STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

PROPRIETARY PRODUCT CERTIFICATION

630-020-07
PROGRAM MANAGEMENT
06/16

To: Mario Bizzio, P.E. Date: _____
Design Engineer

Financial Project ID: 443669-1-52-01 New Const. ☐ RRR ☒
Federal Aid Number: _____
Project Name: SR 492 & NE 30th Ave Signal
State Road Number: 492 Co. / Sec. / Sub.: Marion/36008
Begin Project MP: 2.831 End Project MP: 3.001
Full Federal Oversight: No ☒ Yes ☐ Note: If Yes, submit to FHWA Director.

A justification and all supporting documents must be attached to this document.
Mark the appropriate certification:

"I, Tom Casey (Print Name of Initiator), Div. Head Public Works (Position Title), of the City of Ocala (Name of Agency),

do hereby certify that in accordance with the requirements of 23 CFR 635.411(a)(2),
Mark appropriately (choose only one option):

☒ *that this patented or proprietary item is essential for synchronization with existing highway facilities.*
☐ *that no equally suitable alternative exists for this patented or proprietary item."*

Signature _____ Date 7/7/16

For Department Use Only

"I, JAMES S. STEOR, JR. *(Print Name),* DTOE *(Position Title),*

of the Florida Department of Transportation, do hereby approve this certification request made in accordance with the requirements of 23 CFR 635.411(a)(2),
Mark appropriately (choose only one option):

☒ *that this patented or proprietary item is essential for synchronization with existing highway facilities.*
☐ *that no equally suitable alternative exists for this patented or proprietary item."*
Identify any conditions and limitations:

Signature _____ Date 7/21/16

Financial Project ID: 443669-1-52-01

Name of Initiator: Tom Casey, Infrastructure Operations, Division Head City of Ocala

Item	Patented or Proprietary Item is Essential for Synchronization with Existing Highway Facilities	No Equally Suitable Alternative Exists for this Patented or Proprietary Item	Approved	Not Approved
Trafficware, Wired Cabinet Assembly TS-2 Size 6 model 70006-TS2/FL	x		x	
Trafficware, Contoller NEMA TS2 Type 1 model 980 ATC Type 1	x		x	
Trafficware Group, Malfunction Management Unit (MMU) Type 16 model MMU-516L	x		x	
Temple, UPS model FXM 1100 with 4 alphacell 100 TV 12 volt batteries and FL08 cabinet	x		x	
Polara Bulldog Series Push Button Detector	x		x	
Cyberlock, Traffic Cabinet Lock - Electronic Cylinder Description Part Number: CL-TCI	x		x	
Iteris, Vehicle Detector Video Model Vantage Edge 2	x		x	

James S. Stroz, Jr. P.E.

District Traffic Operations Engineer

Date 7/17/18

Mr. Mario Bizzio, P.E.
District 5 Design Engineer
Florida Department of Transportation
719 South Woodland Blvd
DeLand, FL. 32720-6800

Subject: **Justification for Preferred Use of Proprietary Products for Traffic Signal and ITS Equipment by City of Ocala – SR 492 and NE 30th Ave Signal FPN: 443669-1-52-01**

Dear Mr. Bizzio:

The City of Ocala Traffic Operations Division requests approval of the attached, signed and completed Proprietary Product Certification Form 630-020-07 for the following proprietary products:

1. Trafficware, Wired Cabinet Assembly TS-2 size 6 model 70006-TS2/FL
2. Trafficware, Controller NEMA TS2 Type 1 model ATC Controller w/Ethernet
3. Trafficware Group, Malfunction Management Unit (MMU) Type 16 model MMU-516L
4. Temple, UPS model FXM 1100 with 4 alpha-cell 100 XTV 12 volt batteries and FL08 cabinet
5. Polara Bulldog Series Push Button Detector
6. Cyberlock, Traffic Cabinet Lock – Electronic Cylinder Description Part Number: CL-TCI
7. Iteris, Vehicle Detector Video model Vantage Edge 2

This equipment is being requested for the traffic signal installation at the intersection of SR 492 at NE 30th Avenue. Approval of these proprietary products will allow consistency with existing equipment within the City providing synchronization and reducing cost by eliminating the need for additional training and inventory. Please find further justification for the use of these products on the following pages.

1. Trafficware, Wired Cabinet Assembly TS-2 size 6 model 70006-TS2/FL
   Evidence for Synchronization:
   a. Function: The Trafficware TS-2 Size 6 Cabinet is consistent with the existing traffic signal cabinets in the City of Ocala and is compatible with the traffic controller and MMU used by the City. The City has been using Trafficware cabinets since 2003 and has 15 years of experience with Trafficware cabinets.
   b. Logistics: City staff is familiar with the Trafficware cabinet and able to quickly identify, repair and maintain the equipment reducing impacts to the traveling public. In addition, the City stocks and maintains spare Trafficware cabinets and parts, which provides interchangeable parts for their entire traffic signal system reducing overall costs and requiring no additional training. Using this cabinet provides the most efficient use of the

City's limited staff and resources while minimizing delay to the traveling public.

2. Trafficware, Controller NEMA TS2 Type 1 model ATC Controller w/Ethernet
   Evidence for Synchronization:
   a. Function: The Trafficware TS-2 Type 1 Model ATC Controller w/Ethernet is consistent with the existing traffic signal controllers and is compatible with the Trafficware cabinet and MMU used throughout the City of Ocala. This controller is compatible with the Traffic Management Center's (TMC) Trafficware ATMS.now central software and the Trafficware cabinet. The 16-line display screen and menu navigation panel allows City staff to efficiently trouble shoot and program in the field. The City installed its first Trafficware controller in 2003 and converted its entire traffic signal system to the Trafficware equipment in 2008 giving them 15 years of experience with Trafficware controllers.
   b. Logistics: City staff is familiar with the software and programming the Trafficware controller allowing them to quickly identify, program and maintain the equipment reducing impacts to the traveling public. In addition, the City stocks and maintains spare Trafficware controllers and can quickly replace any failing or damaged controllers. The City has been utilizing the Trafficware ATMS.now system for over 10 years and has in depth knowledge of the controller hardware and software requiring no additional training. Using this controller provides the most efficient use of the City's limited staff and resources while minimizing delay to the traveling public.

3. Trafficware Group, Malfunction Management Unit (MMU) Type 16 model MMU-516L
   Evidence for Synchronization:
   a. Function: The Trafficware Group MMU Type 16 Model MMU-516L is consistent with the existing MMUs used throughout the City of Ocala. The MMU monitors the traffic signal system for conflict, improper sequencing, incorrect timing and improper signal voltage levels. This MMU can be configured to the Trafficware NEMA TS2 Type 1 controller and is compatible with the Trafficware TS-2 Size 6 cabinet. The full LCD screen and menu-driven display is ideal for programming and updating the MMU in the field. The City has been using the Trafficware MMU for over 10 years.
   b. Logistics: City staff is familiar with the Trafficware MMU allowing them to quickly identify problems and maintain the equipment reducing impacts to the traveling public. In addition, the City stocks and maintains spare Trafficware MMUs and can quickly replace any failing or damaged MMUs. The City has been utilizing the Trafficware MMUs for over 10 years with minimal issues and is familiar with the checks and diagnostics it runs to troubleshoot problems and no additional training is required. Using this MMU provides consistency and the most efficient use of the City's limited staff and resources while minimizing delay and increasing safety for the traveling public.

4. Temple, UPS model FXM 1100 with 4 alpha-cell 100 XTV 12 volt batteries and FL08 cabinet

Evidence for Synchronization:

a. Function: The Temple UPS Model FXM 1100 is consistent with the existing traffic signal system used throughout the City of Ocala. This UPS and associated Alpha-cell batteries are contained within the Temple FL08 UPS cabinet which attaches to the side of the Trafficware cabinet mentioned previously, reducing the footprint of the assembly. The City has been utilizing this UPS for 10 years with minimal issues.
b. Logistics: City staff is familiar with the Temple UPS hardware and the installation of the batteries and UPS cabinet allowing them to quickly troubleshoot problems reducing impacts to the traveling public. In addition, the City stocks and maintains spare Temple UPS assemblies and can quickly replace any failing or damaged UPS assemblies. The City has been utilizing the Temple UPS for over 10 years has in depth knowledge of the equipment and no additional training is required. Using this UPS provides the most efficient use of the City's limited staff and resources while minimizing delay to the traveling public.

5. Polara Bulldog Series Push Button Detector

Evidence for Synchronization:

a. Function: The Bulldog Series Push Button Detector is consistent with all the push buttons used throughout the City of Ocala. The City uses the Bulldog detector because they are ADA compliant providing a two-tone audible, as well as, visual confirmation. They are a more durable and reliable product than all previous micro-switch push-button detectors previously used by the City. The Bulldog detector has a 5 year warranty. The City has been using this Bulldog detector for 5 years.
b. Logistics: City staff is familiar with the Bulldog detector at allowing them to quickly troubleshoot problems reducing impacts to the traveling public. In addition, the City stocks and maintains spare Bulldog detectors and can quickly replace any failing or damaged switches. The City has been utilizing the Bulldog detector for over 5 years and has in depth knowledge of the hardware and requires no additional training. Using this Bulldog detector provides the most efficient use of the City's limited staff and resources while minimizing delay to the traveling public.

6. Cyberlock, Traffic Cabinet Lock – Electronic Cylinder Description Part Number: CL-TCI

Evidence for Synchronization:

a. Function: The Cyberlock, Traffic Cabinet Lock is consistent with the smart mechanical key system recently installed in over 240 existing cabinets throughout the City of Ocala. This Cyberlock provides accountability by auditing authorized and unauthorized entry attempts to all traffic controller cabinets and UPS cabinets. The City has recently switched all the existing traffic control cabinet and UPS cabinet locks to the Cyberlock Traffic Cabinet lock Electronic Cyliner.
b. Logistics: City staff has recently installed the CyberLock smart mechanical key system allowing them to maintain interoperability and access to equipment between agencies (City

of Ocala keys working with the FDOT system and FDOT keys working with the City of Ocala System), it is imperative to use the same product. In addition, the City stocks and maintains spare Cyberlock Traffic Cabinet locks and can quickly replace any failing or damaged locks. The City is now using this lock throughout its entire traffic signal system and requires no additional training. Using this Cyberlock provides the most efficient use of the City's limited staff and resources while minimizing delay to the traveling public.

7. Iteris, Vehicle Detector Video model Vantage Edge 2
   Evidence for Synchronization:
   a. Function: The Iteris Vehicle Detector Video Model Vantage Edge 2 System is consistent with the existing video detection used throughout the City of Ocala. The system includes a cabinet processor and video cameras. The City has been utilizing the Iteris Vehicle Detector Video model Vantage Edge 2 for the past 15 years with minimal issues.
   b. Logistics: City staff is familiar with the equipment, software and hardware for the Iteris Vehicle Detector Video model Vantage Edge 2 allowing them to quickly replace, program and troubleshoot problems reducing impacts to the traveling public. In addition, the City stocks and maintains spare Iteris parts such as processor and camera equipment and can quickly replace any failing or damaged equipment. The City has been utilizing the Iteris Vehicle Detector Video Vantage Edge 2 for over 15 years and has in depth knowledge of the Iteris equipment, hardware and software and requires no additional training. Using this Iteris Vehicle Detector Video model Vantage Edge 2 system provides the most efficient use of the City's limited staff and resources while minimizing delay to the traveling public.

In conclusion, the City of Ocala is requesting that the proprietary products listed in this document be furnished for this project. If you have any questions, please feel free to contact me at (352) 351-6723 or via email at TCasey@Ocalafl.org.

Sincerely,

Tom Casey
Infrastructure Operations, Division Head