



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0016

Janet T. Mills
GOVERNOR

Dale F. Doughty
COMMISSIONER

September 14, 2026
Subject: Installation of five
new CCTV cameras along I-95
WIN: 028452.00
Location: Old Town –Medway
Amendment No. 1

Dear Sir/Ms.:

Please make the following changes to the Bid Documents:

REMOVE pages 72-76 labeled SPECIAL PROVISION SECTION 654 INTELLIGENT TRANSPORTATION SYSTEMS (ITS Equipment Cabinet) dated August 3, 2026 (5 pages) and **REPLACE** with the attached SPECIAL PROVISION SECTION 654 INTELLIGENT TRANSPORTATION SYSTEMS (ITS Equipment Cabinet) dated September 11, 2026 (6 pages).

In the Bid Book:

The following questions have been received:

Question: In the previous Maine DOT Projects where a wood pole mounted lowering system was provided, the specifications called for Upper and Lower mounting "boxes" made from Stainless Steel. As the specifications here do not call for stainless steel, we would like to confirm whether stainless steel is required upper and lower mounting boxes are required as on the previous projects.

Response: Upper and lower mounting boxes shall be Stainless Steel.

Question: In the previous Maine DOT Project where a wood pole mounted lowering system was provided, the specifications called for a lowering system that utilized a PERMANENT mounted winch in the lower box. Per item 13 on page 67 of the specs, the DOT seems to be looking for a system with a Portable winch on the project. We would like to confirm that the portable winch is correct and a permanent mounted winch is not required.

Response: Portable winches are acceptable.

Question: If the portable winch is required, will one winch with power drill assembly be required for the whole project, or should the manufacturer supply 5 total portable winches with power drill assembly (one per lowering system)

Response: One portable winch would be acceptable.

Question: The specification for the Pole Mount ITS equipment cabinet is calling for a cabinet with the dimensions of 66"H x 24"W x 30"D (Item 3 page 73). The cabinet dimensions of a Pole Mount ITS cabinet is typically 46"H x 24"W x 20"D. Usually, 66" is the height of a BASE mount ITS Cabinet. Please confirm that the height of 66" is correct or will a cabinet with the dimensions of 46"H x 24"W x 20"D " be acceptable for this project?

Response: The cabinet shall be sized to accommodate all required equipment, power distribution components, surge protection devices, communications equipment, wiring, heater, cooling equipment, rack-mount hardware, and associated ancillary devices identified in the contract documents. The cabinet shall provide sufficient working space for installation, maintenance, and future servicing of equipment and shall be arranged to avoid overcrowding of components and cabling. A cabinet with dimensions smaller than those specified would only be acceptable if it can fully accommodate all required equipment and maintain the required functionality, accessibility, and serviceability. A 46"H x 24"W x 20"D is acceptable for those requirements being met.

Question: The current specifications for the camera lowering device require two distinct features:

A rubber connector at the device interface.

A continuous communication cable with no splices.

During our manufacturer vetting process, we found a direct conflict between these two requirements across leading product lines. Manufacturers who utilize a rubber Hypalon connector rely on a spliced communication cable architecture to join the connector component to the main line. Conversely, manufacturers who guarantee a continuous, splice-free communication cable utilize a non-proprietary polymer compound connector which is fully potted and optimized for seamless cable integration.

A spliced communication cable introduces potential points of failure, signal degradation, and susceptibility to moisture ingress over time, which directly conflicts with the system's longevity and data integrity goals.

Please clarify if a camera lowering device providing a continuous, splice-free communication cable combined with a high-durability alternative connector material is acceptable in lieu of a spliced Hypalon system.

Response: A camera lowering device utilizing a polymer compound connector material in lieu of the specified thermosetting synthetic rubber connector will not be accepted. The female and male socket contact halves of the connector block shall be UL94 V-0 rated thermosetting synthetic rubber, as specified. No substitution will be considered. The "continuous, splice-free" requirement applies to the communication cable between the pole-top connection and the cabinet, not to the connector or its factory-made termination to the cable. A sealed, factory-assembled connection is not considered a splice under this specification.

Consider these changes and information prior to submitting your bid on **September 16, 2026**.

Sincerely,



George M. A. Macdougall P.E.
Contracts & Specifications Engineer

SPECIAL PROVISION
SECTION 654
INTELLIGENT TRANSPORTATION SYSTEMS
(ITS Equipment Cabinet)

Section 654 of the Standard Specifications – Intelligent Transportation Systems – is amended as follows:

654.01 Description

This work shall consist of the furnishing, configuring, integration and testing of intelligent transportation systems (ITS) devices, equipment, and associated materials. This specification includes materials, integration, and warranty requirements for all ITS systems. Each specific ITS system or device will include its own specification that supplements the requirements of this specification.

654.02 General

All ITS equipment shall be new unless otherwise specified. Requests for substitution of any specified material shall be submitted in writing with all documentation (specifications, mill certifications, catalog cuts, shop drawings, etc.) in order to enable the Department to evaluate the equivalency of the substitution. Substitutes shall give equal or better service than the specified material or equipment.

654.021 Materials

The Contractor shall provide a complete Technical Submittal as outlined below for all ITS systems, devices, and equipment. The requirements for the ITS Technical Submittal shall meet the following requirements and additional requirements as indicated by the specific ITS system, device, or equipment specifications:

1. This specification includes the universal requirements for all ITS Technical Submittals; additional requirements for specific ITS systems, devices, and equipment may be found in other specifications.
2. The Contractor shall not proceed with manufacture or fabrication until the Resident has approved the submittals in accordance with Section 105.7.
 - a. The Contractor shall provide drawings, manufacturer's specifications, and applicable catalog cuts for all materials and components for this work, submitted in accordance with Section 105.7.
 - b. The Technical Submittal shall list all proposed equipment to be provided, including mounting hardware as applicable.
 - c. The Contractor shall provide cabinet diagrams for all equipment cabinets showing installed hardware and wiring connections.
 - d. The Contractor shall provide electric load calculations required for all power supply equipment to be installed.

Where solar powered systems are required, the Contractor shall provide solar power calculations to indicate the size, quantity, and capacity of the solar panels and batteries to meet the required autonomy standards

The following sections are added:

654.024 Camera Connection – Wood Pole Mounting

1. The Contractor shall furnish 2-inch diameter galvanized steel conduit. The conduit material shall meet the requirements specified in the following Sections of Division 700, Material Details, Steel Conduit 715.02.
2. The Contractor shall furnish a lightning dissipater attached to a #6 AWG stranded bare copper for grounding.
 - a. The lightning dissipater shall be attached using manufacturer's recommended clamps or banding that shall rigidly hold the lightning dissipater in winds up to 130 mph.
3. The Contractor shall furnish a camera lowering device mounting box (upper mounting box) and winch box as shown on the plans and as recommended by the lowering device manufacturer.
 - a. The upper mounting box and winch box shall be stainless steel and material shall meet the requirements specified in Section of Division 700, Material Details, Metallic Junction and Fuse Box 715.05.
4. The Contractor shall furnish a lowering device system designed to support, lower and raise the CCTV camera without damage.
 - a. All external components of the lowering device shall be made of corrosion-resistant materials in accordance with manufacturer's specifications and procedures.
 - b. The lowering device shall have a locking mechanism between the fixed and moveable components.
 - c. The lowering device cable shall be stainless steel and contained in a conduit system that does not include the camera's power and communication cables.
 - d. The lowering device unit shall have a minimum temperature rating of -40°F to 160°F.
 - e. The camera lowering device shall be mounted within three feet of the top of a wood pole mounting structure.

654.026 Pole Mounted ITS Cabinet

1. Pole Mounted ITS Equipment Cabinets shall be of sufficient size to accommodate all necessary equipment without overcrowding. The cabinet shall have spare space to permit the installation of a spare battery.
2. Pole Mounted ITS Equipment Cabinets shall be 66"H x 24"W x 30"D. The cabinets shall have two locking doors located on opposite sides of the cabinet. All equipment housed in the cabinet shall be rack mountable. The cabinets shall be attached to pole with mounting brackets.
3. Each cabinet shall contain a full-height standard EIA 19-inch rack. The rack shall be secured within the cabinet by mounts at the top and bottom.

4. The cabinets shall protect all equipment against sustained winds of 90 miles per hour (MPH), with 120 MPH wind gusts, blowing sand and dust, roadside pollutants from vehicle exhausts, blowing rain and snow, and heavy ice accumulations.
5. The cabinets shall be weatherproof with the top of the enclosure crowned or slanted to prevent standing water. The field cabinet shall also provide protection against vandalism and theft of equipment. Each cabinet door shall be supplied and installed with Corbin 1548-1 locks for access by #2 keys.
6. The cabinets and doors shall be constructed from sheet aluminum, which has a minimum thickness of 0.125 inches. All welds shall be neatly formatted and free of cracks, blowholes and other irregularities.
7. The cabinets shall be supplied with a captive door restraint bar. The bar shall allow the door to be kept open at a minimum of two different angles, with one at 90 degrees and the other in the fully open position. The door restraint bar shall be supplied and installed such that the door is held in place during a 40 MPH wind without the restraint bar being bent. The door restraint bar shall be provided to prevent door movement when open in windy conditions
8. Door hinges shall be continuous and bolted to the cabinet and door utilizing steel carriage bolts and nylock nuts. The hinges shall be made of a minimum 0.083-inch thick aluminum and shall have a minimum 0.250-inch diameter stainless steel hinge pin. The hinge pin shall be capped at the top and bottom by a weld to prevent removal.
9. The top and bottom of the latching pushrods shall contain nylon rollers to promote secure door closure.
10. The door handles shall be stainless steel. The latching handles shall have provisions for padlocking in the closed position.
11. The cabinets shall contain a power panel, sized for the required current and the required number of circuit breakers. The panel shall also contain a single phase filtering surge protector, designed for use within traffic equipment cabinets, to absorb power line noise and switching transients. The cabinet shall also be supplied with electrical neutral and ground terminal busses.
12. The cabinets shall be equipped with a slide out metal drawer, constructed and installed such that it is capable of holding a 15-pound notebook computer, and mounted at a suitable height for a technician to use as a computer workstation.
13. The air filters shall have an average rated efficiency of 30% and an arrestance of 90% when tested in accordance with ASHRAE 52.1-1992 Test Standard. The filter shall be listed and rated Class 2 by the Underwriters Laboratories. Filters shall have a metal structure; paper or paper-based filters shall be prohibited.
14. All intake and exhaust vents shall meet NEMA 3R requirements with and without powering the air venting arrangements.
15. All conduits terminating in the cabinet shall be sealed with duct sealant. Use of tape to permanently seal conduits shall be prohibited.
 - a. Conduits less than 1 inch diameter shall be sealed with a silicone sealant.
 - b. Conduits greater than 1 inch diameter shall be filled with steel wool in addition to being sealed with duct sealant.
16. Pole mounted cabinets shall be installed with doors opening parallel to adjacent traffic.

17. All cabinet electrical wiring and communication cables shall be of diameters and colors as required by the device Manufacturers.
 - a. Wire connections shall be made without excessively long exposed conductors, or unraveled strands extending beyond connections, to prevent shock hazards.
 - b. Cabinet wiring shall be secured with appropriate cable ties to maintain a neat appearance.
18. Each cabinet shall contain a power panel containing a primary circuit breaker, which will accept the incoming 120 VAC, single-phase power. This primary circuit breaker shall serve as the electrical disconnect for the cabinet and shall shut off all cabinet power when in the “off” position.
19. The primary circuit breaker shall be a single pole, 30-amp breaker. Two additional single pole, 20 amp circuit breakers shall be supplied, installed and be fed from the primary circuit breaker.
 - a. One of the 20 amp circuit breakers shall feed the four 15 amp, electrical outlets to be installed in the cabinet.
 - b. The other 20 amp circuit breaker shall feed a power distribution buss, providing hard wired electrical feed for the lamps, the electric fan, and all other integrated electrical equipment.
20. The power panel shall also contain a single phase filtering surge protector.
21. The field cabinets shall be provided with a minimum of four utility electric power outlets to support electrical equipment. The utility power outlets shall be installed within the field cabinet and not on the cabinet doors.
22. The current rating of all utility outlets shall be 15 amperes, with at least one being a GFCI outlet.
23. The field cabinets shall include a thermostatically controlled electric cooling fan, capable of maintaining temperatures inside the cabinet to that recommended by the equipment Manufacturers for outside installations, or as specified in these Special Provisions.
24. Thermostats for controlling electric cooling fans shall have the capability of being field adjusted from 50°F to 120°F.
25. All exposed, high voltage electrical terminals shall be insulated with non-conducting material such as rubber boots or silicone/rubber caulking.
26. The cabinets shall be electrically bonded to all associated metallic ITS Device support structure grounding systems, as described below or shown on the Plans.
27. All air venting arrangements shall contain air filters. All fans shall be located above the air filters at the top of the cabinets. All exhaust vents shall be furnished with a screen to prevent insects from entering the field cabinet.
28. The cabinets shall be supplied and installed with two internal lights located in the top of each cabinet inside each door. These lights shall automatically turn on when the cabinet doors are open and shut off when the doors are closed. The lights shall be hardwire-connected to the cabinet’s electrical power distribution buss. The lights shall be LED.
29. The Contractor shall furnish, in a watertight container, a control cabinet-wiring diagram. Three sets of identical wiring diagrams shall be furnished for each cabinet.

30. If tracer wire equipment connection points are installed inside ITS equipment cabinets, the tracer wire shall enter the cabinet through a conduit or conduit riser specifically installed for that purpose.
31. All equipment shall be installed using the Manufacturer's recommended cables.
32. The Contractor shall furnish, install, connect, and test all Category 6 (Cat6) cables, of the types required for the application, at locations shown in the Plans or as required to construct a complete, functional system.
33. The Cat6 cables shall not exceed 325 feet in length unless the Contractor is granted written permission from the Engineer.
 - a. All cables shall be installed in a continuous run. Splicing will not be allowed.

654.027 Grounding, Bonding and Surge Suppression:

The Contractor shall provide grounding and Transient Voltage Surge Suppression (TVSS) at all ITS cabinets. The Contractor shall provide grounding connections between each TVSS device and the main grounding terminus in the cabinet. Each TVSS device shall have a dedicated grounding connection, directly with the grounding terminus. Daisy-chaining of grounding connection is not permitted.

1. The Contractor shall furnish and install TVSS devices for all power and communications conductors leaving the ITS equipment cabinets, including but not limited to utility service, and power and communications for all ITS devices that are external to the cabinet.
2. The power panel of all ITS cabinets shall contain a single phase filtering surge protector, connected to the load side of the primary circuit breaker. The electrical neutral buss, the ground buss, the cabinet shell, and the ground rod shall all be wired in conformance to the applicable electrical codes.
3. All grounding shall meet the requirements of the installed equipment Manufacturers. In the event that the Manufacturers' requirements are more stringent than those of the national, state, and local codes, then the Manufacturers' grounding requirements shall apply
4. Each ITS cabinet shall include at least one 3/4-inch by 10-foot ground rod made of solid copper or copper-clad steel rod. A #4 AWG copper ground wire shall be connected to the ground lug on the cabinet or support structure, and exothermically welded to the ground rod. Additional ground rods shall be furnished and installed to provide required grounding. Minimum resistance to ground shall be 25 ohms or in accordance with the cabinet component's equipment manufacturer's requirements, whichever is more stringent.
5. For grounding connections internal to the cabinets or support structure, a conduit shall be installed through the foundation specifically to provide the means to connect the ground wire to the ground rods. Ground wires shall not be mounted externally to any structure, and shall not be installed in conduit with any other power or communication wiring.
6. All ITS cabinets shall be electrically bonded to their associated ITS device support structure ground system using #4 AWG copper wires. The #4 AWG copper wires shall be installed between the support structures and the cabinets providing a common ground system for each terminus.

654.07 Method of Measurement

The following paragraph is added: Pole mounted ITS Equipment Cabinet shall be measured by each cabinet installed in place.

654.08 Basis of Payment

The accepted quantities of ITS Equipment Cabinet will be paid for at the contract unit price each complete in place. Payment shall be full compensation for the cabinet, cabinet components, foundation, platform and work pads, mounting hardware, grounding, TVSS, thermostats, fans, power panel, electrical service connection, grounding, bonding, locks, cables, installation and testing.

If more than one ground rod is required to achieve the required earth grounding, all additional rod installations and wire connections will be subsidiary to the ITS Equipment Cabinet item.

Payment will be made under:

<u>Pay Item</u>	<u>Description</u>	<u>Pay Unit</u>
654.31	ITS Equipment Cabinet	Each