

SOIL EROSION CONTROL NARRATIVE

PROJECT DESCRIPTION:

THE PURPOSE OF THIS PROJECT IS TO DEMOLISH EXISTING PAVEMENT AND CURB, PROVIDE GRADING OPERATIONS FOR THE CONSTRUCTION OF A SONIC RESTAURANT AND ASSOCIATED PAVEMENT, RELOCATE LIGHT POLES, AND INSTALL NEW UTILITY SERVICE LATERALS TO THE PROPOSED RESTAURANT. THE AMOUNT OF LAND DISTURBANCE IS ESTIMATED AT 36,000 SQUARE FEET (0.83 ACRES) WHICH EXCEEDS THE LEASE AREA OF 33,000 SF FROM THE OVERALL LOWES HOME IMPROVEMENT SITE (15.12 ACRES). THE DEMOLITION OF IMPERVIOUS AREA EXCEEDS THE PROPOSED IMPROVEMENTS BEING CONSTRUCTED. RUNOFF WILL BE CONTROLLED BY THE INSTALLATION OF CONCRETE CURB. RUNOFF IS DIRECTED TO AN EXISTING DRAINAGE GRATE INLET, LOCATED DOWNSTREAM WITHIN THE PAVED PARKING LOT. PRIVATE SANITARY SEWER AND WATER LATERALS WILL BE INSTALLED ON THIS PROJECT. OTHER UTILITY SERVICES WILL ALSO BE INCLUDED IN THIS PROJECT INCLUDING, GAS, ELECTRIC, TELEPHONE, AND A PRIVATE IRRIGATION SYSTEM. THE EROSION & SEDIMENT CONTROL MEASURES SHOWN HERE ARE DESIGNED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VA ESCH).

EXISTING SITE CONDITIONS:

THE EXISTING SITE CONDITIONS INCLUDE A PAVED PARKING LOT ALONG RUTGERS STREET, N.W. THE DEVELOPMENT ADJOINS THE KROGER GAS STATION AND A SHARED INGRESS AND EGRESS TO RUTGERS STREET, N.W. AN EXISTING GRATE INLET, LOCATED IN THE LOWES PARKING LOT COLLECTS APPROXIMATELY 4 ACRES OF PAVED AREA. THE GRATE INLET IS IN A SUMP CONDITION. THE DRAINAGE TO THIS GRATE INLET CAN BE DIVIDED INTO SUBAREAS. THE PROPOSED DEVELOPMENT AREA IS ONE OF THOSE SUBAREAS, COLLECTING APPROXIMATELY 0.83 ACRES. A MINOR PORTION OF THE DEVELOPMENT AREA (0.05 AC) DRAINS TO A SECOND GRATE INLET ALSO LOCATED WITHIN THE LOWES PARKING LOT. RUNOFF FROM THE DEVELOPMENT AREA DRAINS TO THE SOUTH AND IS COLLECTED BY THE GRATE INLETS. RUNOFF IS THEN PIPED TO THE EAST AND CONNECTS TO AN EXISTING DRAINAGE SYSTEM ALONG HERSHBERGER ROAD. RUNOFF THEN DRAINS SOUTHEAST TO A NATURAL WATERCOURSE ALONG I-581 AND EVENTUALLY REACHES THE ROANOKE RIVER. THE LANDSCAPE AREA BETWEEN THE SITE AND RUTGERS STREET, N.W. IS THE DRAINAGE DIVIDE. A PORTION OF THE LANDSCAPE AREA DRAINS TO LOWES. THE REMAINDER OF THE LANDSCAPE AREA DRAINS TO PUBLIC STORM SEWER SYSTEM ALONG RUTGERS STREET.

SOILS:

AS IDENTIFIED BY THE U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, GENERAL SOIL MAP, THE BASIC SOIL MATERIAL IS **FREDERICK-URBAN LAND-CHILHOWIE**.

CRITICAL AREAS:

THE CONTRACTOR SHALL IMMEDIATELY INSTALL STRAW BALE INLET PROTECTION ON THE EXISTING GRATE INLET AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROVIDE A NEAT VERTICAL SAW CUT ALONG THE SOUTHERN AND EASTERN LIMITS OF PAVEMENT REMOVAL, REMOVE MINIMAL PAVEMENT AND INSTALL SILT FENCE AS SHOWN ON THE PLANS TO CAPTURE SEDIMENT LADEN RUNOFF AND FILTER RUNOFF PRIOR TO ENTERING DOWNSTREAM AREAS. ALL SILT FENCE SHALL BE INSTALLED AND CHECKED REGULARLY. AS CONTINUED PAVEMENT REMOVAL OCCURS, THE CONTRACTOR SHALL INSTALL A CONSTRUCTION ENTRANCE OFF THE EXISTING INGRESS/EGRESS AREA BETWEEN THE SITE AND THE KROGER GAS STATION AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION ENTRANCE TO THE MINIMUM REQUIRED STANDARDS. THE CONTRACTOR SHALL INSTALL TREE PROTECTION ON 4 MAPLE TREES, LOCATED IN THE LANDSCAPE AREA BETWEEN THE SITE AND RUTGERS STREET, N.W. THE CONTRACTOR SHALL PROVIDE PERMANENT SEEDING WITHIN SEVEN (7) DAYS OF OBTAINING FINAL GRADES. THE CONTRACTOR SHALL HAVE EQUIPMENT ON-SITE TO KEEP SEDIMENT OFF OF EXISTING PAVED AREAS. THE CONTRACTOR SHALL PROVIDE DUST CONTROL MEASURES IN ACCORDANCE WITH THE VA ESCH REQUIREMENTS TO KEEP DUST TO A MINIMUM.

ADJACENT PROPERTY: SEE PLAN SHEETS FOR ADJOINING PROPERTY OWNERS. LOWES IS THE IMMEDIATE DOWNSTREAM LAND OWNER. SITE RUNOFF WILL REACH STORM SEWER INFRASTRUCTURE PRIOR TO LEAVING THE LOWES PROPERTY.

EROSION & 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.

1. REGARDLESS OF FUTURE DEVELOPMENT PLANS, THE CONTRACTOR SHALL IMMEDIATELY INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLANS, IN A MANNER THAT PROTECTS DOWNSTREAM AREAS FROM SEDIMENT LADEN RUNOFF. 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.

2. 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 SEEDDED WITHIN SEVEN (7) DAYS AFTER FINAL GRADING, AND SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", THIRD EDITION.

3. IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL. IN PARTICULAR:

- A. MEASURES SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAYS.
B. ALL SILT FENCE BARRIERS AND INLET PROTECTIONS SHALL BE CHECKED REGULARLY FOR UNDERMINING AND SEDIMENT BUILDUP.
C. ALL SEEDDED AREAS WILL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHALL BE FERTILIZED AND RESEEDDED AS NEEDED.

4. 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:

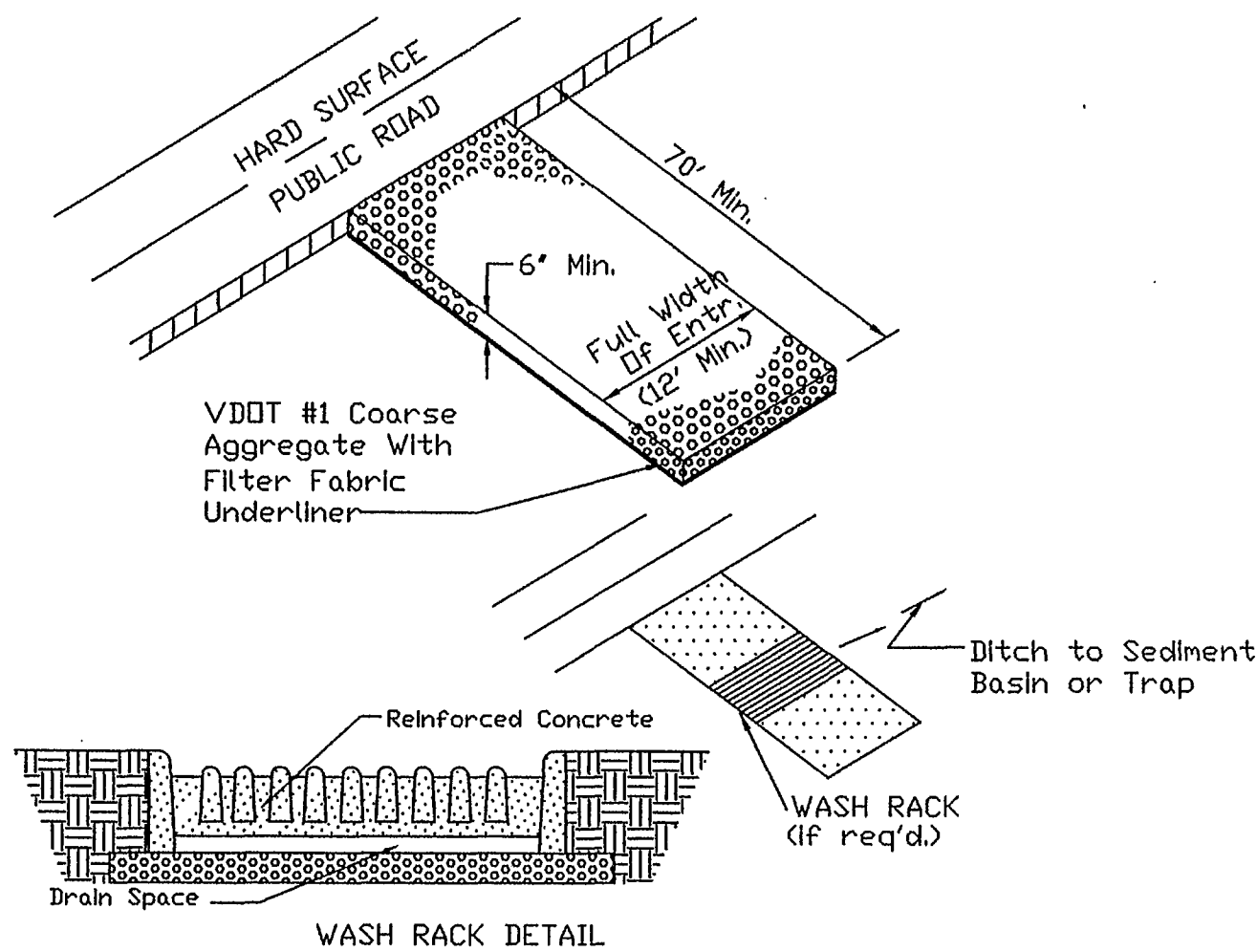
1. THE JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
2. THE APPROVING AUTHORITY RESERVES THE RIGHT TO ADD TO, DELETE, OR OTHERWISE CHANGE EROSION CONTROL DEVICES AS MAY BE DEEMED NECESSARY BY WRITTEN NOTIFICATION TO THE CONTRACTOR.
3. NO WORK SHALL PROCEED ON THE SITE UNTIL THE PROPER AUTHORIZATION OR PERMIT HAS BEEN OBTAINED FROM THE APPROVING AUTHORITY.
4. WHILE THE ENGINEER, PARKER DESIGN GROUP, HAS PREPARED THE PLAN IN ACCORDANCE TO THE VA ESCH, THE ENGINEER ASSUMES NO RESPONSIBILITY FOR QUALITY OR EROSION CONTROL METHODS PERFORMED BY THE CONTRACTOR OR SUBCONTRACTOR.

GENERAL EROSION & SEDIMENT CONTROL NOTES

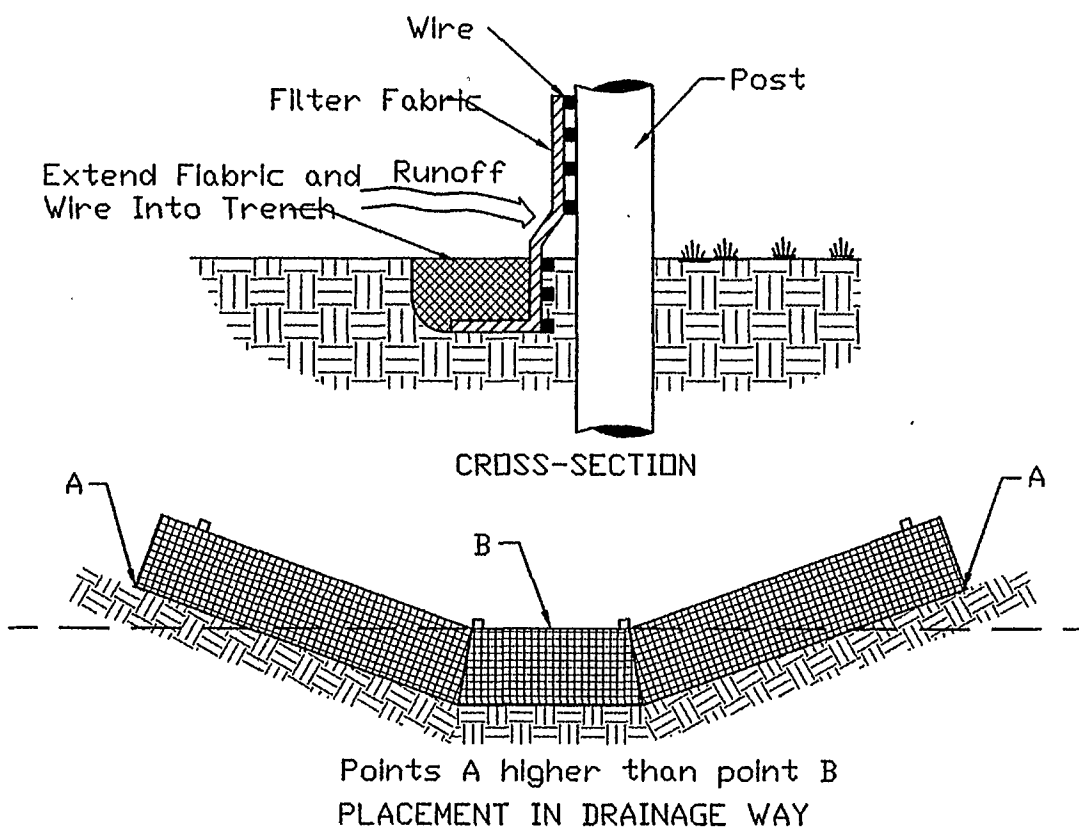
1. ALL SOIL EROSION & SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLAN SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
2. THE APPROVING AUTHORITY MAY ADD TO, DELETE, RELOCATE, CHANGE, OR OTHERWISE MODIFY CERTAIN EROSION AND SEDIMENT CONTROL MEASURES WHERE FIELD CONDITIONS ARE ENCOUNTERED THAT WARRANT SUCH MODIFICATIONS.
3. 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.
4. IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED.
5. 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.
6. 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.
7. REFERENCE IS DIRECTED TO PLAN SHEETS FOR SITE DEPICTING EROSION AND SEDIMENT CONTROL MEASURES.

OFFSITE WASTE AND BORROW NOTE:

THE PROPOSED DEVELOPMENT DOES NOT ANTICIPATE OFF-SITE WASTE AREAS; HOWEVER, SHOULD THE PROJECT REQUIRE OFF-SITE WASTE AREAS OR BORROW AREAS, THE LOCATION OF THESE AREAS NEED TO BE SUBMITTED TO THE LOCAL GOVERNING AUTHORITY AND OTHER LOCAL GOVERNING AUTHORITIES WHERE WASTE/BORROW OCCURS. EROSION CONTROL PLANS OR MEASURES MAY BE REQUIRED FOR THESE OFF-SITE LOCATIONS.

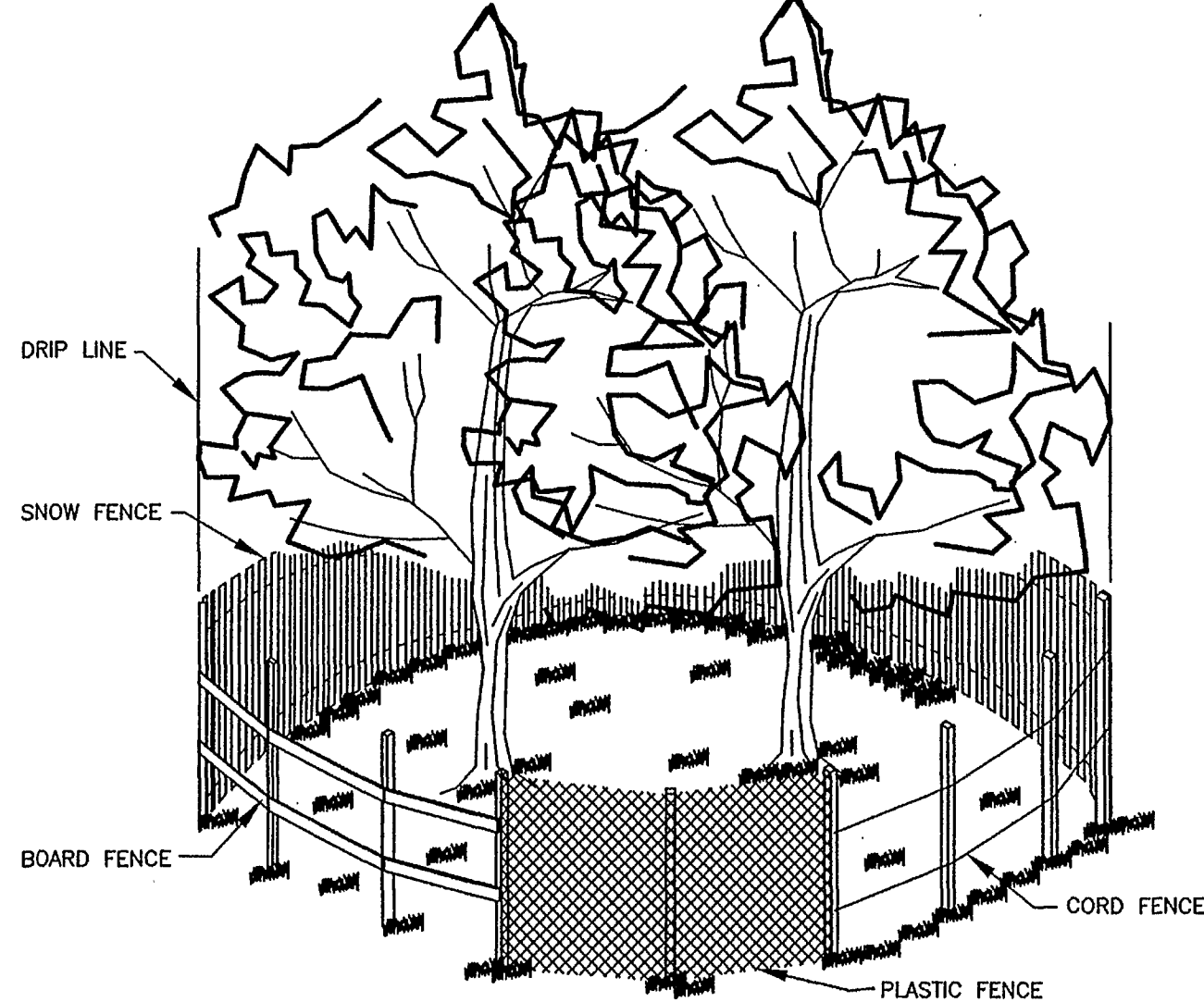


TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
VA ESCH STD. & SPEC. 3.02



SILT FENCE
VA ESCH STD. & SPEC. 3.05

FENCING AND ARMORING



TREE PROTECTION PROTECTION
VA ESCH STD. & SPEC. 3.38

01 MARCH TO 30 APRIL
WINTER RYE (SECALE CERALE) @ 2 1/2 LB / 1000 SF
OR ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM) @ 1 1/2 LF / 1000 SF
OR KOREAN LESPEDEZA (LESPEDEZA STIPULACEA) @ 1 1/2 LF / 1000 SF

01 MAY TO 15 AUGUST
GERMAN MILLET (SETARIA ITALICA) @ 1 LB / 1000 SF
OR WEEDING LOVEGRASS (ERAGROSTIS CLAVULA) @ 5 1/2 OZ / 1000 SF
OR KOREAN LESPEDEZA (LESPEDEZA STIPULACEA) @ 1 1/2 LF / 1000 SF

15 AUGUST TO 01 NOVEMBER
WINTER RYE (SECALE CERALE) @ 1 LB / 1000 SF
AND ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM) @ 1 LF / 1000 SF

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

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

TEMPORARY SEEDING MIXTURE
VA ESCH STD & SPEC 3.31

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

TYPE B (SLOPES 3:1 OR STEEPER)

15 MARCH TO 1 MAY
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

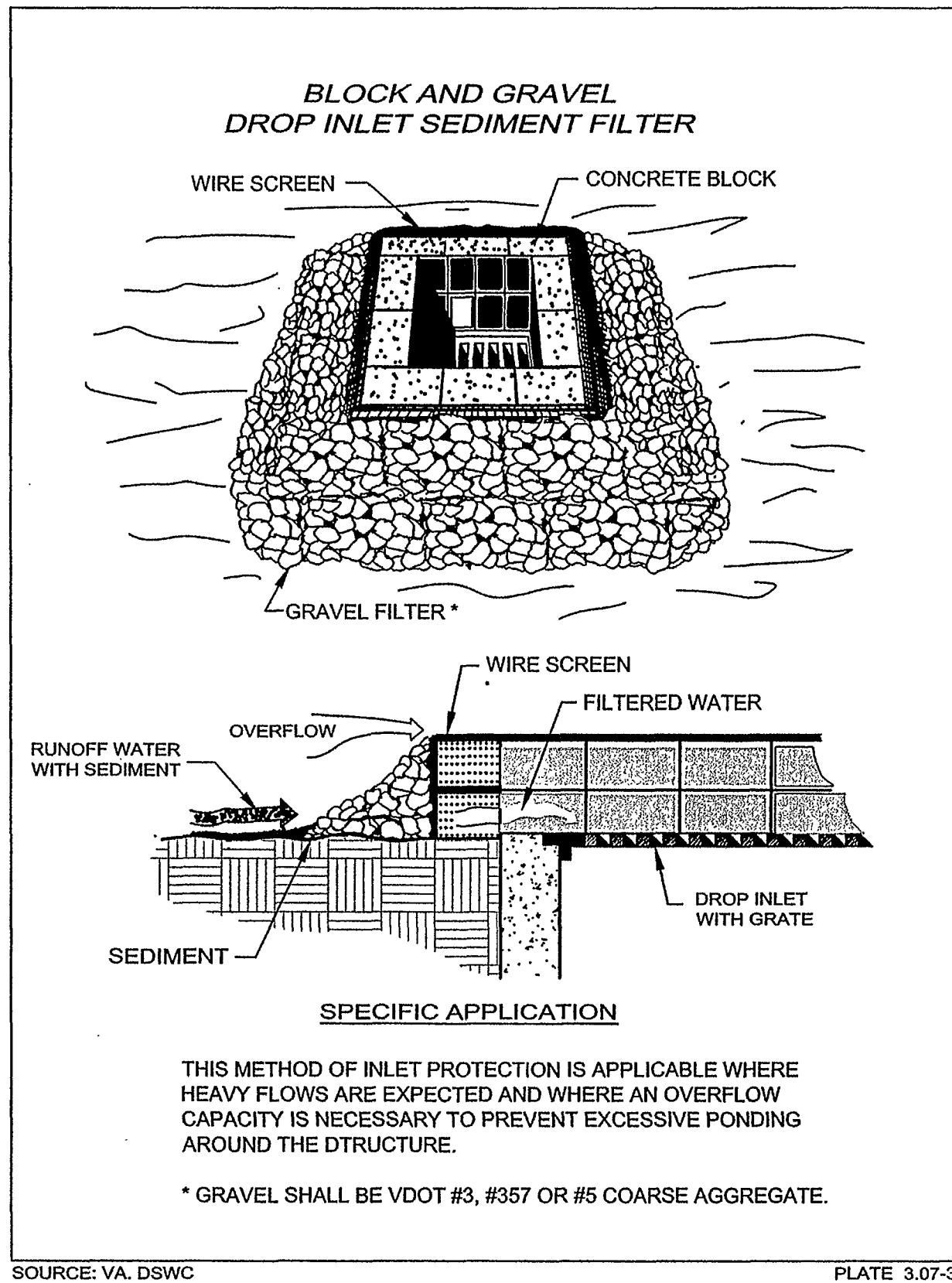
FERTILIZER: 5-20-10 @ 25 LB / 1000 SF

MULCH SHALL BE USED OVER ALL SEEDDED AREAS AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 3.35 OF THE VA ESCH.

SOIL CONDITIONING INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED WITHIN THE VA ESCH. ADDITIONAL SEEDING TO BE PERFORMED AS REQUIRED BY THE INSPECTOR.

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

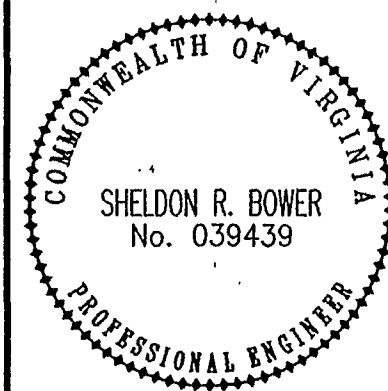
PERMANENT SEEDING MIXTURE
VA ESCH STD & SPEC 3.32



SOURCE: VA. DSWC

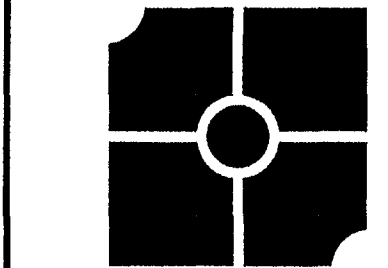
PLATE 3.07-3

STORM DRAIN INLET PROTECTION
VA ESCH STD. & SPEC. 3.07



REVISIONS	DATE	NO.
10/20/06 PER CITY OF ROANOKE COMMENTS		
11/10/06 PER CITY OF ROANOKE COMMENTS		
11/15/06 PER CITY OF ROANOKE COMMENTS		
12/14/06 PER WESTERN VIRGINIA WATER AUTHORITY		

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SONIC DRIVE-IN
BUILDING TYPE: 09
RUTGERS STREET, N.W.
ROANOKE, VIRGINIA
EROSION & SEDIMENT CONTROL
NOTES AND DETAILS

SHEET

C-7

DWG: 06-0064-03
DATE: SEPTEMBER 5, 2006