

STATE OF VERMONT
CONTRACT AMENDMENT

It is hereby agreed by and between the State of Vermont, Department of Buildings and General Services (the "State") and Worksafe Traffic Control Industries, Inc., with a principal place of business in Berlin, VT, (the "Contractor") that the contract between them originally dated as of February 10, 2021, Contract # 41234, as amended to date, (the "Contract") is hereby amended as follows:

I. **Attachment A, Scope of Services**. The scope of services is amended as follows:

Section 1 of Attachment A is hereby deleted in its entirety and replaced as set forth below:

1. PRODUCTS AND PRICES:

Large Portable Changeable Message Signs, Ver-Mac, Model # PCMS 1500 LP: \$22,750.00

PTZ camera module \$6,995.00

Replacement Display Module/Card: \$475.00

Small Portable Changeable Message Signs, Ver-Mac, Model # PCMS 548 WINCH: \$13,795.00

Fixed camera \$2,995.00

Replacement Display Module/Card: \$400.00

Small Portable Changeable Message Signs, Ver-Mac, Model # PCMS 548 HYDRAULIC: \$14,795.00

Portable/Temporary Traffic Signal Purchase and/or Rental; Ver-Mac TLD-361.2G Trailer mounted signal:

WEEKLY RENTAL: \$2,000.00

PER-USE COMBINED SET-UP AND TAKE-DOWN: \$1,500.00

PURCHASE: \$58,295.00

VEHICLE-DETECTION ADD-ON OPTION \$3,250.00

PRE-EMPTION OPTION: \$15,295.00

GENERAL REPLACEMENT COMPONENTS:

Modem, with GPS	\$1,095.00
Solar Panel	\$365.00
Solar Regulator	\$450.00
CPU	\$2,775.00
AC Charger	\$475.00
Batteries	\$225.00
Leveling Jack	\$83.50
Hydraulic Pump	\$560.00
Wheels/tires	\$135.00
Hitch	\$175.00
Retro RS-BUFF to hand held V-Touch controller	\$2,495.00
Intel Display Card (1500)	\$555.00
LCD Display	\$430.00
QWERTY keyboard	\$84.00
KIT-310 Photocell for solar panel	\$19.95

K-164 Photocell Cable 12'	\$18.95
ASS-0043 Hydraulic Cylinder (2x50x1.5x67cc)	\$595.00
ASS-0027 Goodyear Tire, ST20575R16/6 ply white	\$238.00
OPT-GPS EXT-06, GPS option external PCMS Intel	\$750.00
Magnetic Strips/Band Kit for PCMS-1500 Intel	\$295.00
Intel/Distribution Bar for PCMS-1500	\$222.00
Wire Harness Kit (Resistor Type) for PCMS-1500	\$2,112.00
Display Card for PCMS-548	\$395.00
COM Card or PCMS-548	\$390.00
Data Cables (from COM Card to Display Cards) for PCMS-548	\$84.00
Aluminum Control Cabinet	\$595.00
SD Memory Card with Encrypted Software for CPU/BUFF-7400	\$150.00
GPS Accessory Card	\$354.00
GPS Antenna	\$60.00
Permanent Mount Cellular Antenna	\$114.00
Photocell Accessory Card	

\$282.00

Left Tail Light with License Light

\$12.75

Right Tail Light

\$10.95

Upgrade Kit Solar Reg 2009 for RS

\$12.95

LABOR RATE, REPAIR (24-48 HOUR RESPONSE TIME)

\$150.00

ANNUAL MAINTENANCE: Worksafe to provide annual maintenance on all Ver-Mac portable & permanent message boards (total of 79 existing units), models 1500, 548 & B1500-C

\$51,350.00

Maintenance cost on a per unit basis for additional units that may be required by AOT

\$650.00

Training Rate, per hour

\$125.00

II. **Attachment E, Federal Provisions Related to Federal Highway Administration Funding.** Attachment E, as attached to this Amendment 1, is made a part of the contract.

Taxes Due to the State. Contractor certifies under the pains and penalties of perjury that, as of the date this contract amendment is signed, the Contractor is in good standing with respect to, or in full compliance with a plan to pay, any and all taxes due the State of Vermont.

Child Support (Applicable to natural persons only; not applicable to corporations, partnerships or LLCs). Contractor is under no obligation to pay child support or is in good standing with respect to or in full compliance with a plan to pay any and all child support payable under a support order as of the date of this amendment.

Certification Regarding Suspension or Debarment. Contractor certifies under the pains and penalties of perjury that, as of the date this contract amendment is signed, neither Contractor nor Contractor’s principals (officers, directors, owners, or partners) are presently debarred, suspended, proposed for debarment, declared ineligible or excluded from participation in federal programs, or programs supported in whole or in part by federal funds.

Contractor further certifies under pains and penalties of perjury that, as of the date this contract amendment is signed, Contractor is not presently debarred, suspended, nor named on the State’s

debarment list at: <http://bgs.vermont.gov/purchasing-contracting/debarment>

Sole Source Contract for Services. This Contract results from a “sole source” procurement under State of Vermont Administrative Bulletin 3.5 process and Contractor hereby certifies that it is and will remain in compliance with the campaign contribution restrictions under 17 V.S.A. § 2950.

SOV Cybersecurity Standard 19-01. All products and service provided to or for the use of the State under this Contract shall be in compliance with State of Vermont Cybersecurity Standard 19-01, which Contractor acknowledges has been provided to it, and is available on-line at the following URL: <https://digitalservices.vermont.gov/cybersecurity/cybersecurity-standards-and-directives>

This document consists of 5 pages. Except as modified by this Amendment No. 1 all provisions of the Contract remain in full force and effect.

The signatures of the undersigned indicate that each has read and agrees to be bound by this Amendment to the Contract.

STATE OF VERMONT

WORKSAFE TRAFFIC CONTROL INDUSTRIES, INC.

By: _____

By: _____

Name: Jennifer Fitch - Commissioner

Name: _____

Title: Buildings & General Services

Title: _____

Date: _____

Date: _____

ATTACHMENT E

FEDERALLY REQUIRED PROVISIONS CONNECTED WITH FEDERAL HIGHWAY ADMINISTRATION FUNDING

**CONTRACTOR IS TO SIGN THESE DOCUMENTS
IN EACH LOCATION IN WHICH A PLACE TO COMPLETE AND/OR
SIGN IS PROVIDED**

-35 pages, not including this page-

CERTIFICATION FOR FEDERAL-AID CONTRACTS

The prospective bidder, by signing and submitting this bid proposal, certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person or influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered to. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such sub-recipients shall certify and disclose accordingly.

CONTRACTOR'S EEO CERTIFICATION FORM

Certification with regard to the Performance of Previous Contracts of Subcontracts subject to the Equal Opportunity Clause and the filing of Required Reports.

The bidder _____, proposed subcontractor _____, hereby certifies that he/she has _____, has not _____, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246 as amended, and that he/she has _____, has not _____, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Company	By	Title
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NOTE: The above certification is required by the Equal Employment Opportunity regulations of the Secretary of Labor (41 CFR 60-1.7(b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5 (Generally only contracts or subcontracts of \$10,000 or under are exempt.) Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration, or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

DISADVANTAGED BUSINESS ENTERPRISE (DBE) POLICY CONTRACT REQUIREMENTS

Disadvantaged Business Enterprise (DBE) Policy. It shall be the policy of the Vermont Agency of Transportation (VTrans) to ensure nondiscriminatory opportunity for Disadvantaged Business Enterprises (DBEs) to participate in the performance of all contracts and subcontracts financed with Federal funds as specified by the regulations of the United States Department of Transportation (USDOT), Federal Highway Administration and as set forth below.

1. **Policy.** It is the policy of USDOT that DBEs as defined in 49 Code of Federal Regulation (CFR) Part 26 shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds. Consequently, the DBE requirements of 49 CFR Part 26 and 23 CFR, Chapter 1, Part 230, Subpart b apply to this contract.
2. **DBE Obligation.** The State and its Contractors agree to ensure that DBEs as defined in 49 CFR Part 26, have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds. **Each subcontract the prime contractor signs with a subcontractor must include this assurance:** *The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as VTrans deems appropriate.*
3. **Sanctions for Noncompliance.** The Contractor is hereby advised that failure of the Contractor, or any Subcontractor performing work under this contract, to carry out the requirements set forth in paragraphs 1 and 2 above shall constitute a breach of contract and after the notification of the Vermont Agency of Transportation, Secretary of Transportation, may result in termination of this contract by the State or such remedy as the State deems necessary.
4. **Inclusion in Subcontracts.** The Contractor shall insert in each of its subcontracts this Disadvantaged Business Enterprise (DBE) Policy and also a clause requiring its subcontractors to include this same Policy in any lower tier subcontracts which they may enter into, together with a clause requiring the inclusion of the Policy in any further subcontract that may in turn be made. This Policy shall not be incorporated by reference.

Disadvantaged Business Enterprise (DBE) Program Goals. The Vermont Agency of Transportation (VTrans) is required to set an overall DBE goal for participation in all transportation related Federal-aid projects. The goal is determined following guidelines set forth in 49 CFR 26.45, and based on the availability of ready, willing and able DBEs who submitted bids and quotes for transportation related projects, compared as a percentage of all available contractors who submitted bids and quotes for transportation related projects during the same time period. The DBE goal may be adjusted to take into account other factors impacting DBE utilization, in an effort to narrowly tailor the overall DBE goal. The detailed goal setting methodology and current overall DBE goal may be viewed on the VTrans website at:

<http://vtrans.vermont.gov/civil-rights/doing-business/dbe-center/program-goals>

VTrans currently utilizes a race/gender neutral policy to fulfill its overall DBE goals, and relies on the voluntary participation of contractors to utilize certified DBEs on every project sufficient to obtain the Agency's overall DBE goal. In order for this practice to continue, contractors must be proactive and solicit bids and quotes from certified DBEs for use when submitting their own bids, and employ certified DBEs when participating on transportation related projects. Otherwise, VTrans may have to implement specified contract goals on projects to ensure the overall DBE goals are met. VTrans may include specific DBE contract goals in certain cases to ensure DBE participation, if failure to obtain the project DBE goal would negatively impact the Agency's overall DBE goal because of the size of the contract.

Disadvantaged Business Enterprise (DBE) Definition. A DBE is defined as a business that is owned and controlled by one or more socially and economically disadvantaged person(s). For the purposes of this definition:

- (1) "Socially and economically disadvantaged person" means an individual who is a citizen or lawful permanent resident of the United States and who is a Woman, Black, Hispanic, Portuguese, Native American, Asian American, or a member of another group, or an individual found to be disadvantaged by the Small Business Administration pursuant to Section 3 of the Small Business Act.
- (2) "Owned and controlled" means a business which is:
 - a. A sole proprietorship legitimately owned and controlled by an individual who is a disadvantaged person.
 - b. A partnership, joint venture or limited liability company in which at least 51% of the beneficial ownership interests legitimately is held by a disadvantaged person(s).
 - c. A corporation or other entity in which at least 51% of the voting interest and 51% of the beneficial ownership interests legitimately are held by a disadvantaged person(s).

The disadvantaged group owner(s) or stockholder(s) must possess control over management, interest in capital, and interest in earnings commensurate with percentage of ownership. Disadvantaged participation in a joint venture must also be based on the sharing of real earnings, as above. If the disadvantaged group ownership interests are real, substantial and continuing and not created solely to meet the requirements of the program, a firm is considered a bona fide DBE.

Certified DBE Directory. The current Vermont Unified Disadvantaged Business Enterprise (DBE) Directory is available online at: <http://vtrans.vermont.gov/civil-rights/doing-business/dbe-center/directory>. This directory contains all currently certified DBEs available for work in Vermont, and is updated continuously. Only firms listed in this directory are eligible for DBE credit on Vermont Federal-aid projects. If you have questions about DBE certification, or do not have access to the Internet, please call the DBE Program Manager at (802) 828-5858 for assistance.

Counting DBE Participation Towards Project Goals. In order for payments made to DBE contractors to be counted toward DBE goals, the DBE contractors must perform a commercially

useful function (CUF). The DBE must be responsible for execution of the work of the contract and must carry out its responsibilities by actually performing, managing, and supervising the work involved, consistent with standard industry practices.

This means that:

- The DBE must also be responsible for ordering its own materials and supplies, determining quantity and quality, negotiating price, installing (where applicable) and paying for the material itself;
- The DBE must perform work commensurate with the amount of its contract;
- The DBE's contribution cannot be that of an extra participant or a conduit through which funds are passed in order to obtain the appearance of DBE participation;
- The DBE must exercise responsibility for at least fifty percent of the total cost of its contract with its own workforce;
- None of the DBE's work can be subcontracted back to the prime contractor, nor can the DBE employ the prime's or other subcontractor's supervisors currently working on the project;
- The DBE's labor force must be separate and apart from that of the prime contractor or other subcontractors on the project. Transferring crews between primes, subcontractors, and DBE contractors is not acceptable;
- The DBE owner must hold necessary professional or craft license(s) or certification(s) for the type of work he/she performs on the project;
- The DBE may rent or lease, at competitive rates, equipment needed on the project from customary leasing sources or from other subcontractors on the project.

Allowable credit for payments made to DBEs for work performed. A contractor may take credit for payments made to a certified DBE that satisfies CUF requirements at the following rate:

- A DBE Prime Contractor: Count 100% of the value of the work performed by own forces, equipment and materials towards the DBE goals.
- An approved DBE subcontractor: Count 100% of the value of work performed by the DBE's own forces, equipment and materials, excluding the following:
 - The cost of materials/supplies purchased from a non-DBE Prime Contractor.
 - The value of work provided by non-DBE lower tier subcontractors, including non-DBE trucking to deliver asphalt to a DBE contractor.
- A DBE owner-operator of construction equipment: Count 100% of expenditures committed.

- A DBE manufacturer: Count 100% of expenditures committed. The manufacturer must be a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Contractor.
- A regular DBE dealer/supplier: Count 60% of expenditures committed. A regular dealer/supplier is defined as a firm that owns, operates, or maintains a store, warehouse or other establishment, in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. A person may be a dealer in such bulk items as petroleum products, steel, cement, gravel, stone or asphalt without owning, operating or maintaining a place of business, if the person both owns and operates distribution equipment for the products, by the means of a long term agreement, and not by a contract by contract basis.
- A DBE broker: Count for DBE credit only the fees or commissions charged for assistance in the procurement, and, fees and transportation charges for the delivery of materials or supplies required at the job site, but not the cost of materials procured. A broker is defined as any person(s) or firm who arranges or expedites transactions for materials or supplies, and does not take physical possession of the materials or supplies at their place of business for resale.
- A DBE renter of construction equipment to a contractor: Count 20% of expenditures committed, with or without operator.
- A bona fide DBE service provider: Count 100% of reasonable fees or commissions. Eligible services include professional, technical, consultant, or managerial, services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies required for the performance of the contract. Eligible services also include agencies providing bonding and insurance specifically required for the performance of the contract.
- A trucking, hauling or delivery operation: Count 100% of expenditures committed when trucks are owned, operated, licensed and insured by the DBE and used on the contract and, if applicable, includes the cost of the materials and supplies. 100% of expenditures committed when the DBE leases trucks from another DBE firm including an owner-operator. 100% of reasonable fees, or commissions, the DBE receives as a result of a lease arrangement for trucks from a non-DBE, including an owner-operator.
- Any combination of the above.

Removal of Approved DBE From Transportation Related Project. Contractors may not terminate for convenience, any approved DBE subcontractor and perform the work with their own forces, without prior written consent from the VTrans DBE Program Manager or VTrans Chief of Civil Rights.

Federal-aid projects which specify a DBE contract goal. The provisions of the Vermont Agency of Transportation Supplemental Specification – Disadvantaged Business Enterprise

(DBE) Utilization (CR 160) shall apply to all VTrans Federal-aid projects which specify a DBE contract goal.

Compliance With Prompt Payment Statute. In accordance with Vermont's Prompt Payment Act and VTrans Standard Specifications for Construction, Section 107.01(g), the Contractor shall fully comply with the provisions of 9 V.S.A. Chapter 102, also referred to as Act No. 74 of 1991 or the Prompt Payment Act, as amended.

Subcontractor Payments. In accordance with VTrans Standard Specifications for Construction, Section 107.01(h), on all federal-aid and state funded contracts, the Contractor, during the life of the Contract and on a monthly basis, shall submit electronically, a listing of payments to subcontractors on the form specified by the State and made available at: <http://apps.vtrans.vermont.gov/promptpay/>. Electronic reports shall be filed with the Agency Office of Civil Rights by an authorized representative and received in the Agency Office of Civil Rights on or before the tenth working day after month end. Contractors without access to the internet shall obtain and submit manual reports to the Agency Office of Civil Rights. Manual reports shall be signed by an authorized representative, sent to the Agency Office of Civil Rights, and postmarked on or before the tenth working day after month end. There shall be no direct compensation allowed the Contractor for this work, but the cost thereof shall be included in the general cost of the work. In accordance with 9 V.S.A. Section 4003, notwithstanding any contrary agreement, payments made to subcontractors after seven days from receipt of a corresponding progress payment by the State to the Contractor, or seven days after receipt of a subcontractor's invoice, whichever is later, violate this agreement. Violations shall be reported to the Agency Office of Civil Rights for review. Failure to resolve disputes in a timely manner may result in a complaint made to the Agency Pre-qualification Committee. In this Committee's judgment, appropriate penalties may be involved for failure to comply with this specification. Penalties may include suspension, reduction or revocation of the Contractor's pre-qualification rating. This clause shall be included in the prime Contractor's Contract made with all if its subcontractors.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
DEBARMENT AND NON-COLLUSION CERTIFICATION

I, _____, representing
(Official Authorized to Sign Contracts)

_____ of _____,
(Individual, Partnership or Corporation) (City or State)

hereby certify under the penalties of perjury under the laws of the State of Vermont and the United States that on behalf of the person, firm, association, or corporation submitting the bid certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid for the Vermont project:

(Project Name)

_____ project located on _____,
(Project Number) (Route or Highway)

bids opened at _____,
(Town or City)

Vermont on _____.
(Date)

I further certify under the penalties of perjury under the laws of the State of Vermont and the United States that except as noted below said individual, partnership or corporation or any person associated therewith in any capacity is not currently, and has not been within the past three (3) years, suspended, debarred, voluntarily excluded or determined ineligible by any Federal or State Agency; does not have a proposed suspension, debarment, voluntary exclusion or ineligibility determination pending; and has not been indicted, convicted, or had a civil judgement rendered against (it, him, her, them) by a court having jurisdiction in any matter involving fraud or official misconduct within the past three (3) years.

Exceptions: _____ No _____ Yes. (If yes complete second page of this form.)

(Name of Individual, Partnership or Corporation)

(Signature of Official Authorized to Sign Contracts)

(Name of Individual Signing Affidavit)

(Title of Individual Signing Affidavit)

Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. **For any exception noted, indicate below to whom it applies, initiating agency, and dates of action.** Providing false information may result in criminal prosecution or administration sanctions.

EXCEPTIONS:

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

- A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

- 1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

- 2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
 - a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
 - b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."
2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
 - a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
 - b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
 - d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
 - e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
 - b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
 - c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
 - b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
 - c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
 - d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.
6. **Training and Promotion:**
- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
 - c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
 - d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
 - b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
 - c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
 - d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
8. **Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
9. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
 - b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.
10. **Assurance Required by 49 CFR 26.13(b):**
- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

- (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;
- (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
- (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

- a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes

a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. **Withholding**

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. **Payrolls and basic records**

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the

contract and shall certify the following:

- (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
 - (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

- a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount

of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. **Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
6. **Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
7. **Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
8. **Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon

and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
10. **Certification of eligibility.**
 - a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
2. **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
3. **Withholding for unpaid wages and liquidated damages.** The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
4. **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty

items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

B "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

2. **Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
 - (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
 - (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty

of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
 - a. To the extent that qualified persons regularly residing in the area are not available.
 - b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
 - c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.
6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS
(EXECUTIVE ORDER 11246)

1. As used in these specifications:

- a. "Covered Area" means the geographical area described in the solicitation from which this contract resulted.
- b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority.
- c. "Employer Identification Number" means the Federal Social Security Number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

A Minority Group Member is:

...American Indian or Alaskan Native

consisting of all persons having origins in any of the original people of North American and who maintain cultural identification through tribal affiliations or community recognition.

...Black

consisting of all persons having origins in any of the Black racial groups of Africa.

...Asian or Pacific Islander

consisting of all persons having origins in any of the original people of the Far East, Southeast Asia, the Indian Sub-Continent or the Pacific Islands. This area includes China, India, Japan, Korea, the Philippines and Samoa.

...Hispanic

consisting of all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin.

...Cape Verde an

consisting of all persons having origins in the Cape Verde Islands.

...Portuguese

consisting of all persons of Portuguese, Brazilian or other Portuguese culture or origin.

2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000.00 the provisions of these specifications and the notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in the Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or subcontract participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. the overall good faith performance by other Contractors or subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or subcontractor's failure to make good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in Paragraphs 7a through p of these specifications. The goals set for the Contractor in the solicitation from which this contract resulted are expressed as percentages in the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minority or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity . The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available and maintain a record of the organizations' responses.

- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notifications to the Regional Director when the union or unions, with which the Contractor has a collective bargaining agreement, have not referred to the Contractor a minority person or woman sent by the Contractor or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under Paragraph 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, Supervisors etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, and providing written notification to, and discussing the Contractor's EEO policy with, other Contractors and subcontractors with whom the Contractor anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notifications to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the EEO policy and Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (Paragraph 7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under Paragraph 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, reflected in the Contractor's minority and female workforce participation , makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's non-compliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is under-utilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex or national origin.
11. The Contractor shall not enter into any subcontract with any person for firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, terminations and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in Paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment-related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application or requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

**NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL
EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Economic Areas	Timetables	Goals for Minority participation for each trade (%)	Goals for Female Participation in each trade (%)
Entire State of Vermont:			
<u>Vermont</u> 003 Burlington, VT Non-SMSA Counties NH Coos; NH Grafton; NH Sullivan; VT Addison; VT Caledonia; VT Chittenden; VT Essex; VT Franklin; VT Grand Isle; VT Lamoille; VT Orange; VT Orleans; VT Rutland; VT Washington; VT Windsor	Indefinite	0.8	6.9
<u>Connecticut (Mass)</u> 006 Hartford - New Haven Springfield, CT-MA Non-SMSA Counties CT Litchfield; CT Windham; MA Franklin; NH Cheshire; VT Windham	Indefinite	5.9	
<u>New York</u> 007 Albany - Schenectady - Troy, NY Non-SMSA Counties NY Clinton; NY Columbia; NY Essex; NY Fulton; NY Greene; NY Hamilton; NY Schoharie; NY Warren; NY Washington; VT Bennington	Indefinite	2.6	

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulation in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3 (a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notifications shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is (insert description of the geographical areas where the contract is to be performed giving the state, county and city, if any)

Assurance Appendix A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin, sex, age, disability, income-level, or LEP in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations as set forth in Appendix E, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, national origin, sex, age, disability, income-level, or LEP.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement

as the Recipient or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Assurance Appendix E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin), as implemented by 49 C.F.R. § 21.1 *et seq.* and 49 C.F.R. § 303;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (102 Stat. 28.), (“...*which restore[d] the broad scope of coverage and to clarify the application of title IX of the Education Amendments of 1972, section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and title VI of the Civil Rights Act of 1964.*”);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Justice regulations at 28 C.F.R. parts 35 and 36, and Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*), as implemented by 49 C.F.R. § 25.1 *et seq.*

STANDARD CONTACT

1. **Parties.** This is a contract between the State of Vermont, Department of Buildings and General Services, Office of Purchasing & Contracting (hereinafter called “State”), and Worksafe Traffic Control Industries, Inc., with a principal place of business in Berlin, VT, (hereinafter called “Contractor”). Contractor’s form of business organization is corporation. It is Contractor’s responsibility to contact the Vermont Department of Taxes to determine if, by law, Contractor is required to have a Vermont Department of Taxes Business Account Number.
2. **Subject Matter.** The subject matter of this contract is commodities generally on the subject of Portable Changeable Message Signs (PCMS) for highway use. Detailed requirements to be provided by Contractor are described in Attachment A.
3. **Maximum Amount.** In consideration of the commodities to be provided by Contractor, the State agrees to pay Contractor, in accordance with the payment provisions specified in Attachment B, a sum not to exceed \$500,000.00.
4. **Contract Term.** The period of contractor’s performance shall begin on February 10, 2021 and end on February 9, 2025.
5. **Prior Approvals.** This Contract shall not be binding unless and until all requisite prior approvals have been obtained in accordance with current State law, bulletins, and interpretations.
6. **Amendment.** No changes, modifications, or amendments in the terms and conditions of this contract shall be effective unless reduced to writing, numbered and signed by the duly authorized representative of the State and Contractor.
7. **Termination/Cancellation/Rejection.** The State specifically reserves the right upon written notice to immediately terminate the contract or any portion thereof at no additional cost to the State, providing, in the opinion of its Commissioner of Buildings and General Services, the products supplied by Contractor are not satisfactory or are not consistent with the terms of this Contract. The State also specifically reserves the right upon written notice, and at no additional cost to the State, to immediately terminate the contract for convenience and/or to immediately reject or cancel any order for convenience at any time prior to shipping notification.
8. **Attachments.** This contract consists of 27 pages including the following attachments which are incorporated herein:

Attachment A - Statement of Work

Attachment B - Payment Provisions

Attachment C – “Standard State Provisions for Contracts and Grants” a preprinted form (revision date 12/15/2017)

Attachment D – Federal provisions related to COVID-19

9. **Order of Precedence.** Any ambiguity, conflict or inconsistency between the documents comprising this contract shall be resolved according to the following order of precedence:

- (1) Standard Contract
- (2) Attachment D – Federal provisions related to COVID-19
- (3) Attachment C (Standard Contract Provisions for Contracts and Grants)
- (4) Attachment A
- (5) Attachment B

WE THE UNDERSIGNED PARTIES AGREE TO BE BOUND BY THIS CONTRACT

By the State of Vermont:

By the Contractor:

Date: _____

Date: _____

Signature: _____

Signature: _____

Name: _____

Name: _____

Title: _____

Title: _____

ATTACHMENT A – STATEMENT OF WORK

The Contractor shall provide:

1. PRODUCTS AND PRICES:

Large Portable Changeable Message Signs, Ver-Mac, Model # PCMS 1500 LP:	\$22,750.00
PTZ camera module	\$6,995.00
Replacement Display Module/Card:	\$475.00
Small Portable Changeable Message Signs, Ver-Mac, Model # PCMS 548 WINCH:	\$13,795.00
Fixed camera	\$2,995.00
Replacement Display Module/Card:	\$400.00
Small Portable Changeable Message Signs, Ver-Mac, Model # PCMS 548 HYDRAULIC:	\$14,795.00
Portable/Temporary Traffic Signal Purchase and/or Rental; Ver-Mac TLD-361.2G Trailer mounted signal:	
	WEEKLY RENTAL: \$2,000.00
	PER-USE COMBINED SET-UP AND TAKE-DOWN: \$1,500.00
	PURCHASE: \$58,295.00
	VEHICLE-DETECTION ADD-ON OPTION \$3,250.00
	PRE-EMPTION OPTION: \$15,295.00
GENERAL REPLACEMENT COMPONENTS:	
Modem, with GPS	\$1,095.00
Solar Panel	\$365.00
Solar Regulator	\$450.00

CPU	\$2,775.00
AC Charger	\$475.00
Batteries	\$225.00
Leveling Jack	\$83.50
Hydraulic Pump	\$560.00
Wheels/tires	\$135.00
Hitch	\$175.00
LABOR RATE, REPAIR (24-48 HOUR RESPONSE TIME)	\$150.00

2. TECHNICAL REQUIRMENTS:

2.1 LARGE PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) DETAILED

REQUIREMENTS: The contractor shall furnish and test a **Large Portable Changeable Message Sign (PCMS)** that meets the following requirements:

- 2.1.1 BUY AMERICA:** PCMS must comply with FHWA Buy America policies Title 23 C.F.R. 635.41.
- 2.1.2 MUTCD:** Sign must comply with MUTCD section 6F.55.
- 2.1.3 LED Portable Changeable Message Sign:** PCMS provided for this contract shall comply with the most recent revision of the following standards, even if no revision date is given:
- 2.1.4 Aluminum Welding** – The PCMS housing shall be fabricated, welded and inspected in accordance with *ANSI/AWS D1.2-97 Structural Welding Code-Aluminum (1997)/CSA W59.2 welded aluminum construction (1998)*.
- 2.1.5 Electrical Components** – High-voltage components and circuits (120 VAC and greater) shall be wired and color-coded per the National Electric Code.
- 2.1.6 Environmental Resistance** – The PCMS housing shall comply with type 3R enclosure criteria, as described in *NEMA Standards Publication 250-1997, Enclosures for Electrical Equipment (1000 Volts Maximum)*.

- 2.1.7 Maintenance Access** – The LED display matrix and other internal PCMS components shall be accessible through doorways by opening the face of display. The face is maintained open by a pneumatic system.
- 2.1.8 Structural Integrity** – The PCMS housing shall be designed and constructed to withstand a minimum sustained wind load of 65 mph (105kph) in transport mode, and shall meet NEMA TS-4 requirements in operational mode (72 mph minimum overturning wind; 100 mph minimum destruction wind). The PCMS housing shall support a front face ice load of 4 pounds per square foot (19.5 kg per square meter). The PCMS housing shall be designed and constructed to comply with all applicable sections of *AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals, Third Draft, March 1999*, as well as the fatigue resistance requirements of *NCHRP Report 412, Fatigue-Resistant Design of Cantilevered Signal, Sign, and Light Supports*.
- 2.1.9 Couplers/safety chains** – The PCMS shall be designed in accordance with SAE J847/J864.
- 2.2** PCMS field controller hardware/firmware and PCMS control software communications shall comply with the most recent revision of the following AASHTO-ITE-NEMA Joint Committee standards for **NTCIP**:
- 2.3 PCMS Display Capability:** The PCMS shall be full matrix. The PCMS shall contain three rows of eight characters each. The PCMS shall display messages that are continuous, uniform and unbroken in appearance to motorists and travelers.
- 2.3.1** Character height shall be eighteen inches. Each character shall have a 15degree cone of visibility, minimum. Each character shall be comprised of seven pixels high by five pixels wide.
- 2.3.2** Each display pixel shall be comprised of multiple monochrome amber LEDs. Other pixel technologies, such as fiber optic, flip disk, combination flip disk-fiber optic, combination flip disk-LED, liquid crystal, and incandescent lamp will not be accepted.
- 2.3.3** The PCMS shall be able to display messages composed of any combination of alphanumeric text, punctuation symbols.
- 2.3.4** PCMS messages shall be legible within a distance range of 150 feet (46 meters) to 1,000 feet (305 meters) from the PCMS display face under the following conditions:
- 2.3.4.1** When the PCMS is mounted such that its bottom side is positioned between five feet (1,524 mm) and 20 feet (6,096 mm) above the roadway surface.
- 2.3.4.2** Whenever the PCMS is displaying alphanumeric text that is 18 inches (457 mm) tall.
- 2.3.4.3** 24 hours per day and in most normally encountered weather conditions.
- 2.3.4.4** During dawn and dusk hours when sunlight is shining directly on the display face, or when the sun is directly behind (silhouetting) the PCMS.
- 2.3.4.5** When viewed by motorists and travelers that have 20-20 corrected vision.
- 2.3.4.6** When motorists' and travelers' eye level is 3 feet (914 mm) to 12 feet (3,658 mm) above the roadway surface.

2.4 Message Entry Effects: The PCMS shall be able to display messages using the following types of entry effects:

- 2.4.1 Static Message** – The selected message is displayed continuously on the sign face until the field controller blanks the sign or causes the display of another message.
- 2.4.2 Flashing Message** – All or part of a message is displayed and dimmed alternately at rates from as fast as 3 flashes per second to as slow as 1 flash per 10 seconds. The flash rate is user programmable in increments of 0.1 seconds.
- 2.4.3 Scrolling Message** – The message moves across the display face from one side to the other. The direction of travel is user selectable as either left-to-right or right-to-left.
- 2.4.4 Multiple-Page Message** – A message contains up to five different pages of information, with each page filling the entire display. Each page's display time is user programmable in durations of 0.5 seconds or greater and is adjustable in increments of 0.1 seconds.
- 2.4.5** A PCMS message shall be able to utilize a combination of these effects

2.5 PCMS Control and Communications: Each PCMS shall be controlled and monitored by its own field controller. The field controller shall be a stand-alone microcomputer, which does not require continuous communication with PCMS control software to perform most PCMS control functions. The field controller shall be capable of communicating with another computer via both RS-232 and RJ45 Ethernet connections.

- 2.5.1** The PCMS field controller shall be able to receive instructions from and provide information to a computer containing PCMS control software using the following communication modes:
 - 2.5.1.1 Remotely** – Via direct (e.g., RS-232, RJ45 Ethernet, broadband modem such as Satellite, Cable, DSL. The system communications backbone, as well as all field modems or signal converters, shall provide the PCMS field controller with either an RS-232 signal having a baud rate between 2,400 bps and 115200 bps, and/or an RJ45 Ethernet 10/100Mbps signal.
 - 2.5.1.2 Locally** – Via direct connection with a laptop computer that is connected directly to the field controller using a null modem connection and a baud rate between 2,400 bps and 115200 bps.
 - 2.5.1.3 Locally** – Via a keypad/ touch screen and LCD interface.

2.6 Cellular Modem: The PCMS field controller shall communicate with the central control software via a cellular modem utilizing IP addressing. Thirty (30) days prior to the delivery of the PCMS, the Contractor shall coordinate with VTRANS and provide the cellular modem EMEI number and any other information necessary to activate cellular service for the modem. The VTRANS point of contract for cellular service activation is:

Mark Gerrish
Vermont Agency of Transportation
Operations and Safety Bureau
2178 Airport Road Unit A
Barre, VT 05641
802-461-5570
Mark.gerrish@vermont.gov

2.7 Camera and Radar Options: The PCMS shall have the ability to add cameras and/or radar. List available options and specification for cameras and radar. Include as option in cost proposal.

2.7.1 RADAR

Antenna Parameters:

- Antenna type: K-Band
- RF Frequency: 24,150GHz + 50 MHz
- Nominal Beam width: 12°
- Nominal Power Out: 10mW
- Supply Voltage: 10.8VDC - 24VDC
- Nominal Current Draw: 180mA
- Environmental Conditions:
 - Operating temperature: -22°F to +158°F
 - Maximum Humidity: 100%

2.7.2 Speed Range Parameters:

- Minimum Speed: 5 mph
- Maximum Speed: 150 mph

2.7.3 Serial Format:

- RS232 9600 Baud 8N1
- Speed output is in ASCII characters (ASCII <HUNS>, ASCII <TENS>, ASCII <ONES> <CR>)

For example: A radar unit reading a speed of 55 would send ASCII 0, ASCII 5, and ASCII 5 <13>

Output of speed shall occur only on change of target speed

If radar unit is not tracking a target, radar unit will send a zero speed once every 2 seconds.

2.7.4 Data Collection:

- Total vehicle count
- Vehicle count over the speed limit
- Average speed
- Display log daily and by hour
- One log per hour, minimum of 40 days before roll-over

2.8 Diagnostic, GPS tracking and Status Information: PCMS operational status, location, and the functional status of major PCMS components and PCMS field controller communications, shall be reportable to PCMS control software residing in both remote and local computers. This shall include the following information:

- 2.8.1 Field Controller Communications** – As “Normal” or “Failed”.
 - 2.8.2 GPS tracking of sign location.**
 - 2.8.3 Message Display Status** – As {name of message being displayed} or “Blank”.
 - 2.8.4 Maximum Usable Intensity Level** – The maximum usable percentage of the maximum possible drive current that can be applied to the LED display for intensity adjustment purposes. This shall be a user-programmable value, and it shall range from 50% to 100% of the maximum possible LED drive current, in increments of 1%.
 - 2.8.5 Actual LED Intensity Level** – The percentage of the “Maximum Usable Intensity Level” at which the LED display is currently operating, whether intensity control is in an automatic or manual mode.
 - 2.8.6 Actual LED Intensity Level Control Method** – As “Automatic” or “Manual”.
 - 2.8.7 LED Pixel Status (for all pixels)** – Displayed upon operator request in a bit-map graphic format as “Normal”, “Failed”.
 - 2.8.8 Real-Time PCMS Message Verification-** Presents the exact content of the displayed message in real-time. Actual displayed message can be viewed using the PCMS control software.
 - 2.8.9 Regulated DC Power Supply Output Status (for all supplies)** – As “Normal” or “Failed”
 - 2.8.10 Internal PCMS Temperature** – The internal PCMS air temperature measured by internally located sensors. This shall be reported in degrees F and C.
- 2.9 PCMS Housing:** The PCMS housing shall provide a service access for all LED display modules, electronics, power supplies, photo sensor assemblies, environmental control equipment, air filters, wiring, and other internal PCMS components.
- 2.9.1 Dimensions** – PCMS display dimensions shall not exceed 80 inches high by 133 inches wide. The front-to-back housing depth shall not exceed 7 inches at its widest point, including the rear ventilation hoods.
 - 2.9.2 Weight** – PCMS weight shall not exceed 3020 pounds.
 - 2.9.3 Power** – Maximum power shall not exceed 300 watts, when the following circuits are operational and fully loaded:
 - LED display pixels, with 100% of the pixels operating at their maximum possible drive current.
 - PCMS environmental control system.
 - 45-amp utility outlet circuit.

- PCMS field controller.

Typical PCMS AC operating power shall not exceed 36 watts with the following circuit loadings:

- LED display pixels with 25% of the pixels operating at their maximum possible drive current.

PCMS field controller.

PCMS shall operate from one of the following power sources:

- 120 VAC, 60 Hz single-phase, including neutral and earth ground.
 - Solar-powered battery charging. The PCMS should be able to operate 29 days without sunlight in a tunnel with no ambient light and the PCMS at its dimmest intensity setting at 20°C.
- 2.9.4** The PCMS housing shall be constructed to have a neat, professional appearance. The housing shall protect the internal components from rain, ice, dust, and corrosion in accordance with NEMA enclosure Type 3R standards, as described in *NEMA Standards Publication 250-1997, Enclosures for Electrical Equipment (1000 Volts Maximum)*. The PCMS housing bottom side shall contain small weep holes for draining any water that accumulates due to condensation.
- 2.9.5** Weep holes and ventilation/exhaust hoods shall be screened to prevent the entrance of insects and small animals.
- 2.9.6** PCMS and field controller components shall operate in a temperature range of -34 to +165° F (-36 to +74° C) and a relative humidity range of 0 to 95% non-condensing.
- 2.9.7** Internal PCMS component hardware (nuts, bolts, screws, standoffs, rivets, fasteners, etc.) shall be manufactured from stainless steel, aluminum, nylon, or other durable corrosion-resistant materials suitable for the roadway signage application.
- 2.9.8** PCMS and field controller components shall be 100% solid-state. All high voltage electrical components (exceeding 24 VDC) used in the PCMS and the field controller shall be UL (Underwriter's Laboratory) listed.
- 2.9.9** The presence of ambient radio signals and magnetic or electromagnetic interference, including those from power lines, transformers, and motors, shall not impair performance of the PCMS system. The PCMS system shall not radiate electromagnetic signals that adversely affect any other electronic device, including those located in vehicles passing underneath or otherwise near the PCMS and its field controller.
- 2.10 PCMS Housing Frame:** PCMS housing's right, left, front, and rear walls shall be vertical. Top and bottom sides shall be horizontal. LED display modules shall be mounted parallel to the front wall.
- 2.10.1** The PCMS housing structural frame shall consist of aluminum extrusions made from alloy number 6061-T6. All sides of the PCMS housing exterior, except the front, shall be covered with 0.125-inch (3.17 mm) thick aluminum sheets made from alloy number 5052-H32.
- 2.10.2** The PCMS housing shall be manufactured, welded, and inspected in accordance with the requirements of *ANSI/AWS D1.2-97 Structural Welding Code-Aluminum (1997)/CSA W59.2*

welded aluminum construction (1998). Compliance with this standard shall include, but shall not be limited to, the following:

- 2.10.2.1** Welding shall be performed according to documented in-house welding procedures.
- 2.10.2.2** Personnel who perform welding on the PCMS housing shall be certified to *AWS D1.2-97/CSA W47.2* for all weld types required for housing fabrication.
- 2.10.2.3** A Certified Welding Inspector (CWI) shall inspect PCMS welding on a daily basis and shall complete written reports that document welding progress, weld integrity, and any corrective action taken. The PCMS manufacturer shall archive these reports and make them available for review, upon request of the Engineer.
- 2.10.3** PCMS structural assembly hardware and mounting brackets hardware (nuts, bolts, washers, and direct tension indicators) shall be stainless steel or galvanized high-strength steel, and shall be appropriately sized for the application.
- 2.11 Front Face Construction:** The front face shall be made of a clear polycarbonate panel contained in an extruded aluminum framework. This framework shall be hinged at the top to the housing and gasketed to weatherproof the modules inside. A mechanism shall be in place to avoid gasket over compression. Stainless steel hardware shall be used to fasten every component on the trailer.
- 2.11.1** Polycarbonate shall contain UV light inhibitor, which protects the LED display matrix from the effects of ultraviolet light exposure and prevents premature aging of the polycarbonate itself. Polycarbonate sheets shall have the following characteristics:
- Tensile Strength, Ultimate: 10,000 PSI
 - Tensile Strength, Yield: 9,300 PSI
 - Tensile Strain at Break: 125%
 - Tensile Modulus: 330,000 PSI
 - Flexural Modulus: 330,000 PSI
 - Impact Strength, Izod (1/8", notched): 17 ft-lbs/inch of notch
 - Rockwell Hardness: M75, R118
 - Heat Deflection Temperature Under Load: 264 PSI at 270F and 66 PSI at 288F
 - Coefficient of Thermal Expansion: 3.9×10^{-5} in/in/F
 - Specific Heat: 0.30 BTU/lb/F
 - Initial Light Transmittance: 85% minimum
 - Change in Light Transmittance, 3 years exposure in a Southern latitude: 3%
 - Change in Yellowness Index, 3 years exposure in a Southern latitude: less than 5%.

- 2.11.2** PCMS front face borders (top, bottom, left side, and right side), which surround the front face panels and LED display characters, shall be painted black to maximize display contrast and legibility.
- 2.11.3** In the presence of wind, the PCMS front face shall not distort in a manner that adversely affects LED message legibility.
- 2.12** **Serviceability:** The PCMS housing shall provide safe and convenient access for all modular assemblies, components, wiring, and other materials located within the PCMS housing. All internal components shall be removable and replaceable by a single technician.
- 2.12.1** Locking provisions shall be provided with each enclosure on the trailer.
- 2.13** **LED Display Modules:** The PCMS shall contain 7-pixels high by 5-pixel wide LED character display modules, which are placed side-by-side and top-to-bottom to form the complete PCMS display. Modules shall be mounted to the inside of the PCMS display housing, using hardware that requires either basic hand tools or no tools for removal and replacement. Each character display module shall be individually removable and be completely interchangeable with all other character display modules.
- 2.13.1** Removal of a character display module from the PCMS, or failure of a single module, shall not affect the performance of any other module in the sign. Removal of one or more modules shall not affect PCMS structural integrity.
- 2.13.2** All LED's used in all PCMS provided for this contract shall be from the same manufacturer and of the same part number.
- 2.14** **Power system:** The PCMS shall run on solar-powered batteries and shall be have the capability to be connected to standard line voltage for recharging purposes.
- 2.14.1** Solar-powered batteries system shall conform to the following:
- Solar panels shall provide sufficient energy to keep the batteries fully charged while the PCMS is in operation but in no event shall they provide less than 110 watts each.
 - A photovoltaic controller shall be provided to monitor batteries and maintain the maximum power level in it without over charging the batteries. This must be done so batteries expected life will not be affected.
 - The photovoltaic controller shall monitor the batteries and provide an automatic shut off of display below 11.5VDC. This prevents the batteries from being over drained and preserves battery life.
 - Solar panels shall be inclinable to reach a minimum of 60° backward and 30° frontward
 - Solar panels shall rotate 360° independently of the sign panel to allow optimum exposure to the sun.
 - Batteries shall be placed in an easy access for maintenance.
 - Batteries shall be deep-cycle type

- Batteries shall be locked in a cabinet. This cabinet shall have enough ventilation to evacuate the gas generated by the batteries.

2.14.2 The line power system shall conform to the following:

- Operating input voltage range: +90 to +140 VACS
- Operating input frequency range: 50 to 60Hz
- Operating temperature range: -34 to +165° F (-36 to +74° C)
- Easy access and environment protected outlet.
- UL listed.
- Shall completely charge the PCMS batteries in 24 hours or less.

2.15 Ambient Light Measurement System: A sensor that measures outdoor ambient light levels at the PCMS site shall be mounted in-line with the front PCMS housing walls. This system shall consist of a two (2) commercially available photoelectric sensors.

2.15.1 One of the photo sensors shall be placed to measure the ambient light levels striking the PCMS housing walls. The second photo sensor shall be mounted to the PCMS housing bottom and shall face the ground. A change in the amount of light striking a photo sensor shall cause its output to vary. The PCMS field controller shall continuously monitor sensor outputs and use the information to automatically adjust LED display matrix intensity to a level that creates a legible PCMS message.

2.16 Internal Temperature Measurement System: Sensors shall be able to measure a temperature range of -40° to +176° F (-40° to +80° C), and sensor output shall be reportable to the PCMS field controller.

2.17 Internal Wiring: Wiring for LED display module control, environmental control circuits, and other internal PCMS components shall be installed in the PCMS housing in a neat and professional manner. Wiring shall not impede the removal of display modules, power supplies, environmental control equipment, or other sign components. Wires shall not make contact with or around sharp metals edges. LED display module power and signal wiring shall be cut to a length and installed such that it is not possible to connect a module to the wrong set of wires. All wiring shall conform to the National Electric Code.

2.18 Trailer construction: The trailer shall conform to the following:

- The trailer shall be made from heavy-duty welded steel.
- Four stabilizer jacks located at each corner shall be present so the trailer can be stabilized on field.
- The trailer shall have hydraulic brakes with auto back up release system.
- The sign shall be lockable in any position across a 360° range.
- Transportation height must not exceed 10 feet (3048 mm).

- Easy removable tow bar or hitch so the trailer can be left on site without tow bar or hitch.
- Tow bar or hitch can be changed to accommodate any type of towing vehicle. A standard 2" ball hitch shall be supplied with PCMS trailer but any other type shall be available by the manufacturer as an option.
- Light system shall meet Federal and State of Vermont standard highway lighting specifications.
- The trailer shall be supplied with 15 inch radial tires.

2.19 Display Raising/Rotating system: The PCMS shall have the ability to be elevated and lowered via a hydraulic system. The PCMS shall have the ability to be manually aligned.

2.19.1 The hydraulic system shall be conforming to the following:

- Switch button hydraulic system so the display can be raised over a range of 13 feet (3962 mm).
- The hydraulic system shall be fuse protected.
- The pump shall be easy to access for maintenance purposes.

2.19.2 The display alignment system shall be conforming to the following:

- Manual alignment across a 360° range.
- Self-locking system, so no strap or human intervention is needed to fix the display in place.

2.20 Trailer and Display Paint: PCMS front face panels and border pieces shall be coated with black paint which has an expected outdoor service life of 20 years.

2.20.1 The trailer shall be painted highway safety orange.

2.20.2 The thickness of paint shall not be less than 0.0025".

2.21 Field Controller Hardware: A field controller shall be provided with each PCMS. The controller shall:

2.21.1 Be a stand-alone microprocessor-based computer that runs on an embedded operating system.

2.21.2 Mount in a cabinet fixed to the trailer with an easy access or inside the display enclosure itself.

2.21.3 The enclosure cover shall be lockable.

2.21.4 Operate throughout a temperature range of -34 to +165° F (-36 to +74° C) and a humidity range of 0 to 95% non-condensing, without the assistance of an auxiliary heater.

2.21.5 Require an RS-232 communications signal having a baud rate between 2,400 bps and 115,200 bps.

2.21.6 Comply with NTCIP standards specified herein.

- 2.21.7** Support all of the control, monitoring, and diagnostic features described in the PCMS specification.
- 2.21.8** Be individually addressable, so that it does not respond to commands intended for other field controllers.
- 2.21.9** Perform most PCMS control and monitoring functions specified herein, without continuous communications with the system central computer.
- 2.21.10** Field controller hardware and software shall permit communication with the PCMS system central computer in the following mode:
- Polled Operation – in which the field controller informs the central computer of its current status, in response to a periodic automatic query from the central computer.
- 2.22** **Memory:** The field controller shall have both permanent and changeable memory. Permanent memory shall be in the form of flash-PROM integrated circuits that contain the executable field controller software. If new versions of executable code become available, it shall be possible to upgrade the field controller with the latest version either on-site or from a remote location.
- 2.23** **Internal Clock:** The PCMS field controller shall contain a computer-readable time-of-year clock that has a lithium battery backup. The battery shall keep the clock operating properly for at least 10 years without external power, and the clock shall automatically adjust for daylight savings time and leap year using hardware or software, or a combination of both.
- 2.24** **Field Controller Software:** The field controller software shall be compatible with and support the features of the central control software currently installed in the VTRANS Transportation Management Center.
- 2.25** **Message Presentation on the PCMS Display:** The PCMS field controller shall instruct the LED display driver circuitry in a manner that causes the desired message to appear on the PCMS display. At a minimum, the field controller shall support the following features, as described in the PCMS specification:
- Display of alphanumeric characters.
 - Message format details such as centering text on a display line, right justification, left justification, and legible spacing of letters and words.
 - Display of static messages.
 - Flashing of all or part of a message.
 - Message scrolling.
 - Alternating between pages of a multiple-page message.
- 2.26** **Message and Schedule Functions:** The PCMS field controller shall support the following message selection functions, which may be initiated by a PCMS control software operator:

- Cause the field controller to implement a message or message schedule stored in its memory
 - Cause the field controller to implement a new message or schedule entered via the control software
 - Edit or completely replace a message or message schedule stored in the field controller memory
 - Cause the field controller to report the contents of any message or message schedule stored in its memory
 - Override a scheduled message.
- 2.26.1** The field controller shall be able to implement a message stored in its memory at a particular time and date, as supported by a message schedule feature.
- 2.26.2** Field controller software shall incorporate a fail-safe procedure to check the content of messages received and shall not change a message stored in memory, the message displayed on the sign, the schedule stored in memory, or the current controller clock time, unless the new message is correctly received.
- 2.26.3** A displayed message shall remain on the sign until the controller receives a command to change the message or blank the sign, or a schedule stored in the field controller memory indicates that it is time to implement a different message. It shall be possible to confer a “priority” status onto any message, and a command to display a priority message shall cause any non-priority message to be overwritten.
- 2.27** **PCMS Intensity Control:** The PCMS field controller shall be able to automatically adjust the LED display intensity. A system operator shall be able to override the automatic system to manually change the LED intensity.
- 2.27.1** The intensity control system shall employ a photoelectric sensor as described in the PCMS specification. When the system is running in the automatic mode, the field controller shall continuously analyze ambient light levels and shall automatically adjust LED display intensity to provide optimum message legibility for the given ambient light condition. Intensity control shall be achieved using pulse width modulation of the LED forward drive current.
- 2.27.2** The PCMS intensity control system shall:
- Utilize two (2) photoelectric sensors, which are provided and installed as described in the PCMS specification
 - LED intensity levels shall be available in a range of 1% to 100% of the maximum display intensity, and in increments of 1%
 - Not cause any flickering of the LED display matrix
 - Allow manual and automatic intensity control modes to be configurable using the PCMS control software or the keypad LCD interface, although the typical control mode shall be “automatic”

- Allow manual intensity control from both local and remote locations.

- 2.28 LED Diagnostic Test Capability:** Upon command from either a remote computer or a locally connected maintenance computer running PCMS control software, the PCMS field controller shall test the electrical operation of all LED pixels and determine whether their functional status is “ok” or “failed”. Pixel status shall be determined via A/D conversion of the LED pixel forward current, and the resulting data shall be communicated to the PCMS control software.
- 2.28.1** LED pixel diagnostic data shall be displayable to a system operator as described in the PCMS control software specification.
- 2.29 Real-Time PCMS Message Verification:** The PCMS field controller and LED module hardware shall be capable of enabling the PCMS Central Control operator to verify the actual message displayed on the PCMS on a real-time basis. This message verification shall be presented in a WYSIWYG format without disrupting the message displayed on the PCMS. This shall be accomplished each time the PCMS is polled for status by the central control software.
- 2.30 Power Supply Diagnostic Test Capability:** The field controller shall be able to determine the functional status of regulated DC power supplies located in the PCMS by monitoring diagnostic outputs located on the supplies. This information shall be reportable as “ok” or “failed” to the PCMS control software.
- 2.31 Response to Errors:** In the event of a communication error between the PCMS field controller and the system control computer, the “communications loss message” will be displayed. This shall be factory set to blank the PCMS.
- 2.31.1** In the event of a power failure, the “power recovery message” will be displayed. This shall be factory set to blank the PCMS.
- 2.31.2** The PCMS field controller shall contain a hardware watchdog that automatically resets the controller’s microprocessor in the event of a controller lock-up.
- 2.32 NTCIP Specifications:** The changeable message signs required for this project shall comply with all the latest NTCIP communication protocol specifications.
- 2.32.1** **Each NTCIP Component covered by these project specifications shall implement the most recent version of the standard that is at the stage of Recommended Standard or higher as of the contract award date, including any and all Approved or Recommended Amendments to these standards as of the same date. It is the ultimate responsibility of the PCMS manufacturer to monitor NTCIP standards development activities to discover any more recent documents. Refer to the NTCIP library at www.ntcip.org for information on the current status of NTCIP standards.**
- 2.33 Documentation:** Software shall be supplied with full documentation, including ASCII versions of the following Management Information Base (MIB) files in Abstract Syntax Notation 1 (ASN.1) format:
- 2.33.1** The relevant version of each official standard MIB Module referenced by the device functionality.

2.33.2 If the device does not support the full range of any given object within a Standard MIB Module, a manufacturer specific version of the official Standard MIB Module with the supported range indicated in ASN.1 format in the SYNTAX and/or DESCRIPTION fields of the associated OBJECT TYPE macro. The filename of this file shall be identical to the standard MIB Module, except that it will have the extension “.man”.

2.33.3 A MIB Module in ASN.1 format containing any and all manufacturer-specific objects supported by the device with accurate and meaningful DESCRIPTION fields and supported ranges indicated in the SYNTAX field of the OBJECT-TYPE macros.

2.33.4 A MIB containing any other objects supported by the device.

2.34 Acceptance Testing: The acceptance test will use the NTCIP Exerciser, or authorized testing tool. The Engineer reserves the right to enhance these tests as deemed appropriate to ensure device compliance.

3. SMALL PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) DETAILED REQUIREMENTS: The contractor shall furnish and test a Small Portable Changeable Message Sign (PCMS) that meets the following requirements:

3.1 BUY AMERICA: PCMS must comply with FHWA Buy America policies. Title 23 C.F.R. 635.410.

3.2 MUTCD: Sign must comply with MUTCD section 6F.55.

3.3 MESSAGE SIGN OVERALL DIMENSIONS:

- Max overall length: 140”
- Max overall width: 70”
- Display panel height: min 41” max 45”
- Display panel width: min 66” max 89”
- Traveling height: max 95”
- Operating height: max 165”
- Weight: max 1500 lbs

3.4 TEMPERATURE RANGE: Operational: -40° to +165° F. Storage: -40° to +185° F.

3.5 ELECTRICAL INTERFERENCE: The PCMS shall not be affected by all normal (standard) types of RF interference.

3.6 RELATIVE HUMIDITY RANGE: Operating 10 to 95% RH, non-condensing.

3.7 TRAILER:

- Tubular steel
- Painted highway safety orange
- Paint thickness not less than 0.0025”

- Receiver hitch with 2" ball coupler
- Heavy-duty safety chains with safety hooks meeting safety standards
- Tires: 15" radial
- Wheel Size: 15" (5-stud with anti-theft locking mechanism)
- Trailer shall have four-screw jacks and a tongue wheel jack
- Trailer light system shall meet Federal and State of Vermont standards
- Trailer shall have anchor points to allow the sign to be securely anchored to the ground

3.8 CABINETS:

- Aluminum sign and control cabinets
- Lockable, ventilated battery compartment
- Weather stripping sealing each compartment against moisture

3.9 MESSAGE SIGN LIFT MECHANISM: Cable and winch or hydraulic.

3.10 SOLAR PANELS:

- Solar panels shall be inclinable to reach a max of 60° backward and 30° frontward
- Solar panels shall rotate 360° independently of sign panel

3.11 BATTERIES: 6 or 12-volt 220 amp/hour deep-cycle batteries wired to provide a 12-volt system.

3.12 CONTROLLER MENU DISPLAY (LCD): Controller menu displays:

- Current usage and battery voltage
- Solar array current output (to the battery) and voltage
- Remaining sign autonomy in hours
- Sign status (error detection)
- Current message display

3.13 MESSAGE SIGN CONTROLS:

- Main power switch
- 120 volt charge switch
- Can switch from laptop (local communication RS-232) to cellular communication

3.14 SPEED OF MESSAGE CHANGE: All three lines can be changed completely in no more than 100 milliseconds without visual disturbance.

3.15 MESSAGE SIGN LEGIBILITY: Messages shall be legible within a distance range of 150 feet to 1000 feet.

3.16 MESSAGE SIGN DISPLAY CONSTRUCTION:

3.16.1 Amber-color LEDs with a viewing angle of 15-30 degrees.

3.16.2 LEDs shall have a rated life of no less than 100,000 hours.

3.16.3 All LEDs shall be from the same manufacturer and of the same part number.

3.16.4 Three lines of up to 12 characters per line (a character is based on a 5 x 7 pixel of 8" high).

3.16.5 LED output shall adjust automatically to ambient light conditions.

3.16.6 The display shall be enclosed in an aluminum cabinet and protected by a polycarbonate sheet.

3.16.7 Polycarbonate sheet shall meet the following characteristics:

- Tensile Strength, Ultimate: 10,000 PSI
- Tensile Strength, Yield: 9,300 PSI
- Tensile Strain at Break: 125%
- Tensile Modulus: 330,000 PSI
- Flexural Modulus: 330,000 PSI
- Impact Strength, Izod (1/8", notched): 17 ft-lbs/inch of notch
- Rockwell Hardness: M75, R118
- Heat Deflection Temperature Under Load: 264 PSI at 270F and 66 PSI at 288F
- Coefficient of Thermal Expansion: 3.9×10^{-5} in/in/F
- Specific Heat: 0.30 BTU/lb/F
- Initial Light Transmittance: 85% minimum
- Change in Light Transmittance, 3 years exposure in a Southern latitude: 3%
- Change in Yellowness Index, 3 years exposure in a Southern latitude: less than 5%.

3.17 MESSAGE SIGN CONTROLLER: Back-lighted LCD display.

3.18 MESSAGE SIGN KEYBOARD: Full-size QWERTY keyboard with clear plastic weather protection cover or graphic touchscreen.

3.19 MESSAGE SIGN SOFTWARE: Shall allow for a minimum of 200 user-programmable messages.

3.19.1 LED intensity levels shall be available in a range of 1%-100% in increments of 1%.

3.19.2 Field controller hardware/firmware and PCMS control software communications shall comply. With the most recent revision of the following AASHTO-ITE-NEMA Joint Committee standards for NTCIP:

- 1101:1996 – Amendment 1 – NTCIP Simple Transportation Management Framework (STMF). This document was previously published as NEMA TS-3.2-1996
- 1201:2005 – Version 2 – NTCIP Global Object Definitions. This document was previously published as NEMA TS-3.4-1996
- 1203:1997 – NTCIP Object Definitions for Dynamic Message Signs. This document was previously published as NEMA TS-3.6-1997
- 2001 – NTCIP Class B Profile. This document was previously published as NEMA TS 3.3
- 2301:2001 – NTCIP STMF Application Profile. This document was previously published as NEMA TS-3.STMF
- 2202v01.08 (Recommended) – NTCIP Internet Transport Profile. This document was previously published as NEMA TS-3.Internet v99.01.03

3.20 MESSAGE SIGN WARRANTY: Each manufacturer and/or supplier shall include in the proposal a detailed description of both the manufacturers' and the suppliers' warranties. The warranties must be for both materials and labor.

3.21 PCMS CONTROL AND COMMUNICATIONS: The PCMS field controller shall be able to receive instructions from and provide information to a computer containing PCMS control software using the following communication modes:

- 3.21.1 Remotely – Via direct (e.g., RS-232, RJ45 Ethernet, broadband modem such as Satellite, Cable, DSL).** The system communications backbone, as well as all field modems or signal converters, shall provide the PCMS field controller with either an RS-232 signal having a baud rate between 2,400 bps and 115200 bps, and/or an RJ45 Ethernet 10/100Mbps signal.
- 3.21.2 Locally – Via direct connection with a laptop computer that is connected directly to the field controller using a null modem connection and a baud rate between 2,400 bps and 115200 bps.**
- 3.21.3 Locally – Via a keypad and LCD interface.** This provides a way to add or remove message(s) from the PCMS list of installed messages, adjust luminosity to manual or automatic and monitor miscellaneous data like battery voltage, photocells reading, etc.
- 3.21.4 Cellular Modem:** The PCMS field controller shall communicate with the central control software via a cellular modem utilizing IP addressing. Thirty (30) days prior to the delivery of the PCMS, the Contractor shall coordinate with VTRANS and provide the cellular modem EMEI number and any other information necessary to activate cellular service for the modem. The VTRANS point of contract for cellular service activation is:

Mark Gerrish
Vermont Agency of Transportation
Operations and Safety Bureau
2178 Airport Road Unit A
Barre, VT 05641
802-461-5570

Mark.gerrish@vermont.gov

3.22 Camera and Radar Options: The PCMS shall have the ability to add cameras and/or radar. List available options and specification for cameras and radar. Include as option in cost proposal.

3.22.1 RADAR:

Antenna Parameters:

- Antenna type: K-Band
- RF Frequency: 24,150GHz + 50 MHz
- Nominal Beam width: 12°
- Nominal Power Out: 10mW
- Supply Voltage: 10.8VDC - 24VDC
- Nominal Current Draw: 180mA
- Environmental Conditions:
- Operating temperature: -22°F to +158°F
- Maximum Humidity: 100%

3.22.2 Speed Range Parameters:

- Minimum Speed: 5 mph
- Maximum Speed: 150 mph

3.22.3 Serial Format:

- RS232 9600 Baud 8N1
- Speed output is in ASCII characters (ASCII <HUNS>, ASCII <TENS>, ASCII <ONES> <CR>)

For example: A radar unit reading a speed of 55 would send ASCII 0, ASCII 5, ASCII 5 <13>.

Output of speed shall occur only on change of target speed.

If radar unit is not tracking a target, radar unit will send a zero speed once every 2 seconds.

3.22.4 Data Collection:

- Total vehicle count
- Vehicle count over the speed limit
- Average speed
- Display log daily and by hour
- One log per hour, minimum of 40 days before roll-over

4. INFORMATION SECURITY REQUIREMENTS

4.1 Information Security Requirements, Generally

In cases where the State is not permitted to manage/modify the automation equipment (server/computer/other) that controls testing or monitoring devices, the Contractor agrees to update and provide patches for the automation equipment and any installed operating systems or applications on a quarterly basis (at minimum). The Contractor will submit a report to the State of updates installed within 30 days of the installation as well as a Plan of Actions and Milestones (POA&M) to remediate any vulnerabilities ranging from Critical to Low. The contractor will provide an upgrade path or compensatory security controls for any operating systems and applications listed as beyond “end-of-life” or EOL, within 90 days of the EOL and complete the EOL system’s upgrade within 90 days of the approved plan.

4.2 SOV Cybersecurity Standard 19-01

All products and service provided to or for the use of the State under this Contract shall be in compliance with State of Vermont Cybersecurity Standard 19-01, which Contractor acknowledges has been provided to it, and is available on-line at the following URL: <https://digitalservices.vermont.gov/cybersecurity/cybersecurity-standards-and-directives>

5. **WARRANTY:** Each product purchased hereunder shall include a manufacturer’s written warranty, which must be based on commercial use, and extend for a minimum term of one (1) year from the date a Product is available for use by the purchaser, or such longer period as set forth in the written warranty.

The Contractor shall unconditionally guaranty all system and subsystem modules, including all equipment, hardware, and software as specified in the Plans and Specifications to be free of defects for a period of one (1) year from the date of Final Acceptance of each project site by the Project Manager. The guaranty shall cover all materials, software, equipment, tools, transportation, supplies, parts, and incidentals required to facilitate response maintenance as necessary to repair and replace any defective modules, system(s) or subsystem(s) of the completed facility within the one year time period. Additionally, the Contractor shall guarantee availability of compatible replacement equipment (to the field replaceable unit level) for a ten-year time period from the date of Final Acceptance. Acceptance of any system or subsystem during the construction contract, or any modifications to the system design proposed by the Contractor and approved by the Project Manager shall not relieve the Contractor of the requirements of this guaranty. The guaranty period shall be considered to start concurrent with the date of Final Acceptance of each project site. The Contractor shall respond to calls and faxed work orders from the Project Manager and/or a representative from the Transportation Operations Center (TOC), or their duly authorized representative by arriving at the site of the required repair within (24) twenty-four hours of the call. The Contractor will notify the Project Manager by voice communication upon arrival at the site. Calls received Monday through Friday 8 AM to 3 PM require a twenty-four hour response. Calls received after 3 PM require a twenty-four hour response on the next business day, which begins at 8 AM. Once at the site, the Contractor shall

determine the cause of failure and correct the problem within twenty-four (24) hours, unless additional time is allowed by the Project Manager. The Contractor shall notify the Project Manager by fax of the completed repair.

6. **TECHNICAL SUPPORT/TRAINING:** The Contractor shall provide a training program consisting of the furnishing of educational training in the installation, operation, programming and maintenance of each type of component comprising the PCMS system.
- 6.1 The Contractor shall provide qualified instructors approved in writing by the PCMS manufacturer and all training materials necessary for training State and maintaining agency personnel in the operation and maintenance of the system components. Training shall consist of classroom lectures as well as “hands-on” demonstrations.
- 6.2 The Contractor shall develop and submit training course outlines and samples of all training aids and manuals to the Project Manager for approval at least twenty-eight (28) days prior to the proposed start of the training sessions. At the same time, the Contractor shall submit a list of individuals who will conduct the training and resumes of each for review and approval. Written approval of this material and training instructors will be required prior to the final scheduling of the training sessions or the final production of training materials.
- 6.3 The Contractor shall develop and supply all necessary manuals, displays, class notes, visual aids, and other instructional materials as required providing the training programs described herein. The required manuals shall be individually bound in loose-leaf binders. The Contractor shall supply an adequate number of manuals and class notes to provide one copy of each to all session participants. An additional five copies shall be turned over to the Engineer at the completion of the training program. All manuals must be submitted to the Project Manager for approval. Training shall begin no sooner than three weeks after Engineer approval and no later than 30 days after the first field unit is brought on-line.
- 6.4 Training will be conducted at a classroom facility supplied by the Contractor. This facility shall be within 15 miles of the City of Montpelier.
- 6.5 The Contractor shall, as a minimum, establish training sessions lasting three (3) days. Training sessions shall be limited to no more than 6 hours in any single day. All training sessions shall accommodate twenty (20) people.
7. **REPORTING REQUIREMENTS:** Contractor will be required to submit quarterly product sales report to the Purchasing Agent pursuant to the schedule below detailing the purchasing of all items under this Contractor. Contractor’s reporting shall state “no activity” for any month in which there is no activity during a quarterly reporting period.
- a. The reports shall be an excel spreadsheet transmitted electronically to the Purchasing Agent.
- b. Reports are due for each quarter as follows:

Reporting Period	Report Due
January 1 to March 31	April 30

April 1 to June 30	July 31
July 1 to September 30	October 31
October 1 to December 31	January 31

- c. Failure to meet these reporting requirements may result in suspension or termination of this Participating Addendum.
 - d. Notwithstanding the fact that any payment obligation for sales by contractor to any political subdivision or college, pursuant to “Purchasing Entities,” below, shall be solely between the political subdivision or college and the contractor, the contractor must include, in reporting to State, the figures on quantities sold by contractor to, and amounts paid to contractor by, any such political subdivisions or independent colleges.
8. **DELIVERY:** Responsibility for product delivery remains with Contractor until the product is properly delivered and signed for. Contractor shall securely and properly pack all shipments in accordance with accepted commercial practices. Upon delivery, all packaging and containers shall become the property of the State, unless otherwise stated. Delivered goods that do not conform to the specifications or are not in good condition upon receipt shall be replaced promptly by the Contractor.
9. **QUALITY:** All products will be new and unused. All products provided by the Contractor must meet all federal, state, and local standards for quality and safety requirements. Products not meeting the requirements of this section will be deemed unacceptable and returned to the Contractor for credit at no charge to the State.
10. **DEFAULT:** In case of default of the Contractor, the State may procure the materials or supplies from other sources and hold the Contractor responsible for any excess cost occasioned thereby, provided, that if public necessity requires the use of materials or supplies not conforming to the specifications they may be accepted and payment therefore shall be made at a proper reduction in price.
11. **Primary Contacts.** The Parties will keep and maintain current at all times a primary point of contact for this contract. The primary contacts for this this Contract are as follows:

e. **For the Contractor:**

Name: Debra Ricker
Phone: 802-223-8948
Email: DebraR@worksafetci.com

f. **For the State:**

Name: Trevor R. Lewis, State Commodity Procurement Administrator
Address: 109 State Street, Montpelier, VT 05633-3001
Phone: 802/828-2217
Fax: 802/828-2222
Email: Trevor.R.Lewis@vermont.gov

12. **Purchasing Entities:** This Participating Addendum may be used by (a) all departments, offices, institutions, and other agencies of the State of Vermont and counties (each a “State Purchaser”) according to the process for ordering and other restrictions applicable to State Purchasers set forth herein; and (b) political subdivisions of the State of Vermont and any institution of higher education chartered in Vermont and accredited or holding a certificate of approval from the State Board of Education as authorized under 29 V.S.A. § 902 (each an “Additional Purchaser”). Issues concerning interpretation and eligibility for participation are solely within the authority of the State of Vermont Chief Procurement Officer. The State of Vermont and its officers and employees shall have no responsibility or liability for Additional Purchasers. Each Additional Purchaser is to make its own determination whether this Participating Addendum and the Master Agreement are consistent with its procurement policies and regulations.

ATTACHMENT B – PAYMENT PROVISIONS

The maximum dollar amount payable under this contract is not intended as any form of a guaranteed amount. The Contractor will be paid for products actually delivered or performed, as specified in Attachment A, up to the maximum allowable amount specified on page 1 of this contract.

1. Prior to commencement of work and release of any payments, Contractor shall submit to the State:
 - a. a certificate of insurance consistent with the requirements set forth in Attachment C, Section 8 (Insurance), and with any additional requirements for insurance as may be set forth elsewhere in this contract; and
2. Payment terms are **Net 30** days from the date the State receives an error-free invoice with all necessary and complete supporting documentation.
3. All invoices are to be rendered by the Contractor on the vendor's standard billhead and forwarded directly to the institution or agency ordering materials and shall specify the address to which payments will be sent.
4. **PRICING:** Contractor shall provide all products F.O.B. delivery to the ordering facility at no additional cost to the State. No request for extra delivery cost will be honored. All equipment shall be delivered assembled, serviced, and ready for immediate use, unless otherwise requested by the State. No charge for packing, shipping, or for any other purpose will be allowed over and above the price quoted.
5. Contractor shall submit invoice(s) to:

2178 Airport Road
Unit A
Barre, VT 05641
6. Following complete delivery of the items, each as specified in Attachment A, and the State's written confirmation to the Contractor of the State's acceptance of those items and that training, Contractor will, within 15 business days, invoice the State in accordance with the rates specified in Attachment A.
7. Unless otherwise indicated in a manufacturer's return policy, unopened Products can be returned with no restocking fee up to 30 days from the date of receipt.
8. The State Purchasing Card may be used by State Purchasers for the payment of invoices. Use of the Purchasing Card requires all required documentation applicable to the purchase. The Purchasing Card is a payment mechanism, not a procurement approach and, therefore, does not relieve State Purchasers from adhering to all procurement laws, regulations, policies, procedures, and best practices.

**ATTACHMENT C: STANDARD STATE PROVISIONS
FOR CONTRACTS AND GRANTS
REVISED DECEMBER 15, 2017**

“Attachment C: Standard State Provisions for Contracts and Grants” (revision version dated December 15, 2017) constitutes part of this Agreement and is hereby incorporated by reference as if fully set forth herein and shall apply to the purchase of all goods and/or services by the State under this Agreement. A copy of this document is available online at: <https://bgs.vermont.gov/purchasing-contracting/forms>.

ATTACHMENT D

STATE OF VERMONT- FEDERAL TERMS SUPPLEMENT (Non-Construction)

for all Contracts and Purchases¹
of Products and Services Connected with 2020 Pandemic

BYRD ANTI-LOBBYING AMENDMENT

Contractors who apply or bid for an award of \$100,000 or more certify that each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier, up to the recipient who in turn will forward the certification(s) to the awarding agency

PROCUREMENT OF RECOVERED MATERIALS

In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated Items unless the products cannot be acquired-

1. Competitively within a time frame providing for compliance with the contract performance schedule;
2. Meeting contract performance requirements; or
3. At a reasonable price

Information about this requirement, along with the list of EPA-designated items, is available at the EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.

The Contractor also agrees to comply with all other applicable requirements of section 6002 of the Solid Waste Disposal Act.

CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

1. The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
2. The contractor agrees to report each violation to the State of Vermont and understands and agrees that the State of Vermont will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
3. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

¹ These terms, developed by the Vermont Attorney General's Office, are to be included, without any changes, **in all contracts, and any amendments to contracts**, intended or expected to be used in connection with the State of Vermont's response to the 2020 Pandemic. THESE TERMS ARE ALSO TO BE USED AND ADDED FOR **ANY TRANSACTIONS**, SUCH AS BUT NOT ONLY PURCHASE ORDERS, TAKING PLACE UNDER AN EXISTING CONTRACT, IF THE PURCHASE IS FOR THE PANDEMIC AND IF THERE IS ANY POTENTIAL DOUBT AS TO WHETHER THE OVERLYING CONTRACT HAS THESE TERMS. These terms and conditions shall also be added in instances in which a purchase without formal contract is otherwise duly authorized.

4. The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
5. The contractor agrees to report each violation to the State of Vermont and understands and agrees that the State of Vermont will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
6. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA. **a.** Standard. Non-Federal entities and contractors are subject to the debarment and suspension regulations implementing Executive Order 12549, *Debarment and Suspension* (1986) and Executive Order 12689, *Debarment and Suspension* (1989) at 2 C.F.R. Part 180 and the Department of Homeland Security's regulations at 2 C.F.R. Part 3000 (Nonprocurement Debarment and Suspension).

CONTRACTOR BREACH, ERRORS AND OMISSIONS

1. Any breach of the terms of this contract, or material errors and omissions in the work product of the contractor must be corrected by the contractor at no cost to the State, and a contractor may be liable for the State's costs and other damages resulting from errors or deficiencies in its performance.
2. Neither the States' review, approval or acceptance of nor payment for, the services required under this contract shall be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract.
3. The rights and remedies of the State provided for under this contract are in addition to any other rights and remedies provided by law or elsewhere in the contract.

TERMINATION FOR CONVENIENCE

1. General
 - a. Any termination for convenience shall be effected by delivery to the Contractor an Order of Termination specifying the termination is for the convenience of the Agency, the extent to which performance of work under the Contract is terminated, and the effective date of the termination.
 - b. In the event such termination occurs, without fault and for reasons beyond the control of the Contractor, all completed or partially completed items of work as of the date of termination will be paid for in accordance with the contract payment terms.
 - c. No compensation will be allowed for items eliminated from the Contract.
 - d. Termination of the Contract, or portion thereof, shall not relieve the Contractor of its contractual responsibilities for work completed and shall not relieve the Contractor's Surety of its obligation for and concerning any just claim arising out of the work performed.
2. Contractor Obligations

After receipt of the Notice of Termination and except as otherwise directed by the State, the Contractor shall immediately proceed to:

- a. To the extent specified in the Notice of Termination, stop work under the Contract on the date specified.

- b. Place no further orders or subcontracts for materials, services, and/or facilities except as may be necessary for completion of such portion(s) of the work under the Contract as is (are) not terminated.
 - c. Terminate and cancel any orders or subcontracts for related to the services, except as may be necessary for completion of such portion(s) of the work under the Contract as is (are) not terminated.
 - d. Transfer to the State all completed or partially completed plans, drawings, information, and other property which, if the Contract had been completed, would be required to be furnished to the State.
 - e. Take other action as may be necessary or as directed by the State for the protection and preservation of the property related to the contract which is in the possession of the contractor and in which the State has or may acquire any interest.
 - f. Make available to the State all cost and other records relevant to a determination of an equitable settlement.
3. Claim by Contractor

After receipt of the Notice of Termination from the state, the Contractor shall submit any claim for additional costs not covered herein or elsewhere in the Contract within 60 days of the effective termination date, and not thereafter. Should the Contractor fail to submit a claim within the 60-day period, the State may, at its sole discretion, based on information available to it, determine what, if any, compensation is due the Contractor and pay the Contractor the determined amount.

4. Negotiation

Negotiation to settle a timely claim shall be for the sole purpose of reaching a settlement equitable to both the Contractor and the State. Settlement shall be based on actual costs incurred by the Contractor, as reflected by the contract rates. Consequential damages, loss of overhead, loss of overhead contribution of any kind, and/or loss of anticipated profits on work not performed shall not be included in the Contractor's claim and will not be considered, allowed, or included as part of any settlement.