

# **ESSEX HIGH SCHOOL TRACK** REPLACEMENT SITE PLAN ESSEX COUNTY, VIRGINIA



VICINITY MAP

1" = 2000'

## OWNER:

ESSEX HIGH SCHOOL 460 MAIN STREET P.O. BOX 1507 WARSAW, VA 22572 TELEPHONE: (804) 333-3681 FAX: (804) 333-5586

## ENGINEER OF RECORD:

TIMMONS GROUP 1001 BOULDERS PKWY, SUITE 300 RICHMOND, VA 23225 CONTACT: STEVE RAUGH, P.E. TELEPHONE: 804-200-6500

_						
Sh	<b>DDt</b>	Ιi	et '	Tal	hl	Δ

Sheet Number	Sheet Title
C0.00	COVER SHEET
C1.00	OVERALL SITE PLAN
C1.10	ATHLETIC NOTES AND DETAILS
C2.00	EXISTING CONDITIONS AND DEMOLITION PLAN
C3.00	EROSION AND SEDIMENT CONTROL PLAN
C3.10	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
C4.00	LAYOUT PLAN
C5.00	GRADING AND DRAINAGE PLAN
C6.00	STORM PROFILES

TOTAL SHEETS: 9

DATE 04-01-2022 DRAWN BY T.PRICE DESIGNED BY T.PRICE CHECKED BY S.RAUGH SCALE AS SHOWN MENT Ш C く REP 000 S IGH ш SS Ш JOB NO. 49566 SHEET NO. *C0.00* 

C

S

......

ic No 0288

.....

DRAWING PREPARED A CORPORATE OFFICE arkway, Suite 300 | Rich 0 FAX 804 κερ 100 |

1001 Boul TEL 804.2



PAINTED SCRATCH LINE RUNWAY -







#### EROSION CONTROL NARRATIVE

#### PROJECT DESCRIPTION:

The subject property is located in Essex County at 833 High School Circle. The site is the existing Essex High School, and is bound by Airport Road to the East, Residential Homes to the North, Wooded Areas to the West and South. This project includes construction of an 8-Lane Weather Track. The project is anticipated to start in April of 2022 and reach substantial completion by August of 2022.

#### EXISTING SITE CONDITIONS:

The site is the same site of the current Essex High School. The site consists of the existing school buildings, parking, driveways, and sport and multipurpose fields. The majority of the track runoff from the site is collected in storm pipes and discharged into an existing storm structure.

#### ADJACENT AREAS:

he subject parcel is bound by Airport Road to the East, Residential Homes to the North, Wooded Areas to the West and South.

#### OFF-SITE AREAS:

Offsite areas will not be impacted with this project.

CRITICAL AREAS

- ill slopes of 3:1 or greater will be critical in nature and must be stabilized properly and immediately following construction. Avoid nearby RPA and wetlands other than where plans call out to disturb.
- EROSION AND SEDIMENT CONTROL MEASURES Jnless otherwise noted, all vegetative and structural erosion and sediment control practices are to be constructed and maintained according to the Minimum Standards and Specifications of the Virginia Erosion and Sediment Control Handbook. The Minimum Standards are to be adhered to unless otherwise waived or approved by a
- variance by authorities having jurisdiction. STRUCTURAL PRACTICES

.01 SAFETY FENCE: A protective barrier installed to prohibit undesirable use of an erosion control measure.

.02 TEMPORARY STONE CONSTRUCTION ENTRANCE: A stone pad, located at points of vehicular ingress and gress on a construction site, to reduce the soil transported onto public roads and other paved areas.

.03 CONSTRUCTION ROAD STABILIZATION: Temporary stabilization with stone of access roads, subdivision streets, parking areas and other traffic areas immediately after grading to reduce erosion caused by vehicles during vet weather, and to prevent having to regrade permanent roadbeds between initial grading and final stabilization.

.05 SILT FENCE: A temporary sediment barrier constructed of posts, filter fabric and, in some cases, a wire support ence, placed across or at the toe of a slope or in a minor drainage way to intercept and detain sediment and decrease flow velocities from drainage areas of limited size; applicable where sheet and rill erosion or small concentrated flows may be a problem. Maximum effective life of 6 months.

.07 STORM DRAIN INLET PROTECTION: The installation of various kinds of sediment trapping measures around Irop inlets or curb inlet structures prior to permanent stabilization of the disturbed area; limited to drainage areas not exceeding one acre, and not intended to control large, concentrated stormwater flows.

3.09 TEMPORARY DIVERSION DIKE: A ridge of compacted soil constructed at the top or base of a sloping disturbed area which diverts off-site runoff away from unprotected slopes and to a stabilized outlet, or to divert sediment-laden unoff to a sediment trapping structure. Maximum effective life is 18 months.

.12 DIVERSION: A permanent channel with a ridge on the lower side constructed across a slope to reduce slope ength and intercept and divert stormwater runoff to a stabilized outlet at non-erosive velocities.

.13 TEMPORARY SEDIMENT TRAP: A small ponding area, formed by constructing an earthen embankment with a stone outlet across a drainage swale, to detain sediment-laden runoff from small disturbed areas for enough time to allow most of the suspended solids to settle out. Maximum effective life is 18 months.

.14 TEMPORARY SEDIMENT BASIN: A temporary barrier or dam with a controlled stormwater release structure which is formed by constructing an embankment of compacted soil across a drainageway. It is used to detain sediment-laden runoff from drainage areas 3 acres or greater for enough time to allow most of the suspended solids to settle out. It can be constructed only where there is sufficient space and appropriate topography. Maximum effective life is 18 months unless designed as a permanent pond by a qualified professional.

.18 OUTLET PROTECTION: The installation of riprap channel sections and/or stilling basins below storm drain putlets to reduce erosion and under-cutting from scouring at outlets and to reduce flow velocities before stormwater enters receiving channels below these outlets.

0 ROCK CHECK DAMS: Small, temporary stone dams constructed across a drainage ditch to reduce the velocity of concentrated flows, reducing erosion of the swale or ditch. Limited to use in small open channels which drain 10 acres or less; should not be used in live streams.

3.30 TOPSOILING: Preserving and using topsoil to provide a suitable growth medium for vegetation used to stabilize disturbed areas. Applicable where preservation or importation of topsoil is most cost-effective method of providing a uitable growth medium; not recommended for slopes steeper than 2:I unless additional measures are taken to prevent sloughing and erosion.

.31 TEMPORARY SEEDING: Establishment of temporary vegetative cover on disturbed areas that will not be prought to final grade for periods of 30 days to one year by seeding with appropriate rapidly-growing plants.

.32 PERMANENT SEEDING: Establishment of perennial vegetative cover by planting seed on rough-graded areas hat will not be brought to final grade for a year or more or where permanent, long-lived vegetative cover is needed on ine-graded areas.

33 SODDING: Stabilizing fine-graded areas by establishing permanent grass stands with sod. Provides immediate protection against erosion, and is especially effective in grassed swales and water-ways or in areas where an mmediate aesthetic effect is desirable.

.35 MULCHING: Application of plant residues or other suitable materials to disturbed surfaces to prevent erosion and reduce overland flow velocities. Fosters plant growth by increasing available moisture and providing insulation against extreme heat or cold. Should be applied to all seeding operations, other plant materials which do not provide adequate soil protection by themselves and bare areas which cannot be seeded due to the season but which still need protection to prevent soil loss.

.36 SOIL STABILIZATION BLANKETS AND MATTING: The installation of a protective blanket (Treatment 1) or a soil stabilization mat (Treatment 2) on a prepared planting of a steep slope, channel or shoreline.

.37 TREES, SHRUBS. VINES AND GROUND COVERS: Stabilizing disturbed areas by planting trees, shrubs, vines and ground covers where turf is not preferred. These plant materials also provide food and shelter for wildlife as well as many other environmental benefits. Especially effective where ornamental plants are desirable and turf maintenance is difficult.

3.38 TREE PRESERVATION AND PROTECTION: Protecting existing trees from mechanical and other injury during land-disturbing and construction activity to ensure the survival of desirable trees where they will be effective for erosion and sediment control and provide other environmental and aesthetic benefits.

#### VEGETATIVE PRACTICES

Topsoiling (Temporary Stockpile) - 3.30 Topsoil shall be stripped from areas to be graded and stockpiled for later spreading. Stockpile locations shall be located onsite and shall be stabilized with temporary silt fence and vegetation

Temporary Seeding - 3.31

All denuded areas which will be left dormant for more than 14 days shall be seeded with fast germinating temporary vegetation immediately following grading of those areas. Selection of the seed mixture shall depend on the time of year it is applied.

#### Permanent Seeding - 3.32

The establishment of perennial vegetative cover on disturbed areas by planting seed. Soil tests are required to determine requirements for lime & fertilizer.

Mulching - 3.35 Application of plant residues or other suitable materials to the soil surface.

#### MANAGEMENT STRATEGIES

Provide sediment trapping measures as a first step in grading and seed and mulch immediately following installation.

- Provide temporary seeding or other stabilization immediately after grading.
- Isolate trenching for utilities and drainage from downstream conveyances in order to minimize perimeter controls
- All erosion and sediment control practices shall be maintained until they are no longer required to comply with the contract documents or state law.

#### PERMANENT STABILIZATION

grading. Seeding shall be in accordance with Std. & Spec. 3.32, PERMANENT SEEDING. Seed type shall be as seeded surfaces. In all seeding operations seed, fertilizer and lime shall be applied prior to mulching.

#### MINIMUM STANDARDS:

An erosion and sediment control program adopted by a district or locality must be consistent with the following criteria, techniques and methods:

- shall be applied to areas that are to be left dormant for more than one year.
- MS-2. During construction of the project, soil stockpiles and borrow areas shall be stabilized or protected with project site.
- MS-3. A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized mature enough to survive and will inhibit erosion.
- land disturbance takes place.
- after installation.
- be served by the trap or basin.
- trap shall only control drainage areas less than three acres.

b. Surface runoff from disturbed areas that is comprised of flow from drainage areas greater than or equal to three acres shall be controlled by a sediment basin. The minimum storage capacity of a sediment basin shall be 134 cubic yards per acre of drainage area. The outfall system shall, at a minimum, maintain the structural integrity of the basin during a 25-year storm of 24-hour duration. Runoff coefficients used in runoff calculations shall correspond to a bare earth condition or those conditions expected to exist while the sediment basin is utilized

- MS-7. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. Slopes that are slope stabilizing measures until the problem is corrected.
- MS-8. Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume or slope drain structure.
- MS-9. Whenever water seeps from a slope face, adequate drainage or other protection shall be provided.
- MS-11. Before newly constructed stormwater conveyance channels or pipes are made operational, adequate outlet channel and receiving channel.
- structures if armored by nonerodible cover materials.
- temporary vehicular stream crossing constructed of nonerodible material shall be provided.
- met.
- MS-16. Underground utility lines shall be installed in accordance with the following standards in addition to other applicable criteria
  - a. No more than 500 linear feet of trench may be opened at one time.
  - b. Excavated material shall be placed on the uphill side of trenches.
  - property.
  - promote stabilization.
  - e. Restabilization shall be accomplished in accordance with these regulations.
  - Applicable safety regulations shall be complied with.
- individual development lots as well as to larger land-disturbing activities. MS-18. All temporary erosion and sediment control measures shall be removed within 30 days after final site
- measures shall be permanently stabilized to prevent further erosion and sedimentation.
- MS-19. Properties and waterways downstream from development sites shall be protected from sediment deposition, and Sediment Control Handbook, Chapter 8 pages 20-24.

#### GENERAL EROSION AND SEDIMENT CONTROL NOTES:

- ES-1: Unless otherwise indicated, all vegetative and structural erosion and sediment control practices will be Regulations
- ES-2: The plan approving authority must be notified one week prior to the pre-construction 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 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 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 event. Any necessary repairs or cleanup to maintain the effectiveness of the erosion control devices shall be made immediately

### All non-paved areas disturbed by construction shall be stabilized with permanent seeding immediately following finish specified for "Minimum Care Lawns" and "General Slopes" in the Handbook. Mulch (straw or fiber) shall be used on all

MS-1. Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. Temporary soil stabilization shall be applied within seven days to denuded areas that may not be at final grade but will remain dormant for longer than 14 days. Permanent stabilization

Sediment trapping measures. The applicant is responsible for the temporary protection and permanent stabilization of all soil stockpiles on site as well as borrow areas and soil intentionally transported from the

Permanent vegetation shall not be considered established until a ground cover is achieved that is uniform,

MS-4. Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment shall be constructed as a first step in any land-disturbing activity and shall be made functional before upslope

MS-5. Stabilization measures shall be applied to earthen structures such as dams, dikes and diversions immediately

MS-6. Sediment traps and sediment basins shall be designed and constructed based upon the total drainage area to

a. The minimum storage capacity of a sediment trap shall be 134 cubic yards per acre of drainage area and the

found to be eroding excessively within one year of permanent stabilization shall be provided with additional

MS-10. All storm sewer inlets that are made operable during construction shall be protected so that sediment-laden water cannot enter the conveyance system without first being filtered or otherwise treated to remove sediment.

protection and any required temporary or permanent channel lining shall be installed in both the conveyance

MS-12. When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction. Nonerodible material shall be used for the construction of causeways and cofferdams. Earthen fill may be used for these

MS-13. When a live watercourse must be crossed by construction vehicles more than twice in any six-month period, a

MS-14. All applicable federal, state and local regulations pertaining to working in or crossing live watercourses shall be

MS-15. The bed and banks of a watercourse shall be stabilized immediately after work in the watercourse is completed.

Effluent from dewatering operations shall be filtered or passed through an approved sediment trapping device, or both, and discharged in a manner that does not adversely affect flowing streams or off-site

Material used for backfilling trenches shall be properly compacted in order to minimize erosion and

MS-17. Where construction vehicle access routes intersect paved or public roads, provisions shall be made to minimize the transport of sediment by vehicular tracking onto the paved surface. Where sediment is transported onto a paved or public road surface, the road surface shall be cleaned thoroughly at the end of each day. Sediment shall be removed from the roads by shoveling or sweeping and transported to a sediment control disposal area. Street washing shall be allowed only after sediment is removed in this manner. This provision shall apply to

stabilization or after the temporary measures are no longer needed, unless otherwise authorized by the local program authority. Trapped sediment and the disturbed soil areas resulting from the disposition of temporary

erosion and damage due to increases in volume, velocity and peak flow rate of stormwater runoff for the stated frequency storm of 24-hour duration in accordance with the standards and criteria listed in the Virginia Erosion

constructed and maintained according to minimum standards and specifications of the Virginia Erosion and Sediment Control Handbook and Virginia Regulations 9VAC25-840-40 Erosion and Sediment Control

not limited to, off-site borrow or waste areas), the contractor shall submit a supplementary erosion control

#### **EROSION AND SEDIMENT NOTES**

- 1. 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 Regulation 9VAC25-840-40.
- 2. 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.
- 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.
- 4. The contractor is responsible for installation of any additional erosion control measures necessary to prevent erosion and sedimentation as determined by the environmental engineering department.

#### PERMANENT STABILIZATION

All non-paved areas disturbed by construction shall be stabilized with permanent seeding immediately following finish grading. Topsoil shall be placed to a depth of 4" & seeding shall be in accordance with Std. & Spec. 3.32, PERMANENT SEEDING. Imported topsoil shall be obtained from a site with an approved ESC plan. Seed type shall be as specified for "Minimum Care Lawns" and "General Slopes" in the Handbook. Mulch (straw or fiber) in accordance with Std. & Spec. 3.35, shall be used on all seeded surfaces. Erosion control blankets will be installed over fill slopes which have been brought to final grade and have been seeded to protect the slopes from rill & gully erosion and to allow the seed to germinate properly. In all seeding operations seed, fertilizer and lime shall be applied per recommendations of the soil test prior to mulching.

#### MAINTENANCE (Refer to "Minimum Standards" for additional information).

The contractor is responsible for the maintenance of all erosion control measures on site. All erosion and sediment control measures shall be checked daily and after each run-off producing rainfall. The following items shall be checked in particular:

- 1. Silt fence after every storm event to ensure effective operation and remove sediment when the level of sediment deposition reaches half way to the top of the barrier.
- 2. Provide periodic top dressing of construction entrances with additional stone and repair or clean out any of the structures used to trap sediment.
- 3. Check gravel inlet protection for sediment buildup which will prevent drainage. If the gravel is clogged by sediment; remove and clean, or replace.
- 4. Check the seeding areas to ensure that a stand of grass is maintained. Fertilize and reseed as needed.

#### MAINTENANCE OF SLOPES:

When it is clear that plants have not germinated on an area or have died, these areas must be reseeded immediately to prevent erosion damage. However, it is extremely important to determine for what reason germination did not take place and make any corrective action necessary prior to reseeding the area.

All mulches and soil coverings should be inspected periodically (particularly after rainstorms) to check for erosion. Where erosion is observed in mulched areas, additional mulch should be applied. Nets and mats should be inspected after rainstorms for dislocation or failure. If washouts or breakage occur, re-install netting or matting as necessary after repairing damage to the slope or ditch. Inspections should take place up until grasses are firmly established. Where mulch is used in conjunction with ornamental plantings, inspect periodically throughout the year to determine if mulch is maintaining coverage of the soil surface; repair as needed.

All soil stabilization blankets and matting should be inspected periodically following installation, particularly after rainstorms to check for erosion and undermining. Any dislocation or failure should be repaired immediately. If washouts or breakage occurs, reinstall the material after repairing damage to the slope or ditch. Continue to monitor these areas until which time they become permanently stabilized; at that time an annual inspection should be adequate.

**TABLE 3.32-D** 

I AND USE	SPECIES					
	Tall Fescue <sup>1</sup>	95-1009				
Vinimum Care Lawn	Perennial Ryegrass	0-59				
Commercial or Resident	tial) Kentucky Bluegrass <sup>1</sup>	0-5%				
	1					
High-Maintenance Lawn     Tall Fescue     IOTAL: 200-250						
	Tall Fescue' Red Top Grass or Creening Red Fescue	2 bs				
<u> Seneral Slope (3:1 or les</u>	<u>ss)</u> Seasonal Nurse Crop <sup>2</sup>	<u>20 lbs</u>				
		TOTAL: 150 lbs				
_	Tall Fescue <sup>1</sup>	108 lbs				
_ow-Maintenance Slope	Red Top Grass or Creeping Ked Fescue	2 Da				
Steeper than 3:1)	Seasonal Nurse Crop Crownwatch <sup>3</sup>	20 lbs				
		TOTAL: 150 lbs				
1 - When selecting varies	ties of turfgrass, use the Virginia Crop Improvement /	Association (VCIA) recommended				
urfgrass variety list. Qu	ality seed will bear a label indicating that they are app	proved by VCIA. A current turfgrase				
variety list is available at	the local County Extension office or through VCIA at	804-746-4884 or at				
<u> 111p://suuan.cscs.vi.ccc.</u> 2 - Llee seasonal nurse (	<u>ntml/Turl/turl/publications/publicationsz.nem</u> ereo in accordance with seeding dates as stated belov	<b>L</b> /*				
2 - USC SCASONAL NA	February 16 <sup>th</sup> - April	Annual Rve				
	May 1 <sup>st</sup> - August 15 <sup>th</sup>	Foxtail Millet				
	August 16 <sup>th</sup> - October	Annual Rye				
August 16 <sup>th</sup> - October Annual Rye November - February 15 <sup>th</sup> Winter Rye						
· · · · · · · · · · · · ·	3 - Substitute Sericea lespedeza for Crownvetch east of Farmville, VA (May through September use hulled seed,					
3 - Substitute Sericea les	spedeza for Crownvetch east of Farmville, VA (May th	rough September use hulled seed,				
3 - Substitute Sericea les all other periods, use un used include in any slop	spedeza for Crownvetch east of Farmville, VA (May the nulled Sericea). If Flatpea is used, increase rate to 30 a or low maintenance mixture during warmer seeding	rough September use hulled seed, lbs./acre. If Weeping Lovegrass is periods increase to 30 -40				
3 - Substitute Sericea les all other periods, use un used, include in any slop	spedeza for Crownvetch east of Farmville, VA (May th hulled Sericea). If Flatpea is used, increase rate to 30 e or low maintenance mixture during warmer seeding	rough September use hulled seed, lbs./acre. If Weeping Lovegrass is periods, increase to 30 -40				
3 - Substitute Sericea les all other periods, use unf used, include in any slop	spedeza for Crownvetch east of Farmville, VA (May the hulled Sericea). If Flatpea is used, increase rate to 30 ie or low maintenance mixture during warmer seeding FERTILIZER & LIME	nrough September use hulled seed, lbs./acre. If Weeping Lovegrass is periods, increase to 30 -40				
<ul> <li>3 - Substitute Sericea les all other periods, use unl used, include in any slop</li> <li>Apply 10-20-<sup>-</sup></li> <li>Apply Pulver</li> <li>NOTE:</li> <li>- A soil test is necessary</li> <li>- Incorporate the lime ar</li> </ul>	spedeza for Crownvetch east of Farmville, VA (May the hulled Sericea). If Flatpea is used, increase rate to 30 be or low maintenance mixture during warmer seeding FERTILIZER & LIME 10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,0 ized Agricultural Limestone at a rate of 2 tons/acre / to determine the actual amount of lime required to an ind fertilizer into the top 4 – 6 inches of the soil by disk	hrough September use hulled seed, blbs./acre. If Weeping Lovegrass is periods, increase to 30 -40 000 sq. ft.) (or 90 lbs. / 1,000 sq. ft.) djust the soil pH of site. ing or by other means.				
<ul> <li>3 - Substitute Sericea les all other periods, use unl used, include in any slop</li> <li>Apply 10-20-<sup>-</sup></li> <li>Apply Pulver</li> <li>NOTE:</li> <li>A soil test is necessary</li> <li>Incorporate the lime ar</li> <li>When applying Slowly</li> </ul>	Spedeza for Crownvetch east of Farmville, VA (May the hulled Sericea). If Flatpea is used, increase rate to 30 are or low maintenance mixture during warmer seeding  FERTILIZER & LIME  10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,0 ized Agricultural Limestone at a rate of 2 tons/acre  / to determine the actual amount of lime required to an id fertilizer into the top 4 – 6 inches of the soil by disk Available Nitrogen, use rates available in Erosion & 5 are and the source of	arough September use hulled seed, ) Ibs./acre. If Weeping Lovegrass is <u>) periods, increase to 30 -40</u> )00 sq. ft.) (or 90 lbs. / 1,000 sq. ft.) djust the soil pH of site. ing or by other means. <u>Sediment Control Technical Bulletin</u>				
<ul> <li>3 - Substitute Sericea les all other periods, use unlused, include in any slop</li> <li>Apply 10-20-7</li> <li>Apply Pulver</li> <li>NOTE:</li> <li>A soil test is necessary</li> <li>Incorporate the lime ar</li> <li>When applying Slowly</li> <li>4, 2003 Nutrient Manage</li> </ul>	Spedeza for Crownvetch east of Farmville, VA (May the hulled Sericea). If Flatpea is used, increase rate to 30 are or low maintenance mixture during warmer seeding  FERTILIZER & LIME  10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,0 ized Agricultural Limestone at a rate of 2 tons/acre  / to determine the actual amount of lime required to an difertilizer into the top 4 – 6 inches of the soil by disk. Available Nitrogen, use rates available in Erosion & S gement for Development Sites at http://www.dcr.state	arough September use hulled seed, Ibs./acre. If Weeping Lovegrass is periods, increase to 30 -40 100 sq. ft.) (or 90 lbs. / 1,000 sq. ft.) djust the soil pH of site. ing or by other means. <u>Sediment Control Technical Bulletin</u> .va.us/sw/e&s.htm#pubs				
<ul> <li>3 - Substitute Sericea les all other periods, use unl used, include in any slop</li> <li>Apply 10-20-<sup>2</sup></li> <li>Apply Pulver</li> <li>NOTE:</li> <li>A soil test is necessary</li> <li>Incorporate the lime ar</li> <li>When applying Slowly # 4, 2003 Nutrient Manage</li> </ul>	spedeza for Crownvetch east of Farmville, VA (May the hulled Sericea). If Flatpea is used, increase rate to 30 are or low maintenance mixture during warmer seeding  FERTILIZER & LIME  10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,0 ized Agricultural Limestone at a rate of 2 tons/acre  / to determine the actual amount of lime required to a and fertilizer into the top 4 – 6 inches of the soil by disk. Available Nitrogen, use rates available in Erosion & 3 gement for Development Sites at http://www.dcr.state	nrough September use hulled seed, blbs./acre. If Weeping Lovegrass is periods, increase to 30 -40 000 sq. ft.) (or 90 lbs. / 1,000 sq. ft.) djust the soil pH of site. ing or by other means. Sediment Control Technical Bulletin .va.us/sw/e&s.htm#pubs				
<ul> <li>3 - Substitute Sericea les all other periods, use unl used, include in any slop</li> <li>Apply 10-20-7</li> <li>Apply Pulver</li> <li>NOTE: <ul> <li>A soil test is necessary</li> <li>Incorporate the lime ar</li> <li>When applying Slowly # 4, 2003 Nutrient Manage</li> </ul> </li> </ul>	TABLE 3.31-B (Revised June 2003) TEMPORARY SEEDING SPECIFICATION QUICK REFERENCE FOR ALL REGION:	Ibs./acre. If Weeping Lovegrass is periods, increase to 30 -40 000 sq. ft.) (or 90 lbs. / 1,000 sq. ft.) djust the soil pH of site. ing or by other means. Sediment Control Technical Bulletin .va.us/sw/e&s.htm#pubs				
<ul> <li>3 - Substitute Sericea les all other periods, use unl used, include in any slop</li> <li>Apply 10-20-<sup>-</sup></li> <li>Apply Pulver</li> <li>NOTE:</li> <li>A soil test is necessary</li> <li>Incorporate the lime ar</li> <li>When applying Slowly # 4, 2003 Nutrient Manage</li> </ul>	Spedeza for Crownvetch east of Farmville, VA (May the hulled Sericea). If Flatpea is used, increase rate to 30 be or low maintenance mixture during warmer seeding FERTILIZER & LIME 10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,0 ized Agricultural Limestone at a rate of 2 tons/acre / to determine the actual amount of lime required to a nd fertilizer into the top 4 – 6 inches of the soil by disk / Available Nitrogen, use rates available in Erosion & S gement for Development Sites at http://www.dcr.state TABLE 3.31-B (Revised June 2003) TEMPORARY SEEDING SPECIFICATION QUICK REFERENCE FOR ALL REGION: SEED	Arough September use hulled seed, I lbs./acre. If Weeping Lovegrass is g periods, increase to 30 -40 000 sq. ft.) (or 90 lbs. / 1,000 sq. ft.) djust the soil pH of site. ing or by other means. Sediment Control Technical Bulletin .va.us/sw/e&s.htm#pubs IS S				
<ul> <li>3 - Substitute Sericea les all other periods, use unl used, include in any slop</li> <li>Apply 10-20</li> <li>Apply Pulver</li> <li>NOTE:</li> <li>A soil test is necessary</li> <li>Incorporate the lime ar</li> <li>When applying Slowly # 4, 2003 Nutrient Manage</li> </ul>	November - February 10         spedeza for Crownvetch east of Farmville, VA (May the hulled Sericea). If Flatpea is used, increase rate to 30 be or low maintenance mixture during warmer seeding         FERTILIZER & LIME         10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,0 ized Agricultural Limestone at a rate of 2 tons/acre         / to determine the actual amount of lime required to a nd fertilizer into the top 4 – 6 inches of the soil by disk         Available Nitrogen, use rates available in Erosion & S gement for Development Sites at http://www.dcr.state         TABLE 3.31-B         (Revised June 2003)         TEMPORARY SEEDING SPECIFICATION         QUICK REFERENCE FOR ALL REGION         SPECIES	APPLICATION RATES				
<ul> <li>3 - Substitute Sericea les all other periods, use unl used, include in any slop</li> <li>Apply 10-20 • Apply Pulver</li> <li>NOTE: <ul> <li>A soil test is necessary</li> <li>Incorporate the lime ar</li> <li>When applying Slowly</li> </ul> </li> <li># 4, 2003 Nutrient Manage</li> </ul> APPLICATION DATES Sept. 1 - Feb. 15	November - February 10         spedeza for Crownvetch east of Farmville, VA (May the hulled Sericea). If Flatpea is used, increase rate to 30 peor low maintenance mixture during warmer seeding         FERTILIZER & LIME         10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,0         ized Agricultural Limestone at a rate of 2 tons/acre         / to determine the actual amount of lime required to a nd fertilizer into the top 4 – 6 inches of the soil by disk         / Available Nitrogen, use rates available in Erosion & 9         gement for Development Sites at http://www.dcr.state         TABLE 3.31-B         (Revised June 2003)         TEMPORARY SEEDING SPECIFICATION         QUICK REFERENCE FOR ALL REGION:         SPECIES         50/50 Mix of Annual Ryegrass (lolium multi-florum) & Cereal (Winter) Rye (Secale cereale)	APPLICATION RATES				
<ul> <li>3 - Substitute Sericea les all other periods, use unlused, include in any slop</li> <li>Apply 10-20</li> <li>Apply Pulver</li> <li>NOTE: <ul> <li>A soil test is necessary</li> <li>Incorporate the lime ar</li> <li>When applying Slowly # 4, 2003 Nutrient Manage</li> </ul> </li> <li>APPLICATION DATES <ul> <li>Sept. 1 - Feb. 15</li> <li>=eb. 16 - Apr. 30</li> </ul> </li> </ul>	November - February 10         spedeza for Crownvetch east of Farmville, VA (May the hulled Sericea). If Flatpea is used, increase rate to 30 peor low maintenance mixture during warmer seeding         FERTILIZER & LIME         10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,0 ized Agricultural Limestone at a rate of 2 tons/acre         / to determine the actual amount of lime required to a nd fertilizer into the top 4 – 6 inches of the soil by disk         / Available Nitrogen, use rates available in Erosion & 1 gement for Development Sites at http://www.dcr.state         TABLE 3.31-B         (Revised June 2003)         TEMPORARY SEEDING SPECIFICATION         QUICK REFERENCE FOR ALL REGION         SPECIES         50/50 Mix of Annual Ryegrass (lolium multi-florum) & Cereal (Winter) Rye (Secale cereale)         Annual Ryegrass (lolium multi-florum)	Application of the section of the se				
<ul> <li>3 - Substitute Sericea les all other periods, use unlused, include in any slop</li> <li>Apply 10-20-' <ul> <li>Apply Pulver</li> </ul> </li> <li>NOTE: <ul> <li>A soil test is necessary</li> <li>Incorporate the lime ar</li> <li>When applying Slowly # 4, 2003 Nutrient Manage</li> </ul> </li> <li>APPLICATION DATES <ul> <li>Sept. 1 - Feb. 15</li> <li>Eeb. 16 - Apr. 30</li> <li>Way 1 - Aug. 31</li> </ul> </li> </ul>	November Periodaly 10         spedeza for Crownvetch east of Farmville, VA (May the hulled Sericea). If Flatpea is used, increase rate to 30 period of the series of the seri	APPLICATION RATES 50 -100 (lbs/acre) 60 - 100 (lbs/acre) 50 (lbs/acre) 50 (lbs/acre) 50 (lbs/acre) 50 (lbs/acre)				

2 - Incorporate the lime and fertilizer into the top 4 - 6 inches of the soil by disking 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#pubs

![](_page_5_Figure_140.jpeg)

![](_page_5_Figure_141.jpeg)

![](_page_6_Figure_0.jpeg)

![](_page_7_Figure_0.jpeg)

![](_page_8_Figure_0.jpeg)

![](_page_8_Figure_1.jpeg)

301\49566-Essex\_HS\_Track\DWG\Sheet\CD\49566C-C7.00-PFSW.dwg | Plotted on 4/1/2022 2:08 PM | by Steve Rau

STORM PIPE TABLE									
PIPE #	DIA	FROM - TO	UPSTREAM	DOWNSTREAM	SLOPE	LENGTH	DESCRIPTION	STRUCTURE	#
A1	12"	FX-1 - A2	22 50	23.13	1.04%	60 44 I F	12" HDPE	A2	
			22.00	20.10	1.0470	00.44 Li		A4	
A3	6"	A2 - A4	23.13	23.45	0.68%	47.04 LF	6" PERFORATED HDPE (SINGLE-WALL)	A.C.	
A5	6"	NULL5 - A6	23.68	23.93	0.30%	83.14 LF	6" PERFORATED HDPE (SINGLE-WALL)	A0	$\rightarrow$
Δ7	6"	Δ <u>6 -</u> Δ <u>8</u>	23.03	24.42	0.30%	162 03 I F	6" PERFORATED HDPE (SINGLE-WALL)	A8	
		A0 - A0	20.00	27.72	0.3070	102.35 LI		A10	
A9	6"	NULL9 - A10	24.67	24.90	0.30%	76.65 LF	6" PERFORATED HDPE (SINGLE-WALL)		+
A11	6"	A10 - A12	24.90	25.30	0.53%	75.65 LF	6" PERFORATED HDPE (SINGLE-WALL)	A12	
								B2	
B1	6"	A2 - B2	23.13	23.45	0.30%	106.27 LF	6" PERFORATED HDPE (SINGLE-WALL)	B4	-
B3	6"	NULL3 - B4	23.68	23.93	0.30%	83.14 LF	6" PERFORATED HDPE (SINGLE-WALL)		$\rightarrow$
B5	6"	R4 R6	22.02	24.42	0.30%	162.031 E	6" PERFORATED HDPE (SINGLE-WALL)	B6	
B5	0	B4 - B0	23.95	24.42	0.30 %	102.95 LF		B8	
B7	6"	NULL7 - B8	24.67	24.90	0.30%	76.65 LF	6" PERFORATED HDPE (SINGLE-WALL)		_
B9	6"	B8 - B10	24,90	25.30	0.53%	75.65 LF	6" PERFORATED HDPE (SINGLE-WALL)	B10	

STORM STRUCTURE TABLE						
URE #	ТОР	STRUCTURE HEIGHT	DESCRIPTION			
	26.60	3.47'	12"x12" Drain Basin - Grate Top			
	26.30	3.13'	12"x12" Drain Basin - Grate Top			
	26.35	2.69'	12"x12" Drain Basin - Grate Top			
	26.35	2.21'	12"x12" Drain Basin - Grate Top			
)	26.40	1.78'	12"x12" Drain Basin - Grate Top			
2	26.80	1.79'	12"x12" Drain Basin - Solid Top			
	26.40	3.23'	12"x12" Drain Basin - Grate Top			
	26.35	2.42'	12"x12" Drain Basin - Grate Top			

1.93'

1.60'

1.79'

12"x12" Drain Basin - Grate Top

12"x12" Drain Basin - Grate Top

12"x12" Drain Basin - Solid Top

26.35

26.40

26.80

![](_page_8_Figure_6.jpeg)

C6.00