THE CITY OF SOUTH MIAMI
6130 SUNSET DRIVE
SOUTH MIAMI, FLORIDA

US.1 PEDESTRIAN OVERPASS STUDY

January 26th, 2000
July 7th, 2000 - Revised

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ACKNOWLEDGEMENTS
THE CITY OF SOUTH MIAMI

CITY COMMISSION

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Vice-Mayor
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Assistant City Manager/
Project Director
Subrata Basu

The study was funded through
Metropolitan Planning Organization's (MPO) Municipal Grant Programs.

MCHRARYASSOCIATES
ARCHITECTURE/ENGINEERING/PLANNING
Executive Summary -

The City of South Miami's commercial district, once a small, mostly retail sector catering primarily to its residents, has become a vibrant, youthful, mixed-use downtown attracting both locals and visitors. Replete with entertainment venues, restaurants and specialty shops, this rejuvenated downtown promises to sustain its growth into the foreseeable future. This popularity, however, has placed a strain on the City's ability to accommodate the increase in pedestrian and vehicular activity. Accordingly, the City of South Miami has focused attention on alleviating vehicular congestion within the downtown and neighboring residential districts by promoting mass transportation and convenient pedestrian movement as viable alternatives.

The South Miami Metrorail Station is an existing mass transportation hub including access to Metrorail, Miami-Dade buses, and the Downtown Trolley. This transportation terminal also contains a five-level parking garage. The garage is currently underutilized and could be tapped as an additional source of parking for the overburdened downtown. Unfortunately, Dixie Highway's six-lane north/south roadway impedes the City from fully utilizing both the station and the parking garage. Pedestrians are forced to quickly negotiate a lengthy crosswalk. The City of South Miami believes that a pedestrian overpass will safely and effectively mitigate the physical and psychological barrier created by US 1.

M.C. Harry & Associates, Inc., A/E/P, was commissioned to investigate and document the potential locations and configurations for a pedestrian overpass. Their analysis yielded three possible schemes, each examining a different location and alignment. A number of governmental agencies participated in the review and development of the design; among these were MDTA (Metro-Dade Transit Agency), MPO (Metropolitan Planning Organization), and FDOT (Florida Department of Transportation). Of the three schemes, scheme "A" appears to be the most viable solution, offering the best balance of simplicity, cost, convenience and accessibility.

These findings were presented at a workshop held at City Hall on February 29, 2000. Participants included City and County representatives as well as community residents. In general, the participants expressed continued support for the pedestrian overpass. In evaluating the three proposed schemes, "A" and "B" were the most favored. While "A" offered a better balance of cost, accessibility, and simplicity, many felt that the location of the east tower in scheme "B" was a better solution. As a result it was recommended that a follow-on study be conducted to explore a hybrid solution integrating schemes "A" and "B". Additionally, it was requested that the follow-on study advance the architectural expression of the various bridge elements and its visual relationship to the city's "Hometown" character.
Project Definition -

The City of South Miami is a growing and dynamic city of approximately 10,500 inhabitants covering an area of approximately 2.4 square miles. South Miami has been steadily increasing in popularity as a shopping, dining and entertainment destination. The City's planning efforts and land development codes encourages mixed-use, infill developments and promotes the concept of "Eastward Ho", pedestrian activities and ambience. With its hometown "Main Street" of commercial offerings along tree lined and brick-paved sidewalks, this downtown district offers a unique and leisurely shopping experience. The heart of the retail district runs along SW 72nd Street (Sunset Drive) between US 1 and 57th Avenue (Red Road).

Recently South Miami has experienced an exponential increase in retail, commercial and entertainment development. A number of new projects are on the horizon for the city including a possible redevelopment of the property immediately south of the "Shops at Sunset" parking garage. Within recent months the newly completed Shops at Sunset Place has positioned itself as a major multi-faceted retail and entertainment complex attracting not only locals but residents from neighboring communities as well as tourists. This growth has placed a premium on available parking and increased the overall vehicular congestion during peak hours. South Miami is investigating ways of alleviating vehicular congestion while simultaneously promoting alternative methods of arrival to the City. One such readily available mode of transportation is the Metrorail. The Metrorail has a station directly across from the heart of the downtown area. By providing easy access to the downtown district from the Metrorail station, the City of South Miami hopes to make this mode of public transportation a safe and convenient alternative to driving.

Additionally, an increase in activity along Sunset Drive west of US 1, coupled with plans for future development of this area forecast a significant increase in pedestrian flow across this busy federal highway. South Miami has approved a proposed mixed-use joint development adjacent to the existing 5-level parking garage located on the Metrorail station property. This project will provide approximately 120 residential units above 70,000 square feet of commercial/office spaces located at grade level. Miami-Dade Transit Agency is sponsoring this project in an effort to promote infill development at existing stations and promote transit ridership.
South Miami is looking for ways to link its various land uses by providing safe and convenient access to services and facilities on either side of US 1. The City is fostering a seamless connection between the retail, offices, and residential areas predominantly to the east of US 1 with the medical facilities/offices, Civic presence (City Hall, Library, Post Office), and residential areas located west of US 1. To successfully mitigate the intrusion of this highway into the fabric of South Miami, a link must be provided that will satisfy a number of critical items. This link must first be functional for all users, while at the same time, be phenomenologically enticing, adding to the experience of the City of South Miami. Maximizing the use of the Metrorail is essential to the continued growth and development of these land use patterns.

The City of South Miami is promoting the concept of a pedestrian overpass as a viable solution to this multi-faceted problem. A pedestrian overpass would be one of many components contributing to the connection between the various land uses. The City hopes that by introducing a pedestrian overpass into the fabric of the city it will not only mend the rift caused by US 1 but also encourage the use of the Metrorail as an alternate method of transportation. Integrating the pedestrian overpass with the Metrorail station will ultimately make the project more successful.

Although this study deals with the pedestrian overpass at a conceptual level, the schemes developed accommodate existing conditions and constraints imposed by setback and clearance requirements. The use of a pedestrian underpass (underground connection) was precluded from this study because of the high cost and complexity associated with tunneling under an existing highway. The FDOT’s “Plans Preparation Manual” also discourages the use of pedestrian underpasses as “generally undesirable.”

M.C. Harry & Associates, Inc., A/E/P, was commissioned to investigate and document the potential locations and configurations for a pedestrian overpass. MCHA analyzed three conceptual schemes that address these objectives creatively and efficiently. The overpass fundamentally will consist of at least two discharge points, one at either side of US 1, and at least one elevated walking surface (bridge). The discharge points will serve as vertical access to the bridge and could include additional components such as limited retail space that could increase the usability of the overpass. A revenue-collecting node for Metrorail passengers has been included in each of the schemes.
Method and Approach

MCHA began the process by contacting a host of departments and agencies that would have input directly or indirectly with the design and location of the overpass. The information compiled was used to develop and evaluate the various schemes. The primary contributors were MDTA (Metro-Dade Transit Authority), MPO (Metropolitan Planning Organization), FDOT (Florida Department of Transportation) and the City of South Miami.

In order for this project to be successful it is critical that the bridge meet certain criteria. That criteria must be identified, analyzed critically, and tested using design as a tool for investigation, and present recommendations for the best possible solution along with alternatives.

The process included collecting historic information related to traffic and pedestrian circulation patterns and analyzing their impact on the project; identification and familiarity with the nature of influential components of the project, such as the Metrorail, US 1, the existing parking garage, the streets, neighborhoods, and retail area near by.

Accordingly, bridges were designed for each proposed site to the extent necessary to investigate their impact on the sites, existing buildings, Metrorail, and US 1. By incorporating all necessary elements into the design we were able to determine the size of the site needed on either side of US 1 and how the bridge will interface with the Metrorail and parking garage to the west. This design investigation also assisted in formulating a cost estimate.

During this process the schemes were presented to members of BPAC (Bicycle-Pedestrian Advisory Committee), TPTAC (Transportation Plan Technical Advisory Committee), and MPO (Metropolitan Planning Organization) to solicit reaction and constructive critique. The various organizations were supportive and receptive to the project.

Utilizing the historical data and information derived from the design exercise and feedback from the presentations we developed a matrix to weigh each site’s advantages and disadvantages. In this way, a set of criteria was determined and then used to quantify which site best suited user needs and requirements and the impact on available resources.

Ultimately, the report provides recommendations for the best location, identify user needs and requirements, and resources required.
Analysis

Our analysis considered existing site conditions, regulations and guidelines imposed by the various agencies having jurisdiction, and the objectives set forth by the City of South Miami. This resulted in three schemes. Each of these schemes adheres to the guidelines set forth by the various governing agencies. In addition to satisfying the requirements of the South Florida Building Code, Florida Accessibility Code for Building Construction, and the City of South Miami zoning ordinances, the proposed pedestrian overpasses each meet Florida Department of Transportation (FDOT) and Metro-Dade Transit Agency (MDTA) design standards. MCHA consulted with the various agencies during the development of these layouts. Working within these design parameters MCHA has arrived at the following three schemes. Scheme "A" locates the overpass at the south end of the Metrorail platform. Scheme "B" studies the possibility of creating a "hub" over the center of the Metrorail platform. Scheme "C" positions the overpass at the north end of the platform. At this distance each scheme offers a safe and convenient means for crossing US 1, access to and from the Metrorail station and a direct link to the existing parking garage.

Area of Study

Generally, the location of each overpass was situated on the property of the South Miami Metrorail Station and parking garage. This Metrorail Station is directly across from the heart of the City's downtown business district making it an ideal location for a pedestrian overpass. This area, bounded by the corner of Sunset Drive and US 1, is a gathering point for the various forms of pedestrian traffic. Metrorail passengers, pedestrians on Sunset Drive and people using the existing parking garage, converge on this signaled intersection to cross US 1.

Directly across from the Metrorail station is a trapezoid shaped city block that is bordered on the west by US 1, on the east by SW 58th Ave, on the South by SW 72nd street, and on the North by SW 71st street. The south side of the block is lined with small shops that help define the retail corridor on Sunset Drive. Each of the three proposed schemes discharges its occupants at different points along the US 1 side of this city block. The location of the circulation towers within the retail district would serve as the catalyst for growth and redevelopment within the block. This redevelopment could include the redefinition of the block into a series of internal courtyards that are linked to one another while providing a filtered access to the "Main Street". The overpass at a minimum will consist of the bridge spanning across US 1 and the two vertical circulation towers on either side of it.
Program Elements:

There are two essential horizontal links to the overpass. The first, and most important, is the connector spanning over US 1. The second ties into the existing 5-level parking garage. This secondary link increases the visibility of this underutilized parking garage, thus becoming an additional source of parking spaces for the retail district.

The basic components of the vertical circulation are stairs, elevators, and escalators. The stairs are the primarily required to meet egress requirements. The stairs are also necessary during mechanical failure or routine maintenance of the elevator or escalators. Because of the height of the bridge however, most people will find the stairs too strenuous or time consuming to undertake. The elevator will satisfy accessibility requirements for the physically disabled, while providing safe transportation for elderly people and small children. Depending on the amount of people using the facility at one time, elevators might impede the flow of circulation. This can be remedied somewhat by providing multiple elevator cabs. Escalators provide a seamless method of transporting pedestrians from street to bridge level and conversely. Although the escalator is best suited for maintaining an uninterrupted flow of pedestrians, it has a high initial and maintenance cost and is less reliable than the elevator.

Effective ventilation of the bridge is also an important consideration. A comfortable environment will be a more attractive alternative to crossing at grade level and therefore worth the additional effort. Ventilation can be achieved by mechanical or natural means. A naturally ventilated environment will most likely require some form of mechanical supply or exhaust air to maintain constant air circulation. The openings required for a naturally ventilated system will require barriers to prevent people from throwing objects onto the Metrorail tracks and US 1. Natural ventilation will require the use of interior materials and finishes that are moisture resistant. Air-conditioning the overpass will provide the greatest degree of comfort for pedestrians looking for temporary relief from the heat. Air-conditioning the overpass allows it to be completely enclosed thus eliminating any opportunity for throwing objects below.

The following is a detailed description of each schematic concept.
Scheme A - South Platform

General Description

Scheme "A" examines the possibility of locating the Overpass at the South end of the platform. This alignment situates one vertical circulation tower between the existing Metrorail tracks and the other on the northeast corner of US-1 and Sunset Drive. The towers are linked by elevated bridge elements, totaling approximately 260 LF. This includes an extension linking the Metrorail's South Miami Station parking garage to the west tower and the main single span bridge that crosses perpendicular to US-1 and terminates at the east tower.

The tower on the west side of US-1 will be completely open at grade level rising between the tracks on circular columns. It will be accessible at grade level to pedestrians, at the intermediate (platform) level to Metrorail riders, and access to the parking garage at the top (crossover) level. Across the highway the east tower will greet pedestrians with an enclosed main lobby that contains stairs and elevators as well as the potential for some small retail concessions.

Escalators added to the exterior of each circulation tower could facilitate the flow of pedestrians to and from the Overpass.

The first bridge element in scheme "A" spans across US-1 from the vertical circulation, tower located between the Metrorail tracks adjacent to the passenger-loading platform, and the circulation tower attached to an existing two-story building at the northeast corner of US-1 and Sunset Drive. In this scheme the bridge will cross over the Metrorail tracks and will need to be elevated approximately thirteen feet above the top of the rails. The tower nestled between the tracks may need to be located further south if MDTA contemplates a need to accommodate future expansion of the passenger-loading platform. The second bridge element unifies the existing Metrorail parking garage with the circulation tower between tracks and thus, to the principal bridge structure. This circulation tower will allow Metrorail riders to have convenient access to the bridge. Conversely, pedestrians can access the Metrorail station directly from the circulation tower by entering the passenger-loading platform through a revenue-collecting node inside the tower.

The major benefits of this scheme are its location and simplicity. This scheme is situated near the intersection of US-1 and Sunset Drive, a natural crossing point for most pedestrians. This proximity to the intersection will make the Overpass a convenient and easily accessed alternative to crossing US-1 at grade. The Overpass crosses perpendicular to US-1 making it a relatively short span that does not require any intermediate supports. This scheme requires only a minor amount of modification to the existing Metrorail platform.

Drawbacks to this scheme include the limited space available on the northeast corner of US-1 and Sunset Drive. This location will require the relocation of some existing utilities and may also require some modification to the existing two-story building. Additionally, this scheme in its current configuration will prevent the proposed future expansion of the Metrorail platform to accommodate additional train cars. This can be remedied, however, by moving the circulation tower further south, approximately 75'-0".
Scheme B - Central Platform

General Description

Scheme "B" takes a different approach to the way in which the overpass interacts with the Metrorail station. The bridge is located above the center of the passenger-loading platform canopy. It has two main segments that make up the bridge. The first spans from the existing parking garage over the Metrorail station and across the southbound lanes of US.1 to the median. At this point the first link finds and the second bridge segment begins, spanning across the northbound lanes towards the circulation tower located approximately at the center of the block. The "crossroads" of these two bridge segments occurs over the central supporting pier located in the US.1 median. The first bridge segment cantilevers beyond the support pier creating an observation deck.

Another noticeable difference with scheme "B" is the hub occurring over the Metrorail loading platform canopy. This hub will be the transitional point where pedestrians can walk east towards the South Miami retail district, west to access the parking garage, or take the elevator down to the Metrorail. A revenue-collecting gate would be located within this hub to control access to the station. This scheme depends on its connection to the existing parking garage near the circulation core. This location allows the bridge to make use of the existing parking garage stairs and elevators. Although this scheme is remotely located from Sunset Drive, making it slightly more inconspicuous for pedestrians it is better integrated and convenient to the underutilized parking garage. Accessibility to pedestrians can be improved by adding escalators that begin at the southeast corner of the parking garage and continue up along the east facade of the garage towards the top level of the parking garage with intermediate landings located at each parking level. The escalators also provide a smooth and continuous flow up to the bridge. The intermediate landings at each parking level provide additional access points to the bridge.

The circulation tower on the east side of US.1 is centrally located adjacent to an existing parking lot. This location although removed from Sunset Drive, positions the circulation tower near the middle of the block. This opens the possibility to having the block redeveloped into an internalized retail environment, consisting of a series of courtyards that allow pedestrians to meander onto Sunset Drive, also increasing the amount of retail frontage.

This layout will require modifications to the existing Metrorail passenger-loading platform. Sections of the roof will need to be removed to allow access to the bridge above. The existing elevator will need to be replaced and the shaft modified so that it can serve both the Metrorail platform and the pedestrian overpass above.

This scheme requires the greatest amount of structural framework to support the various elevated components. This includes twin piers rising from the existing US.1 median to support the intersection of bridge elements and smaller support columns on either side of the platform to support the transition hub above the station. This scheme is the most complex because of the numerous supports and the extent of modifications required to integrate the overpass with the existing Metrorail station.
Scheme C - North Platform

General Description

The final location and configuration analyzed was a link occurring at the north end of the Metrorail platform. This scheme is very similar to Scheme "A." One circulation tower is located between the Metrorail tracks at the north end of the platform, and the other located on the northeast corner of US 1 and SW 71 Street. The circulation tower on the east side of US 1 is positioned on the corner making a nearly perpendicular connection across US 1. This location, adjacent to SW 71 Street, does not have the same concentration of pedestrian activity that occurs on Sunset Drive, however this scheme discharges pedestrians closer to "The Shops at Sunset," which has become a major destination point.

This scheme, because of its proximity to the "Shops at Sunset," allowed us to explore the possibility of a direct connection into the mall. A direct link into the mall would occur on the west façade where the parking garage is located. This appears to be impractical and dangerous because it would require pedestrians to negotiate their way through a parking garage in order to get to the stair and elevator core. It would also be inconvenient and obscure for pedestrians to enter the mall and find their way through the various parking levels to locate the entrance to the overpass. Additionally, it would require the "Shops" to relinquish parking spaces in order to safely discharge pedestrians. Also, by connecting the bridge directly to the mall it could be misconstrued as an exclusive link for use only by patrons of the "Shops at Sunset.”

The location of this scheme makes for a somewhat awkward connection to the parking garage. This scheme requires only minor modification to the existing Metrorail station; however, a potential problem with the scheme is the possible future expansion of the Metrorail platform as described under Scheme "A." If MDTA insists on maintaining a 75'-0" clearance from the end of the platform for future expansion, this scheme might no longer be feasible. It would increase the span across US 1 and make the connection to the parking garage unreasonably long and complicated.
PEDESTRIAN OVERPASS ESTIMATED CONSTRUCTION COST

<table>
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<tr>
<th>BASE BUILDING</th>
<th>Scheme &quot;A&quot;</th>
<th>Scheme &quot;B&quot;</th>
<th>Scheme &quot;C&quot;</th>
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NOTES:
*Only 2 new elevators
# PEDESTRIAN OVERPASS SCHEME EVALUATION

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<tr>
<th>Parameter</th>
<th>Scheme &quot;A&quot; SOUTH</th>
<th>Scheme &quot;B&quot; CENTRAL</th>
<th>Scheme &quot;C&quot; NORTH</th>
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<td>Minimize Impact on Privately Owned Property</td>
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**Total Score**

- Scheme "A" SOUTH: 67
- Scheme "B" CENTRAL: 50
- Scheme "C" NORTH: 61

Scoring: Excellent = 4; Good = 3; Fair = 2; Poor = 1
TWO (ACCESSIBLE)
HYDRAULIC ELEVATORS
DOWN TO EXISTING
PASSENGER LOADING
PLATFORM AND GRADE.

BRIDGE OVER US 1 TO
BUSINESS DISTRICT

FARE COLLECTION
TURNSTILES BELOW
(PASSENGER LOADING
PLATFORM)

TWO (ACCESSIBLE)
HYDRAULIC ELEVATORS

BRIDGE TO EXISTING
PARKING GARAGE

BRIDGE LEVEL

SCALE: 1" = 20'-0"
June 10, 1999

Mr. Sergio Pendas, B.A.
Project Manager
M.C. Harry & Associates
2790 S. W. Douglas Road, Suite 102
Miami, Florida 33134

Re: City of South Miami, Pedestrian Overpass
At South Dixie Highway (CS-1) near Sunset Drive

Dear Mr. Pendas:

We have reviewed the meeting minutes dated May 3, 1999 (revised May 13, 1999) and the drawings showing the three (3) potential US-1 overpass locations. We offer the following comments:

- Scheme "A" in Sheet A-1 and Scheme "B" in Sheet A-2 seem to meet FDOT criteria for horizontal and vertical clearances.
- Scheme "C" in Sheet A-3 does not appear to meet FDOT required horizontal clearance at the center support. In addition, we foresee a major disruption of traffic on South Dixie Highway during the construction of the center support. We recommend that this scheme or any others with improved support in the median of South Dixie Highway are not considered in your study.
- All three (3) schemes do not show what type of foundation is used in each support. We understand that these are preliminary drawings, but we would like to remind you that FDOT does not allow the use of sugar cane pits for the foundation.

The attached copies (pages 3-18 & 2-63) of FDOT Plans Preparation Manual, showing the design criteria for vertical and horizontal clearances, are for your information.

Should you have any questions, please feel free to call me at (305) 470-5230.

Sincerely,

[Signature]

Design Engineer

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### Table 2.10.1 Vertical Clearances for Bridges

<table>
<thead>
<tr>
<th>FACILITY TYPE</th>
<th>Roadway Or Pedestrian Over Reachback</th>
<th>Roadway Over Reachback</th>
<th>Pedestrian Over Reachback</th>
<th>Pedestrian Over Maintenance</th>
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<tbody>
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<td>(2.40)</td>
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</tbody>
</table>

1. Clearances Measurement:
   - The total vertical distance between the bridge structure and the surface of the roadway (traffic lanes and shoulder) at the top of the highest rail.
   - Includes Future Underpass Roadways:
     - 150 ft over piers and supports.

2. Includes Rail Resurfacings (Track Reason):
   - 50 ft for conventional lightweight
   - Other uses (Table 6.14 Section 6.3.6 of Chapter 6)

3. Over High Speed Rail (Bulky):
   - See Department's published and specifications to Interim Grade Control Operations
   - Designed Standard Specification for the Design and Construction of Railways

4. Over Highway (Bulky):
   - See Department's Drainage Manual, Topic No. 425-040-007, Chapter 4 and Section 2.18.1 of this chapter.

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### Table 2.11.4 Horizontal Clearance to Signal Poles and Controller Cabinets for Signals

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Horizontal Clearance to Signal Pole</th>
<th>Horizontal Clearance to Controller Cabinet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheme A</td>
<td>Outside the clear zone</td>
<td>Outside the clear zone</td>
</tr>
<tr>
<td></td>
<td>1.2 m from face of pole</td>
<td>1.2 m from face of cabinet</td>
</tr>
</tbody>
</table>

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### Table 2.11.5 Horizontal Clearance to Trees

<table>
<thead>
<tr>
<th>Minimum Horizontal Clearance to Trees where the structure is expected to be greater than 100 ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree Structure</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

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### Table 2.11.6 Horizontal Clearance to Bridge Piers and Abutments

<table>
<thead>
<tr>
<th>Minimum Horizontal Clearance to Bridge Piers and Abutments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree Structure</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

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### Table 2.11.7 Horizontal Clearance to Railroad Grade Crossing Traffic Control Devices

<table>
<thead>
<tr>
<th>Minimum Horizontal Clearance to Railroad Grade Crossing Traffic Control Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree Structure</td>
</tr>
</tbody>
</table>

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### Table 2.11.8 Horizontal Clearance to Other Roadside Obstacles

<table>
<thead>
<tr>
<th>Minimum Horizontal Clearance to Other Roadside Obstacles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree Structure</td>
</tr>
</tbody>
</table>

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**Design Geometrics & Criteria**
I realize that decisions about public involvement belong entirely to the City. However, in general, I suggest that public involvement he done early, so as not to look into decisions before the public has an opportunity to comment. This should include members, potential users and the business community.

Specific Comments:

p. 4 The second paragraph may need to be updated to reflect the fact that a revenue collecting node is part of all schemes and cost estimates. Currently the text mentions these nodes as potential additional functions of the structures.

p. 7 Scheme C – What is meant by “final scheme” in the second line? Perhaps “Scheme A” should be substituted.

p. 8 Scheme C – Paragraph 1 says that the bridge will require support in the LR life phase. I believe that is an error, since the schematic for C does not show that, nor do I remember any mention of it during any meeting or discussion.

Suggestion for Photograph Pages:

1) Label
2) Number

Were you planning to try to overlay photographs with outline of the structures?

Once again, thanks for the opportunity to comment. Please contact me at (305) 375-4507 if you have any questions about this.

Sincerely,

[Signature]

Susan Schenker
Transportation Analyst

Attachment:

[Image]
The City of South Miami US 1 Pedestrian Overpass Study
MPO Latest Questions and Comments
August 6, 1999

These questions and comments were for discussion purposes and not meant to be formal comments. However, they were given to the City representative in rough form for his reference, at a meeting between the City, MDTA, and MPO representatives and the consultant on August 6, 1999.

The MPO is requesting a brief status report to the BPAC, August 20th, at 7:00 PM in South Miami and TPC on September 13th at 2:00 PM in the Miami-Dade Government Center, 18th Floor Conf. Room 4. In addition we may ask for the same for TPTAC on Sept 1 (4th) at 10:00 AM, Government Center, 18th Floor Conf. Room 1. Also for City of South Miami to note that as soon as the item gets into conceptual/preliminary design of structure, it should go to TARC.

Have any funds been located to continue planning this?

How do these plans relate to the Hometown Plan?

Have there been Public Involvement? Has the Business Community been consulted? Do they favor any alternative over the others? Have their willingness to contribute to the costs been explored?

Do all alternatives allow for direct access from the overpass to the Metrorail platform via a fare gate within the vertical structure?

If there is connection to the platform, would provision be made to have covering from the structure to the "roof" of the platform?

Is scheme two (C) showing a canopy at some vertical structure?

What are current and planned use of the structure and surrounding sites E. of US 1?

To encourage drivers going to US 1. Place to park at Metrorail this would probably be preferred. For pedestrians simply trying to cross US 1 along Sunset, it would not be convenient. They would probably continue to use the intersection.

Joe Maciella of our Bicycle/Pedestrian program indicates that this is a low pedestrian zone, and suggests that there is really no immediate destination on the east side.

Scheme 3 (new Scheme B):
This one is better for drivers, but not convenient for people who are only traveling by foot (not car or train) and trying to cross US 1.

Mr. Maciella's concern is that this scheme forces pedestrians to enter the garage and also has no immediate clear destination.

Susan Schreiber
MPO
8/6/99, Rev. 8/9/99

TOTAL: 1.00
MEMORANDUM

DATE: March 10, 1999

TO: Mr. Lou Forti

RE: City of South Miami Overpass Study

MCHARRY ASSOCIATES

Dear Mr. Forti,

For our coordination last week, the following represents our findings for the dimensional criteria regulating the pedestrian overpass at the South Miami Biscayne Boulevard station and US 1. The two basic requirements are:

- Minimum vertical clearance: 6 ft. 10 in. (2.1 m) Table 2.1.1
- Minimum horizontal clearance: 4 ft. 3 in. (1.3 m) Table 2.1.6

Please refer to the attached sketch illustrating these clearances and make any necessary comments or corrections.

Additionally, our criteria (Chapter B, Section 8.4) requires that the pedestrian overpass have a minimum interior clear width of 2 ft. 4 in. (711 mm). Section 8.6 also requires that the pedestrian ramps be provided at all pedestrian separation structures. Where practical, a sidewalk can be provided in addition to a ramp. We would like to know if any only access to the pedestrian overpass is mandatory or if there can be an exception allowing access to the bridge by means of stairs and elevator only.

There is any additional criteria that would be relevant to the design, orientation, or configuration of the overpass please contact me or the information to the District's engineer.

We appreciate your time and assistance in this matter and look forward to hearing from you soon.

LOU:

THE CRITERIA SHOWN ABOVE IS CORRECT. PLEASE FIND THE ATTACHED COPY OF CHAPTER 6 OF THE STRUCTURAL DESIGN GUIDELINES FOR YOUR REVIEW.

IN MY OPINION THE APPROACH RAMP IS REQUIRED FOR CHILDREN AND HANDICAPPED OR SENIOR CITIZENS. A COMBINATION OF STAIRS AND ELEVATORS SHOULD DO THE JOB.

Kim Brown 3/10/99

M.C. HARRY ASSOCIATES, INC.

Sergio Mendez
Project Manager

RECEIVED
MAR 17 1999
RECEIVED MCRA

www.dot.state.fl.us
MEETING MINUTES

DATE: May 3, 1999

PROJECT: City of Miami, Miami, Pedestrian Overpass

LOCATION: MCHA Offices

A meeting was held at 10:00 AM on May 3, 1999 at the offices of MCHA to discuss the proposed schemes for the pedestrian overpass across U.S. 1. Representatives of Miami-Dade Transit (MDT) Department of Transportation (DOT) were invited together with Mr. Subrina Baiz, Planning Director for Miami-Dade County, to review and comment on the Miami-Dade Transit overpass scheme. The meeting was chaired by Mr. Alex Kowalski, and the attendees included Mr. Alex Kowalski, Mr. Silviano Rodriguez, Mr. John Bonner, Mr. Anthony Abramson, Mr. John Lee, Mr. Ted Cullinan, Mr. Bryant Porter-Brown, and Mr. Sergio Pereira.

The following were in attendance:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subrina Baiz</td>
<td>Planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Bonner</td>
<td>MDT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthony Abramson</td>
<td>MDT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Lee</td>
<td>MDT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ted Cullinan</td>
<td>MCHA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bryant Porter-Brown</td>
<td>MCHA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sergio Pereira</td>
<td>MCHA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Mr. Baiz opened the meeting by describing the objectives for the pedestrian overpass. He expressed the desire to unify Sunset Drive at the point where it intersects with U.S. 1. The importance of providing a safe, efficient, and seamless means of pedestrian pathways across the busy Sunset Highway was emphasized. Additionally, Mr. Baiz believed a pedestrian overpass would help stimulate growth on the North and South sides of Sunset Drive. Ultimately, the pedestrian overpass would provide the downtown area with a desirable and easily accessible destination.

2. Mr. Baiz also mentioned that Miami Beach, Mr. Oscar Casas, would be revising the plans for the pedestrian overpass. According to Mr. Bonner, NPO was providing funding for this study and should be included in the review.

3. Mr. Baiz asked the participants to review the proposals at a conceptual level. The purpose is to determine the probability that the schemes may evolve into a feasible solution.

4. At the end of the meeting, Mr. Baiz announced that Mr. Anthony Abramson, Mr. John Bonner, Mr. John Lee, Mr. Ted Cullinan, Mr. Bryant Porter-Brown, and Mr. Sergio Pereira would present the three schemes for the pedestrian overpass. Each scheme has its own set of advantages and disadvantages, and the attendees were reminded to keep an open mind as they review the schemes.

5. The three schemes are:
   1. The first scheme illustrates a vertical circulation element between the tracks at the southern end of the pedestrian platform and crossing perpendicular to U.S. 1 at the southeast corner of U.S. 1 and Sunset Drive.
   2. The second scheme involves an overpass above the existing platform canopy and discharges it onto a parking area in multiple directly accessible from the station. This area could then develop into a series of courtyards forming the pedestrian areas through the shops and onto Sunset Drive.
   3. The third scheme was similar to the first except that the vertical circulation element was located at the north-, east-, or west-bound platform. The overpass discharges its occupants to the southwest corner of SW 72nd Street and U.S. 1.

6. Although MDT has no specific criteria for the structural system of the bridge, it does not allow the use of a super beam for the foundation.

7. MDT ensured that the bottom of the bridge would be above the mandated minimum height over U.S. 1 when complying with the minimum required clearance over the elevated pedestrian tracks.

8. MCHA will issue copies of the drawings to Mr. Baiz’s attention for review within this department. As with the other participants, it is expected that MCHA will develop a list of general comments and arrive at a consensus with the other participants involved, considering the positive and negative aspects of each scheme as relevant to the jurisdiction. The purpose of the review is to identify MCHA constraints, which must be adhered to, to achieve an acceptable design concept.

9. It is the responsibility of all meeting attendees to bring all comments and suggestions in these remarks to the attention of the design consultant within 10 days of receipt.

Sincerely,
M.C. Harr & Associates, Inc.

Scotio Pendas, P.A.
Project Manager

---

1. MCHA presented three schemes for the pedestrian overpass. Each scheme has its own set of advantages and disadvantages, and the attendees were reminded to keep an open mind as they review the schemes.

2. MCHA explained that this meeting was held to discuss the proposals with copies of the drawings and discussed that they are available for all attendees. The schemes should be analyzed by the participants with the objective of selecting a preferred scheme which could be presented to the elected officials for consideration.

3. MCHA noted that the schemes presented by MCHA would allow for a bridge overpass to be located in the US 1 median. MCHA noted that the design of the bridge overpass would be based on the existing US 1 median.

4. MCHA noted that the bridge overpass would be in the US 1 median. MCHA noted that the design of the bridge overpass would be based on the existing US 1 median.
South Miami Overpass Study

MPO is considering a report to the BPTAC, to be held on September 15th at 7:00 PM in the Miami-Dade Government Center, 10th Floor Conf. Room 4. Please call FTPAC on Sept. 1 at 9:00 AM Government Center, 10th Floor Conf. Room 1. Also for City of Miami’s Info at 200254-101, 200254-102, 200254-103. Have any comments been received to continue planning this?

How do these plans relate to the Lauderhill Plan?

What did the South Miami Hometown Plan include besides the street improvements? Did it have a plan for physical plans for future development which would show for example the land use and building footprints for the large triangular block? Or the Courtyard referred to in section 2.

Public Involvement: Business Community? Favor?, Willing to Contribute?

Do all alternative allow for direct access from the overpass to the Memorial platform via a fare gate within the vertical structure? Yes/No

How many flights of stairs for the lower alternative?

I would recommend a matrix of some kind evaluating how well each of the schemes serve each of the population who do travel or would travel the highway. Might be defined by various travel Coplanarities of departure points and destinations. We can also look at scheme serves different modes and mode combinations. It would also help to have methods. Percent of downtown traffic, at Memorial at that station and of Sunset Place. Or how well each achieves the various goals of the project.

The City would maintain.

Scheme 1:

Do we know of any studies on this behavior as far as preference for using overpass vs. crossing at grade where possible, unless it was to go directly onto at least one structure.

Joe Mannella of our bicycle ped program prefers this option because a) it is the interaction with the most problems and correctly serves pedestrians.

Would serve more of the existing pedestrians. Drivers and ped going to commercial area of Sunset would prefer A-1 and residents who live south of Sunset walking to rail may also prefer A-1.

AMCOC/VTAP/Commdev 6/97Rev.
Hybrid A+B

General Description

As a result of the workshop held February 2000, a consensus was formed among the participants that a fourth scheme be contemplated. This fourth scheme is a hybrid developed from the integration of the west tower of scheme "A" with the east tower of scheme "B". This configuration will have a longer span across US 1 without the benefit of an intermediate support making it moderately more expensive than Scheme "A".

Advantages of this hybrid over "A" include the remoteness of the East tower from the streetscape, helping to preserve the current building scale along Sunset street. Additionally, this location will promote the concept of the overpass as a catalyst for redevelopment of the retail block both internally and along US 1. The cost of this hybrid scheme is estimated to be approximately $5 million dollars. In comparison this scheme will cost more than "A" but less than either scheme "B" or "C".