## **Letter of Intent - New Bus Shelters**

In October 2001, an agreement between the City and Clear Channel was executed for Clear Channel to construct, operate and maintain bus shelter structures and other street furniture on the public right-of-way throughout the City. The agreement (currently on a month-to-month) provides for commercial advertising on the bus shelter and revenue sharing with the City.

At the December 9, 2015 City Commission meeting, the Commission discussed the need to improve the existing bus shelter design and the desire for bus shelters to include enhancements that could help promote transit.

At the March 9, 2016 City Commission meeting, the Commission adopted Resolution No. 2016-29325 accepting the recommendation of the Finance and Citywide Projects Committee (FCWPC) to issue a Request for Proposals for the design of new bus shelters; and authorizing the City Manager to extend the existing agreement between the City and Clear Channel on a month-to-month basis after expiration on October 31, 2016, as needed, such that the Clear Channel contract would remain in place until the new contract is executed.

On April 13, 2016, the City Commission approved to issue Request for Qualifications (RFQ) No. 2016-116-KB for Architectural and Engineering Design Criteria Professional Services for New Bus Shelters.

The new bus shelter design is intended to be of an iconic nature and incorporate features enhancing the transit experience of passengers, including innovative designs and technology, as well as to enable for installation of bus shelters at more bus stops with high transit ridership.

A contract for bus shelter design services was executed on July 19, 2017, and the design effort commenced on October 4, 2017. The design phase includes development of 100% final engineering plans, specifications, and construction cost estimates and is anticipated to be completed by end of 2018. Some of the deficiencies regarding the existing bus shelters have been noted as follows:

- Minimal protection from the elements
- High cost of installation/removal
- No capability to use technologies for Intelligent Transportation Systems (ITS) and Real-Time Transit Information – currently, the existing design does not incorporate any elements of real time/digital transit information that could be of substantial benefit to the general public and which are common in other parts of the Country
- Insufficient number of facilities the current number of transit facilities does not meet the transit demand of the City and, further, does not encourage/promote the use of transit
- Right-of-Way constraints the installation of bus shelters within the right-of-way is limited by the space available, existing facilities and amenities installed within public frontages, and accessibility requirements

Four (4) shelter design types are being developed by the design team: 1) enhanced shelter (robust shelter for installation at major transfer points with high number of users); 2) standard shelter; 3) minimal shelter (for installation at locations with limited right-of-way width, low

ridership, or adjacent to single family residential areas); and 4) temporary shelter (low-cost installation for temporary use at locations affected by construction).

In December, 2017 design team developed and submitted a pre-design report including four (4) design concepts for each of the bus shelter types, excluding the temporary shelter. Design concepts were presented to FCWPC on December 13, 2017 and February 23, 2018. Ultimately, at its meeting on March 7, 2018, the City Commission selected a primary concept for further design development by the design team.

In July, 2018 selected concept was presented to Design Review Board (DRB) and Historic Preservation Board (HPB). Motion made by both boards was to continue application to October of 2018, so that design team has time to address comments made by each of two boards and what has been done to addressed those comments is as follows:

## DRB:

- 1. Drainage on roof, including how is water drained from the roof and where does it go when it hits sidewalk. Rain (sideways) protection. Response: We intend to add a gutter between the two roof panels to carry the water to one of the columns for drainage out the side of the shelter and away from the covered area. This is an improvement of the existing drainage condition in which the water sheet drains off the back of the shelter. A section through this gutter has been added to the presentation.
- 2. Solar technology, is it current? How is it installed? Solar cubes/tints on colored cells. Need more detail. Response: We intend to use a Building Integrated Photovoltaic System (BIPV). Translucent or transparent PV cells will be integrated into the glazed roof. This has been done with regular PV cells in numerous places in Florida (AA Arena, FPL solar trees). We are attempting to get a mock-up of this system in time for the DRB/HPB meetings.
- 3. White powder-coating. Alternative color scheme should be explored. Response: With regard to the color, we have looked at alternates, but feel that "white" best represents the MIMO character of Miami Beach. With regard to the durability of the powder coat, we are proposing to use an "e-coat" system underneath the finish coat for better protection.
- **4. Seating. Very problematic as proposed.** Response: The seating has been redesigned to address most of the concerns brought up.
- 5. Paving. Paving around bus shelters in concept is good, in reality it is not. Creates territorial area from pedestrian standpoint, ADA pavers problems, Miami Beach red sidewalks conflict. Response: We agree and have revised the design to use the same Miami Beach red sidewalk carried underneath the shelter. We still intend to identify the shelter area with a solid white line.
- 6. *Iterations.* Seems like an option for a sized shelter was missing. Response: We corrected language to indicate that the temporary shelter will be equivalent to the 10'x3' minimal shelter.

## HPB:

- 1. Roof drainage detailing. Response: See response to DRB comment #1.
- 2. Fix seating. Response: See response to DRB comment #4.
- 3. Pervious paving. Response: While we think this approach is a good idea, after some further life-cycle analysis, we've concluded this will be more problematic in the long term. Pervious paving requires frequent maintenance to keep performing as first

installed. Underneath the paving, we would still have concrete foundations taking up most of the space which reduces the drainage capability. Please see the response to DRB comment #1 to understand how we intend to manage the drainage from the shelter.

- 4. Passenger Information System (PIS) sign perpendicular to the road to see from distance. Response: While we think this is a good idea, actual implementation presents some challenges to the design. For example, the PIS sign would need to be double-sided to face both directions. This requires a larger housing that does not mesh well with the slenderness of the tube it will be attached to. Additionally, the purpose of the sign is to share information to passengers at the bus stop. Dynamic PIS in perpendicular orientation may also create distraction to motorist.
- 5. Mockups, samples. Response: We will have for the DRB/HPB meetings.
- **6.** Front to back movement at the shelter. Response: We think this is a good idea and have made modifications to the design to allow this to occur.

Design team evaluated each one of the comments and made all applicable/feasible design accommodations which will be presented before both boards in October of this year.

Once the design process is completed, the City will subsequently procure a new contract to manufacture, install, operate, and maintain the new bus shelters in the City, including advertising components.

With respect to sea level rise, the design team is utilizing strategies to make the shelters more resilient. Some of these include; a more simplistic install and un-install process to facilitate the raising of streets, locating most of the critical electrical components at the roof level, providing a water-tight enclosure for any lower electrical components, and utilizing an aluminum frame system to mitigate the effects of sea water exposure.

Signature

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