EXHIBIT "A", ENCLOSURE 1 Florida Department of Transportation District Five ONOMOUS SHUTTLE SERVICE FOR UNIVERSITY OF CENTRAL FLO

AUTONOMOUS SHUTTLE SERVICE FOR UNIVERSITY OF CENTRAL FLORIDA CAMPUS RFP-DOT-18-19-5010-UCF

PROPOSED AV SHUTTLE STOP LOCATIONS

ROUTE 1 - Operation between Gemini Circle at the Memory Mall/ CFE Arena and the Student Union/Pegasus Drive:

Stop No. 1 – Memory Mall/CFE Arena Stop No. 2 – Student Union/Pegasus Drive

ROUTE 2 (Phase II) – Operation between Physics I Building/Parking Lot C3 and Education Complete/Garage I

Stop No. 1 – Physics I Building/Parking Lot C3 Stop No. 2 – Education Complex/Garage I

Additional mid-route stops may be added to the proposed routes as coordinated between the University of Central Florida, the DEPARTMENT and the Vendor.

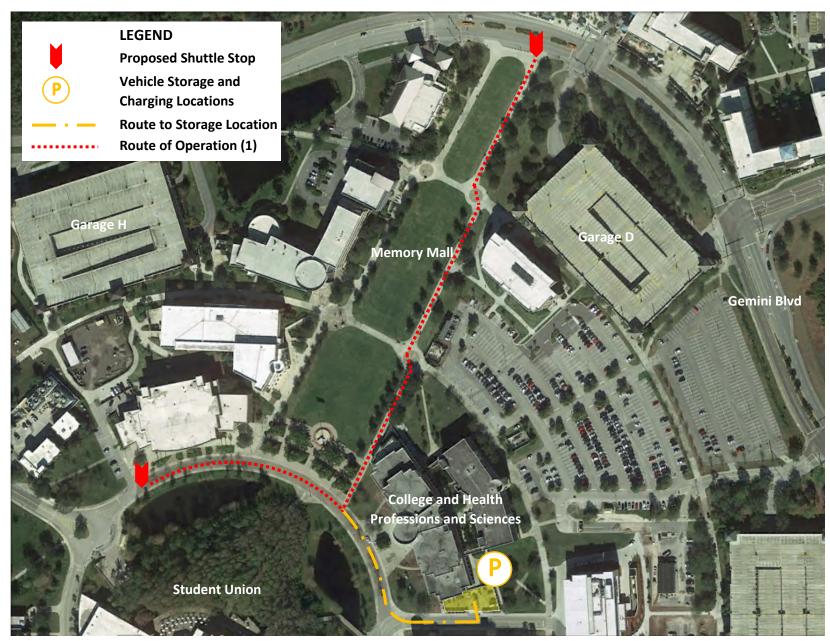


Figure A-1.1: Proposed Autonomous Vehicle Shuttle Route No. 1

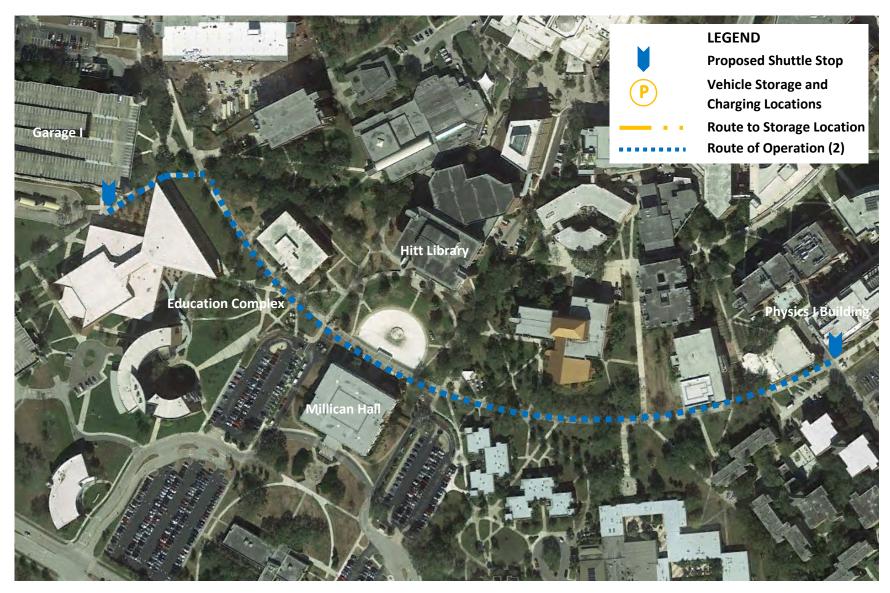


Figure A-1.2: Proposed Autonomous Vehicle Shuttle Route No. 2

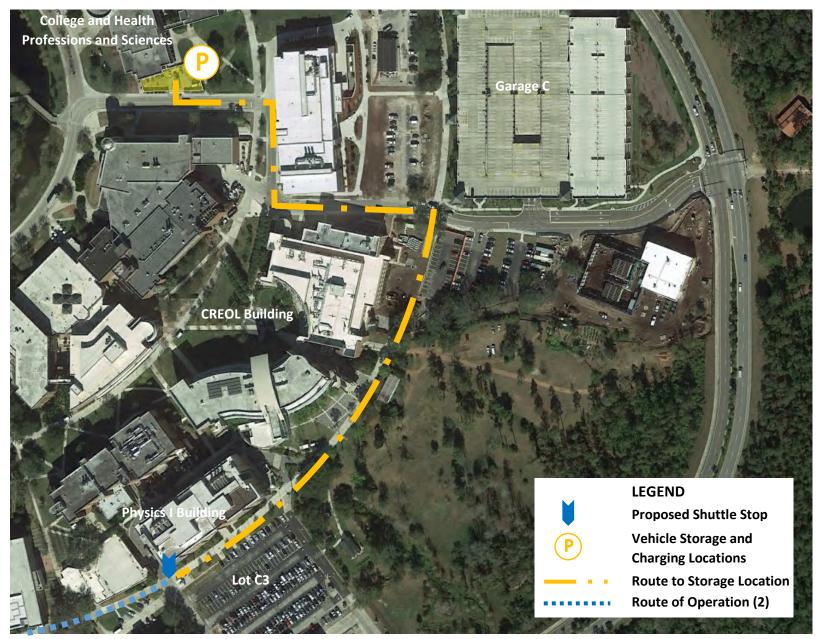


Figure A-1.3: Proposed Autonomous Vehicle Shuttle Route No. 2 to Storage and Charging Locations A-10



Figure A-1.4: Proposed Autonomous Vehicle Storage and Charging Location



Figure A-1.5: Proposed Autonomous Vehicle Storage and Charging Location

EXHIBIT "A", ENCLOSURE 2 Florida Department of Transportation District Five

AUTONOMOUS SHUTTLE SERVICE FOR UNIVERSITY OF CENTRAL FLORIDA CAMPUS RFP-DOT-18-19-5010-UCF

PROJECT BACKGROUND

1. General Overview

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 (11) regional campus locations throughout Central Florida and a fully accredited College of Medical City in Lake Nona.

2. Campus Design

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, also 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 and offers space for students and members of the UCF community to study, socialize, eat, host events, attend meetings, and engage in campus life. 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 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.

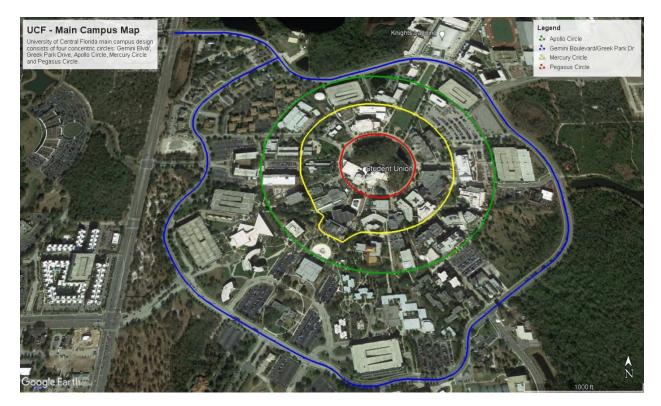


Figure A-2.1: University of Central Florida Campus Design in Concentric Rings

3. Pedestrian Access Facilities

Throughout campus, pedestrian access facilities provide UCF students, faculty, staff, and visitors pathways between academic buildings, student housing centers, and other oncampus facilities. Radiating outward from the center of campus and the Student Union, three primary pedestrian access facilities encircle the campus: Pegasus Circle, Mercury Circle, and Apollo Circle. While primarily for pedestrians, on-campus sidewalk facilities are commonly shared amongst pedestrians, bicyclists, and occasional electric maintenance vehicles.

Encircling the Student Union, Pegasus Circle is comprised of public-access surface streets with 8' sidewalks on either side of Pegasus Drive and Aquarius Agora Drive, connected by an exclusive pedestrian pathway of brick pavers bordered by concrete sidewalks. Pegasus Circle provides access between the Student Union, College of Science, Business Administration, Engineering, Health and Public Administration, Business, and Burnett's Honor College, as well as the Memory Mall greenspace.

Encompassing Pegasus Circle, Mercury Circle is an exclusive pedestrian-access sidewalk providing a continuous radial connection between the Memory Mall, Colleges of Psychology, Communications, Visual Arts, Technology, Chemistry, and Biology, John C. Hilt Library, J.T. Washington Center, and various parking facilities. Pathways along Mercury Circle vary in width of sidewalk from 8' to 20' with numerous diagonal spurs entering and exiting the circular avenue, as well as surface street crossings at Scorpius Street and Aquarius Agora Drive.

Further from the center of campus, Apollo Circle is an exclusive pedestrian- access sidewalk providing a continuous pathway about campus with two surface street crossings at Scorpius Street and Aquarius Agora Drive. Apollo Circle connects Millican Hall—a focal point of campus—with the Alumni Center, Colleges of Health and Pharmacy, Physical Sciences, Optics, Arts and Humanities, and Education, as well as various student residential complexes and numerous facilities. Apollo Circle maintains a constant sidewalk width of 18', providing the largest radial connector on campus.

Bordering Greek Park Drive and Gemini Boulevard, two 6' sidewalks circumnavigate the interior of campus on either side of the roadway, except for in a few select locations. These parallel pathways provide a continuous radial connection between the University Welcome Center, Recreation and Wellness Center, Knights Plaza, Memory Mall, Greek Park, and various parking facilities including Visitor Parking. This exclusive pedestrian-access facility includes thirteen signalized intersections and three non- signalized, mid-block pedestrian crossings.

Exclusive pedestrian-access facilities also connect the Student Union and Pegasus Circle with the Knights Plaza commercial area housing the CFE Arena, across what is known as Memory Mall. Concrete sidewalks bordering Memory Mall are 16' in width and terminate in two signalized intersections across Gemini Boulevard. Within Knights Plaza pedestrian facilities vary in width from 8' to 16' dependent upon location.

4. Parking Facilities

UCF offers a wide variety of parking facilities and services for students, faculty, staff, and visitors on campus. Parking facility access is determined by permit, which can be obtained through the UCF Parking and Transportation Services. Student permits are subdivided into commuting and on-campus residents with four permissions determining which facilities a student may occupy: "D", "R", "RL", and "KP" permits. Similar, faculty permits are subdivided into three permissions: Reserved "A", "B", and "C" permits. Visitors seeking to park on campus in non-metered locations must first obtain a Visitor Permit from the Visitor and Parking Information Center. Disability and Motorcycle parking permits are also available for qualified individuals, with designated parking facilities scattered throughout campus.

Both surface lot and vertical garage parking facilities are provided on campus, located within the interior and along the outskirts of campus. Over 30 surface lots offer available oncampus parking. Lots may be either dedicated permissions or mixed-use with designated stalls determined by signing. Access permission to surface lots may vary depending upon the time of day, allowing for increased access after- hours or overnight.

UCF also offers students a Park and Ride shuttle service between student and on-campus resident Lot E4, located south of the softball stadium on the fringe of campus, and the interior of campus.

In total, ten vertical parking garages are provided on campus, positioned along the primary motorist travel ways around campus, Gemini Boulevard and Libra Drive, and within the Knights Plaza commercial area. Within the interior of campus, there are six garages available to students and on-campus residents, Similarly, two dedicated parking garages within Knights Plaza offer parking to on-campus residents specific to the Towers residence

halls. Located behind the CFE Arena, positioned at the heart of both Knights Plaza and the university athletic complexes, sits one dedicated parking garage for events.

Users of the on-campus garages are limited to vehicles with vertical clearances equal or no greater than 7'-0". Motorists are able to check the availability of parking spaces in the on-campus garages through the UCF Parking and Transportation Services website (http://secure.parking.ucf.edu/GarageCount/).

Located within parking facilities around campus, UCF offers complimentary electric vehicle charging stations in five strategic locations: Parking Lot D1 (Memory Mall), Parking Lot B6 (Visitor Information Center), Parking Lot B1 (nearby Teaching Academy) Parking Garage A (first level, near elevators), and Parking Garage D (top level). Vehicles parked in electric vehicle charging stations are permitted a four- hour maximum charge as long as a valid UCF parking permit is displayed.

5. Student Transit Services

Providing service for students to move about campus, as well as between campus and student residential communities, UCF offers multiple on and off- campus shuttle routes. Two on-campus routes, the Black and Gold, provide shuttle operations between academic buildings and student resource facilities circumnavigating Gemini Circle. Typical operations during the Fall and Spring semesters involve four shuttles running between 7:00 am and 7:00 pm traversing between eight (or nine, Black route only) designated stops. During the Summer semester, Black and Gold route operations are reduced to two shuttles running between 7:00 am and 4:00 pm.

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 hours of operation.

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.

All on and off-campus transit services offered to students, faculty, and staff are provided by a third-party entity, under contract 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 refueling or maintenance efforts exists on campus; the third-party entity maintains an off-campus facility nearby off Forsyth Road in Orlando, Florida.