# West Avenue – Bay Road

## BASIS OF DESIGN REPORT

# City of Miami Beach

Final Report
February 23, 2007

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Section 1

# Executive Summary

## 1.1 Project Limits

The West Avenue / Bay Road Neighborhood is located in the south Miami Beach area, west of Flamingo Park. The neighborhood consists of high-density multi-family development along the Biscayne Bay frontage with single-family and low intensity multi-family structures throughout the remaining area. Alton Road, the neighborhood's eastern boundary, is a busy commercial arterial in which many of the neighborhood's most problematic conditions exist.


*Project Limits*

## 1.2 Historic Character

The City of Miami Beach is home to ten local Historic Districts and one of the first National Historic Districts to celebrate Art Deco architecture in the United States. This District—known as the Art Deco District—is comprised of a number of different examples of styles from the early 1900s until the 1950s, when much of Miami Beach's development occurred.

The West Avenue Area is not currently part of an historic district, likely because much of its original fabric has been destroyed by development since the 1960s. Fortunately, pockets of history remain—one particularly important style in the West Avenue Study Area is the Post World War II Modern Style, sometimes referred to as "MIMo". This style is related to the traditional Art Deco style that abounds in Miami Beach, but tends towards more functional simplicity. Examples include low-rise apartment buildings that are characterized by double loaded corridors, and open air verandas. The "MIMo" style is sometimes difficult to distinguish from the Garden Style of the 1940s-1960s, which placed emphasis on public walkways on the exterior of multi-family units and often surround a common garden area.

In 2001, the City's Planning Department became increasingly concerned about the South Beach area west of Alton Road because of the spike in high rise development projects. These projects went against the grain of the existing community character, which was predominantly one- and two-story apartment buildings, and prompted alarm amongst residents.

As a result of a multi-year process engaging community input, two of Miami Beach's earliest Post-War PUD neighborhoods—the Lincoln Terrace Villas and Alton Beach Bay Front Subdivision—have been recognized for their community historic significance, and have a layer of protection as part of the Gilbert M. Fein Neighborhood Conservation District. A recent initiative established part of the West Avenue Area as a Neighborhood Conservation District. Conservation Districting is a relatively new tool for preservationists and was adopted in an enabling ordinance by the City as recently as 2004. It is not as strict as an historic

district, and instead focuses on preserving general neighborhood character.

Some areas of the West Avenue neighborhood are home to the last remaining examples of this architectural and planning typology in the City of Miami Beach, and are important contributors to the character of West Avenue.

## 1.3 Project Goals

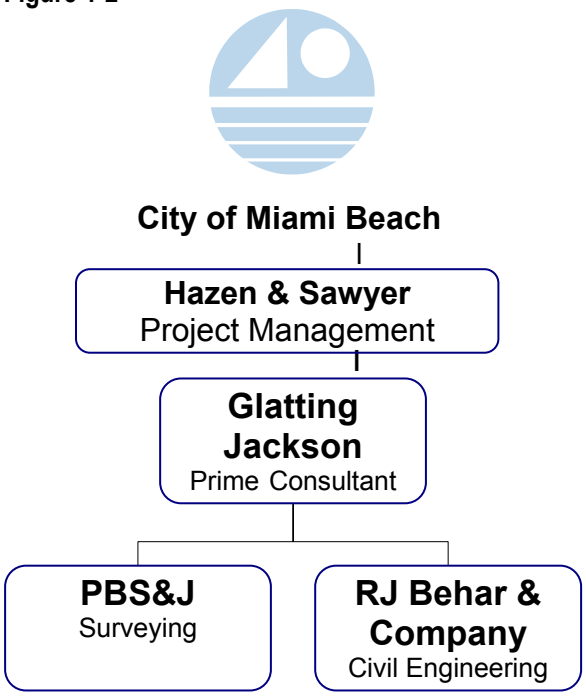
The proposed improvements within the West Avenue neighborhood will include improvements to the existing utility infrastructure as well as enhancements to the function and aesthetics of the right-of-way areas. The project team envisioned the following objectives for the project:

- Create a safe, secure environment
- Provide efficient, functional infrastructure
- Create attractive, well maintained buildings and spaces
- Provide a variety of living and working choices
- Promote neighborhood based businesses
- Integrate schools, civic buildings and places of worship
- Provide a safe, friendly network of roads, transit, bikeways and walkways
- Integrate parks, trails and open space
- Protect natural resources
- Empower citizens

## 1.4 Project Team

Glatting Jackson Kercher Anglin Lopez Rinehart, Inc. (Glatting Jackson) was selected as the prime consultant for the West Avenue / Bay Road Infrastructure Improvement Program project. RJ Behar and Associates was retained to provide civil engineering services and PBS&J provided surveying services. The organization of the team is depicted in Figure 1-2 and further described below.

**Figure 1-2**




- **Glatting Jackson**

Glatting Jackson provided overall project management and team coordination. Additionally, Glatting Jackson led the streetscape and landscape design efforts and facilitated the Community Design Workshops.

- **R.J. Behar and Company**

R.J. Behar and Company provided professional engineering services to include the design of the stormwater infrastructure, potable water system and roadway.

- **PBS&J**

PBS&J provided surveying services.

## 1.5 Summary of Planning Activities

The West Avenue/Bay Road Neighborhood project has been undertaken in two phases: Bay Road and West Avenue. The original project began in October of 2001. During the Community Design Workshop, residents of the neighborhood expressed a strong desire to further enhance the infrastructure improvements to the area in general and to the West Avenue area specifically. The City responded to this concern by reallocating resources to the rapidly redeveloping Bay Road area and began a reevaluation of the remaining West Avenue neighborhood. The Bay Road area proceeded to final design and construction while the City considered alternative budgetary solutions for the remainder of the neighborhood. Following is a summary of the Bay Road planning activities:


*Project Limits with Bay Road and West Avenue Area projects highlighted.*

### A. Bay Road Planning Activities

- Project Kick Off Meeting
- Project Site Reconnaissance
- Visioning Session
- Pre-Community Design Workshop #1
- Community Design Workshop #1

### B. West Avenue Planning Activities

Planning for this second project was originally commenced in August 2001, and culminated after the first Community Design Workshop (CDW) in November 2001, when residents advised the City that planning should stop until requisite funding for water and storm water needs was made available. The original planning budgets did not include water funding, and storm water was very limited. The City complied with this request, and after extensive internal deliberations, planning was re-initiated in July 2005. Proposed improvements will now address required storm water and water improvements, as well as streetscape enhancements.

The West Avenue planning process began again in August of 2005, with a revised financial strategy and an adjusted scope of work to more thoroughly address the infrastructure needs of the neighborhood. The activities included:

- Project Kick Off Meeting
- Project Site Reconnaissance
- Visioning Session
- Pre-Community Design Workshop # 2
- Community Design Workshop # 2

## 1.6 Budget Level Cost Estimates

The West Avenue – Bay Road Infrastructure Improvement Project has a total budget of $22,664,779. This includes the $1,662,229 previously allocated for Bay Road (Neighborhood Bid Package 11A) and $21,002,550 budgeted for the West Avenue Area (Neighborhood Bid Package 11B). A summary breakdown of the costs is shown in the table below, and a detailed estimate prepared according to the City of Miami Beach format is provided in the Appendix. This cost estimate meets the +30%, -15% criteria defined by the American Association of Cost Engineers.

| Funding Source | **Bay Road (Sept 2006)** | **West Avenue (2007)** |
|---|---|---|
| General Obligation | $0 | $1,395,106 |
| Water & Sewer 2000 Bonds | $0 | $3,966,888 |
| Stormwater 2000 Bonds | $1,062,229 | $15,001,556 |
| City Center RDA | $600,000 | $639,000 |
| Total Funding | **$1,662,229** | **$21,002,550** |

Projected construction costs for the proposed improvements are within the +30%, -15% criteria defined by the American Association of Cost Engineers, and are approximately:

| | |
|---|---|
| Water: | $1.0 million |
| Stormwater: | $10.5 million |
| Hardscape and Landscape: | $9.4 million |
| TOTAL: | $20.9 million |

## 1.7 Project Schedule

The status of the various projects and the latest schedule for the West Avenue – Bay Road Infrastructure Improvement Project was established by the City and presented at the Community Design Workshop #2 on September 27, 2006, and is shown below:

| **Project** | |
|---|---|
| Bay Road (14th to 16th Street) | Completed |
| Lincoln Road Street End | Design Completed |
| 10th Street End | Design Completed |
| Bay Road (16th St to Lincoln Rd) | Design Completed |
| Start Construction West Avenue Area | FY 2009 |

The Project Schedule* for completing the West Avenue Area Neighborhood projects outlined in the report is as follows:

Task 1 - Planning (June 2005 – Jan 07)
Task 2 - Design Phase (Feb 08 – Apr 09)
Task 3 - Bid & Award (May 09 – Aug 09)
Task 4 - Construction (Sept 09 – Aug 2012)

**schedule as of December 2006*

## 1.8 Water Main Improvements

The project team will design the replacement of existing water mains to meet the recommendations of the master plan and further recommendations from Miami Beach's *Public Works Department Water Main Prioritization* (April 2003). The following general guidelines were established by the master plan as priorities:

- Water Main Replacement and Extension
- Replacement of Galvanized Iron Water Mains
- Tuberculated 6- and 8-inch Water Mains

Within the project area, a total of approximately 7,725 linear feet of existing water main has been identified for replacement. The existing water mains will be replaced with cement-lined 8-inch diameter ductile iron pop (DIP) along these roadways.

## 1.9 Storm Water Improvements

The City's Comprehensive Storm Water Management Program Master Plan (CSWMPMP) of March 1997 recommended storm water improvements to the basins that comprise the West Avenue/Bay Road neighborhood and adjacent neighborhoods. The level of service for the proposed improvements adhere to the following design standards:

Class A Roadways
Typically these are principal arterials and/or evacuation routes. Standards allow flooding up to 8 inches above the roadway crown during a SFWMD 100-year design storm (equivalent to 18.5 inches for a continuous period of 3 days).

Class B Roadways
Typically these are minor arterials and/or four lane roads. Standards allow no flooding of the roadway crown elevation during a SFWMD 10-year design storm (equivalent to 9.2 inches of water for a continuous period of 24 hours).

Class C Roadways
Typically these are either collectors or residential roads. Standards allow no flooding of the roadway crown elevation during a CSWPMP 5-year design storm (equivalent to a rainfall of 7.5 inches for a 24 hour period.)

**Proposed Improvements**

**Bay Road**
This part of the improvements project was separated out and implemented ahead of time. The project components included full street reconstruction, sidewalk repair/infill, swale/planting strip reclamation and restoration to facilitate drainage and implement the proposed landscape theme, drainage upgrades inclusive of new catch basins, collection mains, swale regrading, pump station and a well system, and improved on-street parking in targeted areas.

**West Avenue**
The proposed drainage system will include a storm water collection network of interconnected catch basins conveying the water to storm water pump stations and drainage wells. In general, the storm water runoff will be directed to the drainage wells prior to the outfalls—by utilizing the wells for disposal, a lower amount of pollutants should enter the surface waters in Biscayne Bay.

Due to the urban nature of the neighborhood, grassy swales and retention areas are not possible. Instead, the roadway improvements will be designed to meet the standards described at left. Alton Road and Collins Avenue are Class B Roadways according to the CSWMPMP, and therefore will be designed to accommodate water from a 10-year storm. All other roads within the project limits are designated Class C Roadways, and will be designed to handle a 5-year storm.

## 1.10 Streetscape Improvements

**General Recommendations**
The issues and goals identified as being most important to staff and citizens for the West Avenue – Bay Road neighborhood streetscape are:

- Calm Traffic
- Improve Pedestrian/Bicycle Circulation
- Preserve Existing Character
- Visually Enhance Neighborhood
- Improve Parking
- Provide Access to Open Space
- Enhance Street Ends
- Improve Infrastructure

With these goals in mind, the Neighborhood Master Plan includes the following categories of improvements:

- Corner Enhancements
- Crosswalk Enhancements
- Mid-Block Crosswalks
- Street End Parks
- Street Tree Plantings
- Gateway Plantings
- Sidewalk Replacements

To implement the improvements, the following materials are recommended:

- Miami Beach Red concrete pavement is proposed throughout the neighborhood for sidewalks.

- Textured concrete walks or pavers matching or complimenting the City's standard Red color is used at key intersections.

- Curbs and gutters are constructed with standard grey concrete.

- Concrete "ball" bollards are proposed along the Collins Canal.

**Bay Road Area Improvements**
Bay Road from 16th Street to 14th Street has already been constructed as part of an agreement with the developers of the "Flamingo" property. The design of this area --referred to as Neighborhood Bid Package 11-A-- was based upon a public workshop held in November, 2001. The result of that workshop is a West Avenue - Bay Road Neighborhood Master Plan approved by the public. The features in the Master Plan affecting Neighborhood 11A design includes new sidewalks, parallel parking, curbs and shade trees. Construction of Bay Road between 16th Street and Lincoln Road is nearing completion. The design of a street-end park at 14th Street was also identified in the Master Plan, and has been constructed. Additional street-end "Shared Courtyards" at Lincoln Terrace and 16th Street have been proposed, but are not included in this project.

**West Avenue Area Improvements**
The remaining areas covered in the West Avenue - Bay Road Neighborhood Master Plan, include *West Avenue*, *Lincoln Road*, *Lincoln Court*, the remainder of *Bay Road north of Lincoln Road*, and *16th* and *10th Streets*. Measuring over a mile long north to south, West Avenue serves as a neighborhood collector street. West Avenue has a 70' wide R.O.W. from Hank Meyer Boulevard to just north of 8th Street, at which point it narrows to approximately 50' wide just north of 6th Street. The street section includes two travel lanes, two parallel parking lanes and a center turn lane from Hank Meyer Boulevard to 13th Street, at which point the parallel parking lane on the west side stops.

The street and adjoining buildings have several distinct but similar characteristics along its length, and proposed changes are organized to reflect the unique attributes of each portion of the area.

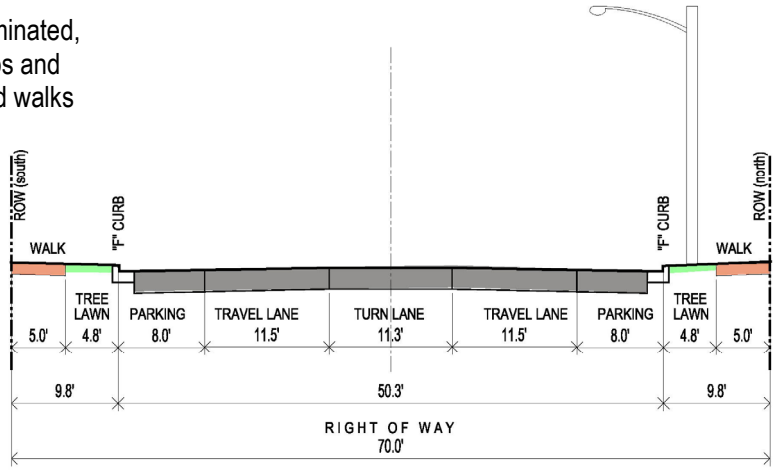
West Avenue

The objective for the proposed plan for West Avenue is to visually unify the design of the street with plantings, paving and fixtures, enhance pedestrian safety, and to accommodate bicycle traffic. Identified as a bicycle route in the City's preliminary Bicycle Trail Master Plan, the cross section for West Avenue from H. Meyer Blvd. to 8th Street includes:

- two 5' wide bicycle lanes,
- two 11' wide travel lanes,
- 10' wide center turn lane,
- two parallel parking lanes.
- Sidewalks will be Miami Beach "Pink" concrete, 6' wide, a net gain of 1' over the existing walks.

South of 8th Street the center turn lane is eliminated, beginning the transition of the proposed curbs and sidewalks to meet with the existing curbs and walks just north of 6th Street.

Eliminated from the current cross section is the 4' grass planting strip, however at the existing driveway curb cuts there are bump-out planting areas with grass and room for one or more shade trees. Corner bump-outs occur at each intersection with wheelchair ramps included per City regulations.

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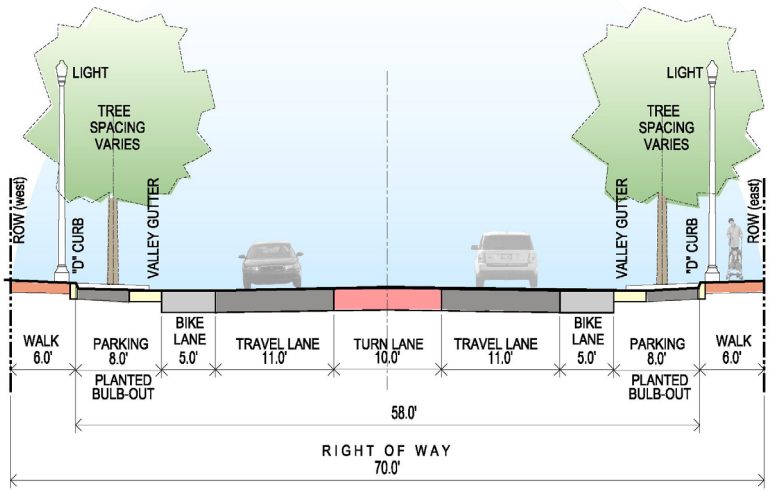
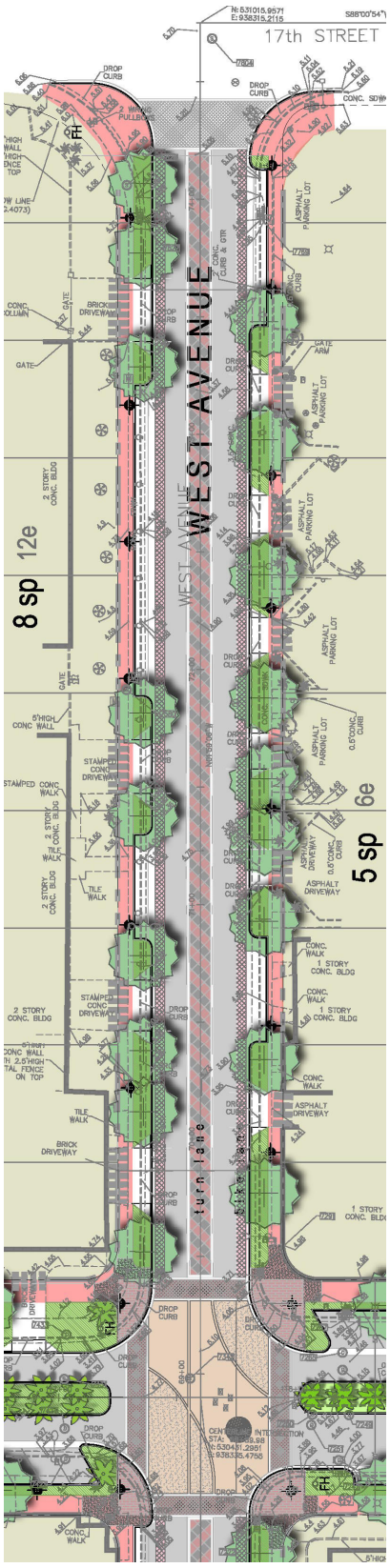


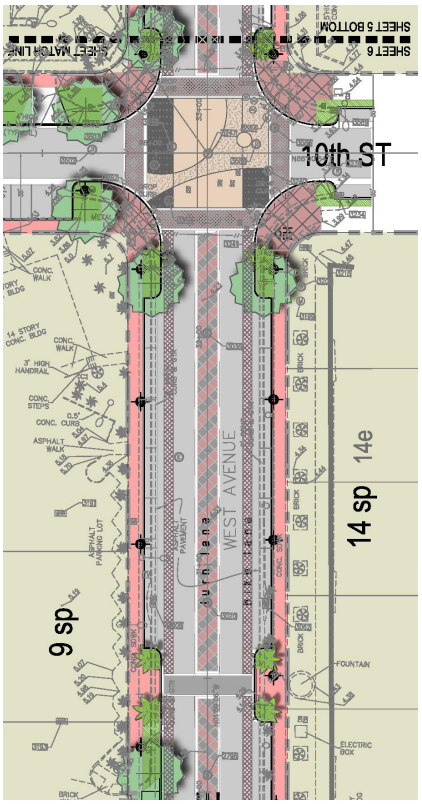

Proposed

**West Avenue Street Cross Sections**

West Avenue (contd.)




**Proposed Plan:**
**West Avenue**
**North of Lincoln Road**

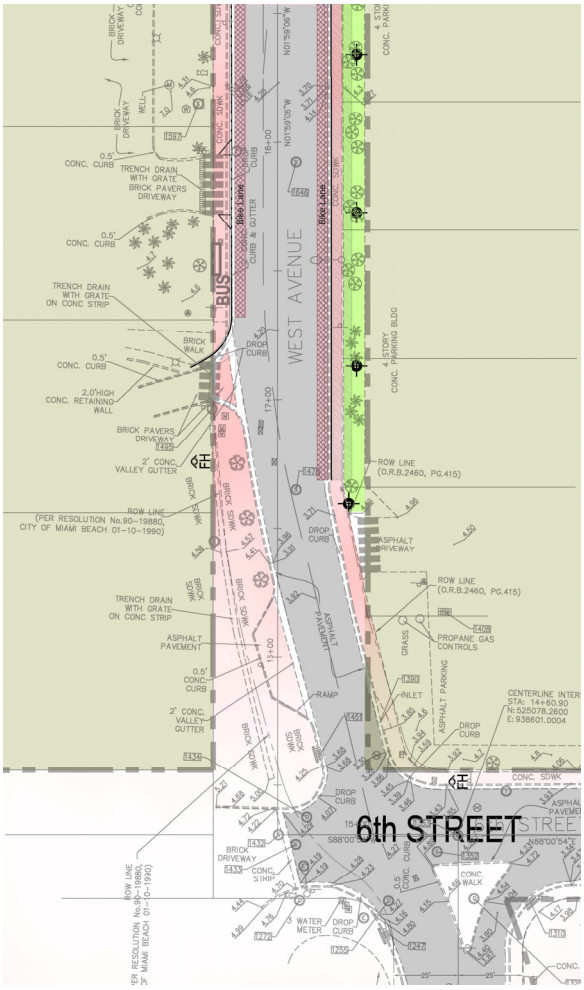



**Proposed Plan:**
**West Avenue**
**Typical Treatment South of Lincoln Road**

West Avenue (contd.)

The decision to include bicycle lanes on West Avenue is the result of strong public interest in improving the bicycle network in the City. Since West Avenue is a neighborhood collector street, it is a logical choice for accommodating bicycles into the new street design, although the space needed to include bike lanes diminishes the already limited space for pedestrians and tree planting areas.

The bicycle lanes extend from H. Meyer Blvd. (17th Street) to just north of 6th Street, where existing private encroachments on the R.O.W. make it infeasible at this time to continue bike lanes to the Causeway.

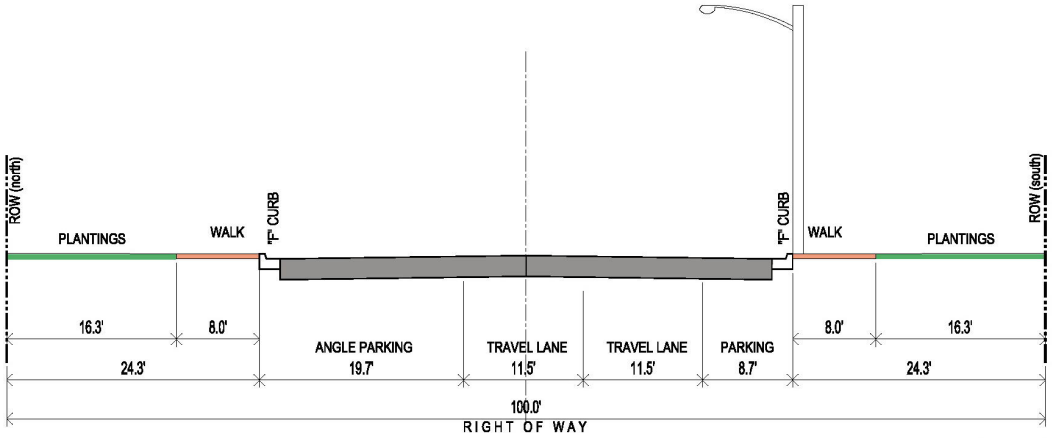



**Proposed Plan:**
**West Avenue**
**South of 6th Street**

Lincoln Road

Two different street cross sections are proposed for Lincoln Road. Between Bay Road and the cul-de-sac at the end of the street, the existing parallel parking is replaced with angle parking on both sides of the street and two 11' travel lanes will be provided. The net effect is a visual narrowing of the street. The proposed street consists of:

- Two 11' wide travel lanes
- Two angle parking lanes
- Tree lawns on each side of the street
- Two 8' wide sidewalks

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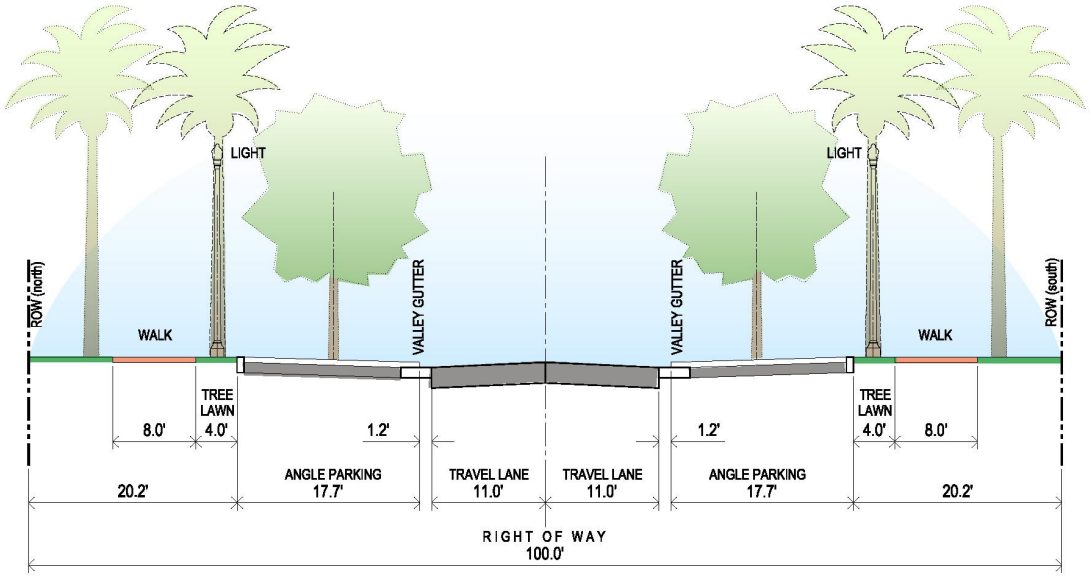


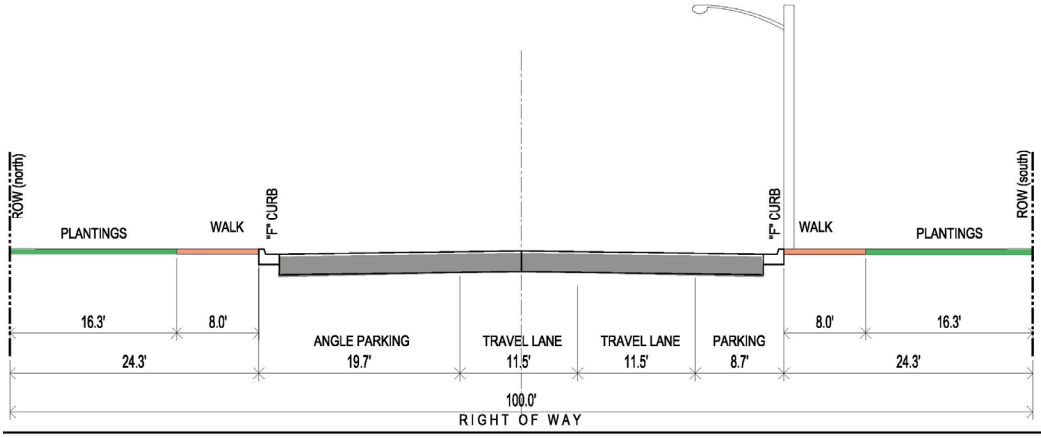

Proposed

**Lincoln Road (west of Bay Road) Street Cross Sections**

Lincoln Road (contd.)

For the proposed street cross section between Bay Road and West Avenue, a median is proposed, and is approximately 6' wider than the existing median east of West Avenue. The median is planted with a double row of Royal Palm trees, and low shrubs below the palms. Sidewalks are 8' wide and located at the edge of the R.O.W. On the north side of the street the building face is approximately 5' off of the R.O.W.; this is where stair entrances to the buildings are located, along with a continuous hedge.

The resulting design for these two street cross sections increases the number of parking spaces, provides tree-planting areas between parking spaces, and allows an uninterrupted route for pedestrians to walk to the Bay.

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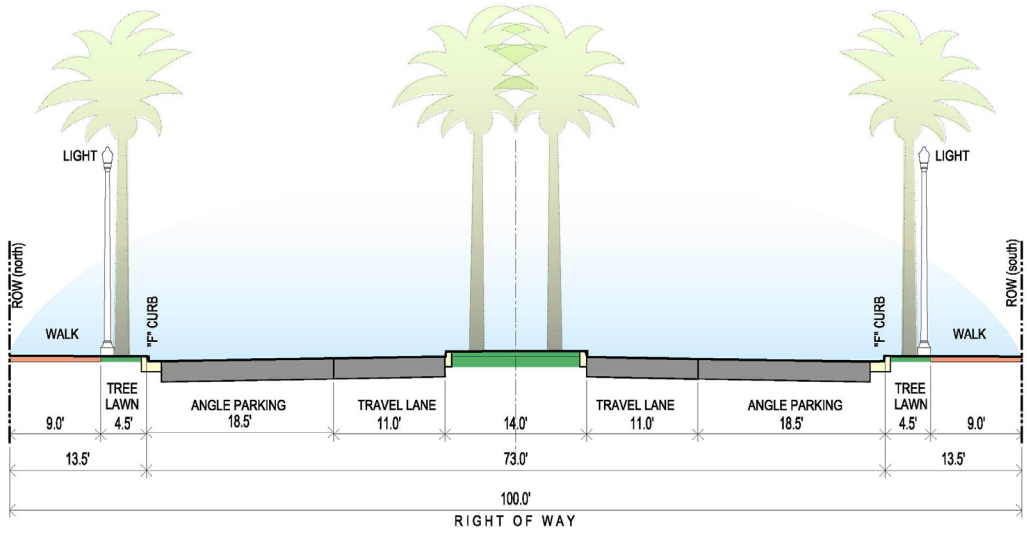
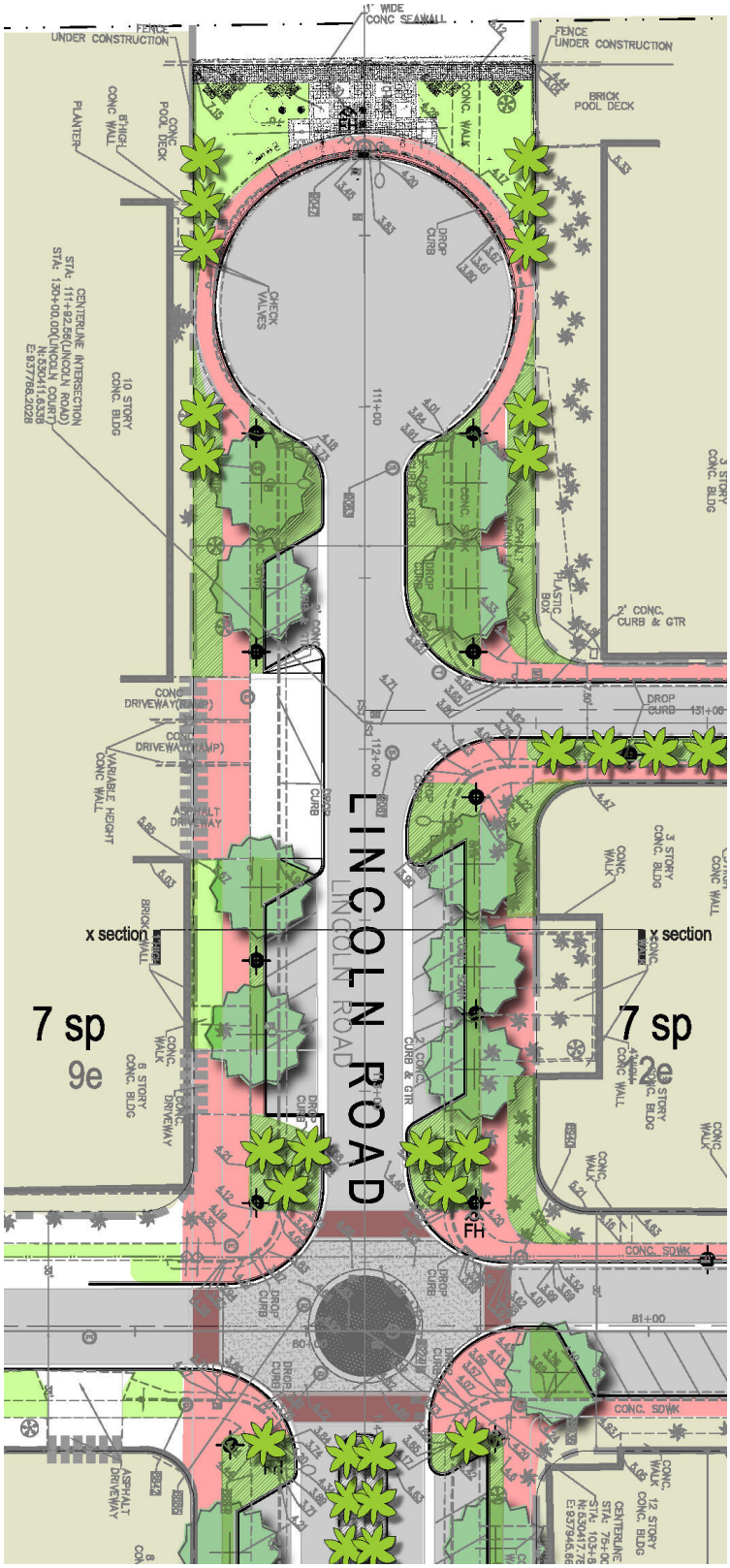
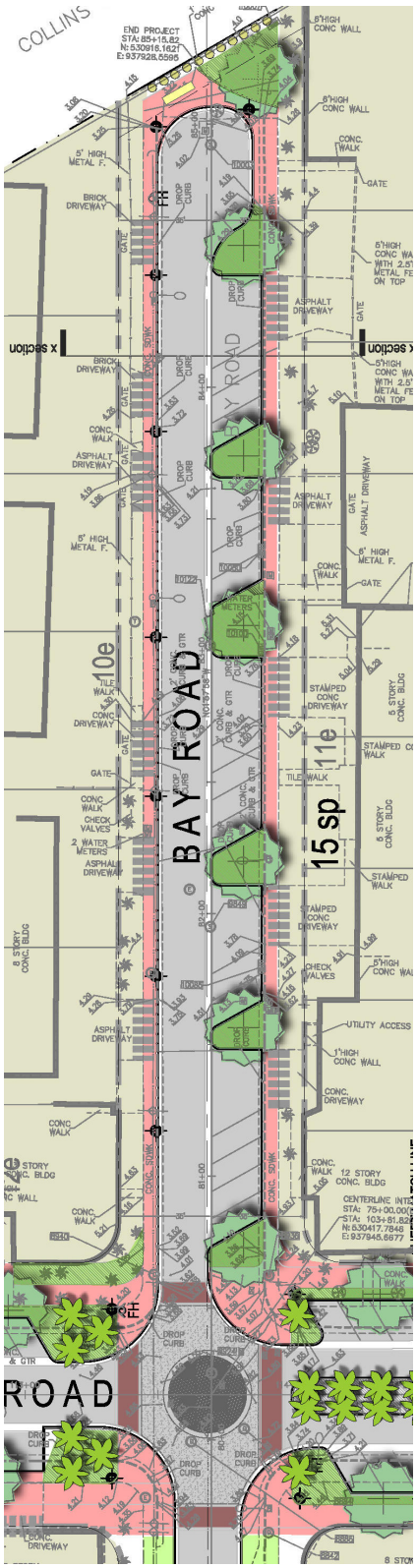



Proposed

**Lincoln Road (between Bay Road and West Ave.) Street Cross Sections**




**Proposed Plan: Lincoln Road**

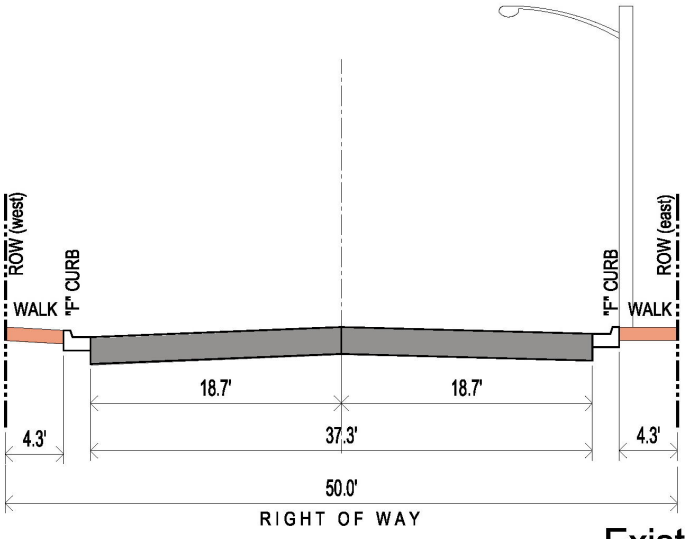



**Proposed Plan:**
**Bay Road (north of West Ave.)**

Bay Road (north of Lincoln Road)

The proposed plan adds tree planting areas and wider sidewalks. The plan provides:

- angle parking on the east side of the street,
- no parking on the west side,
- 18.8' wide travel lane

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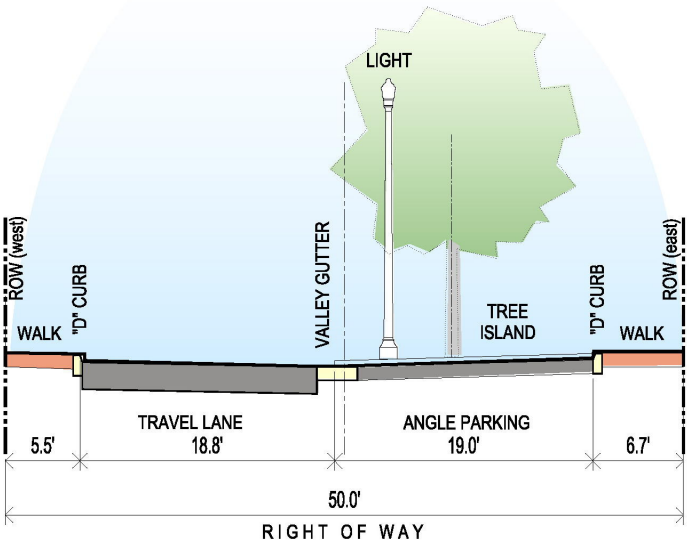
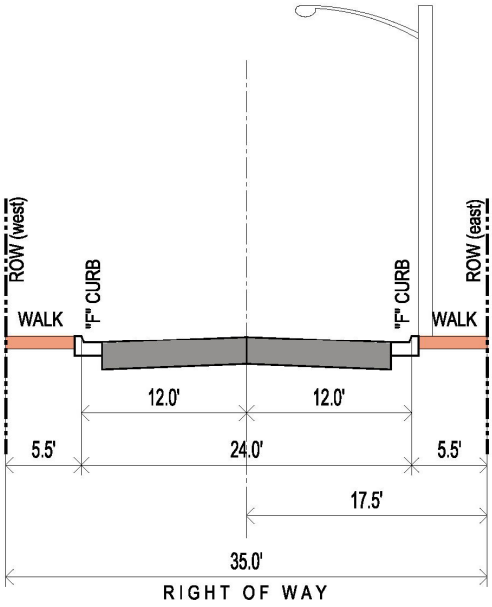



Proposed

**Bay Road Street Cross Sections**

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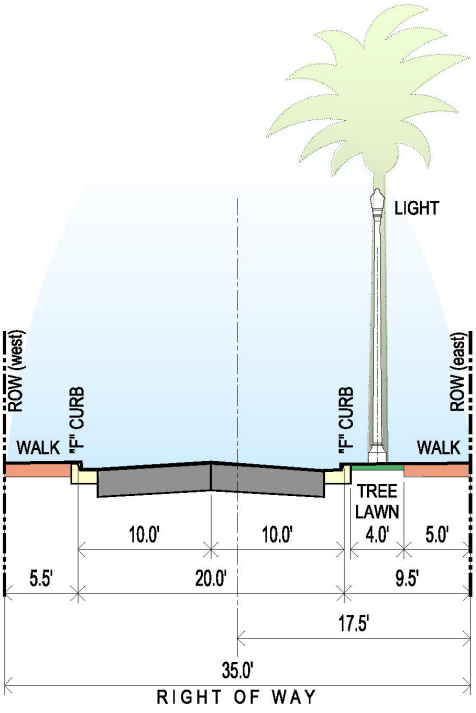


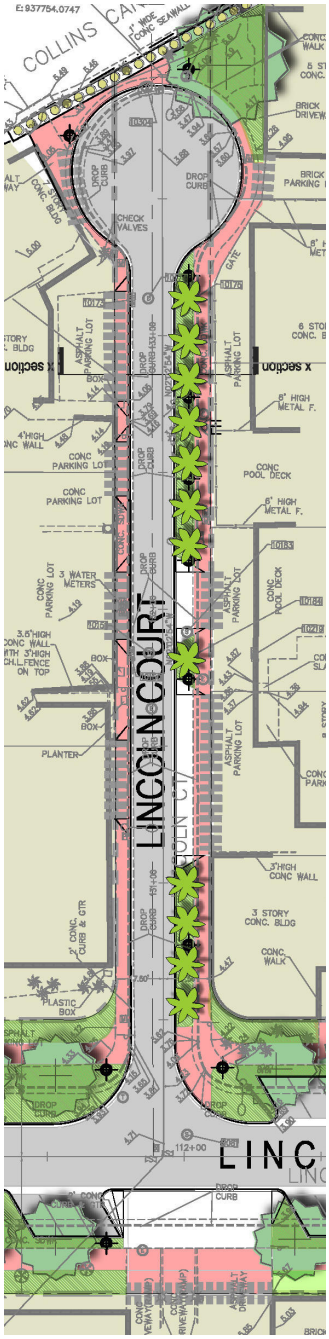

Proposed

**Lincoln Court Street Cross Sections**

Lincoln Court

The design objective for this area is to add trees and improve the appearance of the street end. To make the street more green, the proposed plan:

- Narrows the street to 20' wide,
- Adds a 4' wide grass trip with palm trees.
- Along Collins Canal, textured paving is installed and the existing guardrail is replaced with concrete ball bollards.

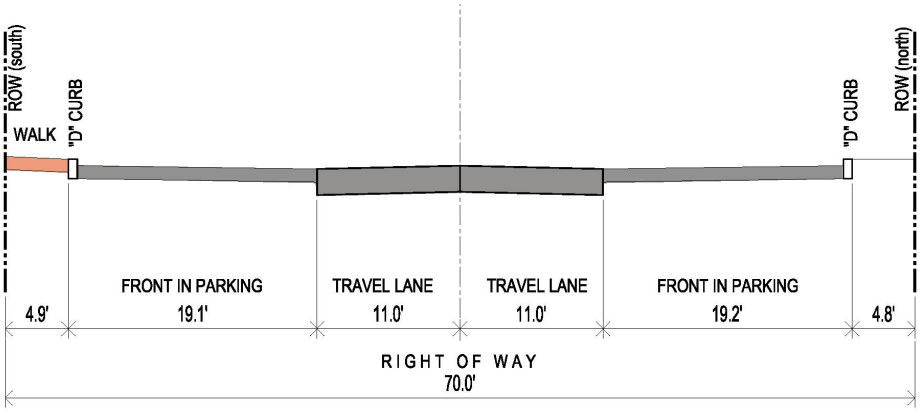



**Proposed Plan: Lincoln Court**

10th Street (west of West Avenue)

The proposed design for 10th Street:

- Provides a view framed by shade trees to the Bay
- A small street end park is currently proposed and will add more shade trees, pavers and benches next to the water.
- The proposed parking spaces are changed from angled to front-in 90 degree spaces.

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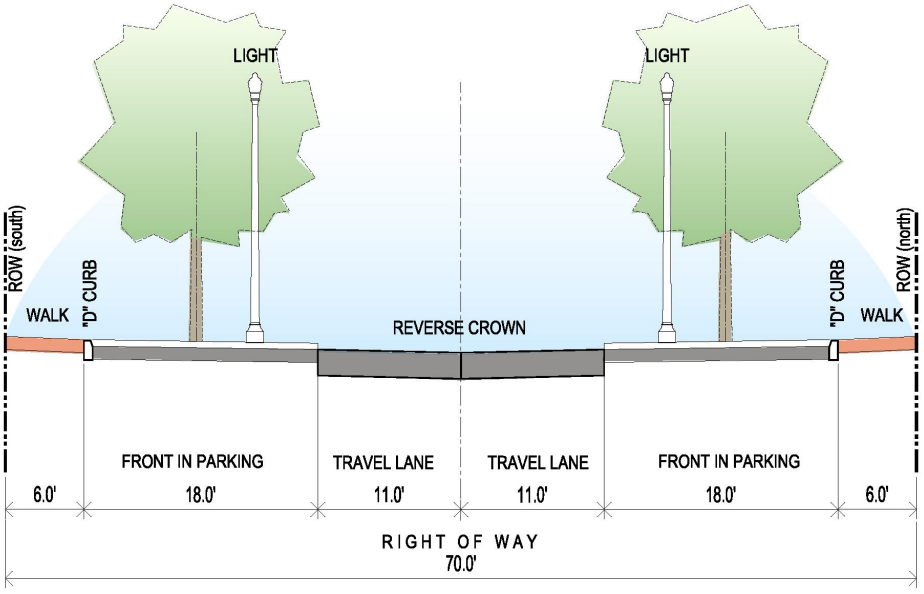
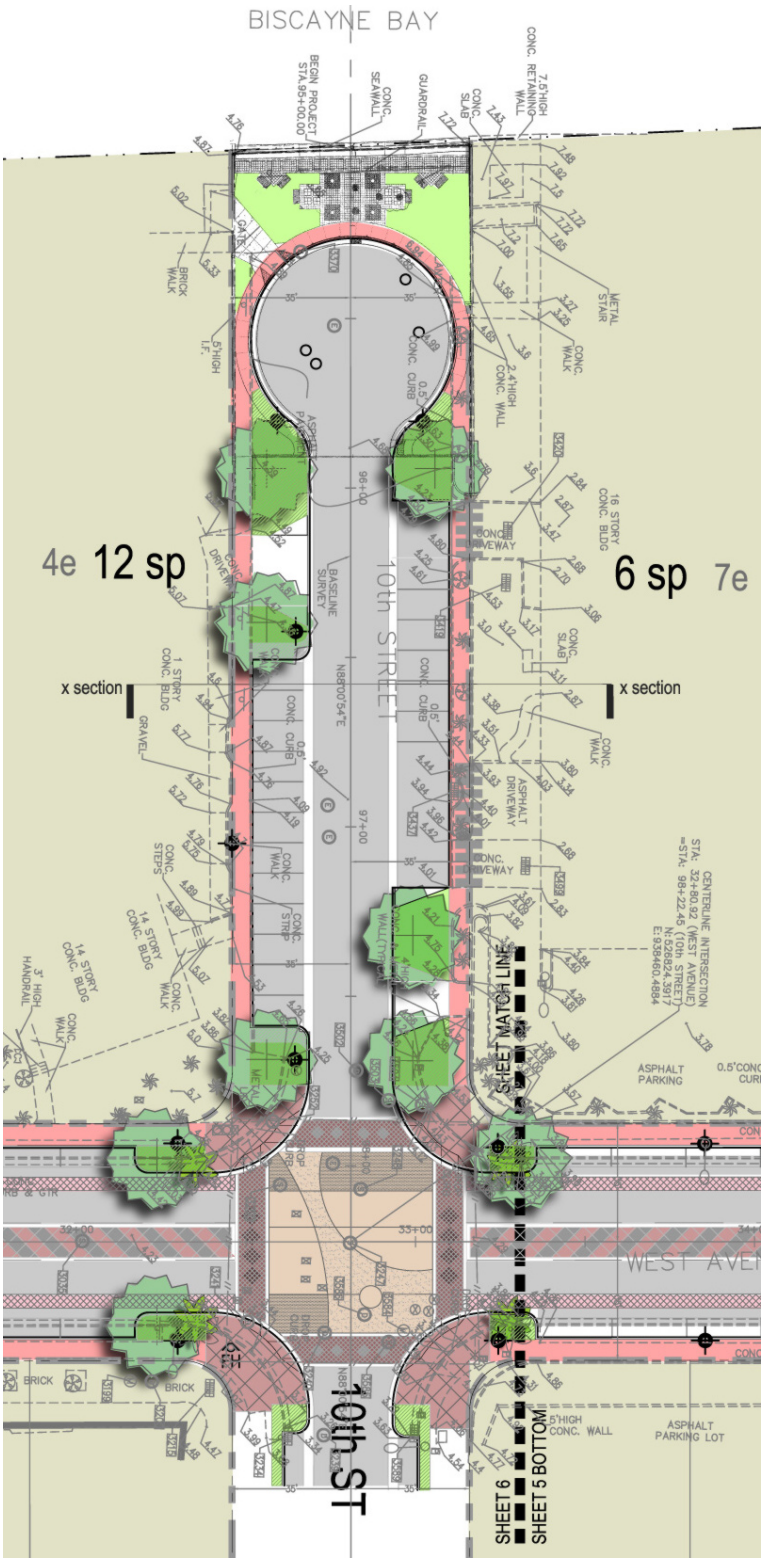



Proposed

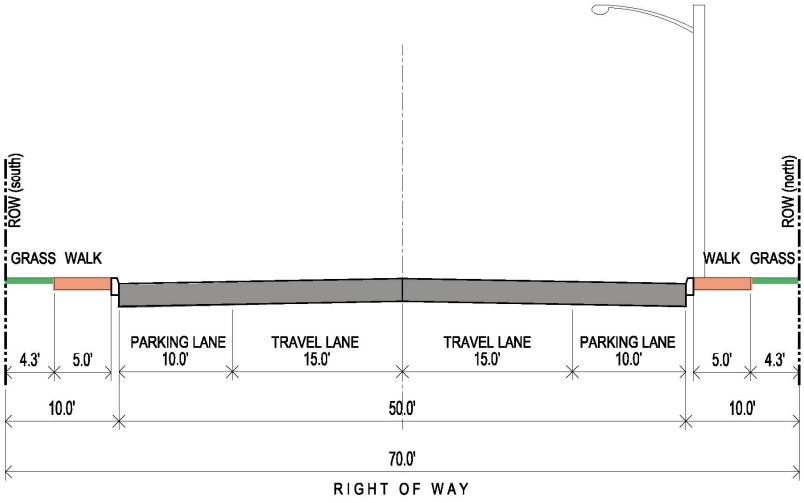
**10th Street Cross Sections**




**Proposed Plan:**
**10th Street**

16th Street (between West Avenue and Bay Road)
The street is identified as the start of an east-west bicycle route in the City's "16th Street Improvement Plan". To accommodate this function the proposed plan provides:

- Two bike lanes,
- Two lanes of parallel parking
- Two travel lanes

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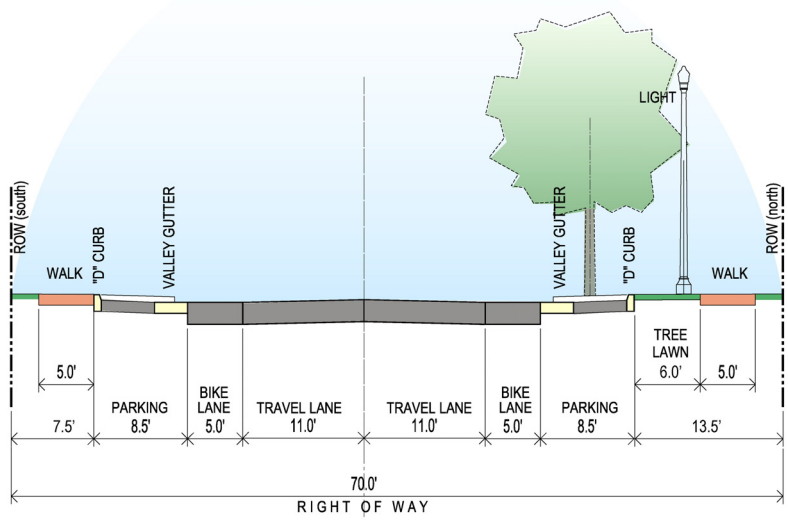
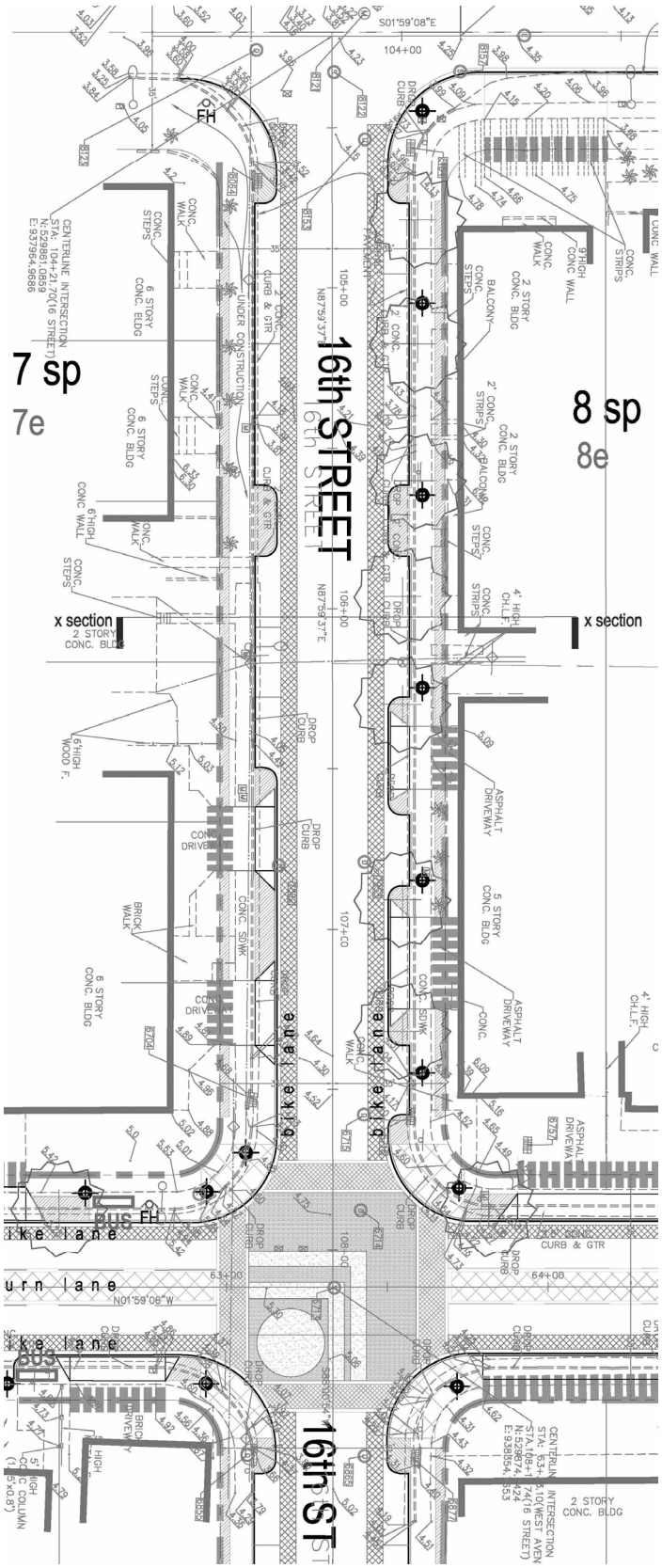



Proposed

**16th Street Cross Sections**




**Proposed Plan:**
**16th Street**

## 1.11 Landscape Improvements

The existing landscape character of West Avenue – Bay Road is shaped by a mixture of tree and shrub plantings outside the public R.O.W. in building setback areas, and sparse tree plantings occurring within the R.O.W.

The design objectives for the proposed plan are:

- Introduce more shade trees
- Plant trees in groups
- Add large palms where vertical emphasis or vistas to the bay are the desired and where this is inadequate room for the canopy of large shade trees
- Provide a simple, durable understory of grass
- Use low shrubs in accent areas
- Space trees as evenly as possible

Given the limited opportunities and constrictions for tree plantings in the project area, the following tree palette is the most conducive for long-term success:

- West Avenue: Live Oak
- Lincoln Road: Live Oak, with Royal Palms in the median and Montgomery Palms at the intersection with Lincoln Court
- 16th Street: Live Oak
- 10th Street: Live Oak
- Bay Road: Live Oak
- Lincoln Court: Royal Palms, Live Oak at end

## 1.12 Proposed Lighting Improvements

The existing lighting in the West Avenue – Bay Road neighborhood is a combination of three different fixtures. The objective of the proposed lighting is to supplement the current "cobrahead" fixtures with pedestrian-scale "acorn" fixtures, except on Lincoln Road, where the existing Poulsen "Satellite" pedestrian fixture is continued to the end of the street. The existing cobrahead light fixtures throughout the neighborhood will be left in place, except in instances where it is not feasible to do so because of proposed reconfigurations of the curbline, utilities or other features.

## 1.13 Parking

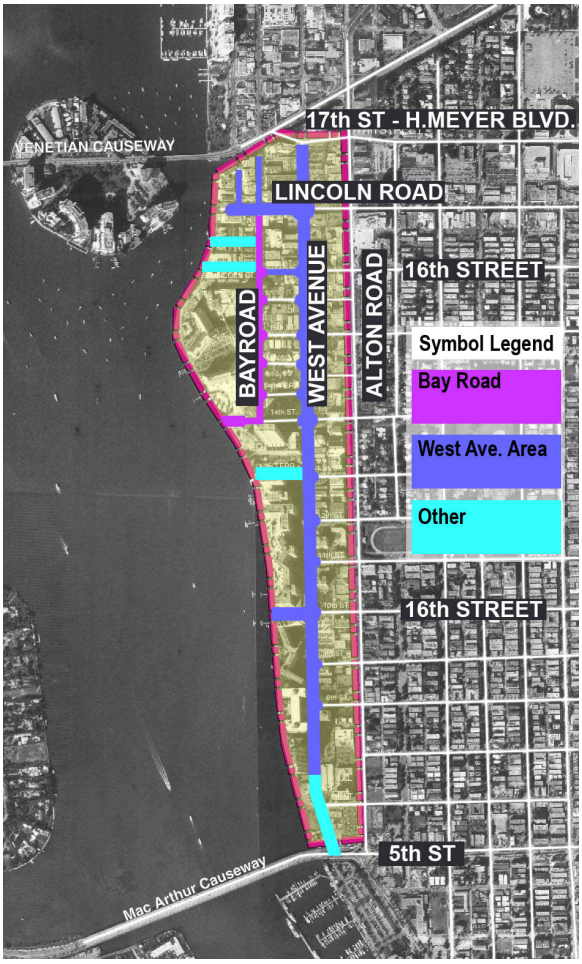
The West Avenue – Bay Road Neighborhood Master Plan makes every attempt to maintain the current number of parking spaces, while adding street trees and maintaining the existing bus stops. As a result there is a net gain of parking spaces as shown in the table below. However, there are three streets –in particular on West Avenue between Lincoln Road and 13th Street-- where there is a reduction of parking due to the need to accommodate bump-outs with a curb radius large enough to meet the City's recommended criteria of 30'. It is important to note that because this is a concept-level plan, the total number of parking spaces may change with further refinement in the construction document phase.

| **Existing / Proposed Parking Summary** | total existing parking spaces | total proposed parking spaces | parking space gain / loss |
|---|---|---|---|
| West Avenue (H. Meyer Blvd - Lincoln Rd) | 18 | 13 | -5 |
| West Avenue (Lincoln Rd - 13th St) | 64 | 51 | -13 |
| West Avenue (13th St - 8th St) | 40 | 66 | 26 |
| West Avenue (8th St - 6th St) | 17 | 18 | 1 |
| Lincoln Road | 45 | 43 | -2 |
| Lincoln Court | 0 | 0 | 0 |
| Bay Road (north of Lincoln Road) | 21 | 15 | -6 |
| 16th Street (West Ave - Bay Rd) | 15 | 15 | 0 |
| 10th Street (west of West Ave) | 11 | 18 | 7 |
| **TOTAL SPACES** | **231** | **239** | **8** |

## 1.14 Unfunded Projects

Areas within the public R.O.W. not included in the West Avenue – Bay Road Neighborhood Master Plan funded improvements are listed as "Other" in the diagram below, and include:

- Lincoln Terrace
- 16th Street west of Bay Road
- 13th Terrace west of Bay Road
- Monad Terrace
- West Avenue south of 7th Street
- All east-west streets not already listed.



Section 2

# Purpose and Scope

The City of Miami Beach has developed various programs to improve the quality of life of its residents. On November 2, 1999, voters approved the issuance of approximately $92 million in General Obligation (GO) Bonds for Neighborhood, Parks, Beach and Fire Safety Improvements, of which $57 million is allocated for capital right-of-way infrastructure projects (Program). In addition to this allocation, the City Administration proposed that a portion of the recent Water and Wastewater Bond and Storm Water Bond issues also be allocated for capital right-of-way infrastructure projects. Over the next six (6) years an estimated $187 million of public right-of-way infrastructure improvement projects are to be implemented. Program elements include citywide water, wastewater and storm water improvements; as well a variety of streetscape enhancement projects.

## 2.1 General Scope of Work

The purpose of the West Avenue Right-of-Way Infrastructure Improvement Project is to provide for the restoration and enhancement of streetscapes and infrastructure within this neighborhood. The proposed improvements were developed by the project team with input from existing master plans, City departments, and community preferences as expressed during the Community Design Workshop. The West Avenue and Bay Road project includes potable water and storm drainage infrastructure upgrades and streetscape improvements with restoration and enhancement of the neighborhood's hardscape, landscape, irrigation and lighting.

## 2.2 Project Goals

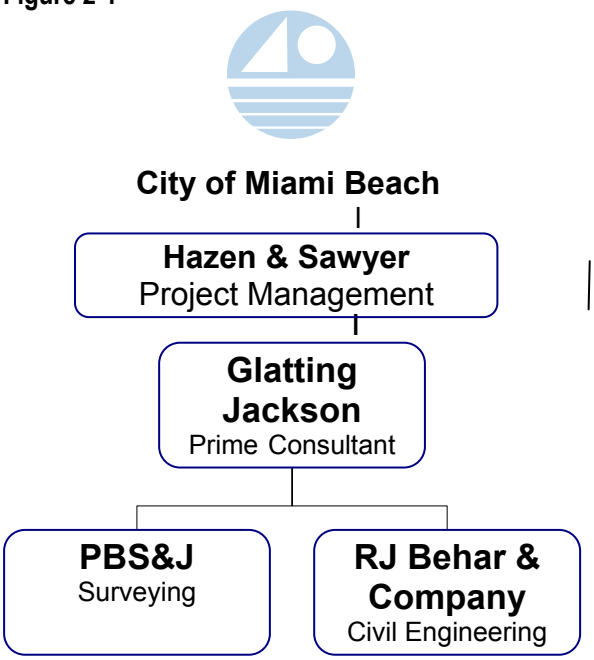
The proposed improvements within the West Avenue neighborhood will include improvements to the existing utility infrastructure as well as enhancements to the function and aesthetics of the right-of-way areas. The project team envisioned the following objectives for the project:

- Create a safe, secure environment
- Provide efficient, functional infrastructure
- Create attractive, well maintained buildings and spaces
- Provide a variety of living and working choices
- Promote neighborhood based businesses
- Integrate schools, civic buildings and places of worship
- Provide a safe, friendly network of roads, transit, bikeways and walkways
- Integrate parks, trails and open space
- Protect natural resources
- Empower citizens

## 2.3 Project Team

Glatting Jackson Kercher Anglin was selected as the prime consultant for the West Avenue / Bay Road Infrastructure Improvement Program project. RJ Behar and Associates was retained to provide civil engineering services and PBS&J provided surveying services. The organization of the team is depicted in Figure 2-1 and further described below.

**Figure 2-1**




- **Glatting Jackson Kercher Anglin**

  Glatting Jackson Kercher Anglin provided overall project management and team coordination. Additionally, Glatting Jackson Kercher Anglin led the streetscape and landscape design efforts and facilitated the Community Design Workshops.

- **R.J. Behar and Company**

  R.J. Behar and Company provided professional engineering services to include the design of the stormwater infrastructure, potable water system and roadway.

- **PBS&J**

  PBS&J provided surveying services.

## 2.4 Project Limits

The West Avenue / Bay Road Neighborhood is located in the south Miami Beach area and west of Flamingo Park. The neighborhood consists of high-density multi-family development along the Biscayne Bay frontage with single-family and low intensity multi-family structures throughout the remaining area. Alton Road, the neighborhood's eastern boundary, is a busy commercial arterial in which many of the neighborhood's most problematic conditions exist. Figure 2-1 depicts the project limits

**Figure 2-2**

## 2.5 Heritage and Character

### History of the Area

The western edge of Miami Beach—particularly along West Avenue and Bay Road-- historically was home to the some of the grandest hotels in the area such as Carl Fisher's Flamingo Hotel (1921) and The Fleetwood Hotel (1924). Guests in these hotels enjoyed the amenities of being located close to Biscayne Bay, such as watching power-boat racers or listening to the Fleetwood's own radio station while lounging in the roof-top garden and admiring the views. This was part of the boom time of the 1920s, when large scale real estate investment took place to attract the well-heeled to the shores of South Florida. A hurricane in 1926 and the Great Depression of the 1930s stunted growth, but Miami Beach recovered more quickly than other areas due to its spectacular location and a shift in economic focus towards tourism rather than land speculation.

Tourism came to a halt in 1942 when the Japanese attacked Pearl Harbor. The Army Air Corps Technical Training Command took over Miami Beach's hotels for use as barracks and classrooms. Even the fancier hotels were turned over to support the war, and many became officer training schools or hospitals. This allowed hotel operators to stay in business during war-time, but the most dramatic far-reaching effect was the large number of soldiers who returned to the area after World War II to settle down with their families.

Linked to the demand for more housing, the 1950s and 1960s saw many of the luxurious former hotels around West Avenue taken down and changed into a community of large-scale apartment buildings and condominiums. Since this shift, the West Avenue area has fallen behind the rest of South Beach as the hip place for travelers and other sun-seekers.

### Architectural Significance and Districting

Miami Beach is home to ten local Historic Districts and one of the first National Historic Districts to celebrate Art Deco architecture in the United States. This District—known as the Art Deco District—is comprised of a number of different examples of styles from the early 1900s until the 1950s, when much of Miami Beach's development occurred.

The West Avenue Area is not currently part of an historic district, likely because much of its original fabric has been destroyed by the development since the 1960s. Fortunately, pockets of history remain—one particularly important style in the West Avenue Study Area is the Post World War II Modern Style, sometimes referred to as "MIMo". This style is related to the traditional Art Deco style that abounds in Miami Beach, but tends towards more functional simplicity. Examples include low-rise apartment buildings that are characterized by double loaded corridors and open air verandas. The "MIMo" style is sometimes difficult to distinguish from the Garden Style of the 1940s-1960s, which placed emphasis on public walkways on the exterior of multi-family units and often surround a common garden area.

In 2001, the City's Planning Department became increasingly concerned about the South Beach area west of Alton Road because of the spike in high rise development projects. These projects went against the grain of the existing community character, which was predominantly one- and two-story apartment buildings, and prompted alarm amongst residents.

As a result of a multi-year process engaging community input, two of Miami Beach's earliest Post-War PUD neighborhoods—the Lincoln Terrace Villas and Alton Beach Bay Front Subdivision—have been recognized for their community historic significance, and have a layer of protection as part of the Gilbert M. Fein Neighborhood Conservation District. A recent initiative established part of the West Avenue Area as a Neighborhood Conservation District. Conservation Districting is a relatively new tool for preservationists and was adopted as an enabling ordinance in Miami Beach as recently as 2004. It is not as strict as an historic district, and instead focuses on preserving general neighborhood character.

Some areas of the West Avenue neighborhood are home to the last remaining examples of this architectural and planning typology in the City of Miami Beach, and are important contributors to the character of West Avenue.

### Recent Development

The designation of the Neighborhood Conservation District illustrates the concern and care that the West Avenue community has about preserving its heritage. Future plans for the area—such as the Miami Mondrian Hotel by the Morgans Hotel Group heralding the return of hotels to West Avenue—will likely continue to attract development. This development interest, while having potentially positive effects on the community, also necessitates the careful planning and foresight for the future quality of life and character in the West Avenue Area.

## 2.6 Summary of Planning Activities

The West Avenue/Bay Road Neighborhood project has been undertaken in essentially two phases: Bay Road and West Avenue. The original project was begun in October of 2001. During the Community Design Workshop, the residents of the neighborhood expressed a strong desire to further enhance the infrastructure improvements to the area in general and to the West Avenue area specifically. The City responded to this concern by reallocating resources to the rapidly redeveloping Bay Road area and began a reevaluation of the remaining West Avenue neighborhood. The Bay Road area proceeded to final design and construction while the City considered alternative budgetary solutions for the remainder of the neighborhood. Following is a summary of the Bay Road planning activities:

### A. Bay Road Planning Activities

- Project Kick Off Meeting

  The initial project kick off meeting was held in September of 2001in the CIP conference room. The program manager facilitated the meeting with the consultant team and representatives of various City departments. The agenda included a review of the project scope and time line, an overview of the Right-of-Way Program, and the distribution of Design Standards Manual (DSM).

- Project Site Reconnaissance

  The project site reconnaissance meeting was held on September 4, 2001. The purpose of the meeting was to familiarize the project team with the existing site conditions and gather any pertinent information necessary for the commencement of work. The meeting minutes are included in Appendix C of this report.

- Visioning Session

  A staff visioning session was held in October of 2001. The project team presented the preliminary design concepts and infrastructure improvements to the City staff. The various design elements were discussed and a consensus was reached as to the best alternatives.

- Pre-Community Design Workshop #1

  The Pre-Community Design Workshop was held in October of 2001 with the program manager and representatives of the City staff. The purpose of this meeting was to refine and cement consensus on the best design alternatives prior to the presentation to the public.

- Community Design Workshop #1

  The Design Workshop was held on November 8, 2001 at the 1st Union Bank, Lincoln Road, South Beach. The project team presented the proposed infrastructure improvements within the West Avenue neighborhood to the general public. At the completion of the presentation, the attendees asked questions of the project team and presented concerns about the proposed improvements. The presentation was made available for download for the general public through the CIP website. The meeting minutes, as prepared by the consultant, are included within Appendix C of this report.

  The consensus of the public at this time was that the City needed to reevaluate the water and storm drainage portion of the work and plan to upgrade the facilities prior to ant streetscape improvements. Because this coupled with the impending development of the “Flamingo” development, the City made the decision to advance the Bay Road

portion of the work near the new development as a separate project and fast track its completion.

Originally planned to be a part of the overall West Avenue ROW improvements Project, Bid Package 11A was separated out and was implemented ahead of time with a $600,000 contribution from the Developer of the "Flamingo" property.

### B. West Avenue Planning Activities

Planning for this project originally commenced in August 2001, and culminated after the first Community Design Workshop (CDW) in November 2001, when residents advised the City that planning should stop until requisite funding for water and storm water needs was made available. The original planning budgets did not include water funding, and storm water funding was very limited. The City complied with this request, and after extensive internal deliberations, planning was re-initiated in July 2005. Proposed improvements will now address required storm water and water main improvements, as well as streetscape enhancements.

The West Avenue planning process began again in August of 2005, with a revised financial strategy and an adjusted scope of work to more thoroughly address the infrastructure needs of the neighborhood.

- Project Kick Off Meeting

  The initial project kick off meeting for the West Avenue portion of the work was held on June 15, 2005 in the CIP conference room. The program manager facilitated the meeting with the consultant team and representatives of various City departments. The agenda included a review of the project scope and time line; an overview of the Right-of-Way Program and the distribution of a updated Design Standards Manual (DSM).

- Project Site Reconnaissance

  The project site reconnaissance meeting was held on July 28, 2006. The purpose of the meeting was to familiarize the project team with the existing site conditions and gather any pertinent information necessary for the commencement of work.

- Visioning Session

  A staff visioning session was held in March 27, 2006. The project team presented the preliminary design concepts and infrastructure improvements to the City staff. The various design elements were discussed and a consensus was reached as to the best alternatives.

- Pre-Community Design Workshop # 2

  The Pre-Community Design Workshop was held on September 5, 2006 with the program manager and representatives of the City staff. The purpose of this meeting was to refine and cement consensus on the best design alternatives prior to the presentation to the public.

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- Community Design Workshop # 2

  The Community Design Workshop was held September 27, 2006 at the Miami Beach City Hall Council Chambers. The project team presented the proposed infrastructure improvements within the West Avenue neighborhood to the general public. At the completion of the presentation, the attendees asked questions of the project team and presented concerns about the proposed improvements. There was a general consensus to move forward with the current scope as presented during the workshop.

  The presentation is available for download for the general public through the CIP website. The meeting minutes, as prepared by the consultant, are included within Appendix C of this report.

Section 3

# Analysis and Recommendations

## 3.1 Water Main Improvements

The City of Miami Beach Water System Master Plan analyzed the existing water system infrastructure throughout the City and recommended improvements to the water distribution system. Within the West Avenue and Bay Road project area, the project team will design the replacement of existing water mains to meet the recommendations of the master plan and will also incorporate recommendations from the Miami Beach's "Public Works Department Water Main Prioritization April 2003" (see figure 3-1). A description of the underground water infrastructure improvements are generally identified in the City of Miami Beach Water System Master Plan. These improvements may also be identified in subsequent amendments to the plans and decisions of the Public Works Department. The following general guidelines were established by the master plan to prioritize the water main:

- Water Main Replacement and Extension

The master plan recommends the replacement of existing water mains to provide adequate fire protection throughout the City. Water mains with a diameter less than 8 inches will not typically provide suitable fire flow to an urban neighborhood zoned for high density multifamily/commercial.

- Replacement of Galvanized Iron Water Mains.

The master plan recommends the replacement of existing galvanized iron water mains and water services due to corrosion problems with this pipe material. The galvanized iron water mains are undersized by current standards and should be replaced with 8-inch diameter DIP. The galvanized iron water services to individual properties should be replaced with polyethylene pipe of similar diameter.

- Tuberculated 6- and 8-inch Water Mains.

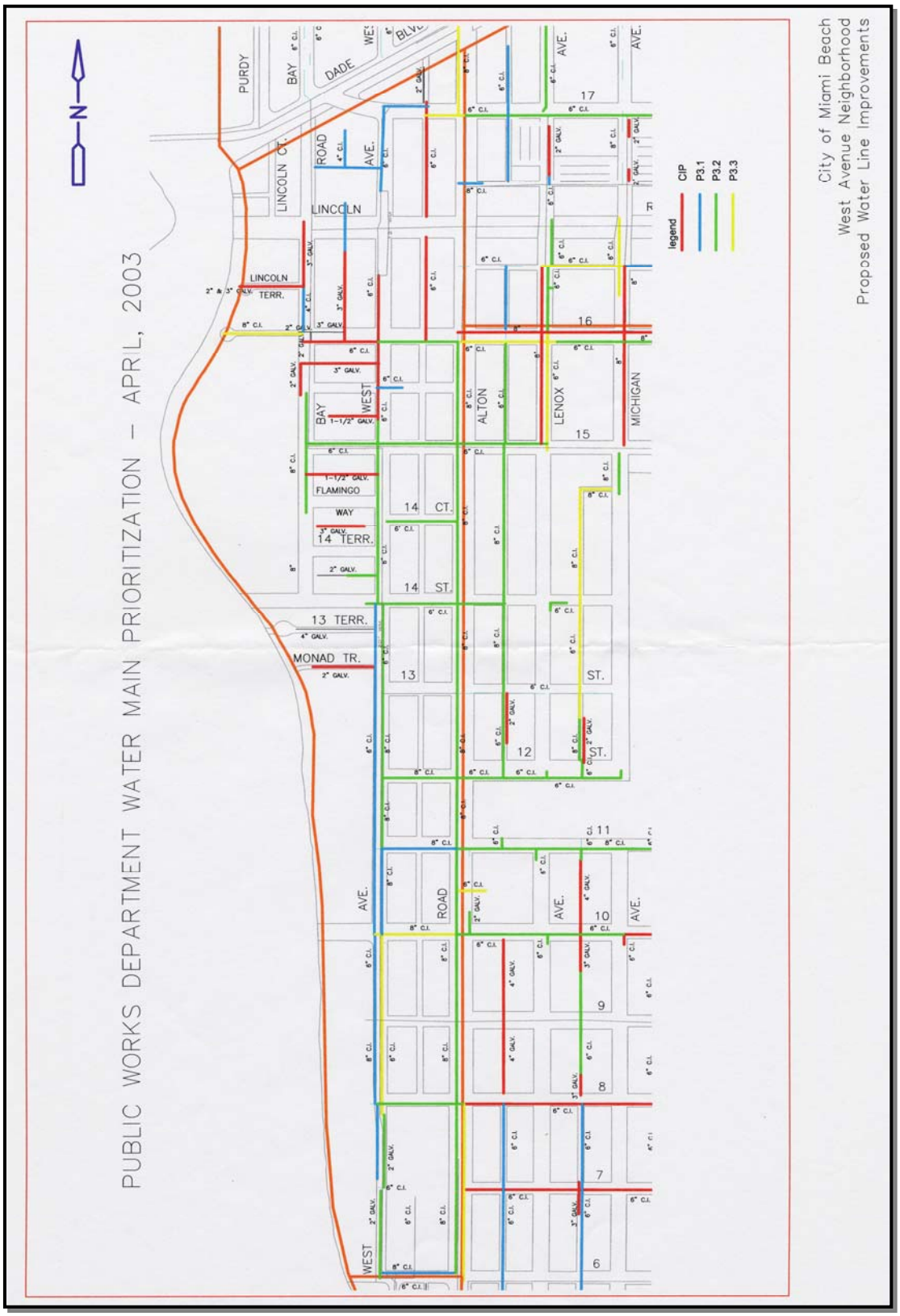
The existing water distribution system typically consists of cast iron or ductile iron pipes. A large portion of the older cast iron and ductile iron pipes were not cement lined, which can lead to tuberculation of the pipe. Tuberculation of water mains reduces the cross sectional area of the pipes and thereby reduces the carrying capacity of the water mains. In locations where the tuberculation has escalated due to graphitization or external corrosion, the water main should be replaced with cement lined ductile iron pipe material.

The Public Works Department has identified existing water mains in need of replacement during this project in the map called "Public Works Department Water Main Prioritization April 2003" shown in *Figure 3-1*. The map classified the existing water mains to be replaced within the West Avenue/Bay Road neighborhood as CIP, P3.1, and P3.2.

Within the project area, a total of approximately 7,725 linear feet of existing water main has been identified for replacement. The existing water mains will be replaced with cement lined 8-inch diameter ductile iron pipe (DIP) along these roadways. Photo 3.1 shows a similar neighborhood watermain construction project.

Photo 3.1

*Figure 3.1*


PUBLIC WORKS DEPARTMENT WATER MAIN PRIORITIZATION – APRIL, 2003
City of Miami Beach
West Avenue Neighborhood
Proposed Water Line Improvements
N
legend
CIP
P3.1
P3.2
P3.3
PURDY
BAY
DADE
LINCOLN CT.
LINCOLN
LINCOLN TERR.
ROAD
AVE.
BAY
WEST
ALTON
LENOX
MICHIGAN
FLAMINGO
WAY
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MONAD TR.
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## 3.2 Storm Water Improvements

The City's Comprehensive Storm water Management Program Master Plan (CSWPMP) of March 1997, recommended storm water improvements to these basins generally comprise the whole of the West Avenue / Bay Road neighborhood and are combined with drainage systems in the adjacent neighborhoods. The master plan analyzed hydraulic and water quality issues of each priority basin within the City and assigned a ranking to the priority basins. The roadways within each priority basin were categorized according to Miami-Dade County Roadway Classification System. This system is used to establish Flood Protection Level of Service, which defines the maximum flood elevation permitted for various design storms. The level of service for the proposed storm water improvements will comply with the following design standard:

- Class A Roadways

These roadways are classified as principal arterials and/or evacuation routes. The design standard allows flooding up to 8 inches above the roadway crown elevation during a SFWMD 100-year design storm. The rainfall determined by the CSWPMP for the 100-year design storm is equivalent to 18.5 inches for a continuous period of 3 days.

- Class B Roadways

These roadways are classified as minor arterials and/or four lane roads. The design standard allows no flooding of the roadway crown elevation during a SFWMD 10-year design storm. The rainfall determined by the CSWPMP 10-year design storm is equivalent to 9.2 inches for a continuous period of 24 hours.

- Class C Roadways

These roadways are classified as either collectors and/or residential roads. The design standard allows no flooding of the roadway crown elevation during a CSWPMP 5-year design storm. The rainfall intensity determined by the CSWPMP 5-year design storm is equivalent to 7.5 inches for a 24 hour period.

The planned level of service for proposed storm water improvements are categorized to comply with City of Miami Beach Design Standards for Class C Roadways since all roadways within the noted areas are residential. These roadways, classified as collectors and/or residential roads, will be designed to anticipate no flooding during a 5-year storm event. Note that a 5-year storm event represents a rainfall of 7.5 inches for a 24 hour period.

### Bay Road

The Bay Road sub-neighborhood, completed early 2005, is generally described as the Bay Road corridor from 14th to 16th Streets. This corridor consists of high-density multi-family developments along the Biscayne Bay frontage, with single-family and low intensity multi-family structures throughout on the eastern side. The overall West Avenue ROW improvements Project, Bid Package 11A was separated out and was implemented ahead of time. The project components included Full Street reconstruction, sidewalk repair / infill, swale/planting strip reclamation and restoration to facilitate drainage and implement the proposed landscape theme, drainage upgrades inclusive of new catch basins, collection mains, swale regrading, pump station and well system. Photo 3.2 shows an example of the construction of a pump station construction for the Bay Road neighborhood project. The Streetscape included the design of improved on-street parking in targeted areas.

Photo 3.2

## West Avenue

The West Avenue neighborhood is generally described as that area bounded by 5th Street to the South, Alton Road to the East, Biscayne Bay to the West and Lincoln Road to the North. As previously mentioned the Bay Road (between 14th and 16th Streets) was expedited as a separate project (Phase 11A) to take advantage of a developer contribution and is not a part of this Project scope. The neighborhood consists of high-density multi-family developments along the Biscayne Bay frontage, with single-family and low intensity multi-family structures throughout the remaining areas. In addition, a small City Center RDA funding eligible area is bounded by Lincoln Road / West Avenue / Alton Road and Dade Boulevard.

Photo 3.3

### Existing Conditions

The West Avenue/ Bay Road neighborhood is primarily medium- and low density residential with some high-density residential, and commercial land use. The asphalt roadways have curb and gutter, which direct stormwater to existing catch basins throughout the neighborhoods. After the stormwater runoff from the right-of-way areas and adjacent properties is collected by the catch basins, stormwater is handled by the underground network of drainage pipe which connects the catch basins. The existing storm water system conveys the runoff westerly to two existing outfalls that discharge into Biscayne Bay.

### Proposed Improvements

The storm water improvements will be designed to meet the level of service outlined within the Master Plan. The proposed drainage system will include a storm water collection network of interconnected catch basins conveying the storm water to storm water pump stations and drainage wells. A preliminary sketch of the proposed improvement is illustrated in *Figure 3-2* and *Figure 3-3*.

In general, the stormwater runoff will be collected in stormsewer inlets placed throughout the project site. These inlets shall be interconnected via a network of subsurface pipes and directed to the drainage wells. See Photo 3.3 for an example of a storm sewer system neighborhood drainage improvement.
By utilizing the drainage wells for disposal, a lower amount of pollutants should enter the surface waters within the Biscayne Bay. The drainage wells should handle the runoff from smaller storm events. The installation of drainage wells is required since water quality treatment of the runoff cannot be reached through other methods.

The installation of exfiltration trenches for water quality treatment is no longer permitted by the Miami Beach Public Works Department. The existing outfalls at Biscayne Bay will need to be inspected and their performance verified. This activity will need to be conducted to determine whether the existing outfalls can be reused. The use of stormwater pumpstations are proposed in combination with the drainage wells to help alleviate drainage issues. Pumpstations are used to maximize the capacity of the wells. They are pressurized systems which pump runoff collected from the streets into these wells at a rate determined from governmental agency requirements.

Photo 3.4

Most pumpstations, such as the one on Bay road (illustrated in Photo 3.4), occupy a significant area owing to the share size of the facility. Determining the location for these structures is typically a concern when using this system as Right Of Way is sometimes not readily available. It can be anticipated that some noise will be heard when these pumpstations are in use as they posses motors which generate sound. However, the pumps only turn on after a design storm event that triggers the system. After the required volume is discharged from the pumpstations the pumps automatically shut off. Most of the system components are housed underground, however the control panel for the pumpstation is above ground features (see Photo 3.4).

As previously mentioned the existing system utilizes a number of outfalls as a part of the subsurface drainage network. Outfalls are areas to which drainage systems have their ultimate discharge, in the West Avenue neighborhood the outfall is to the Biscayne Bay. A pump system, such as the one proposed, does not utilize a connection to an outfall. However it is anticipated that upon an evaluation of the system there may be sections of the project which will maintain some of these existing outfall conditions.

Surface infiltration through grassy swales or retention is not possible due the urban nature of the neighborhoods. Based on Miami-Dade County Drainage System Design Criteria, the drainage system will be designed to handle the CSWPMP determined 10-year storm. The system would be able to designed for 9.2-inch rainfall event that occurs over a 24 hour period. Class C roads (All others) will be designed to handle the CSWPMP determined 5-year storm. The new system will not eliminate flooding caused by storm events of greater intensity. The design standard allows no flooding of the roadway crown elevation during the CSWPMP determined 5-year design storm.

*Figure 3.2 North Drainage Improvement Area*

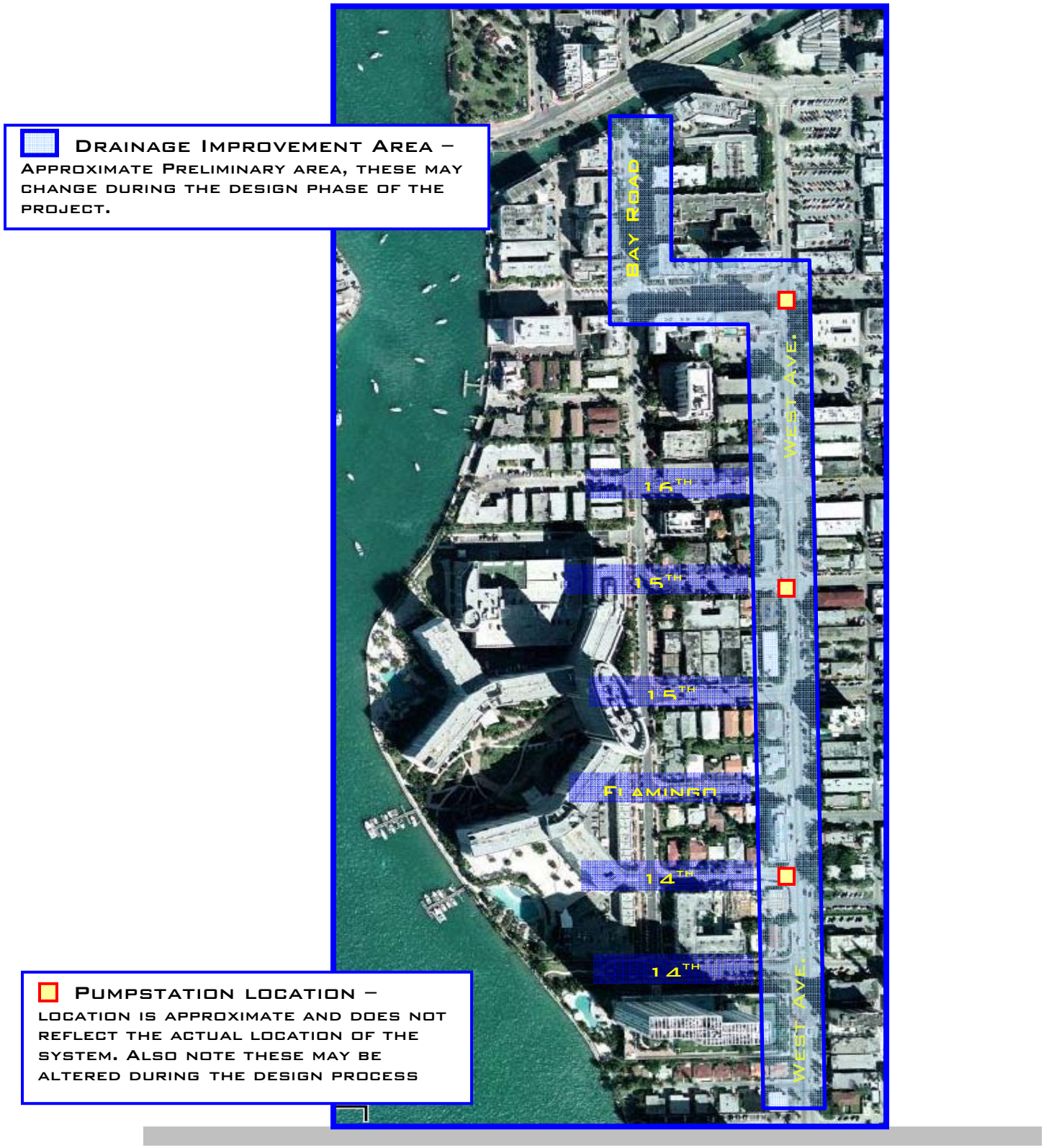
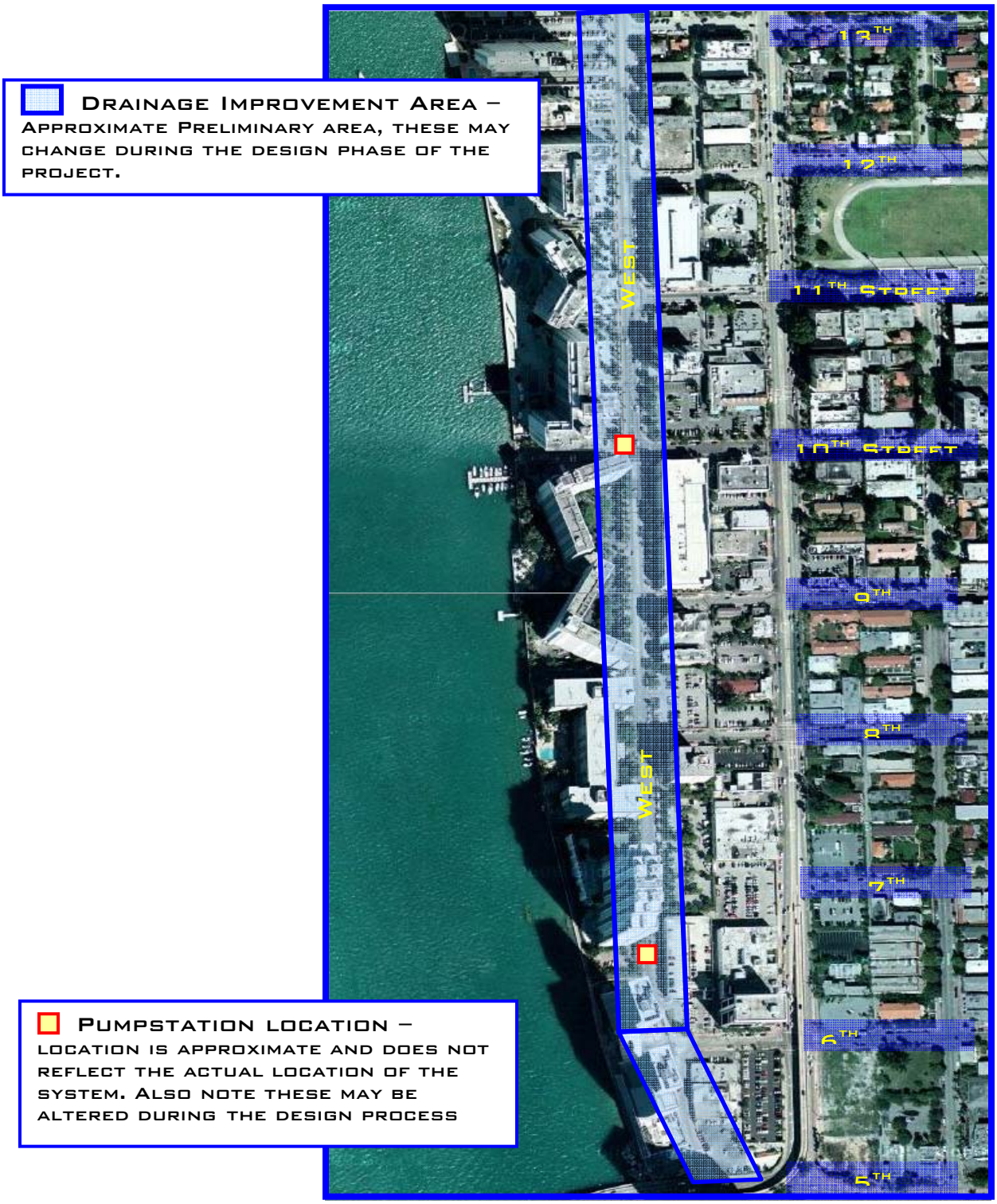


*Figure 3.3 South Drainage Improvement Area*



## 3.3 Streetscape

The following is a description of the general context, existing conditions and proposed plan for the streetscapes in the West Avenue - Bay Road Neighborhood. Because of the large area covered and the completion of portions of the project before this report was completed, this section is divided into two parts: Neighborhood 11A (Bay Road) and 11B (West Avenue Area); the diagram below shows the extent of these areas. For the West Avenue Area (11B), a description of the existing conditions is provided, followed by the proposed plan for each street. Since Bay Road (11A) is already completed, only a description of the existing conditions is provided. To establish the context, what follows is a description of the general characteristics and recommendations for the area.


*Project Limits with Bay Road and West Avenue Area projects highlighted.*

### Area Characteristics and General Recommendations

#### Characteristics

The West Avenue and Bay Road neighborhood is a high-density residential area with some ground-level commercial uses occurring along West Avenue and Lincoln Road. Like much of the City this neighborhood is experiencing a dramatic transformation through numerous renovation and new construction projects. The neighborhood building stock is an eclectic mix of two story walk-ups constructed in the 1940's and 1950's, mid-rise residential towers constructed in the 1960's and 1970's, and an array of newer, taller towers constructed on the bay side of Bay Road and West Avenue. In recent years new residential building projects have maintained a human scale along the street with three to five story buildings next to the street, and towers "tiered" back deeper inside the block when feasible. The older walk-up buildings have reached or are approaching the time when significant renovations or replacement is necessary; the trend is for these structures to be replaced by buildings with more efficient footprints to better accommodate larger residential units along with the requisite parking to support those units.

West Avenue is the neighborhood collector street, although there is a westbound access ramp where West Avenue meets the 5th street Bridge, resulting in some pass-through traffic through the neighborhood. The bulk of the through-traffic occurs further east on Alton Road, although given the congested nature of the area all the streets help to relieve traffic during peak hours and emergencies.

Alleys serve the blocks between Alton Road and West Avenue, and for one block between West Ave and Bay Road between 16th Street and Lincoln Road. The remaining blocks rely upon individual driveways in front of each parcel to access parcels. In front of older dwellings the driveways often serve a single space, resulting in very wide curbcuts, precluding the option for street trees and on-street parking.

All the streets have curbs and gutters, and with few exceptions the sidewalks are approximately 5' wide. The width or presence of a grass strip sometimes varies between the sidewalk and the curb. For example, in most instances the grass strip along West Avenue and Bay Road is approximately 4' wide, but in some areas it is much smaller or non-existent.

*Infill development and redevelopment on West Avenue.*

*Long driveway curbcuts along West Avenue.*

## General Recommendations

The proposed plan for this area follows the recommendations shown in the West Avenue - Bay Road Neighborhood Master Plan approved in 2001. The Master Plan is the result of the goals and objectives identified by City staff, and refined in the public Visioning Workshop held on October 16, 2001. In summary, the issues and goals identified as being most important to staff and citizens for the West Avenue – Bay Road neighborhood are:

- Calm Traffic: The wide roads and number of cars in Miami Beach has resulted in undesirable driver behavior, particularly on West Avenue. The City and citizens want to introduce measures to control the speed of travel through the area, without impeding the functionality and safety of the streets.

- Improve Pedestrian / Bicycle Circulation: The sidewalks are often disconnected or encroached upon by traffic, parking or appurtenances, making it difficult and sometimes hazardous to travel through the area on foot or by bicycle. The City and citizens want to provide clear and safe routes, raising the status of the pedestrian and bicyclist in the street user hierarchy.

- Preserve Existing Character: The development of private land in the neighborhood has not been matched in character or quality by improvements to the public Right of Way (R.O.W.). The concern is that new public improvements may be out of scale and detrimental to the visual character of the neighborhood. The City and citizens want the public R.O.W. to enhance rather than detract from the scale of the neighborhood.

- Visually Enhance the Neighborhood: In many places the sidewalks are uneven and cracked, curbs are broken, and trees have been damaged or removed. The City and citizens want the public R.O.W. to be elevated in aesthetic appeal.

- Improve Parking: In the older areas of the neighborhood there is inadequate off-street parking to serve the current residents. The City and citizens want the existing on-street parking to

be incorporated into the new streetscape with little or no net loss of spaces.

- Provide Access to Public Open Space: The sidewalk network currently provides little or no connection to Flamingo Park. The City and citizens want to make certain the pedestrian network linking the neighborhood to Flamingo Park and other open spaces is safe, clearly identified, and attractive.

- Enhance Street Ends: The street ends are in terrible condition, often filled with litter, no grass and damaged trees. The City and citizens want to see the streets ends made into attractive, useable neighborhood mini-park spaces at some streets, and simply made into safe, attractive spaces in others.

- Improve Infrastructure: There are significant flooding problems in the area, specifically, on Bay Road. The City and the citizens want to control the stormwater within the public R.O.W.


*West Avenue – Bay Road Neighborhood Master Plan, October, 2001.*

The Neighborhood Master Plan included the following categories of improvements:

- Corner Enhancements: At all street corners bump-outs are added to shorten the walking distance for pedestrians crossing the street. The bump-outs incorporate planting beds for low shrubs and trees.

- Crosswalk Enhancements: At key intersections along West Avenue --specifically, at Lincoln Road and 10th, 14th and 16th Streets-- special pavements are recommended to acknowledge that these are areas are a confluence of cross-town pedestrian and vehicular traffic.

- Mid-Block Crosswalks: On West Avenue between 9th and 10th Streets this long block has ground-level retail uses on the east side, and residential towers and a bus stop on the west. By adding a mid-block crossing this will help pedestrians cross safely in an area where jaywalking is already prevalent.

- Street End Parks: At the end of 10th Street, Lincoln Road, Bay Road and Lincoln Court, some landscape improvements are recommended to enhance the appearance and usability of these areas.

- Street Tree Plantings: Shade tree plantings are provided near corners, at existing curbcuts, and between parking spaces.

- Gateway Enhancement: The intersection of West Avenue and Hank Meyer Boulevard should be treated as a "gateway" to the neighborhood through special pavements or other features.

The streetscape improvements proposed (and included in the budget cost estimate) for the West Avenue – Bay Road area include:

- Miami Beach Red concrete pavement is proposed throughout the neighborhood for sidewalks. All sidewalks within the project limits are assumed to be replaced because of the proposed changes to the existing curbline. However, there may be areas where recently installed walks may be preserved.

- Textured concrete walks or pavers matching or complimenting the City's standard Red color is used at key intersections.

- Curbs and gutters are constructed with standard grey concrete.

- Concrete "ball" bollards are proposed along the Collins Canal. The proposed bollard is manufactured by Escofet or an equal supplier.

- Street furnishings (not located in the proposed plans) will be included in the neighborhood as the design is developed further. For example, trash receptacles at street corners on West Avenue, and at bus stops, and bicycle racks at mid-block crossings and corners.

*Ball bollard proposed for use along the Collins Canal at Bay Road and Lincoln Court.*

*Bicycle rack - the City standard fixture used in the South Pointe neighborhood.*

*Trash receptacle – the City standard fixture used in the South Pointe neighborhood.*

## Bay Road Area (Neighborhood 11A)

As previously described in Section 2, Bay Road from 16th Street to 14th Street has already been constructed as part of an agreement with the developers of the "Flamingo" property. The design of this area --referred to as Neighborhood Bid Package 11-A-- was based upon a public workshop held in November, 2001. The result of that workshop is a West Avenue - Bay Road Neighborhood Master Plan approved by the public. The features in the Master Plan affecting Neighborhood 11A include the design includes new sidewalks, parallel parking, curbs and shade trees. Construction of Bay Road between 16th Street and Lincoln Road is nearing completion. The design of a street-end park at 14th Street was also identified in the Master Plan, and has been constructed. Additional street-end "Shared Courtyards" at Lincoln Terrace and 16th Street have been proposed, but are not included in this project.

On the following pages are descriptions of specific areas in the neighborhood, along with photographs of the existing streetscape, and "cropped" plan drawings of the proposed plan for the specific streetscapes (see the appendix for the complete set of illustrative plan and street section graphics):

### Street Ends

The street end park at the terminus of 14th Street was completed in 2002, and is the largest existing or potential street end park in the area. This is a neighborhood resource and is used for strolling, dog walks and viewing the water by residents within walking distance. The park is approximately 150' long by 70', the width of the R.O.W., and includes a winding walk, grass areas with some plantings and seating at the waters edge. A cul-de-sac provides drop off access but there are no dedicated parking spaces serving the park, although on-street spaces exist further east on 14th Street.

*14th Street End Park.*

Bay Road
(south of Lincoln Road)
This recently completed stretch of road has a 70' wide Right of Way (ROW) with two travel lanes, parallel parking on both sides of the street, and a green planting area between the ROW and the front of the residences. This stretch of streetscape was constructed first to coincide with the utility / infrastructure construction schedule necessary to serve the new Flamingo development to the west.

*The Flamingo development and Bay Road prior to construction of the new streetscape.*

*Looking north on the recently completed Bay Road.*

## Existing Conditions and Recommendations: West Avenue Area (Neighborhood 11B)

The remaining areas covered in the West Avenue - Bay Road Neighborhood Master Plan, include West Avenue, Lincoln Road, Lincoln Court, the remainder of Bay Road north of Lincoln Road, and 16th and 10th Streets. The following are descriptions describing the current condition and proposed plans for these areas:

### West Avenue

Measuring over a mile long north to south, West Avenue serves as a neighborhood collector street. West Avenue has a 70' wide R.O.W. from Hank Meyer Boulevard to just north of 8th Street, at which point it narrows to approximately 50' wide just north of 6th Street. The street section includes two travel lanes, two parallel parking lanes and a center turn lane from Hank Meyer Boulevard to 13th Street, at which point the parallel parking lane on the west side stops.

The street and adjoining buildings have several distinct but similar characteristics along its length. The existing conditions for each area are described below, followed by a summary description of the proposed plan for the entire length of West Avenue of these individual descriptions:

### West Avenue (H. Meyer Blvd. to Lincoln Road)

Existing Conditions:
Bound on the east by parking for the convention Center, and high-rise residential towers to the west, this stretch of West Avenue serves as a "gateway" into the neighborhood and as one of the access ways to Lincoln Road businesses. This stretch of West Avenue is one of the busiest portions of the street.

*West Avenue looking south from H. Meyer Blvd.*

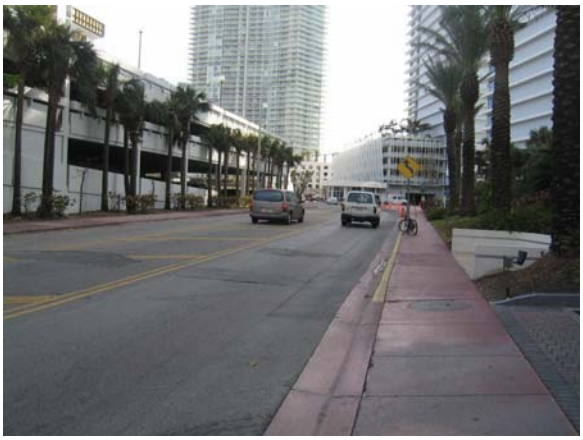
West Avenue (Lincoln Road to 13th Street)
Existing Conditions:
This stretch of West Avenue is one of the most architecturally diverse areas of the neighborhood. A mixture of old and new towers and numerous older walk-up apartments make up the bulk of the buildings in this area. Parallel parking occurs sporadically on both sides of the street between the driveway curb cuts and bus stops, with two travel lanes and a center turn lane.


*West Avenue looking south toward 14th Court.*

West Avenue (13th Street to 8th Street)
Existing Conditions:
This stretch of West Avenue has more residential towers on the west side of the street since these parcels directly front onto Biscayne Bay. Parallel parking occurs on the east side of the street fairly consistently, however there is no parallel parking on the west side, even though the curb to curb dimension (50') is the same as in those areas where there is parallel parking on both sides to the north.


*West Avenue looking south toward 10th Street*

West Avenue (8th Street to 6th Street)
Existing Conditions:
In this stretch of West Avenue the curb to curb dimension transitions from 50' to approximately 28' where West Avenue intersects with 6th Street. Parallel parking occurs intermittently on the east side of the street until just north of 6th Street. The center turn lane changes to a zebra-striped pavement area south of 8th Street.


*West Avenue looking south to the bend in the road just before the 5th Street Bridge on-ramp.*

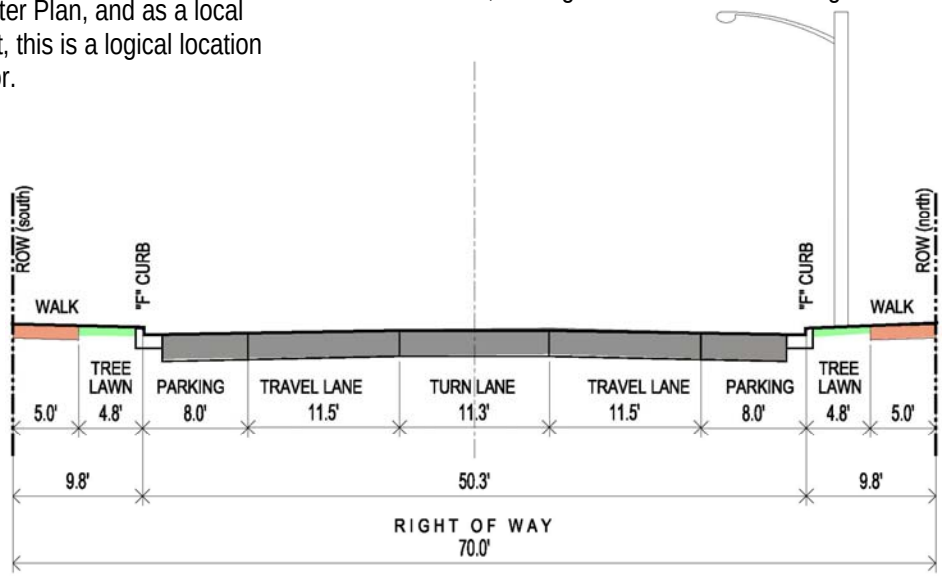

*West Avenue, just outside the project limits, looking north toward 6th Street.*

## Proposed Plan for West Avenue

The objective for the proposed plan for West Avenue is to visually unify the design of the street with plantings, paving and fixtures, enhance pedestrian safety, and to accommodate bicycle traffic. Residents strongly requested bicycle lanes on West Avenue, a feature that reduces the space available for even wider sidewalks and planting areas. However, West Avenue is identified as a bicycle route in the City's preliminary Bicycle Trail Master Plan, and as a local neighborhood collector street, this is a logical location to provide this type of corridor.

The cross section for West Avenue from H. Meyer Blvd. to 8th Street includes:

- two 5' wide bicycle lanes,
- two 11' wide travel lanes,
- 10' wide center turn lane,
- two parallel parking lanes.
- Sidewalks will be Miami Beach "Pink" concrete, 6' wide, a net gain of 1' over the existing walks.

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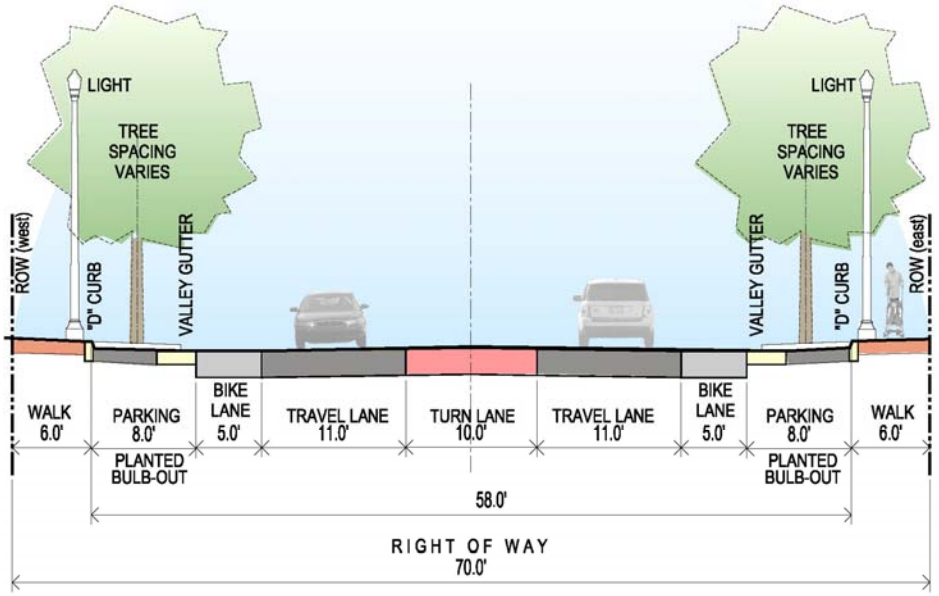
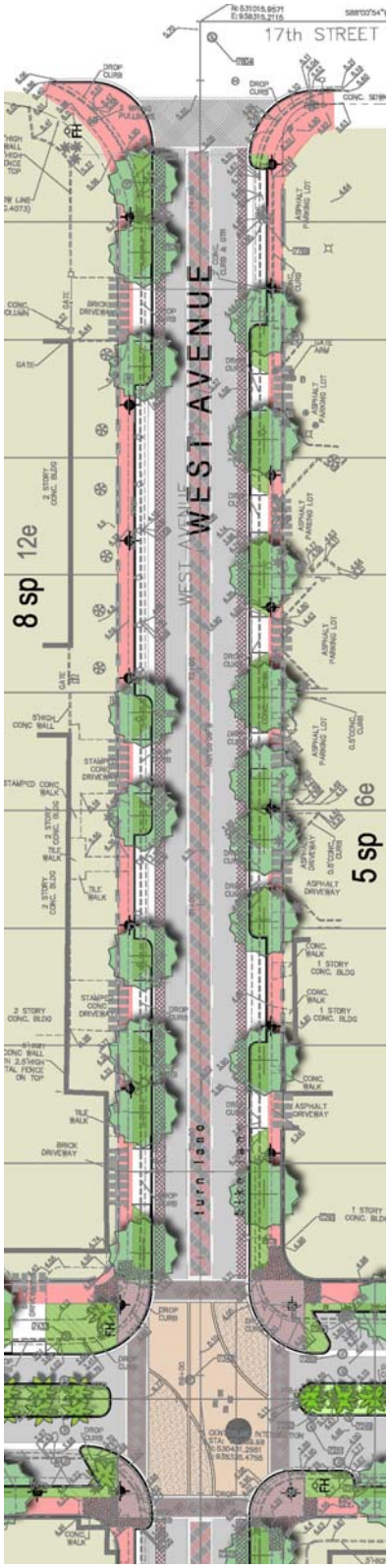



Proposed

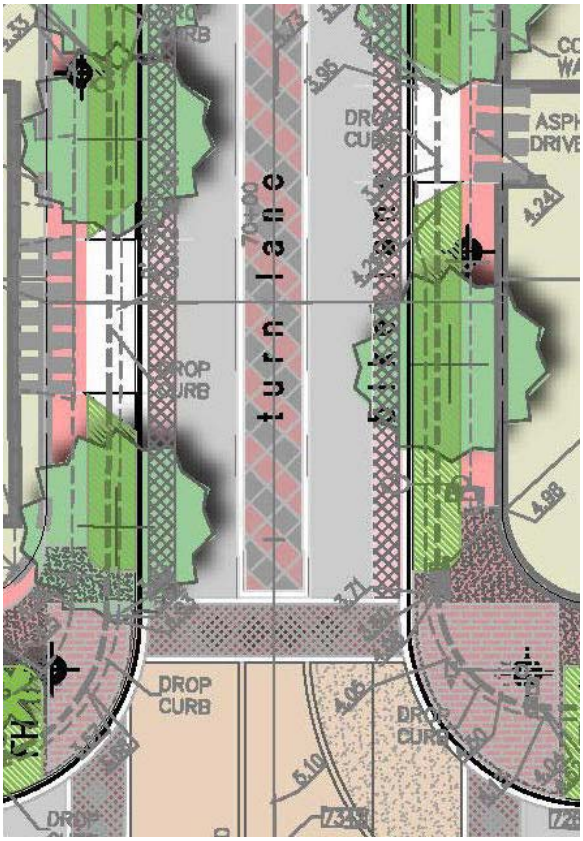
*West Avenue Street Cross Sections*



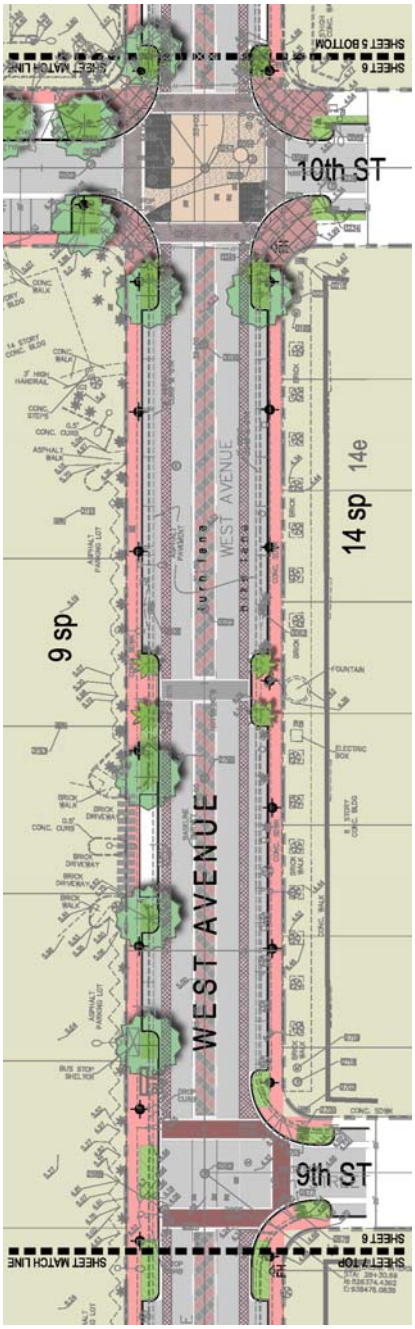

*Proposed Plan: West Ave.*
*(17th Street / H. Meyer Blvd. to Lincoln Rd.)*

## Proposed Plan for West Avenue (contd.)

Bicycle and center turn lanes are deemed necessary on West Avenue to help alleviate the traffic congestion. The downside of these lanes is the amount of asphalt paving added to the street, and the actual and the perceived walking distance for pedestrians crossing the street. To minimize the physical and visual impact of these lanes a patterned and textured pavement is proposed. This change in color, pattern and texture visually narrows the space, and acts as a modest traffic calming measure by visually constraining the main travel lanes. Likewise, a similar treatment occurs at several key intersections, namely, at Lincoln Road and 10th, 14th and 16th Streets, where textured pavements are also incorporated into the corner bump-outs to help signify that these intersections have traffic signals, and are a confluence of pedestrian and bicycle traffic.




*Typical Proposed Plan: West Avenue at a key intersection showing colored, patterned, textured pavement on walks, crosswalks, bikelanes and turnlanes.*

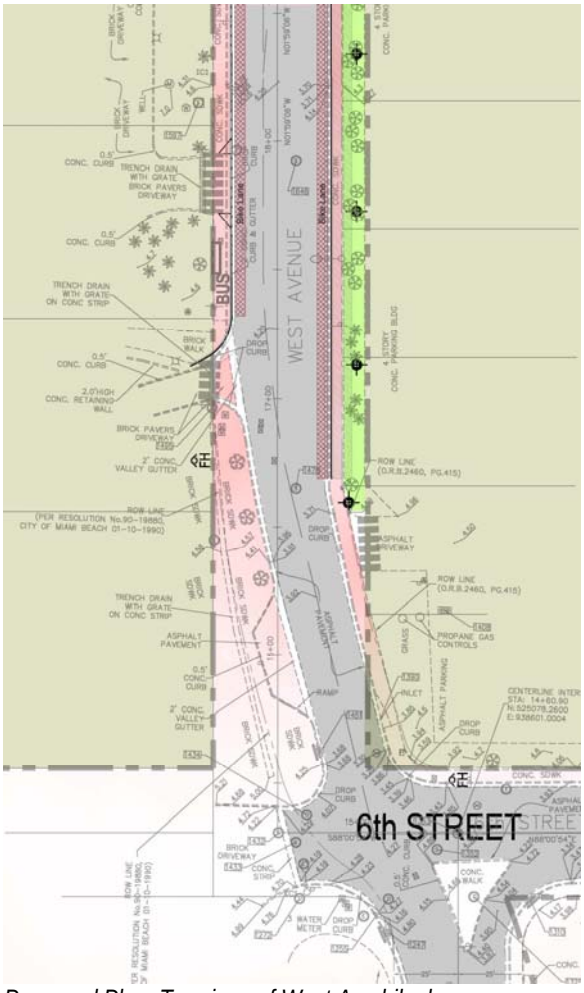



*Proposed Plan: West Ave. (9th - 10th Streets)*

## Proposed Plan for West Avenue (contd.)

The decision to include bicycle lanes on West Avenue is the result of strong public interest in improving the bicycle network in the City. Since West Avenue is a neighborhood collector street it is a logical choice for accommodating bicycles into the new street design, although the space needed to include bike lanes diminishes the already limited space remaining for pedestrians and tree planting areas.

The bicycle lanes extend from H. Meyer Blvd. (17th Street) to just north of 6th Street, where existing private encroachments on the R.O.W. make it infeasible at this time to continue bike lanes to the Causeway.




*Proposed Plan: Terminus of West Ave.bike lanes (north of 6th Street)*

## Lincoln Road

### Existing Conditions:

As Lincoln Road progresses west from Alton Road, the character becomes decidedly residential in character. The street R.O.W. is 100' wide, which accommodates a mix of angle parking on one side of the street, and parallel parking on the other, along with two travel lanes and an un-striped turn lane. In the block between West Avenue and Alton Road there is a median with a single row of Royal Palm trees in the middle. Alleys serve the blocks on the south side of Lincoln Road for the blocks between Alton Road, West Avenue and Bay Road. Just northeast of the cul-de-sac at the end of Lincoln Road there is a drop curb leading to a paved parking area approximately 15' deep x 75' wide, that is an encroachment on the existing R.O.W.

Low to mid-rise residential towers occur along the entire stretch of the street. Between West Avenue and Bay Road, a portion of the block on the south side has ground-level retail uses, otherwise the ground floor uses are residential.

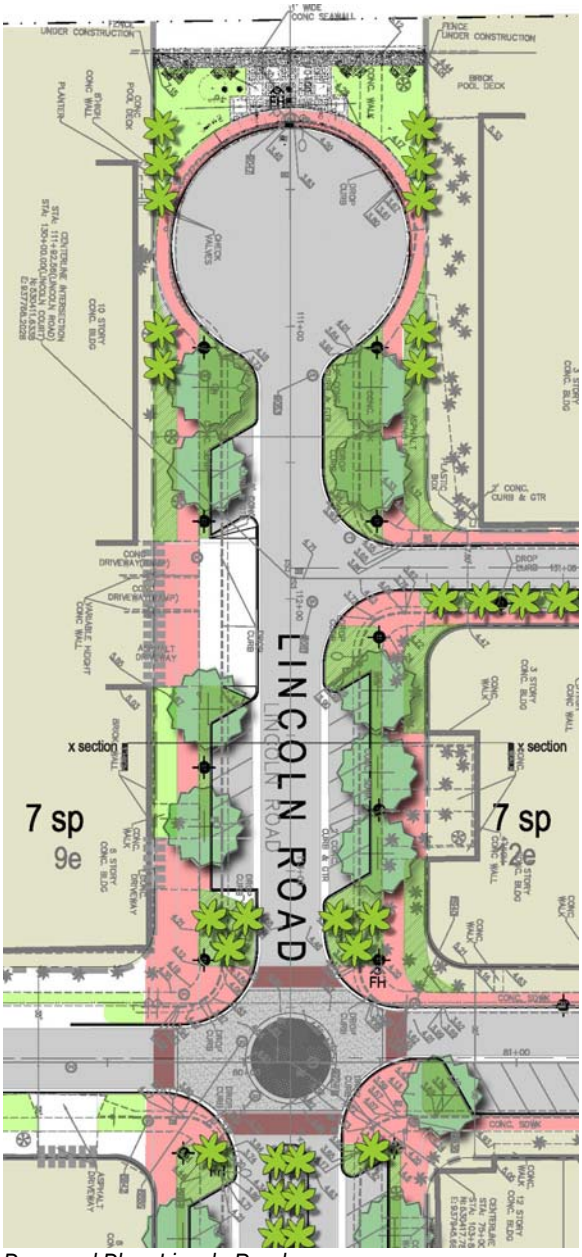
*Parking encroachment at end of Lincoln Road.*

*Lincoln Road looking east toward Lincoln Court.*

*Lincoln Road looking east toward Bay Road.*

*Lincoln Road looking east toward West Ave.*

*Lincoln Road looking across West Ave. toward Alton Road.*



*Proposed Plan: Lincoln Road*

## Proposed Plan for Lincoln Road:

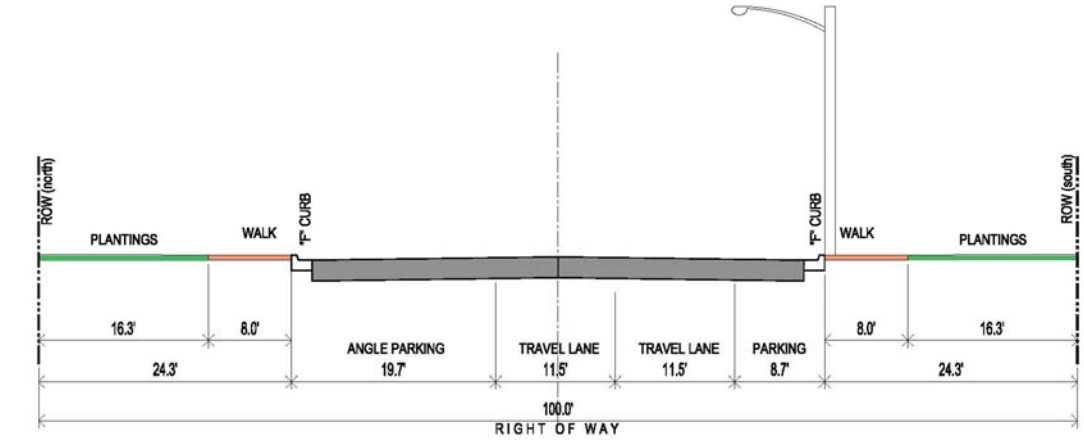
Two different street cross sections are proposed for Lincoln Road:

Between Bay Road and the cul-de-sac at the end of the street, a street narrowing with no median is proposed. In both cross sections the existing row of parallel parking is replaced with a row of angle parking, providing angle parking on both sides of the street. Two 11' travel lanes will be provided, so the net result will be a visual narrowing of the street, and additional room for tree plantings on the sides of the street. The existing sidewalks are removed, and new sidewalks installed closer to the edge of the R.O.W. Between the cul-de-sac and Bay Road, the edge of sidewalk will be approximately 8' from the edge of the R.O.W., leaving ample room for palm trees. Below the palm trees very low shrubs are recommended to provide texture and color at the base of the existing buildings, and to serve as a "friendly" privacy barrier for the adjacent residents.

Between Bay Road and West Avenue, a median is proposed, and is approximately 6' wider than the existing median east of West Avenue. The median is planted with a double row of Royal Palm trees, and low shrubs below the palms. Sidewalks are 8' wide and located at the edge of the R.O.W. The south side of the street currently has a sidewalk in this location, as well as ground-level uses fronting the street. On the north side of the street the building face --a perforated concrete screen with parking behind-- is approximately 5' off of the R.O.W. Stair entrances to the building are located in this 5' setback, along with a continuous hedge against the building face.

The resulting design for these two street cross sections increases the number of parking spaces, provides tree-planting areas between parking spaces, and allows an uninterrupted route for pedestrians to walk to the bay.

## Proposed Plan for Lincoln Road (contd.)

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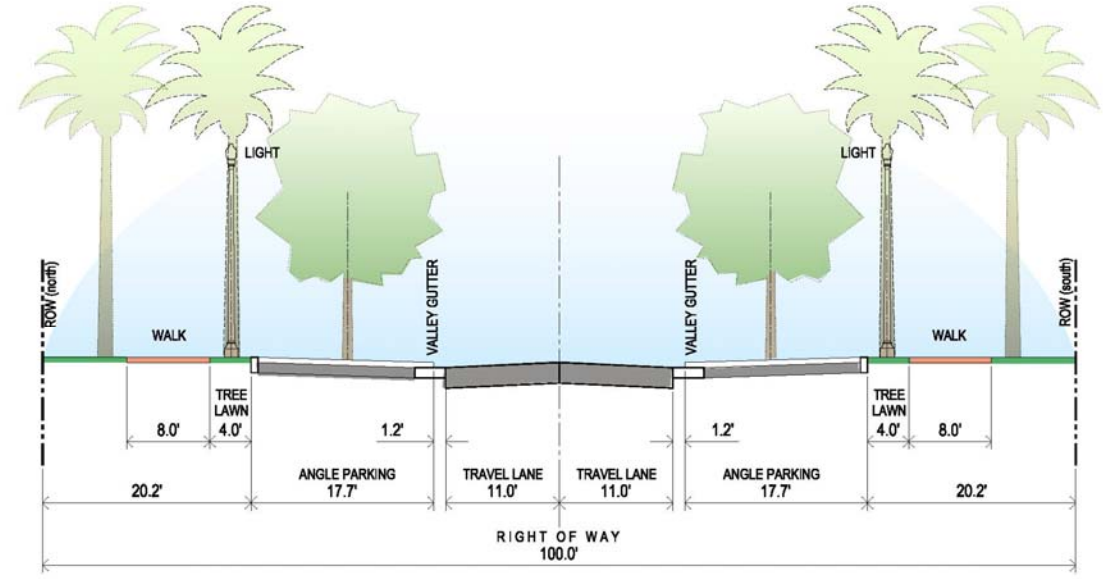
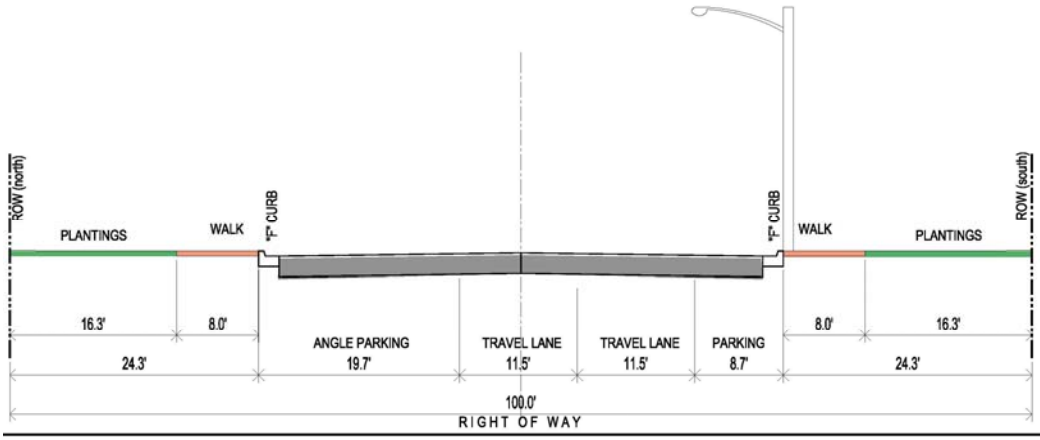



Proposed

*Lincoln Road (west of Bay Road) Street Cross Sections*

Proposed Plan for Lincoln Road (contd.)

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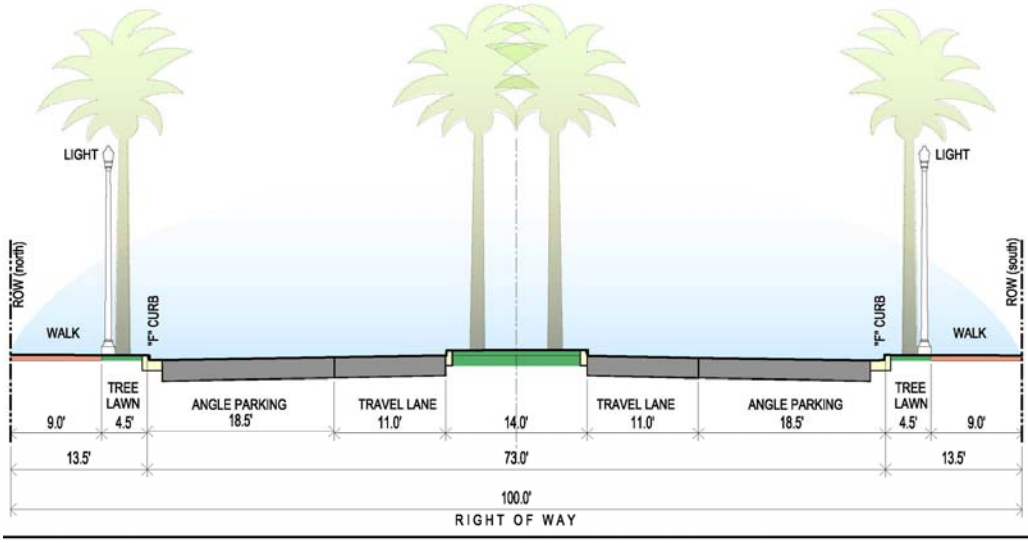



Proposed

*Lincoln Road (between Bay Road and West Ave.) Street Cross Sections*

Bay Road (north of Lincoln Road)

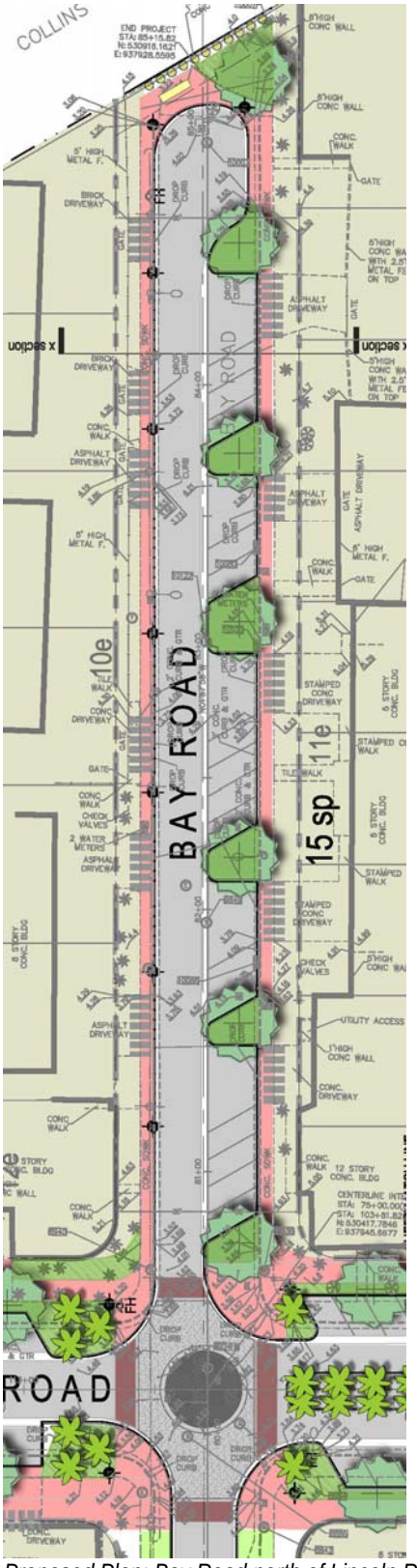
Existing Conditions:

This stretch of Bay Road is decidedly quieter than portions south of Lincoln Road. The R.O.W. is 70' wide, and since the street ends in a small cul-de-sac at the Collins Canal, traffic is minimal. This area differs from the cross section for Bay Road south of Lincoln Road because the street terminates at Collins Canal, and there is no through traffic. Therefore, the street looks and functions more like a parking lot than a neighborhood street. The existing parallel parking is squeezed in very tightly between the existing driveway curb cuts, and currently there are no trees or room to plant trees within the R.O.W.

*Bay Road north of Lincoln Road, looking north.*

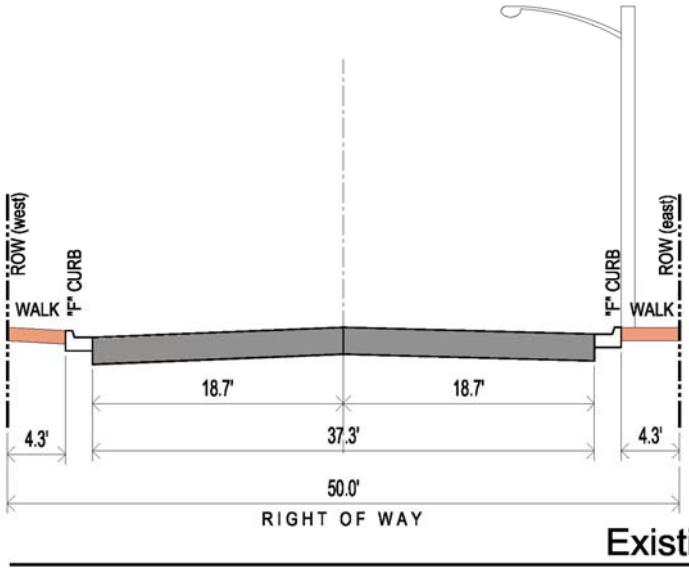
*Proposed Plan for Bay Road:*

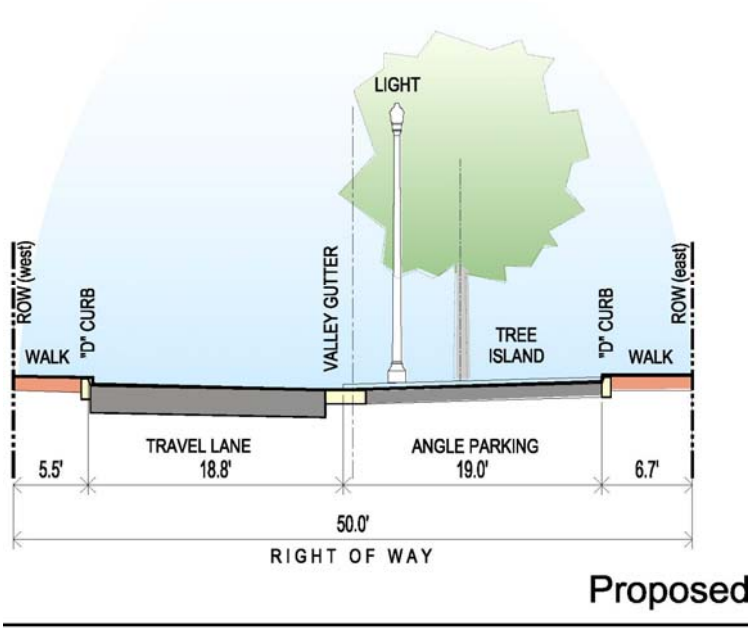
The lack of traffic makes it feasible to use angled parking instead of parallel parking, creating more room for tree planting areas and to fit parking more efficiently between the existing driveway curb cuts. Therefore, the proposed plan provides angle parking on the east side of the street, and no parking on the west side, and has an 18.8' wide travel lane to serve these parking spaces and driveways. Sidewalks are provided at the edge of the R.O.W., on the west side the walk is 5' wide, and on the east side the walk is 6.2d




*Proposed Plan: Bay Road north of Lincoln Road*

Proposed Plan for Bay Road (contd.)




*Bay Road Street Cross Sections*

## Lincoln Court

### Existing Conditions:

Lincoln Court has a 35' wide R.O.W. with buildings built on or close to the R.O.W. line for most of it's length. The street is 26' wide from curb to curb with no parking on it, and terminates in a small turnaround area at the Collins Canal which encroaches on the west side onto private property. The R.O.W. is too narrow for a regulation-sized cul-de-sac. Beyond the turnaround an existing galvanized steel guardrail is installed at the end of the cul-de-sac, roughly 10' from the edge of the canal wall. In the small open area between the guardrail and the wall a few palms are planted.

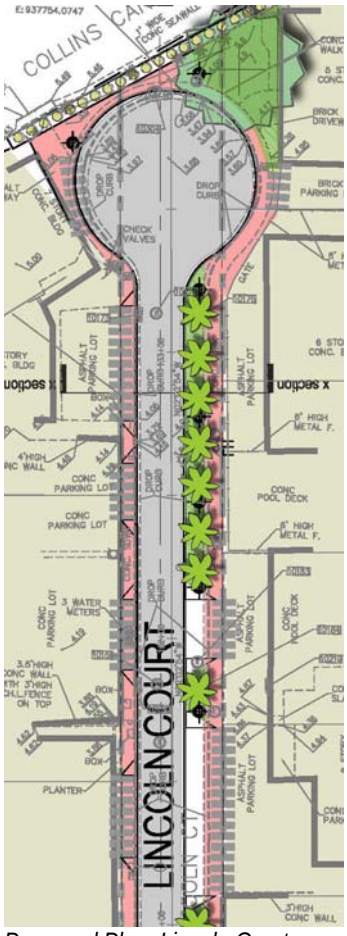
*Looking north on Lincoln Court from Lincoln Road.*

*End of Lincoln Court adjacent to the Collins Canal.*

### Proposed Plan for Lincoln Court:

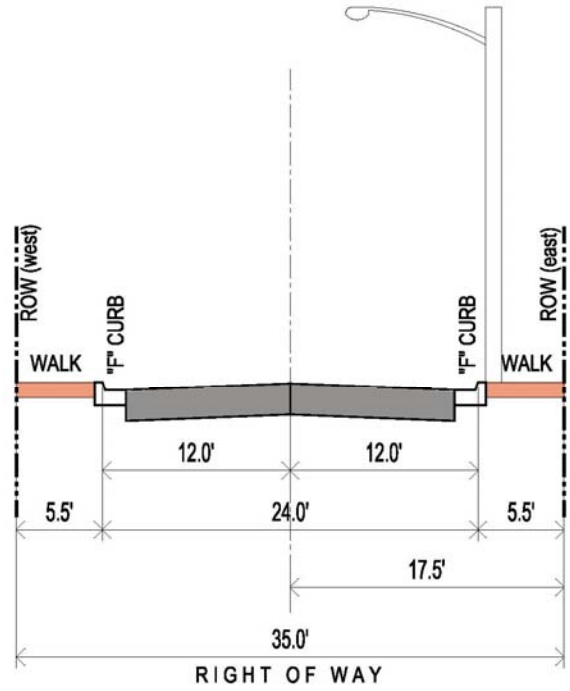
This quiet, narrow street currently has no on street parking or tree plantings within the R.O.W. Since the street ends at a cul-de-sac the objective for the proposed design is to find a way to add trees, and to improve the appearance of the street end. Residents expressed concern about controlling vagrants in the area, and the lack of grass for dog owners in the neighborhood. In response to those concerns the proposed design narrows the street to 20' wide, and adds a 4' wide grass strip with palm trees.

Along the Collins Canal the existing guardrail is replaced with concrete ball bollards installed behind the wall. The bollards serve as a vehicular barrier and are spaced close enough to function as a visual warning to pedestrians. Textured paving is installed up to the bollards, and a shade tree planted in a grass area on the east side of the cul-de-sac.




*Proposed Plan: Lincoln Court*

Proposed Plan for Lincoln Court (contd.)

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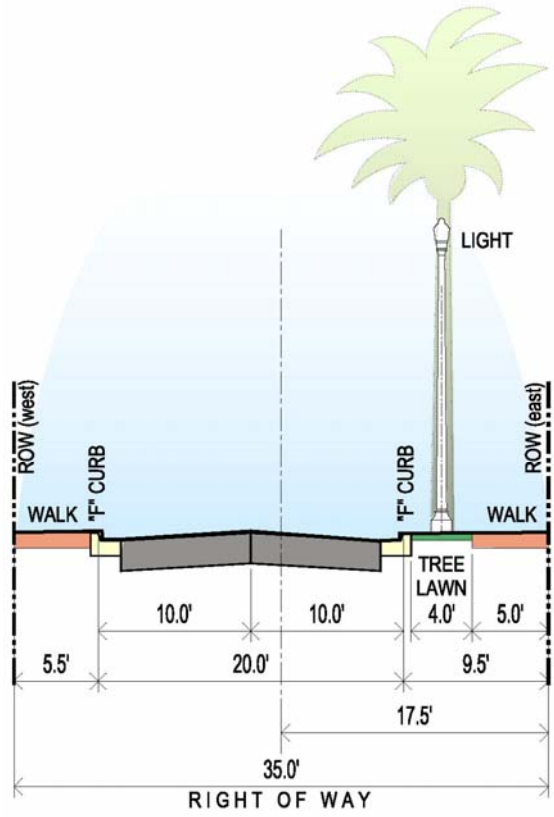



Proposed

*Lincoln Court Street Cross Sections*

10th Street (west of West Avenue)

Existing Conditions:

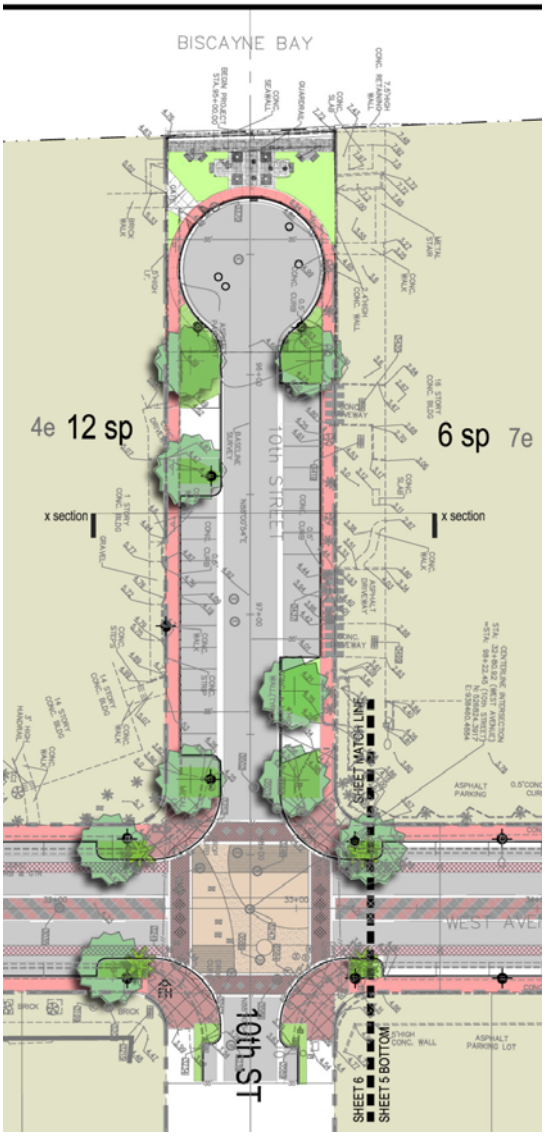
This street provides access to the parking garages and service areas of the adjoining residential towers. The street has a 70' R.O.W. with intermittent angled parking on both sides, and terminates in a cul-de-sac adjacent to Biscayne Bay. There are several service parking spaces next to the buildings' mechanical rooms, and dumpsters located next to the R.O.W. requiring service access.

*Looking east on 10th Street toward West Avenue.*

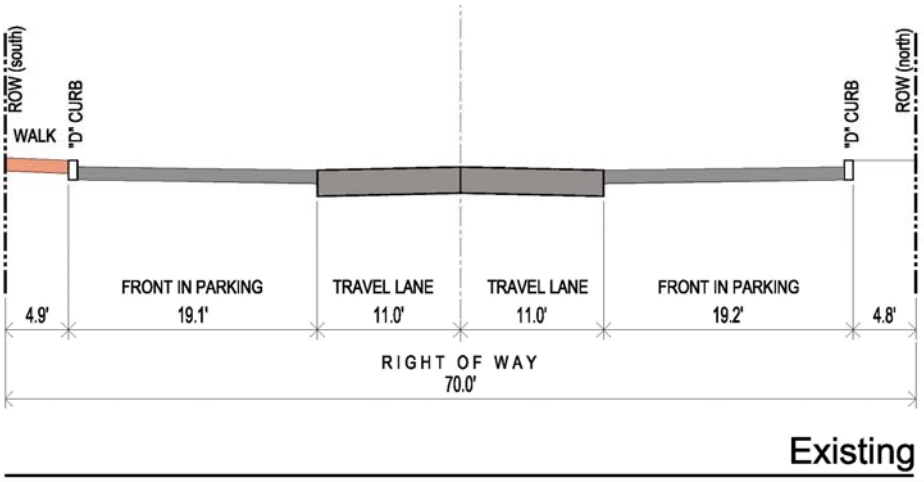
*End of 10th Street adjacent to Biscayne Bay.*

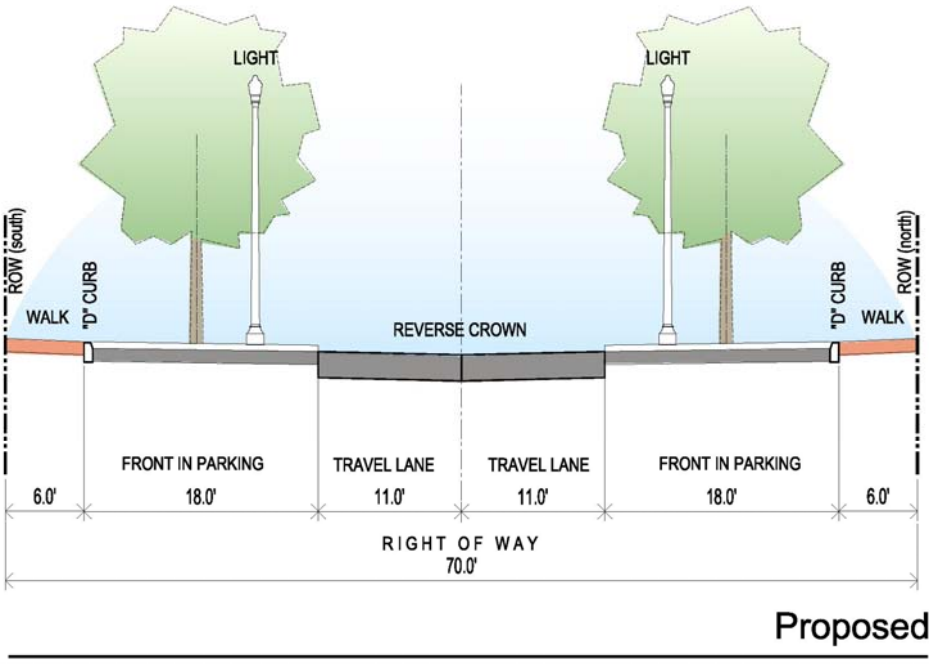
Proposed Plan for 10th Street:

10th street is designed to maintain a view to the bay along the center of the street, with the shade trees framing that view. A small street end park is currently proposed and funded through another project, which will add shade trees, pavers and benches next to the water. The parking spaces are changed from angled to front-in 90 degree (perpendicular to the curb) spaces, allowing drivers easy access to spaces on both parking rows upon entering the street. Tree islands at the ends of the parking bays and at the start of the cul-de-sac provide ample planting space for large shade trees.




*Proposed Plan: 10th Street*




*10th Street Cross Sections*

16th Street (between West Avenue and Bay Road)

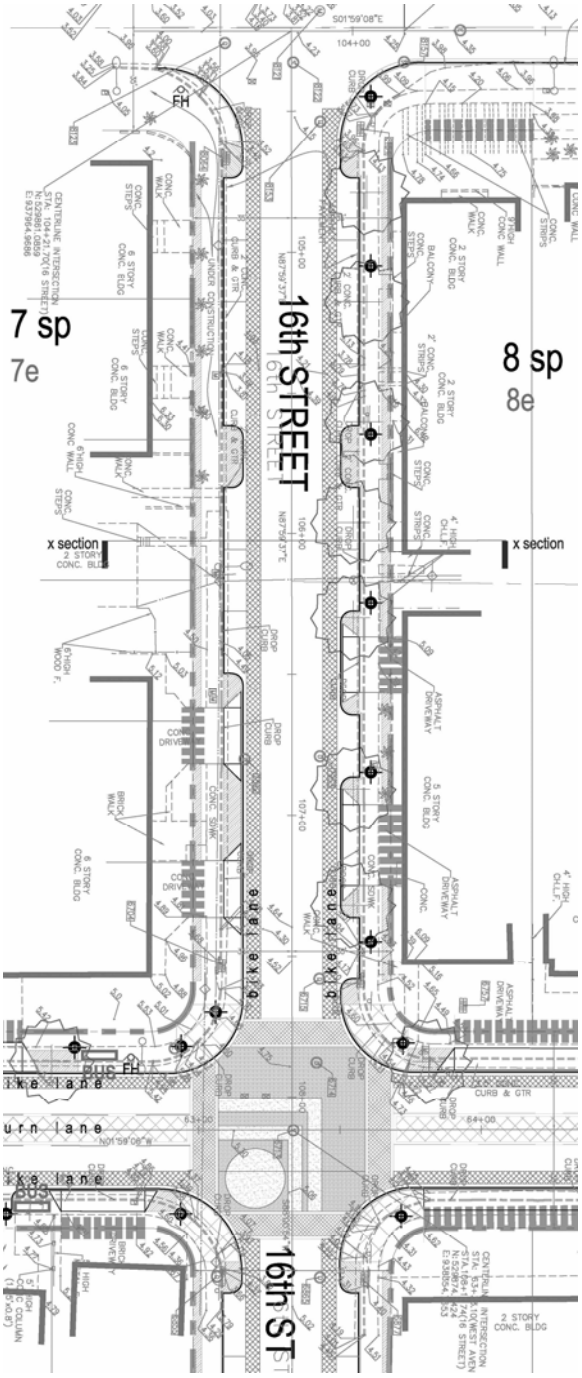
Existing Conditions:

16th Street is a residential street with a 70' R.O.W. with two travel lanes, a turn lane and parallel parking on both sides of the street. A 10' planted setback between buildings and the R.O.W. line. This street is very similar to the old design of Bay Road south of 16th Street prior to the construction of the new streetscape.

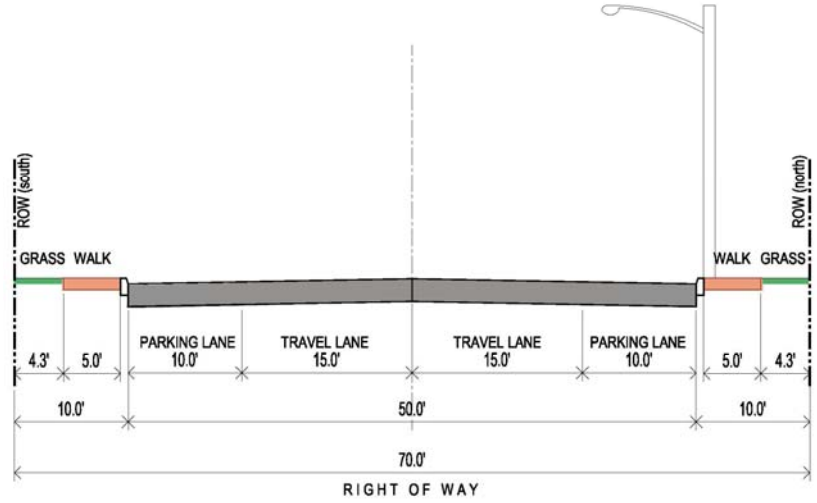
*Looking west from West Avenue down 16th Street.*

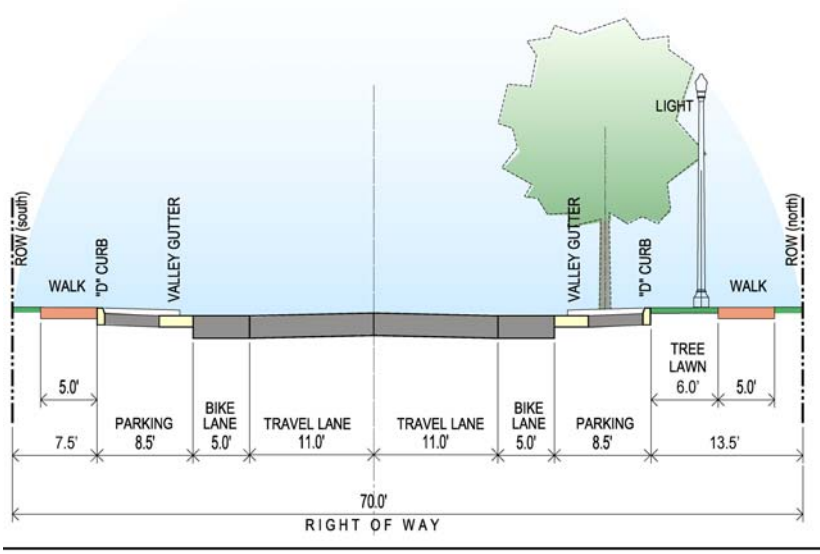
*Proposed Plan for 10th Street:*

This street is identified as the start of an east-west bicycle route in the City's "16th Street Improvement Plan." Two bike lanes, two lanes of parallel parking and two travel lanes are proposed.




*Proposed Plan: 16th Street*




*16th Street Cross Sections*

## 3.4 Landscape

The existing landscape character of West Avenue – Bay Road is shaped by a mixture of tree and shrub plantings outside the public R.O.W. in building setback areas, and sparse tree plantings occurring within the R.O.W. Since this area has a number of large buildings adjacent to or in clear view from the R.O.W., the most successful landscape plantings are those that are of sufficient size to appear in scale with the surrounding buildings. Where trees occur in groups the plantings are generally more successful than solitary specimens in a large space.

There are several blocks where it is infeasible to plant trees because of intersection sight lines or physical constraints such as parking and curb cuts, however, the overall proposed streetscape will be substantially more lush than the existing. The proposed landscape plan shows more than 180 shade trees and 70 palm trees in the neighborhood, where currently there are approximately 30 shade trees and 50 palm trees.

*Royal Palms (Roystonia elata) and Live Oak (Quercus virginiana) trees: examples of plantings that are in scale with adjacent and distant buildings*

The design objectives for the proposed plan are:

- Introduce as many shade trees as possible into the R.O.W. to make the streets more attractive and comfortable to walk along.
- Plant trees in groups whenever possible to increase the impact of the planting, and allow for a larger, contiguous planting area below the trees to establish and maintain a healthy root structure.
- Add large palms where vertical emphasis or vistas to the bay are desired.
- Add large palms where there is inadequate room for the canopy of large shade trees
- Provide a simple, durable understory of grass in most planted areas to minimize maintenance, allow pedestrians to walk over to access adjacent on-street parking, and provide more space for resident dog-walkers.
- Use low shrubs in accent areas where foot-traffic is either not an issue or where a subtle barrier is needed to reinforce the privacy of residents with windows close to the R.O.W.
- Space trees as evenly as possible given the restrictions imposed by existing driveway curb cuts and the spacing of pedestrian / street lights.
- All planted areas are irrigated using City water, with meters and taps into water main every one to two blocks.

Given the limited space for tree plantings in the R.O.W., the exposure to salt spray from the ocean, and the relatively small number of streets in the West Avenue - Bay Road neighborhood, the following simple tree palette is suggested:

- West Avenue: Live Oak
- Lincoln Road: Live Oak, with Royal Palms in the median and Montgomery Palms at the corner of Lincoln Court
- 16th Street: Live Oak
- 10th Street: Live Oak
- Bay Road: Live Oak
- Lincoln Court: Royal Palms, Live Oak at end

## 3.5 Lighting

The existing lighting in the West Avenue – Bay Road neighborhood is a combination of three different fixtures. Throughout the district a standard "cobrahead" fixture provides light for the roadway, and in newer areas pedestrian fixtures supplement the cobraheads to light the walkways. On Bay Road the pedestrian lights are the standard fixture used by the City, the "acorn" luminaire manufactured by Holophane. On Lincoln Road the "Satellite" fixture manufactured by Poulsen is used, which is a theme established on the Lincoln Road Mall.

The objective of the proposed lighting is to supplement the current "cobrahead" fixtures with pedestrian-scale "acorn" fixtures, except on Lincoln Road, where the existing Poulsen "Satellite" pedestrian fixture is continued to the end of the street. The existing cobrahead light fixtures throughout the neighborhood will be left in place, except in instances where it is not feasible to do so because of proposed reconfigurations of the curbline, utilities or other features.

*Poulsen "Satellite" Luminaire*

*Holophane "Acorn" Luminaire*

*Existing Poulsen Satellite fixture on Lincoln Road.*

## 3.6 Parking

The West Avenue – Bay Road Neighborhood Master Plan makes every attempt to maintain the current number of parking spaces, while adding street trees and maintaining the existing bus stops. As a result there is a net gain of parking spaces as shown in the table below. However, there are three streets –in particular on West Avenue between Lincoln Road and 13th Street-- where the current parking configuration has more spaces than the proposed plan. The reduction in parking spaces is primarily due to the extra space needed at the corners to construct a bump-out with a curb radius large enough to meet the City's recommended criteria (30' radius), and to provide room for the curb to return to the outside edge of the proposed parking spaces. This is a conceptual-level plan with further refinement expected in the construction document phase, at which point the total number of parking spaces may change.

| Existing / Proposed Parking Summary | total existing parking spaces | total proposed parking spaces | parking space gain / loss |
|---|---|---|---|
| West Avenue (H. Meyer Blvd - Lincoln Rd) | 18 | 13 | -5 |
| West Avenue (Lincoln Rd - 13th St) | 64 | 51 | -13 |
| West Avenue (13th St - 8th St) | 40 | 66 | 26 |
| West Avenue (8th St - 6th St) | 17 | 18 | 1 |
| Lincoln Road | 45 | 43 | -2 |
| Lincoln Court | 0 | 0 | 0 |
| Bay Road (north of Lincoln Road) | 21 | 15 | -6 |
| 16th Street (West Ave - Bay Rd) | 15 | 15 | 0 |
| 10th Street (west of West Ave) | 11 | 18 | 7 |
| TOTAL SPACES | 231 | 239 | 8 |

## 3.7 Budget Level Cost Estimate

The West Avenue – Bay Road Infrastructure Improvement Project has a total budget of $22,664,779. This includes the $1,662,229 previously allocated for Bay Road (Neighborhood Bid Package 11A) and $21,002,550 budgeted for the West Avenue Area (Neighborhood Bid Package 11B). A summary breakdown of the costs is shown in the table below, and a detailed estimate prepared according to the City of Miami Beach format is provided in the Appendix.

| Funding Source | Bay Road (Sept 2006) | West Avenue (2007) |
|---|---|---|
| General Obligation | $0 | $1,395,106 |
| Water & Sewer 2000 Bonds | $0 | $3,966,888 |
| Stormwater 2000 Bonds | $1,062,229 | $15,001,556 |
| City Center RDA | $600,000 | $639,000 |
| Total Funding | $1,662,229 | $21,002,550 |

The initial budget for West Avenue was significantly less than the current allocation. After the Community Vision Workshop in November 2001, the citizens expressed concern that the stormwater and water issues were not adequately addressed, so the City reassessed the budget and allocated sufficient funds to complete the requested improvements.

Projected construction costs for the proposed improvements are within the +30%, -15% criteria defined by the American Association of Cost Engineers, and are approximately:

| | |
|---|---|
| Water: | $1.0 million |
| Stormwater: | $10.5 million |
| Hardscape and Landscape: | $9.4 million |
| TOTAL: | $20.9 million |

## 3.8 Implementation Schedule

The status of the various projects and the latest schedule for the West Avenue – Bay Road Infrastructure Improvement Project was established by the City and presented at the Community Design Workshop #2 on September 27, 2006, and is shown below:

| Project | |
|---|---|
| Bay Road (14th to 16th Street) | Completed |
| Lincoln Road Street End | Design Completed |
| 10th Street End | Design Completed |
| Bay Road (16th St to Lincoln Rd) | Design Completed |
| Start Construction West Avenue Area | FY 2009 |

The Project Schedule* for completing the West Avenue Area Neighborhood projects outlined in the report is as follows:

Task 1 - Planning (June 2005 – Jan 07)
Task 2 - Design Phase (Feb 08 – Apr 09)
Task 3 - Bid & Award (May 09 – Aug 09)
Task 4 - Construction (Sept 09 – Aug 2012)

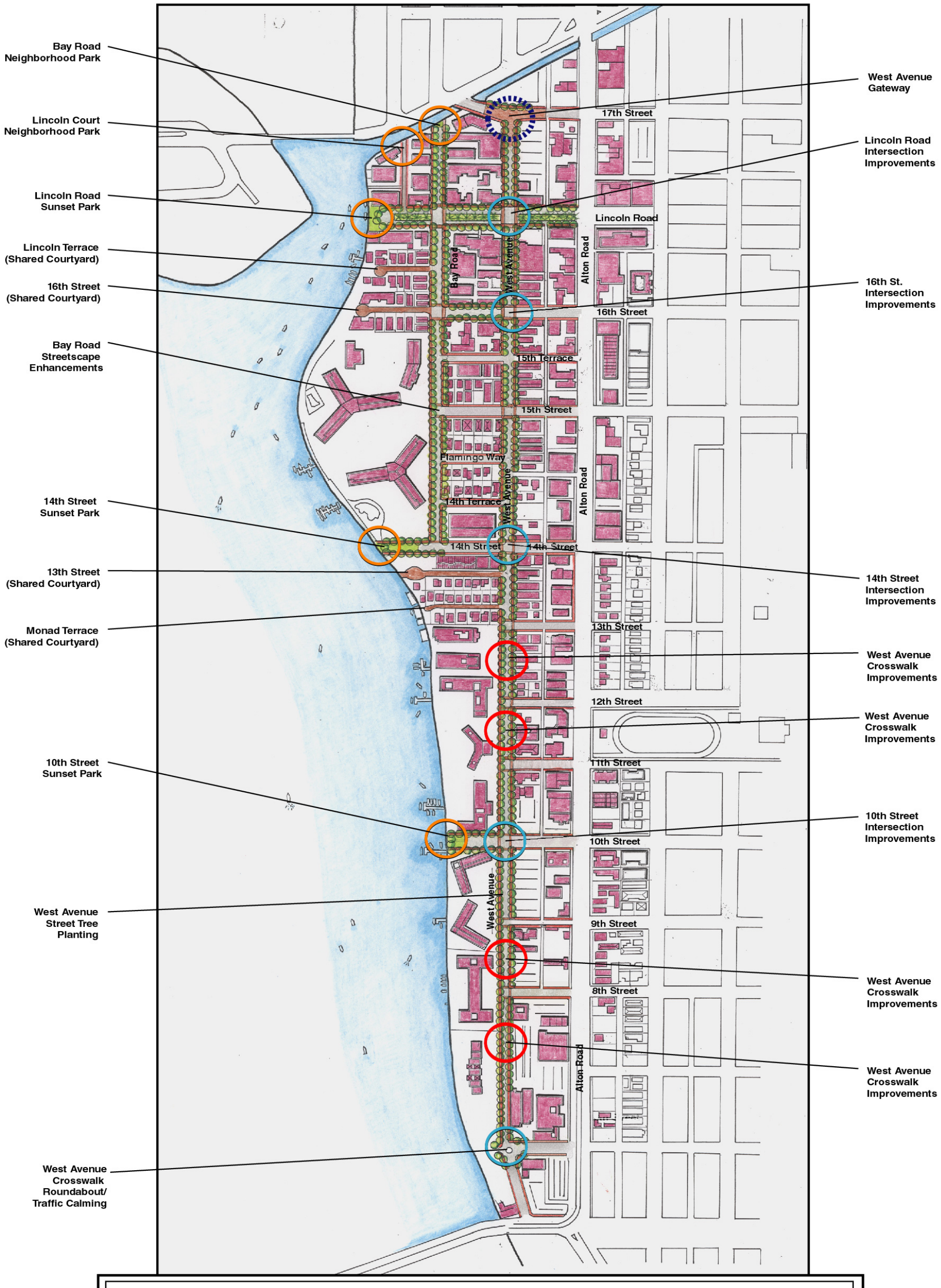
**schedule as of December 2006*

## 3.9 Unfunded Projects

Areas within the public R.O.W. not included in the West Avenue – Bay Road Neighborhood Master Plan funded improvements are listed as "Other" in the diagram below, and include:

- Lincoln Terrace
- 16th Street west of Bay Road
- 13th Terrace west of Bay Road
- Monad Terrace
- West Avenue south of 7th Street
- All east-west streets not already listed.

# Appendix A
# Illustrations




# WEST AVENUE / BAY ROAD NEIGHBORHOOD MASTERPLAN

## CITY OF MIAMI BEACH

Glatting Jackson Kercher Anglin Lopez Rinehart, Inc.

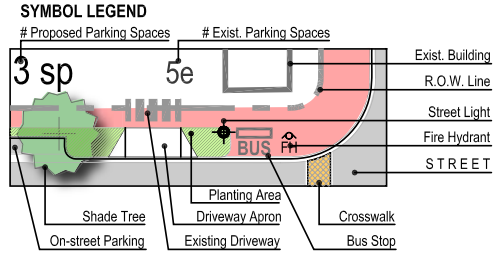

Right of Way Infrastructure Improvements Program
Basis of Design Report

City of Miami Beach **West Avenue**

2006.11.15

mb# 2002-24980
gj 15788

**SYMBOL LEGEND**

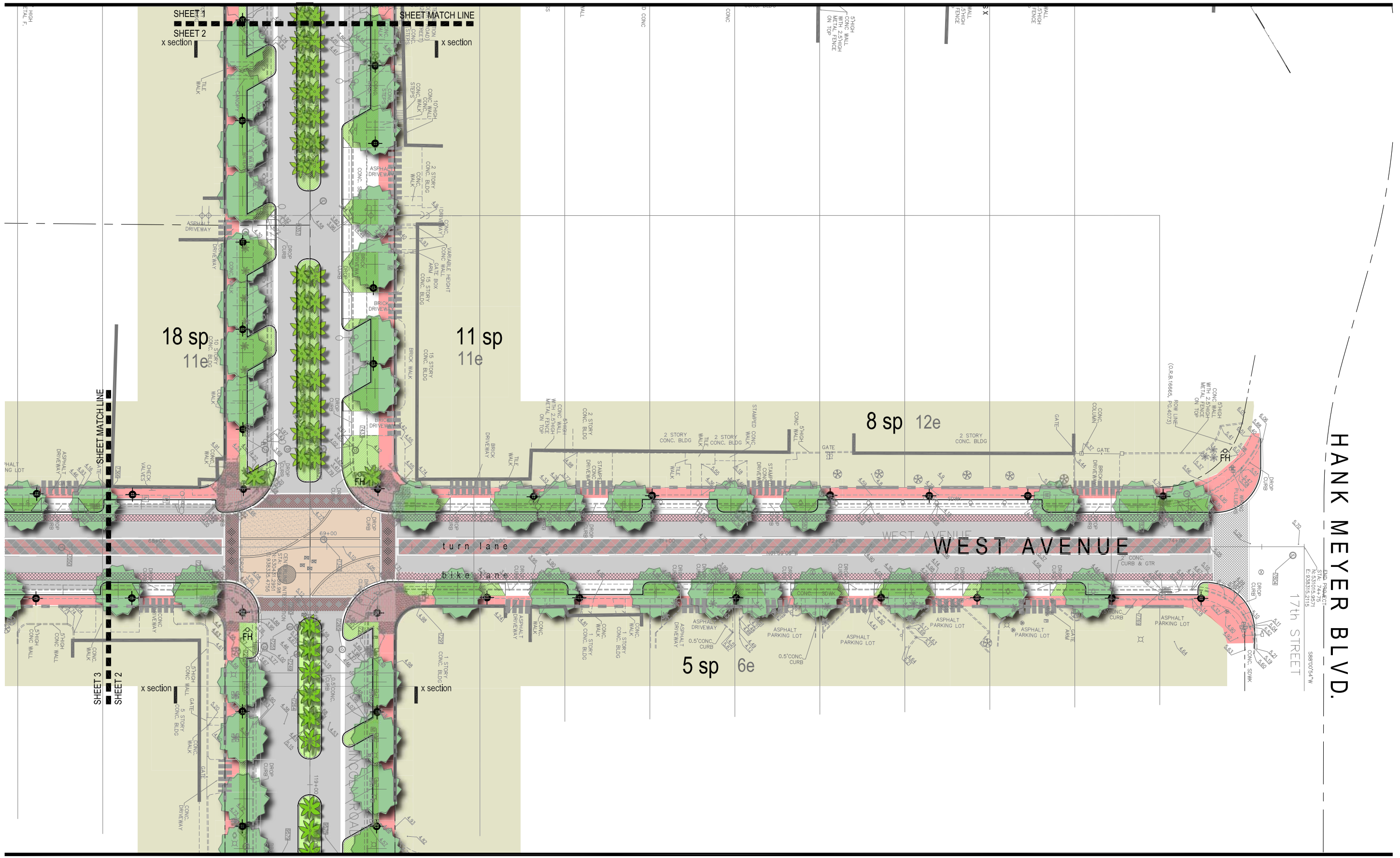



# Plan

## Lincoln Road / Lincoln Court / Bay Road

| Area Parking Count | |
|---|---|
| Existing On-street Spaces | 42 |
| Proposed On-street Spaces | 29 |

**Plan Sheet 1**




Right of Way Infrastructure Improvements Program
Basis of Design Report

City of Miami Beach **West Avenue**

2006.11.15

mb# 2002-24980
gj 15788

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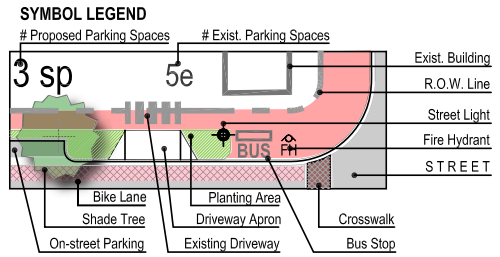
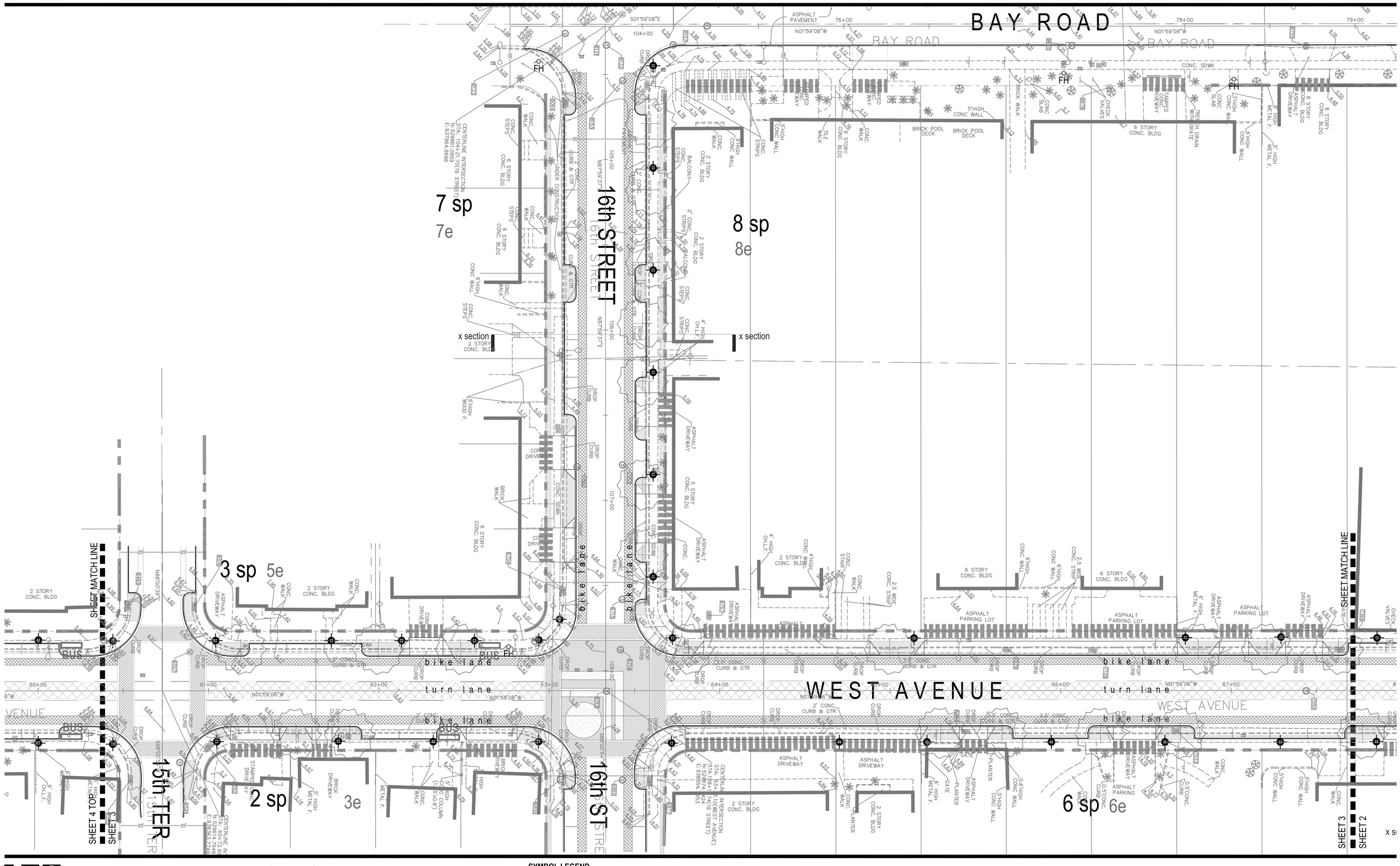



# Plan

## West Avenue / Lincoln Road (Lincoln Road to Hank Meyer)

| Area Parking Count | |
|---|---|
| Existing On-street Spaces | 40 |
| Proposed On-street Spaces | 42 |

**Plan Sheet 2**

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mb# 2002-24980
gj 15788

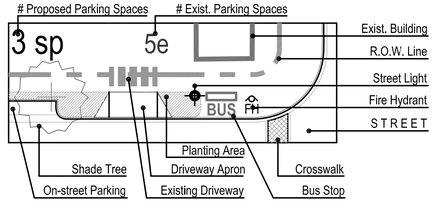
Right of Way Infrastructure Improvements Program

Basis of Design Report

City of Miami Beach **West Avenue**

2007.03.01

**SYMBOL LEGEND**

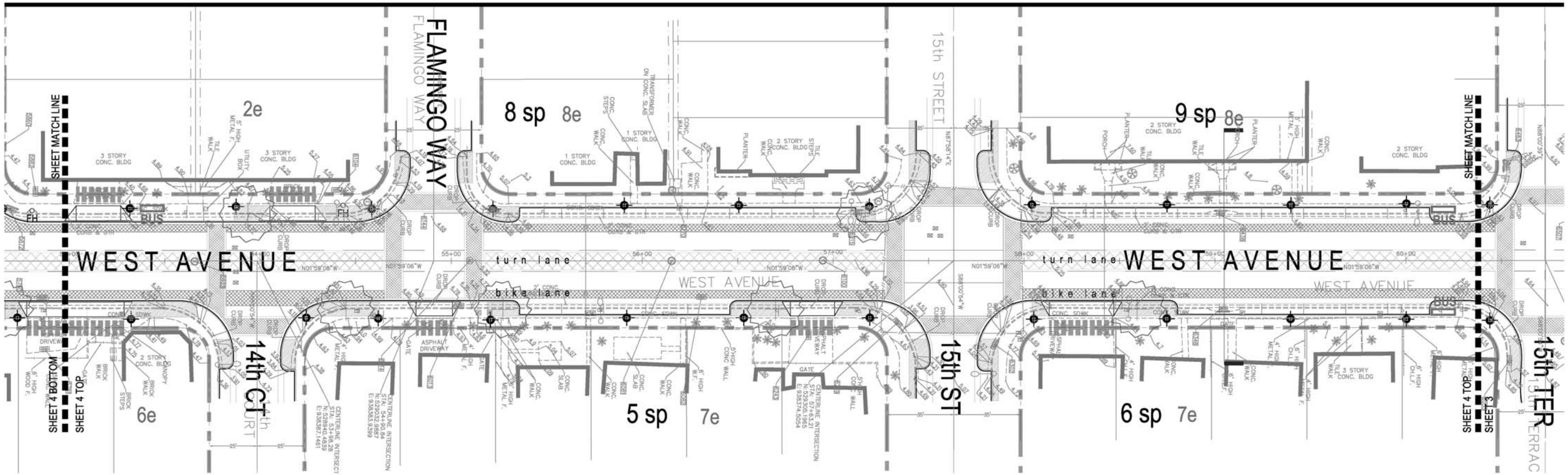


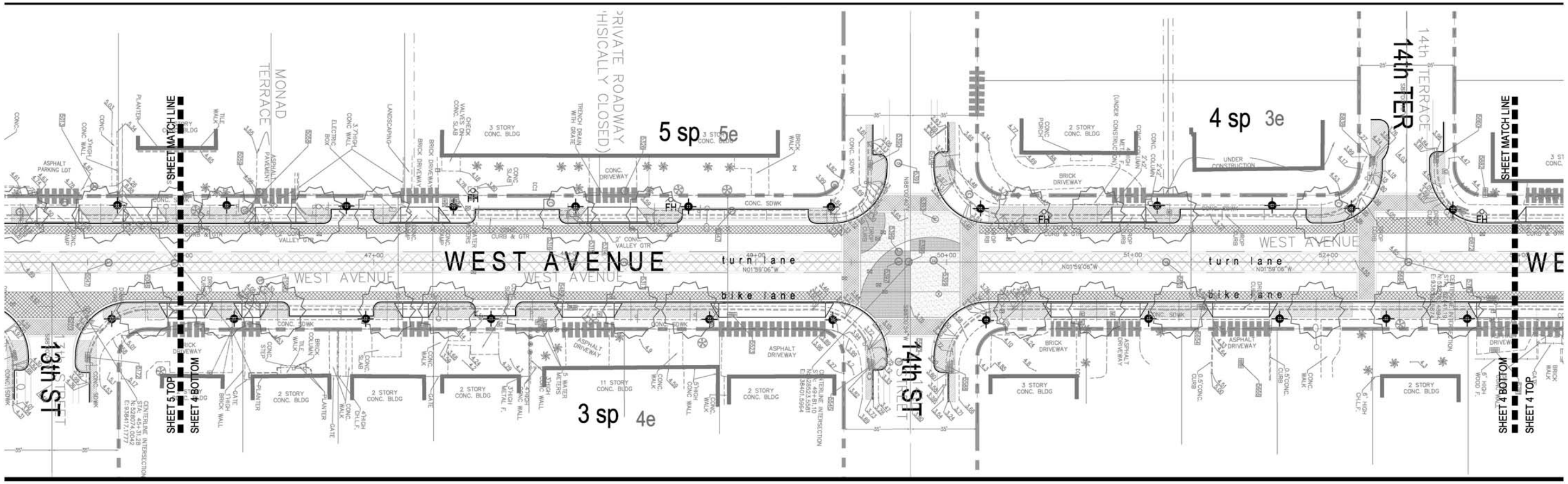

# Plan

## West Avenue / 16th Street (15th Terrace to South of Lincoln Road)

| Area Parking Count | |
|---|---|
| Existing On-street Spaces | 26 |
| Proposed On-street Spaces | 26 |

**Plan Sheet 3**




Right of Way Infrastructure Improvements Program
Basis of Design Report

City of Miami Beach **West Avenue**

2006.11.15

mb# 2002-24980
gj 15788

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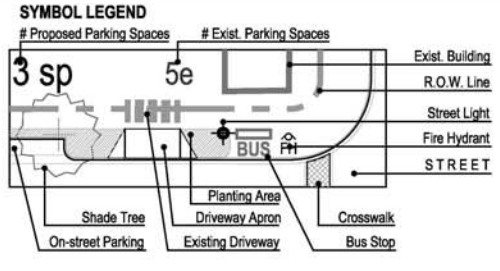
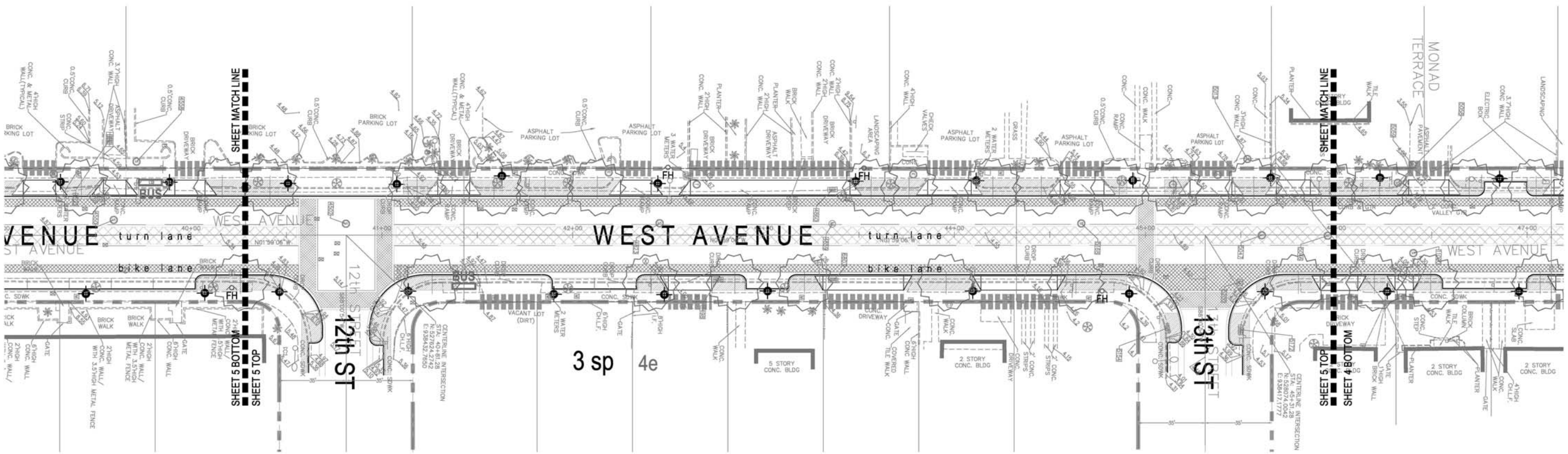


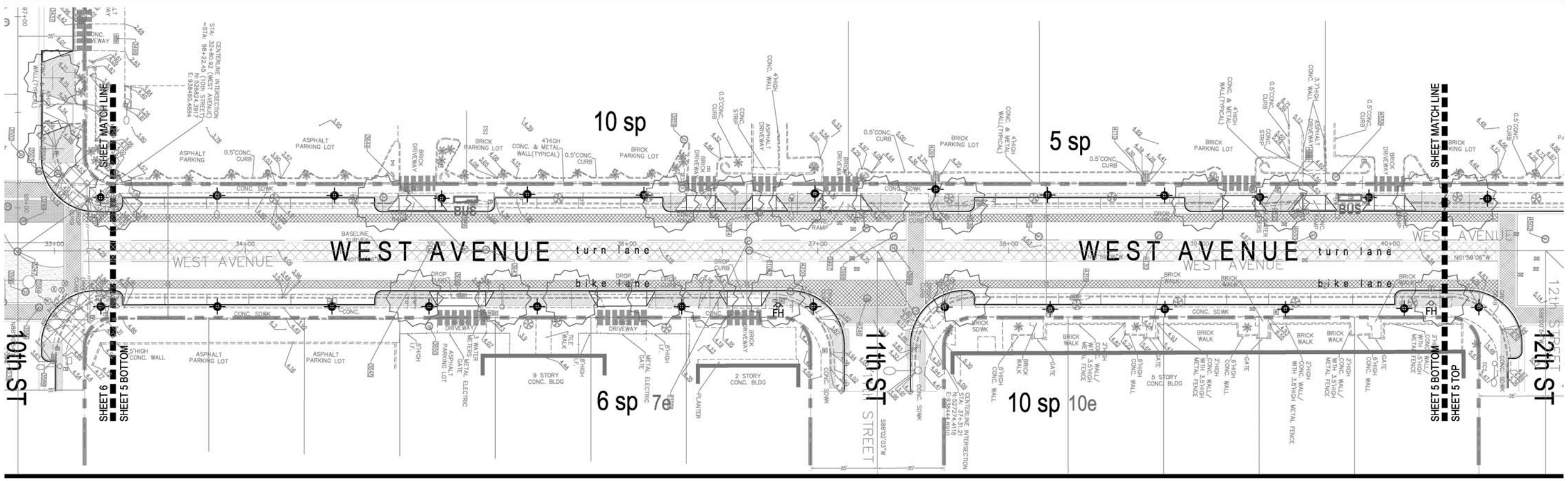

# Plan

## West Avenue (15th Terrace to 13th Street)

| Area Parking Count | |
|---|---|
| Existing On-street Spaces | 50 |
| Proposed On-street Spaces | 40 |

**Plan Sheet 4**




Right of Way Infrastructure Improvements Program
Basis of Design Report

City of Miami Beach **West Avenue**

2006.11.15

mb# 2002-24980
gj 15788

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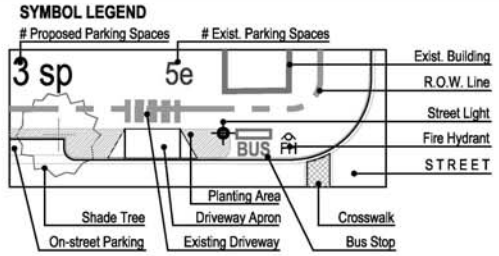
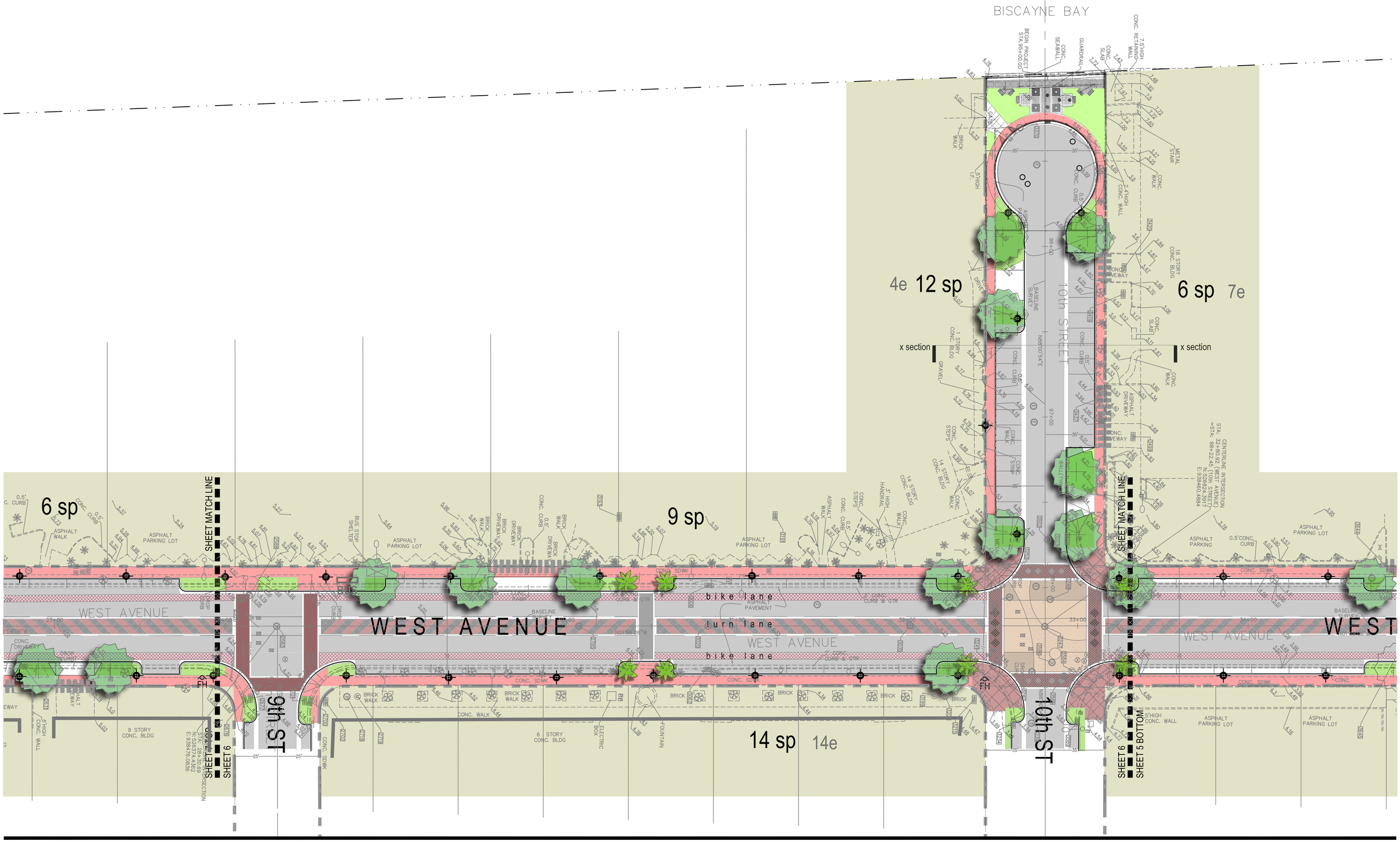



# Plan

## West Avenue (10th Street to 13th Street)

| Area Parking Count | |
|---|---|
| Existing On-street Spaces | 21 |
| Proposed On-street Spaces | 34 |

**Plan Sheet 5**

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Right of Way Infrastructure Improvements Program
Basis of Design Report

# City of Miami Beach **West Avenue**

2007.03.01

mb# 2002-24980
gj 15788

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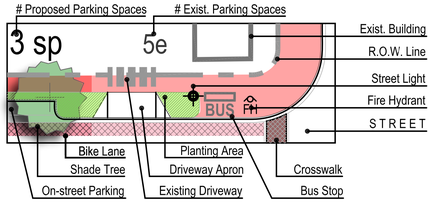
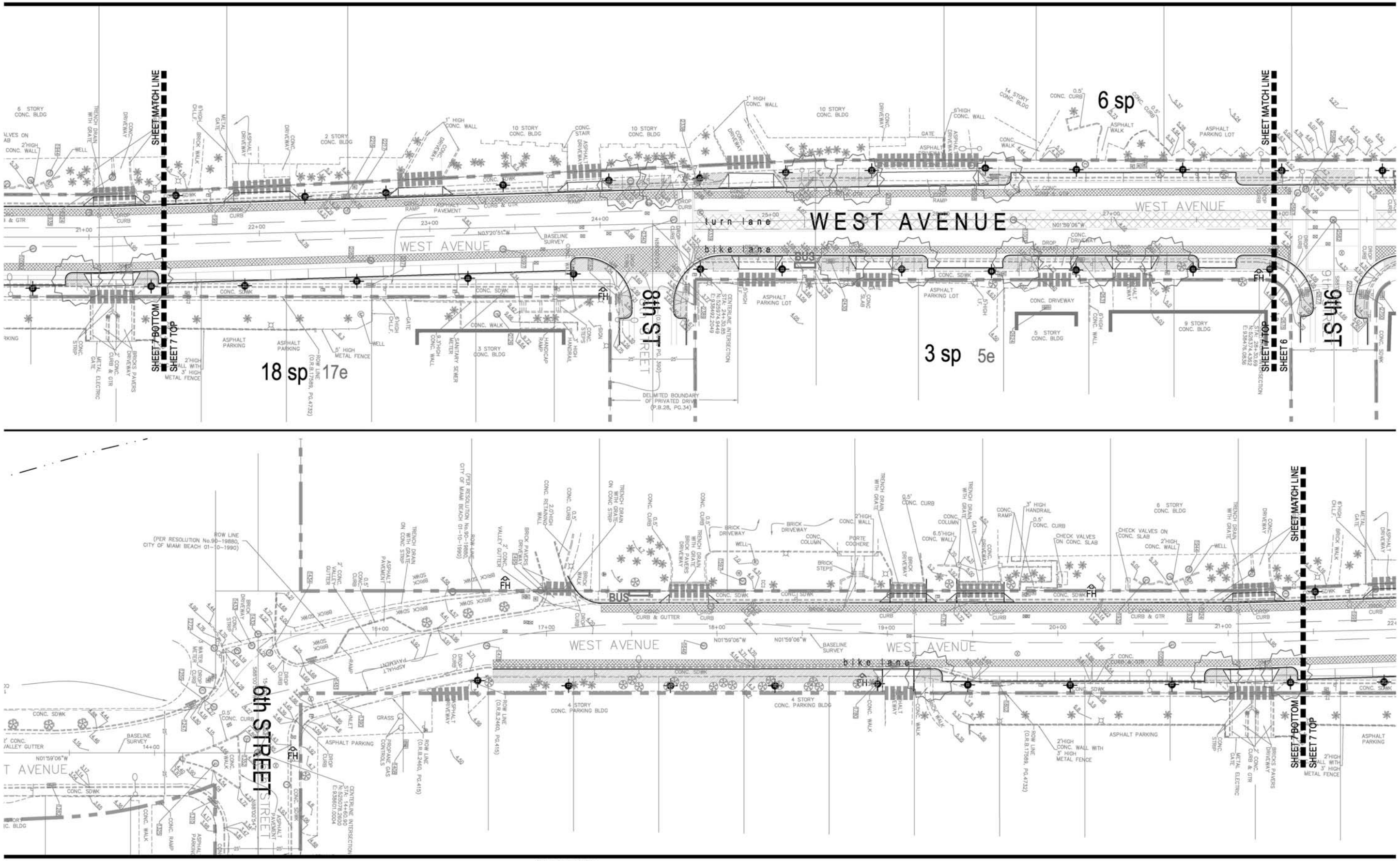



# Plan

## 10th Street, West Avenue (9th Street to 10th Street)

| Area Parking Count | |
|---|---|
| Existing On-street Spaces | 25 |
| Proposed On-street Spaces | 41 |

**Plan Sheet 6**




Right of Way Infrastructure Improvements Program

Basis of Design Report

City of Miami Beach **West Avenue**

2006.11.15

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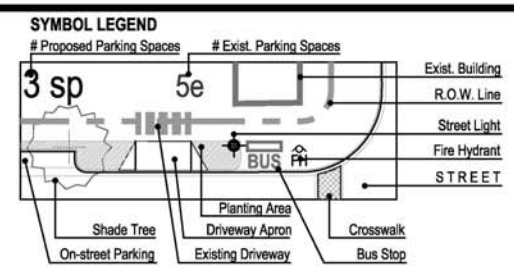
mb# 2002-24980
gj 15788

**SYMBOL LEGEND**



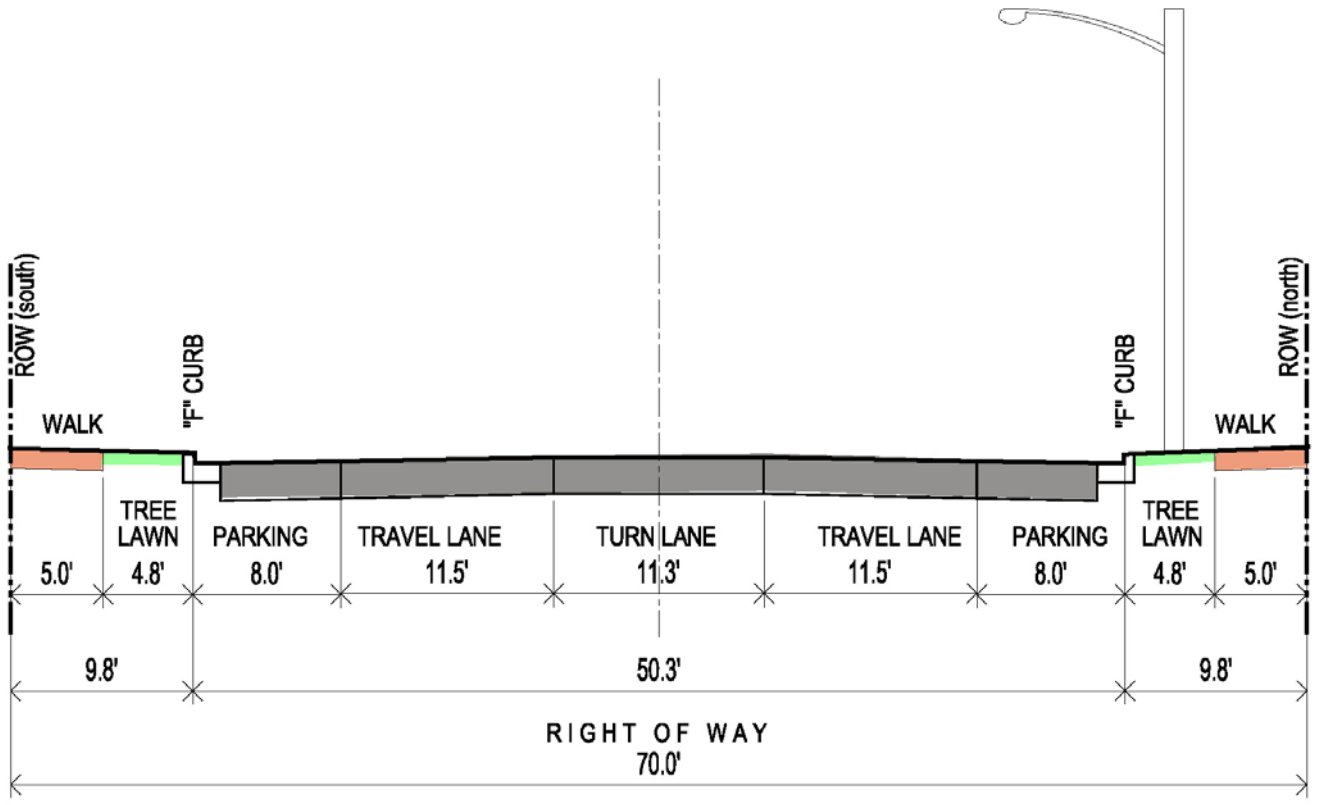

# Plan

## West Avenue (9th Street to 5th Street)

| Area Parking Count | |
|---|---|
| Existing On-street Spaces | 22 |
| Proposed On-street Spaces | 27 |

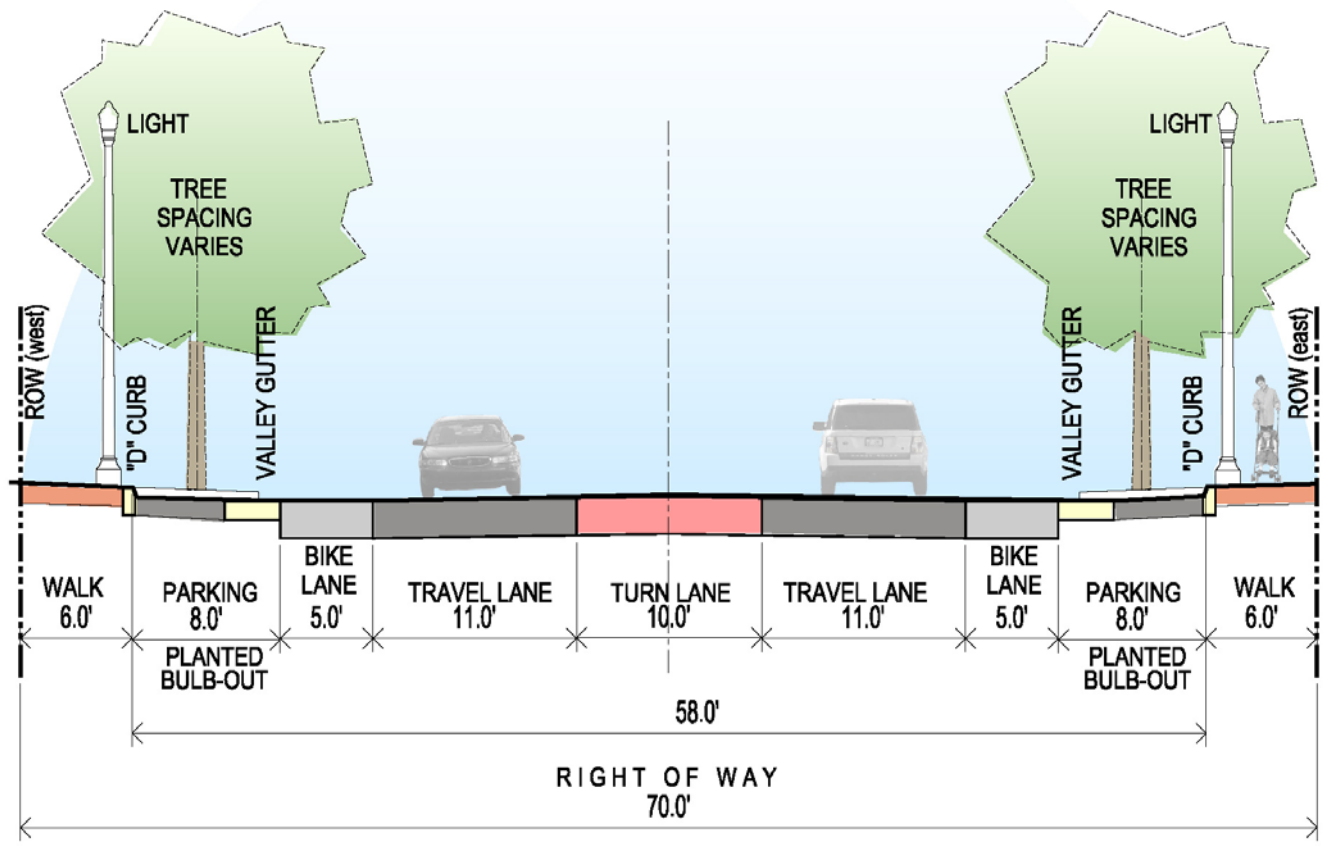
**Plan Sheet 7**

Existing Street (looking north toward 10th Street)




Existing

**features:** (2) travel lanes, (1) turn lane, (2) parallel parking lanes
**parking spaces:** 133 existing spaces total (43 spaces west-side / 90 spaces east-side)




Proposed

**features:** (2) travel lanes, (1) turn lane, (2) parallel parking lanes, (2) bike lane
**parking spaces:** 137 total spaces (56 spaces west-side / 81 spaces east-side)

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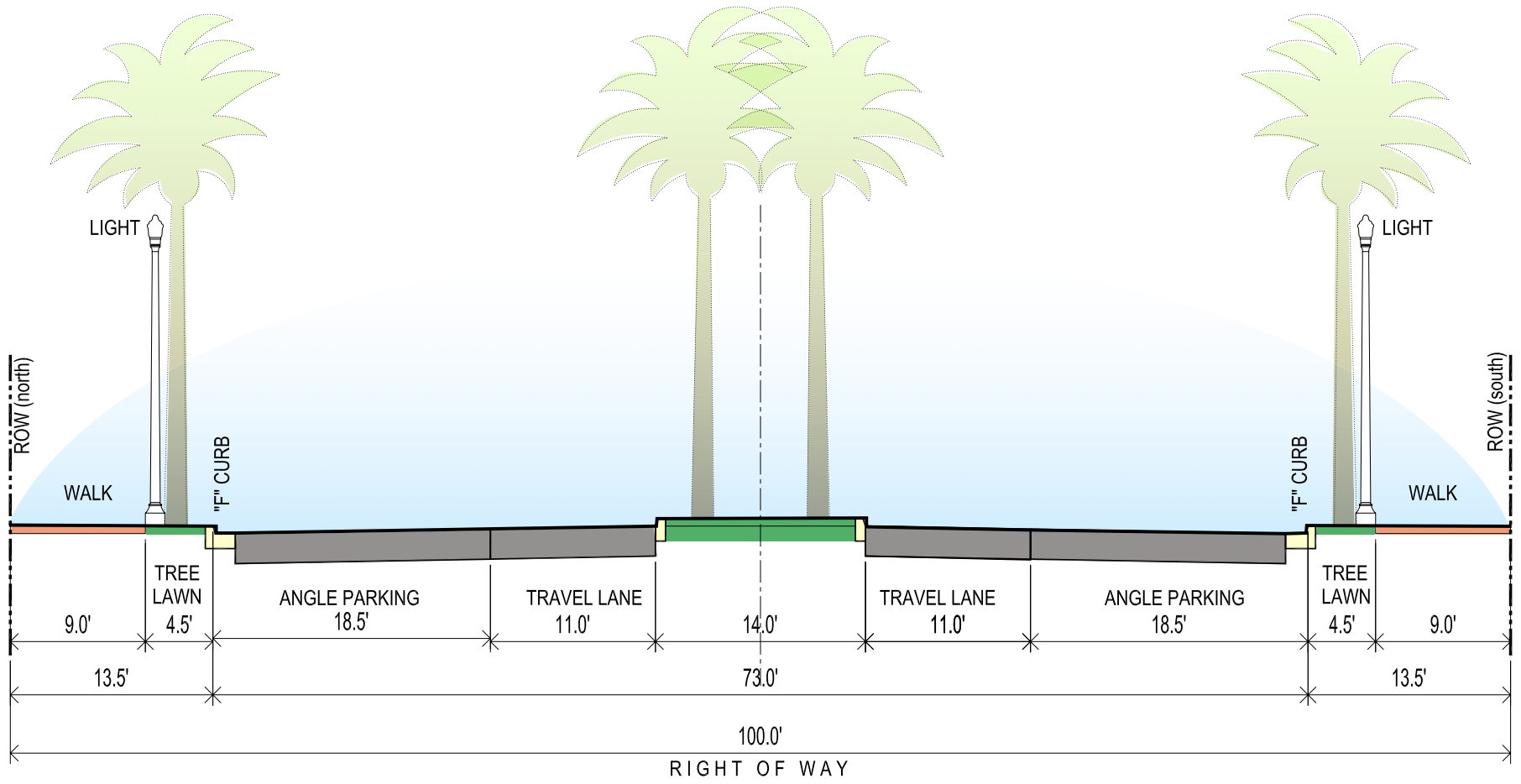
Right of Way Infrastructure Improvements Program
Basis of Design Report

City of Miami Beach **West Avenue**

2006.12.06

# Cross Section West Avenue

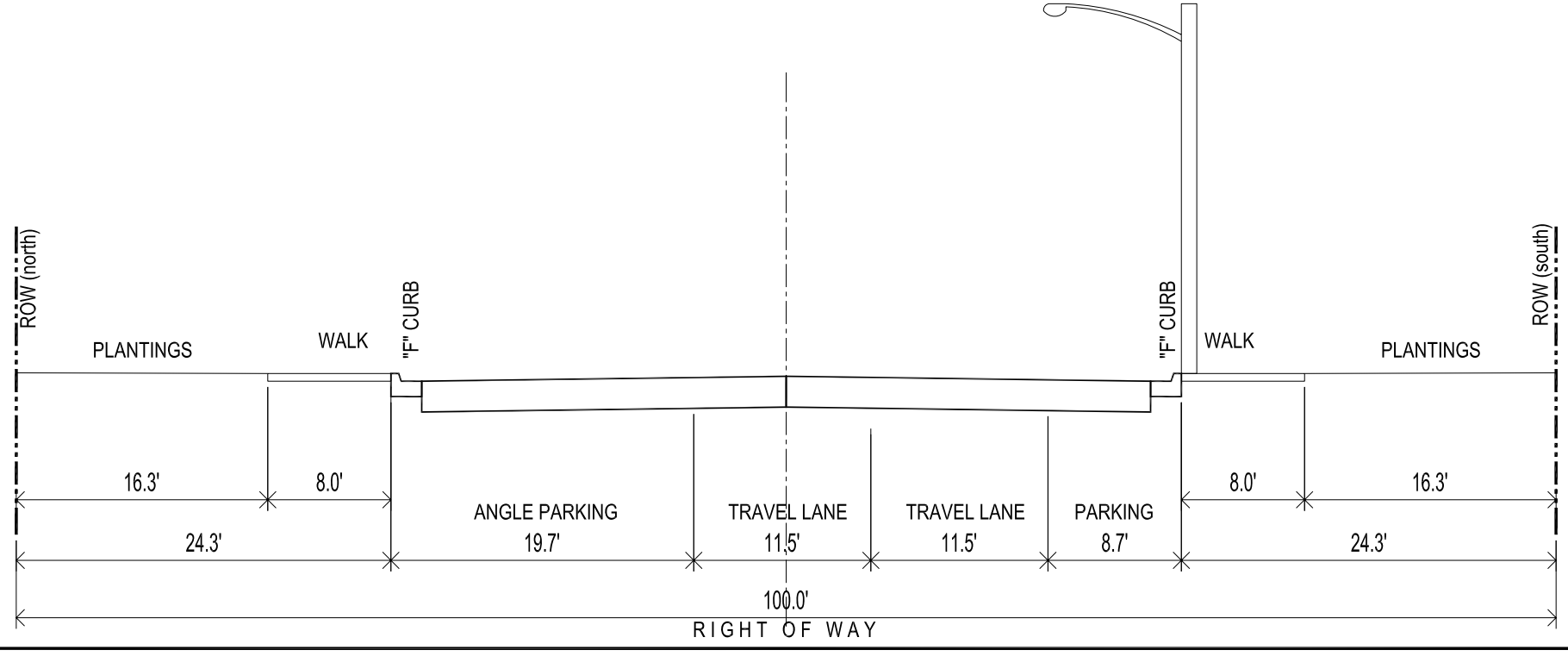



**features:**
(2) travel lanes,
(2) angle parking lane

**parking spaces:**
29 total proposed spaces

## Proposed

Looking east toward West Avenue




**features:**
(2) travel lanes,
(1) parallel parking lane
(1) angle parking lane

**parking spaces:**
22 total proposed spaces

## Existing

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gj 15788.xxx

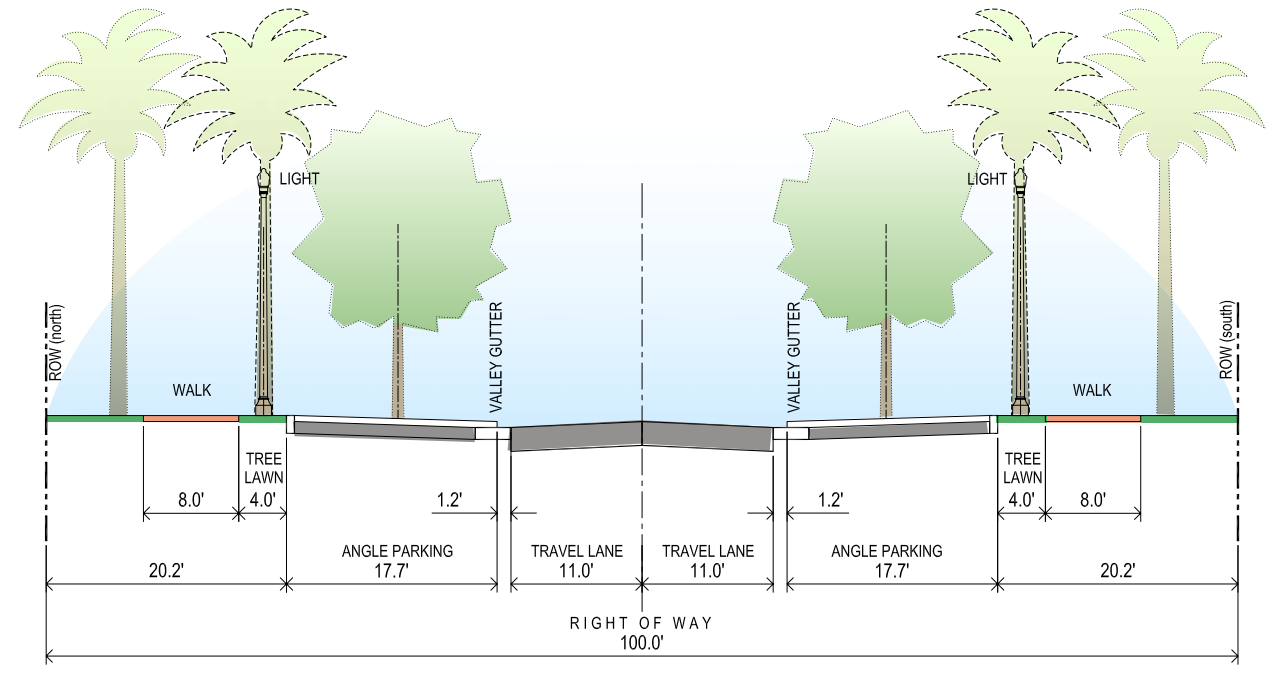
Right of Way Infrastructure Improvements Program
Basis of Design Report

City of Miami Beach **West Avenue**

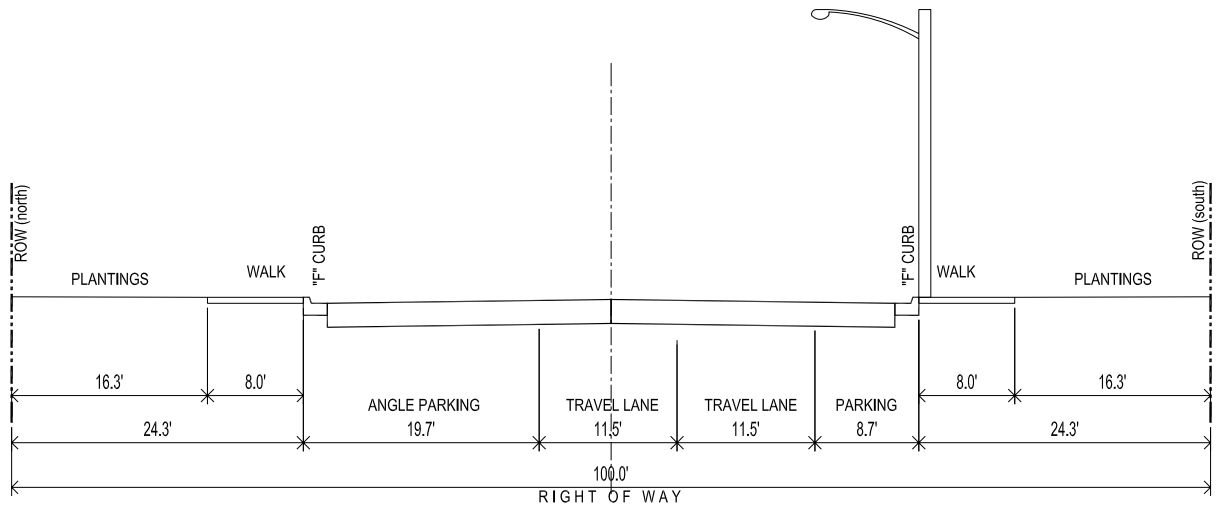
2006.04.26

# Cross Section
# Lincoln Road (Bay Road to West Ave)

Existing Street (looking east toward Bay Road)




Proposed Street




Existing Street Section

0FT 3 6

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mbl# 2002-24980
gj 15788

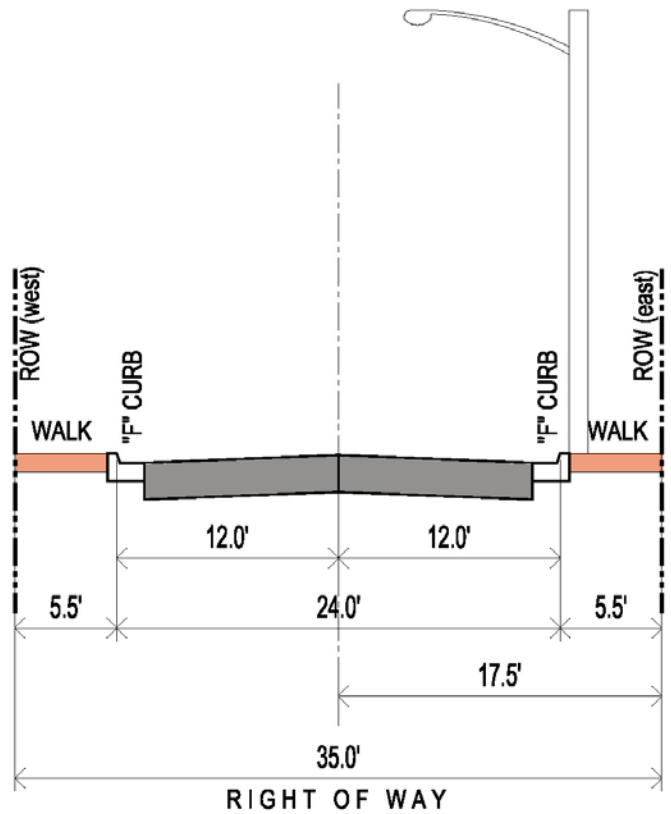
Right of Way Infrastructure Improvements Program
Basis of Design Report

City of Miami Beach **West Avenue**

2006.11.10

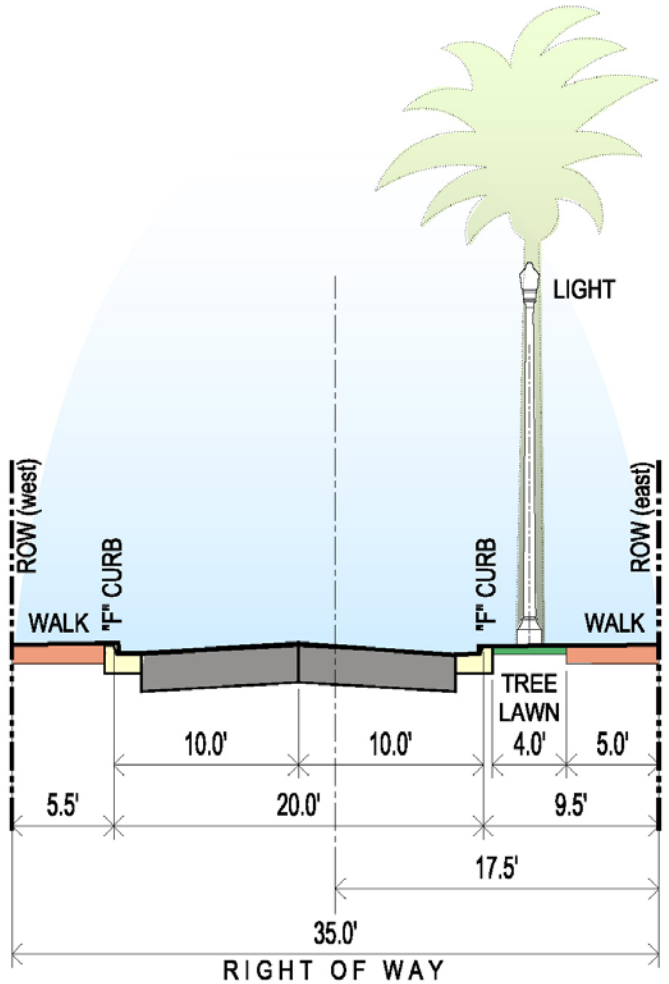
# Cross Section Options
# Lincoln Road (Lincoln Court to Bay Road)

(looking north)




## Existing

**features:** (2) travel lanes
**parking spaces:** 0 existing spaces total




## Proposed

**features:** (2) travel lanes
**parking spaces:** 0 total proposed spaces

0 FT 2 4

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mb# 2002.24980
gj 16788.xxx

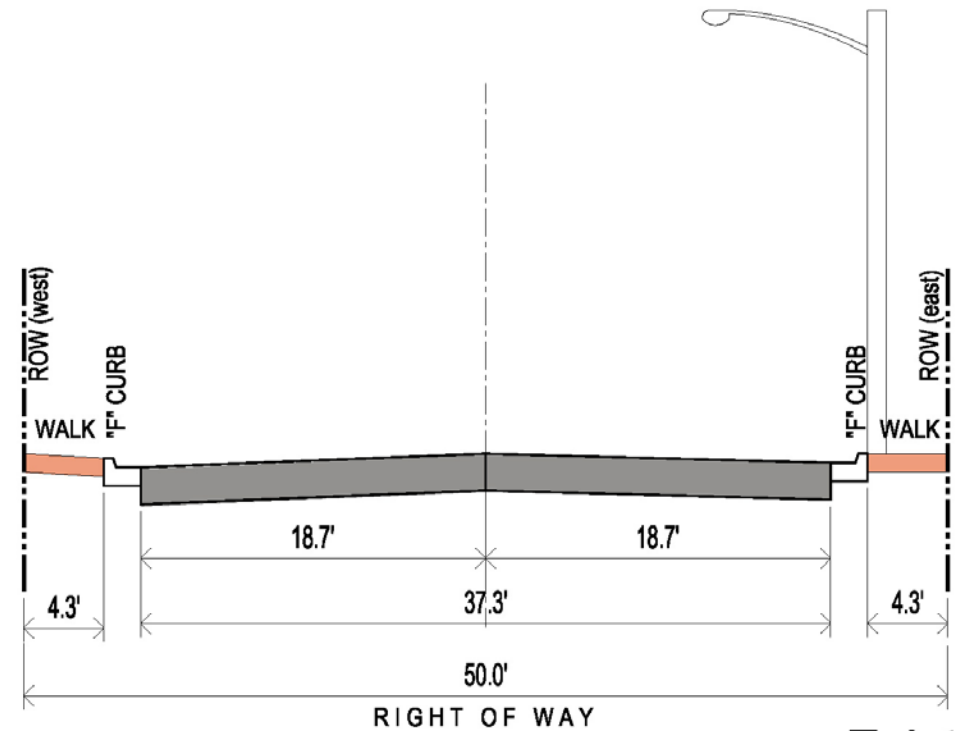
Right of Way Infrastructure Improvements Program
Basis of Design Report

City of Miami Beach **West Avenue**

2006.12.06

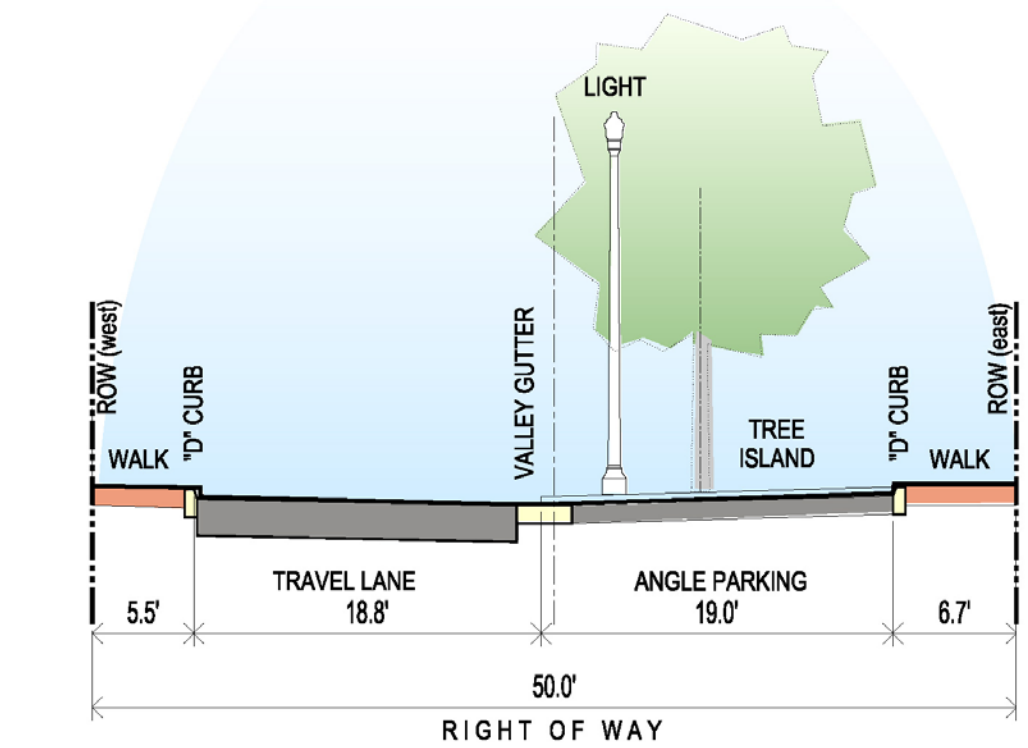
# Cross Section
# Lincoln Court

(looking north)




## Existing

**features:** (2) travel lanes, (2) parallel parking lanes
**parking spaces:** 21 existing spaces total




## Proposed

**features:** (2) travel lanes, (1) angle parking lane
**parking spaces:** 15 total proposed spaces

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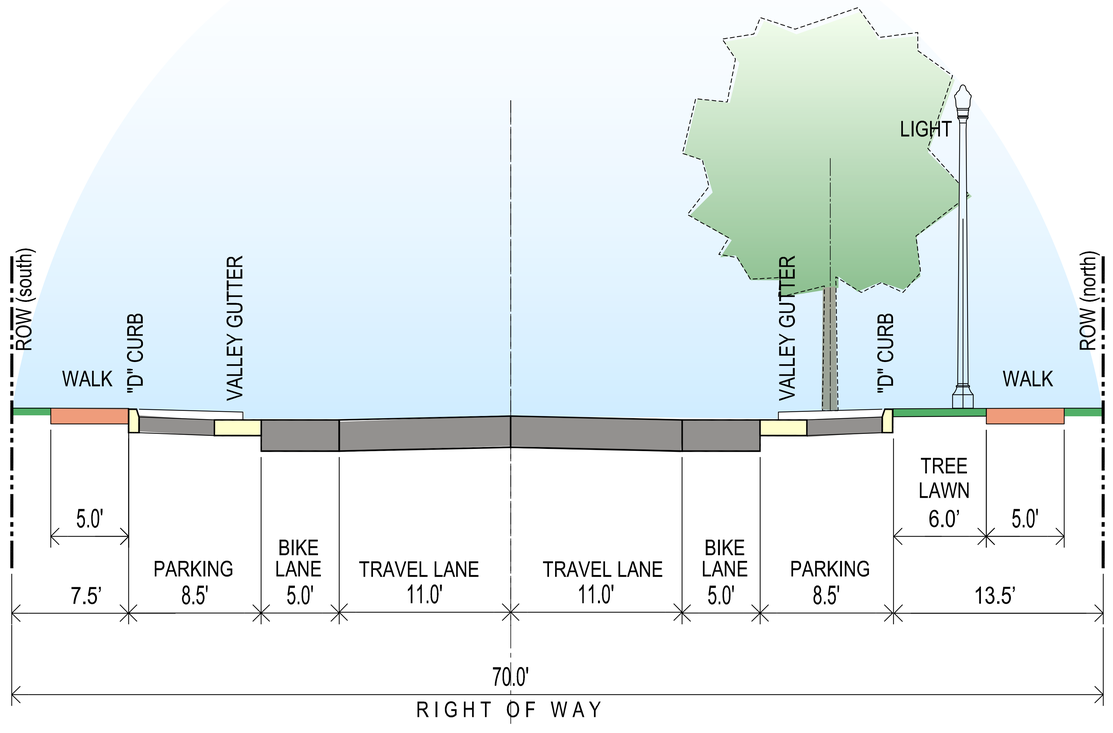
gl 15788.xxx

Right of Way Infrastructure Improvements Program
Basis of Design Report

City of Miami Beach **West Avenue**

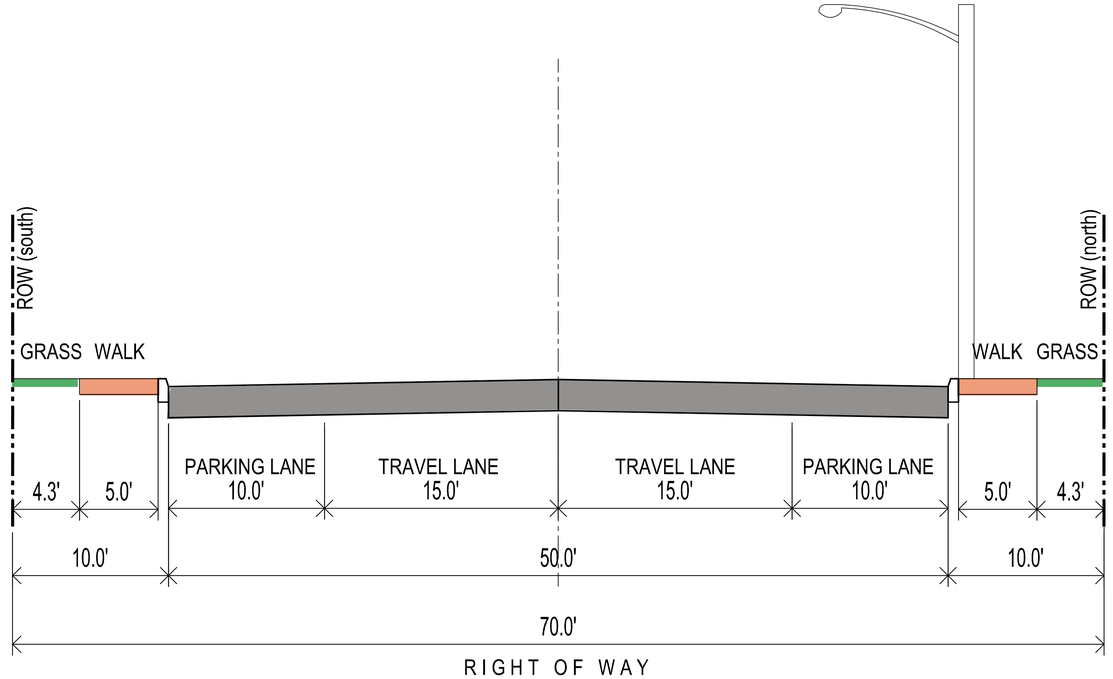
2006.12.06

# Cross Section
# Bay Road (north of Lincoln Road)




Proposed

looking west down 16th Street from West Ave




Existing

0 FT 2 4

GLATTING JACKSON KERCHER ANGLIN LOPEZ RINEHART

mb# 2002-24980
gj 15788.xxx

Right of Way Infrastructure Improvements Program
Basis of Design Report

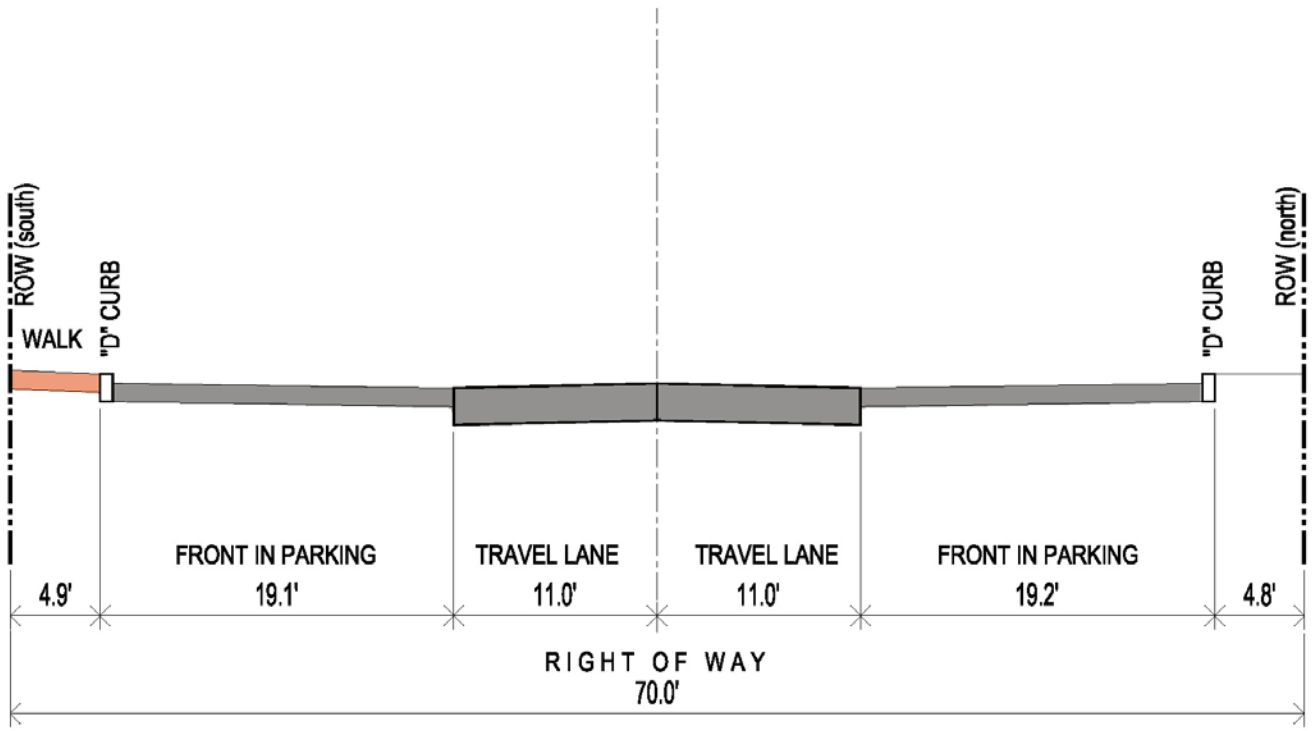
City of Miami Beach **West Avenue**

2006.12.06

# Cross Section
# 16th Street (between Bay Road and West Ave)

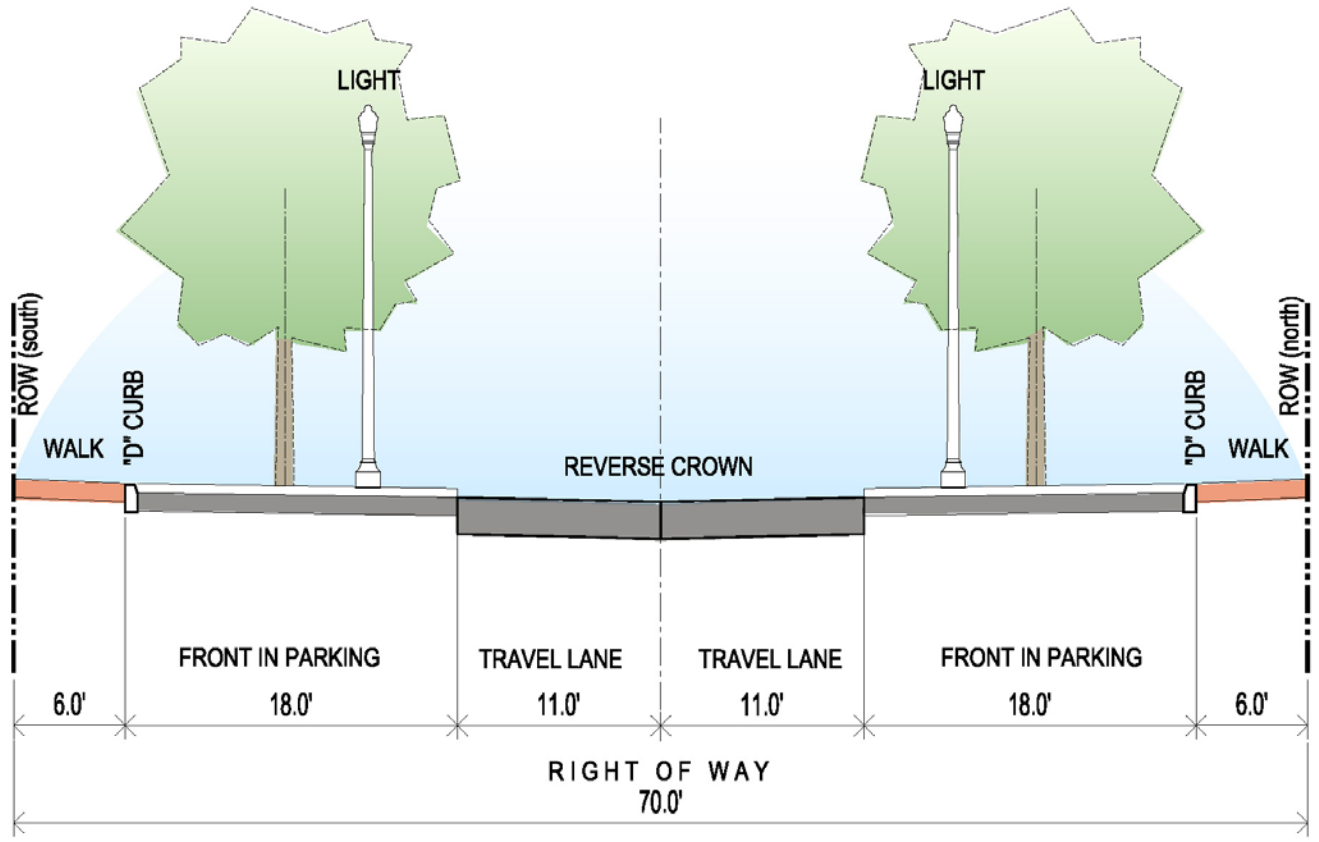
(looking west)

(looking east)




## Existing

**features:** (2) travel lanes, (2) front-in parking lanes
**parking spaces:** 11 existing spaces total




## Proposed

**features:** (2) travel lanes, (2) front-in parking lanes
**parking spaces:** 18 total proposed spaces



# Cross Section
# 10th Street

# Appendix B
# Cost Estimate

| Date: May 16, 2006 | | CITY OF MIAMI BEACH ROW IMPROVEMENT PROGRAM<br>OPINION OF PROBABLE COST | |
|---|---|---|---|
| NEIGHBORHOOD:<br>PROJECT:<br>TOTAL CONSTRUCTION BUDGET: $21,000,000 | | WEST AVENUE / BAY ROAD NEIGHBORHOOD<br>MASTER PLAN | |
| DESCRIPTION | | | Estimated Cost |
| | | | |
| | | | |
| **WATER & STORMWATER** | | | |
| MASTERPLANS | | | $11,645,068 |
| | | | |
| **HARDSCAPE, LANDSCAPING & IRRIGATION** | | | |
| WEST AVENUE | | | $7,971,508 |
| BAY ROAD | | | $180,993 |
| LINCOLN ROAD | | | $645,001 |
| BAY ROAD PARK | | | $38,661 |
| LINCOLN COURT PARK | | | $44,568 |
| 16TH STREET | | | $160,044 |
| 10TH STREET | | | $83,864 |
| LINCOLN TERRACE COURTYARD | | | $326,929 |
| | | | |
| SUBTOTAL | | | $9,451,568 |
| | | | |
| TOTAL ESTIMATED CONSTRUCTION COST | | | **$21,096,637** |
| TOTAL CONSTRUCTION BUDGET | | | **$21,000,000** |
| VARIANCE | | | **($96,637)** |

| Date: May 16, 2006 | | CITY OF MIAMI BEACH<br>RIGHT OF WAY INFRASTRUCTURE IMPROVEMENT PROGRAM<br>WATER LINE IMPROVEMENT COST ESTIMATES | | | | |
|---|---|---|---|---|---|---|
| NEIGHBORHOOD:<br>PROJECT:<br><br>TOTAL CONSTRUCTION BUDGET: | | WEST AVENUE NEIGHBORHOOD | | | | |
| **ITEM** | | **DESCRIPTION** | **QTY** | **UNIT** | **PRICE** | **TOTAL** |
| **ITEM NO. 1 - GENERAL CONDITIONS** | | | | | | |
| | | BONDS AND INSURANCE | 1 | 2% | $17,259 | $17,259 |
| | | MOBILIZATION | 1 | LS | $25,889 | $25,889 |
| | | GENERAL CONDITIONS | 1 | MO | $17,259 | $17,259 |
| | | SURVEY AND LAYOUT SITE CONTROLS | 1 | LS | $25,889 | $25,889 |
| | | MAINTENANCE OF TRAFFIC | 1 | LS | $34,519 | $34,519 |
| | | **SUBTOTAL** | | | | **$120,815** |
| **SUMMARY** | | | | | | |
| | | WATER LINE IMPROVEMENTS | 1 | LS | $862,965 | **$862,965** |
| | | **SUBTOTAL** | | | | **$983,780** |
| | | **CONTINGENCY** | | 20% | | **$196,756** |
| | | **TOTAL** | | | | **$1,180,536** |
| **ITEM** | | **DESCRIPTION** | **QTY** | **UNIT** | **PRICE** | **TOTAL** |
| **ITEM NO. 1 - WATER LINE IMPROVEMENTS** | | | | | | |
| | | | | | | |
| | | | | | | |
| **PRIORITY 2** | | **BAY ROAD** | | | | |
| **WATER LINE REPLACEMENT** | | 8-INCH C.I.P. PIPE | 565 | LF | $145.00 | $81,925 |
| | | 8-INCH TEE | 1 | EA | $600.00 | $600 |
| | | | | | | |
| | | **WEST AVENUE** | | | | |
| | | 2-INCH C.I.P. PIPE | 490 | LF | $70.00 | $34,300 |
| | | 6-INCH C.I.P. PIPE | 1,380 | LF | $115.00 | $158,700 |
| | | 8-INCH C.I.P. PIPE | 805 | LF | $150.00 | $120,750 |
| | | 6-INCH TEE | 14 | EA | $480.00 | $6,720 |
| | | 8-INCHTEE | 1 | EA | $600.00 | $600 |
| | | 6-INCH CROSS | 3 | EA | $675.00 | $2,025 |
| | | 8-INCH D.I.CROSS | 2 | EA | $750.00 | $1,500 |
| | | 6-INCH D.I. ELBOW 90$^{o}$ | 2 | EA | $600.00 | $1,200 |
| | | 6-INCH TO 2-INCH D.I. REDUCER | 5 | EA | $800.00 | $4,000 |
| | | 6-INCH TO 3-INCH D.I. REDUCER | 1 | EA | $850.00 | $850 |
| | | 8-INCH TO 6-INCH D.I. REDUCER | 7 | EA | $850.00 | $5,950 |
| | | | | | | |
| | | **MID-BLOCK (ALTON ROAD/WEST AVENUE)** | | | | |
| | | | | | | |
| | | **16TH STREET** | | | | |
| | | 6-INCH C.I.P. PIPE | 362 | LF | $115.00 | $41,630 |
| | | 8-INCH D.I. PIPE | 0 | LF | **$160.00** | $0 |
| | | 6-INCH TEE | 2 | EA | $600.00 | $1,200 |
| | | 6-INCH TO 2-INCH REDUCER | 1 | EA | $1,400.00 | $1,400 |
| | | 6-INCH TO 3-INCH REDUCER | 1 | EA | $1,400.00 | $1,400 |
| | | | | | | |
| | | **15TH COURT** | | | | |
| | | 6-INCH D.I. PIPE | 172 | LF | **$110.00** | $18,920 |
| | | | | | | |
| | | **15TH STREET** | | | | |
| | | 6-INCH D.I. PIPE | 772 | LF | $110.00 | $84,920 |
| | | | | | | |
| | | **14TH COURT** | | | | |
| | | 6-INCH C.I.P. PIPE | 395 | LF | $115.00 | $45,425 |
| | | | | | | |
| | | **14TH STREET** | | | | |
| | | 6-INCH C.I.P. PIPE | 389 | LF | $115.00 | $44,735 |
| | | | | | | |
| | | **MID-BLOCK (14 TER / 14 ST)** | | | | |
| | | 2-INCH C.M.P. PIPE | 380 | LF | **$75.00** | $28,500 |
| | | | | | | |
| | | **13th TERRACE** | | | | |
| | | 4-INCH C.M.P. PIPE | 505 | LF | **$80.00** | $40,400 |
| | | | | | | |
| | | **12TH STREET** | | | | |
| | | 8-INCH D.I. PIPE | 379 | LF | $160.00 | $60,640 |
| | | | | | | |
| | | **8TH STREET** | | | | |
| | | 6-INCH C.I.P. PIPE | 341 | LF | $115.00 | $39,215 |
| | | | | | | |
| | | **ALLEY ROAD** | | | | |
| | | 6-INCH C.I.P. PIPE | 300 | LF | $115.00 | $34,500 |
| | | 6-INCH TEE | 2 | EA | $480.00 | $960 |
| | | | | | | |
| | | | | | | |
| | | **SUBTOTAL - PRIORITY 2** | | | | **$862,965** |
| | | | | | | |

| Date: May 16, 2006 | | CITY OF MIAMI BEACH ROW IMPROVEMENT PROGRAM<br>OPINION OF PROBABLE COST | | | | |
|---|---|---|---|---|---|---|
| NEIGHBORHOOD:<br>PROJECT:<br><br>TOTAL CONSTRUCTION BUDGET: 1 | | WEST AVENUE / BAY ROAD NEIGHBORHOOD<br>WEST AVENUE<br>70' WIDE STREET | | | | |
| ITEM | | DESCRIPTION | QTY | UNIT | PRICE | TOTAL |
| **ITEM NO. 1 - GENERAL CONDITIONS** | | | | | | |
| | | BONDS AND INSURANCE | 1 | 2% | $140,652 | $140,652 |
| | | MOBILIZATION | 1 | LS | $351,631 | $351,631 |
| | | GENERAL CONDITIONS | 1 | MO | $351,631 | $351,631 |
| | | SURVEY AND LAYOUT SITE CONTROLS | 1 | LS | $351,631 | $351,631 |
| | | MAINTENANCE OF TRAFFIC | 1 | LS | $492,283 | $492,283 |
| | | **SUBTOTAL** | | | | **$1,687,828** |
| **SUMMARY** | | | | | | |
| | | STORMWATER IMPROVEMENTS | 1 | LS | $7,032,616 | **$7,032,616** |
| | | **SUBTOTAL** | | | | **$8,720,444** |
| | | **CONTINGENCY** | | 20% | | **$1,744,089** |
| | | **TOTAL** | | | | **$10,464,532** |
| **ITEM NO. 2 - ROW IMPROVEMENTS** | | | | | | |
| **STORMWATER** | | | | | | |
| | | ASPHALTIC CONCRETE (2.5") | 34,499 | SY | $18.00 | $620,984 |
| | | 8" LIMEROCK BASE | 34,872 | SY | $20.00 | $697,432 |
| | | | | | | |
| | | INSTALL | | | | |
| | | 18-INCH PIPE | 3,370 | LF | $70.00 | $235,900 |
| | | 24-INCH PIPE | 1,830 | LF | $90.00 | $164,700 |
| | | 36-INCH PIPE | 940 | LF | $125.00 | $117,500 |
| | | 42-INCH PIPE | 930 | LF | $200.00 | $186,000 |
| | | | | | | |
| | | DRAINAGE STRUTURES | | | | |
| | | DITCH BOTTOM INLET (TYPE C) | 15.00 | EA. | $3,500.00 | $52,500 |
| | | DRAINAGE INLET (CURB - TYPE P-9) | 32.00 | EA. | $7,000.00 | $224,000 |
| | | MANHOLE (TYPE P-7) | 12.00 | EA. | $6,000.00 | $72,000 |
| | | MANHOLES TO BE ADJUSTED | 2.00 | EA. | $1,200.00 | $2,400 |
| | | | | | | |
| | | DRAINAGE WELLS / FRENCH DRAINS | | | | |
| | | DEEP WELL (24-IN) CASING & OPEN HOLE | 16.00 | EA. | $80,000.00 | $1,280,000 |
| | | | | | | |
| | | CURB AND GUTTER | | | | |
| | | CONCRETE CURB AND GUTTER (TYPE F - REINFORCED) | 5,315.00 | LF | $35.00 | $186,025 |
| | | CONCRETE CURB (TYPE D - REINFORCED) | 5,315.00 | LF | $30.00 | $159,450 |
| | | CONCRETE VALLEY GUTTER (REINFORCED) | 1,000.00 | LF | $35.00 | $35,000 |
| | | | | | | |
| | | STORMWATER PUMP STATIONS | | | | |
| | | PUMP & EQUIPMENT | 5.00 | EA. | $455,000.00 | $2,275,000.00 |
| | | POLLUTION CONTROL BOX | 5.00 | EA. | $15,000.00 | $75,000.00 |
| | | PUMP STATION BOX | 5.00 | EA. | $26,000.00 | $130,000.00 |
| | | VALVE BOX | 5.00 | EA. | $7,500.00 | $37,500.00 |
| | | VALVES | 5.00 | LS. | $20,000.00 | $100,000.00 |
| | | FITTINGS | 5.00 | LS | $13,000.00 | $65,000.00 |
| | | BAR RACK | 5.00 | EA. | $7,500.00 | $37,500.00 |
| | | PRESSURE RELIEF / BOX / PIPING | 5.00 | LS. | $6,500.00 | $32,500.00 |
| | | PIPING | | | | |
| | | 24-IN DUCTILE IRON PIPE | 180.00 | LF | $90.00 | $16,200.00 |
| | | ELECTRICAL / INSTRUMENTATION | | | | |
| | | ELECTRICAL SERVICE | 5.00 | LS | $15,000.00 | $75,000.00 |
| | | | | | | |
| | | | | | | |
| | | REMOVE | | | | |
| | | | | | | |
| | | 15-INCH PIPE | 1,100 | LF | $15.00 | $16,500 |
| | | 18-INCH PIPE | 3,370 | LF | $15.00 | $50,550 |
| | | 24-INCH PIPE | 1,830 | LF | $18.00 | $32,940 |
| | | 27-INCH PIPE | 940 | LF | $18.00 | $16,920 |
| | | 30-INCH PIPE | 930 | LF | $18.00 | $16,740 |
| | | 36-INCH PIPE | 0 | LF | $18.00 | $0 |
| | | 48-INCH PIPE | 0 | LF | $18.00 | $0 |
| | | 36"X60" BOX CULVERT | 0 | LF | $18.00 | $0 |
| | | 36"X78" BOX CULVERT | 0 | LF | $18.00 | $0 |
| | | REMOVE EXISTING PAVEMENT | 8,550 | SY | $2.50 | $21,375 |
| | | | | | | |
| | | | | | | |
| | | **SUBTOTAL** | | | | **$7,032,616** |

| Date: November 27, 2006 | | CITY OF MIAMI BEACH ROW IMPROVEMENT PROGRAM<br>OPINION OF PROBABLE COST | | | | |
|---|---|---|---|---|---|---|
| NEIGHBORHOOD:<br>PROJECT:<br><br>TOTAL CONSTRUCTION BUDGET: 1 | | WEST AVENUE / BAY ROAD NEIGHBORHOOD<br>WEST AVENUE<br>70' WIDE STREET | | | | |
| ITEM | | DESCRIPTION | QTY | UNIT | PRICE | TOTAL |
| **ITEM NO. 1 - GENERAL CONDITIONS** | | | | | | |
| | | BONDS AND INSURANCE | 1 | 2% | $93,562 | $93,562 |
| | | MOBILIZATION | 1 | 5% | $233,906 | $233,906 |
| | | GENERAL CONDITIONS | 1 | 5% | $233,906 | $233,906 |
| | | SURVEY AND LAYOUT SITE CONTROLS | 1 | 3% | $140,343 | $140,343 |
| | | DEMOLITION | 1 | 20% | $935,623 | $935,623 |
| | | MAINTENANCE OF TRAFFIC | 1 | 7% | $327,468 | $327,468 |
| | | **SUBTOTAL** | | | | **$1,964,808** |
| **SUMMARY** | | | | | | |
| | | STORMWATER IMPROVEMENTS | | | | $0 |
| | | STREETSCAPE-CROSSWALKS | 44 | EA | $3,680 | $161,920 |
| | | STREETSCAPE-INTERSECTION BUMPOUTS (4 corners) | 6 | EA | $42,800 | $256,800 |
| | | STREETSCAPE-INTERSECTION BUMPOUTS (2 corners) | 8 | EA | $29,880 | $239,040 |
| | | STREETSCAPE-SPECIAL INTERSECTIONS | 4 | EA | $28,400 | $113,600 |
| | | ROADWAY RECONSTRUCTION | 1 | EA | $2,828,880 | $2,828,880 |
| | | ROADWAY-TURN LANES | 1 | EA | $693,000 | $693,000 |
| | | ROADWAY RECONSTRUCTION-HARDSCAPE | 1 | EA | $144,000 | $144,000 |
| | | ROADWAY RECONSTRUCTION-LANDSCAPE & IRRIGATION | 1 | EA | $240,875 | $240,875 |
| | | **SUBTOTAL** | | | | **$4,678,115** |
| | | **CONTINGENCY** | | 20% | | **$1,328,585** |
| | | **TOTAL** | | | | **$7,971,508** |
| **ITEM NO. 2 - ROW IMPROVEMENTS** | | | | | | |
| **STORMWATER** | | | | | | |
| | | SEE STORMWATER MASTER PLAN COST ESTIMATE | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | **SUBTOTAL** | | | | **$0** |
| **STREETSCAPE-CROSS WALKS** | | | | | | |
| | | 1' X 1' CONCRETE BAND | 50 | LF | $30.00 | $1,500 |
| | | CONCRETE PAVING 4" THICK, COLORED | 270 | SF | $8.00 | $2,160 |
| | | RESTRIPING | 20 | SF | $1.00 | $20 |
| | | **SUBTOTAL** | | | | **$3,680** |
| **STREETSCAPE-INTERSECTION BUMPOUTS (4 CORNERS)** | | | | | | |
| | | CURB, TYPE F | 200 | LF | $25.00 | $5,000 |
| | | 1' X 1' CONCRETE BAND | 280 | LF | $35.00 | $9,800 |
| | | CONCRETE PAVING 4" THICK COLORED | 2,400 | SF | $8.00 | $19,200 |
| | | SPECIALTY PAVING CROSSWALK | 1,100 | SF | $8.00 | $8,800 |
| | | **SUBTOTAL** | | | | **$42,800** |
| **STREETSCAPE-INTERSECTION BUMPOUTS (2 CORNERS)** | | | | | | |
| | | CURB, TYPE F | 180 | LF | $25.00 | $4,500 |
| | | 1' X 1' CONCRETE BAND | 220 | LF | $35.00 | $7,700 |
| | | CONCRETE PAVING 4" THICK COLORED | 1,550 | SF | $8.00 | $12,400 |
| | | SPECIALTY PAVING CROSSWALK | 660 | SF | $8.00 | $5,280 |
| | | **SUBTOTAL** | | | | **$29,880** |
| **STREETSCAPE-SPECIAL INTERSECTIONS** | | | | | | |
| | | 1' X 1' CONCRETE BAND | 200 | LF | $30.00 | $6,000 |
| | | SPECIALTY PAVING | 2,800 | SF | $8.00 | $22,400 |
| | | **SUBTOTAL** | | | | **$28,400** |
| **ROADWAY RECONSTRUCTION** | | | | | | |
| | | CURB, TYPE D | 7,920 | LF | $25.00 | $198,000 |
| | | CURB, TYPE F | 3,300 | LF | $35.00 | $115,500 |
| | | VALLEY CURB | 5,820 | LF | $30.00 | $174,600 |
| | | CONCRETE APRONS | 17,100 | SF | $8.00 | $136,800 |
| | | 1' X 1' CONCRETE BAND - TURN LANE BORDER | 9,400 | LF | $30.00 | $282,000 |
| | | CONCRETE PAVING 4" THICK, COLORED - TURN LANE | 36,400 | SF | $8.00 | $291,200 |
| | | ASPHALT PAVING | 15,250 | SY | $12.00 | $183,000 |
| | | CONCRETE PAVING 4" THICK COLORED | 81,480 | SF | $9.00 | $733,320 |
| | | DECORATIVE LIGHTING | 142 | EA | $3,500.00 | $497,000 |
| | | SIGINAL ARMS AT INTERSECTION | 1 | EA | $200,000.00 | $200,000 |
| | | RESTRIPING | 17,460 | LF | $1.00 | $17,460 |
| | | **SUBTOTAL** | | | | **$2,828,880** |
| **ROADWAY-TURN LANES** | | | | | | |
| | | 1' X 1' CONCRETE BAND | 11,500 | LF | $30.00 | $345,000 |
| | | SPECIALTY PAVING | 43,500 | SF | $8.00 | $348,000 |
| | | **SUBTOTAL** | | | | **$693,000** |
| **ROADWAY RECONSTRUCTION-HARDSCAPE** | | | | | | |
| | | BENCHES | 28 | EA | $2,500.00 | $70,000 |
| | | BIKE RACKS | 8 | EA | $1,000.00 | $8,000 |
| | | TRASH RECEPTACLE | 14 | EA | $1,000.00 | $14,000 |
| | | BUS SHELTERS (INSTALLATION COST ONLY) | 14 | EA | $3,000.00 | $42,000 |
| | | REGULATORY SIGNAGE | 25 | EA | $400.00 | $10,000 |
| | | **SUBTOTAL** | | | | **$144,000** |
| **ROADWAY RECONSTRUCTION-LANDSCAPE & IRRIGATION** | | | | | | |
| | | 100 GAL. SHADE TREES (30' O.C.) | 125 | EA | $1,000.00 | $125,000 |
| | | SOD | 51,500 | SF | $1.50 | $77,250 |
| | | IRRIGATION | 51,500 | SF | $0.75 | $38,625 |
| | | **SUBTOTAL** | | | | **$240,875** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Date: May 16, 2006** | | **CITY OF MIAMI BEACH ROW IMPROVEMENT PROGRAM**<br>**OPINION OF PROBABLE COST** | | | | |
| **NEIGHBORHOOD:**<br>**PROJECT:**<br><br>**TOTAL CONSTRUCTION BUDGET:** 1 | | **WEST AVENUE / BAY ROAD NEIGHBORHOOD**<br>**BAY ROAD**<br>**70' WIDE STREET** | | | | |
| **ITEM** | | **DESCRIPTION** | **QTY** | **UNIT** | **PRICE** | **TOTAL** |
| **ITEM NO. 1 - GENERAL CONDITIONS** | | | | | | |
| | | BONDS AND INSURANCE | 1 | 2% | $2,819 | $2,819 |
| | | MOBILIZATION | 1 | 5% | $7,048 | $7,048 |
| | | GENERAL CONDITIONS | 1 | 5% | $7,048 | $7,048 |
| | | SURVEY AND LAYOUT SITE CONTROLS | 1 | 3% | $4,229 | $4,229 |
| | | DEMOLITION | 1 | 20% | $28,192 | $28,192 |
| | | MAINTENANCE OF TRAFFIC | 1 | 7% | $9,867 | $9,867 |
| | | **SUBTOTAL** | | | | **$59,203** |
| **SUMMARY** | | | | | | |
| | | STORMWATER | | | | $0 |
| | | ROADWAY CONSTRUCTION | 1 | EA | $127,150.00 | $127,150 |
| | | ROADWAY-HARDSCAPE | 1 | EA | $2,400.00 | $2,400 |
| | | ROADWAY-LANDSCAPE & IRRIGATION | 1 | EA | $11,410.00 | $11,410 |
| | | **SUBTOTAL** | | | | **$140,960** |
| | | **CONTINGENCY** | | 20% | | **$40,033** |
| | | **TOTAL** | | | | **$180,993** |
| **ITEM NO. 2 - ROW IMPROVEMENTS** | | | | | | |
| **STORMWATER** | | | | | | |
| | | SEE STORMWATER MASTER PLAN COST ESTIMATE | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | **SUBTOTAL** | | | | **$0** |
| **ROADWAY CONSTRUCTION** | | | | | | |
| | | CURB, TYPE D | 1,200 | LF | $25.00 | $30,000 |
| | | CURB, TYPE F | 550 | LF | $35.00 | $19,250 |
| | | VALLEY CURB | 350 | LF | $30.00 | $10,500 |
| | | ASPHALT PAVING | 500 | SY | $12.00 | $6,000 |
| | | RESTRIPING | 1,000 | LF | $1.00 | $1,000 |
| | | CONCRETE PAVING 4" THICK COLORED 7' WIDE | 3,600 | SF | $9.00 | $32,400 |
| | | DECORATIVE LIGHTING | 8 | EA | $3,500.00 | $28,000 |
| | | **SUBTOTAL** | | | | **$127,150** |
| **ROADWAY-HARDSCAPE** | | | | | | |
| | | BENCHES | 0 | EA | $2,500.00 | $0 |
| | | BIKE RACKS | 0 | EA | $1,000.00 | $0 |
| | | TRASH RECEPTACLES | 2 | EA | $1,000.00 | $2,000 |
| | | BUS SHELTERS (INSTALLATION COST ONLY) | 0 | EA | $3,000.00 | $0 |
| | | REGULTORY SIGNAGE | 1 | EA | $400.00 | $400 |
| | | **SUBTOTAL** | | | | **$2,400** |
| **ROADWAY-LANDSCAPE & IRRIGATION** | | | | | | |
| | | 100 GAL. SHADE TREES | 7 | EA | $1,000.00 | $7,000 |
| | | SOD | 3,000 | SF | $0.25 | $750 |
| | | CYPRESS MULCH | 1 | CY | $60.00 | $60 |
| | | IRRIGATION | 600 | LF | $6.00 | $3,600 |
| | | **SUBTOTAL** | | | | **$11,410** |

| Date: May 16, 2006 | | CITY OF MIAMI BEACH ROW IMPROVEMENT PROGRAM<br>OPINION OF PROBABLE COST | | | | |
|---|---|---|---|---|---|---|
| NEIGHBORHOOD:<br>PROJECT:<br><br>TOTAL CONSTRUCTION BUDGET: 1 | | WEST AVENUE / BAY ROAD NEIGHBORHOOD<br>LINCOLN ROAD | | | | |
| | | | | | | |
| **ITEM** | | **DESCRIPTION** | **QTY** | **UNIT** | **PRICE** | **TOTAL** |
| **ITEM NO. 1 - GENERAL CONDITIONS** | | | | | | |
| | | BONDS AND INSURANCE | 1 | 2% | $8,144 | $8,144 |
| | | MOBILIZATION | 1 | 5% | $20,360 | $20,360 |
| | | GENERAL CONDITIONS | 1 | 5% | $20,360 | $20,360 |
| | | SURVEY AND LAYOUT SITE CONTROLS | 1 | 3% | $12,216 | $12,216 |
| | | DEMOLITION | 1 | 10% | $40,720 | $40,720 |
| | | MAINTENANCE OF TRAFFIC | 1 | 7% | $28,504 | $28,504 |
| | | **SUBTOTAL** | | | | **$130,303** |
| **SUMMARY** | | | | | | |
| | | STORMWATER IMPROVEMENTS | | | | $0 |
| | | ROADWAY RECONSTRUCTION | 1 | EA | $234,122.50 | $234,123 |
| | | HARDSCAPE | 1 | EA | $40,000.00 | $40,000 |
| | | LANDSCAPE & IRRIGATION | 1 | EA | $133,075.00 | $133,075 |
| | | **SUBTOTAL** | | | | **$407,198** |
| | | **CONTINGENCY** | | 20% | | **$107,500** |
| | | **TOTAL** | | | | **$645,001** |
| | | | | | | |
| **ITEM NO. 2 - ROW IMPROVEMENTS** | | | | | | |
| | | | | | | |
| **STORMWATER** | | | | | | |
| | | SEE STORMWATER MASTER PLAN COST ESTIMATE | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | **SUBTOTAL** | | | | **$0** |
| | | | | | | |
| **ROADWAY RECONSTRUCTION** | | | | | | |
| | | CURB, TYPE D | 1,140 | LF | $25.00 | $28,500 |
| | | CURB, TYPE F | 1,120 | LF | $35.00 | $39,200 |
| | | CURB, VALLEY | 460 | LF | $30.00 | $13,800 |
| | | CONCRETE APRONS | 1,200 | SF | $8.00 | $9,600 |
| | | CONCRETE PAVING 4" THICK, COLORED | 4,115 | SF | $9.00 | $37,035 |
| | | SPECIALTY PAVING | 1,000 | SF | $8.00 | $8,000 |
| | | ASPHALT PAVING | 5,600 | SY | $9.00 | $50,400 |
| | | RESTRIPING | 250 | LF | $0.75 | $188 |
| | | DECORATIVE LIGHTING | 10 | EA | $3,500.00 | $35,000 |
| | | SIGNAGE | 1 | EA | $10,000.00 | $10,000 |
| | | REGULATORY SIGNAGE | 6 | EA | $400.00 | $2,400 |
| | | **SUBTOTAL** | | | | **$234,123** |
| | | | | | | |
| **HARDSCAPE** | | | | | | |
| | | BENCHES | 8 | EA | $2,500.00 | $20,000 |
| | | BIKE RACKS | 10 | EA | $1,000.00 | $10,000 |
| | | TRASH RECEPTACLE | 4 | EA | $1,000.00 | $4,000 |
| | | BOLLARDS | 10 | EA | $600.00 | $6,000 |
| | | **SUBTOTAL** | | | | **$40,000** |
| | | | | | | |
| **LANDSCAPE & IRRIGATION** | | | | | | |
| | | 100 GAL. SHADE TREES | 30 | EA | $1,000.00 | $30,000 |
| | | LARGE PALMS | 58 | EA | $1,500.00 | $87,000 |
| | | SHRUB & GROUNDCOVER | 2,500 | SF | $2.00 | $5,000 |
| | | SOD | 6,500 | SF | $0.25 | $1,625 |
| | | CYPRESS MULCH | 45 | CY | $60.00 | $2,700 |
| | | IRRIGATION | 9,000 | SF | $0.75 | $6,750 |
| | | **SUBTOTAL** | | | | **$133,075** |
| | | | | | | |

| Date: May 16, 2006 | | CITY OF MIAMI BEACH ROW IMPROVEMENT PROGRAM<br>OPINION OF PROBABLE COST | | | | |
|---|---|---|---|---|---|---|
| NEIGHBORHOOD:<br>PROJECT:<br><br>TOTAL CONSTRUCTION BUDGET: 1 | | WEST AVENUE / BAY ROAD NEIGHBORHOOD<br>WEST AVENUE<br>70' WIDE STREET | | | | |
| | | | | | | |
| **ITEM** | | **DESCRIPTION** | **QTY** | **UNIT** | **PRICE** | **TOTAL** |
| **ITEM NO. 1 - GENERAL CONDITIONS** | | | | | | |
| | | BONDS AND INSURANCE | 1 | 2% | $1,977 | $1,977 |
| | | MOBILIZATION | 1 | 5% | $4,944 | $4,944 |
| | | GENERAL CONDITIONS | 1 | 5% | $4,944 | $4,944 |
| | | SURVEY AND LAYOUT SITE CONTROLS | 1 | 3% | $2,966 | $2,966 |
| | | DEMOLITION | 1 | 10% | $9,887 | $9,887 |
| | | MAINTENANCE OF TRAFFIC | 1 | 7% | $6,921 | $6,921 |
| | | **SUBTOTAL** | | | | **$31,638** |
| **SUMMARY** | | | | | | |
| | | STORMWATER IMPROVEMENTS | | | | $0 |
| | | STREETSCAPE-CROSSWALKS | 1 | EA | $5,900 | $5,900 |
| | | ROADWAY RECONSTRUCTION | 1 | EA | $64,090 | $64,090 |
| | | ROADWAY RECONSTRUCTION-HARDSCAPE | 1 | EA | $9,800 | $9,800 |
| | | ROADWAY RECONSTRUCTION-LANDSCAPE & IRRIGATION | 1 | EA | $19,080 | $19,080 |
| | | **SUBTOTAL** | | | | **$98,870** |
| | | **CONTINGENCY** | | 20% | | **$26,102** |
| | | **TOTAL** | | | | **$156,610** |
| | | | | | | |
| **ITEM NO. 2 - ROW IMPROVEMENTS** | | | | | | |
| | | | | | | |
| **STORMWATER** | | | | | | |
| | | SEE STORMWATER MASTER PLAN COST ESTIMATE | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | **SUBTOTAL** | | | | **$0** |
| | | | | | | |
| **STREETSCAPE-CROSS WALKS** | | | | | | |
| | | 1' X 1' CONCRETE BAND | 30 | LF | $30.00 | $900 |
| | | SPECIALTY PAVING CROSSWALK | 225 | SF | $8.00 | $1,800 |
| | | CONCRETE PAVING 4" THICK, COLORED | 400 | SF | $8.00 | $3,200 |
| | | **SUBTOTAL** | | | | **$5,900** |
| | | | | | | |
| **ROADWAY RECONSTRUCTION** | | | | | | |
| | | CURB, TYPE F | 780 | LF | $35.00 | $27,300 |
| | | CONCRETE APRONS | 800 | SF | $8.00 | $6,400 |
| | | ASPHALT PAVING | 740 | SY | $12.00 | $8,880 |
| | | RESTRIPING | 200 | LF | $0.75 | $150 |
| | | CONCRETE PAVING 4" THICK COLORED | 40 | SF | $9.00 | $360 |
| | | DECORATIVE LIGHTING | 6 | EA | $3,500.00 | $21,000 |
| | | **SUBTOTAL** | | | | **$64,090** |
| | | | | | | |
| **ROADWAY RECONSTRUCTION-HARDSCAPE** | | | | | | |
| | | BENCHES | 2 | EA | $2,500.00 | $5,000 |
| | | BIKE RACKS | 2 | EA | $1,000.00 | $2,000 |
| | | TRASH RECEPTACLE | 2 | EA | $1,000.00 | $2,000 |
| | | REGULATORY SIGNAGE | 2 | EA | $400.00 | $800 |
| | | **SUBTOTAL** | | | | **$9,800** |
| | | | | | | |
| **ROADWAY RECONSTRUCTION-LANDSCAPE & IRRIGATION** | | | | | | |
| | | LARGE PALMS | 12 | EA | $1,500.00 | $18,000 |
| | | SOD | 1,080 | SF | $0.25 | $270 |
| | | IRRIGATION | 1,080 | SF | $0.75 | $810 |
| | | **SUBTOTAL** | | | | **$19,080** |
| | | | | | | |

| Date: May 16, 2006 | | CITY OF MIAMI BEACH ROW IMPROVEMENT PROGRAM<br>OPINION OF PROBABLE COST | | | | |
|---|---|---|---|---|---|---|
| NEIGHBORHOOD:<br>PROJECT:<br><br>TOTAL CONSTRUCTION BUDGET: 1 | | WEST AVENUE / BAY ROAD NEIGHBORHOOD<br>16TH STREET<br>70' WIDE CROSS STREET | | | | |
| ITEM | | DESCRIPTION | QTY | UNIT | PRICE | TOTAL |
| **ITEM NO. 1 - GENERAL CONDITIONS** | | | | | | |
| | | BONDS AND INSURANCE | 1 | 2% | $2,493 | $2,493 |
| | | MOBILIZATION | 1 | 5% | $6,232 | $6,232 |
| | | GENERAL CONDITIONS | 1 | 5% | $6,232 | $6,232 |
| | | SURVEY AND LAYOUT SITE CONTROLS | 1 | 3% | $3,739 | $3,739 |
| | | INDEMNIFICATION | 1 | 20% | $24,929 | $24,929 |
| | | MAINTENANCE OF TRAFFIC | 1 | 7% | $8,725 | $8,725 |
| | | **SUBTOTAL** | | | | **$52,351** |
| **SUMMARY** | | | | | | |
| | | STORMWATER IMPROVEMENTS | | | | $0 |
| | | STREETSCAPE-BULBOUTS | 2 | EA | $13,000.00 | $26,000 |
| | | ROADWAY CONSTRUCTION | 1 | EA | $77,650.00 | $77,650 |
| | | ROADWAY HARDSCAPE | 1 | EA | $2,000.00 | $2,000 |
| | | ROADWAY -LANDSCAPE & IRRIGATION | 1 | EA | $18,995.00 | $18,995 |
| | | **SUBTOTAL** | | | | **$124,645** |
| | | **CONTINGENCY** | | 20% | | **$35,399** |
| | | **TOTAL** | | | | **$160,044** |
| **ITEM NO. 2 - ROW IMPROVEMENTS** | | | | | | |
| **STORMWATER** | | | | | | |
| | | SEE STORMWATER MASTER PLAN COST ESTIMATE | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | **SUBTOTAL** | | | | **$0** |
| **STREETSCAPE-BULBOUTS** | | | | | | |
| | | 1' X 1' CONCRETE BAND | 100 | LF | $30.00 | $3,000 |
| | | CURB, TYPE D | 60 | LF | $25.00 | $1,500 |
| | | CONCRETE PAVING 4" THICK, COLORED | 500 | SF | $9.00 | $4,500 |
| | | SPECIALTY PAVING CROSSWALK | 500 | SF | $8.00 | $4,000 |
| | | **SUBTOTAL** | | | | **$13,000** |
| **ROADWAY CONSTRUCTION** | | | | | | |
| | | CURB, TYPE D | 250 | LF | $25.00 | $6,250 |
| | | CURB, TYPE F | 340 | LF | $35.00 | $11,900 |
| | | CURB, VALLEY | 250 | LF | $20.00 | $5,000 |
| | | ASPHALT PAVING | 1,100 | SY | $12.00 | $13,200 |
| | | RESTRIPING | 600 | LF | $1.00 | $600 |
| | | CONCRETE PAVING 4" THICK COLORED 10' WIDE | 1,150 | SF | $8.00 | $9,200 |
| | | DECORATIVE LIGHTING | 9 | EA | $3,500.00 | $31,500 |
| | | **SUBTOTAL** | | | | **$77,650** |
| **ROADWAY-HARDSCAPE** | | | | | | |
| | | BIKE RACKS | 2 | EA | $1,000.00 | $2,000 |
| | | **SUBTOTAL** | | | | **$2,000** |
| **ROADWAY-LANDSCAPE & IRRIGATION** | | | | | | |
| | | 100 GAL. SHADE TREES | 15 | EA | $1,000.00 | $15,000 |
| | | SOD | 3,515 | SF | $0.25 | $879 |
| | | CYPRESS MULCH | 8 | CY | $60.00 | $480 |
| | | IRRIGATION | 3,515 | SF | $0.75 | $2,636 |
| | | **SUBTOTAL** | | | | **$18,995** |

| Date: May 16, 2006 | | CITY OF MIAMI BEACH ROW IMPROVEMENT PROGRAM<br>OPINION OF PROBABLE COST | | | | |
|---|---|---|---|---|---|---|
| NEIGHBORHOOD:<br>PROJECT:<br><br>TOTAL CONSTRUCTION BUDGET: 1 | | WEST AVENUE / BAY ROAD NEIGHBORHOOD<br>10TH STREET<br>70' WIDE CROSS STREET | | | | |
| | | | | | | |
| **ITEM** | | **DESCRIPTION** | **QTY** | **UNIT** | **PRICE** | **TOTAL** |
| **ITEM NO. 1 - GENERAL CONDITIONS** | | | | | | |
| | | BONDS AND INSURANCE | 1 | 2% | $1,306 | $1,306 |
| | | MOBILIZATION | 1 | 5% | $3,266 | $3,266 |
| | | GENERAL CONDITIONS | 1 | 5% | $3,266 | $3,266 |
| | | SURVEY AND LAYOUT SITE CONTROLS | 1 | 3% | $1,959 | $1,959 |
| | | DEMOLITION | 1 | 20% | $13,063 | $13,063 |
| | | MAINTENANCE OF TRAFFIC | 1 | 7% | $4,572 | $4,572 |
| | | **SUBTOTAL** | | | | **$27,432** |
| **SUMMARY** | | | | | | |
| | | STORMWATER IMPROVEMENTS | | | | $0 |
| | | ROADWAY CONSTRUCTION | 1 | EA | $54,300.00 | $54,300 |
| | | ROADWAY HARDSCAPE | 1 | EA | $2,000.00 | $2,000 |
| | | ROADWAY LANDSCAPE & IRRIGATION | 1 | EA | $9,015.00 | $9,015 |
| | | **SUBTOTAL** | | | | **$65,315** |
| | | **CONTINGENCY** | | 20% | | **$18,549** |
| | | **TOTAL** | | | | **$83,864** |
| **ITEM NO. 2 - ROW IMPROVEMENTS** | | | | | | |
| | | | | | | |
| **STORMWATER** | | | | | | |
| | | SEE STORMWATER MASTER PLAN COST ESTIMATE | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | **SUBTOTAL** | | | | **$0** |
| | | | | | | |
| **ROADWAY CONSTRUCTION** | | | | | | |
| | | CURB, TYPE D | 720 | LF | $25.00 | $18,000 |
| | | ASPHALT PAVING | 740 | SY | $12.00 | $8,880 |
| | | RESTRIPING | 320 | LF | $1.00 | $320 |
| | | CONCRETE PAVING 4" THICK COLORED | 1,200 | SF | $8.00 | $9,600 |
| | | DECORATIVE LIGHTING | 5 | EA | $3,500.00 | $17,500 |
| | | **SUBTOTAL** | | | | **$54,300** |
| | | | | | | |
| **ROADWAY-HARDSCAPE** | | | | | | |
| | | BIKE RACKS | 2 | EA | $1,000.00 | $2,000 |
| | | **SUBTOTAL** | | | | **$2,000** |
| | | | | | | |
| **ROADWAY-LANDSCAPE & IRRIGATION** | | | | | | |
| | | 100 GAL. SHADE TREES | 7 | EA | $1,000.00 | $7,000 |
| | | SOD | 1,775 | SF | $0.25 | $444 |
| | | CYPRESS MULCH | 4 | CY | $60.00 | $240 |
| | | IRRIGATION | 1,775 | SF | $0.75 | $1,331 |
| | | **SUBTOTAL** | | | | **$9,015** |
| | | | | | | |

| Date: May 16, 2006 | | CITY OF MIAMI BEACH ROW IMPROVEMENT PROGRAM<br>OPINION OF PROBABLE COST | | | | |
|---|---|---|---|---|---|---|
| NEIGHBORHOOD:<br>PROJECT:<br><br>TOTAL CONSTRUCTION BUDGET: 1 | | WEST AVENUE / BAY ROAD NEIGHBORHOOD<br>BAY ROAD<br>NEIGHBORHOOD PARK | | | | |
| **ITEM** | | **DESCRIPTION** | **QTY** | **UNIT** | **PRICE** | **TOTAL** |
| **ITEM NO. 1 - GENERAL CONDITIONS** | | | | | | |
| | | BONDS AND INSURANCE | 1 | 2% | $602 | $602 |
| | | MOBILIZATION | 1 | 5% | $1,506 | $1,506 |
| | | GENERAL CONDITIONS | 1 | 5% | $1,506 | $1,506 |
| | | SURVEY AND LAYOUT SITE CONTROLS | 1 | 3% | $903 | $903 |
| | | INDEMNIFICATION | 1 | 20% | $6,022 | $6,022 |
| | | MAINTENANCE OF TRAFFIC | 1 | 7% | $2,108 | $2,108 |
| | | **SUBTOTAL** | | | | **$12,646** |
| **SUMMARY** | | | | | | |
| | | STORMWATER IMPROVEMENTS | | | | $0 |
| | | PARK CONSTRUCTION | 1 | EA | $9,400.00 | $9,400 |
| | | HARDSCAPE | 1 | EA | $18,600.00 | $18,600 |
| | | LANDSCAPE & IRRIGATION | 1 | EA | $2,110.00 | $2,110 |
| | | **SUBTOTAL** | | | | **$30,110** |
| | | **CONTINGENCY** | | 20% | | **$8,551** |
| | | **TOTAL** | | | | **$38,661** |
| | | | | | | |
| **ITEM NO. 2 - ROW IMPROVEMENTS** | | | | | | |
| | | | | | | |
| **STORMWATER** | | | | | | |
| | | SEE STORMWATER MASTER PLAN COST ESTIMATE | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | **SUBTOTAL** | | | | **$0** |
| | | | | | | |
| **PARK CONSTRUCTION** | | | | | | |
| | | SPECIALTY PAVING | 300 | SF | $8.00 | $2,400 |
| | | DECORATIVE LIGHTING | 2 | EA | $3,500.00 | $7,000 |
| | | **SUBTOTAL** | | | | **$9,400** |
| | | | | | | |
| **HARDSCAPE** | | | | | | |
| | | BENCHES | 4 | EA | $2,500.00 | $10,000 |
| | | BIKE RACKS | 1 | EA | $1,000.00 | $1,000 |
| | | TRASH RECEPTACLE | 1 | EA | $1,000.00 | $1,000 |
| | | BOLLARDS | 11 | EA | $600.00 | $6,600 |
| | | **SUBTOTAL** | | | | **$18,600** |
| | | | | | | |
| **LANDSCAPE & IRRIGATION** | | | | | | |
| | | 100 GAL. SHADE TREES | 1 | EA | $1,000.00 | $1,000 |
| | | SOD | 600 | SF | $0.25 | $150 |
| | | CYPRESS MULCH | 1 | CY | $60.00 | $60 |
| | | IRRIGATION | 600 | SF | $1.50 | $900 |
| | | **SUBTOTAL** | | | | **$2,110** |
| | | | | | | |

| Date: May 16, 2006 | | CITY OF MIAMI BEACH ROW IMPROVEMENT PROGRAM<br>OPINION OF PROBABLE COST | | | | |
|---|---|---|---|---|---|---|
| NEIGHBORHOOD:<br>PROJECT:<br><br>TOTAL CONSTRUCTION BUDGET: 1 | | WEST AVENUE / BAY ROAD NEIGHBORHOOD<br>LINCOLN COURT<br>NEIGHBORHOOD PARK | | | | |
| | | | | | | |
| **ITEM** | | **DESCRIPTION** | **QTY** | **UNIT** | **PRICE** | **TOTAL** |
| **ITEM NO. 1 - GENERAL CONDITIONS** | | | | | | |
| | | BONDS AND INSURANCE | 1 | 2% | $694 | $694 |
| | | MOBILIZATION | 1 | 5% | $1,736 | $1,736 |
| | | GENERAL CONDITIONS | 1 | 5% | $1,736 | $1,736 |
| | | SURVEY AND LAYOUT SITE CONTROLS | 1 | 3% | $1,041 | $1,041 |
| | | DEMOLITION | 1 | 20% | $6,942 | $6,942 |
| | | MAINTENANCE OF TRAFFIC | 1 | 7% | $2,430 | $2,430 |
| | | **SUBTOTAL** | | | | **$14,578** |
| **SUMMARY** | | | | | | |
| | | STORMWATER IMPROVEMENTS | | | | $0 |
| | | PARK CONSTRUCTION | 1 | EA | $11,475.00 | $11,475 |
| | | HARDSCAPE | 1 | EA | $20,600.00 | $20,600 |
| | | LANDSCAPE & IRRIGATION | 1 | EA | $2,635.00 | $2,635 |
| | | **SUBTOTAL** | | | | **$34,710** |
| | | **CONTINGENCY** | | 20% | | **$9,858** |
| | | **TOTAL** | | | | **$44,568** |
| | | | | | | |
| **ITEM NO. 2 - ROW IMPROVEMENTS** | | | | | | |
| | | | | | | |
| **STORMWATER** | | | | | | |
| | | SEE STORMWATER MASTER PLAN COST ESTIMATE | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | **SUBTOTAL** | | | | **$0** |
| | | | | | | |
| **PARK CONSTRUCTION** | | | | | | |
| | | BOLLARDS | 35 | LF | $80.00 | $2,800 |
| | | CURB, TYPE D | 35 | LF | $25.00 | $875 |
| | | SPECIALTY PAVING | 100 | SF | $8.00 | $800 |
| | | DECORATIVE LIGHTING | 2 | EA | $3,500.00 | $7,000 |
| | | **SUBTOTAL** | | | | **$11,475** |
| | | | | | | |
| **HARDSCAPE** | | | | | | |
| | | BENCHES | 2 | EA | $2,500.00 | $5,000 |
| | | BIKE RACKS | 2 | EA | $1,000.00 | $2,000 |
| | | TRASH RECEPTACLE | 1 | EA | $1,000.00 | $1,000 |
| | | BOLLARDS | 21 | EA | $600.00 | $12,600 |
| | | **SUBTOTAL** | | | | **$20,600** |
| | | | | | | |
| **LANDSCAPE & IRRIGATION** | | | | | | |
| | | 100 GAL. SHADE TREES | 1 | EA | $1,000.00 | $1,000 |
| | | SOD | 900 | SF | $0.25 | $225 |
| | | CYPRESS MULCH | 1 | CY | $60.00 | $60 |
| | | IRRIGATION | 900 | SF | $1.50 | $1,350 |
| | | **SUBTOTAL** | | | | **$2,635** |
| | | | | | | |

| Date: May 16, 2006 | | CITY OF MIAMI BEACH ROW IMPROVEMENT PROGRAM<br>OPINION OF PROBABLE COST | | | | |
|---|---|---|---|---|---|---|
| NEIGHBORHOOD:<br>PROJECT:<br><br>TOTAL CONSTRUCTION BUDGET: 1 | | WEST AVENUE / BAY ROAD NEIGHBORHOOD<br>LINCOLN ROAD<br>NEIGHBORHOOD PARK | | | | |
| | | | | | | |
| **ITEM** | | **DESCRIPTION** | **QTY** | **UNIT** | **PRICE** | **TOTAL** |
| **ITEM NO. 1 - GENERAL CONDITIONS** | | | | | | |
| | | BONDS AND INSURANCE | 1 | 2% | $3,837 | $3,837 |
| | | MOBILIZATION | 1 | 5% | $9,593 | $9,593 |
| | | GENERAL CONDITIONS | 1 | 5% | $9,593 | $9,593 |
| | | SURVEY AND LAYOUT SITE CONTROLS | 1 | 3% | $5,756 | $5,756 |
| | | DEMOLITION | 1 | 20% | $38,372 | $38,372 |
| | | MAINTENANCE OF TRAFFIC | 1 | 7% | $13,430 | $13,430 |
| | | **SUBTOTAL** | | | | **$80,581** |
| **SUMMARY** | | | | | | |
| | | STORMWATER IMPROVEMENTS | | | | $0 |
| | | HARDSCAPE | 1 | EA | $152,360.00 | $152,360 |
| | | ROADWAY LANDSCAPE & IRRIGATION | 1 | EA | $39,500.00 | $39,500 |
| | | **SUBTOTAL** | | | | **$191,860** |
| | | **CONTINGENCY** | | 20% | | **$54,488** |
| | | **TOTAL** | | | | **$326,929** |
| **ITEM NO. 2 - ROW IMPROVEMENTS** | | | | | | |
| | | | | | | |
| **STORMWATER** | | | | | | |
| | | SEE STORMWATER MASTER PLAN COST ESTIMATE | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | | | | | $0 |
| | | **SUBTOTAL** | | | | **$0** |
| | | | | | | |
| **HARDSCAPE** | | | | | | |
| | | BOLLARDS | 26 | EA | $500.00 | $13,000 |
| | | BENCH WALLS | 220 | LF | $500.00 | $110,000 |
| | | SPECIALTY PAVING | 1,920 | SF | $8.00 | $15,360 |
| | | DECORATIVE LIGHTING | 4 | EA | $3,500.00 | $14,000 |
| | | **SUBTOTAL** | | | | **$152,360** |
| | | | | | | |
| **LANDSCAPE & IRRIGATION** | | | | | | |
| | | 100 GAL. SHADE TREES | 2 | EA | $1,000.00 | $2,000 |
| | | LARGE PALMS | 24 | EA | $1,500.00 | $36,000 |
| | | IRRIGATION | 2,000 | SF | $0.75 | $1,500 |
| | | **SUBTOTAL** | | | | **$39,500** |
| | | | | | | |

# Appendix C
# Meeting Minutes

GLATTING
JACKSON
KERCHER
ANGLIN
LOPEZ
RINEHART

*COMMUNITY*
*PLANNING*

222 Clematis Street
Suite 200
West Palm Beach
Florida
33401
P 561.659.6552
F 561.833.1790

# Meeting Minutes

**Meeting Date:** 25th October 2001

**Project:** West Ave / Bay Road, City of Miami Beach
GJ # 15788

**Location:** City Manager's Office, Miami

**Purpose:** Visioning Session
Pre-CDW No.1 Meeting

**Attendees:**

| | |
|---|---|
| **Client Group** | |
| Bert Vidal | Hazen & Sawyer |
| Suresh Mistry | Hazen & Sawyer |
| Donald Shockey | City Of Miami Beach |
| William Cary | City Of Miami Beach |
| Reuben Caldwell | City Of Miami Beach |
| Tim Hemstreet | City Of Miami Beach |
| Fred Beckmann | City Of Miami Beach |
| **Consultants** | |
| David Barth | Glatting Jackson |
| Richard Durr | Glatting Jackson |
| Sarah Wilkinson | Glatting Jackson |
| Bob Behar | R.J. Behar & Co |

**Compiled By:** Sarah Wilkinson

**Date:** Monday, October 29, 2001

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## A. Master Plan Vision - West Avenue / Bay Road Neighborhood

Richard Durr outlined the Vision and Preliminary Cost Estimates for the Street Enhancements and Storm water improvements Master Plan for the West Avenue/Bay Road Neighborhood.

1. Hierarchy of streets within the neighborhood –
   - Main roads- West Avenue, Bay Road, Lincoln Road
   - Street Ends / Neighborhood parks
   - Cross streets
   - Cul de sacs / Shared Courtyards

2. GJ's presentation focused on the vision of a pedestrian friendly environment with wide sidewalks throughout the neighborhood
3. Master Plan Streetscape Enhancements will include:

- Streetscape - Crosswalks
- Streetscape - Gateway Features (West Avenue)
- Streetscape - Intersection Enhancements
- Roadway Reconstruction
- Roadway Reconstruction – Hardscape
- Roadway Reconstruction - Landscape & Irrigation
- Street End Neighborhood Parks
- Roadway Reconstruction – Cross Streets
- Shared Courtyards

**B. West Avenue**

1. GJ outlined the need to solve the traffic problems and traffic-calm the road. The ideal section for West Avenue is to narrow the road to 20', with parallel parking on both sides and widen the sidewalks. Curbs will need to be moved/ replaced along the entire street, to tie into the difference in levels (3-5 ") into existing pavement.
2. Will the narrowing the street affect drainage and levels of service – 2/3 years storm water?
3. Existing storm water proposals will reach 3-year service level.
4. Costly to Reconstruct West Avenue - ½ mile reconstruction @ $ 560,000 / ½ mile including drainage
5. West Avenue narrowing and reconstruction may be implemented as part of Phase 2
6. G J to check with Fire, Police, Evacuation Planning re: Evacuation Route along West Avenue as to whether it is possible to narrow the street, as it will have an impact on the width of traffic lanes as an Evacuation Route

C. **StormWater -** Bob Behar outlined the Storm Water Master plan

1. The CH2M Hill Master Plan – 1997, outlined some gaps in the system and is not able to be implemented as a master plan.
2. Areas 8,9,10,11,12,13, up to and including 15th Street on West Avenue
3. Area 15 not is in the master plan area for this neighborhood
4. Storm Water on Bay Road stops @ 15th St.
5. There are some exclusions to the master plan
6. 8 pressurized wells –@ $225,000= $1.8m (Pressurized well – 4 acres of land)
7. Existing manholes will require upsizing eg. proposed size increase (12"-30")
8. Storm Water concept is to upsize the pipes and injection wells on Alton Road and Michigan Avenue
9. The CH2M Hill Master Plan addresses the water quantity not quality
10. Deep wells and swales may help with the Storm Water
11. Consultants must meet with DERM to discuss conceptual stormwater master plan assumptions
12. 3-year storm water design as a minimum – that is permissible design
13. West Avenue is a Class B – 10-year road
14. May need to create a storm water plan that assumes West Ave as level B at a minimum (permittable design?)
15. Level 3 permit could be a possibility
16. Behar to visually determine 'hot spots' through field observations

**D. Storm Water Costings:**

1. Storm Water Master Plan Total $4,716,252
2. Storm Water Phase 1 Total $1,168,800
3. Storm Water Phase 1 Totals may include:
   - 2 injection wells
   - Milling and resurfacing does not address Class level 3 – Class B, 2/3 year storm water

**E. Client Group Discussion / Priorities**

1. Client Group explained that Concept was to make every street look like new, and the costings for Phase 1 had to include milling and / or resurfacing (Approximate cost of Milling and resurfacing West Ave - $300,000)
2. Minimum storm water improvements
3. Aesthetics to neighborhood is a priority
4. GO Bond money is not all for just paving - stormwater monies could include enhancements. The milling and resurfacing should come out of the drainage/storm water monies.
5. Redesign and reconstruction of West Avenue will be very costly and should be included as part of overall Master Plan and not Phase 1.
6. Resurface all streets, although not necessary to mill all streets- perhaps just resurfacing
7. Street End Priorities
   - Lincoln Road Street End – minimal cost
   - 14th Street End (Developer led)
   - 10th Street End – Move circle back and reduce area of grass
8. **Irrigation:**
   - GJ to consider the use of irrigation throughout the project area.
   - Is Irrigation needed at all?
   - Client Group are looking for GJ recommendation on whether to implement an irrigation program
   - It was decided to keep the irrigation element of the enhancements in the Phase 1 cost Estimate
9. Tree Species: Client Group requested whether there any preferred tree species proposed for the neighborhood at present. Shade Trees will be the predominant trees throughout the neighborhood. Specific tree species have not been specified as yet, although suggestions will be welcomed. Tree species that don't need irrigation was suggested
10. Don't include top portion of the reconstruction of Bay Road (north of Lincoln Rd) in Phase 1 master plan
11. Ensure White lines for crosswalks are implemented throughout the project area, after completion of resurfacing
12. Bruce Henderson Bikeway Routes on North side of the Collins Canal – monies may be available for the Street Ends
13. The streetscape improvements along Bay Road in front of the Flamingo Hotel development are to be completed as part of this neighborhood project. City will facilitate meeting with developer to discuss implementation. Glatting Jackson is to coordinate with the developer and prepare planning documents for the streetscape improvements. This information is to be provided to the developer

who would then be responsible for completing the design and construction of the Streetscape projects.

**F. Revised Cost Estimates**

1. Client Group requested the revised and detailed cost estimates for the following:
2. Storm Water construction for:
   - 10 year Service Plan
   - 3 year plan
3. Resurface all streets as an absolute minimum, to ensure that the streets are to look 'new' as part of Storm Water Phase 1 Costs
4. Re-construction costs for Bay Road for Flamingo Development section between 14th and 16th Streets
5. Street End designs

**G. Phase 1 Master Plan Improvements – $ 2.5million**

1. Storm Water ($1m)
   Proposed Storm Water requirements are required to be permittable.
   - Milling and resurfacing of all streets
   - Improve Drainage at 4/5 deep wells at strategic/hot spots/bad areas connect to existing system
   - Upsize pipes on West Avenue
2. Streetscape Enhancements – Bay Road
   - Road reconstruction
   - Street lighting
   - Tree planting
   - Crosswalks
   - Bumpouts
3. Streetscape Enhancements – West Avenue
   - Crosswalks (with pavers at 10th and 14th))
   - Mid block crossings (no pavers, just striped)
   - Tree Planting Program
4. Streetscape Enhancements – Neighborhood Parks
   - 10th Street
   - Lincoln Road (minimum treatment)
   - Bay Road (minimum treatment if possible)

**H. Neighborhood Meeting Master Plan PHASE 1**

1. Need to show exactly what we are doing for Phase 1 Master Plan
2. West Avenue - show existing sections, crosswalks, intersections, Tree plantings
3. Bay Road – show crosswalks, intersections, tree plantings
4. 10th Street – show street end
5. 14th Street – show street end (Developer proposed)
6. Bay Road – show street end

**I. BODR - Ultimate Master plan**

1. Need to show exactly what we are doing for Phase 1 Master Plan

2. Cross sections

**Date of Next Meeting:**

1. Friday 2nd November 11am
2. Rick Durr and Bob Behar to attend. To discuss and update Client Group on revised costings, Revised Phase 1 Master Plan and Graphics, and Storm water Master Plan

**Date of Community Design Workshop :**

1. Thursday 8th November
2. Hazen and Sawyer to confirm time and location.

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# Meeting Minutes

**Date**: September 4th 2001

**Project:** **West Ave./ Bay Road Neighborhood, Miami Beach**
GJ # 15788

**Location:** West Ave./ Bay Road Environs

| **Personnel :** | | |
|---|---|---|
| | Donald Shockey | City Of Miami Beach(CIP ) |
| | Reuben Caldwell | City Of Miami Beach (Planning) |
| | Bert Vidal | Hazen & Saywer (Project Managers) |
| | Suresh Mistry | Hazen & Sawyer (Project Managers) |
| | Bob Behar | R.J. Behar & Associates (Civil Engineers) |
| | Rick Durr | Glatting Jackson (Landscape Architect) |
| | Sarah Wilkinson | Glatting Jackson (Landscape Designer) |

***Purpose of meeting:*** Site Reconnaissance Visit - September 4th 2001

To familiarize the project team with the site location, details and scope of the project.
The overall aim is to set up a master plan for a vision of the West Ave. and Bay Road Neighborhood Area, for the long term future of the neighborhood and develop a program of street enhancement works.

***West Ave.***

- **Southern end of West Ave.**
  Opportunity for enhancement at New Bentley Bay Development site ( new high rise condo development) at 6th Street junction. Opportunity to improve the junction at 7UP corner? The new condo development (The Bentley Bay) at the southern end of West Ave. is likely to have an impact on West Ave.
- Aim is to set up a plan for future streetscapes for the longterm future of City Of Miami, not just the immediate works
- Loading zones need to be resolved with regard to medians / parking
- Can a canopy be created on both sides of the road to provide shade for pedestrians and parked cars. Is this a priority?
- Stormwater design for this neighborhood will include:
  - Development of possible improvements and identification of an achievable level of service based on current funding.

  - Identification of funds needed to achieve master plan proposed level of service. Note that this will require coordination with adjacent Flamingo / lummus neighborhood system.

- A residential street with an eclectic mixture of buildings
- Possibility to create a corridor/ theme along West Ave. Do we create a new theme / concept along the street or do we build on the existing one?

***West Ave. Cont'd***

- Widen sidewalks on both sides of the road.
- The general land uses on West Ave. are:

  North of 12th Street: mixture of retail and commercial and residential.
  South of 12th Street: mainly residential, with single family residential homes on east side of street and high rise condos on west side.
- The City of Miami is keen to resolve the parking issues in the area with a variety of solutions. A code already exists in the guidelines but there are no standards at present. The City of Miami wants to keep a very open mind with regards design standards of parking and does not want to limit creativity, however the parking standards needs to comply within the existing guidelines.
- Opposite Southgate Towers, a garage is planned for development.
- Storm water is currently undersized and needs more catch portions and upsizing from 12 to 24" storm water pipe down the center of road. Adding deep wells and upsizing pipes
- There is an existing wave wall and swale along frontage of Mirador development, which helps screen the existing car parking from the street.
- A discussion took place, as to whether to remove the swale in front of the wave wall and repave it with trees in grilles to increase the width of side walk or introduce a planted median along the middle of the road.
- Opportunity to introduce shade trees along this section of the road. Possibility of tree grilles on the western side of the road and in the existing parking lot on the eastern side of the road. No gravel to be used in tree grilles. Up-lights to be considered, if costs allow.
- Possibility of bump outs for improved road alignment, similar to 77th Street.
- Widen sidewalks on both sides of the street
- The storm water design of road should be considered as part of overall design.
- Need to come up with new ideas on how to deal with all the issues.
- In a discussion regarding the recoating the road with asphalt or just re-patching with a top seal coat, the introduction of trees and a median ranked higher than asphalt.
- How do we resolve the problem of the different tree species along the road? Do we remove any trees that are unsuitable?
- Is there a possibility to get rid of swale and introduce more shade trees. It is ok to remove small unsuitable trees, if it can be demonstrated that it is for the long term benefit of the City of Miami Beach. ie replace small non

shade trees with canopy trees. Possibility of infilling with larger trees between the smaller existing trees.

- Important to make linkages between Flamingo and West Ave. and the east end of the neighborhood. Glatting Jackson to consult with EDAW.
- Many residential single - family houses are being converted into B& B's and attorneys' offices with parking in setbacks. It is prohibited throughout the City to park in setbacks. Development regulations are being changed in this area to help resolve the problem. The paving of the entire yard is detracting form the architecture and the character of the street and the area as a whole. There is a need to resolve the parking issues throughout neighborhood and come with design solutions to the problem of parking in setbacks. May be by introducing pavers and planting along street frontages. May require amendments to the development regulations to accommodate new developments.
- Opposite Waverley the parking is not very attractive and needs s design solution
- City of Miami want to encourage more B&B properties in South Beach but it has an impact on increased parking in the neighborhood and affects the Codes. Need to amend the Codes to accommodate new development.
- Is there an opportunity to create a median along the center of the road? Possibility of Trees in median?
- It is important to emphasize the route between 14th, 15th and 10th streets to Alton Road, with particular focus on 14th Street
- Identify edges and minimal definition along kerbside on West Ave. from 14th Street south.
- Problem with outfall, digging up the road which will add to overall costs.
- Development of planned parking lots along West Ave.
- North end of West Ave. is the main entrance to South Beach from the Venetian Causeway.
- Are replacement street lights required? Pedestrian enhanced lights only.

### *10Th Street (Bay Side of West Ave.)*

- Currently used as a Loading Zone by several vehicles, to Mirador and Southgate Towers, although not a designated loading zone. Enforcement issue? Southgate Towers has a gated loading area directly from West Ave. Mirador has a service access from the 10th Street. The loading vehicles are causing an obstruction in the street.
- 10th Street also has a significant amount of illegal parking that needs to be resolved. The amount of car parking overall can be reduced. The residents commented, at previous workshop, that they did not like the look of the street as a parking lot. The problem of illegal parking may be resolved with the development of the new garage on West Ave. thereby reducing the on street parking and creating a legal parking area which is more attractive for the residents.
- A termination point of 10th Street - There is no public access to waterside at the Bay and no sidewalk to the waterside. At present it has a dumpster and a guardrail, both of which detract from the area. Possibility of

creating a fishing and seating area, with the opportunity to watch the sunsets.

***14th Street***

- Parallel parking and angled parking on the street is detracting from architecture and streetscape. The parking issues need resolving. Create parallel parking on both sides? It is legal parking but there are no meters.
- Very narrow sidewalks on both sides of the street. Possibility of build outs at junctions and wider sidewalks.
- West side of West Ave. at the junction with Bay Road has already been improved by the new developments on either side of the road. New tree planting, verges and sidewalks have been constructed.

**14th Street Cul de Sac**

- Provide a side walk to the waterside, when the Escroe development has been completed. The street is currently used for site cabins for the Escroe development and will be returned to on street parking on completion of the development.

***14th Terrace***

- Very short section of road, which only runs from Bay Road to West Ave. An edge definition is needed to define the road. A solution is needed to resolve the parking problems and introduce shade trees. A five storey building on the corner of West Ave. and 14th Terrace.

***Flamingo Way***

- Coordination and Linkages required between Glatting Jackson and EDAW, with east end of Neighborhood.

***Lincoln Terrace***

- Parallel parking on both sides of the street adjacent to the building frontages. There are a few residential buildings of architectural importance at the western end of the street. The parking is on the public road and partly in setbacks. There may be need for a partnership between public and private ownerships to resolve the parking issues in the street.
- A 6ft high white fence restricts public access to the water.
- A developer has applied for a building to cross the end of the street, however, a 20 feet easement with a right of access to the view across the waterside limits the development in this area

***Lincoln Road***

- Too many Royal Palms on the stretch of road between Bay Area and West Ave.
- Frontage to parking lot
- Possibility of introducing a median

***Bay Road***

- Bay Road in front of Flamingo development – Note that subsequent to the meeting it was determined that to meet implementation timelines for developers co, it would be necessary for developer to design and construct its own improvements along Bay Road. GJKALR would have to develop design criteria and City / GJKALR will then meet with developer

to finalize implementation plan. Escroe development - have offered a contribution towards the street enhancement works to the front of their new development along Bay Road. A discussion is required to resolve the street enhancement works and the issues regarding the design, timescale and construction of the works. (Donald and Bert to discuss further with Tim)

- Bay Road needs priority attention. The side streets are less of a concern.
- The street needs improvement to swales, sidewalks and additional tree planting
- A solution to the problem of parking in setbacks along Bay Road is also required.
- North end of Bay Road has potential for a public space (similar to Palm View enhancement works which cost $20,000) which could be achieved with new fencing, removal of the guardrail.

***Lincoln Road***

- Conceptual plans of the improvements of Lincoln Road were designed 'from the Ocean to the Bay', however this was never realized in the design.
- Possibility of creating a sunset viewpoint at the end of Lincoln Road, where it meets the bay. Replace guardrails with low railings and /or bollards, seating and landscaping. This is an important termination point of Lincoln Road at the Bay. It also functions as a turning head.
- Needs a coherent streetscape along Lincoln Road and to resolve the parking problems on Lincoln Road.

***Lincoln Court***

- A cul-de-sac which terminates at the bay. The sidewalks are very narrow at only 4 feet wide.

**General comments**

- It was acknowledged that funding was "tight" on this project and that many of the recommended improvements would likely fall into the future master plan category.
- It was agreed that all roads in the neighborhood with the exception of West Ave, would be resurfaced to provide a uniform neighborhood "look" and benefit all households, since the ROW improvements would likely be limited due to funding constraints.

**Next steps**

Glatting Jackson to arrange a meeting with EDAW.

Glatting Jackson to prepare information for visioning session

**Next Visioning session** : 16th October 2001

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# Meeting Minutes

**Meeting Date:** Thursday, November 08, 2001

**Project:** City of Miami Beach / West Ave / Bay Road
GJ # 15788

**Location:** 1st Union Bank, Lincoln Road, South Beach

**Purpose:** Neighborhood Meeting

**Compiled By:** Sarah Wilkinson /Richard Durr,Glatting Jackson

**Date:** November 9, 2001

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*Attendees :*

**Client Group**

| | |
|---|---|
| Ronnie Singer | City of Miami Beach |
| Donald Shockey | City Of Miami Beach |
| Reuben Caldwell | City Of Miami Beach |
| Tim Hemstreet | City Of Miami Beach |
| Bert Vidal | Hazen & Sawyer |
| Suresh Mistry | Hazen & Sawyer |

**Consultants**

| | |
|---|---|
| Richard Durr | Glatting Jackson |
| Sarah Wilkinson | Glatting Jackson |
| Bob Behar | R.J. Behar & Co |

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**Introduction :**

Introduction by Ronnie Singer, City of Miami Beach.
The project was outlined by the first phase of improvements

**Construction Budget :**

Bert Vidal : Program Manager of Hazen and Sawyer presented the Construction Budget and detailed the total funding for the Masterplan as follows:

| | |
|---|---|
| GO BOND | $1,800,000 |
| Stormwater Bonds | $1,271,770 |
| Total | $3,071,770, |

(including contingencies, consultants fees)

He explained the breakdown of the costings and the background to the Masterplan and the costings of the project. See attached Powerpoint Displays.

**Project Objectives**:

Rick Durr from Glatting Jackson presented the various streetscape concepts for West Avenue, Bay Road, various street ends and other neighborhood cross streets. These concepts illustrated the overall design theme for the neighborhood – designing for pedestrian safety and comfort. Each alternative concept emphasized widening of sidewalks, addition of shade trees and enhanced crosswalks for pedestrians. Alternative locations were discussed for mid-block crosswalks along West Avenue.

As a part of the presentation, discussion regarding projected costs of the potential improvements yielded a need for phasing-in of the improvements – as well as a discussion over which elements should be included in the current phase of work. As a part of the discussion regarding the construction budget it was noted that the developer of the Flamingo property had donated $300,000 to the project. Implementation of the Bay Road streetscape, adjacent to the Flamingo property, will be based on the concepts provided by Glatting Jackson. In addition, discussion regarding alternative design scenarios of the stormwater system to match the construction budget were discussed and detailed below. It was determined that additional discussion regarding phased stages of the required stormwater improvements will be necessary.

**Questions / Discussions**

The following were comments made by the attendees of the neighborhood meeting on November 8, 2001:

1. How much is the Flamingo Development contributing to this project?
2. Is the funding for the project from rented properties / condos on West Ave / Bay Road?
3. Which streets are benefiting from storm water improvements?
4. Need to spread money throughout neighborhood
5. Flamingo should plant all the trees on Bay Road
6. New sidewalks (Bay Road) – are they at same level as road? Sidewalks need to be at a higher level for drainage
7. Is the stormwater / sewage for Flamingo included in this project?
8. 14th Street does not connect to ocean – would rather improve intersection at 15th Street instead, as it does connect to the ocean
9. Need to look at traffic patterns from Flamingo
10. Suggestion of stop signs and /or on traffic lights at every intersection
11. Can the City of Miami Beach provide trees for residents in private gardens?
12. Swales are not maintained by the City of Miami Beach
13. Suggestion to move the swale from the outside to the inside, with the sidewalk adjacent to curb, (May be a possibility on Bay Road only – not on West where it would cost too much to re-construct)
14. 'U' turns are constant on Lincoln Road – need remedies to resolve U-turns problem
15. Move the turning circle at the end of Lincoln Rd. further east to create another Street End park
16. Build a bridge at the northern end of West Ave to connect to Dade Ave – improve intersection on Dade Ave ( Bridge Construction would be a FDOT project and is not funded under this ROW project)
17. On street parking needs permits for residents only

18. What is the Timeline of the Project?
    - Final Masterplan design – Completed by February 2002
    - 8 months design period
    - Proposed Construction start date 2003
19. The budget seems inadequate. Is that a Bond issue?
20. Need to address water lines on Bay Rd
21. More traffic lights on West Ave. Needs traffic calming
22. Street ends – need maintenance? Pooper scoopers on street ends

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23. Suggestion of angled parking on the streets to improve / calm traffic and speed while creating more parking. Although road may be too narrow for fire and evacuation routes. Issues to be addressed.
24. High rise apartments and condos are creating additional traffic problems
25. Look at proposed site plans – building layouts need amending for Flamingo
26. Does storm water funding include any sewage? The storm water funding does not include sewage improvements
27. Is the Storm Water under-funded?
28. Need to show the proposed storm water improvements on revised master plan
29. No benches on street end parks- attract homeless people
30. Dog owners cannot be enforced to clear mess - provide pooper scoopers
31. Neighborhood parking – bulb outs have reduced parking in South Pointe- good idea
32. Light railway/ tramway proposed for South Beach. Is this feasible in this neighborhood? A loop system is proposed using Collins and Alton Road with a possible for single track through neighborhood. Possibly a single lane on West Avenue? Considerable discussion took place regarding the Light Railway project and the neighborhood representative took the opportunity to discuss the initial plans with the neighborhood group, however the light railway project is not part of this ROW project. The majority of the residents attending the meeting were opposed to the Light Railway / Tramway proposal
33. Need to spread improvements throughout whole neighborhood and along West Avenue, not just on Bay Road and more tree planting and crosswalks on northern section of West Ave.
34. All we need is Water, sewage and sidewalks only
35. U-turns on Lincoln Rd at Bay Rd – create bump outs to prevent U-turns

**Next Stage**

The Consultants will consider the thoughts and views of the neighborhood meeting. The consultants will reconsider the proposed works in the light of the comments made at the community Workshop. Community Design Workshop # 2 will be scheduled for Early 2002.

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| | |
|---|---|
| Meeting Date: | March 27, 2006 |
| Project: | West Ave BODR |
| Location: | City of Miami Beach CIP Conference Room<br>City Hall 2nd Floor |
| Purpose: | Review Meeting |

Attendees:

| | |
|---|---|
| Ruben Caldwell | CMB – Planning |
| William Kerry | CMB – Planning |
| Maria T. Icheverry | CMB – Transportation |
| Saul Francis | CMB – Parking |
| Jorge Cano | CMB – CIP |
| Carla Dixon | CMB – CIP |
| Glenn Englehardt | CMB – Public Works, Engineering |
| Bert Vidal | Hazen & Sawyer |
| Stephanie Harari | Hazen & Sawyer |
| Damian Leslie | R.J. Behar & Company |
| Joe Webb | Glatting Jackson |
| Mike Sobczak | Glatting Jackson |

Compiled By: Joe Webb

**General Discussion:**

- Designs for the street ends for Lincoln Road and 10th Street and Bay Road from Lincoln Road to 10th Street have been completed by the Engineering Department as park of a grant program.
    - Coastal Engineering is preparing the plans.
    - The street ends are from the bulk head to approximately 50' land ward.
    - Copies of those plans will be provided to the Planning and CIP offices for review.
    - William Kerry expressed a concern that the designs have not gone through the City's typical community planning process.

**Action Item:**

- Hazen and Sawyer will coordinate with the City and direct Glatting Jackson as to how to proceed.

- The calculation of existing parking spaces should be reviewed to assure that illegally parked cars are not included.
- Bert Vidal questioned the accuracy of the cost estimate and requested a break down of the costs.

**Action Items:**

- Glatting Jackson will re-calculate the amount of existing, on street, parking
- Glatting Jackson will review the cost estimate and forward an electronic version to Stephanie Harari, for her review.

**West Avenue Review:**

- A center turn lane must be included in the design. It can be reduced to 10' wide, if necessary.
- Sidewalks should be a minimum of 6' wide.
- Drive lanes should be 11' wide
- Parking area should be 8' wide
- The valley curb area should be included as part of the parking and drive dimensions.
- The section location should be adjusted to cut through the parking areas.
- A design scheme should be developed that shows a center turn lane and bike lanes with no parking on the west side of the street.

**Action Items:**

- Glatting Jackson will develop a design scheme that shows a center turn lane and bike lanes with no parking on the west side of the street and forward it to Stephanie Harari with an estimate of the total number of parking spaces that will be lost.
- Hazen and Sawyer will review the proposal with the City and advise Glatting Jackson as to how to proceed.

**10th Street End Review:**

- Concept B, with perpendicular parking, is preferred

**Lincoln Court Review:**

- Concept A, with a planting strip and palm trees, is preferred

**Lincoln Road Review:**

- Concept A, with a center median, is preferred

**Bay Road Street End Review:**

- Concept A, with angled parking is preferred

**Action Item:**

- Upon direction from Hazen and Sawyer, Glatting Jackson will develop the final graphics and presentation materials for the Community Design Workshop.

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| | |
|---|---|
| Meeting Date: | March 27, 2006 |
| Project: | West Ave Neighborhood 11 Right-of-Way Improvements |
| Location: | City of Miami Beach CIP Conference Room<br>City Hall 2nd Floor |
| Purpose: | Visioning Session Meeting Minutes |

Attendees:

| | |
|---|---|
| Reuben Caldwell | CMB – Planning |
| William Cary | CMB – Planning |
| Maria T. Echeverry | CMB – Public Works Transportation |
| Saul Frances | CMB – Parking |
| Jorge Cano | CMB – CIP |
| Carla Dixon | CMB – CIP |
| Glenn Englehardt | CMB – Public Works, Engineering |
| Bert Vidal | Hazen & Sawyer |
| Stephanie Harari | Hazen & Sawyer |
| Damian Leslie | R.J. Behar & Company |
| Joe Webb | Glatting Jackson |
| Mike Sobczak | Glatting Jackson |

Compiled By: Joe Webb

**General Discussion:**

- Designs for the street ends for Lincoln Road, and 10th Street, and Bay Road (Lincoln Road to 10th Street) have been completed by the City's Public Works Department as part of a grant program.
    - Coastal Engineering is preparing the plans.
    - The street ends are from the bulk head to approximately 50' land ward.
    - Public Works will provide copies of the plans to the Planning and CIP offices for review.
    - William Cary expressed a concern that the designs have not gone through the City's typical community planning process.

**Action Item:**

- Hazen and Sawyer will coordinate with the City and direct Glatting Jackson as to how to proceed.

- The calculation of existing parking spaces should be reviewed to assure that illegally parked cars are not included.
- Bert Vidal questioned the accuracy of the cost estimate and requested a break down of the costs.

**Action Items:**

- Glatting Jackson will re-calculate the amount of existing, on street, parking spaces.
- Glatting Jackson will review the cost estimate and forward an electronic version to Stephanie Harari, for her review.

**West Avenue Review:**

- A center turn lane must be included in the design. It can be reduced to 10' wide, if necessary.
- Sidewalks should be a minimum of 6' wide.
- Drive lanes should be 11' wide
- Parking area should be 8' wide
- The valley curb area should be included as part of the parking and drive dimensions.
- The section location should be adjusted to cut through the parking areas.
- A design scheme should be developed that shows a center turn lane and bike lanes with no parking on the west side of the street.

**Action Items:**

- Glatting Jackson will develop a design scheme that shows a center turn lane and bike lanes with no parking on the west side of the street and forward it to Stephanie Harari with an estimate of the total number of parking spaces that will be lost.
- Hazen and Sawyer will review the proposal with the City and advise Glatting Jackson as to how to proceed.

**10th Street End Review:**

- Concept B, with perpendicular parking, is preferred.

**Lincoln Court Review:**

- Concept A, with a planting strip and palm trees, is preferred.

**Lincoln Road Review:**

- Concept A, with a center median, is preferred.

**Bay Road Street End Review:**

- Concept A, with angled parking is preferred.

**Action Item:**

- Upon direction from Hazen and Sawyer, Glatting Jackson will develop the final graphics and presentation materials for the Community Design Workshop.

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**Meeting Minutes:**

Meeting Date: September 05, 2006

Project: City of Miami Beach – BODR (GJ # 15788)

Location: CIP Conference Room

Purpose: Pre-CDW

Attendees:

| | |
|---|---|
| Joe Webb, Mike Sobczak | Glatting Jackson |
| Nick, Maria T. Echeverry | DPW |
| Stephanie Harari, Bert Vidal | Hazen & Sawyer |
| Jorge Cano | CMB-CIP |
| Christine | |

Compiled By: Joseph Webb

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- Planning not in attendance
- Bring big board of storm and water boards to CDW Meeting
- Discussion about 5 years vs. 10 years storm. It is now planned as a 5 year storm. A 10 year storm can be considered again in design.

- Make a large N arrow to help people orient to changing directions
  - Possibly be changing to Z bike
- Give Bert AutoCadd drawing of "Proposed Street Section" for West Avenue
- Draw section to front of curb
- Make clear net gain of parking
- Highlight that street ends are being done by public works

- ❖ Identify construction time for street ends
- ❖ Delete " Ø Parking Spaces Proposed" from Lincoln Court Slide
- ❖ Just do one overall parking discussion to emphasize the net gain of parking
- ❖ Be prepared to answer questions
- ❖ Lincoln Road Bay to West
    - o Make clear that is existing vs. proposed medians
- ❖ Drive Bay Road and street ends to see progress
- ❖ 16th street has bike lanes proposed

**Action Items:**

- ♦♦ Get section ASAP from Public Works and construction schedule

- ♦ Revised presentation back to Stephanie by 9/19. Stephanie is gone after 21st so correspond directly with Carla.

GLATTING
JACKSON
KERCHER
ANGLIN
LOPEZ
RINEHART

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*PLANNING*

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## Meeting Minutes:

Meeting Date: September 27, 2006

Project: Miami Beach - BODR (GJ # 15788)

Location: Commission Chambers

Purpose: Community Design Workshop

Compiled By: Joseph Webb

- Look in the improvement of 14th Avenue street end
  - Originally done under development order for adjacent property (the Waverly)
- Lights to be replaced with acorn lights
- Big issue with multiple delivery trucks clogging the roads
  - Especially in AM
- Add bike racks (in bike master plan)
- Leave lots of open green for dogs (add bag dispensers)
- Irrigation should be included
- Desire to have the median removed and add space up against buildings

Glatting Jackson Kercher Anglin Lopez Rinehart, Inc.