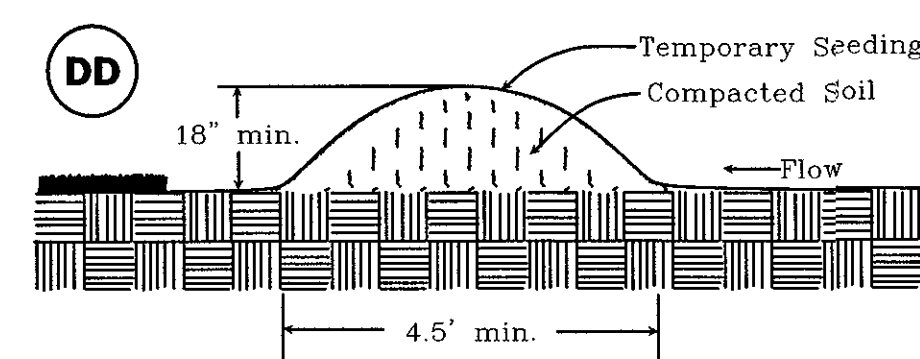


## TEMPORARY DIVERSION DIKE



Erosion & Sediment Control Technical Bulletin No. 4  
Nutrient Management for Development Sites

C. When applying maintenance fertilizer on established sod,

Pounds of nitrogen per 1,000 sq. ft. if the fertilizer is less than 50 percent WIN				
Month	Tall Fescue Perennial Rye	Kentucky Bluegrass	Bermudagrass	Zoysiagrass
September	1	1	0	0
October	1	1	0	0
Early November	0	0	0	0
April	0	0	0	0
May	0-0.5	0-0.05	1	1
June	0	0	1	0
July/August	0	0	0	1
Yearly Lbs. N/1000 sf	2.5	2.5	2	2

Pounds of nitrogen per 1,000 sq. ft. if the fertilizer is more than 50 percent WIN				
Month	Tall Fescue Perennial Rye	Kentucky Bluegrass	Bermudagrass	Zoysiagrass
August 15	1.5	1.5	0	0
October 1	1.5	1.5	0	0
April	0	0	1.5	1.5
May 15	0	0	0	0
June	0	0	1.5	1.5
Yearly Lbs. N/1000 sf	3	3	3	3

FERTILIZER SPECIFICATIONS AND  
RATES FOR MANAGEMENT

TABLE 3.32-C  
(Revised June 2003)  
PERMANENT SEEDING SPECIFICATIONS FOR APPALACHIAN/MOUNTAIN AREA

LAND USE	SPECIES	APPLICATION RATES
Minimum Care Lawn (Commercial or Residential)	Tall Fescue <sup>1</sup>	90-100%
	Perennial Ryegrass <sup>2</sup>	0-10%
	Kentucky Bluegrass <sup>3</sup>	0-10%
TOTAL: 200-250 lbs		
High-Maintenance Lawn	Minimum of three (3) up to five (5) varieties of Kentucky Bluegrass from approved list for use in Virginia <sup>4</sup>	TOTAL: 125 lbs
	Tall Fescue <sup>1</sup>	125 lbs
General Slope (2:1 or less)	Red Top Grass or Creeping Red Fescue	2 lbs
	Seasonal Nurse Crop <sup>5</sup>	20 lbs
TOTAL: 150 lbs		
Low-Maintenance Slope (Steeper than 3:1)	Tall Fescue <sup>1</sup>	105 lbs
	Red Top Grass or Creeping Red Fescue	2 lbs
Seasonal Nurse Crop <sup>5</sup>	Crownvetch <sup>6</sup>	20 lbs
		20 lbs
TOTAL: 150 lbs		

1 - When selecting varieties of turfgrass, use the Virginia Crop Improvement Association (Vicia) recommended turfgrass variety list. Quality seed will bear a label indicating that they are approved by Vicia. A current turfgrass variety list is available at the local County Extension office or through Vicia at 804-746-4884 or at <http://www.vci.org/seedlist.htm>

2 - Perennial Ryegrass will germinate faster and at lower soil temperatures than Tall Fescues, thereby providing cover and erosion resistance for seedbed.

3 - Use seasonal nurse crop in accordance with seeding dates as stated below:

March, April - May 15<sup>th</sup> ..... Annual Rye  
May 16<sup>th</sup> - August 15<sup>th</sup> ..... Fowlst Mill  
August 16<sup>th</sup> - September, October ..... Annual Rye  
November - February ..... Winter Rye

4 - All legume seed must be properly inoculated. If Flakes is used, increase to 30 lbs/acre. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30-40 lbs/acre.

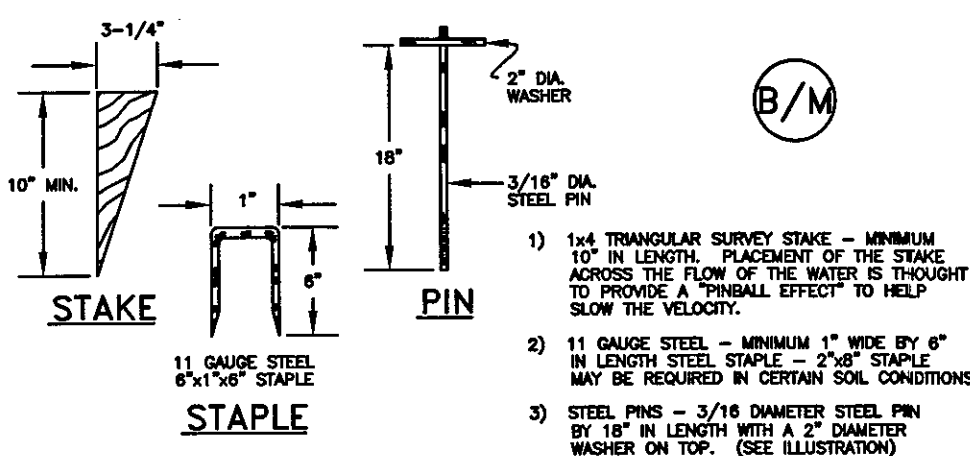
5 - Use seasonal nurse crop in accordance with seeding dates as stated below:

March, April - May 15<sup>th</sup> ..... Annual Rye  
May 16<sup>th</sup> - August 15<sup>th</sup> ..... Fowlst Mill  
August 16<sup>th</sup> - September, October ..... Annual Rye  
November - February ..... Winter Rye

6 - All legume seed must be properly inoculated. If Flakes is used, increase to 30 lbs/acre. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30-40 lbs/acre.

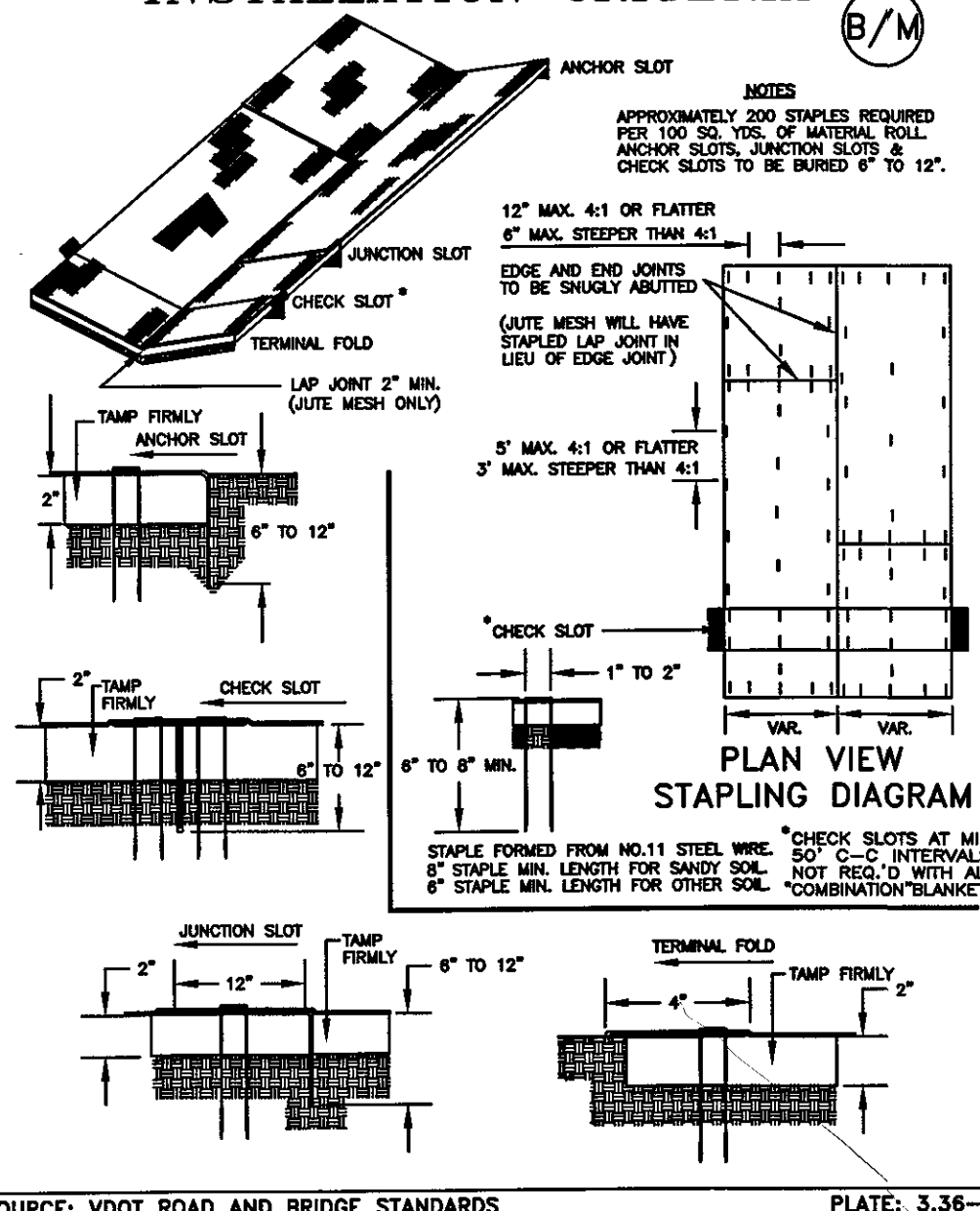
## PERMANENT SEEDING SPECIFICATIONS

## STAKES, STAPLES, & PINS FOR INSTALLATION OF TREATMENT - 2 SOIL STABILIZATION MATTING



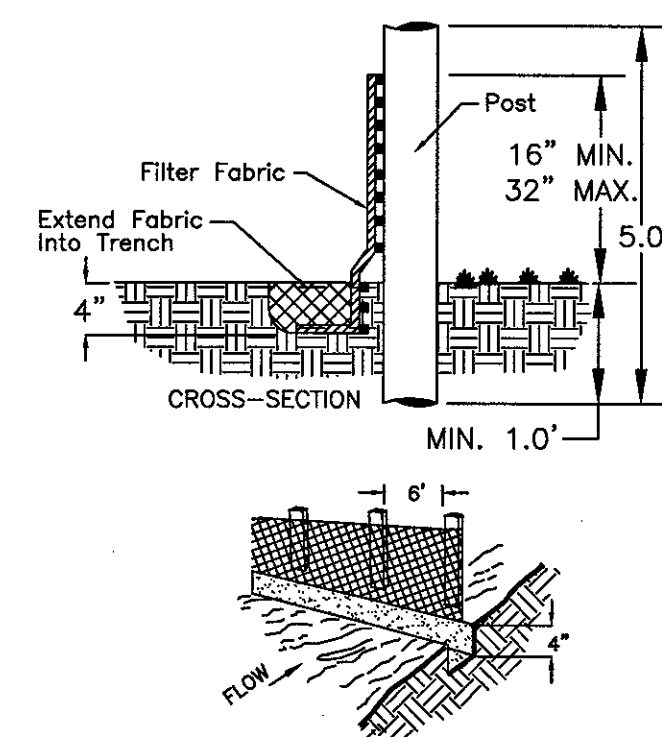
SOURCE: PRODUCT LITERATURE FROM GREENSTREAK, INC. PLATE: 3.36-3

## TYPICAL TREATMENT - 1 (SOIL STABILIZATION BLANKET) INSTALLATION CRITERIA



SOURCE: VDOT ROAD AND BRIDGE STANDARDS PLATE: 3.36-2

## BLANKET MATTING



## CONSTRUCTION OF A SILT FENCE EROSION AND SEDIMENT CONTROL STANDARD - 3.05

TABLE 3.31-B  
(Revised June 2003)  
TEMPORARY SEEDING SPECIFICATIONS  
QUICK REFERENCE FOR ALL REGIONS

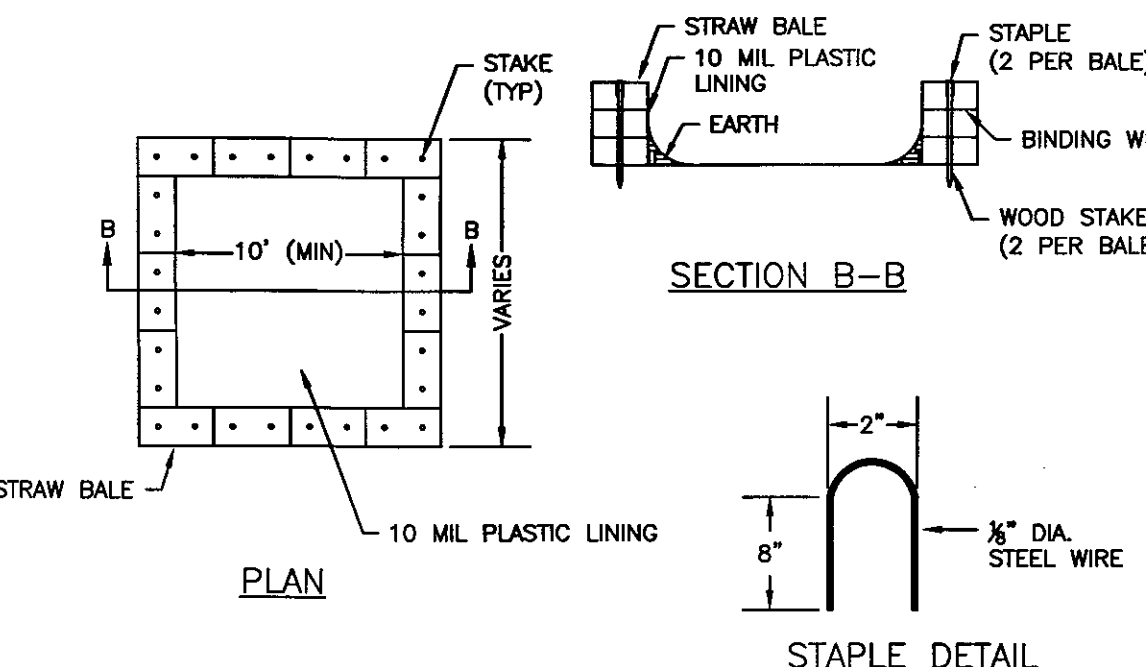
APPLICATION DATES	SPECIES	APPLICATION RATES
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (lolium multi-florum) & Cereal (Winter) Rye (Secale cereale)	50 - 100 (lbs/acre)
Feb. 16 - Apr. 30	Annual Ryegrass (lolium multi-florum)	60 - 100 (lbs/acre)
May 1 - Aug. 31	German Millet	50 (lbs/acre)

## FERTILIZER & LIME

- Apply 10-20-10 fertilizer at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.)
- Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

NOTE:  
1 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.  
2 - Incorporate the lime and fertilizer into the top 4 - 6 inches of the soil by disking or by other means.  
3 - When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at <http://www.dcr.state.va.us/esw/es.htm#pubs>

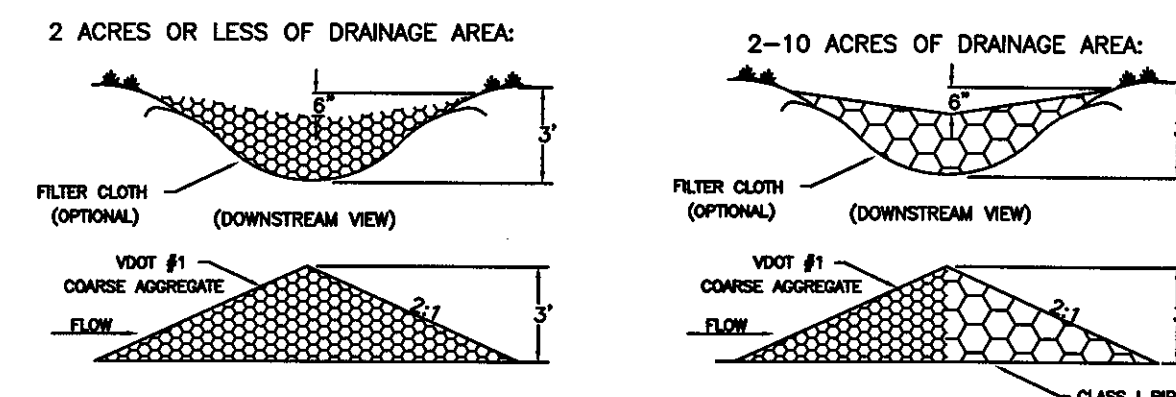
## TEMPORARY SEEDING SPECIFICATIONS



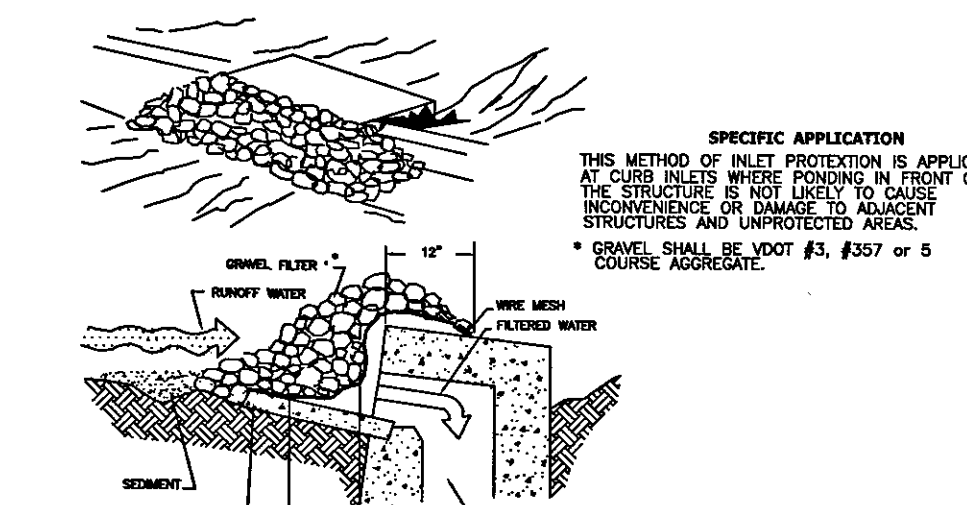
## CONCRETE TRUCK WASHOUT DETAIL

GENERAL NOTES:  
1. ACTUAL SIZE TO BE DETERMINED IN FIELD. A MINIMUM OF 10' WIDE BY 10' LONG AND SIZED TO CONTAIN ALL LIQUID AND SOLID WASTE. A MINIMUM OF 12" FREEBOARD SHALL BE INCLUDED.  
2. THE CONCRETE WASHOUT SHALL NOT BE PLACED WITHIN 50' OF STORM DRAINS.  
3. EXCESS AND SLUMP TEST SOLIDS SHALL BE PLACED ON PLASTIC LINER UNTIL HARDENED. CONTRACTOR MAY CONSIDER INSTALLING WIRE OR REBAR HOOD FOR LATER PICKUP REMOVAL.  
4. INSPECTORS SHALL USE THE WASHOUT FACILITY OR PLASTIC FOR CLEANING OF THEIR TOOLS.

MAINTENANCE NOTES:  
1. CHECK ALL CONCRETE WASHOUT FACILITIES DAILY TO DETERMINE IF THEY HAVE BEEN FILLED TO 75% CAPACITY. THE FACILITY SHALL BE CLEANED OUT OR CHANGED WHEN 75% FULL.  
2. INSPECT LINERS DAILY TO ENSURE THAT LINERS ARE INTACT AND SIDEWALLS HAVE NOT BEEN DAMAGED BY CONSTRUCTION ACTIVITIES. LINERS SHALL BE REPLACED IF THERE ARE HOLES OR TEARS OBSERVED.  
3. CONCRETE WASTE SHALL BE DISCHARGED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN. THE HARDENED CONCRETE SHALL BE BROKEN UP AND DISPOSED OF OFFSITE PER APPLICABLE VA. DEQ RULES AND REGULATIONS. LIQUIDS SHALL NOT BE DISCHARGED DIRECTLY INTO WATERWAYS, STORM DRAINS, SWALES, OR DIRECTLY ONTO THE GROUND.  
4. REMOVE LIQUIDS OR COVER STRUCTURE BEFORE PRECIPITATED STORMS TO PREVENT OVERFLOWS.  
5. INSTALL A NEW PLASTIC LINER AFTER EVERY CLEANING.



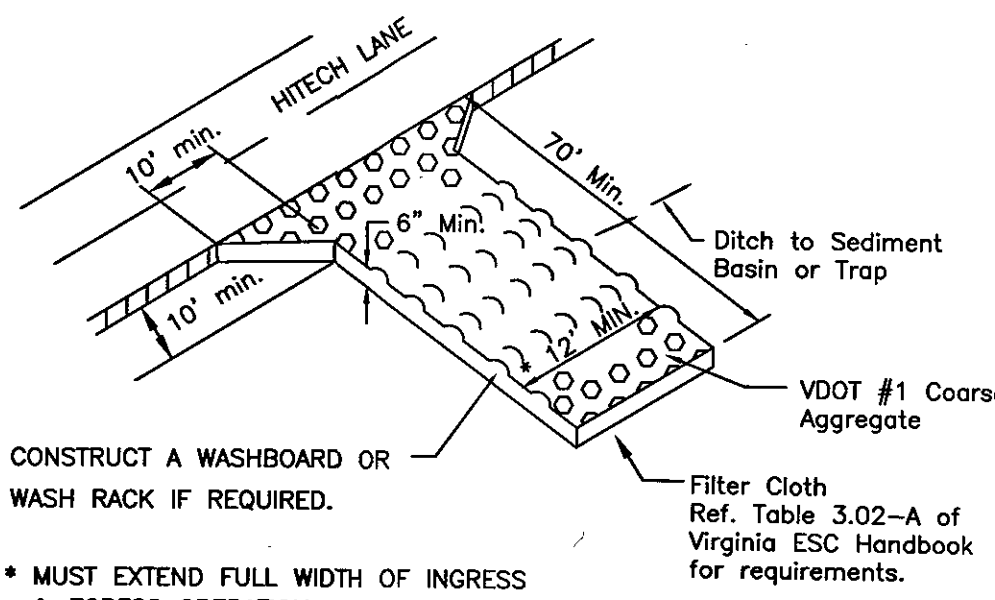
## ROCK CHECK DAM



## GRAVEL CURB INLET SEDIMENT FILTER

SEE SPECIFICATIONS & DETAILS ON SHEET C14

## SEDIMENT BASIN



## TEMPORARY GRAVEL CONSTRUCTION ENTRANCE



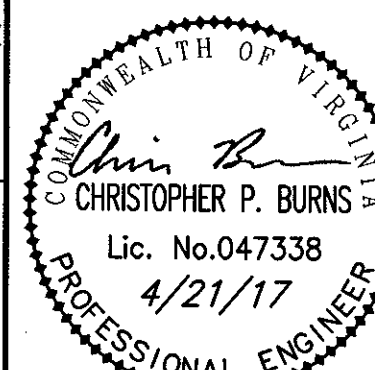
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Balzer and Associates, Inc.

1208 Corporate Circle  
Roanoke, VA 24018  
540-772-9580  
FAX 540-772-8050



PLANTATION STORAGE  
0 PLANTATION ROAD  
E.S.C. DETAILS  
HOLLINS DISTRICT  
ROANOKE COUNTY, VIRGINIA

DRAWN BY BTC  
DESIGNED BY BTC  
CHECKED BY CPB  
DATE 3/14/2017  
SCALE AS SHOWN  
REVISIONS:  
4/12/2017  
4/21/2017

APPROVED

SHEET NO.

C8

JOB NO. 04160070.01