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

Paul R. LePage
GOVERNOR

David Bernhardt
COMMISSIONER

April 12, 2012
Subject: **Auburn**
Federal Project No's: STP-1159(900)X
& STP-1566(800)X
State PIN's: 011599.00 & 015668.00
Amendment No. 2

Dear Sir/Ms:

Make the following changes to the Bid Document:

In the Bid Book (pages 4 thru 9) **REMOVE** the "SCHEDULE OF ITEMS" 6 pages dated 120323 and **REPLACE** with the attached new "SCHEDULE OF ITEMS" 6 pages dated 120411.

In the Bid Book, after page 102, **ADD** the attached "Special Provisions, Traffic Signals, Item 643" 4 pages dated December 2008.

The following questions have been received:

Question: Neither the Specification Sheets nor the Plan Sheets contain ATRC requirements for specifications on Traffic Signal Equipment used in this area, is this going to be a requirement on this job?

Response: Please see "Special Provisions, Traffic Signals" added in this amendment.

Question: Are the Traffic Officers (Bid Item #652.381) to be included on the DBE/Subcontractor Utilization form?

Response: No, the intent is to use local police officers.

Consider these changes and information prior to submitting your bid on April 18, 2012.

Sincerely,

George Macdougall
Acting Contracts & Specifications Engineer

PRINTED ON RECYCLED PAPER

CONTRACT ID: 011599.00 PROJECT(S): STP-1159(900)X
STP-1566(800)X

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 PROJECT ITEMS					
0010	201.23 REMOVING SINGLE TREE TOP ONLY	3.000 EA				
0020	201.24 REMOVING STUMP	3.000 EA				
0030	202.203 PAVEMENT BUTT JOINTS	480.000 SY				
0040	203.20 COMMON EXCAVATION	1775.000 CY				
0050	203.2312 HEALTH AND SAFETY PLAN	LUMP	LUMP			
0060	203.2333 DISPOSAL OF SPECIAL EXCAVATION	50.000 T				
0070	203.25 GRANULAR BORROW	100.000 CY				
0080	206.07 STRUCTURAL ROCK EXCAVATION - DRAINAGE AND MINOR STRUCTURES	25.000 CY				
0090	304.10 AGGREGATE SUBBASE COURSE - GRAVEL	1430.000 CY				
0100	403.1021 TEXTURED ASPHALT PAVEMENT	180.000 SY				

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STP-1566(800)X

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS		UNIT PRICE DOLLARS	CTS	BID AMOUNT DOLLARS	CTS
0110	403.207 HOT MIX ASPHALT 19.0 MM HMA	480.000	T				
0120	403.209 HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS)	15.000	T				
0130	403.210 HOT MIX ASPHALT 9.5 MM	180.000	T				
0140	409.15 BITUMINOUS TACK COAT - APPLIED	100.000	G				
0150	502.341 STRUCTURAL CONCRETE ROADWAY MEDIAN	13.000	CY				
0160	603.159 12 INCH CULVERT PIPE OPTION III	30.000	LF				
0170	604.072 CATCH BASIN TYPE A1-C	3.000	EA				
0180	604.077 72 INCH CATCH BASIN TYPE A1-C	2.000	EA				
0190	604.16 ALTERING CATCH BASIN TO MANHOLES	5.000	EA				
0200	604.18 ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	1.000	EA				
0210	605.09 6 INCH UNDERDRAIN TYPE B	1120.000	LF				

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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS		UNIT PRICE DOLLARS	CTS	BID AMOUNT DOLLARS	CTS
0220	608.08 REINFORCED CONCRETE SIDEWALK	10.000	SY				
0230	608.26 CURB RAMP DETECTABLE WARNING FIELD	20.000	SF				
0240	609.11 VERTICAL CURB TYPE 1	270.000	LF				
0250	609.12 VERTICAL CURB TYPE 1 - CIRCULAR	390.000	LF				
0260	609.234 TERMINAL CURB TYPE 1 - 4 FOOT	7.000	EA				
0270	609.237 TERMINAL CURB TYPE 1 - 7 FOOT	5.000	EA				
0280	609.26 CURB TRANSITION SECTION B TYPE 1	6.000	EA				
0290	609.31 CURB TYPE 3	20.000	LF				
0300	609.34 CURB TYPE 5	22.000	LF				
0310	609.35 CURB TYPE 5 - CIRCULAR	58.000	LF				
0320	609.38 RESET CURB TYPE 1	790.000	LF				

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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS		UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0330	615.0701 LOAM - PLAN QUANTITY	76.000	CY				
0340	618.1301 SEEDING METHOD NUMBER 1 - PLAN QUANTITY	6.000	UN				
0350	618.1401 SEEDING METHOD NUMBER 2 - PLAN QUANTITY	1.000	UN				
0360	619.1201 MULCH - PLAN QUANTITY	6.000	UN				
0370	627.733 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	11470.000	LF				
0380	627.75 WHITE OR YELLOW PAVEMENT & CURB MARKING	830.000	SF				
0390	627.77 REMOVING PAVEMENT MARKINGS	350.000	SF				
0400	629.05 HAND LABOR, STRAIGHT TIME	20.000	HR				
0410	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	10.000	HR				
0420	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	10.000	HR				
0430	631.22 FRONT END LOADER (INCLUDING OPERATOR)	5.000	HR				

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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS		UNIT PRICE DOLLARS	CTS	BID AMOUNT DOLLARS	CTS
0440	639.18 FIELD OFFICE TYPE A	1.000	EA				
0450	643.71 TRAFFIC SIGNAL MODIFICATION	LUMP		LUMP			
0460	643.86 TRAFFIC SIGNAL LOOP DETECTORS	8.000	EA				
0470	645.106 DEMOUNT REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN	6.000	EA				
0480	645.116 REINSTALL REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN	6.000	EA				
0490	645.292 REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGNS TYPE II	20.000	SF				
0500	652.33 DRUM	115.000	EA				
0510	652.34 CONE	185.000	EA				
0520	652.35 CONSTRUCTION SIGNS	520.000	SF				
0530	652.361 MAINTENANCE OF TRAFFIC CONTROL DEVICES	LUMP		LUMP			

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0540	652.38 FLAGGER	1700.000 HR				
0550	652.381 TRAFFIC OFFICER	350.000 HR				
0560	652.41 PORTABLE CHANGEABLE MESSAGE SIGN	2.000 EA				
0570	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP	LUMP			
0580	658.20 ACRYLIC LATEX COLOR FINISH, GREEN	125.000 SY				
0590	659.10 MOBILIZATION	LUMP	LUMP			
	SECTION 0001 TOTAL					
	TOTAL BID					

Special Provisions
Traffic Signals
Item 643

Where called for on the contract plans, traffic signal equipment shall meet the following specifications:

ATRC
Signalized Intersection Specifications

Intent of this Specification:

It is the intent of this specification to provide a minimum equipment standard for any new or modernized traffic signal project, which is fully compatible and operable with the ATRC StreetWise remote computer signal control and monitoring equipment. ATRC has established a goal of being able to remotely access all existing and future traffic signal installations within the ATRC boundaries. ATRC staff has received considerable training in the operation of the StreetWise system. Neither ATRC, nor the member communities, have the staff or financial resources to operate or maintain more than one such traffic control system. Therefore, if a traffic control system or peripheral equipment, other than that listed below, is proposed for installation within the ATRC area, the supplier shall replace all signal equipment, software, and peripherals that are connected to the Streetwise system, and shall include training of ATRC staff in the operation and maintenance of the system to the level they currently enjoy. The expense associated with a complete system replacement and training shall be at no cost to ATRC.

New Signal System:

The decision to install a new or modernized signalized intersection within an existing signal system, new signal system, or to operate the intersection as an isolated signal shall be solely at the discretion of ATRC and MaineDOT.

Controller Equipment:

- Controllers shall be fully compatible with the existing Naztec StreetWise ATMS Software installed at the ATRC office, 125 Manley Road, Auburn, ME 04210. Controllers shall be compatible with both Naztec and NTCIP protocols.
- All major components of the controller cabinet assembly shall be from the same manufacturer; this includes cabinet assembly, controller, MMU, BIUs and cabinet power supply.
- Traffic control cabinets shall be Naztec Model M34 or P44 TS2 Type 1 Series only. Base mount cabinets shall have a 15” extension base.

- Secondary traffic controllers shall be Naztec Model 980-E TS2 Type 1 Series with Ethernet Port only.
- Master controllers shall be Naztec Model 981-E Series with Ethernet Port only.
- Malfunction management units shall be Naztec Model MMU-516L with LCD, Keypad and Communications Port only.
- Bus interface units shall be Naztec Model BIU-130 only.
- Cabinet power supply shall be Naztec Model TS2-CAB-PS only.

Detection Equipment:

Plans call for detection loops if video detection equipment is incorporated it shall be installed and shall be fully compatible with the existing Traficon WATTS Software installed at the ATRC office.

- Video detection communication hub shall be Traficon Model View Com/E with Ethernet Port only.
- Video detection units shall be Traficon Model VIP3D.1 & VIP3D.2 Series only.
- Video detection camera assemblies shall be Traficon approved models only.
- Video detection cameras shall be Day/Night cameras; the cameras shall be color in bright light and high sensitivity B&W in low light.
- Video detection cameras shall be individually surge protected and fused. Fuses shall be field replaceable.
- Video monitor shall have a built-in sequential switcher and quad splitter.
- A Traficon VIP Keypad and 10” video monitor shall be supplied in each cabinet for on-site setup and configuration. Complete on-site setup and configuration shall be possible without the use of a computer.

Communications Equipment:

- Any new control equipment supplied on an interconnected signal system shall be provided with a fiber optics connection to the remote computer interface at the ATRC office, assuming such a connection is not present when the new control equipment is installed. Likewise, if a new signal system is installed or established, fiber optics communication to the ATRC remote computer shall be provided. If the nearest fiber optics line is not within 1000 feet of a system controller, the method of remote communications shall be determined by ATRC and Maine DOT. Additionally, any new isolated traffic signal installation shall also be connected to the ATRC remote computer as noted above.
- Environmentally Hardened Ethernet Switches shall be Cisco Catalyst Model 2955 with Naztec Model 2955PS Power Supply only.

Fiber Optic Equipment:

- Fiber optic cable shall consist of a minimum of 12 single-mode fibers.
- See the “Special Provision, Fiber Optic Cable” for additional information.

Optical Preemption Equipment:

- Optical preemption equipment shall be fully compatible with Tomar secure emitters.
- Optical preemption equipment shall be fully compatible with Tomar OSPsoft IP software installed at the ATRC office.
- Optical signal processor card shall be Tomar Model 3140 Series only.
- OSP device server shall be Wavetronix Click! Model 301 only.
- Card cage shall be Tomar Model 1881 only.
- Optical detector shall be Tomar Model 2090-SD or 2091-SD only.
- Confirmation strobe shall be Tomar Model 804-110-R only.

Uninterruptible Power Supply (UPS) / Battery Backup Equipment:

When required for safety considerations as determined by ATRC, UPS units shall be installed in designated controller cabinets.

- UPS enclosure shall be an Alpha Flextra Model S4 or approved equal.
- UPS enclosure shall have a built-in bypass/generator switch and generator port.
- UPS unit shall be an Alpha Novus FXM Model 1100 or approved equal.
- UPS unit shall have an LCD and keypad for user interface.
- UPS unit shall have an integral SNMP Ethernet port and web-based interface. External serial to Ethernet converters are not acceptable.
- UPS batteries shall be Alpha Model 210GXL or approved equal.
- UPS batteries shall have a 5-year full replacement warranty.

Vehicle Signal Equipment:

- Vehicle signal housings shall be McCain Model MTSTA or MTSTP Series only (Yellow body, Black door, Yellow outside/ Black inside visor.)
- Vehicle signal housings shall include back plates (black finish.)
- LED modules for vehicle indications shall be GELcore Model DR6 Series only

Pedestrian Signal Equipment:

- Pedestrian signal housings shall be McCain Model 1000 Series only (Yellow body, Black door, Yellow outside/ Black inside visor.)
- LED countdown modules for pedestrian indications shall be GELcore Model PS7-CFC9-01A Series only.
- Accessible Pedestrian Signal (APS) pushbuttons shall be Campbell Company Advisor Model A-57 or approved equal.

Traffic Structures:

- Mast arms shall be Valmont SM16 or CB16 Series or approved equal.
- Strain poles shall be Valmont SW56 Series or approved equal.

Arterial Coordination:

At the discretion of the City Engineer, the traffic consultant shall provide an arterial coordination plan for intersections within 1500' of one another. All plans shall be approved by ATRC prior to initialization by the contractor.

- The coordination plan shall consist of a minimum of 4 time-of-day plans: AM Peak, Midday, PM Peak and Free.
- The cycle lengths, splits, and offsets shall be based on recent traffic counts and average speeds of the coordinated intersections.

643.18 Method of Measurement

As per *Maine Department of Transportation Standard Specifications*

643.19 Basis of Payment

Maine Department of Transportation Standard Specifications

Pay Item	*Description*	*Pay Unit*
Maine Department of Transportation Standard Specifications		