



MVP Southgate Amendment Project

Docket No. CP25-XX-000

Resource Report 7 – Soils

November 2018 (Docket No. CP19-14-000)

Amended February 2025

MVP Southgate Amendment Project Resource Report 7 – Soils

Resource Report 7 - Filing Requirements	
Information	Location in Resource Report
Minimum Filing Requirements	
1. List, by milepost, the soil associations that would be crossed and describe the erosion potential, fertility, and drainage characteristics of each association (§ 380.12(i)(1)).	Sections 7.2 and 7.3 Tables 7.2-1 and 7.2-2
2. If an aboveground facility site is greater than 5 acres: (§ 380.12(i)(2)) (i) List the soil series within the property and the percentage of the property comprised of each series; (ii) List the percentage of each series which would be permanently disturbed; (iii) Describe the characteristics of each soil series; and, (iv) Indicate which are classified as prime or unique farmland by the U.S. Department of Agriculture, Natural Resources Conservation Service.	Table 7.2-2
3. Identify, by milepost, potential impact from: Soil erosion due to water, wind, or loss of vegetation; soil compaction and damage to soil structure resulting from movement of construction vehicles; wet soils and soils with poor drainage that are especially prone to structural damage; damage to drainage tile systems due to movement of construction vehicles and trenching activities; and interference with the operation of agricultural equipment due to the probability of large stones or blasted rock occurring on or near the surface as a result of construction (§ 380.12(i)(3,4)).	Section 7.3 Tables 7.2-1 and 7.2-2
4. Identify, by milepost, cropland and residential areas where loss of soil fertility due to trenching and backfilling could occur. Describe proposed mitigation measures to reduce the potential for adverse impact to soils or agricultural productivity. Compare proposed mitigation measures with the staff's current Upland Erosion Control, Revegetation and Maintenance Plan' (§ 380.12(l)(5) and explain how proposed mitigation measures provide equivalent or greater protections to the environment (§ 380.12(i)(4)).	Section 7.4
Additional Information Often Missing and Resulting in Data Requests	
5. If the applicant generally proposes to adopt the Federal Energy Regulatory Commission staff's Upland Erosion Control, Revegetation, and Maintenance Plan except at certain locations, identify on a site-specific basis locations where alternative measures are proposed, and describe the alternative measures that will ensure an equal or greater level of protection.	Resource Report 2, Appendix 2-F
6. Identify invasive species and/or noxious weeds that occur in the area and measure to prevent the introduction and/or spread of these species (if not addressed in Resource Report 3).	Section 3.3.10 of Resource Report 3
7. Provide documentation of consultation with the U.S. Department of Agriculture's Natural Resources Conservation Service or other applicable agencies regarding seed mixes, erosion control, and invasive species/noxious weeds.	Resource Report 3, Resource Report 1, Appendix 1-G.

RESOURCE REPORT 7 SOILS

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LIST OF ACRONYMS AND ABBREVIATIONS

Amendment Project	MVP Southgate Amendment Project
BMPs	best management practices
E&SC	Erosion and Sediment Control
FEIS	Final Environmental Impact Statement
FERC or Commission	Federal Energy Regulatory Commission
Plan	<i>Upland Erosion Control, Revegetation, and Maintenance Plan</i>
Procedures	<i>Wetland and Waterbody Construction and Mitigation Procedures</i>
MLV	mainline valve
Mountain Valley	Mountain Valley Pipeline, LLC
MP	milepost
NASS	National Agricultural Statistics Service
NRCS	Natural Resources Conservation Service
Original Certificated Project	MVP Southgate Project, as approved on June 18, 2020
SSURGO	State Soil Survey Geographic database
USDA	United States Department of Agriculture
WEGs	Wind Erodibility Groups

RESOURCE REPORT 7 SOILS

7.1 INTRODUCTION

On June 18, 2020, in Docket No. CP19-14-000, the Federal Energy Regulatory Commission (“FERC” or “Commission”) issued a Certificate of Public Convenience and Necessity pursuant to Section 7(c) of the Natural Gas Act to Mountain Valley Pipeline, LLC (“Mountain Valley”) authorizing Mountain Valley to construct and operate the MVP Southgate Project (or “Original Certificated Project”). A Final Environmental Impact Statement (“FEIS”) was issued by FERC on February 14, 2020.

In December 2023, Mountain Valley submitted an update on the status of the Original Certificated Project, indicating that it had entered into precedent agreements for a redesigned pipeline route. Mountain Valley is currently seeking to amend the MVP Southgate Project (“Amendment Project”) by truncating the Original Certificated Project to approximately 31.3 miles, incorporating certain route deviations, increasing the diameter of the pipeline, removing the Lambert Compressor Station, and modifying the proposed interconnects. The Amendment Project facilities will be located in Pittsylvania County, Virginia, and Rockingham County, North Carolina. See Resource Report 1 for additional information on the Original Certificated Project and Amendment Project.

7.1.1 Environmental Resource Report Organization

Resource Report 7 includes descriptions and supporting information regarding soils and sediments crossed by the Amendment Project and is prepared and organized according to the FERC (2017) *Guidance Manual for Environmental Report Preparation*. The information presented in Resource Report 7 has not changed from the FEIS issued for the Original Certificated Project on February 14, 2020, except where noted.

7.2 SOILS

To minimize impacts to soils along the pipeline route, Mountain Valley is committed to implementing the best management practices and mitigation measures included in the FERC (2013a; 2013b) *Upland Erosion Control, Revegetation and Maintenance Plan* (“Plan”) and *Wetland and Waterbody Construction and Mitigation Procedures* (“Procedures”). The project-specific Erosion and Sediment Control (“E&SC”) plan incorporated and documented in the FEIS will be updated for the Amendment Project. Acid-producing soils could be encountered along the pipeline in areas of active or previous mining activities where sulfide minerals are exposed to runoff and are addressed in Resource Report 6.

7.2.1 Soil Series

Soils that exhibit similar physical, chemical, horizon composition, thickness, and arrangement make up a soil series. Soil series and map unit designations for similar soils can vary by region, state, and county. General descriptions for the soil series crossed by the Original Certificated Project were provided in the FEIS.

Soil types crossed by the Amendment Project do not differ from those crossed by the Original Certificated Project. These soil types were included as part of the FEIS. Similar to the Original Certificated Project, soil types crossed by the Amendment Project route were evaluated for potential soil limitations. Soil

limitations in the Amendment Project workspaces are summarized in Table 7.2-1 below and listed by milepost (“MP”) in Table 7.2-2 in Appendix 7-A. Table 7.2-2 also provides the characteristics of each soil series map unit. Soil map unit descriptions and their associated map unit symbols (shown in parentheses) are included in Appendix 7-B. Soil series map unit descriptions are based on the dominant component(s) per map unit.

7.2.2 Amendment Project Facilities

7.2.2.1 Pipeline Facilities

See Section 1.2.1 of Resource Report 1 for information on pipeline facilities.

Table 7.2-1 summarizes the percentage of the Amendment Project with soil limitations, and Table 7.2-2 in Appendix 7-A identifies the characteristics of each soil map unit crossed by the pipeline alignment.

7.2.2.2 Aboveground Facilities

See Section 1.2.2 of Resource Report 1 for information on aboveground facilities. Table 7.2-2 in Appendix 7-A details the soil map units located within the proposed layout of the new station facilities and additional aboveground facilities, as well as the corresponding soil characteristics. Each soil map unit is described in Appendix 7-B. Appendix 7-C depicts the location of the aboveground facilities and associated soil map units.

7.2.2.3 Contractor Yards

See Section 1.3.5 of Resource Report 1 for information on contractor yards.

Table 7.2-1 summarizes the percentage of the contractor yards with soil limitations, and Table 7.2-2 in Appendix 7-A details the soil map units located within the contractor yards, as well as the corresponding characteristics. Each soil map unit is described in Appendix 7-B.

7.2.2.4 Access Roads

See Section 1.3.3 of Resource Report 1 for information on access roads.

Table 7.2-1 summarizes the percent of access roads with soil limitations, and Table 7.2-2 in Appendix 7-A details the soil map units located along access roads, as well as the corresponding characteristics. Each soil series map unit is described in Appendix 7-B.

Table 7.2-1

Summary of Soil Characteristics and Limitations for the Amendment Project

Facility / County, State	Area of Amendment Project Workspace within Designated Soil Classification / Limitation (Acres)							
	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	Compaction Prone <u>b/</u>	Hydric Soils <u>c/</u>	Highly Water Erodible <u>d/</u>	Highly Wind Erodible <u>e/</u>	Shallow Depth to Bedrock <u>f/</u>	Low Revegetation Potential <u>g/</u>	Stony / Rocky <u>h/</u>
H-650 Pipeline								
Pittsylvania, VA	360.56	15.46	2.64	8.92	0.00	3.61	5.12	22.12
Rockingham, NC	70.53	4.54	0.00	4.54	0.00	0.00	0.00	0.00
Groundbeds								
Pittsylvania, VA	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rockingham, NC	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aboveground Facilities								
<i>Pittsylvania, VA</i>								
Lambert Interconnect / MLV 1 (MP 0.0)	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MLV 2	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MLV 3	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contractor Yards	29.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Access Roads	30.02	0.00	0.00	0.30	0.00	0.00	0.00	0.49
<i>Rockingham, NC</i>								
LN 3600 Interconnect (MP 28.9)	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dan River Interconnect #1 / MLV 4 (MP 31.3)	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dan River Interconnect #2 (MP 31.3)	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contractor Yards	0.00	8.10	8.10	5.21	0.00	8.10	0.00	13.31
Access Roads	10.81	0.00	0.00	0.85	0.00	0.00	0.00	0.02
Amendment Project Total	504.72	28.10	10.74	19.81	0.00	11.71	5.12	35.94
Percent of Amendment Project Area <u>i/</u>	87.65%	4.88%	1.86%	3.44%	0.00%	2.03%	0.89%	6.24%

Note: A pig launcher and a pig receiver will be within other aboveground facility sites (i.e., the Lambert Interconnect and Dan River Interconnect #1, respectively); therefore, acreage calculations for the pig launcher and receiver are included with those facilities. Mainline valves (“MLVs”) will be 30 feet by 30 feet in area and will be wholly contained within the permanent right-of-way. MLVs at the Lambert Interconnect and the Dan River Interconnect #1 will be located within the fenceline of those facilities; therefore, acreage calculations for these MLVs are included with those facilities.

a/ Prime farmland includes soils designated by the U.S. Department of Agriculture (“USDA”) Natural Resources Conservation Service (“NRCS”) if drained and/or reclaimed of excess salts and sodium. No areas of unique farmland or farmland of local importance are affected by the Amendment Project (USDA National Agricultural Statistics Service [“NASS”] 2022a; 2022b).

b/ Soils categorized as compaction prone include soils with clay loam or finer texture and a drainage class of poor, somewhat poor, and very poor.

c/ Hydric soils include soils with a USDA NRCS hydric classification – presence of predominantly hydric (67% to 99%) and hydric (100%).

d/ Highly water erodible soils include soils with a K factor that is greater than 0.4.

e/ Highly wind erodible soils include those in wind erodibility groups 1 or 2.

f/ Shallow bedrock soils included soils that have a depth to bedrock of less than 5 feet (60 inches).

g/ Soils with low revegetation potential include soils with an average low rating based on factors including but not limited to drainage class of excessively drained or very poorly drained, K factor greater than 0.4, and slope greater than 25 percent (see Table 7.2-2 in Appendix 7-A).

h/ Stony/Rocky soils include those with a cobbly, stony, bouldery, shaly, channery, very gravelly, or extremely gravelly modifier to the textural class of the surface layer and/or that have a surface layer that contains greater than 5 percent by weight rock fragments larger than 3 inches.

i/ Totals do not equal 100 percent as not all soils are classified with limitations, and certain soils are classified as having multiple limitations.

7.3 SOIL IMPACTS

Pipeline construction activities generally result in temporary, minor soil impacts based upon the incorporation of best management practices (“BMPs”) into the Amendment Project design and subsequent implementation from the start of construction until final stabilization is achieved. These BMPs will be specified in the project-specific E&SC plans. Potential soil impacts from the construction of the Amendment Project are anticipated to be the same as those described in the FEIS for the Original Certificated Project for pipeline and aboveground facility impacts.

Soil resource impacts will occur primarily during the construction period. Both temporary and permanent impacts will result from the construction of the proposed facilities as described in the FEIS for the Original Certificated Project. Table 7.2-1 summarizes soil limitations in the Amendment Project area. Table 7.2-2 in Appendix 7-A lists specific locations (by MP) along the pipeline alignment and at aboveground facilities with potential soil limitations and quantifies length crossed (miles), with respect to erosion potential of highly water and wind erodible soils; stony/rocky soils; shallow depth to bedrock; soil compaction; revegetation potential; drainage class; hydric rating; and prime farmland or farmland of statewide importance.

7.3.1 Erosion by Wind and Water

7.3.1.1 Erosion by Water

Factors that influence the degree of erosion include soil texture, structure, length and percent of slope, vegetative cover, and rainfall or wind intensity. Soils most susceptible to erosion by water are typified by bare or sparse vegetative cover, non-cohesive soil particles with low infiltration rates, and moderate to steep slopes. The methods for determining the potential for soils to be eroded by water have not changed from the FEIS. The potential for soils to be eroded by water may be evaluated using the soil’s “K factor,” which is defined in the FEIS. The higher the K factor value, the more susceptible the soil is to water erosion (Multimedia Environmental Pollutant Assessment System 2010).

K factors were obtained from the USDA NRCS Web Soil Survey (USDA NRCS 2024a). Based on the average K factor, each soil type was grouped into a water erosion class of “Low,” “Moderate,” and “High.” Low K values ranged from 0.02 to 0.20, moderate K values ranged from 0.20 to 0.40, and high K values ranged from 0.40 to 0.69. For map units comprised of a complex of different soil types, the soil type with the most limiting average K factor was used to categorize the map unit into a low, medium, or high class. K factors in the Amendment Project area are “Low,” “Moderate,” and “High;” however, high K values were not identified as prevalent in the Amendment Project area. The K factors for soil types in the Amendment Project area are provided in Table 7.2-2 in Appendix 7-A.

7.3.1.2 Erosion by Wind

Wind Erodibility Groups (“WEGs”) are primarily based upon soil texture, clay content, and rock fragment content and are described in the FEIS. WEG data were obtained from the USDA NRCS Web Soil Survey (USDA NRCS 2024a) and reviewed for the Amendment Project. Like the Original Certificated Project as described in the FEIS, no highly wind erodible soils were identified in the Amendment Project area. The WEG for soil types in the Amendment Project area is provided in Table 7.2-2 in Appendix 7-A.

7.3.2 Hydric Soil

Hydric soils are defined by the National Technical Committee for Hydric Soils as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register 2002). The description of hydric soils has not changed from the FEIS.

The depth to seasonal mean high water table indicates the average depth of the water table from the ground surface. High water tables have an impact on trenching design and construction. High water tables at or near the surface also generally coincide with the location of hydric soils, which are indicative of wetland hydrology. Dewatering of the trench or bore pits and/or additional precautions may be necessary where the groundwater is encountered during pipeline installation in this particular area. Impacts associated with hydric soils often coincide with impacts associated with construction in wetlands. Since field-delineated resources are considerably more accurate than the soil surveys discussed herein, refer to Resource Report 2 for a discussion on the proposed minimization of project-related impacts in wetland areas. The FERC Procedures also provide BMPs for construction-related impacts to hydric soils within wetlands. Hydric ratings for soils in the Amendment Project area are provided in Table 7.2-2 in Appendix 7-A.

7.3.3 Drainage Class

Soil drainage refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed and is further described in the FEIS. The drainage class for soil types in the Amendment Project area is provided in Table 7.2-2 in Appendix 7-A.

7.3.4 Soil Compaction

Soil compaction occurs when frequent trips by construction vehicles, equipment, and machinery move over the land. Like the Original Certificated Project, the Amendment Project is anticipated to temporarily compact soils as described in the FEIS. Construction of the Amendment Project could result in loss of soil productivity due to compaction or damage to soil structure from heavy equipment. Soil structural damage and compaction could also result from construction during excessively wet periods. The majority of soils in the Amendment Project area were not identified as compaction prone. Compaction-prone soil types in the Amendment Project area are provided in Table 7.2-2 in Appendix 7-A.

7.3.5 Shallow Depth to Bedrock and Introduction of Rock into Topsoil

The introduction of rock into topsoil results in the reduction of soil quality, potential difficulty in tilling, and damage to farm equipment. This has the potential to occur in areas with shallow depth to bedrock and in areas with stony/rocky soils. Areas of shallow depth to bedrock along the Amendment Project are provided in Table 6-B-2 in Resource Report 6 and are consistent with those defined in Appendix C.5-1 of the FEIS.

The methods that Mountain Valley will use to attempt to remove bedrock have not changed from the FEIS. Depth to bedrock for soil types in the Amendment Project area and stony/rocky soils in the Amendment Project area are provided in Table 7.2-2 in Appendix 7-A.

7.3.6 Low Revegetation Potential

The revegetation capabilities of soil are based on factors such as topsoil thickness, texture of the surface layer, available water capacity, wetness, surface stoniness, flood hazard, soil temperature, and slope. The definition of and parameters for determining revegetation potential have not changed from the FEIS. Areas of low revegetation potential are present along portions of the Amendment Project. Revegetation potential for soil types in the Amendment Project area is provided in Table 7.2-2 in Appendix 7-A.

7.3.7 Prime Farmlands and Farmlands of Statewide Importance

Agricultural land in the Amendment Project area may be used for crop production (e.g., corn, wheat, oats, barley, sorghum, soybeans, and tobacco), forage (e.g., land used for hay, haylage, grass silage, and greenchop), vegetables (e.g., potatoes and sweet potatoes), orchards, livestock, and poultry (USDA NASS 2022a; 2022b). The definitions and criteria for defining and delineating farmland of statewide importance and prime farmland are consistent with those described in the FEIS.

Prime farmland and farmland of statewide importance status for each soil type in the Amendment Project area is provided in Table 7.2-2 in Appendix 7-A. Areas of prime farmland and farmland of statewide importance affected by the construction and operation of the Amendment Project, and portions of these designated areas that are currently in agricultural use, are identified in Table 7.3-1 below.

Facility / County, State	Area of Amendment Project Workspace within Prime Farmland Areas (Acres) <u>a/</u>							
	Mapped Prime Farmland <u>b/</u>		Prime Farmland currently in agricultural use <u>c/</u>		Mapped Farmland of Statewide Importance <u>d/</u>		Farmland of Statewide Importance currently in agricultural use <u>e/</u>	
	Construction <u>f/</u>	Operation <u>g/</u>	Construction	Operation	Construction	Operation	Construction	Operation
H-650 Pipeline								
Pittsylvania, VA	97.48	33.62	3.58	1.37	263.08	105.25	33.11	13.35
Rockingham, NC	58.04	17.17	14.06	1.61	12.49	4.43	0.00	0.00
Groundbeds								
Pittsylvania, VA	0.34	0.34	0.00	0.00	0.81	0.81	0.00	0.00
Rockingham, NC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aboveground Facilities								
<i>Pittsylvania, VA</i>								
Lambert Interconnect / MLV 1 (MP 0.0)	0.72	0.72	0.00	0.00	0.00	0.00	0.00	0.00
MLVs 2 and 3 (MPs 7.4 and 18.3)	0.02	0.02	0.00	0.00	0.02	0.02	0.00	0.00
Contractor Yards	27.74	0.00	0.00	0.00	1.71	0.00	0.00	0.00
Access Roads	11.86	0.02	2.47	0.00	18.16	0.03	3.09	0.00

Table 7.3-1								
Prime Farmland Affected by the Amendment Project								
Facility / County, State	Area of Amendment Project Workspace within Prime Farmland Areas (Acres) <u>a/</u>							
	Mapped Prime Farmland <u>b/</u>		Prime Farmland currently in agricultural use <u>c/</u>		Mapped Farmland of Statewide Importance <u>d/</u>		Farmland of Statewide Importance currently in agricultural use <u>e/</u>	
	Construction <u>f/</u>	Operation <u>g/</u>	Construction	Operation	Construction	Operation	Construction	Operation
<i>Rockingham, NC</i>								
LN 3600 Interconnect (MP 28.9)	0.28	0.28	0.00	0.00	0.00	0.00	0.00	0.00
MLV 4 / Dan River Interconnect #1 (MP 31.3)	0.68	0.68	0.00	0.00	0.00	0.00	0.00	0.00
Dan River Interconnect #2 (MP 31.3)	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00
Contractor Yards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Access Roads	9.21	1.92	1.05	0.00	1.60	1.00	0.00	0.00
Project Amendment Total <u>h/</u>	206.86	55.24	21.16	2.98	297.86	111.54	36.20	13.35
<p>Note: A pig launcher and pig receiver will be within other aboveground facility sites (i.e., the Lambert Interconnect and Dan River Interconnect #1, respectively); therefore, acreage calculations for the pig launcher and receiver are included with those facilities. MLVs 2 and 3 will be wholly contained within the permanent right-of-way, but the acreages of those facilities are shown and included in the table. MLVs at the Lambert Interconnect and the Dan River Interconnect #1 will be located within the fence line of those facilities; therefore, acreage calculations for these MLVs are included with those facilities and not included in the overall totals.</p> <p><u>a/</u> No areas of farmland of local importance or unique farmland are affected by the Amendment Project.</p> <p><u>b/</u> Prime farmland includes soils mapped and designated as prime farmland by the NRCS if drained and/or irrigated and/or reclaimed of excess salts and sodium (State Soil Survey Geographic database (“SSURGO”) reference column “farmlands”).</p> <p><u>c/</u> Agricultural land (i.e., cultivated land identified in Resource Report 8) within areas identified as Prime Farmland. Numbers represent actual land in agricultural use.</p> <p><u>d/</u> Farmland of statewide importance is mapped by SSURGO and determined by the appropriate state agencies, which may include areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.</p> <p><u>e/</u> Agricultural land (i.e., cultivated land identified in Resource Report 8) within areas identified as Farmland of Statewide Importance. Numbers represent actual land in agricultural use.</p> <p><u>f/</u> Construction acres include the area affected by construction (i.e., temporary and additional temporary workspace, contractor yards, and access roads) and the area affected by the operation of the Amendment Project (i.e., facility operation footprint and 50-foot pipeline permanent right-of-way). The 50-foot-wide permanent right-of-way between horizontal directional drill entry and exit points and railroad rights-of-way is not included in this acreage.</p> <p><u>g/</u> Includes only the operation footprint of the Amendment Project facilities and the 50-foot-wide permanent pipeline right-of-way.</p> <p><u>h/</u> Sums may not equal addends due to rounding.</p>								

7.4 MITIGATION

7.4.1 Soil Erosion and Sediment Control

Mountain Valley's objective is to minimize the potential for soil erosion and sedimentation during the construction of the Amendment Project facilities and to effectively restore and revegetate disturbed areas upon completion of construction activities. Mountain Valley will implement the FERC Plan to establish a baseline for minimizing the potential for erosion as a result of water or wind action and to aid in reestablishing vegetation after construction. In addition, Mountain Valley will minimize disturbance associated with Amendment Project construction activities through the application of BMPs included in the project-specific E&SC plans. The project-specific E&SC plans for the Original Certificated Project will be modified for the Amendment Project.

Following the completion of construction activities, Mountain Valley will minimize erosion by following measures identified in the FEIS and implementing the FERC Plan and Procedures, the project-specific E&SC plans, and other applicable construction plans as included in Resource Report 1, Appendix 1-G.

7.4.2 Hydric Soils and Soils with Poor Drainage Potential

Hydric soils, whether or not they occur in wetlands, are generally more susceptible to compaction and rutting than non-hydric soils. Measures to mitigate compaction are discussed in Section 7.4.3 and in the FEIS for the Original Certificated Project. The majority of impacts on hydric soils during construction activities would be short-term. The Amendment Project will not result in the permanent fill of hydric soils. Mountain Valley will implement mitigation measures outlined in Section 2.4.4 of Resource Report 2 to minimize impacts on hydric soils during construction.

7.4.3 Soil Compaction

To minimize soil compaction, Mountain Valley will limit construction traffic within the pipeline construction right-of-way to only that required to accomplish the construction. Following the completion of construction, areas of heavy compaction will be identified by environmental inspectors as described in the FEIS. Impacts and mitigation related to soil compaction have not changed from those described in the FEIS. In agricultural and residential areas where topsoil has been segregated, the subsoil will be de-compacted before replacing the segregated topsoil.

Any adverse impacts on soils due to soil compaction during construction activities would be temporary, with the exception of the aboveground facilities, which will be compacted at grade for the installation of necessary foundations.

7.4.4 Rock Material in the Topsoil

The methods by which rock will be disposed of to avoid the introduction of rock into topsoil at the completion of construction activities have not changed from those described in the FEIS.

7.4.5 Low Revegetation

In accordance with the FERC Plan and as required by regulatory agencies or the landowner, all site-specific fertilizer and soil pH modifiers will be incorporated into the top two inches of soil as soon as practicable.

Where no site-specific requirements are identified, proposed restoration methods have not changed from the FEIS. Mountain Valley will not use soil additives or fertilizers within 100 feet of wetlands or waterbodies unless required to do so in writing by the relevant regulatory agency. If there are landowner-specific requests regarding plant composition for revegetation (e.g., cover crops), Mountain Valley will replant with those particular species. Mountain Valley may develop specialized re-seeding treatment for wetlands, stream banks, and riparian areas. See Sections 2.3.5 and 2.4.4 of Resource Report 2 for additional information on specialized re-seeding treatments. As part of the Original Certificated Project, recommended seed mixes were developed in coordination with the USDA NRCS, VADCR, and North Carolina Wildlife Resources Commission to restore the areas disturbed by construction utilizing native seed mixes, including species beneficial to pollinators, specific to the project locations. These seed mixes were incorporated into the project-specific E&SC plans, which will be updated for the Amendment Project and approved by regulatory agencies. Mountain Valley does not anticipate modifying its previously approved seed mixes; however, if necessary, Mountain Valley will consult with the appropriate agencies to incorporate additional seed mixes as appropriate.

Mountain Valley will monitor the right-of-way and other construction work areas to identify any revegetation problems that may arise due to unforeseen circumstances during the operation of the Amendment Project. Like the Original Certificated Project described in the FEIS, Mountain Valley will conduct inspections after, at a minimum, the first two growing seasons post-construction. Mountain Valley will develop and implement a corrective action plan for those areas that are not revegetating in accordance with regulatory requirements. Revegetation efforts will continue until revegetation regulatory performance standards are met or exceeded. Revegetation will be considered successful based on the parameters identified with the FERC Plan and Procedures.

7.4.6 Cropland

Agricultural activities are not precluded within the permanent pipeline right-of-way; therefore, impacts on prime farmland within temporary workspace will be limited to the construction phase and will be minor and temporary. In accordance with the FERC Plan, Mountain Valley will perform topsoil segregation by stripping topsoil over the full work area in agricultural lands; it will also do so in other areas at the request of landowners or applicable regulatory agencies. The definition of agricultural lands for this purpose and proposed topsoil stripping methods have not changed from those described in the FEIS.

Approximately 36 percent of the Amendment Project area is mapped as prime farmland and farmland of statewide importance. The fact that a particular soil is considered prime farmland or farmland of statewide importance does not mean that it is currently in agricultural use. Some prime farmland or farmland of statewide importance soils may be located in developed, forested, or open uncultivated or non-pasture areas. The acreage of prime farmland and farmland of statewide importance that is currently in agricultural use and that will be affected by the construction and operation of the Amendment Project is identified in Table 7.3-1 above.

Mountain Valley previously surveyed landowners to identify agricultural drain tiles on properties affected by the Original Certificated Project. No agricultural drain tiles have been identified to date through landowner surveys and easement negotiations. In addition, observations will be made before and during construction for evidence of the presence of drain tiles and irrigation systems. Where drain tiles and irrigation systems are identified, pipeline construction methods have not changed from the FEIS. Active drain tiles damaged during construction will be repaired or replaced per the FEIS. For these reasons, and

like the Original Certificated Project described in the FEIS, no significant impacts on soils identified as prime farmland or farmland of statewide importance within the pipeline right-of-way and temporary workspace are anticipated. Please refer to Resource Report 8 for additional information regarding agricultural land crossed by the Amendment Project.

Operation of the permanent aboveground facilities will permanently convert prime farmland and farmland of statewide importance to commercial/industrial uses. The operational area for the Lambert Interconnect (MLV 1), the LN3600 Interconnect, the Dan River Interconnect #1 (MLV 4), and MLVs 2 and 3 are mapped as prime farmland or farmland of statewide importance. Like the Original Certificated Project described in the FEIS, Mountain Valley has attempted to avoid locating aboveground facilities within active agricultural areas to avoid permanent impacts on these areas. However, where construction and operation of aboveground facilities will result in temporary or permanent impacts on active agriculture, Mountain Valley will compensate the landowner(s) accordingly. The amount of land affected will be small compared to the total area of agricultural land in each county. Mountain Valley will minimize the footprint of the permanently impacted land to the extent possible while complying with United States Department of Transportation regulations for pipeline construction and operation (49 Code of Federal Regulations Part 192, Transportation of Natural Gas and Other Pipeline: Minimum Federal Safety Standards). Mountain Valley has contacted the USDA NRCS Virginia and North Carolina state offices regarding the conversion of prime farmlands (see Resource Report 1, Appendix 1-K), and consultation is ongoing.

7.4.7 Residential Land

Where residences are located in close proximity to the edge of the construction right-of-way, Mountain Valley will reduce construction workspace areas as reasonably practicable to minimize inconvenience to property owners. In residential yards, topsoil will be segregated and conserved. Following the completion of major construction activities, the property will be restored to its approximate original grade. Property restoration will be conducted in accordance with applicable agreements between Mountain Valley and the landowner. Residential and commercial lawns will be reseeded or sodded, depending on the original grass variety or in accordance with landowner conditions. Shrubs and small trees on residential properties will be temporarily transplanted and replaced where reasonably practicable. Resource Report 8 provides additional discussion on residential lands affected by the Amendment Project.

7.4.8 Contaminated Soil

As conducted along the Original Certificated Project and described in the FEIS, Mountain Valley arranged for recent database research to identify, to the extent feasible, properties within 0.25 mile of the Amendment Project facilities previously impacted with oil and/or hazardous materials. A search was completed by Environmental Data Resources, Inc. to identify potential and actual sources of contamination to nearby groundwater resources along the Amendment Project facilities. Information from Environmental Data Resources, Inc. is a compilation of a variety of available federal, state, and local government databases. A summary of identified sites is included in Resource Report 2, Appendix 2-D.

Mountain Valley does not anticipate any potential concerns associated with hazardous materials during its construction and operation. If any hazardous materials are encountered during pipeline construction, Mountain Valley will implement measures as described in the FEIS.

Although the probability of encountering contaminated soil during construction is expected to be low, should existing contaminated soil be encountered, it could pose health and safety concerns to construction workers and potentially elevate overall environmental risk through increased exposure. If contaminated soil is encountered during construction, Mountain Valley will implement its Unanticipated Discovery of Contamination Plan, which was presented in the FEIS and revised for the Amendment Project. The revised Unanticipated Discovery of Contamination Plan is included in Resource Report 1, Appendix 1-G.

7.5 REFERENCES

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MVP Southgate Amendment Project

Docket No. CP25-XX-000

Resource Report 7

Appendix 7-A

**Table 7.2-2 Soil Types Crossed
by the Amendment Project**

Table 7.2-2

Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	WEG <u>b/</u>	K Factor <u>c/</u>	Hydric Rating <u>d/</u>	Revegetation Potential <u>e/</u>	Depth to Bedrock (inches) <u>f/</u>	Stony/Rocky <u>g/</u>	Compaction Prone <u>h/</u>	Drainage Class
H-650 Pipeline <u>i/</u>													
<i>Pittsylvania County, VA</i>													
23B	Clover fine sandy loam, 2 to 7 percent slopes	0.00	0.08	442.76	All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
9B	Lackstown fine sandy loam, 2 to 7 percent slopes	0.08	0.10	58.88	Farmland of statewide importance	3	0.20	Predominantly Non-hydric	High	>60	No	No	Moderately well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	0.10	0.17	372.58	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	0.17	0.40	1,258.13	All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	0.40	0.58	932.85	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
8A	Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded	0.58	0.67	495.80	Not prime farmland	5	0.38	Predominantly Non-hydric	High	>60	No	No	Somewhat poorly drained
9C	Lackstown fine sandy loam, 7 to 15 percent slopes	0.67	0.72	251.25	Farmland of statewide importance	3	0.20	Predominantly Non-hydric	High	>60	No	No	Moderately well drained
22B	Bentley sandy loam, 2 to 7 percent slopes	0.72	0.81	441.38	All areas are prime farmland	3	0.19	Predominantly Non-hydric	High	>60	No	No	Moderately well drained
9C	Lackstown fine sandy loam, 7 to 15 percent slopes	0.81	0.88	407.77	Farmland of statewide importance	3	0.20	Predominantly Non-hydric	High	>60	No	No	Moderately well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	0.88	0.91	134.26	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	0.91	1.05	734.81	All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
9B	Lackstown fine sandy loam, 2 to 7 percent slopes	1.05	1.16	617.41	Farmland of statewide importance	3	0.20	Predominantly Non-hydric	High	>60	No	No	Moderately well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	1.16	1.21	230.79	All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
9B	Lackstown fine sandy loam, 2 to 7 percent slopes	1.21	1.34	691.44	Farmland of statewide importance	3	0.20	Predominantly Non-hydric	High	>60	No	No	Moderately well drained
9C	Lackstown fine sandy loam, 7 to 15 percent slopes	1.34	1.43	467.62	Farmland of statewide importance	3	0.20	Predominantly Non-hydric	High	>60	No	No	Moderately well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	1.43	1.53	538.17	All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
9C	Lackstown fine sandy loam, 7 to 15 percent slopes	1.53	1.62	491.68	Farmland of statewide importance	3	0.20	Predominantly Non-hydric	High	>60	No	No	Moderately well drained
7A	Codorus loam, 0 to 2 percent slopes, occasionally flooded	1.62	2.17	2,869.46	Farmland of statewide importance	5	0.44	Predominantly Non-hydric	Moderate	>60	No	No	Somewhat poorly drained
41A	Hatboro silt loam, 0 to 2 percent slopes, frequently flooded	2.17	2.47	1,592.92	Not prime farmland	6	0.41	Predominantly Hydric	Moderate	>60	No	No	Poorly drained
7A	Codorus loam, 0 to 2 percent slopes, occasionally flooded	2.47	2.50	152.28	Farmland of statewide importance	5	0.44	Predominantly Non-hydric	Moderate	>60	No	No	Somewhat poorly drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	2.50	2.59	474.78	Farmland of statewide importance	3	0.37	Non-hydric	High	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	2.59	2.86	1,455.10	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	2.86	2.87	17.87	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained

Table 7.2-2

Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	WEG <u>b/</u>	K Factor <u>c/</u>	Hydric Rating <u>d/</u>	Revegetation Potential <u>e/</u>	Depth to Bedrock (inches) <u>f/</u>	Stony/Rocky <u>g/</u>	Compaction Prone <u>h/</u>	Drainage Class
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	2.87	3.26	2,065.21	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	3.26	3.46	1,075.21	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
4B	Clifford sandy loam, 2 to 7 percent slopes	3.46	3.48	125.00	All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	3.48	3.60	586.51	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	3.60	3.72	635.90	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	3.72	3.94	1,180.29	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	3.94	4.19	1,339.60	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	4.19	4.46	1,437.27	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	4.46	4.63	861.77	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	4.63	4.76	685.15	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	4.76	5.13	1,960.84	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	5.13	5.14	64.00	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
8A	Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded	5.14	5.54	2,078.20	Not prime farmland	5	0.38	Predominantly Non-hydric	High	>60	No	No	Somewhat poorly drained
1C	Nathalie sandy loam, 7 to 15 percent slopes	5.54	5.78	1,317.76	Farmland of statewide importance	3	0.19	Non-hydric	High	>60	No	No	Well drained
1B	Nathalie sandy loam, 2 to 7 percent slopes	5.78	5.96	910.67	All areas are prime farmland	3	0.19	Non-hydric	High	>60	No	No	Well drained
1C	Nathalie sandy loam, 7 to 15 percent slopes	5.96	6.01	304.32	Farmland of statewide importance	3	0.19	Non-hydric	High	>60	No	No	Well drained
4B	Clifford sandy loam, 2 to 7 percent slopes	6.01	6.35	1,748.30	All areas are prime farmland	3	0.24	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	6.35	6.40	284.05	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
1B	Nathalie sandy loam, 2 to 7 percent slopes	6.40	6.45	269.46	All areas are prime farmland	3	0.19	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	6.45	6.56	591.86	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
39	Udorthents, loamy, 0 to 15 percent slopes	6.56	6.63	365.73	Not prime farmland	Unknown	Unknown	Non-hydric	Moderate	>60	Unknown	Unknown	Unknown
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	6.63	6.89	1350.08	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	6.89	6.91	98.93	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	6.91	7.06	818.56	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained

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Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	WEG <u>b/</u>	K Factor <u>c/</u>	Hydric Rating <u>d/</u>	Revegetation Potential <u>e/</u>	Depth to Bedrock (inches) <u>f/</u>	Stony/Rocky <u>g/</u>	Compaction Prone <u>h/</u>	Drainage Class
4B	Clifford sandy loam, 2 to 7 percent slopes	7.06	7.18	615.08	All areas are prime farmland	3	0.24	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	7.18	7.27	484.27	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	7.27	7.31	218.17	Farmland of statewide importance	3	0.37	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	7.31	7.41	509.35	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
4B	Clifford sandy loam, 2 to 7 percent slopes	7.41	7.57	847.68	All areas are prime farmland	3	0.24	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	7.57	7.60	185.35	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	7.60	7.64	212.57	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	7.64	7.69	259.57	Farmland of statewide importance	3	0.37	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	7.69	7.81	640.68	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	7.81	7.87	302.17	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
21E	Poplar Forest fine sandy loam, 25 to 45 percent slopes	7.87	7.92	273.82	Not prime farmland	3	0.37	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	7.92	8.03	561.48	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	8.03	8.10	352.71	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	8.10	8.16	331.71	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	8.16	8.28	656.30	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	8.28	8.34	280.04	Farmland of statewide importance	3	0.37	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	8.34	8.43	516.79	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	8.43	8.52	457.46	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	8.52	8.64	647.16	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	8.64	8.78	713.29	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	8.78	8.81	186.06	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	8.81	8.84	148.96	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
8A	Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded	8.84	8.90	292.27	Not prime farmland	5	0.38	Non-hydric	Moderate	>60	No	No	Somewhat poorly drained
21E	Poplar Forest fine sandy loam, 25 to 45 percent slopes	8.90	8.97	363.58	Not prime farmland	3	0.37	Non-hydric	Moderate	>60	No	No	Well drained

Table 7.2-2

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5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	8.97	9.08	581.71	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	9.08	9.16	419.22	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	9.16	9.19	166.85	Farmland of statewide importance	3	0.37	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	9.19	9.24	266.62	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
4C	Clifford sandy loam, 7 to 15 percent slopes	9.24	9.36	642.11	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	9.36	9.40	208.48	Farmland of statewide importance	3	0.37	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	9.40	9.43	180.09	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	9.43	9.62	1,012.65	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
4B	Clifford sandy loam, 2 to 7 percent slopes	9.62	9.69	324.36	All areas are prime farmland	3	0.24	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	9.69	9.73	228.38	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	9.73	9.78	287.41	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	9.78	9.84	300.37	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	9.84	9.92	441.01	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	9.92	9.95	109.43	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	9.95	10.00	272.14	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	10.00	10.05	293.34	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	10.05	10.09	205.93	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
11B3	Minnieville clay loam, 2 to 7 percent slopes, severely eroded	10.09	10.18	461.37	Not prime farmland	6	0.28	Non-hydric	High	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	10.18	10.36	957.27	Farmland of statewide importance	3	0.37	Non-hydric	High	>60	No	No	Well drained
4C	Clifford sandy loam, 7 to 15 percent slopes	10.36	10.39	169.33	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	10.39	10.47	388.46	Farmland of statewide importance	3	0.37	Non-hydric	High	>60	No	No	Well drained
4B	Clifford sandy loam, 2 to 7 percent slopes	10.47	10.61	755.06	All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	10.61	10.66	286.30	Farmland of statewide importance	3	0.37	Non-hydric	High	>60	No	No	Well drained
4B	Clifford sandy loam, 2 to 7 percent slopes	10.66	11.06	2,112.48	All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained

Table 7.2-2

Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	WEG <u>b/</u>	K Factor <u>c/</u>	Hydric Rating <u>d/</u>	Revegetation Potential <u>e/</u>	Depth to Bedrock (inches) <u>f/</u>	Stony/Rocky <u>g/</u>	Compaction Prone <u>h/</u>	Drainage Class
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	11.06	11.27	1,094.50	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	11.27	11.60	1,723.55	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	11.60	11.77	931.63	Farmland of statewide importance	3	0.37	Non-hydric	High	>60	No	No	Well drained
4B	Clifford sandy loam, 2 to 7 percent slopes	11.77	11.88	588.18	All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	11.88	12.00	593.30	Farmland of statewide importance	3	0.37	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	12.00	12.14	737.45	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	12.14	12.20	352.13	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	12.20	12.30	500.54	Farmland of statewide importance	3	0.37	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	12.30	12.37	389.52	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	12.37	12.47	501.45	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	12.47	12.68	1,138.67	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	12.68	12.71	167.93	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	12.71	12.83	615.39	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	12.83	13.09	1,378.18	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
8A	Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded	13.09	13.14	257.66	Not prime farmland	5	0.38	Predominantly Non-hydric	Moderate	>60	No	No	Somewhat poorly drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	13.14	13.19	286.33	Farmland of statewide importance	3	0.37	Non-hydric	High	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	13.19	13.39	1,043.14	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
17B	Yadkin loam, 2 to 7 percent slopes	13.39	13.55	810.09	All areas are prime farmland	6	0.20	Non-hydric	High	>60	No	No	Well drained
18C3	Yadkin clay loam, 7 to 15 percent slopes, severely eroded	13.55	13.76	1,105.65	Not prime farmland	6	0.20	Non-hydric	High	>60	No	No	Well drained
8A	Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded	13.76	13.81	277.04	Not prime farmland	5	0.38	Predominantly Non-hydric	High	>60	No	No	Somewhat poorly drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	13.81	13.85	204.46	Farmland of statewide importance	3	0.37	Non-hydric	High	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	13.85	13.88	196.75	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	13.88	13.94	287.76	Farmland of statewide importance	3	0.37	Non-hydric	High	>60	No	No	Well drained

Table 7.2-2

Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	WEG <u>b/</u>	K Factor <u>c/</u>	Hydric Rating <u>d/</u>	Revegetation Potential <u>e/</u>	Depth to Bedrock (inches) <u>f/</u>	Stony/Rocky <u>g/</u>	Compaction Prone <u>h/</u>	Drainage Class
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	13.94	14.07	701.63	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	14.07	14.24	898.82	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	14.24	14.33	464.42	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	14.33	14.38	288.83	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	14.38	14.48	482.49	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	14.48	14.56	467.02	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	14.56	14.69	683.95	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	14.69	14.73	184.57	Farmland of statewide importance	3	0.37	Non-hydric	High	>60	No	No	Well drained
4B	Clifford sandy loam, 2 to 7 percent slopes	14.73	14.76	172.94	All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained
11C3	Minnieville clay loam, 7 to 15 percent slopes, severely eroded	14.76	14.85	481.20	Not prime farmland	6	0.28	Non-hydric	High	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	14.85	14.97	631.77	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	14.97	15.03	299.41	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
11B3	Minnieville clay loam, 2 to 7 percent slopes, severely eroded	15.03	15.07	211.00	Not prime farmland	6	0.28	Non-hydric	High	>60	No	No	Well drained
4C	Clifford sandy loam, 7 to 15 percent slopes	15.07	15.10	166.45	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	15.10	15.13	168.97	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
9C	Lackstown fine sandy loam, 7 to 15 percent slopes	15.13	15.19	303.71	Farmland of statewide importance	3	0.20	Predominantly Non-hydric	High	>60	No	No	Moderately well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	15.19	15.35	846.70	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	15.35	15.87	2,723.34	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	15.87	15.90	173.05	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	15.90	16.29	2,049.97	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	16.29	16.36	392.14	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	16.36	16.43	381.32	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	16.43	16.47	219.21	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	16.47	16.63	822.51	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained

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Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	WEG <u>b/</u>	K Factor <u>c/</u>	Hydric Rating <u>d/</u>	Revegetation Potential <u>e/</u>	Depth to Bedrock (inches) <u>f/</u>	Stony/Rocky <u>g/</u>	Compaction Prone <u>h/</u>	Drainage Class
23B	Clover fine sandy loam, 2 to 7 percent slopes	16.63	16.89	1,384.27	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	16.89	17.38	2,599.60	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	17.38	17.66	1,444.32	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23D	Clover fine sandy loam, 15 to 25 percent slopes	17.66	17.73	390.79	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	17.73	17.81	399.60	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23D	Clover fine sandy loam, 15 to 25 percent slopes	17.81	18.13	1,700.25	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23D	Clover fine sandy loam, 15 to 25 percent slopes	18.15	18.19	198.75	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	18.19	18.27	439.58	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	18.27	18.42	781.60	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	18.42	18.82	2094.39	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	18.82	18.86	225.38	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	18.86	19.24	1,992.54	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	19.24	19.29	294.13	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	19.29	19.40	579.88	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	19.40	19.47	342.23	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	19.47	19.53	326.39	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	19.53	19.63	521.72	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	19.63	19.71	440.41	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
4B	Clifford sandy loam, 2 to 7 percent slopes	19.71	19.76	267.57	All areas are prime farmland	3	0.24	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	19.76	20.01	1,287.34	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	20.01	20.07	317.84	Farmland of statewide importance	3	0.37	Non-hydric	Moderate	>60	No	No	Well drained
4C	Clifford sandy loam, 7 to 15 percent slopes	20.07	20.09	121.07	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	20.09	20.19	510.00	Farmland of statewide importance	3	0.37	Non-hydric	High	>60	No	No	Well drained
4C	Clifford sandy loam, 7 to 15 percent slopes	20.19	20.31	653.69	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained

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Soil Types Crossed by the Amendment Project

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5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	20.31	20.40	499.05	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	20.40	20.43	141.80	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	20.43	20.46	136.30	Farmland of statewide importance	3	0.37	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	20.46	20.50	253.85	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
4B	Clifford sandy loam, 2 to 7 percent slopes	20.50	20.60	518.58	All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	20.60	20.74	734.38	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	20.74	20.83	448.05	Farmland of statewide importance	3	0.37	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	20.83	20.88	289.82	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	20.88	20.94	296.20	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	20.94	20.99	293.20	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	20.99	21.07	427.93	Farmland of statewide importance	3	0.37	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	21.07	21.13	292.16	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	21.13	21.17	197.23	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	21.17	21.42	1,346.64	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	21.42	21.47	248.56	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	21.47	21.56	504.52	All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	21.56	21.70	700.71	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	21.70	21.76	304.14	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	21.76	21.90	750.97	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
23D	Clover fine sandy loam, 15 to 25 percent slopes	21.90	21.97	403.55	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
29C	Pinkston-Clover complex, 7 to 15 percent slopes, very stony	21.97	22.14	867.28	Not prime farmland	5	0.27	Non-hydric	Moderate	>60	Yes	No	Excessively drained
29D	Pinkston-Clover complex, 15 to 35 percent slopes, very stony	22.14	22.18	210.96	Not prime farmland	5	0.28	Non-hydric	Moderate	>60	Yes	No	Excessively drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	22.18	22.44	1395.58	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Low	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	22.44	22.49	251.23	Farmland of statewide importance	3	0.37	Non-hydric	Low	>60	No	No	Well drained

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23B	Clover fine sandy loam, 2 to 7 percent slopes	22.49	22.57	415.80	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Low	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	22.57	22.62	262.53	Farmland of statewide importance	3	0.37	Non-hydric	Low	>60	No	No	Well drained
28C	Pinkston cobbly sandy loam, 7 to 15 percent slopes	22.62	22.67	287.34	Not prime farmland	5	0.30	Non-hydric	Low	18.1	Yes	No	Excessively drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	22.67	22.70	137.91	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Low	>60	No	No	Well drained
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	22.70	22.73	183.04	Farmland of statewide importance	3	0.37	Non-hydric	Low	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	22.73	22.75	97.42	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Low	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	22.75	22.89	724.44	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Low	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	22.89	22.91	92.85	Farmland of statewide importance	3	0.20	Non-hydric	Low	>60	No	No	Well drained
23D	Clover fine sandy loam, 15 to 25 percent slopes	22.91	23.01	557.63	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Low	>60	No	No	Well drained
29C	Pinkston-Clover complex, 7 to 15 percent slopes, very stony	23.01	23.08	352.59	Not prime farmland	5	0.27	Non-hydric	Low	>60	Yes	No	Excessively drained
29D	Pinkston-Clover complex, 15 to 35 percent slopes, very stony	23.08	23.19	599.01	Not prime farmland	5	0.28	Non-hydric	Low	>60	Yes	No	Excessively drained
29C	Pinkston-Clover complex, 7 to 15 percent slopes, very stony	23.19	23.25	302.41	Not prime farmland	5	0.27	Non-hydric	Moderate	>60	Yes	No	Excessively drained
29E	Pinkston-Clover complex, 35 to 50 percent slopes, very stony	23.25	23.34	501.57	Not prime farmland	5	0.28	Non-hydric	Moderate	>60	Yes	No	Excessively drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	23.34	23.42	396.50	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
34B	Sheva fine sandy loam, 2 to 7 percent slopes	23.42	23.50	435.89	Not prime farmland	3	0.35	Predominantly Non-hydric	Moderate	29.1	Yes	No	Moderately well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	23.50	23.61	586.94	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23D	Clover fine sandy loam, 15 to 25 percent slopes	23.61	23.69	392.92	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	23.69	23.78	473.06	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	23.78	23.94	840.80	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	23.94	23.98	210.46	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	23.98	24.05	403.74	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	24.05	24.21	833.14	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	24.21	24.26	245.70	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	24.26	24.32	336.63	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained

Table 7.2-2

Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	WEG <u>b/</u>	K Factor <u>c/</u>	Hydric Rating <u>d/</u>	Revegetation Potential <u>e/</u>	Depth to Bedrock (inches) <u>f/</u>	Stony/Rocky <u>g/</u>	Compaction Prone <u>h/</u>	Drainage Class
23C	Clover fine sandy loam, 7 to 15 percent slopes	24.32	24.37	256.93	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
9B	Lackstown fine sandy loam, 2 to 7 percent slopes	24.37	24.45	409.36	Farmland of statewide importance	3	0.20	Predominantly Non-hydric	Moderate	>60	No	No	Moderately well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	24.45	24.48	178.66	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	24.48	24.55	353.74	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
29C	Pinkston-Clover complex, 7 to 15 percent slopes, very stony	24.55	24.72	886.14	Not prime farmland	5	0.27	Non-hydric	Moderate	>60	Yes	No	Excessively drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	24.72	24.78	319.44	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	24.78	24.78	37.03	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
29D	Pinkston-Clover complex, 15 to 35 percent slopes, very stony	24.78	24.89	545.11	Not prime farmland	5	0.28	Non-hydric	Moderate	>60	Yes	No	Excessively drained
29C	Pinkston-Clover complex, 7 to 15 percent slopes, very stony	24.89	24.97	450.47	Not prime farmland	5	0.27	Non-hydric	Moderate	>60	Yes	No	Excessively drained
29D	Pinkston-Clover complex, 15 to 35 percent slopes, very stony	24.97	25.02	252.57	Not prime farmland	5	0.28	Non-hydric	Moderate	>60	Yes	No	Excessively drained
17B	Yadkin loam, 2 to 7 percent slopes	25.02	25.20	935.73	All areas are prime farmland	6	0.20	Non-hydric	Moderate	>60	No	No	Well drained
34B	Sheva fine sandy loam, 2 to 7 percent slopes	25.20	25.48	1,513.72	Not prime farmland	3	0.35	Predominantly Non-hydric	Moderate	29.1	Yes	No	Moderately well drained
18C3	Yadkin clay loam, 7 to 15 percent slopes, severely eroded	25.48	25.49	49.92	Not prime farmland	6	0.20	Non-hydric	Moderate	>60	No	No	Well drained
17B	Yadkin loam, 2 to 7 percent slopes	25.49	25.58	457.34	All areas are prime farmland	6	0.20	Non-hydric	High	>60	No	No	Well drained
18C3	Yadkin clay loam, 7 to 15 percent slopes, severely eroded	25.58	25.61	169.21	Not prime farmland	6	0.20	Non-hydric	High	>60	No	No	Well drained
28C	Pinkston cobbly sandy loam, 7 to 15 percent slopes	25.61	25.67	313.80	Not prime farmland	5	0.30	Non-hydric	Low	18.1	Yes	No	Excessively drained
17B	Yadkin loam, 2 to 7 percent slopes	25.67	25.74	384.47	All areas are prime farmland	6	0.20	Non-hydric	Moderate	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	25.74	25.93	954.66	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
17B	Yadkin loam, 2 to 7 percent slopes	25.93	26.13	1,067.62	All areas are prime farmland	6	0.20	Non-hydric	Moderate	>60	No	No	Well drained
28C	Pinkston cobbly sandy loam, 7 to 15 percent slopes	26.13	26.34	1,136.40	Not prime farmland	5	0.30	Non-hydric	High	18.1	Yes	No	Excessively drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	26.34	26.43	479.12	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	26.43	26.49	292.15	All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes	26.49	26.71	1,159.47	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	26.71	26.76	246.23	All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained

Table 7.2-2

Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	WEG <u>b/</u>	K Factor <u>c/</u>	Hydric Rating <u>d/</u>	Revegetation Potential <u>e/</u>	Depth to Bedrock (inches) <u>f/</u>	Stony/Rocky <u>g/</u>	Compaction Prone <u>h/</u>	Drainage Class
<i>Rockingham County, NC</i>													
CmB	Clover sandy loam, 2 to 8 percent slopes	26.76	27.10	1,795.22	All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained
CmD	Clover sandy loam, 8 to 15 percent slopes	27.10	27.27	934.16	Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
CmB	Clover sandy loam, 2 to 8 percent slopes	27.27	27.32	260.50	All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained
CmD	Clover sandy loam, 8 to 15 percent slopes	27.32	27.43	550.98	Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
CnB2	Clover sandy clay loam, 2 to 8 percent slopes, moderately eroded	27.43	27.51	438.83	All areas are prime farmland	5	0.3	Non-hydric	High	>60	No	No	Well drained
CnE2	Clover sandy clay loam, 15 to 25 percent slopes, moderately eroded	27.51	27.64	661.53	Not prime farmland	5	0.21	Non-hydric	Moderate	>60	No	No	Well drained
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	27.64	27.97	1,780.88	All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
DaA	Dan River loam, 0 to 2 percent slopes, frequently flooded	27.97	28.33	1,891.87	Prime farmland if protected from flooding or not frequently flooded during the growing season	5	0.31	Predominantly Non-hydric	High	>60	No	No	Well drained
WhB	Wickham sandy loam, mesic, 1 to 4 percent slopes, rarely flooded	28.33	28.59	1,368.88	All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	28.59	28.82	1,194.80	All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
CmB	Clover sandy loam, 2 to 8 percent slopes	28.82	29.04	1,175.88	All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	29.04	29.11	343.47	All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
CmB	Clover sandy loam, 2 to 8 percent slopes	29.11	29.22	614.10	All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained
CmD	Clover sandy loam, 8 to 15 percent slopes	29.22	29.45	1,211.45	Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
CmE	Clover sandy loam, 15 to 25 percent slopes	29.45	29.54	480.95	Not prime farmland	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
CmD	Clover sandy loam, 8 to 15 percent slopes	29.54	29.63	484.61	Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
CmE	Clover sandy loam, 15 to 25 percent slopes	29.63	29.70	335.46	Not prime farmland	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
CmD	Clover sandy loam, 8 to 15 percent slopes	29.70	29.76	303.27	Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
CmE	Clover sandy loam, 15 to 25 percent slopes	29.76	29.86	550.08	Not prime farmland	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
CmD	Clover sandy loam, 8 to 15 percent slopes	29.86	29.92	340.43	Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
CnE2	Clover sandy clay loam, 15 to 25 percent slopes, moderately eroded	29.92	30.21	1,525.58	Not prime farmland	5	0.21	Non-hydric	Moderate	>60	No	No	Well drained

Table 7.2-2

Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance ^{a/}	WEG ^{b/}	K Factor ^{c/}	Hydric Rating ^{d/}	Revegetation Potential ^{e/}	Depth to Bedrock (inches) ^{f/}	Stony/Rocky ^{g/}	Compaction Prone ^{h/}	Drainage Class
CsA	Codorus loam, 0 to 2 percent slopes, frequently flooded	30.21	30.55	1,757.34	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	6	0.41	Predominantly Non-hydric	Moderate	>60	No	No	Somewhat poorly drained
DaA	Dan River loam, 0 to 2 percent slopes, frequently flooded	30.55	30.75	1,084.37	Prime farmland if protected from flooding or not frequently flooded during the growing season	5	0.31	Predominantly Non-hydric	High	>60	No	No	Well drained
W	Water	30.75	30.79	230.71	Not prime farmland	Unknown	Unknown	Non-hydric	Moderate	>60	Unknown	Unknown	Unknown
DaA	Dan River loam, 0 to 2 percent slopes, frequently flooded	30.79	30.88	442.91	Prime farmland if protected from flooding or not frequently flooded during the growing season	5	0.31	Predominantly Non-hydric	High	>60	No	No	Well drained
CsA	Codorus loam, 0 to 2 percent slopes, frequently flooded	30.88	30.96	445.03	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	6	0.41	Predominantly Non-hydric	Moderate	>60	No	No	Somewhat poorly drained
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	30.96	31.36	2,104.70	All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
Groundbeds—Pittsylvania County, VA													
<i>Groundbed 1</i>													
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	NA	NA	NA	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	NA	NA	NA	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
4B	Clifford sandy loam, 2 to 7 percent slopes	NA	NA	NA	All areas are prime farmland	3	0.24	Non-hydric	Moderate	>60	No	No	Well drained
<i>Groundbed 2</i>													
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	NA	NA	NA	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	NA	NA	NA	Farmland of statewide importance	3	0.20	Non-hydric	High	>60	No	No	Well drained
Aboveground Facilities													
<i>Pittsylvania County, VA</i>													
Lambert Interconnect / MLV 1 (MP 0.0)													
23C	Clover fine sandy loam, 7 to 15 percent slopes	NA	NA	NA	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	NA	NA	NA	All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
MLVs 2 and 3 (MP 7.8 and 18.8)													
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	NA	NA	NA	Farmland of statewide importance	3	0.20	Non-hydric	Moderate	>60	No	No	Well drained
23B	Clover fine sandy loam, 2 to 7 percent slopes	NA	NA	NA	All areas are prime farmland	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
Contractor Yards													
<i>CY-01</i>													
23B	Clover fine sandy loam, 2 to 7 percent slopes	NA	NA	NA	All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained

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23C	Clover fine sandy loam, 7 to 15 percent slopes	NA	NA	NA	Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
9B	Lackstown fine sandy loam, 2 to 7 percent slopes	NA	NA	NA	Farmland of statewide importance	3	0.2	Predominantly Non-hydric	High	>60	No	No	Moderately well drained
CY-37													
12C	Enott fine sandy loam, 7 to 15 percent slopes	NA	NA	NA	Farmland of statewide importance	3	0.26	Non-hydric	Moderate	>60	No	No	Well drained
1C	Nathalie sandy loam, 7 to 15 percent slopes	NA	NA	NA	Farmland of statewide importance	3	0.19	Non-hydric	High	>60	No	No	Well drained
39	Udorhents, loamy, 0 to 15 percent slopes	NA	NA	NA	Not prime farmland	Unknown	Unknown	Non-hydric	Moderate	>60	Unknown	Unknown	Unknown
4B	Clifford sandy loam, 2 to 7 percent slopes	NA	NA	NA	All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained
Access Roads													
PA-PI-018B													
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	PA-PI-018B			Farmland of statewide importance	3	0.2	Non-hydric	High	>60	No	No	Well drained
PA-PI-024													
4B	Clifford sandy loam, 2 to 7 percent slopes	PA-PI-024			All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained
PA-PI-046A													
23B	Clover fine sandy loam, 2 to 7 percent slopes	PA-PI-046A			All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
PA-PI-050													
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	PA-PI-050			Farmland of statewide importance	3	0.2	Non-hydric	High	>60	No	No	Well drained
TA-PI-000													
23B	Clover fine sandy loam, 2 to 7 percent slopes	TA-PI-000			All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
TA-PI-000A													
23B	Clover fine sandy loam, 2 to 7 percent slopes	TA-PI-000A			All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
TA-PI-000A													
23B	Clover fine sandy loam, 2 to 7 percent slopes	TA-PI-001A			All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
TA-PI-004													
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	TA-PI-004			Farmland of statewide importance	3	0.2	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	TA-PI-004			Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
7A	Codorus loam, 0 to 2 percent slopes, occasionally flooded	TA-PI-004			Farmland of statewide importance	5	0.44	Predominantly Non-hydric	Moderate	>60	No	No	Somewhat poorly drained
TA-PI-005													
21D	Poplar Forest fine sandy loam, 15 to 25 percent slopes	TA-PI-005			Farmland of statewide importance	3	0.37	Non-hydric	Moderate	>60	No	No	Well drained
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	TA-PI-005			Farmland of statewide importance	3	0.2	Non-hydric	High	>60	No	No	Well drained

Table 7.2-2

Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	WEG <u>b/</u>	K Factor <u>c/</u>	Hydric Rating <u>d/</u>	Revegetation Potential <u>e/</u>	Depth to Bedrock (inches) <u>f/</u>	Stony/Rocky <u>g/</u>	Compaction Prone <u>h/</u>	Drainage Class
7A	Codorus loam, 0 to 2 percent slopes, occasionally flooded	TA-PI-005			Farmland of statewide importance	5	0.44	Predominantly Non-hydric	Moderate	>60	No	No	Somewhat poorly drained
TA-PI-011													
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	TA-PI-011			Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
8A	Codorus-Comus complex, 0 to 2 percent slopes, frequently flooded	TA-PI-011			Not prime farmland	5	0.38	Predominantly Non-hydric	High	>60	No	No	Somewhat poorly drained
TA-PI-015													
4B	Clifford sandy loam, 2 to 7 percent slopes	TA-PI-015			All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained
TA-PI-016													
1B	Nathalie sandy loam, 2 to 7 percent slopes	TA-PI-016			All areas are prime farmland	3	0.19	Non-hydric	High	>60	No	No	Well drained
39	Udorthents, loamy, 0 to 15 percent slopes	TA-PI-016			Not prime farmland	Unknown	Unknown	Non-hydric	Moderate	>60	Unknown	Unknown	Unknown
4B	Clifford sandy loam, 2 to 7 percent slopes	TA-PI-016			All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained
TA-PI-017													
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	TA-PI-017			Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
TA-PI-018													
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	TA-PI-018			Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
TA-PI-022													
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	TA-PI-022			Farmland of statewide importance	3	0.2	Non-hydric	High	>60	No	No	Well drained
5C3	Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded	TA-PI-022			Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
TA-PI-023													
4B	Clifford sandy loam, 2 to 7 percent slopes	TA-PI-023			All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained
TA-PI-025													
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	TA-PI-025			Farmland of statewide importance	3	0.2	Non-hydric	High	>60	No	No	Well drained
TA-PI-026B													
4B	Clifford sandy loam, 2 to 7 percent slopes	TA-PI-026B			All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained
TA-PI-027													
4B	Clifford sandy loam, 2 to 7 percent slopes	TA-PI-027			All areas are prime farmland	3	0.24	Non-hydric	High	>60	No	No	Well drained
TA-PI-035													
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded	TA-PI-035			Farmland of statewide importance	3	0.2	Non-hydric	High	>60	No	No	Well drained
TA-PI-037A													
23B	Clover fine sandy loam, 2 to 7 percent slopes	TA-PI-037A			All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained

Table 7.2-2

Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	WEG <u>b/</u>	K Factor <u>c/</u>	Hydric Rating <u>d/</u>	Revegetation Potential <u>e/</u>	Depth to Bedrock (inches) <u>f/</u>	Stony/Rocky <u>g/</u>	Compaction Prone <u>h/</u>	Drainage Class
TA-PI-037B													
23B	Clover fine sandy loam, 2 to 7 percent slopes		TA-PI-037B		All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
TA-PI-043													
23B	Clover fine sandy loam, 2 to 7 percent slopes		TA-PI-043		All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
23C	Clover fine sandy loam, 7 to 15 percent slopes		TA-PI-043		Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
TA-PI-046													
23B	Clover fine sandy loam, 2 to 7 percent slopes		TA-PI-046		All areas are prime farmland	3	0.23	Predominantly Non-hydric	High	>60	No	No	Well drained
TA-PI-050													
5B3	Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded		TA-PI-050		Farmland of statewide importance	3	0.2	Non-hydric	High	>60	No	No	Well drained
TA-PI-052													
23C	Clover fine sandy loam, 7 to 15 percent slopes		TA-PI-052		Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
TA-PI-053													
23C	Clover fine sandy loam, 7 to 15 percent slopes		TA-PI-053		Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
TA-PI-061													
23C	Clover fine sandy loam, 7 to 15 percent slopes		TA-PI-061		Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
TA-PI-066													
23C	Clover fine sandy loam, 7 to 15 percent slopes		TA-PI-066		Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
TA-PI-067													
23C	Clover fine sandy loam, 7 to 15 percent slopes		TA-PI-067		Farmland of statewide importance	3	0.23	Predominantly Non-hydric	Moderate	>60	No	No	Well drained
Rockingham County, NC													
LN 3600 Interconnect (MP 31.3)													
CmB	Clover sandy loam, 2 to 8 percent slopes	NA	NA	NA	All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained
MLV 4 / Dan River Interconnect #1 (MP 31.3)													
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	NA	NA	NA	All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
Dan River Interconnect #2 (MP 31.3)													
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	NA	NA	NA	All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
Contractor Yards													
CY-05													
LeB	Leaksville silt loam, 0 to 4 percent slopes	NA	NA	NA	Not prime farmland	6	0.37	Hydric	Moderate	24	Yes	Yes	Poorly drained
SpB	Spray loam, 0 to 5 percent slopes	NA	NA	NA	Not prime farmland	6	0.43	Non-hydric	Moderate	>60	Yes	No	Well drained
Ud	Udorthents, loamy	NA	NA	NA	Not prime farmland	5	0.2	Non-hydric	High	>60	No	No	Well drained
CY-36													

Table 7.2-2

Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	WEG <u>b/</u>	K Factor <u>c/</u>	Hydric Rating <u>d/</u>	Revegetation Potential <u>e/</u>	Depth to Bedrock (inches) <u>f/</u>	Stony/Rocky <u>g/</u>	Compaction Prone <u>h/</u>	Drainage Class
LeB	Leaksville silt loam, 0 to 4 percent slopes	NA	NA	NA	Not prime farmland	6	0.37	Hydric	Moderate	24	Yes	Yes	Poorly drained
SpB	Spray loam, 0 to 5 percent slopes	NA	NA	NA	Not prime farmland	6	0.43	Non-hydric	Moderate	>60	No	No	Well drained
Access Roads													
PA-RO-000													
CmB	Clover sandy loam, 2 to 8 percent slopes	PA-RO-000			All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained
CmD	Clover sandy loam, 8 to 15 percent slopes	PA-RO-000			Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
PA-RO-082													
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	PA-RO-082			All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
PA-RO-082A													
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	PA-RO-082A			All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
TA-RO-072													
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	TA-RO-072			All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
CnE2	Clover sandy clay loam, 15 to 25 percent slopes, moderately eroded	TA-RO-072			Not prime farmland	5	0.21	Non-hydric	Moderate	>60	No	No	Well drained
TA-RO-072A													
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	TA-RO-072A			All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
TA-RO-072B													
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	TA-RO-072B			All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
CnE2	Clover sandy clay loam, 15 to 25 percent slopes, moderately eroded	TA-RO-072B			Not prime farmland	5	0.21	Non-hydric	Moderate	>60	No	No	Well drained
TA-RO-075													
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	TA-RO-075			All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
CmB	Clover sandy loam, 2 to 8 percent slopes	TA-RO-075			All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained
CmD	Clover sandy loam, 8 to 15 percent slopes	TA-RO-075			Farmland of statewide importance	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
WhB	Wickham sandy loam, mesic, 1 to 4 percent slopes, rarely flooded	TA-RO-075			All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained
TA-RO-076													
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	TA-RO-076			All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
CmB	Clover sandy loam, 2 to 8 percent slopes	TA-RO-076			All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained

Table 7.2-2

Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance <u>a/</u>	WEG <u>b/</u>	K Factor <u>c/</u>	Hydric Rating <u>d/</u>	Revegetation Potential <u>e/</u>	Depth to Bedrock (inches) <u>f/</u>	Stony/Rocky <u>g/</u>	Compaction Prone <u>h/</u>	Drainage Class
TA-RO-077													
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	TA-RO-077			All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
TA-RO-077A													
WhB	Wickham sandy loam, mesic, 1 to 4 percent slopes, rarely flooded	TA-RO-077A			All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained
TA-RO-078													
CmE	Clover sandy loam, 15 to 25 percent slopes	TA-RO-078			Not prime farmland	3	0.2	Non-hydric	Moderate	>60	No	No	Well drained
TA-RO-079													
CsA	Codorus loam, 0 to 2 percent slopes, frequently flooded	TA-RO-079			Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	6	0.41	Predominantly Non-hydric	Moderate	>60	No	No	Somewhat poorly drained
TA-RO-079A													
CmB	Clover sandy loam, 2 to 8 percent slopes	TA-RO-079A			All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained
CnE2	Clover sandy clay loam, 15 to 25 percent slopes, moderately eroded	TA-RO-079A			Not prime farmland	5	0.21	Non-hydric	Moderate	>60	No	No	Well drained
TA-RO-080													
CmB	Clover sandy loam, 2 to 8 percent slopes	TA-RO-080			All areas are prime farmland	3	0.2	Non-hydric	High	>60	No	No	Well drained
CnE2	Clover sandy clay loam, 15 to 25 percent slopes, moderately eroded	TA-RO-080			Not prime farmland	5	0.21	Non-hydric	Moderate	>60	No	No	Well drained
CsA	Codorus loam, 0 to 2 percent slopes, frequently flooded	TA-RO-080			Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	6	0.41	Predominantly Non-hydric	Moderate	>60	No	No	Somewhat poorly drained
TA-RO-080A													
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	TA-RO-080A			All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
TA-RO-081													
BaB	Banister loam, 0 to 4 percent slopes, rarely flooded	TA-RO-081			All areas are prime farmland	5	0.26	Non-hydric	High	>60	No	No	Moderately well drained
TA-RO-82D													
SpB	Spray loam, 0 to 5 percent slopes	TA-RO-082D			Not prime farmland	6	0.43	Non-hydric	Moderate	>60	Yes	No	Well drained
TA-RO-82E													
SpB	Spray loam, 0 to 5 percent slopes	TA-RO-082E			Not prime farmland	6	0.43	Non-hydric	Moderate	>60	Yes	No	Well drained

NA = Not Applicable

a/ Prime farmland includes soils designated as prime farmland by the NRCS if drained and/or irrigated and/or reclaimed of excess salts and sodium (SSURGO reference column "farmland"). No areas of unique farmland or farmland of local importance are affected by the Amendment Project.

b/ WEGs obtained from the NRCS Soil Data Mart. WEGs range from 1 to 8, with 1 being the highest potential for wind erosion, and 8 the lowest. Highly wind-erodible soils include those in wind-erodibility groups 1 or 2 (SSURGO reference column "weg").

c/ Water erosion potential was determined by averaging the K factor values of horizons of each soil type. Based on the average K factor, each soil type was grouped into a water erosion class of "Low," "Moderate," or "High." Highly water erodible soils include those with a K factor greater than 0.4.

Table 7.2-2

Soil Types Crossed by the Amendment Project

Map Unit Symbol	Map Unit Name	MP Start	MP End	Crossing Length (feet)	Prime Farmland or Farmland of Statewide Importance ^{a/}	WEG ^{b/}	K Factor ^{c/}	Hydric Rating ^{d/}	Revegetation Potential ^{e/}	Depth to Bedrock (inches) ^{f/}	Stony/Rocky ^{g/}	Compaction Prone ^{h/}	Drainage Class
<p>^{d/} "Urban Land" and "Udorthents" map units do not have a NRCS designated hydric soil status. These map units were considered to be non-hydric soils. Hydric Type is determined with Hydric Classification - Presence ("hydclprs"), where hydclprs of 0% is categorized as "Non-hydric." Values between 1% – 33% are categorized as "Predominantly Non-hydric," 34% - 66% as "Partially Hydric," 67% - 99% as "Predominantly Hydric," and 100% is categorized as "Hydric."</p> <p>^{e/} Revegetation Potential is determined by three parameters: drainage class, K factor, and slope, each parameter assigned a value of 1, 2, or 3, then averaged. Drainage classes of excessively drained and very poorly drained are designated low (1), somewhat excessively drained and poorly drained are designated moderate (2), and well drained, moderately well drained, and somewhat poorly drained are designated high (3). Low K factor (3), Moderate (2), and High (1). Slopes of 25% or more are low (1), 8%-25% are moderate (2), and slopes of less than 8% are high (3). The average of these three scores is then taken to determine the overall low, moderate, or high revegetation potential. 1.0-1.7 = Low, 1.8-2.3 = Moderate, 2.4-3.0 = High.</p> <p>^{f/} Depth to bedrock is not defined by the NRCS for the "Pavement and Buildings" map unit. In these cases, a depth to bedrock of >60" was assigned, which is consistent with NRCS designations for other natural and fill soils in the Amendment Project area. Shallow bedrock soils include those that have lithic or paralithic bedrock within 60 inches or less of the soil surface (SSURGO and STATGO2 reference column "rescind" and "resdept_r").</p> <p>^{g/} Stony/Rocky soils include those with a cobbly, stony, bouldery, shaly, channery, very gravelly, or extremely gravelly modifier to the textural class of the surface layer and/or that have a surface layer that contains greater than 5 percent by weight rock fragments larger than 3 inches.</p> <p>^{h/} Compaction prone was determined by texture and drainage class. Compaction-prone soils are those with clay loam or finer texture and somewhat poor, poor, and very poor drainage class (SSURGO reference column "texcl" and "drainagecl").</p> <p>^{i/} Mileposts represent soil types crossed by the pipeline alignment only. A summary of limitations associated with all soil types affected by the Amendment Project workspace areas is included in Table 7.2-1.</p>													

MVP Southgate Amendment Project

Docket No. CP25-XX-000

Resource Report 7

Appendix 7-B

Soil Series Descriptions

SOIL SERIES DESCRIPTIONS

Soils map unit descriptions and their associated map unit symbols (shown in parentheses) are listed below (USDA NRCS 2024c).

Pittsylvania County, Virginia

Bentley sandy loam (22B): Slopes are 2 to 7 percent, and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on interfluves. The parent material consists of alluvium derived from igneous and metamorphic rock. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth of about 36 to 72 inches from the soil surface. This soil does not meet the hydric criteria and is classified as all areas are prime farmland.

Clifford sandy clay loam, severely eroded (5B3, 5C3): Slopes are 2 to 15 percent, and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on interfluves. The parent material consists of residuum weathered from granite and gneiss. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth of more than 80 inches from the soil surface. This soil does not meet the hydric criteria and is classified as farmland of statewide importance.

Clifford sandy loam (4B, 4C): Slopes are 2 to 15 percent, and elevation ranges from 160 to 1,640 feet in the Amendment Project area. This soil group occurs on interfluves. The parent material consists of saprolite residuum weathered from granite and gneiss and/or saprolite residuum weathered from schist. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth greater than 80 inches down from the soil surface. This soil does not meet the hydric criteria and is classified as all areas are prime farmland.

Clover fine sandy loam (23B, 23C, 23D): Slopes are 2 to 25 percent, and elevation ranges from 700 to 2,000 feet in the Amendment Project area. This soil group occurs on interfluves and hillslopes on ridges. The parent material consists of residuum weathered from mudstone and/or residuum weathered from shale and siltstone and/or residuum weathered from sandstone. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth greater than 80 inches down from the soil surface. This soil does not meet the hydric criteria. 23B is classified as all areas are prime farmland, 23C is classified as farmland of statewide importance, and 23D is classified as not prime farmland.

Codorus loam, occasionally flooded (7A): Slopes are 0 to 2 percent, and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on tread. The parent material consists of alluvium derived from igneous and metamorphic rock. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth of about 12 to 30 inches from the soil surface. This soil does not meet the hydric criteria and is classified as farmland of statewide importance.

Codorus-Comus complex, frequently flooded (8A): Slopes are 0 to 2 percent, and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on treads. The parent material consists of alluvium derived from igneous and metamorphic rock. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high to high. The water table is

at a depth of about 12 to 30 inches from the soil surface. This soil does not meet the hydric criteria and is classified as not prime farmland.

Enott fine sandy loam (12C): Slopes are 7 to 15 percent, and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on interfluves. The parent material consists of mixed mafic residuum weathered from igneous and metamorphic rock. The natural drainage class is well drained. Water movement in the most restrictive layer is very low to low. The water table is at a depth greater than 80 inches down from the soil surface. This soil does not meet the hydric criteria and is classified as farmland of statewide importance.

Hatboro silt loam, frequently flooded (41A): Slopes are 0 to 2 percent, and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on treads. The parent material consists of alluvium derived from igneous and metamorphic rock. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth of about 0 to 12 inches from the soil surface. This soil meets the hydric criteria and is classified as not prime farmland.

Lackstown fine sandy loam (9B, 9C): Slopes are 2 to 15 percent, and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on interfluves. The parent material consists of Triassic residuum weathered from igneous and sedimentary rock. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is very low to moderately low. The water table is at a depth of about 12 to 24 inches from the soil surface. This soil does not meet the hydric criteria and is classified as farmland of statewide importance.

Minnieville clay loam, severely eroded (11B3, 11C3): Slopes are 2 to 15 percent, and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on interfluves. The parent material consists of mixed mafic residuum weathered from igneous and metamorphic rock. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth of more than 80 inches from the soil surface. This soil does not meet the hydric criteria and is classified as not prime farmland.

Nathalie sandy loam (1B, 1C): Slopes range from 2 to 15 percent, and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on interfluves. The parent material consists of residuum weathered from granite and gneiss. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth of more than 80 inches from the soil surface. This soil does not meet the hydric criteria. 1B is classified as all areas are prime farmland, and 1C is classified as all areas are farmland of statewide importance.

Pinkston cobbly sandy loam (28C): Slopes are 7 to 15 percent, and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on interfluves. The parent material consists of Triassic residuum weathered from igneous and sedimentary rock. The natural drainage class is excessively drained. Water movement in the most restrictive layer is very low to moderately low. The water table is at a depth of more than 80 inches from the soil surface. This soil does not meet the hydric criteria and is classified as not prime farmland.

Pinkston-Clover complex, very stony (29C, 29D, 29E): Slopes are 15 to 50 percent and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on interfluves. The parent material consists of Triassic residuum weathered from igneous and sedimentary rock. The natural drainage class is excessively drained. Water movement in the most restrictive layer is very low to moderately low.

The water table is at a depth greater than 80 inches down from the soil surface. This soil does not meet the hydric criteria and is classified as not prime farmland.

Poplar Forest fine sandy loam (21D, 21E): Slopes are 15 to 45 percent, and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on slide slope. The parent material consists of mixed mafic residuum weathered from igneous and metamorphic rock. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth greater than 80 inches down from the soil surface. This soil does not meet the hydric criteria. 21D is classified as farmland of statewide importance and 21E is classified as not prime farmland.

Sheva fine sandy loam (34B): Slopes are 2 to 7 percent, and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on hillslopes. The parent material consists of Triassic residuum. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is very low to moderately low. The water table is at a depth of about 18 to 24 inches down from the soil surface. This soil does not meet the hydric criteria and is classified as not prime farmland.

Udorthents, loamy (39): Slopes are 0 to 15 percent in the Amendment Project area. This soil group occurs in areas developed by human activity. The water table is at a depth greater than 80 inches down from the soil surface. No areas are classified as prime farmland.

Yadkin clay loam, severely eroded (18C3): Slopes are 7 to 15 percent and elevation ranges from 400 to 1,000 feet in the Amendment Project area. This soil group occurs on interfluves. The parent material consists of alluvium derived from igneous and metamorphic rock. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth greater than 80 inches down from the soil surface. This soil does not meet the hydric criteria and is classified as not prime farmland.

Rockingham County, North Carolina

Banister loam, rarely flooded (BaB): Slopes are 0 to 4 percent, and elevation ranges from 200 to 1,400 feet in the Amendment Project area. This soil group occurs on flats on stream terraces. The parent material consists of old clayey alluvium derived from igneous and metamorphic rock. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. The water table is at a depth greater than 80 inches down from the soil surface. This soil does not meet the hydric criteria and is classified as all areas are prime farmland.

Clover sandy loam (CmB, CmD, CmE): Slopes are 2 to 25 percent, and elevation ranges from 700 to 2,000 feet in the Amendment Project area. This soil group occurs on interfluves and hillslopes on ridges. The parent material consists of residuum weathered from mudstone and/or residuum weathered from shale and siltstone and/or residuum weathered from sandstone. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth greater than 80 inches down from the soil surface. This soil does not meet the hydric criteria. CmB is classified as all areas are prime farmland, CmD is classified as farmland of statewide importance, and CmE is classified as not prime farmland.

Clover sandy clay loam, moderately eroded (CnB2, CnD2, CnE2): Slopes are 2 to 25 percent, and elevation ranges from 200 to 1,400 feet in the Amendment Project area. This soil group occurs on interfluves and hillslopes on ridges. The parent material consists of residuum weathered from mudstone

and/or shale and siltstone and/or sandstone. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth greater than 80 inches down from the soil surface. This soil does not meet the hydric criteria. CnB2 is classified as all areas are prime farmland, CnD2 is classified as farmland of statewide importance, and CnE2 is classified as not prime farmland.

Codorus loam, frequently flooded (CsA): Slopes are 0 to 2 percent, and elevation ranges from 200 to 1,560 feet in the Amendment Project area. This soil group occurs on floodplains. The parent material consists of loamy alluvium derived from igneous and metamorphic rock. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth of about 6 to 24 inches down from the soil surface. This soil does not meet the hydric criteria and is classified as prime farmland if drained and either protected from flooding or not frequently flooded during the growing season.

Dan River loam, frequently flooded (DaA): Slopes are 0 to 2 percent, and elevation ranges from 200 to 1,400 feet in the Amendment Project area. This soil group occurs on floodplains. The parent material consists of loamy alluvium derived from igneous and metamorphic rock. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth of about 30 to 60 inches down from the soil surface. This soil does not meet the hydric criteria and is classified as prime farmland if protected from flooding or not frequently flooded during the growing season.

Leaksville silt loam (LeB): Slopes are 0 to 4 percent, and elevation ranges from 200 to 1,400 feet in the Amendment Project area. This soil group occurs on interfluvies. The parent material consists of residuum weathered from shale and siltstone and/or mudstone and/or sandstone. The natural drainage class is poorly drained. Water movement in the most restrictive layer is very low to moderately low. The water table is at a depth of about 0 to 12 inches down from the soil surface. This soil does meet the hydric criteria. No areas are classified as prime farmland.

Spray loam (SpB): Slopes are 0 to 5 percent, and elevation ranges from 700 to 2,000 feet in the Amendment Project area. This soil group occurs on interfluvies. The parent material consists of residuum weathered from shale and siltstone and/or mudstone and/or sandstone. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high to high. The water table is at a depth greater than 80 inches down from the soil surface. This soil does not meet the hydric criteria. No areas are classified as prime farmland.

Udorthents, loamy (Ud): Elevation ranges from 70 to 1,400 feet in the Amendment Project area. This soil group occurs on interfluvies. The parent material consists of loamy and clayey human-transported material derived from igneous, metamorphic, and sedimentary rock. The natural drainage class is well drained. Water movement in the most restrictive layer is very low to high. The water table is at a depth greater than 80 inches down from the soil surface. This soil does not meet the hydric criteria. No areas are classified as prime farmland.

Wickham sandy loam, mesic, rarely flooded (WhB): Slopes are 1 to 4 percent, and elevation ranges from 200 to 1,400 feet in the Amendment Project area. This soil group occurs on stream terraces. The parent material consists of old loamy alluvium derived from igneous and metamorphic rock. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high to high.

The water table is at a depth greater than 80 inches down from the soil surface. This soil does not meet the hydric criteria, and all areas are classified as prime farmland.

MVP Southgate Amendment Project

Docket No. CP25-XX-000

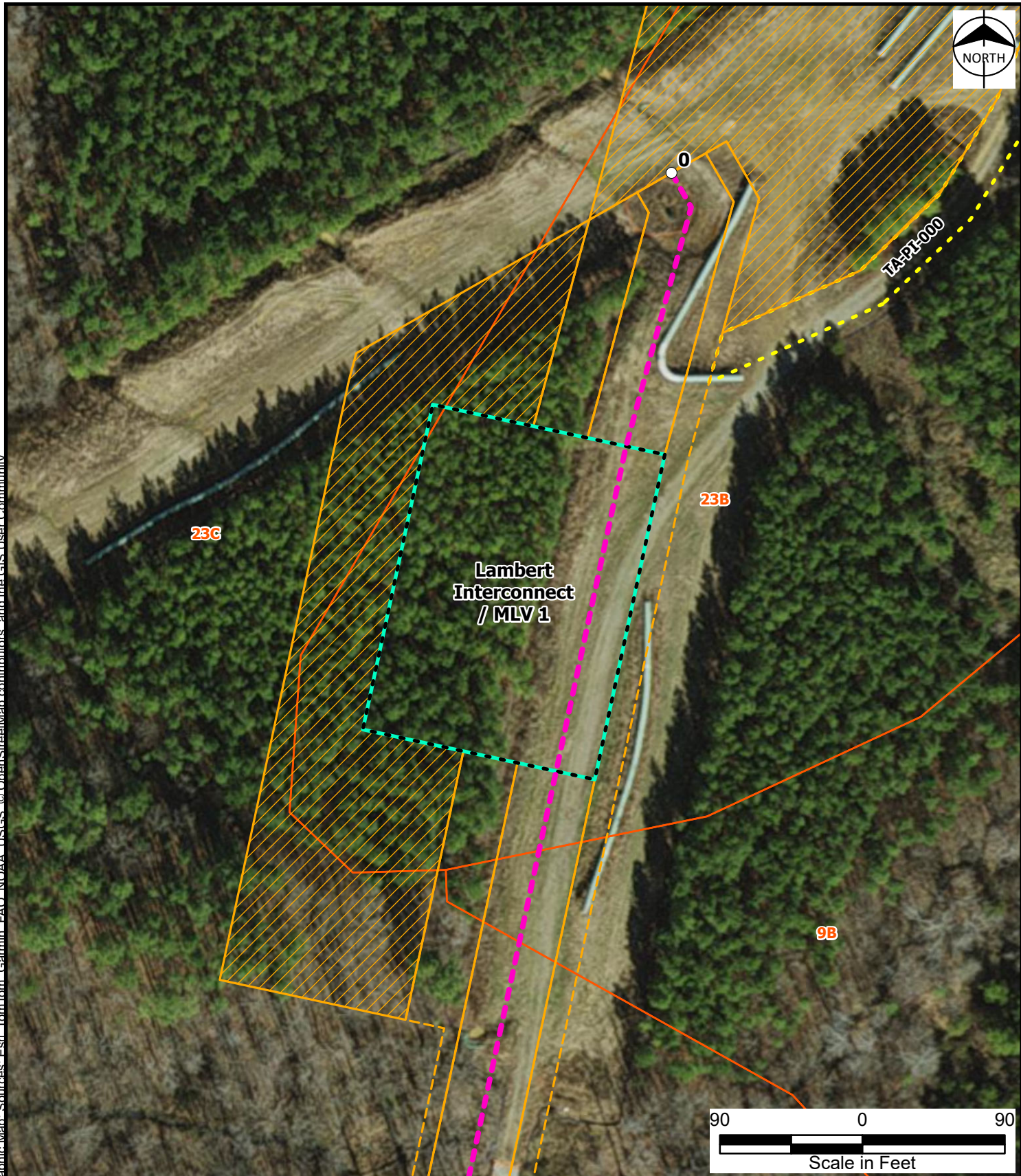
Resource Report 7

Appendix 7-C

Amendment Project Aboveground Facilities Soils Maps



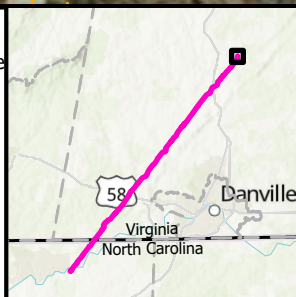
Service Layer Credits: World Topographic Map: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Mileposts	Temporary Workspace
Proposed Pipeline Route	Additional Temporary Workspace
Aboveground Facility	Temporary Access Road
Permanent Easement	Soil

Soil Map Unit Name

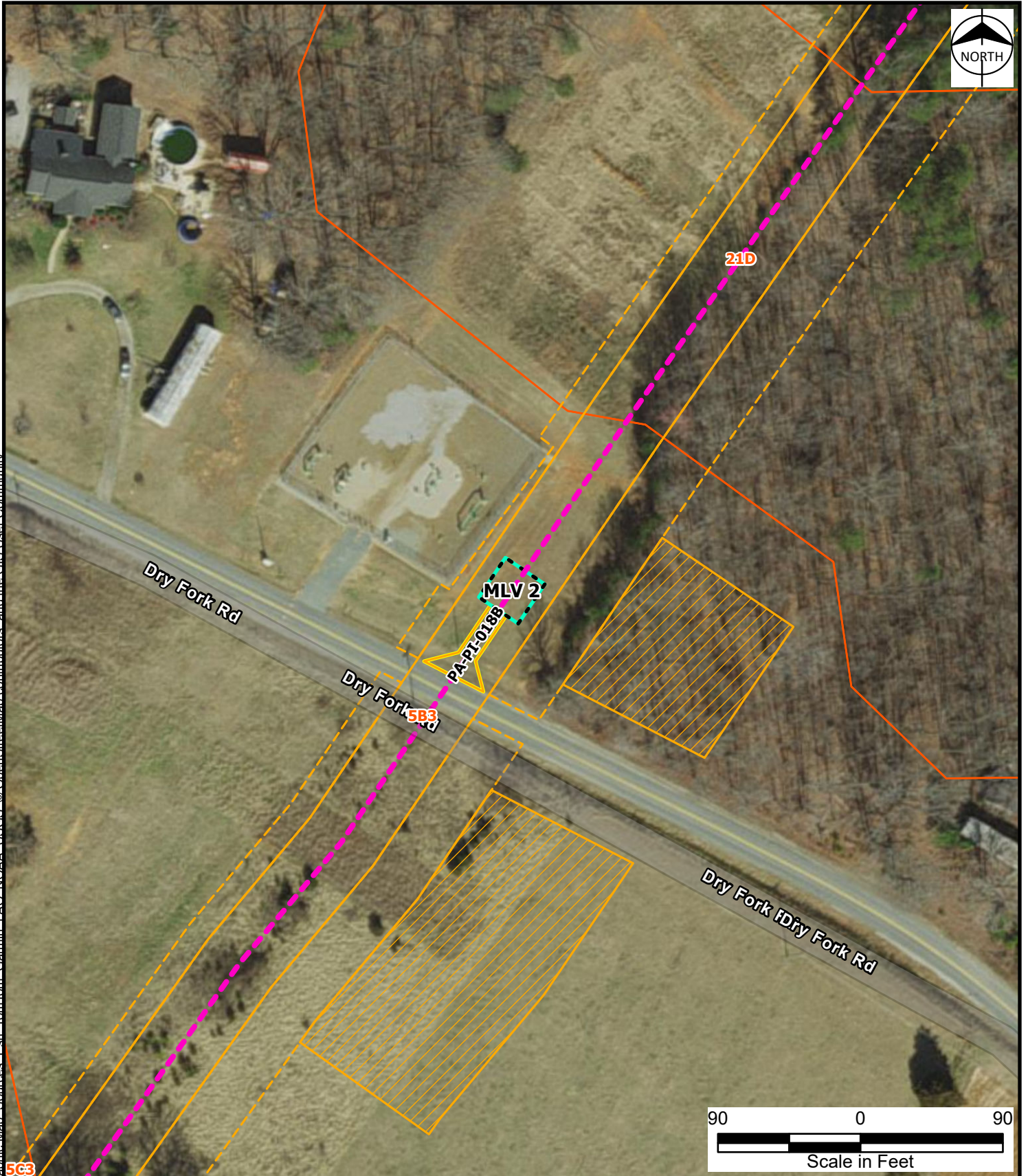
23B,Clover fine sandy loam, 2 to 7 percent slopes
 23C,Clover fine sandy loam, 7 to 15 percent slopes
 9B,Lackstown fine sandy loam, 2 to 7 percent slopes



Mountain Valley PIPELINE

MVP Southgate Amendment Project

Figure 7-C-1
Aboveground Facilities
Lambert Interconnect

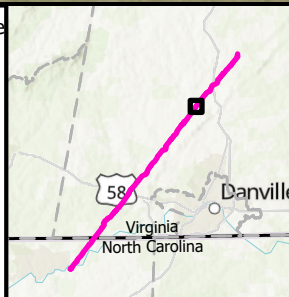


Service Layer Credits: World Topographic Map: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

- - - Proposed Pipeline Route
- Aboveground Facility
- Permanent Easement
- Temporary Workspace
- Additional Temporary Workspace
- Permanent Access Road
- Soil

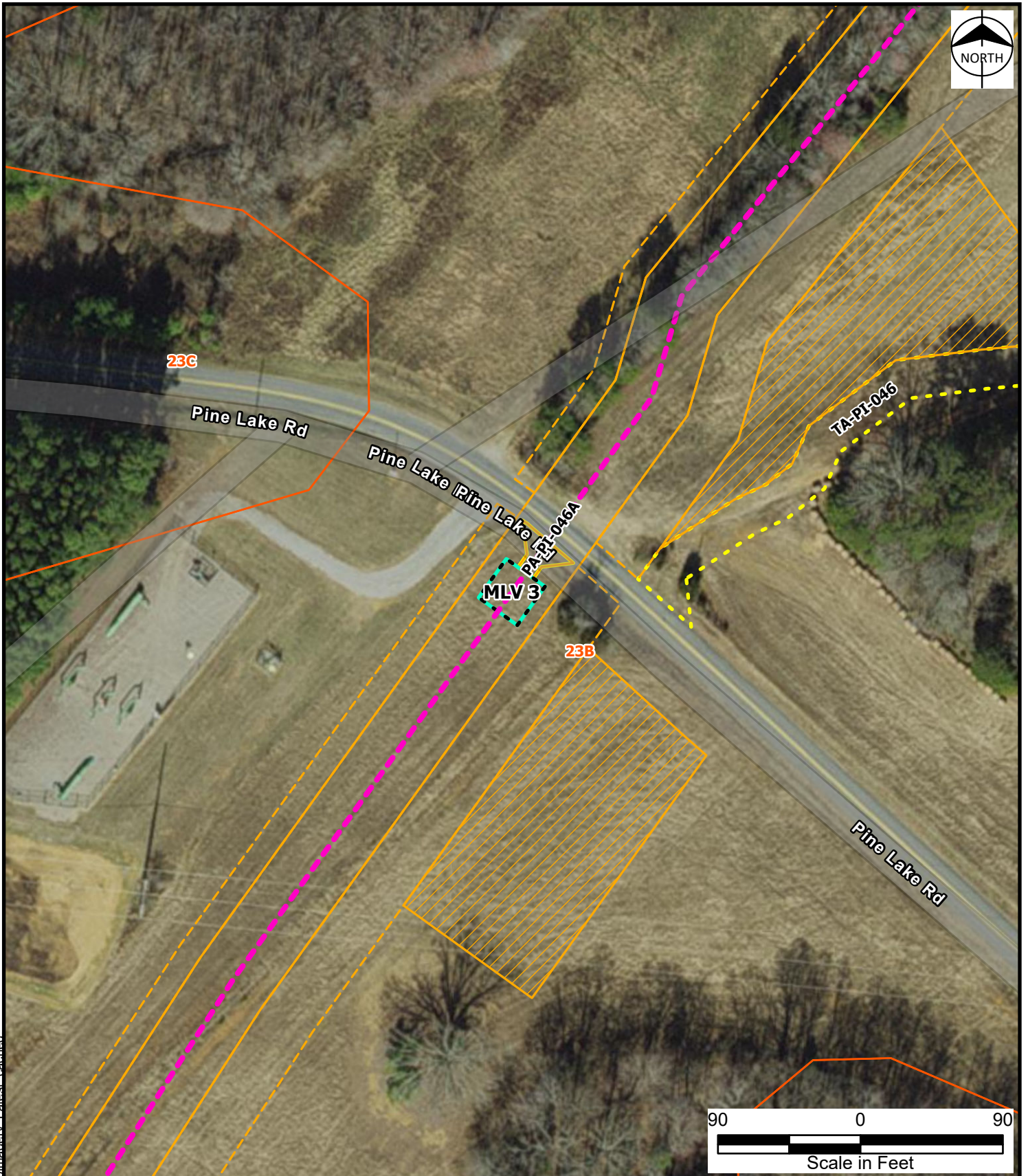
Soil Map Unit Name

- 21D, Poplar Forest fine sandy loam, 15 to 25 percent slopes
- 5B3, Clifford sandy clay loam, 2 to 7 percent slopes, severely eroded
- 5C3, Clifford sandy clay loam, 7 to 15 percent slopes, severely eroded











MVP Southgate
Amendment Project

Figure 7-C-2
Aboveground Facilities
MLV 2

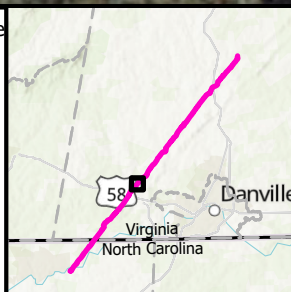


Service Layer Credits: Imagery\Orthoimagery\Latest_cached

-  Proposed Pipeline Route
-  Aboveground Facility
-  Permanent Easement
-  Temporary Workspace
-  Additional Temporary Workspace
-  Temporary Access Road
-  Permanent Access Road
-  Soil

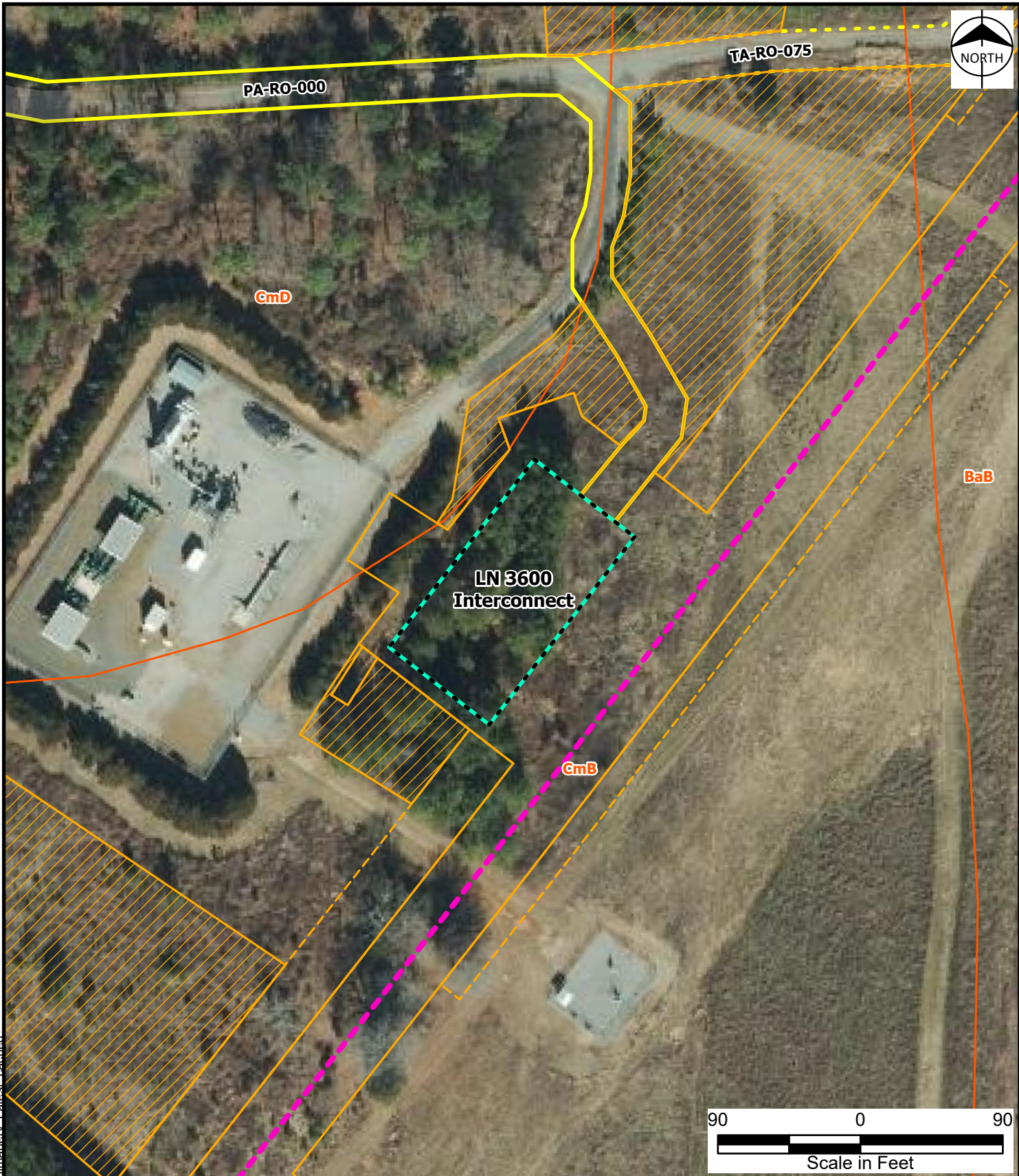
Soil Map Unit Name

- 23B,Clover fine sandy loam, 2 to 7 percent slopes
- 23C,Clover fine sandy loam, 7 to 15 percent slopes




**MVP Southgate
Amendment Project**

**Figure 7-C-3
Aboveground Facilities
MLV 3**

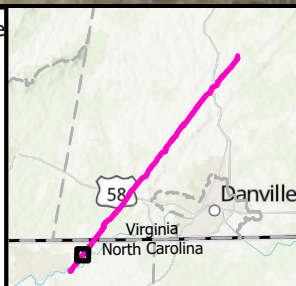


Service Layer Credits: Imagery\Orthoimagery Latest_cached

-  Proposed Pipeline Route
-  Aboveground Facility
-  Permanent Easement
-  Temporary Workspace
-  Additional Temporary Workspace
-  Temporary Access Road
-  Permanent Access Road
-  Soil

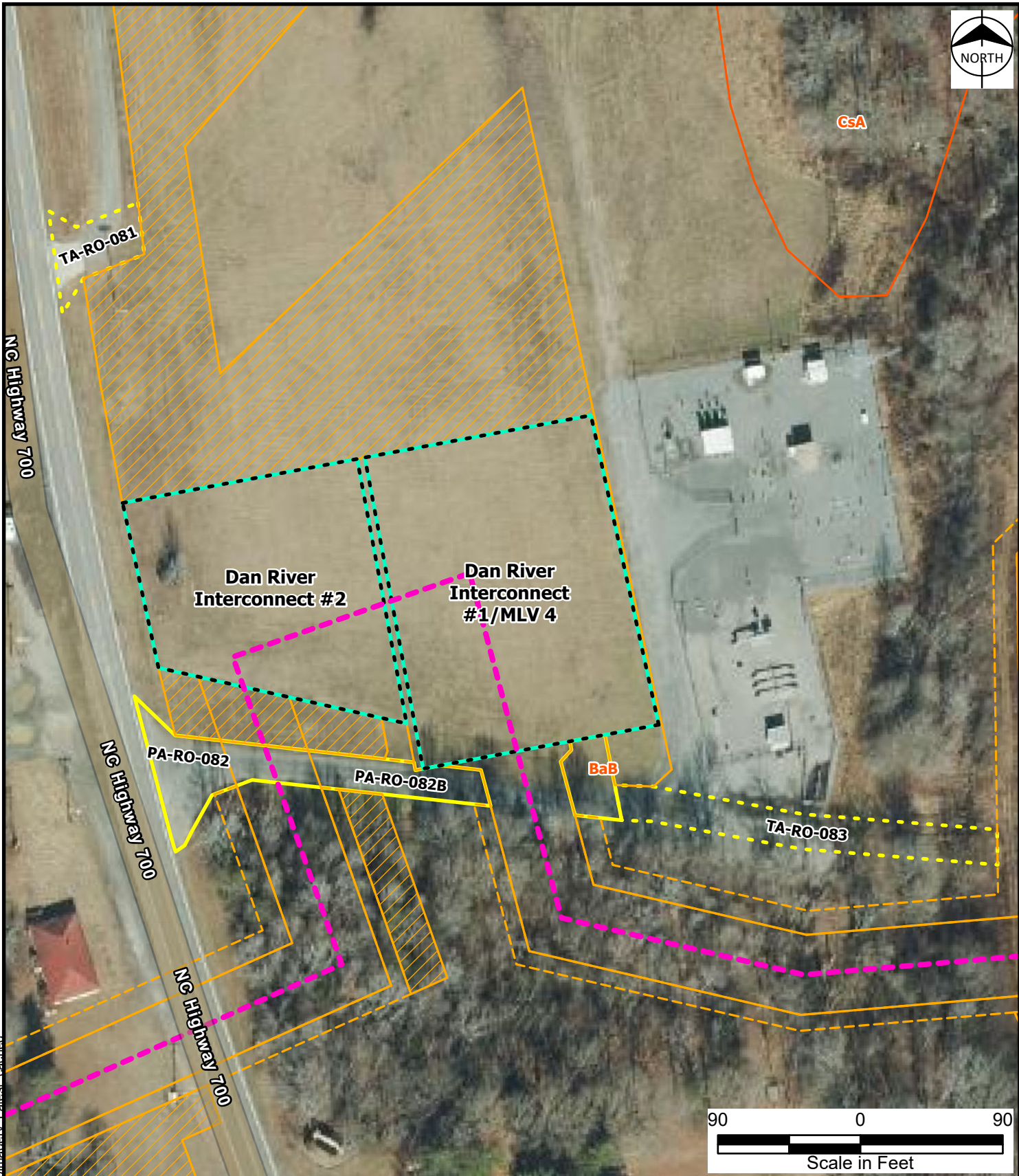
Soil Map Unit Name

- BaB, Banister loam, 0 to 4 percent slopes, rarely flooded
- CmB, Clover sandy loam, 2 to 8 percent slopes
- CmD, Clover sandy loam, 8 to 15 percent slopes



MVP Southgate
Amendment Project

Figure 7-C-4
Aboveground Facilities
LN 3600 Interconnect

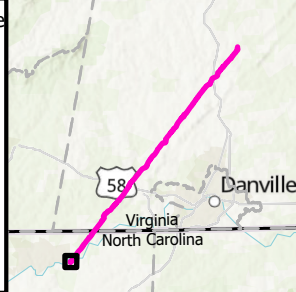


Service Layer Credits: Imagery\Orthoimagery Latest_cached

- Proposed Pipeline Route
- Aboveground Facility
- Permanent Easement
- Temporary Workspace
- Additional Temporary Workspace
- Temporary Access Road
- Permanent Access Road
- Soil

Soil Map Unit Name

BaB, Banister loam, 0 to 4 percent slopes, rarely flooded
 CsA, Codorus loam, 0 to 2 percent slopes, frequently flooded



MVP Southgate Amendment Project

**Figure 7-C-5
Aboveground Facilities
Dan River Interconnects**