GOVERNMENT OF THE DISTRICT OF COLUMBIA
PERMIT OPERATIONS DIVISION
PLANS APPROVED
Permit No. BCIV2300110 Date 11/16/23

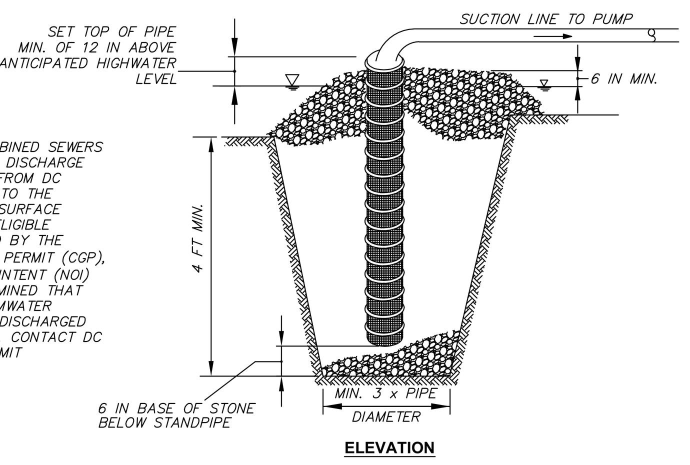
These plans are conditionally approved as submitted or noted during plan review and are subject to field inspection. Approved plans must be kept on site and are needed for all inspections. No changes or modifications to these plans. Changes require a revision permit with the revised plans. Trade Permits are required for trade work, e.g. Electrical or Plumbing

Structural Review - Glenn Kechejian - 11-16-2023
DDOT Review - Shawntanishia Zackery - 11-16-2023
DOEE SE-SW Review - Saba Gharavi - 11-16-2023
HPRB Review - Timothy Dennee - 11-16-2023
DC Water Review - Vahid Bilvardi - 11-16-2023

1 SUMP PIT DETAIL (CIV0840)

NOT TO SCALE

STANDARD SYMBOL: SP



NOTE:

- ANY DISCHARGE TO COMBINED SEWERS REQUIRES A TEMPORARY DISCHARGE AUTHORIZATION PERMIT FROM DC WATER. ANY DISCHARGE TO THE DISTRICT MS4 OR TO A SURFACE WATER BODY FROM AN ELIGIBLE PROJECT, AS REGULATED BY THE CONSTRUCTION GENERAL PERMIT (CGP), REQUIRES A NOTICE OF INTENT (NOI) FROM EPA. ONCE DETERMINED THAT THE PROJECT HAS STORMWATER RUNOFF THAT MUST BE DISCHARGED ON A TEMPORARY BASIS, CONTACT DC WATER OR EPA FOR PERMIT INFORMATION.

CONSTRUCTION SPECIFICATIONS

1. WRAP THE PIPE WITH ¼ INCH GALVANIZED HARDWARE CLOTH AND THEN GEOTEXTILE OVER THE HARDWARE CLOTH.
2. EXCAVATE THE PIT TO 3 TIMES THE PIPE DIAMETER AND 4 FEET IN DEPTH. PLACE CLEAN ¾ TO 1–½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 6 INCHES IN DEPTH PRIOR TO PIPE PLACEMENT.
3. SET THE TOP OF PIPE A MINIMUM OF 12 INCHES ABOVE THE ANTICIPATED WATER SURFACE ELEVATION.
4. BACKFILL PIT AROUND THE OUTER PIPE WITH ¾ TO 1–½ INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE AND EXTEND STONE A MINIMUM OF 6 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION.
5. PLACE THE SUCTION HOSE FROM THE PUMP INSIDE THE PIPE TO BEGIN DEWATERING. PLACE THE DISCHARGE HOSE IN A STABILIZED AREA DOWNSLOPE OF UNSTABILIZED AREAS TO PREVENT EROSION. MEADOW OR WOODED AREAS ARE PREFERRED DISCHARGE LOCATIONS BUT STORM DRAINS AND PAVED AREAS ARE ACCEPTABLE.

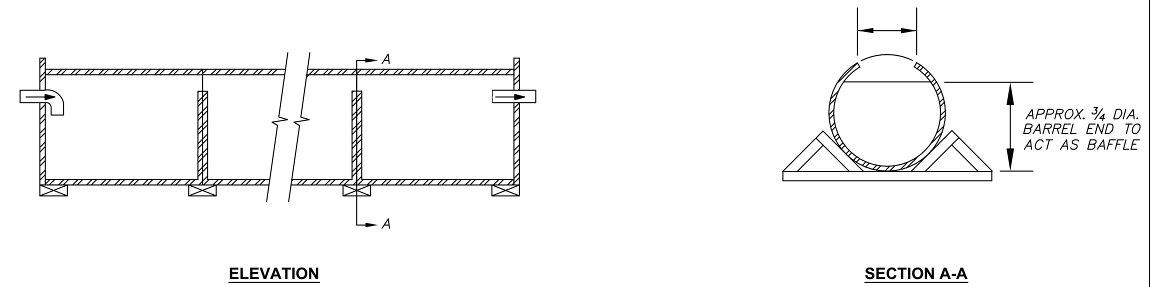
DATE	APPR			
REVISED			**SUMP PIT**	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 702.1

2 PORTABLE SEDIMENT TANK 1 DETAIL (CIV0840)

NOT TO SCALE

SOURCE: USDA–NRCS

STANDARD SYMBOL: PST



CONSTRUCTION SPECIFICATIONS

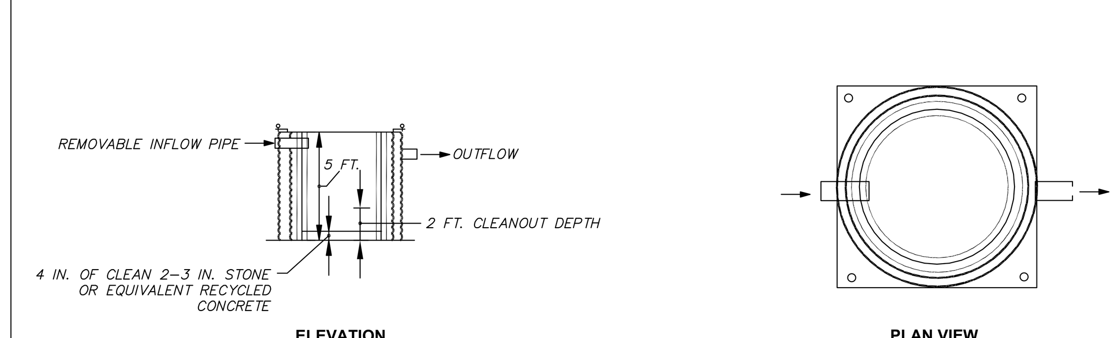
1. CONSTRUCT THE STRUCTURE WITH STEEL DRUMS, STURDY WOOD, OR OTHER MATERIAL SUITABLE FOR HANDLING THE PRESSURE EXERTED BY THE VOLUME OF WATER.
2. SEDIMENT TANKS HAVE A MINIMUM DEPTH OF 2 FEET.
3. ONCE THE WATER LEVEL NEARS THE TOP OF THE TANK, SHUT OFF THE PUMP WHILE THE TANK DRAINS AND ADDITIONAL CAPACITY IS MADE AVAILABLE.
4. DESIGN THE TANK TO ALLOW FOR EMERGENCY FLOW OVER TOP OF THE TANK.

DATE	APPR			
REVISED			**PORTABLE SEDIMENT TANK - 1 (HORIZONTAL)**	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 703.1

3 PORTABLE SEDIMENT TANK 2 DETAIL (CIV0840)

NOT TO SCALE

STANDARD SYMBOL: PST



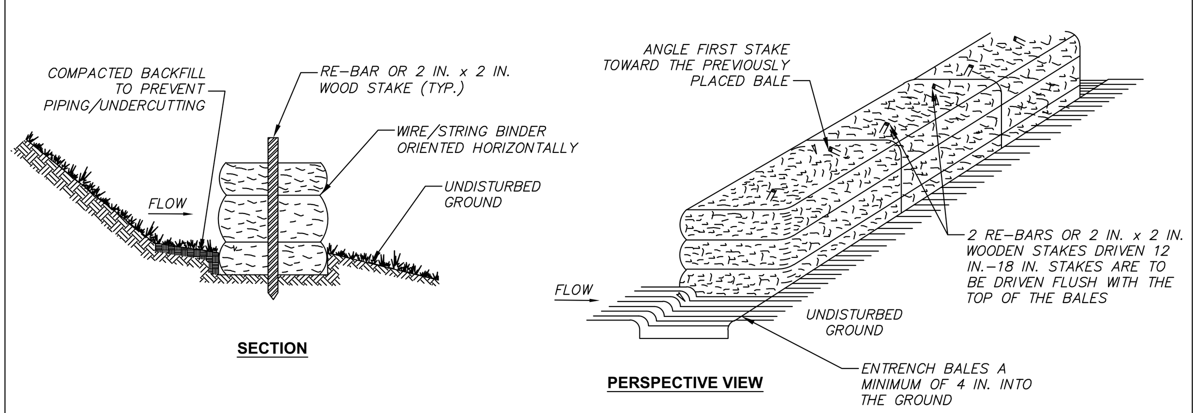
CONSTRUCTION SPECIFICATIONS

1. USE 60 INCH CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS, 6 INCHES ON CENTER FOR THE INNER PIPE. LINE PIPE WITH NONWOVEN GEOTEXTILE SANDWICHED BETWEEN, AND ATTACHED TO, ¼ INCH HARDWARE CLOTH.
2. OVERLAP GEOTEXTILE 8 INCHES MINIMUM AT VERTICAL SEAM AND AT THE BOTTOM PLATE.
3. ANCHOR GEOTEXTILE AT BOTTOM OF TANK WITH 4 INCHES OF 2 TO 3 INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE.
4. USE 72 INCH CORRUGATED METAL OR PLASTIC OUTER PIPE WITH PERMANENT OUTFLOW PIPE WITH INVERT LOWER THAN INFLOW PIPE.
5. INFLOW PIPE MUST DISCHARGE INTO INNER PIPE AND BE REMOVABLE.
6. PLACE TANK ON LEVEL SURFACE AND DISCHARGE TO A STABLE AREA AT A NON–EROSIVE RATE.

DATE	APPR			
REVISED			**PORTABLE SEDIMENT TANK - 2 (VERTICAL)**	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 703.2

4 STRAW BALE DIKE (CIV0840)

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. PLACE BALES IN A ROW ON THE CONTOUR WITH THE ENDS OF EACH BALE TIGHTLY ABUTTING THE ADJACENT BALES.
2. ENTRENCH EACH BALE 4 INCHES MINIMUM INTO THE SOIL AND PLACE SO THE BINDINGS ARE HORIZONTAL. SOME OF THE EXCAVATED SOIL MUST BE BUILT UP AND COMPACTED AT THE UPSTREAM EDGE OF THE DIKE TO PREVENT PIPING AND UNDERCUTTING.
3. SECURELY ANCHOR BALES IN PLACE BY EITHER TWO STAKES OR RE–BARS DRIVEN THROUGH THE BALE 12 TO 18 INCHES INTO THE GROUND. DRIVE THE FIRST STAKE IN EACH BALE TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. DRIVE THE STAKES FLUSH WITH THE TOP OF THE BALE.
4. IMMEDIATELY INSPECT STRAW BALE BARRIERS AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL EVENTS. RE–DRIVE THE ANCHORING STAKES IF THEY BECOME EXPOSED. REMOVE SEDIMENT WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
5. REMOVE ALL BALES WHEN THE SITE HAS BEEN STABILIZED. GRADE FLUSH AND STABILIZE THE TRENCH WHERE THE BALES WERE LOCATED.

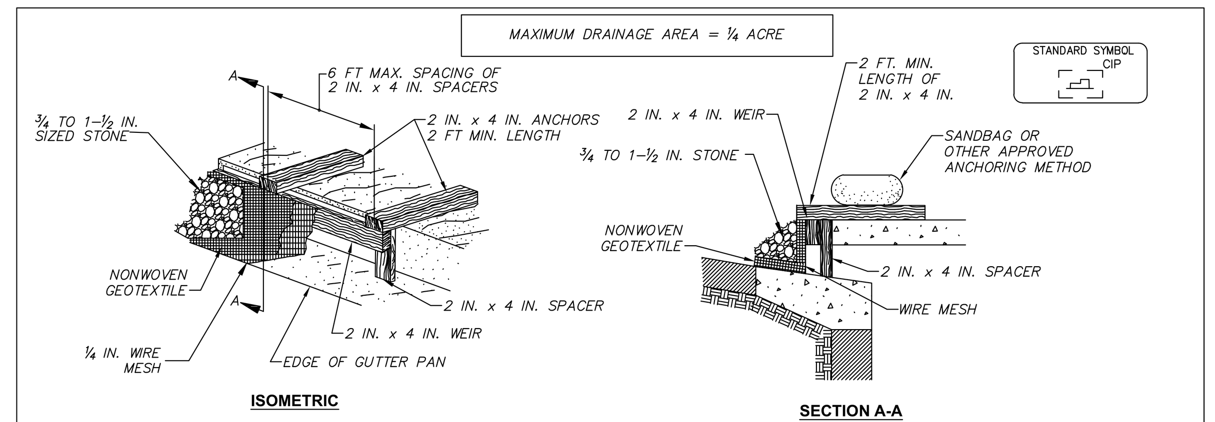
DATE	APPR			
REVISED			**STRAW BALE DIKE**	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 305.1

5 CURB INLET PROTECTION (CIV0840)

NOT TO SCALE

MAXIMUM DRAINAGE AREA = ¼ ACRE

STANDARD SYMBOL: CIP



CONSTRUCTION SPECIFICATIONS

1. ATTACH A CONTINUOUS PIECE OF 1/2 INCH x 1/2 INCH WIRE MESH, (30 INCHES MINIMUM WIDTH BY THROAT LENGTH, PLUS 4 FEET) TO THE 2–INCH x 4–INCH WEIR (MEASURING THROAT LENGTH PLUS 2 FEET) AS SHOWN ON THE STANDARD DRAWING.
2. PLACE A CONTINUOUS PIECE OF GEOTEXTILE CLASS E OF THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH TO THE 2–INCH x 4–INCH WEIR.
3. SECURELY NAIL THE 2–INCH x 4–INCH WEIR TO A 9–INCH LONG VERTICAL SPACER TO BE LOCATED BETWEEN THE WEIR AND THE INLET FACE (MAXIMUM 4 FEET APART).
4. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL (MINIMUM 2–FOOT LENGTHS OF 2–INCHES x 4–INCHES TO THE TOP OF THE WEIR AT SPACER LOCATIONS). EXTEND THESE 2–INCH x 4–INCH ANCHORS ACROSS THE INLET TOP AND BE HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHT.
5. PLACE THE ASSEMBLY SO THAT THE END SPACERS ARE 1 FOOT BEYOND BOTH ENDS OF THE THROAT OPENING.
6. FORM THE 1/2–INCH x 1/2–INCH WIRE MESH AND THE GEOTEXTILE FABRIC TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 3/4 TO 1–1/2 INCH STONE OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE.
7. THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY AND THE GEOTEXTILE FABRIC AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.
8. ASSURE THAT STORM FLOWS DO NOT BYPASS THE INLET BY INSTALLING A TEMPORARY EARTH OR ASPHALT DIKE TO DIRECT THE FLOW TO THE INLET.
9. IF THERE ARE ANY SIGNS OF STREET FLOODING OR WATER PONDING, THIS STRUCTURE MUST BE CLEANED OR REPLACED, OR REDESIGNED WITH A VIABLE ALTERNATIVE SUCH AS 3.3 FILTER SOCK.

*NOTE: FILTER SOCK IS AN ALTERNATIVE WHICH IS EASIER TO INSTALL AND MAINTAIN THAN THIS STANDARD DESIGN.

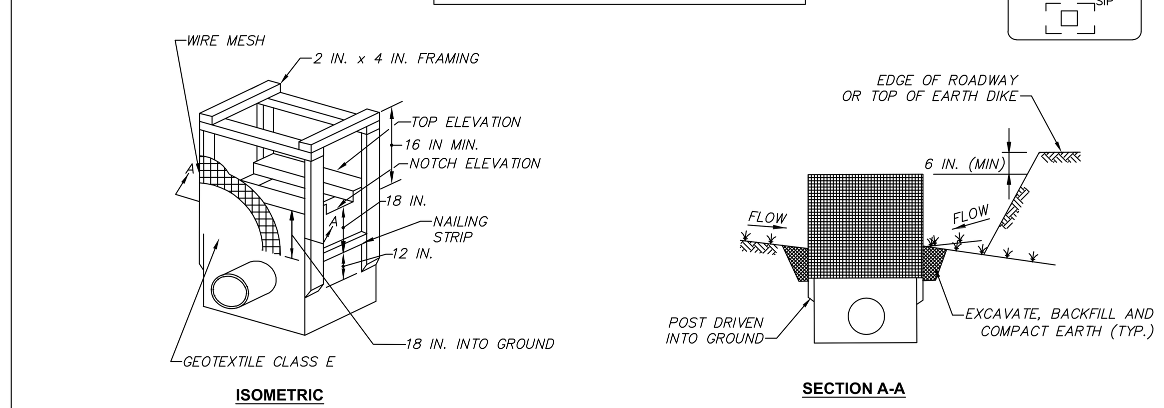
DATE	APPR			
REVISED			**CURB INLET PROTECTION STORM DRAIN INLET PROTECTION**	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 307.3

6 STANDARD INLET PROTECTION (CIV0840)

NOT TO SCALE

MAXIMUM DRAINAGE AREA = ¼ ACRE

STANDARD SYMBOL: SIP



CONSTRUCTION SPECIFICATIONS

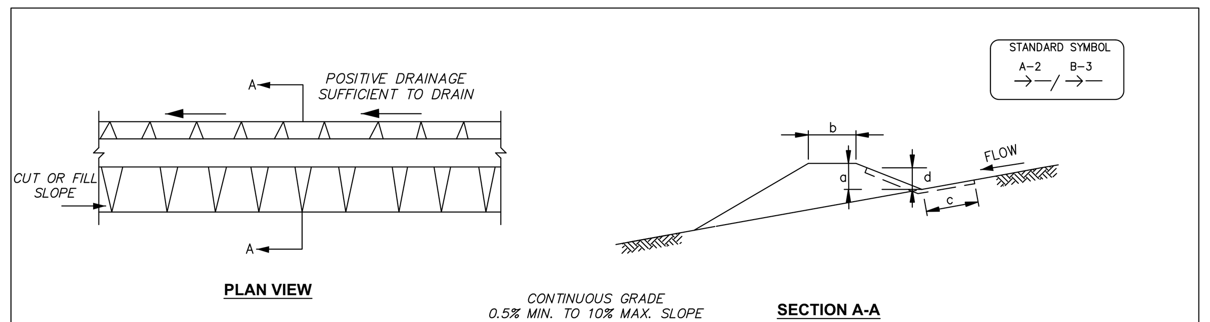
1. EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18 INCHES BELOW THE NOTCH ELEVATION.
2. DRIVE 2–INCH x 4–INCH CONSTRUCTION GRADE LUMBER POSTS 1 FOOT INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2–INCH x 4–INCH FRAME USING THE OVERLAP JOINT SHOWN ON DETAIL 307.1. THE TOP OF THE FRAME (WEIR) MUST BE 6 INCHES BELOW ADJACENT ROADWAYS WHERE FLOODING AND SAFETY ISSUES MAY ARISE.
3. STRETCH 1/2–INCH x 1/2–INCH WIRE MESH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. THE ENDS MUST MEET AND OVERLAP AT A POST.
4. STRETCH THE GEOTEXTILE CLASS E TIGHTLY OVER THE WIRE MESH WITH THE GEOTEXTILE EXTENDING FROM THE TOP OF THE FRAME TO 18 INCHES BELOW THE INLET NOTCH ELEVATION. FASTEN THE GEOTEXTILE FIRMLY TO THE FRAME. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED DOWN.
5. BACKFILL AROUND THE INLET IN COMPACTED 6–INCH LAYERS UNTIL THE LAYER OF EARTH IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
6. IF THE INLET IS NOT IN A SUMP, CONSTRUCT A COMPACTED EARTH DIKE ACROSS THE DITCH LINE DIRECTLY BELOW IT. THE TOP OF THE EARTH DIKE SHOULD BE AT LEAST 6 INCHES HIGHER THAN THE TOP OF THE FRAME.
7. THE STRUCTURE MUST BE INSPECTED PERIODICALLY AND AFTER EACH RAIN AND THE GEOTEXTILE REPLACED WHEN IT BECOMES CLOGGED.

DATE	APPR			
REVISED			**STANDARD INLET PROTECTION STORM DRAIN INLET PROTECTION**	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 307.1

7 EARTH DIKE (CIV0840)

NOT TO SCALE

STANDARD SYMBOL: A–2 / B–3



FLOW CHANNEL STABILIZATION LINING OPTIONS

GRADE 0.5% MIN. 10% MAX

1. SEED AND COVER WITH STRAW MULCH.
2. SEED AND COVER WITH EROSION CONTROL MATTING, OR LINE WITH SOD.
3. 4 TO 7–INCH STONE OR RECYCLED CONCRETE EQUIVALENT PRESSED INTO SOIL USING CONSTRUCTION EQUIPMENT IN A MINIMUM 7–INCH LAYER.

DIKE TYPE

	A	B
a – DIKE HEIGHT	18 IN MIN.	30 IN MIN.
b – DIKE WIDTH	24 IN MIN.	36 IN MIN.
c – FLOW WIDTH	4 FT MIN.	6 FT MIN.
d – FLOW DEPTH	12 IN MIN.	24 IN MIN.

CONSTRUCTION SPECIFICATIONS

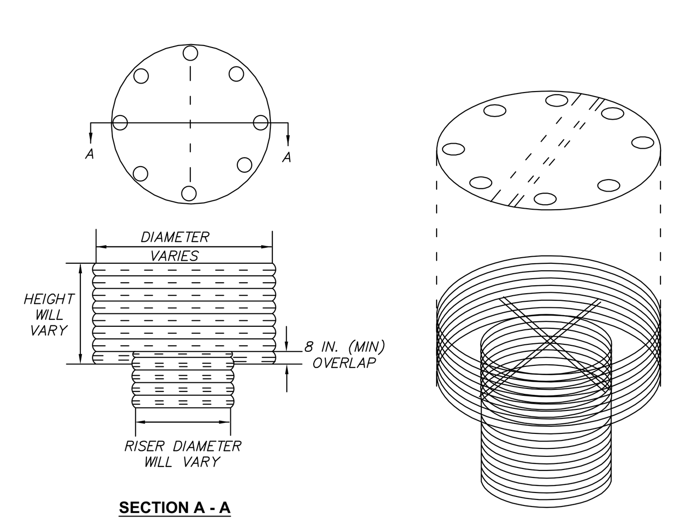
1. ALL TEMPORARY EARTH DIKES MUST HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. EARTH DIKES HAVING LONGITUDINAL SLOPES FLATTER THAN 1% SHOULD HAVE SPOT ELEVATIONS ALONG THE FLOW LINE.
2. DIRECT DIVERTED RUNOFF FROM DISTURBED AREAS TO A SEDIMENT TRAPPING DEVICE.
3. OUTLET DIVERTED RUNOFF FROM UNDISTURBED AREAS DIRECTLY ONTO AN UNDISTURBED, STABILIZED AREA AT A NON–EROSIVE VELOCITY (≤ 4 FEET PER SECOND FOR WELL–ESTABLISED TURFGRASS).
4. REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE EARTH DIKE BERM AND FLOW CHANNEL.
5. EXCAVATE OR SHAPE THE DIKE TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. COMPACT THE FILL BY EARTH MOVING EQUIPMENT IN MAXIMUM 12–INCH LIFTS.
7. PLACE ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE EARTH DIKE BERM AND FLOW CHANNEL.
8. STABILIZE FLOW CHANNEL AS REQUIRED BY DESIGN SELECTION USING TABLE 4.3 OR TABLE 4.4. STONE LINING MUST HAVE GEOTEXTILE UNDERLAYMENT OF CLASS SD TYPE I NON–WOVEN OR PE TYPE I NON–WOVEN FABRIC.
9. PROVIDE INSPECTION AND MAINTENANCE PERIODICALLY, AFTER EACH RAIN EVENT, AND DAILY DURING A PROLONGED RAIN EVENT.

DATE	APPR			
REVISED			**EARTH DIKE - 1**	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 403.1

8 TRASH RACK/ANTI–VORTEX DEVICE (CIV0840)

NOT TO SCALE

STANDARD SYMBOL: TR

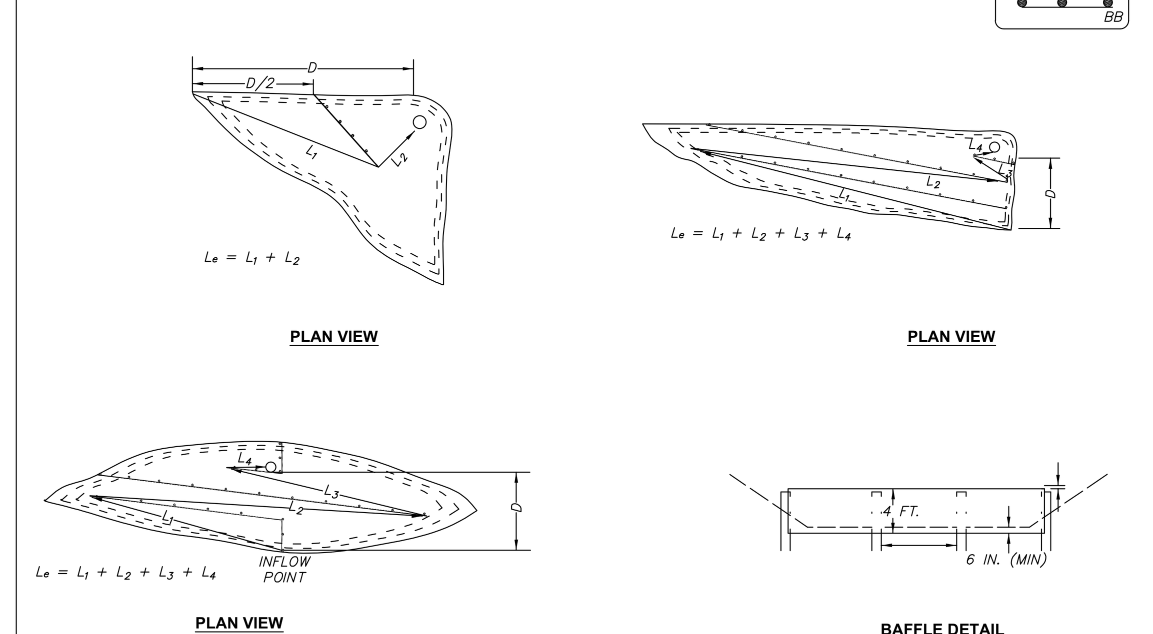


DATE	APPR			
REVISED			**CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE SEDIMENT BASIN**	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 602.3

9 BAFFLE BOARDS (CIV0840)

NOT TO SCALE

STANDARD SYMBOL: BB



D = DISTANCE BETWEEN INFLOW AND OUTFLOW

A = AREA OF PERMANENT POOL

W_e = EFFECTIVE WIDTH

L_e = TOTAL DISTANCE FROM THE INFLOW POINT AROUND THE BAFFLES TO THE RISER.

FORMULA: $W_e = (A/2)^{1/2}$
$L_e \geq W_e \times 2$

DATE	APPR			
REVISED			**BAFFLE BOARDS SEDIMENT BASIN**	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 602.1

VIKA CAPITOL
ENGINEERS ★ PLANNERS ★ LANDSCAPE ARCHITECTS ★ SURVEYORS ★ GEOMATICS
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★ VIKA CAPITOL, LLC ★ 4910 MASSACHUSETTS AVENUE, NW SUITE 16
★ WASHINGTON, DC 20016 ★ PHONE: 202.244.4140 ★
★ W W W . V I K A C A P I T O L . C O M ★

MARET SCHOOL PROPOSED ATHLETIC FIELDS

SQUARE 2319, LOT 832
5901 UTAH AVE NW
WASHINGTON, D.C. 20015

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

VIKA CAPITOL REVISIONS

#	DATE	DESCRIPTION

**NOTE
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DISTRICT OF COLUMBIA — KYLE U. OLIVER — PE900770 — 3/17/2023 — CIVIL — PROFESSIONAL ENGINEER

DATE: 23–FEB–2023
DES. KUO | DWN. BJR
SCALE: AS SHOWN
PROJECT/FILE NO. VC0626D
SHEET NO. CIV0840

Board of Zoning Adjustment
District of Columbia
CASE NO.21100
EXHIBIT NO.23A