UNIVERSITY OF HOUSTON
Campus Facilities Planning Committee
Information Item Description Form

1. ITEM: B-Cycle Stations UH Campus-Wide Installation

2. REQUESTING DEPARTMENT: Facilities, Planning & Construction (FP&C); Office of Sustainability

3. CONTACT NAMES & PHONE NUMBERS: Akila Raman – 713-743-8543;
Nicolas Tamayo – 713-743-6700;
Patrick Peters – 713-320-5185
Melissa Halstead – 713-743-8276

4. PRESENTER(S): Akila Raman & Patrick Peters

5. RECOMMENDATION/ACTION REQUESTED: APPROVAL

6. SUMMARY:

FP&C and designLab would like to present this project for approval to the CFPC. The project is to engage Houston B-Cycle to install solar-powered B-Cycle stations in six proposed locations. The six locations on campus were identified as popular gathering spaces that experience high amounts of pedestrian traffic based on informal research into usage, demand, and ridership conducted by B-Cycle. B-Cycle is a bike sharing program currently implemented within the City of Houston central city. A typical station consists of 13 docks with 7-8 bikes at a time, although the number of docks will be increased or decreased based on user population at each proposed location. Users can purchase per month, per semester, or annual memberships to “rent” out the bikes for quick intracampus or intracity transportation between docks based on an hourly usage fee. The B-Cycle program would benefit the University by relieving congestion of personal bicycles on campus and be a virtually self-sustaining operation with Houston B-Cycle performing periodic maintenance and bike replacement as needed at no additional charge.

7. PROPOSED START DATE: May 2018

8. SUPPORTING DOCUMENTATION:

Dimensioned drawings and photographs depicting a B-Cycle Station, Campus Map with proposed station locations, and diagrams of each priority location
Campus Facilities Planning Committee
Information Only

Akila Raman, LEED AP BD+C, Facilities Planner, UH FPC
Patrick Peters, Architect, Project Coordinator
designLAB, UH GDH CoAD

Site Location Criteria:
- along primary paths
- at trip destinations/origins
- at available solar exposure
- near other bike racks
- accepting of decomposed granite
- separate from public art viewing

Six Site Locations Selected:
01 ERP
02 STUDENT GARAGE/METRORAIL
03 STUDENT CENTER NORTH
04 MOORES SCHOOL OF MUSIC
05 COUGAR VILLAGE
06 TDECU STADIUM
Please contact a B-cycle representative to consult with you on optimal B-station size, configuration options, siting considerations and many other relevant factors.

**Dimensions**

**Power**

AC, Solar or Battery-powered
- A dedicated power line of at least 110V is required for all AC stations.
- Solar power can power a B-station at sites with sufficient sun exposure.
- Use battery power if there is no AC connection or insufficient sunlight.

**AC**
- Height: 73”
- “Battery-powered reaches same height as AC

**Solar (135W)**
- Height: 11’1”
- Optional AC Backup

**Base plates**

Bolted or Non-bolted
- All base plates are 5’2” in length
- All bolted base plates are 19” in depth
- Non-bolted AC or battery-powered base plates are 35” in depth
- Non-bolted solar-powered base plates are 45” in depth
- Refer to the chart to the right for more details.

**Station Weights**

Kiosk - 160 lbs.
Solar Kit - 120 lbs.
19 in. baseplate - 40 lbs.
35 in. baseplate - 175 lbs.
45 in. baseplate - 215 lbs.
Dock - 54 lbs.
Map module - 65 lbs.
**Depth space**

- Single-sided stations must have at least 5’8” of space (this includes a 6” front tire overhang) plus a recommended 4’ back-up zone totaling 9’8”.
- Double-sided stations must have at least 8’6” of space plus a recommended 4’ back-up zone on each side totaling 16’6”.
- Refer to the chart below for more details.

**Single-sided vs Double-sided**

**Single**
- Two docks fit on one base.
- A kiosk takes the place of one dock and can face any direction (to reduce glare, the screen should face away from the sun).
- An endcap takes the space on the base but still allows space for two docks.
- Max 12 bases = 23 docks

**Double**
- Four docks fit on one base.
- A kiosk takes the place of one dock and can face any direction (to reduce glare, the screen should face away from the sun).
- An endcap takes the space on the base but still allows space for three docks.
- Max 6 bases = 22 docks

**Common Configurations**

<table>
<thead>
<tr>
<th>Single-sided</th>
<th>Double-sided</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 kiosk, 1 dock</td>
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</tr>
<tr>
<td>2 docks</td>
<td>4 docks</td>
</tr>
<tr>
<td>2 docks, 1 endcap</td>
<td>3 docks, 1 kiosk</td>
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**Dimensions**

**Single-sided**
- Dimensions:
  - Two docks fit on one base.
  - A kiosk takes the place of one dock and can face any direction (to reduce glare, the screen should face away from the sun).
  - An endcap takes the space on the base but still allows space for two docks.
  - Max 12 bases = 23 docks

**Double-sided**
- Dimensions:
  - Four docks fit on one base.
  - A kiosk takes the place of one dock and can face any direction (to reduce glare, the screen should face away from the sun).
  - An endcap takes the space on the base but still allows space for three docks.
  - Max 6 bases = 22 docks

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BCycle 01 at ERP

INSTALLATION
On 53'-0" x 20'-0" existing unstriped asphalt area place 38 docks, solar-powered, double-sided, wide non-bolted base plates, right center-oriented kiosk, end cap on left, equipped with 24 +/- bikes.

Locate BCycle 01 on existing unstriped asphalt area south of ERP 11 and east of parking canopy along major north/south pedestrian path linking faculty and student parking to bayou trail. Locate at edge of parking canopy bay to allow for minor east/west pedestrian path.
BCycle 02 at STUDENT GARAGE/METRORAIL

INSTALLATION
On 38'-0" x 10'-0" new decomposed granite pad place 13 docks, solar-powered, single-sided, wide non-bolted base plates, left-oriented kiosk, end cap on right, equipped with 7 +/- bikes.

Locate BCycle 02 on new decomposed granite pad just east of existing concrete pad for future directory. Location sits within an existing utility easement under existing high tension line. Permission to be verified.
BCycle 03 at STUDENT CENTER NORTH

INSTALLATION
On 31'-0" x 16'-0" area of existing decomposed granite pad place 18 docks, solar-powered, double-sided, wide non-bolted base plates, right-oriented kiosk, end cap on left, equipped with 11 +/- bikes.

Locate BCycle 03 on the existing decomposed granite pad just north of the existing concrete sidewalk.
**BCycle 04 at MOORES SCHOOL**

**INSTALLATION**
On 53'-0" x 20'-0" existing decomposed granite pad place 19 docks, solar-powered, single-sided, wide non-bolted base plates, center-oriented kiosk, end cap on left, equipped with 11 +/- bikes.

Locate BCycle 04 on existing decomposed granite pad just north of building entry. Relocate existing bike racks to the existing bike rack pad and reset with existing racks in two rows.
BCycle 05 at COUGAR VILLAGE

INSTALLATION
On 32'-0" x 32'-0" new decomposed granite pad placed on.
22 docks, solar-powered, double-sided, wide non-bolted base plates, front center-oriented kiosk, end cap on right, equipped with 14 +/- bikes.

Locate BCycle 05 on new extension of existing decomposed granite pad just north of existing decomposed granite bike rack pad. One existing bike rack to be relocated. New decomposed granite pad to align with existing decomposed granite pad.
BCycle 06 at TDECU Stadium

INSTALLATION
On 53'-0" x 7'-8" new and existing decomposed granite pad place 19 docks, solar-powered, single-sided, wide non-bolted base plates, center-oriented kiosk, end cap on left, equipped with 11 +/- bikes.

Locate BCycle 06 on new extension of existing decomposed granite pad. New decomposed granite pad to the west to align with existing decomposed granite pad.