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**SUMMARY OF TESTING PERFORMED FOR NYOPLAST – PROJECT NO. 43239**

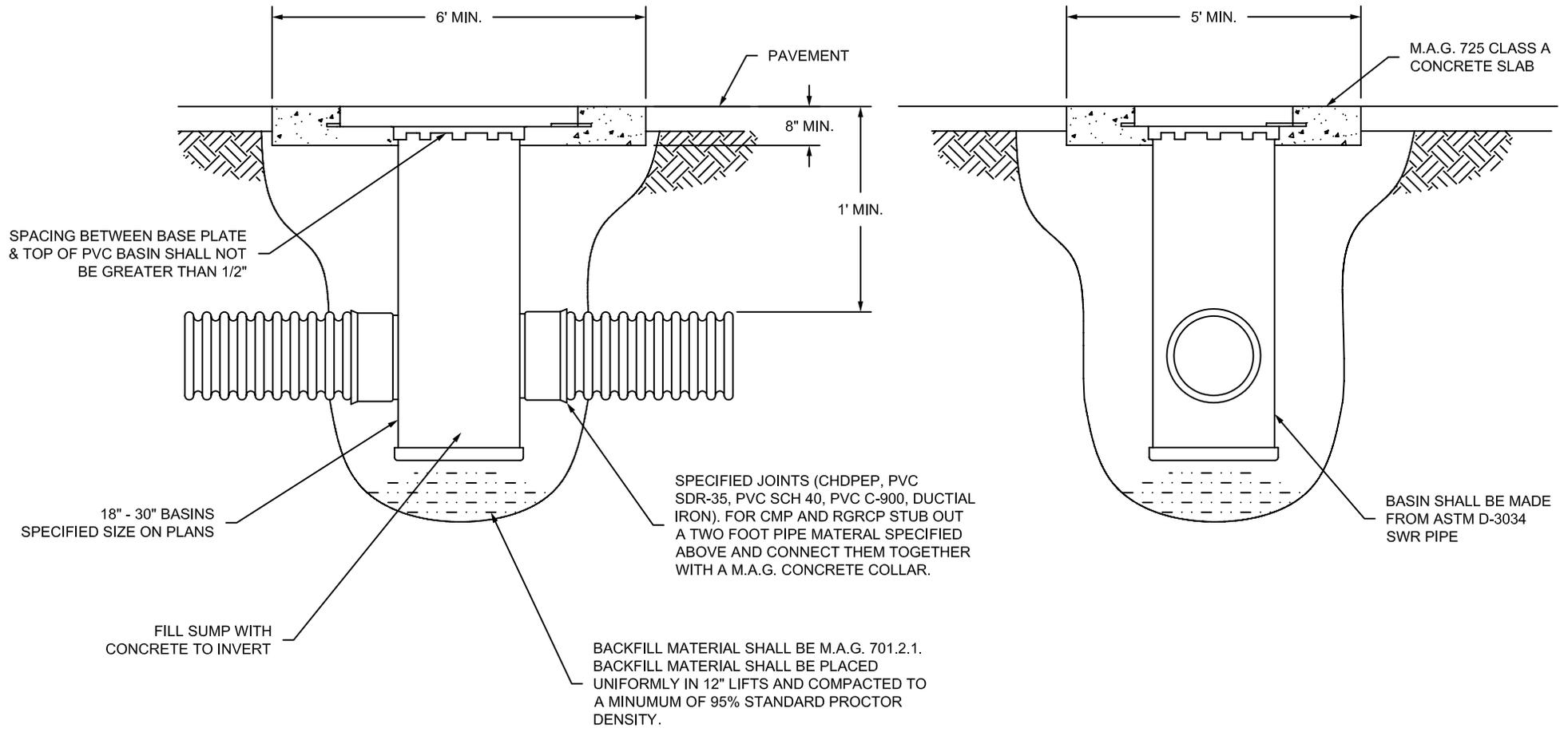
<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>FAILURE LOAD (LBF)</u>
<b>LTI Lab No. NAI001-03-04-07998</b>		
12" Standard Frame End Grate	1299CGS	102,500
15" Standard Frame End Grate	1599CGS	45,000
18" Standard Frame End Grate	1899CGS	40,000
24" Standard Frame End Grate	2499CGS	90,000
2 Ft. x 2 Ft. Road and Highway Frame and Grate	3299CGSQ	51,000
<b>LTI Lab No. NAI001-03-04-10230</b>		
30" Standard Frame and Grate	3099CGS	106,000
2' x 3' Road and Highway Frame and Grate	3299CGR	56,000
2' x 2' Curb Inlet Frame and Standard Grate	3099CGSQ	65,000
2' x 3' Curb Inlet Frame and Diagonal Grate	3099CGRDF	130,000
<b>LTI Lab No. NAI001-04-03-05637</b>		
6" Drop-In Grate	0601DI	12,000
8" Drop-In Grate	0801DI	17,500
10" Drop-In Grate	1001DI	12,500
12" Drop-In Grate	1201DI	33,000
15" Drop-In Grate	1501DI	27,000
18" Drop-In Grate	1801DI	66,000
24" Drop-In Grate	2401DI	46,000
12" Pedestrian Frame and Grate	1299CGP	38,000
15" Pedestrian Frame and Grate	1599CGP	50,000
18" Pedestrian Frame and Grate	1899CGP	21,000
24" Pedestrian Frame and Grate	2499CGP	44,000
2' x 2' Curb Inlet Frame and Diagonal Grate	3099CGSQDF	90,000
30" Standard Frame and Grate	3099CGS	62,500



Cert. #0117-01, 02, 03, 04



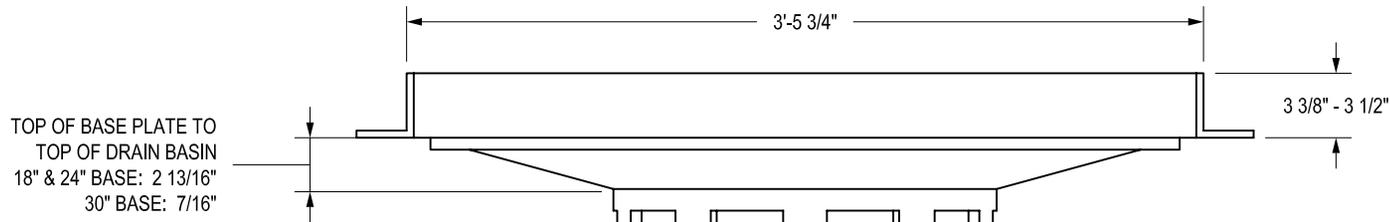
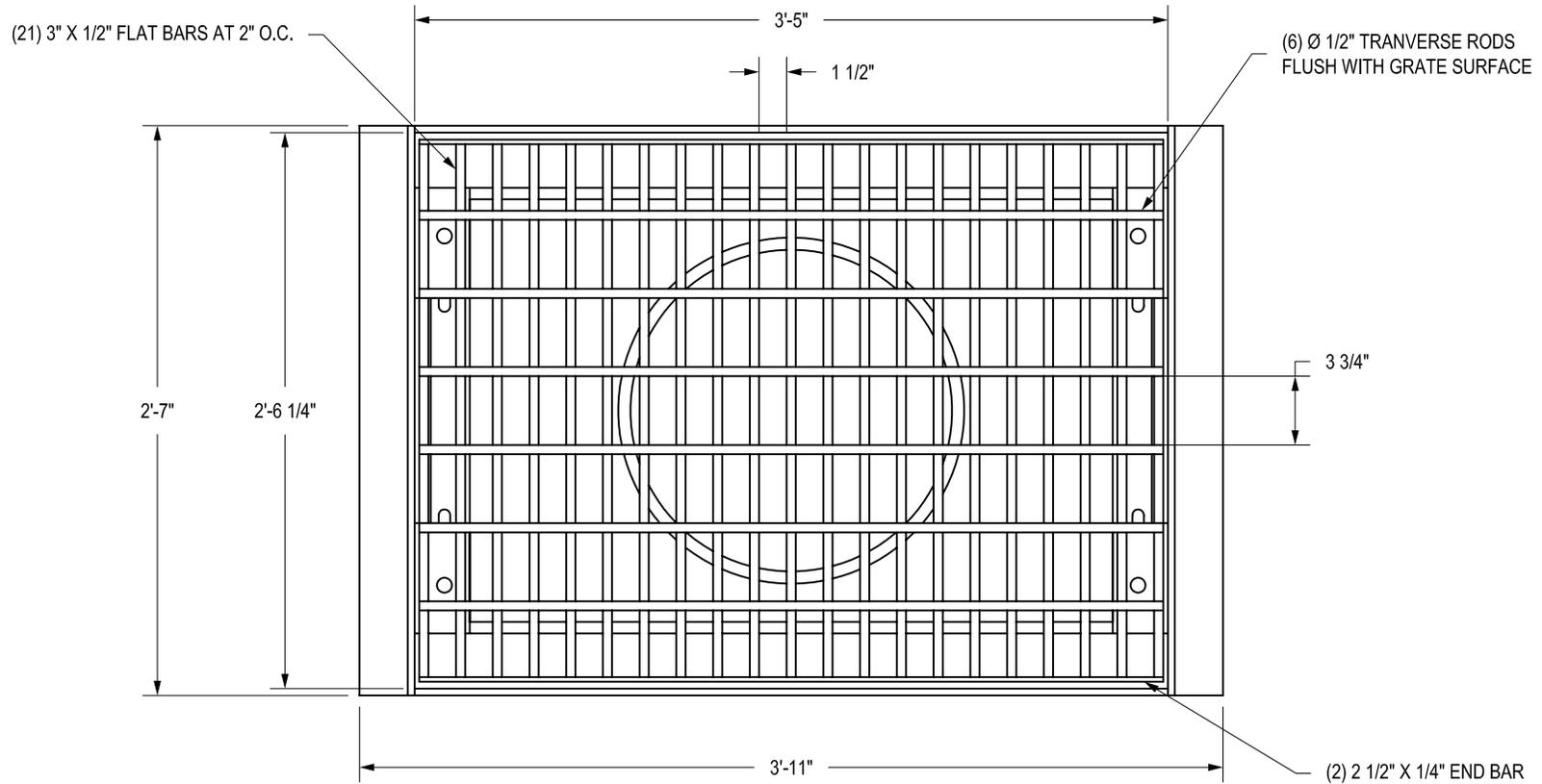
Materials Testing Laboratory  
NDT (PT, MT, RT, UT)



DETAIL NO.  
535-2

CATCH BASIN 'J'

REVISED  
DETAIL NO.  
535-2



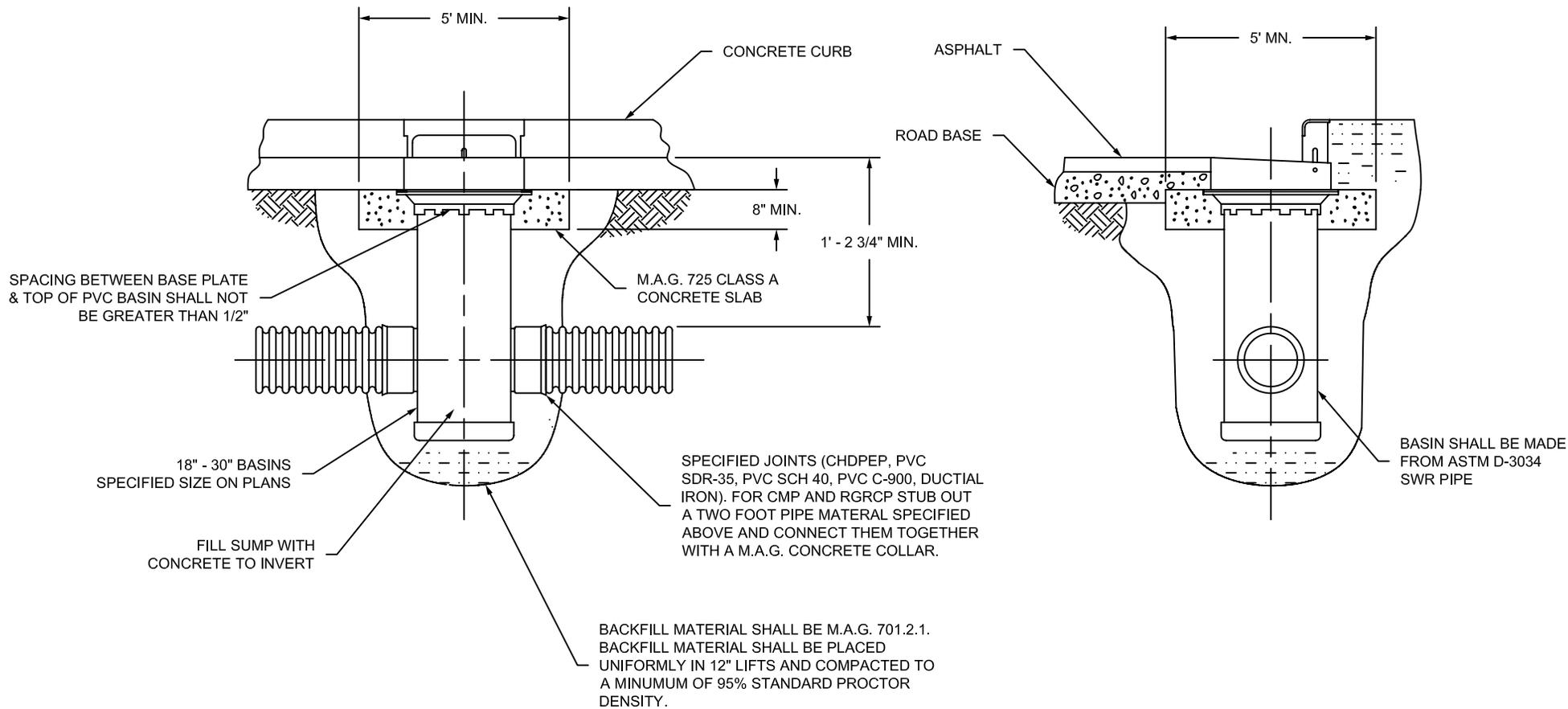
GRATE MEETS H-20 LOAD RATING.  
 QUALITY: FRAME & GRATE MATERIALS SHALL CONFORM TO ASTM  
 A-36 STEEL, BASE PLATE MATERIALS SHALL CONFORM TO ASTM A53  
 GRADE 70-50-05 DUCTILE IRON  
 ALL STRUCTURAL STEEL TO BE PAINTED ONE SHOP COAT OF NO.  
 1 PAINT AND TWO FIELD COATS OF NO. 10 PAINT AS PER SECT. 790  
 OR GALVANIZED. BASE PLATE ARE FURNISHED WITH BLACK ENAMEL  
 PAINT AND ZINC PLATED FASTENERS.  
 ALL WELDS ON FRAME AND SIDE BARS ON GRATE SHALL BE FULL  
 LENGTH OF JOINT.  
 APPROX. DRAIN AREA = 761.18 SQ IN.

DETAIL NO.  
535-3

GRATE FOR CATCH BASIN 'J'

REVISED

DETAIL NO.  
535-3

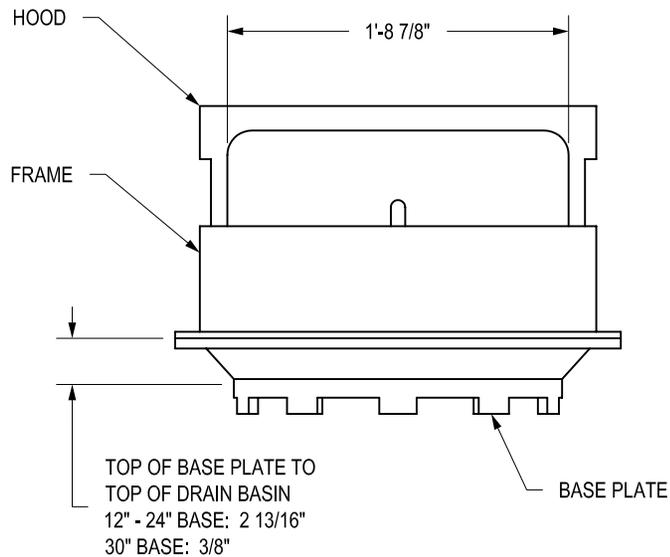
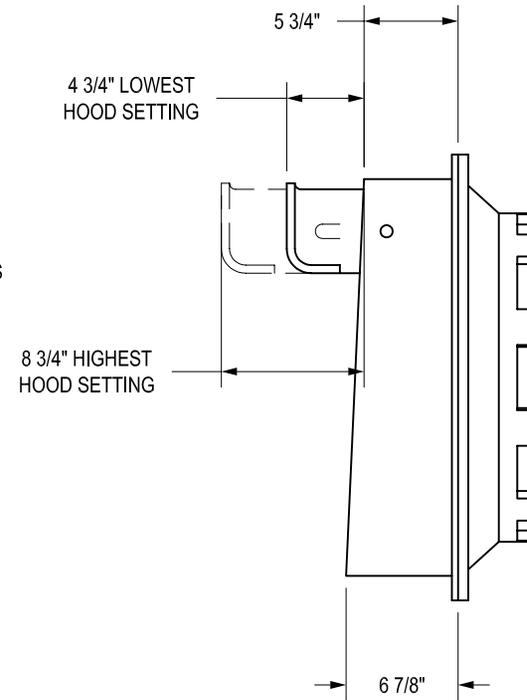
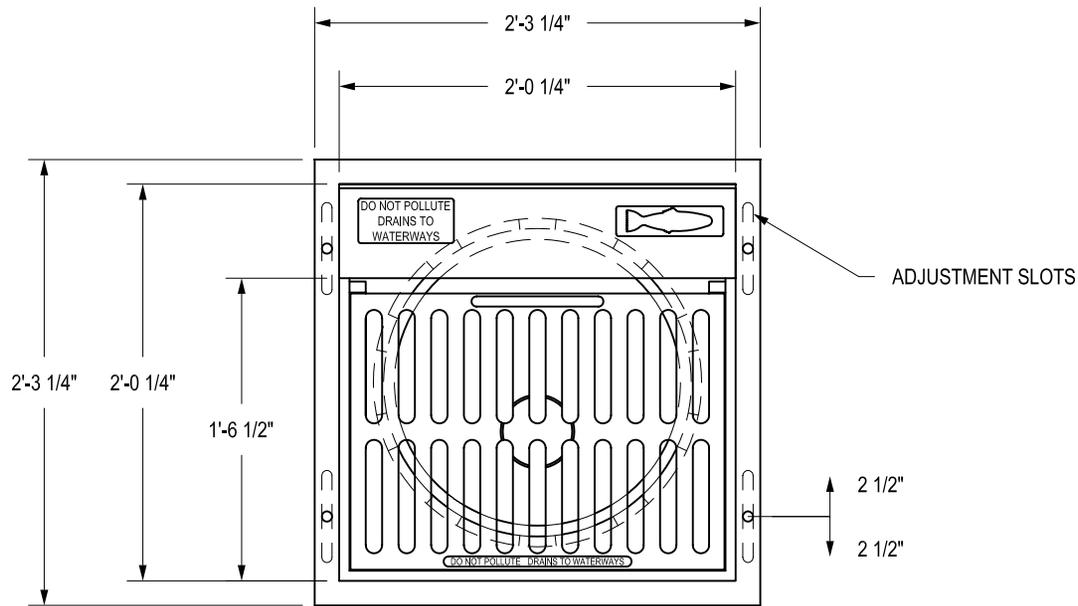


DETAIL NO.  
542-1

2' X 2' CURB INLET INSTALLATION DETAIL

REVISED

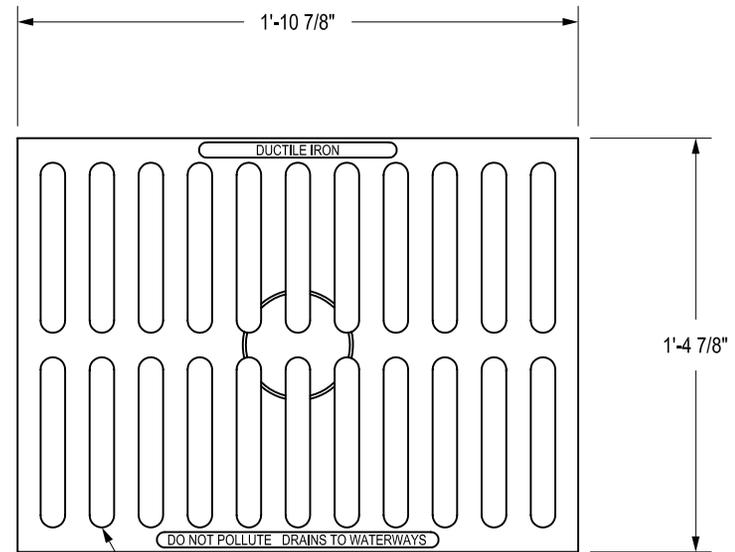
DETAIL NO.  
542-1



MATERIAL: DUCTILE IRON GRATE MEETING H-20 LOAD RATING & CONFORMING TO ASTM A536 GRADE 70-50-05  
 ALL CASTINGS ARE FURNISHED WITH BLACK ENAMEL PAINT AND ZINC PLATED FASTENERS  
 SLOPE OF GRATE SURFACE IS 5.2%  
 CURB INLET FRAME INSIDE VOLUME IS APPROX 1.76 CU FT

GRATE MEETS H-20 LOAD RATED  
MATERIAL: DUCTILE IRON SHALL CONFORM TO ASTM A536 GRADE 70-50-05.  
PAINT: CASTINGS ARE FURNISHED WITH A BLACK ENAMEL PAINT.

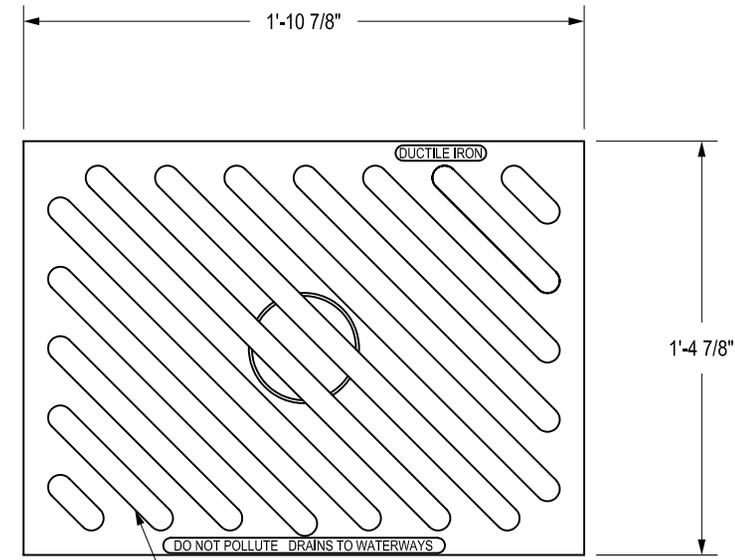
APPROX. DRAIN AREA OF GRATE = 146.18 SQ IN.  
APPROX. DRAIN AREA OF GRATE & HOOD  
LOWEST SETTING = 227.37 SQ IN  
LOWEST + 1" SETTING = 248.25 SQ IN  
LOWEST + 2" SETTING = 269.12 SQ IN  
LOWEST + 3" SETTING = 290.00 SQ IN  
HIGHEST SETTING = 310.87 SQ IN



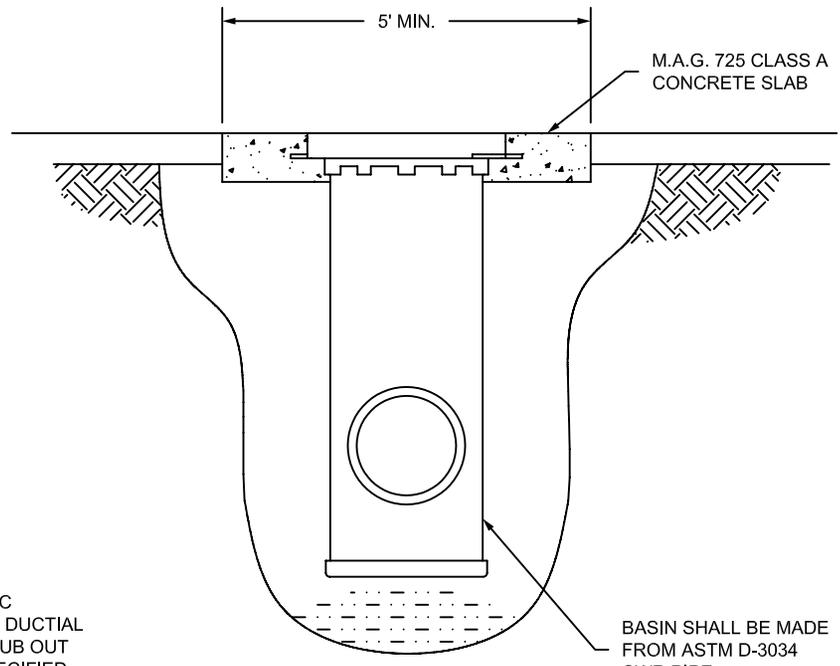
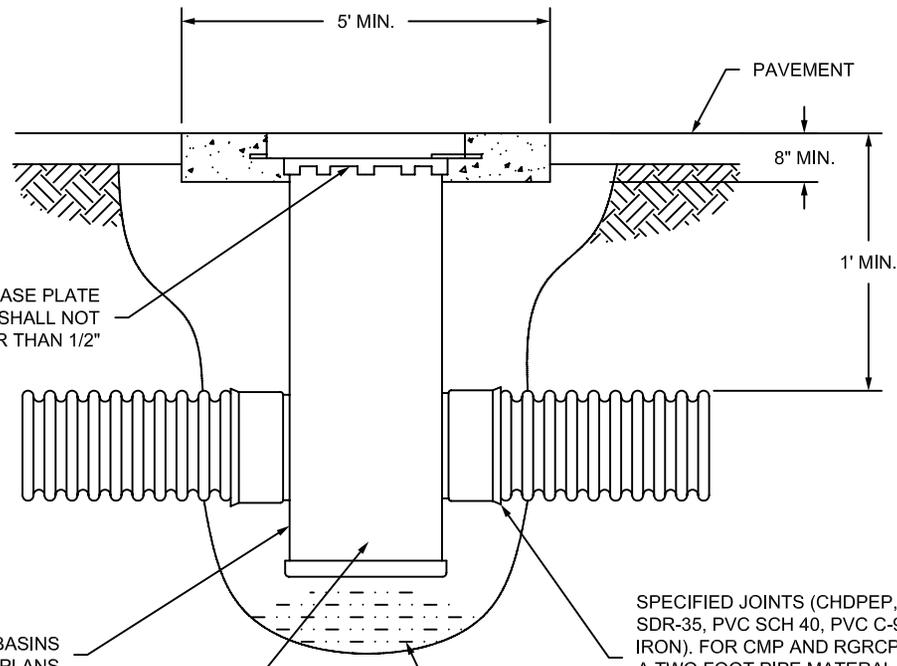
(22) X 1" GRATE SLOTS

GRATE MEETS H-20 LOAD RATING.  
MATERIAL: DUCTILE IRON SHALL CONFORM TO ASTM A536 GRADE 70-50-05.  
PAINT: CASTINGS ARE FURNISHED WITH A BLACK ENAMEL PAINT.

APPROX. DRAIN AREA OF GRATE = 146.70 SQ IN.  
APPROX. DRAIN AREA OF GRATE & HOOD  
LOWEST SETTING = 227.89 SQ IN  
LOWEST + 1" SETTING = 248.77 SQ IN  
LOWEST + 2" SETTING = 269.64 SQ IN  
LOWEST + 3" SETTING = 290.52 SQ IN  
HIGHEST SETTING = 311.39 SQ IN



(12) X 1" GRATE SLOTS



SPACING BETWEEN BASE PLATE & TOP OF PVC BASIN SHALL NOT BE GREATER THAN 1/2"

18" - 30" BASINS SPECIFIED SIZE ON PLANS

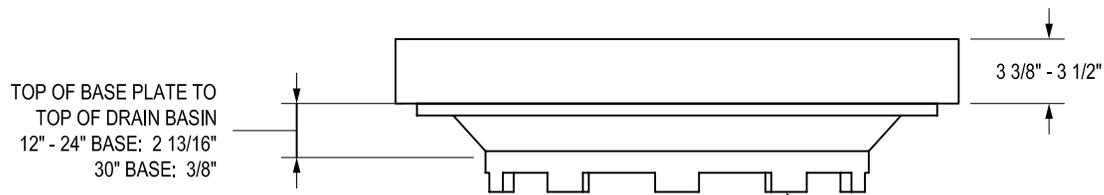
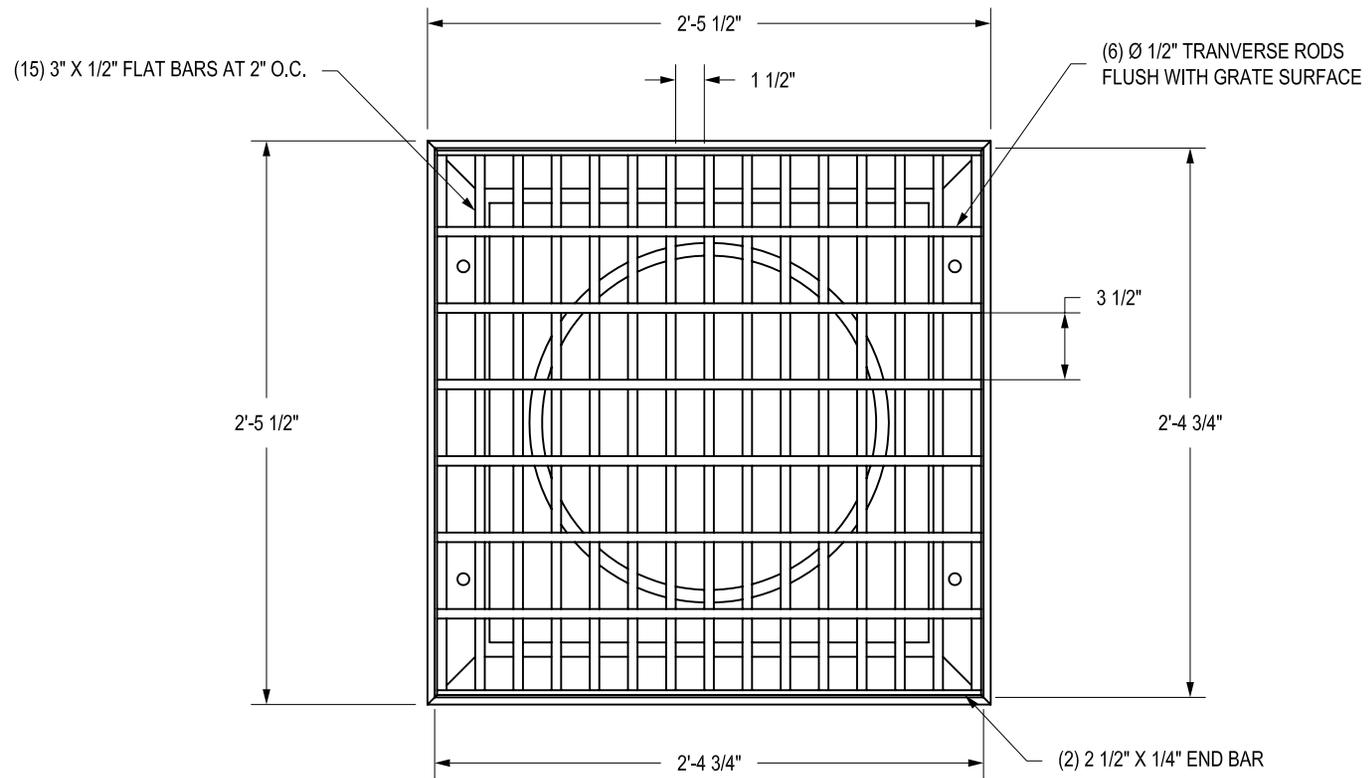
FILL SUMP WITH CONCRETE TO INVERT

SPECIFIED JOINTS (CHDPEP, PVC SDR-35, PVC SCH 40, PVC C-900, DUCTIAL IRON). FOR CMP AND RGRCP STUB OUT A TWO FOOT PIPE MATERIAL SPECIFIED ABOVE AND CONNECT THEM TOGETHER WITH A M.A.G. CONCRETE COLLAR.

BACKFILL MATERIAL SHALL BE M.A.G. 701.2.1. BACKFILL MATERIAL SHALL BE PLACED UNIFORMLY IN 12" LIFTS AND COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.

M.A.G. 725 CLASS A CONCRETE SLAB

BASIN SHALL BE MADE FROM ASTM D-3034 SWR PIPE



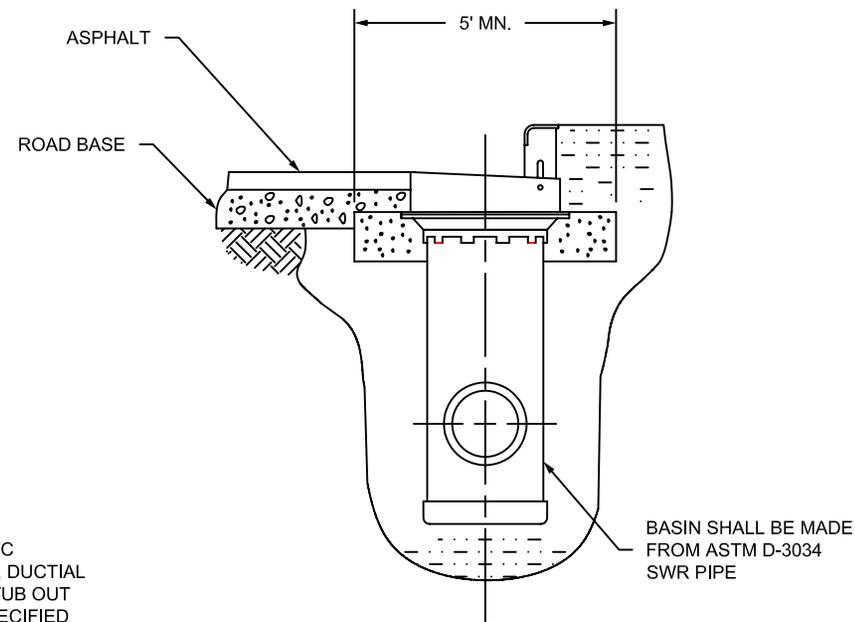
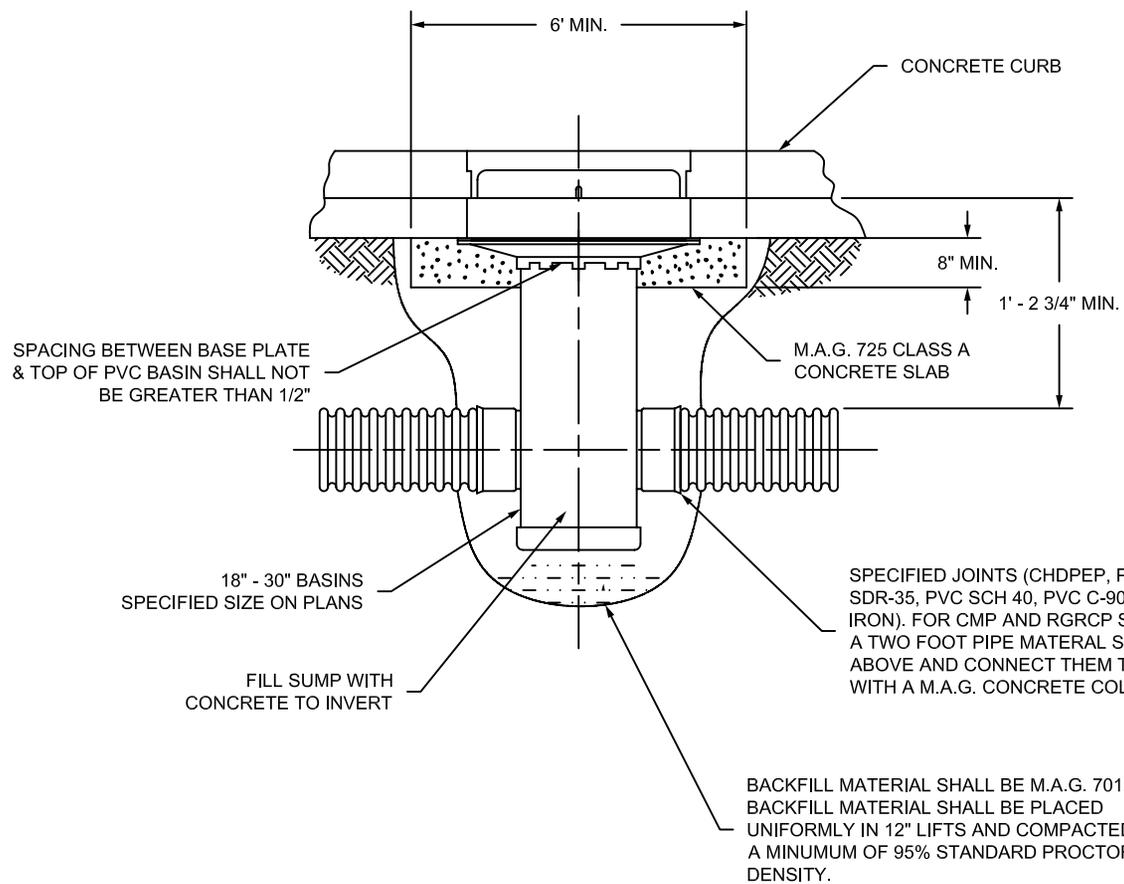
GRATE MEETS H-20 LOAD RATING  
 QUALITY: FRAME & GRATE MATERIALS SHALL CONFORM TO ASTM  
 A-36 STEEL, BASE PLATE DUCTILE IRON MATERIALS SHALL CONFORM  
 TO ASTM A536 GRADE 70-50-05  
 APPROX. DRAIN AREA = 551.25 SQ IN  
 ALL STRUCTURAL STEEL TO BE PAINTED ONE SHOP COAT OF NO.1  
 PAINT AND TWO FIELD COATS OF NO. 10 PAINT AS PER SECT. 790 OR  
 GALVANIZED. BASE PLATE ARE FURNISHED WITH BLACK ENAMEL  
 PAINT AND ZINC PLATED FASTENERS.  
 ALL WELDS ON FRAME AND SIDE BARS ON GRATE SHALL BE FULL  
 LENGTH OF JOINT.

DETAIL NO.  
539-2

GRATE FOR CATCH BASIN 'I'

REVISED

DETAIL NO.  
539-2

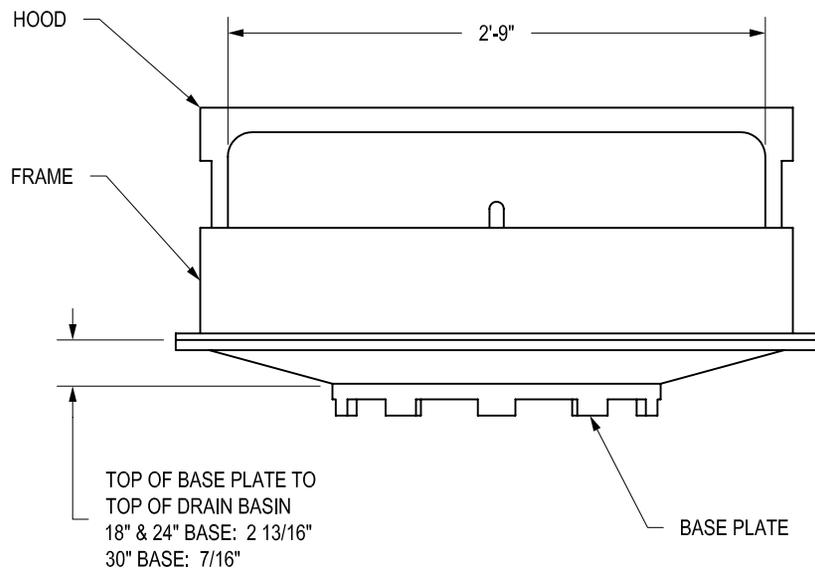
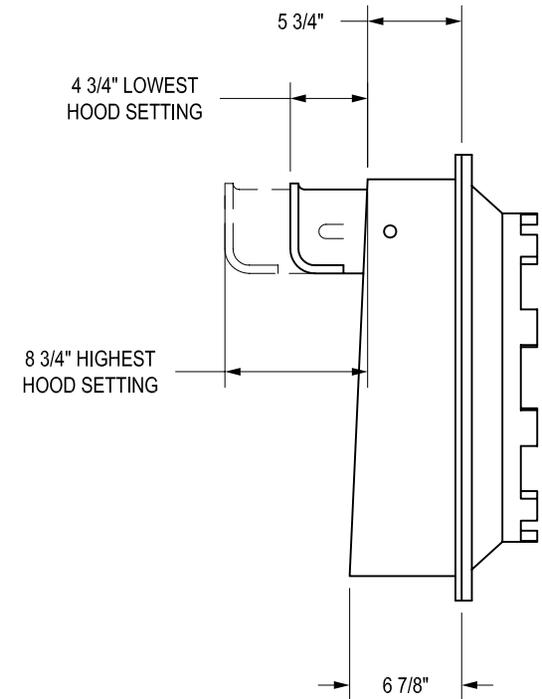
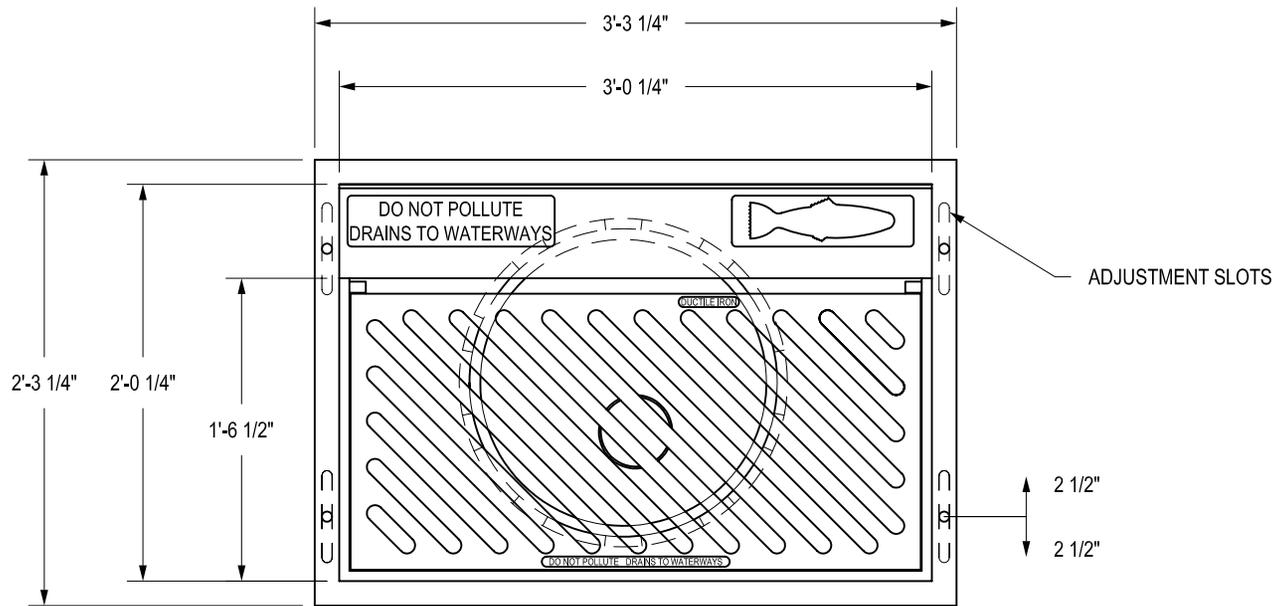


DETAIL NO.  
543-1

2' X 3' CURB INLET INSTALLATION DETAIL

REVISED

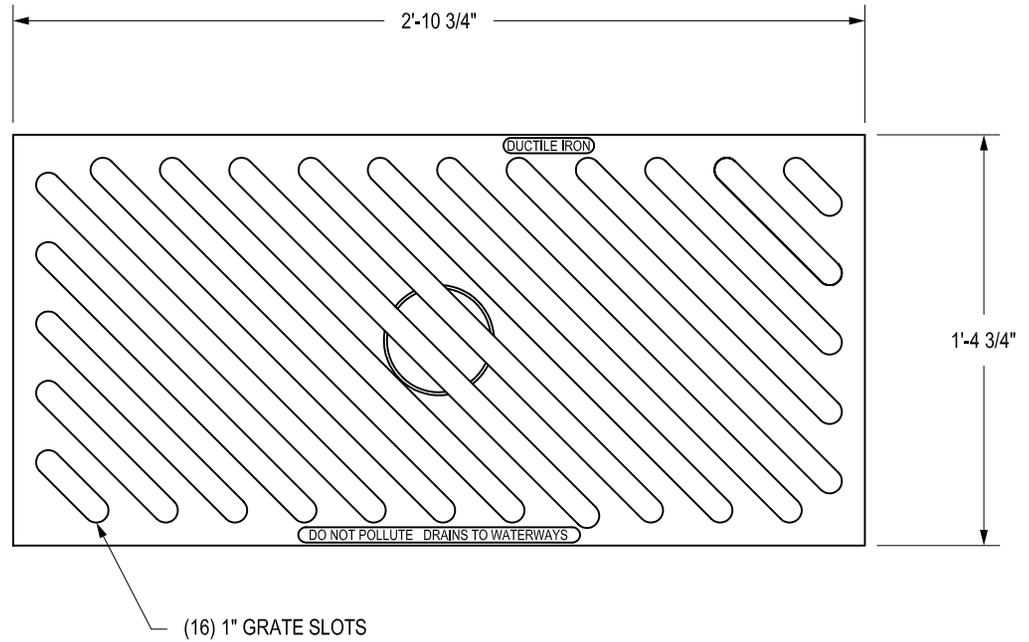
DETAIL NO.  
543-1



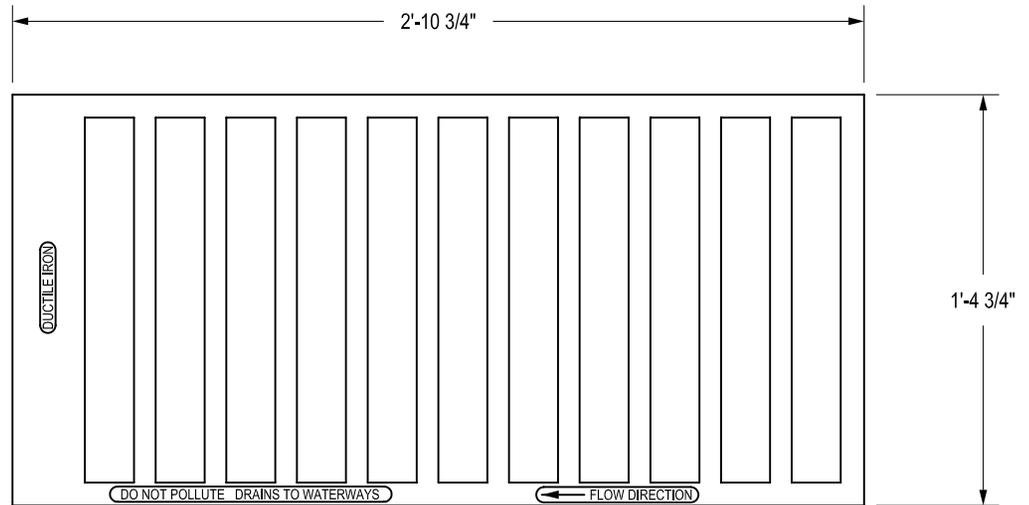
MATERIAL: DUCTILE IRON GRATE MEETING H-20 LOAD RATING & CONFORMING TO ASTM A536 GRADE 70-50-05  
ALL CASTINGS ARE FURNISHED WITH BLACK ENAMEL PAINT AND ZINC PLATED FASTENERS  
SLOPE OF GRATE SURFACE IS 5.2%  
CURB INLET FRAME INSIDE VOLUME IS APPROX 2.73 CU FT

GRATE MEETS H-20 LOAD RATING.  
 MATERIAL: DUCTILE IRON SHALL CONFORM TO ASTM A536 GRADE 70-50-05.  
 PAINT: CASTINGS ARE FURNISHED WITH A BLACK ENAMEL PAINT.

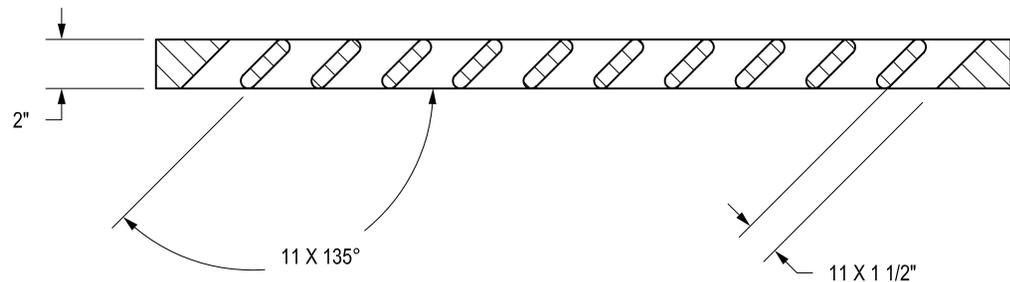
APPROX. DRAIN AREA OF GRATE = 232.87 SQ IN.  
 APPROX. DRAIN AREA OF GRATE & HOOD  
 LOWEST SETTING = 369.54 SQ IN  
 LOWEST + 1" SETTING = 402.41 SQ IN  
 LOWEST + 2" SETTING = 435.29 SQ IN  
 LOWEST + 3" SETTING = 468.16 SQ IN  
 HIGHEST SETTING = 501.044 SQ IN  
 APPROX. WEIGHT OF GRATE = 112.5 LBS.  
 APPROX. WEIGHT OF GRATE, FRAME & HOOD ASSEMBLY  
 W/ 18" BASE = 477.5 LBS.  
 W/ 24" BASE = 466.0 LBS.  
 W/ 30" BASE = 436.5 LBS.

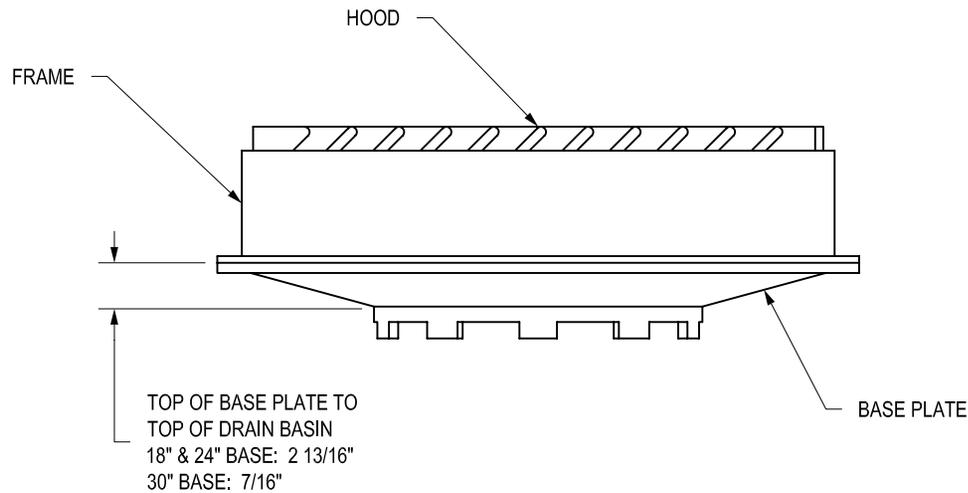
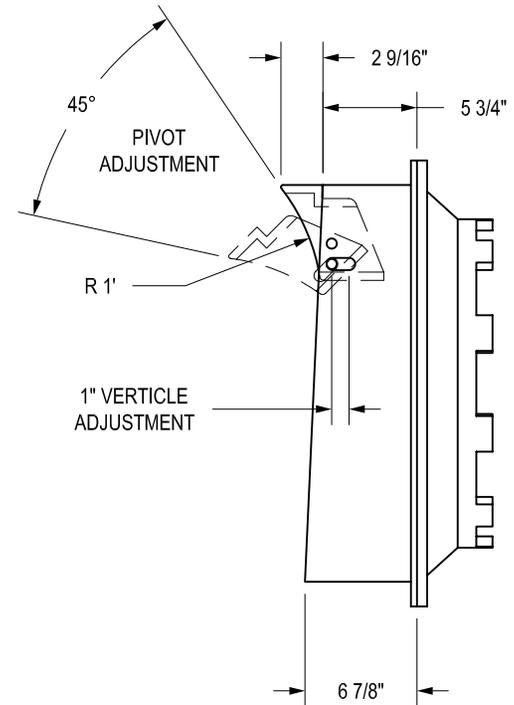
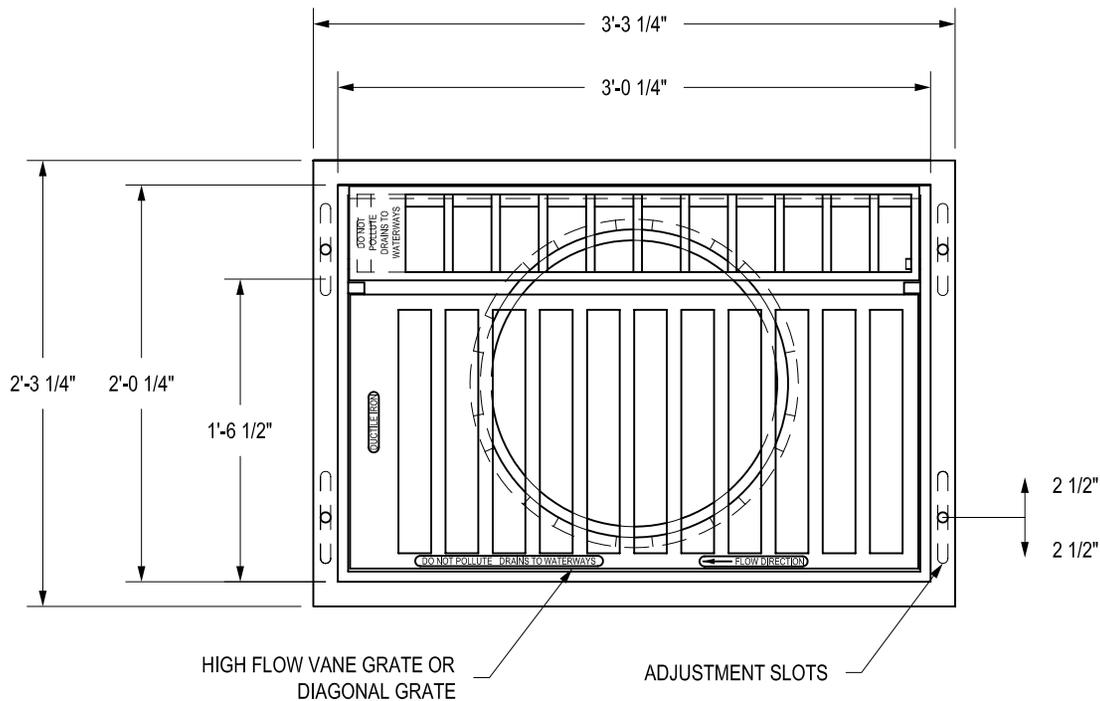


GRATE MEETS H-20 LOAD RATING  
 MATERIAL: DUCTILE IRON SHALL CONFORM TO ASTM A536 GRADE 70-50-05.  
 PAINT: CASTINGS ARE FURNISHED WITH A BLACK ENAMEL PAINT.



APPROX. DRAIN AREA OF GRATE = 327.25 SQ IN.  
 APPROX. DRAIN AREA OF GRATE & HOOD  
 LOWEST SETTING = 463.92 SQ IN  
 LOWEST + 1\"/>





CURB INLET GRATE FITS DRAIN BASIN SIZES: 18", 24" & 30"  
 MATERIAL: DUCTILE IRON GRATE MEETING H-20 LOAD RATING & CONFORMING TO ASTM A536 GRADE 70-50-05  
 ALL CASTINGS ARE FURNISHED WITH BLACK ENAMEL PAINT AND ZINC PLATED FASTENERS  
 SLOPE OF GRATE SURFACE IS 5.2%  
 CURB INLET FRAME INSIDE VOLUME IS APPROX 2.73 CU FT  
 APPROX. DRAIN AREA OF HIGH FLOW VANE GRATE & HOOD = 430.31 SQ IN  
 APPROX. DRAIN AREA OF DIAGONAL GRATE & HOOD = 335.93 SQ IN