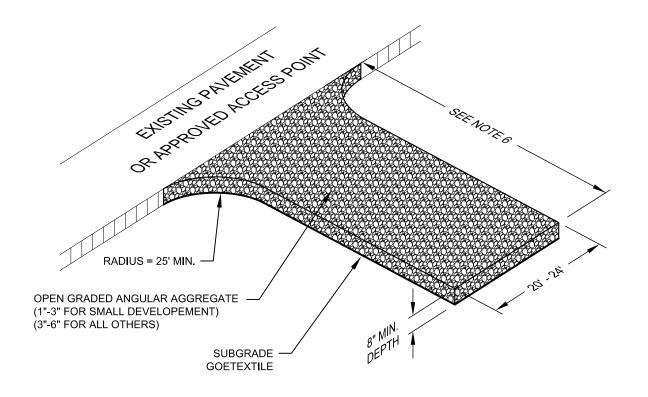
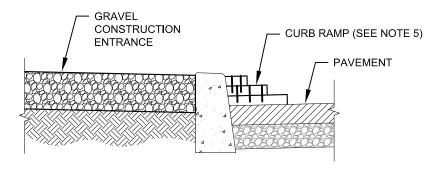
# CITY OF SALEM DEPARTMENT OF PUBLIC WORKS STANDARD DRAWINGS

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800-899	Landscape and Irrigation
900-999	Erosion Control

Plan No.	Title	Date
<b>Erosion C</b>	ontrol	
901	Gravel Construction Fence	03-10-2014
902	Sediment Fence	03-10-2014
903	Wattles Overland Flow	03-10-2014
904	Biofilter Bag Overland Flow	03-10-2014
905	Sidewalk Subgrade Gravel Barrier	03-10-2014
906	Erosion Matting/Blanket Slope Installation	03-10-2014
907	Erosion Matting/Blanket Channel Installation	03-10-2014
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909	Sediment Trap	03-10-2014
910	Sediment Pond	03-10-2014
911	Interceptor Swales and Dikes	03-10-2014
912	Filter Fabric Inlet Barrier	03-10-2014
913	Silt Sack	03-10-2014
914	Biofilter Bag Inlet Protection	03-10-2014
915	Rock Check Dam	03-10-2014
916	Biofilter Bag Check Dam	03-10-2014
917	Concrete Management Facility	03-10-2014





- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO
  PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO
  TRAP SEDIMENT.
- 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- 4. WHERE RUNOFF CONTAINING SEDIMENT LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.
- 5. WHEN THE CURB HAS BEEN REMOVED FOR A NEW DRIVEWAY, WOOD CURB RAMP ARE NOT NEEDED. ADJUST GRAVEL DEPTH AS NEEDED TO PROVIDE MINIMUM DEPTH SHOWN.

#### 6. <u>DIMENSIONS:</u>

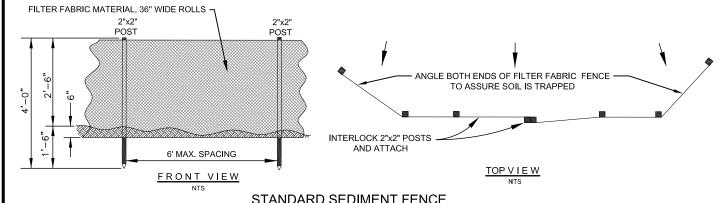
SINGLE FAMILY = 20' LONG X 20' WIDE X 8" DEEP COMMERCIAL = 50' LONG X 24' WIDE X 8" DEEP

# CITY OF SALEM DEPARTMENT OF PUBLIC WORKS

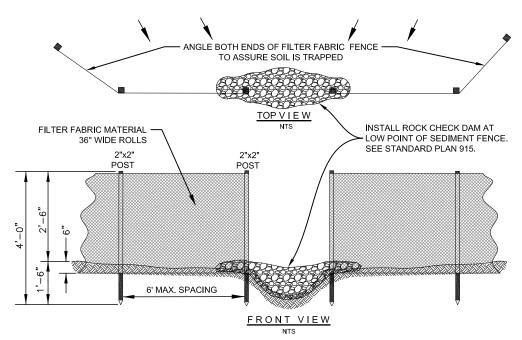
STANDARD PLAN

**GRAVEL CONSTRUCTION ENTRANCE** 

	APPROVED	-/-	mus L	Spinet	3/10/14	DRAWN BY	DTN	1/2014	NO 004
Ľ	AFFROVED	/	CITY ENGINE	EER	DATE	CHECKED BY	RLB	1/2014	140.901



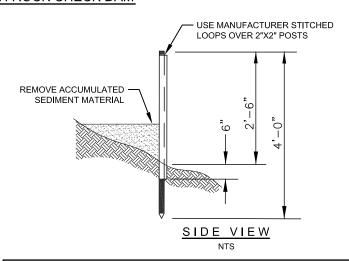
#### STANDARD SEDIMENT FENCE



#### SEDIMENT FENCE WITH ROCK CHECK DAM

### NOTES:

- FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST., WITH A MINIMUM 6-INCH OVERLAP. BOTH ENDS SHALL BE SECURELY FASTENED TO THE POST OR OVERLAPPED AS SHOWN.
- THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS WHERE FEASIBLE. THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN INTO THE THE GROUND A MINIMUM OF 18 INCHES.
- THE FILTER FABRIC SHALL HAVE A MINIMUM VERTICAL BURIAL OF 6 INCHES. ALL EXCAVATED MATERIAL FROM THE FENCE INSTALLATION SHALL BE BACKFILLED AND COMPACTED ALONG THE ENTIRE UPHILL SIDE OF THE DISTURBED AREA
- STANDARD HEAVY DUTY FILTER FABRIC FENCE SHALL HAVE MANUFACTURED STITCHED LOOPS FOR 2"X2" POST INSTALLATION. STITCHED LOOPS SHALL BE INSTALLED ON THE UP-HILL SIDE OF THE SLOPED AREA.
- FILTER FABRIC FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY PROTECTED, STABILIZED, AND APPROVED BY THE CITY.
  - REMOVE ACCUMULATED SEDIMENT MATERIAL ONCE IT HAS REACHED WITHIN 18 INCHES OF THE TOP OF THE SEDIMENT FENCE.

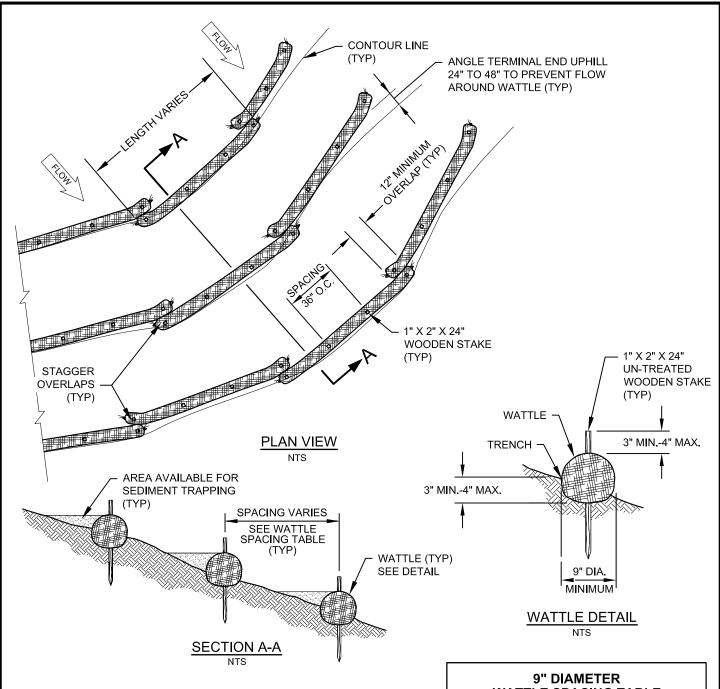


# **CITY OF SALEM DEPARTMENT OF PUBLIC WORKS**

STANDARD PLAN

SEDIMENT FENCE

	<u> </u>		,				
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AFFROVED	CITY ENGINE	ER	DATE	CHECKED BY	RLB	1/2014	110.902



- SECURELY KNOT EACH END OF WATTLE. OVERLAP ADJACENT WATTLE ENDS 12" BEHIND ONE ANOTHER AND SECURELY TIE TOGETHER.
- COMPACT EXCAVATED SOIL AND TRENCHES TO PREVENT UNDERCUTTING, ADDITIONAL STAKING MAY BE NECESSARY TO PREVENT UNDERCUTTING.
- 3. INSTALL WATTLE PERPENDICULAR TO FLOW ALONG CONTOURS.
- WATTLES SHALL BE INSPECTED REGULARLY, AND IMMEDIATELY AFTER A RAINFALL PRODUCES RUNOFF, TO ENSURE THEY REMAIN THOROUGHLY ENTRENCHED AND IN CONTACT WITH THE SOIL.

# WATTLE SPACING TABLE

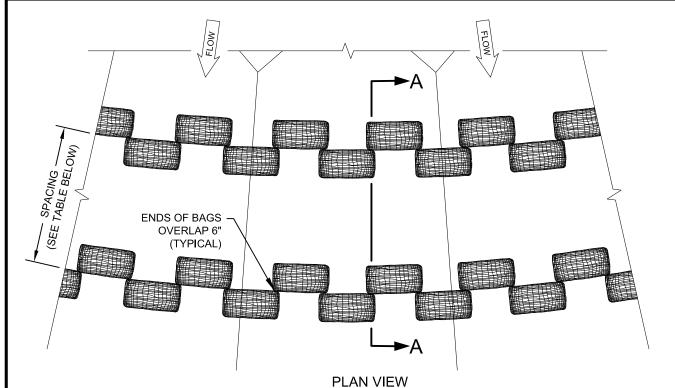
WATTEE OF AGING TABLE							
SLOPE	MAXIMUM SPACING						
1H : 1V	10' - 0"						
2H : 1V	20' - 0"						
3H : 1V	30' - 0"						
4H : 1V	40' - 0"						

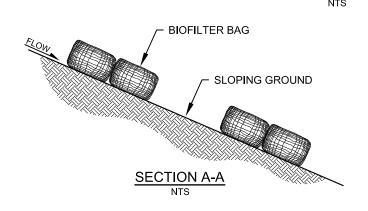
# **CITY OF SALEM DEPARTMENT OF PUBLIC WORKS**

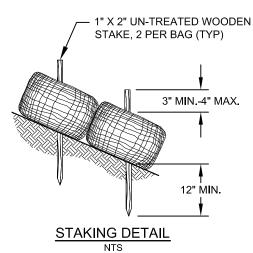
STANDARD PLAN

WATTLES OVERLAND FLOW

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APPROVED	1	mes	Spinet		3/10/14	DRAWN BY	DTN	1/2014	NO 003
APPROVED		CITY ENGINE	ER		DATE	CHECKED BY	RLB	1/2014	110.303







- COMPACT EXCAVATED SOIL TO PREVENT UNDERCUTTING. ADDITIONAL STAKING MAY BE NECESSARY TO PREVENT UNDERCUTTING.
- 2. INSTALL BIOFILTER BAGS PERPENDICULAR TO FLOW ALONG CONTOURS.
- 3. BIOFILTER BAGS SHALL BE INSPECTED REGULARLY, AND IMMEDIATELY AFTER A RAINFALL PRODUCES RUNOFF, TO ENSURE THEY REMAIN STABLE AND IN CONTACT WITH THE SOIL.

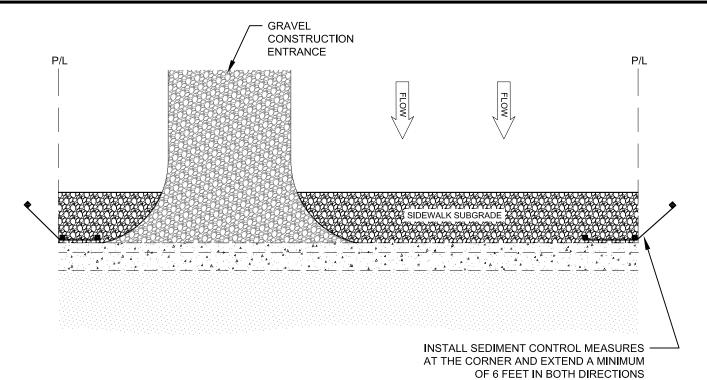
BIOFILTER BAG SPACING TABLE								
SLOPE	MAXIMUM SPACING							
1H: 1V	10' - 0"							
2H : 1V	20' - 0"							
3H : 1V	30' - 0"							
4H : 1V	40' - 0"							

# CITY OF SALEM DEPARTMENT OF PUBLIC WORKS

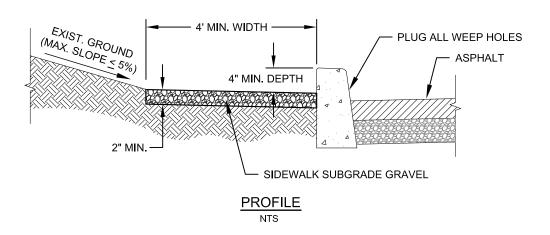
STANDARD PLAN

**BIOFILTER BAG OVERLAND FLOW** 

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APPROVED	10	mes L	Spinet		3/10/14	DRAWN BY	DTN	1/2014	NO 904
APPROVED		CITY ENGINE	ER		DATE	CHECKED BY	RLB	1/2014	NO.304



PLAN VIEW



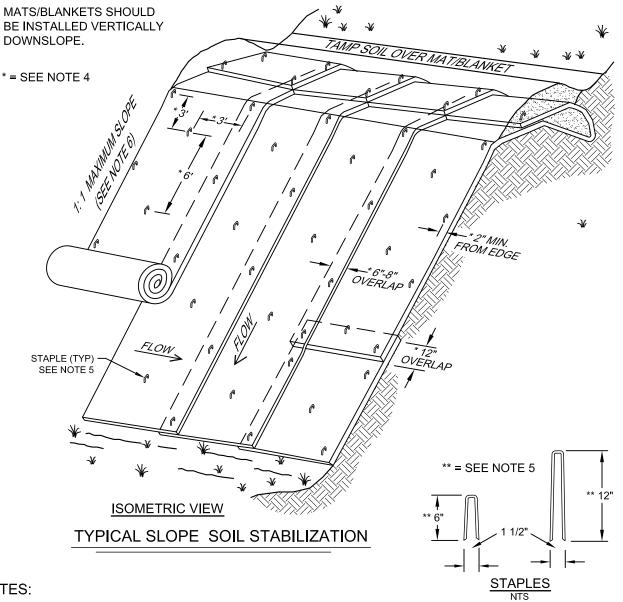
#### NOTES:

- 1. SITE SLOPES GREATER THAN 5% TOWARDS THE SIDEWALK SUBGRADE BARRIER REQUIRE ADDITIONAL SEDIMENT CONTROL BMPS (SEDIMENT FENCE, STRAW WATTLE, ETC.).
- 2. SIDEWALK SUBGRADE GRAVEL CONSISTS OF A MINIMUM 2 INCH LAYER OF APPROVED ANGULAR AGGREGATE MATERIAL.

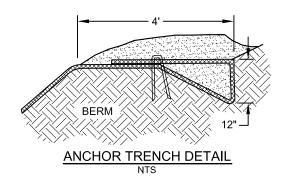
# CITY OF SALEM DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN
SIDEWALK SUBGRADE
GRAVEL BARRIER

		, , , , , , , , , , , , , , , , , , , ,					~ ~ ~ — —	<b>_</b> / \\ \\ \\ \
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APPROVED		CITY ENGINE	ER	DATE	CHECKED BY	RLB	1/2014	NO.303



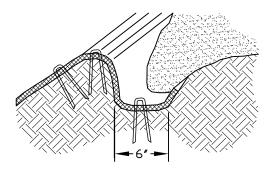
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS, MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
- APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
- LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
- 4. MINIMUM STAKING OR STAPLING LAYOUT PATTERN. SEE MANUFACTURERS SPECIFICATIONS.
- STAPLE LENGTH AND QUANTITY VARIES DEPENDING ON SOIL DENSITY. USE 6" STAPLES ON COMPACTED SOILS. USE 12" STAPLES ON LOOSE SOILS. SEE MANUFACTURERS RECOMMENDATIONS.
- 6. ROLLED EROSION CONTROL MATTING/BLANKET SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. JUTE MATTING LIMITED TO 2:1 SLOPEOR LESS, COIR FIBER MAY BE USED UP TO 1:1 SLOPE.



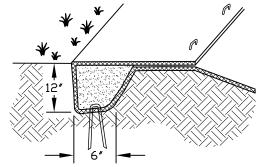
# **CITY OF SALEM DEPARTMENT OF PUBLIC WORKS**

STANDARD PLAN **EROSION MATTING / BLANKET** SLOPE INSTALLATION

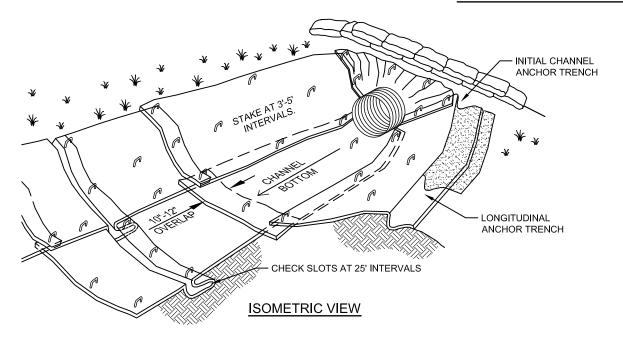
		/						
APPROVED	-/-	mus L	Spinet	3/10/14	DRAWN BY	DTN	1/2014	NO 906
APPROVED		CITY ENGINE	FR	DATE	CHECKED BY	RLB	1/2014	NO.300

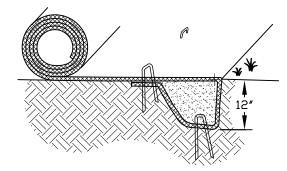


LONGITUDINAL ANCHOR TRENCH DETAIL

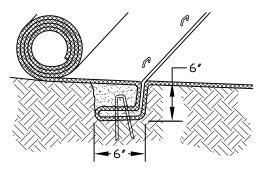


TERMINAL SLOPE AND CHANNEL ANCHOR TRENCH DETAIL





INITIAL CHANNEL ANCHOR TRENCH DETAIL



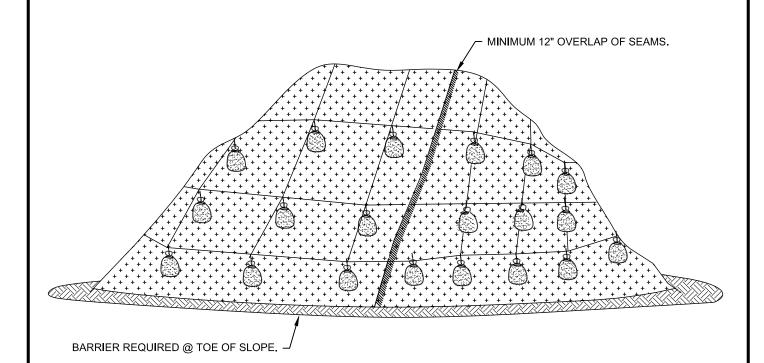
INTERMITTENT CHECK SLOT DETAIL

- 1. CHECK SLOTS TO BE CONSTRUCTED PER MANUFACTURERS SPECIFICATIONS.
- 2. STAKING OR STAPLING LAYOUT PER MANUFACTURERS SPECIFICATIONS.
- 3. FOR OUTLET APPLICATIONS, INSTALL MATTING PRIOR TO RIP RAP PLACEMENT.

# CITY OF SALEM DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN
EROSION MATTING / BLANKET
CHANNEL INSTALLATION

		/		/	<u> </u>			· · · · · · · · · · · · · · · · · · ·
APPROVED	L J.	omes L	Sornet	3/10/14	DRAWN BY	DTN	1/2014	NO 007
APPROVED		CITY ENGINE	EER	DATE	CHECKED BY	RLB	1/2014	140.90 <i>1</i>



PLASTIC SHEETING

### NOTES:

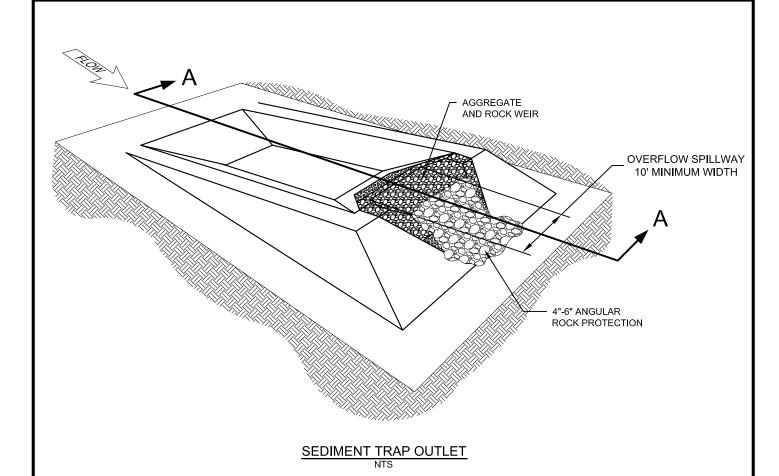
- 1. MINIMUM 12" OVERLAP OF ALL SEAMS REQUIRED.
- 2. BARRIER REQUIRED @ TOE OF STOCK PILE.
- 3. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10' GRID SPACING IN ALL DIRECTIONS.

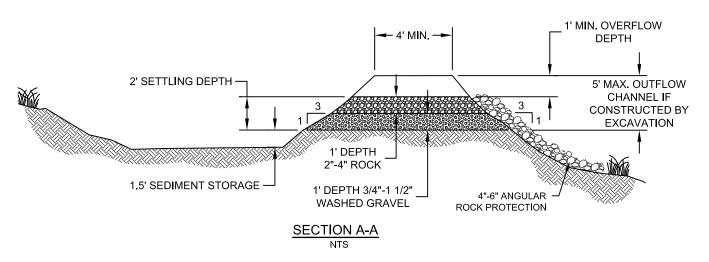
# CITY OF SALEM DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN

**PLASTIC SHEET COVERING** 

		/						
APPROVED	L /	mmes L	Spinet	3/10/14	DRAWN BY	DTN	1/2014	NO.908
APPROVED		CITY ENGINE	FR	DATE	CHECKED BY	RLB	1/2014	NO.300





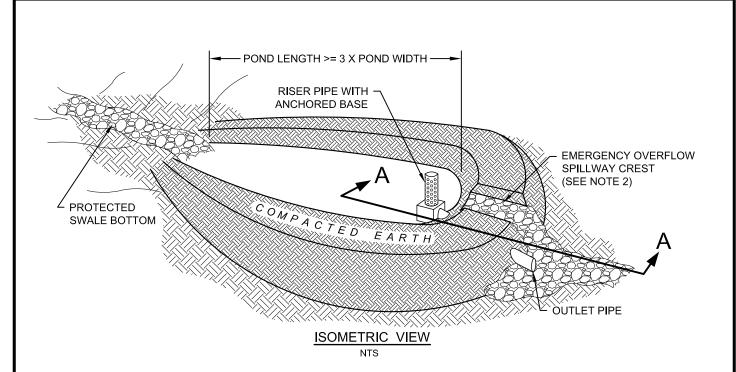
- MAY BE CONSTRUCTED BY EXCAVATION OR BY BUILDING A BERM.
- 2. A FILTER FABRIC FENCE OR SIMILAR FILTER MUST BE CONSTRUCTED TO FILTER RUNOFF FROM THE SEDIMENT TRAP PRIOR TO DISCHARGE FROM THE CONSTRUCTION SITE.
- UTILIZE A SEDIMENT TRAP AT THE LOW POINT DISCHARGES OF SEDIMENT FENCE BARRIERS.

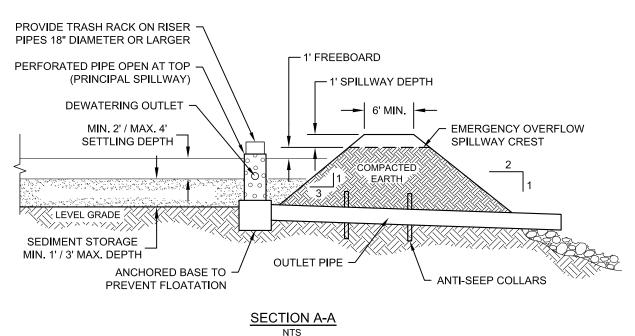
# CITY OF SALEM DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN

SEDIMENT TRAP

		,				
APPROVED	Lomes Soine	3/10/14	DRAWN BY	DTN	1/2014	NO QOQ
AFFROVEL	CITY ENGINEER	DATE	CHECKED BY	RLB	1/2014	NO.303





- USE ADDITIONAL BMPs SUCH AS, 50' MINIMUM OF HIGHLY VEGETATED AREA AND / OR SEDIMENT FENCE IS REQUIRED TO CONTROL SEDIMENT PRIOR TO DISCHARGING TO STREAM OR WETLAND.
- 2. PROTECT SPILLWAY AND OUTLET AREA WITH A MINIMUM OF 12" OF 4"- 6" OPEN GRADED ANGULAR ROCK.
- 3. COMPACTED EARTH SHALL BE CONSTRUCTED TO SCS STANDARDS FOR EMBANKMENT.

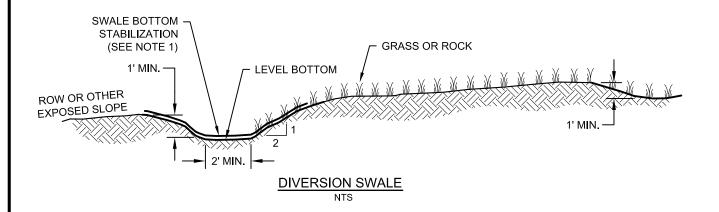
# CITY OF SALEM DEPARTMENT OF PUBLIC WORKS

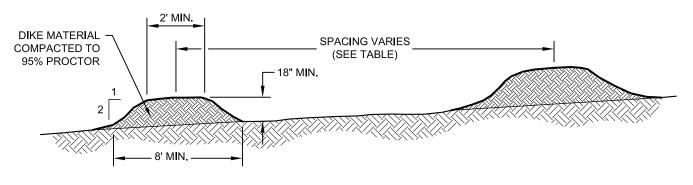
STANDARD PLAN

SEDIMENT POND

APPROVE	Jomes Spinet	3/10/14	DRAWN BY	DTN	1/2014	NO 040
APPROVEL	CITY ENGINEER	DATE	CHECKED BY	RLB	1/2014	140.910

SWALE PROPERTIES TABLE									
FEATURE	CONSTRAINTS								
BOTTOM WIDTH	2 FEET (MIN.)								
DEPTH	1 FOOT (MIN.)								
SIDE SLOPE	2H:1V OR FLATTER								
SWALE GRADE	MAX. 5% (SEE NOTE 2)								





## TEMPORARY DIVERSION DIKE

#### NOTES:

- STABILIZE SWALE BOTTOMS WITH ESTABLISHED VEGETATION OR EROSION CONTROL BLANKETS PRIOR TO USE.
- CONSTRUCT WITH POSITIVE DRAINAGE TO AN APPROVED OUTLET, SUCH AS SEDIMENTATION POND / TRAP.

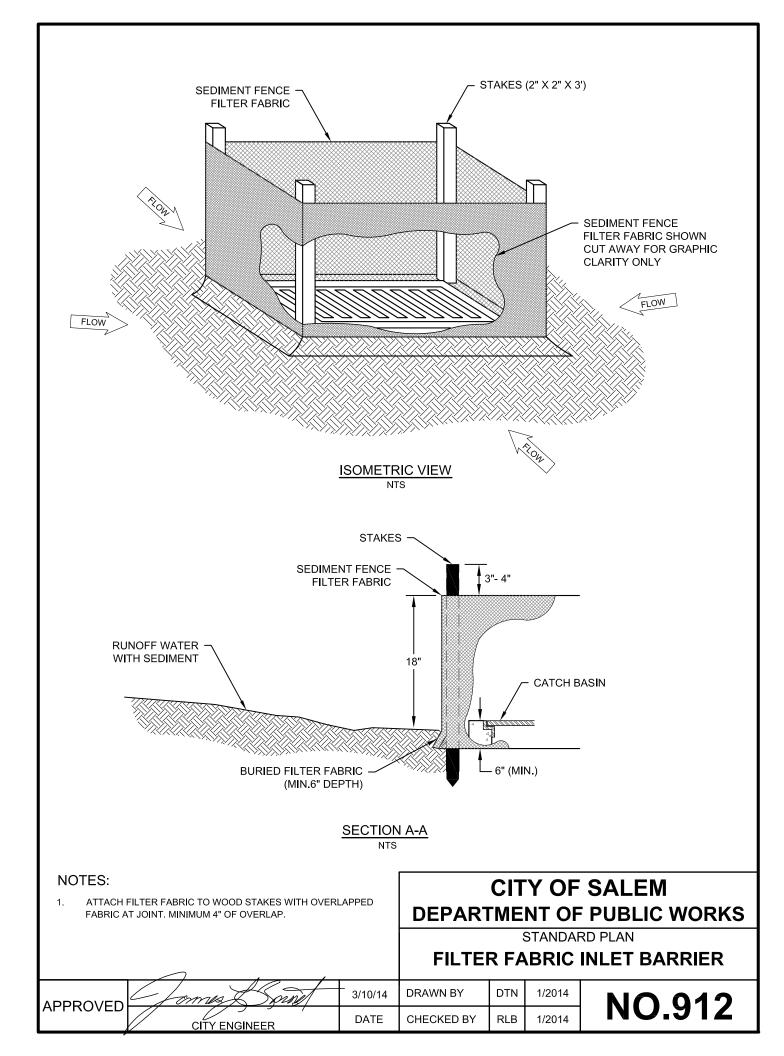
DIVERSION DIKE SPACING									
SLOPE	SPACING								
< 5%	300 FEET								
5 - 10%	200 FEET								
10 - 40%	100 FEET								

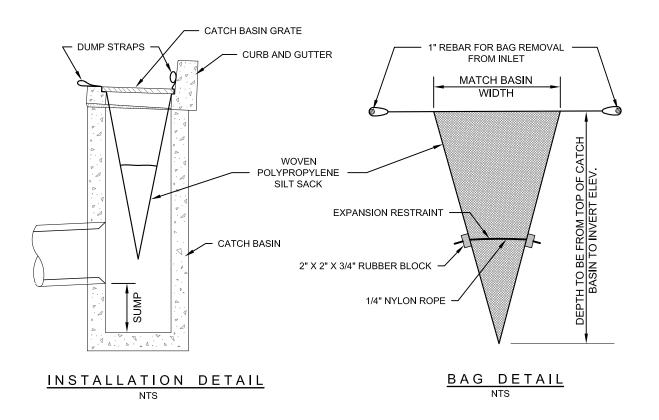
# CITY OF SALEM DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN

**INTERCEPTOR SWALES AND DIKES** 

			,				
APPROVED	omes	Spinet	3/10/14	DRAWN BY	DTN	1/2014	NO 011
APPROVED	CITY ENGINE	EER	DATE	CHECKED BY	RLB	1/2014	110.911

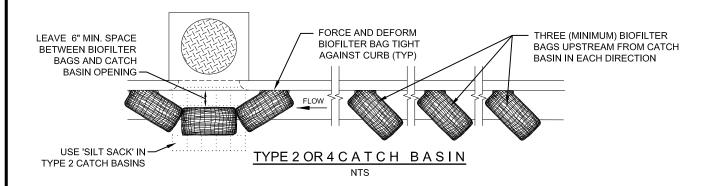


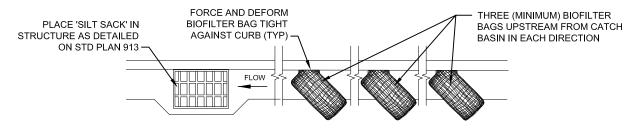


- 1. EMPTY SILT SACK WHEN ACCUMULATED SEDIMENT HAS FILLED OVER 1/2 OF THE DEPTH OF SACK.
- 2. SILTSACK SEDIMENT CONTROL DEVICE AS MANUFACTURED BY ACF ENVIRONMENTAL AND SUPPLIED BY ACF WEST (503-771-5115) OR APPROVED EQUAL.
- 3. RECESSED CURB INLET CATCH BASINS MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS. SIZE OF FILTER FABRIC INLET SACKS TO BE DETERMINED BY MANUFACTURER.

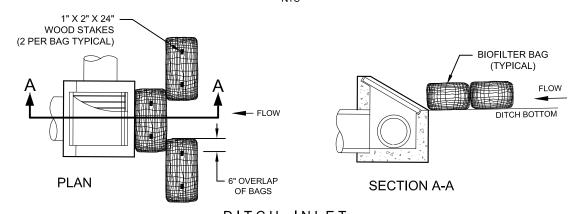
CITY OF SALEM
DEPARTMENT OF PUBLIC WORKS
STANDARD PLAN
SILT SACK

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L	AFFROVED		CITY ENGINE	ER		DATE	CHECKED BY	RLB	1/2014	110.513





## TYPE1CATCH BASIN



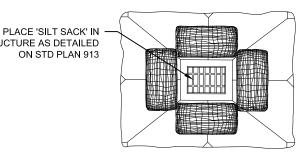
#### DITCH INLET NTS

STRUCTURE AS DETAILED

ON STD PLAN 913

## NOTES:

- LOCATION OF INDIVIDUAL PROTECTION DEVICES TO BE FIELD LOCATED PRIOR TO START OF ANY CONSTRUCTION.
- 2. IF FLOW IS IN THE OPPOSITE DIRECTION SHOWN OR FROM BOTH DIRECTIONS, MIRROR THE PLACEMENT OF THE BIOFILTER BAGS TO THE UPHILL SIDE (OR BOTH SIDES) OF CATCH BASIN.
- OVERLAP BIOFILTER BAGS A MINIMUM OF 6" IN ALL CASES WHERE OVERLAP IS SHOWN.
- STAKE BIOFILTER BAGS WHEN INSTALLED ON NON HARD SURFACE AREAS. ANCHOR ON HARD SURFACES WITH SANDBAGS OR OTHER APPROVED METHODS.



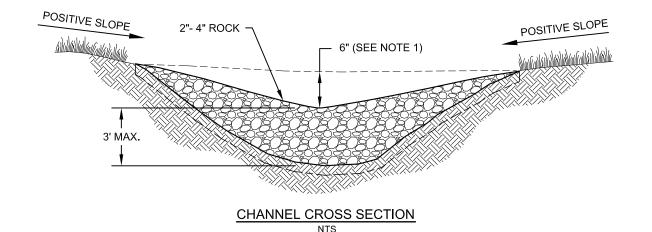
AREA DRAIN

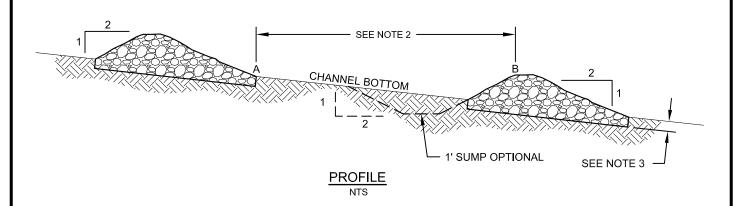
# **CITY OF SALEM DEPARTMENT OF PUBLIC WORKS**

STANDARD PLAN

## **BIOFILTER BAG INLET PROTECTION**

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ſ	APPROVED	10.	mes L	Spinet	3/10/14	DRAWN BY	DTN	1/2014	NO 014
ı	APPROVED		CITY ENGINE	ER	DATE	CHECKED BY	RLB	1/2014	110.914



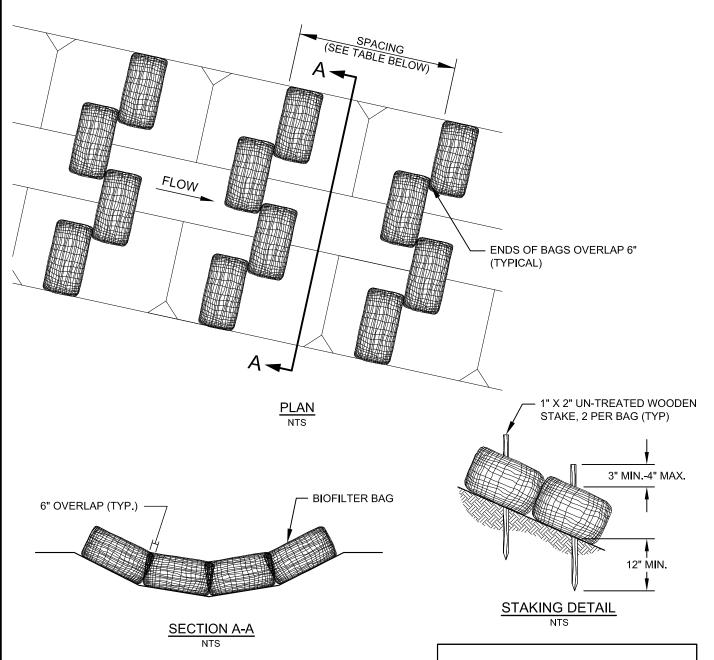


- LOWER CENTER SECTION 6 INCHES MINIMUM TO CAUSE FLOW OVER, NOT AROUND CHECK DAM.
- 2. THE DISTANCE BETWEEN DAMS SHALL BE SUCH THAT THE TOE (A) OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP (B) OF THE DOWNSTREAM DAM.
- 3. THE BASE OF THE CHECK DAM SHALL BE ENTRENCHED APPROXIMATELY 6 TO 12 INCHES DEPENDING UPON SOIL CONDITIONS AND HEIGHT OF CHECK DAM.
- 4. ROCK SHALL COMPLETELY COVER CHANNEL BOTTOM AND SIDES.

# CITY OF SALEM DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN
ROCK CHECK DAM

	 	/		_					
APPROVED	1	ennes L	Spinet		3/10/14	DRAWN BY	DTN	1/2014	NO 015
APPROVED		CITY ENGINE	ER		DATE	CHECKED BY	RLB	1/2014	NO.913



- 1. STAKING OF BAGS REQUIRED USING (2) 1"X2" WOOD STAKES OR APPROVED EQUAL PER BAG.
- 2. SURFACE MUST BE SMOOTH BEFORE APPLICATION.
- 3. CHECK DAMS MAY BE CONSTRUCTED USING STRAW WATTLES OR OTHER MATERIALS AS APPROVED.

## BIOFILTER BAG SPACING TABLE

SLOPE	MAXIMUM SPACING
10H : 1V (10%)	7' *
20H : 1V (5%)	14' *
40H : 1V (2.5%)	28' *

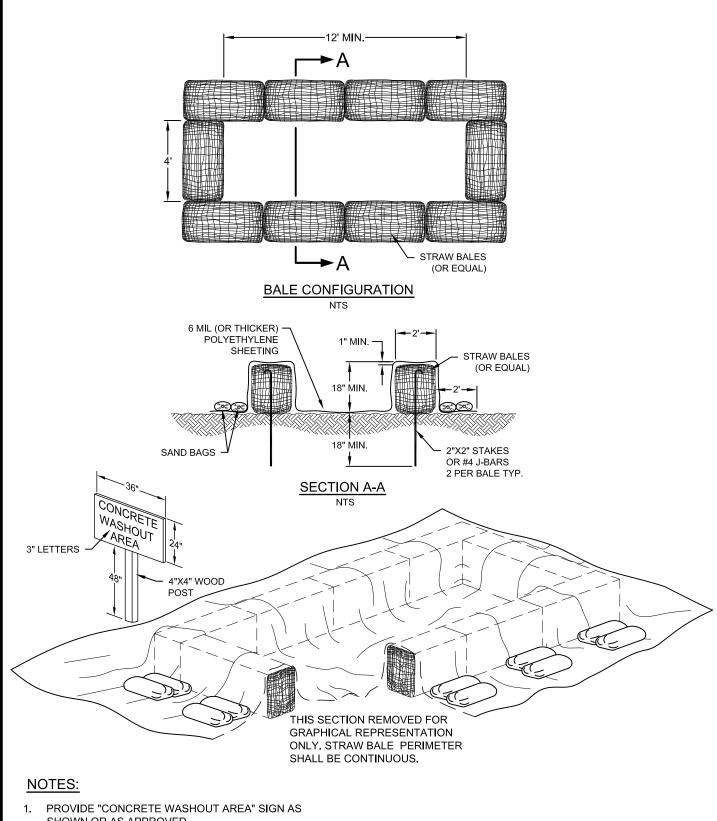
\* NOTE: SPACING CALCULATED USING A STANDARD 10" BIOBAG COMPRESSED TO AN EFFECTIVE 8" WORKING HEIGHT.

# CITY OF SALEM DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN

## **BIOFILTER BAG CHECK DAM**

			)						
ΔPPR	OVED	F	mest	Spinet	3/10/14	DRAWN BY	DTN	1/2014	NO 016
AFFR	OVED		CITY ENGINE	ER	DATE	CHECKED BY	RLB	1/2014	110.910



- SHOWN OR AS APPROVED.
- 2. INSTALL CONCRETE WASHOUT SIGN ADJACENT TO CONCRETE MANAGEMENT FACILITIES. FACE SIGN TOWARD NEAREST STREET OR ACCESS POINT.
- CONCRETE WASHOUT SHALL BE LOCATED BEHIND CURB AND 50 FT. MINIMUM FROM DRAINAGE INLETS OR WATERCOURSES.

# **CITY OF SALEM DEPARTMENT OF PUBLIC WORKS**

STANDARD PLAN

**CONCRETE MANAGEMENT FACILITY** 

L			7						
ſ	APPROVED	-/	must	Spinet	3/10/14	DRAWN BY	DTN	1/2014	NO 017
	APPROVED		CITY ENGINE	ER	DATE	CHECKED BY	RLB	1/2014	NO.917