GENERAL SPECIAL PROVISIONS FOR ALL PROJECTS
2018 STANDARD SPECIFICATIONS FOR CONSTRUCTION

SECTION 103 – TAXES AND INSURANCE

103.03 STATE SALES TAX is hereby modified by deleting the phrase "(see *Vermont Sales and Use Tax Regulations, No. 226-2* and *226-7* and *32 V.S.A. § 9743(4)*)" and the phrase "(see *32 V.S.A. § 9741(44)*)." from the first paragraph.

103.03 STATE SALES TAX is hereby further modified by adding the following reference to the end of the first paragraph:

(see *32 V.S.A. § 9743(4), 32 V.S.A. § 9741(30), 32 V.S.A. § 9741(44),* and the *Vermont Sales and Use Tax Regulations*, *Reg. § 1.9741(34)-5* and *Reg. § 1.9743*).

SECTION 105 – CONTROL OF THE WORK

105.14 SUNDAY, NIGHT, AND HOLIDAY WORK is hereby modified by relabeling part (c), "Application.", as "(d) Application." and part (d), "Other Provisions Not Affected.", as "(e) Other Provisions Not Affected."

105.16 LOAD RESTRICTIONS, part (c), Penalty and Reduction for Overweight Operation., is hereby modified by changing the phrase "*23 V.S.A. § 1391(a)*" to read "*23 V.S.A. § 1391a*".

SECTION 406 – BITUMINOUS CONCRETE PAVEMENT

406.03C REQUIREMENTS FOR BOTH MARSHALL AND SUPERPAVE BITUMINOUS MIXTURES is hereby modified by changing the name of part (e) from "Pay Factor Determination." to "Air Voids Pay Factor (PF_{AV}) Determination."

406.19 METHOD OF MEASUREMENTS is hereby modified by changing the name of part (c) from "Longitudinal Joint Pay Factor." to "Longitudinal Joint Pay Adjustment."

SECTION 506 – STRUCTURAL STEEL

506.19 BOLTING AND CONNECTIONS, part (c), is hereby modified by adding the sentence "Unless otherwise indicated on the plans, *ASTM F 3125/F 3125 M* Grade A 325 hex head bolts shall be used." immediately following the sentence "Bolts shall be tightened to develop a tension not less than 5% more than the minimum bolt tension specified in Table 506.19A."

506.19 BOLTING AND CONNECTIONS is hereby modified by relabeling part (d), "Acceptance of Bolt Tensioning." as "(e) Acceptance of Bolt Tensioning."

506.19 BOLTING AND CONNECTIONS is hereby further modified by adding a new part "(d) Bolt Tensioning Methods." All of the text and tables following paragraph ten, beginning with the phrase "Bolts shall be tensioned by the Contractor in the presence of the Engineer…" and ending with Note 4 of Table 506.19B, shall be moved to the new part (d).

All references to "Column 3 of Table 506.19B" within the text identified above shall be replaced with the phrase "Column 4 of Table 506.19B".

SECTION 510 – PRESTRESSED CONCRETE

510.12 GROUT, part (b), is hereby modified by deleting the phrase "requirements of Subsection 707.03(c)(1) and Subsection 707.03(c)(3)." from the fifth paragraph and replacing it with the phrase "requirements of Subsection 707.03(a)(1) and Subsection 707.03(a)(3)."

SECTION 540 – PRECAST CONCRETE

540.11 GROUT, part (b), is hereby modified by deleting the phrase "requirements of Subsection 707.03(c)(1) and Subsection 707.03(c)(3)." from the fifth paragraph and replacing it with the phrase "requirements of Subsection 707.03(a)(1) and Subsection 707.03(a)(3)."

540.12 POST-TENSIONING is hereby modified by deleting the phrase "requirements of Subsection 510.12(b)." from the second paragraph and replacing it with the phrase "requirements of Subsection 540.11(b)."

SECTION 605 – UNDERDRAINS

605.02 MATERIALS is hereby modified by adding the following as the eighth entry in the Subsection listing:

Geotextile for Underdrain Trench Lining.....720.05

605.02 MATERIALS is hereby further modified by deleting the sentence "Geotextile shall meet the requirements of Table 720.01A for Geotextile for Underdrain Trench Lining."

SECTION 625 – SLEEVES FOR UTILITIES

625.02 MATERIALS is hereby modified by deleting the fifteenth entry, "Well Casing.....741.01", from the Subsection listing.

SECTION 630 – UNIFORMED TRAFFIC OFFICERS AND FLAGGERS

630.04 FLAGGERS, is hereby modified by deleting part (a) in its entirety and replacing it with the following:

(a) Requirements. The Contractor shall verify that Flaggers meet the following requirements. Flaggers shall have successfully completed a 4-hour training course taught by a certified instructor within the last 24 months and shall carry proof of training at all times when on the Project. Certified instructors shall have successfully completed one of the following courses:

(1) Associated General Contractors of VT Traffic Control Technician/Flagger Trainer Course

(2) American Traffic Safety Services Association Flagger Instructor Training Course

(3) National Safety Council Flagger Instructor Course

SECTION 631 – FIELD OFFICE

631.08 TESTING EQUIPMENT, GROUT, is hereby modified by deleting "1 Set of specimen molds meeting the requirements of *AASHTO T 106 M/T 106*" and replacing it with the following:

Specimen molds meeting the requirements of *AASHTO T 106 M/T 106*. The number of molds shall be sufficient to perform both the acceptance testing required for the contract item and any necessary control of work testing. Each specimen mold shall be capable of producing 3 individual cubes.

SECTION 641 – TRAFFIC CONTROL

641.03 TRAFFIC CONTROL DEVICES is hereby modified by adding the following as the thirteenth paragraph, immediately following the phrase "...each consisting of a maximum of three lines of eight characters.":

Each PCMS unit shall be tamper-resistant. The control cabinet shall be locked when not in use. Each PCMS shall also have a security system that will only allow access if a code or password is entered. The default code or password shall be changed upon deployment of the PCMS by the Contractor. PCMS boards featuring remote access shall also be password protected.

SECTION 646 – RETROREFLECTIVE PAVEMENT MARKINGS

646.07 DURABLE PAVEMENT MARKINGS, parts (e)(1) and (g)(1), are both hereby modified by deleting the phrase "paver-placed pavement" from each part and replacing it with the phrase "bonded wearing course".

646.07 DURABLE PAVEMENT MARKINGS is hereby further modified by relabeling part (g), "Polyurea Paint." as "(h) Polyurea Paint."

646.07 DURABLE PAVEMENT MARKINGS is hereby further modified by adding the following as the new part (g):

(g) Preformed Thermoplastic. Preformed thermoplastic shall be one of the Thermoplastic Pavement Markings, Type B listed on the Agency's *Approved Products List*.

646.09 OTHER RELATED MARKINGS, Table 646.09A, is hereby modified by deleting the first row and replacing it with the following:

Marking Material	Recess Depth (mils)

SECTION 649 – GEOTEXTILE FABRIC

649.02 MATERIALS is hereby modified by being deleted in its entirety and replaced with the following:

649.02 MATERIALS. Materials shall meet the requirements of the following Subsections:

Geotextile for Roadbed Separator 720.02
Geotextile Under Railroad Ballast.....720.03
Geotextile Under Stone Fill.....720.04
Geotextile for Underdrain Trench Lining.....720.05
Geotextile for Filter Curtain 720.06

Geotextiles shall conform to the following:

(a) Where sewn seams are used, the Contractor shall furnish the manufacturer's wide strip tensile test results as part of the certification. The results must verify that the seam meets or exceeds the specified average minimum roll values for the grab tensile strength of the geotextiles, or wide strip tensile strength for reinforcement applications.

(b) Field seams, where used, shall be in accordance with the manufacturer's recommendations.

SECTION 653 – EROSION PREVENTION AND SEDIMENT CONTROL

653.02 MATERIALS is hereby modified by inserting the following as the fourth and fifth entries in the Subsection listing:

Geotextile Under Stone Fill.....720.04
Geotextile for Silt Fence.....720.07

653.02 MATERIALS is hereby further modified by deleting the phrase "Geotextile Under Stone Fill shall be in accordance with Section 720 and Table 720.01A. Geotextile for Silt Fence shall be in accordance with Section 720 and Table 720.01A."

653.08 RUNOFF CONTROL MEASURES is hereby modified by deleting the first paragraph of Subsection 653.08(a)(1) in its entirety and replacing it with the following:

(1) Check Dam, Type I. Check Dam, Type I shall be placed in channels and on Geotextile Under Stone Fill meeting the requirements of Subsection 720.04.

653.08 RUNOFF CONTROL MEASURES is hereby further modified by deleting Subsection 653.08(b)(1) and Subsection 653.08(b)(2) in their entirety and replacing them with the following:

(1) Silt Fence, Type I. Silt Fence, Type I shall be constructed of posts and Geotextile for Silt Fence meeting the requirements of Subsection 720.07.

(2) Silt Fence, Type II. Silt Fence, Type II shall be constructed of posts, Geotextile for Silt Fence meeting the requirements of Subsection 720.07, and woven wire reinforcement.

653.09 TREATMENT MEASURES is hereby modified by deleting the second paragraph of Subsection 653.09(a), beginning with "Stabilized Construction Entrances shall be constructed of stone...", in its entirety and replacing it with the following:

Stabilized Construction Entrances shall be constructed of stone meeting the requirements of Subsection 704.17 and shall be placed on top of Geotextile Under Stone Fill meeting the requirements of Subsection 720.04.

653.09 TREATMENT MEASURES is hereby further modified by deleting the third paragraph of Subsection 653.09(b)(1), beginning with "Stake and fabric devices...", in its entirety and replacing it with the following:

Stake and fabric devices shall be constructed of Geotextile for Silt Fence meeting the requirements of Subsection 720.07 and stakes approved by the Engineer.

653.09 TREATMENT MEASURES is hereby further modified by deleting the second paragraph of Subsection 653.09(b)(3), beginning with "Inlet Protection Device, Type III shall be constructed of Aggregate...", in its entirety and replacing it with the following:

Inlet Protection Device, Type III shall be constructed of Aggregate for Erosion Prevention and Sediment Control and shall be placed on top of Geotextile Under Stone Fill meeting the requirements of Subsection 720.04.

SECTION 675 – TRAFFIC SIGNS

675.02 MATERIALS is hereby modified by deleting the first entry, "Paint for Traffic Signs.....708.06", from the Subsection listing.

SECTION 677 – OVERHEAD TRAFFIC SIGN SUPPORTS

677.03 GENERAL is hereby modified by adding the sentence "Field verification testing for Direct Tension Indicators is not required." immediately following the sentence "High-Strength Bolts, Nuts, and Washers shall be tensioned in accordance with Subsection 506.19."

SECTION 678 – TRAFFIC CONTROL SIGNALS

678.09 ERECTION OF POSTS AND POLES is hereby modified by adding the sentence "Field verification testing for Direct Tension Indicators is not required." immediately following the sentence "High-Strength Bolts, Nuts, and Washers shall be tensioned in accordance with Subsection 506.19."

SECTION 679 – STREET LIGHTING

679.02 MATERIALS is hereby modified by deleting the fifth material entry, "Bracket Arms.....753.04", from the Subsection listing.

679.02 MATERIALS is hereby further modified by inserting the following as the fifth and sixth entries in the Subsection listing:

Bracket Arms, Aluminum.....753.04(a)
Bracket Arms, Steel.....753.04(b)

679.05 BRACKET ARMS is hereby modified by deleting the first sentence of the Subsection and replacing it with the following:

Bracket arms shall be free of defects and burrs. Bracket arms shall be able to withstand a vertical load of 100 pounds and a horizontal load of 50 pounds without fracture or permanent deformation and shall be installed as shown in the Contract Documents.

Bracket arms installed on aluminum posts shall be in accordance with Subsection 753.04(a). Bracket arms installed on steel or wood posts shall be in accordance with Subsection 753.04(b).

SECTION 680 – TRAVEL INFORMATION SIGNS

680.02 MATERIALS is hereby modified by deleting the second entry, "Paint for Traffic Signs.....708.06", from the Subsection listing.

SECTION 707 – JOINT MATERIALS

707.14 PREFORMED JOINT FILLER, Table 707.14A, is hereby modified by deleting the reference to "*AASHTO T 42 /*" from column 3.

SECTION 708 – PAINTS, STAINS, AND TRAFFIC MARKING MATERIALS

708.06 PAINT FOR TRAFFIC SIGNS is hereby modified by being deleted in its entirety and replaced with the following:

708.06 THIS SUBSECTION RESERVED.

SECTION 711 – CULVERTS, STORM DRAINS, AND SEWER PIPES, METAL

711.02 CORRUGATED ALUMINUM ALLOY PIPE, PIPE ARCHES, AND UNDERDRAINS, part (a)(2)c., is hereby modified by deleting the phrase "requirements of Subsection 711.01(a)(2)c." and replacing it with the phrase "requirements of Subsection 711.01(a)(1)c."

SECTION 713 – REINFORCING STEEL, STRAND, AND WELDED WIRE REINFORCEMENT

713.04 COLD DRAWN STEEL WIRE is hereby modified by deleting the reference to "*AASHTO M 32 M/M 32*"and replacing it with "*AASHTO M 336 M/M 336*".

713.05 WELDED WIRE REINFORCEMENT is hereby modified by deleting the phrase "*AASHTO M 55 M/M 55* or *AASHTO M 221 M/M 221*"and replacing it with "*AASHTO M 336 M/M 336*".

SECTION 720 – GEOTEXTILES

SECTION 720 – GEOTEXTILES is hereby modified by being deleted in its entirety and replaced with the following:

SECTION 720 – GEOTEXTILES

720.01 GENERAL. Geotextiles shall be evaluated in accordance with the NTPEP geotextiles work plan and in compliance with the NTPEP audit program for geotextiles. Geotextiles shall be one of the products listed on the Agency's *Approved Products List* for the respective material specification.

720.02 GEOTEXTILE FOR ROADBED SEPARATOR. Geotextile for Roadbed Separator shall conform to *AASHTO M 288*, Table 1, Class 1 for Geotextile Strength Property Requirements, and shall conform to *AASHTO M 288*, Table 3 for Separation Geotextile Property Requirements.

720.03 GEOTEXTILE UNDER RAILROAD BALLAST. Minimum Average Roll Values (MARV) for Geotextile Under Railroad Ballast shall be as required in Table 720.03A.

TABLE 720.03A – MARV FOR GEOTEXTILE UNDER RAILROAD BALLAST

Geotextile Property	Test Method	MARV
Elongation Criteria at Failure [1]	*ASTM D 4632/ D4632 M*	≥ 50%
Grab Strength (lbs)	*ASTM D 4632/ D4632 M*	225
Tear Strength (lbs)	*ASTM D 4533/ D 4533 M*	115
Puncture Strength (lbs)	*ASTM D 6241*	850
Permittivity (s^{-1})	*ASTM D 4491/ D 4491 M*	0.70
Apparent Opening Size (mm)	*ASTM D 4751*	0.21 max. (No. 70 Sieve)
UV Resistance (% Strength Retained)	*ASTM D 4355/ D 4355 M*	70% at 500 hours of exposure
Structure	--	Nonwoven only

[1] Elongation corresponds to Maximum Grab Tensile Strength as measured in accordance with the requirements of *ASTM D 4632/D 4632 M*.

720.04 GEOTEXTILE UNDER STONE FILL. Geotextile Under Stone Fill shall conform to *AASHTO M 288,* Table 1, Class 1 for Geotextile Strength Property Requirements, and shall conform to *AASHTO M 288,* Table 5 for Stabilization Geotextile Property Requirements. Geotextile structure shall not be slit film.

720.05 GEOTEXTILE FOR UNDERDRAIN TRENCH LINING. Geotextile for Underdrain Trench Lining shall conform to *AASHTO M 288,* Table 1, Class 3 for Geotextile Strength Property Requirements, with a minimum elongation of 20%. Geotextile for Underdrain Trench Lining shall conform to *AASHTO M 288,* Table 2 (> 50% of in situ soil passing the No. 200 (0.075 mm) sieve) for Subsurface Drainage Geotextile Requirements. Geotextile structure shall be nonwoven and shall not be slit film.

720.06 GEOTEXTILE FOR FILTER CURTAIN. Minimum Average Roll Values (MARV) for Geotextile for Filter Curtain shall be as required in Table 720.06A.

TABLE 720.06A – MARV FOR GEOTEXTILE FOR FILTER CURTAIN

Geotextile Property	Test Method	MARV
Elongation Criteria at Failure [1]	*ASTM D 4632/ D4632 M*	20% max.
Grab Strength (lbs)	*ASTM D 4632/ D4632 M*	200
Tear Strength (lbs)	*ASTM D 4533/ D 4533 M*	50
Puncture Strength (lbs)	*ASTM D 6241*	430
Permittivity (s^{-1})	*ASTM D 4491/ D 4491 M*	0.28
Apparent Opening Size (mm)	*ASTM D 4751*	0.21 max. (No. 70 Sieve)
UV Resistance (% Strength Retained)	*ASTM D 4355/ D 4355 M*	70% at 500 hours of exposure
Structure	--	Woven only

[1] Elongation corresponds to Maximum Grab Tensile Strength as measured in accordance with the requirements of *ASTM D 4632/D 4632 M*.

720.07 GEOTEXTILE FOR SILT FENCE. Geotextile for Silt Fence shall conform to *AASHTO M 288*, Table 8 for Temporary Silt Fence Property Requirements. Geotextile structure shall be woven.

SECTION 725 – CONCRETE CURING MATERIALS AND ADMIXTURES

725.01 CONCRETE CURING MATERIALS, part (d) is hereby modified by being deleted in its entirety and replaced with the following:

(d) Liquid Membrane-Forming Compounds. Liquid membrane-forming compounds shall be one of the products listed on the Agency's *Approved Products List* and shall meet the following requirements:

(1) Liquid membrane-forming compounds shall be evaluated in accordance with the NTPEP concrete curing compounds work plan.

(2) Liquid membrane-forming compounds shall conform to the requirements of *ASTM C 309*, Type 1-D or Type 2, Class B.

(3) Liquid membrane-forming compounds shall not be allowed to freeze.

725.02 CHEMICAL ADMIXTURES, part (a) is hereby modified by being deleted in its entirety and replaced with the following:

(a) General Requirements. Non-bulk quantities of chemical admixtures shall be delivered in the manufacturer's original containers marked with the manufacturer's name and product name. Bulk quantities shall be accompanied by a delivery slip indicating both the manufacturer's name and the product name. Chemical admixtures shall be one of the products listed on the Agency's Approved Products List for the respective material specification, shall be evaluated in accordance with the NTPEP concrete admixtures work plan, and shall meet the requirements of the respective material specification below.

SECTION 753 – HIGHWAY ILLUMINATION

753.04 BRACKET ARMS is hereby modified by being deleted in its entirety and replaced with the following:

753.04 BRACKET ARMS.

(a) Bracket Arms, Aluminum. Single member bracket arms and the main member of truss-type arms shall be fabricated from seamless aluminum tube conforming to the requirements of *ASTM B 221/B 221 M,* Alloy 6063-T6 or Alloy 6061-T6. Other members of truss-type arms shall conform to the requirements of *ASTM B 221/B 221 M,* Alloy 6063-T6. All screws, nuts, bolts and other hardware for mounting bracket arms to the light pole shall be stainless steel, unless otherwise specified.

(b) Bracket Arms, Steel. Components of single member and truss-type bracket arms shall be fabricated from standard steel pipe meeting the requirements of *ASTM A 53/A 53 M* or *ASTM A 501/A 501 M*.