



**REQUEST FOR QUOTE (RFQ) – BID# 7603779**

**STATEWIDE ON-CALL SERVICES FOR TRAFFIC MONITORING STATIONS**

**SUBMISSION DEADLINE: Thursday, May 21, 2020 at 1:00 PM (ET)**

**PRE-BID CONFERENCE:**

☒ NO  
☐ YES

**Mandatory:** ☐ NO

☒ **YES:** Any vendor who intends to submit a bid proposal in response to this solicitation must have its designated representative attend the mandatory pre-bid conference. The representative must register at the pre-bid conference and disclose the identity of the vendor whom he/she represents. Because attendance at the pre-bid conference is mandatory, a vendor's failure to attend and register at the pre-bid conference shall result in disqualification of the vendor's bid proposal as non-responsive to the solicitation.

**Buyer Name:** Marisa DelFarno  
**Title:** Buyer I

**QUESTIONS** Prospective bidders are hereby notified that all questions pertaining to this contract must be submitted to the Department of Transportation in writing through its website at <http://www.dot.ri.gov/contracting/bids> by accessing the questions & answers menu located within the 'contracting', then 'bidding opportunities' link. Response to the submitted questions will also be posted under this link, phone calls will not be accepted.

**SURETY REQUIRED:** NO

**BOND REQUIRED:** NO

**DISK BASED BID:** ☒ NO  
☐ YES: See attached Disk Based Bidding Information

**NOTE TO VENDORS:**

Vendors must register on-line at the Rhode Island Division of Purchases website at [www.purchasing.ri.gov](http://www.purchasing.ri.gov). Offers received without the completed four-page Rhode Island Vendor Information Program (RIVIP) Generated Bidder Certification Cover Form attached may result in disqualification.

**THIS IS NOT A BIDDER CERTIFICATION FORM**



RHODE ISLAND CONTRACT NO. 2020-CT-027  
RHODE ISLAND FEDERAL AID PROJECT NO. SPR (339)

## **TRAFFIC MONITORING STATIONS ON- CALL SERVICES CONTRACT**

VARIOUS LOCATIONS  
STATEWIDE, RHODE ISLAND

### **CONTRACT SPECIFIC DOCUMENTS**

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**Prepared by**

**Rhode Island Department of Transportation**  
**Transportation Management Center**  
**2 Capitol Hill, RM 150, Providence, RI**

## **GENERAL PROVISIONS – CONTRACT SPECIFIC**

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## **1. INTRODUCTION**

### **1.1. Background**

The Rhode Island Department of Transportation (here in after referred to as RIDOT) Traffic Research Section owns, operates and is responsible for the maintenance of numerous Traffic Monitoring devices.

RIDOT Traffic Research section is a computerized control center incorporating radar vehicle detectors (RVD), weigh in motion detectors (WIM), roadway embedded loop detectors, and portable vehicle classification counters. The Traffic Research Section is located at the RIDOT Building at Two Capitol Hill, Providence, Rhode Island.

The Traffic Research Section continues to add additional equipment on a regular basis through RIDOT construction contracts and upgrades of current equipment through this contract. The locations of all current Traffic Monitoring field equipment will be provided in a Google Earth map format upon request (which can be converted to standard latitude/longitude coordinates). This information will be updated and modified as needed due to old equipment being decommissioned and new equipment coming online.

The area covered by the RIDOT Traffic Monitoring field devices primarily includes, but is not limited to, I-95, I-195, I-295, Routes 1, 2, 4, 5, 6, 10, 24, 37, 44, 114, 136, 138, and 146 along with equipment located on other roadways throughout the state.

The intent of this document is to set forth terms and conditions for on-call preventive maintenance, installation, diagnostic and repair services of existing and planned Traffic Monitoring field devices throughout the term of this contract.

## **2. SCOPE OF WORK**

### **2.1. Description of Services**

The purpose of this Request for Bids is to obtain the necessary services required to maintain RIDOT's traffic monitoring equipment and ensure all monitoring equipment remains operational and functional twenty-four (24) hours per day, seven (7) days per week. This contract includes essential "on-call" repair and maintenance services to preserve, upgrade, replace, and expand RIDOT's Traffic Monitoring Stations whenever necessary to assure their continuous operation and to provide cost-effective and enhanced safety and/or mobility for travelers in Rhode Island.

Under this contract, the successful bidder (Contractor) will mobilize, furnish labor and materials as detailed in this document, in-order-to provide comprehensive maintenance, diagnostic and repair services of the electronic and communications equipment and associated devices/subsystems which collectively provide for the functionality and system integrity of RIDOT's Traffic Research Section.

Services solicited under this Contract shall include all labor, material, and incidentals required to execute and complete the requirements of this Contract, including administration, supervision, use of equipment and tools and all services and responsibilities prescribed or implied in the Contract. All services

described herein shall cover all existing and future Traffic Monitoring devices deployed during the term of this Contract, unless specifically excluded by RIDOT.

In some cases, **urgent** diagnostic and repair services may be requested.

Initially, the Contractor will be required to provide defined maintenance and diagnostic and repair services on 275 RVD sites and 18 WIM locations. As existing equipment warranties expire, the Contractor will be required to maintain and repair additional Traffic Monitoring sites.

#### **2.1.1. Routine and Urgent Repair Services**

In addition to specifically scheduled maintenance, the RIDOT Engineer/Inspector or duly authorized representative will direct the Contractor to diagnose and repair system problems as they arise. Direction will be given to the Contractor's representative, who will be responsible for ensuring that the Engineer's directions are carried out by the Contractor's workforce.

In some cases, these repairs may be classified as **urgent**, with associated appropriate time constraints.

### **2.2. Term of Contract**

This contract and the submitted bid prices shall be valid for a period of three (3) years from written Notice to Proceed. At RIDOT's discretion, this Contract may be renewed annually for up to TWO (2) additional YEARS. Bid prices are subject to the agreement of the State.

### **2.3. Award of Contract**

The basis of award of the contract will be to the lowest responsive and responsible Contractor (see Section 4.1 Contractor Qualifications of this Bid Solicitation) bid price at the mutual agreement of the State and the Contractor for all quantities of work shown this Bid Solicitation subject to the review and

correction as provided for in the *State of Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction and Standard Details*.

The State of Rhode Island Standard Specifications for Road and Bridge Construction and Standard Details consists of the following:

1. The Rhode Island Standard Specifications for Road and Bridge Construction, 2004 Amended March 2018
2. Compilation of Approved Specification – September 2018
3. Compilation of Approved Specification – June 2019
4. Required Contract Provisions /Federal-Aid Construction Contracts
5. Rhode Island Standard Details
6. Rhode Island Bridge Standard Details
7. General Provisions
8. Rhode Island Department of Administration Procurement Regulations (latest version)

## **2.4. Contractor Work Schedule**

The Contractor and all Subcontractors shall be required to provide all preventive maintenance activities under this contract Monday through Friday (including holidays, if directed by the Traffic Management Center) during the hours of 7:00 am to 3:00 pm.

No work that will disrupt travel on the existing roadways (lane closures, lane shifts, trenching, etc.) shall be done from 6:00 AM to 9:00 AM and from 3:00 PM to 7:00 PM.

No work shall be done on this contract on Saturdays, Sundays or holidays or on the day before or the day after a long weekend which involves a holiday without prior approval by the RIDOT Engineer/Inspector.

In some cases, **urgent** work may be required to be performed during restricted hours (e.g., weekends), upon approval by the RIDOT Engineer/Inspector. As requested by the Traffic Research Section, the Contractor may be required to provide personnel for weekend work, including early starts (before 7:00 am), and/or late finishes (after 3:00 pm) in order to meet equipment diagnostic and repair needs.

The Contractor will be compensated on a time and materials basis. The Contractor will not be reimbursed for travel time to and from the sites but only for time at the site.

## **2.5. Traffic Monitoring Equipment**

The Contractor shall initially be responsible for providing Maintenance and Repair Services for the equipment. Equipment will be added/subtracted to this contract as needed due to new construction activities. The tables detail the equipment locations, how each site is to be accessed by the Contractor for service, and any maintenance and protection of traffic required for access to the site.

Exact locations (latitude/longitude) of all Traffic Monitoring Equipment will be provided upon request in Google Earth format.

## **3. MATERIALS**

The contractor shall provide all equipment and material required for maintenance and repairs required herein. The contractor shall also maintain a spare equipment inventory for the duration of the Contract.

The contractor will be required to submit copies of all purchase and equipment repair orders listing specific model numbers, price and shipping and handling costs.

All purchases by the contractor shall be made in the most cost-effective manner possible. Equipment necessary to carry out work, including vehicles, shall not be reimbursable unless specifically itemized within this bid document or specifically authorized in writing by the RIDOT Engineer/Inspector.

### **3.1. Miscellaneous Materials and Services**

Any miscellaneous materials required to complete the work under this contract will be either:

- a. supplied by the State from existing inventories,
- b. purchased by the State and supplied to the Contractor, or
- c. the Contractor may be required to purchase material directly and submit for reimbursement. The Contractor will be reimbursed for equipment purchases at total cost plus five (5) percent.

#### **3.1.1. Contractor Reimbursement for Miscellaneous Materials and Equipment**

When directed by the RIDOT Engineer/Project Manager to purchase materials or services eligible for reimbursement, the Contractor shall employ the following as general purchasing practice:

##### **3.1.1.1 Miscellaneous materials and services valued at \$5,000 or less**

Only materials and services valued at \$5,000 or less may be purchased by the Contractor with written authorization from the RIDOT Engineer/Inspector.

All items purchased shall require written confirmation of the winning price quotation to the RIDOT Engineer/Inspector and approval of the quoted price by the RIDOT Engineer/Inspector prior to purchase of the materials or services.

##### **3.1.1.2 Miscellaneous materials valued over \$5,000**

For purchases exceeding \$5,000.00, the Contractor shall provide written confirmation of at least three quotations, and the lowest quoted price shall be used. If no competition exists for the requested materials or services, the Contractor shall provide written justification for why the quoted vendor is the only source for the materials or services.

The contractor will be required to submit copies of all purchases listing specific model numbers and quantities, services, shipping and handling costs.

#### **3.1.2. SPARE EQUIPMENT**



At Notice to Proceed, the Contractor shall arrange to pick up the spare equipment inventory from RIDOT. When spare equipment is utilized in a repair operation, the failed equipment shall be provided to RIDOT for repair. Once repaired, RIDOT will provide the equipment to the Contractor and the Contractor shall return the equipment to the spare equipment inventory. If the failed equipment cannot be repaired, a replacement spare will be provided by RIDOT, or at the option of the State, a replacement spare shall be purchased by the Contractor. All items provided by the Contractor shall be purchased new and be available for inspection by Traffic Research personnel upon request.

The Contractor shall be responsible for all spare equipment in their possession. The Contractor shall maintain complete records of the location and status of all spare equipment and shall make those records available for inspection by RIDOT at any time upon 24 hours advance notification. At the conclusion of the Contract, the Contractor shall turn over all spare equipment inventory to the Traffic Research Section in working order.

## **4. PERSONNEL**

The Contractor shall notify the Traffic Research Section of any personnel changes to personnel assigned to the Contract as early as practical, but no later than one (1) business day after such personnel change occurs.

The State also reserves the option of providing State personnel, or RIDOT designees, and equipment to assist in or perform any work covered under this contract.

### **4.1. CONTRACTOR QUALIFICATIONS**

The contractor must submit a list with the sealed bid of previous work on similar State contracts, qualified personnel, certifications, licenses and equipment in order to be eligible for contract award. The list shall include:

#### **4.1.1. Key Personnel and Equipment**

Specifically identify key personnel to be assigned to the project. Assignment of key personnel to the project must be for the duration of the project. Provide a detailed resume for each such individual, including proof of any equipment service certifications, as required in the specifications herein. In the event such personnel are not employees of the bidder, submit documentation of the relationship. Describe the individuals' responsibilities on previous projects and their proposed responsibility on this project. Demonstrate that the bidder has the capability, in terms of both qualifications and quantities of personnel, facilities and equipment required, to accomplish the work in this contract.

#### **4.1.2. License Requirements**

Where applicable, companies submitting bids must meet the license requirements of the Rhode Island General Statutes. The Contractor shall submit copies of all licenses and certifications for the work required within this contract.

Specifically, the Contractor and all service personnel employed by the Contractor and assigned to this project shall maintain current all State of Rhode Island electrical licenses required to perform the work under the scope of this Contract.

The Contractor shall maintain required licenses for the duration of this contract. Any lapse in required licensure shall be grounds for termination of this contract, at the sole discretion of RIDOT.

#### **4.1.3. Previous Experience**

Identify previous work where the Contractor has successfully maintained a minimum of 100 Radar Vehicle Detectors (RVD's), 5 Weigh in Motion Stations (WIM's), and related system equipment for a period of at least twelve (12) months. This work shall have taken place within the past twenty-four (24) months. Provide references and appropriate contact information for the contracting agency for those services.

#### **4.1.4. Training and Certification**

The Contractor shall have personnel who are trained and certified by the equipment manufacturer in the service and installation of equipment as follows:

1. Wavetronix Remote Traffic Microwave Sensor (RTMS), Smartsensor, Smartsensor HD, Smartsensor V, and
2. Econolite Remote Traffic Microwave Sensor (RTMS) G-4, and
3. International Road Dynamics (IRD) Isinc Weigh in Motion Data Collectors, and
4. Class I Piezoelectric Sensors and cables.

All required certifications shall be maintained current for the duration of the Contract. The Contractor shall provide evidence of certification prior to Notice to Proceed, and on an annual basis there after, and upon notification of any personnel changes. Any lapse in required certifications shall be grounds for termination of this contract, at the sole discretion of RIDOT.

#### **4.1.5. Subcontractors**

RIDOT must approve any and all subcontractors utilized by the successful supplier prior to any such subcontractor commencing any work. Suppliers acknowledge by the act of submitting a bid that any work provided under the contract is work conducted on behalf of the State and that the RIDOT or a designee of RIDOT may communicate directly with any subcontractor as the State deems to be necessary or appropriate. It is also understood that the successful supplier shall be responsible for all payment of fees charged by the subcontractor(s). A performance evaluation of any subcontractor shall be provided promptly by the successful supplier to RIDOT upon request.

### **4.2. Equipment Manufacturer Support to Contractor**

The Contractor shall be responsible for any charges associated with technical support needed from equipment manufacturers required to diagnose equipment failures. Immediately upon Notice to Proceed, the Contractor shall establish any technical support agreements with the manufacturers required to maintain the equipment covered under this Contract. The manufacturers may include

Wavetronix, Econolite, International Road Dynamics, or any other manufacturers of equipment that may be added during the period of performance of this Contract.

#### **4.3. Right to Inspection**

The State reserves the right to inspect a contractor's equipment or facility in an effort to determine if the bidder is qualified to perform the services required by the contract.

### **5. NOTICE TO CONTRACTOR**

Sealed Proposals addressed to the State Purchasing Agent, Rhode Island Department of Administration, Division of Purchases, One Capitol Hill, Providence, Rhode Island 02903, will be opened on **June 2, 2020 at 2:00 PM**. All bidders MUST register online at <https://www.ridop.ri.gov/>. A Bidder Certification Cover Sheet MUST accompany each bid. Bid item description and quantities estimated for this project will also be available online. Should you need assistance in registering or downloading a bid, call (401) 222-3766. Failure to comply will result in mandatory disqualification per Item 4 of Section 102.12 of the Rhode Island Department of Transportation's Standard Specifications for Road and Bridge Construction 2004 Edition and RI General Law 37-2-17 which references the RI Vendor Information Program (RIVIP).

Bid item 20.0 is for the reimbursement of the Contractor for miscellaneous materials and services provided under this Contract, as defined in Section 3.1. The unit price for this bid item shall be \$1.00, and all prospective bidders are directed to include that unit price in their proposals.

The unit price listed by the bidder in the Proposal shall be the maximum unit price for each item.

#### **ADDITIONAL REQUIRED FORMS**

Besides the RIVIP Bidder Certification Cover Sheet (as required at the State level and obtained through the RIVIP website), RIDOT also requires that the following SEVEN (7) FORMS be completed and included in your submission package in line with federal regulations and departmental policy. These FORMS will be reviewed for completeness and at the point of award will be made part of contract document.

**1. W-9 FORM:**

Must be completed and signed by authorized agent of your Firm. Form must be downloaded at <https://www.ridop.ri.gov/>.

**2. CERTIFICATION FOR TITLE VI/Nondiscrimination Assurances for Contractors:**

Shall be fully-completed and submitted accordingly.

**3. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS – PRIMARY COVERED TRANSACTIONS:**

Shall be fully-completed and submitted accordingly.

**4. DISCLOSURE OF LOBBYING ACTIVITIES**

Shall be fully-completed and submitted accordingly.

**5. ANTI-COLLUSION CERTIFICATE FOR CONTRACT AND FORCE ACCOUNT:**

Shall be fully-completed and submitted accordingly.

**6. CONFLICTS DISCLOSURE POLICY:**

Shall be fully-completed and submitted accordingly

**7. NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION:**

Shall be fully-completed and submitted accordingly

Required Contract Provisions - The attention of prospective bidders is called to the fact that this project is to be bid upon and the contract executed under the rules and regulations for carrying out the provisions of the Federal-Aid Highway Act, subject to all appropriate Federal Laws, including Title VI of the Civil Rights Act of 1964, as amended and supplemented, and the required provisions for Federal - Aid Contracts, as provided for in Chapters 85, 86 and 88 of the Public Laws of Rhode Island, 1960.

Wages of labor on Federal -Aid Highway Projects - the prevailing rate of wages for laborers and mechanics employed by contractors or subcontractors on the initial construction of highway projects on the Federal - Aid Highway System, authorized under the Federal Highway Act of 1968, shall be paid wages at rates not less than those prevailing on the same type of work on similar construction in the immediate locality as determined by the United States Secretary of Labor, in accordance with the Act of August 30, 1935, known as the Davis - Bacon Act, under Decision Nos. 1 through 6 as applicable.

Prevailing wage rates and Davis - Bacon Wage Determination Reference Materials are available online at [www.purchasing.ri.gov](http://www.purchasing.ri.gov). It is advisable to print only the pages applicable to this bid; the rates active on the Rhode Island Vendor Information Program's bid solicitation date for this project are applicable for the duration of the contract resulting from this bid.

Work Hours Act of 1962 - This contract is subject to Work Hours Act of 1962, Public Law 87-581 and implementing regulations.

**6. PRE-BID MEETING**

There will be no Pre-Bid Conference.

**7. MAINTENANCE AND PROTECTION OF TRAFFIC**

The Rhode Island Department of Transportation will determine if the Contractor is required to provide Maintenance and Protection of Traffic as detailed in Part 6 of the Manual of Uniform Traffic Control Devices (MUTCD) for Streets and Highways, 2009 Edition, including all updates where work on this contract is being performed as part of this contract. This shall include all recommended equipment as

designated in the MUTCD including but not limited to cones, barrels, signs, flag persons, barricades, and truck mounted attenuators.

In addition to the requirements of the Standard Specifications for Road and Bridge Construction and the Special Requirements of other sections of these contract documents, the Contractor must adhere to the following requirements:

The Contractor is advised that the signs and other traffic control devices required by these specifications are minimum requirements, and it is the Contractor's responsibility to supplement these if necessary, to ensure the public's safety. All Maintenance and Protection of Traffic devices shall be in place and approved by the RIDOT Engineer/Inspector prior to starting any maintenance activities. All Maintenance and Protection of Traffic shall conform to the latest edition and revisions of the MUTCD. The Contractor must submit for approval a traffic control plan when implementing any changes to the details within these specifications or when providing traffic control for situations differing from those indicated in these specifications, including subcontractor work.

Any deviations from the requirements stated here must be submitted to the RIDOT Engineer/Inspector in writing for approval.

In case of an emergency, the Contractor will be required to move equipment and allow the passage of emergency vehicles. The safety of the residents of the area must always be considered.

## **8. INVOICE AND SUBMITTAL SCHEDULE**

In addition to the written failure reports and invoice back-ups, the Contractor is required to submit invoices and summary work sheets once per month to the Traffic Research Section for review and approval. At a minimum this shall include:

### **8.1. Monthly Invoices**

The monthly invoices shall include a summary of all items and man-hours charged during the completion of work under this contract for the prior month. The invoices shall provide a list of all items totaled under the appropriate item number for the contract.

### **8.2. Documentation**

#### **8.2.1. Written Failure Reports**

The Contractor shall resubmit a summary of all written failure reports.

#### **8.2.2. Equipment and Repair Charges**

The contractor shall resubmit copies of all equipment and repair charges.

#### **8.2.3. Progress Report**

The Contractor shall submit a detailed list of work accomplished during the prior month including description, dates, hours worked, tasks accomplished etc...

Failure to submit the required invoices, documentation, and failure reports may be grounds to withhold payment. In the future RIDOT may require the vendor to utilize the DOT's provided work order system to receive and complete work orders/purchase orders.

## **9. WORK ZONE RESTRICTIONS**

Work zone time restrictions for all work areas shall be in accordance with Table 4-1 of the Rhode Island Department of Transportation Traffic Design Manual, dated October 2004.

The Contractor will be required to coordinate with the RIDOT Engineer/Inspector regarding anticipated lane closures.

For all roads that are divided and have no access control, the Contractor shall be required to maintain one full travel lane (10-foot minimum) in each direction open to traffic at all times during working hours with flag persons and traffic persons actively engaged in directing traffic. During non-working hours (including evenings, weekends and holidays) the Contractor shall restore the roadway to be fully open to traffic in all travel lanes in each direction. Safe access and egress to side streets and all driveways shall be maintained at all times.

For Interstate and other limited access highways (including ramps), the Contractor shall be required to maintain one full travel lane (11-foot minimum) in each direction open to traffic at all times during working hours. The Contractor shall not close more than two lanes at any time during operations. During non-working hours (including evenings, weekends, and holidays) the Contractor shall restore the roadway to be fully open to traffic in all travel lanes.

The Contractor shall provide appropriate tree and shrub protection as directed by the RIDOT Engineer/Inspector.

All disturbed grass areas shall be restored with plantable soil and type 1 seeding or loam and type 2 seeding as shown on the plans or as directed by the RIDOT Engineer/Inspector.

## **10. COORDINATION WITH OTHER CONTRACTORS**

The Contractor shall be required to coordinate with RIDOT Construction prior to beginning work at any of the sites. The Contractor shall be responsible to coordinate work schedules to prevent conflict with other projects in the work areas. The Contractor shall not be allowed to work over the objections of the Prime Contractor on the other projects.

## **11. CONTRACTOR'S RESPONSIBILITY FOR DAMAGED STORM DRAINS**

The Contractor shall use care when working within or in the vicinity of existing drainage structures. Any drainage structures, pipe or culverts damaged during the disposing of, cleaning of and installation of or while making repairs to drainage structures, pipes or culverts or while carrying out any other work on this contract shall be the Contractor's responsibility. Any pipe/culvert damaged by the Contractor while carrying out this contract shall be replaced or repaired by the Contractor to the satisfaction of the RIDOT Engineer/Inspector at no additional charge to the State.

The Contractor shall make every effort to prevent debris from falling into catch basins. Should any debris fall inside a structure, it shall be removed immediately.

## **12. RIGHT-OF-WAY AND DAMAGE TO PROPERTY**

If the Contractor desires to use additional areas outside of the right-of-way, he shall arrange for such areas at his own expense.

The Contractor shall take adequate precautions to avoid unnecessary damage to pavements, utilities, or private properties. The Contractor shall promptly repair (in kind), at his own expense, any damage attributed to his work to such pavements, utilities, or private property to the satisfaction of the RIDOT Engineer/Inspector.

The Contractor shall assume all risk and liability for his equipment left on site during both working and non-working hours.

## **13. SHOP DRAWINGS AND SUBMITTALS**

The Contractor's attention is called to the following list of submittals for various pay items. The Contractor shall study the plans and specifications for the submittal requirements. Every attempt has been made to make the following list as complete as possible. The Contractor shall refer to Section 105.02 of the State of Rhode Island Procurement Regulations, with all amendments, for submission requirements to the RIDOT Engineer/Inspector and the Prime Engineering Design Consultant and Engineering Subconsultants. It is the Contractor's responsibility to ensure that all submittals are made in a timely manner even if they are not shown in the list below.

### Item No.:

- 26 - T03.9903 – Multi-Lane Permanent Automatic Vehicle Classification/Weigh-in-Motion (AVC/WIM) Equipment
- 27 - T03.9904 – Automatic Vehicle Classification/Weigh-in-Motion Test Vehicle
- 38 - T06.9901 – Solar Power Equipment
- 39 - T06.9902 – Radar Vehicle Detector w/Solar Power Equipment and RF Communicator
- 40 - T06.9903 – RF Cluster Controller System
- 45 - T12.9901 – Ground Mounted Controller Cabinet
- 46 - T12.9902 – Ground Controller Cabinet and Foundation
- 47 - T12.9903 – Pole Mounted Controller Cabinet
- 48 - T13.9901 – Class I Piezoelectric Sensor (12-Foot)
- 49 - T13.9903 – Radar Vehicle Detector
- 50 - T13.9906 – Wireless Modem

#### **14. POLICE COMPENSATION**

It will be the responsibility of the RIDOT Engineer/Inspector to retain the services of the State and Local Police for traffic control and protection of this project. The Contractor shall give the RIDOT Engineer/Inspector four working days' notice of anticipated lane closures (location and duration) in order for the RIDOT Engineer/Inspector to determine if police details are appropriate and to obtain their services. The Contractor will not be required to bid, or be compensated for, the services of the police.

#### **15. CONDUIT INSTALLATION**

All new conduit shall include the installation of No. 6 copper ground wire. The copper ground wire shall be bonded to ground rods in accordance with Section T.03 of the Rhode Island Department of Transportation Standard Specification. Pull tape shall also be installed within all new conduit for the future wiring installation. These items shall be considered incidental to the cost of the conduit and there shall be no separate pay item. All PVC conduit is to be gray, Schedule 80 PVC Conduit.

#### **16. INCIDENT MANAGEMENT**

In the event of an accident or other unforeseen incident which closes the roadway, the Contractor shall positively cooperate with local authorities by providing traffic control devices, personnel, equipment, and material as required, both on and off site. The Contractor shall assist in whatever way possible to clear debris from the roadway and maintain traffic flow. Payment for this work shall be on a force account basis. If the personnel are not available on site, they shall be "on call" and able to respond to the site within one hour of notification by the Department of Transportation (by phone or in person) to the Contractor's appointed representative.

#### **17. STORAGE OF MATERIAL AND/OR EQUIPMENT**

##### **a. Roads without Curbing and Sidewalks:**

Storage of material and/or equipment within the road "clear zone", as described below, will require prior written approval of the RIDOT Engineer/Inspector. Material stored in the "clear zone" must be used or moved within 14 days. Furthermore, no overnight storage of equipment within the "clear zone" will be allowed.

<u>Posted Speed</u>	<u>Distance from Edge of Travel Lane</u>
39 MPH or Less	12 Feet
40 – 45 MPH	16 Feet



50 MPH	20 Feet
55 MPH or Greater	30 Feet

Area of the "clear zone" that is used for storage of materials must be clearly delineated with appropriate traffic control devices.

There shall be no parking of vehicles or storage of equipment under the drip line of any trees, within a wetland buffer, or within an ASSF.

## **18. GENERAL NOTES**

The Contractor will be responsible for coordination of contract work with utilities when they are involved and/or in conflict. Verifying the actual utility locations in the field shall be the sole responsibility of the Contractor. The Contractor has full responsibility for any or all damage to any utility or lighting system caused by installation activities.

All traffic monitoring equipment is to be replaced in accordance with the latest Rhode Island Standard Details as directed by the RIDOT Engineer/Inspector. Installation methods and materials shall be in accordance with the Manufacturer's latest recommendations.

All piezo loop sites shall have dry-cut loop installation.

This note refers to component bid prices only. The unit bid price for the installation of component items shall include disassembly of damaged sections, with proper care, so as not to damage components that can be reused. Any undamaged sections, which must be replaced because of the Contractor's negligence, will be done so at the Contractor's expense.

All serviceable components or materials shall be reused prior to the use of new items contained in this contract.

There will be no direct payment for the hardware, nuts, bolts, washers, etc., unless otherwise noted, required to properly complete the installation of the traffic monitoring equipment in accordance with the manufacturer's specifications and the Standard Specifications or Standard Details contained in this contract.

Work will not be considered completed until the RIDOT Engineer/Inspector has approved it. The Contractor shall verify with the RIDOT Engineer/Inspector whether replaced material shall be salvaged or disposed. All salvageable material and/or components, which are not reused, shall be disposed of legally by the Contractor at no additional cost to the Department.

The Unit Bid Prices for the traffic monitoring equipment items are to include the furnishing of all labor, equipment, and materials necessary to complete the work specified by the Contract.

The Contractor shall, at a minimum, remove damaged equipment and secure the site within forty-eight (48) hours from the date on which the work order is issued, weather permitting. The contractor shall complete the required repairs within two weeks, unless granted a time extension

by the RIDOT Engineer/Inspector. Time extensions for work and decisions on weather conditions will be made by the RIDOT Engineer/Inspector.

The Department reserves the right to determine and assign priorities for work on the various traffic monitoring equipment statewide at any given time. The Traffic Research Section will make every effort to complete needed work in a general area. However, if safety conditions dictate, the Contractor will be directed to work in an alternate area if it is in the public interest.

The Contractor, as a condition of the Contract, shall be responsible to notify the RIDOT Engineer/Inspector of his schedule of work on a daily basis or as directed by the RIDOT Engineer/Inspector.

No mobilization item will be included in this contract.

The quantities represented in this contract are estimates only. The actual amounts may vary based on the number and severity of the damage done to the site throughout the contract period.

The Contractor shall record all inspection/installation tasks performed. The record shall be provided to the RIDOT Engineer/Inspector as required. Each record shall include clear photographs, supplied by the Contractor at no extra cost, showing all areas of component damage/installation before and after improvements. In the future RIDOT may require the vendor to utilize the RIDOT's provided work order system to receive recorded information from completed tasks.

## **19. INSURANCE REQUIREMENTS**

See Rhode Island Department of Administration Procurement Regulations (latest version) – General Conditions – Addendum A - Schedule A5 – Departmentation of Transportation Projects

## SPECIFICATIONS – JOB SPECIFIC

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DIVISION 1, PART 100 GENERAL REQUIREMENTS AND COVENANTS

Division I, Part 100 has been deleted from these specifications and has been made a part of the Rhode Island Department of Administration Procurement Regulations at Section 12.

NOTE: ALL REFERENCES TO DIVISION 1, Part 100 SHALL NOW REFER TO THE APPLICABLE SECTION OF SECTION 12 OF THE EMERGENCY PROCUREMENT REGULATIONS
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Replace **Subsection 108.01; Subletting of Contract**, page 1-56 of the Standard Specifications for Road and Bridge Construction (Amended 2013) in its entirety with the following.

## **SECTION 108**

### **PROSECUTION AND PROGRESS**

**108.01 SUBLETTING OF CONTRACT.** The Contractor shall not sublet, sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of its right, title, or interest therein, without written consent of the Engineer. If the Engineer gives such consent, the Contractor will only be permitted to sublet a portion thereof. The Contractor shall perform with its own organization work amounting to not less than 40 percent of the adjusted contract cost. The adjusted contract cost is the total contract cost less the total cost of subcontract specialty items listed in the Proposal. Specialty Items are defined in **Subsection 101.63**.

No subcontracts or transfers of Contract shall relieve the Contractor of liability under the Contract and Bonds. A copy of written agreements with subcontractors must be submitted when making application to sublet any work under the Contract. The Contractor shall not require or withhold retainage from subcontractors. Furthermore, no agreements between the Contractor and its subcontractors or vendors shall create any "third party" relationships between said subcontractors or vendors and the State.

The Contractor shall provide written notice to, and obtain prior written consent from the Engineer, before allowing any subcontractor to sublet any portion of its work to a lower-tier contractor.

**109.04 DIFFERING SITE CONDITIONS, CHANGES, EXTRA WORK, AND FORCE ACCOUNT WORK.**

**a. Methods of Payment.** Differing site conditions, changes, extra work, and significant changes in the character of the work, all performed in accordance with **SECTION 104; SCOPE OF WORK**, will be paid for in accordance with the following methods as appropriate:

1. Contract unit prices.
2. Unit prices agreed upon in the order authorizing the work.
3. An agreed upon lump sum amount.
4. If directed by the Rhode Island Department of Transportation, on a Force Account Basis to be compensated in the following manner:

**(a) Labor.** For all labor and foremen in direct charge of the specific operations, the Contractor shall receive the rate of wage actually paid as shown by its certified payroll, which rate shall be at least the prevailing rate of wage (or scale), for every hour that said labor and foremen are engaged in the work.

No part of the salary or expenses of anyone connected with the Contractor's forces above the grade of foreman, and having general supervision of the work, will be included in the labor item as specified above.

The Engineer reserves the right to determine the number and type of labor employed.

The Contractor shall receive the actual costs paid to, or in behalf of, workers by reason of subsistence and travel allowances, health and welfare benefits, pension fund benefits or other benefits, when such amounts are required by collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work.

An amount equal to 20 percent of the sum of the above items will also be paid the Contractor.

**(b) Bond, Insurance and Tax.** For property damage, liability, unemployment insurance contributions, and social security taxes incurred on force account work, the Contractor shall receive the actual cost, to which cost a surcharge of 6-percent will be added. The Contractor shall furnish satisfactory evidence of the rate or rates paid for such bonds, insurances and taxes.

**(c) Worker's Compensation Insurance Premiums.** The contractor shall receive the actual cost of the workers compensation costs incurred, which shall be calculated net of all

applicable credits, rebates, refunds and allowances. An additional surcharge will be added to actual costs incurred based upon the Experience Modification Factors (MOD Factors) below:

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1. For MOD factors greater than 1.0 the surcharge shall be 6%
2. For MOD factors greater than .80 and less than or equal to 1.0 the surcharge shall be 8%
3. For MOD factors less than or equal to .80 the surcharge shall be 10%

**The Contractor shall submit a copy of the policy to show actual costs and MOD rates.**

**(d) Materials.** For materials accepted by the Managing Engineer and used in the work, the Contractor shall receive the actual cost of such materials delivered to the site, including transportation charges paid (exclusive of machinery rentals as hereinafter set forth), to which cost a surcharge of 15 percent will be added. The Contractor will not be reimbursed for any penalty or carrying charge incurred due to late or delayed payment for materials used in the work.



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Replace **Subsection 109.06(a); Partial Payments - Amount**, page 1-83 of the Standard Specifications for Road and Bridge Construction (Amended 2013) in its entirety with the following.

## **SECTION 109**

### **MEASUREMENT AND PAYMENT**

#### **109.06 PARTIAL PAYMENTS.**

**a. Amount.** Partial payments will be made bi-weekly as the work progresses. The amount of the partial payments shall be 100 percent of the Contract price for the work performed during the previous payment period, all as measured and/or estimated and accepted by the Engineer.

No partial payments shall be made when, in the judgment of the Engineer, the work has not proceeded according to provisions of the Contract. Partial payments shall not be construed as an acceptance by the Rhode Island Department of Transportation of any materials furnished or work performed.

No partial payments shall be made on perishable plant materials until such plant materials are planted as specified in the Contract.

Upon written request from the Contractor, supported by delivery invoices, and for those conditions outlined below, the Engineer may allow partial payment on such approved materials, supplies and equipment as are delivered to an approved site in acceptable condition. Such materials, supplies, and equipment, yet not incorporated into the work, shall be identified, set aside and suitably stored at or near the site of the work.

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Replace **Subsection 109.09; Partial Payments - Amount**, pages 1-83 and 1-84 of the Standard Specifications for Road and Bridge Construction (Amended 2013) in its entirety with the following.

## **SECTION 109**

### **MEASUREMENT AND PAYMENT**

**109.09 ACCEPTANCE AND FINAL PAYMENT.** When the project has been accepted as provided in **Subsection 105.17**, the Engineer will prepare the final estimate of work performed. If the Contractor approves the final estimate or files no claim or objection to the quantities therein within 30 days of receiving the final estimate, the Rhode Island Department of Transportation will process the estimate for final payment. With approval of the final estimate by the Contractor, payment will be made for the entire sum found to be due after deducting all previous payments and all amounts deducted under the provisions of the Contract.

If the Contractor files a claim in accordance with Contract requirements, it shall be submitted in writing in sufficient detail to enable the Engineer to ascertain the basis and amount of such claim. Upon final adjudication of the claim, any additional payment determined to be due the Contractor will be placed on a supplemental estimate and processed for payment.

All prior partial estimates and payments will be subject to correction in the final estimate and payment.

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**JOB SPECIFIC**

**201.9901**

**REMOVE AND DISPOSE POWER SUPPLY (ELECTRIC), RADAR VEHICLE DETECTOR  
AND CAMERA COMPOSITE CABLE**

**DESCRIPTION:** This work shall consist of the removal and disposal of the existing cabinet power supply, pole mounted radar vehicle detector (RVD) and cabinet house equipment, and traffic camera composite cable at the locations indicated on the Plans or as directed by the Rhode Island Department of Transportation (Here in after referred to as RIDOT) Engineer or Inspector.

**CONSTRUCTION METHODS:** The equipment removed shall be delivered to RIDOT. The contractor will also be required to disconnect the existing electrical power and existing loop or radar detector connections from the existing cabinet. Upon completion of the above-described preparation work, the contractor will be responsible for the removal and proper disposal of the existing cabinet and foundation.

**METHOD OF MEASUREMENT:** “REMOVE AND DISPOSE POWER SUPPLY (ELECTRIC), RADAR VEHICLE DETECTOR AND CAMERA COMPOSITE CABLE” will be measured for payment at the unit price per “EACH” for each set of equipment removed and salvaged in accordance with the plans or as directed by the RIDOT Engineer or Inspector.

**BASIS OF PAYMENT:** The accepted quantities of “POWER SUPPLY (ELECTRIC), RADAR VEHICLE DETECTOR AND CAMERA COMPOSITE CABLE” will be paid for at the respective contract unit price per “EACH” as listed in the proposal. The price so-stated constitutes full and complete compensation for all materials, equipment, tools, labor and all other incidentals required to finish the work, complete in place and accepted by the RIDOT Engineer or Inspector.

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**JOB SPECIFIC**

**201.9902**

**REMOVE AND DISPOSE CONTROLLER CABINET**

**DESCRIPTION:** This work shall consist of the removal and disposal of the existing controller cabinet at the locations indicated on the Plans or as directed by the RIDOT Engineer or Inspector.

**CONSTRUCTION METHODS:** Prior to the removal of the cabinet the contractor shall be required to remove all existing traffic controller equipment from the cabinet and provide the equipment to RIDOT. The contractor will also be required to disconnect the existing electrical power and existing loop or radar detector connections from the existing cabinet. Upon completion of the above-described preparation work, the contractor will be responsible for the removal and proper disposal of the existing cabinet.

**METHOD OF MEASUREMENT:** “REMOVE AND DISPOSE CONTROLLER CABINET” will be measured for payment at the unit price per “EACH” for each controller cabinet removed and disposed in accordance with the plans or as directed by the RIDOT Engineer or Inspector.

**BASIS OF PAYMENT:** The accepted quantities of “REMOVE AND DISPOSE CONTROLLER CABINET” will be paid for at the respective contract unit price per “EACH” as listed in the proposal. The price so-stated constitutes full and complete compensation for all materials, equipment, tools, labor and all other incidentals required to finish the work, complete in place and accepted by the RIDOT Engineer or Inspector.

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**JOB SPECIFIC**

**201.9903**

**REMOVE AND DISPOSE CONCRETE FOUNDATION**

**DESCRIPTION:** This work shall consist of the removal and disposal of concrete foundations, at the location indicated on the Plan or as directed by the RIDOT Engineer or Inspector.

**CONSTRUCTION METHODS:** The contractor shall remove and legally dispose of the concrete foundation at the location specified on the plans.

**METHOD OF MEASUREMENT:** “REMOVE AND DISPOSE CONCRETE FOUNDATION” will be measured for payment at the unit price per “EACH” for each concrete foundation removed and disposed in accordance with the plans or as directed by the RIDOT Engineer or Inspector.

**BASIS OF PAYMENT:** The accepted quantities of “REMOVE AND DISPOSE CONCRETE FOUNDATION” will be paid for at the respective contract unit price per “EACH” as listed in the proposal. The price so-stated constitutes full and complete compensation for all materials, equipment, tools, and labor including excavation, and all other incidentals required to finish the work, complete in place and accepted by the RIDOT Engineer or Inspector.

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**JOB SPECIFIC**

**201.9904**

**REMOVE AND DISPOSE JUNCTION BOX AND WOODEN POST**

**DESCRIPTION:** This item of work shall consist of the removal and disposal of an existing junction box and wooden post, at the locations indicated on the plans or as directed by the RIDOT Engineer or Inspector.

**CONSTRUCTION METHODS:** Prior to the removal and disposal of the junction box and wooden post, the Contractor will be required to disconnect the existing electrical power and existing loop connections from the junction box and wooden post.

**METHOD OF MEASUREMENT:** "REMOVE AND DISPOSE EXISTING JUNCTION BOX AND WOODEN POST" will be measured for payment at the unit price per "EACH".

**BASIS OF PAYMENT:** "REMOVE AND DISPOSE EXISTING JUNCTION BOX AND WOODEN POST" will be paid for at the contract unit price per "EACH" as listed in the proposal. The price so-stated constitutes full and complete compensation for all materials, equipment, tools, and labor, including excavation and disposal, and all other incidentals required to finish the work, complete in place and accepted by the RIDOT Engineer or Inspector.

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**JOB SPECIFIC**

**201.9905**

**REMOVE AND DISPOSE SOLAR POWER EQUIPMENT**

**DESCRIPTION:** This item of work shall consist of the removal and disposal of existing solar power equipment at the locations indicated on the plans or as directed by the RIDOT Engineer or Inspector.

**CONSTRUCTION METHODS:** Prior to removing the solar power equipment, the Contractor shall disconnect the wiring from the controller cabinet. All material shall be legally disposed of in accordance with State and Federal regulations.

**METHOD OF MEASUREMENT:** “REMOVE AND DISPOSE SOLAR POWER EQUIPMENT” will be measured for payment at the unit price per “EACH”, which shall include all associated materials part of the complete solar power system at the project site.

**BASIS OF PAYMENT:** “REMOVE AND DISPOSE SOLAR POWER EQUIPMENT” will be paid for at the contract unit price per “EACH” as listed in the proposal. The price so-stated constitutes full and complete compensation for all materials, equipment, tools, and labor, including excavation and disposal, and all other incidentals required to finish the work, complete in place and accepted by the RIDOT Engineer or Inspector.

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**JOB SPECIFIC**

**201.9906**

**REMOVE AND DISPOSE TRAFFIC SIGNAL WOOD POLE**

**DESCRIPTION:** This item of work shall consist of removing and disposing the existing traffic signal wood pole at the locations indicated on the plans or as directed by the RIDOT Engineer or Inspector.

**CONSTRUCTION METHODS:** Prior to the removal and disposal of the traffic signal wood pole, the Contractor will be required to disconnect the existing electrical power, conduit, and wiring from the wood pole. Any damaged conduits shall be removed and disposed in accordance with State and Federal regulations.

**METHOD OF MEASUREMENT:** "REMOVE AND DISPOSE TRAFFIC SIGNAL WOOD POLE" will be measured for payment at the unit price per "EACH". The removal and disposal of radar units and solar power equipment from the traffic signal wood pole will be paid for at their respective contract prices.

**BASIS OF PAYMENT:** "REMOVE AND DISPOSE TRAFFIC SIGNAL WOOD POLE" will be paid for at the contract unit price per "EACH" as listed in the proposal. The price so-stated constitutes full and complete compensation for all materials, equipment, tools, and labor, including excavation and disposal, and all other incidentals required to finish the work, complete in place and accepted by the RIDOT Engineer or Inspector.



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**JOB SPECIFIC**

**201.9907**

**REMOVE AND DISPOSE RADAR VEHICLE DETECTOR**

**DESCRIPTION:** This item of work shall consist of removing and disposing or salvaging existing radar vehicle detector(s) as shown on the plans or as directed by the RIDOT Engineer or Inspector.

**CONSTRUCTION METHODS:** The RIDOT Engineer or Inspector shall make a field determination whether the radar vehicle detector will be salvaged or disposed prior to the Contractor removing the unit from the pole. The Contractor shall legally dispose of units designated for disposal. Units to be salvaged shall be carefully removed from the pole and delivered to the RIDOT Engineer or Inspector.

**METHOD OF MEASUREMENT:** “REMOVE AND DISPOSE RADAR VEHICLE DETECTOR” will be measured for payment at the unit price per “EACH”.

**BASIS OF PAYMENT:** “REMOVE AND DISPOSE RADAR VEHICLE DETECTOR” will be paid for at the contract unit price per “EACH”. The price so-stated constitutes full and complete compensation for all materials, equipment, tools, and labor, including excavation and disposal, and all other incidentals required to finish the work, complete in place and accepted by the RIDOT Engineer or Inspector.

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**JOB SPECIFIC**

**201.9908**

**REMOVE AND DISPOSE PIEZO ELECTRIC AXLE SENSOR/SEALING RESIN**

**DESCRIPTION:** This item of work shall consist of removing and disposing existing piezo electric axle sensor(s) and sealing resin as shown on the plans or as directed by the RIDOT Engineer or Inspector.

**CONSTRUCTION METHODS:** The Contractor shall remove and dispose of units designated for disposal as shown on the Plan or as directed by the Engineer. All material shall be legally disposed of in accordance with State and Federal regulations.

**METHOD OF MEASUREMENT:** "REMOVE AND DISPOSE PIEZO ELECTRIC AXLE SENSOR/SEALING RESIN" will be measured for payment at the unit price per "EACH".

**BASIS OF PAYMENT:** "REMOVE AND DISPOSE PIEZO ELECTRIC AXLE SENSOR/SEALING RESIN" will be paid for at the contract unit price per "EACH". The price so-stated constitutes full and complete compensation for all materials, equipment, tools, and labor, including excavation and disposal, and all other incidentals required to finish the work, complete in place and accepted by the RIDOT Engineer or Inspector.

Remove subsections **601.03.7B-H** in its entirety and replace it with the following:

**B. Engineer's Acceptance Sampling, Testing and Inspection.**

The Engineer is responsible for sampling, testing, and inspection for acceptance, except for furnishing of necessary materials, which shall be the Contractor's responsibility as directed by the Engineer and at no additional cost to the State. Acceptance is based on the Engineer's inspection of the construction, monitoring of the Contractor's quality control program, and the acceptance test results.

The Contractor shall afford the Engineer all reasonable access without charge.

Samples of fresh concrete for testing will be taken after all concrete retempering is performed. When sampling from within the forms is impractical, samples will be taken at the nearest accessible point in the conveyance system prior to placement into the forms.

Acceptance sampling and testing will meet the requirements of the Contract and the "Master Schedule for the Preparation of a Project Schedule for Sampling, Testing, and Certification of Materials."

Whenever random samples do not meet specifications, subsequent continuous samples will be taken from each truck batched until field test results indicate that specifications are satisfied, after which time random sampling will resume.

Compressive strength test specimens will be standard 4"x 8" cylinders for all placements unless otherwise modified by the Engineer.

**C. Engineer's Acceptance Plan.**

The following is the acceptance plan necessary to obtain samples, perform tests and provide inspection of the work. The terms used in this acceptance plan are defined as follows:

**1. Placement.** For a given class of concrete, the portions of a concrete structure constructed during one continuous concrete operation.

**2. Acceptance Plan.** The method of taking and making measurements of sample, for the purpose of determining the acceptability of a Placement of material or construction. Acceptance plans include random sampling plans.

**3. Random Sample.** A sample chosen in such a manner that each increment in the Lot has an equal probability of being selected. The Engineer reserves the right to take more samples, in addition to those samples taken in accordance with the random sampling plan.

**4. Acceptance.** As defined in Table 5 - Placement Acceptance Schedule.

**5. Rejection.** When used in this context "rejection" shall mean remove, dispose and replace at the Contractor's expense, or at the discretion of the Engineer "rejection" will mean acceptance at a lower price determined by Pay Factors, as specified herein.

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**6. Lot.** An isolated quantity of material from a single source or a measured amount of construction produced by the same process. For Placements less than 750 cubic yards the Lot shall be 150 cubic yards or less. For Placements of 750 cubic yards or greater the Lot shall be 250 cubic yards or less.

Lots will be determined as follows:

- a) The total cubic yards for the Placement will be divided by 150 for Placements less than 750 cubic yards and 250 for Placements greater than or equal to 750 cubic yards.
- b) The result will then be rounded up to the next whole number. This number is the number of Lots in the Placement.
- c) The total cubic yards for the Placement in (a) will be divided by the number in (b) to determine Lot size.
- d) Each Lot size will be adjusted by rounding to the nearest 10 CY ( or other number representing one truck load), and this adjusted Lot size will be used to determine the number of trucks in the Lot.
- e) For purposes of the acceptance plan the total cubic yards of concrete placed on all the Lots will be the Placement volume.

**7. Sublots.** Equal divisions or portions of a Lot as defined herein.

The Sublot size for each Lot will be calculated by dividing each Lot into thirds rounded to the nearest truck.

- a.) Cylinders shall be cast for each Placement less than or equal to 150 cubic yards of concrete delivered for each class of concrete in accordance with the following:

1 truck = 4 cylinders from the 1 truck  
(6 cylinders for Class MC)

2 trucks = 4 cylinders from 1 randomly selected truck  
(6 cylinders from 1 randomly selected truck for Class MC)

3 trucks = 2 cylinders from 2 randomly selected trucks  
(3 cylinders from 2 randomly selected trucks for Class MC)

4 thru 10 trucks = 2 cylinders from 1 randomly selected truck from the first half of the Placement and 2 cylinders from 1 randomly selected truck from the second half of the Placement.

(3 cylinders from 1 randomly selected truck from the first half of the Placement and 3 cylinders from 1 randomly selected truck from the second half of the Placement for Class MC).

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11 thru 15 trucks = 2 cylinders from 1 randomly selected truck from the first third of the Placement, 2 cylinders from 1 randomly selected truck from the second third of the Placement and 2 cylinders from 1 randomly selected truck from the final third of the Placement.

- b.) Cylinders shall be cast for each Placement greater than 150 cubic yards and less than 750 cubic yards of concrete delivered for each class of concrete in accordance with the following

2 cylinders from 1 randomly selected truck from the first third of the Lot, 2 cylinders from 1 randomly selected truck from the second third of the Lot and 2 cylinders from 1 randomly selected truck from the final third of the Lot.

- c.) Cylinders shall be cast for each Placement greater than or equal to 750 cubic yards of concrete delivered for each class of concrete in accordance with the following:

2 cylinders from 1 randomly selected truck from the first third of the Lot, 2 cylinders from 1 randomly selected truck from the second third of the Lot and 2 cylinders from 1 randomly selected truck from the final third of the Lot.

Sidewalk placements will have a minimum of one set of four cylinders taken from one randomly selected truck per project per day.

#### **D. Placement Acceptance Compressive Strength Evaluation.**

Acceptance for compressive strength will be evaluated relative to compliance with the minimum 28- or 56-day compressive strength ( $f'_c$ ) specified herein for each class of concrete produced in accordance with TABLE 5 - Placement Acceptance Schedule. Acceptance for Class MC will be based on 56-day compressive strength test.

Three cylinders randomly selected from each set of 4 or 6 cylinders, as determined under “Sublots”, will be tested for either 28-day or 56-day compressive strengths.

#### **Case A: Single Lot Placement.**

The average 28- or 56-day compressive strength of 3 cylinders selected from a set of 4 or 6 cylinders and the Range, the difference between the largest and the smallest test result, will be used to calculate the acceptance of the Placement. The following formulas will be used to calculate the Placement Acceptance Test Result (PATR). The Engineer reserves the right to use Formula – B for any Lot size when more than one set of 3 cylinders are tested.

**Formula - A**

$$\text{PATR} = \bar{X} = \frac{X_1 + X_2 + X_3}{3}$$

$$\text{RANGE (R)} = X_{(\text{largest})} - X_{(\text{smallest})}$$

Symbols

X= individual test value which is the 28- or 56-day compressive strength of each cylinder tested.

$\bar{X}$ = the mean (average) 28- or 56-day compressive strength of a set of 3 cylinders.

R= (Range), the difference between the largest and smallest 28- or 56-day compressive strength test result.

PATR= Placement acceptance test result.

**Case B: Multiple Lot Placements.**

For multiple Lot placements 3 cylinders from each set of 6 cylinders from each Lot shall be tested for 28- or 56-day compressive strength) The mean value of the sum of the average compressive strengths and the mean value of the sum of the Ranges will be used to calculate the acceptance of the Placement. The following formula will be used to calculate the Placement Acceptance Test Result (PATR).

**Formula – B**

$$\text{PATR} = \bar{X} = \frac{\bar{X}_1 + \bar{X}_2 + \dots + \bar{X}_n}{n}$$

$$\bar{R} = \frac{R_1 + R_2 + \dots + R_n}{n}$$

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## Symbols

$\bar{X}$  = the mean (average) 28- or 56-day compressive strength of a set of 3 cylinders for each Lot.

=

$\bar{X}$  = the mean (average) of the sum of the average 28- or 56-day compressive strength test result of each Lot.

$\bar{R}$

$\bar{R}$  = the average of the sum of the Ranges (R) for each Lot.

n = number of sets.

Concrete will be evaluated for acceptance in accordance with Table 5 – Placement Acceptance Schedule, based on the calculated Placement Acceptance Test Results (PATR).

**Table 5**  
**Placement Acceptance Schedule**

Placement Acceptance Test Result (PATR)	Pay Factor
$\bar{X}$ or $\bar{X}$	(PPF)
Not less than $f'c + 0.21 \bar{R}$ (or R)	1.00
Not less than $f'c + 0.04 \bar{R}$ (or R)	0.95
Not less than $f'c - 0.10 \bar{R}$ (or R)	0.70
For less than $f'c - 0.10 \bar{R}$ (or R)	0.50

1.  $f'c$  is the specified 28-or 56-day compressive strength.

2. Range R (or R) is the difference between the results of the largest and smallest Lot acceptance test results.

Acceptance of the Placement at the 0.95 Placement Pay Factor (PPF) in lieu of remove, dispose and replacement of the Placement will be at the request of the Contractor and approval by the RIDOT Engineer.

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Acceptance at the 0.70 or 0.50 Placement Pay Factor (PPF) in lieu of remove, dispose and replacement will be as determined by the Engineer based on the effect of the defective Lot on the structural integrity of the concrete structure.

The Contractor may elect to remove and dispose any defective material and replace it with new material to avoid a pay factor of less than 1.00. Any such new material will be sampled, tested, and evaluated for acceptance in accordance with the applicable requirements of this **SECTION 601**.

The RIDOT Engineer may reject any quantity of material which appears to be defective based on visual inspection or test results. Such rejected material shall not be used in the work and the results of the tests run on the rejected material will not be included in the calculation of the Placement Acceptance Test Results.

**601.05 BASIS OF PAYMENT.** "Portland Cement Concrete," complete in place and fully accepted, will be paid for as provided in the Specifications. These payments shall constitute full compensation for furnishing all labor, materials, equipment, tools, and incidentals to produce, place, and protect the concrete as herein specified, in addition to any requirements in the Specifications for the particular use, except that a reduction in payment will be made for each Placement of concrete not fully accepted. This reduction in payment for each Placement will be based on the following:

Case 1: For concrete for which a unit price is provided in the Proposal:

Unit price reduction =  $(1.00 - \text{PPF}) \times$  the unit bid price in the Proposal

Case 2: For concrete which is paid for as part of a lump sum item or lump sum items as listed in the Proposal:

1.  $(1.00 - \text{PPF}) \times$  the price of the various items of concrete per cubic yard as provided in the approved Contractor's Lump Sum Breakdown

PPF is the pay factor determined in **Subsection 601.03.7 D**.



**JOB SPECIFIC****903.9901****TRAFFIC PVC JUNCTION BOX AND WOODEN MOUNTING POST, TYPE 1****903.9902****TRAFFIC PVC JUNCTION BOX AND WOODEN MOUNTING POST, TYPE 2**

**DESCRIPTION:** This work shall consist of the furnishing and installing one or two weather tight PVC Junction Box(es), wood mounting post, and 1” steel conduit pitched to handhole, as shown on the detail sheet or as directed by the RIDOT Engineer or Inspector. This box will be used to house the connectors for traffic detectors loops and traffic counting equipment. Detector loop wires will be coiled within the junction box with a minimum of 18 inches per wire. Installation of counting equipment will be provided by RIDOT.

“TRAFFIC PVC JUNCTION BOX AND WOODEN MOUNTING POST, TYPE 1” is meant to connect to a male adapter. “TRAFFIC PVC JUNCTION BOX AND WOODEN MOUNTING POST, TYPE 2” is meant to connect to a female adapter.

**MATERIALS:** The junction box provided shall conform to the following specifications:

- PVC, ABS of equivalent
- Must be weather tight
- Color: Not required

**Steel Conduit:** 1” PVC Schedule 40 conduit will be used to house the loop wires

**Wood Mounting Post:** Lumber must be treated with a preserving agent such as pressure treated creosote.

**Dimension:** Height 8’, Width 4”, Depth 6”

**Accessories:** Terminal board-double row, barrier strip shall be provided to connect traffic loops to equipment.

**Markings:** A 2-inch abbreviation “RIDOT” with station identification shall be stencil, painted to the face of the wood post furthers from the travel lane.

**CONSTRUCTION METHOD:**

The junction box installation shall be in accordance with the “TYPICAL JUNCTION BOX WOOD POST DETAIL”, Std 17.1.0.

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**METHOD MEASUREMENT:** “TRAFFIC PVC JUNCTION BOX AND WOODEN MOUNTING POST” shall be measured for payment at the unit price per “EACH”, complete in place and accepted by the RIDOT Engineer or Inspector.

**BASIS OF PAYMENT:** “TRAFFIC PVC JUNCTION BOX AND WOODEN MOUNTING POST” shall be paid for at the contract unit price per “EACH”, which price shall include full compensation for all materials, including conduit, wiring, handholes, etc., equipment, tools, labor and work incidental thereto complete in place and accepted by the RIDOT Engineer or Inspector.

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**JOB SPECIFIC**

**CODE 937.1000**

**MAINTENANCE AND MOVEMENT OF TRAFFIC PROTECTIVE DEVICES**

**DESCRIPTION:**

**Subsection 937.05.2; Failure to Comply**, of the Rhode Island Standard Specifications for Road and Bridge Construction, amended 2010, with all revisions, requires that charges be deducted from monies due the Contractor for failure to satisfactorily maintain and remove and/or relocate traffic control devices.

**a. Maintenance.** If, in the judgment of the RIDOT Engineer, the Contractor fails to adequately and safely maintain traffic control devices along any portion of the project, a charge will be assessed as follows:

For each calendar day the RIDOT Engineer determines that the Contractor has failed to comply with the provisions of this Section, a daily charge in the amount of \$ 100.00 will be deducted from monies due the Contractor.

**b. Movement.** If the Contractor fails to remove and/or relocate traffic control devices for compliance with the traffic-related work restrictions included in the Transportation Management Plan or to otherwise meet changes in traffic conditions, construction operations, or other conditions affecting the safety and/or mobility of the traveling public, a charge(s) will be assessed as follows:

When the RIDOT Engineer determines that the Contractor has violated the general restrictions of the Transportation Management Plan, an amount of \$ 500.00 per hour, for each hour of violation, will be deducted from monies due the Contractor.

**JOB SPECIFIC****937.9901****MAINTENANCE AND MOVEMENT OF TRAFFIC PROTECTIVE DEVICES – TYPE 1****937.9902****MAINTENANCE AND MOVEMENT OF TRAFFIC PROTECTIVE DEVICES – TYPE 2****937.9903****MAINTENANCE AND MOVEMENT OF TRAFFIC PROTECTIVE DEVICES – TYPE 3****937.9904****MAINTENANCE AND MOVEMENT OF TRAFFIC PROTECTIVE DEVICES – TYPE 4****937.9905****MAINTENANCE AND MOVEMENT OF TRAFFIC PROTECTIVE DEVICES – TYPE 5****937.9906****MAINTENANCE AND MOVEMENT OF TRAFFIC PROTECTIVE DEVICES – TYPE 6**

**DESCRIPTION:** This work shall consist of the furnishing Maintenance and Protection of Traffic Devices and personnel for work performed by the Contractor at various locations as directed by the RIDOT Engineer or Inspector. This work shall include all devices including but not limited to traffic cones, construction signs, barrels, flaggers, flashing arrow panels and truck mounted attenuators. This work shall also include all personnel and equipment required for the set-up and removal of said devices at the locations and time periods approved by the RIDOT Engineer or Inspector.

**MATERIALS:** All maintenance and protection of traffic devices and plans shall be those meeting the criteria of the Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 Edition, the Rhode Island Standard Specification for Road and Bridge Construction, Amended 2010, with all revisions, and the Rhode Island Department of Transportation Standard Details, 1998 Edition with all revisions.

**CONSTRUCTION METHODS:** The following maintenance and protection of traffic plans shall apply:

1. Maintenance and Protection of Traffic – Type 1
  - Work Beyond the Shoulder – Typical Application 1 (TA-1) as defined in the Manual of Uniform Traffic Control Devices for Streets and Highways, 2009 Edition with all revisions.
2. Maintenance and Protection of Traffic – Type 2
  - Shoulder Work with Minor Encroachment – Typical Application 6 (TA-6) as defined in the Manual of Uniform Traffic Control Devices for Streets and Highways, 2009 Edition with all revisions.

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3. Maintenance and Protection of Traffic – Type 3
  - Lane Closure on a Two-Lane Road Using Flaggers – Typical Application 10 (TA-10) as defined in the Manual of Uniform Traffic Control Devices for Streets and Highways, 2009 Edition with all revisions.
4. Maintenance and Protection of Traffic – Type 4
  - Half Road Closure on Multilane High-Speed Highway – Typical Application 32 (TA-32) as defined in the Manual of Uniform Traffic Control Devices for Streets and Highways, 2009 Edition with all revisions.
5. Maintenance and Protection of Traffic – Type 5
  - Stationary Lane Closure on a Divided Highway – Typical Application 33 (TA-33) as defined in the Manual of Uniform Traffic Control Devices for Streets and Highways, 2009 Edition with all revisions.
6. Maintenance and Protection of Traffic – Type 6
  - Double Lane Closure on a Freeway – Typical Application 37 (TA-37) as defined in the Manual of Uniform Traffic Control Devices for Streets and Highways, 2009 Edition with all revisions.

**METHOD OF MEASUREMENT:** “MAINTENANCE AND PROTECTION OF TRAFFIC – TYPE 1”, “MAINTENANCE AND PROTECTION OF TRAFFIC – TYPE 2”, “MAINTENANCE AND PROTECTION OF TRAFFIC – TYPE 3”, “MAINTENANCE AND PROTECTION OF TRAFFIC – TYPE 4”, “MAINTENANCE AND PROTECTION OF TRAFFIC – TYPE 5”, and “MAINTENANCE AND PROTECTION OF TRAFFIC – TYPE 6” shall be measured for payment at the unit price “PER DAY” as directed by the RIDOT Engineer or Inspector.

**BASIS OF PAYMENT:** The accepted quantity of “MAINTENANCE AND PROTECTION OF TRAFFIC – TYPE 1”, “MAINTENANCE AND PROTECTION OF TRAFFIC – TYPE 2”, “MAINTENANCE AND PROTECTION OF TRAFFIC – TYPE 3”, “MAINTENANCE AND PROTECTION OF TRAFFIC – TYPE 4”, “MAINTENANCE AND PROTECTION OF TRAFFIC – TYPE 5”, and “MAINTENANCE AND PROTECTION OF TRAFFIC – TYPE 6” will be paid for at the contract unit price “PER DAY”. The payment constitutes full compensation for all labor, equipment, tools, signs, cones, barrels, flashing arrow boards, truck mounted attenuators, personnel, accessories, including hardware, and incidentals necessary to complete the work in accordance with this Special Provision, completed and accepted by the RIDOT Engineer or Inspector.

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**JOB SPECIFIC**

**941.9901**

**MISCELLANEOUS MATERIALS AND EQUIPMENT**

**DESCRIPTION:** This item shall consist of furnishing and installing any and all items not listed separately in this contract.

**MATERIALS:** The materials or equipment under this item may be supplied by the State from existing inventories, or the Contractor may be directed to purchase the materials or equipment directly with the approval of the RIDOT Traffic Management Section.

**Purchasing Requirement:**

- All items purchased shall require written confirmation of the winning price quotation for purchases valued at \$5,000.00 or less.
- The Contractor shall submit copies of all purchase and/or equipment repair orders listing specific model numbers, price, and shipping and handling costs. The Contractor will be reimbursed for purchases or repairs at total cost paid plus five (5) percent.
- All purchases by the Contractor shall be made in the most cost-effective manner possible. Materials and/or equipment necessary to carry out work, including vehicles, shall not be reimbursable unless specifically itemized within this bid document or specifically authorized in writing by the Traffic Management Section.

**METHOD OF MEASUREMENT:** This work does not require a measurement for payment.

**BASIS OF PAYMENT:** The Contractor will be reimbursed for materials and/or equipment purchases and repairs at total paid cost plus five (5) percent.

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**JOB SPECIFIC**

**L02.1000**

**GENERAL HIGHWAY SEEDING (TYPE 1)**

**DESCRIPTION:** Subsection L.02.03.7; Para. c, Failure to Perform Care During Construction, of the Standard Specifications requires that a daily charge be deducted from monies due the Contractor in the event the RIDOT Engineer or Inspector decides that the Care During Construction has not been adequately performed.

The charge for this Contract will be \$**100.00** per day.

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**JOB SPECIFIC**

**T03.9901**

**TRAFFIC SIGNAL WOOD POLE, 35 FOOT**

**T03.9902**

**TRAFFIC SIGNAL WOOD POLE, 45 FOOT**

**DESCRIPTION:** This item of work shall consist of furnishing and installing traffic signal standard wood service pole.

**MATERIALS:** The service pole standard shall consist of a Class II, wood pole, southern pine, pressure treated to current standard specifications. The materials shall meet the requirements of Section T.11 “Traffic Signal Standards and Posts”, Rhode Island Standard Specification for Road and Bridge Construction, Amended 2010, with all revisions.

**CONSTRUCTION METHODS:** The provisions of Section T.11.03.3 shall apply. The installed pole shall meet all minimum standards set by Cox Communications, Verizon, and National Grid Electric Company and shall be installed in accordance with RI Standard Detail 18.7.0.

1. The 35-foot pole shall have a minimum embedment depth of 8 feet.
2. The 45-foot pole shall have a minimum embedment depth of 10 feet.

**METHOD OF MEASUREMENT:** “TRAFFIC SIGNAL WOOD POLE 35-FOOT” and “TRAFFIC SIGNAL WOOD POLE 45-FOOT” shall be measured for payment at the unit price per “EACH” complete in place and accepted by the RIDOT Engineer or Inspector.

**BASIS OF PAYMENT:** “TRAFFIC SIGNAL WOOD POLE 35-FOOT” and “TRAFFIC SIGNAL WOOD POLE 45-FOOT” will be paid for at the contract unit price per “EACH”, which price shall include all necessary excavation, backfilling, and plantable soil and seeding in accordance with SECTION T.01.03.6 of the R.I. Standard Specifications for Road and Bridge Construction, Amended 2010, with all revisions, labor, work incidental thereto complete in place and accepted by the RIDOT Engineer or Inspector.



**JOB SPECIFIC****T03.9903****MULTI-LANE PERMANENT AUTOMATIC VEHICLE CLASSIFICATION/  
WEIGH-IN-MOTION (AVC/WIM) EQUIPMENT**

**DESCRIPTION:** Work under this item shall consist of the purchasing/replacement of a fully automatic, self-sufficient, permanently calibrated, commissioned, and installed Automatic Vehicle Classification/Weigh-In-Motion (AVC/WIM) systems.

**SCOPE:** The systems shall operate on a continuous basis, collecting data on individual axle weights, individual axle spacing, vehicle classification (according to the FHWA 13 vehicle classification scheme), and vehicle speed across multiple travel lanes. The systems shall be accessible remotely using a standard communications line, modem, and a personal computer, as well as on site using a laptop PC in terminal mode, or via network connection. These systems shall operate reliably in all weather conditions likely to be experienced in Rhode Island.

The AVC/WIM vendor shall be responsible for the installation of all AVC/WIM electronic components of the AVC/WIM systems, which shall be housed in traffic cabinets installed at roadside.

In addition to the previously mentioned general requirements, each system shall meet the minimum specific requirements set forth in the following specifications.

**REQUIREMENTS:**

- Each AVC/WIM system electronics shall consist of a WIM control unit, sensor and output modules to interface the various devices specific to a site's requirements, terminal modules with over-voltage protection for each input and output line, and an external power supply. The system software shall be pre-loaded and automatically start when the system is powered up. The electronics shall use a modular design based on the Controller Area Network (CAN) communication bus for scalability, ease of maintenance, troubleshooting and in-field servicing.
- Each AVC/WIM system shall be able to utilize the non-staggered piezo sensor arrays installed under this contract to collect AVC/WIM data. The system shall accurately count/weigh vehicles straddling lanes. Systems that double count, ignore, or inaccurately report data on straddling vehicles are not acceptable. Vehicles straddling lanes shall be recorded as traveling in the rightmost lane of the two lanes being straddled.
- Each AVC/WIM system shall be able to accept signals from inductance loops which share home run cuts with other loops, Piezos, and quartz sensors, without failure due to sensor lead cross-talk.

- Each AVC/WIM shall have a self-calibration system which continuously and automatically adjusts the calibration of the system to maintain the weight accuracy, based on user input parameters.
- The mode of operation and parameters for the data processing and storage shall be user programmable, both on site and remotely via a telephone modem or network connection.
- Each system shall have remote diagnostic checks of system operation and performance which include, as a minimum: checks for low battery power, axle sensor failure, data consistency between sensors, and telemetry errors.
- In the continuous mode of operation, individual vehicle data for all vehicles shall be stored in memory or be able to be viewed in real time, including, but not necessarily limited to: vehicle number, date, time, lane, speed, FHWA classification axle spacing, and each individual axle weight.
- AVC/WIM must be able to interface with IRD Bending Plates, IRD Single Load Cell Scales, and IRD DYNAX Sensors.
- Each system shall be equipped with on-board Ethernet interface and USB interface for flash drives.
- Each system shall be designed for low power consumption and continuous operation and shall be capable of operating on 110-volt AC, solar, or battery power
- Each system shall be housed in a roadside cabinet containing electrical power, telephone connection and other electronic equipment. The AVC/WIM vendor shall provide the appropriate case and rack system for the equipment, if needed, which will prevent accidental damage to components during routine maintenance procedures, as well as provide protection from damage due to dust and moisture. Each system shall not be sensitive to extreme heat or cold as will be experienced in the roadside cabinet. If an environmental control system is needed for the AVC/WIM system cabinet, such system shall be supplied by the AVC/WIM vendor and installed by the installation contractor.
- Each AVC/WIM chassis shall accommodate up to 10 interface modules, which includes 9 sensor modules and 1 WCU (WIM Control Unit) module. All sensor modules will connect to the system via terminals and overvoltage protection for each channel. Enclosure size shall be 6 inches high x 10.5 inches wide x 11.5 inches deep.

**SOFTWARE:**

- The vendor shall provide user friendly, menu driven software that will classify vehicles according to the Federal Highway Administration's (FHWA) scheme F classifications.
- The software shall automatically produce the FHWA Stations (STA), Classification (CLA), and Weight (WGT) records in addition to the traditional FHWA 2, 4, and 7 card records.

- The software shall produce a raw vehicle file in an ASCII format that will include, but not be limited to, the following data items for each vehicle weighted: ESAL's, gross vehicle weight, individual axle weights, axle spacing, wheel base, vehicle speed, time (HH:MM:SS), date (YY/MM/DD), and bumper-to-bumper vehicle length. The software shall be able to report these data items in metric units and U.S. standard units (where applicable) based on user-selected options.
- The raw vehicle file shall be available in a report format that includes headers, page breaks, etc. and a data file format that shall be capable of being imported into a macro program and query facility (such as Microsoft Access and Oracle Database) without the necessity of manually stripping out the headers, page breaks, etc.
- The software shall run on an x64 system, running Windows 7-64.
- Two (2) clearly written software manuals shall be provided with each set of electronics. The manuals shall include record layouts for all data files.
- Software upgrades, maintenance, and telephone support shall be provided to the RIDOT Traffic and Safety Management Section for a period of three (3) years after final acceptance of the AVC/WIM electronics at no additional cost to the RIDOT. After the three (3) year period the vendor shall notify RIDOT Traffic and Safety Management Section personnel of any software upgrades.

**MISCELLANEOUS:**

- All manuals, reports, user accessible software (i.e. menus, dialog boxes, error messages, etc.) shall be in the English language.
- All equipment furnished under these specifications shall be warranted for a period of one (1) year after final acceptance and payment by the State, against failure in normal use. If during the warranty period such faults develop that require the equipment, or parts affected, to be repaired or replaced, the vendor shall repair and replace the faulty unit or parts at no cost to the RIDOT including shipping. The vendor shall pay for any trips and/or expenses incurred by the vendor or his agents, necessary to repair the equipment under this warranty. The vendor shall deliver all equipment within thirty (30) days after the bid are awarded. All equipment shipped during the warranty period shall be at the vendor's expense.
- The AVC/WIM electronics must function properly for a period of thirty (30) consecutive business days after the system is fully operational. If the AVC/WIM electronics fail at any time within the thirty (30) day testing period, the necessary repairs and/or adjustments shall be made by the contractor at no cost to the State of Rhode Island, and the testing period shall be restarted at day one following the successful repair of the equipment.

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**VENDOR INFORMATION:**

The AVC/WIM equipment shall be purchased from one of the following vendors or an approved equal:

INTERNATIONAL ROAD DYNAMICS (IRD)

2402 Spring Ridge Road

Spring Grove, IL 60081

Telephone: 1-306-653-6627

ELECTRONIC CONTROL MEASUREMENT, INC. (ECM)

646 Commercial Drive

Buda, Texas 78610

Telephone: 1-512-295-9752

**METHOD OF MEASUREMENT:** "MULTI-LANE PERMANENT AUTOMATIC VEHICLE CLASSIFICATION/WEIGH-IN-MOTION (AVC/WIM) EQUIPMENT" shall be measured for payment at the unit price per "EACH", complete and accepted.

**BASIS OF PAYMENT:** "MULTI-LANE PERMANENT AUTOMATIC VEHICLE CLASSIFICATION/WEIGH-IN-MOTION (AVC/WIM) EQUIPMENT" will be paid for at the contract unit price per "EACH" for AVC/WIM electronics, complete, which price shall include full compensation for all materials, equipment and work incidental thereto. The materials and equipment shall include, but not be limited to one (1) AVC/WIM electronics, one (1) IP Addressable Cellular Modem, one (1) software package, two (2) software manuals, one (1) software maintenance agreement.

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**JOB SPECIFIC****T03.9904****AUTOMATIC VEHICLE CLASSIFICATION/  
WEIGH-IN -MOTION (AVC/WIM) TEST VEHICLE**

**DESCRIPTION:** This item of work shall consist of providing a five (5)-axle tractor-trailer loaded to a minimum Gross Vehicle Weight (GVW) of 70,000 pounds and a maximum GVW of 75,000 pounds. The vehicle shall be used for calibrating and testing each travel lane equipped with automatic vehicle classification/weigh-in-motion (AVC/WIM) sensors and electronics installed in this contract. The calibration and testing of each AVC/WIM system cannot begin until all equipment and electronics for that system are completely installed as directed on the plans and by the RIDOT Engineer or Inspector.

**TEST VEHICLE REQUIREMENTS:** The test vehicle shall be a five (5)-axle tractor-trailer with a three (3)-axle power unit (tractor) and a two (2)-axle semi-trailer. The test vehicle shall not have spread tandem axles. Both the tractor and the semi-trailer tandem axles shall be spaced more than 40 inches apart but not more than 96 inches apart and shall be articulated from a common attachment. The test vehicle shall be weighed at the beginning of each day and the contractor shall provide the RIDOT Engineer or Inspector with a weight slip for the vehicle prior to commencing the calibration work. The test vehicle shall be loaded with a material that will remain stable in weight throughout the test day regardless of environmental conditions.

**CALIBRATION PROCEDURES:** The test vehicle shall make a minimum of four (4) successful passes over the sensors in each travel lane at each location as directed by the RIDOT Engineer or Inspector. For example, a 4-lane road will require a minimum of sixteen (16) successful passes of the test vehicle. The vehicle shall make all turning maneuvers to reverse travel direction in a safe manner consistent with general traffic laws. Travel speeds and other site-specific items shall be determined in the field, by the RIDOT Engineer or Inspector.

**METHOD OF MEASUREMENT:** "AUTOMATIC VEHICLE CLASSIFICATION/WEIGH-IN-MOTION TEST VEHICLE" shall be measured for payment by the unit "Per Day", which is defined as an 8-hour workday.

**BASIS OF PAYMENT:** "AUTOMATIC VEHICLE CLASSIFICATION/WEIGH-IN-MOTION TEST VEHICLE" will be paid for at the contract unit price bid "Per Day", which price and payment shall include full compensation for the vehicle, driver, fuel, loading material, weight certification, and any incidentals necessary to complete the work at each individual location to be calibrated and tested.

**JOB SPECIFIC****T04.9991****WEATHERPROOF CATEGORY 6 UTP – 4 PAIR 23 AWG CABLE****DESCRIPTION:**

The contractor shall furnish and install Weatherproof Category 6 UTP – 4 Pair 23 AWG Cable.

**MATERIALS:**

This specifies the requirements Weatherproof Category 6 UTP – 4 Pair 23 AWG Cable as shown on the Plans and approved by the RIDOT Engineer. Contractor shall provide male and female connectors as required. The Weatherproof Category 6 UTP cable shall be designed for use in the locations as shown on the Plans, including wet areas.

1. Weatherproof Category 6 UTP Network Cable:

- 1.1.1. The Weatherproof Category 6 UTP network cable shall be designed for the use and location for which it is intended and shall maintain the specified electrical properties over the entire temperature range for which it may be exposed.
- 1.1.2. The Weatherproof Category 6 UTP network cable shall be able to transport Gigabit Ethernet signals from Video Input and Video Output Modules to the Ethernet Switches as shown on the Contract Documents.
- 1.1.3. The Weatherproof Category 6 UTP network cable shall have the following characteristics:
  - 1.1.3.1. Pair Count        4
  - 1.1.3.2. Conductors       Solid annealed copper
  - 1.1.3.3. AWG                23
  - 1.1.3.4. Characteristic Impedance 100 ohms, +/- 15 ohms
  - 1.1.3.5. The Weatherproof Category 6 UTP network cabling shall comply with the following:
  - 1.1.3.6. The Weatherproof Category 6 UTP network cabling shall have EIA/TIA 568B Series standard pin/pair termination assignments. All conductors provided shall be properly and consistently terminated at both ends throughout the entire system.

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- 1.1.3.7. The Weatherproof Category 6 UTP network cabling shall comply with the following industry standards: UL 444, CSA C22.2 No. 214-08, UL 1666, NFPA 262, ANSI/TIA-568-C.2, and shall be RoHS-compliant
- 1.1.3.8. The Weatherproof Category 6 UTP network cabling shall be tested to 550 MHz and have guaranteed electrical performance to 400 MHz
- 1.1.3.9. The Weatherproof Category 6 UTP network cabling shall be of a round design with filler separator for increased electrical performance.
- 1.1.3.10. The Weatherproof Category 6 UTP network cabling shall include an alphanumeric identification code printed every 2 feet.
- 1.1.3.11. The outer jacket shall be green in color, or other color as approved by the Engineer.
- 1.1.4. The Weatherproof Category 6 UTP network cabling shall meet or exceed the following guaranteed and typical electrical performance specifications:
- 1.1.4.1. Insertion Loss Maximum in dB/100 m
- |            |                    |                 |
|------------|--------------------|-----------------|
| At 250 MHz | 32.6 dB guaranteed | 29.8 dB typical |
| At 400 MHz | 42.7 dB guaranteed | 38.9 dB typical |
| At 550 MHz | ---                | 47.2 dB typical |
- 1.1.4.2. NEXT Minimum in dB/100 m
- |            |                    |                 |
|------------|--------------------|-----------------|
| At 250 MHz | 41.3 dB guaranteed | 50.5 dB typical |
| At 400 MHz | 35.3 dB guaranteed | 45.2 dB typical |
| At 550 MHz | ---                | 41.0 dB typical |
- 1.1.4.3. Return Loss Minimum dB/100 m
- |            |                    |                 |
|------------|--------------------|-----------------|
| At 250 MHz | 17.8 dB guaranteed | 29.1 dB typical |
| At 400 MHz | 15.9 dB guaranteed | 26.0 dB typical |
| At 550 MHz | ---                | 23.6 dB typical |

**SUBMITTALS:**

The contractor shall submit product data sheets for the materials provided in this item.

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**CONSTRUCTION METHODS:**

The Contractor shall fully comply with the following cable installation procedures when installing wires and cables for this project:

1. All cables shall be permanently labeled with alphanumeric cable identifications (cable ID's) at each end. Each cable ID number shall be included in the wiring diagrams as described in the "Submittals, As-Drawings and Operation and Maintenance Manuals" Section of the Specifications.

**METHOD OF MEASUREMENT:**

Item T04.9901 "WEATHERPROOF CATEGORY 6 UTP – 4 PAIR 23 AWG CABLE" shall be measured for payment by the unit "LINEAR FOOT" for linear feet installed complete in place and accepted.

**BASIS OF PAYMENT:**

This work will be paid for at the contract unit price bid per "LINEAR FOOT" for "WEATHERPROOF CATEGORY 6 UTP – 4 PAIR 23 AWG CABLE", complete in place and accepted by the RIDOT Engineer. The price shall include full compensation for all materials, equipment, tools, labor, and work thereto.



**JOB SPECIFIC**

**T06.9901**

**SOLAR POWER EQUIPMENT**

**DESCRIPTION:** The work under this item includes furnishing and installing solar power equipment necessary to power the radar vehicle detector and other items in the controller cabinet.

**MATERIALS:** The solar equipment shall be capable of providing necessary power to the RVD, communications device, and any other equipment as required providing a fully functional Detection system. This system shall be able to operate within the state of Rhode Island year-round supplying a minimum of 21 days battery autonomy. The solar modules shall be able to fully charge the batteries when 8-hours of full sunlight is available”

The solar modules shall be made in North America and have a 20-year factory warranty. The solar array shall be a minimum 75 Watts. The solar modules shall be UL listed, FM Class I, Div. II, Group C&D approved. The array mount shall attach to the side of the wood pole with stainless steel fasteners. The array mount shall be aluminum alloy or stainless steel. The array shall be capable of withstanding 125 mph winds.

The solar charge regulator shall be UL listed, minimum 10A with solid state, low voltage disconnects. The solar charge regulator shall be sealed with internal temperature compensation, lightning protection, reverse polarity protection and LED indicators. The solar charge regulator shall be FM Class I, Div. II, Groups ABCD and have the CE mark. The batteries shall be 12V gel electrolyte, non-spillable, maintenance free units. Battery autonomy shall be 21 days.

Enclosures shall be 0.125” aluminum with stainless steel hardware. The enclosures shall have #2 lock and key on an insulated door. There shall be separate compartments for the batteries and the electronics.

For the solar array, power wiring shall be 10-2, stranded copper, double insulated, sunlight resistant, 600V 90C rated cable.

**VENDOR INFORMATION:** The solar power equipment shall be purchased from either of the following recommended vendors or an approved equal:

Econolite Control Products, Inc.  
3360 E. La Palma Avenue  
Anaheim, CA 92806-2856  
Phone: (714) 630-3700

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Wavetronix, LLC  
380 South Technology Court  
Lindon, UT 84042  
(801) 764-0277

**CONSTRUCTION METHODS:** The solar power equipment shall be installed in accordance with the manufacturer's requirements.

**METHOD OF MEASUREMENT:** "SOLAR POWER EQUIPMENT" shall be measured for payment at the unit price per "EACH", which is the number of such solar power systems installed in accordance with the plans and/or as specified by the RIDOT Engineer or Inspector.

**BASIS OF PAYMENT:** The accepted quantities of "SOLAR POWER EQUIPMENT" will be paid for at their respective contract unit price per "EACH" such installation as listed in the Proposal. The price so stated constitutes full and complete compensation for all labor, materials, and equipment, including the mounting hardware and brackets for providing and installing said units and all other incidentals required to finish the work, complete and accepted by the RIDOT Engineer or Inspector.

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**JOB SPECIFIC**

**T06.9902**

**RADAR VEHICLE DETECTOR WITH SOLAR POWER EQUIPMENT  
AND RF COMMUNICATOR**

**DESCRIPTION:** The work under this item includes furnishing and installing a radar vehicle detector with RF communicator device and solar power equipment necessary to power the radar vehicle detector and other items in the controller cabinet.

**MATERIALS:** The radar vehicle detector shall be the latest model as specified in Item T13.9902 Radar Vehicle Detector. The solar power equipment shall be as specified in Item T06.9901 Solar Power Equipment. The RF Communicator shall be compatible with Item T13.9902 and T06.9903.

**VENDOR INFORMATION:** The radar vehicle detector, solar power equipment, and RF Communicator System shall be purchased from either of the following recommended vendors or an approved equal:

Econolite Control Products, Inc.  
3360 E. La Palma Avenue  
Anaheim, CA 92806-2856  
Phone: (714) 630-3700

Wavetronix, LLC  
380 South Technology Court  
Lindon, UT 84042  
(801) 764-0277

**CONSTRUCTION METHODS:** The radar vehicle detector shall be installed as specified in Item T13.9902 Radar Vehicle Detector. The solar power equipment shall be installed in accordance with the manufacturer's requirements.

**METHOD OF MEASUREMENT:** "RADAR VEHICLE DETECTOR WITH SOLAR POWER EQUIPMENT AND RF COMMUNICATOR" shall be measured by the for payment at the unit price per "EACH", which shall be for a complete system including the radar vehicle detector with RF communicator device and solar power system in accordance with the plans and/or as specified by the RIDOT Engineer or Inspector.

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**BASIS OF PAYMENT:** The accepted quantities of “RADAR VEHICLE DETECTOR WITH SOLAR POWER EQUIPMENT AND RF COMMUNICATOR” will be paid for at their respective contract unit price per “EACH” complete system as listed in the Proposal. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment, including the RVD unit with RF communicator, all RVD cables required to connect the RVD unit to the RS-232 connector, the mounting hardware and brackets for providing and installing said units, all solar power equipment including enclosure and all other incidentals required to finish the work, complete and accepted by the RIDOT Engineer or Inspector.

**JOB SPECIFIC****T06.9903****RF CLUSTER CONTROLLER SYSTEM**

**DESCRIPTION:** The work under this item includes furnishing and installing an RF cluster controller system within the ground mounted controller cabinet as specified on the drawings.

**MATERIALS:** The RF Cluster Controller System shall consist of a communication infrastructure that shall allow for the communication of multiple Radar Vehicle Detectors (RVD) via a single point of communications. This shall be accomplished by use of a RF modem(s) that meet the following requirements:

Data rate throughput:	Minimum 115.2 Kbps
Range of transmit/receive:	20 miles (with clear line of site)
Number of Data Channels:	Minimum of 130 channels
Transmission Modes:	Both Point-to-Point and Point-to-Multi-point communications
Networking modes:	Full-duplex/half-duplex
Receive Sensitivity:	Minimum -90dBm
Operating Voltage:	6 to 30 VDC
Operating Frequency:	902-928 ISM Band
Transmit Power:	Less than 1 watt
Data interface:	RS232, RS485 or Ethernet
Environmental Operating range:	The RF Cluster Controller shall operate normally within the following environmental conditions: -40°C to + 80° C; Humidity 95% non-condensing

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**TESTING:** The contractor shall submit shop drawings for the RF transmitter and receiver, along with results of a spectrum analysis and show calculations demonstrating that the product meets or exceeds all specifications given the ambient noise levels as measured by the spectrum analysis

**VENDOR INFORMATION:** The “RF Cluster Controller System” shall be purchased from one of the following recommended vendors or an approved equal:

Econolite Control Products, Inc.  
3360 E. La Palma Avenue  
Anaheim, CA 92806-2856  
Phone: (714) 630-3700

Wavetronix, LLC  
380 South Technology Court  
Lindon, UT 84042  
(801) 764-0277

**METHOD OF MEASUREMENT:** “RF CLUSTER CONTROLLER SYSTEM” shall be measured for payment at the unit price per “EACH” in accordance with the plans and/or as specified by the RIDOT Engineer or Inspector.

**BASIS OF PAYMENT:** The accepted quantities of “RF CLUSTER CONTROLLER SYSTEM” will be paid for at their respective contract unit price per “EACH” such installation as listed in the Proposal. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and all other incidentals required to finish the work, complete and accepted by the RIDOT Engineer or Inspector.

**JOB SPECIFIC**

**T06.9904**

**1 ½" FLEXIBLE METALLIC LIQUID TIGHT CONDUIT**

**T06.9905**

**1" FLEXIBLE METALLIC LIQUID TIGHT CONDUIT**

**DESCRIPTION:** This work shall consist of furnishing and installing "Flexible Metallic Liquid Tight Conduit", of the specified size, including the necessary fittings, at the locations indicated on the Plans or as directed by the RIDOT Engineer or Inspector.

**MATERIALS:** "Flexible Metallic Liquid Tight Conduit" is manufactured from galvanized steel with a durable polyvinyl chloride jacket. It is manufactured to the dimensional tolerances required of flexible electrical liquid-type connectors. The conduit is to be able to withstand temperatures ranging from -20°C to 80°C.

**CONSTRUCTION METHODS:** Construction methods shall conform to Section T06.03 of the Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2010 edition and/or its latest revisions.

**METHOD OF MEASUREMENT:** "FLEXIBLE METALLIC LIQUID TIGHT CONDUIT" will be measured for payment at the unit price per "LINEAR FOOT" installed, with no deduction for fittings and couplings.

**BASIS OF PAYMENT:** The accepted quantities of "FLEXIBLE METALLIC LIQUID TIGHT CONDUIT" will be paid for at the respective contract unit price per "LINEAR FOOT" as listed in the Proposal. The price so-stated constitutes full and complete compensation for all materials, equipment, tools, and labor including all fittings couplings, saw cutting, excavation and backfill, restoration of existing pavements, testing, and all other incidentals required to finish the work, complete in place and accepted by the RIDOT Engineer or Inspector.

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**JOB SPECIFIC**

**T06.9906**

**1" FLEXIBLE PVC CONDUIT**

**DESCRIPTION:** This work shall consist of furnishing and installing "1" FLEXIBLE PVC CONDUIT", of the specified size, including the necessary fittings, at the locations indicated on the Plans or as directed by the RIDOT Engineer or Inspector.

**MATERIALS:** "1" FLEXIBLE PVC CONDUIT" is manufactured from a smooth seamless inner core of flexible PVC bonded to a covering of flexible PVC, with a layer of woven nylon mesh between layers for reinforcement. The conduit shall be composed of a flame-retarded compound that resists oils, mild acids and exposure to sunlight. The conduit shall be able to withstand temperatures ranging from -20C to 60 C.

**CONSTRUCTION METHODS:** Construction methods shall conform to Section T06.03 of the Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2010 edition and/or its latest revisions.

**METHOD OF MEASUREMENT:** "1" FLEXIBLE PVC CONDUIT" will be measured for payment at the unit price per "LINEAR FOOT" actually installed, with no deduction for fittings and couplings.

**BASIS OF PAYMENT:** The accepted quantities of "1" FLEXIBLE PVC CONDUIT" will be paid for at the respective contract unit price per "LINEAR FOOT" as listed in the Proposal. The price so-stated constitutes full and complete compensation for all materials, equipment, tools, and labor including all fittings couplings, saw cutting, excavation and backfill, restoration of existing pavements, testing, and all other incidentals required to finish the work, complete in place and accepted by the RIDOT Engineer or Inspector.



**JOB SPECIFIC**

**T12.9901**

**GROUND MOUNTED CONTROLLER CABINET**

**T12.9902**

**GROUND MOUNTED CONTROLLER CABINET AND FOUNDATION**

**T12.9903**

**POLE MOUNTED CONTROLLER CABINET**

**DESCRIPTION:** The work under this item specifies the requirements for the Ground Mounted Controller Cabinet Ground Mounted Control Cabinet and Foundation and the Pole Mounted Controller Cabinet.

**MATERIALS:** The Contractor shall furnish, install and test the Ground Mounted Controller Cabinet and Foundation or Pole Mounted Controller Cabinet that meet the following requirements:

- A. The materials for this work shall conform to the relevant provisions of the “Rhode Island Standard Specifications for Road and Bridge Construction, 2010 Edition with latest revisions.
- B. The ground mounted controller cabinet shall be 51” H x 30” W x 17” D and the pole mounted controller cabinet shall be 51” H x 25” W x 16” D. All equipment, which will be housed in the cabinet, will be shelf mounted.
- C. In unpaved areas a 3’0” x 2’6” x 4” concrete work pad shall be installed in front of the field cabinet door. The pad shall be placed on 6-inches of gravel borrow sub-base course. The pad shall be with a slight grade such that any water on the pad shall flow away from the cabinet.
- D. Cabinet Marking: Three-inch station identification numbers shall be stencil painted with black paint to the exterior face of the cabinet door.
- E. The Cabinet shall have the following Accessories:
  - Fan (1) Power Outlet Box
  - Thermostat Assembly (2) 4 Wire Duplex Outlet with Light\*
  - Terminal Board - Double Row (1) 15 AMP Circuit Breaker
  - (1) 2 Pole 3 Wire Voltage Spike (1) Meter Socket
  - Large Housing Vent (1) Pull Chain Light
  - (1) Telephone Jack Screen Holder
  - (2) Shelves Cabinet Lock and Key (No. 2 Key)
  - (2) Screens
  - (1) 15 AMP Ground Fault Circuit Interrupter (GFI) Circuit Breaker

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- F. Transformer meeting the following specifications will be supplied by the Contractor if needed:
- Volts 120/240 KVA.100 HZ60
  - All wiring, connectors and fittings necessary for a complete and acceptable electrical installation.
  - \*Four (4) duplex outlets required at CCTV locations.

Shop drawing submission for the above-specified cabinet will not be required.

**CONSTRUCTION METHODS:** The cabinet installations shall be in accordance with the "Typical Installation Detail", "Traffic Cabinet Wiring Detail" and the Standard Specifications. Transformer and circuit breaker power box will be mounted in the top right-hand corner of the storage cabinet. The cabinet shall be installed with the door opening away from traffic, unless specified on the plans. The concrete working pad, if required, shall be installed on the door opening side of the cabinet. Concrete working pads are not required if the cabinet door opens onto the sidewalk.

All conduits shall exit on the pole side of the cabinet foundation.

**METHOD OF MEASUREMENT:** "GROUND MOUNTED CONTROLLER CABINET", "GROUND MOUNTED CONTROLLER CABINET AND FOUNDATION", and "POLE MOUNTED CONTROLLER CABINET" will be measured for payment at the unit price per "EACH" for each unit installed and accepted by the RIDOT Engineer or Inspector.

**BASIS OF PAYMENT:** This work will be paid for at the contract unit price per "EACH" for "GROUND MOUNTED CONTROLLER CABINET", "GROUND MOUNTED CONTROLLER CABINET AND FOUNDATION", and "POLE MOUNTED CONTROLLER CABINET" complete in place and accepted. The price shall include full compensation for all materials, equipment including cabinets, foundation, concrete work pad, mounting hardware, ground rod and wire, conduits, appurtenances, making all required tests, tools, labor, excavation, backfill, top soil and seeding, and work thereto.

**JOB SPECIFIC****T13.9901****CLASS 1 PIEZOELECTRIC SENSOR (12-FOOT)****DESCRIPTION:**

Work under this item will consist of installing new Class 1 Piezoelectric Sensors and cables as shown on the plans or as directed by the Managing Engineer. These specifications describe Class 1 Piezoelectric Sensors for use in Weigh-in-Motion (WIM) applications. These sensors are designed for permanent installation in the road.

**MATERIALS:**

Sensor Element: Spiral-wrapped PVDF Piezoelectric film or pre-approved equivalent.

Sensor Length: 12 (twelve) feet

Sensor Lead: RG-58 C/U with High Density Polyethylene Outer jacket rated for direct burial; 3/16" outside diameter. Length = 250'

Installation Grout: The material or grout used to install the sensor in the road shall be referred to as an Acrylic or Methyl Methacrylate supplied with the sensor by the sensor vendor. The material shall be suitable for sensor installations in both asphaltic and Portland cement concrete pavements. The material shall also be suitable for installing the sensor 3/8 inch below the surface of the pavement.

**PIEZOELECTRIC SENSOR:**

Piezo sensors used for WIM applicator shall have a Class I designation and satisfy the following criteria.

- Resistance: Between core and shield; greater than 500 mega ohms.
- Capacitance: 13.50 nF to 40.00 nF with 250 ft. lead.
- Cross sensitivity: Better than +/- 7.

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**VENDOR INFORMATION:**

The Class I Piezo sensor shall be purchased from one of the following vendors or an approved equal:

INTERNATIONAL ROAD DYNAMICS (IRD)  
2402 Spring Ridge Road  
Spring Grove, IL 60081  
Telephone: 1-306-653-6627

ELECTRONIC CONTROL MEASUREMENT, INC. (ECM)  
646 Commercial Drive  
Buda, Texas 78610  
Telephone: 1-512-295-9752

**CONSTRUCTION METHODS:**

All cuts in the pavement surface shall be dry cut.

The piezoelectric sensors shall be installed in accordance with manufacturer's guidelines.

**Installation Precautions**

- The sensors are fragile and should be handled with EXTREME care. Do not drop or drag the sensor along the ground.
- Do not bend the sensors. Bending the sensors can cause a crack, thus destroying the sensor.
- Never cut the active portion of the sensor.
- Do not install sensors in inclement weather or when relative humidity is greater than 95 percent.
- No splices of the sensor lead will be allowed.

**METHOD OF MEASUREMENT:**

"CLASS 1 PIEZOELECTRIC SENSOR (12-FOOT)" shall be measured by the unit "EACH" sensor, complete in place and accepted.

**BASIS OF PAYMENT:**

The work performed under items "CLASS 1 PIEZOELECTRIC SENSOR (12-FOOT)" will be paid for at the contract unit price per 'EACH' as listed in the proposal, for installation of the Class 1 Piezoelectric Sensors, complete in place, which price shall include; saw cutting and full compensation for obtaining all materials including installation grout, labor and work incidental thereto.

**JOB SPECIFIC**

**T13.9903**

**RADAR VEHICLE DETECTOR**

**DESCRIPTION:** This item of work shall consist of furnishing and installing a Radar Vehicle Detector (RVD) at the locations indicated on the Plans or as directed by the RIDOT Engineer. The purpose of this specification is to describe the minimum requirements of the RVD. The RVD shall be easy to install and remove and shall be fully programmable to support a variety of applications.

**MATERIALS:** All equipment and component parts furnished shall be new, be of the latest design and manufacture, and be in an operable condition at the time of delivery and installation. All parts shall be of high-quality workmanship, and no part or attachment shall be substituted or applied contrary to the manufacturer's recommendations and standard practices.

The design shall be such as to prevent reversed assembly or improper installation of connectors, fasteners, etc. Each item of equipment shall be designed to protect personnel from exposure to high voltage during equipment operation, adjustments, and maintenance.

The designed Mean Time Between Failures (MTBF) of the RVD unit, operating continuously in their application shall be 10 years or longer.

The Contractor shall submit shop drawings for the RVD unit.

**MEASUREMENT ACCURACY:** The detector shall identify vehicle presence in each detection zone with a 95% or greater accuracy, independent of the vehicle's direction of travel through the detection zone. The maximum permissible error shall be 5% in the detection of the direction and magnitude of radial speed and 10% in the case of transverse speed.

**VENDOR INFORMATION:** The Radar Vehicle Detector may be purchased from either of the following known vendors or from a vendor of the contractor's choice provided that **ALL** requirements of this performance specification are met.

Electronic Integrated Systems, Inc. (EIS)  
150 Bridgeland Avenue #204  
Toronto, Ontario M6A1Z5  
(416) 785-9248

Wavetronix, LLC  
380 South Technology Court  
Lindon, UT 84042  
(801) 764-0277

**ENVIRONMENTAL CONDITIONS:** Except as stated otherwise herein, the equipment shall meet all its specified requirements during and after subjecting to any combination of the following conditions:

- Ambient temperature range of  $-40^{\circ}\text{C}$  to  $+74^{\circ}\text{C}$ .
- Relative humidity from 5 to 95 percent, non-condensing
- Power surge of 6 KV – 10,000 amps.
- Humidity – Up to 95% RH (noncondensing)

The design shall be temperature compensated to prevent abnormal operation. The circuit design shall include such compensation as is necessary to overcome adverse effects of temperatures within the specified range.

Except as may be otherwise stated herein for a particular item, no item, component, or subassembly shall emit a noise level exceeding the peak level of 55 dBA when measured at a distance of one meter away from its surface.

The detector shall include surge protection in accordance with IEEE Standard C62.41 – 1980 Category C.

The microwave radar detector shall be resistant to vibration in accordance with IE C 68-2-30 (test Fc), NEMA TS-1 (Section 2.1.12), or approved equivalent. The microwave detector shall be resistant to shock in accordance with IEC 68-2-27 (test Ea.), NEMA TS-1 (Section 2.1.13), or approved equivalent.

### **FUNCTIONAL CHARACTERISTICS:**

**Capabilities:** The RVD shall be a true presence detector, which can provide presence, volume, lane occupancy and speed information on a minimum of eight discreet detection zones. This information shall be available to existing controllers via contact closure pairs and to other systems via IP based Ethernet communications.

**Transmission:** Each microwave radar detector shall transmit on a frequency band of 10.525 GHZ  $\pm$ 25 MHz (K-band) or another approved spectral band. The detector shall comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules or the appropriate Spectrum Management Authority. The RVD shall not interfere with any known equipment. The transmitter power shall not exceed 10 milliwatts.

**Area Coverage:** The RVD's field of view shall cover an area defined by a beam of known shape and characteristics and its maximum detection range shall be as follows:

- Elevation Beam Width                      50 to 80 degrees
- Azimuth Beam Width                        12 to 15 degrees
- Range    0 to 250 feet

**Detection Zones:** The minimum number of detection zones defined shall be a minimum of eight (8) up to twelve (12). The range limits of each zone shall be user-defined in 7 ft. increments.

**MECHANICAL:** The microwave radar detector shall be enclosed in a rugged weatherproof box and sealed to protect the unit from wind up to 90 mph, dust and airborne particles, and exposure to moisture (NEMA type 4X enclosure). The total weight of the microwave radar detector assembly shall not exceed 5 pounds.

The mounting assembly shall have all painted steel, stainless steel, or aluminum construction, and shall support a load of 20 pounds. The mounting assembly shall incorporate a ball-joint, or other approved mechanism, which can be tilted in both axes, then locked into place, to provide the optimum area of coverage.

**ELECTRICAL:** The RVD unit shall be operable from 9 – 24V DC dissipating not more than 15W.

The interface shall consist of a single MS connector which provides power to the unit, output contact closure wire pairs for each of the required detection zones rated at 200V AC/DC 100 mA, and serial communication lines for programming, testing or modem interface at 9600 Baud rates. Data format of the serial port shall be standard binary NRZ 8 bits data, 1 stop bit, no parity.

A UV-resistant cable of multiple twisted pairs of stranded AWG #20 or #22 wires with a common shield rated at 300V with a temperature rating of 105 degrees C (Belden #9516 or approved equal) shall provide connection between the RVD and the cabinet equipment.

The MS connector pins must be soldered to the cable conductors and assembled and tested prior to installation and pulling of cable on site.

The junction box or cabinet to house the RS 232 connector shall be located within sight of the desired detection zones in order to initially set up the sensor or to alter the set-up at a later date.

## **CONSTRUCTION METHODS:**

### **INSTALLATION**

The RVD shall be mounted in a Side-fired configuration. It shall be mounted on the proposed pole at the specified location using the supplied mounting brackets. The brackets shall be attached with approved ¾-inch wide, .30-inch thick, stainless steel bands.

The Contractor shall install the detector unit at a height above the road surface as specified by the manufacturer's specifications.

The Contractor shall arrange to have a technician certified by the manufacturer of the RVD present at the time the equipment is installed, turned-on, and calibrated.

The RVD detection zones shall be set up using the provided software and a Notebook PC.

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**METHOD OF MEASUREMENT:** “Radar Vehicle Detector” will be measured for payment at the unit price “EACH” by the number of such units installed in accordance with the plans and/or as directed by the Engineer.

**BASIS OF PAYMENT:** The accepted quantities of “Radar Vehicle Detector” will be paid for at their respective contract unit price per each such unit as listed in the Proposal. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment, including all RVD cable required to connect the RVD unit to the RS-232 connector, the mounting hardware and brackets for providing and installing said units and all other incidentals required to finish the work, complete and accepted by the RIDOT Engineer.



**JOB SPECIFIC****T13.9904****SATELLITE WIRELESS TELEMETRY SYSTEM SUPPORT (SWTSS)**

**DESCRIPTION:** The purpose of this specification is to describe the minimum requirements of Satellite Wireless Telemetry System Support during transition from existing 2 G Traffmate wireless modems to 5 G wireless communication into the MS2 system.

**QUALITY CONTROL OF SATELLITE COMMUNICATION SYSTEM:**

The Quality Control (QC) of the traffic data collected as part of RIDOT's continuous traffic count program will involve the following tasks:

1. Periodic review of the QC Error reports produced by the MS2 (Midwestern Software Solutions, LLC) portal. The QC Error reports are available to persons authorized by RIDOT with a username and password. The QC Error reports are available on the "Admin" page of the MS2 portal and provides details of any data errors identified by MS2. The Contractor shall review the QC Error reports on the MS2 portal, at a minimum, once in two weeks, preferably once every week. A summary review shall be submitted to RIDOT documenting the issue identified by MS2 for each of the stations included in the QC Error report and the disposition such as:
  - a. Station requires field visit to troubleshoot equipment and count data should be cleared (rejected) by RIDOT
  - b. Station requires field visit to confirm count accuracy and the disposition of the count data will be determined upon completion of field visit
  - c. Station is working properly, and the count data may be accepted by RIDOT
2. In addition to the above review of QC Error reports, the Contractor shall also use the MS2 portal to also identify stations that have stopped working and not transmitting data for more than two (2) days.
3. The Contractor shall conduct as-needed field investigations of stations identified either through the review of the QC Error reports and/or through the review of the MS2 portal of non-operational stations. The Contractor shall undertake one of the following actions:

- a. The Contractor shall troubleshoot, reconfigure or recalibrate the equipment as necessary. The Contractor shall also confirm count accuracy by observing a total of 10 vehicles in each lane and ensuring that the radar detector detects over 90% of all vehicles in each lane. The Contractor shall undertake additional measures as necessary to ensure the 90% count accuracy. These measures may include but not be limited to the following:
    - i. Re-orient the sensor as necessary
    - ii. Adjust the detection zones as necessary
    - iii. Adjust the sensitivity and other parameters as necessary
  - b. The Contractor shall confirm that the issue identified at the station during a prior QC Error report review has been resolved during the subsequent QC Error report review.
  - c. In the event the Contractor determines that one or more equipment is not operational and has been to replace, the Contractor shall submit a quote for furnishing, replacing and re-configuring the equipment as necessary to bring the station back to operational status.
4. The Contractor shall assist RIDOT as necessary to generate monthly data files in approved Traffic Monitoring Guide (TMG) format using the MS2 portal for submission by RIDOT to the FHWA TMAS portal.
  5. The Contractor shall assist RIDOT in maintaining the station configurations in MS2. As-needed changes to the station configurations shall be made to ensure the information in MS2 for each station is correct and accurate.
  6. Each year, the Contractor shall update the Seasonal Corrector Factors based on the prior year data. Any updates to the currently defined Seasonal Factor (SF) Groups shall be made and the association of each station to a SF group. Using the Clustering Analysis tool within MS2, the Contractor shall generate the Seasonal Correction Factors and submit to RIDOT for review and approval. Any comments from RIDOT shall be reviewed and necessary changes made to the Seasonal Correction Factors within MS2. The Contractor shall finalize the computation of the Annual Average Daily Traffic (AADT) and the Monthly Average Daily Traffic (MADT) for each of the short-duration count stations based on the final Seasonal Correction Factors.

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7. Each year the Contractor shall review the existing QC rules within MS2 and suggest modifications as appropriate to RIDOT. Changes approved by RIDOT shall be implemented in MS2.
8. The Contractor shall assist RIDOT as necessary in the importation of short-duration counts into the MS2 portal. The Contractor shall coordinate with the short-duration data collection vendor to ensure proper, efficient and accurate data collection and importation.
9. The Contractor shall provide as needed assistance to RIDOT in the generation of AADT for use with the yearly Travel Time Reliability reports to HPMS.
10. The Contractor shall assist RIDOT in the review and testing of new data collection technologies and coordination with MS2 to ensure proper, efficient and accurate data polling by MS2. The new data collection technologies may be related to vehicles or for pedestrians and bicycles.

**METHOD OF MEASUREMENT:** “SATELLITE WIRELESS TELEMETRY SYSTEM SUPPORT” shall be measured for payment at the unit price per "EACH", complete in place and accepted.

**BASIS OF PAYMENT:** This work will be paid for at the contract unit price per “EACH” for “SATELLITE WIRELESS TELEMETRY SYSTEM SUPPORT”, complete in place. The price so-stated constitutes full and complete compensation for all materials, equipment, tools, labor, and all other incidentals required to finish the work, complete in place and accepted by the RIDOT Engineer or Inspector.

**JOB SPECIFIC****T13.9906****WIRELESS MODEM**

**DESCRIPTION:** The work under this item specifies the requirements for the Wireless Modem. The Wireless Modem will be used for communications at Radar Vehicle Detector (RVD) and Weigh in Motion (WIM) stations. The Wireless Modem shall accept multiple interfaces including Ethernet, serial, and USB. The Wireless Modem shall be a Sierra Wireless, Inc. model Airlink LS300 Gateway, or equivalent.

**MATERIALS:** The materials for this item shall conform to the following requirements:

- 1.1 The Wireless Modem specified herein shall be a self-contained unit capable of 24-hour per day unattended operation. The Wireless Modem shall be supplied, assembled and tested by the contractor. The Wireless Modem shall be of rugged design and suitable for reliable operation when mounted in the configuration as specified in these Technical Special Provisions and Plans. The Wireless Modem shall be configured for minimum maintenance and need for adjustment after initial set-up. The Wireless Modem shall include all software required for monitoring and updating the Wireless Modem from a computer within the RIDOT.
- 1.2 The Wireless Modem shall have the following communications ports:
  - 1.2.1 USB Port – Micro-B connector.
  - 1.2.2 Serial Port – 9-pin connector for RS-232 communication with standard straight-through serial cable.
  - 1.2.3 Ethernet – RJ-45 connector.
- 1.3 The Wireless Modem shall have the following connections:
  - 1.3.1 Two (2), SMA antenna connectors
- 1.4 The Wireless Modem shall be a 3G cellular device.
- 1.5 The Wireless Modem shall have an operating temperature range of -30°C to +70° C

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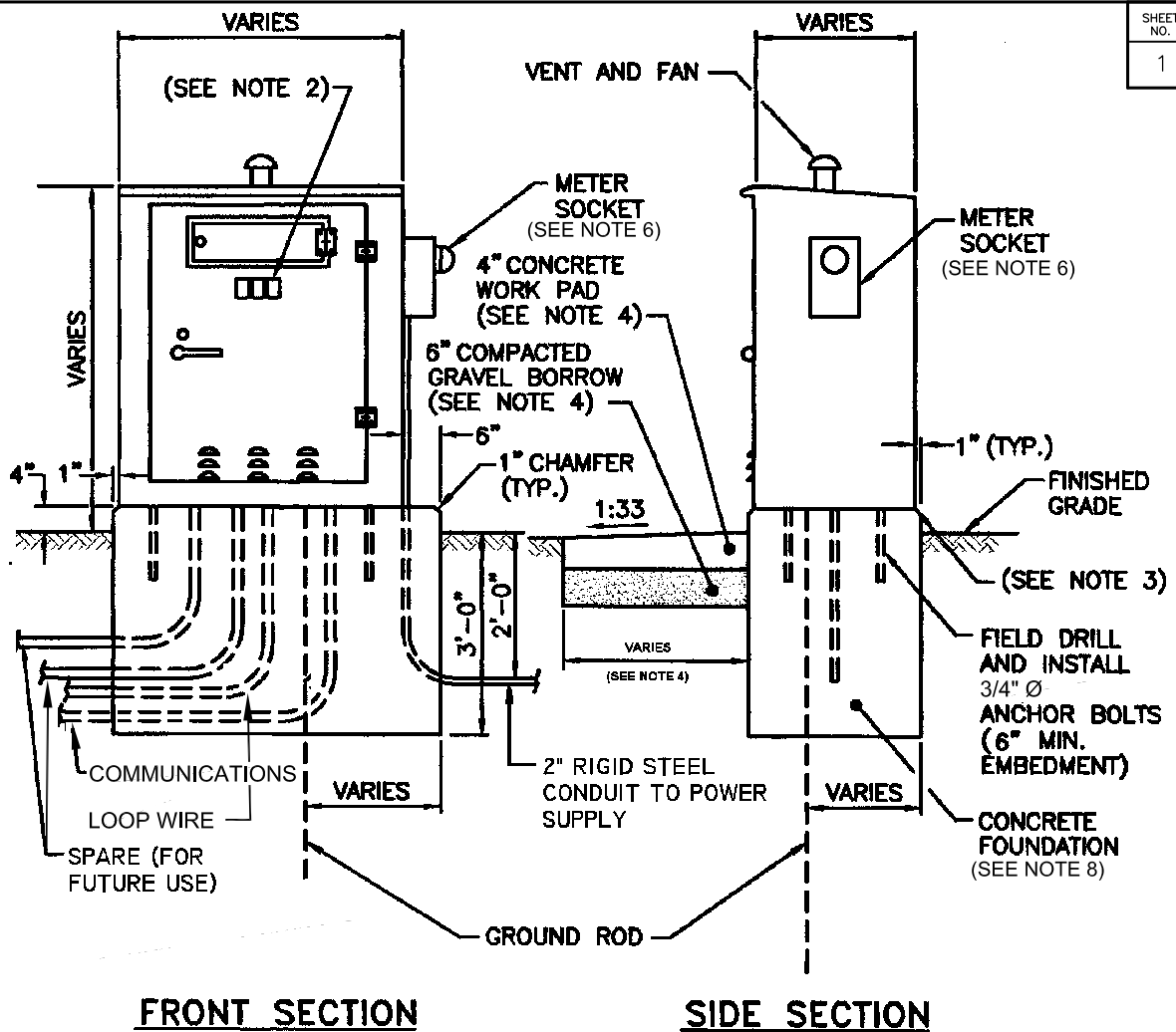
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- 1.6 The Wireless Modem shall be equipped with LEDs to show the operating status of the device. At a minimum, the device shall include the following LED indicators:
  - 1.6.1 Network – Indicating when the device is connected to a cellular network with an IP address assigned and a channel acquired.
  - 1.6.2 Signal – Indicating when a cellular signal is being received.
  - 1.6.3 Activity – Indicating when the radio link is active.
  - 1.6.3 Power – Indicating when the device is connected to power.
- 1.7 The Wireless Modem shall be equipped with a reset button.
- 1.8 The Wireless Modem shall be equipped with a SIM Card Port.
- 1.9 The Wireless Modem shall have a minimum 3-year warranty.

**METHOD OF MEASUREMENT:** “WIRELESS MODEM” shall be measured for payment by the unit “EACH” for each unit installed and accepted.

**BASIS OF PAYMENT:** “WIRELESS MODEM” shall be paid for at the contract unit price bid per "EACH", which price shall include full compensation for all materials, equipment, tools, testing, labor, and work incidental thereto complete in place and accepted by the RIDOT Engineer.

## **APPENDIX A      CONTRACT DRAWINGS**



- CABINET SHALL BE IN ACCORDANCE WITH SECTION T.12 OF THE R.I. STANDARD SPECIFICATION AND JOB SPECIFIC SPECIFICATION T12.9901.
- STATION IDENTIFICATION NUMBER TO BE STENCILED ON EXTERIOR AND INTERIOR OF ALL CABINET DOORS (GROUND AND POLE MOUNTED). STENCIL SHALL BE 2" HIGH BLOCK LETTERS APPLIED WITH HIGH CONTRAST COLOR PAINT.
- SILICONE CAULKING TO BE APPLIED BETWEEN CABINET AND FOUNDATION TO PROVIDE A PERMANENT WEATHER TIGHT SEAL.
- IN UNPAVED AREAS, CONCRETE WORK PAD SHALL BE PLACED IN FRONT OF THE CABINET DOOR. SEE SPECIFICATION T12.9901 FOR THE SIZE OF THE CONCRETE PAD.
- ANY GRAVEL NECESSARY TO LEVEL THE GROUND AT THE CABINET LOCATION SHALL BE CONSIDERED INCIDENTAL AND INCLUDED UNDER THIS ITEM.
- METER SOCKET SHALL ALWAYS BE INSTALLED ON THE SIDE OF THE CABINET AWAY FROM ONCOMING TRAFFIC.
- ALL CABINETS SHALL OPEN AWAY FROM TRAFFIC UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS OR DIRECTED BY THE ENGINEER.
- SPARE CONDUITS SHALL BE STUBBED AND CAPPED 2 FEET BEYOND FOUNDATION. THE TOP TWO (2) CONDUITS SHALL BE THE SPARE CONDUITS. CONDUITS SHALL EXIT ON THE POLE-SIDE OF THE FOUNDATION.
- ALL CONDUIT WITHIN THE FOUNDATION SHALL BE 2" RIGID STEEL. PVC CONDUIT WILL BE USED BETWEEN THE FOUNDATION AND THE POLE, EXCEPT FOR POWER SUPPLY CONDUIT WHICH SHALL BE 2" RIGID STEEL.

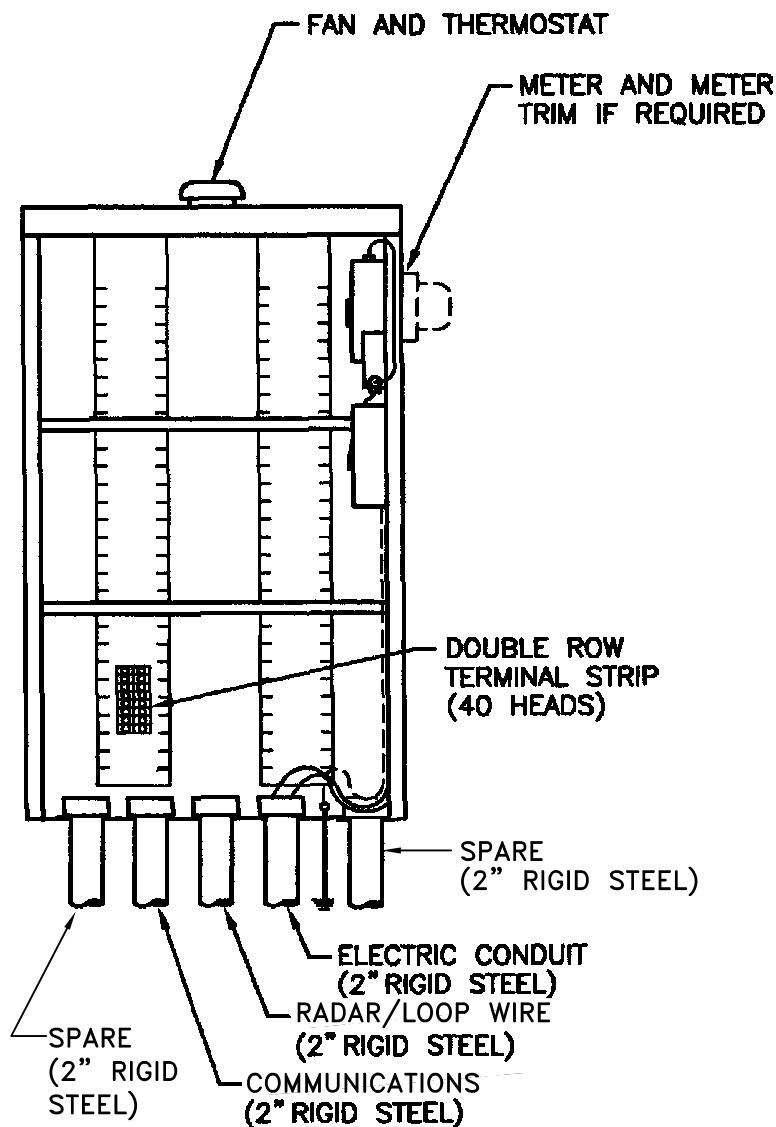
NOT TO SCALE



STATE OF RHODE ISLAND  
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Rhode Island Department of Transportation  
Highway Performance Monitoring System  
Statewide, Rhode Island

Detail No. 1  
Ground Mounted  
Controller Cabinet



### FRONT SECTION

#### NOTES:

1. TRANSFORMER MUST BE WIRED TO ALLOW 120 SECONDARY VOLTAGE AT POWER OUTLET BOX.
2. WIRING SHOWN WITHOUT METER. IF METER IS REQUIRED, WIRE METER BETWEEN CONDUIT AND "MAIN."
3. 3/4" MARINE PLYWOOD TO BE USED AS BACKING TO MOUNT ACCESSORIES.
4. DOUBLE POLE BREAKER SWITCH REQUIRED FOR 240 VOLTAGE ONLY. SINGLE POLE BREAKER WITH ENCLOSURE MAY BE USED FOR 120 VOLTAGE.
5. INSTALLATION TO INCLUDE TELEPHONE JACK, PULL CHAIN LIGHT AND SURGE ARRESTOR.
6. PROVIDE 60 AMP SERVICE.

NOT TO SCALE

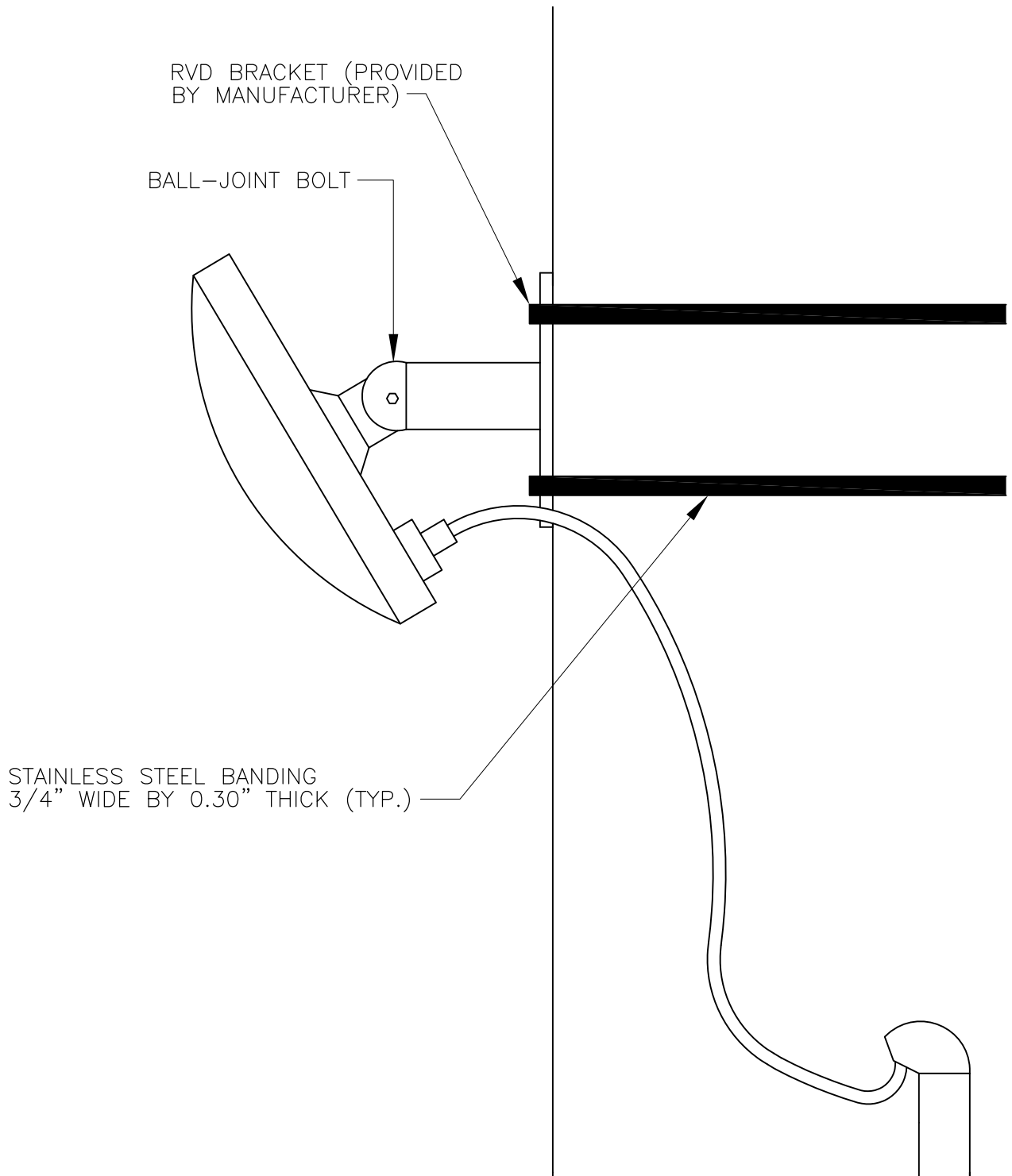


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Highway Performance Monitoring System  
Statewide, Rhode Island

Detail No. 2  
Front and Side Cabinet Sections





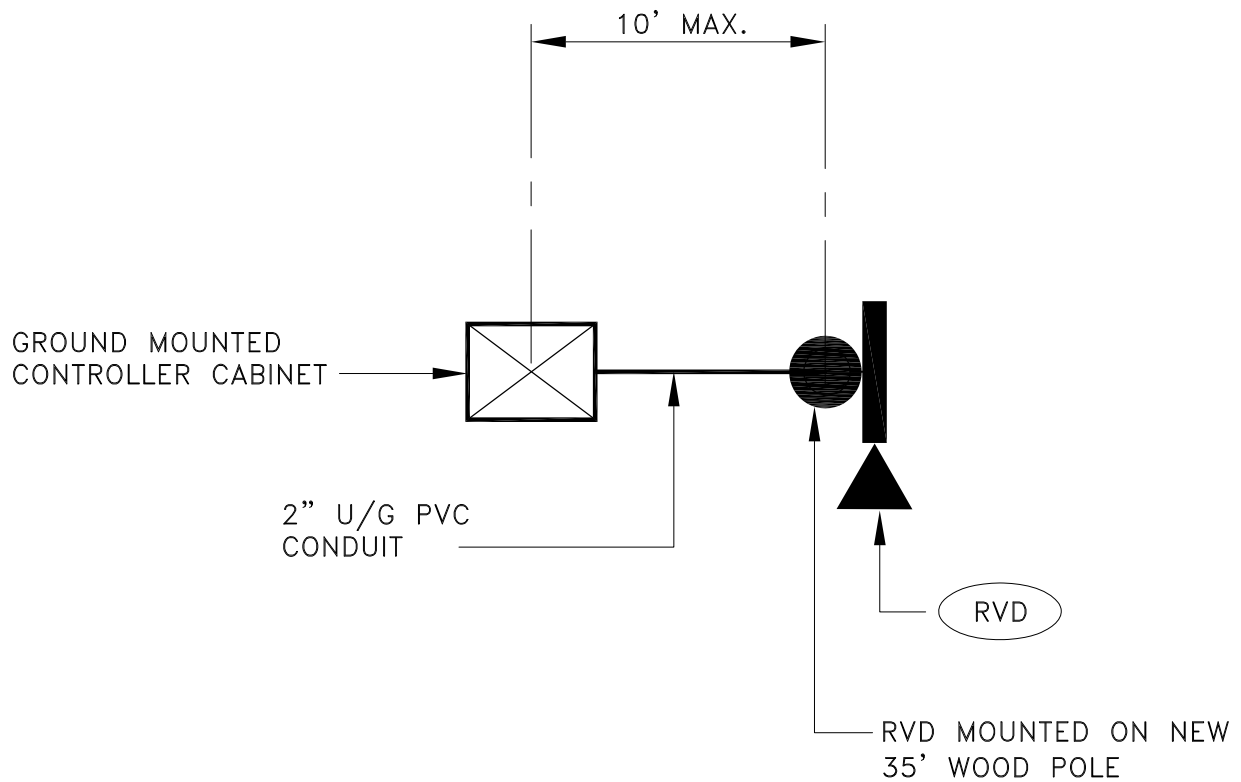
NOT TO SCALE



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**Detail No. 3**  
**Radar Vehicle Detector**  
**With Mounting Device**



**\*NOTE:**

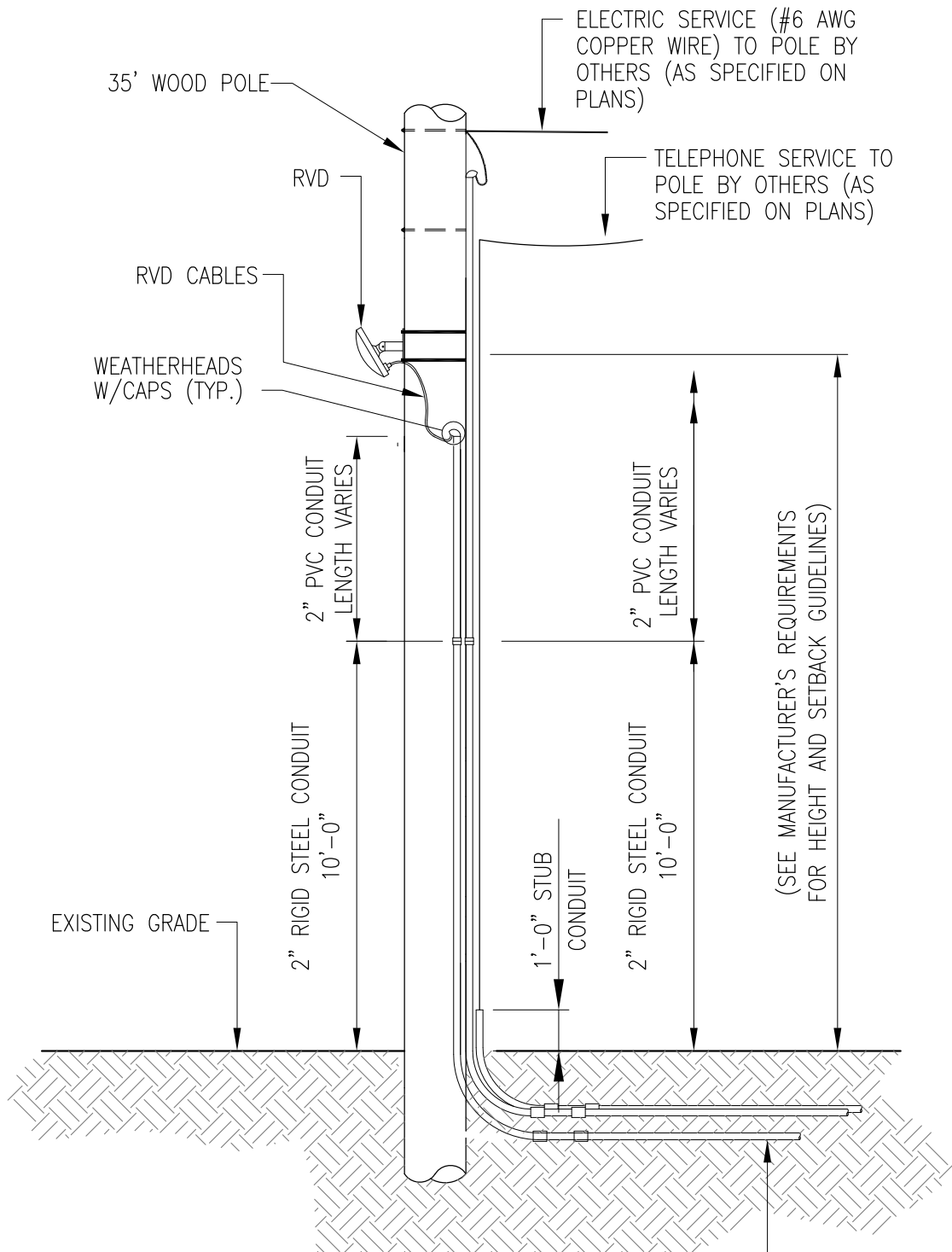
THE CABINET SHALL BE LOCATED A MAXIMUM DISTANCE OF 10 FEET FROM THE POLE UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS OR DIRECTED BY THE ENGINEER.



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**Detail No. 4**  
Typical Layout For Pole and  
Ground Mounted Controller Cabinet



NOTE:

1. CONDUIT FASTENED W/GALV. OR S.S. CLAMPS 5'-0" o.c. MIN.
2. ALL CONDUITS SHALL BE INSTALLED ON THE BACK SIDE OF THE POLE (AWAY FROM TRAFFIC).
3. ALL CONDUIT SHALL BE GREY IN COLOR.

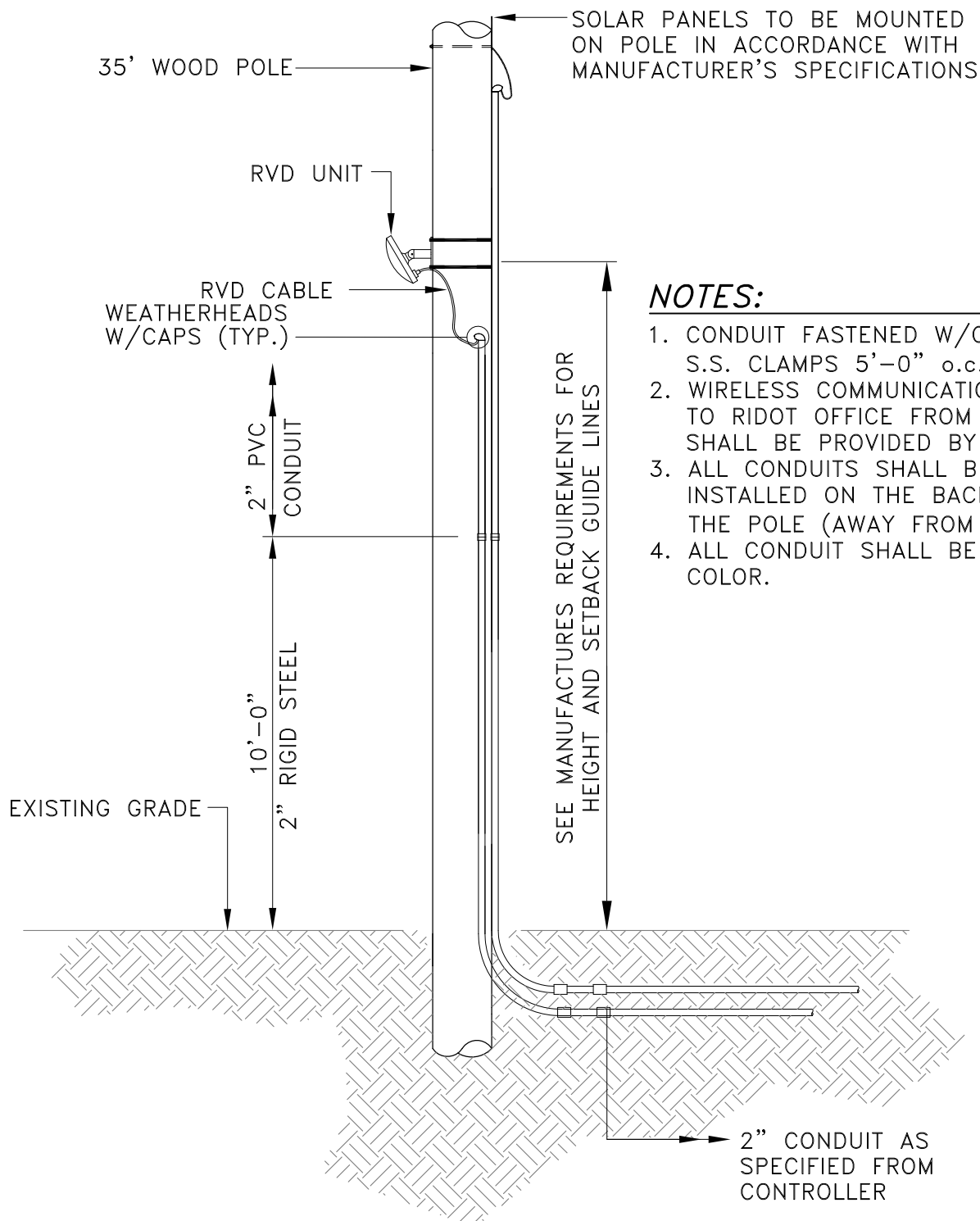
(1) 2" CONDUIT AS SPECIFIED FROM CONTROLLER

NOT TO SCALE



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Highway Performance Monitoring System  
Statewide, Rhode Island  
**Detail No. 5a**  
Pole Mounted Radar (1) and Ground  
Mounted Controller w/O.H. Utility Supply



### NOTES:

1. CONDUIT FASTENED W/GALV. OR S.S. CLAMPS 5'-0" o.c. MIN.
2. WIRELESS COMMUNICATION SERVICE TO RIDOT OFFICE FROM CABINET SHALL BE PROVIDED BY RIDOT.
3. ALL CONDUITS SHALL BE INSTALLED ON THE BACK SIDE OF THE POLE (AWAY FROM TRAFFIC).
4. ALL CONDUIT SHALL BE GRAY IN COLOR.

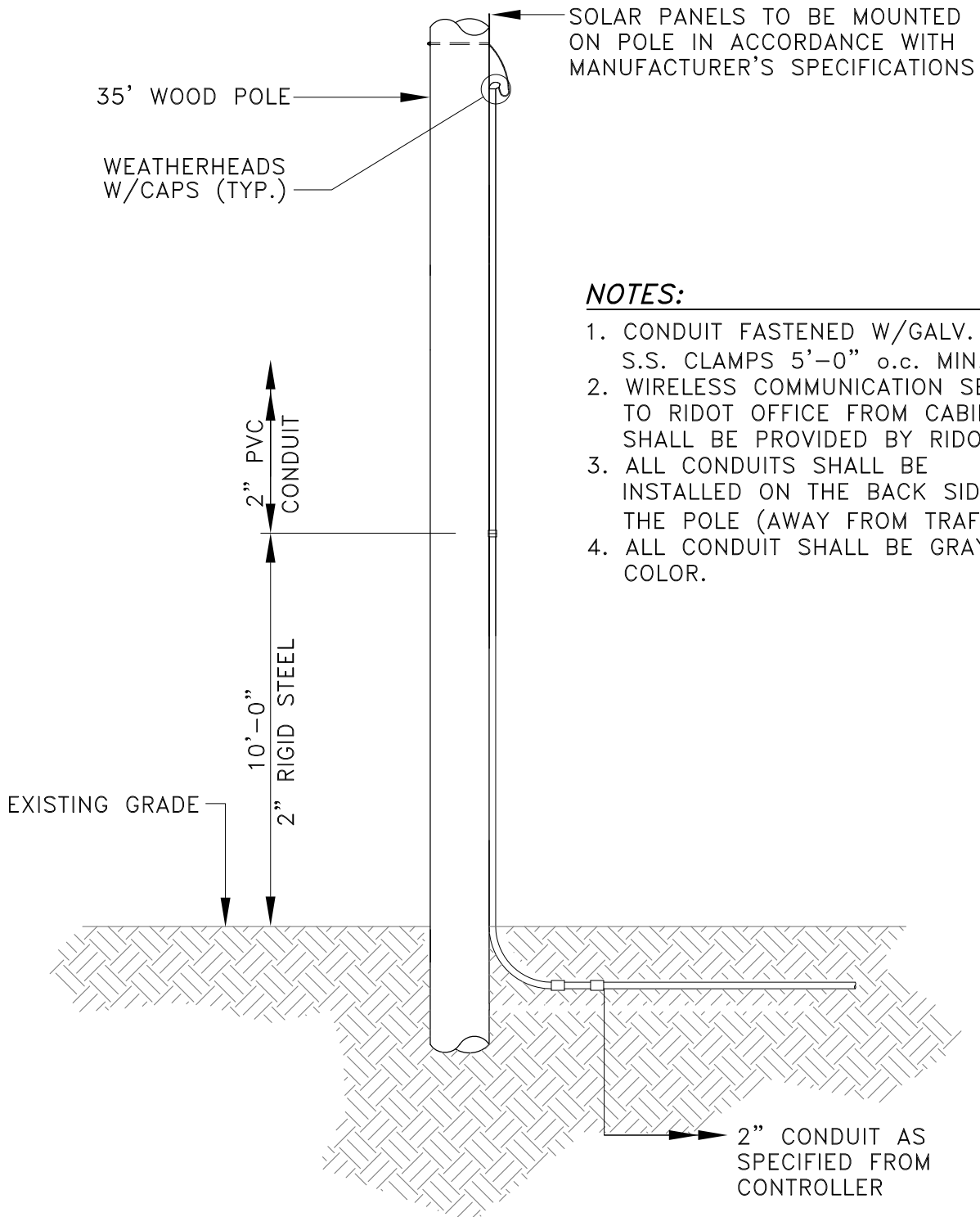
NOT TO SCALE



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Highway Performance Monitoring System  
Statewide, Rhode Island

**Detail No. 5b**  
Pole Mounted Radar w/Solar  
Power Equipment and Ground  
Mounted Controller



**NOTES:**

1. CONDUIT FASTENED W/GALV. OR S.S. CLAMPS 5'-0" o.c. MIN.
2. WIRELESS COMMUNICATION SERVICE TO RIDOT OFFICE FROM CABINET SHALL BE PROVIDED BY RIDOT.
3. ALL CONDUITS SHALL BE INSTALLED ON THE BACK SIDE OF THE POLE (AWAY FROM TRAFFIC).
4. ALL CONDUIT SHALL BE GRAY IN COLOR.

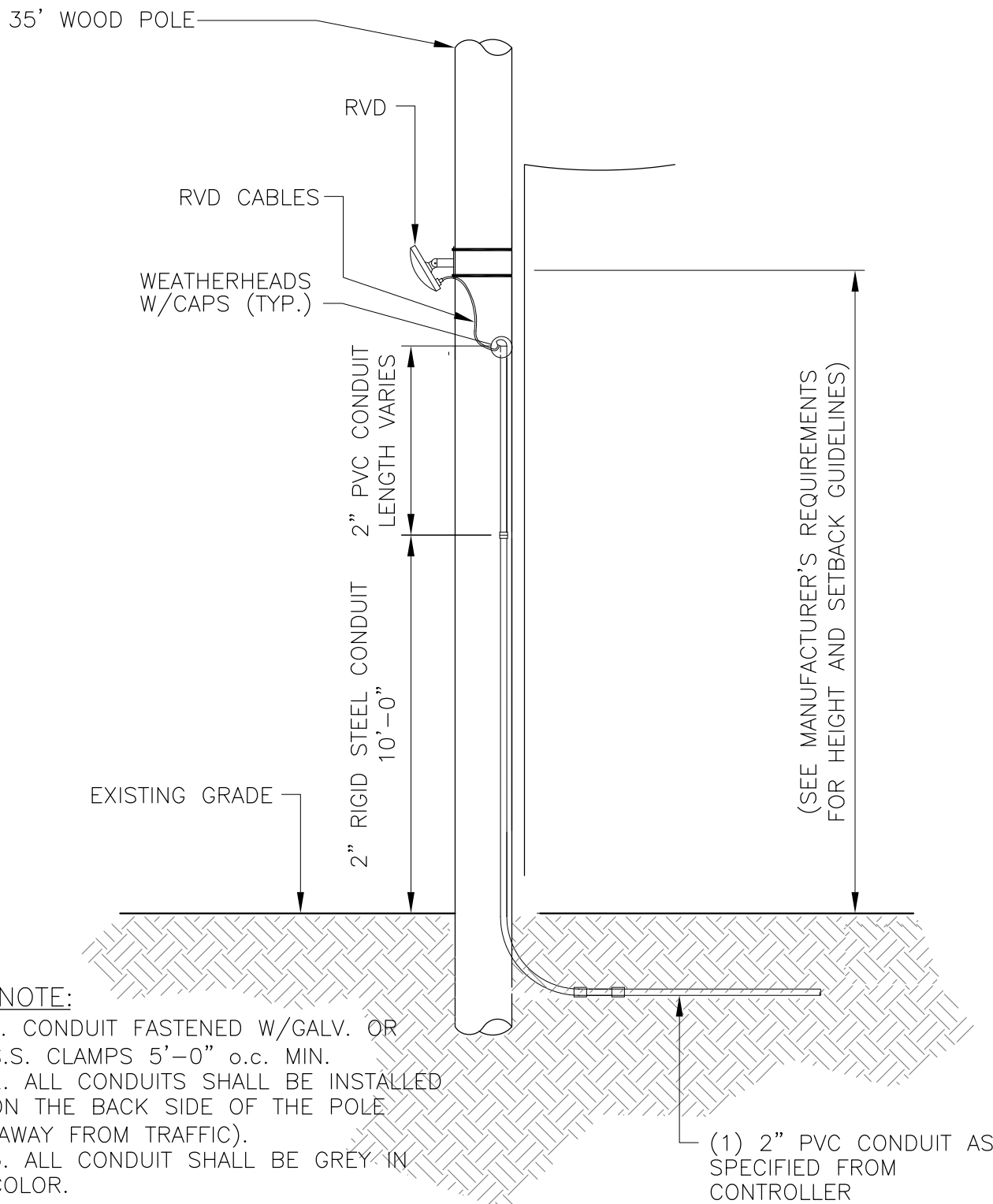
NOT TO SCALE



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**Detail No. 5c**  
**Solar Power Equipment On Pole**



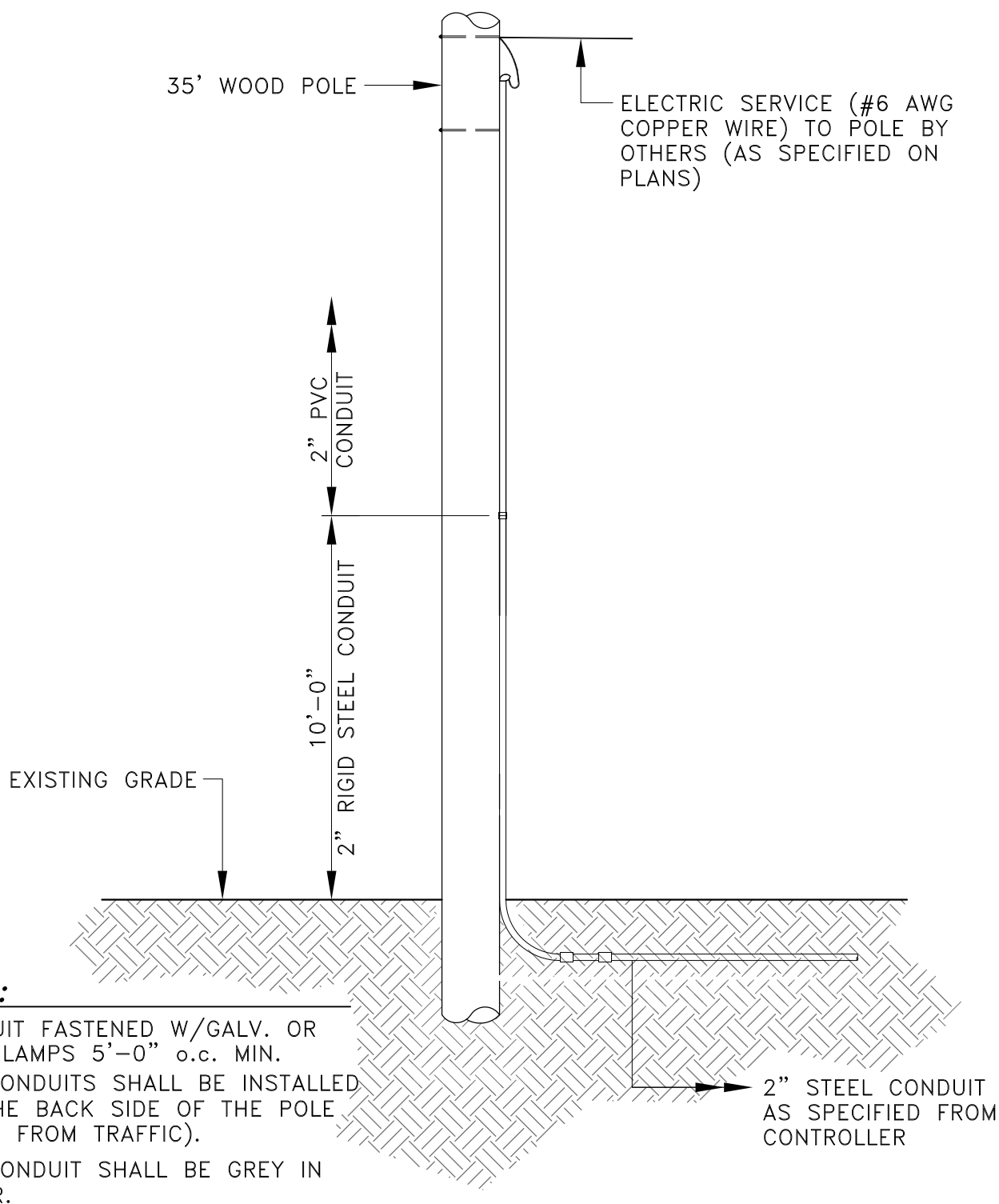
NOT TO SCALE



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**Detail No. 5d**  
**Pole Mounted Radar (1) and Ground**



### NOTES:

1. CONDUIT FASTENED W/GALV. OR S.S. CLAMPS 5'-0" o.c. MIN.
2. ALL CONDUITS SHALL BE INSTALLED ON THE BACK SIDE OF THE POLE (AWAY FROM TRAFFIC).
3. ALL CONDUIT SHALL BE GREY IN COLOR.

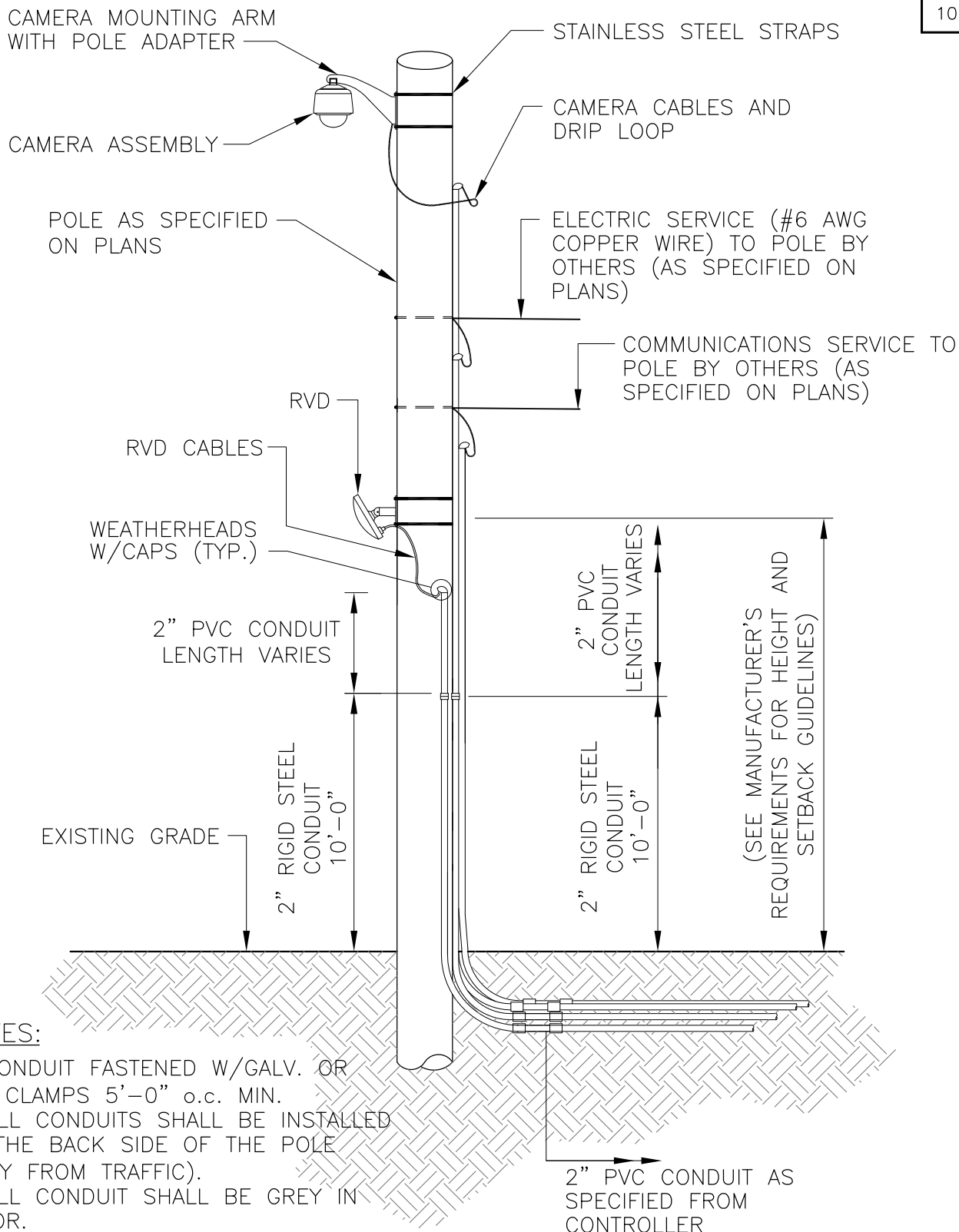
NOT TO SCALE



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Highway Performance Monitoring System  
Statewide, Rhode Island

**Detail No. 5e**  
Overhead Power Supply to Ground  
Mounted Controller



# NOTES:

1. CONDUIT FASTENED W/GALV. OR S.S. CLAMPS 5'-0" o.c. MIN.
2. ALL CONDUITS SHALL BE INSTALLED ON THE BACK SIDE OF THE POLE (AWAY FROM TRAFFIC).
3. ALL CONDUIT SHALL BE GREY IN COLOR.

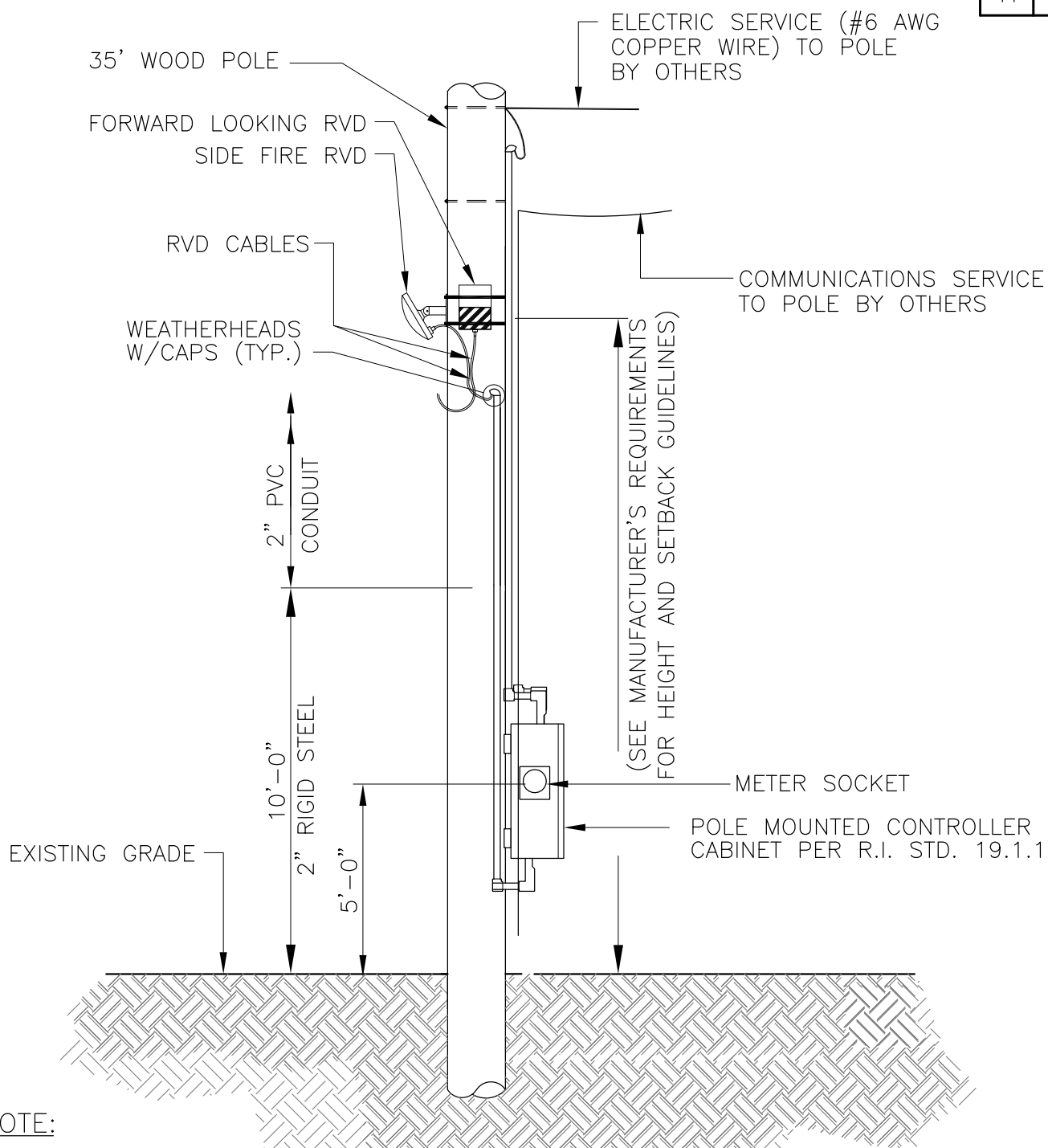
NOT TO SCALE



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Highway Performance Monitoring System  
Statewide, Rhode Island  
**Detail No. 5f**  
Pole Mounted Radar (1), Closed Circuit  
Television Camera, and Ground  
Mounted Controller w/O.H. Utility Supply





**NOTE:**

1. CONDUIT FASTENED W/GALV. OR S.S. CLAMPS 5'-0" o.c. MIN.
2. ALL CONDUITS SHALL BE INSTALLED ON THE BACK SIDE OF THE POLE (AWAY FROM TRAFFIC).
3. ALL CONDUIT SHALL BE GREY IN COLOR.

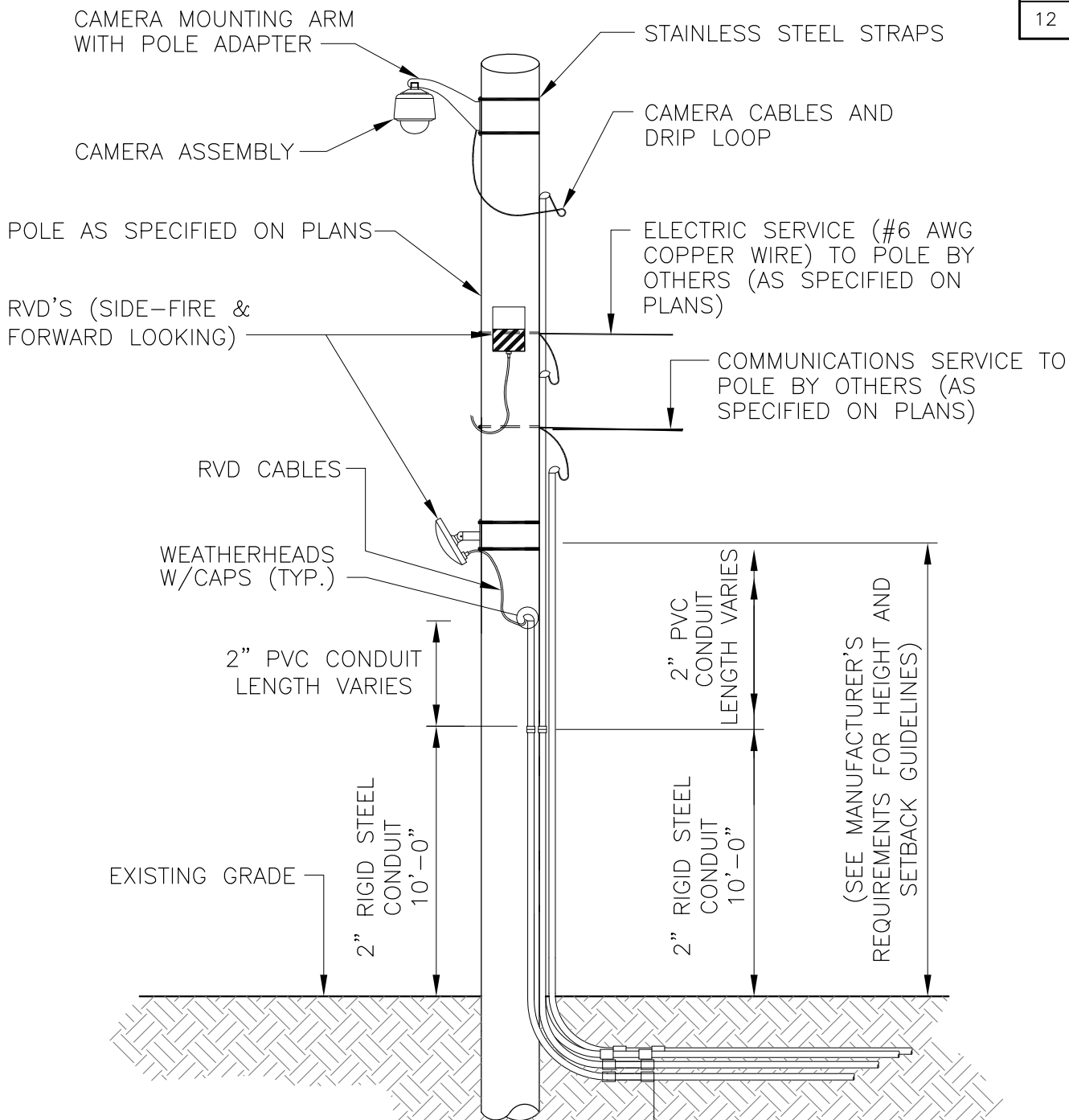
SCALE: 1"=4'-0"



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Statewide, Rhode Island

**Detail No. 5g**  
**Pole Mounted Radar (2) and**  
**Controller w/O.H. Utility Supply**



#### NOTES:

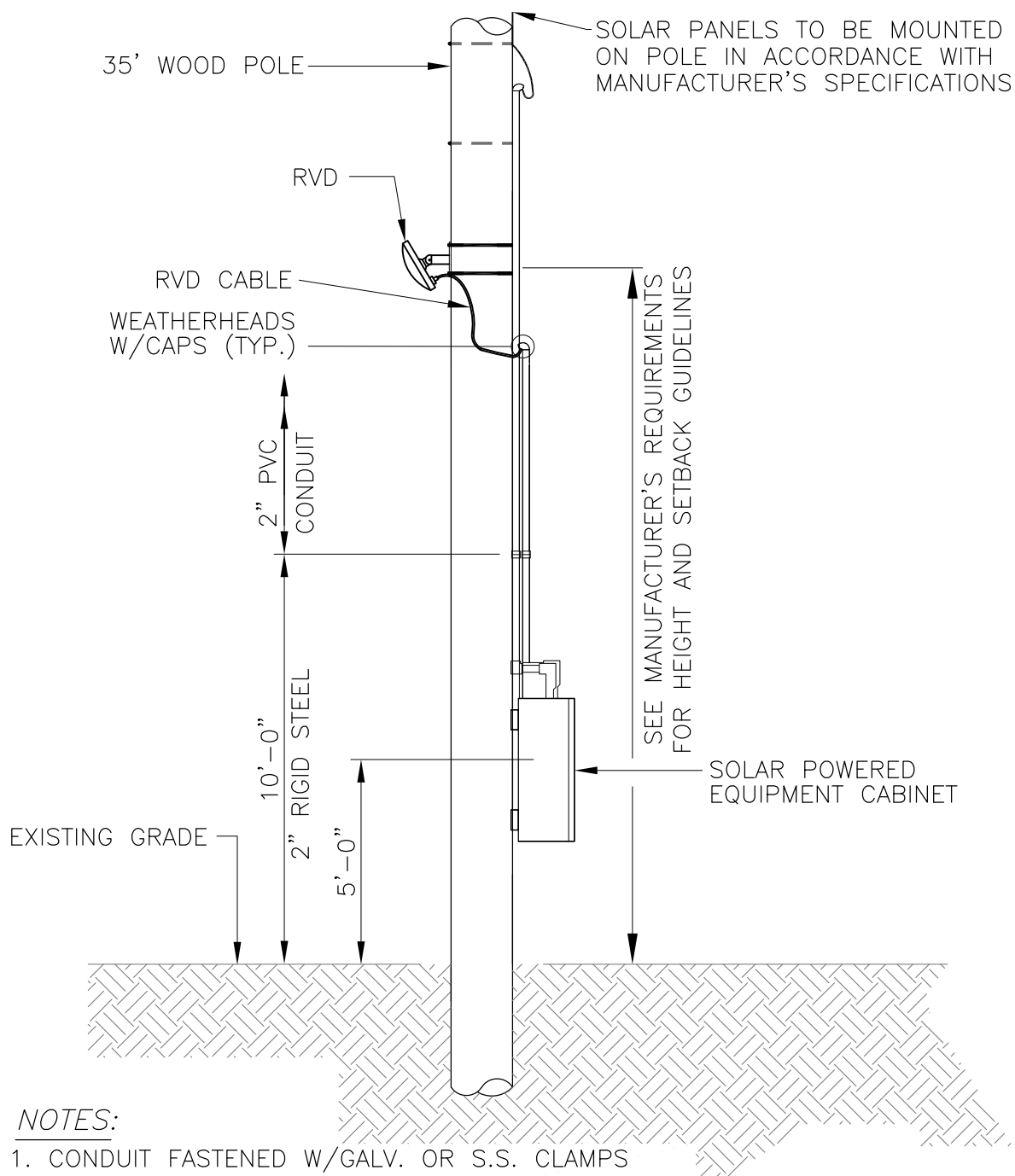
1. CONDUIT FASTENED W/GALV. OR S.S. CLAMPS 5'-0" o.c. MIN.
2. ALL CONDUITS SHALL BE INSTALLED ON THE BACK SIDE OF THE POLE (AWAY FROM TRAFFIC).
3. ALL CONDUIT SHALL BE GREY IN COLOR.

NOT TO SCALE



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Highway Performance Monitoring System  
Statewide, Rhode Island  
**Detail No. 5h**  
Pole Mounted Radar (2), Closed Circuit  
Television Camera, and Ground  
Mounted Controller w/O.H. Utility Supply



**NOTES:**

1. CONDUIT FASTENED W/GALV. OR S.S. CLAMPS 5'-0" o.c. MIN.
2. ALL CONDUITS SHALL BE INSTALLED ON THE BACK SIDE OF THE POLE (AWAY FROM TRAFFIC).
3. ALL CONDUIT SHALL BE GREY IN COLOR.

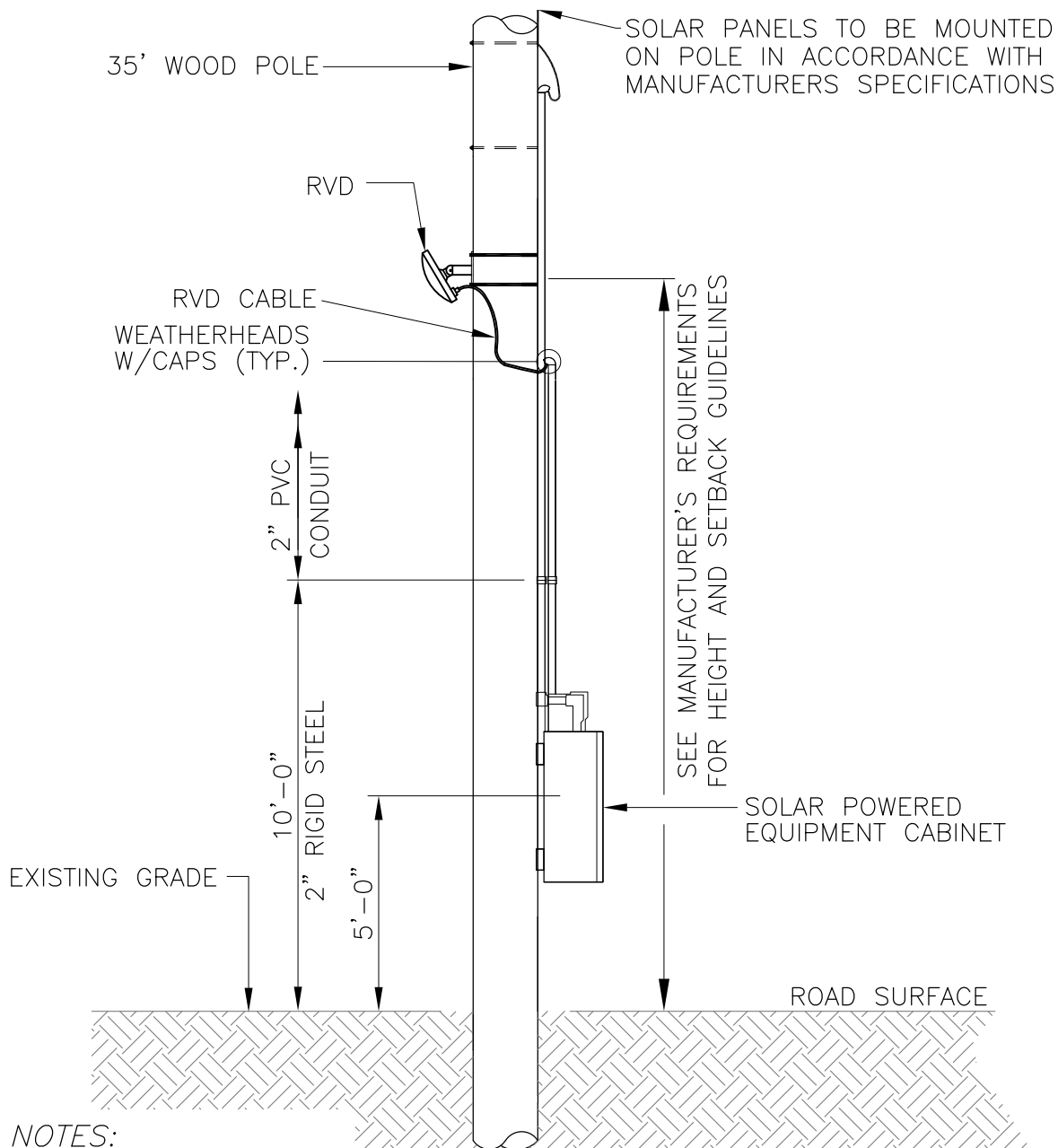
SCALE: 1"=4'-0"



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Highway Performance Monitoring System  
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**Detail No. 5i**  
Pole Mounted Radar w/Solar  
Power Equipment



**NOTES:**

1. CONDUIT FASTENED W/GALV. OR S.S. CLAMPS 5'-0" o.c. MIN.
2. WIRELESS COMMUNICATION SERVICE TO RIDOT OFFICE FROM CABINET SHALL BE PROVIDED BY RIDOT.
3. ALL CONDUITS SHALL BE INSTALLED ON THE BACK SIDE OF THE POLE (AWAY FROM TRAFFIC).
4. ALL CONDUIT SHALL BE GREY IN COLOR.
5. RF COMMUNICATOR TO BE INSTALLED AS NOTED ON THE PLANS.

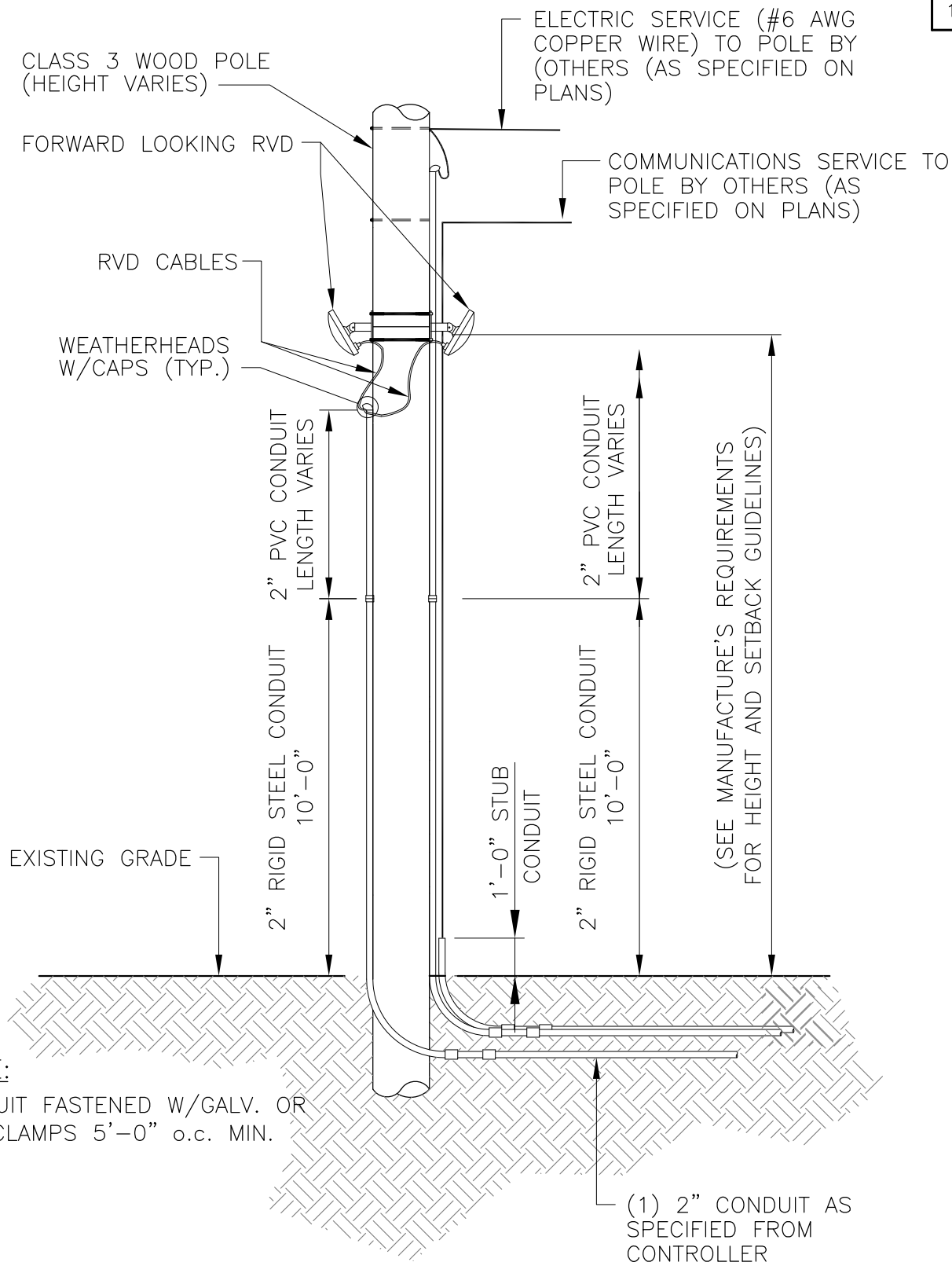
SCALE: 1"=4'-0"



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Highway Performance Monitoring System  
Statewide, Rhode Island

**Detail No. 5j**  
**Pole Mounted Radar w/Solar**  
**Power Equipment &**  
**RF Communicator**



**NOTE:**

CONDUIT FASTENED W/GALV. OR S.S. CLAMPS 5'-0" o.c. MIN.

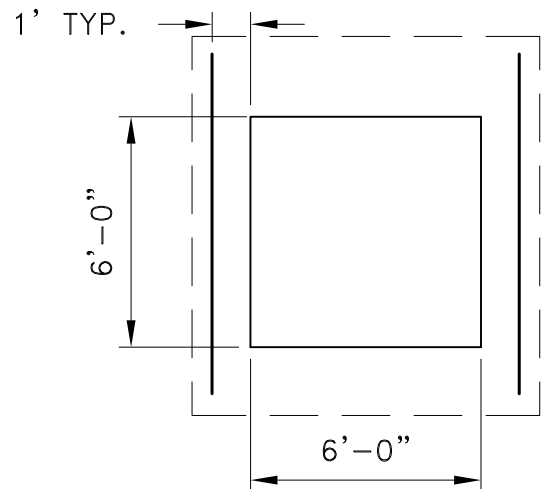
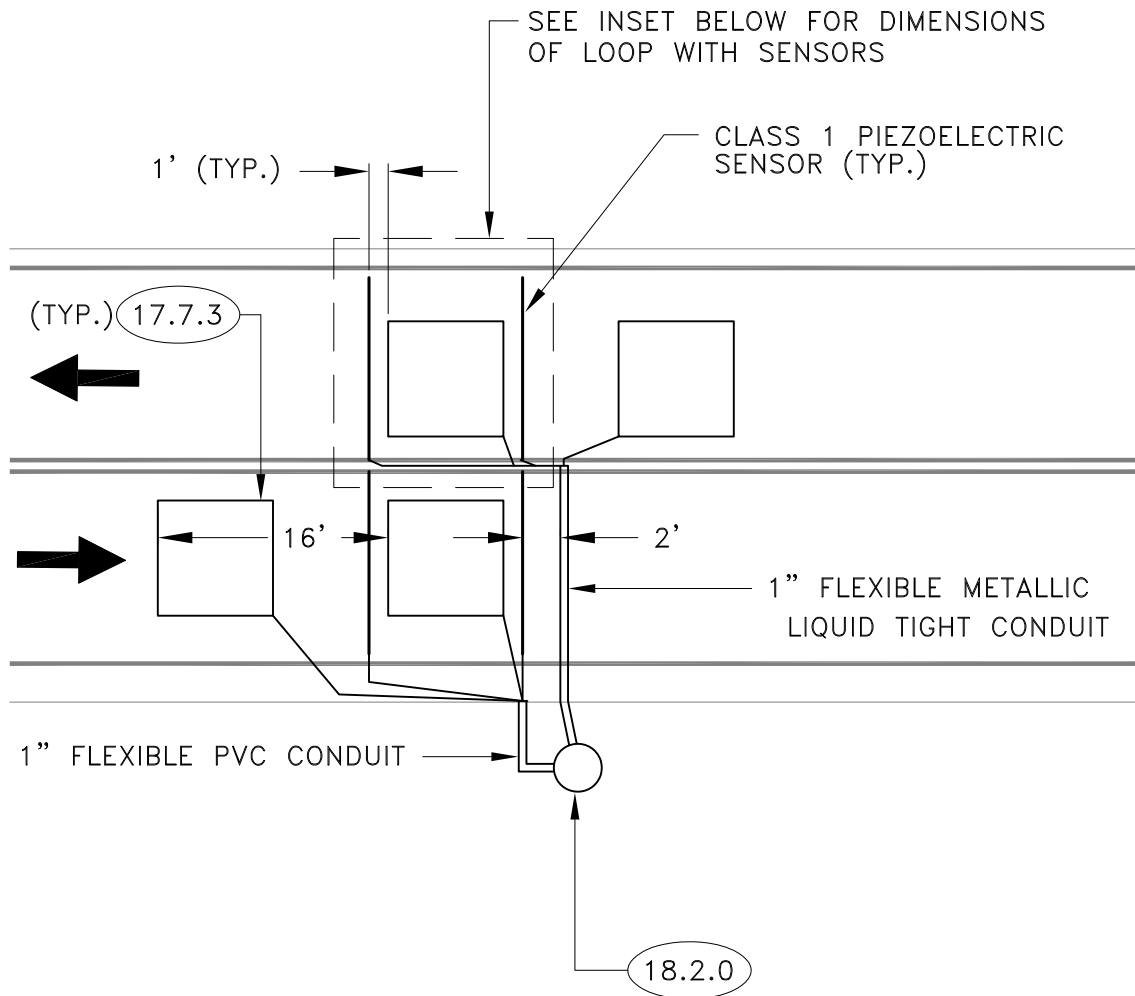
NOT TO SCALE



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Statewide, Rhode Island

**DETAIL No. 5k**  
**OPPOSING POLE MOUNTED RADAR (2)**  
**AND GROUND MOUNTED CONTROLLER**  
**W/O.H. UTILITY SUPPLY**



NOT TO SCALE

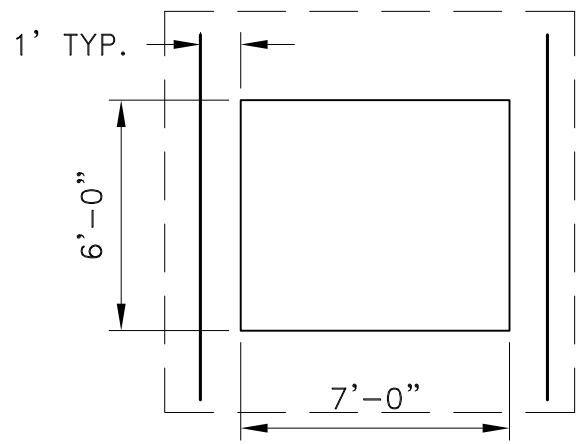
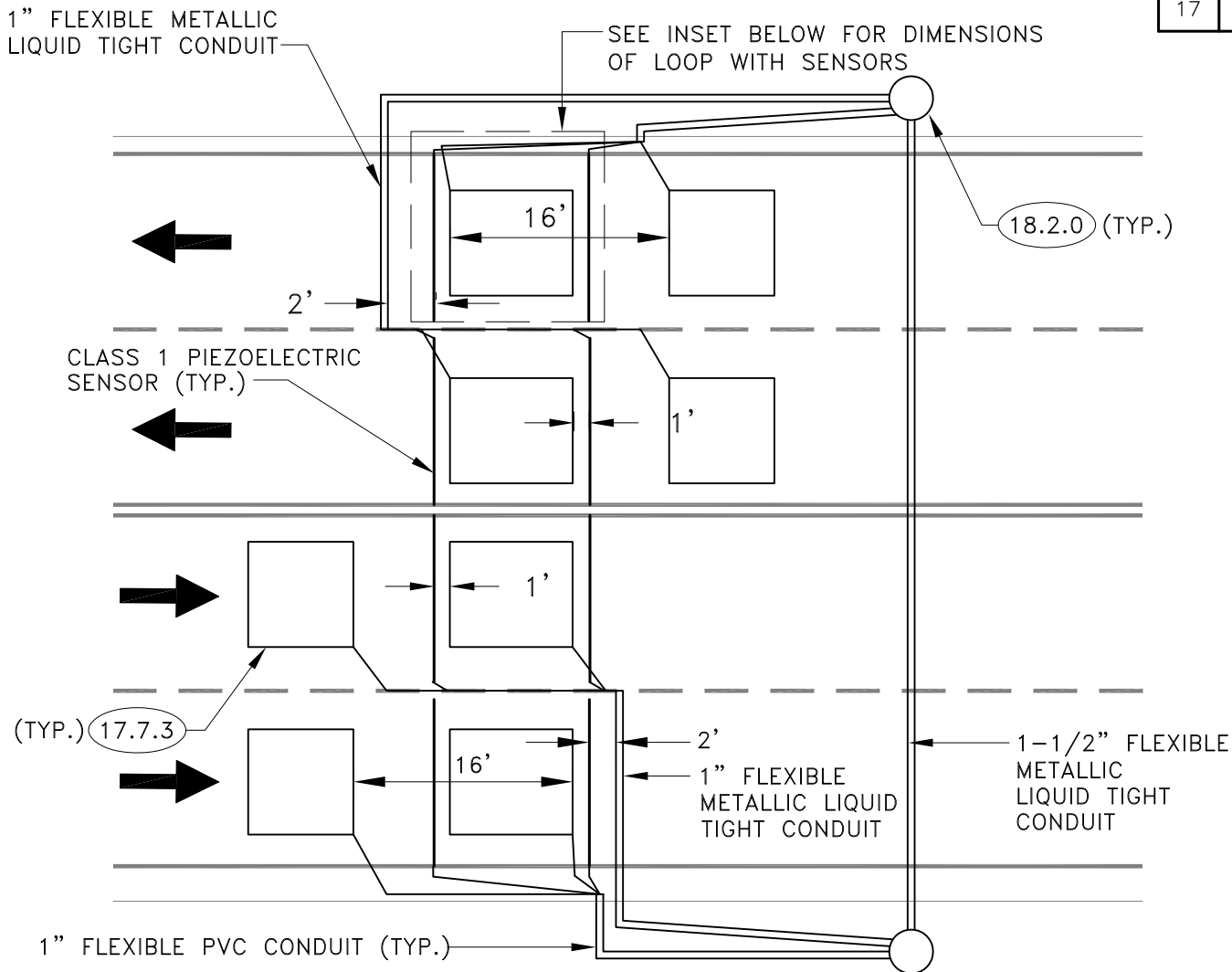


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**Detail No. 6a**  
Piezo Sensor Layout For 2-Lane Road

SHEET NO.	TOTAL SHEETS
17	38



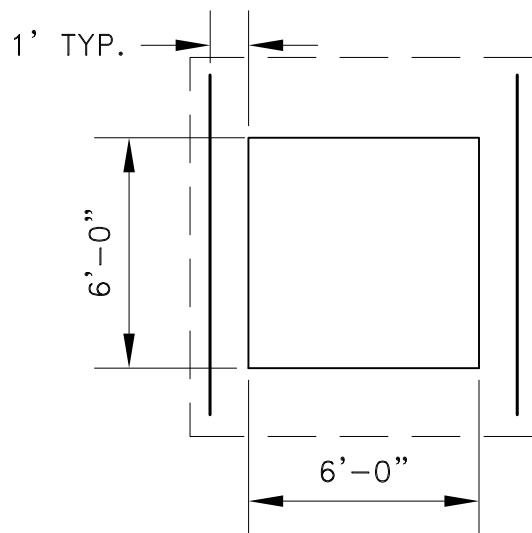
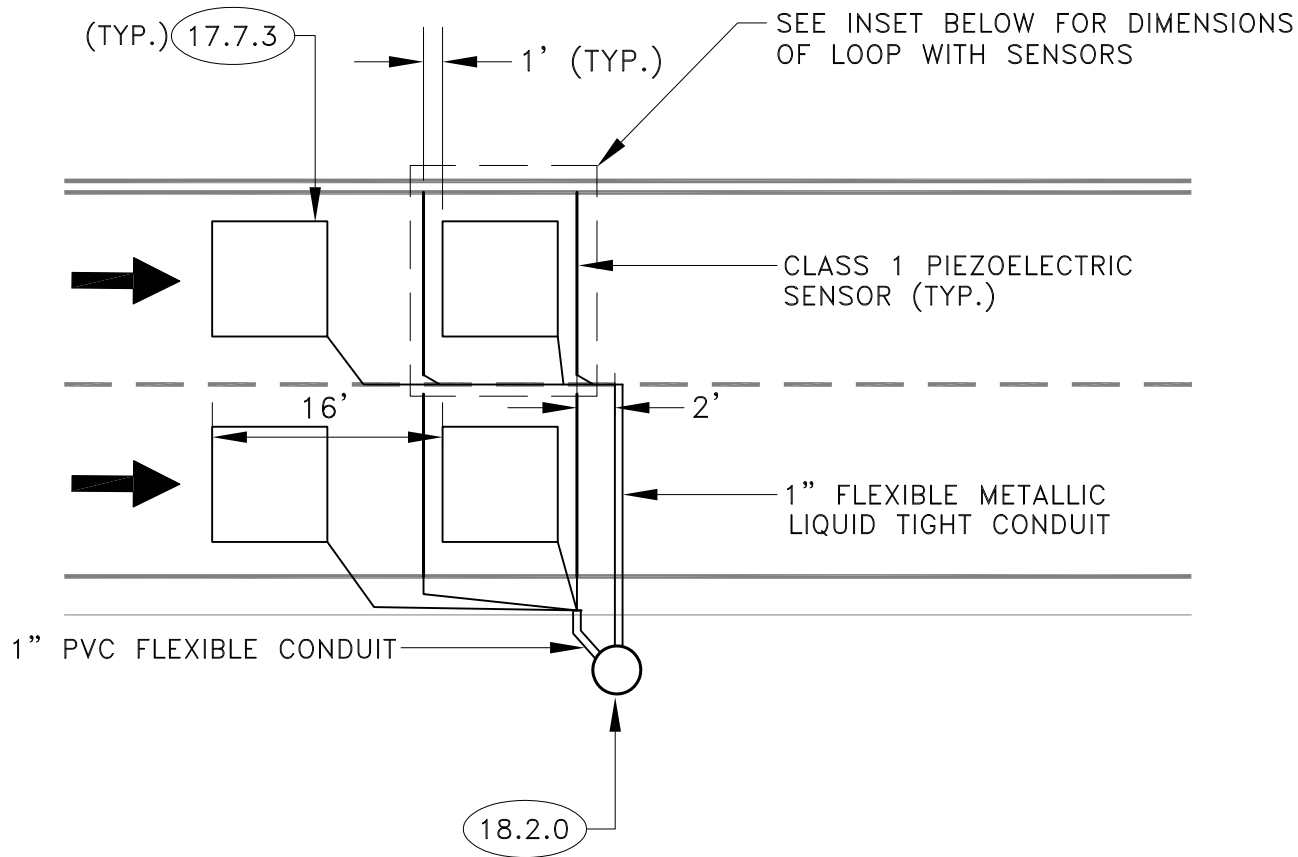
NOT TO SCALE



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# Detail No. 6b Piezo Sensor Layout For 4-Lane Road



NOT TO SCALE

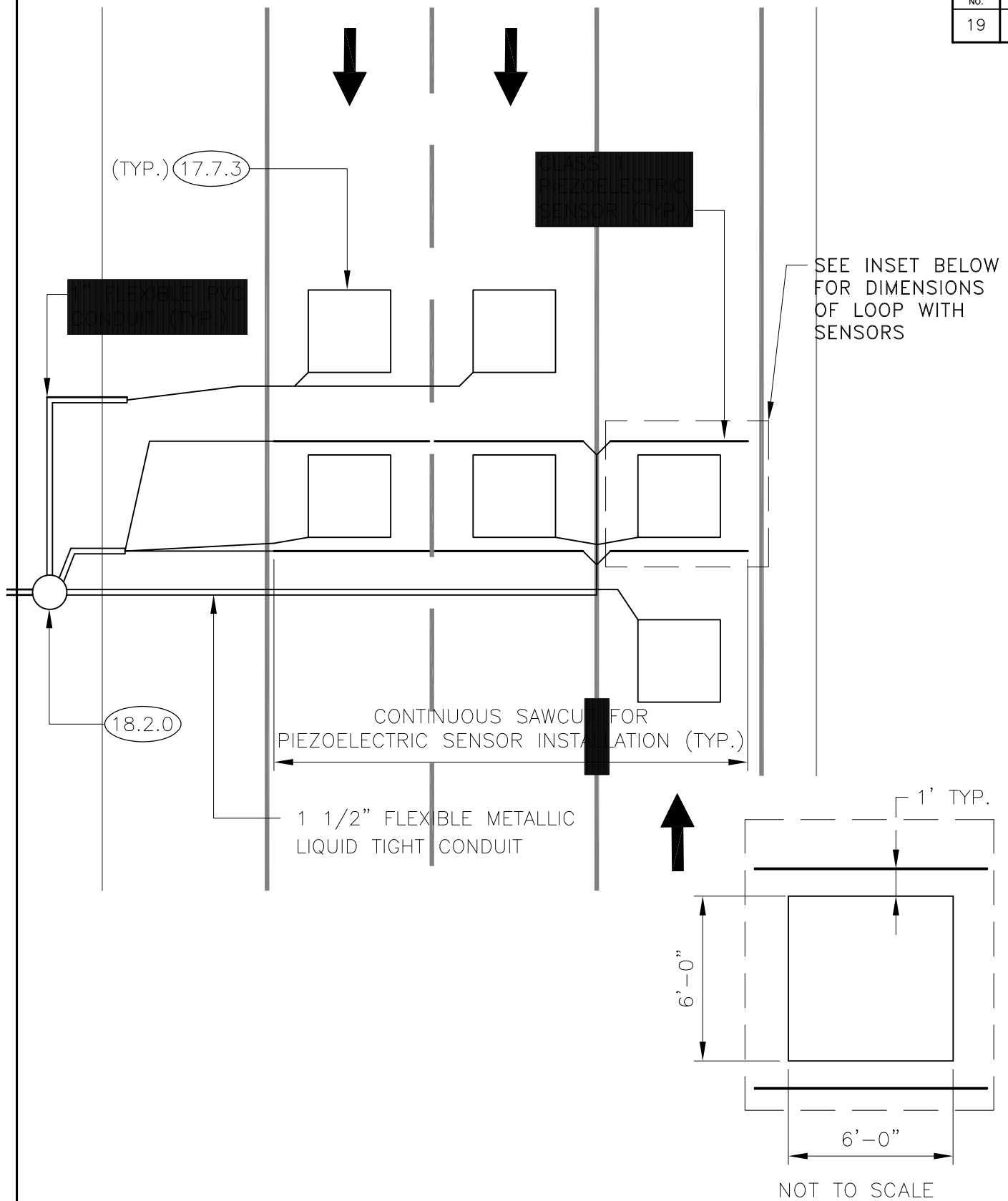


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**Detail No. 6c**  
Piezo Sensor Layout For 2-Lanes,  
Same Direction

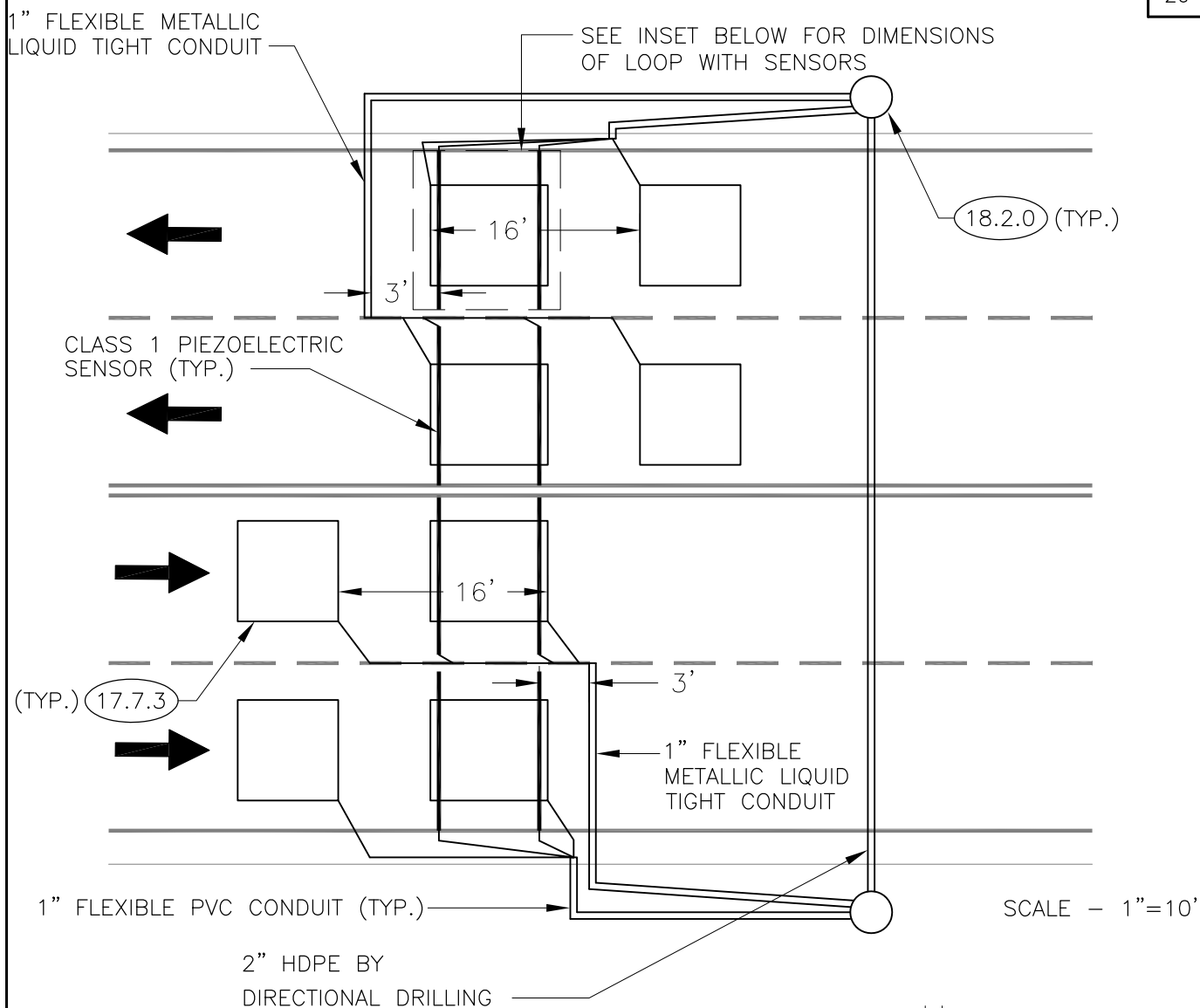




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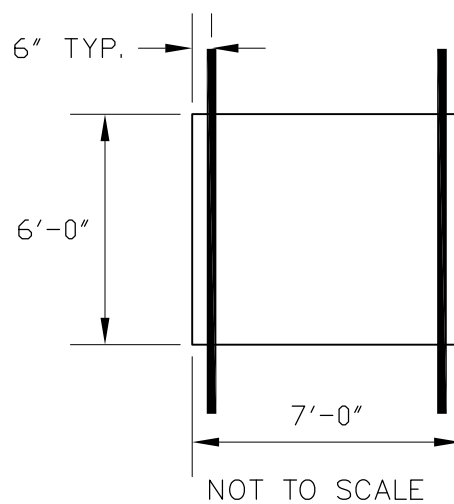
Rhode Island Department of Transportation  
Highway Performance Monitoring System  
Statewide, Rhode Island

**Detail No. 6d**  
**Piezo Sensor Layout For 3-Lanes,  
Opposite Direction**



(TYP.) 17.7.3

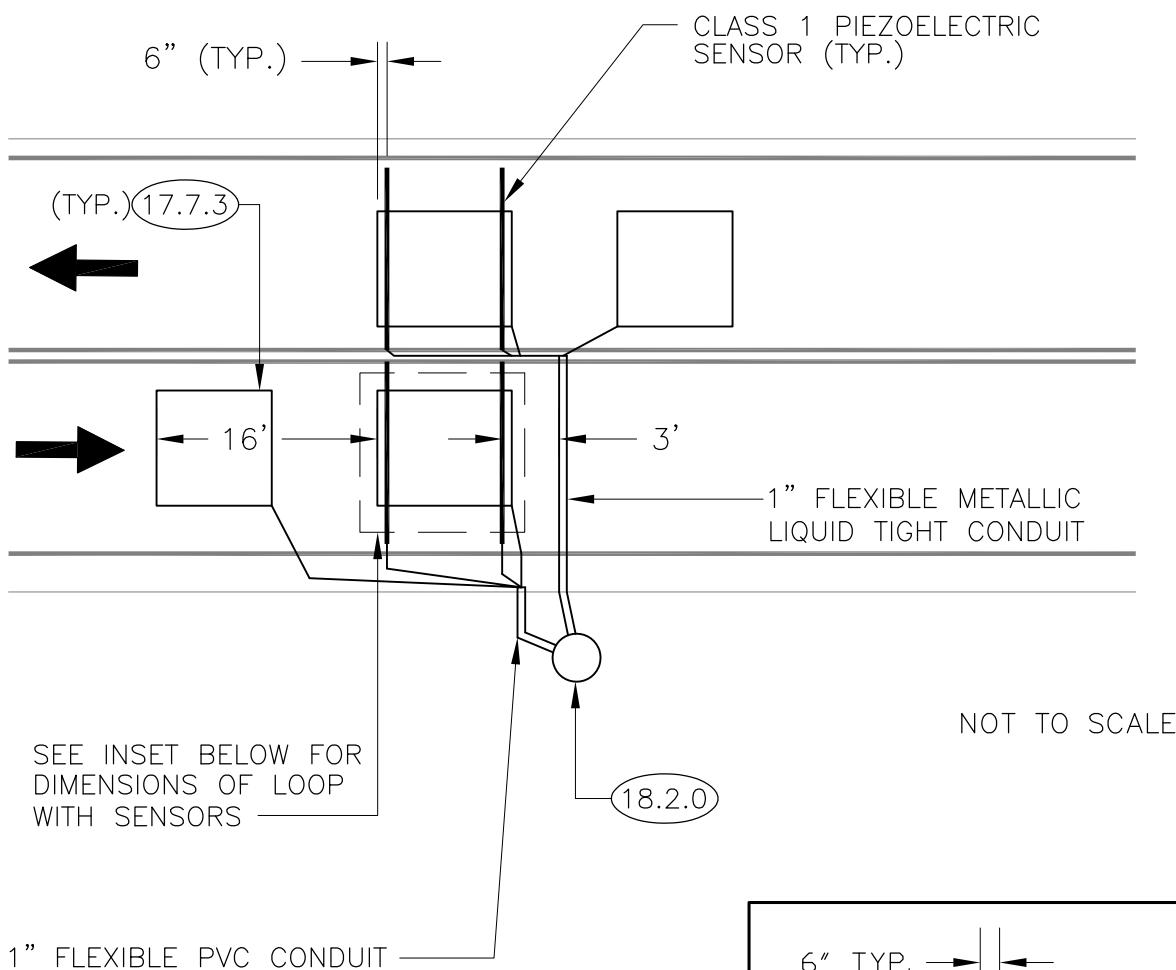
NOTE:  
TRAFFIC LOOP LAYOUT SHALL BE IN  
ACCORDANCE WITH R.I. STANDARD  
DETAIL 17.7.1



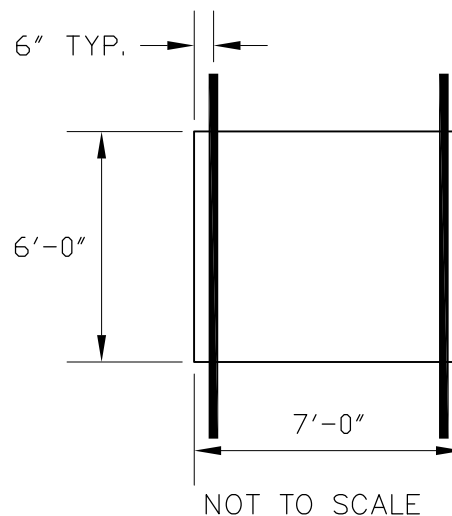
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**Detail No. 6e**  
**AVC/WIM Layout For 4-Lane Road And**  
**Pavement With Reinforced Concrete Base**



NOTE:  
TRAFFIC LOOP LAYOUT SHALL BE IN  
ACCORDANCE WITH R.I. STANDARD  
DETAIL 17.7.1

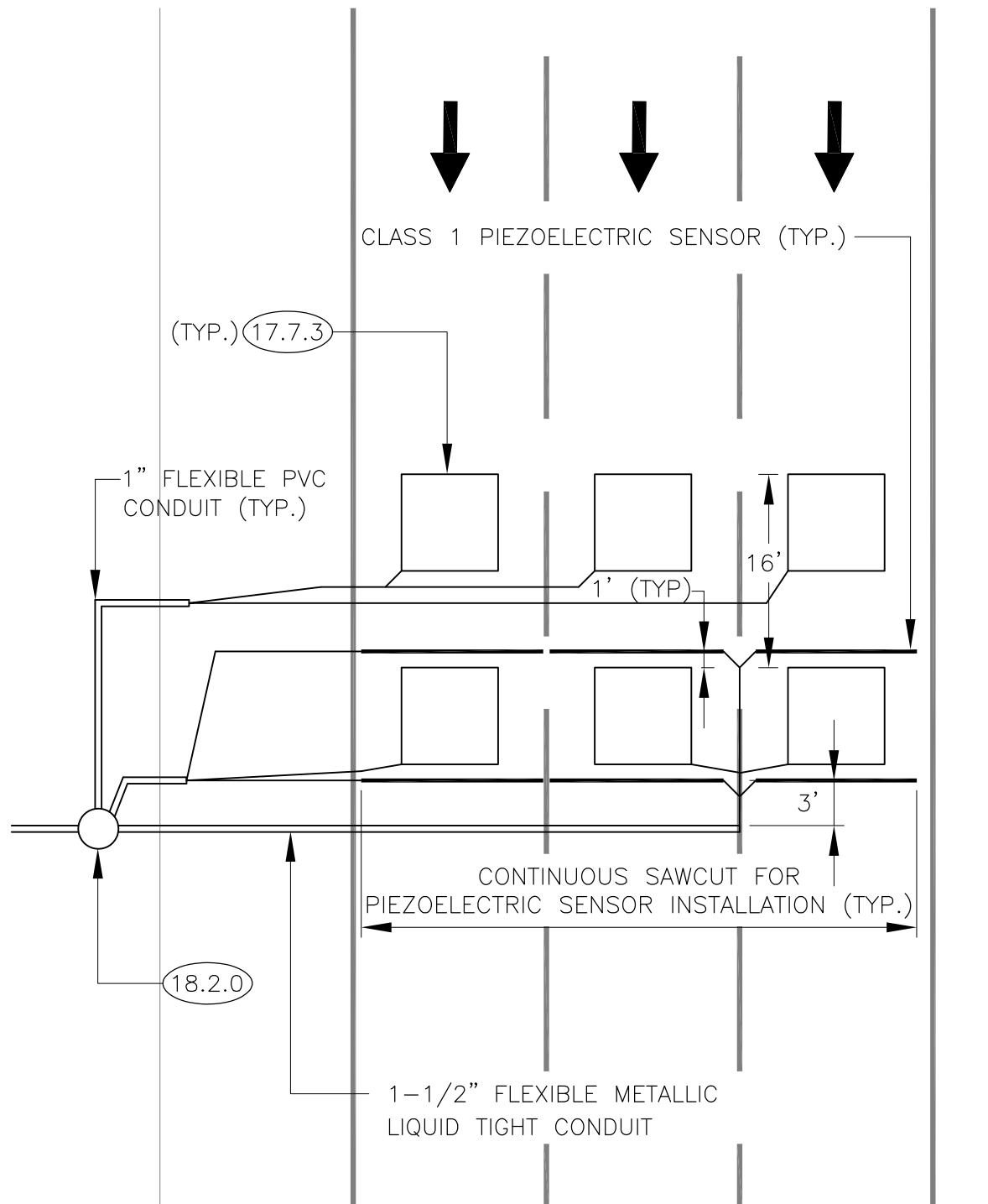


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# Rhode Island Department of Transportation Highway Performance Monitoring System Statewide, Rhode Island

### Detail No. 6f

## AVC/WIM Layout For 2-lane Road And Pavement With Reinforced Concrete Base



NOTE:  
TRAFFIC LOOP LAYOUT SHALL BE IN  
ACCORDANCE WITH R.I. STANDARD  
DETAIL 17.7.1

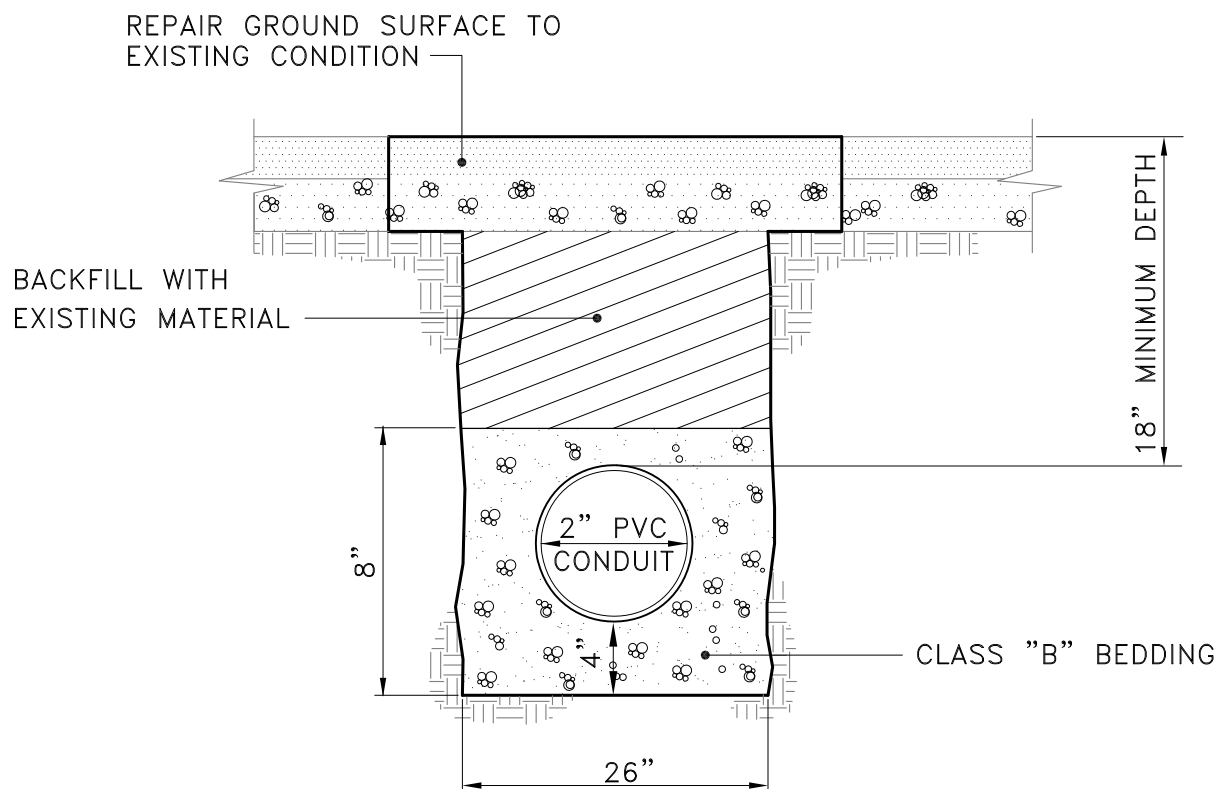
NOT TO SCALE



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**DETAIL No. 6g**  
AVC/WIM Layout For 3-lanes,  
Same Direction



**NOTE:**

TO ALLOW DRAINAGE OF THE CONDUIT, THE CONTRACTOR SHALL DRILL HOLES IN THE BOTTOM OF THE CONDUIT AT THE LOW POINT. ALSO AT THE LOW POINT, THE CONTRACTOR SHALL INSTALL THE CONDUIT IN CLASS B BEDDING AS SHOWN IN THE TYPICAL SECTION ON THIS SHEET.

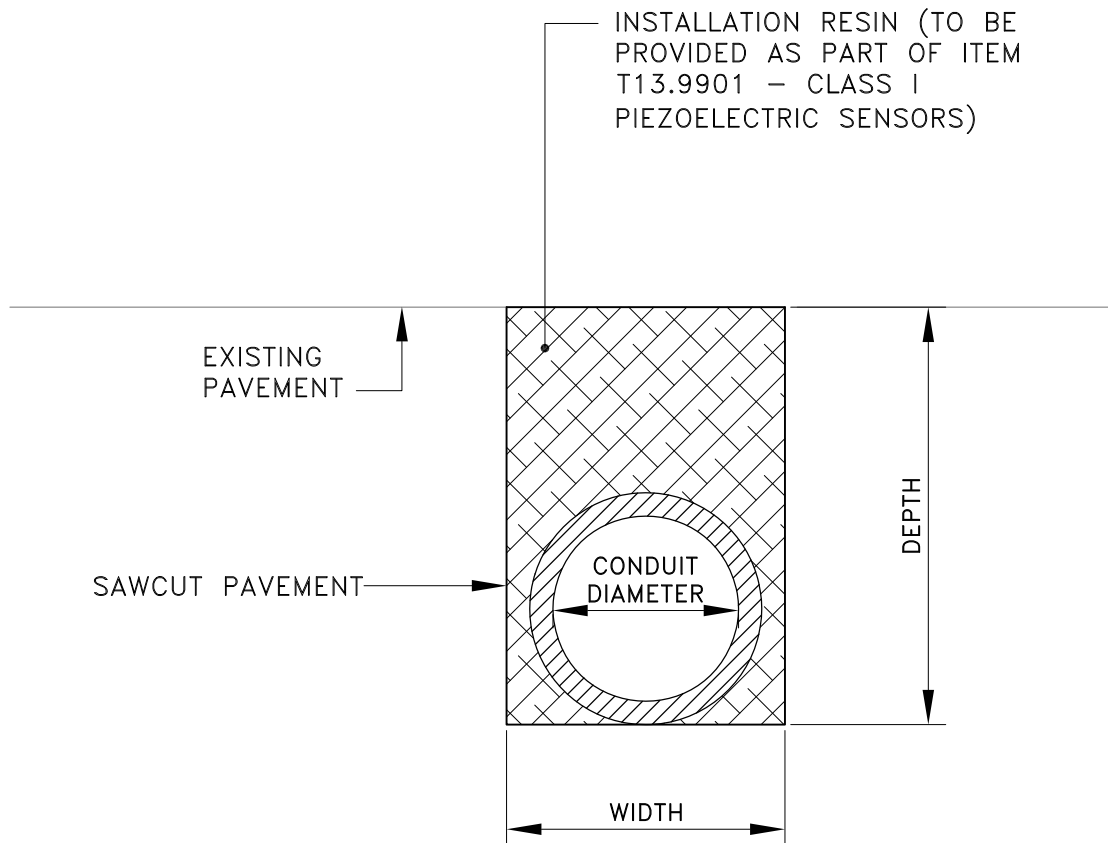
NOT TO SCALE



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**Detail No. 7a**  
**Typical Trench For Conduit**  
**Installation in Median**



CONDUIT DIAMETER	SAWCUT	
	DEPTH	WIDTH
1" (1.25" O.D.)	2.25"	1.50"
1.5" (1.875" O.D.)	2.75"	2.00"

NOT TO SCALE



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**Detail No. 7b**  
Typical Installation For Flexible Metallic  
Liquid Tight Conduit in Existing Pavement



Arrow board



Arrow board support or trailer  
(shown facing down)



Changeable message sign or support trailer



Channelizing device



Crash cushion



Direction of temporary traffic detour



Direction of traffic



Flagger



High-level warning device  
(Flag tree)



Longitudinal channelizing device



Luminaire



Pavement markings that should be  
removed for a long-term project



Shadow vehicle



Sign (shown facing left)



Surveyor



Temporary barrier



Temporary barrier with warning light



Traffic or pedestrian signal



Truck-mounted attenuator



Type 3 barricade



Warning light



Work space



Work vehicle



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## Traffic Control Setup Legend

**Table 6H-3. Meaning of Letter Codes on Typical Application Diagrams**

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

\* Speed category to be determined by highway agency

\*\* The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

**Table 6H-4. Formulas for Determining Taper Length**

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where: L = taper length in feet  
W = width of offset in feet  
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph



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Advance Warning Sign Spacing and  
Taper Length Determination



**Notes for Figure 6H-1—Typical Application 1  
Work Beyond the Shoulder**

**Guidance:**

1. *If the work space is in the median of a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.*

**Option:**

2. The ROAD WORK AHEAD sign may be replaced with other appropriate signs such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.
3. The ROAD WORK AHEAD sign may be omitted where the work space is behind a barrier, more than 24 inches behind the curb, or 15 feet or more from the edge of any roadway.
4. For short-term, short duration or mobile operation, all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
5. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

**Standard:**

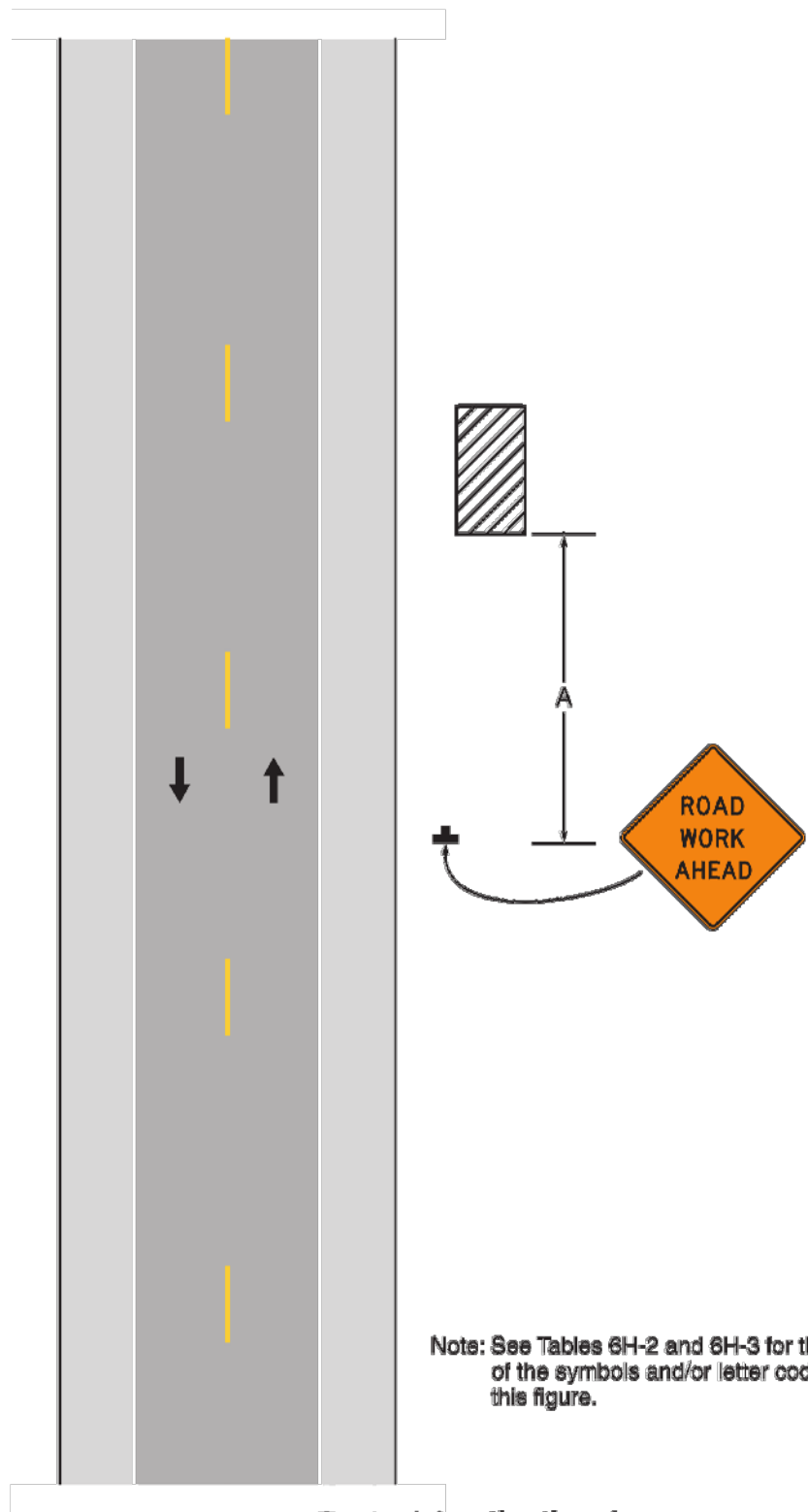
6. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.



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**Traffic Control Notes  
For Work Beyond The Shoulder**



Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

**Typical Application 1**



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**Traffic Control Setup  
For Work Beyond The Shoulder**

### Notes for Figure 6H-6—Typical Application 6 Shoulder Work with Minor Encroachment

**Guidance:**

1. *All lanes should be a minimum of 10 feet in width as measured to the near face of the channelizing devices.*
2. *The treatment shown should be used on a minor road having low speeds. For higher-speed traffic conditions, a lane closure should be used.*

**Option:**

3. For short-term use on low-volume, low-speed roadways with vehicular traffic that does not include longer and wider heavy commercial vehicles, a minimum lane width of 9 feet may be used.
4. Where the opposite shoulder is suitable for carrying vehicular traffic and of adequate width, lanes may be shifted by use of closely-spaced channelizing devices, provided that the minimum lane width of 10 feet is maintained.
5. Additional advance warning may be appropriate, such as a ROAD NARROWS sign.
6. Temporary traffic barriers may be used along the work space.
7. The shadow vehicle may be omitted if a taper and channelizing devices are used.
8. A truck-mounted attenuator may be used on the shadow vehicle.
9. For short-duration work, the taper and channelizing devices may be omitted if a shadow vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
10. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

**Standard:**

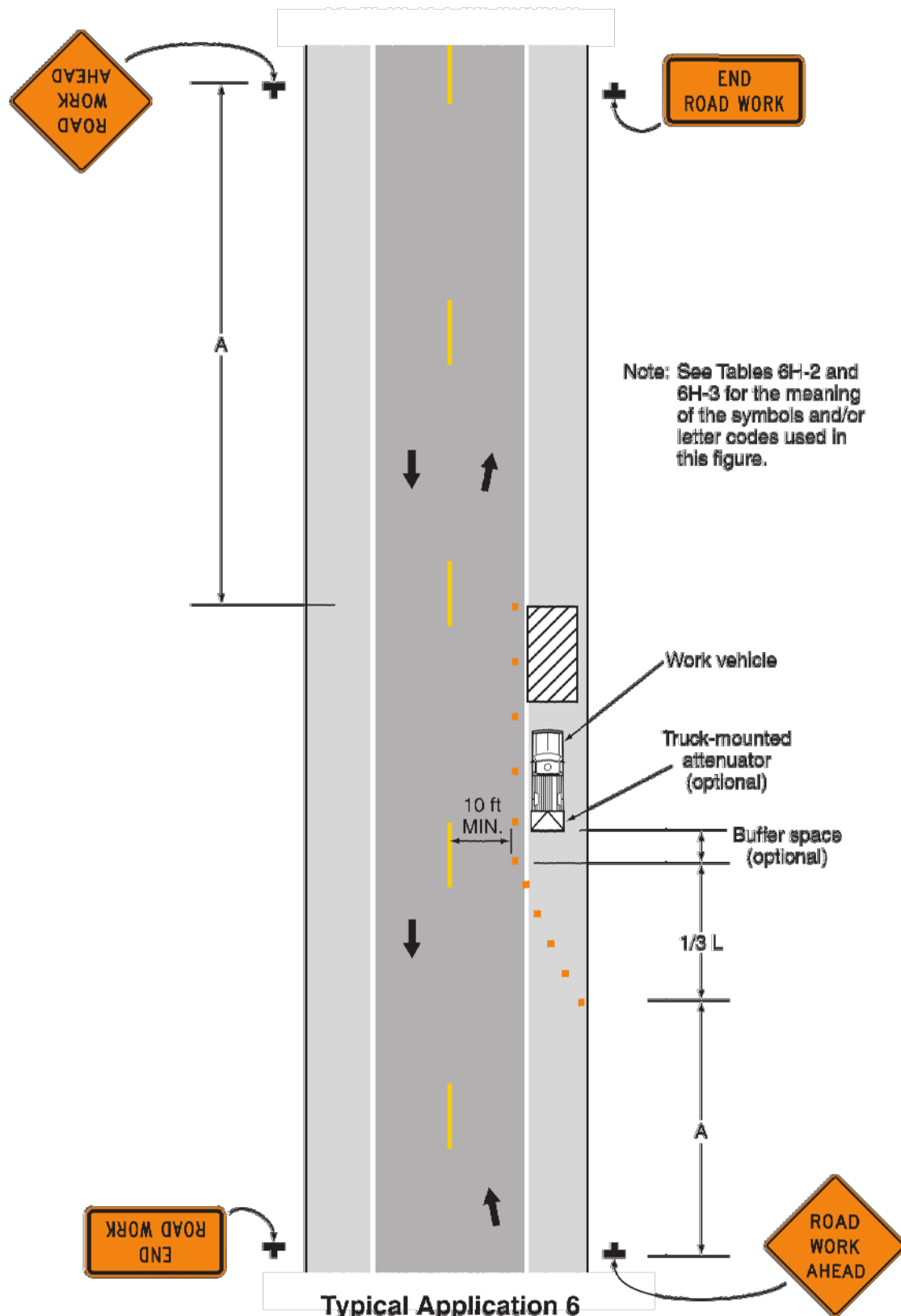
11. **Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.**
12. **Shadow and work vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.**
13. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.**



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**Traffic Control Notes  
For Shoulder Work With  
Minor Encroachment**



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## Traffic Control Setup For Shoulder Work With Minor Encroachment

## Notes for Figure 6H-10—Typical Application 10

### Lane Closure on a Two-Lane Road Using Flaggers

**Option:**

1. For low-volume situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger, positioned to be visible to road users approaching from both directions, may be used (see Chapter 6E).
2. The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short-duration operations.
3. Flashing warning lights and/or flags may be used to call attention to the advance warning signs. A BE PREPARED TO STOP sign may be added to the sign series.

**Guidance:**

4. *The buffer space should be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped vehicles.*

**Standard:**

5. **At night, flagger stations shall be illuminated, except in emergencies.**

**Guidance:**

6. *When used, the BE PREPARED TO STOP sign should be located between the Flagger sign and the ONE LANE ROAD sign.*
7. *When a grade crossing exists within or upstream of the transition area and it is anticipated that queues resulting from the lane closure might extend through the grade crossing, the TTC zone should be extended so that the transition area precedes the grade crossing.*
8. *When a grade crossing equipped with active warning devices exists within the activity area, provisions should be made for keeping flaggers informed as to the activation status of these warning devices.*
9. *When a grade crossing exists within the activity area, drivers operating on the left-hand side of the normal center line should be provided with comparable warning devices as for drivers operating on the right-hand side of the normal center line.*
10. *Early coordination with the railroad company or light rail transit agency should occur before work starts.*

**Option:**

11. A flagger or a uniformed law enforcement officer may be used at the grade crossing to minimize the probability that vehicles are stopped within 15 feet of the grade crossing, measured from both sides of the outside rails.

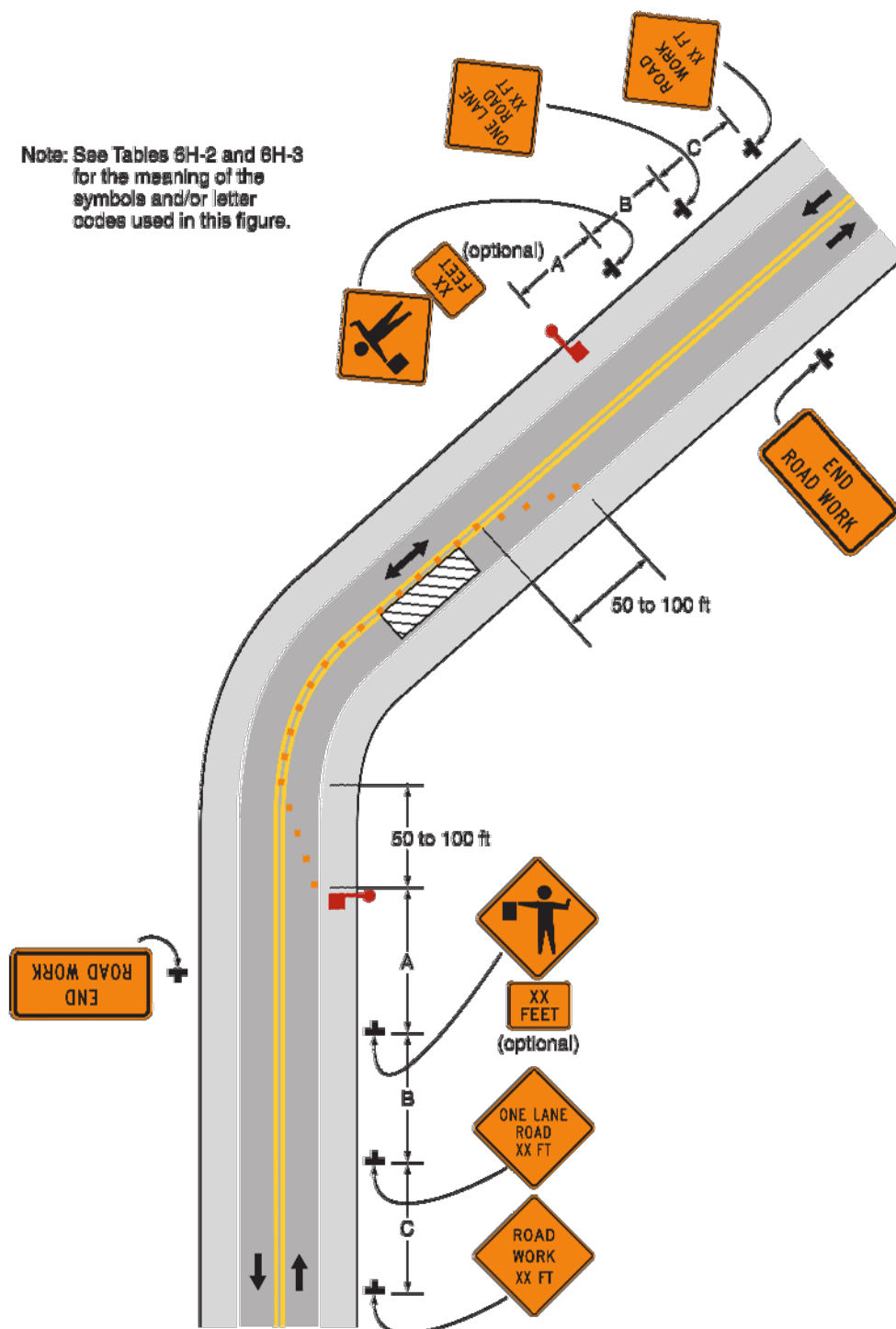


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Highway Performance Monitoring System  
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**Traffic Control Notes**  
**Lane Closure For One Lane**  
**Two Way Traffic Control**

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.



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Traffic Control Setup  
Lane Closure For One Lane  
Two Way Traffic Control



**Notes for Figure 6H-32—Typical Application 32  
Half Road Closure on a Multi-Lane, High-Speed Highway**

**Standard:**

1. Pavement markings no longer applicable shall be removed or obliterated as soon as practical. Except for intermediate-term and short-term situations, temporary markings shall be provided to clearly delineate the temporary travel path. For short-term and intermediate-term situations where it is not feasible to remove and restore pavement markings, channelization shall be made dominant by using a very close device spacing.

**Guidance:**

2. *When paved shoulders having a width of 8 feet or more are closed, channelizing devices should be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.*
3. *Where channelizing devices are used instead of pavement markings, the maximum spacing should be  $1/2 S$  feet where  $S$  is the speed in mph.*
4. *If the tangent distance along the temporary diversion is less than 600 feet, a Double Reverse Curve sign should be used instead of the first Reverse Curve sign, and the second Reverse Curve sign should be omitted.*

**Option:**

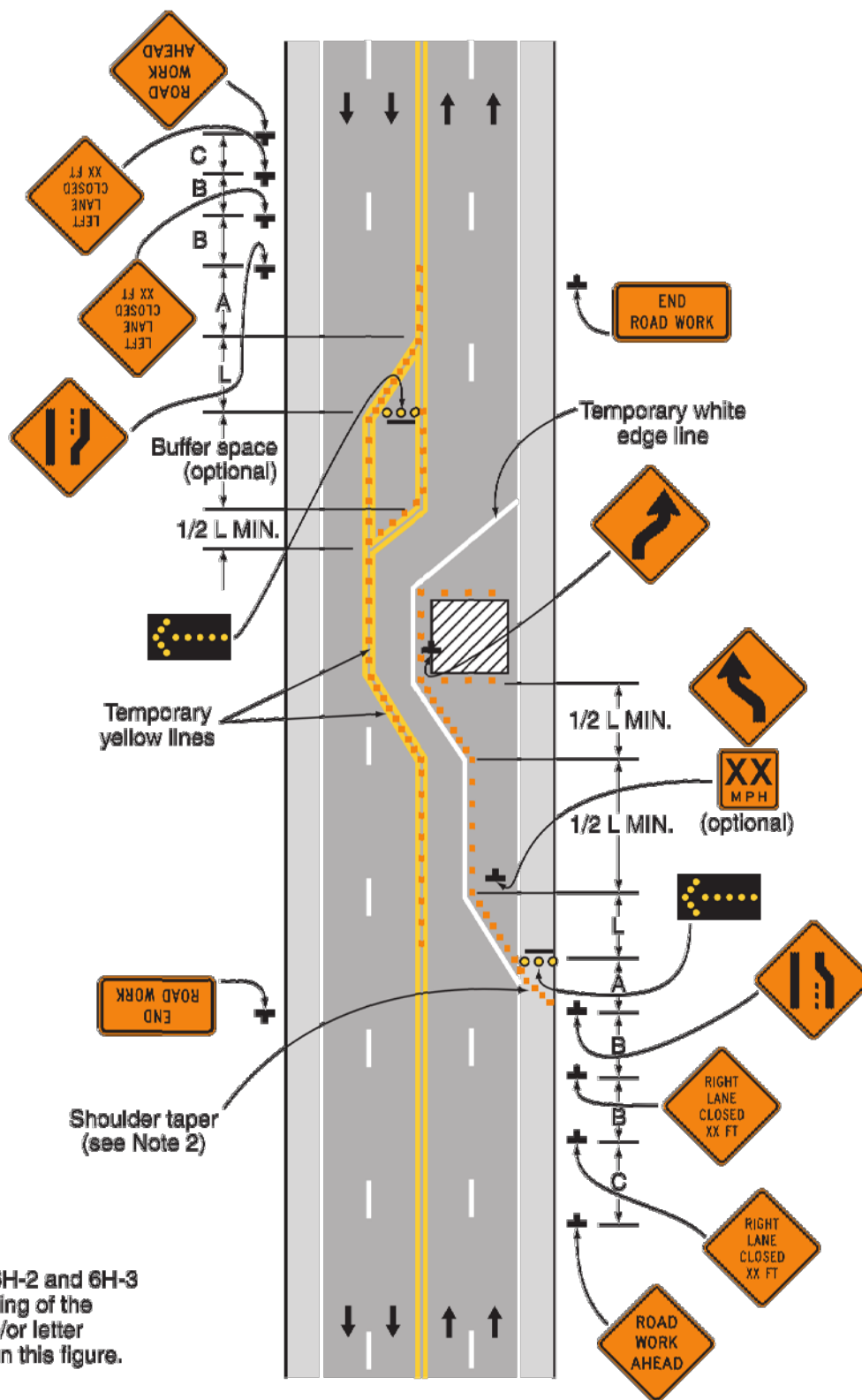
5. Warning lights may be used to supplement channelizing devices at night.
6. A truck-mounted attenuator may be used on the work vehicle and/or the shadow vehicle.



STATE OF RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION

Rhode Island Department of Transportation  
Highway Performance Monitoring System  
Statewide, Rhode Island

**Traffic Control Notes For  
Half Road Closure On Multilane  
High - Speed Highway**



Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.



STATE OF RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION

Rhode Island Department of Transportation  
Highway Performance Monitoring System  
Statewide, Rhode Island

## Traffic Control Setup For Half Road Closure On Multilane High - Speed Highway



### Notes for Figure 6H-33—Typical Application 33 Stationary Lane Closure on a Divided Highway

**Standard:**

1. This information also shall be used when work is being performed in the lane adjacent to the median on a divided highway. In this case, the LEFT LANE CLOSED signs and the corresponding Lane Ends signs shall be substituted.
2. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.

**Guidance:**

3. When paved shoulders having a width of 8 feet or more are closed, channelizing devices should be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.

**Option:**

4. A truck-mounted attenuator may be used on the work vehicle and/or shadow vehicle.

**Support:**

5. Where conditions permit, restricting all vehicles, equipment, workers, and their activities to one side of the roadway might be advantageous.

**Standard:**

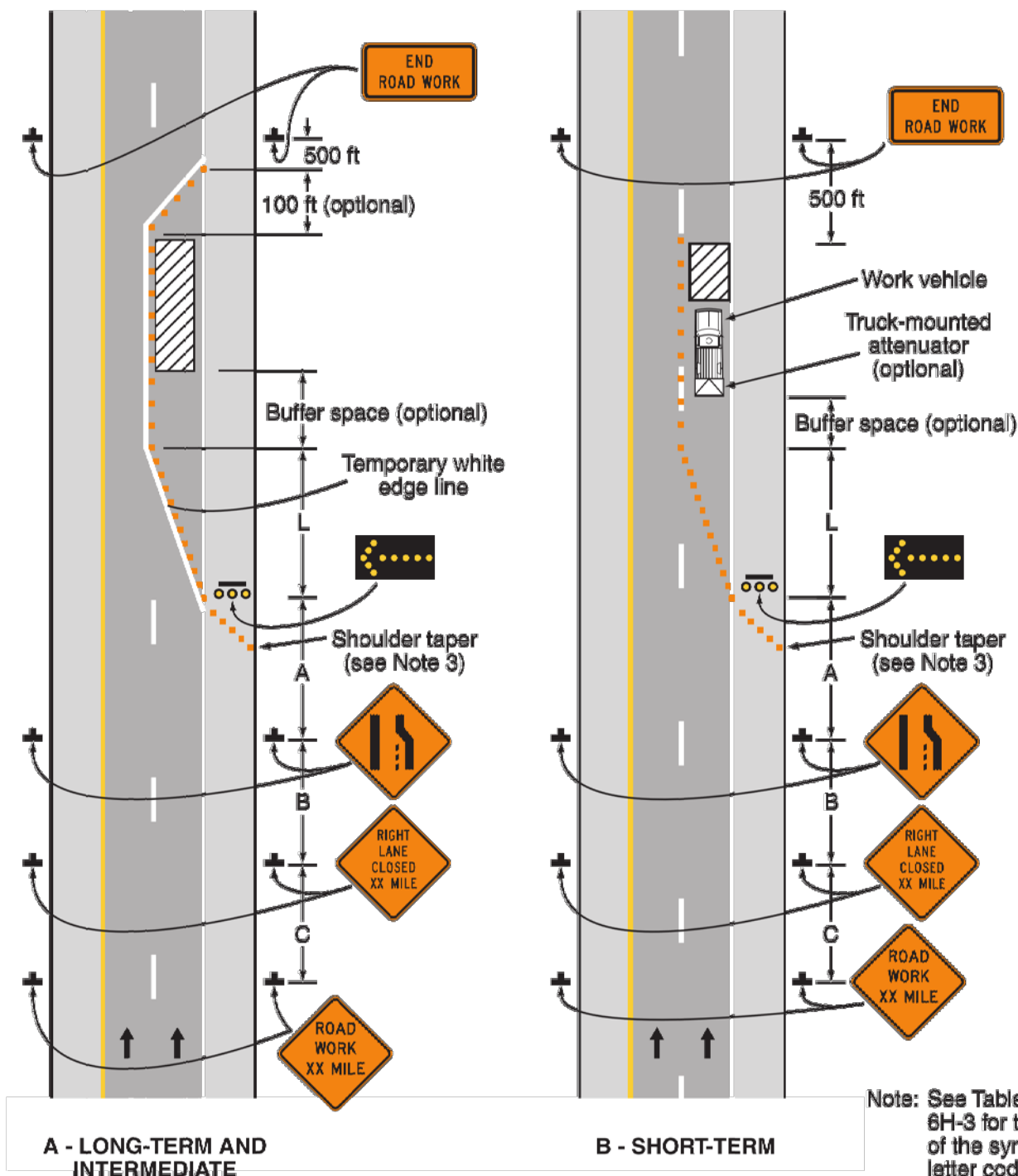
6. An arrow board shall be used when a freeway lane is closed. When more than one freeway lane is closed, a separate arrow board shall be used for each closed lane.



STATE OF RHODE ISLAND  
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Rhode Island Department of Transportation  
Highway Performance Monitoring System  
Statewide, Rhode Island

**Traffic Control Notes  
For Lane Closure  
On Divided Highway**



**Typical Application 33**



STATE OF RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION

Rhode Island Department of Transportation  
Highway Performance Monitoring System  
Statewide, Rhode Island

**Traffic Control Setup  
For Lane Closure  
On Divided Highway**

## Notes for Figure 6H-37—Typical Application 37

### Double Lane Closure on a Freeway

#### Standard:

1. An arrow board shall be used when a freeway lane is closed. When more than one freeway lane is closed, a separate arrow board shall be used for each closed lane.

#### Guidance:

2. Ordinarily, the preferred position for the second arrow board is in the closed exterior lane at the upstream end of the second merging taper. However, the second arrow board should be placed in the closed interior lane at the downstream end of the second merging taper in the following situations:
  - a. When a shadow vehicle is used in the interior closed lane, and the second arrow board is mounted on the shadow vehicle;
  - b. If alignment or other conditions create any confusion as to which lane is closed by the second arrow board; and
  - c. When the first arrow board is placed in the closed exterior lane at the downstream end of the first merging taper (the alternative position when the shoulder is narrow).

#### Option:

3. Flashing warning lights and/or flags may be used to call attention to the initial warning signs.
4. A truck-mounted attenuator may be used on the shadow vehicle.
5. If a paved shoulder having a minimum width of 10 feet and sufficient strength is available, the left and adjacent interior lanes may be closed and vehicular traffic carried around the work space on the right-hand lane and a right-hand shoulder.

#### Guidance:

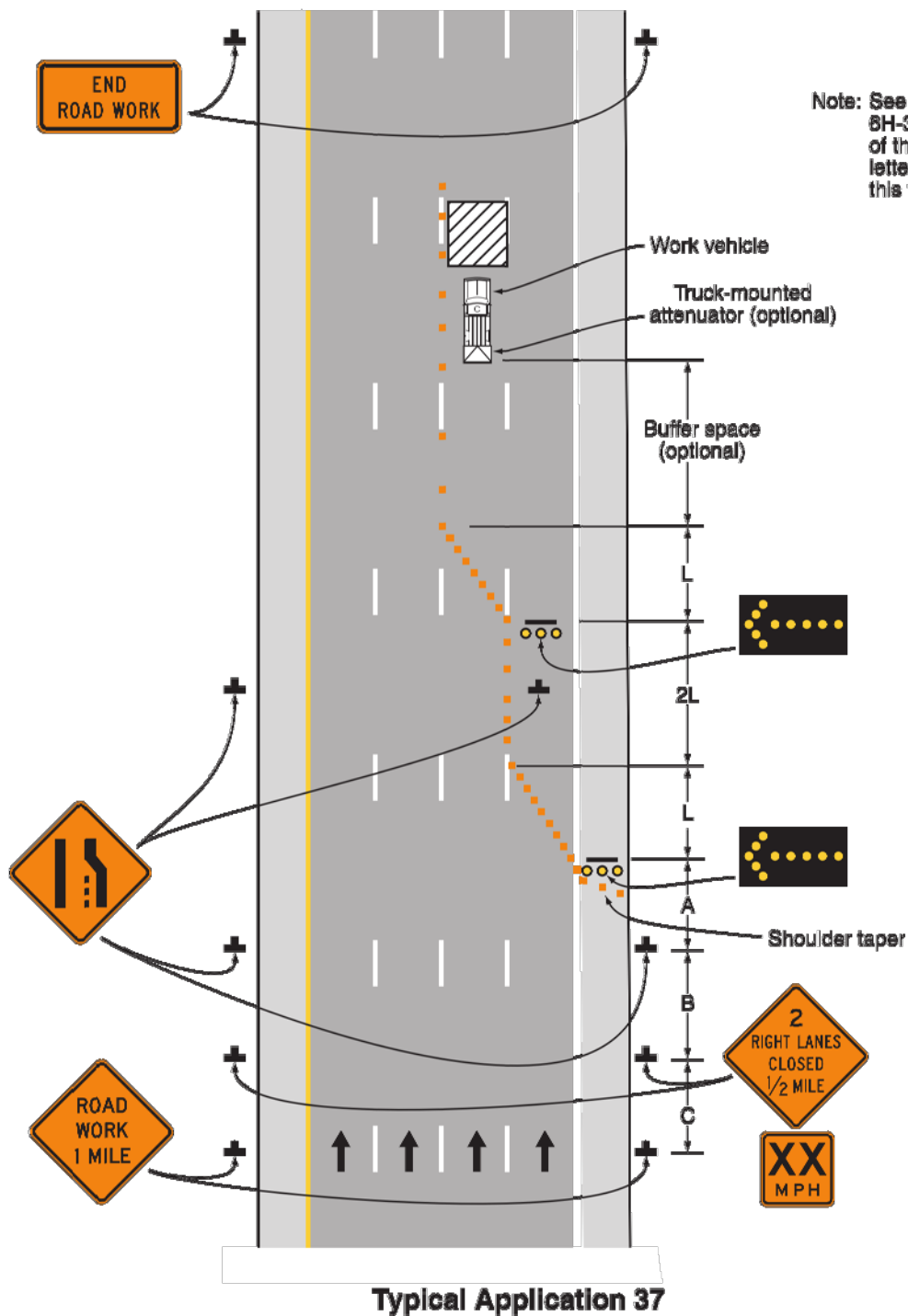
6. When a shoulder lane is used that cannot adequately accommodate trucks, trucks should be directed to use the normal travel lanes.



STATE OF RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION

Rhode Island Department of Transportation  
Highway Performance Monitoring System  
Statewide, Rhode Island

**Traffic Control Notes  
For Double Lane Closure  
On Freeway**



STATE OF RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION

Rhode Island Department of Transportation  
Highway Performance Monitoring System  
Statewide, Rhode Island

## Traffic Control Setup For Double Lane Closure On Freeway

## APPENDIX B REQUIRED FORMS

Revised: 4/12/2002

<b>Traffic Monitoring Stations On-Call Services Contract – 2020-CT-027</b>
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**ANTI-COLLUSION CERTIFICATE FOR CONTRACT AND FORCE ACCOUNT**  
**[Unsworn Declaration]**

Title 23, United States Code, Section 112(c), requires, as a condition precedent to approval by the Director of Public Roads of the contract for this work, that there be filed an unsworn declaration executed by, 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. This unsworn statement shall be in the form of a declaration executed under penalty of perjury under the laws of the United States.

To the: **STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS**  
**DEPARTMENT OF TRANSPORTATION, DIVISION OF PUBLIC WORKS**

State of \_\_\_\_\_

County of \_\_\_\_\_

I, \_\_\_\_\_, \_\_\_\_\_, under  
penalty under the laws of the United States, do depose and say:

On behalf of \_\_\_\_\_, of \_\_\_\_\_ that  
said Contractor 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 Rhode Island Contract Number \_\_\_\_\_, Federal-Aid Project Number  
\_\_\_\_\_, County of \_\_\_\_\_  
Town-City \_\_\_\_\_, Road-Bridge \_\_\_\_\_.

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION,  
AND OTHER RESPONSIBILITY MATTERS  
PRIMARY COVERED TRANSACTIONS**

In accordance with the code of Federal Regulations, Part 49 CFR Section 29.5 10, the prospective primary participant \_\_\_\_\_, \_\_\_\_\_, being duly sworn (or executed under penalty of perjury under the laws of the United States), certifies to the best of his/her knowledge and belief, that its principals:

- a.) Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily Excluded from covered transactions by any Federal department or agency;
- b.) 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;
- c.) 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 (l)(b) of this certification;
- d.) 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.

Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall list exceptions below.

Exceptions will not necessarily result in denial of award, but, will be considered in determining contractor responsibility. For any exception noted, indicate below to whom it applies, the initiating agency, and the dates of the action. Providing false information may result in criminal prosecution or administrative sanctions. If an exception is noted the contractor must contact the Department to discuss the exception prior to award of the contract.

<b>Traffic Monitoring Stations On-Call Services Contract – 2020-CT-027</b>
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### Conflicts Disclosure Policy

To ensure that the Rhode Island Department of Transportation (RIDOT) maintains the continued confidence and trust of the people of Rhode Island in carrying out its mission, prospective vendors must disclose any family (or other personal) relationships, associations or connections that the vendor, its affiliates, or employees, may currently have with any RIDOT employee. A Conflicts Disclosure Statement shall be submitted to RIDOT from the following:

- Owners;
- Directors;
- Principals;
- Officers, board members, or individuals with corporate authority;
- If the vendor is a partnership, the applicant's partners;
- If the vendor is a limited liability company, its members and managers;
- Employees with decision-making authority, including executive directors, managers or individuals in a similar position with corporate authority; and
- Shareholders with a controlling interest.



Conflicts Disclosure Statement

RE:

I, BLANK hereby certify as follows:

I am employed as a BLANK of BLANK and to the best of my knowledge:

PLEASE CHECK THE APPROPRIATE CIRCLE:

- ☐ I have no family or personal relations currently employed either on a full-time or part-time basis at the Rhode Island Department of Transportation.
- ☐ I do have family or personal relations currently employed at the Rhode Island Department of Transportation. Please list their name(s), title(s), and RIDOT Division(s) (if known):

Name	Title	RIDOT Division

*If necessary, please add any additional names as attachments hereto.*

**FOR ILLUSTRATIVE PURPOSES, FAMILY RELATIONS SHALL INCLUDE, WHETHER BY BLOOD, ADOPTION OR MARRIAGE, ANY OF THE FOLLOWING RELATIONSHIPS:**

**Father, Mother, Son, Daughter, Brother, Sister, Grandfather, Grandmother, Grandson, Granddaughter, Father-In-Law, Mother-In-Law, Brother-In-Law, Sister-In-Law, Son-In-Law, Daughter-In-Law, Stepfather, Stepmother, Stepson, Stepdaughter, Stepbrother, Stepsister, Half-Brother Or Half-Sister, Niece, Nephew, And Cousin**

- *If you are unsure whether a relationship, association, or connection you have may need to be disclosed, please consult with RIDOT's Legal Office at (401) 222-6510.*

SIGNATURE

DATE

By signing this form you: (1) certify that the information contained in this form is complete and accurate to the best of your knowledge; and (2) acknowledge your continuing obligation to complete and submit a new Disclosure form when there is any change in your family or personal relations during the course of this Contract.

This document is used for internal RIDOT purposes only in order to address and avoid any potential conflicts at the inception of the contract process and to avoid any impropriety or the appearance of impropriety during the contract process. Any disclosures made hereto will not prejudice prospective vendors from selection.

<b>Traffic Monitoring Stations On-Call Services Contract – 2020-CT-027</b>
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**Disclosure of Lobbying Activities**

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

(See reverse for public burden disclosure)

<b>1. Type of Federal Action:</b> _____ a. contract _____ b. grant _____ c. cooperative agreement _____ d. loan _____ e. loan guarantee _____ f. loan insurance	<b>2. Status of Federal Action:</b> _____ a. bid/offer/application _____ b. initial award _____ c. post-award	<b>3. Report Type:</b> _____ a. initial filing _____ b. material change  <b>For material change only:</b> Year _____ quarter _____ Date of last report _____
<b>4. Name and Address of Reporting Entity:</b> _____ Prime      _____ Subawardee Tier _____, if Known:   <b>Congressional District, if known:</b>	<b>5. If Reporting Entity in No. 4 is Subawardee,</b> Enter Name and Address of Prime:    <b>Congressional District, if known:</b>	
<b>6. Federal Department/Agency:</b>	<b>7. Federal Program Name/Description:</b>  CFDA Number, if applicable: _____	
<b>8. Federal Action Number, if known:</b>	<b>9. Award Amount, if known:</b> \$ _____	
<b>10. a. Name and Address of Lobbying Registrant</b> <i>(if individual, last name, first name, MI):</i>	<b>b. Individuals Performing Services</b> <i>(including address if different from No. 10a)</i> <i>(last name, first name, MI):</i>	
<b>11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.</b>		
<b>Signature:</b> _____  <b>Print Name:</b> _____  <b>Title:</b> _____  <b>Telephone No.:</b> _____ <b>Date:</b> _____		
<b>Federal Use Only</b>		
<b>Authorized for Local Reproduction</b> <b>Standard Form - LLL (Rev. 7-97)</b>		

## INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitations for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Included prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.  
  
(b) Enter the full names of the individual(s) performing services, and include full address if different from 10(a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

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According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503

**Traffic Monitoring Stations On-Call Services Contract – 2020-CT-027**
**BID CONDITIONS**
**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL 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 Opportunity Construction Contract Specifications set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for Minority Participation for Each Trade	Goals for Female Participation in Each Trade
	3.0% R.I. Except Newport County	6.9%
	3.1% Newport County	6.9%

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 nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications 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, 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 through the Area Director, OFCCP, 169 Weybosset Street, Providence, Rhode Island 02903, within 10 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 notification shall list the name, address and telephone number of the Subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.
4. As used in this Notice, and in the contract resulting from this Solicitation, the "covered area" is the State of Rhode Island.

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.
  - (d) "Minority" includes:
    - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
    - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
    - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
    - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
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 a 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 Subcontractor 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 a approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take 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 forth in the solicitation from which this contract resulted are expressed as percentages of 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. Covered Construction Contractors performing construction work in geographical areas where they do not have a

Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical

area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting 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 minorities 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 nonworking 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 to 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 Contractors 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 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 organization 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 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 notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contactor, 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 complied under 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 work 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, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or 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 notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection procedures.
- (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 work force.
- (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 the 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 (7a through p). The efforts of a contractor associations, 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 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, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force 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 noncompliance.

- 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 nonminority. 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 a 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 underutilized).
- 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 or 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, termination 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 application of other laws which establish different standards of compliance or upon the application of 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.).

- (a) A Form 257, Monthly Employment Utilization Report, is to be completed by both Contractor and Subcontractors, and signed by the designated EEO Officer or an authorized representative of the prime or subcontractor. The reports are to be submitted by the 5th of each month during the term of the contract. The Contractor shall submit an aggregate Form 257 showing its entire work force, minority work force, and female work force (in work hours), on all construction work (Federal and non-federally assisted) in the covered area. The Contractor shall collect and submit reports for each Subcontractor's aggregate work force, providing the same information as above.
- (b) The Contractor shall submit a Form PR-1391 , Federal-Aid Highway Construction Contractors' Annual EEO Report, to be completed by the Contractor and each Subcontractor for every month of July, during which work was performed and submitted to the State. A separate report is to be completed for each Contractor and subcontractor holding contracts or subcontracts exceeding \$10,000.00, except where specified. The employment data entered should reflect the work force on board during all or any part of the last payroll period preceding the end of the month of July.

NOTE: Include the R.I. Contract Number in the upper right-hand corner of the form.

- (c) The Contractor shall submit a Form EEO-10, Federal-Aid Highway Construction Contractors' Semiannual Training Report, to be completed by the Contractor semiannually for each individual employed on this contract (including any subcontractors under it who have provided training during the reporting period under the training special provision). This report is to be submitted by the 20th of the month following the reporting period (July 20 and January 20). The original of this report is to be furnished to the trainee, and two (2) copies submitted to the State.

These reports are required by the Public Laws of Rhode Island (1960), Chapters 85, 96, & 88; 23 U.S.C., 140(a); 23 CFR, Part 23; and Executive Order 11246.

Name \_\_\_\_\_

Date \_\_\_\_\_



**USDOT Standard Title VI/Nondiscrimination  
Assurances for Contractors  
DOT Order 1050.2A**

Project: **Traffic Monitoring Stations On-Call Services Contract – 2020-CT-027**

I, \_\_\_\_\_, \_\_\_\_\_ **Job Title** \_\_\_\_\_, a duly  
authorized representative of \_\_\_\_\_ **Company Name** \_\_\_\_\_  
do hereby certify that the organization affirmatively agrees to the provisions set forth by *U.S. DOT  
Order 1050.2A, DOT Standard Title VI Assurances and Non-Discrimination Provisions (April 11, 2013)*

\_\_\_\_\_  
**Signature of Authorized Official**

\_\_\_\_\_  
**Date**

**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 Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin 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, 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, or national origin.

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 Federal Highway Administration 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 Federal Highway Administration, 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 Federal Highway Administration 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 Federal Highway Administration 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.

## **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:

### **Pertinent Non-Discrimination Authorities:**

- 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); and 49 CFR Part 21;
- 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, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- 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 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.*).

Last Update: November 2017

## 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 designbuild 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 601.4(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 nonminority 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 FHWA1273 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 DavisBacon 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 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 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 Federalaid 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 of 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 contractor). "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 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

"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



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.

## Appendix C - Federal Wage Rates

"General Decision Number: RI20200001 03/13/2020

Superseded General Decision Number: RI20190001

State: Rhode Island

Construction Types: Building, Heavy (Heavy and Marine) and Highway

Counties: Rhode Island Statewide.

**BUILDING CONSTRUCTION PROJECTS** (does not include residential construction consisting of single family homes and apartments up to and including 4 stories) **HEAVY, HIGHWAY AND MARINE CONSTRUCTION PROJECTS**

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/03/2020
1	01/24/2020
2	02/21/2020
3	03/06/2020
4	03/13/2020

ASBE0006-006 12/01/2019

Rates      Fringes

HAZARDOUS MATERIAL HANDLER  
(Includes preparation,  
wetting, stripping, removal  
scrapping, vacuuming, bagging  
& disposing of all insulation  
materials, whether they  
contain asbestos or not, from  
mechanical systems).....\$ 36.60      22.40

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ASBE0006-008 09/01/2019

	Rates	Fringes
Asbestos Worker/Insulator Includes application of all insulating materials, protective coverings, coatings & finishes to all types of mechanical systems.	\$ 43.60	29.90

-----  
BOIL0029-001 01/01/2017

	Rates	Fringes
BOILERMAKER.....	\$ 42.42	24.92

-----  
BRRI0003-001 12/01/2019

	Rates	Fringes
Bricklayer, Stonemason, Pointer, Caulker & Cleaner.....	\$ 41.00	27.83

-----  
BRRI0003-002 03/01/2020

	Rates	Fringes
Marble Setter, Terrazzo Worker & Tile Setter.....	\$ 40.78	28.92

-----  
BRRI0003-003 03/01/2020

	Rates	Fringes
Marble, Tile & Terrazzo Finisher.....	\$ 34.10	27.88

-----  
CARP0330-001 09/01/2019

	Rates	Fringes
CARPENTER (Includes Soft Floor Layer).....	\$ 38.48	28.60

Diver Tender.....	\$ 36.28	27.15
DIVER.....	\$ 49.28	28.50
Piledriver.....	\$ 37.13	28.45
WELDER.....	\$ 39.48	28.60

FOOTNOTES:

- When not diving or tending the diver, the diver and diver tender shall receive the piledriver rate. Diver tenders shall receive \$1.00 per hour above the pile driver rate when tending the diver.
- Work on free-standing stacks, concrete silos & public utility electrical power houses, which are over 35 ft. in height when constructed: \$.50 per hour additional.
- Work on exterior concrete shear wall gang forms, 45 ft. or more above ground elevation or on setback: \$.50 per hour additional.
- The designated piledriver, known as the ""monkey"": \$1.00 per hour additional.

CARP1121-002 01/06/2020

	Rates	Fringes
MILLWRIGHT.....	\$ 39.07	29.15

ELEC0099-002 06/01/2019

	Rates	Fringes
ELECTRICIAN.....	\$ 40.40	57.24%
Teledata System Installer.....	\$ 30.30	13.10%+14.53

FOOTNOTES:

- Work of a hazardous nature, or where the work height is 30 ft. or more from the floor, except when working OSHA-approved lifts: 20% per hour additional.
- Work in tunnels below ground level in combined sewer outfall: 20% per hour additional.

ELEV0039-001 01/01/2020

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 53.25	34.765+a+b

FOOTNOTES:

A. PAID HOLIDAYS: New Years Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day; the Friday after Thanksgiving Day; and Christmas Day.

B. Employer contributes 8% basic hourly rate for 5 years or more of service of 6% basic hourly rate for 6 months to 5 years of service as vacation pay credit.

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ENGI0057-001 12/01/2019

Rates                      Fringes

Operating Engineer: (power plants, sewer treatment plants, pumping stations, tunnels, caissons, piers, docks, bridges, wind turbines, subterranean & other marine and heavy construction work)

GROUP 1.....	\$ 42.55	25.95+a
GROUP 2.....	\$ 40.55	25.95+a
GROUP 3.....	\$ 36.17	25.95+a
GROUP 4.....	\$ 33.32	25.95+a
GROUP 5.....	\$ 39.60	25.95+a
GROUP 6.....	\$ 30.40	25.95+a
GROUP 7.....	\$ 24.40	25.95+a
GROUP 8.....	\$ 36.25	25.95+a
GROUP 9.....	\$ 40.17	25.95+a

a. BOOM LENGTHS, INCLUDING JIBS:

- 150 feet and over + \$ 2.00
- 180 feet and over + \$ 3.00
- 210 feet and over + \$ 4.00
- 240 feet and over + \$ 5.00
- 270 feet and over + \$ 7.00
- 300 feet and over + \$ 8.00
- 350 feet and over + \$ 9.00
- 400 feet and over + \$10.00

a. PAID HOLIDAYS:  
New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, Christmas Day. a: Any employee who works 3 days in the week in which a holiday falls shall be paid for the holiday.

a. FOOTNOTES:  
Hazmat work: \$2.00 per hour additional.  
Tunnel/Shaft work: \$5.00 per hour additional.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, lighters, boom trucks and derricks

GROUP 2: Digging machine, Ross Carrier, locomotive, hoist, elevator, bidwell-type machine, shot & water blasting machine, paver, spreader, graders, front end loader (3 yds. and over), vibratory hammer & vacuum truck, roadheaders, forklifts, economobile type equipment, tunnel boring machines, concrete pump and on site concrete plants.

GROUP 3: Oilers on cranes.

GROUP 4: Oiler on crawler backhoe.

GROUP 5: Bulldozer, bobcats, skid steer loader, tractor, scraper, combination loader backhoe, roller, front end loader (less than 3 yds.), street and mobile-powered sweeper (3-yd. capacity), 8-ft. sweeper minimum 65 HP).

GROUP 6: Well-point installation crew.

GROUP 7: Utility Engineers and Signal Persons

GROUP 8: Heater, concrete mixer, stone crusher, welding machine, generator and light plant, gas and electric driven pump and air compressor.

GROUP 9: Boat & tug operator.

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ENGI0057-002 11/01/2019

	Rates	Fringes
Power Equipment Operator (highway construction projects; water and sewerline projects which are incidental to highway construction projects; and bridge projects that do not span water)		
GROUP 1.....	\$ 35.70	25.95+a
GROUP 2.....	\$ 30.40	25.95+a
GROUP 3.....	\$ 24.40	25.95+a
GROUP 4.....	\$ 30.98	25.95+a
GROUP 5.....	\$ 34.68	25.95+a
GROUP 6.....	\$ 34.30	25.95+a
GROUP 7.....	\$ 29.95	25.95+a
GROUP 8.....	\$ 31.33	25.95+a
GROUP 9.....	\$ 33.28	25.95+a

a. FOOTNOTE: a. Any employee who works three days in the week



in which a holiday falls shall be paid for the holiday.

- a. PAID HOLIDAYS: New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day & Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Digging machine, crane, piledriver, lighter, locomotive, derrick, hoist, boom truck, John Henry's, directional drilling machine, cold planer, reclaimer, paver, spreader, grader, front end loader (3 yds. and over), vacuum truck, test boring machine operator, veemere saw, water blaster, hydro-demolition robot, forklift, economobile, Ross Carrier, concrete pump operator and boats

GROUP 2: Well point installation crew

GROUP 3: Utlity engineers and signal persons

GROUP 4: Oiler on cranes

GROUP 5: Combination loader backhoe, front end loader (less than 3 yds.), forklift, bulldozers & scrapers and boats

GROUP 6: Roller,skid steer loaders, street sweeper

GROUP 7: Gas and electric drive heater, concrete mixer, light plant, welding machine, pump & compressor

GROUP 8: Stone crusher

GROUP 9: Mechanic & welder

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ENGI0057-003 12/01/2019

BUILDING CONSTRUCTION

	Rates	Fringes
Power Equipment Operator		
GROUP 1.....	\$ 41.82	25.95+a
GROUP 2.....	\$ 39.82	25.95+a
GROUP 3.....	\$ 39.60	25.95+a
GROUP 4.....	\$ 35.60	25.95+a
GROUP 5.....	\$ 32.75	25.95+a
GROUP 6.....	\$ 38.90	25.95+a
GROUP 7.....	\$ 38.47	25.95+a
GROUP 8.....	\$ 35.79	25.95+a

- a.BOOM LENTHS, INCLUDING JIBS:

150 ft. and over: + \$ 2.00

180 ft. and over: + \$ 3.00  
210 ft. and over: + \$ 4.00  
240 ft. and over: + \$ 5.00  
270 ft. and over: + \$ 7.00  
300 ft. and over: + \$ 8.00  
350 ft. and over: + \$ 9.00  
400 ft. and over: + \$10.00

a. PAID HOLIDAYS: New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day & Christmas Day. a: Any employee who works 3 days in the week in which a holiday falls shall be paid for the holiday.

a. FOOTNOTE: Hazmat work: \$2.00 per hour additional.  
Tunnel/Shaft work: \$5.00 per hour additional.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, lighters, boom trucks and derricks.

GROUP 2: Digging machine, Ross carrier, locomotive, hoist, elevator, bidwell-type machine, shot & water blasting machine, paver, spreader, front end loader (3 yds. and over), vibratory hammer and vacuum truck

GROUP 3: Telehandler equipment, forklift, concrete pump & on-site concrete plant

GROUP 4: Fireman & oiler on cranes

GROUP 5: Oiler on crawler backhoe

GROUP 6: Bulldozer,skid steer loaders,bobcats, tractor, grader, scraper,combination loader backhoe, roller, front end loader (less than 3 yds.), street and mobile powered sweeper (3 yds. capacity), 8-ft. sweeper (minimum 65 hp)

GROUP 7: Well point installation crew

GROUP 8: Heater, concrete mixer, stone crusher, welding machine, generator for light plant, gas and electric driven pump & air compressor

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IRON0037-001 09/16/2019

	Rates	Fringes
IRONWORKER.....	\$ 36.27	28.98

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LABO0271-001 06/02/2019

BUILDING CONSTRUCTION

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 31.80	25.05
GROUP 2.....	\$ 32.05	25.05
GROUP 3.....	\$ 32.55	25.05
GROUP 4.....	\$ 32.80	25.05
GROUP 5.....	\$ 33.80	25.05

LABORERS CLASSIFICATIONS

GROUP 1: Laborer, Carpenter Tender, Mason Tender, Cement Finisher Tender, Scaffold Erector, Wrecking Laborer, Asbestos Removal [Non-Mechanical Systems]

GROUP 2: Asphalt Raker, Adzemen, Pipe Trench Bracer, Demolition Burner, Chain Saw Operator, Fence & Guard Rail Erector, Setter of Metal Forms for Roadways, Mortar Mixer, Pipelayer, Riprap & Dry Stonewall Builder, Highway Stone Spreader, Pneumatic Tool Operator, Wagon Drill Operator, Tree Trimmer, Barco-Type Jumping Tamper, Mechanical Grinder Operator

GROUP 3: Pre-Cast Floor & Roof Plank Erectors

GROUP 4: Air Track Operator, Hydraulic & Similar Self-Powered Drill, Block Paver, Rammer, Curb Setter, Powderman & Blaster

GROUP 5: Toxic Waste Remover

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LABO0271-002 06/02/2019

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
LABORER		
COMPRESSED AIR		
Group 1.....	\$ 49.23	23.50
Group 2.....	\$ 38.75	23.50
Group 3.....	\$ 51.23	23.50
FREE AIR		
Group 1.....	\$ 41.30	23.50
Group 2.....	\$ 38.75	23.50
Group 3.....	\$ 43.30	23.50
LABORER		
Group 1.....	\$ 31.80	23.05
Group 2.....	\$ 32.05	23.05
Group 3.....	\$ 32.80	23.05
Group 4.....	\$ 25.30	23.05
Group 5.....	\$ 33.80	23.05

OPEN AIR CAISSON,  
UNDERPINNING WORK AND  
BORING CREW

Bottom Man.....	\$ 37.80	23.05
Top Man & Laborer.....	\$ 36.85	23.05
TEST BORING		
Driller.....	\$ 38.25	23.05
Laborer.....	\$ 36.85	23.05

LABORER CLASSIFICATIONS

GROUP 1: Laborer; Carpenter tender; Cement finisher tender; Wrecking laborer; Asbestos removers [non-mechanical systems]; Plant laborer; Driller in quarries

GROUP 2: Adzeperson; Asphalt raker; Barcotype jumping tamper; Chain saw operators; Concrete and power buggy operator; Concrete saw operator; Demolition burner; Fence and guard rail erector; Highway stone spreader; Laser beam operator; Mechanical grinder operator; Mason tender; Mortar mixer; Pneumatic tool operator; Riprap and dry stonewall builder; Scaffold erector; Setter of metal forms for roadways; Wagon drill operator; Wood chipper operator; Pipelayer; Pipe trench bracer

GROUP 3: Air track drill operator; Hydraulic and similar powered drills; Brick paver; Block paver; Rammer and curb setter; Powderperson and blaster

GROUP 4: Flagger & signaler

GROUP 5: Toxic waste remover

LABORER - COMPRESSED AIR CLASSIFICATIONS

GROUP 1: Mucking machine operator, tunnel laborer, brake person, track person, miner, grout person, lock tender, gauge tender, miner: motor person & all others in compressed air

GROUP 2: Change house attendant, powder watchperson, top person on iron

GROUP 3: Hazardous waste work within the ""HOT"" zone

LABORER - FREE AIR CLASSIFICATIONS

GROUP 1: Grout person - pumps, brake person, track person, form mover & stripper (wood & steel), shaft laborer, laborer topside, outside motorperson, miner, conveyor operator, miner welder, heading motorperson, erecting operator, mucking machine operator, nozzle person, rodperson, safety miner, shaft & tunnel, steel & rodperson,

mole nipper, concrete worker, form erector (wood, steel and all accessories), cement finisher (this type of work only), top signal person, bottom person (when heading is 50' from shaft), burner, shield operator and TBM operator

GROUP 2: Change house attendant, powder watchperson

GROUP 3: Hazardous waste work within the ""HOT"" zone

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PAIN0011-005 06/01/2019

	Rates	Fringes
PAINTER		
Brush and Roller.....	\$ 34.62	21.80
Epoxy, Tanks, Towers, Swing Stage & Structural Steel.....	\$ 36.62	21.80
Spray, Sand & Water Blasting.....	\$ 37.62	21.80
Taper.....	\$ 35.37	21.80
Wall Coverer.....	\$ 35.12	21.80

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PAIN0011-006 06/01/2019

	Rates	Fringes
GLAZIER.....	\$ 38.18	21.80

FOOTNOTES:

SWING STAGE: \$1.00 per hour additional.

PAID HOLIDAYS: Labor Day & Christmas Day.

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PAIN0011-011 06/01/2019

	Rates	Fringes
Painter (Bridge Work).....	\$ 51.00	21.80

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PAIN0035-008 06/01/2011

	Rates	Fringes
Sign Painter.....	\$ 24.79	13.72

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PLAS0040-001 06/03/2019

BUILDING CONSTRUCTION

Rates	Fringes
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CEMENT MASON/CONCRETE FINISHER...\$ 36.00 27.15

FOOTNOTE: Cement Mason: Work on free swinging scaffolds under 3 planks width and which is 20 or more feet above ground and any offset structure: \$.30 per hour additional.

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PLAS0040-002 07/01/2019

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 32.85	22.20

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PLAS0040-003 07/01/2019

	Rates	Fringes
PLASTERER.....	\$ 37.55	27.50

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PLUM0051-002 03/02/2020

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 43.69	30.05

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ROOF0033-004 12/01/2019

	Rates	Fringes
ROOFER.....	\$ 37.90	27.25

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\* SFRI0669-001 01/02/2020

	Rates	Fringes
SPRINKLER FITTER.....	\$ 45.67	24.74

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SHEE0017-002 12/01/2018

	Rates	Fringes
Sheet Metal Worker.....	\$ 36.13	35.13

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TEAM0251-001 05/01/2019

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
TRUCK DRIVER		
GROUP 1.....	\$ 27.96	26.8525+A+B+C

GROUP 2.....	\$ 27.61	26.8525+A+B+C
GROUP 3.....	\$ 27.66	26.8525+A+B+C
GROUP 4.....	\$ 27.71	26.8525+A+B+C
GROUP 5.....	\$ 27.81	26.8525+A+B+C
GROUP 6.....	\$ 28.21	26.8525+A+B+C
GROUP 7.....	\$ 28.41	26.8525+A+B+C
GROUP 8.....	\$ 27.91	26.8525+A+B+C
GROUP 9.....	\$ 28.16	26.8525+A+B+C
GROUP 10.....	\$ 27.96	26.8525+A+B+C

#### FOOTNOTES:

A. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, plus Presidents' Day, Columbus Day, Veteran's Day & V-J Day, providing the employee has worked at least one day in the calendar week in which the holiday falls.

B. Employee who has been on the payroll for 1 year or more but less than 5 years and has worked 150 Days during the last year of employment shall receive 1 week's paid vacation; 5 to 10 years - 2 weeks' paid vacation; 10 or more years - 3 week's paid vacation.

C. Employees on the seniority list shall be paid a one hundred dollar (\$100.00) bonus for every four hundred (400) hours worked, up to a maximum of five hundred dollars (\$500.00)

All drivers working on a defined hazard material job site shall be paid a premium of \$2.00 per hour over applicable rate.

#### TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Pick-up trucks, station wagons, & panel trucks

GROUP 2: Two-axle on low beds

GROUP 3: Two-axle dump truck

GROUP 4: Three-axle dump truck

GROUP 5: Four- and five-axle equipment

GROUP 6: Low-bed or boom trailer.

GROUP 7: Trailers when used on a double hook up (pulling 2 trailers)

GROUP 8: Special earth-moving equipment, under 35 tons

GROUP 9: Special earth-moving equipment, 35 tons or over

GROUP 10: Tractor trailer

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198



indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"