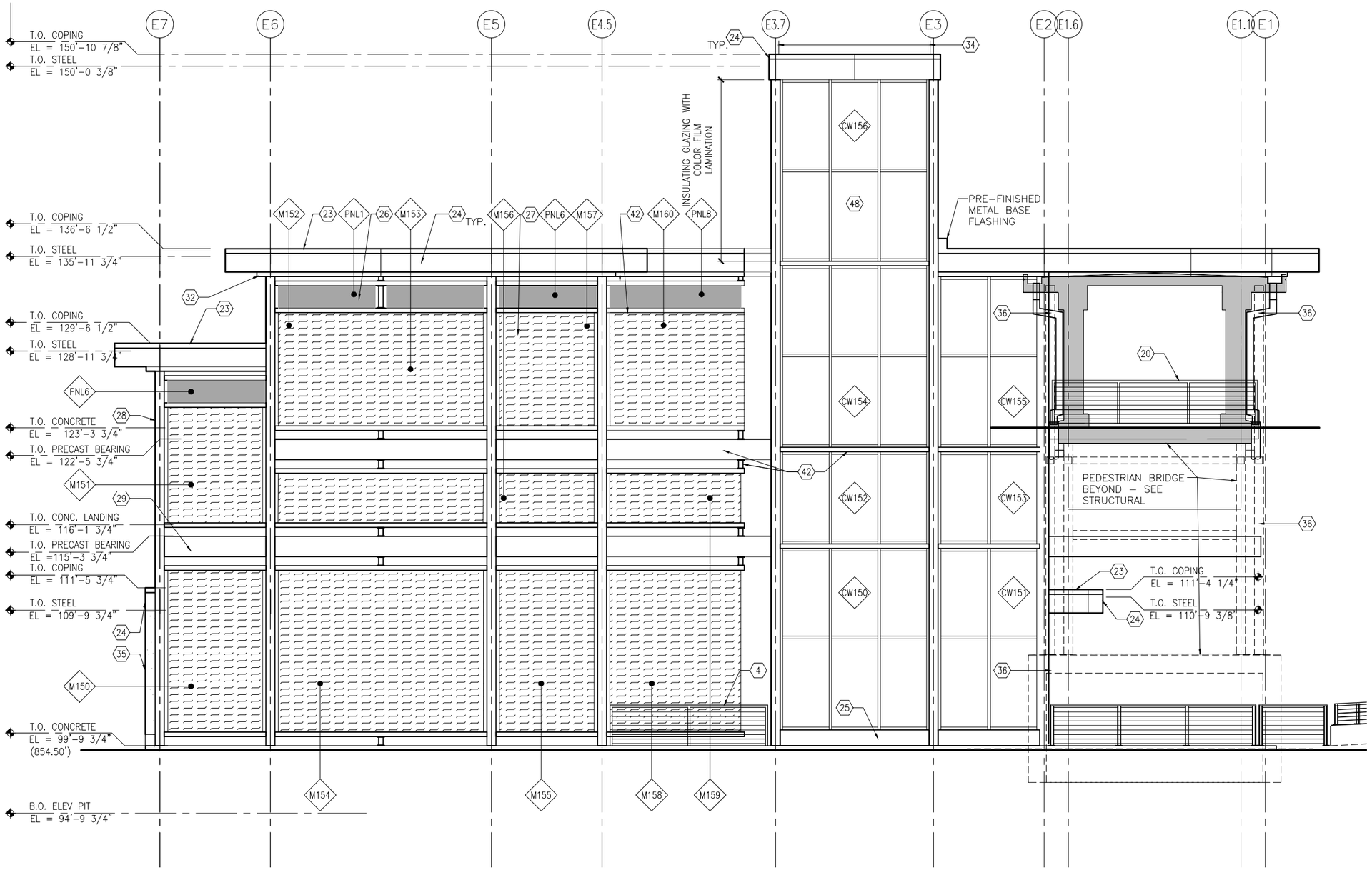
CIVIL - VOLUME 11D
PENN STATION
SIDE ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-216

SHEET 98 OF 394

Jan. 18 2016 01:01 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-ELV-216.dwg By: v-mccarrtp



1 VC TRACK 1 ELEVATION
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
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14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
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17. CANOPY ABOVE
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37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

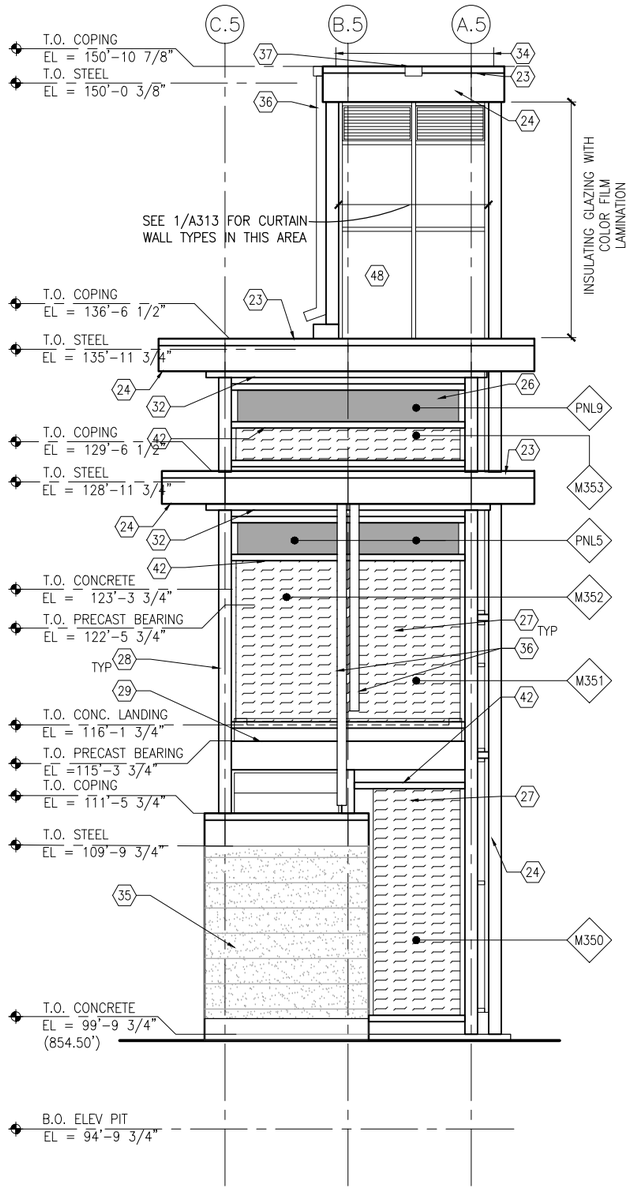
CIVIL - VOLUME 11D
PENN STATION
VC TRACK 1 ELEVATION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-220

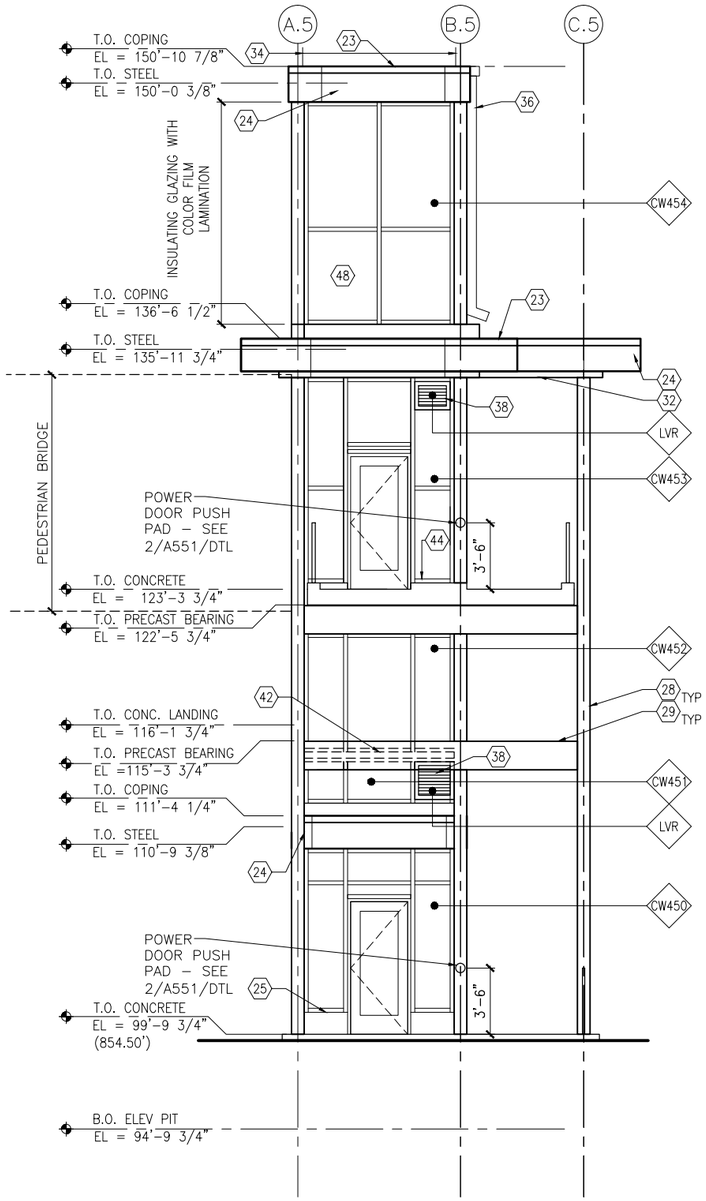
SHEET 99 OF 394

Jan, 18 2016 01:01 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-ELV-220.dwg By: v-mccarrtp



1 VC SIDE ELEVATIONS
SCALE:1/8"=1'-0"

SCALE 0 2 4 8



2 VC SIDE ELEVATIONS
SCALE:1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

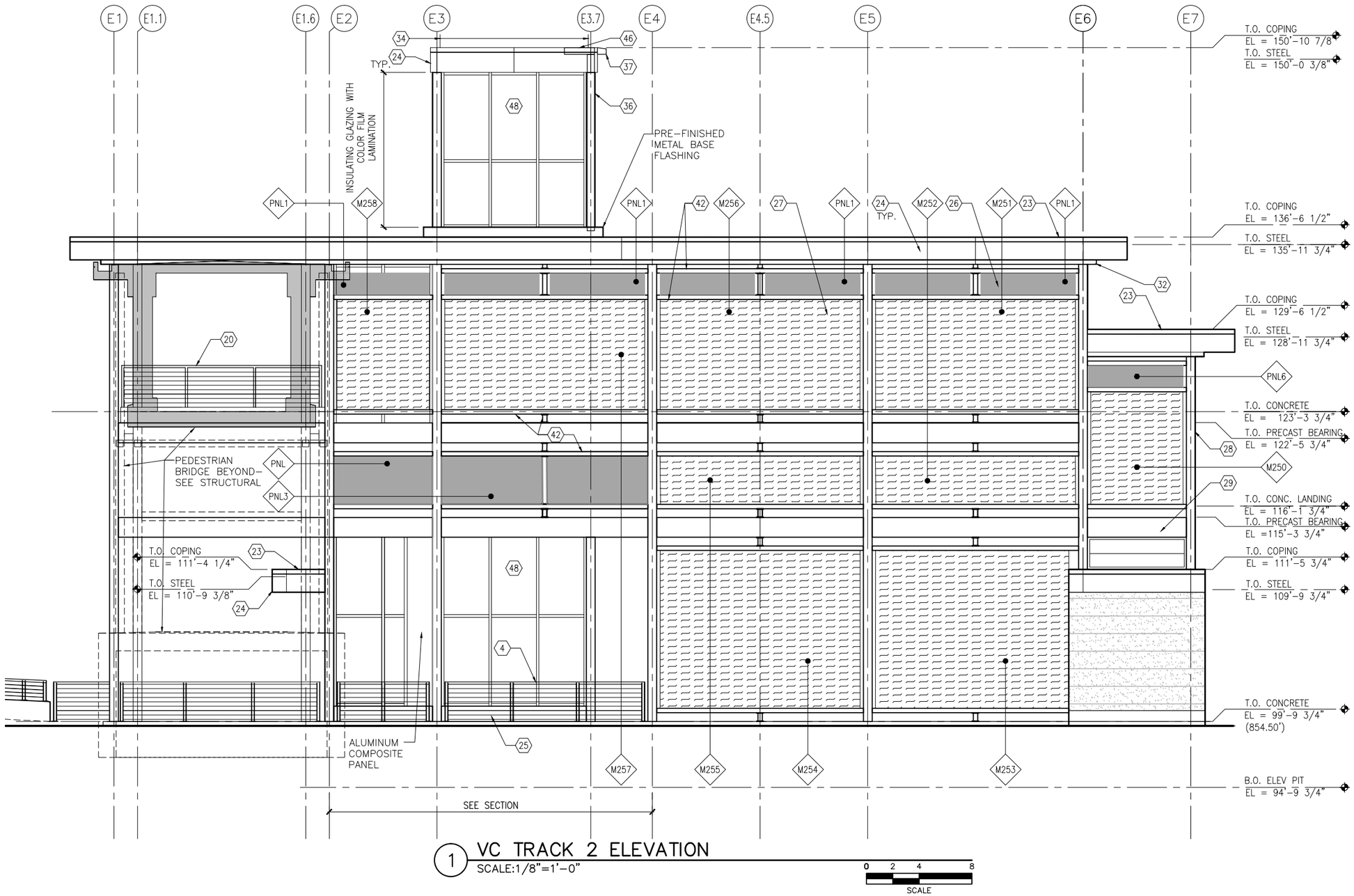
CIVIL - VOLUME 11D
PENN STATION
VC SIDE ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-221

SHEET 100 OF 394

Jan, 18 2016 01:02 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-ELV-221.dwg By: v-mccarrtp



1 VC TRACK 2 ELEVATION
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
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17. CANOPY ABOVE
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45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

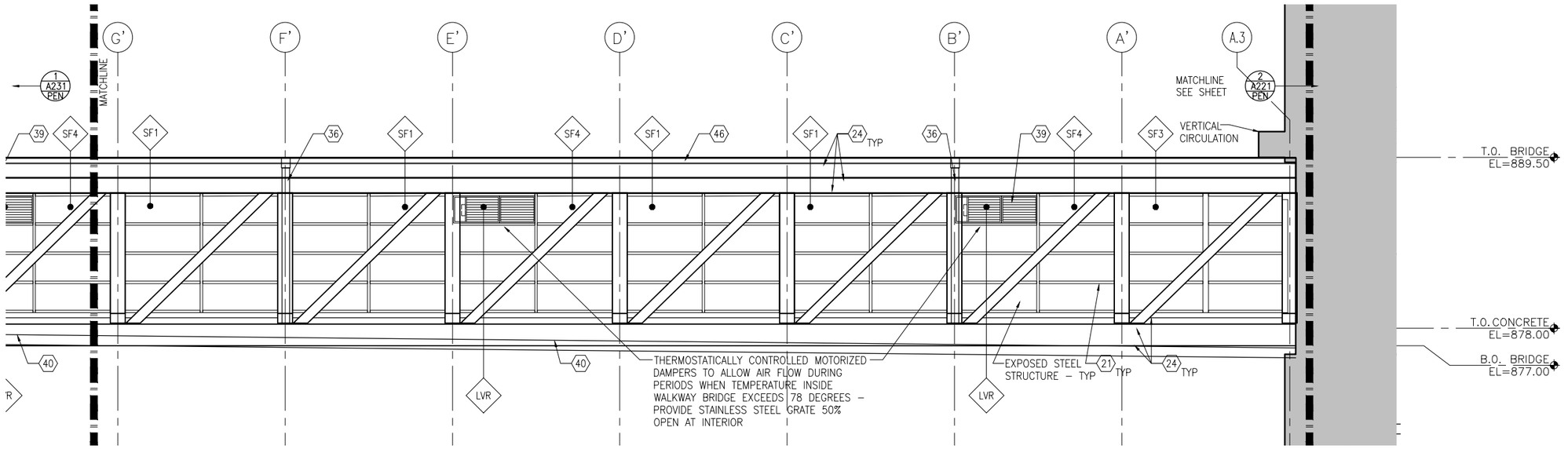
CIVIL - VOLUME 11D
PENN STATION
VC TRACK 2 ELEVATION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-226

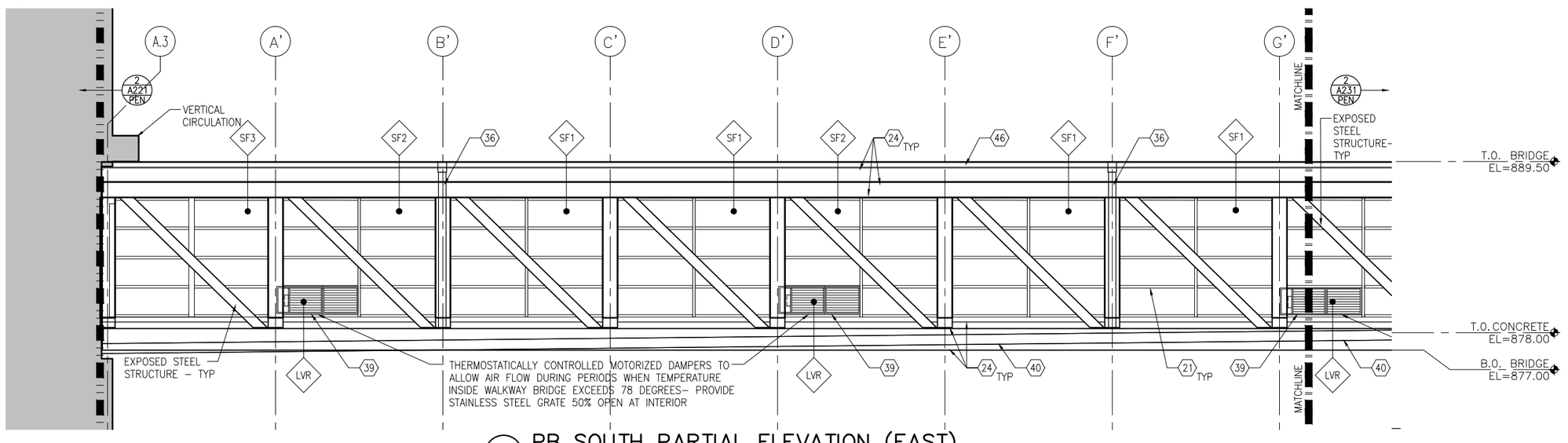
SHEET 101 OF 394

Jan, 18 2016 01:02 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-ELV-226.dwg By: v-mccarrtp



1 PB SOUTH PARTIAL ELEVATION (WEST)
SCALE:1/8" = 1'–0"

0 2 4 8
SCALE



2 PB SOUTH PARTIAL ELEVATION (EAST)
SCALE:1/8" – 1'–0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
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26. TRANSLUCENT PLASTIC PANEL
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28. STEEL COLUMN – SEE STRUCTURAL
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45. PC CONC STAIR – SEE STRUCT
46. PRE–FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN–CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

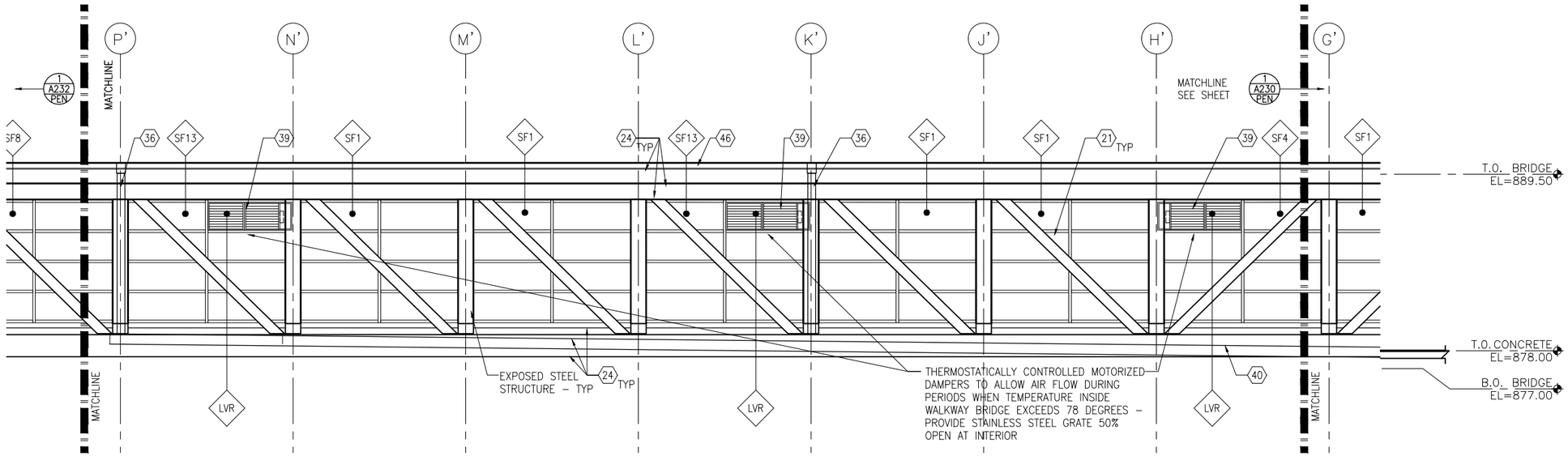
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE SOUTH
PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-230

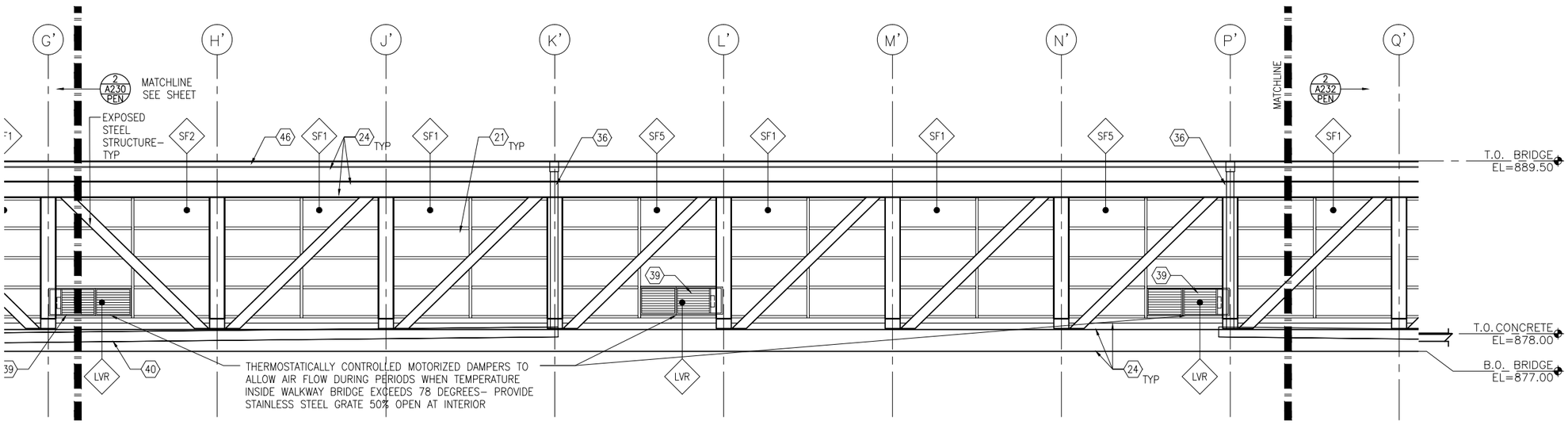
SHEET 102 OF 394

Jan, 18 2016 01:03 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-ELV-230.dwg By: v-mccarrtp



1 PB MIDDLE PARTIAL ELEVATION (WEST)
SCALE:1/8" = 1'–0"

0 2 4 8
SCALE



2 PB MIDDLE PARTIAL ELEVATION (EAST)
SCALE:1/8" = 1'–0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
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24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
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46. PRE–FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN–CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

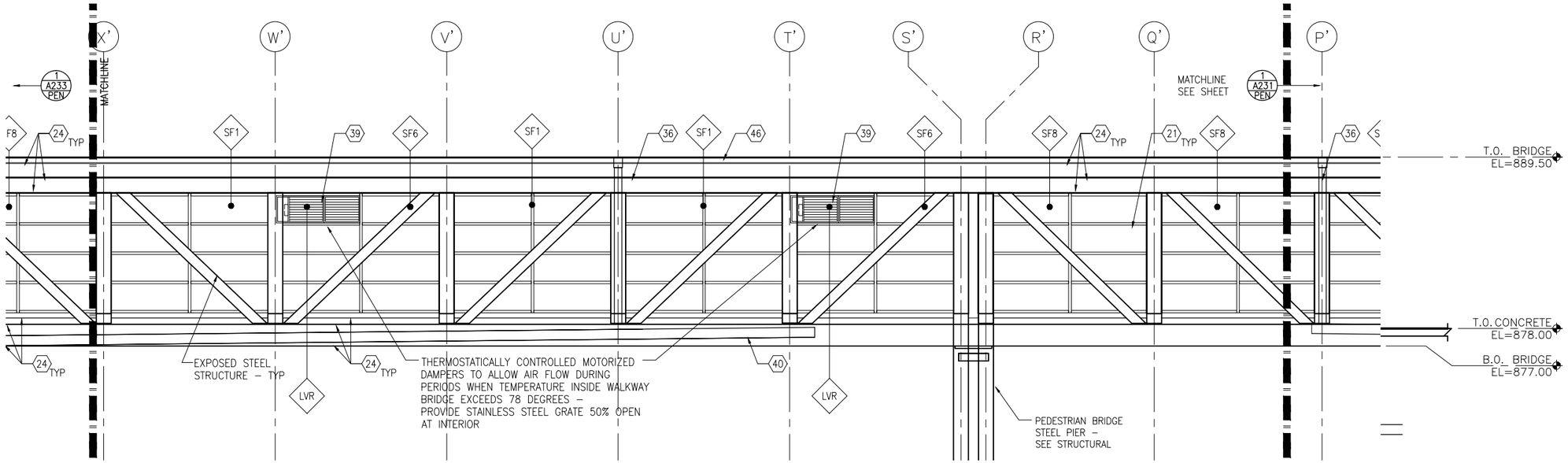
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE MIDDLE
PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-231

SHEET 103 OF 394

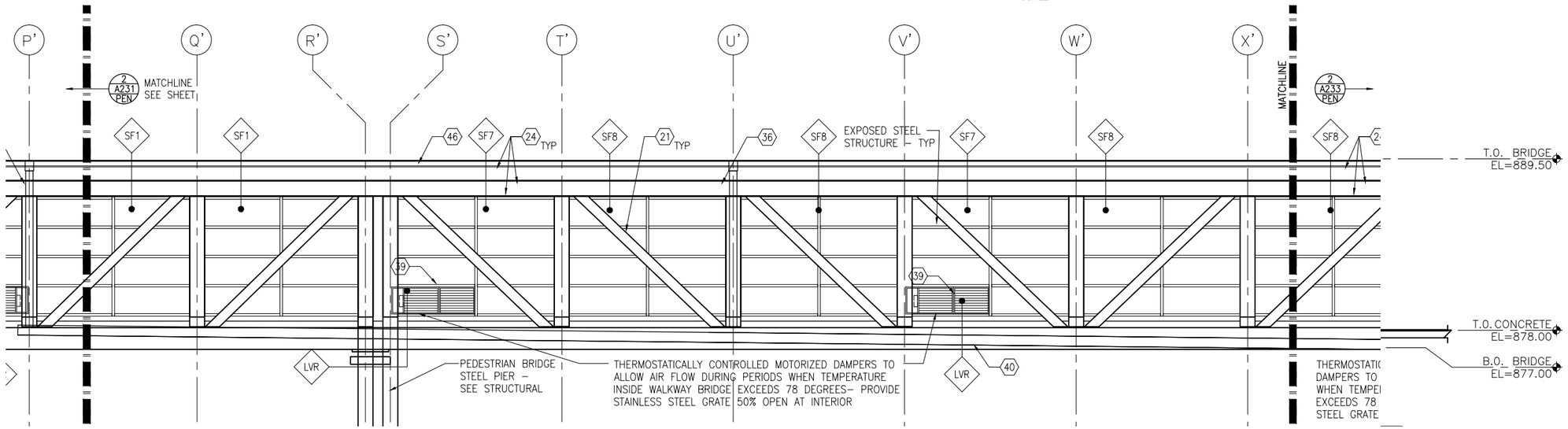
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1 PB NORTH PARTIAL ELEVATION (WEST)

SCALE:1/8" = 1'–0"

0 2 4 8
SCALE



2 PB NORTH PARTIAL ELEVATION (EAST)

SCALE:1/8" = 1'–0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
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6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
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NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

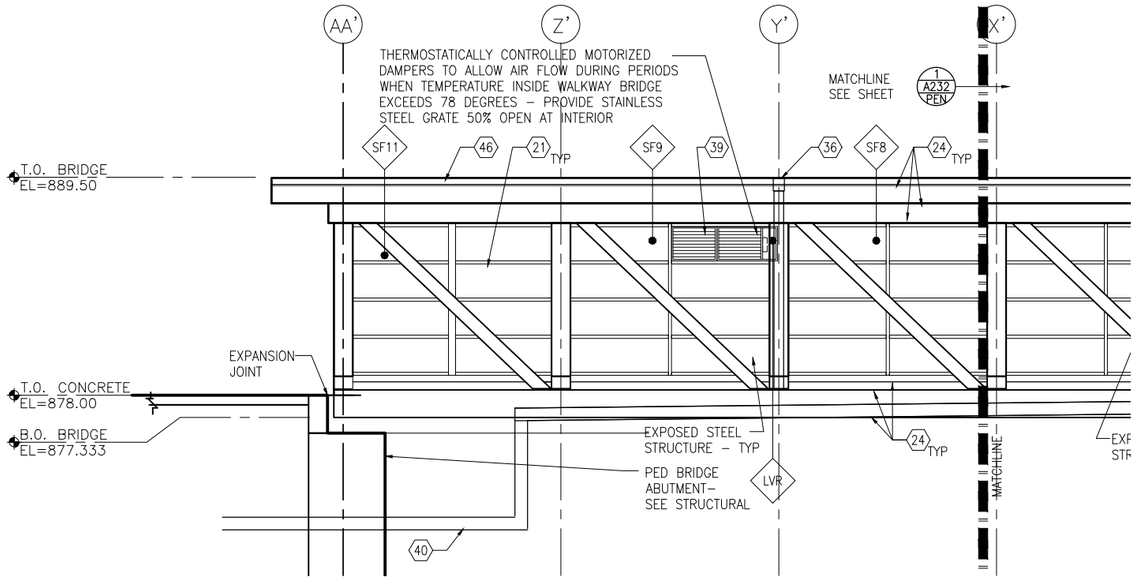
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE NORTH
PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-232

SHEET 104 OF 394

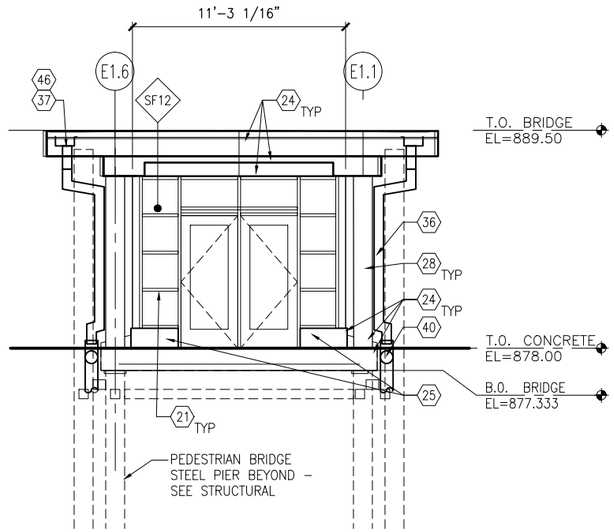
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1 PB NORTH PARTIAL ELEVATION (WEST)

SCALE:1/8" = 1'–0"

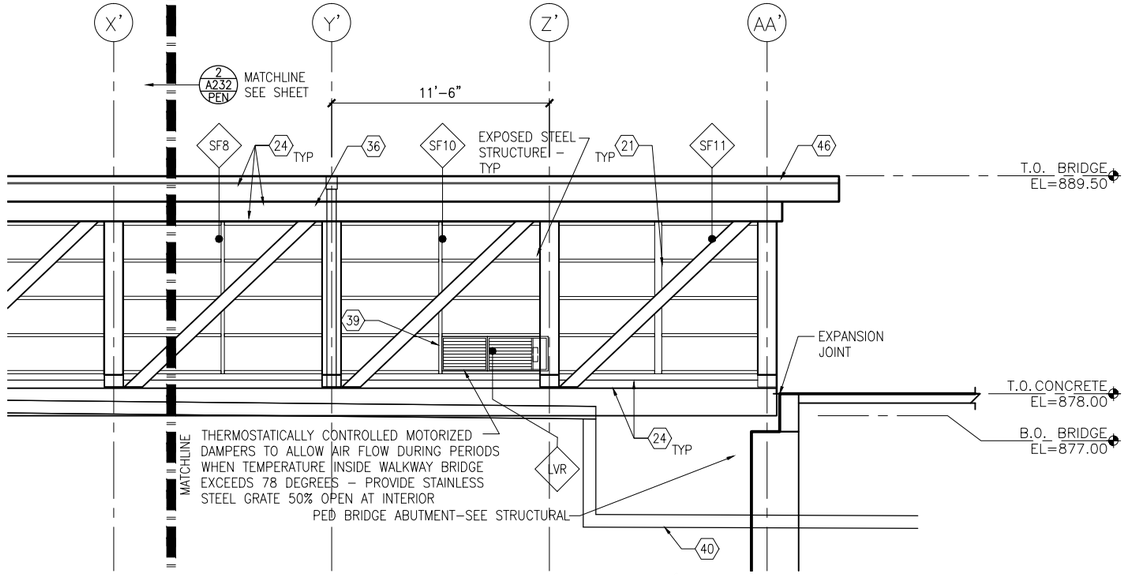
0 2 4 8 SCALE



3 PB NORTH SIDE ELEVATION

SCALE: 1/8" = 1'–0"

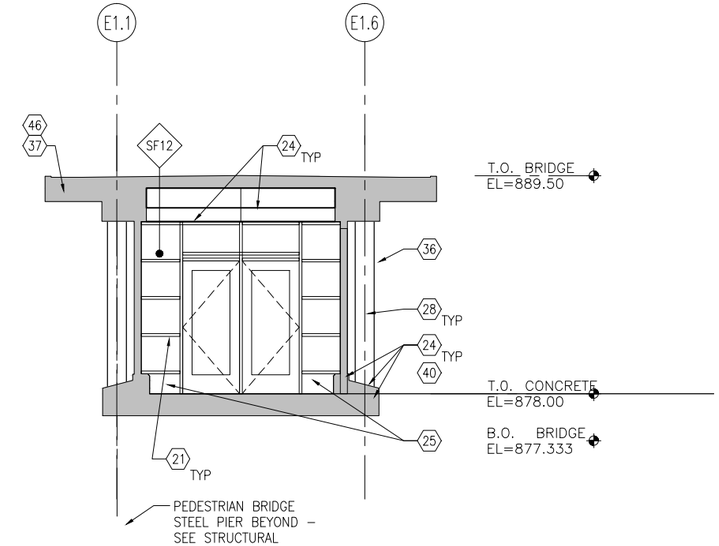
0 2 4 8 SCALE



2 PB NORTH PARTIAL ELEVATION (EAST)

SCALE:1/8" = 1'–0"

0 2 4 8 SCALE



4 PB SOUTH SIDE ELEVATION / SECTION

SCALE: 1/8" = 1'–0"

0 2 4 8 SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

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2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
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4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE–FIN. METAL SCUPPER
38. PRE–FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE–FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN–CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

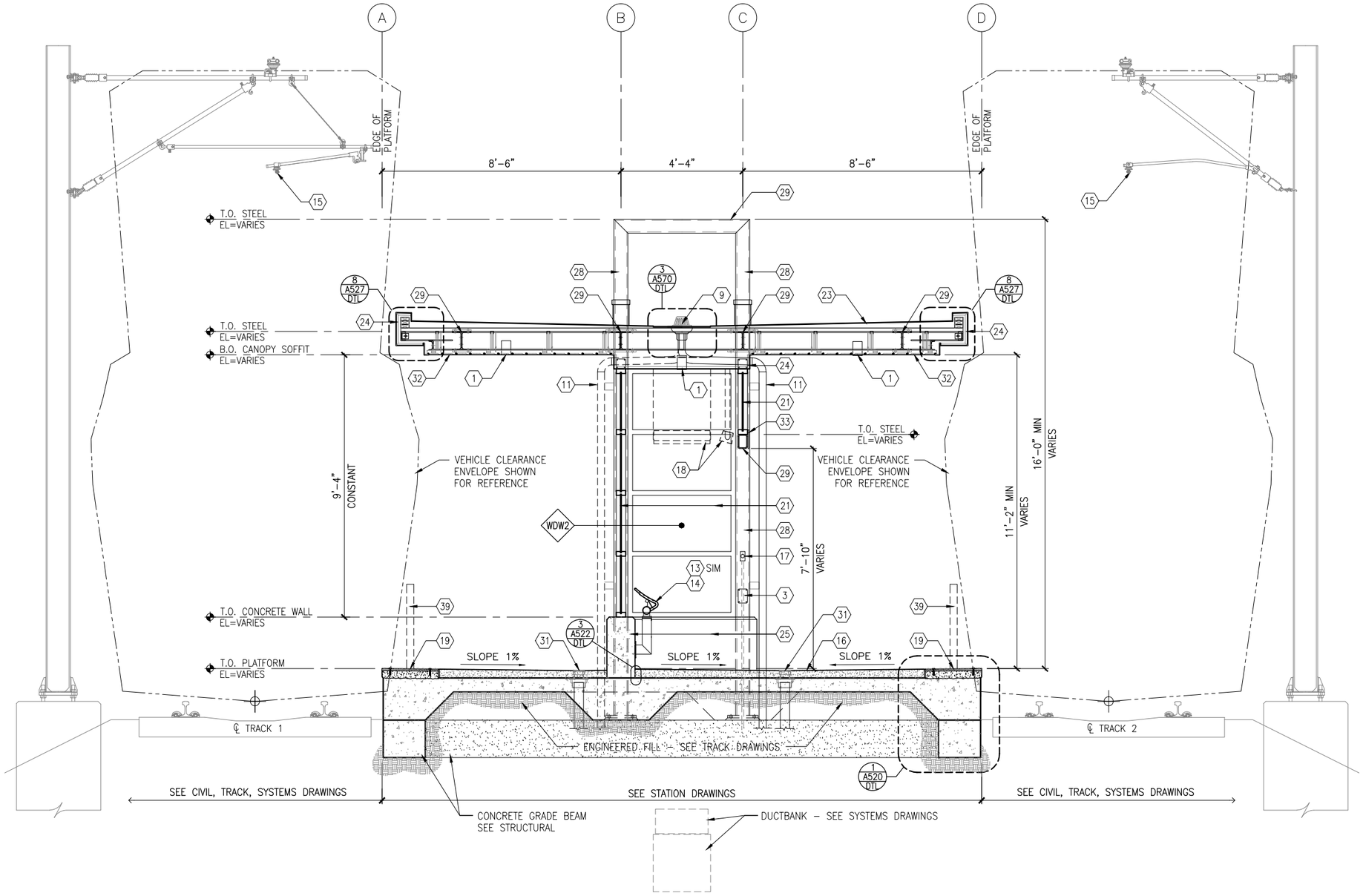
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE
SIDE ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-233

SHEET 105 OF 394

Jan. 18 2016 01:05 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-ELV-233.dwg By: v-mccarrtp



1 TYPICAL PLATFORM SECTION

SCALE: 1/4"=1'-0"

0 1 2 4
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES - ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. LIGHT RECESSED IN SOFFIT - SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE - SEE ELECTRICAL
3. HAND HOLE IN STEEL STRUCTURE
4. HAND RAIL
5. SECURITY CAMERA - SEE ELEC
6. TICKET VENDING MACHINE - SEE ELEC
7. EMERGENCY TELEPHONE LIGHT - SEE ELECTRICAL
8. EMERGENCY TELEPHONE - SEE ELEC
9. ROOF DRAIN - SEE PLUMBING
10. PRE-FINISHED METAL GUTTER
11. PAINTED CAST IRON RAIN WATER LEADER - SEE PLUMBING
12. PRE-FINISHED METAL SCUPPER
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM - SEE SYSTEMS (NIC)
16. CONCRETE PLATFORM
17. HEATER CONTROL - SEE ELEC
18. INFRARED HEATER - SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN - SEE ELEC
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27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN - SEE STRUCTURAL
29. STEEL BEAM - SEE STRUCTURAL
30. WALL HYDRANT - SEE PLUMBING
31. AREA DRAIN - SEE PLUMBING
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. PC CONC WALKWAY - SEE STRUCT
35. PC CONC STAIR - SEE STRUCT
36. PC CONC WALL PANEL
37. SECONDARY STEEL FRAMING - SEE STRUCTURAL
38. COMPOSITE ALUM PANEL
39. ADA BETWEEN-CAR BARRIER
40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R- ROOF TYPE - SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

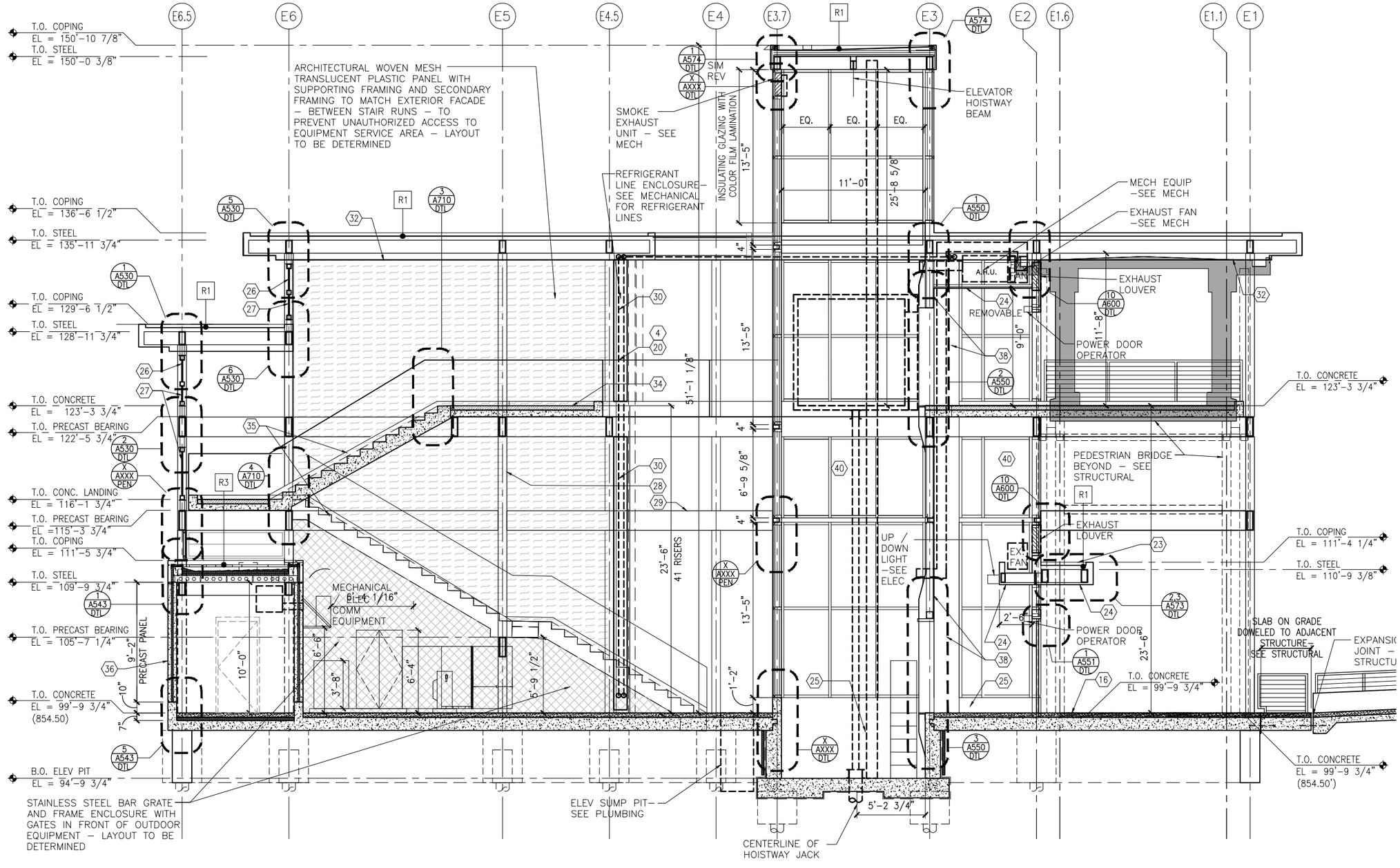
CIVIL - VOLUME 11D
PENN STATION
TYPICAL PLATFORM SECTION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-SCT-300

SHEET 106 OF 394

Jan. 18 2016 01:06 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-SCT-300.dwg By: v-mccartp



1 VC LONGITUDINAL SECTION
SCALE: 1/8" = 1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. LIGHT RECESSED IN SOFFIT – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
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4. HAND RAIL
5. SECURITY CAMERA – SEE ELEC
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. EMERGENCY TELEPHONE – SEE ELEC
9. ROOF DRAIN – SEE PLUMBING
10. PRE–FINISHED METAL GUTTER
11. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
12. PRE–FINISHED METAL SCUPPER
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYSTEMS (NIC)
16. CONCRETE PLATFORM
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18. INFRARED HEATER – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
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28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. AREA DRAIN – SEE PLUMBING
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. PC CONC WALKWAY – SEE STRUCT
35. PC CONC STAIR – SEE STRUCT
36. PC CONC WALL PANEL
37. SECONDARY STEEL FRAMING – SEE STRUCTURAL
38. COMPOSITE ALUM PANEL
39. ADA BETWEEN–CAR BARRIER
40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R– ROOF TYPE – SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

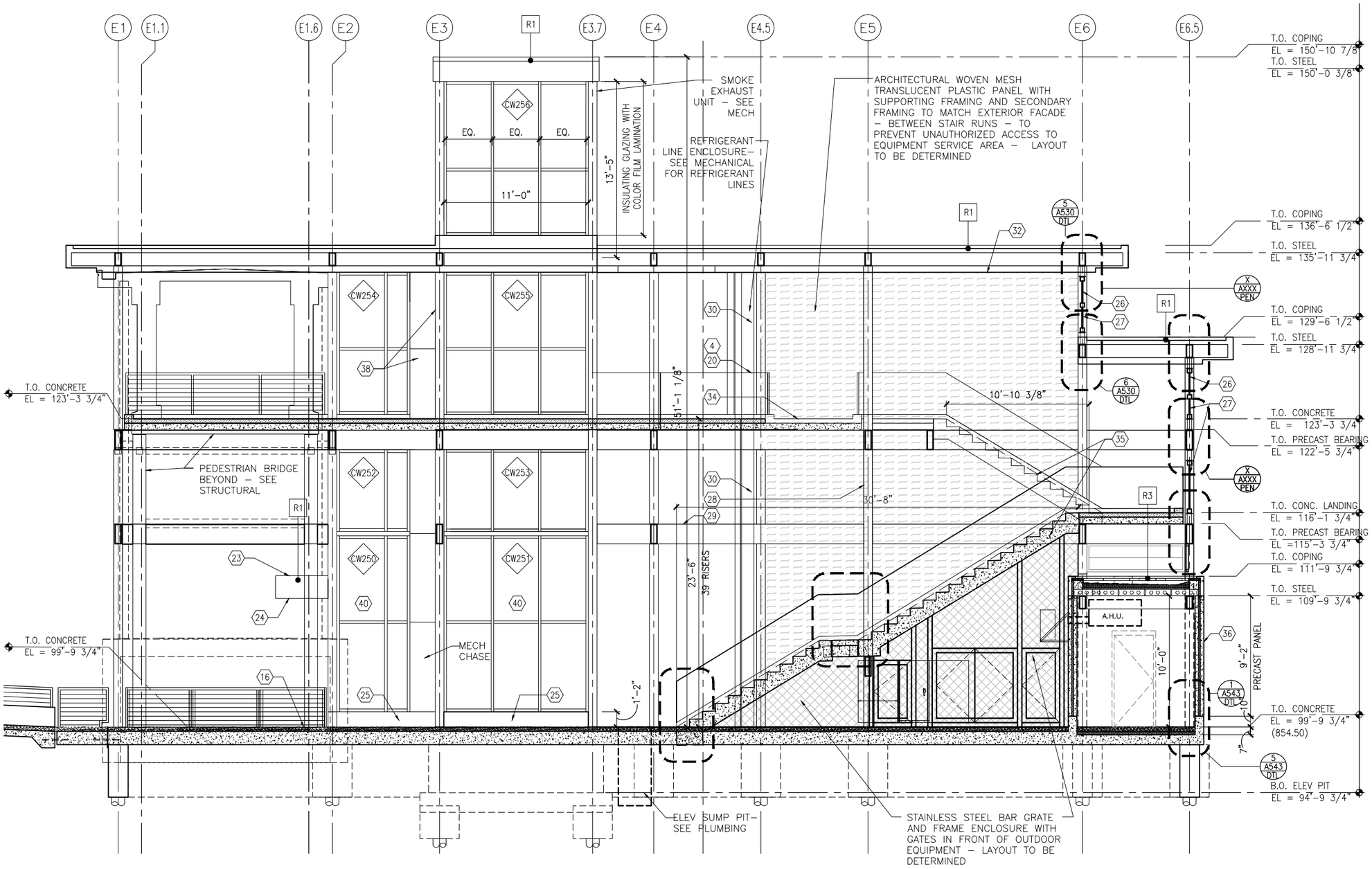
CIVIL - VOLUME 11D
PENN STATION
VC LONGITUDINAL SECTION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-SCT-310

SHEET 107 OF 394

Jan, 18 2016 01:06 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-SCT-310.dwg By: v-mccarrtp



1 VC LONGITUDINAL SECTION

SCALE: 1/8" = 1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. LIGHT RECESSED IN SOFFIT – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. HAND HOLE IN STEEL STRUCTURE
4. HAND RAIL
5. SECURITY CAMERA – SEE ELEC
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. EMERGENCY TELEPHONE – SEE ELEC
9. ROOF DRAIN – SEE PLUMBING
10. PRE–FINISHED METAL GUTTER
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18. INFRARED HEATER – SEE ELEC
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28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
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31. AREA DRAIN – SEE PLUMBING
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. PC CONC WALKWAY – SEE STRUCT
35. PC CONC STAIR – SEE STRUCT
36. PC CONC WALL PANEL
37. SECONDARY STEEL FRAMING – SEE STRUCTURAL
38. COMPOSITE ALUM PANEL
39. ADA BETWEEN–CAR BARRIER
40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R– ROOF TYPE – SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

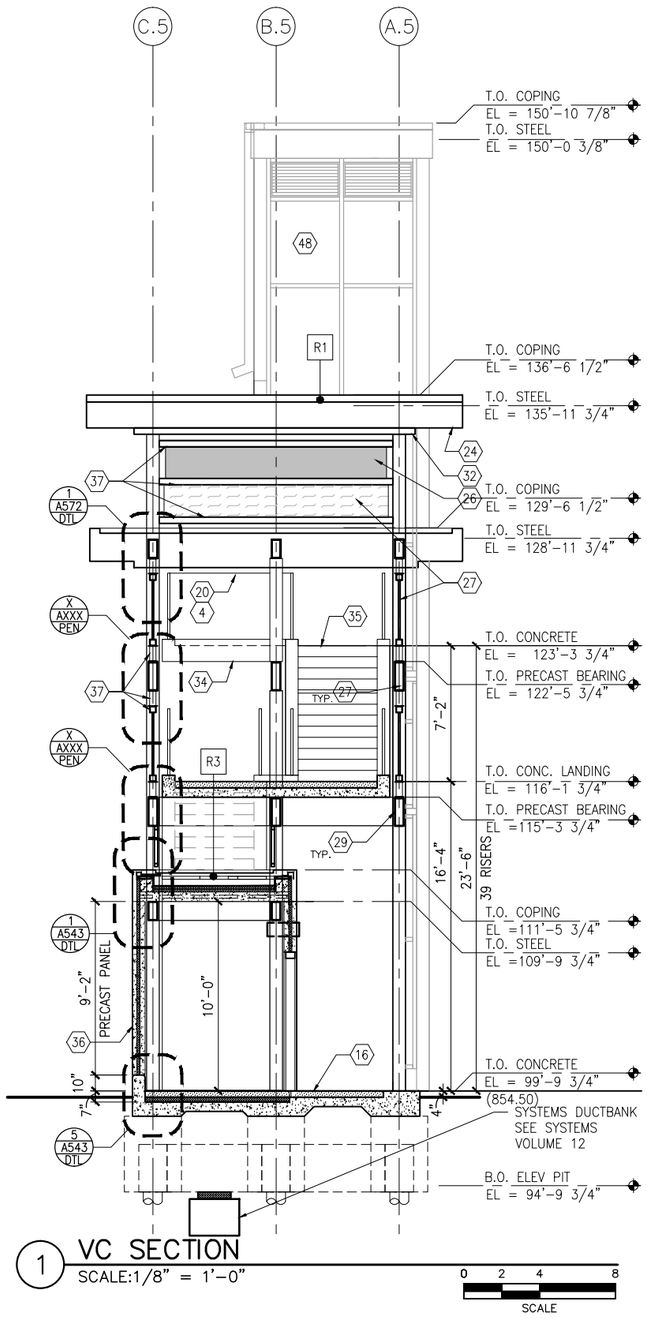
CIVIL - VOLUME 11D
PENN STATION
VC LONGITUDINAL SECTION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-SCT-311

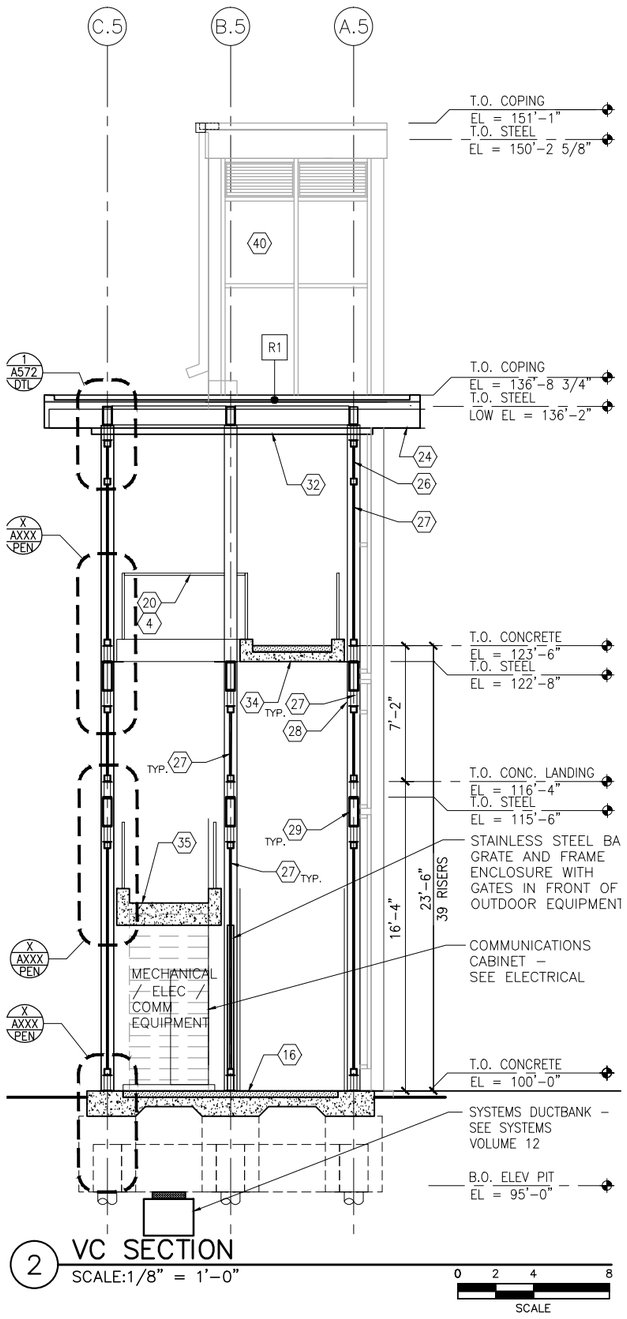
SHEET 108 OF 394

Jan. 18 2016 01:07 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-SCT-311.dwg By: v-mccarrtp



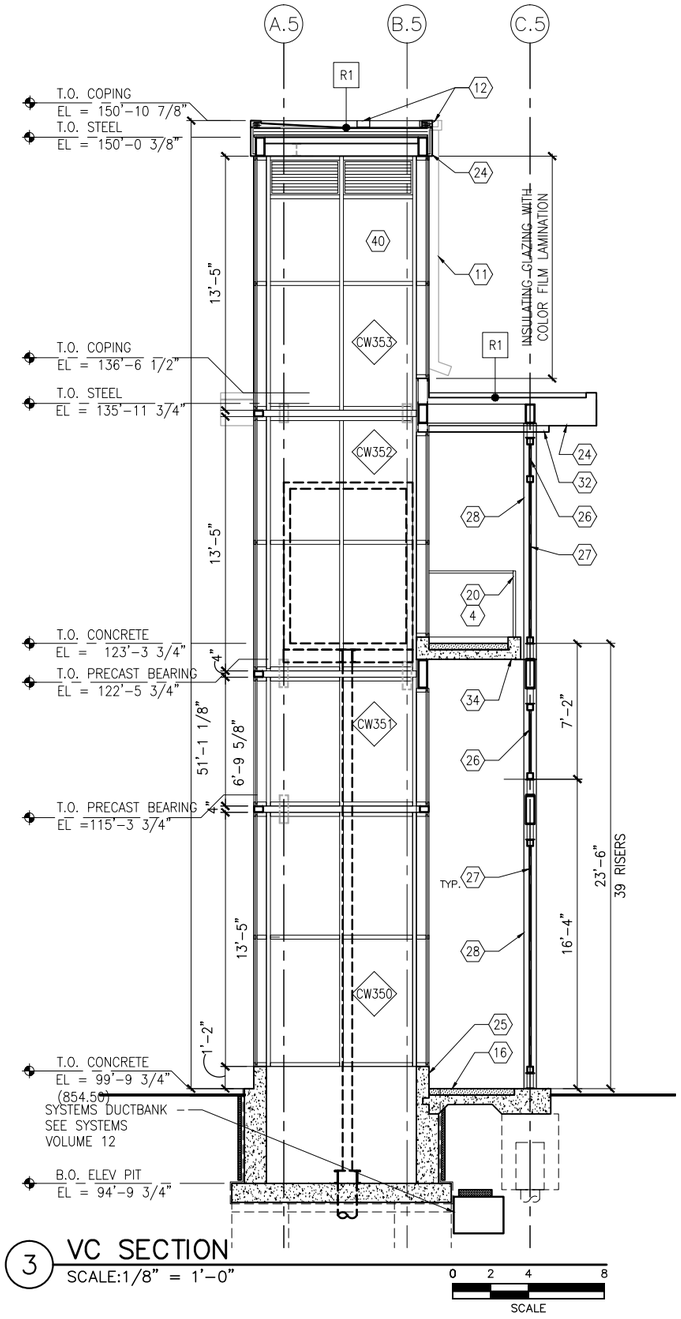
1 VC SECTION
SCALE:1/8" = 1'-0"

SCALE 0 2 4 8



2 VC SECTION
SCALE:1/8" = 1'-0"

SCALE 0 2 4 8



3 VC SECTION
SCALE:1/8" = 1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. LIGHT RECESSED IN SOFFIT – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. HAND HOLE IN STEEL STRUCTURE
4. HAND RAIL
5. SECURITY CAMERA – SEE ELEC
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. EMERGENCY TELEPHONE – SEE ELEC
9. ROOF DRAIN – SEE PLUMBING
10. PRE-FINISHED METAL GUTTER
11. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
12. PRE-FINISHED METAL SCUPPER
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYSTEMS (NIC)
16. CONCRETE PLATFORM
17. HEATER CONTROL – SEE ELEC
18. INFRARED HEATER – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
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25. CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
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29. STEEL BEAM – SEE STRUCTURAL
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31. AREA DRAIN – SEE PLUMBING
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. PC CONC WALKWAY – SEE STRUCT
35. PC CONC STAIR – SEE STRUCT
36. PC CONC WALL PANEL
37. SECONDARY STEEL FRAMING – SEE STRUCTURAL
38. COMPOSITE ALUM PANEL
39. ADA BETWEEN-CAR BARRIER
40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R- ROOF TYPE – SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

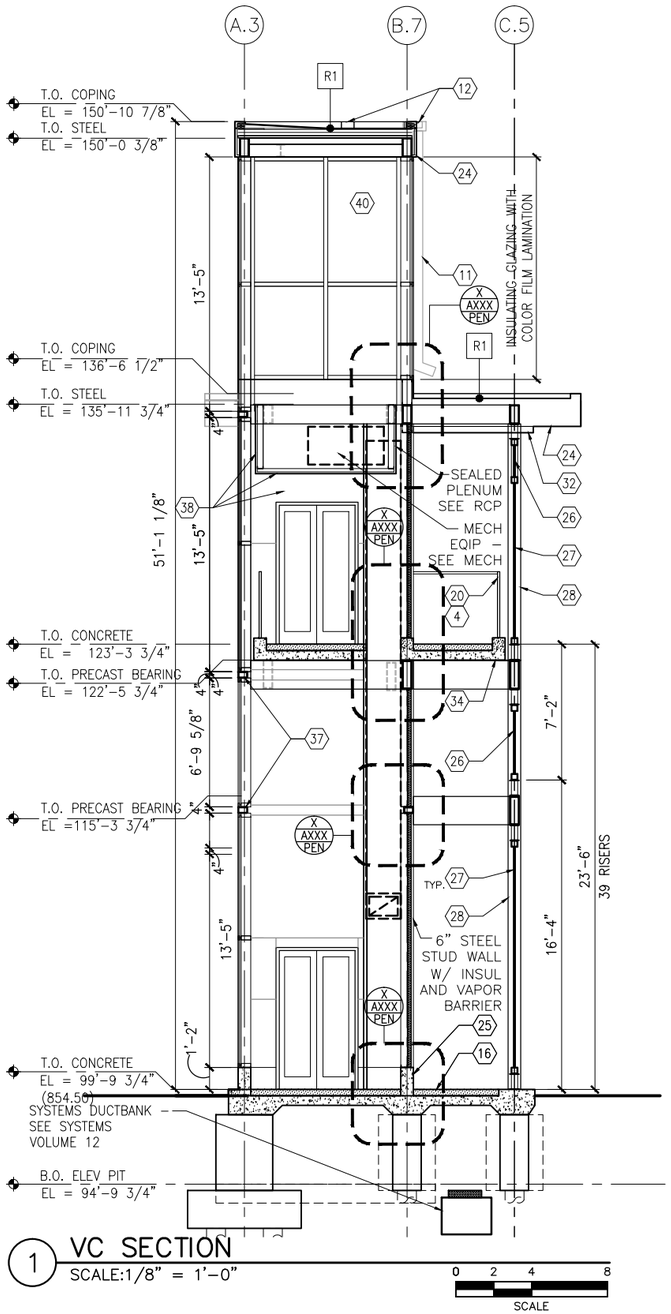
CIVIL - VOLUME 11D
PENN STATION
VC SECTIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-SCT-312

SHEET 109 OF 394

Jan. 18 2016 01:07 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-SCT-312.dwg By: v-mccarrtp



1 VC SECTION
SCALE:1/8" = 1'-0"

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
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3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

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1. LIGHT RECESSED IN SOFFIT – SEE ELECTRICAL
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39. ADA BETWEEN-CAR BARRIER
40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R– ROOF TYPE – SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

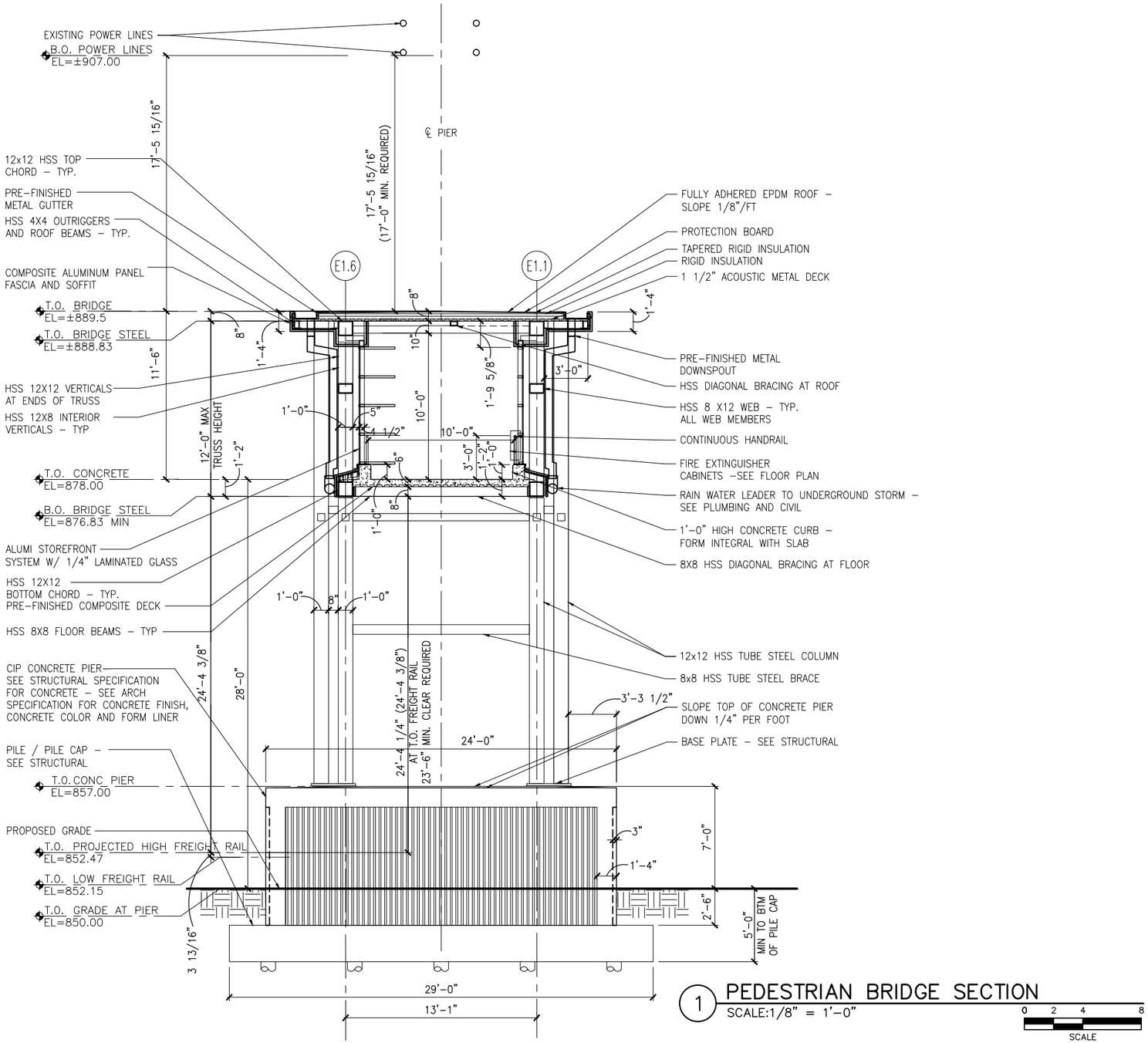
CIVIL - VOLUME 11D
PENN STATION
VC SECTIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-SCT-313

SHEET 110 OF 394

Jan, 18 2016 01:08 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-SCT-313.dwg By: v-mccarrtp



1 PEDESTRIAN BRIDGE SECTION
SCALE:1/8" = 1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
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40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R– ROOF TYPE – SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

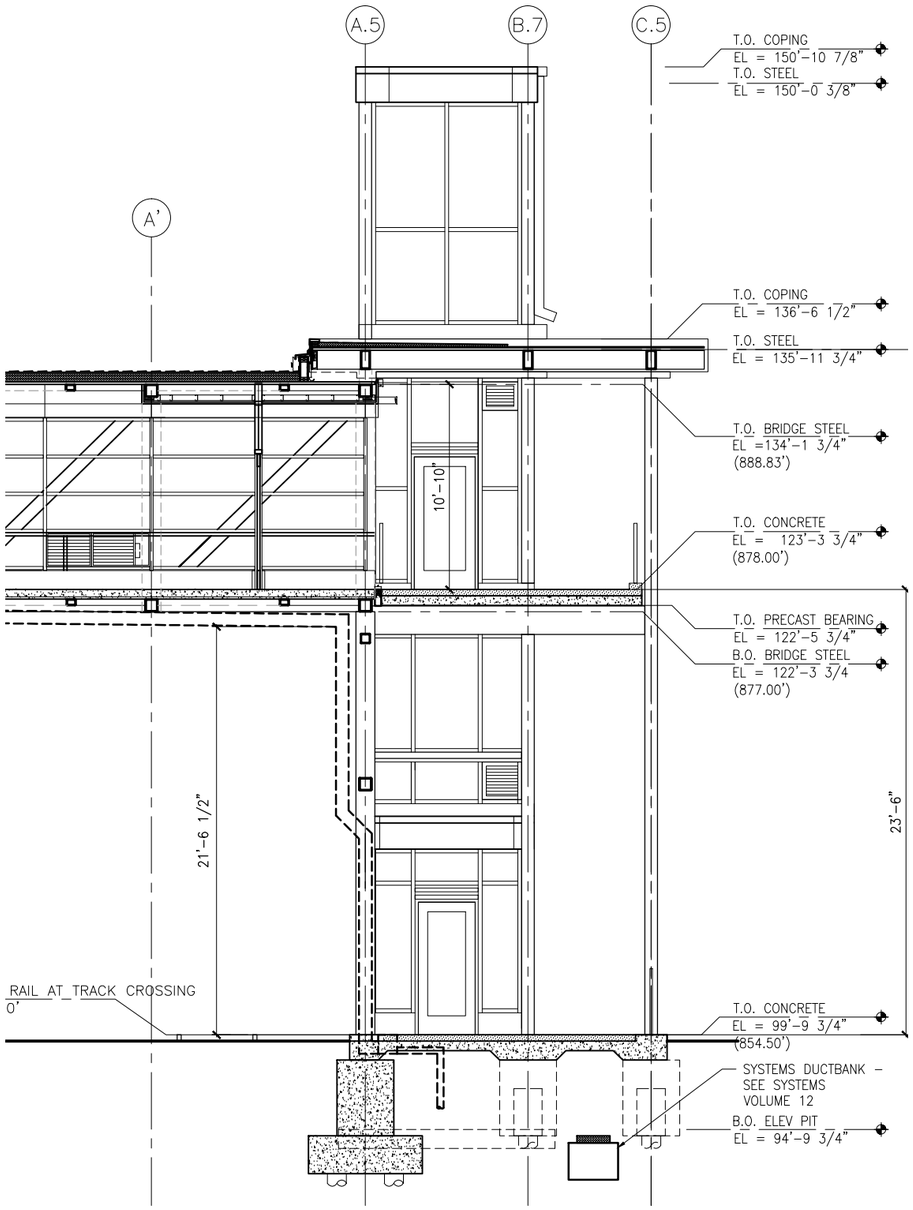
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE SECTIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-SCT-316

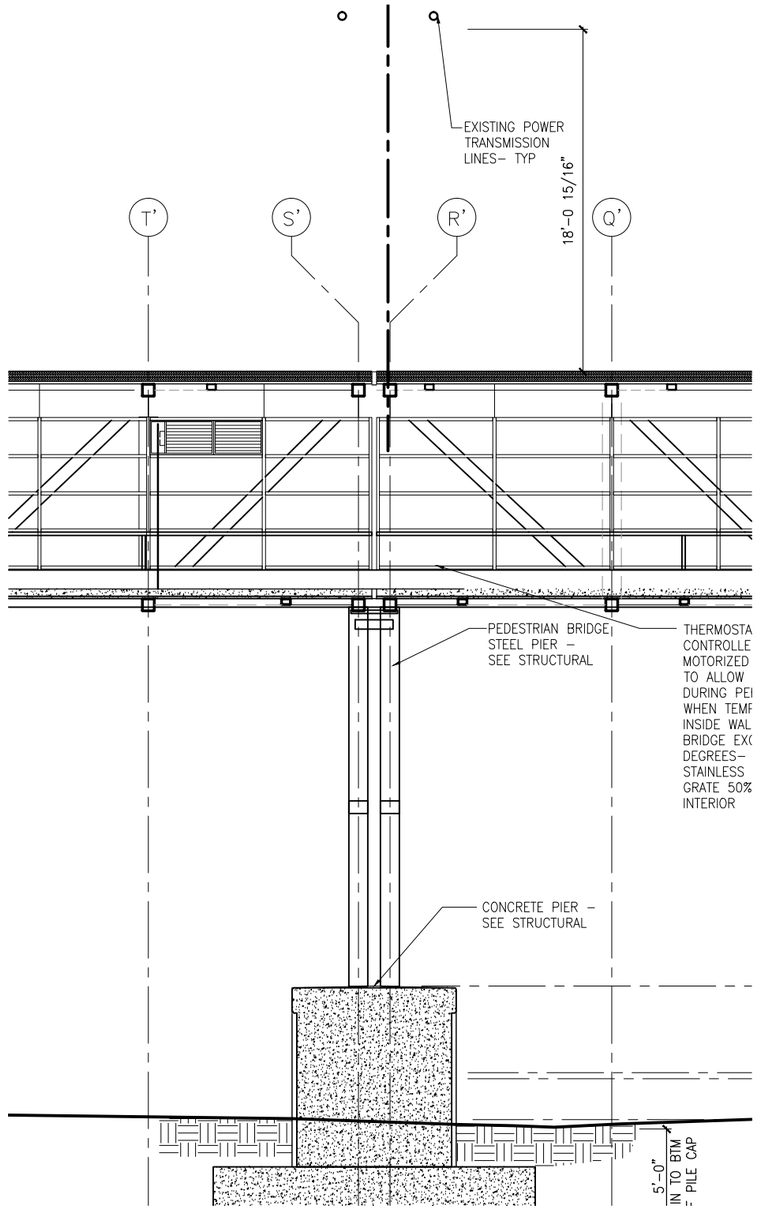
SHEET 111 OF 394

Jan, 18 2016 01:09 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-SCT-316.dwg By: v-mccarrtp



2 PEDESTRIAN BRIDGE SECTION
SCALE:1/8" = 1'-0"

0 2 4 8
SCALE



1 PEDESTRIAN BRIDGE SECTION
SCALE:1/8" = 1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. LIGHT RECESSED IN SOFFIT – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. HAND HOLE IN STEEL STRUCTURE
4. HAND RAIL
5. SECURITY CAMERA – SEE ELEC
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. EMERGENCY TELEPHONE – SEE ELEC
9. ROOF DRAIN – SEE PLUMBING
10. PRE-FINISHED METAL GUTTER
11. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
12. PRE-FINISHED METAL SCUPPER
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYSTEMS (NIC)
16. CONCRETE PLATFORM
17. HEATER CONTROL – SEE ELEC
18. INFRARED HEATER – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. AREA DRAIN – SEE PLUMBING
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. PC CONC WALKWAY – SEE STRUCT
35. PC CONC STAIR – SEE STRUCT
36. PC CONC WALL PANEL
37. SECONDARY STEEL FRAMING – SEE STRUCTURAL
38. COMPOSITE ALUM PANEL
39. ADA BETWEEN-CAR BARRIER
40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R- ROOF TYPE – SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

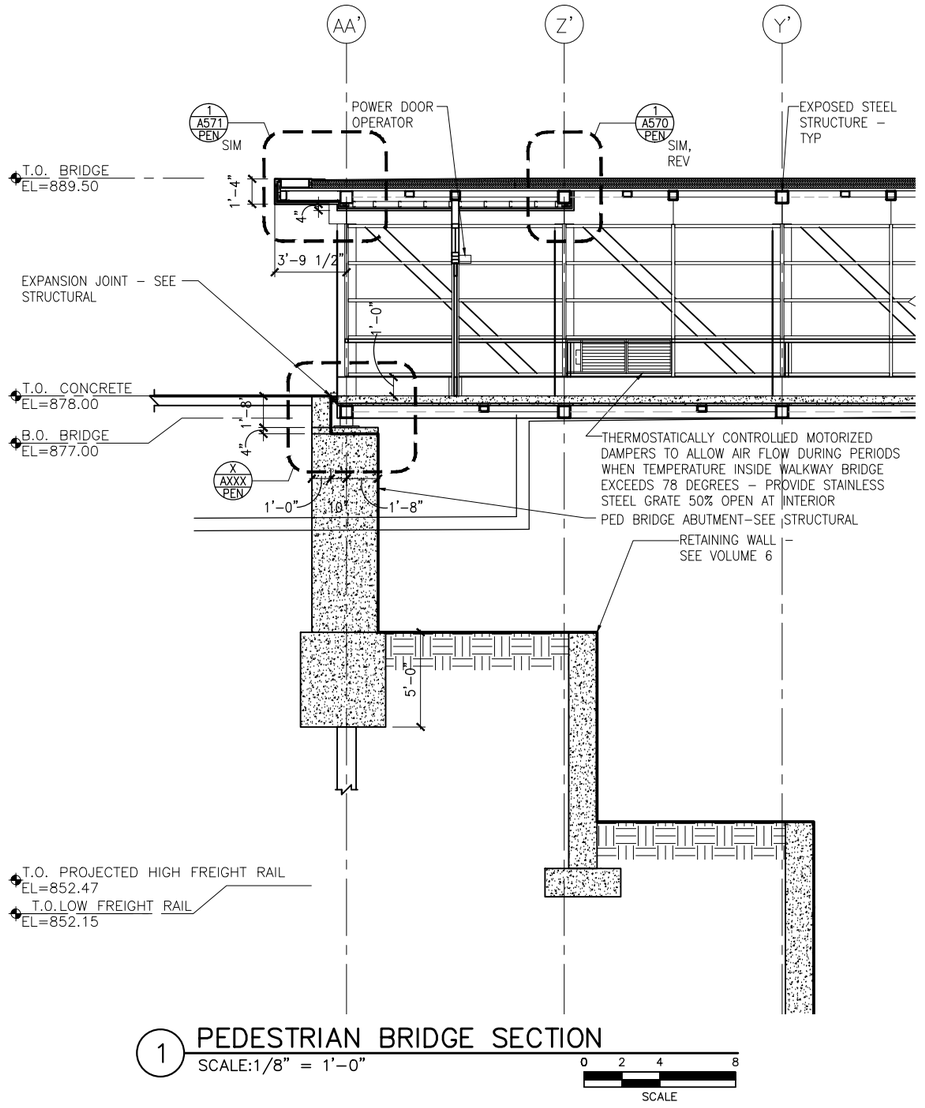
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE SECTIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-SCT-317

SHEET 112 OF 394

Jan. 18 2016 01:09 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-SCT-317.dwg By: v-mccarrtp



1 PEDESTRIAN BRIDGE SECTION
SCALE:1/8" = 1'–0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

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KEY NOTES – ⟨#⟩

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40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R– ROOF TYPE – SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

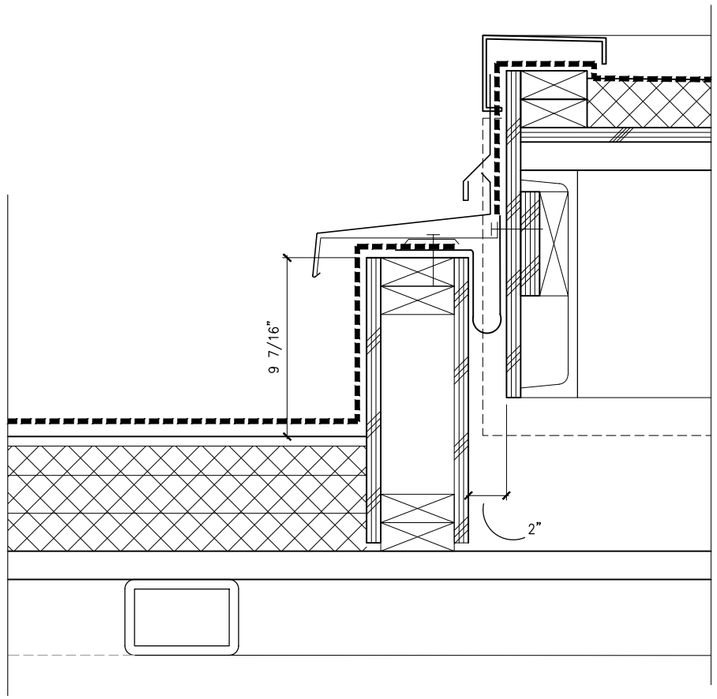
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE SECTIONS

DISCIPLINE: ARCHITECTURE

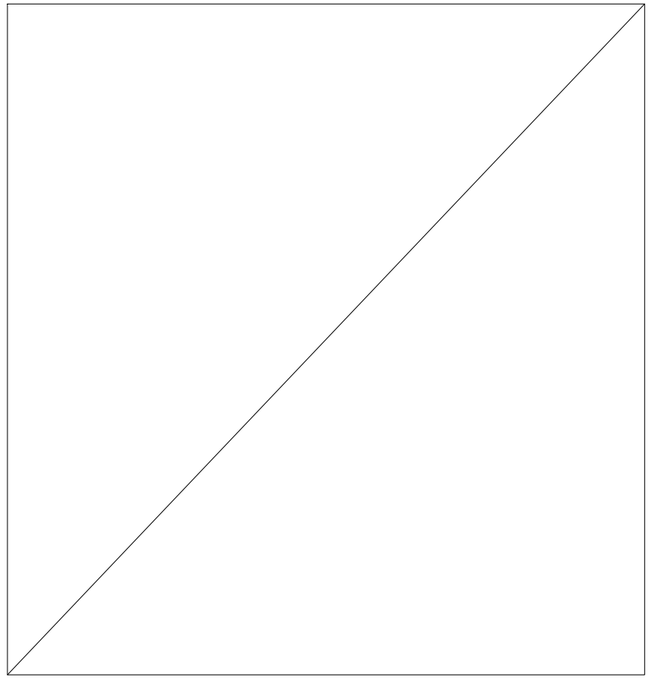
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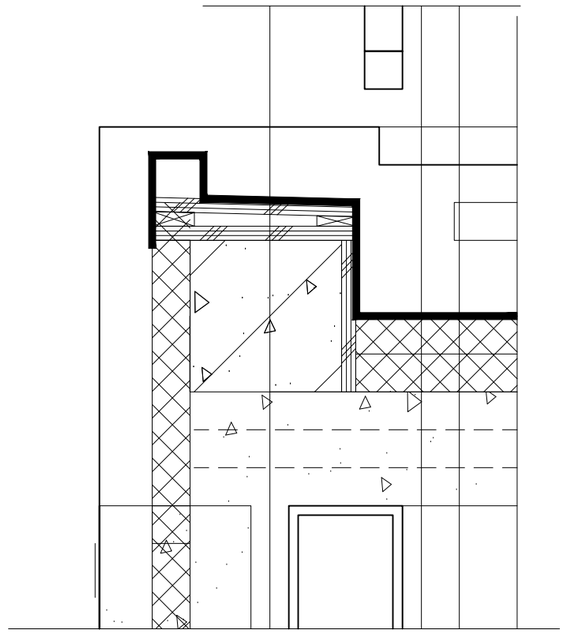
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1 VC ROOF EDGE EXPANSION JOINT AT PED. BRIDGE
SCALE: 1 1/2"=1'-0"



2 VC FLOOR EXPANSION JOINT AT PED. BRIDGE
SCALE: 1 1/2"=1'-0"



3 VC ROOF EDGE AT ELEV. MACHINE ROOM
SCALE: 1 1/2"=1'-0"

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL
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SOUTHWEST Green Line LRT Extension

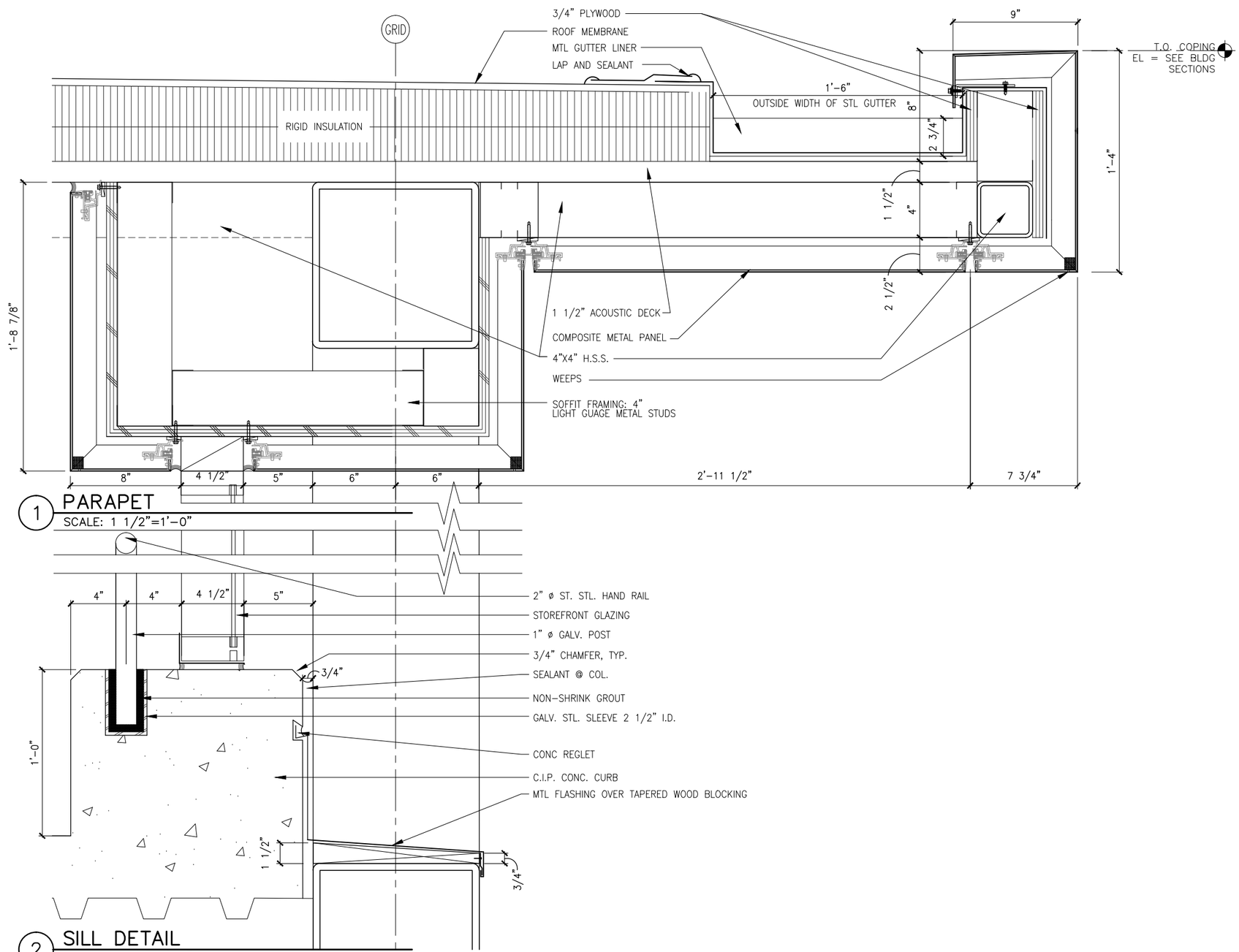
CIVIL - VOLUME 11D
PENN STATION
ROOF DETAILS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-DTL-570

SHEET 114 OF 394

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ROOF DETAILS

SHEET 115 OF 394

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-DTL-571

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DOOR SCHEDULES- PENN STATION

LEVEL	DOOR NO.	FROM ROOM	TO ROOM	WIDTH	HEIGHT	TYPE	FRAME DETAILS			HARDWARE SET	NOTES
							HEAD	JAMB	SILL		
PLATFORM	100	ELEV LOBBY	EXTERIOR	3'-0"	7'-0"	ALUMINUM	/ A	/ A	/ A	SEE SPECIFICATIONS	
		100	WALKWAY								
	101	ELEV MACHINE ROOM	EQUIPMENT ACCESS	3'-6"	7'-0"	HM				SEE SPECIFICATIONS	
		101	103								
	102A	EQUIPMENT	EQUIPMENT ACCESS	2'-10.5"		FRAMED ARCH WOVEN MESH	/ A	/ A	/ A	SEE SPECIFICATIONS	
		102	103								
	102B	EQUIPMENT	EQUIPMENT ACCESS	6'-6"		FRAMED ARCH WOVEN MESH	/ A	/ A	/ A	SEE SPECIFICATIONS	
		102	103								
	102C	EQUIPMENT	EQUIPMENT ACCESS	2'-10.5"		FRAMED ARCH WOVEN MESH	/ A	/ A	/ A	SEE SPECIFICATIONS	
		102	103								
	103	EXTERIOR	EQUIPMENT ACCESS	2'-10"		FRAMED ARCH WOVEN MESH	/ A	/ A	/ A	SEE SPECIFICATIONS	
		WALKWAY	103								
BRIDGE	200	ELEV LOBBY	EXTERIOR	3'-0"	7'-0"	STOREFRONT ENTRANCE	/ A	/ A	/ A	SEE SPECIFICATIONS	
		200	WALKWAY								
	201A	EXTERIOR	PEDESTRIAN BRIDGE	6'-2"	7'-0"	STOREFRONT ENTRANCE	/ A	/ A	/ A	SEE SPECIFICATIONS	
		WALKWAY	201								
	201B	PEDESTRIAN BRIDGE	EXTERIOR	6'-2"	7'-0"	STOREFRONT ENTRANCE	/ A	/ A	/ A	SEE SPECIFICATIONS	
		201	WALKWAY								

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

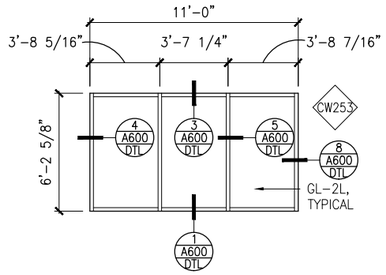
CIVIL - VOLUME 11D
PENN STATION
DOOR AND FRAME SCHEDULE

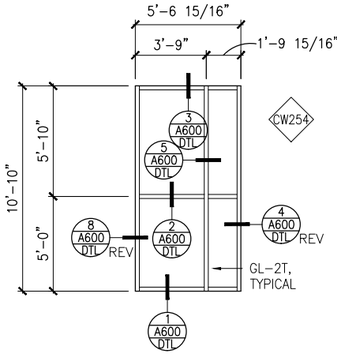
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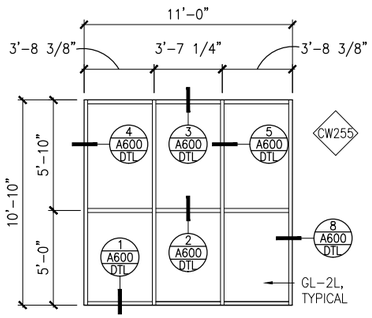
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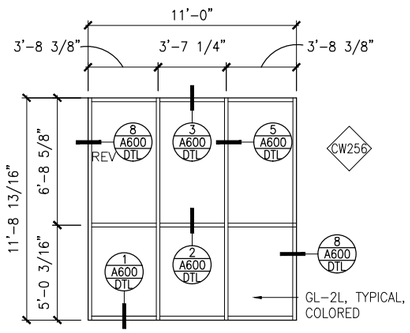
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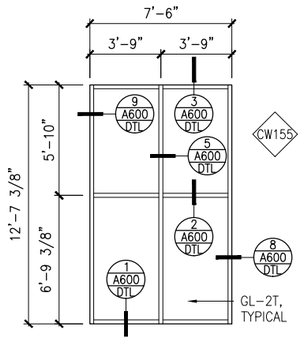
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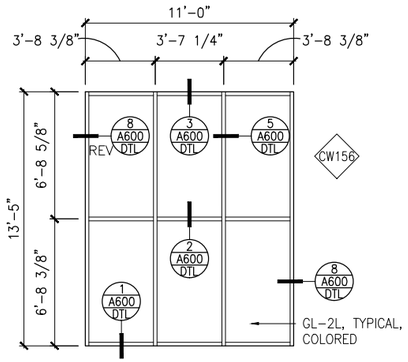


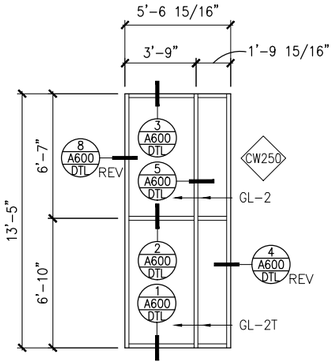


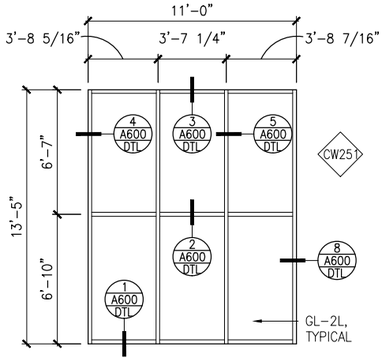


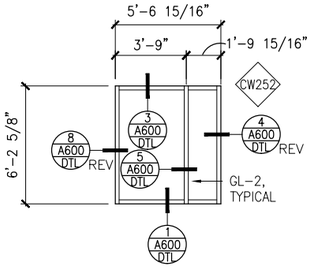


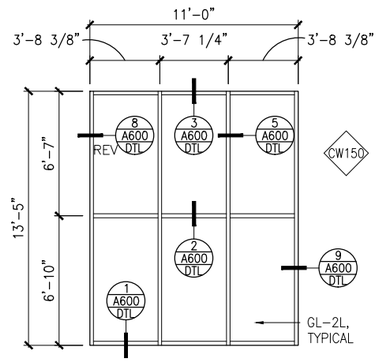


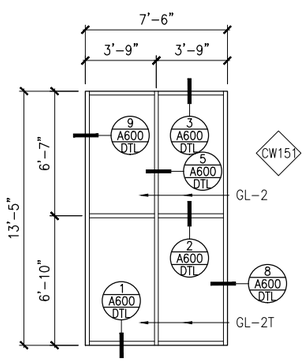


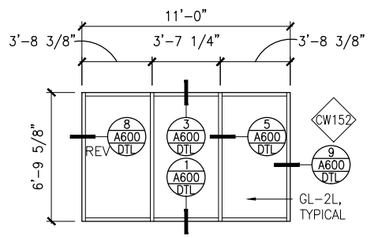


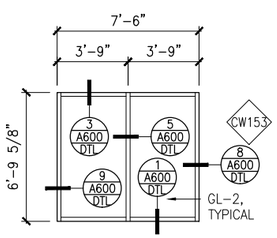


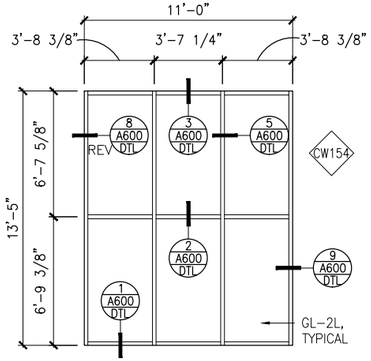












1 VC WINDOW TYPES
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

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SOUTHWEST Green Line LRT Extension

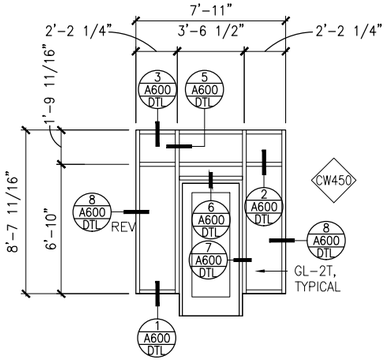
CIVIL - VOLUME 11D
PENN STATION
VC WINDOW TYPES

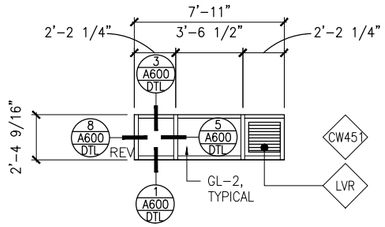
DISCIPLINE: ARCHITECTURE

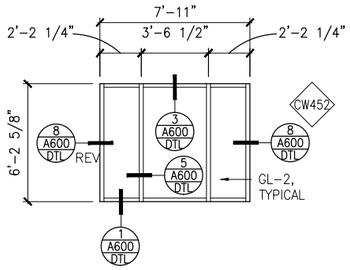
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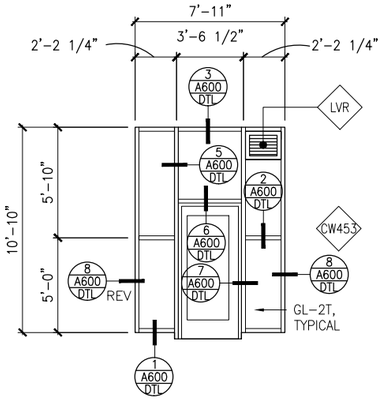
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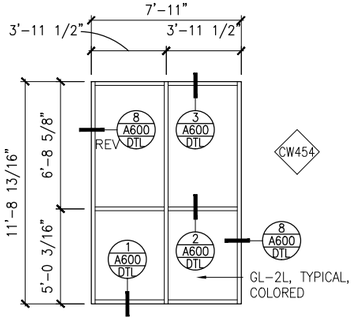
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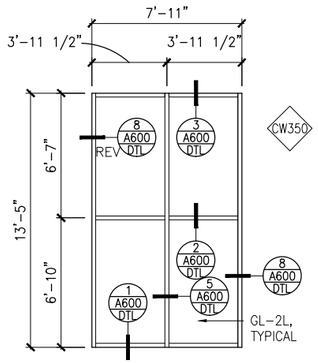


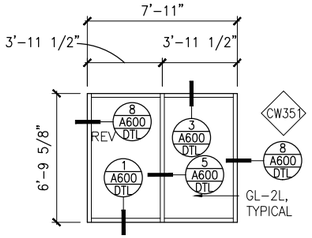


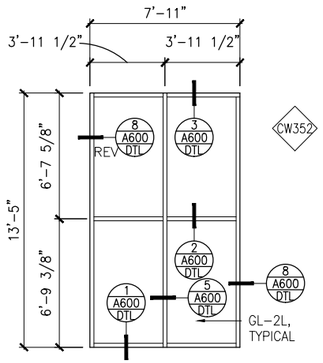


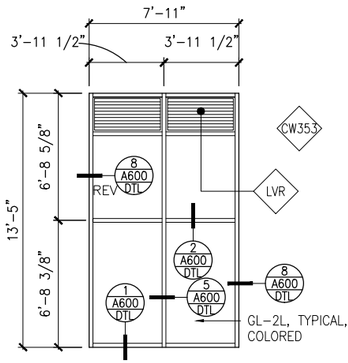












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SCALE

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

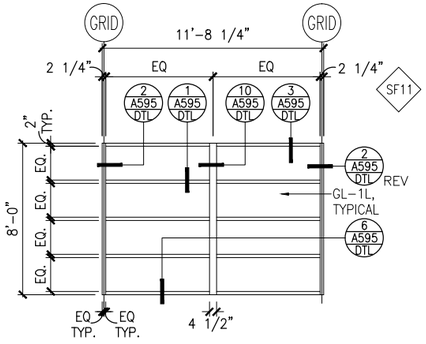
CIVIL - VOLUME 11D
PENN STATION
VC WINDOW TYPES

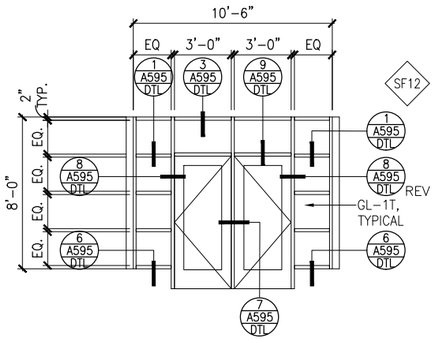
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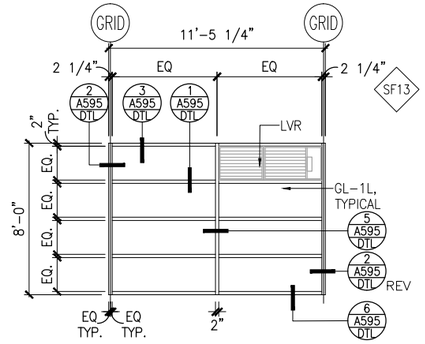
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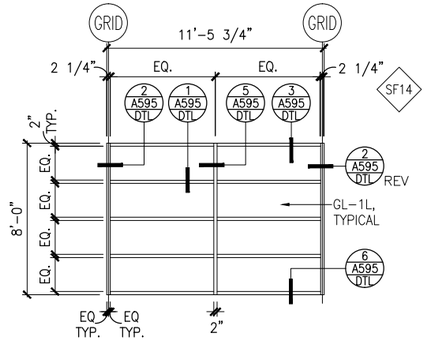
SHEET 118 OF 394

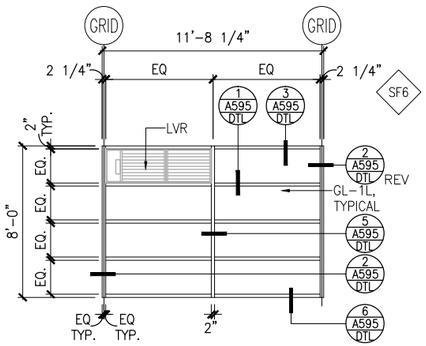
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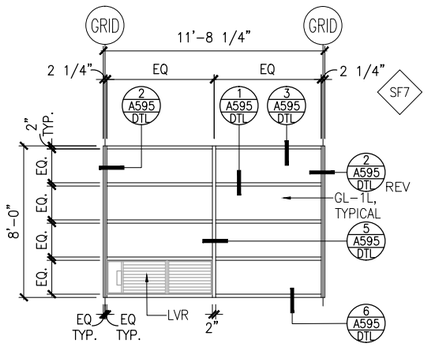


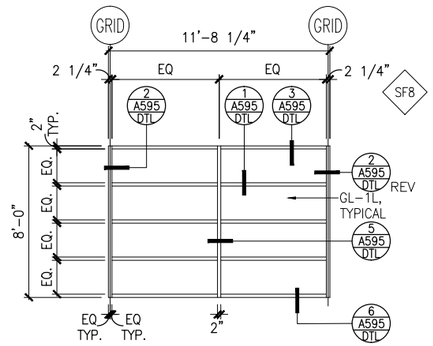


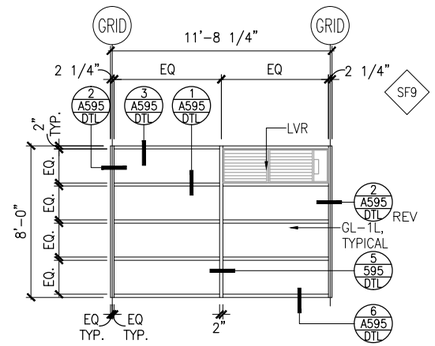


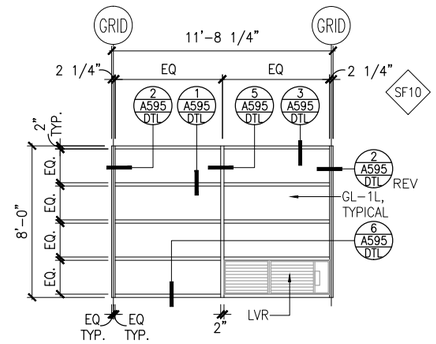


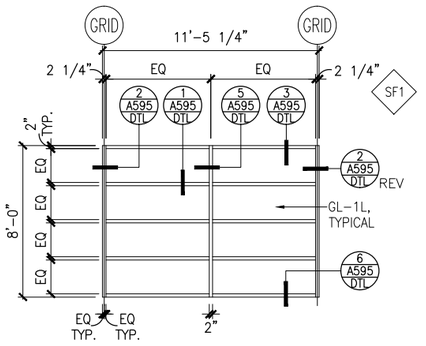


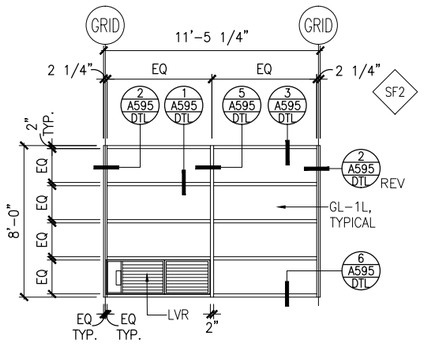


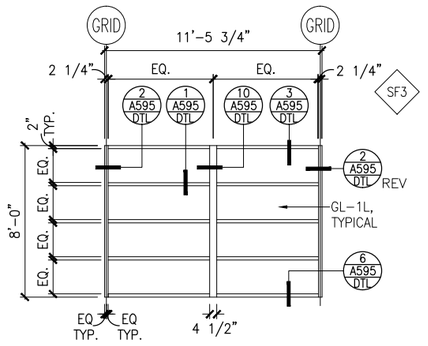


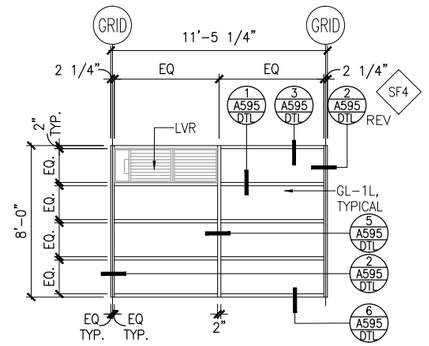


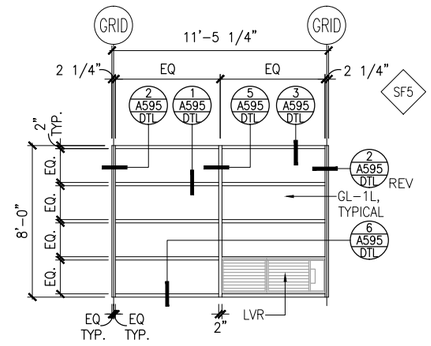












1 VC WINDOW TYPES

SCALE:1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE
WINDOW TYPES

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-DTL-594

SHEET 119 OF 394

Jan. 18 2016 01:11 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-DTL-594.dwg By: v-mccarrtp

ARCHITECTURAL WOVEN MESH SCHEDULES

ELEVATION	PANEL NO.	WIDTH	HEIGHT	TYPE	ELEV DWG REFERENCE	ATTACHMENT DETAILS	NOTES
TRACK 1	M150	6'-11 15/16"	11'-11 5/8"		E4-PEN-ARC-ELV-220	/ A	
	M151	6'-11 15/16"	8'-6 3/8"		E4-PEN-ARC-ELV-220	/ A	
	M152	15'-1 7/8"	8'-4 3/8"		E4-PEN-ARC-ELV-220	/ A	
	M153	15'-1 7/8"	3'-8"		E4-PEN-ARC-ELV-220	/ A	
	M154	15'-1 15/16"	11'-11 5/8"		E4-PEN-ARC-ELV-220	/ A	
	M155	6'-11 15/16"	11'-11 5/8"		E4-PEN-ARC-ELV-220	/ A	
	M156	6'-11 15/16"	3'-8"		E4-PEN-ARC-ELV-220	/ A	
	M157	6'-11 15/16"	8'-4 5/16"		E4-PEN-ARC-ELV-220	/ A	
	M158	9'-8 1/16"	11'-11 5/8"		E4-PEN-ARC-ELV-220	/ A	
	M159	9'-8 1/16"	3'-8"		E4-PEN-ARC-ELV-220	/ A	
	M160	9'-11 1/8"	8'-4 3/8"		E4-PEN-ARC-ELV-220	/ A	
TRACK 2	M250	6'-11 15/16"	8'-6 3/8"		E3-WST-ARC-ELV-226	/ A	
	M251	15'-1 7/8"	8'-4 3/8"		E3-WST-ARC-ELV-226	/ A	
	M252	15'-1 7/8"	3'-8"		E3-WST-ARC-ELV-226	/ A	
	M253	14'-7 15/16"	11'-11 5/8"		E3-WST-ARC-ELV-226	/ A	
	M254	15'-1 15/16"	11'-11 5/8"		E3-WST-ARC-ELV-226	/ A	
	M255	15'-1 7/8"	3'-8"		E3-WST-ARC-ELV-226	/ A	
	M256	15'-1 7/8"	8'-4 3/8"		E3-WST-ARC-ELV-226	/ A	
	M257	15'-1 7/8"	8'-4 3/8"		E3-WST-ARC-ELV-226	/ A	
	M258	7'-0"	8'-4 3/8"		E3-WST-ARC-ELV-226	/ A	
SIDE	M350	4'-7"	11'-11 5/8"		E3-WST-ARC-ELV-221	/ A	
	M351	5'-4"	8'-6 1/16"		E3-WST-ARC-ELV-221	/ A	
	M352	5'-4"	8'-6 1/16"		E3-WST-ARC-ELV-221	/ A	
	M353	11'-10	1'-8 1/2"		E3-WST-ARC-ELV-221	/ A	

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

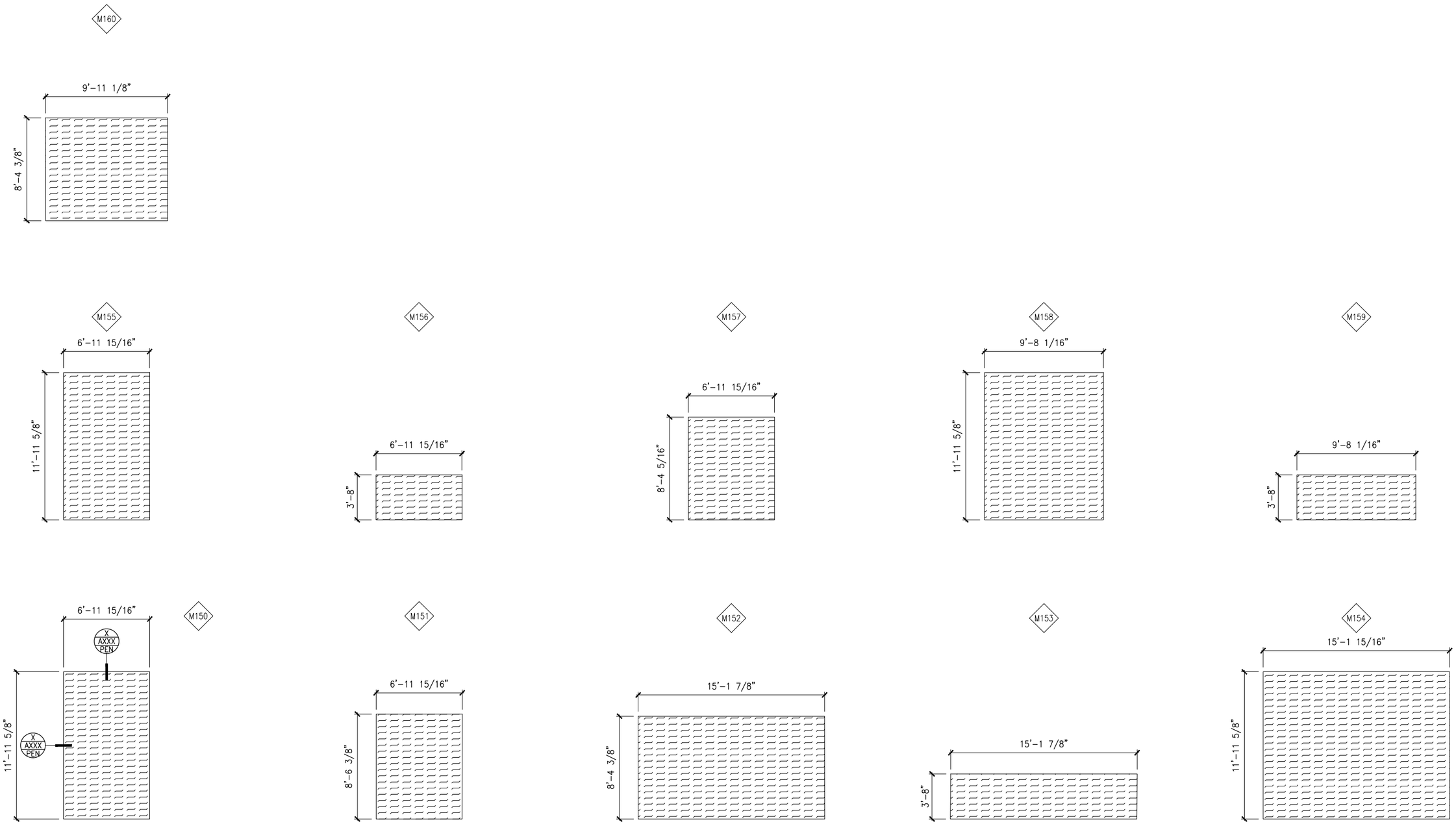
CIVIL - VOLUME 11D
PENN STATION
VC ARCHITECTURAL WOVEN METAL MESH SCHEDULE-1

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-SCH-650

SHEET 120 OF 394

Jan, 18 2016 01:12 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-SCH-650.dwg By: v-mccartp



1 VC WOVEN METAL MESH TYPES

SCALE:1/8"=1'-0"

0 2 4 8

SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

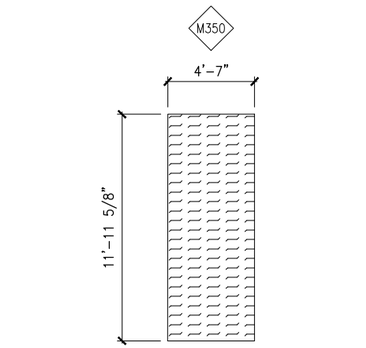
CIVIL - VOLUME 11D
PENN STATION
VC ARCHITECTURAL WOVEN METAL MESH TYPES

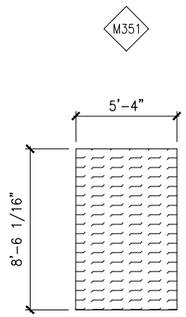
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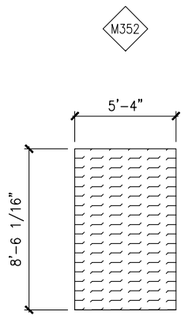
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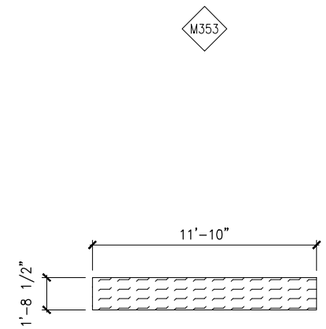
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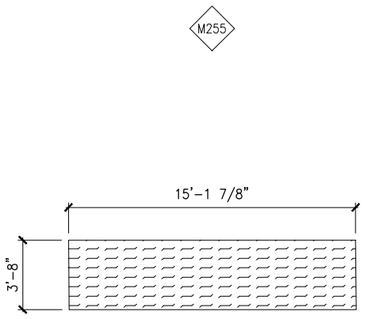
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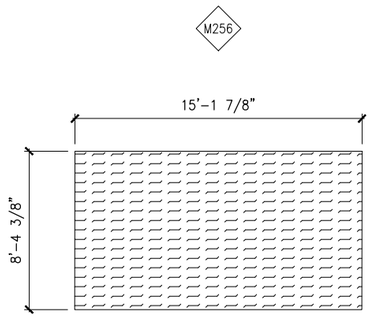


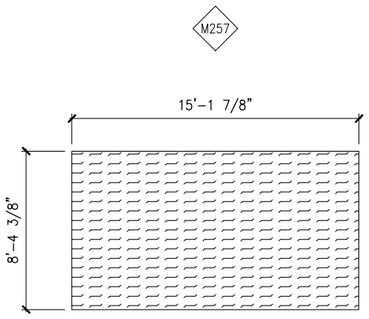


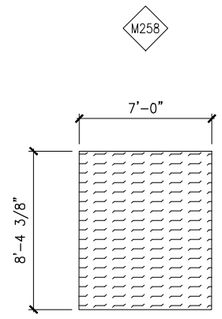


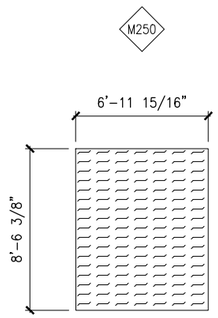


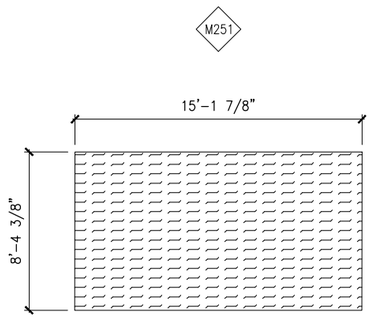


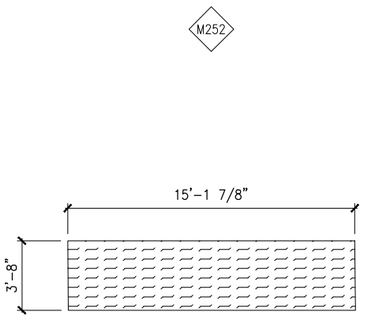


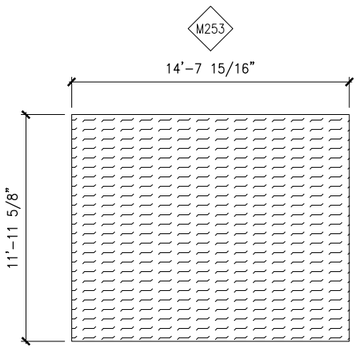


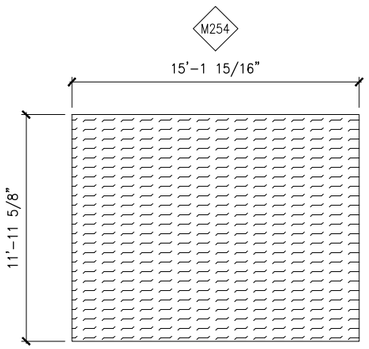












1 VC WOVEN METAL MESH TYPES
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0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

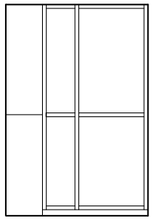
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC ARCHITECTURAL WOVEN METAL MESH TYPES

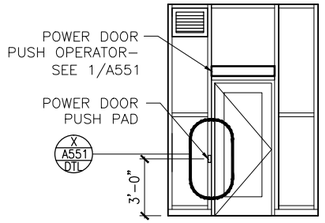
DISCIPLINE: ARCHITECTURE
SHEET NAME: E4-PEN-ARC-DTL-652

SHEET 122 OF 394

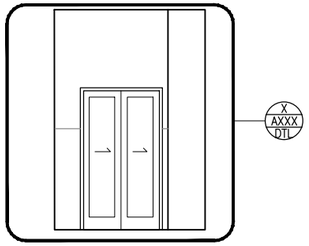
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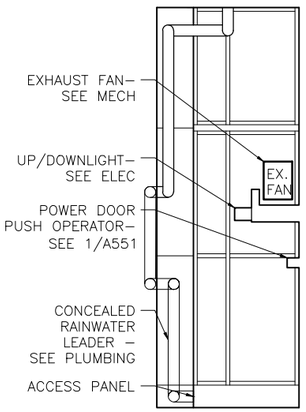
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SCALE: 1/4"=1'-0"



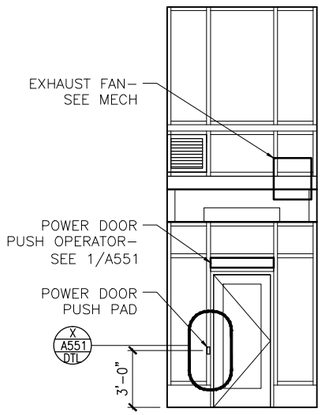
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SCALE: 1/4"=1'-0"



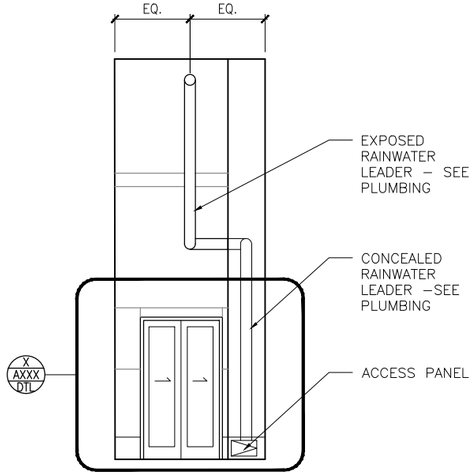
6 ELEVATION LOBBY 200
SCALE: 1/4"=1'-0"



1 ELEVATION LOBBY 100
SCALE: 1/4"=1'-0"



3 ELEVATION LOBBY 100
SCALE: 1/4"=1'-0"



5 ELEVATION LOBBY 100
SCALE: 1/4"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

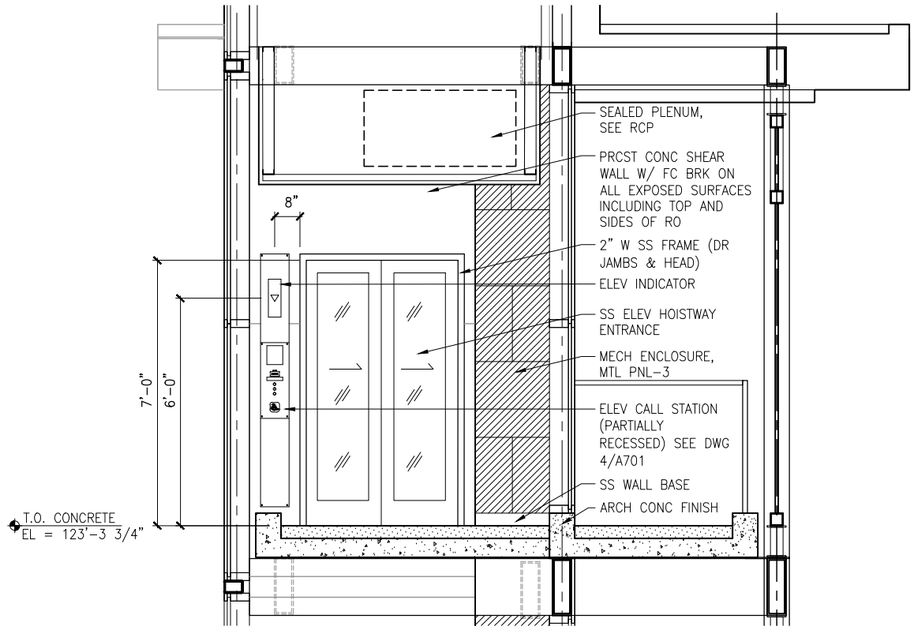
CIVIL - VOLUME 11D
PENN STATION
VC INTERIOR ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-700

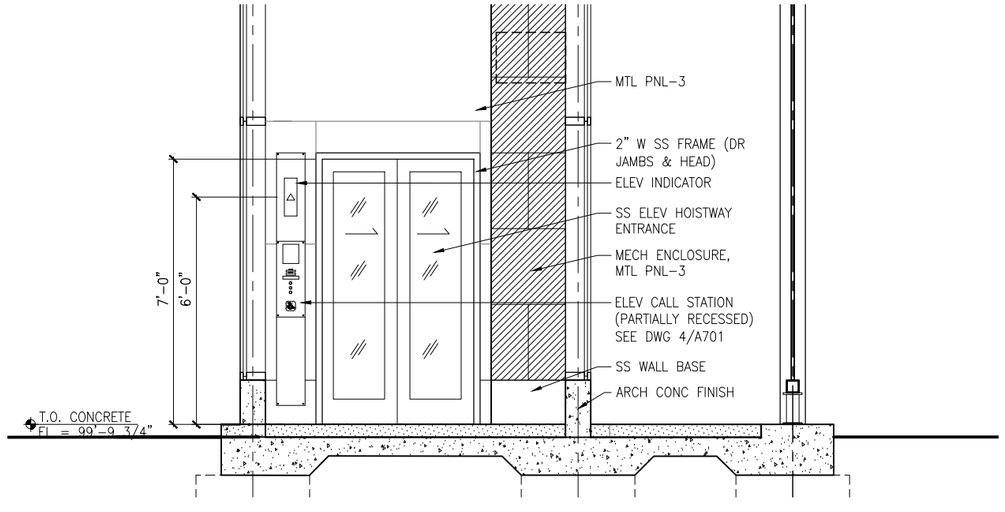
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Jan, 19 2016 09:41 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-ELV-700.dwg By: Ebsenjr



1 VC BRIDGE LEVEL ELEVATOR DOOR ELEVATION

SCALE:1/4"=1'-0"



2 VC PLATFORM LEVEL ELEVATOR DOOR ELEVATION

SCALE:1/4"=1'-0"

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

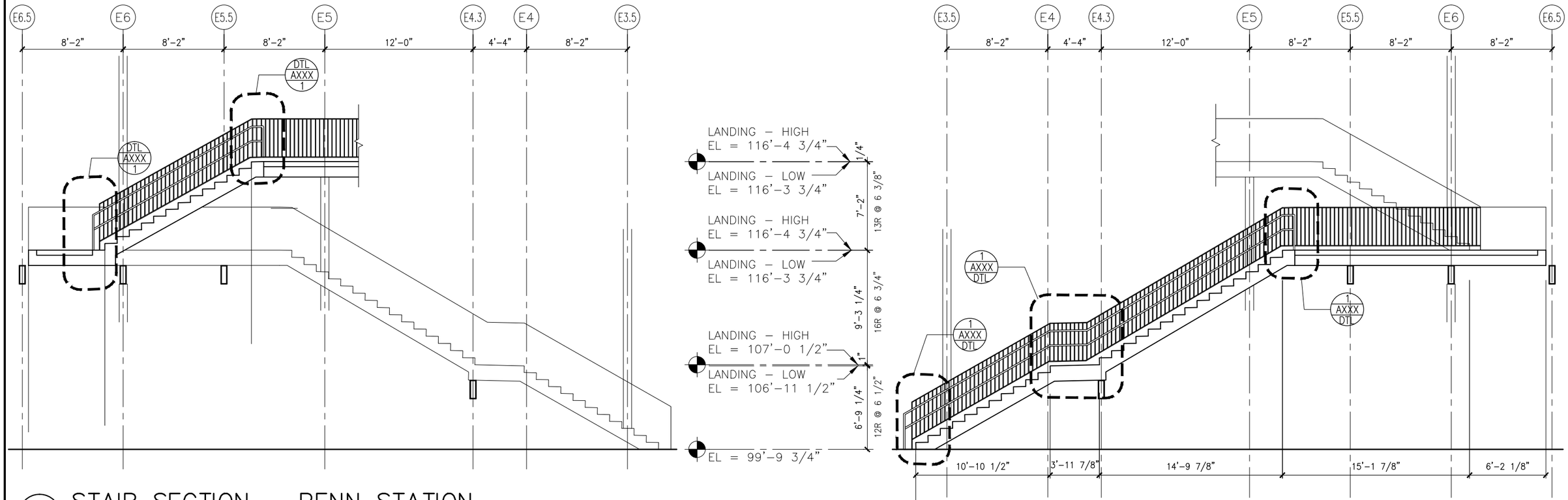
CIVIL - VOLUME 11D
PENN STATION
ELEVATOR LOBBY ENLARGED ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-ELV-701

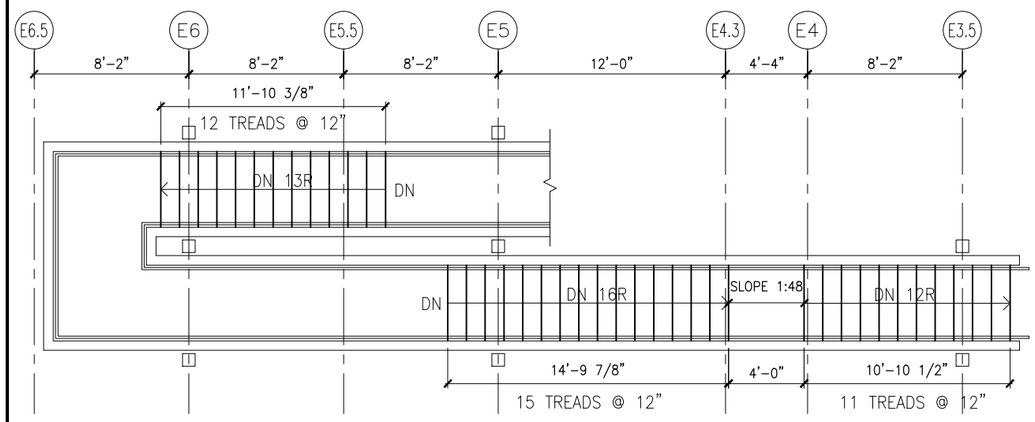
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1 STAIR SECTION – PENN STATION

SCALE:1/8"=1'-0"



2 STAIR PLAN – PENN STATION

SCALE:1/8"=1'-0"

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL
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AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

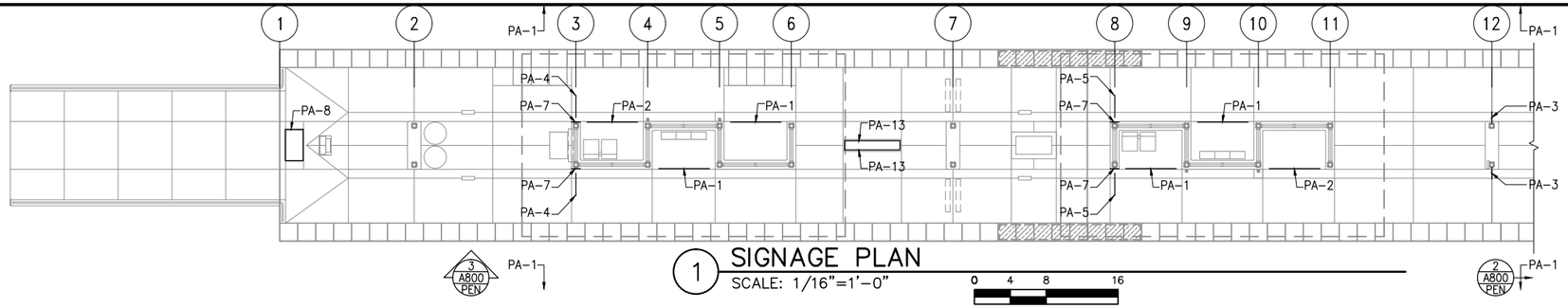
CIVIL - VOLUME 11D
PENN STATION
STAIR DETAILS

SHEET 125 OF 394

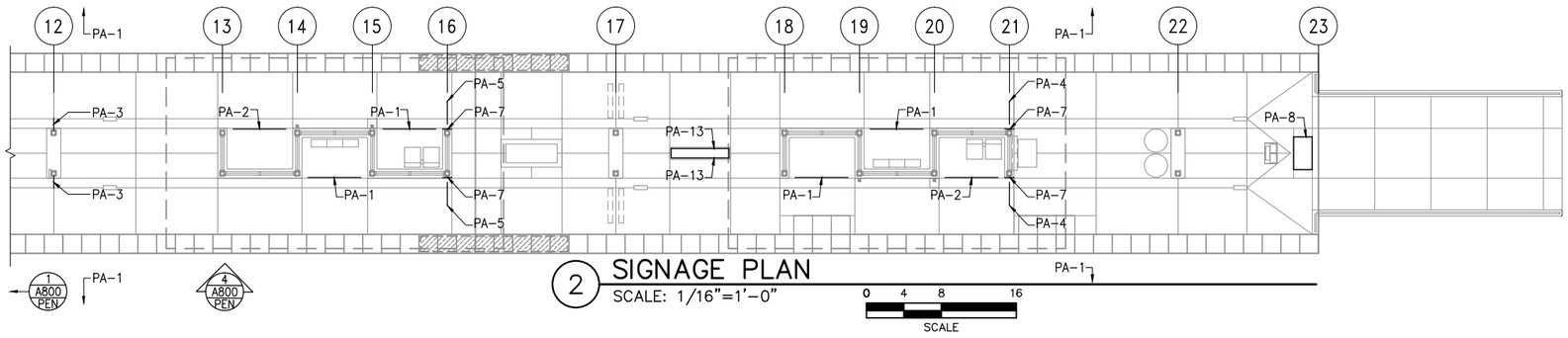
DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-DTL-710

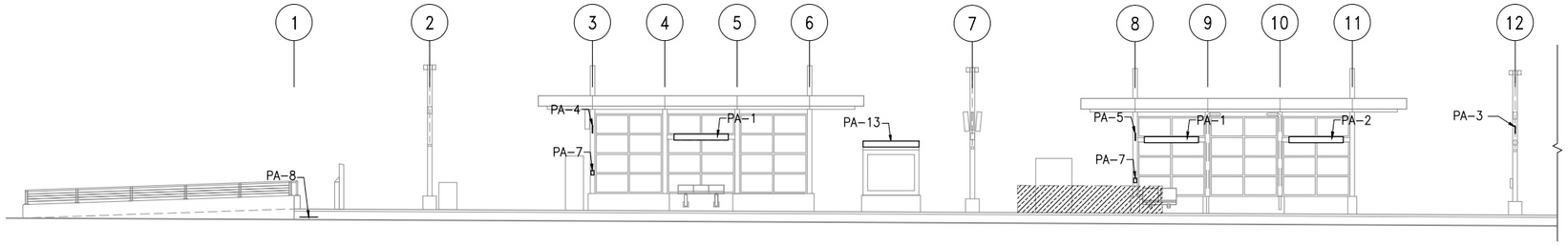
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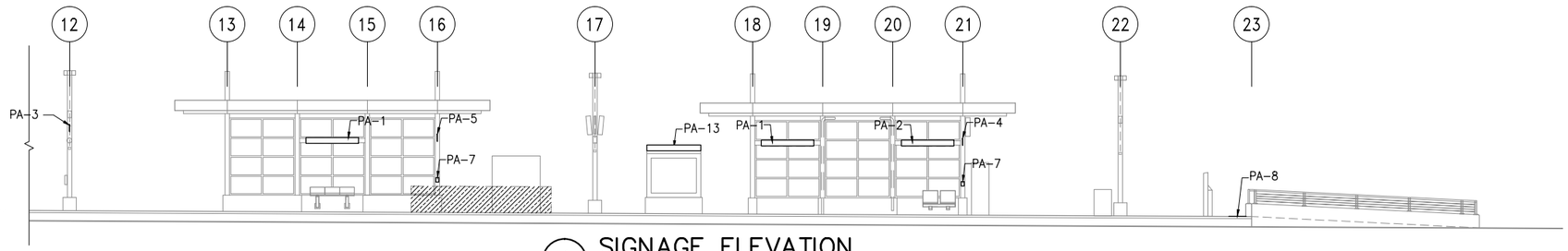
1 SIGNAGE PLAN
SCALE: 1/16"=1'-0"
0 4 8 16
SCALE



2 SIGNAGE PLAN
SCALE: 1/16"=1'-0"
0 4 8 16
SCALE



3 SIGNAGE ELEVATION
SCALE: 1/16"=1'-0"
0 4 8 16
SCALE



4 SIGNAGE ELEVATION
SCALE: 1/16"=1'-0"
0 4 8 16
SCALE

GENERAL SHEET NOTES

1. ALL SIGNAGE MOUNTING HEIGHTS ARE FROM CENTER LINE AT BOTTOM EDGE TO TOP OF PLATFORM
2. FOR SIGNS PA-1, PA-4, PA-5 SEE SHEET DTL A801 FOR MOUNTING
3. FOR SIGNS PA-6, PA-12, PA-13, PA-14, PA-15, PA-16 SEE KIOSK AND CABINET DETAILS FOR MOUNTING
4. SEE VOLUME 11E FOR COMMON DETAILS

SIGNAGE KEY

PA-1 PA-2	1 A801 DTL
PA-3 PA-4 PA-5	2 A801 DTL
PA-6	3 A801 DTL
PA-7	4 A801 DTL
PA-8	5 A801 DTL
PA-12	6 A801 DTL
PA-13 PA-14	7 A801 DTL
PA-15	3 A803 DTL
PA-16	2 A803 DTL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

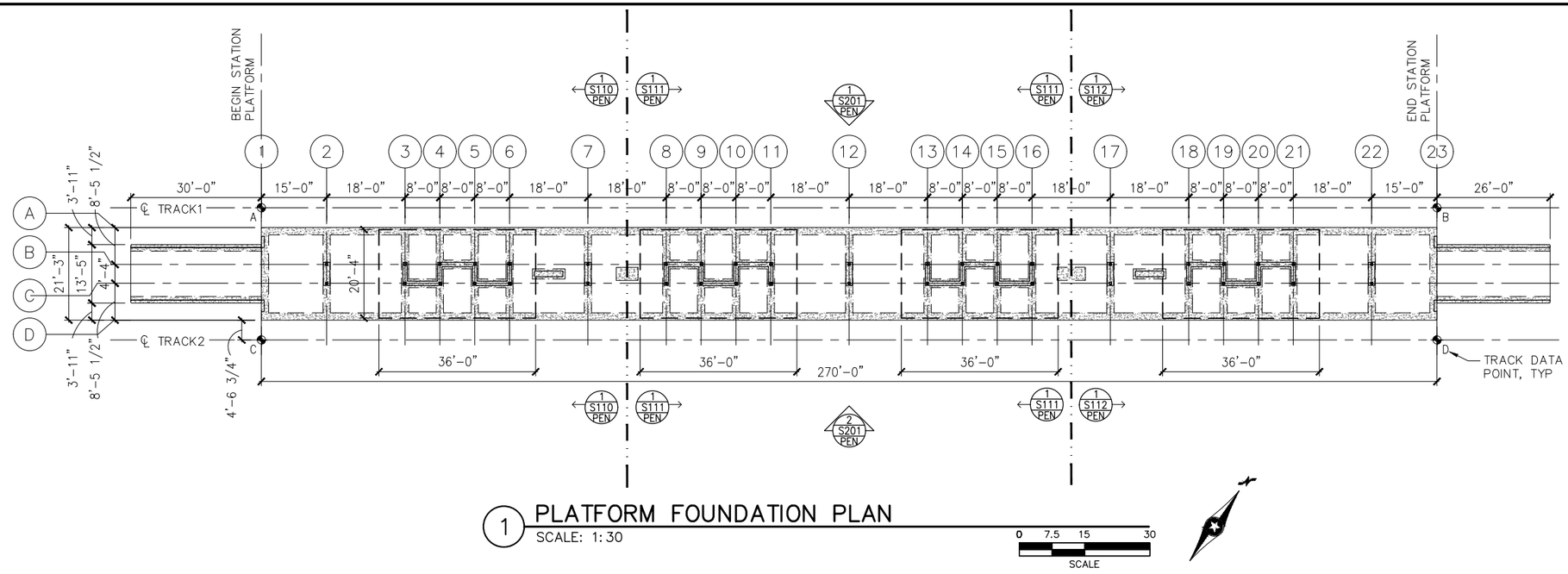
CIVIL - VOLUME 11D
PENN STATION
SIGNAGE PLANS AND ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-PEN-ARC-SGN-800

SHEET 126 OF 394

Jan, 18 2016 01:15 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\PENN STATION\E4-PEN-ARC-SGN-800.dwg By: v-mccartp



1 PLATFORM FOUNDATION PLAN

SCALE: 1:30

0 7.5 15 30
SCALE

TRACK DATA

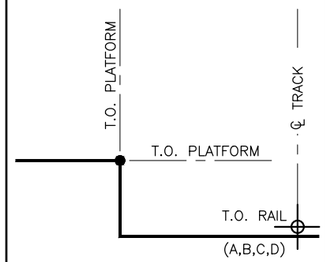
ELEV 100'-0" (LOCATION ON PLAN)

TRACK 1 EL 100'-0"= 854.69 (PT 'B')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
A	856.04	1856+02.16	
B	854.69	1858+72.16	

TRACK 2 EL 100'-0"= 854.69 (PT 'D')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
C	856.04	2856+02.16	
D	854.69	2858+72.16	



SECTION DIAGRAM AT PLATFORM EDGE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
PLATFORM FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-PLN-101

SHEET 127 OF 394

Jan. 14 2016 06:01 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PENN STATION\E4-PEN-STR-PLN-101.dwg By: jordanl

PENN

PENN STATION PLATFORM

REFERENCE GRID	DISTANCE FROM BEGIN PLATFORM (FT)	T.O. TOPPING ELEVATION	T.O. STR. SLAB ELEVATION	T.O. TOPPING ELEVATION AT "L7"	B.O. BASEPLATE ELEVATION	T.O. WALL ELEVATION	T.O. HSS4X6 ELEVATION	T.O. W8X31 ELEVATION	T.O. HSS6X6X1/2 ELEVATION	H1 (T.O. SLAB TO T.O. WALL) (FT)
1	0	857.21	856.87	857.14						
2	15	857.13	856.80	857.06	855.38	858.63			873.13	1.83
3	33	857.04	856.71	856.97	855.29	858.90	865.40	869.07	873.07	2.19
4	41	857.00	856.67	856.93	855.25	858.90	865.40	869.07		2.23
5	49	856.96	856.63	856.89	855.21	858.90	865.40	869.07		2.27
6	57	856.92	856.59	856.85	855.17	858.90	865.40	869.07	873.07	2.31
WALL TRANSITION POINT 1	**62.75**	**856.89**	**856.56**	**856.82**		**858.73**				**2.17**
WALL TRANSITION POINT 2	**69.25**	**856.86**	**856.53**	**856.79**		**858.73**				**2.20**
7	75	856.83	856.50	856.76	855.08	858.33			872.83	1.83
8	93	856.74	856.41	856.67	854.99	858.60	865.10	868.77	872.77	2.19
9	101	856.70	856.37	856.63	854.95	858.60	865.10	868.77		2.23
10	109	856.66	856.33	856.59	854.91	858.60	865.10	868.77		2.27
11	117	856.62	856.29	856.55	854.87	858.60	865.10	868.77	872.77	2.31
12	135	856.53	856.20	856.46	854.78	858.03			872.53	1.83
13	153	856.44	856.11	856.37	854.69	858.30	864.80	868.47	872.47	2.19
14	161	856.40	856.07	856.33	854.65	858.30	864.80	868.47		2.23
15	169	856.36	856.03	856.29	854.61	858.30	864.80	868.47		2.27
16	177	856.32	855.99	856.25	854.57	858.30	864.80	868.47	872.47	2.31
17	195	856.23	855.90	856.16	854.48	857.73			872.23	1.83
WALL TRANSITION POINT 3	**200.75**	**856.20**	**855.87**	**856.13**		**858.04**				**2.17**
WALL TRANSITION POINT 4	**207.25**	**856.17**	**855.84**	**856.10**		**858.04**				**2.20**
18	213	856.14	855.81	856.07	854.39	858.00	864.50	868.17	872.17	2.19
19	221	856.10	855.77	856.03	854.35	858.00	864.50	868.17		2.23
20	229	856.06	855.73	855.99	854.31	858.00	864.50	868.17		2.27
21	237	856.02	855.69	855.95	854.27	858.00	864.50	868.17	872.17	2.31
22	255	855.93	855.60	855.86	854.18	857.43			871.93	1.83
23	270	855.86	855.52	855.79						

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.

REFERENCE TABLE NOTES

1. TOP OF PLATFORM ELEVATION (TOPPING SLAB) SHALL BE 4"(±) ABOVE TOP OF STRUCTURAL SLAB ELEVATION AS INDICATED IN TABLE.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

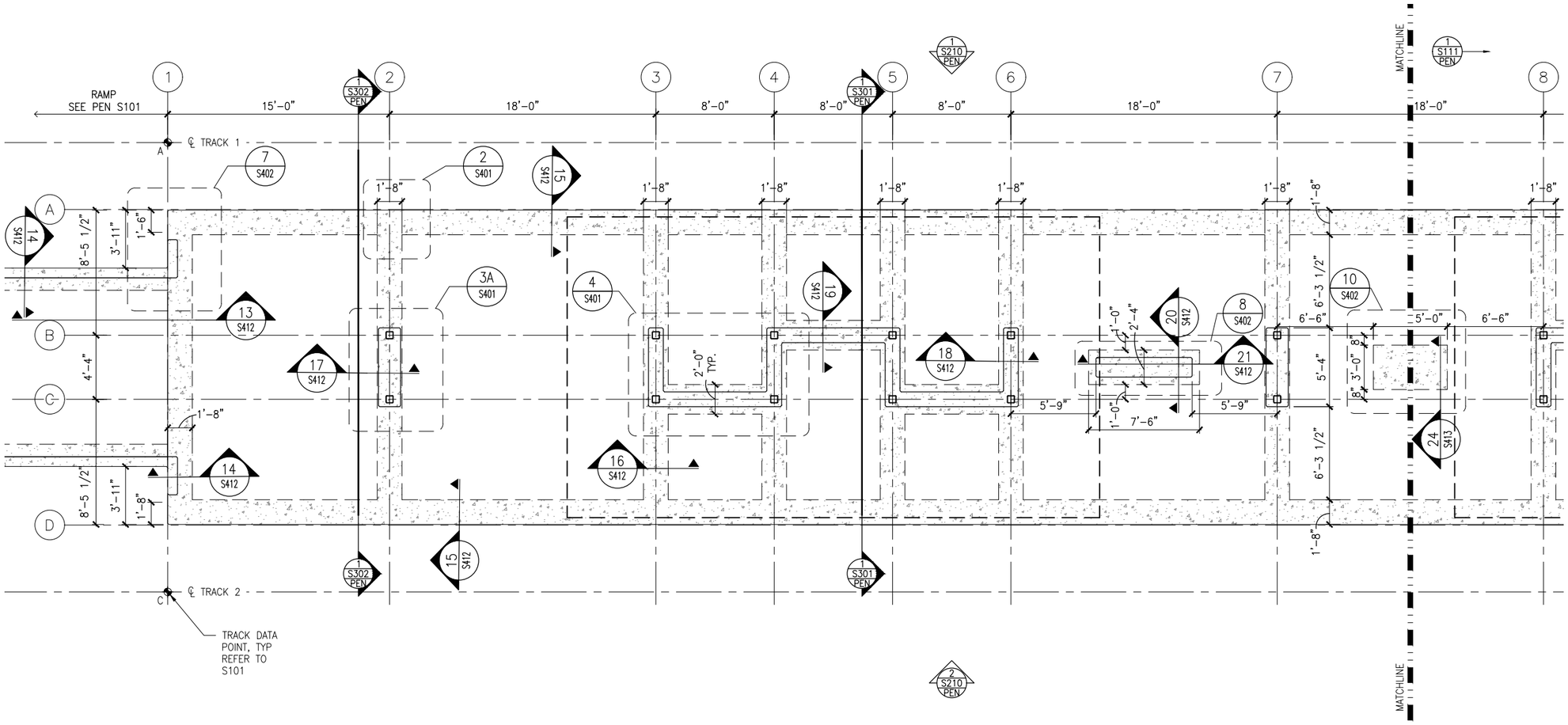
CIVIL - VOLUME 11D
PENN STATION
STATION REFERENCE TABLE

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-SCH-102

SHEET 128 OF 394

Jan. 14 2016 06:05 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PENN STATION\E4-PEN-STR-SCH-102.dwg By: jordanl



1 WEST PARTIAL FOUNDATION PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

FLOOR PLAN NOTES

1. FOR HEIGHTS AND LOCATIONS OF KNEE WALLS, SEE ARCH. DWGS.
2. FOR TYPICAL COLUMN BASE PLATE DETAILS SEE DWG. XXXXXX.
3. "GB–X" INDICATES GRADE BEAM MARK.
4. SLAB ON GRADE SHALL BEAR ON ENGINEERED FILL, REINF. W/ 4x4–W4.0xW4.0 W.W.F. TOP, W/ 1" CLR. COVER.

SCHEDULES or LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

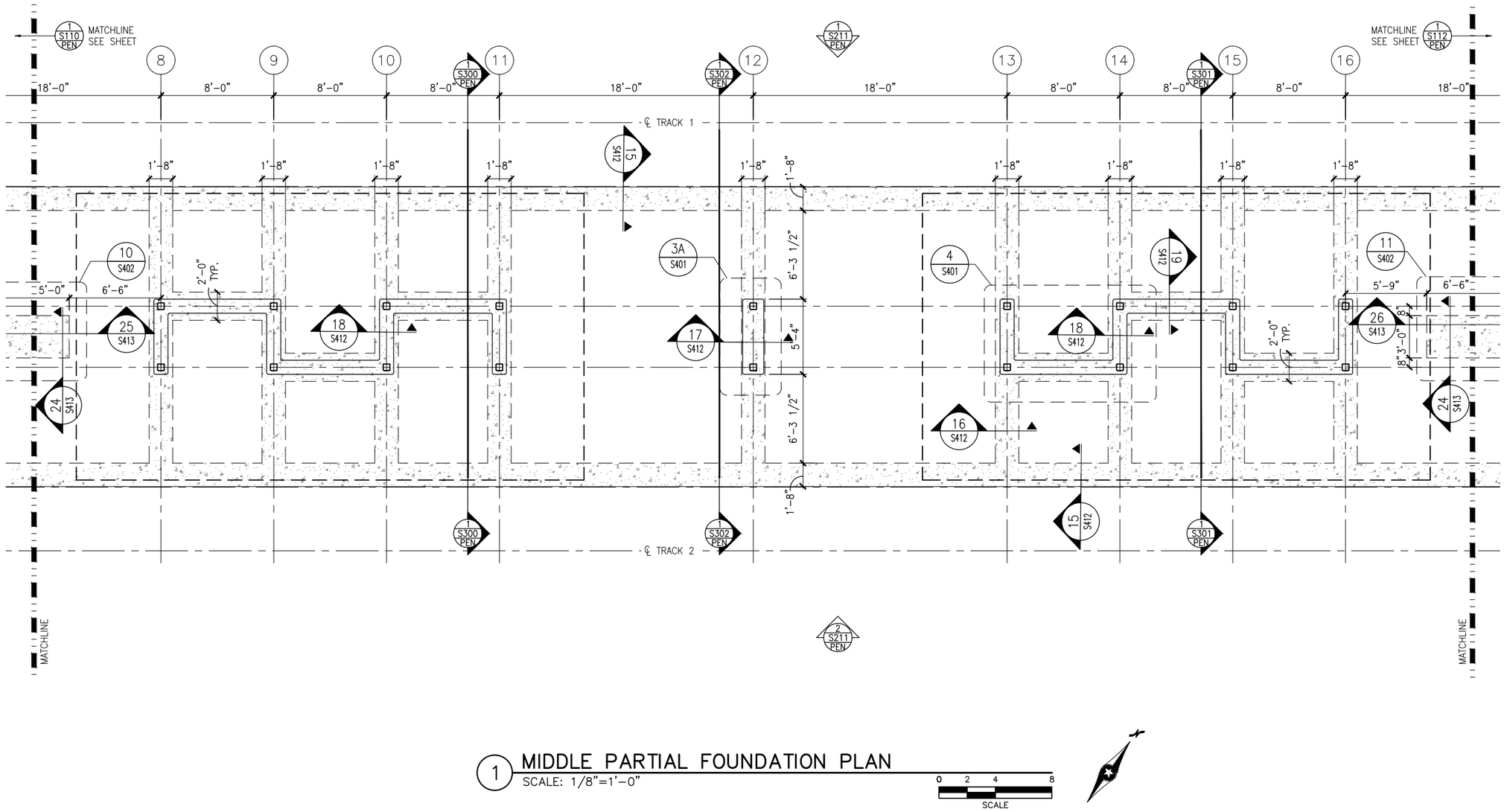
CIVIL - VOLUME 11D
PENN STATION
WEST PARTIAL FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-PLN-110

SHEET 129 OF 394

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1 MIDDLE PARTIAL FOUNDATION PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

FLOOR PLAN NOTES

1. FOR HEIGHTS AND LOCATIONS OF KNEE WALLS, SEE ARCH. DWGS.
2. FOR TYPICAL COLUMN BASE PLATE DETAILS SEE DWG. XXXXXX.
3. "GB–X" INDICATES GRADE BEAM MARK.
4. SLAB ON GRADE SHALL BEAR ON ENGINEERED FILL, REINF. W/ 4x4–W4.0xW4.0 W.W.F. TOP, W/ 1" CLR. COVER.

SCHEDULES or LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

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SOUTHWEST Green Line LRT Extension

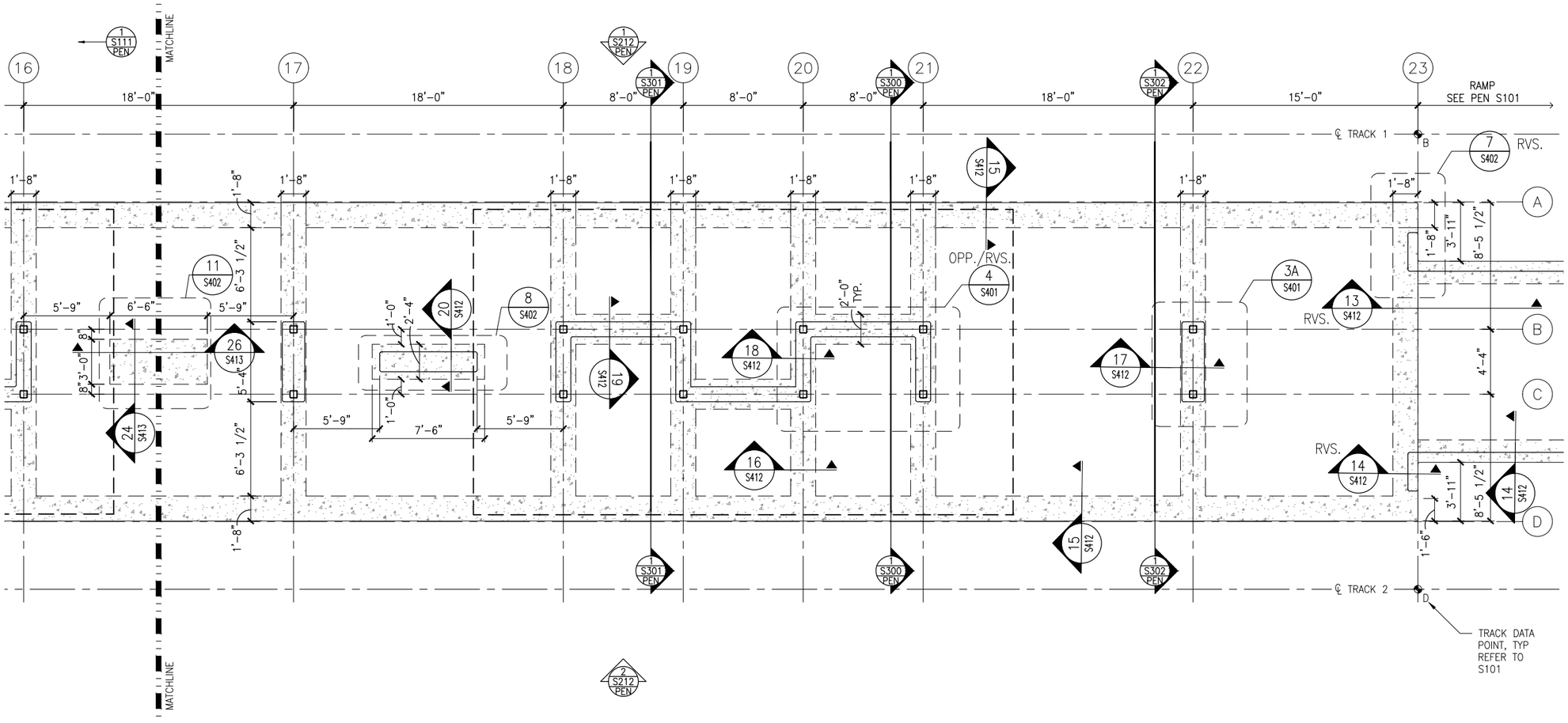
CIVIL - VOLUME 11D
PENN STATION
MIDDLE PARTIAL FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-PLN-111

SHEET 130 OF 394

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1 EAST PARTIAL FOUNDATION PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

FLOOR PLAN NOTES

1. FOR HEIGHTS AND LOCATIONS OF KNEE WALLS, SEE ARCH. DWGS.
2. FOR TYPICAL COLUMN BASE PLATE DETAILS SEE DWG. XXXXXX.
3. "GB-X" INDICATES GRADE BEAM MARK.
4. SLAB ON GRADE SHALL BEAR ON ENGINEERED FILL, REINF. W/ 4x4-W4.0xW4.0 W.W.F. TOP, W/ 1" CLR. COVER.

SCHEDULES or LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

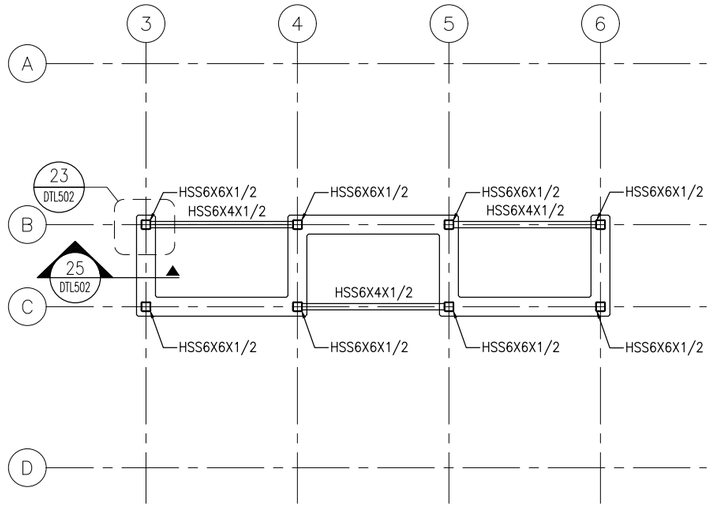
CIVIL - VOLUME 11D
PENN STATION
EAST PARTIAL FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-PLN-112

SHEET 131 OF 394

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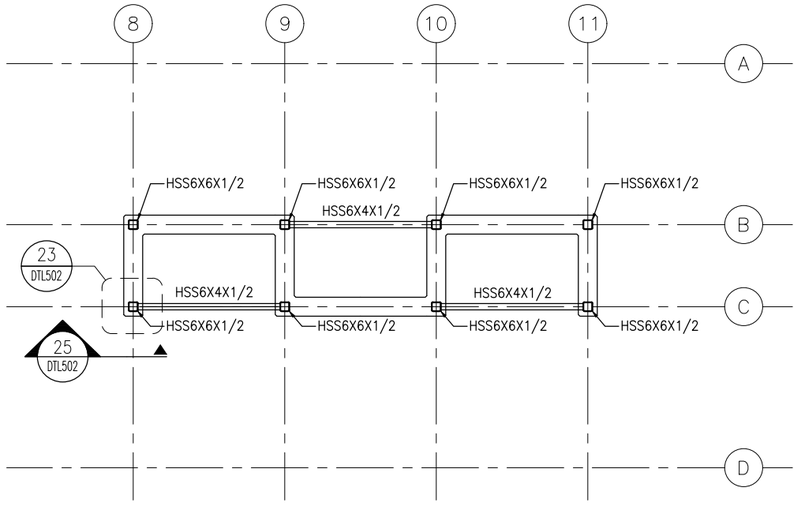


1 INTERMEDIATE FRAMING PLAN – SOUTH CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

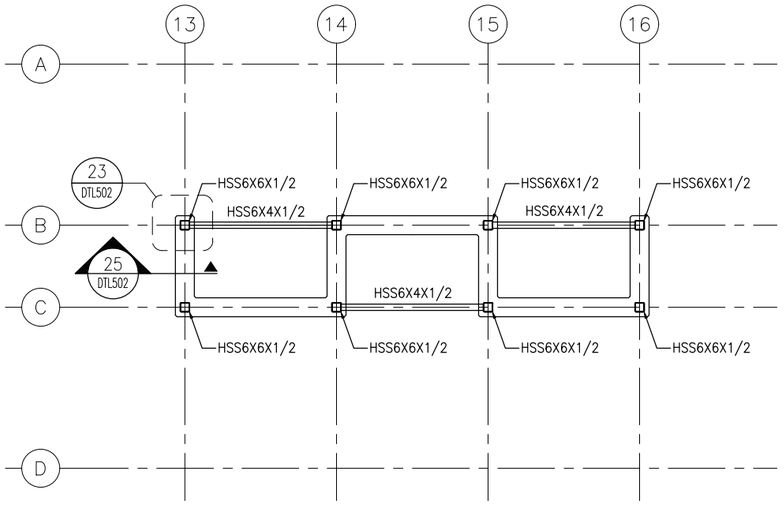


2 INTERMEDIATE FRAMING PLAN – MIDDLE CANOPY

SCALE: 1/8"=1'-0"

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SCALE

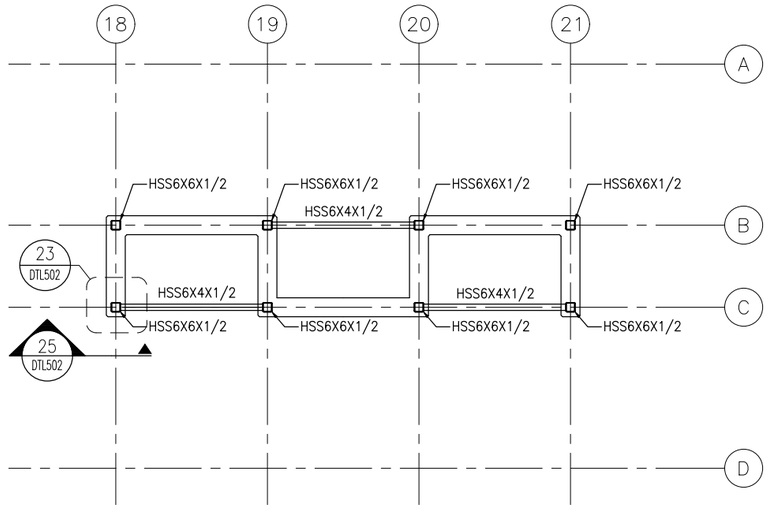


3 INTERMEDIATE FRAMING PLAN – MIDDLE CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE



4 INTERMEDIATE FRAMING PLAN – NORTH CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

SHEET NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

KEY NOTES

1. [ ] INDICATES SPAN DIRECTION OF ROOF METAL DECK. SEE ARCH. DWGS.
2. [ ] DENOTES PREQUALIFIED SHOP OR FIELD WELDED CONNECTION.
3. BC DENOTES BOLTED CONNECTION, FOR TYPICAL BEAM TO BEAM BOLTED CONNECTIONS AND SIMILAR DETAILS SEE DWG. XXXXXXX & XXXXXXX

LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

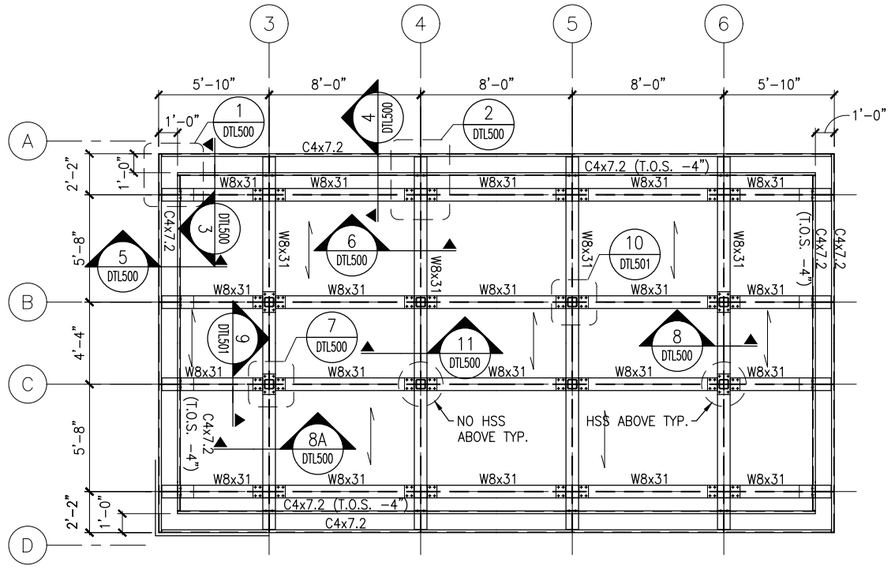
CIVIL - VOLUME 11D
PENN STATION
INTERMEDIATE FRAMING PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-PLN-140

SHEET 132 OF 394

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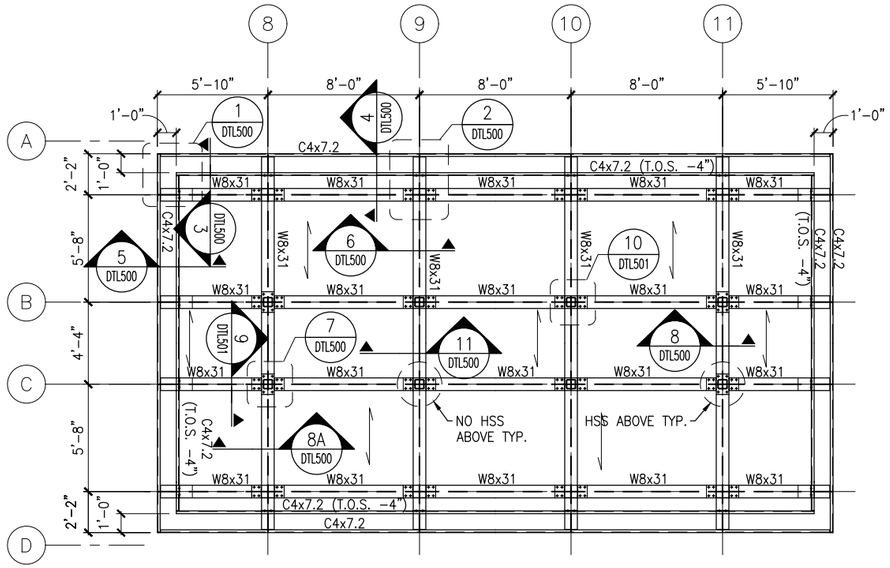


1 FRAMING PLAN – WEST CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

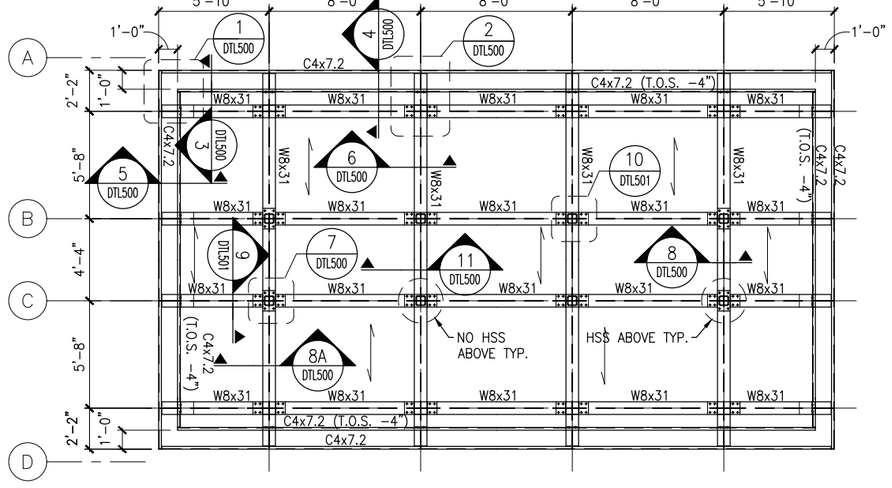


2 FRAMING PLAN – MIDDLE CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

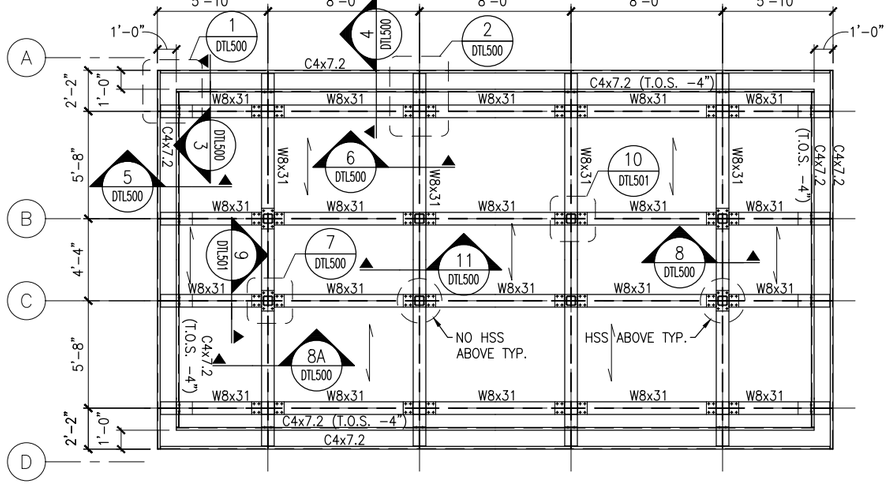


3 FRAMING PLAN – MIDDLE CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE



4 FRAMING PLAN – EAST CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

SHEET NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

KEY NOTES

1. [ ] INDICATES SPAN DIRECTION OF ROOF METAL DECK. SEE ARCH. DWGS.
2. [ ] DENOTES PREQUALIFIED SHOP OR FIELD WELDED CONNECTION.
3. BC DENOTES BOLTED CONNECTION, FOR TYPICAL BEAM TO BEAM BOLTED CONNECTIONS AND SIMILAR DETAILS SEE DWG. XXXXXXX & XXXXXXX

LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

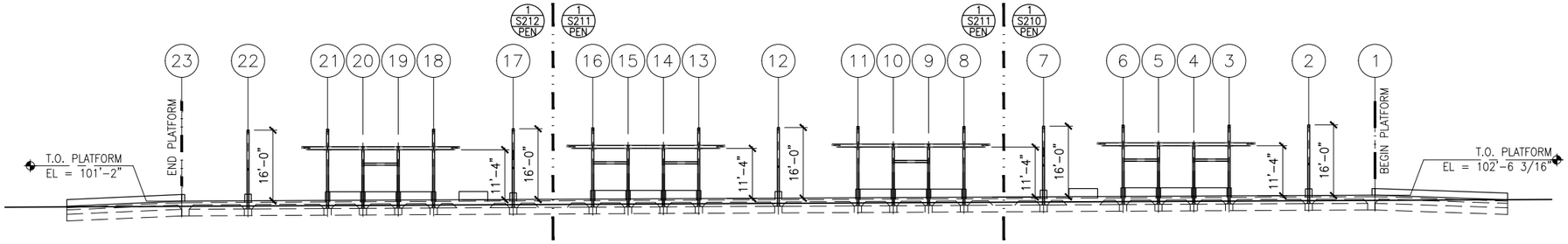
CIVIL - VOLUME 11D
PENN STATION
ROOF FRAMING PLANS

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-PLN-150

SHEET 133 OF 394

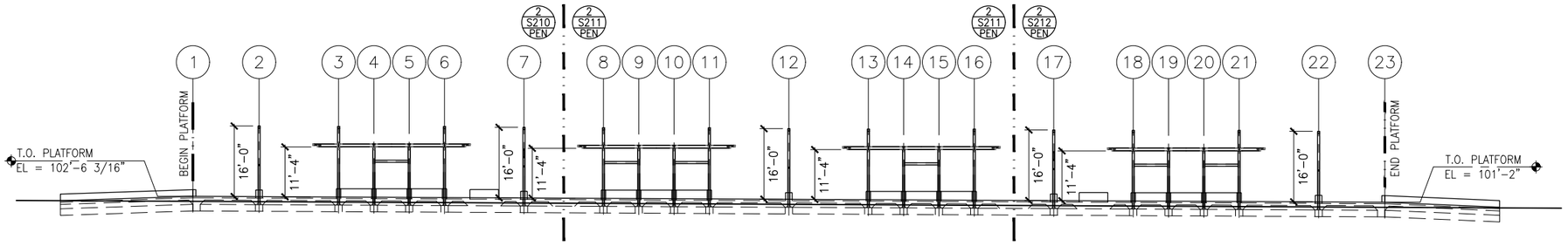
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1 TRACK 1 ELEVATION – FRAMING

SCALE: 1:30 (–0.50% SLOPE)*

0 7.5 15 30
SCALE



2 TRACK 2 ELEVATION – FRAMING

SCALE: 1:30 (–0.50% SLOPE)*

0 7.5 15 30
SCALE

*VERIFY W/ TRACK PROFILE, ADJUST ELEVATIONS ACCORDINGLY

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AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

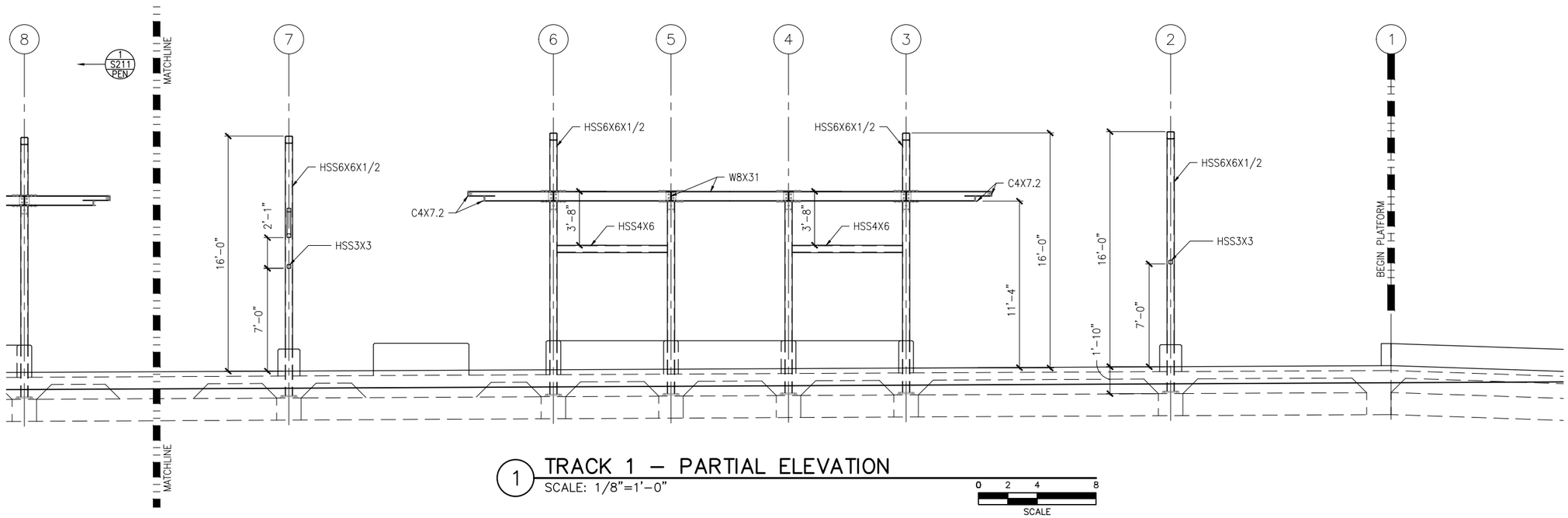
CIVIL - VOLUME 11D
PENN STATION
ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-ELV-201

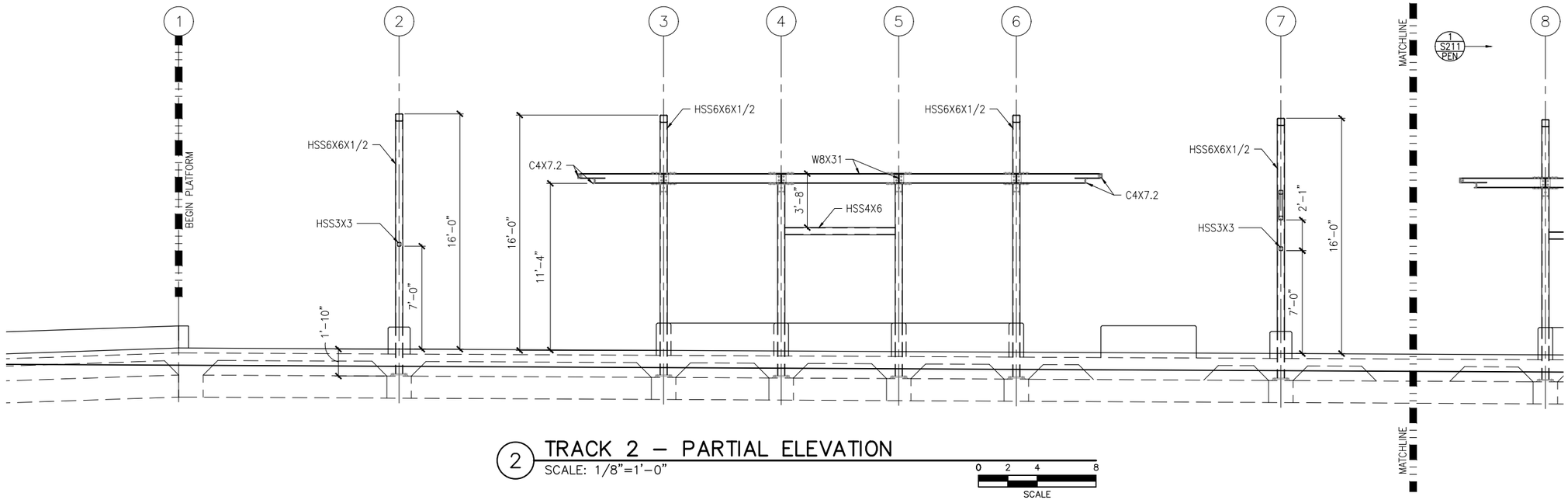
SHEET 134 OF 394

Jan, 14 2016 06:07 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STR\E4-PEN-STR-ELV-201.dwg By: jordanl



1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

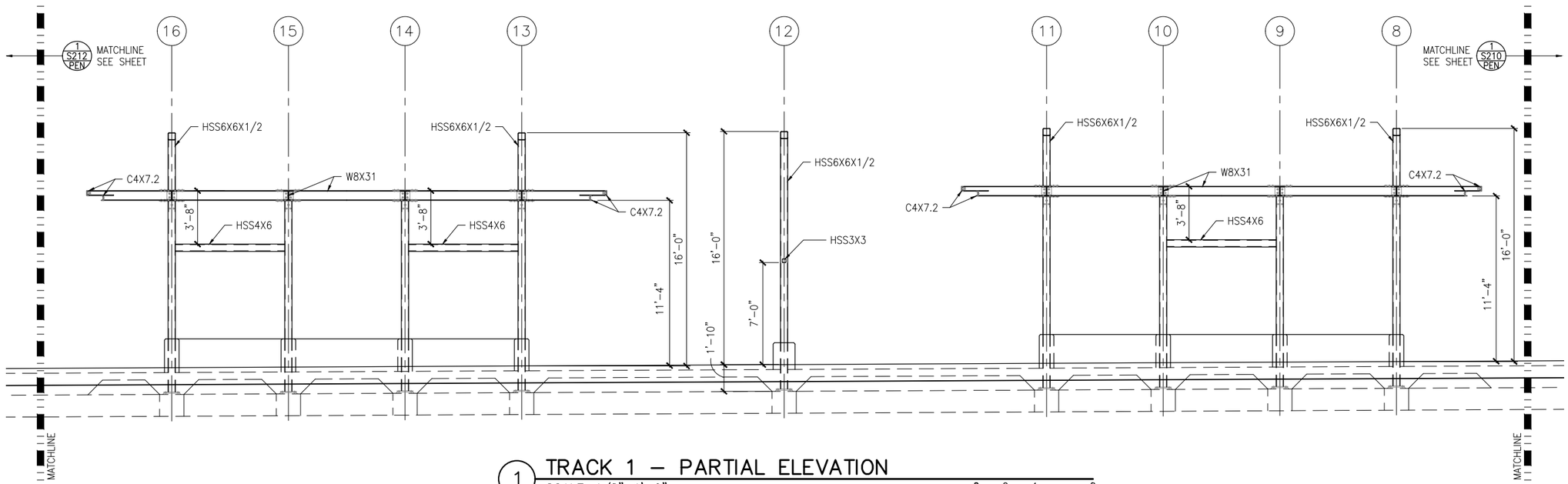
CIVIL - VOLUME 11D
PENN STATION
WEST PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-ELV-210

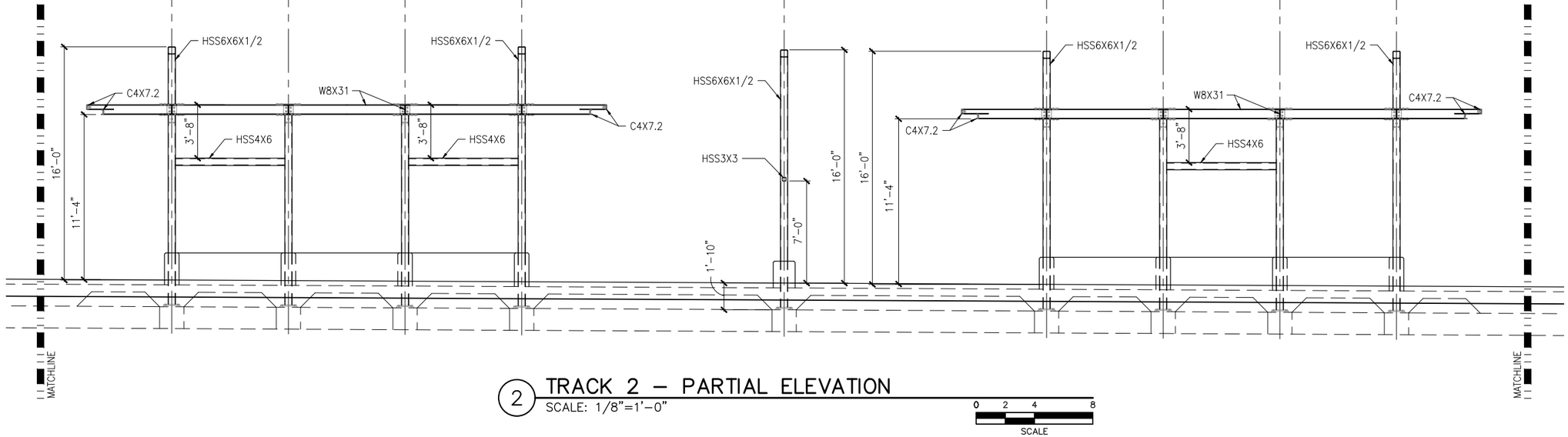
SHEET 135 OF 394

Jan, 14 2016 06:07 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PENN STATION\E4-PEN-STR-ELV-210.dwg By: jordanl



1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

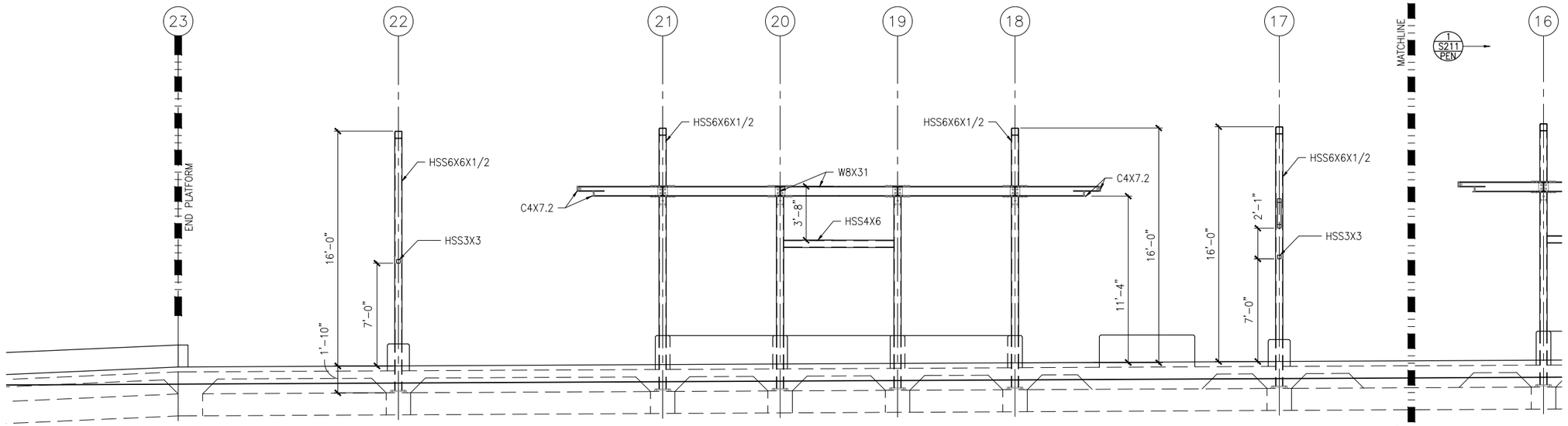
CIVIL - VOLUME 11D
PENN STATION
MIDDLE PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-ELV-211

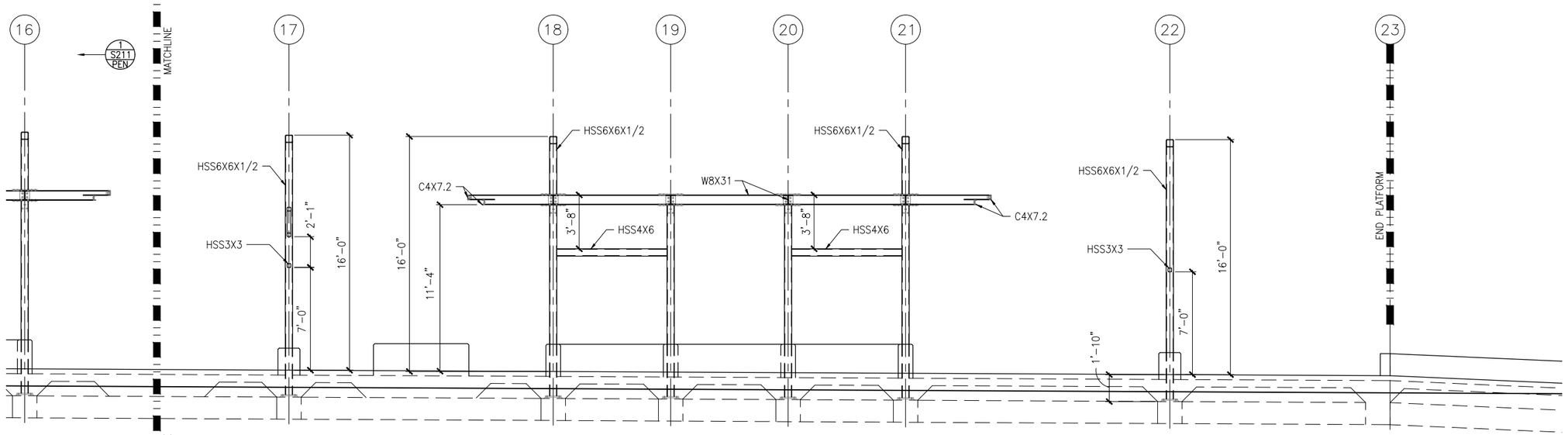
SHEET 136 OF 394

Jan, 14 2016 06:08 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PENN STATION\E4-PEN-STR-ELV-211.dwg By: jordanl



1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

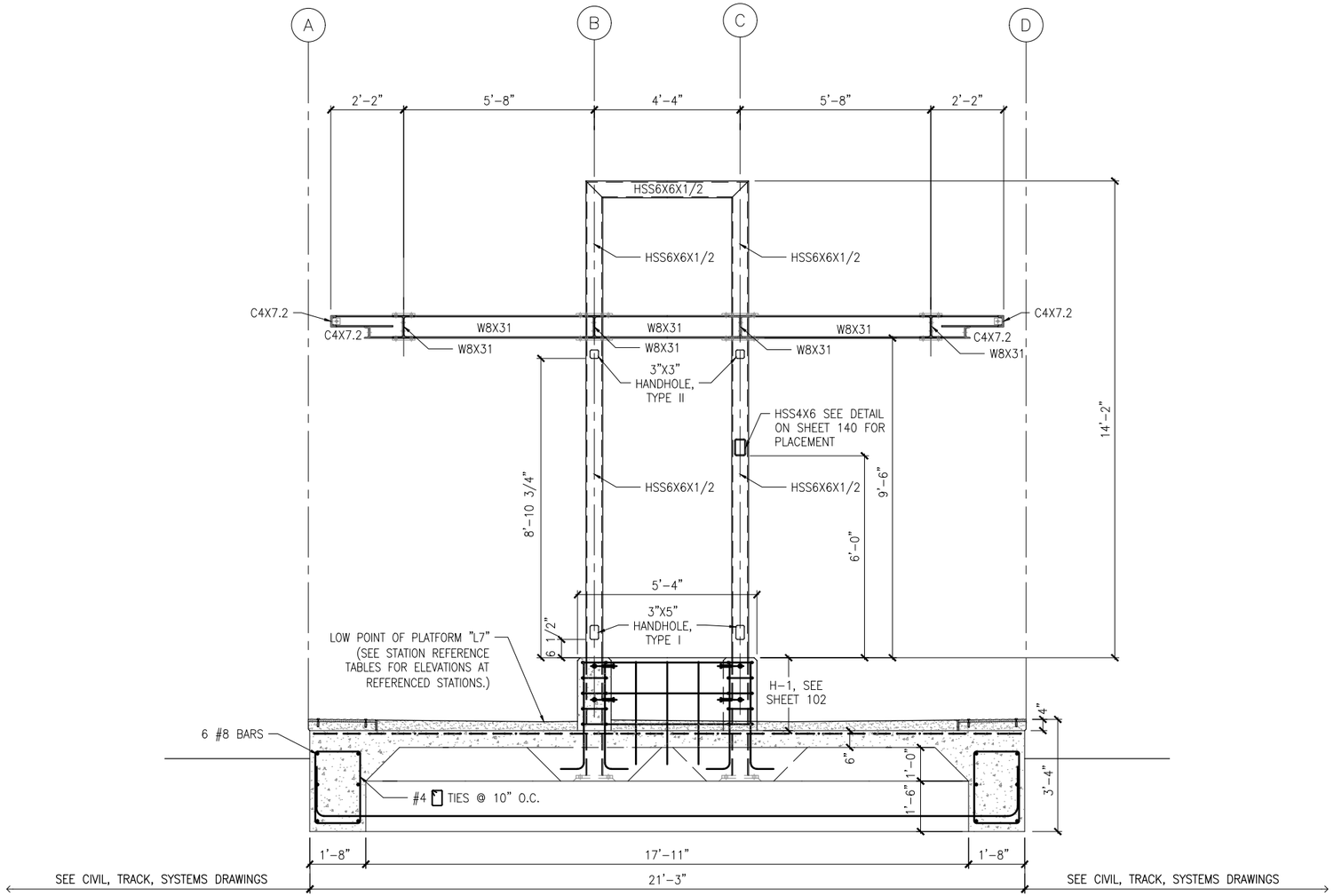
CIVIL - VOLUME 11D
PENN STATION
EAST PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-ELV-212

SHEET 137 OF 394

Jan, 14 2016 06:08 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\E4-PEN-STR-ELV-212.dwg By: jordanl



1 TYPICAL PLATFORM SECTION

SCALE:1/4"=1'-0"

0 1 2 4
SCALE

TYPICAL AT COL. LINES 3, 6, 8, 11, 13, 16, 18, 21
HSS4X6 LOCATED ON COL. LINE B BETWEEN COLUMNS 3-4, 5-6, 9-10, 13-14, 15-16, 19-20
HSS4X6 LOCATED ON COL. LINE C BETWEEN COLUMNS 4-5, 8-9, 10-11, 14-15, 18-19, 20-21
SEE PLN FOR LOCATION OF CONC FDN WALL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

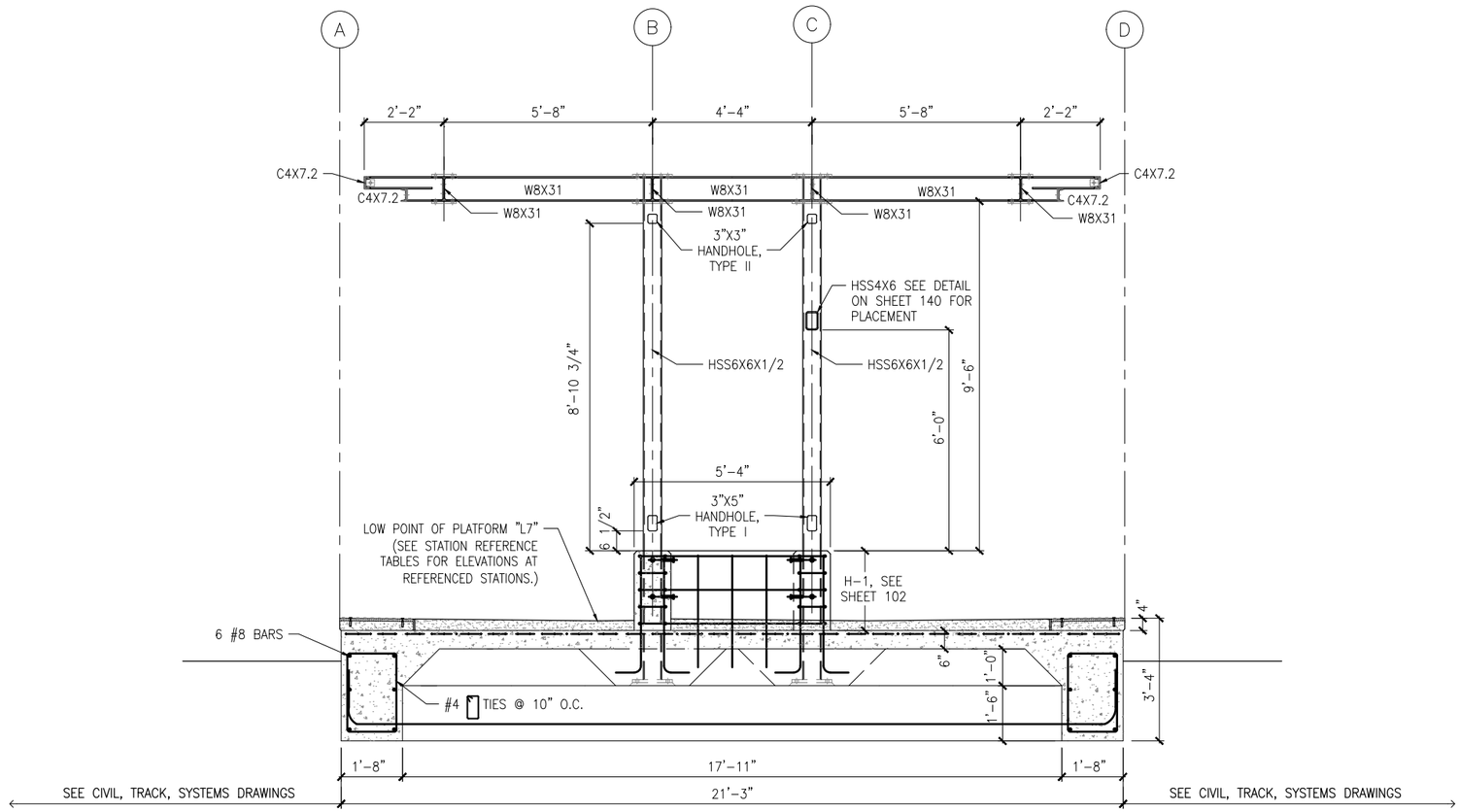
CIVIL - VOLUME 11D
PENN STATION
TYPICAL PLATFORM SECTION

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-SCT-300

SHEET 138 OF 394

Jan, 14 2016 06:08 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PENN STATION\E4-PEN-STR-SCT-300.dwg By: jordanl



1 TYPICAL PLATFORM SECTION

SCALE:1/4"=1'-0"
TYPICAL AT COL. LINES 4, 5, 9, 10, 14, 15, 19, 20
HSS4X6 LOCATED ON COL. LINE B BETWEEN COLUMNS 3-4, 5-6, 9-10, 13-14, 15-16, 19-20
HSS4X6 LOCATED ON COL. LINE C BETWEEN COLUMNS 4-5, 8-9, 10-11, 14-15, 18-19, 20-21
SEE PLN FOR LOCATION OF CONC FDN WALL

0 1 2 4
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

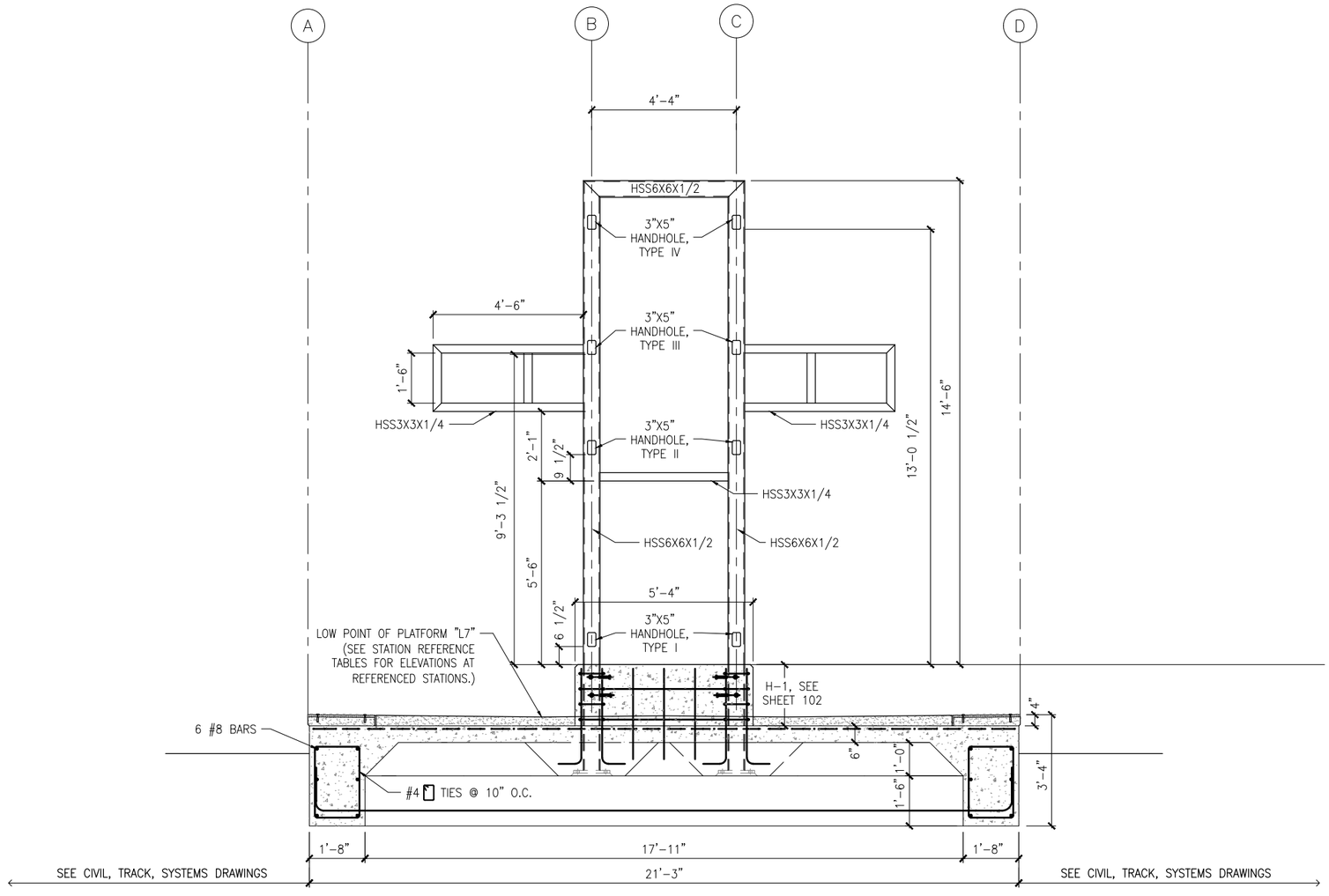
CIVIL - VOLUME 11D
PENN STATION
TYPICAL PLATFORM SECTION

SHEET 139 OF 394

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-SCT-301

Jan. 14 2016 06:09 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PENN STATION\E4-PEN-STR-SCT-301.dwg By: jordanl



1 TYPICAL PLATFORM SECTION AT WICKET

SCALE:1/4"=1'-0"
TYPICAL AT COL. LINES 2,7,12,17,22
VMS SUPPORTS AT COL. LINES 7 & 17

0 1 2 4
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
TYPICAL PLATFORM SECTION

SHEET 140 OF 394

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-SCT-302

Jan, 14 2016 06:09 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PENN STATION\E4-PEN-STR-SCT-302.dwg By: jordanl

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.

FOUNDATION NOTES:

1. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED, THE FOLLOWING NOTES RELATING TO THE FOUNDATION PLAN SHALL GOVERN.
2. FOUNDATIONS SHALL BE CENTERED ON COLUMN GRID LINES, EG COLUMNS, WALLS, ETC. UNLESS NOTED OTHERWISE.
3. ALL FOUNDATION WORK RELATING TO THE INSTALLATION OF REBAR SHALL BE OBSERVED AND APPROVED BY THE ENGINEER.
4. WHERE SHOWN, BUT NOT SPECIFICALLY NOTED, PROVIDE STANDARD ACI 90° OR 180° HOOKS, AS APPLICABLE, TO REBAR.
5. FOUNDATION DESIGN IS BASED ON INFORMATION AND RECOMMENDATIONS PROVIDED BY AMERICAN ENGINEERING TESTING IN THEIR REPORT OF GEOTECHNICAL EXPLORATION AND REVIEW REPORT No. 01-6403.01 DATED 12/1/2015.
6. PERCHED GROUNDWATER MAY BE ENCOUNTERED WITHIN FOUNDATION EXCAVATION. REMOVE WATER TO FACILITATE FOUNDATION CONSTRUCTION.
7. SEE D0-STR-DTL-601 FOR PILE CAP AND GRADE BEAM SCHEDULES.

LEGEND:

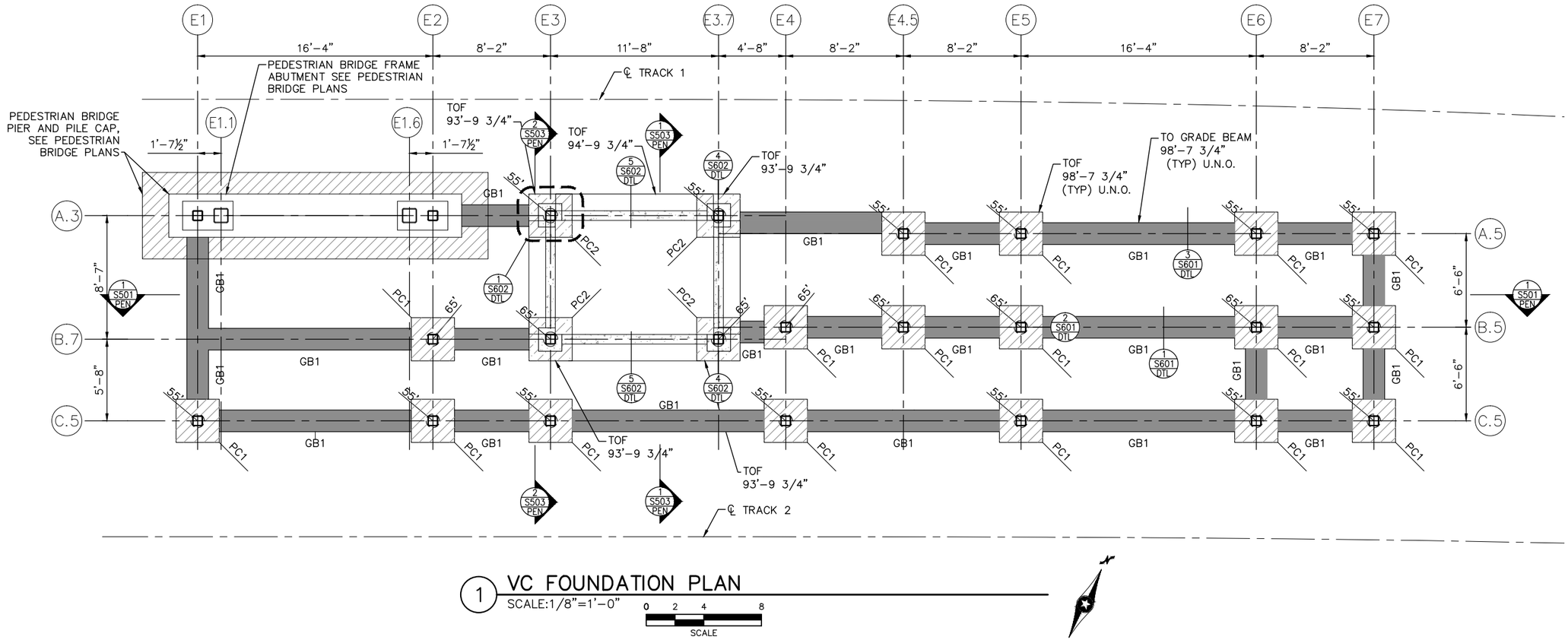
TOF 96'-10" DENOTES TOP OF FOOTING ELEVATION AT 96'-10"

100' 12" CIP STEEL PILE 100' LENGTH

STEEL TUBE COLUMN – SEE FRAMING PLAN

CAST IN PLACE CONCRETE PILE CAP SEE PILE CAP SCHEDULE FOR SIZE AND REINFORCEMENT

CAST IN PLACE CONCRETE GRADE BEAM SEE GRADE BEAM SCHEDULE FOR SIZE AND REINFORCEMENT



1 VC FOUNDATION PLAN
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC
FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-PLN-401

SHEET 141 OF 394

Jan, 18 2016 09:36 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PEN-STATION\141 E4-PEN-STR-PLN-401.dwg By: casey.leedom

GENERAL NOTES:

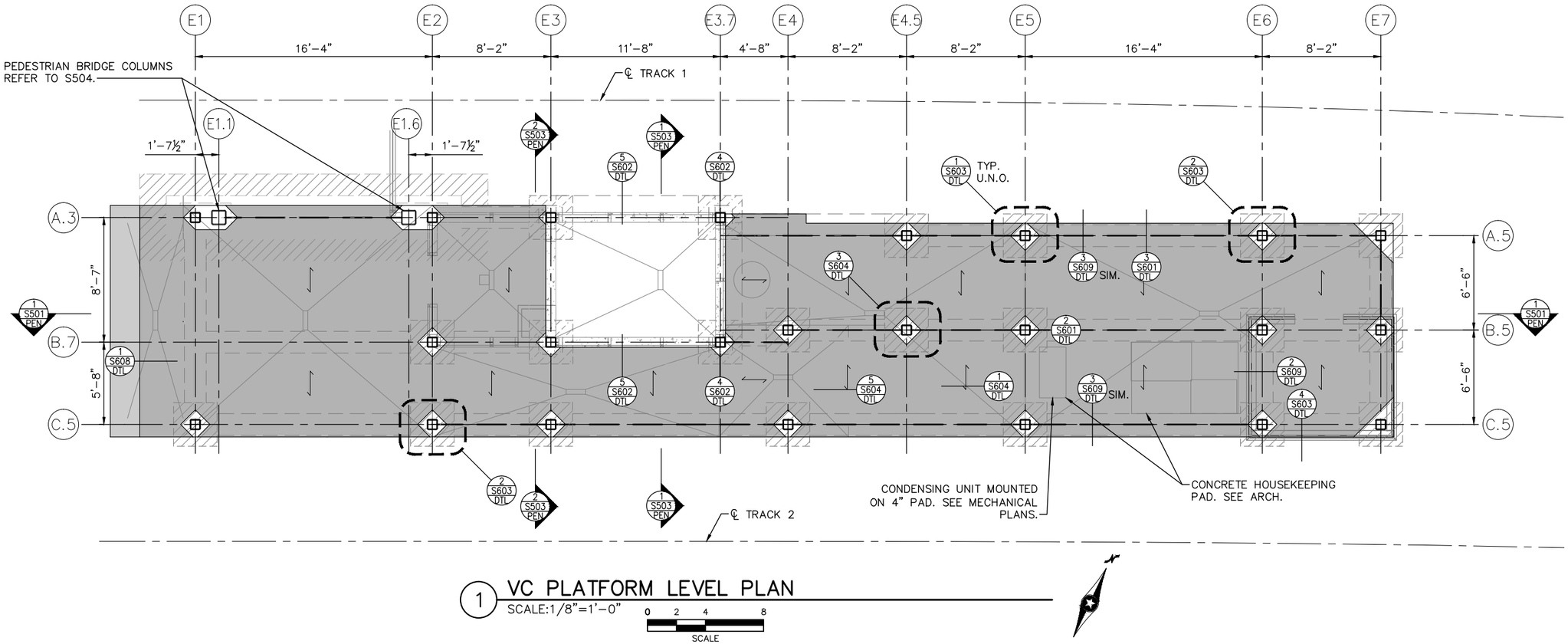
1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.

SLAB ON GRADE NOTES:

1. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED, THE FOLLOWING NOTES RELATING TO THE SLAB ON GRADE PLAN SHALL GOVERN.
2. FOR SUMP PIT, FLOOR DRAIN LOCATIONS, AND PITCH REFER TO ARCHITECTURAL PLANS.
3. SEE SHEETS S612 AND S613 FOR FLOOR DRAIN DETAILS AND CONTROL JOINT AND SEALANT DETAILS AND S604 FOR CONSTRUCTION JOINT DETAILS.

LEGEND:

- STEEL TUBE COLUMN – SEE FRAMING PLANS
- CAST IN PLACE CONCRETE PILE CAP
- CAST IN PLACE CONCRETE GRADE BEAM
- 6" SLAB ON GRADE



1 VC PLATFORM LEVEL PLAN
SCALE:1/8"=1'–0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM Kimley»Horn

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC
PLATFORM PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-PLN-402

SHEET 142 OF 394

Jan. 18 2016 10:06 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PEN-STATION\142 E4-PEN-STR-PLN-402.dwg By: casey.leedom

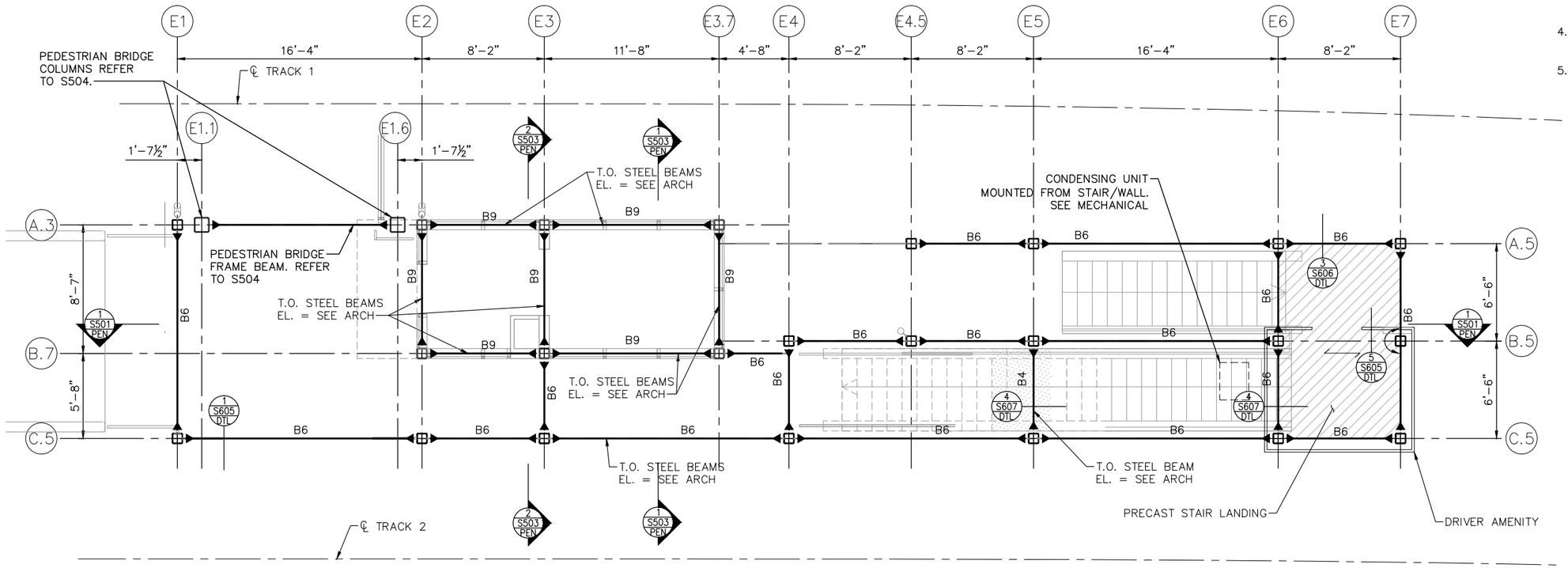
GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.
2. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED.

STAIR LANDING PLAN NOTES

1. TOP OF STEEL BEAMS ELEVATION AS NOTED ON ARCHITECTURAL PLAN.
2. ⟷ INDICATES SPAN DIRECTION OF PRECAST STAIR LANDING.
3. MOMENT CONNECTIONS ARE DENOTED THUS (▶—) ON PLAN OR PREQUALIFIED SHOP WELDED OR FIELD WELDED CONNECTION.
4. ⌒ INDICATES BEAM IS CONTINUOUS OVER COLUMN.
5. □ DENOTES HSS8X8X5/8 COLUMN. SEE SHEET S607 FOR HAND HOLE DETAILS

BEAM SCHEDULE	
MARK	SIZE
B1	C12X20.7
B2	W8X18
B3	W12X16
B4	HSS12X6X$\frac{1}{2}$
B5	HSS12X6X$\frac{1}{2}$
B6	HSS18X6X$\frac{5}{8}$
B7	HSS18X6X$\frac{5}{8}$
B8	HSS16X8X$\frac{1}{2}$
B9	HSS6X4X$\frac{5}{16}$



1 VC STAIR LANDING LEVEL
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM Kimley»Horn

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC INTERMEDIATE LEVEL FRAMING PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-PLN-411

SHEET 143 OF 394

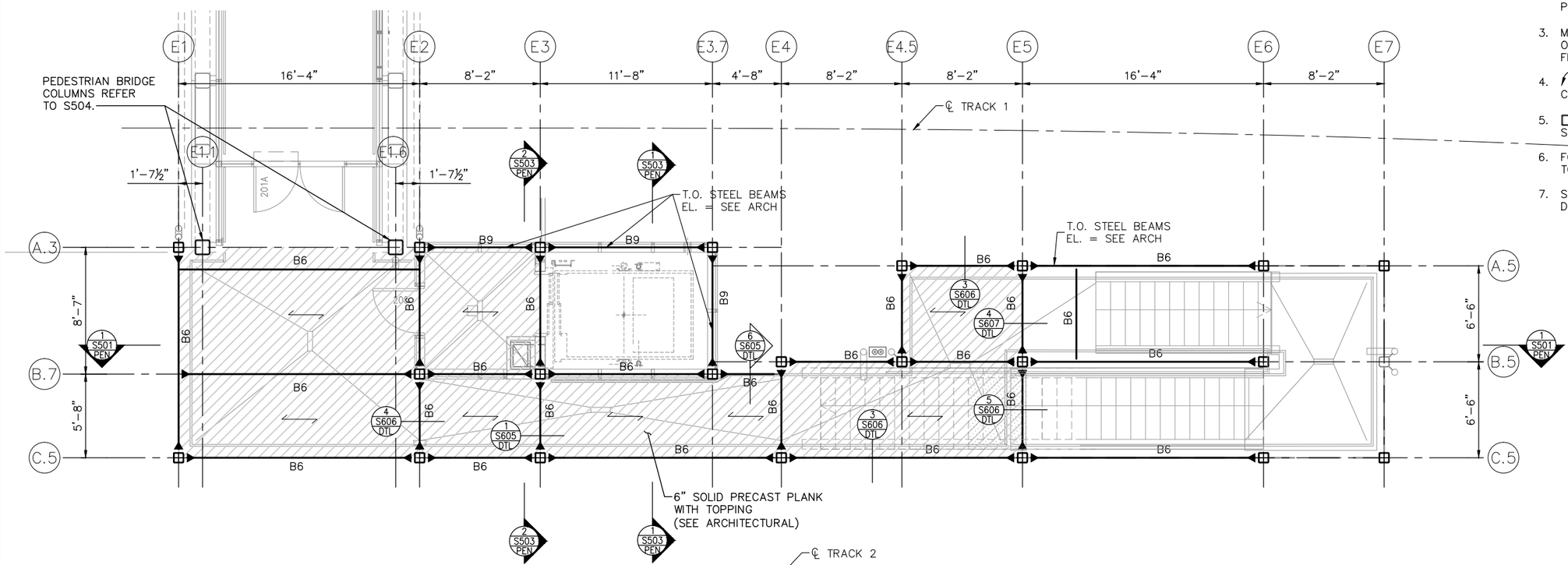
Jan, 18 2016 08:40 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PEN-STATION\143 E4-PEN-STR-PLN-411.dwg By: casey.leedom

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.
2. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED.

BRIDGE LEVEL PLAN NOTES

1. TOP OF STEEL BEAMS ELEVATION AS NOTED ON ARCHITECTURAL PLAN.
2. ⟷ INDICATES SPAN DIRECTION OF 6" SOLID PRECAST PLANK DECK WITH TOPPING.
3. MOMENT CONNECTIONS ARE DENOTED THUS (▶—) ON PLAN OR PREQUALIFIED SHOP WELDED OR FIELD WELDED CONNECTION.
4. ⌒ INDICATES BEAM IS CONTINUOUS OVER COLUMN.
5. □ DENOTES HSS8X8X5/8 TUBE STEEL COLUMN. SEE SHEET S607 FOR HAND HOLE DETAILS.
6. FOR FLOOR DRAIN LOCATIONS AND PITCH, REFER TO ARCHITECTURAL PLANS.
7. SEE SHEETS S612 AND S613 FOR FLOOR DRAIN DETAILS AND SLAB JOINT AND SEALANT DETAILS.



BEAM SCHEDULE	
MARK	SIZE
B1	C12X20.7
B2	W8X18
B3	W12X16
B4	HSS12X6X$\frac{1}{2}$
B5	HSS12X6X$\frac{1}{2}$
B6	HSS18X6X$\frac{5}{8}$
B7	HSS18X6X$\frac{5}{8}$
B8	HSS16X8X$\frac{1}{2}$
B9	HSS6X4X$\frac{5}{16}$

1 VC PEDESTRIAN BRIDGE LEVEL
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM Kimley»Horn

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

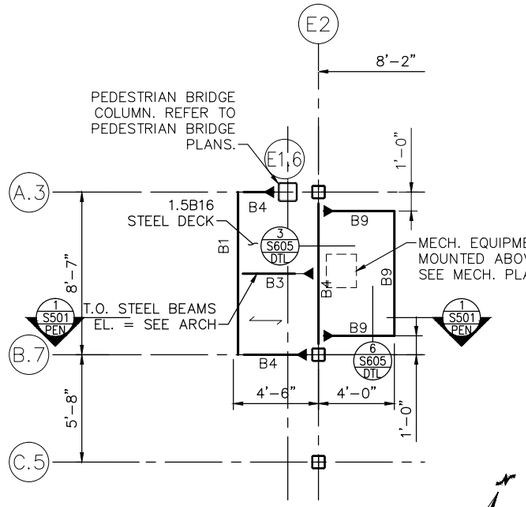
CIVIL - VOLUME 11D
PENN STATION
VC BRIDGE LEVEL
FRAMING PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-PLN-412

SHEET 144 OF 394

Jan, 18 2016 10:03 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PEN-STATION\144 E4-PEN-STR-PLN-412.dwg By: casey.leedom

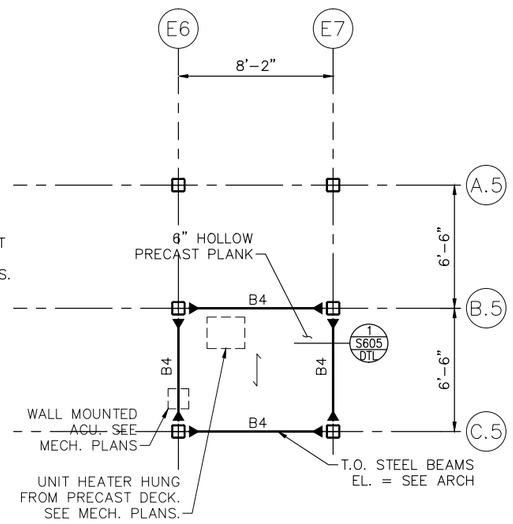


2 VC ELEVATOR LOBBY ENTRANCE ROOF

SCALE:1/8"=1'-0"

0 2 4 8

SCALE

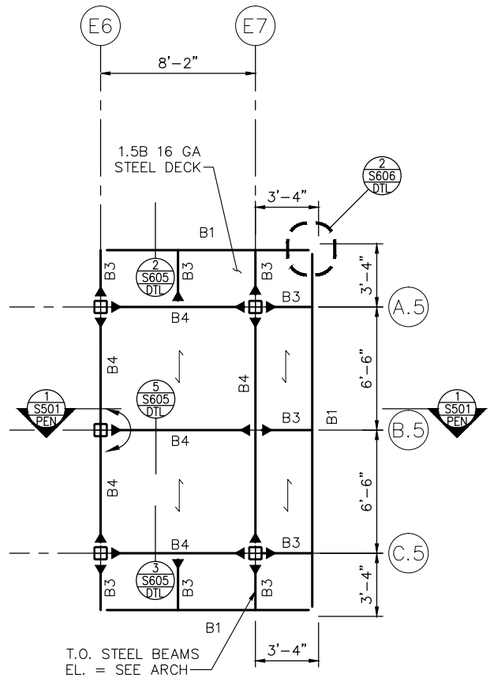


3 VC DRIVER AMENITY ROOF

SCALE:1/8"=1'-0"

0 2 4 8

SCALE

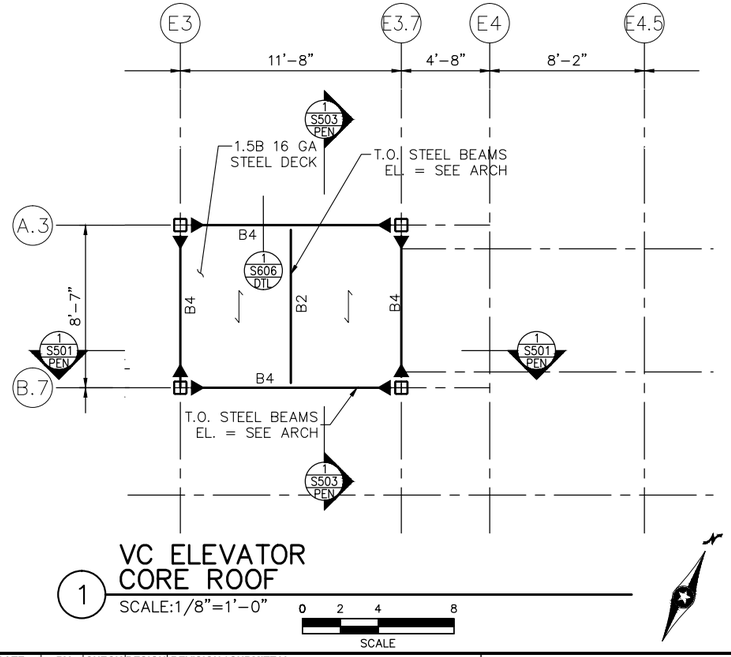


4 VC REAR STAIR LANDING ROOF

SCALE:1/8"=1'-0"

0 2 4 8

SCALE



1 VC ELEVATOR CORE ROOF

SCALE:1/8"=1'-0"

0 2 4 8

SCALE

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.
2. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED.

ROOF PLAN NOTES

1. TOP OF STEEL BEAMS ELEVATION AS NOTED ON ARCHITECTURAL PLAN.
2. ⟵ INDICATES SPAN DIRECTION OF 1.5B16 STEEL ROOF DECK UNLESS OTHERWISE NOTED.
3. MOMENT CONNECTIONS ARE DENOTED THUS (▶—) ON PLAN OR PREQUALIFIED SHOP WELDED OR FIELD WELDED CONNECTION.
4. ⌒ INDICATES BEAM IS CONTINUOUS OVER COLUMN.
5. ☐ DENOTES HSS8X8X5/8 COLUMN. SEE SHEET S607 FOR HAND HOLE DETAILS.

BEAM SCHEDULE	
MARK	SIZE
B1	C12X20.7
B2	W8X18
B3	W12X16
B4	HSS12X6X$\frac{1}{2}$
B5	HSS12X6X$\frac{1}{2}$
B6	HSS18X6X$\frac{5}{8}$
B7	HSS18X6X$\frac{5}{8}$
B8	HSS16X8X$\frac{1}{2}$
B9	HSS6X4X$\frac{5}{16}$

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM Kimley»Horn

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC PARTIAL ROOF FRAMING PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-PLN-413

SHEET 145 OF 394

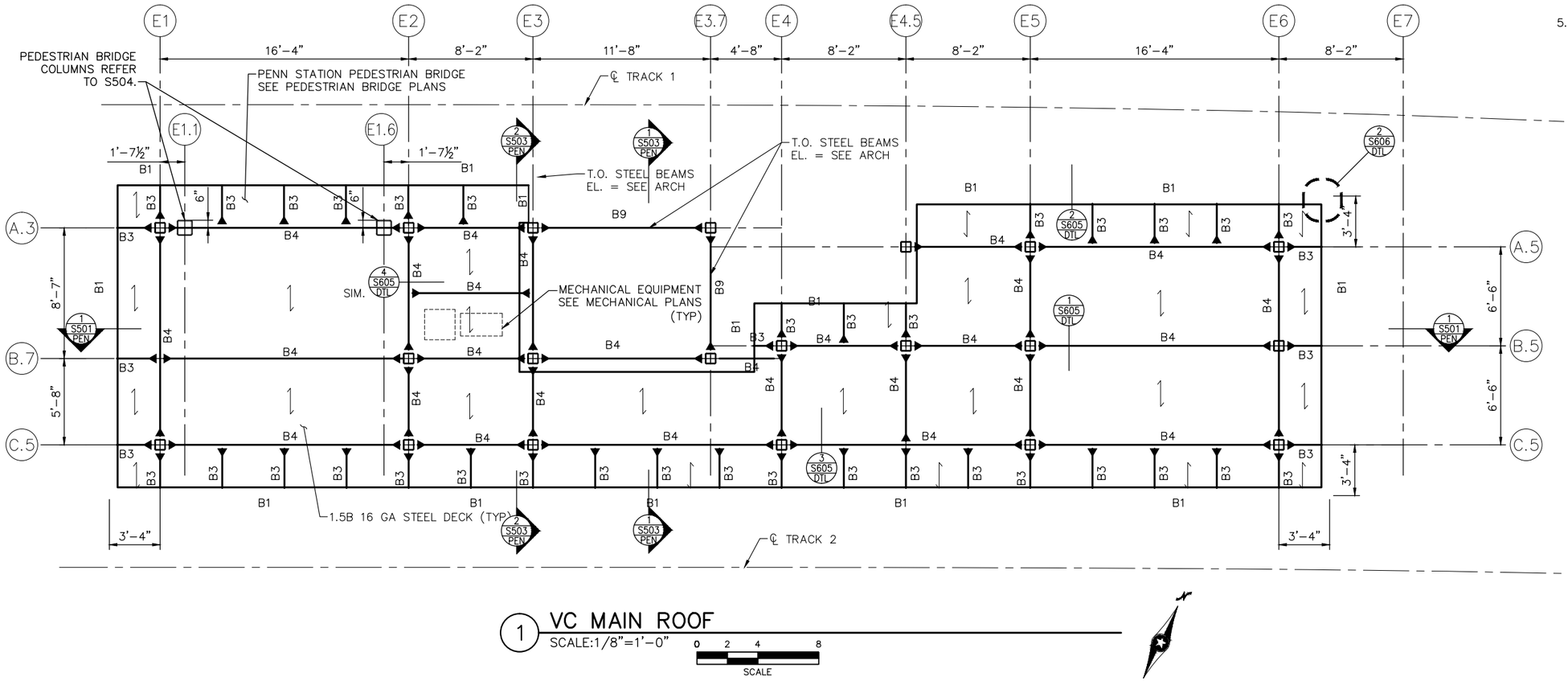
Jan, 18 2016 08:41 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PEN-STATION\145 E4-PEN-STR-PLN-413.dwg By: casey.leedom

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.
2. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED.

ROOF PLAN NOTES

1. TOP OF STEEL BEAMS ELEVATION AS NOTED ON ARCHITECTURAL PLAN.
2. ⟷ INDICATES SPAN DIRECTION OF 1.5B16 STEEL ROOF DECK.
3. MOMENT CONNECTIONS ARE DENOTED THUS (▶—) ON PLAN OR PREQUALIFIED SHOP WELDED OR FIELD WELDED CONNECTION.
4. ⌒ INDICATES BEAM IS CONTINUOUS OVER COLUMN.
5. □ DENOTES HSS8X8X5/8 COLUMN



1 VC MAIN ROOF
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

BEAM SCHEDULE	
MARK	SIZE
B1	C12X20.7
B2	W8X18
B3	W12X16
B4	HSS12X6X$\frac{1}{2}$
B5	HSS12X6X$\frac{1}{2}$
B6	HSS18X6X$\frac{5}{8}$
B7	HSS18X6X$\frac{5}{8}$
B8	HSS16X8X$\frac{1}{2}$
B9	HSS6X4X$\frac{5}{16}$

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM Kimley»Horn

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

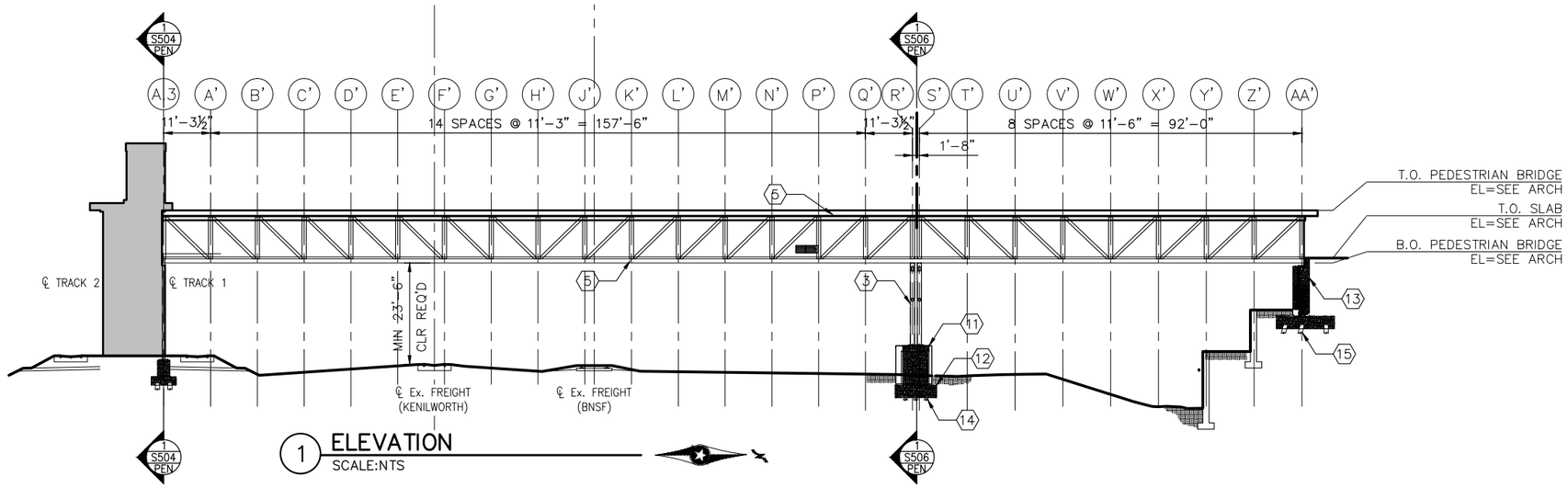
CIVIL - VOLUME 11D
PENN STATION
VC MAIN ROOF
FRAMING PLAN

DISCIPLINE: STRUCTURES

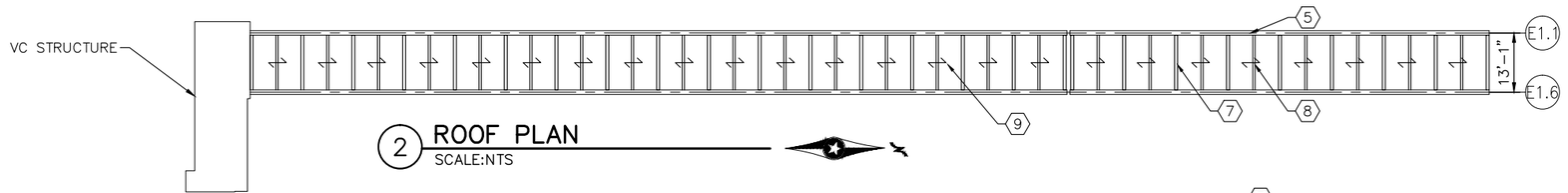
SHEET NAME: E4-PEN-STR-PLN-414

SHEET 146 OF 394

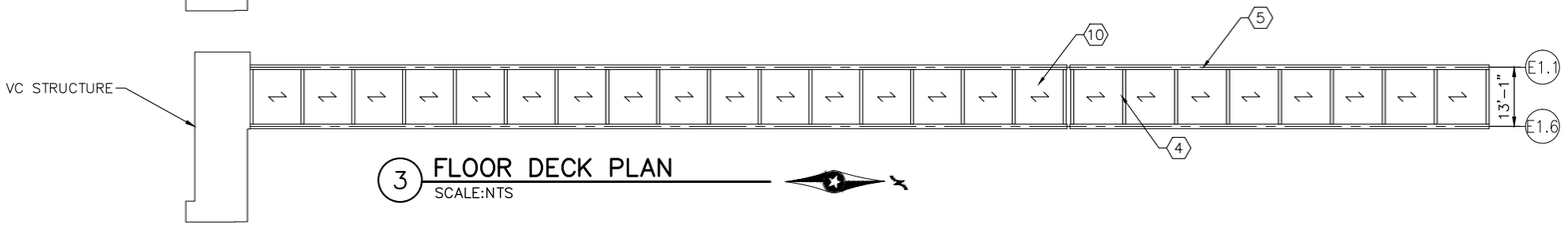
Jan, 18 2016 09:26 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\PEN-STATION\146 E4-PEN-STR-PLN-414.dwg By: casey.leedom



1 ELEVATION
SCALE:NTS



2 ROOF PLAN
SCALE:NTS



3 FLOOR DECK PLAN
SCALE:NTS

FOUNDATION LOADS (KIPS)							
GRID	DEAD LOAD (DL, KIPS)	LIVE LOAD (LL, KIPS)	SNOW LOAD (SL, KIPS)	WIND LOAD (WL, KIPS)		LOAD COMBINATION (KIPS) (1)	
				VERTICAL	HORIZONTAL	SERVICE 1	STRENGTH 1
A.3	170.5	88.5	61.1	–	21	326	475
R'–S'	254.0	134.5	92.4	–	31	490	715
AA'	83.5	46.0	31.3	–	10	164	240

(1) LOAD COMBINATION SERVICE 1: DL + LL + SL + 0.3xWL
STRENGTH 1: 1.25xDL + 1.75x(LL + SL)

KEY NOTES

1. HSS 12X8 TRUSS FRAME VERTICAL
2. HSS 12X12X⅝ SUPPORT FRAME COLUMN
3. HSS 12X12 ARCHITECTURAL COLUMN
4. HSS 8X8 FLOOR BEAM (TYP)
5. HSS 12X12 TRUSS CHORD (TYP)
6. HSS 12X8X½ FRAME BEAM
7. HSS 8X8 TOP CHORD STRUT AT TRUSS PANEL POINTS
8. HSS 6X6 TOP CHORD INTERMEDIATE STRUT
9. 1 ½" – 20 GA. GALVANIZED ACOUSTIC METAL CELLULAR ROOF DECK
10. 6" THICK CONCRETE FLOOR SLAB WITH 3" – 18 GA. GALVANIZED COMPOSITE METAL FLOOR DECK.
11. CONCRETE PIER
12. CONCRETE PILE CAP
13. CONCRETE ABUTMENT
14. HELICAL STEEL PILES
15. 12" CIP PILES
16. STEEL REINFORCED ELASTOMERIC SLIDE BEARING PAD
17. 1'–0" X 1'–8" X 1½" STEEL BASE PLATE
18. 3–8" X 3–8" X 3" STEEL BASE PLATE
19. 2'–0" X 3'–6" X 2½" STEEL BASE PLATE
20. 1" DIAMETER ANCHOR BOLTS
21. 1 ¼" DIAMETER ANCHOR BOLTS
22. EXPANSION JOINT
23. HSS 8X8X½ FRAME BEAM
24. VC STRUCTURE HSS COLUMN
25. BEARING ELEVATIONS BASED ON FINAL BRIDGE DESIGN. ADJUST DIMENSIONS ACCORDINGLY.

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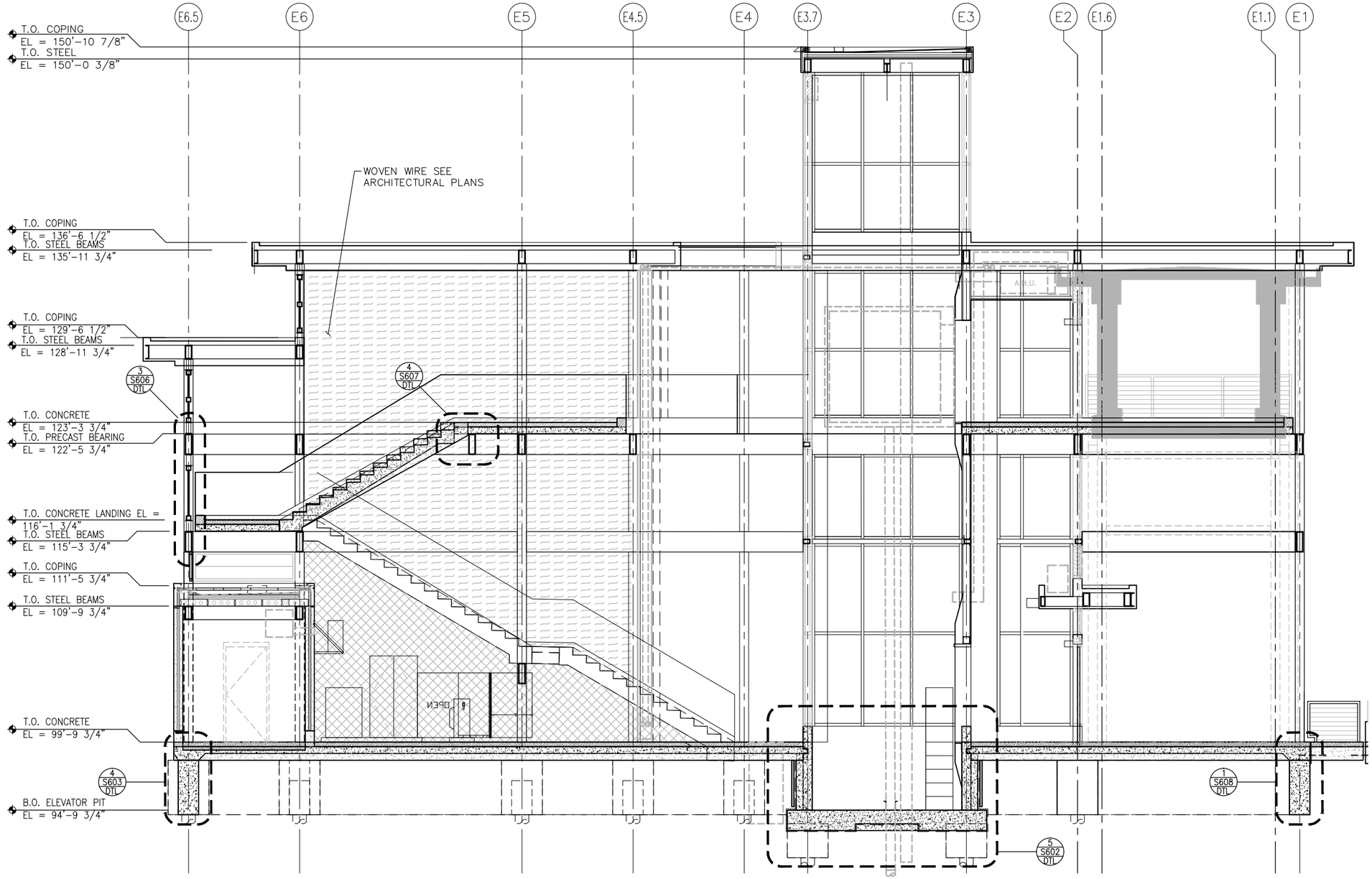
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE
GENERAL PLANS AND ELEVATION

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-PLN-415

SHEET 147 OF 394

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1 VC SECTION
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

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SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC TRACK 1
SECTION VIEW

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-SCT-501

SHEET 148 OF 394

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SOUTHWEST Green Line LRT Extension

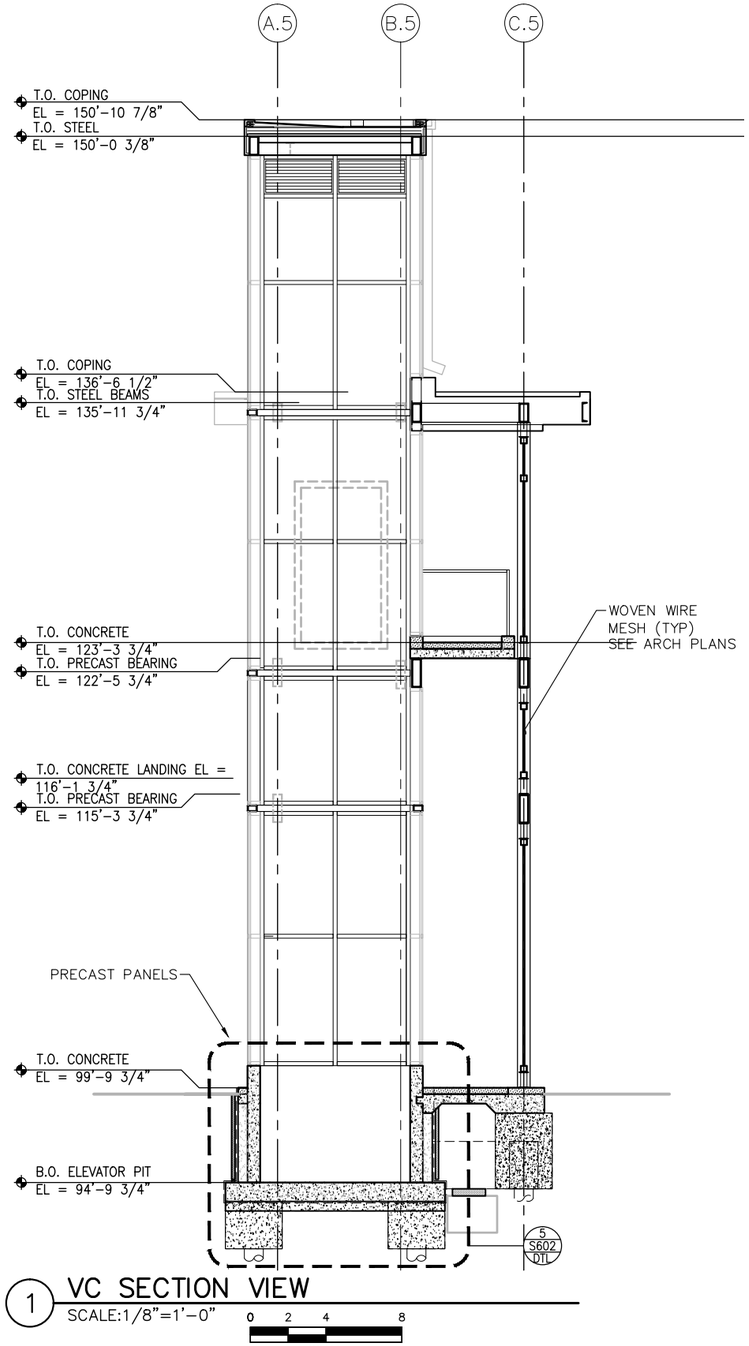
CIVIL - VOLUME 11D
PENN STATION
VC TRACK 2
SECTION VIEW

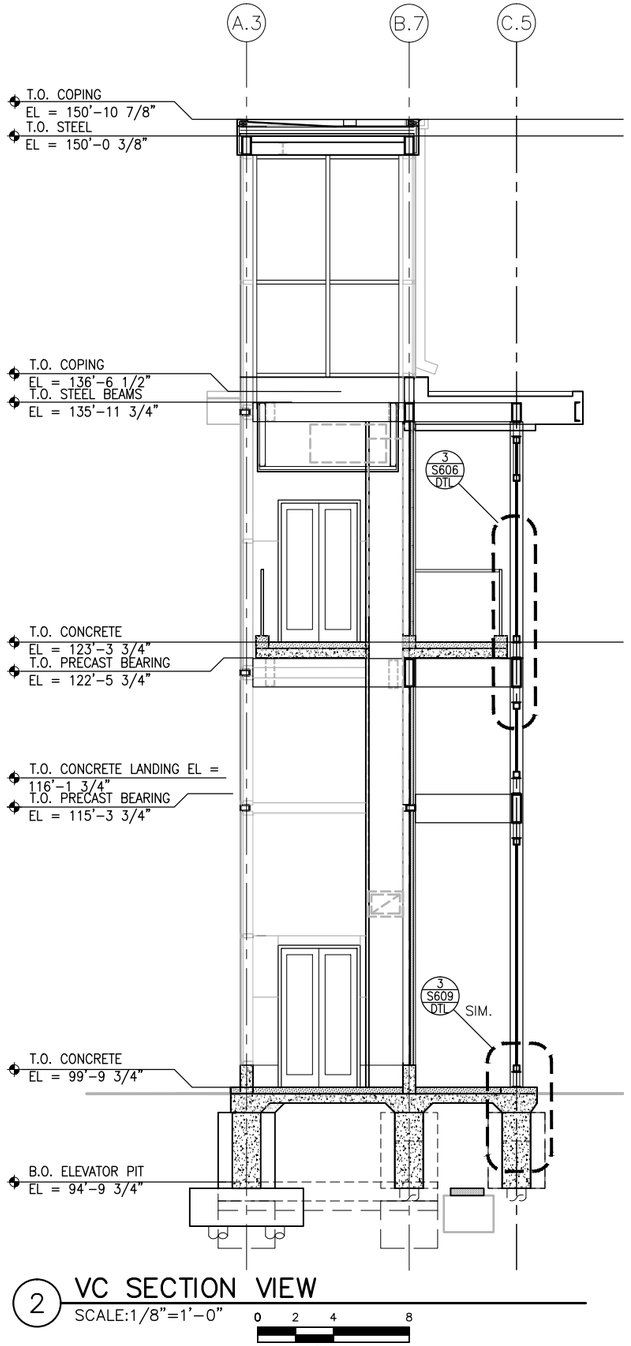
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SHEET **149** OF **394**

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SOUTHWEST Green Line LRT Extension

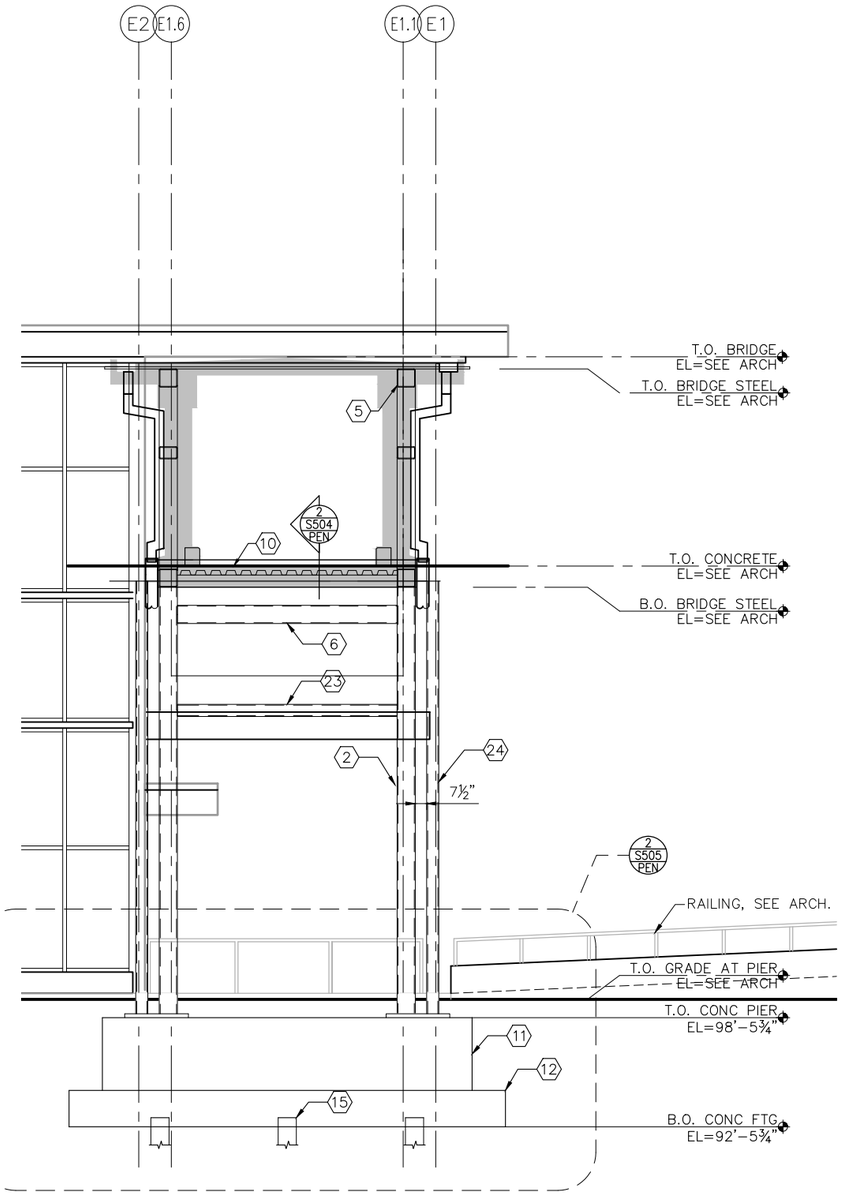
CIVIL - VOLUME 11D
PENN STATION
VC
SECTION VIEWS

DISCIPLINE: STRUCTURES

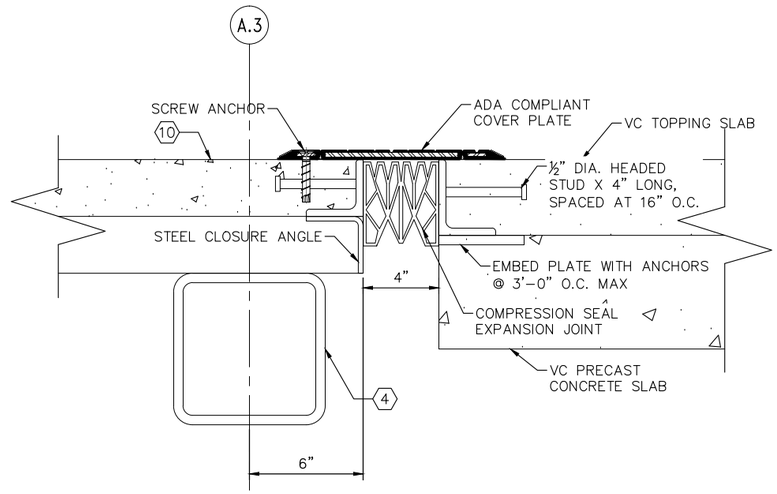
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SHEET 150 OF 394

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1 TRANSVERSE SECTION
SCALE:NTS



2 EXPANSION JOINT DETAIL
SCALE:NTS

KEY NOTES

1. HSS 12X8 TRUSS FRAME VERTICAL
2. HSS 12X12X⅝ SUPPORT FRAME COLUMN
3. HSS 12X12 ARCHITECTURAL COLUMN
4. HSS 8X8 FLOOR BEAM (TYP)
5. HSS 12X12 TRUSS CHORD (TYP)
6. HSS 12X8X½ FRAME BEAM
7. HSS 8X8 TOP CHORD STRUT AT TRUSS PANEL POINTS
8. HSS 6X6 TOP CHORD INTERMEDIATE STRUT
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12. CONCRETE PILE CAP
13. CONCRETE ABUTMENT
14. HELICAL STEEL PILES
15. 12" CIP PILES
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17. 1'-0" X 1'-8" X 1½" STEEL BASE PLATE
18. 3-8" X 3-8" X 3" STEEL BASE PLATE
19. 2'-0" X 3'-6" X 2½" STEEL BASE PLATE
20. 1" DIAMETER ANCHOR BOLTS
21. 1 ¼" DIAMETER ANCHOR BOLTS
22. EXPANSION JOINT
23. HSS 8X8X½ FRAME BEAM
24. VC STRUCTURE HSS COLUMN
25. BEARING ELEVATIONS BASED ON FINAL BRIDGE DESIGN. ADJUST DIMENSIONS ACCORDINGLY.

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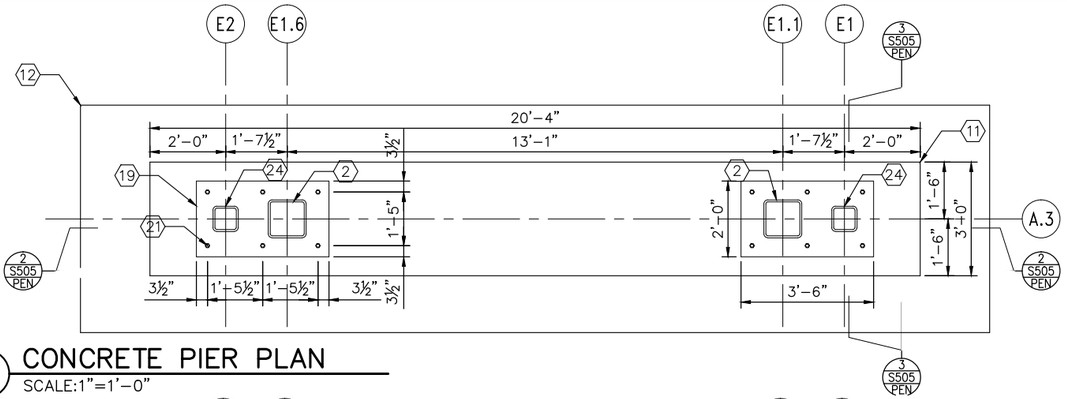
CIVIL - VOLUME 11D
PENN AVENUE STATION
PEDESTRIAN BRIDGE
PIER AT VC STRUCTURE

DISCIPLINE: STRUCTURES

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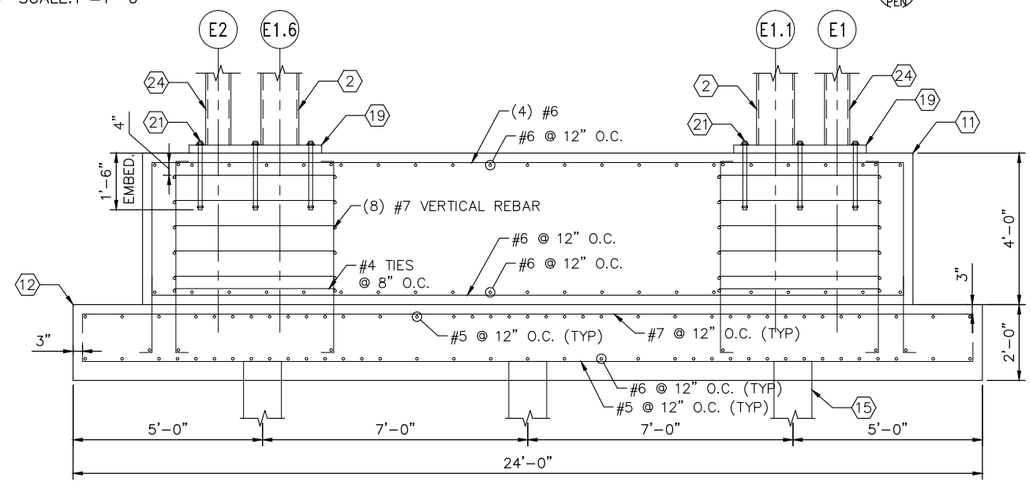
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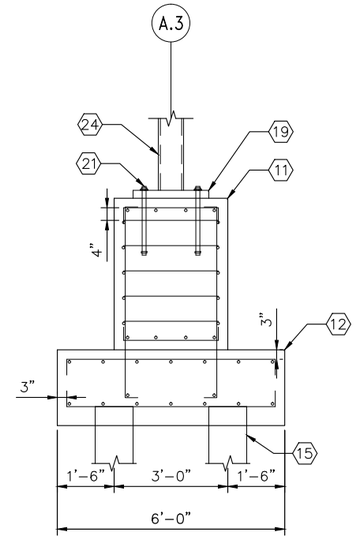
1 CONCRETE PIER PLAN

SCALE:1"=1'-0"



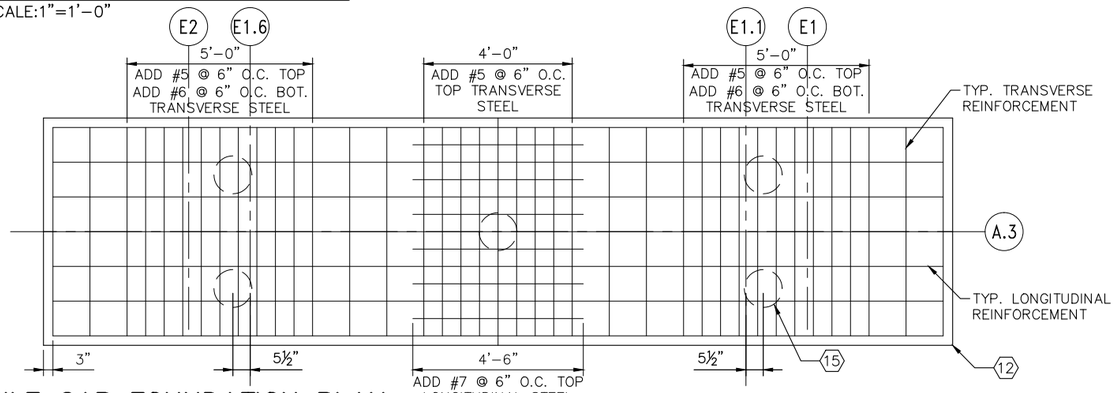
2 PIER FOUNDATION ELEVATION

SCALE:1"=1'-0"



3 PIER FOUNDATION SECTION

SCALE:1"=1'-0"



4 PILE CAP FOUNDATION PLAN

SCALE:NTS

KEY NOTES

1. HSS 12X8 TRUSS FRAME VERTICAL
2. HSS 12X12X⅝ SUPPORT FRAME COLUMN
3. HSS 12X12 ARCHITECTURAL COLUMN
4. HSS 8X8 FLOOR BEAM (TYP)
5. HSS 12X12 TRUSS CHORD (TYP)
6. HSS 12X8X½ FRAME BEAM
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19. 2'-0" X 3'-6" X 2½" STEEL BASE PLATE
20. 1" DIAMETER ANCHOR BOLTS
21. 1 ¼" DIAMETER ANCHOR BOLTS
22. EXPANSION JOINT
23. HSS 8X8X½ FRAME BEAM
24. VC STRUCTURE HSS COLUMN
25. BEARING ELEVATIONS BASED ON FINAL BRIDGE DESIGN. ADJUST DIMENSIONS ACCORDINGLY.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

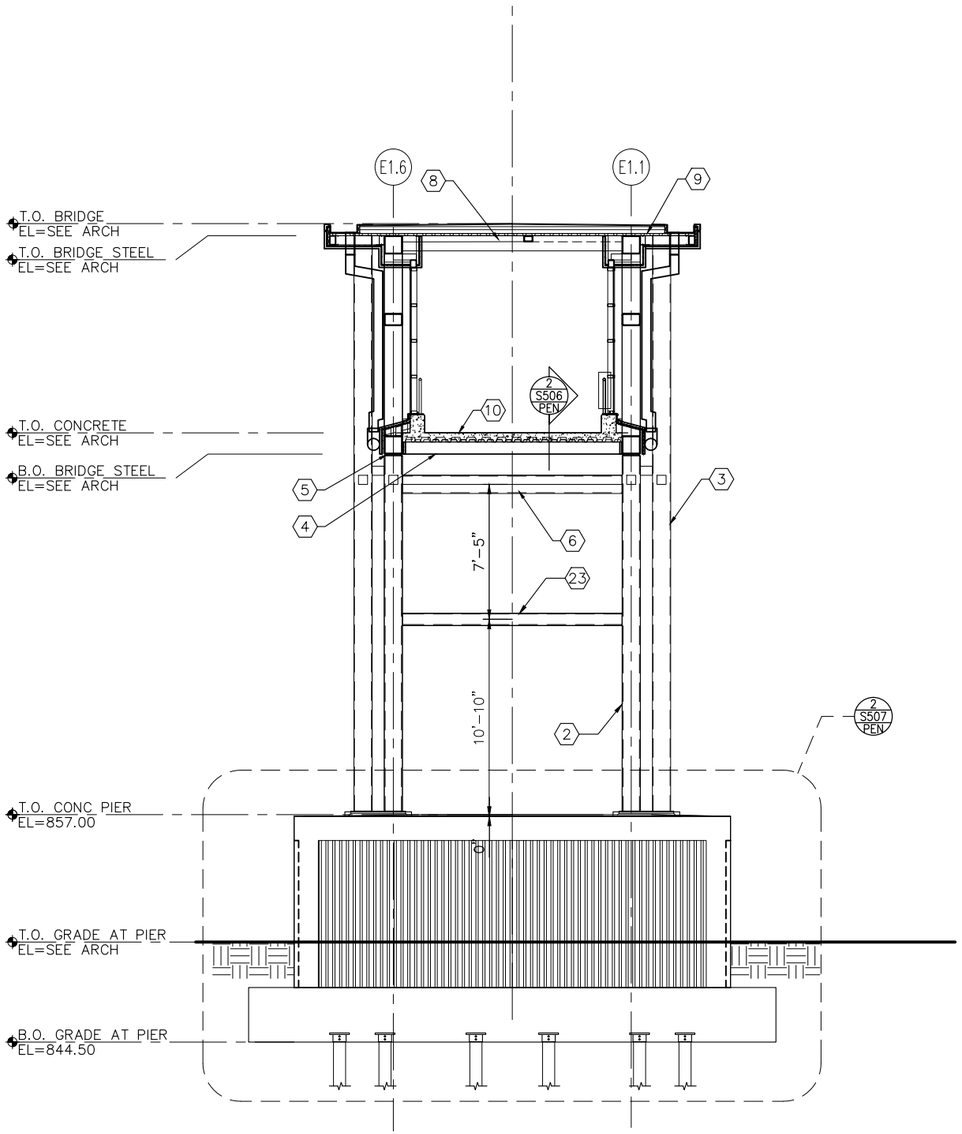
CIVIL - VOLUME 11D
PENN AVENUE STATION
PEDESTRIAN BRIDGE
VC STRUCTURE PIER DETAILS

DISCIPLINE: STRUCTURES

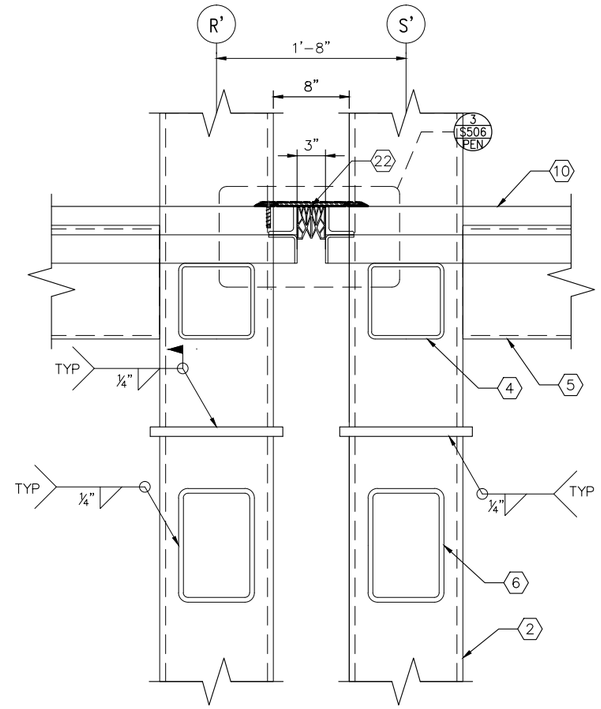
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SHEET 152 OF 394

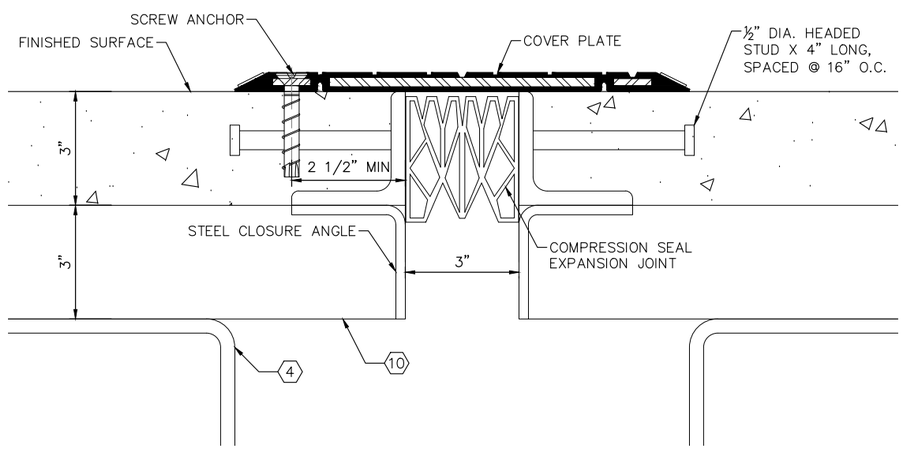
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1 TRANSVERSE SECTION
SCALE:NTS



2 PIER FRAME DETAIL
SCALE:3/4"=1'-0"



2 EXPANSION JOINT DETAIL
SCALE:3"=1'-0"

KEY NOTES

1. HSS 12X8 TRUSS FRAME VERTICAL
2. HSS 12X12X⅝ SUPPORT FRAME COLUMN
3. HSS 12X12 ARCHITECTURAL COLUMN
4. HSS 8X8 FLOOR BEAM (TYP)
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20. 1" DIAMETER ANCHOR BOLTS
21. 1 ¼" DIAMETER ANCHOR BOLTS
22. EXPANSION JOINT
23. HSS 8X8X½ FRAME BEAM
24. VC STRUCTURE HSS COLUMN
25. BEARING ELEVATIONS BASED ON FINAL BRIDGE DESIGN. ADJUST DIMENSIONS ACCORDINGLY.

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SOUTHWEST Green Line LRT Extension

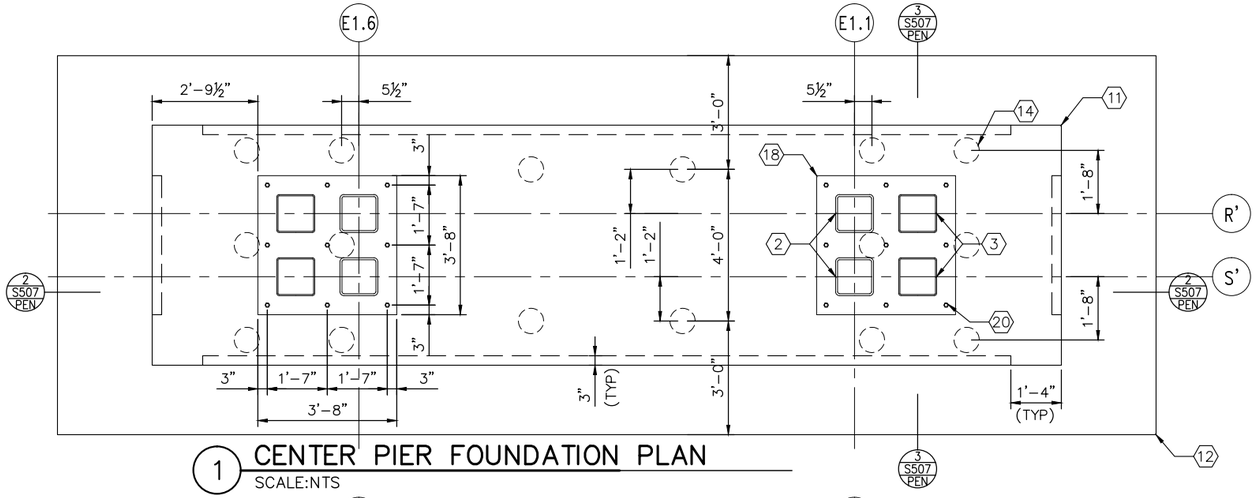
CIVIL - VOLUME 11D
PENN AVENUE STATION
PEDESTRIAN BRIDGE
CENTER PIER

DISCIPLINE: STRUCTURES

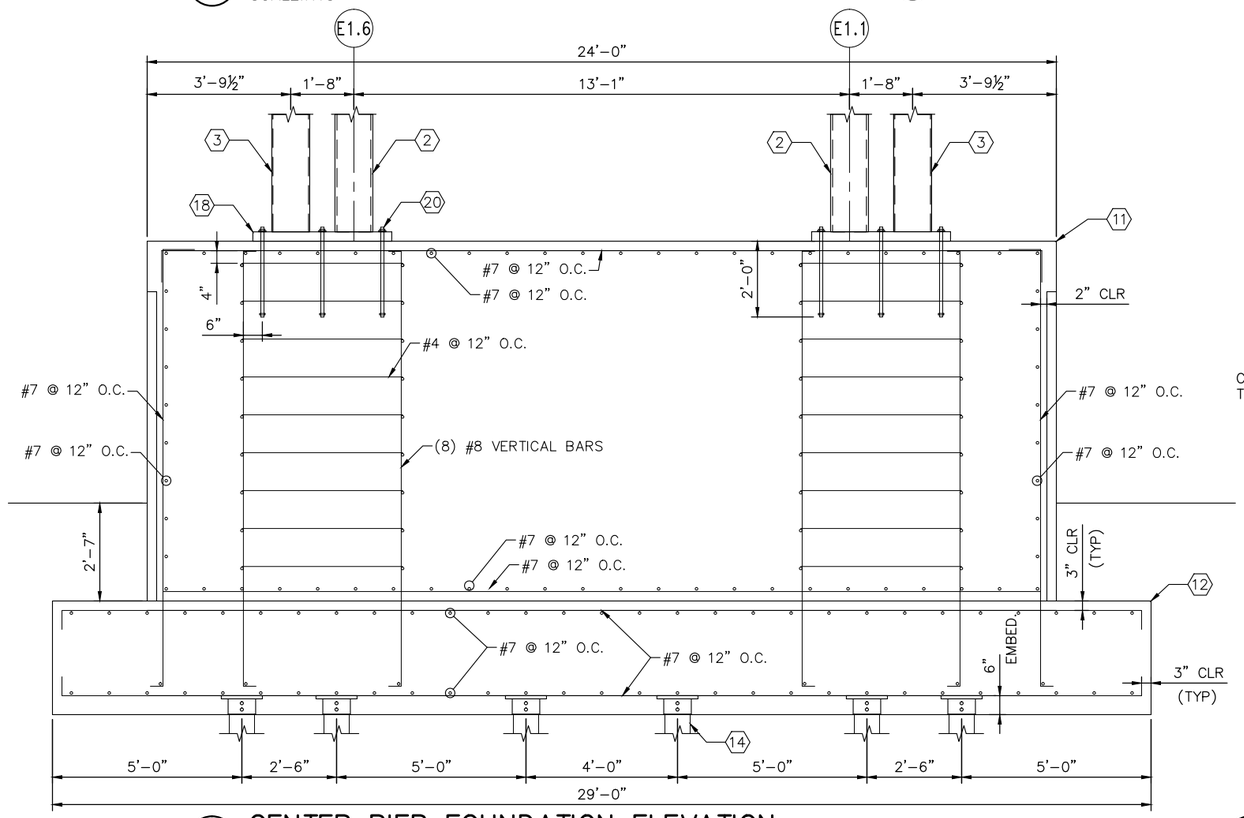
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SHEET 153 OF 394

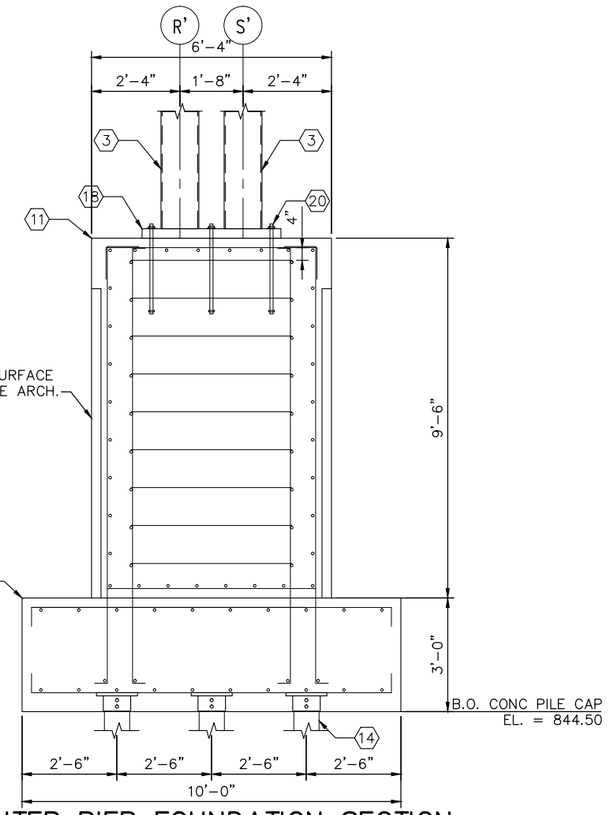
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1 CENTER PIER FOUNDATION PLAN
SCALE:NTS



2 CENTER PIER FOUNDATION ELEVATION
SCALE:NTS



3 CENTER PIER FOUNDATION SECTION
SCALE:NTS

KEY NOTES

1. HSS 12X8 TRUSS FRAME VERTICAL
2. HSS 12X12X⅝ SUPPORT FRAME COLUMN
3. HSS 12X12 ARCHITECTURAL COLUMN
4. HSS 8X8 FLOOR BEAM (TYP)
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20. 1" DIAMETER ANCHOR BOLTS
21. 1 ¼" DIAMETER ANCHOR BOLTS
22. EXPANSION JOINT
23. HSS 8X8X½ FRAME BEAM
24. VC STRUCTURE HSS COLUMN
25. BEARING ELEVATIONS BASED ON FINAL BRIDGE DESIGN. ADJUST DIMENSIONS ACCORDINGLY.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

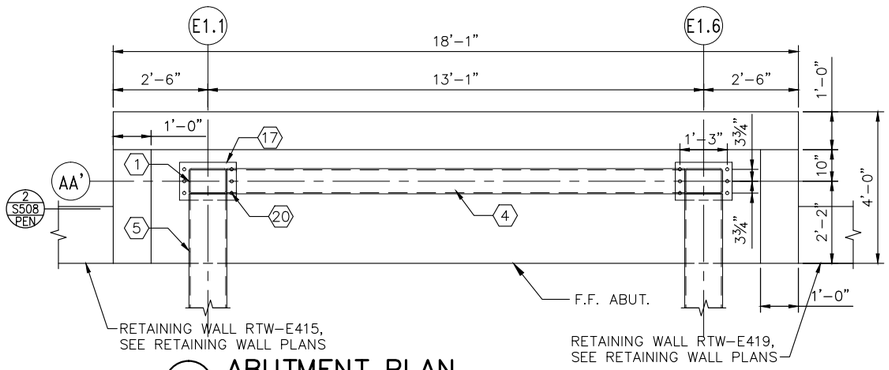
CIVIL - VOLUME 11D
PENN AVENUE STATION
PEDESTRIAN BRIDGE
CENTER PIER DETAILS

DISCIPLINE: STRUCTURES

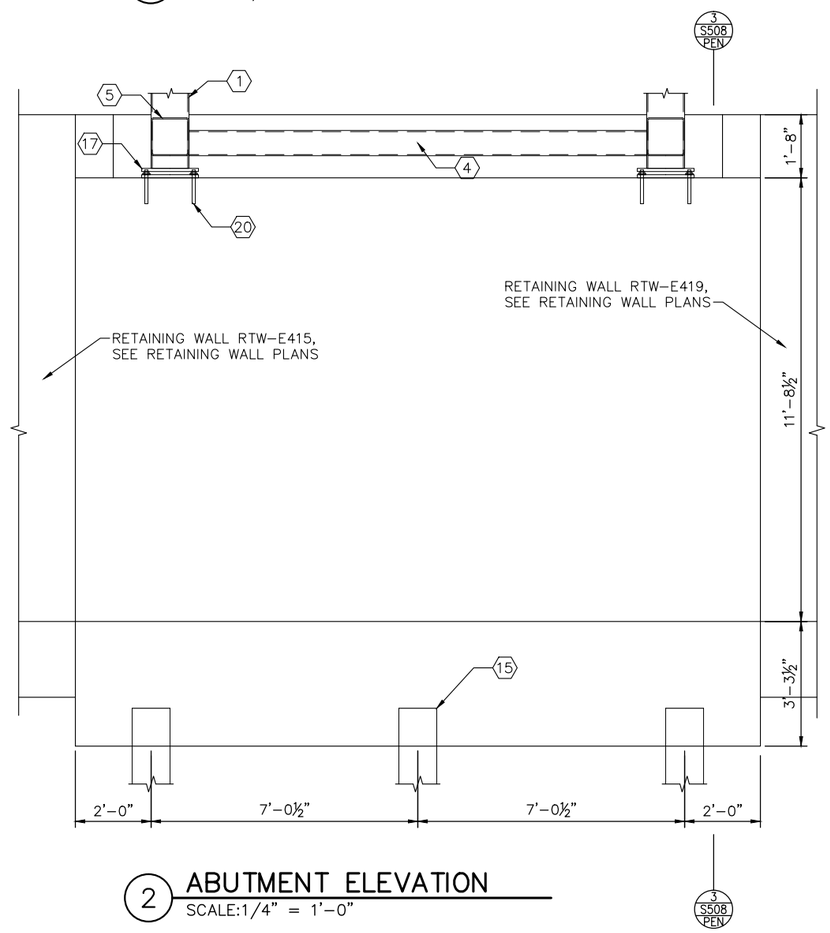
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SHEET 154 OF 394

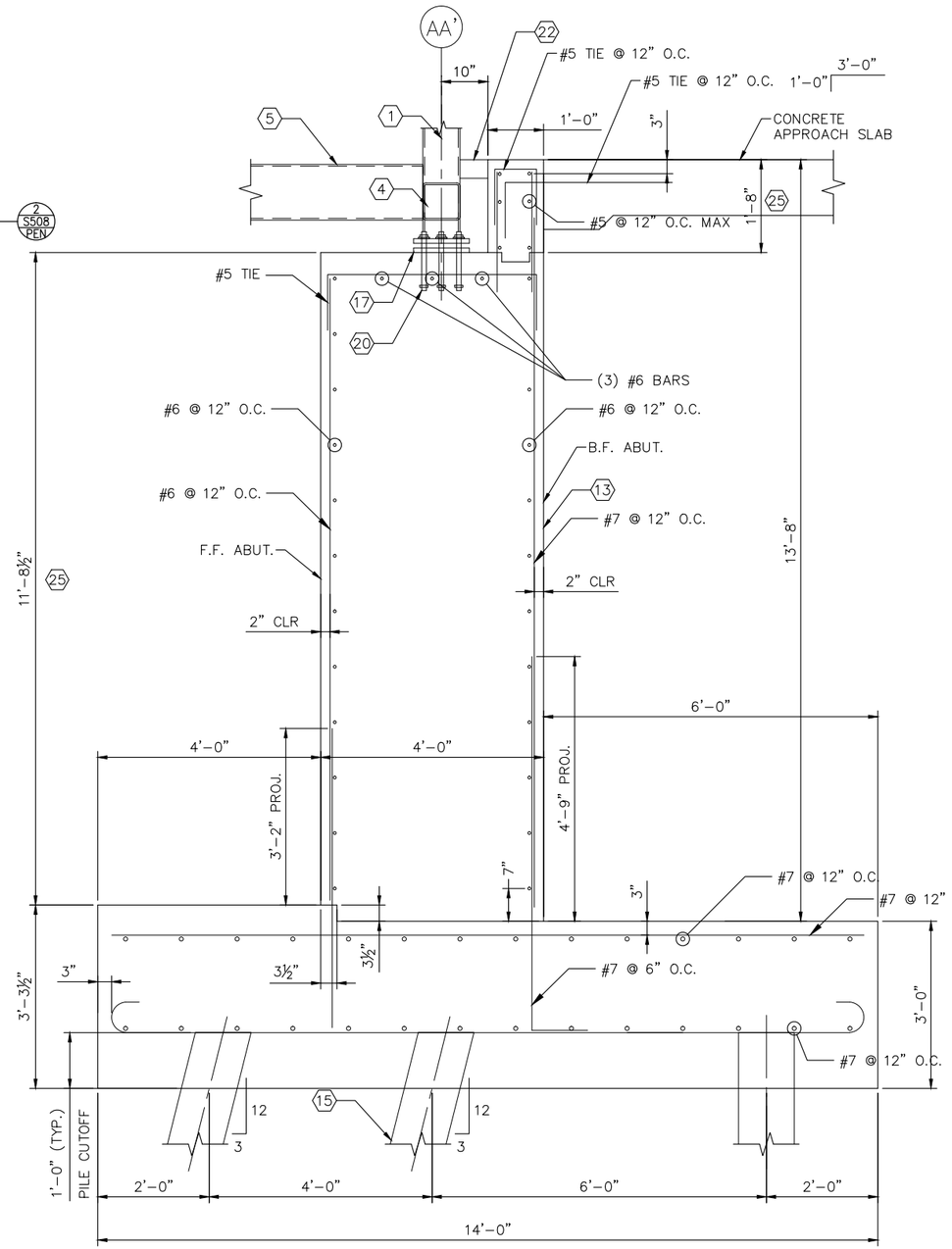
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1 ABUTMENT PLAN
SCALE:1/4" = 1'-0"



2 ABUTMENT ELEVATION
SCALE:1/4" = 1'-0"



3 ABUTMENT SECTION
SCALE:3/8" = 1'-0"

KEY NOTES

1. HSS 12X8 TRUSS FRAME VERTICAL
2. HSS 12X12X⅝ SUPPORT FRAME COLUMN
3. HSS 12X12 ARCHITECTURAL COLUMN
4. HSS 8X8 FLOOR BEAM (TYP)
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20. 1" DIAMETER ANCHOR BOLTS
21. 1 ¼" DIAMETER ANCHOR BOLTS
22. EXPANSION JOINT
23. HSS 8X8X½ FRAME BEAM
24. VC STRUCTURE HSS COLUMN
25. BEARING ELEVATIONS BASED ON FINAL BRIDGE DESIGN. ADJUST DIMENSIONS ACCORDINGLY.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM Kimley»Horn

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

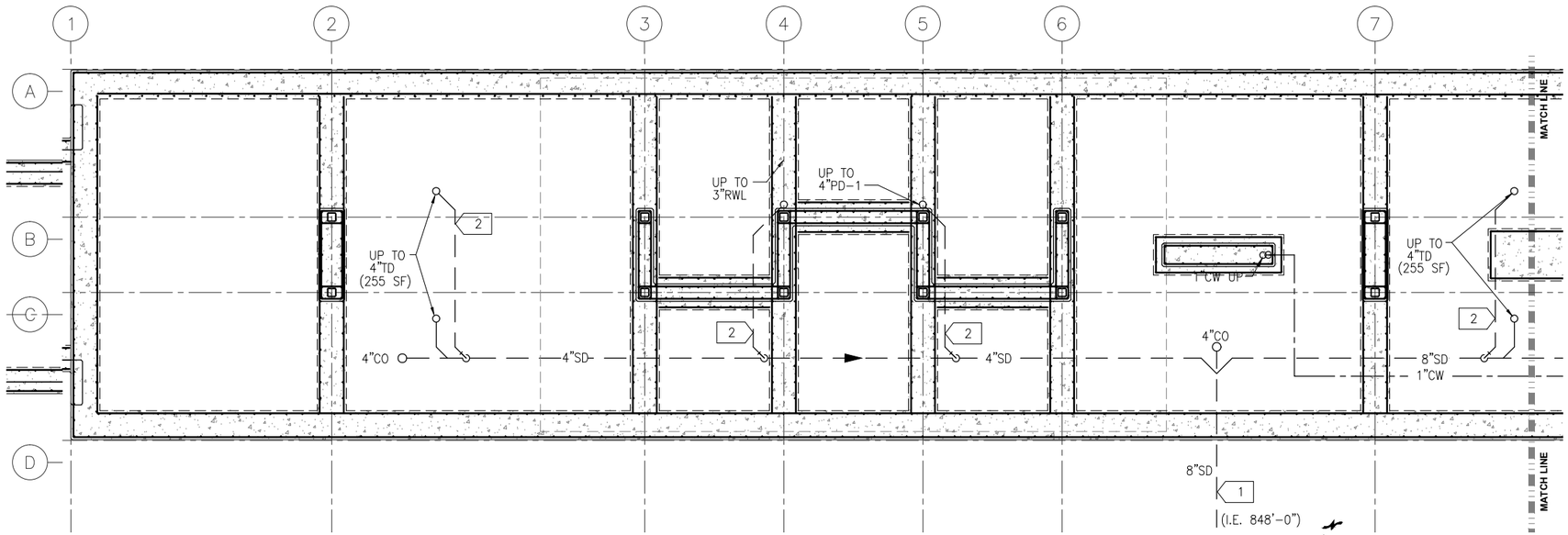
CIVIL - VOLUME 11D
PENN AVENUE STATION PEDESTRIAN BRIDGE
NORTH ABUTMENT DETAILS

DISCIPLINE: STRUCTURES

SHEET NAME: E4-PEN-STR-DTL-508

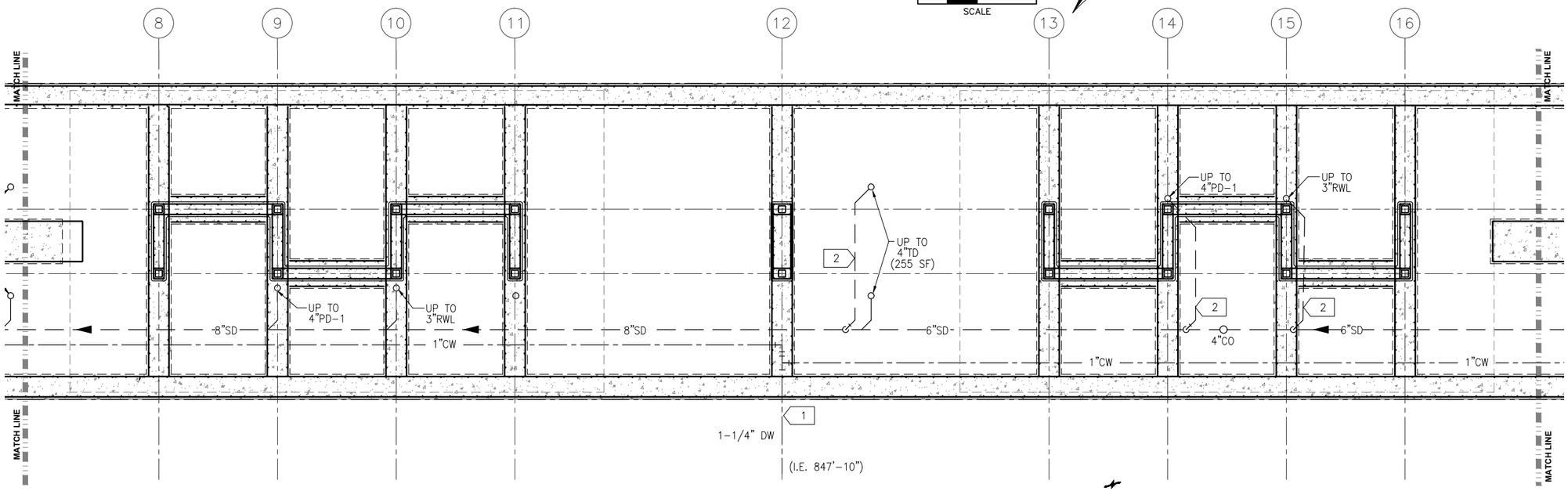
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1 WEST UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 MIDDLE UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES:

1 EXTEND WATER AND STORM OUTSIDE GUIDEWAY. CONNECTION BY OUTDOOR UTILITY CONTRACTOR.

2 ROUTE PIPING ABOVE DUCT BANK. DROP DOWN TO CONNECT TO MAIN.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM
LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

90% SUBMISSION - 01/22/16

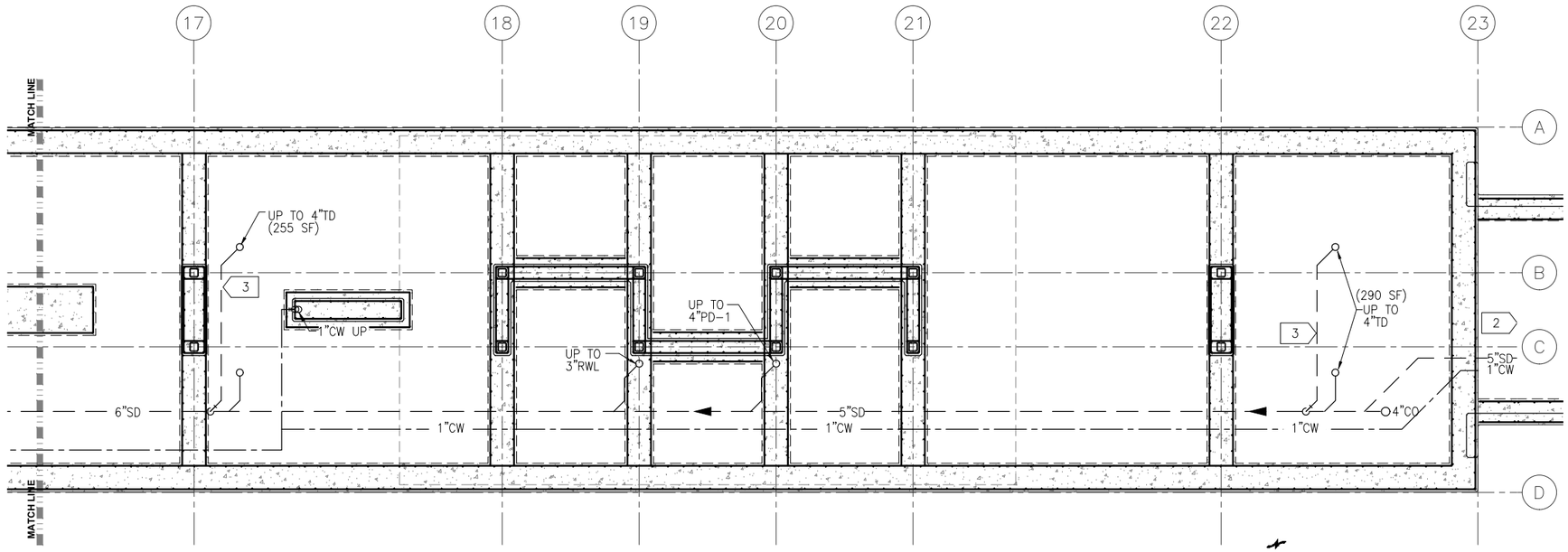
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
WEST AND MIDDLE PARTIAL UNDERFLOOR PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-PEN-PLM-PLN-100

SHEET 156 OF 394

Jan, 16 2016 03:06 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN STATION\E4-PEN-PLM-PLN-100.dwg By: craig



1 EAST UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

PLUMBING GENERAL NOTES

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PLUMBING KEY NOTES

1 EXTEND WATER AND STORM OUTSIDE GUIDEWAY. CONNECTION BY OUTDOOR UTILITY CONTRACTOR.

2 CONTINUE TO VERTICAL CIRCULATION PLATFORM.

3 ROUTE PIPING ABOVE DUCT BANK. DROP DOWN TO CONNECT TO MAIN.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL SOUTHWEST Green Line LRT Extension

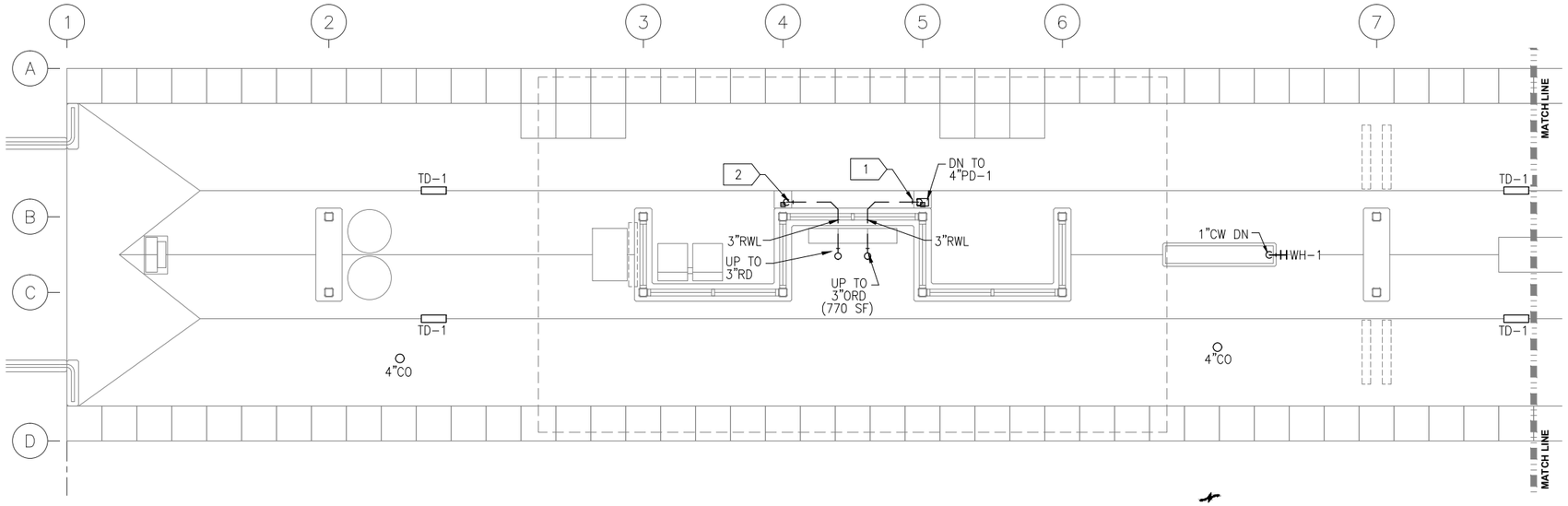
CIVIL - VOLUME 11D
PENN STATION
EAST PARTIAL UNDERFLOOR
PLUMBING PLAN

DISCIPLINE: PLUMBING

SHEET NAME: E4-PEN-PLM-PLN-101

SHEET 157 OF 394

Jan, 16 2016 03:06 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN STATION\E4-PEN-PLM-PLN-101.dwg By: craig



1 WEST PLATFORM PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

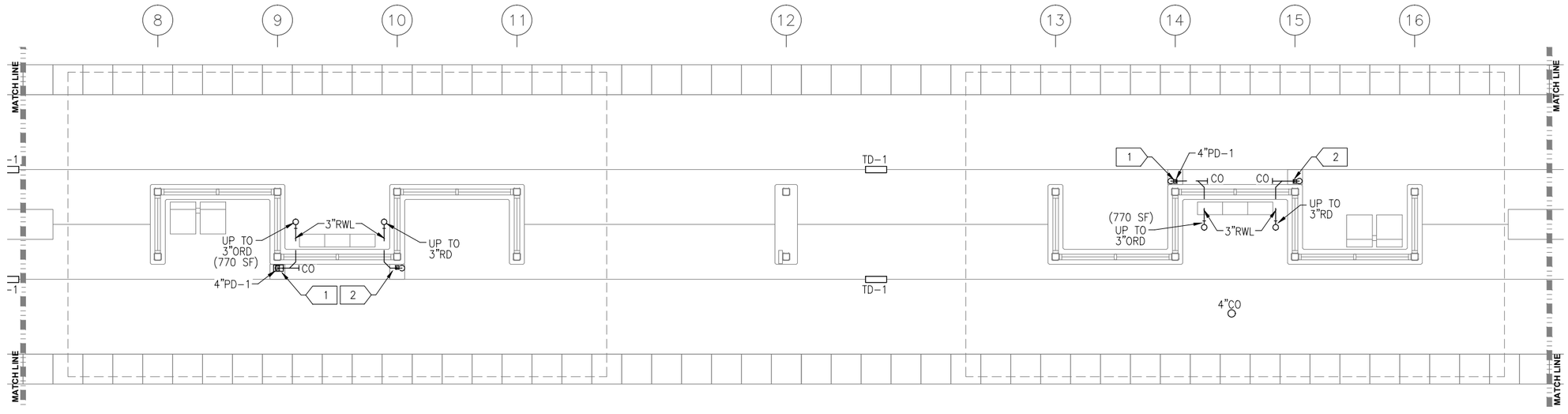
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PLUMBING KEY NOTES

1 3"ORD RWL'S DOWN TO 4"PD-1.

2 3"ø RWL DOWN TO BELOW PLATFORM.



2 MIDDLE PLATFORM PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

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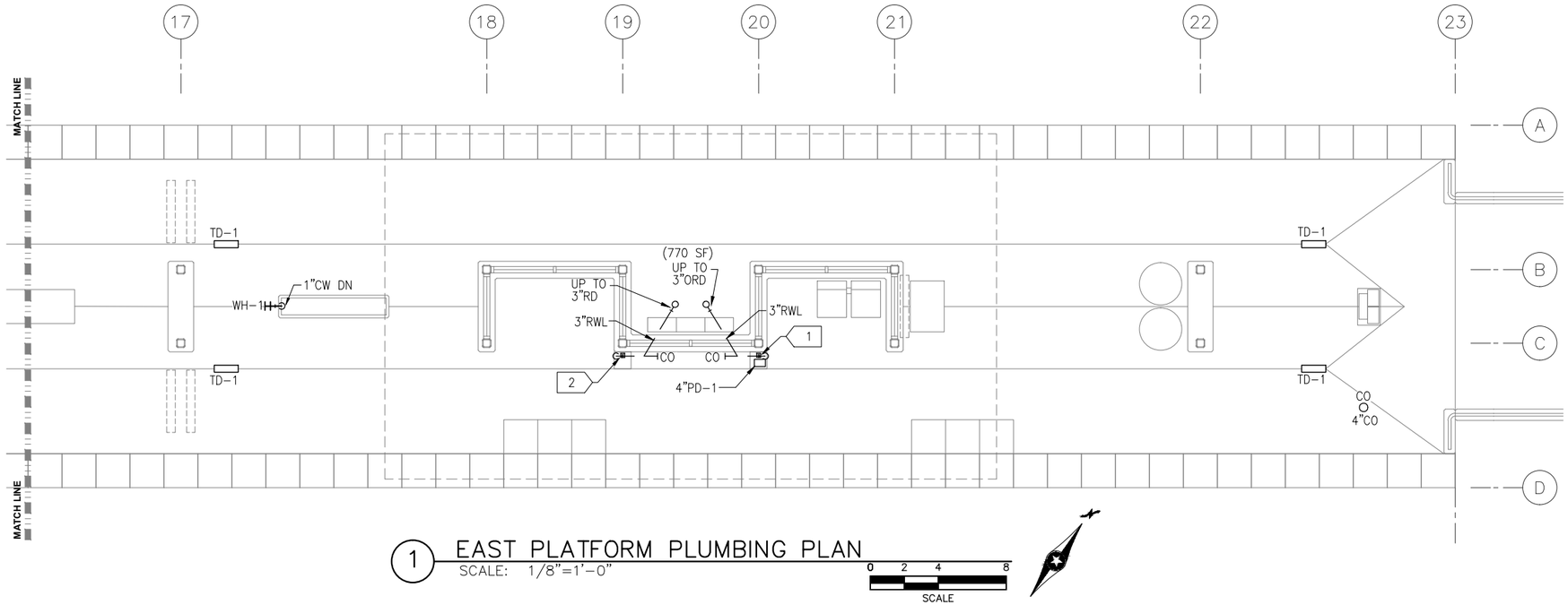
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
WEST AND MIDDLE PARTIAL PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-PEN-PLM-PLN-110

SHEET 158 OF 394

Jan, 16 2016 03:06 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN STA



1 EAST PLATFORM PLUMBING PLAN

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

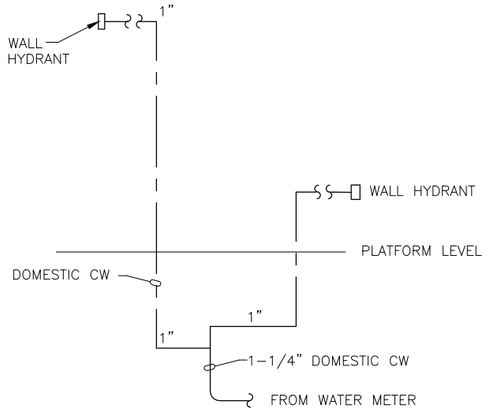
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PLUMBING KEY NOTES

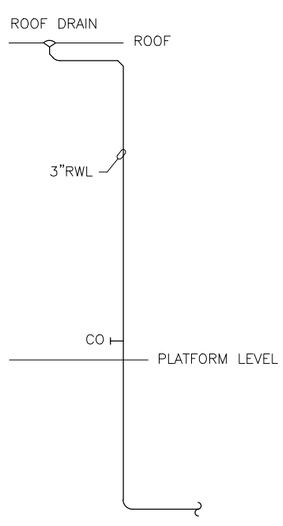
1 3"ORD RWL'S DOWN TO 4"PD-1.

2 3"ø RWL DOWN TO BELOW PLATFORM.



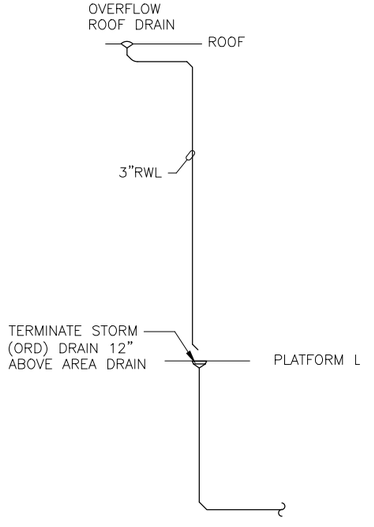
2/111 DOMESTIC WATER RISER DIAGRAM

NO SCALE



1/111 TYPICAL ROOF DRAIN DIAGRAM

NO SCALE



2/111 TYPICAL OVERFLOW ROOF DRAIN DIAGRAM

NO SCALE

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METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

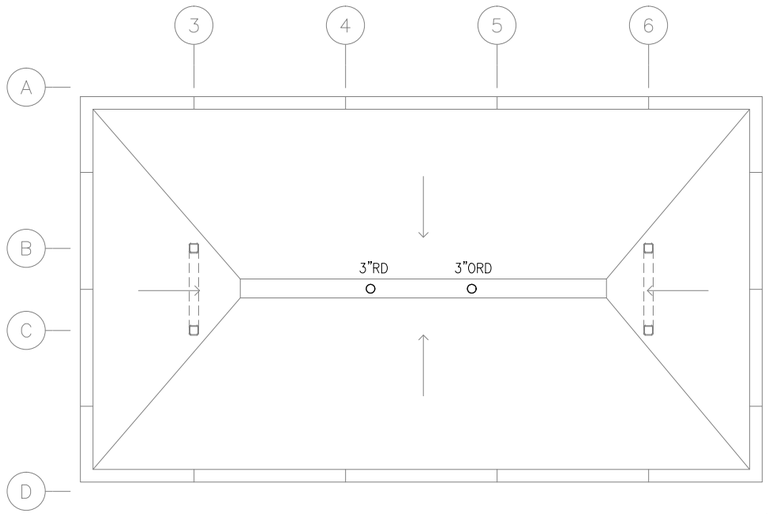
CIVIL - VOLUME 11D
PENN STATION
EAST PARTIAL PLUMBING PLAN AND RISER DIAGRAMS

DISCIPLINE: PLUMBING

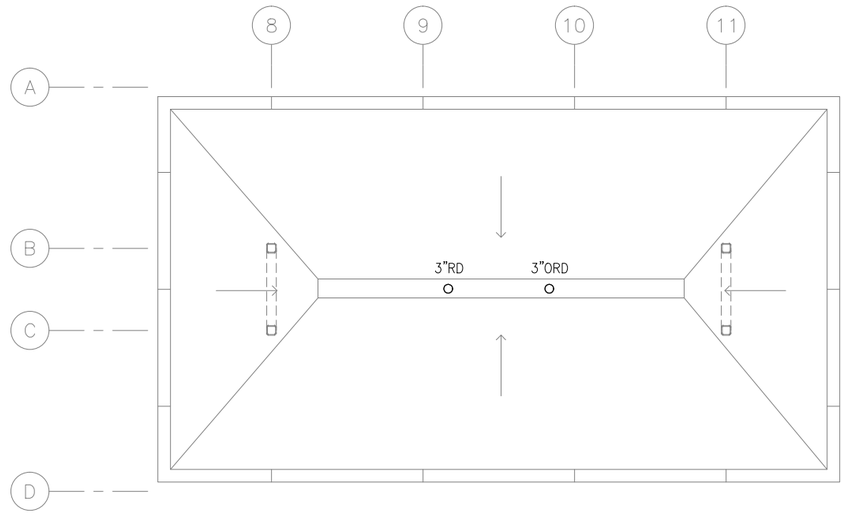
SHEET NAME: E4-PEN-PLM-PLN-111

SHEET 159 OF 394

Jan, 16 2016 03:06 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN STATION\E4-PEN-PLM-PLN-111.dwg By: craig



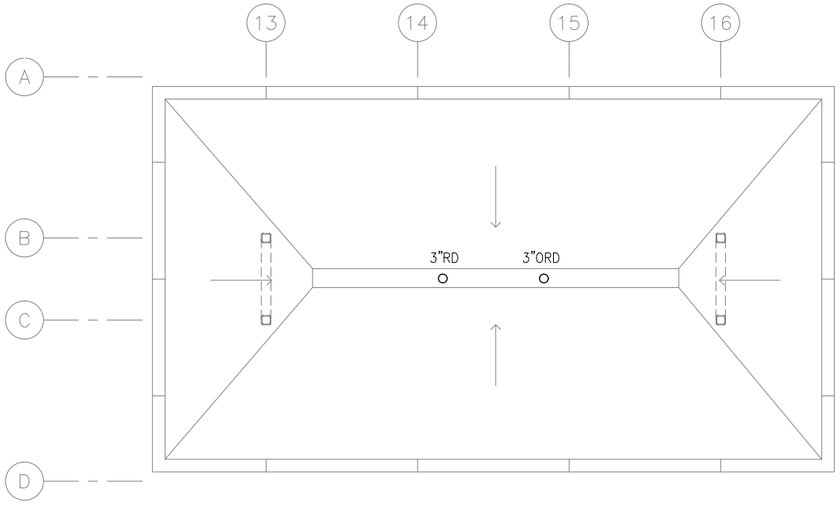
1 WEST ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"



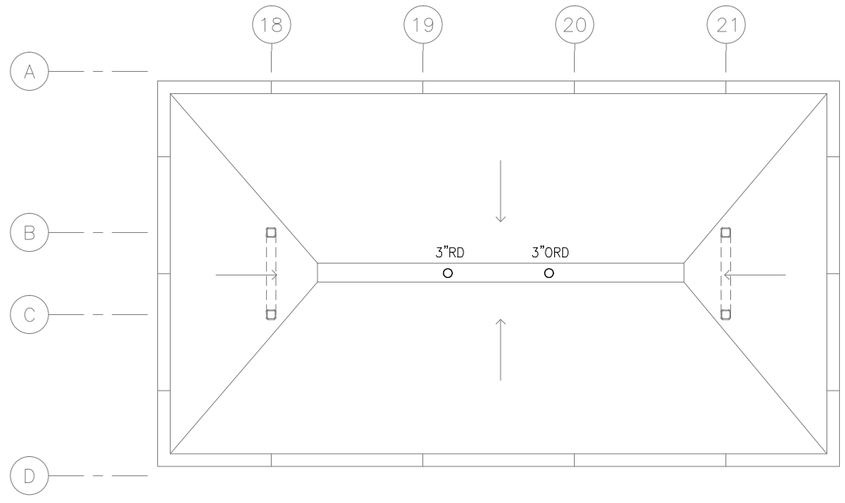
2 MIDDLE WEST ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"

PLUMBING GENERAL NOTES

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2 MIDDLE EAST ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"



3 EAST ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

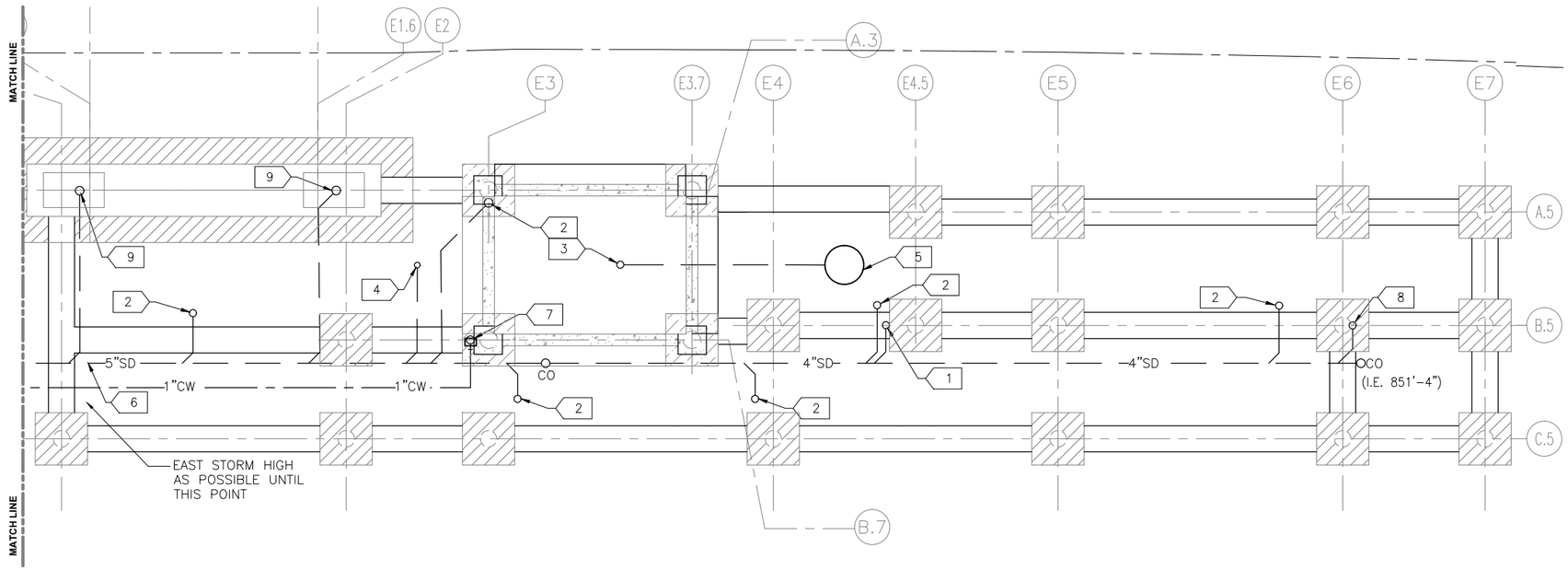
90% SUBMISSION - 01/22/16

CIVIL - VOLUME 11D
PENN STATION
ROOF PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-PEN-PLM-PLN-120

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Jan, 16 2016 03:06 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN STATION\E4-PEN-PLM-PLN-120.dwg By: craig



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PLUMBING KEY NOTES:

1. UP TO 4" PD-1.
2. UP TO 4" TRENCH DRAIN OUTLET.
3. UP TO 4" FLOOR DRAIN IN ELEVATOR HOISTWAY. ELEVATOR DRAIN ROUTES TO SUMP INLET.
4. UP TO 4" TRENCH DRAIN IN ELEVATOR LOBBY.
5. ELEVATOR SUMP ST-2 WITH 4-INCH INLET FROM ELEVATOR PIT.
6. STORM WATER DRAINAGE CONTINUES TO PLATFORM DRAWINGS.
7. 1" COLD WATER UP TO WALL HYDRANT.
8. UP TO 4" RWL WITH BOOT CONNECTION.
9. UP TO 4" RWL.

1 UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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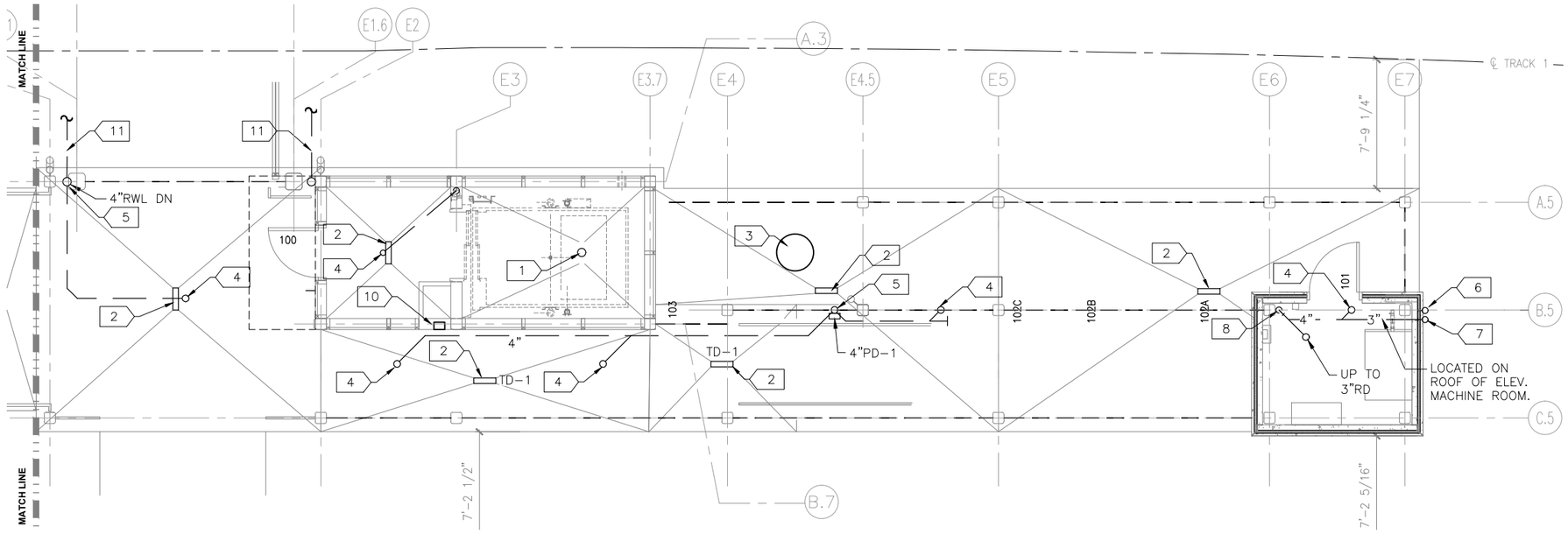
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METROPOLITAN COUNCIL SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC UNDERFLOOR PLATFORM LEVEL
PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-PEN-PLM-PLN-130

SHEET 161 OF 394



1 PLATFORM LEVEL PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

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PLUMBING KEY NOTES:

1. 4-INCH ELEVATOR HOISTWAY DRAIN TO UNDERFLOOR SUMP. DRAIN SHALL HAVE NO TRAP.
2. STORM WATER TRENCH DRAIN TD-1.
3. ELEVATOR HOISTWAY SUMP TANK LID.
4. UP TO 4" TD.
5. 4" RWL UP AND DOWN, TERMINATE ABOVE 4"PD-1.
6. 3" O.D. TERMINATE ON ROOF OF ELEVATOR MACHINE ROOM.
7. 3" RWL UP.
8. 4" RWL DOWN.
9. 4" STORM WATER CONNECTED TO PEDESTRIAN BRIDGE.
10. WALL HYDRANT AND 1" COLD WATER UP.
11. 4" HORIZONTAL BRIDGE RWL, DROP VERTICAL AT COLUMN.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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90% SUBMISSION - 01/22/16

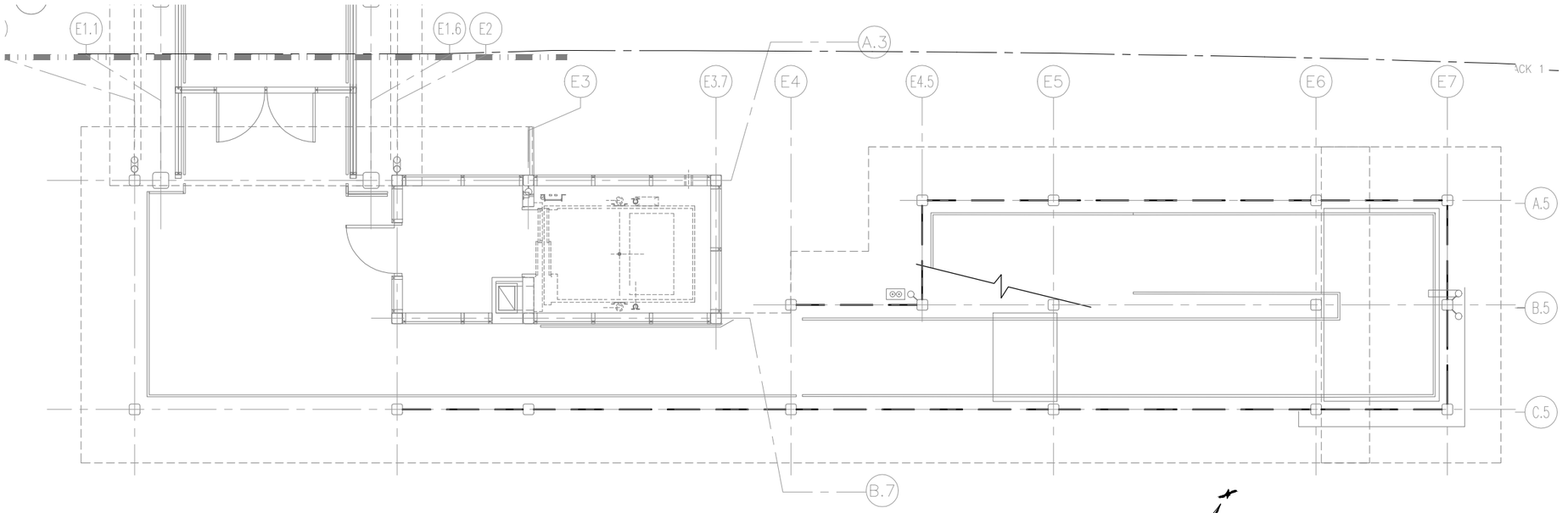
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC PLATFORM LEVEL PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-PEN-PLM-PLN-131

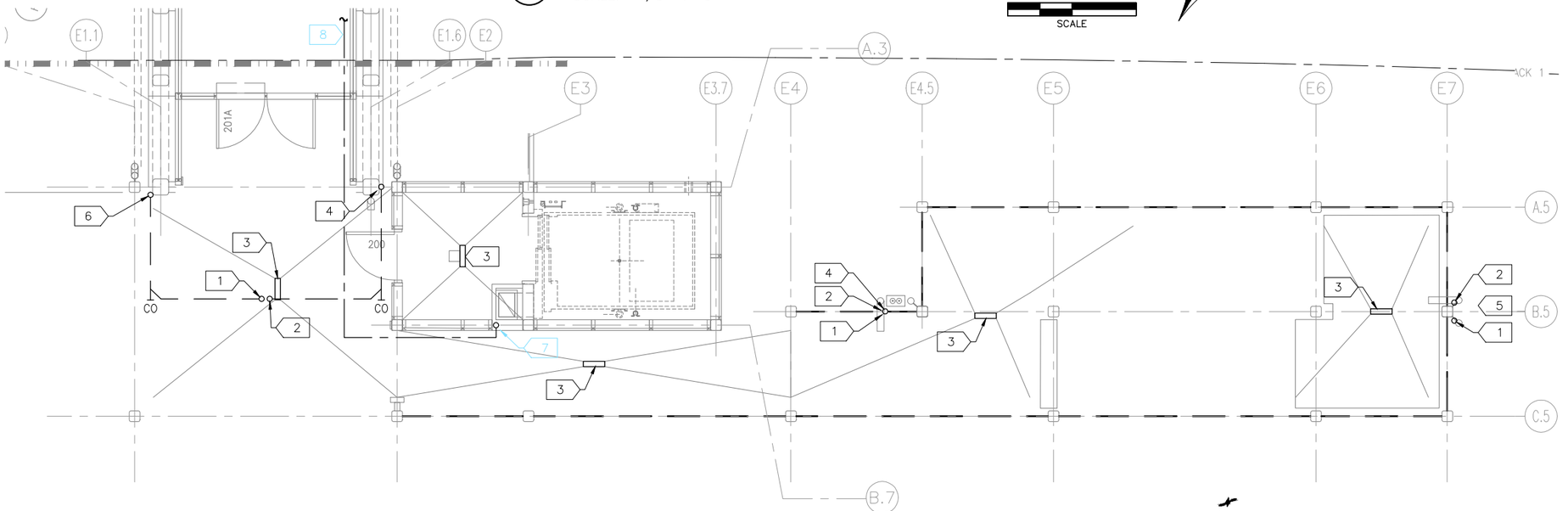
SHEET 162 OF 394

Jan, 16 2016 03:06 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN VERTICAL\PENN STATION\PENN VERTICAL CIRCULATION\E4-PEN-PLM-PLN-131.dwg By: craig



1 INTERMEDIATE LEVEL PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 BRIDGE LEVEL PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

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PLUMBING KEY NOTES:

1. UP TO 3" RD.
2. UP TO 3" OD.
3. 4" PD-1.
4. TERMINATE 3" ORD AT BRIDGE DECK.
5. DROP RD AND ORD DOWN TO PLATFORM LEVEL.
6. 3" RWL DOWN.
7. 1" COLD WATER DOWN.
8. 1" COLD WATER @ CEILING LINE. ROUTE TO NORTH EDGE OF BRIDGE HYDRANT.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

90% SUBMISSION - 01/22/16

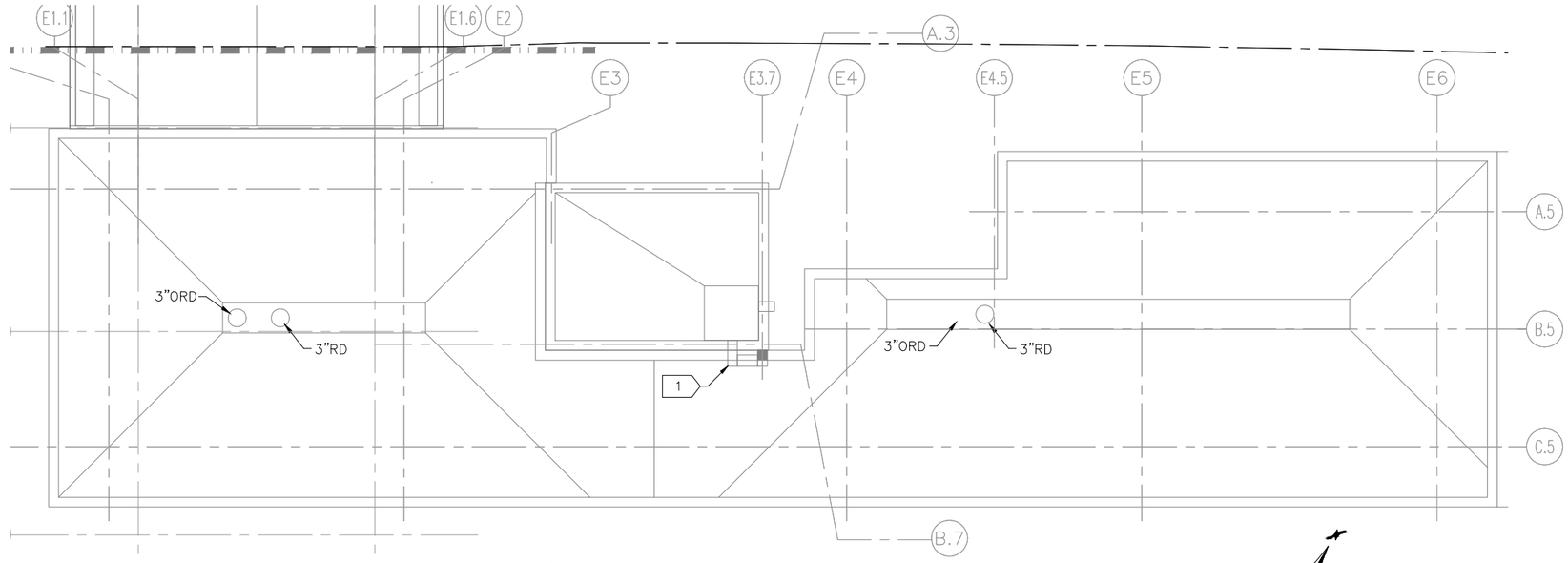
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC WEST INTERMEDIATE AND BRIDGE LEVEL PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-PEN-PLM-PLN-132

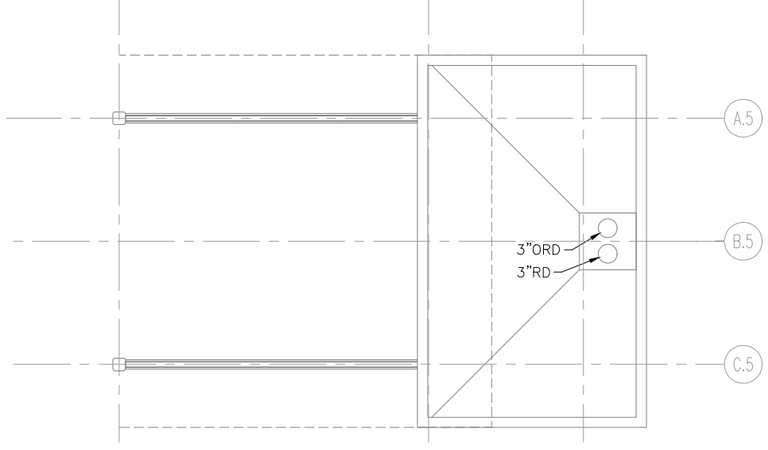
SHEET 163 OF 394

Jan, 16 2016 03:07 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN STATION\PENN VERTICAL CIRCULATION\E4-PEN-PLM-PLN-132.dwg By: craig



1 ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

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PLUMBING KEY NOTES:

1 3" O.R.D. TERMINIATE ON ROOF OF ELEVATOR MACHINE ROOM.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM
LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

90% SUBMISSION - 01/22/16

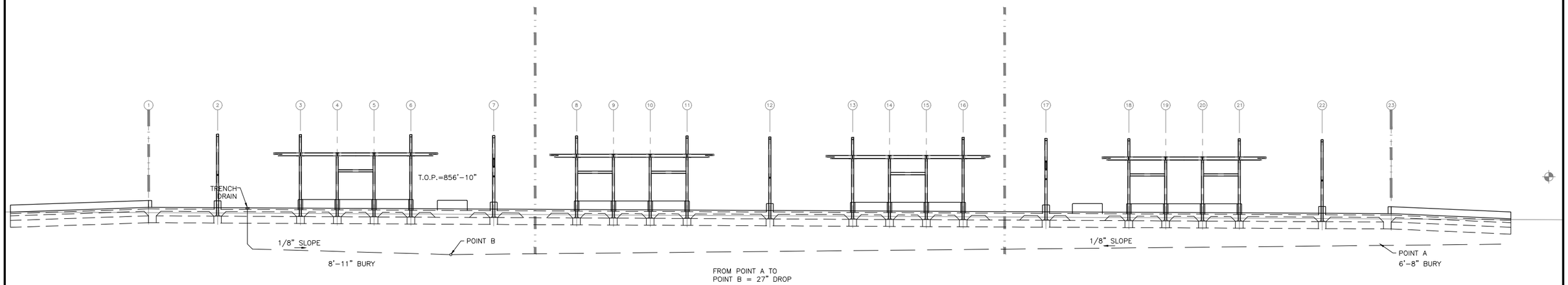
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC WEST ROOF PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-PEN-PLM-PLN-133

SHEET 164 OF 394

Jan, 16 2016 03:07 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN STATION\PENN VERTICAL CIRCULATION\E4-PEN-PLM-PLN-133.dwg By: craig



1 PLUMBING SECTION
SCALE: 3/64"=1'-0"

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

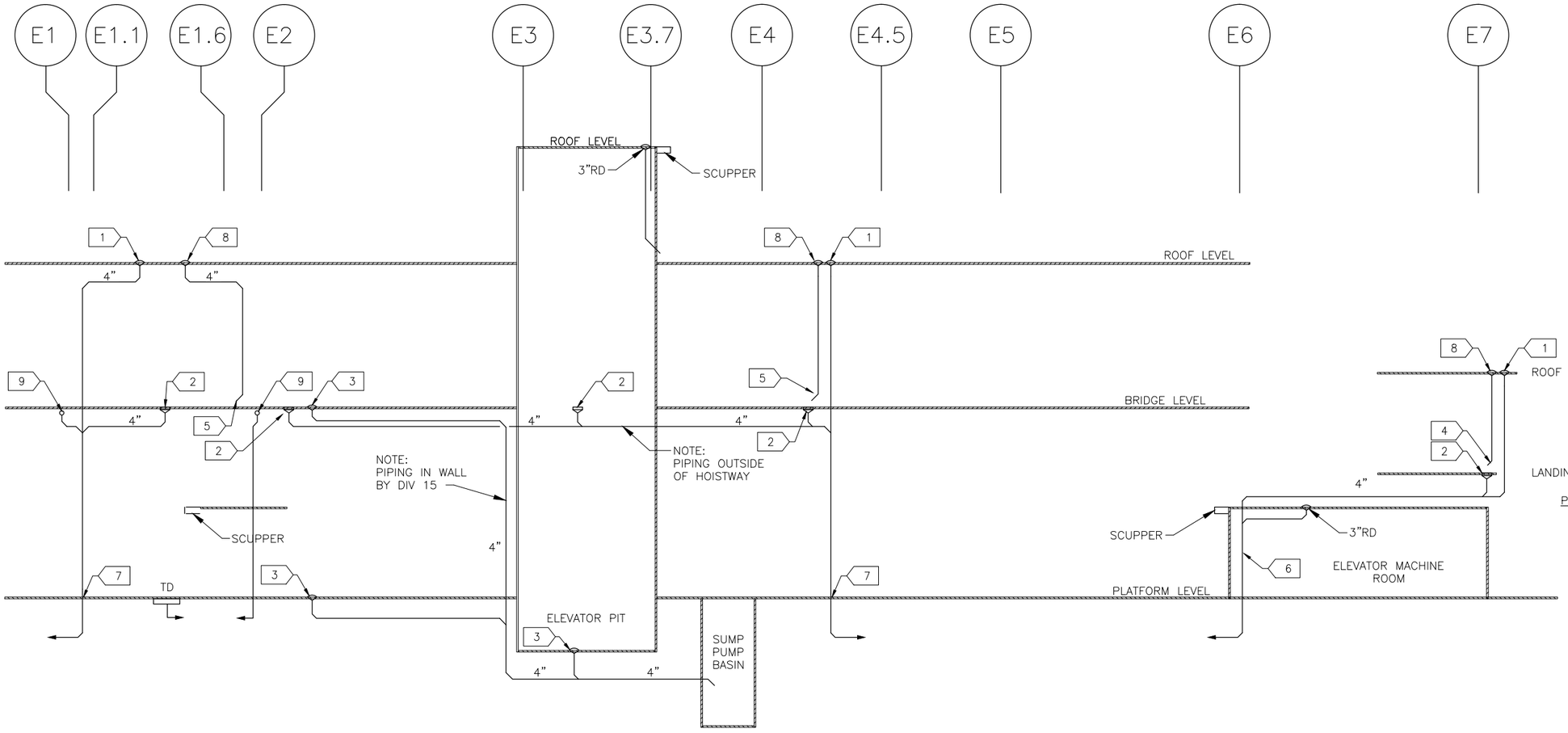
CIVIL - VOLUME 11D
PENN STATION
TYPICAL PLATFORM PLUMBING SECTION

DISCIPLINE: PLUMBING

SHEET NAME: E4-PEN-PLM-SCT-201

SHEET 165 OF 394

Jan, 16 2016 03:06 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN STATION\E4-PEN-PLM-SCT-201.dwg By: craig



1 VC STORM DRAINAGE RISER
NO SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

1. 3"RD AND 3"ORD
2. 4" PD-2
3. 4" AREA DRAIN
4. TERMINATE ORD AT LANDING
5. TERMINATE ORD AT BRIDGE LEVEL
6. ENCASE ALL RAINWATER PIPING LOCATED WITHIN ELEVATOR MACHINE ROOM
7. RWL TO UNDERFLOOR PLATFORM. REFER TO DETAIL X/X FOR SLEEVED CONNECTION.
8. 3" ORD.
9. 4" HORIZONTAL BRIDGE RWL.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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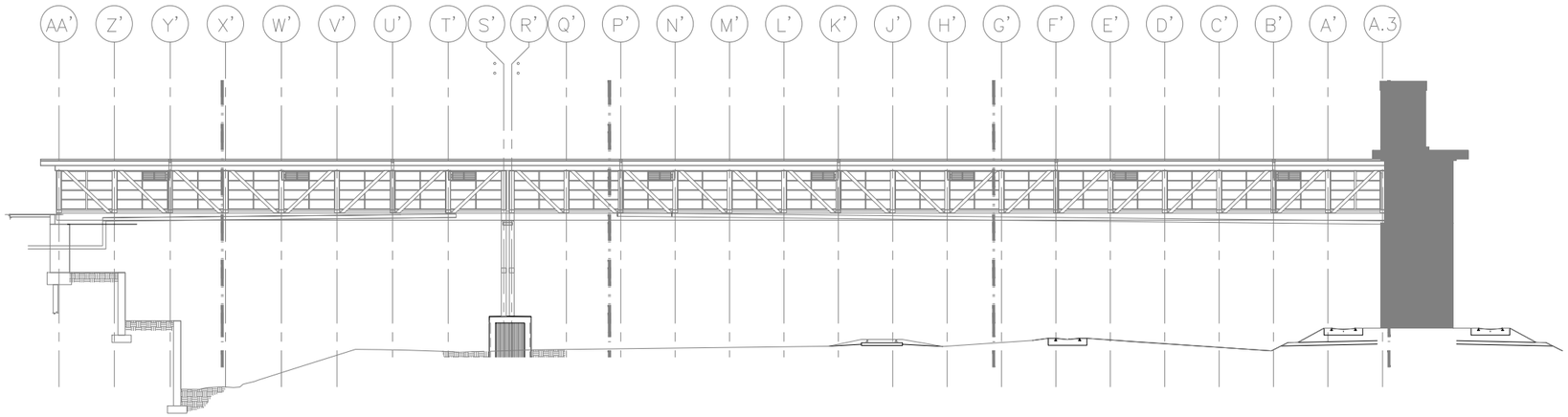
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC STORM DRAINAGE RISER

DISCIPLINE: PLUMBING
SHEET NAME: E4-PEN-PLM-DTL-300

SHEET 166 OF 394

Jan, 16 2016 03:06 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PEN STATION\PENN VERTICAL CIRCULATION\E4-PEN-PLM-DTL-300.dwg By: craig



1 PEDESTRIAN BRIDGE PLUMBING ELEVATIONS (WEST)
SCALE: 1/8"=1'-0"

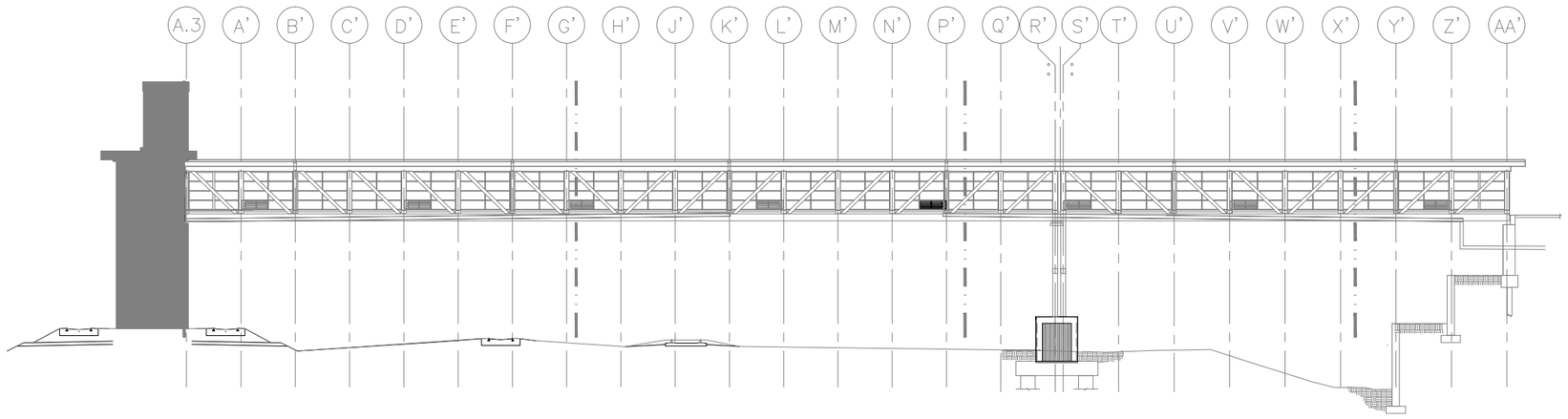
0 2 4 8
SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES:

1 4" STORM DRAIN CONNECT TO CIVIL AT NORTH END OF PEDESTRIAN BRIDGE.
2 4" STORM DRAIN CONNECT TO VERTICAL CIRCULATION STORM DRAINAGE.
3 THERE IS AN APPROXIMATE 23" VERTICAL DROP FROM GRID "P" TO THE VERTICAL CIRCULATION.



2 PEDESTRIAN BRIDGE PLUMBING ELEVATIONS (EAST)
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

90% SUBMISSION - 01/22/16

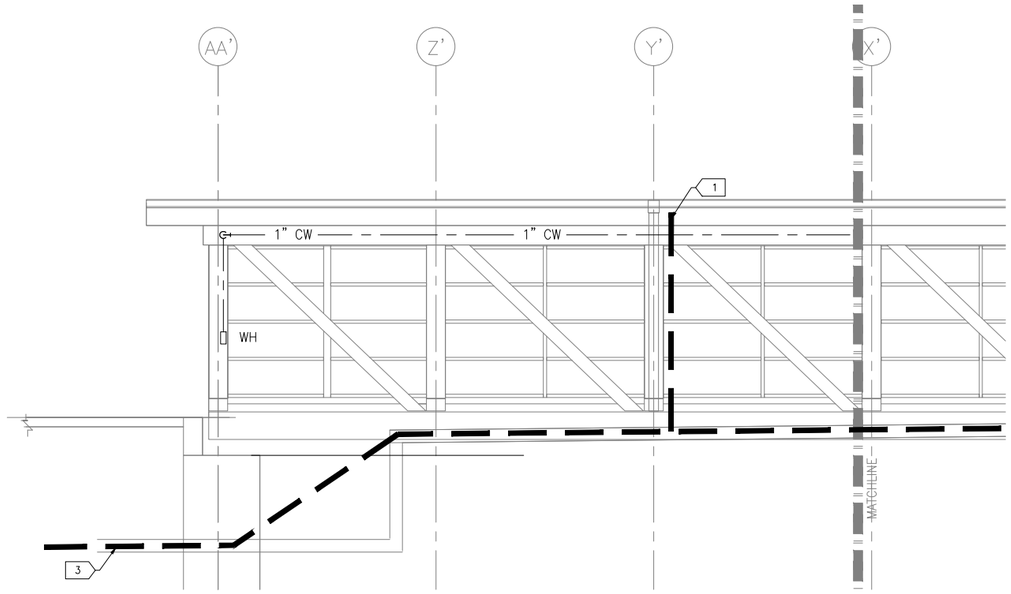
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE
PLUMBING ELEVATIONS

DISCIPLINE: PLUMBING
SHEET NAME: E4-PEN-PLM-ELV-400

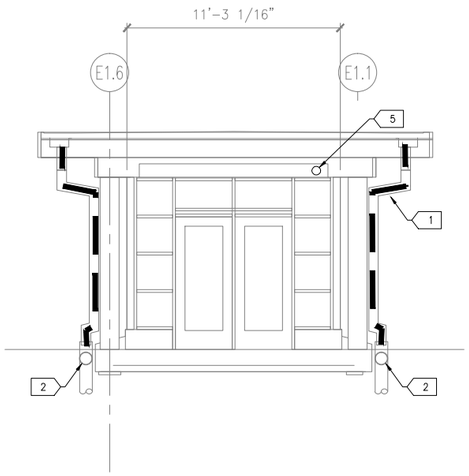
SHEET 167 OF 394

Jan. 18 2016 02:38 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN STATION\PENN PEDESTRIAN CIRCULATION\E4-PEN-PLM-ELV-400.dwg By: craig



1 NORTH PEDESTRIAN BRIDGE PLUMBING ELEV (WEST)
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



3 PEDESTRIAN BRIDGE PLUMBING SECTION (NORTH)
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES:

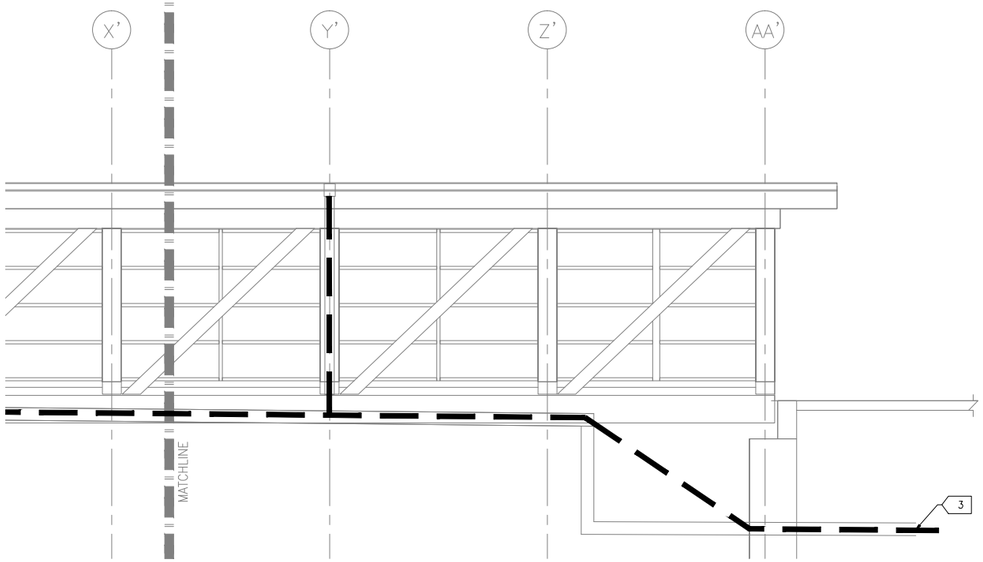
1 TYPICAL ARCHITECTURAL DOWNSPOUT FROM GUTTER TO HUB AND SPIGOT STORM PIPING.

2 STORM PIPE SLOPE TO NORTH OR SOUTH AT 1/8TH INCH PER FOOT OF RUN.

3 SLOPE STORM PIPE TO NORTH SIDE OF PEDESTRIAN BRIDGE AND EXTEND TO CIVIL DRAINAGE CONNECTION.

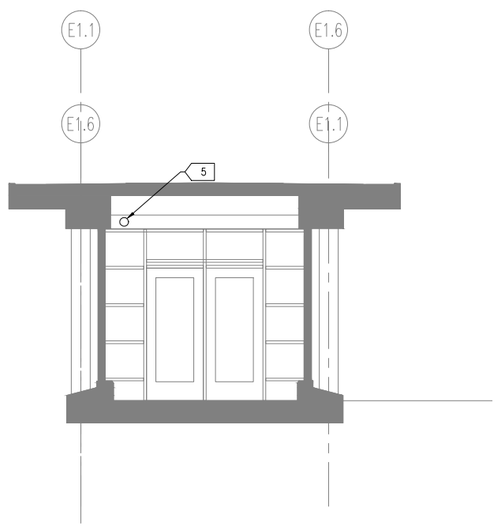
4 PROVIDE PIPE SUPPORT FROM PED BRIDGE ABOVE.

5 1" COLD WATER TO WALL HYDRANT.



2 NORTH PEDESTRIAN BRIDGE PLUMBING ELEV (EAST)
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



4 PEDESTRIAN BRIDGE PLUMBING SECTION (SOUTH)
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

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90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

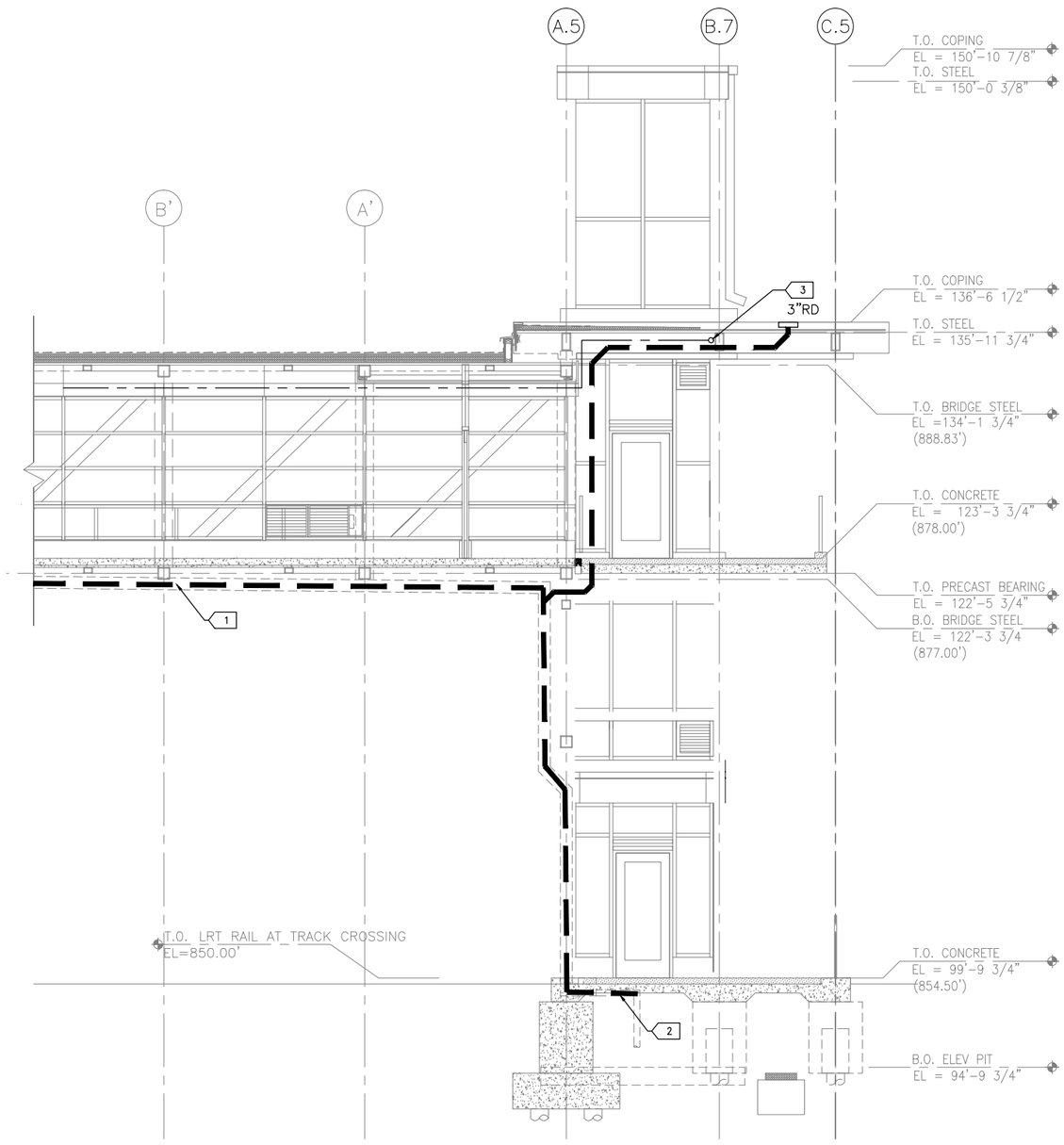
CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE PLUMBING ELEVATIONS AND SECTIONS

DISCIPLINE: PLUMBING

SHEET NAME: E4-PEN-PLM-ELV-401

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Jan, 18 2016 02:07 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN STATION\PEN PEDESTRIAN CIRCULATION\E4-PEN-PLM-ELV-401.dwg By: craig



1 SOUTH PEDESTRIAN BRIDGE PLUMBING ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES:

1 4" STORM TO VERTICAL CIRCULATION. SLOPE PIPE AT 1/8TH INCH PER FOOT.

2 CONNECT 4" STORM FROM PEDESTERIAN BRIDGE TO STORM DRAINAGE AT THE VERTICAL CIRCULATION. REFER TO PENN UNDERFLOOR PLUMBING PLAN FOR CONTINUATION.

3 1" COLD WATER TO NORTH END BRIDGE WALL HYDRANT.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE
METROPOLITAN COUNCIL
SOUTHWEST

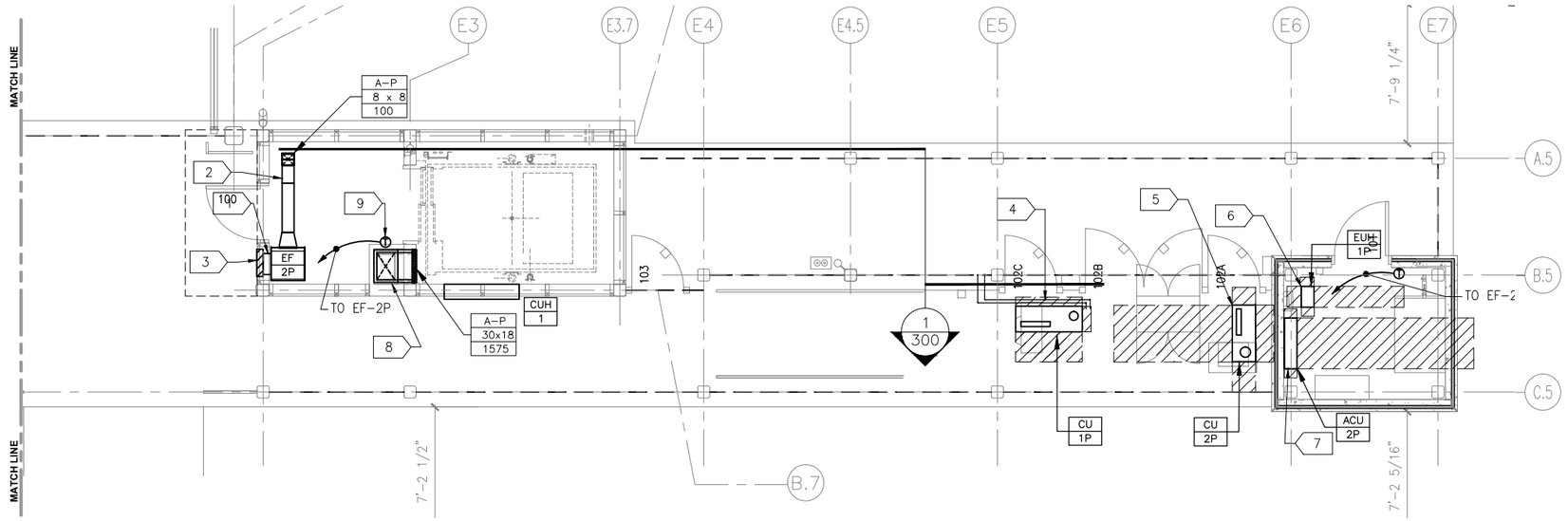
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CIVIL - VOLUME 11D
PENN STATION
PEDESTRIAN BRIDGE PLUMBING ELEVATION

DISCIPLINE: PLUMBING
SHEET NAME: E4-PEN-PLM-ELV-402

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Jan, 18 2016 02:09 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN STATION\PENN PEDESTRIAN CIRCULATION\E4-PEN-PLM-ELV-402.dwg By: craig



1 PLATFORM LEVEL HVAC PLAN
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE

HVAC GENERAL SHEET NOTES

A. SECURELY SUSPEND HVAC EQUIPMENT FROM STRUCTURE AND PROVIDE VIBRATION ISOLATION. REFER TO STRUCTURAL DRAWINGS FOR LIMITATIONS.
B. PROVIDE MANUAL BALANCING DAMPERS FOR ALL SUPPLY AIR OUTLETS AND WHERE INDICATED ON BRANCH DUCTWORK.
C. PROVIDE DUCT ACCESS PANELS AT LOCATIONS OF ALL MOTORIZED DAMPERS AND FIRE DAMPERS.
D. PROVIDE FLEXIBLE DUCT CONNECTIONS AT ALL DUCTWORK TO MECHANICAL EQUIPMENT CONNECTIONS.
E. MAINTAIN REQUIRED CLEARANCES DIRECTLY OVER AND IN FRONT OF ALL ELECTRICAL EQUIPMENT.
F. MAINTAIN REQUIRED CLEARANCES AT ALL MECHANICAL EQUIPMENT.
G. RUN DUCTWORK AS HIGH AS POSSIBLE.
H. INLET VENTILATION AIR DUCTWORK SHALL BE INSULATED FULL LENGTH.
I. PROVIDE CEILING ACCESS PANELS AT MANUAL VOLUME DAMPERS AND FAN ACCESS.
J. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION FOR GRILLES, REGISTERS, AND DIFFUSERS.

HVAC KEY NOTES:

1. LOUVER PLENUM TO 8X14 EXHAUST DUCT CONNECTED TO EXHAUST FAN OUTLET.
2. 8X8 EXHAUST AIR DUCT FROM FROM EXHAUST GRILLE, TRANSITIONS TO A 12X12 DUCT TO CONNECT TO EXHAUST FAN INLENT.
3. LOUVER–SEE ARCH SPECIFICATION AND DRAWINGS FOR INFORMATION
4. CONDENSING UNIT MOUNTED ON 4–INCH EQUIPMENT PAD.
5. CONDENSING UNIT MOUNTED FROM STAIR AND WALL. 6'–6"
6. CLEARANCE (MIN) ABOVE TRANSFORMER. UNIT HEATER HUNG FROM DECK, 2–INCH CLEARANCE (MIN) FROM CEILING, 7' CLEARANCE (MIN) ABOVE FLOOR, 9–INCH CLEARANCE (MIN) IN FRONT OF WALL.
7. ACU WALL–MOUNTED, 2–INCH CLEARANCE (MIN) BELOW CEILING AND 66–INCH CLEARANCE (MIN) ABOVE FINISHED FLOOR.
8. 18X12 RETURN AIR DUCT UP TO ACU IN 2ND FLOOR PLENUM.
9. MOUNT THERMOSTAT ON DUCT ENCLOSURE. PROVIDE LOCKING COVER. RUN CONTROL WIRE IN CONDUIT MOUNTED ON UNDERSIDE OF DECK.
10. MOUNT THERMOSTAT ON WALL APPROXIMATELY 50 INCHES AFF. INTERLOCK UNIT HEATER WITH ACU–2P TO PREVENT SIMULTANEOUS HEATING AND COOLING.
11. RECESSED CABINET UNIT HEATER INSTALLED IN ELEVATOR PIT.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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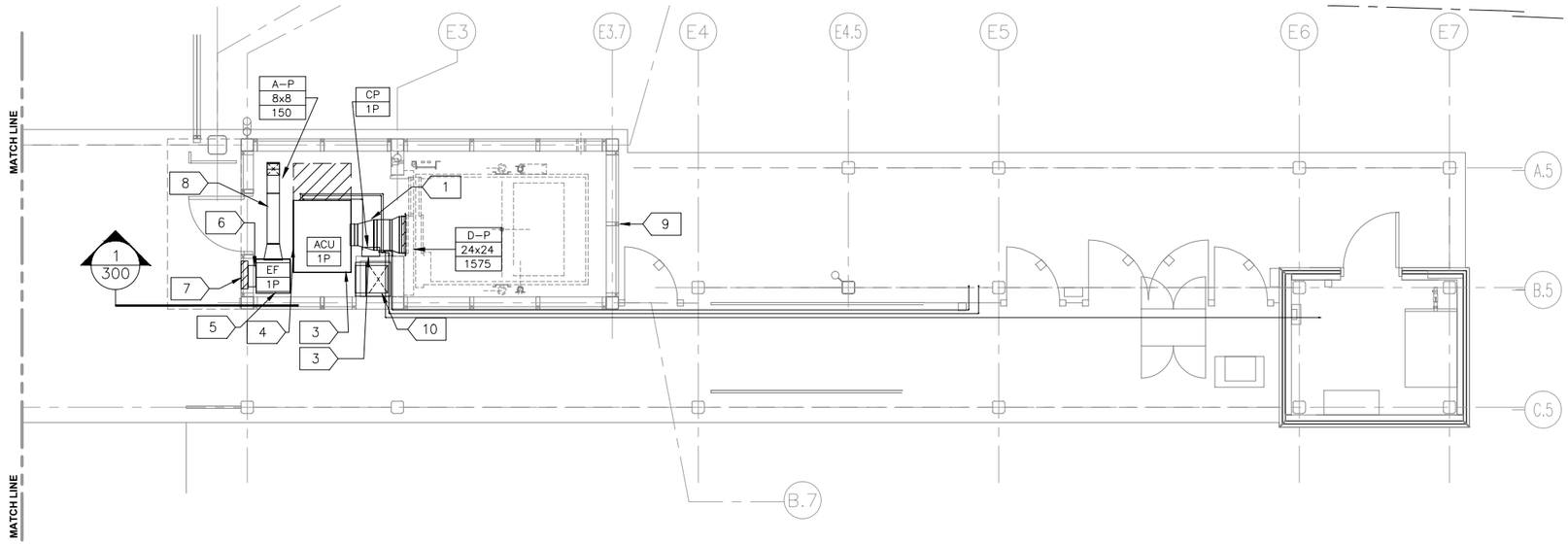
90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC PLATFORM LEVEL HVAC PLAN

DISCIPLINE: MECHANICAL
SHEET NAME: E4-PEN-MEC-PLN-130

SHEET 170 OF 394



1 BRIDGE HVAC PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

HVAC GENERAL SHEET NOTES:

A. SECURELY SUSPEND HVAC EQUIPMENT FROM STRUCTURE AND PROVIDE VIBRATION ISOLATION. REFER TO STRUCTURAL DRAWINGS FOR LIMITATIONS.
B. PROVIDE MANUAL BALANCING DAMPERS FOR ALL SUPPLY AIR OUTLETS AND WHERE INDICATED ON BRANCH DUCTWORK.
C. PROVIDE DUCT ACCESS PANELS AT LOCATIONS OF ALL MOTORIZED DAMPERS AND FIRE DAMPERS.
D. PROVIDE FLEXIBLE DUCT CONNECTIONS AT ALL DUCTWORK TO MECHANICAL EQUIPMENT CONNECTIONS.
E. MAINTAIN REQUIRED CLEARANCES DIRECTLY OVER AND IN FRONT OF ALL ELECTRICAL EQUIPMENT.
F. MAINTAIN REQUIRED CLEARANCES AT ALL MECHANICAL EQUIPMENT.
G. RUN DUCTWORK AS HIGH AS POSSIBLE.
H. INLET VENTILATION AIR DUCTWORK SHALL BE INSULATED FULL LENGTH.
I. PROVIDE CEILING ACCESS PANELS AT MANUAL VOLUME DAMPERS AND FAN ACCESS.
J. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION FOR GRILLES, REGISTERS, AND DIFFUSERS.

HVAC KEY NOTES:

1. ACU SUPPLY OUTLET TO TRANSITION TO 24X24 TO REGISTER.
2. CONDENSATE PUMP MOUNTED ON CHASE WALL. PROVIDE BRACKET FOR SUPPORT. SEE DETAIL _/__.
3. ACU MOUNTED TO DECK. PROVIDE VIBRATION ISOLATION
4. RETURN AIR INLET DRAWING FROM PLENUM.
5. EXHAUST FAN HUNG FROM DECK. PROVIDE VIBRATION ISOLATION.
6. 14X8 EXHAUST AIR DUCT TO LOUVER PLENUM.
7. LOUVER–SEE ARCH SPECIFICATION AND DRAWINGS FOR INFORMATION.
8. 8X8 EXHAUST AIR DUCT FROM FROM EXHAUST GRILLE, TRANSITIONS TO A 12X12 DUCT TO CONNECT TO EXHAUST FAN INLET.
9. LOUVER – SEE ARCH SPECIFICATION AND DRAWINGS FOR INFORMATION. LOUVER AND MOTORIZED DAMPER FOR FIRE SERVICE SMOKE EVACUATION. KEY OPERATED SWITCH AT LEVEL _. OPENING IS LOCATED NEAR THE TOP OF HOISTWAY.
10. MOUNT THERMOSTAT FOR ACU–1P AT TOP OF RETURN AIR CHASE WITHIN PLENUM SPACE.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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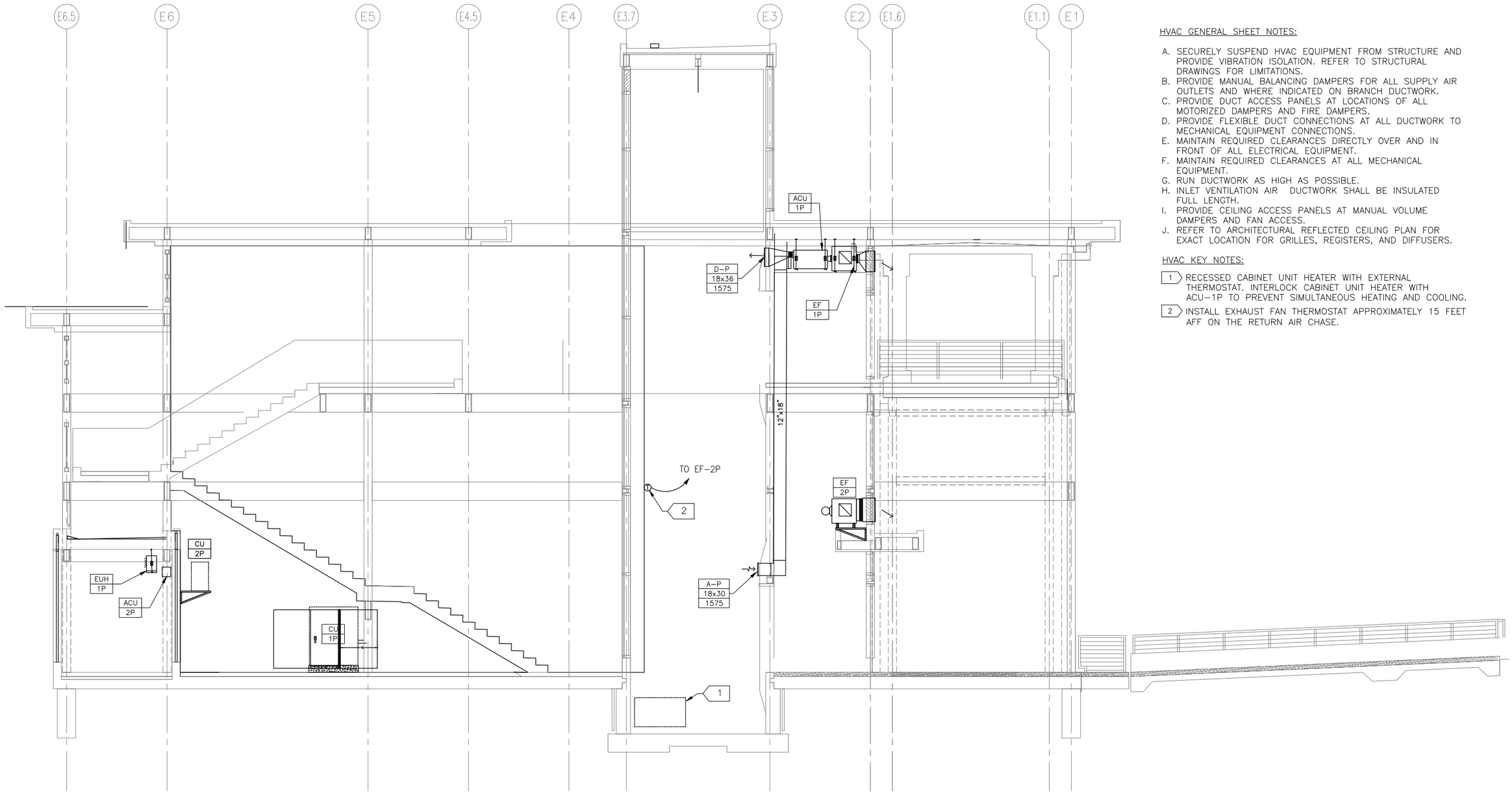
METROPOLITAN COUNCIL SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
VC BRIDGE LEVEL HVAC PLAN

DISCIPLINE: MECHANICAL
SHEET NAME: E4-PEN-MEC-PLN-131

SHEET 171 OF 394

Jan, 16 2016 03:05 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\PENN STATION\PENN VERTICAL CIRCULATION\E4-PEN-MEC-PLN-131.dwg By: craig



HVAC GENERAL SHEET NOTES:

A. SECURELY SUSPEND HVAC EQUIPMENT FROM STRUCTURE AND PROVIDE VIBRATION ISOLATION. REFER TO STRUCTURAL DRAWINGS FOR LIMITATIONS.
B. PROVIDE MANUAL BALANCING DAMPERS FOR ALL SUPPLY AIR OUTLETS AND WHERE INDICATED ON BRANCH DUCTWORK.
C. PROVIDE DUCT ACCESS PANELS AT LOCATIONS OF ALL MOTORIZED DAMPERS AND FIRE DAMPERS.
D. PROVIDE FLEXIBLE DUCT CONNECTIONS AT ALL DUCTWORK TO MECHANICAL EQUIPMENT CONNECTIONS.
E. MAINTAIN REQUIRED CLEARANCES DIRECTLY OVER AND IN FRONT OF ALL ELECTRICAL EQUIPMENT.
F. MAINTAIN REQUIRED CLEARANCES AT ALL MECHANICAL EQUIPMENT.
G. RUN DUCTWORK AS HIGH AS POSSIBLE.
H. INLET VENTILATION AIR DUCTWORK SHALL BE INSULATED FULL LENGTH.
I. PROVIDE CEILING ACCESS PANELS AT MANUAL VOLUME DAMPERS AND FAN ACCESS.
J. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION FOR GRILLES, REGISTERS, AND DIFFUSERS.

HVAC KEY NOTES:

1 RECESSED CABINET UNIT HEATER WITH EXTERNAL THERMOSTAT. INTERLOCK CABINET UNIT HEATER WITH ACU-1P TO PREVENT SIMULTANEOUS HEATING AND COOLING.

2 INSTALL EXHAUST FAN THERMOSTAT APPROXIMATELY 15 FEET AFF ON THE RETURN AIR CHASE.

1 PENN – HVAC SECTION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

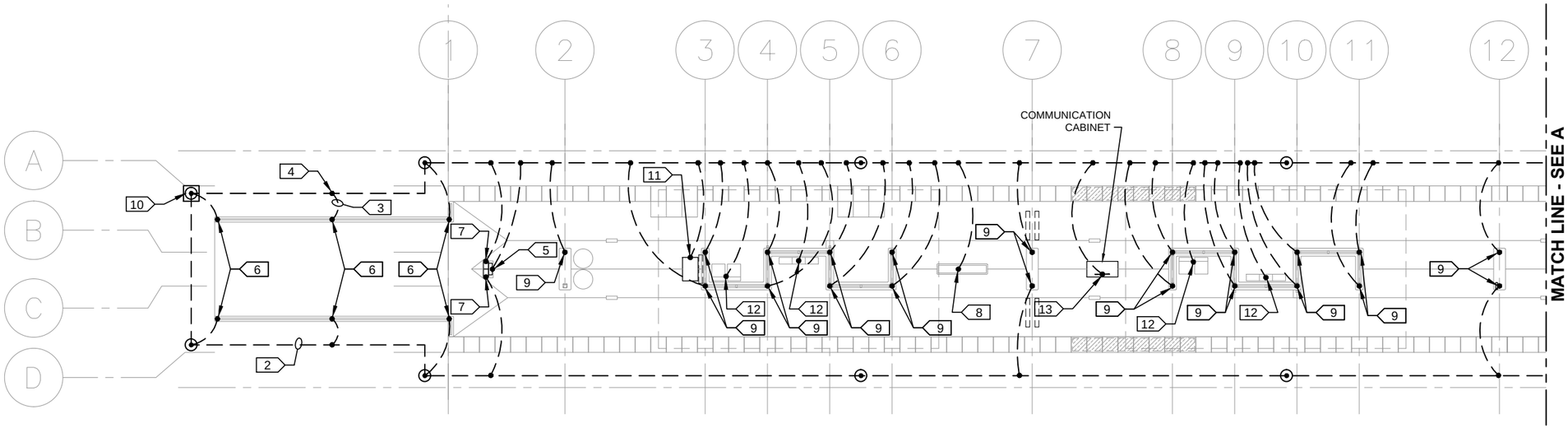
90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
TYPICAL MECHANICAL SECTIONS

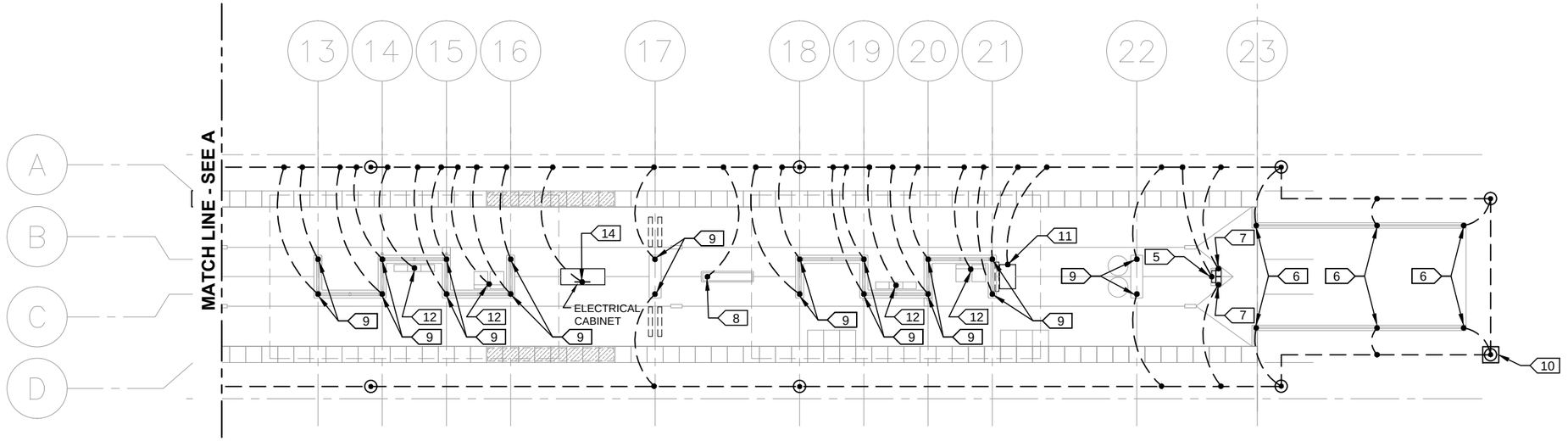
DISCIPLINE: MECHANICAL
SHEET NAME: E4-PEN-MEC-SCT-300

SHEET 172 OF 394



1 PARTIAL PLATFORM PLAN

SCALE: 1/16"=1'-0"



2 PARTIAL PLATFORM PLAN

SCALE: 1/16"=1'-0"

KEYNOTES:

1. GROUND ROD, TYPICAL.
2. GROUND LOOP, TYPICAL.
3. GEC, TYPICAL.
4. EXOTHERMIC WELD, TYPICAL.
5. GEC CONNECTION TO RIDER ALERT PANEL.
6. GEC CONNECTION TO RAILING POST.
7. GEC CONNECTION TO RSV.
8. GEC CONNECTION TO KIOSK.
9. GEC CONNECTION TO COLUMN.
10. GROUND TEST WELL.
11. GEC CONNECTION TO TVM.
12. GEC CONNECTION TO SEAT OR LEAN RAIL.
13. GEC CONNECTION TO COMMUNICATIONS CABINET GROUND BUS.
14. #3/0 GEC CONNECTION TO ELECTRICAL ENCLOSURE GROUND BUS.

GENERAL NOTES:

1. ALL METALLIC OBJECTS SHALL BE GROUNDED AND THE GROUNDING PLAN IS INTENDED TO DEMONSTRATE THE GROUNDING OF THE PLATFORM, GUIDEWAY AND EQUIPMENT WITHIN THE VICINITY. OBJECTS NOT SHOWN GROUNDED DOES RELIEVE THE CONTRACTOR FROM THE DESIGN INTENT.
2. GROUND LOOP SHALL BE #3/0 BARE COPPER. LOOP SHALL BE INSTALLED 48" BELOW GRADE OR 6" BELOW THE FROST LINE, WHICHEVER IS GREATER. GROUND LOOP IS SHOWN DIAGRAMMATICALLY. INSTALL GROUND LOOP UNDER PLATFORM PERIMETER TO PROTECT FROM WORK PERFORMED OUTSIDE THE PLATFORM LIMITS BY OTHER TRADES. GROUND TEST WELLS SHALL REMAIN ACCESSIBLE AS SHOWN.
3. GROUNDING ELECTRODE CONDUCTORS (GEC) SHALL BE #2/0 BARE COPPER UNLESS NOTED OTHERWISE.
4. ALL EXOTHERMIC WELDS TO COLUMNS, TVM'S, RSV'S, SEATS, LEAN RAILS AND EQUIPMENT CABINETS SHALL BE ABOVE GRADE AND VISIBLE. PAINT WELDS TO MATCH SURFACE COLOR. VERIFY COLOR WITH CAR.
5. INSTALL GROUND ROD SO THAT 8-FT IS BELOW THE FROST LINE.
6. IF RAILING HAS AN ISOLATION GAP, JUMPER BETWEEN GAPS WITH GEC.

0 4 8 16

HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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SOUTHWEST Green Line LRT Extension

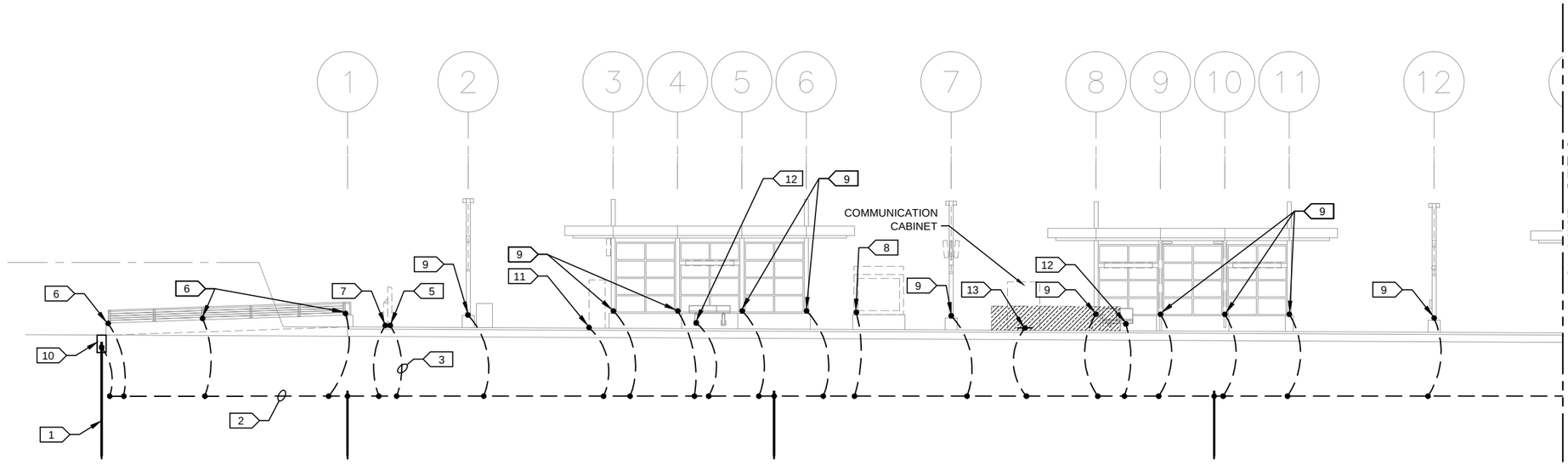
CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL
GROUNDING PLAN

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-PEN-ELE-PLN-201

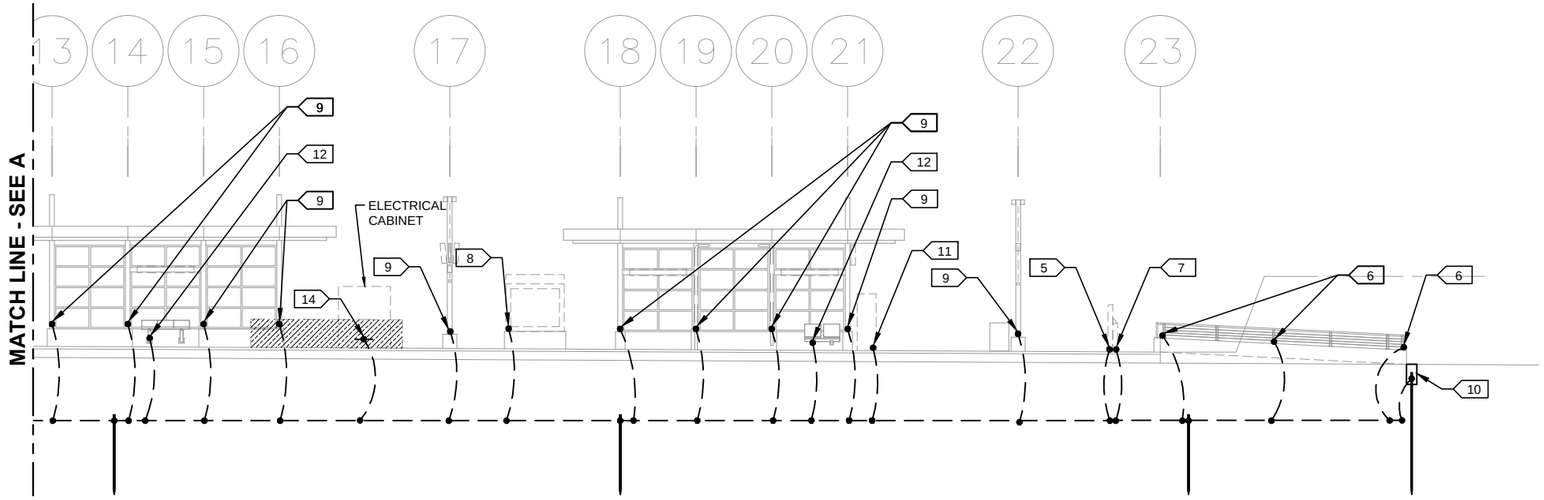
SHEET 173 OF 394

Jan, 18 2016 11:04 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-PLN-201.dwg By: V-Begej.dB



1 PARTIAL PLATFORM ELEVATION

SCALE: 1/16"=1'-0"



2 PARTIAL PLATFORM ELEVATION

SCALE: 1/16"=1'-0"

KEYNOTES:

1. GROUND ROD, TYPICAL.
2. GROUND LOOP, TYPICAL.
3. GEC, TYPICAL.
4. EXOTHERMIC WELD, TYPICAL.
5. GEC CONNECTION TO RIDER ALERT PANEL.
6. GEC CONNECTION TO RAILING POST.
7. GEC CONNECTION TO RSV.
8. GEC CONNECTION TO KIOSK.
9. GEC CONNECTION TO COLUMN.
10. GROUND TEST WELL.
11. GEC CONNECTION TO TVM.
12. GEC CONNECTION TO SEAT OR LEAN RAIL.
13. GEC CONNECTION TO COMMUNICATIONS CABINET GROUND BUS.
14. #3/0 GEC CONNECTION TO ELECTRICAL ENCLOSURE GROUND BUS.

GENERAL NOTES:

1. ALL METALLIC OBJECTS SHALL BE GROUNDED AND THE GROUNDING PLAN IS INTENDED TO DEMONSTRATE THE GROUNDING OF THE PLATFORM, GUIDEWAY AND EQUIPMENT WITHIN THE VICINITY. OBJECTS NOT SHOWN GROUNDED DOES RELIEVE THE CONTRACTOR FROM THE DESIGN INTENT.
2. GROUND LOOP SHALL BE #3/0 BARE COPPER. LOOP SHALL BE INSTALLED 48" BELOW GRADE OR 6" BELOW THE FROST LINE, WHICHEVER IS GREATER. GROUND LOOP IS SHOWN DIAGRAMMATICALLY. INSTALL GROUND LOOP UNDER PLATFORM PERIMETER TO PROTECT FROM WORK PERFORMED OUTSIDE THE PLATFORM LIMITS BY OTHER TRADES. GROUND TEST WELLS SHALL REMAIN ACCESSIBLE AS SHOWN.
3. GROUNDING ELECTRODE CONDUCTORS (GEC) SHALL BE #2/0 BARE COPPER UNLESS NOTED OTHERWISE.
4. ALL EXOTHERMIC WELDS TO COLUMNS, TVM'S, RSV'S, SEATS, LEAN RAILS AND EQUIPMENT CABINETS SHALL BE ABOVE GRADE AND VISIBLE. PAINT WELDS TO MATCH SURFACE COLOR. VERIFY COLOR WITH CAR.
5. INSTALL GROUND ROD SO THAT 8-FT IS BELOW THE FROST LINE.
6. IF RAILING HAS AN ISOLATION GAP, JUMPER BETWEEN GAPS WITH GEC.

0 4 8 16

HORIZONTAL SCALE IN FEET

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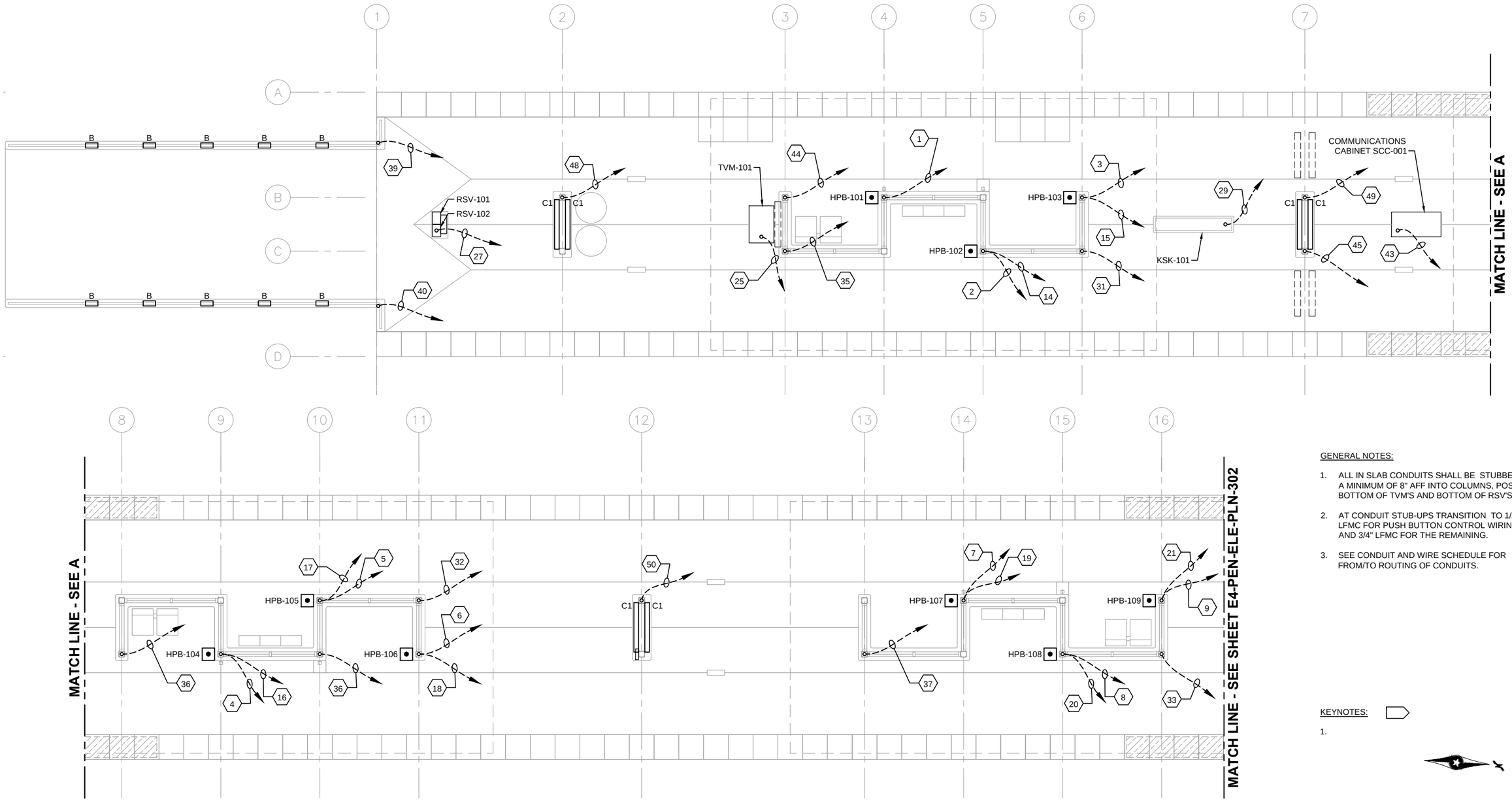
CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL
GROUNDING ELEVATION

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-PEN-ELE-ELV-202

SHEET 174 OF 394

Jan, 18 2016 11:04 am v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-ELV-202.dwg By: V-Begej



1 PLATFORM PLAN

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. ALL IN SLAB CONDUITS SHALL BE STUBBED UP A MINIMUM OF 8" AFF INTO COLUMNS, POSTS, BOTTOM OF TVM'S AND BOTTOM OF RSV'S.
2. AT CONDUIT STUB-UPS TRANSITION TO 1/2" LFMC FOR PUSH BUTTON CONTROL WIRING AND 3/4" LFMC FOR THE REMAINING.
3. SEE CONDUIT AND WIRE SCHEDULE FOR FROM/TO ROUTING OF CONDUITS.

KEYNOTES:

1.

0 2 4 8

HORIZONTAL SCALE IN FEET

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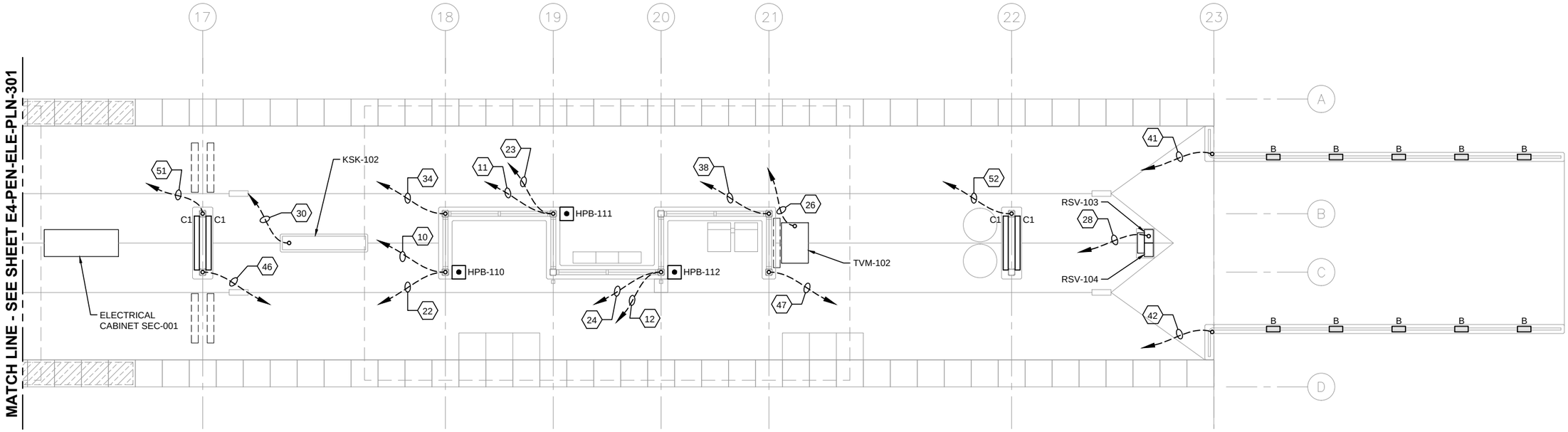
CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL
UNDERSLAB CONDUIT PLAN (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-PEN-ELE-PLN-301

SHEET 175 OF 394

Jan, 18 2016 11:04 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-PLN-301.dwg By: V-Begej.dB



1 PLATFORM PLAN

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. ALL IN SLAB CONDUITS SHALL BE STUBBED UP A MINIMUM OF 8" AFF INTO COLUMNS, POSTS, BOTTOM OF TVM'S AND BOTTOM OF RSV'S.
2. AT CONDUIT STUB-UPS TRANSITION TO 1/2" LFMC FOR PUSH BUTTON CONTROL WIRING AND 3/4" LFMC FOR THE REMAINING.
3. SEE CONDUIT AND WIRE SCHEDULE FOR FROM/TO ROUTING OF CONDUITS.

KEYNOTES:

1.

HORIZONTAL SCALE IN FEET
0 2 4 8

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SOUTHWEST
Green Line LRT Extension

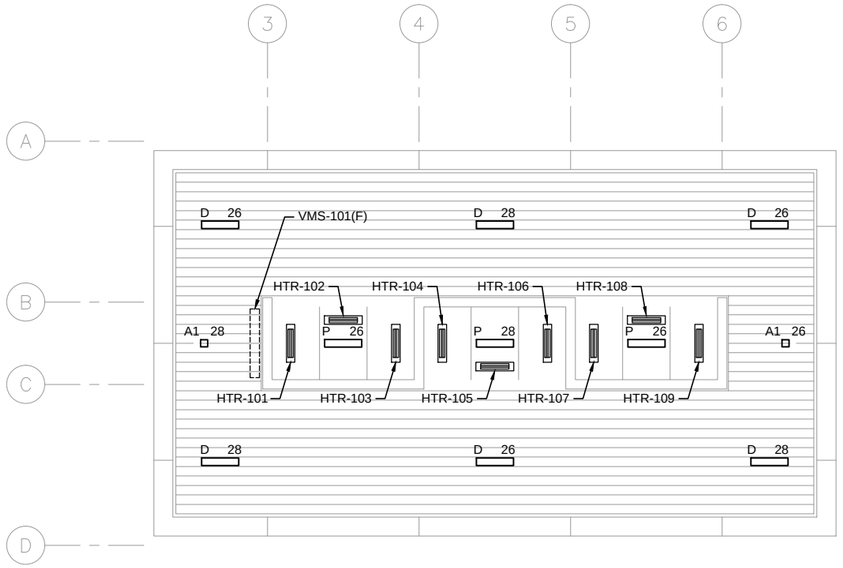
CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL
UNDERSLAB CONDUIT PLAN (2 OF 2)

DISCIPLINE: ELECTRICAL

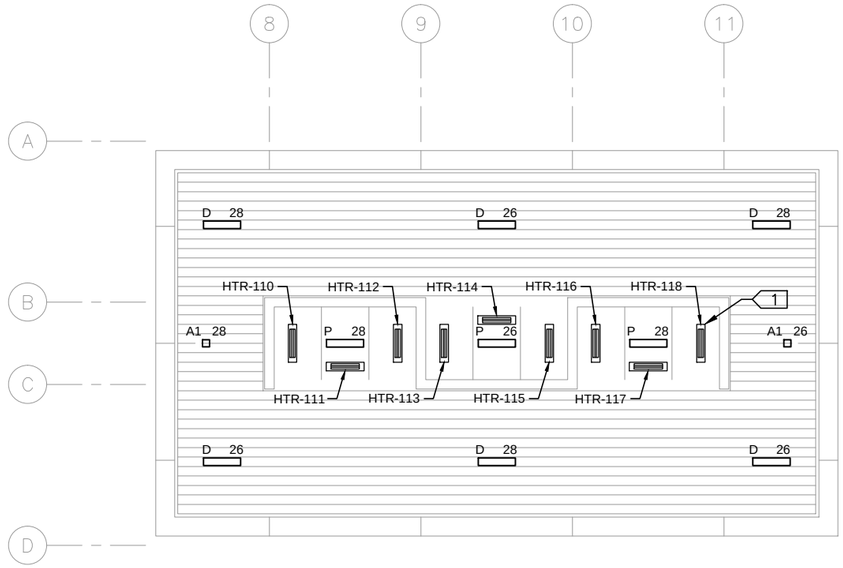
SHEET NAME: E4-PEN-ELE-PLN-302

SHEET 176 OF 394

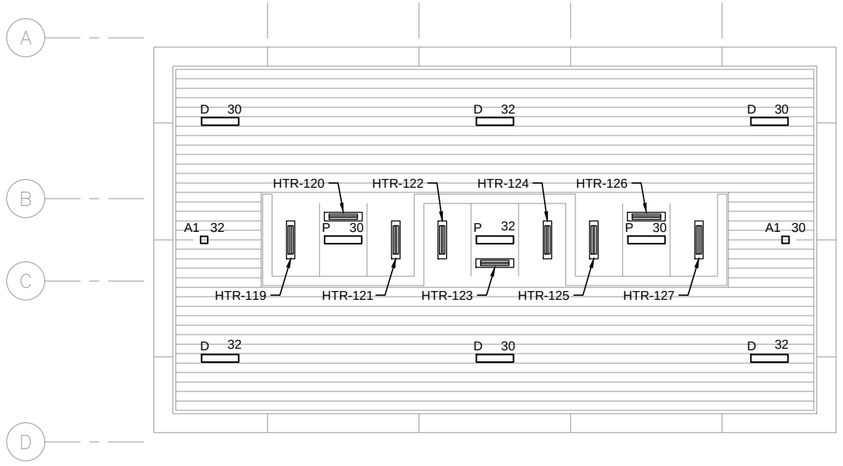
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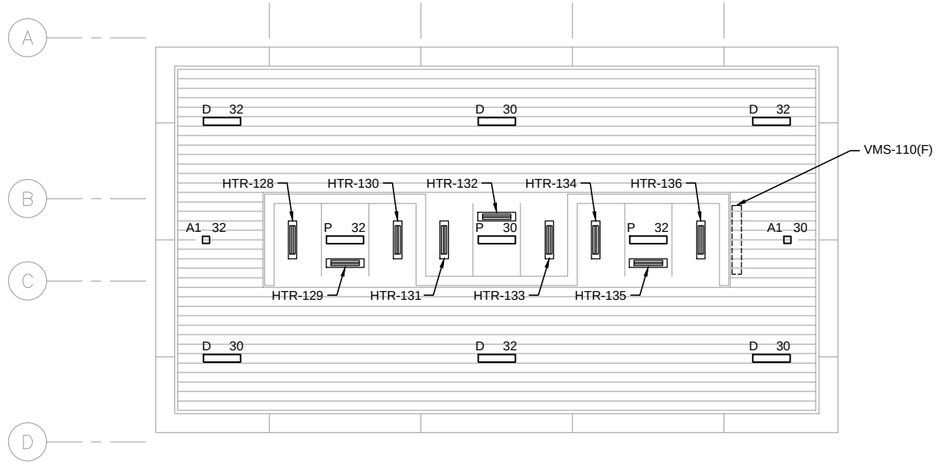
1 CANOPY PLAN – WEST END
SCALE: 1/8"=1'–0"



2 CANOPY PLAN – WEST MIDDLE
SCALE: 1/8"=1'–0"



3 CANOPY PLAN – EAST MIDDLE
SCALE: 1/8"=1'–0"



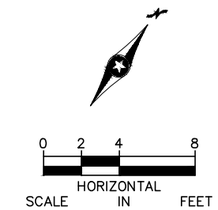
4 CANOPY PLAN – EAST END
SCALE: 1/8"=1'–0"

GENERAL NOTES:

1. ALL LIGHTING SHOWN ON THIS SHEET SHALL BE RECESSED MOUNTED IN SOFFIT. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.
2. ALL CONDUIT FOR LIGHTING AND TO VMS'S SHALL BE RUN CONCEALED WITHIN SOFFIT AREA.

KEYNOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR HEATER MOUNTING DETAILS.



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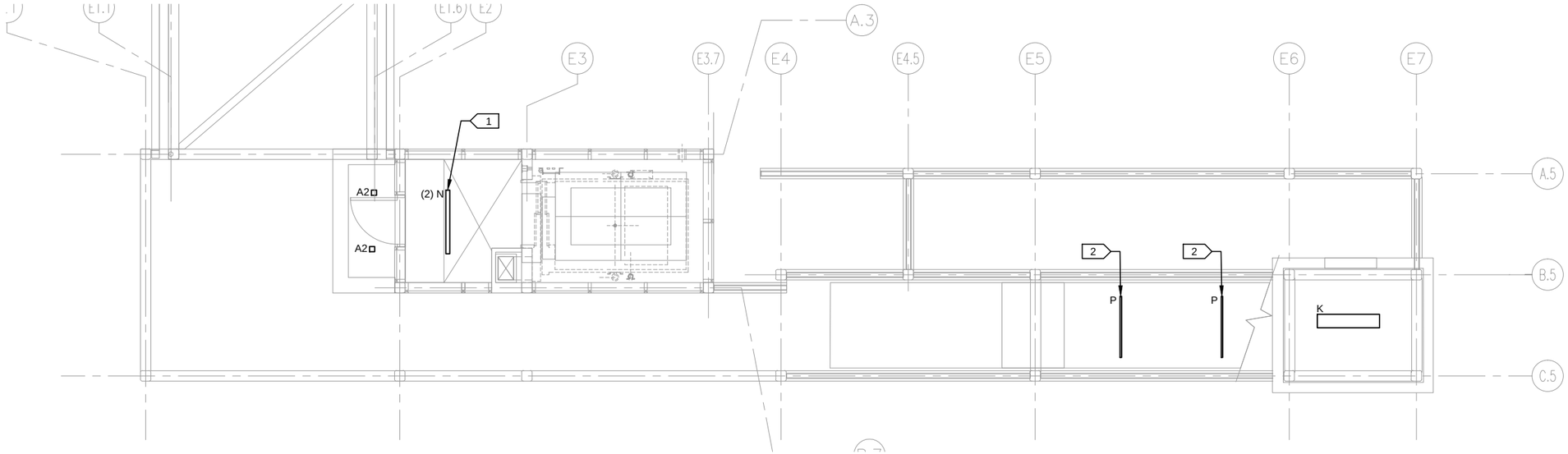
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL
CANOPY PLAN

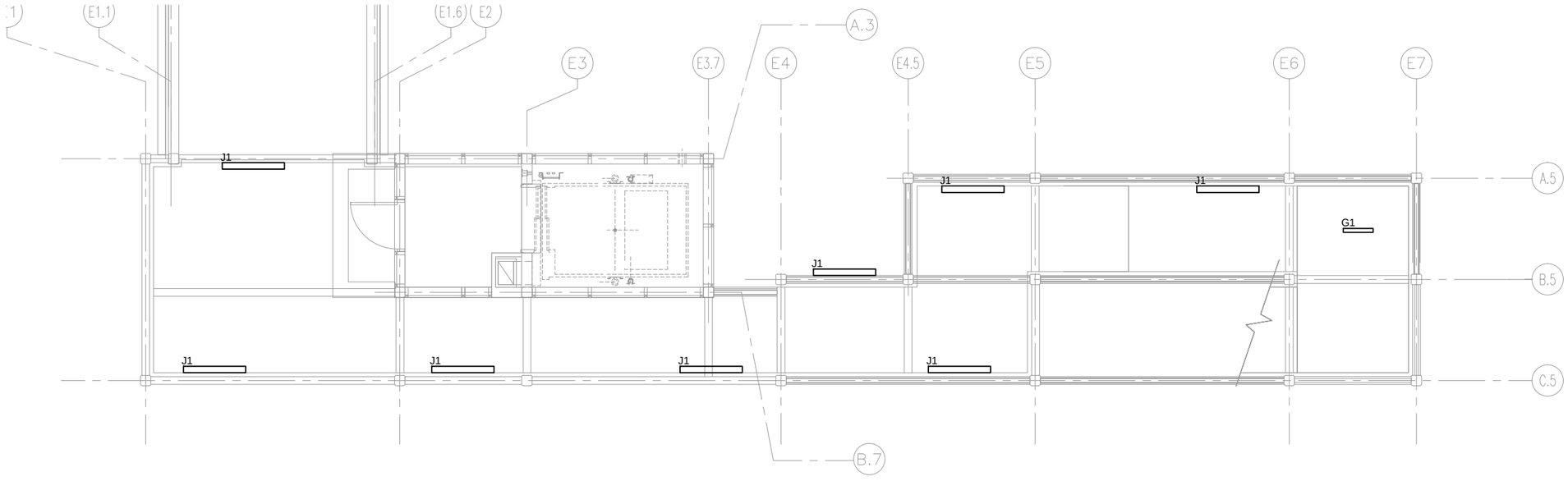
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SHEET NAME: E4-PEN-ELE-PLN-303

SHEET 177 OF 394

Jan, 18 2016 11:05 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-PLN-303.dwg By: V-BegeuB



1 ELECTRICAL LIGHTING PLAN PLATFORM LEVEL
SCALE: 1/8"=1'-0"



2 ELECTRICAL LIGHTING PLAN INTERMEDIATE LEVEL
SCALE: 1/8"=1'-0"

KEYNOTES:

1. WALL WASH LUMINAIRES. (1) AIMED DOWN AT 10'-6" AND (1) AIMED DOWN AT 10'-10".
2. SURFACE MOUNT TO UNDERSIDE OF STAIRS.

0 2 4 8
HORIZONTAL SCALE IN FEET

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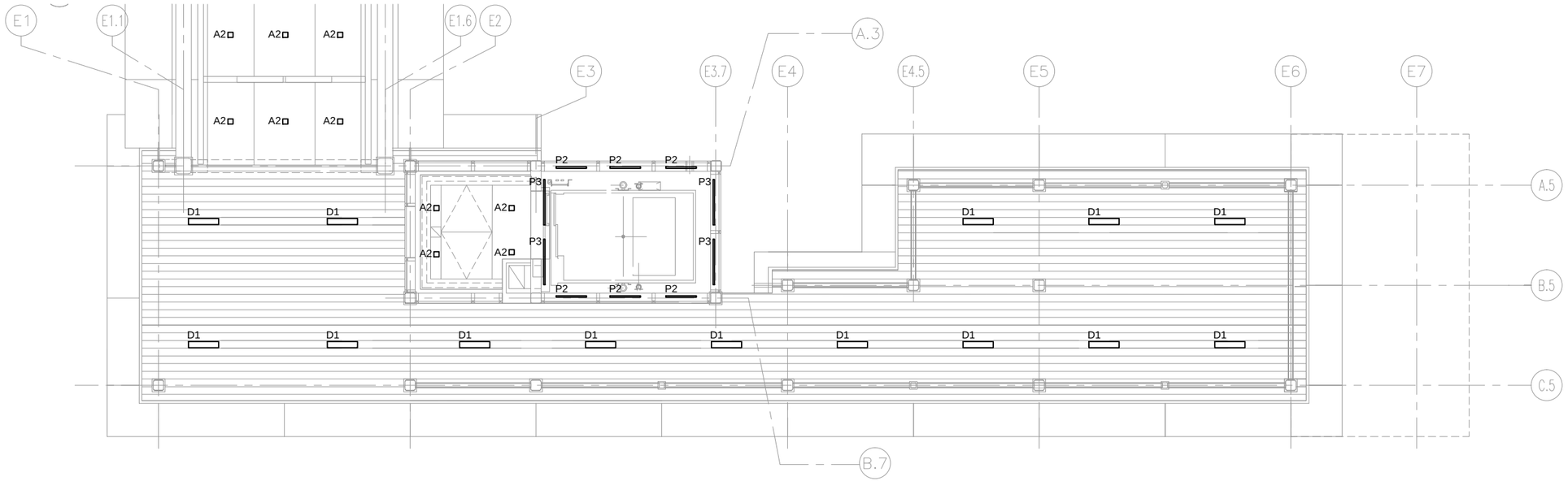
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL LIGHTING PLAN
VC PLATFORM LEVEL

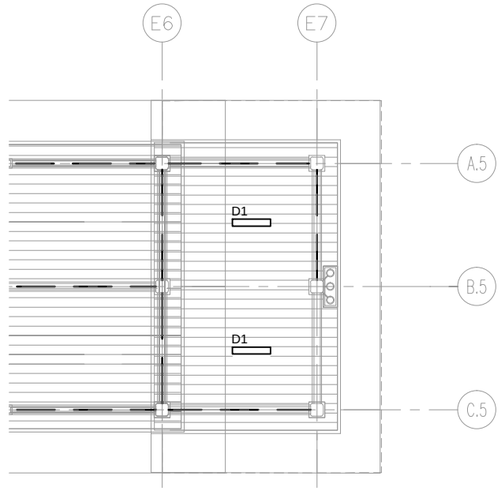
DISCIPLINE: ELECTRICAL
SHEET NAME: E4-PEN-ELE-PLN-304

SHEET 178 OF 394

Jan, 18 2016 11:06 am v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-PLN-304.dwg By: V-BegeJB



1 ELECTRICAL LIGHTING PLAN BRIDGE LEVEL
SCALE: 1/8"=1'-0"



2 ELECTRICAL LIGHTING PLAN INTERMEDIATE LEVEL
SCALE: 1/8"=1'-0"

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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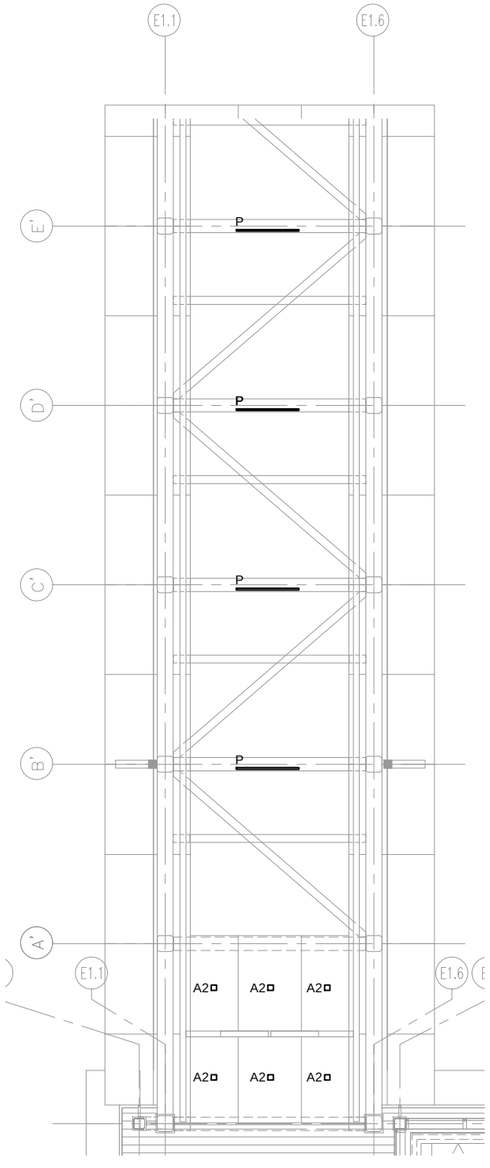
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL LIGHTING PLAN
VC BRIDGE LEVEL

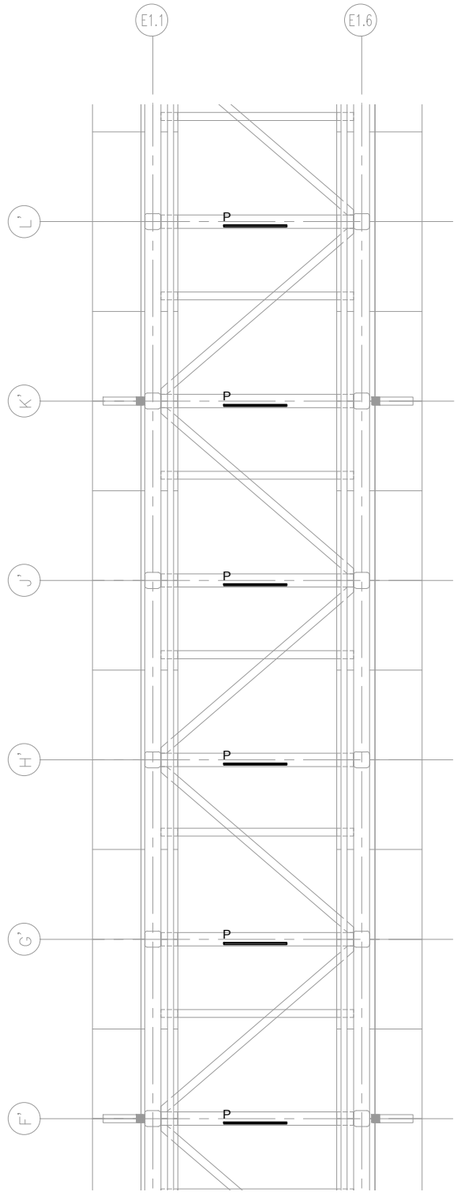
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SHEET NAME: E4-PEN-ELE-PLN-305

SHEET 179 OF 394

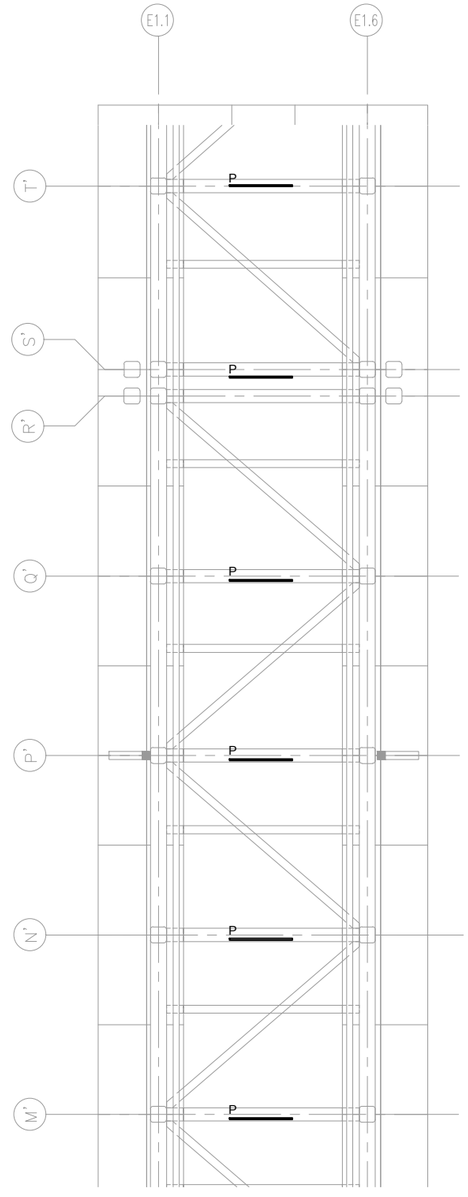
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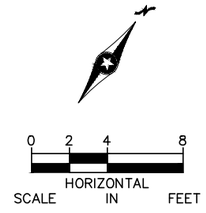
1 ELECTRICAL LIGHTING PLAN
PARTIAL BRIDGE LEVEL
SCALE: 1/8"=1'-0"



2 ELECTRICAL LIGHTING PLAN
PARTIAL BRIDGE LEVEL
SCALE: 1/8"=1'-0"



3 ELECTRICAL LIGHTING PLAN
PARTIAL BRIDGE LEVEL
SCALE: 1/8"=1'-0"



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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

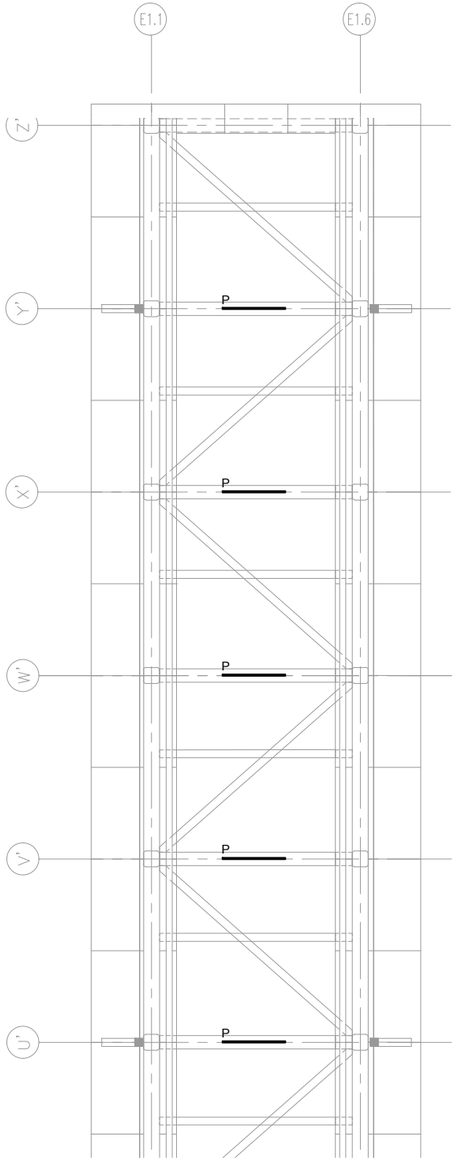
CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL LIGHTING PLAN
PED WALKWAY (1 OF 2)

DISCIPLINE: ELECTRICAL

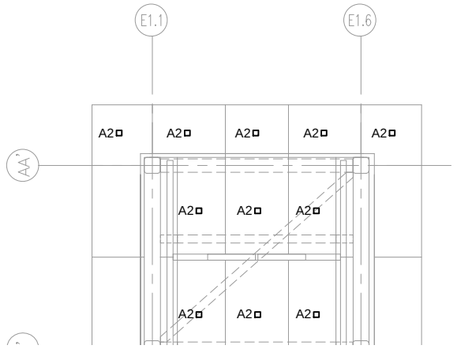
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SHEET 180 OF 394

Jan. 18 2016 11:08 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-PLN-306.dwg By: V-Begeulß



1 PARTIAL BRIDGE LEVEL ELECTRICAL LIGHTING PLAN
SCALE: 1/8"=1'-0"



2 PARTIAL BRIDGE LEVEL ELECTRICAL LIGHTING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
HORIZONTAL SCALE IN FEET

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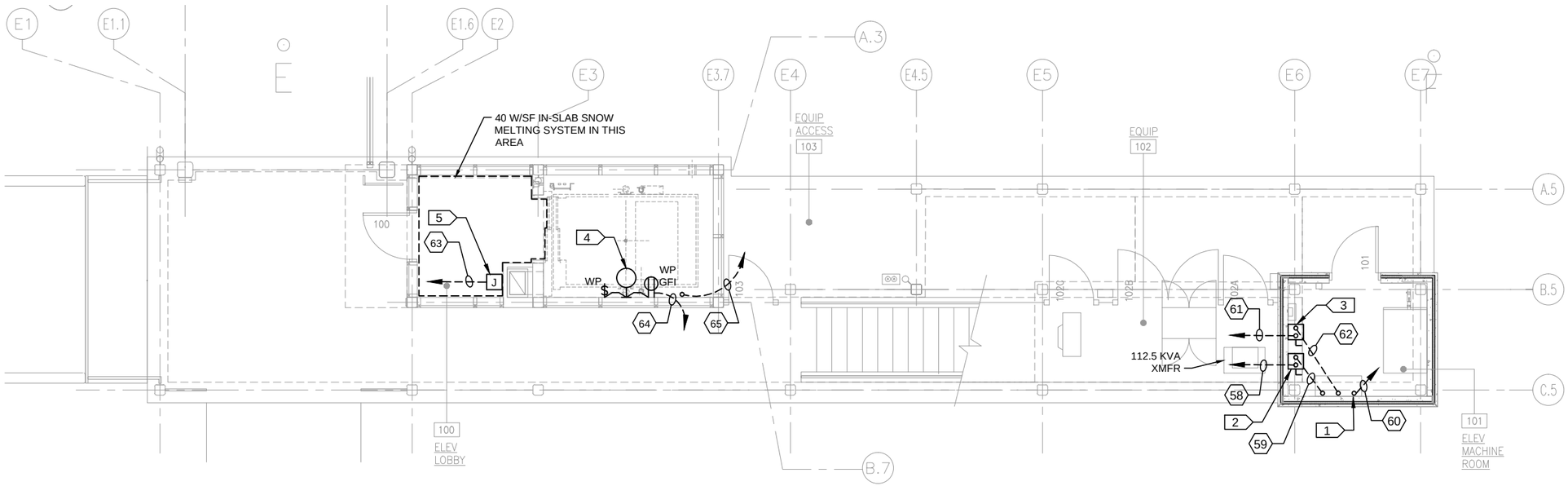
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL LIGHTING PLAN
PED WALKWAY (2 OF 2)

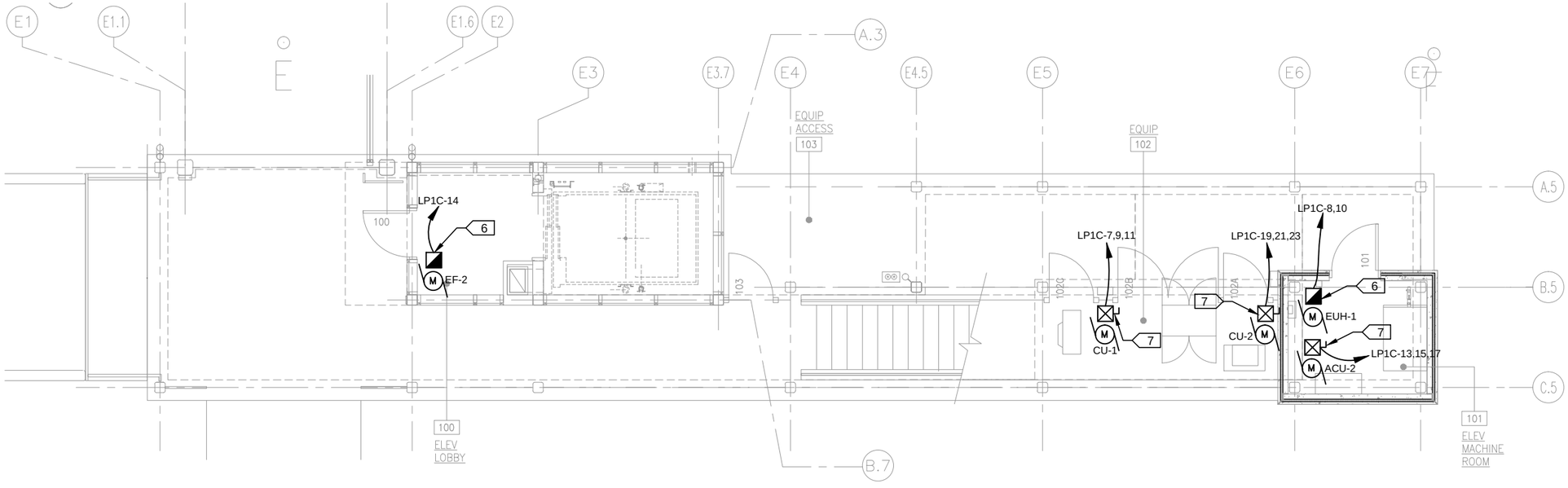
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SHEET 181 OF 394

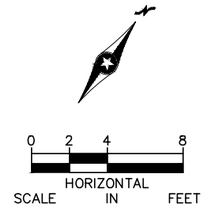
Jan. 18 2016 11:09 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-PLN-307.dwg By: V-BegeJB



1 UNDERSLAB CONDUIT PLAN PLATFORM LEVEL
SCALE: 1/8"=1'-0"



2 POWER PLAN PLATFORM LEVEL
SCALE: 1/8"=1'-0"



GENERAL NOTES:

1. ALL IN SLAB CONDUITS SHALL BE STUBBED UP A MINIMUM OF 8" AFF INTO COLUMNS, POSTS, BOTTOM OF TVM'S AND BOTTOM OF RSV'S.
2. AT CONDUIT STUB-UPS TRANSITION TO 1/2" LFMC FOR PUSH BUTTON CONTROL WIRING AND 3/4" LFMC FOR THE REMAINING.
3. SEE CONDUIT AND WIRE SCHEDULE FOR FROM/TO ROUTING OF CONDUITS.

KEYNOTES:

1. ELEVATOR CONTROLLER.
2. 100A, 480V, 3P CIRCUIT BREAKER DISCONNECT SWITCH FOR ELEVATOR.
3. 20A, 120V, 2P DISCONNECT SWITCH FOR ELEVATOR CAB LIGHTING AND POWER.
4. ELEVATOR PIT LUMINAIRE, LIGHT SWITCH AND RECEPTACLE. INSTALL AT 18" ABOVE PIT FLOOR.
5. FLUSH MOUNTED JUNCTION BOX FOR CONNECTION TO IN-SLAB FLOOR HEATING CABLES.
6. SINGLE PHASE DISCONNECT/STARTER.
7. THREE PHASE STARTER.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

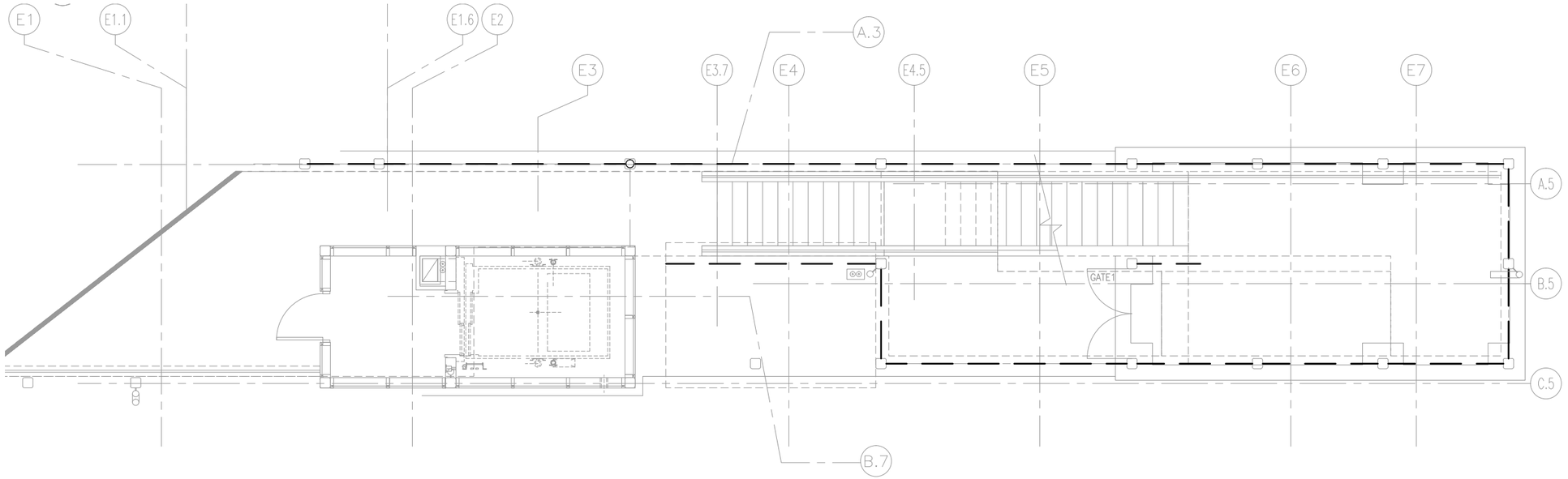
CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL PLAN
VC PLATFORM LEVEL

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-PEN-ELE-PLN-308

SHEET 182 OF 394

Jan, 18 2016 11:10 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-PLN-308.dwg By: V-Bege.JB



1 POWER PLAN INTERMEDIATE LEVEL
SCALE: 1/8"=1'-0"

0 2 4 8
HORIZONTAL SCALE IN FEET

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SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL POWER PLAN
VC INTERMEDIATE LEVEL

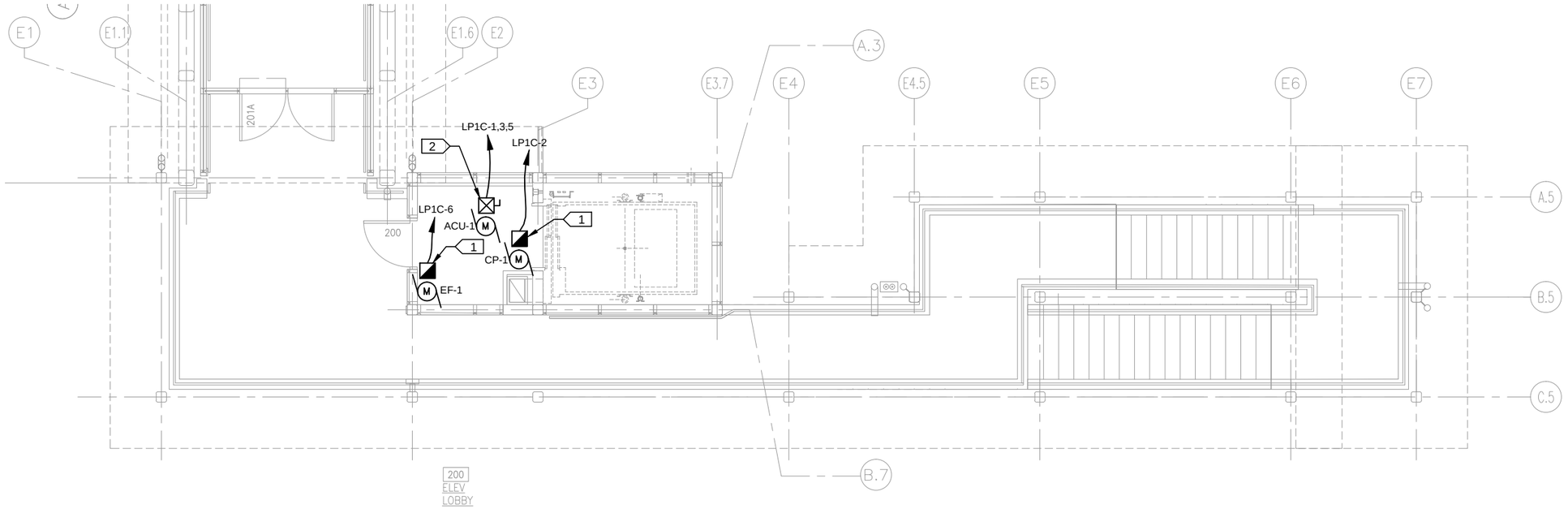
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SHEET NAME: E4-PEN-ELE-PLN-309

SHEET 183 OF 394

Jan, 18 2016 11:10 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-PLN-309.dwg By: V-BegeJB

KEYNOTES:

1. SINGLE PHASE DISCONNECT/STARTER.
2. THREE PHASE STARTER.



1 POWER PLAN BRIDGE LEVEL
SCALE: 1/8"=1'-0"

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

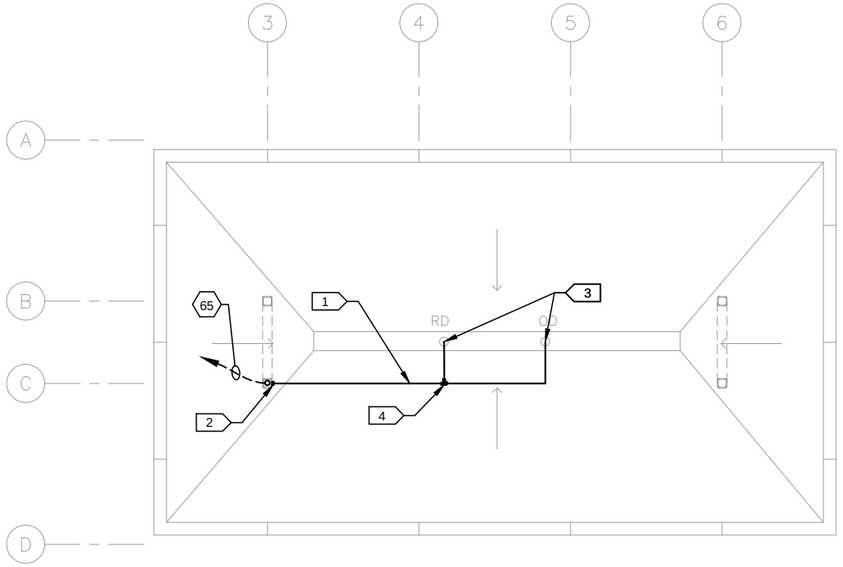
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL POWER PLAN
VC BRIDGE LEVEL

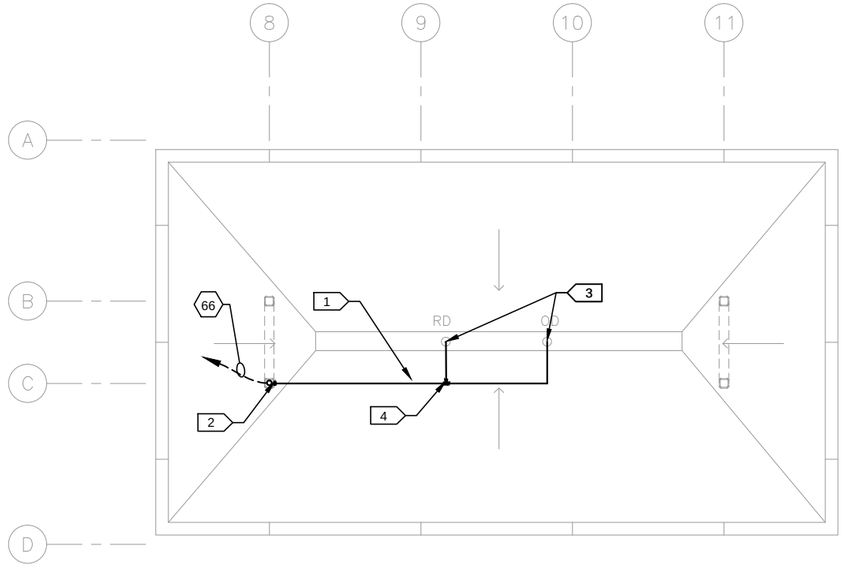
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SHEET NAME: E4-PEN-ELE-PLN-310

SHEET 184 OF 394

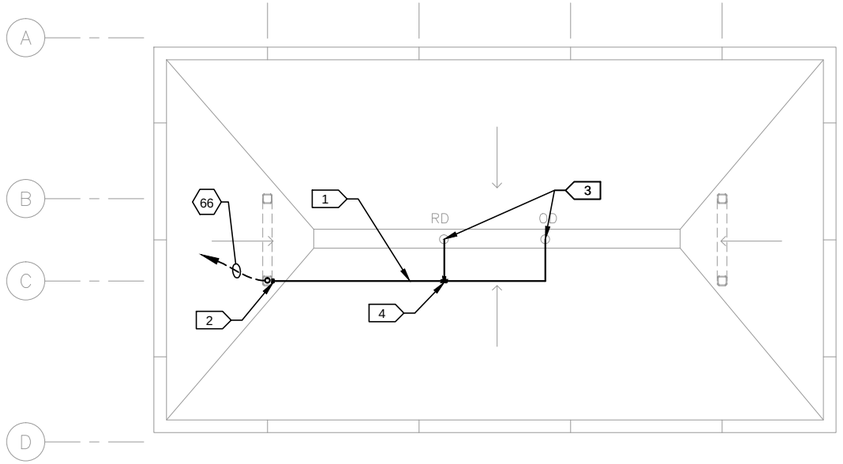
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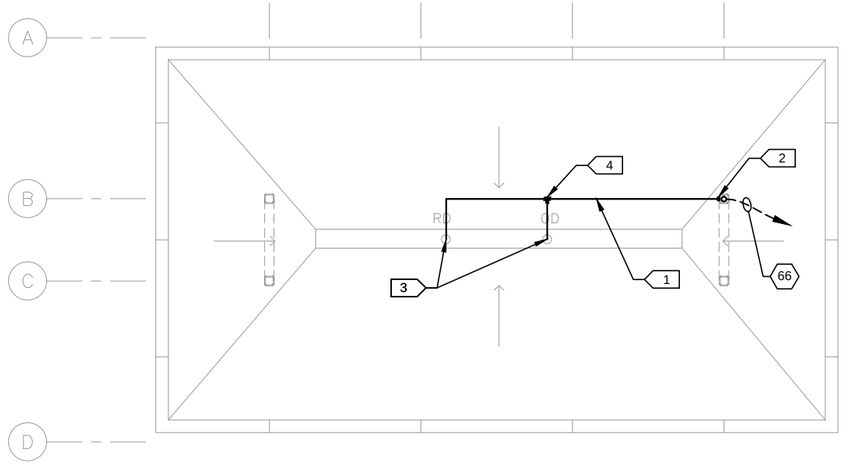
1 ROOF PLAN – WEST CANOPY
SCALE: 1/8"=1'-0"



2 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



3 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



4 ROOF PLAN – EAST CANOPY
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. HEAT TRACE CONTROL PANEL LOCATED IN SEC-001.

KEYNOTES:

1. SELF REGULATING HEAT TRACE CABLE. ATTACH CABLE TO ROOF WITH CLIPS. COORDINATE CLIP REQUIREMENTS WITH ROOFING CONTRACTOR.
2. POWER CONNECTION KIT WITH DOUBLE HEAT TRACE CABLE CONNECTION. COORDINATE MOUNTING REQUIREMENTS WITH STRUCTURAL STEEL CONTRACTOR.
3. RUN HEAT TRACE DOWN RAIN WATER LEADER 6' BELOW FINISHED FLOOR, PROVIDE CABLE PROTECTION WHERE CABLE ENTERS DRAIN STRAINER.
4. HEAT TRACE SPLICE KIT.

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METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL
HEAT TRACE PLAN

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-PEN-ELE-PLN-321

SHEET 185 OF 394

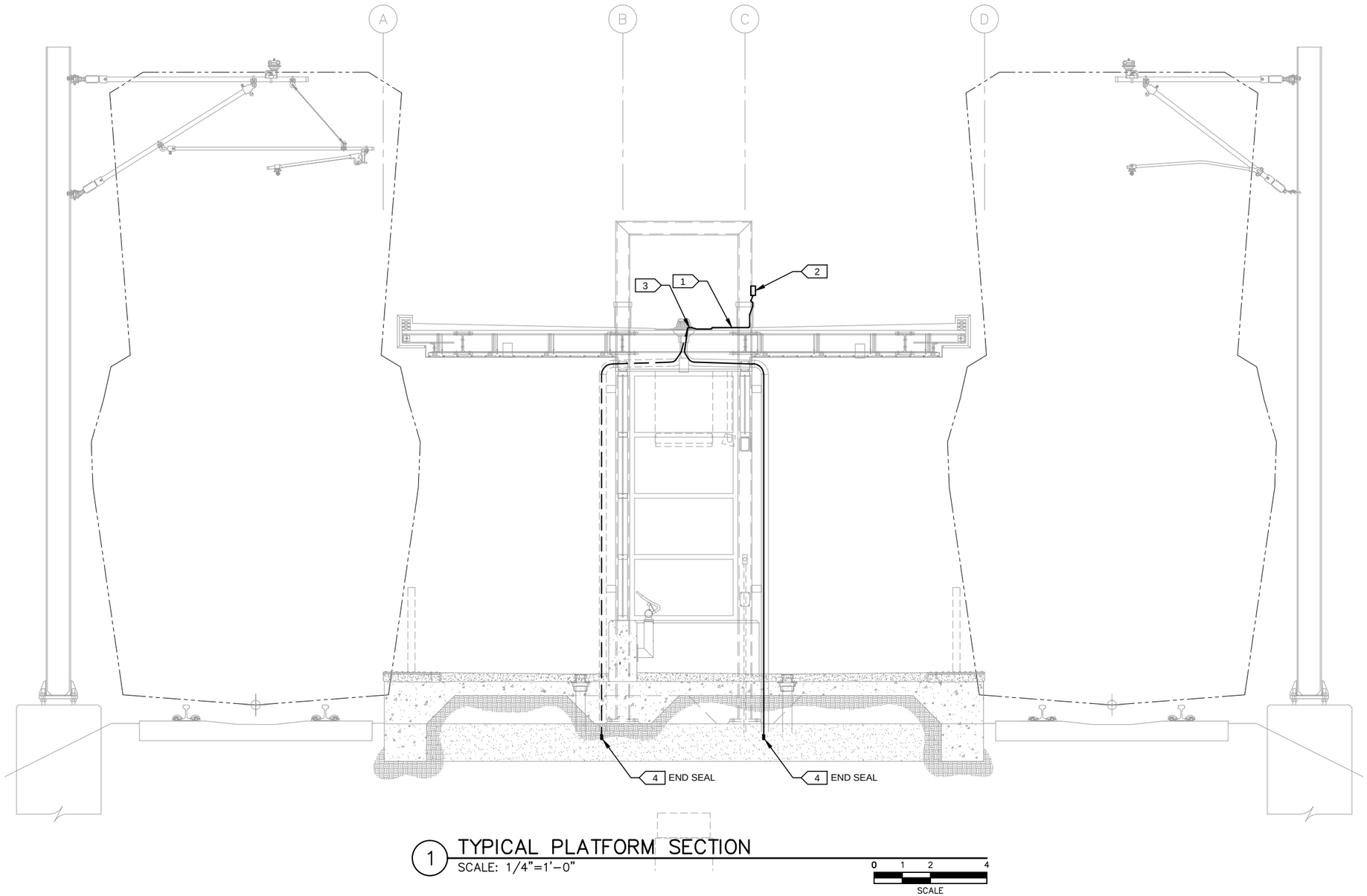
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GENERAL NOTES:

1. HEAT TRACE CONTROL PANEL LOCATED IN SEC-001.
2. SEE HEAT TRACE PLAN FOR HEAT TRACE AT CANOPY ROOFS.

KEYNOTES:

1. SELF REGULATING HEAT TRACE CABLE. ATTACH CABLE TO ROOF WITH CLIPS. COORDINATE CLIP REQUIREMENTS WITH ROOFING CONTRACTOR.
2. POWER CONNECTION KIT WITH DOUBLE HEAT TRACE CABLE CONNECTION. COORDINATE MOUNTING REQUIREMENTS WITH STRUCTURAL STEEL CONTRACTOR.
3. PROVIDE CABLE PROTECTION WHERE CABLE ENTERS ROOF DRAIN STRAINERS.
4. RUN HEAT TRACE DOWN WATER LEADER. ADD END SEALS AT DOWNSPOUT.



1 TYPICAL PLATFORM SECTION
SCALE: 1/4"=1'-0"

0 1 2 4
SCALE

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL
HEAT TRACE ELEVATION

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-PEN-ELE-ELV-322

SHEET 186 OF 394

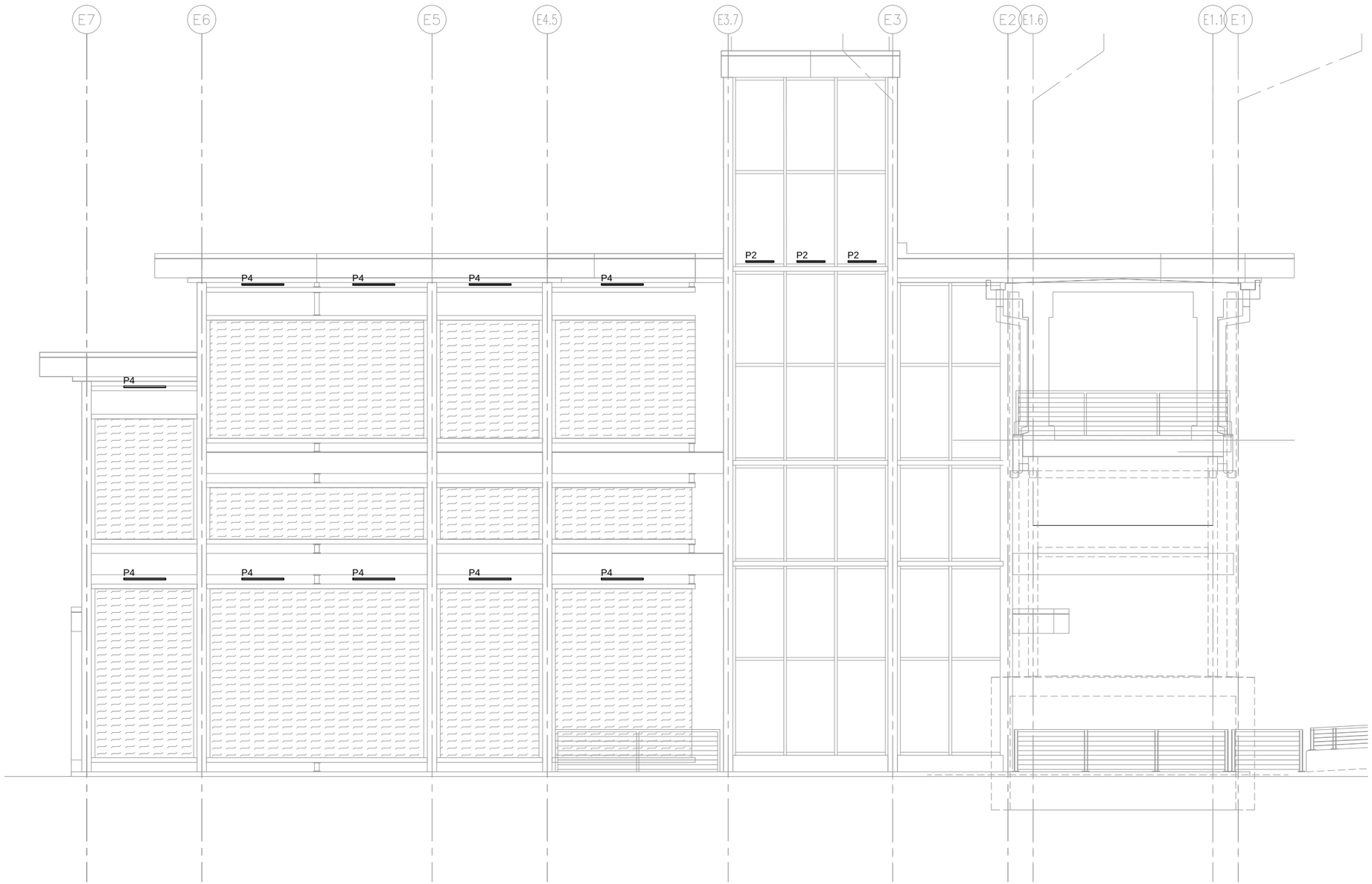
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GENERAL NOTES:

1.

KEYNOTES:

1.



1 VC TRACK 1 ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
HORIZONTAL SCALE IN FEET

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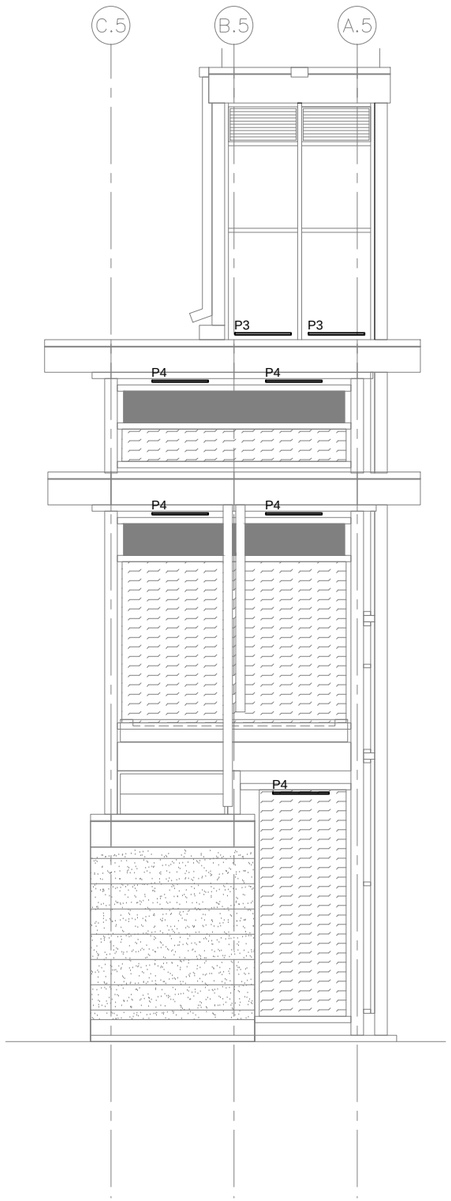
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL
VC TRACK 1 ELEVATION

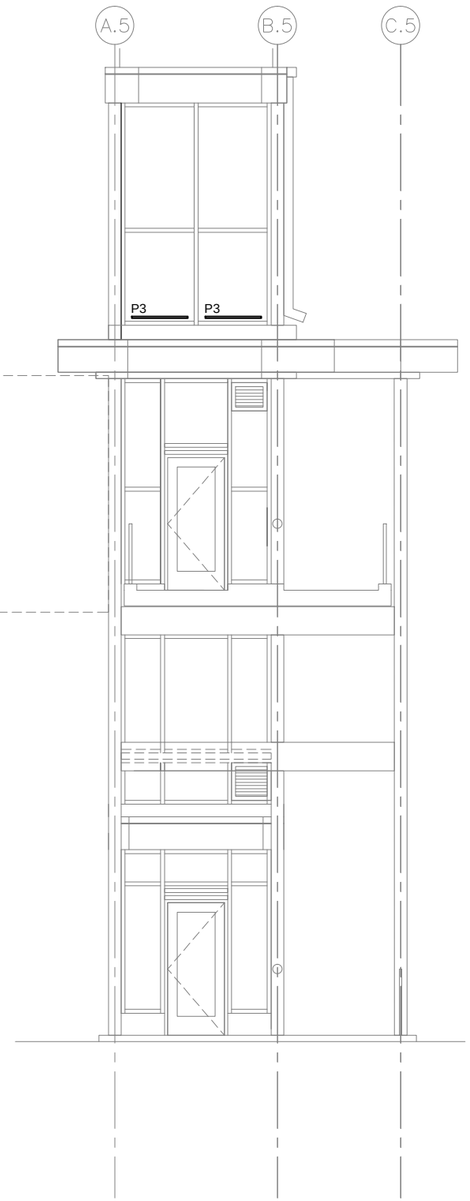
DISCIPLINE: ELECTRICAL
SHEET NAME: E4-PEN-ELE-ELV-350

SHEET 187 OF 394

Jan, 18 2016 11:12 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-ELV-350.dwg By: V-BegeJB



1 VC SIDE ELEVATIONS
SCALE: 1/8"=1'-0"



2 VC SIDE ELEVATIONS
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1.

KEYNOTES:

1.

0 2 4 8
HORIZONTAL
SCALE IN FEET

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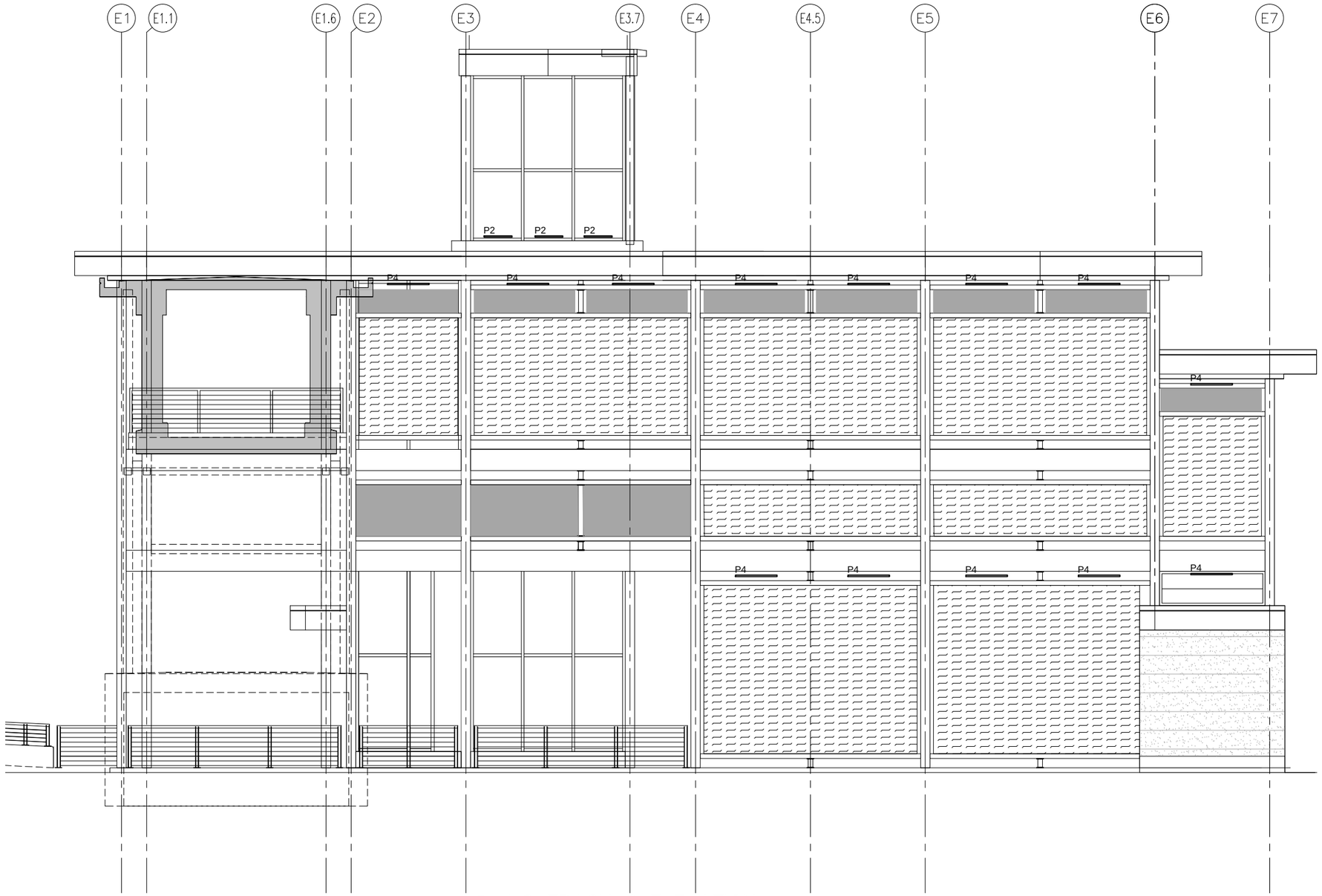
METROPOLITAN COUNCIL SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL
VC SIDE ELEVATIONS

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-PEN-ELE-ELV-351

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1 VC TRACK 2 ELEVATION
SCALE:1/8"=1'-0"

GENERAL NOTES:

1.

KEYNOTES:

1.

0 2 4 8
HORIZONTAL SCALE IN FEET

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

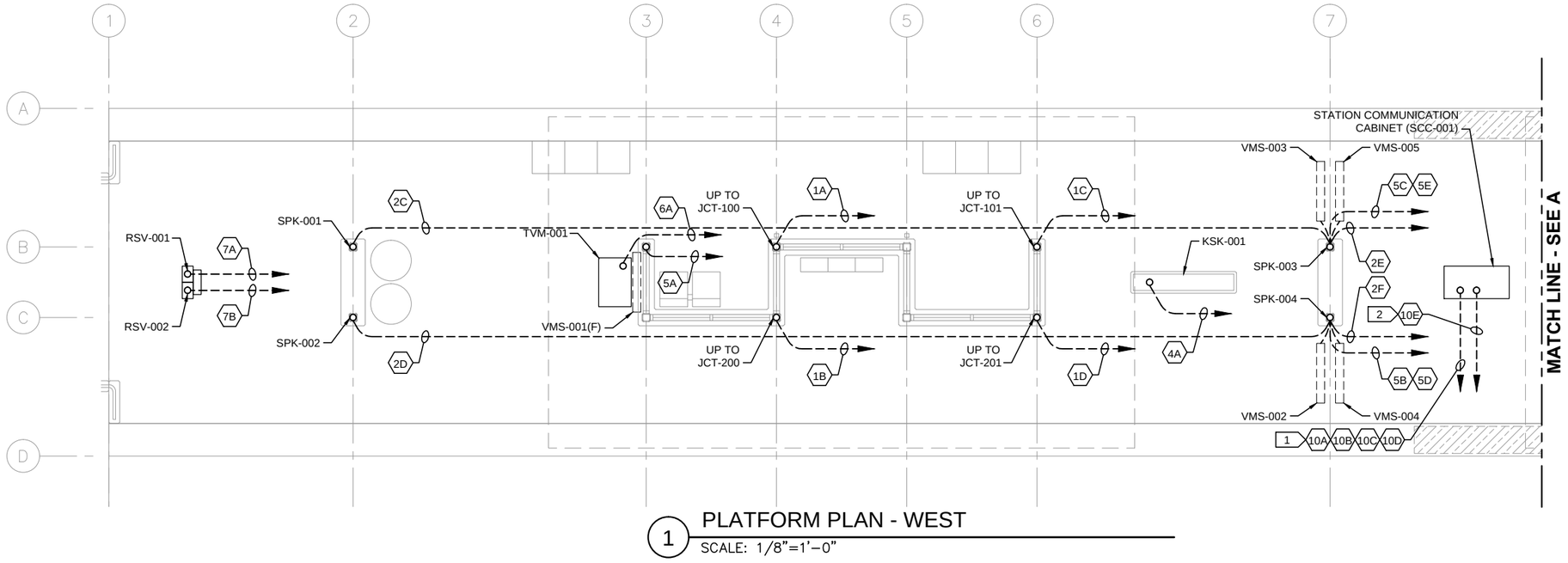
CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL
VC TRACK 2 ELEVATION

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-PEN-ELE-ELV-352

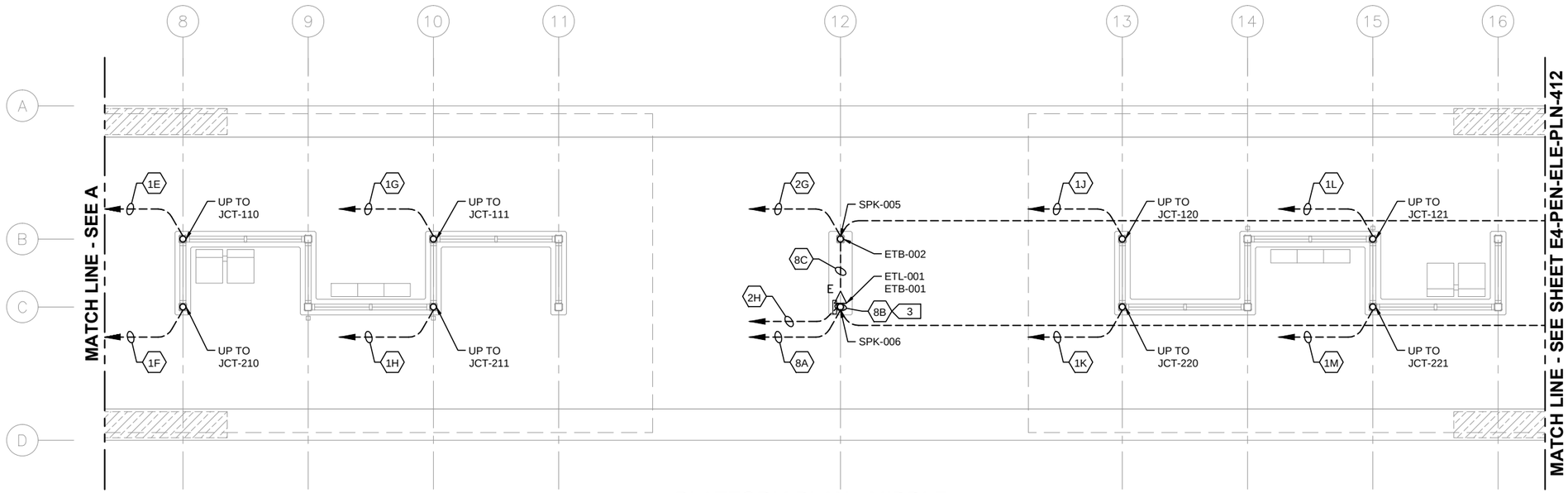
SHEET 189 OF 394

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1 PLATFORM PLAN - WEST

SCALE: 1/8"=1'-0"



2 PLATFORM PLAN - MIDDLE

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. DASHED LINES WITH AN ARROWHEAD DENOTE HOMERUN TO SCC-001, UNLESS OTHERWISE NOTED.
2. FOR CONDUITS AND DEVICES MOUNTED TO CANOPY, SEE COMMUNICATIONS CANOPY PLAN.
3. SEE SHEETS E4-PEN-ELE-SCH-461 AND E4-PEN-ELE-462 FOR CONDUIT SCHEDULES.
4. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
5. ALL UNDERSLAB CONDUIT SHALL BE PVC, ALL CONDUIT ABOVE PLATFORM SURFACE SHALL BE GRS.
6. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
7. TVMs, RSVs, SPEAKERS, ETELS AND COMMUNICATION CABINET TO BE PROVIDED BY OTHERS; SHOWN FOR REFERENCE ONLY.

KEYNOTES:

1. COMMUNICATIONS CONDUITS TO/FROM STATION SIGNAL-COMMUNICATIONS HOUSE VIA MH-XXXX.
2. CONDUIT TO/FROM STATION-COMMUNICATIONS HOUSE FOR UPS POWER FEED TO SCC-001.
3. CONDUIT AND CABLE FOR ETEL BEACON LIGHT SHALL BE INSTALLED ENTIRELY WITHIN COLUMN.

SCALE HORIZONTAL 0 2 4 8 IN FEET

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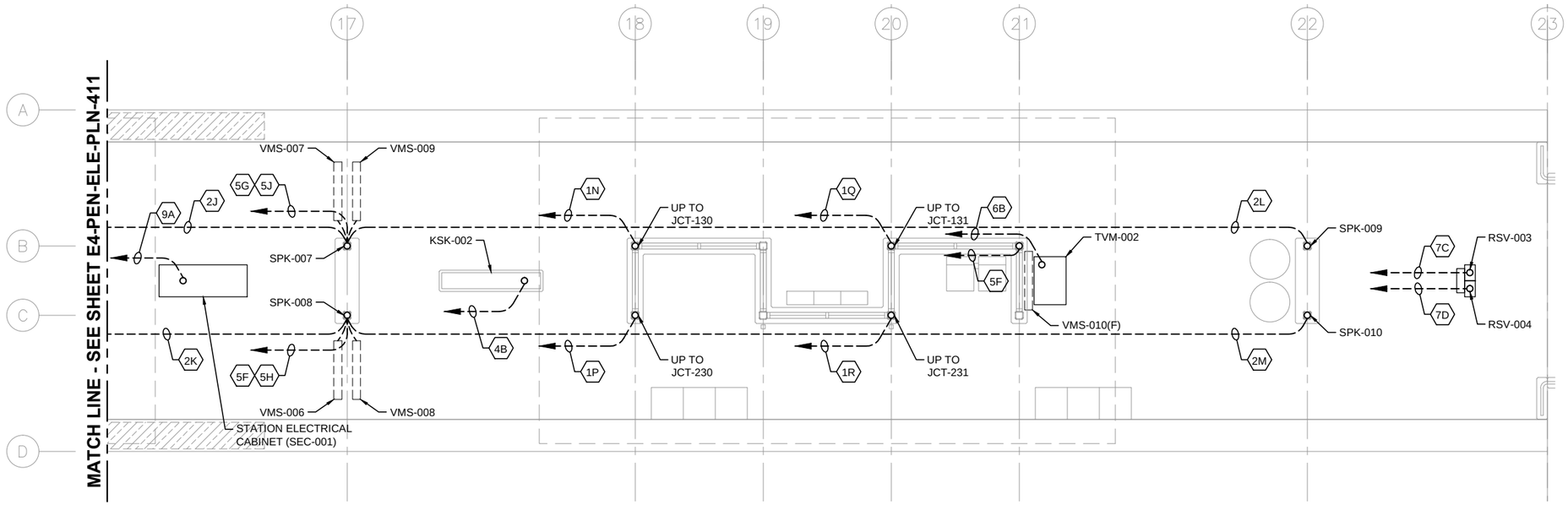
CIVIL - VOLUME 11D
PENN STATION
COMMUNICATIONS
UNDERSLAB CONDUIT PLAN (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-PEN-ELE-PLN-411

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1 PLATFORM PLAN - EAST

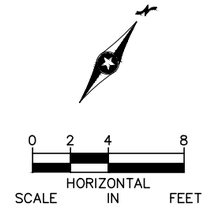
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. DASHED LINES WITH AN ARROWHEAD DENOTE HOMERUN TO SCC-001, UNLESS OTHERWISE NOTED.
2. FOR CONDUITS AND DEVICES MOUNTED TO CANOPY, SEE COMMUNICATIONS CANOPY PLAN.
3. SEE SHEETS E4-PEN-ELE-SCH-461 AND E4-PEN-ELE-462 FOR CONDUIT SCHEDULES.
4. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
5. ALL UNDERSLAB CONDUIT SHALL BE PVC, ALL CONDUIT ABOVE PLATFORM SURFACE SHALL BE GRS.
6. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
7. TVMs, RSVs, SPEAKERS, ETELS AND COMMUNICATION CABINET TO BE PROVIDED BY OTHERS; SHOWN FOR REFERENCE ONLY.

KEYNOTES:

1.



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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

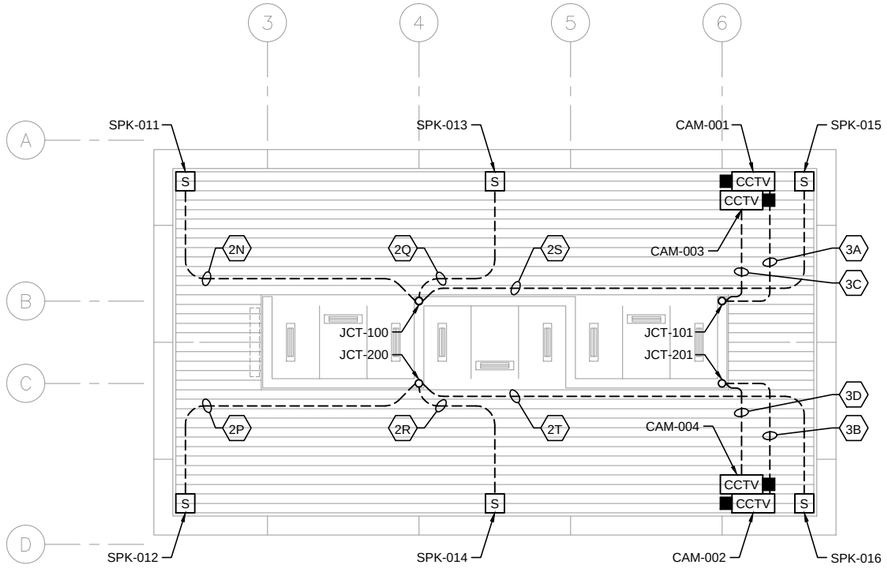
CIVIL - VOLUME 11D
PENN STATION
COMMUNICATIONS
UNDERSLAB CONDUIT PLAN (2 OF 2)

DISCIPLINE: ELECTRICAL

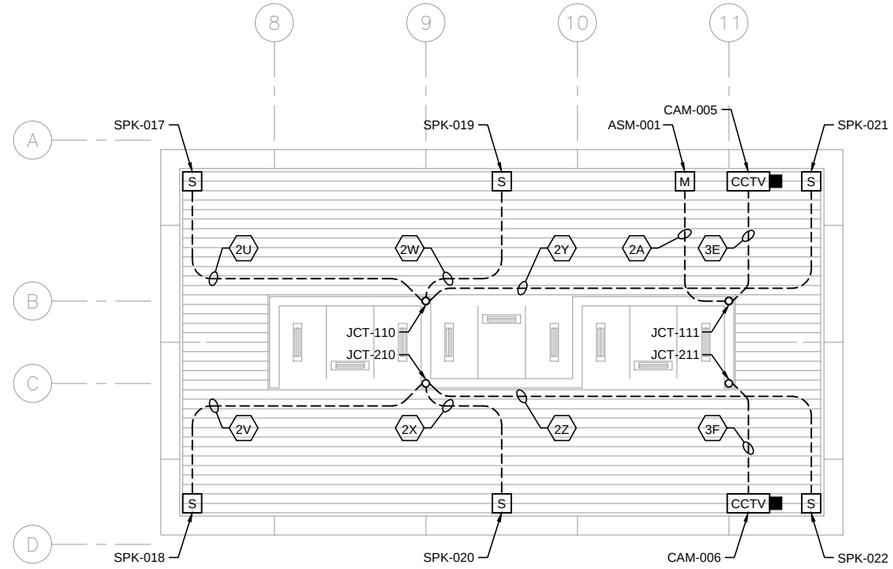
SHEET NAME: E4-PEN-ELE-PLN-412

SHEET 191 OF 394

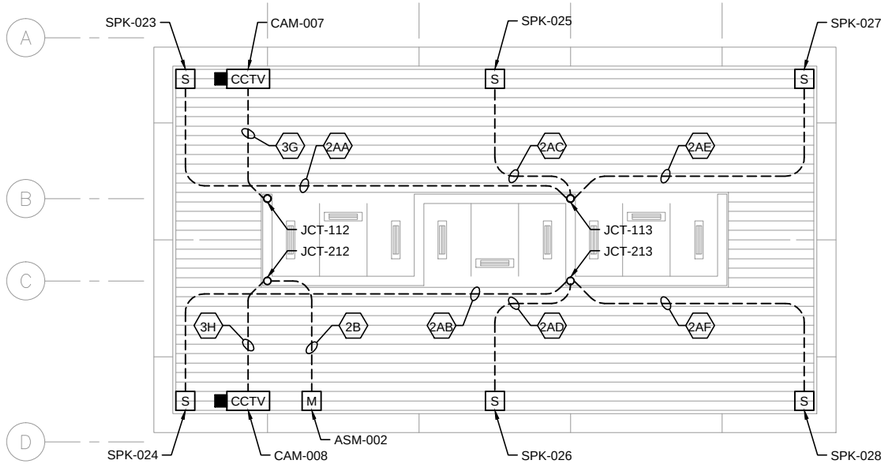
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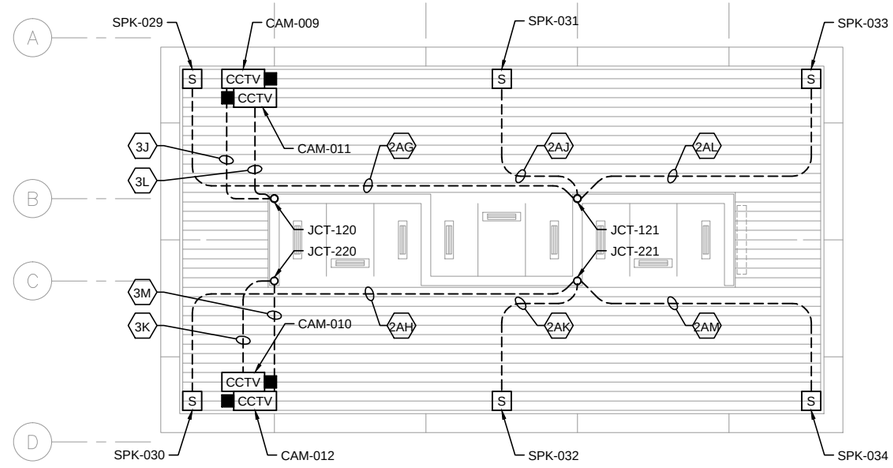
1 CANOPY PLAN – WEST END
SCALE: 1/8"=1'–0"



2 CANOPY PLAN – WEST MIDDLE
SCALE: 1/8"=1'–0"



3 CANOPY PLAN – EAST MIDDLE
SCALE: 1/8"=1'–0"



4 CANOPY PLAN – EAST END
SCALE: 1/8"=1'–0"

GENERAL NOTES:

1. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
2. SEE SHEETS E4-PEN-ELE-SCH-461 AND E4-PEN-ELE-462 FOR CONDUIT SCHEDULES.
3. ALL CONDUITS SHOWN SHALL BE GRS.
4. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
5. SPEAKERS, CCTV CAMERAS AND MICROPHONES SHOWN FOR REFERENCE ONLY; WILL BE PROVIDED BY OTHERS.

KEYNOTES:

1.

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

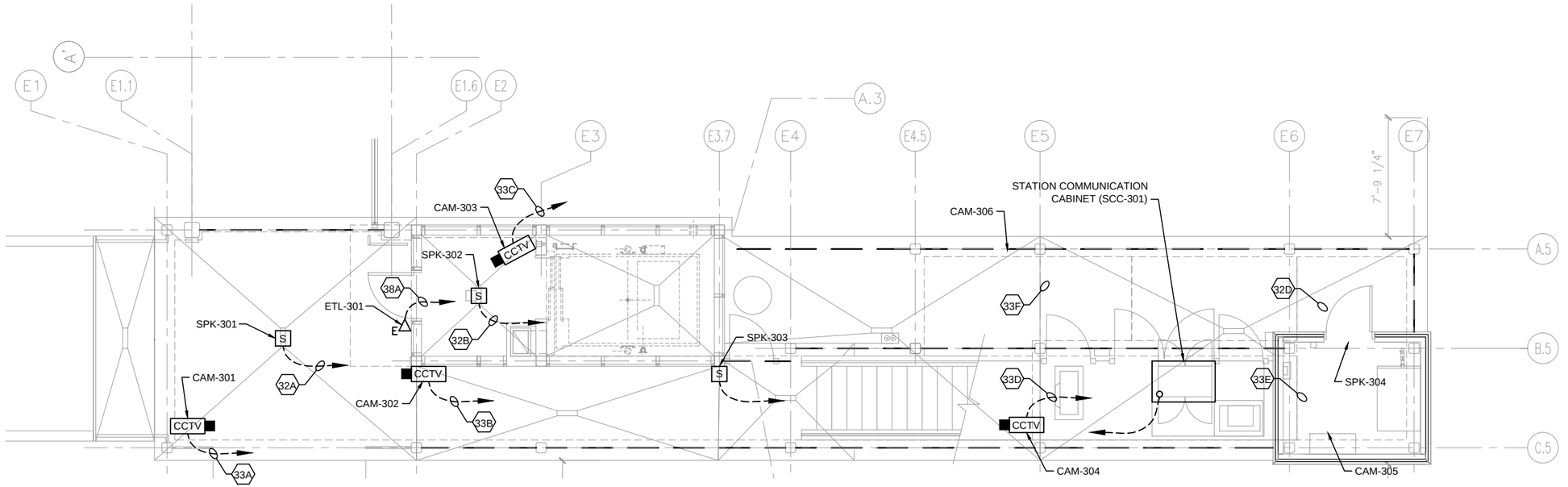
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CIVIL - VOLUME 11D
PENN STATION
COMMUNICATIONS
CANOPY PLAN

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-PEN-ELE-PLN-421

SHEET 192 OF 394

Jan, 18 2016 11:15 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-PLN-421.dwg By: V-BegeJB



1 VC PLATFORM LEVEL PARTIAL PLAN
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. DASHED LINE WITH ARROWHEAD DENOTES HOME RUN TO SCC-301 UNLESS OTHERWISE NOTED.

KEYNOTES:

1.

0 2 4 8
HORIZONTAL SCALE IN FEET

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

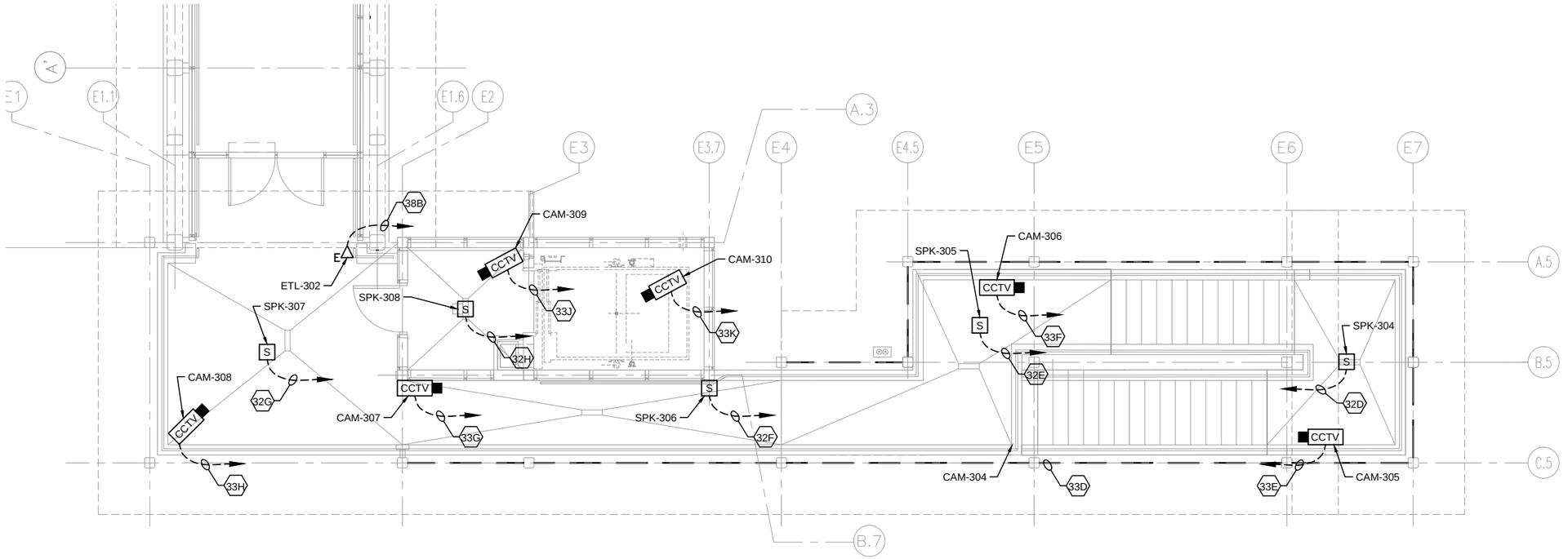
CIVIL - VOLUME 11D
PENN STATION
COMMUNICATIONS
VC PLATFORM LEVEL PLAN

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-PEN-ELE-PLN-431

SHEET 193 OF 394

Jan, 18 2016 11:16 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-PLN-431.dwg By: V-BegeJB



GENERAL NOTES:

1. DASHED LINE WITH ARROWHEAD DENOTES HOME RUN TO SCC-301 UNLESS OTHERWISE NOTED.

KEYNOTES:

1.

2 VC BRIDGE LEVEL PLAN

SCALE: 1/8"=1'-0"

0 2 4 8
HORIZONTAL SCALE IN FEET

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Metropolitan Council — Southwest Green Line LRT Extension

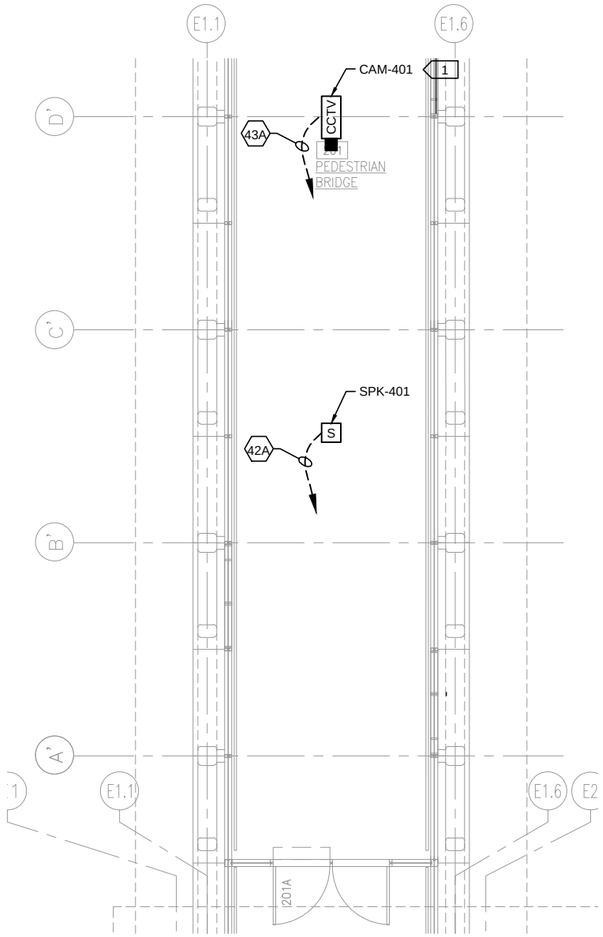
CIVIL - VOLUME 11D
PENN STATION
COMMUNICATIONS
VC BRIDGE LEVEL PLAN

DISCIPLINE: ELECTRICAL

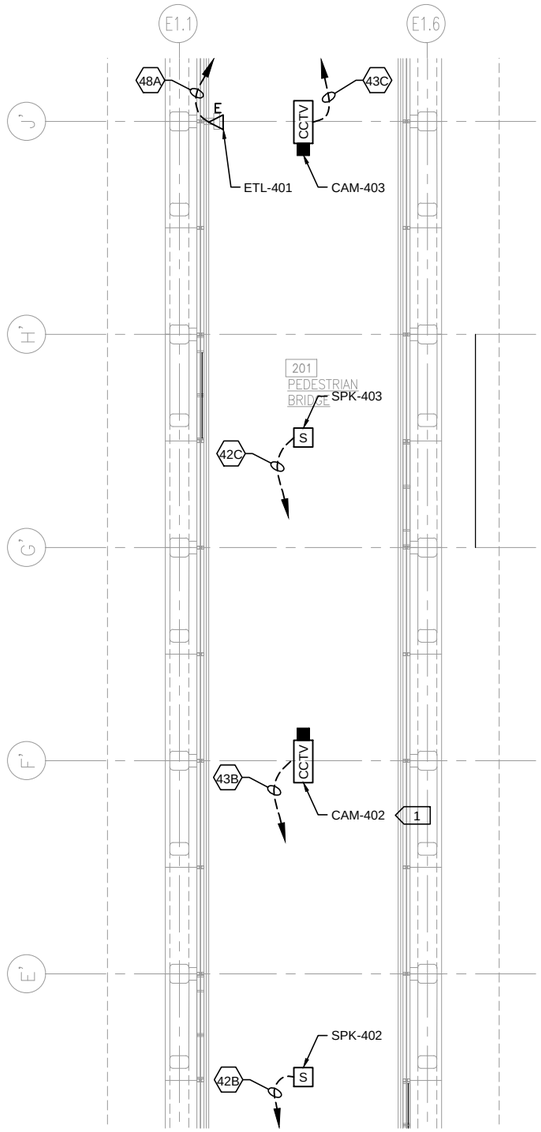
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SHEET 194 OF 394

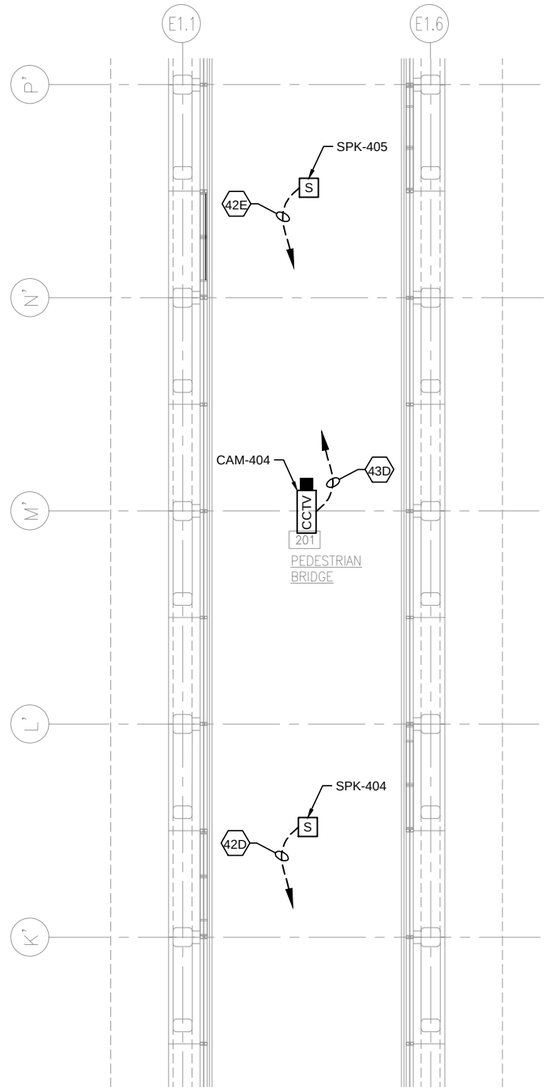
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1 PB BRIDGE LEVEL PLAN
SCALE: 1/8"=1'-0"



2 PB BRIDGE LEVEL PLAN
SCALE: 1/8"=1'-0"



3 PB BRIDGE LEVEL PLAN
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. CONDUIT FOR ALL SPEAKERS SHALL BE ROUTED TO SCC-301.
2. CONDUIT FOR CAMERAS AND ETELS SHALL BE ROUTED TO SCC-401 UNLESS OTHERWISE NOTED.

KEYNOTES:

1. ROUTE CONDUIT TO THESE DEVICES TO SCC-301.

0 2 4 8
HORIZONTAL SCALE IN FEET

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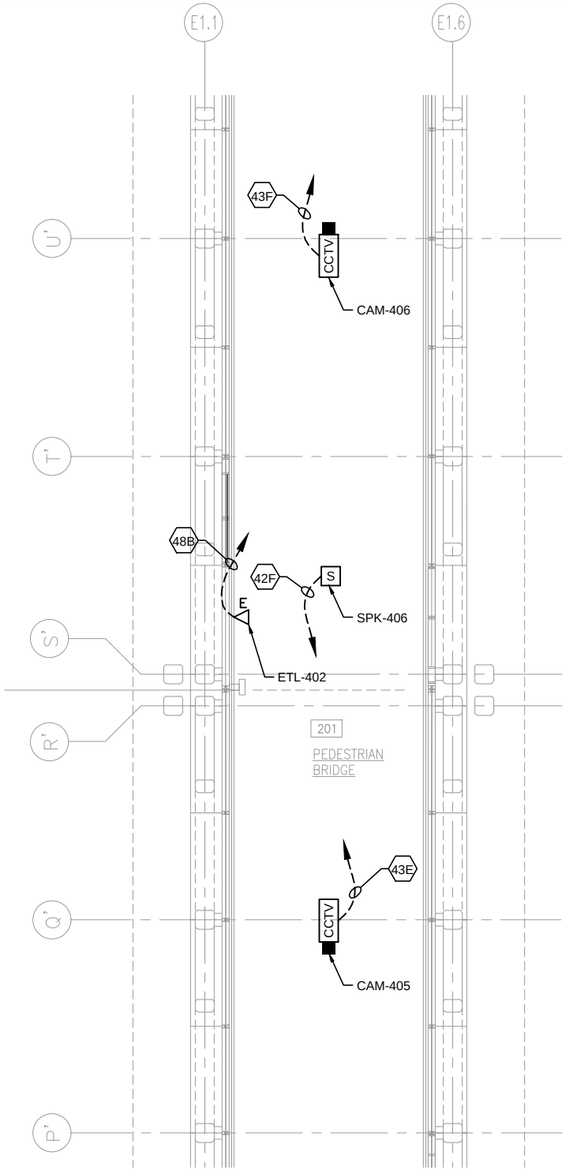
METROPOLITAN COUNCIL
SOUTHWEST
Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
COMMUNICATIONS
VC PED WALKWAY PLAN (1 OF 2)

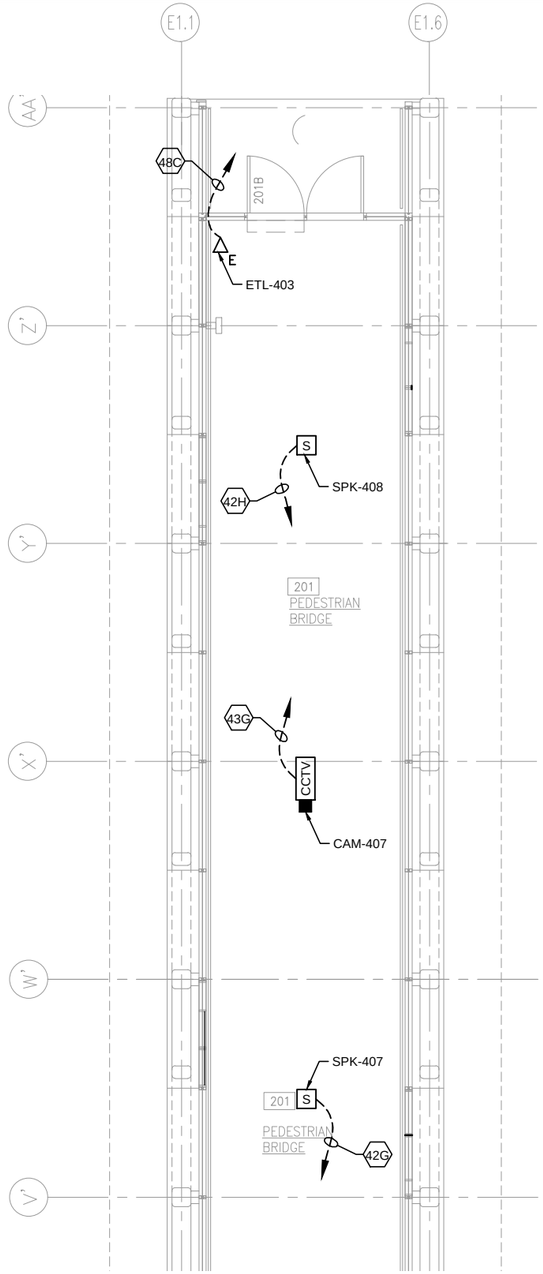
DISCIPLINE: ELECTRICAL
SHEET NAME: E4-PEN-ELE-PLN-433

SHEET 195 OF 394

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1 PB BRIDGE LEVEL PLAN
SCALE: 1/8"=1'-0"



2 PB BRIDGE LEVEL PLAN
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. CONDUIT FOR ALL SPEAKERS SHALL BE ROUTED TO SCC-301.
2. CONDUIT FOR CAMERAS AND ETELS SHALL BE ROUTED TO SCC-401 UNLESS OTHERWISE NOTED.

KEYNOTES:

1.

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
COMMUNICATIONS
VC PED WALKWAY PLAN (2 OF 2)

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-PEN-ELE-PLN-434

SHEET 196 OF 394

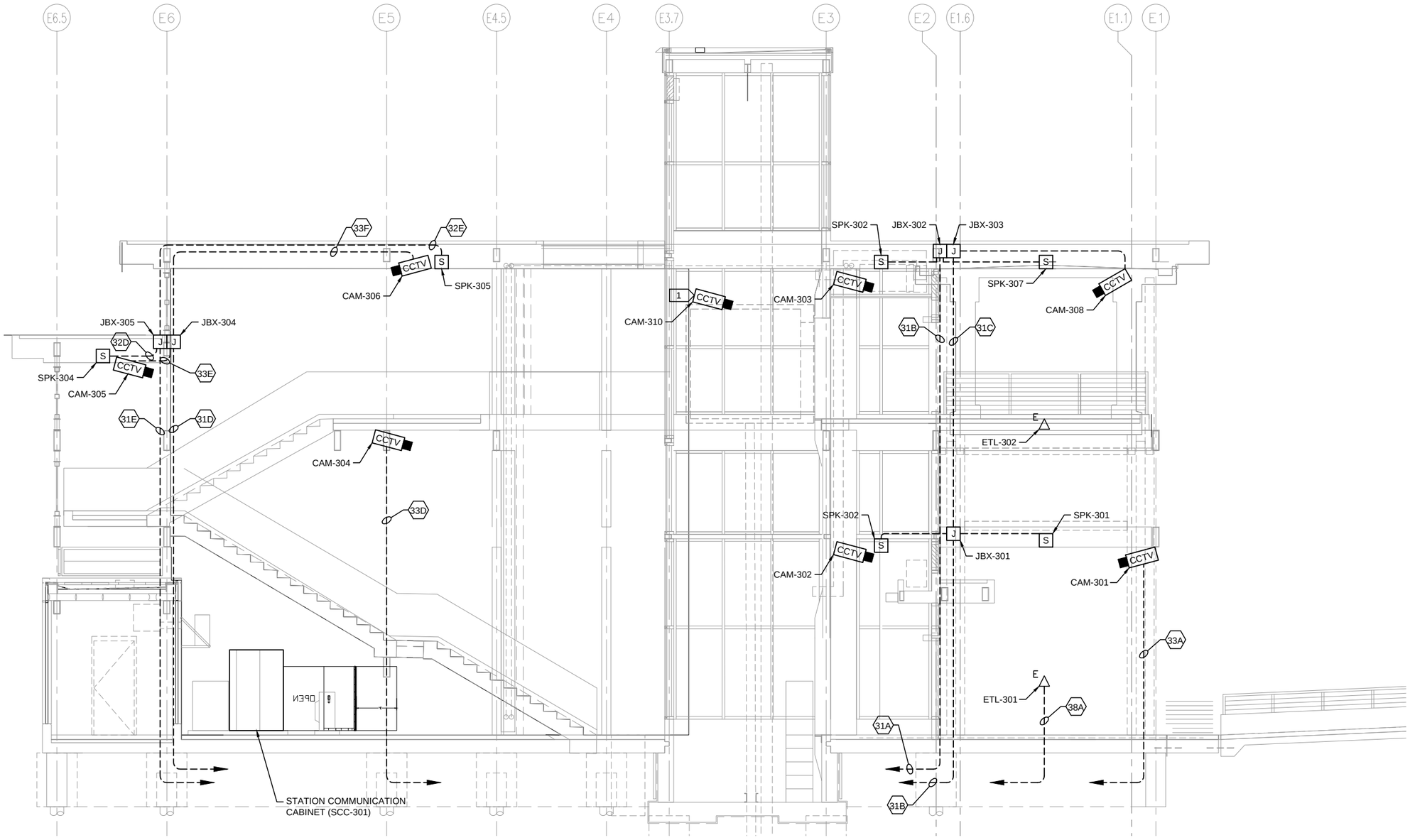
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GENERAL NOTES:

1. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
2. SEE SHEETS E4-PEN-ELE-SCH-461 AND E4-PEN-ELE-SCH-462 FOR CONDUIT SCHEDULES.
3. ALL CONDUIT SHOWN SHALL BE GRS.
4. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.

KEYNOTES:

1. CAMERA TO BE INSTALLED IN ELEVATOR CAB BY OTHERS.



1 TRACK 1 – VC ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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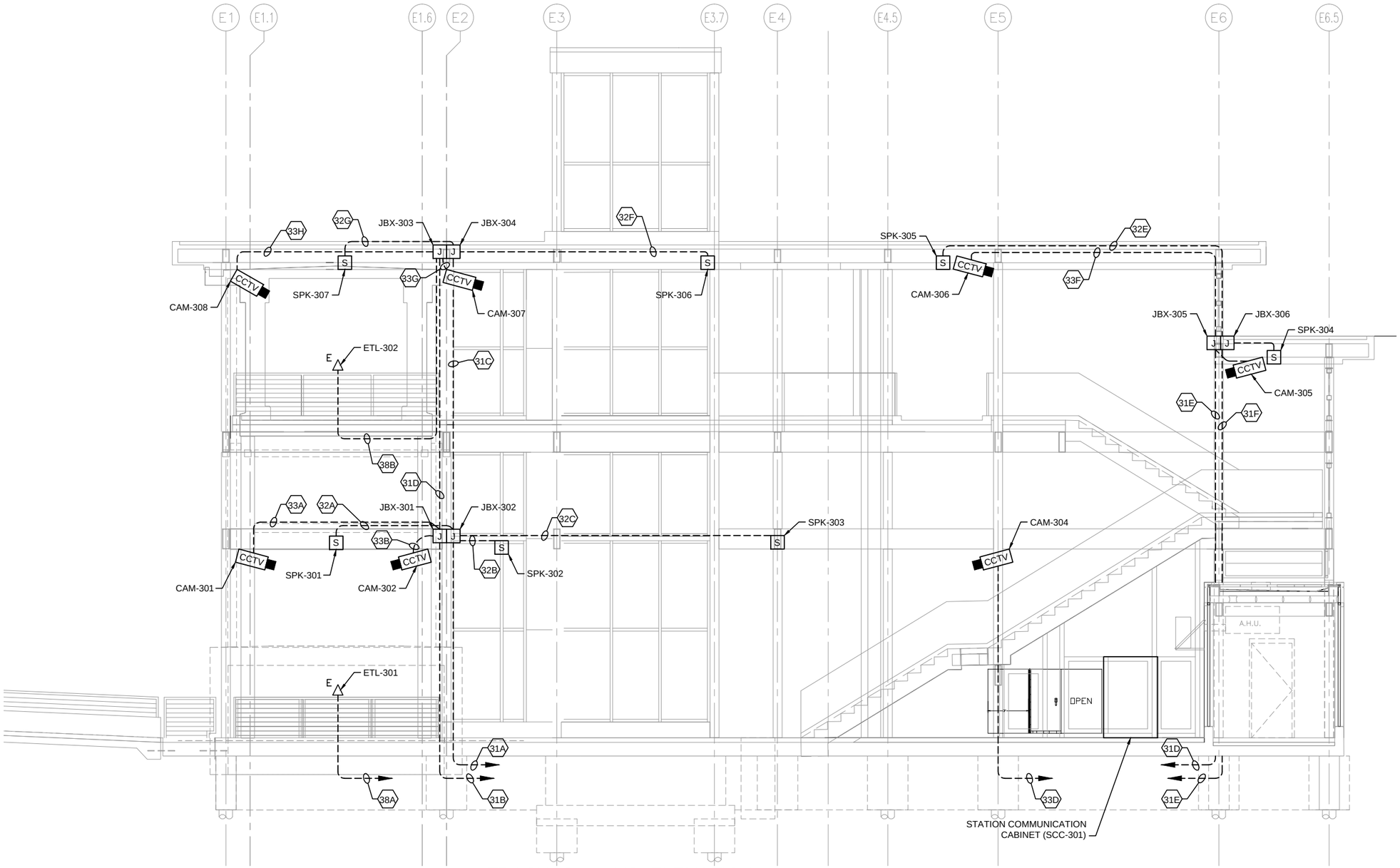
METROPOLITAN COUNCIL
SOUTHWEST
Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION COMMUNICATIONS
VC TRACK 1 ELEVATION

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-PEN-ELE-ELV-441

SHEET 197 OF 394

Jan, 18 2016 11:18 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-ELV-441.dwg By: V-BegeJB



1 TRACK 2 – VC ELEVATION
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
2. SEE SHEETS E4-PEN-ELE-SCH-461 AND E4-PEN-ELE-SCH-462 FOR CONDUIT SCHEDULES.
3. ALL CONDUIT SHOWN SHALL BE GRS.
4. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.

KEYNOTES:

1.

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
COMMUNICATIONS
VC TRACK 2 ELEVATION

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-PEN-ELE-ELV-442

SHEET 198 OF 394

Jan, 18 2016 11:19 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-ELV-442.dwg By: V-BegeJB

GENERAL NOTES:

1. CONDUIT NUMBERS CORRELATE TO ⬡ NUMBERS ON PLAN SHEETS AND ELEVATIONS.
2. SEE PLAN AND ELEVATION SHEETS FOR LOCATIONS OF CONDUITS.

PENN STATION COMMUNICATION CONDUIT AND CABLE SCHEDULE

CONDUIT NO.	DEVICE ID	DESCRIPTION/USE	FROM	TO	CONDUIT SIZE
10A	PEN -CON-0001	S/C HOUSE TO SCC-001	S/C MANHOLE	PEN -SCC-001	3"
10B	PEN -CON-0002	S/C HOUSE TO SCC-001	S/C MANHOLE	PEN -SCC-001	3"
10C	PEN -CON-0003	S/C HOUSE TO SCC-001	S/C MANHOLE	PEN -SCC-001	3"
10D	PEN -CON-0004	S/C HOUSE TO SCC-001	S/C MANHOLE	PEN -SCC-001	3"
10E	PEN -CON-0005	UPS POWER FEED: SCH TO SCC	PEN -SCH-001	PEN -SCC-001	3"
1A	PEN -CON-0101	SCC TO JUNCTION 100	PEN -SCC-001	PEN -JCT-100	2"
1B	PEN -CON-0102	SCC TO JUNCTION 200	PEN -SCC-001	PEN -JCT-200	2"
1C	PEN -CON-0103	SCC TO JUNCTION 101	PEN -SCC-001	PEN -JCT-101	2"
1D	PEN -CON-0104	SCC TO JUNCTION 201	PEN -SCC-001	PEN -JCT-201	2"
1E	PEN -CON-0105	SCC TO JUNCTION 110	PEN -SCC-001	PEN -JCT-110	2"
1F	PEN -CON-0106	SCC TO JUNCTION 210	PEN -SCC-001	PEN -JCT-210	2"
1G	PEN -CON-0107	SCC TO JUNCTION 111	PEN -SCC-001	PEN -JCT-111	2"
1H	PEN -CON-0108	SCC TO JUNCTION 211	PEN -SCC-001	PEN -JCT-211	2"
1J	PEN -CON-0109	SCC TO JUNCTION 112	PEN -SCC-001	PEN -JCT-112	2"
1K	PEN -CON-0110	SCC TO JUNCTION 212	PEN -SCC-001	PEN -JCT-212	2"
1L	PEN -CON-0111	SCC TO JUNCTION 113	PEN -SCC-001	PEN -JCT-113	2"
1M	PEN -CON-0112	SCC TO JUNCTION 213	PEN -SCC-001	PEN -JCT-213	2"
1N	PEN -CON-0113	SCC TO JUNCTION 120	PEN -SCC-001	PEN -JCT-120	2"
1P	PEN -CON-0114	SCC TO JUNCTION 220	PEN -SCC-001	PEN -JCT-220	2"
1Q	PEN -CON-0115	SCC TO JUNCTION 121	PEN -SCC-001	PEN -JCT-121	2"
1R	PEN -CON-0116	SCC TO JUNCTION 221	PEN -SCC-001	PEN -JCT-221	2"
2A	PEN -CON-0201	MICROPHONE 1 - NOISE SENSING	PEN -JCT-111	PEN -ASM-001	1"
2B	PEN -CON-0202	MICROPHONE 2 - NOISE SENSING	PEN -JCT-211	PEN -ASM-002	1"
2C	PEN -CON-0203	SPEAKER 1 - POLE	PEN -SPK-003	PEN -SPK-001	1-1/2"
2D	PEN -CON-0204	SPEAKER 2 - POLE	PEN -SPK-004	PEN -SPK-002	1-1/2"
2E	PEN -CON-0205	SPEAKER 3 - POLE	PEN -SCC-001	PEN -SPK-003	1-1/2"
2F	PEN -CON-0206	SPEAKER 4 - POLE	PEN -SCC-001	PEN -SPK-004	1-1/2"
2G	PEN -CON-0207	SPEAKER 5 - POLE	PEN -SCC-001	PEN -SPK-005	1-1/2"
2H	PEN -CON-0208	SPEAKER 6 - POLE	PEN -SCC-001	PEN -SPK-006	1-1/2"
2J	PEN -CON-0209	SPEAKER 7 - POLE	PEN -SPK-005	PEN -SPK-007	1-1/2"
2K	PEN -CON-0210	SPEAKER 8 - POLE	PEN -SPK-006	PEN -SPK-008	1-1/2"
2L	21S -CON-0211	SPEAKER 9 - POLE	21S -SPK-007	21S -SPK-009	1-1/2"
2M	21S -CON-0212	SPEAKER 10 - POLE	21S -SPK-008	21S -SPK-010	1-1/2"
2N	PEN -CON-0211	SPEAKER 11 - CANOPY	PEN -JCT-100	PEN -SPK-011	1"
2P	PEN -CON-0212	SPEAKER 12 - CANOPY	PEN -JCT-200	PEN -SPK-012	1"
2Q	PEN -CON-0213	SPEAKER 13 - CANOPY	PEN -JCT-100	PEN -SPK-013	1"
2R	PEN -CON-0214	SPEAKER 14 - CANOPY	PEN -JCT-200	PEN -SPK-014	1"
2S	PEN -CON-0215	SPEAKER 15 - CANOPY	PEN -JCT-100	PEN -SPK-015	1"
2T	PEN -CON-0216	SPEAKER 16 - CANOPY	PEN -JCT-200	PEN -SPK-016	1"
2U	PEN -CON-0217	SPEAKER 17 - CANOPY	PEN -JCT-110	PEN -SPK-017	1"
2V	PEN -CON-0218	SPEAKER 18 - CANOPY	PEN -JCT-210	PEN -SPK-018	1"
2W	PEN -CON-0219	SPEAKER 19 - CANOPY	PEN -JCT-110	PEN -SPK-019	1"
2X	PEN -CON-0220	SPEAKER 20 - CANOPY	PEN -JCT-210	PEN -SPK-020	1"
2Y	PEN -CON-0221	SPEAKER 21 - CANOPY	PEN -JCT-110	PEN -SPK-021	1"
2Z	PEN -CON-0222	SPEAKER 22 - CANOPY	PEN -JCT-210	PEN -SPK-022	1"
2AA	PEN -CON-0223	SPEAKER 23 - CANOPY	PEN -JCT-112	PEN -SPK-023	1"
2AB	PEN -CON-0224	SPEAKER 24 - CANOPY	PEN -JCT-212	PEN -SPK-024	1"
2AC	PEN -CON-0225	SPEAKER 25 - CANOPY	PEN -JCT-112	PEN -SPK-025	1"
2AD	PEN -CON-0226	SPEAKER 26 - CANOPY	PEN -JCT-212	PEN -SPK-026	1"
2AE	PEN -CON-0227	SPEAKER 27 - CANOPY	PEN -JCT-112	PEN -SPK-027	1"
2AF	PEN -CON-0228	SPEAKER 28 - CANOPY	PEN -JCT-212	PEN -SPK-028	1"
2AG	PEN -CON-0229	SPEAKER 29 - CANOPY	PEN -JCT-121	PEN -SPK-029	1"
2AH	PEN -CON-0230	SPEAKER 30 - CANOPY	PEN -JCT-221	PEN -SPK-030	1"
2AJ	PEN -CON-0231	SPEAKER 31 - CANOPY	PEN -JCT-121	PEN -SPK-031	1"
2AK	PEN -CON-0232	SPEAKER 32 - CANOPY	PEN -JCT-221	PEN -SPK-032	1"
2AL	PEN -CON-0233	SPEAKER 33 - CANOPY	PEN -JCT-121	PEN -SPK-033	1"
2AM	PEN -CON-0234	SPEAKER 34 - CANOPY	PEN -JCT-221	PEN -SPK-034	1"

PENN STATION COMMUNICATION CONDUIT AND CABLE SCHEDULE

CONDUIT NO.	DEVICE ID	DESCRIPTION/USE	FROM	TO	CONDUIT SIZE
3A	PEN -CON-0301	CAMERA 1	PEN -JCT-101	PEN CAM-001	1"
3B	PEN -CON-0302	CAMERA 2	PEN -JCT-201	PEN CAM-002	1"
3C	PEN -CON-0303	CAMERA 3	PEN -JCT-101	PEN CAM-003	1"
3D	PEN -CON-0304	CAMERA 4	PEN -JCT-201	PEN CAM-004	1"
3E	PEN -CON-0305	CAMERA 5	PEN -JCT-111	PEN CAM-005	1"
3F	PEN -CON-0306	CAMERA 6	PEN -JCT-211	PEN CAM-006	1"
3G	PEN -CON-0307	CAMERA 7	PEN -JCT-111	PEN CAM-007	1"
3H	PEN -CON-0308	CAMERA 8	PEN -JCT-211	PEN CAM-008	1"
3J	PEN -CON-0309	CAMERA 9	PEN -JCT-120	PEN CAM-009	1"
3K	PEN -CON-0310	CAMERA 10	PEN -JCT-220	PEN CAM-010	1"
3L	PEN -CON-0311	CAMERA 11	PEN -JCT-120	PEN CAM-011	1"
3M	PEN -CON-0312	CAMERA 12	PEN -JCT-220	PEN CAM-012	1"
4A	PEN -CON-0401	KIOSK 1 (F)	PEN -SCC-001	PEN -KSK-001	2"
4B	PEN -CON-0402	KIOSK 2 (F)	PEN -SCC-001	PEN -KSK-002	2"
5A	PEN -CON-0501	VMS 1 (F)	PEN -SCC-001	PEN -VMS-001	1"
5B	PEN -CON-0502	VMS 2, VMS 3	PEN -SCC-001	PEN -VMS-002, -VMS-003	1-1/2"
5C	PEN -CON-0503	VMS 4, VMS 5	PEN -SCC-001	PEN -VMS-004, -VMS-005	1-1/2"
5D	PEN -CON-0504	VMS 6, VMS 7	PEN -SCC-001	PEN -VMS-006, -VMS-007	1-1/2"
5E	PEN -CON-0505	VMS 8, VMS 9	PEN -SCC-001	PEN -VMS-008, -VMS-009	1-1/2"
5F	PEN -CON-0506	VMS 10 (F)	PEN -SCC-001	PEN -VMS-010	1"
6A	PEN -CON-0601	TVM 1	PEN -SCC-001	PEN -TVM-001	2"
6B	PEN -CON-0602	TVM 2	PEN -SCC-001	PEN -TVM-002	2"
7A	PEN -CON-0701	VALIDATOR 1	PEN -SCC-001	PEN -RSV-001	1-1/2"
7B	PEN -CON-0702	VALIDATOR 2	PEN -SCC-001	PEN -RSV-002	1-1/2"
7C	PEN -CON-0703	VALIDATOR 3	PEN -SCC-001	PEN -RSV-003	1-1/2"
7D	PEN -CON-0704	VALIDATOR 4	PEN -SCC-001	PEN -RSV-004	1-1/2"
8A	PEN -CON-0801	EMERGENCY TELEPHONE 1 - PHONE	PEN -SCC-001	PEN -ETL-001	1-1/2"
8B	PEN -CON-0802	EMERGENCY TELEPHONE 1 - BEACON LIGHT 1	PEN -ETL-001	PEN -ETB-001	1"
8C	PEN -CON-0803	EMERGENCY TELEPHONE 1 - BEACON LIGHT 2	PEN -ETL-001	PEN -ETB-002	1"
9A	PEN -CON-0901	STATION ELECTRICAL CABINET	PEN -SCC-001	PEN -SEC-001	2"

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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
COMMUNICATIONS
CONDUIT SCHEDULE (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-PEN-ELE-SCH-461

SHEET 199 OF 394

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GENERAL NOTES:

1. CONDUIT NUMBERS CORRELATE TO ⬡ NUMBERS ON PLAN SHEETS AND ELEVATIONS.
2. SEE PLAN AND ELEVATION SHEETS FOR LOCATIONS OF CONDUITS.

PENN VERTICAL CIRCULATION COMMUNICATION CONDUIT AND CABLE SCHEDULE

CONDUIT NO.	DEVICE ID	DESCRIPTION/USE	FROM	TO	CONDUIT SIZE
30A	PEN -CON-3001	SCC-001 TO SCC-301	PEN -SCC-001	PEN -SCC-301	3"
30B	PEN -CON-3002	SCC-001 TO SCC-301	PEN -SCC-001	PEN -SCC-301	3"
31A	PEN -CON-3101	SCC-301 TO JBX-301	PEN -SCC-301	PEN -JBX-301	2"
31B	PEN -CON-3102	SCC-301 TO JBX-302	PEN -SCC-301	PEN -JBX-302	2"
31C	PEN -CON-3103	JBX-301 TO JBX-303	PEN -JBX-301	PEN -JBX-303	2"
31D	PEN -CON-3104	JBX-302 TO JBX-304	PEN -JBX-302	PEN -JBX-304	2"
31E	PEN -CON-3105	SCC-301 TO JBX-305	PEN -SCC-301	PEN -JBX-305	2"
31F	PEN -CON-3106	SCC-301 TO JBX-306	PEN -SCC-301	PEN -JBX-306	2"
32A	PEN -CON-3201	SPEAKER 301	PEN -JBX-301	PEN -SPK-301	1"
32B	PEN -CON-3202	SPEAKER 302	PEN -JBX-301	PEN -SPK-302	1"
32C	PEN -CON-3203	SPEAKER 303	PEN -JBX-301	PEN -SPK-303	1"
32D	PEN -CON-3204	SPEAKER 304	PEN -JBX-305	PEN -SPK-304	1"
32E	PEN -CON-3205	SPEAKER 305	PEN -JBX-305	PEN -SPK-305	1"
32F	PEN -CON-3206	SPEAKER 306	PEN -JBX-303	PEN -SPK-306	1"
32G	PEN -CON-3207	SPEAKER 307	PEN -JBX-303	PEN -SPK-307	1"
32H	PEN -CON-3208	SPEAKER 308	PEN -JBX-303	PEN -SPK-308	1"
33A	PEN -CON-3301	CAMERA 301	PEN -JBX-302	PEN -CAM-301	1"
33B	PEN -CON-3302	CAMERA 302	PEN -JBX-302	PEN -CAM-302	1"
33C	PEN -CON-3303	CAMERA 303	PEN -JBX-302	PEN -CAM-303	1"
33D	PEN -CON-3304	CAMERA 304	PEN -SCC-301	PEN -CAM-304	1"
33E	PEN -CON-3305	CAMERA 305	PEN -JBX-306	PEN -CAM-305	1"
33F	PEN -CON-3306	CAMERA 306	PEN -JBX-306	PEN -CAM-306	1"
33G	PEN -CON-3307	CAMERA 307	PEN -JBX-304	PEN -CAM-307	1"
33H	PEN -CON-3308	CAMERA 308	PEN -JBX-304	PEN -CAM-308	1"
33J	PEN -CON-3309	CAMERA 309	PEN -JBX-304	PEN -CAM-309	1"
33K	PEN -CON-3310	CAMERA 310	PEN -ITC-301	PEN -CAM-310	1"
38A	PEN -CON-3801	EMERGENCY TELEPHONE 301 - PHONE	PEN -SCC-301	PEN -ETL-301	1-1/2"
38B	PEN -CON-3802	EMERGENCY TELEPHONE 301 - BEACON LIGHT	PEN -ETL-301	PEN -ETB-301	1"
38C	PEN -CON-3803	EMERGENCY TELEPHONE 302 - PHONE	PEN -JBX-302	PEN -ETL-302	1-1/2"
38D	PEN -CON-3804	EMERGENCY TELEPHONE 302 - BEACON LIGHT	PEN -ETL-302	PEN -ETB-302	1"

PENN PEDESTRIAN BRIDGE COMMUNICATION CONDUIT AND CABLE SCHEDULE

CONDUIT NO.	DEVICE ID	DESCRIPTION/USE	FROM	TO	CONDUIT SIZE
40A	PEN -CON-4001	S/C HOUSE TO SCC-401	PEN -SCC-001	PEN -SCC-401	3"
40B	PEN -CON-4002	S/C HOUSE TO SCC-401	PEN -SCC-001	PEN -SCC-401	3"
41A	PEN -CON-4101	SCC-401 TO JCT BOX 411	PEN -SCC-401	PEN -JBX-411	2"
41B	PEN -CON-4102	JCT BOX 411 TO JCT BOX 412	PEN -JBX-411	PEN -JBX-412	2"
41C	PEN -CON-4103	JCT BOX 412 TO JCT BOX 413	PEN -JBX-412	PEN -JBX-413	2"
41D	PEN -CON-4104	JCT BOX 413 TO JCT BOX 414	PEN -JBX-413	PEN -JBX-414	2"
41E	PEN -CON-4105	JCT BOX 414 TO JCT BOX 415	PEN -JBX-414	PEN -JBX-415	2"
41F	PEN -CON-4106	JCT BOX 415 TO JCT BOX 416	PEN -JBX-415	PEN -JBX-416	2"
41G	PEN -CON-4107	JCT BOX 416 TO JCT BOX 417	PEN -JBX-416	PEN -JBX-417	2"
41H	PEN -CON-4108	JCT BOX 417 TO JCT BOX 418	PEN -JBX-417	PEN -JBX-418	2"
41J	PEN -CON-4109	JCT BOX 418 TO JCT BOX 303	PEN -JBX-418	PEN -JBX-303	2"
41K	PEN -CON-4110	SCC-401 TO JCT BOX 421	PEN -SCC-401	PEN -JBX-421	2"
41L	PEN -CON-4111	JCT BOX 421 TO JCT BOX 422	PEN -JBX-421	PEN -JBX-422	2"
41M	PEN -CON-4112	JCT BOX 422 TO JCT BOX 423	PEN -JBX-422	PEN -JBX-423	2"
41N	PEN -CON-4113	JCT BOX 423 TO JCT BOX 424	PEN -JBX-423	PEN -JBX-424	2"
41P	PEN -CON-4114	JCT BOX 424 TO JCT BOX 425	PEN -JBX-424	PEN -JBX-425	2"
41Q	PEN -CON-4115	JCT BOX 425 TO JCT BOX 426	PEN -JBX-425	PEN -JBX-426	2"
41R	PEN -CON-4116	JCT BOX 426 TO JCT BOX 427	PEN -JBX-426	PEN -JBX-427	2"
41S	PEN -CON-4117	JCT BOX 427 TO JCT BOX 428	PEN -JBX-427	PEN -JBX-304	2"
42A	PEN -CON-4201	SPEAKER 401	PEN -JBX-411	PEN -SPK-401	1"
42B	PEN -CON-4202	SPEAKER 402	PEN -JBX-412	PEN -SPK-402	1"
42C	PEN -CON-4203	SPEAKER 403	PEN -JBX-413	PEN -SPK-403	1"
42D	PEN -CON-4204	SPEAKER 404	PEN -JBX-414	PEN -SPK-404	1"
42E	PEN -CON-4205	SPEAKER 405	PEN -JBX-415	PEN -SPK-405	1"
42F	PEN -CON-4206	SPEAKER 406	PEN -JBX-416	PEN -SPK-406	1"
42G	PEN -CON-4207	SPEAKER 407	PEN -JBX-417	PEN -SPK-407	1"
42H	PEN -CON-4208	SPEAKER 408	PEN -JBX-418	PEN -SPK-408	1"
43A	PEN -CON-4301	CAMERA 401	PEN -JBX-421	PEN -CAM-401	1"
43B	PEN -CON-4302	CAMERA 402	PEN -JBX-422	PEN -CAM-402	1"
43C	PEN -CON-4303	CAMERA 403	PEN -JBX-423	PEN -CAM-403	1"
43D	PEN -CON-4304	CAMERA 404	PEN -JBX-424	PEN -CAM-404	1"
43E	PEN -CON-4305	CAMERA 405	PEN -JBX-425	PEN -CAM-405	1"
43F	PEN -CON-4306	CAMERA 406	PEN -JBX-426	PEN -CAM-406	1"
43G	PEN -CON-4307	CAMERA 407	PEN -JBX-427	PEN -CAM-407	1"
48A	PEN -CON-4801	EMERGENCY TELEPHONE 401 - PHONE	PEN -SCC-401	PEN -ETL-401	1-1/2"
48B	PEN -CON-4802	EMERGENCY TELEPHONE 401 - BEACON LIGHT	PEN -ETL-401	PEN -ETB-401	1"
48C	PEN -CON-4803	EMERGENCY TELEPHONE 402 - PHONE	PEN -SCC-401	PEN -ETL-402	1-1/2"
48D	PEN -CON-4804	EMERGENCY TELEPHONE 402 - BEACON LIGHT	PEN -ETL-402	PEN -ETB-402	1"

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
COMMUNICATIONS
CONDUIT SCHEDULE (2 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-PEN-ELE-SCH-462

SHEET 200 OF 394

Jan, 18 2016 11:19 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-PEN-ELE-SCH-462.dwg By: V-BegeJB

VAN WHITE CONDUIT AND WIRE SCHEDULE

CONDUIT NUMBER	SIZE	WIRE	FROM	TO	REMARKS	NOTES
1	1"	2#8, 1#10G	HEATERS HTR-101, 102, 103	PANELBOARD LP1A	POWER TO HEATERS	
2	1"	2#8, 1#10G	HEATERS HTR-104, 105, 106	PANELBOARD LP1A	POWER TO HEATERS	
3	1"	2#8, 1#10G	HEATERS HTR-107, 108, 109	PANELBOARD LP1A	POWER TO HEATERS	
4	1"	2#8, 1#10G	HEATERS HTR-110, 111, 112	PANELBOARD LP1A	POWER TO HEATERS	
5	1"	2#8, 1#10G	HEATERS HTR-113, 114, 115	PANELBOARD LP1A	POWER TO HEATERS	
6	1"	2#8, 1#10G	HEATERS HTR-116, 117, 118	PANELBOARD LP1A	POWER TO HEATERS	
7	1"	2#8, 1#10G	HEATERS HTR-119, 120, 121	PANELBOARD LP1A	POWER TO HEATERS	
8	1"	2#8, 1#10G	HEATERS HTR-122, 123, 124	PANELBOARD LP1A	POWER TO HEATERS	
9	1"	2#8, 1#10G	HEATERS HTR-125, 126, 127	PANELBOARD LP1A	POWER TO HEATERS	
10	1"	2#8, 1#10G	HEATERS HTR-128, 129, 130	PANELBOARD LP1A	POWER TO HEATERS	
11	1"	2#8, 1#10G	HEATERS HTR-131, 132, 133	PANELBOARD LP1A	POWER TO HEATERS	
12	1"	2#8, 1#10G	HEATERS HTR-134, 135, 136	PANELBOARD LP1A	POWER TO HEATERS	
13	1"	2#14, 1#14G	HPB-101	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
14	1"	2#14, 1#14G	HPB-102	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
15	1"	2#14, 1#14G	HPB-103	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
16	1"	2#14, 1#14G	HPB-104	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
17	1"	2#14, 1#14G	HPB-105	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
18	1"	2#14, 1#14G	HPB-106	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
19	1"	2#14, 1#14G	HPB-107	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
20	1"	2#14, 1#14G	HPB-108	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
21	1"	2#14, 1#14G	HPB-109	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
22	1"	2#14, 1#14G	HPB-110	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
23	1"	2#14, 1#14G	HPB-111	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
24	1"	2#14, 1#14G	HPB-112	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
25	1"	2#10, 1#10G	TVM-101	PANELBOARD LP1B	POWER TO TVM	
26	1"	2#10, 1#10G	TVM-102	PANELBOARD LP1B	POWER TO TVM	
27	1"	4#12, 2#12G	RSV-101, RSV-102	PANELBOARD LP1B	POWER TO RSVs	
28	1"	4#12, 2#12G	RSV-103, RSV-104	PANELBOARD LP1B	POWER TO RSVs	
29	1"	2#12, 1#12G	KSK-101	PANELBOARD LP1A	POWER TO KIOSK	
30	1"	2#12, 1#12G	KSK-102	PANELBOARD LP1A	POWER TO KIOSK	
31	1"	2#12, 1#12G	CANOPY LUMINAIRES	PANELBOARD LP1A	POWER TO LUMINAIRES	
32	1"	2#12, 1#12G	CANOPY LUMINAIRES	PANELBOARD LP1A	POWER TO LUMINAIRES	
33	1"	2#12, 1#12G	CANOPY LUMINAIRES	PANELBOARD LP1A	POWER TO LUMINAIRES	
34	1"	2#12, 1#12G	CANOPY LUMINAIRES	PANELBOARD LP1A	POWER TO LUMINAIRES	
35	1"	2#10, 1#10G	HEAT TAPE	HTCP	POWER TO HEAT TAPE	2
36	1"	2#10, 1#10G	HEAT TAPE	HTCP	POWER TO HEAT TAPE	2
37	1"	2#10, 1#10G	HEAT TAPE	HTCP	POWER TO HEAT TAPE	2
38	1"	2#10, 1#10G	HEAT TAPE	HTCP	POWER TO HEAT TAPE	2
39	1"	2#10, 1#10G	RAMP LIGHTING	PANELBOARD LP1A	POWER TO RAMP LIGHTING	
40	1"	2#10, 1#10G	RAMP LIGHTING	PANELBOARD LP1A	POWER TO RAMP LIGHTING	
41	1"	2#10, 1#10G	RAMP LIGHTING	PANELBOARD LP1A	POWER TO RAMP LIGHTING	
42	1"	2#10, 1#10G	RAMP LIGHTING	PANELBOARD LP1A	POWER TO RAMP LIGHTING	
43	1 1/4"	4#10, 1#10G	COMMUNICATIONS CABINET SCC-001	PANELBOARD LP1B	POWER TO COMMUNICATIONS CABINET	
44	1"	EMPTY W/ PULL CORD	VMS-001 (F)	PANELBOARD LP1B	POWER TO VMS (F)	
45	1"	4#10, 2#10G	VMS-002, VMS-003	PANELBOARD LP1B	POWER TO VMS	
46	1"	4#10, 2#10G	VMS-008, VMS-009	PANELBOARD LP1B	POWER TO VMS	
47	1"	EMPTY W/ PULL CORD	VMS-010 (F)	PANELBOARD LP1B	POWER TO VMS (F)	
48	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
49	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
50	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
51	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
52	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
53	2(2")	2(4#3/0, 1#3G)	C/T METERING CABINET AT XCEL POINT OF CONNECTION.	PANELBOARD HP1	PLATFORM POWER	
54	3/4"	3#10, 1#10G	PANELBOARD HP1	45 KVA TRANSFORMER	PLATFORM POWER	6
55	1-1/4"	4#6, 1#10G	45 KVA TRANSFORMER	PANELBOARD LP1C	PLATFORM POWER	6
56	2(2-1/2)"	2(3#2/0 , 1#6G)	PANELBOARD HP1	112.5 KVA TRANSFORMER	PLATFORM POWER	6
57	2(3")	2(4#3/0, 1#3G)	112.5 KVA TRANSFORMER	PANELBOARD LP1A	PLATFORM POWER	6
58	1 1/4"	3#3, 1#8G	PANELBOARD HP1	ELEVATOR DISCONNECT SWITCH	ELEVATOR POWER	
59	1 1/4"	3#3, 1#8G	ELEVATOR DISCONNECT SWITCH	ELEVATOR CONTROLLER	ELEVATOR POWER	
60	1 1/4"	PULL WIRE	ELEVATOR CONTROLLER	ELEVATOR MOTOR	ELEVATOR POWER	
61	1"	3#10, 1#10G	PANELBOARD LP1C	ELEVATOR CAB DISCONNECT SWITCH	ELEVATOR CAB LTG AND POWER	
62	1"	3#10, 1#10G	ELEVATOR CAB DISCONNECT SWITCH	ELEVATOR CONTROLLER	ELEVATOR CAB LTG AND POWER	
63	1"	2#10, 1#10G	SNOW MELT JUNCTION BOX	SNOW MELT SYSTEM 30/2P CONTACTOR	ELEVATOR LOBBY SNOW MELT SYSTEM POWER	
64	1"	3#10, 1#10G	ELEVATOR PIT LTG AND RECEPTACLE	PANELBOARD LP1C	ELEVATOR PIT LTG AND RECEPTACLE POWER	
65	3"				EMPTY WITH PULL WIRE	

PANELBOARD SCHEDULE PEN-HP1

400 AMP BUS RATING — 42 POLES
277/480 VOLTS — 3 PHASE — SURFACE MOUNTED
400 AMP MAIN BREAKER — 4 WIRE 60Hz — 42k AIC

DESCRIPTION	kVA	AMPS/POLES	CKT	AØ	BØ	CØ	CKT	AMPS/POLES	kVA	DESCRIPTION
	26.5		1	X			2		17.7	
112.5 KVA TRANSFORMER (LP1A&LP1B)	28.0	170/3	3		X		4	100/3	17.7	ELEVATOR
	26.7		5			X	6		17.7	
	7.3		7	X			8			
45 KVA TRANSFORMER (LP1C)	7.6	70/3	9		X		10			
	7.9		11			X	12			
			13	X			14			
SPD		60/3	15		X		16			
			17			X	18			
SPACE			19	X			20			
SPACE			21		X		22			
SPACE			23			X	24			
SPACE			25	X			26			
SPACE			27		X		28			
						X				
		kVA		51.5	53.3	52.3	kVA			
		AMPS		186.1	192.3	188.7	AMPS			

PANELBOARD SCHEDULE PEN-LP1A

400 AMP BUS RATING — 42 POLES
120/208 VOLTS — 3 PHASE — SURFACE MOUNTED
300 AMP MAIN BREAKER — 4 WIRE 60Hz — LOCATION

DESCRIPTION	kVA	AMPS/POLES	CKT	AØ	BØ	CØ	CKT	AMPS/POLES	kVA	DESCRIPTION
RAMP LIGHTING	0.4	20/1	1	X			2	30/2	2.4	HTR-119, 120, 121
RAMP LIGHTING	0.4	20/1	3		X		4		2.4	
HTR-101, 102, 103	2.4	30/2	5			X	6	30/2	2.4	HTR-122, 123, 124
	2.4		7	X			8		2.4	
HTR-104, 105, 106	2.4	30/2	9		X		10	30/2	2.4	HTR-125, 126, 127
	2.4		11			X	12		2.4	
HTR-107, 108, 109	2.4	30/2	13	X			14	30/2	2.4	HTR-128, 129, 130
	2.4		15		X		16		2.4	
HTR-110, 111 112	2.4	30/2	17			X	18	30/2	2.4	HTR-131, 132, 133
	2.4		19	X			20		2.4	
HTR-113, 114, 115	2.4	30/2	21		X		22	30/2	2.4	HTR-134, 135, 136
	2.4		23			X	24		2.4	
HTR-116, 117, 118	2.4	30/2	25	X			26	20/1	0.17	SHELTER LUMINAIRES
	2.4		27		X		28	20/1	0.17	SHELTER LUMINAIRES
KSK-101	0.3	20/1	29			X	30	20/1	0.17	SHELTER LUMINAIRES
KSK-102	0.3	20/1	31	X			32	20/1	0.17	SHELTER LUMINAIRES
HTRCP-101	1.0	30/2	33		X		34	20/1	1.0	POLE LUMINAIRES
	1.0		35			X	36	20/1		SPARE
HTRCP-102	1.0	30/2	37	X			38	20/1		SPARE
	1.0		39		X		40			SPACE
SPACE			41			X	42			SPACE
		kVA		26.5	28.0	26.7	kVA		5.3	
		AMPS		221.2	233.1	222.3	AMPS		5.2	
									6.0	FEED THROUGH LUGS LP1B

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM — M-P Consultants, Consulting Engineering, Minneapolis • Minnesota

90% SUBMISSION - 01/22/16

Metropolitan Council — Southwest Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL
SCHEDULES (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-PEN-ELE-SCH-501

SHEET 201 OF 319

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VAN WHITE CONDUIT AND WIRE SCHEDULE

CONDUIT NUMBER	SIZE	WIRE	FROM	TO	REMARKS	NOTES
66		1#8	45 KVA TRANSFORMER	GROUNDING ELECTRODE SYSTEM	GROUNDING ELECTRODE CONDUCTOR FOR 45 KVA TRANSFORMER	7
67		1#1/0	112.5 KVA TRANSFORMER	GROUNDING ELECTRODE SYSTEM	GROUNDING ELECTRODE CONDUCTOR FOR 112.5 KVA TRANSFORMER	7
68	1"	3#12, 1#12G	ACU-1	PANELBOARD LP1C	POWER TO FAN COIL UNIT	
69	1"	8#12, 1#10G	ACU-2	PANELBOARD LP1C	POWER TO FAN COIL UNIT	
70	1"	3#12, 1#12G	CU-1	PANELBOARD LP1C	POWER TO CONDENSING UNIT	
71	1"	3#12, 1#12G	CU-2	PANELBOARD LP1C	POWER TO CONDENSING UNIT	
72	1"	3#12, 1#12G	CP-1	PANELBOARD LP1C	POWER TO CONDENSATE PUMP	
73	1"	2#12, 1#12G	EX-1	PANELBOARD LP1C	POWER TO EXHAUST FAN	
74	1"	2#12, 1#12G	EX-2	PANELBOARD LP1C	POWER TO EXHAUST FAN	
75	1"	2#12, 1#12G	EUH-1	PANELBOARD LP1C	POWER TO ELECTRIC UNIT HEATER	

ELECTRICAL NOTES

1. NOT USED
2. 3/C #18 CABLE FOR AMBIENT AIR TEMPERATURE SENSOR IS ALSO RUN IN THE CONDUIT.
3. NOT USED
4. NOT USED
5. 2#14 FOR POWER OUT INDICATION, ROUTE BETWEEN SCADA PLC AND POWER OUT RELAY IN ELECTRICAL ENCLOSURE
6. FMC
7. EXOTHERMIC WELD GEC TO NEAREST STRUCTURAL STEEL COLUMN

PANELBOARD SCHEDULE PEN-LP1B

400 AMP BUS RATING
120/208 VOLTS
400 MLO
3 PHASE
4 WIRE 60Hz
30 POLES
SURFACE MOUNTED
LOCATION

DESCRIPTION	kVA	AMPS/POLES	CKT	AØ	BØ	CØ	CKT	AMPS/POLES	kVA	DESCRIPTION
SPD		60/2	1	X			2	20/1	0.3	RSV-101
			3		X		4	20/1	0.3	RSV-102
SEC-001	0.5	20/1	5			X	6	20/1	0.3	RSV-103
VMS-001 (FUTURE)	1.0	20/1	7	X			8	20/1	0.3	RSV-104
VMS-002	1.0	20/1	9		X		10	20/1		SPARE
VMS-003	1.0	20/1	11			X	12	20/1		SPARE
SCC-001	2.7	30/2	13	X			14	20/1	1.0	VMS-008
	2.7		15		X		16	20/1	1.0	VMS-009
SPARE		20/1	17			X	18	20/1	1.0	VMS-010 (FUTURE)
SPARE		20/1	19	X			20	30/1		SPARE
HTG AND LTG CONTROL SYSTEM	0.2	15/1	21		X		22	30/1		SPARE
TVM-101	1.6	30/1	23			X	24	30/1	1.6	TVM-102
SPACE			25	X			26			SPACE
SPACE			27		X		28			SPACE
SPACE			29			X	30			SPACE
		kVA		5.3	5.2	6.0	kVA			
		AMPS		44.2	43.3	50.0	AMPS			

PANELBOARD SCHEDULE PEN-LP1C

225 AMP BUS RATING
120/208 VOLTS
175 AMP MAIN BREAKER
3 PHASE
4 WIRE 60Hz
42 POLES
SURFACE MOUNTED
10 KAIC

DESCRIPTION	kVA	AMPS/POLES	CKT	AØ	BØ	CØ	CKT	AMPS/POLES	kVA	DESCRIPTION
ACU-1	0.5	20/3	1	X			2	20/1	0.3	CP-1
	0.5		3		X		4	20/1		SPARE
	0.5		5			X	6	20/1	0.7	EF-1
CU-1	0.2	20/3	7	X			8	20/2	1.0	EUH-1
	0.2		9		X		10		1.0	
	0.2		11			X	12	20/1		SPARE
ACU-2	0.1	20/3	13	X			14	20/1	0.7	EF-2
	0.1		15		X		16	20/1		SPARE
	0.1		17			X	18	20/1	0.6	ELEVATOR PIT LTG & RECEPT
CU-2	3.5	40/3	19	X			20	20/1	1.0	ELEVATOR CAB LTG & POWER
	3.5		21		X		22	30/2	2.3	ELEVATOR LOBBY SNOW MELT
	3.5		23			X	24		2.3	
SPARE		20/3	25	X			26	20/1		
			27		X		28	20/1		
			29			X	30	20/1		
SPARE		20/3	31	X			32	30/2		
			33		X		34			
			35			X	36	20/1		SPARE
SPACE			37	X			38			SPACE
SPACE			39		X		40			SPACE
SPAE			41			X	42			SPACE
		kVA		7.3	7.6	7.9	kVA			
		AMPS		60.8	63.3	65.8	AMPS			

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM
MP Consultants
CONSULTING ENGINEERING
MINNEAPOLIS • MINNESOTA

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL
SOUTHWEST
Green Line LRT Extension

CIVIL - VOLUME 11D
PENN STATION
ELECTRICAL
SCHEDULES (2 OF 2)

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-PEN-ELE-SCH-502

SHEET 202 OF 319

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CODE SUMMARY - CENTER PLATFORM
VAN WHITE STATION

CODE REFERENCES

MINNESOTA STATE BUILDING CODE	2015
NFPA 130 – STANDARD FOR FIXED GUIDEWAY TRANSIT AND PASSENGER RAIL SYSTEMS	2014

IBC REVIEW

A. DESCRIPTION
LOCATION: MINNEAPOLIS, MN

THE LIGHT RAIL TRANSIT STATION IS A PARTIALLY CANOPIED PLATFORM AREA. IT CONSISTS OF A PLATFORM 270' LONG BY 25'–11 1/2" ACCESSED BY A SLOPED WALK AT EACH END OF PLATFORM. PLATFORM IS OPEN TO EXTERIOR ON ALL FOUR SIDES.

A PASSENGER ELEVATOR AND OPEN STAIR (VERTICAL CIRCULATION) ARE PROVIDED FOR PEDESTRIAN STATION ACCESS FROM VAN WHITE BOULEVARD.

TYPICAL PLATFORM AREA: 7008 SQUARE FEET (GROSS AREA)
5512 SQUARE FEET (NET AREA AFTER STRUCTURAL ELEMENTS, FIXTURES AND PERMANENTLY INSTALLED FURNISHINGS ARE REMOVED)

CANOPY COVERAGE AREA AT PLATFORM: = 3416 SQUARE FEET
1708 SQUARE FEET (1 @ 84'–0" X 20'–4") WEST CANOPY
1708 SQUARE FEET (1 @ 84'–0" X 20'–4") EAST CANOPY

B. OCCUPANCY CLASSIFICATION (IBC 2015 SECTION 303.1)

WAITING AREAS IN TRANSPORTATION TERMINALS: GROUP 'A' DIVISION 3
(15 S.F. PER PERSON)

C. OCCUPANCY SEPARATIONS

NONE ARE REQUIRED
ELEVATOR HOIST WAY DOES NOT PENETRATE FLOOR/CEILING OR ROOF/CEILING ASSEMBLIES – NO RATING REQUIRED
ELEVATOR MACHINE ROOM DOES NOT ABUT, OR OPEN TO, THE ELEVATOR HOIST WAY – NO RATING REQUIRED

D. TYPE OF CONSTRUCTION (IBC 2015 TABLE 601)

TYPE IIB CONSTRUCTION

E. ALLOWABLE BUILDING AREA AND BUILDING HEIGHT (IBC 2015 TABLE 503)

2 STORIES AT 9,500 SQUARE FEET PER STORY

F. IBC EXITING SUMMARY

NO. OF OCCUPANTS = 5512 S.F. / 15 S.F./OCC = 368
REQUIRED EGRESS WIDTH = 368 X 0.2 = 74" (PER 1005.3.2)
WIDTH PROVIDED = 2 RAMPS AT 145" = 290"
2 MEANS OF EGRESS PROVIDED
THE VERTICAL CIRCULATION IS NOT CONSIDERED A MEANS OF EGRESS FROM THE STATION, AND IT IS CONSIDERED UNOCCUPIED

PLATFORM COLOR AND FINISH SCHEDULE

PRODUCTS AND COLORS LISTED ARE THE BASIS OF DESIGN FOR AESTHETIC/ARCHITECTURAL INTENT. SEE SPECIFICATIONS FOR MATERIAL/PRODUCT REQUIREMENTS.

PLATFORM COLOR AND FINISH SCHEDULE

TYPE	STATION	STRUCTURAL STEEL PAINT COLOR	PLATFORM CONC COLOR	PLATFORM CONC FINISH	CONC WALL COLOR	CONC WALL FINISH	RAILING INFILL MATERIAL	ALUM WDW FRAME FINISH	EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA FINISH	ALUM COMP CANOPY SOFFIT AND FASCIA COLOR	ARCH WOVEN MESH
CENTER	VAN WHITE STATION	PPG 518–6 KNIGHT'S ARMOR	CEMSTONE SPLIT ROCK	LIGHT BROOM	CEMSTONE SPLIT ROCK	TBD	GALV STL CABLE	CLEAR ANODIZED	HUNTER DOUGLAS WOODWRIGHT 8420 LIGHT OAK	ALUCOBOND DAYLILY YELLOW	GKD OMEGA DIVERGENCE WITH ETCHED GRAPHIC

VERTICAL CIRCULATION COLOR AND FINISH SCHEDULE

PRECAST WALL COLOR	PRECAST FLOOR COLOR	STRUCTURAL STEEL PAINT COLOR	PLATFORM CONC COLOR	PLATFORM CONC FINISH	CONC WALL COLOR	CONC WALL FINISH	ARCH WOVEN MESH	ALUM WDW FRAME FINISH	EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA FINISH	ALUM COMP CANOPY SOFFIT AND FASCIA COLOR	TRANSLUCENT PLASTIC PANEL
TBD	TBD	PPG 518–6 KNIGHT'S ARMOR	CEMSTONE SPLIT ROCK	TBD	CEMSTONE SPLIT ROCK	TBD	GKD OMEGA DIVERGENCE	CLEAR ANODIZED	HUNTER DOUGLAS WOODWRIGHT 8420 LIGHT OAK	ALUCOBOND DAYLILY YELLOW	3FORM KODA XT YELLOW Y–04

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

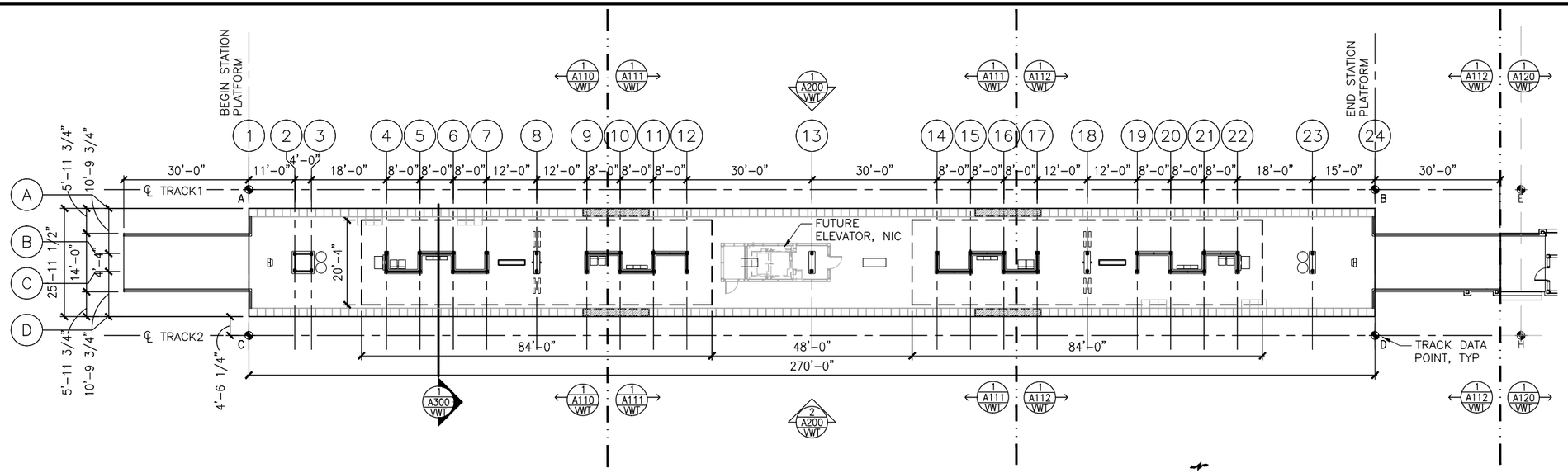
CIVIL - VOLUME 11D
VAN WHITE STATION
CODE SUMMARY / FINISH SCHEDULE

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-COD-010

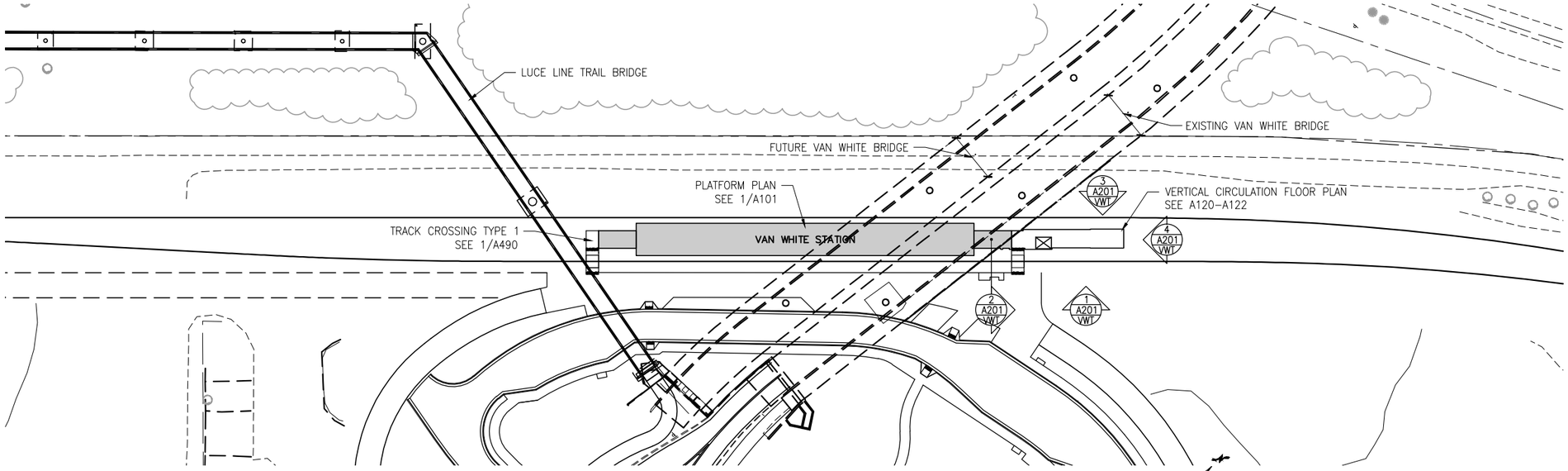
SHEET 203 OF 394

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1 PLATFORM PLAN
SCALE: 1"=30'

SCALE 0 7.5 15 30



2 STATION AREA PLAN
SCALE: 1"=100'

SCALE 0 25 50 100

TRACK DATA

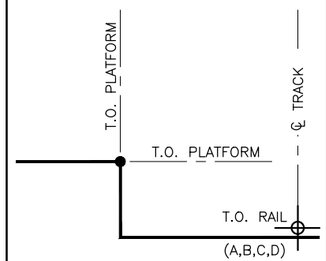
℄ ELEV 100'-0" (LOCATION ON PLAN)

TRACK 1 EL 100'-0"= 816.93 (PT 'B')

POINT	T.O. RAIL ELEVATION	TRACK 1 STATIONING	
A	817.47	1898+32.55	
B	816.93	1901+02.55	

TRACK 2 EL 100'-0"= 816.93 (PT 'D')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
C	817.47	2898+32.55	
D	816.93	2901+02.55	



SECTION DIAGRAM AT PLATFORM EDGE
SEE DTL 1/A520
FOR DETAIL AND DIMENSIONS

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

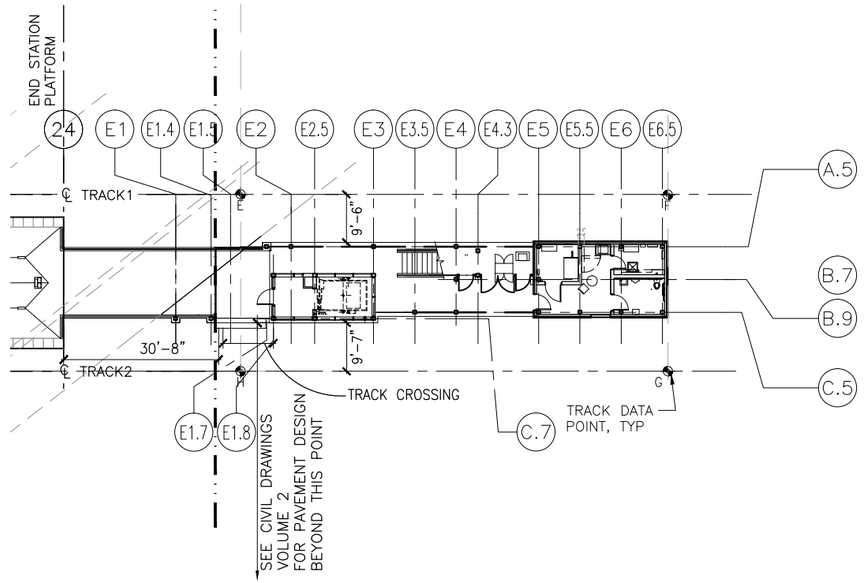
CIVIL - VOLUME 11D
VAN WHITE STATION
PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-101

SHEET 204 OF 394

Jan. 18 2016 10:00 am v:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-101.DWG By: v-mccartp



1 VERTICAL CIRCULATION PLAN
SCALE: 1"=30'

0 7.5 15 30
SCALE

SEE SHEET A101 FOR STATION PLATFORM TRACK DATA POINT LOCATIONS

SEE SHEET A101 FOR STATION AREA PLAN

TRACK DATA

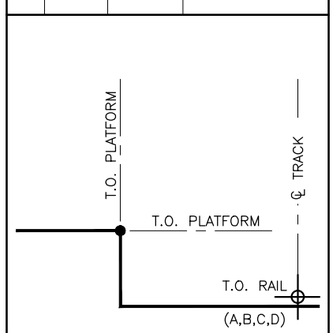
ELEV 100'-0" (LOCATION ON PLAN)

TRACK 1 EL 100'-0"= 816.93 (PT 'B')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
A	–	–	SEE A101
B	–	–	SEE A101
E	818.86	1901+37.55	
F	816.92	1902+22.18	

TRACK 2 EL 100'-0"= 816.93 (PT 'D')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
C	–	–	SEE A101
D	–	–	SEE A101
G	816.92	2802+22.14	
H	816.86	2901+37.55	



SECTION DIAGRAM AT PLATFORM EDGE
SEE DTL 1/A520
FOR DETAIL AND DIMENSIONS

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

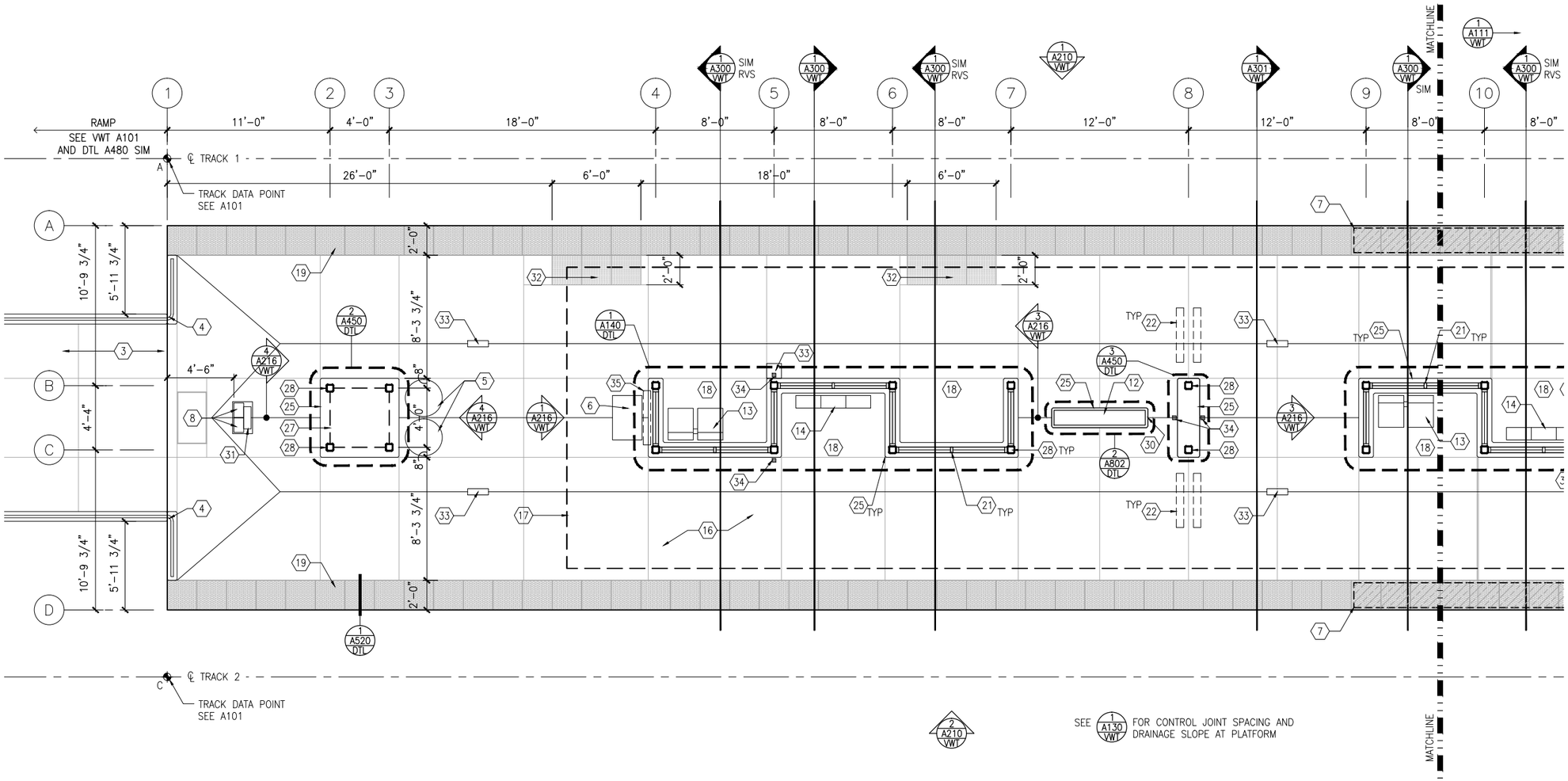
CIVIL - VOLUME 11D
VAN WHITE STATION
VERTICAL CIRCULATION PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-102

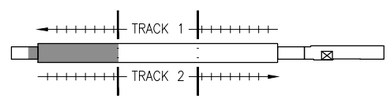
SHEET 205 OF 394

Jan, 18 2016 10:02 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-102.DWG By: v-mccarrtp



1 WEST PARTIAL PLATFORM PLAN
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



KEYPLAN

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN-CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

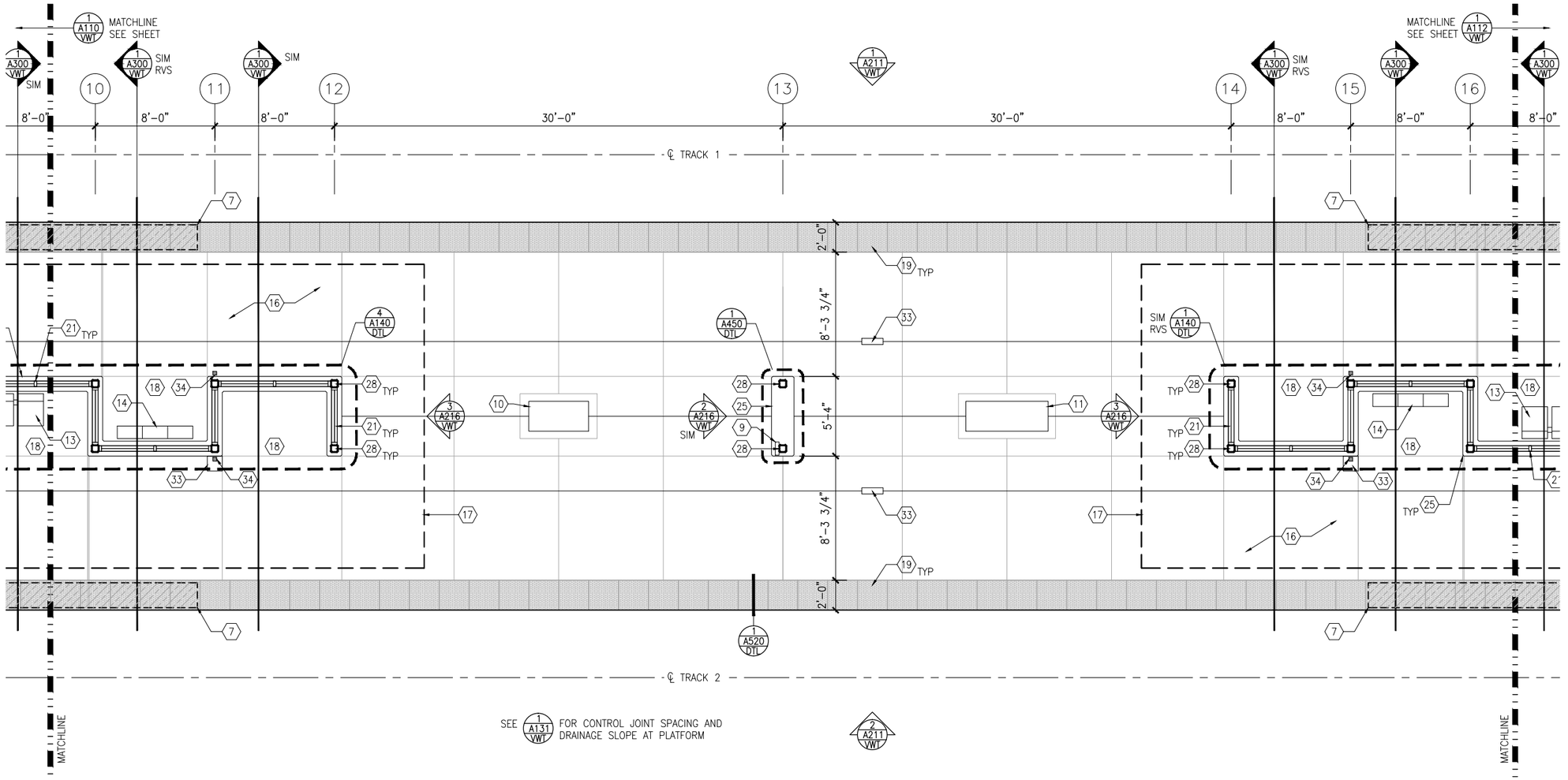
CIVIL - VOLUME 11D
VAN WHITE STATION
WEST PARTIAL PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-110

SHEET 206 OF 394

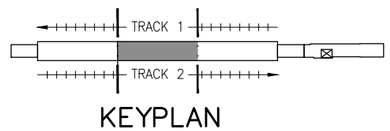
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1 MIDDLE PARTIAL PLATFORM PLAN

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



KEYPLAN

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN-CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

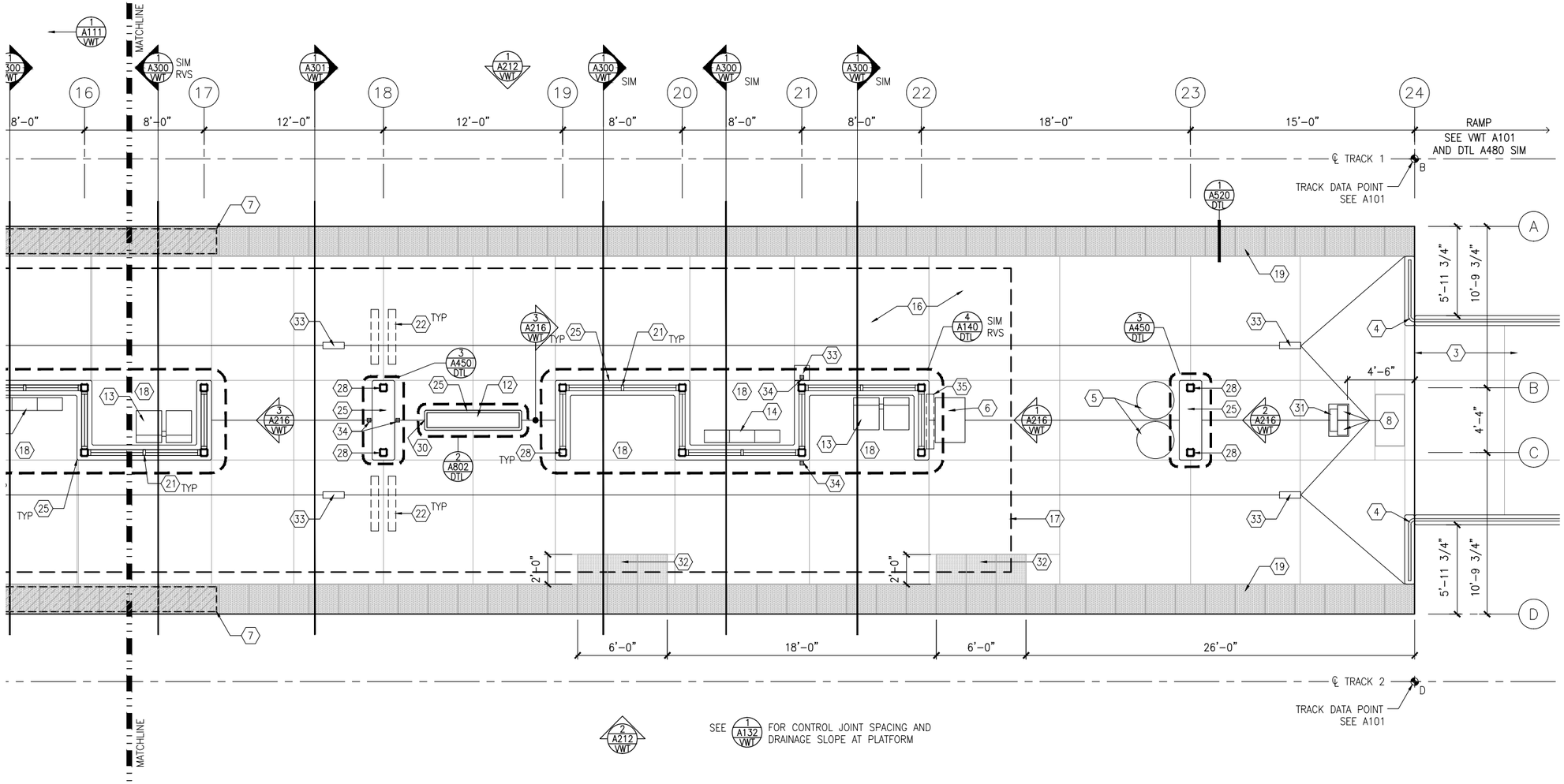
CIVIL - VOLUME 11D
VAN WHITE STATION
MIDDLE PARTIAL PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-111

SHEET 207 OF 394

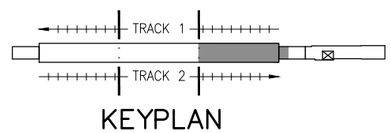
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1 EAST PARTIAL PLATFORM PLAN

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



KEYPLAN

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN-CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
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14. LEANING RAIL
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26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

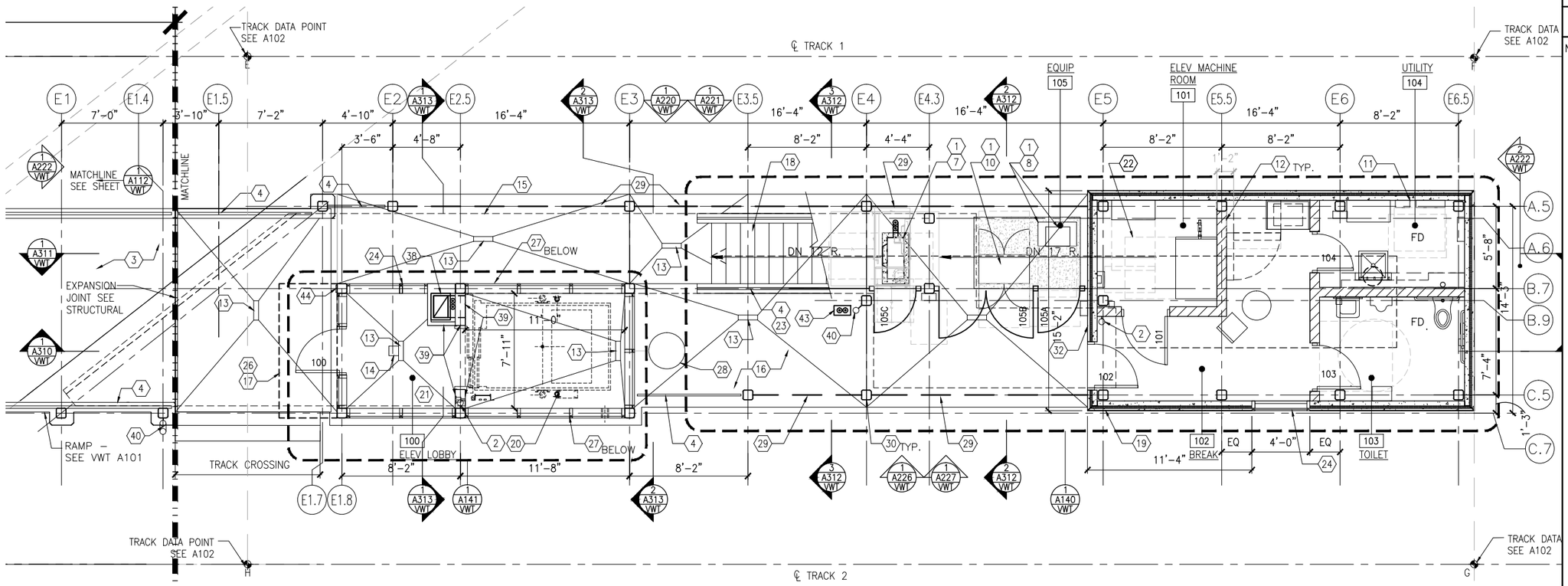
CIVIL - VOLUME 11D
VAN WHITE STATION
EAST PARTIAL PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-112

SHEET 208 OF 394

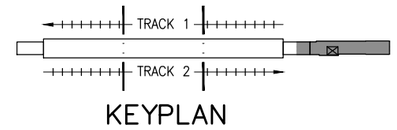
Jan, 18 2016 10:04 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-112.dwg By: v-mccartp



1 VC PLATFORM LEVEL PLAN

SCALE:1/8"=1'-0"

SCALE 0 2 4 8



KEYPLAN

SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. CONCRETE HOUSEKEEPING PAD
2. RAINWATER LEADER – SEE PLUMB
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE
7. CONDENSING UNIT – SEE MECH
8. TRANSFORMER – SEE ELEC
9. EMERGENCY CALL BOX
10. COMMUNICATION CABINET
11. ELECTRICAL CABINET
12. CMU WALL
13. AREA DRAIN
14. SNOW MELT SYSTEM
15. PRCST CONC WALKWAY
16. CONCRETE PLATFORM
17. CANOPY ABOVE
18. PRCST CONC STAIR – SEE STRUCT
19. PRCST CONC WALL PANEL–SEE STRUCT
20. ELEVATOR
21. ELEVATOR LOBBY
22. ELEVATOR MACHINE ROOM
23. GUARD RAIL
24. ALUM & GLASS FRAMING SYSTEM
25. VARIABLE MESSAGE SIGN
26. METAL SOFFIT AND FASCIA
27. GUARD RAIL
28. SUMP PIT
29. ARCHITECTURAL WOVEN MESH
30. STEEL COLUMN – SEE STRUCTURAL
31. STEEL BEAM – SEE STRUCTURAL
32. CONNECTION WALL HYDRANT
33. EXPANSION JOINT
34. EXISTING CRASH BARRIER
35. CRASH BARRIER/GUARD RAIL
36. EXISTING BARRIER / SIDEWALK
37. ROOF BELOW – SEE ROOF PLAN
38. CHASE – SEE MECH FOR DUCT WORK
39. COMPOSITE ALUM WALL PANEL
40. PAINTED CAST IRON (AP CTG) METAL DOWNSPOUT
41. LIGHT MOUNTED TO STRUCTURE
42. NOT USED
43. REFRIGERANT LINE ENCLOSURE– SEE MECHANICAL FOR REFRIGERANT LINES
44. DOOR OPERATOR PUSH BUTTON

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

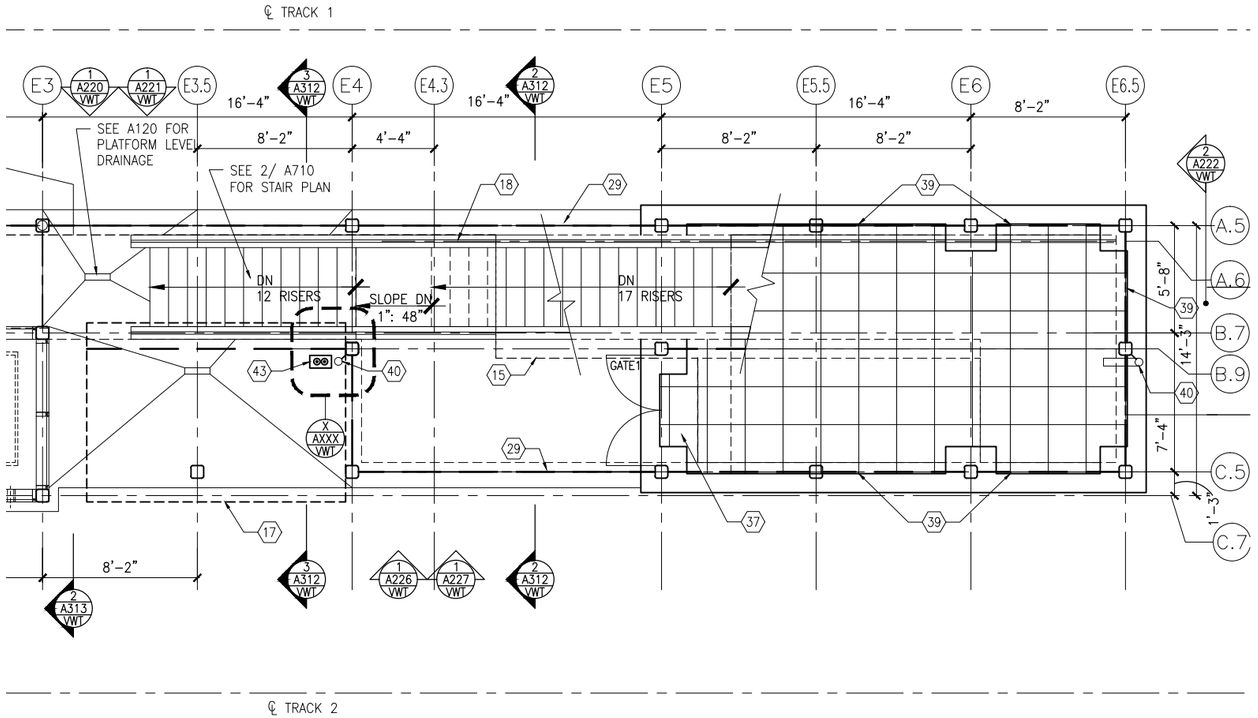
CIVIL - VOLUME 11D
VAN WHITE STATION
VC PLATFORM LEVEL PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-120

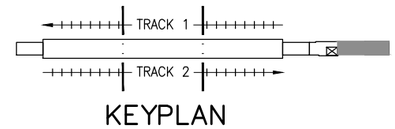
SHEET 209 OF 394

Jan, 18 2016 10:04 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-120.dwg By: v-mccarrtp



1 VC INTERMEDIATE LEVEL PLAN
SCALE:1/8"=1'-0"

0 2 4 8
SCALE



KEYPLAN

SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. CONCRETE HOUSEKEEPING PAD
2. RAINWATER LEADER – SEE PLUMB
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE
7. CONDENSING UNIT – SEE MECH
8. TRANSFORMER – SEE ELEC
9. EMERGENCY CALL BOX
10. COMMUNICATION CABINET
11. ELECTRICAL CABINET
12. CMU WALL
13. AREA DRAIN
14. SNOW MELT SYSTEM
15. PRCST CONC WALKWAY
16. CONCRETE PLATFORM
17. CANOPY ABOVE
18. PRCST CONC STAIR – SEE STRUCT
19. PRCST CONC WALL PANEL–SEE STRUCT
20. ELEVATOR
21. ELEVATOR LOBBY
22. ELEVATOR MACHINE ROOM
23. GUARD RAIL
24. ALUM & GLASS FRAMING SYSTEM
25. VARIABLE MESSAGE SIGN
26. METAL SOFFIT AND FASCIA
27. GUARD RAIL
28. SUMP PIT
29. ARCHITECTURAL WOVEN MESH
30. STEEL COLUMN – SEE STRUCTURAL
31. STEEL BEAM – SEE STRUCTURAL
32. CONNECTION WALL HYDRANT
33. EXPANSION JOINT
34. EXISTING CRASH BARRIER
35. CRASH BARRIER/GUARD RAIL
36. EXISTING BARRIER / SIDEWALK
37. ROOF BELOW – SEE ROOF PLAN
38. CHASE – SEE MECH FOR DUCT WORK
39. COMPOSITE ALUM WALL PANEL
40. PAINTED CAST IRON (AP CTG) METAL DOWNSPOUT
41. LIGHT MOUNTED TO STRUCTURE
42. NOT USED
43. REFRIGERANT LINE ENCLOSURE– SEE MECHANICAL FOR REFRIGERANT LINES
44. DOOR OPERATOR PUSH BUTTON

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
VC INTERMEDIATE LEVEL PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-121

SHEET 210 OF 394

Jan, 18 2016 10:05 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-121.dwg By: v-mccartp

LEGEND

PRECAST CONCRETE WALKWAY

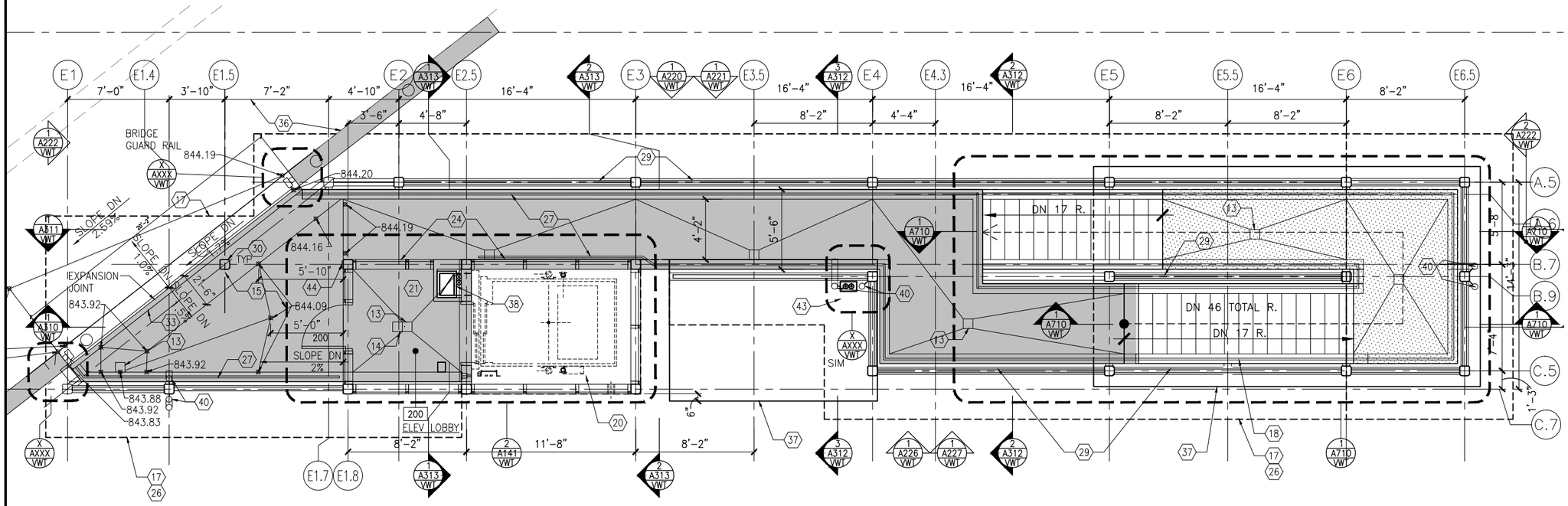
SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

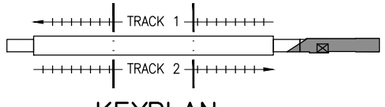
1. CONCRETE HOUSEKEEPING PAD
2. RAINWATER LEADER – SEE PLUMB
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE
7. CONDENSING UNIT – SEE MECH
8. TRANSFORMER – SEE ELEC
9. EMERGENCY CALL BOX
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17. CANOPY ABOVE
18. PRCST CONC STAIR – SEE STRUCT
19. PRCST CONC WALL PANEL–SEE STRUCT
20. ELEVATOR
21. ELEVATOR LOBBY
22. ELEVATOR MACHINE ROOM
23. GUARD RAIL
24. ALUM & GLASS FRAMING SYSTEM
25. VARIABLE MESSAGE SIGN
26. METAL SOFFIT AND FASCIA
27. GUARD RAIL
28. SUMP PIT
29. ARCHITECTURAL WOVEN MESH
30. STEEL COLUMN – SEE STRUCTURAL
31. STEEL BEAM – SEE STRUCTURAL
32. CONNECTION WALL HYDRANT
33. EXPANSION JOINT
34. EXISTING CRASH BARRIER
35. CRASH BARRIER/GUARD RAIL
36. EXISTING BARRIER / SIDEWALK
37. ROOF BELOW – SEE ROOF PLAN
38. CHASE – SEE MECH FOR DUCT WORK
39. COMPOSITE ALUM WALL PANEL
40. PAINTED CAST IRON (AP CTG) METAL DOWNSPOUT
41. LIGHT MOUNTED TO STRUCTURE
42. NOT USED
43. REFRIGERANT LINE ENCLOSURE– SEE MECHANICAL FOR REFRIGERANT LINES
44. DOOR OPERATOR PUSH BUTTON



1 VC BRIDGE LEVEL PLAN
SCALE:1/8"=1'-0"

0 2 4 8
SCALE





KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
VC BRIDGE LEVEL PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-122

SHEET 211 OF 394

Jan, 18 2016 10:06 am v:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-122.dwg By: v-mccarthyp

PAVEMENT NOTES	LEGEND
SLOPE TRANSITIONS ARE SHOWN FOR REFERENCE. BLEND/EASE TRANSITIONS TO DRAIN AND SO THAT NO ABRUPT CHANGE IN SLOPE IS VISIBLE ON PLATFORM SURFACE	– – – – – – SLOPES ———— CUT JOINTS

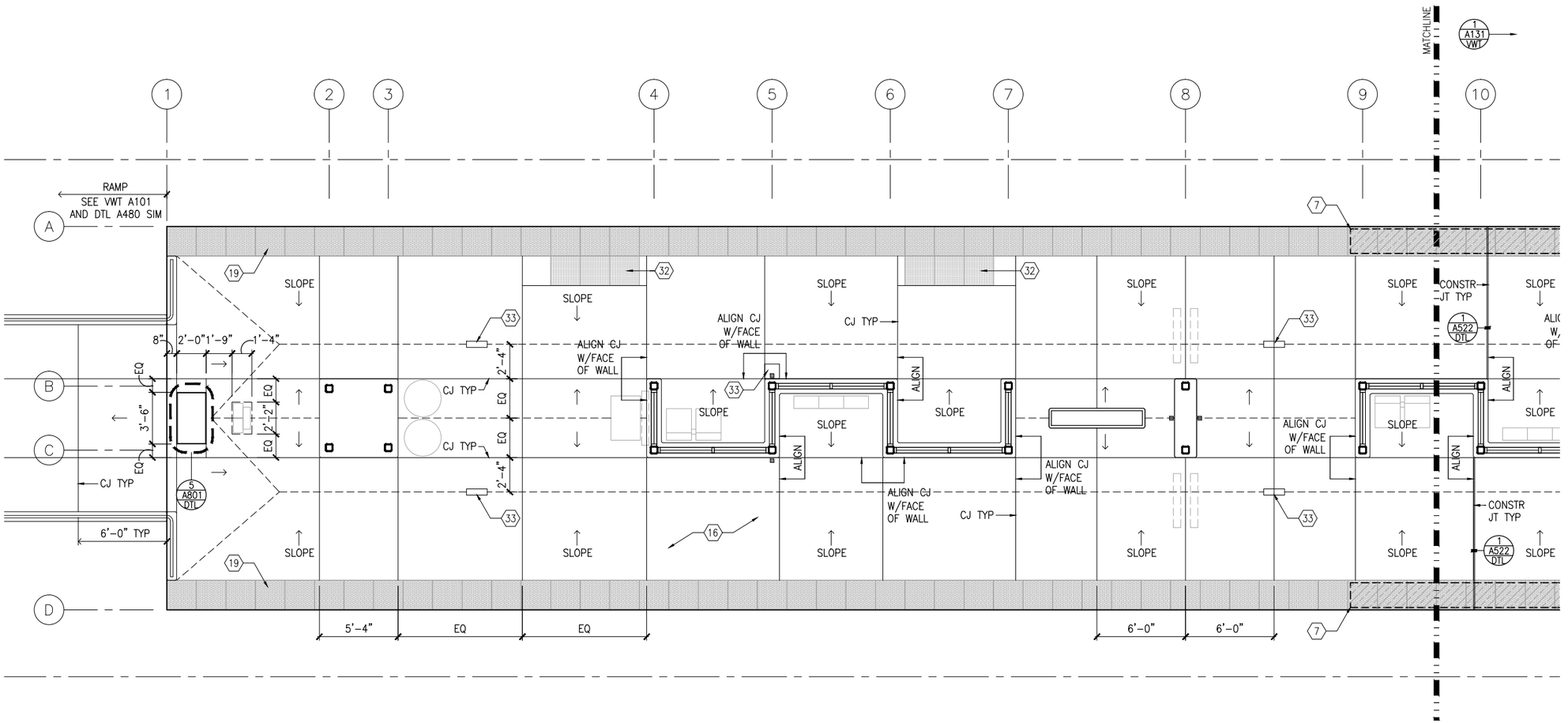
GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

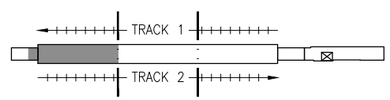
NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN–CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL



1 WEST PARTIAL PAVEMENT PLAN
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
WEST PARTIAL PAVEMENT PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-130

SHEET 212 OF 394

Jan, 18 2016 10:06 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-130.dwg By: v-mccartp

PAVEMENT NOTES	LEGEND
SLOPE TRANSITIONS ARE SHOWN FOR REFERENCE. BLEND/EASE TRANSITIONS TO DRAIN AND SO THAT NO ABRUPT CHANGE IN SLOPE IS VISIBLE ON PLATFORM SURFACE	– – – – – – SLOPES ———— CUT JOINTS

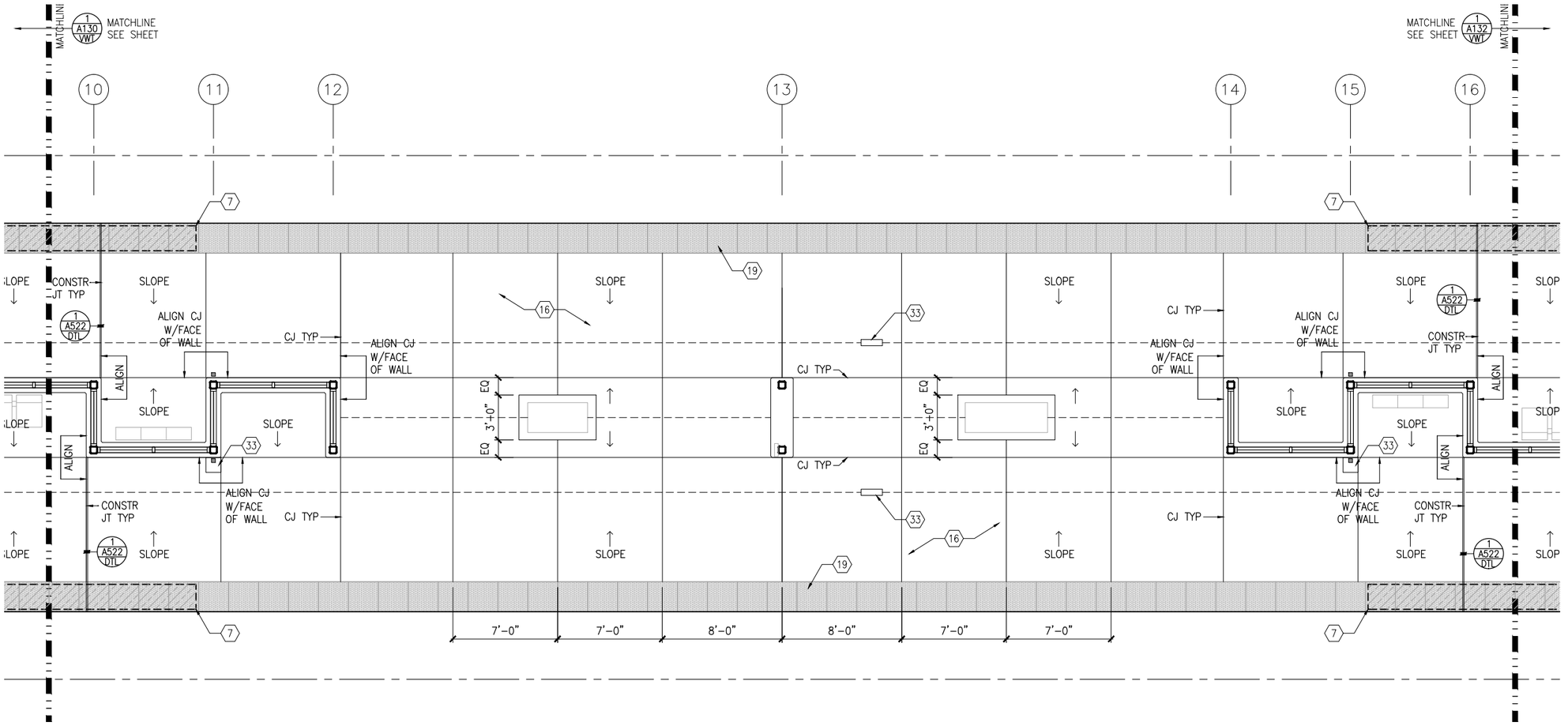
GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN–CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
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29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL



1 MIDDLE PARTIAL PAVEMENT PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
MIDDLE PARTIAL PAVEMENT PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-131

SHEET 213 OF 394

Jan, 18 2016 10:07 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-131.dwg By: v-mccartp

PAVEMENT NOTES	LEGEND
SLOPE TRANSITIONS ARE SHOWN FOR REFERENCE. BLEND/EASE TRANSITIONS TO DRAIN AND SO THAT NO ABRUPT CHANGE IN SLOPE IS VISIBLE ON PLATFORM SURFACE	– – – – – – SLOPES ———— CUT JOINTS

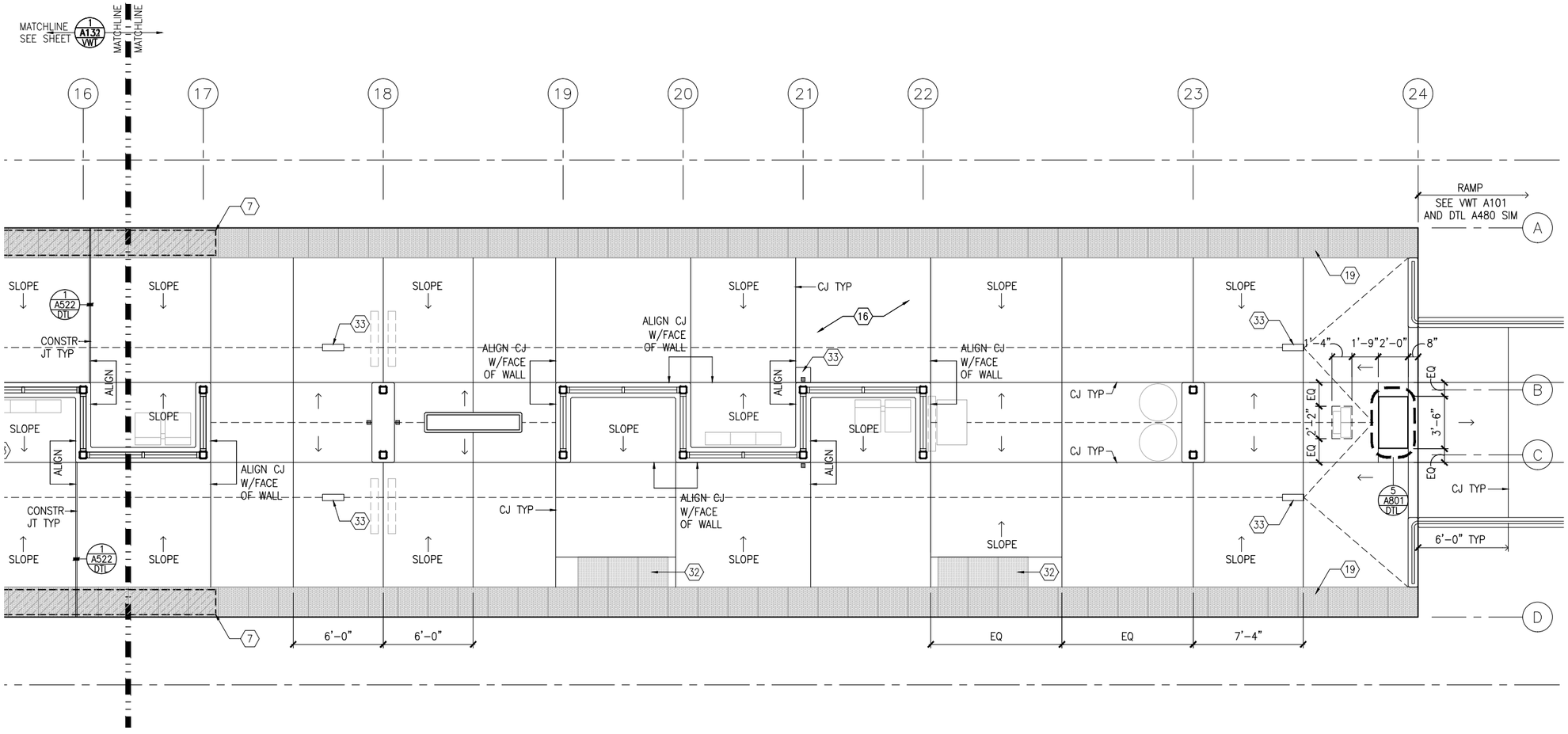
GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

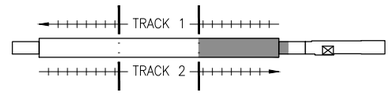
NOTE: ALL KEYNOTES MAY NOT BE USED

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30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL



1 EAST PARTIAL PAVEMENT PLAN
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

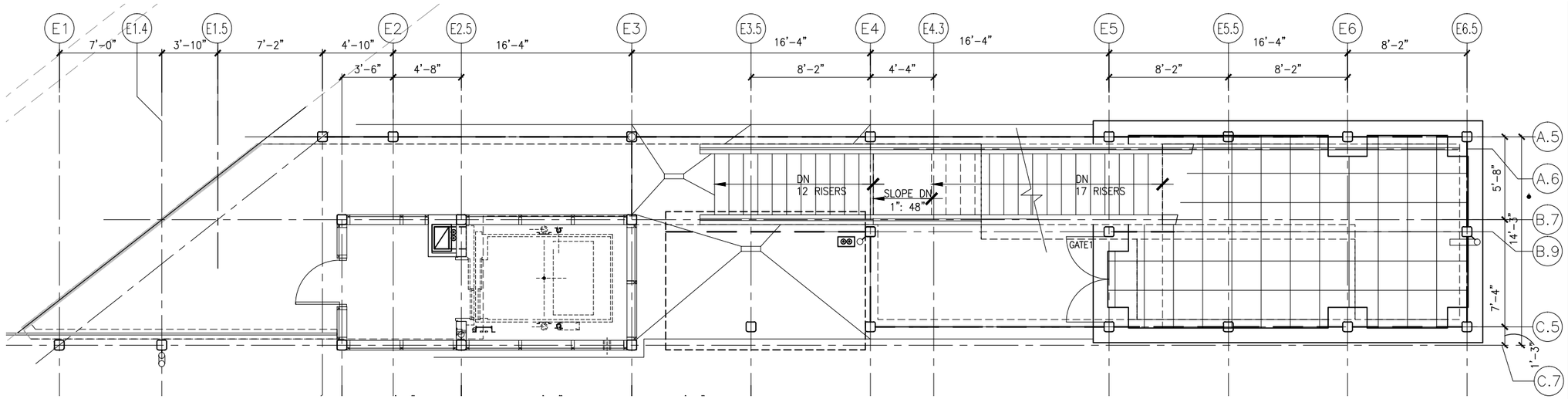
CIVIL - VOLUME 11D
VAN WHITE STATION
EAST PARTIAL PAVEMENT PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-132

SHEET 214 OF 394

Jan, 18 2016 10:07 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-132.dwg By: v-mccarrtp

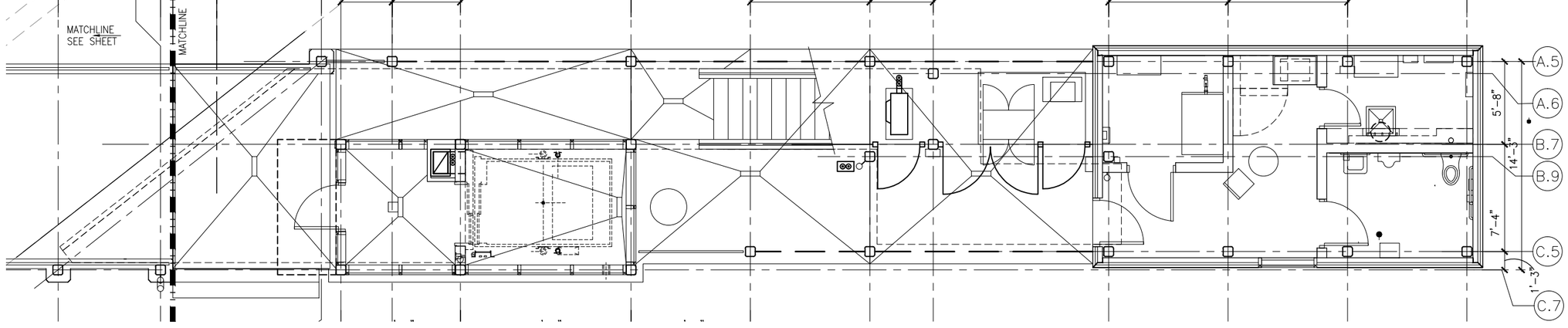


2 VC INTERMEDIATE LEVEL PAVEMENT PLAN

SCALE:1/8"=1'-0"

0 2 4 8

SCALE

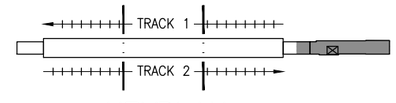


1 VC PLATFORM LEVEL PAVEMENT PLAN

SCALE:1/8"=1'-0"

0 2 4 8

SCALE



KEYPLAN

SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. CONCRETE HOUSEKEEPING PAD
2. RAINWATER LEADER – SEE PLUMB
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE
7. CONDENSING UNIT – SEE MECH
8. TRANSFORMER – SEE ELEC
9. EMERGENCY CALL BOX
10. COMMUNICATION CABINET
11. ELECTRICAL CABINET
12. CMU WALL
13. AREA DRAIN
14. SNOW MELT SYSTEM
15. PRCST CONC WALKWAY
16. CONCRETE PLATFORM
17. CANOPY ABOVE
18. PRCST CONC STAIR – SEE STRUCT
19. PRCST CONC WALL PANEL–SEE STRUCT
20. ELEVATOR
21. ELEVATOR LOBBY
22. ELEVATOR MACHINE ROOM
23. GUARD RAIL
24. ALUM & GLASS FRAMING SYSTEM
25. VARIABLE MESSAGE SIGN
26. METAL SOFFIT AND FASCIA
27. GUARD RAIL
28. SUMP PIT
29. ARCHITECTURAL WOVEN MESH
30. STEEL COLUMN – SEE STRUCTURAL
31. STEEL BEAM – SEE STRUCTURAL
32. CONNECTION WALL HYDRANT
33. EXPANSION JOINT
34. EXISTING CRASH BARRIER
35. CRASH BARRIER/GUARD RAIL
36. EXISTING BARRIER / SIDEWALK
37. ROOF BELOW – SEE ROOF PLAN
38. CHASE – SEE MECH FOR DUCT WORK
39. COMPOSITE ALUM WALL PANEL
40. PAINTED CAST IRON (AP CTG) METAL DOWNSPOUT
41. LIGHT MOUNTED TO STRUCTURE
42. NOT USED
43. REFRIGERANT LINE ENCLOSURE– SEE MECHANICAL FOR REFRIGERANT LINES
44. DOOR OPERATOR PUSH BUTTON

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

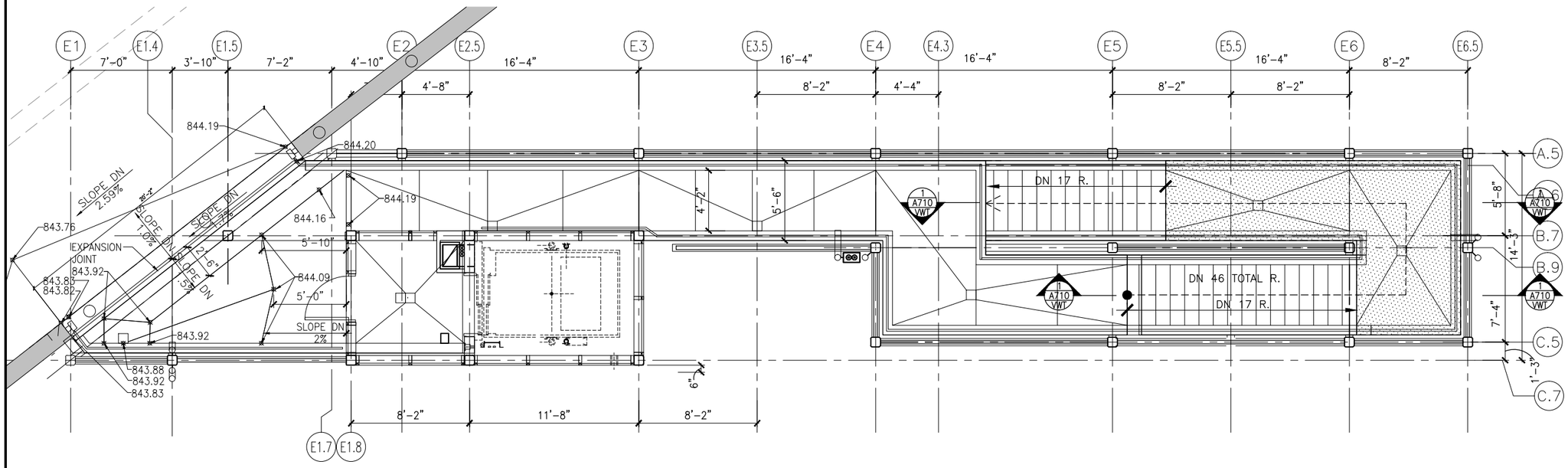
CIVIL - VOLUME 11D
VAN WHITE STATION
VC PAVEMENT PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-135

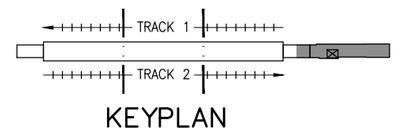
SHEET 215 OF 394

Jan, 18 2016 10:08 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-135.dwg By: v-mccartp



1 VC BRIDGE LEVEL PAVEMENT PLAN
SCALE:1/8"=1'-0"

0 2 4 8
SCALE



KEYPLAN

SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. CONCRETE HOUSEKEEPING PAD
2. RAINWATER LEADER – SEE PLUMB
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE
7. CONDENSING UNIT – SEE MECH
8. TRANSFORMER – SEE ELEC
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13. AREA DRAIN
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16. CONCRETE PLATFORM
17. CANOPY ABOVE
18. PRCST CONC STAIR – SEE STRUCT
19. PRCST CONC WALL PANEL–SEE STRUCT
20. ELEVATOR
21. ELEVATOR LOBBY
22. ELEVATOR MACHINE ROOM
23. GUARD RAIL
24. ALUM & GLASS FRAMING SYSTEM
25. VARIABLE MESSAGE SIGN
26. METAL SOFFIT AND FASCIA
27. GUARD RAIL
28. SUMP PIT
29. ARCHITECTURAL WOVEN MESH
30. STEEL COLUMN – SEE STRUCTURAL
31. STEEL BEAM – SEE STRUCTURAL
32. CONNECTION WALL HYDRANT
33. EXPANSION JOINT
34. EXISTING CRASH BARRIER
35. CRASH BARRIER/GUARD RAIL
36. EXISTING BARRIER / SIDEWALK
37. ROOF BELOW – SEE ROOF PLAN
38. CHASE – SEE MECH FOR DUCT WORK
39. COMPOSITE ALUM WALL PANEL
40. PAINTED CAST IRON (AP CTG) METAL DOWNSPOUT
41. LIGHT MOUNTED TO STRUCTURE
42. NOT USED
43. REFRIGERANT LINE ENCLOSURE– SEE MECHANICAL FOR REFRIGERANT LINES
44. DOOR OPERATOR PUSH BUTTON

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

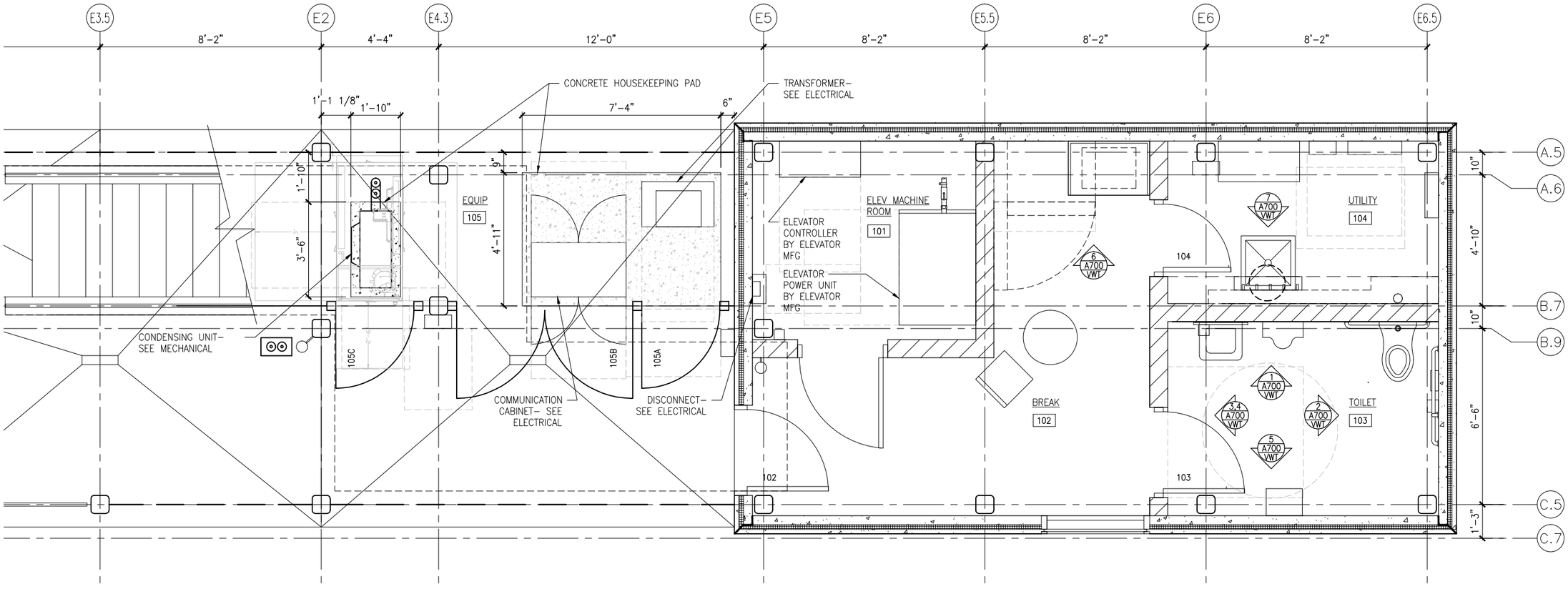
CIVIL - VOLUME 11D
VAN WHITE STATION
VC PAVEMENT PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-136

SHEET 216 OF 394

Jan, 18 2016 10:09 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-136.dwg By: v-mccarrtp



1 VC PLATFORM LEVEL ENLARGED PLAN

SCALE:1/4"=1'-0"

0 1 2 4

SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

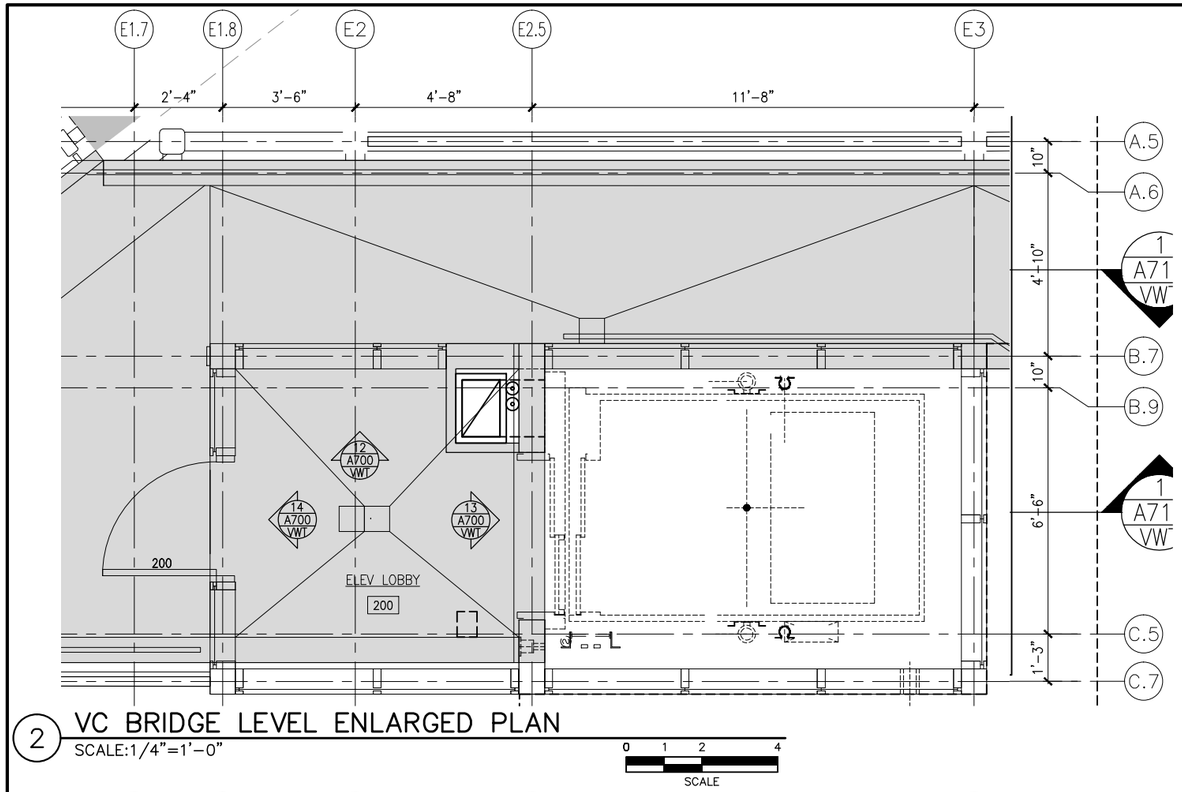
CIVIL - VOLUME 11D
VAN WHITE STATION
VC ENLARGED PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-140

SHEET 217 OF 394

Jan, 18 2016 10:10 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-140.dwg By: v-mccartp

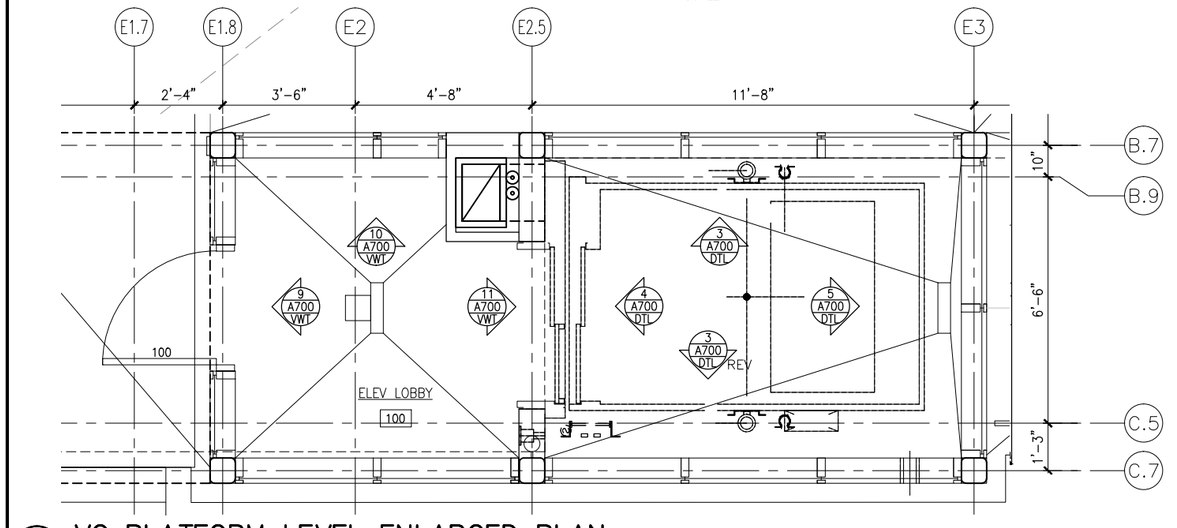


2 VC BRIDGE LEVEL ENLARGED PLAN

SCALE:1/4"=1'-0"

0 1 2 4

SCALE



1 VC PLATFORM LEVEL ENLARGED PLAN

SCALE:1/4"=1'-0"

0 1 2 4

SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

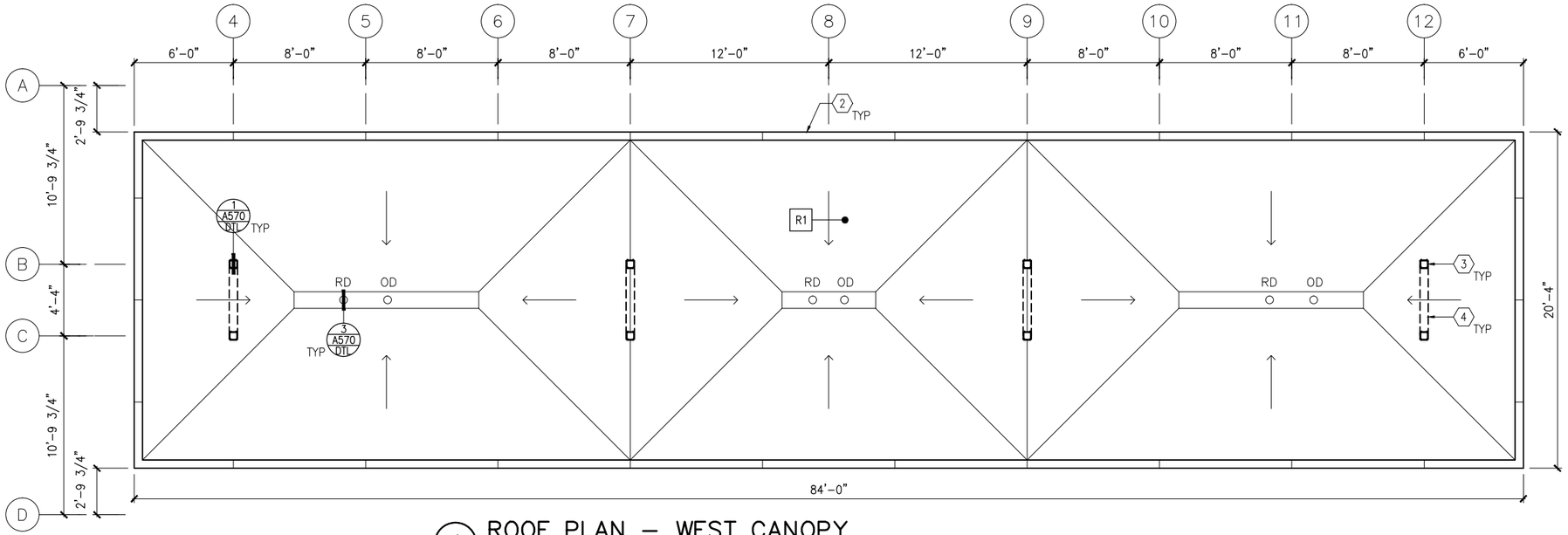
CIVIL - VOLUME 11D
VAN WHITE STATION
VC ENLARGED PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-141

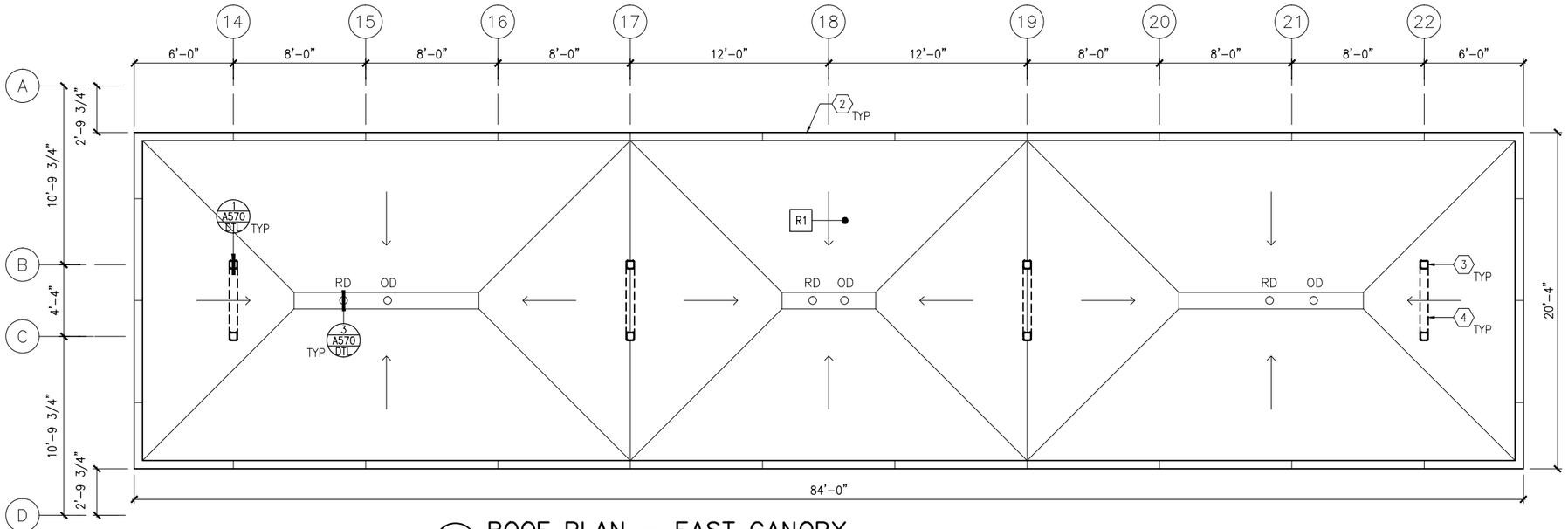
SHEET 218 OF 394

Jan, 19 2016 09:56 pm V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\VAN WHITE STATION\E4-VWT-ARC-PLN-141.dwg By: Ebsenjr



1 ROOF PLAN – WEST CANOPY
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



2 ROOF PLAN – EAST CANOPY
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. ROOF SLOPE IS 1/4" PER FT UNO
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ALUMINUM STOREFRONT AND TRANSLUCENT GLAZING SYSTEM
2. ALUMINUM COMPOSITE PANEL COPING
3. STEEL COLUMN – SEE STRUCTURAL
4. STEEL BEAM ABOVE – SEE STRUCTURAL
5. PREFINISHED METAL SCUPPER
6. PREFINISHED METAL GUTTER, SLOPE TO DOWNSPOUTS
7. ROOF BASE FLASHING
8. SUMP
9. CONCRETE SPLASH BLOCK
10. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
11. ROOF EXPANSION JOINT
12. BUILDING EXPANSION JOINT
13. VENT THROUGH ROOF – SEE PLUMB
14. INTEGRAL ROOF GUTTER – SLOPE TO DOWNSPOUTS BELOW
15. MECHANICAL EQUIP – SEE MECH

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- STEEL COLUMN
- OVERHEAD SUPPORT
- RD OD — ROOF DRAIN AND OVERFLOW ROOF DRAIN
- R1 — ROOF ASSEMBLY TYPE 1 BALLASTED EPDM
- R2 — ROOF ASSEMBLY TYPE 2 PRECAST PAVER OVER EPDM
- R3 — ROOF ASSEMBLY TYPE 3 SAME AS TYPE 2 WITH R_ INSULATION

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

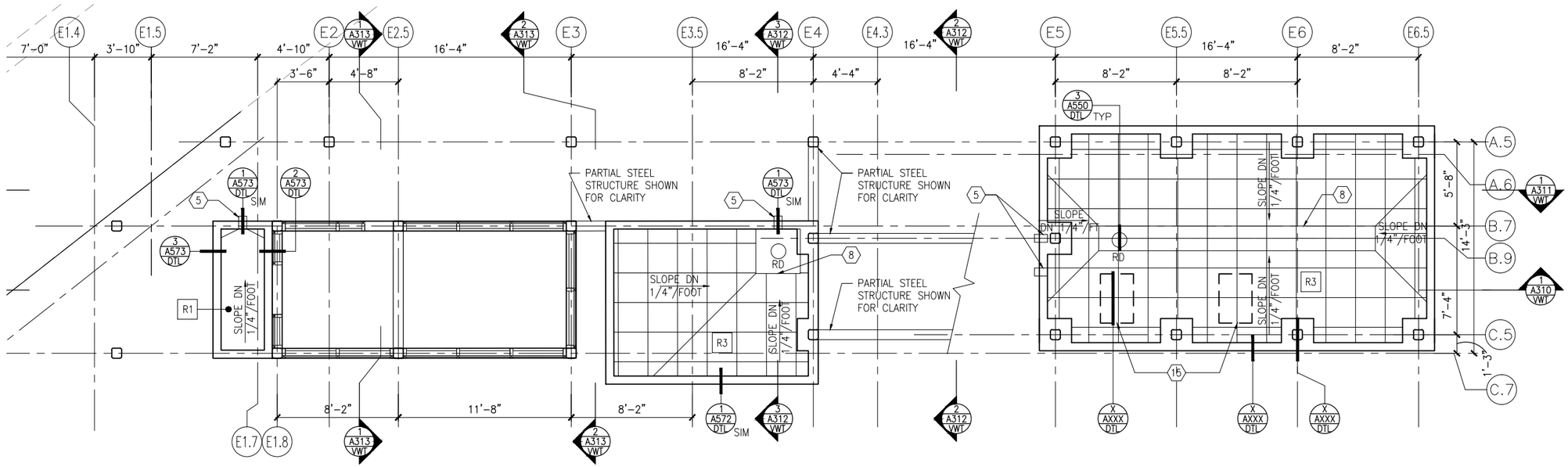
CIVIL - VOLUME 11D
VAN WHITE STATION
ROOF PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-150

SHEET 219 OF 394

Jan, 18 2016 10:11 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-150.dwg By: v-mccartp



1 VC LOWER ROOF PLAN

SCALE:1/8"=1'-0"

0 2 4 8

SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. ROOF SLOPE IS 1/4" PER FT UNO
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ALUMINUM STOREFRONT AND TRANSLUCENT GLAZING SYSTEM
2. ALUMINUM COMPOSITE PANEL COPING
3. STEEL COLUMN – SEE STRUCTURAL
4. STEEL BEAM ABOVE – SEE STRUCTURAL
5. PREFINISHED METAL SCUPPER
6. PREFINISHED METAL GUTTER, SLOPE TO DOWNSPOUTS
7. ROOF BASE FLASHING
8. SUMP
9. CONCRETE SPLASH BLOCK
10. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
11. ROOF EXPANSION JOINT
12. BUILDING EXPANSION JOINT
13. VENT THROUGH ROOF – SEE PLUMB
14. INTEGRAL ROOF GUTTER – SLOPE TO DOWNSPOUTS BELOW
15. MECHANICAL EQUIP – SEE MECH

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- STEEL COLUMN
- OVERHEAD SUPPORT
- RD OD — ROOF DRAIN AND OVERFLOW ROOF DRAIN
- R1 — ROOF ASSEMBLY TYPE 1 BALLASTED EPDM
- R2 — ROOF ASSEMBLY TYPE 2 PRECAST PAVER OVER EPDM
- R3 — ROOF ASSEMBLY TYPE 3 SAME AS TYPE 2 WITH R_ INSULATION

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

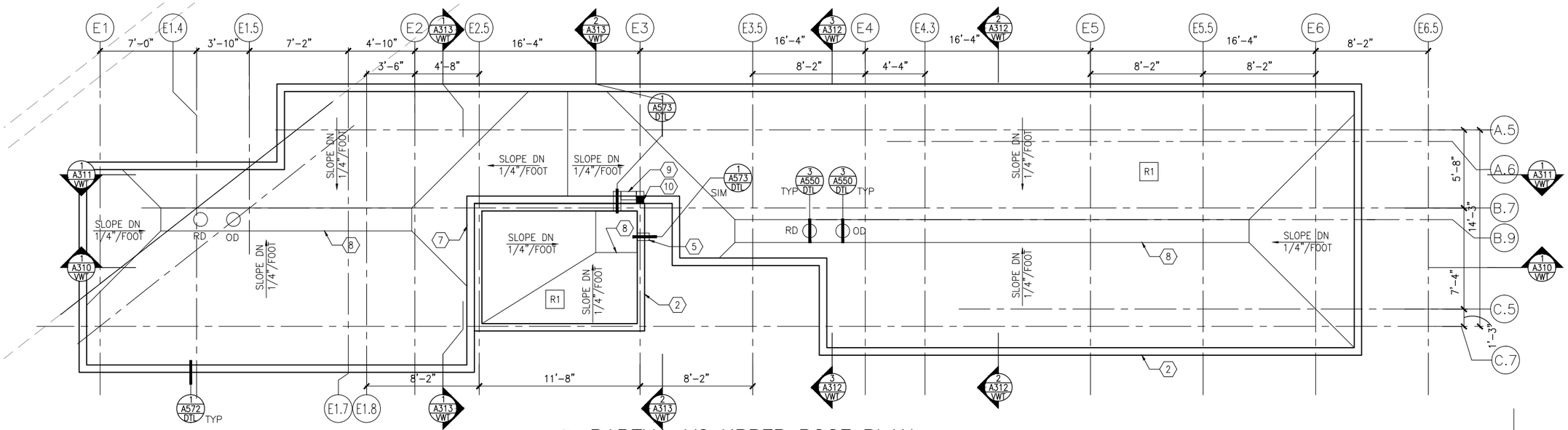
CIVIL - VOLUME 11D
VAN WHITE STATION
VC ROOF PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-160

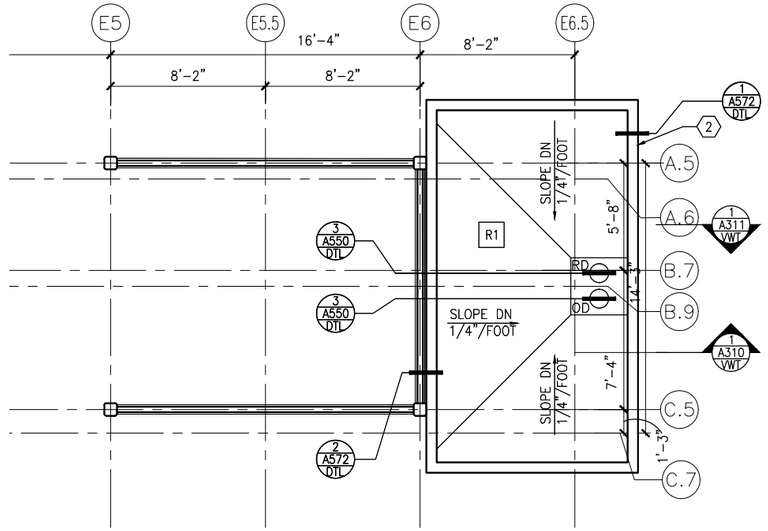
SHEET 220 OF 394

Jan, 18 2016 10:11 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-PLN-160.dwg By: v-mccarrtp



1 PARTIAL VC UPPER ROOF PLAN
SCALE:1/8"=1'-0"

0 2 4 8
SCALE



2 PARTIAL VC INTERMEDIATE ROOF PLAN
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. ROOF SLOPE IS 1/4" PER FT UNO
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ALUMINUM STOREFRONT AND TRANSLUCENT GLAZING SYSTEM
2. ALUMINUM COMPOSITE PANEL COPING
3. STEEL COLUMN – SEE STRUCTURAL
4. STEEL BEAM ABOVE – SEE STRUCTURAL
5. PREFINISHED METAL SCUPPER
6. PREFINISHED METAL GUTTER, SLOPE TO DOWNSPOUTS
7. ROOF BASE FLASHING
8. SUMP
9. CONCRETE SPLASH BLOCK
10. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
11. ROOF EXPANSION JOINT
12. BUILDING EXPANSION JOINT
13. VENT THROUGH ROOF – SEE PLUMB
14. INTEGRAL ROOF GUTTER – SLOPE TO DOWNSPOUTS BELOW

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- STEEL COLUMN
- OVERHEAD SUPPORT
- RD OD — ROOF DRAIN AND OVERFLOW ROOF DRAIN
- R1 — ROOF ASSEMBLY TYPE 1 BALLASTED EPDM
- R2 — ROOF ASSEMBLY TYPE 2 PRECAST PAVER OVER EPDM
- R3 — ROOF ASSEMBLY TYPE 3 SAME AS TYPE 2 WITH R_ INSULATION

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

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SOUTHWEST Green Line LRT Extension

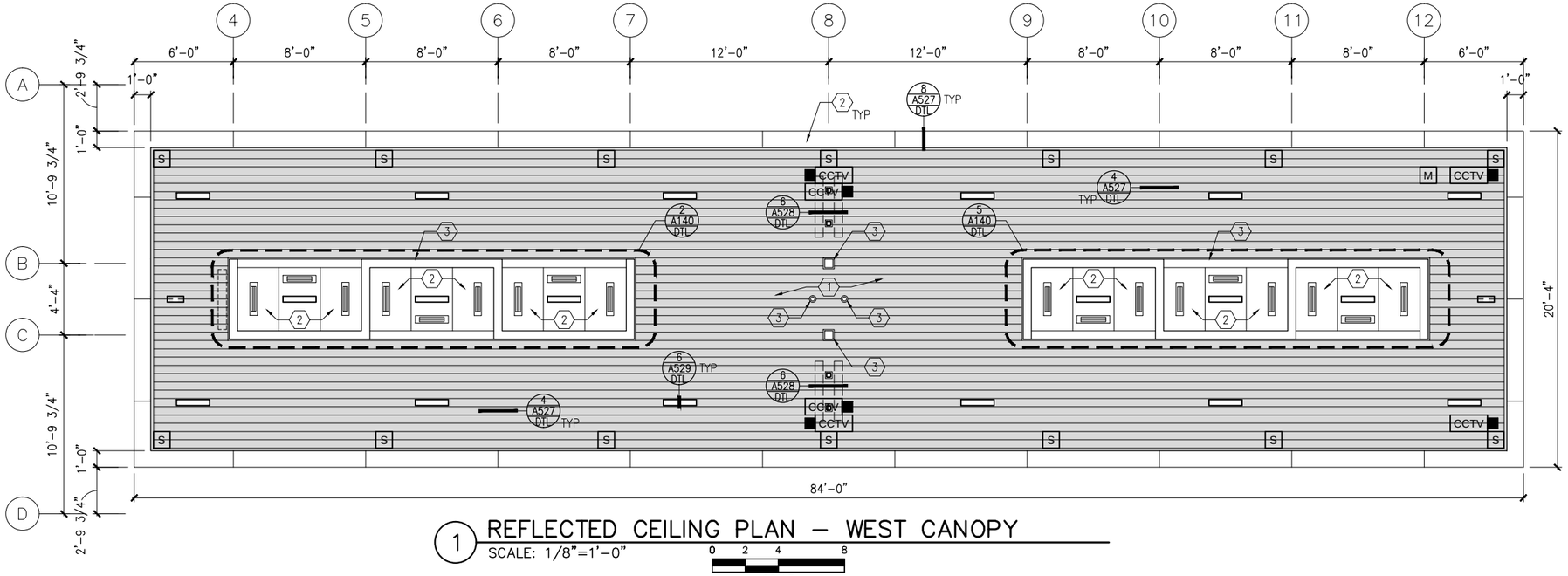
CIVIL - VOLUME 11D
VAN WHITE STATION
VC ROOF PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-PLN-161

SHEET 221 OF 394

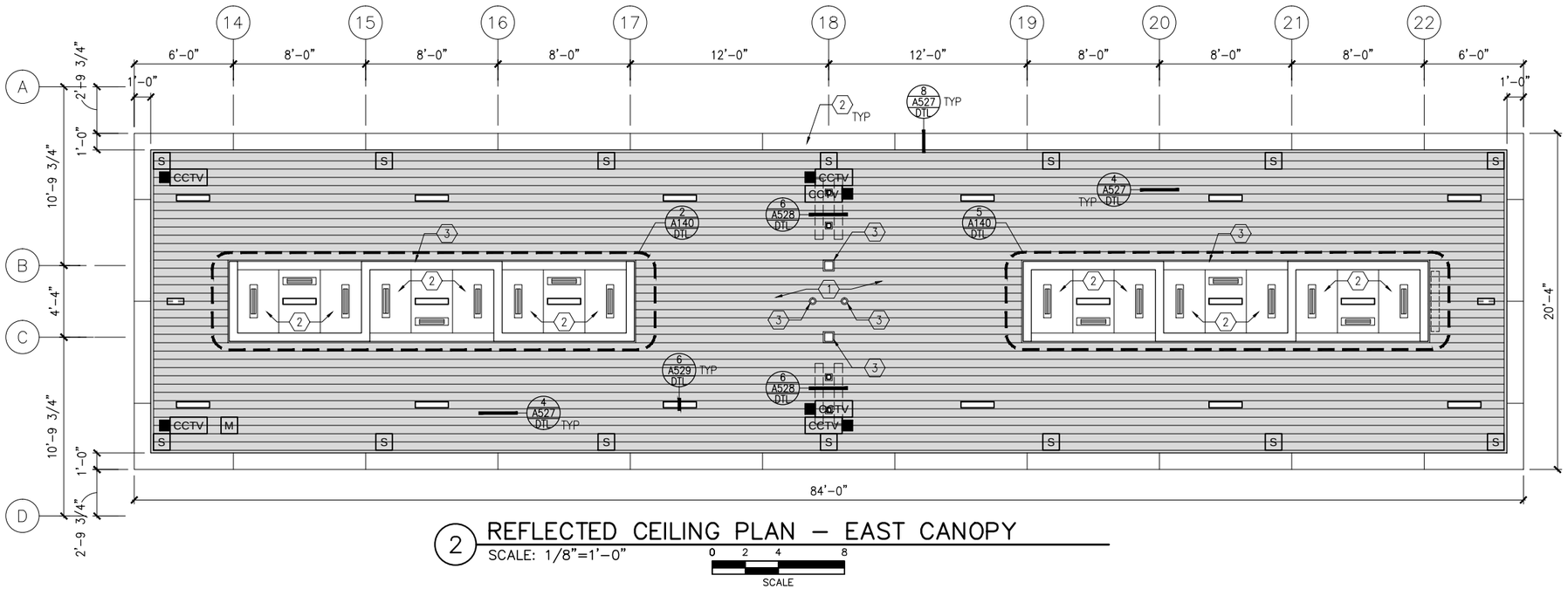
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1 REFLECTED CEILING PLAN – WEST CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 REFLECTED CEILING PLAN – EAST CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. EXTERIOR LINEAR METAL CEILING SOFFIT IN SHADED AREA
2. ALUMINUM COMPOSITE PANEL SOFFIT
3. PROVIDE MATCHING CEILING TRIM AROUND STEEL COLUMN AND/OR SHELTERS
4. PC CONC WALKWAY – SEE STRUCT
5. PC CONC STAIR – SEE STRUCT
6. EXPOSED STRUCTURE – SEE STRUCTURAL
7. ACOUSTIC CEILING
8. ACCESS PANELS FOR EQUIPMENT ACCESS
9. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- SHELTER HEATER
- S SPEAKER
- M MICROPHONE
- C SECURITY CAMERA
- ELECT/COMM JUNCTION BOX
- LED LINEAR LIGHT FIXTURE
- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY-IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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SOUTHWEST Green Line LRT Extension

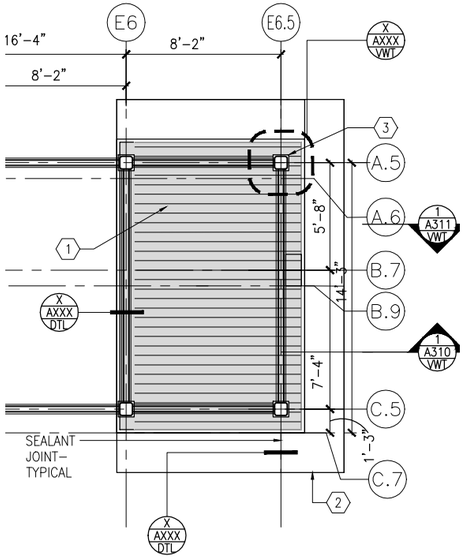
CIVIL - VOLUME 11D
VAN WHITE STATION
REFLECTED CEILING PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-RCP-180

SHEET 222 OF 394

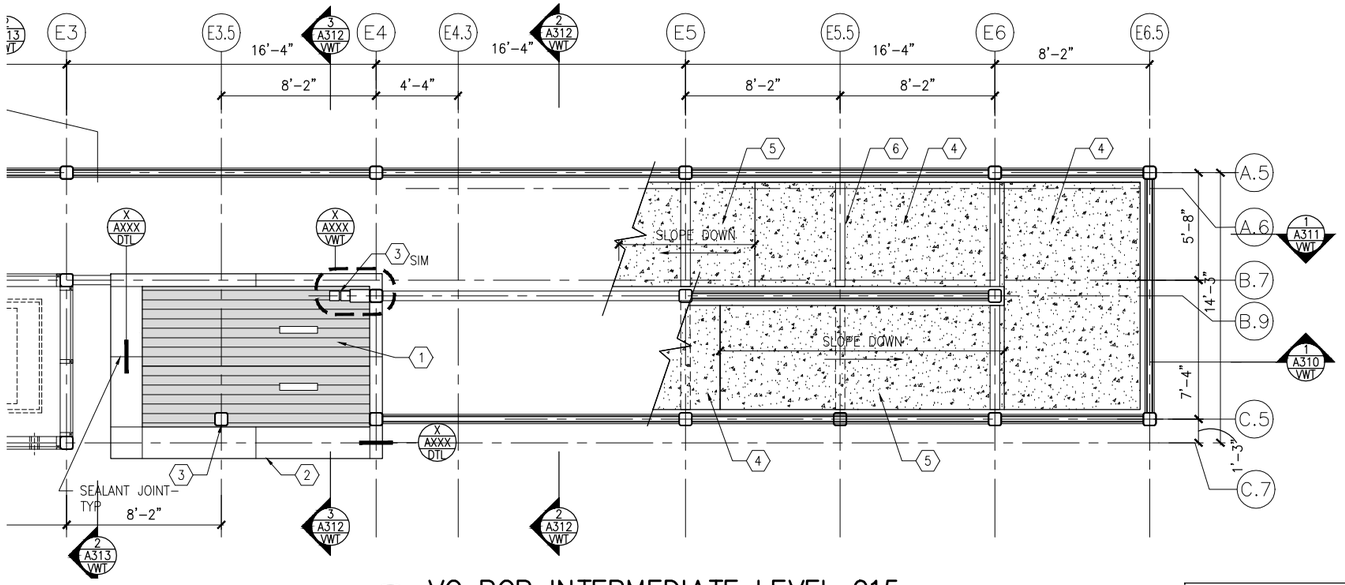
Jan, 18 2016 10:13 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-RCP-180.dwg By: v-mccartp



1 VC RCP INTERMEDIATE LEVEL 018

SCALE:1/8"-1'-0"

SCALE 0 2 4 8

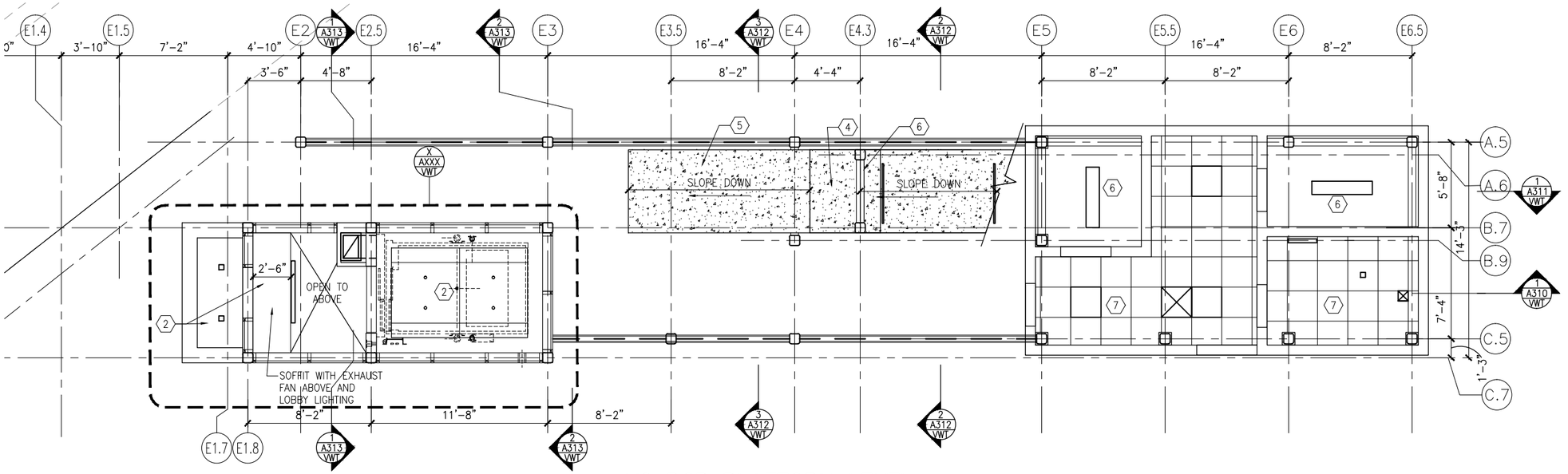


1 VC RCP INTERMEDIATE LEVEL 015

SCALE:1/8"-1'-0"

SCALE 0 2 4 8

SEE SHEETS A220-A227 FOR LED ACCENT LIGHTING AT FACADE



2 VC RCP PLATFORM LEVEL

SCALE:1/8"-1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. EXTERIOR LINEAR METAL CEILING SOFFIT IN SHADED AREA
2. ALUMINUM COMPOSITE PANEL SOFFIT
3. PROVIDE MATCHING CEILING TRIM AROUND STEEL COLUMN AND/OR SHELTERS
4. PC CONC WALKWAY – SEE STRUCT
5. PC CONC STAIR – SEE STRUCT
6. EXPOSED STRUCTURE – SEE STRUCTURAL
7. ACOUSTIC CEILING
8. ACCESS PANELS FOR EQUIPMENT ACCESS
9. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- SHELTER HEATER
- S SPEAKER
- M MICROPHONE
- C SECURITY CAMERA
- ELECT/COMM JUNCTION BOX
- LED LINEAR LIGHT FIXTURE
- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY-IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

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AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

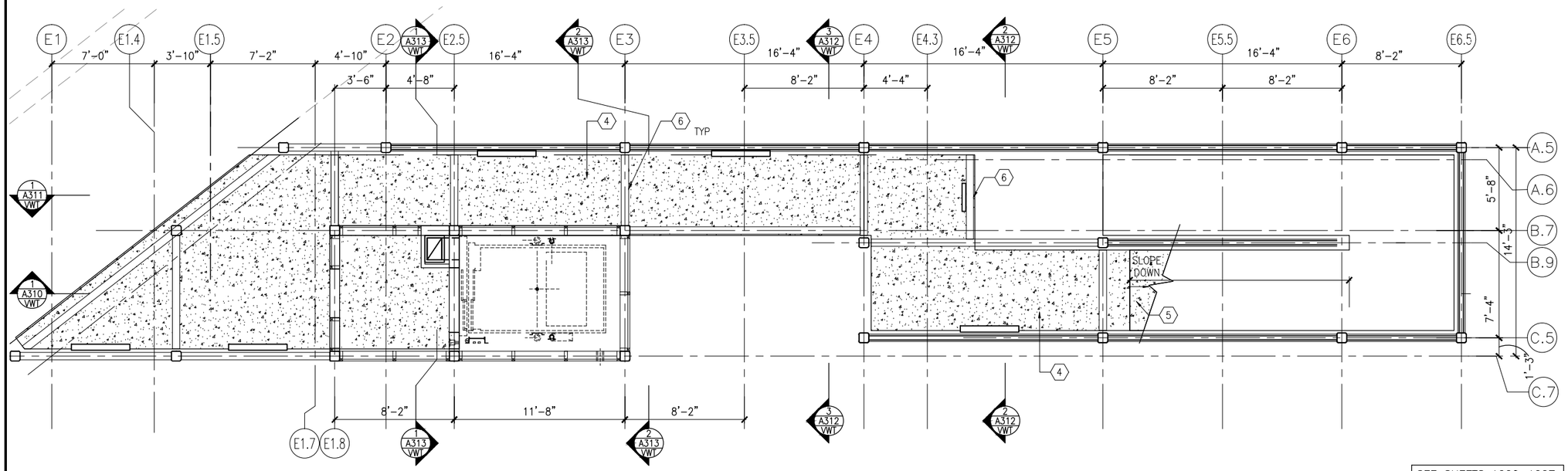
CIVIL - VOLUME 11D
VAN WHITE STATION
VC RCP INTERMEDIATE AND PLATFORM LEVEL

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-RCP-185

SHEET 223 OF 394

Jan, 18 2016 10:14 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-RCP-185.dwg By: v-mccarrtp

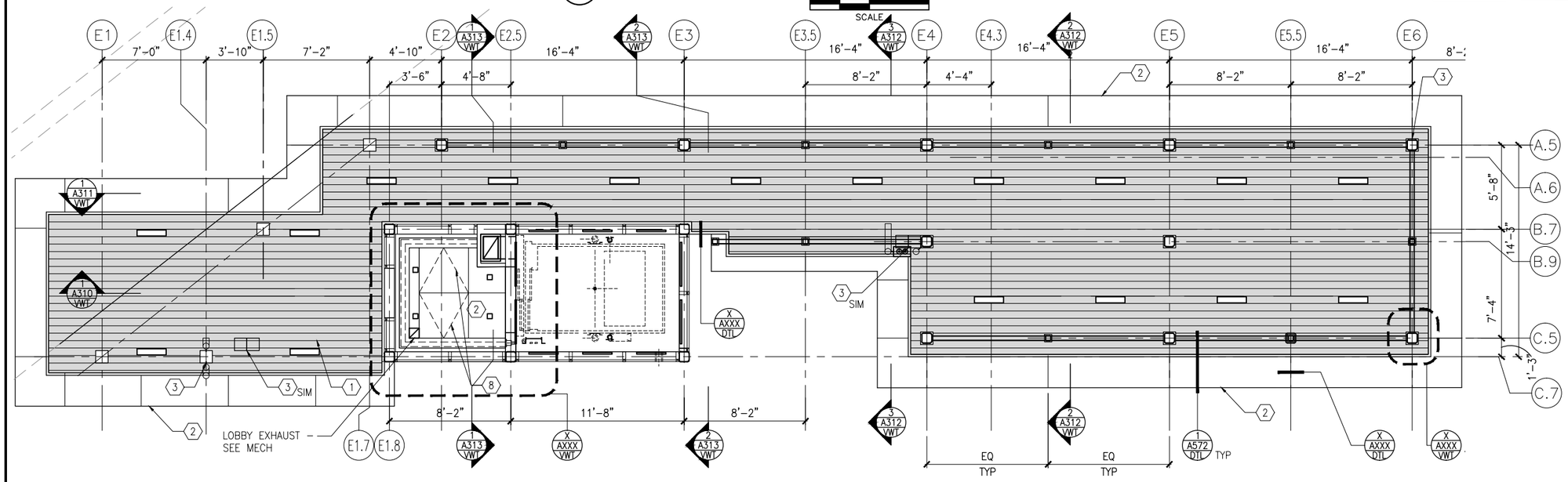


1 VC RCP INTERMEDIATE LEVEL 017

SCALE:1/8"–1'–0"

0 2 4 8
SCALE

SEE SHEETS A220–A227 FOR LED ACCENT LIGHTING AT FACADE



2 VC REFLECTED CEILING PLAN BRIDGE LEVEL

SCALE:1/8"–1'–0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. EXTERIOR LINEAR METAL CEILING SOFFIT IN SHADED AREA
2. ALUMINUM COMPOSITE PANEL SOFFIT
3. PROVIDE MATCHING CEILING TRIM AROUND STEEL COLUMN AND/OR SHELTERS
4. PC CONC WALKWAY – SEE STRUCT
5. PC CONC STAIR – SEE STRUCT
6. EXPOSED STRUCTURE – SEE STRUCTURAL
7. ACOUSTIC CEILING
8. ACCESS PANELS FOR EQUIPMENT ACCESS
9. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- SHELTER HEATER
- S SPEAKER
- M MICROPHONE
- C SECURITY CAMERA
- ELECT/COMM JUNCTION BOX
- LED LINEAR LIGHT FIXTURE
- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY-IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

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AECOM

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SOUTHWEST Green Line LRT Extension

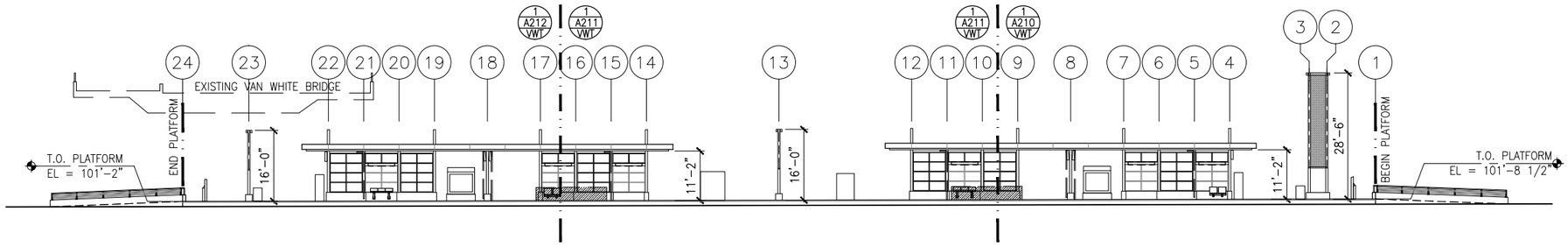
CIVIL - VOLUME 11D
VAN WHITE STATION
VC RCP INTERMEDIATE AND BRIDGE LEVEL

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-RCP-186

SHEET 224 OF 394

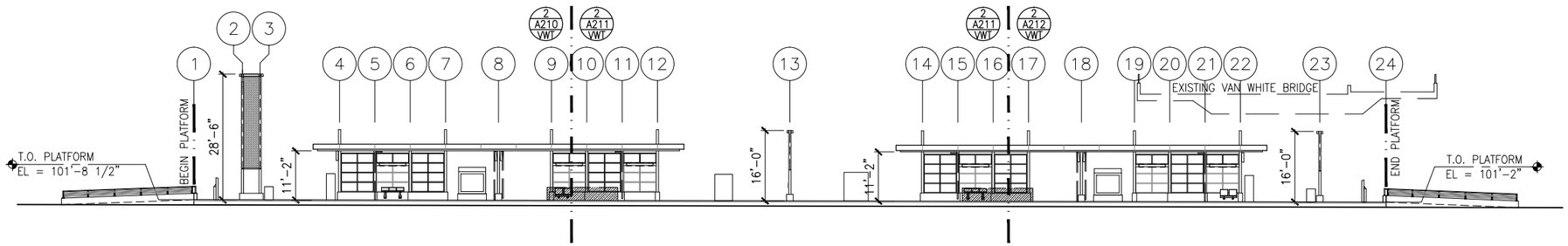
Jan, 18 2016 10:16 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-RCP-186.dwg By: v-mccartp



1 TRACK 1 ELEVATION
SCALE: 1"=30'

0 7.5 15 30
SCALE

(-0.20% SLOPE)*



2 TRACK 2 ELEVATION
SCALE: 1"=30'

0 7.5 15 30
SCALE

(-0.20% SLOPE)*

*VERIFY W/ TRACK PROFILE, ADJUST ELEVATIONS ACCORDINGLY

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

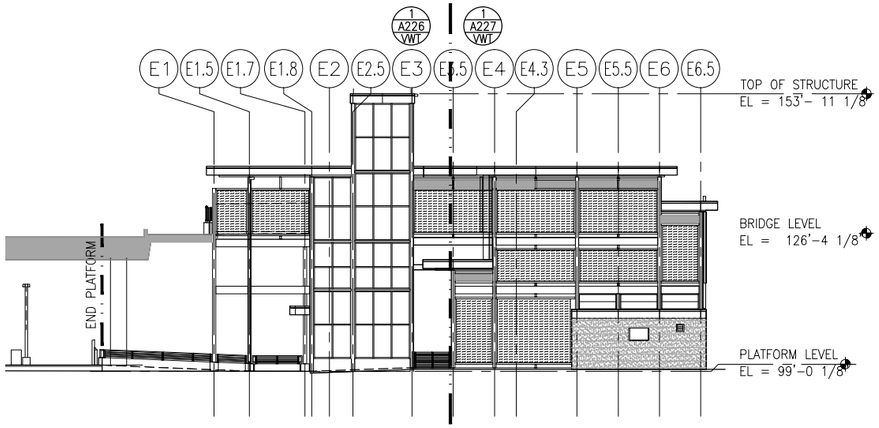
CIVIL - VOLUME 11D
VAN WHITE STATION
ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-200

SHEET 225 OF 394

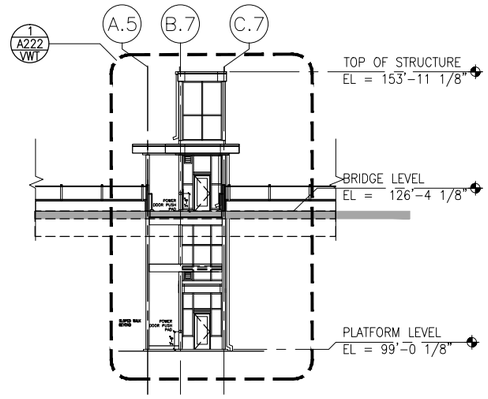
Jan, 18 2016 10:17 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-ELV-200.DWG By: v-mccarrtp



1 VC TRACK 2 ELEVATION

SCALE: 1"=30'

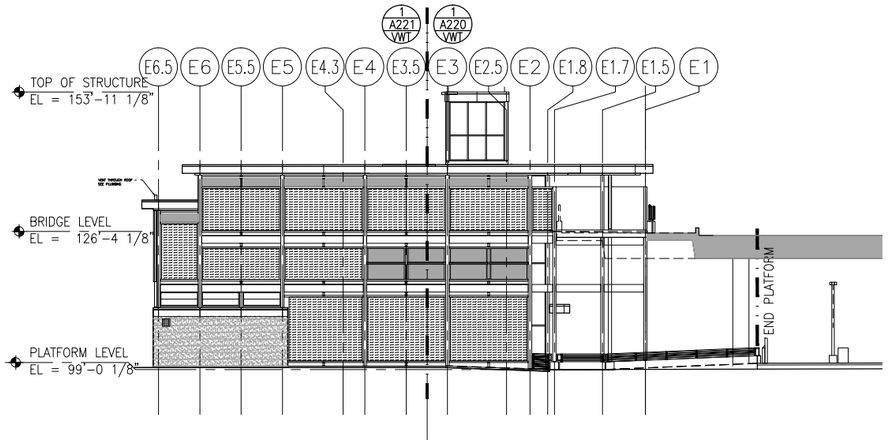
0 7.5 15 30
SCALE



2 VC WEST ELEVATION

SCALE: 1"=30'

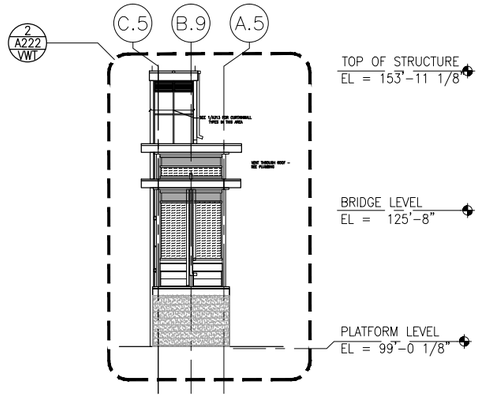
0 7.5 15 30
SCALE



3 VC TRACK 1 ELEVATION

SCALE: 1"=30'

0 7.5 15 30
SCALE



4 VC EAST ELEVATION

SCALE: 1"=30'

0 7.5 15 30
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

*VERIFY W/ TRACK PROFILE, ADJUST ELEVATIONS ACCORDINGLY

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

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SOUTHWEST Green Line LRT Extension

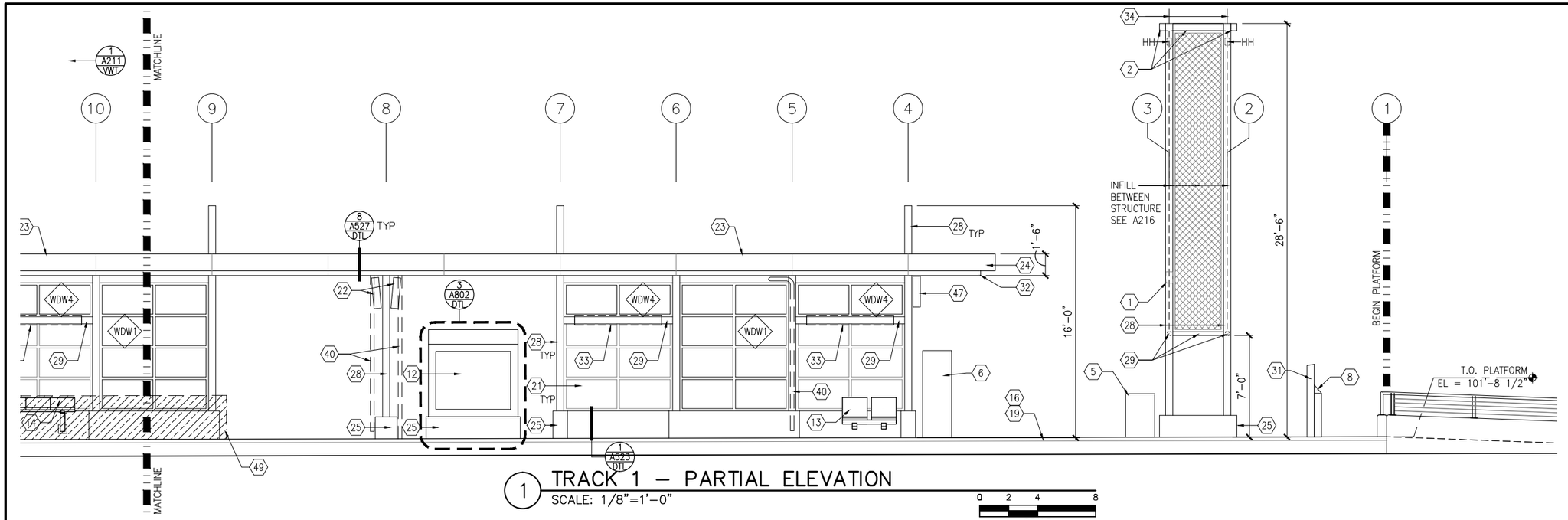
CIVIL - VOLUME 11D
VAN WHITE STATION
VC ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-201

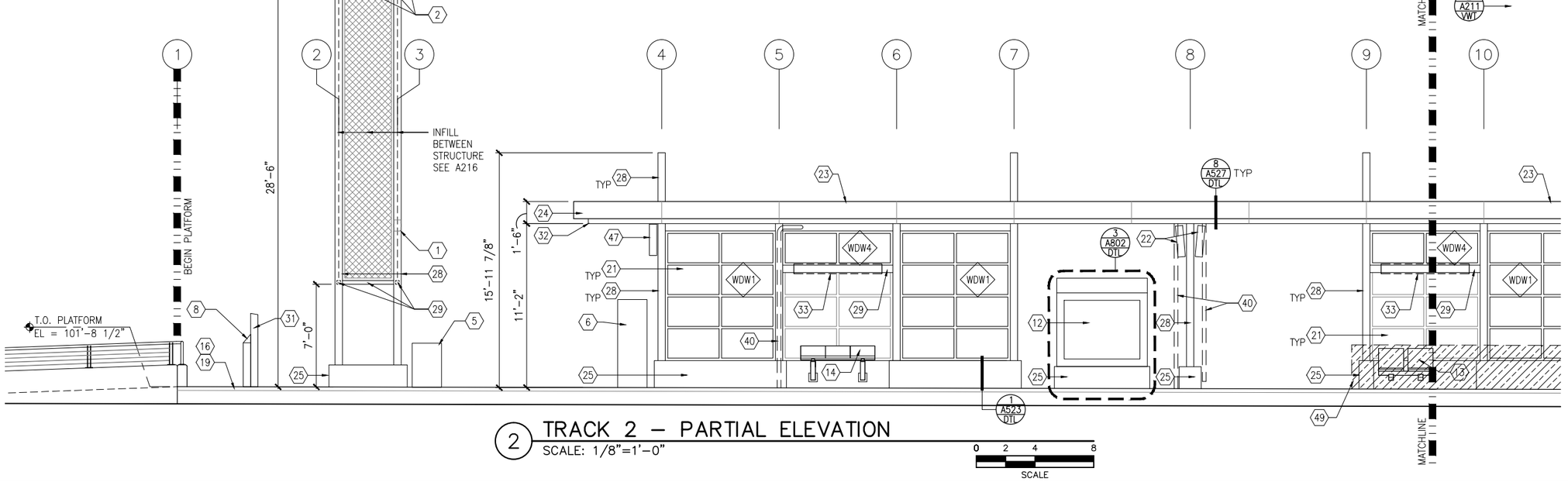
SHEET 226 OF 394

Jan, 18 2016 10:17 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-ELV-201.dwg By: v-mccartp



1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

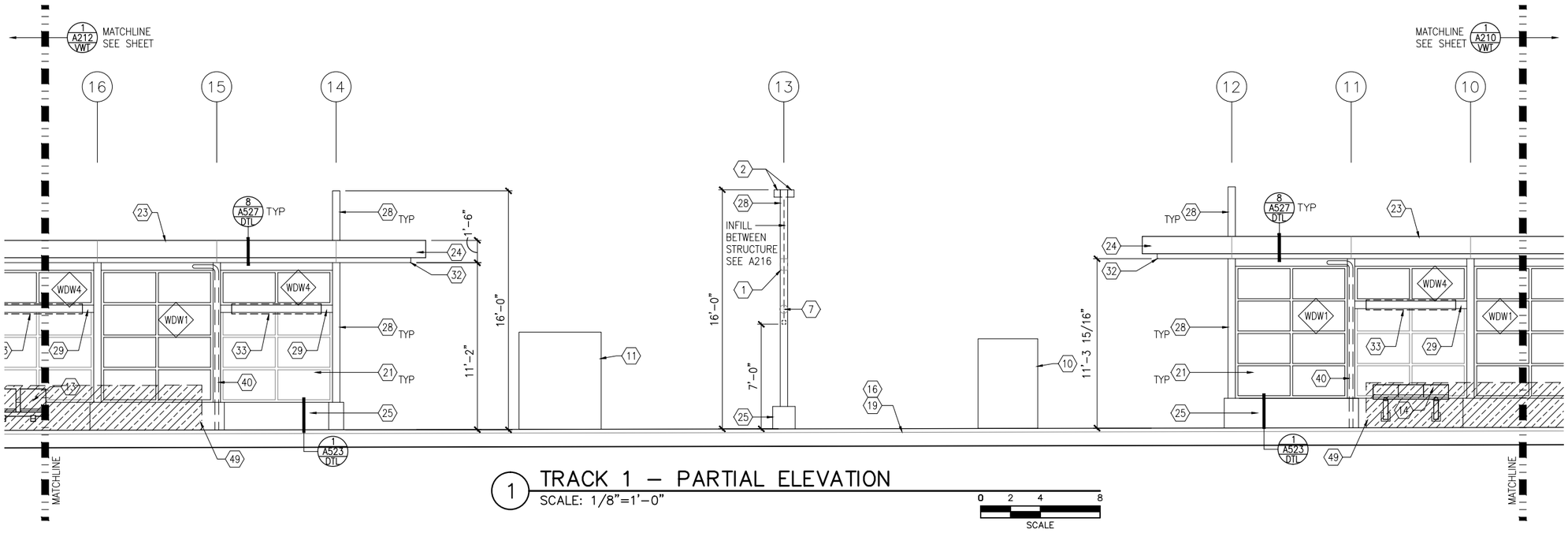
CIVIL - VOLUME 11D
VAN WHITE STATION
WEST PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-210

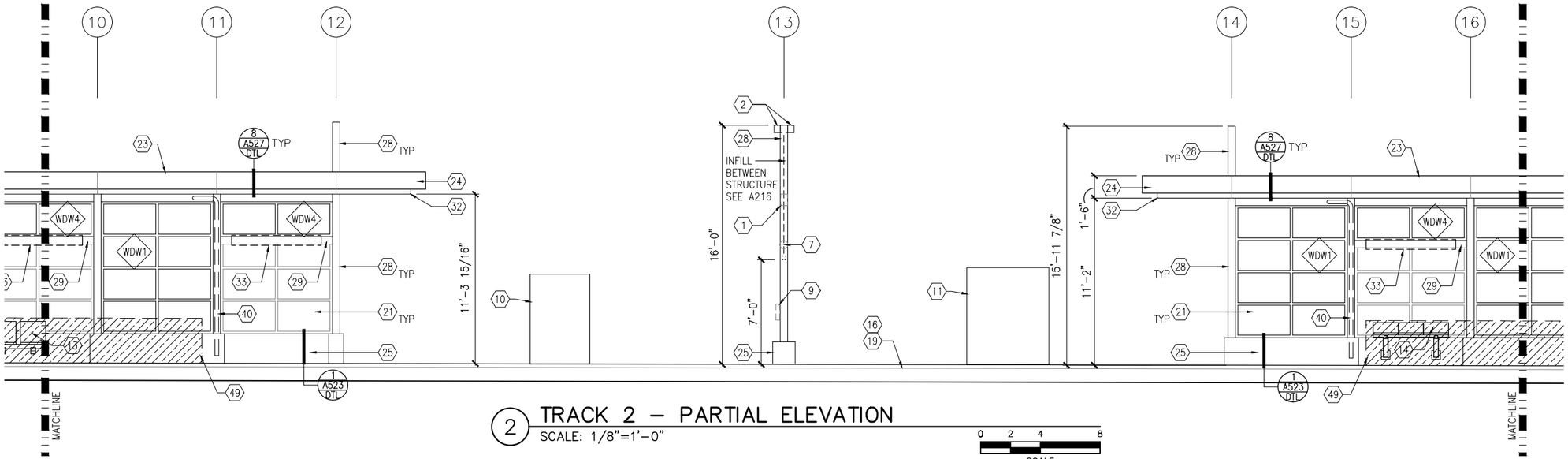
SHEET 227 OF 394

Jan, 18 2016 10:18 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-ELV-210.dwg By: v-mccartp



1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

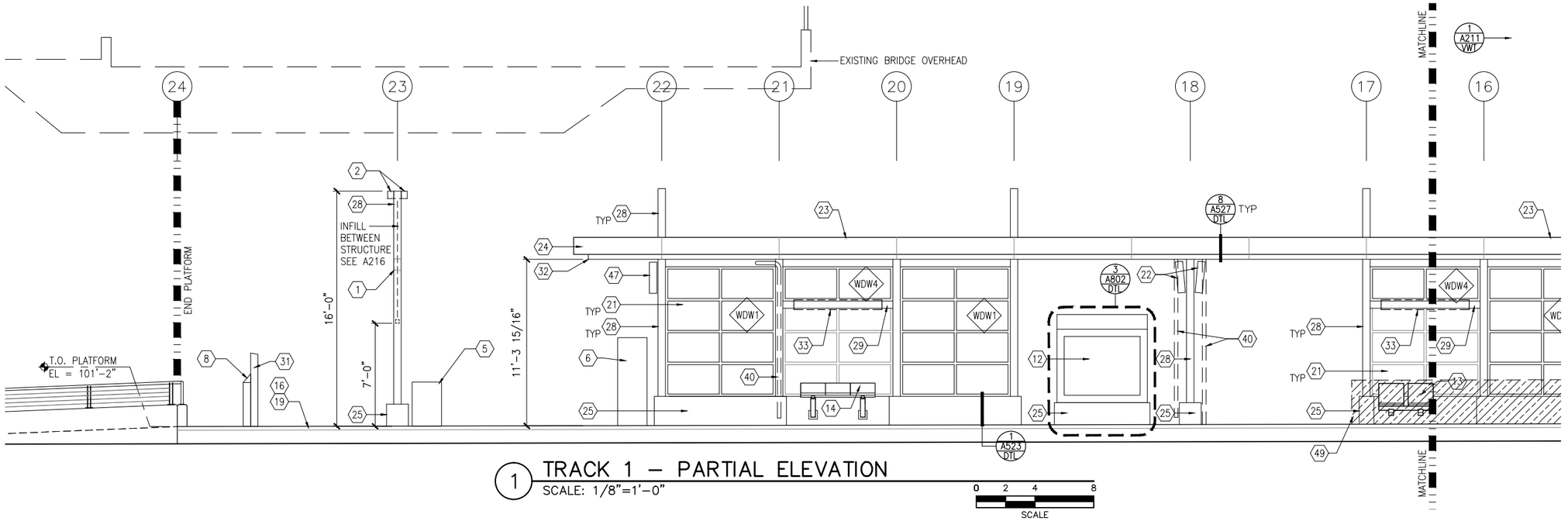
CIVIL - VOLUME 11D
VAN WHITE STATION
MIDDLE PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-211

SHEET 228 OF 394

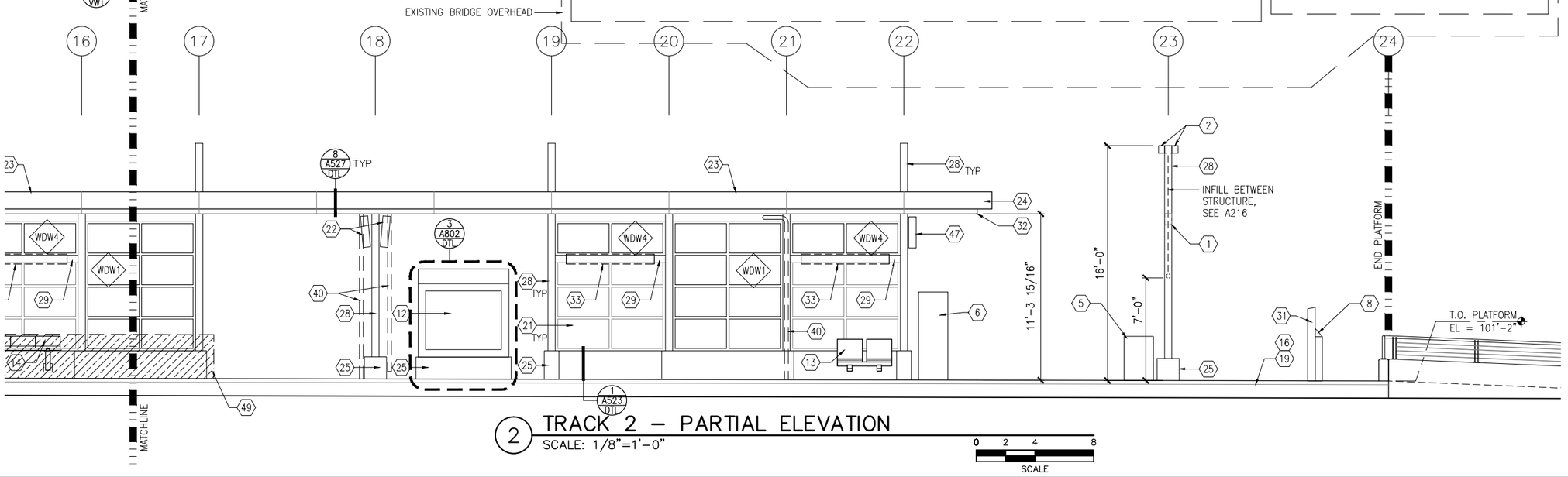
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1 TRACK 1 – PARTIAL ELEVATION

SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



2 TRACK 2 – PARTIAL ELEVATION

SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

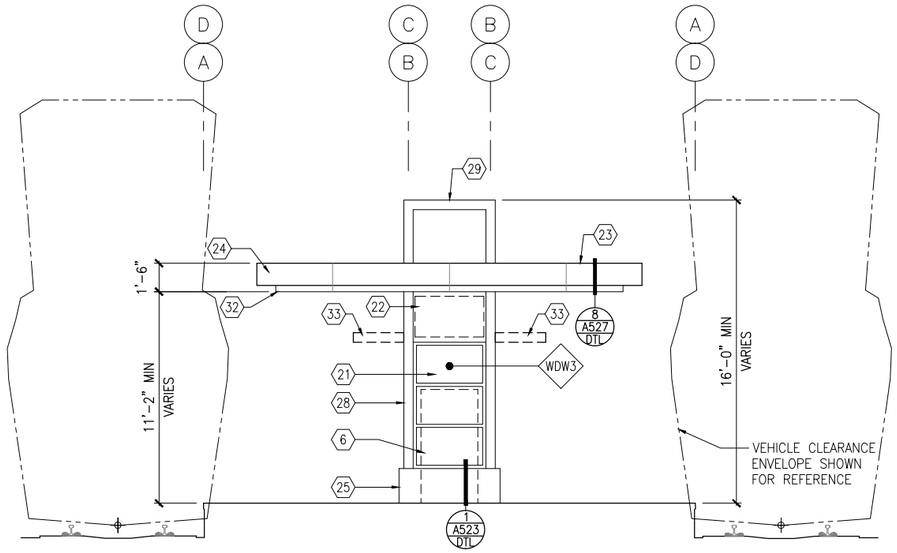
CIVIL - VOLUME 11D
VAN WHITE STATION
EAST PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-212

SHEET 229 OF 394

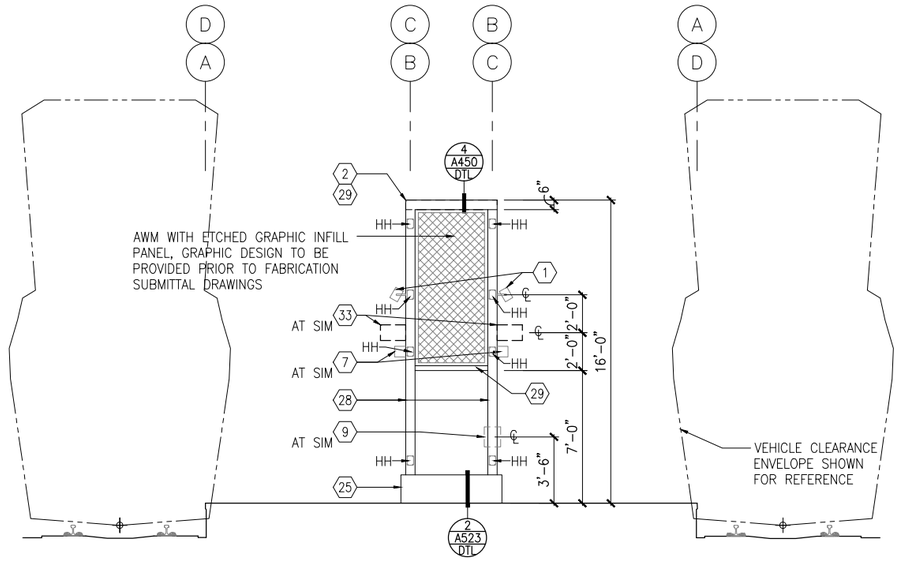
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1 SIDE ELEVATION

SCALE: 1/8"=1'-0"

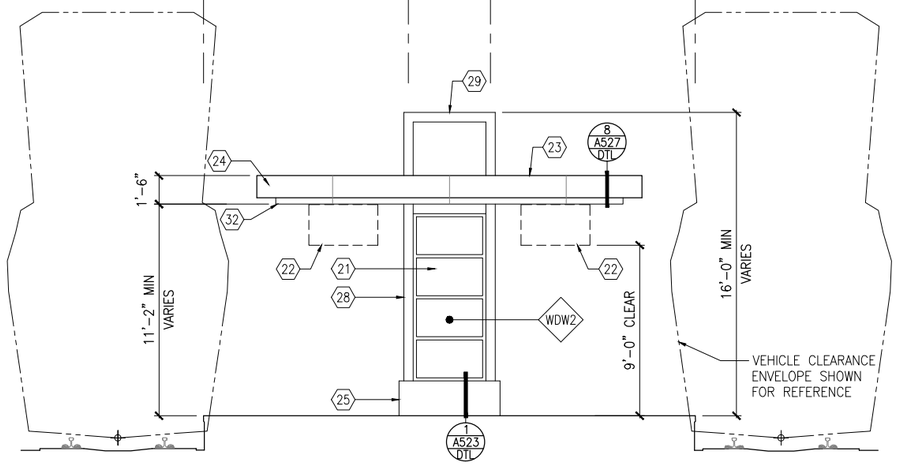
0 2 4 8
SCALE



2 SIDE ELEVATION

SCALE: 1/8"=1'-0"

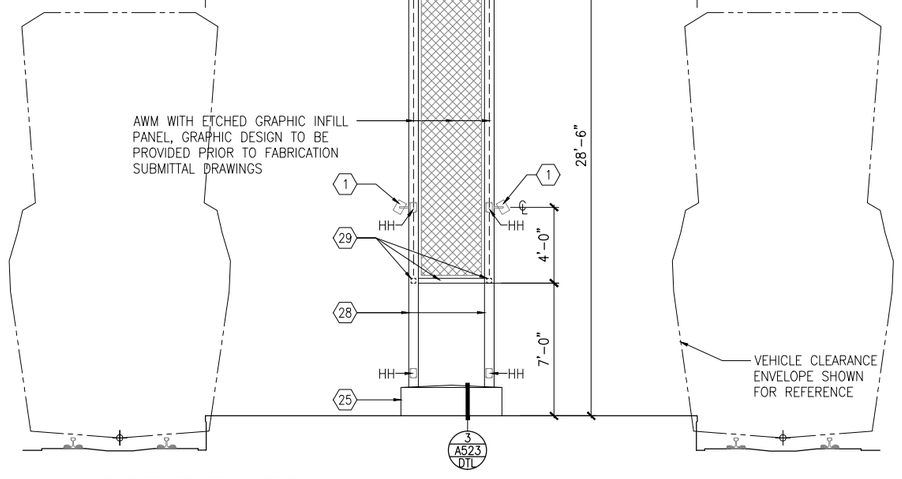
0 2 4 8
SCALE



3 SIDE ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



4 SIDE ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
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29. STEEL BEAM – SEE STRUCTURAL
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34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
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39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
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45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

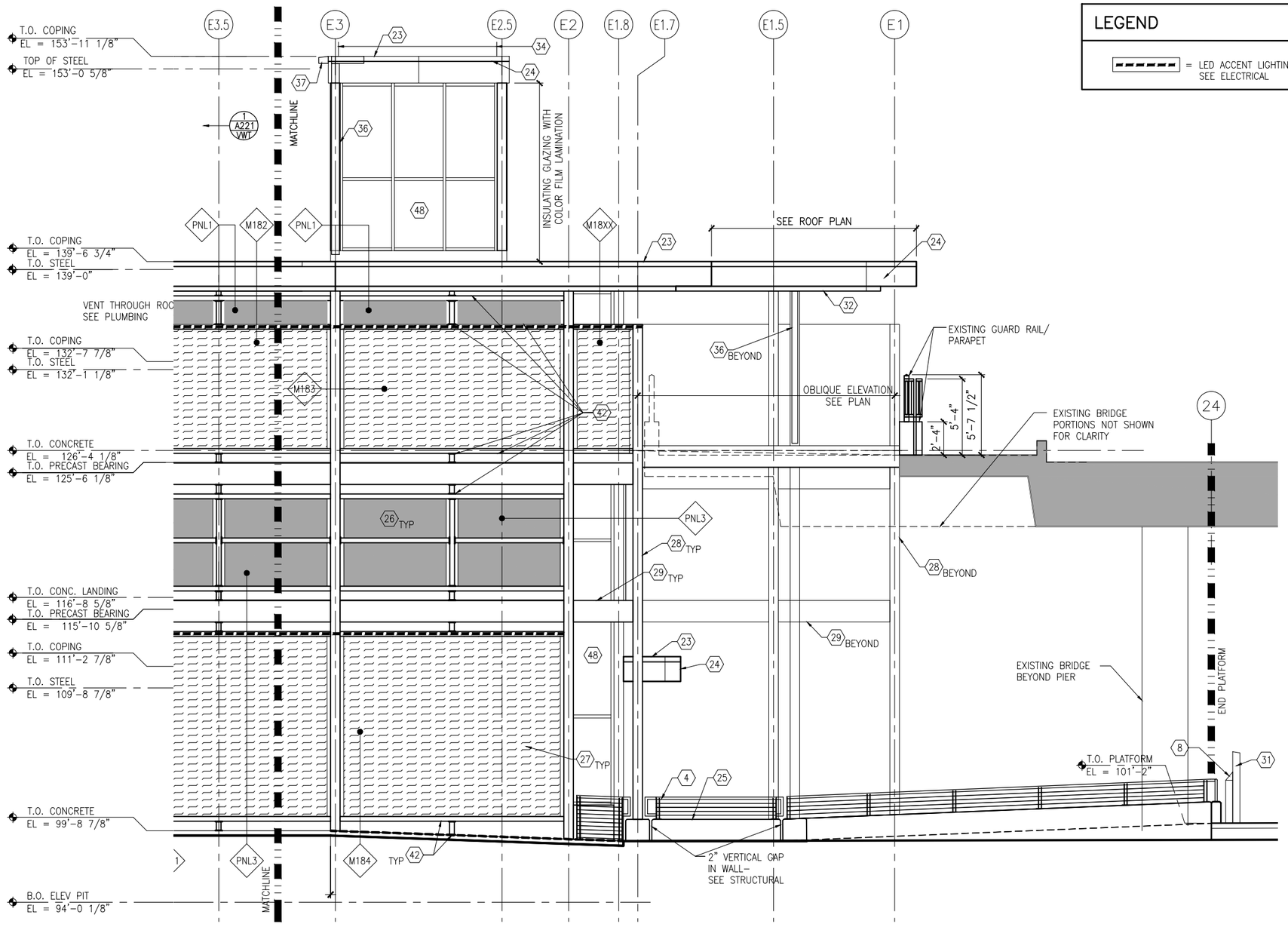
CIVIL - VOLUME 11D
VAN WHITE STATION
SIDE ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-216

SHEET 230 OF 394

Jan, 18 2016 10:19 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-ELV-216.dwg By: v-mccarrtp



1 TRACK 1 – PARTIAL ELEVATION

SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

LEGEND

= LED ACCENT LIGHTING – SEE ELECTRICAL

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
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39. LOUVER WITH MOTORIZED DAMPER
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43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

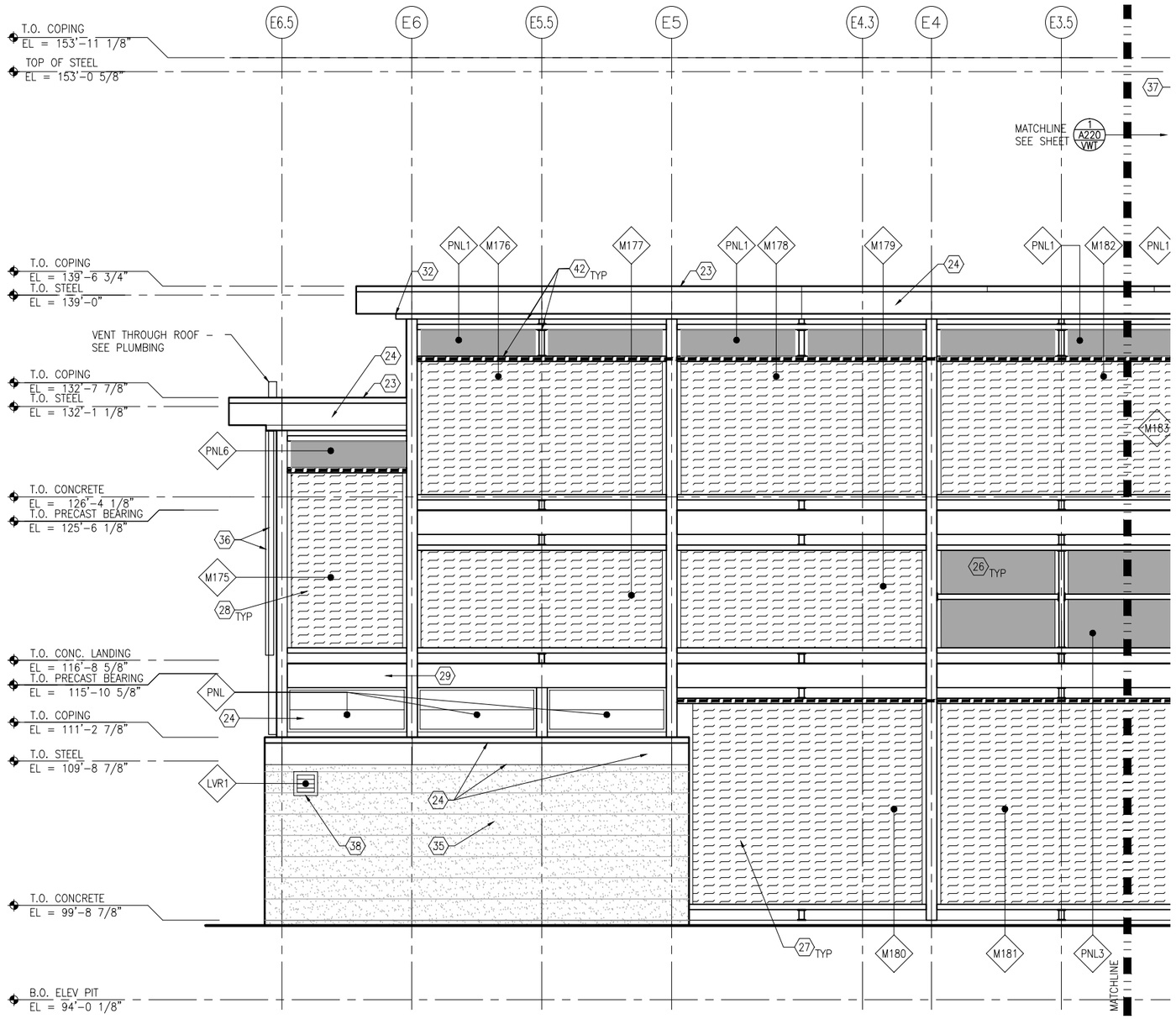
CIVIL - VOLUME 11D
VAN WHITE STATION
VC TRACK 1 - PARTIAL ELEVATION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-220

SHEET 231 OF 394

Jan, 18 2016 10:20 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-ELV-220.dwg By: v-mccartp



1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

LEGEND

= LED ACCENT LIGHTING – SEE ELECTRICAL

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
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11. ELECTRICAL CABINET – SEE ELEC
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13. BENCH
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45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

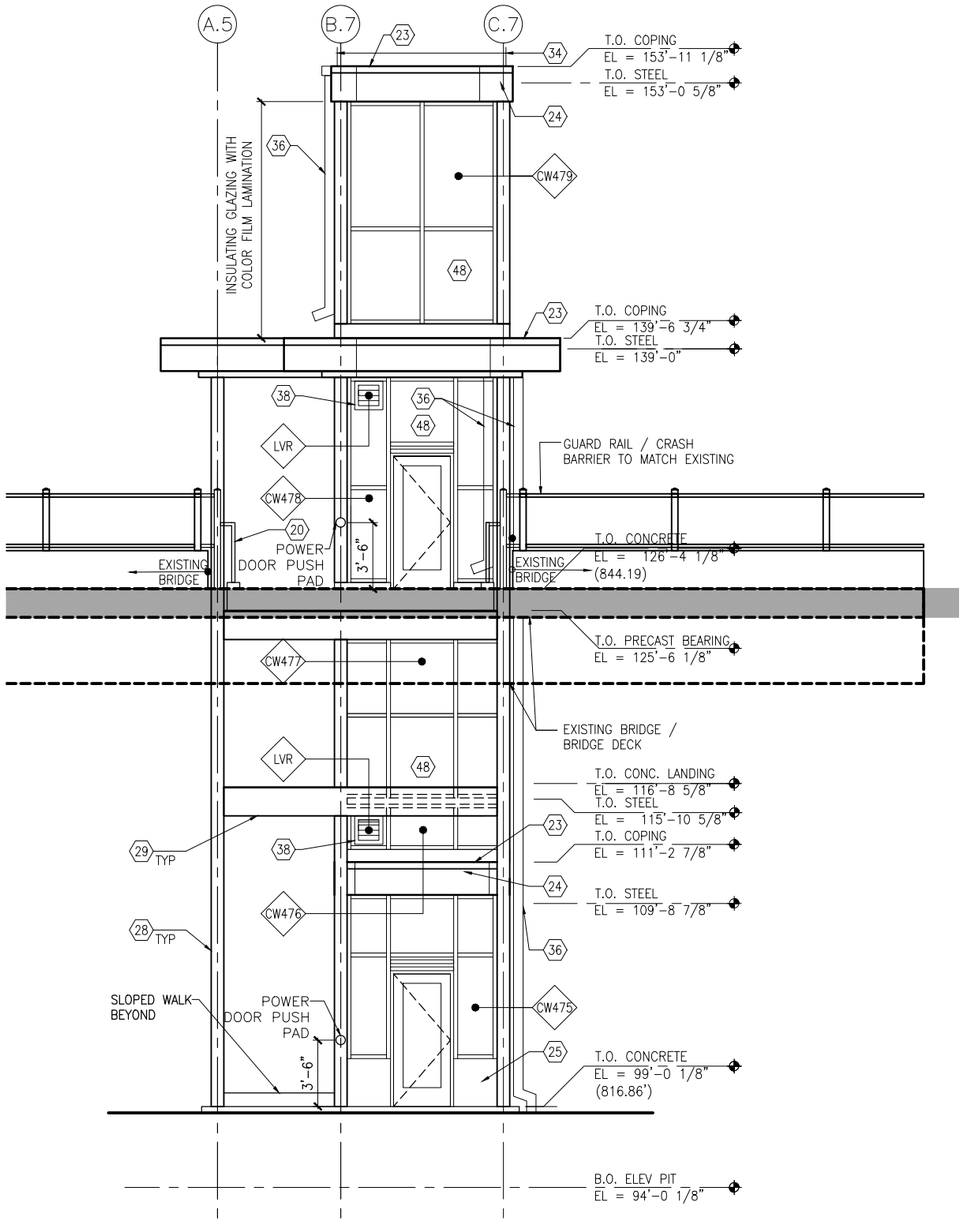
CIVIL - VOLUME 11D
VAN WHITE STATION
VC TRACK 1 - PARTIAL ELEVATION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-221

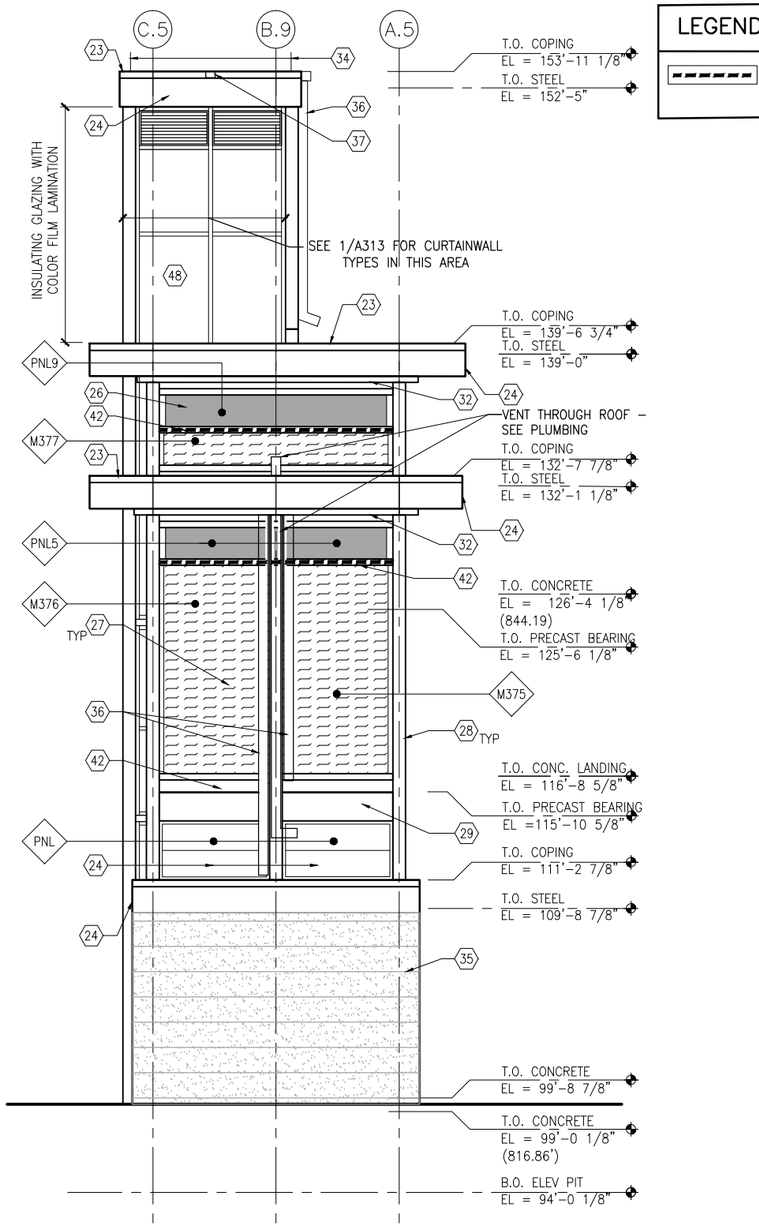
SHEET 232 OF 394

Jan, 18 2016 10:21 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-ELV-221.dwg By: v-mccartp



1 VC WEST ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 VC EAST ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

LEGEND

= LED ACCENT LIGHTING - SEE ELECTRICAL

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES - (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE - SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE - SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE - SEE ELEC
7. EMERGENCY TELEPHONE LIGHT - SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE - SEE ELEC
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14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM - SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS - SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
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22. VARIABLE MESSAGE SIGN - SEE ELEC
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28. STEEL COLUMN - SEE STRUCTURAL
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48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

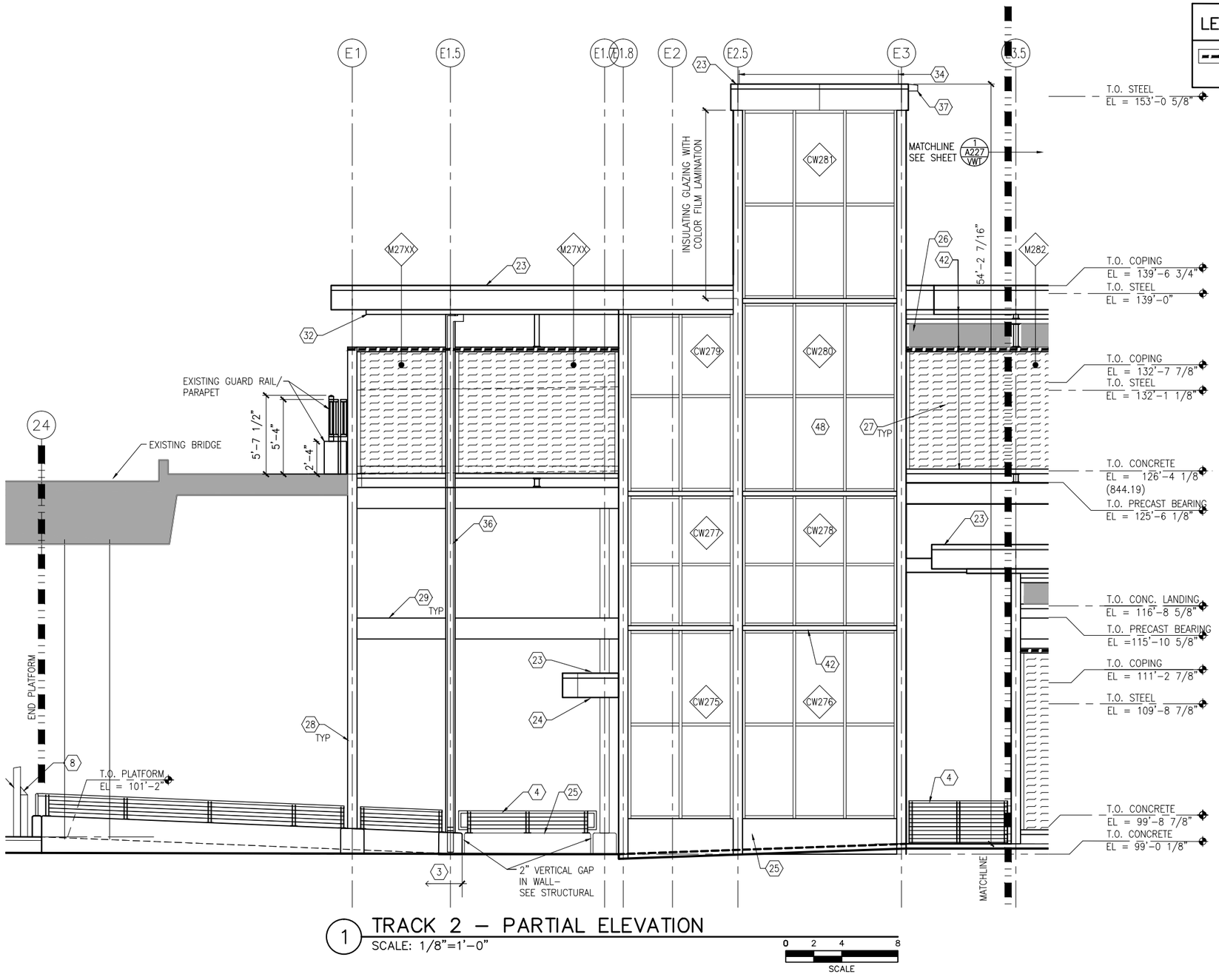
CIVIL - VOLUME 11D
VAN WHITE STATION
VC SIDE ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-222

SHEET 233 OF 394

Jan, 18 2016 10:21 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-ELV-222.dwg By: v-mccartp



1 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

LEGEND

= LED ACCENT LIGHTING – SEE ELECTRICAL

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

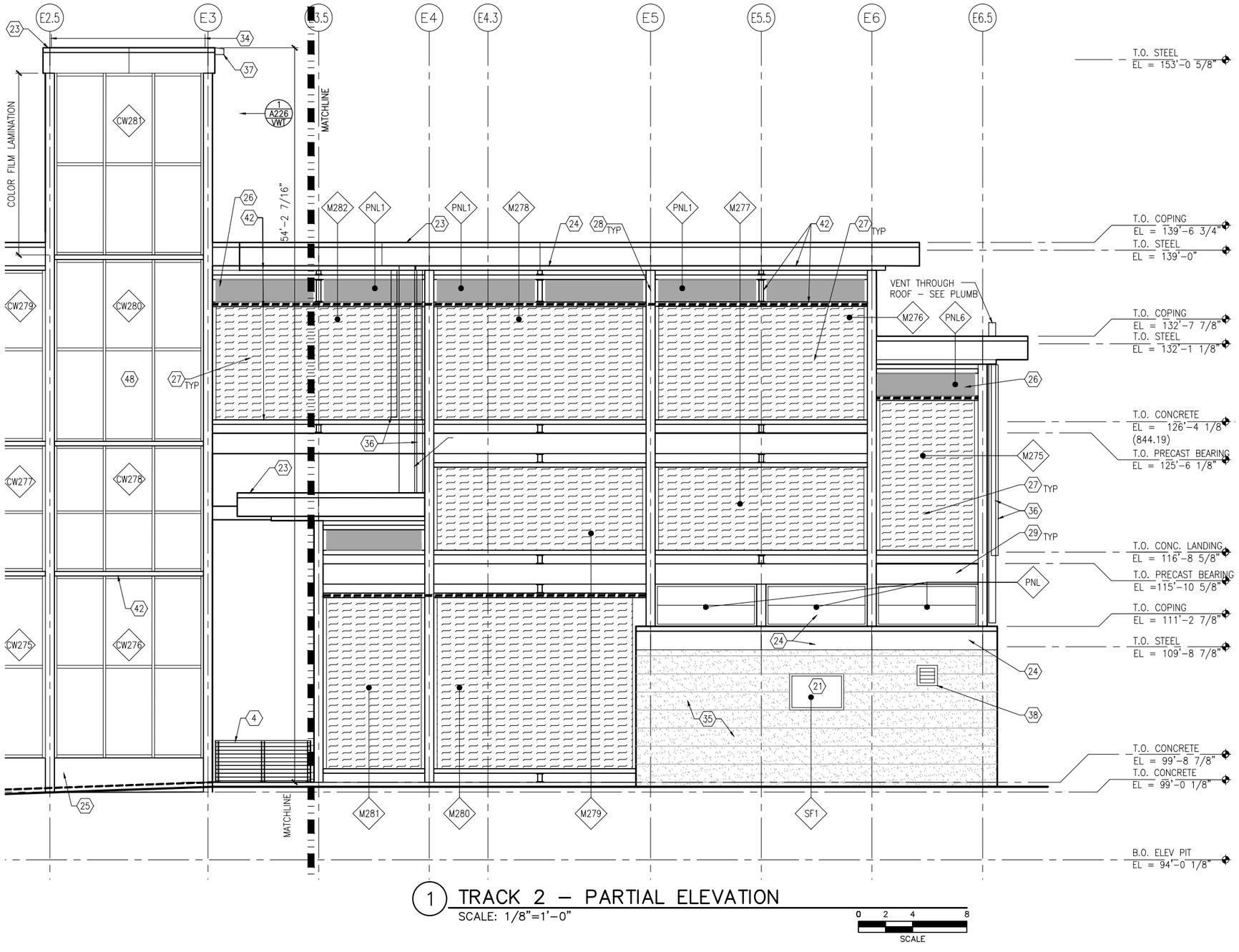
CIVIL - VOLUME 11D
VAN WHITE STATION
VC TRACK 2 - PARTIAL ELEVATION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-226

SHEET 234 OF 394

Jan, 18 2016 10:22 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-ELV-226.dwg By: v-mccarrtp



1 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

LEGEND

= LED ACCENT LIGHTING – SEE ELECTRICAL

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
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23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
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27. ARCHITECTURAL WOVEN MESH
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29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
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38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

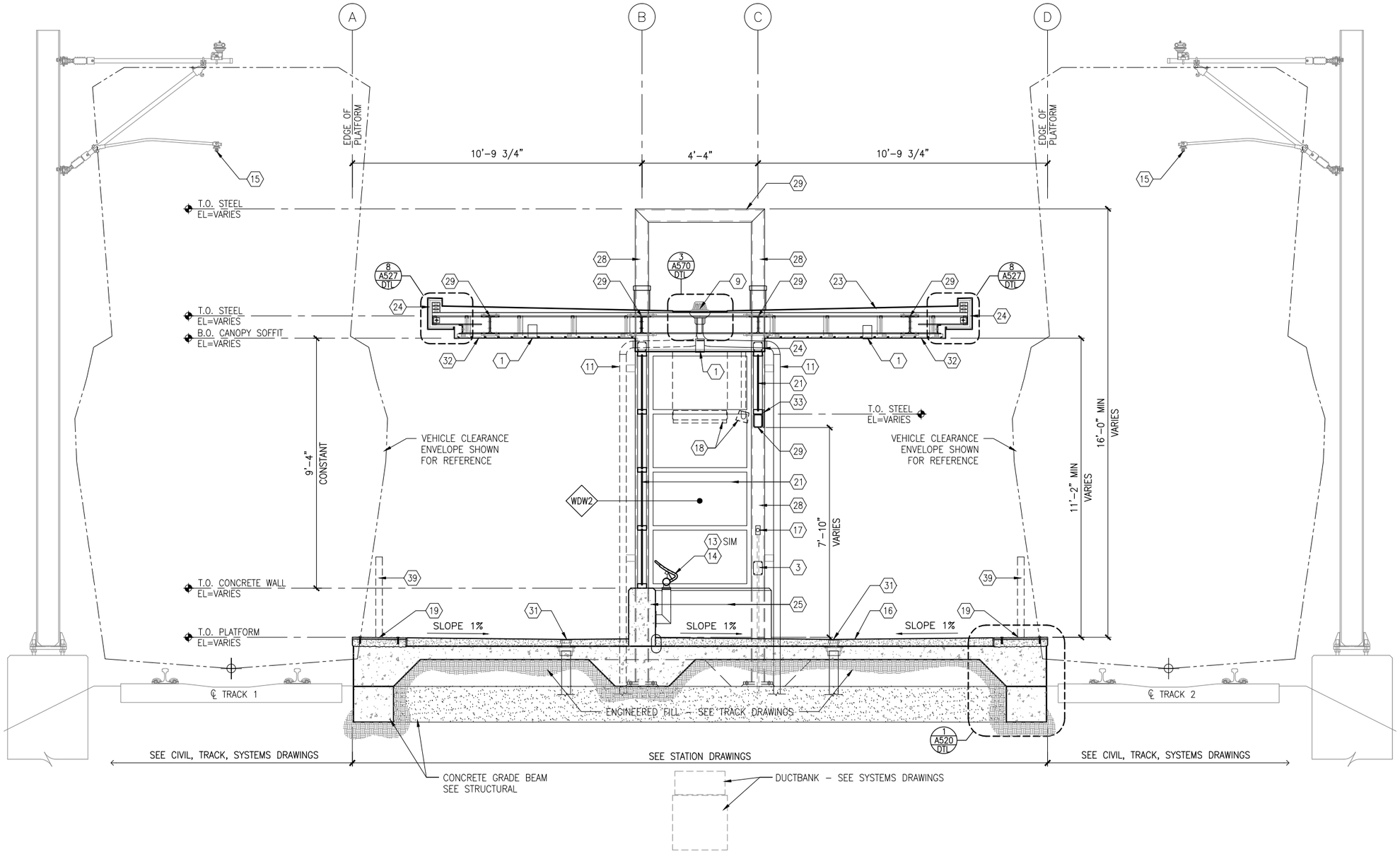
CIVIL - VOLUME 11D
VAN WHITE STATION
VC TRACK 2 - PARTIAL ELEVATION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-227

SHEET 235 OF 394

Jan, 18 2016 10:23 am v:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-ELV-227.dwg By: v-mccarrtp



1 TYPICAL PLATFORM SECTION

SCALE: 1/4"=1'-0"

0 1 2 4
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES - (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. LIGHT RECESSED IN SOFFIT - SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE - SEE ELECTRICAL
3. HAND HOLE IN STEEL STRUCTURE
4. HAND RAIL
5. SECURITY CAMERA - SEE ELEC
6. TICKET VENDING MACHINE - SEE ELEC
7. EMERGENCY TELEPHONE LIGHT - SEE ELECTRICAL
8. EMERGENCY TELEPHONE - SEE ELEC
9. ROOF DRAIN - SEE PLUMBING
10. PRE-FINISHED METAL GUTTER
11. PAINTED CAST IRON RAIN WATER LEADER - SEE PLUMBING
12. PRE-FINISHED METAL SCUPPER
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM - SEE SYSTEMS (NIC)
16. CONCRETE PLATFORM
17. HEATER CONTROL - SEE ELEC
18. INFRARED HEATER - SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN - SEE ELEC
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25. CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN - SEE STRUCTURAL
29. STEEL BEAM - SEE STRUCTURAL
30. WALL HYDRANT - SEE PLUMBING
31. AREA DRAIN - SEE PLUMBING
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. PC CONC WALKWAY - SEE STRUCT
35. PC CONC STAIR - SEE STRUCT
36. PC CONC WALL PANEL
37. SECONDARY STEEL FRAMING - SEE STRUCTURAL
38. COMPOSITE ALUM PANEL
39. ADA BETWEEN-CAR BARRIER
40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R- ROOF TYPE - SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

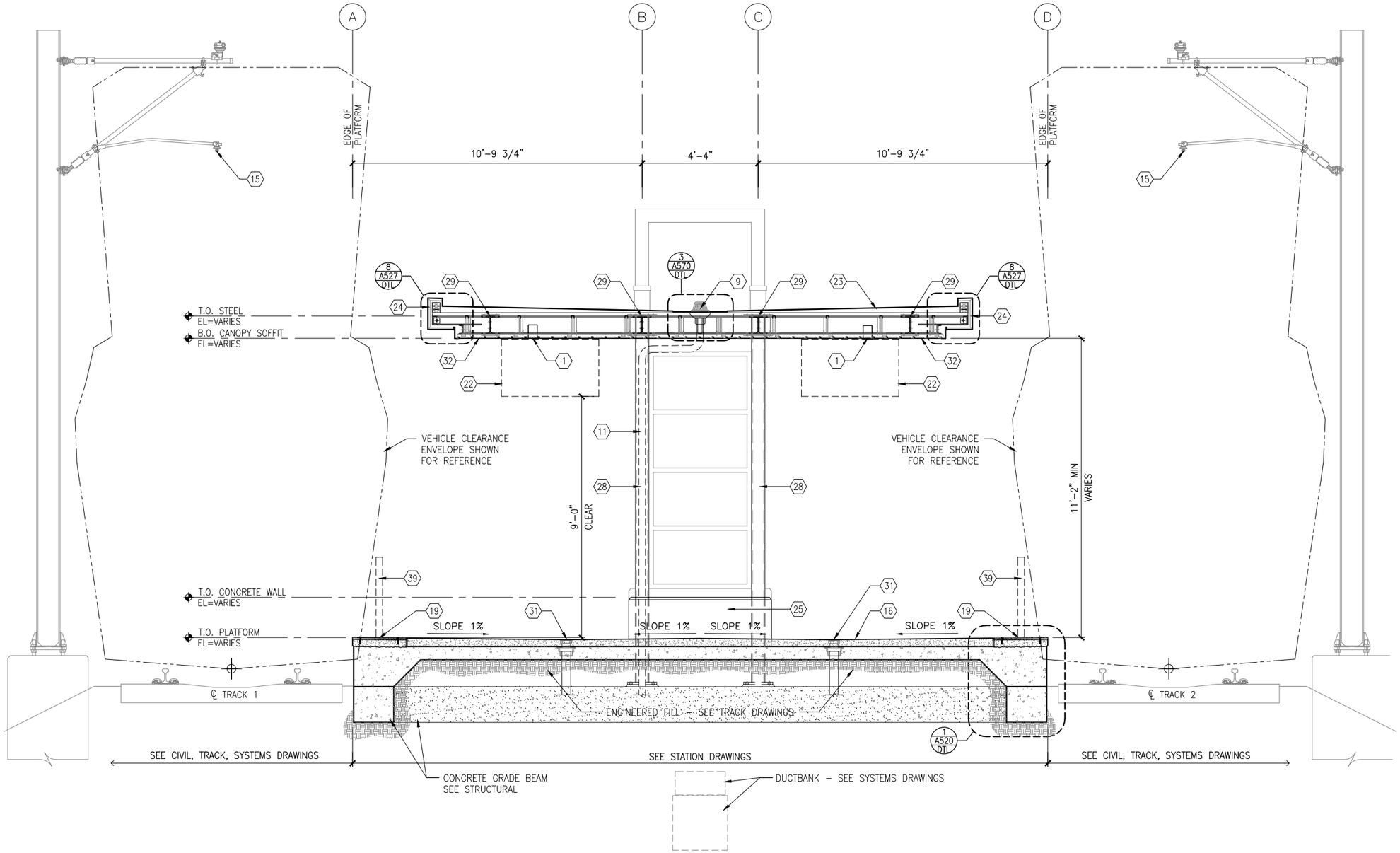
CIVIL - VOLUME 11D
VAN WHITE STATION
TYPICAL PLATFORM SECTION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-SCT-300

SHEET 236 OF 394

Jan, 18 2016 10:23 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-SCT-300.dwg By: v-mccarrtp



1 PLATFORM SECTION

SCALE: 1/4"=1'-0"

0 1 2 4
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES - ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. LIGHT RECESSED IN SOFFIT - SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE - SEE ELECTRICAL
3. HAND HOLE IN STEEL STRUCTURE
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6. TICKET VENDING MACHINE - SEE ELEC
7. EMERGENCY TELEPHONE LIGHT - SEE ELECTRICAL
8. EMERGENCY TELEPHONE - SEE ELEC
9. ROOF DRAIN - SEE PLUMBING
10. PRE-FINISHED METAL GUTTER
11. PAINTED CAST IRON RAIN WATER LEADER - SEE PLUMBING
12. PRE-FINISHED METAL SCUPPER
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM - SEE SYSTEMS (NIC)
16. CONCRETE PLATFORM
17. HEATER CONTROL - SEE ELEC
18. INFRARED HEATER - SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN - SEE ELEC
23. ROOFING - REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
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26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN - SEE STRUCTURAL
29. STEEL BEAM - SEE STRUCTURAL
30. WALL HYDRANT - SEE PLUMBING
31. AREA DRAIN - SEE PLUMBING
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. PC CONC WALKWAY - SEE STRUCT
35. PC CONC STAIR - SEE STRUCT
36. PC CONC WALL PANEL
37. SECONDARY STEEL FRAMING - SEE STRUCTURAL
38. COMPOSITE ALUM PANEL
39. ADA BETWEEN-CAR BARRIER
40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R- ROOF TYPE - SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

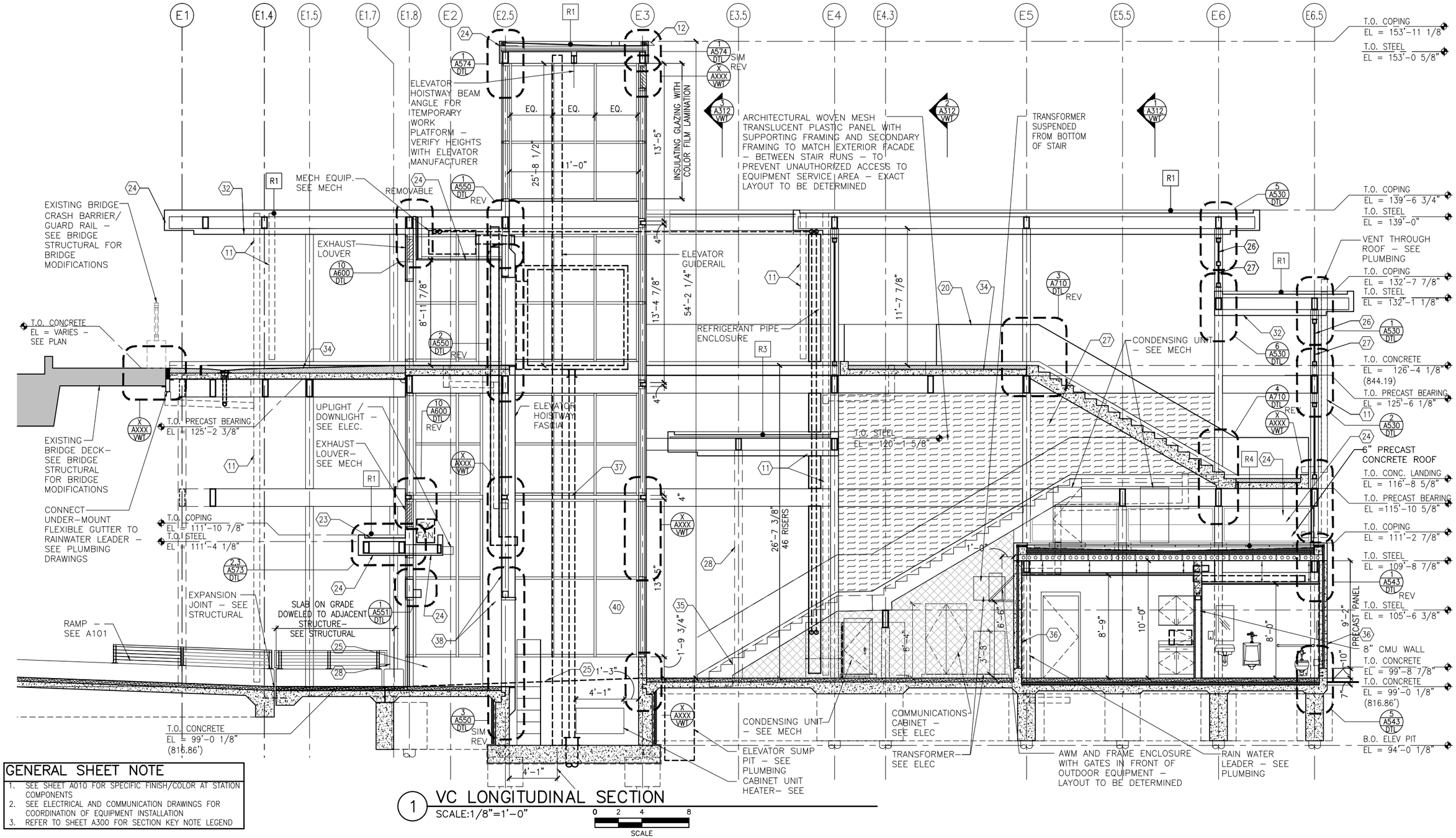
CIVIL - VOLUME 11D
VAN WHITE STATION
PLATFORM SECTION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-SCT-301

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Jan, 18 2016 10:24 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-SCT-301.dwg By: v-mccarrtp



1 VC LONGITUDINAL SECTION
SCALE:1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTE

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. REFER TO SHEET A300 FOR SECTION KEY NOTE LEGEND

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

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SOUTHWEST Green Line LRT Extension

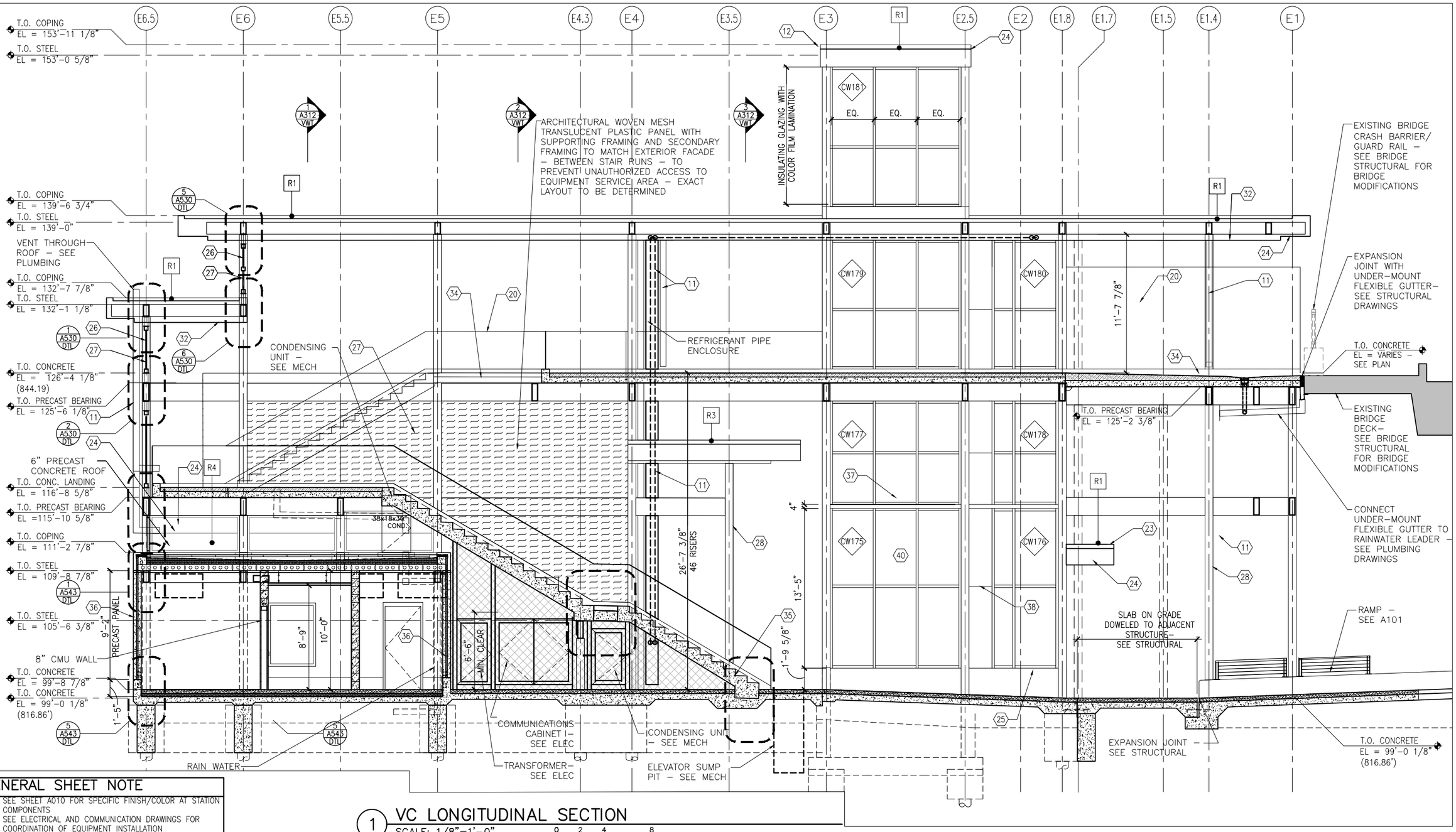
CIVIL - VOLUME 11D
VAN WHITE STATION
VC LONGITUDINAL SECTION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-SCT-310

SHEET 238 OF 394

Jan, 18 2016 10:24 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-SCT-310.dwg By: v-mccarrtp



GENERAL SHEET NOTE

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. REFER TO SHEET A300 FOR SECTION KEY NOTE LEGEND

1 VC LONGITUDINAL SECTION

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

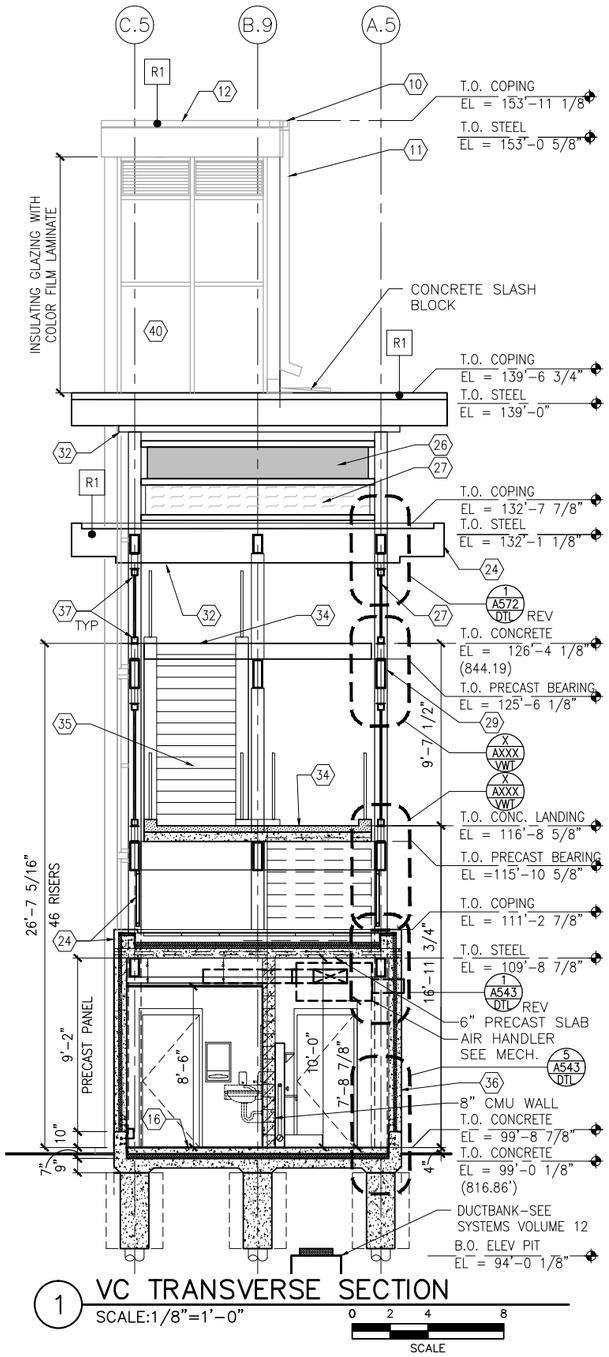
CIVIL - VOLUME 11D
VAN WHITE STATION
VC LONGITUDINAL SECTION

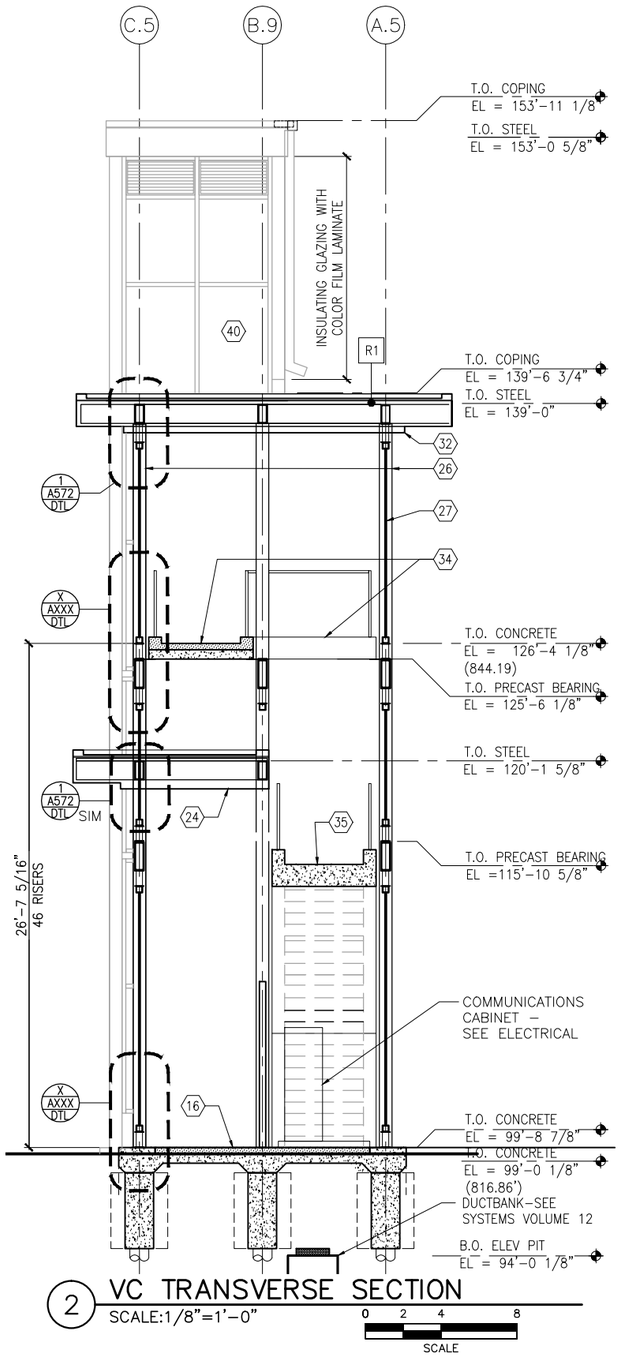
SHEET 239 OF 394

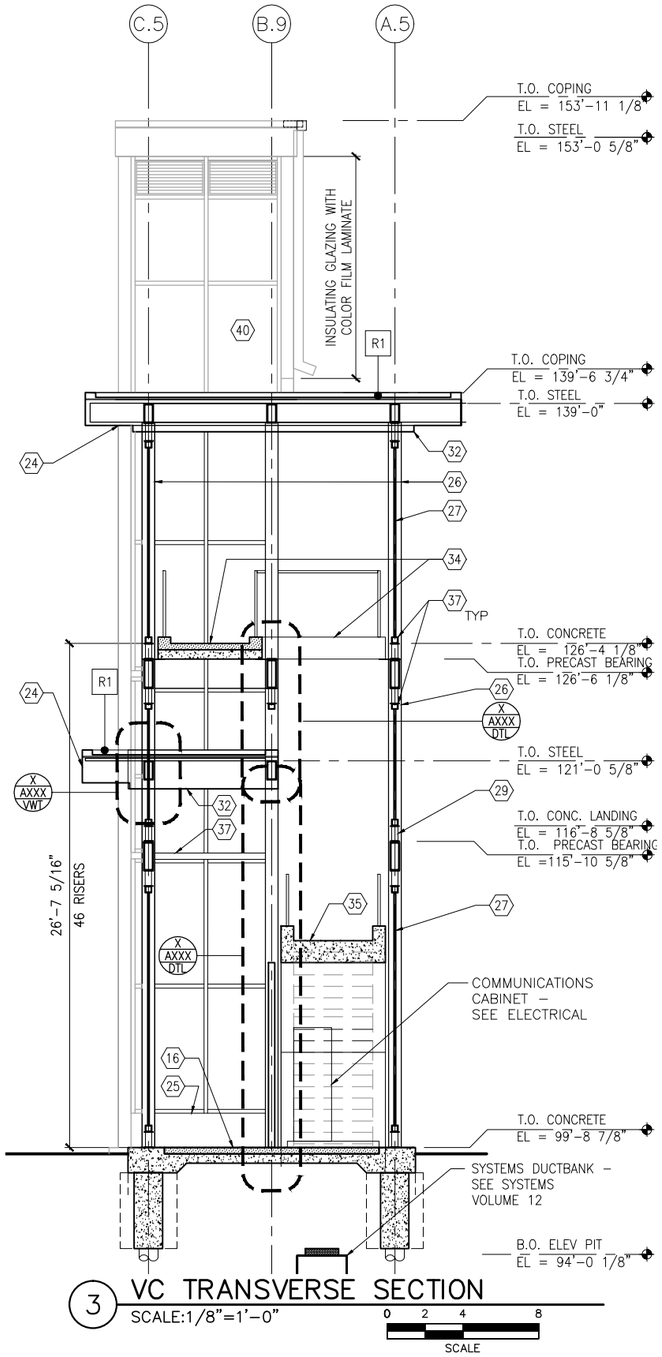
DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-SCT-311

Jan, 18 2016 10:24 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-SCT-311.dwg By: v-mccarrtp







GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. LIGHT RECESSED IN SOFFIT – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. HAND HOLE IN STEEL STRUCTURE
4. HAND RAIL
5. SECURITY CAMERA – SEE ELEC
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. EMERGENCY TELEPHONE – SEE ELEC
9. ROOF DRAIN – SEE PLUMBING
10. PRE-FINISHED METAL GUTTER
11. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
12. PRE-FINISHED METAL SCUPPER
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYSTEMS (NIC)
16. CONCRETE PLATFORM
17. HEATER CONTROL – SEE ELEC
18. INFRARED HEATER – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. AREA DRAIN – SEE PLUMBING
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. PC CONC WALKWAY – SEE STRUCT
35. PC CONC STAIR – SEE STRUCT
36. PC CONC WALL PANEL
37. SECONDARY STEEL FRAMING – SEE STRUCTURAL
38. COMPOSITE ALUM PANEL
39. ADA BETWEEN-CAR BARRIER
40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R- ROOF TYPE – SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

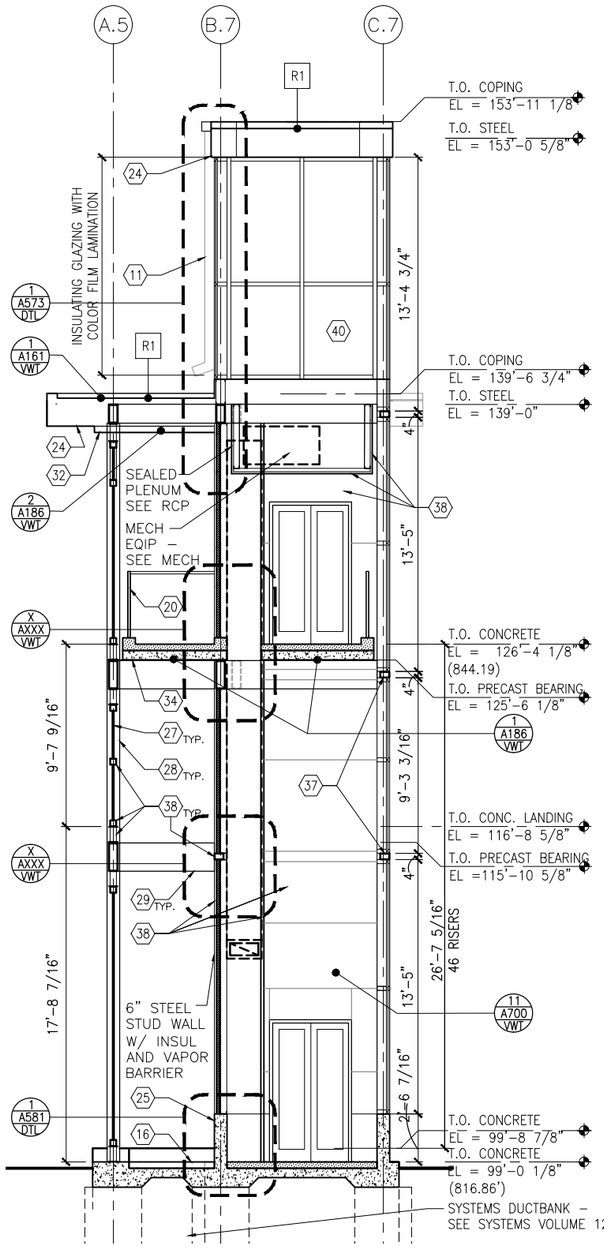
CIVIL - VOLUME 11D
VAN WHITE STATION
VC SECTIONS

DISCIPLINE: ARCHITECTURE

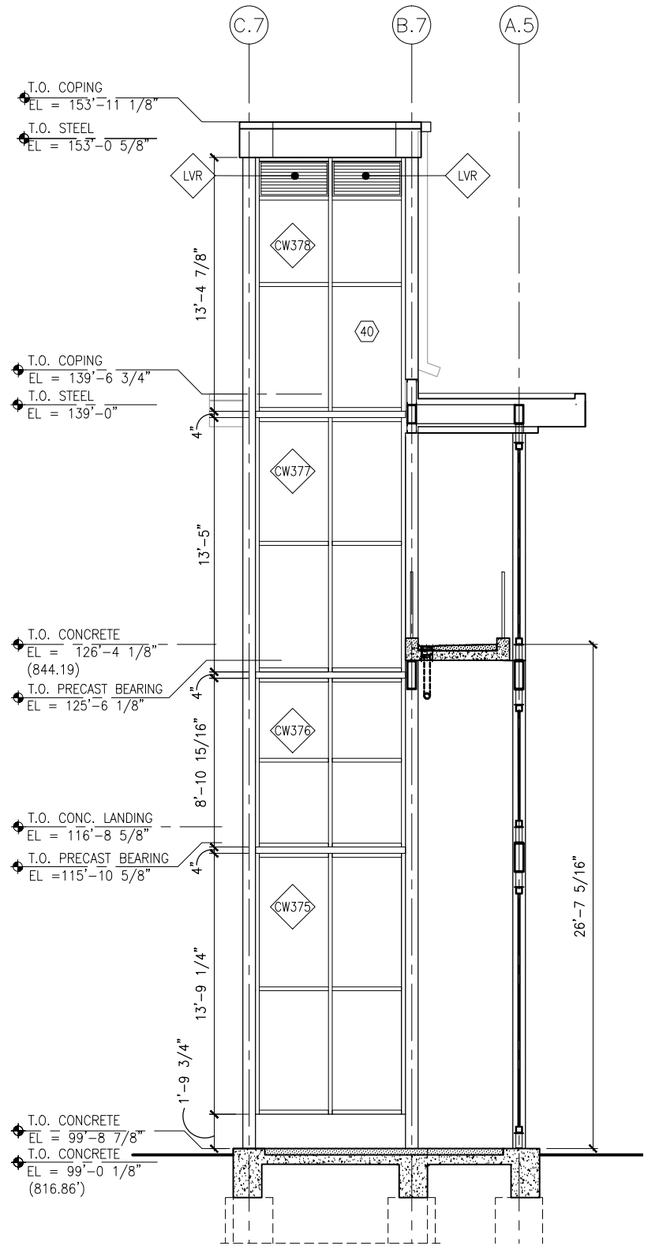
SHEET NAME: E4-VWT-ARC-SCT-312

SHEET 240 OF 394

Jan. 18 2016 10:25 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-SCT-312.dwg By: v-mccarrtp



1 VC TRANSVERSE SECTION
SCALE:1/8"=1'-0"



2 VC TRANSVERSE SECTION
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

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5. SECURITY CAMERA – SEE ELEC
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. EMERGENCY TELEPHONE – SEE ELEC
9. ROOF DRAIN – SEE PLUMBING
10. PRE-FINISHED METAL GUTTER
11. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
12. PRE-FINISHED METAL SCUPPER
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYSTEMS (NIC)
16. CONCRETE PLATFORM
17. HEATER CONTROL – SEE ELEC
18. INFRARED HEATER – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. AREA DRAIN – SEE PLUMBING
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. PC CONC WALKWAY – SEE STRUCT
35. PC CONC STAIR – SEE STRUCT
36. PC CONC WALL PANEL
37. SECONDARY STEEL FRAMING – SEE STRUCTURAL
38. COMPOSITE ALUM PANEL
39. ADA BETWEEN-CAR BARRIER
40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R- ROOF TYPE – SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
VC SECTIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-SCT-313

SHEET 241 OF 394

Jan. 18 2016 10:26 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-SCT-313.dwg By: v-mccarrtp

DOOR SCHEDULES- VAN WHITE STATION

LEVEL	DOOR NO.	FROM ROOM	TO ROOM	WIDTH	HEIGHT	TYPE	FRAME DETAILS			HARDWARE SET	NOTES
							HEAD	JAMB	SILL		
PLATFORM	100	ELEV LOBBY	PLATFORM ?	3'-0"	7'-0"	ALUMINUM	/ A	/ A	/ A	SEE SPECIFICATIONS	
		100									
	101	ELEV MECH ROOM	BREAK ROOM	3'-0"	7'-0"	HM				SEE SPECIFICATIONS	
		101	102								
	102	PLATFORM ?	BREAK ROOM	3'-0"	7'-0"	HM	/ A	/ A	/ A	SEE SPECIFICATIONS	
		102	102								
	103	BREAK ROOM	TOILET	3'-0"	7'-0"	HM	/ A	/ A	/ A	SEE SPECIFICATIONS	
		102	103								
	104	BREAK ROOM	UTILITY	2'-6"	7'-0"	HM	/ A	/ A	/ A	SEE SPECIFICATIONS	
		102	104								
	105A	PLATFORM ?	EQUIPMENT	2'-10.5"		FRAMED ARCH WOVEN MESH	/ A	/ A	/ A	SEE SPECIFICATIONS	
			105								
	105B	PLATFORM ?	EQUIPMENT	6'-6"		FRAMED ARCH WOVEN MESH	/ A	/ A	/ A	SEE SPECIFICATIONS	
	105C	PLATFORM ?	EQUIPMENT	2'-10.5"		FRAMED ARCH WOVEN MESH	/ A	/ A	/ A	SEE SPECIFICATIONS	
			105								
INTERMEDIATE	GATE1	PLATFORM ?	PLATFORM ?	5'-10"			/ A	/ A	/ A	SEE SPECIFICATIONS	
BRIDGE	200	ELEV LOBBY	XXXX	3'-0"	7'-0"	STOREFRONT ENTRANCE	/ A	/ A	/ A	SEE SPECIFICATIONS	
		200									

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NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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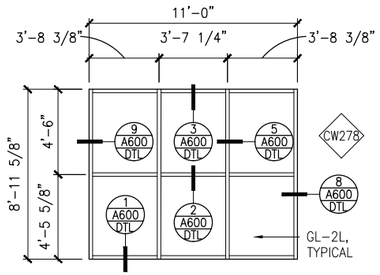
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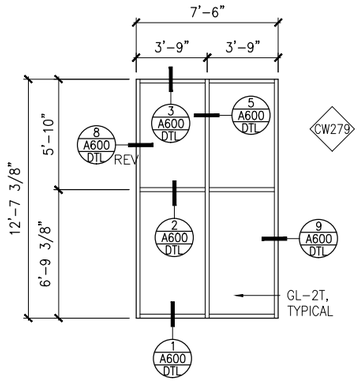
SOUTHWEST Green Line LRT Extension

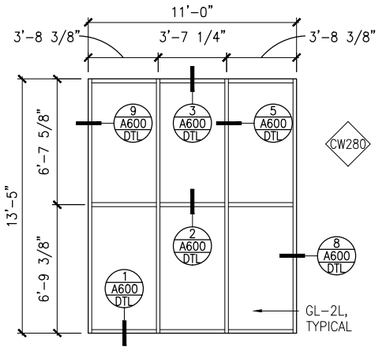
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VAN WHITE STATION
DOOR AND FRAME SCHEDULE

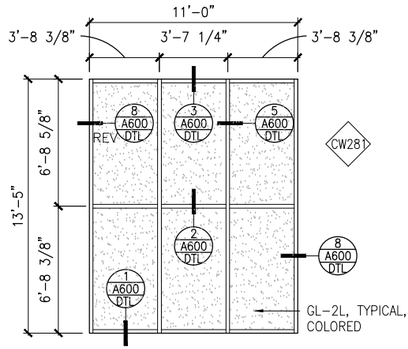
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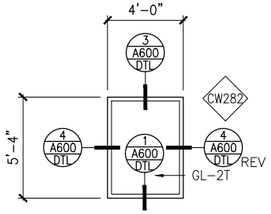
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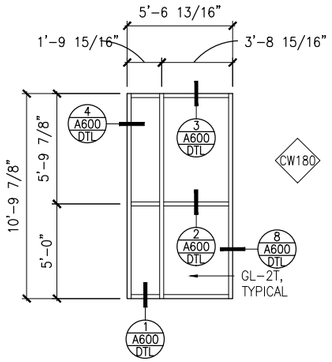


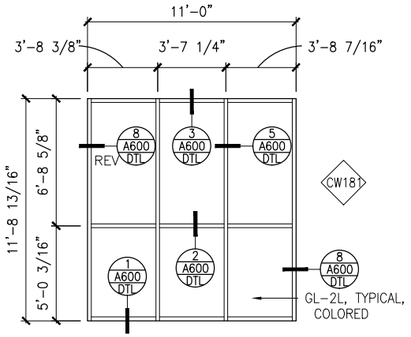


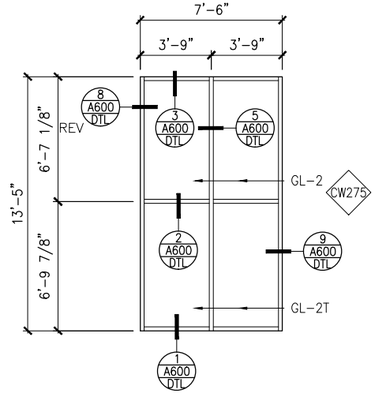


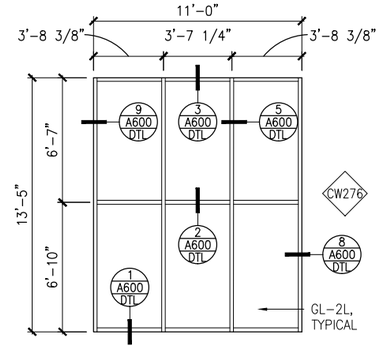


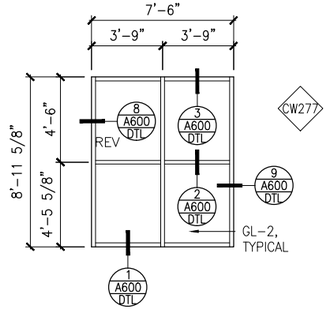


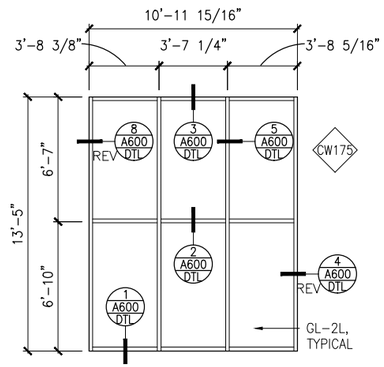


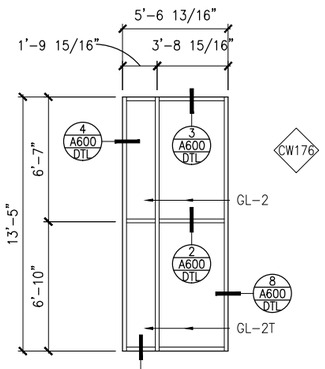


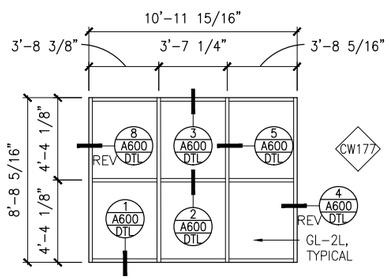


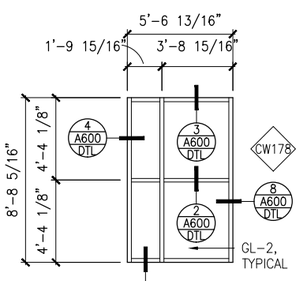


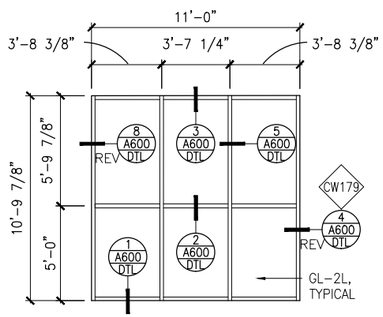












1 VC WINDOW TYPES
SCALE:1/8"=1'-0"

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SCALE

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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

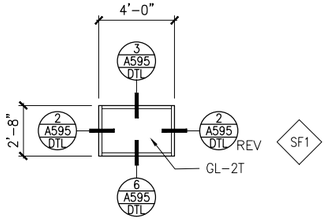
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VAN WHITE STATION
VC WINDOW TYPES

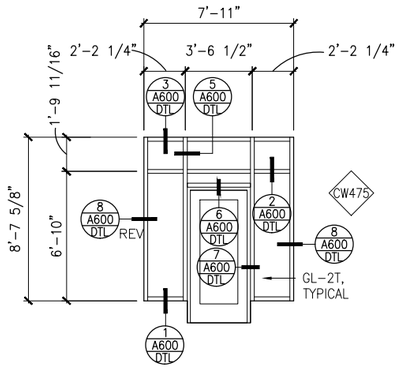
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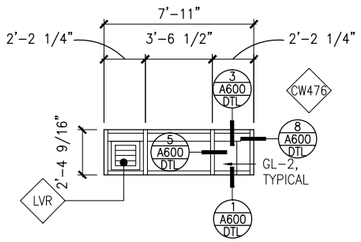
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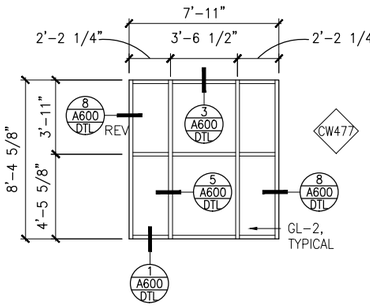
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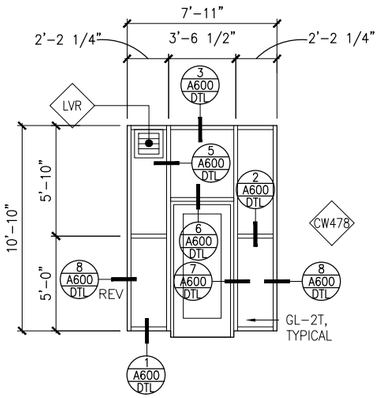
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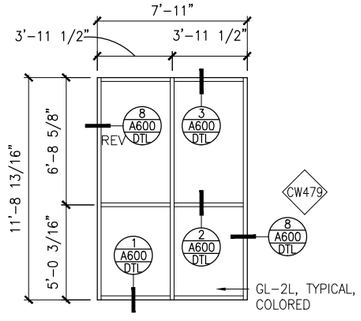


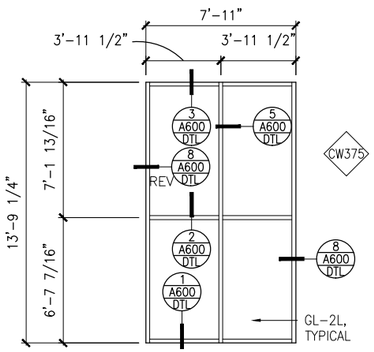


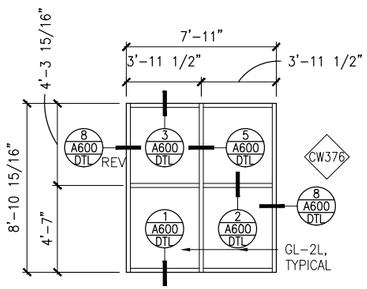


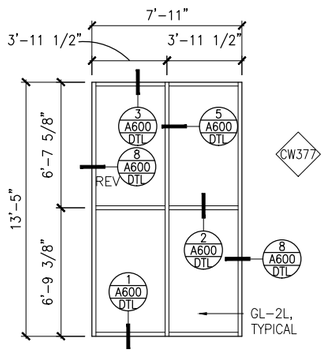


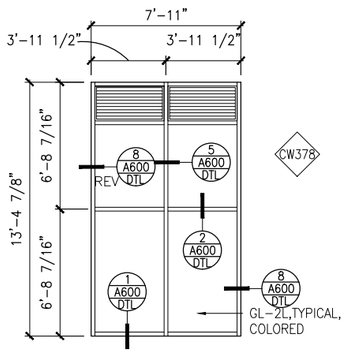












1 VC WINDOW TYPES
SCALE:1/8"=1'-0"

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SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
VC WINDOW TYPES

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-DTL-593

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ARCHITECTURAL WOVEN MESH SCHEDULES

ELEVATION	PANEL NO.	WIDTH	HEIGHT	TYPE	ELEV DWG REFERENCE	ATTACHMENT DETAILS	NOTES
TRACK 2	M275	6'-11 15/16"	11'-0 15/16"		E3-VWT-ARC-ELV-227	/ A	
	M276	15'-1 7/8"	8'-4 3/8"		E3-VWT-ARC-ELV-227	/ A	
	M277	15'-1 7/8"	6'-1 5/8"		E3-VWT-ARC-ELV-227	/ A	
	M278	15'-1 7/8"	8'-4 3/8"		E3-VWT-ARC-ELV-227	/ A	
	M279	15'-1 7/8"	6'-1 1/2"		E3-VWT-ARC-ELV-227	/ A	
	M280	14'-5"	12'-7 7/16"		E3-VWT-ARC-ELV-227	/ A	
	M281	7'-0 1/16"	12'-7 7/16"		E3-VWT-ARC-ELV-227	/ A	
	M282	15'-1 7/8"	8'-4 3/8"		E3-VWT-ARC-ELV-227	/ A	
	M283	11'-1 3/16"	8'-8 3/16"		E3-VWT-ARC-ELV-227	/ A	
	M284	5'-9 3/16"	8'-4 3/8"		E3-VWT-ARC-ELV-227	/ A	
TRACK 1	M175	6'-11 15/16"	10'-8 3/8"		E3-VWT-ARC-ELV-221	/ A	
	M176	15'-1 7/8"	8'-4 3/8"		E3-VWT-ARC-ELV-221	/ A	
	M177	15'-1 7/8"	5'10"		E3-VWT-ARC-ELV-221	/ A	
	M178	15'-1 7/8"	8'-4 3/8"		E3-VWT-ARC-ELV-221	/ A	
	M179	15'-1 7/8"	5'10"		E3-VWT-ARC-ELV-221	/ A	
	M180	14'-5"	11'-11 5/8"		E3-VWT-ARC-ELV-221	/ A	
	M181	15'-2"	11'-11 5/8"		E3-VWT-ARC-ELV-221	/ A	
	M182	15'-1 7/8"	8'-4 3/8"		E3-VWT-ARC-ELV-221	/ A	
	M183	15'-1 7/8"	8'-4 3/8"		E3-VWT-ARC-ELV-220	/ A	
	M184	15'-2"	11'-11 5/8"		E3-VWT-ARC-ELV-220	/ A	
	M185	3'-7 13/16"	8'-4 3/8"		E3-VWT-ARC-ELV-220	/ A	
SIDE ELEVATION EAST	M375	5'-7"	10'-11 15/16"		E3-VWT-ARC-ELV-222	/ A	
	M376	5'-7"	10'-11 15/16"		E3-VWT-ARC-ELV-222	/ A	
	M377	11'-10"	1'-8 1/2"		E3-VWT-ARC-ELV-222	/ A	

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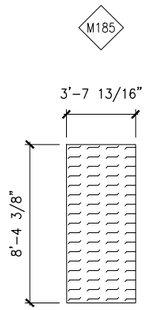
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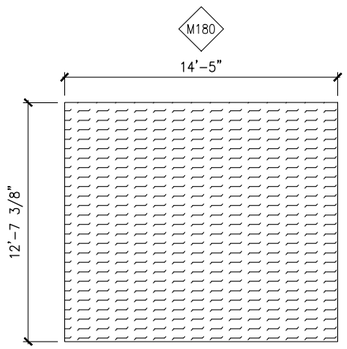
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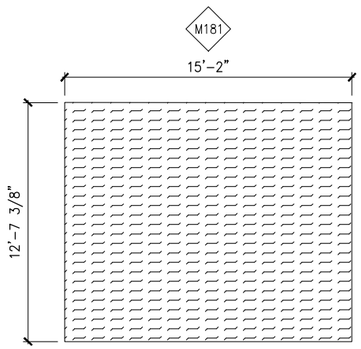
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VAN WHITE STATION
VC ARCHITECTURAL WOVEN METAL MESH SCHEDULE-1

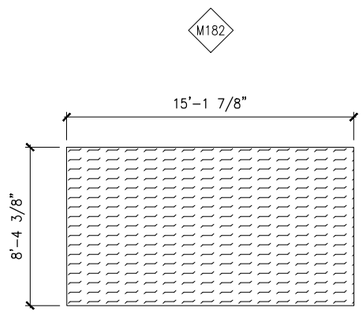
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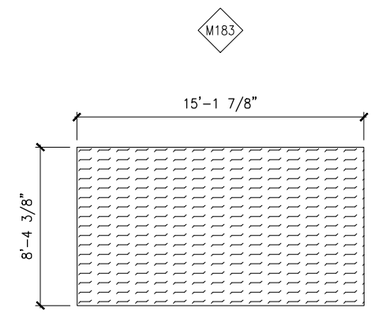
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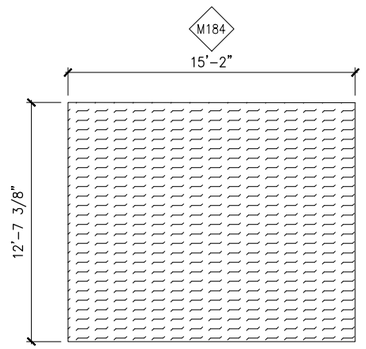


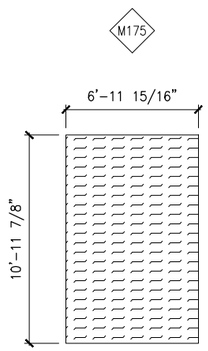


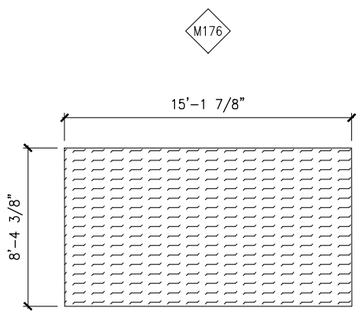


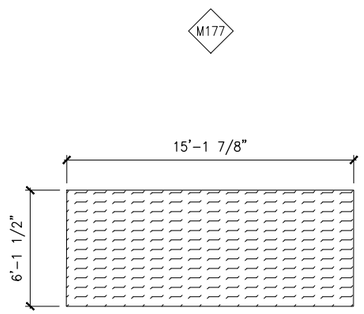


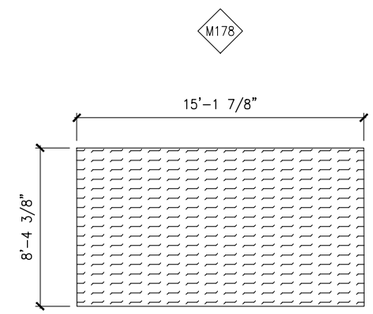


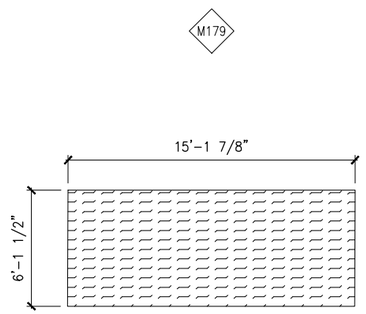












1 VC WOVEN METAL MESH TYPES
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SCALE

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SOUTHWEST Green Line LRT Extension

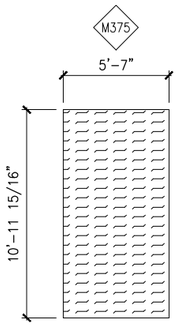
CIVIL - VOLUME 11D
VAN WHITE STATION
VC ARCHITECTURAL WOVEN METAL MESH TYPES

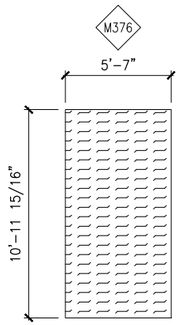
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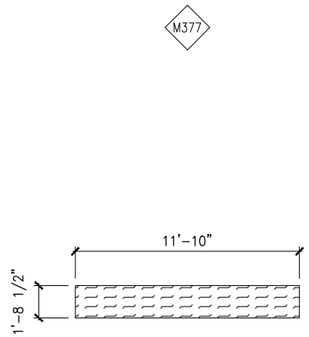
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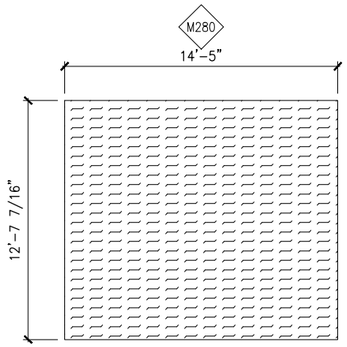
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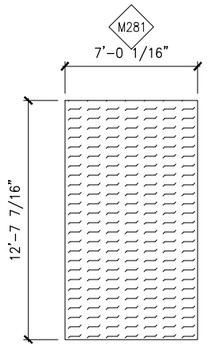
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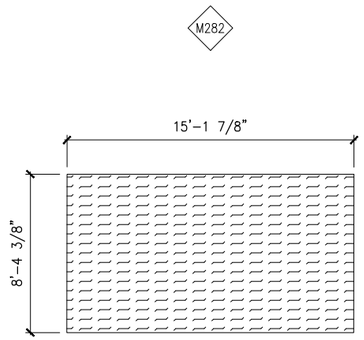


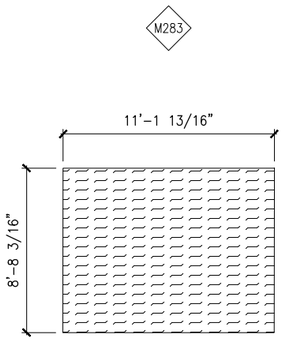


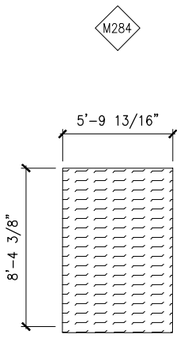


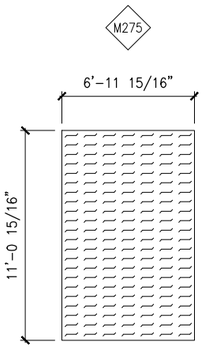


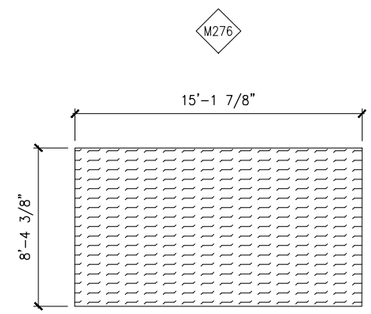


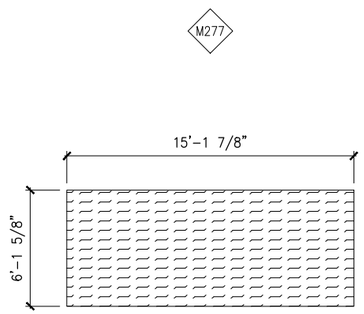


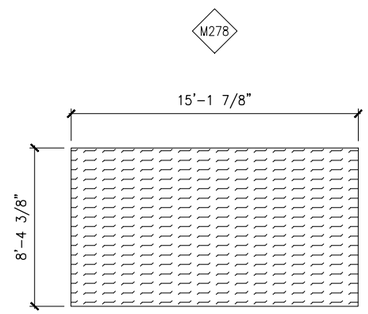


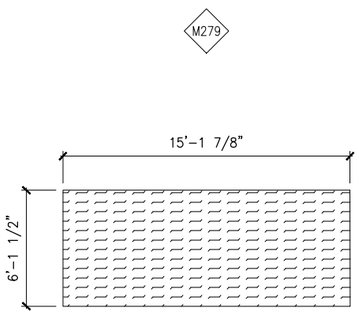












1 VC WOVEN METAL MESH TYPES
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

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AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

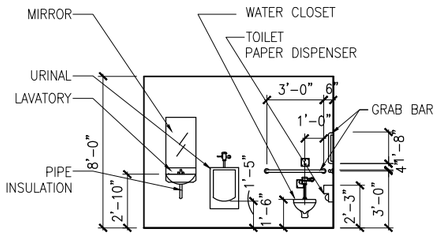
CIVIL - VOLUME 11D
VAN WHITE STATION
VC ARCHITECTURAL WOVEN METAL MESH TYPES

DISCIPLINE: ARCHITECTURE

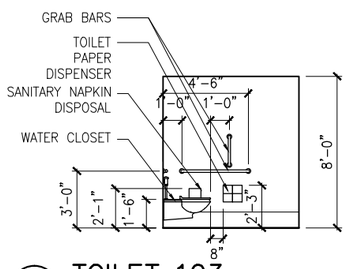
SHEET NAME: E4-VWT-ARC-DTL-652

SHEET 247 OF 394

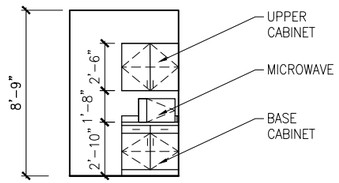
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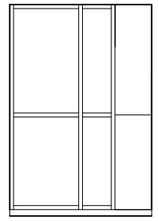
1 TOILET 103
SCALE: 1/4"=1'-0"



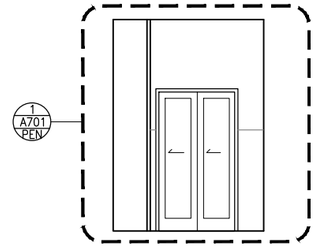
2 TOILET 103
SCALE: 1/4"=1'-0"



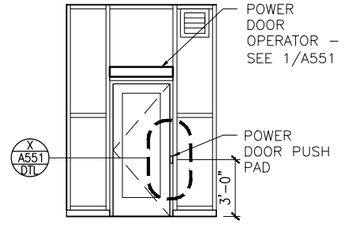
6 BREAK 102
SCALE: 1/4"=1'-0"



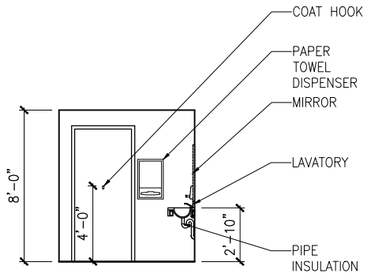
12 ELEV LOBBY 200
SCALE: 1/4"=1'-0"



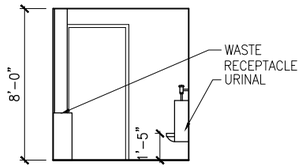
13 ELEV LOBBY 200
SCALE: 1/4"=1'-0"



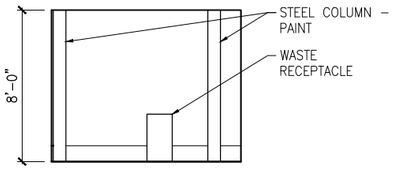
14 ELEV LOBBY 200
SCALE: 1/4"=1'-0"



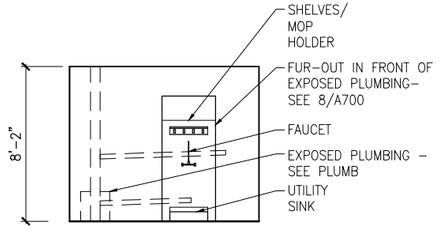
3 TOILET 103
SCALE: 1/4"=1'-0"



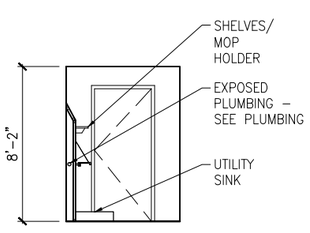
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SCALE: 1/4"=1'-0"



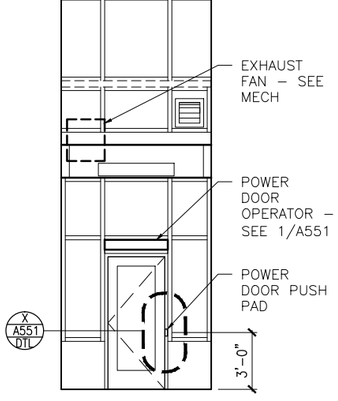
5 TOILET 103
SCALE: 1/4"=1'-0"



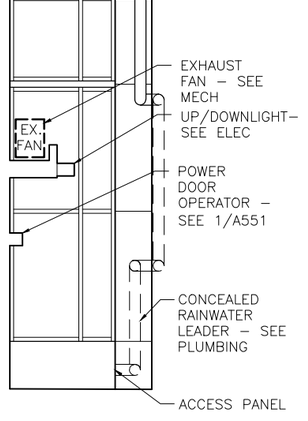
7 UTILITY 104
SCALE: 1/4"=1'-0"



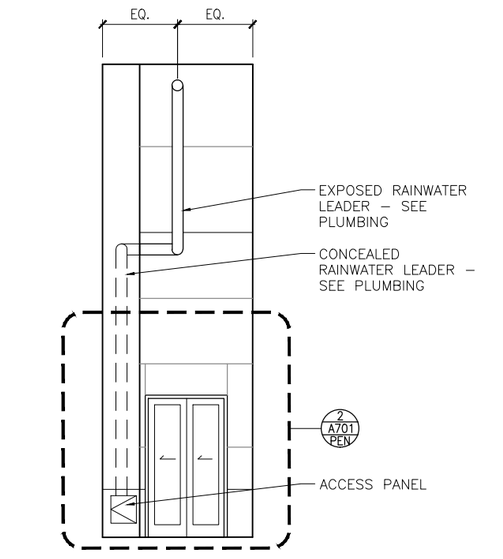
8 UTILITY 104
SCALE: 1/4"=1'-0"



9 ELEV LOBBY 100
SCALE: 1/4"=1'-0"



10 ELEV LOBBY 100
SCALE: 1/4"=1'-0"



11 ELEV LOBBY 100
SCALE: 1/4"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

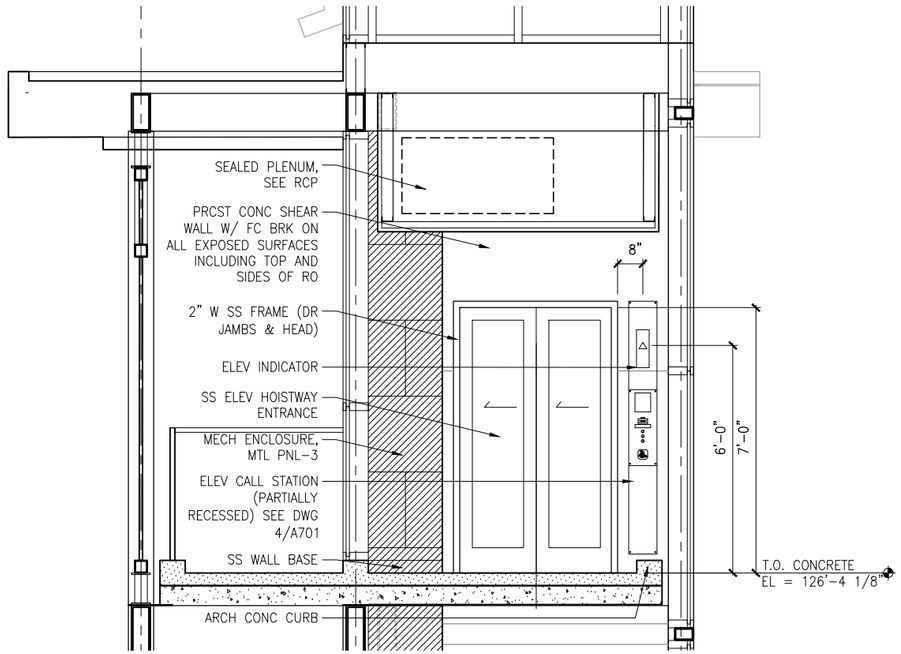
CIVIL - VOLUME 11D
VAN WHITE STATION
VC INTERIOR ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-700

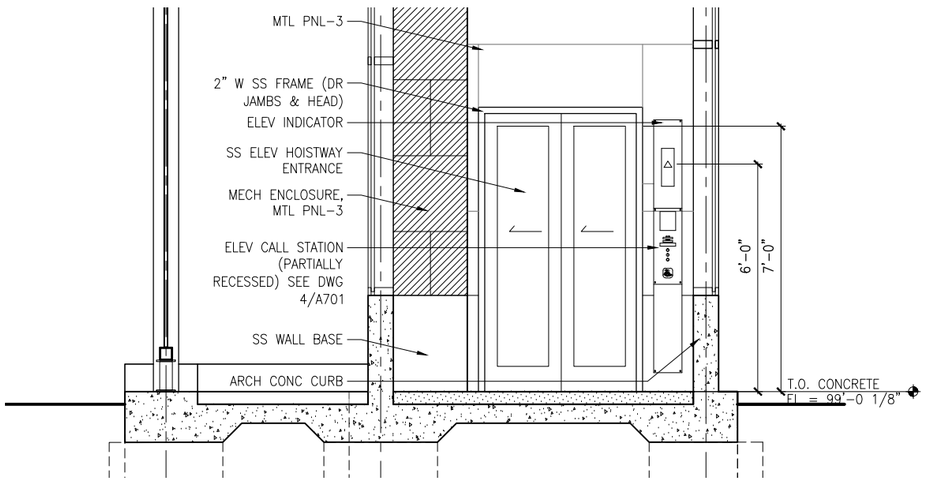
SHEET 248 OF 394

Jan, 19 2016 09:56 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\VAN WHITE STATION\E4-VWT-ARC-ELV-700.dwg By: Ebsenjr



1 VC ELEVATOR LOBBY INTERIOR ELEVATION

SCALE:1/4"=1'-0"



2 VC ELEVATOR LOBBY INTERIOR ELEVATION

SCALE:1/4"=1'-0"

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

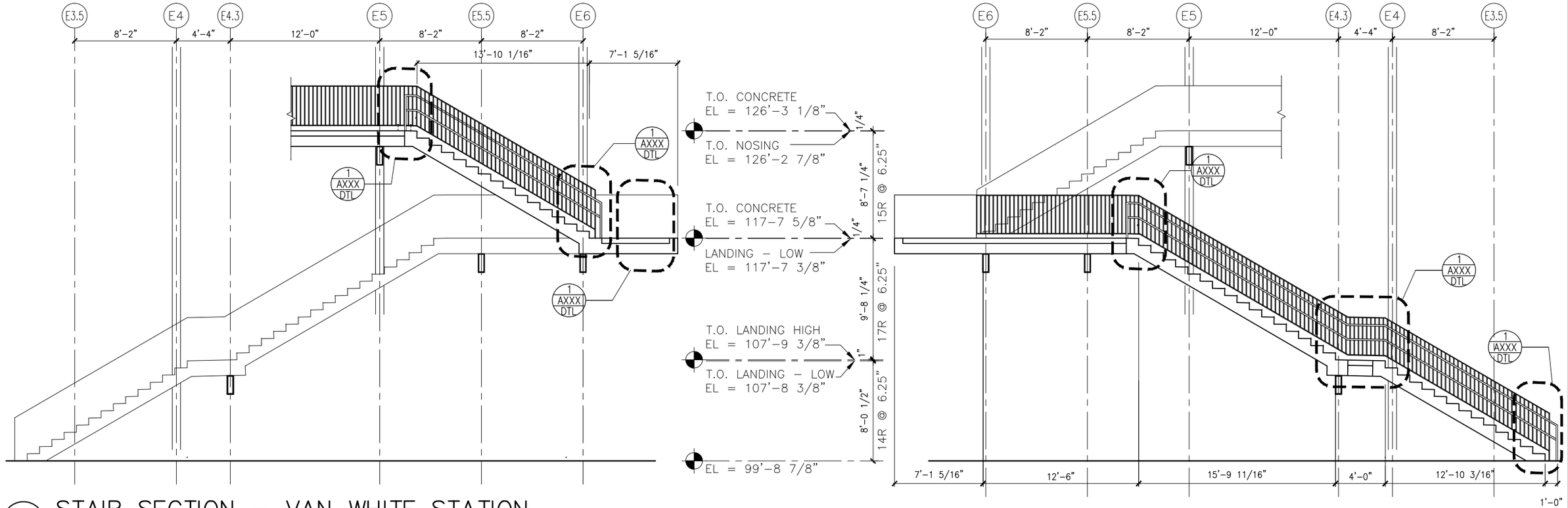
CIVIL - VOLUME 11D
VAN WHITE STATION
ELEVATOR LOBBY ENLARGED ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-ELV-701

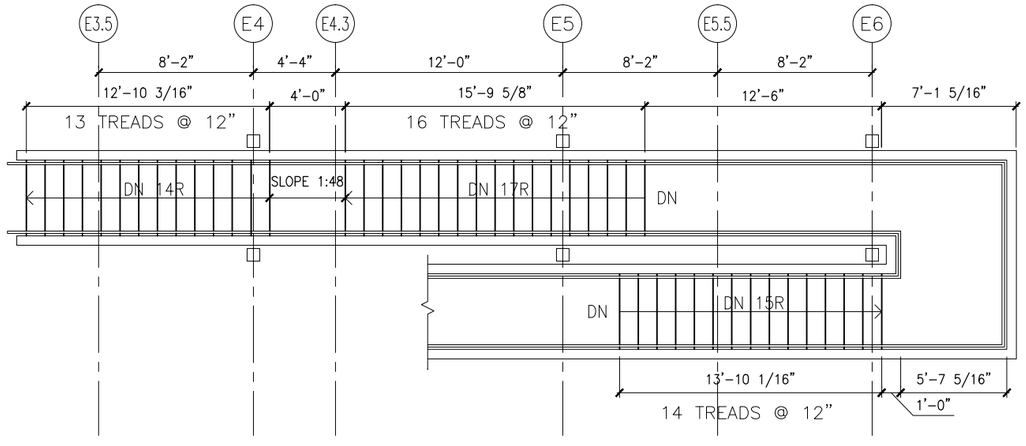
SHEET 249 OF 394

Jan, 18 2016 10:29 am V:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-ELV-701.dwg By: v-mccartp



1 STAIR SECTION – VAN WHITE STATION

SCALE:1/8"=1'-0"



2 STAIR PLAN – VAN WHITE STATION

SCALE:1/8"=1'-0"

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SOUTHWEST Green Line LRT Extension

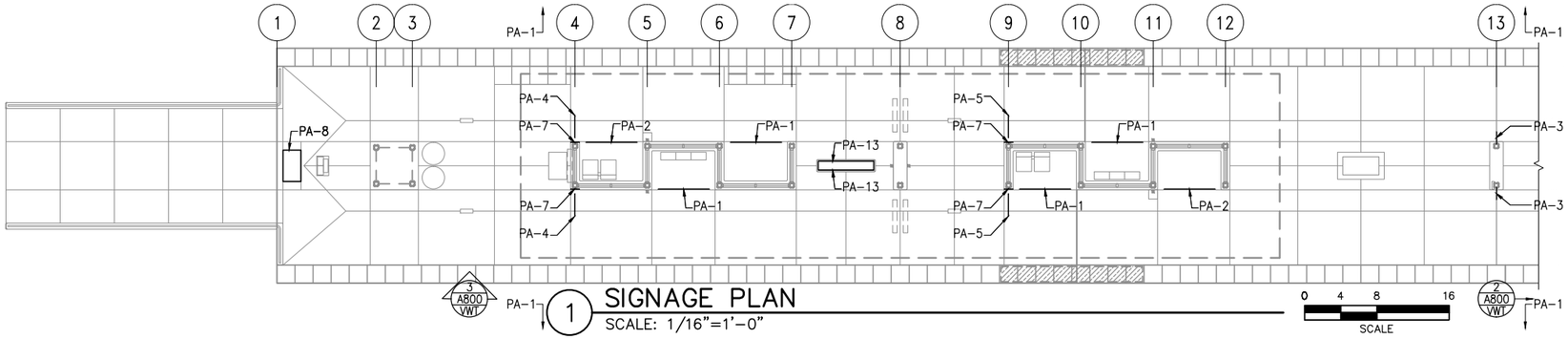
CIVIL - VOLUME 11D
VAN WHITE STATION
STAIR DETAILS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-DTL-710

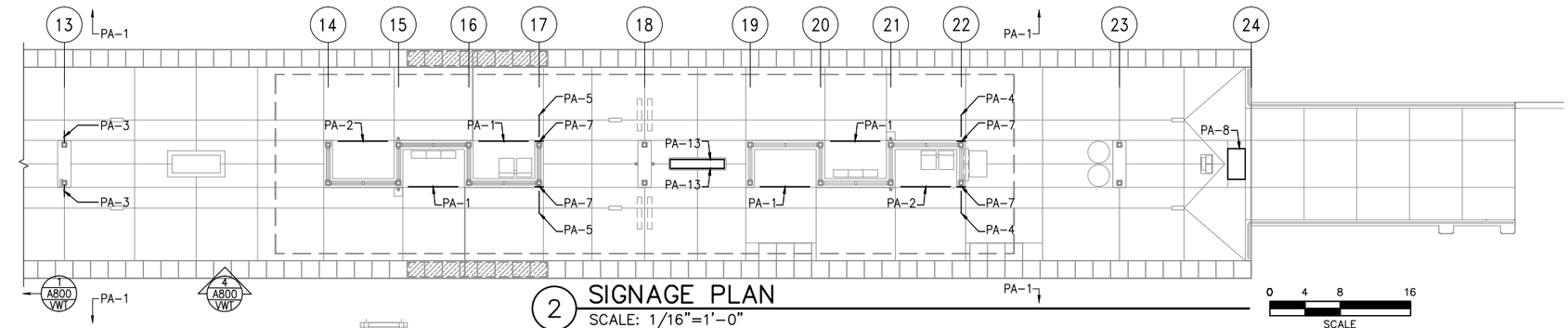
SHEET 250 OF 394

Jan, 19 2016 09:57 pm v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\VAN WHITE STATION\E4-VWT-ARC-DTL-710.dwg By: Ebsenjr



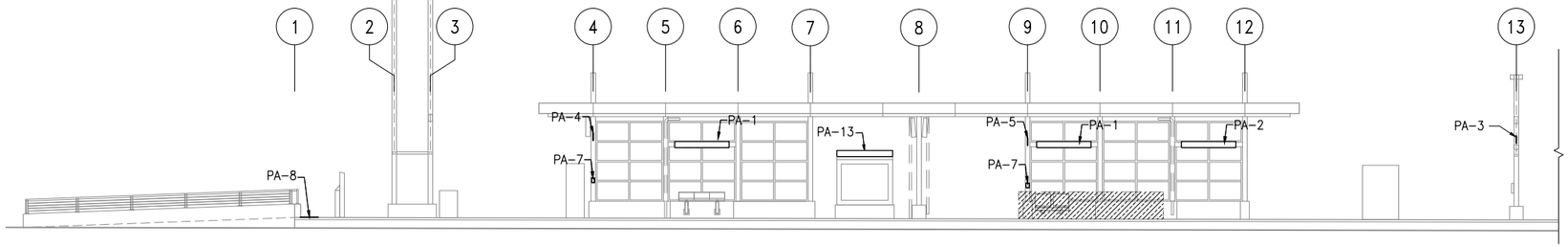
1 SIGNAGE PLAN
SCALE: 1/16"=1'-0"

0 4 8 16
SCALE



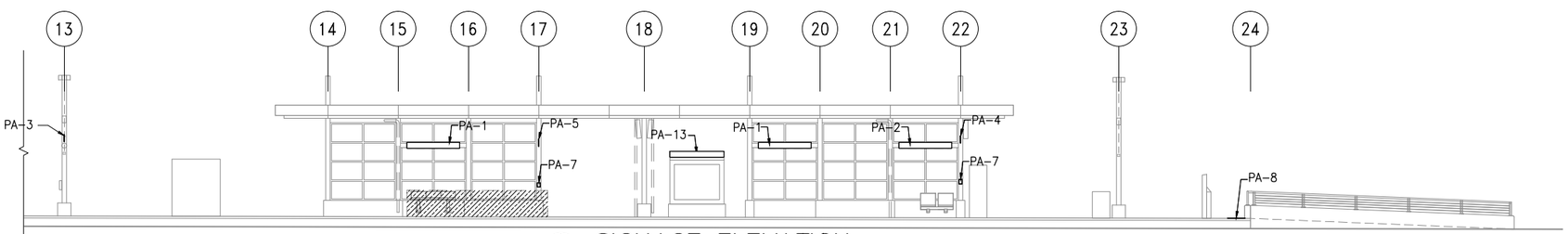
2 SIGNAGE PLAN
SCALE: 1/16"=1'-0"

0 4 8 16
SCALE



3 SIGNAGE ELEVATION
SCALE: 1/16"=1'-0"

0 4 8 16
SCALE



4 SIGNAGE ELEVATION
SCALE: 1/16"=1'-0"

0 4 8 16
SCALE

GENERAL SHEET NOTES

1. ALL SIGNAGE MOUNTING HEIGHTS ARE FROM CENTER LINE AT BOTTOM EDGE TO TOP OF PLATFORM
2. FOR SIGNS PA-1, PA-4, PA-5 SEE SHEET DTL A801 FOR MOUNTING
3. FOR SIGNS PA-6, PA-12, PA-13, PA-14, PA-15, PA-16 SEE KIOSK AND CABINET DETAILS FOR MOUNTING
4. SEE VOLUME 11E FOR COMMON DETAILS

SIGNAGE KEY

PA-1 PA-2	1 A801 DTL
PA-3 PA-4 PA-5	2 A801 DTL
PA-6	3 A801 DTL
PA-7	4 A801 DTL
PA-8	5 A801 DTL
PA-12	6 A801 DTL
PA-13 PA-14	7 A801 DTL
PA-15	3 A803 DTL
PA-16	2 A803 DTL

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AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

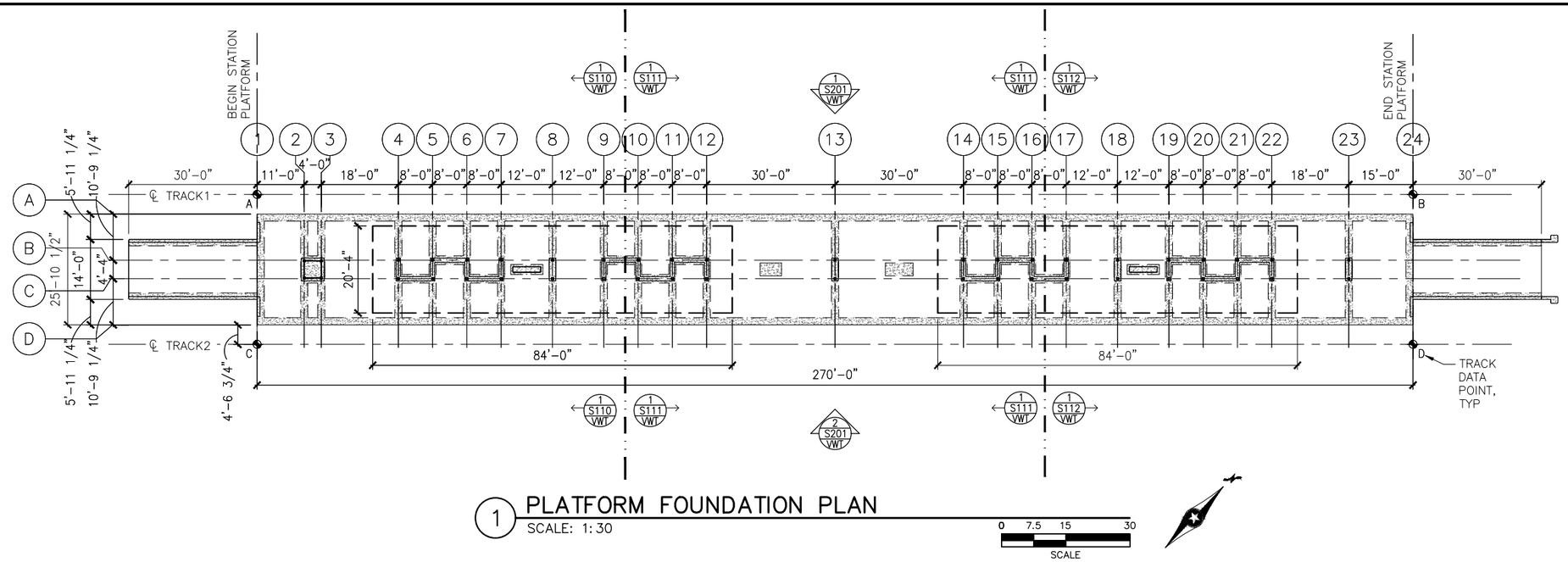
CIVIL - VOLUME 11D
VAN WHITE STATION
SIGNAGE PLANS AND ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-VWT-ARC-SGN-800

SHEET 251 OF 394

Jan, 18 2016 10:30 am v:\3400_ADC\CAD\segment e4\plan sheets\ARCH\van white station\E4-VWT-ARC-SGN-800.dwg By: v-mccarrtp



1 PLATFORM FOUNDATION PLAN

SCALE: 1:30

0 7.5 15 30

SCALE

TRACK DATA

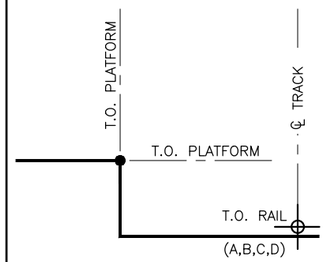
ELEV 100'-0" (LOCATION ON PLAN)

TRACK 1 EL 100'-0"= 816.93 (PT 'B')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
A	817.47	1898+32.55	
B	816.93	1901+02.55	

TRACK 2 EL 100'-0"= 816.93 (PT 'D')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
C	817.47	2898+32.55	
D	816.93	2901+02.55	



SECTION DIAGRAM AT PLATFORM EDGE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
PLATFORM FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-101

SHEET 252 OF 394

Jan, 14 2016 06:30 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\VAN WHITE STATION\E4-VWT-STR-PLN-101.dwg By: jordanl

VAN WHITE

VAN WHITE STATION PLATFORM

REFERENCE GRID	DISTANCE FROM BEGIN PLATFORM (FT)	T.O. TOPPING ELEVATION	T.O. STR. SLAB ELEVATION	T.O. TOPPING ELEVATION AT "L7"	B.O. BASEPLATE ELEVATION	T.O. WALL ELEVATION	T.O. HSS4X6 ELEVATION	T.O. W8X31 ELEVATION	T.O. HSS6X6X1/2 ELEVATION	H1 (T.O. SLAB TO T.O. WALL) (FT)
1	0	818.64	818.30	818.56						
2	11	818.61	818.28	818.53	816.86	820.11			834.61	1.83
3	15	818.61	818.27	818.53	816.86	820.11			834.61	1.84
4	33	818.57	818.24	818.49	816.82	820.41	826.91	830.58	834.91	2.18
5	41	818.55	818.22	818.47	816.80	820.41	826.91	830.58		2.19
6	49	818.54	818.21	818.46	816.79	820.41	826.91	830.58		2.21
7	57	818.52	818.19	818.44	816.77	820.41	826.91	830.58	834.91	2.22
WALL TRANSITION POINT 1	**59.75**	**818.52**	**818.18**	**818.44**		**820.02**		**830.58**		**1.83**
WALL TRANSITION POINT 2	**66.25**	**818.50**	**818.17**	**818.42**		**820.02**		**830.58**		**1.85**
8	69	818.50	818.17	818.42	816.75	820.00		830.58		1.83
9	81	818.47	818.14	818.39	816.72	820.41	826.91	830.58	834.91	2.27
10	89	818.46	818.13	818.38	816.71	820.41	826.91	830.58		2.29
11	97	818.44	818.11	818.36	816.69	820.41	826.91	830.58		2.30
12	105	818.43	818.09	818.35	816.68	820.41	826.91	830.58	834.91	2.32
13	135	818.37	818.03	818.29	816.62	819.87			834.37	1.83
14	165	818.31	817.97	818.23	816.56	820.15	826.65	830.32	834.65	2.18
15	173	818.29	817.96	818.21	816.54	820.15	826.65	830.32		2.19
16	181	818.27	817.94	818.19	816.52	820.15	826.65	830.32		2.21
17	189	818.26	817.93	818.18	816.51	820.15	826.65	830.32	834.65	2.22
18	201	818.23	817.90	818.15	816.48	819.73		830.32		1.83
WALL TRANSITION POINT 3	**203.75**	**818.23**	**817.90**	**818.15**		**819.73**		**830.32**		**1.83**
WALL TRANSITION POINT 4	**210.25**	**818.22**	**817.88**	**818.14**		**819.73**		**830.32**		**1.85**
19	213	818.21	817.88	818.13	816.46	820.15	826.65	830.32	834.65	2.27
20	221	818.19	817.86	818.11	816.44	820.15	826.65	830.32		2.29
21	229	818.18	817.85	818.10	816.43	820.15	826.65	830.32		2.30
22	237	818.16	817.83	818.08	816.41	820.15	826.65	830.32	834.65	2.32
23	255	818.13	817.79	818.05	816.38	819.63			834.13	1.83
24	270	818.10	817.76	818.02						

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.

REFERENCE TABLE NOTES

1. TOP OF PLATFORM ELEVATION (TOPPING SLAB) SHALL BE 4"(±) ABOVE TOP OF STRUCTURAL SLAB ELEVATION AS INDICATED IN TABLE.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

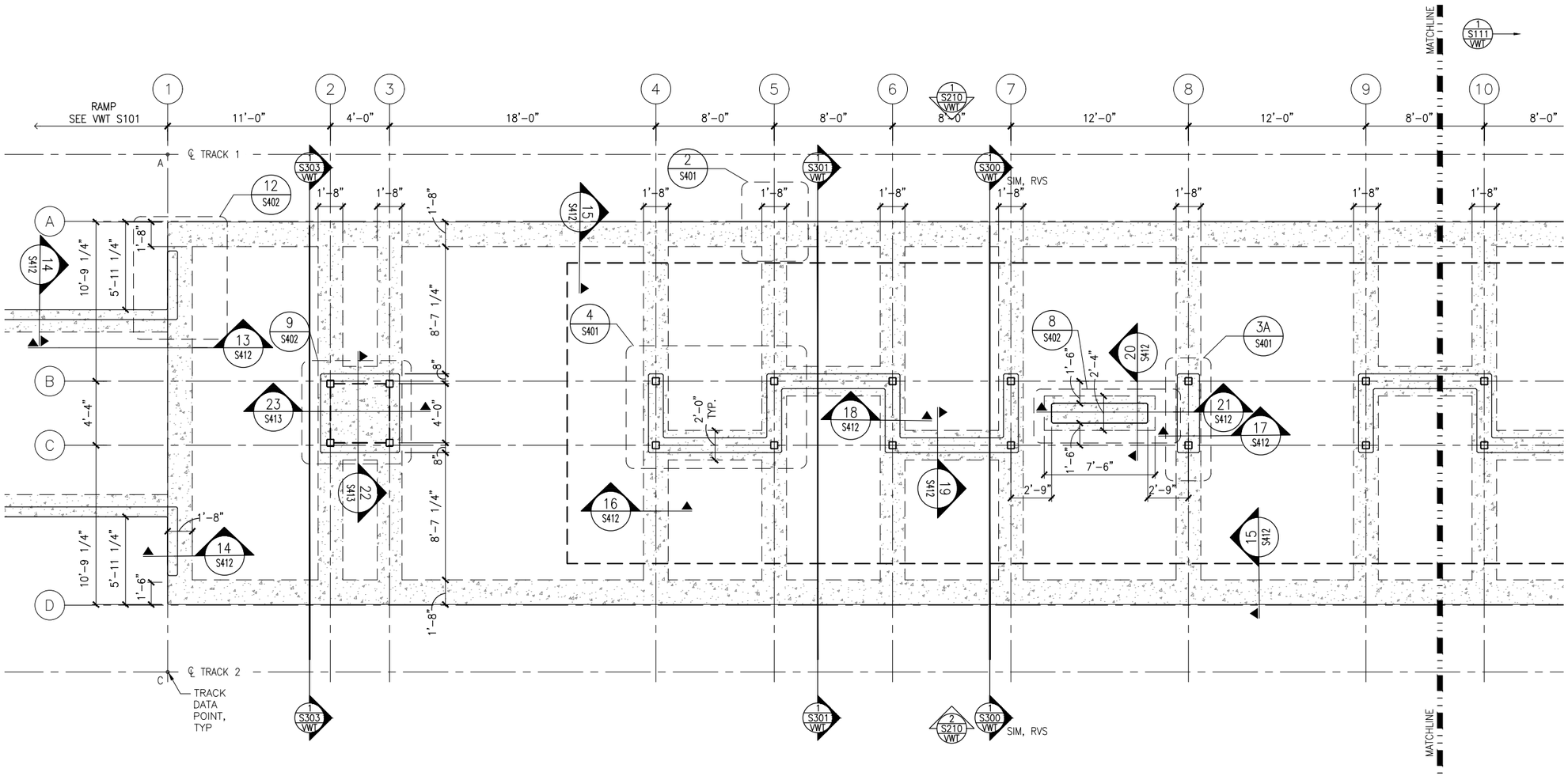
CIVIL - VOLUME 11D
VAN WHITE STATION
STATION REFERENCE TABLE

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-SCH-102

SHEET 253 OF 394

Jan, 14 2016 06:34 pm K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTS\STRUCTURES\VAN WHITE STATION\E4-VWT-STR-SCH-102.dwg By: jordanl



1 WEST PARTIAL FOUNDATION PLAN
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

FLOOR PLAN NOTES

1. FOR HEIGHTS AND LOCATIONS OF KNEE WALLS, SEE ARCH. DWGS.
2. FOR TYPICAL COLUMN BASE PLATE DETAILS SEE DWG. XXXXXX.
3. "GB–X" INDICATES GRADE BEAM MARK.
4. SLAB ON GRADE SHALL BEAR ON ENGINEERED FILL, REINF. W/ 4x4–W4.0xW4.0 W.W.F. TOP, W/ 1" CLR. COVER.

SCHEDULES or LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

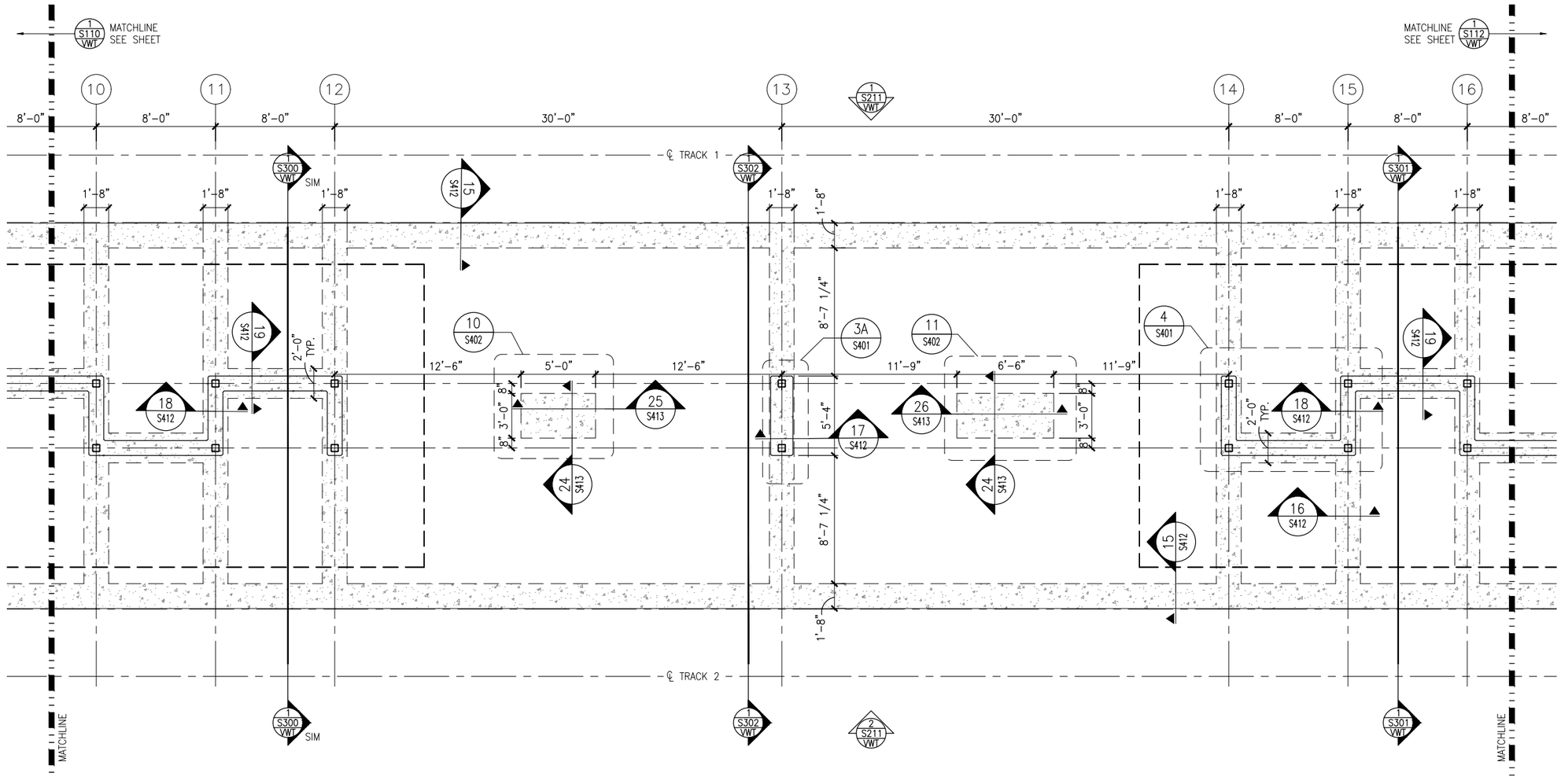
CIVIL - VOLUME 11D
VAN WHITE STATION
WEST PARTIAL FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-110

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1 MIDDLE PARTIAL FOUNDATION PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

FLOOR PLAN NOTES

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2. FOR TYPICAL COLUMN BASE PLATE DETAILS SEE DWG. XXXXXX.
3. "GB-X" INDICATES GRADE BEAM MARK.
4. SLAB ON GRADE SHALL BEAR ON ENGINEERED FILL, REINF. W/ 4x4-W4.0xW4.0 W.W.F. TOP, W/ 1" CLR. COVER.

SCHEDULES or LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

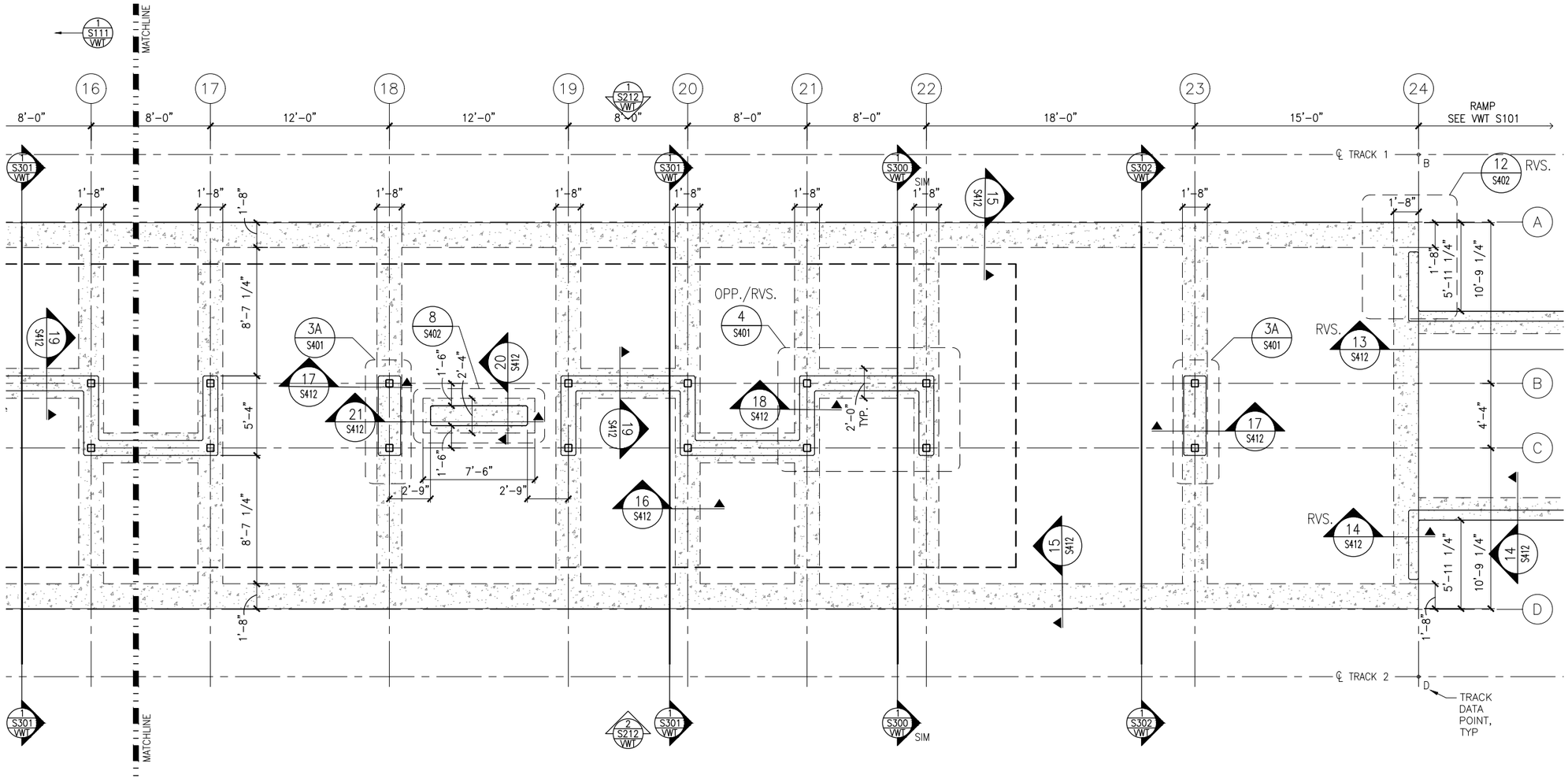
CIVIL - VOLUME 11D
VAN WHITE STATION
MIDDLE PARTIAL FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-111

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1 EAST PARTIAL FOUNDATION PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

FLOOR PLAN NOTES

1. FOR HEIGHTS AND LOCATIONS OF KNEE WALLS, SEE ARCH. DWGS.
2. FOR TYPICAL COLUMN BASE PLATE DETAILS SEE DWG. XXXXXX.
3. "GB-X" INDICATES GRADE BEAM MARK.
4. SLAB ON GRADE SHALL BEAR ON ENGINEERED FILL, REINF. W/ 4x4-W4.0xW4.0 W.W.F. TOP, W/ 1" CLR. COVER.

SCHEDULES or LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

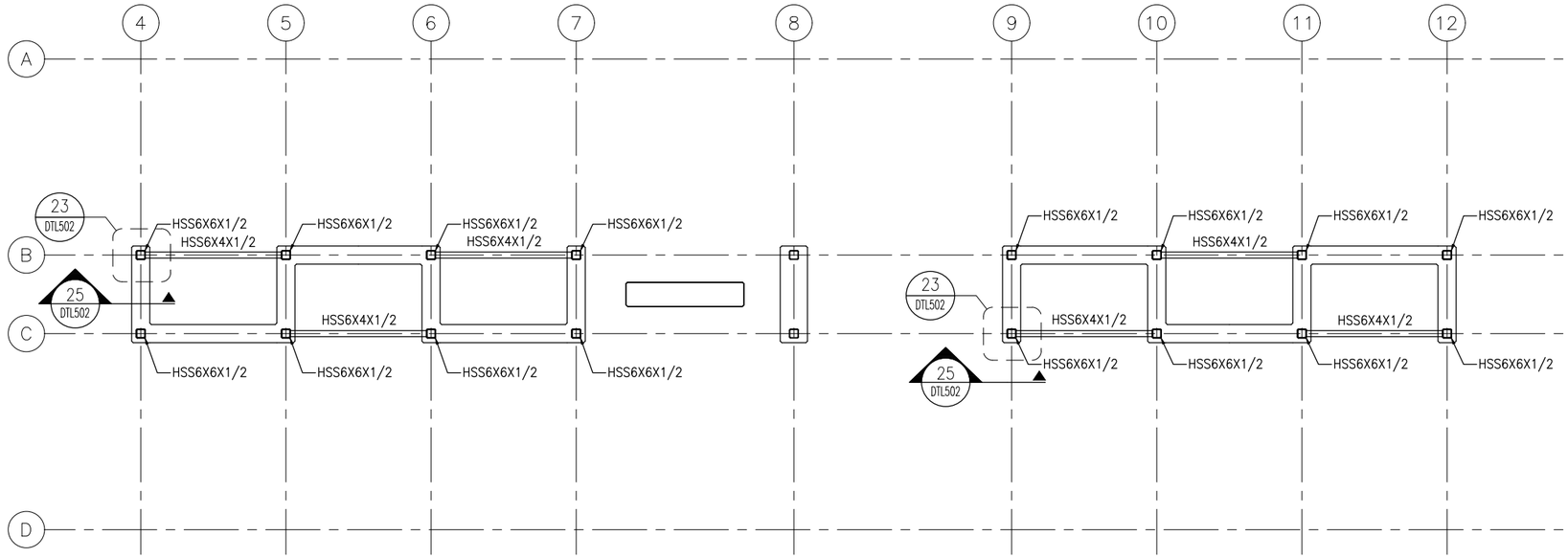
CIVIL - VOLUME 11D
VAN WHITE STATION
EAST PARTIAL FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-112

SHEET 256 OF 394

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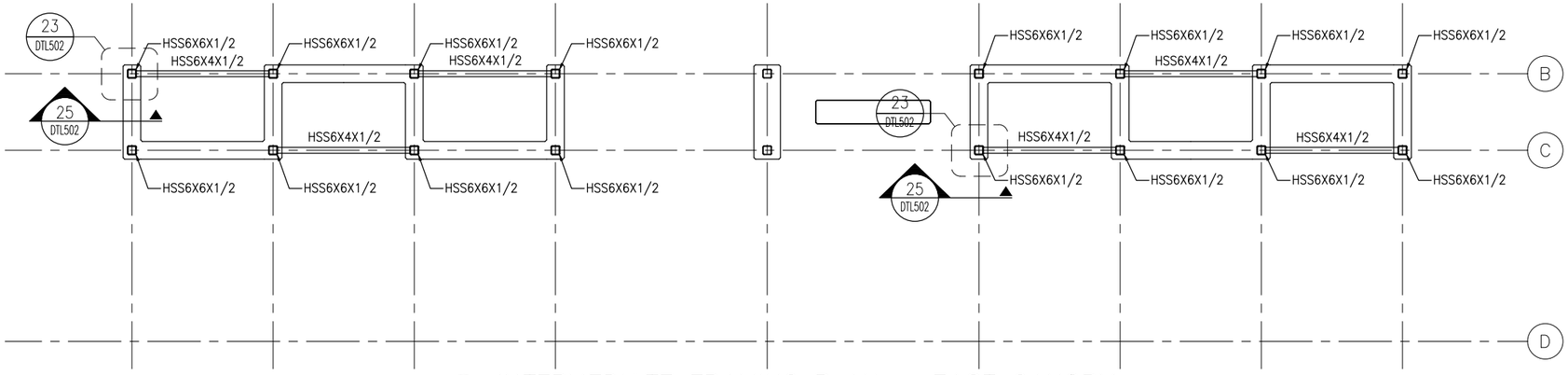


1 INTERMEDIATE FRAMING PLAN – WEST CANOPY

SCALE: 1/8"=1'–0"

0 2 4 8

SCALE



2 INTERMEDIATE FRAMING PLAN – EAST CANOPY

SCALE: 1/8"=1'–0"

0 2 4 8

SCALE

SHEET NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

KEY NOTES

1. [ ] INDICATES SPAN DIRECTION OF ROOF METAL DECK. SEE ARCH. DWGS.
2. [ ] DENOTES PREQUALIFIED SHOP OR FIELD WELDED CONNECTION.
3. BC DENOTES BOLTED CONNECTION, FOR TYPICAL BEAM TO BEAM BOLTED CONNECTIONS AND SIMILAR DETAILS SEE DWG. XXXXXXX & XXXXXXX

LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

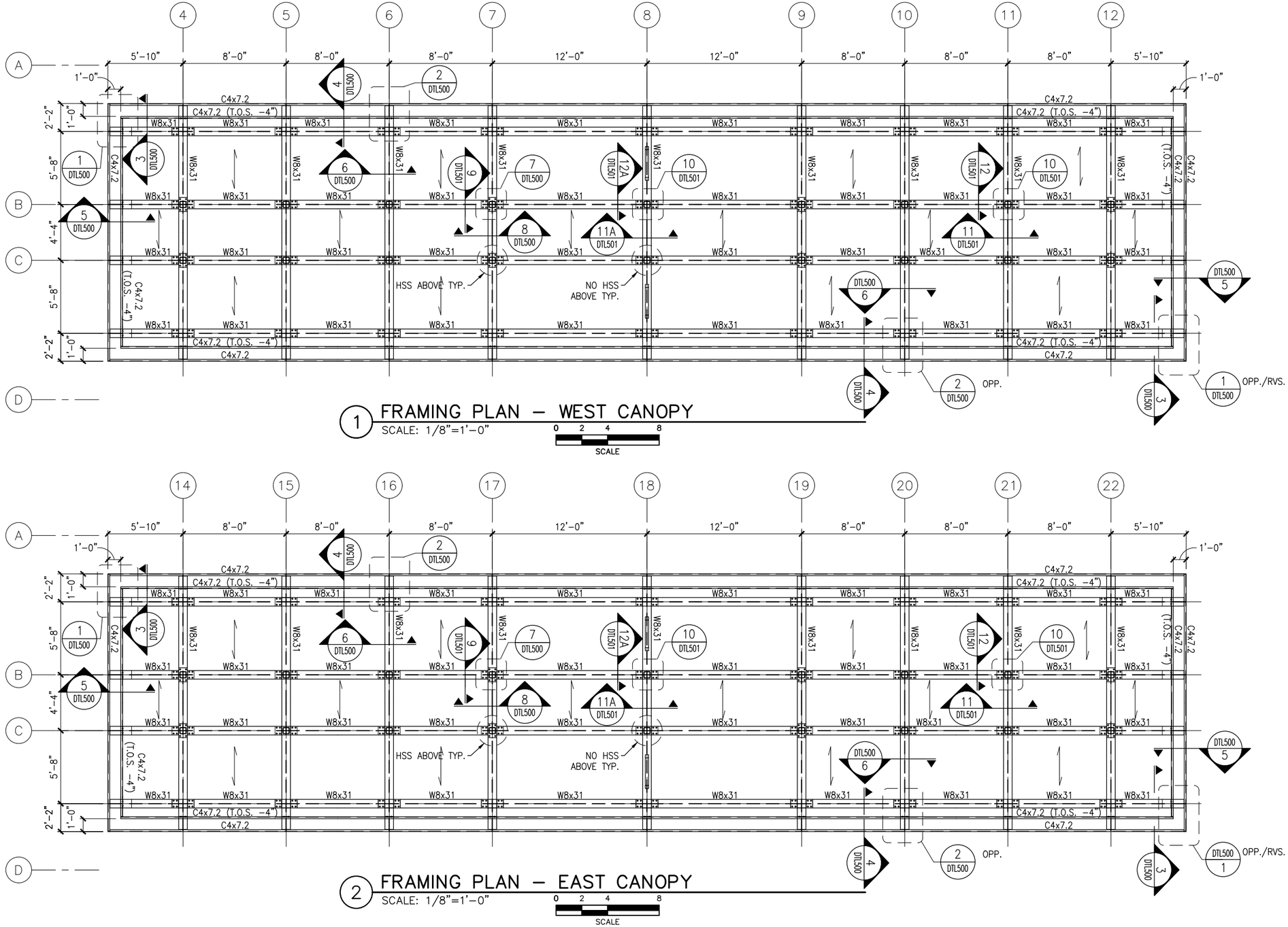
CIVIL - VOLUME 11D
VAN WHITE STATION
INTERMEDIATE FRAMING PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-140

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1 FRAMING PLAN – WEST CANOPY
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

2 FRAMING PLAN – EAST CANOPY
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

SHEET NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.
3. SEE VOLUME 11E FOR COMMON DETAILS.

KEY NOTES

1. [ ] INDICATES SPAN DIRECTION OF ROOF METAL DECK. SEE ARCH. DWGS.
2. [ ] DENOTES PREQUALIFIED SHOP OR FIELD WELDED CONNECTION.
3. BC DENOTES BOLTED CONNECTION, FOR TYPICAL BEAM TO BEAM BOLTED CONNECTIONS AND SIMILAR DETAILS SEE DWG. XXXXXXX & XXXXXXX

LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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SOUTHWEST Green Line LRT Extension

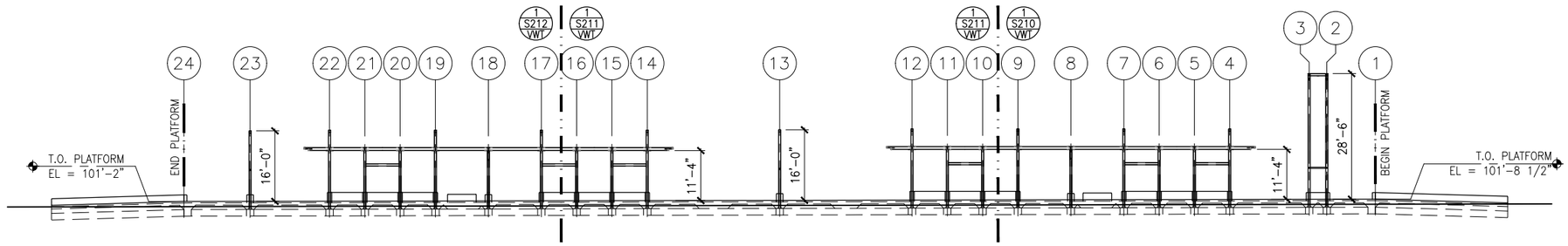
CIVIL - VOLUME 11D
VAN WHITE STATION
ROOF FRAMING PLANS

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DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-150

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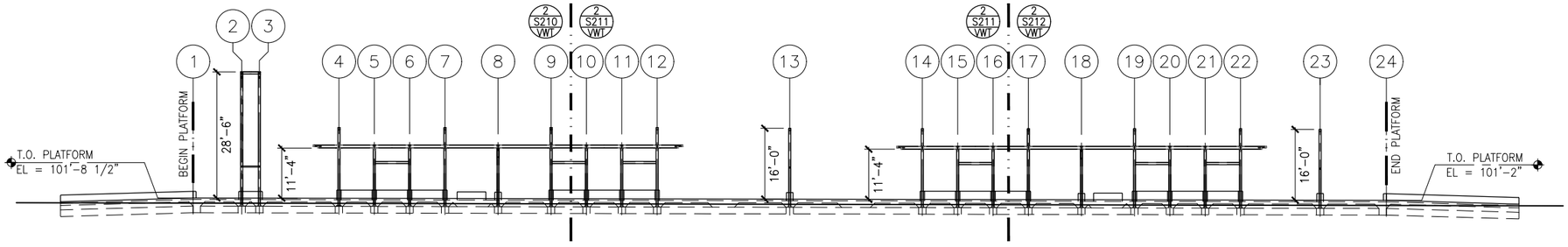


1 TRACK 1 ELEVATION – FRAMING

SCALE: 1:30 (–0.20% SLOPE)*

0 7.5 15 30

SCALE



2 TRACK 2 ELEVATION – FRAMING

SCALE: 1:30 (–0.20% SLOPE)*

0 7.5 15 30

SCALE

*VERIFY W/ TRACK PROFILE, ADJUST ELEVATIONS ACCORDINGLY

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

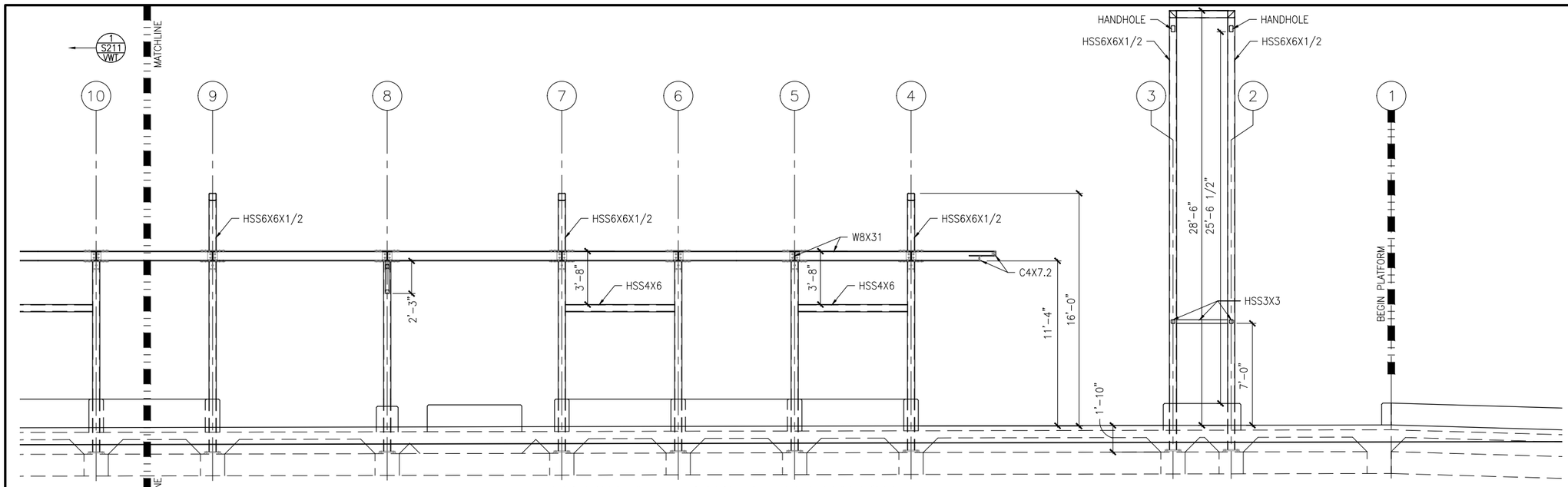
CIVIL - VOLUME 11D
VAN WHITE STATION
ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-ELV-201

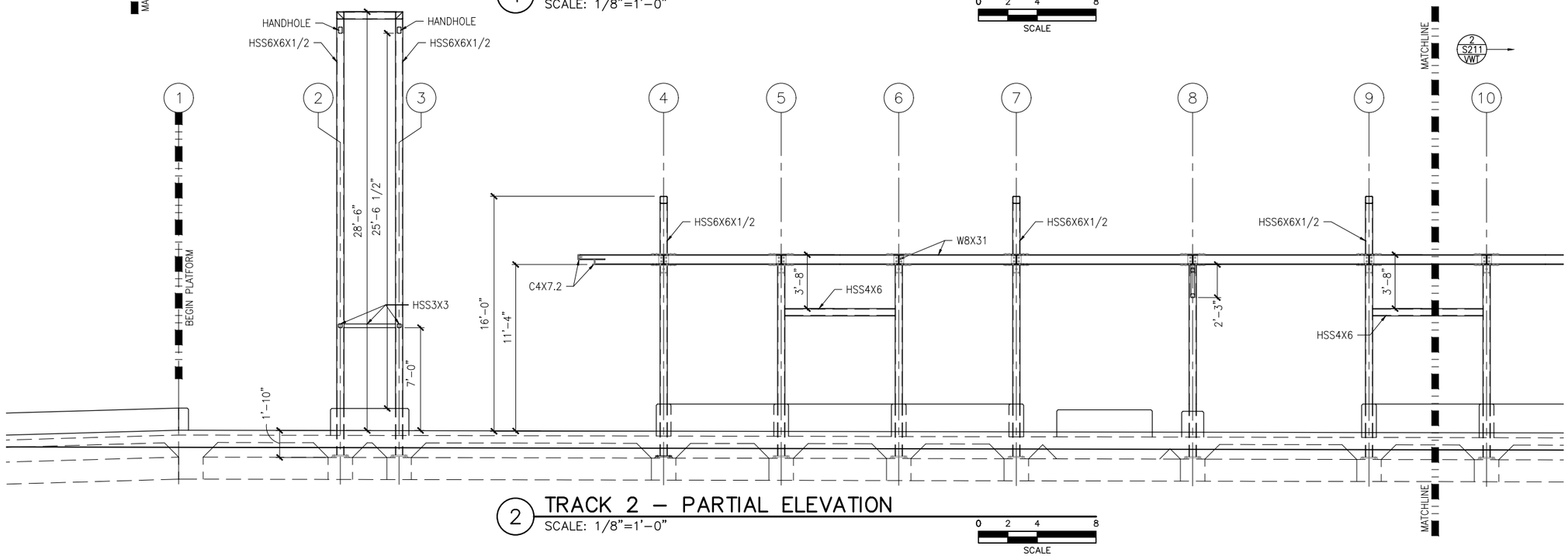
SHEET 259 OF 394

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1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

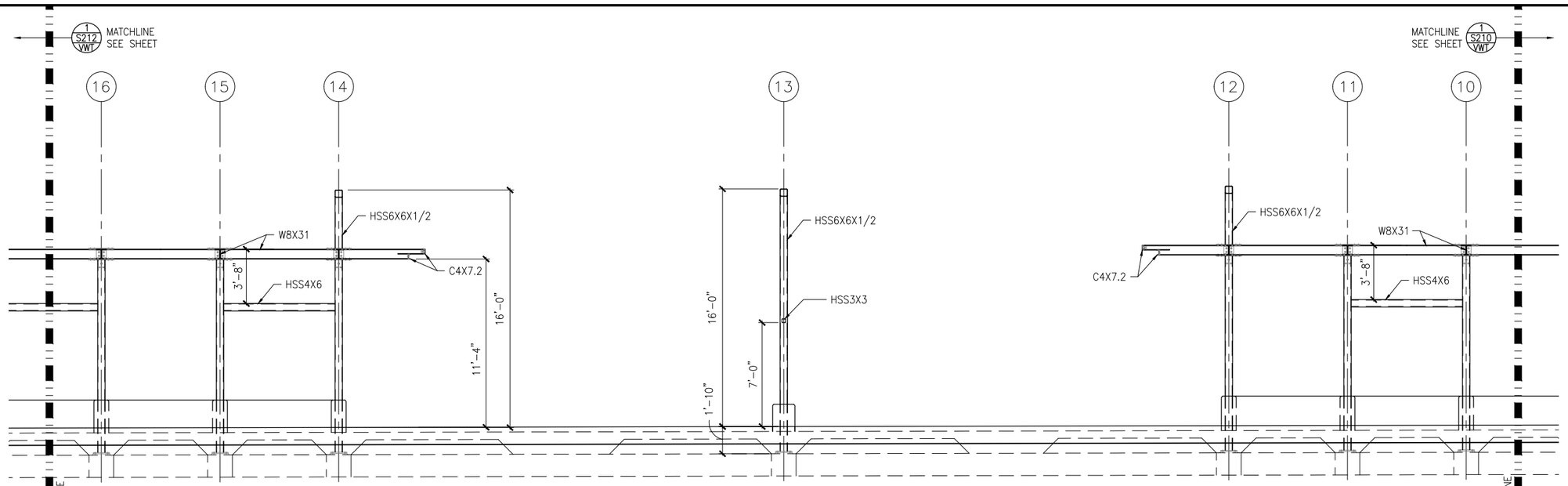
CIVIL - VOLUME 11D
VAN WHITE STATION
WEST PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-ELV-210

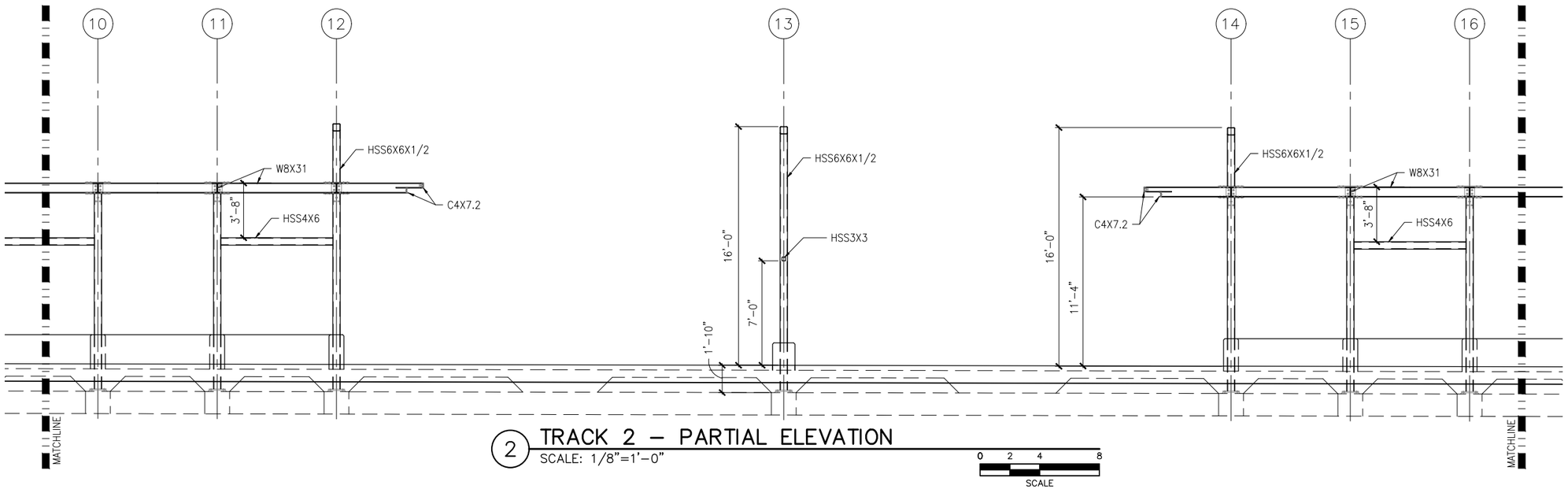
SHEET 260 OF 394

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1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

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SOUTHWEST Green Line LRT Extension

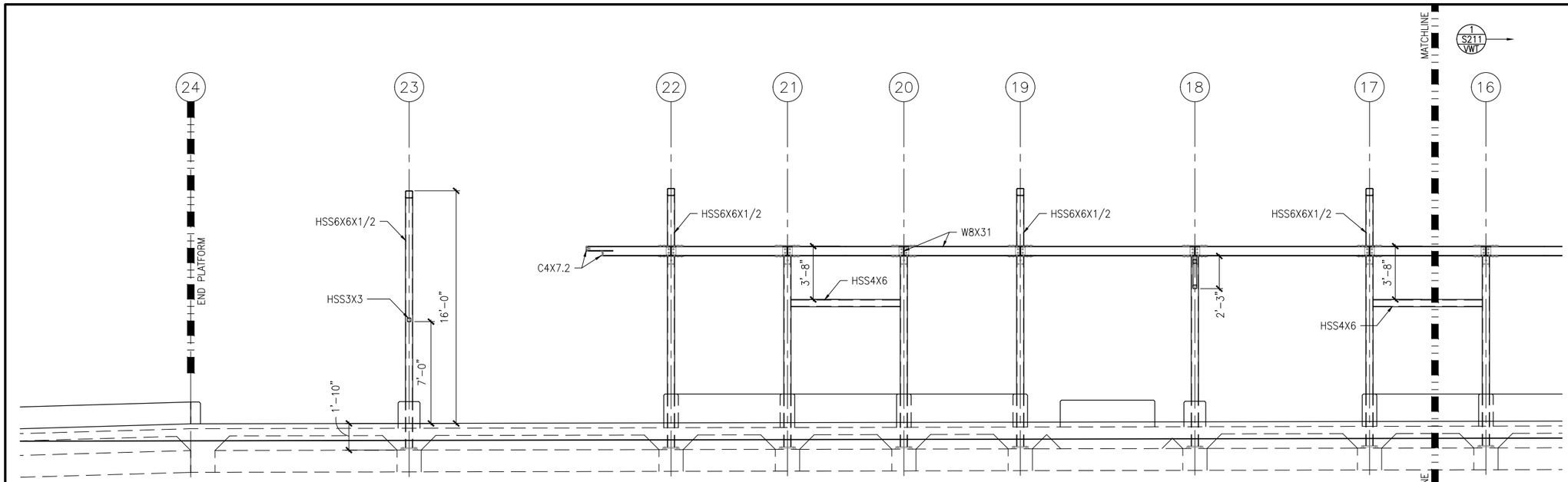
CIVIL - VOLUME 11D
VAN WHITE STATION
MIDDLE PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

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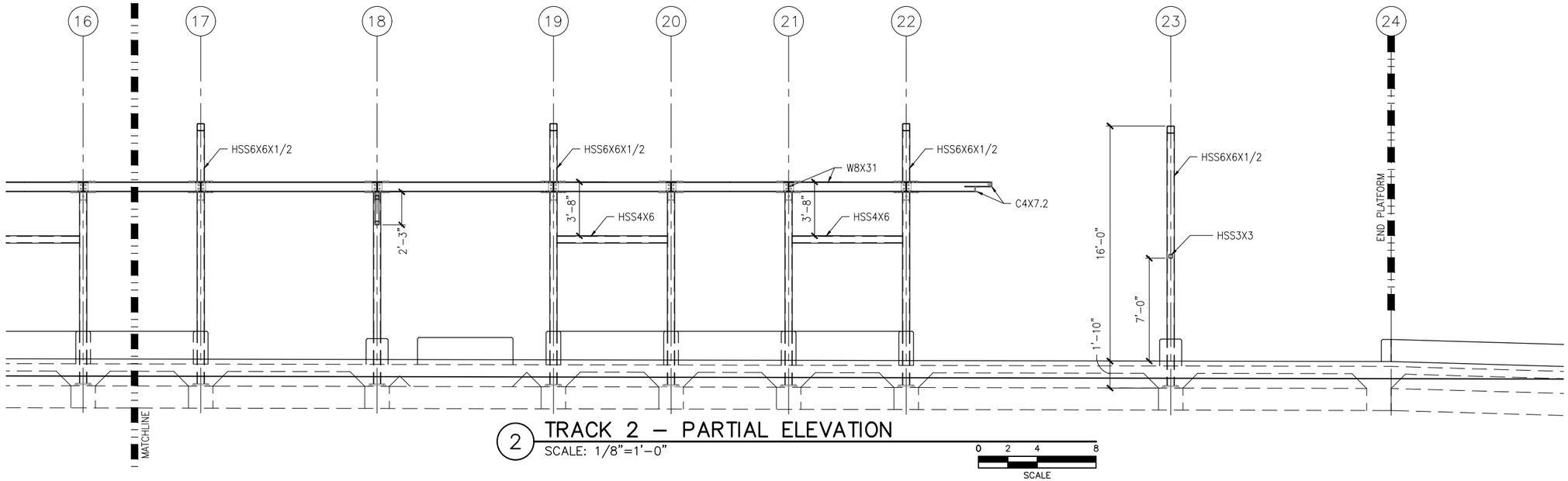
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1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



2 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

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SOUTHWEST Green Line LRT Extension

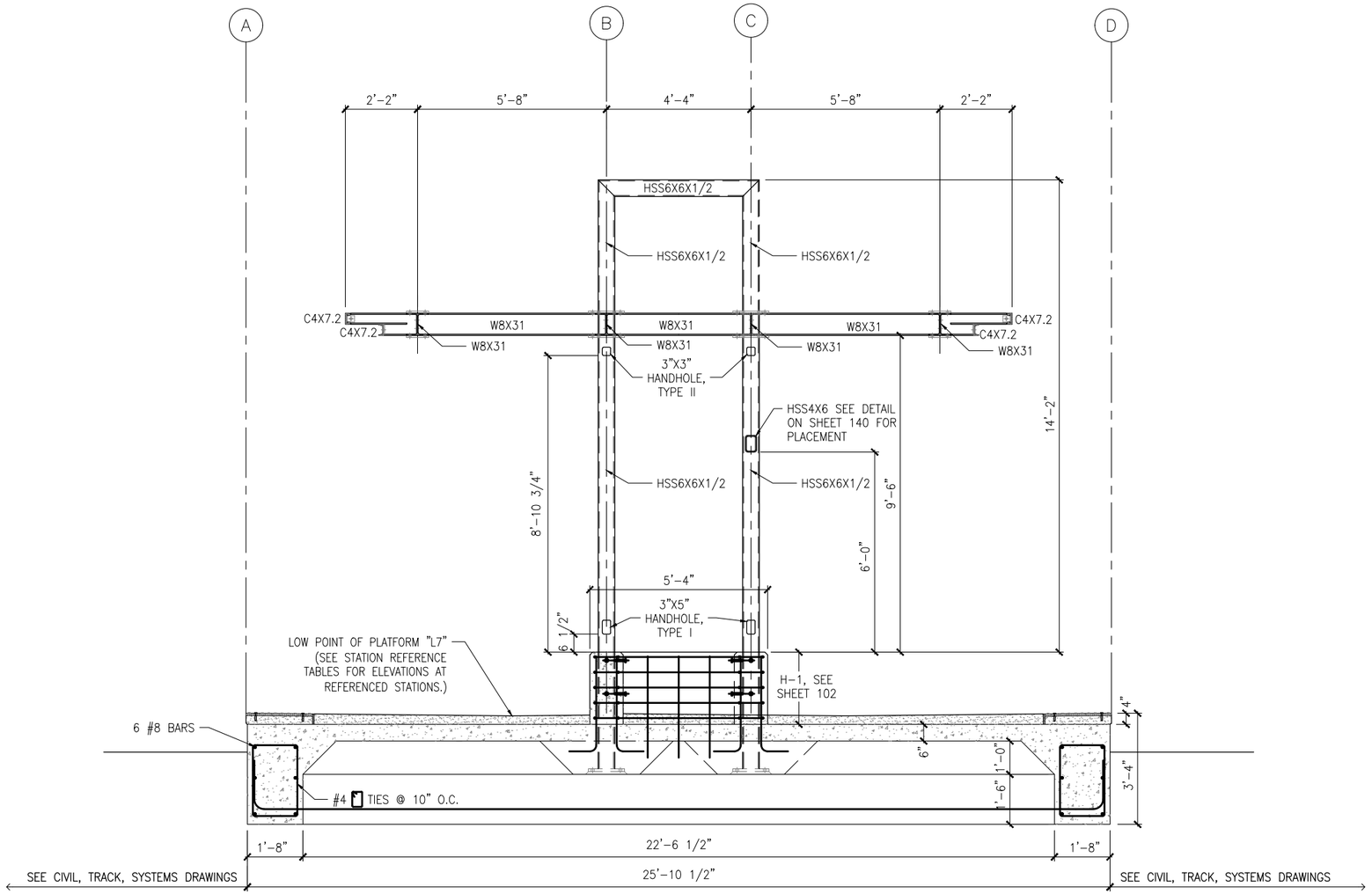
CIVIL - VOLUME 11D
VAN WHITE STATION
EAST PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-ELV-212

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1 TYPICAL PLATFORM SECTION

SCALE:1/4"=1'-0"

0 1 2 4
SCALE

TYPICAL AT COL. LINES 4, 7, 9, 12, 14, 17, 19, 22
HSS4X6 LOCATED ON COL. LINE B BETWEEN COLUMNS 4-5, 6-7, 10-11, 14-15, 16-17, 20-21
HSS4X6 LOCATED ON COL. LINE C BETWEEN COLUMNS 5-6, 9-10, 11-12, 15-16, 19-20, 21-22
SEE PLN FOR LOCATION OF CONC FDN WALL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

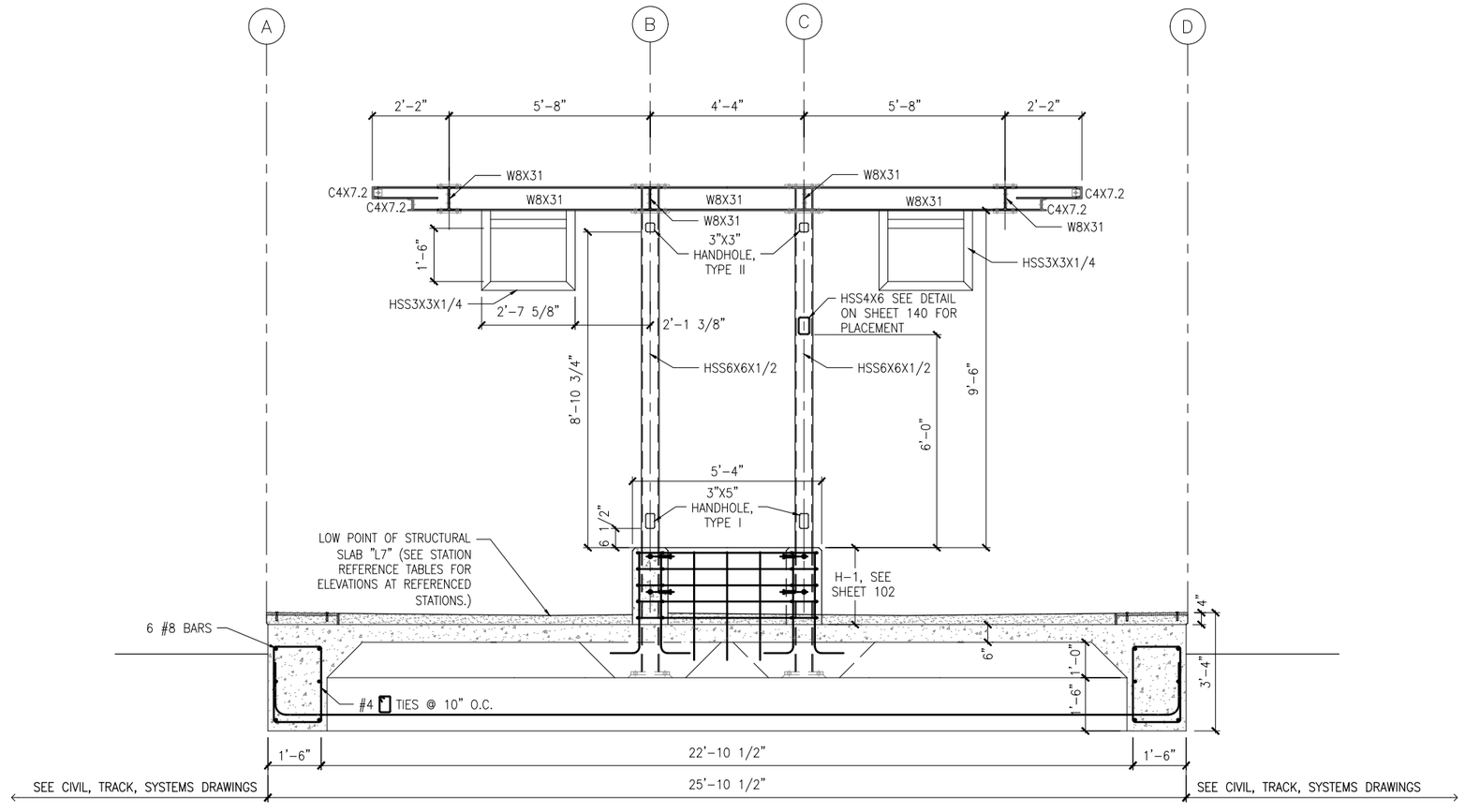
CIVIL - VOLUME 11D
VAN WHITE STATION
TYPICAL PLATFORM SECTION

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-SCT-300

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1 TYPICAL PLATFORM SECTION

SCALE:1/4"=1'-0"

0 1 2 4
SCALE

TYPICAL AT COL. LINES 5, 6, 8, 10, 11, 15, 16, 18, 20, 21
HSS4X6 LOCATED ON COL. LINE B BETWEEN COLUMNS 4–5, 6–7, 10–11, 14–15, 16–17, 20–21
HSS4X6 LOCATED ON COL. LINE C BETWEEN COLUMNS 5–6, 9–10, 11–12, 15–16, 19–20, 21–22
HSS4X6 NOT INSTALLED AT COL. LINES 8, 18
VMS SUPPORTS AT COL. LINES 8 & 18

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

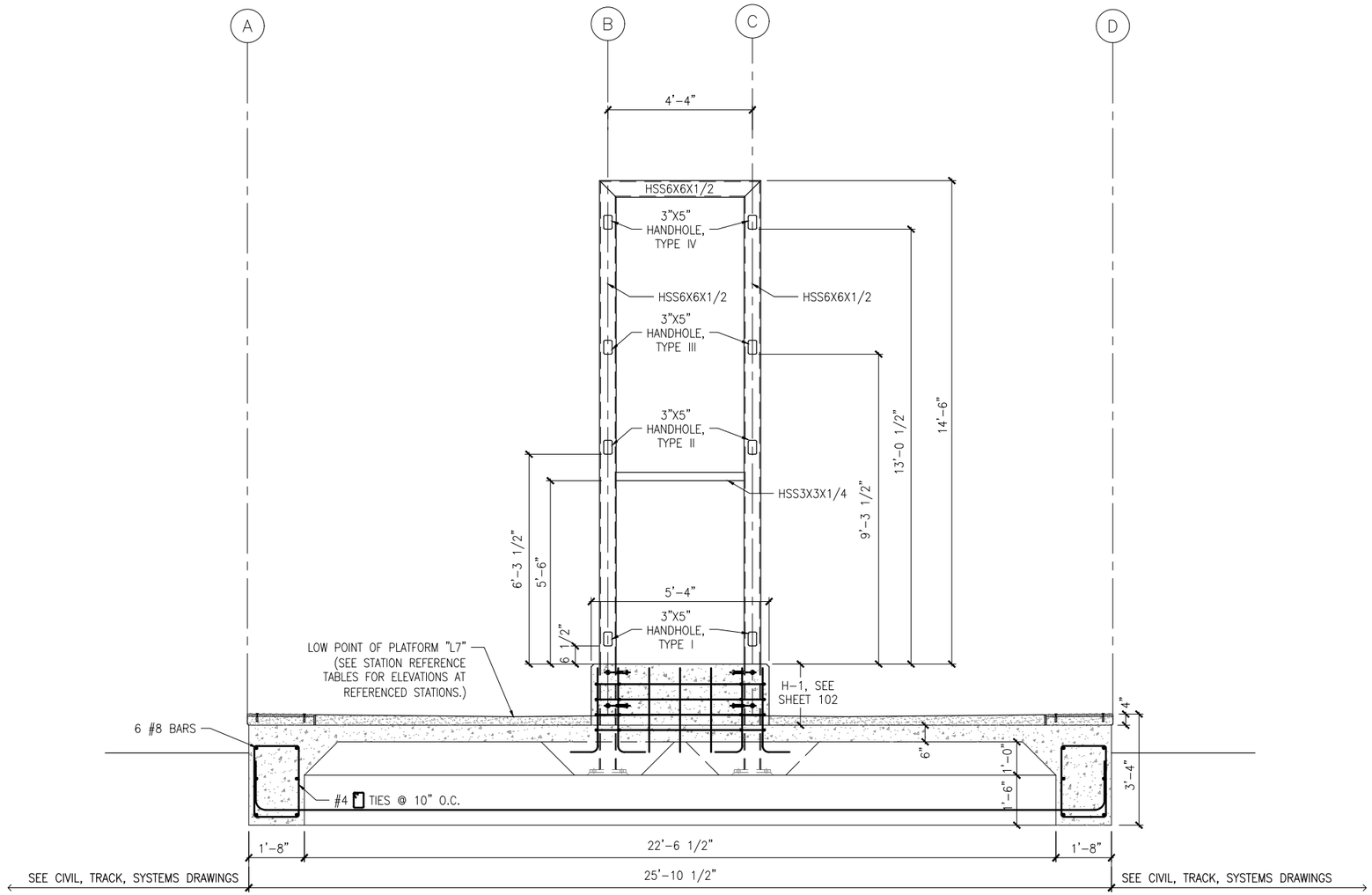
CIVIL - VOLUME 11D
VAN WHITE STATION
TYPICAL PLATFORM SECTION

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-SCT-301

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1 TYPICAL PLATFORM SECTION AT WICKET

SCALE:1/4"=1'-0"
TYPICAL AT COL. LINES 13,23

0 1 2 4
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

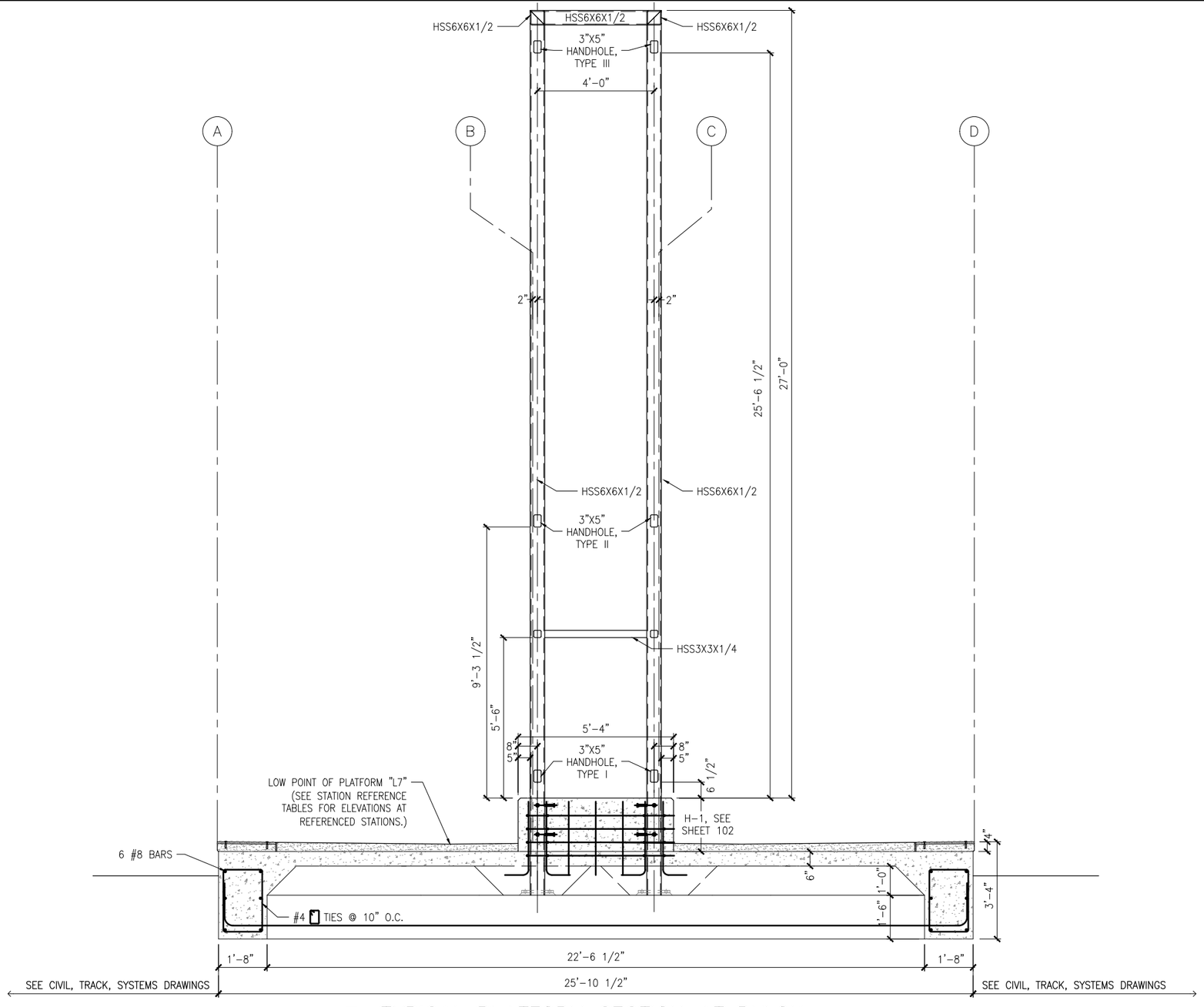
CIVIL - VOLUME 11D
VAN WHITE STATION
TYPICAL PLATFORM SECTION

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-SCT-302

SHEET 265 OF 394

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1 TYPICAL PLATFORM SECTION AT PYLON

SCALE:1/4"=1'-0"
TYPICAL AT COL. LINES 2,3

0 1 2 4
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
TYPICAL PLATFORM SECTION

SHEET 266 OF 394

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-SCT-303

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GENERAL NOTES:

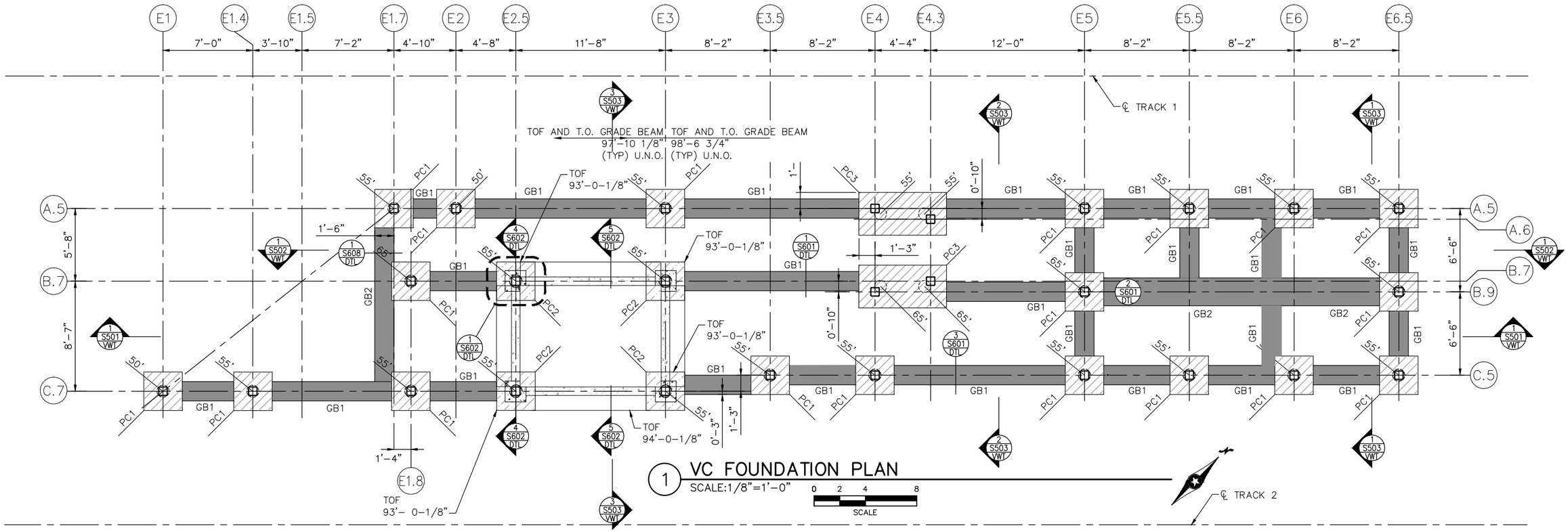
1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.

FOUNDATION NOTES:

1. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED, THE FOLLOWING NOTES RELATING TO THE FOUNDATION PLAN SHALL GOVERN.
2. FOUNDATIONS SHALL BE CENTERED ON COLUMN GRID LINES, EG COLUMNS, WALLS, ETC. UNLESS NOTED OTHERWISE.
3. ALL FOUNDATION WORK RELATING TO THE INSTALLATION OF REBAR SHALL BE OBSERVED AND APPROVED BY THE ENGINEER.
4. WHERE SHOWN, BUT NOT SPECIFICALLY NOTED, PROVIDE STANDARD ACI 90° OR 180° HOOKS, AS APPLICABLE, TO REBAR.
5. FOUNDATION DESIGN IS BASED ON INFORMATION AND RECOMMENDATIONS PROVIDED BY AMERICAN ENGINEERING TESTING IN THEIR REPORT OF GEOTECHNICAL EXPLORATION AND REVIEW REPORT No. 01-6403.01 DATED 12/1/2015.
6. PERCHED GROUNDWATER MAY BE ENCOUNTERED WITHIN FOUNDATION EXCAVATIONS. REMOVE WATER TO FACILITATE FOUNDATION CONSTRUCTION.
7. SEE D0-STR-DTL-601 FOR PILE CAP AND GRADE BEAM SCHEDULE.

LEGEND:

- TOF 96'-10" — DENOTES TOP OF FOOTING ELEVATION AT 96'-10"
- 100' — 12" CIP STEEL PILE 100' LENGTH
- STEEL TUBE COLUMN – SEE FRAMING PLANS
- CAST IN PLACE CONCRETE PILE CAP SEE PILE CAP SCHEDULE FOR SIZE AND REINFORCEMENT
- CAST IN PLACE CONCRETE GRADE BEAM SEE GRADE BEAM SCHEDULE FOR SIZE AND REINFORCEMENT



1 VC FOUNDATION PLAN
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM Kimley»Horn

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL- VOLUME 11D
VAN WHITE STATION
VC
FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-401

SHEET 267 OF 394

Jan. 18 2016 07:39 am C:\Users\casey.leedom\appdata\local\temp\AcPublish_2296\267 E4-VWT-STR-PLN-401.dwg By: casey.leedom

GENERAL NOTES:

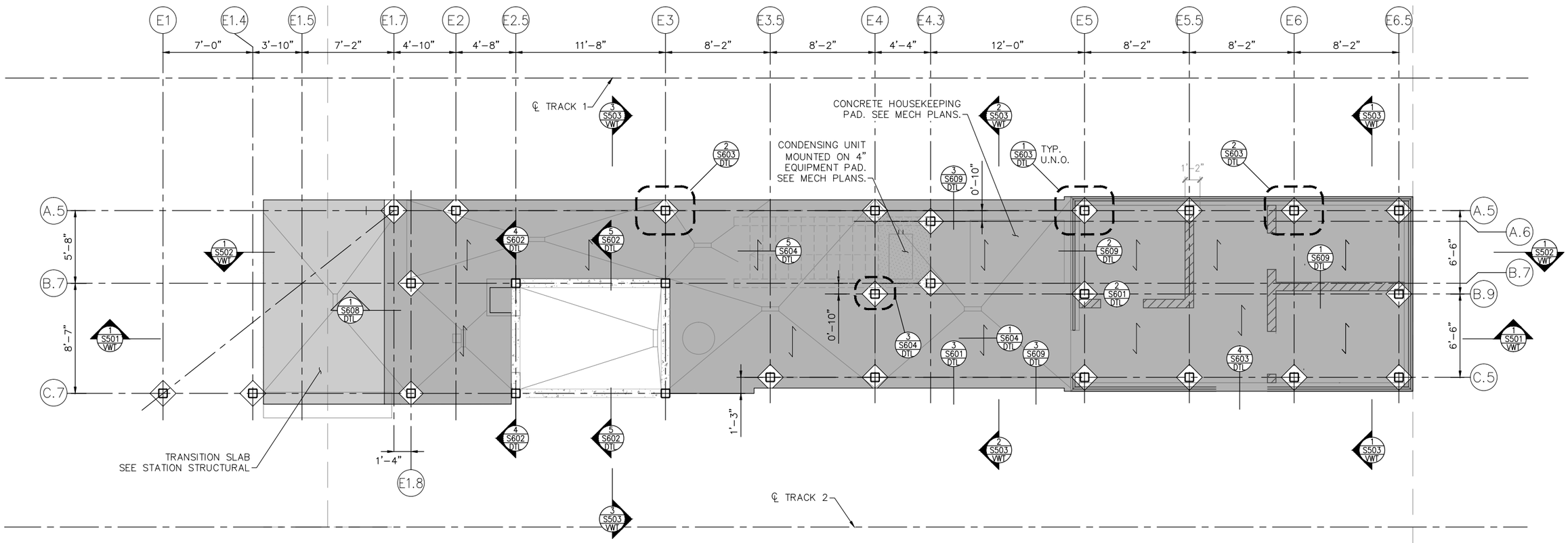
1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.

SLAB ON GRADE NOTES:

1. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED, THE FOLLOWING NOTES RELATING TO THE SLAB ON GRADE PLAN SHALL GOVERN.
2. FOR SUMP PIT, FLOOR DRAIN LOCATIONS AND PITCH REFER TO ARCHITECTURAL PLANS.
3. SEE SHEET S604 FOR CONSTRUCTION JOINT DETAILS
4. SEE SHEETS S612, S613, AND S614 FOR FLOOR DRAIN DETAILS AND CONTROL JOINT AND SEALANT DETAILS.

LEGEND:

- STEEL TUBE COLUMN – SEE FRAMING PLANS
- CAST IN PLACE CONCRETE PILE CAP
- CAST IN PLACE CONCRETE GRADE BEAM
- 6" SLAB ON GRADE
- 8" CMU WALL BELOW WITH #5 VERTICAL BARS SPACED 4'–0" O.C. AND AT ALL OPENINGS, CORNERS AND WALL ENDS. SOLID GROUT FULL HEIGHT VERTICAL CORES WITH REINFORCEMENT.



1 VC PLATFORM LEVEL PLAN
SCALE:1/8"=1'–0"
0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

CIVIL- VOLUME 11D
VAN WHITE STATION
VC
PLATFORM PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-402

SHEET 268 OF 394

Jan, 18 2016 10:06 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\VWHT-STATION\268 E4-VWT-STR-PLN-402.dwg By: scott.shepard

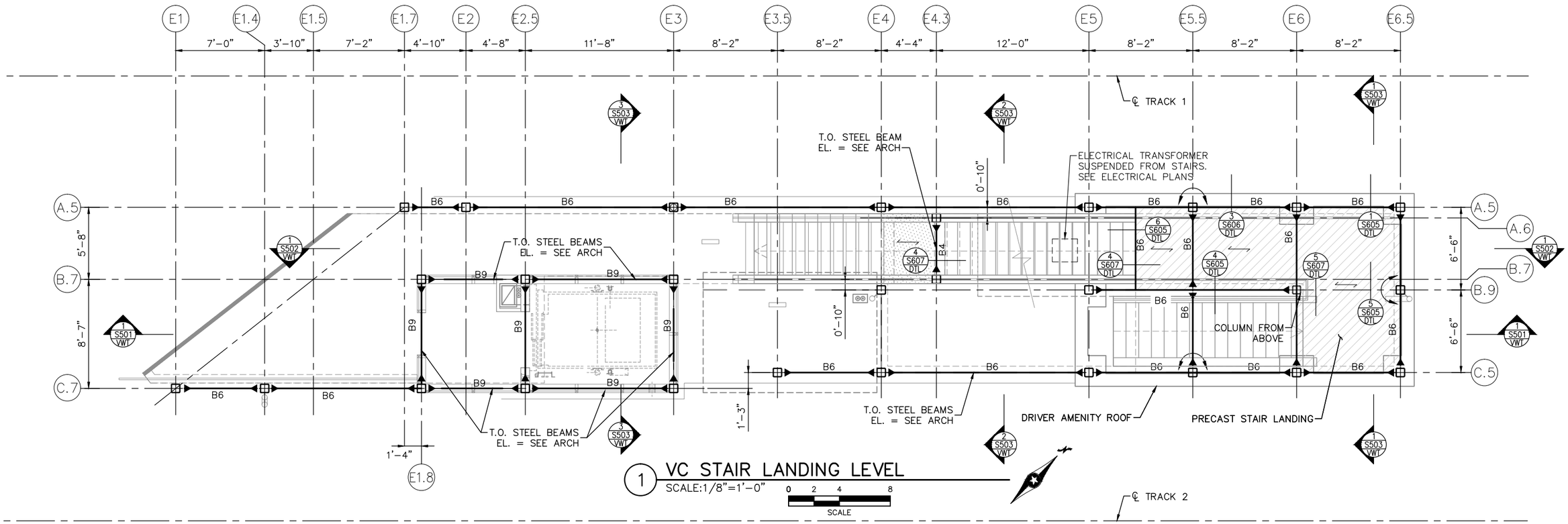
BEAM SCHEDULE	
MARK	SIZE
B1	C12X20.7
B2	W8X18
B3	W12X16
B4	HSS12X6X$\frac{1}{2}$
B5	HSS12X6X$\frac{1}{2}$
B6	HSS18X6X$\frac{5}{8}$
B7	HSS18X6X$\frac{5}{8}$
B8	HSS16X8X$\frac{1}{2}$
B9	HSS6X4X$\frac{5}{16}$

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.
2. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED.

STAIR LANDING PLAN NOTES

1. TOP OF STEEL BEAMS ELEVATION AS NOTED ON ARCHITECTURAL PLAN.
2. ⟵⟶ INDICATES SPAN DIRECTION OF PRECAST STAIR LANDING.
3. MOMENT CONNECTIONS ARE DENOTED THUS (▶—) ON PLAN OR PREQUALIFIED SHOP WELDED OR FIELD WELDED CONNECTION.
4. ⌒ INDICATES BEAM IS CONTINUOUS OVER COLUMN.
5. □ DENOTES HSS8X8X5/8 COLUMN. SEE SHEET S607 FOR HAND HOLE DETAILS.



1 VC STAIR LANDING LEVEL
SCALE:1/8"=1'-0"
0 2 4 8
SCALE

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SOUTHWEST Green Line LRT Extension

CIVIL- VOLUME 11D
VAN WHITE STATION
VC INTERMEDIATE LEVEL FRAMING PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-411

SHEET 269 OF 394

Jan. 18 2016 07:40 am v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\VNWHT-STATION\269 E4-VWT-STR-PLN-411.dwg By: casey.leedom

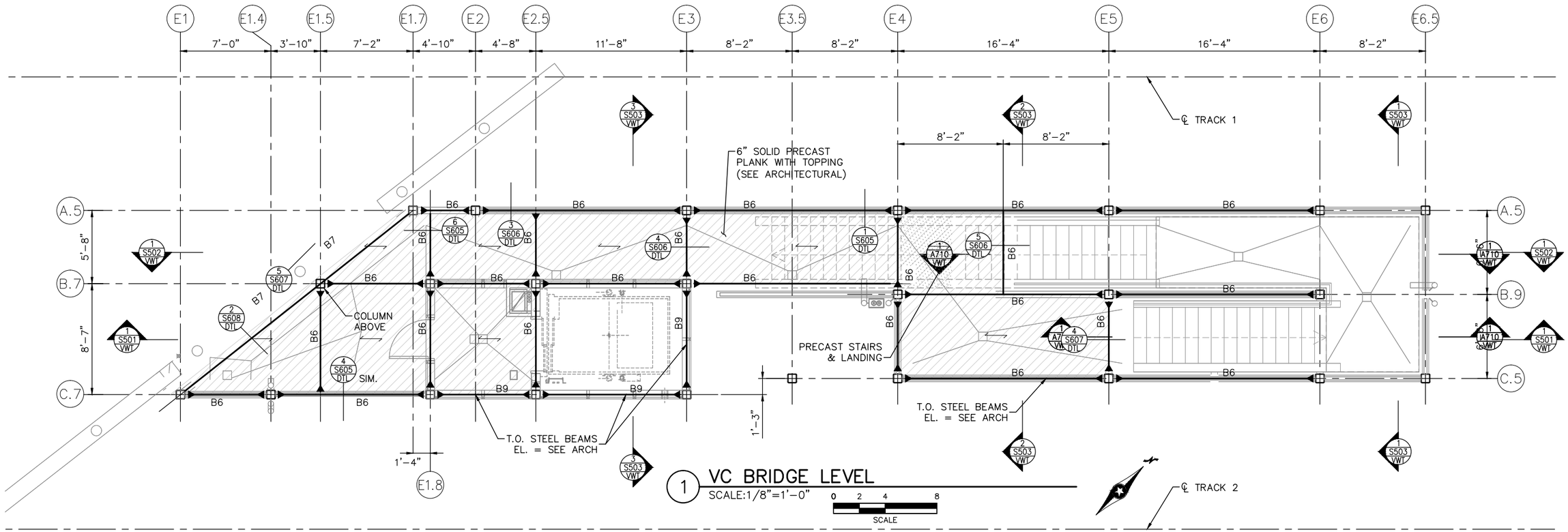
BEAM SCHEDULE	
MARK	SIZE
B1	C12X20.7
B2	W8X18
B3	W12X16
B4	HSS12X6X$\frac{1}{2}$
B5	HSS12X6X$\frac{1}{2}$
B6	HSS18X6X$\frac{5}{8}$
B7	HSS18X6X$\frac{5}{8}$
B8	HSS16X8X$\frac{1}{2}$
B9	HSS6X4X$\frac{5}{16}$

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.
2. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED.

BRIDGE LEVEL PLAN NOTES

1. TOP OF STEEL BEAMS ELEVATION AS NOTED ON ARCHITECTURAL PLAN.
2. ⟷ INDICATES SPAN DIRECTION OF 6" SOLID PRECAST PLANK WITH TOPPING.
3. MOMENT CONNECTIONS ARE DENOTED THUS (▶—) ON PLAN OR PREQUALIFIED SHOP WELDED OR FIELD WELDED CONNECTION.
4. ⌒ INDICATES BEAM IS CONTINUOUS OVER COLUMN.
5. □ DENOTES HSS8X8X5/8 COLUMN. SEE SHEET S607 FOR HAND HOLE DETAILS.
6. FOR FLOOR DRAIN LOCATIONS AND PITCH, REFER TO ARCHITECTURAL PLANS.
7. SEE SHEETS S612 AND S613 FOR FLOOR DRAIN DETAILS AND SLAB JOINT AND SEALANT DETAILS.



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

CIVIL- VOLUME 11D
VAN WHITE STATION
VC BRIDGE LEVEL
FRAMING PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-412

SHEET 270 OF 394

Jan, 18 2016 07:41 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\VNWHT-STATION\270 E4-VWT-STR-PLN-412.dwg By: casey.leedom

LEGEND:

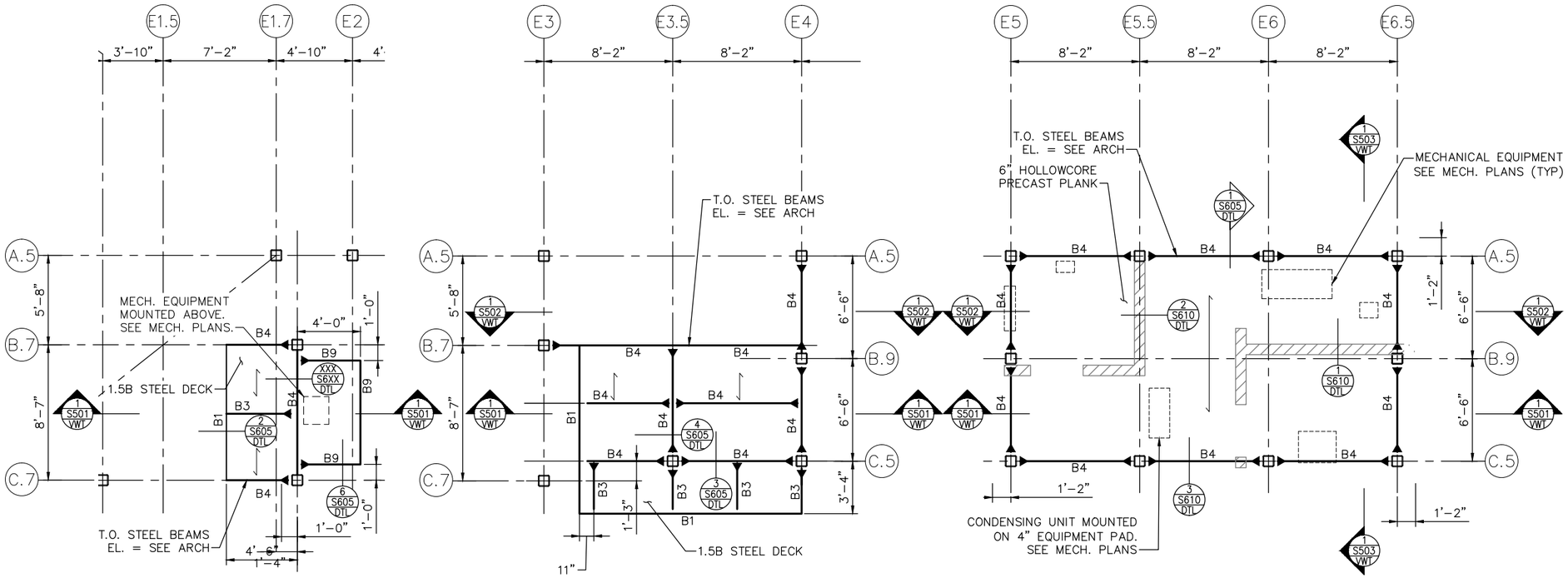
8" CMU WALL BELOW WITH #5 VERTICAL BARS SPACED 4'-0" O.C. AND AT ALL OPENINGS, CORNERS AND WALL ENDS. SOLID GROUT FULL HEIGHT VERTICAL CORES WITH REINFORCEMENT.

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.
2. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED.

ROOF PLAN NOTES

1. TOP OF STEEL BEAMS ELEVATION AS NOTED ON ARCHITECTURAL PLAN.
2. ⟷ INDICATES SPAN DIRECTION OF 1.5B16 STEEL ROOF DECK UNLESS NOTED OTHERWISE.
3. MOMENT CONNECTIONS ARE DENOTED THUS (▶—) ON PLAN OR PREQUALIFIED SHOP WELDED OR FIELD WELDED CONNECTION.
4. ⌒ INDICATES BEAM IS CONTINUOUS OVER COLUMN.
5. □ DENOTES HSS8X8X5/8 COLUMN. SEE DETAILS ON SHEET S607 FOR HAND HOLE DETAILS.



1 VC ELEVATOR LOBBY ENTRANCE ROOF FRAMING PLAN
SCALE:1/8"=1'-0"

2 VC STAIR ENTRANCE ROOF FRAMING PLAN
SCALE:1/8"=1'-0"

3 VC DRIVER AMENITY ROOF FRAMING PLAN
SCALE:1/8"=1'-0"

SCALE 0 2 4 8

BEAM SCHEDULE	
MARK	SIZE
B1	C12x20.7
B2	W8x18
B3	W12x16
B4	HSS12x6x$\frac{1}{2}$
B5	HSS12x6x$\frac{1}{2}$
B6	HSS18x6x$\frac{5}{8}$
B7	HSS18x6x$\frac{5}{8}$
B8	HSS16x8x$\frac{1}{2}$
B9	HSS6x4x$\frac{5}{16}$

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM Kimley»Horn

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

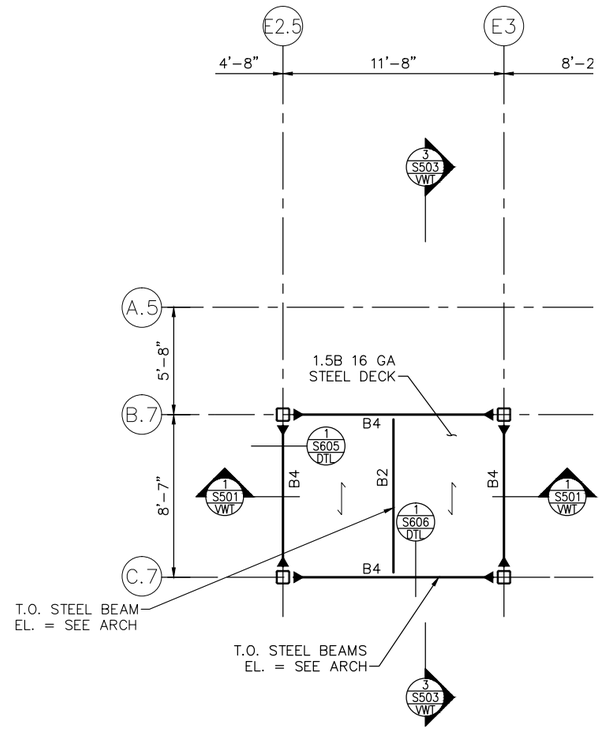
CIVIL- VOLUME 11D
VAN WHITE STATION
VC PARTIAL ROOF FRAMING PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-413

SHEET 271 OF 394

Jan, 18 2016 07:41 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\VNWHT-STATION\271 E4-VWT-STR-PLN-413.dwg By: casey.leedom

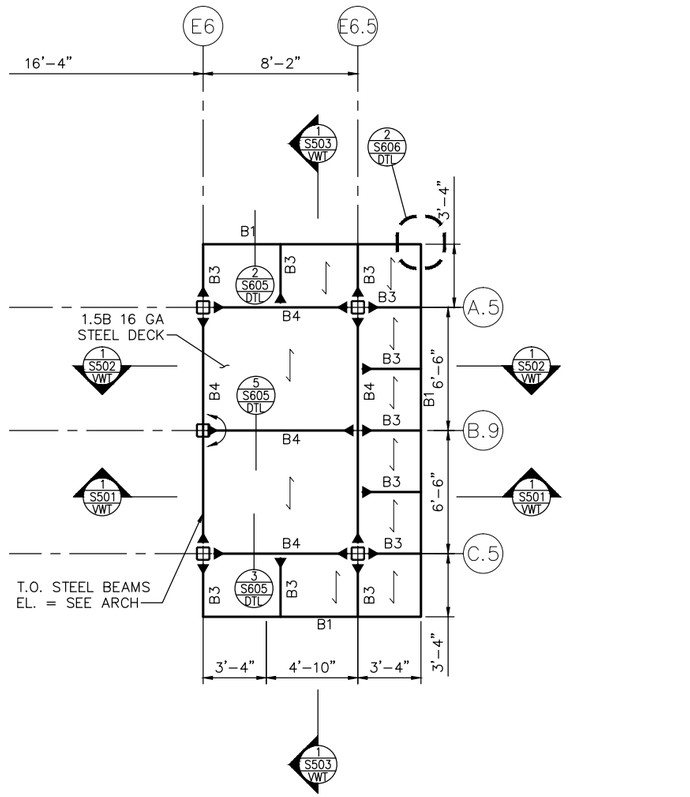


1 VC ELEVATOR CORE ROOF

SCALE:1/8"=1'-0"

0 2 4 8

SCALE



2 VC REAR STAIR LANDING ROOF

SCALE:1/8"=1'-0"

0 2 4 8

SCALE

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.
2. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED.

ROOF PLAN NOTES

1. TOP OF STEEL BEAMS ELEVATION AS NOTED ON ARCHITECTURAL PLAN.
2. ⟷ INDICATES SPAN DIRECTION OF 1.5B16 STEEL ROOF DECK UNLESS NOTED OTHERWISE.
3. MOMENT CONNECTIONS ARE DENOTED THUS (▶—) ON PLAN OR PREQUALIFIED SHOP WELDED OR FIELD WELDED CONNECTION.
4. ⌒ INDICATES BEAM IS CONTINUOUS OVER COLUMN.
5. □ DENOTES HSS8X8X5/8 COLUMN. SEE DETAILS ON S607 FOR HAND HOLE DETAILS.

BEAM SCHEDULE	
MARK	SIZE
B1	C12X20.7
B2	W8X18
B3	W12X16
B4	HSS12X6X$\frac{1}{2}$
B5	HSS12X6X$\frac{1}{2}$
B6	HSS18X6X$\frac{5}{8}$
B7	HSS18X6X$\frac{5}{8}$
B8	HSS16X8X$\frac{1}{2}$
B9	HSS6X4X$\frac{5}{16}$

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM Kimley»Horn

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL- VOLUME 11D
VAN WHITE STATION
VC PARTIAL ROOF
FRAMING PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-414

SHEET 272 OF 394

Jan, 18 2016 07:42 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\VNWHT-STATION\272 E4-VWT-STR-PLN-414.dwg By: casey.leedom

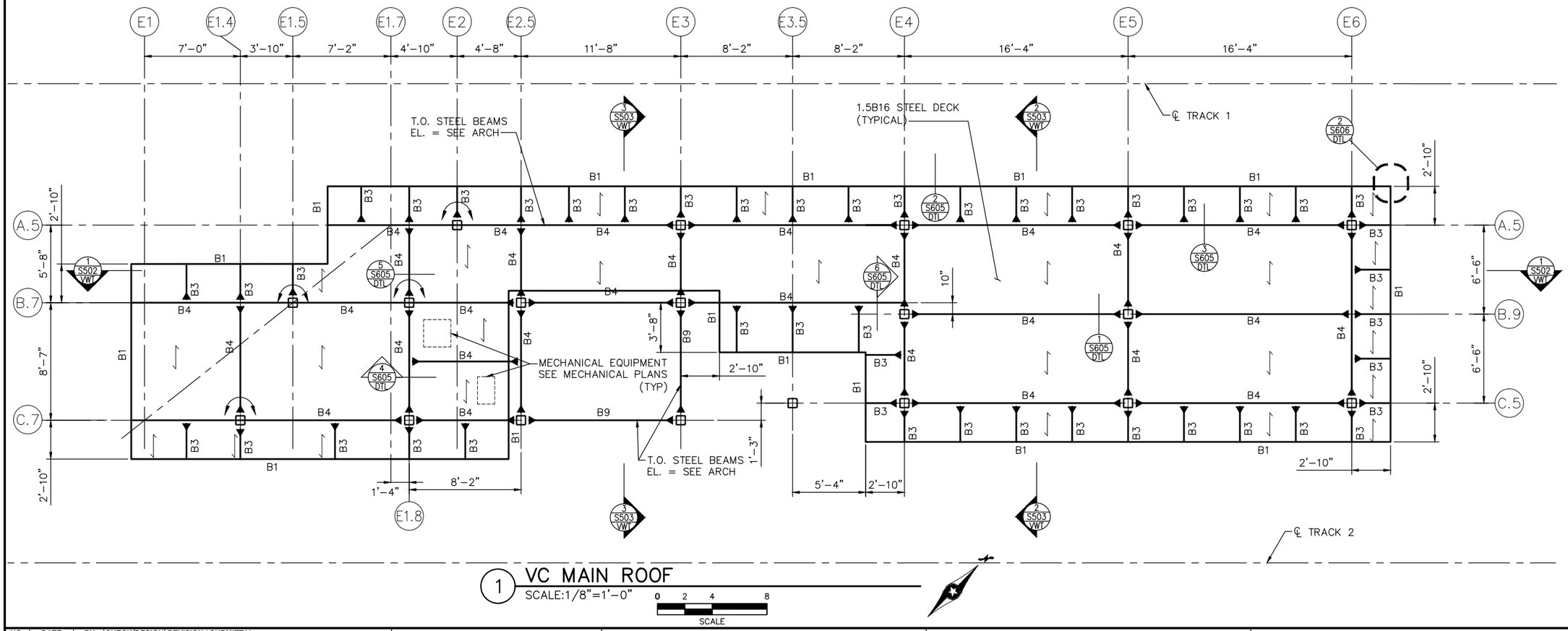
BEAM SCHEDULE	
MARK	SIZE
B1	C12X20.7
B2	W8X18
B3	W12X16
B4	HSS12X6X$\frac{1}{2}$
B5	HSS12X6X$\frac{1}{2}$
B6	HSS18X6X$\frac{5}{8}$
B7	HSS18X6X$\frac{5}{8}$
B8	HSS16X8X$\frac{1}{2}$
B9	HSS6X4X$\frac{5}{16}$

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS, DETAILS, AND FIELD VERIFICATION.
2. COMPLY WITH SPECIFICATIONS AND STRUCTURAL GENERAL NOTES UNLESS OTHERWISE SPECIFIED.

ROOF PLAN NOTES

1. TOP OF STEEL BEAMS ELEVATION AS NOTED ON ARCHITECTURAL PLAN.
2. ⟵ INDICATES SPAN DIRECTION OF 1.5B16 STEEL ROOF DECK.
3. MOMENT CONNECTIONS ARE DENOTED THUS (▶—) ON PLAN OR PREQUALIFIED SHOP WELDED OR FIELD WELDED CONNECTION. SEE STR-GEN-601 TO 602 FOR CONNECTION DETAILS.
4. ⌒ INDICATES BEAM IS CONTINUOUS OVER COLUMN.
5. □ DENOTES HSS8X8X5/8 COLUMN. SEE DETAILS ON SHEET S607 FOR HAND HOLE DETAILS.



1 VC MAIN ROOF
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

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SOUTHWEST Green Line LRT Extension

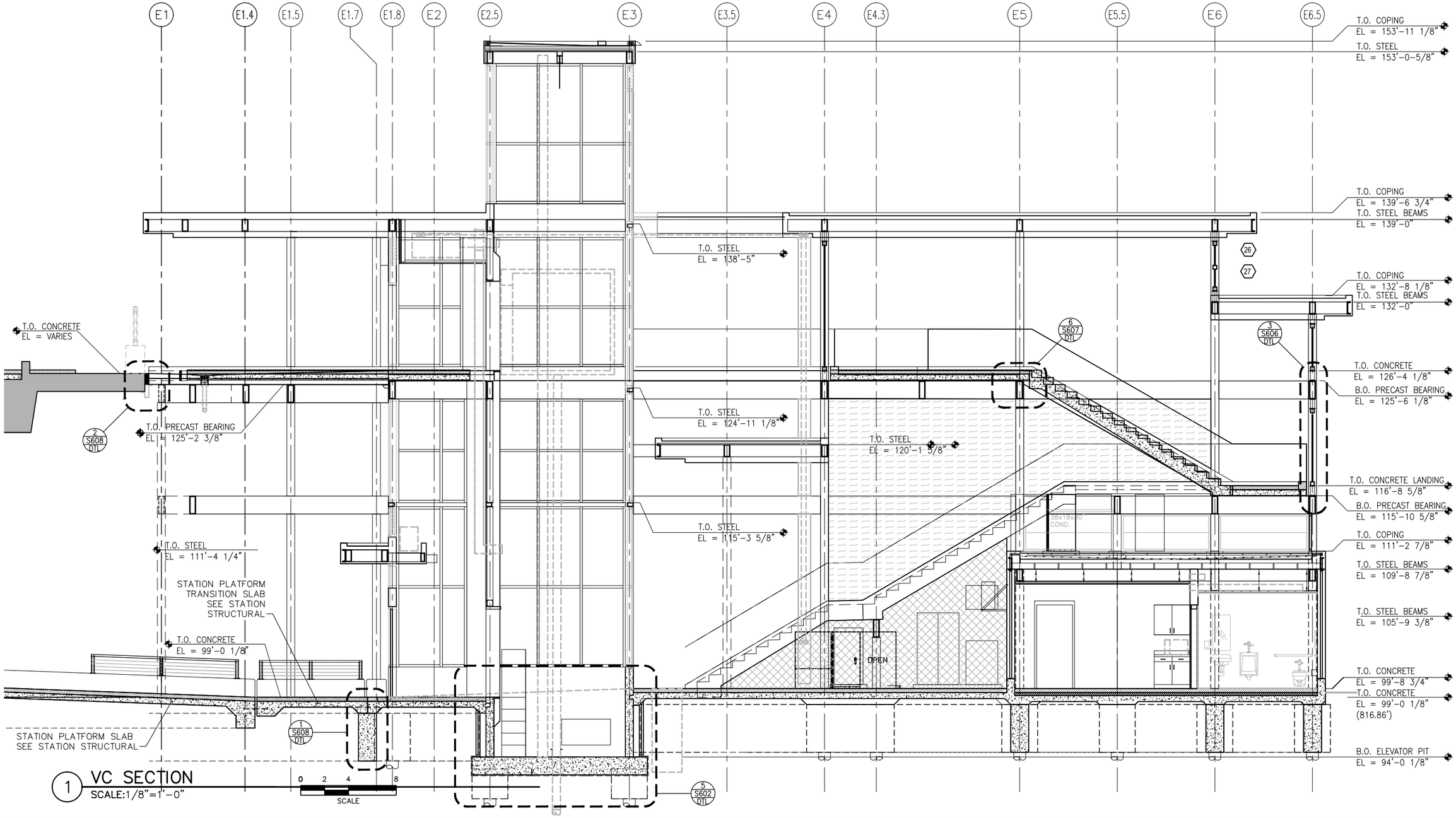
CIVIL- VOLUME 11D
VAN WHITE STATION
VC MAIN ROOF
FRAMING PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-PLN-415

SHEET 273 OF 394

Jan, 18 2016 07:42 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\VNWHT-STATION\273 E4-VWT-STR-PLN-415.dwg By: casey.leedom



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SOUTHWEST
Green Line LRT Extension

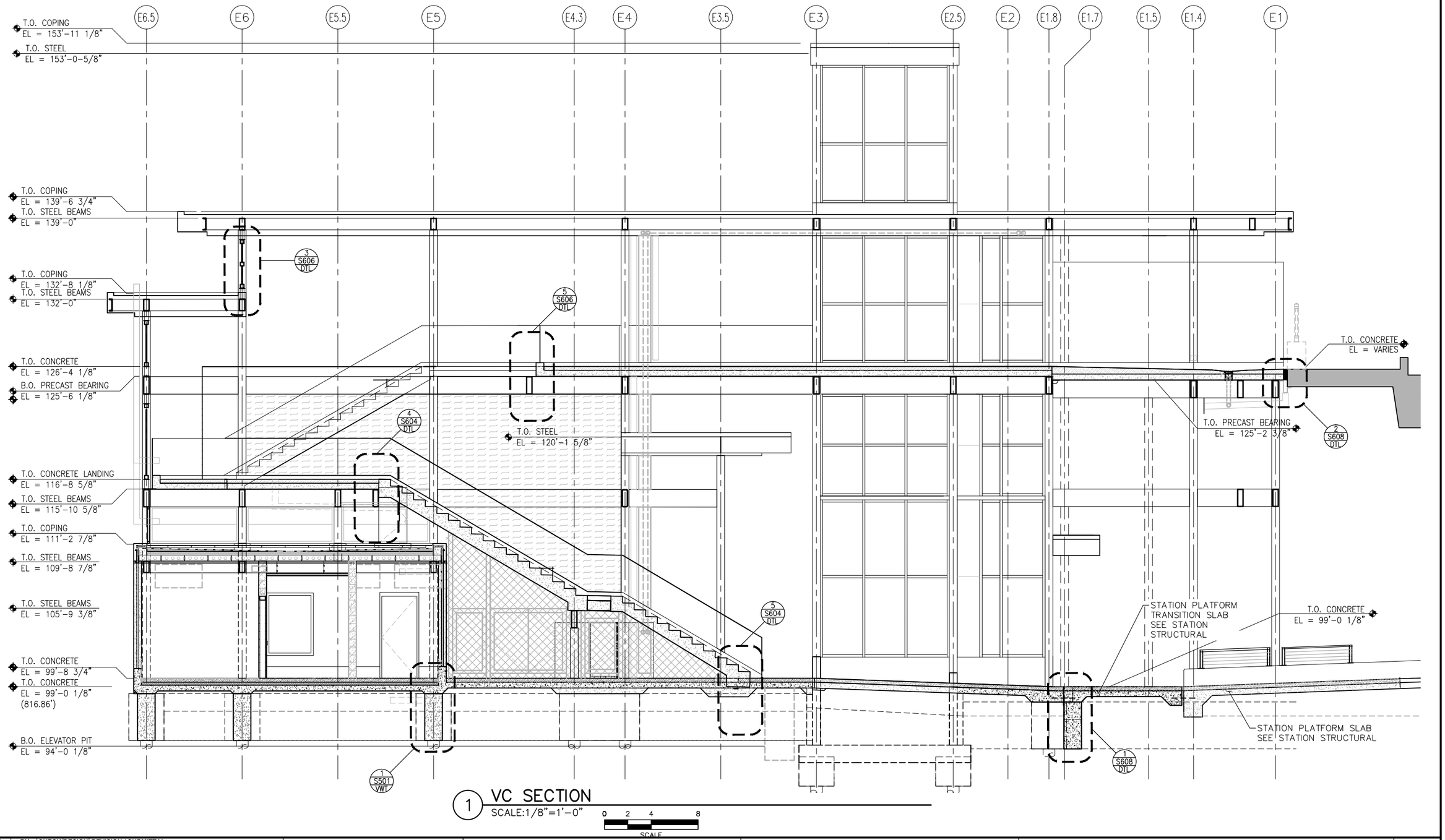
CIVIL- VOLUME 11D
VAN WHITE STATION
VC TRACK 1
SECTION VIEW

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-SCT-501

SHEET 274 OF 394

Jan, 18 2016 07:43 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\VNWHT-STATION\274 E4-VWT-STR-SCT-501.dwg By: casey.leedom



1 VC SECTION
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

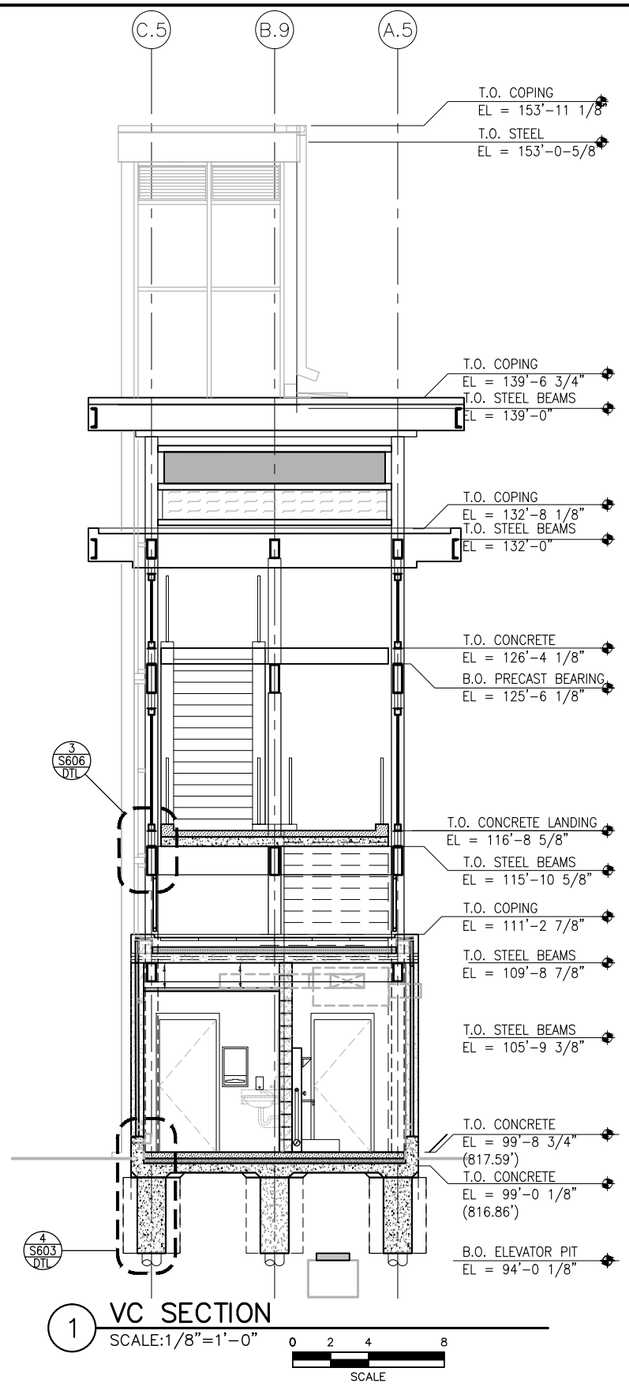
CIVIL- VOLUME 11D
VAN WHITE STATION
VC TRACK 2
SECTION VIEW

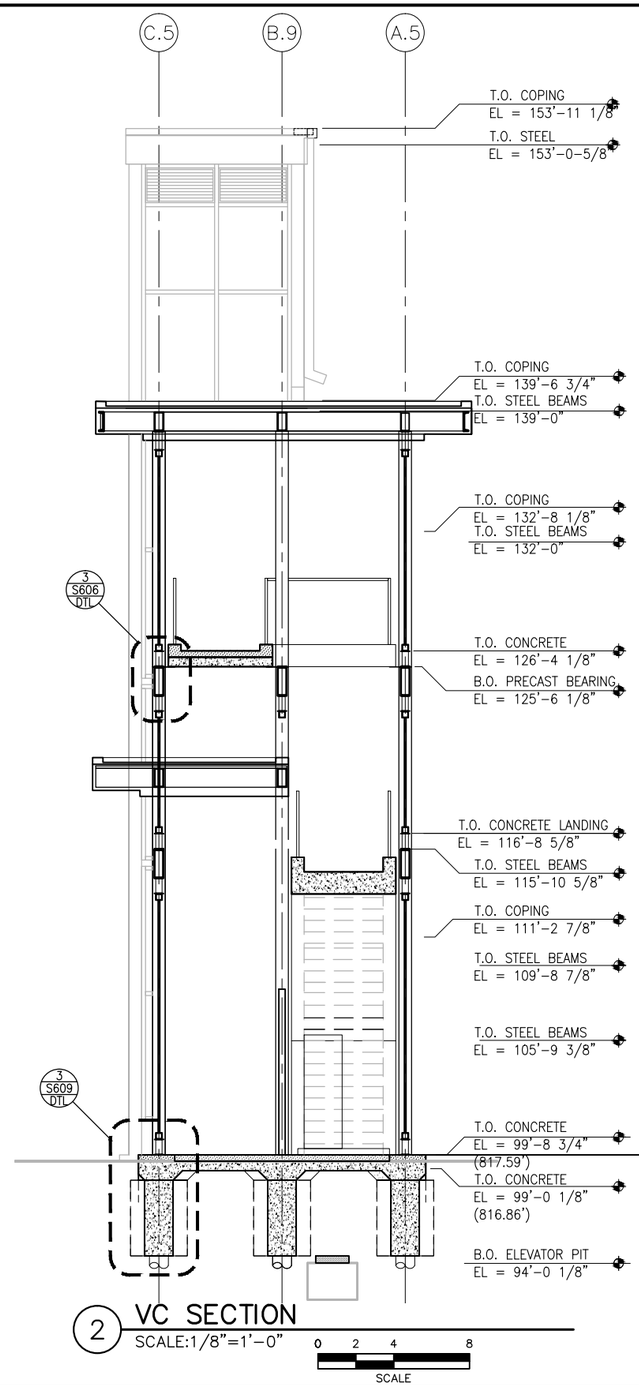
DISCIPLINE: STRUCTURES

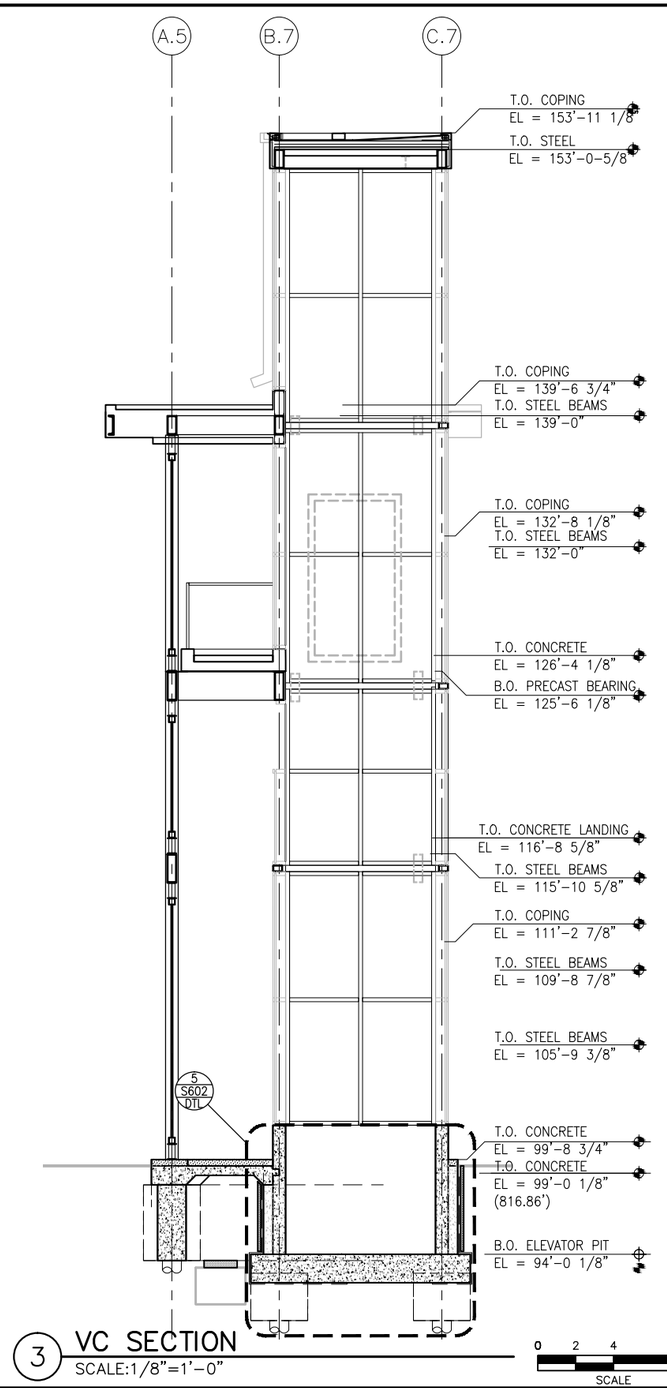
SHEET NAME: E4-VWT-STR-SCT-502

SHEET 275 OF 394

Jan, 18 2016 07:44 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\VNWHT-STATION\275 E4-VWT-STR-SCT-502.dwg By: casey.leedom







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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

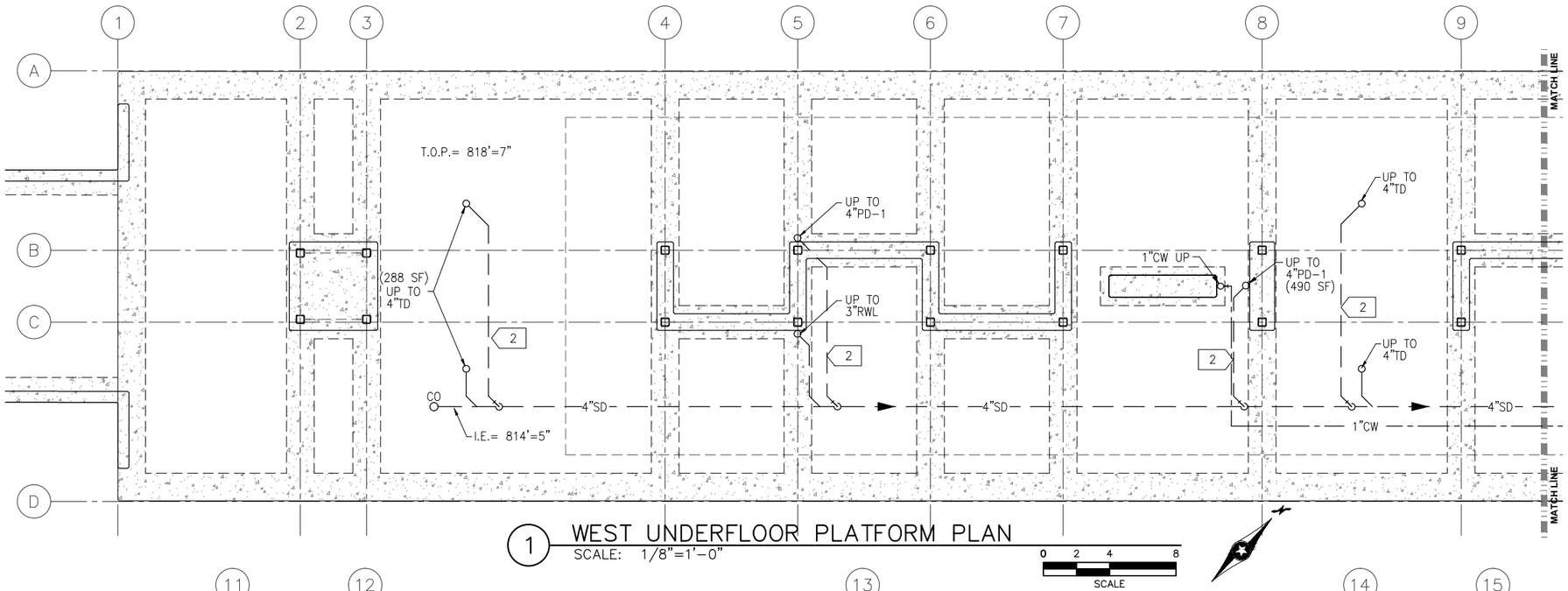
CIVIL- VOLUME 11D
VAN WHITE STATION
VC
SECTION VIEWS

DISCIPLINE: STRUCTURES

SHEET NAME: E4-VWT-STR-SCT-503

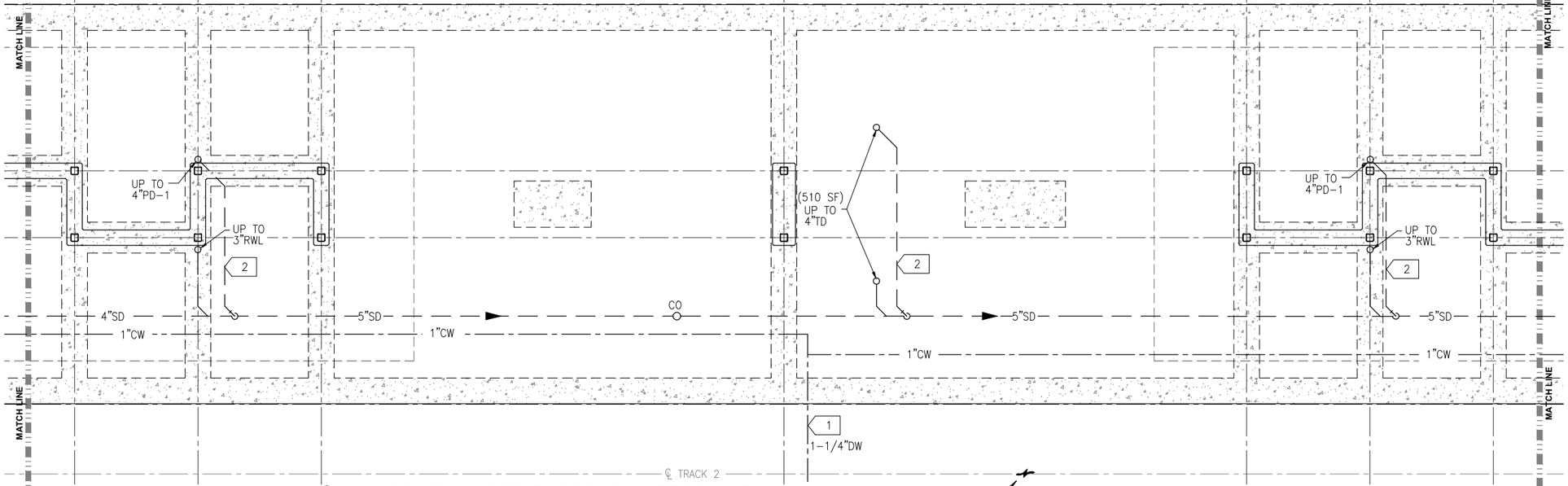
SHEET 276 OF 394

Jan, 18 2016 07:44 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\VNWHT-STATION\276 E4-VWT-STR-SCT-503.dwg By: casey.leedom



1 WEST UNDERFLOOR PLATFORM PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 MIDDLE UNDERFLOOR PLATFORM PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES:

1 EXTEND WATER AND STORM OUTSIDE GUIDEWAY. CONNECTION BY OUTDOOR UTILITY CONTRACTOR.

2 ROUTE PIPING ABOVE DUCT BANK. DROP DOWN TO CONNECT TO MAIN.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM
LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

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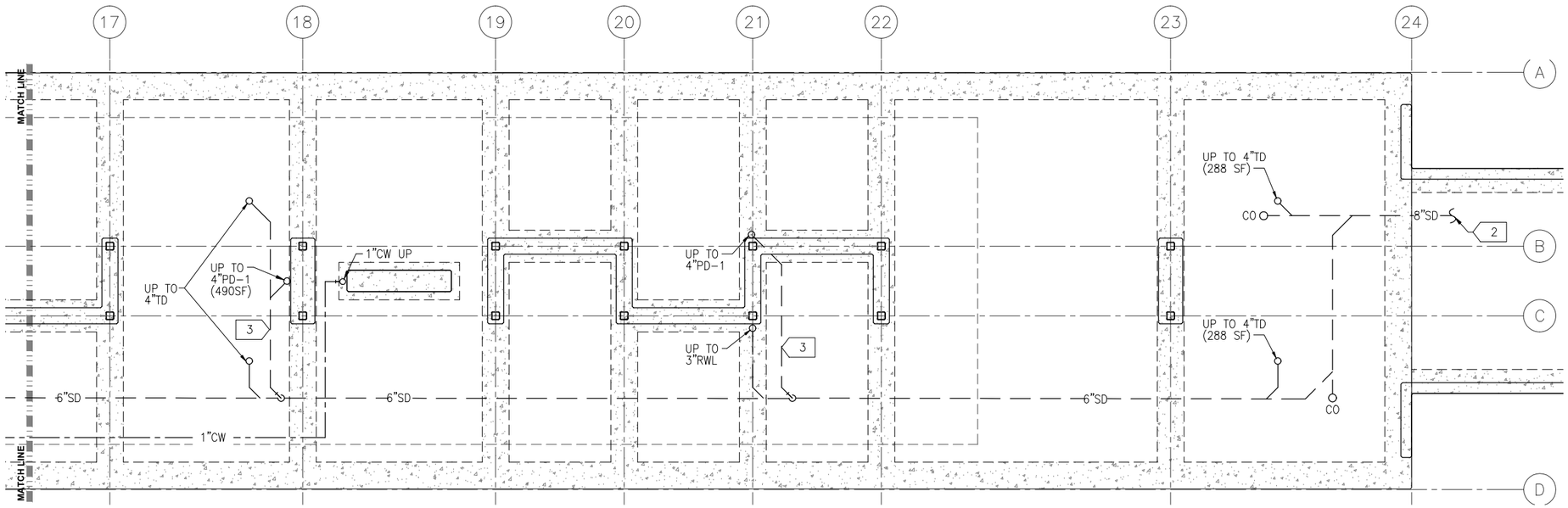
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
WEST AND MIDDLE PARTIAL
UNDERFLOOR PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-VWT-PLM-PLN-100

SHEET 277 OF 394

Jan, 16 2016 03:09 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN WHITE STATION\E4-VWT-PLM-PLN-100.dwg By: craig



1 EAST UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES:

1 EXTEND WATER AND STORM OUTSIDE GUIDEWAY. CONNECTION BY OUTDOOR UTILITY CONTRACTOR.

2 CONTINUE AT VERTICAL CIRCULATION, SHEET E4-VWT-PLM-PLN-130.

3 ROUTE PIPING ABOVE DUCT BANK. DROP DOWN TO CONNECT TO MAIN.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

90% SUBMISSION - 01/22/16

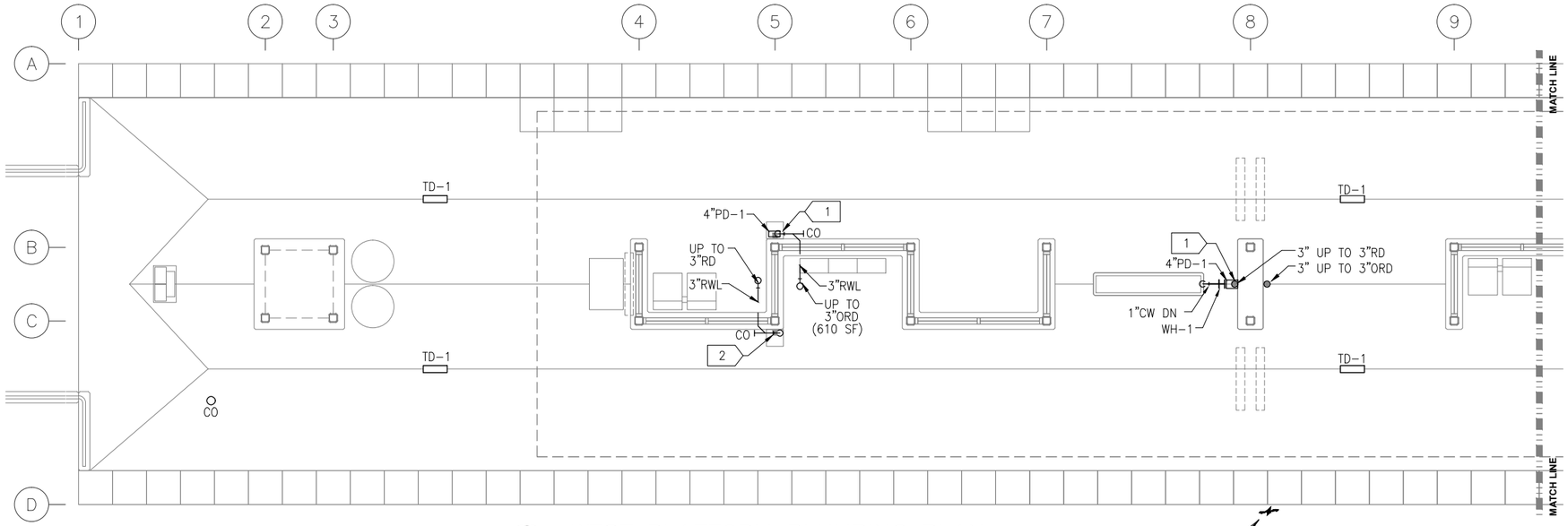
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
EAST PARTIAL UNDERFLOOR PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-VWT-PLM-PLN-101

SHEET 278 OF 394

Jan, 16 2016 03:09 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN



1 WEST PLATFORM PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

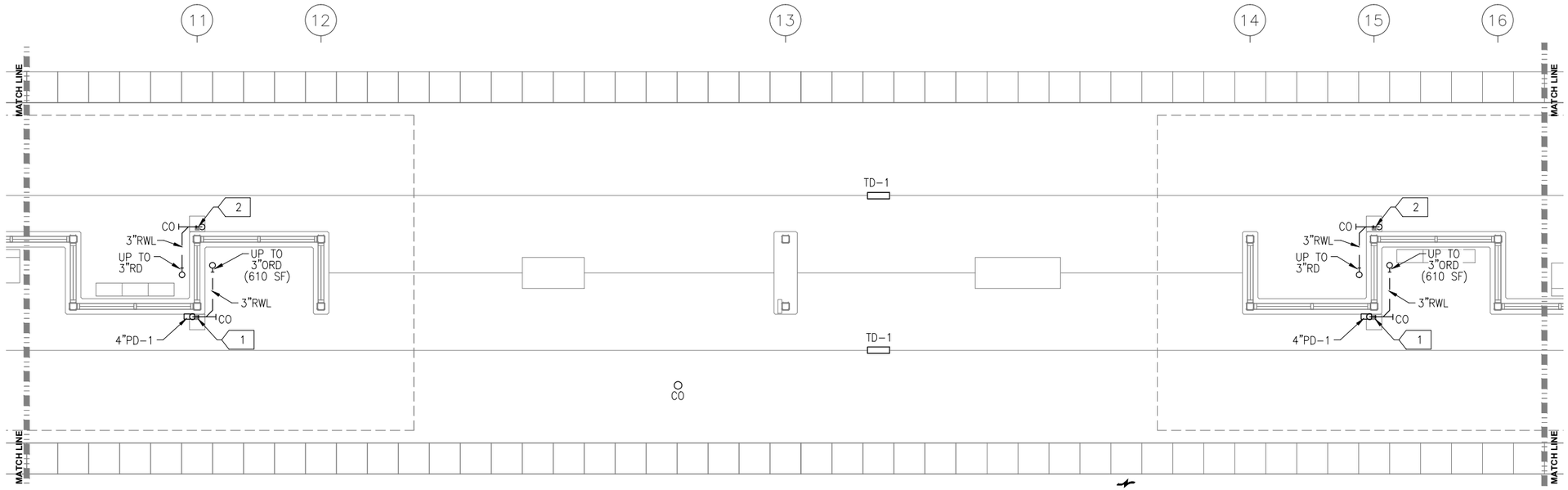
PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
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G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES

1 3"ORD RWL'S DOWN TO 4"PD-1.

2 3"ø RWL DOWN TO BELOW PLATFORM.



2 MIDDLE PLATFORM PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

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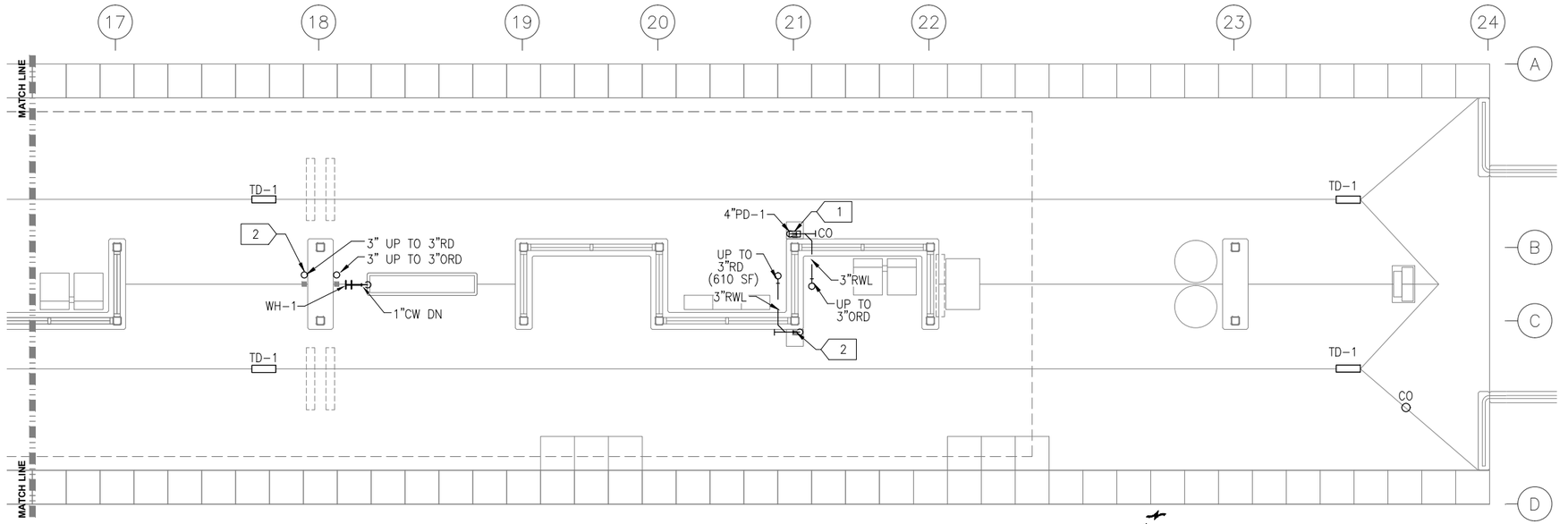
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
WEST AND MIDDLE PARTIAL PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-VWT-PLM-PLN-110

SHEET 279 OF 394

Jan, 16 2016 03:09 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN WHITE STATION\E4-VWT-PLM-PLN-110.dwg By: craig



1 EAST PLATFORM PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

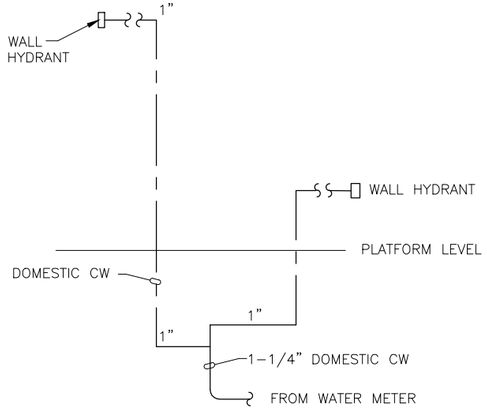
PLUMBING GENERAL NOTES

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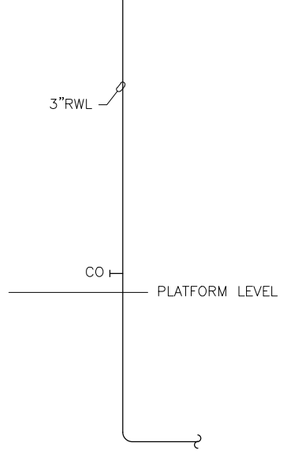
PLUMBING KEY NOTES

1 3"ORD RWL'S DOWN TO 4"PD-1.

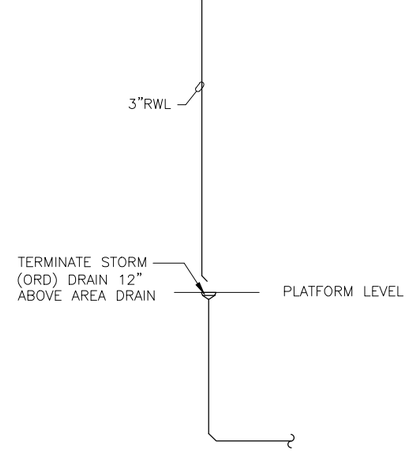
2 3"ø RWL DOWN TO BELOW PLATFORM.



2/111 DOMESTIC WATER RISER DIAGRAM
NO SCALE



1/111 TYPICAL ROOF DRAIN DIAGRAM
NO SCALE



2/111 TYPICAL OVERFLOW ROOF DRAIN DIAGRAM
NO SCALE

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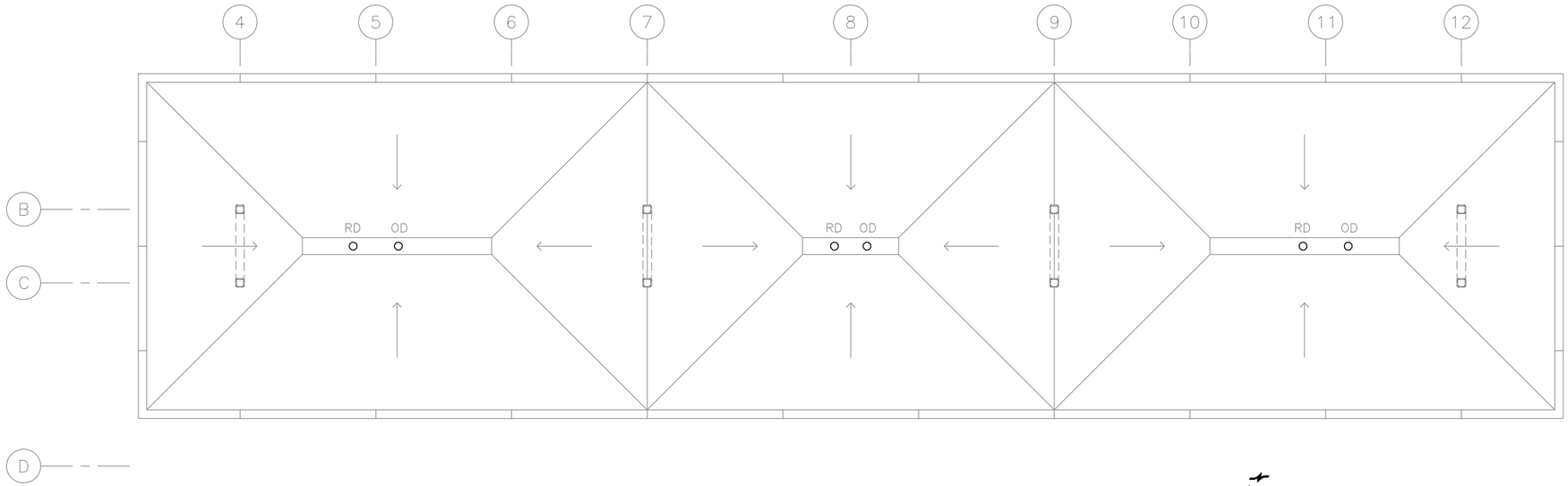
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
EAST PARTIAL PLUMBING PLAN AND PLUMBING RISER DIAGRAMS

DISCIPLINE: PLUMBING
SHEET NAME: E4-VWT-PLM-PLN-111

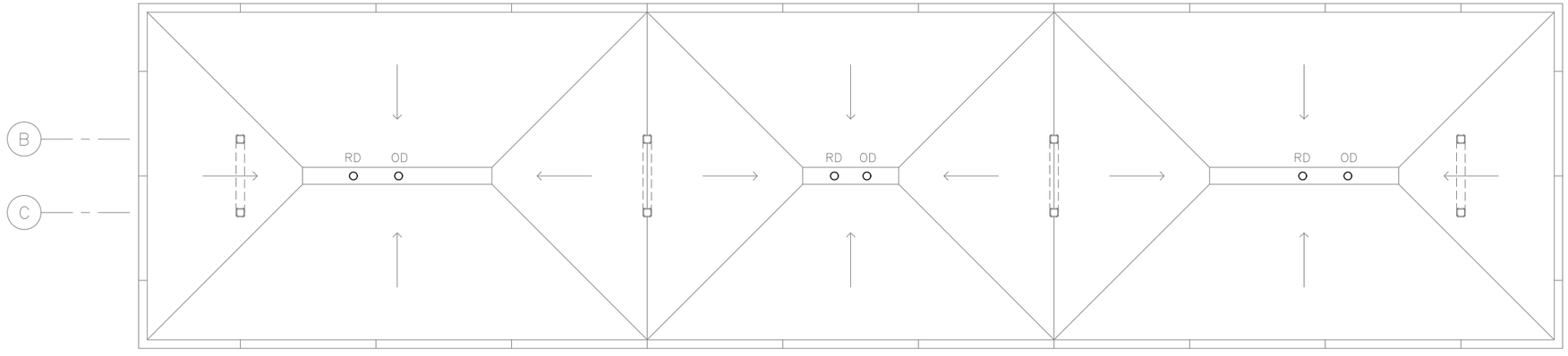
SHEET 280 OF 394

Jan, 16 2016 03:09 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN WHITE STATION\E4-VWT-PLM-PLN-111.dwg By: craig



1 WEST ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



1 EAST ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

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NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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90% SUBMISSION - 01/22/16

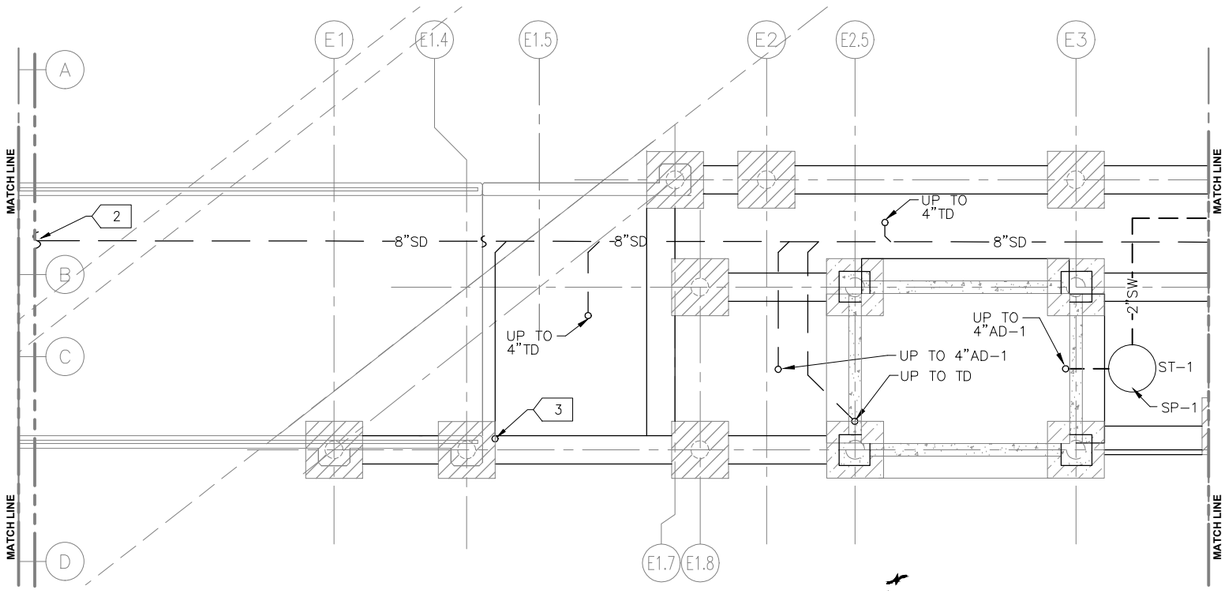
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
ROOF PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-VWT-PLM-PLN-120

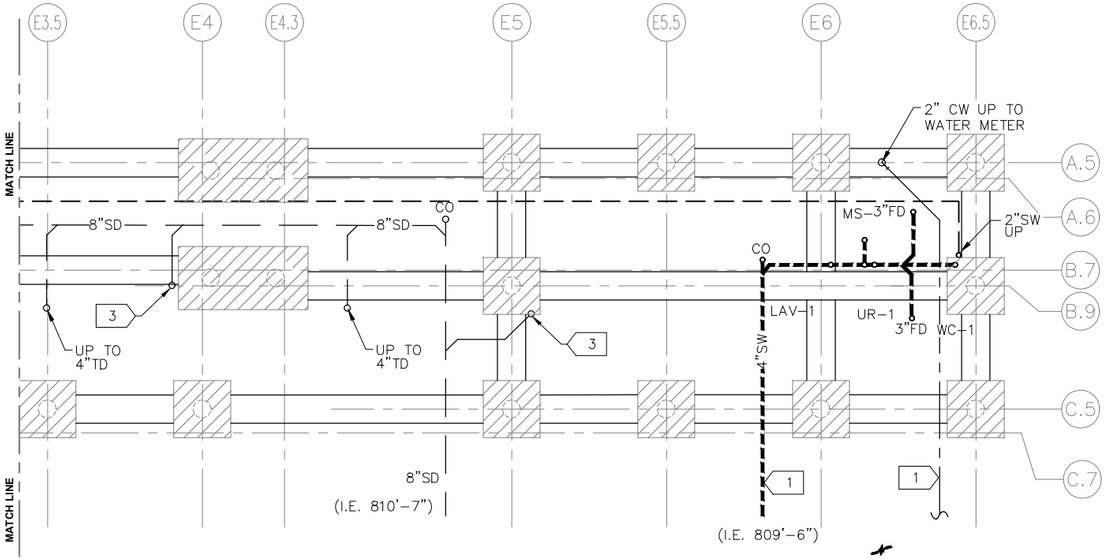
SHEET 281 OF 394

Jan. 16 2016 03:09 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN



1 UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

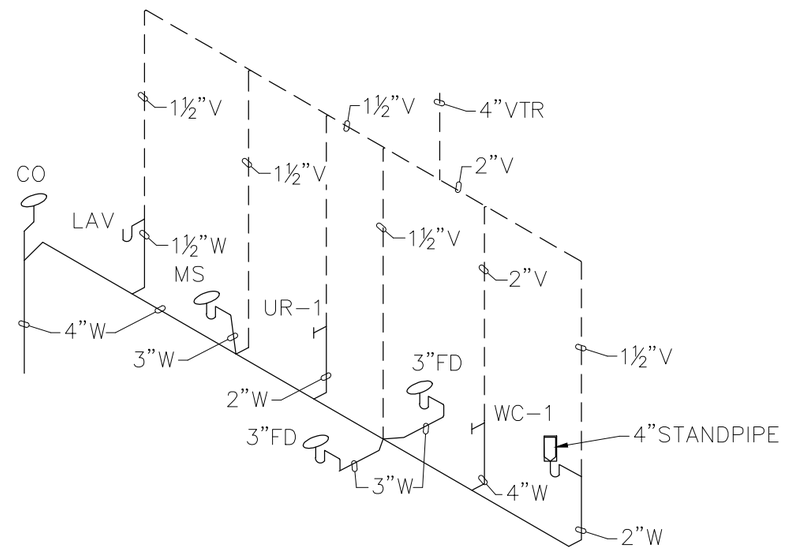
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H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES:

1 EXTEND WATER AND STORM OUTSIDE GUIDEWAY. CONNECTION BY OUTDOOR UTILITY CONTRACTOR.

2 5" STORM WATER DRAINAGE CONTINUES TO PLATFORM DRAWINGS. SHEET E4-VWT-PLM-PLN-101.

3 UP TO 4" PD-1.



3 SANITARY WASTE AND VENT RISER DIAGRAM
NOT TO SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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90% SUBMISSION - 01/22/16

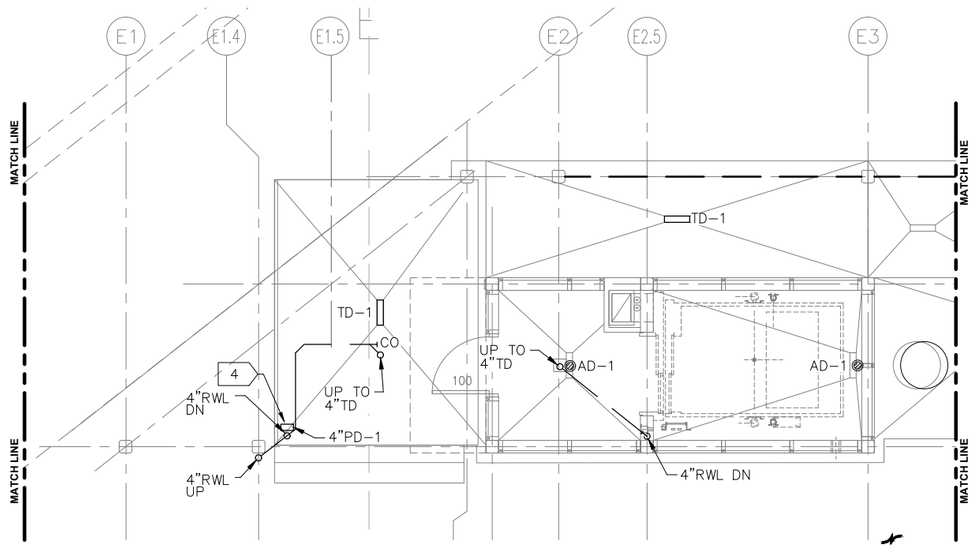
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
VC UNDERFLOOR PLATFORM LEVEL PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-VWT-PLM-PLN-130

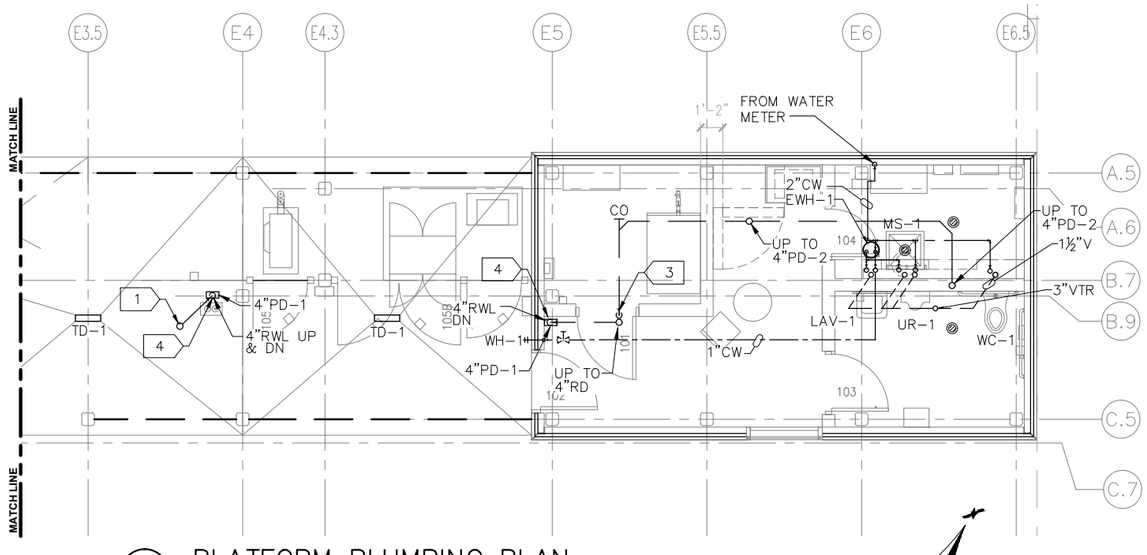
SHEET 282 OF 394

Jan, 16 2016 03:09 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN WHITE STATION\VAN WHITE VERTICAL CIRCULATION\E4-VWT-PLM-PLN-130.dwg By: craig



1 PLATFORM PLUMBING PLAN
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



2 PLATFORM PLUMBING PLAN
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

PLUMBING GENERAL NOTES

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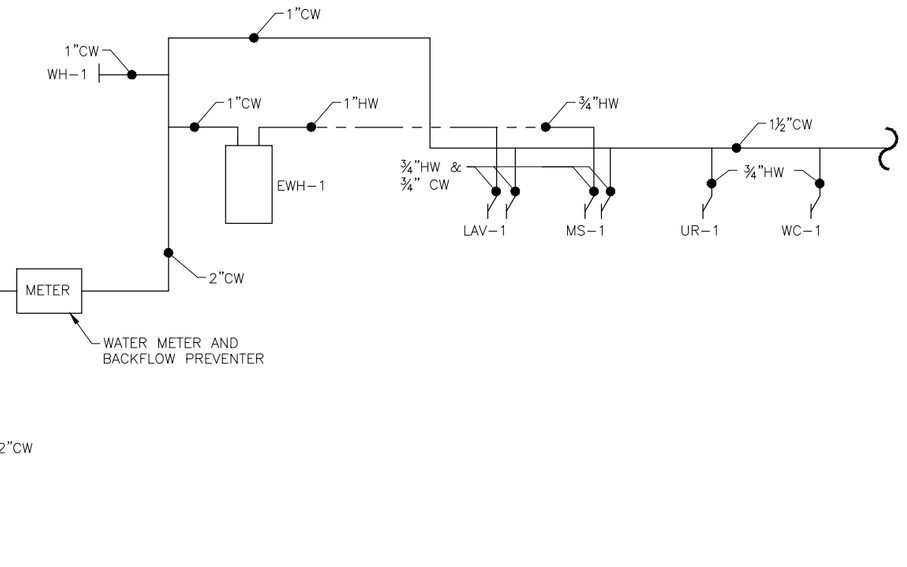
PLUMBING KEY NOTES:

1 UP TO 3" RD.

2 3" RWL UP, TERMINATE ON ROOF ABOVE TOILETS.

3 TERMINATE TRENCH DRAIN PIPING ABOVE 4" ROOF DRAIN.

4 TERMINATE 4" RWL ABOVE 4"PD-1.



3 DOMESTIC WATER RISER
NOT TO SCALE

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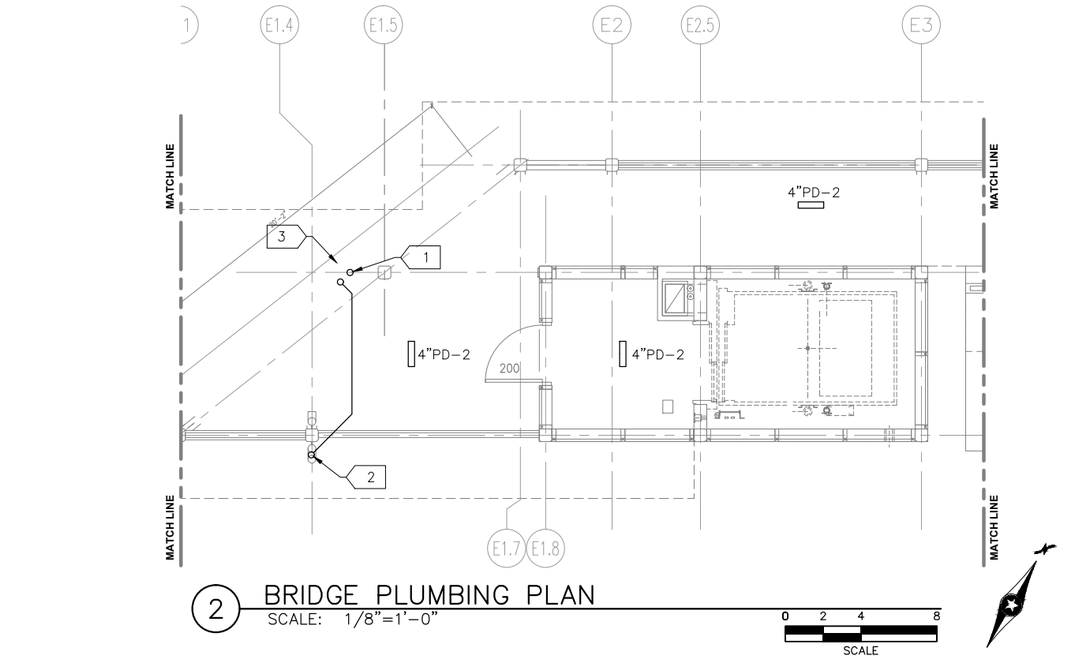
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
VC PLATFORM LEVEL PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-VWT-PLM-PLN-131

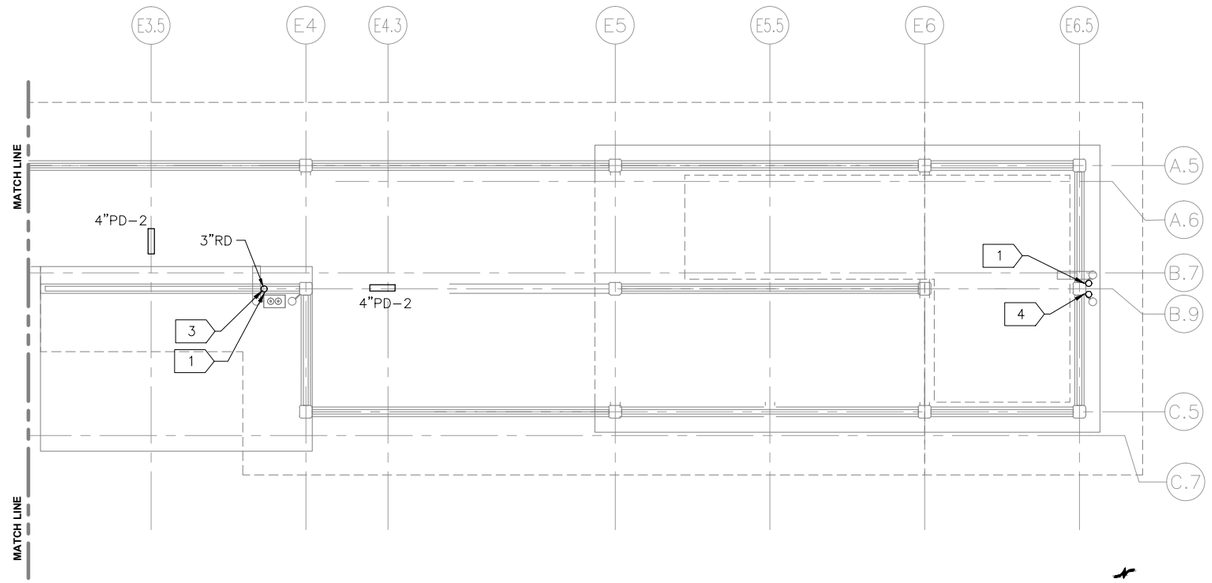
SHEET 283 OF 394

Jan, 18 2016 02:44 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN WHITE STATION\VAN WHITE VERTICAL CIRCULATION\E4-VWT-PLM-PLN-131.dwg By: craig



2 BRIDGE PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



1 BRIDGE PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

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PLUMBING KEY NOTES:

1 TERMINATE ON ROOF ABOVE TOILETS.

2 TERMINATE TRENCH DRAIN PIPING ABOVE 4" ROOF DRAIN.

3 TERMINATE 4" RWL ABOVE 4"PD-1.

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AECOM LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL SOUTHWEST Green Line LRT Extension

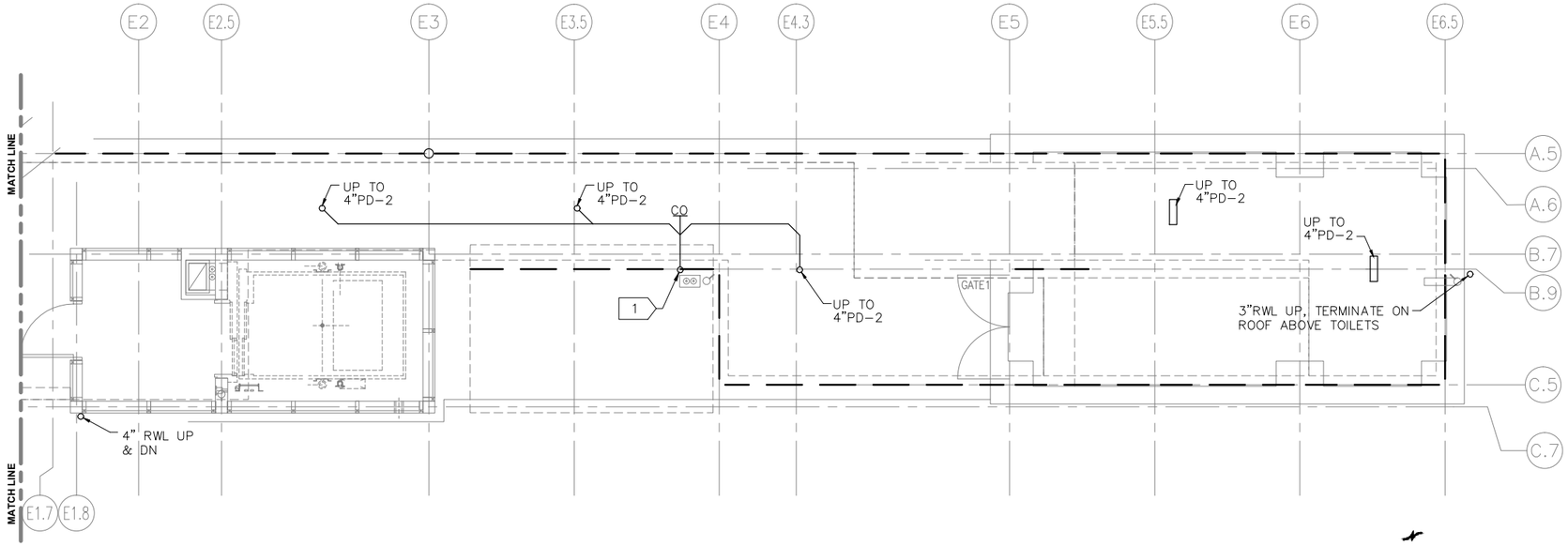
CIVIL - VOLUME 11D
VAN WHITE STATION
VC BRIDGE LEVEL PLUMBING PLAN

SHEET 284 OF 394

DISCIPLINE: PLUMBING

SHEET NAME: E4-VWT-PLM-PLN-132

Jan, 16 2016 03:10 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN WHITE STATION\VAN WHITE VERTICAL CIRCULATION\E4-VWT-PLM-PLN-132.dwg By: craig



1 INTERMEDIATE LEVEL PLUMBING PLAN

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

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PLUMBING KEY NOTES:

1 4"RD AND 4"ORD UP AND DOWN.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

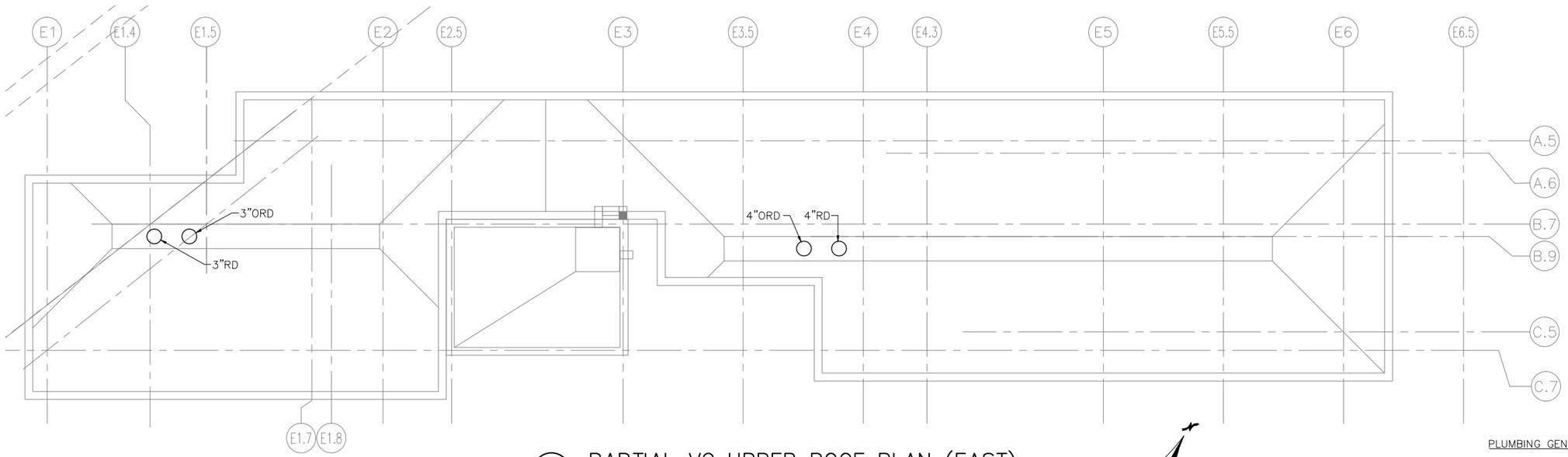
CIVIL - VOLUME 11D
VAN WHITE STATION
VC INTERMEDIATE LEVEL
PLUMBING PLAN

DISCIPLINE: PLUMBING

SHEET NAME: E4-VWT-PLM-PLN-133

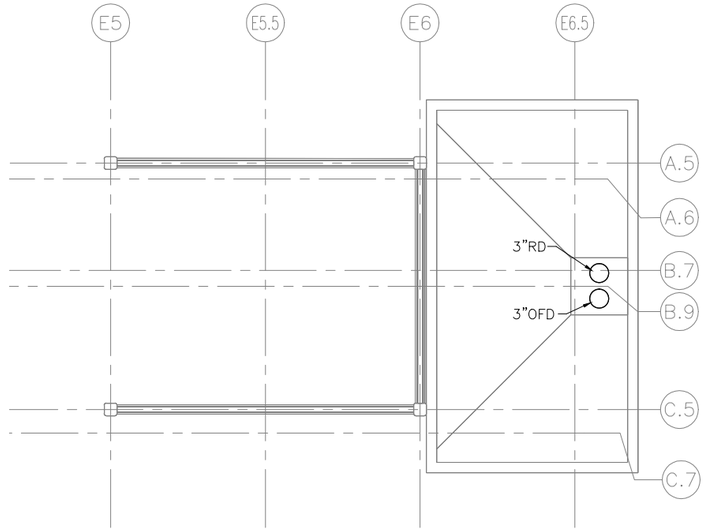
SHEET 285 OF 394

Jan, 16 2016 03:10 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN WHITE STATION\VAN WHITE VERTICAL CIRCULATION\E4-VWT-PLM-PLN-133.dwg By: craig



1 PARTIAL VC UPPER ROOF PLAN (EAST)
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 PARTIAL VC INTERMEDIATE ROOF PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

90% SUBMISSION - 01/22/16

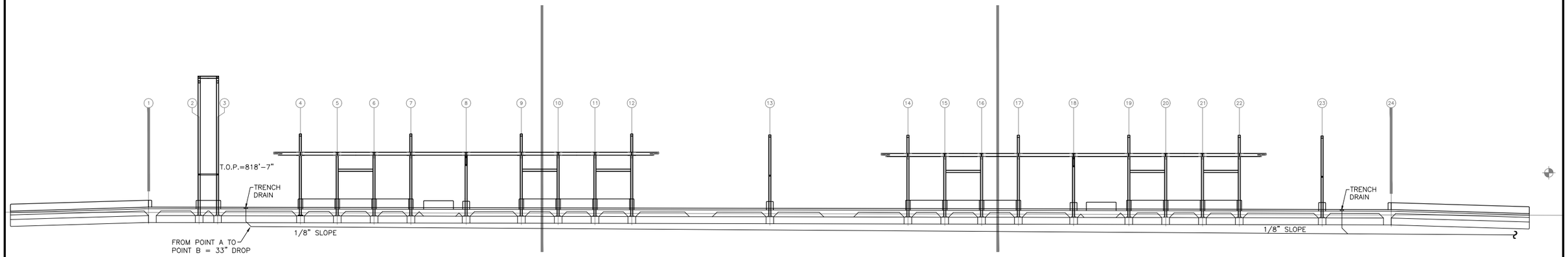
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
VC ROOF PLANS

SHEET 286 OF 394

DISCIPLINE: PLUMBING
SHEET NAME: E4-VWT-PLM-PLN-134

Jan, 16 2016 03:10 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN WHITE STATION\VAN WHITE VERTICAL CIRCULATION\E4-VWT-PLM-PLN-134.dwg By: craig



1 PLUMBING SECTION
SCALE: 3/64"=1'-0"

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

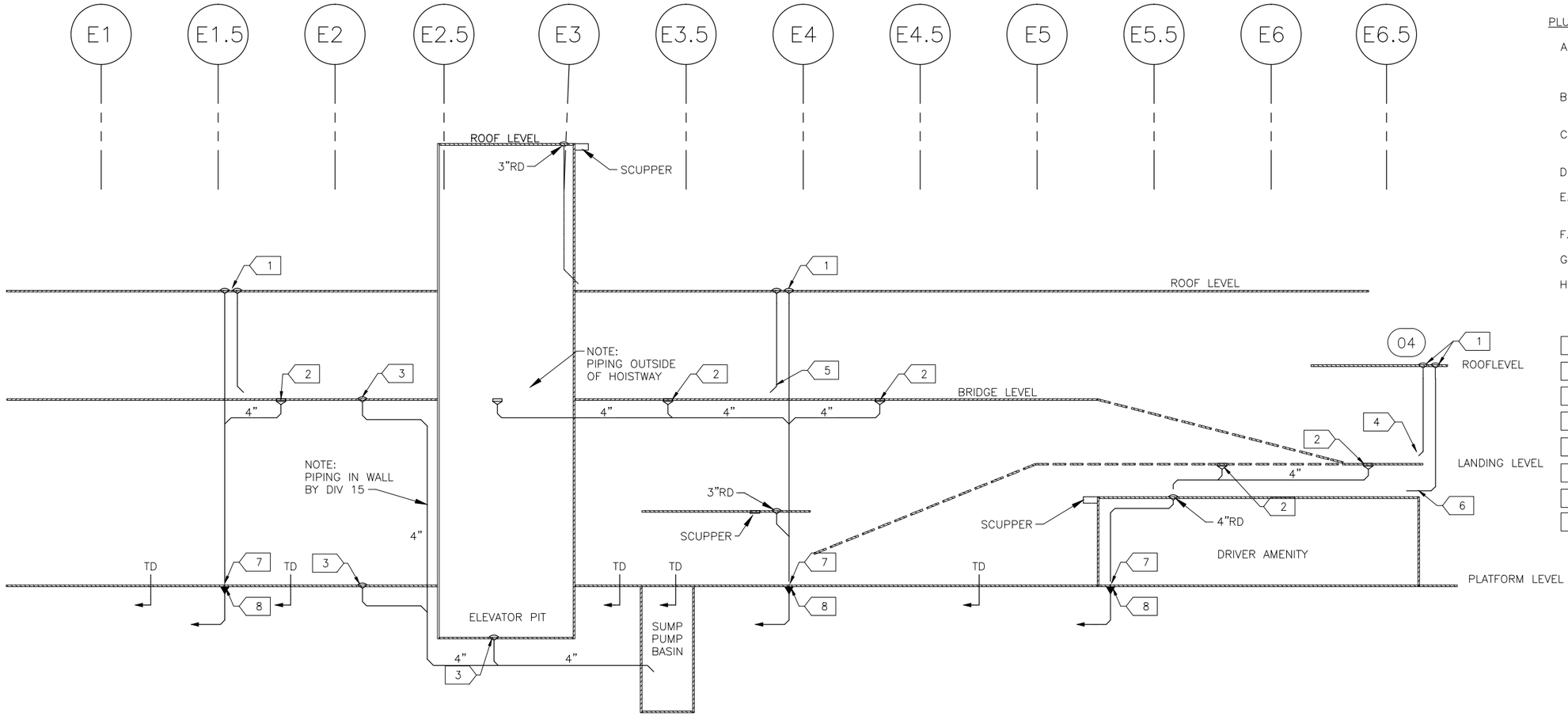
CIVIL - VOLUME 11D
VAN WHITE STATION
TYPICAL PLATFORM PLUMBING SECTION

DISCIPLINE: PLUMBING

SHEET NAME: E4-VWT-PLM-SCT-201

SHEET 287 OF 394

Jan. 16 2016 03:09 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN WHITE STATION\E4-VWT-PLM-SCT-201.dwg By: craig



1 VC STORM DRAINAGE RISER
NO SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

1 3"RD AND 3"ORD
2 4" PD-2
3 4" AREA DRAIN
4 TERMINATE ORD AT LANDING
5 TERMINATE ORD AT BRIDGE LEVEL
6 TERMINATE RD ON ROOF ABOVE TOILETS
7 TERMINATE RWL ABOVE 4" PD-1.
8 4" PROMENADE DECK DRAIN 4"PD-1.

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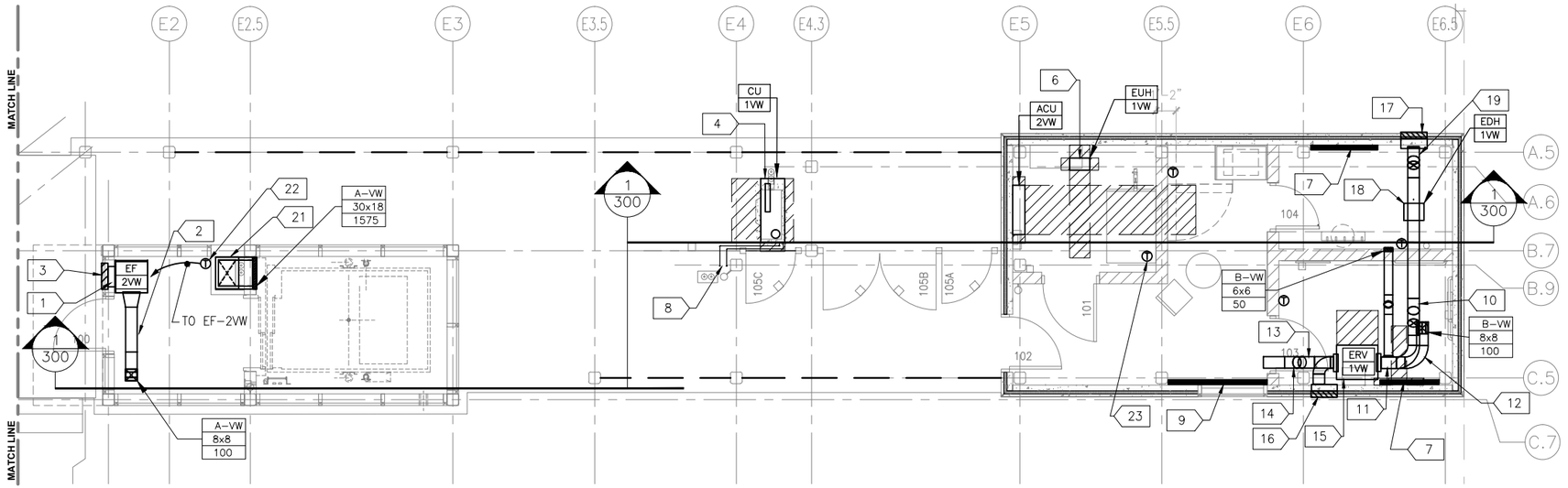
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
VC STORM DRAINAGE RISER

DISCIPLINE: PLUMBING
SHEET NAME: E4-VWT-PLM-DTL-300

SHEET 288 OF 394

Jan. 16 2016 03:10 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN WHITE STATION\VAN WHITE VERTICAL CIRCULATION\E4-VWT-PLM-DTL-300.dwg By: craig



1 PLATFORM HVAC PLAN

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

HVAC GENERAL SHEET NOTES

A. SECURELY SUSPEND HVAC EQUIPMENT FROM STRUCTURE AND PROVIDE VIBRATION ISOLATION. REFER TO STRUCTURAL DRAWINGS FOR LIMITATIONS.
B. PROVIDE MANUAL BALANCING DAMPERS FOR ALL SUPPLY AIR OUTLETS AND WHERE INDICATED ON BRANCH DUCTWORK.
C. PROVIDE DUCT ACCESS PANELS AT LOCATIONS OF ALL MOTORIZED DAMPERS, FIRE DAMPERS, AND FIRE/SMOKE DAMPERS.
D. PROVIDE FLEXIBLE DUCT CONNECTIONS AT ALL DUCTWORK TO MECHANICAL EQUIPMENT CONNECTIONS.
E. MAINTAIN REQUIRED CLEARANCES AT ALL MECHANICAL EQUIPMENT.
F. RUN DUCTWORK AS HIGH AS POSSIBLE.
G. INLET VENTILATION AIR DUCTWORK SHALL BE INSULATED FULL LENGTH.
H. PROVIDE CEILING ACCESS PANELS AT MANUAL VOLUME DAMPERS AND FAN ACCESS.
I. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION FOR GRILLES, REGISTERS, AND DIFFUSERS.

HVAC KEY NOTES:

1. LOUVER PLENUM TO 8X14 EXHAUST DUCT CONNECTED TO EXHAUST FAN OUTLET.
2. 8X8 EXHAUST AIR DUCT FROM FROM EXHAUST GRILLE, TRANSITIONS TO A 12X12 DUCT TO CONNECT TO EXHAUST FAN INLET.
3. LOUVER-SEE ARCH SPECIFICATION AND DRAWINGS FOR INFORMATION.
4. CONDENSING UNIT MOUNTED ON 4-INCH EQUIPMENT PAD.
5. CONDENSING UNIT MOUNTED FROM STAIR AND WALL. 6'-6" CLEARANCE (MIN) ABOVE TRANSFORMER.
6. UNIT HEATER HUNG FROM DECK, 2-INCH CLEARANCE (MIN) FROM CEILING, 7' CLEARANCE (MIN) ABOVE FLOOR, 9-INCH CLEARANCE (MIN) IN FRONT OF WALL.
7. ELECTRIC BASEBOARD RADIATION MOUNTED AT FLOOR. 1 KW.
8. REFRIGERANT PIPE RISES.
9. ELECTRIC BASEBOARD RADIATION MOUNTED AT FLOOR. 2.5 KW.
10. 8-INCH DIAMETER ROUND OUTDOOR AIR FROM LOUVER PLENUM. OFFSET DUCT TO CLEAR CONFLICTS AND ATTACH TO ERV OA INLET.
11. 6-INCH DIAMETER ROUND EXHAUST AIR FROM 6X6 RETURN AIR GRILLE TO EXHAUST AIR MAIN. OFFSET DUCT TO CLEAR OBSTRUCTIONS.
12. 8-INCH DIAMETER ROUND EXHAUST AIR DUCT FROM 8X8 EXHAUST GRILLE TO COMBINE WITH JANITOR'S CLOSET EXHAUST AND ENTER ERV EXHAUST INLET.
13. 8-INCH DIAMETER ROUND VENTILATION AIR DUCT FROM ERV VENTILATION AIR OUTLET TO BREAK ROOM PLENUM. PROVIDE 1/4 -INCH HARDWARE CLOTH OVER DUCT OUTLET.
14. 8-INCH DIAMETER EXHAUST AIR DUCT RUN FROM ERV TO CONNECT TO LOUVER PLENUM.
15. HANG ERV FROM DECK. PROVIDE VIBRATION ISOLATION.
16. LOUVER-SEE ARCH SPECIFICATION AND DRAWINGS FOR INFORMATION.
17. LOUVER-SEE ARCH SPECIFICATION AND DRAWINGS FOR INFORMATION.
18. 5 KW DUCT HEATER MOUNTED ON OUTSIDE AIR DUCT BETWEEN LOUVER INTAKE AND THE ERV INLET. LEAVE 1/2-INCH CLEARANCE ABOVE HEATER. PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCE AND DISTANCES FROM INTAKES AND OUTLETS.
19. PROVIDE AND INSTALL A 3/4-INCH CONDENSATE LINE FROM ERV OUTDOOR AIR INLET TO MOP SINK. REFER TO DETAIL _/_ FOR CONNECTION.
20. NOT USED.
21. 18X12 RETURN AIR DUCT UP TO ACU IN 2ND FLOOR PLENUM.
22. MOUNT THERMOSTAT ON DUCT ENCLOSURE. PROVIDE LOCKING COVER. RUN CONTROL WIRE IN CONDUIT MOUNTED ON UNDERSIDE OF DECK.
23. MOUNT THERMOSTAT ON WALL APPROXIMATELY 50 INCHES AFF. INTERLOCK UNIT HEATER IWTH ACU-2VW TO PREVENT SIMULTANEOUS HEATING AND COOLING.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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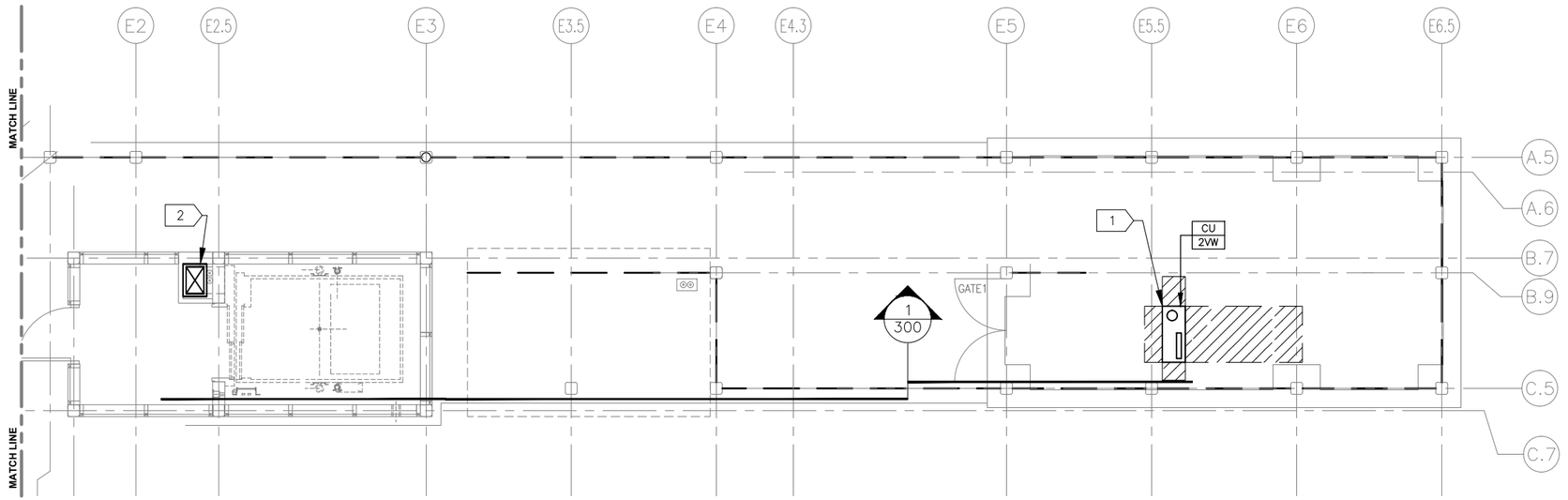
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
VC PLATFORM LEVEL HVAC PLAN

SHEET 289 OF 394

DISCIPLINE: MECHANICAL

SHEET NAME: E4-VWT-MEC-PLN-130



1 INTERMEDIATE HVAC PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

HVAC GENERAL SHEET NOTES

A. SECURELY SUSPEND HVAC EQUIPMENT FROM STRUCTURE AND PROVIDE VIBRATION ISOLATION. REFER TO STRUCTURAL DRAWINGS FOR LIMITATIONS.
B. PROVIDE MANUAL BALANCING DAMPERS FOR ALL SUPPLY AIR OUTLETS AND WHERE INDICATED ON BRANCH DUCTWORK.
C. PROVIDE DUCT ACCESS PANELS AT LOCATIONS OF ALL MOTORIZED DAMPERS AND FIRE DAMPERS.
D. PROVIDE FLEXIBLE DUCT CONNECTIONS AT ALL DUCTWORK TO MECHANICAL EQUIPMENT CONNECTIONS.
E. MAINTAIN REQUIRED CLEARANCES DIRECTLY OVER AND IN FRONT OF ALL ELECTRICAL EQUIPMENT.
F. MAINTAIN REQUIRED CLEARANCES AT ALL MECHANICAL EQUIPMENT.
G. RUN DUCTWORK AS HIGH AS POSSIBLE.
H. INLET VENTILATION AIR DUCTWORK SHALL BE INSULATED FULL LENGTH.
I. PROVIDE CEILING ACCESS PANELS AT MANUAL VOLUME DAMPERS AND FAN ACCESS.
J. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION FOR GRILLES, REGISTERS, AND DIFFUSERS.

HVAC KEY NOTES:

1 MOUNT CONDENSING UNIT ON 4-INCH EQUIPMENT PAD.
2 12X18 RETURN DUCT UP TO ACU IN 2ND FLOOR PLENUM AND DOWN TO RETURN GRILLE IN HOISTWAY.

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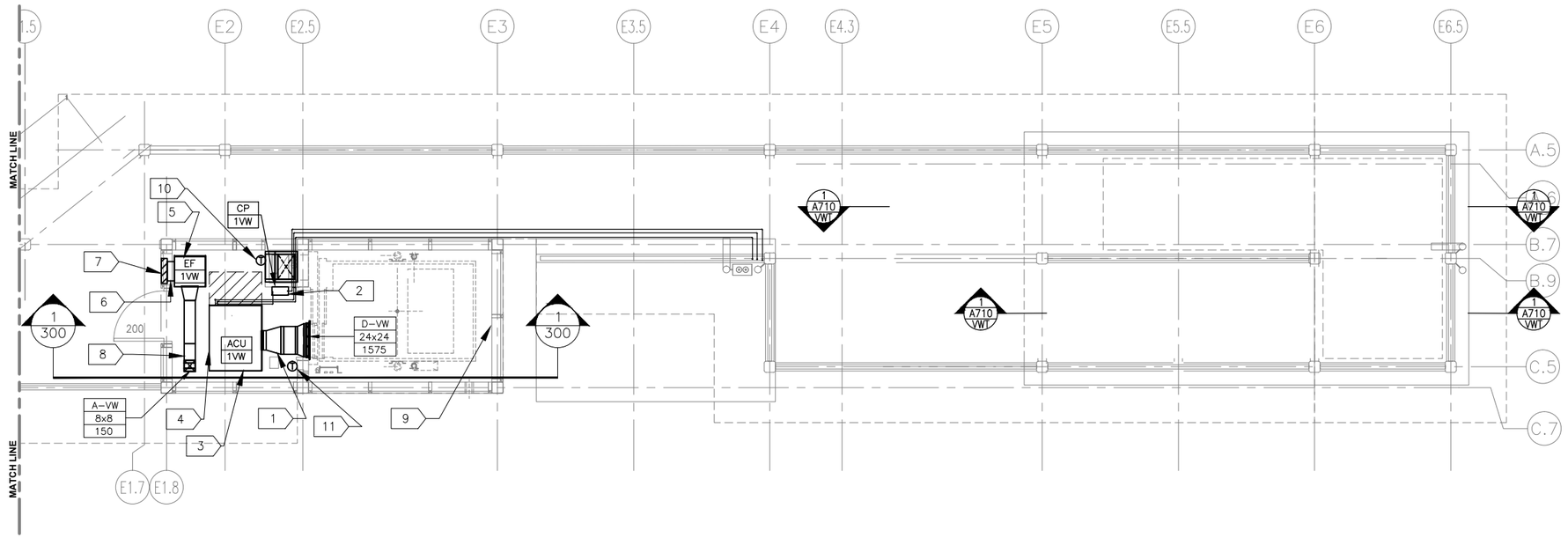
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
VC INTERMEDIATE LEVEL HVAC PLAN

DISCIPLINE: MECHANICAL
SHEET NAME: E4-VWT-MEC-PLN-131

SHEET 290 OF 394

Jan, 16 2016 03:08 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\VAN WHITE STATION\VAN WHITE VERTICAL CIRCULATION\E4-VWT-MEC-PLN-131.dwg By: craig



1 BRIDGE HVAC PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

HVAC GENERAL SHEET NOTES

A. SECURELY SUSPEND HVAC EQUIPMENT FROM STRUCTURE AND PROVIDE VIBRATION ISOLATION. REFER TO STRUCTURAL DRAWINGS FOR LIMITATIONS.
B. PROVIDE MANUAL BALANCING DAMPERS FOR ALL SUPPLY AIR OUTLETS AND WHERE INDICATED ON BRANCH DUCTWORK.
C. PROVIDE DUCT ACCESS PANELS AT LOCATIONS OF ALL MOTORIZED DAMPERS AND FIRE DAMPERS.
D. PROVIDE FLEXIBLE DUCT CONNECTIONS AT ALL DUCTWORK TO MECHANICAL EQUIPMENT CONNECTIONS.
E. MAINTAIN REQUIRED CLEARANCES DIRECTLY OVER AND IN FRONT OF ALL ELECTRICAL EQUIPMENT.
F. MAINTAIN REQUIRED CLEARANCES AT ALL MECHANICAL EQUIPMENT.
G. RUN DUCTWORK AS HIGH AS POSSIBLE.
H. INLET VENTILATION AIR DUCTWORK SHALL BE INSULATED FULL LENGTH.
I. PROVIDE CEILING ACCESS PANELS AT MANUAL VOLUME DAMPERS AND FAN ACCESS.
J. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION FOR GRILLES, REGISTERS, AND DIFFUSERS.

HVAC KEY NOTES:

1. ACU SUPPLY OUTLET TO TRANSITION TO 24X24 TO REGISTER.
2. CONDENSATE PUMP MOUNTED ON WALL.
3. ACU MOUNTED TO DECK. PROVIDE VIBRATION ISOLATION.
4. RETURN AIR INLET DRAWING FROM PLENUM.
5. EXHAUST FAN HUNG FROM DECK. PROVIDE VIBRATION ISOLATION.
6. 14X8 EXHAUST AIR DUCT TO LOUVER PLENUM.
7. LOUVER–SEE ARCH SPECIFICATION AND DRAWINGS FOR INFORMATION.
8. 8X8 EXHAUST AIR DUCT FROM FROM EXHAUST GRILLE, TRANSITIONS TO A 12X12 DUCT TO CONNECT TO EXHAUST FAN INLET.
9. LOUVER AND MOTORIZED DAMPER FOR FIRE SERVICE SMOKE EVACUATION. KEY OPERATED SWITCH AT PLATFORM LEVEL. OPENING IS LOCATED NEAR THE TOP OF HOISTWAY. SEE ARCH SPECIFICATION AND DRAWINGS FOR LOUVER INFORMATION.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

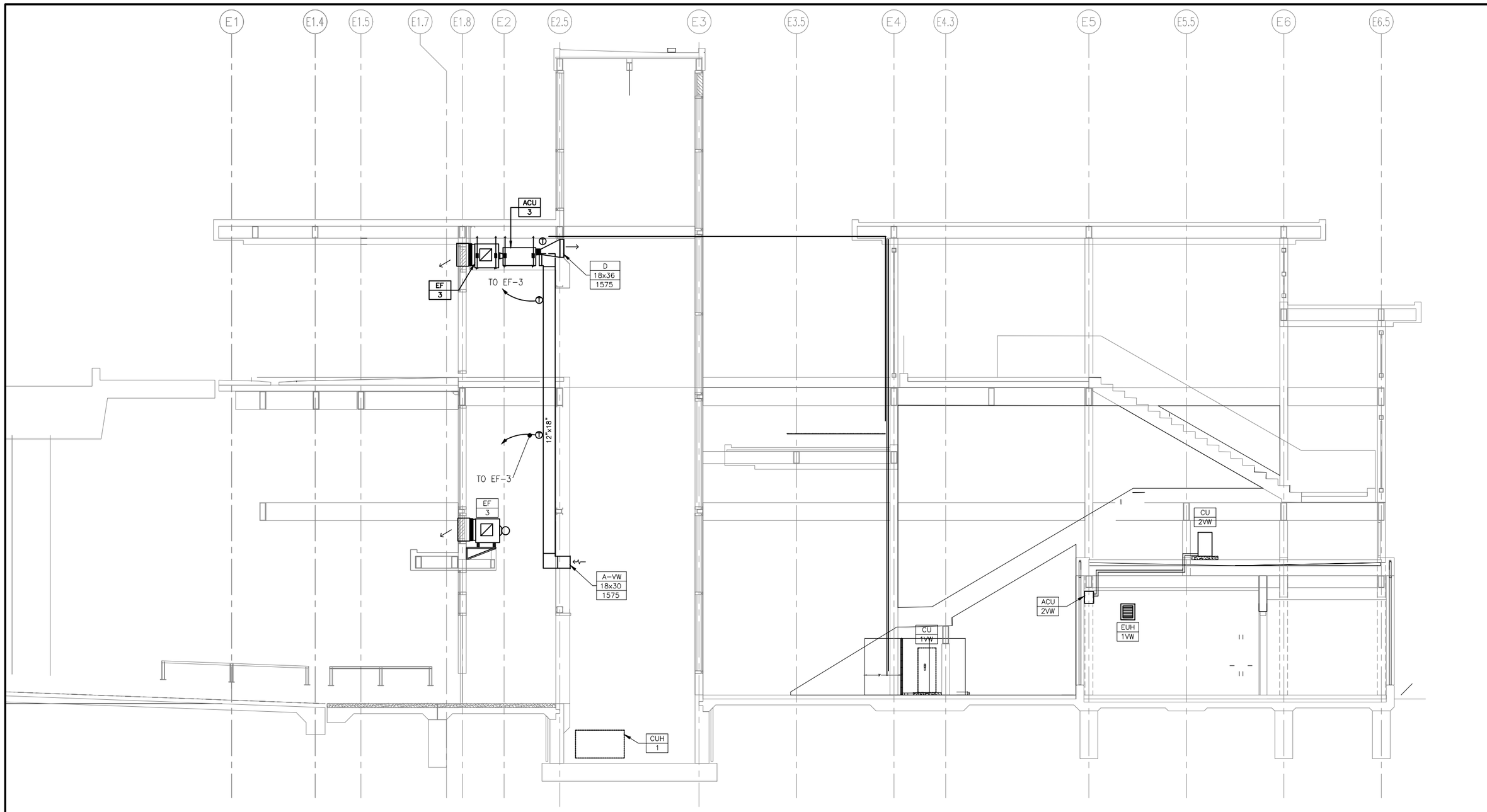
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METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
VC BRIDGE LEVEL HVAC PLAN

DISCIPLINE: MECHANICAL
SHEET NAME: E4-VWT-MEC-PLN-132

SHEET 291 OF 394



1 VAN WHITE– HVAC SECTION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

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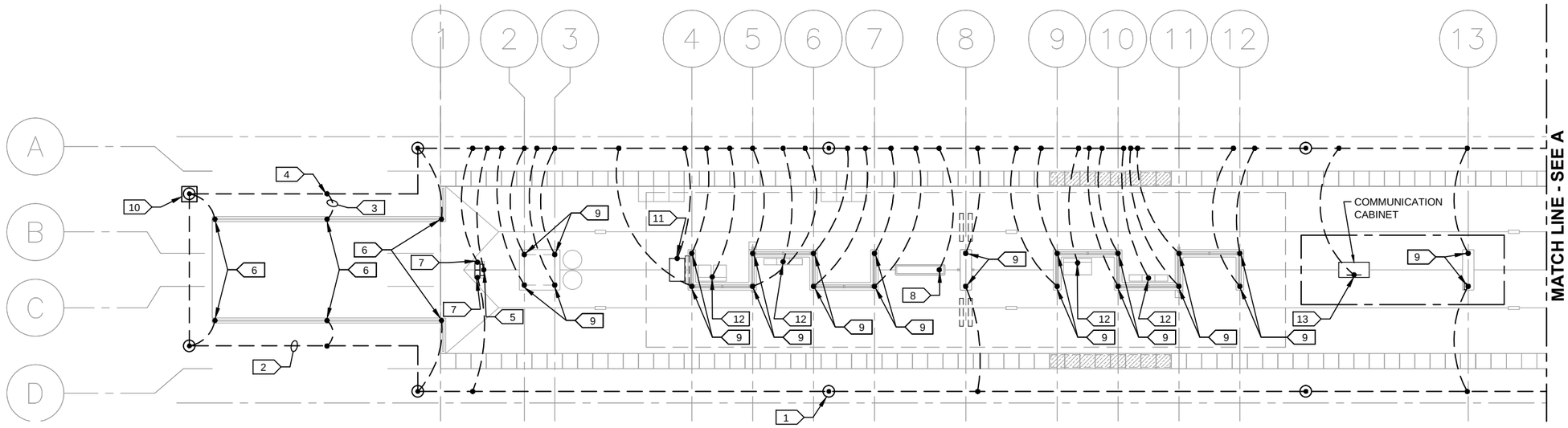
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
TYPICAL HVAC SECTION

DISCIPLINE: MECHANICAL

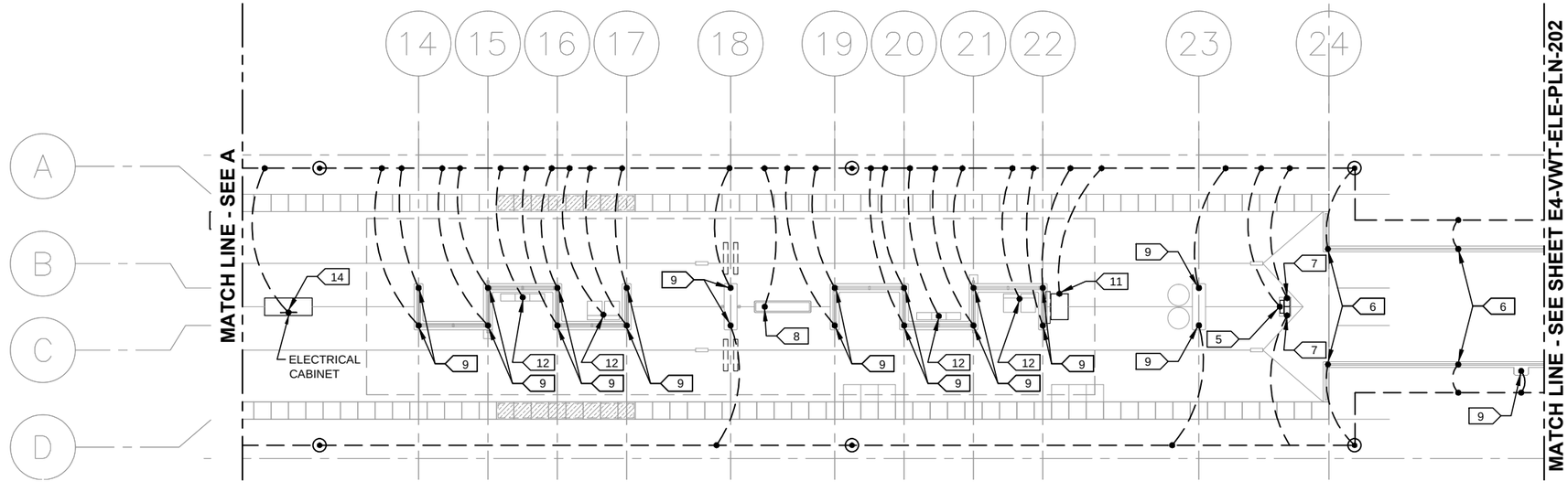
SHEET NAME: E4-VWT-MEC-SCT-300

SHEET 292 OF 394



1 PARTIAL PLATFORM PLAN

SCALE: 1/16"=1'-0"



2 PARTIAL PLATFORM PLAN

SCALE: 1/16"=1'-0"

KEYNOTES:

1. GROUND ROD, TYPICAL.
2. GROUND LOOP, TYPICAL.
3. GEC, TYPICAL.
4. EXOTHERMIC WELD, TYPICAL.
5. GEC CONNECTION TO RIDER ALERT PANEL.
6. GEC CONNECTION TO RAILING POST.
7. GEC CONNECTION TO RSV.
8. GEC CONNECTION TO KIOSK.
9. GEC CONNECTION TO COLUMN.
10. GROUND TEST WELL.
11. GEC CONNECTION TO TVM.
12. GEC CONNECTION TO SEAT OR LEAN RAIL.
13. GEC CONNECTION TO COMMUNICATIONS CABINET GROUND BUS.
14. #3/0 GEC CONNECTION TO ELECTRICAL ENCLOSURE GROUND BUS.

GENERAL NOTES:

1. ALL METALLIC OBJECTS SHALL BE GROUNDED AND THE GROUNDING PLAN IS INTENDED TO DEMONSTRATE THE GROUNDING OF THE PLATFORM, GUIDEWAY AND EQUIPMENT WITHIN THE VICINITY. OBJECTS NOT SHOWN GROUNDED DOES RELIEVE THE CONTRACTOR FROM THE DESIGN INTENT.
2. GROUND LOOP SHALL BE #3/0 BARE COPPER. LOOP SHALL BE INSTALLED 48" BELOW GRADE OR 6" BELOW THE FROST LINE, WHICHEVER IS GREATER. GROUND LOOP IS SHOWN DIAGRAMMATICALLY. INSTALL GROUND LOOP UNDER PLATFORM PERIMETER TO PROTECT FROM WORK PERFORMED OUTSIDE THE PLATFORM LIMITS BY OTHER TRADES. GROUND TEST WELLS SHALL REMAIN ACCESSIBLE AS SHOWN.
3. GROUNDING ELECTRODE CONDUCTORS (GEC) SHALL BE #2/0 BARE COPPER UNLESS NOTED OTHERWISE.
4. ALL EXOTHERMIC WELDS TO COLUMNS, TVM'S, RSV'S, SEATS, LEAN RAILS AND EQUIPMENT CABINETS SHALL BE ABOVE GRADE AND VISIBLE. PAINT WELDS TO MATCH SURFACE COLOR. VERIFY COLOR WITH CAR.
5. INSTALL GROUND ROD SO THAT 8-FT IS BELOW THE FROST LINE.
6. IF RAILING HAS AN ISOLATION GAP, JUMPER BETWEEN GAPS WITH GEC.

0 4 8 16

HORIZONTAL SCALE IN FEET

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

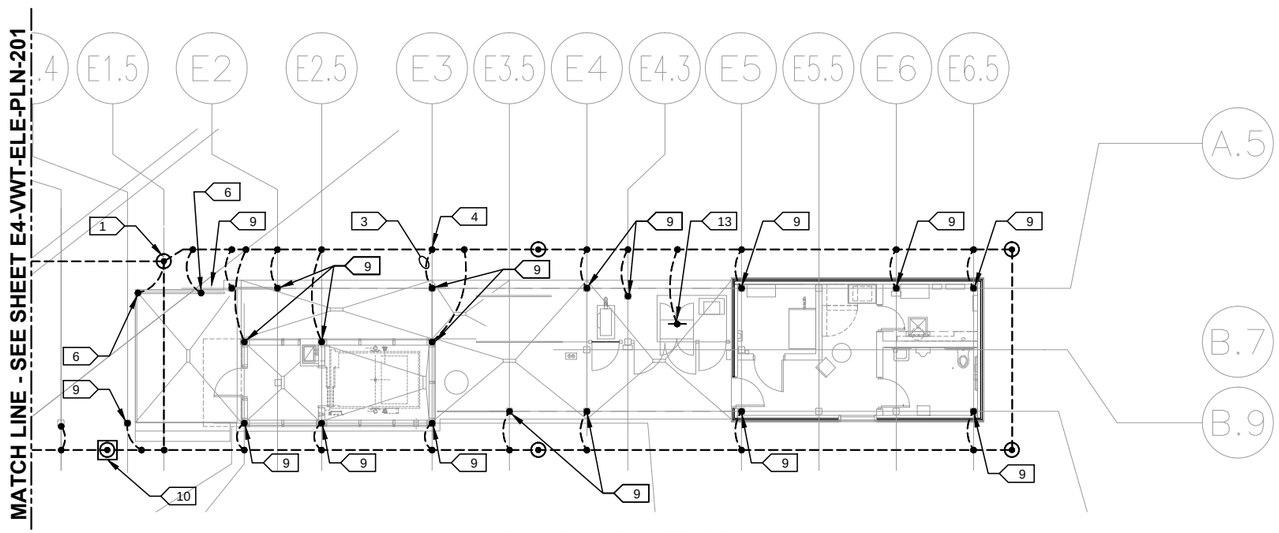
CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
GROUNDING PLAN (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-VWT-ELE-PLN-201

SHEET 293 OF 394

Jan, 18 2016 11:23 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-201.dwg By: V-BegeJB



1 PARTIAL PLATFORM PLAN

SCALE: 1/16"=1'-0"

KEYNOTES:

1. GROUND ROD, TYPICAL.
2. GROUND LOOP, TYPICAL.
3. GEC, TYPICAL.
4. EXOTHERMIC WELD, TYPICAL.
5. NOT USED
6. GEC CONNECTION TO RAILING POST.
7. GEC CONNECTION TO RSV.
8. GEC CONNECTION TO KIOSK.
9. GEC CONNECTION TO COLUMN.
10. GROUND TEST WELL.
11. GEC CONNECTION TO TVM.
12. GEC CONNECTION TO SEAT OR LEAN RAIL.
13. GEC CONNECTION TO COMMUNICATIONS CABINET GROUND BUS.
14. NOT USED

GENERAL NOTES:

1. ALL METALLIC OBJECTS SHALL BE GROUNDED AND THE GROUNDING PLAN IS INTENDED TO DEMONSTRATE THE GROUNDING OF THE PLATFORM, GUIDEWAY AND EQUIPMENT WITHIN THE VICINITY. OBJECTS NOT SHOWN GROUNDED DOES RELIEVE THE CONTRACTOR FROM THE DESIGN INTENT.
2. GROUND LOOP SHALL BE #3/0 BARE COPPER. LOOP SHALL BE INSTALLED 48" BELOW GRADE OR 6" BELOW THE FROST LINE, WHICHEVER IS GREATER. GROUND LOOP IS SHOWN DIAGRAMMATICALLY. INSTALL GROUND LOOP UNDER PLATFORM PERIMETER TO PROTECT FROM WORK PERFORMED OUTSIDE THE PLATFORM LIMITS BY OTHER TRADES. GROUND TEST WELLS SHALL REMAIN ACCESSIBLE AS SHOWN.
3. GROUNDING ELECTRODE CONDUCTORS (GEC) SHALL BE #2/0 BARE COPPER UNLESS NOTED OTHERWISE.
4. ALL EXOTHERMIC WELDS TO COLUMNS, TVM'S, RSV'S, SEATS, LEAN RAILS AND EQUIPMENT CABINETS SHALL BE ABOVE GRADE AND VISIBLE. PAINT WELDS TO MATCH SURFACE COLOR. VERIFY COLOR WITH CAR.
5. INSTALL GROUND ROD SO THAT 8-FT IS BELOW THE FROST LINE.
6. IF RAILING HAS AN ISOLATION GAP, JUMPER BETWEEN GAPS WITH GEC.

0 4 8 16

HORIZONTAL SCALE IN FEET

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90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

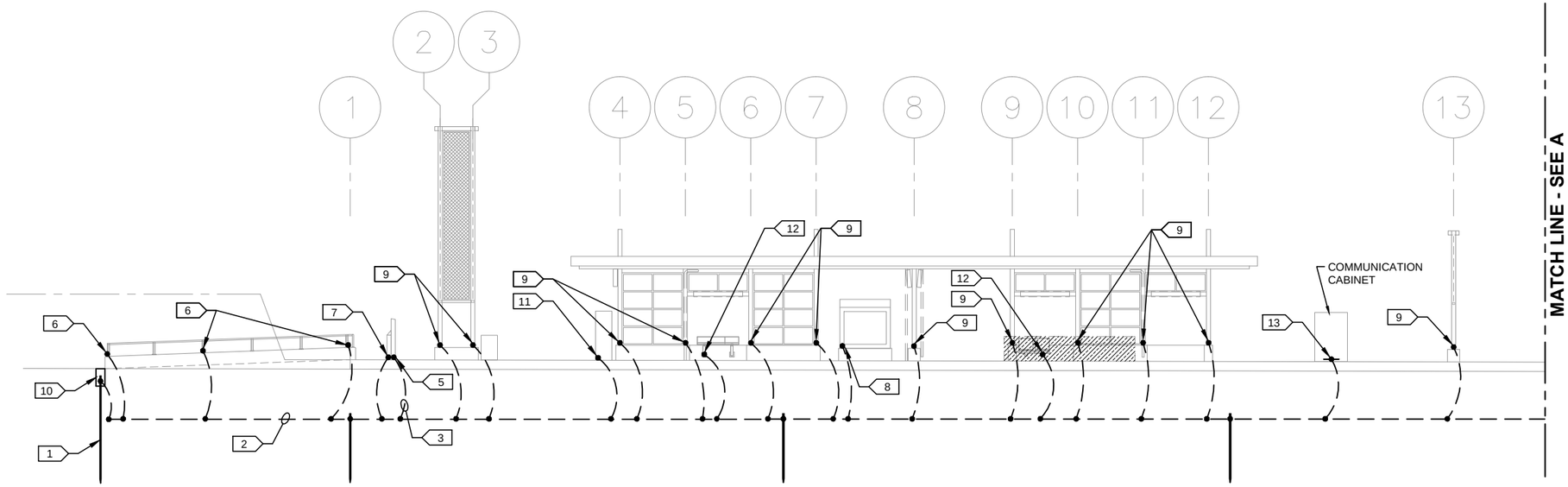
CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
GROUNDING PLAN (2 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-VWT-ELE-PLN-202

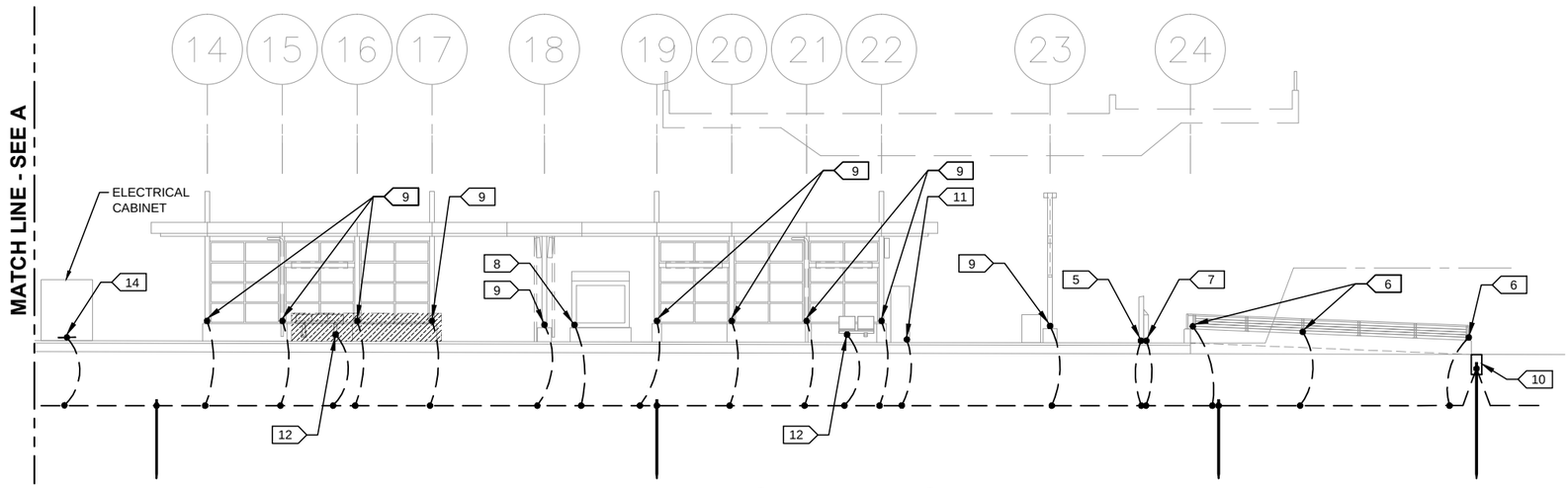
SHEET 294 OF 394

Jan. 18 2016 11:24 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-202.dwg By: V-BegeJB



1 PARTIAL PLATFORM ELEVATION

SCALE: 1/16"=1'-0"



2 PARTIAL PLATFORM ELEVATION

SCALE: 1/16"=1'-0"

KEYNOTES:

1. GROUND ROD, TYPICAL.
2. GROUND LOOP, TYPICAL.
3. GEC, TYPICAL.
4. EXOTHERMIC WELD, TYPICAL.
5. GEC CONNECTION TO RIDER ALERT PANEL.
6. GEC CONNECTION TO RAILING POST.
7. GEC CONNECTION TO RSV.
8. GEC CONNECTION TO KIOSK.
9. GEC CONNECTION TO COLUMN.
10. GROUND TEST WELL.
11. GEC CONNECTION TO TVM.
12. GEC CONNECTION TO SEAT OR LEAN RAIL.
13. GEC CONNECTION TO COMMUNICATIONS CABINET GROUND BUS.
14. #3/0 GEC CONNECTION TO ELECTRICAL ENCLOSURE GROUND BUS.

GENERAL NOTES:

1. ALL METALLIC OBJECTS SHALL BE GROUNDED AND THE GROUNDING PLAN IS INTENDED TO DEMONSTRATE THE GROUNDING OF THE PLATFORM, GUIDEWAY AND EQUIPMENT WITHIN THE VICINITY. OBJECTS NOT SHOWN GROUNDED DOES RELIEVE THE CONTRACTOR FROM THE DESIGN INTENT.
2. GROUND LOOP SHALL BE #3/0 BARE COPPER. LOOP SHALL BE INSTALLED 48" BELOW GRADE OR 6" BELOW THE FROST LINE, WHICHEVER IS GREATER. GROUND LOOP IS SHOWN DIAGRAMMATICALLY. INSTALL GROUND LOOP UNDER PLATFORM PERIMETER TO PROTECT FROM WORK PERFORMED OUTSIDE THE PLATFORM LIMITS BY OTHER TRADES. GROUND TEST WELLS SHALL REMAIN ACCESSIBLE AS SHOWN.
3. GROUNDING ELECTRODE CONDUCTORS (GEC) SHALL BE #2/0 BARE COPPER UNLESS NOTED OTHERWISE.
4. ALL EXOTHERMIC WELDS TO COLUMNS, TVM'S, RSV'S, SEATS, LEAN RAILS AND EQUIPMENT CABINETS SHALL BE ABOVE GRADE AND VISIBLE. PAINT WELDS TO MATCH SURFACE COLOR. VERIFY COLOR WITH CAR.
5. INSTALL GROUND ROD SO THAT 8-FT IS BELOW THE FROST LINE.
6. IF RAILING HAS AN ISOLATION GAP, JUMPER BETWEEN GAPS WITH GEC.

0 4 8 16

HORIZONTAL SCALE IN FEET

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90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

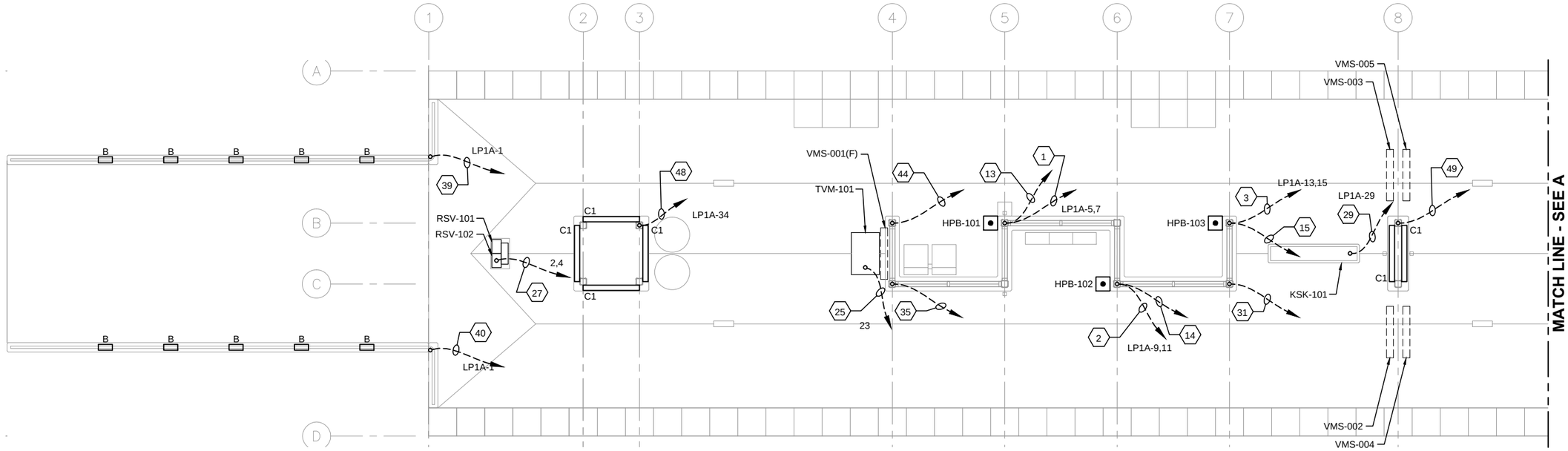
CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
GROUNDING ELEVATIONS

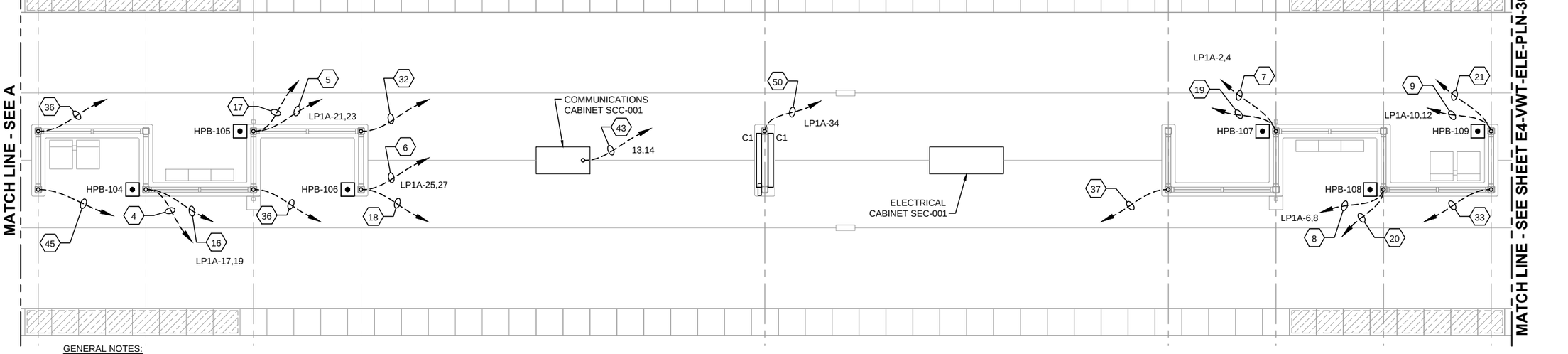
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SHEET NAME: E4-VWT-ELE-ELV-203

SHEET 295 OF 394

Jan, 18 2016 11:24 am v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-ELV-203.dwg By: V-Bege.dB





GENERAL NOTES:

1. ALL IN SLAB CONDUITS SHALL BE STUBBED UP A MINIMUM OF 8" AFF INTO COLUMNS, POSTS, BOTTOM OF TVM'S AND BOTTOM OF RSV'S.
2. AT CONDUIT STUB-UPS TRANSITION TO 1/2" LFMC FOR PUSH BUTTON CONTROL WIRING AND 3/4" LFMC FOR THE REMAINING.
3. SEE CONDUIT AND WIRE SCHEDULE FOR FROM/TO ROUTING OF CONDUITS.
4. UNLESS OTHERWISE NOTED, CIRCUITS WILL BE FED FROM PANEL LP1B.

1 PLATFORM PLAN
SCALE: 1/8"=1'-0"

SCALE HORIZONTAL 0 2 4 8 FEET IN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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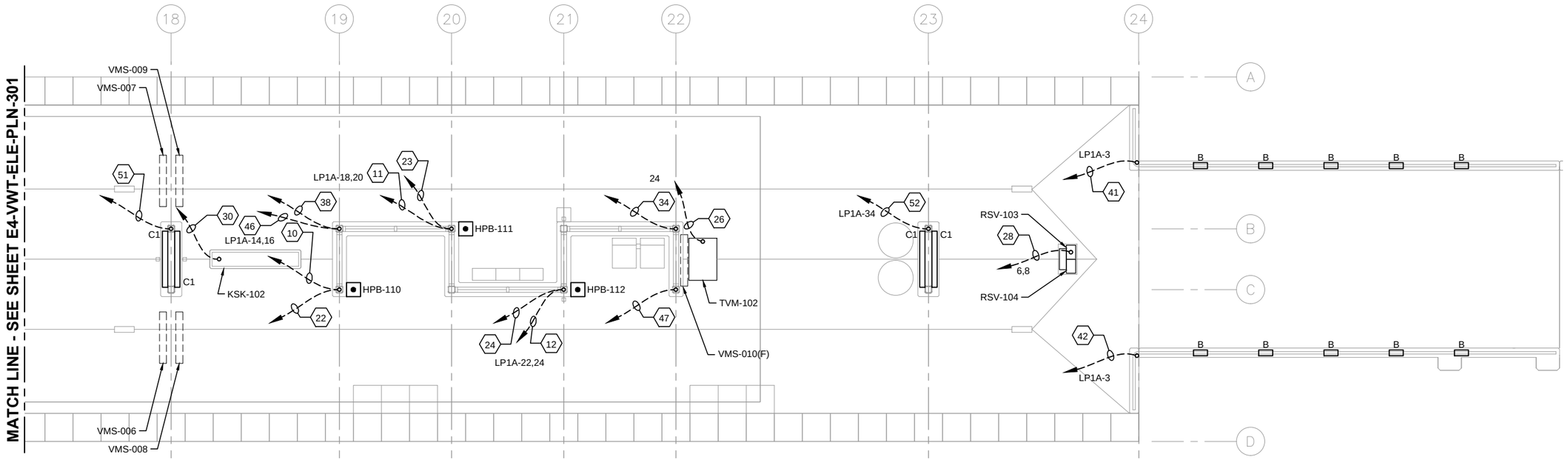
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
UNDERSLAB CONDUIT PLAN (1 OF 2)

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-PLN-301

SHEET 296 OF 394

Jan, 18 2016 11:25 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-301.dwg By: V-BegeJB



1 PLATFORM PLAN

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. ALL IN SLAB CONDUITS SHALL BE STUBBED UP A MINIMUM OF 8" AFF INTO COLUMNS, POSTS, BOTTOM OF TVM'S AND BOTTOM OF RSV'S.
2. AT CONDUIT STUB-UPS TRANSITION TO 1/2" LFMC FOR PUSH BUTTON CONTROL WIRING AND 3/4" LFMC FOR THE REMAINING.
3. SEE CONDUIT AND WIRE SCHEDULE FOR FROM/TO ROUTING OF CONDUITS.
4. UNLESS OTHERWISE NOTED, CIRCUITS WILL BE FED FROM PANEL LP1B.

0 2 4 8

HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

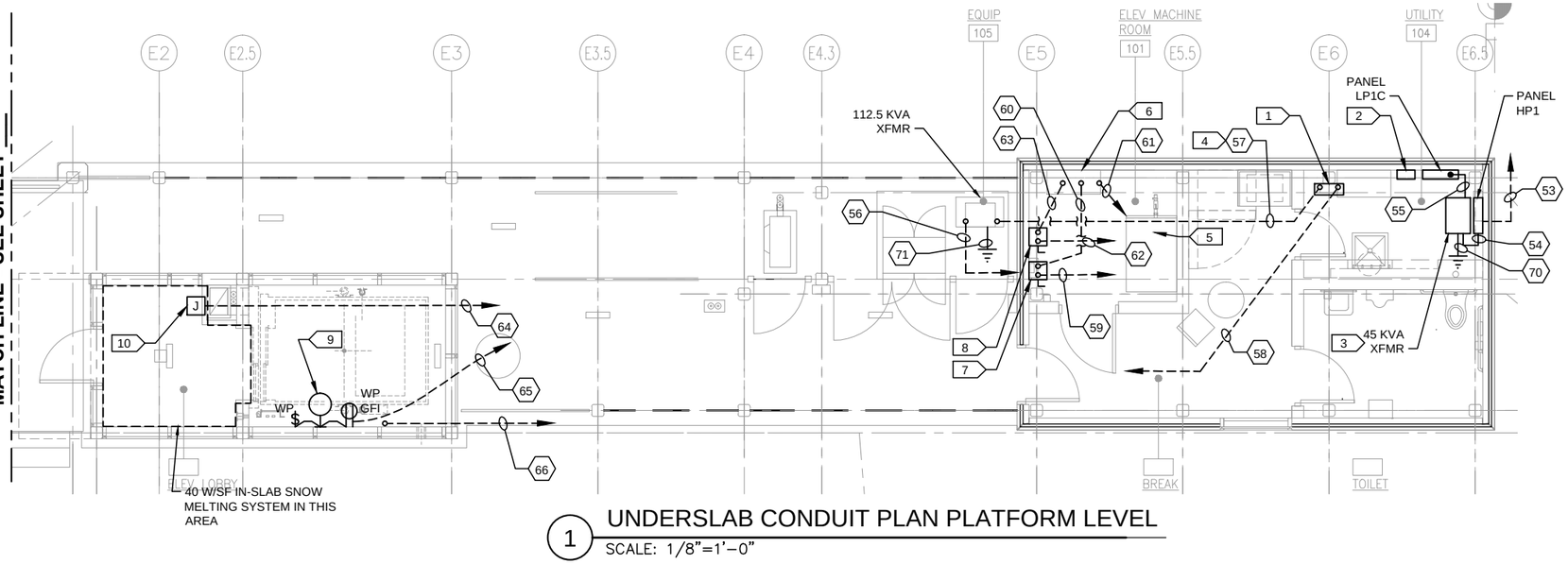
CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
UNDERSLAB CONDUIT PLAN (2 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-VWT-ELE-PLN-302

SHEET 297 OF 394

Jan, 18 2016 11:26 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-302.dwg By: V-BegeJB



1 UNDERSLAB CONDUIT PLAN PLATFORM LEVEL

SCALE: 1/8"=1'-0"

GENERAL NOTES:

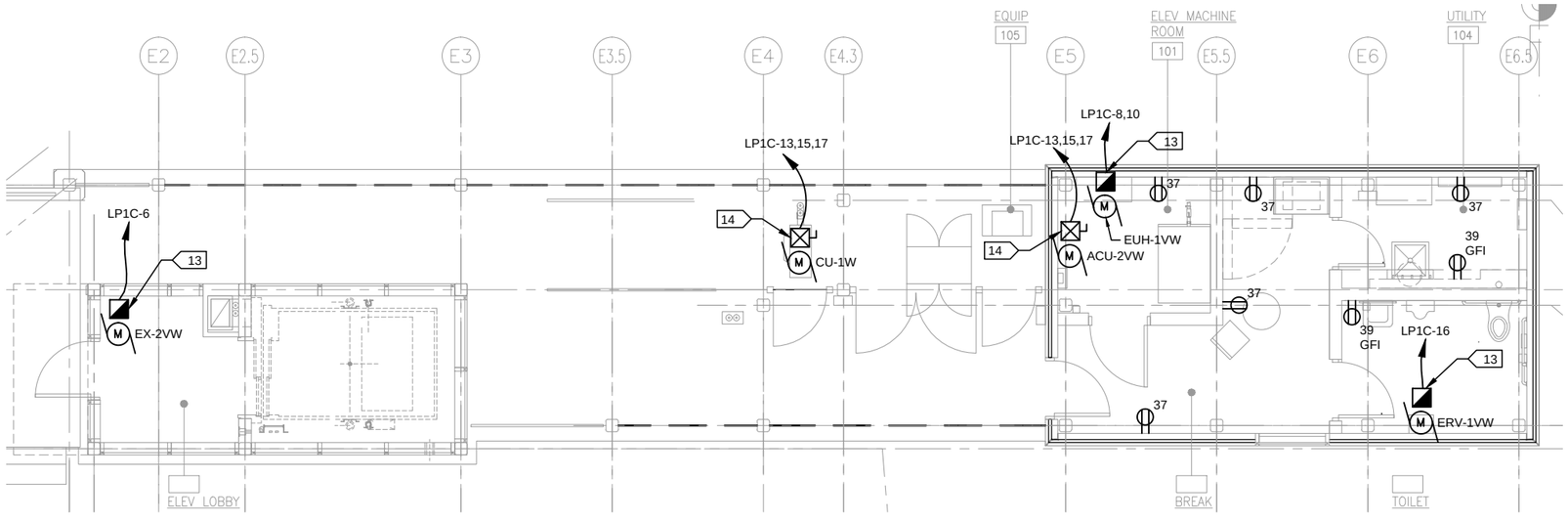
1. ALL IN SLAB CONDUITS SHALL BE STUBBED UP A MINIMUM OF 8" AFF INTO COLUMNS, POSTS, BOTTOM OF TVM'S AND BOTTOM OF RSV'S.
2. AT CONDUIT STUB-UPS TRANSITION TO 1/2" LFMC FOR PUSH BUTTON CONTROL WIRING AND 3/4" LFMC FOR THE REMAINING.
3. SEE CONDUIT AND WIRE SCHEDULE FOR FROM/TO ROUTING OF CONDUITS.
4. SEE DETAIL XX/XXX FOR SCV ROUGH-IN AND DETAIL XX/XXX FOR TVM ROUGH-IN.
5. SEE DETAIL XX/XXX FOR MOUNTING OF HEATERS. WIRE BETWEEN ELECTRIC HEATERS.
6. PLATFORM LEVEL RECEPTACLES CONNECTED TO LP1C-37,39.

KEYNOTES:

1. 500A, 208V, 3P CIRCUIT BREAKER DISCONNECT SWITCH FOR 150 KVA XFMR.
2. 20A/2P, 208V CONTACTOR AND CONTROLLER FOR ELEVATOR LOBBY IN-SLAB HEATING. PROVIDE SPACE FOR FUTURE ELEVATOR LOBBY IN-SLAB 20A/2P, 208V CONTACTOR AND CONTROLLER.
3. HANG XFMR FROM CEILING WITH THREADED RODS AND STEEL U-CHANNEL.
4. MAXIMUM LENGTH OF CONDUCTORS SHALL BE 25' FROM TERMINATION TO TERMINATION.
5. ELEVATOR HYDRAULIC PUMP.
6. ELEVATOR CONTROLLER.
7. 100A, 480V, 3P CIRCUIT BREAKER DISCONNECT SWITCH FOR ELEVATOR.
8. 20A, 120V, 2P DISCONNECT SWITCH FOR ELEVATOR CAB LIGHTING AND POWER.
9. ELEVATOR PIT LUMINAIRE, LIGHT SWITCH AND RECEPTACLE. INSTALL AT 18" ABOVE PIT FLOOR.
10. FLUSH MOUNTED JUNCTION BOX FOR CONNECTION TO IN-SLAB FLOOR HEATING CABLES.
11. STUB CONDUIT OUT AT 12" BELOW FINISHED SURFACE OF PLATFORM. CAP AND SEAL WATERTIGHT.
12. STUB CONDUITS OUT AT 36" BELOW FINISHED SURFACE OF PLATFORM. CAP AND SEAL WATERTIGHT.
13. SINGLE PHASE DISCONNECT/STARTER.
14. THREE PHASE STARTER.

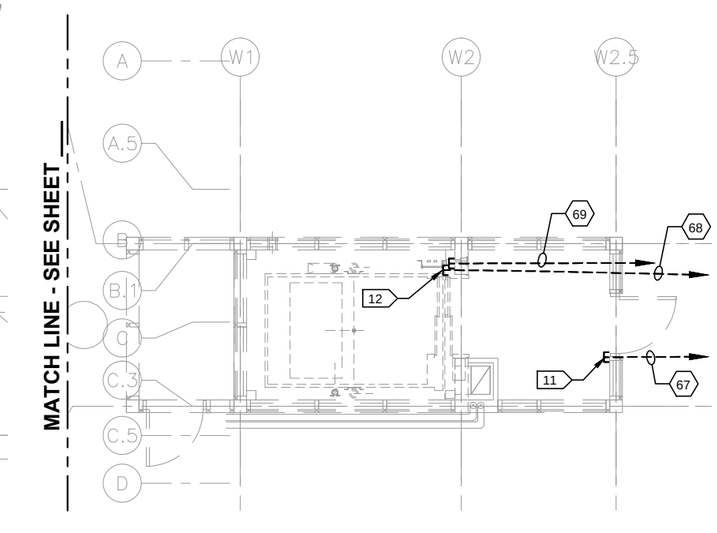
0 2 4 8

HORIZONTAL SCALE IN FEET



2 POWER PLAN PLATFORM LEVEL

SCALE: 1/8"=1'-0"



3 UNDERSLAB CONDUIT PLAN PLATFORM LEVEL (FUTURE)

SCALE: 1/8"=1'-0"

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Green Line LRT Extension

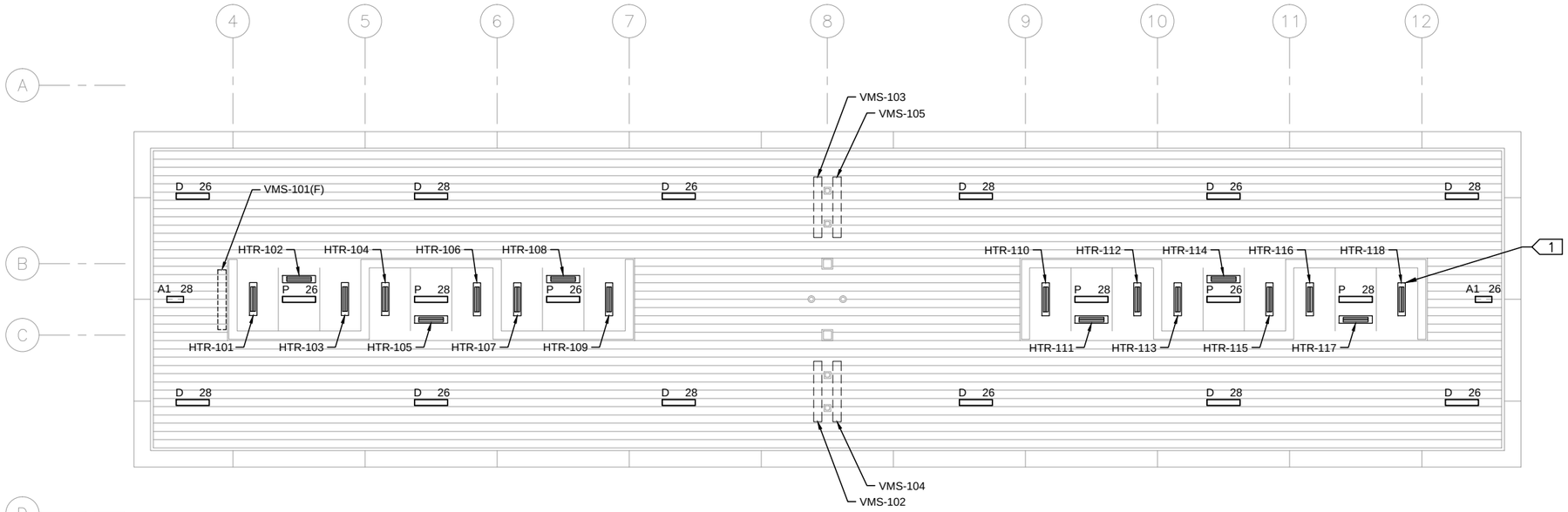
CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL PLAN
VC PLATFORM AND WALKWAY

DISCIPLINE: ELECTRICAL

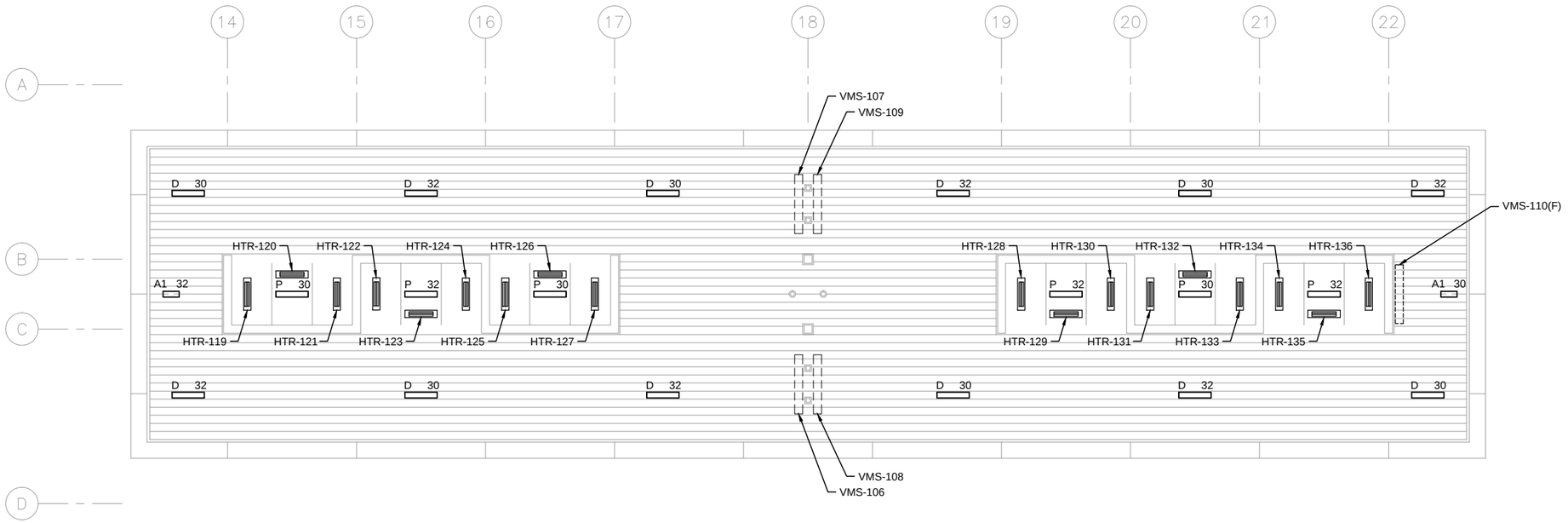
SHEET NAME: E4-VWT-ELE-PLN-303

SHEET 298 OF 394

Jan. 18 2016 11:27 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-303.dwg By: V-Begej



1 CANOPY PLAN – WEST
SCALE: 1/8"=1'–0"



2 CANOPY PLAN – EAST
SCALE: 1/8"=1'–0"

GENERAL NOTES:

1. ALL LIGHTING SHOWN ON THIS SHEET SHALL BE RECESSED MOUNTED IN SOFFIT. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.
2. ALL CONDUIT FOR LIGHTING AND TO VMS'S SHALL BE RUN CONCEALED WITHIN SOFFIT AREA.

KEYNOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR HEATER MOUNTING DETAILS.

0 2 4 8
HORIZONTAL SCALE IN FEET

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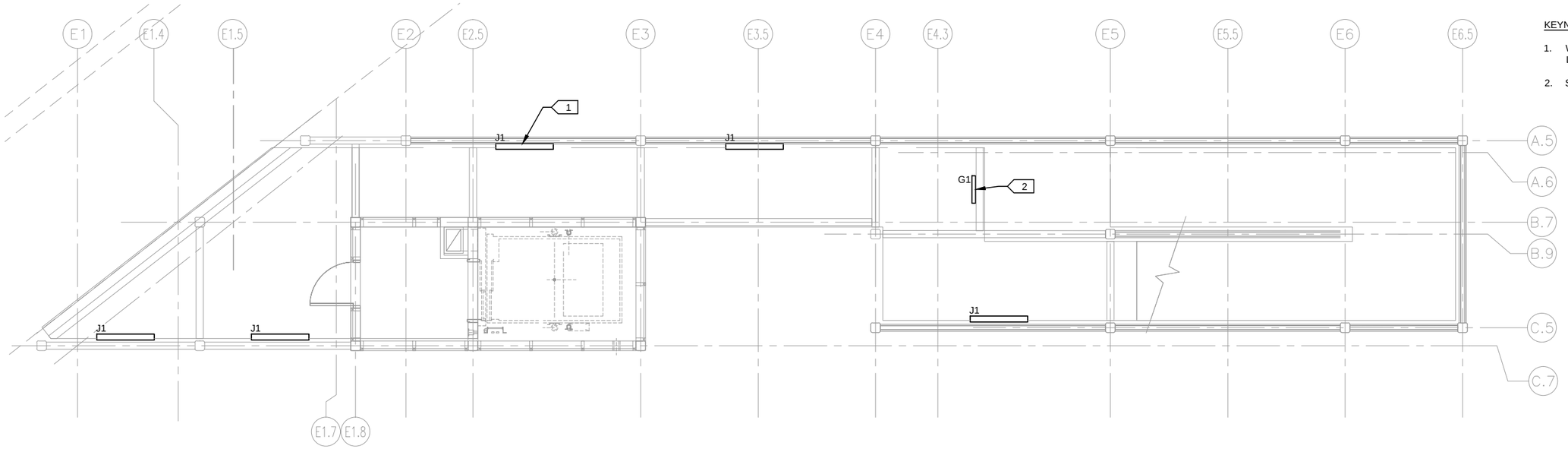
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
CANOPY PLAN

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-PLN-304

SHEET 299 OF 394

Jan, 18 2016 11:27 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-304.dwg By: V-BegeJB

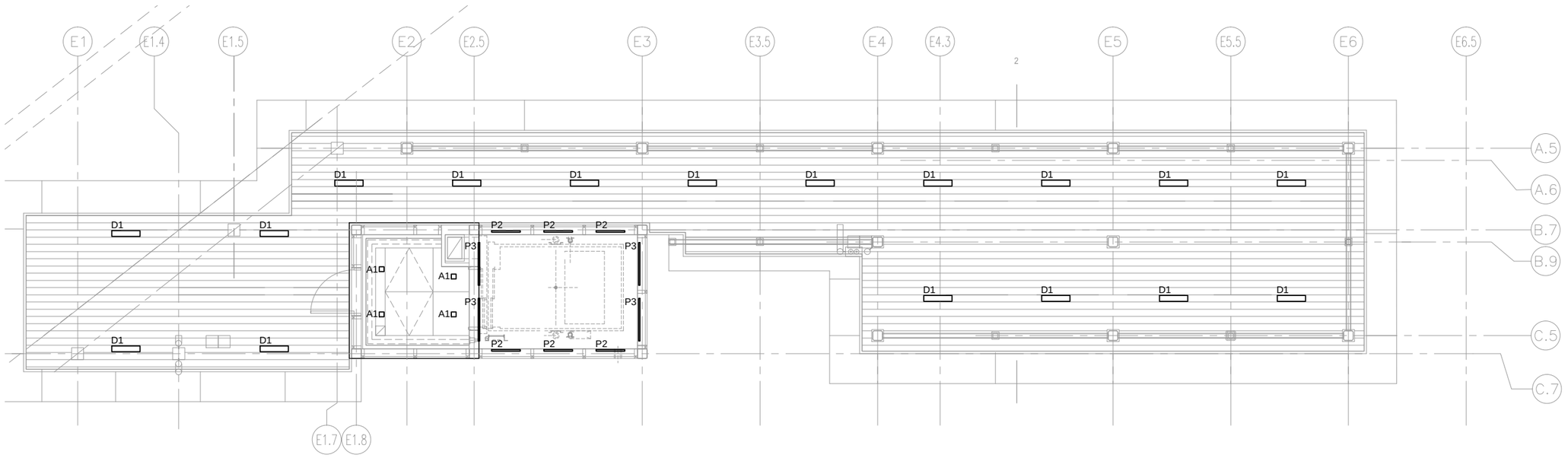


KEYNOTES:

1. WALL MOUNTED AT 14'-0" TO BOTTOM OF LUMINAIRE. ON STEEL BEAM ALONG WALL.
2. SURFACE MOUNT TO DECK JUST BEHIND BEAM.

1 ELECTRICAL LIGHTING PLAN INTERMEDIATE LEVEL

SCALE: 1/8"–1'–0"



2 ELECTRICAL LIGHTING PLAN BRIDGE LEVEL

SCALE: 1/8"–1'–0"

0 2 4 8

HORIZONTAL SCALE IN FEET

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SOUTHWEST
Green Line LRT Extension

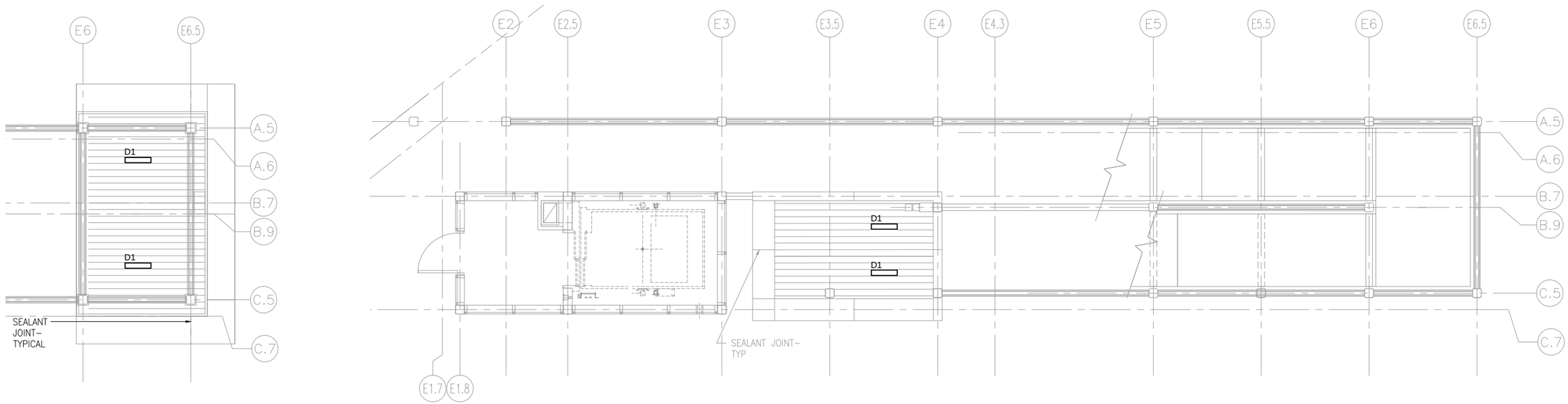
CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL LIGHTING PLAN
VC PLATFORM LEVEL

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-VWT-ELE-PLN-305

SHEET 300 OF 394

Jan. 18 2016 11:28 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-305.dwg By: V-BegeuB



1 ELECTRICAL LIGHTING PLAN INTERMEDIATE LEVEL

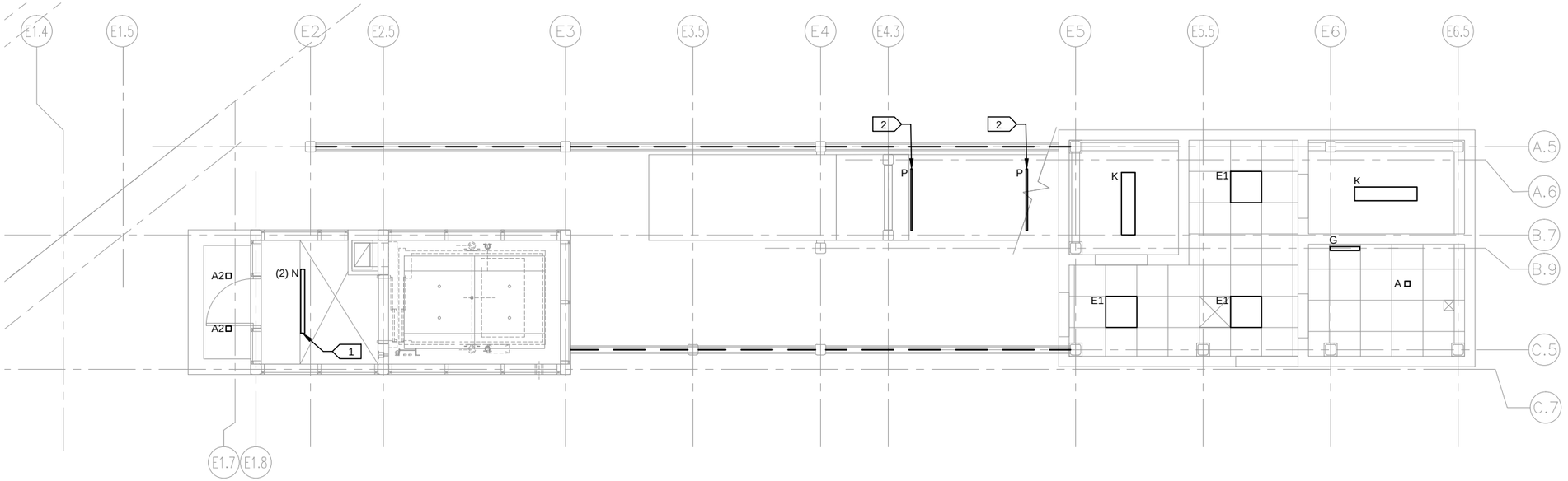
SCALE: 1/8"–1'–0"

1 ELECTRICAL LIGHTING PLAN INTERMEDIATE LEVEL

SCALE: 1/8"–1'–0"

KEYNOTES:

1. WALL WASH LUMINAIRES. (1) AIMED DOWN AT 10'-6" AND (1) AIMED DOWN AT 10'-10".
2. SURFACE MOUNT TO UNDERSIDE OF STAIRS.



2 ELECTRICAL LIGHTING PLAN PLATFORM LEVEL

SCALE: 1/8"–1'–0"

0 2 4 8

HORIZONTAL SCALE IN FEET

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL LIGHTING PLAN
VC BRIDGE LEVEL

DISCIPLINE: ELECTRICAL

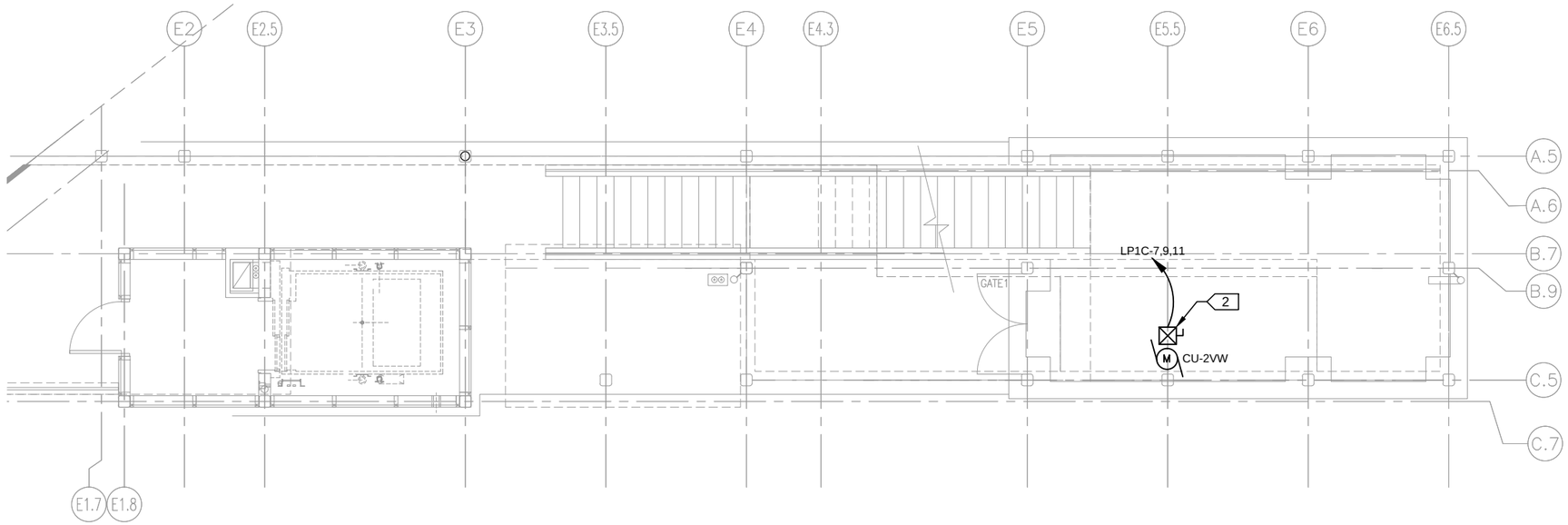
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SHEET 301 OF 394

Jan, 18 2016 11:29 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-306.dwg By: V-Bege.dB

KEYNOTES:

1. SINGLE PHASE DISCONNECT/STARTER.
2. THREE PHASE STARTER.



1 POWER PLAN INTERMEDIATE LEVEL
SCALE: 1/8"–1'–0"

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME D
VAN WHITE STATION
ELECTRICAL POWER PLAN
VC INTERMEDIATE LEVEL

DISCIPLINE: ELECTRICAL

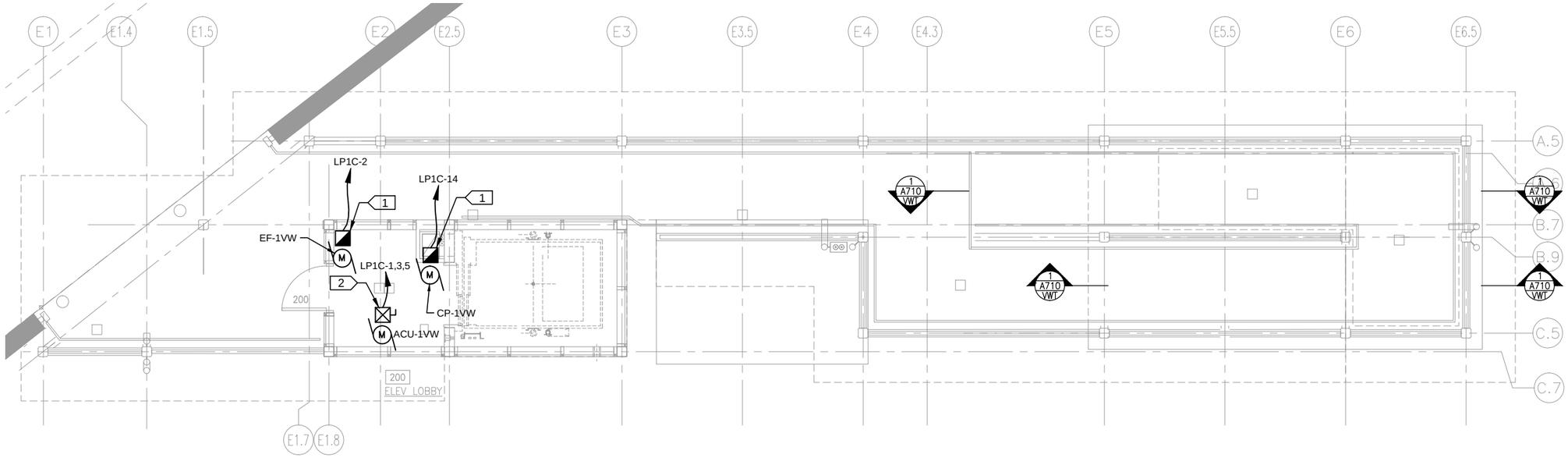
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SHEET 302 OF 394

Jan, 18 2016 11:30 am v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-307.dwg By: V-Begeulß

KEYNOTES:

1. SINGLE PHASE DISCONNECT/STARTER.
2. THREE PHASE STARTER.



1 POWER PLAN BRIDGE LEVEL
SCALE: 1/8"–1'–0"

0 2 4 8
HORIZONTAL
SCALE IN FEET

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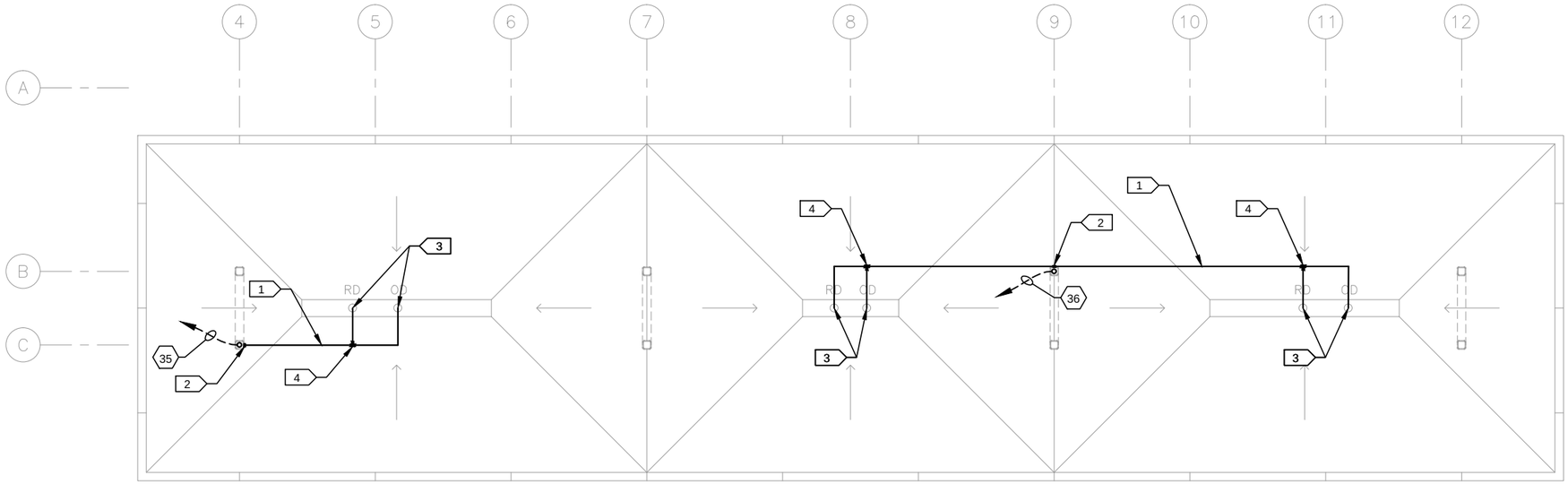
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME D
VAN WHITE STATION
ELECTRICAL POWER PLAN
VC BRIDGE LEVEL

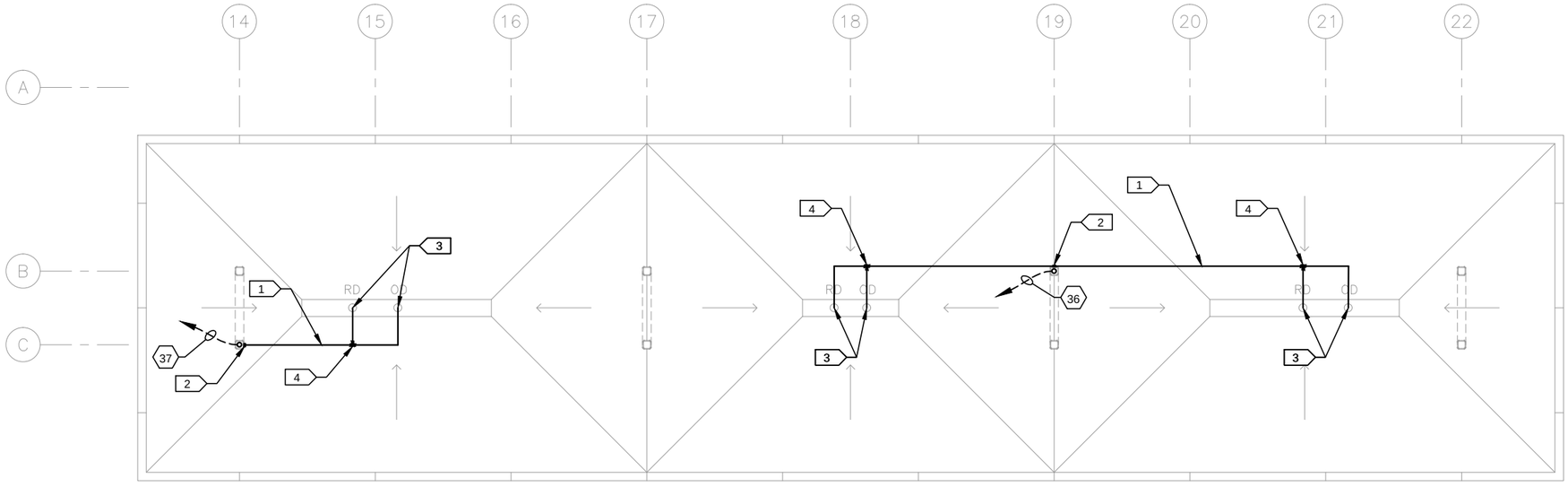
DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-PLN-308

SHEET 303 OF 394

Jan, 18 2016 11:31 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-308.dwg By: V-BegeJB



1 ROOF PLAN – WEST CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



2 ROOF PLAN – EAST CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE

GENERAL NOTES:

1. HEAT TRACE CONTROL PANEL LOCATED IN SEC-001.

KEYNOTES:

1. SELF REGULATING HEAT TRACE CABLE. ATTACH CABLE TO ROOF WITH CLIPS. COORDINATE CLIP REQUIREMENTS WITH ROOFING CONTRACTOR.
2. POWER CONNECTION KIT WITH DOUBLE HEAT TRACE CABLE CONNECTION. COORDINATE MOUNTING REQUIREMENTS WITH STRUCTURAL STEEL CONTRACTOR.
3. RUN HEAT TRACE DOWN RAIN WATER LEADER 6' BELOW FINISHED FLOOR, PROVIDE CABLE PROTECTION WHERE CABLE ENTERS DRAIN STRAINER.
4. HEAT TRACE SPLICE KIT.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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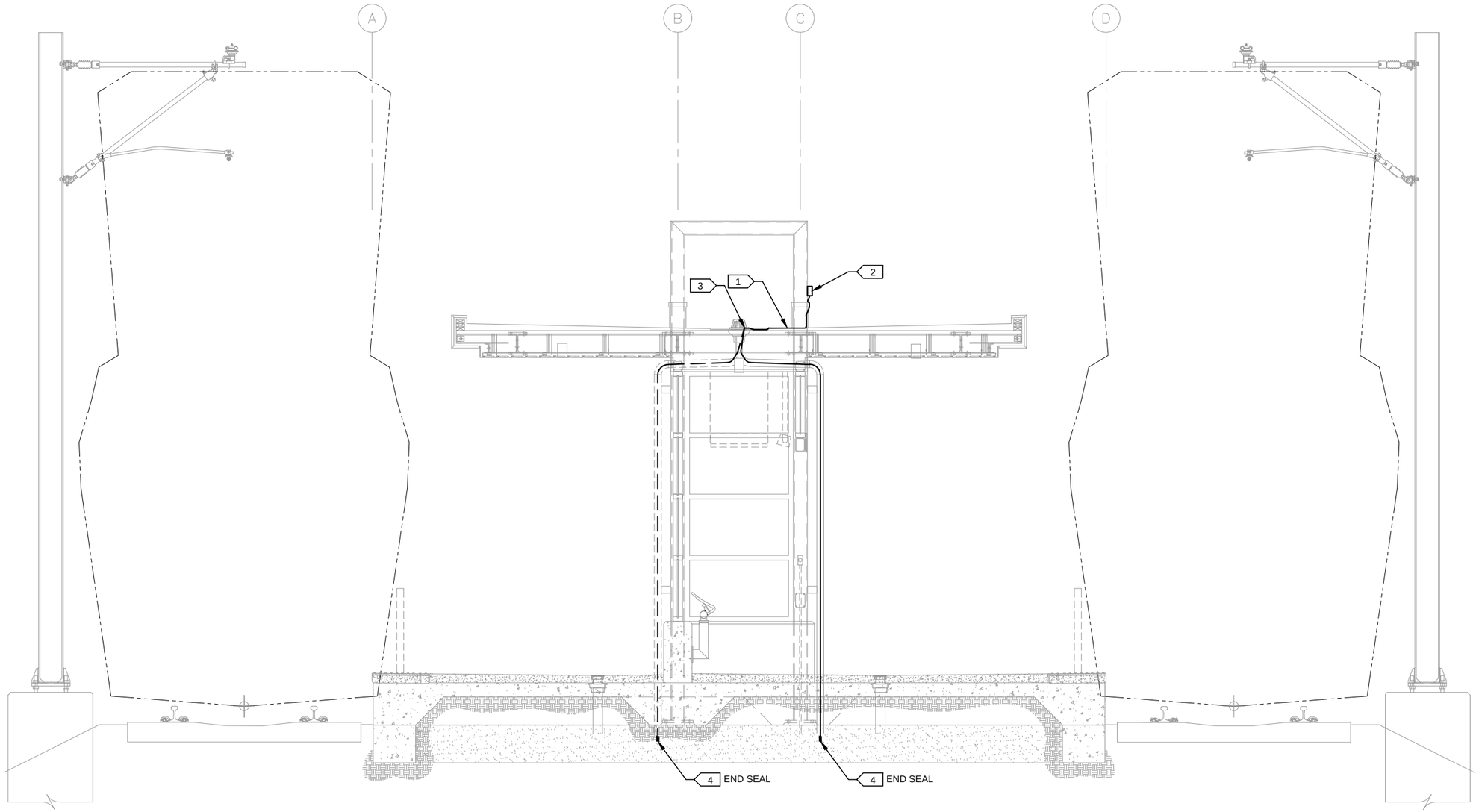
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
HEAT TRACE PLAN

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-PLN-311

SHEET 304 OF 394

Jan, 18 2016 11:31 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-311.dwg By: V-BegeJB



1 TYPICAL PLATFORM SECTION
SCALE: 1/4"=1'-0"

0 1 2 4
SCALE

GENERAL NOTES:

1. HEAT TRACE CONTROL PANEL LOCATED IN SEC-001.
2. SEE HEAT TRACE PLAN FOR HEAT TRACE AT CANOPY ROOFS.

KEYNOTES:

1. SELF REGULATING HEAT TRACE CABLE. ATTACH CABLE TO ROOF WITH CLIPS. COORDINATE CLIP REQUIREMENTS WITH ROOFING CONTRACTOR.
2. POWER CONNECTION KIT WITH DOUBLE HEAT TRACE CABLE CONNECTION. COORDINATE MOUNTING REQUIREMENTS WITH STRUCTURAL STEEL CONTRACTOR.
3. PROVIDE CABLE PROTECTION WHERE CABLE ENTERS ROOF DRAIN STRAINERS.
4. RUN HEAT TRACE DOWN RAIN WATER LEADER. ADD END SEALS AT DOWNSPOUT.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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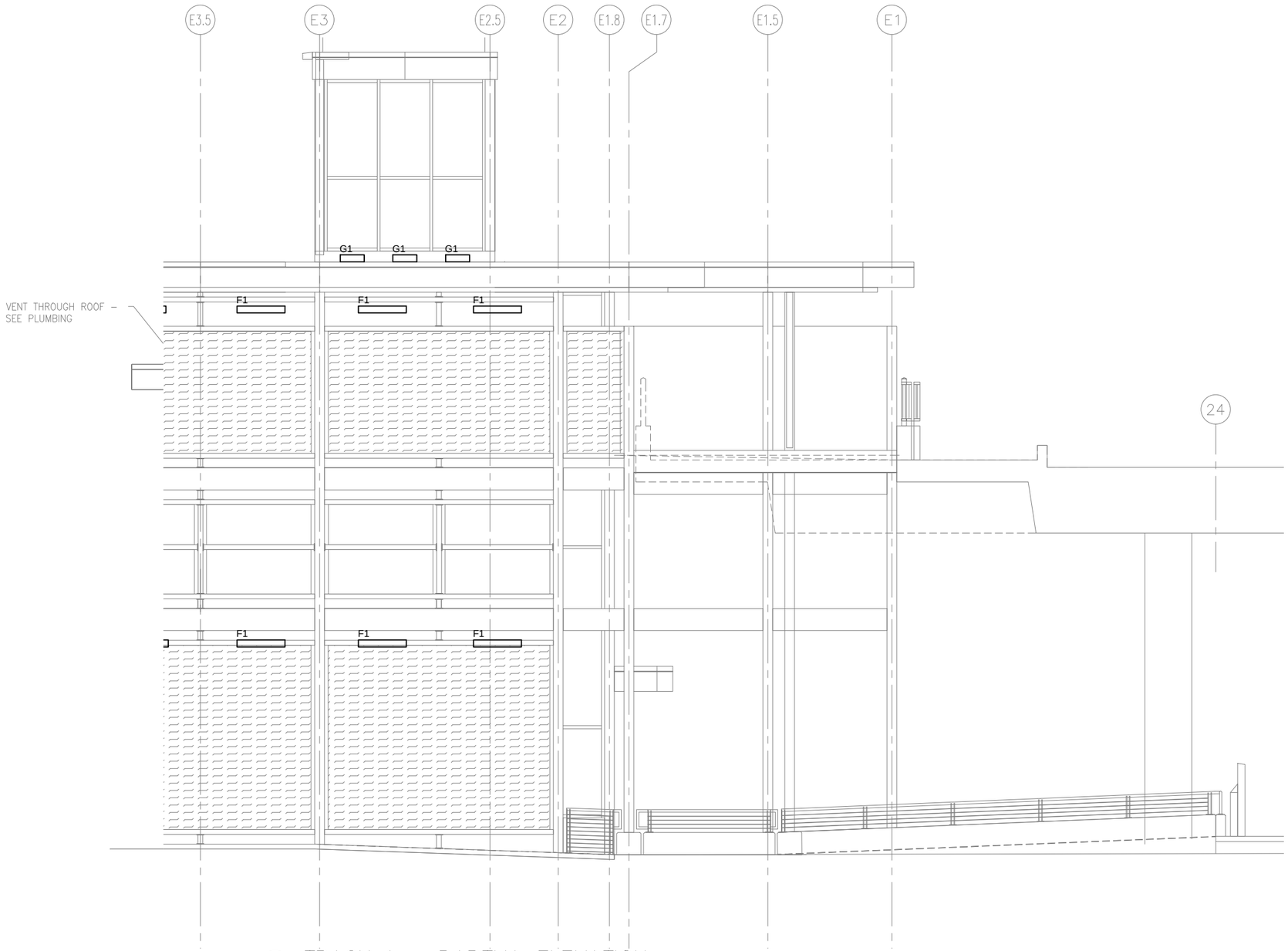
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
HEAT TRACE ELEVATION

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-ELV-321

SHEET 305 OF 394

Jan, 18 2016 11:31 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-ELV-321.dwg By: V-BegeJB



1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1.

KEYNOTES:

1.

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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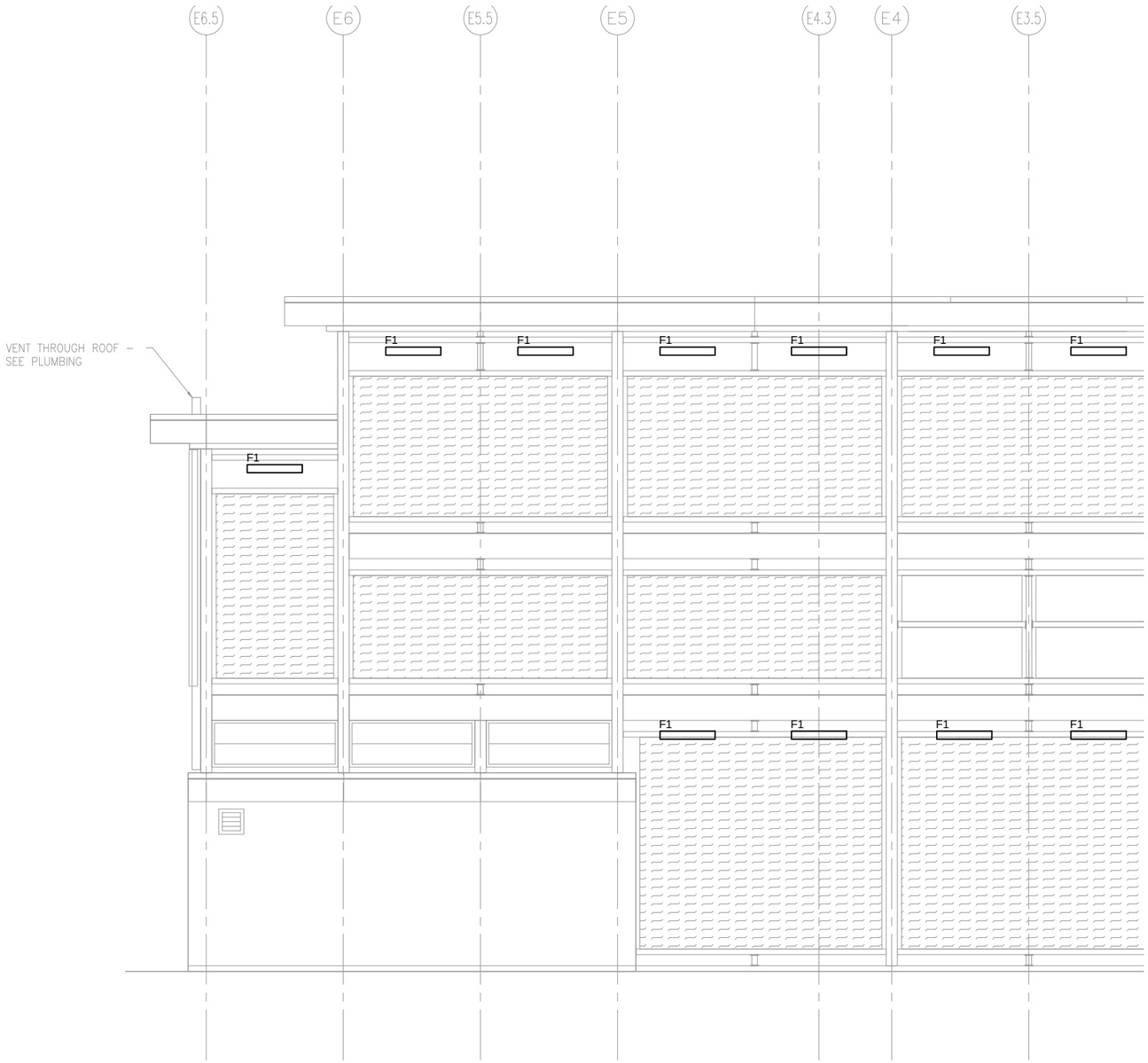
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
VC TRACK 1 - PARTIAL ELEVATION

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-ELV-350

SHEET 306 OF 394

Jan, 18 2016 11:32 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-ELV-350.dwg By: V-BegeJB



1 TRACK 1 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1.

KEYNOTES:

1.

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

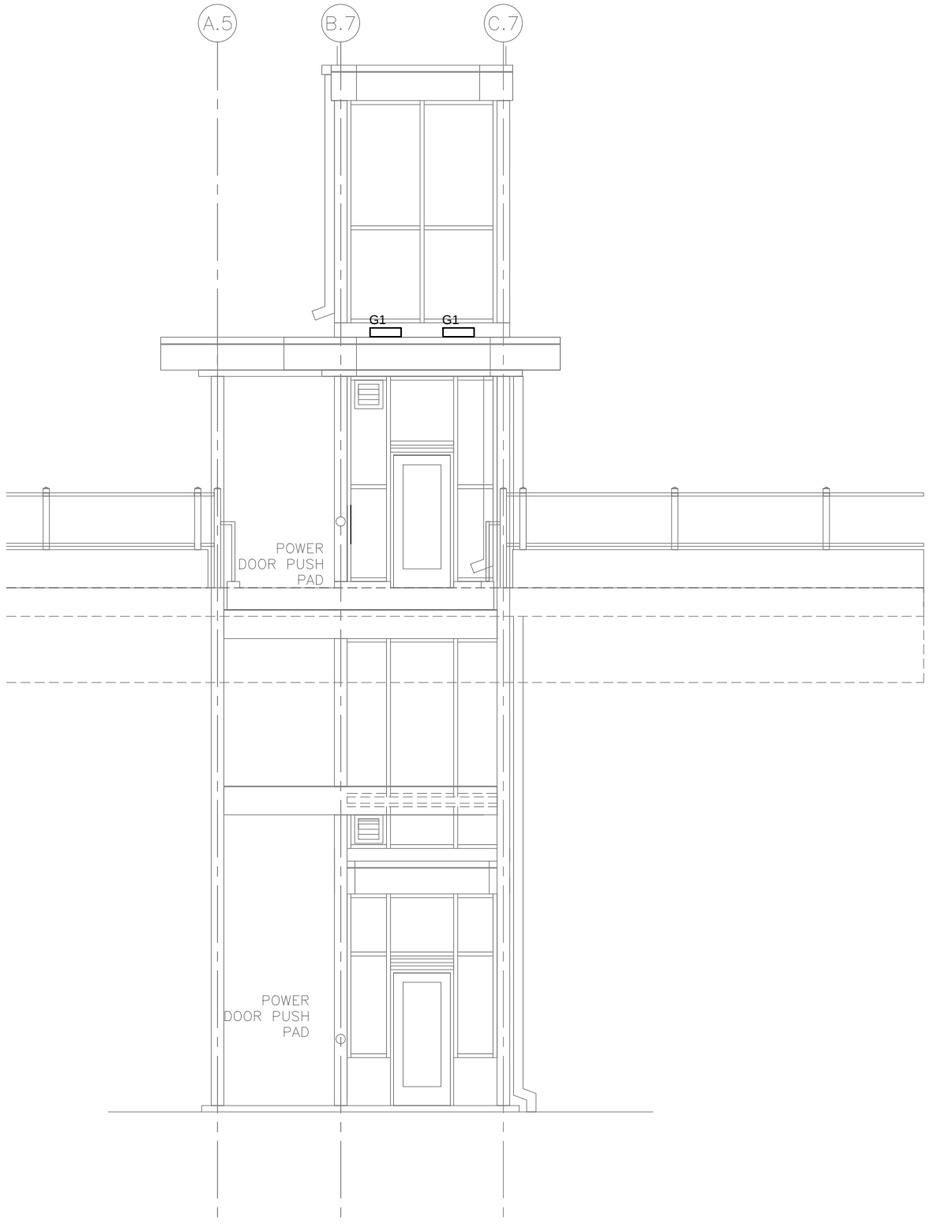
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VAN WHITE STATION
ELECTRICAL
VC TRACK 1 - PARTIAL ELEVATION

DISCIPLINE: ELECTRICAL

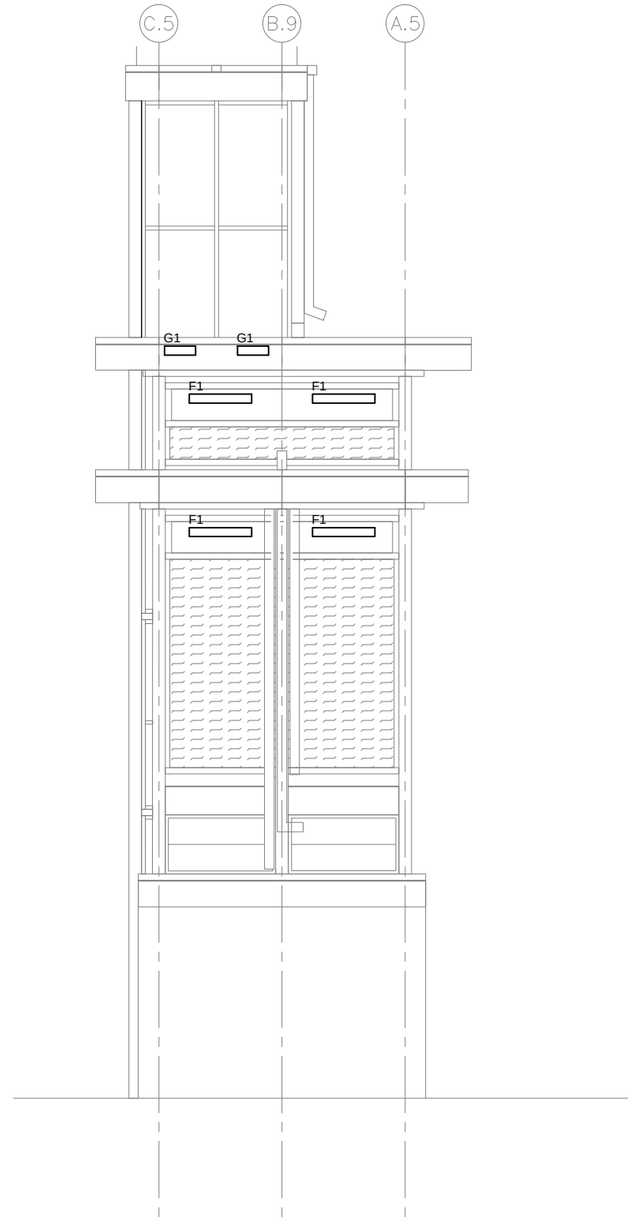
SHEET NAME: E4-VWT-ELE-ELV-351

SHEET 307 OF 394

Jan. 18 2016 11:33 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-ELV-351.dwg By: V-BegeJB



1 VC WEST ELEVATION
SCALE: 1/8"=1'-0"



2 VC EAST ELEVATION
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1.

KEYNOTES:

1.

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
VC SIDE ELEVATIONS

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-ELV-352

SHEET 308 OF 394

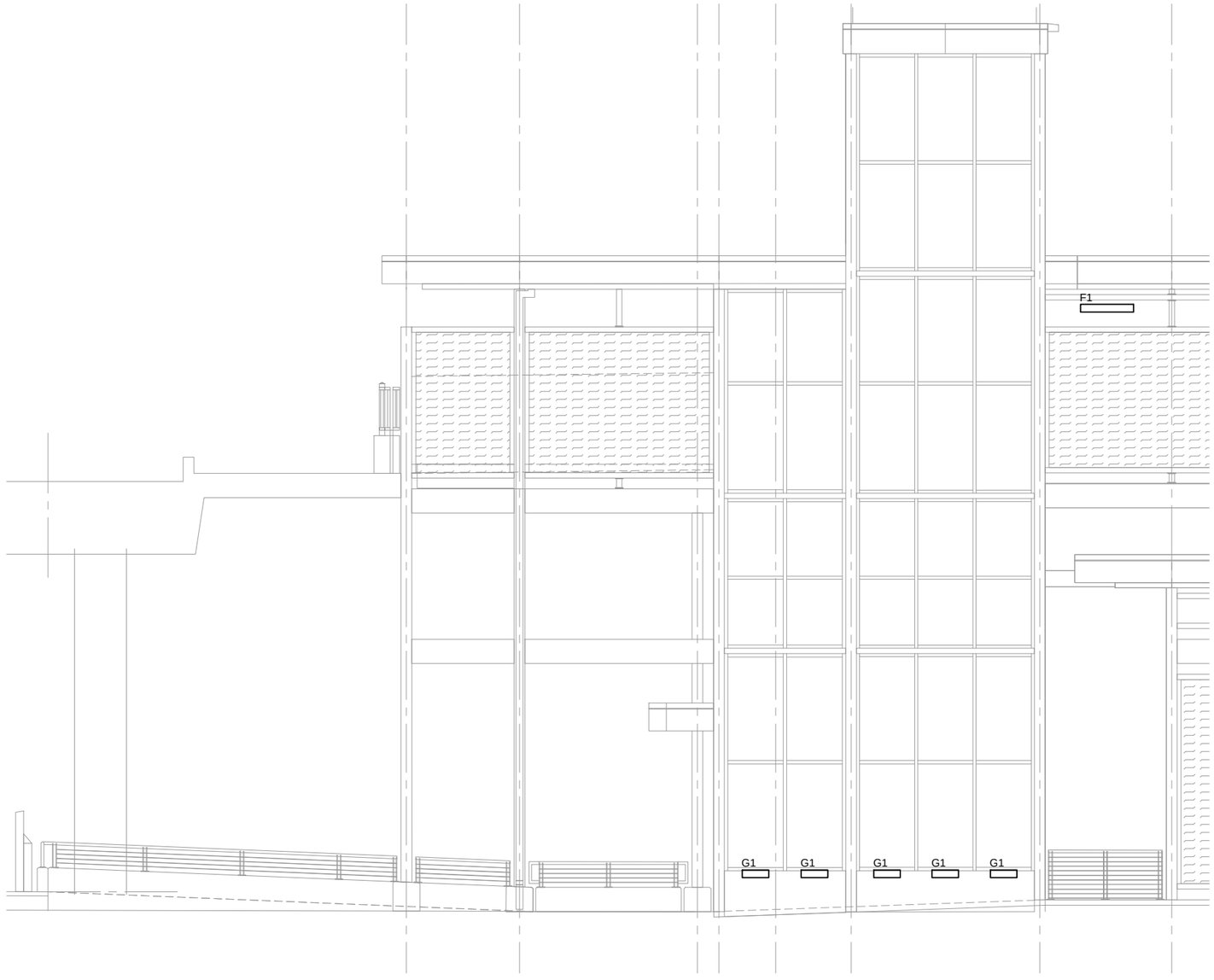
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GENERAL NOTES:

1.

KEYNOTES:

1.



1 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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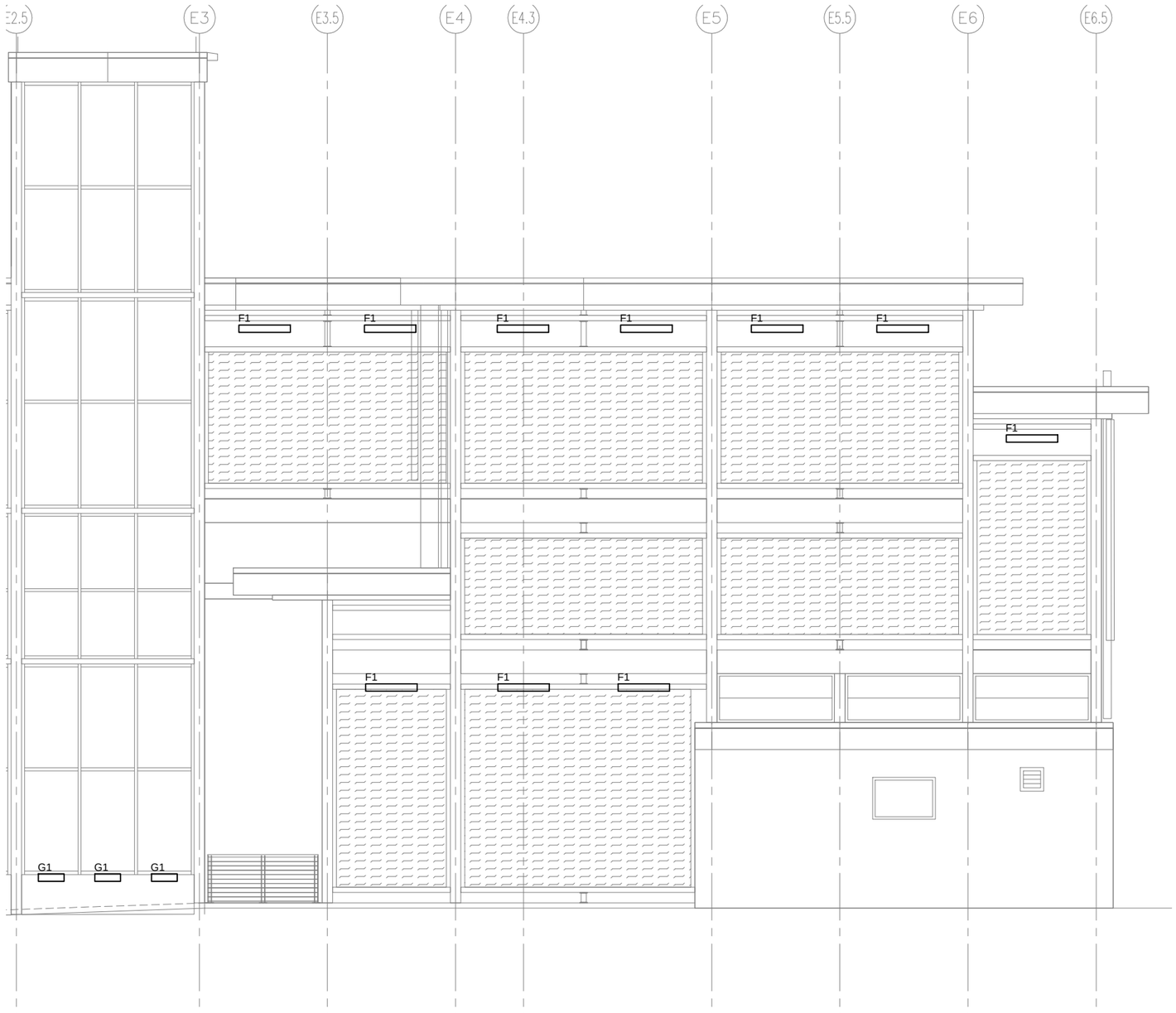
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
VC TRACK 2 - PARTIAL ELEVATION

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-ELV-353

SHEET 309 OF 394

Jan, 18 2016 11:34 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-ELV-353.dwg By: V-Bege.dB



1 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1.

KEYNOTES:

1.

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

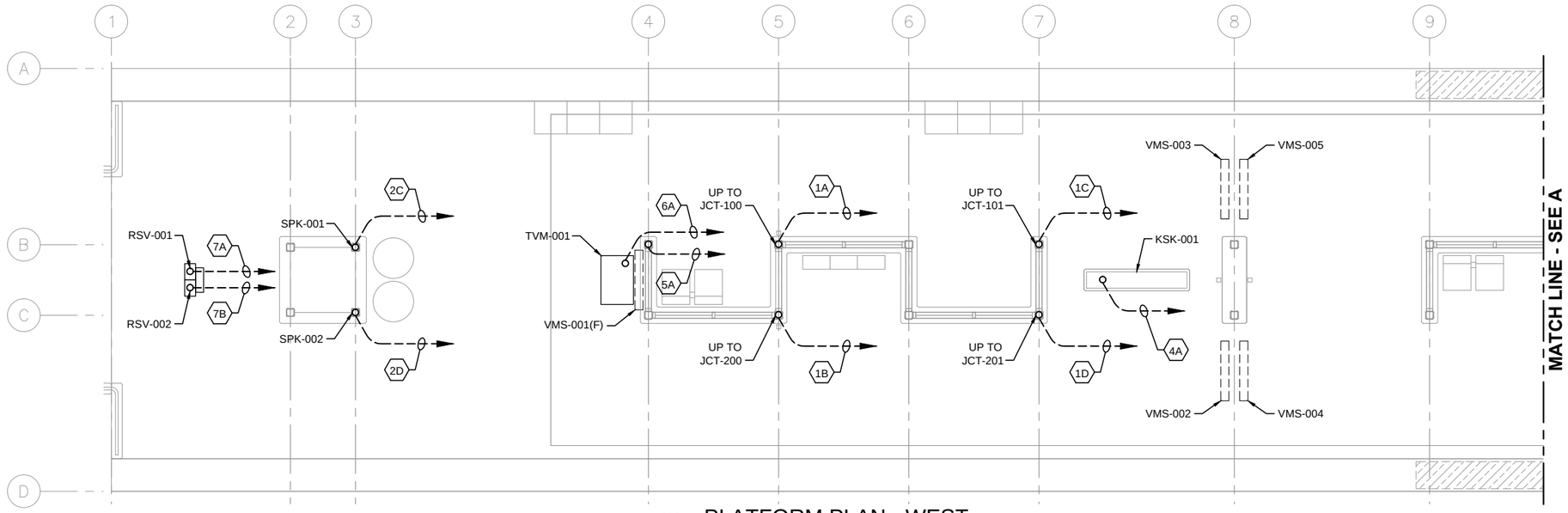
SOUTHWEST
Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
VC TRACK 2 - PARTIAL ELEVATION

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-ELV-354

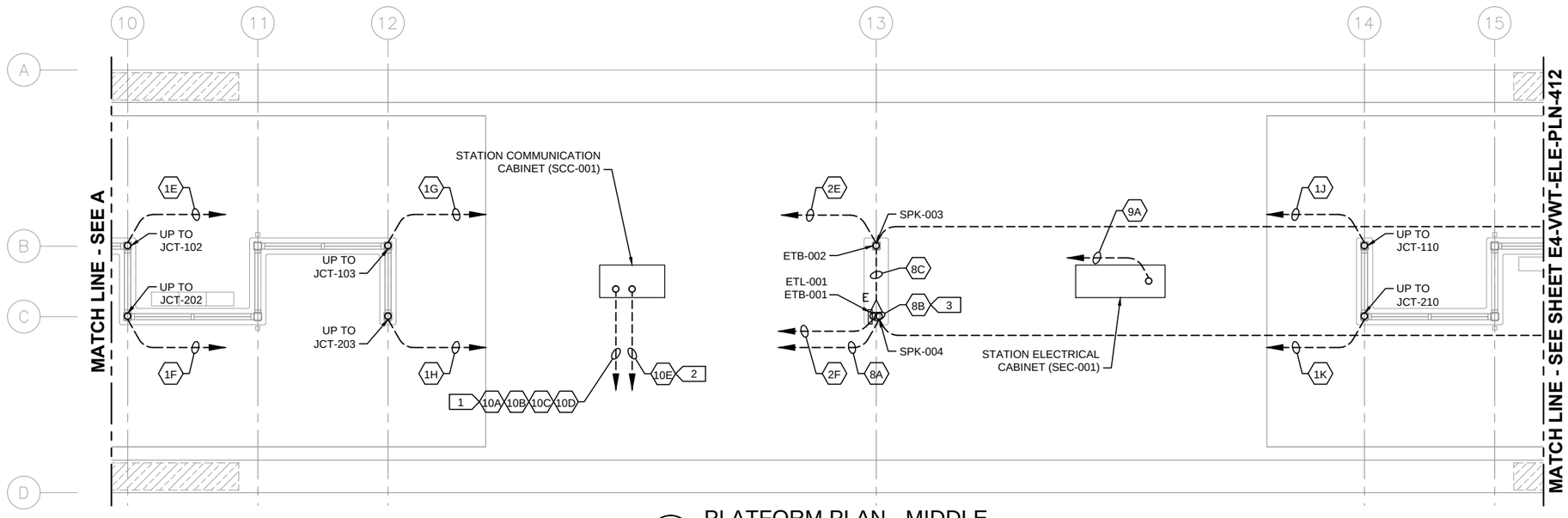
SHEET 310 OF 394

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1 PLATFORM PLAN - WEST

SCALE: 1/8"=1'-0"



2 PLATFORM PLAN - MIDDLE

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. DASHED LINES WITH AN ARROWHEAD DENOTE HOMERUN TO SCC-001, UNLESS OTHERWISE NOTED.
2. FOR CONDUITS AND DEVICES MOUNTED TO CANOPY, SEE COMMUNICATIONS CANOPY PLAN.
3. SEE SHEETS E4-VWT-ELE-SCH-461 AND E4-VWT-ELE-SCH-462 FOR CONDUIT SCHEDULES.
4. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
5. ALL UNDERSLAB CONDUIT SHALL BE PVC, ALL CONDUIT ABOVE PLATFORM SURFACE SHALL BE GRS.
6. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
7. TVMs, RSVs, SPEAKERS, ETELS AND COMMUNICATION CABINET TO BE PROVIDED BY OTHERS; SHOWN FOR REFERENCE ONLY.

KEYNOTES:

1. COMMUNICATIONS CONDUITS TO/FROM STATION SIGNAL-COMMUNICATIONS HOUSE, VIA MH-XXXX.
2. CONDUIT TO/FROM STATION-COMMUNICATIONS HOUSE FOR UPS POWER FEED TO SCC-001.
3. CONDUIT AND CABLE FOR ETEL BEACON LIGHT SHALL BE INSTALLED ENTIRELY WITHIN COLUMN.

0 2 4 8

HORIZONTAL SCALE IN FEET

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

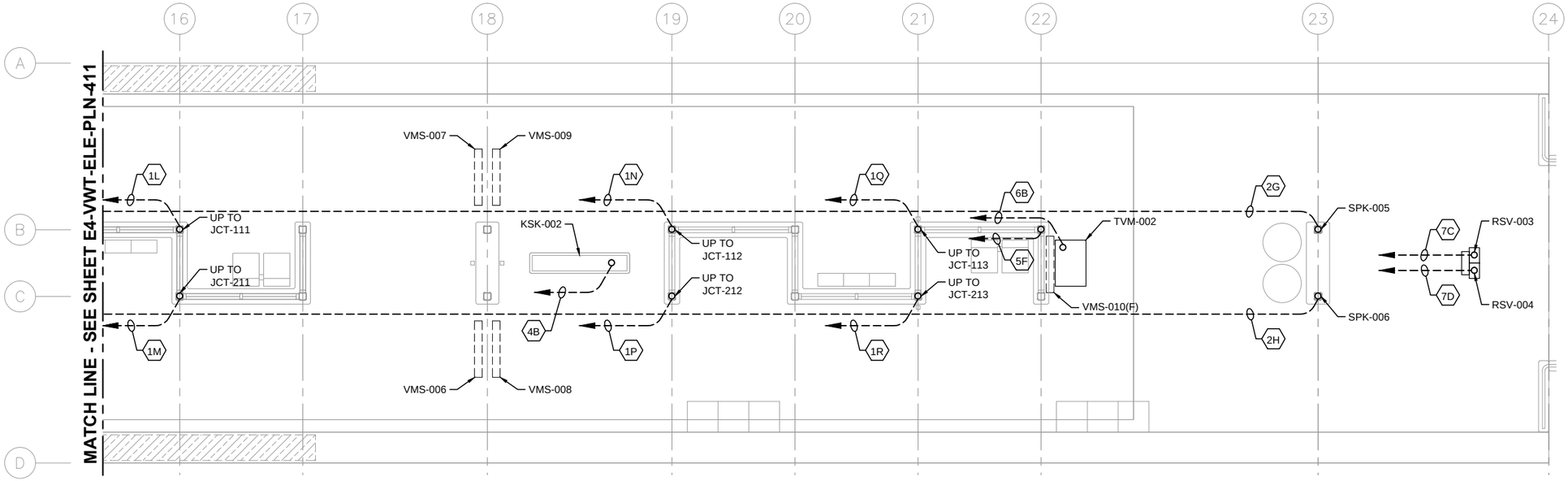
CIVIL - VOLUME 11D
VAN WHITE STATION
COMMUNICATIONS
UNDERSLAB CONDUIT PLAN (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-VWT-ELE-PLN-411

SHEET 311 OF 394

Jan, 18 2016 11:35 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-411.dwg By: V-BegeJB



1 PLATFORM PLAN - EAST

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. DASHED LINES WITH AN ARROWHEAD DENOTE HOMERUN TO SCC-001, UNLESS OTHERWISE NOTED.
2. FOR CONDUITS AND DEVICES MOUNTED TO CANOPY, SEE COMMUNICATIONS CANOPY PLAN.
3. SEE SHEETS E4-VWT-ELE-SCH-461 AND E4-VWT-ELE-SCH-462 FOR CONDUIT SCHEDULES.
4. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
5. ALL UNDERSLAB CONDUIT SHALL BE PVC, ALL CONDUIT ABOVE PLATFORM SURFACE SHALL BE GRS.
6. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
7. TVMs, RSVs, SPEAKERS, ETELS AND COMMUNICATION CABINET TO BE PROVIDED BY OTHERS; SHOWN FOR REFERENCE ONLY.

KEYNOTES:

1.

0 2 4 8

HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

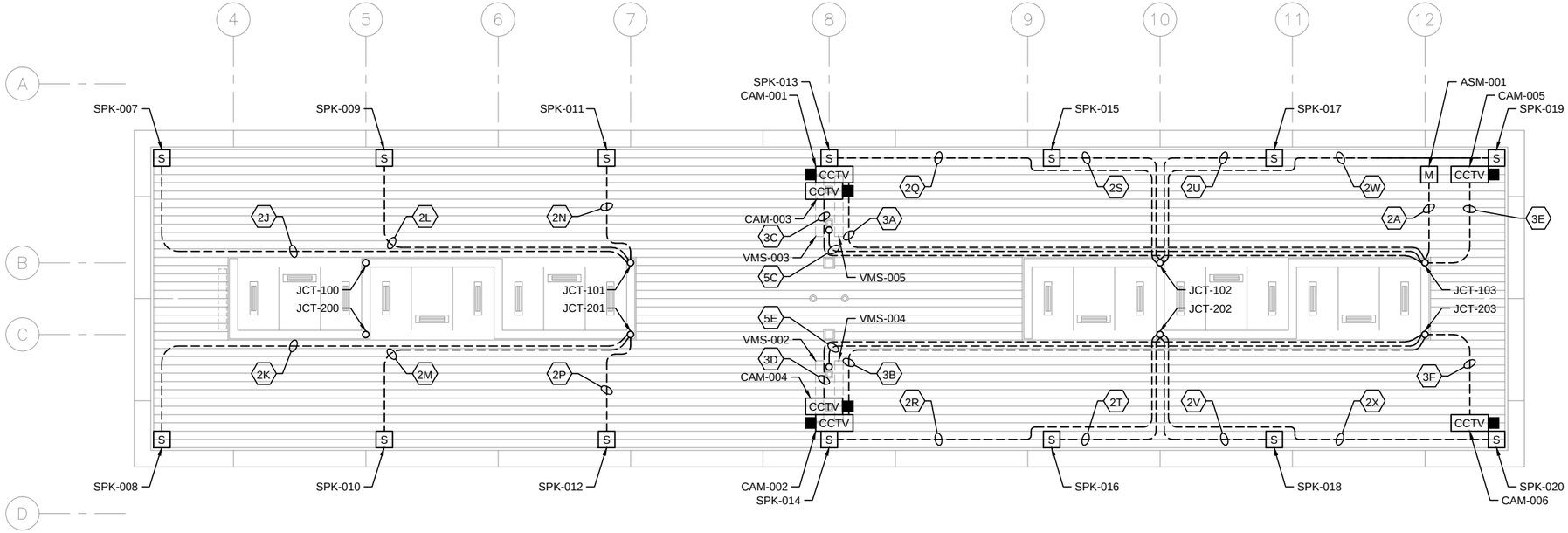
CIVIL - VOLUME 11D
VAN WHITE STATION
COMMUNICATIONS
UNDERSLAB CONDUIT PLAN (2 OF 2)

DISCIPLINE: ELECTRICAL

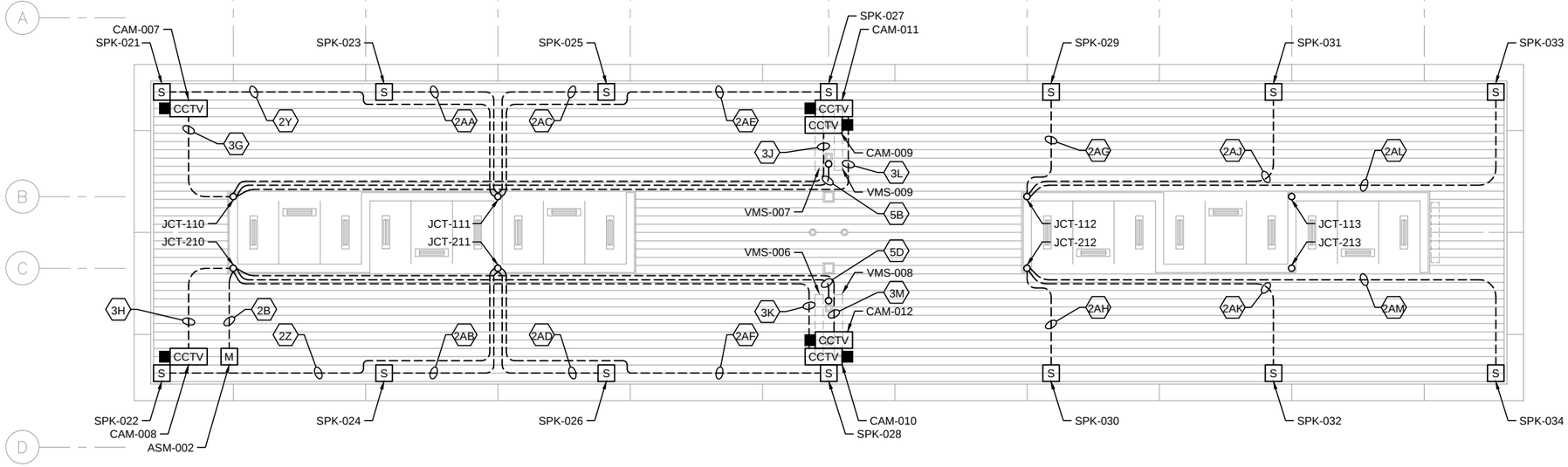
SHEET NAME: E4-VWT-ELE-PLN-412

SHEET 312 OF 394

Jan, 18 2016 11:35 am v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-412.dwg By: V-Begej



1 CANOPY PLAN – WEST
SCALE: 1/8"=1'–0"



2 CANOPY PLAN – EAST
SCALE: 1/8"=1'–0"

0 2 4 8
HORIZONTAL SCALE IN FEET

GENERAL NOTES:

1. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
2. SEE SHEETS E4-VWT-ELE-SCH-461 AND E4-VWT-ELE-SCH-462 FOR CONDUIT SCHEDULES.
3. ALL CONDUIT SHOWN SHALL BE GRS.
4. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.

KEYNOTES:

1.

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METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
COMMUNICATIONS
CANOPY PLAN

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-PLN-421

SHEET 313 OF 394

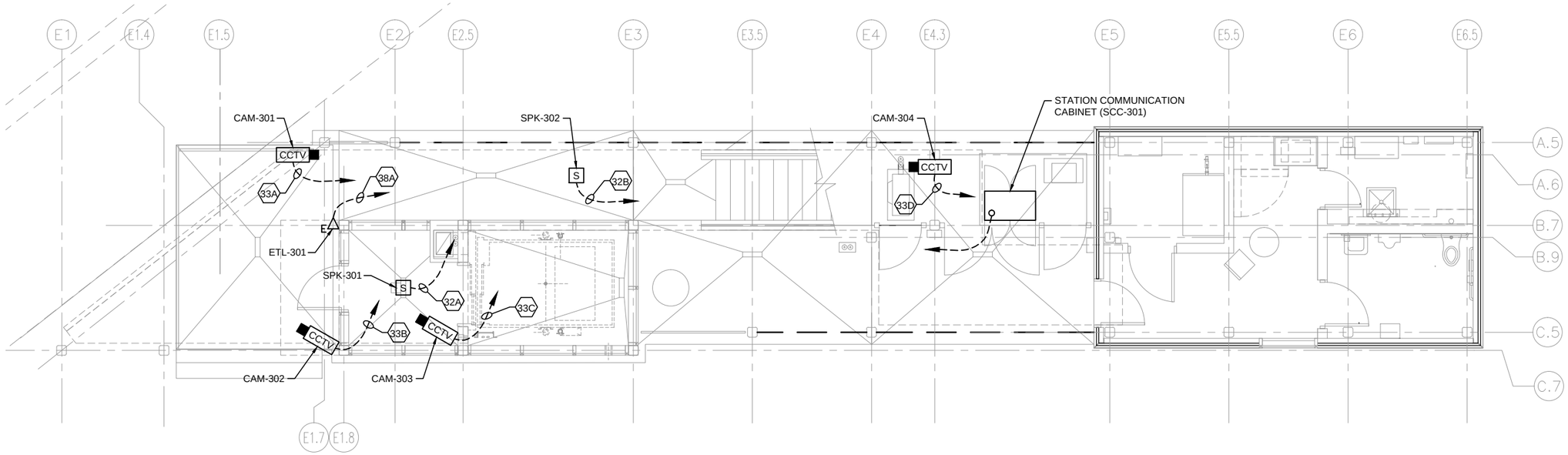
Jan, 18 2016 11:36 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-421.dwg By: V-BegeJB

GENERAL NOTES:

1. DASHED LINE WITH ARROWHEAD DENOTES HOME RUN TO SCC-301 UNLESS OTHERWISE NOTED.

KEYNOTES:

1.



1 VC PLATFORM LEVEL PLAN (EAST)
SCALE: 1/8"=1'-0"

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
COMMUNICATIONS
VC PLATFORM LEVEL PLAN

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-PLN-431

SHEET 314 OF 394

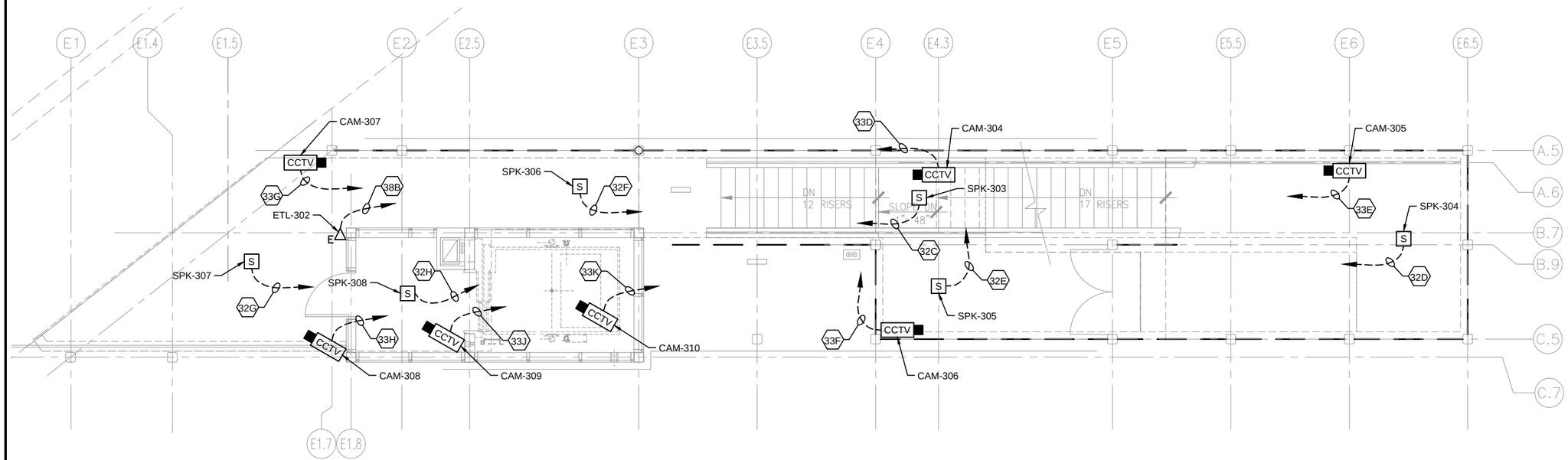
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GENERAL NOTES:

1. DASHED LINE WITH ARROWHEAD DENOTES HOME RUN TO SCC-301 UNLESS OTHERWISE NOTED.

KEYNOTES:

1.



1 VC BRIDGE LEVEL PLAN (EAST)
SCALE: 1/8"=1'-0"

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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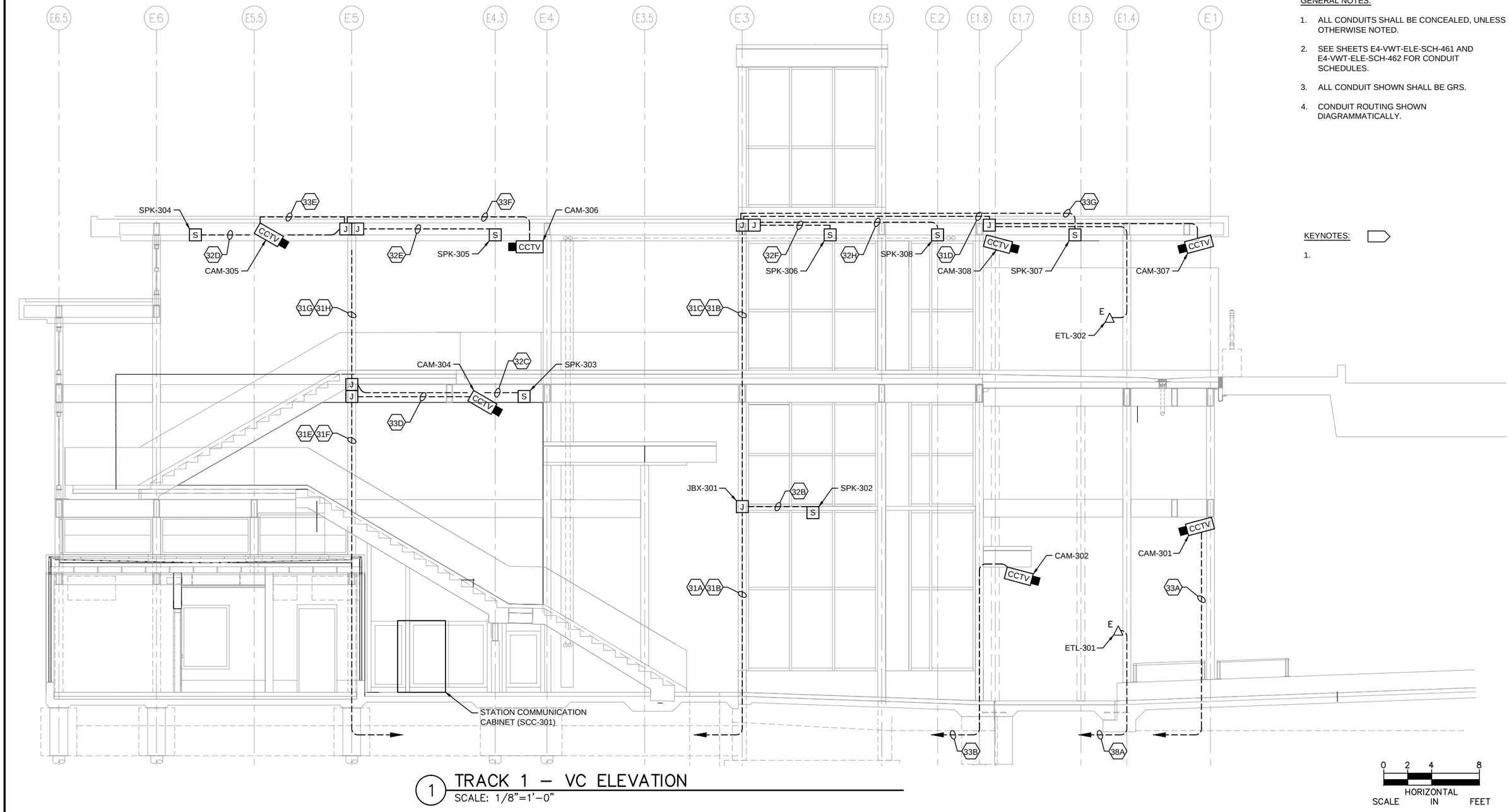
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
COMMUNICATIONS
VC BRIDGE LEVEL PLAN

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-PLN-432

SHEET 315 OF 394

Jan, 18 2016 11:37 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-PLN-432.dwg By: V-BegeJB



1 TRACK 1 – VC ELEVATION
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
2. SEE SHEETS E4-VWT-ELE-SCH-461 AND E4-VWT-ELE-SCH-462 FOR CONDUIT SCHEDULES.
3. ALL CONDUIT SHOWN SHALL BE GRS.
4. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.

KEYNOTES:

1.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
COMMUNICATIONS
VC TRACK 1 ELEVATION

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-ELV-441

SHEET 316 OF 394

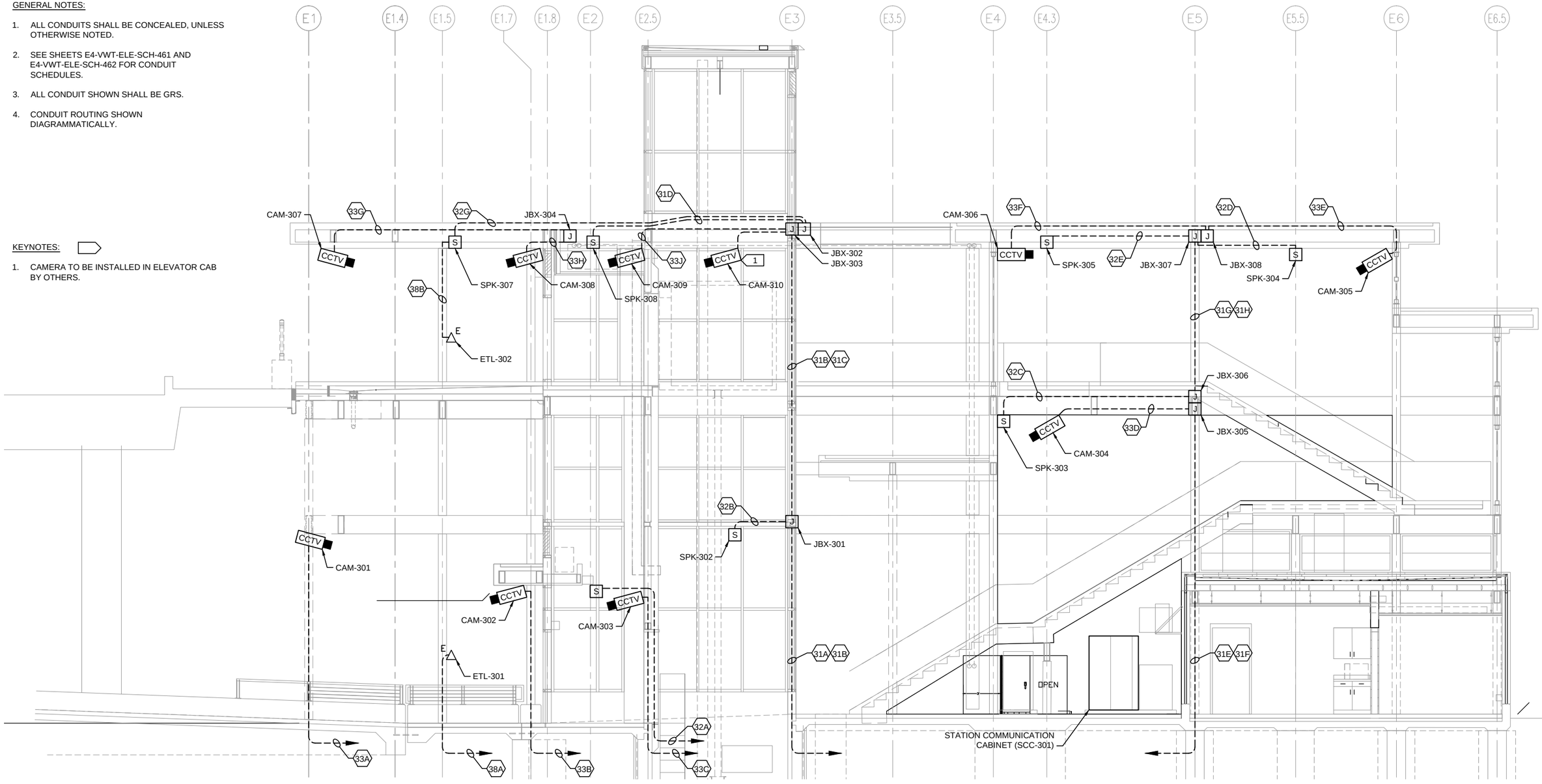
Jan, 18 2016 11:38 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-ELV-441.dwg By: V-Bege.IB

GENERAL NOTES:

1. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
2. SEE SHEETS E4-VWT-ELE-SCH-461 AND E4-VWT-ELE-SCH-462 FOR CONDUIT SCHEDULES.
3. ALL CONDUIT SHOWN SHALL BE GRS.
4. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.

KEYNOTES:

1. CAMERA TO BE INSTALLED IN ELEVATOR CAB BY OTHERS.



1 TRACK 2 – PARTIAL ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
COMMUNICATIONS
VC TRACK 2 ELEVATION

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-VWT-ELE-ELV-442

SHEET 317 OF 394

Jan, 18 2016 11:38 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-ELV-442.dwg By: V-Bege.JB

GENERAL NOTES:

1. CONDUIT NUMBERS CORRELATE TO ⬡ NUMBERS ON PLAN SHEETS AND ELEVATIONS.
2. SEE PLAN AND ELEVATION SHEETS FOR LOCATIONS OF CONDUITS.

VAN WHITE STATION COMMUNICATION CONDUIT AND CABLE SCHEDULE

CONDUIT NO.	DEVICE ID	DESCRIPTION/USE	FROM	TO	CONDUIT SIZE
10A	VWT -CON-0001	S/C HOUSE TO SCC-001	S/C MANHOLE	VWT -SCC-001	3"
10B	VWT -CON-0002	S/C HOUSE TO SCC-001	S/C MANHOLE	VWT -SCC-001	3"
10C	VWT -CON-0003	S/C HOUSE TO SCC-001	S/C MANHOLE	VWT -SCC-001	3"
10D	VWT -CON-0004	S/C HOUSE TO SCC-001	S/C MANHOLE	VWT -SCC-001	3"
10E	VWT -CON-0005	UPS POWER FEED: SCH TO SCC	VWT -SCH-001	VWT -SCC-001	3"
1A	VWT -CON-0101	SCC TO JUNCTION 100	VWT -SCC-001	VWT -JCT-100	2"
1B	VWT -CON-0102	SCC TO JUNCTION 200	VWT -SCC-001	VWT -JCT-200	2"
1C	VWT -CON-0103	SCC TO JUNCTION 101	VWT -SCC-001	VWT -JCT-101	2"
1D	VWT -CON-0104	SCC TO JUNCTION 201	VWT -SCC-001	VWT -JCT-201	2"
1E	VWT -CON-0105	SCC TO JUNCTION 102	VWT -SCC-001	VWT -JCT-102	2"
1F	VWT -CON-0106	SCC TO JUNCTION 202	VWT -SCC-001	VWT -JCT-202	2"
1G	VWT -CON-0107	SCC TO JUNCTION 103	VWT -SCC-001	VWT -JCT-103	2"
1H	VWT -CON-0108	SCC TO JUNCTION 203	VWT -SCC-001	VWT -JCT-203	2"
1J	VWT -CON-0109	SCC TO JUNCTION 110	VWT -SCC-001	VWT -JCT-110	2"
1K	VWT -CON-0110	SCC TO JUNCTION 210	VWT -SCC-001	VWT -JCT-210	2"
1L	VWT -CON-0111	SCC TO JUNCTION 111	VWT -SCC-001	VWT -JCT-111	2"
1M	VWT -CON-0112	SCC TO JUNCTION 211	VWT -SCC-001	VWT -JCT-211	2"
1N	VWT -CON-0113	SCC TO JUNCTION 112	VWT -SCC-001	VWT -JCT-112	2"
1P	VWT -CON-0114	SCC TO JUNCTION 212	VWT -SCC-001	VWT -JCT-212	2"
1Q	VWT -CON-0115	SCC TO JUNCTION 113	VWT -SCC-001	VWT -JCT-113	2"
1R	VWT -CON-0116	SCC TO JUNCTION 213	VWT -SCC-001	VWT -JCT-213	2"
2A	VWT -CON-0201	MICROPHONE 1 - NOISE SENSING	VWT -JCT-103	VWT -ASM-001	1"
2B	VWT -CON-0202	MICROPHONE 2 - NOISE SENSING	VWT -JCT-210	VWT -ASM-002	1"
2C	VWT -CON-0203	SPEAKER 1 - POLE	VWT -SCC-001	VWT -SPK-001	1-1/2"
2D	VWT -CON-0204	SPEAKER 2 - POLE	VWT -SCC-001	VWT -SPK-002	1-1/2"
2E	VWT -CON-0205	SPEAKER 3 - POLE	VWT -SCC-001	VWT -SPK-003	1-1/2"
2F	VWT -CON-0206	SPEAKER 4 - POLE	VWT -SCC-001	VWT -SPK-004	1-1/2"
2G	VWT -CON-0207	SPEAKER 5 - POLE	VWT -SPK-003	VWT -SPK-005	1-1/2"
2H	VWT -CON-0208	SPEAKER 6 - POLE	VWT -SPK-004	VWT -SPK-006	1-1/2"
2J	VWT -CON-0209	SPEAKER 7 - CANOPY	VWT -JCT-101	VWT -SPK-007	1"
2K	VWT -CON-0210	SPEAKER 8 - CANOPY	VWT -JCT-201	VWT -SPK-008	1"
2L	VWT -CON-0211	SPEAKER 9 - CANOPY	VWT -JCT-101	VWT -SPK-009	1"
2M	VWT -CON-0212	SPEAKER 10 - CANOPY	VWT -JCT-201	VWT -SPK-010	1"
2N	VWT -CON-0213	SPEAKER 11 - CANOPY	VWT -JCT-101	VWT -SPK-011	1"
2P	VWT -CON-0214	SPEAKER 12 - CANOPY	VWT -JCT-201	VWT -SPK-012	1"
2Q	VWT -CON-0215	SPEAKER 13 - CANOPY	VWT -JCT-102	VWT -SPK-013	1"
2R	VWT -CON-0216	SPEAKER 14 - CANOPY	VWT -JCT-202	VWT -SPK-014	1"
2S	VWT -CON-0217	SPEAKER 15 - CANOPY	VWT -JCT-102	VWT -SPK-015	1"
2T	VWT -CON-0218	SPEAKER 16 - CANOPY	VWT -JCT-202	VWT -SPK-016	1"
2U	VWT -CON-0219	SPEAKER 17 - CANOPY	VWT -JCT-102	VWT -SPK-017	1"
2V	VWT -CON-0220	SPEAKER 18 - CANOPY	VWT -JCT-202	VWT -SPK-018	1"
2W	VWT -CON-0221	SPEAKER 19 - CANOPY	VWT -JCT-102	VWT -SPK-019	1"
2X	VWT -CON-0222	SPEAKER 20 - CANOPY	VWT -JCT-202	VWT -SPK-020	1"
2Y	VWT -CON-0223	SPEAKER 21 - CANOPY	VWT -JCT-111	VWT -SPK-021	1"
2Z	VWT -CON-0224	SPEAKER 22 - CANOPY	VWT -JCT-211	VWT -SPK-022	1"
2AA	VWT -CON-0225	SPEAKER 23 - CANOPY	VWT -JCT-111	VWT -SPK-023	1"
2AB	VWT -CON-0226	SPEAKER 24 - CANOPY	VWT -JCT-211	VWT -SPK-024	1"
2AC	VWT -CON-0227	SPEAKER 25 - CANOPY	VWT -JCT-111	VWT -SPK-025	1"
2AD	VWT -CON-0228	SPEAKER 26 - CANOPY	VWT -JCT-211	VWT -SPK-026	1"
2AE	VWT -CON-0229	SPEAKER 27 - CANOPY	VWT -JCT-111	VWT -SPK-027	1"
2AF	VWT -CON-0230	SPEAKER 28 - CANOPY	VWT -JCT-211	VWT -SPK-028	1"
2AG	VWT -CON-0231	SPEAKER 29 - CANOPY	VWT -JCT-112	VWT -SPK-029	1"
2AH	VWT -CON-0232	SPEAKER 30 - CANOPY	VWT -JCT-212	VWT -SPK-030	1"
2AJ	VWT -CON-0233	SPEAKER 31 - CANOPY	VWT -JCT-112	VWT -SPK-031	1"
2AK	VWT -CON-0234	SPEAKER 32 - CANOPY	VWT -JCT-212	VWT -SPK-032	1"
2AL	VWT -CON-0235	SPEAKER 33 - CANOPY	VWT -JCT-112	VWT -SPK-033	1"
2AM	VWT -CON-0236	SPEAKER 34 - CANOPY	VWT -JCT-212	VWT -SPK-034	1"

VAN WHITE STATION COMMUNICATION CONDUIT AND CABLE SCHEDULE

CONDUIT NO.	DEVICE ID	DESCRIPTION/USE	FROM	TO	CONDUIT SIZE
3A	VWT -CON-0301	CAMERA 1	VWT -JCT-103	VWT CAM-001	1"
3B	VWT -CON-0302	CAMERA 2	VWT -JCT-203	VWT CAM-002	1"
3C	VWT -CON-0303	CAMERA 3	VWT -JCT-103	VWT CAM-003	1"
3D	VWT -CON-0304	CAMERA 4	VWT -JCT-203	VWT CAM-004	1"
3E	VWT -CON-0305	CAMERA 5	VWT -JCT-103	VWT CAM-005	1"
3F	VWT -CON-0306	CAMERA 6	VWT -JCT-203	VWT CAM-006	1"
3G	VWT -CON-0307	CAMERA 7	VWT -JCT-110	VWT CAM-007	1"
3H	VWT -CON-0308	CAMERA 8	VWT -JCT-210	VWT CAM-008	1"
3J	VWT -CON-0309	CAMERA 9	VWT -JCT-110	VWT CAM-009	1"
3K	VWT -CON-0310	CAMERA 10	VWT -JCT-210	VWT CAM-010	1"
3L	VWT -CON-0311	CAMERA 11	VWT -JCT-110	VWT CAM-011	1"
3M	VWT -CON-0312	CAMERA 12	VWT -JCT-210	VWT CAM-012	1"
4A	VWT -CON-0401	KIOSK 1 (F)	VWT -SCC-001	VWT -KSK-001	2"
4B	VWT -CON-0402	KIOSK 2 (F)	VWT -SCC-001	VWT -KSK-002	2"
5A	VWT -CON-0501	VMS 1 (F)	VWT -SCC-001	VWT -VMS-001	1"
5B	VWT -CON-0502	VMS 2, VMS 3	VWT -SCC-001	VWT -VMS-002, -VMS-003	1-1/2"
5C	VWT -CON-0503	VMS 4, VMS 5	VWT -SCC-001	VWT -VMS-004, -VMS-005	1-1/2"
5D	VWT -CON-0504	VMS 6, VMS 7	VWT -SCC-001	VWT -VMS-006, -VMS-007	1-1/2"
5E	VWT -CON-0505	VMS 8, VMS 9	VWT -SCC-001	VWT -VMS-008, -VMS-009	1-1/2"
5F	VWT -CON-0506	VMS 10 (F)	VWT -SCC-001	VWT -VMS-010	1"
6A	VWT -CON-0601	TVM 1	VWT -SCC-001	VWT -TVM-001	2"
6B	VWT -CON-0602	TVM 2	VWT -SCC-001	VWT -TVM-002	2"
7A	VWT -CON-0701	VALIDATOR 1	VWT -SCC-001	VWT -RSV-001	1-1/2"
7B	VWT -CON-0702	VALIDATOR 2	VWT -SCC-001	VWT -RSV-002	1-1/2"
7C	VWT -CON-0703	VALIDATOR 3	VWT -SCC-001	VWT -RSV-003	1-1/2"
7D	VWT -CON-0704	VALIDATOR 4	VWT -SCC-001	VWT -RSV-004	1-1/2"
8A	VWT -CON-0801	EMERGENCY TELEPHONE 1 - PHONE	VWT -SCC-001	VWT -ETL-001	1-1/2"
8B	VWT -CON-0802	EMERGENCY TELEPHONE 1 - BEACON LIGHT 1	VWT -ETL-001	VWT -ETB-001	1"
8C	VWT -CON-0803	EMERGENCY TELEPHONE 1 - BEACON LIGHT 2	VWT -ETL-001	VWT -ETB-002	1"
9A	VWT -CON-0901	STATION ELECTRICAL CABINET	VWT -SCC-001	VWT -SEC-001	2"

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METROPOLITAN COUNCIL | SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION COMMUNICATIONS CONDUIT SCHEDULE (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-VWT-ELE-SCH-461

SHEET 318 OF 394

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VAN WHITE VERTICAL CIRCULATION COMMUNICATION CONDUIT AND CABLE SCHEDULE					
CONDUIT NO.	**DEVICE ID**	**DESCRIPTION/USE**	**FROM**	**TO**	**CONDUIT SIZE**
30A	VWT -CON-3001	SCC-001 TO SCC-301	VWT -SCC-001	VWT -SCC-301	3"
30B	VWT -CON-3002	SCC-001 TO SCC-301	VWT -SCC-001	VWT -SCC-301	3"
31A	VWT -CON-3101	SCC-301 TO JBX-301	VWT -SCC-301	VWT -JBX-301	2"
31B	VWT -CON-3102	SCC-301 TO JBX-302	VWT -SCC-301	VWT -JBX-302	2"
31C	VWT -CON-3103	JBX-301 TO JBX-303	VWT -JBX-301	VWT -JBX-303	2"
31D	VWT -CON-3104	JBX-302 TO JBX-304	VWT -JBX-302	VWT -JBX-304	2"
31E	VWT -CON-3105	SCC-301 TO JBX-305	VWT -SCC-301	VWT -JBX-305	2"
31F	VWT -CON-3106	SCC-301 TO JBX-306	VWT -SCC-301	VWT -JBX-306	2"
31G	VWT -CON-3107	JBX-305 TO JBX-307	VWT -JBX-305	VWT -JBX-307	2"
31H	VWT -CON-3108	JBX-306 TO JBX-308	VWT -JBX-306	VWT -JBX-307	2"
32A	VWT -CON-3201	SPEAKER 301	VWT -SCC-301	VWT -SPK-301	1"
32B	VWT -CON-3202	SPEAKER 302	VWT -JBX-301	VWT -SPK-302	1"
32C	VWT -CON-3203	SPEAKER 303	VWT -JBX-303	VWT -SPK-303	1"
32D	VWT -CON-3204	SPEAKER 304	VWT -JBX-307	VWT -SPK-304	1"
32E	VWT -CON-3205	SPEAKER 305	VWT -JBX-307	VWT -SPK-305	1"
32F	VWT -CON-3206	SPEAKER 306	VWT -JBX-303	VWT -SPK-306	1"
32G	VWT -CON-3207	SPEAKER 307	VWT -JBX-303	VWT -SPK-307	1"
32H	VWT -CON-3208	SPEAKER 308	VWT -JBX-303	VWT -SPK-308	1"
33A	VWT -CON-3301	CAMERA 301	VWT -SCC-301	VWT -CAM-301	1"
33B	VWT -CON-3302	CAMERA 302	VWT -SCC-301	VWT -CAM-302	1"
33C	VWT -CON-3303	CAMERA 303	VWT -SCC-301	VWT -CAM-303	1"
33D	VWT -CON-3304	CAMERA 304	VWT -JBX-304	VWT -CAM-304	1"
33E	VWT -CON-3305	CAMERA 305	VWT -JBX-306	VWT -CAM-305	1"
33F	VWT -CON-3306	CAMERA 306	VWT -JBX-306	VWT -CAM-306	1"
33G	VWT -CON-3307	CAMERA 307	VWT -JBX-304	VWT -CAM-307	1"
33H	VWT -CON-3308	CAMERA 308	VWT -JBX-304	VWT -CAM-308	1"
33J	VWT -CON-3309	CAMERA 309	VWT -JBX-302	VWT -CAM-309	1"
33K	VWT -CON-3310	CAMERA 310	VWT -ITC-301	VWT -CAM-310	1"
38A	VWT -CON-3801	EMERGENCY TELEPHONE 301 - PHONE	VWT -SCC-301	VWT -ETL-301	1-1/2"
38B	VWT -CON-3802	EMERGENCY TELEPHONE 301 - BEACON LIGHT	VWT -ETL-301	VWT -ETB-301	1"
38C	VWT -CON-3803	EMERGENCY TELEPHONE 302 - PHONE	VWT -JBX-304	VWT -ETL-302	1-1/2"
38D	VWT -CON-3804	EMERGENCY TELEPHONE 302 - BEACON LIGHT	VWT -ETL-302	VWT -ETB-302	1"

GENERAL NOTES:

1. CONDUIT NUMBERS CORRELATE TO ⬡ NUMBERS ON PLAN SHEETS AND ELEVATIONS.
2. SEE PLAN AND ELEVATION SHEETS FOR LOCATIONS OF CONDUITS.

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METROPOLITAN COUNCIL SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
COMMUNICATIONS
CONDUIT SCHEDULE (2 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-VWT-ELE-SCH-462

SHEET 319 OF 394

VAN WHITE CONDUIT AND WIRE SCHEDULE

CONDUIT NUMBER	SIZE	WIRE	FROM	TO	REMARKS	NOTES
1	1"	2#8, 1#10G	HEATERS HTR-101, 102, 103	PANELBOARD LP1A	POWER TO HEATERS	
2	1"	2#8, 1#10G	HEATERS HTR-104, 105, 106	PANELBOARD LP1A	POWER TO HEATERS	
3	1"	2#8, 1#10G	HEATERS HTR-107, 108, 109	PANELBOARD LP1A	POWER TO HEATERS	
4	1"	2#8, 1#10G	HEATERS HTR-110, 111, 112	PANELBOARD LP1A	POWER TO HEATERS	
5	1"	2#8, 1#10G	HEATERS HTR-113, 114, 115	PANELBOARD LP1A	POWER TO HEATERS	
6	1"	2#8, 1#10G	HEATERS HTR-116, 117, 118	PANELBOARD LP1A	POWER TO HEATERS	
7	1"	2#8, 1#10G	HEATERS HTR-119, 120, 121	PANELBOARD LP1A	POWER TO HEATERS	
8	1"	2#8, 1#10G	HEATERS HTR-122, 123, 124	PANELBOARD LP1A	POWER TO HEATERS	
9	1"	2#8, 1#10G	HEATERS HTR-125, 126, 127	PANELBOARD LP1A	POWER TO HEATERS	
10	1"	2#8, 1#10G	HEATERS HTR-128, 129, 130	PANELBOARD LP1A	POWER TO HEATERS	
11	1"	2#8, 1#10G	HEATERS HTR-131, 132, 133	PANELBOARD LP1A	POWER TO HEATERS	
12	1"	2#8, 1#10G	HEATERS HTR-134, 135, 136	PANELBOARD LP1A	POWER TO HEATERS	
13	1"	2#14, 1#14G	HPB-101	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
14	1"	2#14, 1#14G	HPB-102	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
15	1"	2#14, 1#14G	HPB-103	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
16	1"	2#14, 1#14G	HPB-104	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
17	1"	2#14, 1#14G	HPB-105	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
18	1"	2#14, 1#14G	HPB-106	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
19	1"	2#14, 1#14G	HPB-107	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
20	1"	2#14, 1#14G	HPB-108	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
21	1"	2#14, 1#14G	HPB-109	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
22	1"	2#14, 1#14G	HPB-110	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
23	1"	2#14, 1#14G	HPB-111	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
24	1"	2#14, 1#14G	HPB-112	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
25	1"	2#10, 1#10G	TVM-101	PANELBOARD LP1B	POWER TO TVM	
26	1"	2#10, 1#10G	TVM-102	PANELBOARD LP1B	POWER TO TVM	
27	1"	4#12, 2#12G	RSV-101, RSV-102	PANELBOARD LP1B	POWER TO RSVs	
28	1"	4#12, 2#12G	RSV-103, RSV-104	PANELBOARD LP1B	POWER TO RSVs	
29	1"	2#12, 1#12G	KSK-101	PANELBOARD LP1A	POWER TO KIOSK	
30	1"	2#12, 1#12G	KSK-102	PANELBOARD LP1A	POWER TO KIOSK	
31	1"	2#12, 1#12G	CANOPY LUMINAIRES	PANELBOARD LP1A	POWER TO LUMINAIRES	
32	1"	2#12, 1#12G	CANOPY LUMINAIRES	PANELBOARD LP1A	POWER TO LUMINAIRES	
33	1"	2#12, 1#12G	CANOPY LUMINAIRES	PANELBOARD LP1A	POWER TO LUMINAIRES	
34	1"	2#12, 1#12G	CANOPY LUMINAIRES	PANELBOARD LP1A	POWER TO LUMINAIRES	
35	1"	2#10, 1#10G	HEAT TAPE	HTCP	POWER TO HEAT TAPE	2
36	1"	2#10, 1#10G	HEAT TAPE	HTCP	POWER TO HEAT TAPE	2
37	1"	2#10, 1#10G	HEAT TAPE	HTCP	POWER TO HEAT TAPE	2
38	1"	2#10, 1#10G	HEAT TAPE	HTCP	POWER TO HEAT TAPE	2
39	1"	2#10, 1#10G	RAMP LIGHTING	PANELBOARD LP1A	POWER TO RAMP LIGHTING	
40	1"	2#10, 1#10G	RAMP LIGHTING	PANELBOARD LP1A	POWER TO RAMP LIGHTING	
41	1"	2#10, 1#10G	RAMP LIGHTING	PANELBOARD LP1A	POWER TO RAMP LIGHTING	
42	1"	2#10, 1#10G	RAMP LIGHTING	PANELBOARD LP1A	POWER TO RAMP LIGHTING	
43	1 1/4"	4#10, 1#10G	COMMUNICATIONS CABINET SCC-001	PANELBOARD LP1B	POWER TO COMMUNICATIONS CABINET	
44	1"	EMPTY W/ PULL CORD	VMS-001 (F)	PANELBOARD LP1B	POWER TO VMS (F)	
45	1"	4#10, 2#10G	VMS-002, VMS-003	PANELBOARD LP1B	POWER TO VMS	
46	1"	4#10, 2#10G	VMS-008, VMS-009	PANELBOARD LP1B	POWER TO VMS	
47	1"	EMPTY W/ PULL CORD	VMS-010 (F)	PANELBOARD LP1B	POWER TO VMS (F)	
48	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
49	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
50	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
51	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
52	1"	2#10, 1#10G	POLE LUMINAIRES	PANELBOARD LP1A	POWER TO POLE LUMINAIRES	
53	2(2")	2(4#3/0, 1#3G)	C/T METERING CABINET AT XCEL POINT OF CONNECTION.	PANELBOARD HP1	PLATFORM POWER	
54	3/4"	3#10, 1#10G	PANELBOARD HP1	45 KVA TRANSFORMER	PLATFORM POWER	6
55	1-1/4"	4#6, 1#10G	45 KVA TRANSFORMER	PANELBOARD LP1C	PLATFORM POWER	6
56	2(2-1/2)"	2(3#2/0 , 1#6G)	PANELBOARD HP1	112.5 KVA TRANSFORMER	PLATFORM POWER	6
57	2(3")	2(4#3/0, 1#3G)	112.5 KVA TRANSFORMER	500A CIRCUIT BREAKER	PLATFORM POWER	6
58	2(3")	2(4#3/0, 1#3G)	500A CIRCUIT BREAKER	PANELBOARD LP1A	PLATFORM POWER	6
59	1 1/4"	3#3, 1#8G	PANELBOARD HP1	ELEVATOR DISCONNECT SWITCH	ELEVATOR POWER	
60	1 1/4"	3#3, 1#8G	ELEVATOR DISCONNECT SWITCH	ELEVATOR CONTROLLER	ELEVATOR POWER	
61	1 1/4"	PULL WIRE	ELEVATOR CONTROLLER	ELEVATOR MOTOR	ELEVATOR POWER	
62	1"	3#10, 1#10G	PANELBOARD LP1C	ELEVATOR CAB DISCONNECT SWITCH	ELEVATOR CAB LTG AND POWER	
63	1"	3#10, 1#10G	ELEVATOR CAB DISCONNECT SWITCH	ELEVATOR CONTROLLER	ELEVATOR CAB LTG AND POWER	
64	1"	2#10, 1#10G	SNOW MELT JUNCTION BOX	SNOW MELT SYSTEM 30/2P CONTACTOR	ELEVATOR LOBBY SNOW MELT SYSTEM POWER	
65	1"	3#10, 1#10G	ELEVATOR PIT LTG AND RECEPTACLE	PANELBOARD LP1C	ELEVATOR PIT LTG AND RECEPTACLE POWER	

PANELBOARD SCHEDULE VWT-HP1

400 AMP BUS RATING — 42 POLES
277/480 VOLTS — 3 PHASE — SURFACE MOUNTED
400 AMP MAIN BREAKER — 4 WIRE 60Hz — 42k AIC

DESCRIPTION	kVA	AMPS/POLES	CKT	AØ	BØ	CØ	CKT	AMPS/POLES	kVA	DESCRIPTION
112.5 KVA TRANSFORMER (LP1A&LP1B)	26.5	170/3	1	X			2	100/3	17.7	ELEVATOR
	28.0		3		X		4		17.7	
	26.7		5			X	6		17.7	
45 KVA TRANSFORMER (LP1C)	12.3	70/3	7	X			8	100/3	17.7	FUTURE ELEVATOR
	12.8		9		X		10		17.7	
	12.3		11			X	12		17.7	
SPD		60/3	13	X			14			
			15		X		16			
			17			X	18			
SPACE			19	X			20			
SPACE			21		X		22			
SPACE			23			X	24			
SPACE			25	X			26			
SPACE			27		X		28			
						X				
		kVA		74.2	76.2	74.4	kVA			
		AMPS		267.9	274.9	268.4	AMPS			

PANELBOARD SCHEDULE VWT-LP1A

400 AMP BUS RATING — 42 POLES
120/208 VOLTS — 3 PHASE — SURFACE MOUNTED
300 AMP MAIN BREAKER — 4 WIRE 60Hz — LOCATION

DESCRIPTION	kVA	AMPS/POLES	CKT	AØ	BØ	CØ	CKT	AMPS/POLES	kVA	DESCRIPTION
RAMP LIGHTING	0.4	20/1	1	X			2	30/2	2.4	HTR-119, 120, 121
RAMP LIGHTING	0.4	20/1	3		X		4		2.4	
HTR-101, 102, 103	2.4	30/2	5			X	6	30/2	2.4	HTR-122, 123, 124
	2.4		7	X			8		2.4	
HTR-104, 105, 106	2.4	30/2	9		X		10	30/2	2.4	HTR-125, 126, 127
	2.4		11			X	12		2.4	
HTR-107, 108, 109	2.4	30/2	13	X			14	30/2	2.4	HTR-128, 129, 130
	2.4		15		X		16		2.4	
HTR-110, 111 112	2.4	30/2	17			X	18	30/2	2.4	HTR-131, 132, 133
	2.4		19	X			20		2.4	
HTR-113, 114, 115	2.4	30/2	21		X		22	30/2	2.4	HTR-134, 135, 136
	2.4		23			X	24		2.4	
HTR-116, 117, 118	2.4	30/2	25	X			26	20/1	0.15	SHELTER LUMINAIRES
	2.4		27		X		28	20/1	0.15	SHELTER LUMINAIRES
KSK-101	0.3	20/1	29			X	30	20/1	0.15	SHELTER LUMINAIRES
KSK-102	0.3	20/1	31	X			32	20/1	0.15	SHELTER LUMINAIRES
HTRCP-101	1.0	30/2	33		X		34	20/1	1.0	POLE LUMINAIRES
	1.0		35			X	36	20/1		SPARE
HTRCP-102	1.0	30/2	37	X			38	20/1		SPARE
	1.0		39		X		40			SPACE
SPACE			41			X	42			SPACE
		kVA		26.5	28.0	26.7	kVA		5.3	
		AMPS		220.8	232.9	222.1	AMPS		5.2	
									6.0	FEED THROUGH LUGS LP1B

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CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
SCHEDULES (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-VWT-ELE-SCH-501

SHEET 320 OF 394

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VAN WHITE CONDUIT AND WIRE SCHEDULE

CONDUIT NUMBER	SIZE	WIRE	FROM	TO	REMARKS	NOTES
66	3"	EMPTY W/ PULL CORD	ELEVATOR PIT	ELEVATOR CONTROLLER	TRAVELLER CABLE	
67	1"	PULL WIRE	FUTURE SNOW MELT JUNCTION BOX	FUTURE SNOW MELT SYSTEM 30/2P CONTACTOR	FUTURE ELEVATOR LOBBY SNOW MELT SYSTEM POWER	
68	1"	PULL WIRE	RECEPTACLE	PANELBOARD LP1C	ELEVATOR PIT LTG AND RECEPTACLE POWER	
69	3"	PULL WIRE	FUTURE ELEVATOR PIT	ELEVATOR CONTROLLER	FUTURE TRAVELLER CABLE	
70		1#8	45 KVA TRANSFORMER	GROUNDING ELECTRODE SYSTEM	GROUNDING ELECTRODE CONDUCTOR FOR 15 KVA TRANSFORMER	7
71		1#1/0	112.5 KVA TRANSFORMER	GROUNDING ELECTRODE SYSTEM	GROUNDING ELECTRODE CONDUCTOR FOR 112.5 KVA TRANSFORMER	7
72	1"	3#12, 1#12G	ACU-1	PANELBOARD LP1C	POWER TO FAN COIL UNIT	
73	1"	3#12, 1#12G	ACU-2	PANELBOARD LP1C	POWER TO FAN COIL UNIT	
74	1"	3#12, 1#12G	ACU-3	PANELBOARD LP1C	POWER TO FAN COIL UNIT	
75	1"	3#12, 1#12G	CU-1	PANELBOARD LP1C	POWER TO CONDENSING UNIT	
76	1"	8#12, 1#10G	CU-2	PANELBOARD LP1C	POWER TO CONDENSING UNIT	
77	1"	3#12, 1#12G	CU-3	PANELBOARD LP1C	POWER TO CONDENSING UNIT	
78	1"	3#12, 1#12G	CP-1	PANELBOARD LP1C	POWER TO CONDENSATE PUMP	
79	1"	3#12, 1#12G	CP-2	PANELBOARD LP1C	POWER TO CONDENSATE PUMP	
80	1"	2#12, 1#12G	EX-1	PANELBOARD LP1C	POWER TO EXHAUST FAN	
81	1"	2#12, 1#12G	EX-2	PANELBOARD LP1C	POWER TO EXHAUST FAN	
82	1"	2#12, 1#12G	EUH-1	PANELBOARD LP1C	POWER TO ELECTRIC UNIT HEATER	
83	1"	2#12, 1#12G	EWH-1	PANELBOARD LP1C	POWER TO ELECTRIC WATER HEATER	
84	1"	2#12, 1#12G	ERV-1	PANELBOARD LP1C	POWER TO ERV	

ELECTRICAL NOTES
1. NOT USED
2 3/C#18 CABLE FOR AMBIENT AIR TEMPERATURE SENSOR IS ALSO RUN IN THE CONDUIT.
3. NOT USED
4. NOT USED
5, 2#14 FOR POWER OUT INDICATION, ROUTE BETWEEN SCADA PLC AND POWER OUT RELAY IN ELECTRICAL ENCLOSURE
6. FMC
7. EXOTHERMIC WELD GEC TO NEAREST STRUTURAL STEEL COLUMN

PANELBOARD SCHEDULE VWT-LP1B

400 AMP BUS RATING | 120/208 VOLTS | 400 MLO | 3 PHASE | 4 WIRE 60Hz | 30 POLES | SURFACE MOUNTED | LOCATION

DESCRIPTION	kVA	AMPS/POLES	CKT	AØ	BØ	CØ	CKT	AMPS/POLES	kVA	DESCRIPTION
SPD		60/2	1	X			2	20/1	0.3	RSV-101
			3		X		4	20/1	0.3	RSV-102
SEC-001	0.5	20/1	5			X	6	20/1	0.3	RSV-103
VMS-001 (FUTURE)	1.0	20/1	7	X			8	20/1	0.3	RSV-104
VMS-002	1.0	20/1	9		X		10	20/1		SPARE
VMS-003	1.0	20/1	11			X	12	20/1		SPARE
SCC-001	2.7	30/2	13	X			14	20/1	1.0	VMS-008
	2.7		15		X		16	20/1	1.0	VMS-009
SPARE		20/1	17			X	18	20/1	1.0	VMS-010 (FUTURE)
SPARE		20/1	19	X			20	30/1		SPARE
HTG AND LTG CONTROL SYSTEM	0.2	15/1	21		X		22	30/1		SPARE
TVM-101	1.6	30/1	23			X	24	30/1	1.6	TVM-102
SPACE			25	X			26			SPACE
SPACE			27		X		28			SPACE
SPACE			29			X	30			SPACE
		kVA		5.3	5.2	6.0	kVA			
		AMPS		44.2	43.3	50.0	AMPS			

PANELBOARD SCHEDULE VWT-LP1C

225 AMP BUS RATING | 120/208 VOLTS | 175 AMP MAIN BREAKER | 3 PHASE | 4 WIRE 60Hz | 42 POLES | SURFACE MOUNTED | 10 KAIC

DESCRIPTION	kVA	AMPS/POLES	CKT	AØ	BØ	CØ	CKT	AMPS/POLES	kVA	DESCRIPTION
ACU-1VW	0.5	20/3	1	X			2	20/1	0.7	EF-1VW
	0.5		3		X		4	20/1	0.6	ELEVATOR PIT LTG & RECEPT
	0.5		5			X	6	20/1	0.7	EF-2VW
CU-1VW	0.2	20/3	7	X			8	20/2	1.0	EUH-1VW
	0.2		9		X		10		1.0	
	0.2		11			X	12	20/1	0.6	FUTURE ELEVATOR PIT LTG & RECEPT
ACU-2VW	0.1	20/3	13	X			14	20/1	0.3	CP-1VW
	0.1		15		X		16	20/1	0.2	ERV-1VW
	0.1		17			X	18	20/1	0.3	CP-2VW
CU-2VW	3.5	40/3	19	X			20	20/1	1.0	ELEVATOR CAB LTG & POWER
	3.5		21		X		22	30/2	2.3	ELEVATOR LOBBY SNOW MELT
	3.5		23			X	24		2.3	
ACU-3VW	0.6	20/3	25	X			26	30/2	2.3	FUTURE ELEVATOR LOBBY SNOW MELT
	0.6		27		X		28		2.3	
	0.6		29			X	30	20/1	1.0	FUTURE ELEVATOR CAB LTG & POWER
CU-3VW	0.1	20/3	31	X			32	20/1		SPARE
	0.1		33		X		34	20/2	0.4	EWH-1VW
	0.1		35			X	36		0.4	
VC PLATFORM LEVEL RECEPTACLES	1.0	20/1	37	X			38	20/1	1.0	VC PLATFORM LEVEL LUMINAIRES
SPACE			39		X		40	20/1	1.0	VC INTERMEDIATE LEVEL LUMINAIRES
VC PLATFORM LEVEL RECEPTACLES	1.0	20/1	41			X	42	20/1	1.0	VC BRIDGE LEVEL LUMINAIRES
		kVA		12.3	12.8	12.3	kVA			
		AMPS		102.5	106.7	102.5	AMPS			

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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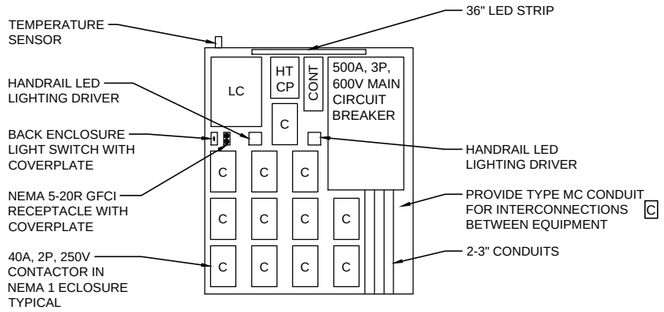
Metropolitan Council | Southwest Green Line LRT Extension

CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
SCHEDULES (2 OF 2)

DISCIPLINE: ELECTRICAL | SHEET NAME: E4-VWT-ELE-SCH-502

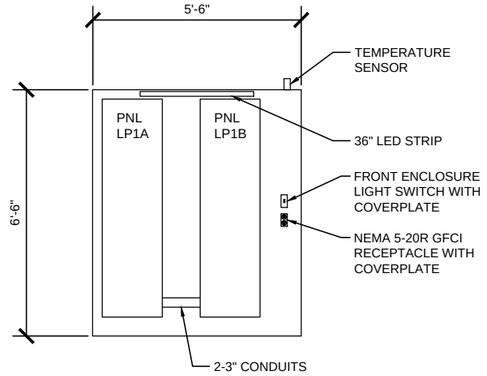
SHEET 321 OF 394

Jan, 18 2016 11:39 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-SCH-502.dwg By: V-BegeJB



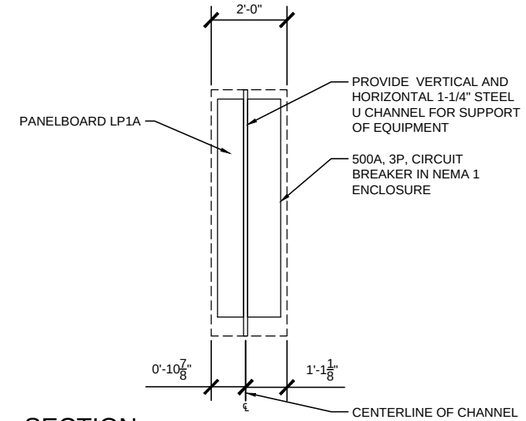
1 BACK ELEVATION

SCALE: 1/2"=1'-0"



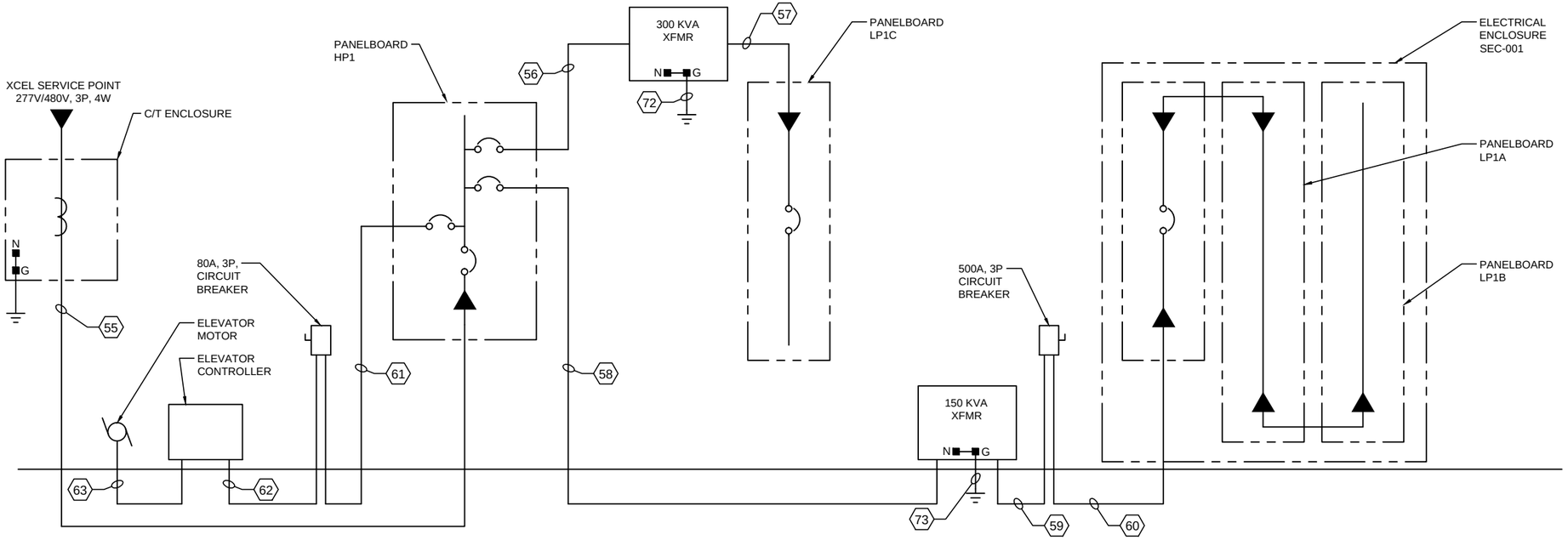
2 FRONT ELEVATION

SCALE: 1/2"=1'-0"



3 SECTION

SCALE: 1/2"=1'-0"



4 ELECTRICAL SERVICE ONE LINE DIAGRAM

SCALE: N.T.S.

GENERAL NOTES:

1. SEE PANELBOARD SCHEDULES ON SHEET 502 FOR PANELBOARD VOLTAGE, AMPACITY AND PHASE.
2. SEE VAN WHITE CONDUIT AND WIRE SCHEDULE ON SHEET 501 FOR CONDUIT AND WIRE SIZES FOR TAGS INDICATED.
3. ALL DETAILS ON THIS SHEET ARE FOR VAN WHITE STATION AND OTHER STATIONS WITH ELEVATORS.

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SOUTHWEST
Green Line LRT Extension

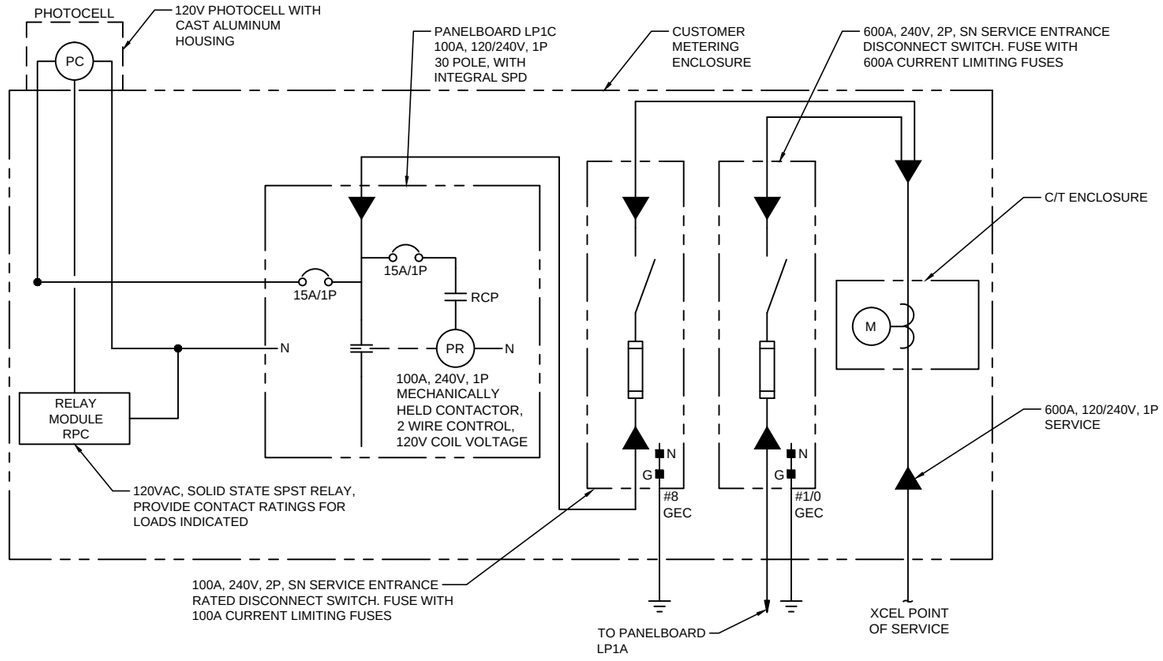
CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL DETAILS
ONE LINE DIAGRAM (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-VWT-ELE-DTL-601

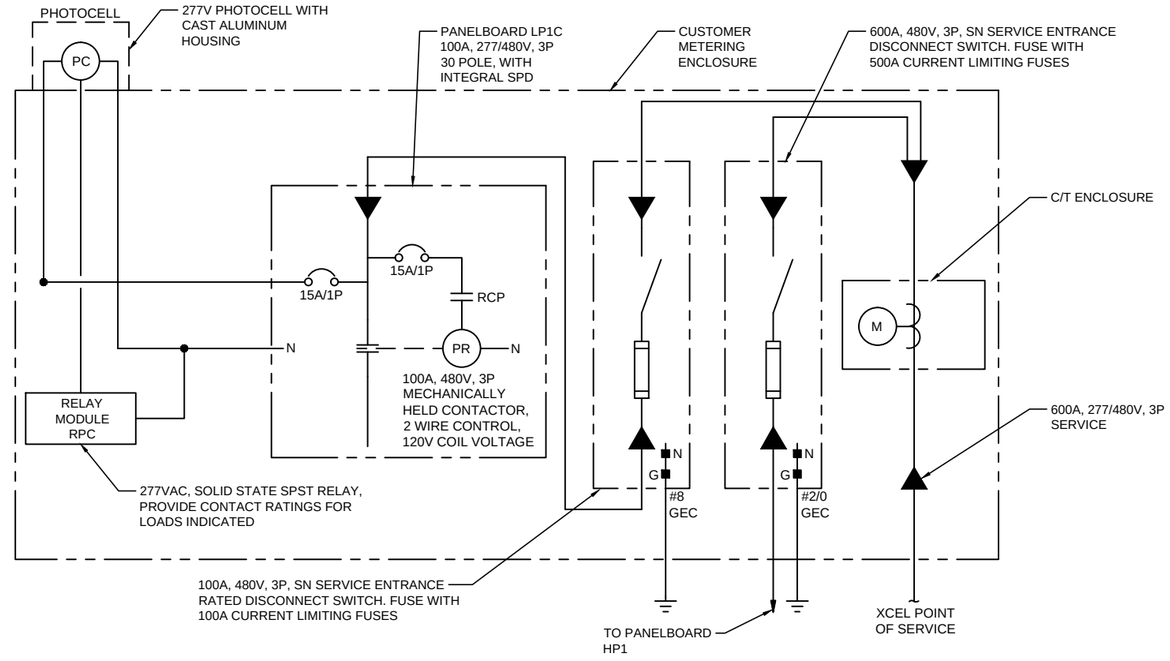
SHEET 322 OF 394

Jan, 18 2016 11:40 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-DTL-601.dwg By: V-BegeJB



3 PLATFORM ONE LINE DIAGRAM

SCALE: N.T.S. 120/240V, 1P SERVICE



4 PLATFORM ONE LINE DIAGRAM

SCALE: N.T.S. 277/480V, 3P SERVICE

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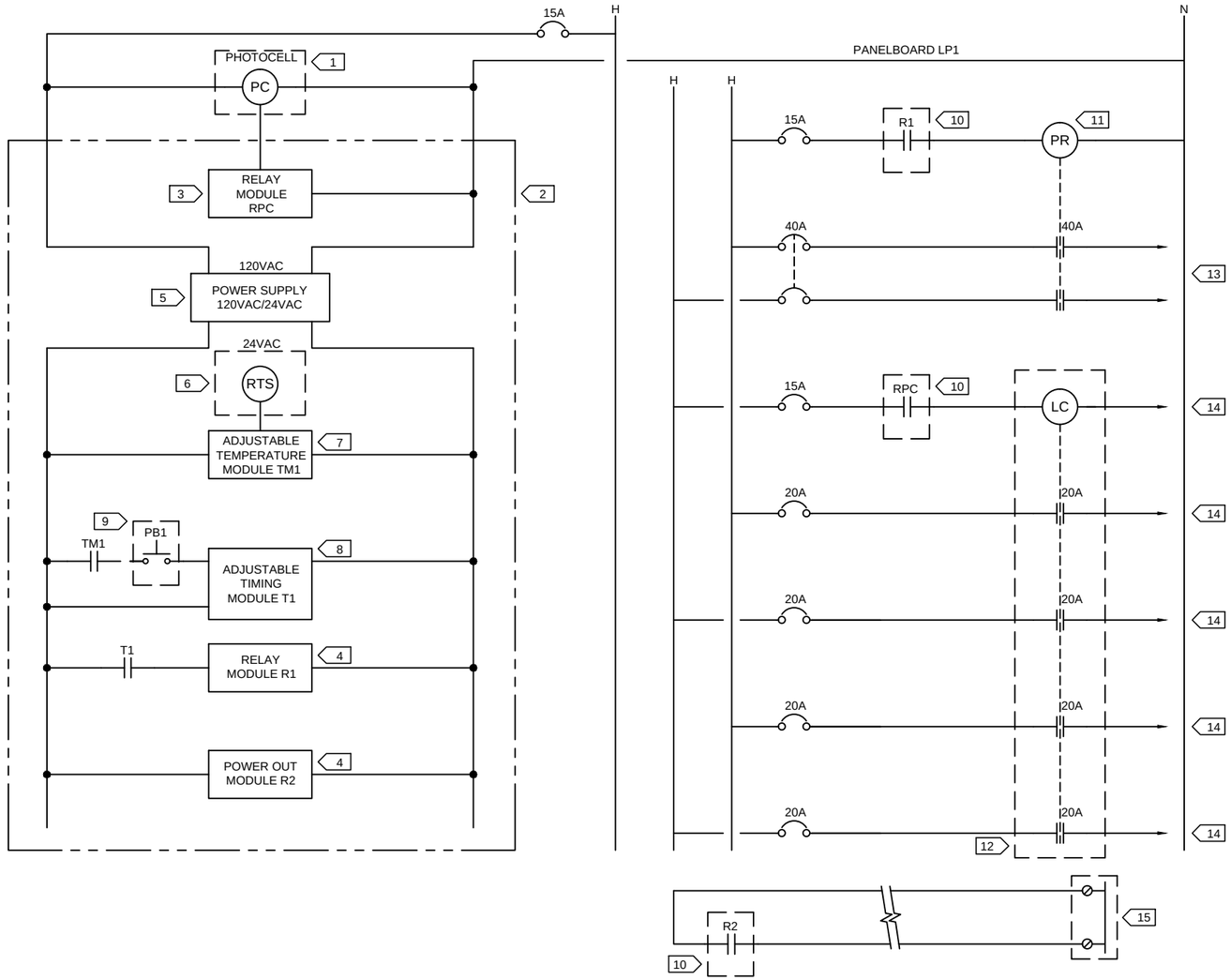
CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL DETAILS
ONE LINE DIAGRAM (2 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-VWT-ELE-DTL-602

SHEET 323 OF 394

Jan, 18 2016 11:40 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-DTL-602.dwg By: V-BegeJB



KEYNOTES:

1. PHOTOCELL WITH CAST ALUMINUM HOUSING, REMOTE MOUNT AT LOCATION WITH MINIMAL NIGHT LIGHTING.
2. DIN RAIL MOUNTED MODULES. LOCATED IN THE ELECTRICAL ENCLOSURE.
3. SOLID STATE SPST RELAY, 120VAC INPUT/OUTPUT. PROVIDE CONTACT RATINGS FOR LOADS INDICATED.
4. SOLID STATE SPST RELAY, 24VAC INPUT/OUTPUT. PROVIDE CONTACT RATINGS FOR LOADS INDICATED.
5. SOLID STATE POWER SUPPLY, 120VAC IN 24VAC OUT.
6. HERMETICALLY SEALED TEMPERATURE SENSOR. MOUNT ON TOP OF ENCLOSURE. PROVIDE PROTECTIVE METAL HOUSING.
7. SOLID STATE ADJUSTABLE TEMPERATURE MODULE. PROVIDE WITH BRACKET AND SOCKET FOR DIN RAIL MOUNTING.
8. SOLID STATE, DELAYED TIME, TIMER. PROVIDE TOTAL OF 12 TIMERS.
9. 16MM 5/8" ANTI-VANDAL MOMENTARY STAINLESS STEEL METAL PUSH BUTTON SWITCH WITH SCREW TERMINALS. MOUNT IN PASSENGER SHELTER COLUMN WITH STAINLESS STEEL COVERPLATE. PROVIDE TOTAL OF 12 PUSH BUTTONS AND COVERPLATES.
10. CONTACTS LOCATED AT DIN RAIL MOUNTED RELAY MODULES.
11. 40A, 2P, 250V MECHANICALLY HELD, LATCHING TYPE, 2 WIRE CONTROL, NEMA 1 ENCLOSURE, PANEL MOUNTED CONTACTOR. PROVIDE TOTAL OF 12 CONTACTORS.
12. 20A, 4 POLE, 250V MECHANICALLY HELD, LATCHING TYPE, 2 WIRE CONTROL, NEMA 1 ENCLOSURE, PANEL MOUNTED LIGHTING CONTACTOR.
13. TO RADIANT HEATERS.
14. TO LUMINAIRES.
15. TO SCADA TERMINALS ON PLC. LOCATED IN COMMUNICATIONS CABINET SCC-001, VERIFY TERMINALS.

1 PLATFORM CONTROL WIRING DETAIL

SCALE: N.T.S.

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CIVIL - VOLUME 11D
VAN WHITE STATION
ELECTRICAL
PLATFORM CONTROL WIRING DETAIL

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-VWT-ELE-DTL-603

SHEET 324 OF 394

Jan. 18 2016 11:40 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-VWT-ELE-DTL-603.dwg By: V-BegeJB

CODE SUMMARY - SIDE PLATFORM
ROYALSTON STATION

CODE REFERENCES

MINNESOTA STATE BUILDING CODE	2015
NFPA 130 – STANDARD FOR FIXED GUIDEWAY TRANSIT AND PASSENGER RAIL SYSTEMS	2014

IBC REVIEW

A. DESCRIPTION
LOCATION: MINNEAPOLIS, MN

THE LIGHT RAIL TRANSIT STATION IS A PARTIALLY CANOPIED PLATFORM AREA. IT CONSISTS OF TWO SIDE PLATFORMS 270' LONG BY 12'–8" THAT ARE ACCESSED BY SLOPED WALKS AT THE ENDS OF EACH PLATFORM AND THE MIDPOINT OF THE TRACK 2 PLATFORM. PLATFORMS ARE OPEN TO EXTERIOR ON ALL FOUR SIDES.

TYPICAL PLATFORM AREA: 3420 SQUARE FEET (GROSS AREA)
2944 SQUARE FEET (NET AREA AFTER STRUCTURAL ELEMENTS, FIXTURES AND PERMANENTLY INSTALLED FURNISHINGS ARE REMOVED)

CANOPY COVERAGE AREA PER PLATFORM: = 1968 SQUARE FEET
492 SQUARE FEET (1 @ 36'–0" X 13'–8") SOUTH CANOPY
492 SQUARE FEET (1 @ 36'–0" X 13'–8") MIDDLE CANOPY
492 SQUARE FEET (1 @ 36'–0" X 13'–8") MIDDLE CANOPY
492 SQUARE FEET (1 @ 36'–0" X 13'–8") NORTH CANOPY

B. OCCUPANCY CLASSIFICATION (IBC 2015 SECTION 303.1)

WAITING AREAS IN TRANSPORTATION TERMINALS: GROUP 'A' DIVISION 3 (15 S.F. PER PERSON)

C. OCCUPANCY SEPARATIONS

NONE ARE REQUIRED

D. TYPE OF CONSTRUCTION (IBC 2015 TABLE 601)

TYPE IIB CONSTRUCTION

E. ALLOWABLE BUILDING AREA AND BUILDING HEIGHT (IBC 2015 TABLE 503)

2 STORIES AT 9,500 SQUARE FEET PER STORY

F. IBC EXITING SUMMARY

NO. OF OCCUPANTS = 2944 S.F. / 15 S.F./OCC = 196
REQUIRED EGRESS WIDTH = 196 X 0.2 = 39" (PER 1005.3.2)
WIDTH PROVIDED = 2 RAMPS AT 80.5" = 161"
2 MEANS OF EGRESS PROVIDED

PLATFORM COLOR AND FINISH SCHEDULE

PRODUCTS AND COLORS LISTED ARE THE BASIS OF DESIGN FOR AESTHETIC/ARCHITECTURAL INTENT. SEE SPECIFICATIONS FOR MATERIAL/PRODUCT REQUIREMENTS.

PLATFORM COLOR AND FINISH SCHEDULE

TYPE	STATION	STRUCTURAL STEEL PAINT COLOR	PLATFORM CONC COLOR	PLATFORM CONC FINISH	CONC WALL COLOR	CONC WALL FINISH	RAILING INFILL MATERIAL	ALUM WDW FRAME FINISH	EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA FINISH	ALUM COMP CANOPY SOFFIT AND FASCIA COLOR	ARCH WOVEN MESH
SIDE	ROYALSTON STATION	PPG 518–6 KNIGHT'S ARMOR	CEMSTONE SPLIT ROCK	LIGHT BROOM	CEMSTONE SPLIT ROCK	TBD	GALV STL CABLE	CLEAR ANODIZED	HUNTER DOUGLAS WOODWRIGHT 8436 GOLDEN DOUGLAS FIR	CUSTOM COLOR TO MATCH PPG 130–7 CROSSFIRE	GKD OMEGA DIVERGENCE WITH ETCHED GRAPHIC

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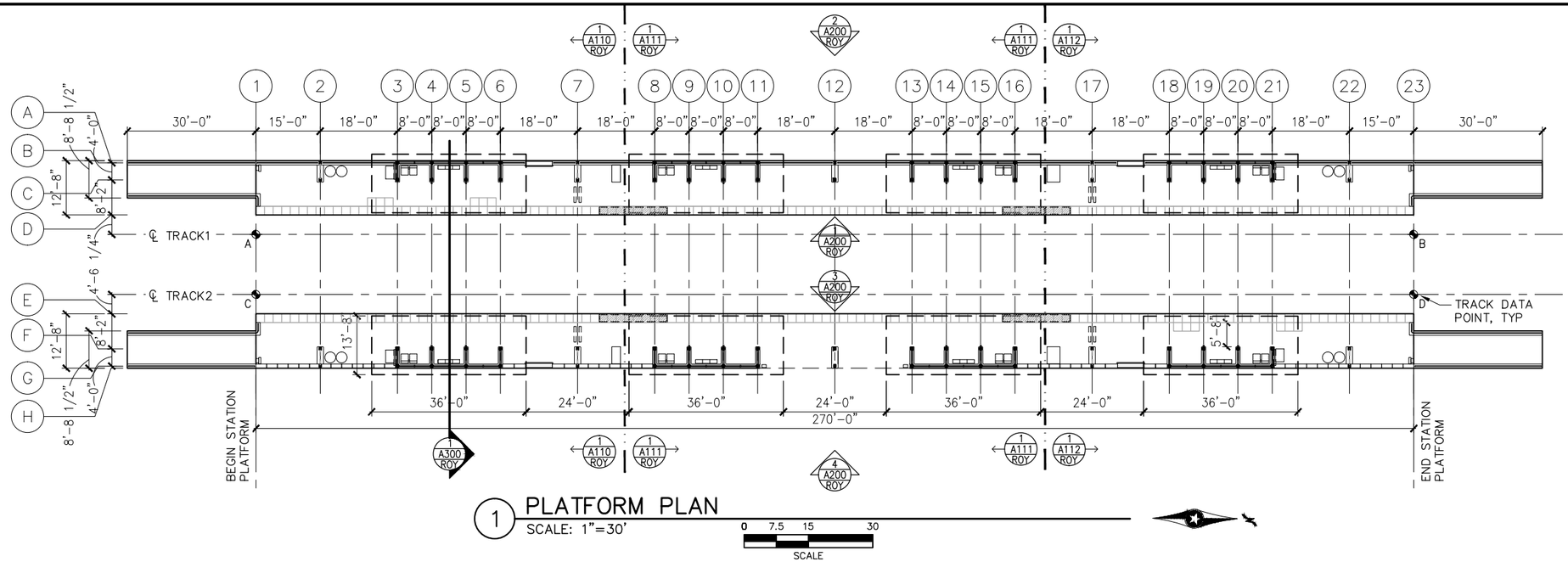
CIVIL - VOLUME 11D
ROYALSTON STATION
CODE SUMMARY / FINISH SCHEDULE

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-COD-010

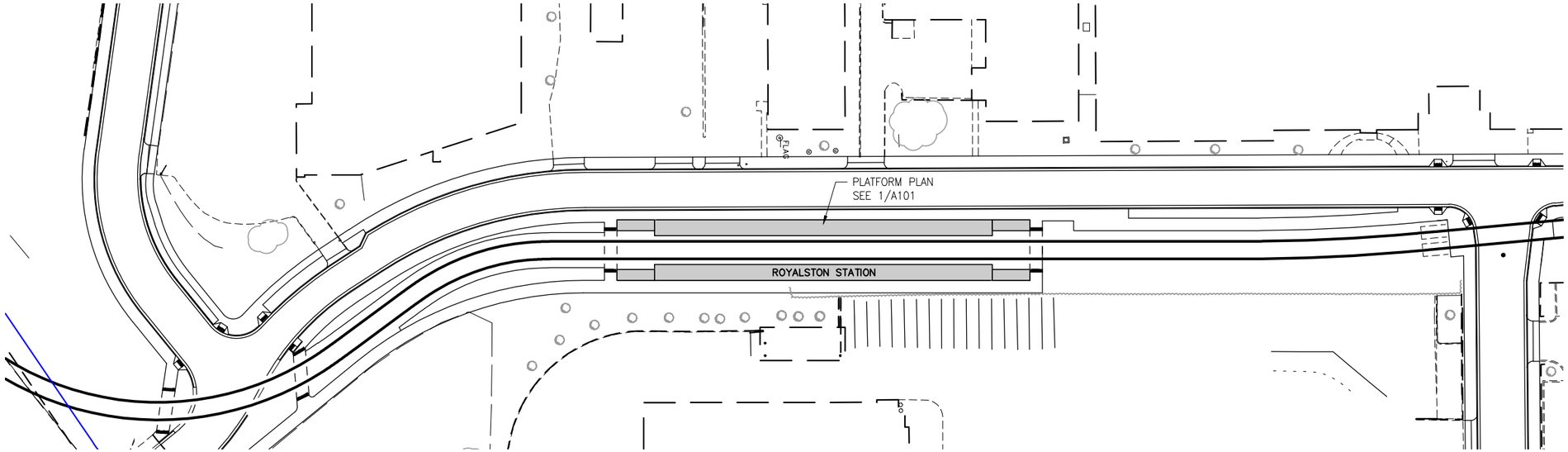
SHEET 325 OF 394

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1 PLATFORM PLAN
SCALE: 1"=30'

0 7.5 15 30
SCALE



2 STATION AREA PLAN
SCALE: 1"=100'

0 25 50 100
SCALE

TRACK DATA

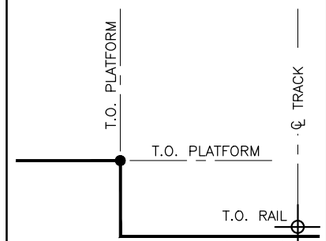
ELEV 100'-0" (LOCATION ON PLAN)

TRACK 1 EL 100'-0"= 841.63 (PT 'B')

POINT	T.O. RAIL ELEVATION	TRACK 1 STATIONING	
A	843.52	1944+28.50	
B	841.63	1946+98.50	

TRACK 2 EL 100'-0"= 841.63 (PT 'D')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
C	843.52	2944+28.50	
D	841.63	2946+98.50	



SECTION DIAGRAM AT PLATFORM EDGE
SEE DTL 1/A520
FOR DETAIL AND DIMENSIONS

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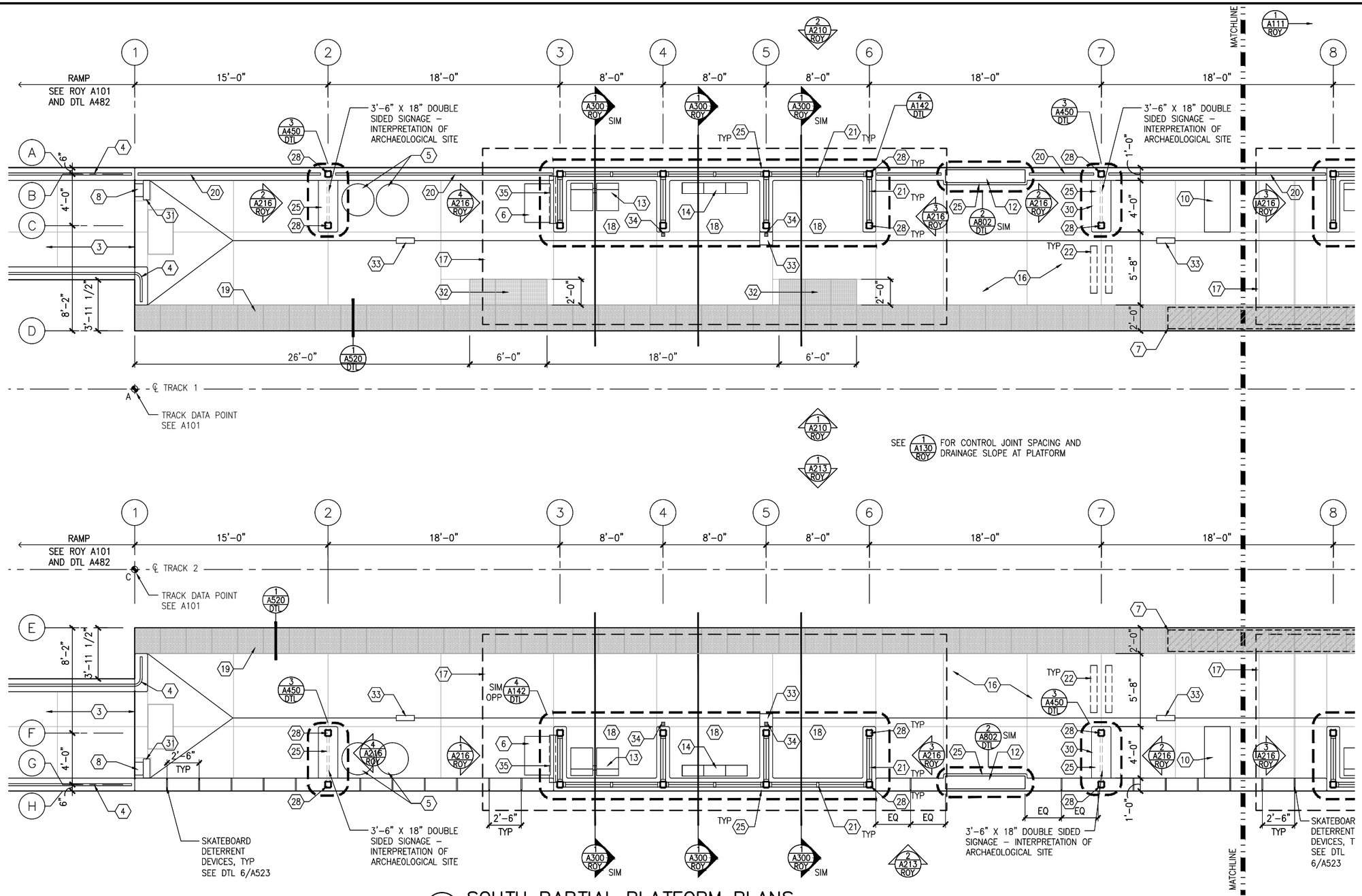
CIVIL - VOLUME 11D
ROYALSTON STATION
PLATFORM PLAN

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-PLN-101

SHEET 326 OF 394

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1 SOUTH PARTIAL PLATFORM PLANS

SCALE:1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN-CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

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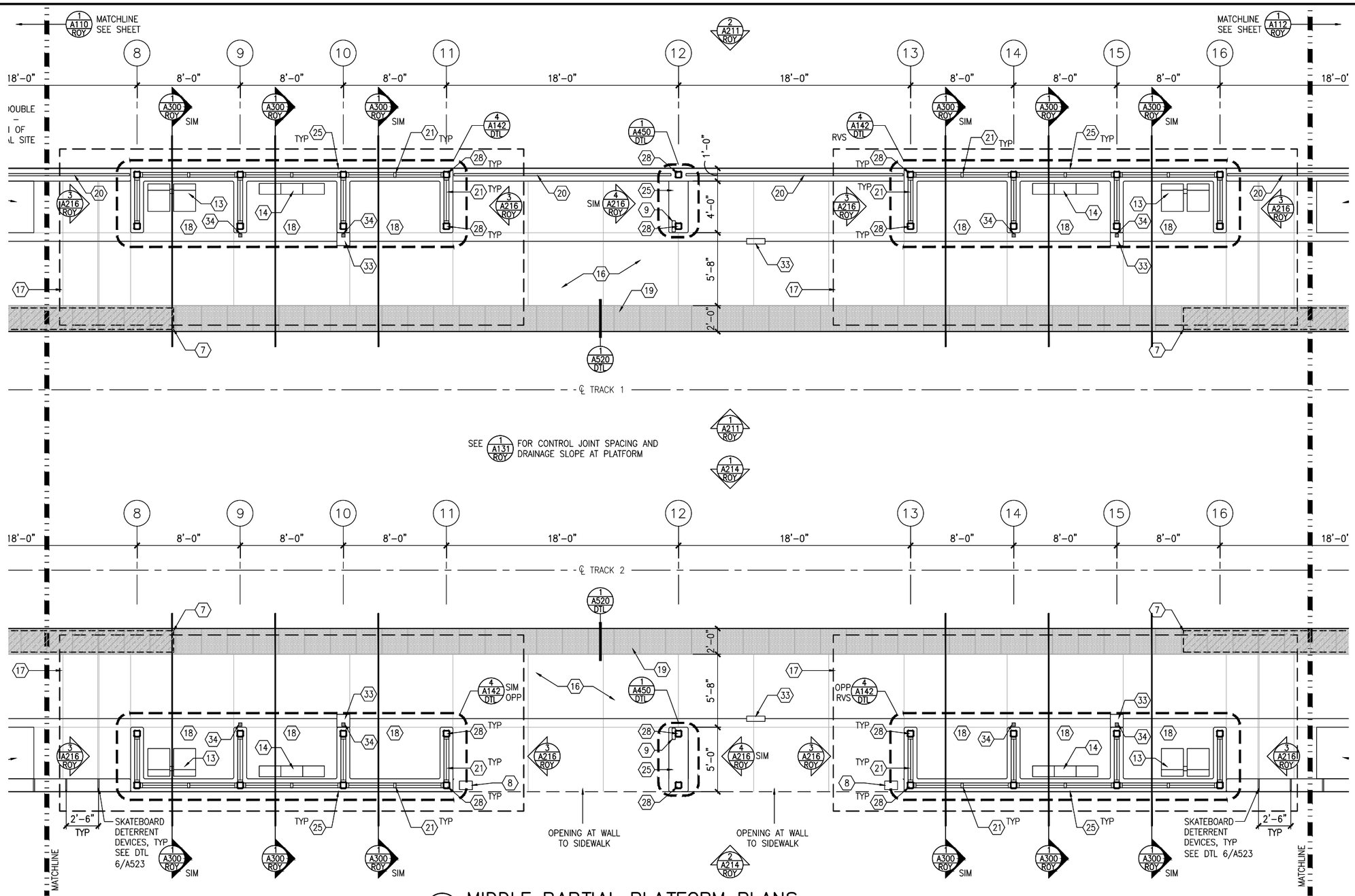
CIVIL - VOLUME 11D
ROYALSTON STATION
SOUTH PARTIAL PLATFORM PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-PLN-110

SHEET 327 OF 394

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1 MIDDLE PARTIAL PLATFORM PLANS
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

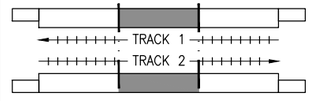
GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN-CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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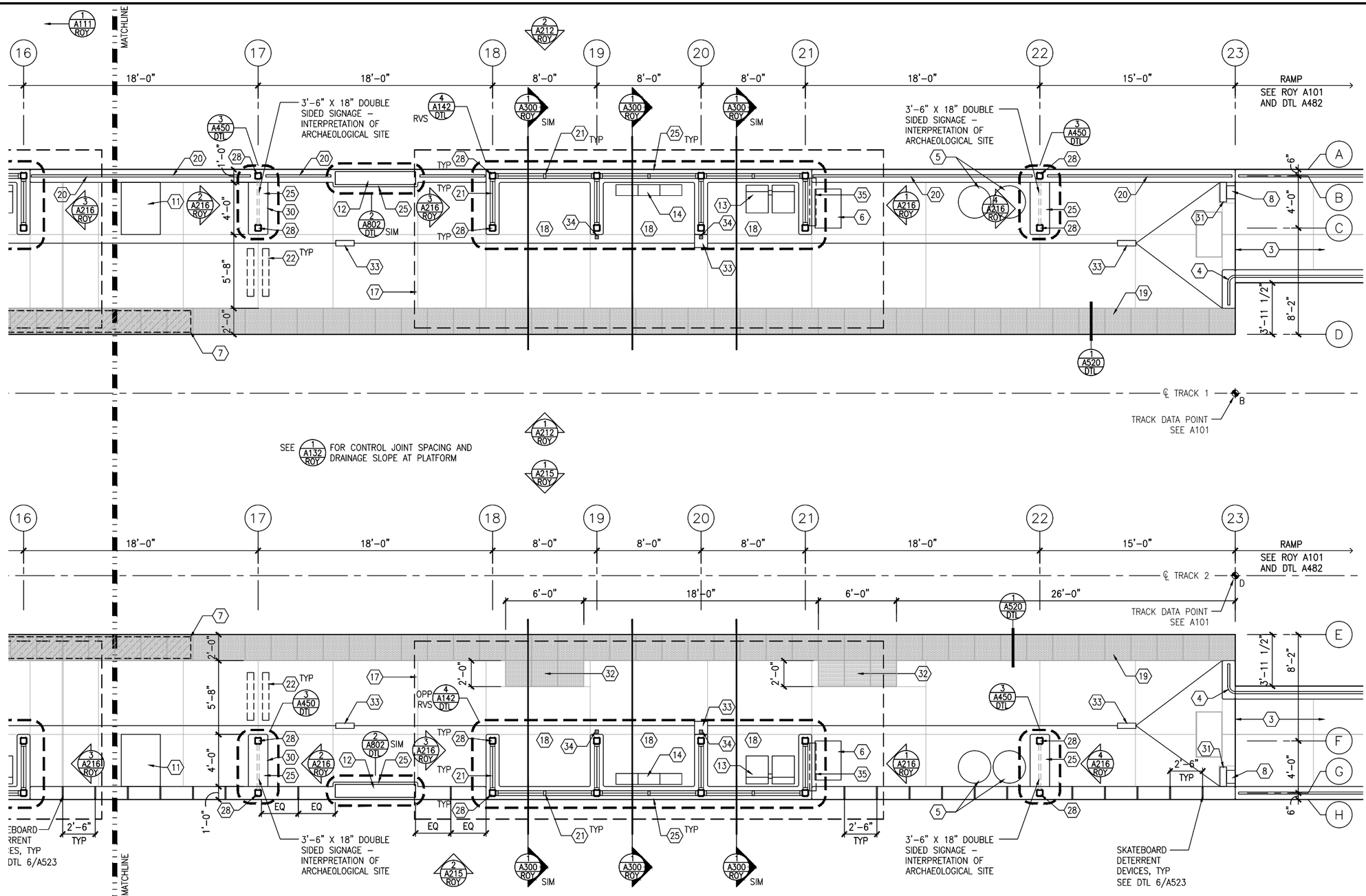
CIVIL - VOLUME 11D
ROYALSTON STATION
MIDDLE PARTIAL PLATFORM PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-PLN-111

SHEET 328 OF 394

Jan, 18 2016 11:30 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-PLN-111.dwg By: V-TroutPD



1 NORTH PARTIAL PLATFORM PLANS
SCALE:1/8"=1'–0"

SCALE 0 2 4 8

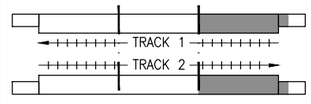
GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN–CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

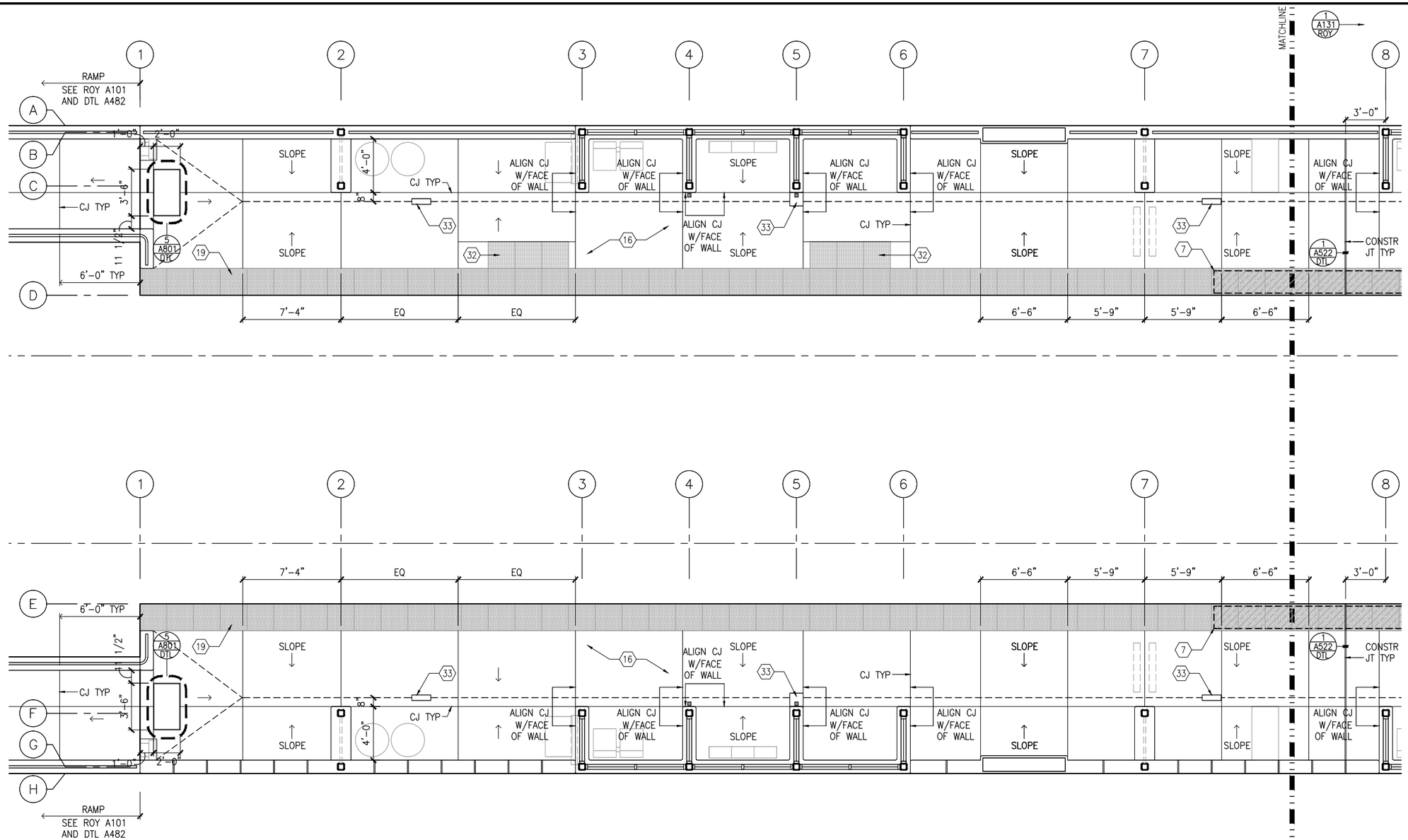
CIVIL - VOLUME 11D
ROYALSTON STATION
NORTH PARTIAL PLATFORM PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-PLN-112

SHEET 329 OF 394

Jan, 18 2016 11:31 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-PLN-112.dwg By: V-TroutPD



GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

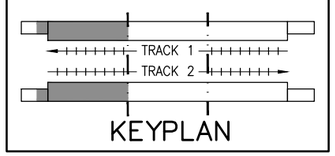
1. ENTRY MARKER
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN-CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
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14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
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17. CANOPY ABOVE
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20. GUARD RAIL AND SAFETY SCREEN
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24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
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29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

1 SOUTH PARTIAL PAVEMENT PLANS

SCALE:1/8"=1'-0"

0 2 4 8
SCALE

PAVEMENT NOTES	LEGEND
SLOPE TRANSITIONS ARE SHOWN FOR REFERENCE. BLEND/EASE TRANSITIONS TO DRAIN AND SO THAT NO ABRUPT CHANGE IN SLOPE IS VISIBLE ON PLATFORM SURFACE	SLOPES CUT JOINTS



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

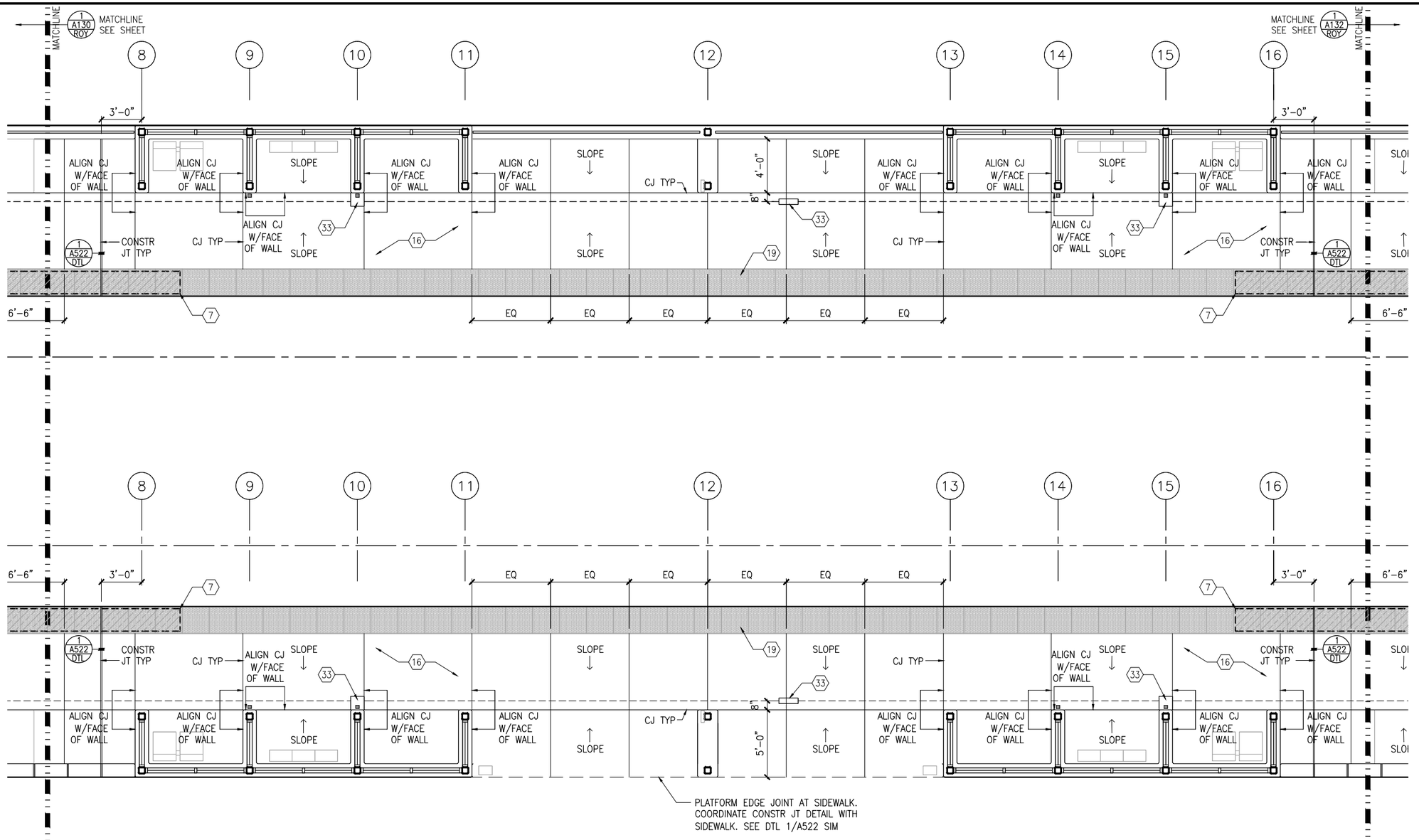
CIVIL - VOLUME 11D
ROYALSTON STATION
SOUTH PARTIAL PAVEMENT PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-PLN-130

SHEET 330 OF 394

Jan, 18 2016 11:31 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-PLN-130.dwg By: V-TroutPD



1 MIDDLE PARTIAL PAVEMENT PLANS

SCALE:1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

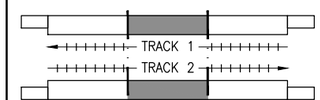
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2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. ADA BETWEEN-CAR BARRIER
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN ABOVE – SEE ELECTRICAL
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31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

PAVEMENT NOTES

SLOPE TRANSITIONS ARE SHOWN FOR REFERENCE. BLEND/EASE TRANSITIONS TO DRAIN AND SO THAT NO ABRUPT CHANGE IN SLOPE IS VISIBLE ON PLATFORM SURFACE

LEGEND

- – – – – – SLOPES
- ——— CUT JOINTS



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

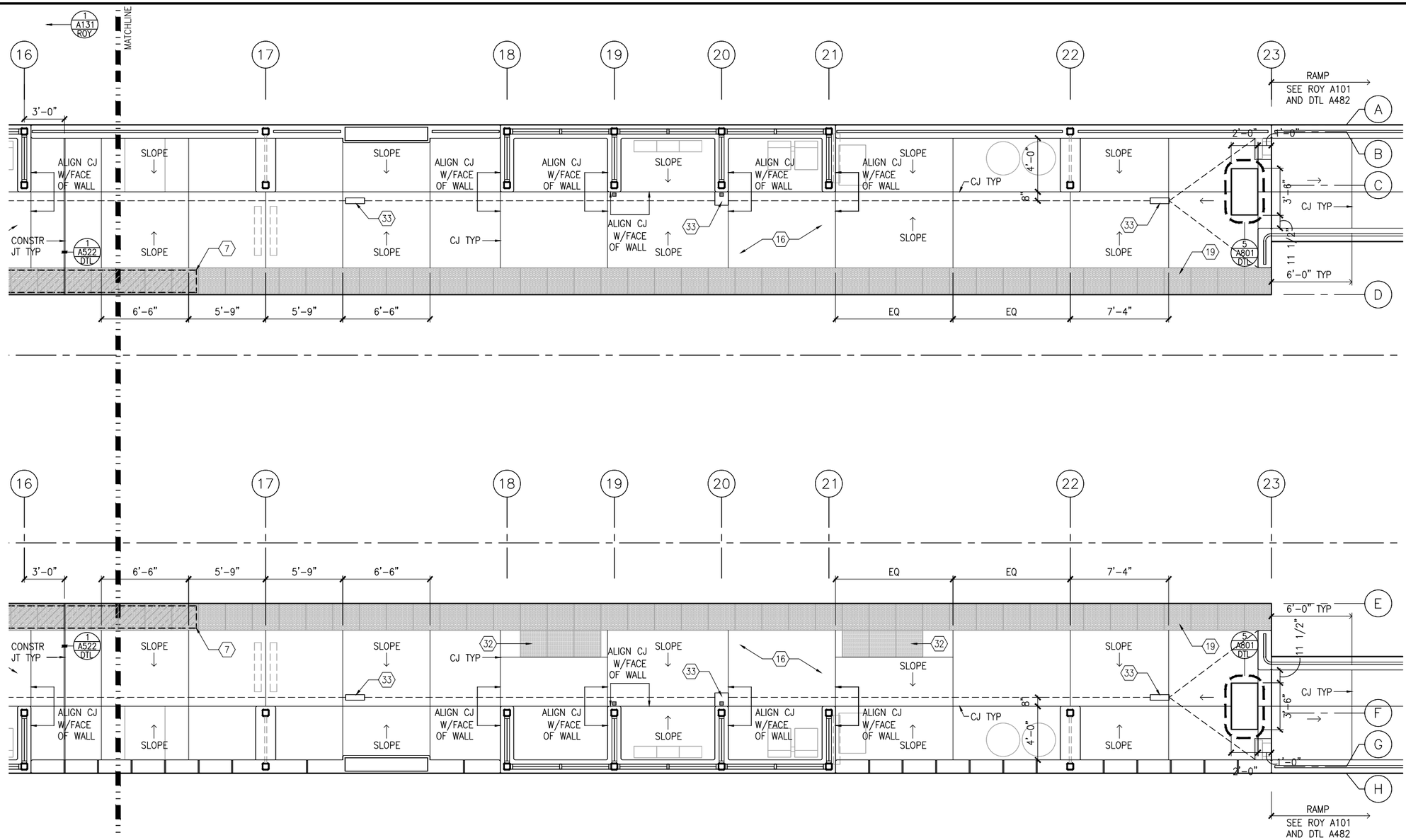
CIVIL - VOLUME 11D
ROYALSTON STATION
MIDDLE PARTIAL PAVEMENT PLANS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-PLN-131

SHEET 331 OF 394

Jan. 18 2016 11:32 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-PLN-131.dwg By: V-TroutPD



1 NORTH PARTIAL PAVEMENT PLANS
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

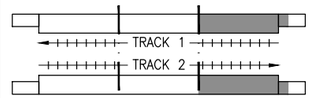
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30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. ADA DOOR POSITION INDICATOR
33. AREA DRAIN – SEE PLUMBING
34. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
35. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL

PAVEMENT NOTES

SLOPE TRANSITIONS ARE SHOWN FOR REFERENCE. BLEND/EASE TRANSITIONS TO DRAIN AND SO THAT NO ABRUPT CHANGE IN SLOPE IS VISIBLE ON PLATFORM SURFACE

LEGEND

- SLOPES
- CUT JOINTS



KEYPLAN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

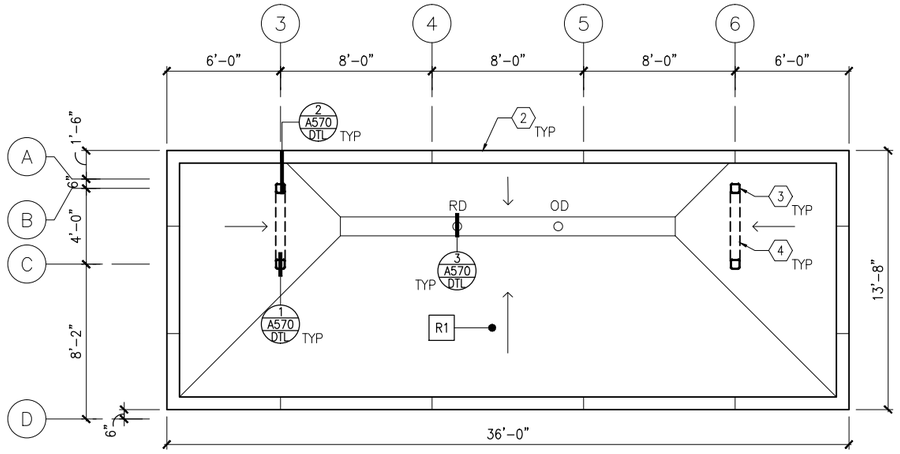
CIVIL - VOLUME 11D
ROYALSTON STATION
NORTH PARTIAL PAVEMENT PLANS

DISCIPLINE: ARCHITECTURE

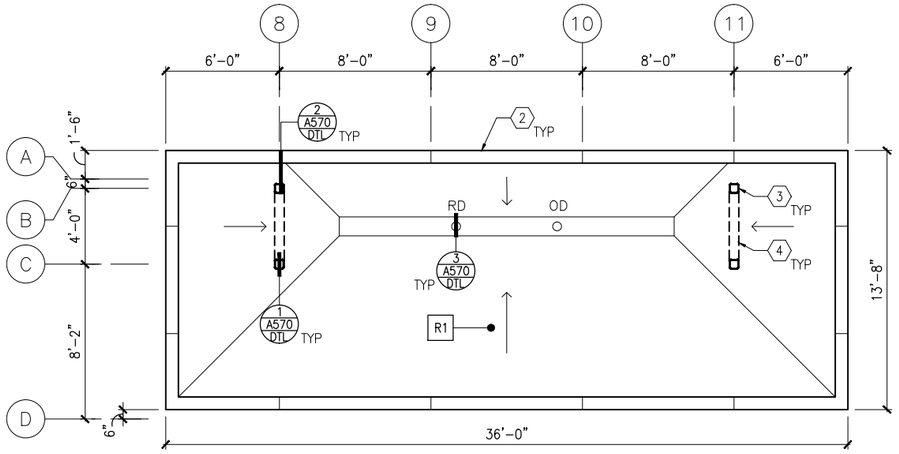
SHEET NAME: E4-ROY-ARC-PLN-132

SHEET 332 OF 394

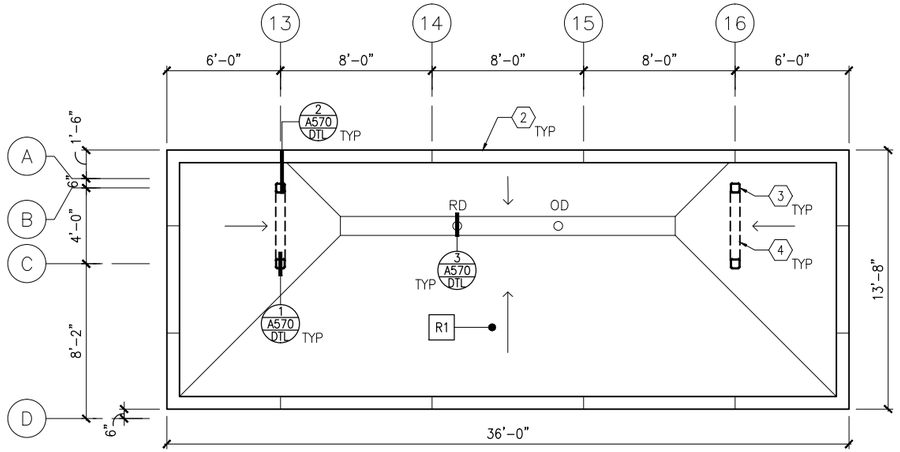
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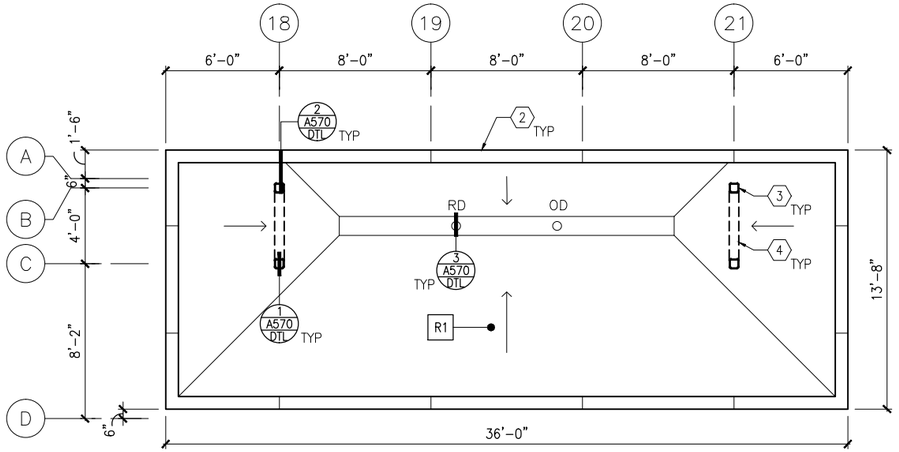
1 ROOF PLAN – SOUTH CANOPY
SCALE: 1/8"=1'–0"
0 2 4 8
SCALE



2 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'–0"
0 2 4 8
SCALE



3 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'–0"
0 2 4 8
SCALE



4 ROOF PLAN – NORTH CANOPY
SCALE: 1/8"=1'–0"
0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. ROOF SLOPE IS 1/4" PER FT UNO
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ALUMINUM STOREFRONT AND TRANSLUCENT GLAZING SYSTEM
2. ALUMINUM COMPOSITE PANEL COPING
3. STEEL COLUMN – SEE STRUCTURAL
4. STEEL BEAM ABOVE – SEE STRUCTURAL
5. PREFINISHED METAL SCUPPER
6. PREFINISHED METAL GUTTER, SLOPE TO DOWNSPOUTS
7. ROOF BASE FLASHING
8. SUMP
9. CONCRETE SPLASH BLOCK
10. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
11. ROOF EXPANSION JOINT
12. BUILDING EXPANSION JOINT
13. VENT THROUGH ROOF – SEE PLUMB
14. INTEGRAL ROOF GUTTER – SLOPE TO DOWNSPOUTS BELOW
15. MECHANICAL EQUIP – SEE MECH

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- STEEL COLUMN
- OVERHEAD SUPPORT
- RD OD — ROOF DRAIN AND OVERFLOW ROOF DRAIN
- R1 — ROOF ASSEMBLY TYPE 1 BALLASTED EPDM
- R2 — ROOF ASSEMBLY TYPE 2 PRECAST PAVER OVER EPDM
- R3 — ROOF ASSEMBLY TYPE 3 SAME AS TYPE 2 WITH R_ INSULATION

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

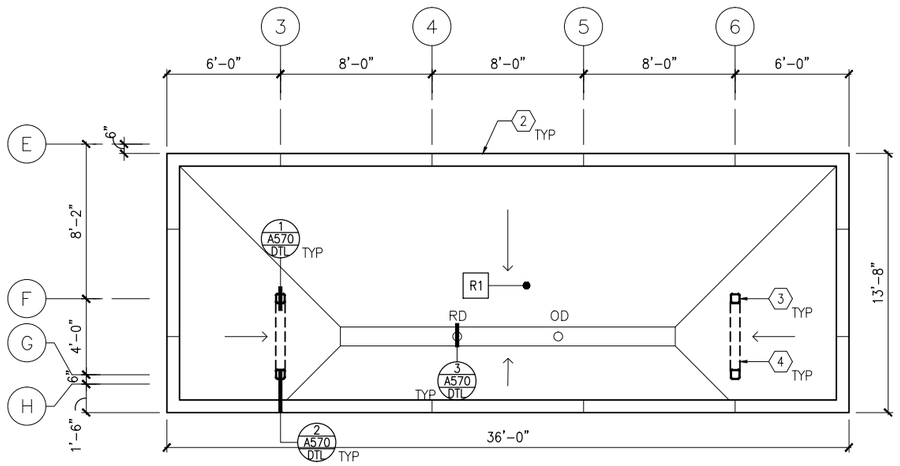
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 1 - ROOF PLANS

DISCIPLINE: ARCHITECTURE

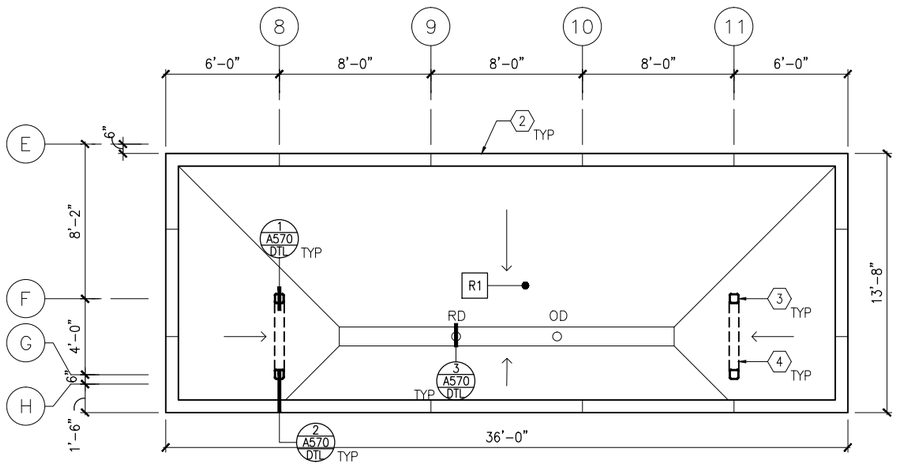
SHEET NAME: E4-ROY-ARC-PLN-150

SHEET 333 OF 394

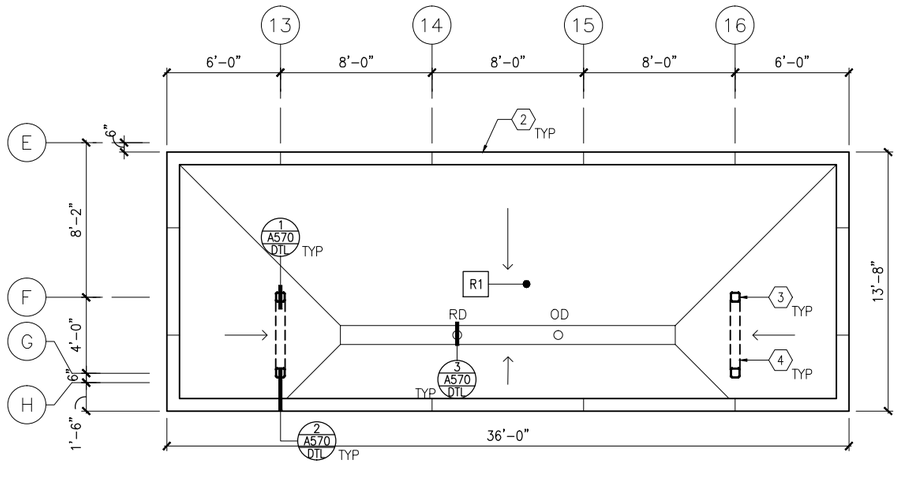
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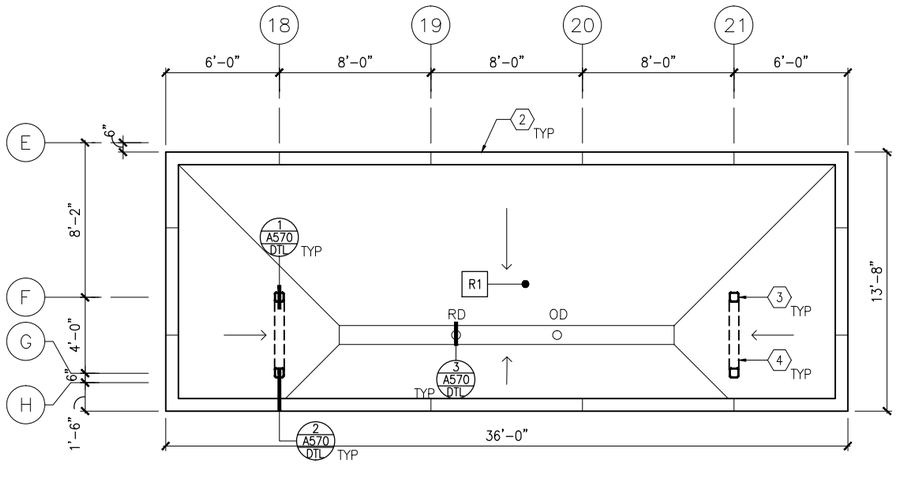
1 ROOF PLAN – SOUTH CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



2 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



3 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



4 ROOF PLAN – NORTH CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. ROOF SLOPE IS 1/4" PER FT UNO
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⬡

NOTE: ALL KEYNOTES MAY NOT BE USED

1. ALUMINUM STOREFRONT AND TRANSLUCENT GLAZING SYSTEM
2. ALUMINUM COMPOSITE PANEL COPING
3. STEEL COLUMN – SEE STRUCTURAL
4. STEEL BEAM ABOVE – SEE STRUCTURAL
5. PREFINISHED METAL SCUPPER
6. PREFINISHED METAL GUTTER, SLOPE TO DOWNSPOUTS
7. ROOF BASE FLASHING
8. SUMP
9. CONCRETE SPLASH BLOCK
10. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
11. ROOF EXPANSION JOINT
12. BUILDING EXPANSION JOINT
13. VENT THROUGH ROOF – SEE PLUMB
14. INTEGRAL ROOF GUTTER – SLOPE TO DOWNSPOUTS BELOW
15. MECHANICAL EQUIP – SEE MECH

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- STEEL COLUMN
- OVERHEAD SUPPORT
- RD OD — ROOF DRAIN AND OVERFLOW ROOF DRAIN
- R1 — ROOF ASSEMBLY TYPE 1 BALLASTED EPDM
- R2 — ROOF ASSEMBLY TYPE 2 PRECAST PAVER OVER EPDM
- R3 — ROOF ASSEMBLY TYPE 3 SAME AS TYPE 2 WITH R_ INSULATION

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90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

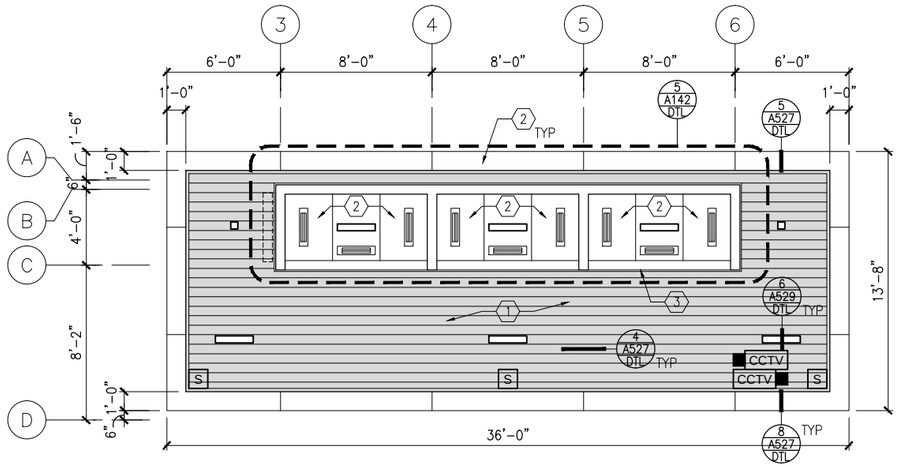
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 2 - ROOF PLANS

DISCIPLINE: ARCHITECTURE

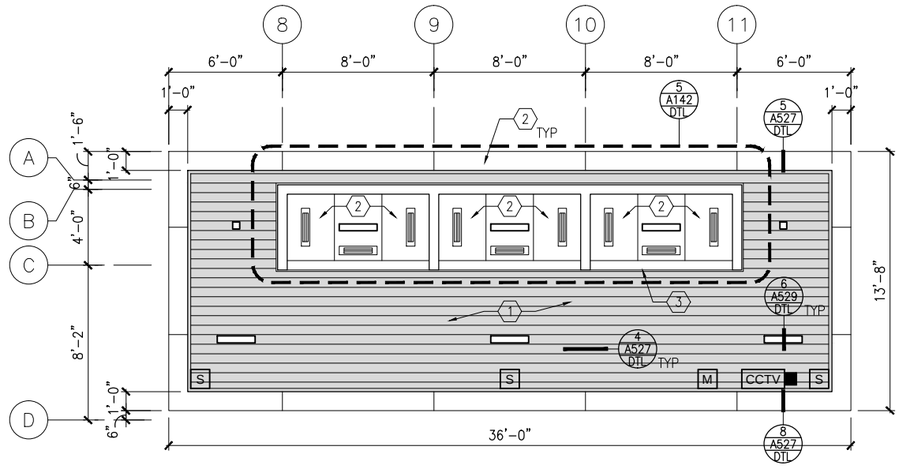
SHEET NAME: E4-ROY-ARC-PLN-151

SHEET 334 OF 394

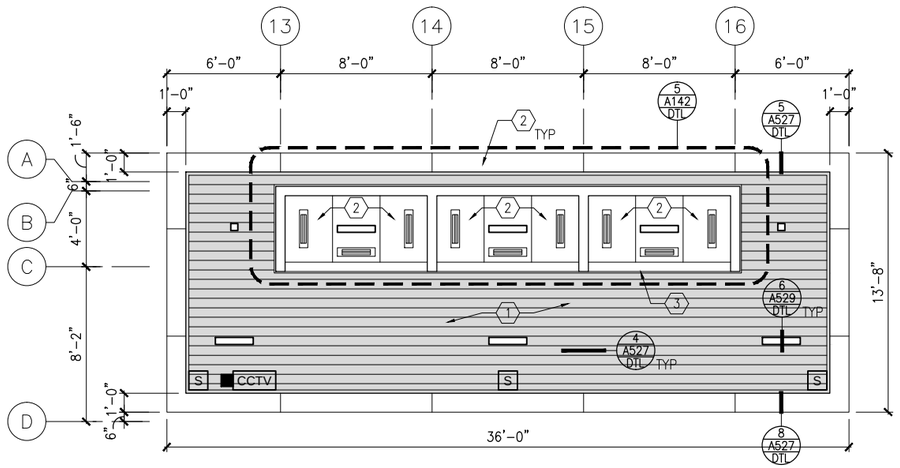
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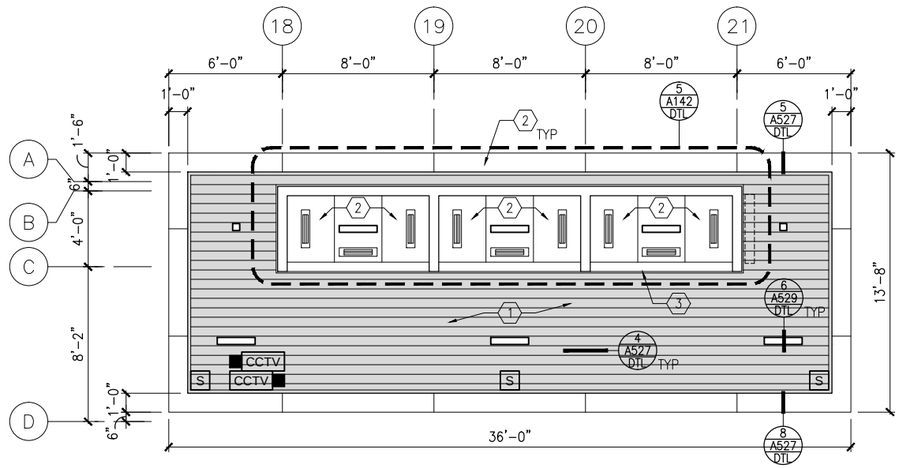
1 REFLECTED CEILING PLAN – SOUTH CANOPY
SCALE: 1/8"=1'-0"



2 REFLECTED CEILING PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



3 REFLECTED CEILING PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



4 REFLECTED CEILING PLAN – NORTH CANOPY
SCALE: 1/8"=1'-0"

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. EXTERIOR LINEAR METAL CEILING SOFFIT IN SHADED AREA
2. ALUMINUM COMPOSITE PANEL SOFFIT
3. PROVIDE MATCHING CEILING TRIM AROUND STEEL COLUMN AND/OR SHELTERS
4. PC CONC WALKWAY – SEE STRUCT
5. PC CONC STAIR – SEE STRUCT
6. EXPOSED STRUCTURE – SEE STRUCTURAL
7. ACOUSTIC CEILING
8. ACCESS PANELS FOR EQUIPMENT ACCESS
9. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- SHELTER HEATER
- S SPEAKER
- M MICROPHONE
- C SECURITY CAMERA
- ELECT/COMM JUNCTION BOX
- LED LINEAR LIGHT FIXTURE
- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY-IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

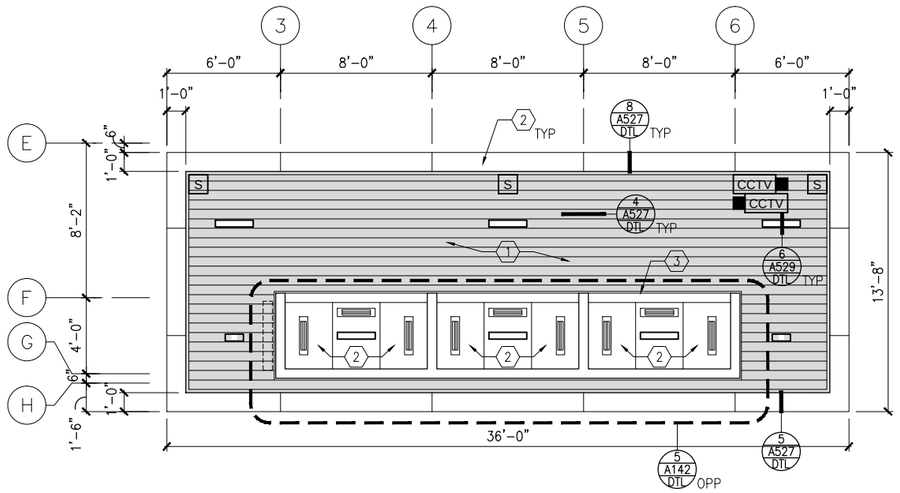
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 1 - REFLECTED CEILING PLANS

DISCIPLINE: ARCHITECTURE

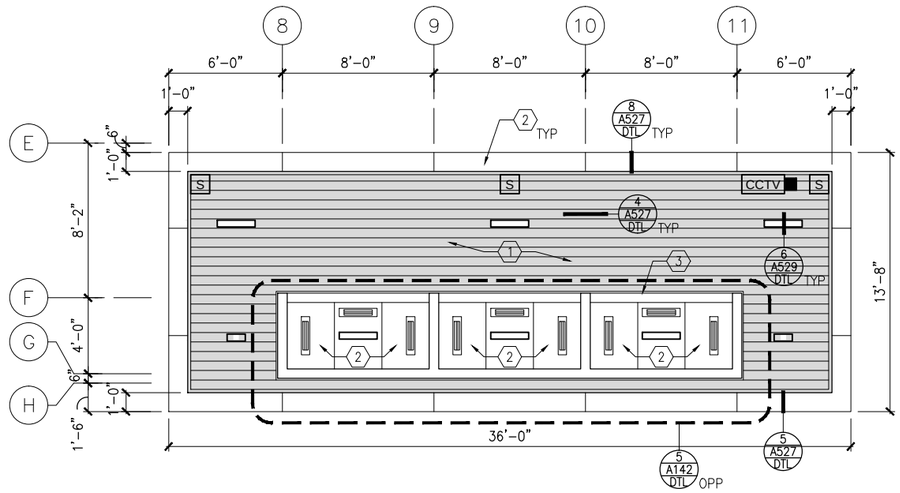
SHEET NAME: E4-ROY-ARC-RCP-180

SHEET 335 OF 394

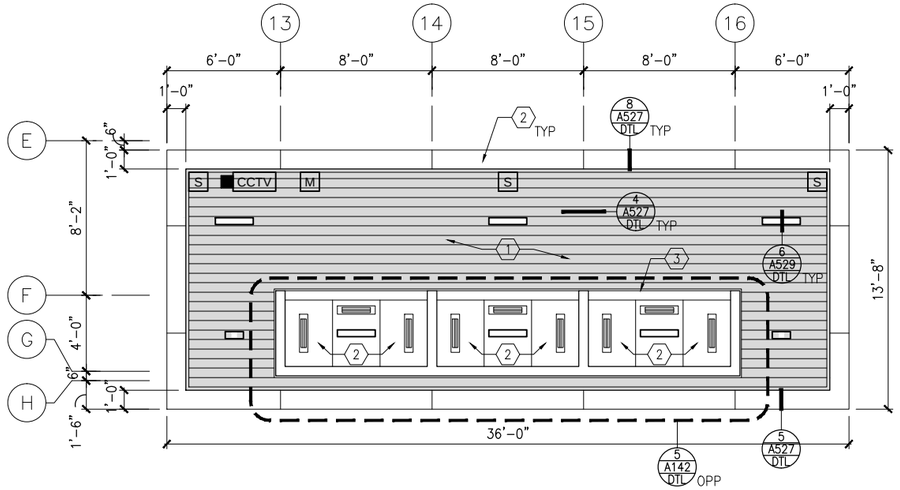
Jan, 18 2016 11:34 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-RCP-180.dwg By: V-TroutPD



1 REFLECTED CEILING PLAN – SOUTH CANOPY
SCALE: 1/8"=1'-0"

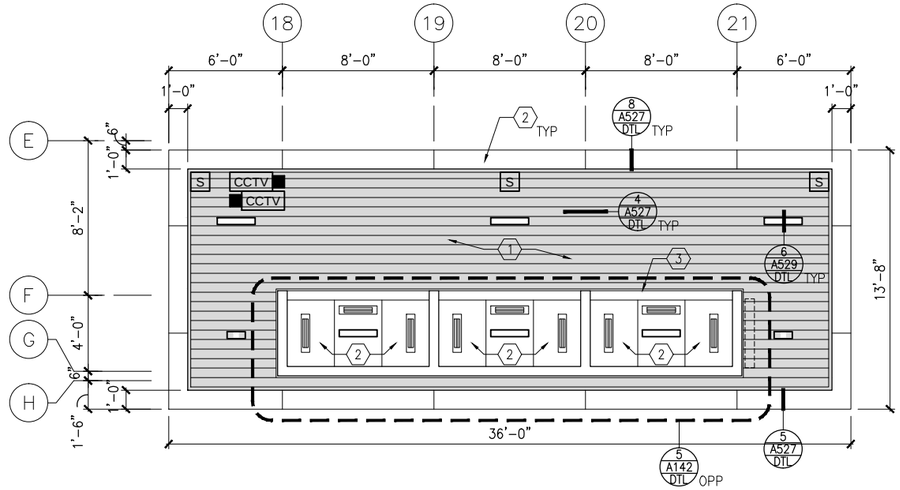


2 REFLECTED CEILING PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



3 REFLECTED CEILING PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"





4 REFLECTED CEILING PLAN – NORTH CANOPY
SCALE: 1/8"=1'-0"



GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. EXTERIOR LINEAR METAL CEILING SOFFIT IN SHADED AREA
2. ALUMINUM COMPOSITE PANEL SOFFIT
3. PROVIDE MATCHING CEILING TRIM AROUND STEEL COLUMN AND/OR SHELTERS
4. PC CONC WALKWAY – SEE STRUCT
5. PC CONC STAIR – SEE STRUCT
6. EXPOSED STRUCTURE – SEE STRUCTURAL
7. ACOUSTIC CEILING
8. ACCESS PANELS FOR EQUIPMENT ACCESS
9. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING

LEGEND

NOTE: ALL LEGEND ITEMS MAY NOT BE USED

- SHELTER HEATER
- S SPEAKER
- M MICROPHONE
- C SECURITY CAMERA
- ELECT/COMM JUNCTION BOX
- LED LINEAR LIGHT FIXTURE
- LED DOWNLIGHT LIGHT FIXTURE
- VARIABLE MESSAGE SIGN
- LAY-IN ACOUSTIC CEILING
- EXPOSED CONCRETE
- EXTERIOR LINEAR METAL CEILING
- LED LINEAR LIGHT FIXTURE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

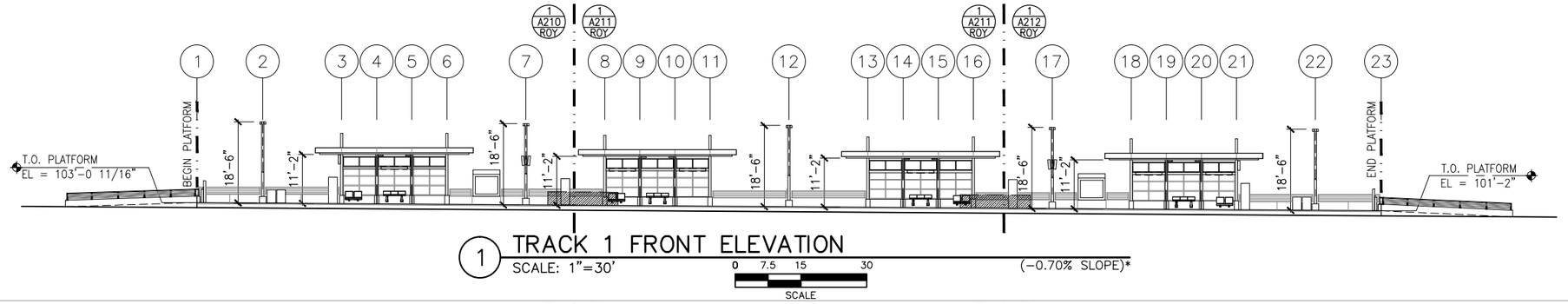
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 2 - REFLECTED CEILING PLANS

DISCIPLINE: ARCHITECTURE

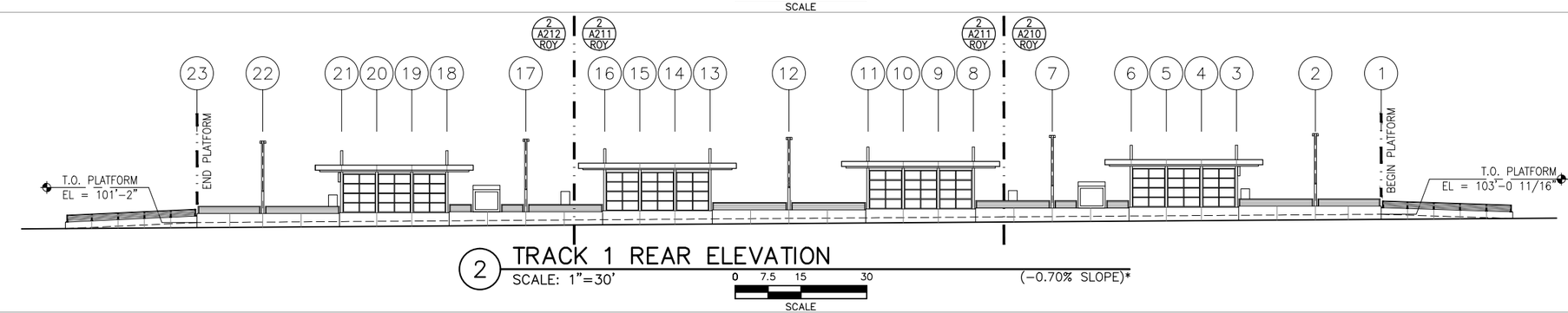
SHEET NAME: E4-ROY-ARC-RCP-181

SHEET 336 OF 394

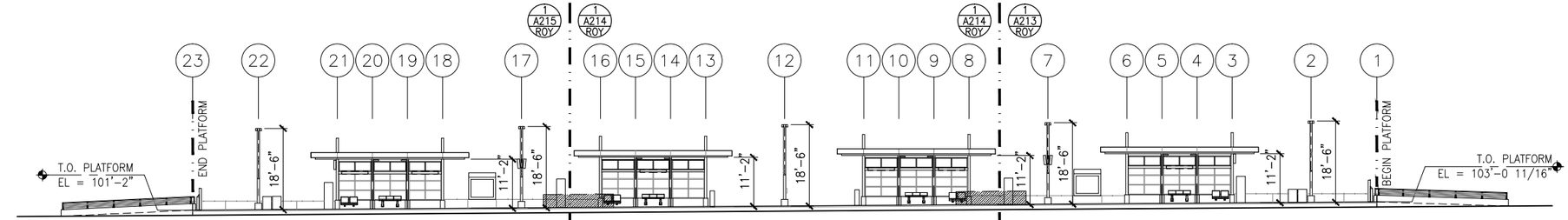
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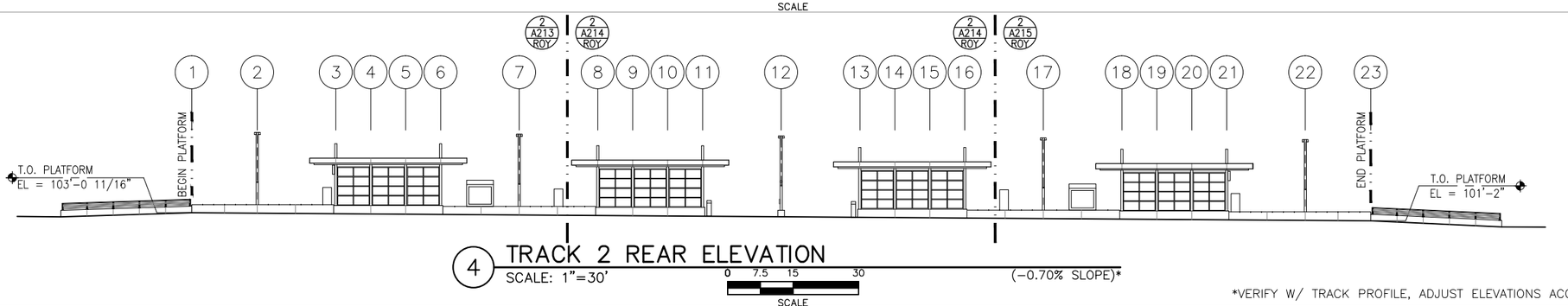
1 TRACK 1 FRONT ELEVATION
SCALE: 1"=30' (−0.70% SLOPE)*
0 7.5 15 30 SCALE



2 TRACK 1 REAR ELEVATION
SCALE: 1"=30' (−0.70% SLOPE)*
0 7.5 15 30 SCALE



3 TRACK 2 FRONT ELEVATION
SCALE: 1"=30' (−0.70% SLOPE)*
0 7.5 15 30 SCALE



4 TRACK 2 REAR ELEVATION
SCALE: 1"=30' (−0.70% SLOPE)*
0 7.5 15 30 SCALE

*VERIFY W/ TRACK PROFILE, ADJUST ELEVATIONS ACCORDINGLY

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

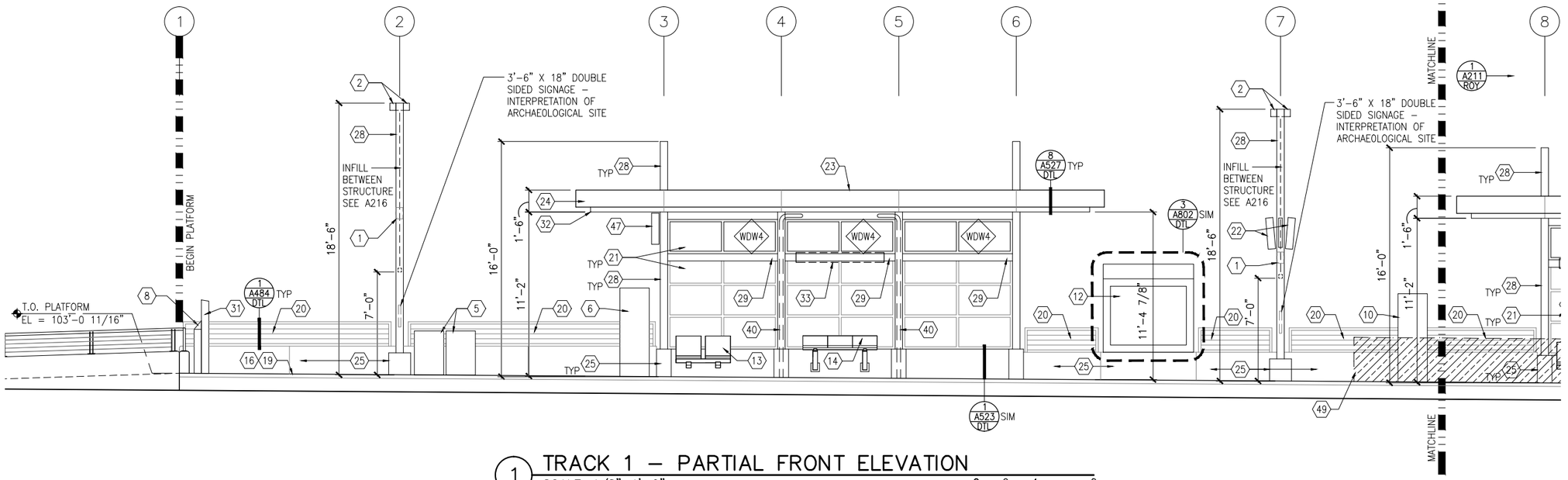
CIVIL - VOLUME 11D
ROYALSTON STATION
ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-ELV-200

SHEET 337 OF 394

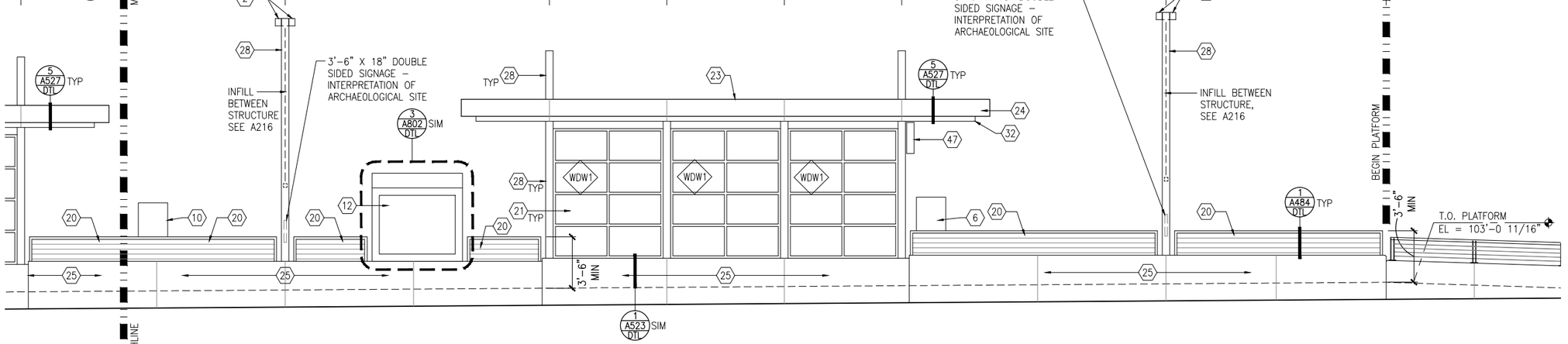
Jan, 18 2016 11:35 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-ELV-200.dwg By: V-TroutPD



1 TRACK 1 – PARTIAL FRONT ELEVATION

SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



2 TRACK 1 – PARTIAL REAR ELEVATION

SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

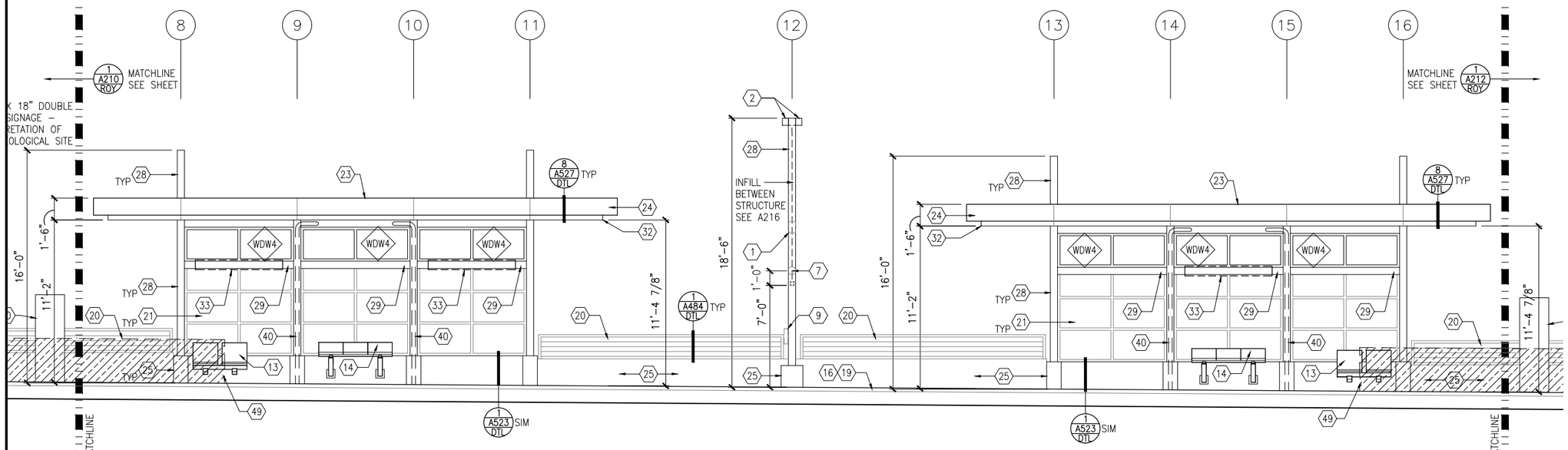
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 1 - SOUTH PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-ELV-210

SHEET 338 OF 394

Jan, 18 2016 11:36 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-ELV-210.dwg By: V-TroutPD

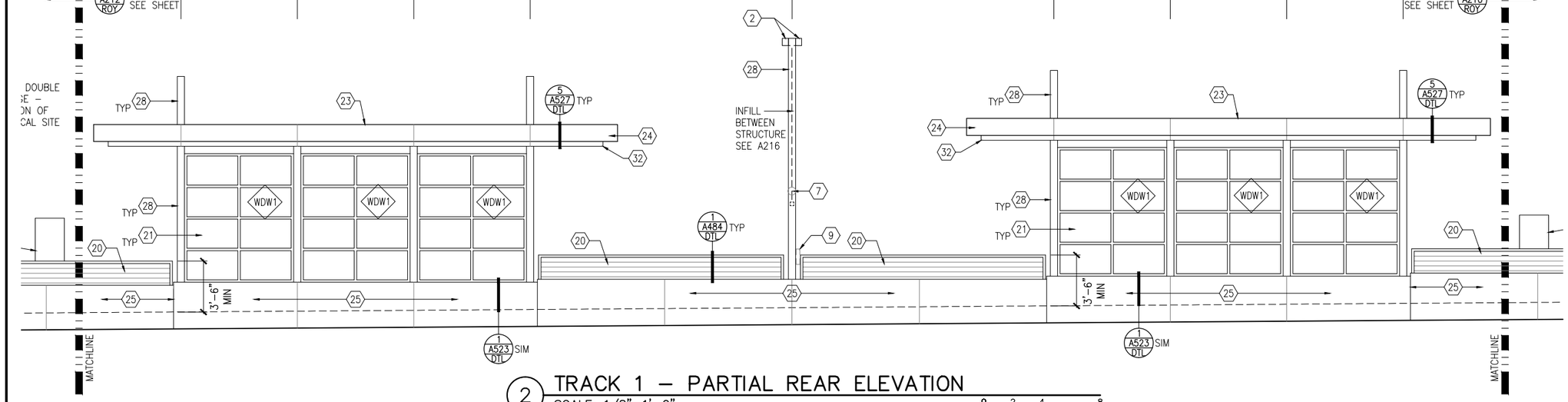


1 TRACK 1 – PARTIAL FRONT ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE



2 TRACK 1 – PARTIAL REAR ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8

SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

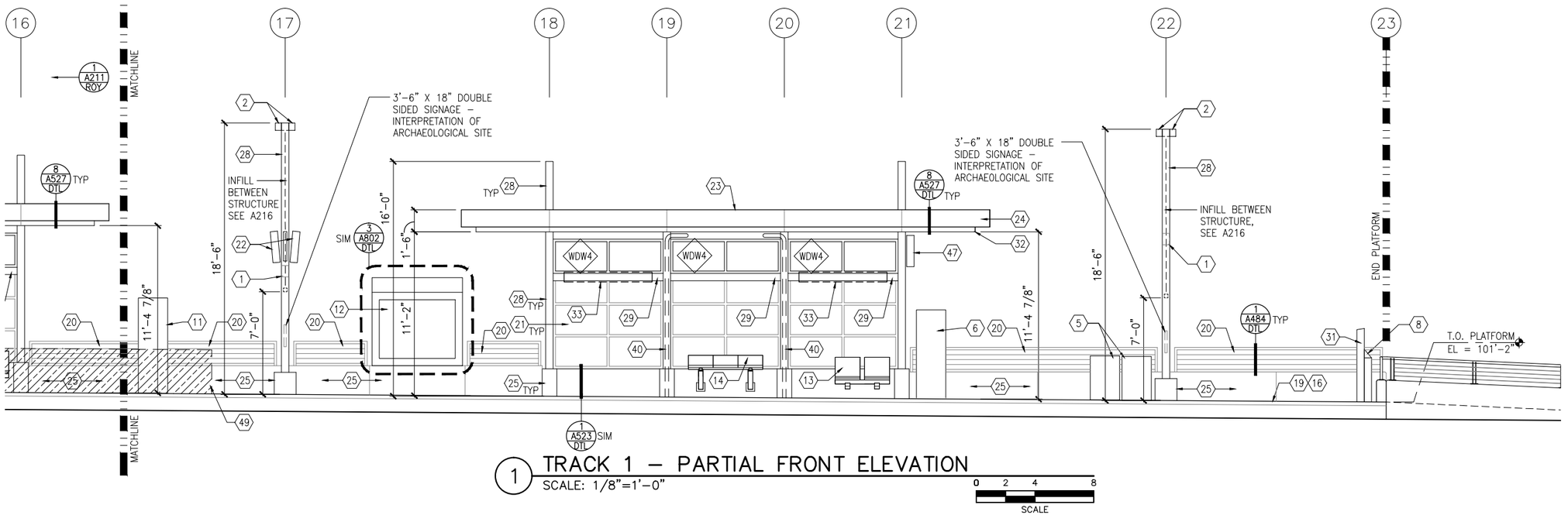
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 1 - MIDDLE PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-ELV-211

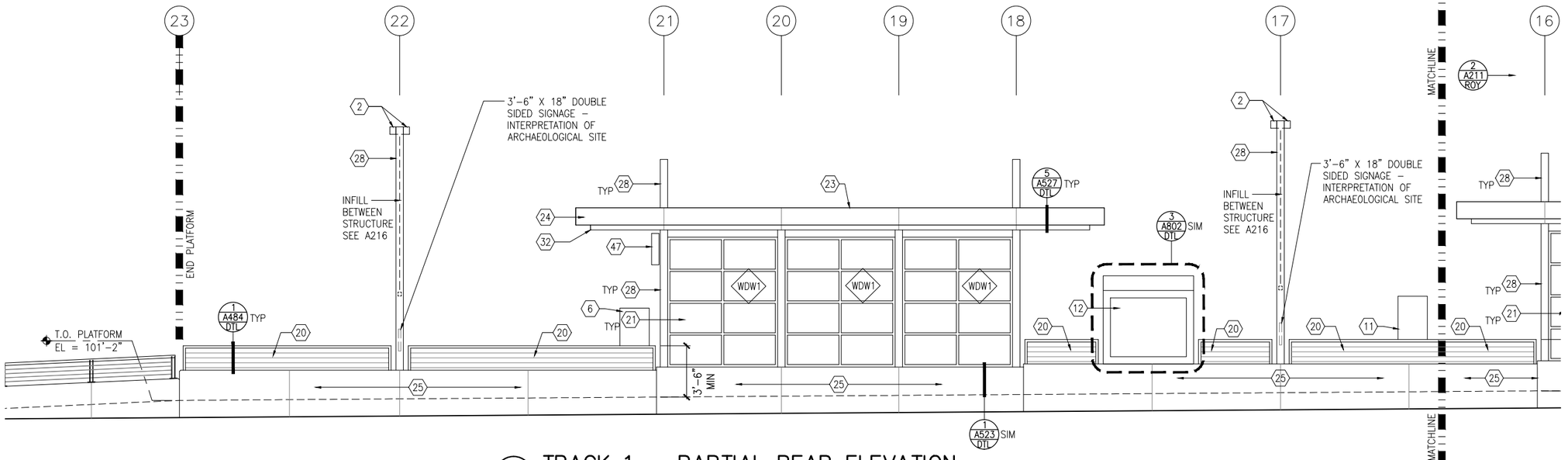
SHEET 339 OF 394

Jan. 18 2016 11:36 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-ELV-211.dwg By: V-TroutPD



1 TRACK 1 – PARTIAL FRONT ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 1 – PARTIAL REAR ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

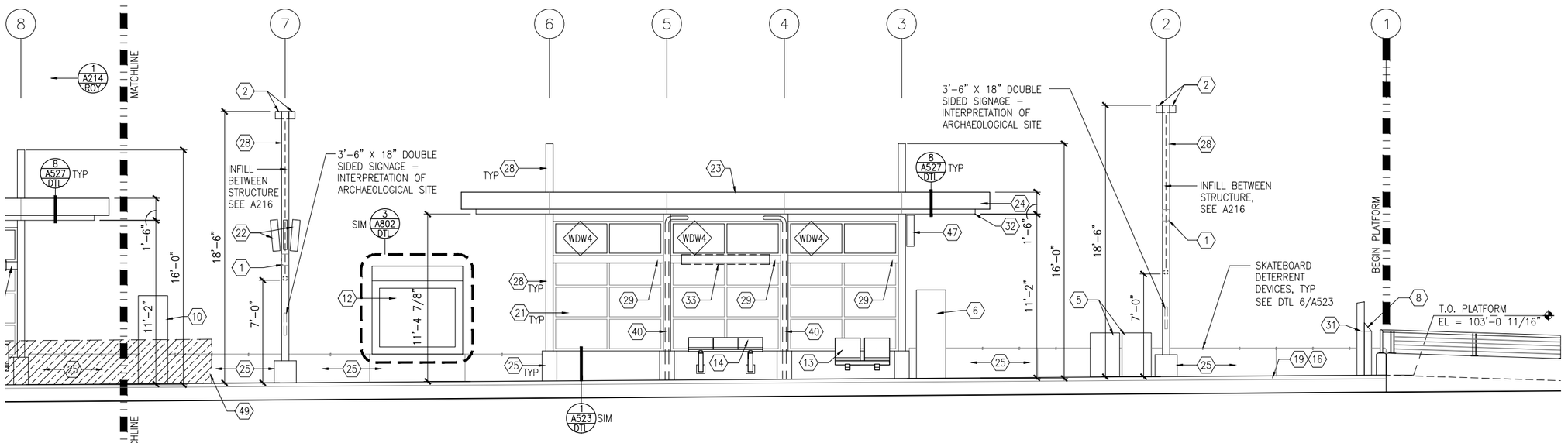
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 1 - NORTH PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-ELV-212

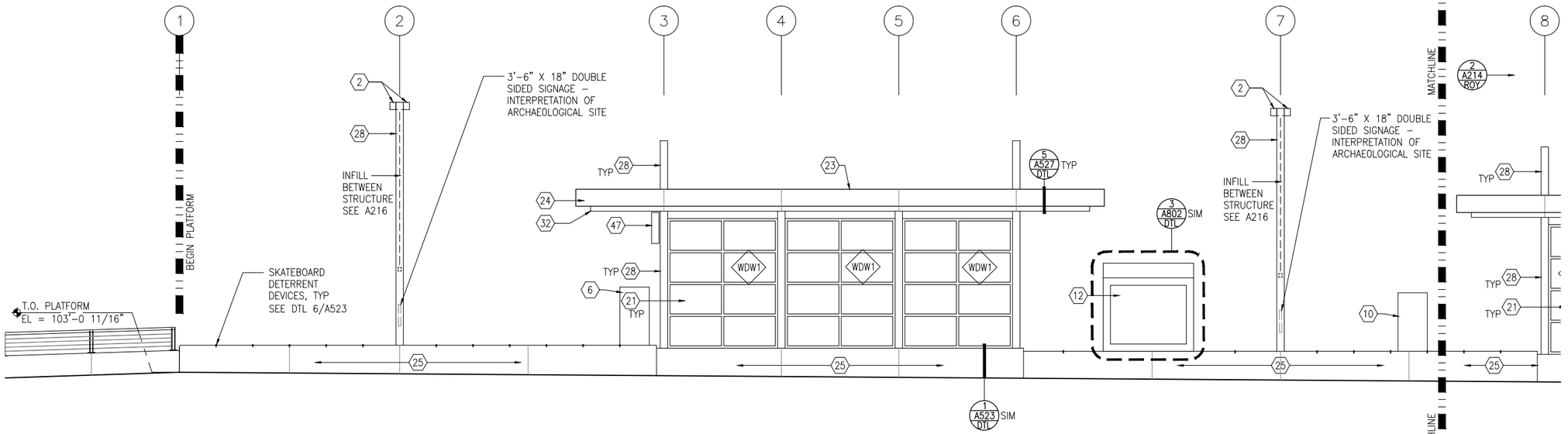
SHEET 340 OF 394

Jan, 18 2016 11:36 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-ELV-212.dwg By: V-TroutPD



1 TRACK 2 – PARTIAL FRONT ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL REAR ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
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33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

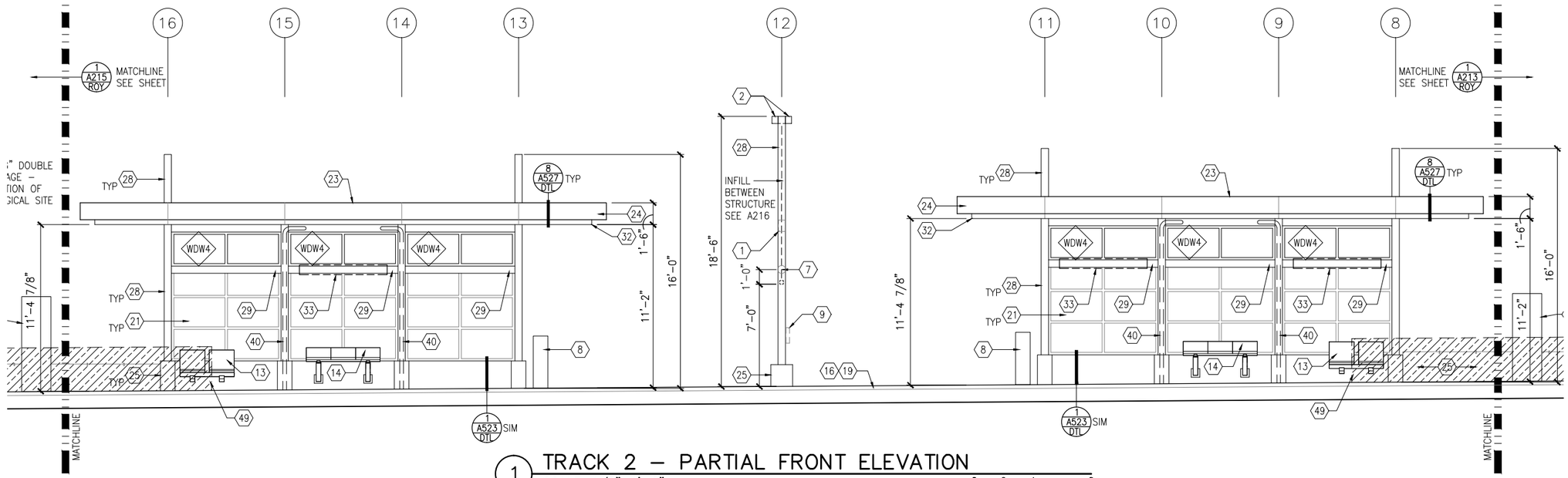
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 2 - SOUTH PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-ELV-213

SHEET 341 OF 394

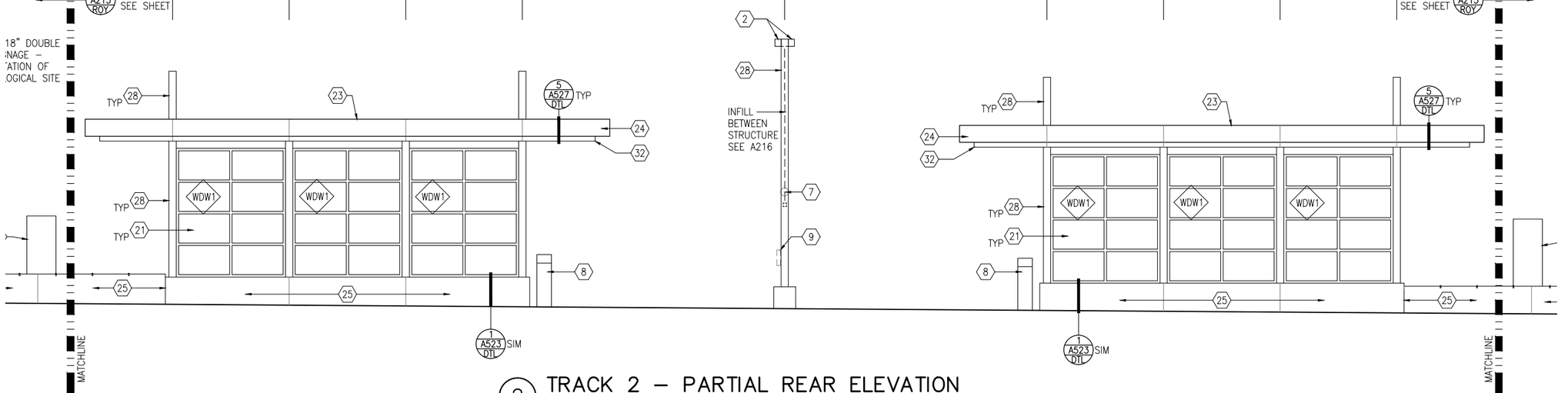
Jan. 18 2016 11:37 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-ELV-213.dwg By: V-TroutPD



1 TRACK 2 – PARTIAL FRONT ELEVATION

SCALE: 1/8"=1'–0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL REAR ELEVATION

SCALE: 1/8"=1'–0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

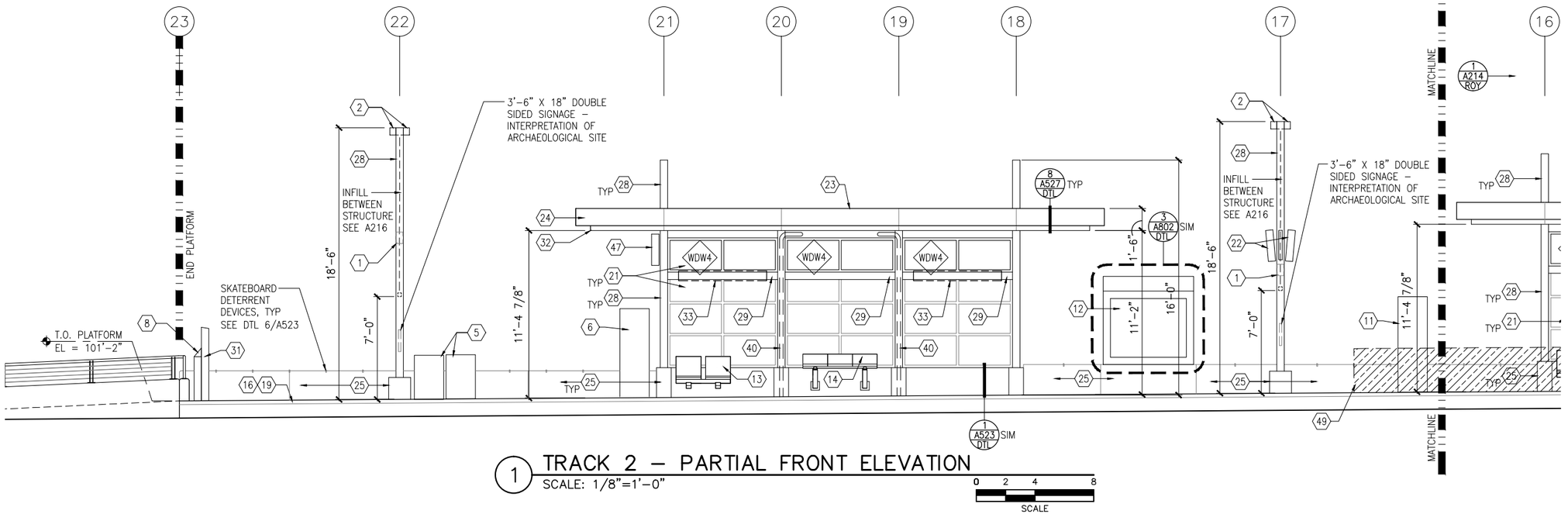
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 2 - MIDDLE PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-ELV-214

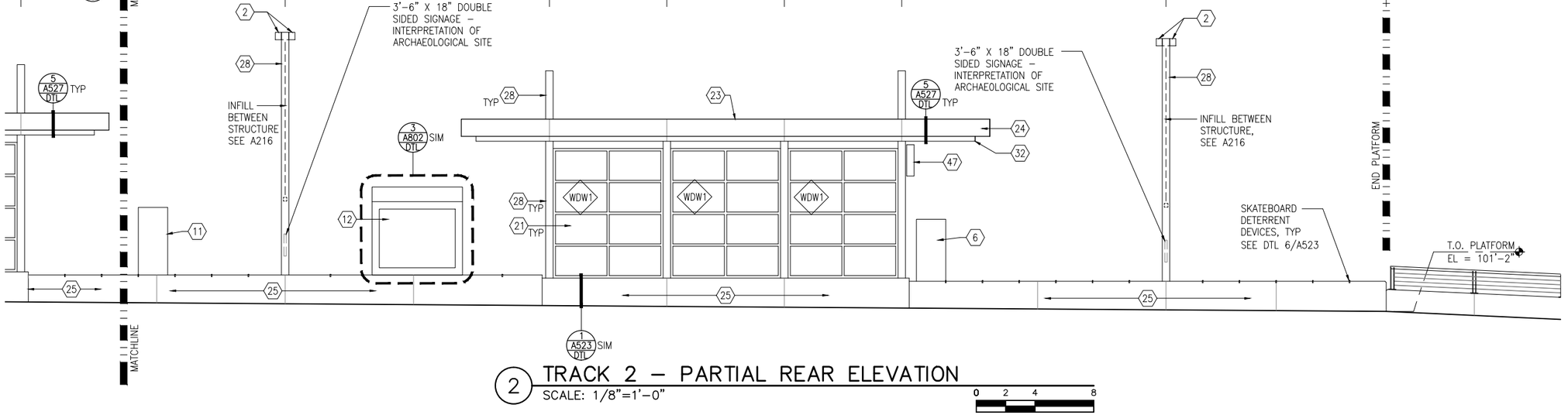
SHEET 342 OF 394

Jan, 18 2016 11:37 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-ELV-214.dwg By: V-TroutPD



1 TRACK 2 – PARTIAL FRONT ELEVATION
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



2 TRACK 2 – PARTIAL REAR ELEVATION
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

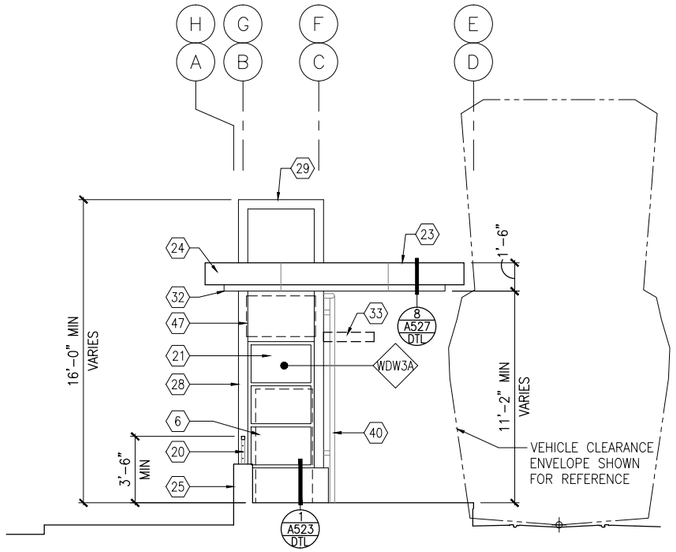
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 2 - NORTH PARTIAL ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-ELV-215

SHEET 343 OF 394

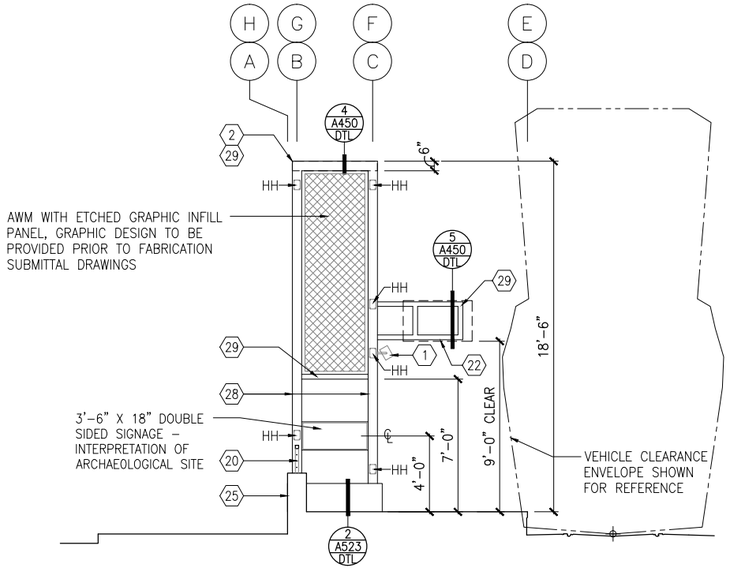
Jan, 18 2016 11:38 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-ELV-215.dwg By: V-TroutPD



1 SIDE ELEVATION

SCALE: 1/8"=1'-0"

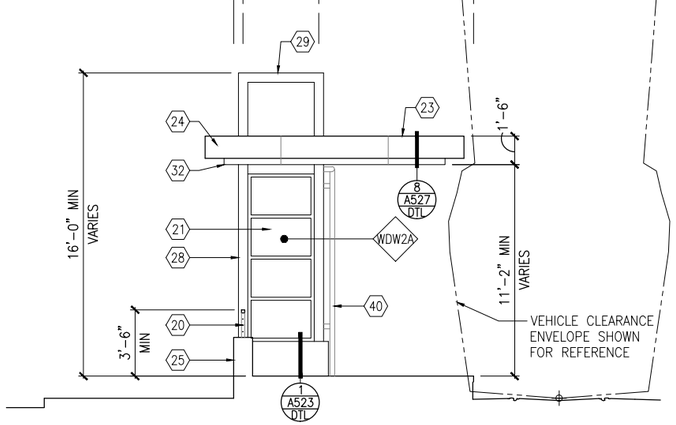
0 2 4 8
SCALE



2 SIDE ELEVATION

SCALE: 1/8"=1'-0"

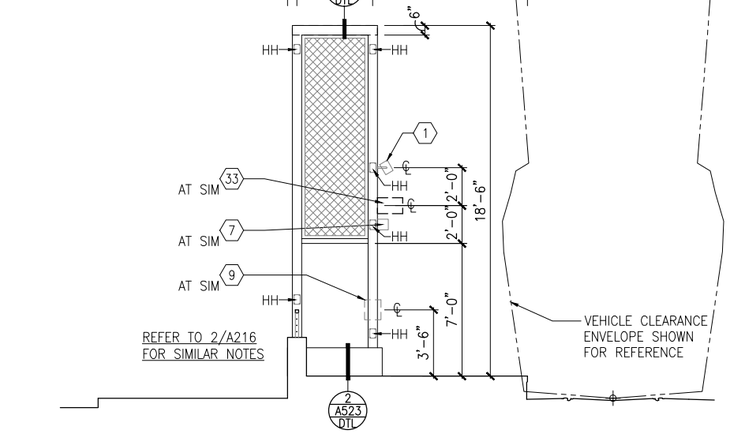
0 2 4 8
SCALE



3 SIDE ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



4 SIDE ELEVATION

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – (#)

NOTE: ALL KEYNOTES MAY NOT BE USED

1. SPEAKER MOUNTED TO STRUCTURE – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. ACCESS RAMP
4. HAND RAIL
5. TRASH/RECYCLING RECEPTACLE, BLAST CONTROLLING TYPE
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. RAIL SMARTCARD VALIDATOR
9. EMERGENCY TELEPHONE – SEE ELEC
10. COMMUNICATION CABINET – SEE ELEC
11. ELECTRICAL CABINET – SEE ELEC
12. INFORMATION KIOSK WITH TRANSIT INFO AND ADVERTISING
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYS
16. INTEGRAL COLOR CONCRETE PLATFORM
17. CANOPY ABOVE
18. SHELTER: WINDSCREEN, LIGHTS, AND INFRARED HEATERS – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. INTEGRAL COLOR CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. RIDER ALERT PANEL
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. LIGHTNING ROD – SEE ELECTRICAL
35. PC CONC WALL PANEL
36. CAST IRON DOWNSPOUT – PAINT
37. PRE-FIN. METAL SCUPPER
38. PRE-FINISHED LOUVER
39. LOUVER WITH MOTORIZED DAMPER
40. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
41. DOWNSPOUT NOZZLE – SEE PLUMBING
42. SECONDARY STEEL FRAMING – SEE STRUCTURAL
43. DOOR – SEE DOOR SCHEDULE
44. PC CONC WALKWAY – SEE STRUCT
45. PC CONC STAIR – SEE STRUCT
46. PRE-FINISHED METAL GUTTER
47. FUTURE VARIABLE MESSAGE SIGN LOCATION – SEE ELECTRICAL
48. ALUMINUM CURTAINWALL
49. ADA BETWEEN-CAR BARRIER

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

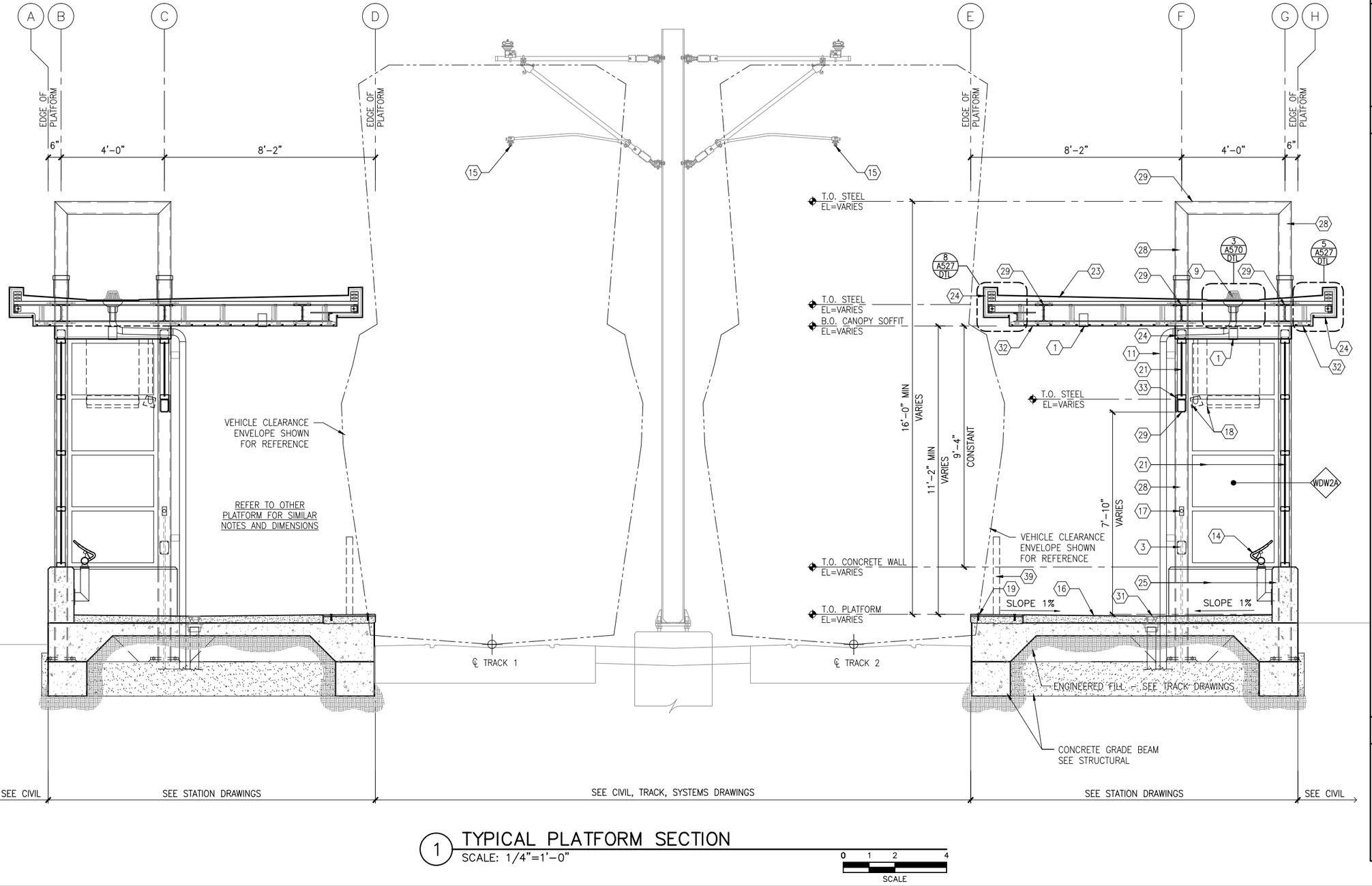
CIVIL - VOLUME 11D
ROYALSTON STATION
SIDE ELEVATIONS

SHEET 344 OF 394

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-ELV-216

Jan, 18 2016 11:38 am v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-ELV-216.dwg By: V-TroutPD



1 TYPICAL PLATFORM SECTION

SCALE: 1/4"=1'-0"

0 1 2 4
SCALE

GENERAL SHEET NOTES

1. SEE SHEET A010 FOR SPECIFIC FINISH/COLOR AT STATION COMPONENTS
2. SEE ELECTRICAL AND COMMUNICATION DRAWINGS FOR COORDINATION OF EQUIPMENT INSTALLATION
3. SEE VOLUME 11E FOR COMMON DETAILS

KEY NOTES – ⟨#⟩

NOTE: ALL KEYNOTES MAY NOT BE USED

1. LIGHT RECESSED IN SOFFIT – SEE ELECTRICAL
2. LIGHT MOUNTED TO STRUCTURE – SEE ELECTRICAL
3. HAND HOLE IN STEEL STRUCTURE
4. HAND RAIL
5. SECURITY CAMERA – SEE ELEC
6. TICKET VENDING MACHINE – SEE ELEC
7. EMERGENCY TELEPHONE LIGHT – SEE ELECTRICAL
8. EMERGENCY TELEPHONE – SEE ELEC
9. ROOF DRAIN – SEE PLUMBING
10. PRE-FINISHED METAL GUTTER
11. PAINTED CAST IRON RAIN WATER LEADER – SEE PLUMBING
12. PRE-FINISHED METAL SCUPPER
13. BENCH
14. LEANING RAIL
15. OVERHEAD CONTACT SYSTEM – SEE SYSTEMS (NIC)
16. CONCRETE PLATFORM
17. HEATER CONTROL – SEE ELEC
18. INFRARED HEATER – SEE ELEC
19. DETECTABLE WARNING AT BOARDING EDGE
20. GUARD RAIL AND SAFETY SCREEN
21. ALUMINUM STOREFRONT AND GLASS WINDOW SYSTEM
22. VARIABLE MESSAGE SIGN – SEE ELEC
23. ROOFING – REFER TO ROOF PLAN FOR ROOFING TYPE
24. ALUMINUM COMPOSITE PANEL SOFFIT AND FASCIA
25. CONCRETE WALL
26. TRANSLUCENT PLASTIC PANEL
27. ARCHITECTURAL WOVEN MESH
28. STEEL COLUMN – SEE STRUCTURAL
29. STEEL BEAM – SEE STRUCTURAL
30. WALL HYDRANT – SEE PLUMBING
31. AREA DRAIN – SEE PLUMBING
32. EXTERIOR LINEAR METAL CEILING SOFFIT AND FASCIA
33. STATION SIGNAGE
34. PC CONC WALKWAY – SEE STRUCT
35. PC CONC STAIR – SEE STRUCT
36. PC CONC WALL PANEL
37. SECONDARY STEEL FRAMING – SEE STRUCTURAL
38. COMPOSITE ALUM PANEL
39. ADA BETWEEN-CAR BARRIER
40. ALUMINUM CURTAINWALL

LEGEND

- CIP CONCRETE
- ARCHITECTURAL CONCRETE
- R– ROOF TYPE – SEE A150

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

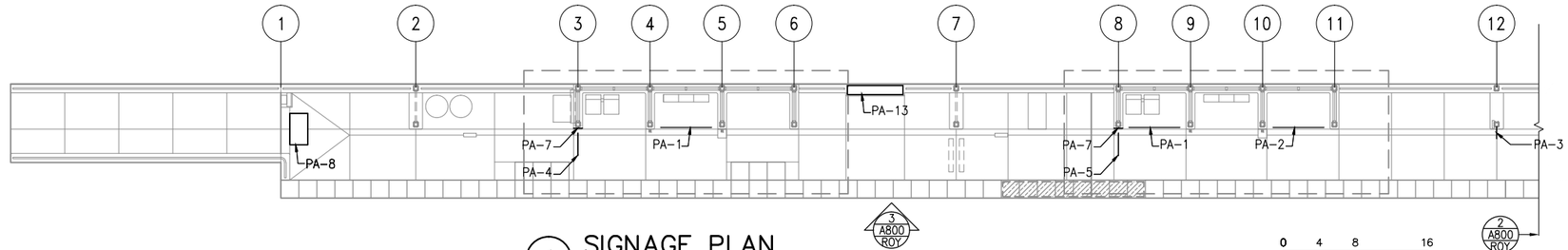
CIVIL - VOLUME 11D
ROYALSTON STATION
TYPICAL PLATFORM SECTION

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-SCT-300

SHEET 345 OF 394

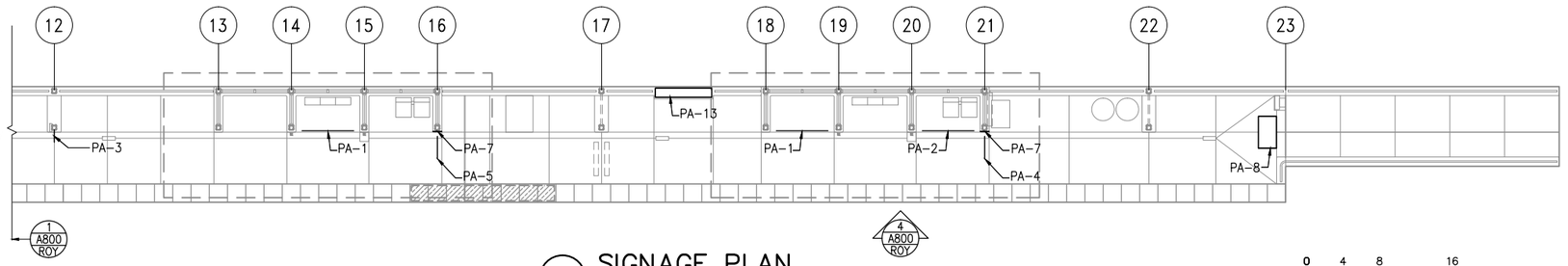
Jan. 18 2016 11:39 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-SCT-300.dwg By: V-TroutPD



1 SIGNAGE PLAN
SCALE: 1/16"=1'-0"

NOTE: TRACK 2 PLATFORM SIM

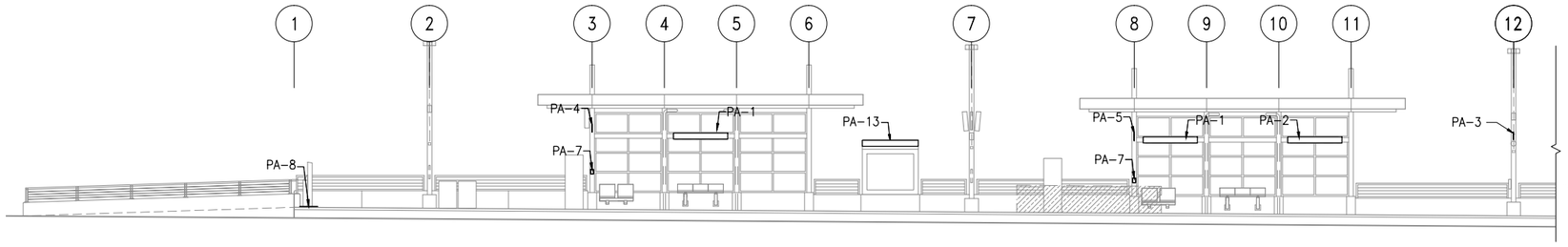
0 4 8 16
SCALE



2 SIGNAGE PLAN
SCALE: 1/16"=1'-0"

NOTE: TRACK 2 PLATFORM SIM

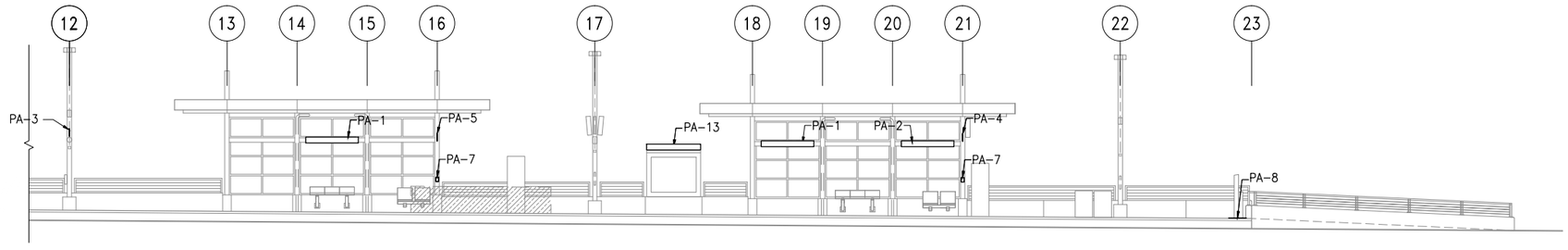
0 4 8 16
SCALE



3 SIGNAGE ELEVATION
SCALE: 1/16"=1'-0"

NOTE: TRACK 2 PLATFORM SIM

0 4 8 16
SCALE



4 SIGNAGE ELEVATION
SCALE: 1/16"=1'-0"

NOTE: TRACK 2 PLATFORM SIM

0 4 8 16
SCALE

GENERAL SHEET NOTES

1. ALL SIGNAGE MOUNTING HEIGHTS ARE FROM CENTER LINE AT BOTTOM EDGE TO TOP OF PLATFORM
2. FOR SIGNS PA-1, PA-4, PA-5 SEE SHEET DTL A801 FOR MOUNTING
3. FOR SIGNS PA-6, PA-12, PA-13, PA-14, PA-15, PA-16 SEE KIOSK AND CABINET DETAILS FOR MOUNTING
4. SEE VOLUME 11E FOR COMMON DETAILS

SIGNAGE KEY

PA-1 PA-2	1 A801 DTL
PA-3 PA-4 PA-5	2 A801 DTL
PA-6	3 A801 DTL
PA-7	4 A801 DTL
PA-8	5 A801 DTL
PA-12	6 A801 DTL
PA-13 PA-14	7 A801 DTL
PA-15	3 A803 DTL
PA-16	2 A803 DTL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

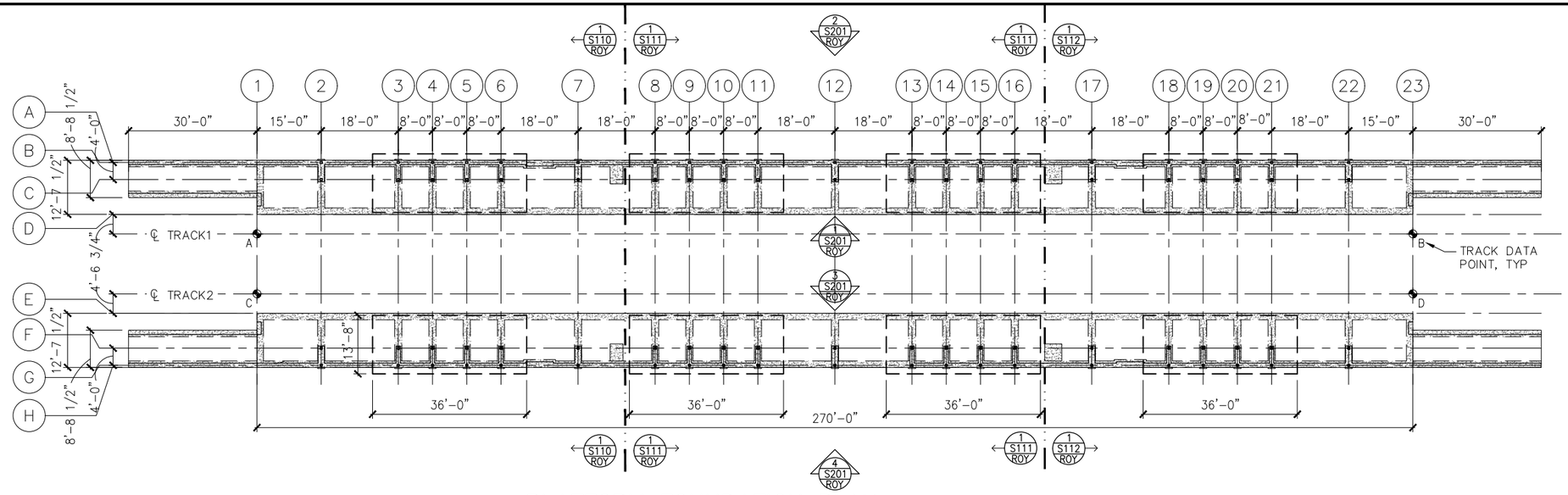
CIVIL - VOLUME 11D
ROYALSTON STATION
SIGNAGE PLANS AND ELEVATIONS

DISCIPLINE: ARCHITECTURE

SHEET NAME: E4-ROY-ARC-SGN-800

SHEET 346 OF 394

Jan, 18 2016 11:40 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ARCH\ROYALSTON STATION\E4-ROY-ARC-SGN-800.dwg By: V-TroutPD



1 PLATFORM FOUNDATION PLAN

SCALE: 1:30

0 7.5 15 30
SCALE

TRACK DATA

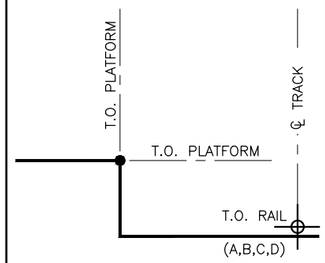
ELEV 100'-0" (LOCATION ON PLAN)

TRACK 1 EL 100'-0"= 841.63 (PT 'B')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
A	843.52	1944+28.50	
B	841.63	1946+98.50	

TRACK 2 EL 100'-0"= 841.63 (PT 'D')

POINT	T.O. RAIL ELEVATION	TRACK 2 STATIONING	
C	843.52	2944+28.50	
D	841.63	2946+98.50	



SECTION DIAGRAM AT PLATFORM EDGE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
PLATFORM FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-PLN-101

SHEET 347 OF 394

Jan, 15 2016 10:30 am K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\ROYALSTON STATION\E4-ROY-STR-PLN-101.dwg By: jordanl

ROYALSTON

ROYALSTON STATION PLATFORM

REFERENCE GRID	DISTANCE FROM BEGIN PLATFORM (FT)	T.O. TOPPING ELEVATION	T.O. STR. SLAB ELEVATION	T.O. TOPPING ELEVATION AT "L7"	B.O. BASEPLATE ELEVATION	T.O. WALL ELEVATION	T.O. BACKWALL ELEVATION	T.O. HSS4X6 ELEVATION	T.O. W8X31 ELEVATION	T.O. HSS6X6X1/2 ELEVATION	H1 (T.O. SLAB TO T.O. WALL) (FT)
1	0	844.69	844.35	844.62			846.53				
2	15	844.58	844.25	844.51	842.83	846.08	846.53			860.58	1.83
3	33	844.46	844.12	844.39	842.71	846.32	846.32	852.82	856.49	860.49	2.20
4	41	844.40	844.07	844.33	842.65	846.32	846.32	852.82	856.49		2.26
5	49	844.34	844.01	844.27	842.59	846.32	846.32	852.82	856.49		2.31
6	57	844.29	843.95	844.22	842.54	846.32	846.32	852.82	856.49	860.49	2.37
WALL TRANSITION POINT 1	**62.75**	**844.25**	**843.91**	**844.18**		**846.11**	**846.11**				**2.20**
WALL TRANSITION POINT 2	**69.25**	**844.20**	**843.87**	**844.13**		**846.11**	**846.11**				**2.25**
7	75	844.16	843.83	844.09	842.41	845.66	846.11			860.16	1.83
8	93	844.04	843.70	843.97	842.29	845.90	845.90	852.40	856.07	860.07	2.20
9	101	843.98	843.65	843.91	842.23	845.90	845.90	852.40	856.07		2.26
10	109	843.92	843.59	843.85	842.17	845.90	845.90	852.40	856.07		2.31
11	117	843.87	843.53	843.80	842.12	845.90	845.90	852.40	856.07	860.07	2.37
12	135	843.74	843.41	843.67	841.99	845.24	845.69			859.74	1.83
13	153	843.62	843.28	843.55	841.87	845.48	845.48	851.98	855.65	859.65	2.20
14	161	843.56	843.23	843.49	841.81	845.48	845.48	851.98	855.65		2.26
15	169	843.50	843.17	843.43	841.75	845.48	845.48	851.98	855.65		2.31
16	177	843.45	843.11	843.38	841.70	845.48	845.48	851.98	855.65	859.65	2.37
17	195	843.32	842.99	843.25	841.57	844.82	845.28			859.32	1.83
WALL TRANSITION POINT 3	**200.75**	**843.28**	**842.95**	**843.21**		**845.28**	**845.28**				**2.33**
WALL TRANSITION POINT 4	**207.25**	**843.24**	**842.90**	**843.17**		**845.28**	**845.28**				**2.37**
18	213	843.20	842.86	843.13	841.45	845.06	845.06	851.56	855.23	859.23	2.20
19	221	843.14	842.81	843.07	841.39	845.06	845.06	851.56	855.23		2.26
20	229	843.08	842.75	843.01	841.33	845.06	845.06	851.56	855.23		2.31
21	237	843.03	842.69	842.96	841.28	845.06	845.06	851.56	855.23	859.23	2.37
22	255	842.90	842.57	842.83	841.15	844.40	844.85			858.90	1.83
23	270	842.80	842.46	842.73			844.85				

GENERAL NOTES

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2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE C.A.R. PRIOR TO PROCEEDING WITH WORK.

REFERENCE TABLE NOTES

1. TOP OF PLATFORM ELEVATION (TOPPING SLAB) SHALL BE 4"(±) ABOVE TOP OF STRUCTURAL SLAB ELEVATION AS INDICATED IN TABLE.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

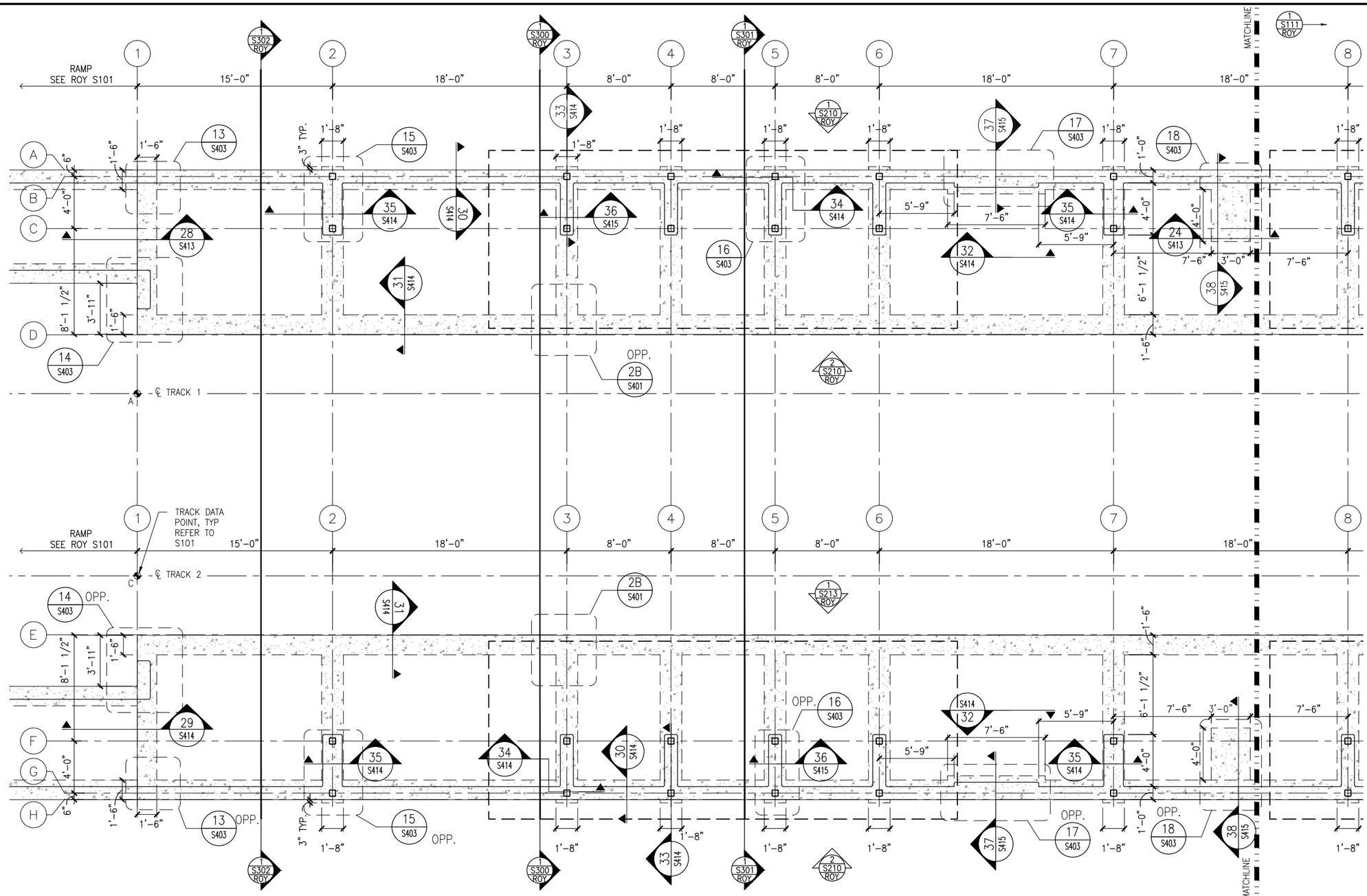
CIVIL - VOLUME 11D
ROYALSTON STATION
STATION REFERENCE TABLE

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-SCH-102

SHEET 348 OF 394

Jan. 15 2016 10:30 am K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\ROYALSTON STATION\E4-ROY-STR-SCH-102.dwg By: jordanl



1 SOUTH PARTIAL FOUNDATION PLAN
SCALE:1/8"=1'-0"

SCALE 0 2 4 8

GENERAL NOTES

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3. SEE VOLUME 11E FOR COMMON DETAILS.

FLOOR PLAN NOTES

1. FOR HEIGHTS AND LOCATIONS OF KNEE WALLS, SEE ARCH. DWGS.
2. FOR TYPICAL COLUMN BASE PLATE DETAILS SEE DWG. XXXXXX.
3. "GB-X" INDICATES GRADE BEAM MARK.
4. SLAB ON GRADE SHALL BEAR ON ENGINEERED FILL, REINF. W/ 4x4-W4.0xW4.0 W.W.F. TOP, W/ 1" CLR. COVER.

SCHEDULES or LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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SOUTHWEST Green Line LRT Extension

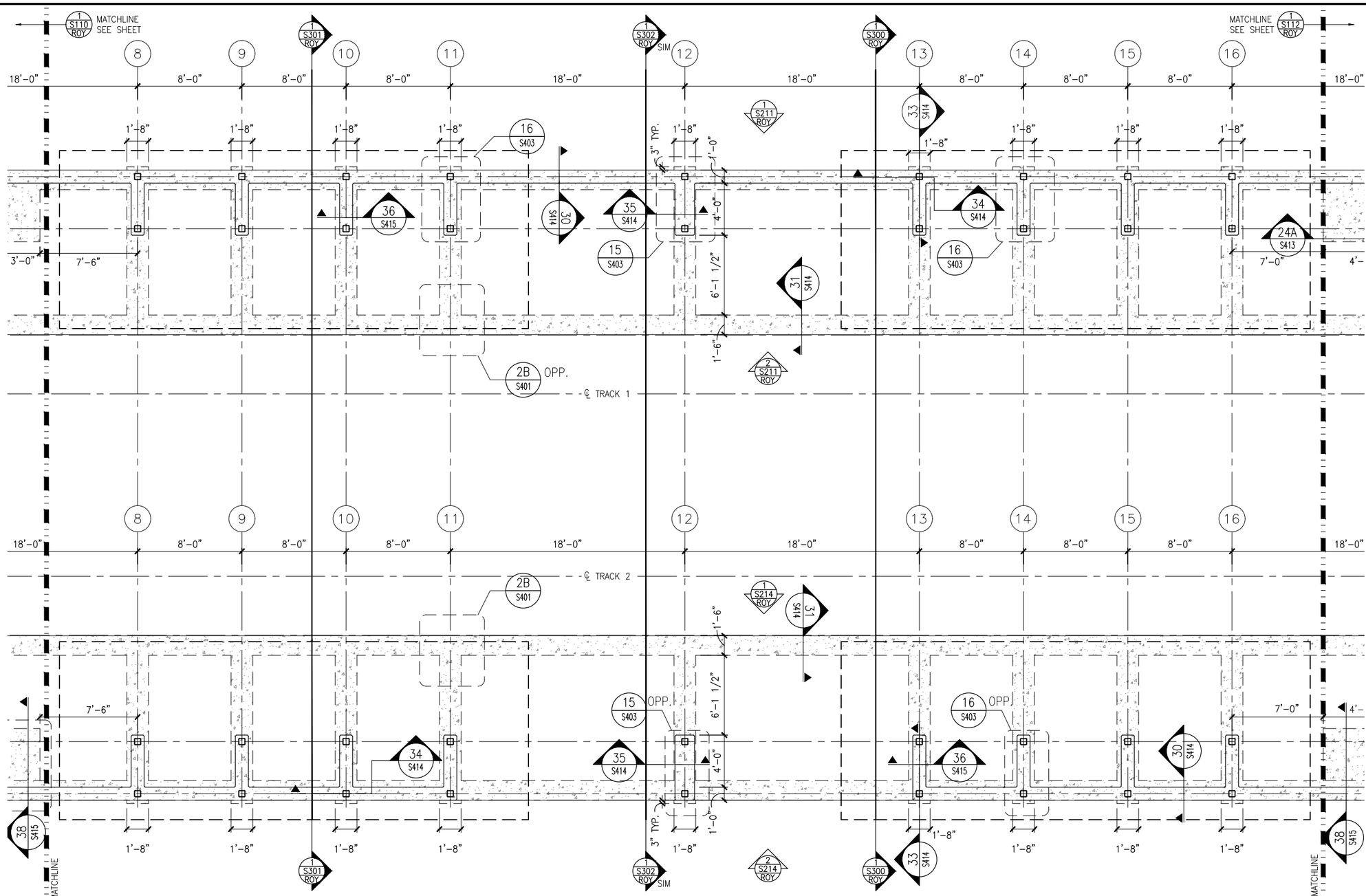
CIVIL - VOLUME 11D
ROYALSTON STATION
SOUTH PARTIAL FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-PLN-110

SHEET 349 OF 394

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1 MIDDLE PARTIAL FOUNDATION PLAN
SCALE:1/8"=1'-0"

0 2 4 8
SCALE

GENERAL NOTES

1. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES, USE PLAN INFORMATION, DIMENSIONS DETAILS AND FIELD VERIFICATION.
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3. SEE VOLUME 11E FOR COMMON DETAILS.

FLOOR PLAN NOTES

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SCHEDULES or LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

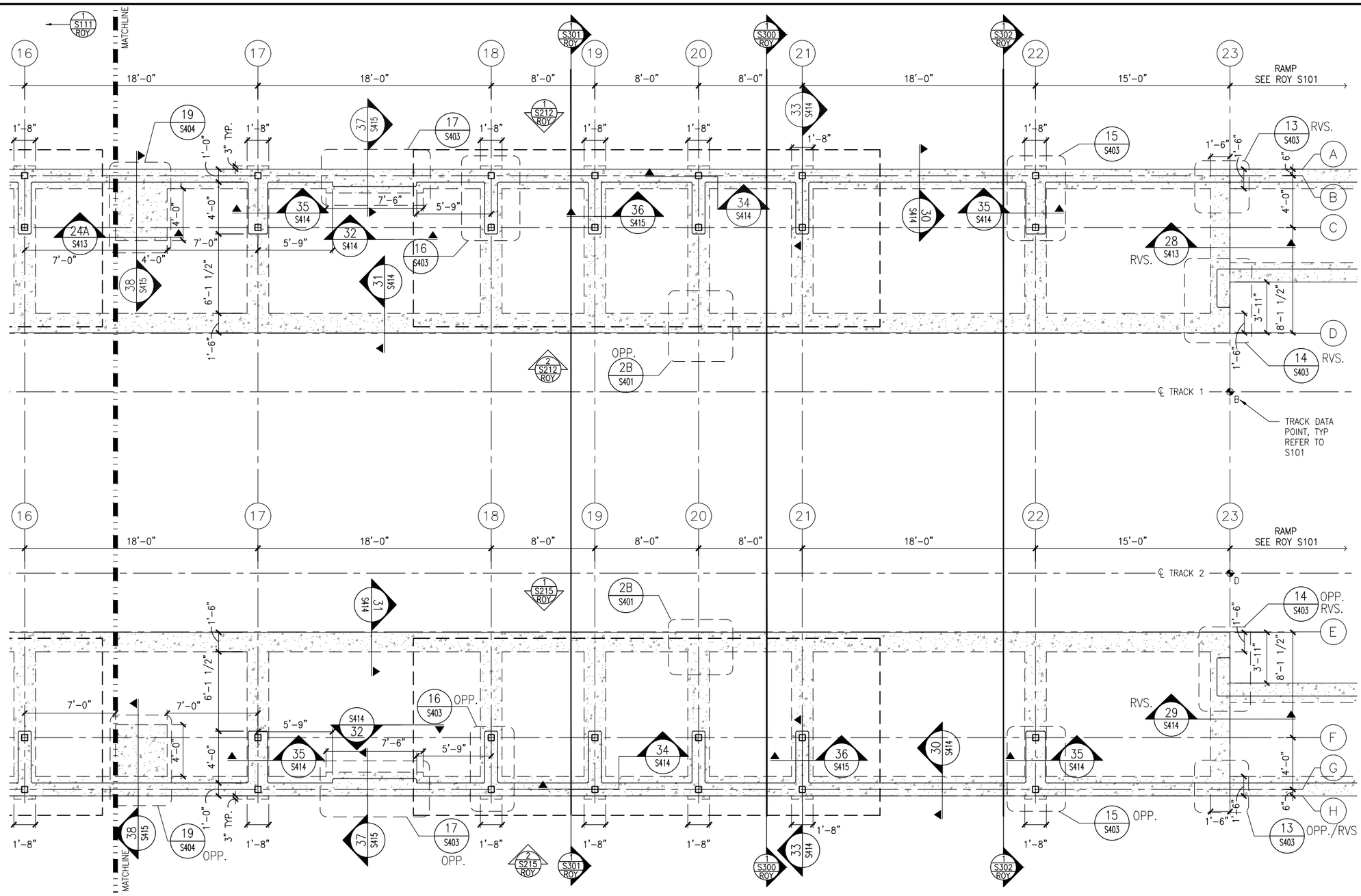
CIVIL - VOLUME 11D
ROYALSTON STATION
MIDDLE PARTIAL FOUNDATION PLAN

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-PLN-111

SHEET 350 OF 394

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1 NORTH PARTIAL FOUNDATION PLAN
SCALE:1/8"=1'-0"

SCALE 0 2 4 8

GENERAL NOTES

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3. SEE VOLUME 11E FOR COMMON DETAILS.

FLOOR PLAN NOTES

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4. SLAB ON GRADE SHALL BEAR ON ENGINEERED FILL, REINF. W/ 4x4-W4.0xW4.0 W.W.F. TOP, W/ 1" CLR. COVER.

SCHEDULES or LEGEND

STEEL COLUMN

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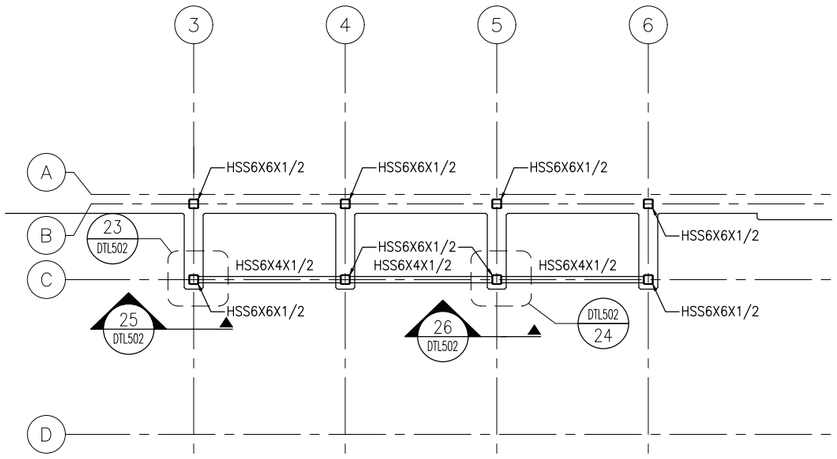
CIVIL - VOLUME 11D
ROYALSTON STATION
NORTH PARTIAL FOUNDATION PLAN

DISCIPLINE: STRUCTURES

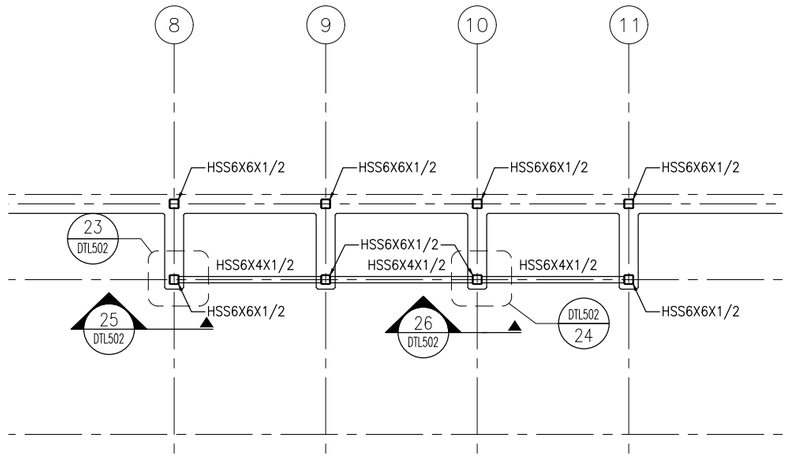
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SHEET 351 OF 394

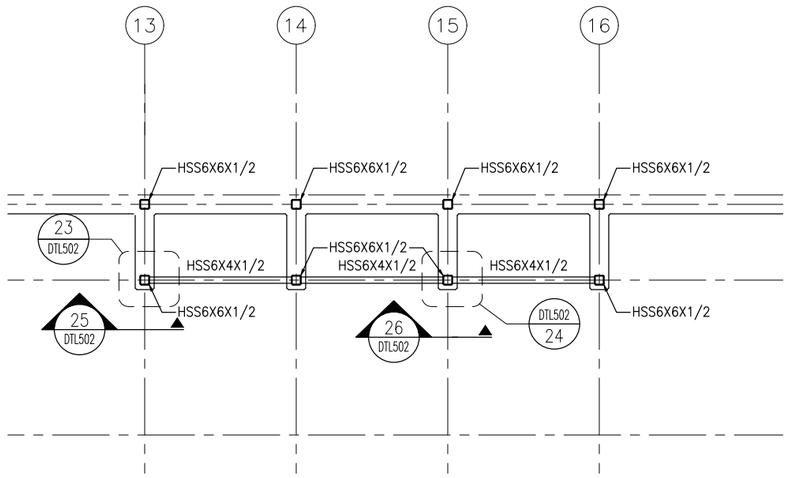
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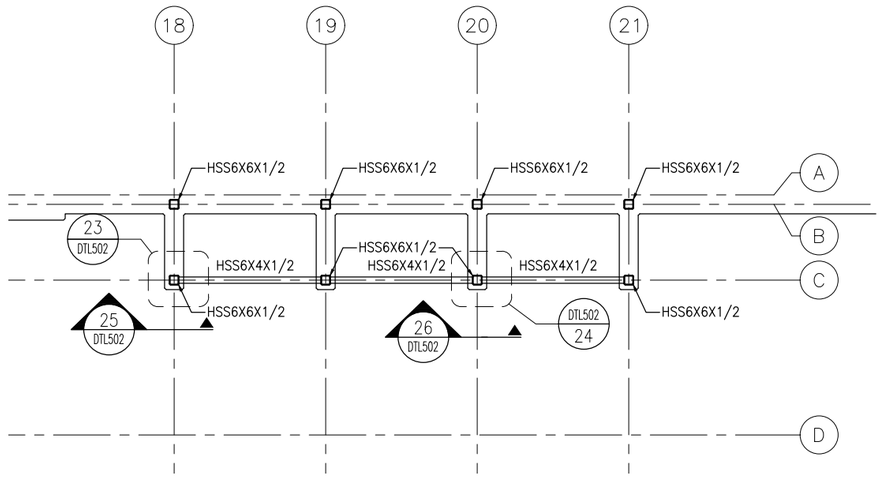
1 INTERMEDIATE FRAMING PLAN – SOUTH CANOPY
SCALE: 1/8"=1'-0"



2 INTERMEDIATE FRAMING PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



3 INTERMEDIATE FRAMING PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



4 INTERMEDIATE FRAMING PLAN – NORTH CANOPY
SCALE: 1/8"=1'-0"

SHEET NOTES

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3. SEE VOLUME 11E FOR COMMON DETAILS.

KEY NOTES

1. [ ] INDICATES SPAN DIRECTION OF ROOF METAL DECK. SEE ARCH. DWGS.
2. [ ] DENOTES PREQUALIFIED SHOP OR FIELD WELDED CONNECTION.
3. BC DENOTES BOLTED CONNECTION, FOR TYPICAL BEAM TO BEAM BOLTED CONNECTIONS AND SIMILAR DETAILS SEE DWG. XXXXXXX & XXXXXXX

LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

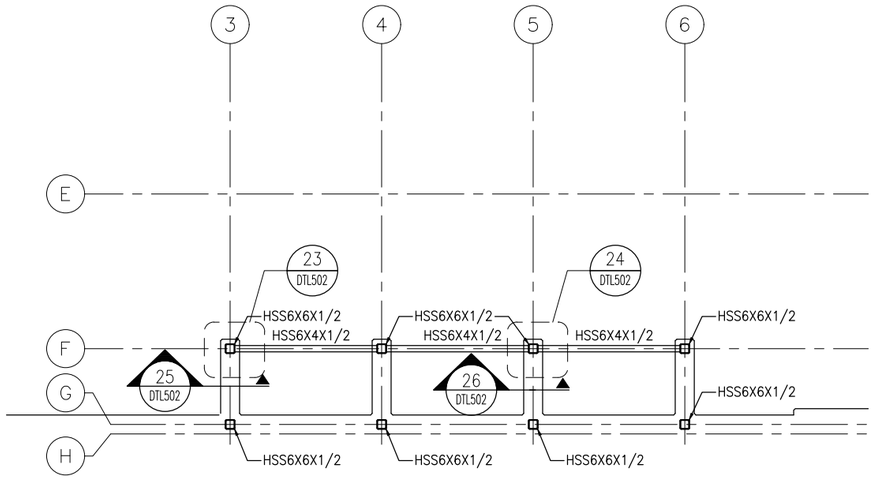
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 1 - INTERMEDIATE FRAMING PLAN

DISCIPLINE: STRUCTURES

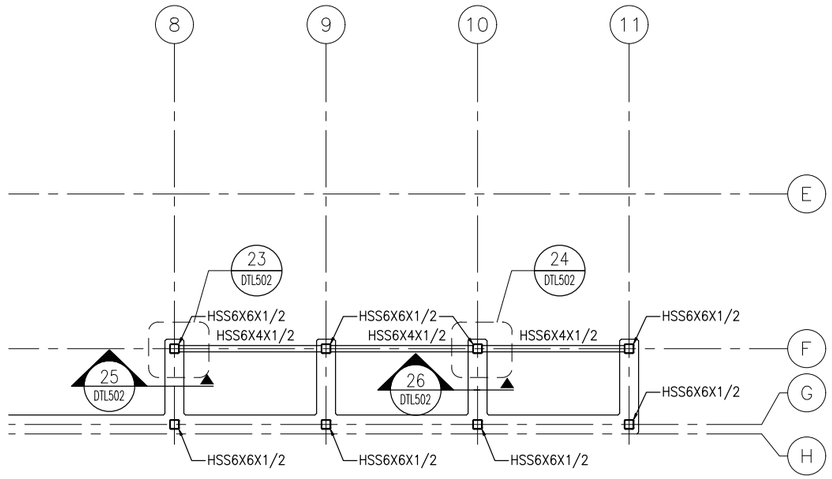
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SHEET 352 OF 394

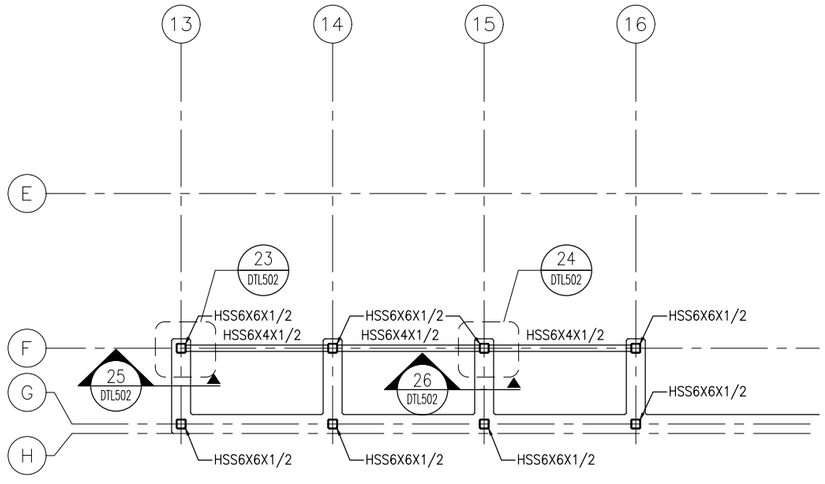
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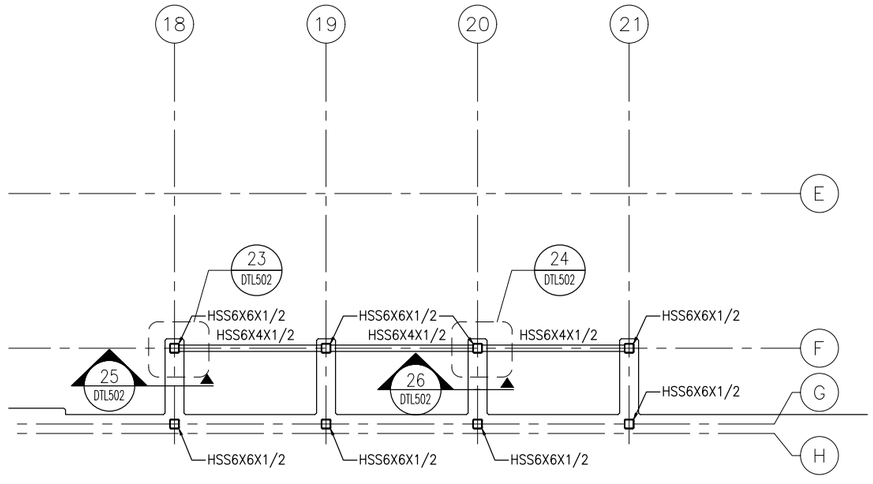
1 INTERMEDIATE FRAMING PLAN – SOUTH CANOPY
SCALE: 1/8"=1'–0"



2 INTERMEDIATE FRAMING PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'–0"



3 INTERMEDIATE FRAMING PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'–0"



4 INTERMEDIATE FRAMING PLAN – NORTH CANOPY
SCALE: 1/8"=1'–0"

SHEET NOTES

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3. SEE VOLUME 11E FOR COMMON DETAILS.

KEY NOTES

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LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

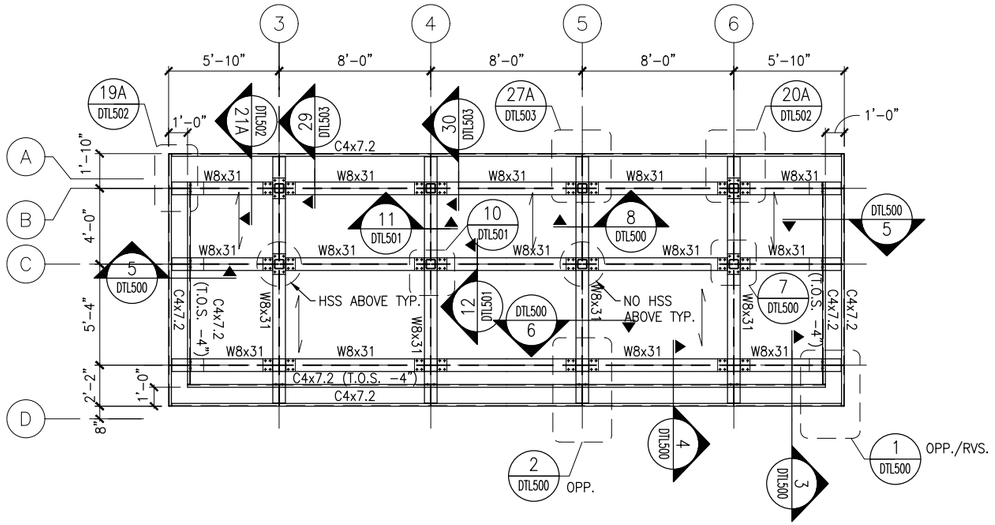
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 2 - INTERMEDIATE FRAMING PLAN

DISCIPLINE: STRUCTURES

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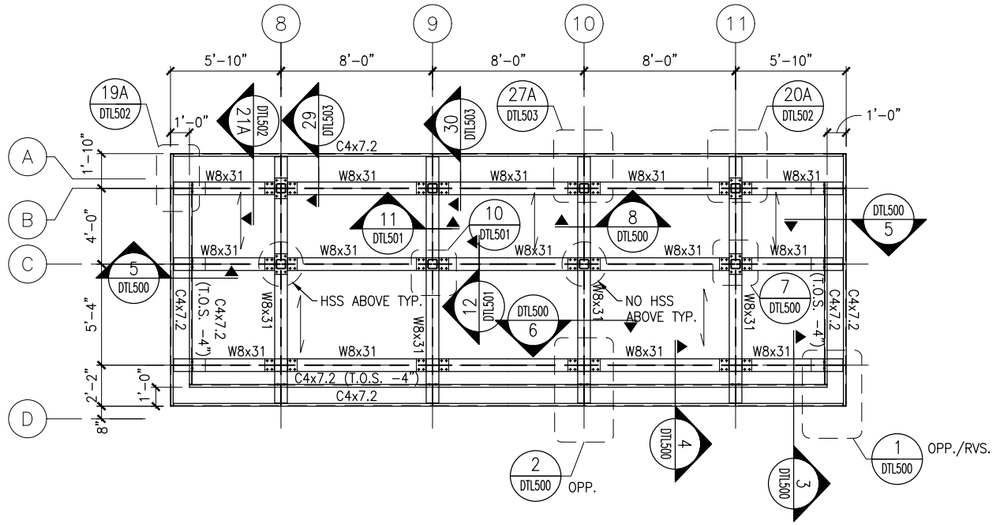
SHEET 353 OF 394

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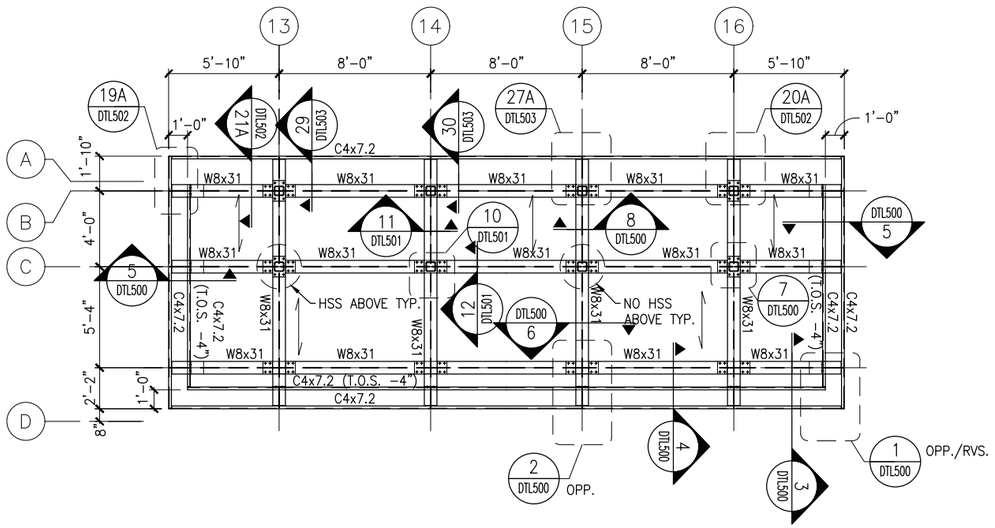
1 FRAMING PLAN – SOUTH CANOPY
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE



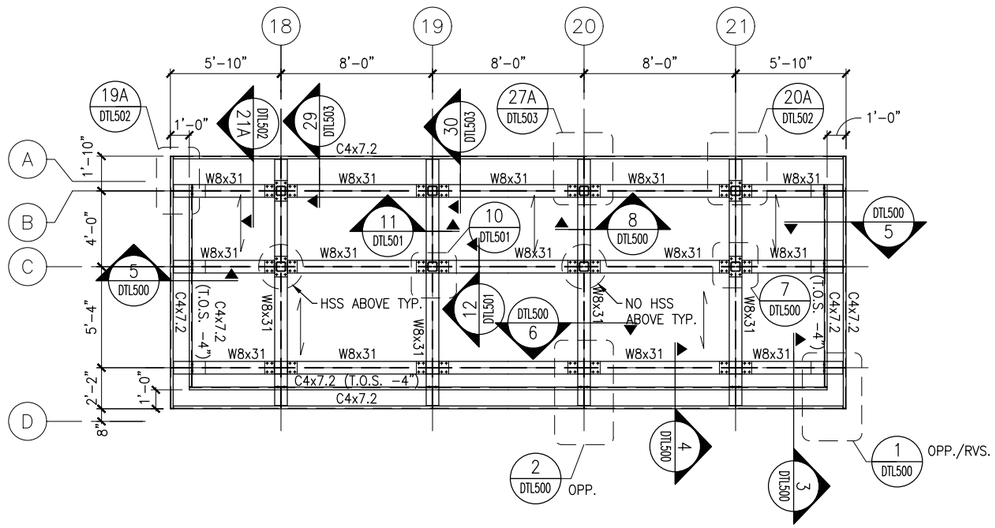
2 FRAMING PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE



3 FRAMING PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE



4 FRAMING PLAN – NORTH CANOPY
SCALE: 1/8"=1'–0"

0 2 4 8
SCALE

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LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

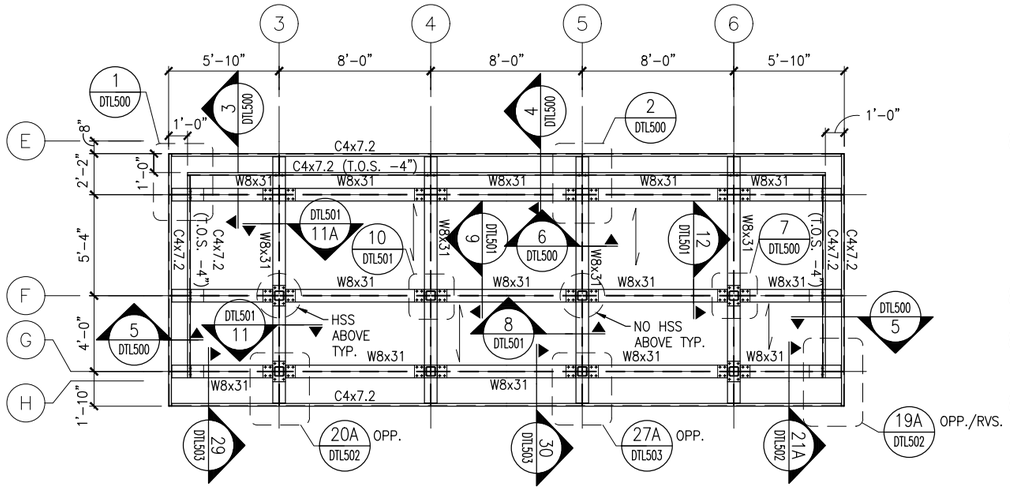
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 1 - ROOF FRAMING PLANS

SHEET 354 OF 394

DISCIPLINE: STRUCTURES

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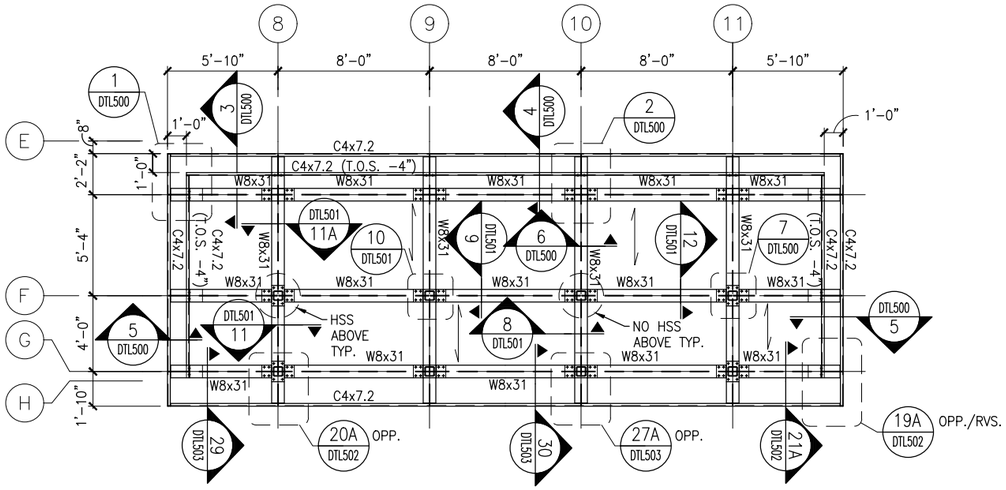
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1 FRAMING PLAN – SOUTH CANOPY

SCALE: 1/8"=1'-0"

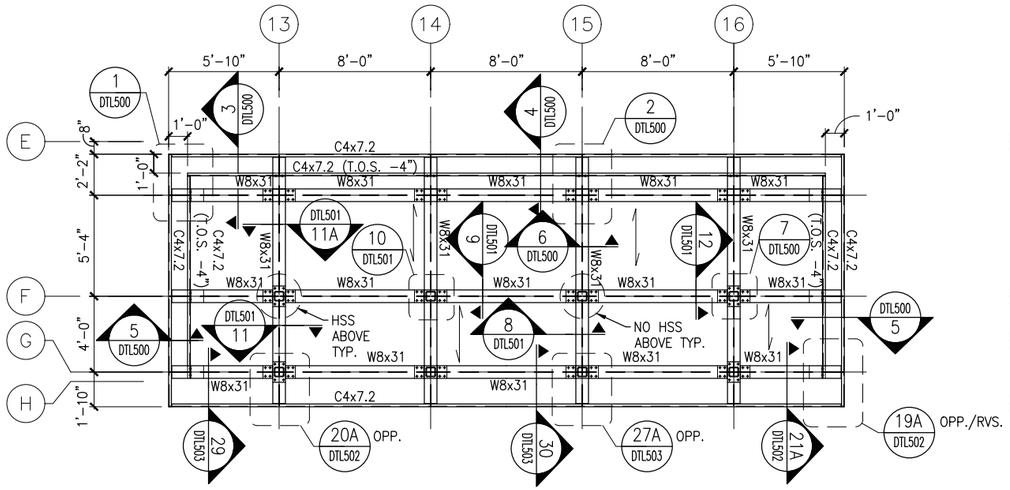
0 2 4 8 SCALE



2 FRAMING PLAN – MIDDLE CANOPY

SCALE: 1/8"=1'-0"

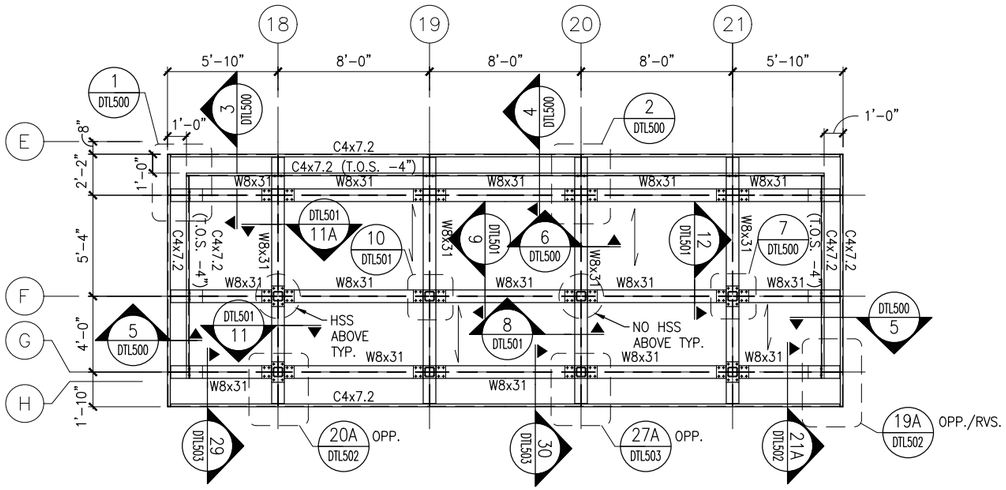
0 2 4 8 SCALE



3 FRAMING PLAN – MIDDLE CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8 SCALE



4 FRAMING PLAN – NORTH CANOPY

SCALE: 1/8"=1'-0"

0 2 4 8 SCALE

SHEET NOTES

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LEGEND

STEEL COLUMN

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

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SOUTHWEST Green Line LRT Extension

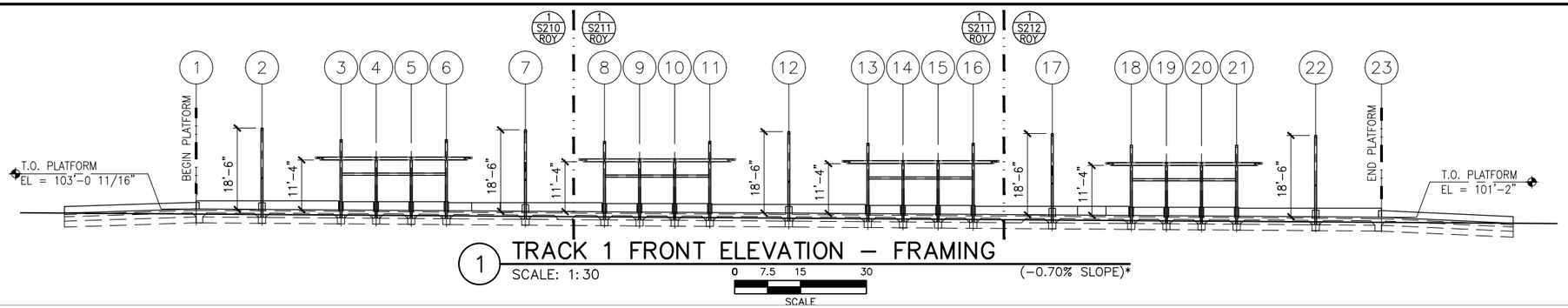
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 2 - ROOF FRAMING PLANS

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-PLN-151

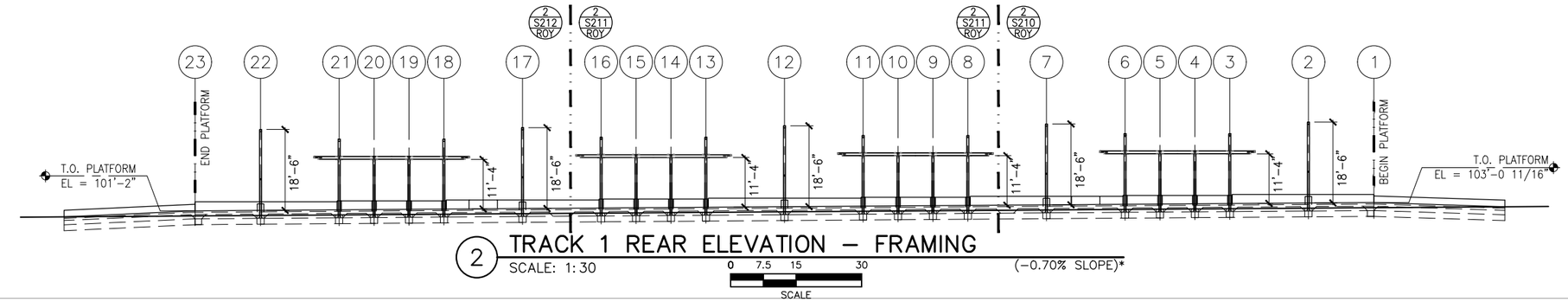
SHEET 355 OF 394

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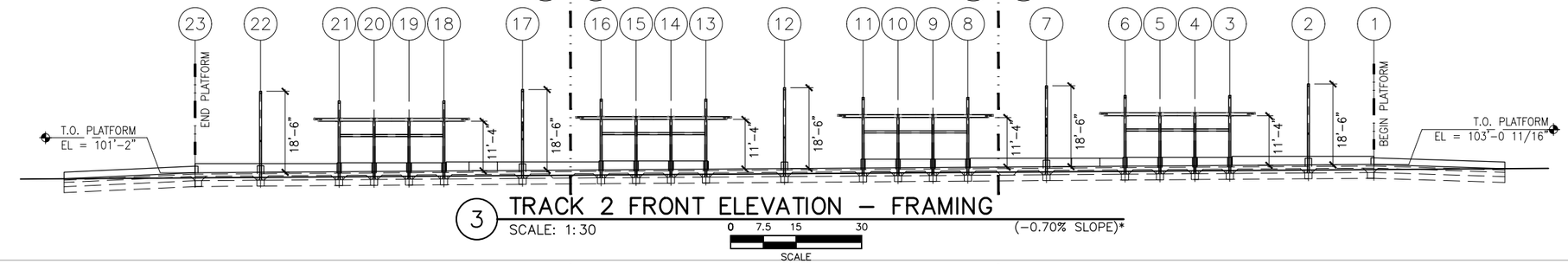
1 TRACK 1 FRONT ELEVATION – FRAMING

SCALE: 1:30 0 7.5 15 30 SCALE (–0.70% SLOPE)*



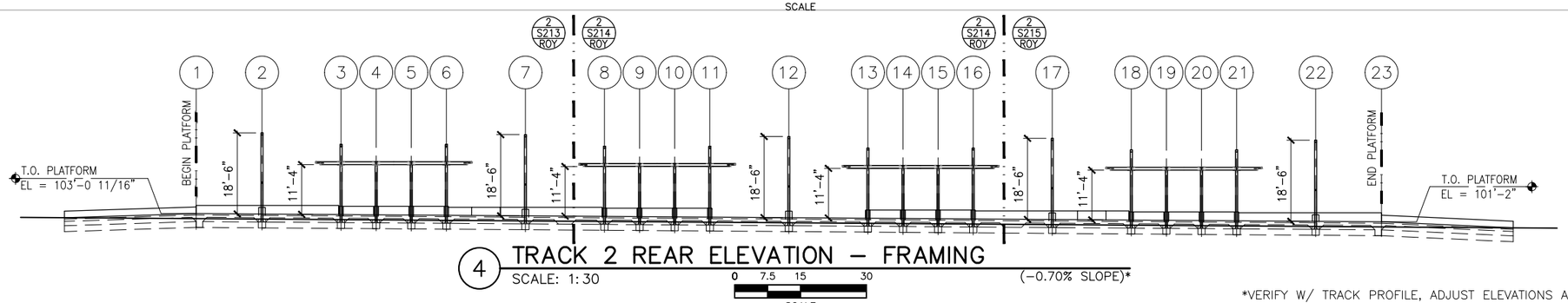
2 TRACK 1 REAR ELEVATION – FRAMING

SCALE: 1:30 0 7.5 15 30 SCALE (–0.70% SLOPE)*



3 TRACK 2 FRONT ELEVATION – FRAMING

SCALE: 1:30 0 7.5 15 30 SCALE (–0.70% SLOPE)*



4 TRACK 2 REAR ELEVATION – FRAMING

SCALE: 1:30 0 7.5 15 30 SCALE (–0.70% SLOPE)*

*VERIFY W/ TRACK PROFILE, ADJUST ELEVATIONS ACCORDINGLY

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

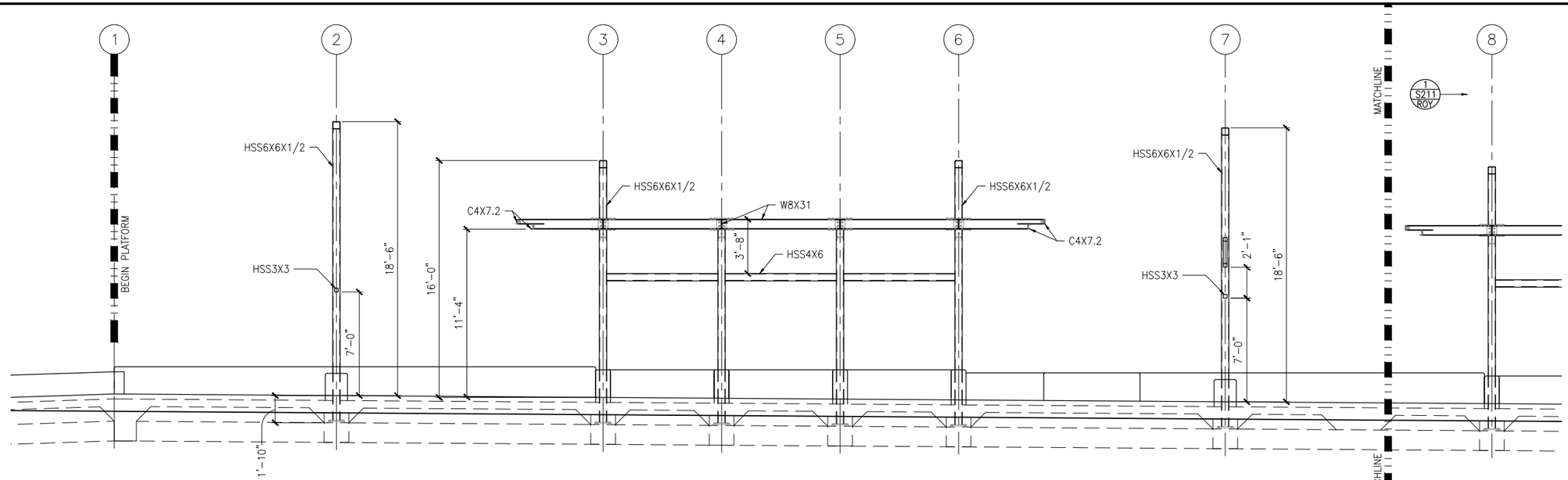
CIVIL - VOLUME 11D
ROYALSTON STATION
ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-ELV-201

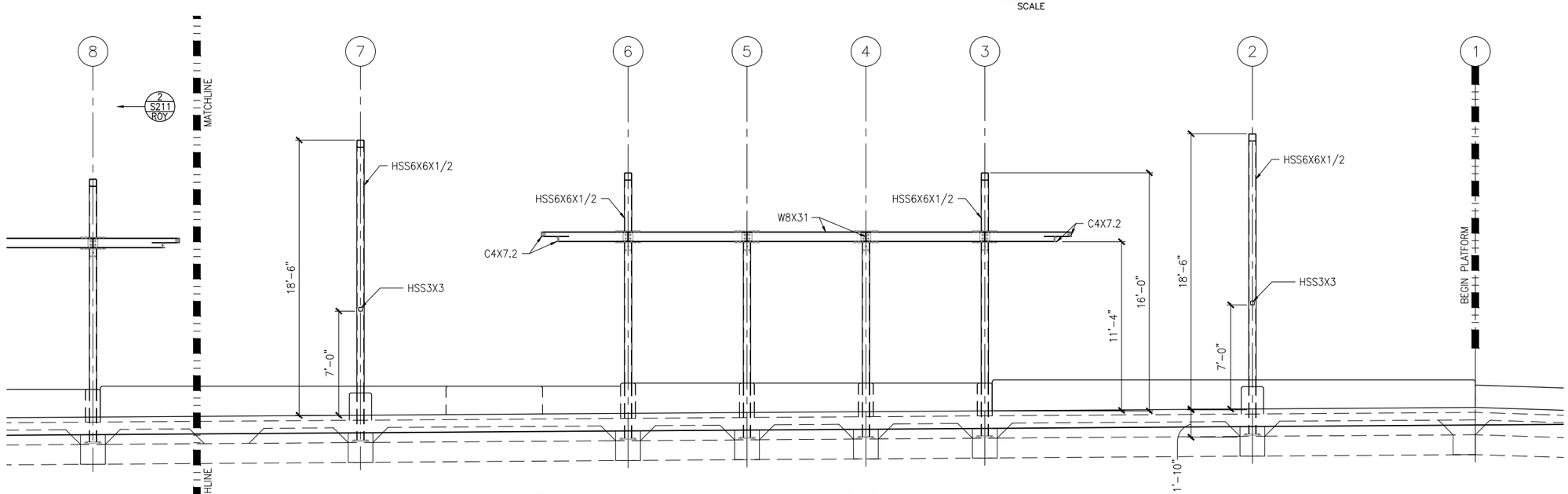
SHEET 356 OF 394

Jan, 15 2016 10:34 am K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\E4-ROY-STR-ELV-201.dwg By: jordanl



1 TRACK 1 – PARTIAL FRONT ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 1 – PARTIAL REAR ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

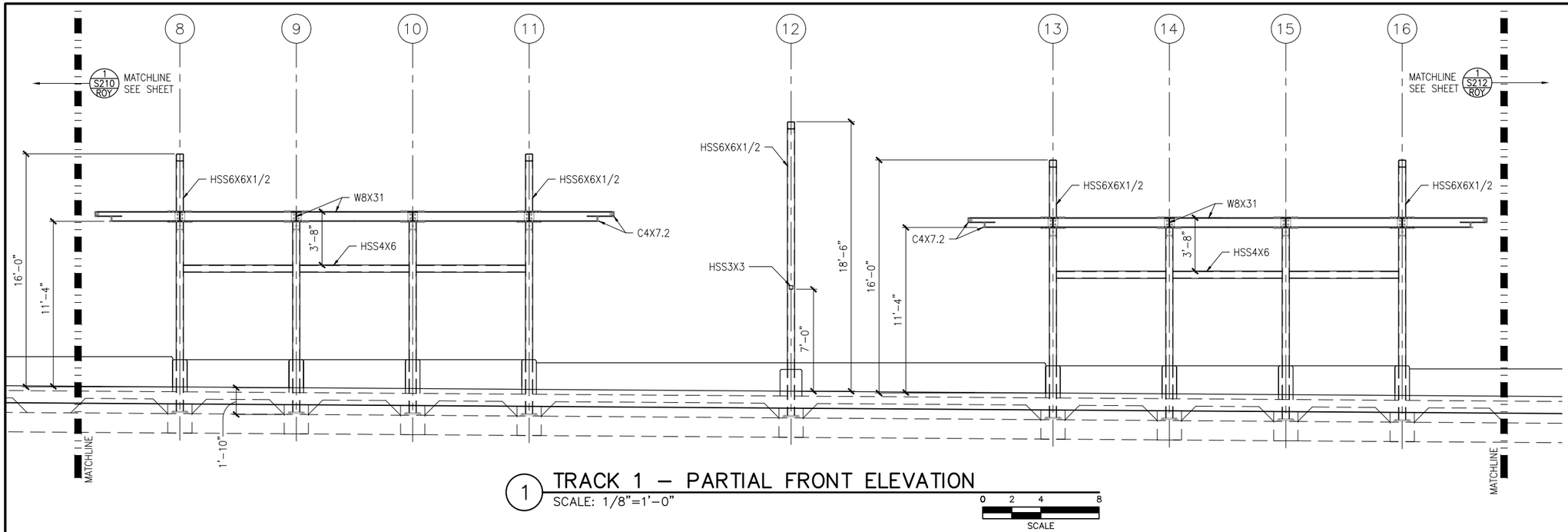
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 1 - SOUTH PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-ELV-210

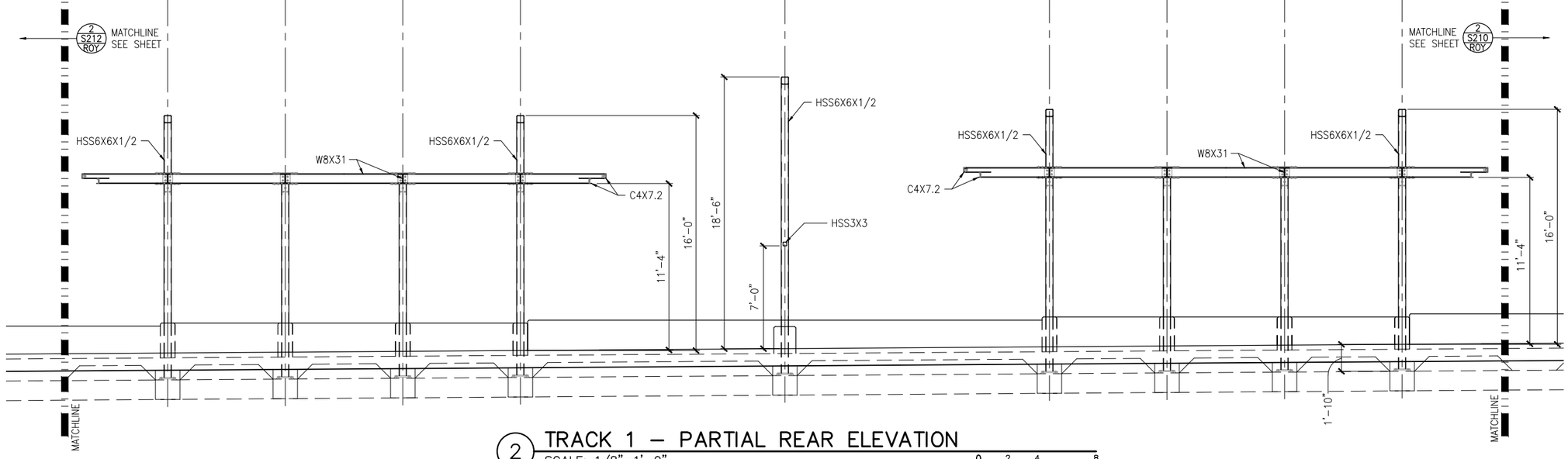
SHEET 357 OF 394

Jan, 15 2016 10:34 am K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\R



1 TRACK 1 – PARTIAL FRONT ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 1 – PARTIAL REAR ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

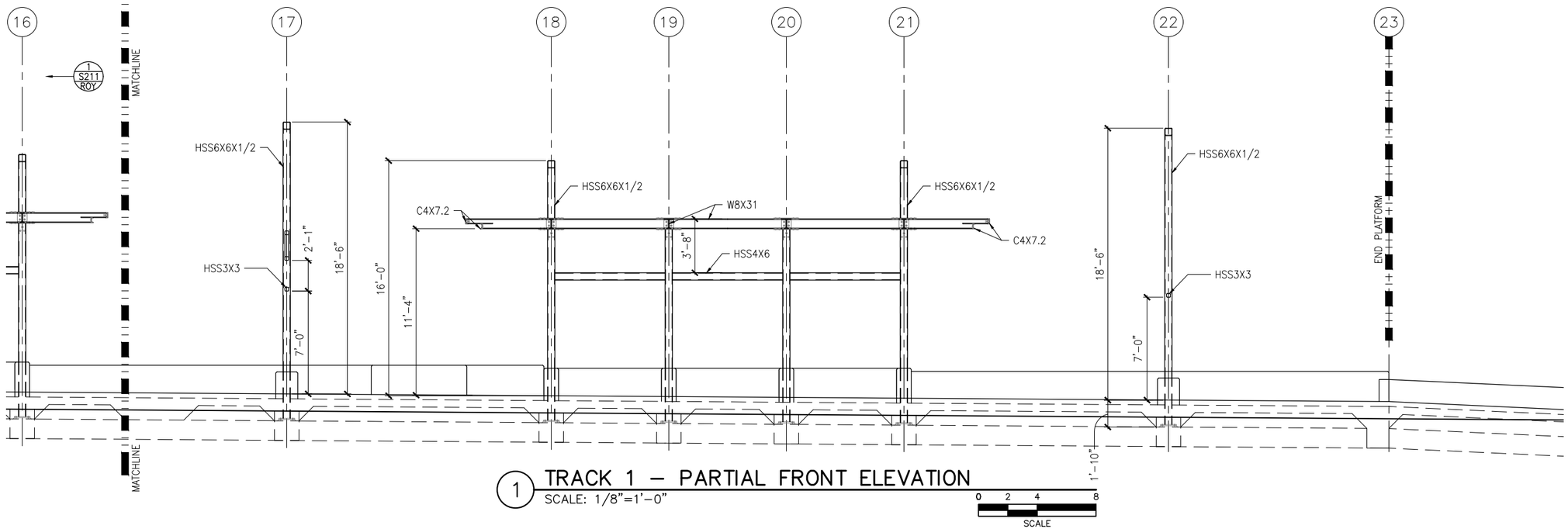
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 1 - MIDDLE PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-ELV-211

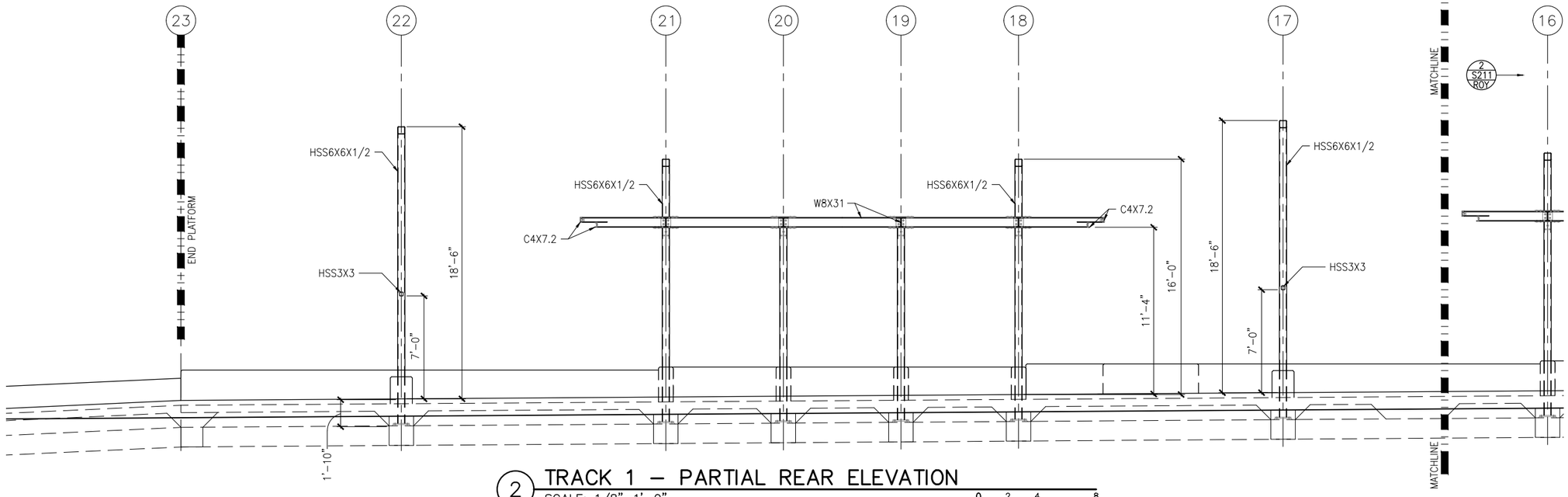
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1 TRACK 1 – PARTIAL FRONT ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 1 – PARTIAL REAR ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

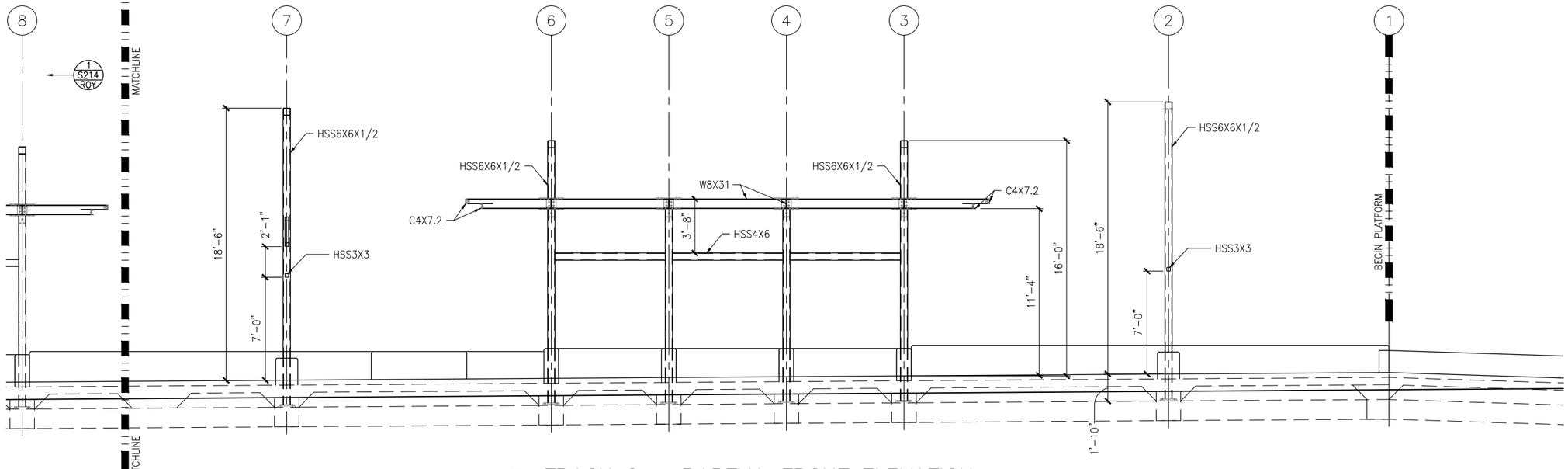
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 1 - NORTH PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-ELV-212

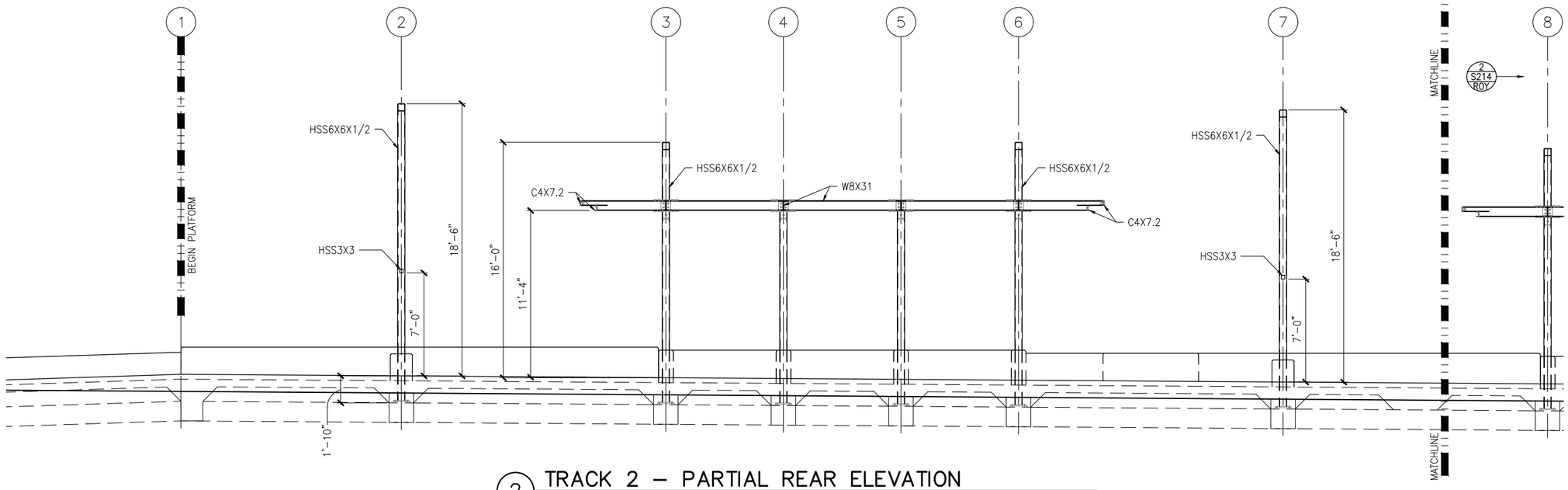
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1 TRACK 2 – PARTIAL FRONT ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL REAR ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

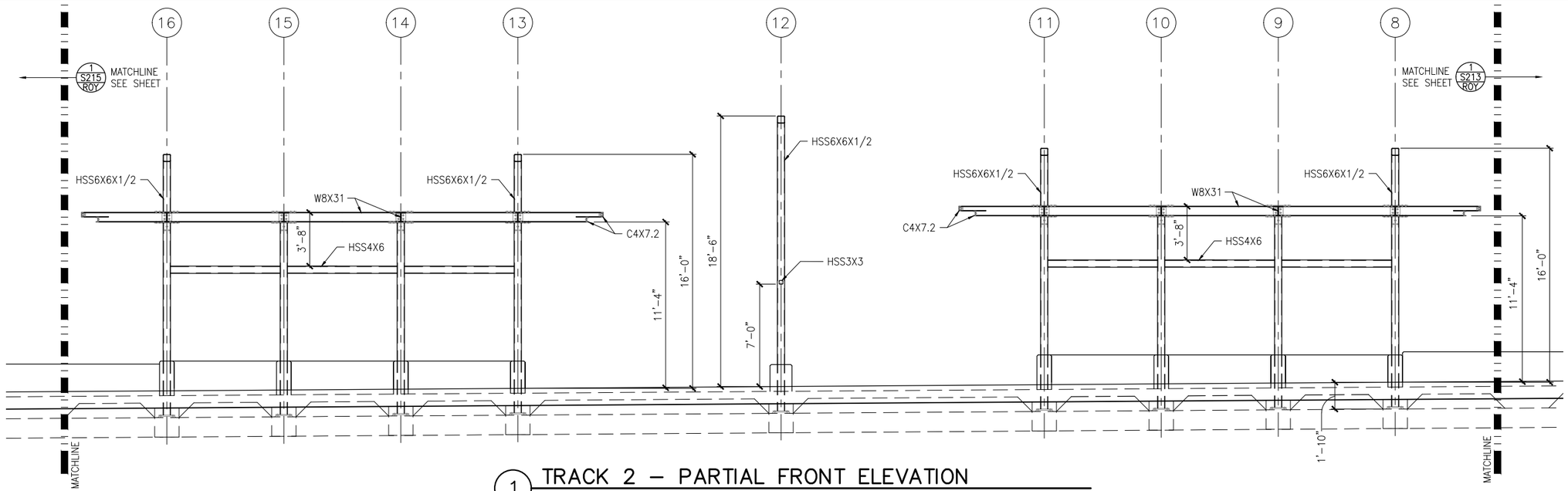
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 2 - SOUTH PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-ELV-213

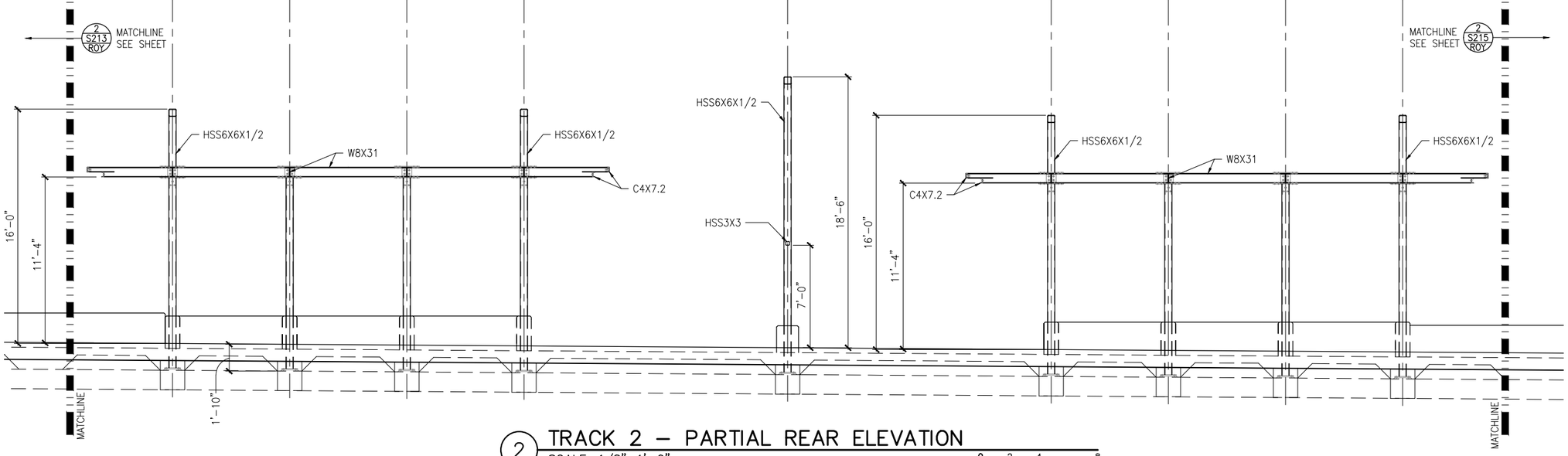
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1 TRACK 2 – PARTIAL FRONT ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE



2 TRACK 2 – PARTIAL REAR ELEVATION
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST Green Line LRT Extension

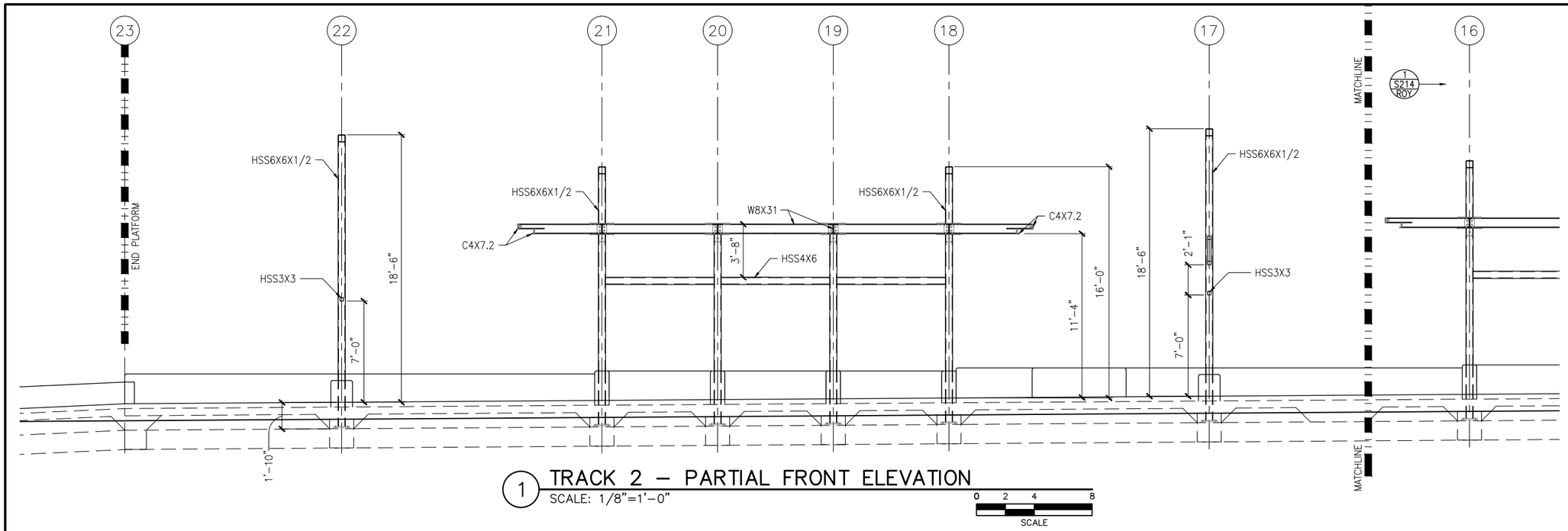
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 2 - MIDDLE PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-ELV-214

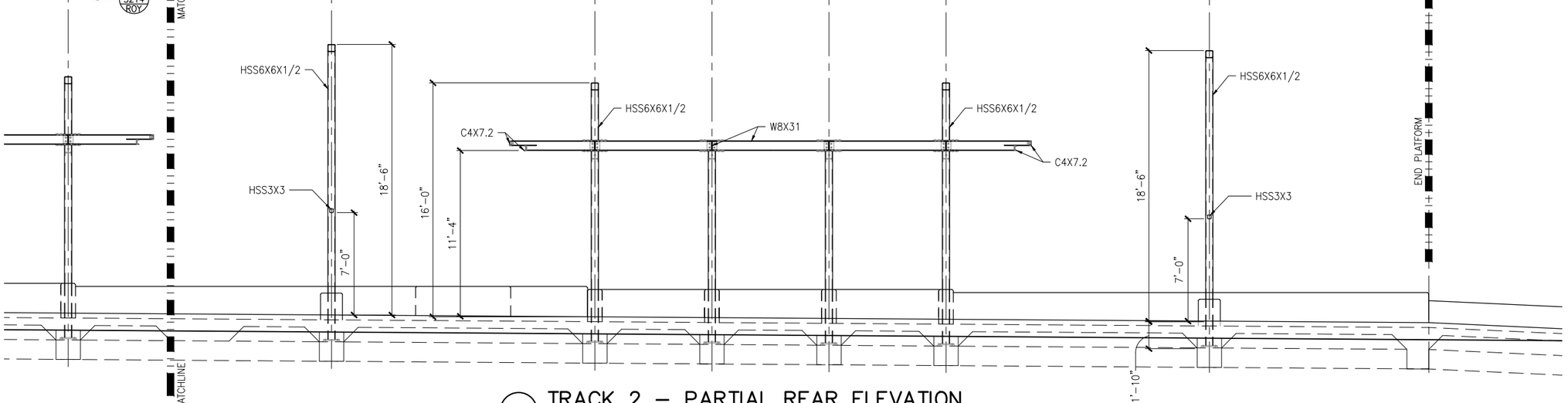
SHEET 361 OF 394

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1 TRACK 2 – PARTIAL FRONT ELEVATION
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8



2 TRACK 2 – PARTIAL REAR ELEVATION
SCALE: 1/8"=1'-0"

SCALE 0 2 4 8

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SOUTHWEST Green Line LRT Extension

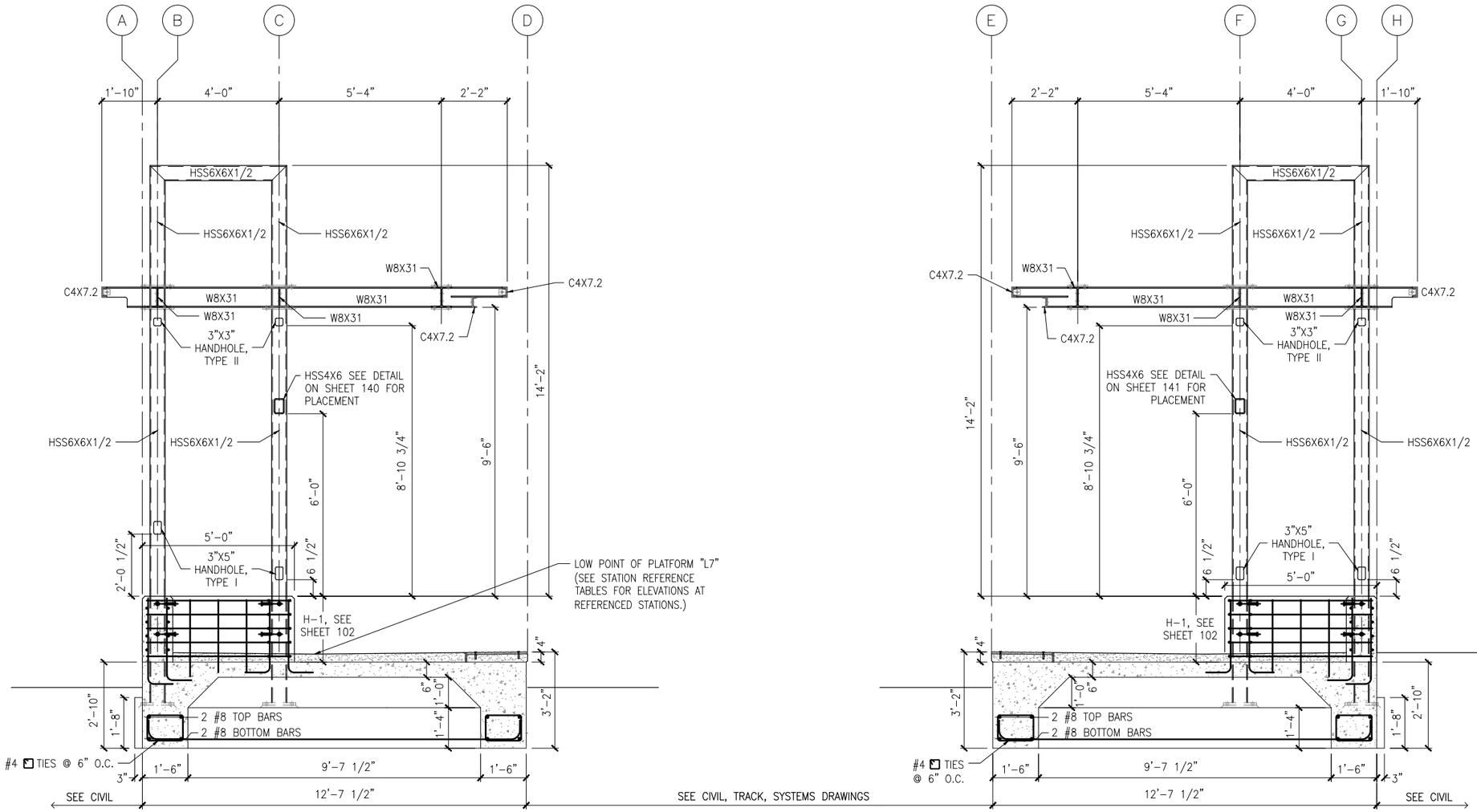
CIVIL - VOLUME 11D
ROYALSTON STATION
TRACK 2 - NORTH PARTIAL ELEVATIONS -- FRAMING

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-ELV-215

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Jan. 15 2016 10:36 am K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\ROYALSTON STATION\E4-ROY-STR-ELV-215.dwg By: jordanl



1 TYPICAL PLATFORM SECTION

SCALE:1/4"=1'-0"
TYPICAL AT COL. LINES 3,6,8,11,13,16,18,21

0 1 2 4
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

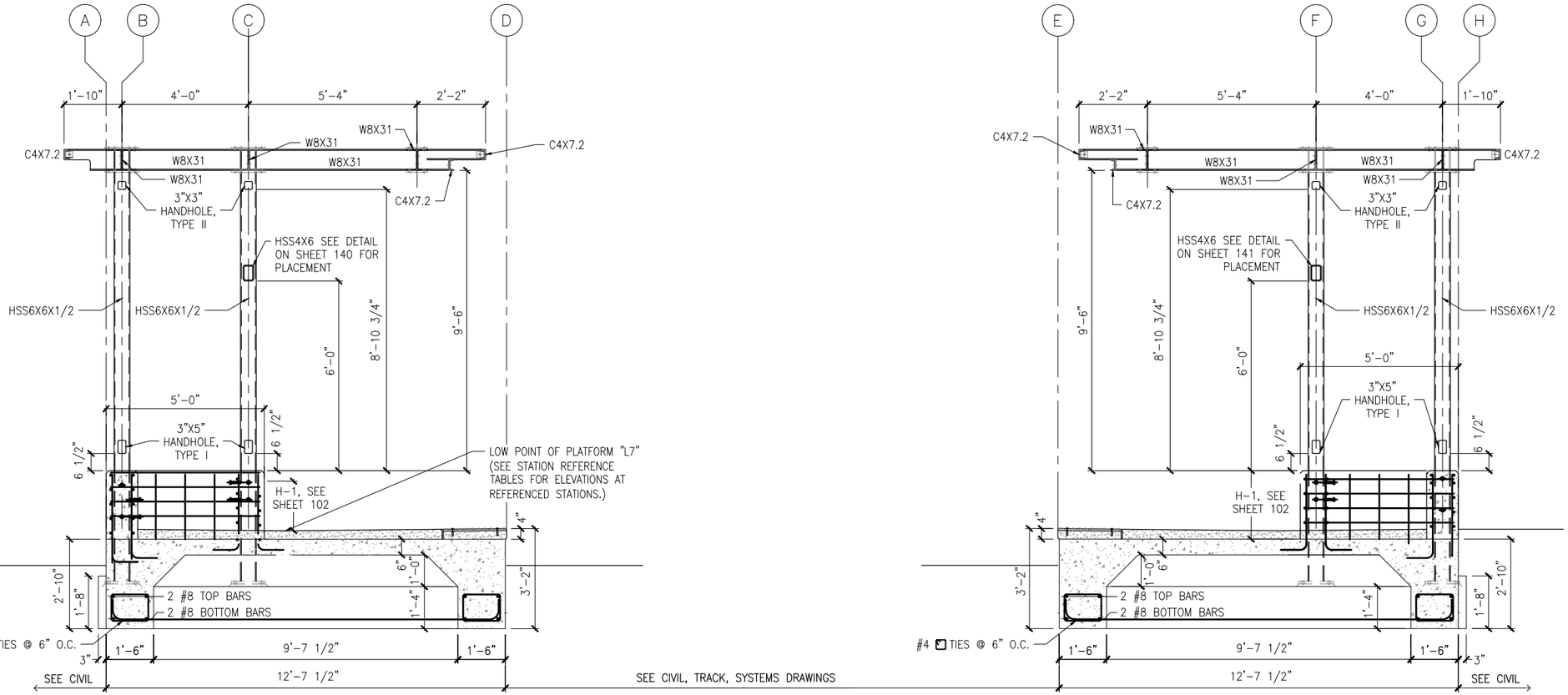
CIVIL - VOLUME 11D
ROYALSTON STATION
TYPICAL PLATFORM SECTION

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-SCT-300

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Jan, 15 2016 10:36 am K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\ROYALSTON STATION\E4-ROY-STR-SCT-300.dwg By: jordanl



1 TYPICAL PLATFORM SECTION

SCALE:1/4"=1'–0"
TYPICAL AT COL. LINES 4,5,9,10,14,15,19,20

0 1 2 4
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

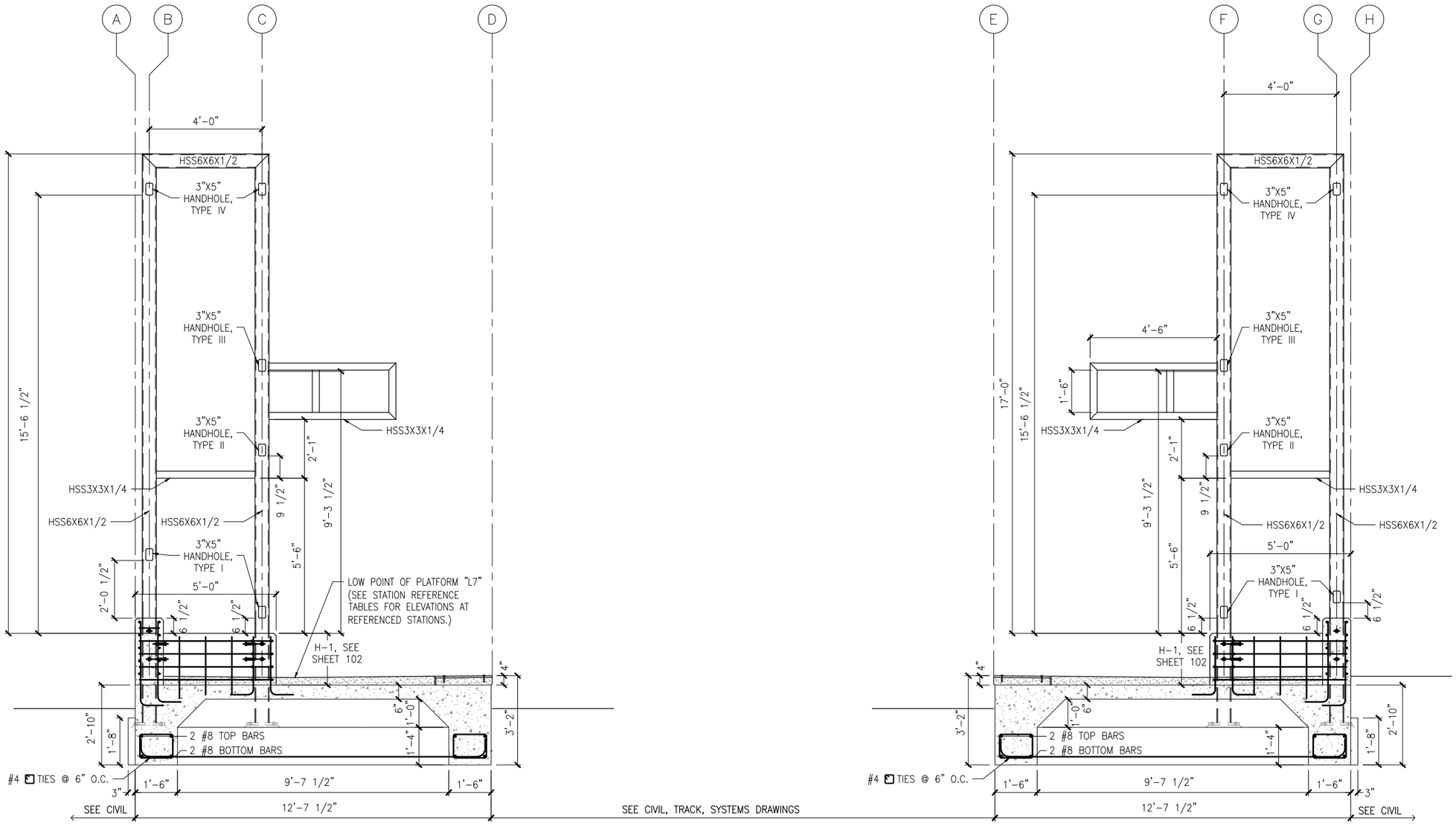
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
TYPICAL PLATFORM SECTION

DISCIPLINE: STRUCTURES
SHEET NAME: E4-ROY-STR-SCT-301

SHEET 364 OF 394

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1 TYPICAL PLATFORM SECTION AT WICKET

SCALE:1/4"=1'-0"
TYPICAL AT COL. LINES 2,7,12,17,22
VMS SUPPORTS AT COL. LINES 7 & 17

0 1 2 4
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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SOUTHWEST Green Line LRT Extension

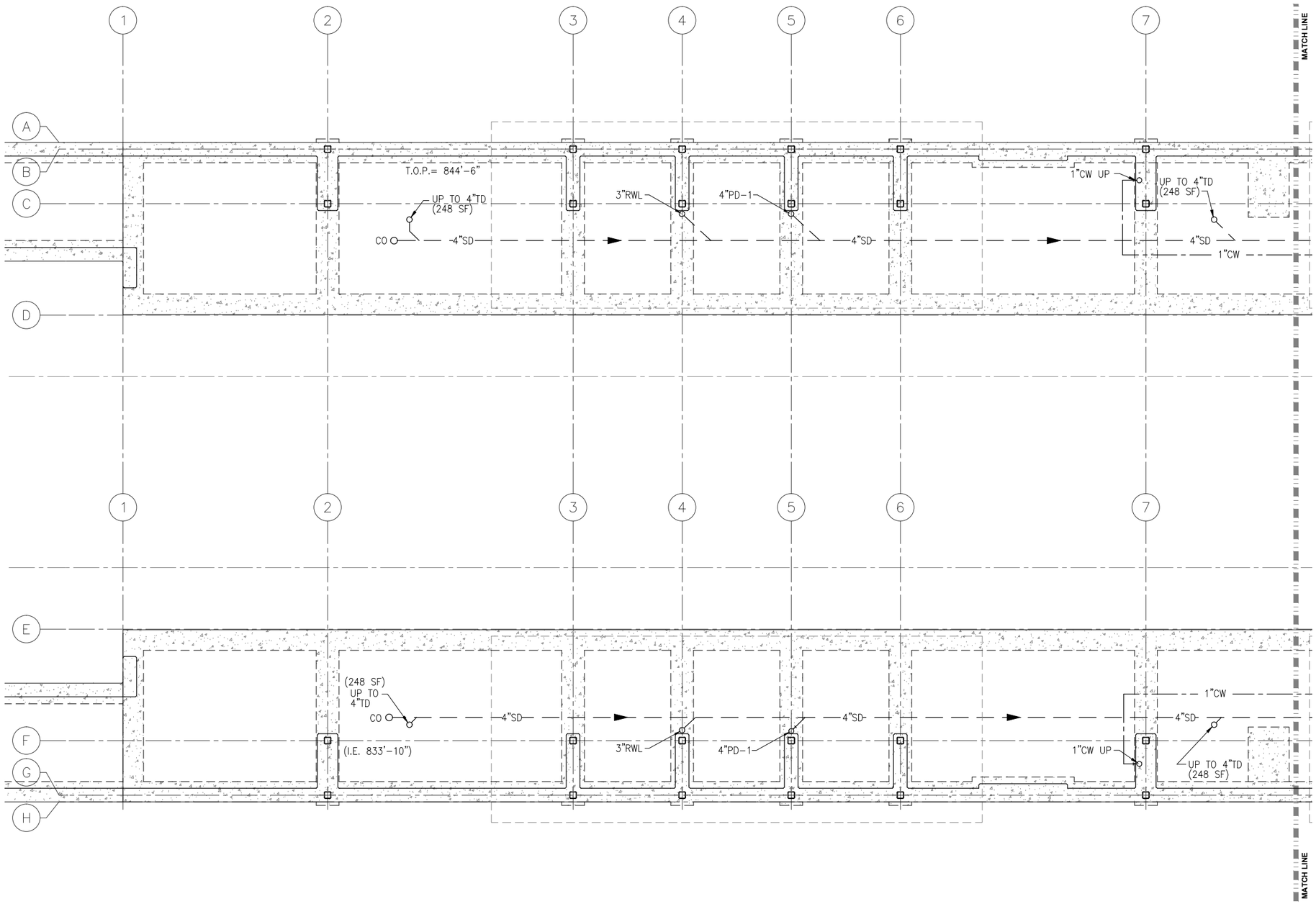
CIVIL - VOLUME 11D
ROYALSTON STATION
TYPICAL PLATFORM SECTION

SHEET 365 OF 394

DISCIPLINE: STRUCTURES

SHEET NAME: E4-ROY-STR-SCT-302

Jan. 15 2016 10:37 am K:\Projects\Minneapolis_Light_Rail\Station_Structural_Drawings\CAD\SEGMENT E4\PLAN SHEETS\STRUCTURES\ROYALSTON STATION\E4-ROY-STR-SCT-302.dwg By: jordanl



1 SOUTH UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES:

1 EXTEND WATER AND STORM OUTSIDE GUIDEWAY. CONNECTION BY OUTDOOR UTILITY CONTRACTOR.

2 INSTALL UTILITIES UNDER TRACKS IN SCHEDULE 80 PVC AT 7 FEET BURY.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

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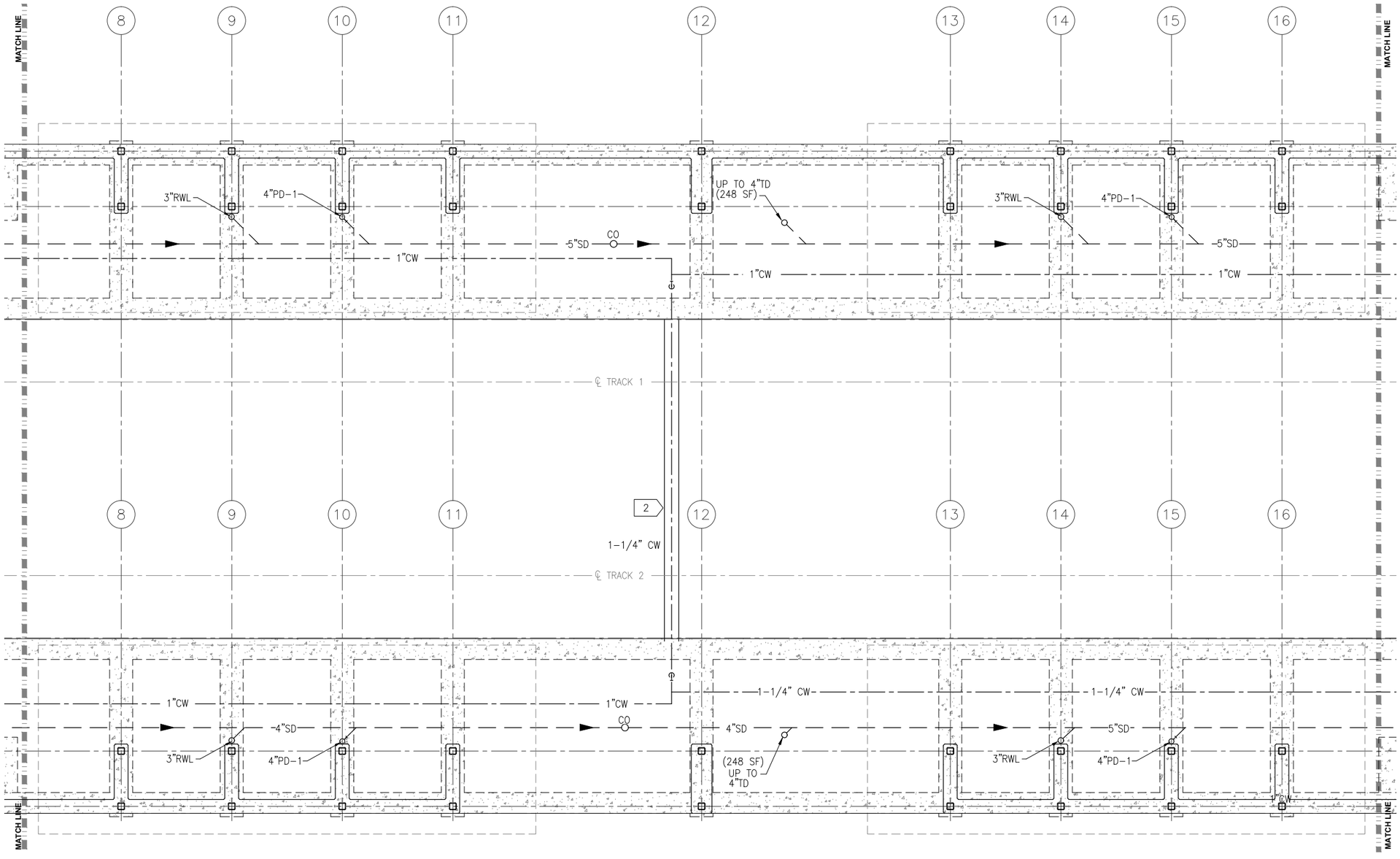
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
SOUTH PARTIAL UNDERFLOOR PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-ROY-PLM-PLN-100

SHEET 366 OF 394

Jan, 16 2016 03:07 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\ROYALSTON STATION\E4-ROY-PLM-PLN-100.dwg By: craig



1 MIDDLE UNDERFLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES:

1 EXTEND WATER AND STORM OUTSIDE GUIDEWAY. CONNECTION BY OUTDOOR UTILITY CONTRACTOR.

2 INSTALL UTILITIES UNDER TRACKS IN SCHEDULE 80 PVC AT 7 FEET BURY.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

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METROPOLITAN COUNCIL SOUTHWEST Green Line LRT Extension

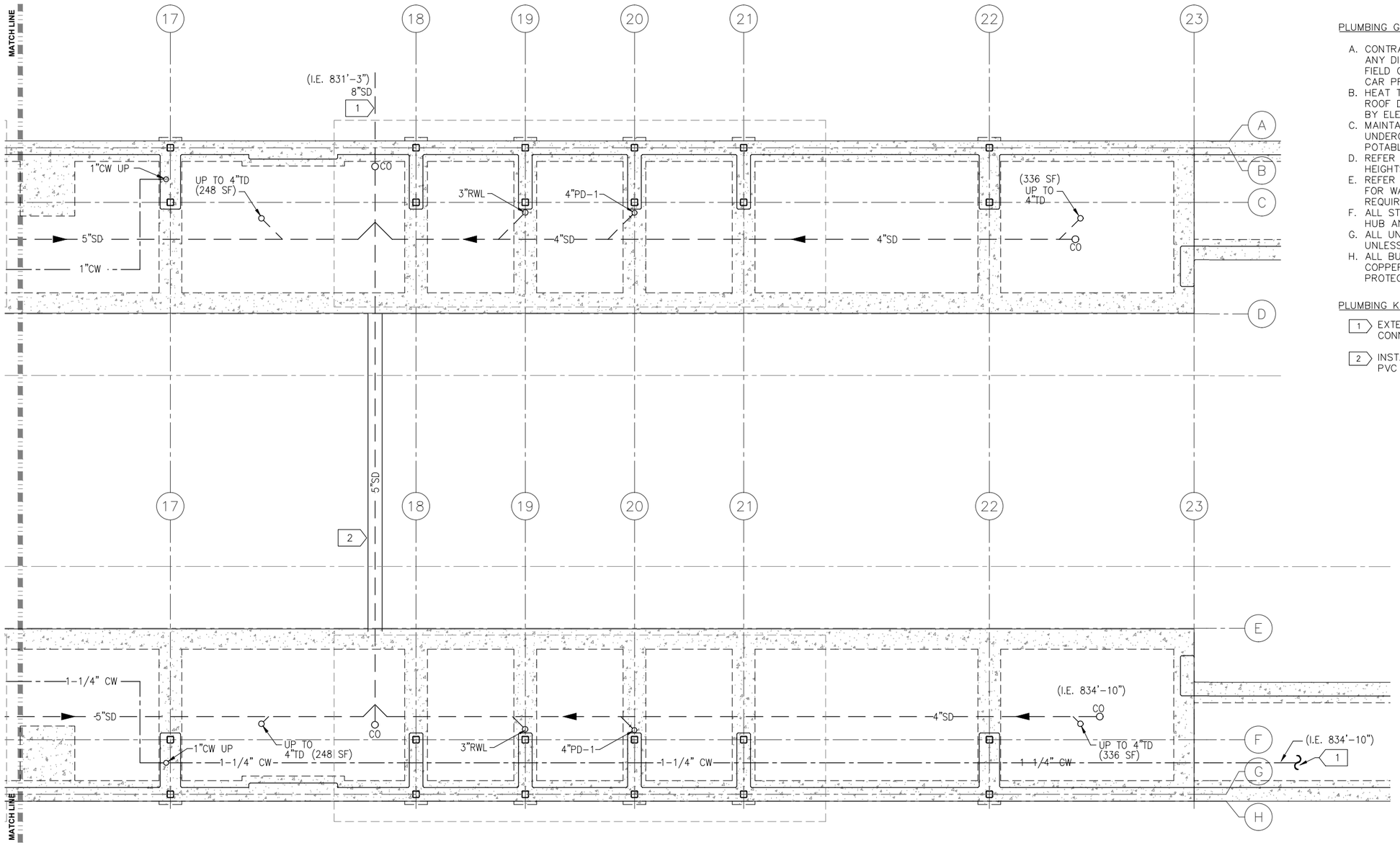
CIVIL - VOLUME 11D
ROYALSTON STATION
MIDDLE PARTIAL UNDERFLOOR PLUMBING PLAN

DISCIPLINE: PLUMBING

SHEET NAME: E4-ROY-PLM-PLN-101

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Jan, 16 2016 03:08 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\ROYALSTON STATION\E4-ROY-PLM-PLN-101.dwg By: craig



PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
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PLUMBING KEY NOTES:

1 EXTEND WATER AND STORM OUTSIDE GUIDEWAY. CONNECTION BY OUTDOOR UTILITY CONTRACTOR.

2 INSTALL UTILITIES UNDER TRACKS IN SCHEDULE 80 PVC AT 7 FEET BURY.

1 NORTH UNDERFLOOR PLUMBING PLAN

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

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SOUTHWEST Green Line LRT Extension

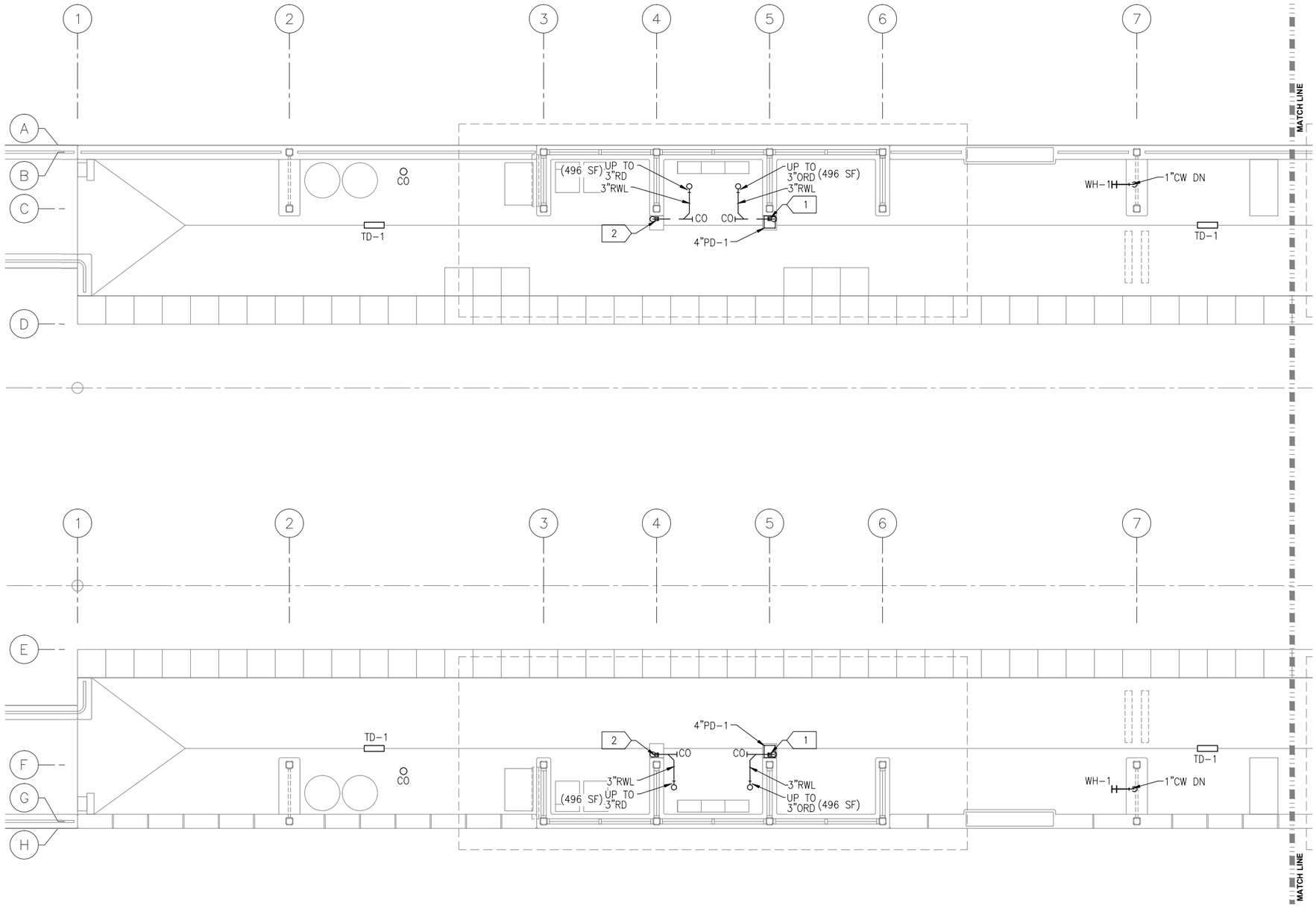
CIVIL - VOLUME 11D
ROYALSTON STATION
NORTH PARTIAL UNDERFLOOR PLUMBING PLAN

DISCIPLINE: PLUMBING

SHEET NAME: E4-ROY-PLM-PLN-102

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1 SOUTH PLATFORM PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
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D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
E. REFER TO PLUMBING DETAIL XXX AND VOLUME 7 FOR WATER METER LOCATION AND ENCLOSURE REQUIREMENTS.
F. ALL STORM AND SANITARY PIPE IS CAST IRON HUB AND SPIGOT UNLESS OTHERWISE NOTED.
G. ALL UNDERGROUND DOMESTIC WATER IS PEX-A UNLESS OTHERWISE NOTED.
H. ALL BURIED, PRESSURIZED FERROUS PIPES AND COPPER SERVICES REQUIRE CORROSION PROTECTION.

PLUMBING KEY NOTES

1 3"ø ORD RWL'S DOWN TO 4"PD-1.

2 3"ø RWL DOWN TO BELOW PLATFORM.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

90% SUBMISSION - 01/22/16

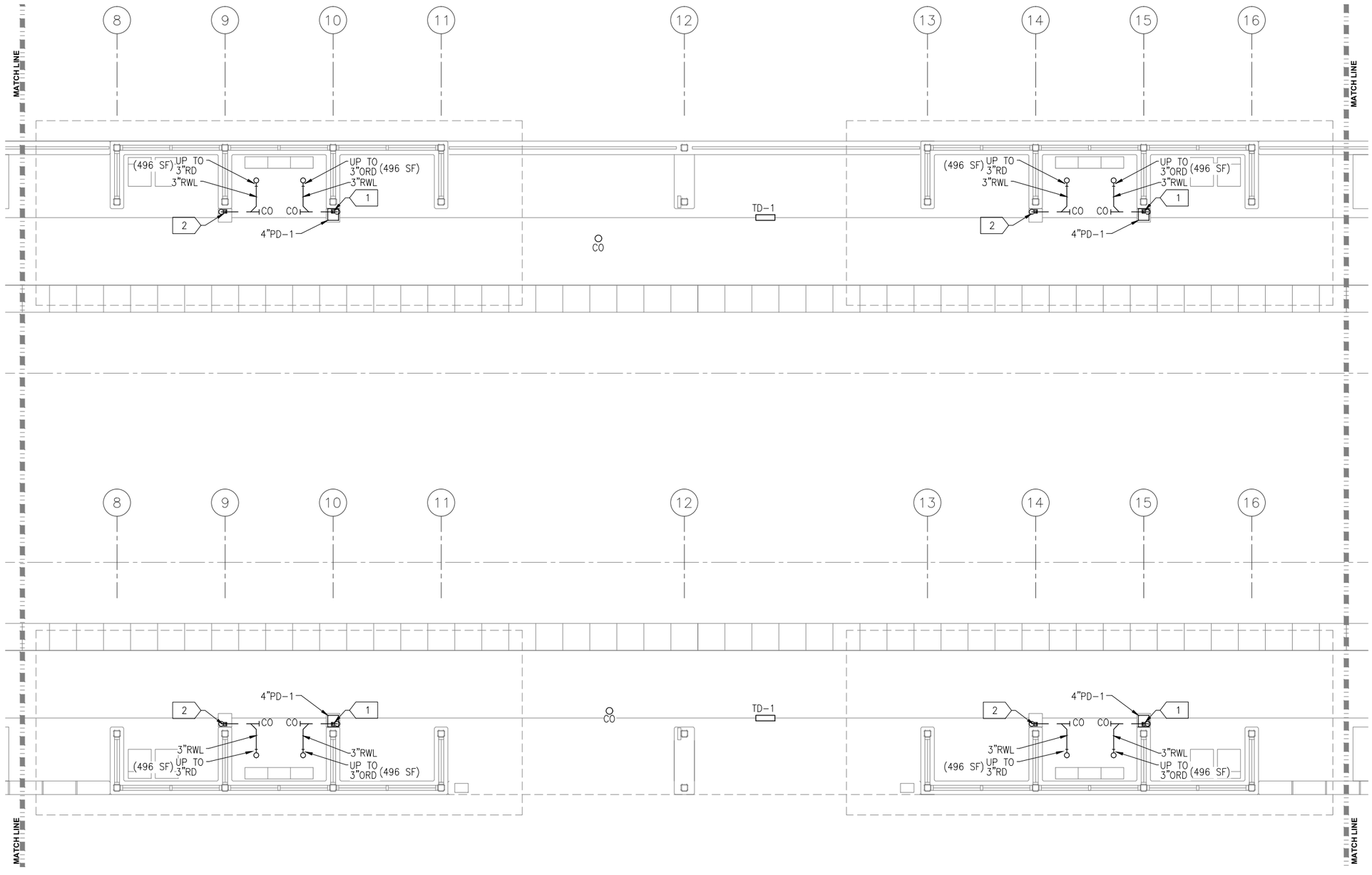
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL E- VOLUME 11D
ROYALSTON STATION
SOUTH PARTIAL PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-ROY-PLM-PLN-110

SHEET 369 OF 394

Jan, 16 2016 03:08 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\ROYALSTON STATION\E4-ROY-PLM-PLN-110.dwg By: craig



1 MIDDLE PLATFORM PLUMBING PLAN
SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

PLUMBING GENERAL NOTES

A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE CAR PRIOR TO PROCEEDING WITH WORK.
B. HEAT TRACING ALONG ALL GUTTERS, AROUND ALL ROOF DRAINS, AND ALL RAIN LEADERS SHALL BE BY ELECTRICAL DIVISION.
C. MAINTAIN CODE REQUIRED DISTANCE BETWEEN UNDERGROUND SANITARY AND UNDERGROUND POTABLE WATER.
D. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF HEIGHTS AND LAYOUT.
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PLUMBING KEY NOTES

1 3"ø ORD RWL'S DOWN TO 4"PD-1.

2 3"ø RWL DOWN TO BELOW PLATFORM.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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LV ENGINEERING • LLC CERTIFIED WOMEN'S BUSINESS ENTERPRISE

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METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

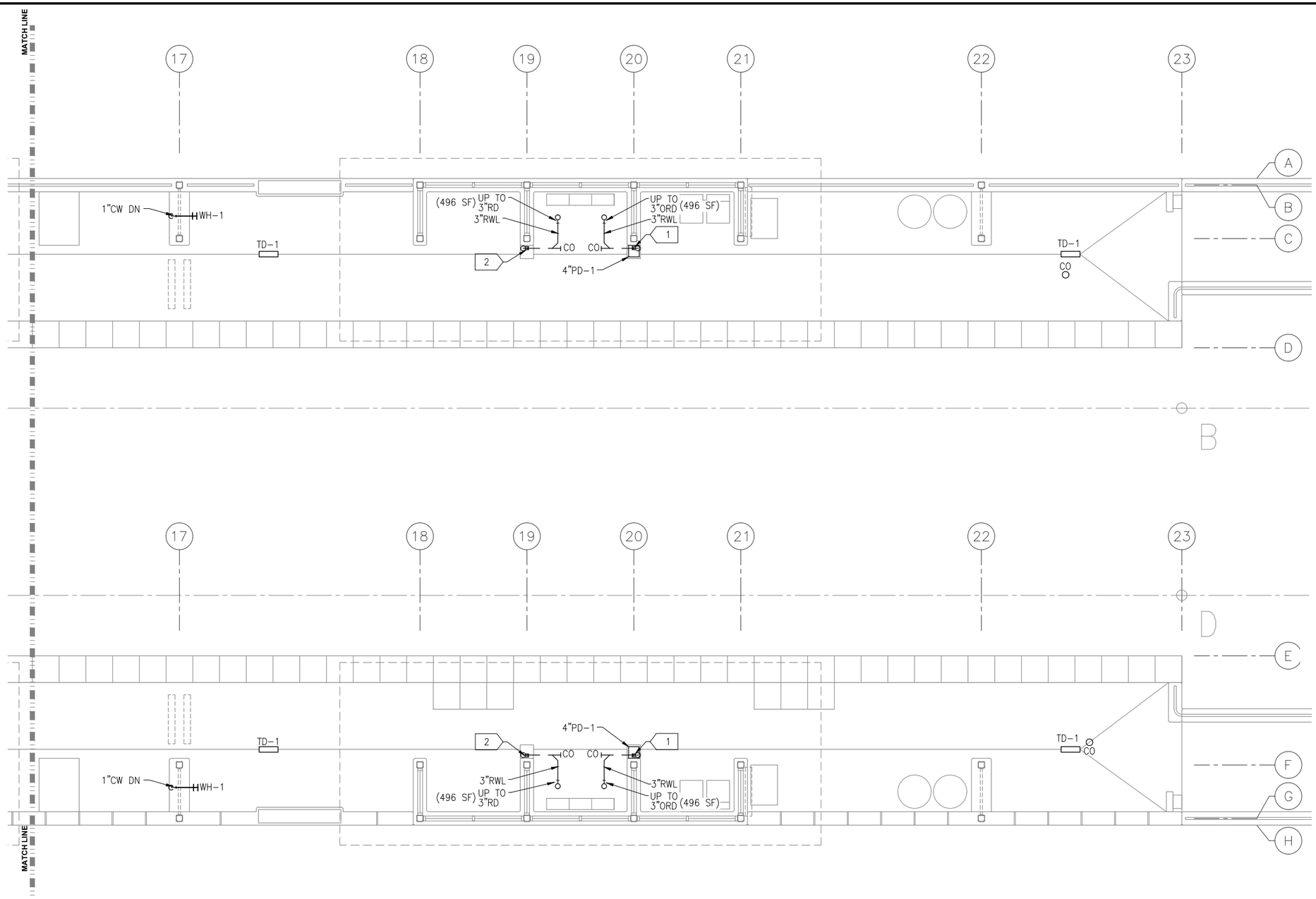
CIVIL - VOLUME 11D
ROYALSTON STATION
MIDDLE PARTIAL PLUMBING PLAN

SHEET 370 OF 394

DISCIPLINE: PLUMBING

SHEET NAME: E4-ROY-PLM-PLN-111

Jan, 16 2016 03:08 pm Z:\Projects\AECOM SWLRT west\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\MECHANICAL\ROYALSTON STATION\E4-ROY-PLM-PLN-111.dwg By: craig



PLUMBING GENERAL NOTES

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PLUMBING KEY NOTES

1 3"ø ORD RWL'S DOWN TO 4"PD-1.

2 3"ø RWL DOWN TO BELOW PLATFORM.

1 NORTH PLATFORM PLUMBING PLAN

SCALE: 1/8"=1'-0"

0 2 4 8
SCALE

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
NORTH PARTIAL PLUMBING PLAN

DISCIPLINE: PLUMBING

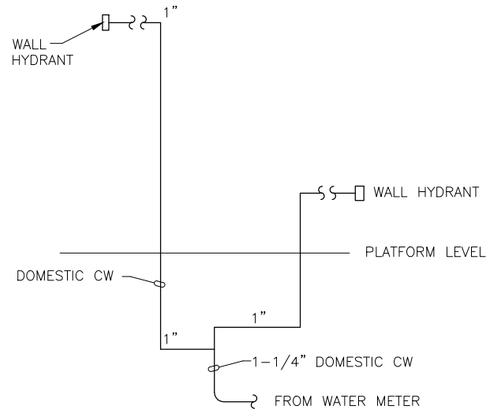
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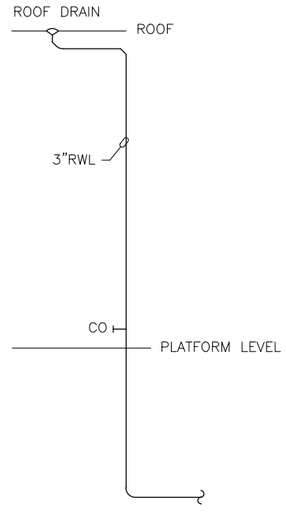
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PLUMBING GENERAL NOTES

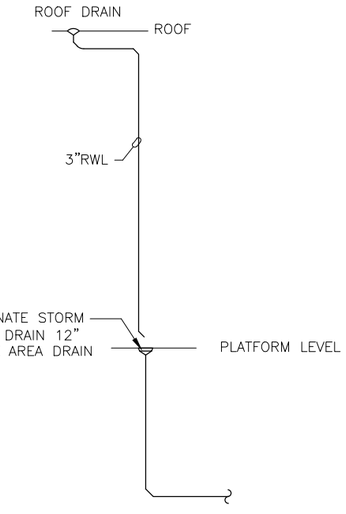
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2/111 DOMESTIC WATER RISER DIAGRAM
NO SCALE



1/111 TYPICAL ROOF DRAIN DIAGRAM
NO SCALE



2/111 TYPICAL OVERFLOW ROOF DRAIN DIAGRAM
NO SCALE

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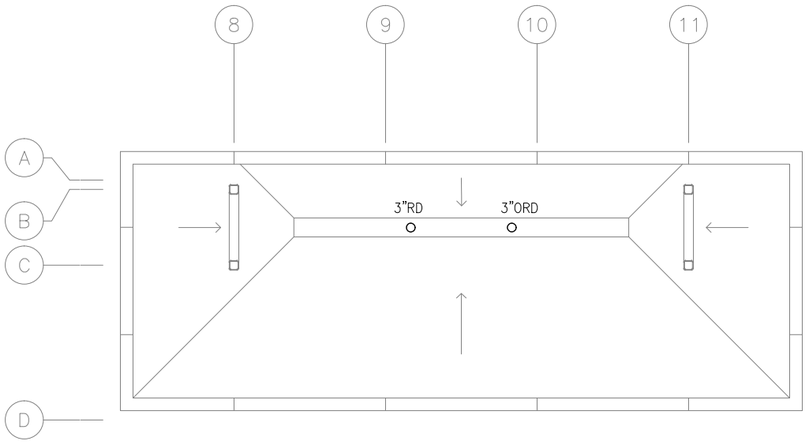
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
PLUMBING RISER DIAGRAMS

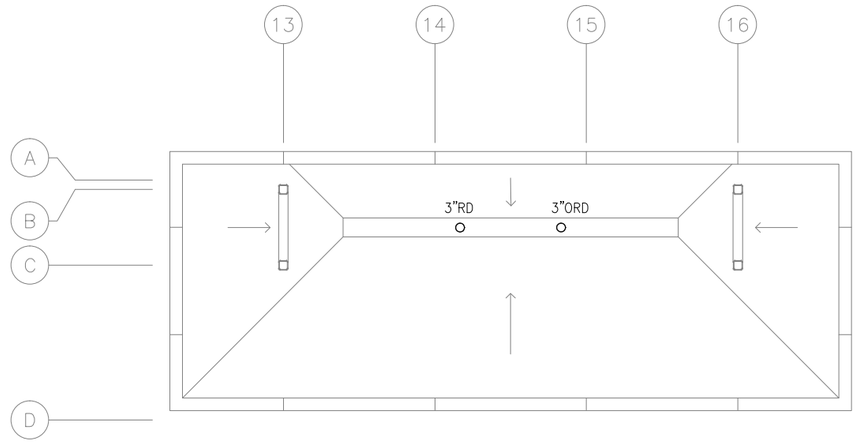
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SHEET NAME: E4-ROY-PLM-PLN-113

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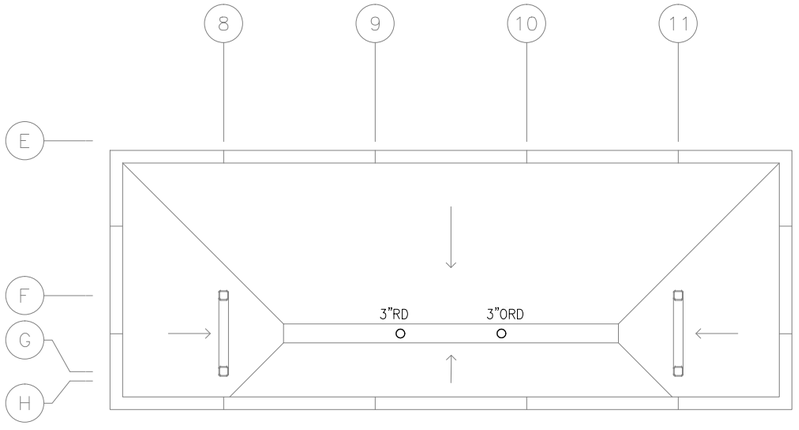
1 WEST ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"



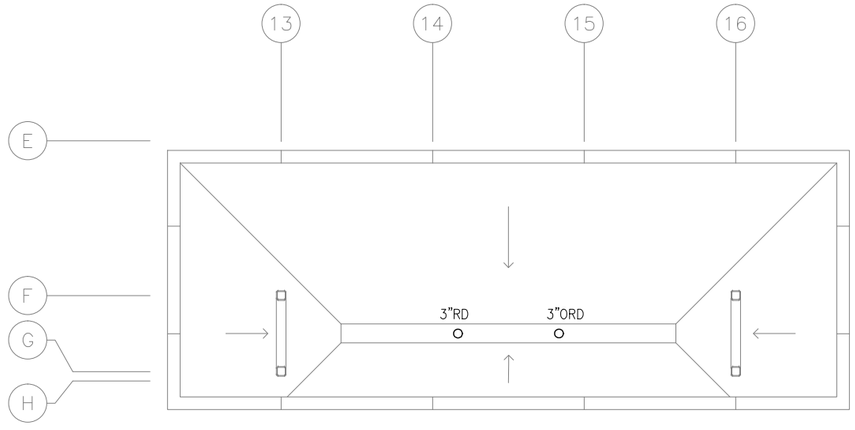
2 MIDDLE WEST ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"

PLUMBING GENERAL NOTES

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3 MIDDLE EAST ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"



4 EAST ROOF PLUMBING PLAN
SCALE: 1/8"=1'-0"

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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CERTIFIED WOMEN'S BUSINESS ENTERPRISE

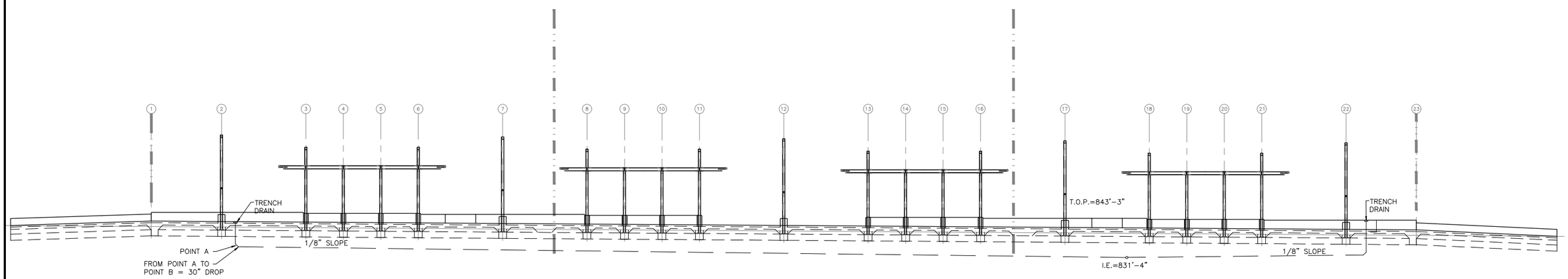
90% SUBMISSION 01/22/16

METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
ROOF PLUMBING PLAN

DISCIPLINE: PLUMBING
SHEET NAME: E4-ROY-PLM-PLN-120

SHEET 373 OF 394



1 PLUMBING SECTION
SCALE: 3/64"=1'-0"

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

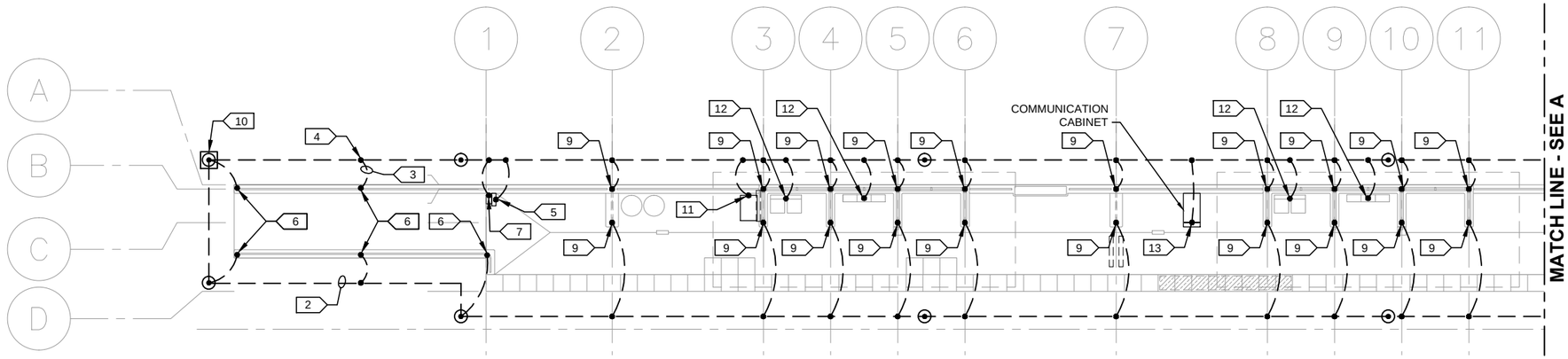
CIVIL - VOLUME 11D
ROYALSTON STATION
TYPICAL PLATFORM PLUMBING SECTION

DISCIPLINE: PLUMBING

SHEET NAME: E4-ROY-PLM-SCT-201

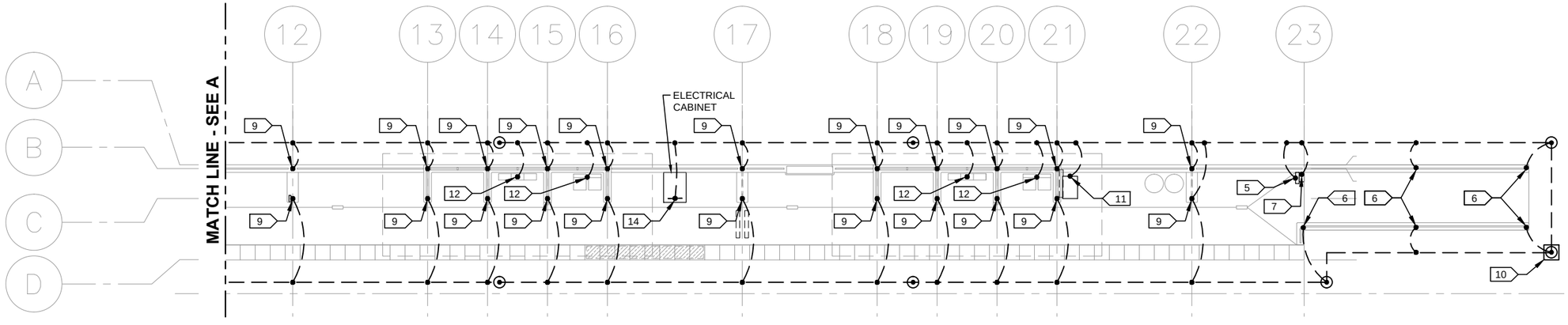
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1 PARTIAL PLATFORM PLAN

SCALE: 1/16"=1'-0"



2 PARTIAL PLATFORM PLAN

SCALE: 1/16"=1'-0"

KEYNOTES:

1. GROUND ROD, TYPICAL.
2. GROUND LOOP, TYPICAL.
3. GEC, TYPICAL.
4. EXOTHERMIC WELD, TYPICAL.
5. GEC CONNECTION TO RIDER ALERT PANEL.
6. GEC CONNECTION TO RAILING POST.
7. GEC CONNECTION TO RSV.
8. GEC CONNECTION TO KIOSK.
9. GEC CONNECTION TO COLUMN.
10. GROUND TEST WELL.
11. GEC CONNECTION TO TVM.
12. GEC CONNECTION TO SEAT OR LEAN RAIL.
13. GEC CONNECTION TO COMMUNICATIONS CABINET GROUND BUS.
14. #3/0 GEC CONNECTION TO ELECTRICAL ENCLOSURE GROUND BUS.

GENERAL NOTES:

1. ALL METALLIC OBJECTS SHALL BE GROUNDED AND THE GROUNDING PLAN IS INTENDED TO DEMONSTRATE THE GROUNDING OF THE PLATFORM, GUIDEWAY AND EQUIPMENT WITHIN THE VICINITY. OBJECTS NOT SHOWN GROUNDED DOES RELIEVE THE CONTRACTOR FROM THE DESIGN INTENT.
2. GROUND LOOP SHALL BE #3/0 BARE COPPER. LOOP SHALL BE INSTALLED 48" BELOW GRADE OR 6" BELOW THE FROST LINE, WHICHEVER IS GREATER. GROUND LOOP IS SHOWN DIAGRAMMATICALLY. INSTALL GROUND LOOP UNDER PLATFORM PERIMETER TO PROTECT FROM WORK PERFORMED OUTSIDE THE PLATFORM LIMITS BY OTHER TRADES. GROUND TEST WELLS SHALL REMAIN ACCESSIBLE AS SHOWN.
3. GROUNDING ELECTRODE CONDUCTORS (GEC) SHALL BE #2/0 BARE COPPER UNLESS NOTED OTHERWISE.
4. ALL EXOTHERMIC WELDS TO COLUMNS, TVM'S, RSV'S, SEATS, LEAN RAILS AND EQUIPMENT CABINETS SHALL BE ABOVE GRADE AND VISIBLE. PAINT WELDS TO MATCH SURFACE COLOR. VERIFY COLOR WITH CAR.
5. INSTALL GROUND ROD SO THAT 8-FT IS BELOW THE FROST LINE.
6. IF RAILING HAS AN ISOLATION GAP, JUMPER BETWEEN GAPS WITH GEC.

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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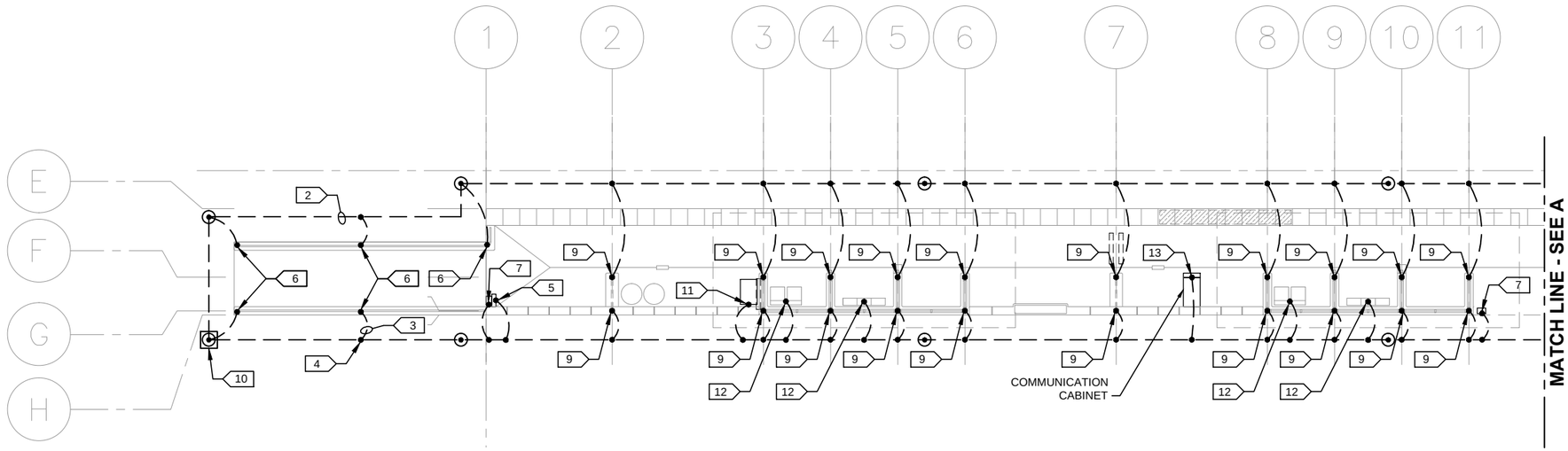
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
ELECTRICAL
GROUNDING PLAN - TRACK 1 SIDE

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-ROY-ELE-PLN-201

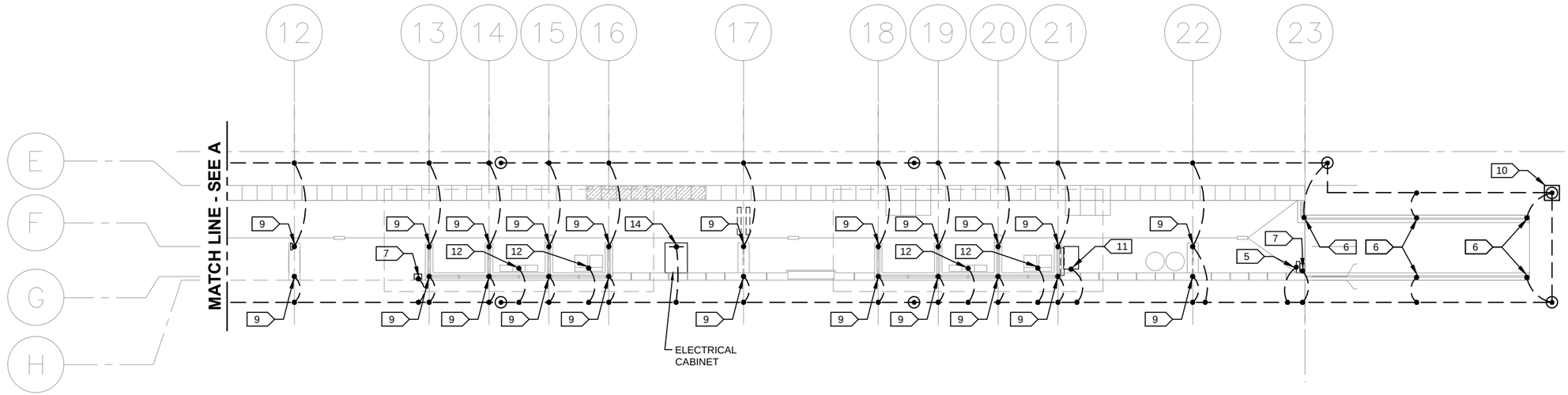
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1 PARTIAL PLATFORM PLAN

SCALE: 1/16"=1'-0"



2 PARTIAL PLATFORM PLAN

SCALE: 1/16"=1'-0"

KEYNOTES:

1. GROUND ROD, TYPICAL.
2. GROUND LOOP, TYPICAL.
3. GEC, TYPICAL.
4. EXOTHERMIC WELD, TYPICAL.
5. GEC CONNECTION TO RIDER ALERT PANEL.
6. GEC CONNECTION TO RAILING POST.
7. GEC CONNECTION TO RSV.
8. GEC CONNECTION TO KIOSK.
9. GEC CONNECTION TO COLUMN.
10. GROUND TEST WELL.
11. GEC CONNECTION TO TVM.
12. GEC CONNECTION TO SEAT OR LEAN RAIL.
13. GEC CONNECTION TO COMMUNICATIONS CABINET GROUND BUS.
14. #3/0 GEC CONNECTION TO ELECTRICAL ENCLOSURE GROUND BUS.

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3. GROUNDING ELECTRODE CONDUCTORS (GEC) SHALL BE #2/0 BARE COPPER UNLESS NOTED OTHERWISE.
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5. INSTALL GROUND ROD SO THAT 8-FT IS BELOW THE FROST LINE.
6. IF RAILING HAS AN ISOLATION GAP, JUMPER BETWEEN GAPS WITH GEC.

0 2 4 8

HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

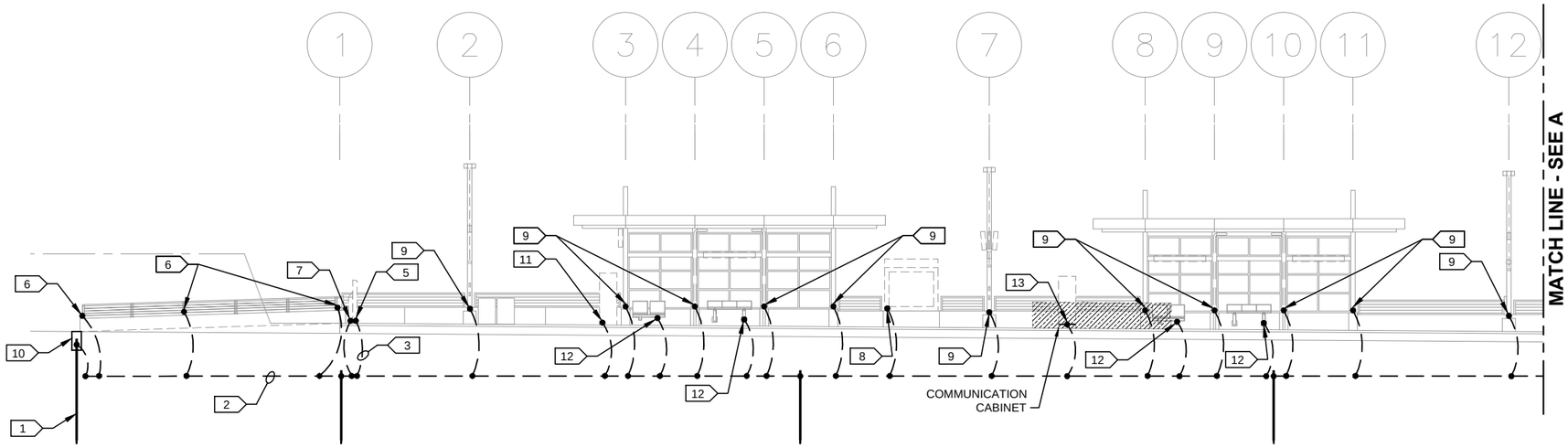
CIVIL - VOLUME 11D
ROYALSTON STATION
ELECTRICAL
GROUNDING PLAN - TRACK 2 SIDE

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-ROY-ELE-PLN-202

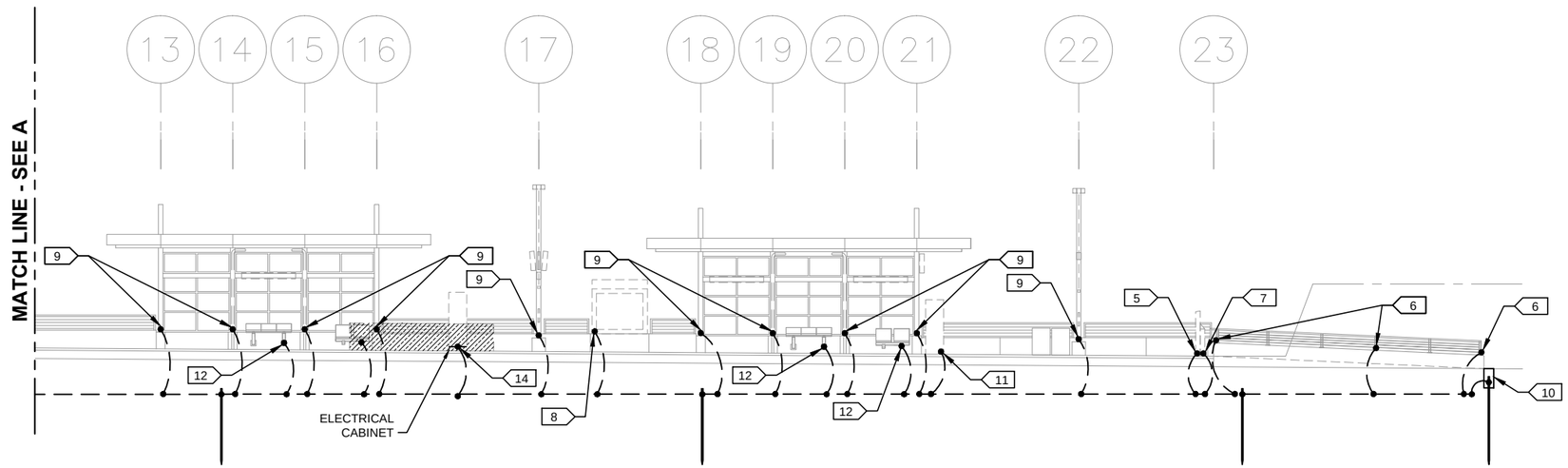
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Jan. 18 2016 11:42 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-ROY-ELE-PLN-202.dwg By: V-Bege.IB



1 PARTIAL PLATFORM ELEVATION

SCALE: 1/16"=1'-0"



2 PARTIAL PLATFORM ELEVATION

SCALE: 1/16"=1'-0"

KEYNOTES:

1. GROUND ROD, TYPICAL.
2. GROUND LOOP, TYPICAL.
3. GEC, TYPICAL.
4. EXOTHERMIC WELD, TYPICAL.
5. GEC CONNECTION TO RIDER ALERT PANEL.
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9. GEC CONNECTION TO COLUMN.
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11. GEC CONNECTION TO TVM.
12. GEC CONNECTION TO SEAT OR LEAN RAIL.
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14. #3/0 GEC CONNECTION TO ELECTRICAL ENCLOSURE GROUND BUS.

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6. IF RAILING HAS AN ISOLATION GAP, JUMPER BETWEEN GAPS WITH GEC.

0 2 4 8

HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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M-P Consultants CONSULTING ENGINEERING MINNEAPOLIS • MINNESOTA

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

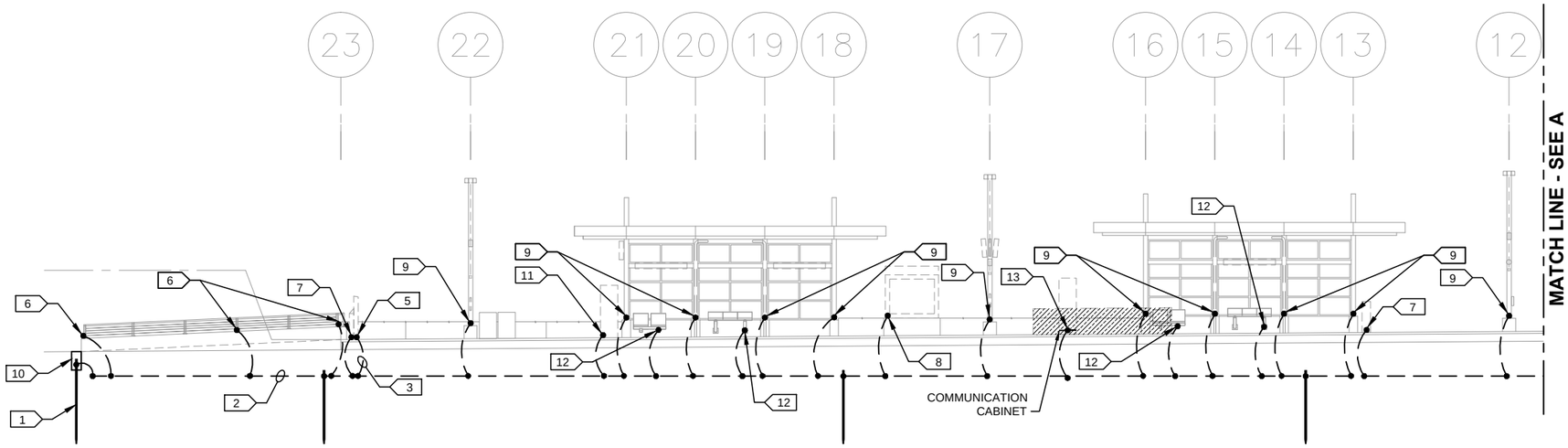
CIVIL - VOLUME 11D
ROYALSTON STATION
ELECTRICAL
GROUNDING ELEVATION - TRACK 1 SIDE

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-ROY-ELE-ELV-203

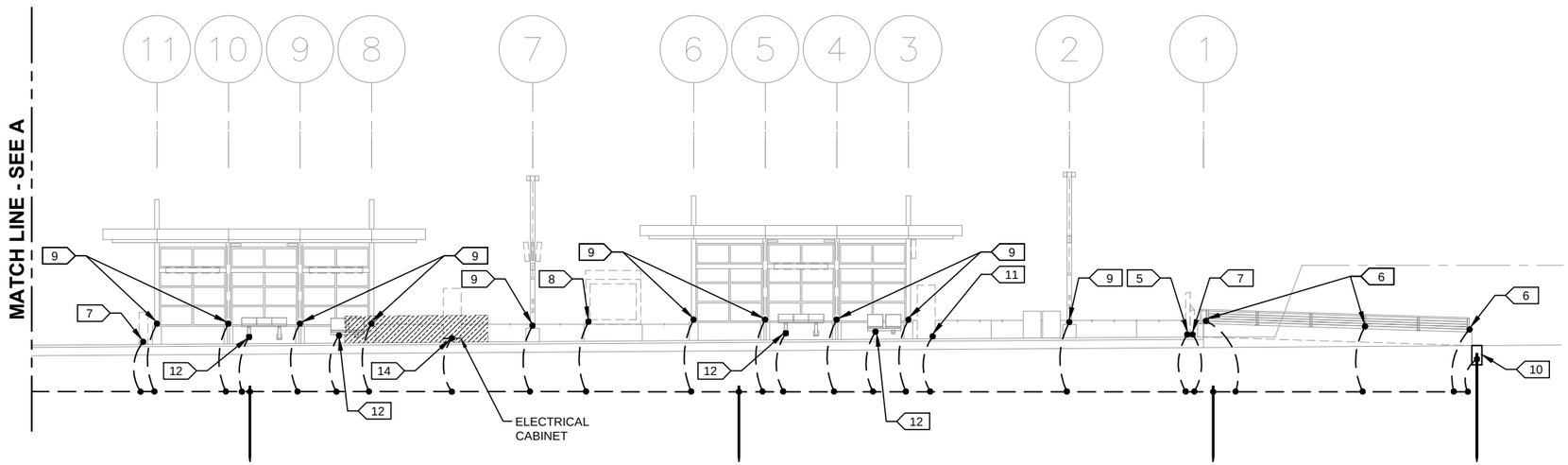
SHEET 377 OF 394

Jan, 18 2016 11:42 am v:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-ROY-ELE-ELV-203.dwg By: V-Begejb



1 PARTIAL PLATFORM ELEVATION

SCALE: 1/16"=1'-0"



2 PARTIAL PLATFORM ELEVATION

SCALE: 1/16"=1'-0"

KEYNOTES:

1. GROUND ROD, TYPICAL.
2. GROUND LOOP, TYPICAL.
3. GEC, TYPICAL.
4. EXOTHERMIC WELD, TYPICAL.
5. GEC CONNECTION TO RIDER ALERT PANEL.
6. GEC CONNECTION TO RAILING POST.
7. GEC CONNECTION TO RSV.
8. GEC CONNECTION TO KIOSK.
9. GEC CONNECTION TO COLUMN.
10. GROUND TEST WELL.
11. GEC CONNECTION TO TVM.
12. GEC CONNECTION TO SEAT OR LEAN RAIL.
13. GEC CONNECTION TO COMMUNICATIONS CABINET GROUND BUS.
14. #3/0 GEC CONNECTION TO ELECTRICAL ENCLOSURE GROUND BUS.

GENERAL NOTES:

1. ALL METALLIC OBJECTS SHALL BE GROUNDED AND THE GROUNDING PLAN IS INTENDED TO DEMONSTRATE THE GROUNDING OF THE PLATFORM, GUIDEWAY AND EQUIPMENT WITHIN THE VICINITY. OBJECTS NOT SHOWN GROUNDED DOES RELIEVE THE CONTRACTOR FROM THE DESIGN INTENT.
2. GROUND LOOP SHALL BE #3/0 BARE COPPER. LOOP SHALL BE INSTALLED 48" BELOW GRADE OR 6" BELOW THE FROST LINE, WHICHEVER IS GREATER. GROUND LOOP IS SHOWN DIAGRAMMATICALLY. INSTALL GROUND LOOP UNDER PLATFORM PERIMETER TO PROTECT FROM WORK PERFORMED OUTSIDE THE PLATFORM LIMITS BY OTHER TRADES. GROUND TEST WELLS SHALL REMAIN ACCESSIBLE AS SHOWN.
3. GROUNDING ELECTRODE CONDUCTORS (GEC) SHALL BE #2/0 BARE COPPER UNLESS NOTED OTHERWISE.
4. ALL EXOTHERMIC WELDS TO COLUMNS, TVM'S, RSV'S, SEATS, LEAN RAILS AND EQUIPMENT CABINETS SHALL BE ABOVE GRADE AND VISIBLE. PAINT WELDS TO MATCH SURFACE COLOR. VERIFY COLOR WITH CAR.
5. INSTALL GROUND ROD SO THAT 8-FT IS BELOW THE FROST LINE.
6. IF RAILING HAS AN ISOLATION GAP, JUMPER BETWEEN GAPS WITH GEC.

0 2 4 8

HORIZONTAL SCALE IN FEET

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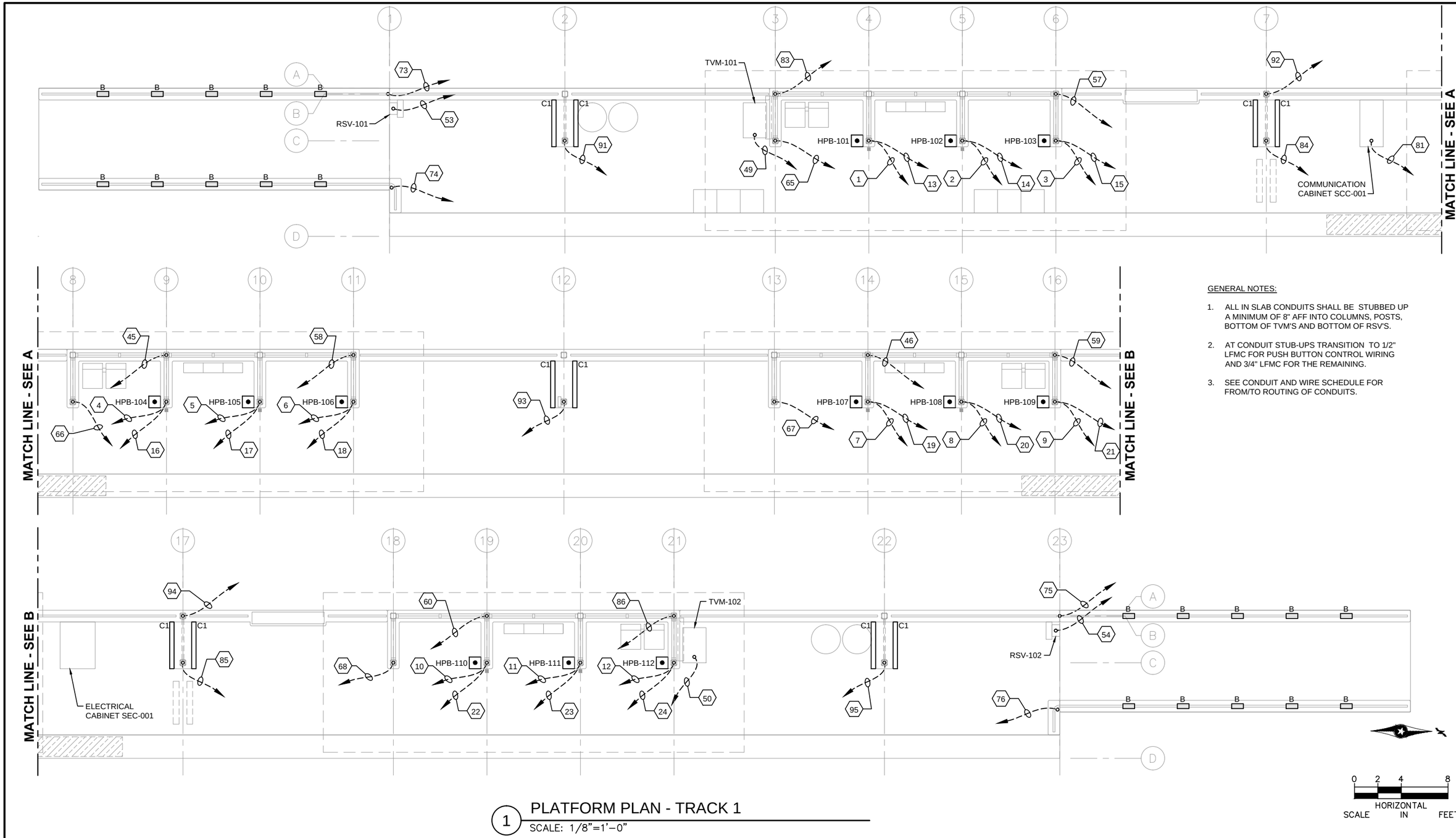
CIVIL - VOLUME 11D
ROYALSTON STATION
ELECTRICAL
GROUNDING ELEVATION - TRACK 2 SIDE

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-ROY-ELE-ELV-204

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GENERAL NOTES:

1. ALL IN SLAB CONDUITS SHALL BE STUBBED UP A MINIMUM OF 8" AFF INTO COLUMNS, POSTS, BOTTOM OF TVM'S AND BOTTOM OF RSV'S.
2. AT CONDUIT STUB-UPS TRANSITION TO 1/2" LFMC FOR PUSH BUTTON CONTROL WIRING AND 3/4" LFMC FOR THE REMAINING.
3. SEE CONDUIT AND WIRE SCHEDULE FOR FROM/TO ROUTING OF CONDUITS.

0 2 4 8
HORIZONTAL SCALE IN FEET

1 PLATFORM PLAN - TRACK 1
SCALE: 1/8"=1'-0"

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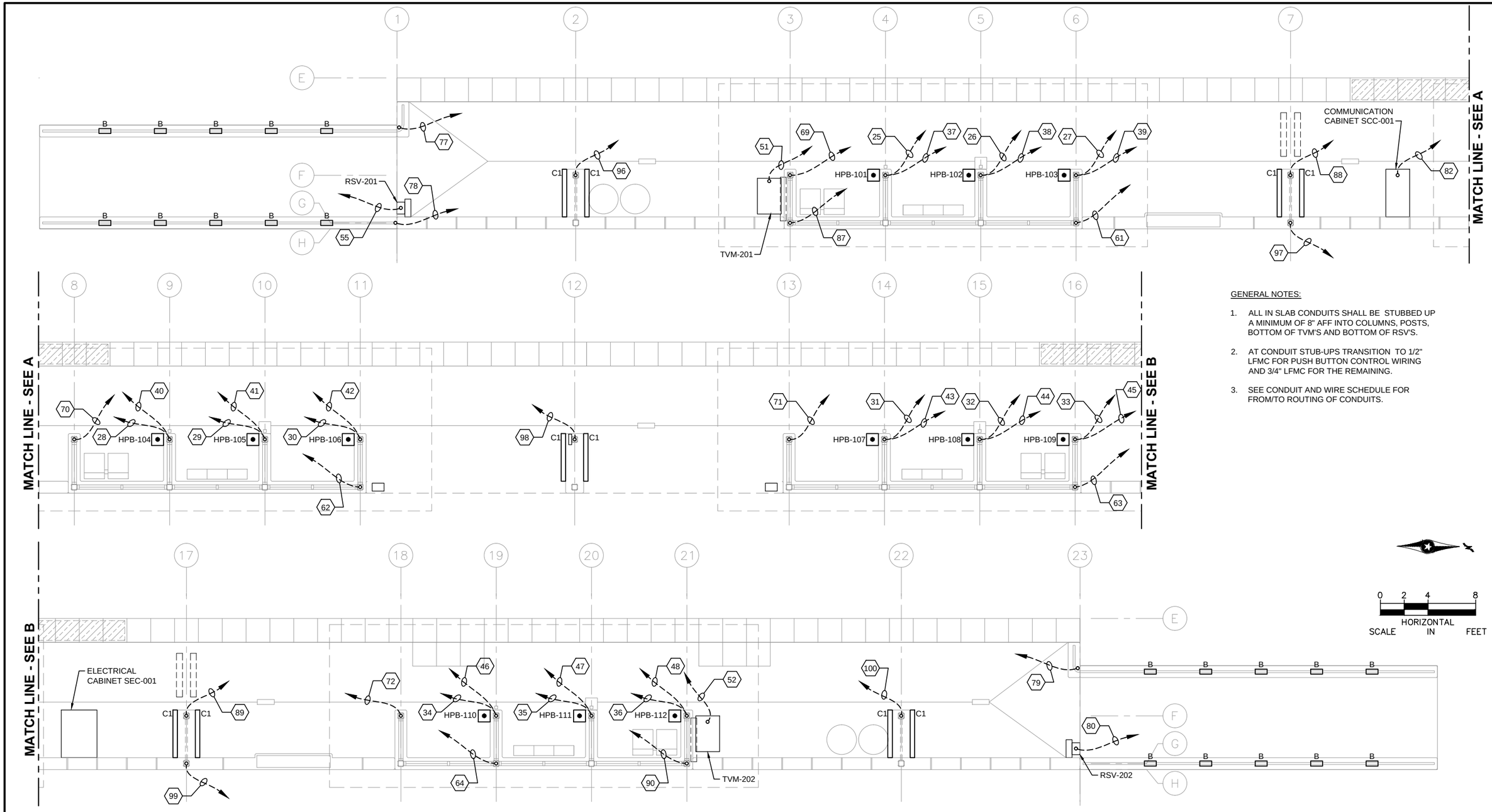
Metropolitan Council | Southwest Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
ELECTRICAL
UNDERSLAB CONDUIT PLAN - TRACK 1

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-ROY-ELE-PLN-301

SHEET 379 OF 394

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1 PLATFORM PLAN

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. ALL IN SLAB CONDUITS SHALL BE STUBBED UP A MINIMUM OF 8" AFF INTO COLUMNS, POSTS, BOTTOM OF TVM'S AND BOTTOM OF RSV'S.
2. AT CONDUIT STUB-UPS TRANSITION TO 1/2" LFMC FOR PUSH BUTTON CONTROL WIRING AND 3/4" LFMC FOR THE REMAINING.
3. SEE CONDUIT AND WIRE SCHEDULE FOR FROM/TO ROUTING OF CONDUITS.

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

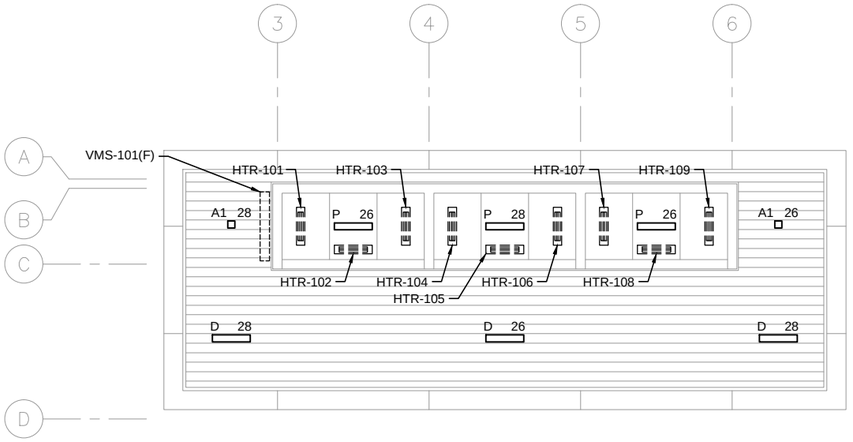
CIVIL - VOLUME 11D
ROYALSTON STATION
ELECTRICAL
UNDERSLAB CONDUIT PLAN - TRACK 2

DISCIPLINE: ELECTRICAL

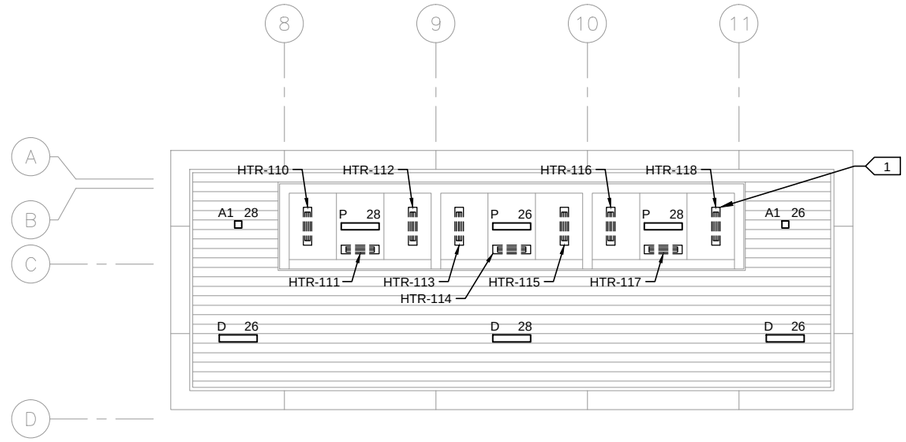
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SHEET 380 OF 394

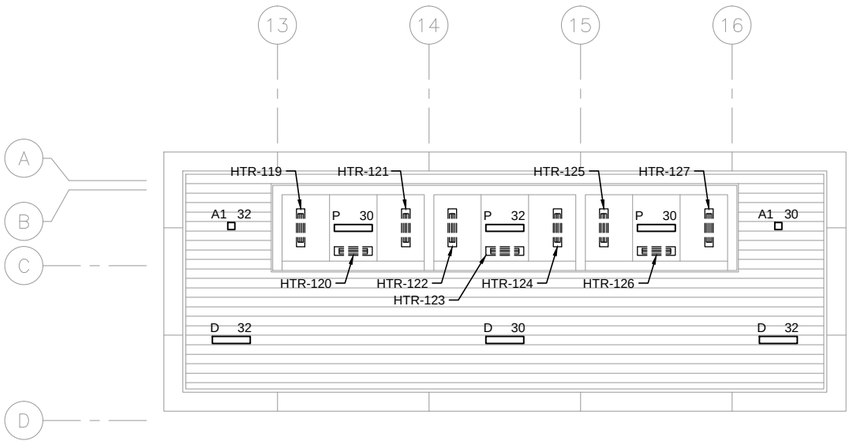
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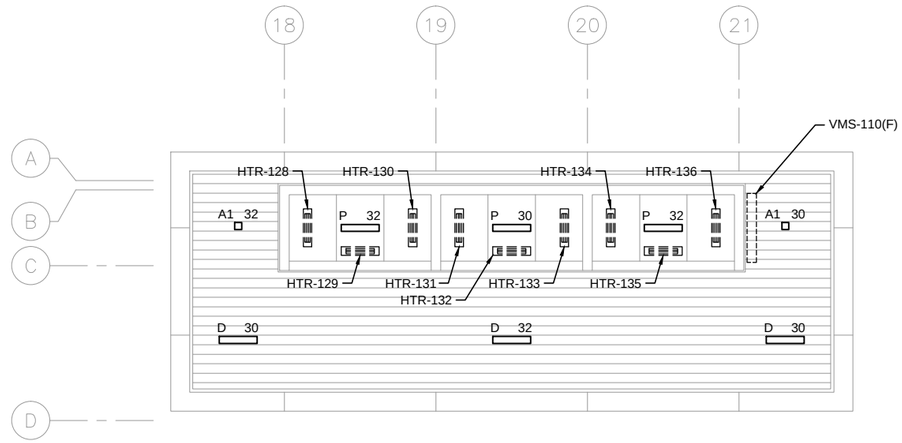
1 TRACK 1 SIDE CANOPY PLAN – SOUTH
SCALE: 1/8"=1'-0"



2 TRACK 1 SIDE CANOPY PLAN – SOUTH MIDDLE
SCALE: 1/8"=1'-0"



3 TRACK 1 CANOPY PLAN – NORTH MIDDLE
SCALE: 1/8"=1'-0"



4 TRACK 1 CANOPY PLAN – NORTH
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. ALL LIGHTING SHOWN ON THIS SHEET SHALL BE RECESSED MOUNTED IN SOFFIT. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.
2. ALL CONDUIT FOR LIGHTING AND TO VMS'S SHALL BE RUN CONCEALED WITHIN SOFFIT AREA.

KEYNOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR HEATER MOUNTING DETAILS.

0 2 4 8
HORIZONTAL SCALE IN FEET

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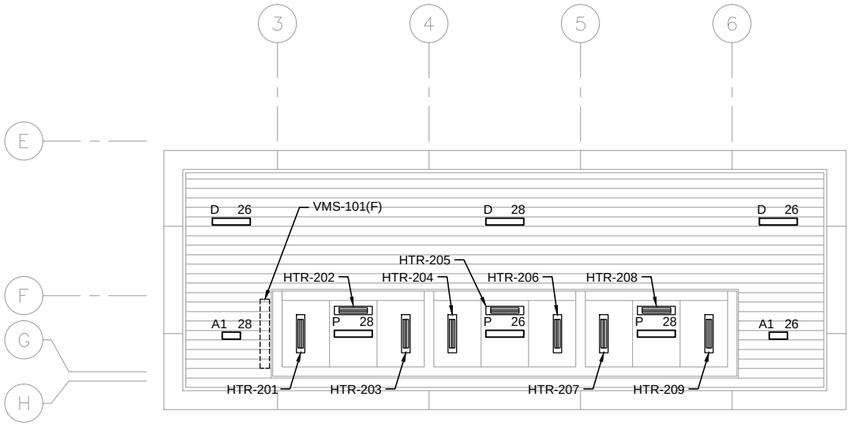
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
ELECTRICAL
CANOPY PLAN - TRACK 1 SIDE

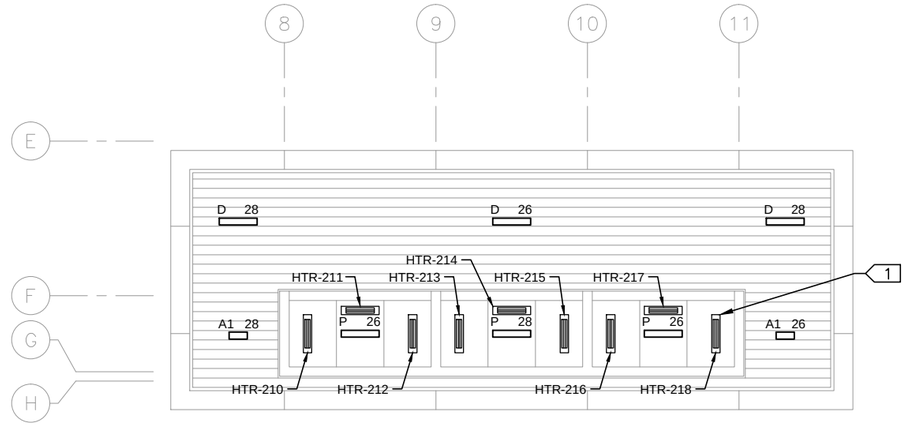
DISCIPLINE: ELECTRICAL
SHEET NAME: E4-ROY-ELE-PLN-303

SHEET 381 OF 394

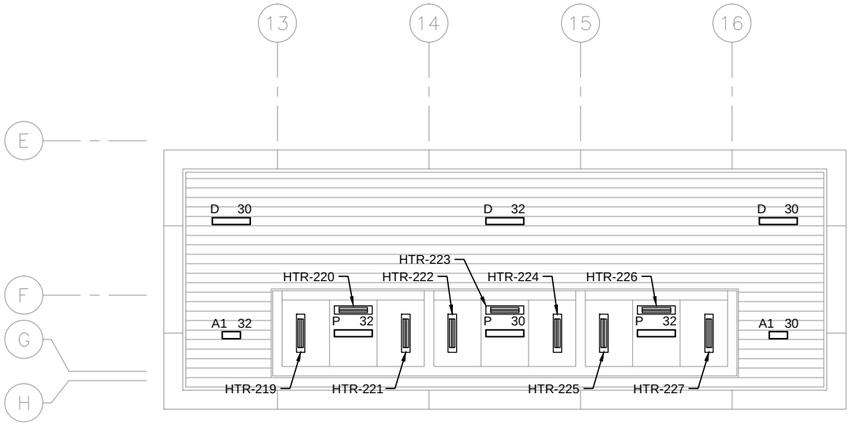
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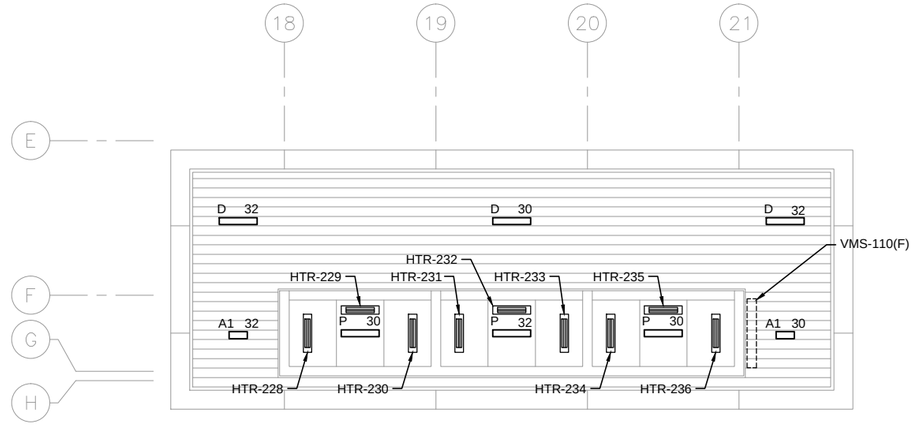
1 TRACK 2 SIDE CANOPY PLAN – SOUTH
SCALE: 1/8"=1'-0"



2 TRACK 2 SIDE CANOPY PLAN – SOUTH MIDDLE
SCALE: 1/8"=1'-0"



3 TRACK 2 CANOPY PLAN – NORTH MIDDLE
SCALE: 1/8"=1'-0"



4 TRACK 2 CANOPY PLAN – NORTH
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. ALL LIGHTING SHOWN ON THIS SHEET SHALL BE RECESSED MOUNTED IN SOFFIT. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.
2. ALL CONDUIT FOR LIGHTING AND TO VMS'S SHALL BE RUN CONCEALED WITHIN SOFFIT AREA.

KEYNOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR HEATER MOUNTING DETAILS.

0 2 4 8
HORIZONTAL SCALE IN FEET

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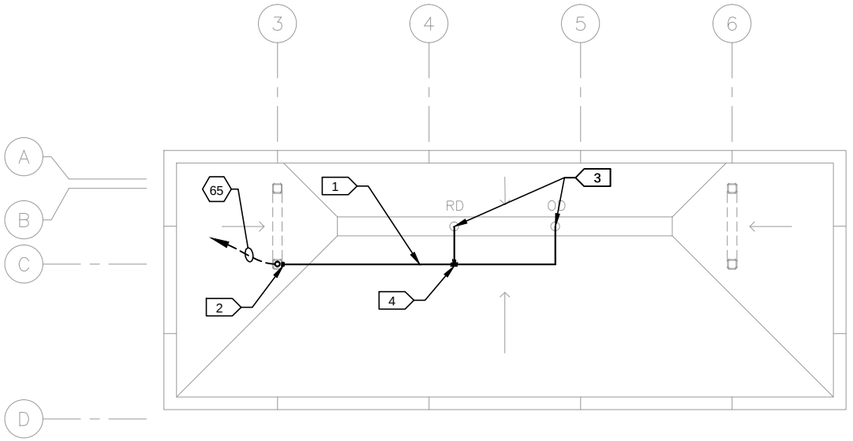
METROPOLITAN COUNCIL
SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
ELECTRICAL
CANOPY PLAN - TRACK 2 SIDE

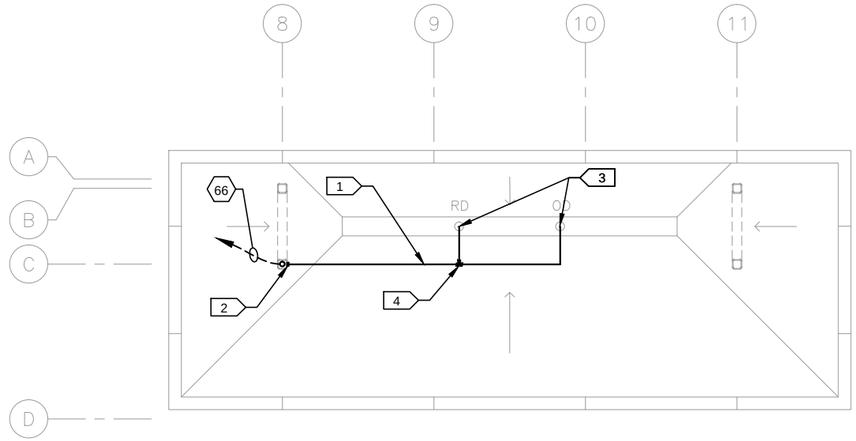
DISCIPLINE: ELECTRICAL
SHEET NAME: E4-ROY-ELE-PLN-304

SHEET 382 OF 394

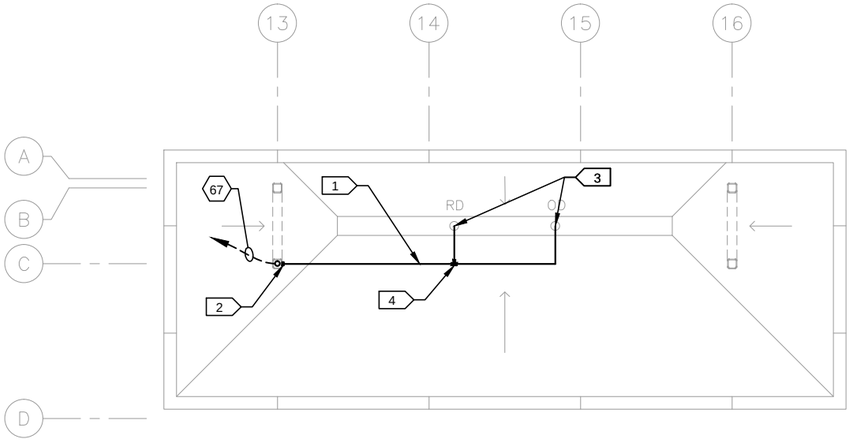
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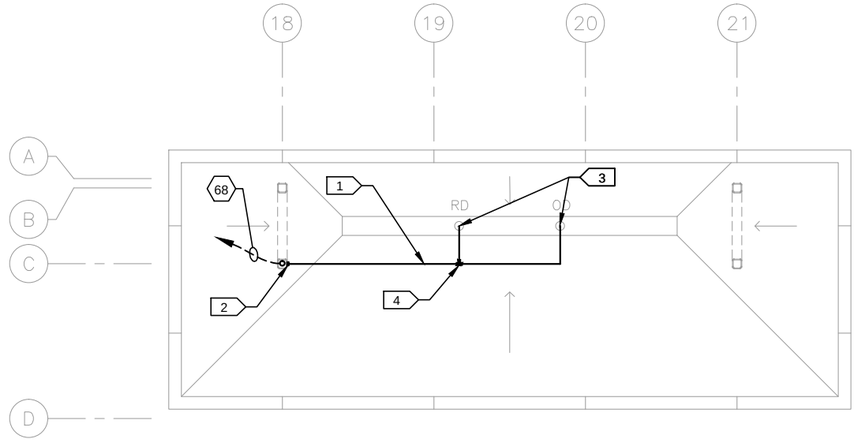
1 ROOF PLAN – SOUTH CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



2 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



3 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE



4 ROOF PLAN – NORTH CANOPY
SCALE: 1/8"=1'-0"
0 2 4 8
SCALE

GENERAL NOTES:

1. HEAT TRACE CONTROL PANEL LOCATED IN SEC-001.

KEYNOTES:

1. SELF REGULATING HEAT TRACE CABLE. ATTACH CABLE TO ROOF WITH CLIPS. COORDINATE CLIP REQUIREMENTS WITH ROOFING CONTRACTOR.
2. POWER CONNECTION KIT WITH DOUBLE HEAT TRACE CABLE CONNECTION. COORDINATE MOUNTING REQUIREMENTS WITH STRUCTURAL STEEL CONTRACTOR.
3. RUN HEAT TRACE DOWN RAIN WATER LEADER 6' BELOW FINISHED FLOOR, PROVIDE CABLE PROTECTION WHERE CABLE ENTERS DRAIN STRAINER.
4. HEAT TRACE SPLICE KIT.

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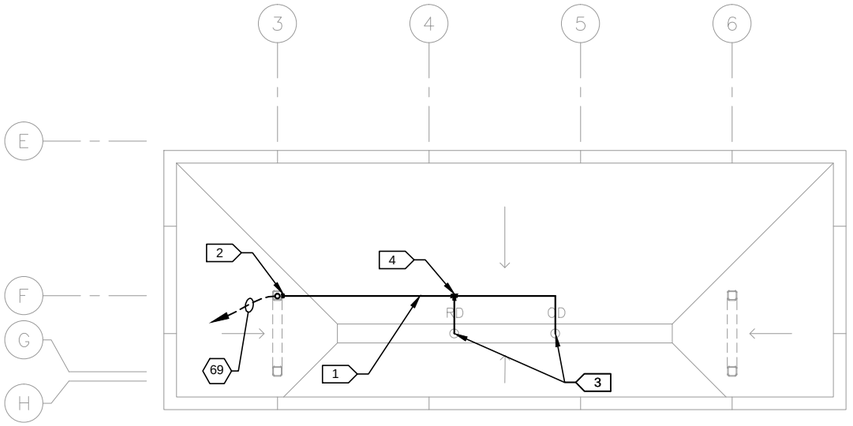
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SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
ELECTRICAL
HEAT TRACE PLAN - TRACK 1

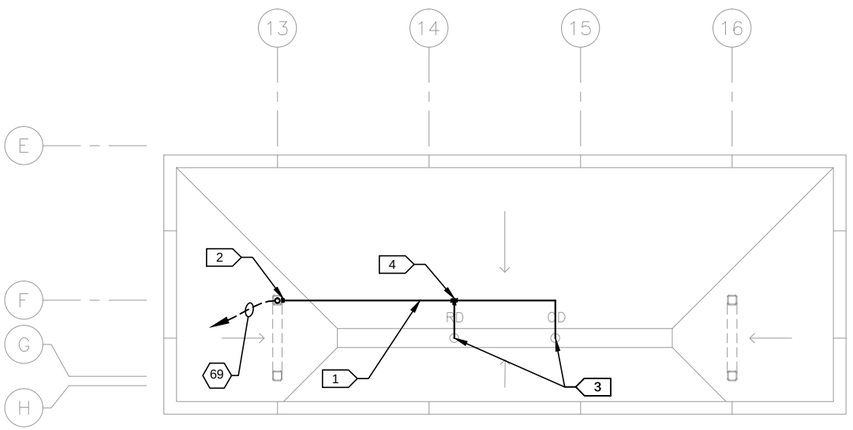
DISCIPLINE: ELECTRICAL
SHEET NAME: E4-ROY-ELE-PLN-311

SHEET 383 OF 394

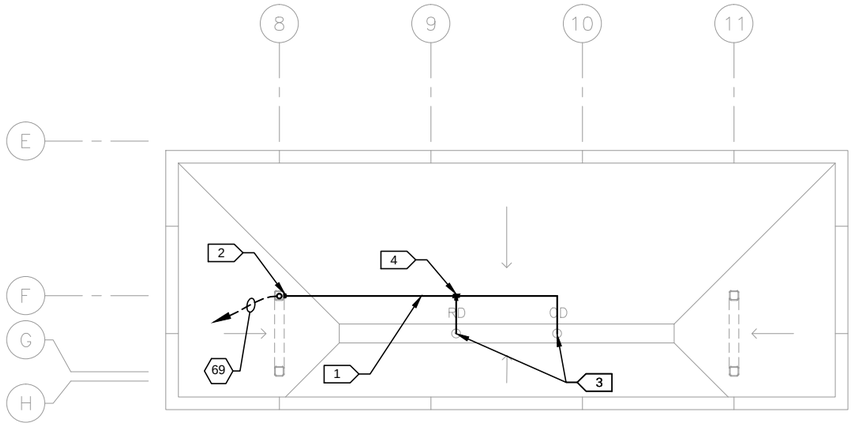
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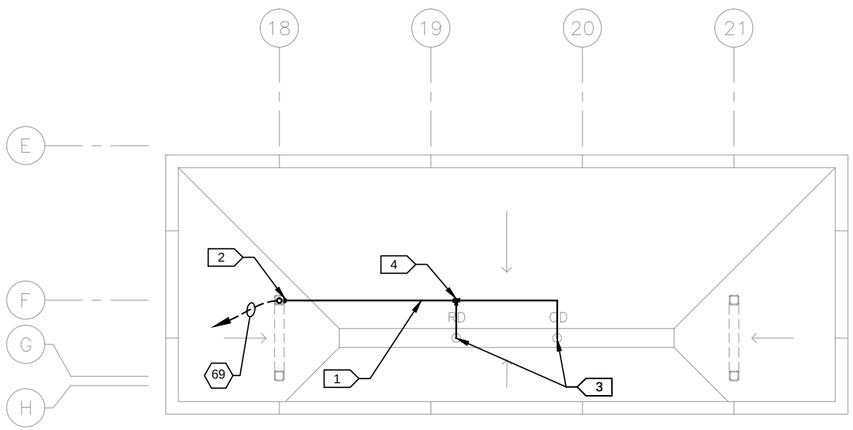
1 ROOF PLAN – SOUTH CANOPY
SCALE: 1/8"=1'-0"



3 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



2 ROOF PLAN – MIDDLE CANOPY
SCALE: 1/8"=1'-0"



4 ROOF PLAN – NORTH CANOPY
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. HEAT TRACE CONTROL PANEL LOCATED IN SEC-001.

KEYNOTES:

1. SELF REGULATING HEAT TRACE CABLE. ATTACH CABLE TO ROOF WITH CLIPS. COORDINATE CLIP REQUIREMENTS WITH ROOFING CONTRACTOR.
2. POWER CONNECTION KIT WITH DOUBLE HEAT TRACE CABLE CONNECTION. COORDINATE MOUNTING REQUIREMENTS WITH STRUCTURAL STEEL CONTRACTOR.
3. RUN HEAT TRACE DOWN RAIN WATER LEADER 6' BELOW FINISHED FLOOR, PROVIDE CABLE PROTECTION WHERE CABLE ENTERS DRAIN STRAINER.
4. HEAT TRACE SPLICE KIT.

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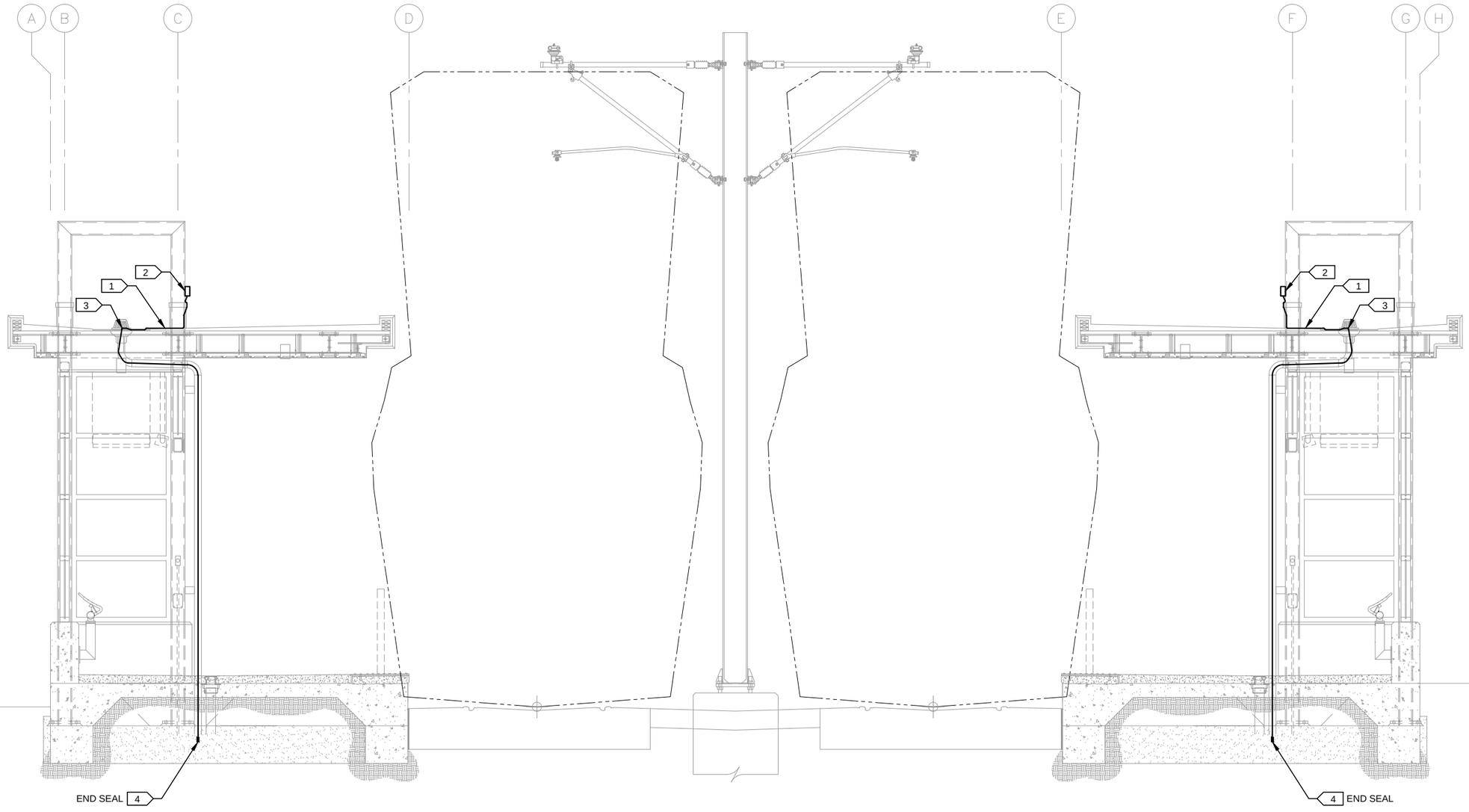
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SOUTHWEST
Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
ELECTRICAL
HEAT TRACE PLAN - TRACK 2

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-ROY-ELE-PLN-312

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1 TYPICAL PLATFORM SECTION
SCALE: 1/4"=1'-0"

0 1 2 4
SCALE

GENERAL NOTES:

1. HEAT TRACE CONTROL PANEL LOCATED IN SEC-001.
2. SEE HEAT TRACE PLAN FOR HEAT TRACE AT CANOPY ROOFS.

KEYNOTES:

1. SELF REGULATING HEAT TRACE CABLE. ATTACH CABLE TO ROOF WITH CLIPS. COORDINATE CLIP REQUIREMENTS WITH ROOFING CONTRACTOR.
2. POWER CONNECTION KIT WITH DOUBLE HEAT TRACE CABLE CONNECTION. COORDINATE MOUNTING REQUIREMENTS WITH STRUCTURAL STEEL CONTRACTOR.
3. PROVIDE CABLE PROTECTION WHERE CABLE ENTERS ROOF DRAIN STRAINERS.
4. RUN HEAT TRACE DOWN RAIN WATER LEADER. ADD END SEALS AT DOWNSPOUT.

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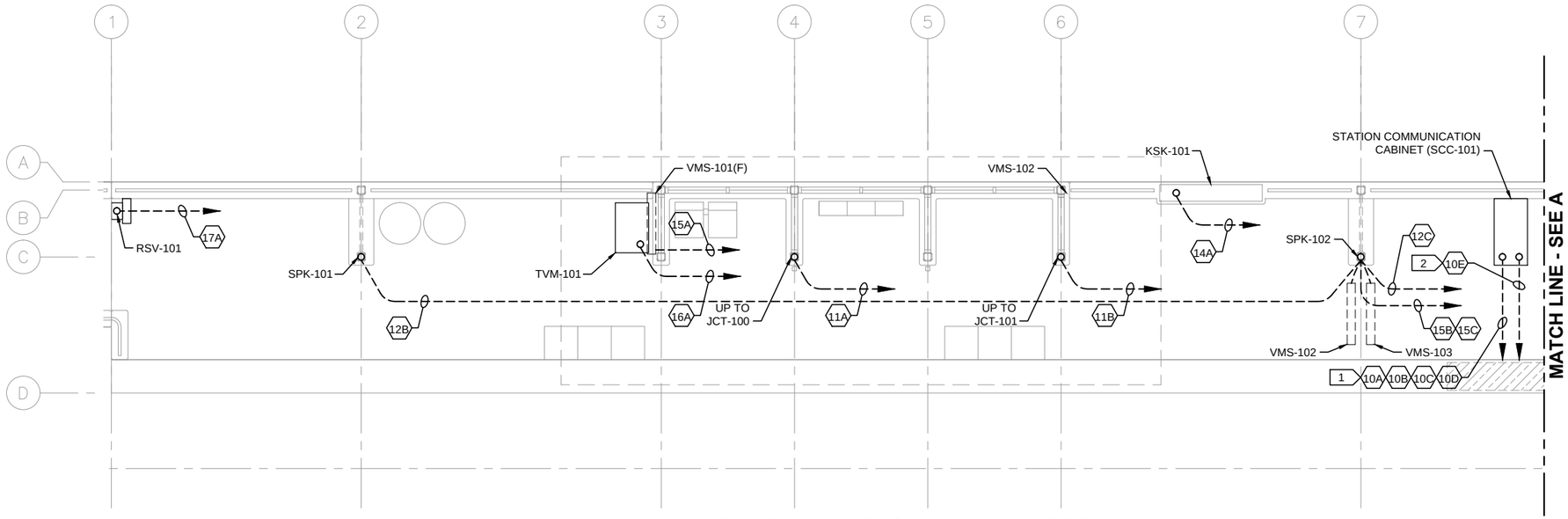
METROPOLITAN COUNCIL
SOUTHWEST
Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
ELECTRICAL
HEAT TRACE ELEVATION

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-ROY-ELE-ELV-321

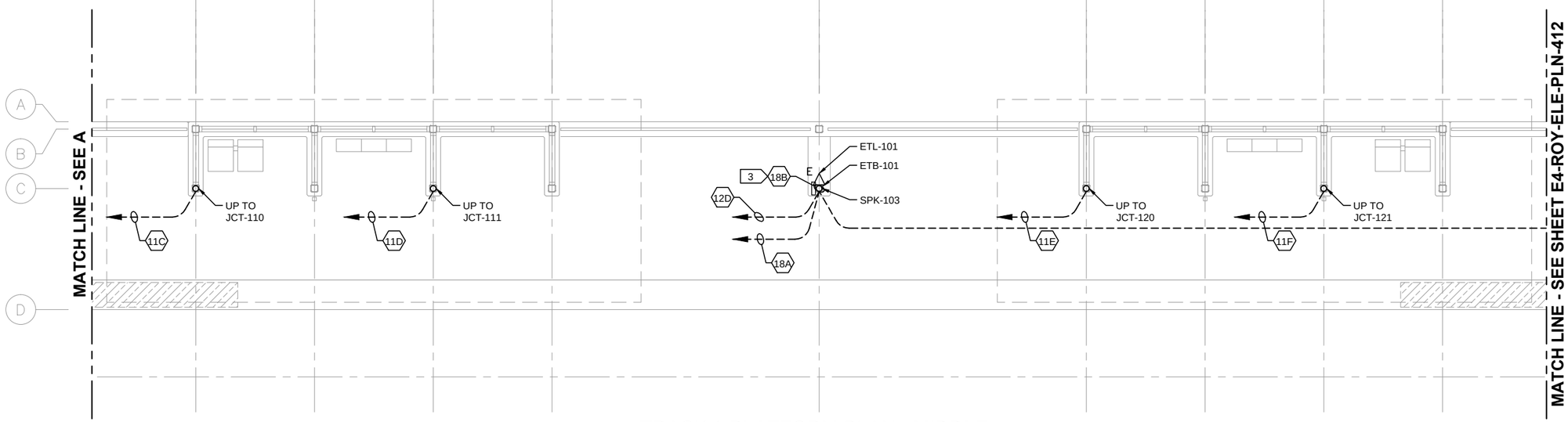
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1 TRACK 1 PLATFORM PLAN - WEST

SCALE: 1/8"=1'-0"



2 TRACK 1 PLATFORM PLAN - MIDDLE

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. DASHED LINES WITH AN ARROWHEAD DENOTE HOMERUN TO SCC-001, UNLESS OTHERWISE NOTED.
2. FOR CONDUITS AND DEVICES MOUNTED TO CANOPY, SEE COMMUNICATIONS CANOPY PLAN.
3. SEE SHEETS E4-ROY-ELE-SCH-461 AND E4-ROY-ELE-462 FOR CONDUIT SCHEDULES.
4. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
5. ALL UNDERSLAB CONDUIT SHALL BE PVC, ALL CONDUIT ABOVE PLATFORM SURFACE SHALL BE GRS.
6. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
7. TVMs, RSVs, SPEAKERS, ETELS AND COMMUNICATION CABINET TO BE PROVIDED BY OTHERS; SHOWN FOR REFERENCE ONLY.

KEYNOTES:

1. COMMUNICATIONS CONDUITS TO/FROM STATION SIGNAL-COMMUNICATIONS HOUSE VIA MH-XXXX.
2. CONDUIT TO/FROM STATION-COMMUNICATIONS HOUSE FOR UPS POWER FEED TO SCC-001.
3. CONDUIT AND CABLE FOR ETEL BEACON LIGHT SHALL BE INSTALLED ENTIRELY WITHIN COLUMN.

0 2 4 8

HORIZONTAL SCALE IN FEET

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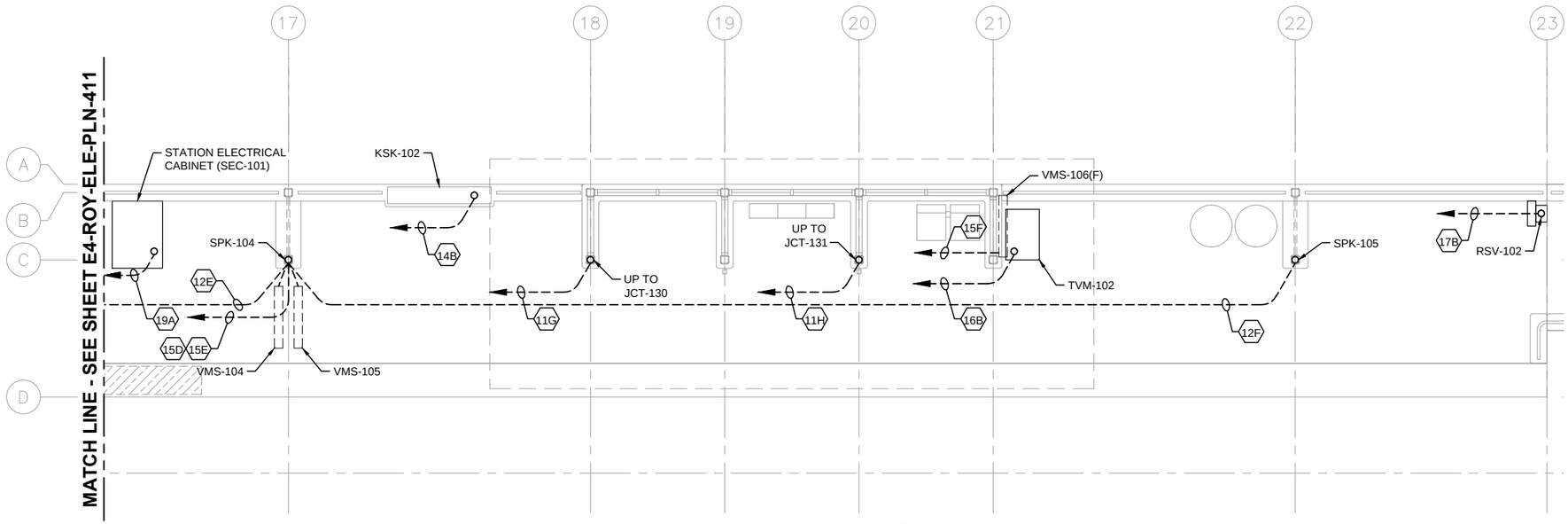
CIVIL - VOLUME 11D
ROYALSTION STATION
COMMUNICATIONS UNDERSLAB CONDUIT PLAN - TRACK 1 (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-ROY-ELE-PLN-411

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1 TRACK 1 PLATFORM PLAN - EAST

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. DASHED LINES WITH AN ARROWHEAD DENOTE HOMERUN TO SCC-001, UNLESS OTHERWISE NOTED.
2. FOR CONDUITS AND DEVICES MOUNTED TO CANOPY, SEE COMMUNICATIONS CANOPY PLAN.
3. SEE SHEETS E4-ROY-ELE-SCH-461 AND E4-ROY-ELE-462 FOR CONDUIT SCHEDULES.
4. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
5. ALL UNDERSLAB CONDUIT SHALL BE PVC, ALL CONDUIT ABOVE PLATFORM SURFACE SHALL BE GRS.
6. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
7. TVMs, RSVs, SPEAKERS, ETELS AND COMMUNICATION CABINET TO BE PROVIDED BY OTHERS; SHOWN FOR REFERENCE ONLY.

KEYNOTES:

1.

0 2 4 8

HORIZONTAL SCALE IN FEET

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90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

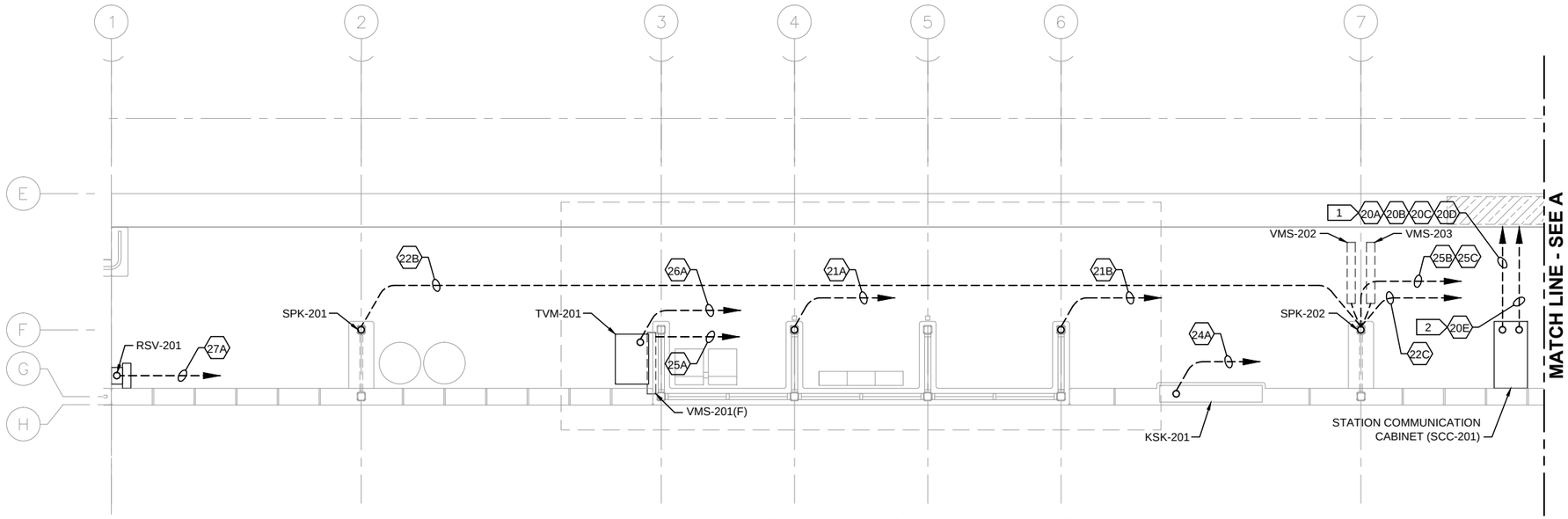
CIVIL - VOLUME 11D
ROYALSTON STATION
COMMUNICATIONS UNDERSLAB CONDUIT PLAN - TRACK 1 (2 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-ROY-ELE-PLN-412

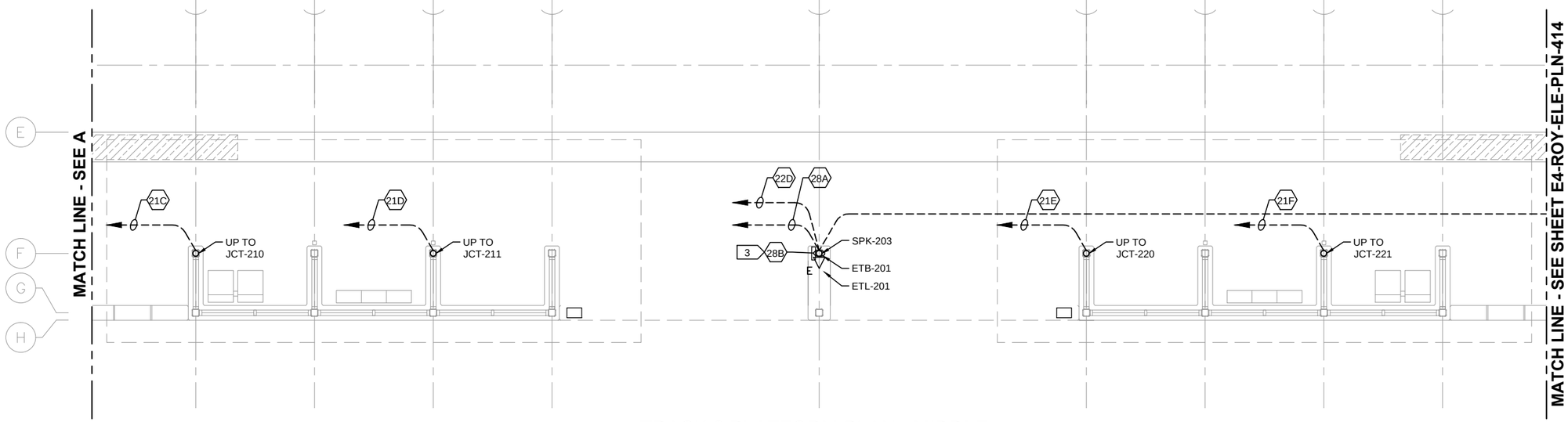
SHEET 387 OF 394

Jan, 18 2016 11:46 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-ROY-ELE-PLN-412.dwg By: V-BegeJB



1 TRACK 2 PLATFORM PLAN - WEST

SCALE: 1/8"=1'-0"



2 TRACK 2 PLATFORM PLAN - MIDDLE

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. DASHED LINES WITH AN ARROWHEAD DENOTE HOMERUN TO SCC-001, UNLESS OTHERWISE NOTED.
2. FOR CONDUITS AND DEVICES MOUNTED TO CANOPY, SEE COMMUNICATIONS CANOPY PLAN.
3. SEE SHEETS E4-ROY-ELE-SCH-461 AND E4-ROY-ELE-462 FOR CONDUIT SCHEDULES.
4. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
5. ALL UNDERSLAB CONDUIT SHALL BE PVC, ALL CONDUIT ABOVE PLATFORM SURFACE SHALL BE GRS.
6. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
7. TVMs, RSVs, SPEAKERS, ETELS AND COMMUNICATION CABINET TO BE PROVIDED BY OTHERS; SHOWN FOR REFERENCE ONLY.

KEYNOTES:

1. COMMUNICATIONS CONDUITS TO/FROM STATION SIGNAL-COMMUNICATIONS HOUSE VIA MH-XXXX.
2. CONDUIT TO/FROM STATION-COMMUNICATIONS HOUSE FOR UPS POWER FEED TO SCC-001.
3. CONDUIT AND CABLE FOR ETEL BEACON LIGHT SHALL BE INSTALLED ENTIRELY WITHIN COLUMN.

0 2 4 8

HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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Green Line LRT Extension

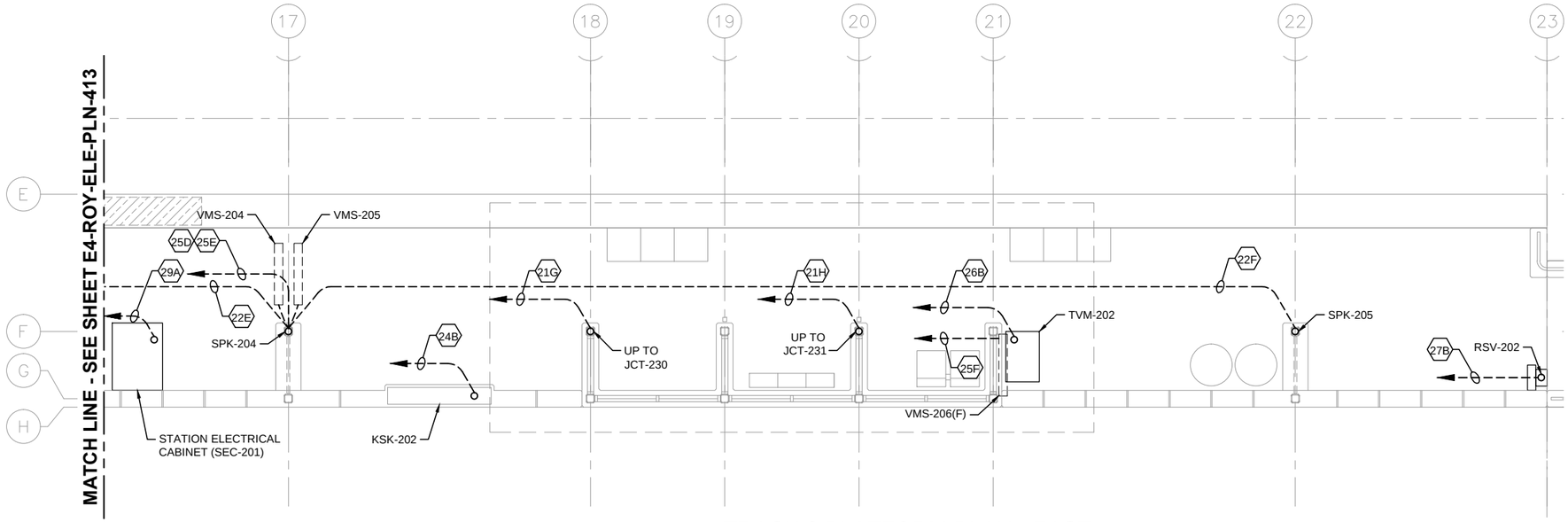
CIVIL - VOLUME 11D
ROYALSTON STATION
COMMUNICATIONS UNDERSLAB CONDUIT PLAN - TRACK 2 (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-ROY-ELE-PLN-413

SHEET 388 OF 394

Jan. 18 2016 11:46 am V:\3400_ADC\CAD\SEGMENT E4\PLAN SHEETS\ELECTRICAL\E4-ROY-ELE-PLN-413.dwg By: V-BegeJB



1 TRACK 2 PLATFORM PLAN - EAST

SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. DASHED LINES WITH AN ARROWHEAD DENOTE HOMERUN TO SCC-001, UNLESS OTHERWISE NOTED.
2. FOR CONDUITS AND DEVICES MOUNTED TO CANOPY, SEE COMMUNICATIONS CANOPY PLAN.
3. SEE SHEETS E4-ROY-ELE-SCH-461 AND E4-ROY-ELE-462 FOR CONDUIT SCHEDULES.
4. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
5. ALL UNDERSLAB CONDUIT SHALL BE PVC, ALL CONDUIT ABOVE PLATFORM SURFACE SHALL BE GRS.
6. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
7. TVMs, RSVs, SPEAKERS, ETELS AND COMMUNICATION CABINET TO BE PROVIDED BY OTHERS; SHOWN FOR REFERENCE ONLY.

KEYNOTES:

1.

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HORIZONTAL SCALE IN FEET

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SOUTHWEST
Green Line LRT Extension

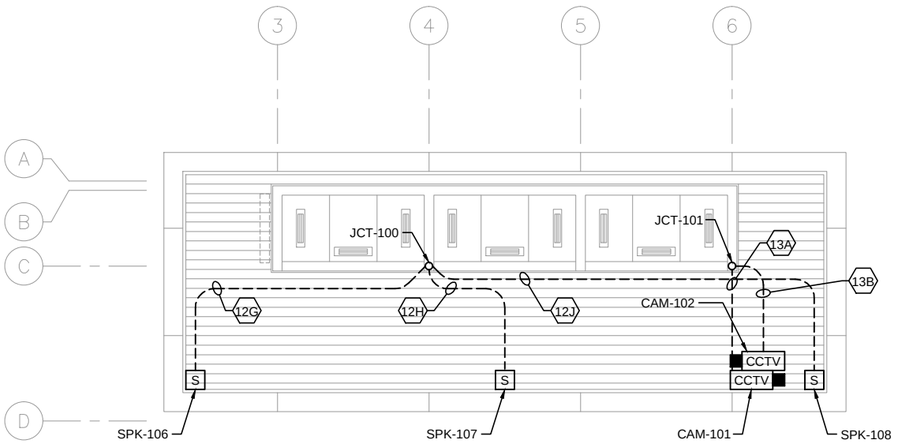
CIVIL - VOLUME 11D
ROYALSTON STATION
COMMUNICATIONS UNDERSLAB
CONDUIT PLAN - TRACK 2 (2 OF 2)

DISCIPLINE: ELECTRICAL

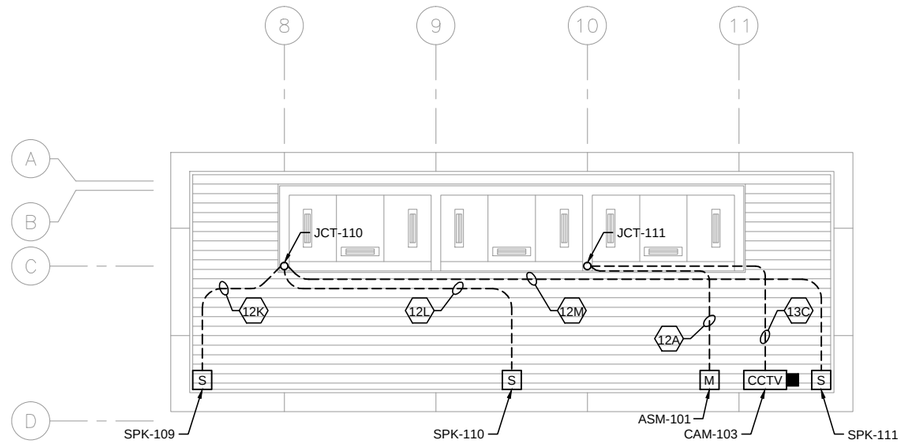
SHEET NAME: E4-ROY-ELE-PLN-414

SHEET 389 OF 394

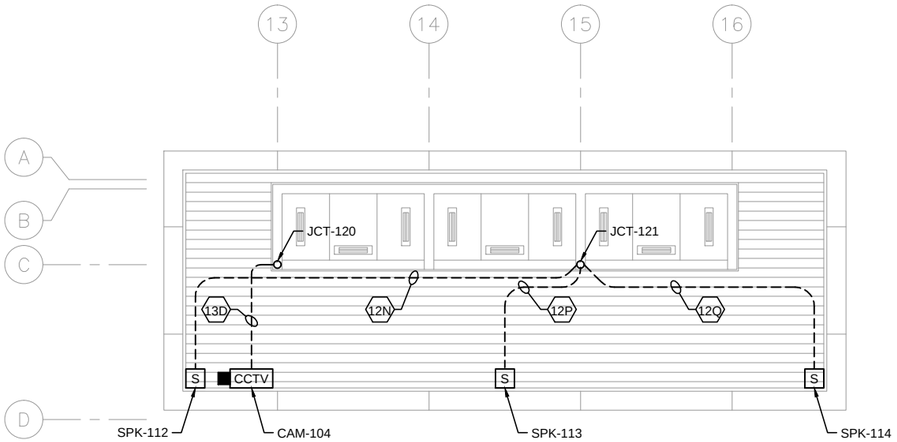
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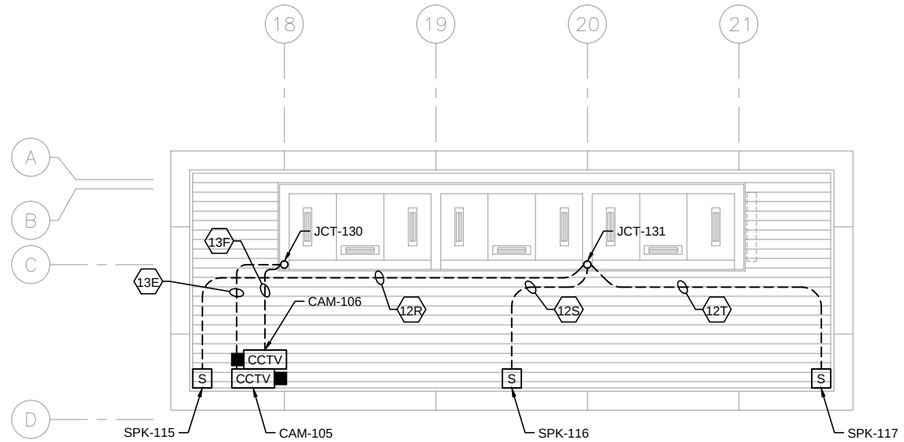
1 TRACK 1 SIDE CANOPY PLAN – WEST
SCALE: 1/8"=1'–0"



2 TRACK 1 SIDE CANOPY PLAN – WEST MIDDLE
SCALE: 1/8"=1'–0"



3 TRACK 1 CANOPY PLAN – EAST MIDDLE
SCALE: 1/8"=1'–0"



4 TRACK 1 CANOPY PLAN – EAST
SCALE: 1/8"=1'–0"

GENERAL NOTES:

1. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
2. SEE SHEETS E4-ROY-ELE-SCH-461 AND E4-ROY-ELE-462 FOR CONDUIT SCHEDULES.
3. ALL CONDUITS SHOWN SHALL BE GRS.
4. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
5. SPEAKERS, CCTV CAMERAS AND MICROPHONES SHOWN FOR REFERENCE ONLY; WILL BE PROVIDED BY OTHERS.

KEYNOTES:

1.

0 2 4 8
HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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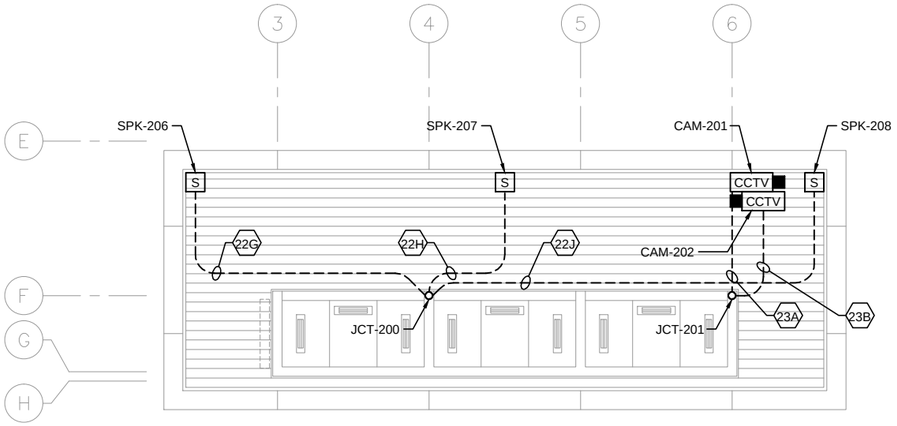
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CIVIL - VOLUME 11D
ROYALSTON STATION
COMMUNICATIONS
CANOPY PLAN - TRACK 1 SIDE

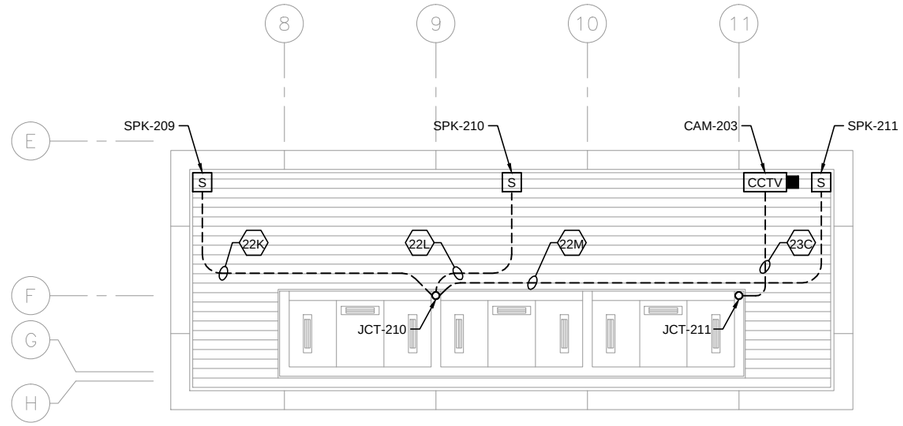
DISCIPLINE: ELECTRICAL
SHEET NAME: E4-ROY-ELE-PLN-421

SHEET 390 OF 394

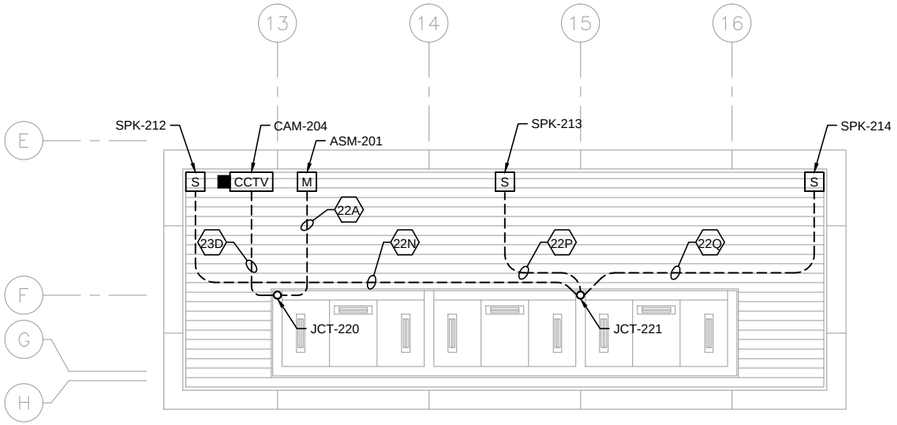
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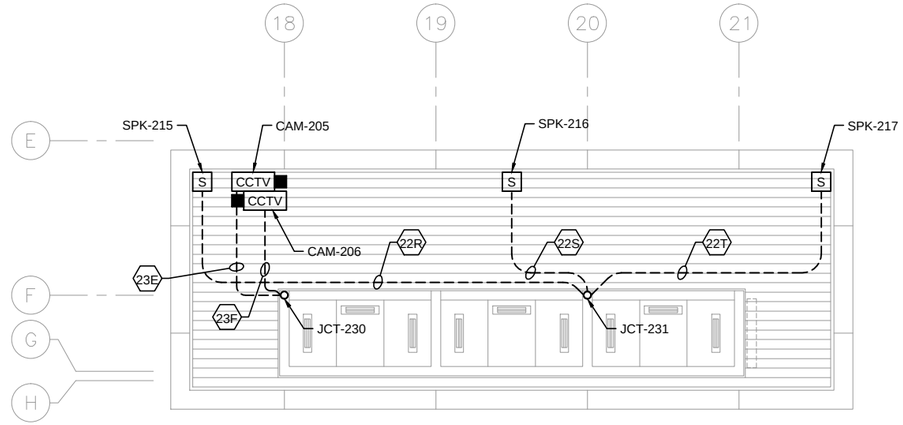
1 TRACK 2 SIDE CANOPY PLAN – WEST
SCALE: 1/8"=1'-0"



2 TRACK 2 SIDE CANOPY PLAN – WEST MIDDLE
SCALE: 1/8"=1'-0"



3 TRACK 2 CANOPY PLAN – EAST MIDDLE
SCALE: 1/8"=1'-0"



4 TRACK 2 CANOPY PLAN – EAST
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. ALL CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
2. SEE SHEETS E4-ROY-ELE-SCH-461 AND E4-ROY-ELE-462 FOR CONDUIT SCHEDULES.
3. ALL CONDUITS SHOWN SHALL BE GRS.
4. CONDUIT ROUTING SHOWN DIAGRAMMATICALLY.
5. SPEAKERS, CCTV CAMERAS AND MICROPHONES SHOWN FOR REFERENCE ONLY; WILL BE PROVIDED BY OTHERS.

KEYNOTES:

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HORIZONTAL SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
COMMUNICATIONS
CANOPY PLAN - TRACK 2 SIDE

DISCIPLINE: ELECTRICAL
SHEET NAME: E4-ROY-ELE-PLN-422

SHEET 391 OF 394

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GENERAL NOTES:

1. CONDUIT NUMBERS CORRELATE TO ⬡ NUMBERS ON PLAN SHEETS AND ELEVATIONS.
2. SEE PLAN AND ELEVATION SHEETS FOR LOCATIONS OF CONDUITS.

ROYALSTON STATION TRACK 1 COMMUNICATION CONDUIT AND CABLE SCHEDULE

CONDUIT NO.	DEVICE ID	DESCRIPTION/USE	FROM	TO	CONDUIT SIZE
10A	ROY -CON-1001	S/C HOUSE TO SCC 101	S/C MANHOLE	ROY -SCC-101	3"
10B	ROY -CON-1002	S/C HOUSE TO SCC 101	S/C MANHOLE	ROY -SCC-101	3"
10C	ROY -CON-1003	S/C HOUSE TO SCC 101	S/C MANHOLE	ROY -SCC-101	3"
10D	ROY -CON-1004	S/C HOUSE TO SCC 101	S/C MANHOLE	ROY -SCC-101	3"
10E	ROY -CON-1005	UPS POWER FEED: SCH TO SCC	S/C MANHOLE	ROY -SCC-101	3"
11A	ROY -CON-1101	SCC TO JUNCTION 100	ROY -SCC-101	ROY -JCT-100	2"
11B	ROY -CON-1102	SCC TO JUNCTION 101	ROY -SCC-101	ROY -JCT-101	2"
11C	ROY -CON-1103	SCC TO JUNCTION 110	ROY -SCC-101	ROY -JCT-110	2"
11D	ROY -CON-1104	SCC TO JUNCTION 111	ROY -SCC-101	ROY -JCT-111	2"
11E	ROY -CON-1105	SCC TO JUNCTION 120	ROY -SCC-101	ROY -JCT-120	2"
11F	ROY -CON-1106	SCC TO JUNCTION 121	ROY -SCC-101	ROY -JCT-121	2"
11G	ROY -CON-1107	SCC TO JUNCTION 130	ROY -SCC-101	ROY -JCT-130	2"
11H	ROY -CON-1108	SCC TO JUNCTION 131	ROY -SCC-101	ROY -JCT-131	2"
12A	ROY -CON-1201	MICROPHONE 101 - NOISE SENSING	ROY -JCT-101	ROY -ASM-101	1"
12B	ROY -CON-1202	SPEAKER 101 - POLE	ROY -SPK-102	ROY -SPK-101	1-1/2"
12C	ROY -CON-1203	SPEAKER 102 - POLE	ROY -SCC-101	ROY -SPK-102	1-1/2"
12D	ROY -CON-1204	SPEAKER 103 - POLE	ROY -SCC-101	ROY -SPK-103	1-1/2"
12E	ROY -CON-1205	SPEAKER 104 - POLE	ROY -SPK-103	ROY -SPK-104	1-1/2"
12F	ROY -CON-1206	SPEAKER 105 - POLE	ROY -SPK-104	ROY -SPK-105	1-1/2"
12G	ROY -CON-1207	SPEAKER 106 - CANOPY	ROY -JCT-100	ROY -SPK-106	1"
12H	ROY -CON-1208	SPEAKER 107 - CANOPY	ROY -JCT-100	ROY -SPK-107	1"
12J	ROY -CON-1209	SPEAKER 108 - CANOPY	ROY -JCT-100	ROY -SPK-108	1"
12K	ROY -CON-1210	SPEAKER 109 - CANOPY	ROY -JCT-110	ROY -SPK-109	1"
12L	ROY -CON-1211	SPEAKER 110 - CANOPY	ROY -JCT-110	ROY -SPK-110	1"
12M	ROY -CON-1212	SPEAKER 111 - CANOPY	ROY -JCT-110	ROY -SPK-111	1"
12N	ROY -CON-1213	SPEAKER 112 - CANOPY	ROY -JCT-121	ROY -SPK-112	1"
12P	ROY -CON-1214	SPEAKER 113 - CANOPY	ROY -JCT-121	ROY -SPK-113	1"
12Q	ROY -CON-1215	SPEAKER 114 - CANOPY	ROY -JCT-121	ROY -SPK-114	1"
12R	ROY -CON-1216	SPEAKER 115 - CANOPY	ROY -JCT-131	ROY -SPK-115	1"
12S	ROY -CON-1217	SPEAKER 116 - CANOPY	ROY -JCT-131	ROY -SPK-116	1"
12T	ROY -CON-1218	SPEAKER 117 - CANOPY	ROY -JCT-131	ROY -SPK-117	1"
13A	ROY -CON-1301	CAMERA 101	ROY -JCT-101	ROY -CAM-101	1"
13B	ROY -CON-1302	CAMERA 102	ROY -JCT-101	ROY -CAM-102	1"
13C	ROY -CON-1303	CAMERA 103	ROY -JCT-111	ROY -CAM-103	1"
13D	ROY -CON-1304	CAMERA 104	ROY -JCT-120	ROY -CAM-104	1"
13E	ROY -CON-1305	CAMERA 105	ROY -JCT-130	ROY -CAM-105	1"
13F	ROY -CON-1306	CAMERA 106	ROY -JCT-130	ROY -CAM-106	1"
14A	ROY -CON-1401	KIOSK 101 (F)	ROY -SCC-101	ROY -KSK-101	1"
14B	ROY -CON-1402	KIOSK 102 (F)	ROY -SCC-101	ROY -KSK-102	1"
15A	ROY -CON-1501	VMS 101 (F)	ROY -SCC-001	ROY -VMS-101	1"
15B	ROY -CON-1502	VMS 102, VMS 103	ROY -SCC-001	ROY -VMS-102, -VMS-103	1-1/2"
15C	ROY -CON-1503	VMS 104, VMS 105	ROY -SCC-001	ROY -VMS-104, -VMS-105	1-1/2"
15D	ROY -CON-1504	VMS 106 (F)	ROY -SCC-001	ROY -VMS-106	1"
16A	ROY -CON-1601	TVM 101	ROY -SCC-101	ROY -TVM-101	1-1/2"
16B	ROY -CON-1602	TVM 102	ROY -SCC-101	ROY -TVM-102	1-1/2"
17A	ROY -CON-1701	VALIDATOR 101	ROY -SCC-101	ROY -RSV-101	1"
17B	ROY -CON-1702	VALIDATOR 102	ROY -SCC-101	ROY -RSV-102	1"
18A	ROY -CON-1801	EMERGENCY TELEPHONE 101 - PHONE	ROY -SCC-101	ROY -ETL-101	1-1/2"
18B	ROY -CON-1802	EMERGENCY TELEPHONE 101 - BEACON LIGHT	ROY -ETL-101	ROY -ETB-101	1"
19A	ROY -CON-1901	STATION ELECTRICAL CABINET	ROY -SCC-101	ROY -SEC-101	2"

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NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
COMMUNICATIONS
CONDUIT SCHEDULE (1 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-ROY-ELE-SCH-461

SHEET 392 OF 394

ROYALSTON STATION TRACK 2 COMMUNICATION CONDUIT AND CABLE SCHEDULE

CONDUIT NO.	DEVICE ID	DESCRIPTION/USE	FROM	TO	CONDUIT SIZE
20A	ROY -CON-2001	S/C HOUSE TO SCC 201	S/C MANHOLE	ROY -SCC-201	3"
20B	ROY -CON-2002	S/C HOUSE TO SCC 201	S/C MANHOLE	ROY -SCC-201	3"
20C	ROY -CON-2003	S/C HOUSE TO SCC 201	S/C MANHOLE	ROY -SCC-201	3"
20D	ROY -CON-2004	S/C HOUSE TO SCC 201	S/C MANHOLE	ROY -SCC-201	3"
20E	ROY -CON-2005	UPS POWER FEED: SCH TO SCC	S/C MANHOLE	ROY -SCC-201	3"
21A	ROY -CON-2101	SCC TO JUNCTION 200	ROY -SCC-201	ROY -JCT-200	2"
21B	ROY -CON-2102	SCC TO JUNCTION 201	ROY -SCC-201	ROY -JCT-201	2"
21C	ROY -CON-2103	SCC TO JUNCTION 210	ROY -SCC-201	ROY -JCT-210	2"
21D	ROY -CON-2104	SCC TO JUNCTION 211	ROY -SCC-201	ROY -JCT-211	2"
21E	ROY -CON-2105	SCC TO JUNCTION 220	ROY -SCC-201	ROY -JCT-220	2"
21F	ROY -CON-2106	SCC TO JUNCTION 221	ROY -SCC-201	ROY -JCT-221	2"
21G	ROY -CON-2107	SCC TO JUNCTION 230	ROY -SCC-201	ROY -JCT-230	2"
21H	ROY -CON-2108	SCC TO JUNCTION 231	ROY -SCC-201	ROY -JCT-231	2"
22A	ROY -CON-2201	MICROPHONE 201 - NOISE SENSING	ROY -JCT-201	ROY -ASM-201	1"
22B	ROY -CON-2202	SPEAKER 201 - POLE	ROY -SPK-202	ROY -SPK-201	1-1/2"
22C	ROY -CON-2203	SPEAKER 202 - POLE	ROY -SCC-201	ROY -SPK-202	1-1/2"
22D	ROY -CON-2204	SPEAKER 203 - POLE	ROY -SCC-201	ROY -SPK-203	1-1/2"
22E	ROY -CON-2205	SPEAKER 204 - POLE	ROY -SPK-203	ROY -SPK-204	1-1/2"
22F	ROY -CON-2206	SPEAKER 205 - POLE	ROY -SPK-204	ROY -SPK-205	1-1/2"
22G	ROY -CON-2207	SPEAKER 206 - CANOPY	ROY -JCT-200	ROY -SPK-206	1"
22H	ROY -CON-2208	SPEAKER 207 - CANOPY	ROY -JCT-200	ROY -SPK-207	1"
22J	ROY -CON-2209	SPEAKER 208 - CANOPY	ROY -JCT-200	ROY -SPK-208	1"
22K	ROY -CON-2210	SPEAKER 209 - CANOPY	ROY -JCT-210	ROY -SPK-209	1"
22L	ROY -CON-2211	SPEAKER 210 - CANOPY	ROY -JCT-210	ROY -SPK-210	1"
22M	ROY -CON-2212	SPEAKER 211 - CANOPY	ROY -JCT-210	ROY -SPK-211	1"
22N	ROY -CON-2213	SPEAKER 212 - CANOPY	ROY -JCT-221	ROY -SPK-212	1"
22P	ROY -CON-2214	SPEAKER 213 - CANOPY	ROY -JCT-221	ROY -SPK-213	1"
22Q	ROY -CON-2215	SPEAKER 214 - CANOPY	ROY -JCT-221	ROY -SPK-214	1"
22R	ROY -CON-2216	SPEAKER 215 - CANOPY	ROY -JCT-231	ROY -SPK-215	1"
22S	ROY -CON-2217	SPEAKER 216 - CANOPY	ROY -JCT-231	ROY -SPK-216	1"
22T	ROY -CON-2218	SPEAKER 217 - CANOPY	ROY -JCT-231	ROY -SPK-217	1"
23A	ROY -CON-2301	CAMERA 201	ROY -JCT-201	ROY -CAM-201	1"
23B	ROY -CON-2302	CAMERA 202	ROY -JCT-201	ROY -CAM-202	1"
23C	ROY -CON-2303	CAMERA 203	ROY -JCT-211	ROY -CAM-203	1"
23D	ROY -CON-2304	CAMERA 204	ROY -JCT-220	ROY -CAM-204	1"
23E	ROY -CON-2305	CAMERA 205	ROY -JCT-230	ROY -CAM-205	1"
23F	ROY -CON-2306	CAMERA 206	ROY -JCT-230	ROY -CAM-206	1"
24A	ROY -CON-2401	KIOSK 201 (F)	ROY -SCC-201	ROY -KSK-201	1"
24B	ROY -CON-2402	KIOSK 202 (F)	ROY -SCC-201	ROY -KSK-202	1"
25A	ROY -CON-2501	VMS 201 (F)	ROY -SCC-001	ROY -VMS-201	1"
25B	ROY -CON-2502	VMS 202, VMS 203	ROY -SCC-001	ROY -VMS-202, -VMS-203	1-1/2"
25C	ROY -CON-2503	VMS 204, VMS 205	ROY -SCC-001	ROY -VMS-204, -VMS-205	1-1/2"
25D	ROY -CON-2504	VMS 206 (F)	ROY -SCC-001	ROY -VMS-206	1"
26A	ROY -CON-2601	TVM 201	ROY -SCC-201	ROY -TVM-201	1-1/2"
26B	ROY -CON-2602	TVM 202	ROY -SCC-201	ROY -TVM-202	1-1/2"
27A	ROY -CON-2701	VALIDATOR 201	ROY -SCC-201	ROY -RSV-201	1"
27B	ROY -CON-2702	VALIDATOR 202	ROY -SCC-201	ROY -RSV-202	1"
28A	ROY -CON-2801	EMERGENCY TELEPHONE 201 - PHONE	ROY -SCC-201	ROY -ETL-201	1-1/2"
28B	ROY -CON-2802	EMERGENCY TELEPHONE 201 - BEACON LIGHT	ROY -ETL-201	ROY -ETB-201	1"
29A	ROY -CON-2901	STATION ELECTRICAL CABINET	ROY -SCC-201	ROY -SEC-201	2"

GENERAL NOTES:

1. CONDUIT NUMBERS CORRELATE TO ⬡ NUMBERS ON PLAN SHEETS AND ELEVATIONS.
2. SEE PLAN AND ELEVATION SHEETS FOR LOCATIONS OF CONDUITS.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM MP Consultants CONSULTING ENGINEERING MINNEAPOLIS • MINNESOTA

90% SUBMISSION - 01/22/16

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
COMMUNICATIONS
CONDUIT SCHEDULE (2 OF 2)

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-ROY-ELE-SCH-462

SHEET 393 OF 394

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ROYALSTON CONDUIT AND WIRE SCHEDULE

CONDUIT NUMBER	SIZE	WIRE	FROM	TO	REMARKS	NOTES
1	1"	2#8, 1#10G	HEATERS HTR-101, 102, 103	PANELBOARD LP1A	POWER TO HEATERS	
2	1"	2#8, 1#10G	HEATERS HTR-104, 105, 106	PANELBOARD LP1A	POWER TO HEATERS	
3	1"	2#8, 1#10G	HEATERS HTR-107, 108, 109	PANELBOARD LP1A	POWER TO HEATERS	
4	1"	2#8, 1#10G	HEATERS HTR-110, 111, 112	PANELBOARD LP1A	POWER TO HEATERS	
5	1"	2#8, 1#10G	HEATERS HTR-113, 114, 115	PANELBOARD LP1A	POWER TO HEATERS	
6	1"	2#8, 1#10G	HEATERS HTR-116, 117, 118	PANELBOARD LP1A	POWER TO HEATERS	
7	1"	2#8, 1#10G	HEATERS HTR-119, 120, 121	PANELBOARD LP1A	POWER TO HEATERS	
8	1"	2#8, 1#10G	HEATERS HTR-122, 123, 124	PANELBOARD LP1A	POWER TO HEATERS	
9	1"	2#8, 1#10G	HEATERS HTR-125, 126, 127	PANELBOARD LP1A	POWER TO HEATERS	
10	1"	2#8, 1#10G	HEATERS HTR-128, 129, 130	PANELBOARD LP1A	POWER TO HEATERS	
11	1"	2#8, 1#10G	HEATERS HTR-131, 132, 133	PANELBOARD LP1A	POWER TO HEATERS	
12	1"	2#8, 1#10G	HEATERS HTR-134, 135, 136	PANELBOARD LP1A	POWER TO HEATERS	
13	1"	2#14, 1#14G	HPB-101	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
14	1"	2#14, 1#14G	HPB-102	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
15	1"	2#14, 1#14G	HPB-103	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
16	1"	2#14, 1#14G	HPB-104	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
17	1"	2#14, 1#14G	HPB-105	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
18	1"	2#14, 1#14G	HPB-106	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
19	1"	2#14, 1#14G	HPB-107	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
20	1"	2#14, 1#14G	HPB-108	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
21	1"	2#14, 1#14G	HPB-109	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
22	1"	2#14, 1#14G	HPB-110	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
23	1"	2#14, 1#14G	HPB-111	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
24	1"	2#14, 1#14G	HPB-112	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
25	1"	2#8, 1#10G	HEATERS HTR-201, 202, 203	PANELBOARD LP1C	POWER TO HEATERS	
26	1"	2#8, 1#10G	HEATERS HTR-204, 205, 206	PANELBOARD LP1C	POWER TO HEATERS	
27	1"	2#8, 1#10G	HEATERS HTR-207, 208, 209	PANELBOARD LP1C	POWER TO HEATERS	
28	1"	2#8, 1#10G	HEATERS HTR-210, 211, 212	PANELBOARD LP1C	POWER TO HEATERS	
29	1"	2#8, 1#10G	HEATERS HTR-213, 214, 215	PANELBOARD LP1C	POWER TO HEATERS	
30	1"	2#8, 1#10G	HEATERS HTR-216, 217, 218	PANELBOARD LP1C	POWER TO HEATERS	
31	1"	2#8, 1#10G	HEATERS HTR-219, 220, 221	PANELBOARD LP1C	POWER TO HEATERS	
32	1"	2#8, 1#10G	HEATERS HTR-222, 223, 224	PANELBOARD LP1C	POWER TO HEATERS	
33	1"	2#8, 1#10G	HEATERS HTR-225, 226, 227	PANELBOARD LP1C	POWER TO HEATERS	
34	1"	2#8, 1#10G	HEATERS HTR-228, 229, 230	PANELBOARD LP1C	POWER TO HEATERS	
35	1"	2#8, 1#10G	HEATERS HTR-231, 232, 233	PANELBOARD LP1C	POWER TO HEATERS	
36	1"	2#8, 1#10G	HEATERS HTR-234, 235, 236	PANELBOARD LP1C	POWER TO HEATERS	
37	1"	2#14, 1#14G	HPB-201	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
38	1"	2#14, 1#14G	HPB-202	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
39	1"	2#14, 1#14G	HPB-203	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
40	1"	2#14, 1#14G	HPB-204	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
41	1"	2#14, 1#14G	HPB-205	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
42	1"	2#14, 1#14G	HPB-206	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
43	1"	2#14, 1#14G	HPB-207	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
44	1"	2#14, 1#14G	HPB-208	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
45	1"	2#14, 1#14G	HPB-209	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
46	1"	2#14, 1#14G	HPB-210	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
47	1"	2#14, 1#14G	HPB-211	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
48	1"	2#14, 1#14G	HPB-212	OFF DELAY TIME CIRCUIT	CONTROL FOR HEATERS	
49	1"	2#10, 1#10G	TVM-101	PANELBOARD LP1B	POWER TO TVM	
50	1"	2#10, 1#10G	TVM-102	PANELBOARD LP1B	POWER TO TVM	
51	1"	2#10, 1#10G	TVM-201	PANELBOARD LP1B	POWER TO TVM	
52	1"	2#10, 1#10G	TVM-202	PANELBOARD LP1B	POWER TO TVM	
53	1"	2#12, 1#12G	RSV-101	PANELBOARD LP1B	POWER TO RSVs	
54	1"	2#12, 1#12G	RSV-102	PANELBOARD LP1B	POWER TO RSVs	
55	1"	2#12, 1#12G	RSV-201	PANELBOARD LP1B	POWER TO RSVs	
56	1"	2#12, 1#12G	RSV-202	PANELBOARD LP1B	POWER TO RSVs	
57	1"	2#12, 1#12G	CANOPY LUMINAIRES TRACK 1	PANELBOARD LP1A	POWER TO LUMINAIRES	
58	1"	2#12, 1#12G	CANOPY LUMINAIRES TRACK 1	PANELBOARD LP1A	POWER TO LUMINAIRES	
59	1"	2#12, 1#12G	CANOPY LUMINAIRES TRACK 1	PANELBOARD LP1A	POWER TO LUMINAIRES	
60	1"	2#12, 1#12G	CANOPY LUMINAIRES TRACK 1	PANELBOARD LP1A	POWER TO LUMINAIRES	
61	1"	2#12, 1#12G	CANOPY LUMINAIRES TRACK 2	PANELBOARD LP1C	POWER TO LUMINAIRES	
62	1"	2#12, 1#12G	CANOPY LUMINAIRES TRACK 2	PANELBOARD LP1C	POWER TO LUMINAIRES	
63	1"	2#12, 1#12G	CANOPY LUMINAIRES TRACK 2	PANELBOARD LP1C	POWER TO LUMINAIRES	
64	1"	2#12, 1#12G	CANOPY LUMINAIRES TRACK 2	PANELBOARD LP1C	POWER TO LUMINAIRES	
65	1"	2#10, 1#10G	HEAT TAPE TRACK 1	HTCP	POWER TO HEAT TAPE	2

PANELBOARD SCHEDULE ROY-LP1A

400 AMP BUS RATING — 120/208 VOLTS — MLO — 3 PHASE — 4 WIRE 60Hz — 42 POLES — SURFACE MOUNTED — LOCATION

DESCRIPTION	kVA	AMPS/POLES	CKT	AØ	BØ	CØ	CKT	AMPS/POLES	kVA	DESCRIPTION
RAMP LIGHTING	0.4	20/1	1	X			2	30/2	2.4	HTR-119, 120, 121
RAMP LIGHTING	0.4	20/1	3		X		4		2.4	
HTR-101, 102, 103	2.4	30/2	5			X	6	30/2	2.4	HTR-122, 123, 124
	2.4		7	X			8		2.4	
HTR-104, 105, 106	2.4	30/2	9		X		10	30/2	2.4	HTR-125, 126, 127
	2.4		11			X	12		2.4	
HTR-107, 108, 109	2.4	30/2	13	X			14	30/2	2.4	HTR-128, 129, 130
	2.4		15		X		16		2.4	
HTR-110, 111 112	2.4	30/2	17			X	18	30/2	2.4	HTR-131, 132, 133
	2.4		19	X			20		2.4	
HTR-113, 114, 115	2.4	30/2	21		X		22	30/2	2.4	HTR-134, 135, 136
	2.4		23			X	24		2.4	
HTR-116, 117, 118	2.4	30/2	25	X			26	20/1	0.13	TRACK 1 SHELTER LUMINAIRES
	2.4		27		X		28	20/1	0.13	TRACK 1 SHELTER LUMINAIRES
KSK-101	0.3	20/1	29			X	30	20/1	0.13	TRACK 1 SHELTER LUMINAIRES
KSK-102	0.3	20/1	31	X			32	20/1	0.13	TRACK 1 SHELTER LUMINAIRES
HTRCP-101	1.0	30/2	33		X		34	20/1	1.0	TRACK 1 POLE LUMINAIRES
	1.0		35			X	36	20/1		SPARE
HTRCP-102	1.0	30/2	37	X			38	20/1		SPARE
	1.0		39		X		40			SPACE
SPACE			41			X	42			SPACE
		kVA		49.4	51.5	48.1	kVA		28.2	
		AMPS		411.3	429.4	401.1	AMPS		28.8	
									27.5	FEED THROUGH LUGS LP1B

PANELBOARD SCHEDULE ROY-LP1B

400 AMP BUS RATING — 120/208 VOLTS — 400 MLO — 3 PHASE — 4 WIRE 60Hz — 30 POLES — SURFACE MOUNTED — LOCATION

DESCRIPTION	kVA	AMPS/POLES	CKT	AØ	BØ	CØ	CKT	AMPS/POLES	kVA	DESCRIPTION
SPD		60/2	1	X			2	20/1	0.3	RSV-101
			3		X		4	20/1	0.3	RSV-102
SEC-001	0.5	20/1	5			X	6	20/1	0.3	RSV-103
VMS-001 (FUTURE)	1.0	20/1	7	X			8	20/1	0.3	RSV-104
VMS-002	1.0	20/1	9		X		10	20/1		SPARE
VMS-003	1.0	20/1	11			X	12	20/1		SPARE
SCC-001	2.7	30/2	13	X			14	20/1	1.0	VMS-004
	2.7		15		X		16	20/1	1.0	VMS-005
SPARE		20/1	17			X	18	20/1	1.0	VMS-006 (FUTURE)
SPARE		20/1	19	X			20	30/1		SPARE
HTG AND LTG CONTROL SYSTEM	0.2	15/1	21		X		22	30/1		SPARE
TVM-101	1.6	30/1	23			X	24	30/1	1.6	TVM-102
SPACE			25	X			26			SPACE
SPACE			27		X		28			SPACE
SPACE			29			X	30			SPACE
		kVA		28.2	28.8	27.5	kVA		22.9	
		AMPS		235.0	240.0	229.2	AMPS		23.6	
									21.5	FEED THROUGH LUGS LP1C

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Metropolitan Council — Southwest Green Line LRT Extension

CIVIL - VOLUME 11D
ROYALSTON STATION
ELECTRICAL
SCHEDULES

DISCIPLINE: ELECTRICAL

SHEET NAME: E4-ROY-ELE-SCH-501

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