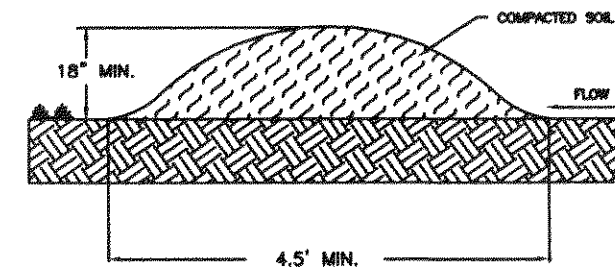


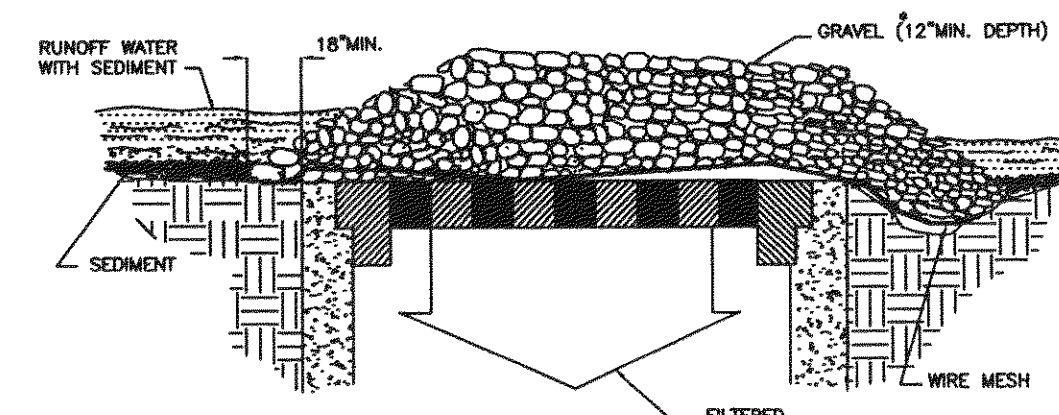
GENERAL NOTES

- ES-1 UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2 THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRECONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3 ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4 A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5 PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- ES-6 THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ES-7 ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8 DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9 THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.



- DD TEMPORARY DIVERSION DIKE
- FD TEMPORARY FILL DIVERSION
- RWD TEMPORARY RIGHT-OF-WAY DIVERSION
- DV DIVERSION

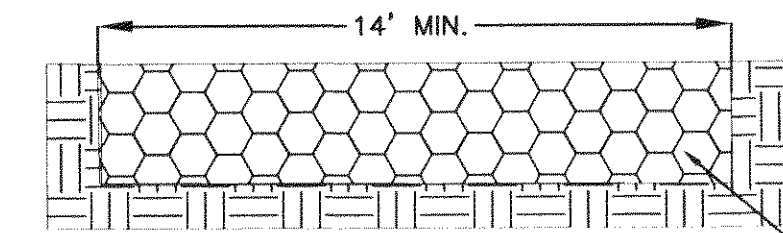
NOTE:
TEMPORARY OR PERMANENT SEEDING AND MULCH SHALL BE APPLIED TO DISTURBED AREAS IMMEDIATELY FOLLOWING CONSTRUCTION OF DIVERSIONS.



SPECIFIC APPLICATION
This method of inlet protection is applicable where heavy concentrated flows are expected, but not where ponding around the structure might cause excessive inconvenience or damage to adjacent structures and unprotected areas.

* Gravel shall be VDOT #3, #357 or #5 coarse aggregate.

IP GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER



- TEMPORARY ROADS SHALL FOLLOW THE CONTOUR OF THE NATURAL TERRAIN TO THE EXTENT POSSIBLE. SLOPES SHOULD NOT EXCEED 10 PERCENT.
- ROADBEDS SHALL BE AT LEAST 14 FEET WIDE FOR ONE-WAY TRAFFIC AND 20 FEET WIDE FOR TWO-WAY TRAFFIC.
- ALL CUTS AND FILLS SHALL BE 2:1 OR FLATTER TO THE EXTENT POSSIBLE.
- DRAINAGE DITCHES SHALL BE PROVIDED AS NEEDED AND SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH STORMWATER CONVEYANCE CHANNEL, STD. & SPEC. 3.17.
- THE ROADBED OR PARKING SURFACE SHALL BE CLEARED OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- AGGREGATE SHALL BE APPLIED IMMEDIATELY AFTER GRADING OR THE COMPLETION OF UTILITY INSTALLATION WITH THE TRAVEL WAY.

CRS CONSTRUCTION ROAD STABILIZATION

BM BLANKET MATTING SHALL BE VDOT EC-2 OR APPROVED EQUAL.

TYPE A	TYPE B (SLOPES 3:1 OR STEEPER)
15. OCTOBER TO 1 FEBRUARY K-31 FESCUE • 5 LB / 1000 SF BORZY WINTER RYE • 1/2 LB / 1000 SF	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
FEBRUARY TO 1 JUNE K-31 FESCUE • 5 LB / 1000 SF ANNUAL RYE • 1/2 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
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	

LIME: 140 LB / 1000 SF PULVERIZED AGRICULTURAL LIMESTONE

FERTILIZER: 5-20-10 • 25 LB / 1000 SF
38-0-0 • 7 LB / 1000 SF

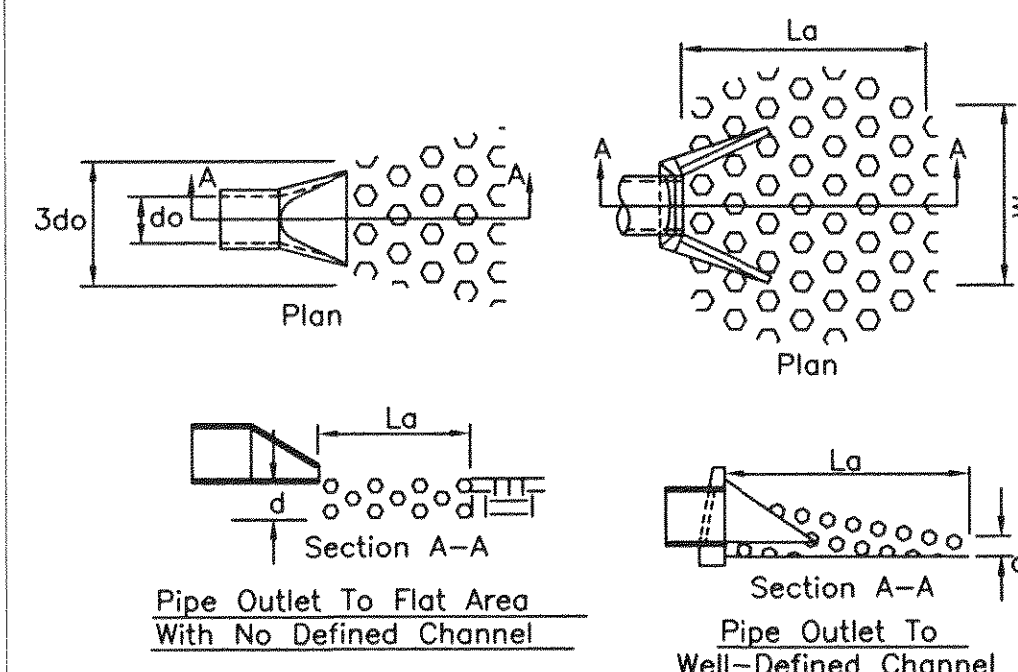
MULCH: IF REQUIRED, SHALL BE USED OVER ALL SEEDED AREAS AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 1.75 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

SOIL CONDITIONING:
INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. 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 FIRM, FRABLE, SEEDBED. MAXIMUM SEEDING DEPTH SHALL BE 1/4 INCH.

TOTAL DISTURBED AREA = APPROXIMATELY 6 AC.

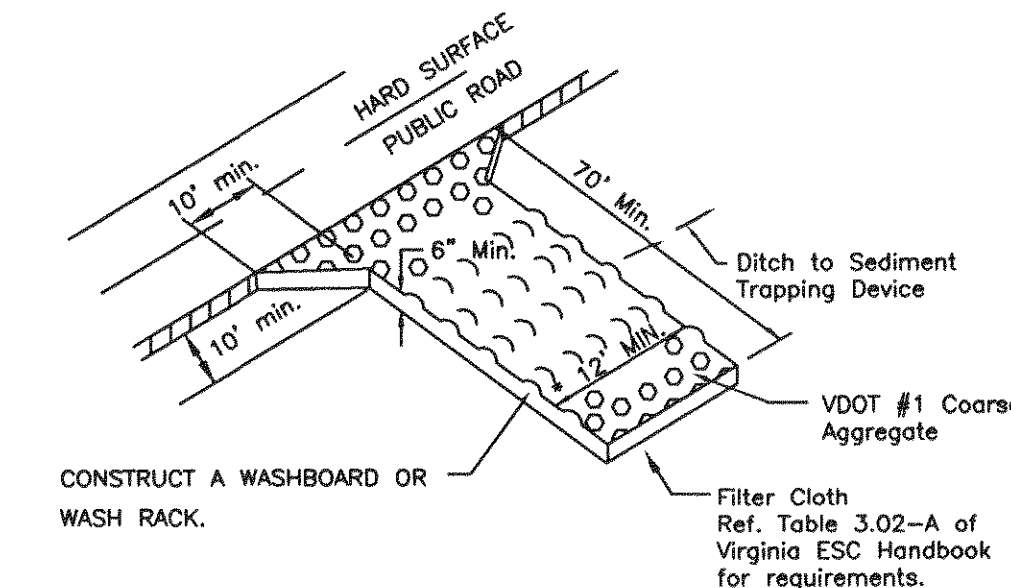
PS PERMANENT SEEDING MIXTURE



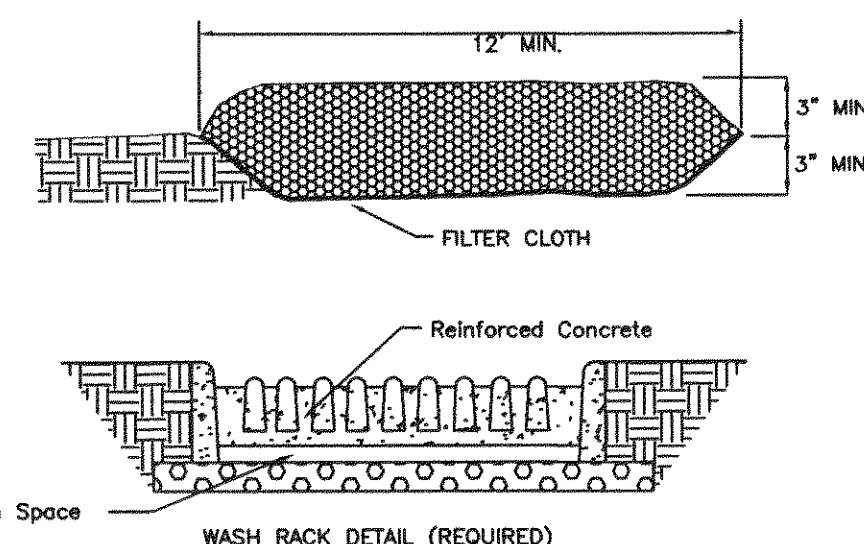
- NOTES
- Apron lining may be rip-rap, grouted rip-rap, or concrete.
 - La is the length of the rip-rap apron as calculated using plates 1.36d and 1.36e.
 - d = 1.5 times the maximum stone diameter, but not less than 6".

OP OUTLET PROTECTION

NOTE:
SEE EROSION AND SEDIMENT CONTROL PLAN FOR SPECIFIC DIMENSIONS AND STONE SIZE OF OUTLET PROTECTIONS.

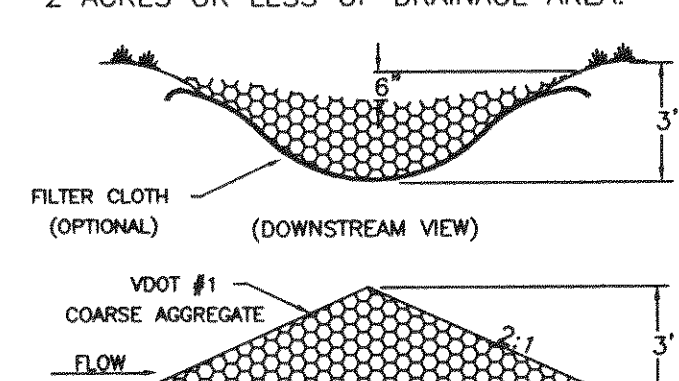


* MUST EXTEND FULL WIDTH OF INGRESS & EGRESS OPERATION.



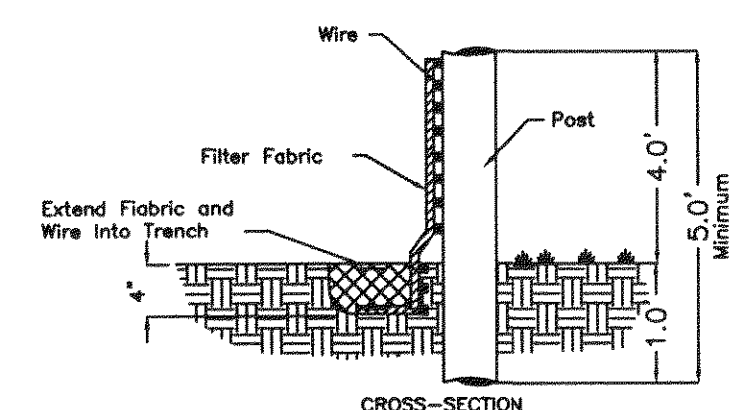
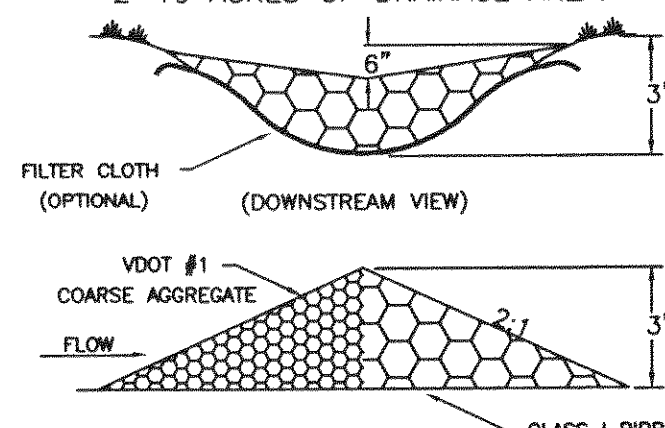
CE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

2 ACRES OR LESS OF DRAINAGE AREA:

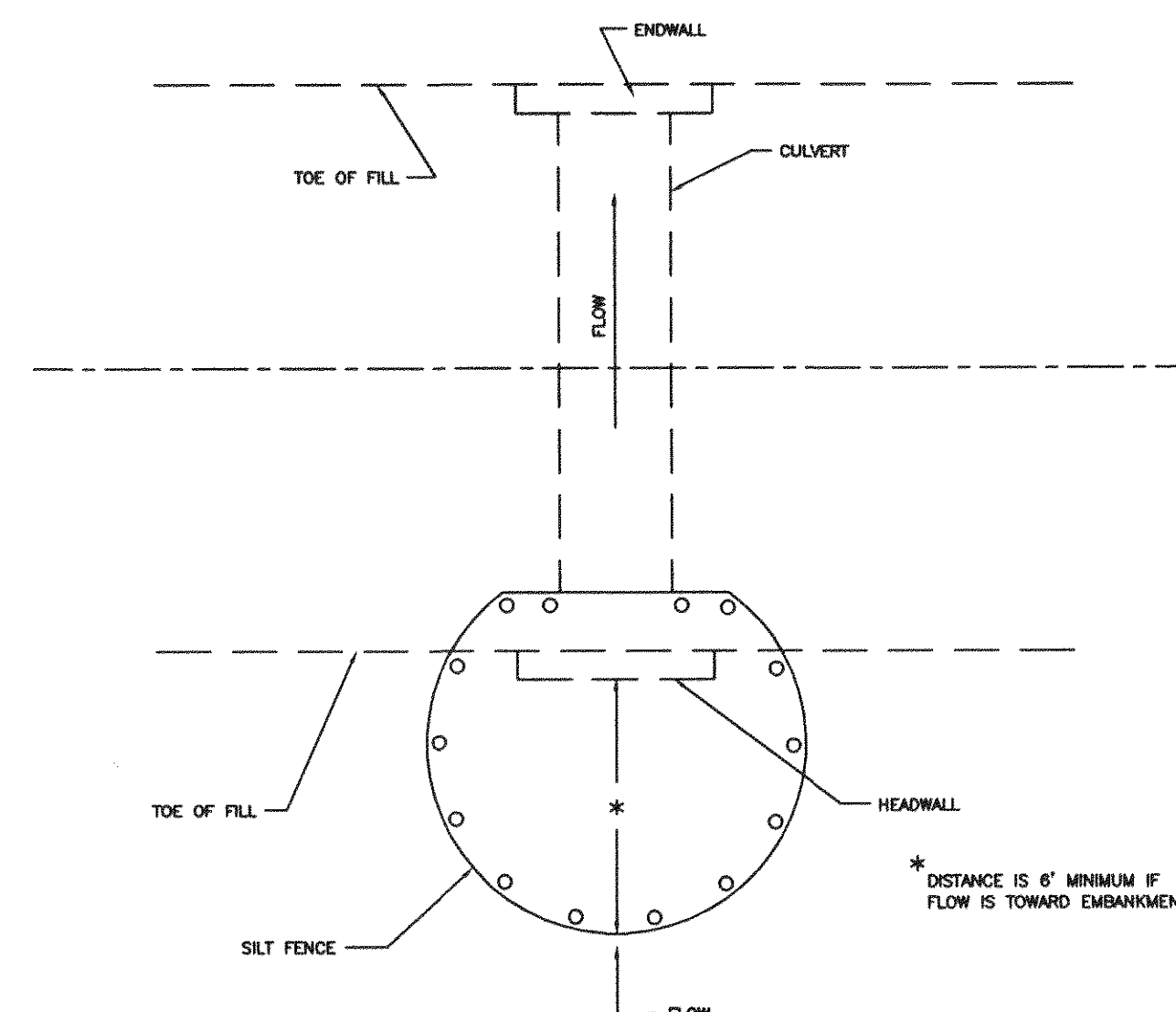


CD ROCK CHECK DAM

2-10 ACRES OF DRAINAGE AREA:



SF CONSTRUCTION OF A SILT FENCE



NOTES:
If silt fence culvert inlet protection is not sufficient due to expected high velocity of flow, contractor shall install optional stone and inlet sediment trap protection per STD. & SPEC. 3.08.

CIP SILT FENCE CULVERT INLET PROTECTION

SOURCE: 1992 VA. EROSION AND SEDIMENT CONTROL HANDBOOK, STD. & SPEC. 3.08

EROSION-SEDIMENTATION CONTROL COST ESTIMATE

ALL COSTS GIVEN ARE COMPLETE IN PLACE

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
CONSTRUCTION ENTRANCE	EA	1	\$ 1,000	\$ 1,000
SILT FENCE	LF	1,200	3	3,600
INLET PROTECTION	EA	2	100	200
STORMWATER CONVEYANCE CHANNEL	LF	2,750	2	5,500
CHECK DAM	EA	29	100	2,900
PERMANENT SEEDING	1000 SF	253	35	8,855
OUTLET PROTECTION	EA	4	250	1,000
LINING UNDER RR	S.Y.	160	0.75	120
RIP RAP	TON	200	45	9,000
SUB-TOTAL				\$ 32,175
20% CONTINGENCY				\$ 6,435
TOTAL PROJECT COST				\$ 38,610

NO.	TITLE	KEY	SYMBOL	NO.	TITLE	KEY	SYMBOL
3.01	SAFETY FENCE	SAF		3.20	ROCK CHECK DAMS	CD	
3.02	TEMPORARY GRAVEL CONSTRUCTION ENTRANCE	CE		3.21	LEVEL SPREADER	LS	
3.03	CONSTRUCTION ROAD STABILIZATION	CRS		3.22	VEGETATIVE STREAMBANK STABILIZATION	VSS	
3.04	STRAW BALE BARRIER	STB		3.23	STRUCTURAL STREAMBANK STABILIZATION	SSS	
3.05	SILT FENCE	SF		3.24	TEMPORARY VEHICULAR STREAM CROSSING	VSC	
3.06	BRUSH BARRIER	BB		3.25	UTILITY STREAM CROSSING	USC	
3.07	STORM DRAIN INLET PROTECTION	IP		3.26	DEWATERING STRUCTURE	DS	
3.08	CULVERT INLET PROTECTION	CIP		3.27	TURBIDITY CURTAIN	TC	
3.09	TEMPORARY DIVERSION DIKE	DD		3.28	SUBSURFACE DRAIN	SD	
3.10	TEMPORARY FILL DIVERSION	FD		3.29	SURFACE ROUGHENING	SR	
3.11	TEMPORARY RIGHT-OF-WAY DIVERSION	RWD		3.30	TOPSOILING	TO	
3.12	DIVERSION	DV		3.31	TEMPORARY SEEDING	TS	
3.13	TEMPORARY SEDIMENT TRAP	ST		3.32	PERMANENT SEEDING	PS	
3.14	TEMPORARY SEDIMENT BASIN	SB		3.33	SODDING	SO	
3.15	TEMPORARY SLOPE DRAIN	TSD		3.34	BERMUDA GRASS AND ZOYSIA GRASS ESTABLISHMENT	BSZ	
3.16	PAVED FLUME	PF		3.35	MULCHING	MU	
3.17	STORMWATER CONVEYANCE CHANNEL	SCC		3.36	SOIL STABILIZATION BLANKETS AND MATTING	BSM	
3.18	OUTLET PROTECTION	OP		3.37	TREES, SHRUBS, VINES AND GROUND COVERS	VEG	
3.19	RIPRAP	RR		3.38	TREE PRESERVATION AND PROTECTION	TP	
				3.39	DUST CONTROL	DC	

CRITICAL EROSION AREAS

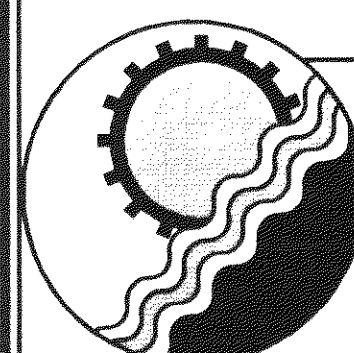
SOUTH CENTER DRIVE
AND SANITARY SEWER EXTENSION
EROSION & SEDIMENT
CONTROL DETAILS

SCALE : NONE

FEBRUARY 2001

PROJECT: 00144

C4 of C10



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