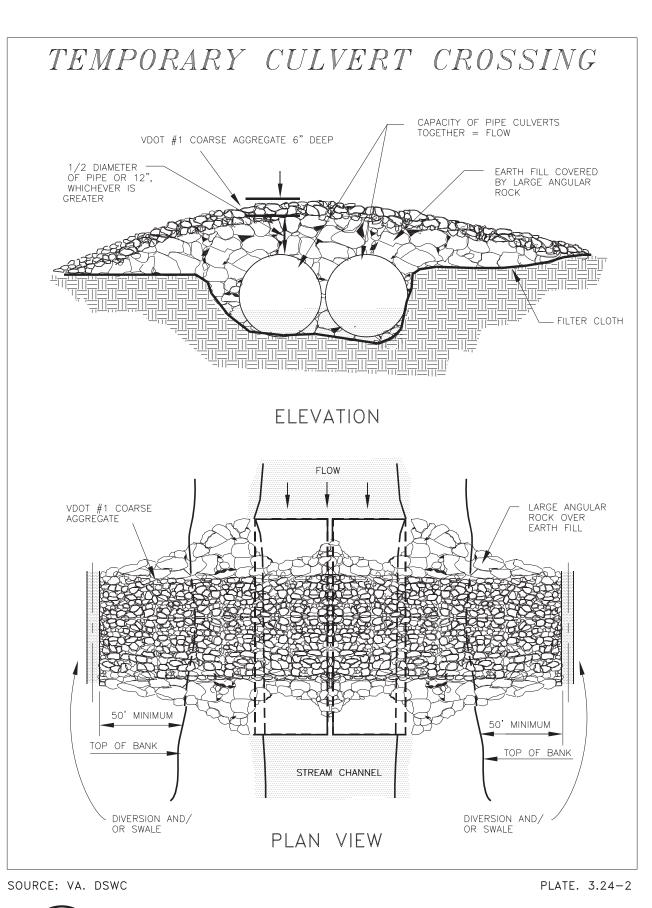


DITCH DESIGN SUMMARY TABLE														
DITCH ID	LOCATION	DESIGN FLOW Q2 (CFS)	DESIGN FLOW Q10 (CFS)	BOTTOM WIDTH (FT)	CHANNEL DEPTH (FT)	SIDE SLOPE L/R (H:1)	CHANNEL SLOPE (MIN) (%)	CHANNEL SLOPE (MAX) (%)	DESIGN FLOW VELOCITY Q2 (FPS)	DESIGN FLOW DEPTH Q10 (FT)	TEMPORARY LINING MATERIAL	PERMANENT LINING MATERIAL	MANNINGS "N" PERMANENT LINING	NOTES:
А	OUTFALL - SD 3-2 TO GLADE CREEK TRIB.	8.00	10.52	4.0	2.00	2/2	2.00	2.00	2.03	0.84	CLASS A1 RIP-RAP (T = 20")	CLASS A1 RIP-RAP (T = 20")	0.069	3.
В	STA. 13+00 - 14+50. RT	0.36	0.50	0.0	1.00	3/3	2.00	2.00	1.66	0.30	EC-2	GRASS	0.032	1.
С	STA. 12+50 - 14+50. LT	0.54	0.74	0.0	1.00	3/3	2.00	2.00	1.84	0.35	EC-2	GRASS	0.032	1.
D	OUTFALL - SD 3-7 TO GLADE CREEK TRIB.	0.69	0.95	2.0	1.00	2/2	2.00	2.00	1.78	0.20	EC-2	GRASS	0.032	1.
NOTES:									1		l	I		

1. CHANNEL SHALL BE LINED WITH SOIL STABILIZATION BLANKETS AND MATTING IN ACCORDANCE WITH STD. AND SPEC. 3.36, TREATMENT - 1, VDOT EC-2

2. CHANNEL SHALL BE LINED WITH SOIL STABILIZATION BLANKETS AND MATTING IN ACCORDANCE WITH STD. AND SPEC. 3.36, TREATMENT - 1, VDOT EC-3, TYPE B. 3. CHANNEL SHALL BE LINED WITH RIP-RAP TO THE CROSS-SECTION AND DEPTH AS INDICATED IMMEDIATELY UPON EXCAVATION OF CHANNEL.





TEMPORARY SEEDING MIXTURE (CITY OF ROANOKE):

THE SEEDING INFORMATION PROVIDED BELOW IS FOR GENERAL COMPLIANCE WITH EROSION & SEDIMENT CONTROL REQUIREMENTS. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL TECHNICAL REQUIREMENTS.

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(STD. & SPEC. 3.24)

FERTILIZER: SHALL MEET REQUIREMENTS OF FEDERAL SPECIFICATION 0 F 241. PROVIDE FERTILIZER THAT IS COMPLETE, INORGANIC, UNIFORM IN COMPOSITION, AND SUITABLE FOR APPLICATION WITH APPROVED EQUIPMENT. PROPORTIONS OF FERTILIZER NUTRIENTS SHALL BE THE FOLLOWING:

10 LBS. OF ACTUAL NITROGEN 10 LBS. OF ACTUAL PHOSPHATE 10 LBS. OF ACTUAL POTASH

TEMPORARY SEED MIXTURE: SHALL HAVE THE FOLLOWING CHARACTERISTICS:

BETWEEN MAY 2 ND AND AUGUST 31 ST TEMPORARY SEEDING SHALL BE GERMAN FOXTAIL MILLET, APPLIED AT A RATE OF 30 LBS./ACRE.

BETWEEN NOVEMBER 1 ST AND FEBRUARY 28 TH TEMPORARY SEEDING SHALL CONSIST OF ANNUAL RYE APPLIED AT A RATE OF 120 LBS./ACRE.

UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR USE CEREAL RYE.

LIME: SHALL BE GROUND AGRICULTURAL GRADE LIMESTONE CONTAINING NOT LESS THAN 85 PERCENT CALCIUM AND MAGNESIUM CARBONATES. FINENESS SHALL BE SUCH THAT 100 PERCENT WILL PASS A NO. 20 SIEVE, AND NOT LESS THAN 50 PERCENT WILL PASS A NO. 100 SIEVE. BURNT LIME OR HYDRATED LIME MAY BE SUBSTITUTED IN EQUIVALENT CARBONATES, IF REQUESTED.

MULCH: TYPE I MULCH SHALL BE CURLEX BLANKET EROSION CONTROL FABRIC BLANKET. THE FABRIC SHALL BE MANUFACTURED OF MATERIALS WHICH DEGRADE IN 6 TO 8 MONTHS UNDER OUTDOOR EXPOSURE. TYPE II MULCH COMPOSED OF THRESHED STRAW OF CEREAL GRAIN, PINE NEEDLES, OR WOOD FIBER SHALL BE FREE OF OBJECTIONABLE WEED SEEDS OR OTHER HARMFUL MATERIAL.

BINDER: SYNTHETIC MULCH BINDER FOR USE WITH TYPE II MULCH: CURASOL, DCA 70, PETROSET, OR TERRA TACK.

THE SEEDING INFORMATION PROVIDED BELOW IS FOR GENERAL COMPLIANCE WITH EROSION & SEDIMENT CONTROL REQUIREMENTS. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL TECHNICAL REQUIREMENTS.

LIME: AS REQUIRED BY SOIL TEST. AGRICULTURAL LIMESTONE CONTAINING MINIMUM OF 85 PERCENT CARBONATES. MINIMUM GRADATION: 100 PERCENT PASSING A 10 MESH SIEVE; 98 PERCENT A 20 MESH SIEVE; 55 PERCENT A 60 MESH SIEVE; AND 40 PERCENT A 10 MESH SIEVE.

FERTILIZER: SHALL BE GRANULAR, OR PELLETED; COMPLETE COMMERCIAL TYPE WITH 50 PERCENT OF THE NITROGEN IN SLOWLY AVAILABLE FORM. ALL FERTILIZER SHALL BE A COMMERCIAL BALANCED FORMULA WITH AT BEST 25 PERCENT ORGANIC MATERIAL, AND SHALL CONFORM TO APPLICABLE STATE FERTILIZER LAWS. IT SHALL BE UNIFORM IN COMPOSITION, IN GRANULAR FORM DRY AND FREE-FLOWING. FOR ALL GRASS AND LAWN AREAS IT SHALL HAVE A MINIMUM GUARANTEED ANALYSIS OF 15 PERCENT NITROGEN, 30 PERCENT PHOSPHORUS, AND 15 PERCENT POTASH.

SEED: ALL PERMANENT GRASS SEED SHALL BE MANUFACTURED BY A SEED COMPANY THAT CAN GUARANTEE ALL SEED SHALL BE FREE OF NOXIOUS WEED SEEDS, CLEANED GRADE A RECENT CROP SEED. SEED COMPANY SHALL PROVIDE GUARANTEED GERMINATION OF 80 PERCENT.

UNLESS NOTED OTHERWISE, ALL SHOULDER RESTORATION AND UTILITY TRENCH AREAS SHALL BE SEEDED WITH TALL TURF FESCUE MIX (I.E. SOUTHERN LAWN).

TALL TURF FESCUE MIX (I.E. SOUTHERN LAWN): SHALL CONSIST OF A 50/50 BLEND OF WYATT AND DYNASTY TALL FESCUES. USE BLUE-TAG CERTIFIED SEED WITH A DELIVERY DATE NOT GREATER THAN 30-DAYS OLD FROM SITE OF ORIGIN. APPLICATION: SEEDING SHALL BE APPLIED BETWEEN MARCH 1 AND MAY 15, OR AUGUST 16 AND

MULCH: SHALL BE CLEAN WHEAT OR BARLEY STRAW, FREE FROM NOXIOUS WEED SEED AND OTHER HARMFUL MATERIAL. COMMERCIAL PRODUCTS MAY BE USED WITH APPROVAL.

BINDER: SHALL BE FIBER MULCH BASED TACK BINDER SUCH AS "ENVIRO-BLEND" BY CONWED OR EQUAL. APPLY AT 25 LBS. PER THOUSAND SQUARE FEET ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

TEMPORARY VEHICULAR STREAM CROSSING - CULVERT

PERMANENT SEEDING

PERMANENT SEEDING MIXTURE (CITY OF ROANOKE SPECIFICATION):

SEED MIXTURE SHALL CONSIST OF:

OCTOBER 31. CAST SEEDS AT 20 POUNDS PER THOUSAND SQUARE FEET.

