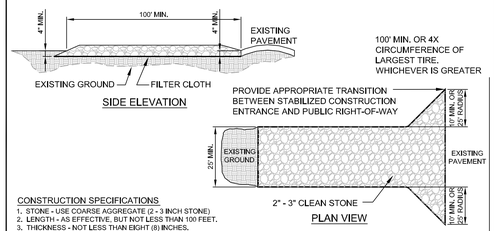
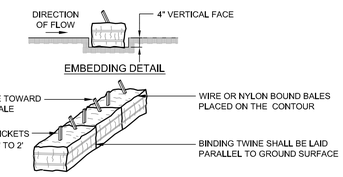


CONSTRUCTION SPECIFICATIONS

1. STONE - USE COARSE AGGREGATE (2 - 3 INCH STONE)
2. LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 100 FEET.
3. THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WASHING - WHEN NECESSARY, 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 CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
6. MAINTENANCE - THE ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
7. 12' X 24' METAL GRATE MAY BE USED. GRATE SHALL BE 25' AWAY FROM PAVEMENT AND APPROPRIATE SEDIMENT CONTROL TRAPPING DEVICE SHALL BE USED AT GRATE OUTLET POINT.

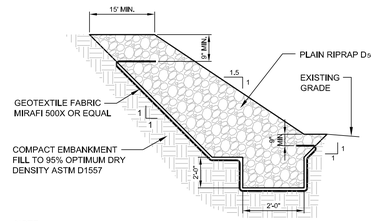
(A) STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



CONSTRUCTION SPECIFICATIONS

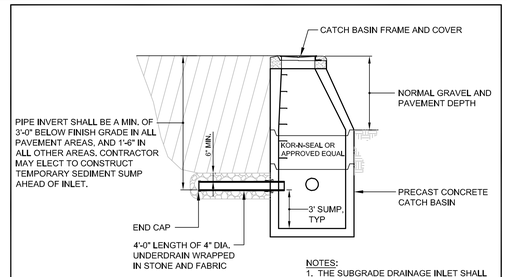
1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

(E) STRAW OR HAY BALE BARRIER
N.T.S.



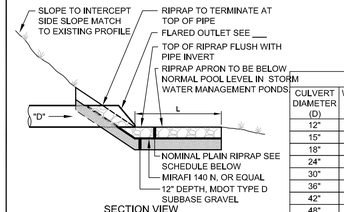
NOTE:
INSTALL RIPRAP SLOPE PROTECTION AS DIRECTED BY THE OWNER'S REPRESENTATIVE OR GEOTECHNICAL ENGINEER IF REQUIRED, DUE TO DISCOVERED FIELD CONDITIONS, AT NO EXTRA EXPENSE TO THE OWNER.

(H) RIPRAP SLOPE PROTECTION DETAIL
N.T.S.



NOTES:
1. THE SUBGRADE DRAINAGE INLET SHALL BE USED TO PROVIDE SITE DRAINAGE UNTIL SUBBASE GRAVEL OR LOAM IS PLACED.
2. THIS INLET DRAIN IS REQUIRED FOR ALL CATCH BASINS OF 4'-0" DIA. OR GREATER ON THE PROJECT UNLESS CONNECTED TO PERFORATED STORM DRAIN.

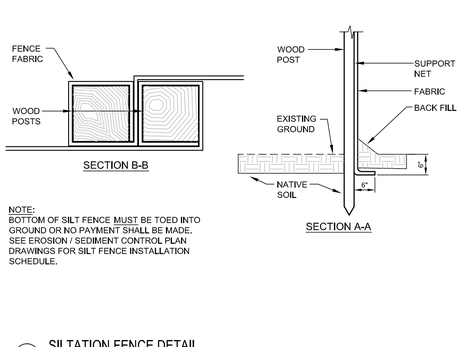
(L) INLET SUBGRADE DRAINAGE SWALE
N.T.S.



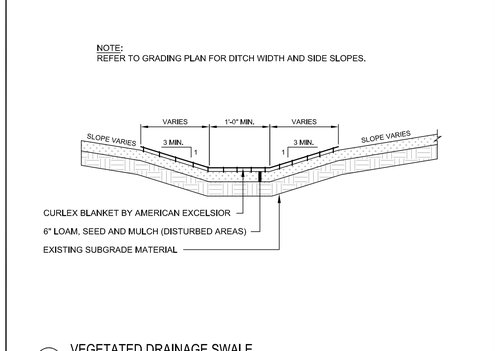
SCHEDULE				
CULVERT DIAMETER (D)	WIDTH (W)	STONE D_{50}	RIPRAP THICKNESS
12"	2'	6"	14"
15"	4'	6"	14"
18"	4'	6"	14"
24"	6'	6"	14"
36"	8'	12"	27"
42"	10'	12"	27"
48"	12'	12"	27"

NOTE:
RIPRAP GRADATION AND PLACEMENT - THE RIPRAP GRADATION SHALL BE A WELL-GRADED MIX FROM ABOUT 1.5 TIMES THE D SIZE TO ABOUT 25 PERCENT OF THE D SIZE. THE RIPRAP STONES SHALL BE CAREFULLY PLACED WORKING FROM THE TOE OF THE SLOPE UPWARD, THE STONES SHOULD BE LOWERED TO THE SLOPE AND NOT BE ALLOWED TO DROP MORE THAN 12 INCHES ONTO THE GEOTEXTILE. THE FINISHED SURFACE SHALL BE A RELATIVELY SMOOTH UNIFORMLY SLOPED SURFACE.

(B) PIPE/CULVERT INLET APRON
N.T.S.

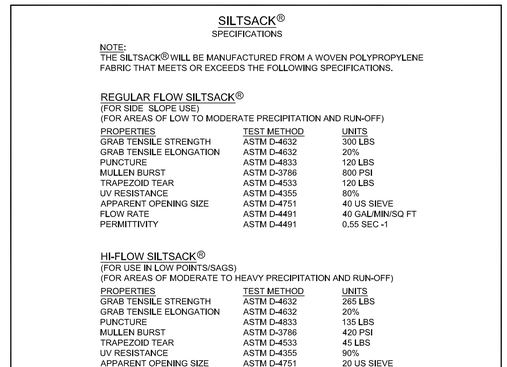


*NOTE:
THE SILT FENCE SHOULD HAVE A MAXIMUM STAKING DISTANCE OF 6' UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT A MAXIMUM 14 GAUGE AND WITH A MINIMUM MESH SPACING OF 6".

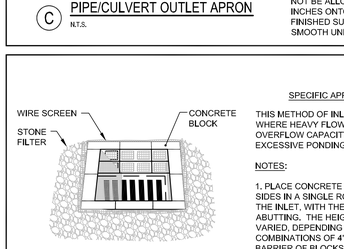


NOTE:
THIS DETAIL TO BE USED AT ANY AREA WHERE FLOWS CONCENTRATE DURING CONSTRUCTION. THE USE OF STONE CHECK DAMS SHALL BE REVIEWED AND APPROVED BY THE OWNER'S REPRESENTATIVE. ALL CHECK DAMS SHALL BE REMOVED UPON PERMANENT STABILIZATION OF THE SITE.

(I) STONE CHECK DAM
N.T.S.



(M) TYPICAL TEMPORARY DRAINAGE SWALE DETAIL
N.T.S.



SCHEDULE				
CULVERT DIAMETER (D)	WIDTH (W)	LENGTH (L)	STONE D_{50}	RIPRAP THICKNESS
12"	8'	10'	6"	14"
15"	8'	10'	6"	14"
18"	10'	14'	6"	14"
24"	12'	16'	9"	21"
30"	12'	16'	12"	27"
36"	20'	24'	12"	27"
42"	24'	26'	12"	27"
48"	28'	32'	12"	27"

NOTE:
RIPRAP GRADATION AND PLACEMENT - THE RIPRAP GRADATION SHALL BE A WELL-GRADED MIX FROM ABOUT 1.5 TIMES THE D SIZE TO ABOUT 25 PERCENT OF THE D SIZE. THE RIPRAP STONES SHALL BE CAREFULLY PLACED WORKING FROM THE TOE OF THE SLOPE UPWARD. THE STONES SHOULD BE LOWERED TO THE SLOPE AND NOT BE ALLOWED TO DROP MORE THAN 12 INCHES ONTO THE GEOTEXTILE. THE FINISHED SURFACE SHALL BE A RELATIVELY SMOOTH UNIFORMLY SLOPED SURFACE.

(C) PIPE/CULVERT OUTLET APRON
N.T.S.

NOTE:
BOTTOM OF SILT FENCE MUST BE TOED INTO GROUND OR NO PAYMENT SHALL BE MADE. SEE EROSION / SEDIMENT CONTROL PLAN DRAWINGS FOR SILT FENCE INSTALLATION SCHEDULE.

(F) SILTATION FENCE DETAIL
N.T.S.

NOTE:
REFER TO GRADING PLAN FOR DITCH WIDTH AND SIDE SLOPES.

(J) VEGETATED DRAINAGE SWALE
N.T.S.

SILTSAC®
SPECIFICATIONS

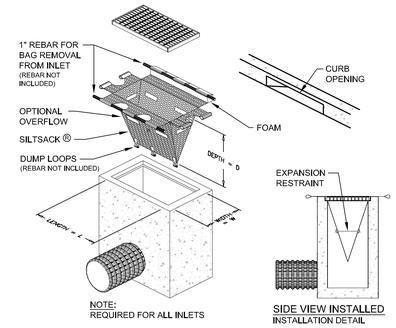
NOTE:
THE SILTSAC® WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

REGULAR FLOW SILTSACK®
(FOR SIDE SLOPE USE)
(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80%
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

HI-FLOW SILTSACK®
(FOR USE IN LOW POINTS/SAGS)
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

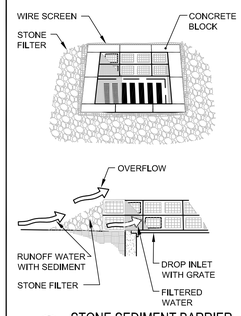
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90%
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1



NOTE:
REQUIRED FOR ALL INLETS

SIDE VIEW INSTALLED
INSTALLATION DETAIL

(N) SILTSACK® DETAIL AND SPECIFICATIONS
N.T.S.



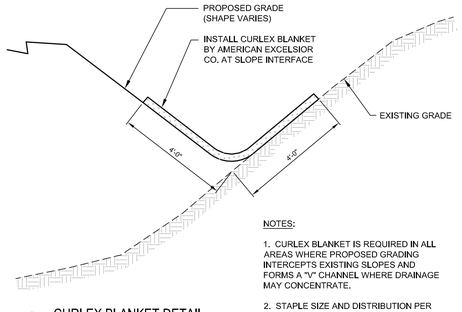
SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

NOTES:

1. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF 4", 8" AND 12" WIDE BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES HIGH, AND NO GREATER THAN 24" HIGH.
2. WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEBBING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH ½" OPENINGS SHALL BE USED.
3. STONE SHALL BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER, AS SHOWN IN DETAIL. THE STONE FILTER SHALL BE ½" CRUSHED STONE.
4. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED.
5. PREMANUFACTURED SILT-SACKS ™ MAY BE USED AS AN EQUIVALENT TO STONE SEDIMENT BARRIERS.

(D) STONE SEDIMENT BARRIER
N.T.S.

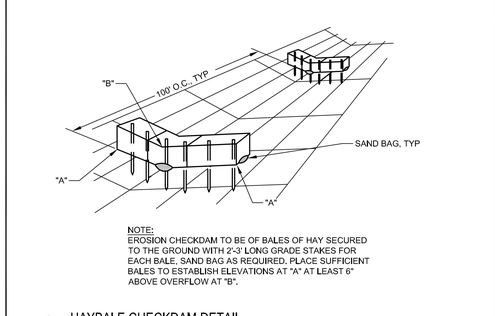


NOTES:

1. CURLEX BLANKET IS REQUIRED IN ALL AREAS WHERE PROPOSED GRADING INTERCEPTS EXISTING SLOPES AND FORMS A "V" CHANNEL WHERE DRAINAGE MAY CONCENTRATE.

2. STAPLE SIZE AND DISTRIBUTION PER MANUFACTURERS SPECIFICATION.

(G) CURLEX BLANKET DETAIL
N.T.S.



NOTE:
EROSION CHECKDAM TO BE OF BALES OF HAY SECURED TO THE GROUND WITH 2'-3' LONG GRADE STAKES FOR EACH BALE, SAND BAG AS REQUIRED. PLACE SUFFICIENT BALES TO ESTABLISH ELEVATIONS AT "A" AT LEAST 6" ABOVE OVERFLOW AT "B".

(K) HAYBALE CHECKDAM DETAIL
N.T.S.

REV	DATE	DESCRIPTION
3	12.01.14	FINAL PHASE 1A SITE PLAN SUBMITTED TO CITY
2	07.29.14	REVISED PHASE 1A SITE PLAN SUBMITTED TO CITY
1	06.30.14	AMENDED PHASE 1A SITE PLANS SUBMITTED TO CITY FOR REVIEW

REVISIONS

STATE OF MAINE — BO KENNEDY No. 11994 — REGISTERED PROFESSIONAL ENGINEER
P.E. BO KENNEDY
LIC. #11994

PROJECT
BRICK NORTH BUILDING AT THE FOREFRONT AT THOMPSON'S POINT

SHEET TITLE
EROSION AND SEDIMENT CONTROL DETAILS

CLIENT
FOREFRONT PARTNERS I, LP

FST — FAY, SPOFFORD & THORNDIKE
ENGINEERS · PLANNERS · SCIENTISTS
778 MAIN ST, SUITE 8, SOUTH PORTLAND, ME 04106

DRAWN: | DATE: JUNE 2014
DESIGNED: | SCALE: N.T.S.
CHECKED: | JOB NO: 2982.05
FILE NAME: 2982.05DETAILS
SHEET | DATE OF APPROVAL

CITY OF PORTLAND
APPROVED SITE PLAN
Subject to conditions of Approval and Standard Conditions
PLANNER Christine Grimando
PROJECT NO. 2014-120
Dec. 4, 2014

PRELIMINARY - NOT FOR CONSTRUCTION

R:\2982.05 Amended Site Plan Part II\Cadd\Permit Set\dwg\BRICK NORTH - Amended\2982.05-BN DET.dwg davis_d 12/1/2014 11:25 AM