

**State of Florida
Department of Transportation**



Request for Information

**District Five PedSafe/Greenway
Deployment Project-Transit Kiosks for
University of Central Florida Campus**

RFI-DOT-18-19-5002-UCF

Florida Department of Transportation
Procurement Office, MS-524
719 South Woodland Boulevard
DeLand, Florida 32720-6834

Cover Page

REQUEST FOR INFORMATION (RFI) from the Florida Department of Transportation

The Florida Department of Transportation (FDOT), hereafter referred to as “Department”, in partnership with the University of Central Florida (UCF), is requesting the following information from prospective vendors about the commodities and/or contractual services described below.

Description of commodities/contractual services:

This RFI is to solicit information from the private sector and not intended to select a contractor, vendor, or consultant for a final team.

The Department will be pursuing a new turnkey solution providing transit kiosks on the main campus of UCF in Orlando, Florida.

The Department is requesting information from parties who are interested in working with FDOT and UCF about how they can contribute to the prospective project.

Timeline

Provided below is a list of critical dates and actions. These dates are subject to change. Notices of changes (addenda) will be posted on the Florida Vendor Bid System at www.myflorida.com (click on “BUSINESS”, click on “Doing Business with the State”, under “Everything for Vendors and Customers”, click on “Vendor Bid System (VBS)”, click on “Search Advertisements”) under this bid number. It is the responsibility of all potential Proposer’s to monitor this site for any changing information prior to submitting your proposal.

Unless otherwise specified, all public meetings will be held at the address provided on the cover sheet.

ACTION / LOCATION	DATE	LOCAL TIME
ADVERTISEMENT	August 24, 2018	4:00PM
DEADLINE FOR ALL QUESTIONS	September 13, 2018	3:00PM
QUESTIONS AND ANSWERS POSTED	September 18, 2018	4:00PM
PROPOSAL DUE DATE	September 25, 2018	2:00PM
PUBLIC OPENING OF INFORMATION RECEIVED	September 25, 2018	3:00PM

Specific Information Requested in RFI:

- 1) Provide the options available to the Department for transit kiosk procurement (e.g. purchase, lease, lease-to-own).
- 2) Provide specifications related to kiosk technology; e.g. systems, sensors, electrical connections (solar), battery life and replacement, interfaces (touch screen), and communications medium.

- 3) Provide details on software suites and/or mobile applications provided as a component of transit kiosks.
- 4) Provide a plan for interfacing with the existing UCF shuttle automatic vehicle location (AVL) system.
- 5) Provide a plan for interfacing with the FDOT SunGuide system and UCF Parking and Transportation Services system.
- 6) Provide a plan for minimum cybersecurity countermeasures.
- 7) Provide a plan for the distribution of sensor and user interface data to FDOT and UCF.
- 8) Provide details on the system and hardware maintenance.
- 9) Provide details on hardware security and durability.
- 10) Provide details on the infrastructure required.
- 11) Provide structural design details for the transit kiosks.

The Department requests responses to be delivered on single sided 8.5" X 11" sheets. Resumes may be provided for key personnel who may be critical to the success of your team but are not required.

Please provide **one (1) hard copy** of the response to this RFI **and one (1) CD or DVD**.

Mail or Deliver Proposals to: Florida Department of Transportation
Do NOT E-mail or Fax Attn: Tammy Hodgkins, CPPB, BAS
719 South Woodland Blvd. MS #4-524
DeLand, Florida 32720-6834
(386) 943-5000

It is the Proposer's responsibility to assure that the RFI is delivered to the proper place **on or before** the RFI Due Date and time (See Timeline). The Proposal which for any reason is not so delivered will not be considered.

NOTE: Responses to this RFI will be reviewed by FDOT and UCF for informational purposes only and will not be considered as offers to be accepted by the agencies to form a binding contract. Advertisement of any subsequent competitive solicitation that may result from this RFI will be posted on the Florida Vendor Bid System.

Contact for Questions or Clarification:

All questions arising from this RFI must be forwarded, in writing, to the FDOT District 5 procurement questions mailbox at **D5.ProcurementQuestions@dot.state.fl.us**. When submitting questions, please reference the RFI Number in the Subject Line; RFI-DOT-18-19-5002-UCF.

In accordance with section 287.057(23), Florida Statutes, respondents to this solicitation or persons acting on their behalf **may not contact**, between the release of the solicitation and the end of the 72-hour period following the agency posting the notice of intended award, excluding Saturdays, Sundays, and state holidays, any employee or officer of the executive or legislative branch concerning any aspect of this solicitation, except in writing to the procurement officer or as provided in the solicitation documents. Violation of this provision may be grounds for rejecting a response.

Questions will be responded to at the discretion of the Department. Responses will be

posted on or before September 18, 2018 to the Vendor Bid system at: www.myflorida.com (click on "BUSINESS", click on "Doing Business with the State", under "Everything for Vendors and Customers", click on "Vendor Bid System (VBS)", click on "Search Advertisements") under this bid number. It is the responsibility of all potential Respondents/Proposer's to monitor this site for any changing information prior to submitting a response.

Response Opening Agenda

The sealed proposals will be opened by the Department's Procurement Office personnel at the date, time and location in the Timeline. All proposal openings are open to the public and will be conducted according to the following agenda:

Opening remarks – Approximate time of 2 minutes by Department Procurement Office personnel.

Public input period – To allow a maximum of 15 minutes total for public input related to the bid solicitation.

Bids opened – At conclusion of public input or 15 minutes, whichever occurs first, bids received timely will be opened with bidder's name and prices to be read aloud.

Adjourn - After all proposals received timely have been opened, the meeting will be adjourned.

DRAFT EXHIBIT “A”, SCOPE OF SERVICES
District Five PedSafe/Greenway Deployment Project--
TRANSIT KIOSKS FOR THE UNIVERSITY OF CENTRAL FLORIDA ORLANDO CAMPUS

I. PURPOSE

The Florida Department of Transportation (FDOT), specifically District 5, is seeking information from vendors related to a turnkey solution for providing transit kiosks on the main campus of the University of Central Florida in Orlando, Florida. This turnkey solution shall include, but is not limited to, the procurement of all hardware and software required for the installation and operation of transit kiosks throughout the UCF campus. This RFI addresses the deployment of technologies and proposed operation and maintenance strategies.

The intent of this RFI is to determine the feasibility of installing and operating transit kiosks on the UCF campus; to analyze options and vendor strategies for successful, cost-efficient operation; and, to determine qualified vendors capable of the development, implementation, operation, and maintenance of these technologies.

II. BACKGROUND

Founded in 1963, the University of Central Florida (UCF) is an emerging preeminent research university located in metropolitan Orlando, Florida. With more than 66,000 students, UCF is one of the largest public state universities in the nation. The 1,415-acre main campus is located 13 miles east of downtown Orlando, adjacent to one of the top research parks in the country. In addition to the main campus, UCF also maintains eleven regional campus locations throughout Central Florida and a fully accredited College of Medicine in the Medical City at Lake Nona.

A. Campus Design

- a. Designed to be a pedestrian oriented campus, UCF is comprised of a series of four concentric circles: Gemini Boulevard, Apollo Circle, Mercury Circle, and Pegasus Circle. The outermost campus ring, Gemini Boulevard, serves as the main roadway for vehicular traffic on campus. Inside of Gemini, exclusive pedestrian-access rings, Apollo Circle and Mercury Circle, provide circuitous paths between various academic and student-life buildings. Pegasus Circle, the innermost ring, contains the Student Union situated at the very heart of campus offering space for students and members of the UCF community to study, socialize, eat, host events, attend meetings, and engage in campus life.
- b. All academic buildings are positioned inside of Gemini Circle, with the circle divided into smaller sections for each college. Conversely, student housing is provided along the perimeter of the campus, separated into various themed sections, including Greek Park to the northwest, Knights Plaza and athletic facilities to the north, the Arboretum to the east, and student recreation and wellness facilities to the south.
- c. Refer to **Exhibit “B”** for a map of the UCF campus.

B. Student Transit Services

- a. Effective August 20, 2018, the on-campus shuttle system will be renamed as the Pegasus Express and will revise operations to serve 11 designated stops while maintaining the existing hours of operation.

<https://parking.ucf.edu/shuttles/on-campus-shuttles/>

- b. The Pegasus Express provides services for students to move about the campus, as well as between campus and student residential communities offering multiple on and off-campus shuttle routes. One on-campus route, the Pegasus Express, provides shuttle operations between academic buildings and student resource facilities circumnavigating Gemini Circle. Typical operations during the Fall and Spring semesters involve shuttles running between 7:00 am and 7:00 pm on class days (except Saturday), traversing eleven designated stops. During the Summer semester, operations are reduced to running between 7:00 am and 4:00 pm on class days (except Saturday).
- c. In addition to on-campus shuttles, UCF offers multiple off-campus shuttle routes connecting students to satellite campuses, as well as affiliated and non-affiliated student apartments, residential centers, and other off-campus entities from various main campus locations. In total, 15 off-campus routes are provided, connecting students with the surrounding Orlando area.
- d. All on and off-campus transit services offered to students, faculty, and staff are provided by a third-party entity, under a contract that extends through June 2020. This third-party transit provider is responsible for all tasks related to vehicle procurement, re-fueling, maintenance, day-to-day operations, and overall program management. No facility dedicated to transit vehicle re-fueling or maintenance efforts exists on campus; the third-party entity maintains an off-campus facility nearby, on Forsyth Road in Orlando, Florida.
- e. Refer to **Exhibit “C”** for additional information related to campus transit services.

III. SERVICES

FDOT District 5 is interested in providing transit kiosks at each of the 11 UCF Pegasus Express shuttle stops within the UCF main campus in Orlando, Florida. The kiosks and associated equipment will allow students, faculty, staff, and visitors to obtain general information including information on shuttle routes, travel times, and shuttle locations; allow users to inform shuttle drivers they are waiting at a stop; and use video analytics to detect and record the number of users waiting at each stop and detect the presence of shuttles at a stop. The transit kiosk and associated equipment should be a complete standalone system that is Americans with Disabilities Act (ADA) accessible, powered by solar array, and able to communicate wirelessly with multiple agencies including the UCF transit services and FDOT.

A. Transit Kiosk

- a. Vendors shall provide accommodations for one kiosk to service each designated stop for the entirety of the hours of operation of the Pegasus Express shuttle. Minimum hours of operation shall be structured around Pegasus Express hours of operation. Kiosks shall operate 7:00 am to 7:00 pm on class days (except Saturday). During the Summer semester, operations are reduced to running between 7:00 am to 4:00 pm on class days (except Saturday).
- b. In order to operate a transit kiosk system on the UCF campus, FDOT is seeking qualified and experienced parties capable of providing full turnkey solutions. Successful responders will be responsible for procurement of all hardware and software required for the installation and operation of transit kiosks throughout the UCF campus.

- c. Additionally, this deployment will provide valuable data to UCF and FDOT on transit operations and rider patterns. Vendors shall be willing to cooperate in the exchange of data, participation in research, and the testing, development, and analysis of new applications, in conjunction with the UCF Department of Civil, Environmental, and Construction Engineering and other partners.

IV. TECHNICAL REQUIREMENTS

I. Minimum Technical Requirements for Transit Kiosk

Listed below are the minimum requirements for the transit kiosk deployment on UCF's campus. A typical detail for the transit kiosk is included in **Exhibit "D"**. This detail is provided as a reference to depict the required equipment and connections and is not intended to define the design or aesthetics of proposed kiosks.

- a. Vendors shall provide a stand-alone and self-contained transit kiosk with a touch screen display, processor, CCTV camera, and cellular communications.
- b. Kiosks shall be capable of 4G, or better, wireless connectivity with the ability to stream live video and other real-time data feeds for remote management and vehicle operations center.
- c. The kiosks shall be ADA accessible based on the 2010 ADA Standards for Accessible Design and shall include an ADA compatible user interface.
https://www.ada.gov/2010ADASTandards_index.htm
- d. The kiosks shall utilize a solar power array and battery system that can operate from 7:00 am to 7:00 pm.
- e. The touch screen human machine interface (HMI) shall allow users to obtain general information including information on shuttle routes, travel times, and shuttle locations, and allow users to inform shuttle drivers they are waiting at a stop.
- f. The kiosks shall be open source and allow for the addition of 3rd party applications by FDOT or UCF.
- g. The kiosks shall host a real-time AVL data stream consistent with the existing UCF Shuttle Locator desktop and mobile application.
<https://ucf.crystal-tod.com/rider/>
<https://ucfmobile.ucf.edu/>
- h. The kiosks shall contain a 360° CCTV camera capable of identifying transit riders and shuttles approaching or at the stop. The camera will be used to perform video analytics to detect users waiting at the stop, collect information on the number of users waiting at the stop, and detect presence of shuttles at the stop.
- i. The kiosks shall be easy to maintain, require minimal scheduled maintenance, and be vandal and tamper resistant.
- j. The kiosks shall be capable of operating in various weather and atmospheric conditions that may limit sensor performance including, but not limited to, rain, hail, fog, wind, and smoke.

- k. The kiosks shall provide the appropriate cybersecurity safety measures necessary to deter and prevent attempted access by outside parties.
- l. The kiosks shall be able to push data to and receive data from the FDOT SunGuide system and the UCF transit system. Coordinate with FDOT District 5 and UCF Parking and Transportation Services for additional information on these systems.
- m. The kiosks shall provide the ability for customization of appearance, including a wrap with space to identify project partners or commercial advertisement.

IV. INFORMATION REQUESTED

In addition to the minimum technical requirements, vendors are requested to provide the following information pertaining to their transit kiosk, operational strategies, and potential cost-saving measures.

I. Requested Information

- a. Provide the options available to the Department for transit kiosk procurement (e.g. purchase, lease, lease-to-own).
- b. Provide specifications related to kiosk technology; e.g. systems, sensors, electrical connections (solar), battery life and replacement, interfaces (touch screen), and communications medium.
- c. Provide details on software suites and/or mobile applications provided as a component of transit kiosks.
- d. Provide a plan for interfacing with the FDOT SunGuide system and UCF Parking and Transportation Services system.
- e. Provide plan for interface with the existing UCF shuttle AVL system.
- f. Provide plan for minimum cybersecurity countermeasures.
- g. Provide plan for distribution of sensor and user interface data to FDOT and UCF.
- h. Provide details on system and hardware maintenance.
- i. Provide details on hardware security and durability.
- j. Provide details on the infrastructure required.
- k. Provide structural design details for the transit kiosk.

EXHIBIT "B"

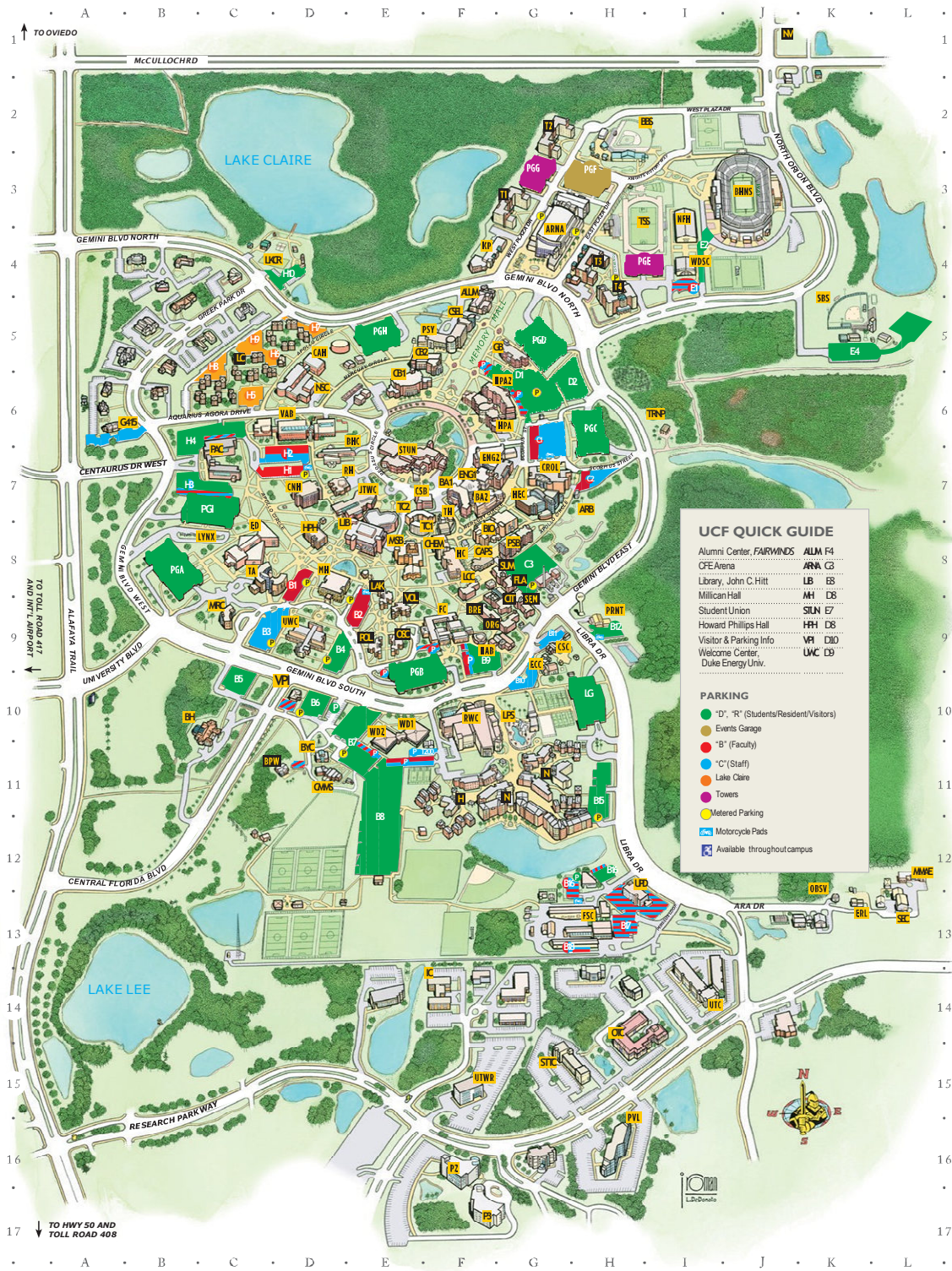
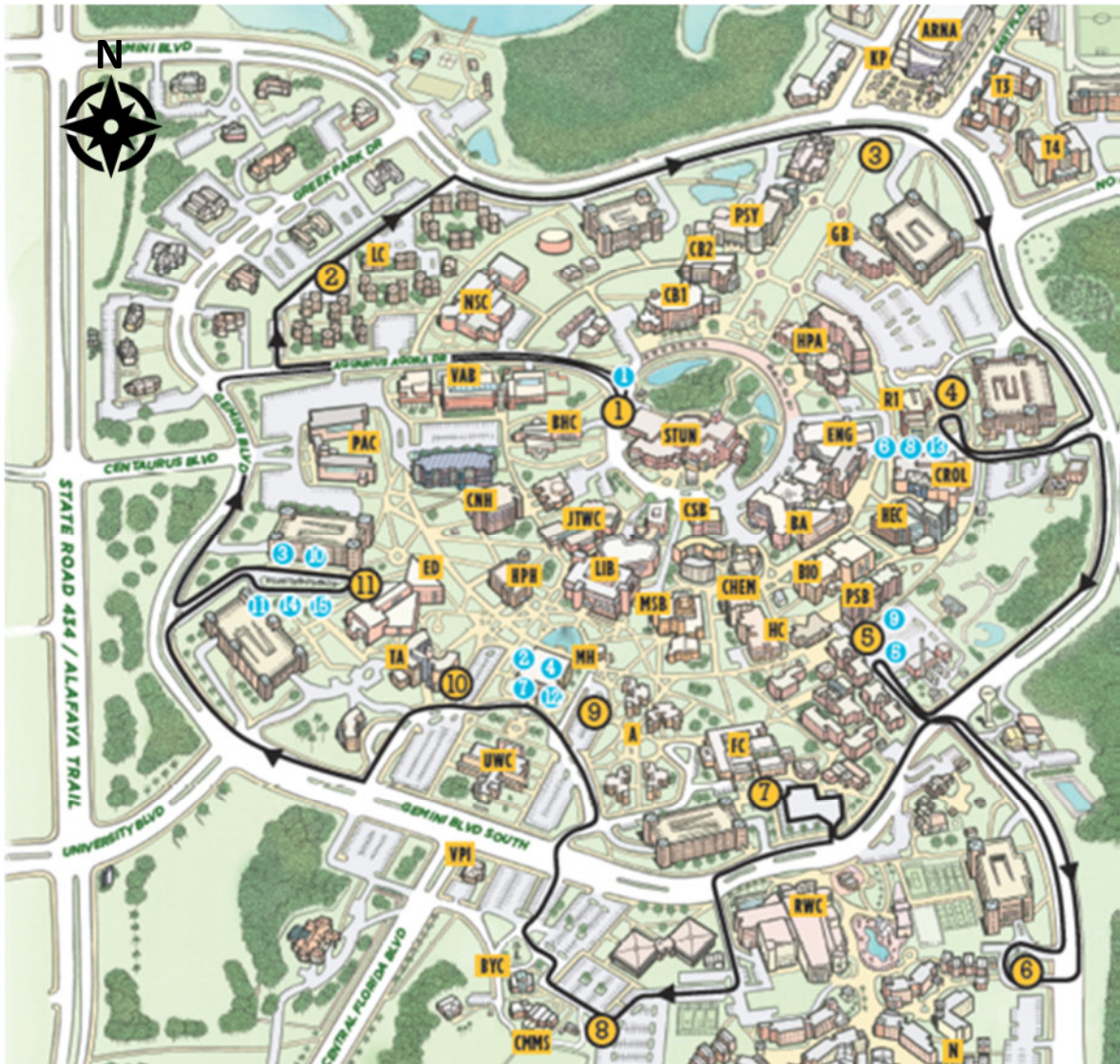


EXHIBIT "C"



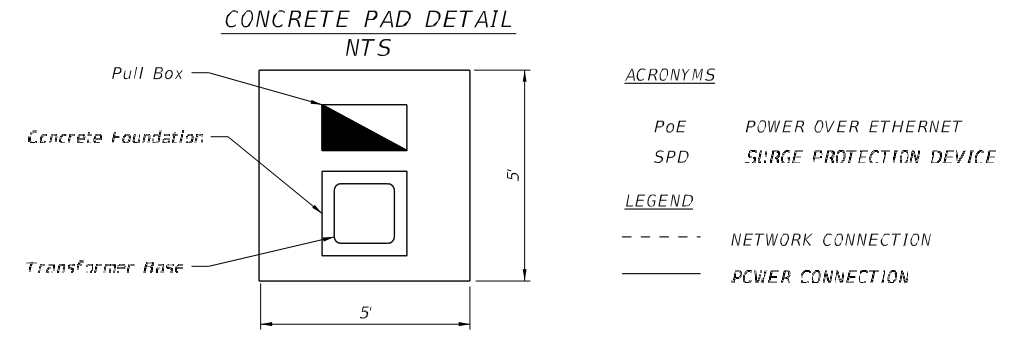
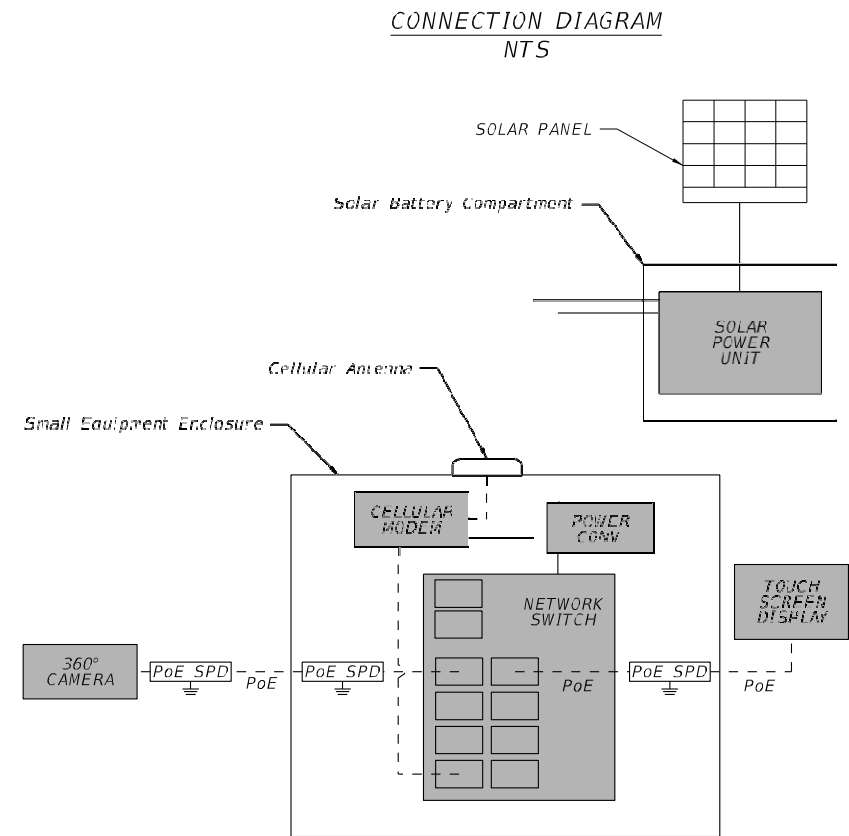
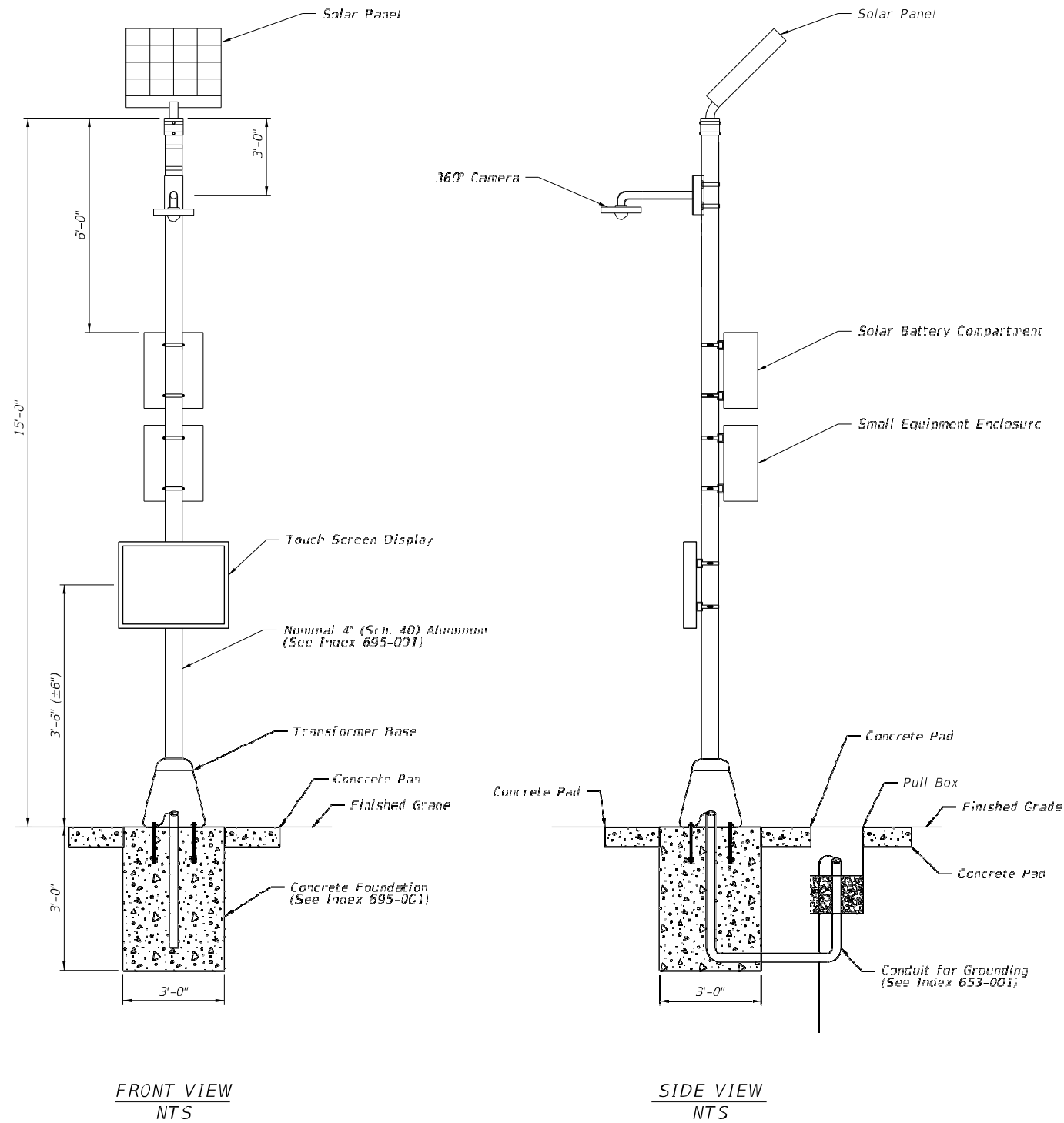
SHUTTLE STOPS ON-CAMPUS PEGASUS EXPRESS

- | | |
|---|--|
| ① Student Union | ⑦ Ferrell Commons/GMG Connect/
Recreation & Wellness Center |
| ② Lake Claire Community | ⑧ Nike, Hercules and Neptune
Communities/Center for
Multilingual Multicultural Studies |
| ③ CFE Arena/Knights Plaza/Towers | ⑨ Library/Millican Hall/Apollo
Community |
| ④ Engineering/Business
CREOL/Research I | ⑩ Teaching Academy/Howard
Phillips Hall |
| ⑤ Physical Sciences/Student
Health Center | ⑪ Lynx Transit Center |
| ⑥ Nike, Hercules and Neptune
Communities/Red Coach Connect | |

On-campus Pegasus Express shuttle buses operate on class days only
7 a.m. – 7 p.m. (except Saturdays)

During the summer, on-campus Pegasus Express shuttle buses operate
7 a.m. – 4 p.m. on class days only (except Saturdays)

EXHIBIT "D"



- NOTES:
1. INSTALL 5' X 5' CONCRETE PAD AS SHOWN ABOVE UNLESS OTHERWISE SHOWN IN PLANS.
 2. INSTALLATION PROCEDURES FOR TRANSIT KIOSK COMPONENTS SHALL MEET MANUFACTURER'S RECOMMENDATIONS FOR ALL COMPONENTS.