MEMORANDUM

State of Alaska

Department of Transportation and Public Facilities

To: Joel G. St. Aubin, P.E.,
Central Region Construction Engineer

Date: August 31, 2021

Thru: Sharon L. Smith, P.E.,
Chief of Contracts

Telephone No: 269-0639

From: Scott Thomas, P.E
Central Region Traffic & Safety Engineer

Subject: Econolite Brand Name Spec

Determination:

In accordance with P & P 10.02.050 and Alaska Administrative Code 2 AAC 12.100, this Determination supports the specification of brand specific items for state funded construction contracts and federally funded construction contracts advertised in Central Region for a period not to exceed three (3) years, beginning on the date this Determination is fully executed by the Central Region Construction Engineer who serves as the Contracting Officer for those construction contracts.

Items to be specified by brand name:

Econolite assembled, manufactured, and rebranded traffic signal control devices, cabinets, software, training, support, and technology partners (Econolite Supplied Items – ESI). Typical of the larger costs are, $40,000 per traffic signal cabinet for completely provisioned, tested, and delivered with on-site manufacturer; assisted "turn on". $24,000 per intersection for radar detection. $30,000/yr for Signal System Management software maintenance. $10,000 per server at the TMC. $1,000/year/signal for each: Signal Performance Measures and Adaptive Signal Control. Econolite supplies expertise on an as needed basis called "Signals as a Service" with hourly rates ranging from $80 to $180. We anticipate additional ESI associated with connected vehicles and other technological advances.

Justification:

The Econolite Supplied items (ESI) are selected for the following reasons:

1) ESI were selected over 15 years ago by competitive specification. Since then several consecutive Public Interest Findings (PIF) for ESI have resulted in ESI being incrementally added to the system with each new signal installation and upgrades to signal and Signal Operations Centers (SOC). We now have deployed over approximately 80 intersection and two SOC's with ESI. This Brand Name Spec is the continuation of the process established by prior PIF's.

2) Over almost 15 years ESI have proven to be very reliable and durable.

3) Our staff is trained on the programming and operation of ESI. The programming is highly specialized and usually unique to the ESI. It is difficult to stay proficient in even one operating system, much less with multiple. This has important safety benefits for repairs at night, in the cold, and in emergencies. It has important efficiency benefits for training and system operation. When staff are tasked with replacing failed or damaged ESI, it often occurs under adverse traffic, weather, and/or limited daylight conditions. Utilizing ESI at intersections throughout Central Region benefits the public through reduced outage time due to compatible spare parts and devices being available, and increased efficiency for staff performing the work due to product familiarity.

4) With all ESI supported by Econolite or their partners we are also provided troubleshooting and integration services they offer. When devices of separate manufacturers are deployed in the same system, DOTPF's past experience is the manufacturers are frequently unfamiliar with the other devices and unable to assist in rapid or long term troubleshooting or integrating of devices. Even worse they require the owner or a third party hired by the owner to resolve operational or integrational issues. This is time consuming and expensive.

5) Econolite has a technical (Licensed Electrician/Sales Rep/troubleshooter) residing and based in Eagle River, Alaska, from where he frequently provides rapid incidental service and more in-depth on-site service charges. He is available for on-site emergency assistance. Having worked in the past as a state signal technician in the Valley, he is thoroughly familiar with our system. We are a small and regionally fragmented system compared to the scale of signals nationally such that a typical manufacturer could not provide such a localized of support otherwise.. No other alternative to ESI manufacturer has resources closer than Seattle with transportation costs, per diem, and increased delay.

6) Northern Region DOTPF and the Municipality of Anchorage both use Econolite devices systemwide. We are able to mutually assist each other, sharing devices and expertise.

7) Within the Municipality of Anchorage (MOA) the MOA operates and maintains 180 State owned ESI signals. In addition, the MOA has ESI at their 100 intersections. For added efficiency, the MOA and CR jointly operate an ESI based Traffic Management Center (SOC) at the MOA. We are able to able to mutually assist each other, sharing devices and expertise. Unilaterally changing suppliers and mismatching devices could result in an extremely expensive "duplication" of facilities and efforts. The State of Alaska pays the MOA to maintain and operate State signals. All of the considerations for safety and efficiency listed above apply to the MOA maintenance and operations staff, also. Having to develop and deploy expertise in systems not already supported will result in increased costs to the State for signal operation and maintenance within the MOA and delays, with safety and economic impacts..

8) One of the purposes of the FHWA's relaxation of requirements for brand name specifications is to promote new and innovative technologies. Econolite is a leader in new and innovative technologies and in the creation and adoption of new industry standards. Unforeseen product mismatch and integration problems are a frequent cause of project failures. With one manufacturer providing the devices, on-site supervision, integration, troubleshooting, and training, we can readily adopt new and innovative technologies confident that the system can be completed and operated as represented.

Submitted by: Scott Thomas Digitally signed by Scott Thomas Date: 2021.08.31 17:18:57 -08'00'

Scott Thomas, P.E. — Date
Central Region Traffic & Safety Engineer

Recommended by: FOR — 9/7/2021

Sharon L. Smith, P.E. — Date
Chief of Contracts

Approved by: — 9/8/2021

Joel G. St Aubin, P.E. — Date
Central Region Construction Engineer,
and Contracting Officer

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