



**MEMORANDUM
ADDENDUM NO. 1**

Date: February 13, 2020

To: Bidders

From: Robin Morgan
Senior Contract Specialist
Florida's Turnpike Enterprise

Subject: DOT-ITB-20-8020-RM
Upgrades to Existing Building Management System (BMS) and Equipment Controllers – Pompano
Turnpike Operations Center, Florida's Turnpike Mainline (SR 91), Milepost 65.0

Bidders and other interested parties are informed that the referenced documents are hereby revised changed and supplemented as set forth below:

- Exhibit "A," Scope of Services, page A-3, section B, dated 2/13/2020.
- Exhibit "A," Scope of Services, page A-4, section C, dated 2/13/2020.
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Please replace the above referenced pages in the Complete Bid Package with the attached revised pages, dated 2/13/2020.

Failure to file a protest within the time prescribed in Section 120.57(3), Florida Statutes, or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under Chapter 120, Florida Statutes.

4.0 Scope of Services

4.1 Project Description

The Vendor shall perform a turnkey replacement of current BMS using existing infrastructure including the upgrade of equipment controllers.

A. Scope of Work:

- Remove and replace existing BMS with a new Open BACnet Direct Digital Control Building Management System for the heating, ventilation and air conditioning.
- Inter connect with new Open BACnet Direct Digital Control Building Management System.
- Work shall include all required components for a fully operational BMS system as described below including all parts and labor.

B. Upgrade Requirements:

- The Vendor shall perform due diligence at the site and provide existing equipment characteristics including controls requirements to the Department for evaluation prior to submitting shop drawings and cut sheets of all proposed equipment.
- The Vendor shall provide system engineering and construction documents for the new BMS.
- This project shall require very strict coordination, scheduling and equipment shut down approvals by the Department's representative.
 - The Vendor shall provide a minimum of seven (7) day notice of any scheduled equipment shut down and related work that may impact facility operations. The Vendor shall replace BMS **at nights or** on weekends with no more than twenty-four (24) hours from shut down to re-start of the new systems.
 - This facility is occupied from 6:00AM to 7:00PM, Monday through Friday. During this period, work activities that have minimal impact or disturbance to occupants will be permissible.
 - Activities involving heavy equipment/tools or creating loud noises shall be performed at night or on weekends.
 - The Vendor shall schedule all work to minimize any A/C down time. In the event that the existing A/C equipment/system or the new system is interrupted, the Vendor shall provide temporary cooling equipment/systems as required to maintain these spaces at seventy-five (75) degrees for the duration of this project.
- The Vendor shall provide a proposed schedule for approval prior to commencing any work.
- The Vendor is responsible for maintaining all affected areas clean and free from debris at all time during construction.
- The Vendor shall provide permit plans signed and sealed by a Florida licensed Engineer if required to obtain permits from local authority.
- The Vendor shall perform test and balance commissioning.
- The Vendor shall provide plenum rated low voltage control wiring including terminations.
- The Vendor shall provide all electrical work including, electrical wiring, new circuits and ¾" min. EMT conduits including terminations.
- The Vendor shall provide onsite Project Management.

- The Vendor shall provide shop drawing submittals.
- The Vendor shall provide training to Department personnel on the upgraded Building Management System – min two (2) hours at project site.
- The Vendor shall provide programming, graphics, start-up and commissioning of control system.
- The Vendor shall provide a one (1) year warranty on Carrier Controls, Parts and installation labor.
- The Vendor shall provide Operation and Maintenance Manuals.

C. Operations Building BMS upgrade to Carrier i-Vu System

- Supply and installation of Carrier i-Vu Plus **hardware and i-Vu Pro Software**.
- **The Vendor shall install the Department-provided PC workstation with monitor.**
- Supply and installation of Carrier XTLB 3rd party integration link.
- Integration of existing system points into new i-Vu management system including Annex Building Delta controls system.

D. Air Handling Unit Control - AHU 1, 2, 3

Field mounted controls by Vendor to include:

- Carrier Open BACnet controller with local enclosure.
- Modulating outside air damper actuator.
- Chilled water valve control – *use existing valve*.
- Supply fan start/stop & status.
- Variable frequency drive speed signal – *use existing VFD*.
- Static pressure transducer.
- Duct temperature sensors.
- Humidity sensor.
- Duct CO2 sensors.
- Electric Heater Control.

E. Fan Powered VAV and VAV Terminal Units (Typical of 41)

Field **connection** controls by Vendor to include:

- Connect to existing Fan Powered VAV and VAV Terminal units.
- Discharge air temperature sensor.
- Control transformer.

F. Chiller Control - CH 1, 2 & 3

Field mounted controls by Vendor to include:

- Carrier Open BACnet controller with local enclosure.
- Carrier XT-RB 3rd party equipment integration link with local enclosure.
- Trane BACnet interface module – supply and **install**.
- Integration of available points to Carrier i-Vu system.
- Chiller start/stop and status through BACnet network.
- CHWP -1, 2 & 3 start/stop and status
- Outside air temperature/humidity sensor.

G. Exhaust Fan Control - EF – 1

Field mounted controls by Vendor to include:

- EF Start/stop
- EF Status