

Memorandum



Date: January 18, 2022

To: Honorable Chairman Jose “Pepe” Diaz
and Members, Board of County Commissioners

From: Daniella Levine Cava *Daniella Levine Cava*
Mayor

Subject: Status Report – South Dade Electric Bus Maintenance Facility Project (CIP227)

EXECUTIVE SUMMARY

This memo serves as a report on the status of the selection process and for the design and construction of the South Dade Electric Bus Maintenance Facility over the last 15 months. This facility is intended to serve bus routes in South Miami-Dade County, including the South Corridor Bus Rapid Transit (BRT) system. In the summer of 2021, Commissioner McGhee expressed his desire to utilize the County’s preferred site (Site #5-Homestead Air Reserve Base Conveyance), for an alternative purpose, and recently at the meeting of the Transportation, Mobility and Planning Committee (TMPC) on January 11, 2022, Commissioner McGhee sought to prohibit the use of the preferred County owned site as an electric bus maintenance facility. Therefore, DTPW has been compelled to identify additional sites for evaluation. This memo outlines the impact of selecting an alternative site other than Site #5.

BACKGROUND

The Department of Transportation and Public Works (DTPW) operates three bus maintenance facilities – Central, Coral Way and Northeast – where its diesel and Compressed Natural Gas (CNG) bus fleet are serviced. The County, pursuant to Resolution No. R-1041-19, on October 3, 2019, approved contracting with Proterra, Inc. for the purchase of up to 75, 40-foot, battery-electric buses, including the installation of charging systems at each of DTPW’s maintenance facilities. An additional procurement for up to 100, 60-foot battery-electric articulated buses is currently under the Cone of Silence. These electric bus procurements align with the County’s policy mandate to transition to cleaner burning heavy fleet to reduce greenhouse gas emissions.

In October 2020 in preparation for the purchase of the 60-foot electric buses, designed to serve the South Corridor Bus Rapid Transit (BRT) system currently under construction, DTPW commenced a site analysis and planning study for a new electric bus maintenance facility as the three existing facilities are operating at or beyond their design capacity. The study included a conceptual plan, identifying programming requirements essential to efficiently and cost-effectively service South Dade’s bus and BRT operations as the area does not have a maintenance facility and electric buses will be deployed along the South Dade TransitWay.

Even now, more than 35% of DTPW’s bus routes service the areas south of the existing maintenance facilities. As such, a new location in the South Dade area is strategically important as it would result in decreased operational costs, labor requirements and excess mileage impacts from transiting to and from the existing garages.

STATUS REPORT

The study’s project scope was divided into three phases: (1) identification of the facility’s requirements and site selection; (2) development of the conceptual design plan; and (3) construction of the facility.

Facility Needs: To identify the facility's requirements, the Project Team met with various DTPW divisions such as Operations, Safety and Security, Maintenance, and Facilities. As a result of those meetings, the following functions were identified as facility needs to serve the ultimate proposed fleet of 100, 60-foot articulated battery electric buses:

- Bus Maintenance
- Bus Operations & Administration
- Parts Storage
- Body Repair & Paint
- Service & Wash Lanes
- Security / Vault Pull
- South Corridor Gate Arm Maintenance
- Facilities & System Maintenance
- 100 bus parking spaces including within-space overhead pantograph battery electric bus charging (configured in a 1:2 charger-to-dispenser ratio) and associated electrical utility yard
- Employee/ Visitor Parking

Cumulatively, these functions require at a minimum, approximately 95,967 square feet of building space, 277,310 square feet of parking/yard space as part of an overall 801,965 square feet (18.41 acres) of programmed site space. To optimize site size needs to the minimum total acreage, some of the functions, such as operations, administration, and employee parking would need to be elevated above the ground floor.

Site Selection: The department initially identified the following eight potential sites located in South Dade, falling within Commission Districts 8 and 9 and in close proximity to the South Dade TransitWay. Proximity to the Transitway is an integral selection factor in order to efficiently serve the South Corridor BRT and the range constraints of the battery electric bus fleet. DTPW conducted an initial feasibility screening and ranked five of the original sites selected.

Original Sites Evaluated:

- Site No. 1: 13450 SW 244th Street (11.1 ac)
- Site No. 2: 75 West Palm Drive (16.3 ac)
- Site No. 3: 601 NW 3rd Ave and Krome Avenue (14.7 ac)
- Site No. 4: Last Chance Saloon (12.7 ac)
- Site No. 5: Homestead Air Reserve Base Conveyance (20 ac)

Sites disqualified early in the process:

- Site No. 6: SW 240th Street and SW 97th Ave (WASD)
- Site No. 7: SW 127th Ave Homestead Speedway (20ac)
- Site No. 8: 28600 SW 107th Avenue (24 ac)

Sites 6, 7 and 8 were disqualified early in the process as Site 6 falls within the Biscayne Bay Water Recharge area and is outside the Urban Development Boundary (UDB) in the Coastal High Hazard Area. Site 7 is currently zoned agricultural and adjacent to environmentally endangered land (EEL). Site 8 is outside the UDB in the Coastal High Hazard Area, landlocked with no available access to enter, requiring additional project scope to build roads and install utilities.

Sites 1 through 5 were evaluated further and were rated against the following criteria:

- Proximity to the South Dade TransitWay BRT
- Acquisition Cost
- Development Timeline
- Allows for On-Site Expansion
- Development Cost
- Relocation Cost
- Utility Availability
- Neighborhood Compatibility
- Environmental Impact
- Site Configuration
- Flood Plains and Drainage
- Traffic & Surrounding Roadway Conditions
- Potential for Transit Oriented Development (TOD)
- Easements
- Geotechnical
- Reusable Existing Facilities
- Site Size
- Former Landfill
- Zoning

Each were assigned a weight factor indicating its relative importance to DTPW. Based on the results of the initial site screening and the identified limitations of the proposed sites, only Site 2 and 5 were deemed adequate to advance for further development, with Site 5 rating the highest cumulatively. Site 5 has available space to fit the fully programmed facility, is located approximately three-miles from the South Dade TransitWay BRT, is free of acquisition cost as County-owned land, has been reviewed and determined to have no major environmental or Title VI equity issues, and is properly zoned for this use.

in Fall 2021, in response to requests from the District 9 Commissioner that other sites be considered since he had a preferred use for Site 5, the Project Team began evaluation of five additional sites:

- Site No. 9: Military Barracks @ 28451 SW 127th Ave (21 ac)
- Site No. 10: SW 127th Avenue and Saint Nazaire Blvd.
- Site No. 11: SW 328 St and SW 152nd Ave (28 ac)
- Site No. 12: SW 288th St SW 137th Ave (10.70)
- Site No. 13: SW 344th St @ TransitWay

In addition, the project team developed and presented enhanced facility concept for Site 5 that incorporated open green space and water features, linear park, community center and designated space for commercial use prior to the January 11 TMPC meeting.

The analysis of these additional sites is currently undergoing the same site selection process as the original five identified sites with evaluation and concepts to be developed by February 2022. Resorting to these alternatives will create a delay of at least 12 months. Please refer to Exhibit A and B for the list of parcels evaluated and the associated site maps.

Project Schedule

Based on facility needs and the sites being evaluated, the following project milestone schedule had been developed based on the recommended site #5 that is County-owned, and had no environmental issues:

- February 2022 – Finalize Site Analysis
- March 2022 – Finalize Title VI and Hold Public Meeting
- April 2022 – Advertise Design-Build Contract Tier 1
- Spring 2023 – Award Design-Build Contract
- **Summer 2025 - Construction of Facility Completed**

Impacts of Additional Site Evaluation and Selection

One of the options staff is considering is reducing the size of the facility to primarily address the electric bus fleet that will be servicing the South Corridor BRT. If the projected fleet size for the facility is reduced, the facility needs analysis would be amended, i.e., the analysis for each of the sites would change. This would require the Project Team to re-evaluate the previously completed project site analysis adding approximately 12 months to an already compressed project schedule. This could place at risk the County’s ability to receive, store and operate the battery electric bus fleet currently in procurement, and require temporary frequent redistribution of buses to other facilities to balance space needs. Below are examples of schedule impacts if the County were not to proceed with the current site evaluations and work completed by the Project Team to date:

For a County-owned site with no land acquisition necessary: Re-evaluate with a downsized fleet requirement based on only servicing the BRT.

- February 2022 – Notice to Proceed (NTP) to consultant to begin planning and preliminary engineering services
- May 2022 – Finalize site analysis and evaluation
- May 2022 – Begin the conceptual design and layouts
- August 2022 – Finalize Title VI and hold public meeting
- December 2022 – Finalize the preliminary engineering (survey, utility coordination, geotechnical and Phase I Environmental)
- Spring 2023 – Finalize the Design Criteria Package (DCP) for procurement
- Summer 2023 - Advertise Design-Build Contract Tier 1
- Summer 2024 - Award Design-Build Contract
- **Fall 2026 - Construction of Facility Completed**

For privately owned sites where land acquisition is necessary: Re-evaluate with a downsized fleet requirement based on only servicing the BRT.

- February 2022 - NTP to consultant to begin planning and preliminary engineering services
- May 2022 – Finalize site analysis and evaluation
- May 2022 – Begin the conceptual design and layouts
- Summer 2022 – Finalize Title VI and hold public meeting
- Summer 2022 – Begin right-of-way acquisition and DCP development
- Fall 2022 - Finalize the preliminary engineering (survey, utility coordination, geotechnical and Phase I Environmental)

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- Winter 2024 – Finalize right-of-way acquisition and DCP development
- Fall 2023 - Advertise Design-Build Contract Tier 1
- Fall 2024 - Award Design-Build Contract
- **Spring 2027 - Construction of Facility Completed**

The project team will continue to finalize the evaluation of the additional five sites to arrive at an alternative recommended site that meets the project needs if site #5 is disallowed. Depending on the characteristics of the final recommended site and its anticipated construction completion a new detailed schedule will be developed.

Should you require additional information, please contact DTPW Director & CEO Eulois Cleckley at (786) 469-5406.

c: Geri Bonzon-Keenan, County Attorney
Gerald K. Sanchez, First Assistant County Attorney
Jess McCarty, Executive Assistant County Attorney
Office of the Mayor Senior Staff
Eulois Cleckley, Director and CEO, Department of Transportation and Public Works
Yinka Majekodunmi, Commission Auditor
Jennifer Moon, Chief, Office of Policy and Budgetary Affairs
Melissa Adames, Director, Clerk of the Board
Eugene Love, Agenda Coordinator