

SOIL EROSION CONTROL NARRATIVE

PROJECT DESCRIPTION: THE PURPOSE OF THIS PROJECT IS TO MOVE APPROXIMATELY 19,000 CUBIC YARDS FROM THE WEST SIDE OF NORTH BROOK DRIVE TO THE EAST SIDE OF NORTH BROOK DRIVE TO CREATE BUILDABLE AREAS FOR TOWNHOUSES. TO INSTALL PUBLIC UTILITIES FOR THE DEVELOPMENT, AND TO INSTALL THE STORMWATER MANAGEMENT POND FOR THIS DEVELOPMENT. THIS PROJECT WILL FILL WITHIN THE FLOOD PLAIN WITHOUT FILLING WITHIN THE FLOOD WAY, TO ALLOW FOR CONSTRUCTION OF UNITS ABOVE THE PUBLISHED 100-YR FLOOD ELEVATION.

EXISTING SITE CONDITIONS: THE SITE IS LOCATED JUST WEST OF TINKER CREEK AT THE INTERSECTION OF TINKER CREEK WITH U.S. ROUTE 11. THE SITE DRAINS GENERALLY IN AN EASTERLY DIRECTION TOWARD TINKER CREEK. THE SUBJECT SITE IS GRASSED WITH APPROXIMATE SLOPES BETWEEN 5 TO 20%. APPROXIMATELY 5.4 ACRES WILL BE DISTURBED.

SOILS: THE BASIC SOIL MATERIAL, AS IDENTIFIED BY THE U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, IS IDENTIFIED AS FREDERICK-URBAN LAND-CHILHOWIE. THE SITE WILL UTILIZE A CONSTRUCTION ENTRANCE, SILT FENCE, INLET PROTECTION, CULVERT INLET PROTECTION, TEMPORARY SEDIMENT TRAPS, PERMANENT SEEDING, AND DUST CONTROL.

CRITICAL AREAS: A TEMPORARY SEDIMENT TRAP AND SILT FENCE JUST WEST OF NORTH BROOK DRIVE AND A TEMPORARY SEDIMENT TRAP AND SILT FENCE ALONG TINKER CREEK SHOULD BE PLACED AND CHECKED REGULARLY TO KEEP SEDIMENT WITHIN THE CONSTRUCTION LIMITS. INLET PROTECTION OF AN EXISTING STRUCTURE TO THE SOUTH OF THE SITE SHOULD BE INSTALLED AND CHECKED REGULARLY TO PROTECT DOWN STREAM CONTAMINATION. INSTALLATION OF A CONSTRUCTION ENTRANCE ON EACH SIDE OF NORTH BROOK DRIVE SHOULD KEEP SEDIMENT OFF THE EXISTING PAVEMENT. NO MORE THAN 3 ACRES SHALL DRAIN TO A TEMPORARY SEDIMENT TRAP. SHOULD MORE THAN 3 ACRES DRAIN TO A TRAP, THE TRAP SHALL BE MODIFIED TO A SEDIMENT BASIN.

ADJACENT PROPERTY: SEE MAP

EROSION AND SEDIMENT CONTROL MEASURES: UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", THIRD EDITION.

- PRIOR TO ANY WORK BEING PERFORMED ON THE PROPOSED PROJECT, A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE PROVIDED OFF OF THE EXISTING PAVEMENT OF SHERWOOD MEMORIAL PARK. THE CONSTRUCTION ENTRANCE SHALL BE COMPOSED OF GRADED 3" STONE TO A MINIMUM DEPTH OF 6". THE ENTRANCE SHALL ALSO RUN FOR A MINIMUM DISTANCE OF NOT LESS THAN 70' BACK FROM THE EXISTING PAVEMENT EDGES. THE ENTRANCE SHALL BE CONTINUALLY MAINTAINED, INSPECTED, REPAIRED, OR OTHERWISE BE KEPT IN GOOD FUNCTIONAL ORDER THROUGHOUT THE EXTENT OF THE WORK ON THE SITE.
- REGARDLESS OF FUTURE DEVELOPMENT PLANS, THE CONTRACTOR SHALL IMMEDIATELY INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLANS. THIS WORK SHALL BE COORDINATED IN ORDER OF THE WORK WHICH IS TO FOLLOW: CONTROL AT CENTERS OF FLOW, AND OTHER POINTS OF CONCENTRATION SHOWN SHALL BE CONSTRUCTED IN PLACE FIRST. CONSTRUCTION ENTRANCES, INLET PROTECTION, SILT FENCE AND TEMPORARY SEDIMENT TRAPS SHALL BE INSTALLED AS SHOWN ON THE PLANS.
- AFTER THE INSTALLED CONTROL DEVICES ARE FOUND TO BE FUNCTIONAL, THE CONTRACTOR SHALL IMMEDIATELY PROCEED WITH DEMOLITION, CLEARING, AND PRELIMINARY GRADING OPERATIONS. ALL EXPOSED DENuded AREAS SHALL BE SEEDD WITHIN SEVEN (7) DAYS AFTER FINAL GRADING, AND SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", THIRD EDITION.
- IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL. IN PARTICULAR:
 - THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION TO PREVENT TRACKING OR FLOW OF MUD ONTO PRIVATE ROADS AND PUBLIC RIGHT-OF-WAYS.
 - ALL SILT FENCE BARRIERS AND INLET PROTECTIONS SHALL BE CHECKED REGULARLY FOR UNDERMINING AND SEDIMENT BUILDUP.
 - ALL SEEDD AREAS WILL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHALL BE FERTILIZED AND RESEEDD AS NEEDED.
- FOLLOWING THE COMPLETION OF DEVELOPMENT AND STABILIZATION OF ALL AREAS AND AFTER IT HAS BEEN DETERMINED THAT EROSION OR SEDIMENTATION IS NO LONGER OCCURRING ON THE SITE OR AT ITS BOUNDARIES AND THAT DRAINAGE FLOWS ARE FUNCTIONING ACCORDING TO DESIGN, THE CONTRACTOR MAY THEN BEGIN TO REMOVE THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES. THIS WORK SHALL BE DONE IN A CAREFUL, NEAT, ORGANIZED MANNER.

GENERAL COMMENTS: 1. THE JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.

2. THE COUNTY OF ROANOKE RESERVES THE RIGHT TO ADD TO, DELETE, OR OTHERWISE CHANGE EROSION CONTROL DEVICES AS MAY BE DEEMED NECESSARY BY WRITTEN NOTIFICATION TO THE CONTRACTOR.

3. NO WORK SHALL PROCEED ON THE SITE UNTIL THE PROPER AUTHORIZATION OR PERMIT HAS BEEN OBTAINED FROM THE COUNTY OF ROANOKE.

4. THE ENGINEER, T.P.PARKER & SON, ASSUMES NO RESPONSIBILITY FOR ANY WORK BEING PERFORMED.

GENERAL EROSION & SEDIMENT CONTROL NOTES

ALL SOIL EROSION & SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLAN SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

THE APPROVING AUTHORITY MAY ADD TO, DELETE, RELOCATE, CHANGE, OR OTHERWISE MODIFY CERTAIN EROSION AND SEDIMENT CONTROL MEASURES WHERE FIELD CONDITIONS ARE ENCOUNTERED THAT WARRANT SUCH MODIFICATIONS.

ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLAN SHALL BE PLACED IN ADVANCE OF THE WORK BEING PERFORMED, AS FAR AS PRACTICAL.

IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LEAVE THE SITE ADEQUATELY PROTECTED AGAINST EROSION, SEDIMENTATION, OR ANY DAMAGE TO ANY ADJACENT PROPERTY AT THE END OF EACH DAY'S WORK.

FOR THE EROSION CONTROL KEY SYMBOLS SHOWN ON THE PLANS, REFER TO THE VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

REFERENCE IS DIRECTED TO THE "EROSION AND SEDIMENT CONTROL DETAILS".

THE PROPOSED DEVELOPMENT DOES NOT ANTICIPATE OFF-SITE WASTE AREAS; HOWEVER, SHOULD THE PROJECT REQUIRE OFF-SITE WASTE AREAS OR BORROW AREAS, THE LOCATIONS OF THESE AREAS NEED TO BE SUBMITTED TO THE ROANOKE COUNTY COMMUNITY DEVELOPMENT OFFICE. EROSION CONTROL PLAN OR MEASURES MAY BE REQUIRED FOR THESE OFF-SITE AREAS.

EROSION AND SEDIMENT CONTROL MEASURES:

- (CE) PROVIDE STONE CONSTRUCTION ENTRANCE MEETING VESCH STD. & SPEC. 3.02
- (SF) PROVIDE SILT FENCE MEETING VESCH STD. & SPEC. 3.05
- (IP) PROVIDE STORM DRAIN INLET PROTECTION MEETING VESCH STD. & SPEC. 3.07
- (CIP) PROVIDE CULVERT INLET PROTECTION MEETING VESCH STD. & SPEC. 3.08
- (ST) PROVIDE TEMPORARY SEDIMENT TRAP MEETING VESCH STD. & SPEC. 3.13
- (PS) PROVIDE PERMANENT SEEDING MEETING VESCH STD. & SPEC. 3.32
- (B/M) PROVIDE SOIL STABILIZATION MATTING MEETING VESCH STD. & SPEC. 3.36, TREATMENT TYPE 2
- (DC) PROVIDE DUST CONTROL MEETING VESCH STD. & SPEC. 3.39

SEE DETAILS IN "VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK", LATEST EDITION, FOR INSTALLATION DETAILS. (SEE VDOT STD EC-3 DETAILS AS WELL)

THE CONTRACTOR SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION AND STAPLE PATTERNS.

MATERIALS SHALL CONSIST OF ONE OF THE FOLLOWING TYPES:

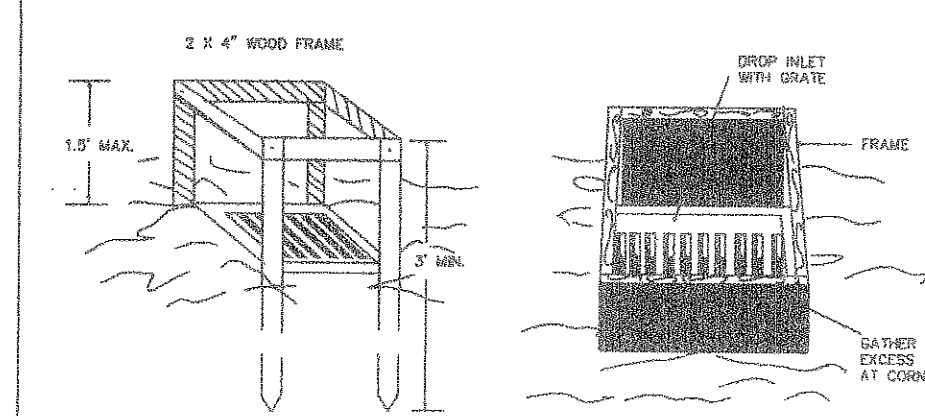
- NORTH AMERICAN GREEN TEMPORARY LINER, C125, STAPLE PATTERN D, AND PERIODIC INSPECTION FOR A GOOD STAND OF GRASS. AREAS SHOWING POOR GROWTH SHALL BE RESEEDD OR
- NORTH AMERICAN GREEN PERMANENT LINER, SC250, STAPLE PATTERN E OR
- NORTH AMERICAN GREEN PERMANENT LINER C350, STAPLE PATTERN E OR
- APPROVED EQUIVALENT VDOT EC-3, TYPE B MATTING AND PERIODIC INSPECTION OF A GOOD STAND OF GRASS OR
- VDOT EC-3, TYPE C MATTING.

(B/M) SOIL STABILIZATION MATTING

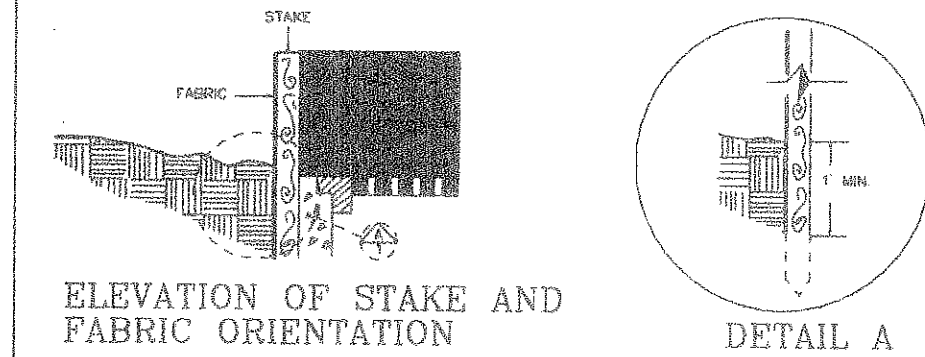
BOND COST ESTIMATE

ITEM -- E & S	UNITS	QUANTITY	UNIT COST	TOTAL
CONSTRUCTION ENTRANCE	EA	2	\$ 900	\$ 1,800
SILT FENCE	LF	1,400	\$ 4	\$ 5,600
INLET PROTECTION (BLOCK & GRAVEL)	EA	10	\$ 200	\$ 2,000
INLET PROTECTION (EXCAVATED SED. TRAP)	EA	1	\$ 2,000	\$ 2,000
CULVERT INLET PROTECTION	EA	2	\$ 500	\$ 1,000
TEMPORARY SEDIMENT TRAP	EA	2	\$ 4,000	\$ 8,000
PERMANENT SEEDING	AC	3	\$ 1,750	\$ 5,250
SOIL STABILIZATION MATTING	SY	850	\$ 7	\$ 5,950
DUST CONTROL	LS	1	\$ 2,000	\$ 2,000
SUBTOTAL				\$ 33,600
10% CONTINGENCY				\$ 3,360
TOTAL				\$ 36,960

SILT FENCE DROP INLET PROTECTION



PERSPECTIVE VIEWS



ELEVATION OF STAKE AND FABRIC ORIENTATION

DETAIL A

SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OR OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

SOURCE: N.C. Erosion and Sediment Control Planning and Design Manual, 1988

PLATE 3.07-1

(IP) INLET PROTECTION

TYPE A (SLOPES FLATTER THAN 3:1)

15 OCTOBER TO 1 FEBRUARY
K-31 FESCUE @ 5 LB / 1000 SF
BORZY WINTER RYE @ 1/2 LB / 1000 SF

1 FEBRUARY TO 1 JUNE
K-31 FESCUE @ 5 LB / 1000 SF
ANNUAL RYE @ 1/2 LB / 1000 SF

1 JUNE TO 1 SEPTEMBER
K-31 FESCUE @ 5 LB / 1000 SF
GERMAN MILLET @ 1/2 LB / 1000 SF

1 SEPTEMBER TO 15 OCTOBER
K-31 FESCUE @ 5 LB / 1000 SF
ANNUAL RYE @ 1/2 LB / 1000 SF

15 MARCH TO 1 MAY

TYPE B (SLOPES 3:1 OR STEEPER)

CROWN VETCH @ 1/2 LB / 1000 SF
PERENNIAL RYEGRASS @ 1/2 LB / 1000 SF
RED TOP @ 1/8 LB / 1000 SF

15 AUGUST TO 1 OCTOBER
CROWN VETCH @ 1/2 LB / 1000 SF
PERENNIAL RYEGRASS @ 1/2 LB / 1000 SF
RED TOP @ 1/8 LB / 1000 SF

LIME: 140 LB / 1000 SF PULVERIZED AGRICULTURAL LIMESTONE

FERTILIZER: 5-20-10 @ 25 LB / 1000 SF
35-0-0 @ 7 LB / 1000 SF

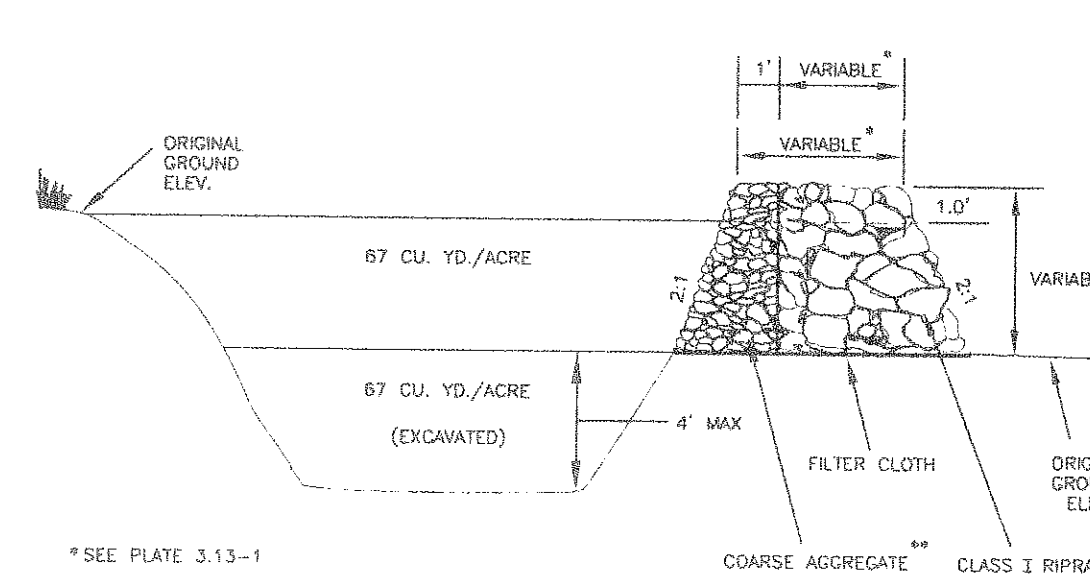
MULCH: SHALL BE USED OVER ALL SEEDD AREAS AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, 3rd ED.

SOIL CONDITIONING: INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDLINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED WITHIN THE VIRGINIA SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, THIRD EDITION. ADDITIONAL SEEDING TO BE PERFORMED AS REQUIRED BY THE INSPECTOR.

SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE SEEDBED. MAX. SEEDING DEPTH SHALL BE 1/4 INCH.

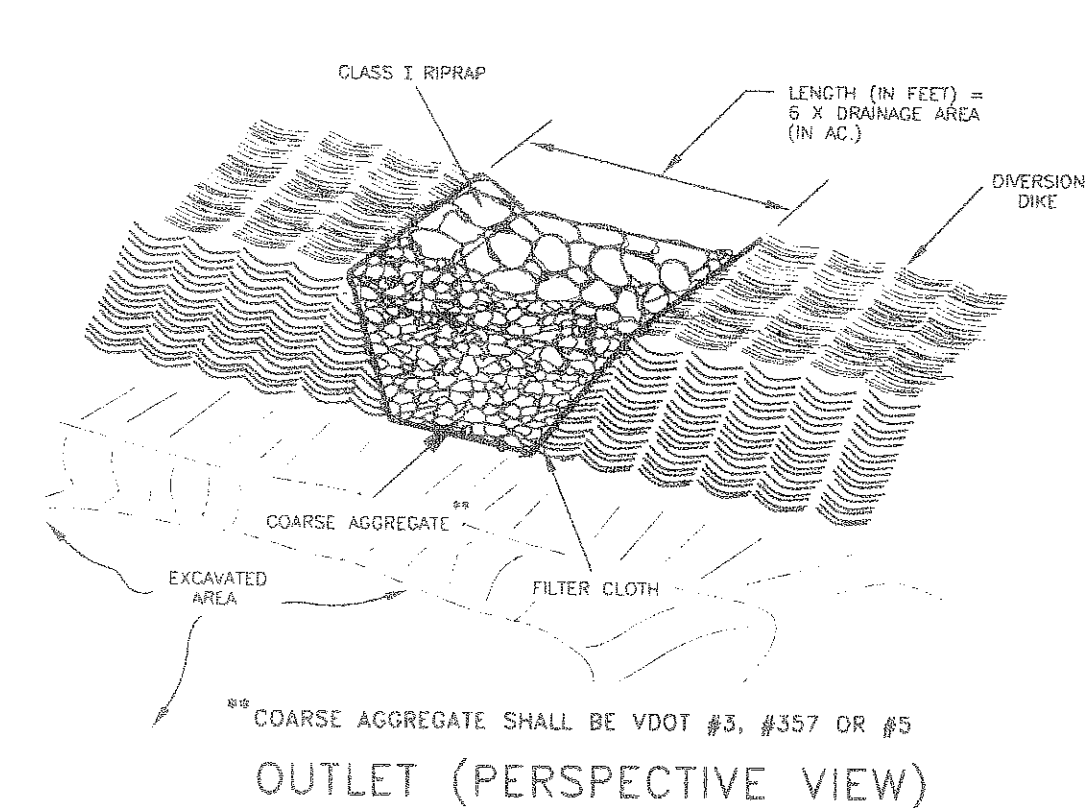
(PS) PERMANENT SEEDING MIXTURE

TEMPORARY SEDIMENT TRAP



* SEE PLATE 3.13-1

CROSS SECTION OF OUTLET



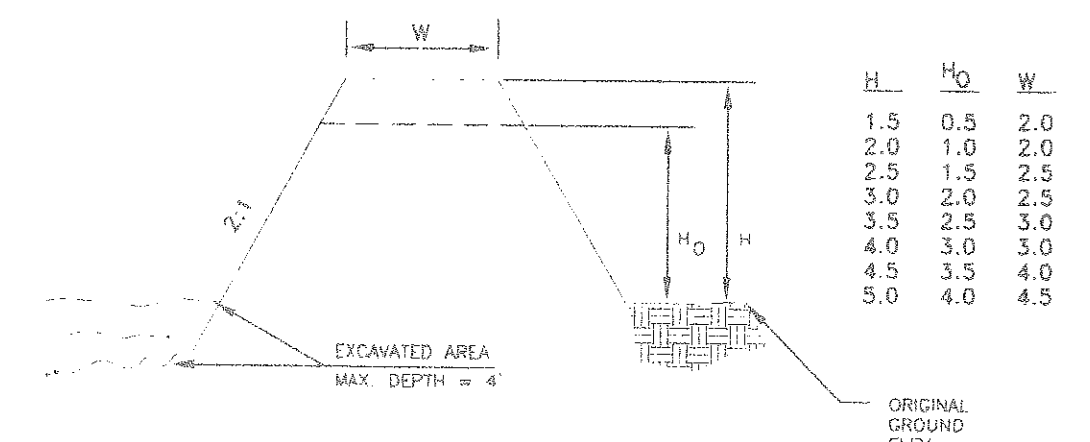
** COARSE AGGREGATE SHALL BE VDOT #3, #57 OR #5

OUTLET (PERSPECTIVE VIEW)

SOURCE: VA, DSWC

PLATE: 3.13-2

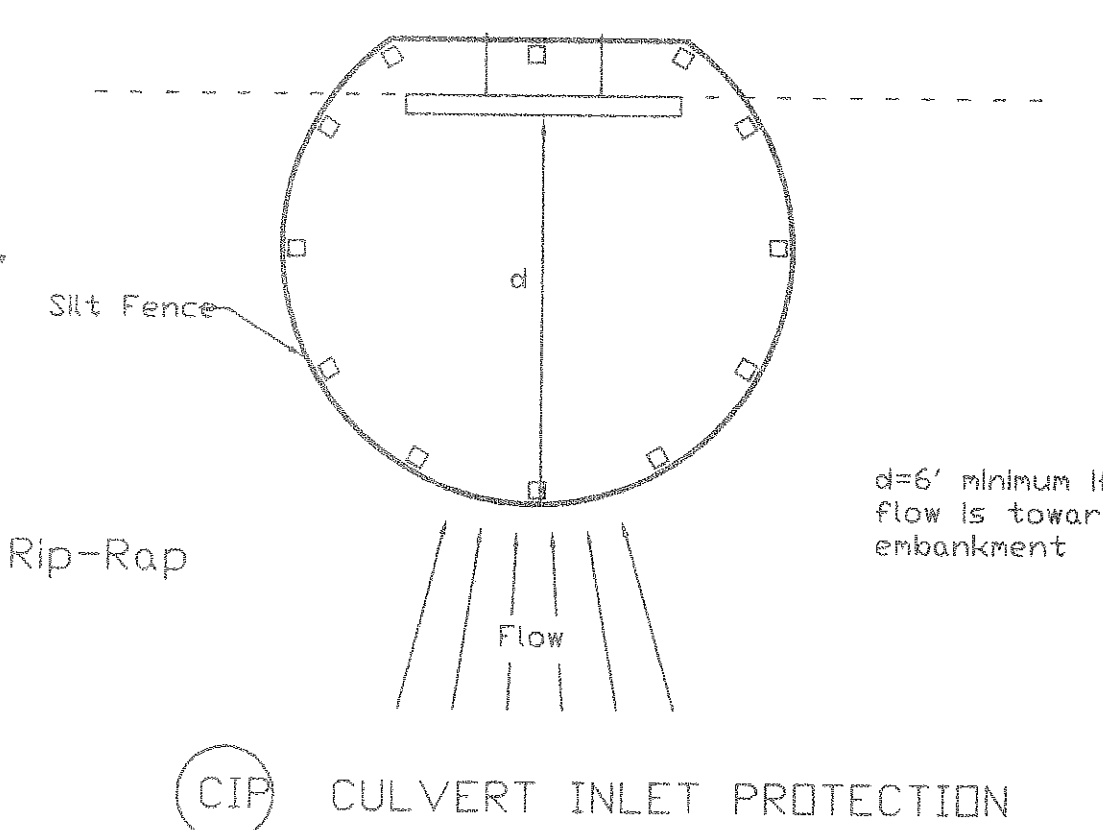
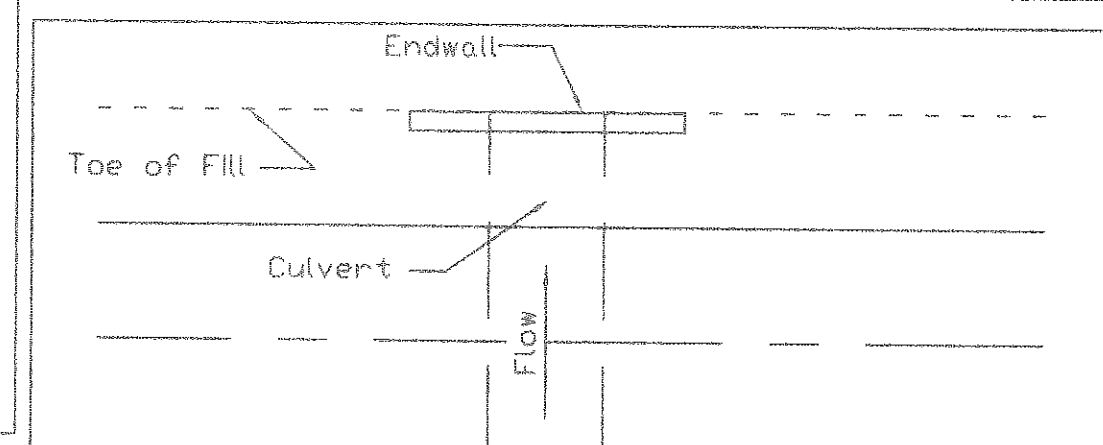
MINIMUM TOP WIDTH (W) REQUIRED FOR SEDIMENT TRAP EMBANKMENTS ACCORDING TO HEIGHT OF EMBANKMENT (FEET)



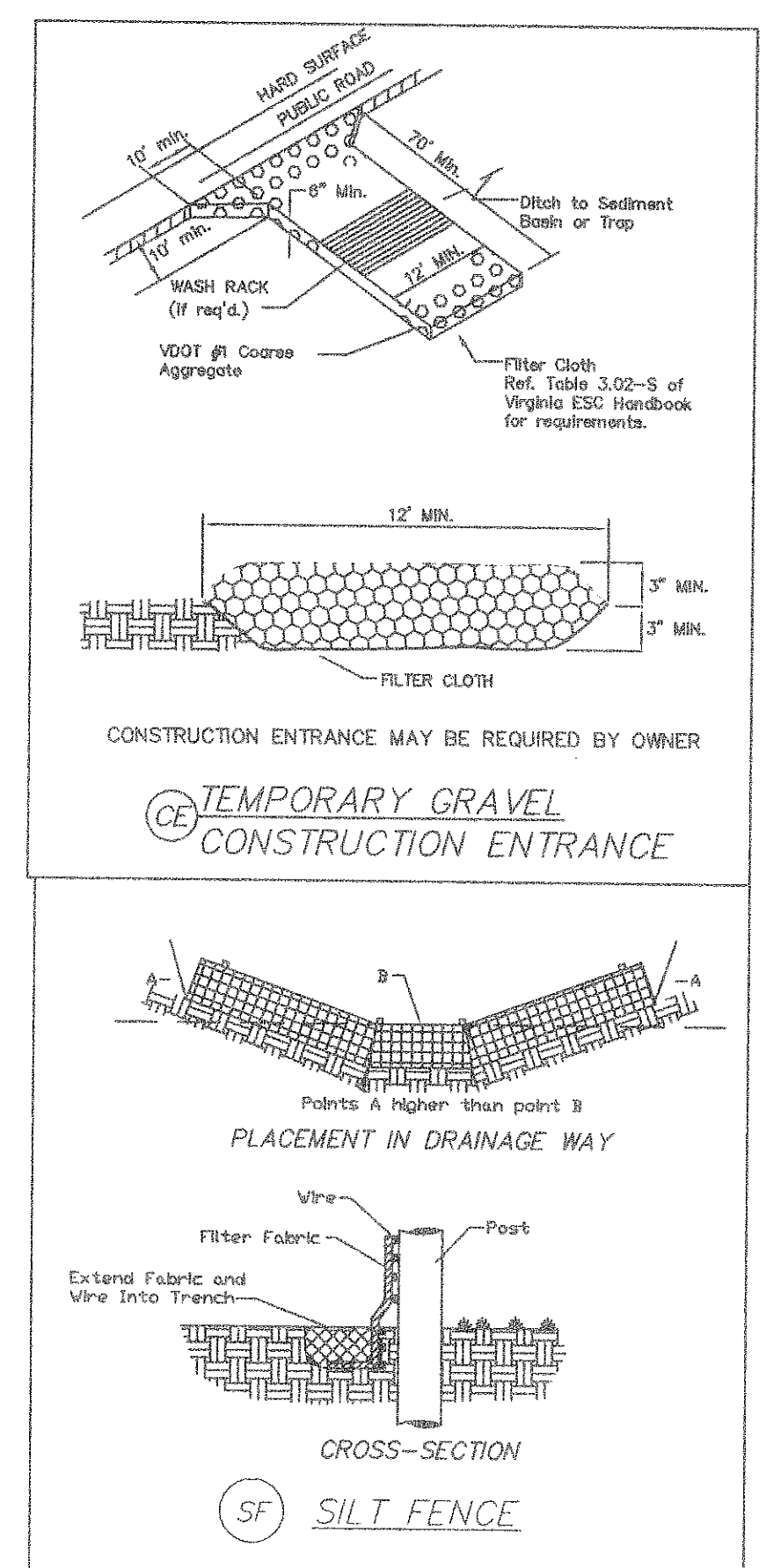
SOURCE: VA, DSWC

PLATE: 3.13-1

(ST) TEMPORARY SEDIMENT TRAP

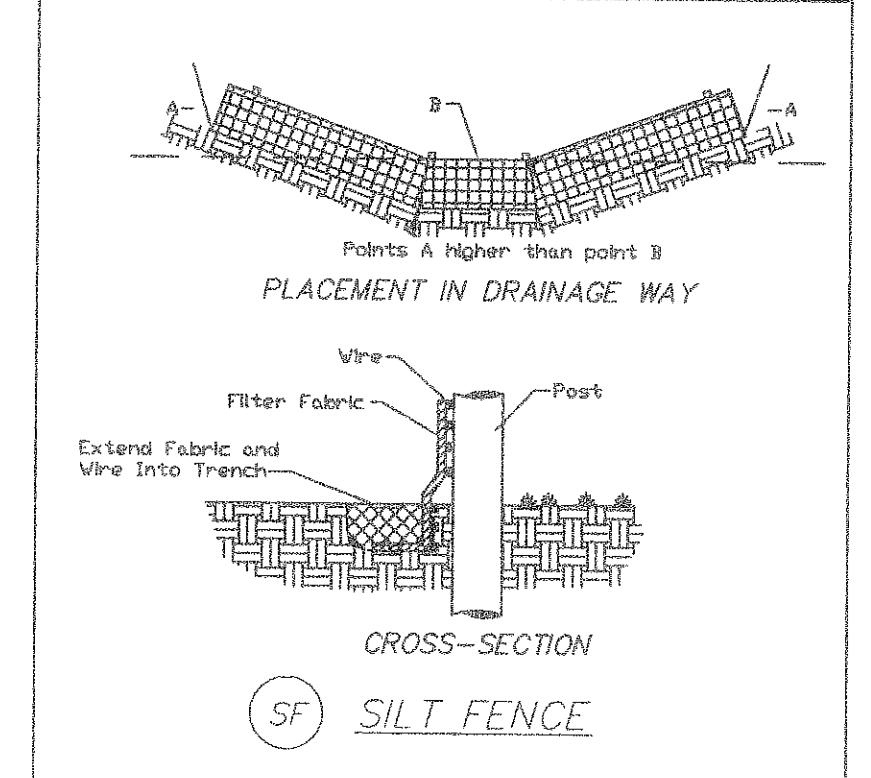


(CIP) CULVERT INLET PROTECTION



CONSTRUCTION ENTRANCE MAY BE REQUIRED BY OWNER

(CE) TEMPORARY GRAVEL CONSTRUCTION ENTRANCE



CROSS-SECTION

(SF) SILT FENCE

RESPONSIBLE LAND DISTURBER CERTIFICATION

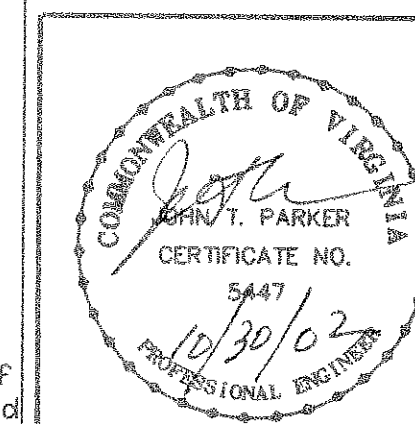
THIS PROJECT IS CURRENTLY OUT TO BID. THE SUCCESSFUL BIDDER, IF ANY, SHALL NAME ONE PERSON RESPONSIBLE FOR ALL LAND DISTURBANCE ACTIVITIES AND EROSION CONTROL MEASURES. THE PERSON NAMED SHALL HOLD A "RESPONSIBLE LAND DISTURBER CERTIFICATE" UNDER THE GENERAL ASSEMBLY REVISIONS TO THE VIRGINIA EROSION & SEDIMENT CONTROL LAW AS REVISED JULY 1, 2001. THE PERSON NAMED WILL BE IN CHARGE OF AND RESPONSIBLE FOR CARRYING OUT ALL EROSION CONTROL MEASURES. THE PERSON NAMED SHALL AFFIX SIGNED AND PRINTED NAME TO ONE COPY OF THIS EROSION CONTROL SHEET AND SUBMIT TO THE ROANOKE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT. NO EROSION AND SEDIMENT CONTROL PLANS CAN BE APPROVED AND NO PERMITS CAN BE ISSUED UNTIL THIS NAME HAS BEEN PROVIDED TO THE GOVERNING AGENCY.

PRINTED NAME _____

SIGNATURE _____

RESPONSIBLE LAND DISTURBER CERTIFICATE # _____

COMPANY NAME
CONTACT ADDRESS
PHONE NUMBER



EROSION CONTROL NARRATIVE & DETAILS
FOR
MEADOWBROOK VILLAGE TOWNHOUSES
PHASE V
BARRENS DEVELOPMENT CORPORATION
NORTH BROOK DRIVE & U.S. ROUTE 11,
HOLLINS MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA
REVISED: 18 SEPT 2002 SCALE: 1" = 50'

DESIGNED BY P.J. BROWN
DRAWN BY PJB
CHECKED BY JTP, SR
W.O. # 01-0207
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