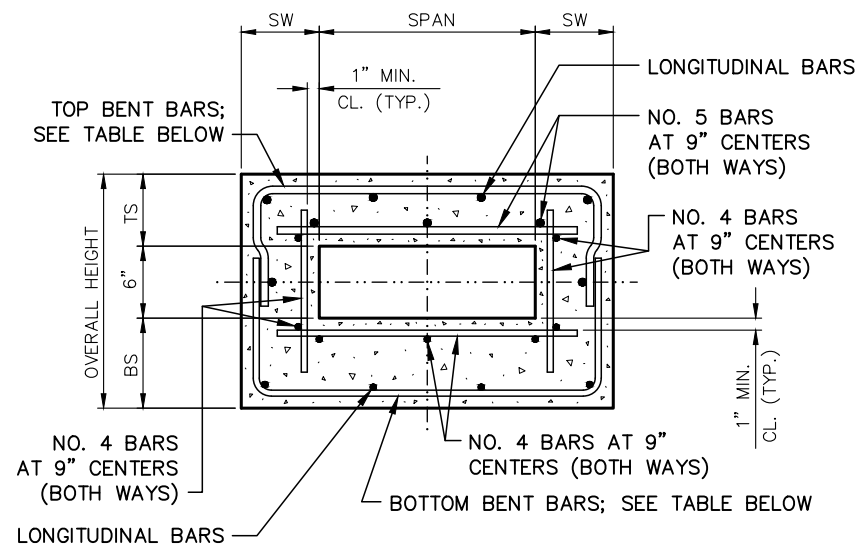


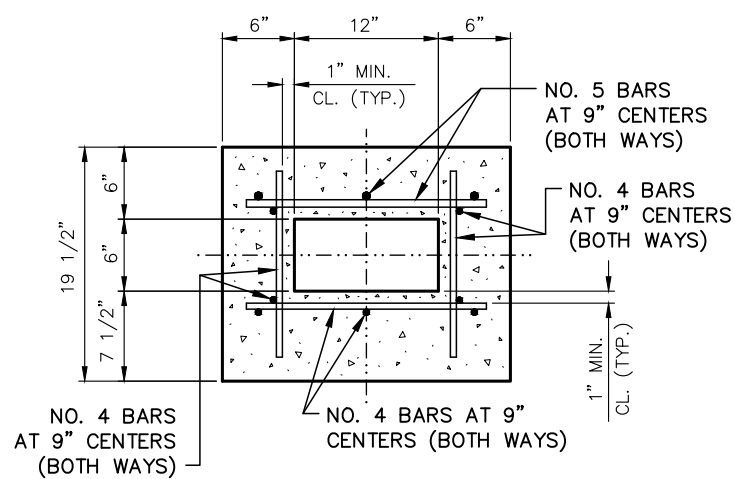
18 January 2022 MONOCHROME.CTB 1:1 KIPPER, BRIAN \\W63-TRITON\PLANNING\DESIGN DRAFTING\KCMO\STANDARD & SPEC DRAWINGS\STORMWATER\STORMINLET-GRATEDDETAILS\SDC.DWG



SECTION A - A

**ADDITIONAL REINFORCED SHALLOW CULVERT - SECTION VIEW**

SCALE: 3/4" = 1' - 0"

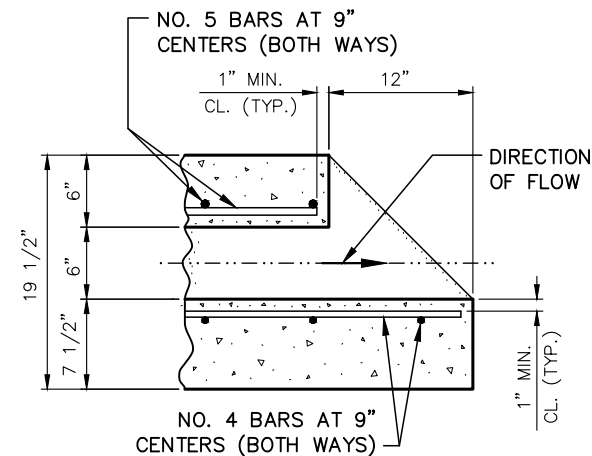


SECTION A - A

**SHALLOW DRIVE CULVERT - SECTION VIEW**

SCALE: 3/4" = 1' - 0"

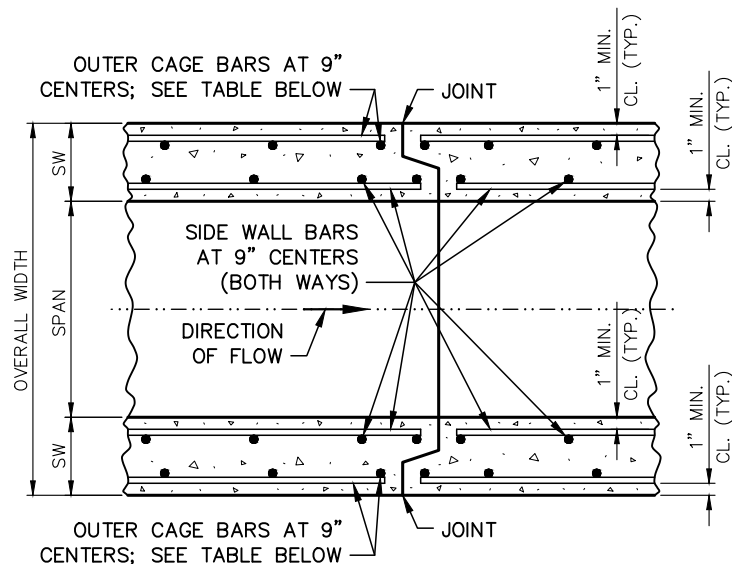
**END OF SHALLOW DRIVE CULVERT - PROFILE VIEW**



SCALE: 3/4" = 1' - 0"

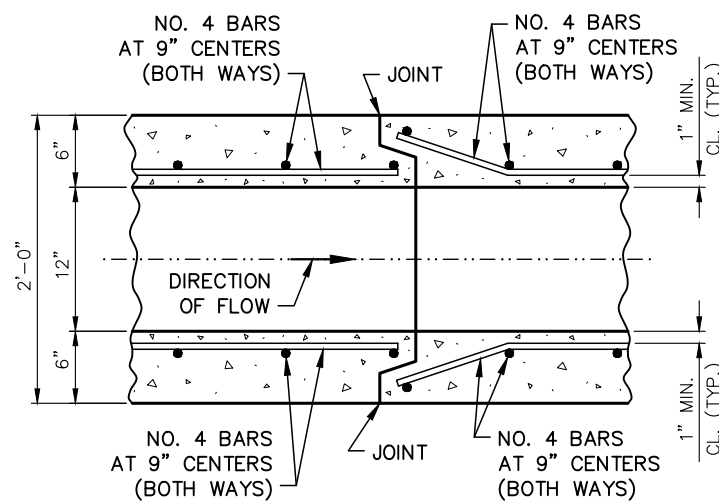
**NOTES:**

1. ALL WORK SHALL MEET THE REQUIREMENTS OF APWA-KCMO 2600.
2. LAP ALL LONGITUDINAL BARS 12" AT SPLICE.
3. BEVEL ALL EXPOSED EDGES AT CULVERT ENDS WITH 3/4" CHAMFER OR 1/2" TOOLED EDGE.
4. REINFORCING STEEL SHALL BE NEW BILLET, MINIMUM GRADE 60 AS PER ASTM A615, AND SHALL BE BENT COLD.
5. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BARS. 2" CLEARANCE SHALL BE PROVIDED THROUGHOUT UNLESS NOTED OTHERWISE. TOLERANCE OF +/- 1/8" SHALL BE PERMITTED.
6. BACKFILL BENEATH AND ON EITHER SIDE OF STRUCTURES SHALL BE CLASS II GRANULAR BACKFILL MATERIAL CONFORMING TO ASTM D2321.
7. THE STRUCTURE ELEVATION SHOWN ON THE PLANS IS THE TOP SURFACE OVER EACH END.
8. LENGTHS OVER 10 FEET SHALL HAVE MANUFACTURED JOINT AS SHOWN IN DETAIL.
9. ENDS OF STANDARD 10 FOOT CULVERTS OR OPPOSING ENDS OF LONGER CULVERTS SHALL BE SLOPED AS SHOWN.
10. ALL CULVERTS MUST BE PRECAST.
11. LAP ALL TOP BENT BARS AND BOTTOM BENT BARS 4" AT SPLICES.
12. ALL CONCRETE SHALL BE 4,000 PSI MINIMUM.
13. A 1/2" JOINT FILLER SHALL BE PLACED BETWEEN ADJOINING CONCRETE SURFACES AND CULVERT.



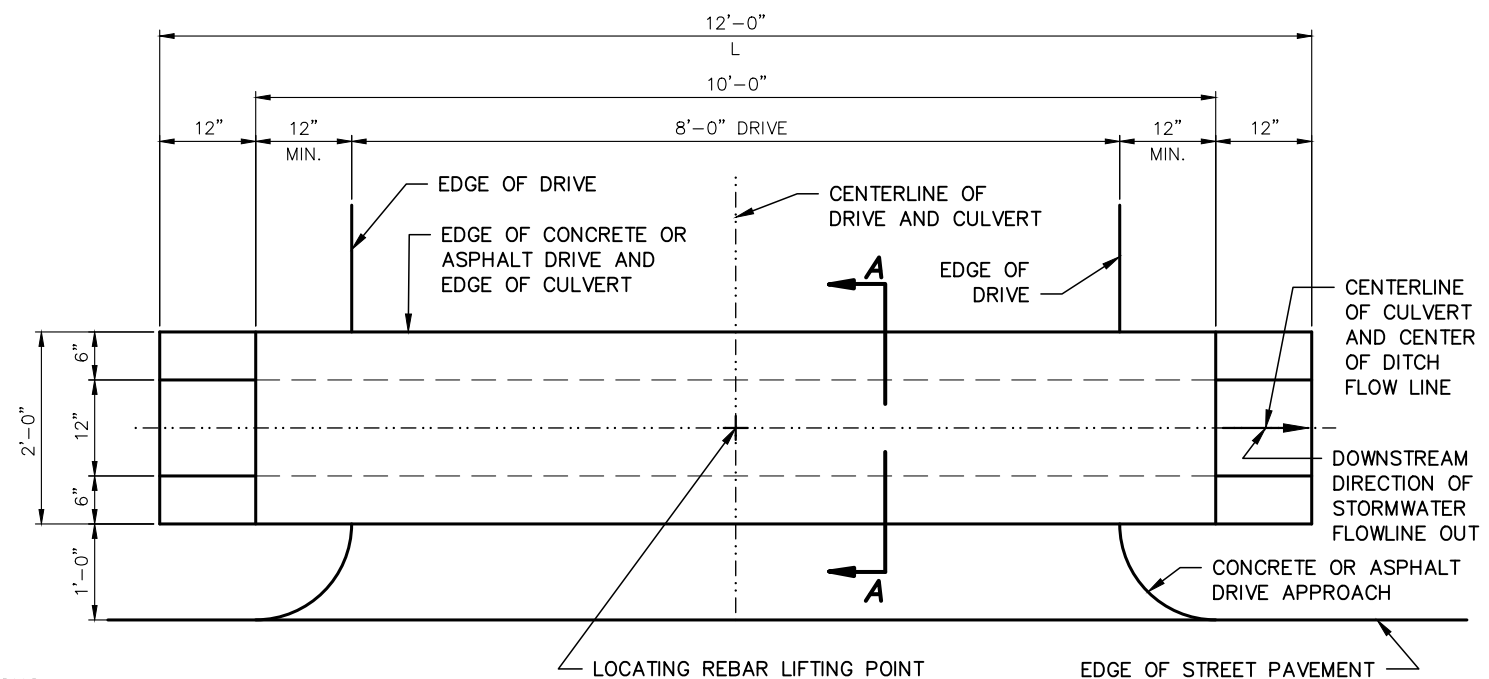
**ADDITIONAL REINFORCED JOINT DETAIL - PLAN VIEW**

SCALE: 3/4" = 1' - 0"



**JOINT DETAIL - PLAN VIEW**

SCALE: 3/4" = 1' - 0"



**SHALLOW DRIVE CULVERT - PLAN VIEW**

SCALE: 1/2" = 1' - 0"

DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES. ANY QUESTIONS REGARDING DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE CITY PRIOR TO CONSTRUCTION.

SPAN	SIDE WALLS (SW)	TOP SLAB (TS)	BOTTOM SLAB (BS)	REINFORCING				
				SIDE WALL BARS	TOP BARS	BOTTOM BARS	TOP BENT BARS	BOTTOM BENT BARS
12"	6"	6"	7 1/2"	# 4 @ 9"	# 5 @ 9"	# 4 @ 9"	N/A	N/A
18"	6 1/2"	6"	7 1/2"	# 4 @ 9"	# 5 @ 9"	# 4 @ 9"	# 5 @ 9"	# 4 @ 9"
24"	6 1/2"	6"	7 1/2"	# 4 @ 9"	# 5 @ 9"	# 4 @ 9"	# 5 @ 9"	# 4 @ 9"
30"	6 1/2"	6 1/2"	7 1/2"	# 4 @ 9"	# 5 @ 9"	# 4 @ 9"	# 5 @ 9"	# 4 @ 9"
36"	6 1/2"	6 1/2"	7 1/2"	# 4 @ 9"	# 5 @ 9"	# 4 @ 9"	# 5 @ 9"	# 4 @ 9"

NOTE:  
 ALL LONGITUDINAL BARS SHALL BE # 4 BARS AT 9" CENTERS.  
 ALL TOP BENT AND BOTTOM BENT BAR LENGTHS SHALL BE CALCULATED AS SHOWN ON PLANS.  
 ALL REBARS SHALL MAINTAIN A MINIMUM OF 1" CLEARANCE FROM EDGES.

NO.	DATE	BY	NATURE
REVISIONS			

**SHALLOW DRIVE CULVERT DETAILS**

WATER SERVICES  
 CITY OF KANSAS CITY, MISSOURI

DEVELOPED BY:  
 STORMWATER STANDARDS

DRAWING NO. **SDC**

APPROVED BY:  
 DATE: 1/18/2022