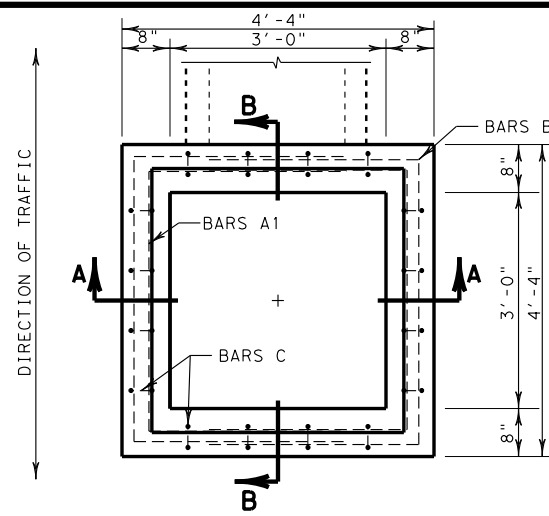


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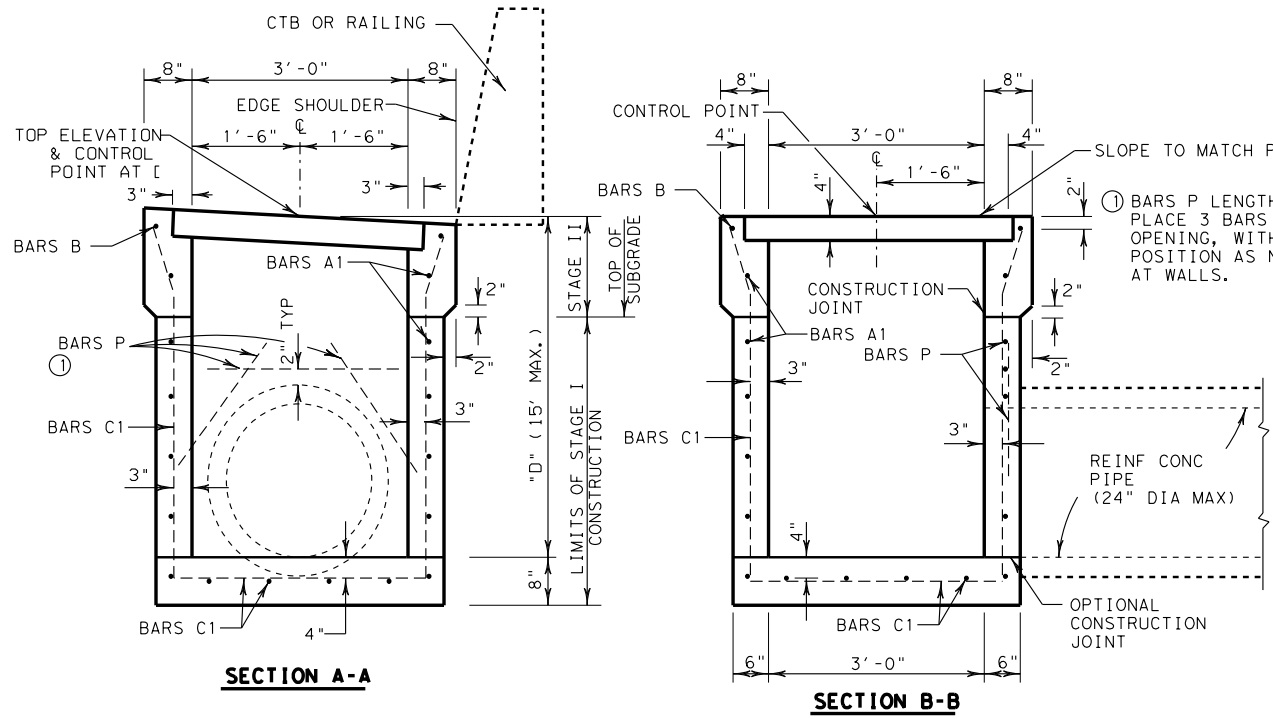
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PLAN VIEW

N. T. S.

TYPE FG INLET (FREE-STANDING) BILL OF REINFORCING STEEL										
BAR	SIZE	SPACING (IN)	"D" = 4.00'		"D" = 15.00'		"D" = 30.00'			
			NO.	WT (LBS)	NO.	WT (LBS)	NO.	WT (LBS)		
A1	#4	10	10	9,167	36	9,167	36	9,167	220	
A2	#5	12	0	9,625	0	9,625	0	9,625	301	
B	#4	10	2	9,750	13	9,750	13	9,750	13	
C1	#4	12	8	11,917	64	33,917	181	0	0	
C2	#5	10	0	11,500	0	33,500	0	16	33,000	
SUMMARY OF QUANTITIES			TOTAL REINFORCING STEEL (LBS)		415		1085			
			CLASS "C" CONCRETE (CY)		4.44		9.87			
ADJUSTMENT FOR DEPTHS OTHER THAN THOSE SHOWN ABOVE										
FOR "D" = 4' TO 15'					FOR "D" = 15' TO 30'					
REINFORCING STEEL (LBS)					REINFORCING STEEL (LBS)					534 + 37 #/LF
CLASS "C" CONCRETE (CY)					CLASS "C" CONCRETE (CY)					4.50 + 0.36 CY/LF



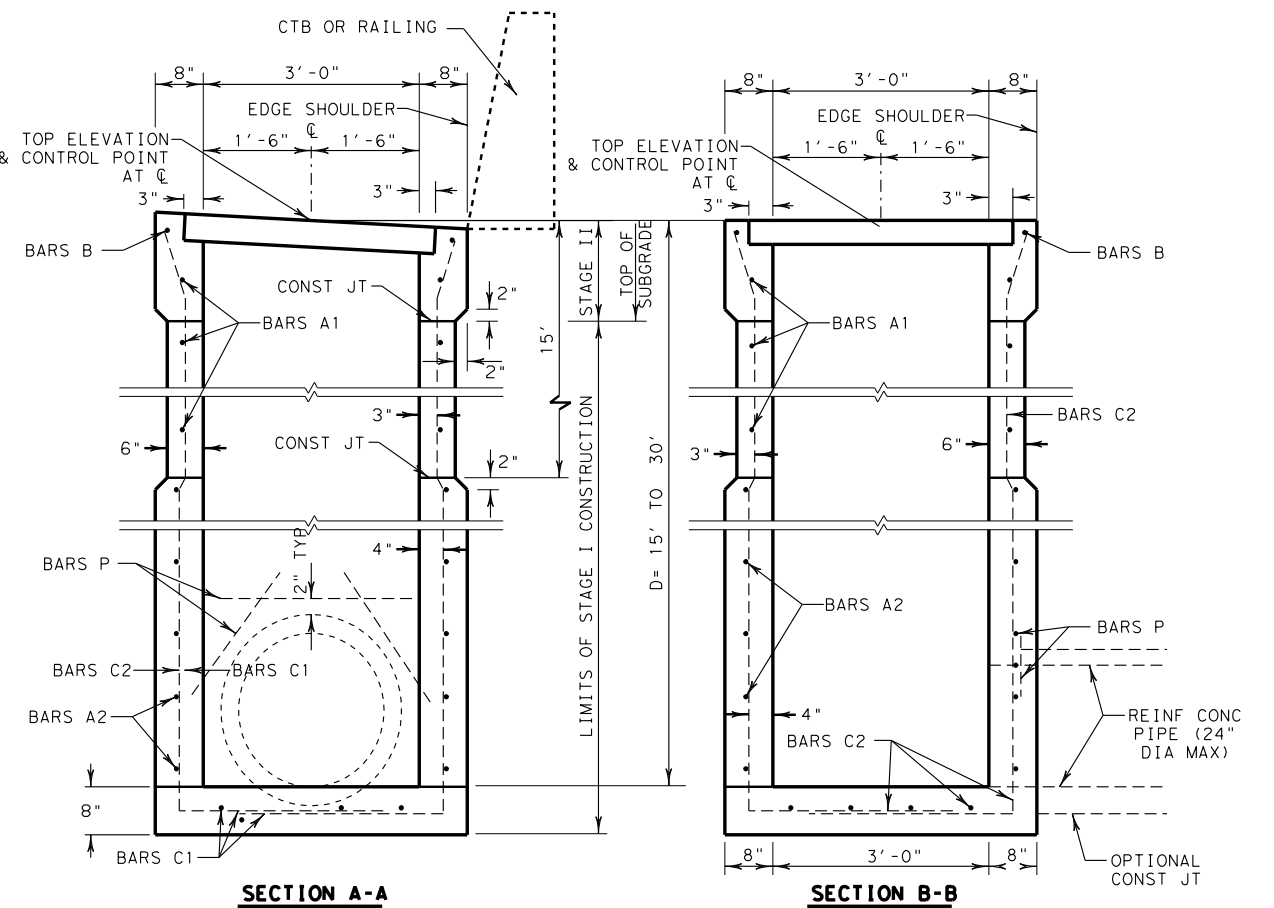
SECTION A-A

SECTION B-B

TYPE FG INLET (FREE-STANDING)

MAXIMUM PIPE SIZE - 24" DIAMETER
 (D < 15')
 N.T.S.

① BARS P LENGTH = PIPE O.D. + 0'-9"
 PLACE 3 BARS P AS SHOWN AT EACH PIPE OPENING, WITH 2" CLEAR COVER OVER PIPE. POSITION AS NEEDED TO PROVIDE 2" CLEAR AT WALLS.



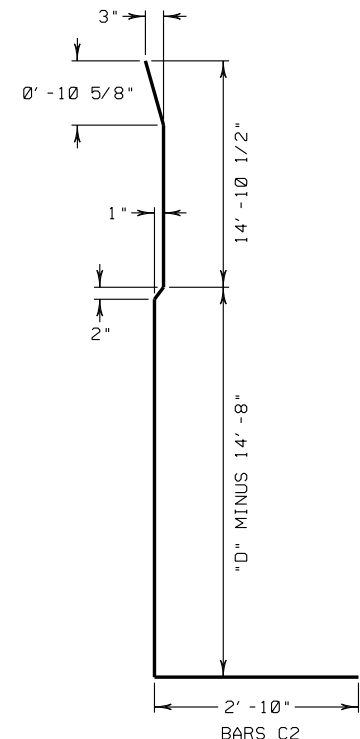
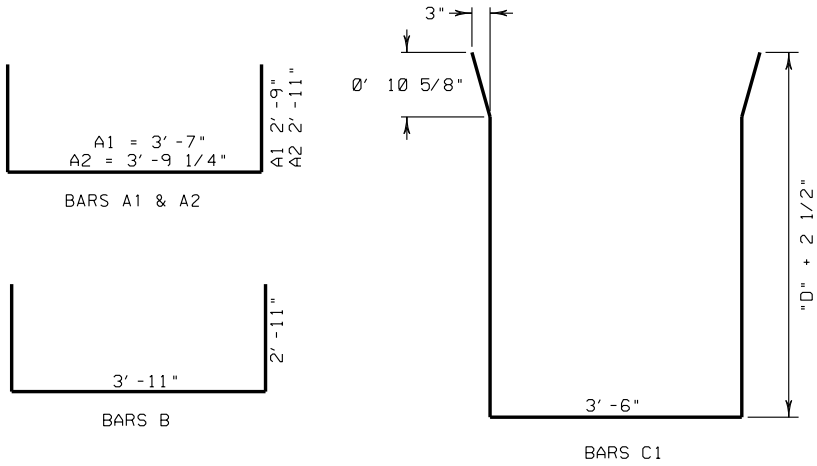
SECTION A-A

SECTION B-B

TYPE FG INLET (FREE-STANDING)

MAXIMUM PIPE SIZE - 24" DIAMETER
 (D = 15' TO 30')
 N.T.S.

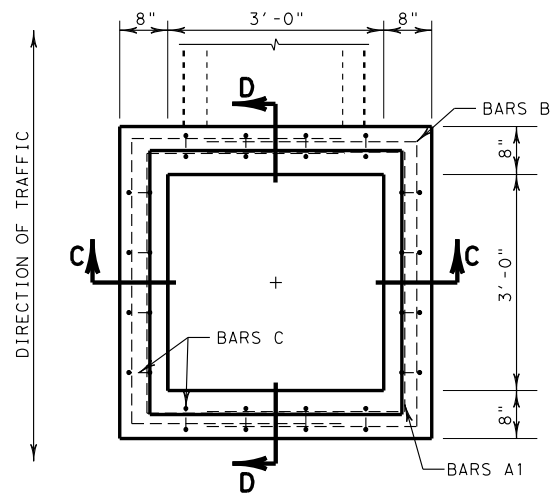
NOTE:
 SEE SHEET 2 OF 2 FOR GENERAL NOTES



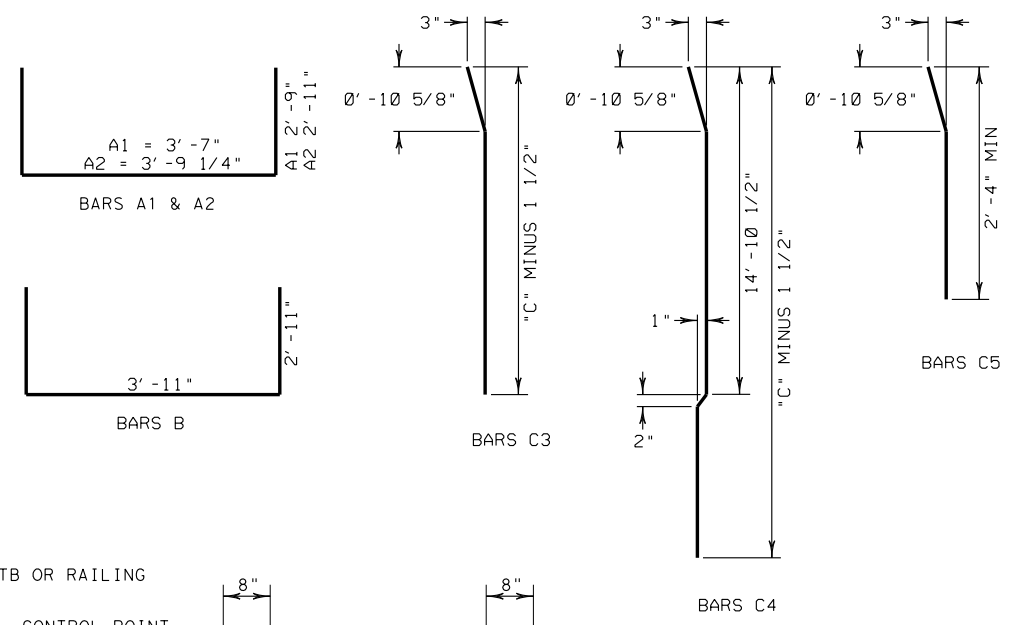
		Fort Worth District Standard	
<h2>GRATED INLET FOR PAVED SURFACES</h2> <h3>TYPE FG</h3> <h3>I-FG (FTW)</h3>			
ORIGINAL DRAWING: 05/2019	ifg-ftw.dgn	PROJECT NO.	
DATE	REVISIONS	STATE	STATE DIST. NO.
05/2019	REPLACES G1-1-02(FW)	TEXAS	FTW
09/2020	REVISED TITLE BLOCK TO INDICATE APPLICATION		
11/2020	REVISE JOINT NOMENCLATURE	CONT.	SECT.
07/2022	REVISE NOTES AND ADD DETAILS FOR USE WITH PRECAST BASE AND RISER	JOB	HIGHWAY NO.

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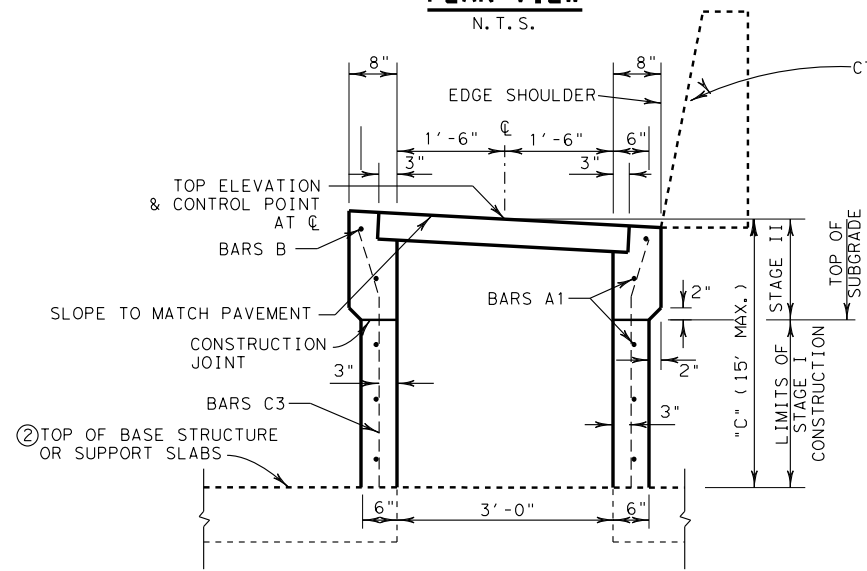
https://www.dot.state.tx.us/ftw/specinfo/standard.htm
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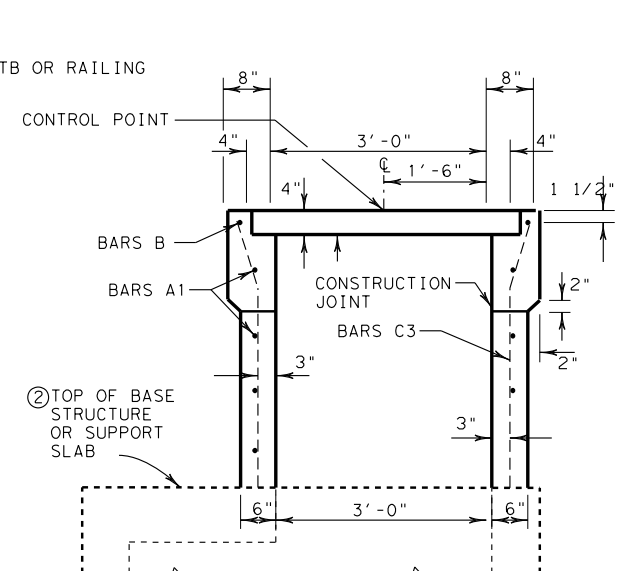
PLAN VIEW
N. T. S.



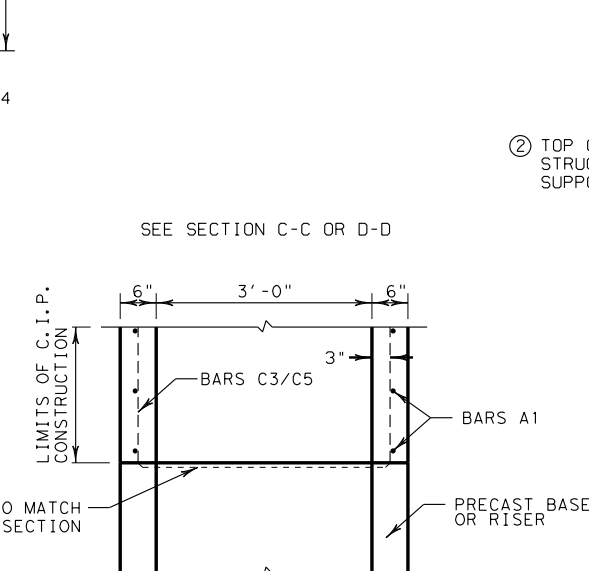
TYPE FG INLET (RISER ONLY) BILL OF REINFORCING STEEL														
BAR	SIZE	SPACING (IN)	1.5'		"D" = 15.00'		"D" = 30.00'							
			NO.	LENGTH (FT)	WT (LBS)	NO.	LENGTH (FT)	WT (LBS)	NO.	LENGTH (FT)	WT (LBS)	NO.	LENGTH (FT)	WT (LBS)
A1	#4	10	2	9.167	12	36	9.167	220	36	9.167	220			
A2	#5	12	0	0.000	0	0	0.000	0	30	9.625	301			
B	#4	-	2	9.750	13	2	9.750	13	2	9.750	13			
C3	#4	10	16	1.125	12	16	14.875	159	0	0.000	0			
C4	#5	12			0			0	16	29.875	499			
SUMMARY OF QUANTITIES														
TOTAL REINFORCING STEEL (LBS)					37		392				1033			
CLASS "C" CONCRETE (CY)					0.54		4.04				9.47			
ADJUSTMENT FOR DEPTHS OTHER THAN THOSE SHOWN ABOVE														
FOR "D" = 1.5' TO 15'							FOR "D" = 15' TO 30'							
REINFORCING STEEL (LBS)					37 + 26 #/LF		REINFORCING STEEL (LBS)					482 + 37 #/LF		
CLASS "C" CONCRETE (CY)					.54 + 0.26 CY/LF		CLASS "C" CONCRETE (CY)					4.04 + 0.36 CY/LF		



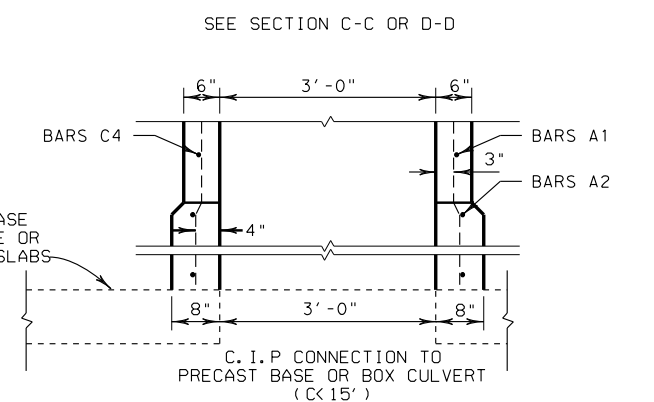
SECTION C-C



SECTION D-D



CONNECTION TO PRECAST BASE OR RISER (< 15')



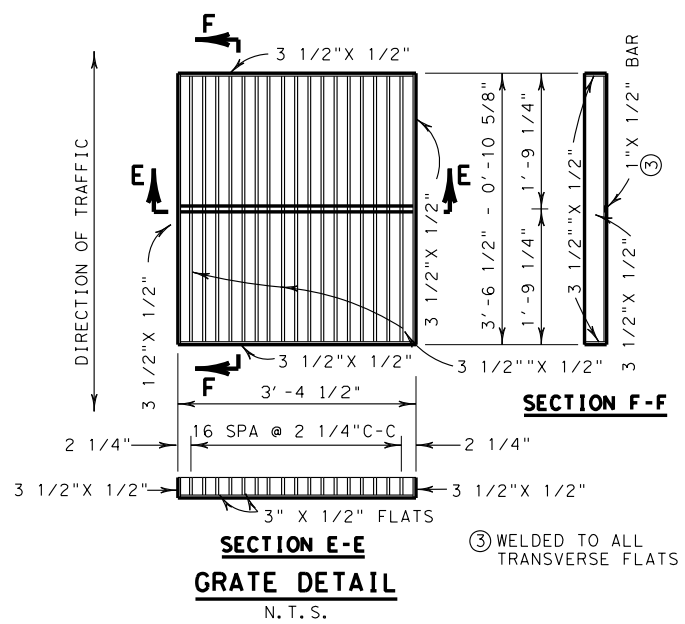
CONNECTION TO PRECAST BASE OR BOX CULVERT (< 15')

TYPE FG INLET D<15' (RISER ONLY)
N. T. S.
FOR USE WITH BASE STRUCTURE OR BOX CULVERT
DO NOT USE WITH BOX CULVERT SPAN LESS THAN 4'

② SEE STANDARD MI-CBC (FTW) FOR CONNECTION TO BOX CULVERT AND SUPPORT SLAB DETAILS
 SEE STANDARD MI-B&R (FTW) FOR CONNECTION TO BASE STRUCTURE

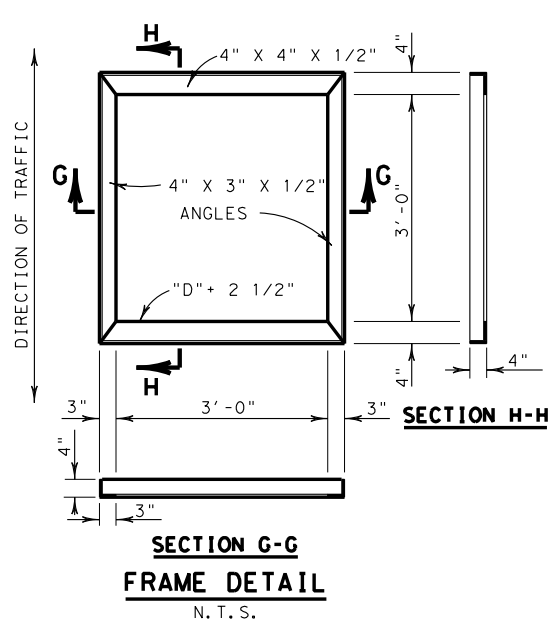
GENERAL NOTES

- INLET (INCLUDING GRATE) DESIGNED FOR AASHTO LRFD HL 93 LOADING.
- STAGE I MAY BE EITHER CAST-IN-PLACE OR PRECAST. FABRICATE PRECAST RISER IN ACCORDANCE WITH STANDARD MI-B&R (FTW), EXCEPT THAT A MINIMUM 2' AT THE TOP OF STAGE I IS TO BE FABRICATED USING REBAR AS DETAILED HEREON. INCLUDE BARS C (C1-C4) WITH STAGE I, PROJECTING INTO STAGE II AS SHOWN. SUBMIT SEALED ENGINEERING CALCULATIONS AND DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.
- STAGE II SHALL BE CAST-IN-PLACE. CONSTRUCT TOP TO CONFORM TO SLOPE OF SURFACE. STAGE II MAY BE CAST MONOLITHICALLY WITH CONCRETE PAVEMENT. IF NOT CAST MONOLITHICALLY, PLACE A SEALED 1/2" ISOLATION JOINT AROUND THE TOP OF THE INLET STRUCTURE, TO THE DEPTH OF CONCRETE PAVEMENT. USE CLASS 5 OR 8 JOINT SEALANT TO SEAL THE JOINT. SEE STANDARD JS (FTW) FOR ADDITIONAL INFORMATION.
- USE CLASS "C" CONCRETE FOR CAST-IN-PLACE STRUCTURES; USE CLASS "H" CONCRETE (MINIMUM 5000 PSI DESIGN STRENGTH) FOR PRECAST STRUCTURES.
- USE GRADE 60 STEEL FOR ALL REINFORCING.
- DIMENSIONS RELATING TO REINFORCING STEEL ARE TO THE CENTERS OF BARS.
- FIELD CUT AND BEND BARS AS NECESSARY TO ACCOMMODATE STORM DRAIN PIPE.
- FABRICATE FRAME AND GRATE FROM WELDED STEEL IN ACCORDANCE WITH ITEM 471.
- FOR CAST-IN-PLACE STRUCTURES, A CONSTRUCTION JOINT MAY BE PLACED AT EACH 5' (MIN) INCREMENT OF DEPTH.
- DO NOT USE INLET IN OR ADJACENT TO AREAS DESIGNATED FOR PEDESTRIAN OR BICYCLE ACCESS.
- FOR PIPE OR BOX CONNECTIONS TO PRECAST STRUCTURES, SEE STANDARD PBGC.
- MAXIMUM DEPTH "D" FOR CAST-IN-PLACE FREE-STANDING INLETS IS 30', WITH INCREASED WALL THICKNESS AND ADDITIONAL REINFORCEMENT FOR DEPTHS GREATER THAN 15', AS DETAILED. MAXIMUM DEPTH "D" FOR INLETS USING PRECAST UNITS IN STAGE I, OR "C" FOR RISERS ON BASE STRUCTURES, IS 25' TO THE TOP OF THE BASE SLAB, IN ACCORDANCE WITH STANDARD MI-B&R (FTW). DETERMINE QUANTITIES FOR DEPTHS OTHER THAN THOSE SHOWN HEREON BY INTERPOLATION.
- DO NOT COMMENCE WITH STAGE II CONSTRUCTION UNTIL PERMISSION IS GRANTED BY THE ENGINEER.
- INSTALL A TEMPORARY WOOD COVER AFTER STAGE I IS COMPLETED, TO REMAIN IN PLACE UNTIL STAGE II CONSTRUCTION BEGINS.
- THE LOCATION OF INLET AS SHOWN IN THE PLANS REFERS TO THE CONTROL POINT SHOWN HEREON AND DETAILED ON THE "DRAINAGE STRUCTURE CONTROL DATA" SHEET. FOR INLET RISERS LOCATED ON BASE STRUCTURE, LOCATE AND POSITION BASE AS DETAILED ON THE DRAINAGE STRUCTURE CONTROL DATA SHEET, OR AS DIRECTED. FOR INLETS LOCATED ON BOX CULVERT LESS THAN 4' SPAN, USE WITH BASE STRUCTURE.



SECTION E-E
GRATE DETAIL
N. T. S.

③ WELDED TO ALL TRANSVERSE FLATS



SECTION G-G
FRAME DETAIL
N. T. S.

		Fort Worth District Standard	
<h2>GRATED INLET FOR PAVED SURFACES</h2> <h3>TYPE FG</h3> <h3>I-FG (FTW)</h3>			
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