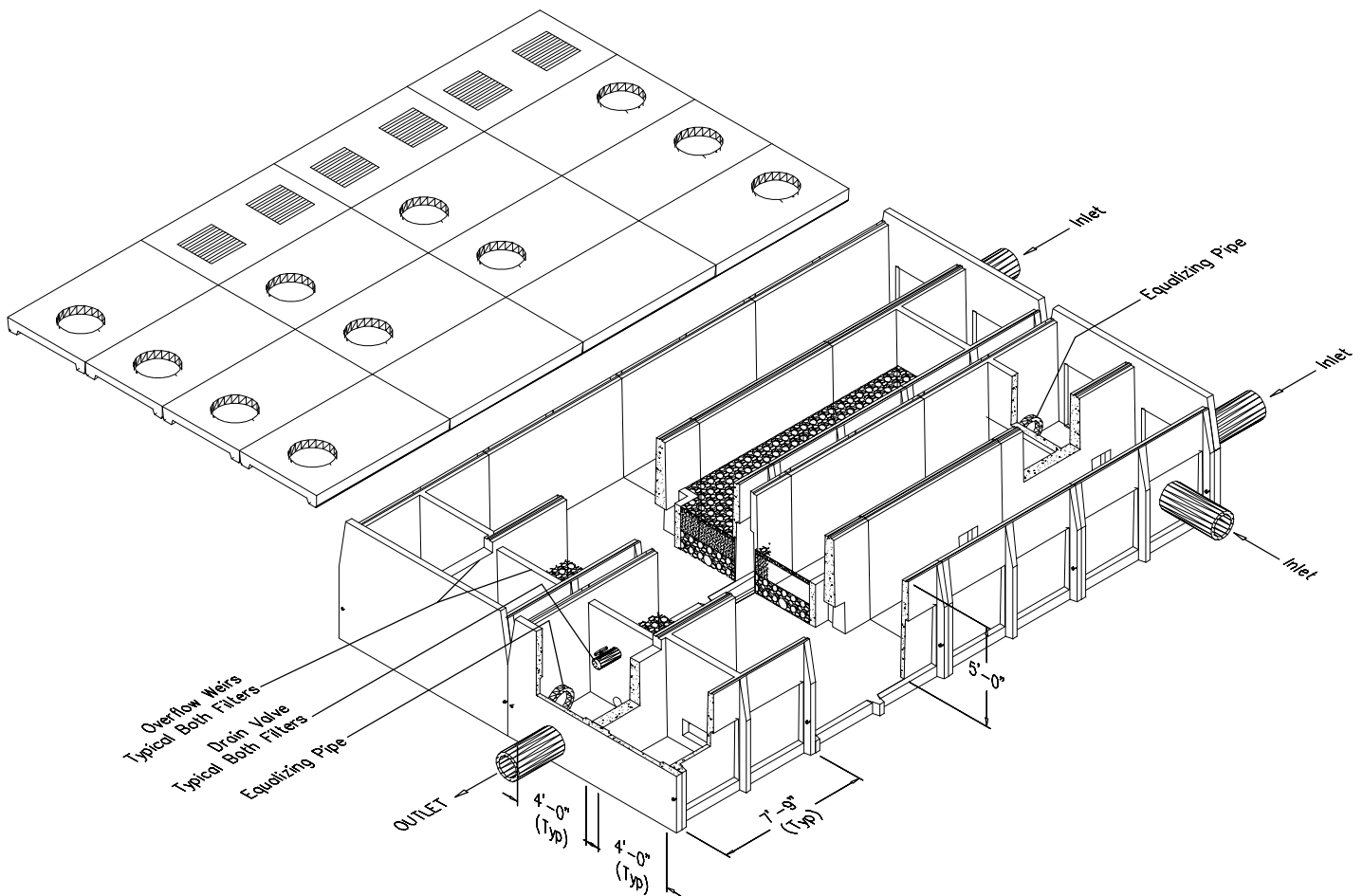
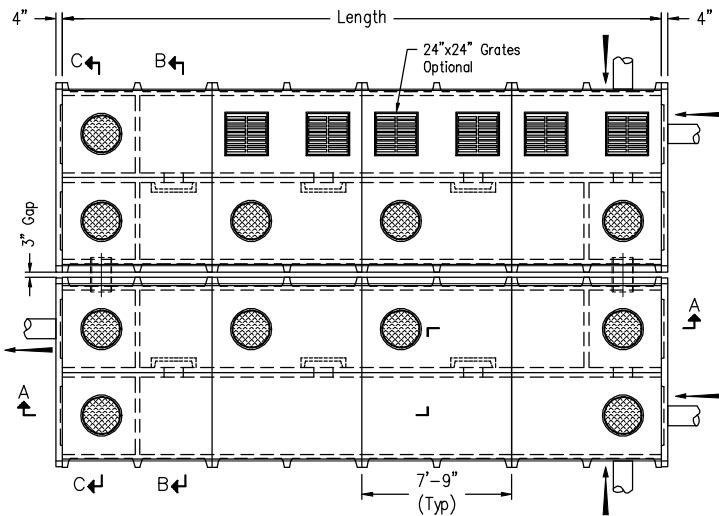


Twin Perimeter Sandfilter

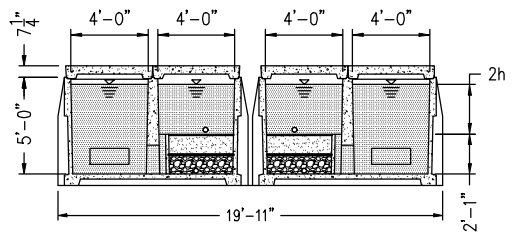


DESIGN SPECIFICATIONS:

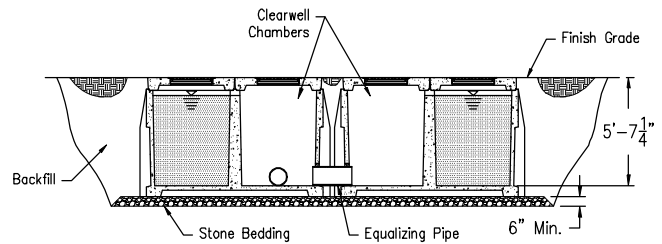
- Concrete Min (28-Day) Compressive Strength 5,000 psi.
- Reinforcing Deformed Bars: ASTM A-615 (Fy=60 ksi)
- Reinforcing Deformed Wire: ASTM A-185 or A-497 (Fy=65 ksi).
- Design Live Load: AASHTO HS-20.
- Earth Cover: 0'-0" (Top Slab Flush w/ Finish Grade)
- Soil Unit Weight: 120 pcf.
- Design Specifications: AASHTO, 16th Edition & ASTM C 890



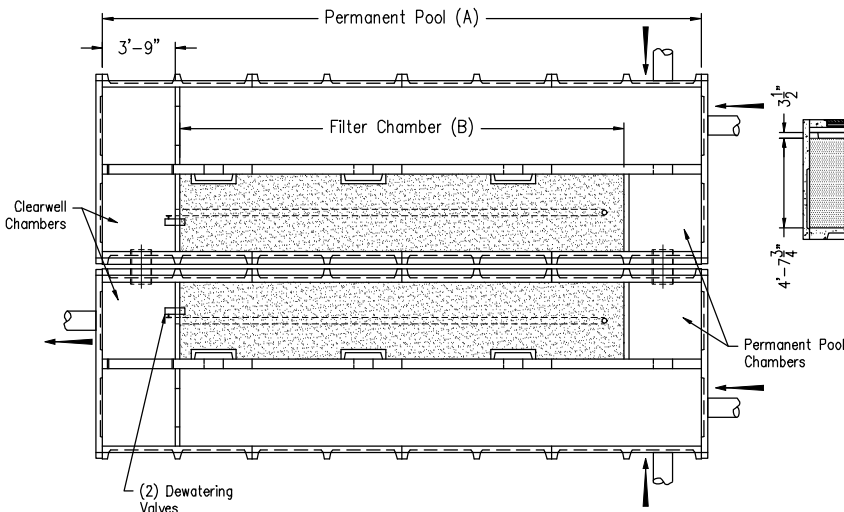
PLAN VIEW
w/ Top Slabs And
Access Covers



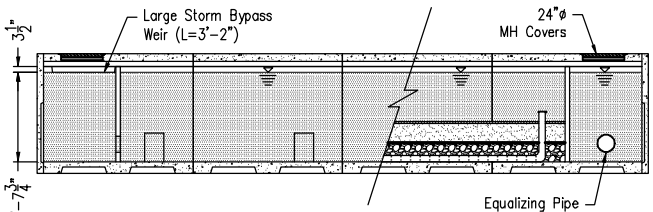
SECTION B-B



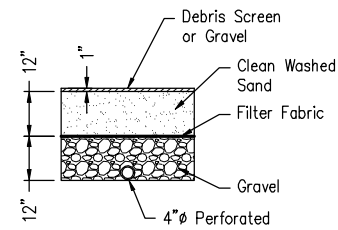
SECTION C-C



PLAN VIEW
w/Out Top Slabs And
Access Covers



SECTION A-A



FILTER MEDIA

Sandfilter Chamber Lengths (Based on Twin 4' Wide Chambers)

Drainage Area (Acres)	.25	.375	.5	.625	.75	.875	1.0	1.125	1.25	1.375	1.5	1.625	1.75	1.875	2.0
Permanent Pool (A)	15'-3"	30'-6"	42'-3"	38'-3"	50'-0"	46'-0"	57'-9"	69'-3"	65'-6"	77'-0"	88'-9"	84'-9"	96'-6"	92'-6"	104'-3"
Filter Chamber (B)	11'-6"	11'-6"	15'-3"	19'-3"	23'-0"	27'-0"	30'-9"	34'-9"	38'-6"	42'-6"	46'-3"	50'-3"	54'-0"	58'-0"	61'-9"
Clearwell	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"
Length	15'-6"	23'-3"	31'-0"	31'-0"	38'-9"	38'-9"	46'-6"	54'-3"	54'-3"	62'-0"	69'-9"	69'-9"	77'-6"	77'-6"	85'-3"

Sandfilter Sizing Notes:

- Sizes Figured Using "Unified Stormwater Sizing Method" Per The State Of Maryland.
- Areas Are "Total Drainage Areas" Draining To Sandfilter.
- Impervious Cover = 90%.
- Rainfall Depth = 1.0"
- Height Of Water Above Filter (2h) = 2'-6 3/4"

Overflow Weir Notes:

- Weir Length = 14'-4"
- Discharge Coefficient (c) = 2.70
- Head Above Crest (H) = 3 1/2"
- Allowable Overflow Rate (Q) = 6.4 cfs

Twin Perimeter Sandfilter

* Patent Pending

Material	Qty/lf of Filter (B)	Specification	Notes
Sand	8.0 cf/lf	Clean AASHTO-M-6 or ASTM C-33 Concrete Sand	Size = .02" to .04"
Underdrain Gravel	7.8 cf/lf	AASHTO-M-43	Size = .375" to .75"
Filter Fabric	10.0 sf/lf	ASTM-D-4833 (PS = 125 lbs.) & ASTM-D-4632 (TS = 300 lbs.)	Must Maintain 125 gpm per sq. ft. Flow Rate
Underdrain Piping	2.0 ft/lf	F 758, Type PS 28 or AASHTO-M-278	4" Dia., .375" perf. @ 6" cc, 4 Holes Per Row



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