



DADE COUNTY PARK & RIDE LOT PLAN

WPI No. 6810187

State Job No. 87000-1845

JUSTIFICATION REPORT

SOUTH DADE COUNTY SOUTH DIXIE HIGHWAY BUSWAY PARK AND RIDE LOTS

Prepared for the

FLORIDA DEPARTMENT OF TRANSPORTATION

DISTRICT 6



By

FREDERIC R. HARRIS, INC.

MIAMI LAKES, FLORIDA

In Association With

Avino and Associates, Inc.

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I. INTRODUCTION

This Justification Report is provided to assist in the implementation of the **Dade County Park and Ride Lot Plan**. The Park and Ride Lot Plan provides a generic analysis of potential park and ride lot locations identifying site(s)/system(s) with the best potential for immediate and short range implementation and documenting future park and ride lot locations for integration into the long range planning process.

This Report is based on the development of park and ride lots as an adjunct to the planned South Dixie Busway between Dadeland and Cutler Ridge. The report provides sufficient data and explanation to show the need and purpose of this proposal. The analysis includes: a presentation of the costs and benefits; the relation of the proposal to other plans and existing projects in the area; the impacts on the local transportation system; and the needs required by the improvement. In addition conceptual design plans have been prepared as a general outline of site needs.

The Report is formatted into four (4) sections. Following this Section is Section II: Plans, Projects and Proposals which provides a background discussion of the corridor proposed for park and ride implementation followed by a discussion of future plans. Section III includes the analysis of alternative lot and corridor treatments and estimations of costs. A benefit/cost analysis based on system implementation is also provided in this section. The Final Section summarizes the need and benefits of the proposed improvement.

Note, the analyses provided in this document are more specific than those provided in the Park and Ride Lot Plan. Where the Park and Ride Lot Plan performed impact, cost/benefit and effectiveness analyses for the purposes of comparing all of the potential sites, this document is directed to determining the specific impacts of the proposed Park and Ride Lot treatments to the South Dade County: Dixie Highway Corridor.

II. PLANS, PROJECTS and PROPOSALS

Introduction

The South Dixie Highway Corridor study limits includes the area adjacent to the South Dixie Busway and US 1 between Dadeland and Cutler Ridge. Figure 1 shows the corridor indicating the US 1 roadway and the proposed South Dixie Busway.

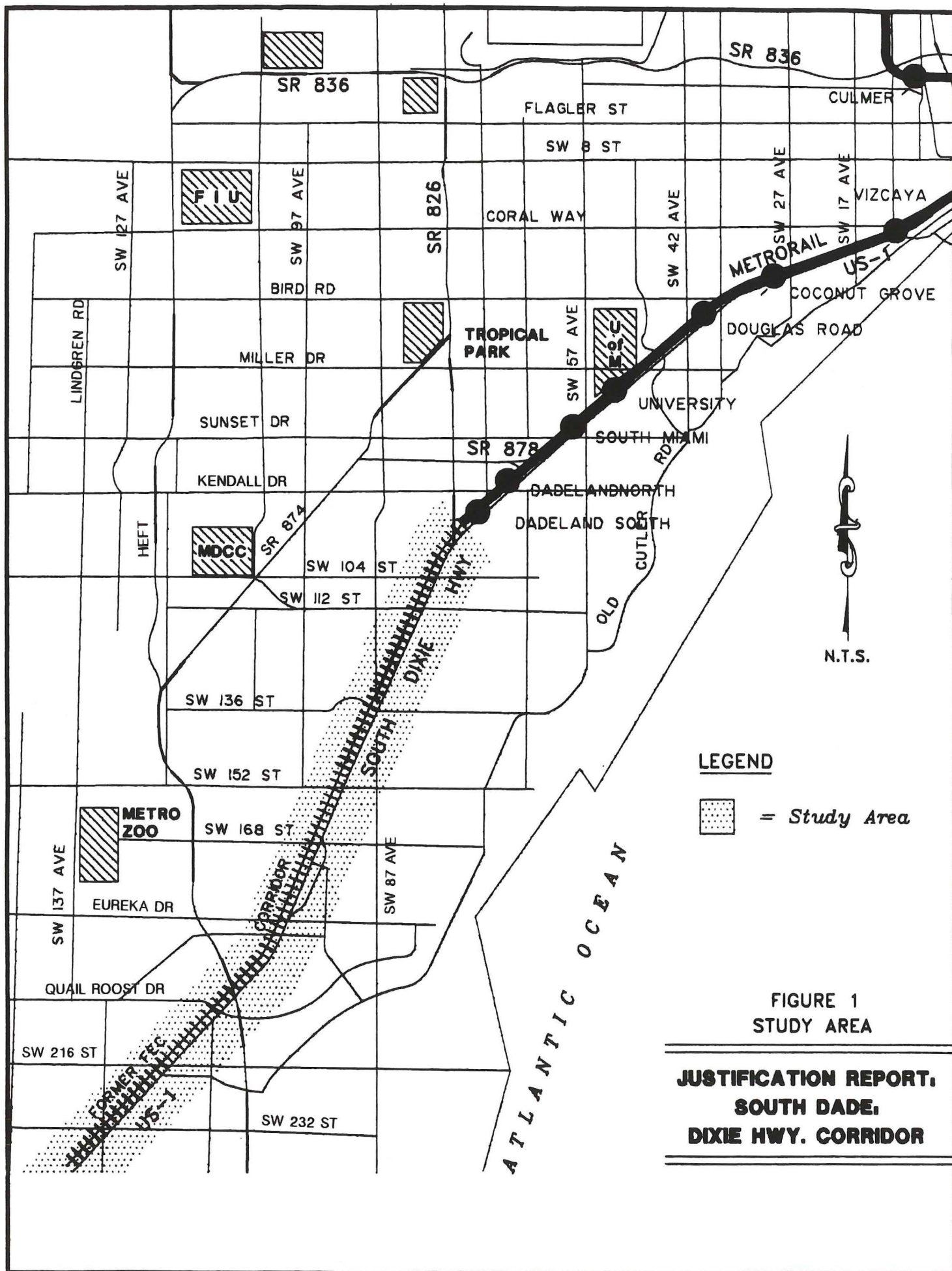
Existing Transportation System

The corridor is well served by the local bus transportation network with direct service to the Dadeland, South Miami and Douglas Road Metrorail Stations. Figure 2 shows an excerpt from the Dade County Transit Map provided by Metro-Dade Transit Agency indicating the availability of bus routes on all arterials and major collectors.

Bus ridership in the area is significant with the corridor mostly served by five (5) local routes and express service provided by the 38X express route. Route 1 is a local route providing service to the residential concentrations east of US 1 in the Cutler Ridge/Caribbean Boulevard area and traversing US 1 between SW 174th Street and Dadeland North. Route 35 provides service between Florida City and Miami Dade Community College South traversing a small section of the corridor between Caribbean Boulevard and SW 184th Street. Route 52 serves some of the same Cutler Ridge area as serviced by Route 1, however, the route crosses over to the west side of US 1 providing service to the Perrine area. The route rejoins US 1 at SW 152nd Street proceeding to the Dadeland South Metrorail Station and the Coral Gables Bus Station. Route 57 serves the residential concentrations east of US 1 between SW 152nd Street and Sunset Drive. The route does not actually utilize US 1, rather using parallel facilities such as SW 77th Avenue, SW 67th Avenue and Red Road.

The 38X and 65 Routes provide express service. Route 38X operates only during the AM and PM peak hours providing service to the Homestead/Florida City area, proceeds north to serve the Cutler Ridge area and then utilizes the Homestead Extension of the Florida's Turnpike (HEFT), the Don Shula (SR 874) and Snapper Creek (SR 878) Expressway's to the Dadeland North Metrorail Station. Route 65 also operates during the AM and PM peak hours, however, provides only one peak hour express run during each period. The remainder of the service period is local. Service is provided between SW 136th Street and the Coral Gables Bus Terminal. The express routes utilize US 1 while the local route uses Old Cutler Road. Standard fares apply to all routes, local service is provided at \$1.25, express service is \$1.50 and all transfers are \$0.25.

A number of arterials and collectors provide east/west traffic flow including SW 200th St, Caribbean Boulevard, Eureka Drive, SW 188th Street, SW 152nd Street, SW 136th Street and Kendall Drive. North/south movement is primarily served by the HEFT/SR 874 and South Dixie Highway Corridors. South Dixie Highway has traditionally operated at congested levels while the western Turnpike and SR 874 roadways have experienced better levels of service. However, since Hurricane Andrew, increased construction activity and mobility of the residents has increased traffic on the HEFT to congested levels. This is expected to be a temporary phenomenon, but, should last for several years.



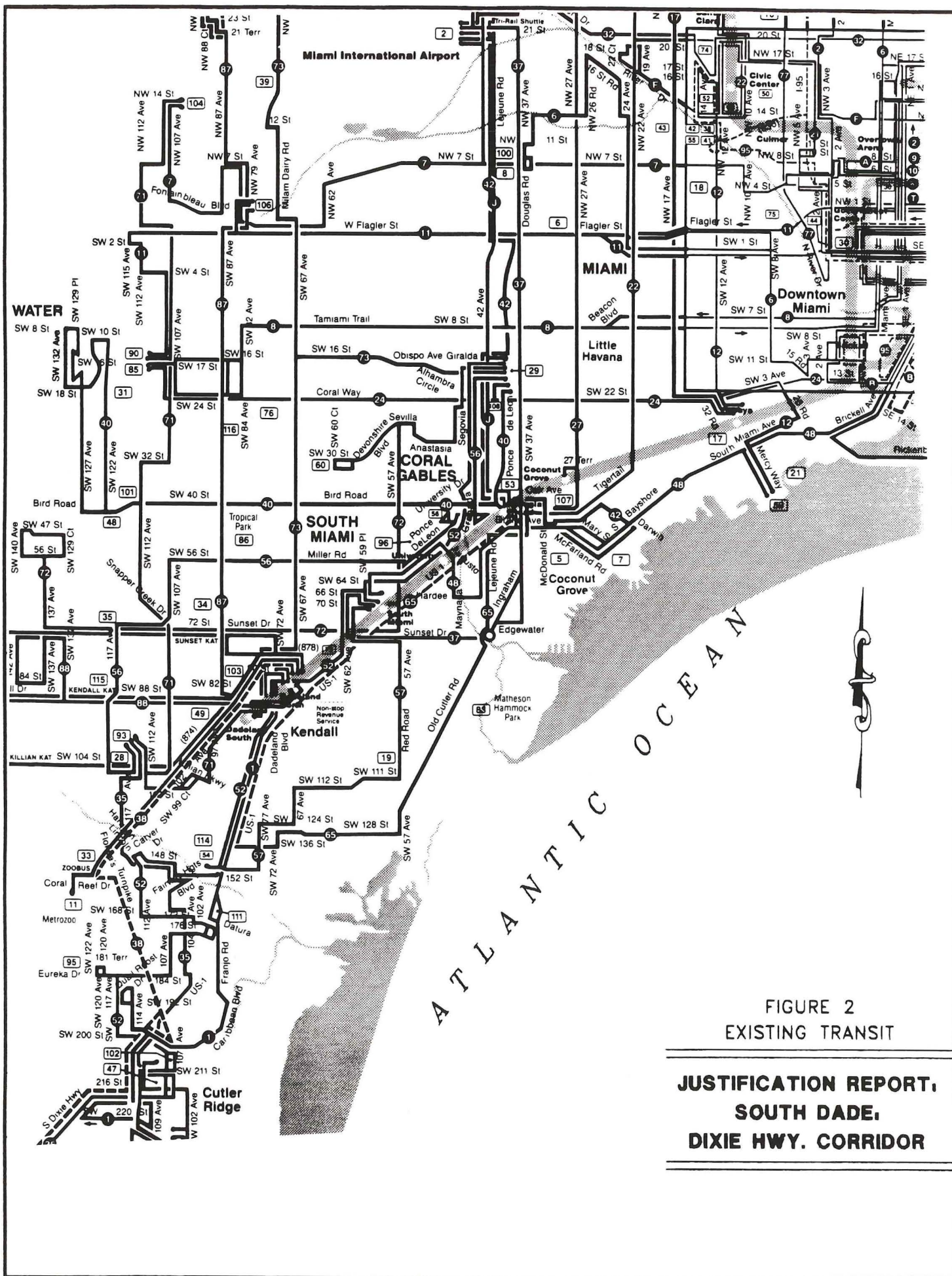


FIGURE 2
EXISTING TRANSIT

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Previous Transit Programs

Other than the express service provided on Route 38X and 65, there have been no past transit programs specifically on this corridor, however, the previous Blue Dash Express Bus Service and the existing Metrorail service north of the corridor have a significant impact. The Blue Dash was utilized as precursor to the Metrorail on/adjacent to US 1 between Dadeland and Downtown Miami. The programs have been successful in that more than 3,600 commuters park at the Dadeland and South Miami Park and Ride lots. Many of these commuters come from the study area subject of this report and may be intercepted prior to the Metrorail lots. This proposal will have additional benefits by relieving parking congestion at the Dadeland Metrorail lots. The Dadeland lots reach capacity almost daily and commuters are turned away. Intercepting some of these riders will provide a parking supply for the overcapacity demand.

Past park and ride lot experience in Dade County in general, however, has seen its successes and failures. There are four active park and ride sites, outside of the Metrorail system, that operate at relatively high levels of success. These include the Golden Glades Lot, Hammocks Town Center, West Lakes Plaza, and Miami-Dade-South Campus. The **MDTA Park and Ride Lots Facilities Plan, 1989** indicates the success of these lots can be attributed to:

- Frequent Metrobus Service
- Availability of Off-Peak Service
- Competitive Cost in Comparison to Automobile
- Competitive Travel Time in Comparison to Automobile
- Clear Lot Identification, lighting and sheltered waiting areas
- High, visible security

There are also a number of park and ride lot facilities with and without Metrorail service that have failed and are currently inactive. The Dade County **Congestion Management Plan** indicates the inactive lots outside of the Metrorail system have failed because of low transit frequencies. Two of these lots are located in proximity to this study area including the SW 186th Street/HEFT and the SW 216th Street/HEFT lot.

Programmed and Planned Improvements

Table 1 shows there are three programmed roadway projects for the study area including the five laning of segments of SW 184th Street, Quail Roost Drive and Franjo Road. The Table also indicates the scheduling of the planned South dade Busway. The park and ride lot system proposed within this report has been developed in support of the this project and should be constructed simultaneously. The project will provide two exclusive bus lanes parallel to US 1 within the former FEC rail corridor between Caribbean Boulevard and Dadeland South.

The South Dade County: Dixie Highway Corridor is also part of the MPO **Dade County Transit Corridors Transitional Analysis**, where long range multi-modal corridor treatments are being analyzed. The corridor limits in this study extend as far south as SW 344th Street. Alternative improvements include Busway, "Hybrid" LRT, "Regular" LRT and an extensions of the Metrorail. Major bus stops within the corridor between

Table 1 – Programmed Improvements

Roadway	From	To	Improvement	Constr FY
SW 184th St	US 1	Frajo Rd	Widen to 5L	'92-'93
	SW 97th Ave	Old Cutler Rd	+2L(4LD)	'96-'97
Franjo Rd	SW 184th St	US 1	Widen to 5L	'96-'97
Quail Roost Dr	SW 127th Ave	US 1	+2L(4LD)	'94-95
South Dade Busway	SW 112th Ave	SW 173rd St	Bus Lanes	'93-94
	SW 173rd St	SW 124th St	Bus Lanes	'93-94
	SW 124th St	Dadeland So. Metrorail	Bus Lanes	'93-94

Source: Frederic R. Harris, Inc.
Metro-Dade MPO

Dadeland and Caribbean Boulevard include:

SW 136th Street
SW 152nd Street
Hibiscus Street
Marlin Road
Caribbean Boulevard

These locations are consistent with the park and ride facilities proposed within this report and are locations where local and express bus routes will enter/exit the express bus lanes.

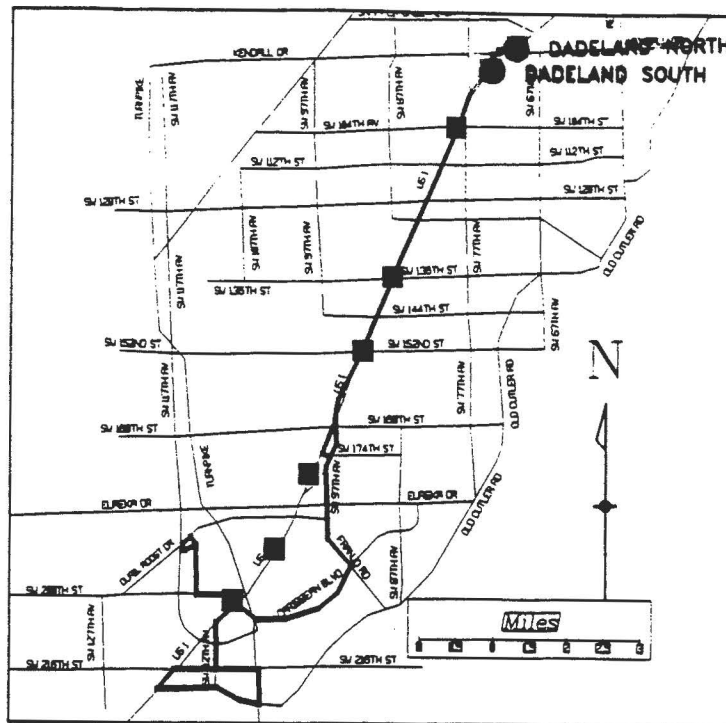
Figures 3, 4, 5, and 6 show the proposed bus routes for the busway. The figures are taken from the *Traffic Forecast and Ridership* element of the **Design Traffic Study for the South Dade Busway PD & E Study**. The parking demand projections are based on this proposed system.

Site Location Analysis

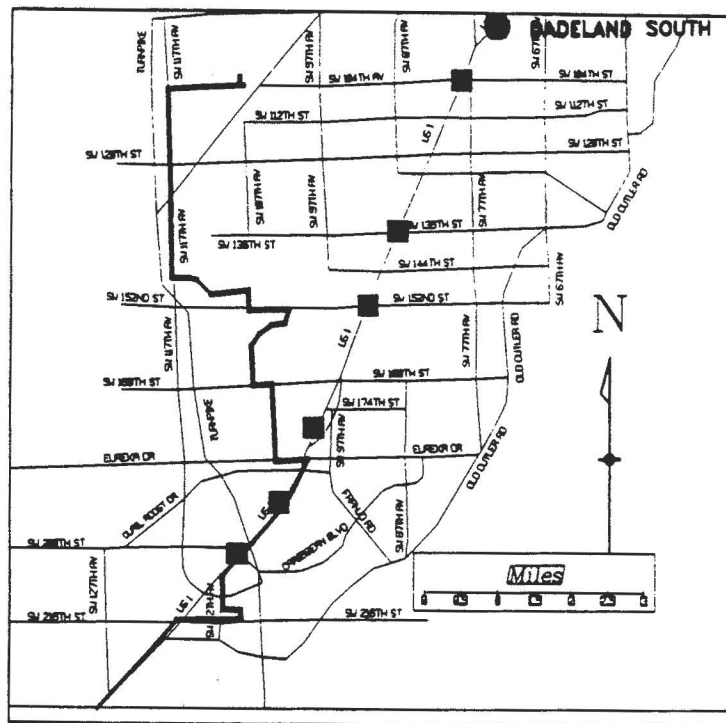
Potential sites for the implementation of Park and Ride were identified based on the results of a Systems Level and Project Level Analysis documented in the Park and Ride Lot Plan. The initial analysis indicted a number of sites at each of the Location Areas identified in the **Dade County Park and Ride Lot Plan**. The aftermath of Hurricane Andrew however has increased the potential for lot development in this area. This is especially true between SW 168th Street and Caribbean Boulevard. As a result the best sites identified for development are adjacent to the former FEC right of way with direct access to the major bus stop cross-streets named above.

The potential SW 136th Street lot is located in the northwest corner of the US 1/SW 136th Street intersection. The site has been developed but was significantly damaged by the Hurricane. The potential SW 152nd Street location is a large vacant parcel at the northwest corner of SW 152nd Street and US 1. The best location for the Hibiscus Street lot includes a strip of Hurricane damaged properties north of Hibiscus Street and adjacent to the FEC Corridor. The site with the best potential for implementation for the Marlin Road Location Area is a large vacant parcel at the southwest corner of Marlin Road/US 1. The site for the Caribbean Boulevard location is the Cutler Ridge Mall. This site has been identified by the County as a "Terminal" Station for the Busway and will be developed as a park and ride lot as part of the overall busway project.

Figure 7 shows the proposed South Dade Busway park and ride lot location



Proposed Route 1



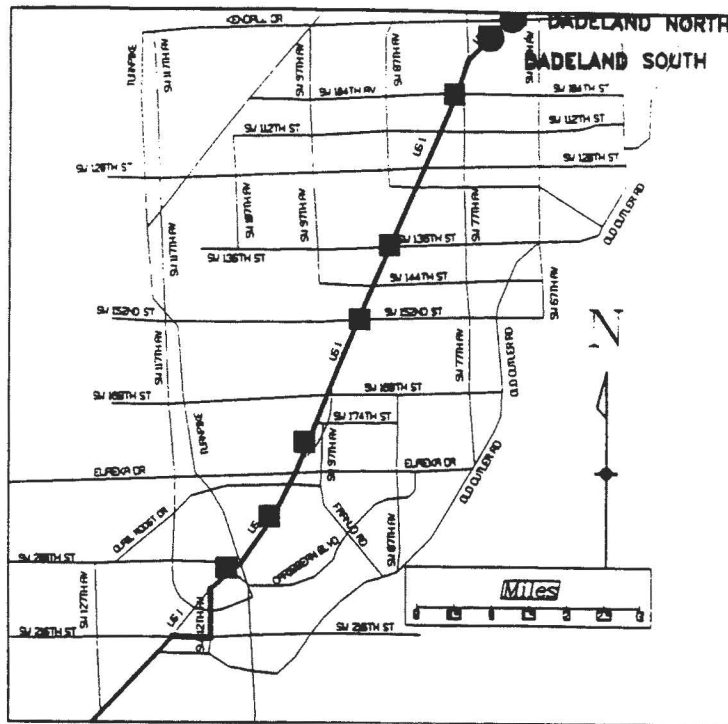
LEGEND

- = Existing Metrorail Station
- = Proposed Park & Ride Lots

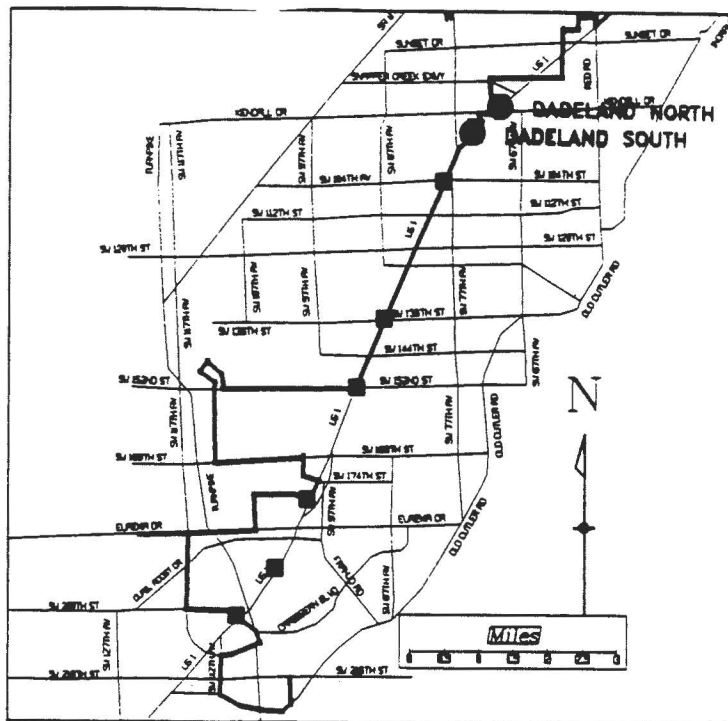
Proposed Route 35

FIGURE 3
PROPOSED BUS ROUTES
1 AND 35

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Proposed Route 38X

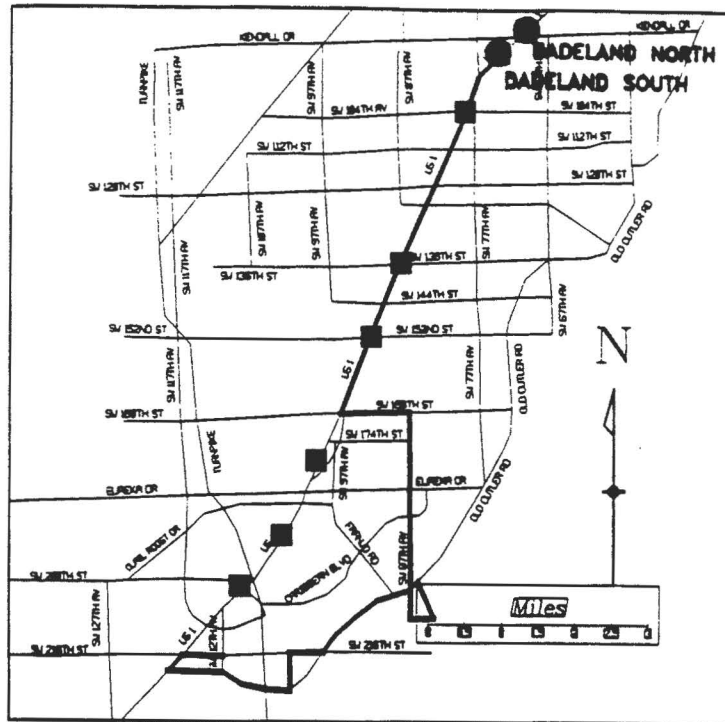


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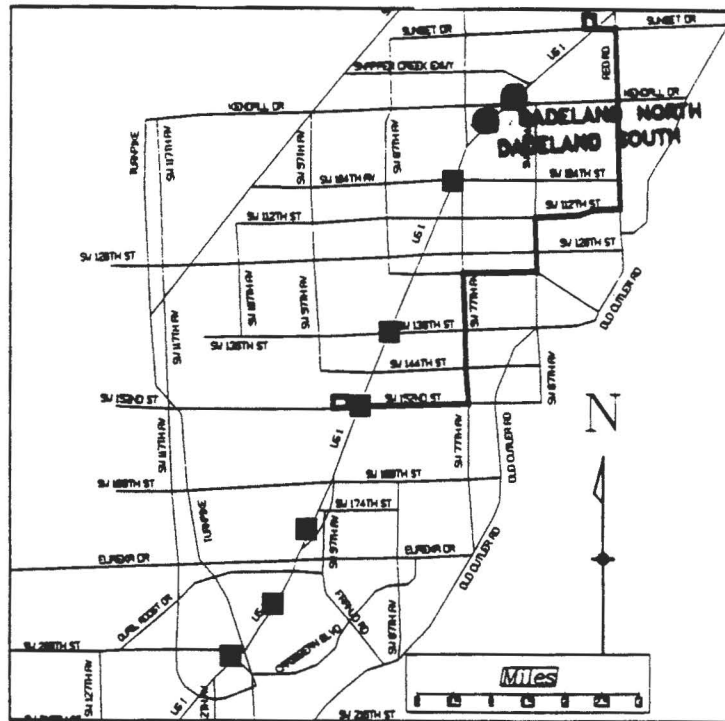
- = Existing Metrorail Station
- = Proposed Park & Ride Lots

Proposed Route 52

FIGURE 4
PROPOSED BUS ROUTES
38X AND 52



Proposed Route 51X



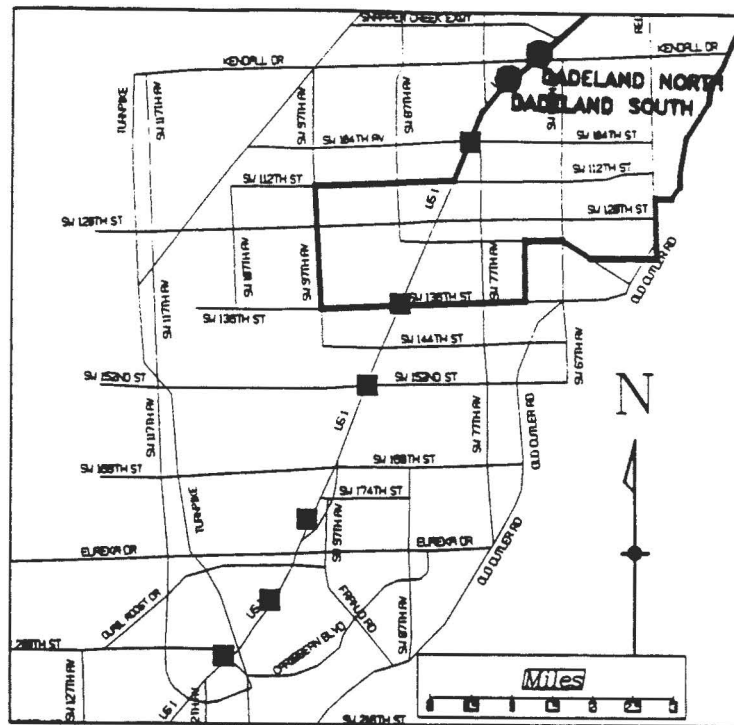
LEGEND

- = Existing Metrorail Station
- = Proposed Park & Ride Lots

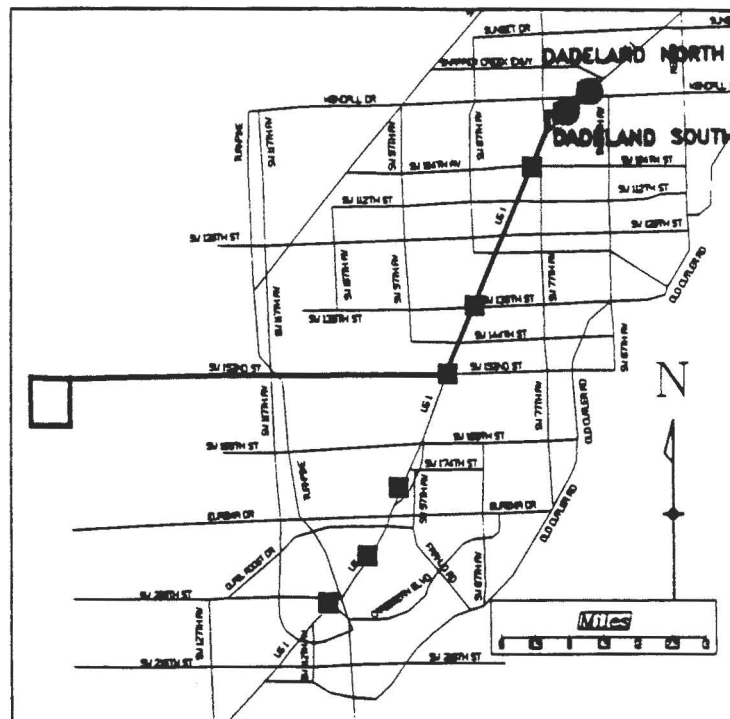
Proposed Route 57

FIGURE 5
PROPOSED BUS ROUTES
51X AND 57

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Proposed Route 65



LEGEND

- = Existing Metrorail Station
- = Proposed Park & Ride Lots

Proposed Route 152X

FIGURE 6
PROPOSED BUS ROUTES
65 AND 152X

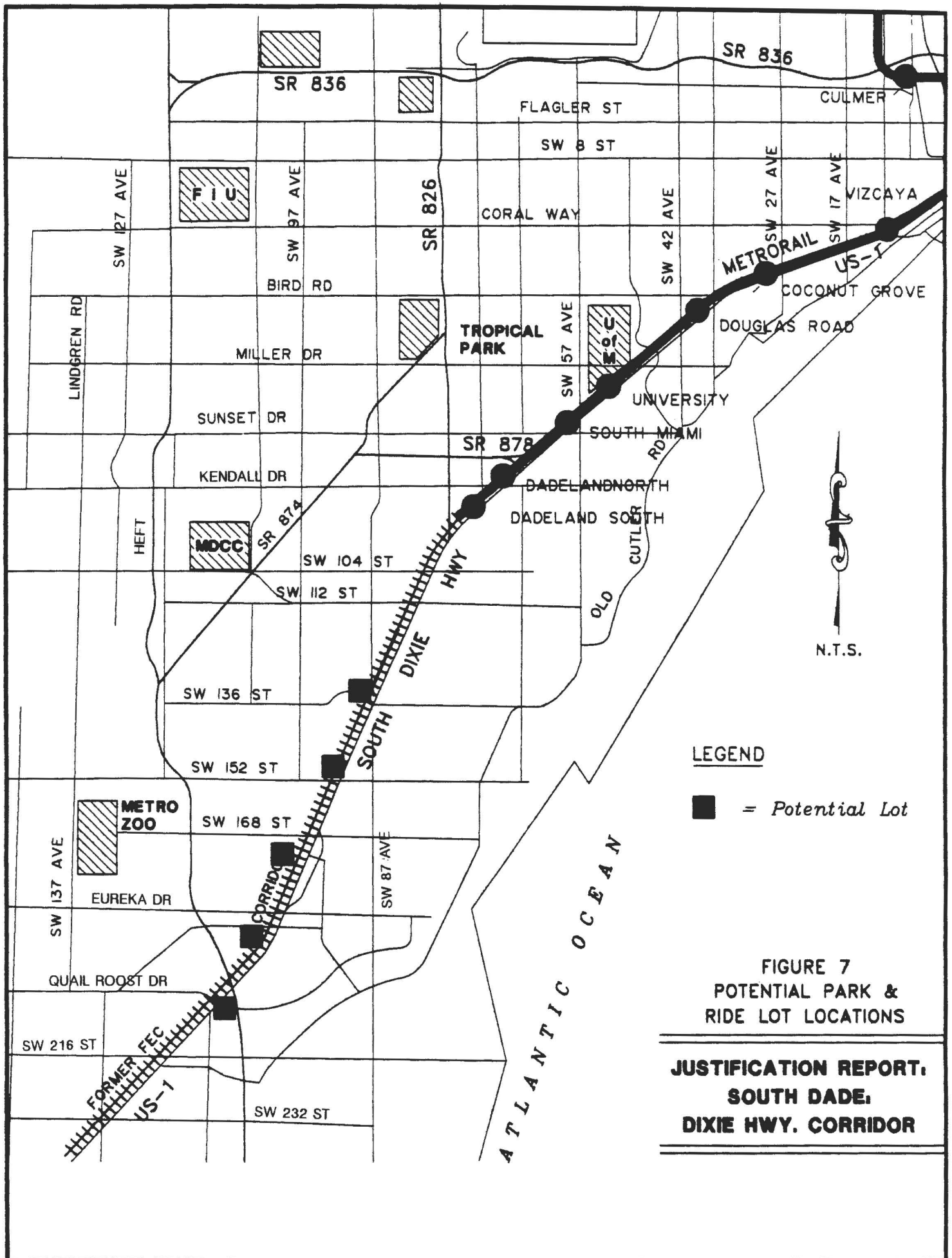


FIGURE 7
POTENTIAL PARK &
RIDE LOT LOCATIONS

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III. PARK AND RIDE LOT SYSTEM TREATMENTS AND COSTS

Introduction

Conceptual design details of the recommended plan improvements are presented in this section of the report. The improvements include the development of new facilities, at the SW 136th Street, SW 152nd Street, Hibiscus Street, Marlin Road and Caribbean Lots. A cost analysis for the Caribbean Boulevard lot is provided based on the analyses performed in the Dade County Park and Ride Lot Plan. FDOT has conceptual plans and cost estimate based on a larger facility.

The park and ride lot design includes access to stations within the Busway corridor and do not allow for bus circulation within the lot. The details are presented at a level which permits the Department to approach private landowners for purchase negotiations and the subsequent design of system improvements.

Recommended park and ride lot treatments include:

1. The potential development of new facilities at
 - SW 136th Street
 - SW 152nd Street
 - Hibiscus Street
 - Marlin Road
 - Caribbean Boulevard
2. The rerouting of existing bus service including routes 1, 35, 38X, 52, 51X, 65 and 152X.
3. Development, encouragement and involvement in TDM programs and strategies

Park-and-Ride Facilities

Except for a potential station at The Falls (SW 136th Street), all of the potential park-and-ride sites proposed to support the South Dade Busway will require purchase and development. Parking lot site may require demolition, and will need paving and grading and drainage improvements. On-site costs also include bus shelters, passenger amenities, signage and pavement marking improvements. Site development cost estimates were developed for the four sites based on parcel size and rounding of 2010 demand to accommodate expansion. The 2010 demand projections are documented in the **Park and Ride Lot Plan**. The Plan indicates there is a need for 67 spaces at SW 136th Street, 61 spaces at SW 152nd Street, 92 spaces at Hibiscus Street, 118 Spaces at Marlin Road and 171 spaces at Caribbean Boulevard. These results indicate small to medium size lots, however, providing several lots is in consideration of passenger choice, ease of access and does not create a major traffic generator which will be less offensive to nearby residential areas.

Land costs are based on assessments obtained from the Dade County Tax Assessors Office. Site development is based on \$1,800/space for vacant sites and \$2,000/space for

developed sites. Estimated costs (1992 dollars) of bus shelters, passenger amenities, signage and pavement markings for each site is provided below. Passenger amenities include two (2) bus shelters, two (2) public phones, newspaper racks, bicycle and pedestrian facilities, benches and posted bus schedules/routes. Bus shelters are estimated at \$5,000 apiece (MDTA estimate) and amenities, on-site signage and pavement markings are based on estimates from the Justification Report developed for the Kendall Area Transit Park and Ride Lots prepared by Frederic R. Harris, Inc adjusted to 1992 dollars. The estimated cost of site purchase and development is provided below:

• SW 136th St Site	Land	\$1,136,544
	Clearance, Paving, Grading & Drainage	\$272,000
	Shelters (4)	\$20,000
	Amenities, Pavement & Marking, Site Signs	<u>\$15,000</u>
	Total	\$1,443,544
• SW 152nd St Site	Land	\$60,000
	Clearance, Paving, Grading & Drainage	\$100,000
	Shelters (4)	\$20,000
	Amenities, Pavement & Marking, Site Signs	<u>\$6,500</u>
	Total	\$220,500
• Hibiscus St Site	Land	\$38,300
	Clearance, Paving, Grading & Drainage	\$222,000
	Shelters (4)	\$20,000
	Amenities, Pavement & Marking, Site Signs	<u>\$13,000</u>
	Total	\$293,300
• Marlin Rd Site	Land	\$624,890
	Clearance, Paving, Grading & Drainage	\$144,000
	Shelters (4)	\$20,000
	Amenities, Pavement & Marking, Site Signs	<u>\$9,000</u>
	Total	\$797,890
• Caribbean Bd	Land	\$905,560
	Clearance, Paving, Grading & Drainage	\$144,000
	Shelters (4)	\$30,000
	Amenities, Pavement & Marking, Site Signs	<u>\$9,000</u>
	Total	\$1,088,560
TOTAL COSTS ALL SITES		\$3,843,794

Conceptual design plans for the SW 136th Street, SW 152nd Street, Hibiscus Road and Marlin Road lots are provided on Figures 8, 9, 10 and 11. A second option for the SW 136th Street site has also been shown on Figure 8b.

No conceptual design has been provided for the Caribbean Boulevard lot because one has already been developed by the Department of Transportation as part of the South Dade Busway project. Note, the cost analysis in this report is based on a lot to accomodate 171 vehicles, not the lot designed for the Department.

Security

Lot security is a critical element to the success of this proposal. A conceptual plan to provide a secure facility attractive to the commuter includes the installation of gates and a video system at each of the four sites for which cost estimates are being developed and the leasing of roving security services for the lots. Signage indicating security and video are in use will also be provided. An automatic gate system would be provided at all access points where vehicles would have to stop before entering or exiting the lot. Strategically placed video cameras would tape the vehicle, passenger and license plate. Additional cameras would be placed to obtain an overall view of the lots. The lots would also be protected by a roving security officer from 6:00AM to 8:00PM. The officer would travel on the busway between the lots and inspect each site throughout the day. Estimated costs are based on current use of gates and cameras per information provided by the MDTA Revenue Office and current Security leases per information provided by the MDTA Budget and Grants Office. The cost of implementing the video system and the annual cost of providing the security officer is shown below.

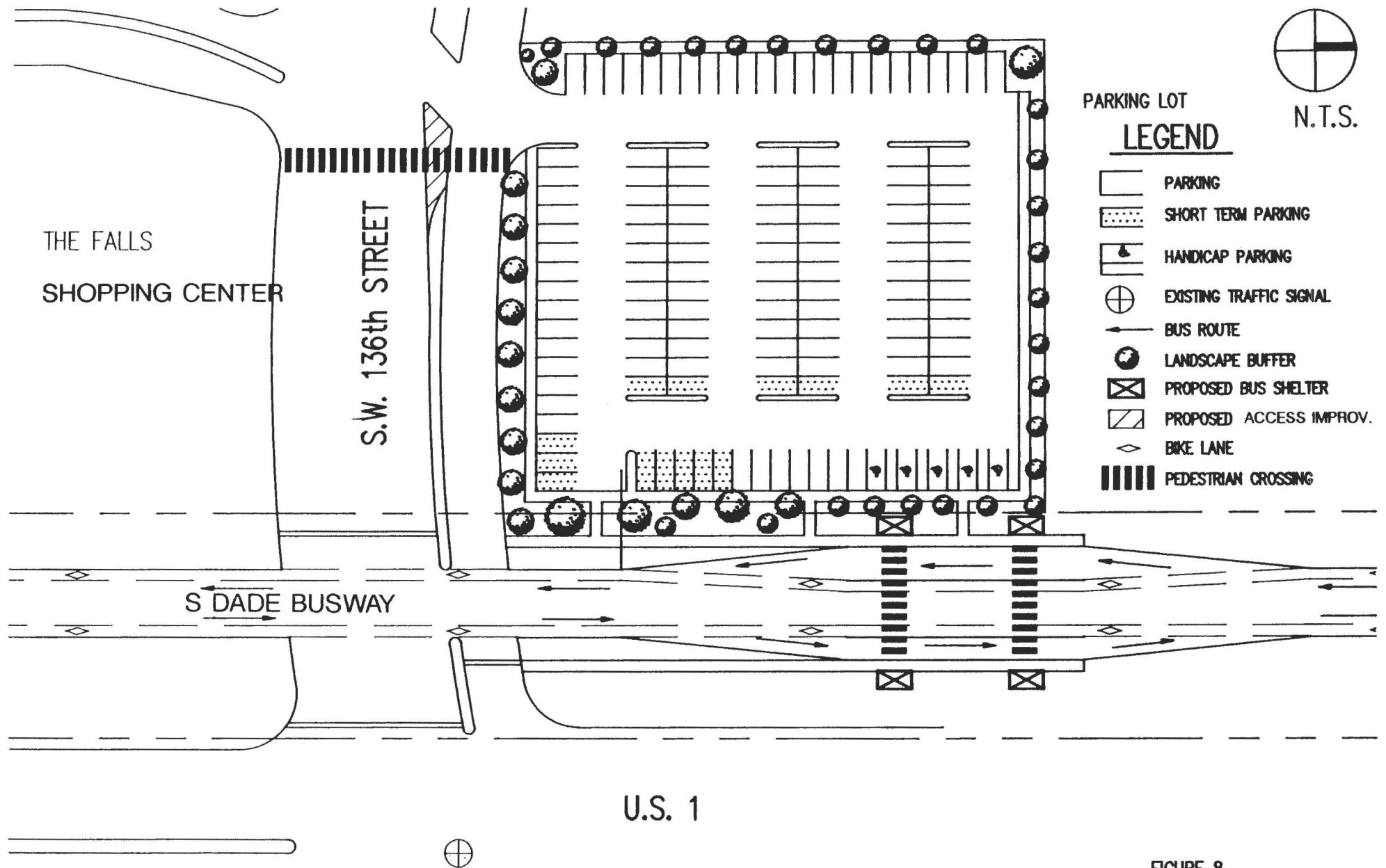
Video Cameras (4/lot)	\$800/ each	\$12,800
Weatherization (per camera)	\$1,000/ camera	\$16,000
VCR (1/lot)	\$1,100/ each	\$4,400
Quad Monitor (1/lot)	\$1,000/ each	\$4,000
Security Officer: Annual Lease w/Vehicle		
Mon–Fri 6AM to 8PM	\$61,000 /year	\$61,000
Total Security System:		\$98,200

Transit Service

The proposed park and ride lot system would utilize existing transit rerouted for the South Dade Busway. The **Design Traffic Study for the South Dade Busway PD&E Study** indicates sufficient capacity for transit users. There are no costs associated with additional transit service.

Traffic Operations Improvements

No corridor traffic operations analyses are required for this proposal. The park and ride lots will be used to support the South Dade Busway which is a capital intensive improvement not associated with corridor traffic. Busway design should provide plans for bus movements at cross streets. This type of analysis is beyond the scope of this study. Traffic operations improvements reviewed in this analysis include commuter access and signage improvements for the lots only.



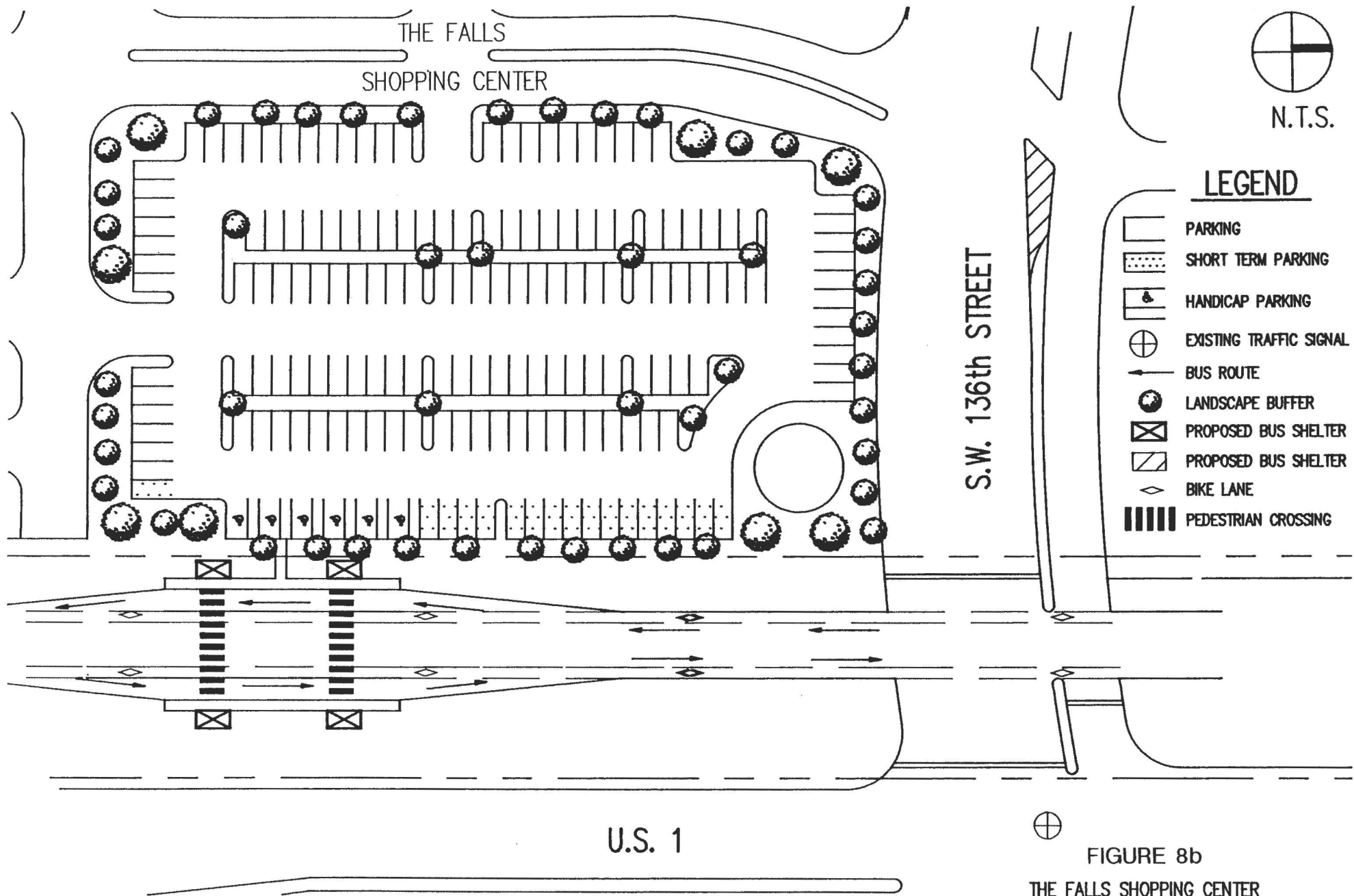
TABULATION

TOTAL PARKING= 136 SPACES
 HANDICAP PARKING= 5 SPACES
 SHORT TERM PARKING= 14 SPACES

FIGURE 8

SW 136th ST SITE
 CONCEPTUAL DESIGN

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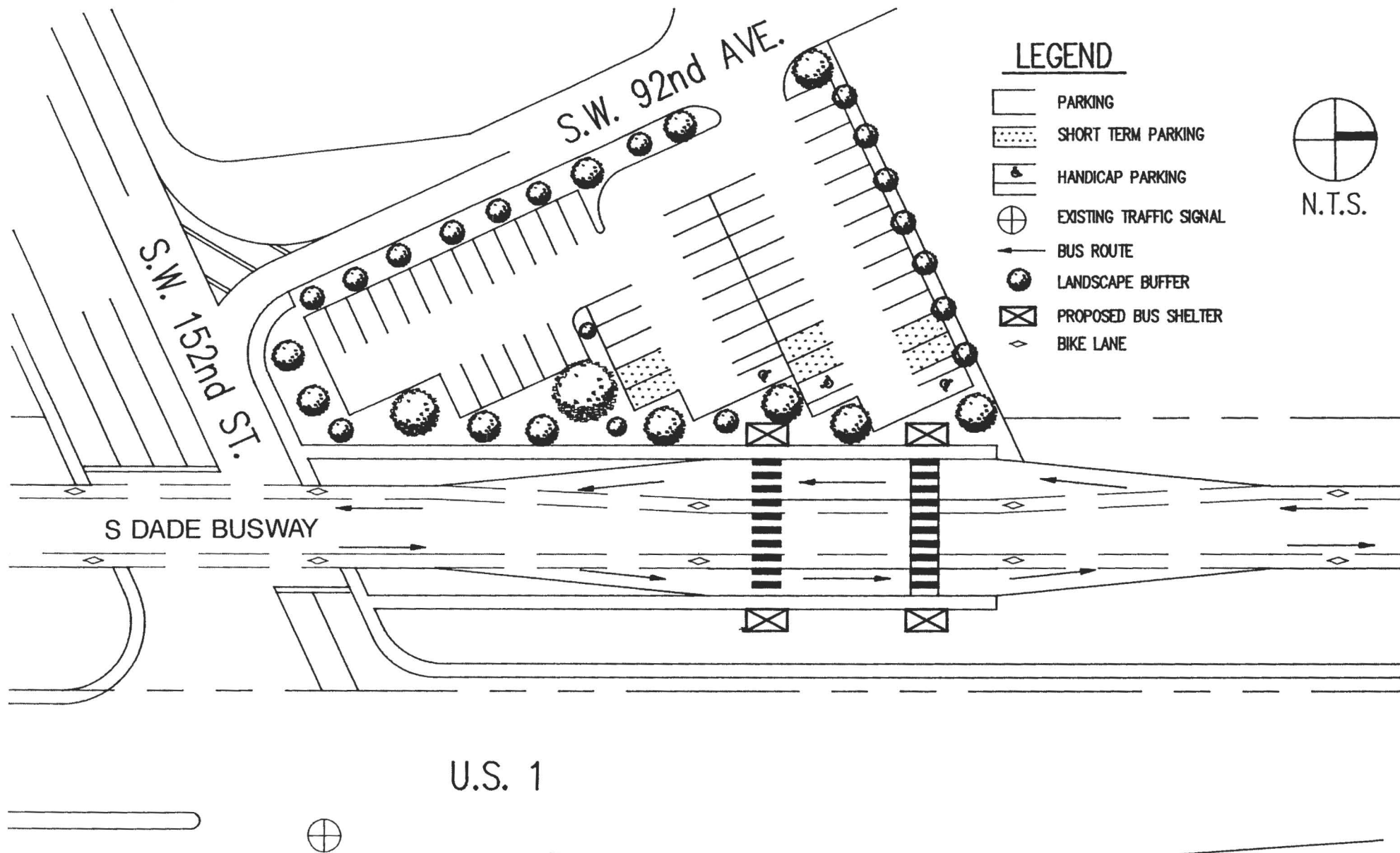


TABULATION

TOTAL PARKING= 169 SPACES
 HANDICAP PARKING= 6 SPACES
 SHORT TERM PARKING= 17 SPACES

FIGURE 8b
 THE FALLS SHOPPING CENTER
 CONCEPTUAL DESIGN

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TABULATION

TOTAL PARKING=	56 SPACES
HANDICAP PARKING=	3 SPACES
SHORT TERM PARKING=	6 SPACES

FIGURE 9
SW 152nd ST SITE
CONCEPTUAL DESIGN

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N.T.S.

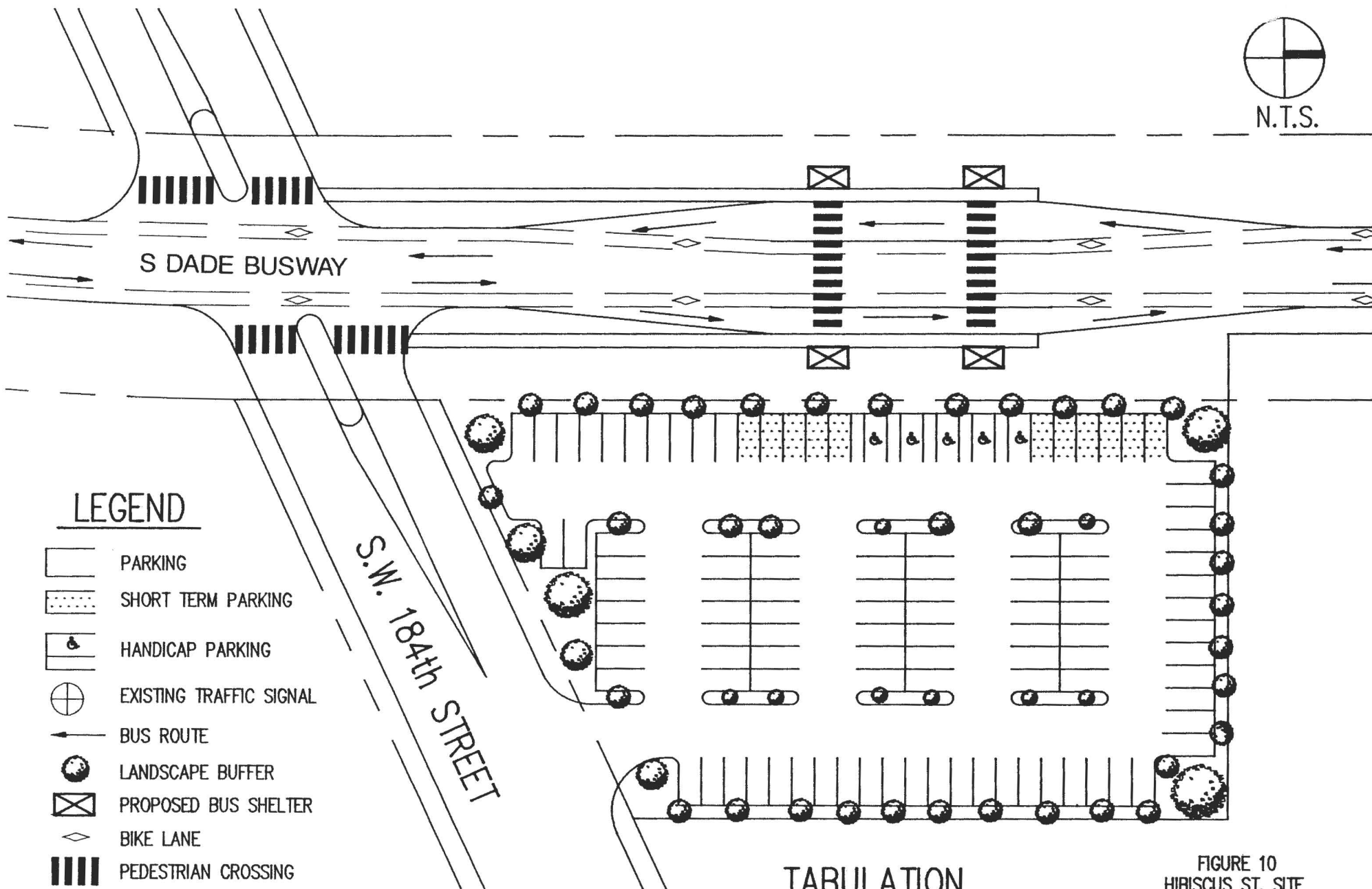
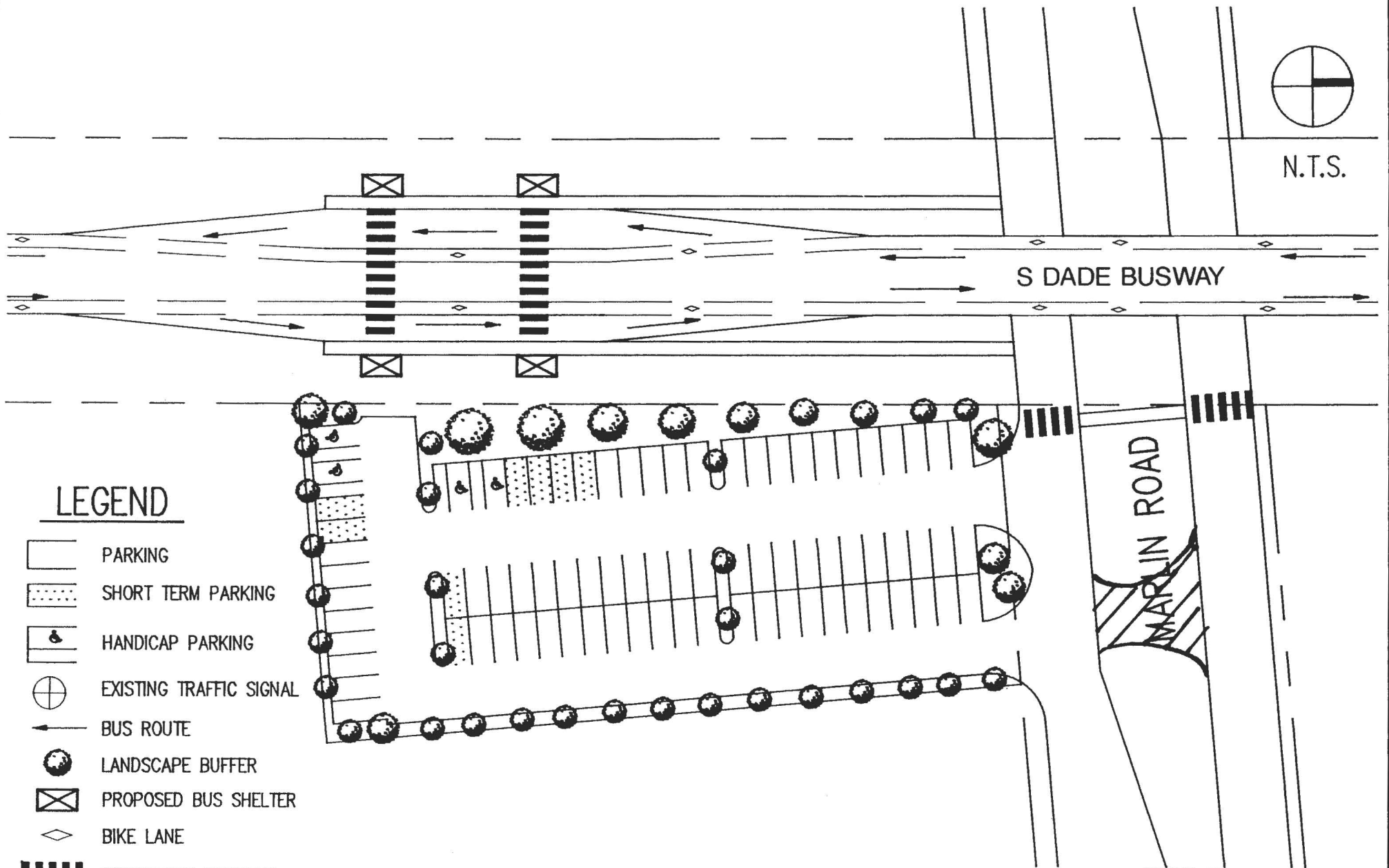












FIGURE 10
HIBISCUS ST. SITE
CONCEPTUAL DESIGN

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LEGEND

-  PARKING
-  SHORT TERM PARKING
-  HANDICAP PARKING
-  EXISTING TRAFFIC SIGNAL
-  BUS ROUTE
-  LANDSCAPE BUFFER
-  PROPOSED BUS SHELTER
-  BIKE LANE
-  PEDESTRIAN CROSSING
-  PROPOSED ACCESS IMPROV.

TABULATION

TOTAL PARKING= 80 SPACES
 HANDICAP PARKING= 4 SPACES
 SHORT TERM PARKING= 8 SPACES

FIGURE 11
 MARLIN ROAD SITE
 CONCEPTUAL DESIGN

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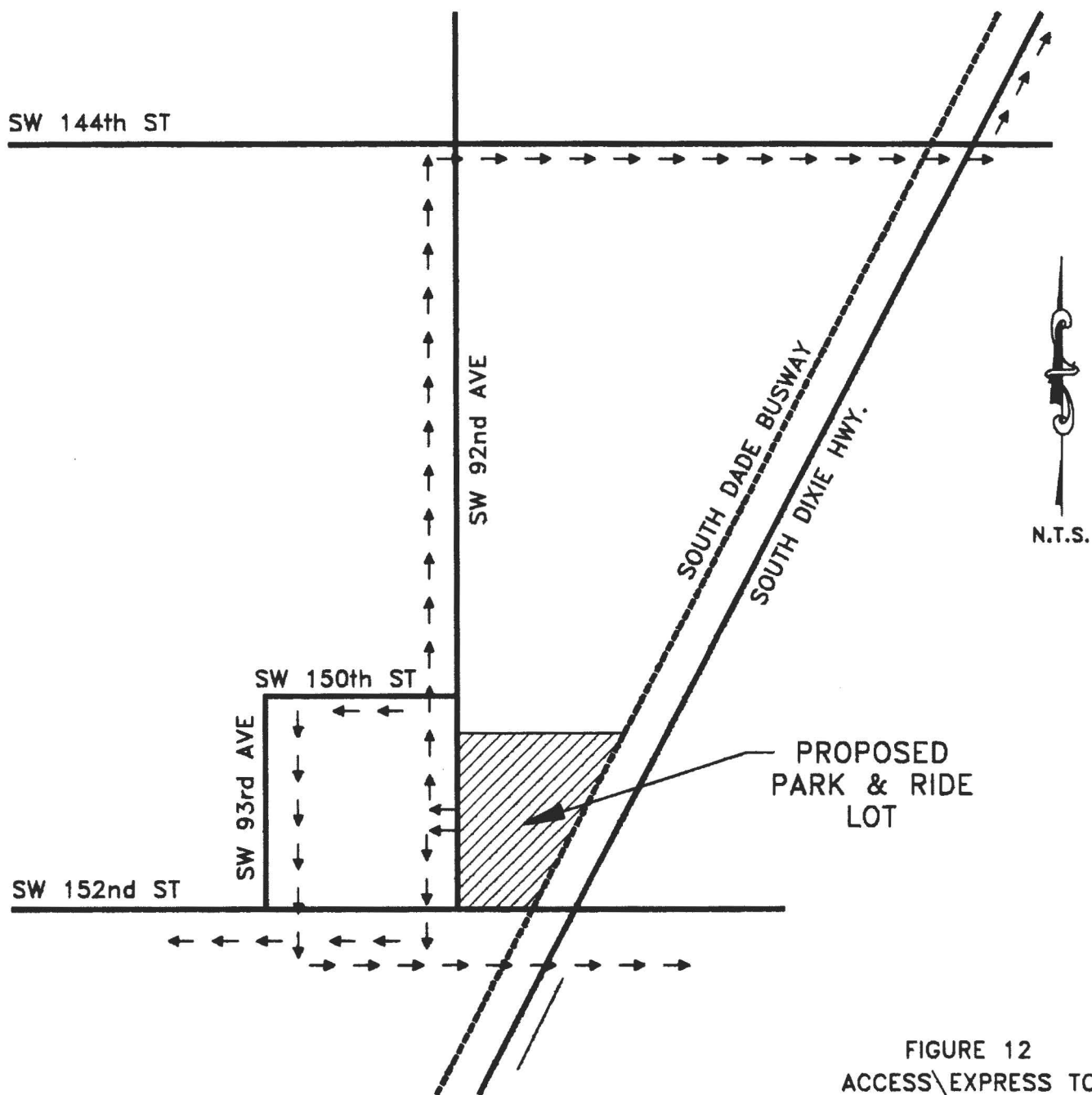


FIGURE 12
ACCESS/EXPRESS TO
THE SW 152nd ST.
LOCATION

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Access improvements were reviewed at each of the sites. Commuter access to the proposed SW 136th Street site will be via SW 136th Street or the traffic signal at SW 136th Street/US 1. Channelization improvements will be needed to allow for vehicles to exit the site and turn left as shown on Figure 8. Estimated cost is \$10,000. Access to the proposed SW 152nd Street site poses problems for traffic wishing to access US 1. The southbound left turning movement is prohibited restricting egress to Figure 9. It is recommended additional signage be provided to direct traffic to US 1 per Figure 12. Additional signage is estimated to cost approximately \$1,950.

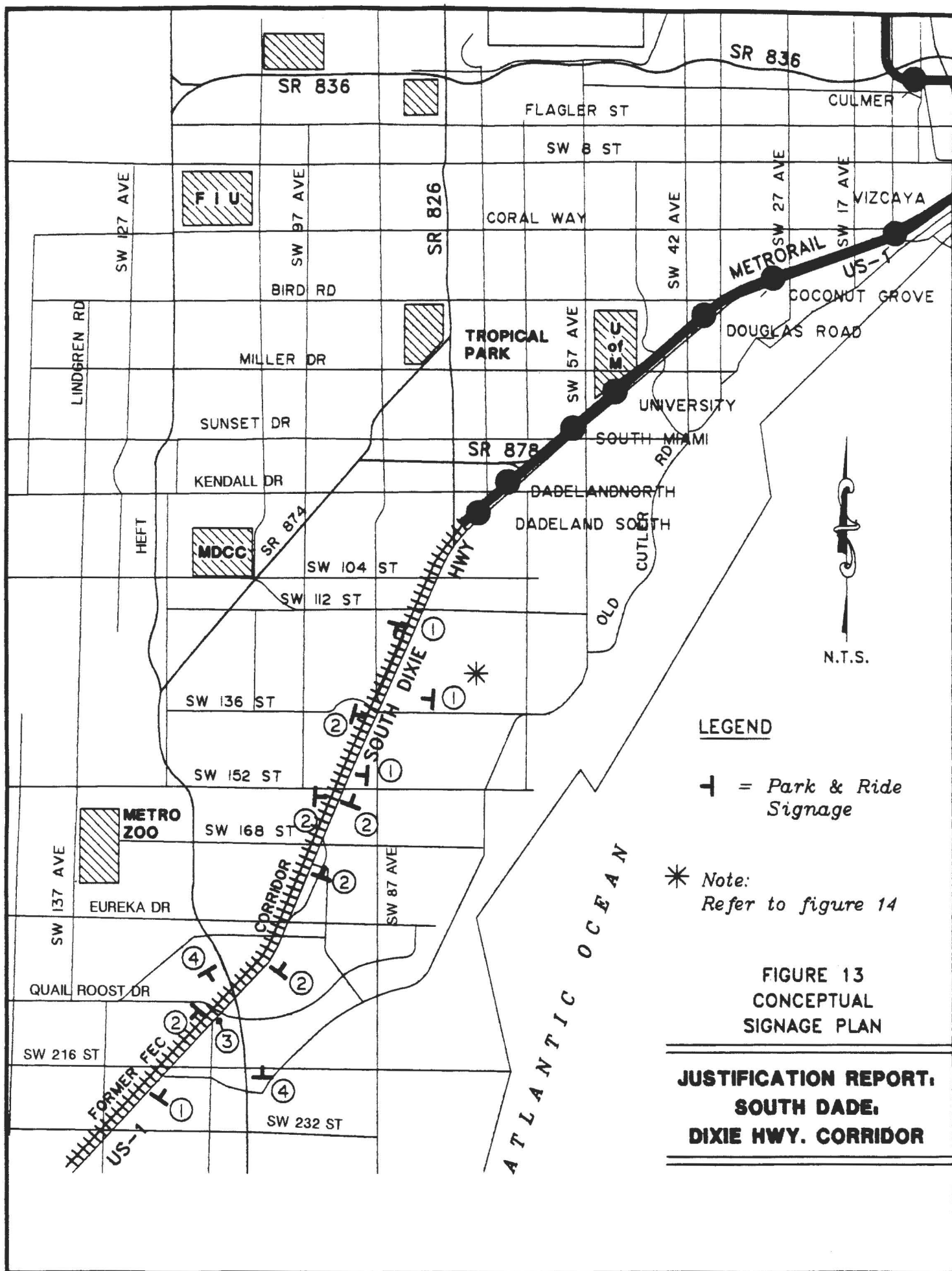
At the proposed Marlin Road site there is currently a median opening with the potential to provide access to the proposed park and ride lot, however, the opening is within the South Dade Busway right of way approximately 40' east of the existing railroad tracks. It is recommended the existing opening be moved to the eastern boundary of the site at an estimated cost of \$10,000. Figure 11 shows the proposed improvement. No access improvements are needed for the proposed Hibiscus Road site.

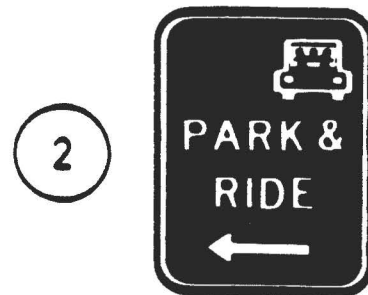
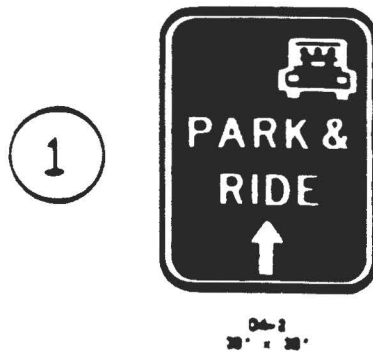
Signage improvements for the park and ride lots should be incorporated with the South Dade Busway signage plan. This report provides a proposed signage plan indicating the location of park-and-ride facilities and amenities. Figure 13 and 14 provide a conceptual corridor signage plan and index. The cost of this plan is estimated at \$5,000.

Congestion Management Plan

Dade County is currently funding a **Transportation Management and Congestion Mitigation Study** to develop a countywide Congestion Management Plan (CMP). A number of recommended approaches to congestion management are now being studied including specific applications relating to park and ride facilities. The **Congestion Management Plan Background Report** prepared by Barton-Aschman Associates, Inc. provides a number of Transportation Demand Management (TDM) tools that have the potential of encouraging direct use of park and ride lots or indirect use of the lots as staging areas. The recommended TDM measures include:

- Carpool Programs
- Subsidized or Reduced Transit Costs
- Vanpool Programs in associate with Transportation Management Areas
- Increased Park and Ride Lot Use
- Flextime
- Employee Paid Parking
- Employee Travel Allowances
- Congestion Pricing
- Subscription Bus Service
- Telecommuting
- Incorporate TDM as DIC Alternative
- Negotiated TDM Developer Agreements
- Mixed Use Developments
- Parking Supply Limitations
- Pedestrian Amenities at Suburban Centers
- Bicycle Facilities and Parking





1,2 & 3 SIGNAGE PROVIDED BY MUTCD.
SHOULD BE REVISED TO INICATE MULTIMODAL
PROVISIONS RATHER THAN CARPOOL ONLY.

FIGURE 14
CONCEPTUAL SIGNAGE
PLAN INDEX

**JUSTIFICATION REPORT,
SOUTH DADE,
DIXIE HWY. CORRIDOR**

In addition to these TDM measures, the CMP also recommends required complimentary actions for TDM's that will be beneficial to the success of the proposed park and ride lot system. Marketing of the TDM's is currently funded by the Department through the services of Gold Coast Commuter Services (GCCS). GCCS has developed a marketing scheme for general multi-modal commuting through the use of the "Joe the Chameleon" advertising campaign. This program should be utilized to market the proposed South Dade Busway park and ride system. A sample of the advertising campaign is provided on Exhibit A. Other complimentary actions include the designation of Transportation Coordinators to implement and administer TDM's, the development of Transportation Management Areas and Trip Reduction Ordinances.

All of the CMP actions, recommendations and programs should be utilized to the fullest in the implementation and operation of the proposed system. The programs are a no cost item to this project.

Facilitating the access of transit at park and ride location by pedestrians and bicyclists. To accomplish this, the accessibility of each station's location and design must be carefully considered. Insuring the safety and accessibility of pedestrian and cyclists may require the improvement of facilities both within and near to park and ride lots. The minimum warrants specified in Section 4c of the Manual on Uniform Traffic Control Devices should be used to guide the placement of pedestrian markings and controls. Secure bicycle parking should be provided through the installation of permanently installed racks (preferably covered) or lockers. Five percent of the automobile parking capacity should be provided in bicycle parking units.

All lots will be developed to meet the requirements of the Americans with Disabilities Act.

Benefit Analysis

A revised analysis of benefits was performed based on the combined impact of the four proposed lot locations. Where the Dade County Park and Ride Lot Plan assessed all of the lots on individual merit, this analysis combines the impacts of the SW 136th Street, SW 152nd Street, Hibiscus Street, and Marlin Road Location Areas. Figure 15 shows the peak hour traffic removed from the system during one hour of the AM peak period.

An analysis of impacts was performed for 1997 based on the volumes shown on Figure 15 and 1997 traffic conditions. The results indicate the proposal would:

Reduce Annual Vehicle Miles of Travel by:	1,440,000 miles
Reduce Annual Fuel Consumption by:	48,436 gallons
Reduce Annual Carbon Monoxide Emissions by:	62,920 pounds
Reduce Annual Hydrocarbon Emissions by:	1,480 pounds
Reduce Annual Vehicle Hours of Travel by:	166,730 hours
Reduce Annual Person Hours of Travel by;	160,895 hours

Benefits were also assessed based on financial concerns following the procedures provided in the FDOT Park and Ride Lot manual and the dade County Park and Ride Lot Plan the results indicate a systemwide annual benefit of \$10,160,000. A breakdown

EXHIBIT A



Gold Coast
Commuter Services

6261 N.W. 6th Way, Suite 100
Fort Lauderdale, FL 33309

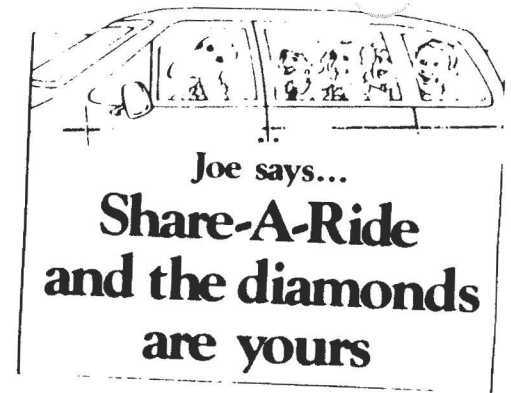
Broward: 525-RIDE

Dade/Palm Beach: 1-800-234-RIDE

Fax: (305) 776-7592



TURN OVER A NEW LEAF
with **FREE** transportation planning.



Let Joe Chameleon
show you how to
TURN OVER
A NEW LEAF
with **FREE**
transportation planning.



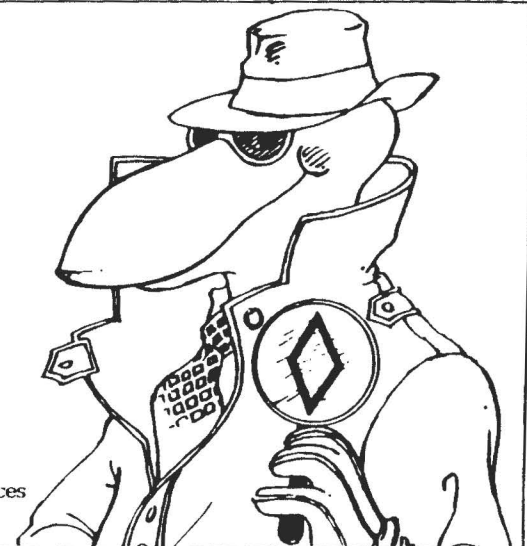
Joe says...

**Share-A-Ride and the
diamonds are yours**

1-800-234-RIDE



Gold Coast
Commuter Services



of the benefits includes:

Annual Travel Time Savings	\$1,287,000
Annual Vehicle Operating Costs	\$576,000
Annual Accident Savings	\$8,477,600
less: Annual User Increased Transit Cost	\$200,000
TOTAL BENEFIT	\$10,140,000

Note, the Benefit analysis and Figure 15 do not incorporate the impacts of the Caribbean Boulevard Lot. This is necessary to make a comparison to the costs estimates provided in this document.

A summary of all costs described in this report is provided below. Additional costs for preliminary engineering and site maintenance are also provided.

Land Cost	\$1,859,734
Site Development	\$895,500
Preliminary Eng	\$180,000
Site Maintenance	\$23,000 (Annual)
Security (Capital: Video)	\$37,200
Security Annual Lease	\$61,000 (Annual)
Access Improvements	\$21,950
Preliminary Eng: Access	\$8,000
Off-Site Signage	\$5,000
TOTAL STARTUP COST	\$3,091,384
ANNUAL COSTS	\$84,000

Based on a 20 year life span, 7% discount rate and residual value on the land, the Benefit/Cost Ratio is 29.91.

Revenues

Revenues include farebox revenue expanded ridership on the Biscayne MAX and additional transfers at the Omni Metromover Station. additional revenue will equal approximately \$200,000 annually. No income is assumed for parking at the Park & Ride lots, from advertising or concessions.

BROWARD CO.
DADE CO.

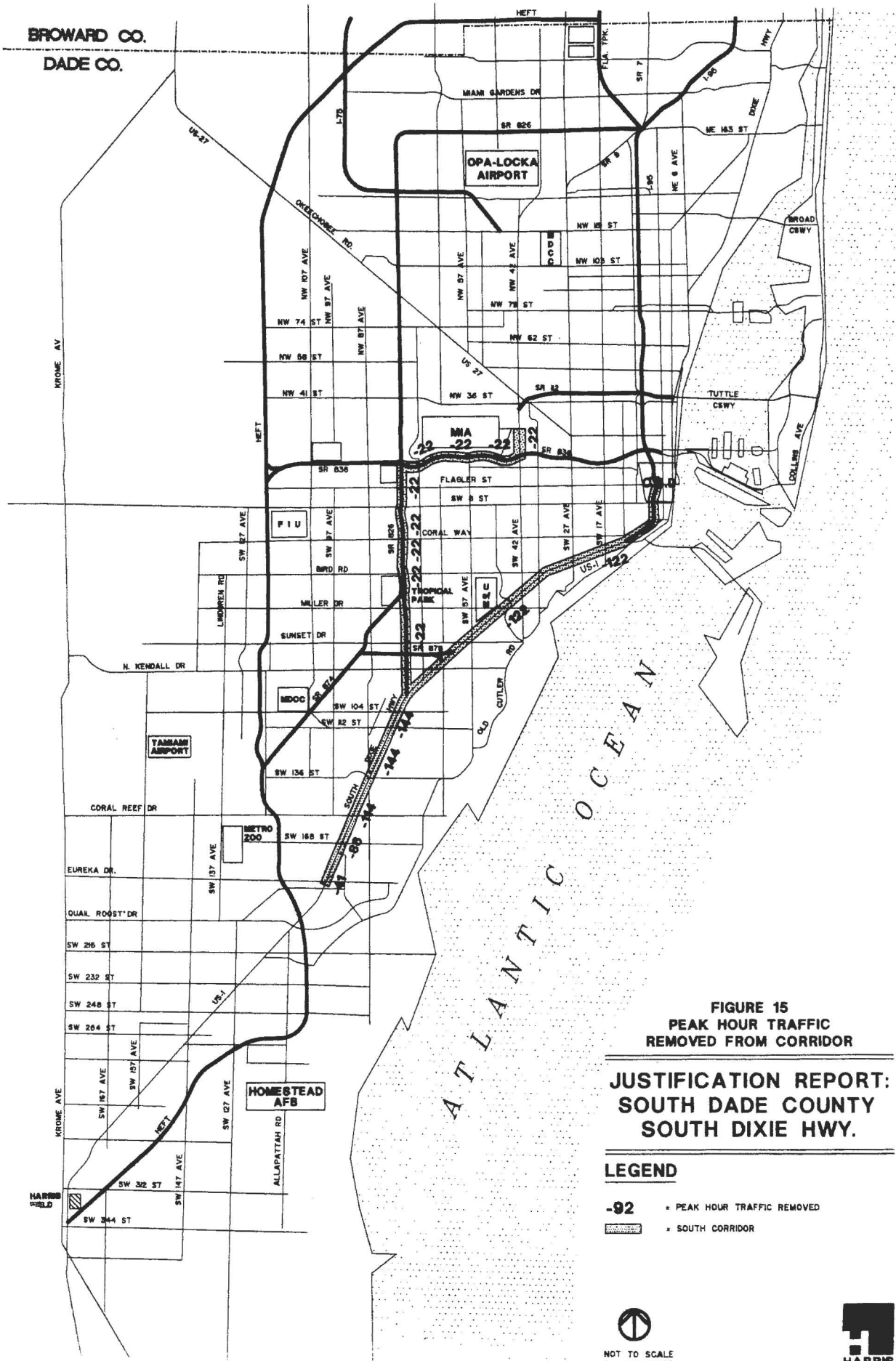


FIGURE 15
PEAK HOUR TRAFFIC
REMOVED FROM CORRIDOR

JUSTIFICATION REPORT: SOUTH DADE COUNTY SOUTH DIXIE HWY.

LEGEND

- 92 * PEAK HOUR TRAFFIC REMOVED
- SHADING * SOUTH CORRIDOR

NOT TO SCALE
DATE: 2/06/93



Implementation

The implementation schedule generally includes three time frames.

- Pre-start activities
- Construction activities
- Post-start activities

Pre-start activities include coordination with landowners to negotiate a sale, final design of park-and-ride facilities; construction of traffic operations improvements; and marketing surveys and promotion. Negotiation over land costs should include a review with respect to Hurricane damage and reassessed values. It is recommended the Department use in-house resources to provide the necessary services required to negotiate an agreement with the landowners. Additional functions would include appraisals of recommended park-and-ride sites, assistance during negotiations and/or litigation, and assistance during selection of alternate sites if the recommended sites are substantially higher than the estimates documented in this report.

The Department should discuss with Gold Coast Commuter Services promotion of the facilities. The development of brochures, surveys, signs, and radio advertisement spots. Door hangers (i.e. brochures and surveys) would be distributed to communities within the service area. Marketing and promotion should also be assisted by MDTA.

Construction activities include development of park-and-ride facilities and site improvements. It is assumed that all permit approvals and plan reviews would have been obtained during the design or bid procurement phase.

Post-start activities include a continuance of the marketing campaign; monitoring of busway ridership; detection and resolution of problems; monitoring of the project's success; and planning of future expansion improvements.

Marketing

An active marketing campaign would need to continue for a minimum of 1-2 months after project start-up in order to maximize public awareness of the project. It is anticipated that subsequent to the initial marketing period, the best method of promotion would be through "word of mouth". Therefore, it is critical that performance standards be high and reliability be maintained – particularly during the formative stages of the project. Follow-up telephone and on-board surveys should be conducted to assess the project's success and to determine how the service could be improved or expanded. Continued marketing should be included as part of the GCCS services.

Monitoring of Lot Usage

A continuing monitoring of busway lot usage should be instituted with results summarized in a monthly report. The monthly report should be inclusive of the following information:

- Summary of project Status
- Bus Ridership Levels
- Vanpool Ridership Levels
- Park-and-Ride Facility Usage
- Problem Identification and Proposed Methods to Resolve Such Problems
- Schedule Adherence and Reliability
- Minutes of Meetings
- Cash flow Assessment

IV. SUMMARY

The results of the Justification Report indicate the proposed park and Ride Lot system to support the South Dade Busway project is a feasible Transportation Demand Management program. The analysis indicates the system will add as many as 90,000 new transit riders by 1997 and 118,000 by 2010. Note, these figures are based on the development of a Park and Ride Lot system and TDM measures and do not include the extension of the busway to Homestead or extended Metrorail service.

The lots would be developed for commuter vehicle access only with pedestrian access to the Busway. The sites and bus stops should be attractive and will be accessed through entrance gates with video cameras recording access and lot activity. Access improvements will be required at the NW 136th Street, NW 152nd Street and Marlin Road sites.

An analysis of site costs indicates the project could be developed for approximately \$3,100,000 with annual maintenance costs of \$35,000 and security costs of \$61,000. Based on these results the project should move forward to the programming and implementation stages.

Note, there has been an indication the proposed SW 152nd Street location may be part of an environmentally sensitive site. If further investigation confirms this, the parking space requirements should be absorbed by the lots proposed north and south of the lot.

