



City of Belton Public Works
700 Seabee Road
Belton, MO 64012
Phone: 816-331-4331

Addendum #1
STBG-3003(006)
Route 58 Multimodal Traffic Relief
October 31, 2023

- 1. MoDOT has specific bid items listed out and the city of Belton portion of work is LSUM for the traffic control. On the QTY sheets in the plans, neither the MoDOT portion nor the City portion show message boards. However, in the JSP's, it mentions that message boards are to be provided.**

The plans and JSPs have been updated to address this. Please see the following sheets for clarification.

- 2. Regarding the temporary traffic barriers, the quantity seems low and the units are typically LF. Also, how is the relocation of the barriers paid?**

The quantities and units have been corrected. Please see the following sheets including the updated page for Schedule A of the bid tab. It corrects the issues in question.

Bidders shall replace Schedule A in the bid tab and add the JSPs included in the addendum to the original JSPs. Bidders shall also insert the updated plan sheets into the original plans to replace those sheets.



Route 58 Multi-Modal Traffic Relief

10/30/2023

Engineer's Estimate of Probable Construction Cost

SCHEDULE A - MODOT STANDARD PAY ITEMS					
ROUTE 58 WIDENING & 3/4-ACCESS, POWELL TRAFFIC SIGNAL, AND PECULIAR SIGNAL REMOVAL					
ITEM NO.	ITEM DESCRIPTION	QTY	UNIT TYPE	UNIT PRICE	EXTENDED PRICE
2013000	CLEARING & GRUBBING	0.5	ACRE		
2022010	REMOVAL OF IMPROVEMENTS	1	LS		
2031000	CLASS A EXCAVATION	3508	CY		
2036000	COMPACTING EMBANKMENT	4781	CY		
2037075	COMPACTING IN CUT	14	STA		
3040504	4" TYPE 5 AGGREGATE BASE	2304	SQYD		
3040506	6" TYPE 5 AGGREGATE BASE	2949	SQYD		
4030132	ASPHALTIC CONCRETE MIXTURE PG 76-22 (SP125BSM MIX)	1105	TONS		
4030306	ASPHALTIC CONCRETE MIXTURE PG 64-22 (SP250C MIX)	1275	TONS		
4071005	TACK COAT	1326	GAL		
6044011	PIPE COLLAR, TYPE A (5')	1	EA		
6071102	MODIFIED CONCRETE GUTTER TYPE B	186	LF		
6081010	CONCRETE CURB RAMP	153	SQYD		
6084024	SIDEWALK HAND-RAILING WITH BALUSTERS	186	LF		
6085008	PAVED APPROACH 8"	952	SQYD		
6086004	CONCRETE SIDEWALK, 4 IN.	1199	SQYD		
6089901	MISC., REPLACE BRICKS IN I-49 SB OFF-RAMP ISLAND	1	LS		
6089903	MISC., CAST IRON TRUNCATED DOMES	279	SQFT		
6097000	ROCK LINING	9	CY		
6091052	CURB & GUTTER TYPE B	1868	LF		
6091010	CONCRETE CURB (6 IN. HEIGHT AND UNDER) TYPE S	1098	LF		
6083004	4 IN. CONCRETE MEDIAN STRIP	237	SQYD		
6122008	IMPACT ATTENUATOR 40 MPH (SAND BARRELS)	2	EA		
6161005	CONSTRUCTION SIGNS	693	SQFT		
6161010	RELOCATED SIGNS	470	SQFT		
6161008	ADVANCED WARNING RAIL SYSTEM	5	EA		
6161025	CHANNELIZER (TRIM LINE)	74	EA		
6161030	TYPE III MOVEABLE BARRICADE	17	EA		
6161040	FLASHING ARROW PANEL	1	EA		
6169902	MISC., NTCIP COMPLIANT CHANGEABLE MESSAGE SIGN (CONTRACTOR FURNISHED, CITY RETAINED)	3	EA		
6173600D	CONTRACTOR FURNISHED/RETAINED TEMPORARY TRAFFIC BARRIER	944	LF		
6175010A	RELOCATING TEMPORARY TRAFFIC BARRIER	2292	LF		
6181000	MOBILIZATION	1	LS		
6200015	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 24 IN. WHITE	670	LF		
6200021	PREFORMED THERMOPLASTIC PAVEMENT MARKING, LEFT/RIGHT ARROW	15	EA		
6200024	PREFORMED THERMOPLASTIC PAVEMENT MARKING, STRAIGHT ARROW	3	EA		
6200027	PREFORMED THERMOPLASTIC PAVEMENT MARKING, COMBINATION STR/LT/RT	2	EA		
6205901A	4 IN. YELLOW HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT, TYPE L BEADS	3820	LF		
6205902A	6 IN. WHITE HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT, TYPE L BEADS	2592	LF		
6205906A	12 IN. WHITE HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT, TYPE L BEADS	221	LF		
6208076	4 IN TEMPORARY PAVEMENT MARKING PAINT	3500	LF		
6214600A	FLOWABLE BACKFILL	18.5	CY		
6221001	COLDMILLING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (3 IN. THICK OR LESS)	8834	SQYD		
6274000	CONTRACTOR FURNISHED SURVEYING & STAKING	1	LS		
7201000	MECHANICALLY STABILIZED EARTH WALL SYSTEMS	1099	SQFT		
7201200	SELECT GRANULAR BACKFILL FOR STRUCTURAL SYSTEMS	409	CY		
7261012	12" PIPE GROUP A	1297.6	LF		
7261024	24" PIPE GROUP A	10.1	LF		
7311022	PRECAST CONCRETE DROP INLET 2 FT X 2 FT	9	EA		
7311033	PRECAST CONCRETE DROP INLET 3 FT X 3 FT	1	EA		
7320612A	12 IN. OR ALLOWED SUBSTITUTE GROUP A FLARED END SECTION	1	EA		
7320624A	24 IN. OR ALLOWED SUBSTITUTE GROUP A FLARED END SECTION	1	EA		
8051000A	SEEDING - COOL SEASON GRASSES	0.6	ACRE		
8061005	ROCK DITCH CHECK	14	LF		
8061007A	CURB INLET CHECK	14	EACH		
8061016	SEDIMENT REMOVAL	37	CY		
8061019	SILT FENCE	2175	LF		
9019901	MISC., RTE 58 STREETLIGHTING	1	LS		
9029400	TEMPORARY TRAFFIC SIGNALS	1	LS		
9029901	MISC., RTE 58 / POWELL PKWY TRAFFIC SIGNAL	1	LS		
9029901	MISC., RTE 58 / I-49 SB RAMP TRAFFIC SIGNAL MODIFICATIONS	1	LS		
9039901	MISC., MoDOT SIGNAGE	1	LS		
SCHEDULE A SUBTOTAL					\$ -

City of Belton, MO

JOB SPECIAL PROVISIONS TABLE OF CONTENTS

(Job Special Provisions shall prevail over General Special Provisions whenever in conflict therewith).

~~W. ADDITIONAL MOBILIZATION FOR SEEDING NJSP 16-03~~ 3

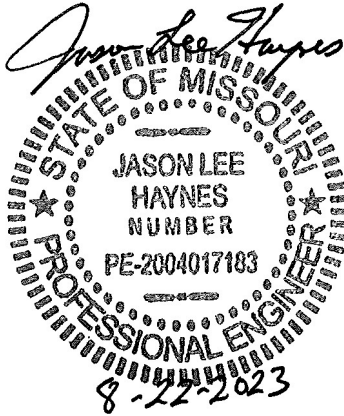
CC. REPLACE BRICKS IN I-49 SB OFF-RAMP ISLAND 3

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EE. NTCIP COMPLIANT CHANGEABLE MESSAGE SIGN (CONTRACTOR FURNISHED,
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City of Belton, MO

ENGINEER SEAL PAGE 1 OF 1

	HDR 2139 E. Primrose St. Springfield, MO 65804-4589 Certificate of Authority: 001270 Consultant Phone: (417) 351-6500
	Route 58 Multimodal Traffic Relief Belton Project Number STBG-3003(006) Date Prepared: 8/11/2023
	ADDENDUM DATE: 10/30/2023
If a seal is present on this sheet JSP's have been electronically sealed and dated.	

City of Belton, MO

W. ADDITIONAL MOBILIZATION FOR SEEDING NJSP-16-03

~~1.0 Description.~~ This provision provides compensation for additional mobilization for seeding, as specified herein.

~~2.0 Additional Mobilization for Seeding.~~ Additional mobilization to perform temporary or permanent seeding, beyond the initial occurrence, may be necessary as specified in Sec 806.50.2 and as required per terms of the SWPPP. Mobilization of all equipment, workers and materials necessary to perform seeding and mulching shall be considered included in this work.

~~2.1 Measurement of the number of occurrences authorized by the engineer to mobilize equipment onto the project to perform temporary or permanent seeding will be made per each occurrence, except for the initial occurrence and as specified herein. No measurement will be made for mobilization necessary to perform repair work to previously seeded areas or for mobilization necessary due to removal of equipment prior to completion of seeding all areas available for seeding, as determined by the engineer.~~

~~3.0 Basis of Payment.~~ The accepted occurrences of Additional Mobilization for Seeding will be paid for under 618-99.02, ADDITIONAL MOBILIZATION FOR SEEDING, at a fixed unit price of \$600 per each occurrence. Payment for the initial occurrence to mobilize for seeding, and any additional mobilization costs in excess of the fixed price, shall be considered completely covered under other items.

CC. REPLACE BRICKS IN I-49 SB OFF-RAMP ISLAND

1.0 Description. Contractor to use existing undamaged bricks in combination with new matching bricks and install inside the new S-curb edge of the Southbound I-49 Off-Ramp at Route 58.

2.0 Work Requirements. The existing curb edge around the brick laid island has degraded and bricks on the edge have fallen. A new S-curb will be installed around the edge of this island on this project. Prior to installation of the replacement S-curb, contractor shall move and salvage undamaged bricks sufficient to demolish the remaining degraded curb without any further damage to the brick surface. Following installation of the replacement S-curb, contractor shall use existing salvaged, undamaged bricks in combination with newly purchased matching bricks and install to match the previous intended pattern.

3.0 Method of Measurement. This work will be measured as indicated on the plans, complete-in-place and accepted by the engineer, as unit lump sum quantity for all work necessary.

4.0 Basis of Payment. Payment for this work shall include all materials, labor, equipment, and time necessary to salvage bricks and supply/install new and existing bricks. No separate payment shall be made for any other work incidental to completing this work necessary to complete installation of bricks to match the intended pattern. The accepted quantity will be paid at the contract unit cost price for Item 608-99.01, MISC., REPLACE BRICKS IN I-49 SB OFF-RAMP ISLAND per lump sum.

City of Belton, MO

DD. CAST IRON TRUNCATED DOMES

- 1.0 Description.** Cast Iron Truncated Domes shall be constructed at the locations shown on the plans and meeting Public Rights-of-Way Accessibility Guidelines (PROWAG) detectable warning standards.
- 2.0 Work Requirements.** Work shall be in accordance with Sec 608 of the Standard Specifications and Standard Plan 608.50. The truncated domes shall be made from Cast Iron, red in color. and wet set integral with the concrete, surface applied products will not be allowed.
- 3.0 Method of Measurement.** This work will be measured by the quantity of red cast iron truncated domes placed to the nearest square foot.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to construct the red Cast Iron Truncated Domes as shown in the contract documents. The accepted quantity will be paid for at the contract unit price for Item 608-99.03, MISC., CAST IRON TRUNCATED DOMES per square foot.

EE. NTCIP COMPLIANT CHANGEABLE MESSAGE SIGN (CONTRACTOR FURNISHED, CITY RETAINED)

- 1.0 Description.** All solar powered changeable message signs, hereinafter referred to as a CMS, shall be in accordance with these specifications.
- 2.0 Material.** Each CMS shall consist of an all LED (light emitting diode) matrix message board, solar/battery power supply and a user-operated interface, as specified, all mounted on a heavy duty, towable trailer.
 - 2.1** Each CMS shall be either Full Matrix or Character Matrix, and have the following minimum characteristics:
 - (a) Full Matrix - Each CMS shall be the Full Matrix type with the capability of providing one, two, and three lines of individual changeable characters with minimum heights of 52 (1300), 28 (700), and 18 (450) inches (mm), respectively. Full Matrix signs shall be capable of both static and dynamic graphics, and full display sized messages.
 - (b) Character Matrix (Three Line) – Each CMS shall consist of a minimum of three lines containing eight individual changeable characters per line. Each character shall be a minimum of 12 inches wide and 18 inches (450 mm) high.
 - (c) Sign firmware shall comply with the current FHWA and DOT (Department of Transportation) NTCIP standards and support all NTCIP mandatory objects.
 - (d) Physical access to the onboard computer shall be protected by a padlock or other locking handle mechanism. Electronic access to the onboard computer shall be protected by a username and password.

2.2 Full matrix CMS and character matrix CMS shall meet the following:

- (a) The overall sign dimensions shall not be less than 72 inches (1800 mm) high x 126 inches (3150 mm) wide.
- (b) The CMS shall be legible up to a distance of 650 feet (200 m) for both day and night operations and shall be visible for ½-mile (800 m) with 18 inch (450 mm) characters.
- (c) When fully raised in the display position, the bottom of the CMS board shall be at least a height of 7 feet (2100 mm) from the ground and shall be able to rotate a complete 360 degrees atop the lift mechanism. A sight tube, used to aim the CMS board to oncoming traffic, shall be installed on the CMS board or mast. The CMS shall have an electrical-hydraulic lifting mechanism that includes a manual lifting and lowering relief mechanism as a backup. It also must be able to be locked into various viewing angles as determined best for the motorists by the CMS operator.
- (d) All LED displays and control circuitry shall be operational from -20 F (-29 C) to 120 F (50 C). The LED's shall have a rated life of 100,000 hours. The LED's shall be ITE amber in color on a flat black background.
- (e) The CMS face shall be constructed that if an individual panel or pixel fails the rest of the face shall continue to display the message.
- (f) The unit shall be able to withstand a 65-mph (105-kmph) maximum road wind speed. The trailer shall be able to support the fully extended CMS board in an 80-mph (130-kmph) wind load.
- (g) Solar charging system shall allow for total autonomy of 24/7/365 continuous operation.
- (h) All exterior surfaces except the sign face shall be cleaned, primed, and finished with two coats of Highway Safety Orange and the sign interior itself shall be cleaned and finished with one coat of corrosion inhibiting primer and two coats of flat black. The sign face shall be covered with a rigid translucent material to prevent damage to the sign face caused by the environment.

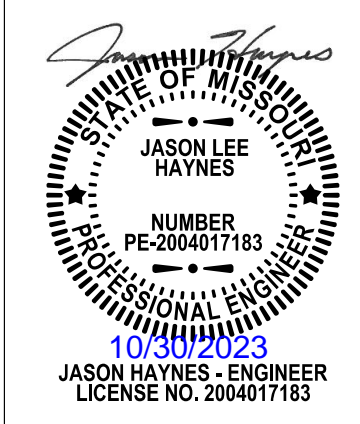
3.0 Construction Requirements. Prior to placing a CMS on a project, the engineer shall verify proposed CMS location is void of conflict with another DMS or CMS locations presently established. If a conflict is present, the engineer shall contact the Belton Public Works Department (Ryan Haupt) at 816-892-1267 to mitigate. The engineer and contractor shall verify the message displayed on board is compliant with CMS messaging policies. The contractor shall place the CMS 6 feet [2 meters] off of the right edge of shoulder at the location shown on the plans or as directed by the engineer. The CMS shall be placed so that the right side of the unit is advanced approximately 3 degrees ahead with the direction of traffic. CMS shall not be located in medians. CMS shall be delineated with a minimum of five non-metallic channelizing devices. Installation, including location and placement, shall be approved by the engineer. If needed, the contractor shall relocate the CMS as directed by the engineer.

City of Belton, MO

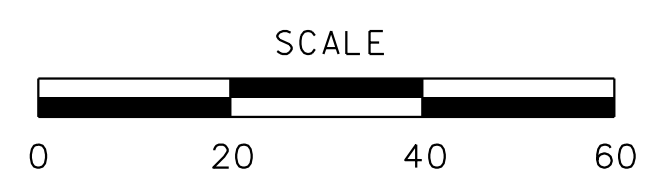
3.1 When not in use, the CMS shall be stored no closer than 30 feet [10 meters] to the edge of pavement carrying traffic, unless it is in a properly protected area or an off-site storage area or as otherwise directed by the engineer.

4.0 Basis of Payment. All expenses incurred by the contractor in integrating, maintaining, relocating, operating and protecting the changeable message signs as outlined above shall be paid for at the contract unit price for Item 616-99.02, MISC., NTCIP CHANGEABLE MESSAGE SIGN (CONTRACTOR FURNISHED, CITY RETAINED) per each.

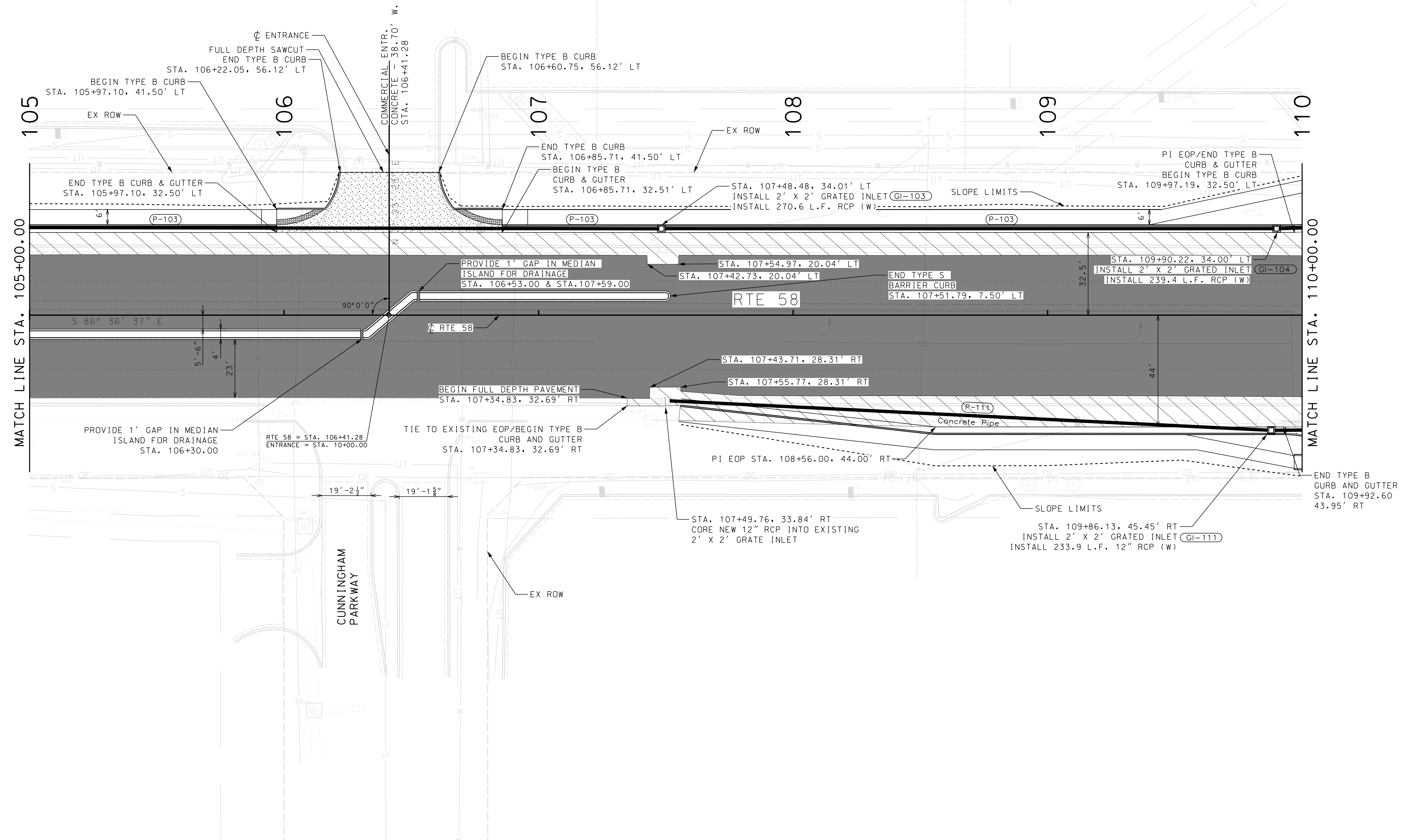
4.1 Cost for channelizers shall be included in the contract unit price for CMS.



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- FULL DEPTH PAVEMENT
- MILL AND OVERLAY
- PAVED APPROACH
- SEAL PARKING LOT



DATE PREPARED		10/30/2023	
ROUTE	STATE	58	MO
DISTRICT	SHEET NO.	KC	19
COUNTY			
CASS			
JOB NO.			
J4S3483			
CONTRACT ID.			
PROJECT NO.			
BRIDGE NO.			

DATE	DESCRIPTION

CITY OF BELTON
 PUBLIC WORKS DEPARTMENT

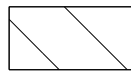



506 MAIN STREET
 BELTON, MO 64012
 1-816-331-4331

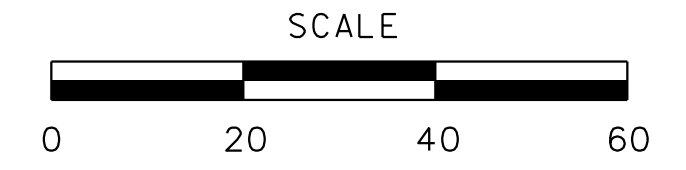
PREPARED BY:
HDR
 HDR ENGINEERING, INC.
 10450 HOLMES ROAD
 SUITE 800
 KANSAS CITY, MO 64131
 816-360-2700
 CDR: JCA/056
 AUTHORITY: 000686

PLAN
 RTE 58

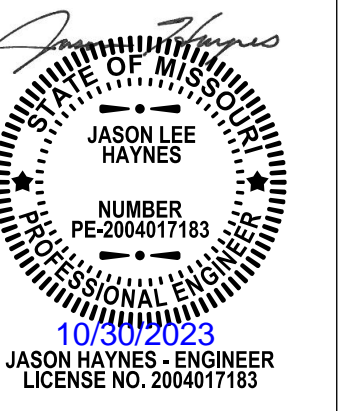
SHEET 2 OF 12

CURVE RTE58_3
 PI 112+09.13
 PC 110+68.85
 PT 113+49.38
 Δ 1° 36' 26.3" (LT)
 D 0° 34' 22.6"
 L 280.53'
 T 140.27'
 R 10,000.00'

-  FULL DEPTH PAVEMENT
-  MILL AND OVERLAY
-  PAVED APPROACH
-  SEAL PARKING LOT



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DATE PREPARED 10/30/2023
 ROUTE 58 STATE MO
 DISTRICT KC SHEET NO. 20
 COUNTY CASS
 JOB NO. J4S3483
 CONTRACT ID.

PROJECT NO.
 BRIDGE NO.

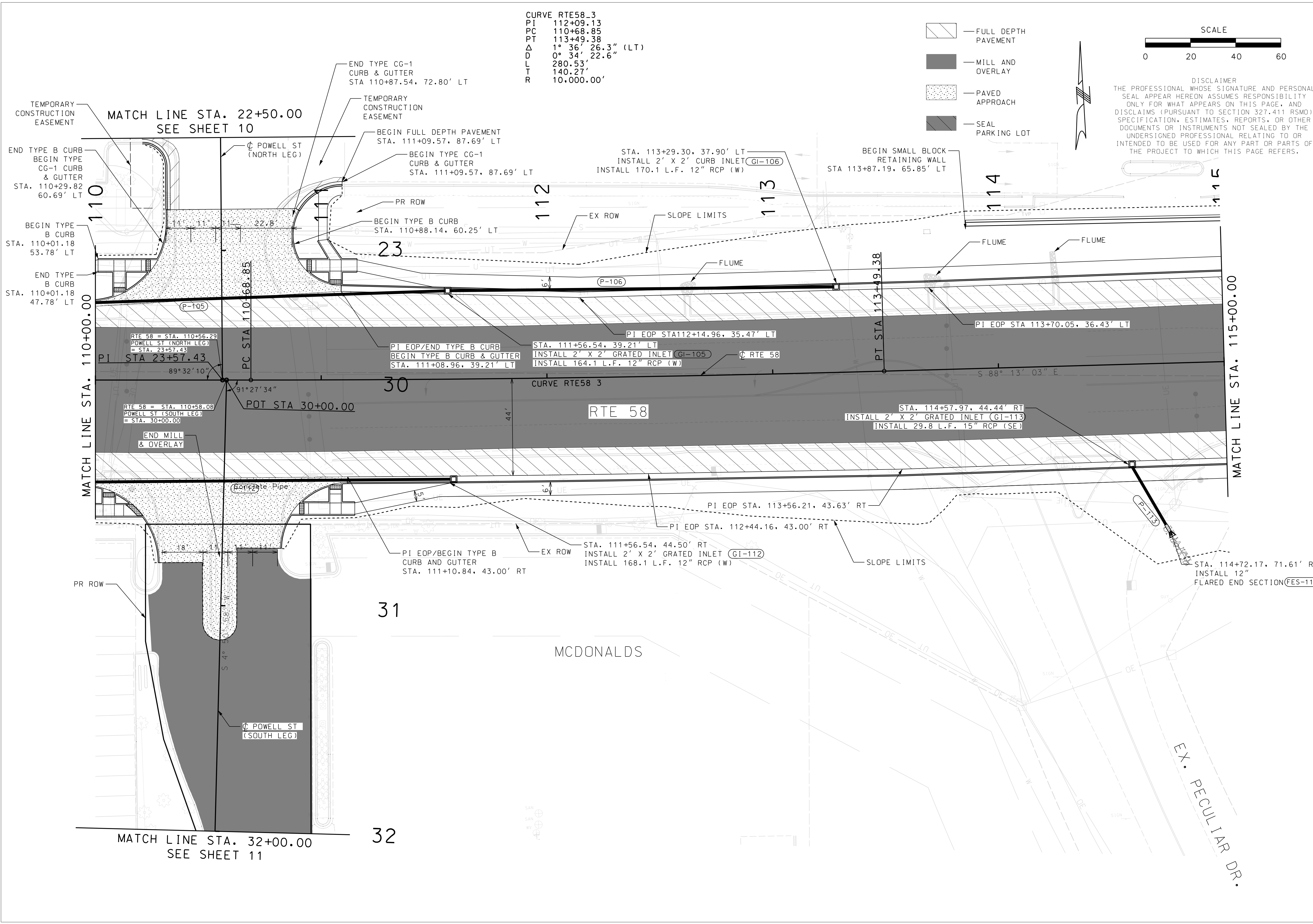
DATE	DESCRIPTION

CITY OF BELTON
 PUBLIC WORKS DEPARTMENT
 506 MAIN STREET
 BELTON, MO 64012
 1-816-331-4331



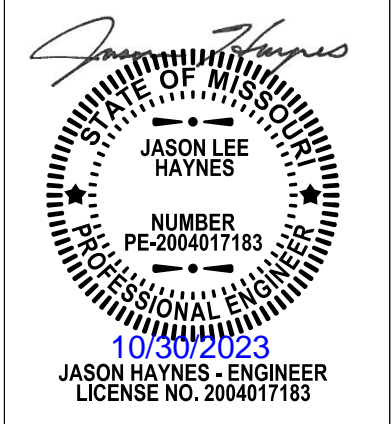
PREPARED BY:
HR
 HDR ENGINEERING, INC.
 10450 HOLMES ROAD
 SUITE 800
 KANSAS CITY, MO 64131
 816-380-2700
 OFFICE AUTHORITY: 000866

PLAN RTE 58
 SHEET 3 OF 12



MATCH LINE STA. 110+00.00

MATCH LINE STA. 115+00.00



DATE PREPARED
10/31/2023

ROUTE 58 STATE MO
DISTRICT KC SHEET NO. 46

COUNTY CASS
JOB NO. J4S3483
CONTRACT ID.

PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

CITY OF BELTON
PUBLIC WORKS DEPARTMENT

506 MAIN STREET
BELTON, MO 64012
1-816-331-4331



PREPARED BY:
FR
HDR ENGINEERING, INC.
10450 HOLMES ROAD
SUITE 800
KANSAS CITY, MO 64131
816-360-2700
OFFICE
AUTHORITY: 000866

SIGNAL PLAN

SHEET 1 OF 7

TRAFFIC SIGNALS LEGEND

	CONTROLLER WITH PAD		CONDUIT MEDIAN
	CONTROLLER (EXISTING)		CONDUIT PUSHED
	JUNCTION BOX		CONDUIT BRIDGE
	POWER SOURCE		CONDUIT EXISTING
	POWER SUPPLY		CONDUIT TRENCHED
	SIGNAL HEAD (PEDESTRIAN)		SPAN WIRE
	SIGNAL HEAD (STANDARD)		MAST ARM WITH SIGNAL HEADS AND LED - A LUMINAIRE
	VIDEO DETECTOR		TYPE A BASE
	PUSH BUTTON DETECTOR		TYPE F BASE
	PREFORMED PULL BOX TYPE 1		TYPE C BASE
	PREFORMED PULL BOX TYPE 2		CCTV CAMERA
	DETECTION ZONE		

SIGNAL HEAD LEGEND

11 31 21 22 23 24 25 51 71 41 42 43 44 45 61 62 63 64 65 81 82 83 84

SIGN LEGEND

