

SPECIAL PROVISIONS

1. NOTICE TO BIDDERS – CONTRACT COMPLETION DATE. This Contract shall be completed on or before **Month Day, Year.**
2. NOTICE TO BIDDERS – PROHIBITION OF RUSSIAN GOODS. The Contractor is hereby notified that, pursuant to Vermont Executive Order No. 02-22, dated March 3rd, 2022, the purchase of Russian-sourced goods and goods produced by Russian entities (defined as institutions or companies that are headquartered in Russia or have their principal place of business in Russia) is prohibited. The awarded Contractor must fill out and sign the Executive Order 02-22 Vendor Certification as part of the Contract awarding process.
3. NOTICE TO BIDDERS – NIGHT WORK. The Contractor is hereby notified that night work will not be permitted on this Contract. Night will be as defined in Subsection 101.02.
4. NOTICE TO BIDDERS – ELECTRONIC DOCUMENT MANAGEMENT. The Contractor is hereby notified that the Contractor, their subcontractors, and suppliers shall create both a Doc Express and an iCXWeb account. The Contractor shall use these applications for collection and management of electronic documents. Doc Express can be accessed at the following link: <https://docexpress.com>. iCXWeb can be accessed at the following link: [vtrans.exevision.com/icx/Index.aspx](https://vtrans.exevision.com/icx/Index.aspx).

All costs associated with the use of Doc Express and iCXWeb will be considered incidental to Item 635.1100, Mobilization/Demobilization. The State will manage the applications including Contract setup upon Contract execution.

To create an account and for more information regarding the use of Doc Express see the information at the following link:

<https://outside.vermont.gov/agency/vtrans/external/docs/construction/Contracting/DocExpressOverviewforContractors.docx>.

To create an account and for more information regarding the use of iCXWeb see the information at the following link: <https://vtrans.vermont.gov/icx>.

5. NOTICE TO BIDDERS – ELECTRONIC TICKETING VTRANS PORTAL. The Contractor is hereby notified that the Contractor, their subcontractors, and suppliers shall connect to the VTrans Portal and use the application for distribution and management of electronic tickets (e-tickets). VTrans Portal is a state cloud-based e-ticket database, including a web-based user interface and a jobsite mobile e-ticket application. VTrans Portal will interface with the Contractor's supplier existing point of sales or e-ticketing platform and will allow VTrans to manage bituminous material e-tickets.

All costs associated with the use of VTrans Portal will be considered incidental to the appropriate Section 406 and Section 407 pay items. The Agency will manage the VTrans Portal application including Contract setup upon Contract execution.

To create an account, connect to the VTrans Portal, and for more information regarding the use of VTrans Portal see the information at the following link: <https://www.haulhub.com/vermont-agency-transport-22/>

6. NOTICE TO BIDDERS – CONTACT WITH THE AGENCY. From the time of advertising until the actual bid opening for this Contract, all prospective Contractors, subcontractors, and suppliers shall direct all inquiries related to this Contract solely to the Agency's Contract Administration Section at [AOT.ConstructionContractingInquiry@vermont.gov](mailto:AOT.ConstructionContractingInquiry@vermont.gov).

The deadline for submitting inquiries related to this Contract is 4:30 p.m. Eastern Time on Month Day, Year. Inquiries received prior to this time will receive a response from the Agency. Inquiries received after this time may receive a response at the Agency's discretion.

7. NOTICE TO BIDDERS – OTHER SPECIFICATIONS AND CONTRACT REQUIREMENTS.

Categorical Exclusion

Impact Plans

Project Impact Data Forms

FHWA 1273 – Required Contract Provisions for Federal Aid Construction Contracts

USDOL Davis Bacon Wage Rates by County

Disadvantaged Business Enterprise (DBE) Policy Contract Requirements - CR-110

Attachment C - Standard State Provisions for Contracts and Grants

USDOT Standard Title VI Nondiscrimination Assurances Appendices A, E

Standard Federal Equal Employee Opportunity (EEO) Construction Contract Specifications CA26

Contractor Equal Employment Opportunity (EEO) Certification Form – CA109

Vermont Agency of Transportation Certificate of Compliance – CA271

Vermont Agency of Transportation Minimum Labor and Truck Rates – CA101

Commodity Index Prices – CA170

Schedule of Pay Items

8. NOTICE TO BIDDERS – NEW PREQUALIFICATION FORM. The Contractor is hereby notified that the Agency is required by the U.S. Department of Transportation to develop and maintain a list of information about all firms that bid on federally funded Contracts in accordance with *49 C.F.R. § 26.11*. The Agency has developed a new electronic form to collect this information. The Contractor shall fill out this form as part of their project-specific prequalification for every Contract that they bid on. A link to this form is provided in the prequalification form available through iCX and the Agency's website.
9. NOTICE TO BIDDERS – DAVIS-BACON. U.S. Department of Labor Davis-Bacon wage rates are applicable to this Contract. Copies of the applicable rates are included in this proposal.

*In the included wage rates, the requirements of Executive Order 13658 and 14026 do not apply to this Contract.*

10. NOTICE TO BIDDERS – STANDARD DRAWINGS. *The Vermont Agency of Transportation Standard Drawings listed on the Index of Sheets are not included in the plan set, but may be found at the following address:*  
[https://resources.vtrans.vermont.gov/resources/cadd/VAOTconSTD\\_Name.xml?\\_gl=1\\*6cpy62\\*\\_ga\\*MTU5MTQ3NTcyNi4xNzIwMjM5NjI0\\*\\_ga\\_V9WQH77KLW\\*czE3NTI3NTYyMzQkbzE3NC RnMSR0MTc1Mjc1NjkwMyRqNjAkbDAkaDA](https://resources.vtrans.vermont.gov/resources/cadd/VAOTconSTD_Name.xml?_gl=1*6cpy62*_ga*MTU5MTQ3NTcyNi4xNzIwMjM5NjI0*_ga_V9WQH77KLW*czE3NTI3NTYyMzQkbzE3NC RnMSR0MTc1Mjc1NjkwMyRqNjAkbDAkaDA).
11. NOTICE TO BIDDERS – INFORMATIONAL DOCUMENTS. The Contractor is hereby notified that the following informational documents for this Contract are available on iCXWeb and the VTrans Bid Opportunities website. These documents are being provided during the bid solicitation period for informational purposes only.
  - (a) Traffic Management Plan (TMP) Checklist
  - (b) Geophysical Survey Report
  - (c) Record Plans
12. NOTICE TO BIDDERS – SURFACE WATER WITHDRAWAL. The Contractor is hereby notified that the Vermont state law, Act 135 of 2022, requires any person withdrawing surface water (as defined in 10 V.S.A. § 1002 (20)) to register with and report the water withdrawal and usage to the Vermont Department of Environmental Conservation beginning January 1, 2023. Guidance can be found here: <https://dec.vermont.gov/watershed/rivers/streamflow-protection/act-135-surface-water-withdrawal-registration-and-reporting>
13. NOTICE TO BIDDERS – ENVIRONMENTAL COMMITMENTS. Will incorporate when received from VTrans.
14. NOTICE TO BIDDERS – UTILITIES. Will incorporate when received from VTrans.
15. NOTICE TO BIDDERS – CONCURRENT CONSTRUCTION. The Contractor is made aware of the following VTrans construction project(s) which are expected to be in progress within the area of this project during its construction.

TABLE 1 – CONCURRENT CONSTRUCTION PROJECTS

Project	Contractor	Anticipated Contract Completion Date
ESSEX STPG 030-1(22)	TBD	SEP 2027 – MARCH 2028

This list is not all-inclusive and it is possible there may be other VTrans, municipal, or private construction projects within the area of this project during its construction.

The Contractor shall coordinate construction schedules and traffic control with the work required for these projects.

There will be no extra compensation paid to the Contractor for any inconvenience caused by working around these or other projects.

16. NOTICE TO BIDDERS – SPECIAL CONSTRUCTION REQUIREMENTS.

- (a) During construction it will be necessary for the Contractor to maintain one-lane traffic for extended periods of time. In no case shall the paved width for this one-lane traffic, including shoulders, be reduced to less than 11 feet. This paved width shall remain free of obstructions and obstacles at all times.
- (b) The Contractor shall position Portable Changeable Message Signs at locations determined by the Engineer properly warning motorists of the roadway conditions ahead. As directed by the Engineer, these locations may change during construction as needs arise based on daily work activities. The message to be displayed shall be submitted to the Engineer in advance for approval. The displayed message should accurately reflect what motorists can expect to encounter through the project area. The cost of providing the Portable Changeable Message Signs will be paid for under Contract item 641.1500, as applicable. The Contractor shall also install and maintain appropriate construction signing warning the traveling public of the expected roadway surface conditions.
- (c) Prior to final acceptance of the project, all drop inlets and bridge joints within the project limits shall be cleaned and all material within the drop inlets and bridge joints shall be removed. All paved areas adjacent to curbs shall be swept and cleaned of all extraneous material. Costs for this work will not be paid for directly, but will be considered incidental to all Contract items.
- (d) There are special events throughout the year that may require close communication and coordination between the Contractor and the municipality to reduce conflicts. The municipality will advise the Engineer and Contractor of the specifics of each event and the Engineer will direct the Contractor as to what actions, if any, will be necessary on the Contractor's part to minimize impacts to the event. Special events that may conflict with Contractor operations are not limited to those which may be listed in this Notice to Bidders. There will be no extra compensation paid to the Contractor for any inconvenience caused by working around any listed or unlisted special events.

For more information about area special events, contact the following:

Essex: Tammy Getchell  
 Assistant to the Town Manager / Public Information Officer  
 Town of Essex  
 81 Main Street  
 Essex Junction, VT 05452  
 tgetchell@essex.org  
 802-878-1341

TABLE 1 – SCHEDULE OF KNOWN EVENTS

Event	Date
Essex Farmers Market	Wednesdays June-October
Champlain Valley Fair	Late August

17. NOTICE TO BIDDERS – AFAD. The Contractor is hereby notified that Automated Flagger Assistance Devices (AFADs) are remotely operated devices that enable a certified flagger to be positioned out of the lane of traffic and are used to control motorists through work zones.

AFADs shall only be used in situations where there is no more than one lane of approaching traffic that needs to be controlled. Additionally, since AFADs are not traffic control signals, they shall not be used to replace traffic signals or other continuously operating traffic control devices.

These devices may be used as a safety enhancement to flaggers on an hour-for-hour basis. AFADs shall meet the following requirements:

- (a) All AFAD applications shall meet the requirements of the applicable sections of the current edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*.
- (b) All AFAD applications shall be in accordance with *NCHRP Report 350* or the *MASH* for the applicable test level and device weight. Documentation of the crashworthiness of the device shall be submitted to the Engineer for approval prior to use on the project.
- (c) AFAD applications shall always be controlled by a flagger who has been trained in the operation of the AFAD and who meets the requirements of Section 630. The flagger shall not flag traffic and operate an AFAD at the same time.
- (d) Should an AFAD malfunction or otherwise not function as intended they shall be replaced by another AFAD or flagger(s) or work shall cease and the roadway shall be opened to unrestricted traffic flow immediately.
- (e) Each AFAD will be considered equivalent to one flagger and will be measured and paid for on an hourly basis under Item 630.1500 Flaggers. One hour of AFAD use shall be paid for as one hour of flagging.

- (f) Flaggers will only be measured for payment when actually performing flagging duties. Flaggers controlling AFADs but not actually flagging will not be measured for payment, but will be considered incidental to the Contract lump sum price for Item 641.1000 Traffic Control, or Item 641.1100 Traffic Control, All-Inclusive, as applicable.
- (g) The use of AFADs may be suspended at the discretion of the Engineer.

18. NOTICE TO BIDDERS – SUBSECTION 105.11(b). Subsection 105.11(b) is hereby modified by being deleted in its entirety and replaced with the following:

- (b) Permanent Marking Layout. The Contractor shall be responsible for the layout of the permanent traffic markings in accordance with the Plans. The Engineer will verify the layout of the permanent traffic markings, including passing zones and breaks for town highways.

19. NOTICE TO BIDDERS – SUBSECTION 107.21(b). Subsection 107.21(b) is hereby modified by deleting the phrase “M-22-11” from the second sentence and replacing it with the phrase “M-24-02”.

20. NOTICE TO BIDDERS – TABLE 108.12A. Table 108.12A is hereby modified by being deleted in its entirety and replaced with the following:

TABLE 108.12A – DAILY LIQUIDATED DAMAGES CHARGE PER WORKING DAY OF DELAY

Original Contract Amount		Daily Charge per Working Day of Delay
From More Than	To and Including	
\$0	\$1,500,000	\$3,200
\$1,500,000	\$3,000,000	\$3,400
\$3,000,000	\$5,000,000	\$3,600
\$5,000,000	\$10,000,000	\$4,100
\$10,000,000	\$15,000,000	\$4,700
\$15,000,000	\$20,000,000	\$5,200
\$20,000,000	--	\$5,800

21. NOTICE TO BIDDERS – SUBSECTION 501.03. Subsection 501.03 is hereby modified by relabeling Table 501.03B as Table 501.03C and by deleting the phrase “Table 501.03B” in the first and second sentences of Subsection 501.03(d) and replacing them with the phrase “Table 501.03C”.

22. NOTICE TO BIDDERS – SUBSECTION 501.03. Subsection 501.03 is hereby further modified by adding the following paragraph as the second paragraph of the subsection, immediately before Table 501.03A:

When the Contract specifies Performance-Based Concrete, Class PCD or Performance-Based Concrete, Class PCS, the Contractor may supply a material meeting the requirements of either Table 501.03A or Table 501.03B for the class specified.

23. NOTICE TO BIDDERS – SUBSECTION 501.03. Subsection 501.03 is hereby further modified by adding the following as a new Table 501.03B:

TABLE 501.03B – PRESCRIPTIVE OPTIONS FOR CLASS PCD AND CLASS PCS

Concrete Class <sup>1</sup>	Min. 56-Day Comp. Strength (psi) <sup>2</sup>	Max. W/CM Ratio	Max. VSI <sup>3</sup>	Slump/Spread Limit <sup>4</sup>	Air Content Limits	Cement (lbs/yd <sup>3</sup> )	GGBFS (lbs/yd <sup>3</sup> )	Total Cementitious Materials (lbs/yd <sup>3</sup> )
PCD <sup>5</sup>	4,000	0.44	--	N/A	6.0% min.	330	330	660
PCS <sup>5</sup>	3,500	0.44	--	N/A	6.0% min.	330	330	660

<sup>1</sup> PCD = Performance Concrete, Deck

PCS = Performance Concrete, Substructure

<sup>2</sup> The concrete may be accepted if the design compressive strength from standard cured cylinders has been obtained at 28 days. Any 56 day acceptance cylinders shall be tested regardless of the results of earlier tests.

<sup>3</sup> Visual stability index (VSI) as determined in accordance with *ASTM C1611*.

<sup>4</sup> The mix shall not exhibit segregation. If the mix does exhibit segregation, the load shall be rejected. If the spread is equal to or exceeds 20 inches, the mix shall be classified as Class SCC concrete.

<sup>5</sup> Alkali-silica reactivity results shall be provided as specified in Subsection 501.03(c) for the aggregate and cementitious source combinations used. No other mix design qualification testing is required.

24. NOTICE TO BIDDERS – SUBSECTION 540.02. Subsection 540.02 is hereby modified by adding the following entry to the materials subsection list in numerical order:  
 High Early-Strength Portland-Limestone Cement.....701.08

25. NOTICE TO BIDDERS – SUBSECTION 540.04. Subsection 540.04(a)(7) is hereby modified by being deleted in its entirety and replaced with the following:

- (7) Mix Design Approval and Changes. After the mix design furnished by the Contractor has been reviewed and approved by the Structural Concrete Engineer, no changes to the mix design will be allowed except as defined in Table 540.04A. All changes to an approved mix design, including the addition of admixtures not previously included, shall require a revised mix design submittal for approval.

Following an approved change in accordance with Table 540.04A, the Contractor may still revert to the original approved mix design formulation. If a source change is requested due to a change in product or material name that does not include any change in product formulation or material characteristic, and this is substantiated by the product or material supplier in writing, re-testing is not required.

TABLE 540.04A – ALLOWABLE MIX DESIGN CHANGES

Previously Approved Component or Property Being Changed	Mix Design Resubmittal Requirements <sup>1</sup>	No. of Changes Allowed
Cement source <sup>2</sup>	If the alkali content (Na and K) of the new source is greater than that of the original source, and the original result from <u>Subsection 540.04(a)(6)g.</u> was greater than 0.08% expansion, then updated ASR testing is required. Otherwise, no qualification testing is required.	Unlimited
Cement proportioning (± 5% by volume)	No qualification testing required.	One
Aggregate proportioning (± 10% by volume)	No qualification testing required.	One
Aggregate source	ASR testing and gradation check by original Contractor method.	One
Slag source	If same grade is used, no qualification testing required.	Unlimited
Silica fume source	No qualification testing required.	Unlimited
Fly ash source	If either the calcium (CaO) or the alkali (Na and K) content of the new source is greater than that of the original source, and the original result from <u>Subsection 540.04(a)(6)g.</u> was greater than 0.08% expansion, then updated ASR testing is required. Otherwise, no qualification testing is required.	Unlimited
Air-entraining admixture source ( <u>Subsection 725.02(b)</u> )	Resubmittal of freeze/thaw durability qualification testing.	Unlimited
Shrinkage reducing admixture source ( <u>Subsection 725.02(k)</u> )	Resubmittal of shrinkage qualification testing.	Unlimited
Corrosion inhibiting admixture source ( <u>Subsection 725.02(k)</u> )	Resubmittal of shrinkage qualification testing. If shrinkage qualification testing of the original mix design is greater than 70% of shrinkage limit, then updated shrinkage testing is required.	Unlimited
Latex admixture source ( <u>Subsection 725.02(d)</u> )	Resubmittal of surface resistivity testing.	Unlimited
Accelerating admixture dosage increase ( <u>Subsection 725.02(i)</u> , <u>Subsection 725.02(j)</u> )	Resubmittal of shrinkage qualification testing.	Unlimited
Accelerating admixture source ( <u>Subsection 725.02(i)</u> , <u>Subsection 725.02(j)</u> )	No qualification testing required.	Unlimited
ASR mitigating admixture source and dosage decrease ( <u>Subsection 725.02(k)</u> )	Resubmittal of ASR qualification testing.	Unlimited
All other admixture source and dosage changes ( <u>Subsection 725.02</u> )	No qualification testing required.	Unlimited

<sup>1</sup> All changes will require administrative submittal to establish proposed changes. Where required, resubmittal testing shall be completed using the same material sources and proportions from the original approved mix design.

<sup>2</sup> The same cement type from a different manufacturer. Type 1L may be substituted for Type I/II from the same source and Type 1L(HE) may be substituted for Type III from the same source.

In no case shall concrete from more than one mix design be permitted to be used during the same pour without prior written approval of the Engineer.

The approved mix design will be allowed consecutive re-approval if no material proportioning or material sources have changed from the previous year's approved mix design, except as allowed by Table 540.04A, and the mix design is submitted with updated aggregate properties and volumes adjusted accordingly. The aggregate properties shall be tested annually. Aggregate property values will be valid for 14 months from the date tested. The properties to be tested include, but are not limited to, specific gravity and absorption.

The mix design shall be accompanied by the previously completed and accepted mix qualification test data and any applicable updated test information. The submittal shall also include all applicable quality control test results and all requests for variance from the material requirements of these specifications.

26. NOTICE TO BIDDERS – SUBSECTION 542.03. Subsection 542.03(d) is hereby modified by being deleted in its entirety and replaced with the following:

- (d) Mix Design Approval and Changes. After the mix design furnished by the Contractor has been reviewed and approved by the Structural Concrete Engineer, no changes to the mix design will be allowed except as defined in Table 542.03B. All changes to an approved mix design, including the addition of admixtures not previously included, shall require a revised mix design submittal for approval.

Following an approved change in accordance with Table 542.03B, the Contractor may still revert to the original approved mix design formulation. If a source change is requested due to a change in product or material name that does not include any change in product formulation or material characteristic, and this is substantiated by the product or material supplier in writing, re-testing is not required.

TABLE 542.03B – ALLOWABLE MIX DESIGN CHANGES

Previously Approved Component or Property Being Changed	Mix Design Resubmittal Requirements <sup>1</sup>	No. of Changes Allowed
Cement source <sup>2</sup>	If the alkali content (Na and K) of the new source is greater than that of the original source, and the original result from <u>Subsection 542.03(c)</u> was greater than 0.08% expansion, then updated ASR testing is required. Otherwise, no qualification testing is required.	Unlimited
Cement proportioning (± 5% by volume)	No qualification testing required.	One
Aggregate proportioning (± 10% by volume)	No qualification testing required.	One
Aggregate source	ASR testing and gradation check by original Contractor method.	One
Slag source	If same grade is used, no qualification testing required.	Unlimited
Silica fume source	No qualification testing required.	Unlimited
Fly ash source	If either the calcium (CaO) or the alkali (Na and K) content of the new source is greater than that of the original source, and the original result from <u>Subsection 542.03(c)</u> was greater than 0.08% expansion, then updated ASR testing is required. Otherwise, no qualification testing is required.	Unlimited
Air-entraining admixture source ( <u>Subsection 725.02(b)</u> )	Resubmittal of freeze/thaw durability qualification testing.	Unlimited
Shrinkage reducing admixture source ( <u>Subsection 725.02(k)</u> )	Resubmittal of shrinkage qualification testing.	Unlimited
Corrosion inhibiting admixture source ( <u>Subsection 725.02(k)</u> )	Resubmittal of shrinkage qualification testing. If shrinkage qualification testing of the original mix design is greater than 70% of shrinkage limit, then updated shrinkage testing is required.	Unlimited
Latex admixture source ( <u>Subsection 725.02(d)</u> )	Resubmittal of surface resistivity testing.	Unlimited
Accelerating admixture dosage increase ( <u>Subsection 725.02(i)</u> , <u>Subsection 725.02(j)</u> )	Resubmittal of shrinkage qualification testing.	Unlimited
Accelerating admixture source ( <u>Subsection 725.02(i)</u> , <u>Subsection 725.02(j)</u> )	No qualification testing required.	Unlimited
ASR mitigating admixture source and dosage decrease ( <u>Subsection 725.02(k)</u> )	Resubmittal of ASR qualification testing.	Unlimited
All other admixture source and dosage changes ( <u>Subsection 725.02</u> )	No qualification testing required.	Unlimited

<sup>1</sup> All changes will require administrative submittal to establish proposed changes. Where required, resubmittal testing shall be completed using the same material sources and proportions from the original approved mix design.

<sup>2</sup> The same cement type from a different manufacturer. Type 1L may be substituted for Type I/II from the same source and Type 1L(HE) may be substituted for Type III from the same source.

In no case shall concrete from more than one mix design be permitted to be used during the same pour without prior written approval of the Engineer.

The approved mix design will be allowed consecutive re-approval if no material proportioning or material sources have changed from the previous year's approved mix design, except as allowed by Table 542.03B, and the mix design is submitted with updated aggregate properties and volumes adjusted accordingly. The aggregate properties shall be tested annually. Aggregate property values will be valid for 14 months from the date tested. The properties to be tested include, but are not limited to, specific gravity and absorption.

The mix design shall be accompanied by the previously completed and accepted mix qualification test data and any applicable updated test information. The submittal shall also include all applicable quality control test results and all requests for variance from the material requirements of these specifications.

27. NOTICE TO BIDDERS – SUBSECTION 646.04(d). Subsection 646.04(d) is hereby modified by deleting the first sentence of the first paragraph in its entirety and replacing it with the following:

The Contractor shall be responsible for the layout for the permanent traffic markings as specified in Subsection 105.11(b).

28. NOTICE TO BIDDERS – SUBSECTION 646.08(a)(2)a. Subsection 646.08(a)(2)a is hereby modified by deleting the first sentence of the first paragraph in its entirety and replacing it with the following:

Initial dry retroreflectivity minimums for surface-applied polyurea shall be 250 mcd/m<sup>2</sup>/lx for yellow markings and 350 mcd/m<sup>2</sup>/lx for white markings.

29. NOTICE TO BIDDERS – SUBSECTION 701.08. Subsection 701.08 is hereby made a new subsection of the specifications as follows:

701.08 HIGH EARLY-STRENGTH PORTLAND-LIMESTONE CEMENT. High early strength Portland-limestone cement shall meet the requirements of AASHTO M 240 and ASTM C595, Type IL (HE).

30. NOTICE TO BIDDERS – SUBSECTION 702.01. Subsection 702.01 is hereby modified by deleting the phrase “AASHTO PP 113” from the second paragraph and replacing it with the phrase “AASHTO R 118”.

31. NOTICE TO BIDDERS – SUBSECTION 702.03. Subsection 702.03 is hereby modified by being deleted in its entirety and replaced with the following:

702.03 WARM-MIX ASPHALT TECHNOLOGIES. Warm-mix asphalt (WMA) technologies shall be evaluated in accordance with the AASHTO Product Evaluation & Audit Solutions work plan for Evaluation of Warm Mix Asphalt Technologies and Anti-Strip Additives, be one of the products listed on the Agency's Approved Products List, and meet the following requirements:

- (a) PG Binder Grading. The product shall not change the classified performance grade or traffic designation of the base asphalt binder when tested in accordance with AASHTO M 332.
- (b) Tensile Strength Ratio (TSR). WMA mixtures shall achieve a TSR value greater than or equal to that of the corresponding control (non-WMA) mixture as determined in accordance with AASHTO T 283.
- (c) Hamburg Wheel Tracker Test (HWTT). WMA mixtures shall have a final rut depth of less than 1/2 inch (12.5 mm) after a minimum of 10,000 passes when tested in accordance with AASHTO T 324.

WMA technologies that also act as an anti-strip agent, and are dosed to abate stripping, shall also meet the requirements of Subsection 702.04 and will be evaluated separately.

32. NOTICE TO BIDDERS – SUBSECTION 702.04. Subsection 702.04 is hereby modified by being deleted in its entirety and replaced with the following:

702.04 ANTI-STRIP ADDITIVES. Anti-strip additives (ASA) used to abate stripping between asphalts and aggregate shall be heat stable for all temperature ranges prescribed for the asphalt binder and capable of thorough dispersion in the binder without losing their effectiveness when in storage and at the designated mixture temperatures. The ASA shall also be capable of improving the moisture sensitivity and rutting susceptibility, and reducing film stripping of the bituminous concrete mixture. ASAs shall be evaluated in accordance with the AASHTO Product Evaluation & Audit Solutions work plan for Evaluation of Warm Mix Asphalt Technologies and Anti-Strip Additives, be one of the products listed on the Agency's Approved Products List, and meet the following requirements:

- (a) PG Binder Grading. The product shall not change the classified performance grade or traffic designations of the base asphalt binder.
- (b) Tensile Strength Ratio (TSR). Limestone ASA mixtures shall have a TSR value greater than or equal to the result corresponding to the limestone control (non-ASA) mixture. Granite ASA mixtures shall have a minimum TSR value that is 100% greater than the result corresponding to the granite control (non-ASA) mixture. All TSR testing shall be in accordance with AASHTO T 283.
- (c) Hamburg Wheel Tracker Test (HWTT). Granite ASA mixtures shall have a final rut depth of less than 1/2 inch (12.5 mm) and a minimum stripping inflection point (SIP) that is 25% greater than the result corresponding to the granite control (non-ASA) mixture. All HWTT testing shall be in accordance with AASHTO T 324.
- (d) Boil Test. The ASA technology shall demonstrate no loss of adhesion and have a maximum of 5% uncoated particles in both the limestone and granite samples when tested in accordance with ASTM D3625.

33. NOTICE TO BIDDERS – TABLE 716.02B. Table 716.02B is hereby modified by deleting the third row in its entirety and replacing it with the following:

Air voids	4.00%	4.00%	4.00%	4.00%	3.00%
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34. NOTICE TO BIDDERS – SUBSECTION 716.02(b)(2). Subsection 716.02(b)(2) is hereby modified by deleting subpart a. in its entirety and relabeling subparts b. through e. as a. through d.

35. NOTICE TO BIDDERS – SUBSECTION 716.02(b)(3). Subsection 716.02(b)(3) is hereby modified by deleting subparts d. and e. and Table 716.02E in their entirety and replacing them with the following:

- d. Evaluate mixture moisture sensitivity and rutting susceptibility using the Hamburg wheel tracker test (HWTT) to ensure the criteria outlined in Table 716.02E are met. Specimen fabrication, conditioning, and test procedures for the HWTT shall be in accordance with *AASHTO T 324* as modified in the Agency’s *Bituminous Concrete Policy Manual*. The HWTT will not be applicable to material used for non-paver placed pavement, surface preparation, temporary pavement, curbs, gutters, or sidewalks.
- e. Determine mixture cracking tolerance index (CT-Index) using the indirect tensile cracking test to ensure the criteria outlined in Table 716.02E are met. Specimen fabrication, conditioning, and test procedures for determination of the CT-Index shall be in accordance with *ASTM D8225* as modified in the Agency’s *Bituminous Concrete Policy Manual*. The CT-Index will not be applicable to material used for non-paver placed pavement, surface preparation, temporary pavement, curbs, gutters, or sidewalks.

TABLE 716.02E – MIXTURE PERFORMANCE CHARACTERISTICS

Mix Type	Hamburg Wheel Tracker Test			Indirect Tensile Cracking Test
	Maximum Rut Depth	Minimum Number of Passes	Minimum Stripping Inflection Point (SIP)	Minimum Average CT-Index Value
Type IS	1/2 in. (12.5 mm)	20,000 passes	15,000 passes	Report
Type IIS	1/2 in. (12.5 mm)	20,000 passes	15,000 passes	45
Type IIIS	1/2 in. (12.5 mm)	20,000 passes	15,000 passes	70
Type IVS	1/2 in. (12.5 mm)	20,000 passes	15,000 passes	85
Type IVSB	1/2 in. (12.5 mm)	20,000 passes	15,000 passes	85

36. NOTICE TO BIDDERS – SUBSECTION 728.02. When material is supplied in accordance with Subsection 728.02(b) or Subsection 728.02(e), material in accordance with *AASHTO M 180-18* may be substituted in place of material meeting *AASHTO M 180-23*.