

**FILTER FABRIC FENCE**  
NTS

*Jon C. Spangler*

APPROVED BY: JON C. SPANGLER  
NATURAL RESOURCES/STORMWATER ENGINEERING MANAGER

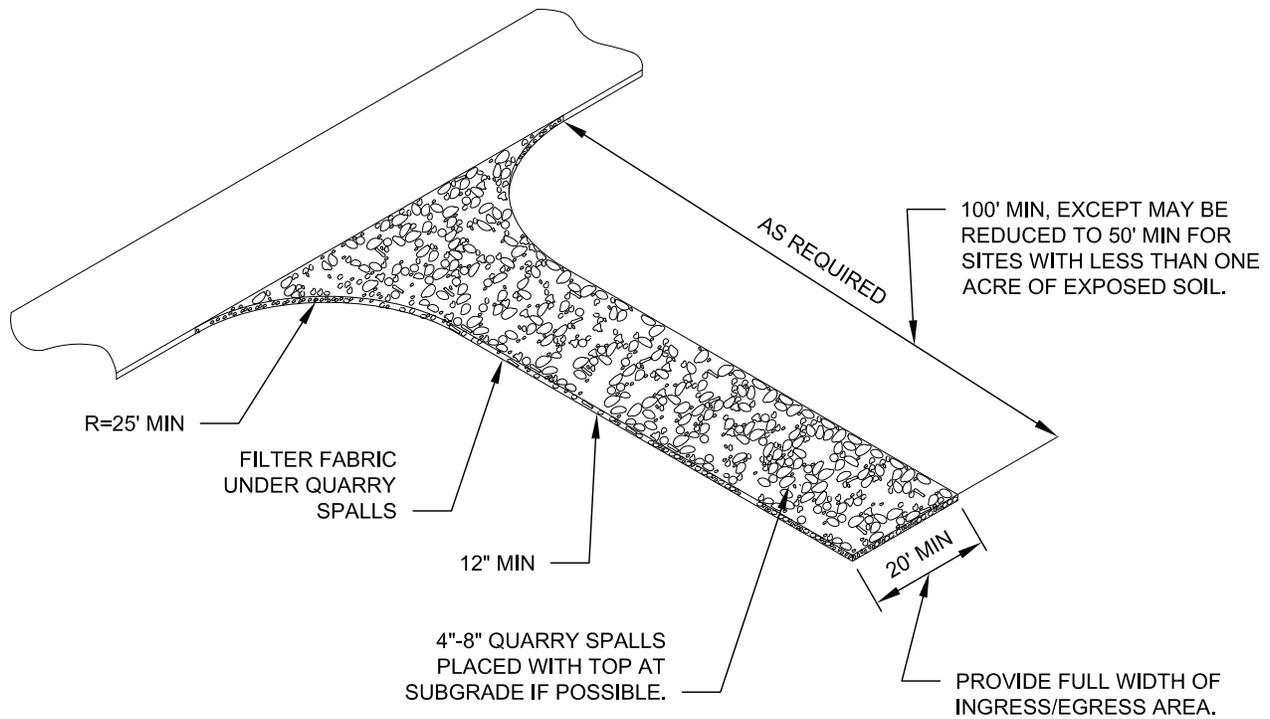
REVISION DATE: JULY 01, 2014



STANDARD DETAILS

**FILTER FABRIC FENCE**

FILE NAME: SD502.DWG | DETAIL NUMBER: **502**

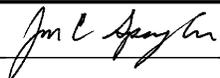


**STABILIZED CONSTRUCTION ENTRANCE**

NTS

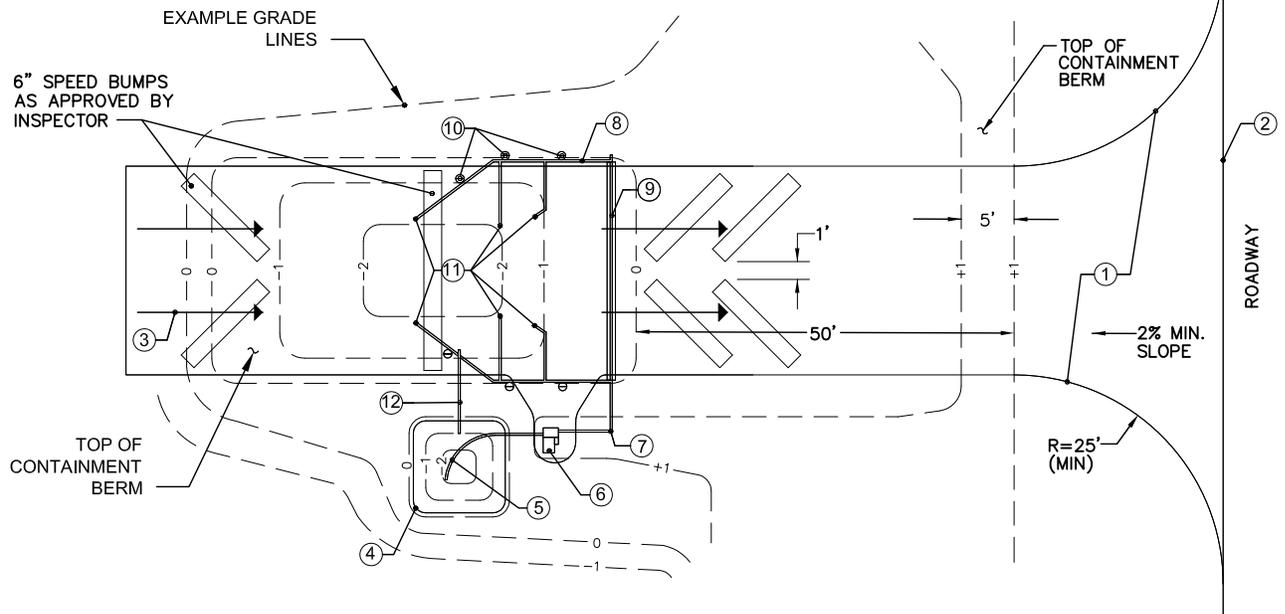
NOTES:

1. STONE SIZE- USE 4" STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED BUT NOT LESS THAN 50' (EXCEPT ON SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN 12"
4. WIDTH - 20' MINIMUM BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. "FILTER FABRIC SHALL BE WOVEN STABILIZATION FABRIC WITH A MINIMUM PERMITIVITY OF 0.9(SEC-1). PLACE FILTER FABRIC OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER FABRIC IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT"
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TIP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
7. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

  
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STANDARD DETAILS	
<b>STABILIZED CONSTRUCTION ENTRANCE</b>	
FILE NAME: SD503.DWG	DETAIL NUMBER: <b>503</b>



## PAVED CONSTRUCTION EXIT

NTS

### LEGEND

- ① TEMPORARY CONSTRUCTION EXIT 25'Wx100'L. 2" A.C. OVER 2" CRUSHED ROCK OVER 8" QUARRY SPALLS.
- ② EXIST. EDGE OF PAVEMENT
- ③ 8"x15' ORANGE PAINT STRIPE (TYP.) TO DIRECT TRAFFIC THROUGH WASH AREA.
- ④ 10'x10'x3' DEEP SUMP. LINE SUMP WITH 12 MIL. SHEET PLASTIC.
- ⑤ 3" FLEXIBLE SUCTION LINE. SUSPEND INTAKE END 6" BELOW DESIGN WATER SURFACE.
- ⑥ GAS POWERED LINE PUMP (3" DISCHARGE).
- ⑦ 2" DIA. PVC OR P.E. PIPE (PUMP DISCHARGE LINE). CONNECT TO PUMP WITH TRANSITION COUPLING.
- ⑧ 2" DIA. PVC OR P.E. PIPE (SPRAY MANIFOLD). ELEVATE 2' ABOVE GRADE. SUPPORT MANIFOLD AND SPRAY ARMS WITH METAL STAKES.
- ⑨ 6" DIA. HEAVY WALL PVC CASING UNDER CONSTRUCTION EXIT PAVEMENT. PROVIDE 12" MIN. COVER. (SLEEVE DISCHARGE LINE THROUGH CASING)
- ⑩ STEEL SUPPORT STAKE (TYP.) EACH SIDE.
- ⑪ SPRAY NOZZLE FORMED BY DRILLING THREE 1/4" DIA. HOLES IN END OF 2" PVC CAP. SET TO SPRAY TRUCK WHEELS AND UNDERSIDE.
- ⑫ 6" DIA. PVC DRAIN LINE. (DRAIN WASH AREA INTO SUMP, MAINTAINS 12" OF WATER DURING RECIRCULATION)

### NOTES

- 1. USE SOLVENT - GLUED JOINTS AND FITTINGS IN PUMP DISCHARGE LINE/SPRAY MANIFOLD.
- 2. PAINT OUTER 2" OF SPRAY ARM ENDS WITH ORANGE WARNING PAINT.
- 3. FILL TRUCK WASH AND SUMP AREAS WITH CLEAN WATER TO DESIGN OPERATING DEPTH. SUPPLEMENT AS NECESSARY.
- 4. WASH WATER TO BE DISCHARGED TO SANITARY SEWER OR OTHER APPROVED WASTE DISCHARGE.

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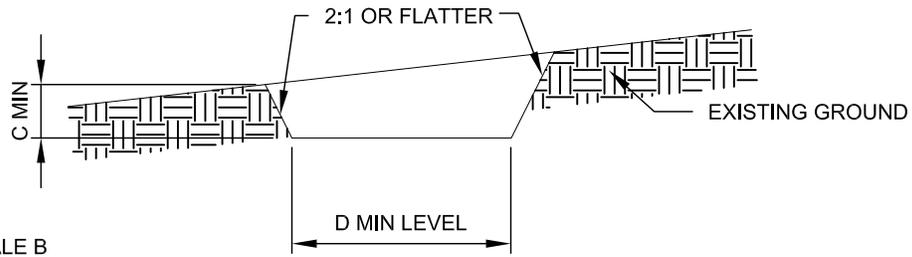


City of Redmond  
WASHINGTON

STANDARD DETAILS

## **PAVED CONSTRUCTION EXIT**

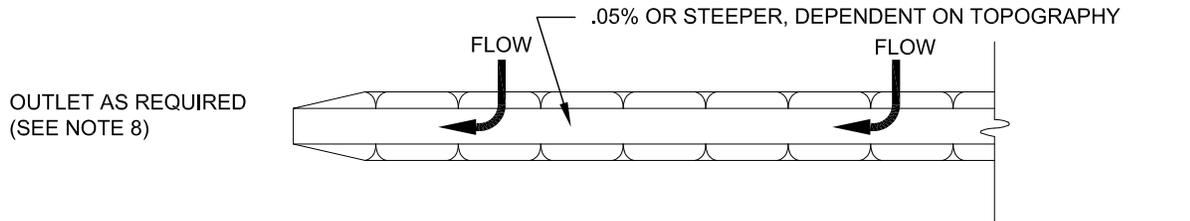
FILE NAME: SD503A.DWG    DETAIL NUMBER: **503A**



	SWALE A	SWALE B
C	1'	1'
D	4'	6'

**CROSS SECTION**

NTS



**PLAN VIEW**

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STANDARD SYMBOL

A-2 / B-3

**NOTES:**

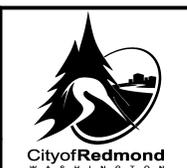
1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED 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. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE SWALE.
8. STABILIZATION SHALL BE AS PER THE CHART BELOW:

**FLOW CHANNEL STABILIZATION**

TYPE OF TREATMENT	CHANNEL GRADE	FLOW CHANNEL STABILIZATION	
		A (5 AC OR LESS)	B (5 AC - 10 AC)
1	0.5% - 3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1% - 5.0%	SEED AND STRAW MULCH	SEED USING JUTE OR EXCELSIOR
3	3.1% - 5.0%	SEED USING JUTE OR EXCELSIOR; SOD	LINED RIP-RAP 4"-8" RECYCLED CONCRETE EQUIVALENT
4	3.1% - 5.0%	LINED 4"-8" RIP-RAP	ENGINEERED DESIGN

9. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

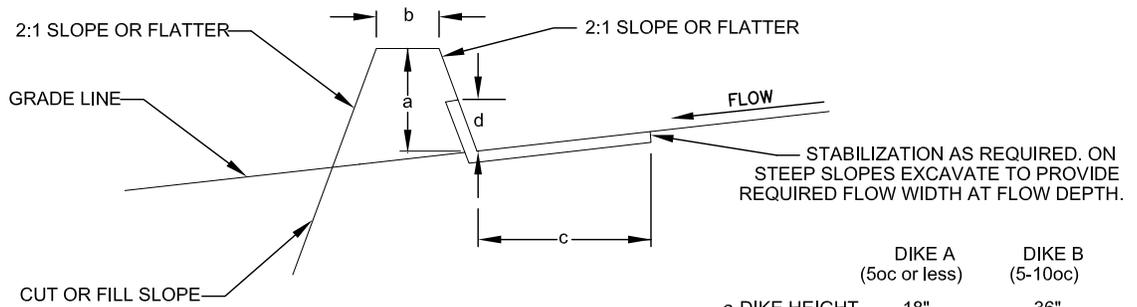
  
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STANDARD DETAILS

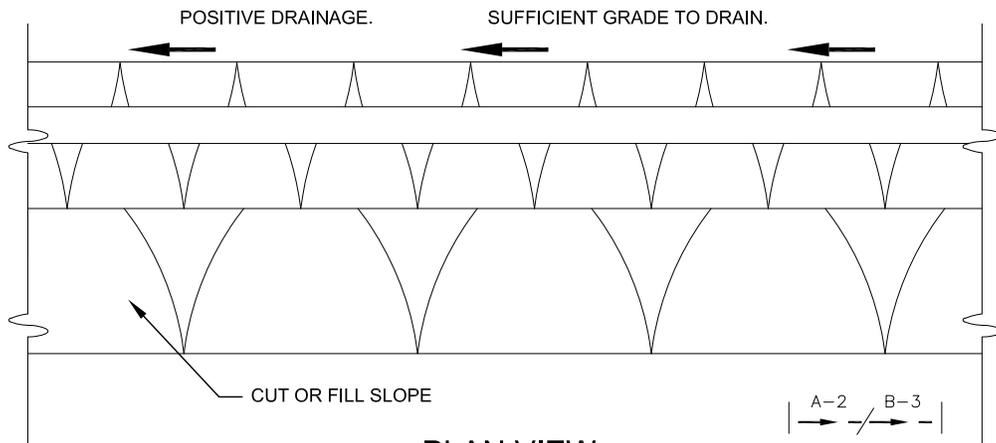
**TEMPORARY SWALE**

FILE NAME: SD504.DWG    DETAIL NUMBER: **504**



**CROSS SECTION**  
NTS

	DIKE A (50c or less)	DIKE B (5-100c)
a-DIKE HEIGHT	18"	36"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	8"	15"



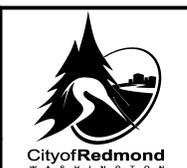
**PLAN VIEW**  
NTS

1. ALL DIKES SHALL BE COMPACTED BY EARTH MOVING EQUIP.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON. (B) FLOW CHANNEL AS PER THE CHART BELOW.

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	0.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

- A. STONE TO BE 2" STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3" IN THICKNESS AND BE PRESSED INTO THE SOIL WITH EQUIPMENT.
  - B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES AND PRESSED INTO THE SOIL.
  - C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

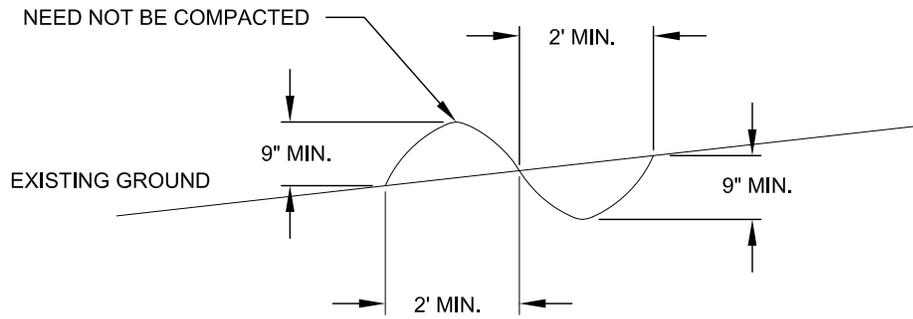
  
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STANDARD DETAILS

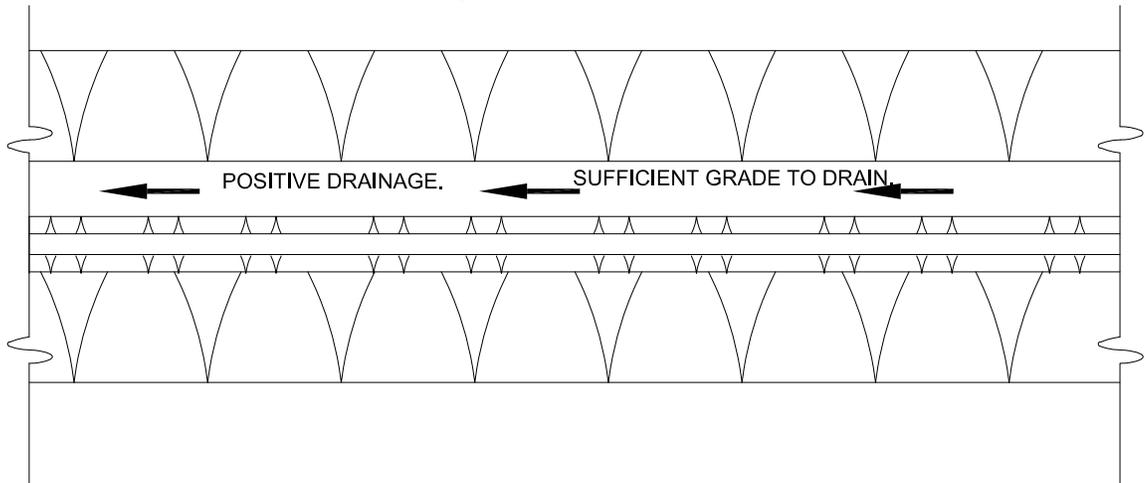
**EARTH DIKE**

FILE NAME: SD505.DWG      DETAIL NUMBER: **505**



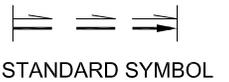
**CROSS SECTION**

NTS



**PLAN VIEW**

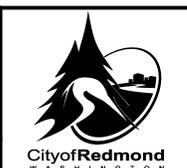
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NOTES:

1. ALL PERIMETER DIKE/SWALE HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM A UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED IN THE STANDARD.
5. STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SWALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SEED AND STRAW MULCH, AND SHALL BE DONE WITHIN 10 DAYS.
6. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

  
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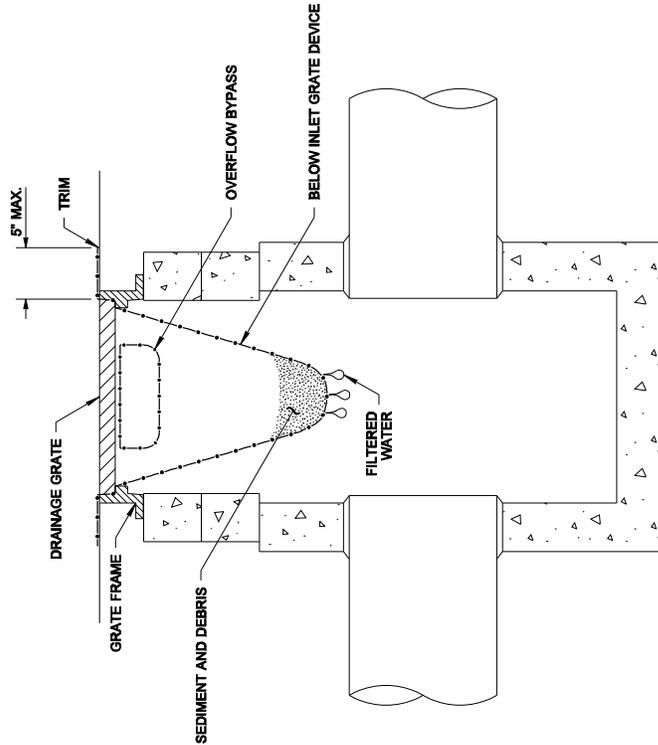
STANDARD DETAILS

**PERIMETER DIKE/SWALE**

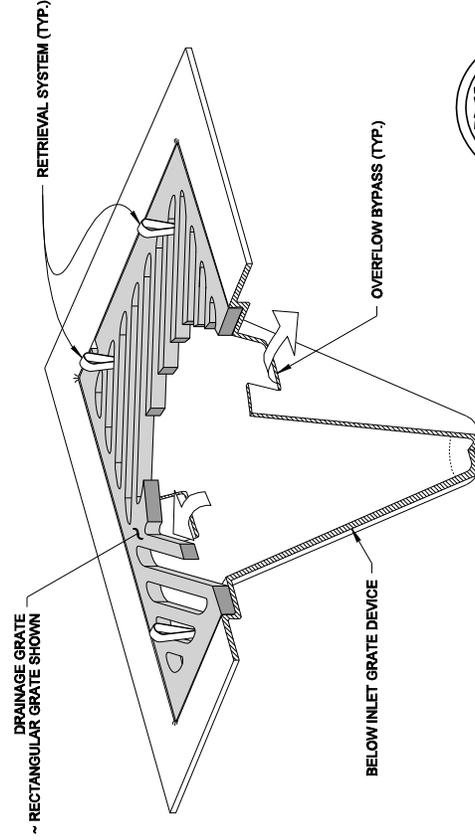
FILE NAME: SD506.DWG    DETAIL NUMBER: **506**

**NOTES**

1. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
2. The BIGD shall have a built-in high-flow relief system (overflow bypass).
3. The retrieval system must allow removal of the BIGD without spilling the collected material.
4. Perform maintenance in accordance with Standard Specification 8-01.3(15).



**SECTION VIEW**  
NOT TO SCALE



**ISOMETRIC VIEW**



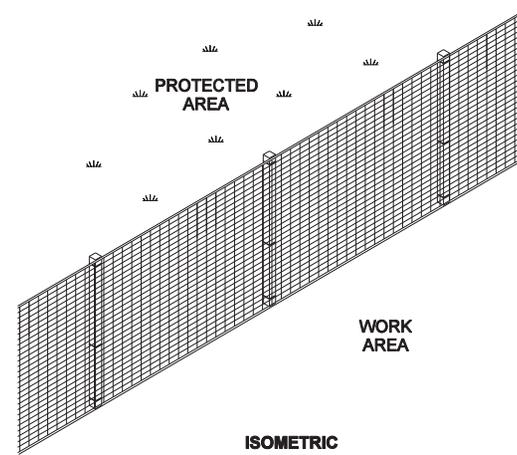
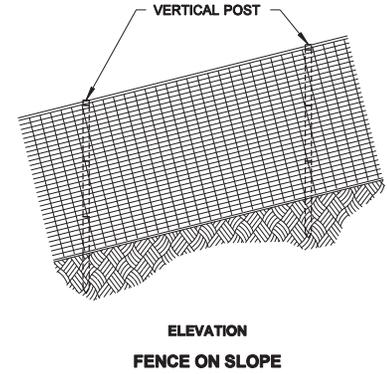
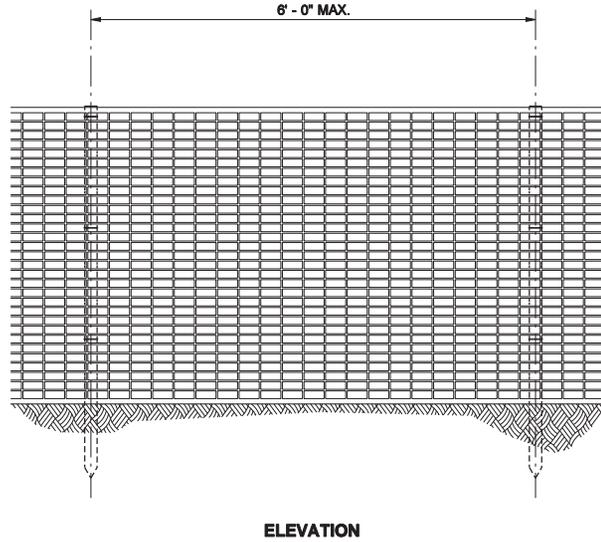
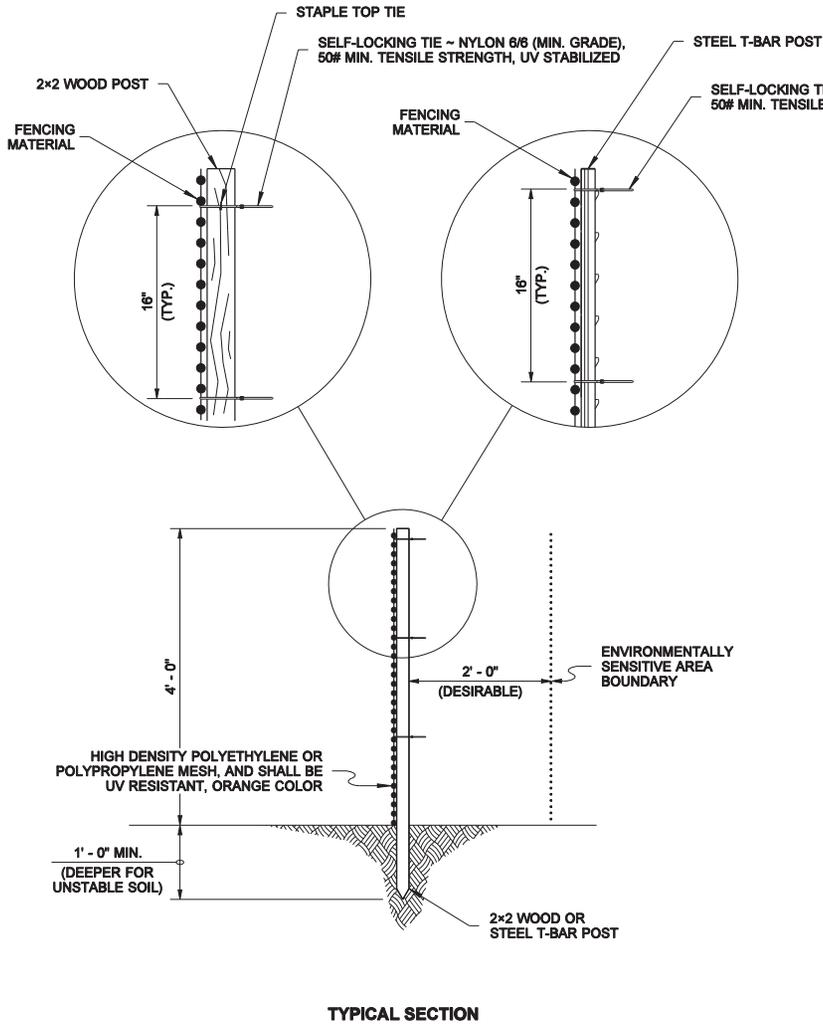
STATE OF WASHINGTON  
LICENSED PROFESSIONAL ENGINEER  
LANDSCAPE ARCHITECT  
MARK W. MAURER  
CERTIFICATE NO. 000698

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**STORM DRAIN  
INLET PROTECTION  
STANDARD PLAN I-40.20-00**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
**Pasco Bakofich III** 09-20-07  
STATE DESIGN ENGINEER DATE  
Washington State Department of Transportation



**NOTE**

1. Post shall have sufficient strength and durability to support the fence through the life of the project.



STATE OF WASHINGTON  
REGISTERED  
LANDSCAPE ARCHITECT  
**MARK W. MAURER**  
CERTIFICATE NO. 000598

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**HIGH VISIBILITY FENCE**

**STANDARD PLAN I-10.10-01**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

**Pasco Bakotich III** 08-11-09

STATE DESIGN ENGINEER DATE

