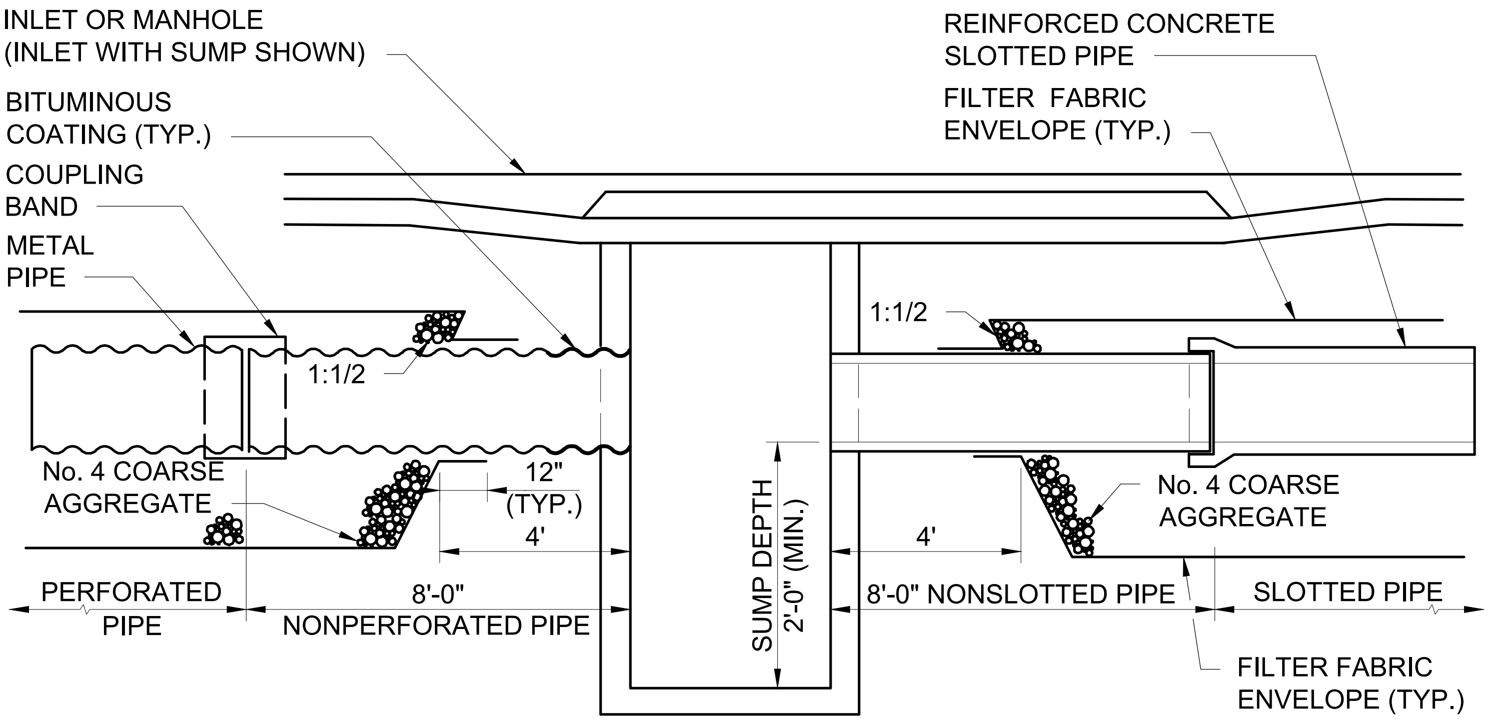


SECTION

NOTES:

1. EXFILTRATION PIPE SHALL COMPLY WITH FDOT STANDARD SPECIFICATION SECTION 443.

2. CONCRETE PIPE SHALL BE PLACED WITH SLOTS POSITIONED ON SIDES.

3. ALIGNMENT JOINTS ARE STANDARD (GASKETS NOT REQUIRED). RECORREGATION OF METAL PIPE ENDS NOT REQUIRED.

4. FILTER FABRIC SHALL BE SUBSURFACE DRAINAGE TYPE PER FDOT SECTION 985. ALL FILTER FABRIC JOINTS SHALL LAP A MINIMUM OF 2 FEET.

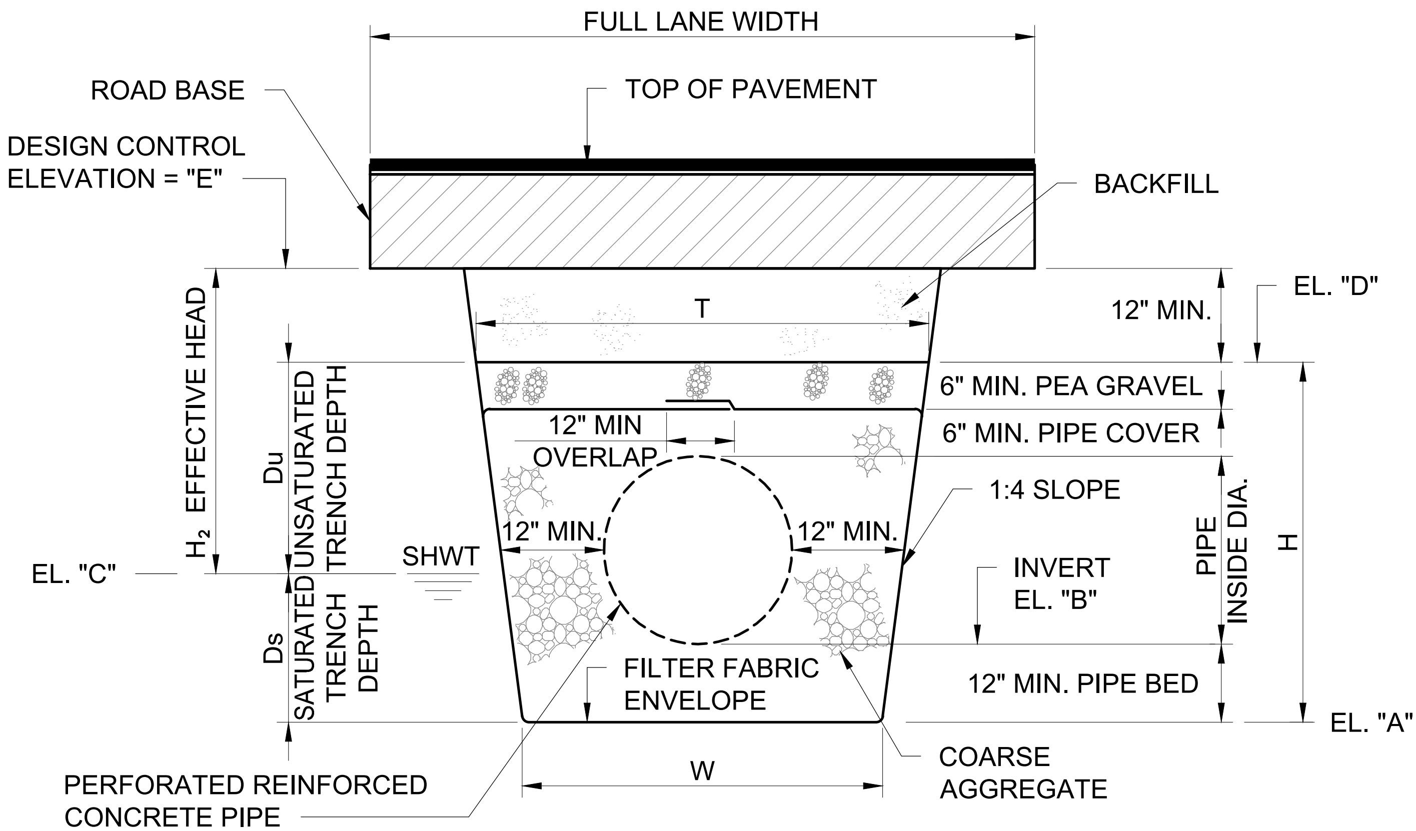
5. PREVENT CONTAMINATION OF THE EXFILTRATION TRENCH WITH SAND, SILT AND FOREIGN MATERIALS.

6. NO WEEP HOLES SHALL BE PERMITTED IN STRUCTURES.

7. PIPE INVERT SHALL BE AT OR ABOVE THE WATER TABLE WHEN POSSIBLE.

8. COAT END OF METAL PIPE AT MANHOLE CONNECTION WITH A BITUMINOUS COATING. COATING SHALL EXTEND 12" BEYOND EXTERIOR OF MANHOLE.

CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT ENGINEERING DETAILS 100 North Andrews Avenue, Fort Lauderdale, Florida 33301	EXFILTRATION TRENCH LONGITUDINAL SECTION	DETAIL NO. STRM 001 REVISED: 2016/09/21



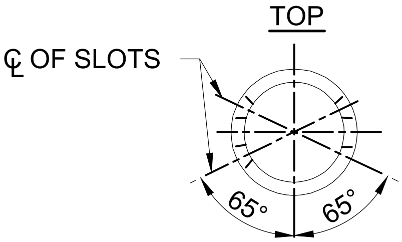
TRENCH SCHEDULE		
PARAMETER	TRENCH 1	TRENCH 2
PIPE DIAMETER		
W		
T		
H		
Ds		
Du		
H_2		
EL. "A"		
EL. "B"		
EL. "C"(SHWT)		
EL. "D"		
EL. "E" (DCE)		

NOTES:
DCE: DESIGN CONTROL ELEVATION
SHWT: SEASONAL HIGH WATER TABLE

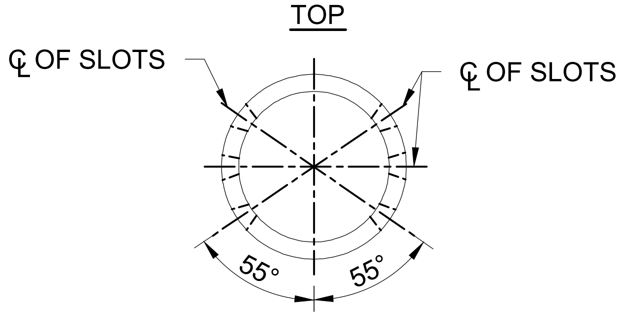
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

EXFILTRATION TRENCH
CROSS SECTION

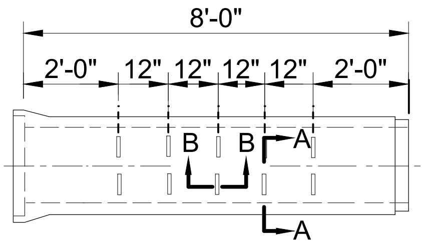
DETAIL NO.
STRM
002
REVISED:
2016/09/21



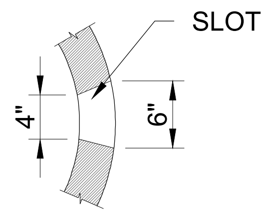
15" TO 30"
DIAMETER



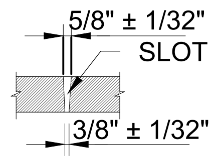
36" TO 72"
DIAMETER



SIDE VIEW



SECTION A-A

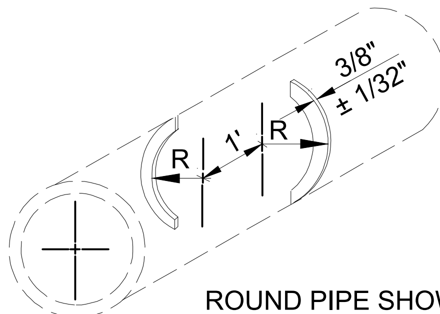


SECTION B-B

OPTION A - ROUND PIPE

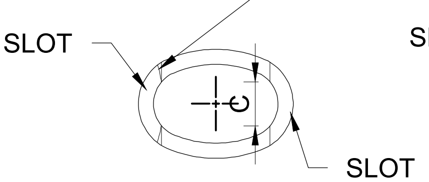
ELLIPTICAL PIPE		
PIPE SIZE	SLOT CUT OPENING C	
	MIN.	MAX.
14" x 23"	10"	12"
19" x 30"	14"	16"
24" x 38"	14"	16"
29" x 45"	20"	22"
34" x 53"	20"	22"
38" x 60"	20"	22"

ROUND PIPE		
PIPE SIZE	SLOT CUT OPENING C	
	MIN.	MAX.
15"	12"	14"
18"	12"	14"
24"	16"	18"
30"	16"	18"
36"	22"	24"
42"	22"	24"
48"	22"	24"
54"	24"	26"
60"	24"	26"
66"	24"	26"
72"	24"	26"

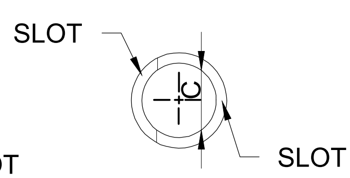


ROUND PIPE SHOWN
PICTORIAL VIEW

A CURVED CUT IS ACCEPTABLE PROVIDED THE CONTROL DIMENSION IS MAINTAINED (TYPICAL FOR ELLIPTICAL & ROUND PIPE)

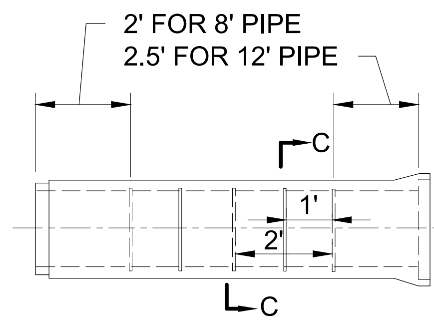


ELLIPTICAL PIPE



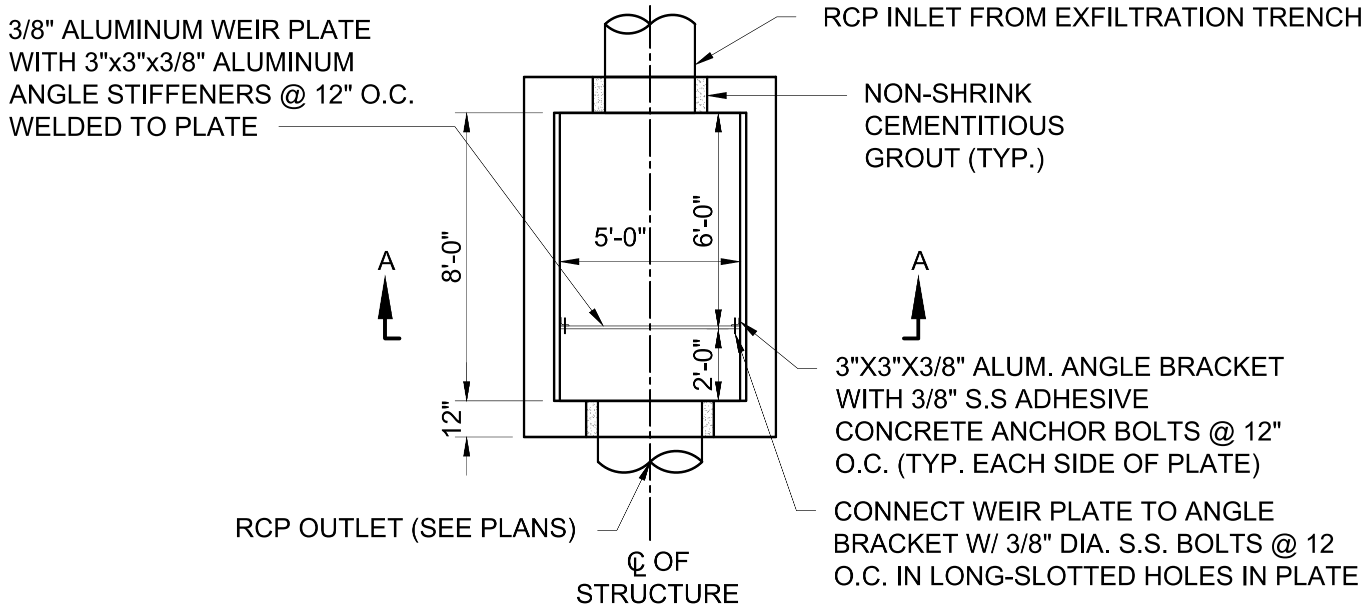
ROUND PIPE

SECTION C-C

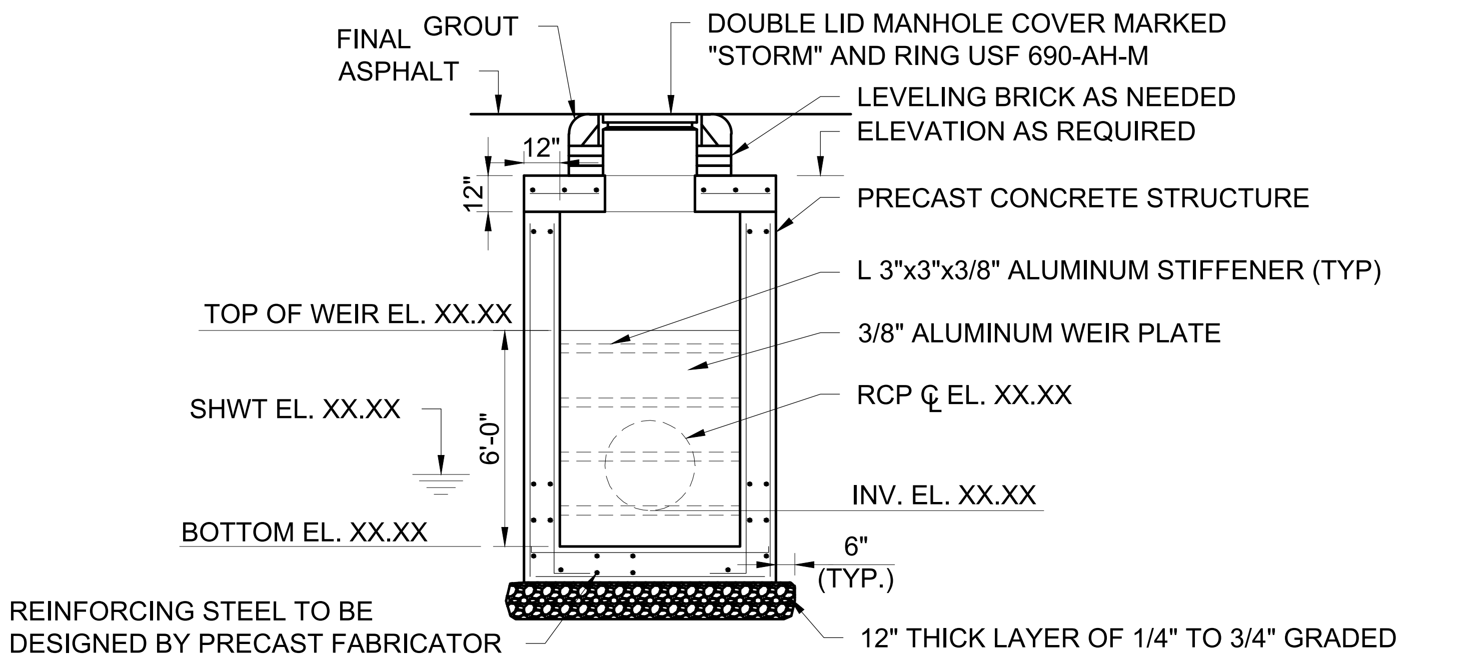


SIDE VIEW

OPTION B - ROUND OR ELLIPTICAL PIPE



LOWER PLAN



SECTION A-A

NOTES:

1. ALL PRECAST CONCRETE SECTIONS SHALL CONFORM TO ASTM C478.

2. CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR ENGINEER'S REVIEW AND APPROVAL. SHOP DRAWING SHALL INCLUDE DESIGN CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.

3. SHOP DRAWINGS SHALL INCLUDE CALCULATIONS DEMONSTRATING THAT STRUCTURE WILL RESIST FLOATION WHEN EMPTY AND SUBJECT TO GROUNDWATER TO TOP OF STRUCTURE.

4. PRECAST CONCRETE SECTION SHALL BE DESIGNED FOR THE FOLLOWING LOADS:

   a. LATERAL SOIL PRESSURE.
   b. GROUNDWATER ELEVATION = AT GRADE
   c. COMPACTION OF SOIL DURING BACKFILL.
   d. ADDITION STRESSES INDUCED BY TRANSPORTATION AND HANDLING.
   e. PIPE THRUST = 500 LB.
   f. H-20 TRUCK LOAD.

LEGEND:

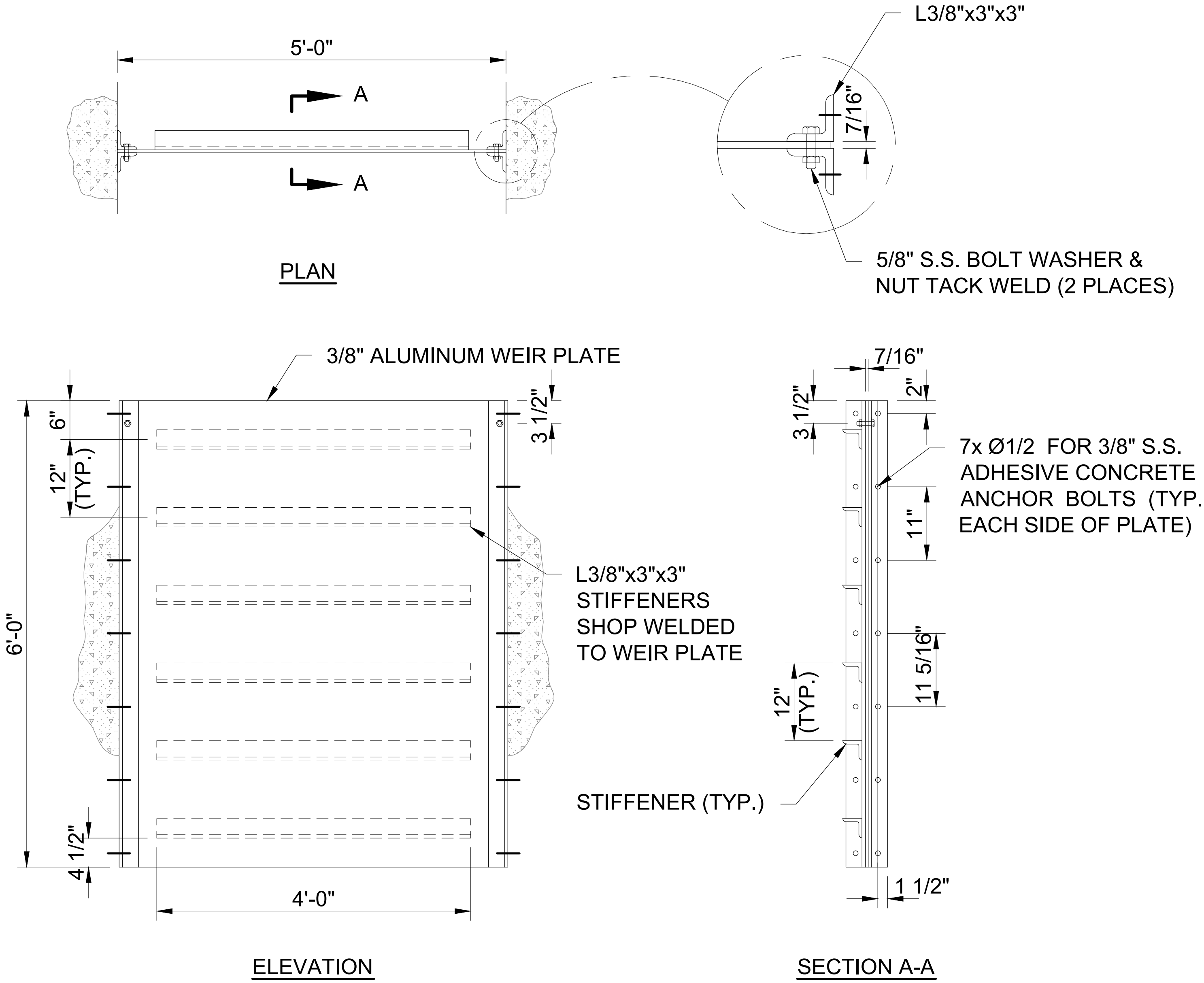
SHWT : SEASONAL HIGH WATER

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

TRENCH OVERFLOW STRUCTURE
PLAN AND SECTION
SHEET 1

DETAIL NO.
STRM 004

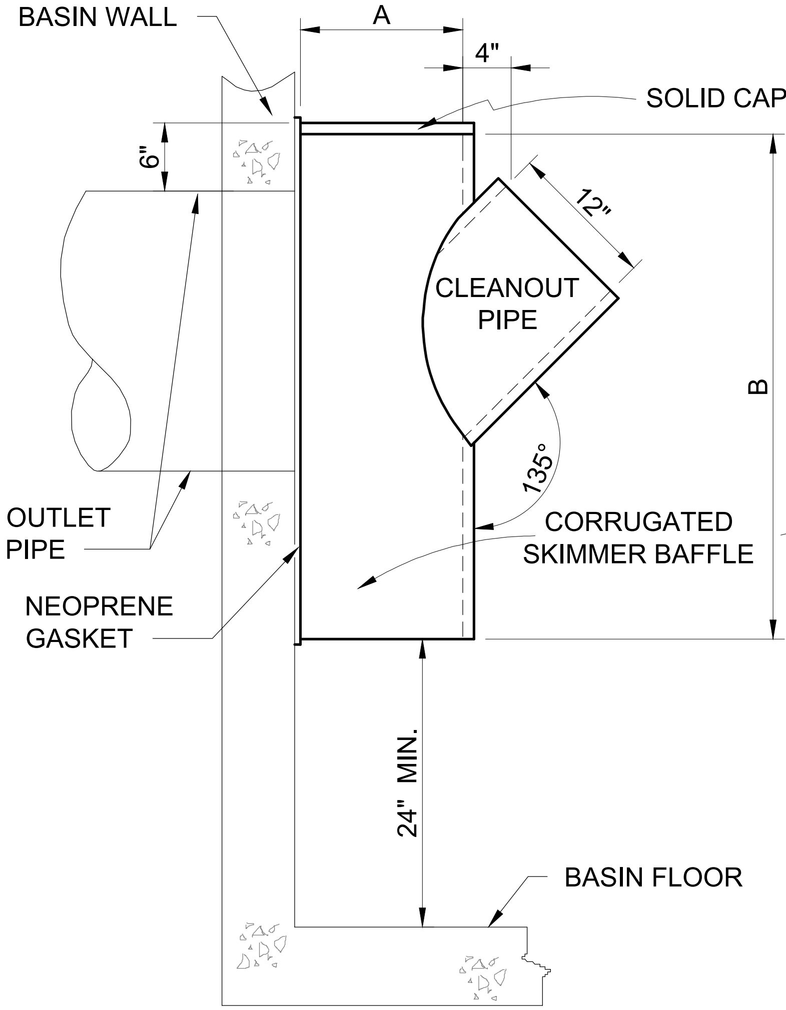
REVISED:
2016/09/21



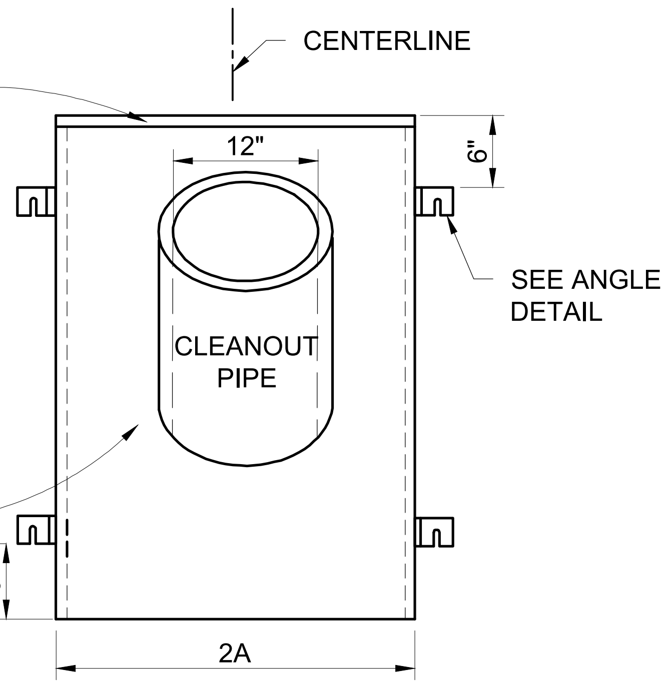
NOTES:

1. WEIR PLATE MATERIAL: ALUMINUM MILL FINISH.

CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT ENGINEERING DETAILS 100 North Andrews Avenue, Fort Lauderdale, Florida 33301	TRENCH OVERFLOW STRUCTURE WEIR PLATE SHEET 2	DETAIL NO. STRM 004 REVISED: 2016/09/21

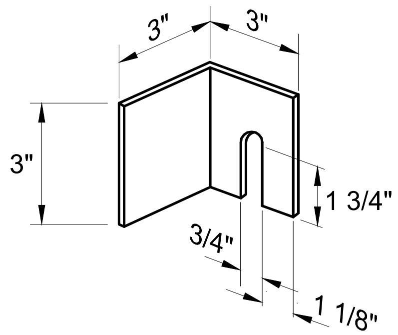


SIDE ELEVATION



FRONT ELEVATION

TYPE 1 SKIMMER DIMENSION TABLE		
OUTLET PIPE	A	B
18"	12"	42"
24"	15"	48"
30"	18"	54"
36"	21"	60"



ANGLE DETAIL

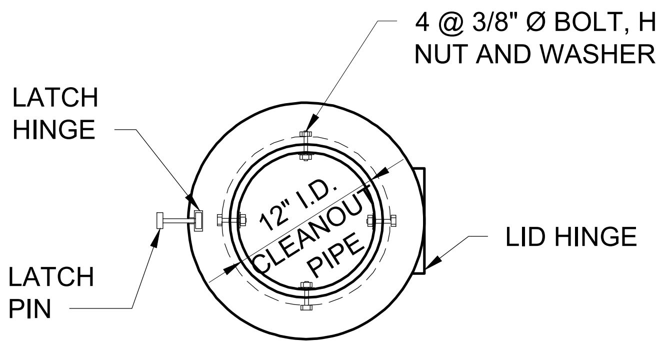
ANGLES ON OTHER SIDE OF SKIMMER ARE MIRROR IMAGE

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

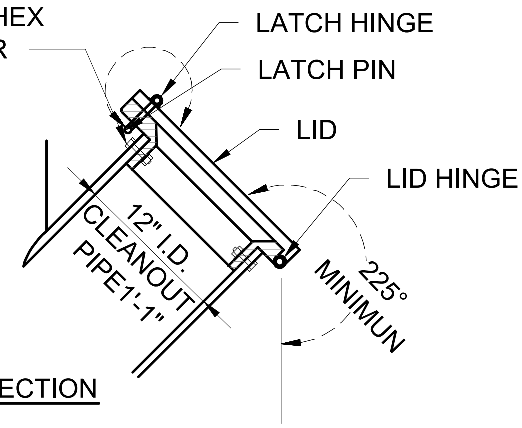
SKIMMER FOR EXFILTRATION TRENCH OUTLET
TYPE 1 - SHEET 1

DETAIL NO.
STRM 005

REVISED:
2016/09/21

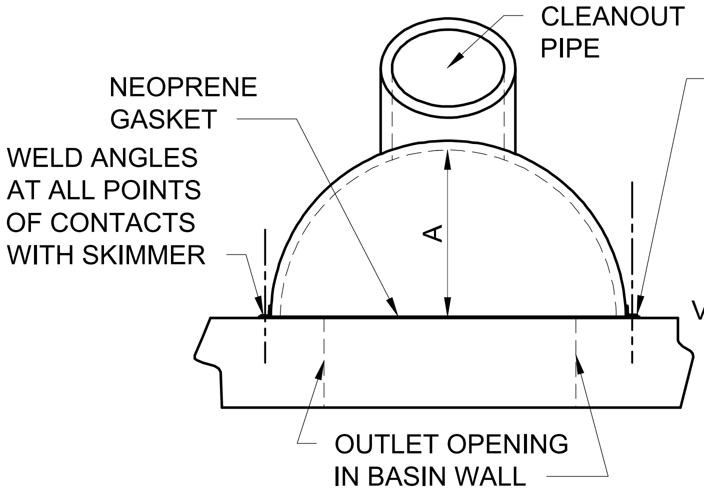


PLAN

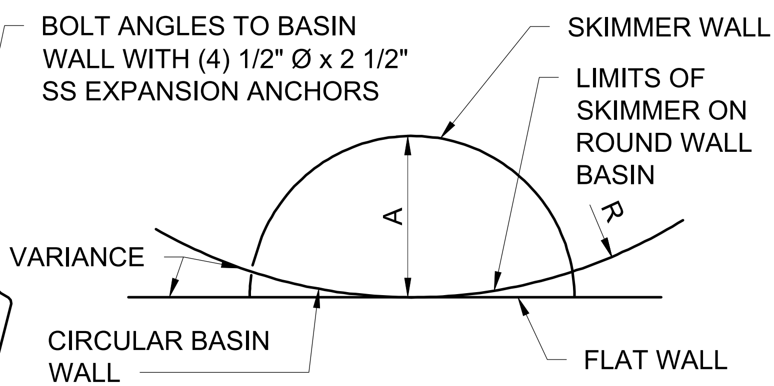


SECTION

LID DETAILS



TOP VIEW



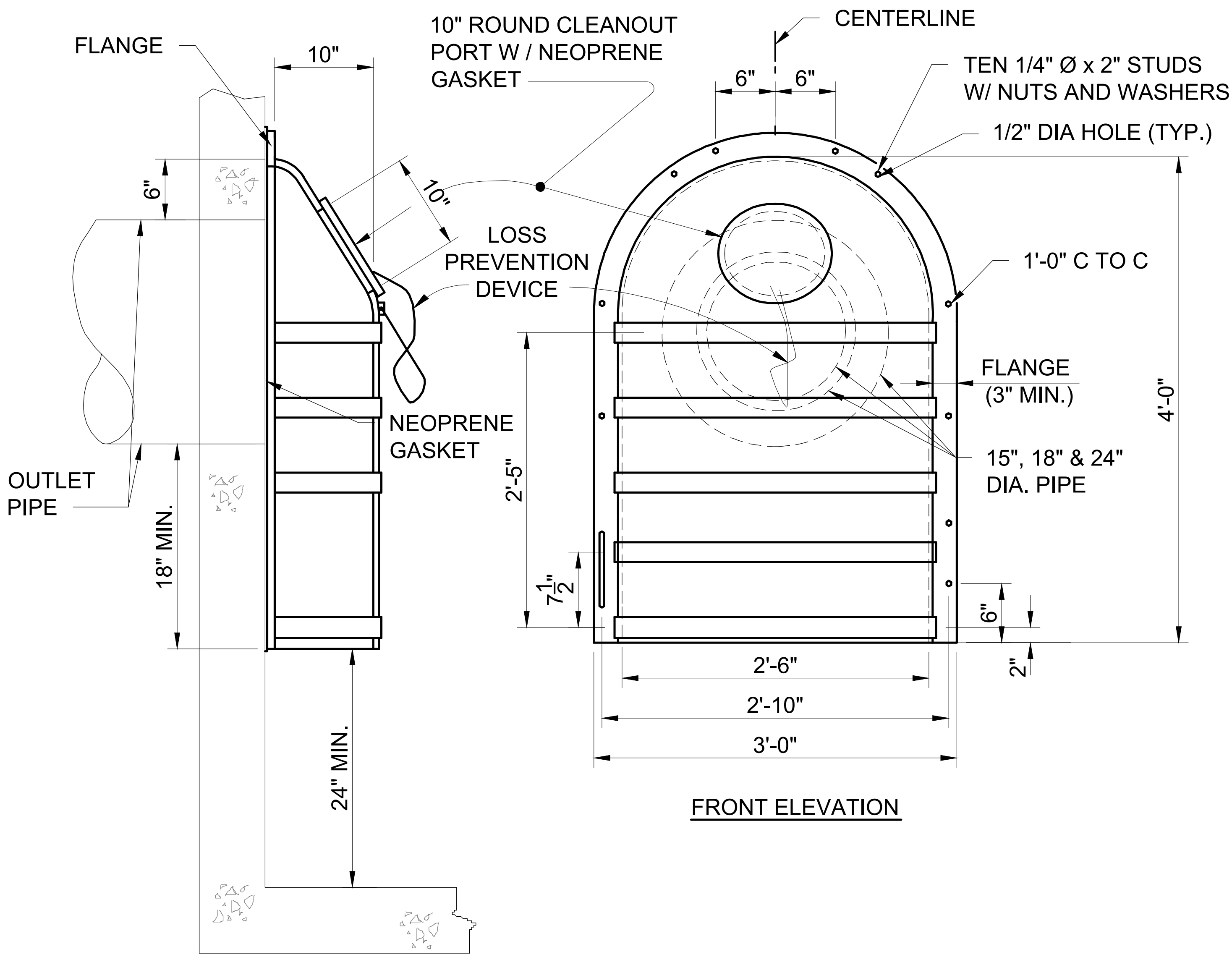
TOP VIEW SCHEMATIC

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

2016/09/21
SKIMMER FOR EXFILTRATION TRENCH OUTLET
TYPE 1 - SHEET 2

DETAIL NO.
STRM
006

REVISED:
2016/09/21



FRONT ELEVATION

SIDE ELEVATION

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

SKIMMER FOR EXFILTRATION TRENCH OUTLET
TYPE 2

DETAIL NO.
STRM
007

REVISED:
2016/09/21

NOTES:

1. THE SKIMMER IS A HOODED COVER, MOUNTED OVER AN OUTLET IN A CATCHBASIN, THAT PREVENTS OIL AND FLOATING DEBRIS FROM EXITING THE BASIN. USE THIS SKIMMER IN CATCHBASINS WHERE THERE IS A NEED TO PREVENT OIL, DEBRIS OR OTHER FLOATING CONTAMINANTS FROM EXITING CATCHBASINS THROUGH OUTLET PIPES.

2. PLACE NEOPRENE GASKET MATERIAL BETWEEN THE SKIMMER AND THE CATCHBASIN AT ALL POINTS OF CONTACT. TRIM THE GASKET NEATLY TO EXTEND 1/2 INCH BEYOND THE JOINT ON ALL SIDES.

3. SKIMMER BAFFLE, CLEANOUT PIPE AND ANGLES SHALL BE PRIMARILY CONSTRUCTED OF EITHER GALVANIZED STEEL, ALUMINUM, POLYVINYL CHLORIDE, POLYETHYLENE, FIBERGLASS OR ACRYLONITRITE BUTADIENE STYRENE. ALL STEEL COMPONENTS, OTHER THAN STAINLESS STEEL, SHALL BE HOT-DIP GALVANIZED.

4. MOUNTING HARDWARE, HINGES AND LATCHES SHALL ALL BE 316 STAINLESS STEEL. LOSS PREVENTION DEVICE SHALL BE EITHER 316 STAINLESS STEEL CHAIN OR RIVETED NYLON STRAP.

5. MATERIAL USED IN CONSTRUCTION OF SKIMMER BODIES (BAFFLES) AND CLEANOUT PIPE SHALL COMPLY WITH FDOT STANDARD SPECIFICATION 943 FOR STEEL, 945 FOR ALUMINUM OR 948 FOR PLASTICS.

6. ALL COST FOR FURNISHING AND INSTALLING A SKIMMER SHALL BE INCLUDED IN THE COST OF THE BASIN IN WHICH IT IS INSTALLED.

7. PLASTIC SKIMMER SHALL CONTAIN A MINIMUM OF 1.5% BY WEIGHT OF CARBON BLACK FOR UV PROTECTION.

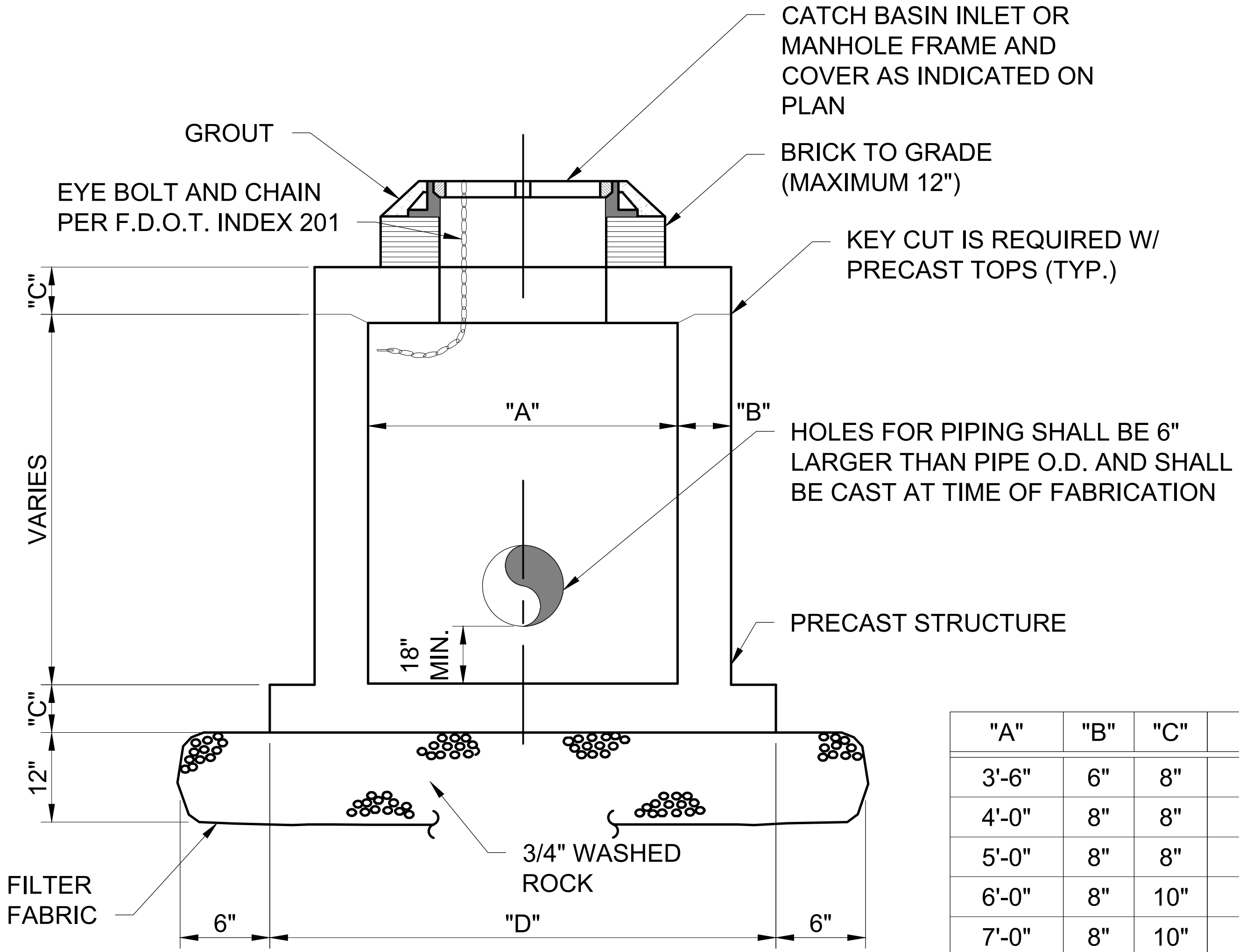
8. THE BACKS OF SKIMMERS MUST CONFORM TO THE SHAPE OF THE BASIN WALLS ON WHICH THEY ARE MOUNTED.

9. THE CLEANOUT PORT FOR THE TYPE 2 SKIMMER SHALL BE GASKETED, WITH EITHER A THREADED SCREW-IN LID OR A LID SECURED BY FOUR STAINLESS STEEL QUICK-RELEASE LATCHES.

10. TYPE II SKIMMER ARE TO BE USED ONLY WITH OUTLET PIPE DIAMETERS OF 15", 18" AND 24".

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

SKIMMER FOR EXFILTRATION TRENCH OUTLET
NOTES



SECTION

"A"	"B"	"C"	"D"
3'-6"	6"	8"	5'-0"
4'-0"	8"	8"	5'-10"
5'-0"	8"	8"	6'-10"
6'-0"	8"	10"	7'-10"
7'-0"	8"	10"	8'-10"
8'-0"	10"	10"	10'-2"

NOTES:

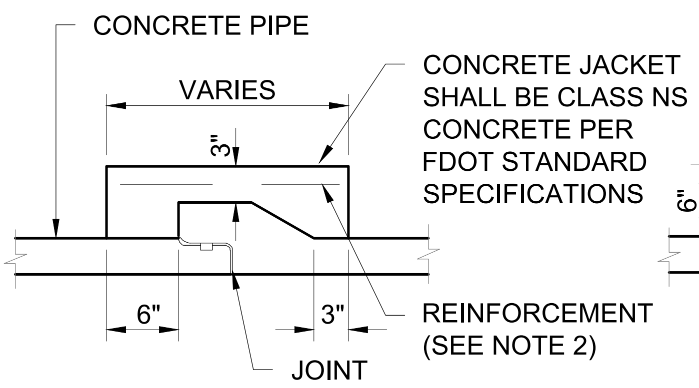
1. PRECAST STRUCTURE SHALL BE EITHER SQUARE OR ROUND AS INDICATED ON THE PLANS.
2. REINFORCING SHALL BE DESIGNED BY THE PRECAST MANUFACTURER TO COMPLY WITH FDOT INDEX 200.
3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER'S REVIEW. SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.
4. DESIGN STRUCTURE FOR H-20 TRUCK LOAD.
5. SHOP DRAWINGS SHALL INCLUDE CALCULATIONS DEMONSTRATING THAT STRUCTURE WILL RESIST FLOATION WHEN EMPTY AND SUBJECT TO GROUNDWATER TO TOP OF STRUCTURE.
6. CATCH BASINS SHALL HAVE USF 4155 FRAME AND 6209 GRATE.
7. MANHOLES SHALL HAVE USF 230 RING AND TYPE AA COVER WITH THE LETTERING "STORM SEWER" CAST IN THE COVER.

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

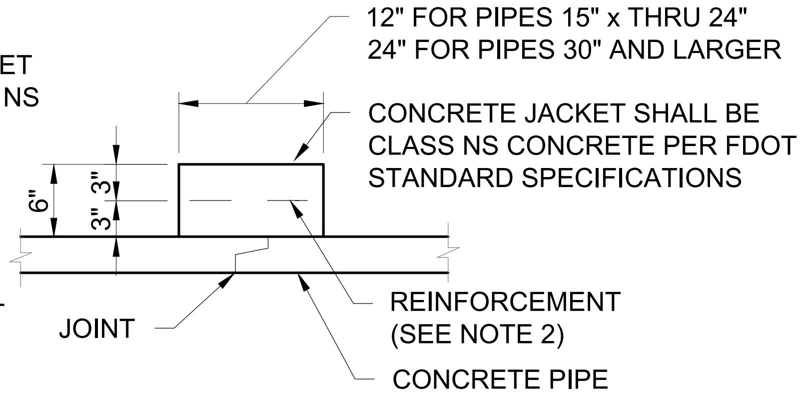
PRECAST CIRCULAR & SQUARE DRAINAGE STRUCTURES

DETAIL NO.
STRM
009

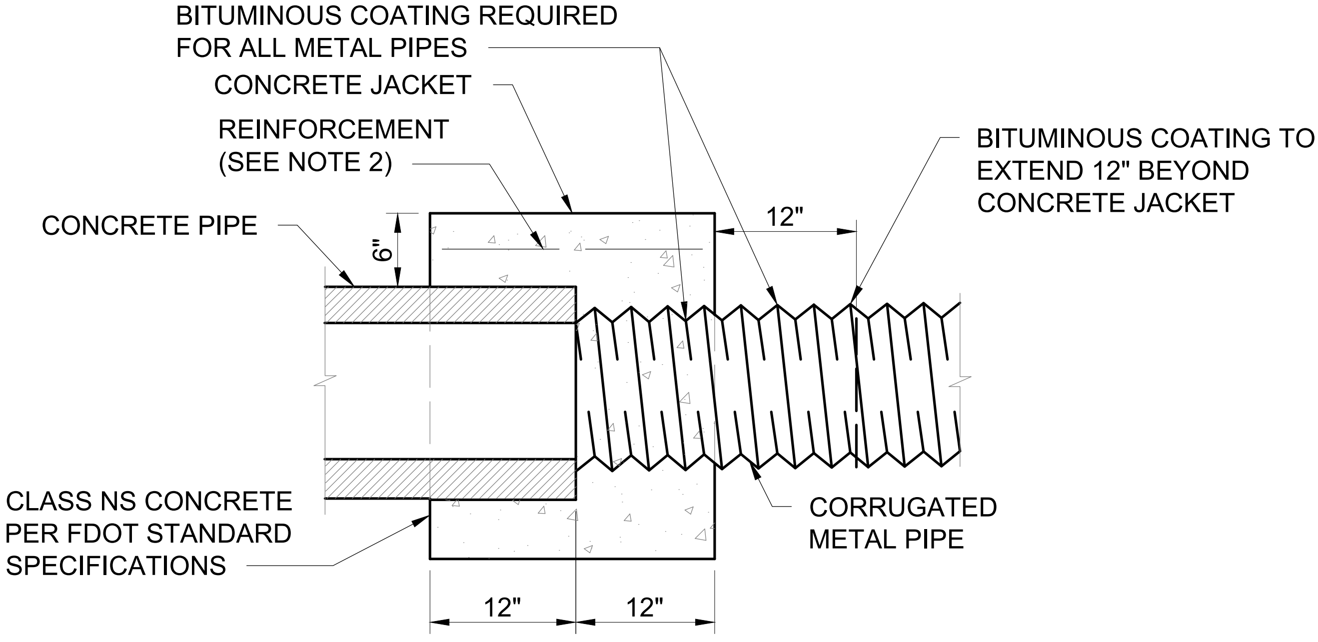
REVISED:
2017/07/14



BELL AND SPIGOT



TONGUE & GROOVE



CONCRETE AND METAL PIPE JOINT

NOTES:

1. CONCRETE JACKET SHALL NOT BE USED TO JOIN METAL PIPES OF DISSIMILAR MATERIALS.

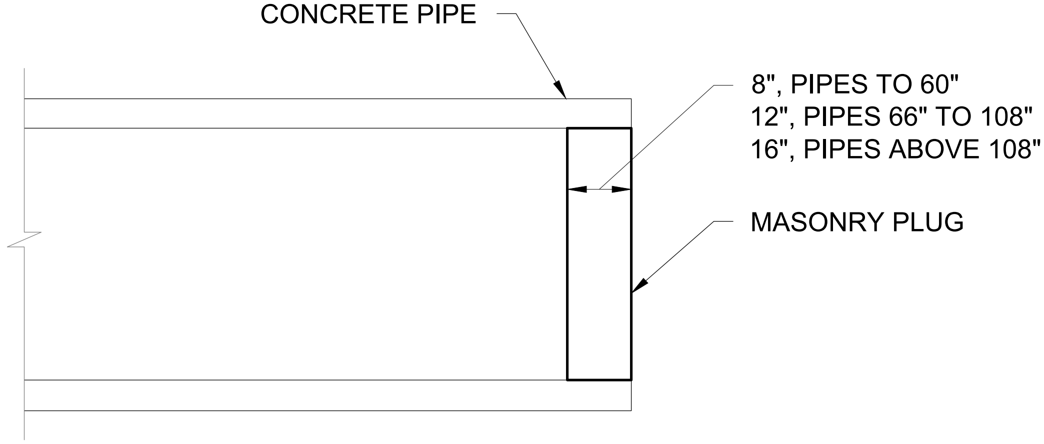
2. ANY WIRE MESH ARRANGEMENT WHICH PROVIDES 0.126 SQUARE INCHES OF STEEL AREA PER LINEAR FOOT BOTH WAYS MAY BE USED; PROVIDED THE WIRES ARE SPACED A MINIMUM OF 2" AND/OR A MAXIMUM OF 6" ON CENTERS.
3.
4. COST OF CONCRETE JACKET AND BITUMINOUS COATING SHALL BE INCLUDED IN THE COST OF THE PIPE.

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

CONCRETE JACKET FOR STORMWATER PIPE

DETAIL NO.
STRM 010

REVISED:
2017/07/24



NOTES:

1. THE COST OF PLUGGING PIPES TO BE INCLUDED IN CONTRACT UNIT PRICE FOR NEW PIPE.

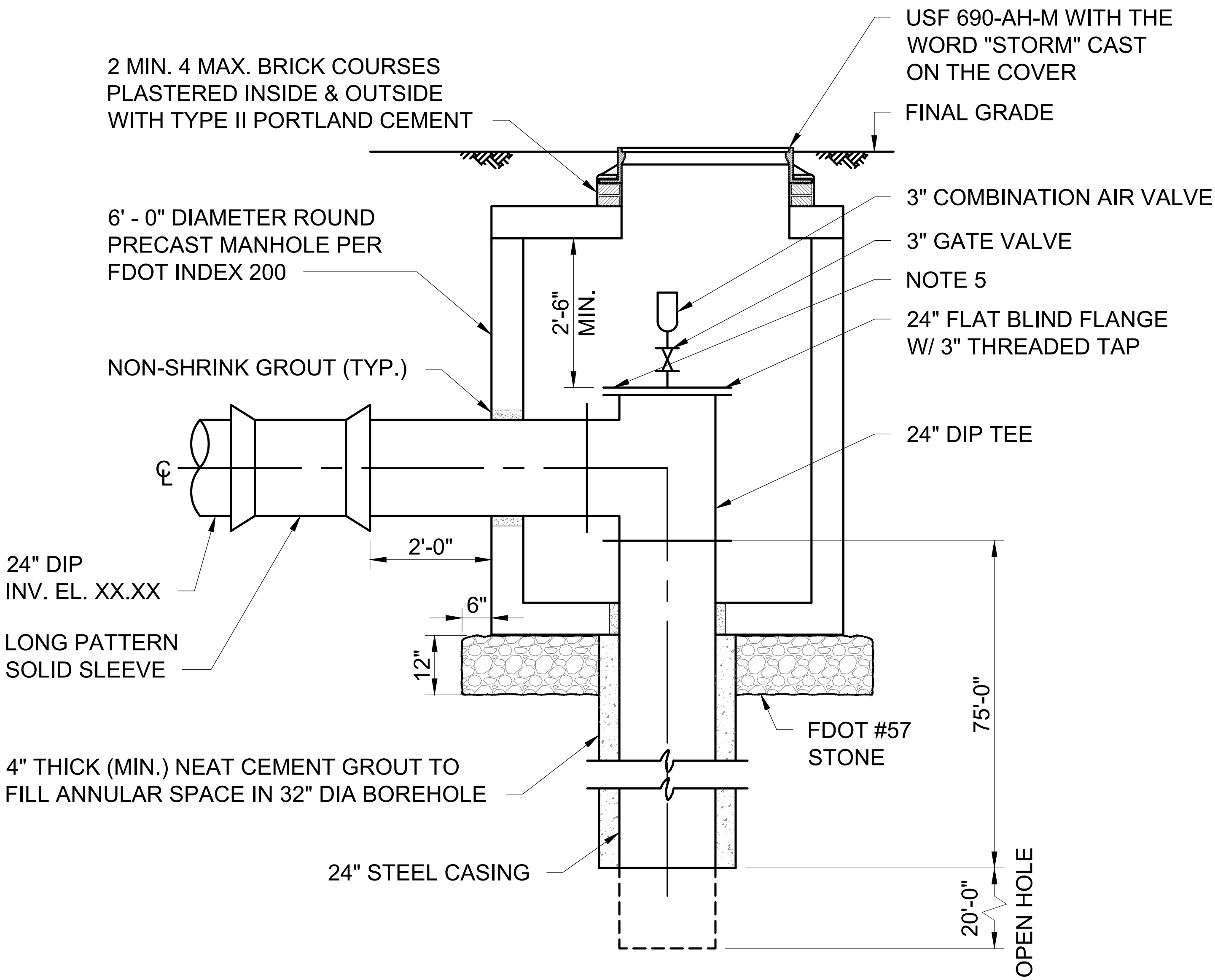
2. EITHER BRICK MASONRY OR CONCRETE BRICK MAY BE USED FOR THE PLUG.

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

PIPE PLUG

DETAIL NO.
STRM
011

REVISED:
2017/07/19

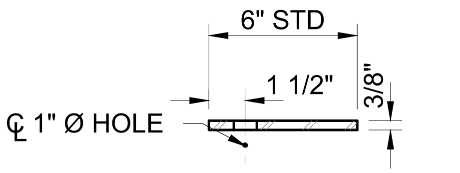


SECTION

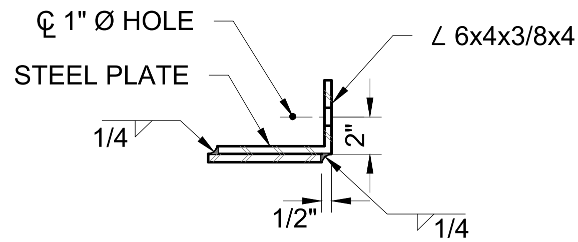
NOTES:

1. REINFORCING SHALL BE DESIGNED BY THE PRECAST MANUFACTURER TO COMPLY WITH FDOT INDEX 200.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER'S REVIEW. SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.
3. DESIGN STRUCTURE FOR H-20 TRUCK LOAD.
4. SHOP DRAWINGS SHALL INCLUDE CALCULATIONS DEMONSTRATING THAT STRUCTURE WILL RESIST FLOTATION WHEN EMPTY AND SUBJECT TO GROUNDWATER TO TOP OF STRUCTURE.
5. PROVIDE TWO 1"Ø THREADED TAPS ON THE BLIND FLANGE WITH 1" 316 STAINLESS STEEL BALL VALVES EQUIPPED WITH 316 STAINLESS STEEL THREADED PLUGS.
6. ALL FLANGES SHALL BE SECURED WITH 316 STAINLESS NUTS AND BOLTS. NUTS SHALL CONFORM TO ASTM A194, GRADE 8M. BOLTS SHALL CONFORM TO ASTM A193 GRADE B8M.

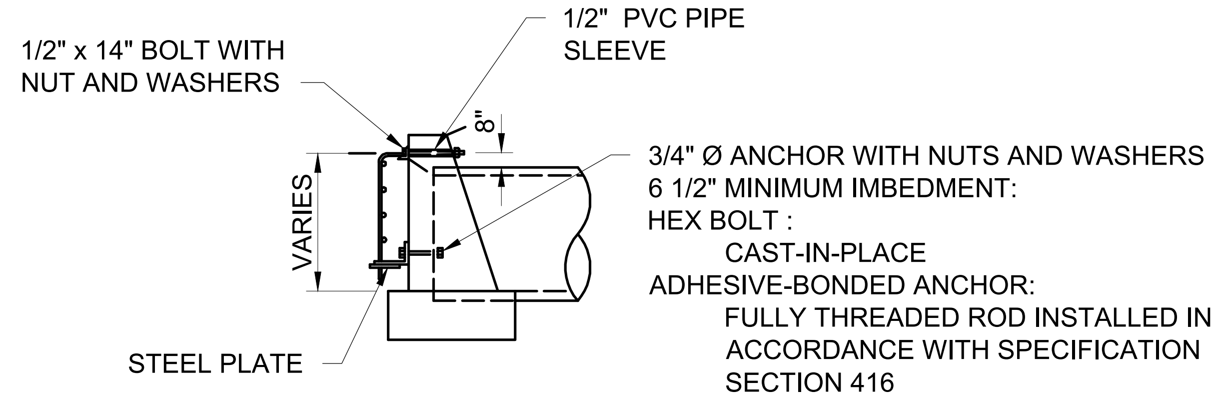
CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT ENGINEERING DETAILS 100 North Andrews Avenue, Fort Lauderdale, Florida 33301	PRESSURIZED DRAINAGE WELL	DETAIL NO. STRM 012 REVISED: 2017/07/19



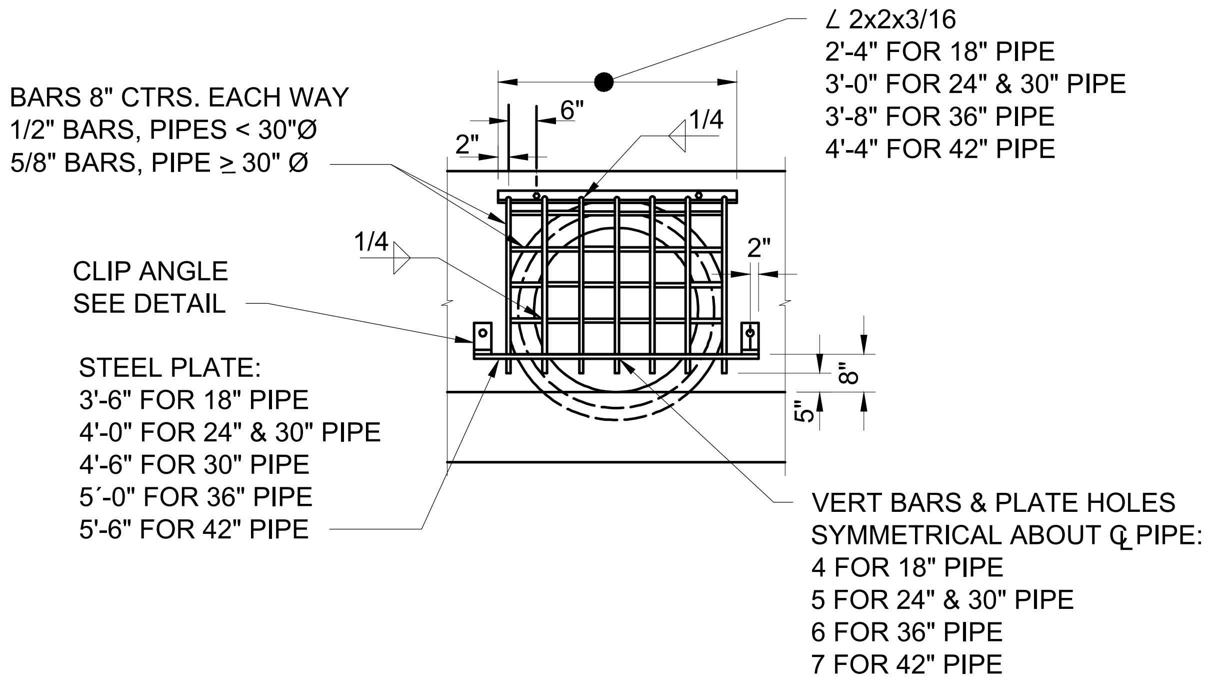
SECTION - STEEL PLATE



CLIP DETAIL



SIDE VIEW



PIPE DIA.	18"	24"	30"	36"	42"
GRATE (LBS).	48	58	74	90	111

FRONT VIEW

NOTE:

GUARDS TO BE CONSTRUCTED ONLY AT LOCATIONS SPECIFICALLY CALLED FOR IN PLANS.

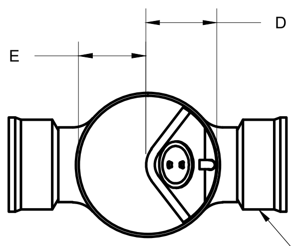
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

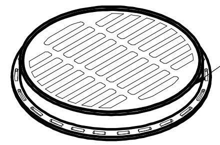
MANATEE GRATE

DETAIL NO.
STRM
013

REVISED:
2017/07/25

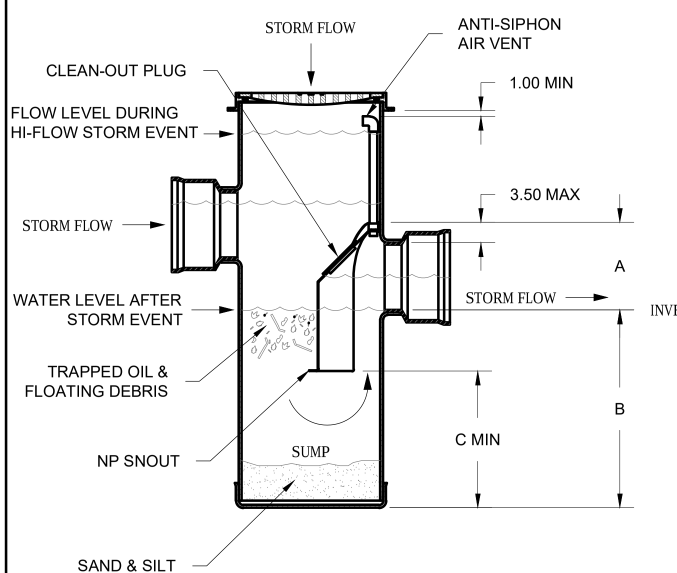
NYLOPLAST DRAIN BASIN WITH SNOUT

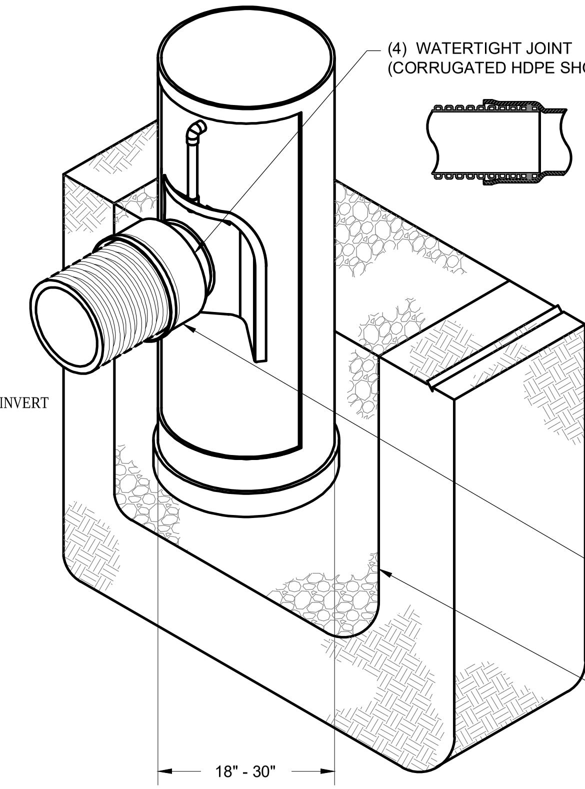




BASIN SIZE	D	E	OPEN AREA	SNOUT PART #	OPEN AREA W/O SNOUT
18"	9.45	8.52	181.34	5618AG0412	254.07
18"	12.24	11.59	290.50	5624AG0415	446.00
18"	15.25	15.50	509.95	5630AG0418	742.40
18"	21.75	8.99	354.63	5630AG24	742.40

PERCENTAGE OF SNOUT OPEN AREA VS OUTLET PIPE OPEN AREA				
PIPE SIZE	5618AG0412	5618AG0412	5618AG0412	5618AG0412
4"	551%	893%	1395%	2469%
6"	257%	417%	651%	1153%
8"	145%	235%	366%	649%
10"	93%	150%	235%	415%
12"	63%	102%	159%	281%
15"	N/A	67%	104%	184%
18"	N/A	46%	72%	127%
24"	N/A	N/A	N/A	72%





PIPE SIZE	A	B 18" BASIN	B 24" BASIN	B 30" BASIN	C
4"	7.51	24.18	30.05	36.87	12.00
6"	9.25	22.44	28.31	35.13	12.00
8"	11.29	22.40	30.27	37.09	16.00
10"	13.21	26.48	32.35	39.17	20.00
12"	15.05	26.64	34.51	41.33	24.00
15"	17.78	N/A	37.78	44.60	30.00
18"	20.98	N/A	40.58	47.40	36.00
24"	27.79	N/A	N/A	58.96	48.00

1 - SNOUT AVAILABLE WITH ALL 18" - 30" STRUCTURE OPTIONS (CUSTOM BASIN, ROAD & HIGHWAY, & CURB INLET).
2 - FRAMES, GRATES, COVERS, HOODS, & BASE PLATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7004-110-043.

DRAWN BY EBC	MATERIAL		
DATE 4-27-06			
REVISED BY EBC	PROJECT NO./NAME		
DATE 3-21-10			
DWG SIZE A	SCALE 1:30	SHEET 1 OF 1	

Nyloplast®
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE
DRAIN BASIN WITH SNOUT
QUICK SPEC INSTALLATION DETAIL

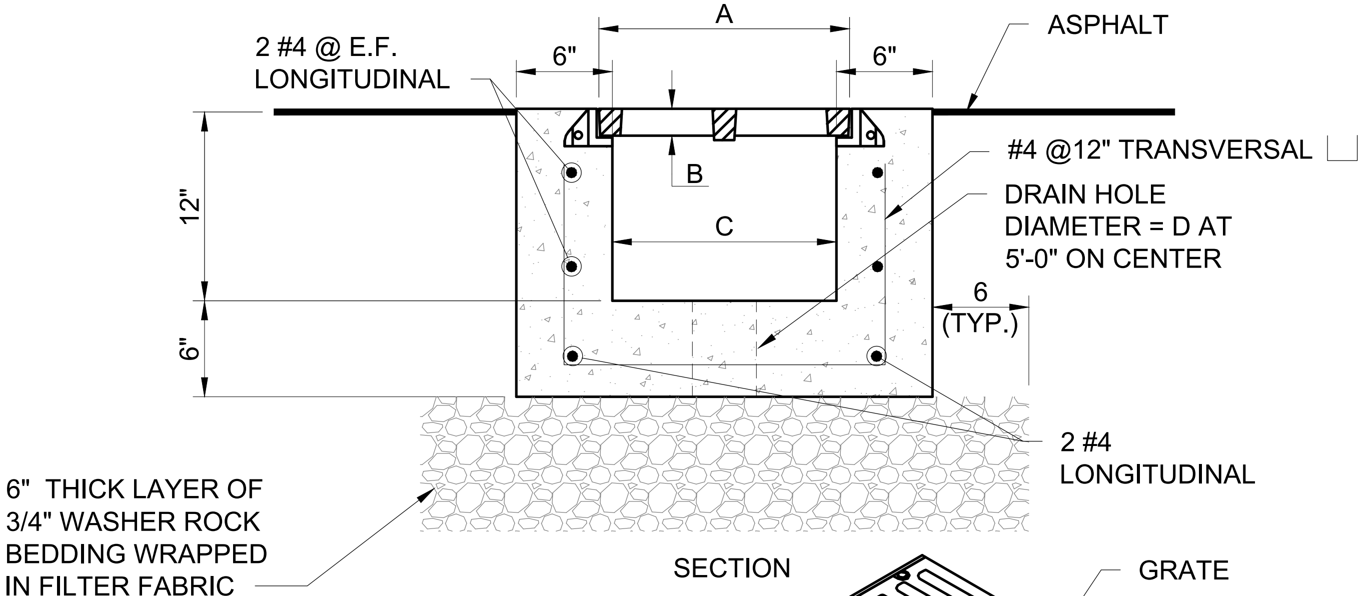
DWG NO. 7004-110-050 REV E

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

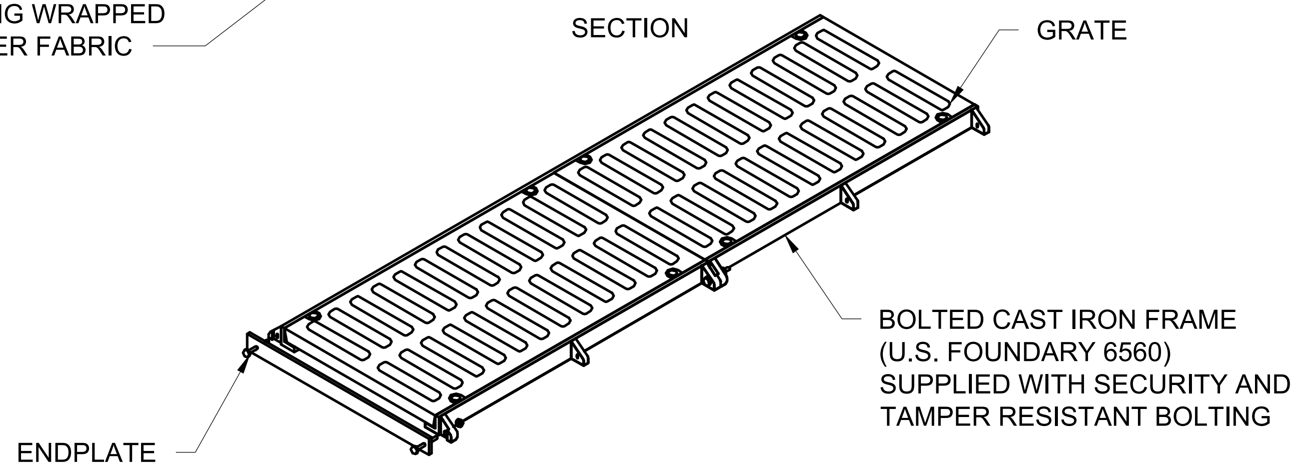
PLASTIC DRAIN BASIN

DETAIL NO.
STRM 014
REVISED:
2017/07/25

GRATE NUMBER	TYPE	"A" WIDTH	"B" SEAT HEIGHT	"C" CLEAR OPENING	ADA COMPLIANT	FLOW AREA	"D" DRAIN HOLE DIA.
6451	STANDARD	8"	1 1/2"	6"	NO	70	2"
6452	STANDARD	10"	1 1/2"	8"	NO	75	3"
6453	STANDARD	12"	1 1/2"	10"	NO	100	3"
6454	STANDARD	14"	1 1/2"	12"	NO	116	4"
6455	STANDARD	17"	1 1/2 "	15"	NO	132	4"
6456	STANDARD	20"	1 1/2"	18"	NO	138	4"
6457	STANDARD	23"	1 1/2"	21"	NO	161	6"
6458	STANDARD	26"	1 1/2"	24"	NO	192	6"
6461	STANDARD	30"	2"	27"	NO	212	6"
6266	NARROW SLOTTED	8"	1 1/2"	6"	YES	30	2"
6267	NARROW SLOTTED	10"	1 1/2"	8"	YES	35	3"
6268	NARROW SLOTTED	12"	1 1/2"	10"	YES	50	3"
6269	NARROW SLOTTED	14"	1 1/2"	12"	YES	60	4"



SECTION

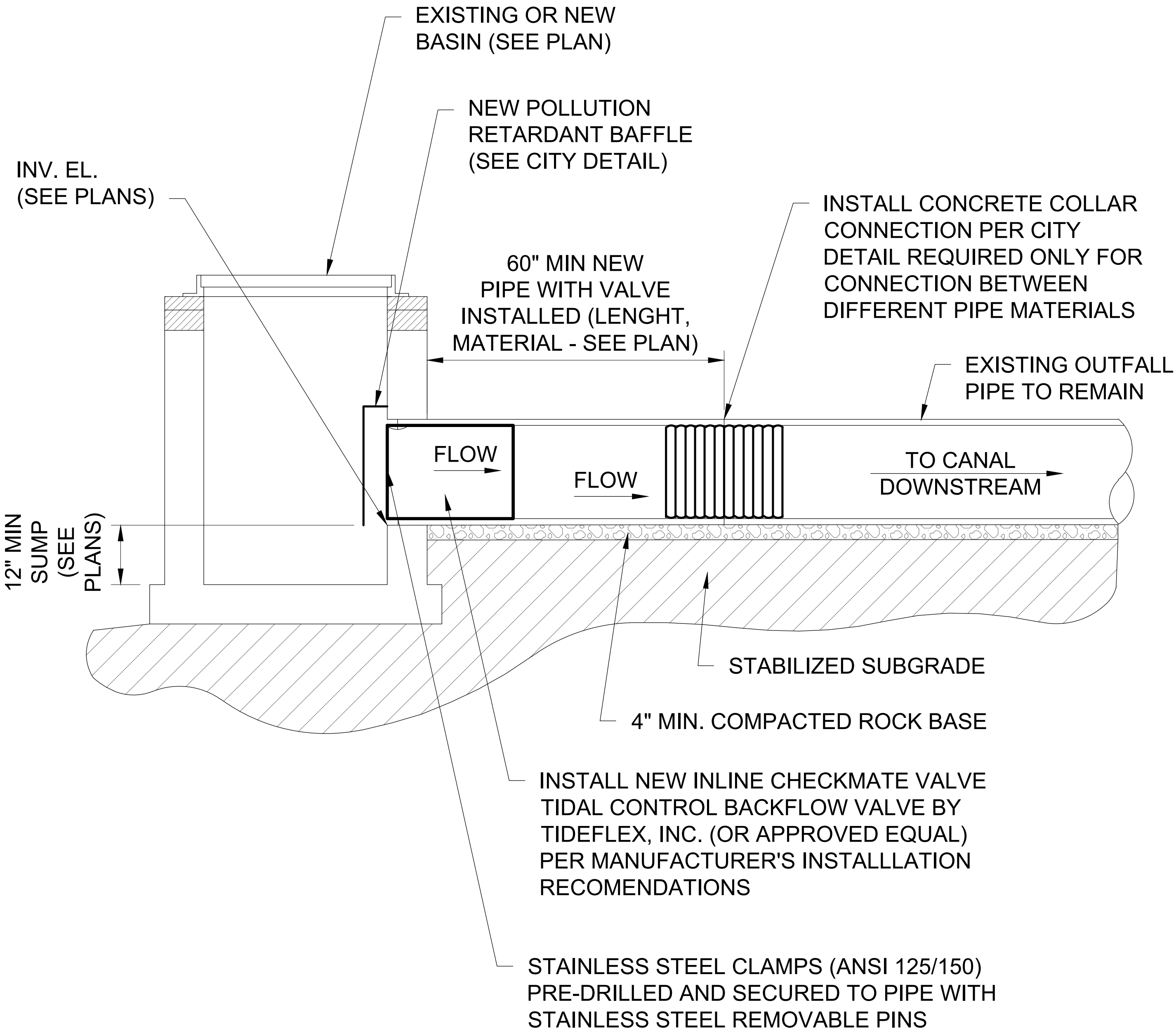


NOTE: DO NOT DISASSEMBLE BOLTED UNITS DURING FORMING PROCEDURES

NOTES:

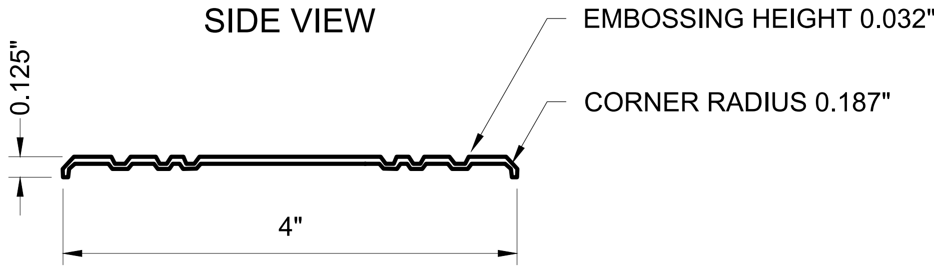
1. FRAME AND GRATE SHALL BE SUPPLIED IN 2'-0" LENGTHS.
2. GRATES SHALL BE BOLTED TO THE FRAME.

CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT ENGINEERING DETAILS 100 North Andrews Avenue, Fort Lauderdale, Florida 33301	TRENCH DRAIN	DETAIL NO. STRM 015 REVISED: 2017/07/31

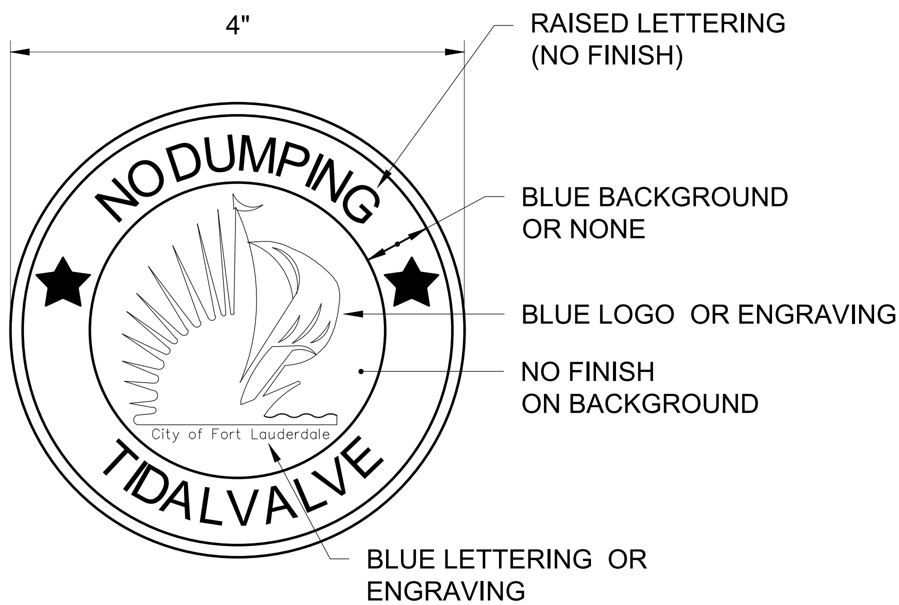


CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT ENGINEERING DETAILS 100 North Andrews Avenue, Fort Lauderdale, Florida 33301	INLINE CHECKVALVE INSTALLATION FOR TIDAL FLOOD CONTROL	DETAIL NO. STRM 016 REVISED: 2017/07/28

SIDE VIEW



TOP VIEW



FINISH		
UV BAKED ENAMEL - 1 COLOR OPTION		
MATERIAL	THICKNESS	WEIGHT
304 ANNEALED STAINLESS STEEL	0.062"	0.218 LBS.

NOTES:

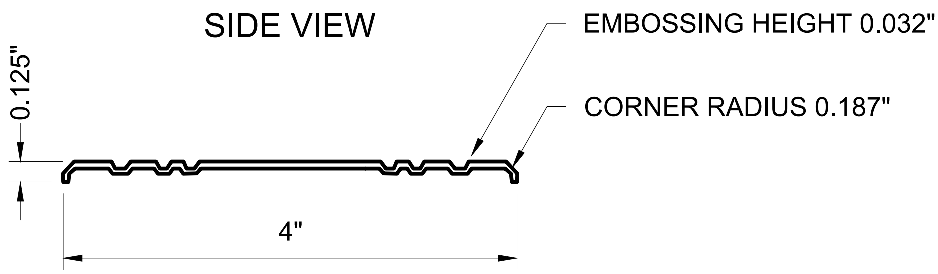
1. DRAIN MARKER SHALL BE BY LORDON, INC., OR EQUAL.
2. SECURE WITH SIKAFLEX IIFC ADHESIVE.

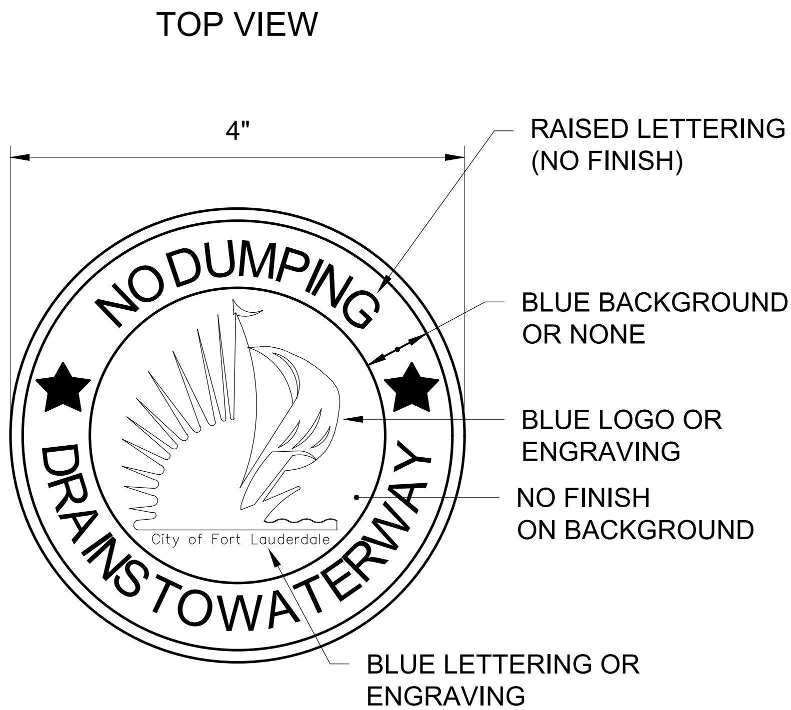
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

TIDAL VALVE MARKER

DETAIL NO.
STRM
022

REVISED:
2017/12/22





FINISH		
UV BAKED ENAMEL - 1 COLOR OPTION		
MATERIAL	THICKNESS	WEIGHT
304 ANNEALED STAINLESS STEEL	0.062"	0.218 LBS.

NOTES:

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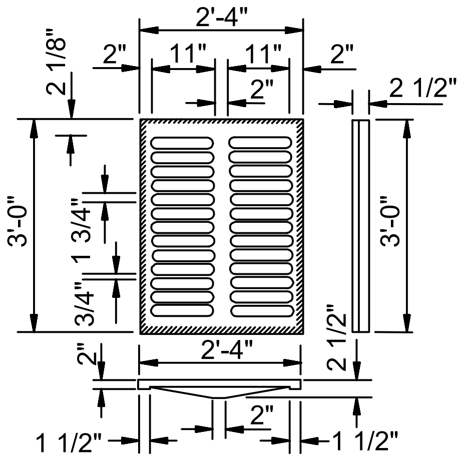
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DRAIN MARKER

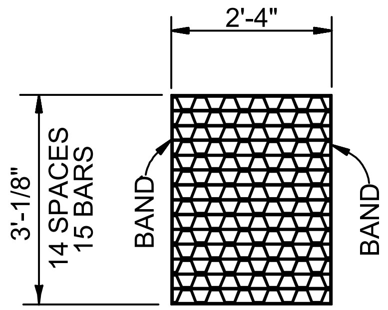
DETAIL NO.
STRM
021

REVISED:
2017/12/22



APPROX. WEIGHT 235 LBS

CAST IRON GRATE



STRAIGHT BARS 2" x 1/4"
RETICULINE BARS 1 1/4" x 3/16"
BANDS 2" x 1/4"
APPROX. WEIGHT 104 LBS

STEEL GRATE

NOTES

1. THESE INLETS ARE SUITABLE FOR BICYCLE TRAFFIC AND ARE TO BE USED IN DITCHES, MEDIANS AND OTHER AREAS SUBJECT TO INFREQUENT TRAFFIC LOADINGS BUT ARE NOT TO BE PLACED IN AREAS SUBJECT TO ANY HEAVY WHEEL LOADS. THESE INLETS MAY BE PLACED IN AREAS SUBJECT TO OCCASIONAL PEDESTRIAN TRAFFIC SUCH AS LANDSCAPED AREAS AND PAVEMENT AREAS WHERE PEDESTRIANS TRAFFIC SUCH AS LANDSCAPED AREAS AND PAVEMENT AREAS WHERE PEDESTRIANS CAN WALK AROUND THE INLET.

2. INLETS SUBJECT TO MINIMAL DEBRIS SHOULD BE CONSTRUCTED WITHOUT SLOTS. WHERE DEBRIS IS A PROBLEM INLETS SHOULD BE CONSTRUCTED WITH SLOTS. SLOTTED INLETS LOCATED WITHIN ROADWAY CLEAR ZONES AND AREAS SUBJECT TO PEDESTRIANS SHALL HAVE TRAVERSABLE SLOTS. TRAVERSABLE SLOTS SHALL NOT BE USED IN AREAS SUBJECT TO OCCASIONAL BICYCLE TRAFFIC.

3. STEEL GRATES ARE TO BE USED ON ALL INLETS WHERE BICYCLE TRAFFIC IS ANTICIPATED. STEEL GRATES ARE TO BE USED ON ALL INLETS WITH TRAVERSABLE SLOTS. EITHER CAST IRON OR STEEL GRATES MAY BE USED ON INLETS WITHOUT SLOTS WHERE BICYCLE TRAFFIC IS NOT ANTICIPATED. EITHER CAST IRON OR STEEL GRATES MAY BE USED ON ALL INLETS WITH NON-TRAVERSABLE SLOTS.

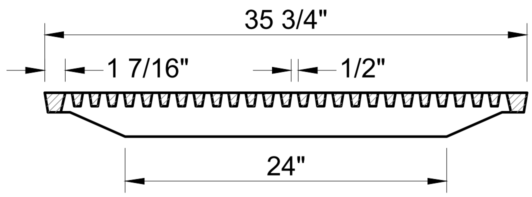
4. STEEL GRATES ARE REQUIRED ON INLETS WITH TRAVERSABLE SLOTS AND ON INLETS WHERE BICYCLE TRAFFIC IS ANTICIPATED.

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING DETAILS
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

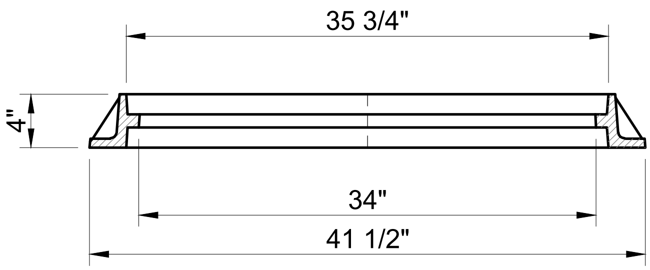
DITCH BOTTOM INLET
TYPE C
GRATES

DETAIL NO.
STRM
020

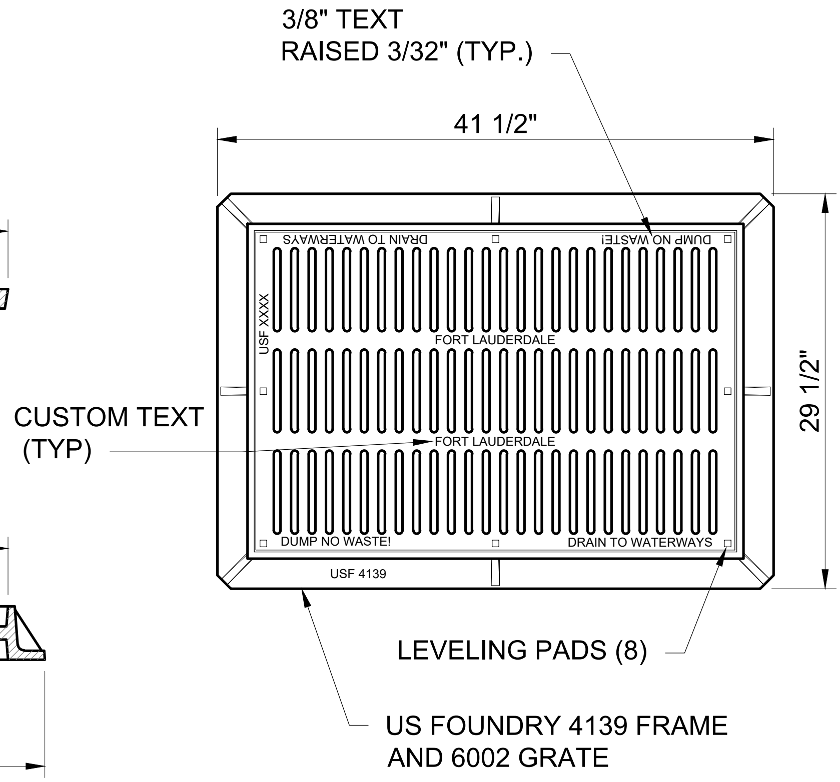
REVISED:
2017/12/22



GRATE



FRAME



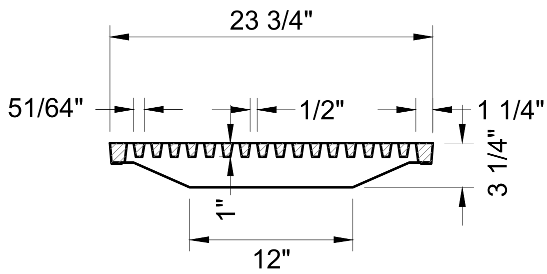
PLAN

23-3/4" x 35-3/4" RECTANGULAR GRATE

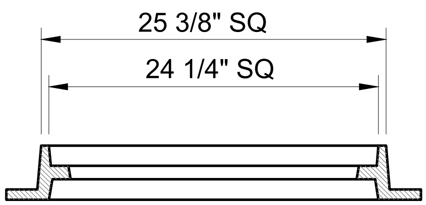
NOTES:

1. FRAME WEIGHT: 165 POUNDS
2. GRATE WEIGHT: 190 POUNDS
3. LOAD RATING: AASHTO H-20
4. OPEN AREA: 233 SQUARE INCHES
5. INSTALL DRAIN MARKER

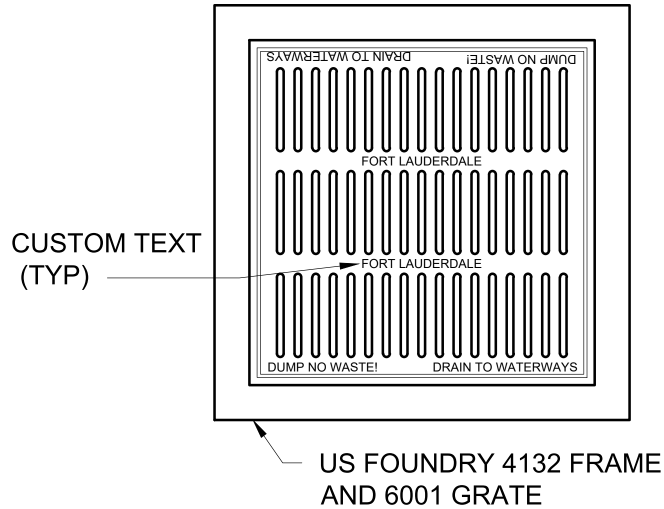
CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT ENGINEERING DETAILS 100 North Andrews Avenue, Fort Lauderdale, Florida 33301	ADA COMPLIANT CATCH BASIN FRAME AND GRATE 23" x 35"	DETAIL NO. STRM 019 REVISED: 2018/1/13



GRATE



FRAME



PLAN

23-3/4" SQUARE GRATE

NOTES:

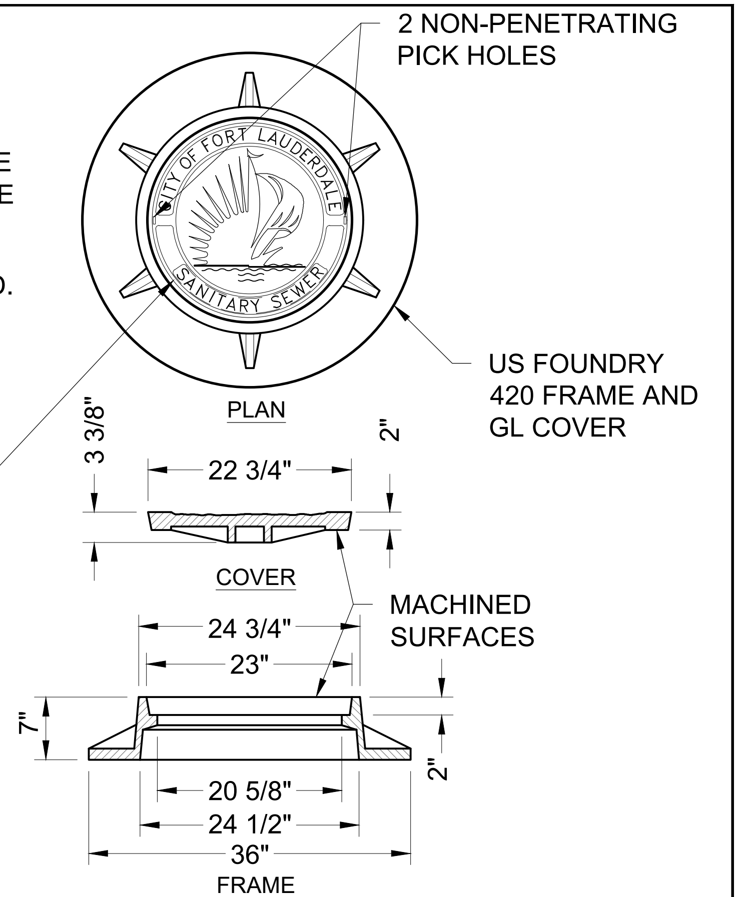
1. FRAME WEIGHT: 160 POUNDS
2. GRATE WEIGHT: 125 POUNDS
3. LOAD RATING: AASHTO H-20
4. OPEN AREA: 153 SQUARE INCHES
5. INSTALL DRAIN MARKER

CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT ENGINEERING DETAILS 100 North Andrews Avenue, Fort Lauderdale, Florida 33301	ADA COMPLIANT CATCH BASIN FRAME AND GRATE 23" x 23"	DETAIL NO. STRM 018 REVISED: 2018/1/13

NOTES:

1. MATERIAL: ASTM-A48 GRAY IRON CLASS 35B.
2. ADDITIONAL GRADE RINGS MAY BE USED TO ELEVATE EXISTING MANHOLE FRAMES TO RESURFACED GRADE (MAX 4" HEIGHT).
3. OPTIONAL: HINGED FRAME AND COVER AS SPECIFIED.
4. LOAD RATING: AASHTO H-20

LETTERING SHALL BE "STORMWATER", OR "TIDAL VALVE" AS INDICATED BY THE SERVICE SHOWN ON PLANS

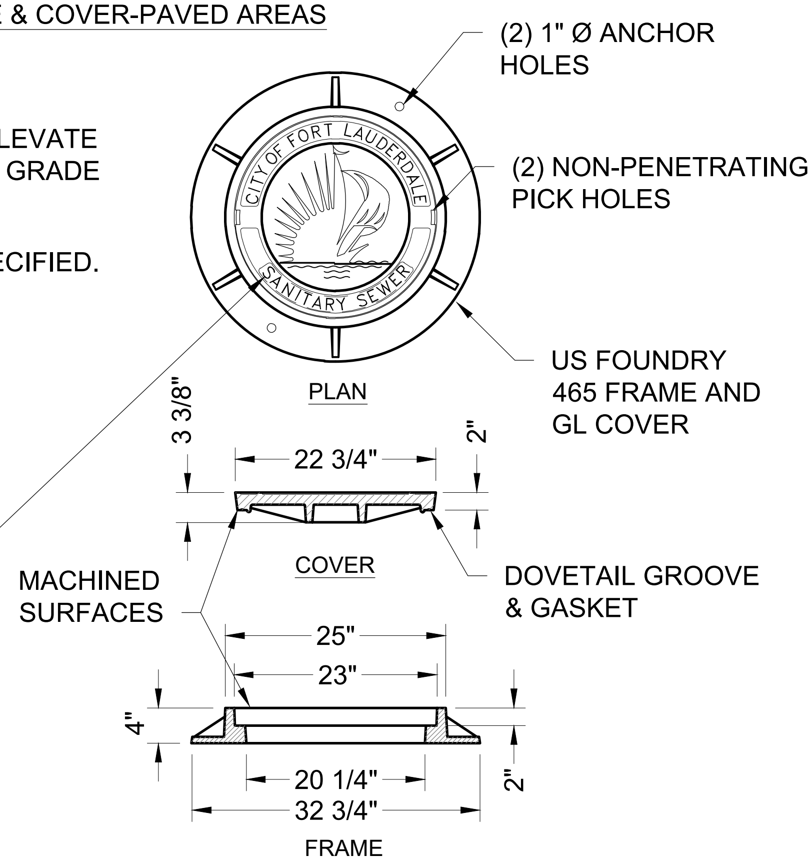


MANHOLE FRAME & COVER-PAVED AREAS

NOTES:

1. MATERIAL: ASTM-A48 GRAY IRON CLASS 35B.
2. ADDITIONAL GRADE RINGS MAY BE USED TO ELEVATE EXISTING MANHOLE FRAMES TO RESURFACED GRADE (MAX 4" HEIGHT).
3. OPTIONAL: HINGED FRAME AND COVER AS SPECIFIED.
4. LOAD RATING: AASHTO H-20

LETTERING SHALL BE "STORMWATER", OR "TIDAL VALVE" AS INDICATED BY THE SERVICE SHOWN ON PLANS



MANHOLE FRAME & COVER-UNPAVED AREAS

CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT ENGINEERING DETAILS 100 North Andrews Avenue, Fort Lauderdale, Florida 33301	MANHOLE FRAME AND COVER	DETAIL NO. STRM 017 REVISED: 2017/12/22