

MEMORANDUM

STATE OF ALASKA

Department of Transportation and Public Facilities

To: Joel G. St. Aubin, P.E.
Contracting Officer and Regional
Construction Engineer, Central Region

Date: April 1, 2021

Thru: Sharon Smith, P.E.
Chief of Contracts, Central Region

From: Sean Baski, P.E. *SB*
Project Manager

Project No.: CFHWY000213/0001579
Project Name: Seward Highway, MP 75-90 Ingram
Creek to Girdwood Road and Bridge
Rehabilitation, Phase II
Subject: **Brand Name Specification
Determination**

Introduction:

This is a request to allow the specification of the following proprietary items in the upcoming Seward Highway, MP 75-90 Ingram Creek to Girdwood Road and Bridge Rehabilitation, Phase II Project with an anticipated completion date of 2023.

Automatic Traffic Recorder (ATR) Parts List:

- Campbell Scientific CR1000X-XT-SW-NC Datalogger
- Campbell Scientific 107 Temperature Probe
- Campbell Scientific 105E-L Pavement Temperature Sensor
- Campbell Scientific 41303-5A Solar Radiation Shield
- Campbell Scientific CS230 Ground Temperature Probe

Road Weather Information System (RWIS) Parts List:

- Sierra Wireless RV50 Modem with Antenna
- Clear RF WRE5500-S 4G Cellular Amplifier
- CTC Union IFS-500C-E Ethernet Switch
- Hoffman NEMA 4X Enclosure
- Schnieder Linergy TR NYSTRV352/NYSTRV352PE Terminal Blocks
- Axis Q6155-E PTZ Camera
- Axis T8144 DC 60W POE Injector
- RM Young 05106 Anemometer with Interface
- Vaisala DMU703 Data Logger with PMU and Battery
- Vaisala WXT535 Precipitation and Barometric Pressure Sensor
- Vaisala PWD12 Present Weather Sensor
- Vaisala DSC111 Pavement Surface State Sensor
- Vaisala DST111 Non-Intrusive Pavement Temperature Sensor
- Vaisala DRS511 In-Pavement Surface Temperature Sensor
- Transtector 1104-15-000 Surge Protector
- WTAPRS WT10 Micro Wind Turbine
- Outback Power Energycell 200PLR Battery System with Controller and Inverter

The estimated total cost of the components being requested for brand specification approval is between \$90,000 and \$150,000. The Engineer's Estimate for the contract is between \$80,000,000 and \$90,000,000.

Justification

DOT&PF has an existing statewide Road Weather Information System (RWIS) contract, competitively bid using federal dollars, which includes an equipment buy list for RWIS sites. Contract # 2517H004. This contract includes proprietary items noted on the equipment list for providing atmospheric data, camera images, pavement temperature and subsurface soil temperature data for RWIS sites. Likewise, the listed Automated Traffic Recorder (ATR) equipment matches all other ATR site equipment which has been in use by DOT&PF for over 10 years. All equipment selected was either chosen from the equipment list for the statewide contract or it was selected in coordination with State RWIS and Highway Data staff to ensure compatibility. This equipment has been carefully specified and selected to interface with an existing system for gathering, recording and communicating data efficiently.

Approval for these proprietary items serves two purposes:

1. The data is standardized and can be ingested and processed by our Department's software and web server without additional customizations or programmatic resources. Data standards ensure a smooth process for dissemination to the Department's website at roadweather.alaska.gov, as well as the Department's Maintenance Decision Support System (MDSS). In addition, partner agencies such as National Weather Service receive daily data extracts from our RWIS server.
2. Standardization of ESS equipment streamlines the maintenance and operations of the onsite ESS equipment and reduces the complexity of the installation, commissioning, network configuration, and ongoing calibration of sensors. Standardization of equipment also reduces the level of training DOT&PF staff will need for troubleshooting the equipment onsite.

Determination

It is hereby determined that products identified herein are the only products to satisfy the state's needs, in accordance with 2 AAC 12.100 and department Policy and Procedure 10.02.050, and brand specifying them is approved for the Seward Hwy MP 75-90 Project.

Submitted By: Sean Baski
Sean Baski, P.E.
Project Manager

4/1/21
Date

Recommended By: Sharon L. Smith
Sharon L. Smith, P.E.
Chief of Contracts, Central Region

4/2/21
Date

Approved By: Joel G. St. Aubin
Joel G. St. Aubin, P.E.
Contracting Officer & Regional
Construction Engineer, Central Region

4/2/2021
Date