

August 22, 2019

Mr. Mario Bizzio, P.E. – District Design Engineer
Florida Department of Transportation
719 South Woodland Boulevard
DeLand, Florida 32720

Subject: Proprietary Product Certification Justification & Backup Documentation
FPID: 439133-1-52-01
SR 15 (Conway Rd.) at SR 552 (Curry Ford Rd.) Signal Reconstruction – Orange
County

Dear Mr. Bizzio,

Please find attached the Proprietary Product Request form for the referenced project. The City of Orlando requests the use of the specific products identified below as they are required for compatibility with the City's existing traffic control system. Please see required justification below:

1) Description of the project need for the proprietary product.

- a. **Project Description:** The 439133-1-52-01 project includes reconstruction of the traffic signal with mast arm assemblies at the intersection of SR 15 and SR 552 in Orange County.
- b. **Compatibility with Existing Systems:** The City of Orlando requests the use of the products included in this Proprietary Product Certification request and listed below. The City currently utilizes traffic control systems that are compatible with the requested systems.
 - i. **Microwave Detection System** –Wavetronx Smart Matrix.
 - ii. **CCTV Cameras** – color dome cameras capable of sending video streams (both unicast and multicast) in H.264 format over a TCP/IP network, Bosch 7000 Star Light, compatible with the City's Cameleon ITS, VIDOS, and Bosch Video Client systems and the FDOT SunGuide system (NTCIP), capable of being controlled and managed via a standard internet browser client and support Simple Network Management Protocol (SNMP).

- iii. **Uninterruptible Power Source (UPS) with Cabinet** – standard is a PowerBack UPS, NEMA 3R Cabinet, PG-12V103FR 12 V 103 Ah Battery, capable of 10 hours of operation
- iv. **Traffic Controller** – Trafficware Series 980 TS-2 Type 2 controller with full Ethernet functionality or Trafficware 980 ATC Type 2 capable of flashing yellow arrow operations
- v. **Traffic Cabinet** – Type VI TS-2 Type 1 cabinet compatible with the Trafficware components. The cabinet must include fiber optic patch panes, Ethernet switch, and other components required for the location to communicate with the City’s Regional Computerized Signal System (RCSS)

2) Factual and technical supporting evidence for requested systems.

A. Microwave Detection System –Wavetronx Smart Matrix.

- a. Function: the proprietary product is necessary for the satisfactory operation of the existing facility.
 - i. This product is the same manufacturer as products already in use by City of Orlando and is guaranteed to be compatible with the existing infrastructure.
- b. Logistics: the proprietary product is interchangeable with products in City of Orlando existing maintenance inventory.
 - i. This product is the same product already in use by the City of Orlando and is guaranteed to be interchangeable with the existing maintenance inventory.
- c. Training costs for staff, such as significant training required to effectively maintain and operate an unfamiliar product.
 - i. The current City of Orlando staff are familiar with and trained to use the existing product. By proposing the same product, no additional training costs are anticipated.

B. CCTV Cameras

- a. Function: the proprietary product is necessary for the satisfactory operation of the existing facility.
 - i. This product has color dome cameras capable of sending video streams (both unicast and multicast) in H.264 format over a TCP/IP network and Bosch 7000 Star Light.
 - ii. The proposed product is compatible with the City of Orlando’s Traffic Management System.
- b. Logistics: the proprietary product is interchangeable with products in City of Orlando existing maintenance inventory.
 - i. This product is compatible with the City’s Cameleon ITS, VIDOS, Bosch Video Client systems and the FDOT SunGuide system (NTCIP).
 - ii. This product is capable of being controlled and managed via a standard internet browser client and support Simple Network Management Protocol (SNMP).

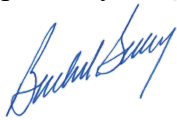
- c. Training costs for staff, such as significant training required to effectively maintain and operate an unfamiliar product.
 - i. The current City of Orlando staff are familiar with and trained to use the existing product. By proposing the same product, no additional training costs are anticipated.
- C. Uninterruptible Power Source (UPS)
 - a. Function: the proprietary product is necessary for the satisfactory operation of the existing facility.
 - i. This product is capable of 10 hours of operation.
 - ii. This product is manufactured with Cabinet and is a PowerBack UPS, NEMA 3R Cabinet, PG-12V103FR with a 12V 103 Ah Battery.
 - b. Logistics: the proprietary product is interchangeable with products in City of Orlando existing maintenance inventory.
 - i. The proposed product is compatible with the City of Orlando's Traffic Management System.
 - c. Training costs for staff, such as significant training required to effectively maintain and operate an unfamiliar product.
 - i. The current City of Orlando staff are familiar with and trained to use the existing product. By proposing the same product, no additional training costs are anticipated.
- D. Traffic Controller
 - a. Function: the proprietary product is necessary for the satisfactory operation of the existing facility.
 - i. This product is a Trafficware Series 980 TS-2 Type 2 controller with full Ethernet functionality or Trafficware 980 ATC Type 2 capable of flashing yellow arrow operations.
 - b. Logistics: the proprietary product is interchangeable with products in City of Orlando existing maintenance inventory.
 - i. The proposed product is compatible with the City of Orlando's Traffic Management System.
 - c. Training costs for staff, such as significant training required to effectively maintain and operate an unfamiliar product.
 - i. The current City of Orlando staff are familiar with and trained to use the existing product. By proposing the same product, no additional training costs are anticipated.
- E. Traffic Cabinet
 - a. Function: the proprietary product is necessary for the satisfactory operation of the existing facility.
 - i. This product is the same manufacturer as products already in use by City of Orlando and is guaranteed to be compatible with the existing infrastructure.
 - b. Logistics: the proprietary product is interchangeable with products in City of Orlando existing maintenance inventory.
 - i. This product is Type VI TS-2 Type 1 cabinet compatible with the Trafficware components.

- ii. The proposed product is compatible with the City of Orlando's Traffic Management System.
- c. Training costs for staff, such as significant training required to effectively maintain and operate an unfamiliar product.
 - i. The cabinet must include fiber optic patch panes, Ethernet switch, and other components required for the location to communicate with the City's Regional Computerized Signal System (RCSS)

In summary, these products are required by the City of Orlando to maintain compatibility with the existing Traffic Management System. If you have any questions please feel free to contact me at (407) 246-3626 or via email at benton.bonney@cityoforlando.net.

Thank you for accommodating these products within the City of Orlando.

Respectfully,



Benton StJ Bonney, P.E.
Transportation Systems Manager
400 South Orange Avenue
Orlando, Florida 32801

Cc. Carol Hatfield, PE – FDOT
Maj Alam, PE, PMP – Propel Engineering, Inc.
Jim Vomacka, PE – Propel Engineering, Inc.