

CLEARBROOK PARK PARKING EXPANSION

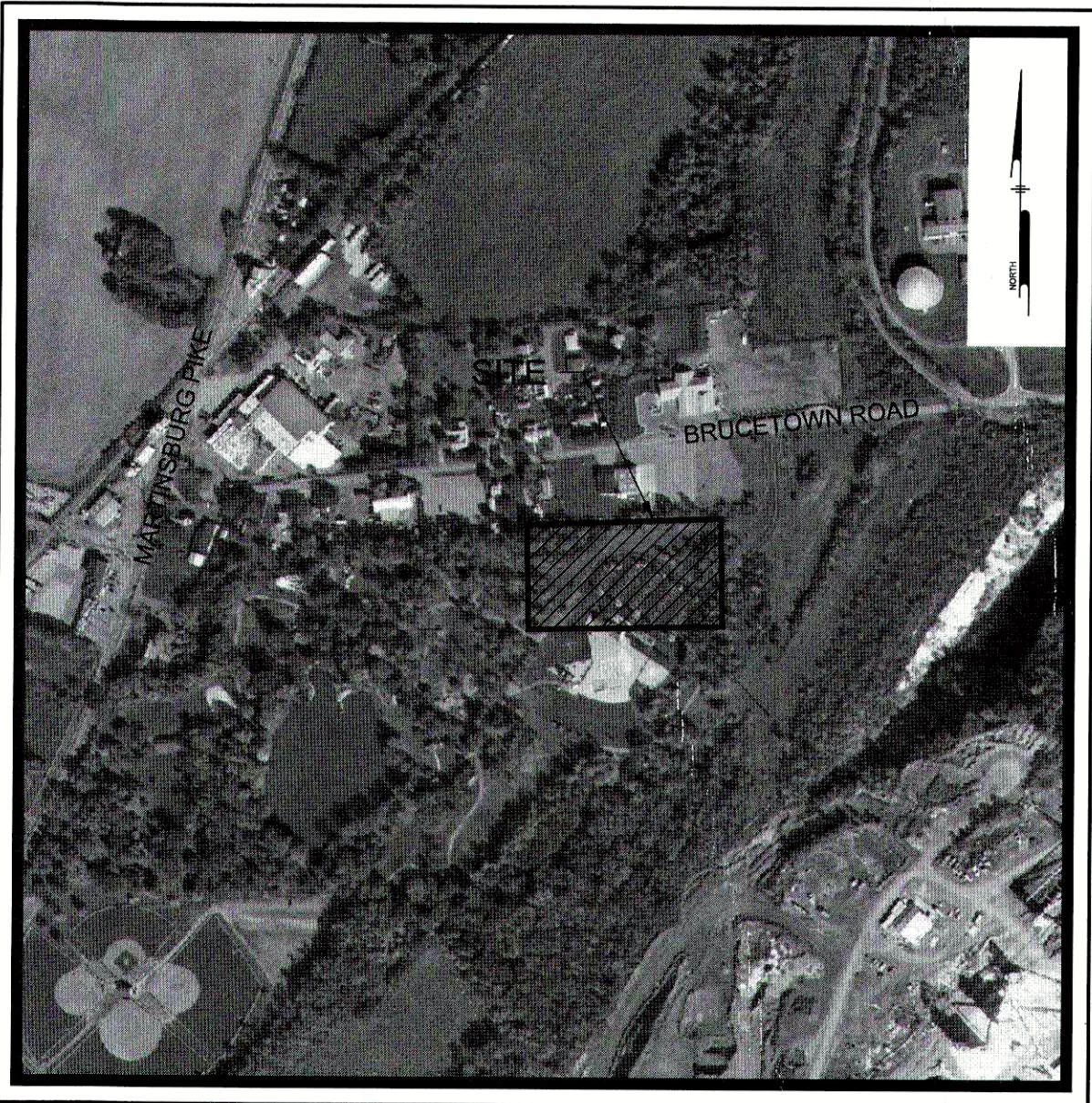
SITE PLAN  
FREDC18003  
FREDERICK COUNTY, VIRGINIA  
DECEMBER 11, 2018  
REVISED JANUARY 22, 2019  
STONEWALL MAGISTERIAL DISTRICT  
PREPARED FOR:  
OWNER/DEVELOPER

COUNTY OF FREDERICK, VIRGINIA

107 NORTH KENT STREET  
WINCHESTER, VIRGINIA 22601

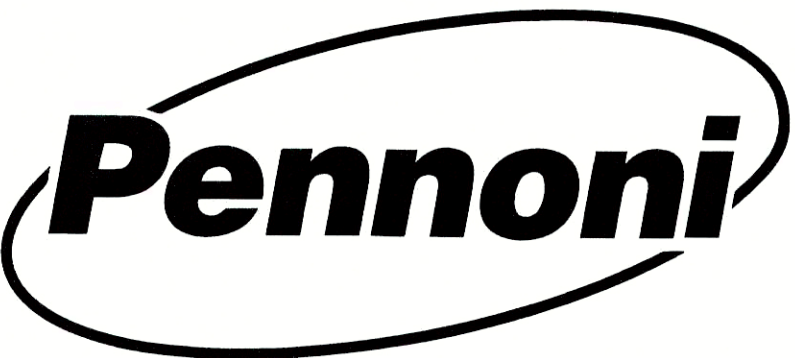
(540) 665-5600

SP# 01-19  
IFB# 2019-11C



LOCATION MAP  
Scale: 1" = 500'

PREPARED BY:  
PENNONI ASSOCIATES INC.



117 East Piccadilly Street  
Winchester, VA 22601  
T 540.667.2139  
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Sheet List Table	
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Prior to initiating any land disturbing activity, it will be necessary to schedule an on-site pre-construction meeting with E & S inspector to discuss the approved erosion and sediment control plan. No Land Disturbance Permit will be issued prior to the conducting of a pre-construction meeting for the subject project.

RESPONSIBLE LAND DISTURBER:

NAME: \_\_\_\_\_  
CERTIFICATION #: \_\_\_\_\_  
DATE: \_\_\_\_\_

THE RESPONSIBLE LAND DISTURBER IS THAT PARTY RESPONSIBLE FOR CARRYING OUT THE LAND DISTURBING ACTIVITY AS SET FORTH IN THE PLANS.

APPROVED BY FREDERICK COUNTY ZONING ADMINISTRATOR

*[Signature]*  
SITE PLAN APPROVAL VALID FOR 5 YEARS FROM APPROVAL DATE  
DATE: 15 Feb 19

LOCAL UTILITIES

WATER/SEWER DISTRICT  
FREDERICK WATER  
P.O. BOX 1877  
WINCHESTER, VA. 22604  
(540) 868-1061

CABLE SERVICE  
COMCAST COMMUNICATIONS  
195 RAINVILLE ROAD  
WINCHESTER, VIRGINIA 22602  
(540) 504-0942

ELECTRIC SERVICE  
SHENANDOAH VALLEY ELECTRIC COOP  
3463 VALLEY PIKE  
WINCHESTER, VA. 22602  
(540) 450-2039

GAS SERVICE  
WASHINGTON GAS  
P.O. BOX 2400  
WINCHESTER, VIRGINIA 22604  
(540) 869-1111

TELEPHONE SERVICE  
VERIZON  
404 HILLDALE LANE  
WINCHESTER, VA. 22602  
(540) 665-3156



CALL BEFORE YOU DIG

ALWAYS CALL 811 BEFORE YOU DIG IN VIRGINIA

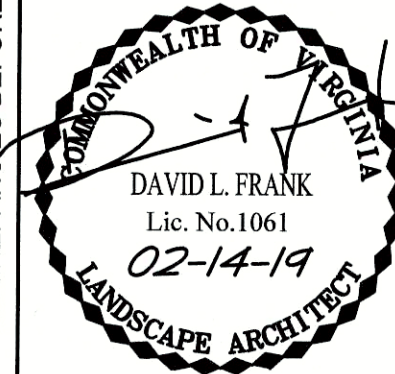
CALL 1-800-552-7001

SECTION 56-265.17 REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL OR BLAST VIRGINIA UTILITY PROTECTION SERVICE, INC. TICKET NUMBER(S):



PENNONI ASSOCIATES INC.  
117 East Piccadilly Street  
Winchester, VA 22601  
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ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK



CLEARBROOK PARK PARKING EXPANSION

3300 MARTINSBURG PIKE  
CLEARBROOK, VIRGINIA

COVER SHEET

COUNTY OF FREDERICK, VIRGINIA  
107 NORTH KENT STREET  
WINCHESTER, VIRGINIA 22601

NO.	DATE	REVISIONS	BY
1	1-22-19	REVISED PER COUNTY COMMENTS	KLM

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PROJECT	FREDC18003
DATE	2018-12-11
DRAWING SCALE	AS NOTED
DRAWN BY	TEAM
APPROVED BY	DLF

CS000

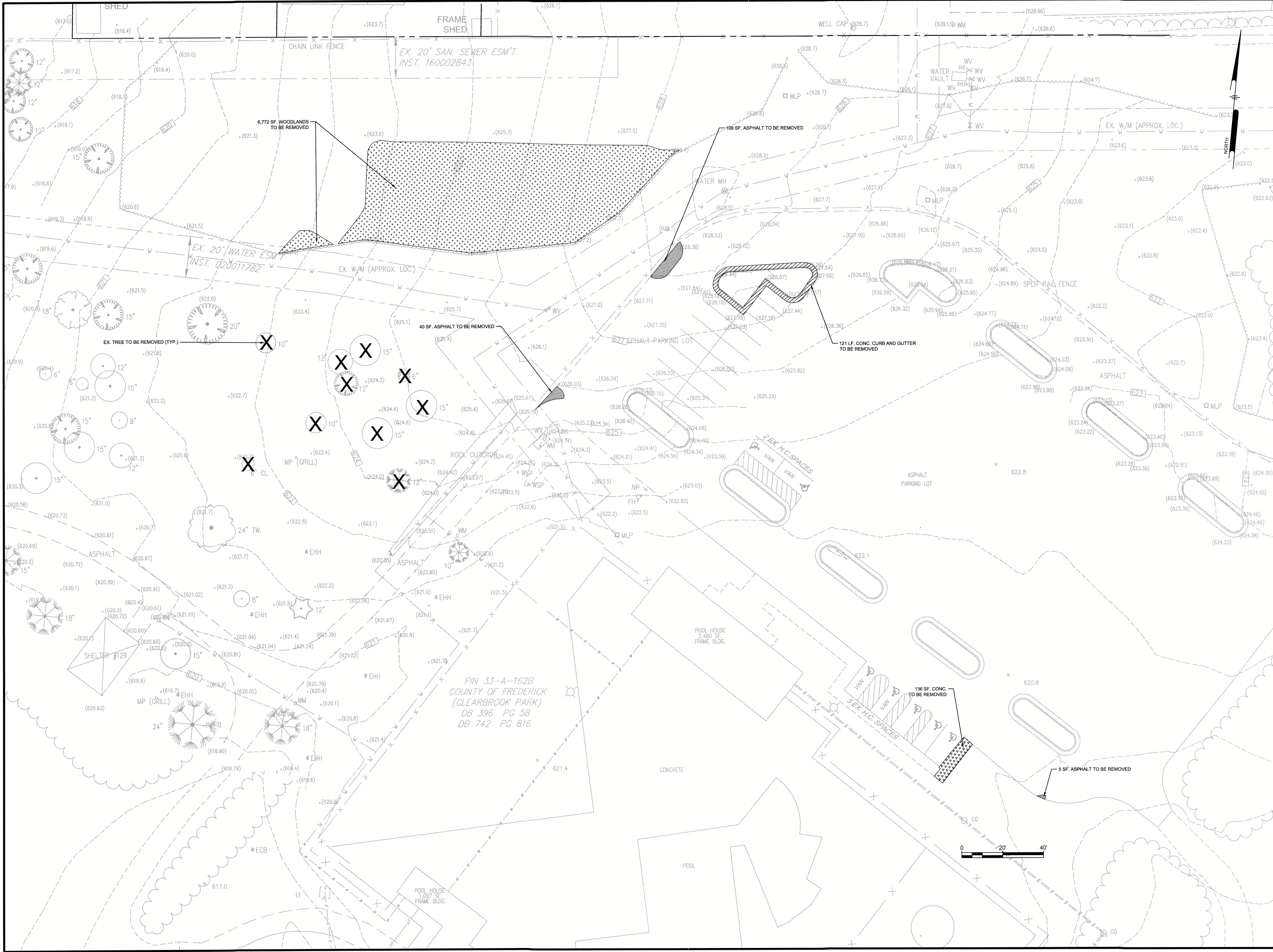














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**DAVID L. FRANK**  
Lic. No. 1061  
02-14-19  
LANDSCAPE ARCHITECT

**CLEARBROOK PARK PARKING EXPANSION**  
3300 MARTINSBURG PIKE  
CLEAR BROOK, VIRGINIA

**DEMOLITION PLAN**  
COUNTY OF FREDERICK, VIRGINIA  
107 NORTH KENT STREET  
WINCHESTER, VIRGINIA 22601

REVISIONS		BY	
NO	DATE	NO	DATE
1	1-22-19		

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PROJECT	FREDC18003
DATE	2018-12-11
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DRAWN BY	DKV
APPROVED BY	DLF

**CS101**  
SHEET 4 OF 12

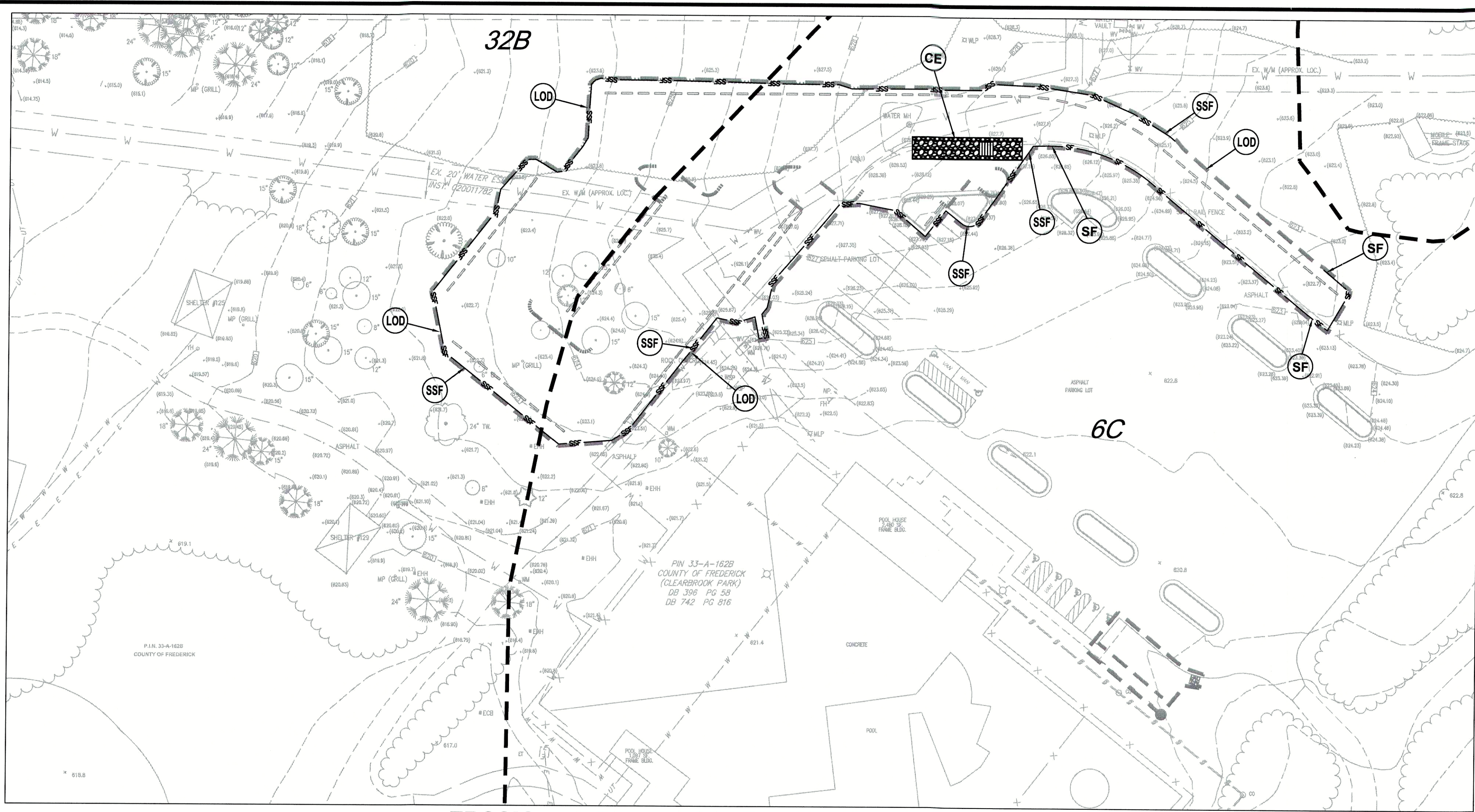












EROSION AND SEDIMENT CONTROL PLAN PHASE I

EROSION AND SEDIMENT CONTROL LEGEND

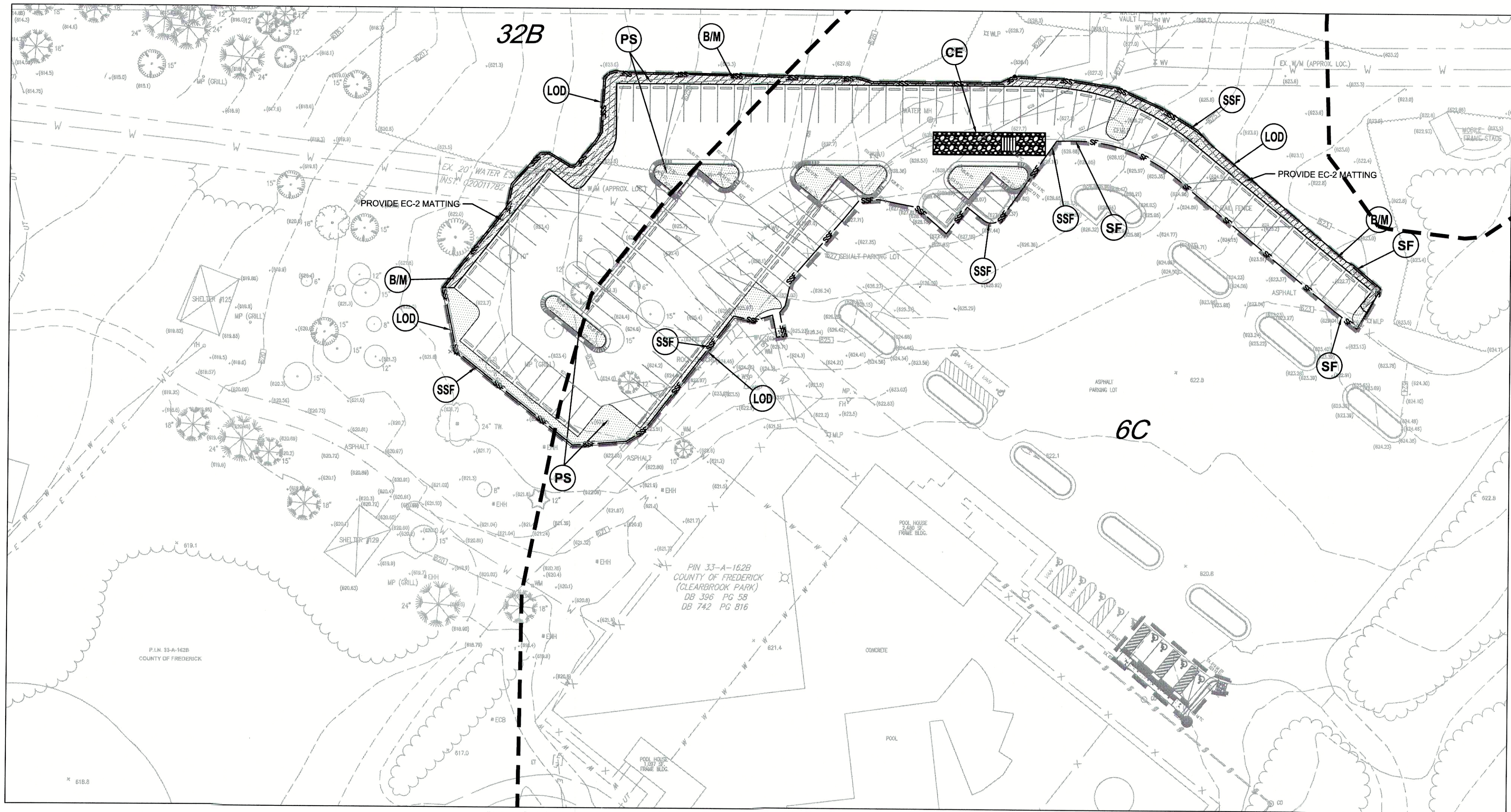
3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.05	SILT FENCE	SF	
3.32	PERMANENT SEEDING	PS	
3.36	SOIL STABILIZATION BLANKETS & MATTING	B/M	
	SUPER SILT FENCE	SSF	
	LIMITS OF DISTURBANCE	LOD	

NOTE:

1. PROVIDE EC-2 ON ALL SLOPES 4:1 OR STEEPER.

SOIL DATA

NUMBER	NAME	SLOPES	K-FACTOR	HYDROLOGIC SOIL GROUP	RUNOFF/EROSION POTENTIAL
6C	CARBO-OAKLET VERY ROCKY SILT LOAM	2 TO 15 PERCENT	0.43	D	VERY HIGH
32B	OAKLET SILT LOAM	2 TO 7 PERCENT	0.37	C	HIGH



EROSION AND SEDIMENT CONTROL PLAN PHASE II



PENNONI ASSOCIATES INC.  
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CLEARBROOK PARK PARKING EXPANSION  
3300 MARTINSBURG PIKE  
CLEAR BROOK, VIRGINIA

EROSION AND SEDIMENT  
CONTROL PLAN

COUNTY OF FREDERICK, VIRGINIA  
107 NORTH KENT STREET  
WINCHESTER, VIRGINIA 22601

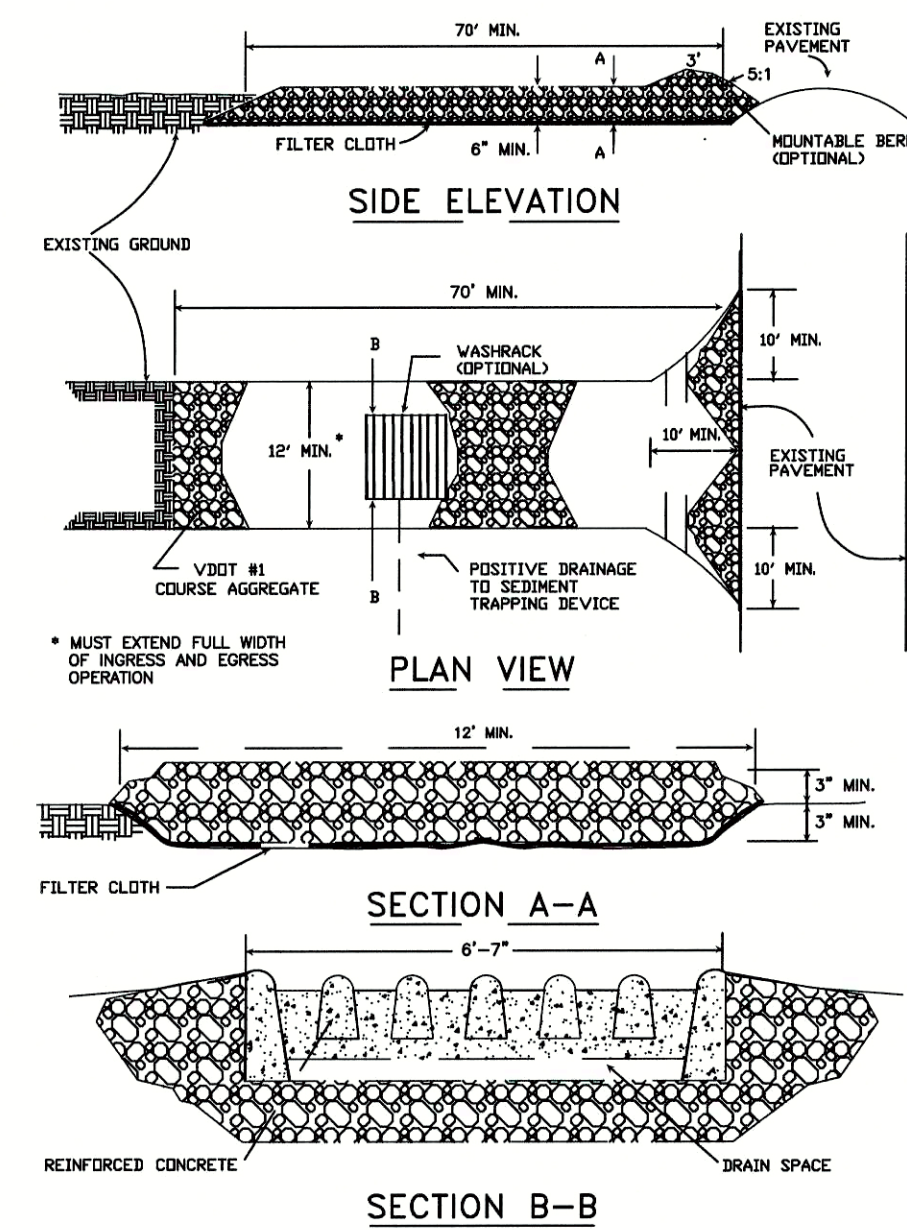
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## STONE CONSTRUCTION ENTRANCE



SOURCE: ADAPTED FROM 1983 Maryland Standards for Soil Erosion and Sediment Control, and Va. DOWC  
2016 ROAD & BRIDGE STANDARDS

## CONSTRUCTION OF A SILT FENCE (WITH WIRE SUPPORT)

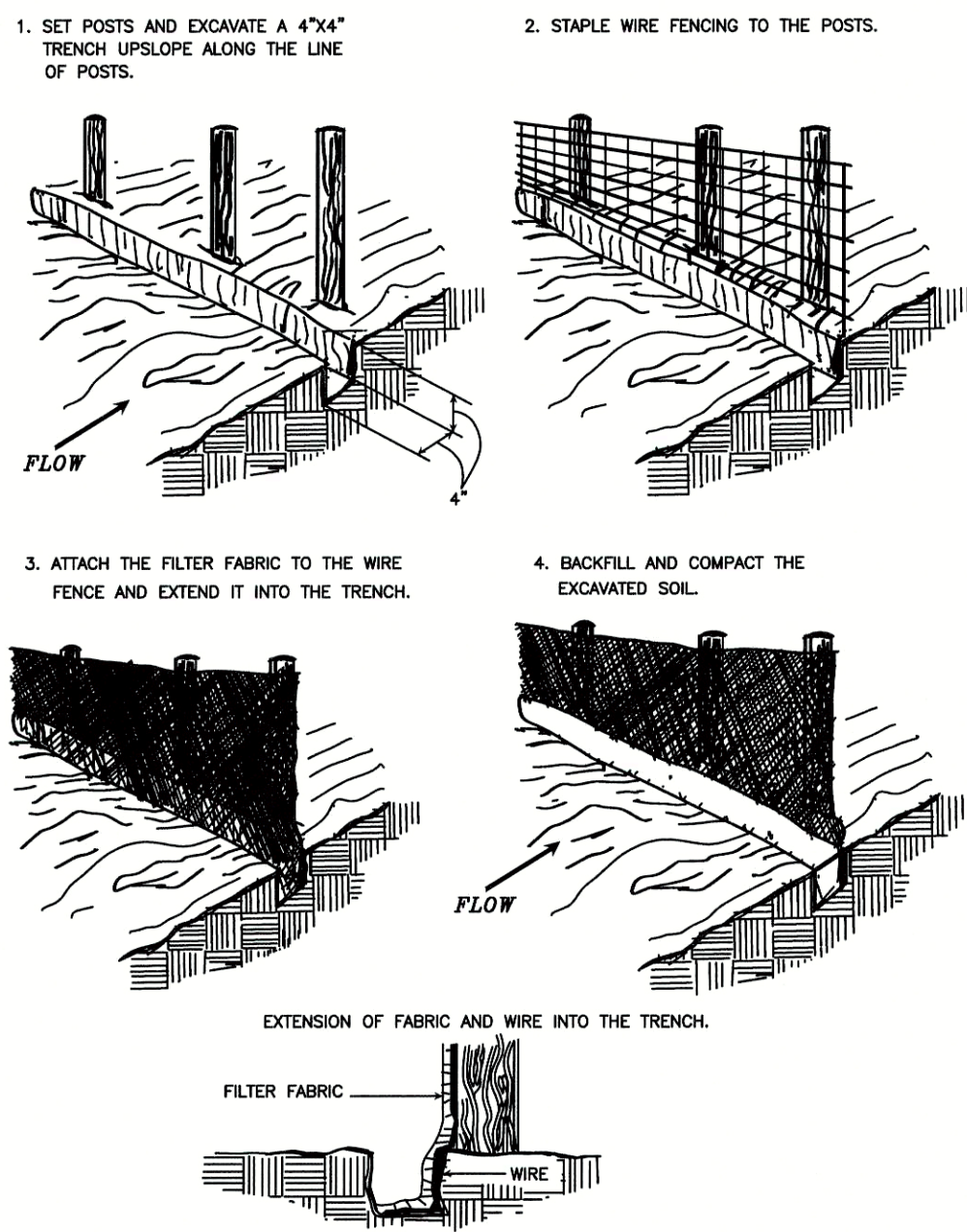
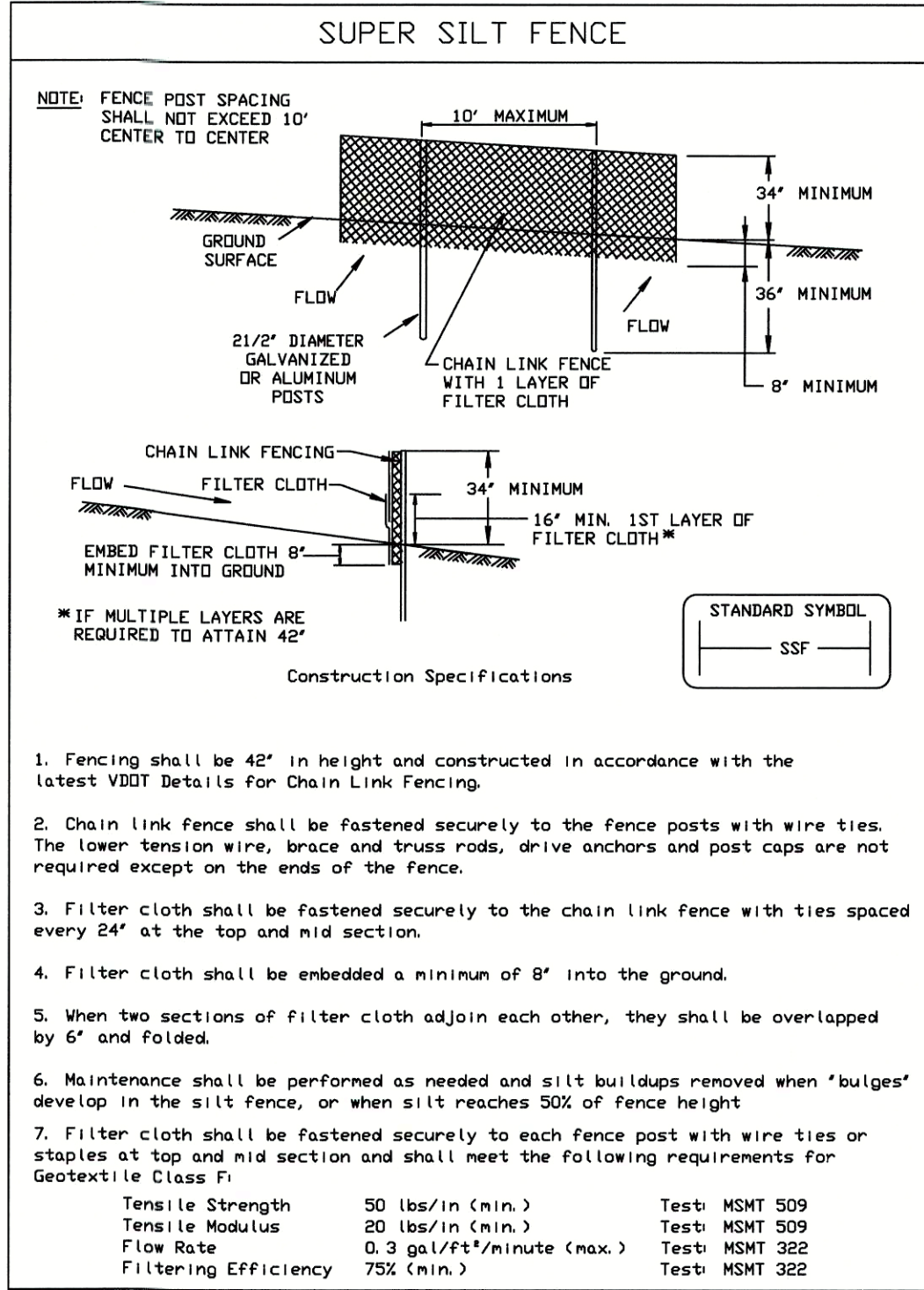


Plate 3.02-SOURCE: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control.  
2016 ROAD & BRIDGE STANDARDS



**LONG TERM MAINTENANCE AND REPAIR PLAN**  
MOWING: ALL GRASSES SHOULD BE MOWED AT LEAST TWICE EACH YEAR. GRASSES SUCH AS TALL FESCUE SHOULD BE MOWED IN EARLY SUMMER AFTER EMERGENCE OF THE HEADS ON COOL SEASON GRASSES. THEY SHOULD BE MOWED AGAIN IN THE EARLY FALL TO PREVENT SEEDS OF ANNUAL WEEDS FROM MATURING. MOWING OF LEGUMES SUCH AS SERICEA LESPEDEZA AND CROWN VETCH CAN BE PERMITTED TO GROW ON THE DAM OR IN ANY PART OF THE EMERGENCY SPILLWAY.

**LIMING AND FERTILIZING:** THE SOIL SHOULD BE SAMPLED ACCORDING TO RECOMMENDED PROCEDURES AT LEAST ONCE EVERY 4 YEARS. THE SAMPLE SHOULD BE TESTED AT A QUALIFIED SOIL TESTING LABORATORY (SUCH AS THE ONE AT VPI&SU). LIME AND FERTILIZER SHOULD BE APPLIED IN ACCORDANCE WITH RECOMMENDATIONS BASED ON THE TESTS.

**REPLANTING AND OVER SEEDING:** IF VEGETATION COVERS LESS THAN 40% OF THE SOIL SURFACE, LIME, FERTILIZER AND SEED IN ACCORDANCE WITH CURRENT RECOMMENDATIONS FOR NEW SEEDING. IF VEGETATION COVERS MORE THAN 40% BUT LESS THAN 70% OF THE SOIL SURFACE, LIME FERTILIZER AND OVER SEED IN ACCORDANCE WITH CURRENT RECOMMENDATIONS.

**REMOVING TRASH AND DEBRIS:** TRASH, LITTER AND VEGETATION (OTHER THAN GRASS) WILL BE REMOVED AS NEEDED (BUT NO LESS THAN TWO TIMES PER YEAR) TO PREVENT OBSTRUCTION TO THE FLOW OF WATER; TO PREVENT MOVEMENT OF TRASH AND LITTER TO DOWNSTREAM PROPERTIES; TO MAINTAIN THE INTEGRITY OF THE STRUCTURE, TO PROVIDE AN ATTRACTIVE APPEARANCE AND TO MINIMIZE WATER POLLUTION.

**REMOVING SEDIMENT:** SOIL MATERIALS (INCLUDING CLAY, SILT, SAND AND GRAVEL) WILL BE REMOVED BEFORE THE DETENTION POOL LOSES 10% OF THE DESIGNED STORAGE CAPACITY.

**SEDIMENT DISPOSAL:** SEDIMENT DISPOSAL SHOULD BE IN ACCORDANCE WITH CURRENT PROCEDURES FOR DISPOSAL OF SEDIMENT. WHERE REQUIRED BY THE APPROPRIATE AUTHORITIES, THE SEDIMENT WILL BE TESTED FOR APPROPRIATE POLLUTANTS AT THE OWNER'S EXPENSE BEFORE IT IS REMOVED FROM THE POND.

**REPAIRS:** REPAIR SLIDES, SLUMPS AND ERODED AREAS PROMPTLY AND IN A WORKMANLIKE MANNER TRASH RACKS, PIPES, HEADWALLS, ETC. WILL BE MAINTAINED, REPAIRED AND/OR REPLACED AS NEEDED TO MAINTAIN THE INTEGRITY OF THE STRUCTURE. EXPOSED METAL SURFACES WILL BE PAINTED TO MINIMIZE DAMAGE DUE TO RUST.

**MAINTENANCE INSPECTIONS:** THE OWNER WILL BE RESPONSIBLE FOR INSPECTING EACH STORMWATER MANAGEMENT STRUCTURE AFTER EACH SIGNIFICANT RAINFALL. ONCE EACH YEAR A REPRESENTATIVE OF DEQ WILL JOINTLY INSPECT EACH STORMWATER MANAGEMENT STRUCTURE. APPROPRIATE ACTION WILL BE TAKEN TO ENSURE APPROPRIATE MAINTENANCE. ALL MAINTENANCE COSTS WILL BE BORNE BY THE OWNER. WHERE STRUCTURES ARE TO BE MAINTAINED BY MORE THAN ONE PARTY, ALLOCATION OF COSTS WILL BE IN ACCORDANCE WITH TERMS SET FORTH IN THE MAINTENANCE AGREEMENT. KEYS TO LOCKED ACCESS POINTS SHALL BE AVAILABLE TO DEQ PERSONNEL UPON REQUEST.

**MAINTENANCE RECORDS:** THE LANDOWNER, OR SOMEONE DESIGNATED BY THE LANDOWNER, SHALL INSPECT THE DETENTION POND WITHIN 24 HOURS AFTER EACH RAINFALL EVENT OF ONE INCH OR MORE OF RAIN. THE OWNER OR THE DESIGNEE SHALL KEEP WRITTEN RECORDS OF THESE INSPECTIONS. THE RECORDS SHALL ALSO INCLUDE MAINTENANCE AND REPAIRS PERFORMED. COPIES OF THESE RECORDS SHALL BE PROVIDED TO THE TOWN UPON REQUEST.

THE WATER QUALITY FEATURES SHALL NOT BE MODIFIED IN ANY WAY WITHOUT PRIOR APPROVAL BY DEQ AND FREDERICK COUNTY.

## EROSION AND SEDIMENT CONTROL NARRATIVE

### PROJECT DESCRIPTION

THIS SITE IS LOCATED IN NORTHERN FREDERICK COUNTY, VIRGINIA ON THE EAST SIDE OF US ROUTE 11 AND SOUTH OF BRUCETOWN ROAD. THE CLEARBROOK PARK PARKING EXPANSION INVOLVES ADDITION OF 117 PARKING SPACES TO THE EXISTING PARKING LOT ADJACENT TO THE POOL IN CLEARBROOK PARK. LANDSCAPING, LIGHTING AND A SMALL EXTENSION TO AN EXISTING CONCRETE SIDEWALK ARE ALSO PROPOSED. THE LAND DISTURBANCE FOR THIS PROJECT IS 0.98 ACRES.

### EXISTING SITE CONDITIONS

THE EXISTING SITE AREA IS 44.02 ACRES. HOWEVER, THE PROJECT AREA FOR THIS PARKING EXPANSION WILL BE LESS THAN 1 ACRE. THE SITE IS CURRENTLY A PUBLIC PARK WITH A POOL, PLAYGROUND AREAS, WALKING TRAIL POND, PAVILIONS AND OTHER PARK AMENITIES. THE PROJECT AREA GENERALLY DRAINS OUTWARD IN ALL DIRECTIONS FROM A HIGH POINT IN THE NORTHERN PORTION OF THE PARKING LOT. THE SITE RANGES IN ELEVATION FROM APPROXIMATELY 622.00 TO 629.00 AND SLOPES VARY BETWEEN 1% TO 10% ON AVERAGE.

### ADJACENT PROPERTY

THE SITE IS BOUNDED BY RESIDENTIAL PROPERTIES TO THE NORTH, A QUARRY TO THE EAST AND SOUTH, AND A COMMERCIAL BUSINESS AND ROUTE 11 TO THE WEST.

### OFF-SITE AREAS

NO OFF-SITE AREAS ARE ASSOCIATED WITH THIS PROJECT.

### SOILS AND GEOLOGY

THE USDA SOIL SURVEY MAPS THE PREDOMINANT SOILS FOR THIS SITE ARE 6C CARBO-OAKLET VERY ROCKY SILT LOAMS WITH 2 TO 15% SLOPES (HSG D) AND 32B OAKLET SILT LOAM WITH 2 TO 7% SLOPES (HSG C).

6C SOILS HAVE SLOW PERMEABILITY, MEDIUM RUNOFF, HIGH SHRINK-SWELL POTENTIAL AND SEVERE EROSION HAZARD.

32B SOILS HAVE SLOW PERMEABILITY, MEDIUM RUNOFF, HIGH SHRINK-SWELL POTENTIAL AND MODERATE EROSION HAZARD.

SEE THE EROSION AND SEDIMENT CONTROL PLAN FOR SOILS MAPPING.

### CRITICAL AREAS

CRITICAL AREAS, IF ANY, ARE MARKED BY A STAR AND CONSIST OF 3:1 SLOPES. THESE SLOPES HAVE THE POTENTIAL FOR GREATER EROSION AND SHALL BE IMMEDIATELY STABILIZED AFTER REACHING FINAL GRADE.

### EROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

### STRUCTURAL MEASURES

SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES SHOWN ON THE PLANS INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.

### PHASE I:

CONSTRUCTION ENTRANCE WITH WASH RACK (3.02) SHALL BE INSTALLED AT THE LOCATION SHOWN ON THE PHASE I PLAN TO PREVENT MUD AND DEBRIS FROM BEING TRACKED ONTO ROADWAYS.

SILT FENCE WITH WIRE SUPPORT (3.05) SHALL BE INSTALLED AS SHOWN ON THE PLANS TO FILTER RUNOFF FROM DISTURBED AREAS BEFORE IT LEAVES THE SITE.

SUPER SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLANS TO FILTER RUNOFF FROM DISTURBED AREAS BEFORE IT LEAVES THE SITE.

TEMPORARY SEEDING (3.31) SHALL BE PLACED ON ALL CRITICAL SLOPES (3:1 OR GREATER) AND AS NEEDED TO STABILIZE DISTURBED AREAS.

### PHASE II:

ALL CONTROLS INSTALLED IN PHASE I SHOULD REMAIN UNTIL THE SITE IS STABILIZED.

PERMANENT SEEDING (3.32) SHALL BE PLACED ON ALL CRITICAL SLOPES (3:1 OR GREATER) AND AS NEEDED TO STABILIZE DISTURBED AREAS.

SOIL STABILIZATION BLANKETS AND MATTING (3.36) SHALL BE PLACED ON ALL SLOPES 4:1 OR GREATER.

### VEGETATIVE MEASURES

PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDATED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDATED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN FOURTEEN (14) DAYS. PERMANENT SOIL STABILIZATION SHALL BE APPLIED TO ALL AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN SIX (6) MONTHS.

SOIL THAT HAS BEEN STOCKPILED SHALL BE SURROUNDED WITH SILT FENCE AND PROTECTED BY MULCH AND/OR TEMPORARY VEGETATION IMMEDIATELY AFTER GRADING.

ALL EARTH BERMS, DAMS, DIKES, DIVERSIONS AND SEDIMENT TRAP EMBANKMENTS ARE TO BE MACHINE-COMPACTED, IMMEDIATELY SEEDED AND MULCHED (HAY MULCH OR STRAW) FOR TEMPORARY AND/OR PERMANENT VEGETATIVE COVER WITHIN FIVE (5) DAYS AFTER GRADING.

TOPSOIL SHALL BE SPREAD AT A MINIMUM DEPTH OF 4".  
PULVERIZED AGRICULTURAL LIMESTONE SHALL BE INCORPORATED INTO SOIL AT A RATE OF 92 LBS. PER 1000 S.F. (2 TONS PER ACRE).  
FERTILIZER WITH 10-20-10 AT A RATE OF 12 LBS. PER 1000 S.F. (500 LBS. PER ACRE).  
SEED MIX SHALL CONSIST OF 90% KENTUCKY 31 TALL FESCUE AND 10% KENTUCKY BLUEGRASS APPLIED AT THE RATE OF 200 LBS. PER ACRE.

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 10-10-10 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:**
- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
  - Incorporate the lime and fertilizer into the top 4 - 6 inches of the soil by disk or by other means.
  - 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/sw/e&s.htm#ntrps>

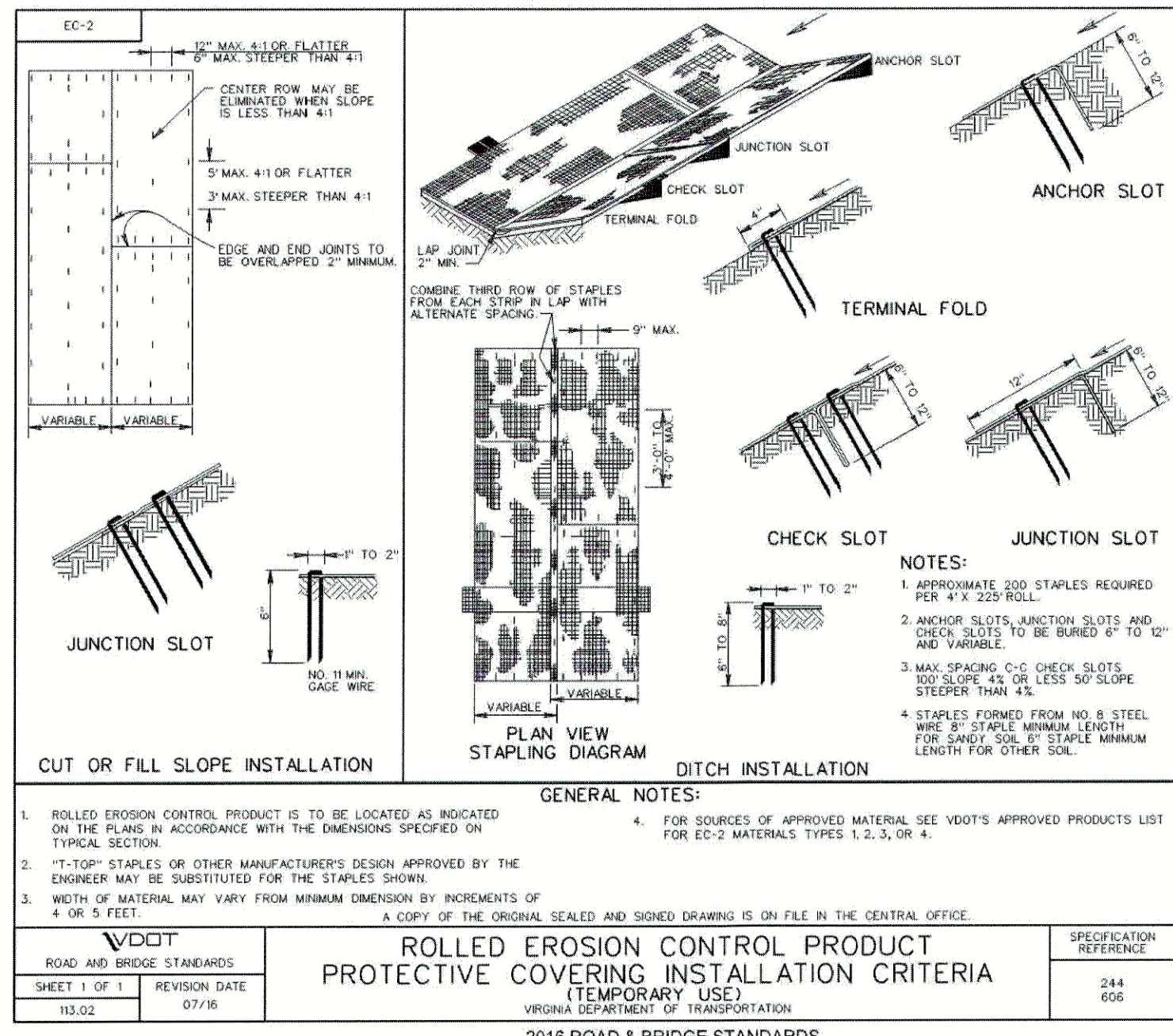


TABLE 3.32-C (Revised June 2003) PERMANENT SEEDING SPECIFICATIONS FOR APPALACHIAN/MOUNTAIN AREA		
LAND USE	SEED <sup>1</sup>	APPLICATION RATES
Minimum Care Lawn (Commercial or Residential)	Tall Fescue <sup>1</sup> Perennial Ryegrass <sup>2</sup> Kentucky Bluegrass <sup>1</sup>	90-100% 0-10% 0-10% TOTAL: 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>3</sup>	TOTAL: 125 lbs.
General Slope (3:1 or less)	Tall Fescue <sup>1</sup> Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop <sup>3</sup>	128 lbs. 2 lbs. 20 lbs. TOTAL: 150 lbs.
Low-Maintenance Slope (Steeper than 3:1)	Tall Fescue <sup>1</sup> Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop <sup>3</sup> Crownvetch <sup>4</sup>	100 lbs. 2 lbs. 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://sudan.cses.vt.edu/html/Turf/turfpublications/publications2.html>

**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>	Foxtail Millet
August 16 <sup>th</sup> - September, October	Annual Rye
November - February	Winter Rye

**4.** All legume seed must be properly inoculated. If Flatopa 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.

**FERTILIZER & LIME**

- Apply 10-20-10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,000 sq. ft.)
- Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

**NOTE:**

- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
- Incorporate the lime and fertilizer into the top 4 - 6 inches of the soil by disk or by other means.
- 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/sw/e&s.htm#ntrps>

**Pennoni**

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CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, OR SLOPE DRAIN STRUCTURE.

DAVID L. FRANK  
Lic. No. 1061  
02-14-19  
LANDSCAPE ARCHITECT

CLEARBROOK PARK PARKING EXPANSION

3300 MARTINSBURG PIKE  
CLEAR BROOK, VIRGINIA

EROSION AND SEDIMENT CONTROL DETAILS AND NARRATIVE

COUNTY OF FREDERICK, VIRGINIA

107 NORTH KENT STREET  
WINCHESTER, VIRGINIA 22601

PROJECT	DATE	REVISIONS	BY
FREDC18003	2018-12-11		
DATE	2018-12-11		
DRAWING SCALE	AS NOTED		
DRAWN BY	DKV		
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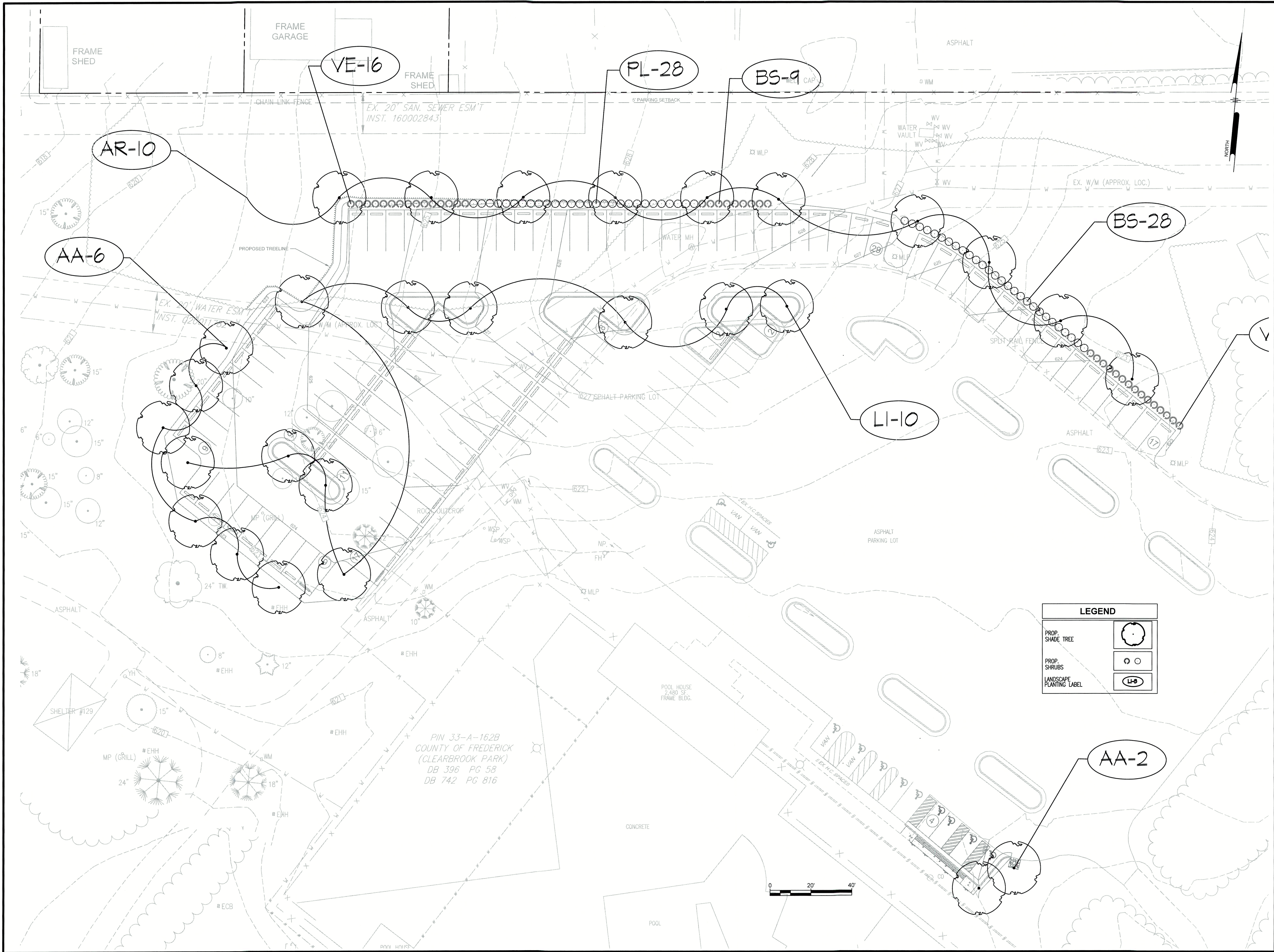
**CS301**  
SHEET 8 OF 12







U:\account\FREDC\FREDC18003 - Clearbrook Park\DESIGN\_SHEETS\Site Plan\CS500.dwg PLOTTED: 21/07/19 2:28 PM BY: Kelly Malow PROJECT STATUS: —



PENNONI ASSOCIATES INC.  
117 East Piccadilly Street  
Winchester, VA 22801  
T 540.667.2139 F 540.665.0493

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR  
AND OWNER MUST BE NOTIFIED OF ANY  
DISCREPANCIES BEFORE PROCEEDING WITH WORK



CLEARBROOK PARK PARKING EXPANSION

3300 MARTINSBURG PIKE  
CLEAR BROOK, VIRGINIA

LANDSCAPE PLAN

COUNTY OF FREDERICK, VIRGINIA

107 NORTH KENT STREET  
WINCHESTER, VIRGINIA 22801

NO.	DATE	REVISIONS	BY
1	1-22-19	REVISED PER COUNTY COMMENTS	KLM

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES  
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE  
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED  
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON  
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER  
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION  
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE  
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS  
SOLE RISK AND WITHOUT LIABILITY OR LEGAL  
EXPOSURE TO PENNONI ASSOCIATES AND OWNER  
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI  
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND  
EXPENSES ARISING OUT OF OR RESULTING THEREFROM

PROJECT	FREDC18003
DATE	2018-12-11
DRAWING SCALE	AS NOTED
DRAWN BY	TEAM
APPROVED BY	DLF

CS500

SHEET 10 OF 12



## SCOPE OF WORK

THE LANDSCAPE CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT TO COMPLETE ALL LANDSCAPE WORK AS SHOWN ON THE PLANS AND SPECIFICATIONS.

NOTE: IF THE CONTRACTOR BIDS ACCORDING TO THE PLANT LIST, HE/SHE SHOULD THOROUGHLY CHECK THE PLANT LIST QUANTITIES WITH THE SYMBOLS DRAWN ON THE PLAN, TO BE SURE THERE ARE NO DISCREPANCIES. IF THERE IS A DISCREPANCY BETWEEN THE DRAWING AND THE LIST ON THE PLANS, THE DRAWING TAKES PRECEDENCE.

## STANDARDS

- A. ALL PLANT MATERIAL WILL CONFORM TO THE CURRENT ISSUE OF THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (ANLA).
- B. PLANT MATERIAL MUST BE SELECTED FROM NURSERIES THAT HAVE BEEN INSPECTED AND CERTIFIED BY STATE PLANT INSPECTORS.
- C. COLLECTED MATERIAL MAY BE USED ONLY WHEN APPROVED BY OWNER'S REPRESENTATIVE.
- D. NOMENCLATURE WILL BE IN ACCORDANCE WITH HORTUS III BY L.H. BAILEY.

SUBSTITUTIONS: PRE-BID

IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO MAKE EVERY REASONABLE EFFORT TO FIND THE MATERIAL SPECIFIED BY THE ARCHITECT. THE LANDSCAPE CONTRACTOR MAY OFFER SUBSTITUTIONS TO THE LANDSCAPE ARCHITECT FOR HIS/HER CONSIDERATION. THE LANDSCAPE CONTRACTOR WILL NOTIFY THE LANDSCAPE ARCHITECT IF THERE ARE KNOWN DISEASES OR INSECT RESISTANT SPECIES THAT CAN BE SUBSTITUTED FOR A SELECTED PEST-PRONE PLANT. THE CONTRACTOR SHALL SUBMIT A BASE BID AS PER PLAN PLUS PRICE CLARIFICATIONS FOR ALL RECOMMENDED SUBSTITUTIONS.

SUBSTITUTIONS: POST-BID

IT IS THE INTENT TO ELIMINATE POST-BID SUBSTITUTIONS. HOWEVER, IN THE EVENT THAT THE CONTRACT MATERIAL HAS BECOME UNAVAILABLE, AN APPROPRIATE SUBSTITUTION MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE.

### UTILITIES AND UNDERGROUND FEATURES

THE LANDSCAPE CONTRACT SHALL NOTIFY UTILITY COMPANIES AND/OR THE GENERAL CONTRACTOR IN ADVANCE OF CONSTRUCTION TO LOCATE UTILITIES.

- A. IF THERE IS A CONFLICT WITH THE UTILITIES AND THE PLANTING, THE LANDSCAPE ARCHITECT SHALL BE RESPONSIBLE FOR RELOCATING PLANTS PRIOR TO THE PLANTING PROCESS. ANY COST DUE TO RELOCATING AFTER PLANTING SHALL BE BORNE BY THE OWNER.

## DRAINAGE

IF PLANTS ARE TO BE INSTALLED IN AREAS THAT SHOW OBVIOUS POOR DRAINAGE, AND THE PLANTS ARE INAPPROPRIATE FOR THAT CONDITION, THE LANDSCAPE CONTRACTOR SHALL BE RELOCATED, THE CONTRACT SHALL BE ADJUSTED TO ALLOW FOR DRAINAGE CORRECTION AT A NEGOTIATED COST, OR THE PLANT SELECTION MODIFIED BY THE LANDSCAPE ARCHITECT TO ACCOMMODATE THE POOR DRAINAGE SITUATION.

## WARRANTY

- A. THE STANDARD WARRANTY IS FOR A ONE (1) YEAR PERIOD, EXCLUDING BUILDS, SOD AND ANNUALS, COMMENCING ON THE DATE OF INITIAL ACCEPTANCE. ALL PLANTS SHALL BE ALIVE AND IN SATISFACTORY GROWTH AT THE END OF THE GUARANTEE PERIOD.
- B. BALLED AND BURLAPPED (B&B).
1. BALLED AND BURLAPPED PLANTS SHALL BE DUG WITH FIRM ROOT BALLS FREE OF NOXIOUS WEEDS. THERE SHOULD BE NO EXCESS SOIL ON TOP OF THE ROOT BALL OR AROUND THE TRUNK.
  2. BALL SIZE SHALL BE IN ACCORDANCE WITH ANLA STANDARDS.
  3. CALIPER AND HEIGHT MEASUREMENTS: IN SIZE GRADING B&B SINGLE-TRUNK TREES, CALIPER SHALL TAKE PRECEDENCE OVER HEIGHT. CALIPER OF THE TRUNK SHALL BE TAKEN 6" ABOVE THE GROUND LEVEL (UP TO INCLUDING 4" CALIPER SIZE) AND 12" ABOVE THE GROUND LEVEL OF LARGER TREES. FOR MULTIPLE-TRUNK TREES, HEIGHT MEASUREMENT SHALL TAKE PRECEDENCE OVER CALIPER.
- C. CONTAINER-GROWN STOCK
1. THE SIZE OF CONTAINER-GROWN SHRUBS IS MEASURED BY THE GROUND WIDTH OF PLANT. CONTAINER-GROWN TREES ARE MEASURED BY THE SAME STANDARDS LISTED IN B.3 ABOVE. THE ROOT SYSTEM OF CONTAINER-GROWN PLANTS SHALL BE WELL-DEVELOPED AND WELL-DISTRIBUTED THROUGHOUT THE CONTAINER.
  2. ALL CONTAINER-GROWN TREES AND SHRUBS THAT HAVE CIRCLING AND MATTED ROOTS SHALL BE TREATED IN THE FOLLOWING MANNER PRIOR TO PLANTING: USING A KNIFE OR SHARP BLADE, MAKE 4-5 CUTS, 1" DEEP, THE LENGTH OF THE ROOT BALL, TO CUT ALL CIRCLING ROOTS. SEE PLANTING PROCEDURES FOR ALL CONTAINER-GROWN TREES & SHRUBS IN THIS SECTION.
  3. ALL CONTAINER-GROWN PLANTS SHOULD BE GROUPEO AND WATERED DAILY UNTIL THEY ARE PLANTED IN THE LANDSCAPE, THE SOIL SHALL BE KEPT MOIST WITH THE EQUIVALENT OF ONE INCH OF RAINFALL PER WEEK.
- A. PRUNING SHALL BE DONE BEFORE PLANTING OR DURING THE PLANTING OPERATION. PRUNING DETAIL FOR TREES IN THIS SECTION.
- B. ALL PLANT MATERIAL IN TRANSIT SHALL BE COVERED TO KEEP MATERIAL FROM DRYING OUT. THE COVERING SHALL COMPLY WITH STATE AND LOCAL LAWS PERTAINING TO THE TRANSPORT OF MATERIALS.
- C. TREES SHALL BE PLACED IN AN UPRIGHT POSITION WITH THE ROOTBALL COVERED BY MULCH AND KEPT MOIST. TREES AND SHRUBS SHOULD NOT BE LEFT ON SITE UNPLANTED FOR MORE THAN 24 HOURS WITHOUT ADEQUATE WATER TO INSURE ROOTS SURVIVAL.

## INSPECTION

- A. PLANTS MAY BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR OWNER'S REPRESENTATIVE AT THE PLACE OF GROWTH OR HOLDING YARD FOR CONFORMITY TO SPECIFICATION REQUIREMENTS AS TO QUALITY, SIZE AND VARIETY.
- B. PLANTS DAMAGED IN HANDLING OR TRANSPORTATION CAN BE REJECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- C. STATE NURSERY INSPECTION CERTIFICATES SHALL BE FURNISHED TO THE LANDSCAPE ARCHITECT UPON REQUEST.

## PLANTING PROCEDURES FOR ALL CONTAINER-GROWN TREES &amp; SHRUBS

- A. REMOVE THE PLANT EITHER BY CUTTING OR INVERTING THE CONTAINER.
- B. FOR UNTREATED PLASTIC CONTAINER GROWN PLANTS WITH CIRCLING ROOTS, USE A SHARP KNIFE TO MAKE 1" CUTS THE LENGTH OF THE ROOTBALL.
- C. PLANT SHRUB TO TREE A MINIMUM OF 1/8 OF THE HEIGHT OF THE ROOTBALL ABOVE EXISTING GRADE.
- D. APPLY A 2 TO 3" THICK LAYER OF APPROVED MULCH. KEEP MULCH 6" AWAY FROM THE TRUNK OF ALL TREES AND SHRUBS.
- E. PLANTS GROWN IN ROOT CONTAINMENT BAGS MUST HAVE THE BAGS REMOVED DURING THE PLANTING OPERATION. NO ADDITIONAL SLASHING OF THE ROOTBALL IS NECESSARY.

**MAINTENANCE OF LANDSCAPING NOTES:**

1. ALL LANDSCAPED AREA SHALL BE MAINTAINED IN GOOD CONDITION BY OWNER.
2. REASONABLE PROVISIONS SHALL BE MADE FOR PROTECTION FROM VEHICLES, PEDESTRIANS, OR SHOPPING CARTS.
3. DEAD OR DYING VEGETATION SHALL BE REPLACED AT DIRECTION OF ADMINISTRATOR.
4. SHRUBS SHALL BE REPLACED AT A SIZE CONSISTENT WITH THAT OF EXPECTED FOR SPECIES AND TIME SINCE INSTALLATION.
5. TREES SHALL BE REPLACED AT A SIZE OF 0.5" CALIPER ABOVE 2" FOR EVERY YEAR SINCE INSTALLATION UP TO 5" CALIPER.

**GENERAL LANDSCAPING NOTES:**

1. NO TREES OR SHRUBS SHALL BE PLACED ON FCSA EASEMENTS.
2. ALL LANDSCAPING SHALL COMPLY WITH FREDERICK COUNTY ZONING ORDINANCE SECTION (§165-203.01) BUFFERS AND LANDSCAPING.

PERIMETER LANDSCAPING

IMPERVIOUS SURFACE: 31,882 S.F.  
TREES REQUIRED AT 1 PER 2,000 S.F.: 16  
TREES PROVIDED: 16  
3' HEDGE REQUIRED: YES  
3' HEDGE PROVIDED: YES

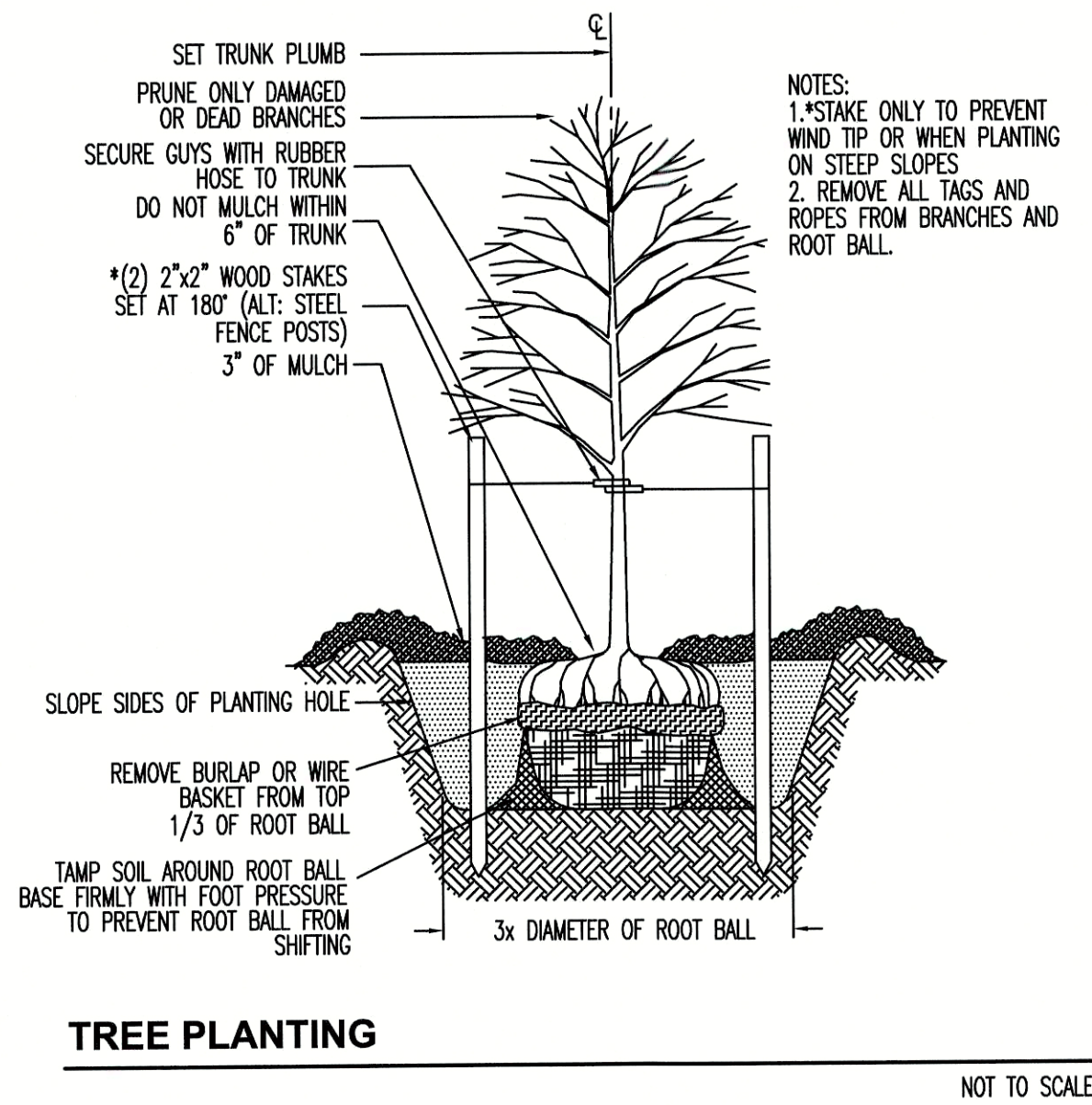
### INTERIOR LANDSCAPING

PARKING LOT AREA: 42,773 S.F.  
 INTERIOR LANDSCAPING AREA REQUIRED: 2,139 S.F. (5.00%)  
 INTERIOR LANDSCAPING AREA PROVIDED: 2,463 S.F. (5.76%)  
 NUMBER OF SPACES PROPOSED: 117  
 INTERIOR TREES REQUIRED: 12 (1 PER 10 SPACES)  
 INTERIOR TREES PROVIDED: 12

## GENERAL PLANT LIST

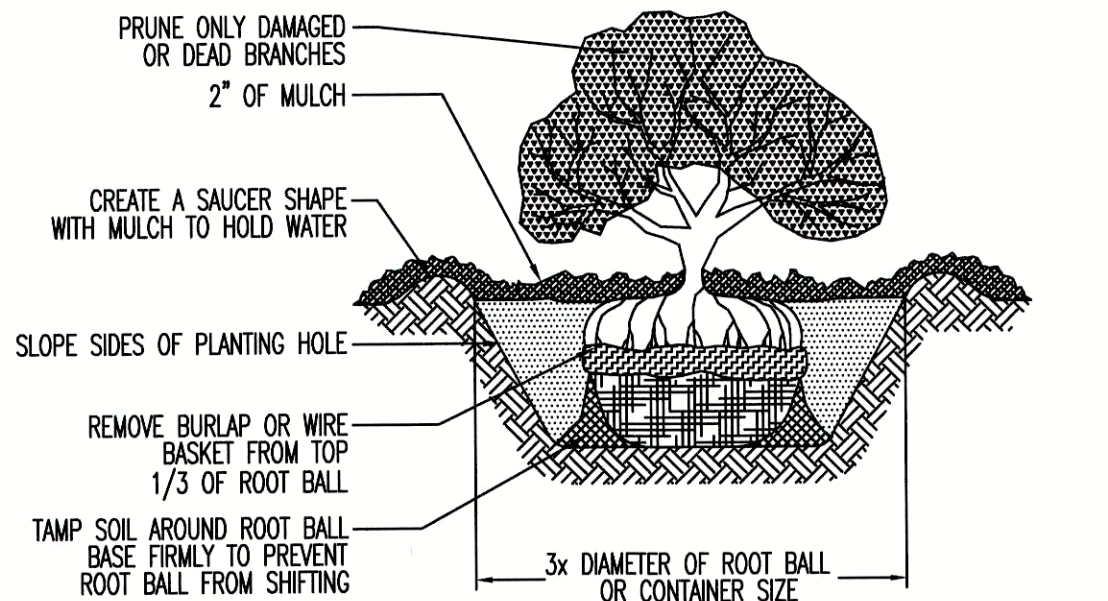
DECIDUOUS TREES					
SYMBOL	BOTANICAL	COMMON NAME	SIZE	SPACING	QUANTITY
AA	AMELANCHIER ARBOREA	SERVICEBERRY	2.0" CAL.	AS SHOWN	8
AR	ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2.0" CAL.	AS SHOWN	10
LI	LAGERSTROEMIA INDICA 'NATCHEZ'	NATCHEZ CRAPE MYRTLE	2.0" CAL.	AS SHOWN	10

SHRUBS					
SYMBOL	BOTANICAL	COMMON NAME	SIZE	SPACING	QUANTITY
BS	BUXUS SEMPERVIRENS 'WINTERGREEN'	WINTERGREEN BOXWOOD	3 GAL. CONT./36" HT. MIN.	4' O.C.	37
PL	PRUNUS LAUROCERASUS 'OTTO LUYKEN'	OTTO LUYKEN CHERRY LAUREL	3 GAL. CONT./36" HT. MIN.	4' O.C.	28
VF	VIBURNUM 'ESKIMO'	ESKIMO VIBURNUM	3 GAL. CONT./36" HT. MIN.	4' O.C.	32



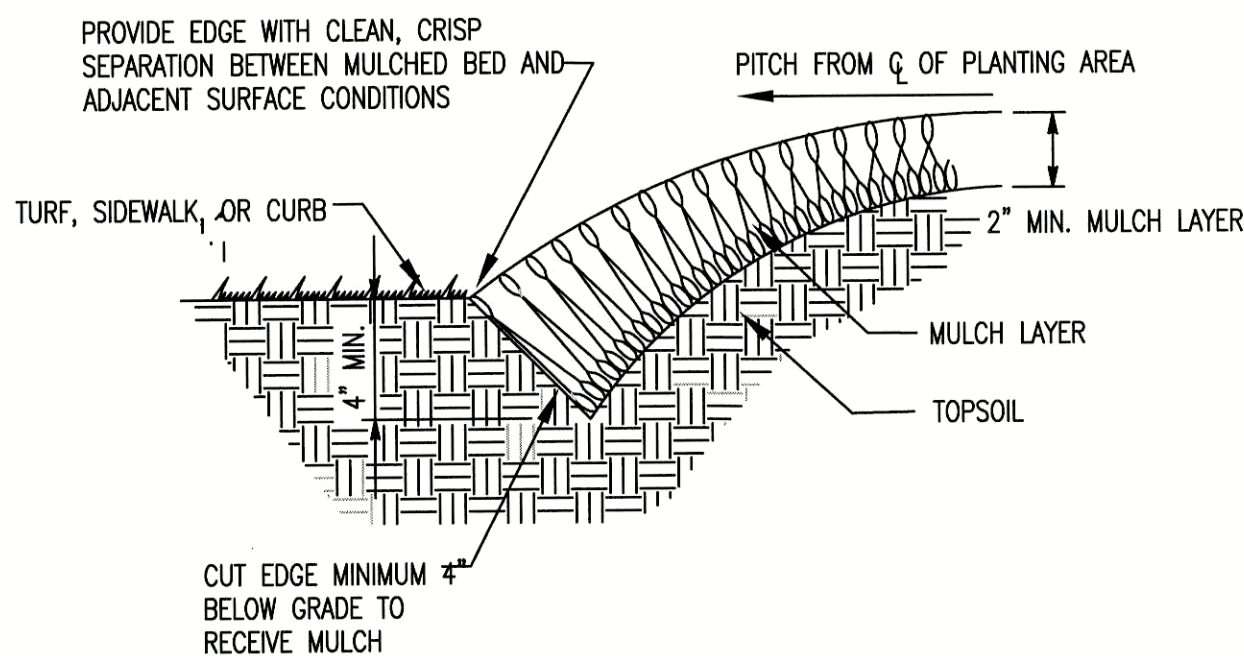
## TREE PLANTING

NOT TO SCALE



## SHRUB PLANTING

NOT TO SCALE

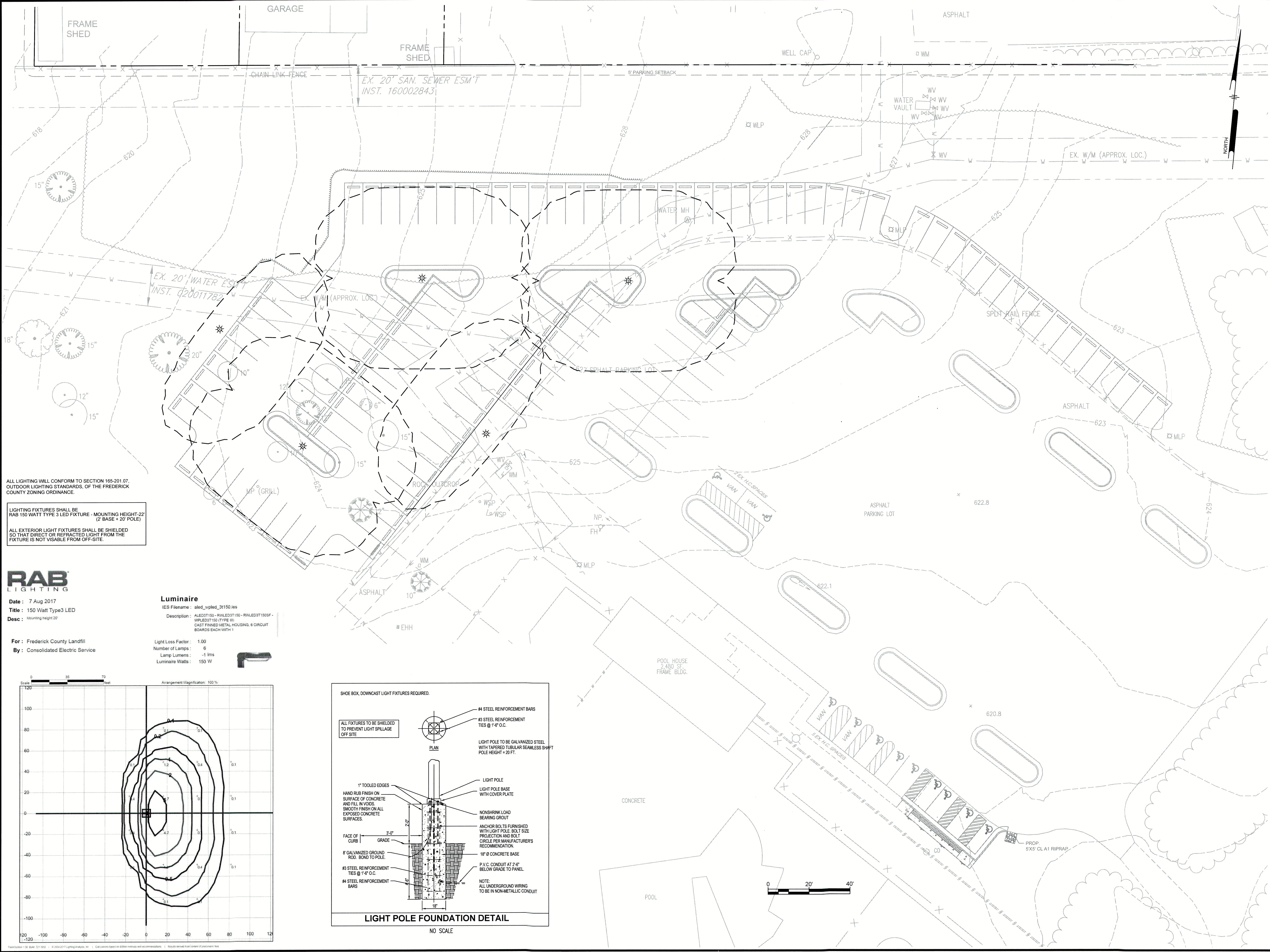


### TYPICAL MULCH EDGING DETAIL

NOT TO SCALE

[illegible]





ALL LIGHTING WILL CONFORM TO SECTION 165-201.07, OUTDOOR LIGHTING STANDARDS, OF THE FREDERICK COUNTY ZONING ORDINANCE.

LIGHTING FIXTURES SHALL BE RAB 150 WATT TYPE 3 LED FIXTURE - MOUNTING HEIGHT 22' (2' BASE + 20' POLE)

ALL EXTERIOR LIGHT FIXTURES SHALL BE SHIELDED SO THAT DIRECT OR REFRACTED LIGHT FROM THE FIXTURE IS NOT VISABLE FROM OFF-SITE.

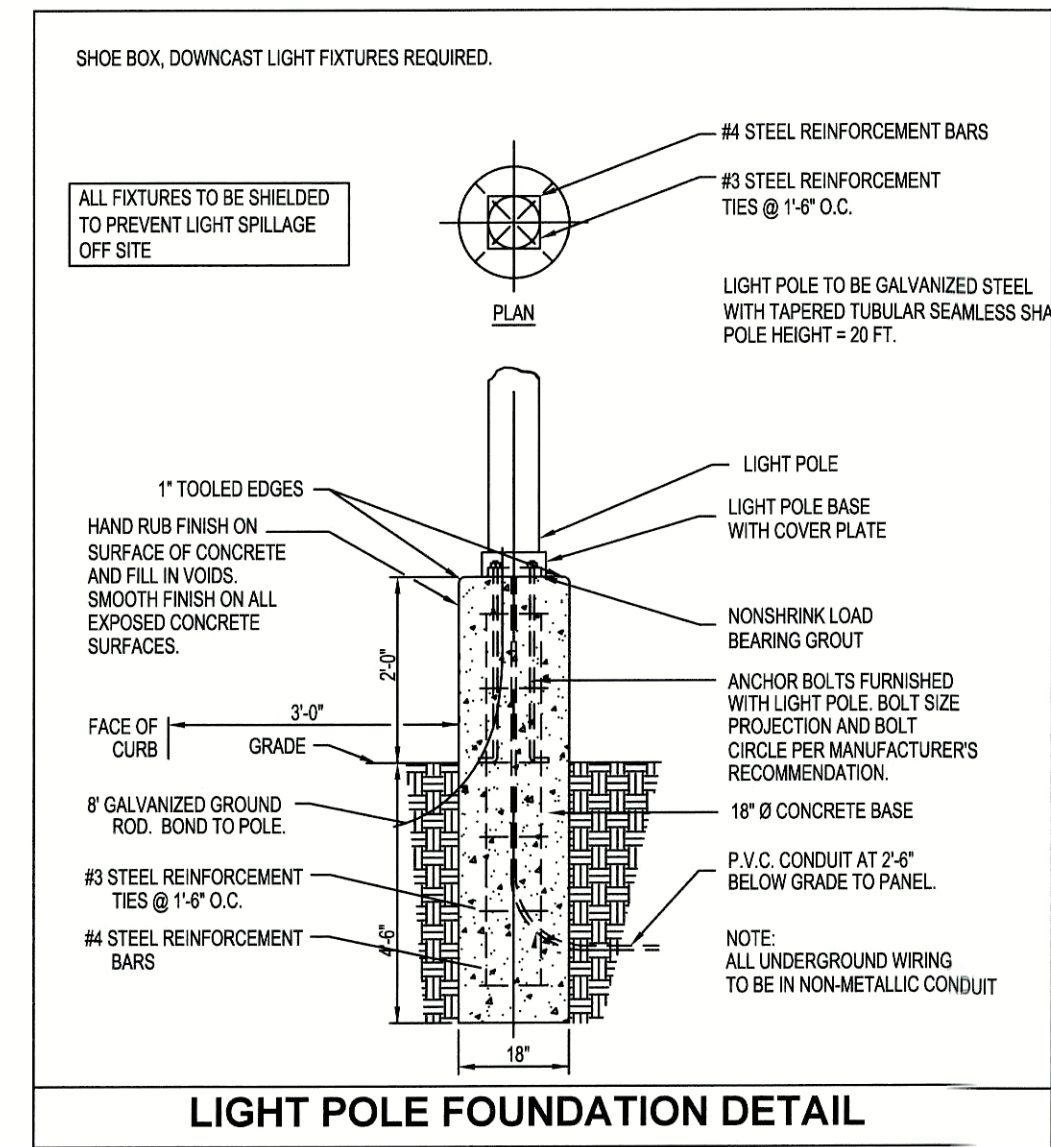
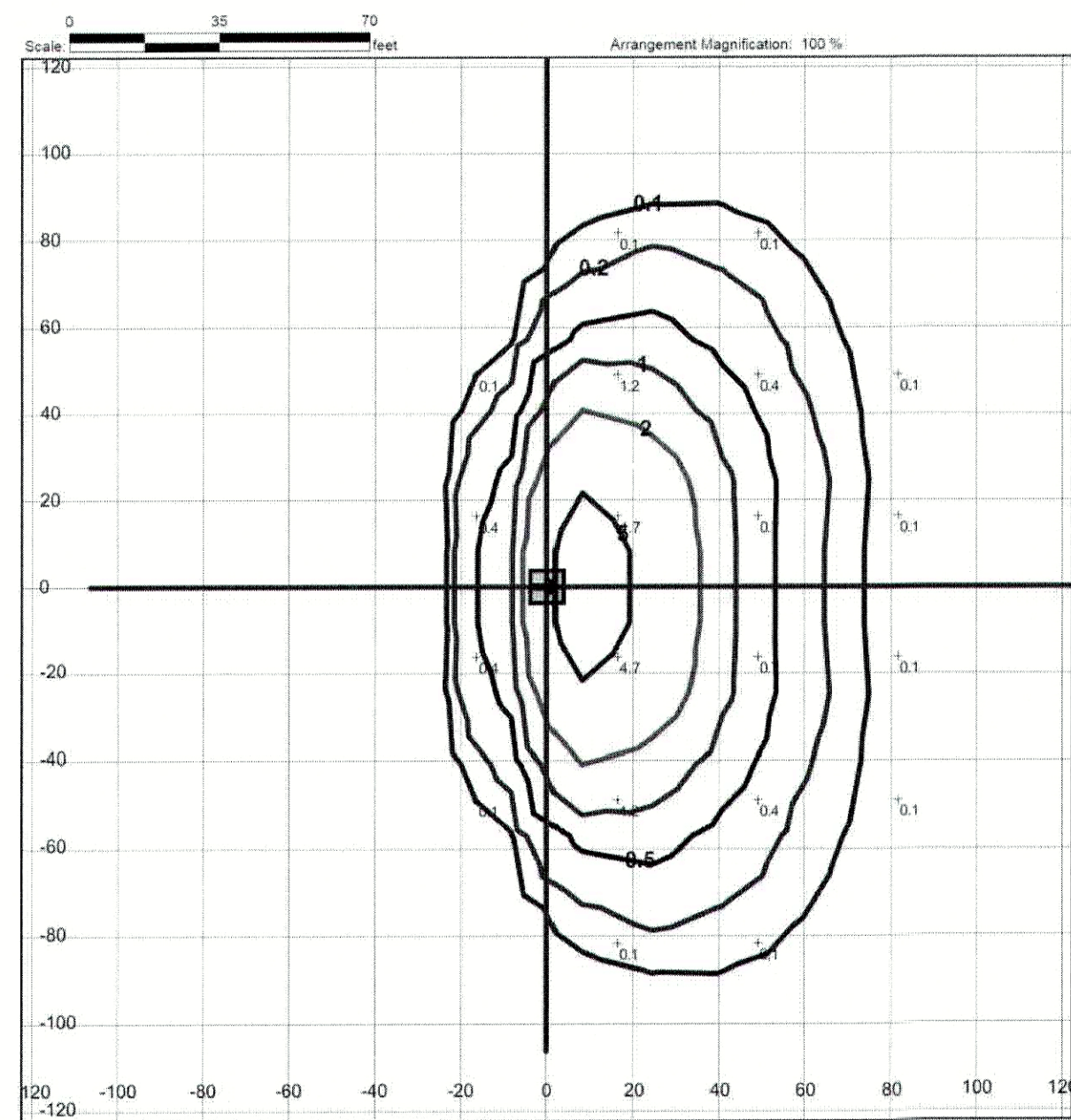


Date : 7 Aug 2017  
Title : 150 Watt Type3 LED  
Desc : Mounting height 20'

For : Frederick County Landfill  
By : Consolidated Electric Service

**Luminaire**  
IES Filename : aled\_vpld\_31150.ies  
Description : ALED3T150 - RWLED3T150 - RWLED3T150SF - WPLED3T150 (TYPE III) - CAST FINNED METAL HOUSING, 6 CIRCUIT BOARD, EACH WITH 1

Light Loss Factor : 1.00  
Number of Lamps : 6  
Lamp Lumens : 1 lms  
Luminaire Watts : 150 W



U:\cadd\p\FRED\18003 - Clearbrook Park\DESIGN\_SHEETS\SSA\_PlanCS600.dwg PLOTTED: 2/10/2018 2:38 PM BY: Kelly Malow PROJECT STATUS: — PLOT STYLE: Penmon NCS.ctb

PENNONI ASSOCIATES INC.  
117 East Piccadilly Street  
Winchester, VA 22601  
T 540.667.2139 F 540.665.0493

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CLEARBROOK PARK PARKING EXPANSION

3300 MARTINSBURG PIKE  
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LIGHTING PLAN

COUNTY OF FREDERICK, VIRGINIA  
107 NORTH KENT STREET  
WINCHESTER, VIRGINIA 22801

NO	DATE	REVISIONS	BY
1	1-22-19	REVISED PER COUNTY COMMENTS	KJM

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PROJECT: FREDC18003  
DATE: 2018-12-11  
DRAWING SCALE: AS NOTED  
DRAWN BY: DKV  
APPROVED BY: DLF

**CS600**

SHEET 12 OF 12