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



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)

APPROVED BY

KCATA PROJECT MANAGER

KCATA CHIEF ENGINEER

KCMO DIRECTOR OF TRANSPORTATION

KCMO CITY ENGINEER

KCMO DIRECTOR OF PUBLIC WORKS

KANSAS CITY STREETCAR AUTHORITY

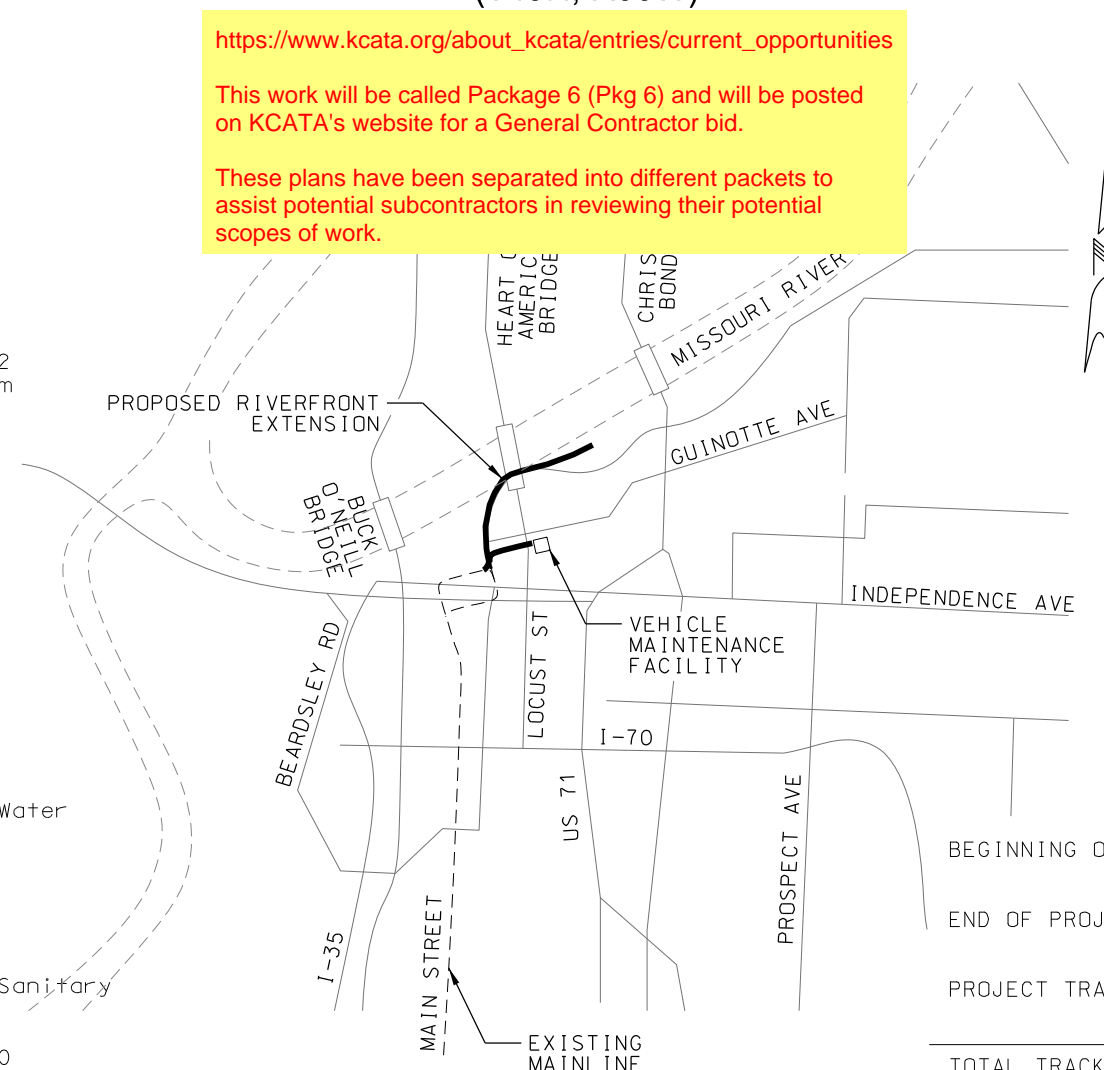
PORT AUTHORITY OF KANSAS CITY, MISSOURI
(PORT KC)

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)



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.

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



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

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	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 1		FILENAME: G010.dgn	
			DRAWN BY	MMO						CONTRACT NO.: CONTRACT NO. ***	
			CHECKED BY	JWR						VOLUME: 1	
			APPROVED BY	NKS						DRAWING NO.: G010	
PLOT DATE: \$DATE\$		\$TIME\$	DATE	12-23-2022	NOT FOR CONSTRUCTION					SHEET NO.: 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	
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			DRAWN BY	MMO						CONTRACT NO.:	CONTRACT NO. ***
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			APPROVED BY	NKS						DRAWING NO.:	SHEET NO.:
PLOT DATE: \$DATE\$			\$TIME\$		DATE	12-23-2022	NOT FOR CONSTRUCTION		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 DETAILS		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": NOT TO SCALE FILENAME: G012.dgn CONTRACT NO.: CONTRACT NO. *** VOLUME: 1	DRAWING NO.:	SHEET NO.:		
			CHECKED BY	JWR			 <div>HDR Engineering, Inc. 10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-380-2700 Certificate of Authority: 000856</div>	NOT FOR CONSTRUCTION						
			DRAWN BY	MMO										
			CHECKED BY	JWR										
			APPROVED BY	NKS										
PLOT DATE: \$DATE\$			\$TIME\$		DATE	12-23-2022	INDEX OF DRAWINGS SHEET 3						G012	4

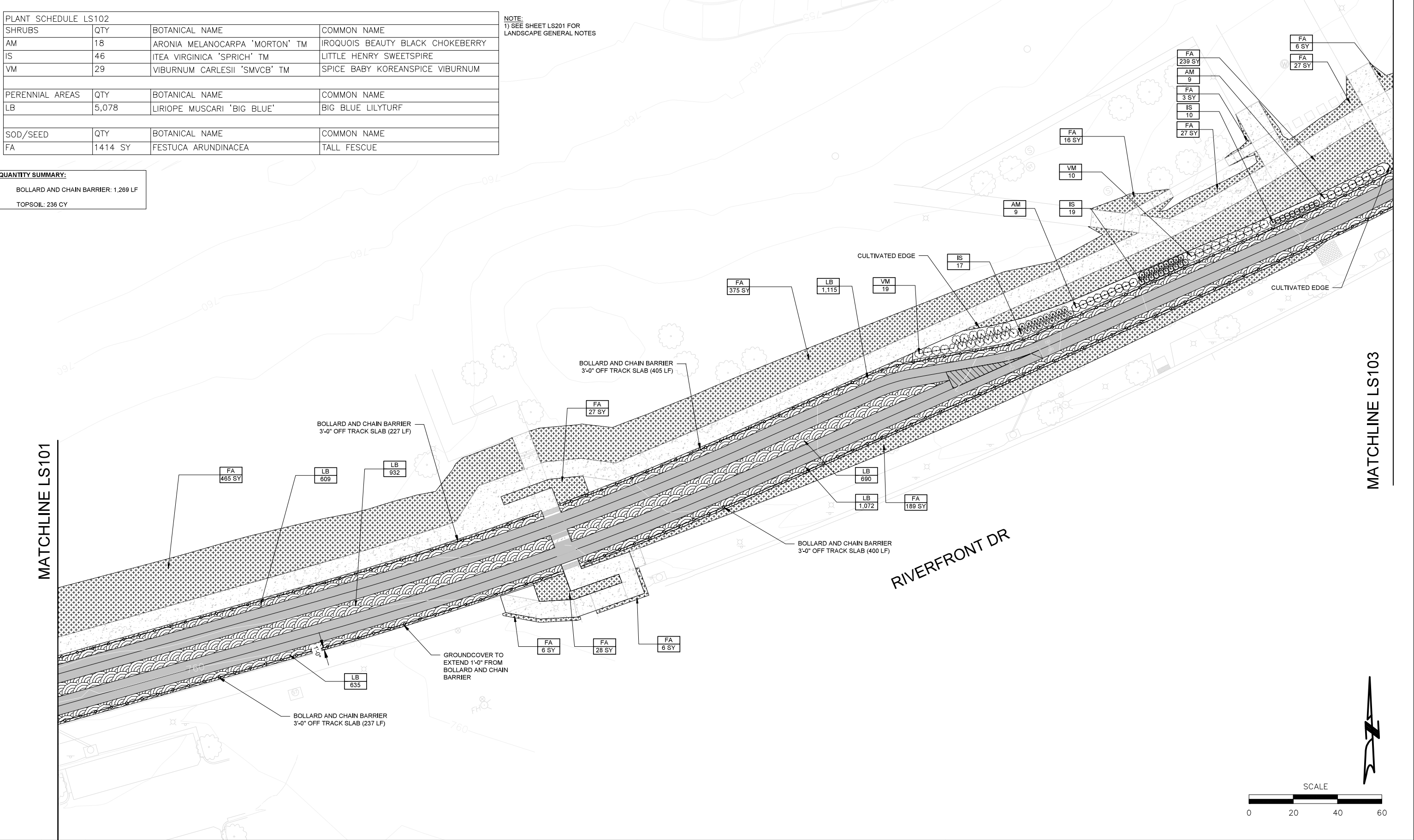
#	dwg	TITLE	DESCRIPTION	#	dwg	TITLE	DESCRIPTION
364	Y061	IN-SPAN ASSEMBLIES JUMPER ASSEMBLIES		427	Z618	COMMUNICATIONS DETAILS	RING DIAGRAM SHEET 4
365	Y062	IN-SPAN ASSEMBLIES SECTION INSULATOR ASSEMBLY		428	Z619	COMMUNICATIONS DETAILS	RING DIAGRAM SHEET 5
366	Y063	IN-SPAN ASSEMBLIES TYPICAL SPLICE DETAILS		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				

REV	DATE	DESCRIPTION	DESIGNED BY	MMO		<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":			
			CHECKED BY	JWR			 HDR Engineering, Inc. 10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856	INDEX OF DRAWINGS SHEET 4			NOT TO SCALE		
			DRAWN BY	MMO							FILENAME:		
			CHECKED BY	JWR							CONTRACT NO.:		
			APPROVED BY	NKS							CONTRACT NO. ***		
								VOLUME:					
PLOT DATE: \$DATE\$			\$TIME\$			DATE	12-23-2022			DRAWING NO.:	SHEET NO.:		
										G013	5		

PLANT SCHEDULE LS102			
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME
AM	18	ARONIA MELANOCARPA 'MORTON' TM	IROQUOIS BEAUTY BLACK CHOKEBERRY
IS	46	ITEA VIRGINICA 'SPRICH' TM	LITTLE HENRY SWEETSPIRE
VM	29	VIBURNUM CARLESII 'SMVCB' TM	SPICE BABY KOREANSPICE VIBURNUM
PERENNIAL AREAS	QTY	BOTANICAL NAME	COMMON NAME
LB	5,078	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILYTURF
SOD/SEED	QTY	BOTANICAL NAME	COMMON NAME
FA	1414 SY	FESTUCA ARUNDINACEA	TALL FESCUE

NOTE:
1) SEE SHEET LS201 FOR
LANDSCAPE GENERAL NOTES

QUANTITY SUMMARY:	
BOLLARD AND CHAIN BARRIER:	1,269 LF
TOPSOIL:	236 CY

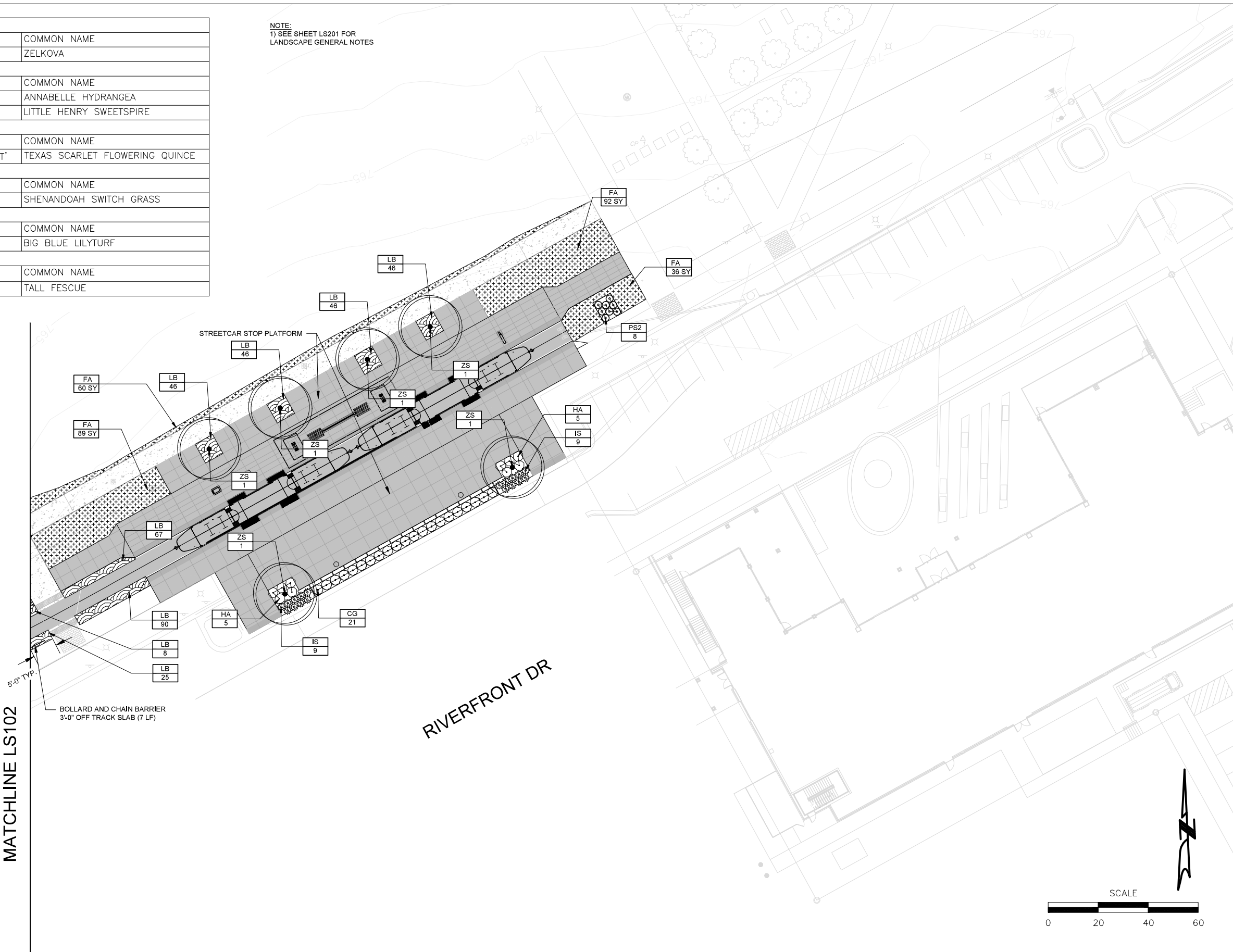


REV	DATE	DESCRIPTION	DESIGNED BY	AAB		<p>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</p>	ISSUED FOR BID	DATE: 12-23-2022		<p>10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856</p>	<p>715 Kirk Drive Kansas City, MO 64105 816-472-1201 Certificate of Authority: 001270</p>	<p>KANSAS CITY STREETCAR - RIVERFRONT EXTENSION</p>	<p>LANDSCAPE PLAN BERKLEY PARK - 2</p>	SCALE FOR 22"x34": 1"=20'
			CHECKED BY	WHM			FILENAME: 79668_RFL_LandscapeSheets.dwg							
			DRAWN BY	AAB			CONTRACT NO.: LS102							
			CHECKED BY	WHM			VOLUME: 1							
			APPROVED BY	CJH			DRAWING NO.: LS102							
PLOT DATE: 12/23/2022			10:12:50 AM		DATE	12/23/2022	NOT FOR CONSTRUCTION				SHEET NO.: 276			

PLANT SCHEDULE LS103			
TREES	QTY	BOTANICAL NAME	COMMON NAME
ZS	6	ZELKOVA SERRATA	ZELKOVA
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME
HA	10	HYDRANGEA ARBORESCENS 'ANNABELLE'	ANNABELLE HYDRANGEA
IS	18	ITEA VIRGINICA 'SPRICH' TM	LITTLE HENRY SWEETSPIRE
EVERGREEN	QTY	BOTANICAL NAME	COMMON NAME
CG	21	CHAENOMELES SPECIOSA 'TEXAS SCARLET'	TEXAS SCARLET FLOWERING QUINCE
GRASSES	QTY	BOTANICAL NAME	COMMON NAME
PS2	8	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS
PERENNIAL AREAS	QTY	BOTANICAL NAME	COMMON NAME
LB	374	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILYTURF
SOD/SEED	QTY	BOTANICAL NAME	COMMON NAME
FA	277 SY	FESTUCA ARUNDINACEA	TALL FESCUE

NOTE:
1) SEE SHEET LS201 FOR
LANDSCAPE GENERAL NOTES

QUANTITY SUMMARY:
BOLLARD AND CHAIN BARRIER: 7 LF
TOPSOIL: 46 CY



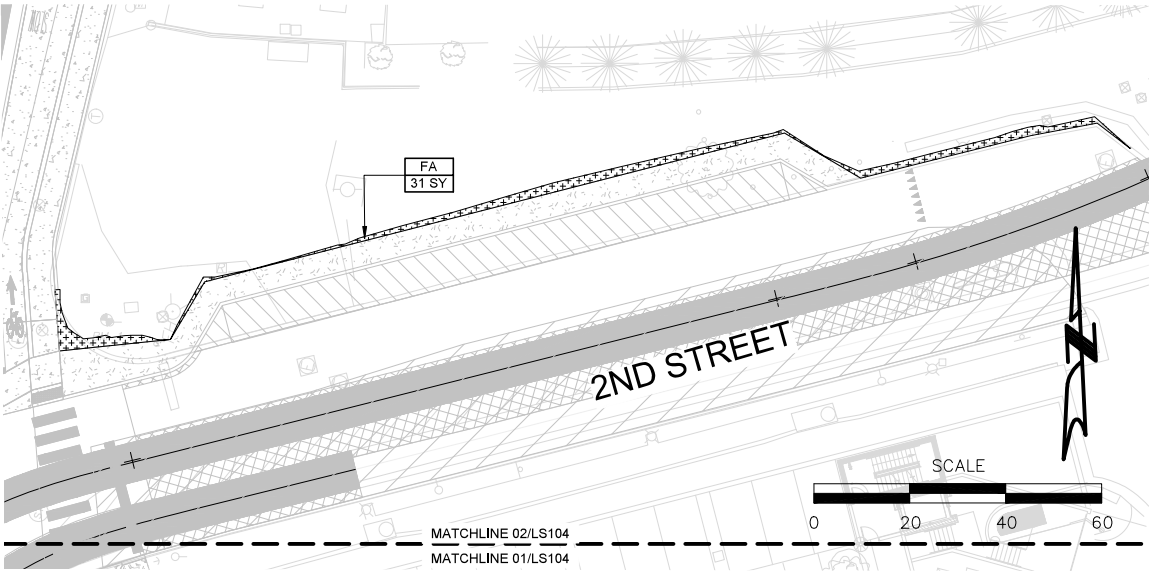
REV	DATE	DESCRIPTION	DESIGNED BY	AAB		<div>This set of plans is not for construction. These plans are intended to build interest in bidding the project.</div>	ISSUED FOR BID	DATE: 12-23-2022	 <div>HDR Engineering, Inc. 10450 Holmes Road Suite 600 Kansas City, MO 64131-3471 816-360-2700 Certificate of Authority: 000856</div>	 <div>The HNTB Companies 715 Kirk Drive Kansas City, MO 64105 816-472-1201 Certificate of Authority: 001270</div>	KANSAS CITY STREETCAR - RIVERFRONT EXTENSION	LANDSCAPE PLAN BERKLEY PARK - 3	SCALE FOR 22"x34": 1"=20'			
			CHECKED BY	WHM										FILENAME: 79668_RFE_LandscapeSheets.dwg		
			DRAWN BY	AAB										LS103		
			CHECKED BY	WHM										CONTRACT NO. ###		
			APPROVED BY	CJH										VOLUME: 1		
PLOT DATE: 12/23/2022			10:12:50 AM		DATE: 12/23/2022		NOT FOR CONSTRUCTION							DRAWING NO.:	SHEET NO.:	
												LS103	277			

PLANT SCHEDULE LS104			
SOD/SEED	QTY	BOTANICAL NAME	COMMON NAME
FA	248 SY	FESTUCA ARUNDINACEA	TALL FESCUE

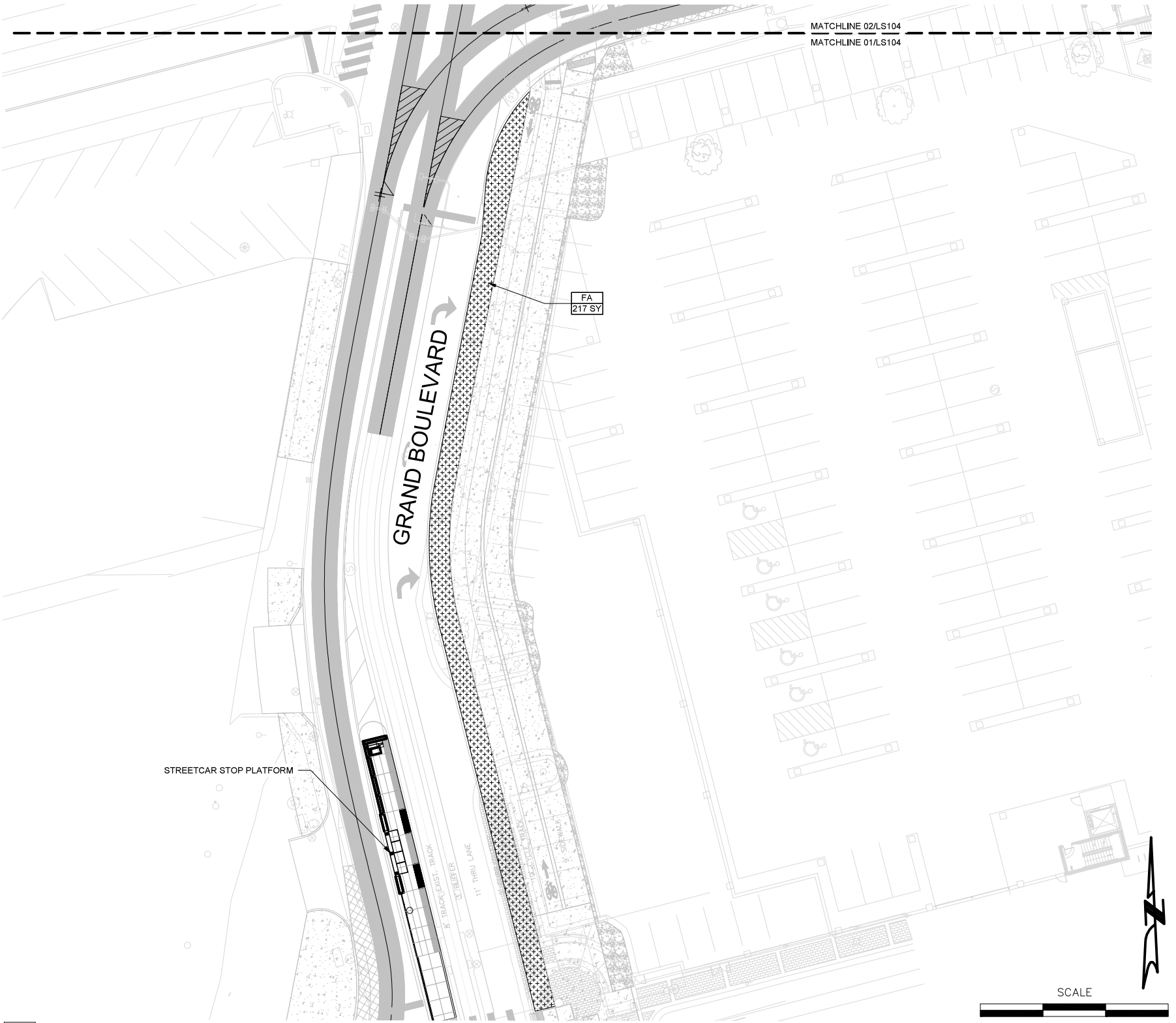
QUANTITY SUMMARY:

TOPSOIL: 41 CY

NOTE:
1) SEE SHEET LS201 FOR
LANDSCAPE GENERAL NOTES



02 LANDSCAPE PLAN - 2ND STREET



01 LANDSCAPE PLAN - GRAND BOULEVARD

REV	DATE	DESCRIPTION	DESIGNED BY	AAB
			CHECKED BY	WHM
			DRAWN BY	AAB
			CHECKED BY	WHM
			APPROVED BY	CJH
PLOT DATE: 12/23/2022		10:12:50 AM	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

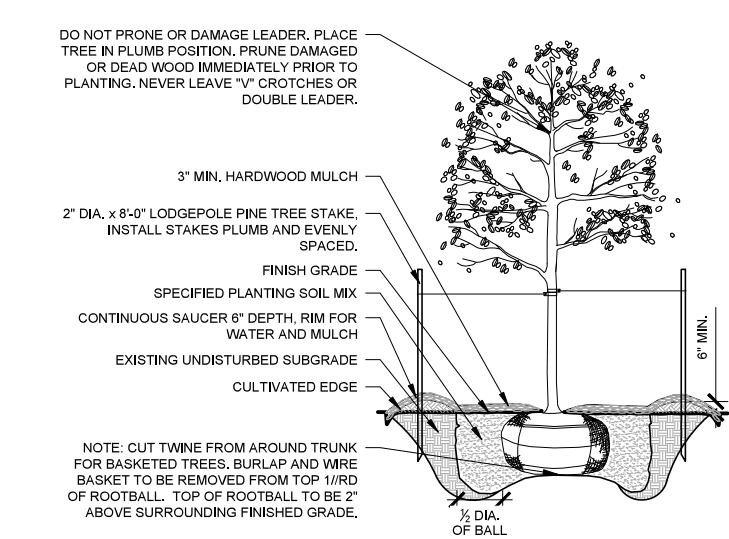
The HNTB Companies
715 Kirk Drive
Kansas City, MO 64105
816-472-1201
Certificate of Authority: 001270

NOT FOR CONSTRUCTION

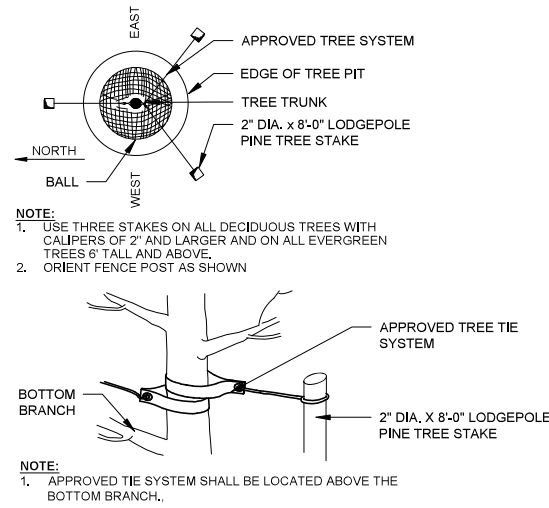
KANSAS CITY STREETCAR - RIVERFRONT EXTENSION

LANDSCAPE PLAN
GRAND BOULEVARD

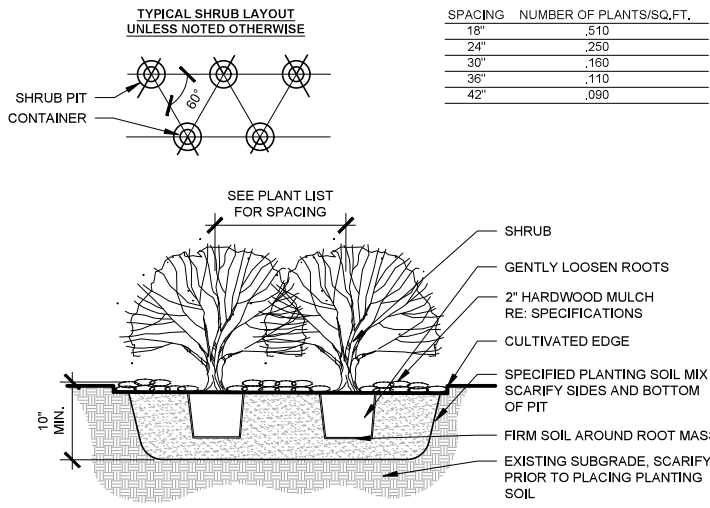
SCALE FOR 22"x34": 1"=20'	
FILENAME: 79668_RFE_LandscapeSheets.dwg LS104	
CONTRACT NO.: CONTRACT NO. ###	
VOLUME: 1	
DRAWING NO.: LS104	SHEET NO.: 278



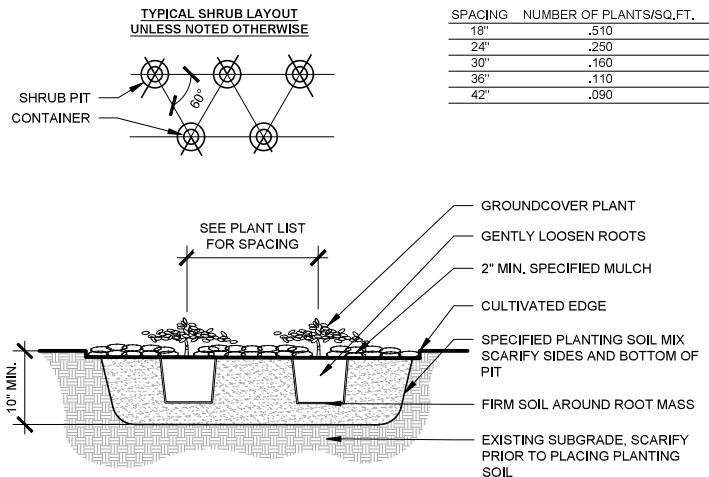
1 TYP. TREE PLANTING
NTS



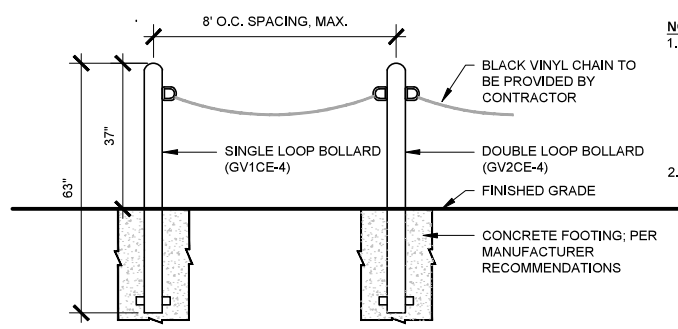
2 TYP. TREE STAKING
NTS



3 TYP. SHRUB PLANTING
NTS

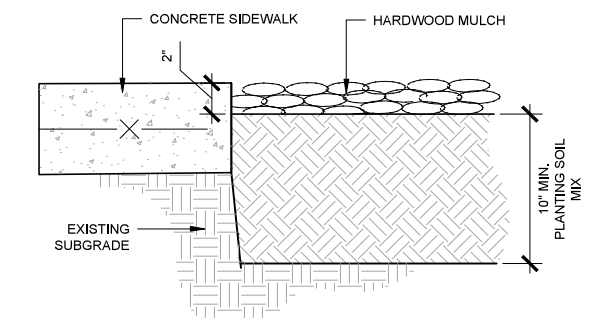


4 TYP. ORNAMENTAL GRASS/GROUNDCOVER PLANTING
NTS

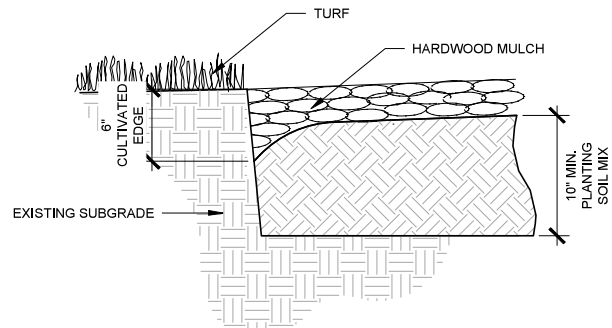


7 POST CHAIN FENCE
NTS

NOTES:
1. SINGLE AND DOUBLE LOOP BOLLARDS
PRODUCTS: GROVE BOLLARDS GV1CE-4 & GV2CE-4
OR APPROVED EQUAL
MANUFACTURER: KEYSTONE RIDGE DESIGNS
COLOR: MATTE BLACK
WEBSITE: WWW.KEYSTONERIDGEDESIGNS.COM
CONTACT: JUSTIN MASKAL
PHONE: 724.284.1213 EX. 243
2. CONTRACTOR TO PROVIDE SHOP DRAWINGS AND
BOLLARD LAYOUT FOR LANDSCAPE ARCHITECT
APPROVAL.



5 PLANT BED AT WALK EDGE
NTS



6 CULTIVATED EDGE
NTS

PLANT SCHEDULE									
TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	UNIT		
ZS	6	ZELKOVA SERRATA	ZELKOVA	3" CAL.	B&B	AS SHOWN			
SHRUBS									
	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	UNIT	SPACING	
AM	41	ARONIA MELANOCARPA 'MORTON' TM	IROQUOIS BEAUTY BLACK CHOKEBERRY	#5	CONT.			48"	o.c.
HA	10	HYDRANGEA ARBORESCENS 'ANNABELLE'	ANNABELLE HYDRANGEA	#5	CONT.			48"	o.c.
IS	86	ITEA VIRGINICA 'SPRICH' TM	LITTLE HENRY SWEETSPIRE	#5	CONT.			36"	o.c.
VM	39	VIBURNUM CARLESII 'SMVCB' TM	SPICE BABY KOREANSPICE VIBURNUM	#5	CONT.			48"	o.c.
EVERGREEN	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	UNIT	SPACING	
CG	21	CHAENOMELES SPECIOSA 'TEXAS SCARLET'	TEXAS SCARLET FLOWERING QUINCE	#5	CONT.		EA	48"	o.c.
GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	UNIT	SPACING	
PS2	8	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	#1	CONT.			36"	o.c.
PERENNIAL AREAS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	UNIT	SPACING	
LB	10,451	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILYTURF	#1	CONT.			15"	o.c.
SOD/SEED	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	UNIT	SPACING	
FA	3487 SY	FESTUCA ARUNDINACEA	TALL FESCUE	SOD			SY		
TOTAL QUANTITY SUMMARY:									
BOLLARD AND CHAIN BARRIER: 3394 LF									
TOPSOIL: 581 CY									

8 PLANT SCHEDULE
NTS

- LANDSCAPE GENERAL NOTES:
- CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO COMMENCING LANDSCAPE OPERATIONS. NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
 - LANDSCAPE CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES PRIOR TO PLANTING. ANY DISCREPANCIES WITH THE PLAN SHALL BE BROUGHT TO THE OWNER'S REPRESENTATIVE.
 - REFER TO LANDSCAPE PLANT SCHEDULE AND PLANTING DETAILS ON SHEET LS201.
 - PLANTING SHALL BE PER 32 93 00 PLANTS. SOD SHALL BE PER 32 92 23 SODDING.
 - CONTRACTOR SHALL NOT COMMENCE LANDSCAPE WORK UNTIL THE SITE IS FREE OF DEBRIS CAUSED BY ON-GOING CONSTRUCTION OPERATIONS. LANDSCAPE WORK SHALL BEGIN AFTER THE OWNER HAS GIVEN WRITTEN APPROVAL FOR SUCH. THERE SHALL BE NO DEVIATION DUE TO LACK OF COORDINATION FOR THIS ACTIVITY.
 - THE OWNER OR OWNER'S REPRESENTATIVE SHALL APPROVE GRADES AND CONDITION OF THE SITE PRIOR TO THE PLANTING OPERATIONS.
 - CONTRACTOR SHALL LAYOUT ALL PLANT MATERIAL PER THE SPECIFICATIONS.
 - ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH FESCUE SOD OR APPROVED BY THE LANDSCAPE ARCHITECT.
 - ALL PLANTING BEDS AND TREE DISHS SHALL BE MULCHED PER THE PLANTING DETAILS AND SPECIFICATIONS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE PLANTS PER SECTION 32 01 90 OPERATION AND MAINTENANCE OF PLANTING.
 - CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE WORK AND PLANT MATERIALS FOR A PERIOD OF TWO YEARS FROM DATE OF ACCEPTANCE OF THE WORK BY THE OWNER.
 - ANY PLANT MATERIAL WHICH DIES DURING THE TWO-YEAR GUARANTEE PERIOD SHALL BE REPLACED BY THE CONTRACTOR DURING THE NEXT NORMAL PLANTING SEASON.
 - PLANT TAGS FOR ALL PLANTS SHALL NOT HAVE PLANT TAGS REMOVED.