



KANSAS CITY AREA TRANSPORTATION AUTHORITY WITH CITY OF KANSAS CITY, MISSOURI KANSAS CITY STREETCAR AUTHORITY PORT AUTHORITY OF KANSAS CITY, MO



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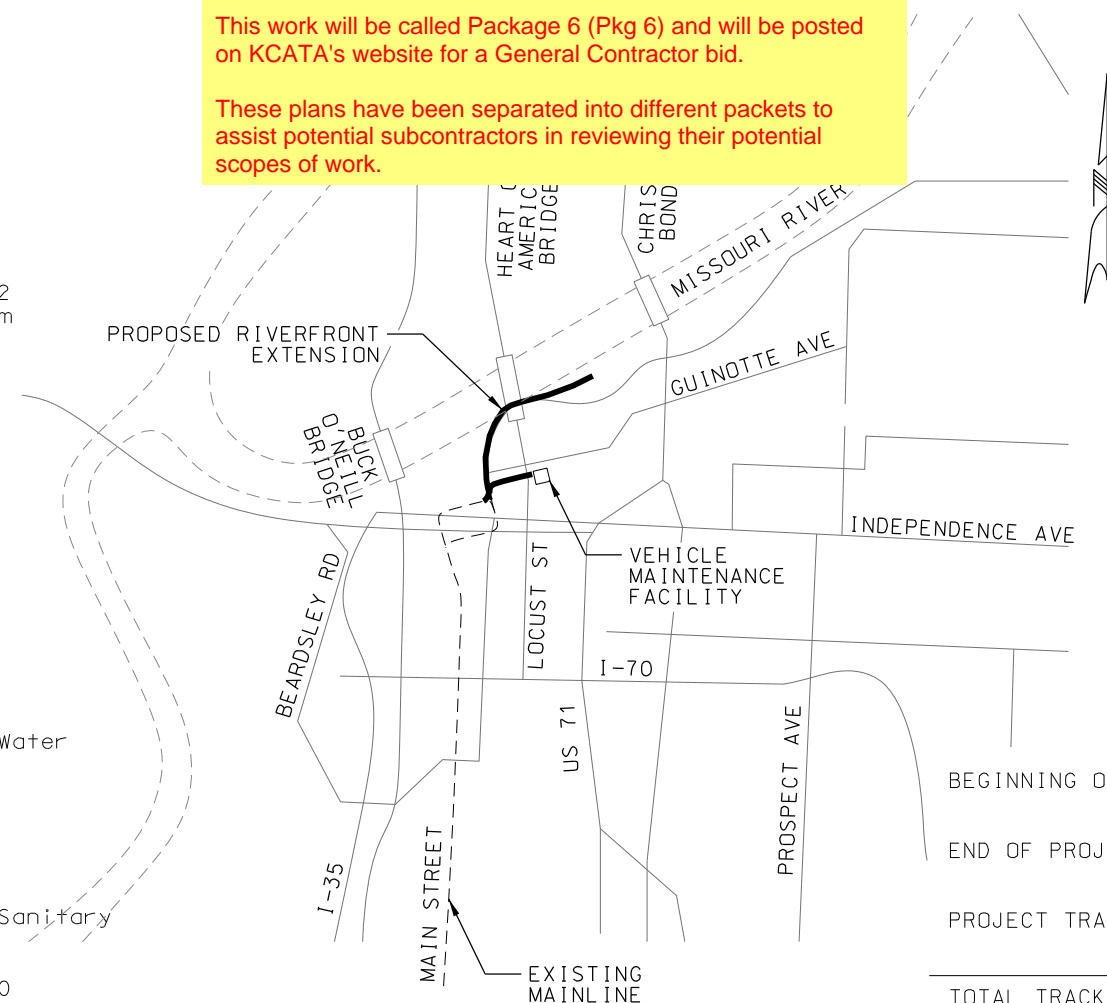
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KANSAS CITY STREETCAR RIVERFRONT EXTENSION FTA FAIN # MO-2022-002-00 KCATA PROJECT No.: 2021-SC-3P01 KCMO PROJECT No.: 89022015 ISSUED FOR BID DECEMBER 2022 (T49N, R33W)

https://www.kcata.org/about_kcata/entries/current_opportunities

This work will be called Package 6 (Pkg 6) and will be posted on KCATA's website for a General Contractor bid.

These plans have been separated into different packets to assist potential subcontractors in reviewing their potential scopes of work.



APPROVED BY

KCATA PROJECT MANAGER

KCATA CHIEF ENGINEER

KCMO DIRECTOR OF TRANSPORTATION

KCMO CITY ENGINEER

KCMO DIRECTOR OF PUBLIC WORKS

KANSAS CITY STREETCAR AUTHORITY

PORT AUTHORITY OF KANSAS CITY, MISSOURI
(PORT KC)

ENTRY NO.

C.D. NO. 4

LENGTH OF PROJECT	
BEGINNING OF PROJECT	STA 113+00.00 NB MAINLINE STA 199+89.24 SB MAINLINE
END OF PROJECT	STA 150+82.51 NB MAINLINE STA 236+48.29 SB MAINLINE
PROJECT TRACK LENGTH	3,783 TF NB 3,659 TF SB
TOTAL TRACK LENGTH	7,442 TF (1.4 MILES)



10450 Holmes Road
Suite 600
Kansas City, MO 64131-3471
816-360-2700
Certificate of Authority: 000856

This set of plans is
not for
construction.
These plans are
intended to build
interest in bidding
the project.

SCALE FOR 22"x34": NOT TO SCALE	
FILENAME: G001.dgn	
CONTRACT NO.: CONTRACT NO. ***	
VOLUME:	
DRAWING NO.: G001	SHEET NO.: 1



#	dwg	TITLE	DESCRIPTION	#	dwg	TITLE	DESCRIPTION
GENERAL SHEETS							
1	G001	TITLE SHEET AND LOCATION MAP		60	K304A	SOUTHBOUND 115RE TRACK PROFILE	SB STA 211+00 TO STA 215+00
2	G010	INDEX OF DRAWINGS	SHEET 1	61	K305	NORTHBOUND 115RE TRACK PLAN AND PROFILE	NB STA 125+00 TO STA 129+00
3	G011	INDEX OF DRAWINGS	SHEET 2	62	K305A	SOUTHBOUND 115RE TRACK PROFILE	SB STA 215+00 TO STA 219+00
4	G012	INDEX OF DRAWINGS	SHEET 3	63	K306	NORTHBOUND 115RE TRACK PLAN AND PROFILE	NB STA 129+00 TO STA 133+00
5	G013	INDEX OF DRAWINGS	SHEET 4	64	K306A	SOUTHBOUND 115RE TRACK PROFILE	SB STA 219+00 TO STA 223+00
6	G030	STANDARD ABBREVIATIONS	SHEET 1 OF 2	TRACK DETAILS			
7	G031	STANDARD ABBREVIATIONS	SHEET 2 OF 2	65	K901	TRACK SLAB DETAILS	DETAIL SHEET 1 OF 5
8	G032	DCS GENERAL SYMBOLS AND ABBREVIATIONS		66	K902	TRACK SLAB DETAILS	DETAIL SHEET 2 OF 5
9	G035	STANDARD SYMBOLS		67	K903	TRACK SLAB DETAILS	DETAIL SHEET 3 OF 5
10	G036	TRACTION POWER SYMBOLS		68	K904	TRACK SLAB DETAILS	DETAIL SHEET 4 OF 5
11	G037	TRACTION POWER ABBREVIATIONS		69	K905	TRACK SLAB DETAILS	DETAIL SHEET 5 OF 5
12	G038	SYSTEMWIDE ELECTRICAL ABBREVIATIONS AND SYMBOLS		70	K906	115 RE AND 112 TRAM RAIL SECTIONS	
13	G040	GENERAL NOTES		71	K907	TRANSITION RAIL	
14	G041	DCS GENERAL NOTES		72	K908	25M/25M EQUILATERAL CONTINUOUSLY CURVED FROG TURNOUT	
15	G042	DCS STRUCTURAL STEEL AND CONCRET NOTES		73	K909	25M CONTINUOUSLY CURVED FROG TURNOUT	
16	G043	TRACTION POWER GENERAL NOTES		74	K910	25M CONTINUOUSLY CURVED FROG TURNOUT	
SURVEY CONTROL				75	K911	25M STRAIGHT FROG TURNOUT	
17	SV001	SURVEY CONTROL	SHEET 1 OF 2	76	K912	TURNOUT ENCAPSULATION AND SECTION DETAILS	
18	SV002	SURVEY CONTROL	SHEET 2 OF 2	77	K913	MANHOLE REBAR DETAIL	DETAIL SHEET 1 OF 2
DEMOLITION PLANS				78	K914	MANHOLE REBAR DETAIL	DETAIL SHEET 2 OF 2
19	C501	DEMOLITION PLAN	NB STA BEGIN TO STA 113+00	79	K915	TRACK DRAIN DETAILS	
20	C502	DEMOLITION PLAN	NB STA 113+00 TO STA 117+92	80	K916	HORIZONTAL PRECURVED RAIL LOCATION MAP	
21	C503	DEMOLITION PLAN	NB STA 117+92 TO STA 121+00	81	K917	HORIZONTAL PRECURVED RAIL DETAILS	
22	C504	DEMOLITION PLAN	NB STA 121+00 TO STA 125+00	82	K918	RESTRAINING RAIL	
23	C505	DEMOLITION PLAN	NB STA 125+00 TO STA 129+00	83	K919	INSULATED JOINT 115 RE RAIL	
24	C506	DEMOLITION PLAN	NB STA 129+00 TO STA 133+00	84	K920	TRACK SLAB JOINTS	
25	C507	DEMOLITION PLAN	NB STA 133+00 TO STA 135+50	85	K921	END OF LINE CURB STOP	
26	C508	DEMOLITION PLAN	NB STA 135+50 TO STA 139+50	86	K922	TRACK SLAB INFILL GRADING DETAIL	
27	C509	DEMOLITION PLAN	NB STA 139+50 TO STA 143+50	87	K923	112 TRAM RAIL EXPANSION JOINTS	
28	C510	DEMOLITION PLAN	NB STA 143+50 TO STA 147+50	88	K923A	115 RE RAIL EXPANSION JOINTS	
29	C511	DEMOLITION PLAN	NB STA 147+50 TO END	89	K924	NO. 4 STRAIGHT FROG CROSSEVER	
30	C512	DEMOLITION PLAN	2ND STREET TO VMF	CIVIL DETAILS			
TRACK PLAN AND PROFILES				90	C001	TYPICAL SECTIONS 1	
31	K001	TRACK KEY MAP		91	C002	TYPICAL SECTIONS 2	
32	K101	NORTHBOUND TRACK PLAN AND PROFILE	NB STA BEGIN TO STA 113+50	92	C003	TYPICAL SECTIONS 3	
33	K101A	EXISTING TRACK TIE-IN PROFILE STA -1+00 TO STA 2+50	SB TRACK PROFILE STA 199+00 TO STA 203+00	93	C004	TYPICAL DRIVEWAY DETAILS	
34	K102	NORTHBOUND TRACK PLAN AND PROFILE	NB STA 113+50 TO STA 117+00	94	C005	TYPICAL CURB DETAILS	
35	K102A	VMF LEAD PROFILE STA -0+50 TO STA 3+00	SB TRACK PROFILE STA 203+00 TO STA 207+00	95	C006	MISCELLANEDUS CIVIL DETAILS	
36	K103	NORTHBOUND TRACK PLAN AND PROFILE	NB STA 117+00 TO STA 121+00	CIVIL PLANS			
37	K103A	SOUTHBOUND TRACK PROFILE	SB STA 207+00 TO STA 211+00	96	C101	CIVIL PLAN	NB STA BEGIN TO STA 113+00
38	K104	NORTHBOUND TRACK PLAN AND PROFILE	NB STA 121+00 TO STA 125+00	97	C102	CIVIL PLAN	NB STA 113+00 TO STA 117+00
39	K104A	SOUTHBOUND TRACK PROFILE	SB STA 211+00 TO STA 215+00	98	C103	CIVIL PLAN	NB STA 117+00 TO STA 121+00
40	K105	NORTHBOUND TRACK PLAN AND PROFILE	NB STA 125+00 TO STA 129+00	99	C104	CIVIL PLAN	NB STA 121+00 TO STA 125+00
41	K105A	SOUTHBOUND TRACK PROFILE	SB STA 215+00 TO STA 219+00	100	C105	CIVIL PLAN	NB STA 125+00 TO STA 129+00
42	K106	NORTHBOUND TRACK PLAN AND PROFILE	NB STA 129+00 TO STA 133+00	101	C106	CIVIL PLAN	NB STA 129+00 TO STA 133+00
43	K106A	SOUTHBOUND TRACK PROFILE	SB STA 219+00 TO STA 223+00	102	C107	CIVIL PLAN	NB STA 133+00 TO STA 135+50
44	K107	NORTHBOUND TRACK PLAN AND PROFILE	NB STA 133+00 TO STA 135+50	103	C108	CIVIL PLAN	NB STA 135+50 TO STA 139+50
45	K107A	SOUTHBOUND TRACK PROFILE	SB STA 223+00 TO STA 225+50	104	C109	CIVIL PLAN	NB STA 139+50 TO STA 143+50
46	K108	NORTHBOUND TRACK PLAN AND PROFILE	NB STA 135+50 TO STA 139+50	105	C110	CIVIL PLAN	NB STA 143+50 TO STA 147+50
47	K108A	SOUTHBOUND TRACK PROFILE	SB STA 225+50 TO STA 229+50	106	C111	CIVIL PLAN	NB STA 147+50 TO END
48	K109	NORTHBOUND TRACK PLAN AND PROFILE	NB STA 139+50 TO STA 143+50	107	C112	CIVIL PLAN	2ND STREET TO VMF
49	K109A	SOUTHBOUND TRACK PROFILE	SB STA 229+50 TO STA 233+50	STREETCAR STOP DETAILS			
50	K110	NORTHBOUND TRACK PLAN AND PROFILE	NB STA 143+50 TO STA 147+50	108	C201	STREETCAR STOP	NB "RIVER MARKET NORTH"
51	K110A	SOUTHBOUND TRACK PROFILE	SB STA 233+50 TO STA 237+50	109	C202	STREETCAR STOP	NB/SB "RIVERFRONT"
52	K111	NORTHBOUND TRACK PLAN AND PROFILE	NB STA 147+50 TO STA 150+83	ADA PLANS			
53	K112	NORTHBOUND TRACK PLAN AND PROFILE	2ND STREET TO VMF	110	C301	ADA CURB RAMPS LAYOUT PLAN	RAMP NOTES AND DETAILS
54	K113	NORTHBOUND TRACK PLAN AND PROFILE	2ND STREET TO VMF	111	C302	ADA CURB RAMP STANDARD DETAILS	SHEET 1 OF 2
TRACK ALIGNMENT TABLES				112	C303	ADA RAMP STANDARD DETAILS	SHEET 2 OF 2
55	K200	TRACK ALIGNMENT TABULATION		113	C304	3RD STREET AND GRAND BOULEVARD	GRADING PLAN
56	K201	TRACK ALIGNMENT TABULATION		114	C305	2ND STREET AND GRAND BOULEVARD	GRADING PLAN
TRACK PLANS 115RE				115	C306	GRADING LAYOUT PLANS	2ND STREET TO VMF
57	K303	NORTHBOUND 115RE TRACK PLAN AND PROFILE	NB STA 117+00 TO STA 121+00	116	C307	GRADING LAYOUT PLANS	
58	K303A	SOUTHBOUND 115RE TRACK PROFILE	SB STA 207+00 TO STA 211+00	117	C308	GRADING LAYOUT PLANS	
59	K304	NORTHBOUND 115RE TRACK PLAN AND PROFILE	NB STA 121+00 TO STA 125+00	118	C309	GRADING LAYOUT PLANS	
				119	C310	GRADING LAYOUT PLANS	

REV	DATE	DESCRIPTION	DESIGNED BY	MMO		 <p>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p>	ISSUED FOR BID	DATE: 12-23-2022	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION	INDEX OF DRAWINGS SHEET 1	SCALE FOR 22"x34": NOT TO SCALE	
			CHECKED BY	JWR			 <p>HDR Engineering, Inc. 10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856</p>	NOT FOR CONSTRUCTION			FILENAME:	
			DRAWN BY	MMO							G010.dgn	
			CHECKED BY	JWR							CONTRACT NO.:	
			APPROVED BY	NKS							CONTRACT NO. ***	
PLOT DATE: \$DATE\$			\$TIME\$		DATE	12-23-2022			DRAWING NO.:	SHEET NO.:		
									G010	2		

#	dwg	TITLE	DESCRIPTION	#	dwg	TITLE	DESCRIPTION
120	C311	GRADING LAYOUT PLANS		181	P310	"TYPE B" SHELTER	PLANS AND ELEVATIONS
121	C312	GRADING LAYOUT PLANS		182	P311	"TYPE B" SHELTER	SHELTER ROOF PLAN AND RCP
122	C313	GRADING LAYOUT PLANS		183	P312	"TYPE B" SHELTER	SHELTER ENLARGED PLANS
123	C314	GRADING LAYOUT PLANS		184	P313	"TYPE B" SHELTER	ENLARGED ELEVATION AND SECTION
124	C315	POINT TABLES		185	P361	SHELTER DETAILS	
125	C316	POINT TABLES		186	P362	SHELTER DETAILS	
TPSS PLANS				187	P363	"TYPE B" SHELTER DETAILS	ADD ALTERNATE
126	C401	TRACTION POWER SUBSTATION (TPSS)	RIVERFRONT GRADING PLAN	188	P371	MARKER SECTION AND DETAILS	
127	C402	TRACTION POWER SUBSTATION (TPSS)	RIVERFRONT DUCTBANK PLAN	189	P372	MARKER SECTION AND DETAILS	
128	C403	TRACTION POWER SUBSTATION (TPSS)	RIVERFRONT DUCTBANK PRDFILE 1	190	P380	ELECTRICAL LIGHTING PLANS AND FIXTURE SCHEDULE	
129	C404	TRACTION POWER AND SCADA SYSTEM	TYPICAL DUCTBANK SECTIONS	191	P401	PLATFORM ITS AND ELECTRICAL GENERAL NOTES	
130	C405	TRACTION POWER SUBSTATION (TPSS)	DUCTBANK SPECIAL DETAILS	192	P402	PLATFORM ROADSIDE ITS 343 CABINET DIAGRAM	
131	C406	TRACTION POWER SUBSTATION (TPSS)	TYPICAL LOW VOLTAGE 5'x7' MANHOLE DETAILS	193	P403	CCTV ATTACHMENT ON OCS AND LIGHT POLE DETAILS	
132	C407	TRACTION POWER SUBSTATION (TPSS)	COMMUNICATIONS AND STRAY CURRENT PULLBOX TYPICAL DETAILS	194	P404	STREETCAR STOP "RIVER MARKET NORTH"	ELECTRICAL AND ITS PLAN
133	C408	TRACTION POWER SUBSTATION (TPSS)	TYPICAL NEGATIVE RETURN DETAIL TRACK BLOCKOUT DETAIL AND TYPICAL CONDUIT STUB-UP DETAIL	195	P405	STREETCAR STOP "RIVERFRONT"	ELECTRICAL AND ITS PLAN
134	C409	TRACTION POWER SUBSTATION (TPSS)	TYPICAL NEGATIVE RETURN DETAIL TRACK BLOCKOUT DETAIL AND TYPICAL CONDUIT STUB-UP DETAIL	196	P406	ITS TYPICAL DRAWING	TYPICAL STOP ELECTRICAL SCHEDULES AND DETAILS
TPSS DETAILS				PLATFORM STRUCTURAL			
135	J101	TRACTION POWER SYSTEM	MASTER SINGLE LINE DIAGRAM RIVERFRONT EXTENSION	197	PS001	STRUCTURAL GENERAL NOTES	
136	J610	TRACTION POWER	TYPICAL MAINLINE TPSS SINGLE LINE SINGLE LINE DIAGRAM	198	PS002	INSPECTION - IBC 2018	
137	J620	TRACTION POWER	TYPICAL PREFABRICATED TPSS PLAN EQUIPMENT LAYOUT PLAN	199	PS101	"TYPE A" SHELTER - FOUNDATION AND FRAMING PLANS	
138	J621	TRACTION POWER	TYPICAL PREFABRICATED TPSS - EXTERIOR ELEVATIONS ELEVATION VIEW	200	PS102	"TYPE B" SHELTER - FOUNDATION AND FRAMING PLANS	
139	J622	TRACTION POWER	TYPICAL PREFABRICATED TPSS INTERIOR ELEVATIONS INTERIOR ELEVATIONS	201	PS201	"TYPE A" SHELTER - SECTIONS AND ELEVATIONS	
140	J623	TRACTION POWER	TYPICAL SURGER ARRESTER INTERIOR ELEVATIONS	202	PS202	"TYPE B" SHELTER - SECTIONS AND ELEVATIONS	
141	J630	TRACTION POWER	TPSS D1 SITE RACEWAY LAYOUT	203	PS301	TYPICAL CONCRETE DETAILS	
142	J632	TRACTION POWER	TPSS D1 GROUND GRID LAYOUT	204	PS302	"TYPE A" SHELTER CONCRETE DETAILS	
143	J640	TRACTION POWER	TYPICAL DISCONNECT SWITCH ARRANGEMENT	205	PS303	"TYPE B" SHELTER CONCRETE DETAILS	
144	J642	TRACTION POWER	120/208V AC PANEL ADP PANEL SCHEDULE	206	PS501	TYPICAL STEEL SECTIONS AND DETAILS	
145	J643	TRACTION POWER	125V DC PANEL DDP PANEL SCHEDULE	PLATFORM ELEVATION PLANS			
146	J644	TRACTION POWER	TYPICAL TPSS LIGHTING SCHEMATIC	207	PS01	"RIVER MARKET NORTH" PLATFORM	SIGNAGE LOCATION ELEVATION
147	J645	TRACTION POWER	TYPICAL TPSS RECEPTACLES AND SMOKE DETECTOR SCHEMATIC	208	PS02	"RIVERFRONT" PLATFORM	SIGNAGE LOCATION ELEVATION
148	J646	TRACTION POWER	TYPICAL TPSS HVAC AND VENTILATION SCHEMATIC	209	PS03	SIGNAGE TYPES OVERVIEW	
149	J648	TRACTION POWER	LOGIC DIAGRAMS SYMBOLS AND LEGEND	210	PS04	SIGNAGE TYPES OVERVIEW	
150	J649	TRACTION POWER	SUBSTATION LOCKOUT AND ALARM LOGIC DIAGRAM	211	PS05	SIGNAGE TYPES OVERVIEW	
151	J650	TRACTION POWER	AC SWITCHGEAR INCOMING CUBICLE LOGIC DIAGRAM	212	PS06	SIGNAGE TYPES OVERVIEW	
152	J652	TRACTION POWER	TYPICAL DC FEEDER CUBICLE LOGIC DIAGRAM SHEET 1 OF 2	213	PS07	"RIVER MARKET NORTH" PLATFORM	WAYFINDING PLAN
153	J653	TRACTION POWER	TYPICAL DC FEEDER CUBICLE LOGIC DIAGRAM SHEET 2 OF 2	TRAFFIC SIGNAL LAYOUT PLANS			
154	J654	TRACTION POWER	NEGATIVE AND POSITIVE DISCONNECT SWITCH LOGIC DIAGRAM	214	T100	TRAFFIC SIGNAL GENERAL NOTES	
155	J660	TRACTION POWER	STATION CONTROL CABINET TYPICAL LAYOUT	215	T101	TRAFFIC SIGNAL LAYOUT PLAN	3RD STREET AND GRAND BOULEVARD
156	J661	TRACTION POWER	RAIL TO GROUND (R2G) CABINET TYPICAL LAYOUT	216	T101A	TRAFFIC SIGNAL LAYOUT PLAN	3RD STREET AND GRAND BOULEVARD
157	J665	TRACTION POWER	TPSS COMMUNICATIONS BLOCK DIAGRAM	217	T101B	TRAFFIC SIGNAL WIRING DIAGRAM AND PHASING	3RD STREET AND GRAND BOULEVARD
158	J673	TRACTION POWER	TYPICAL GROUNDING DETAILS	218	T101C	TRAFFIC SIGNAL SUMMARY OF QUANTITIES	3RD STREET AND GRAND BOULEVARD
159	J680	TRACTION POWER	D1 CONDUCTOR SCHEDULE	219	T102	TRAFFIC SIGNAL LAYOUT PLAN	2ND STREET AND GRAND BOULEVARD
160	J690	TRACTION POWER	TYPICAL TPSS HMI ALARM SCREEN LAYOUT	220	T102A	TRAFFIC SIGNAL LAYOUT PLAN	2ND STREET AND GRAND BOULEVARD
161	J691	TRACTION POWER	TYPICAL TPSS HMI CONTROL SCREEN LAYOUT	221	T102B	TRAFFIC SIGNAL WIRING DIAGRAM AND PHASING	2ND STREET AND GRAND BOULEVARD
162	J692	TRACTION POWER	TYPICAL TPSS HMI EVENT LOG SCREEN LAYOUT	222	T102C	TRAFFIC SIGNAL SUMMARY OF QUANTITIES	2ND STREET AND GRAND BOULEVARD
163	J693	TRACTION POWER	TYPICAL TPSS HMI NETWORK STATUS SCREEN LAYOUT	223	T103	TRAFFIC SIGNAL LAYOUT PLAN	BERKLEY PARKWAY / RIVERFRONT DRIVE
164	J694	TRACTION POWER	TYPICAL SUBSTATION FOUNDATION DETAIL	224	T103B	TRAFFIC SIGNAL WIRING DIAGRAM AND PHASING	BERKLEY PARKWAY / RIVERFRONT DRIVE
165	J695	TRACTION POWER	TYPICAL PAD MOUNTED DISCONNECT SWITCH FOUNDATION DETAILS	225	T103C	TRAFFIC SIGNAL SUMMARY OF QUANTITIES	BERKLEY PARKWAY / RIVERFRONT DRIVE
DRAINAGE PLANS				TRAFFIC SIGNAL DETAILS			
166	D101	DRAINAGE PLAN	NB STA BEGIN TO STA 113+00	226	T201	TRAFFIC SIGNAL DETAILS	CROSS SPAN JOINT USE TRAFFIC/OCS POLE
167	D102	DRAINAGE PLAN	NB STA 113+00 TO STA 117+00	227	T202	TRAFFIC SIGNAL DETAILS	AUXILIARY CABINET MOUNTING DETAIL
168	D103	DRAINAGE PLAN	NB STA 117+00 TO STA 121+00	228	T203	TRAFFIC SIGNAL DETAILS	TRAFFIC SIGNAL SYMBOLS
169	D106	DRAINAGE PLAN	NB STA 129+00 TO STA 133+00	229	T204	TRAFFIC SIGNAL DETAILS	SIGNAL HEAD DETAILS
170	D109	DRAINAGE PLAN	NB STA 139+50 TO STA 143+50	230	T205	TRAFFIC SIGNAL DETAILS	SIGNAL MAST ARM DETAILS
171	D110	DRAINAGE PLAN	NB STA 143+50 TO STA 147+50	231	T206	TRAFFIC SIGNAL DETAILS	SIGNAL CONCRETE BASE DETAILS
172	D111	DRAINAGE PLAN	NB STA 147+50 TO END	232	T207	TRAFFIC SIGNAL DETAILS	SIGNAL PULL BOX DETAILS
173	D301	MISCELLANEOUS DRAINAGE DETAILS		233	T208	TRAFFIC SIGNAL DETAILS	SIGNAL PULL BOX DETAILS
PLATFORMS				234	T209	TRAFFIC SIGNAL DETAILS	SIGNAL PTZ CAMERA INSTALL DETAILS
174	P101	"RIVER MARKET NORTH"	PLATFORM PLAN	235	T210	TRAFFIC SIGNAL DETAILS	PEDESTRIAN PUSHBUTTON POLE DETAILS
175	P102	"RIVERFRONT"	PLATFORM PLAN	236	T211	TRAFFIC SIGNAL DETAILS	PEDESTRIAN PUSHBUTTON POLE DETAILS
176	P201	"RIVER MARKET NORTH"	PLATFORM ELEVATION	SIGNING AND STRIPING PLANS			
177	P202	"RIVERFRONT"	PLATFORM ELEVATION	237	S001	SIGNING AND STRIPING	GENERAL NOTES
178	P203	PLATFORM SITE DETAILS		238	S100	SIGNING AND STRIPING PLAN	5TH TO 3RD STREET
179	P204	PLATFORM SEAT WALL DETAILS		239	S101	SIGNING AND STRIPING PLAN	NB STA BEGIN TO STA 113+00
180	P302	"TYPE A" SHELTER	PLANS AND ELEVATIONS	240	S102	SIGNING AND STRIPING PLAN	NB STA 113+00 TO STA 117+00
				241	S103	SIGNING AND STRIPING PLAN	NB STA 117+00 TO STA 121+00

REV	DATE	DESCRIPTION	DESIGNED BY	MMO		 <p>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p>	ISSUED FOR BID	DATE: 12-23-2022	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION	SCALE FOR 22"x34": NOT TO SCALE	
			CHECKED BY	JWR			 <p>HDR Engineering, Inc. 10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856</p>	INDEX OF DRAWINGS SHEET 2		FILENAME:	
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PLOT DATE: \$DATE\$			\$TIME\$		DATE	12-23-2022	NOT FOR CONSTRUCTION			DRAWING NO.:	SHEET NO.:
										G011	3

#	dwg	TITLE	DESCRIPTION	#	dwg	TITLE	DESCRIPTION
242	S104	SIGNING AND STRIPING PLAN	NB STA 121+00 TO STA 125+00	302	ST308	BID ALTERNATE - 115RE JOINTS FINGER JOINT MODIFICATION PLAN - PIER 8	
243	S105	SIGNING AND STRIPING PLAN	NB STA 125+00 TO STA 129+00	303	ST309	BID ALTERNATE - 115RE JOINTS FINGER JOINT MODIFICATION DETAILS	
244	S106	SIGNING AND STRIPING PLAN	NB STA 129+00 TO STA 133+00	304	ST310	BID ALTERNATE - 115RE JOINTS STRIP SEAL REMOVAL AND REPLACEMENT PLAN - PIERS 11 & 12	
245	S107	SIGNING AND STRIPING PLAN	NB STA 133+00 TO STA 135+50	305	ST311	BID ALTERNATE - 115RE JOINTS STRIP SEAL DETAILS	
246	S108	SIGNING AND STRIPING PLAN	NB STA 135+50 TO STA 139+50	306	ST312	BID ALTERNATE - 115RE JOINTS TYPICAL SLAB SECTIONS AND DETAILS	
247	S109	SIGNING AND STRIPING PLAN	NB STA 139+50 TO STA 143+50	307	ST313	BID ALTERNATE - 115RE JOINTS SLAB REINFORCING - PIER 2	
248	S110	SIGNING AND STRIPING PLAN	NB STA 143+50 TO STA 147+50	308	ST314	BID ALTERNATE - 115RE JOINTS SLAB REINFORCING - PIER 5	
249	S111	SIGNING AND STRIPING PLAN	NB STA 147+50 TO END	309	ST315	BID ALTERNATE - 115RE JOINTS SLAB REINFORCING - PIER 8	
250	S112	SIGNING AND STRIPING PLAN	2ND STREET TO VMF	310	ST316	BID ALTERNATE - 115RE JOINTS SLAB REINFORCING - PIER 11	
251	S113	PAVEMENT MARKING TABULATION		311	ST317	BID ALTERNATE - 115RE JOINTS SLAB REINFORCING - PIER 12	
252	S114	SIGN REMOVAL TABULATION		312	ST318	BID ALTERNATE - 115RE JOINTS BILL OF REINFORCING STEEL (SLAB)	
253	S115	SIGN PANEL DETAIL		313	ST319	BID ALTERNATE - 115RE JOINTS BILL OF REINFORCING STEEL (SLAB)	
LIGHTING PLANS				314	ST320	BID ALTERNATE - 115RE JOINTS BILL OF REINFORCING STEEL (SLAB)	
254	L001	GENERAL LIGHTING NOTES AND SYMBOL LEGEND		315	ST321	BID ALTERNATE - 115RE JOINTS EAST BARRIER RAIL AT PIER 2, 5 & 8	
255	L101	LIGHTING PLAN	NB STA BEGIN TO STA 113+00	316	ST322	BID ALTERNATE - 115RE JOINTS EAST BARRIER RAIL AT PIER 11 & 12	
256	L102	LIGHTING PLAN	NB STA 113+00 TO STA 117+00	317	ST323	BID ALTERNATE - 115RE JOINTS EAST BARRIER DETAILS	
257	L103	LIGHTING PLAN	NB STA 117+00 TO STA 121+00	318	ST324	BID ALTERNATE - 115RE JOINTS WEST BARRIER RAIL AT PIER 2, 5 & 8	
258	L104	LIGHTING PLAN	NB STA 121+00 TO STA 125+00	319	ST325	BID ALTERNATE - 115RE JOINTS WEST BARRIER RAIL AT PIER 11 & 12	
259	L105	LIGHTING PLAN	NB STA 125+00 TO STA 129+00	320	ST326	BID ALTERNATE - 115RE JOINTS WEST BARRIER DETAILS	
260	L106	LIGHTING PLAN	NB STA 129+00 TO STA 133+00	321	ST328	BID ALTERNATE - 115RE JOINTS BARRIER DETAILS 1	
261	L107	LIGHTING PLAN	NB STA 133+00 TO STA 135+50	322	ST329	BID ALTERNATE - 115RE JOINTS BARRIER DETAILS 2	
262	L108	LIGHTING PLAN	NB STA 135+50 TO STA 139+50	323	ST330	BID ALTERNATE - 115RE JOINTS BARRIER DETAILS 3	
263	L109	LIGHTING PLAN	NB STA 139+50 TO STA 143+50	324	ST331	BID ALTERNATE - 115RE JOINTS EAST BARRIER BAR LIST	
264	L110	LIGHTING PLAN	NB STA 143+50 TO STA 147+50	325	ST332	BID ALTERNATE - 115RE JOINTS WEST BARRIER BAR LIST	
265	L111	LIGHTING PLAN	NB STA 147+50 TO END	EROSION CONTROL PLANS			
266	L112	LIGHTING PLAN	2ND STREET TO VMF	326	EC101	EROSION CONTROL PLAN	NB STA 135+50 TO STA 139+50
LIGHTING DETAILS				327	EC102	EROSION CONTROL PLAN	NB STA 139+50 TO STA 143+50
267	L300	STREET LIGHTING DETAILS		328	EC103	EROSION CONTROL PLAN	NB STA 143+50 TO STA 147+50
268	L301	STREET LIGHTING DETAILS		329	EC104	EROSION CONTROL PLAN	NB STA 147+50 TO END
269	L302	POWER AND LIGHTING DETAILS		OCS TECHNICAL SHEETS			
270	L303	POWER AND LIGHTING DETAILS		330	Y004	TECHNICAL SHEETS CONDUCTOR PARTICULARS	
271	L304	STREET LIGHTING SCHEDULES		331	Y005	TECHNICAL SHEETS VERTICAL ELECTRICAL CLEARANCE REQUIREMENTS	
272	L305	STREET LIGHTING SCHEDULES		332	Y006	TECHNICAL SHEETS PANTOGRAPH SECURITY	
273	L306	WIRING SCHEMATIC DETAILS		333	Y007	TECHNICAL SHEETS TYPICAL OFFSET AND STAGGER DETAILS	
274	L307	WIRING SCHEMATIC DETAILS		334	Y008	TECHNICAL SHEETS INSTALLATION TENSION CHART	
LANDSCAPE PLANS				335	Y009	TECHNICAL SHEETS ALONG TRACK MOVEMENT CHART	
275	LS101	LANDSCAPE PLAN	BERKLEY PARK - 1	336	Y010	TECHNICAL SHEETS VERTICAL AND RADIAL LOADS	
276	LS102	LANDSCAPE PLAN	BERKLEY PARK - 2	337	Y011	TYPICAL ARRANGEMENTS TYPICAL OVERLAP ARRANGEMENT	
277	LS103	LANDSCAPE PLAN	BERKLEY PARK - 3	338	Y012	TYPICAL ARRANGEMENTS AT GRAND BOULEVARD VIADUCT	
278	LS104	LANDSCAPE PLAN	GRAND BOULEVARD	339	Y013	TYPICAL ARRANGEMENTS AT APPROACH STRUCTURES	
279	LS201	LANDSCAPE DETAILS		340	Y021	STRUCTURAL DETAILS TYPICAL POLE DETAIL	
BRIDGE DETAILS 112TRAM				341	Y023	STRUCTURAL DETAILS STREETLIGHT POLE DETAIL	
280	ST100	BASE BID - 112TRAM JOINTS GENERAL NOTES		342	Y025	STRUCTURAL DETAILS DOWN GUY ASSEMBLY	
281	ST101	BASE BID - 112TRAM JOINTS DECK MILL AND OVERLAY LIMITS	1 OF 3	343	Y031	STRUCTURAL DETAILS TYPICAL FOUNDATION DETAIL	
282	ST102	BASE BID - 112TRAM JOINTS DECK MILL AND OVERLAY LIMITS	2 OF 3	344	Y033	STRUCTURAL DETAILS STREETLIGHT POLE FOUNDATION DETAIL	
283	ST103	BASE BID - 112TRAM JOINTS DECK MILL AND OVERLAY LIMITS	3 OF 3	345	Y034	STRUCTURAL DETAILS 2 FT DIAMETER FOUNDATION DETAIL	
284	ST104	BASE BID - 112TRAM JOINTS MODIFIED FINGER JOINT PLAN	PIERS 2 AND 5	346	Y035	STRUCTURAL DETAILS ROCK SOCKET AND DOWN GUY FOUNDATION DETAILS	
285	ST105	BASE BID - 112TRAM JOINTS MODIFIED FINGER JOINT PLAN	PIER 8	347	Y036	STRUCTURE DETAIL TYPICAL SPREAD FOOTING FOUNDATION DETAIL	
286	ST106	BASE BID - 112TRAM JOINTS FINGER JOINT MODIFICATION DETAILS		348	Y037	POLE INSTALLATION DETAILS AT GRAND BOULEVARD VIADUCT	SHEET 1 OF 2
287	ST107	BASE BID - 112TRAM JOINTS STRIP SEAL PLAN	PIERS 11 AND 12	349	Y038	POLE INSTALLATION DETAILS AT GRAND BOULEVARD VIADUCT	SHEET 2 OF 2
288	ST108	BASE BID - 112TRAM JOINTS STRIP SEAL DETAILS		350	Y039	STRUCTURAL DETAILS ANCHOR BOLT DETAIL	
289	ST109	BASE BID - 112TRAM JOINTS BRIDGE TYPICAL SECTIONS		351	Y041	BRACKET ARM ASSEMBLIES SINGLE PIPE BRACKET ARM	
BRIDGE TRACK DRAIN DETAILS				352	Y042	BRACKET ARM ASSEMBLIES DOUBLE PIPE BRACKET ARM	
290	ST201	PLAN VIEW - ABUTMENT 2 - TRACK DRAIN		353	Y043	BRACKET ARM ASSEMBLIES OVERLAP SINGLE PIPE BRACKET ARM	
291	ST202	APPROACH SLAB EXPANSION JOINT DRAIN DETAIL		354	Y044	BRACKET ARM ASSEMBLIES POLE CLAMP DETAILS	
292	ST203	EXISTING MSE WALLS		355	Y045	BRACKET ARM ASSEMBLIES BRACKET ARM POLE SOCKET	
293	ST204	TRACK SLAB DETAIL - OVER UTILITY VAULT		356	Y046	BRACKET ARM ASSEMBLIES OVERLAP BRACKET ARM MOUNTING BRACKET DETAIL	
BRIDGE DETAILS 115RE				357	Y047	BRACKET ARM ASSEMBLIES SECTION INSULATOR SUPPORT	
294	ST300	BID ALTERNATE - 115RE JOINTS GENERAL NOTES		358	Y051	SPAN WIRE ARRANGEMENTS CROSS SPAN DETAILS	
295	ST301	BID ALTERNATE - 115RE JOINTS MILL AND OVERLAY LIMITS - ABUT 1		359	Y052	SPAN WIRE ARRANGEMENTS HEADSPAN ASSEMBLY	
296	ST302	BID ALTERNATE - 115RE JOINTS CONCRETE REMOVAL - PIER 2		360	Y056	REGISTRATION ASSEMBLIES PULLOVER ASSEMBLIES	SHEET 1 OF 2
297	ST303	BID ALTERNATE - 115RE JOINTS CONCRETE REMOVAL - PIER 5		361	Y057	REGISTRATION ASSEMBLIES PULLOVER ASSEMBLIES	SHEET 2 OF 2
298	ST304	BID ALTERNATE - 115RE JOINTS CONCRETE REMOVAL - PIER 8		362	Y058	REGISTRATION ASSEMBLIES PENDULUM SUSPENSION ASSEMBLIES	
299	ST305	BID ALTERNATE - 115RE JOINTS CONCRETE REMOVAL - PIER 11		363	Y059	REGISTRATION ASSEMBLIES SUSPENSION ASSEMBLIES	
300	ST306	BID ALTERNATE - 115RE JOINTS CONCRETE REMOVAL - PIER 12					
301	ST307	BID ALTERNATE - 115RE JOINTS FINGER JOINT MODIFICATION PLAN - PIERS 2 & 5					

REV	DATE	DESCRIPTION	DESIGNED BY	MMO		 <p>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p>	ISSUED FOR BID		DATE: 12-23-2022		KANSAS CITY STREETCAR - RIVERFRONT EXTENSION				SCALE FOR 22"x34":	
			CHECKED BY	JWR			 HDR Engineering, Inc. 10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856		NOT FOR CONSTRUCTION						INDEX OF DRAWINGS SHEET 3	
			DRAWN BY	MMO							FILENAME: G012.dgn					
			CHECKED BY	JWR							CONTRACT NO.:					
			APPROVED BY	NKS							CONTRACT NO. ***					
PLOT DATE: \$DATE\$			\$TIME\$			DATE	12-23-2022				DRAWING NO.:		G012	SHEET NO.:	4	

#	dwg	TITLE	DESCRIPTION	#	dwg	TITLE	DESCRIPTION
364	Y061	IN-SPAN ASSEMBLIES JUMPER ASSEMBLIES		427	Z618	COMMUNICATIONS DETAILS	RING DIAGRAM SHEET 4
365	Y062	IN-SPAN ASSEMBLIES SECTION INSULATOR ASSEMBLY		428	Z619	COMMUNICATIONS DETAILS	RING DIAGRAM SHEET 5
366	Y063	IN-SPAN ASSEMBLIES TYPICAL SPLICE DETAILS		429	Z620	COMMUNICATIONS DETAILS	3RD ST SPLICE
367	Y064	IN-SPAN ASSEMBLIES SPAN SPACER AND CROSS CONTACT WIRE CLAMP ASSEMBLIES		430	Z621	COMMUNICATIONS DETAILS	3RD ST SPLICE INSET
368	Y065	IN-SPAN ASSEMBLIES CONTACT WIRE PROTECTION BOARD		431	Z622	COMMUNICATIONS DETAILS	2ND ST SPLICE
369	Y066	SWITCHING AND FEEDER ASSEMBLIES FEEDER TAP DETAILS		432	Z623	COMMUNICATIONS DETAILS	SUB STATION SPLICE
370	Y067	SWITCHING AND FEEDER ASSEMBLIES SURGE ARRESTER DETAILS		433	Z624	COMMUNICATIONS DETAILS	BERKLEY PKWY SPLICE
371	Y068	SECTIONALIZING DIAGRAM		434	Z625	COMMUNICATIONS DETAILS	RIVERFRONT SPLICE DIAGRAM
372	Y069	POLE GROUND WIRE INSTALLATION GRAND BOULEVARD VIADUCT PIERS		435	Z626	COMMUNICATIONS DETAILS	RIVERFRONT STATION SPLICE
373	Y070	SWITCHING FEEDER ASSEMBLIES FEEDER TAP DETAILS		436	Z627	ITS CONDUIT HANGER DETAILS	
374	Y071	TERMINATION ASSEMBLIES FIXED TERMINATION ASSEMBLY		437	Z628	CONDUIT TRANSITION DETAIL	
375	Y072	TERMINATION ASSEMBLIES SPRING TENSIONER TERMINATION ASSEMBLY		438	Z629	ITS CONDUIT TRANSITION BOX DETAIL	
376	Y081	MISCELLANEOUS POLE NUMBERING DETAIL		439	Z630	ITS CONDUIT EXPANSION/DEFLECTION POINT	
377	Y092	CROSS SECTION HEART OF AMERICA BRIDGE		440	Z631	ITS CONDUIT RISER	
378	Y093	PROFILES HEART OF AMERICA	SHEET 1 OF 2	TRAIN CONTROL PLANS			
379	Y094	PROFILES HEART OF AMERICA	SHEET 2 OF 2	441	N101	TRAIN CONTROL PLAN	3RD & GRAND
380	Y097	CROSS SECTION OCS FEEDING POINT		442	N102	TRAIN CONTROL PLAN	2ND & GRAND
381	Y111	STRUCTURE SCHEDULE POLE AND FOUNDATION SCHEDULE	SHEET 1 OF 2	443	N103	TRAIN CONTROL PLAN	FRONT & BERKLEY
382	Y112	STRUCTURE SCHEDULE POLE AND FOUNDATION SCHEDULE	SHEET 2 OF 2	444	N104	TRAIN CONTROL PLAN	RIVERFRONT
OCS LAYOUT PLANS				445	N105	TRAIN CONTROL PLAN	VMF
383	Y198	KEY MAP		TRAIN SIGNALING			
384	Y199	MASTER OVERLAP CHART		446	N600	TRAIN CONTROL TRACK AND CABLE PLAN	3RD & GRAND
385	Y201	OCS LAYOUT PLAN	NB STA BEGIN TO STA 113+00	447	N601	TRAIN CONTROL TRACK AND CABLE PLAN	2ND & GRAND
386	Y202	OCS LAYOUT PLAN	NB STA 113+00 TO STA 117+00	448	N602	TRAIN CONTROL TRACK AND CABLE PLAN	FRONT STREET
387	Y203	OCS LAYOUT PLAN	NB STA 117+00 TO STA 121+00	449	N603	TRAIN CONTROL TRACK AND CABLE PLAN	RIVERFRONT
388	Y204	OCS LAYOUT PLAN	NB STA 121+00 TO STA 125+00	450	N604	TRAIN CONTROL ROUTE AND ASPECT CHART	3RD & GRAND
389	Y205	OCS LAYOUT PLAN	NB STA 125+00 TO STA 129+00	451	N605	TRAIN CONTROL ROUTE AND ASPECT CHART	2ND & GRAND
390	Y206	OCS LAYOUT PLAN	NB STA 129+00 TO STA 133+00	452	N606	TRAIN CONTROL ROUTE AND ASPECT CHART	RIVERFRONT
391	Y207	OCS LAYOUT PLAN	NB STA 133+00 TO STA 135+50	453	N607	TRAIN CONTROL TURNOUT BONDING	
392	Y208	OCS LAYOUT PLAN	NB STA 135+50 TO STA 139+50	454	N608	TRAIN CONTROL	TYPICAL SIGNAL CASE LAYOUT RELAY CASE
393	Y209	OCS LAYOUT PLAN	NB STA 139+50 TO STA 143+50	455	N609	TRAIN CONTROL	TYPICAL SIGNAL CASE FOUNDATION AND GROUNDING DETAILS
394	Y210	OCS LAYOUT PLAN	NB STA 143+50 TO STA 147+50	456	N610	TRAIN CONTROL	TYPICAL TWC LOOP INSTALLATION EMBEDDED TRACK
395	Y211	OCS LAYOUT PLAN	NB STA 147+50 TO END	457	N611	TRAIN CONTROL	CABLE / CONDUIT SCHEDULE
396	Y212	OCS BRIDGE GROUNDING LAYOUT PLAN	STA 117+00 TO STA 121+00	458	N612	TRAIN CONTROL	CABLE / CONDUIT SCHEDULE
397	Y213	OCS BRIDGE GROUNDING LAYOUT PLAN	STA 121+00 TO STA 125+00	459	N613	TRAIN CONTROL	CABLE / CONDUIT SCHEDULE
398	Y214	OCS BRIDGE GROUNDING LAYOUT PLAN	STA 125+00 TO STA 129+00	RIGHT OF WAY PLANS			
399	Y215	OCS BRIDGE GROUNDING LAYOUT PLAN	STA 129+00 TO STA 133+00	460	RW001	RIGHT OF WAY KEY MAP	
400	Y216	OCS LAYOUT PLAN	2ND STREET TO VMF	461	RW101	RIGHT OF WAY PLAN	100 GRAND BLVD
401	Y217	OCS LAYOUT PLAN	ENLARGED VIEW	462	RW102	RIGHT OF WAY PLAN	101 GRAND BLVD
COMMUNICATION SCHEDULES				463	RW103	RIGHT OF WAY PLAN	599 E RIVERFRONT ROAD - SHEET 1
402	Z001	COMMUNICATION SCHEDULE		464	RW104	RIGHT OF WAY PLAN	599 E RIVERFRONT ROAD - SHEET 2
COMMUNICATION PLANS				465	RW105	RIGHT OF WAY PLAN	599 E RIVERFRONT ROAD - SHEET 3
403	Z101	COMMUNICATIONS PLAN	NB STA BEGIN TO STA 113+00	466	RW106	RIGHT OF WAY PLAN	599 E RIVERFRONT ROAD - SHEET 4
404	Z102	COMMUNICATIONS PLAN	NB STA 113+00 TO STA 117+00	DETOUR PLAN			
405	Z103	COMMUNICATIONS PLAN	NB STA 117+00 TO STA 121+00	467	DT101	DETOUR PLAN	
406	Z104	COMMUNICATIONS PLAN	NB STA 121+00 TO STA 125+00	MILL AND OVERLAY PLANS			
407	Z105	COMMUNICATIONS PLAN	NB STA 125+00 TO STA 129+00	468	R101	ROADWAY MILL AND OVERLAY PLAN AND PROFILE	STA 0+00 TO STA 4+00
408	Z106	COMMUNICATIONS PLAN	NB STA 129+00 TO STA 133+00	469	R102	ROADWAY MILL AND OVERLAY PLAN AND PROFILE	STA 4+00 TO STA 8+00
409	Z107	COMMUNICATIONS PLAN	NB STA 133+00 TO STA 135+50	470	R103	ROADWAY MILL AND OVERLAY PLAN AND PROFILE	STA 19+00 TO STA 23+00
410	Z108	COMMUNICATIONS PLAN	NB STA 135+50 TO STA 139+50	471	R104	ROADWAY MILL AND OVERLAY PLAN AND PROFILE	STA 23+00 TO STA 28+00
411	Z109	COMMUNICATIONS PLAN	NB STA 139+50 TO STA 143+50	472	R105	ROADWAY MILL AND OVERLAY PLAN AND PROFILE	2ND STREET TO VMF
412	Z110	COMMUNICATIONS PLAN	NB STA 143+50 TO STA 147+50	473	R201	ROADWAY MILL AND OVERLAY	ALIGNMENT TABLE GRAND BOULEVARD & BERKLEY PARKWAY
413	Z111	COMMUNICATIONS PLAN	NB STA 147+50 TO END	MILL AND OVERLAY CROSS SECTIONS			
414	Z112	COMMUNICATIONS PLAN	2ND STREET TO VMF	474	XS01	ROADWAY MILL AND OVERLAY CROSS SECTIONS	GRAND BOULEVARD
COMMUNICATION DETAILS				475	XS02	ROADWAY MILL AND OVERLAY CROSS SECTIONS	GRAND BOULEVARD
415	Z601	SYSTEMWIDE ELECTRICAL	TYPICAL MANHOLE DETAILS	476	XS03	ROADWAY MILL AND OVERLAY CROSS SECTIONS	GRAND BOULEVARD
416	Z602	SYSTEMWIDE ELECTRICAL	MANHOLE INSTALLATION AND SWITCH HEATER/TRACK CIRCUIT BLOCKOUT DETAILS	477	XS04	ROADWAY MILL AND OVERLAY CROSS SECTIONS	GRAND BOULEVARD
417	Z603	SYSTEMWIDE ELECTRICAL	FIBER OPTIC SPLICE VAULT	478	XS05	ROADWAY MILL AND OVERLAY CROSS SECTIONS	GRAND BOULEVARD
418	Z604	SYSTEMWIDE ELECTRICAL	HANDHOLE DETAILS	479	XS06	ROADWAY MILL AND OVERLAY CROSS SECTIONS	GRAND BOULEVARD
419	Z606	SYSTEMWIDE ELECTRICAL	TYPICAL TRACK CIRCUIT BLOCKOUT DETAIL	480	XS07	ROADWAY MILL AND OVERLAY CROSS SECTIONS	BERKLEY PARKWAY
420	Z607	SYSTEMWIDE ELECTRICAL	TRACK TURNOUT BLOCKOUT DETAIL	481	XS08	ROADWAY MILL AND OVERLAY CROSS SECTIONS	BERKLEY PARKWAY
421	Z608	SYSTEMWIDE ELECTRICAL	TYPICAL DUCTBANK INSTALLATION MANHOLE AND CONDUIT LABELING AND CONDUIT STUB-UP DETAIL	482	XS09	ROADWAY MILL AND OVERLAY CROSS SECTIONS	BERKLEY PARKWAY
422	Z609	SYSTEMWIDE ELECTRICAL	COMMUNICATION CONDUIT TYPICAL SECTIONS	483	XS10	ROADWAY MILL AND OVERLAY CROSS SECTIONS	2ND STREET
423	Z614	COMMUNICATIONS DETAILS	NETWORK DIAGRAM	484	XS11	ROADWAY MILL AND OVERLAY CROSS SECTIONS	2ND STREET
424	Z615	COMMUNICATIONS DETAILS	RING DIAGRAM SHEET 1	485	XS12	ROADWAY MILL AND OVERLAY CROSS SECTIONS	2ND STREET
425	Z616	COMMUNICATIONS DETAILS	RING DIAGRAM SHEET 2	486	XS13	ROADWAY MILL AND OVERLAY CROSS SECTIONS	2ND STREET
426	Z617	COMMUNICATIONS DETAILS	RING DIAGRAM SHEET 3				

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			CHECKED BY	JWR								
			DRAWN BY	MMO								
			CHECKED BY	JWR								
			APPROVED BY	NKS								
PLOT DATE: \$DATE\$			\$TIME\$		DATE	12-23-2022	NOT FOR CONSTRUCTION		INDEX OF DRAWINGS SHEET 4			
											G013	5

SYMBOLS LEGEND		GENERAL NOTES		KCMO RELOCATION AND REMOVAL NOTES			
	OCS POLES SHOWN FOR REFERENCE ONLY	<p>PER THE DEVELOPER’S MAINTENANCE AGREEMENT WITH THE CITY, ALL WORK SHALL COMPLY WITH THE KANSAS CITY, MO, DEPARTMENT OF PUBLIC WORKS STANDARD CONSTRUCTION AND MATERIALS SPECIFICATION, DIVISION 11 SECTION 2800, DIVISION V SECTION 5800, SUPPLEMENTAL CHANGES AND OTHER APWA SECTIONS REQUIRED TO RESTORE THE CITY’S “RIGHT-OF-WAY” TO ITS ORIGINAL CONDITION.</p> <p>1. ROADWAY AND AREA CLASSIFICATIONS FOR GRAND BLVD IS MAJOR/COMMERCIAL. PAVEMENT CLASSIFICATION IS R3 WITH A LLF OF .56. OBTAINED BY KCMO STREET LIGHTING DEPARTMENT.</p> <p>2. THE GRAND BLVD LAYOUT WAS BASED ON THE FOLLOWING KCMO LED STANDARDS:</p> <p>TYPE D: KCMO APPROVED, MULTI- VOLT, TYPE II OR III OPTICS, 20KV SPD, 7 PIN RECEPTACLE, NEMA LABEL AND DIMMABLE DRIVER WITH SHORTING CAP OR APPROVED EQUAL.</p> <p>3. DEDICATED KCMO STREETLIGHT POLES SHALL BE PER APWA SECTION 2802.18 WITH A MOUNTING HEIGHT OF 32, 35 AND 40FT. ALL OTHER POLES, MOUNTING HEIGHTS AND ARMS SHALL BE PER PLANS.</p> <p>4. ALL DISTRIBUTION CABLE SHALL BE INSTALLED IN SCHEDULE 40, 2” PVC CONDUIT OR IN PREASSEMBLED “CABLE-IN-DUCT.” ALL CONDUIT RUNS SHALL BE PLACED 2FT FROM BACK OF CURB WHERE POSSIBLE AND AT A MINIMUM DEPTH OF 24”.</p> <p>5. PER APWA SECTION 5800, ALL STREETLIGHT POLES, MATERIALS AND CONTROLLER MUST BE INSTALLED WITHIN THE CITY’S “RIGHT-OF-WAY.”</p> <p>6. DISTRIBUTION CABLE SHALL BE PER PLANS TYPE RHH/RHW/USE, 240 VOLT, COPPER STRANDED AND COLOR CODED BLACK, RED (OR BLACK) AND GREEN (APWA 2802.10) FOR A GROUNDED 240 VOLT SYSTEM (SINGLE PHASE).</p> <p>7. CABLE USED WITHIN THE POLES SHALL BE 3-#10, TYPE RHW/USE, 600 VOLTS RATED, COPPER STRANDED, U.L. LISTED AND COLOR-CODED RED, BLACK AND GREEN ACCORDING TO THE NEC.</p> <p>8. PROVIDE AND INSTALL IN EACH POLE BASE, 3 SINGLE-POLE, SET-SCREW, IN-LINE, BREAKAWAY, FUSEHOLDERS. USE BUSSMAN (OR APPROVED EQUAL) MODEL NO. HEB-JW-RYC AND HEB-JW-RLC-J (LAST POLE). FOR THE 2 “HOT” BREAKAWAY CONDUCTORS, PLACE A 10 AMP KTK FUSE IN EACH BREAKAWAY FUSEHOLDER AND AN NNB COPPER SLUG IN THE SYSTEM GROUND FUSEHOLDER.”</p> <p>9. INDIVIDUAL AND SYSTEM GROUNDS SHALL BE INSTALLED ON ALL CIRCUITS (POLE GROUNDING RODS AND A GROUND WIRE FROM POLE TO POLE). GROUNDING SHALL COMPLY WITH SECTION 2803.8 OF STANDARDS NOTED ABOVE.</p> <p>10. ALL CONDUIT CROSSINGS SHALL BE INDICATED WITH AN ALUMINUM MARKER IN THE TOP OF CURB. ALUMINUM MARKERS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.</p> <p>11. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. THE CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND PIPELINES, CONDUITS, STRUCTURES AND OVERHEAD LINES BY CONTACTING THE OWNERS OF THE UTILITIES.</p>	<p>12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION OF THE CONSTRUCTION SITE TO CITY SPECIFICATIONS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH ANY DAMAGE, INCLUDING BUT NOT LIMITED TO LANDSCAPING, SPRINKLER SYSTEMS, WATER, SEWER, CURBS AND SIDEWALK, GAS MAIN, ETC., CAUSED BY THE CONSTRUCTION.</p> <p>13. ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE STREET LIGHTING, PUBLIC WORKS DEPARTMENT. COORDINATE A FINAL JOINT INSPECTION WITH BRYAN CARTER AT (816) 513-9857.</p> <p>14. LUMINAIRE AND CONTROLLER CABINET LABELS: THE LABELS SHALL BE KCMO-2X16-ADDS OR EQUAL. CONTACT WILLIAM FRICK & COMPANY AT (847) 918-3700. THE CONTRACTOR SHALL FURNISH AND INSTALL LUMINAIRE AND CONTROLLER CABINET IDENTIFICATION LABELS ACCORDING TO THE CONSTRUCTION PLANS. IDENTIFICATION LABELS SHALL CONSIST OF THREE LETTERS AND FOUR NUMERALS IN VERTICAL ORIENTATION WITH THE LETTERS AT THE TOP SO AS TO READ DOWNWARD. LEGEND SHALL BE 2 INCH SERIES “C” UPPER CASE BLACK CHARACTERS ON SILVER RETRO-REFLECTIVE SHEETING WITH PRESSURE SENSITIVE ADHESIVE BACKING, AS PRESCRIBED FOR USE ON STANDARD HIGHWAYS SIGNS IN THE FHWA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. LABELS FOR DECORATIVE POLES MUST BE COORDINATED WITH THE STREET LIGHTING SECTION AT (816) 513-9857.</p> <p>STEEL POLES SHALL BE LABELED BY AFFIXING SELF-ADHESIVE DECAL DIRECTLY ON THE POLE. THE LABEL SHALL BE POSITION ON THE VERTICAL AXIS OF THE POLE FACING THE STREET AND 8-10 FEET ABOVE THE PAVEMENT SURFACE. LABELS ON CABINETS SHALL BE POSITIONED NEAR THE TOP OF THE DOOR ADJACENT TO THE DOOR HINGE.</p> <p>15. ON DEDICATED KCMO STREETLIGHT POLES, THE CONTRACTOR SHALL INSTALL A CABLE RETAINER ASSEMBLY MOUNTED BETWEEN A LUMINAIRE TYPE POLE AND FOUNDATION ANCHOR. THE RETAINER IS DESIGNED TO SECURE THE ELECTRICAL CONDUCTORS TO PREVENT CONDUCTOR THEFT. CONTACT PELCO AT (405) 562-4680 FOR INFORMATION AND MATERIAL.</p> <p>16. CONTRACTOR TO PLACE KCMO LUMINAIRE LABELS ON COMBINED OCS/SL POLES PER NOTE 14.</p> <p>17. STREETLIGHTS MOUNTED ON TRAFFIC SIGNAL POLE SHALL BE INSTALLED PERPENDICULAR TO THE ROAD UNLESS SPECIFIED OTHERWISE.</p> <p>18. REFER TO TRAFFIC LIGHT SIGNAL SHEETS FOR WIRING DIAGRAMS OF LUMINAIRES ON TRAFFIC SIGNAL POLES.</p> <p>19. COORDINATE WITH EVERGY CONTACT PERSON: JOEY WHITE EMAIL, JOEY.WHITE@EVERGY.COM</p> <p>20. PEDESTRIAN AREA CLASSIFICATION IN THE RP-8 FOR MEDIUM CONFLICT AREA: E AVG.: 0.5 (FC) E MIN.: 0.2 (FC) E AVG./MIN.: 4:1</p> <p>21. THE POLE SETBACK FROM CURB SHOULD BE SELECTED TO HELP PREVENT THE POLE FROM BEING STRUCK BY VEHICLE. THIS SHOULD BE 8 OR MORE FEET ON HEAVILY TRAVELED STREETS. AN APPROPRIATE LENGTH MOUNTING ARM TO PUT THE LUMINAIRE AT OR NEAR THE CURB SHOULD BE SPECIFIED. ON LIMITED ACCESS ROADWAYS, THE USE OF BREAKAWAY POLE BASES IS RECOMMENDED. GUARDRAIL CAN ALSO BE USED TO PREVENT A VEHICLE FROM STRIKING THE POLE.</p> <p>22. ALL NEW OCS POLE AND NEW LIGHT ASSEMBLIES NEED TO MAINTAIN 10’ SPACING FROM OVERHEAD LINES.</p>	<p>ALL WORK SHALL COMPLY WITH THE KANSAS CITY, MO, DEPARTMENT OF PUBLIC WORKS, STANDARD CONSTRUCTION AND MATERIALS SPECIFICATION, DIVISION 11 / SECTION 2800, DIVISION V / SECTION 5800, AND ANY SUPPLEMENTAL CHANGES.</p> <p>1. GENERAL: THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE REMOVAL AND REINSTALLATION OF EXISTING STREET LIGHTING EQUIPMENT. THE CONTRACTOR SHALL COORDINATE THE DISCONNECTION OF THE EXISTING LIGHTING CIRCUIT WITH THE PUBLIC WORKS, STREETLIGHT, BRYAN CARTER AT (816) 513-9857. REMOVALS AND INSTALLATIONS MUST ALSO BE COORDINATED WITH THE CITY’S INSPECTOR.</p> <p>2. POLE RELOCATIONS: THE CONTRACTOR SHALL STAKE POLE RELOCATIONS PER PLANS. PRIOR TO ANY CONSTRUCTION, THE CITY INSPECTOR SHALL VERIFY THE POLE LOCATIONS STAKED BY THE CONTRACTOR. THE POLE MUST BE INSTALLED PERPENDICULAR TO THE STREET AND 3FT BEHIND BACK OF CURB OR MATCH EXISTING POLES. THE ENGINEER WILL DETERMINE EXCEPTIONS. MINIMUM ADA SIDEWALK CLEARANCES SHALL BE MAINTAINED.</p> <p>3. POLE AND CONSTRUCTION: POLE AND HARDWARE CAN BE RE-USED WHERE THEY ARE PROPERLY SIZED, EXCEPT IF DAMAGED OR DETERMINED TO BE UNFIT FOR INSTALLATION. WORK SHALL INCLUDE REMOVING, REPLACING AND RESETTING THE POLES PER PLANS. ALL CONCRETE BASES NEED TO BE REMOVED 2FT BELOW GRADE, BACK-FILLED WITH PROJECT-SITE IDENTICAL MATERIAL, AND COMPACTED.</p> <p>4. UTILITIES LOCATES & REPAIRS: ALL UTILITY LOCATES SHALL BE ORDERED BY THE CONTRACTOR. PRIOR TO ANY CONSTRUCTION, THE ENGINEER SHALL APPROVE ANY CHANGES TO THE PLANS DUE TO UTILITY OR OTHER CONFLICTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING ALL STREET LIGHTING EQUIPMENT AND UTILITIES DAMAGED DURING THE CONSTRUCTION OF THE PROJECT. ANY DAMAGE CAUSED TO EXISTING LIGHTING EQUIPMENT AND UTILITIES BY THE CONTRACTOR’S CONSTRUCTION, SHALL BE REPAIRED BY THE APPROPRIATE UTILITY AT THE CONTRACTOR’S EXPENSE.</p> <p>5. DISTRIBUTION CABLE INSTALLATION: ALL DISTRIBUTION CABLE SHALL BE INSTALLED IN SCHEDULE 40, 2” PVC CONDUIT OR IN PREASSEMBLED “CABLE-IN-DUCT.” MATCH EXISTING CABLE SIZE AND TYPE. ALL CONDUIT RUNS SHALL BE PLACED 2FT FROM BACK OF CUB WHERE POSSIBLE AND AT A MINIMUM DEPTH OF 24”. ALL SPLICES MUST BE DONE IN THE POLE BASE OR PULL BOX. NO MID-SPAN SPLICES OR BURIED SPLICES ARE ALLOWED.</p> <p>6. FUSING: ON DEDICATED KCMO STREETLIGHT POLE REPLACEMENTS OR RELOCATIONS, MATCH EXISTING LIGHTING EQUIPMENT PER KCMO APWA.</p> <p>7. ANTI-THEFT DEVICE: PELCO OR APPROVED EQUAL RETAINERS SHALL BE INSTALLED ON DEDICATED KCMO POLES.</p>		<p>8. STORAGE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY STORAGE OF MATERIALS, MAINTAINING, AND REPLACING MATERIALS (IN LIKE KIND) DAMAGED DURING THE CONSTRUCTION CONTRACT.</p> <p>9. CLEARANCE AND RIGHT OF WAY: ALL STREETLIGHT EQUIPMENT SHALL MEET OR EXCEED THE LATEST REVISION OF NATIONAL ELECTRICAL CODE (NEC) AND NATIONAL ELECTRICAL SAFETY CODE (NESC) STANDARDS FOR LINE AND EQUIPMENT CLEARANCE. ALL POLES AND DISTRIBUTION CABLE MUST BE INSTALLED IN THE CITY’S “RIGHT-OF-WAY.”</p> <p>10. SITE RESTORATION: THE CONTRACTOR IS RESPONSIBLE FOR ALL RESTORATION OF THE CONSTRUCTION SITE TO CITY SPECIFICATIONS AT NO ADDITIONAL COST. CONTRACTOR IS ALSO RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ANY DAMAGE, INCLUDING BUT NOT LIMITED TO LANDSCAPING, SPRINKLER SYSTEMS, WATER, SEWER, CURB AND SIDEWALK, GAS MAIN, ETC., CAUSED BY THE CONSTRUCTION.</p> <p>11. CONTRACTOR TO COORDINATE POWER SOURCE FOR NEW STREET LIGHTING CONTROLLER WITH EVERGY POWER COMPANY.</p> <p>12. CONTRACTOR TO COORDINATE THE REMOVAL OF EXISTING CONDUCTORS AND ABANDON EXISTING CONDUIT FOR THE EXISTING LIGHTING CIRCUIT THAT WILL NOT BE USED FOR COMBINED OCS POLE WITH STREET LIGHTING WITH KCMO CITY INSPECTOR.</p> <p>13. CONTRACTOR TO MAINTAIN EXISTING LIGHTING CIRCUITS DURING CONSTRUCTION WHEN POSSIBLE. IN AREAS WHERE THIS CANNOT BE ACHIEVED, COORDINATE WITH KCMO STREET LIGHTING INSPECTOR.</p> <p>14. ALL LIGHTING OUTAGES TO BE SCHEDULED AND COORDINATED WITH CITY LIGHTING DEPARTMENT.</p>	
	EXISTING LED COBRA HEAD STREETLIGHT ON OCS, EX						
	NEW LED COBRA HEAD STREETLIGHT ON TRAFFIC SIGNAL/OCS POLE						
	STREETLIGHT ON OCS/TRAFFIC SIGNAL POLE						
	NEW LED LUMINAIRE ON TRAFFIC SIGNAL POLE						
	EXISTING COBRA HEAD LED LUMINAIRE ON TRAFFIC SIGNAL POLE						
	EXISTING COBRA HEAD STREETLIGHT ON TRAFFIC SIGNAL POLE TO BE REMOVED						
	EXISTING COBRA HEAD STREETLIGHT POLE TO BE REMOVED						
	NEW KCMO SIGNITY LUMEC TYPE ‘D’ LED LIGHT FIXTURE ON STREETLIGHT POLE						
	EXISTING COBRA HEAD STREETLIGHT POLE TO REMAIN						
	NEW KCMO PHILIPS TYPE ‘C’ LED LUMINAIRE ON OCS POLE						
	NEW QUAD KCMO AMERICAN ELECTRIC TYPE ‘D’ & ‘C’ LED LIGHT FIXTURES ON OCS POLE						
	NEW TWIN KCMO AMERICAN ELECTRIC TYPE ‘D’ LED LIGHT FIXTURES ON OCS POLE						
	NEW KCMO AMERICAN ELECTRIC TYPE ‘D’ LED LIGHT FIXTURE ON OCS POLE						
	EXISTING SHOEBOX STREETLIGHT POLE TO REMAIN						
	EXISTING SHOEBOX STREETLIGHT POLE TO BE REMOVED						
	EXISTING SHOEBOX STREETLIGHT POLE TO BE RELOCATED TO NEW LOCATION						
	EXISTING PEDESTRIAN LIGHT AND POLE TO REMAIN						
	EXISTING PEDESTRIAN LIGHT AND POLE TO BE REMOVED						
	EXISTING PEDESTRIAN LIGHT AND POLE TO BE RELOCATED X DESIGNATION FOR POLE NUMBER						
	RELOCATED EXISTING PEDESTRIAN LIGHT AND POLE X DESIGNATION FOR POLE NUMBER						
	EXISTING STREET LIGHTING CONTROLLER TO REMAIN						
	EXISTING STREET LIGHTING CONTROLLER TO BE RELOCATED						
	NEW STREET LIGHTING CONTROLLER						
	NEW PULL BOX						
	PULL BOX FOR TRAFFIC SIGNAL						
	EXISTING EVERGY PAD MOUNTED TRANSFORMER TO BE RELOCATED						
	EXISTING EVERGY PAD MOUNTED TO TRANSFORMER TO REMAIN						
	EXISTING EVERGY SWITCH GEAR TO REMAIN						
	EXISTING ELECTRICAL POWER BOX TO BE RELOCATED						
	RELOCATED ELECTRICAL POWER BOX						
	NEW LIGHTING CIRCUIT						
	EXISTING LIGHTING CIRCUIT TO REMAIN						
	PHASE WIRE						
	GROUND WIRE						

REV	DATE	DESCRIPTION	DESIGNED BY	AAS		<p>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p>	ISSUED FOR BID	DATE: 12-23-2022	<p>KANSAS CITY STREETCAR - RIVERFRONT EXTENSION</p> <p>GENERAL LIGHTING NOTES AND SYMBOL LEGEND</p>	SCALE FOR 22"x34": NOT TO SCALE FILENAME: L001.dgn CONTRACT NO.: CONTRACT NO. *** VOLUME: 1 DRAWING NO.: SHEET NO.: L001 254
			CHECKED BY	CKB			HDR Engineering, Inc.			
			DRAWN BY	RAL			10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856	Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239		
			CHECKED BY	CKB						
			APPROVED BY	AAS						
PLOT DATE: 12/22/2022			2:01:39 PM		DATE	12-23-2022	NOT FOR CONSTRUCTION			

STATIONING TABLE		
ITEM	STATION	OFFSET
SBC5500	N 111+05	R 56.49
RE1	N 111+38	R 22.83
SBCXXX	N 111+79	R 21.41
RE2	N 112+21	R 21.27
RE3	N 112+79	R 25.96



GENERAL NOTES

1. FOR GENERAL NOTES AND SYMBOL LEGEND, SEE SHEET L001.

KEYED NOTES

- 1 EXISTING COBRA HEAD LED STREETLIGHT ON EXISTING TRAFFIC SIGNAL POLE TO REMAIN.
- 2 EXISTING COBRA HEAD LED STREETLIGHT ON EXISTING EVERY WOOD POLE TO REMAIN.
- 3 LOCATION OF OCS POLE.
- 4 EXISTING COBRA HEAD LED STREETLIGHT ON EXISTING OCS POLE TO REMAIN.
- 5 EXISTING SHOEBOX LIGHT POLE TO BE RELOCATED. PROVIDE NEW POLE BASE FOR SHOEBOX LIGHT POLE AT NEW LOCATION. EXTEND EXISTING CONDUIT AND WIRE TO NEW LOCATION.
- 6 EXISTING PEDESTRIAN LIGHT TO REMAIN.
- 7 EXISTING PEDESTRIAN LIGHT POLE TO BE RELOCATED TO NEW LOCATION IN NEW GREEN SPACE. PROVIDE NEW POLE BASE FOR PEDESTRIAN LIGHT POLE AT NEW LOCATION. PROVIDE NEW CONDUIT AND WIRES TO NEW LOCATION. REMOVE EXISTING CONDUCTORS AND ABANDONED EXISTING CONDUIT FOR RELOCATED EXISTING PEDESTRIAN LIGHT POLES. RECONNECT TO EXISTING CIRCUIT FOR PEDESTRIAN LIGHT POLE.
- 8 RELOCATE EXISTING LED COBRA HEAD STREETLIGHT FIXTURE ON OCS POLE. TO NEW LOCATION SHOWN ON PLAN. REFER TO OCS SHEETS FOR STATIONING OF RELOCATED OCS POLE.
- 9 EXISTING COBRA HEAD LED STREETLIGHT ON EXISTING EVERY WOOD POLE TO REMAIN. EVERY WOOD POLE HAS EXISTING CONDUIT AND FIXTURES WIRES THAT PROVIDE POWER FOR STREETLIGHT ON TRAFFIC SIGNAL POLES AT INTERSECTION OF 3RD AND GRAND BLVD.
- 10 EXISTING COBRA HEAD LED STREETLIGHT ON EXISTING TRAFFIC SIGNAL POLE TO BE REMOVED. DELIVER EXISTING COBRA HEAD LED LIGHT FIXTURE TO MAINTENANCE CONTRACTOR OF KANSAS CITY, MISSOURI.
- 11 NEW LED LUMINAIRE ON TRAFFIC SIGNAL/OCS POLE. REFER TO TRAFFIC SIGNAL SHEETS FOR LOCATION OF NEW LED LUMINAIRE ON TRAFFIC SIGNAL OCS POLE AND CONDUIT SIZE FOR LUMINAIRE. PROVIDE 1-3#8 FROM EXISTING EVERY POWER POLE TO EACH LED LUMINAIRES ON TRAFFIC SIGNAL POLE. LUMINAIRE SHOWN FOR REFERENCE ONLY.
- 12 REMOVE EXISTING PULL BOX FOR TRAFFIC SIGNAL POLES CONTRACTOR TO PULL BACK CONDUCTOR AND INTERCEPT CONDUIT WITH NEW PULL BOX AND PROVIDE NEW WIRES.
- 13 2 #6, 1 #6 GND IN 2" CONDUIT.
- 14 2 #8, 1 #8 GND FOR STREETLIGHTS ON TRAFFIC SIGNAL POLES IN 2" CONDUIT PROVIDED BY TRAFFIC SIGNAL.

- 15 EXISTING PEDESTRIAN LIGHT TO BE REMOVED.
- 16 PROVIDE 2#8, 1#8 GND. IN 2" CONDUIT FROM TRAFFIC SIGNAL PULL BOX TO NEW LED LUMINAIRE TYPE 'D' ON 35' POLE. PROVIDE BASE PER DETAIL ON SHEET L302. REFER TO SPECIFICATION OF LUMINAIRE TYPE 'D' ON SHEET L302. COORDINATE STREET LIGHTING NUMBER WITH KCMO STREET LIGHTING DEPARTMENT. REFER TO TRAFFIC SIGNAL SHEETS FOR LOCATION OF TRAFFIC SIGNAL PULL BOX.
- 17 EXISTING CONDUIT AND WIRES TO EXISTING TRAFFIC SIGNAL POLES TO BE PULLED BACK AND RECRUITED FOR LIGHTING CIRCUIT FOR STREET LIGHTS ON TRAFFIC SIGNAL POLES.

MATCHLINE STA. 113+00

REV	DATE	DESCRIPTION	DESIGNED BY	AAS
			CHECKED BY	CKB
			DRAWN BY	RAL
			CHECKED BY	CKB
			APPROVED BY	AAS
PLOT DATE: 12/22/2022			DATE	12-23-2022



This set of plans is not for construction. These plans are intended to build interest in bidding the project.

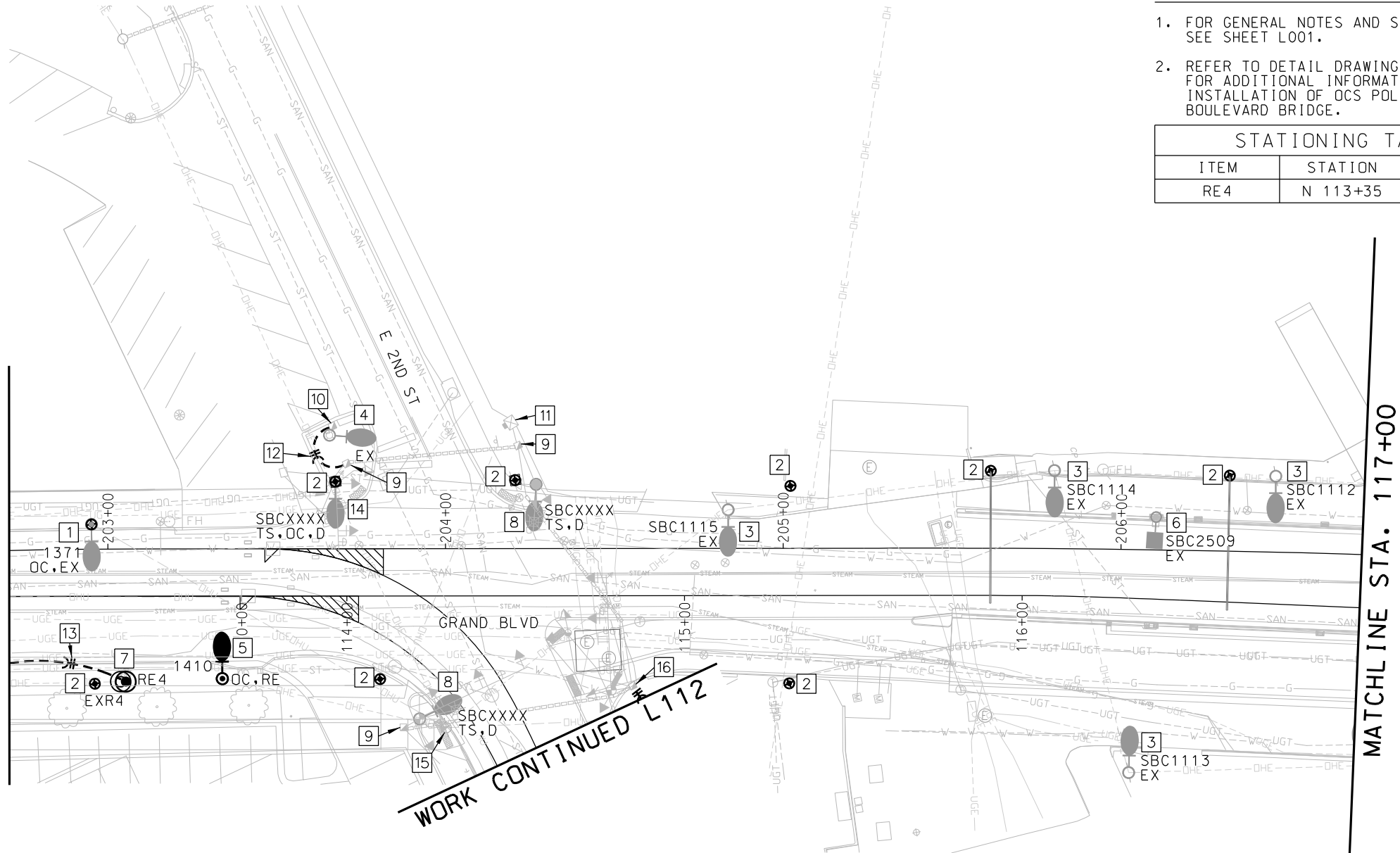
ISSUED FOR BID		DATE: 12-23-2022
10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856		Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239
NOT FOR CONSTRUCTION		

KANSAS CITY STREETCAR - RIVERFRONT EXTENSION

NORTHBOUND TRACK
LIGHTING PLAN
STA BEGIN TO STA 113+00

SCALE FOR 22"x34": 1" = 20'	
FILENAME: L101.dgn	
CONTRACT NO.: CONTRACT NO. ***	
VOLUME: 1	
DRAWING NO.: L101	SHEET NO.: 255

MATCHLINE STA. 113+00



MATCHLINE STA. 117+00

GENERAL NOTES

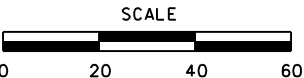
- FOR GENERAL NOTES AND SYMBOL LEGEND, SEE SHEET L001.
- REFER TO DETAIL DRAWINGS Y037 & Y038 FOR ADDITIONAL INFORMATION REGARDING INSTALLATION OF OCS POLES ON GRAND BOULEVARD BRIDGE.

STATIONING TABLE

ITEM	STATION	OFFSET
RE4	N 113+35	R 25.31

KEYED NOTES

- EXISTING COBRA HEAD 400 WATT HPS STREETLIGHT ON EXISTING OCS POLE TO REMAIN.
- LOCATION OF OCS POLE.
- EXISTING COBRA HEAD 150 WATT HPS STREETLIGHT ON EXISTING EVERGY WOOD POLE TO REMAIN.
- EXISTING COBRA HEAD 150 WATT HPS STREET LIGHT ON METAL POLE TO REMAIN.
- EXISTING COBRA HEAD STREETLIGHT ON EXISTING OCS POLE TO BE RELOCATED IN NEW GREEN SPACE. REFER TO OCS SHEETS FOR STATIONING OF RELOCATED OCS POLE.
- EXISTING SHOE BOX STREETLIGHT POLE ON THE BRIDGE TO REMAIN. EXISTING SHOE BOX FIXTURE WILL BE REPLACED WITH AMERICAN ELECTRIC TYPE 'D' LIGHT FIXTURE BY CITY OF KCMO. COORDINATE REPLACEMENT WITH KCMO STREET LIGHTING DEPARTMENT.
- EXISTING PEDESTRIAN LIGHT POLE TO BE RELOCATED TO NEW LOCATION IN NEW GREEN SPACE. PROVIDE NEW POLE BASE FOR PEDESTRIAN LIGHT POLE AT NEW LOCATION. PROVIDE NEW CONDUIT AND WIRES TO NEW LOCATION. REMOVE EXISTING CONDUCTORS AND ABANDONED EXISTING CONDUIT FOR RELOCATED EXISTING PEDESTRIAN LIGHT POLES. RECONNECT TO EXISTING CIRCUIT FOR PEDESTRIAN LIGHT POLE.
- NEW LED LUMINAIRE ON TRAFFIC SIGNAL POLE. REFER TO TRAFFIC SIGNAL SHEET FOR LOCATION OF NEW LED LUMINAIRE ON TRAFFIC SIGNAL AND CONDUIT SIZE FOR LUMINAIRE. PROVIDE 1-3#8 FROM EXISTING STREET LIGHTING CIRCUIT TO EACH LED LUMINAIRES ON TRAFFIC SIGNAL POLE. LUMINAIRE SHOWN FOR REFERENCE ONLY. COORDINATE STREET LIGHTING NUMBER WITH KCMO STREET LIGHTING DEPARTMENT.
- PULL BOX FOR TRAFFIC SIGNAL. COORDINATE LOCATION WITH TRAFFIC SIGNAL SHEET. PULL BOX IS SHOWN FOR REFERENCE ONLY.
- EXISTING PULL BOX FOR EXISTING STREET LIGHT TO REMAIN.
- CABINET FOR TRAFFIC SIGNAL. REFER TO TRAFFIC SIGNAL SHEETS FOR CABINET LOCATION. CABINET FOR TRAFFIC SIGNAL IS SHOWN FOR REFERENCE ONLY.
- 1-3#8 IN 2" CONDUIT FOR LIGHTING CIRCUIT FROM PULL BOX FOR TRAFFIC SIGNAL TO EXISTING PULL FOR STREETLIGHT INTERCEPT EXISTING STREETLIGHT CIRCUIT AND TIE TO EXISTING CIRCUIT.
- 2 #6, 1 #6 GND IN 2" CONDUIT.
- NEW LED LUMINAIRE ON OCS/TRAFFIC SIGNAL POLE. REFER TO TRAFFIC SIGNAL SHEET FOR LOCATION OF NEW LED LUMINAIRE ON TRAFFIC SIGNAL AND CONDUIT SIZE FOR LUMINAIRE. PROVIDE 1-3C#8 FROM EXISTING STREET LIGHTING CIRCUIT TO EACH LED LUMINAIRES ON TRAFFIC SIGNAL POLE. LUMINAIRE SHOWN FOR REFERENCE ONLY. COORDINATE STREET LIGHTING NUMBER WITH KCMO STREET LIGHTING DEPARTMENT.
- EXISTING EVERGY POWER POLE TO BE RELOCATED BY EVERGY. COORDINATE RELOCATION WITH EVERGY CONTACT PERSON. JOEY WHITE, BY E-MAIL: JOEY.WHITE@EVERGY.COM.
- LOCATION OF TRAFFIC SIGNAL PULL BOX. INTERCEPT LIGHTING CIRCUIT AT JUCTION BOX AND TIE NEW LIGHTING CIRCUIT FOR NEW KCMO LED LUMINARIES TYPE 'C' OCS POLES SHOWN ON SHEET L112. PULL BOX IS SHOWN FOR REFERENCE ONLY.



REV	DATE	DESCRIPTION

DESIGNED BY	AAS
CHECKED BY	CKB
DRAWN BY	RAL
CHECKED BY	CKB
APPROVED BY	AAS



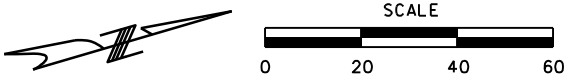
This set of plans is not for construction. These plans are intended to build interest in bidding the project.

ISSUED FOR BID	DATE: 12-23-2022
HDR Engineering, Inc. 10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856	Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239
NOT FOR CONSTRUCTION	

KANSAS CITY STREETCAR - RIVERFRONT EXTENSION

NORTHBOUND TRACK
LIGHTING PLAN
STA 113+00 TO STA 117+00

SCALE FOR 22"x34": 1" = 20'	FILENAME: L102.dgn
CONTRACT NO.: CONTRACT NO. ***	VOLUME: 1
DRAWING NO.: L102	SHEET NO.: 256

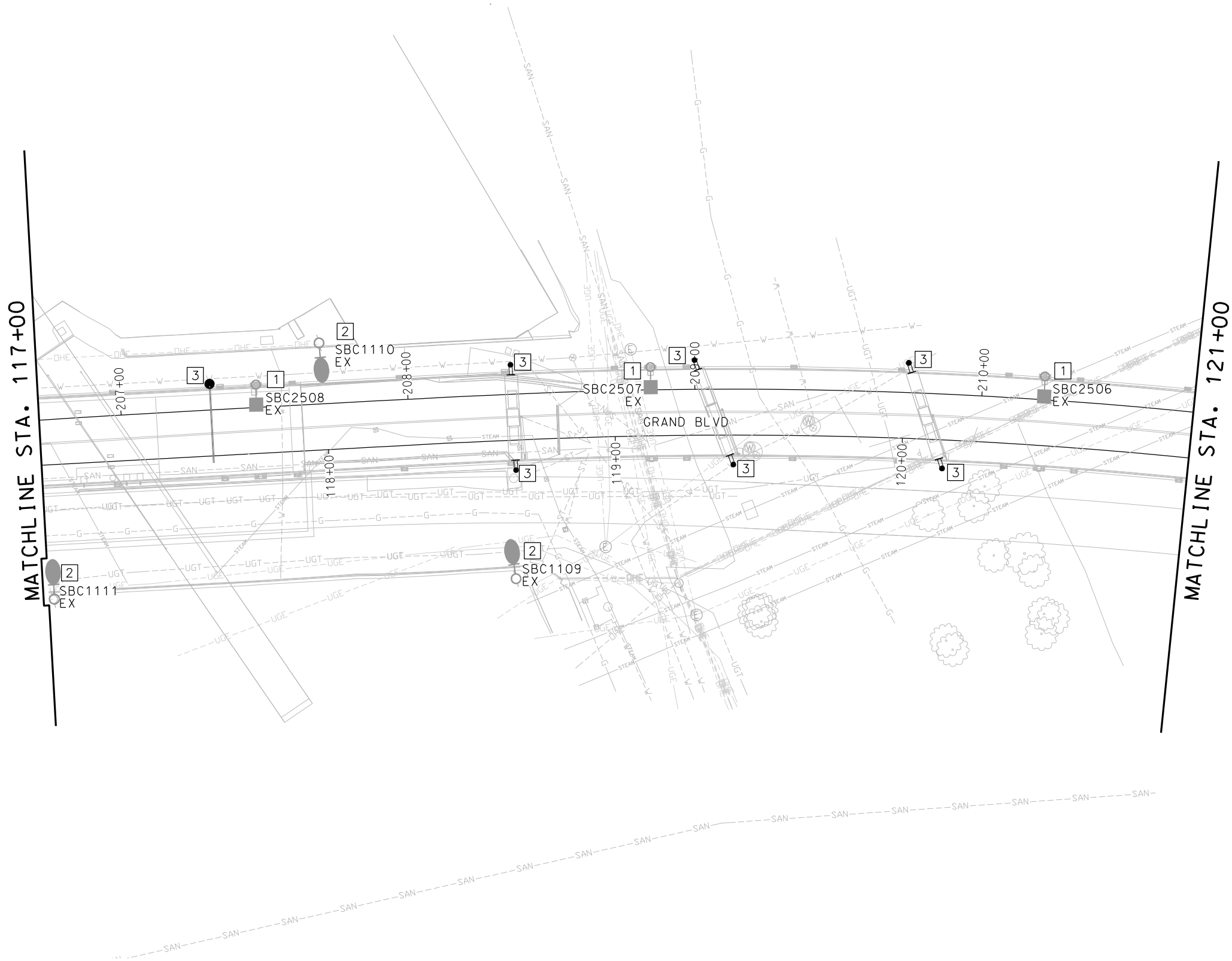


GENERAL NOTES

1. FOR GENERAL NOTES AND SYMBOL LEGEND, SEE SHEET L001.
2. REFER TO DETAIL DRAWINGS Y037 & Y038 FOR ADDITIONAL INFORMATION REGARDING INSTALLATION OF OCS POLES ON GRAND BOULEVARD BRIDGE.

KEYED NOTES

- 1 EXISTING SHOE BOX STREETLIGHT POLE ON THE BRIDGE TO REMAIN. EXISTING SHOE BOX FIXTURE WILL BE REPLACED WITH AMERICAN ELECTRIC TYPE 'D' LIGHT FIXTURE BY CITY OF KCMO. COORDINATE REPLACEMENT WITH KCMO STREET LIGHTING DEPARTMENT.
- 2 EXISTING 150-WATT HPS STREETLIGHT ON WOOD POLE TO REMAIN.
- 3 LOCATION OF OCS POLE.



REV	DATE	DESCRIPTION	DESIGNED BY	AAS		<p>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p>	ISSUED FOR BID		DATE: 12-23-2022	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION		SCALE FOR 22"x34": 1" = 20'				
			CHECKED BY	CKB			 HDR Engineering, Inc.		 Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239			FILENAME: L103.dgn				
			DRAWN BY	RAL			10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856					CONTRACT NO.:				
			CHECKED BY	CKB			NOT FOR CONSTRUCTION					CONTRACT NO. ***				
			APPROVED BY	AAS								VOLUME: 1				
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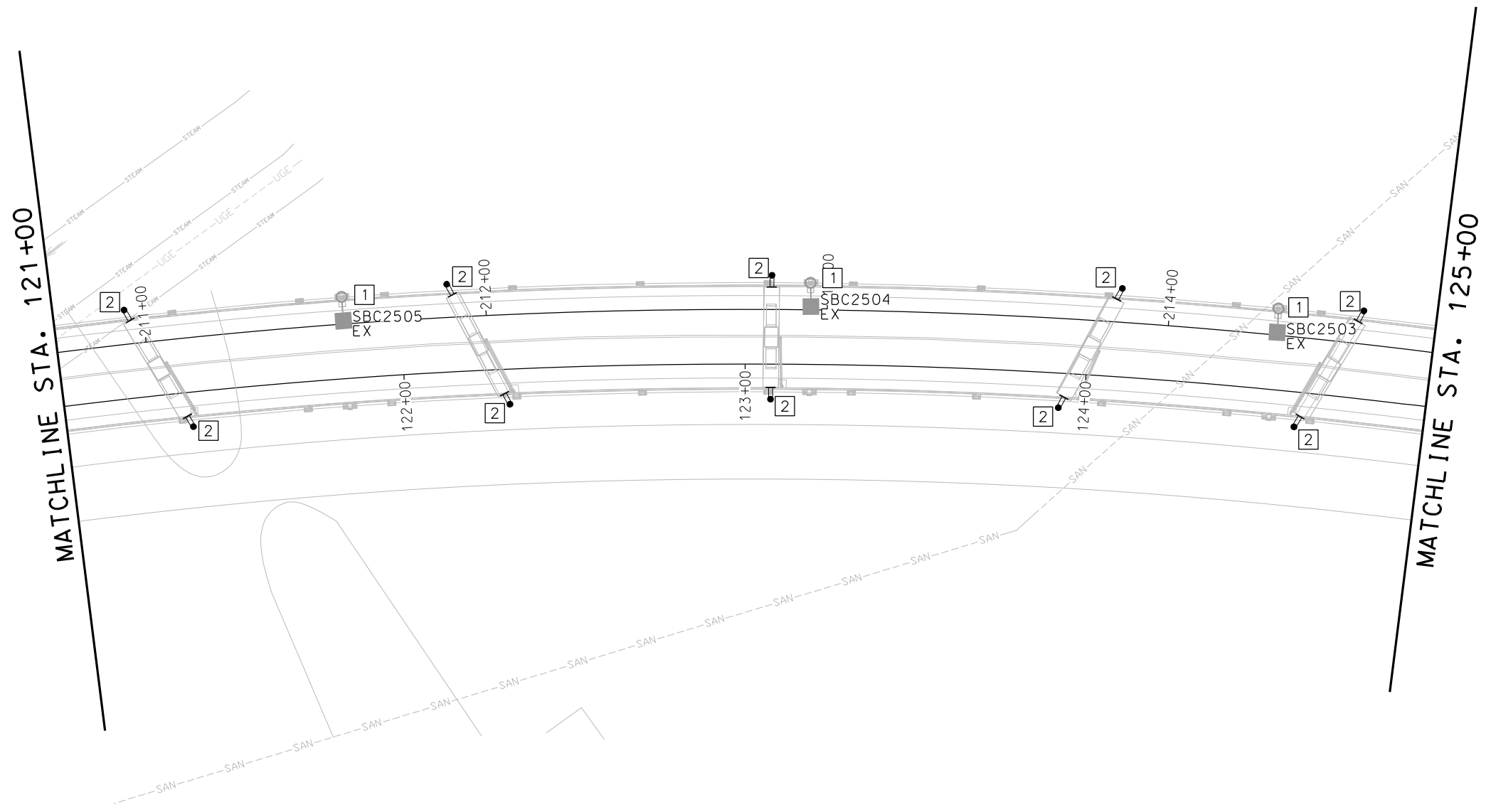


GENERAL NOTES

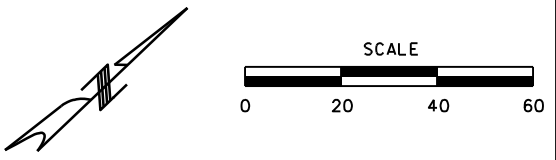
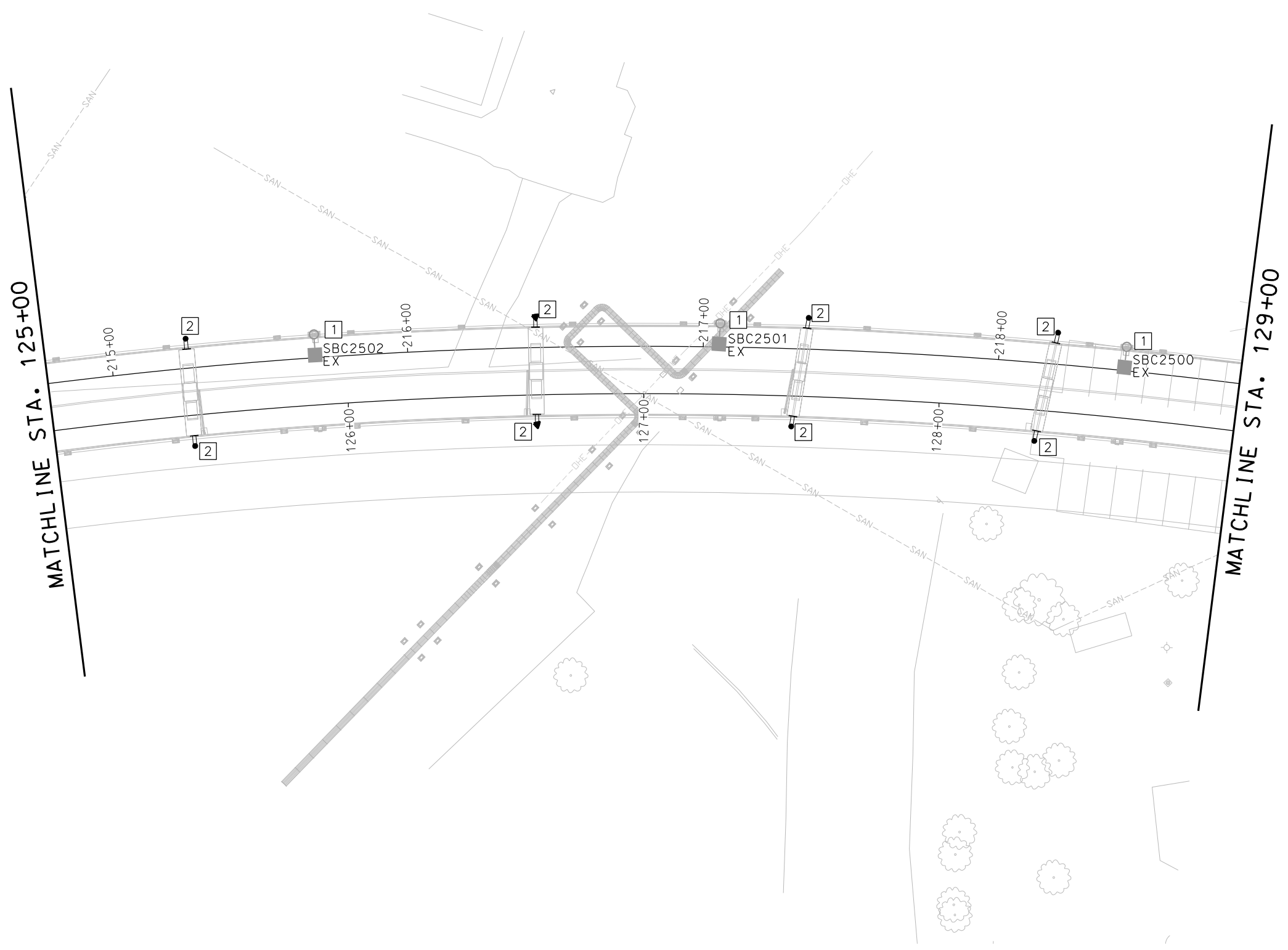
- 1. FOR GENERAL NOTES AND SYMBOL LEGEND, SEE SHEET L001.
- 2. REFER TO DETAIL DRAWINGS Y037 & Y038 FOR ADDITIONAL INFORMATION REGARDING INSTALLATION OF OCS POLES ON GRAND BOULEVARD BRIDGE.

KEYED NOTES

- 1 EXISTING SHOE BOX STREETLIGHT POLE ON THE BRIDGE TO REMAIN. EXISTING SHOE BOX FIXTURE WILL BE REPLACED WITH AMERICAN ELECTRIC TYPE 'D' LIGHT FIXTURE BY CITY OF KCMO. COORDINATE REPLACEMENT WITH KCMO STREET LIGHTING DEPARTMENT.
- 2 LOCATION OF OCS POLE.



REV	DATE	DESCRIPTION	DESIGNED BY	AAS	<div><div>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</div></div>	ISSUED FOR BID	DATE: 12-23-2022	<div>KANSAS CITY STREETCAR - RIVERFRONT EXTENSION</div> <div>NORTHBOUND TRACK LIGHTING PLAN</div> <div>STA 121+00 TO STA 125+00</div>		SCALE FOR 22"x34":	
			CHECKED BY	CKB		<div><div>HDR Engineering, Inc.</div></div>	<div><div>Custom Engineering</div></div>			1" = 20'	FILENAME:
			DRAWN BY	RAL		10450 Holmes Road	12760 East 40 Highway			L104.dgn	CONTRACT NO.:
			CHECKED BY	CKB		Suite 600	Kansas City, MO 64131-3471			CONTRACT NO. ***	VOLUME:
			APPROVED BY	AAS		816-360-2700	816-350-1473			1	DRAWING NO.:
PLOT DATE: 12/22/2022			DATE	12-23-2022		Certificate of Authority: 000856		Certificate of Authority: 000239		1	SHEET NO.:
						NOT FOR CONSTRUCTION				L104	258



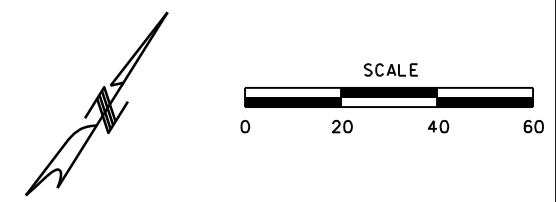
GENERAL NOTES

- 1. FOR GENERAL NOTES AND SYMBOL LEGEND, SEE SHEET L001.
- 2. REFER TO DETAIL DRAWINGS Y037 & Y038 FOR ADDITIONAL INFORMATION REGARDING INSTALLATION OF OCS POLES ON GRAND BOULEVARD BRIDGE.

KEYED NOTES

- 1 EXISTING SHOE BOX STREETLIGHT POLE ON THE BRIDGE TO REMAIN. EXISTING SHOE BOX FIXTURE WILL BE REPLACED WITH AMERICAN ELECTRIC TYPE 'D' LIGHT FIXTURE BY CITY OF KCMO. COORDINATE REPLACEMENT WITH KCMO STREET LIGHTING DEPARTMENT.
- 2 LOCATION OF OCS POLE.

<div>REV</div> <div>DATE</div> <div>DESCRIPTION</div>			<div>DESIGNED BY</div> <div>AAS</div>		<div></div>	<div><p>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p></div>	<div>ISSUED FOR BID</div> <div>DATE: 12-23-2022</div>		<div>KANSAS CITY STREETCAR - RIVERFRONT EXTENSION</div>		<div>SCALE FOR 22"x34":</div> <div>1" = 20'</div>	
			<div>CHECKED BY</div> <div>CKB</div>				<div></div> <div>HDR Engineering, Inc.</div>		<div>Custom Engineering</div>		<div>FILENAME:</div> <div>L105.dgn</div>	
			<div>DRAWN BY</div> <div>RAL</div>				<div>10450 Holmes Road</div> <div>Suite 600</div> <div>Kansas City, MO 64131-3471</div> <div>816-360-2700</div> <div>Certificate of Authority: 000856</div>		<div>12760 East 40 Highway</div> <div>Independence, MO 64055</div> <div>816-350-1473</div> <div>Certificate of Authority: 000239</div>		<div>CONTRACT NO.:</div> <div></div>	
			<div>CHECKED BY</div> <div>CKB</div>				<div>NOT FOR CONSTRUCTION</div>				<div>CONTRACT NO. ***</div>	
			<div>APPROVED BY</div> <div>AAS</div>								<div>VOLUME:</div> <div>1</div>	
<div>PLOT DATE: 12/22/2022</div> <div>2:04:01 PM</div>			<div>DATE</div> <div>12-23-2022</div>						<div>DRAWING NO.:</div> <div>L105</div>		<div>SHEET NO.:</div> <div>259</div>	

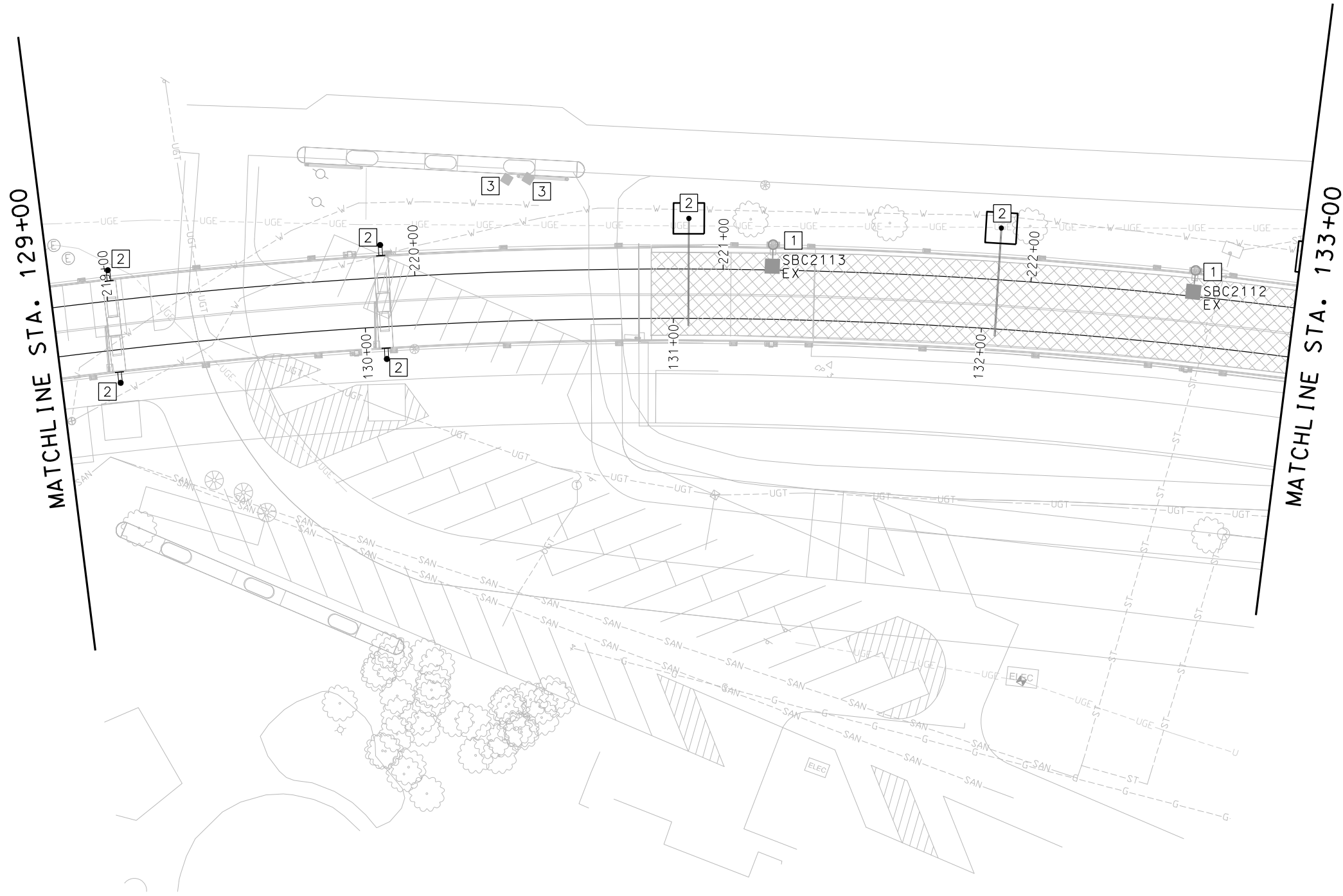


GENERAL NOTES

- 1. FOR GENERAL NOTES AND SYMBOL LEGEND, SEE SHEET L001.
- 2. REFER TO DETAIL DRAWINGS Y037 & Y038 FOR ADDITIONAL INFORMATION REGARDING INSTALLATION OF OCS POLES ON GRAND BOULEVARD BRIDGE.

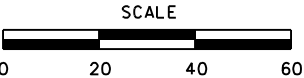
KEYED NOTES

- 1 EXISTING SHOE BOX STREETLIGHT POLE ON THE BRIDGE TO REMAIN. EXISTING SHOE BOX FIXTURE WILL BE REPLACED WITH AMERICAN ELECTRIC TYPE 'D' LIGHT FIXTURE BY CITY OF KCMO. COORDINATE REPLACEMENT WITH KCMO STREET LIGHTING DEPARTMENT.
- 2 LOCATION OF OCS POLE.
- 3 EXISTING GRAND AND PEDESTRIAN LIGHTING CONTROLLER LOCATIONS. COORDINATE FINAL LOCATIONS WITH PUBLIC WORKS STREET LIGHTING.



REV	DATE	DESCRIPTION	DESIGNED BY	AAS		<div>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</div>	ISSUED FOR BID	DATE: 12-23-2022	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION	<div>NORTHBOUND TRACK LIGHTING PLAN STA 129+00 TO STA 133+00</div>	SCALE FOR 22"x34": 1" = 20'	
			CHECKED BY	CKB				HDR Engineering, Inc.				FILENAME: L106.dgn
			DRAWN BY	RAL			10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856	Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239			CONTRACT NO.: CONTRACT NO. ***	
			CHECKED BY	CKB								VOLUME: 1
			APPROVED BY	AAS								DRAWING NO.: L106
PLOT DATE: 12/22/2022		2:04:26 PM	DATE	12-23-2022			NOT FOR CONSTRUCTION				SHEET NO.: 260	

This set of plans is not for construction. These plans are intended to build interest in bidding the project.

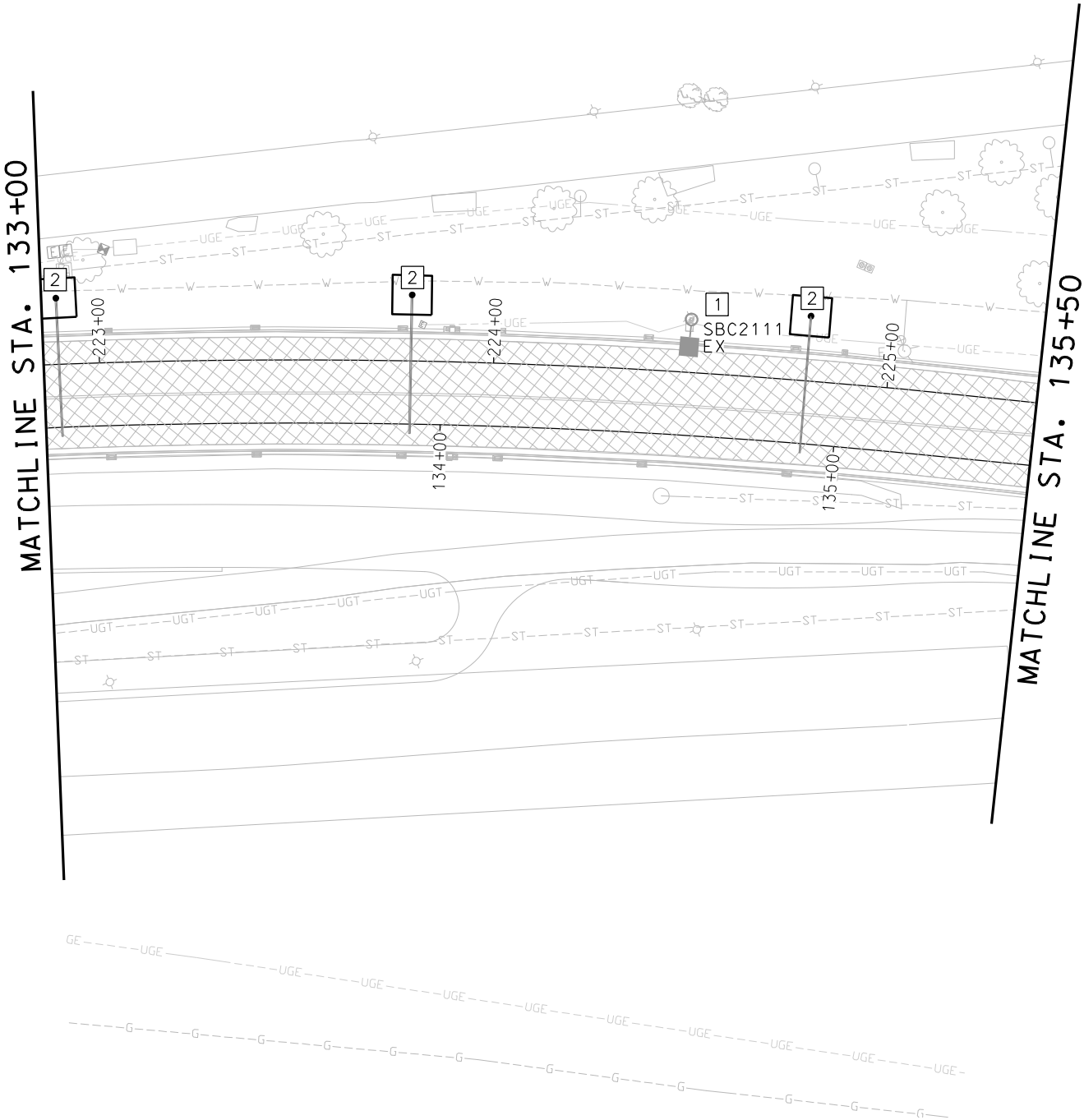


GENERAL NOTES

1. FOR GENERAL NOTES AND SYMBOL LEGEND, SEE SHEET L001.
2. REFER TO DETAIL DRAWINGS Y037 & Y038 FOR ADDITIONAL INFORMATION REGARDING INSTALLATION OF OCS POLES ON GRAND BOULEVARD BRIDGE.

KEYED NOTES

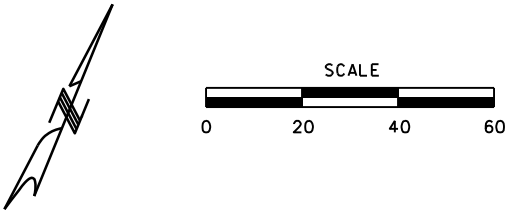
- 1 EXISTING SHOE BOX STREETLIGHT POLE ON THE BRIDGE TO REMAIN. EXISTING SHOE BOX FIXTURE WILL BE REPLACED WITH AMERICAN ELECTRIC TYPE 'D' LIGHT FIXTURE BY CITY OF KCMO. COORDINATE REPLACEMENT WITH KCMO STREET LIGHTING DEPARTMENT.
- 2 LOCATION OF OCS POLE.



REV	DATE	DESCRIPTION	DESIGNED BY	AAS		<div>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</div>	ISSUED FOR BID	DATE: 12-23-2022	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION		SCALE FOR 22"x34": 1" = 20'	
			CHECKED BY	CKB			 <div>HDR Engineering, Inc. 10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856</div>	 <div>Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239</div>	NORTHBOUND TRACK LIGHTING PLAN		FILENAME: L107.dgn	
			DRAWN BY	RAL					CONTRACT NO.:		CONTRACT NO. ...	
			CHECKED BY	CKB					VOLUME:		1	
			APPROVED BY	AAS					DRAWING NO.:		SHEET NO.:	
PLOT DATE: 12/22/2022			2:04:51 PM		DATE	12-23-2022	NOT FOR CONSTRUCTION		L107	261		

VOLTAGE DROP TABLE & CIRCUIT SIZE			
LIGHTING CONTROLLER	CKT #	SIZE	% VOLTAGE DROP
EXISTING LTC-SBC9001	CIRCUIT #3 (COMBINED OCS POLES & LED FIXTURES)	2 #2 RHH/RHW/USE, 1 #2 GND, 2" CONDUIT	2.53%
LTC-1	CIRCUIT #1 (RELOCATED PEDESTRIAN LIGHT POLES)	2 #6 RHH/RHW/USE, 1 #6 GND, 2" CONDUIT	2.98%

STATIONING TABLE		
ITEM	STATION	OFFSET
RE5	S 227+56	L 22.86
RE6	S 228+64	L 21.00

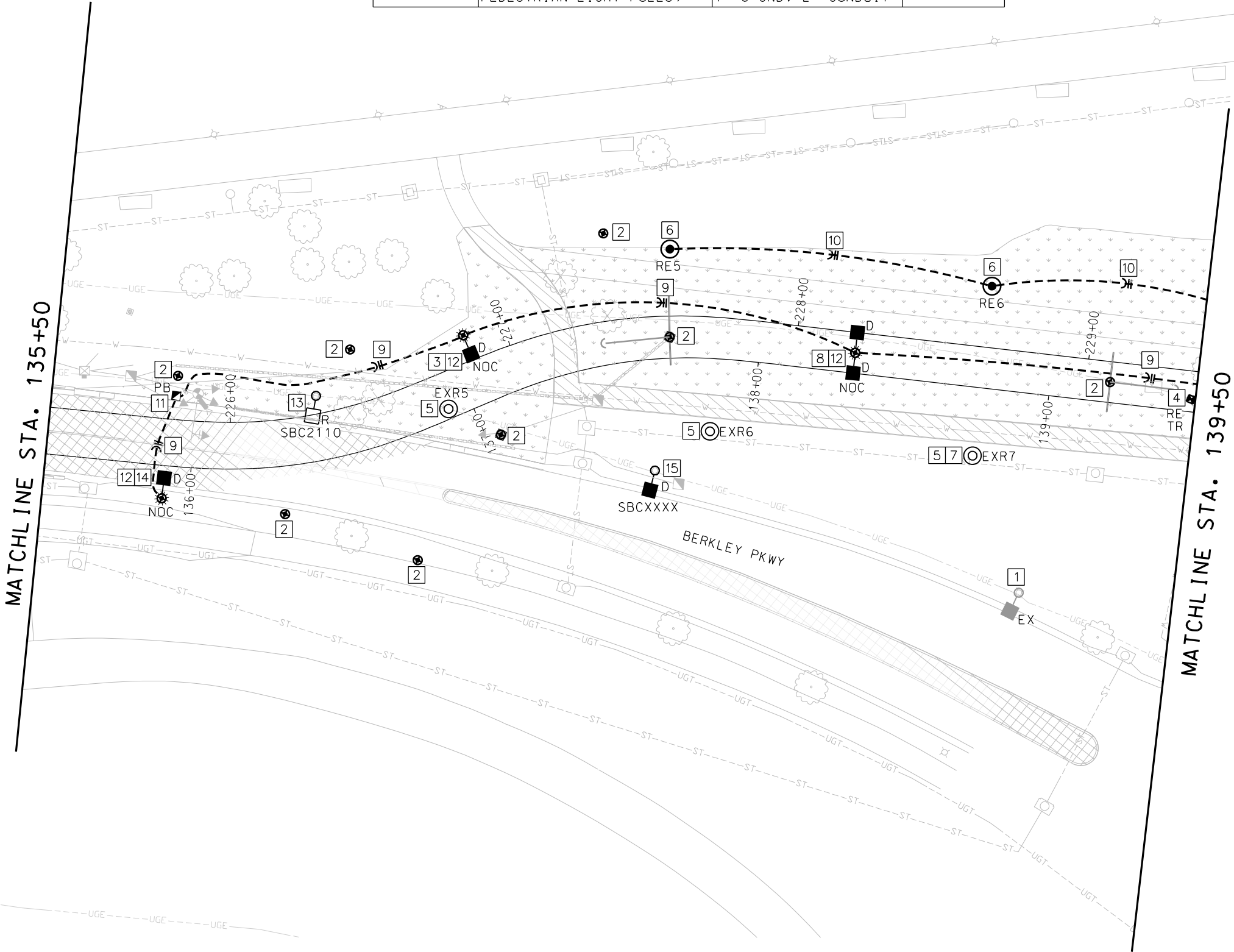


GENERAL NOTES

- FOR GENERAL NOTES AND SYMBOL LEGEND, SEE SHEET L001.
- REFER TO DETAIL DRAWINGS Y037 & Y038 FOR ADDITIONAL INFORMATION REGARDING INSTALLATION OF OCS POLES ON GRAND BOULEVARD BRIDGE.

KEYED NOTES

- EXISTING SHOE BOX LED STREETLIGHT POLE TO REMAIN.
- LOCATION OF OCS POLE.
- INSTALL KCMO AMERICAN ELECTRIC TYPE 'D' LIGHT FIXTURE ON OCS POLE. REFER TO DETAIL 1 ON SHEET L301.
- EXISTING EVERGY PAD MOUNTED TRANSFORMER TO RELOCATED TO NEW LOCATION BY EVERGY.
- EXISTING PEDESTRIAN LIGHT POLE TO BE RELOCATED TO NEW LOCATION AS SHOWN ON PLAN. REMOVE EXISTING CONDUCTORS AND ABANDONED EXISTING CONDUIT FOR RELOCATED EXISTING PEDESTRIAN LIGHT POLES.
- NEW LOCATION OF EXISTING PEDESTRIAN LIGHT POLE. PROVIDE NEW POLE BASE FOR PEDESTRIAN LIGHT POLE AT NEW LOCATION.
- REFER TO NEW LOCATION OF PEDESTRIAN LIGHT POLE ON SHEET L109.
- INSTALL AMERICAN ELECTRIC TYPE 'D' LIGHT FIXTURE ON OCS POLE. REFER TO DETAIL 2 ON SHEET L301.
- CIRCUIT #3 FOR NEW LED LIGHT ON OCS POLE, 2 #2, 1 #2 GND IN 2" CONDUIT.
- CIRCUIT #1 FOR RELOCATED PEDESTRIAN LIGHT POLES, 2 #6, 1 #6 GND IN 2" CONDUIT.
- NEW PULL BOX. REFER TO PULL BOX DETAIL ON SHEET L300.
- SEE OCS SHEETS FOR STATIONING AND OFFSET OF OCS POLES WITH AMERICAN ELECTRIC LED LIGHTS.
- EXISTING SHOE BOX LIGHT FIXTURE ON 40' POLE TO BE REMOVED. EXISTING LIGHTING CIRCUIT TO REMAIN.
- INSTALL KCMO AMERICAN ELECTRIC TYPE 'D' LIGHT FIXTURE ON OCS POLE. REFER TO DETAIL 3 ON SHEET L301. CONTACT CITY FOR NEW POLE NUMBER.
- EXISTING SHOE BOX STREETLIGHT POLE WITH CREE LED LIGHT FIXTURE. REPLACE EXISTING FIXTURE WITH NEW KCMO AMERICAN ELECTRIC TYPE 'D' LED LIGHT FIXTURE. COORDINATE STREET LIGHTING NUMBER WITH KCMO STREET LIGHTING DEPARTMENT. COORDINATE STREET LIGHTING REPLACEMENT FIXTURE WITH KCMO STREET LIGHTING DEPARTMENT.

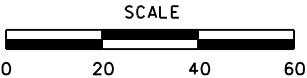


REV	DATE	DESCRIPTION	DESIGNED BY AAS		<p>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p>	ISSUED FOR BID	DATE: 12-23-2022	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION	SCALE FOR 22"x34": 1" = 20' FILENAME: L108.dgn CONTRACT NO.: CONTRACT NO. *** VOLUME: 1 DRAWING NO.: SHEET NO.: L108 262		
			CHECKED BY CKB				10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856				Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239
			DRAWN BY RAL								
			CHECKED BY CKB								
			APPROVED BY AAS								
PLOT DATE: 12/22/2022			2:05:22 PM	DATE	12-23-2022	NOT FOR CONSTRUCTION					

NORTHBOUND TRACK
LIGHTING PLAN
STA 135+50 TO STA 139+50

VOLTAGE DROP TABLE & CIRCUIT SIZE			
LIGHTING CONTROLLER	CKT #	SIZE	% VOLTAGE DROP
EXISTING LTC-SBC9001	CIRCUIT #3 (COMBINED OCS POLES & LED FIXTURES)	2 #2 RHH/RHW/USE, 1 #2 GND, 2" CONDUIT	2.53%
EXISTING LTC-SBC9001	CIRCUIT #4 (COMBINED OCS POLES & LED FIXTURES)	2 #2 RHH/RHW/USE, 1 #2 GND, 2" CONDUIT	2.47%
LTC-1	CIRCUIT #1 (RELOCATED PEDESTRIAN LIGHT POLES)	2 #6 RHH/RHW/USE, 1 #6 GND, 2" CONDUIT	2.98%

STATIONING TABLE		
ITEM	STATION	OFFSET
RE6	S 229+55	L 21.00
RE7	S 231+02	L 21.00
RE8	S 232+52	L 21.00

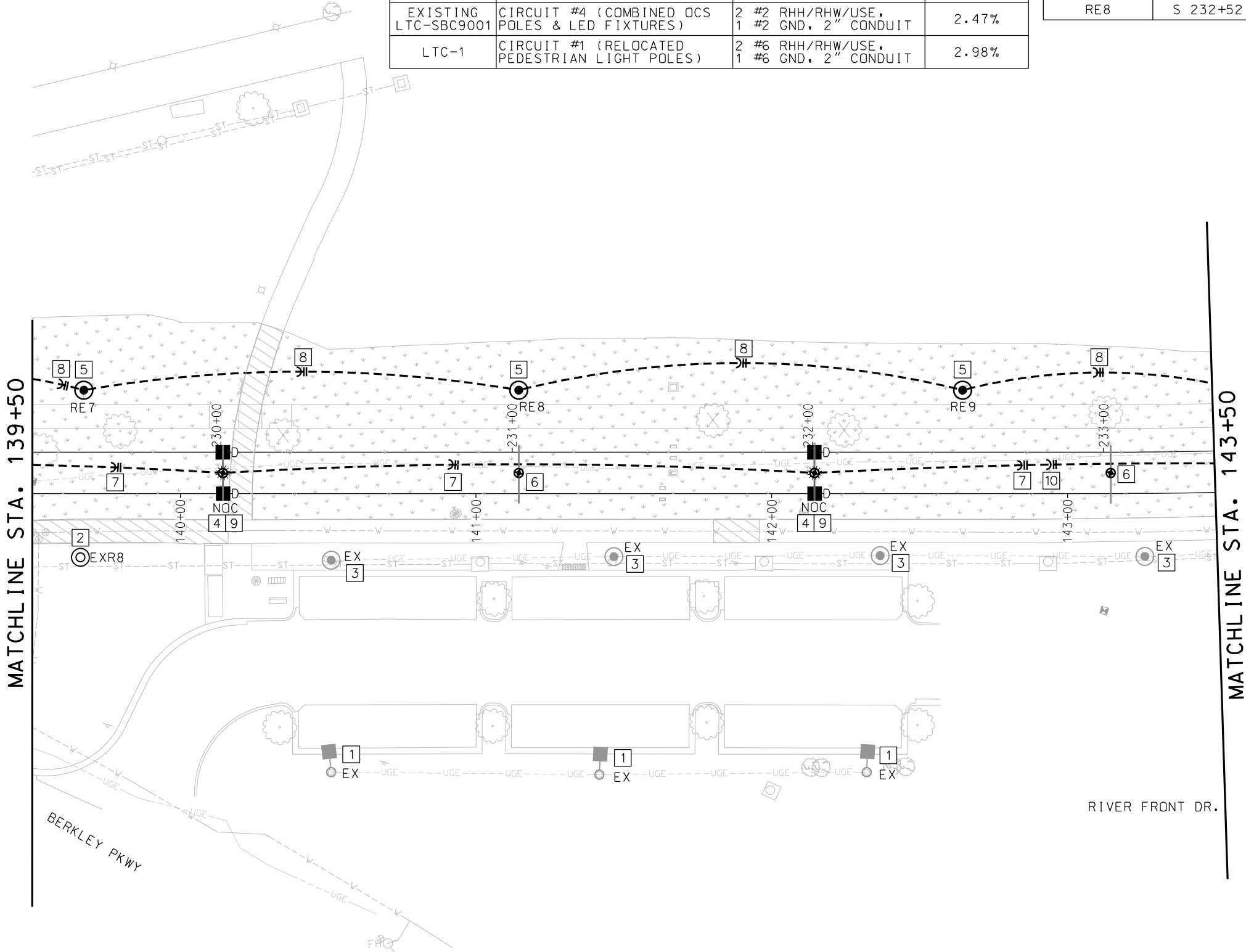


GENERAL NOTES

1. FOR GENERAL NOTES AND SYMBOL LEGEND, SEE SHEET L001.

KEYED NOTES

- 1 EXISTING SHOE BOX LED STREETLIGHT POLE TO REMAIN.
- 2 EXISTING PEDESTRIAN LIGHT POLE TO BE RELOCATED TO NEW LOCATION AS SHOWN ON PLAN. REMOVE EXISTING CONDUCTORS AND ABANDONED EXISTING CONDUIT FOR RELOCATED EXISTING PEDESTRIAN LIGHT POLES.
- 3 EXISTING PEDESTRIAN LIGHT POLE TO REMAIN. CONTRACTORS TO ENSURE EXISTING PEDESTRIAN LIGHT POLE HAS POWER AND WORKING PROPERLY.
- 4 INSTALL KCMO AMERICAN ELECTRIC TYPE 'D' LIGHT FIXTURE ON OCS POLE. REFER TO DETAIL 02 ON SHEET L301.
- 5 NEW LOCATION OF EXISTING PEDESTRIAN LIGHT POLE. PROVIDE NEW POLE BASE FOR PEDESTRIAN LIGHT POLE AT NEW LOCATION.
- 6 LOCATION OF OCS POLE.
- 7 CIRCUIT #3 FOR NEW LED LIGHT ON OCS POLE, 2 #2, 1 #2 GND IN 2" CONDUIT.
- 8 CIRCUIT #1 FOR RELOCATED PEDESTRIAN LIGHT POLES, 2 #6, 1 #6 GND IN 2" CONDUIT.
- 9 SEE OCS SHEETS FOR STATIONING AND OFFSET OF OCS POLES WITH AMERICAN ELECTRIC LED LIGHTS.
- 10 CIRCUIT #4 FOR NEW LED LIGHT ON OCS POLE, 2 #2, 1 #2 GND IN 2" CONDUIT.



REV	DATE	DESCRIPTION

PLOT DATE: 12/22/2022 2:05:55 PM

DESIGNED BY	AAS
CHECKED BY	CKB
DRAWN BY	RAL
CHECKED BY	CKB
APPROVED BY	AAS
DATE	12-23-2022



This set of plans is not for construction. These plans are intended to build interest in bidding the project.

ISSUED FOR BID	DATE: 12-23-2022
HDR Engineering, Inc. 10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856	Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239
NOT FOR CONSTRUCTION	

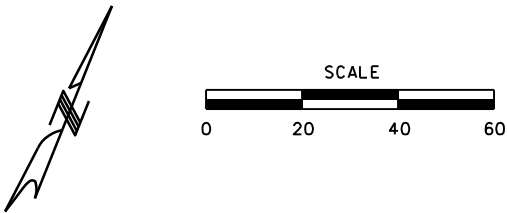
KANSAS CITY STREETCAR - RIVERFRONT EXTENSION

NORTHBOUND TRACK
LIGHTING PLAN
STA 139+50 TO STA 143+50

SCALE FOR 22"x34": 1" = 20'	
FILENAME: L109.dgn	
CONTRACT NO.:	
CONTRACT NO. ***	
VOLUME: 1	
DRAWING NO.:	SHEET NO.:
L109	263

VOLTAGE DROP TABLE & CIRCUIT SIZE			
LIGHTING CONTROLLER	CKT #	SIZE	% VOLTAGE DROP
EXISTING LTC-SBC9001	CIRCUIT #3 (COMBINED OCS POLES & LED FIXTURES)	2 #2 RHH/RHW/USE, 1 #2 GND, 2" CONDUIT	2.53%
EXISTING LTC-SBC9001	CIRCUIT #4 (COMBINED OCS POLES & LED FIXTURES)	2 #2 RHH/RHW/USE, 1 #2 GND, 2" CONDUIT	2.47%
LTC-1	CIRCUIT #1 (RELOCATED PEDESTRIAN LIGHT POLES)	2 #6 RHH/RHW/USE, 1 #6 GND, 2" CONDUIT	2.98%
LTC-1	CIRCUIT #2 (RELOCATED PEDESTRIAN LIGHT POLES)	2 #8 RHH/RHW/USE, 1 #8 GND, 2" CONDUIT	1.13%

STATIONING TABLE		
ITEM	STATION	OFFSET
RE10	S 233+44	L 21.15
RE11	N 143+46	R 21.05
RE12	S 234+30	L 30.76
RE13	S 235+15	L 21.03
RE14	N 146+54	L 35.00

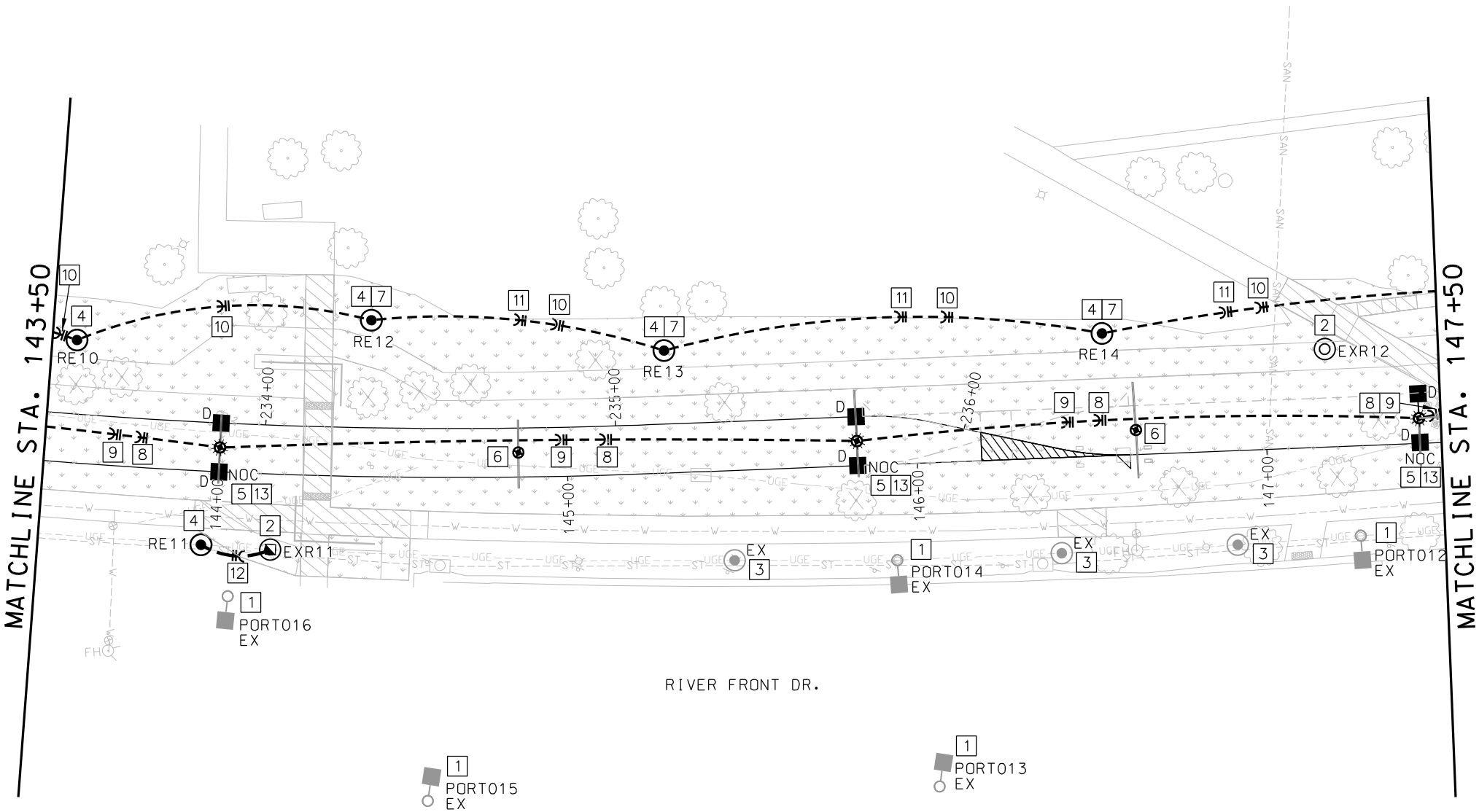


GENERAL NOTES

1. FOR GENERAL NOTES AND SYMBOL LEGEND, SEE SHEET L001.

KEYED NOTES

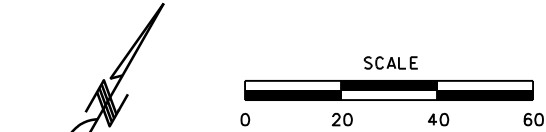
- 1 EXISTING SHOE BOX 400-WATT MH STREETLIGHT POLE TO REMAIN. EXISTING LIGHT POLES OWNED AND MAINTAINED BY PORT AUTHORITY.
- 2 EXISTING PEDESTRIAN LIGHT POLE TO BE RELOCATED TO NEW LOCATION AS SHOWN ON PLAN. REMOVE EXISTING CONDUCTORS AND ABANDONED EXISTING CONDUIT FOR RELOCATED EXISTING PEDESTRIAN LIGHT POLES.
- 3 EXISTING PEDESTRIAN LIGHT POLE TO REMAIN. CONTRACTORS TO ENSURE EXISTING PEDESTRIAN LIGHT POLE HAS POWER AND WORKING PROPERLY.
- 4 NEW LOCATION OF EXISTING PEDESTRIAN LIGHT POLE. PROVIDE NEW POLE BASE FOR PEDESTRIAN LIGHT POLE AT NEW LOCATION.
- 5 INSTALL KCMO AMERICAN ELECTRIC TYPE 'D' LIGHT FIXTURE ON OCS POLE. REFER TO DETAIL 02 ON SHEET L301.
- 6 LOCATION OF OCS POLE.
- 7 REFER TO SHEET L111 FOR ORIGINAL LOCATION OF EXISTING PEDESTRIAN LIGHT POLE THAT NEED TO BE RELOCATED.
- 8 CIRCUIT #3 FOR NEW LED LIGHT ON OCS POLE, 2 #2, 1 #2 GND IN 2" CONDUIT.
- 9 CIRCUIT #4 FOR NEW LED LIGHT ON OCS POLE, 2 #2, 1 #2 GND IN 2" CONDUIT.
- 10 CIRCUIT #1 FOR RELOCATED PEDESTRIAN LIGHT POLES, 2 #6, 1 #6 GND IN 2" CONDUIT.
- 11 CIRCUIT #2 FOR RELOCATED PEDESTRIAN LIGHT POLES, 2 #8, 1 #8 GND IN 2" CONDUIT.
- 12 EXTEND EXISTING CONDUIT AND WIRE TO NEW LOCATION OF PEDESTRIAN LIGHT POLE.
- 13 SEE OCS SHEETS FOR STATIONING AND OFFSET OF OCS POLES WITH AMERICAN ELECTRIC LED LIGHTS.



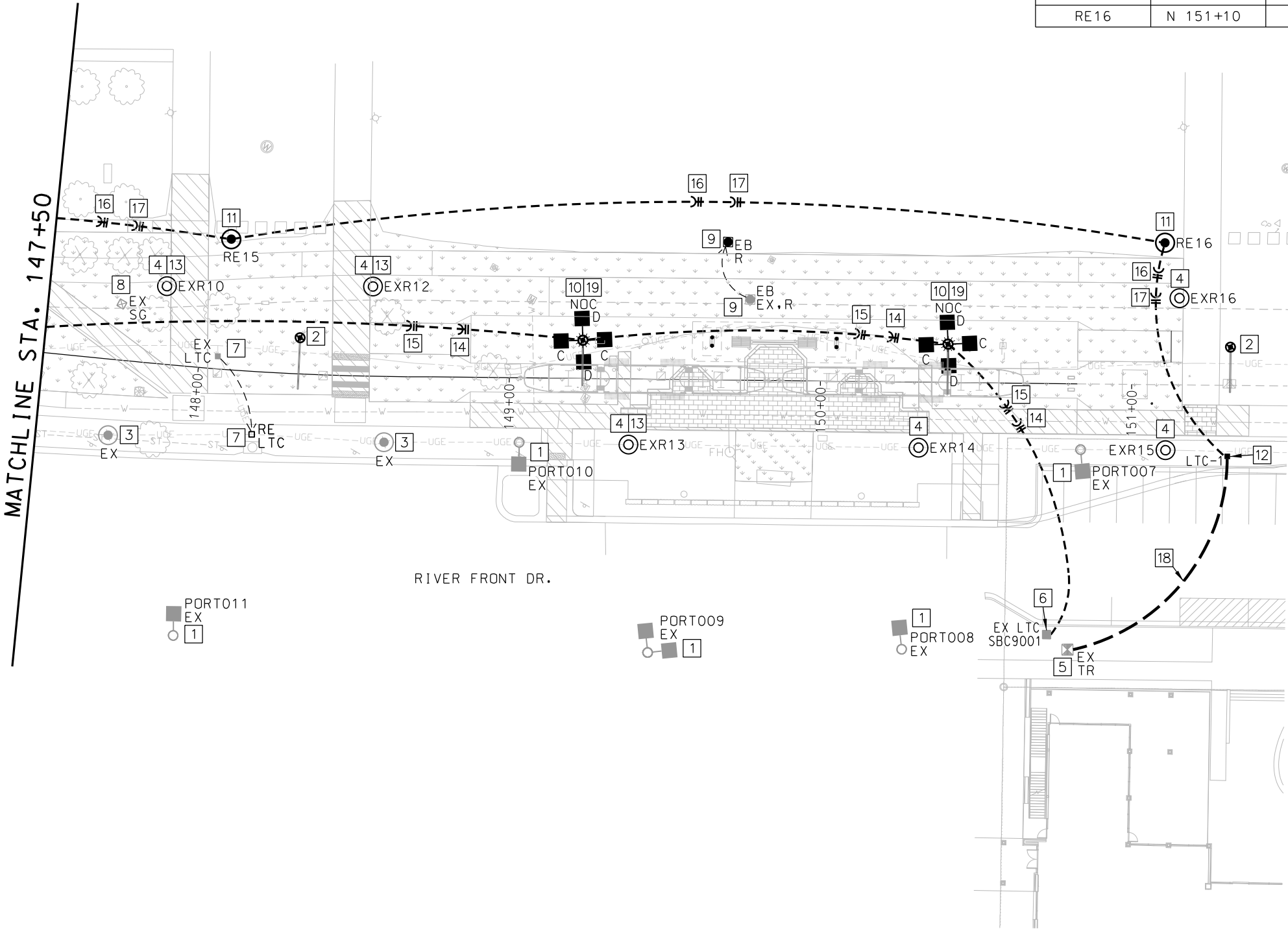
REV	DATE	DESCRIPTION	DESIGNED BY	AAS		<p>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p>	ISSUED FOR BID		DATE: 12-23-2022	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION		SCALE FOR 22"x34":	
			CHECKED BY	CKB					Custom Engineering	NORTHBOUND TRACK		1" = 20'	
			DRAWN BY	RAL			10450 Holmes Road		12700 East 40 Highway	LIGHTING PLAN		L110.dgn	
			CHECKED BY	CKB			Suite 600		Independence, MO 64055	STA 143+50 TO STA 147+50		CONTRACT NO.:	
			APPROVED BY	AAS			Kansas City, MO 64131-3471		816-350-1473			CONTRACT NO. ***	
PLOT DATE: 12/22/2022			DATE		12-23-2022	NOT FOR CONSTRUCTION						DRAWING NO.: SHEET NO.:	
												L110 264	

VOLTAGE DROP TABLE & CIRCUIT SIZE			
LIGHTING CONTROLLER	CKT #	SIZE	% VOLTAGE DROP
EXISTING LTC-SBC9001	CIRCUIT #3 (COMBINED OCS POLES & LED FIXTURES)	2 #2 RHH/RHW/USE, 1 #2 GND, 2" CONDUIT	2.53%
EXISTING LTC-SBC9001	CIRCUIT #4 (COMBINED OCS POLES & LED FIXTURES)	2 #2 RHH/RHW/USE, 1 #2 GND, 2" CONDUIT	2.47%
LTC-1	CIRCUIT #1 (RELOCATED PEDESTRIAN LIGHT POLES)	2 #6 RHH/RHW/USE, 1 #6 GND, 2" CONDUIT	2.98%
LTC-1	CIRCUIT #2 (RELOCATED PEDESTRIAN LIGHT POLES)	2 #8 RHH/RHW/USE, 1 #8 GND, 2" CONDUIT	1.13%

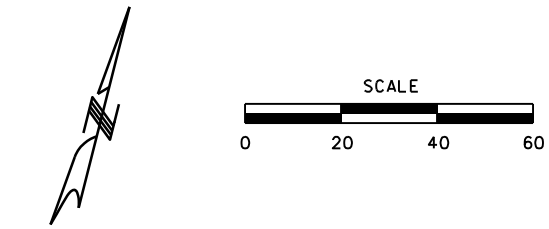
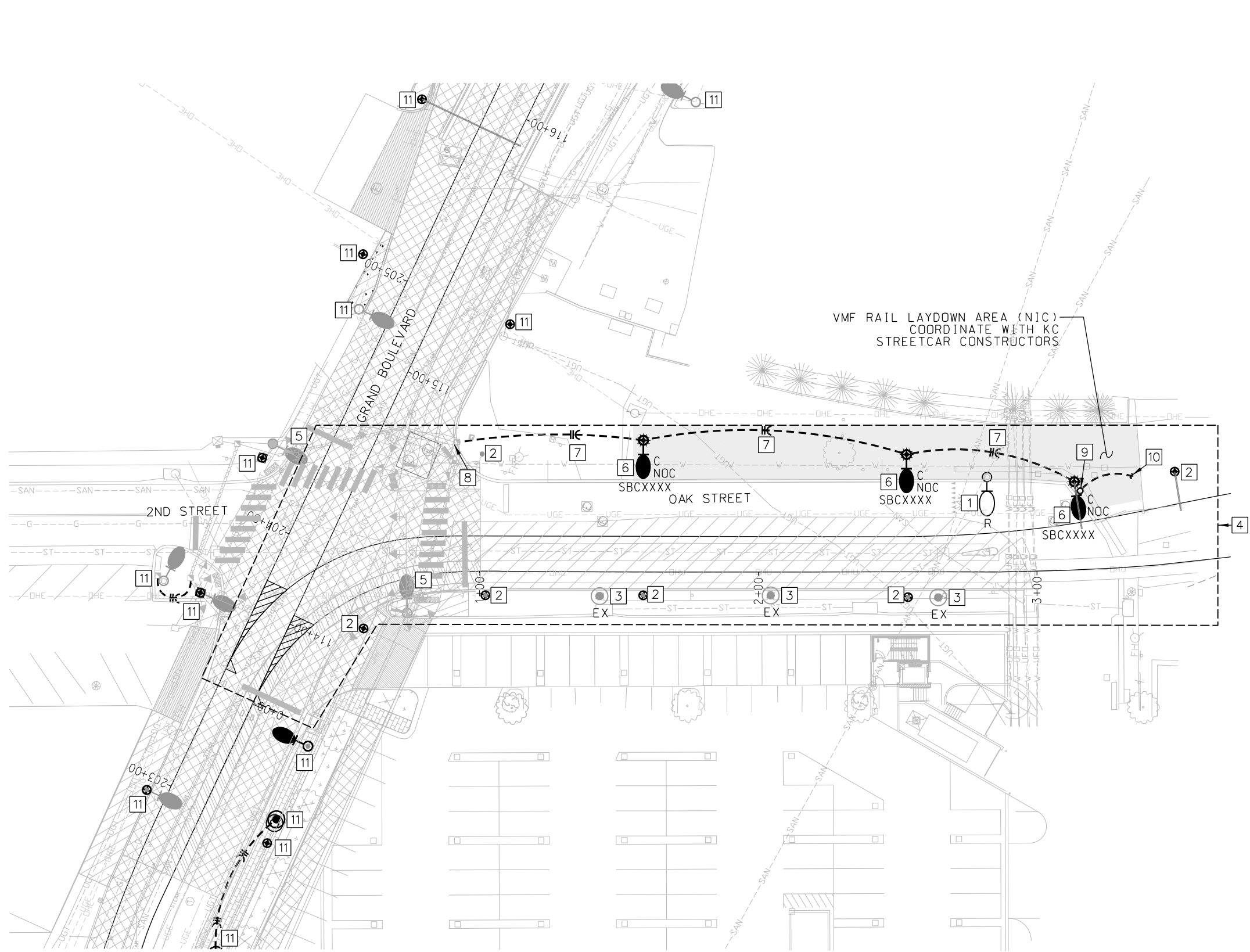
GENERAL NOTES		
1. FOR GENERAL NOTES AND SYMBOL LEGEND, SEE SHEET L001.		
STATIONING TABLE		
ITEM	STATION	OFFSET
RE15	N 148+07	L 41.93
RELOCATED LTC	N 148+18	R 20.17
ELEC PWR BOX	N 149+70	L 44.38
RE16	N 151+10	L 45.59



- | KEYED NOTES | |
|-------------|--|
| 1 | EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN. |
| 2 | LOCATION OF OCS POLE. |
| 3 | EXISTING PEDESTRIAN LIGHT POLE TO REMAIN. CONTRACTORS TO ENSURE EXISTING PEDESTRIAN LIGHT POLE HAS POWER AND WORKING PROPERLY. |
| 4 | EXISTING PEDESTRIAN LIGHT POLE TO BE RELOCATED TO NEW LOCATION AS SHOWN ON PLAN. REMOVE EXISTING CONDUCTORS AND ABANDONED EXISTING CONDUIT FOR RELOCATED EXISTING PEDESTRIAN LIGHT POLES. |
| 5 | EXISTING EVERGY PAD MOUNTED TRANSFORMER TO REMAIN. |
| 6 | EXISTING STREET LIGHTING CONTROLLER TO REMAIN. |
| 7 | EXISTING STREET LIGHTING CONTROLLER TO BE RELOCATED TO NEW LOCATION. |
| 8 | EXISTING EVERGY PAD MOUNTED SWITCH GEAR TO BE RELOCATED TO NEW LOCATION BY EVERGY. NEW LOCATION WILL BE DETERMINED BY EVERGY. |
| 9 | EXISTING ELECTRICAL POWER BOX TO BE RELOCATED BEHIND SIDEWALK. |
| 10 | INSTALL KCMO AMERICAN ELECTRIC TWO TYPE 'C' AND TWO 'D' LIGHT FIXTURE ON OCS POLE. REFER TO DETAIL 3 ON SHEET L301. |
| 11 | NEW LOCATION OF EXISTING PEDESTRIAN LIGHT POLE. PROVIDE NEW POLE BASE FOR PEDESTRIAN LIGHT POLE AT NEW LOCATION. |
| 12 | LOCATION OF NEW 4-CIRCUIT LIGHTING CONTROLLER. REFER TO 4-CIRCUIT LIGHTING CONTROLLER DETAIL ON SHEET L303. |
| 13 | REFER TO NEW LOCATION OF PEDESTRIAN LIGHT POLE ON SHEET L110. |
| 14 | CIRCUIT #3 FOR NEW LED LIGHT ON OCS POLE, 2 #2, 1 #2 GND IN 2" CONDUIT. |
| 15 | CIRCUIT #4 FOR NEW LED LIGHT ON OCS POLE, 2 #2, 1 #2 GND IN 2" CONDUIT. |
| 16 | CIRCUIT #1 FOR RELOCATED PEDESTRIAN LIGHT POLES, 2 #6, 1 #6 GND IN 2" CONDUIT. |
| 17 | CIRCUIT #2 FOR RELOCATED PEDESTRIAN LIGHT POLES, 2 #8, 1 #8 GND IN 2" CONDUIT. |
| 18 | PROVIDE 3" SCHEDULE 40 PVC WITH EVERGY PROVIDED URD CABLE FROM 4-CIRCUIT LIGHTING CONTROLLER TO NEW LOCATION OF EVERGY PAD MOUNTED TRANSFORMER. COORDINATE WITH EVERGY CONTACT PERSON: JOEY WHITE, E-MAIL JOEY.WHITE@EVERGY.COM. |
| 19 | SEE OCS SHEETS FOR STATIONING AND OFFSET OF OCS POLES WITH AMERICAN ELECTRIC LED LIGHTS. |



REV	DATE	DESCRIPTION	DESIGNED BY	AAS		<p>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p>	ISSUED FOR BID	DATE: 12-23-2022	 HDR Engineering, Inc. 10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856	 Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION	NORTHBOUND TRACK LIGHTING PLAN STA 147+50 TO END	SCALE FOR 22"x34": 1" = 20'	
			CHECKED BY	CKB			FILENAME: L111.dgn	CONTRACT NO.:						
			DRAWN BY	RAL			CONTRACT NO. ***	VOLUME:						
			CHECKED BY	CKB			1	DRAWING NO.:						
			APPROVED BY	AAS			22	SHEET NO.:						
PLOT DATE: 12/22/2022			2:06:45 PM		DATE	12-23-2022	NOT FOR CONSTRUCTION		L111	265				



GENERAL NOTES

1. FOR GENERAL NOTES AND SYMBOL LEGEND, SEE SHEET L001.

KEYED NOTES

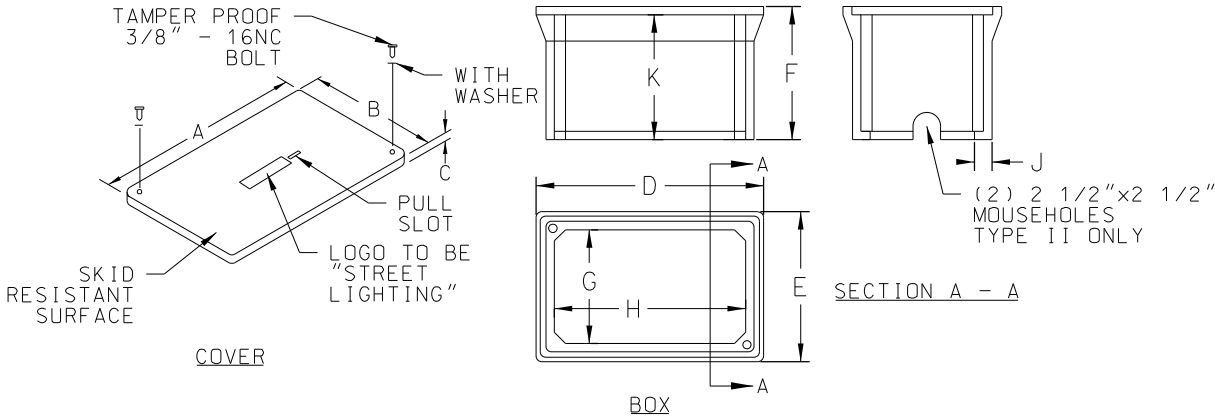
- 1 EXISTING COBRA HEAD 400-WATT HPS STREET LIGHT POLE TO BE REMOVED.
- 2 LOCATION OF OCS POLE.
- 3 EXISTING PEDESTRIAN LIGHT POLE TO REMAIN.
- 4 OAK STREET TO VMF AREA OF WORK. REFER TO LIGHTING SHEET L102 FOR WORK OUTSIDE OF THIS AREA.
- 5 TRAFFIC SIGNAL LIGHTS SHOWN FOR REFERENCE ONLY REFER TO L102 FOR FURTHER DETAILS.
- 6 INSTALL KCMO LED LUMINAIRE TYPE 'C' ON OCS POLE. REFER TO DETAIL 2 ON SHEET L302. COORDINATE SHEET LIGHTING NUMBER WITH KCMO STREET LIGHTING DEPARTMENT.
- 7 2 #6, 1 #6 GND IN 2" CONDUIT.
- 8 CONNECT LIGHTING CIRCUIT FOR KCMO LED LUMINAIRE TYPE 'C' ON OCS POLE TO LIGHTING CIRCUIT FOR LED LUMINAIRE TYPE 'D' ON TRAFFIC SIGNAL POLE. INTERCEPT LIGHTING CIRCUIT AT PULL BOX FOR TRAFFIC SIGNAL POLE.
- 9 COORDINATE EXACT LOCATION FOR BLANKOUT SIGN WITH INSTALLER.
- 10 PROVIDE 3/C #8 IN 2" CONDUIT FROM BLANKOUT SIGN TO GATE CONTROLLER APPROXIMATELY 370' EAST.
- 11 SHOWN FOR REFERENCE ONLY REFER TO L102 FOR FURTHER DETAILS.

REV	DATE	DESCRIPTION	DESIGNED BY	AAS		<p>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p>	ISSUED FOR BID		DATE: 12-23-2022	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION		SCALE FOR 22"x34": 1" = 20'	
			CHECKED BY	CKB					Custom Engineering	NORTHBOUND TRACK		FILENAME:	
			DRAWN BY	RAL			10450 Holmes Road		12760 East 40 Highway	LIGHTING PLAN		L112.dgn	
			CHECKED BY	CKB			Suite 600		Independence, MO 64055	2ND STREET TO VMF		CONTRACT NO. ***	
			APPROVED BY	AAS			816-360-2700		816-350-1473			VOLUME:	
							Certificate of Authority: 000856		Certificate of Authority: 000239			DRAWING NO.:	
PLOT DATE: 12/22/2022			DATE: 12-23-2022		NOT FOR CONSTRUCTION						L112		SHEET NO.: 266

* STREET LIGHTING SUMMARY OF QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY
1	KCMO LED LIGHT FIXTURE AMERICAN ELECTRIC TYPE 'D' ON OCS POLE (NOC)	EA	18
2	KCMO LED LIGHT FIXTURE AMERICAN ELECTRIC TYPE 'C' ON OCS POLE (NOC)	EA	4
3	KCMO LED LIGHT FIXTURE SIGNIFY LUMEC TYPE 'C' ON OCS POLE (NOC)	EA	3
4	KCMO LED LIGHT FIXTURE SIGNIFY LUMEC TYPE 'D' ON 35' STREET LIGHT POLE	EA	1
5	8' ARM FOR KCMO LED LIGHT FIXTURE SIGIFY LUMEC TYPE 'C' ON OCS POLE	EA	3
6	8' ARM FOR KCMO LED LIGHT FIXTURE SIGNIFY LUMEC TYPE 'D' ON STREET LIGHT POLE	EA	1
7	35' STREET LIGHT POLE TYPE 'D'	EA	1
8	1 #10 RHW/USE INTERNAL POLE WIRE	LF	2300
9	3" HDPE CONDUIT FOR EVERGY FEED	LF	150
10	1#6 AWG BARE COPPER WIRE	LF	150
11	2#2 RHH/RHW/USE, 1 #2 GND. FOR LIGHTING CIRCUIT #3, COMBINED OCS POLE AND KCMO LED LIGHT FIXTURE TYPE D ON EXISTING LTC, SBC9001.	LF	1500
12	2#4 RHH/RHW/USE, 1 #4 GND. FOR LIGHTING CIRCUIT #4, COMBINED OCS POLE AND KCMO LED LIGHT FIXTURES TYPE D AND TYPE C ON EXISTING LTC, SBC9001.	LF	900
13	2#6 RHH/RHW/USE, 1 #6 GND. FOR LIGHTING CIRCUIT #1, RELOCATED PEDESTRIAN LIGHT POLES ON NEW STREET LIGHTING CONTROLLER LTC-1	LF	1700
14	2#8 RHH/RHW/USE, 1 #8 GND. FOR LIGHTING CIRCUIT #2, RELOCATED PEDESTRIAN LIGHT POLES ON NEW STREET LIGHTING CONTROLLER LTC-1	LF	500
15	2#6 RHH/RHW/USE, 1 #6 GND. FOR LIGHTING CIRCUIT FOR KCMO LED LIGHT FIXTURE TYPE 'C' ON OCS POLES ON 2ND STREET	LF	250
16	2#8 RHH/RHW/USE, 1 #8 GND. FOR STREET LIGHTS ON TRAFFIC SIGNAL POLES	LF	350
17	2" PVC CONDUIT FOR LIGHTING CIRCUITS #3 AND #4 ON EXISTING LTC, SBC9001 AND LIGHTING CIRCUITS #1 AND #2 ON NEW STREET LIGHTING CONTROLLER LTC-1	LF	4850
18	FUSE KITS	EA	26
19	NON-FUSED FUSE KITS	EA	52
20	CABLE RETAINERS	EA	26
21	POLE BASE FOR RELOCATED PEDESTRIAN LIGHT POLE	EA	16
22	ID TAG FOR STREET LIGHT AND NEW STREET LIGHTING CONTROLLER	EA	26
23	NEW 4-CIRCUIT STREET LIGHTING CONTROLLER LTC-1 FOR RELOCATED PEDESTRIAN LIGHT POLES	EA	1
24	CONCRETE FOUNDATIONS FOR NEW STREET LIGHTING CONTROLLER LTC-1	EA	1
25	RELOCATED EXISTING LUMINAIRE AND EXISTING POLE FOR STREET LIGHT POLE	EA	1
26	NEW POLE BASE FOR RELOCATED EXISTING AND NEW STREET STREET LIGHT POLES	EA	2
27	RELOCATED EXISTING PEDESTRIAN LIGHT POLE	EA	16
28	NEW POLE BASE FOR RELOCATED PEDESTRIAN LIGHT POLES	EA	16
29	RELOCATED EXISTING LED STREET LIGHT ON OCS POLE	EA	2
30	NEW OCS POLE ATTACHMENT FOR NEW LED LUMINAIRE ON OCS POLES	EA	25
31	TRENCH AND BACKFILL	LF	4850
32	REMOVAL OF EXISTING CONDUCTORS FOR RELOCATED PEDESTRIAN LIGHT POLES	LF	800
33	NEW PULL BOXES	EA	1
34	POWER HOOKUP FOR EVERGY POWER SOURCE	EA	1

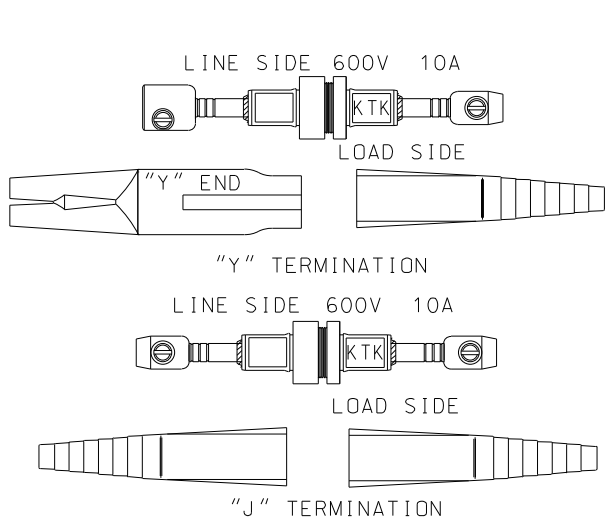
* NOTE: QUANTITIES ARE FOR BID COMPARISON PURPOSE ONLY. CONTRACTOR SHALL PROVIDE ALL MATERIAL AND LABOR FOR A COMPLETE AND WORKING LIGHTING SYSTEM.

TYPE	DIMENSIONS (IN.)									
	A	B	C	D	E	F	G	H	J	K
II	18-1/2	11-1/2	3/4	20-1/2	13-1/2	12	10-1/4	17-1/4	3/8	11-1/4



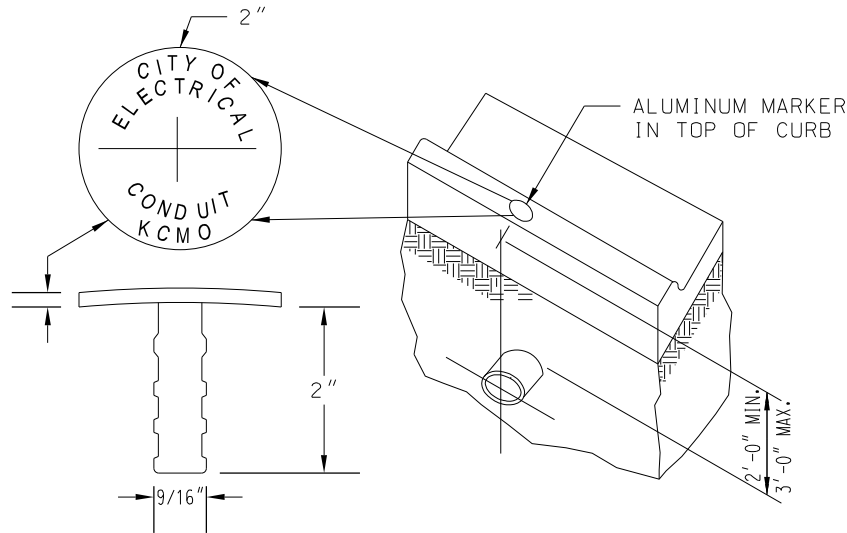
1 FIBERGLASS REINFORCED POLYMER CONCRETE JUNCTION/PULL BOX DETAILS
NOT TO SCALE

2 STREET LIGHT MARKER DETAIL
NOT TO SCALE
(PROVIDED BY CONTRACTOR)



FUSE SHALL BE 10 AMP - TYPE KTK-10 RESPECTIVE ELECTRICAL CONNECTOR KITS SHALL BE BUSSMAN: HEB-JW-RLC-J, HEB-JW-RYC, HET-JW-RLC-J (NON-FUSED NEUTRAL), HET-JW-RYC (NON-FUSED NEUTRAL), OR APPROVED EQUALS.

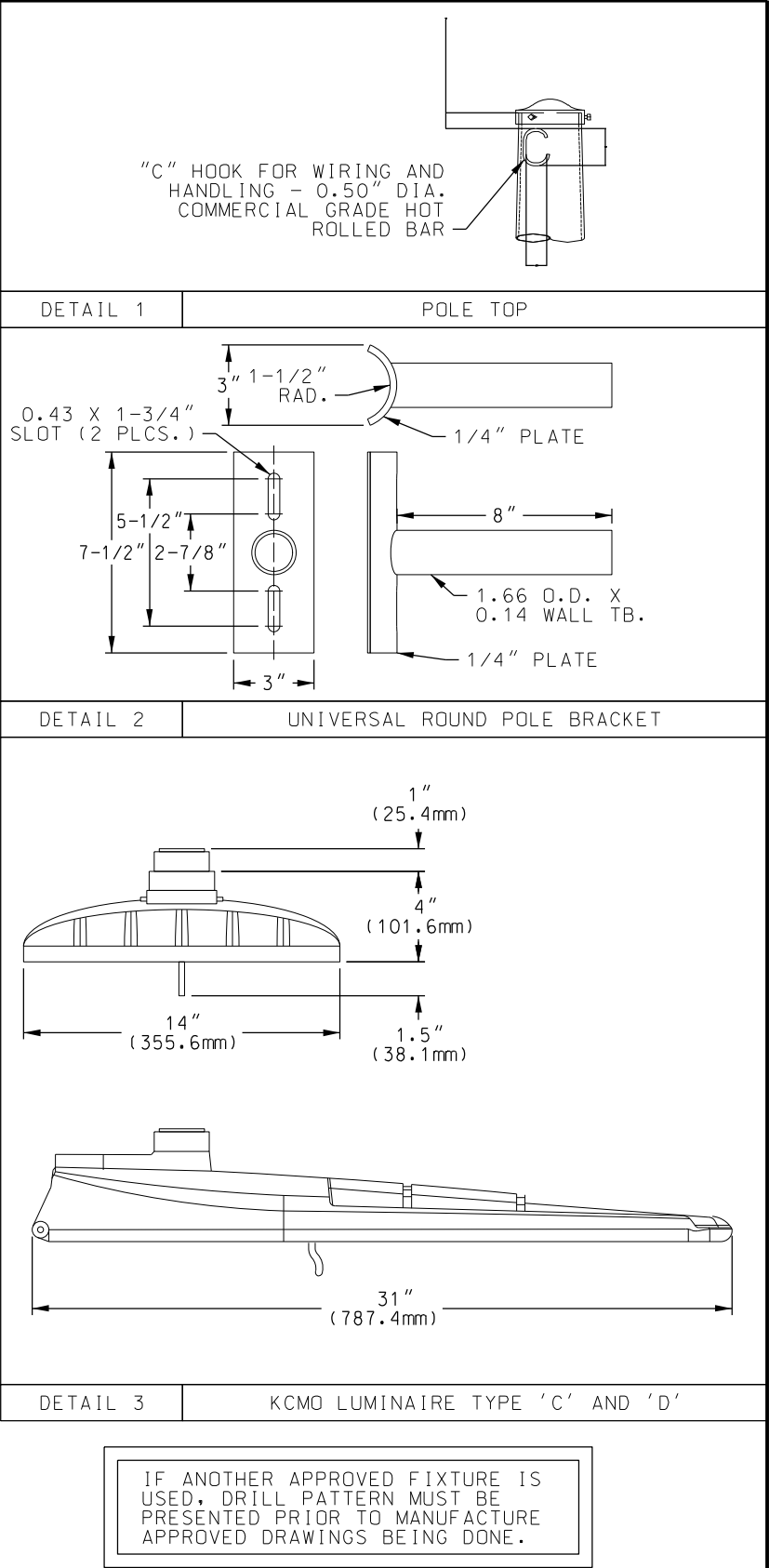
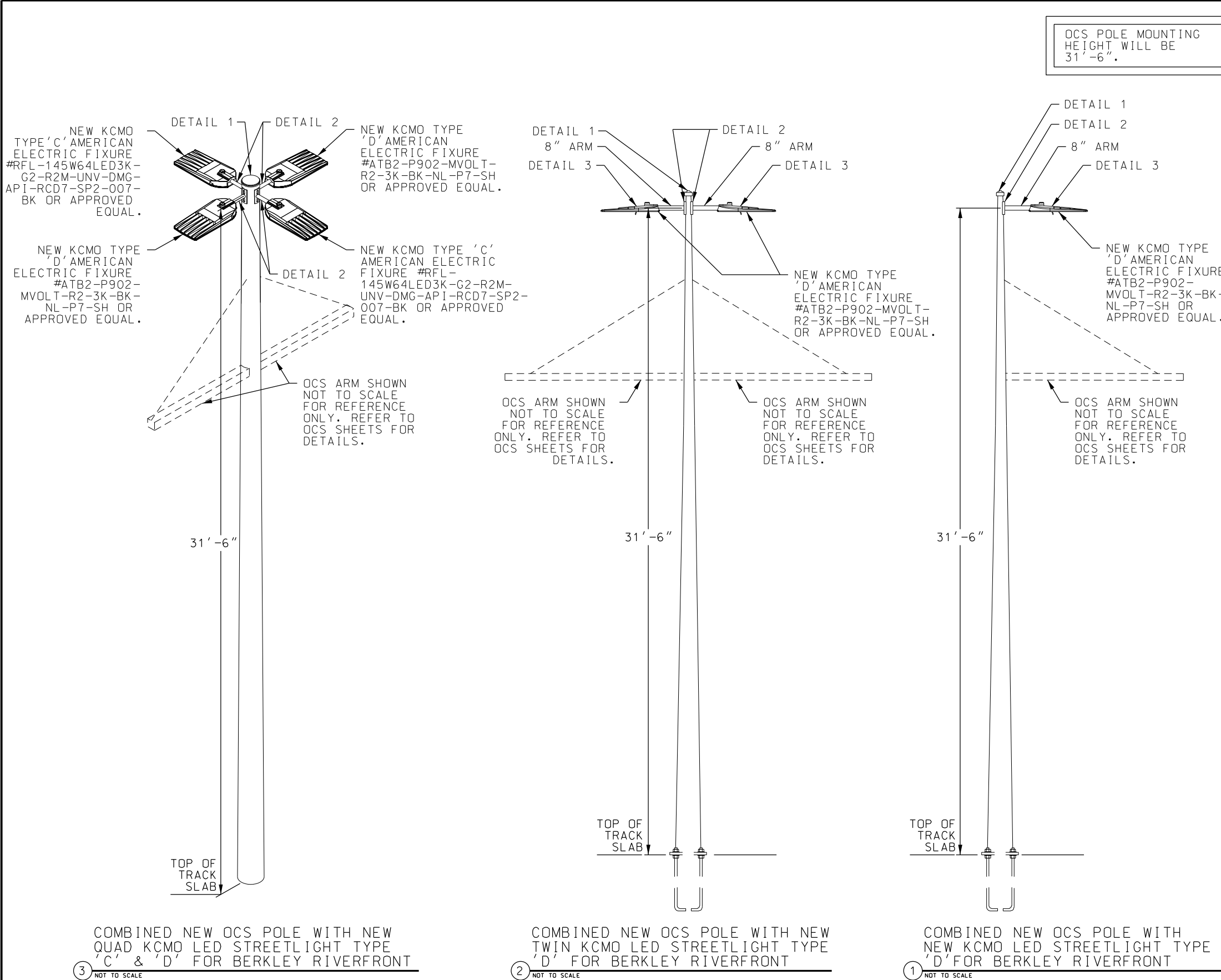
3 BREAK AWAY FUSE KIT DETAILS
NOT TO SCALE



NOTE: CONDUIT SHALL BE INSTALLED 2'-3" BELOW THE TOP OF CURB ELEVATION. AN ALUMINUM MARKER SHALL BE PLACED IN THE TOP OF THE CURB DIRECTLY OVER THE CONDUIT. ALUMINUM MARKERS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

4 CONDUIT MARKING DETAIL
NOT TO SCALE

REV	DATE	DESCRIPTION	DESIGNED BY	AAS			ISSUED FOR BID		DATE: 12-23-2022	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION		SCALE FOR 22"x34": NOT TO SCALE	
			CHECKED BY	CKB			 HDR Engineering, Inc.		 Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239			FILENAME: L300.dgn	
			DRAWN BY	RAL			10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856					CONTRACT NO.: ***	
			CHECKED BY	CKB								VOLUME: 1	
			APPROVED BY	AAS								DRAWING NO.: SHEET NO.:	
PLOT DATE: 12/22/2022			2:07:37 PM		DATE	12-23-2022	NOT FOR CONSTRUCTION				L300	267	



REV	DATE	DESCRIPTION
PLOT DATE: 12/22/2022		2:07:38 PM

DESIGNED BY	AAS
CHECKED BY	CKB
DRAWN BY	RAL
CHECKED BY	CKB
APPROVED BY	AAS
DATE	12-23-2022



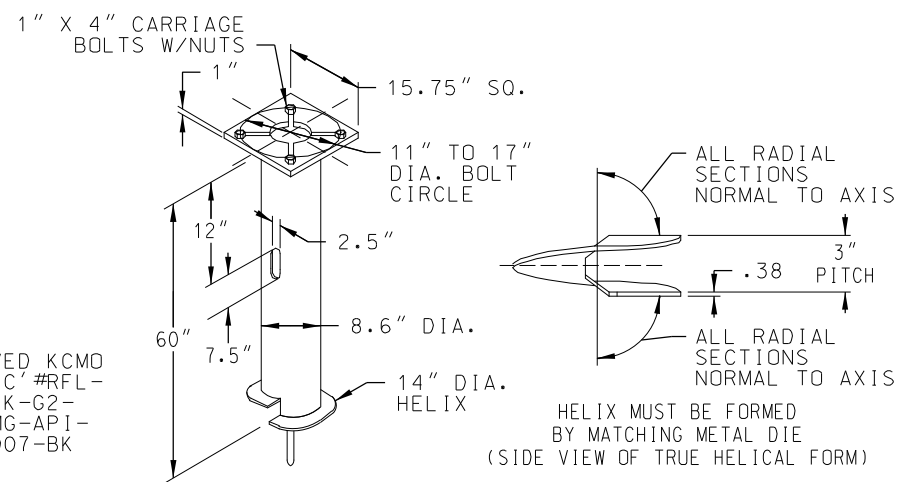
This set of plans is not for construction. These plans are intended to build interest in bidding the project.

ISSUED FOR BID	DATE: 12-23-2022
HDR HDR Engineering, Inc. 10450 Holmes Road Suite 800 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856	 Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239
NOT FOR CONSTRUCTION	

KANSAS CITY STREETCAR - RIVERFRONT EXTENSION

STREET LIGHTING DETAILS

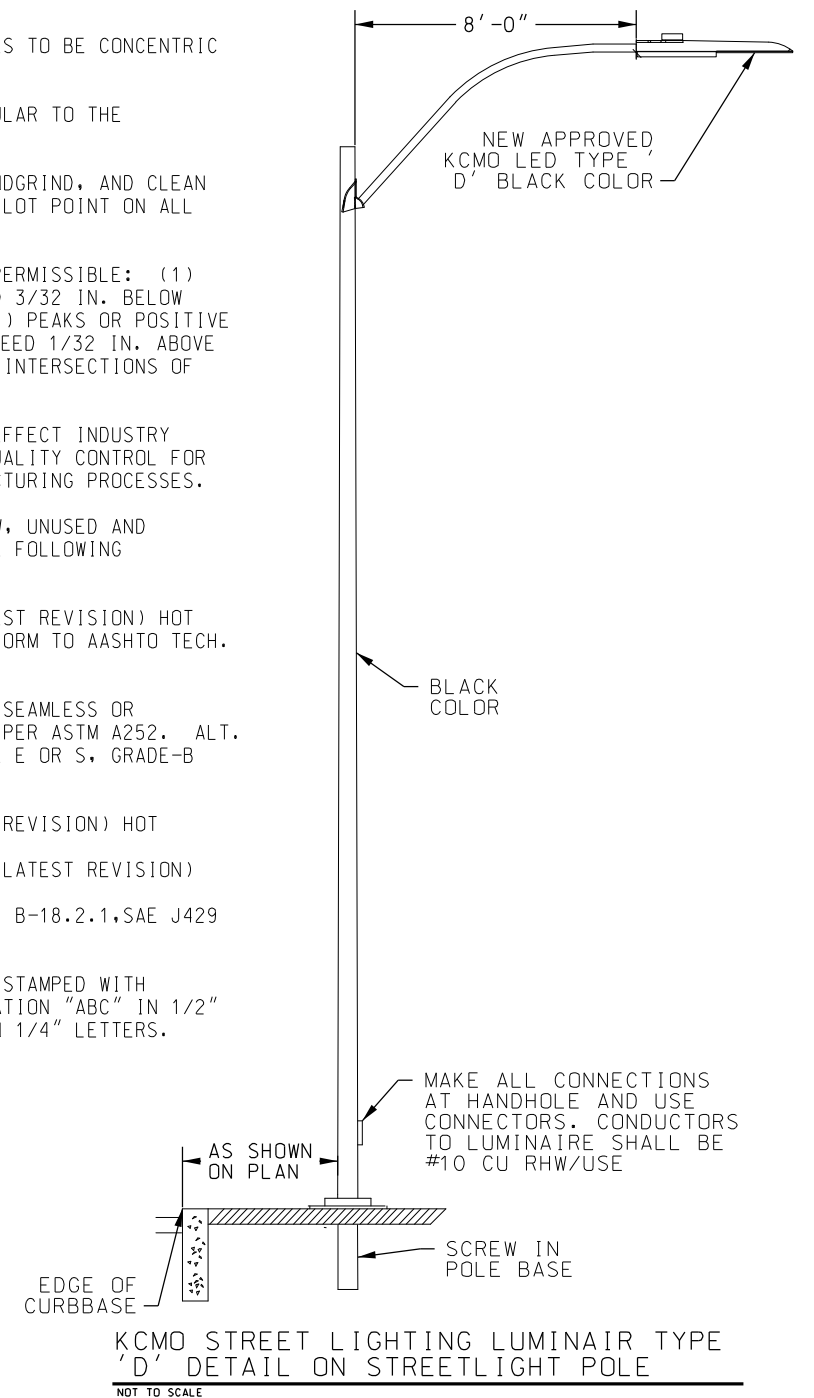
SCALE FOR 22"x34": NOT TO SCALE	
FILENAME: L301.dgn	
CONTRACT NO.: CONTRACT NO. ***	
VOLUME: 1	
DRAWING NO.:	SHEET NO.:
L301	268



LIGHTING POLE 'D' DESIGN PARAMETERS

- ## SCREW-IN FOUNDATION NOTES

10. BASEPLATE IS PERMANENTLY STAMPED WITH MANUFACTURER'S IDENTIFICATION "ABC" IN 1/2" LETTERS AND DATE CODE IN 1/4" LETTERS.



SCREW-IN FOUNDATION DETAIL FOR POLE TYPE 'D' 35 FEET

NOT TO SCALE

REF:	TITLE: Cable Retainer Assy w/ Conductor Guide, for 8.0" Foundation Anchor, Steel, Galv	PART NO.: SP-6205-GLV
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SP-6243-GLV SADDLES
SP-6204-GLV

NOTE: INCLUDE
Z-2057 INSTALLATION
INSTRUCTIONS

ITEM	PART NUMBER	DESCRIPTION	QTY
1	SP-6243-GLV	Weldment, Conductor Guide, 8" Cable Retainer Assy, Steel, Galv	1
2	SP-6199-3-GLV	Bar, Cable Retainer Assembly, Steel	2
3	SP-6199-4	Pad, Cable Retainer, 3/16" Thick, 90 Duro, Red Urethane	4
4	FS-2016-SS	Bolt, Hex Hd Tap, 5/16"-18 x 2-1/4", Type 304 Stainless	4
5	SP-6204-GLV	Weldment, Cable Retainer Assembly, for 8" foundation Anchor, Steel Galvanized	1
6	O-3142	Label, 1" x 2", Cable Retainer	1
7	FS-4101-SS	Washer, Flat, 5/16" x .750" OD, Type 304 Stainless	8
8	FS-4201-SS	Lock Washer, Split, 5/16", Type 304 Stainless	4
9	FS-1001-SS	Nut, Hex 5/16"-18, Type 304 Stainless	4

DRAWN: Kenneth George DATE: 4/8/2009
CHECK: RWG DATE: 4/8/2009
DATE: 4/8/2009

REV: G-05-22/10 GMB
REV: G-05-22/10 GMB
DATE: 6/23/2010

SHEET 1 OF 1

CABLE RETAINER ASSEMBLY FOR 8" FOUNDATION
ANCHOR FOR POLE TYPE 'D' 35 FEET

NOT TO SCALE

REV	DATE	DESCRIPTION	DESIGNED BY	AAS
			CHECKED BY	CKB
			DRAWN BY	RAL
			CHECKED BY	CKB
			APPROVED BY	AAS
PLOT DATE: 12/22/2022		2:08:03 PM	DATE	12-23-2022



This set of plans is not for construction. These plans are intended to build interest in bidding the project.

ISSUED FOR BID



HDR Engineering, Inc.
10450 Holmes Road
Suite 600
Kansas City, MO 64131-3471
816-360-2700
Certificate of Authority: 000856

DATE: 12-23-2022



Custom Engineering
12760 East 40 Highway
Independence, MO 64055
816-350-1473
Certificate of Authority: 000239

KANSAS CITY STREETCAR - RIVERFRONT EXTENSION

STREET LIGHTING DETAILS

SCALE FOR 22"x34":	
NOT TO SCALE	
FILENAME:	
L302.dgn	
CONTRACT NO.:	
CONTRACT NO. ***	
VOLUME:	
1	
DRAWING NO.:	SHEET NO.:
L302	269



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*** TORQUE INFORMATION
  o 350MCM - 6 CU/LA 325 IN.LB.
  Δ #14-1/0 CU/LA 50 IN.LB.
*** NEUTRAL & EQUIPMENT GROUND-SINGLE CONDUCTOR
  o #14-1/0 CU/LA #3-1/0 50 IN.LB.
  Δ #6-4 45 IN.LB.
  o #14-6 CU/LA #6 35 IN.LB.
  Δ #4-10 25 IN.LB.
  o #14-10 CU/LA #4-10 20 IN.LB.
*** EQUIPMENT GROUND-MULTIPLE CONDUCTOR
  o (2 OR 3) #10,12,14 CU/LA 40 IN.LB.
  o (2) #12,14 CU/LA 20 IN.LB.
*** FIELD INSTALLED DEVICES-TORQUE TO VALUES
  INDICATED ON OR WITH DEVICE

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*SHIPPING TENDS TO LOOSEN ELECTRICAL CONNECTIONS - TIGHTEN ALL CONNECTIONS BEFORE ENERGIZING UNIT.



FOUR CIRCUIT STREET LIGHTING CONTROLLER DETAIL
FOR LED STREET LIGHT ON TRAFFIC SIGNAL POLE

2 DETAIL
NOT TO SCALE

L303	270
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DRAWING #	FIXTURE TYPE	WATTS	STREET LIGHT #	POLE TYPE	NOTES:
L101	LED-COBRA HEAD	248W	SBC8510	WOOD EVERGY	EXISTING LED COBRA HEAD STREETLIGHT ON WOOD EVERGY POLE TO REMAIN.
L101	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO REMAIN.
L101	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO REMAIN.
L101	LED-COBRA HEAD	248W	SBC8509	WOOD EVERGY	EXISTING LED COBRA HEAD STREETLIGHT ON WOOD EVERGY POLE TO REMAIN.
L101	LED-COBRA HEAD	248W	SBC8508	TRAFFIC SIGNAL POLE	EXISTING LED COBRA HEAD STREETLIGHT ON TRAFFIC SIGNAL POLE TO REMAIN.
L101	LED-COBRA HEAD	248W	SBC8507	TRAFFIC SIGNAL POLE	EXISTING LED COBRA HEAD STREETLIGHT ON TRAFFIC SIGNAL POLE TO REMAIN.
L101	LED-COBRA HEAD	248W	SBC8506	TRAFFIC SIGNAL POLE	NEW LED COBRA HEAD STREETLIGHT ON NEW COMBINED OCS/TRAFFIC SIGNAL POLE.
L101	LED-COBRA HEAD	248W	SBC8505	TRAFFIC SIGNAL POLE	NEW LED COBRA HEAD STREETLIGHT ON NEW COMBINED OCS/TRAFFIC SIGNAL POLE.
L101	LED-COBRA HEAD	248W	SBC8514	WOOD EVERGY	EXISTING LED COBRA HEAD STREETLIGHT ON WOOD EVERGY POLE TO REMAIN.
L101	HPS-SHOE BOX	400W	SBC5500	DCS POLE	EXISTING SHOE BOX STREET LIGHT POLE TO BE RELOCATED TO NEW LOCATION.
L101	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED.
L101	LED-COBRA HEAD	400W	SBC8504	DCS POLE	EXISTING LED COBRA HEAD ON OCS POLE TO BE RELOCATED.
L101	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED.
L101	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED.
L101	LED-COBRA HEAD	400W	SBC8502	DCS POLE	EXISTING LED COBRA HEAD STREETLIGHT ON EXISTING OCS POLE TO REMAIN.
L101	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE REMOVED.
L101	LED COBRA HEAD	248W	SBCXXXXX	ALUMINUM	NEW KCMO SGINIFY TYPE D LED LIGHT FIXTURE ON 35' POLE.
L102	HPS-COBRA HEAD	400W	1371	DCS POLE	EXISTING COBRA HEAD STREETLIGHT ON EXISTING OCS POLE TO REMAIN.
L102	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED.
L102	HPS-COBRA HEAD	400W	1410	DCS POLE	EXISTING COBRA HEAD STREETLIGHT ON EXISTING OCS POLE TO BE RELOCATED.
L102	HPS-COBRA HEAD	150W	NO NUMBER	ALUMINUM	EXISTING COBRA HEAD STREETLIGHT ON METAL POLE TO REMAIN.
L102	LED-COBRA HEAD	248W	SBCXXXX	TRAFFIC SIGNAL POLE	NEW KCMO SIGNIFY TYPE D LIGHT FIXTURE ON COMBINED OCS/ TRAFFIC SIGNAL POLE.
L102	LED-COBRA HEAD	248W	SBCXXXX	TRAFFIC SIGNAL POLE	NEW KCMO SIGNIFY TYPE D LIGHT FIXTURE ON TRAFFIC SIGNAL POLE.
L102	LED-COBRA HEAD	248W	SBCXXXX	TRAFFIC SIGNAL POLE	NEW KCMO SIGNIFY TYPE D LIGHT FIXTURE ON TRAFFIC SIGNAL POLE.
L102	HPS-COBRA HEAD	150W	SBC1115	WOOD	EXISTING COBRA HEAD STREETLIGHT ON EVERGY WOOD POLE TO REMAIN.
L102	HPS-COBRA HEAD	150W	SBC1114	WOOD	EXISTING COBRA HEAD STREETLIGHT ON WOOD POLE TO REMAIN.
L102	HPS-COBRA HEAD	150W	SBC1113	WOOD	EXISTING COBRA HEAD STREETLIGHT ON WOOD POLE TO REMAIN.
L102	HPS-SHOE BOX	400W	SBC2509	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L102	HPS-COBRA HEAD	150W	SBC1112	WOOD	EXISTING COBRA HEAD STREETLIGHT ON WOOD POLE TO REMAIN.

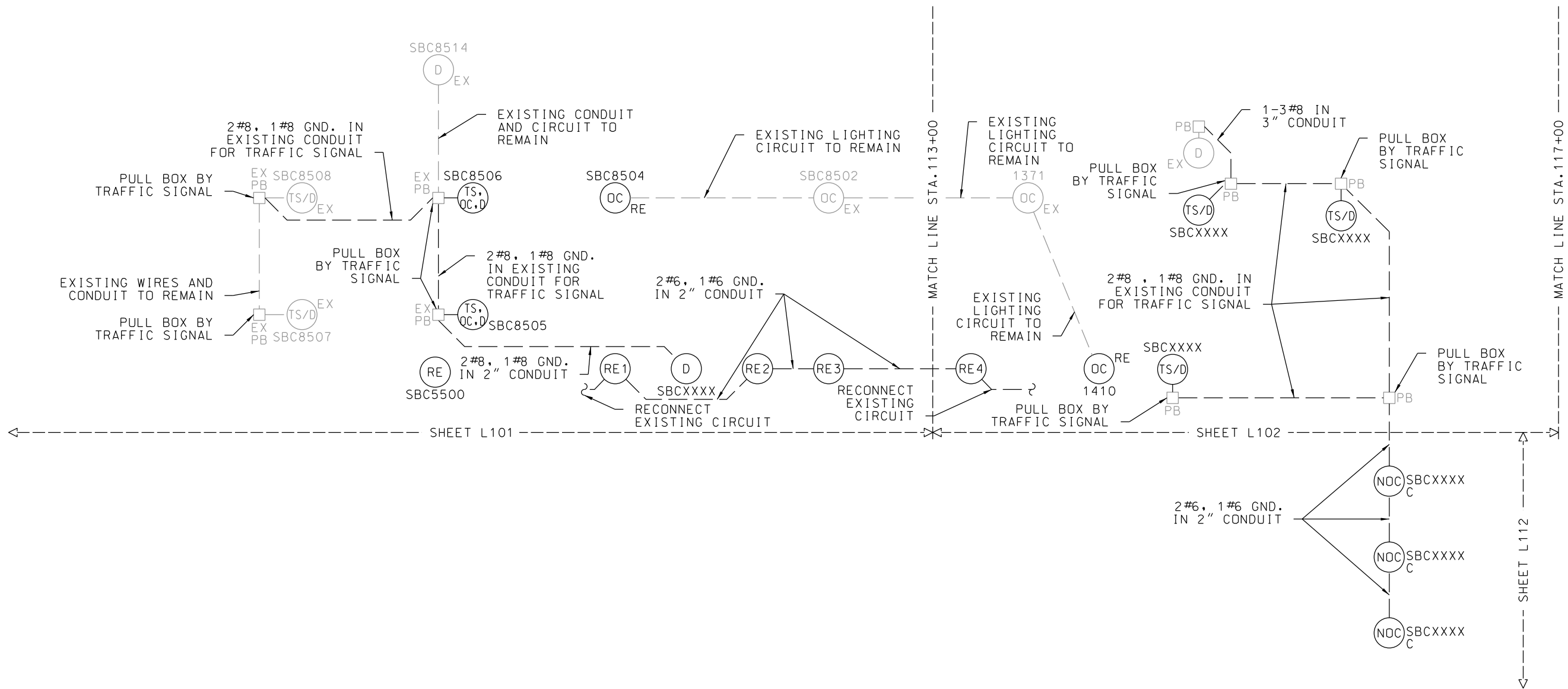
DRAWING #	FIXTURE TYPE	WATTS	STREET LIGHT #	POLE TYPE	NOTES:
L103	HPS-COBRA HEAD	150W	SBC1111	WOOD	EXISTING COBRA HEAD STREETLIGHT ON WOOD POLE TO REMAIN.
L103	HPS-SHOE BOX	400W	SBC2508	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L103	HPS-COBRA HEAD	150W	SBC1110	WOOD	EXISTING COBRA HEAD STREETLIGHT ON WOOD POLE TO REMAIN.
L103	HPS-COBRA HEAD	150W	SBC1109	WOOD	EXISTING COBRA HEAD STREETLIGHT ON WOOD POLE TO REMAIN.
L103	HPS-SHOE BOX	400W	SBC2507	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L103	HPS-SHOE BOX	400W	SBC2506	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L104	HPS-SHOE BOX	400W	SBC2505	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L104	HPS-SHOE BOX	400W	SBC2504	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L104	HPS-SHOE BOX	400W	SBC2503	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L105	HPS-SHOE BOX	400W	SBC2502	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L105	HPS-SHOE BOX	400W	SBC2501	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L105	HPS-SHOE BOX	400W	SBC2500	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L106	HPS-SHOE BOX	400W	SBC2113	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L106	HPS-SHOE BOX	400W	SBC2112	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L107	HPS-SHOE BOX	400W	SBC2111	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE ON THE BRIDGE TO REMAIN.
L108	LED-SHOE BOX	254W	N/A	DCS POLE	NEW KCMO AMERICAN ELECTRIC TYPE D LIGHT FIXTURE ON NEW OCS POLE.
L108	LED-SHOE BOX	254W	N/A	DCS POLE	NEW KCMO AMERICAN ELECTRIC TYPE D LIGHT FIXTURE ON NEW OCS POLE.
L108	LED-SHOE BOX	267W	SBC2110	ALUMINUM	EXISTING SHOE BOX LED STREETLIGHT ON METAL POLE TO BE REMOVED.
L108	LED-SHOE BOX	508W	N/A	DCS POLE	NEW TWIN KCMO AMERICAN LED LIGHT FIXTURES TYPE D ON NEW OCS POLE.
L108	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	RELOCATED EXISTING PEDESTRIAN LIGHT ON METAL POLE.
L108	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	RELOCATED EXISTING PEDESTRIAN LIGHT ON METAL POLE.
L108	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED TO NEW LOCATION.
L108	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED TO NEW LOCATION.
L108	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED TO NEW LOCATION.
L108	LED-SHOE BOX	267W	NO NUMBER	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L108	LED-SHOE BOX	254W	SBCXXXX	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN. REPLACE EXISTING CREE LIGHT FIXTURE WITH KCMO AMERICAN ELECTRIC LIGHT FIXTURE TYPE D.

REV	DATE	DESCRIPTION	DESIGNED BY	AAS		<p>..... This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p>	ISSUED FOR BID		DATE: 12-23-2022	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION		SCALE FOR 22"x34": NOT TO SCALE			
			CHECKED BY	CKB				HDR Engineering, Inc.				Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239	STREET LIGHTING SCHEDULES	FILENAME: L304.dgn	
			DRAWN BY	RAL										10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856	CONTRACT NO.: CONTRACT NO. ***
			CHECKED BY	CKB											VOLUME: 1
			APPROVED BY	AAS											DRAWING NO.: SHEET NO.:
PLOT DATE: 12/22/2022			2:08:38 PM		DATE	12-23-2022	NOT FOR CONSTRUCTION				L304	271			

DRAWING #	FIXTURE TYPE	WATTS	STREET LIGHT #	POLE TYPE	NOTES:
L109	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	RELOCATED EXISTING PEDESTRIAN LIGHT ON METAL POLE.
L109	LED-SHOE BOX	508W	N/A	DCS POLE	NEW TWIN KCMO AMERICAN ELECTRIC LED LIGHT FIXTURES TYPE D ON NEW OCS POLE.
L109	LED-SHOE BOX	267W	NO NUMBER	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L109	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO REMAIN.
L109	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	RELOCATED EXISTING PEDESTRIAN LIGHT ON METAL POLE.
L109	LED-SHOE BOX	267W	NO NUMBER	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L109	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO REMAIN.
L109	LED-SHOE BOX	508W	NEW	DCS POLE	NEW TWIN KCMO AMERICAN ELECTRIC LED LIGHT FIXTURES TYPE D ON NEW OCS POLE.
L109	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO REMAIN.
L109	LED-SHOE BOX	267W	NO NUMBER	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L109	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	RELOCATED EXISTING PEDESTRIAN LIGHT ON METAL POLE.
L109	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO REMAIN.
L109	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED.
L110	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	RELOCATED EXISTING PEDESTRIAN LIGHT ON METAL POLE.
L110	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	RELOCATED EXISTING PEDESTRIAN LIGHT ON METAL POLE.
L110	LED-SHOE BOX	508W	N/A	DCS POLE	NEW TWIN KCMO AMERICAN ELECTRIC LED LIGHT FIXTURES TYPE D ON NEW OCS POLE.
L110	MH-SHOE BOX	267W	PORT016	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L110	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	RELOCATED EXISTING PEDESTRIAN LIGHT ON METAL POLE.
L110	MH-SHOE BOX	267W	PORT015	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L110	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	RELOCATED EXISTING PEDESTRIAN LIGHT ON METAL POLE.
L110	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO REMAIN.
L110	LED-SHOE BOX	508W	N/A	DCS POLE	NEW TWIN KCMO AMERICAN ELECTRIC LED LIGHT FIXTURES TYPE D ON NEW OCS POLE.
L110	LED-SHOE BOX	267W	N/A	DCS POLE	NEW TWIN LED SHOE BOX LIGHT FIXTURES ON NEW OCS POLE.
L110	MH-SHOE BOX	267W	PORT014	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L110	MH-SHOE BOX	267W	PORT013	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L110	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO REMAIN.
L110	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	RELOCATED EXISTING PEDESTRIAN LIGHT ON METAL POLE.
L110	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED.
L110	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED

DRAWING #	FIXTURE TYPE	WATTS	STREET LIGHT #	POLE TYPE	NOTES:
L110	MH-SHOE BOX	400W	PORT012	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L110	LED-SHOE BOX	508W	N/A	DCS POLE	NEW TWIN KCMO AMERICAN ELECTRIC LED LIGHT FIXTURES TYPE D ON NEW OCS POLE.
L111	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO REMAIN.
L111	MH-SHOE BOX	400W	PORT011	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L111	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	RELOCATED EXISTING PEDESTRIAN LIGHT ON METAL POLE.
L111	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	RELOCATED EXISTING PEDESTRIAN LIGHT ON METAL POLE.
L111	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO REMAIN.
L111	MH-SHOE BOX	400W	PORT010	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L111	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED.
L111	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED.
L111	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED.
L111	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED.
L111	MH-SHOE BOX	400W	PORT009	ALUMINUM	EXISTING TWIN SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L111	MH-SHOE BOX	400W	PORT008	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L111	MH-SHOE BOX	400W	PORT007	ALUMINUM	EXISTING SHOE BOX STREETLIGHT ON METAL POLE TO REMAIN.
L111	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED.
L111	PEDESTRIAN LIGHT	150W	N/A	ALUMINUM	EXISTING PEDESTRIAN LIGHT ON METAL POLE TO BE RELOCATED.
L111	LED-SHOE BOX	774W	N/A	DCS POLE	NEW QUAD KCMO AMERICAN ELECTRIC TYPE D AND C LIGHT FIXTURES ON NEW OCS POLE.
L111	LED-SHOE BOX	774W	N/A	DCS POLE	NEW QUAD KCMO AMERICAN ELECTRIC TYPE D AND C LIGHT FIXTURES ON NEW OCS POLE.
L112	LED COBRA HEAD	137W	SBCXXXX	DCS POLE	NEW KCMO SIGNIFY TYPE C LIGHT FIXTURE ON NEW OCS POLE.
L112	LED COBRA HEAD	137W	SBCXXXX	DCS POLE	NEW KCMO SIGNIFY TYPE C LIGHT FIXTURE ON NEW OCS POLE.
L112	LED COBRA HEAD	137W	SBCXXXX	DCS POLE	NEW KCMO SIGNIFY TYPE C LIGHT FIXTURE ON NEW OCS POLE.
L112	COBRA HEAD	400W	N/A	METAL POLE	EXISTING COBRA HEAD LIGHT FIXTURE ON METAL POLE TO BE REMOVED.

REV	DATE	DESCRIPTION	DESIGNED BY	AAS		<p>..... This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p>	ISSUED FOR BID		DATE: 12-23-2022	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION			SCALE FOR 22"x34": NOT TO SCALE	
			CHECKED BY	CKB									FILENAME: L305.dgn	
			DRAWN BY	RAL			10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856						CONTRACT NO.: CONTRACT NO. ***	
			CHECKED BY	CKB			Custom Engineering 12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239						VOLUME: 1	
			APPROVED BY	AAS			NOT FOR CONSTRUCTION						DRAWING NO.: SHEET NO.:	
PLOT DATE: 12/22/2022			2:08:38 PM		DATE	12-23-2022	L305 272							



1 WIRING SCHEMATIC DETAIL FOR COMBINED OCS POLE WITH STREET LIGHTING AND TRAFFIC SIGNAL LIGHT NOT TO SCALE

CIRCUIT LEGEND

- — — NEW CONDUIT AND CIRCUIT
- — — EXISTING CONDUIT AND CIRCUIT

REFER TO TRAFFIC SIGNAL SHEETS FOR WIRING OF LED LUMINAIRE MOUNTED ON TRAFFIC SIGNAL POLE.

REV	DATE	DESCRIPTION	DESIGNED BY	AAS		<div>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</div>	ISSUED FOR BID		DATE: 12-23-2022	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION		SCALE FOR 22"x34": NOT TO SCALE	
			CHECKED BY	CKB			 HDR Engineering, Inc.		 Custom Engineering			FILENAME: L306.dgn	
			DRAWN BY	RAL			10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856		12760 East 40 Highway Independence, MO 64055 816-350-1473 Certificate of Authority: 000239		CONTRACT NO.:		
			CHECKED BY	CKB							CONTRACT NO. ***		
			APPROVED BY	AAS							VOLUME: 1		
PLOT DATE: 12/22/2022			DATE: 12-23-2022				NOT FOR CONSTRUCTION				DRAWING NO.:	SHEET NO.:	
											L306	273	

WIRING SCHEMATIC DETAILS

