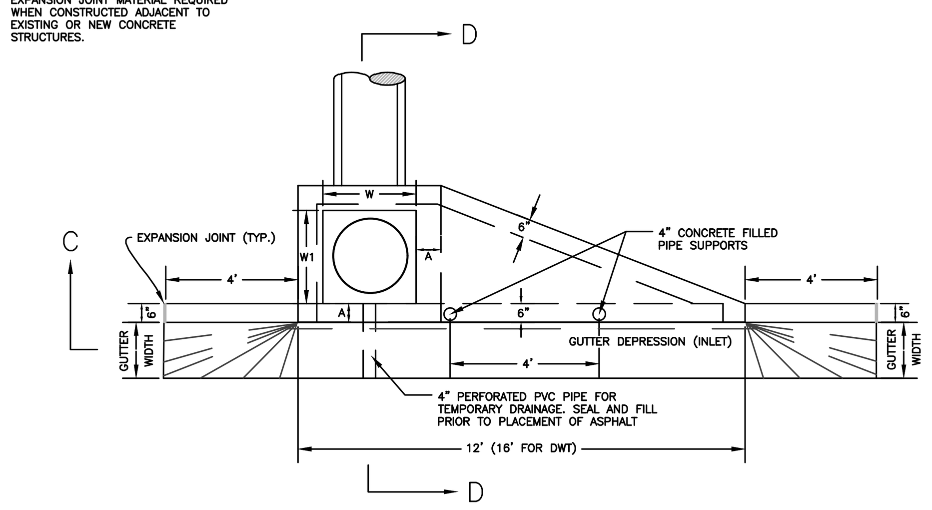
SINGLE WING TRAP

NOTES:
1. IF DEPTH EXCEEDS 4', INSTALL STEPS.
2. WING TRAPS CAN BE EITHER BRICK OR PRECAST CONCRETE, MINIMUM 3,000 PSI. PRECAST "KNOCKOUT" BOXES ARE NOT ALLOWED.
3. EXPANSION JOINT MATERIAL REQUIRED WHEN CONSTRUCTED ADJACENT TO EXISTING OR NEW CONCRETE STRUCTURES.



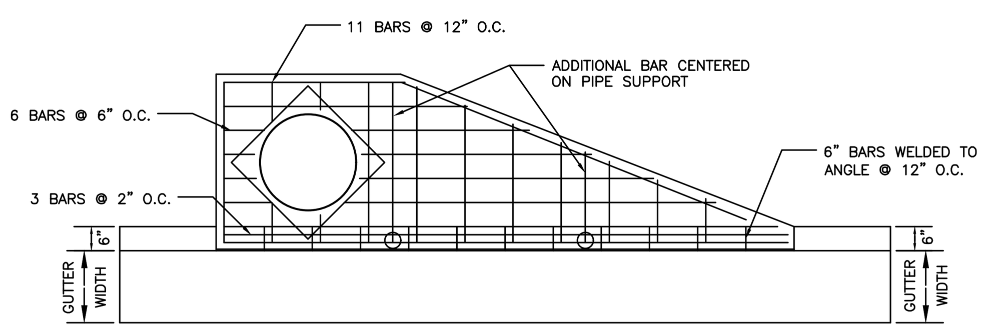
DIMENSION A:
6" FOR PRECAST OPTION
8" FOR BRICK OPTION

FOR SECTION C–C: SEE DETAIL 6.03
FOR SECTION D–D: SEE DETAIL 6.04
FOR DIMENSIONS W & W1: SEE DETAIL 6.05

NOT TO SCALE

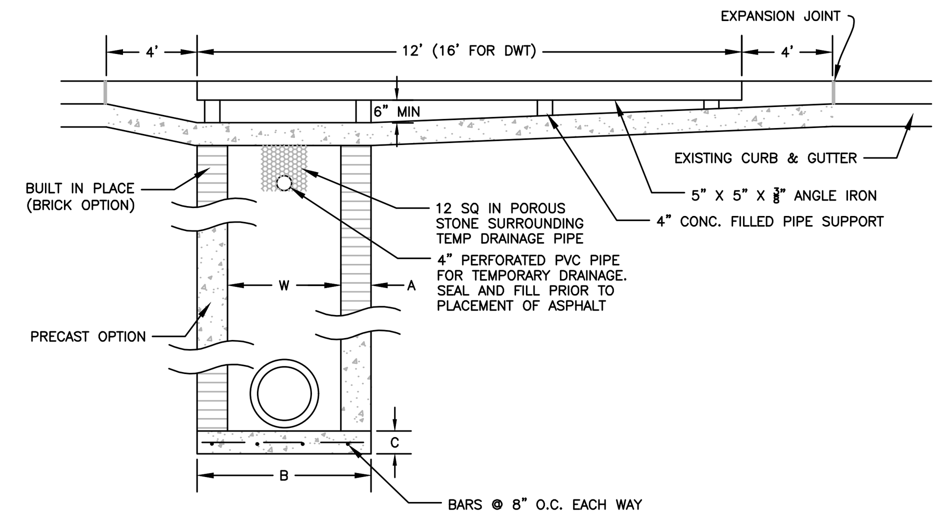
REBAR SCHEDULE

NOTES:
1. ALL REBAR TO BE #5.
2. MAINTAIN 1 ½" CLEAR SPACE BETWEEN STEEL AND BOTTOM OF TRAP TOP.



NOT TO SCALE

WING TRAP SECTION C–C



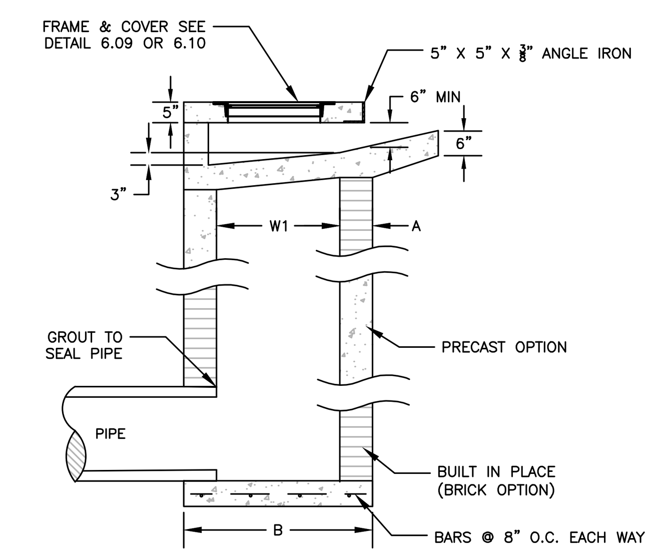
NOTES:
1. ALL CONCRETE TO BE 3,000 PSI.
2. IF DEPTH EXCEEDS 4', INSTALL STEPS.
3. ALL REBAR TO BE #5.
4. MAINTAIN 1½" CLEAR SPACE BETWEEN STEEL AND BOTTOM OF BASE
5. EXPANSION JOINT MATERIAL REQUIRED WHEN CONSTRUCTED ADJACENT TO EXISTING OR NEW CONCRETE STRUCTURES.

NOT TO SCALE

DIMENSION A:
6" FOR PRECAST OPTION
8" FOR BRICK OPTION
DIMENSION C:
6" FOR PIPE 24" & UNDER
8" FOR PIPE 30" & OVER
FOR DIMENSION W & B:
SEE DETAIL 6.05

WING TRAP SECTION D–D

DIMENSION A:
6" FOR PRECAST OPTION
8" FOR BRICK OPTION
FOR DIMENSION W1 & B:
SEE DETAIL 6.05



NOTES:
1. ALL CONCRETE TO BE 3,000 PSI.
2. IF DEPTH EXCEEDS 4', INSTALL STEPS.
3. ALL REBAR TO BE #5.
4. MAINTAIN 1½" CLEAR SPACE BETWEEN STEEL AND BOTTOM OF BASE
5. EXPANSION JOINT MATERIAL REQUIRED WHEN CONSTRUCTED ADJACENT TO EXISTING OR NEW CONCRETE STRUCTURES.

NOT TO SCALE

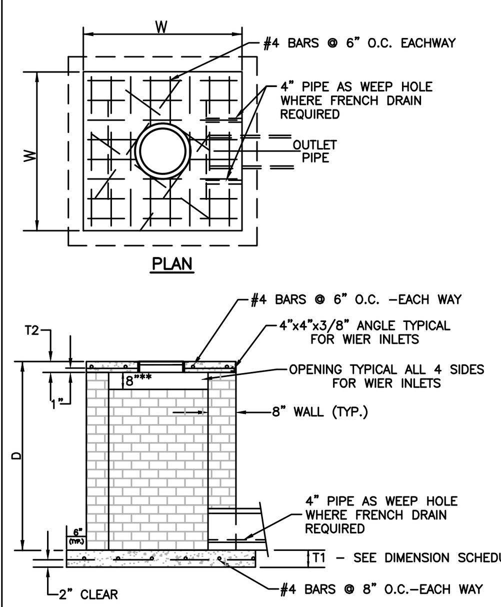
WING TRAP BOX DIMENSIONS

INSIDE DIAMETER OF PIPE	B	W*	W1**
18"	48"	36"	36"
24"	54"	36"	36"
30"	60"	42"	36"
36"	72"	54"	36"
42"	78"	60"	36"
48"	88"	70"	36"
54"	94"	76"	36"
60"	102"	84"	36"

* IF W AND/OR W1 EXCEEDS 42", USE TRANSITION SECTION TO REDUCE TO 36" X 36".

** IF PIPE(S) EXIT/ENTER BOX FROM SIDE (PARALLEL TO ROAD), W1 = W.

WIER INLET & JUNCTION BOX



**AS REQUIRED BY THE ENGINEER

NOTES:
1. USE 4" X 4" X ⅜" ANGLE IRON WITH ⅜" X 3" NELSON STUDS AT 18" O.C. ON OUTSIDE BOTTOM EDGES OF SUSPENDED SLABS. FOR SPANS EXCEEDING 4', PROVIDE A 4" CONCRETE FILLED PVC PIPE SUPPORT WITH 6" X 6" X ¼" TOP AND BOTTOM PLATES AT CENTER OF ALL SPANS.
2. INSTALL #3 BARS @ 8" O.C. IN WEIR OPENINGS AND TACK WELD TO ANGLE IRON TO PROVIDE FOR SAFETY WHEN "H" EXCEEDS 8".
3. FOR JUNCTION BOXES, BRICK UP INLETS AND SET TOP FLUSH WITH GROUND.
4. BOX CAN BE EITHER BRICK OR PRECAST. IF BOX IS PRECAST, MINIMUM 3,000 PSI FOR ALL CONCRETE.

DIMENSION SCHEDULE FOR WIER INLETS

PIPE SIZE	W	MIN. "D"	"T1"	"T2"
18"	4'-0"	4'-0"	6"	4"
24"	4'-0"	4'-6"	6"	4"
30"	5'-0"	5'-0"	8"	6"
36"	5'-6"	6'-0"	8"	6"
42"	6'-0"	6'-6"	8"*	8"*
48"	7'-0"	7'-0"	8"*	8"*
54"	8'-0"	7'-6"	8"*	8"*

DIMENSIONS FOR JUNCTION BOXES

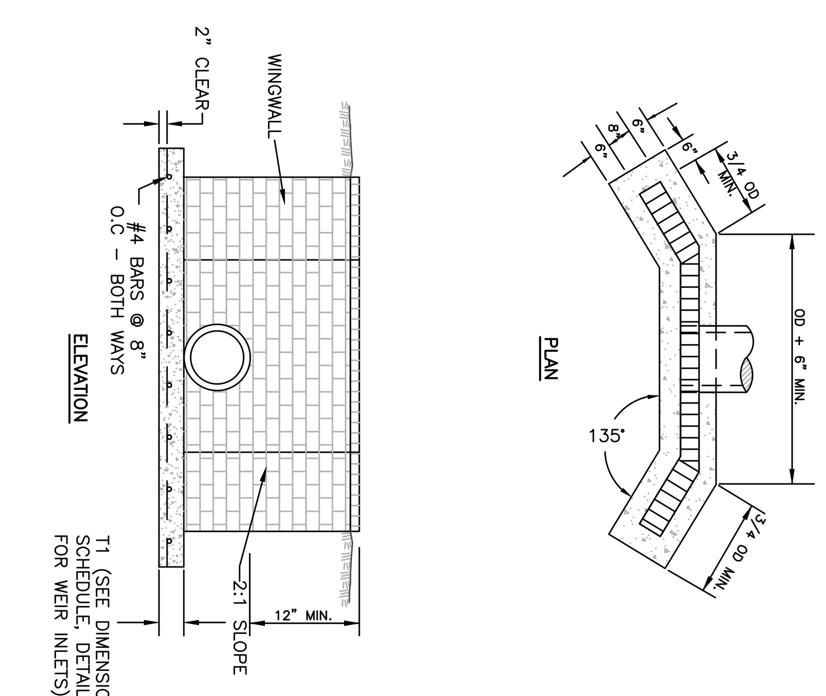
PIPE SIZE	W	MIN. "D"	"T1"	"T2"
UP TO 24"	4'-0"	4'-0"	6"	4"
30"	4'-6"	4'-6"	8"	6"
36"	5'-0"	5'-0"	8"	6"
42"	6'-0"	5'-6"	8"	8"*
48"	6'-6"	6'-0"	8"	8"*
54"	7'-0"	6'-6"	8"	8"*

* USE REINFORCING STEEL AT TOP AND BOTTOM OF SLAB

STANDARD HEADWALL

NOT TO SCALE

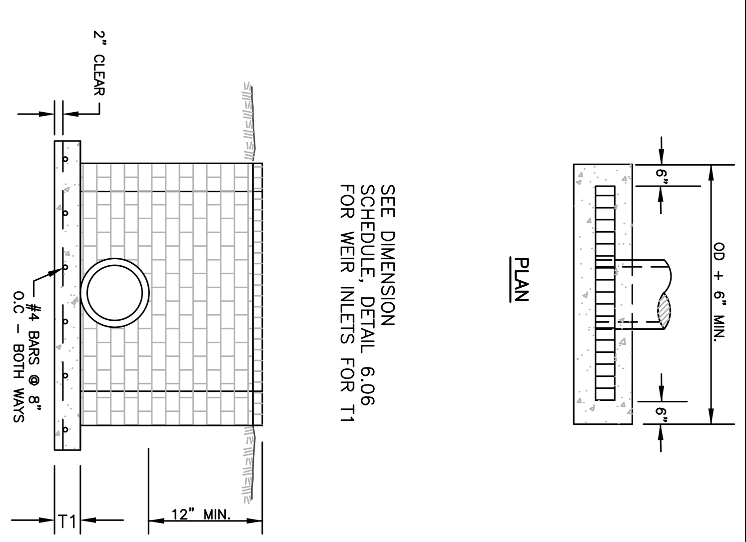
NOTES:
1. HEADWALL CAN BE EITHER BRICK OR PRECAST. IF HEADWALL IS PRECAST, MINIMUM 3,000 PSI FOR ALL CONCRETE.



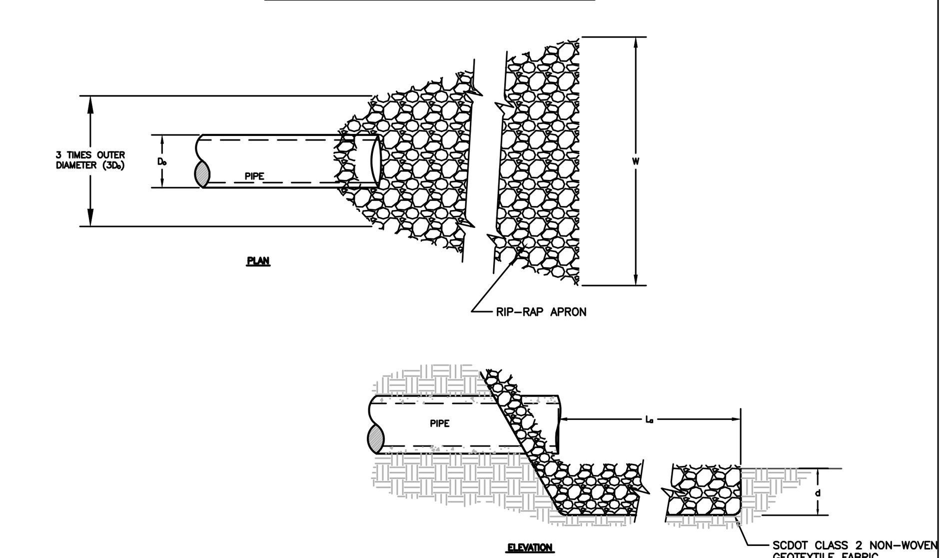
STANDARD HEADWALL
(NO WING WALLS)

NOT TO SCALE

NOTES:
1. HEADWALL CAN BE EITHER BRICK OR PRECAST. IF HEADWALL IS PRECAST, MINIMUM 3,000 PSI FOR ALL CONCRETE.



RIP–RAP OUTLET PROTECTION

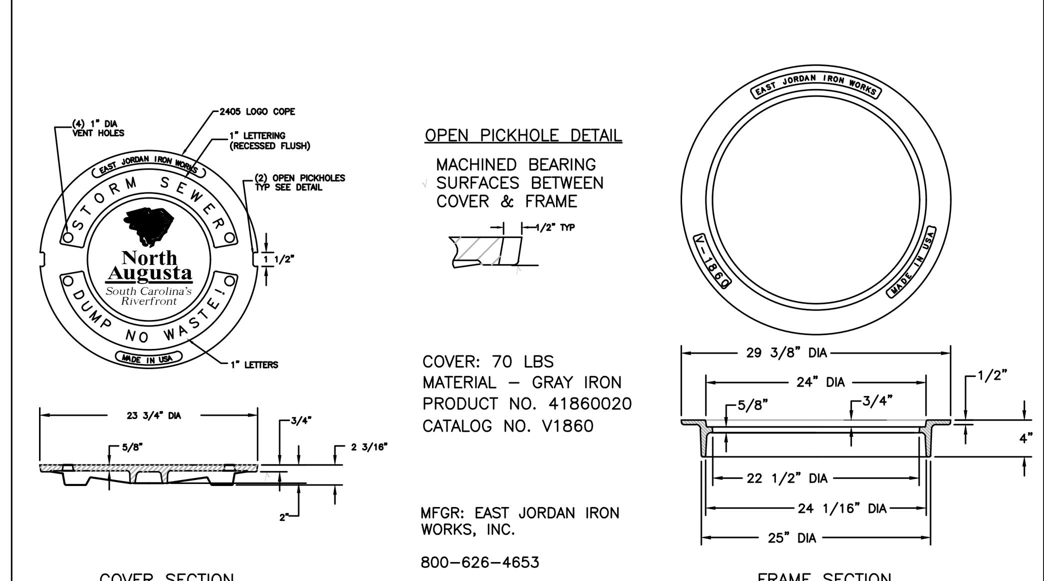


NOTE:
D_o = OUTER DIAMETER OF OUTLET PIPE
W = WIDTH OF OUTLET PROTECTION AT END OF RIP–RAP APRON
L_a = LENGTH OF RIP–RAP APRON
d = DEPTH OF RIP–RAP

ALL ITEMS TO BE DESIGNED USING SCDOT WATER QUALITY MANUAL. SHOW DIMENSIONS ON PLAN SHEETS

NOT TO SCALE

NON–TRAFFIC FRAME AND COVER



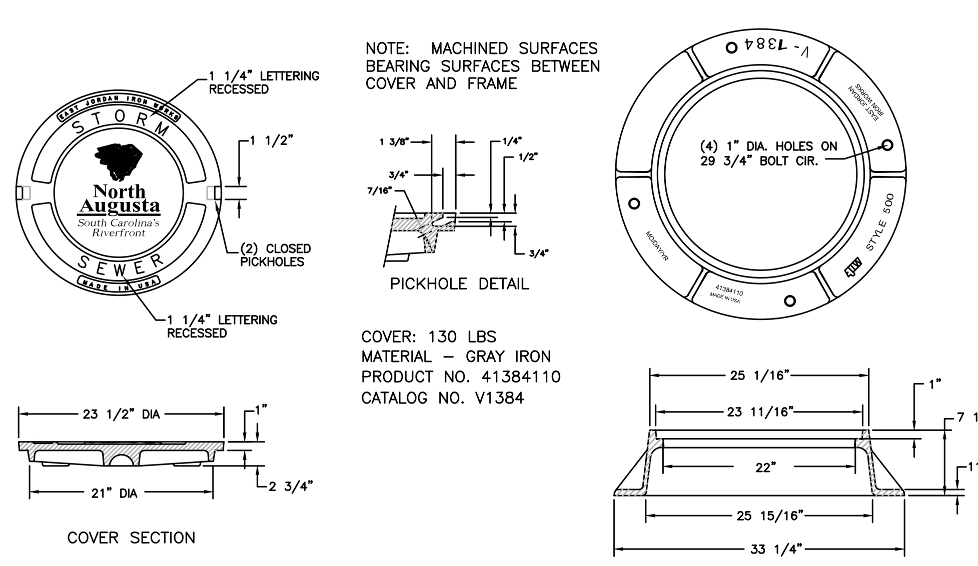
COVER: 70 LBS
MATERIAL – GRAY IRON
PRODUCT NO. 41860020
CATALOG NO. V1860

MFGR: EAST JORDAN IRON WORKS, INC.

800–626–4653

NOT TO SCALE

TRAFFIC (HEAVY DUTY) FRAME AND COVER

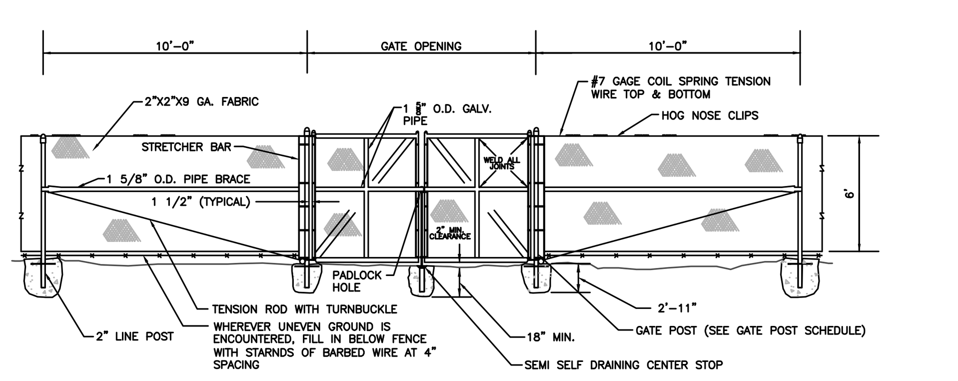


NOTE: MACHINED SURFACES BEARING SURFACES BETWEEN COVER AND FRAME

COVER: 130 LBS
MATERIAL – GRAY IRON
PRODUCT NO. 41384110
CATALOG NO. V1384

NOT TO SCALE

DETENTION POND FENCE



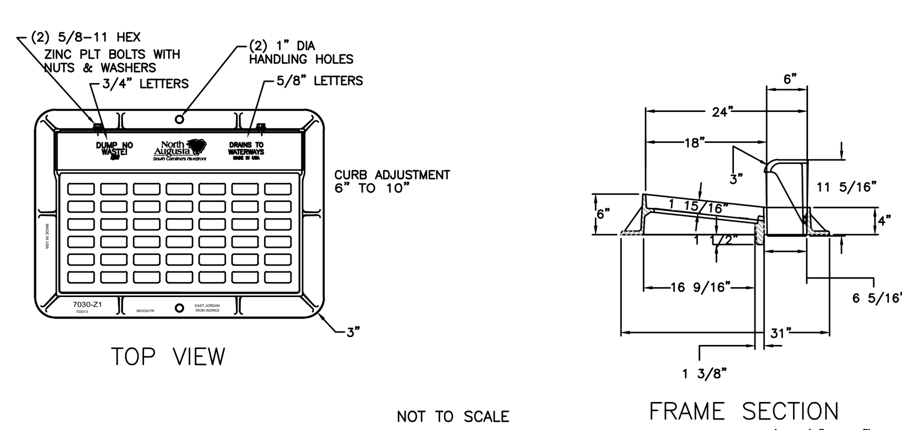
GATE POST SCHEDULE

GATE OPENING	NOM. PIPE SIZE
TO 6' INC.	2 1/2"
6'–13' INC.	3 1/2"
13'–18' INC.	6"
OVER 18'	8"

NOT TO SCALE

NOTES:
1. WHERE PVC COATING IS REQUIRED OR USED, FABRIC COATING TO BE 7 MIL THICKNESS AND POST COATING TO BE 10–15 MIL THICKNESS. COLOR IS TO BE BLACK.
2. 1 ⅝" O.D. DIAGONAL BRACES REQUIRED ON GATES WITH OPENING GREATER THAN 20'–0".
3. 3 STRANDS OF BARBED WIRE ON TOP.
4. 2 ½" PULL POST REQUIRED AT 500' MAX., CORNERS & ALL SHARP BREAKS IN TERRAIN.

24" HOODBACK INLET
FRAME AND GRATE



NOT TO SCALE

PRODUCT NO. 00703040B1
CATALOG NO. 7030
CATALOG NO. 7030M2
CATALOG NO. 7030T1

ALL MAT'LS GRAY IRON, ASTM CL35B

FRAME & BACK: 328 LBS
GRATE: 185 LBS
TOTAL WT: 513 LBS

MFGR: EAST JORDAN IRON WORKS, INC.

800–626–4653

SESC SYMBOLS (1)

UNIFORM CODING SYSTEM FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAMS			A SMALL TEMPORARY BARRIER OR DAM CONSTRUCTED ACROSS A SWALE, DRAINAGE DITCH OR AREA OF CONCENTRATED FLOW.
Ch	CHANNEL STABILIZATION			IMPROVING, CONSTRUCTING OR STABILIZING AN OPEN CHANNEL, EXISTING STREAM, OR DITCH.
Co	CONSTRUCTION EXIT			A CRUSHED STONE PAD LOCATED AT THE CONSTRUCTION SITE EXIT TO PROVIDE A PLACE FOR REMOVING MUD FROM TIRES THEREBY PROTECTING PUBLIC STREETS.
Di	DIVERSION			AN EARTH CHANNEL OR DIKE LOCATED ABOVE, BELOW, OR ACROSS A SLOPE TO DIVERT RUNOFF. THIS MAY BE A TEMPORARY OR PERMANENT STRUCTURE.
Dn1	DOWNDRAIN STRUCTURE			A PAVED CHUTE, PIPE, SECTIONAL CONDUIT, OR SIMILAR MATERIAL DESIGNED TO SAFELY CONDUCT SURFACE RUNOFF DOWN A SLOPE.
Dn2	DOWNDRAIN STRUCTURE, FLEXIBLE			A FLEXIBLE CONDUIT OF HEAVY–DUTY FABRIC OR OTHER MATERIAL DESIGNED TO SAFELY CONDUCT SURFACE RUNOFF DOWN A SLOPE. THIS IS TEMPORARY AND INEXPENSIVE.
Ga	GABIONS			ROCK FILLED BASKETS WHICH ARE HAND–PLACED INTO POSITION FORMING SOIL STABILIZING STRUCTURES.
Gr	GRADE STABILIZATION STRUCTURE			PERMANENT STRUCTURES INSTALLED TO PROTECT NATURAL OR ARTIFICIAL CHANNELS OR WATERWAYS WHERE OTHERWISE THE SLOPE WOULD BE SUFFICIENT FOR THE RUNNING WATER TO FORM GULLIES.
Lv	LEVEL SPREADER			A STRUCTURE TO CONVERT CONCENTRATED FLOW OF WATER INTO LESS EROSIVE SHEET FLOW. THIS SHOULD BE CONSTRUCTED ONLY ON UNDISTURBED SOILS.
Rd	ROCK FILTER DAM			A PERMANENT OR TEMPORARY STONE FILTER DAM INSTALLED ACROSS SMALL STREAMS OR DRAINAGEWAYS.
Re	RETAINING WALL			A WALL INSTALLED TO STABILIZE CUT AND FILL SLOPES WHERE MAXIMUM PERMISSIBLE SLOPES ARE NOT OBTAINABLE. EACH SITUATION WILL REQUIRE SPECIAL DESIGN.
Rp	RIPRAP			LOOSE ROCK OR SIMILAR DURABLE MATERIAL INSTALLED ON SLOPES FOR PROTECTION FROM EROSION CAUSED BY WATER TURBULENCE OR HIGH VELOCITIES.
Rt	RETROFITTING			A DEVICE OR STRUCTURE PLACED IN FRONT OF A PERMANENT STORMWATER DETENTION POND OUTLET STRUCTURE TO SERVE AS A TEMPORARY SEDIMENT FILTER.
Sd1	SEDIMENT BARRIER			A BARRIER TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. IT MAY BE SANDBAGS, BALES OF STRAW OR HAY, BRUSH, LOGS AND POLES, GRAVEL, OR A SEDIMENT FENCE. THE BARRIERS ARE USUALLY TEMPORARY AND INEXPENSIVE.

SESC SYMBOLS (2)

UNIFORM CODING SYSTEM FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

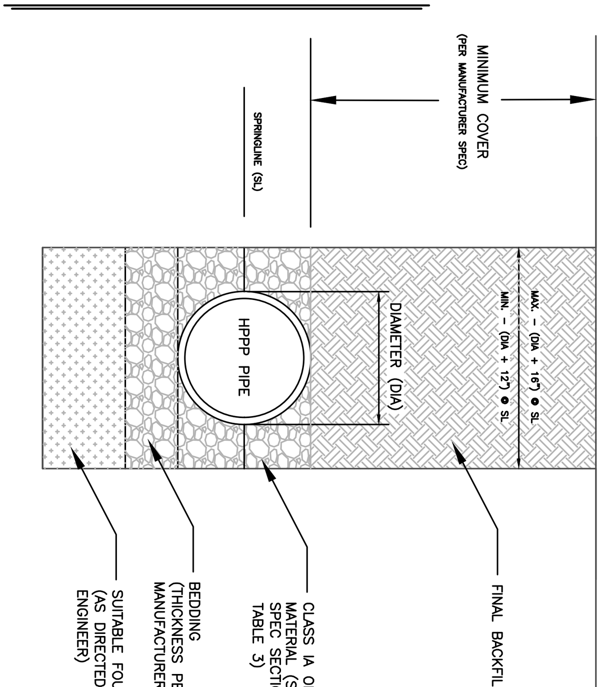
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sd2	SEDIMENT BASIN, TEMPORARY			A BASIN CREATED BY EXCAVATION OR A DAM ACROSS A WATERWAY. THE SURFACE WATER RUNOFF IS TEMPORARILY STORED, ALLOWING THE BULK OF THE SEDIMENT TO DROP OUT. THE BASIN IS USUALLY TEMPORARY BUT MAY BE DESIGNED AS A PERMANENT POND OR STORMWATER RETENTION DEVICE.
Sd3	SEDIMENT TRAP, TEMPORARY			AN IMPOUNDING AREA CREATED BY EXCAVATING AROUND A STORM DRAIN DROP INLET. THE EXCAVATED AREA WILL BE FILLED AND STABILIZED ON COMPLETION OF CONSTRUCTION ACTIVITIES.
Sr	STREAM CROSSING, TEMPORARY			A TEMPORARY BRIDGE OR CULVERT–TYPE STRUCTURE PROTECTING A STREAM OR WATERCOURSE FROM DAMAGE BY CROSSING CONSTRUCTION EQUIPMENT.
St1	STORM DRAIN INLET/OUTLET PROTECTION			A PAVED OR SHORT SECTION OF RIPRAP CHANNEL AT THE OUTLET OF A STORM DRAIN SYSTEM PREVENTING EROSION FROM THE CONCENTRATED RUNOFF. SEE DETAIL 6.09.
St2	STORM WATER RETENTION STRUCTURE			A STRUCTURE TEMPORARILY STORING STORM WATER RUNOFF AND RELEASING IT SLOWLY.
Su	SURFACE ROUGHENING			A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS ON A CONTOUR OR SLOPES LEFT IN A ROUGHENED CONDITION AFTER GRADING.
Tp	TOPSOILING			THE PRACTICE OF STRIPPING OFF THE MORE FERTILE TOP SOIL, STORING IT, THEN SPREADING IT OVER THE DISTURBED AREA AFTER THE COMPLETION OF CONSTRUCTION ACTIVITIES.
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL			PAVED OR VEGETATIVE WATER OUTLETS FOR DIVERSIONS, TERRACES, BERMS, DIKES OR SIMILAR STRUCTURES.

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE		Bf	AN UNDISTURBED NATURAL "GREEN BELT" SEPARATING THE LAND–DISTURBING SITE FROM SURROUNDING PROPERTY AND BORDERING STREAMS. IT SERVES TO REDUCE WATER VELOCITY AND REMOVE SOME SEDIMENT. IT IS ALSO AT TIMES A NOISE OR "VISION POLLUTION" BARRIER.
Ds1	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)		Ds1	ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON DISTURBED AREAS.
Ds2	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)		Ds2	ESTABLISHING PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD, OR LEGUMES ON DISTURBED AREAS.
Ds3	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds3	ESTABLISHING TEMPORARY PROTECTION FOR DISTURBED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDING COVER.
Du	DUST CONTROL ON DISTURBED AREAS		DU	CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADWAYS AND SIMILAR SITES.

CORRUGATED PLASTIC PIPE BEDDING

NOT TO SCALE



North Augusta
South Carolina's Riverfront

REVISIONS

DATE	BY	DESCRIPTION
2/16/23	BGM	CREATED COMBINED DETAIL PAGE
1/06/26	BGM	ADDED NEW DETAILS

SECTION 6 – STORM SEWER DETAILS

Prepared By:
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North Augusta, South Carolina 29841