

- Original -
Do Not Take

Florida Department of Transportation

ENVIRONMENTAL DETERMINATION

FOR

Hillsborough Avenue (SR 580/600)

Eisenhower Blvd. (SR 589)

to

Nebraska Avenue (US 41/SR 45)

6. IMPACT EVALUATION

| Topical Categories | Sign | Min | None | No Inv | REMARKS |
|---|------|-----|------|--------|---|
| A. SOCIAL IMPACTS | | | | | |
| 1. Land Use Changes | [] | [X] | [] | [] | See Attachment A-1 |
| 2. Community Cohesion | [] | [X] | [] | [] | " " A-2 |
| 3. Relocation Potential | [] | [X] | [] | [] | " " A-3 |
| 4. Churches and Schools | [] | [X] | [] | [] | " " A-4 |
| 5. Title VI Considerations | [] | [] | [X] | [] | " " A-5 |
| 6. Controversy Potential | [] | [X] | [] | [] | " " A-6 |
| 7. Energy | [] | [] | [] | [X] | |
| B. CULTURAL IMPACTS | | | | | |
| 1. Section 4(f) lands | [] | [] | [X] | [] | See Attachment B-1 |
| 2. Historic Sites/District | [] | [X] | [] | [] | " " B-2 |
| 3. Archeological Sites | [] | [] | [X] | [] | Letters from SHPO dated 5/16/88 & 6/29/88 |
| 4. Recreation Areas | [] | [] | [X] | [] | See Attachment B-1 |
| C. NATURAL ENVIRONMENT | | | | | |
| 1. Wetlands | [] | [X] | [] | [] | See Attachment C-1 |
| 2. Aquatic Preserves | [] | [] | [] | [X] | |
| 3. Water Quality | [] | [X] | [] | [] | See Attachment C-3 |
| 4. Outstanding Fla. Waters | [] | [] | [] | [X] | |
| 5. Hazardous Mat. Sites | [] | [X] | [] | [] | See Attachment C-5 |
| 6. Wild/Scenic Rivers | [] | [] | [] | [X] | |
| 7. Floodplains | [] | [] | [X] | [] | See Attachment C-7 |
| 8. Coastal Zone Consistency | [] | [] | [X] | [] | Consistent; letter dated September 15, 1984 |
| 9. Coastal Barrier Island | [] | [] | [] | [X] | |
| 10. Endang./Threat. Species | [] | [] | [X] | [] | See Attachment C-10 |
| 11. Farmlands | [] | [] | [] | [X] | |
| D. PHYSICAL IMPACTS | | | | | |
| 1. Noise | [] | [X] | [] | [] | See Attachment D-1 |
| 2. Air | [] | [X] | [] | [] | " " D-2 |
| 3. Construction | [] | [X] | [] | [] | " " D-3 |
| E. PERMITS REQUIRED | | | | | |
| FL Dept. of Environmental Regulation | | | | | |
| Southwest Florida Water Management District | | | | | |
| U.S. Army Corps of Engineers | | | | | |
| U.S. Coast Guard and Tampa Port Authority | | | | | |

7. WETLANDS FINDING: (Applies to Categorical Exclusions only)

It has been determined that the proposed project will have no significant short or long term adverse impacts to wetlands, that there is no practicable alternative to construction in wetlands, and all measures have been taken to minimize harm to wetlands. (See also Attachment C-1)

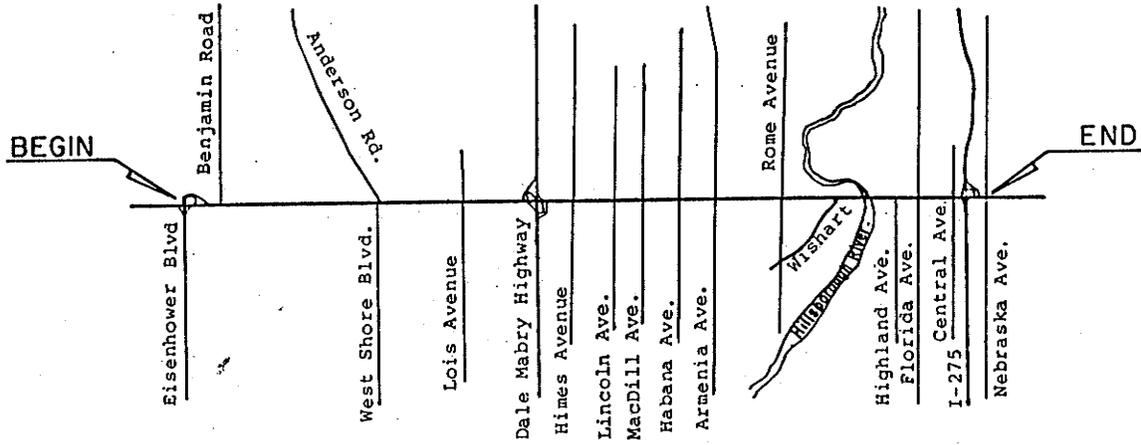
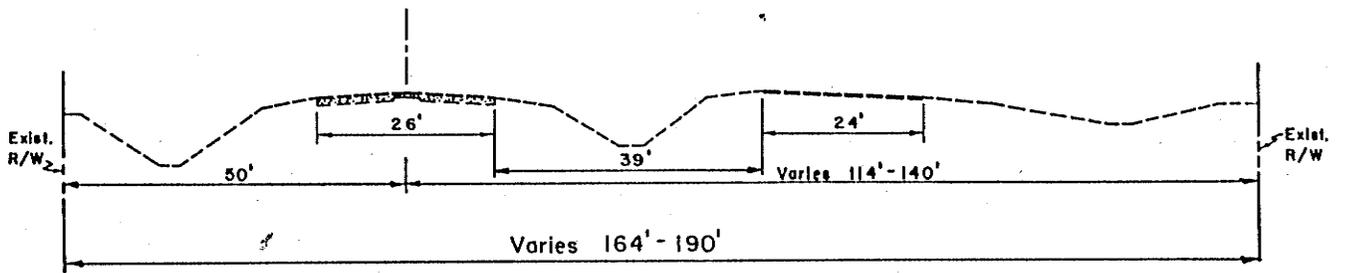


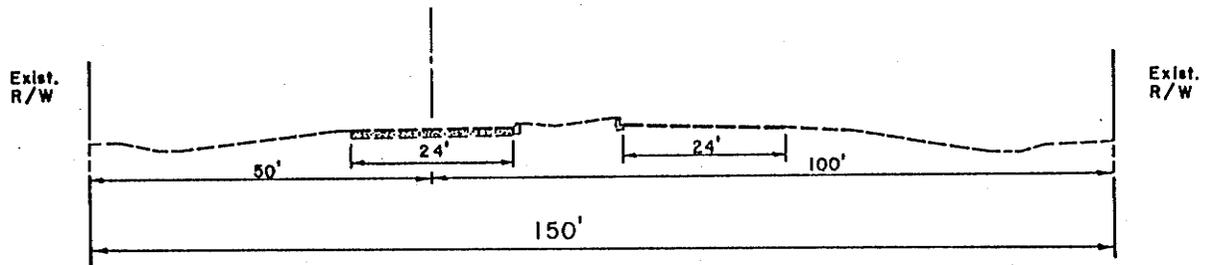
FIGURE 1 LOCATION MAP

HILLSBOROUGH AVENUE

Eisenhower Blvd. to Church St.



Himes Ave. to Lincoln Ave.



Lincoln Ave. to Aldana Dr.

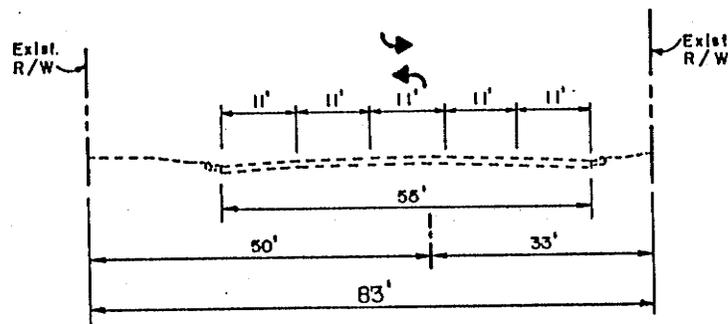
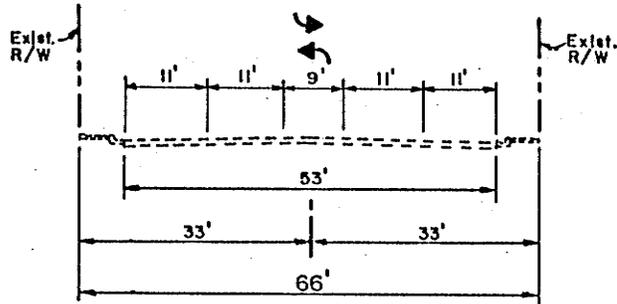
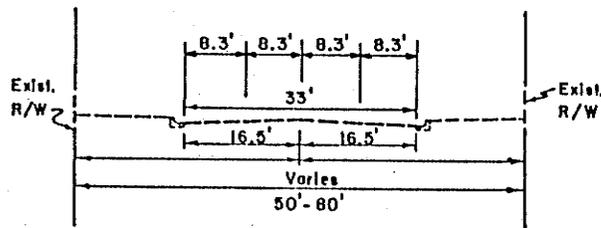


FIGURE 2 EXISTING TYPICAL SECTIONS

Aldana Dr. to Habana Ave.

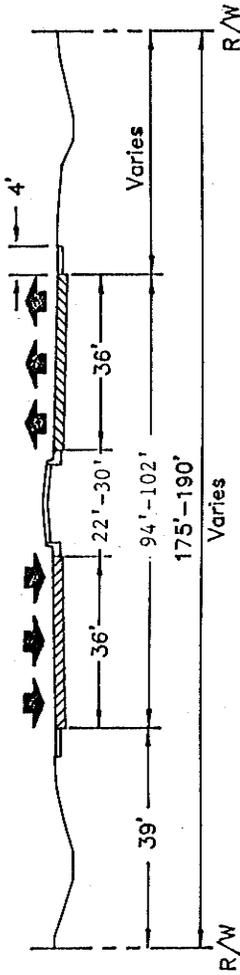


Habana Ave. to Central Ave.

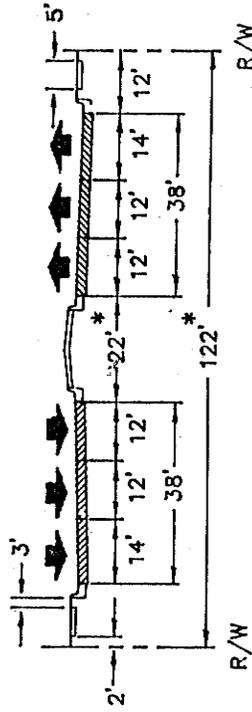


Eisenhower Blvd. to Dale Mabry Hwy.

MODIFIED 6 LANE RURAL (LOOKING EAST)

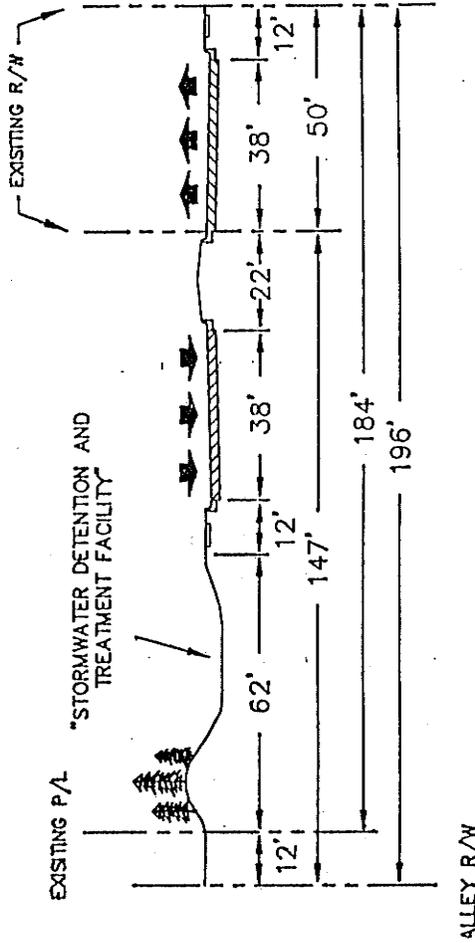


Dale Mabry to O1a Avenue
& Central Ave. to Nebraska Ave.

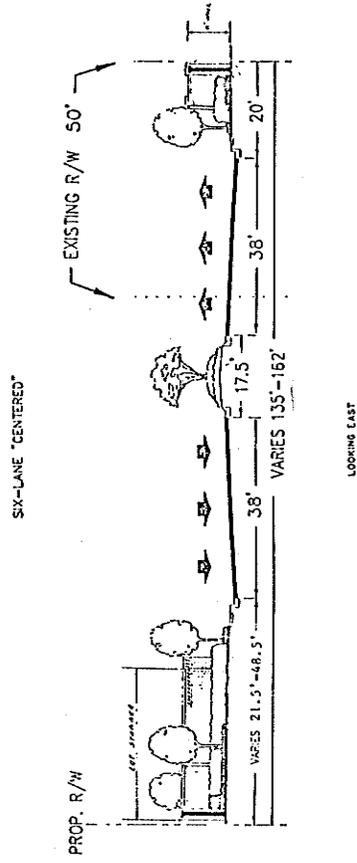


*Add 6' for dual lefts in segment between
Himes Avenue and Armenia Avenue

O1a Ave. to Florida Avenue



Florida Ave. to Central Avenue



REV. 5-01-00

FIGURE 3 - RECOMMENDED TYPICAL SECTIONS

HILLSBOROUGH AVENUE

ATTACHMENT A-1
LAND USE CHANGES

As shown in figures 1 and 2, existing land use consists of mostly public uses (airport, two parks, and three churches), numerous commercial uses, scattered undeveloped parcels, and various density residential uses; there are single family homes adjacent to Hillsborough Avenue in Wellwood and Seminole Heights.

Future land use, as documented in the amended Tampa Comprehensive Plan 2000¹ is shown in Figure 3. Future uses adjacent to Hillsborough Avenue are projected to include light industrial uses near the airport, "community commercial" (includes site-plan controlled zoning districts), medium density residential, office and retail, and low medium density residential uses.

For Subsector B-1 (Figure 3), according to the above reference¹, "The completion of improvements to the highway network must be accomplished to support recommended development. These include improvements to Hillsborough...Avenue..." as described in the Circulation and Transit Element. Commercial acreage is expected to increase substantially, especially in the eastern half of Drew Park. A large increase in industrial uses is also expected in Drew Park.

Several areas along Hillsborough Avenue are designated planned commercial, which requires site plan review and access control. Therefore, any changes in existing uses or additional commercial development can be reviewed to minimize adverse impacts on the transportation network or adjacent noncommercial areas.

For the remaining Subsectors contiguous to Hillsborough Avenue (A-2, A-3, and A-5), commercial acreage is expected to increase minimally with new development infilling existing commercial areas. The majority of development will be infilling of existing residential areas.

¹ Tampa Comprehensive Plan 2000, Land Use Element (Subsector land use plan), Prepared by the Hillsborough County City-County Planning Commission, Adopted June 8, 1984, Ordinance 8572-A. Map revised 11-4-85.

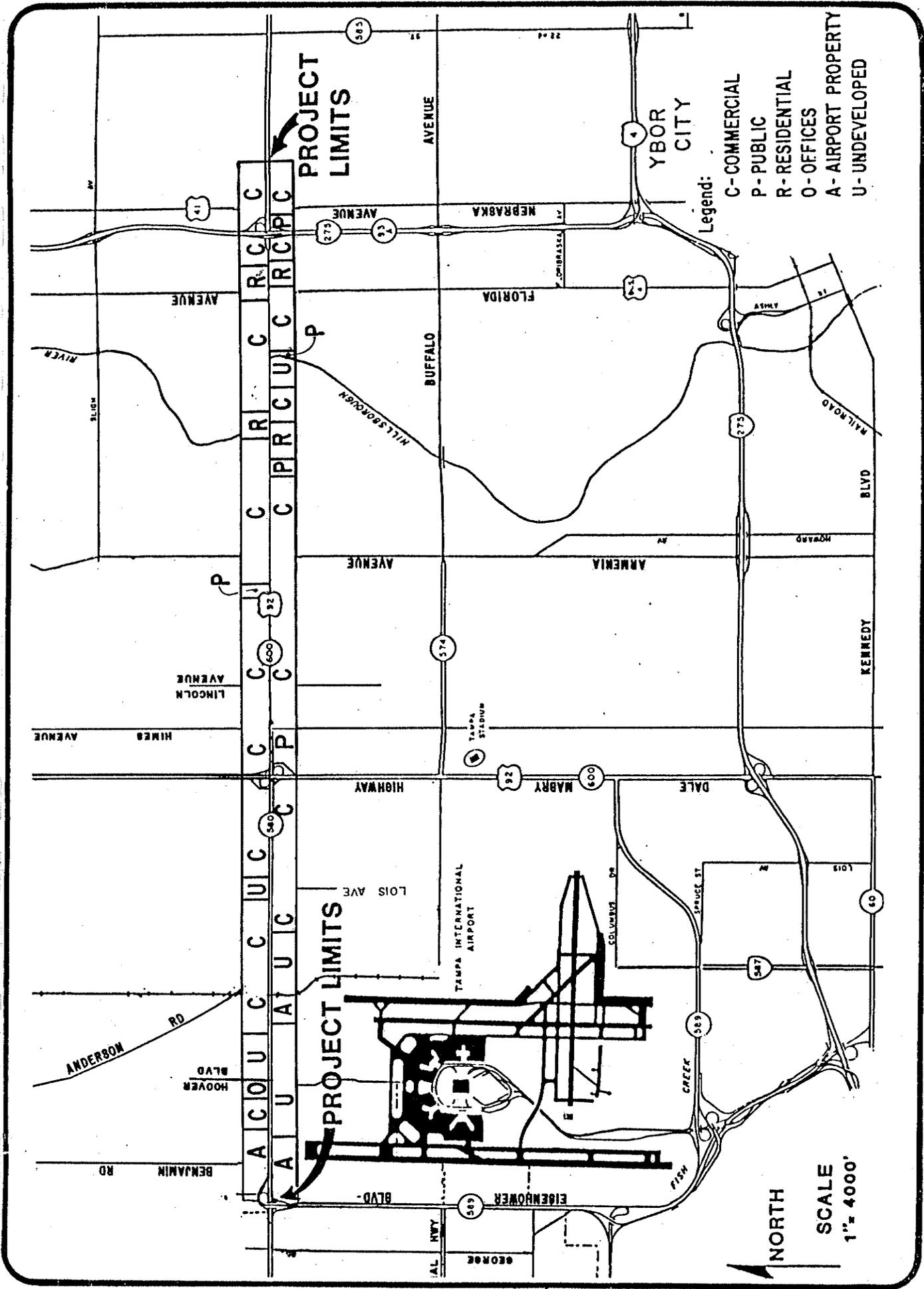
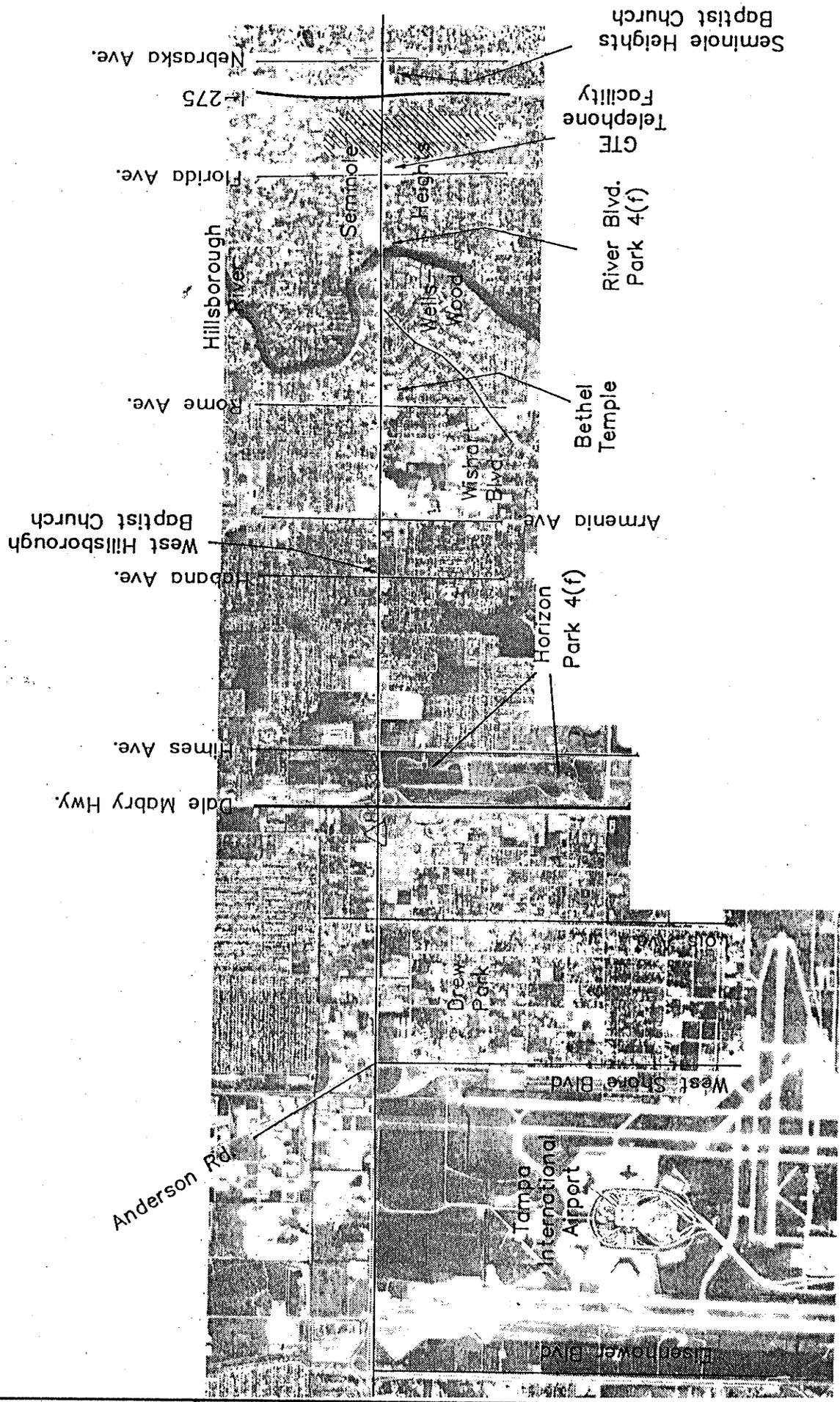


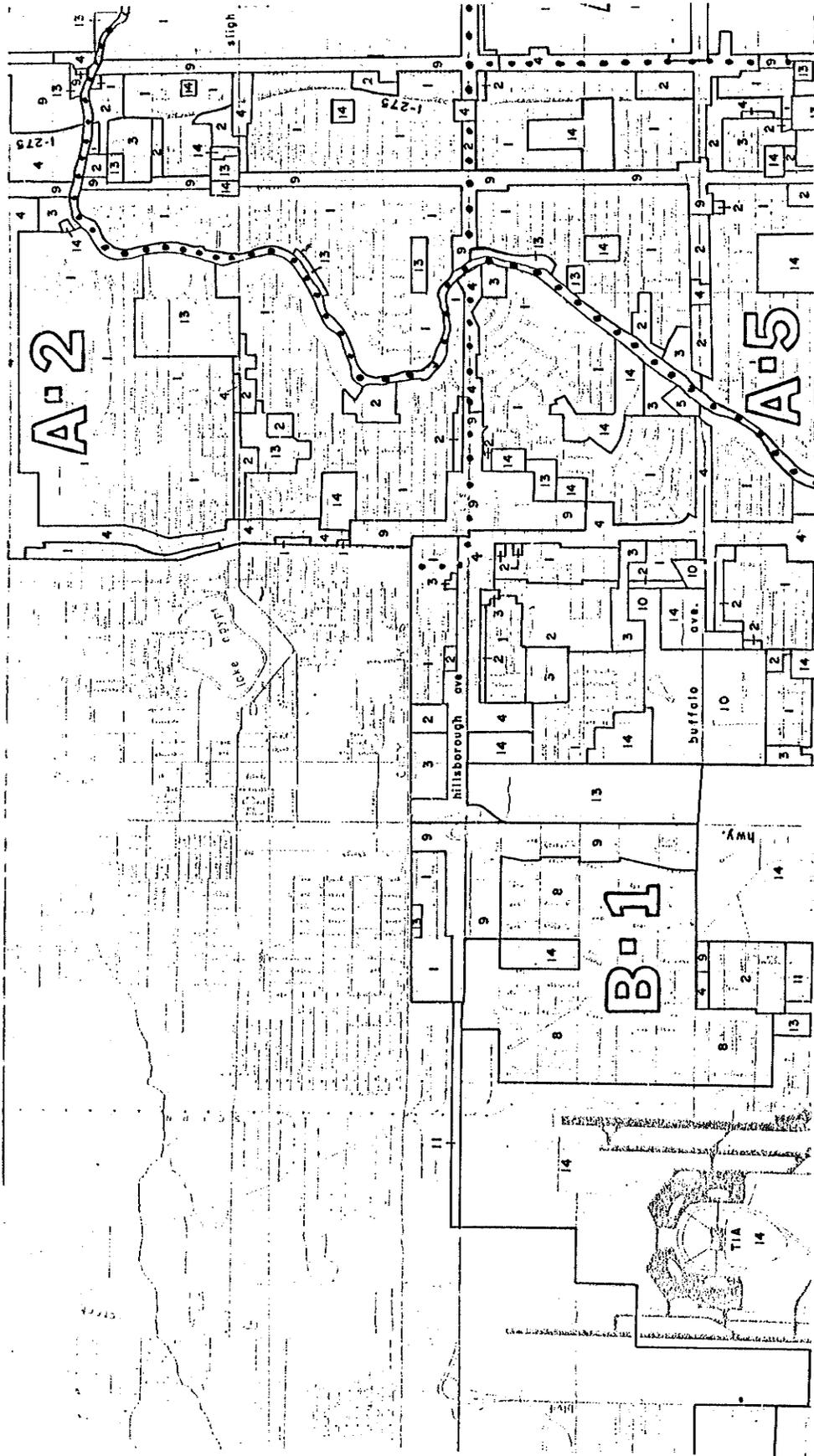
Figure 1 EXISTING LAND USE



SEMINOLE HEIGHTS
HISTORIC DISTRICT

Rev. 6/6/89

FIGURE 2 CULTURAL AND OTHER FEATURES



LEGEND

- 1 = Low Density Residential
- 2 = Low Medium Density Residential
- 3 = Medium Density Residential
- 4 = Medium Residential - Office - Retail
- 8 = Mixed Use
- 9 = Community Commercial
- 11 = Light Industrial
- 13 = Recreation/ Open Space
- 14 = Public/ Semi-Public

Source: Hillsborough County City-County Planning Commission Land Use Plan Map (Rev. 11-4-85).

FIGURE 3 - FUTURE LAND USE

For subsector A-5 (which includes Hillsborough Avenue between the Hillsborough River and Nebraska Avenue) "increased growth in other areas of the City will necessitate improvements to the transportation network ... by the year 2000", according to the City's Subsector Plan. The MPO's year 2010 transportation plan designates Hillsborough Avenue as a six-lane divided, general access arterial.

The Tampa Bay Regional Planning Council (TBRPC) reviewed the proposed project for consistency with its adopted growth policy, the Future of the Region (A Comprehensive Regional Policy Plan for the Tampa Bay Region, October, 1986) and it found the project to be consistent with its policy of giving priority to the reconstruction of existing highway facilities "to protect and maintain existing investments" (letter dated 9-24-84 to J. C. Kraft).

For areas immediately contiguous to Hillsborough Avenue, it is expected that the improved highway capacity, safety and accessibility resulting from construction of the proposed project will encourage redevelopment (infill) of some of the more marginal commercial areas. This will have positive benefits to the surrounding communities provided that proper buffers and transitional uses are required, consistent with zoning regulations and site plan requirements.

Subsequent to approval of a final alignment for construction, it is expected that the boundaries of the future land use map will be adjusted in some areas to allow for proper transitional uses (e.g. commercial/medium density residential/office/retail) between the expanded highway and adjacent residential areas. This will occur through amendments to the land use plan which is currently being updated. In some areas the land use lines may shift to allow for conversion of existing residential areas to commercial or higher-density residential uses. However, it is too early at this time to specify how many residential lots may become eligible for commercial uses.

According to the Planning Commission (based on draft language dated November 17, 1988), detailed studies will be undertaken for

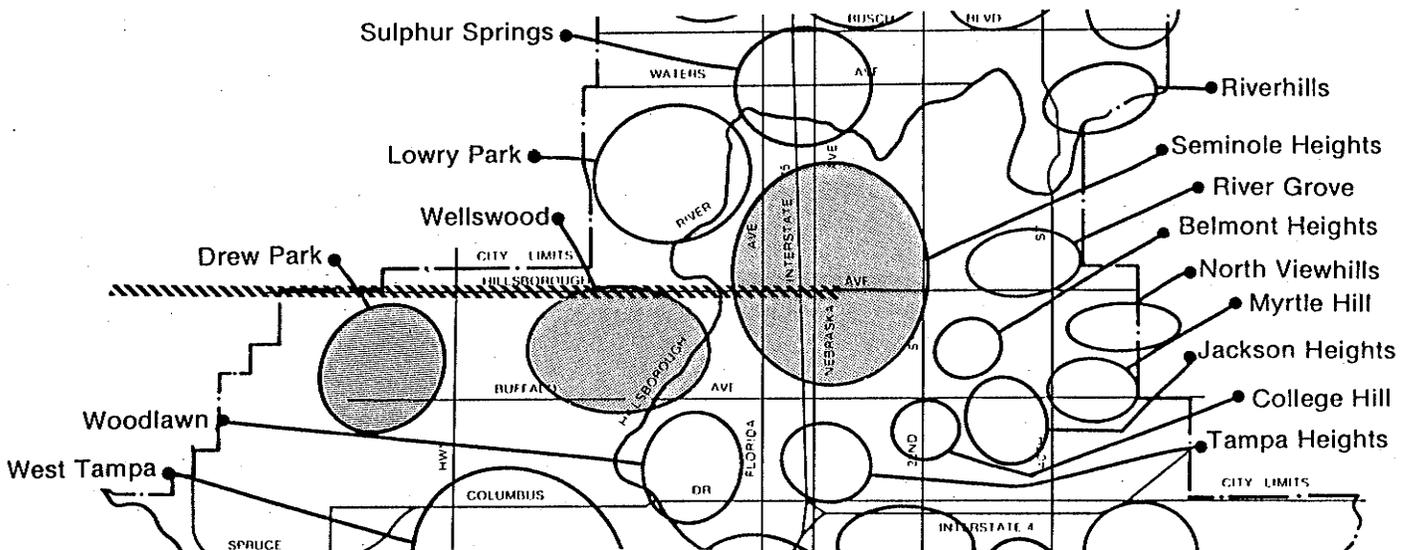
specific highway widening projects to ensure that Tampa's viable neighborhoods are protected before any land use plan lines are moved. Their recommended approach is to leave plan lines intact until such time that construction is imminent (subsequent to right-of-way acquisition). At that time, plan amendments will be considered in relation to probable impacts on surrounding land uses, particularly residential neighborhoods.

Concern has been expressed by residents of Seminole Heights that the highway expansion could encourage the development of strip commercial uses adjacent to Hillsborough Avenue between Florida and Central Avenues. This is considered unlikely to happen for the following reasons:

- o Buffer walls proposed for either side of Hillsborough Avenue are intended to help preserve the integrity of the residential character of the neighborhood.
- o The long range plan currently designates the Seminole Heights area as "low medium density residential" use; no commercial uses are proposed in this area.
- o Any commercial rezonings would be inconsistent with the long range land use plan and require City Council approval. The Seminole Heights Civic Association has a strong political influence which could effectively discourage any attempts to rezone these areas as commercial uses.

ATTACHMENT A-2
COMMUNITY COHESION

There are three neighborhoods which are located in the immediate area of the study corridor: Drew Park, Wellswood, and Seminole Heights (Figure 1). Drew Park is an industrial/commercial/residential area located near the airport which would not be affected other than having accessibility improved. Wellswood is directly south of Hillsborough Avenue; several homes along the northern border of the neighborhood would be displaced as a result of the proposed action; however, the neighborhood itself will not be bisected as a result of the proposed project. Seminole Heights is a neighborhood which is already bisected by several major transportation facilities, including Hillsborough Avenue, Florida Avenue, I-275 and Nebraska Avenue. The major effect of the project to Seminole Heights would be the displacement of several homes along the north side of Hillsborough Avenue as well as some businesses which serve the local area. (Relocation impacts are discussed in Attachment A-3).



Source: Tampa Comprehensive Plan 2000

FIGURE 1 -- NEIGHBORHOODS IN THE STUDY AREA

Minor changes in travel patterns are expected for residents in neighborhoods contiguous to Hillsborough Avenue due to the Department's proposed median treatment, which consists of special median channelization designed to prohibit left turn egress from driveways and minor (local) streets.

Bicycle travel in the immediate proposed project area will be improved by the provision of 14-foot curb lanes in each direction. (Existing lanes are only 8.3 feet wide in some areas, making bicycle travel very hazardous in these areas).

Continuous sidewalks will be provided on both sides to accommodate pedestrians. Safety of pedestrians attempting to cross Hillsborough Avenue (in the urban sections) should be improved slightly since pedestrians will be able to cross halfway at a time due to minimum 4 feet wide refuge areas provided in the median. They will only have to look in one direction at a time while crossing, making it easier to judge when a safe gap will occur. On the other hand, their total crossing distance will be more than doubled (98 feet vs. 40 + feet existing). / A mid-block pedestrian crossing traffic signal is planned to be installed approximately midway between Florida and Central Avenues.

To help buffer the Seminole Heights area landscaped berms and/or walls are proposed to be constructed along both sides of the project, between Florida Avenue and Central Avenue. These are shown on the typical section sketches (Figure 2 near the beginning of this report).

The proposed project is expected to result in improved traffic flow and highway safety due to the provision of adequate lane, border, and median widths and other safety design features.

Community impacts associated with relocations and the proposed Seminole Heights Historic District are discussed in Attachments A-3 and B-2, respectively.

ATTACHMENT A-3
RELOCATION POTENTIAL

This attachment is a brief summary of the Conceptual Stage Relocation Plan prepared for the proposed project.¹

The total number of estimated displacements by type is summarized below in Table 1.

| Residential Owner | Residential Tenants | Business Owners | Business Tenants |
|----------------------|------------------------|--------------------|---------------------|
| 23 | 27 | 36 | 44 |
| 50 | | 80 | |
| 130 | | | |

TABLE 1 - ESTIMATED DISPLACEMENTS BY TYPE

The majority of the displacements on this project are of a business nature. It has been estimated that 80 business owners and tenants will be displaced. Although this seems extensive, the actual impact is minimal. When looking at the entire commercial community, which is approximately 417, the displacement is only 19% of the total commercial population. Lengthy interviews with local realtors and County and City Officials confirmed this determination. The general concensus was that the displaced businesses

¹Conceptual Stage Relocation Plan for Hillsborough Avenue (S.R. 580/600). Prepared by Kaiser Engineers for the Florida Department of Transportation, March 25, 1988.

would easily be absorbed into the surrounding Commercial-Retail-Office zoned areas in close proximity to the subject area. According to a planner with HCCCPC, 10% of the land use in the City will accommodate the displacees and once the acquisition has occurred, the comprehensive plan will be revised and extended beyond its current boundaries to further accommodate existing business as on Hillsborough Avenue (also see Attachment A-1). The MLS listing of businesses for sale, as well as commercial and retail space for lease, produced over 200 potential replacement sites and establishments within a four-mile area of the project. Waters Avenue, Buffalo Avenue and Armenia Avenue, all dense commercial areas, could absorb the entire displacement.

As mentioned earlier, only 19% of the total business population in this area will be displaced, which will have little or no effect on the remaining businesses and the community in general. In fact, there may be increased exposure and a benefit to the remaining businesses due to the increased volume of traffic after the highway improvements have been completed.

Discussion with County/City Zoning and Building Departments proved to be helpful regarding flexibility to business owners in the area. There will be consideration given to each property owner on a case-by-case basis; the existing structures, that are not determined uneconomic, will more likely be allowed to operate as a legal non-conforming use. However, if the owner were to build, he would have to comply with all current zoning regulations.

Statistical data was collected and analyzed to estimate the resource needs of potential residential displacees. An inventory of displacee needs was completed to determine the type and quality of housing that would be necessary to accomplish a successful relocation of all displacees. A market search has revealed that more than sufficient resources are available to accommodate the relatively small number of residential displacements. Comparable replacement housing for each family was located using newspapers, publications, bulletin boards, Multiple Listing Services, and Realtors. An MLS computer printout of a two square mile area on Hillsborough Avenue directly bisecting the affected area produced over 80 available residential properties ranging from \$40,000 to \$95,000 on 50' x 100' lots, comparable to the displaced homes. This indicates an abundance of resources in this area. A similar rental listing produced a 5:1 ratio of available rentals to displaced householders. This trend is consistent with the 1980 census of residential homes for sale, indicating approximately 10% availability across the board. This computes to about 70 homes within the affected tracts. Each of these replacements are equal to, or superior to, the subjects in terms of community facilities, environmental quality, aesthetic appeal, and property value. With a small number of tenants being displaced, seasonal influx will not be a factor during this project.

Assistance to all relocatees will be provided by the Florida Department of Transportation through its Right-of-Way Acquisition and Relocation Assistance Program in accordance with Florida Statutes, Chapter 339.09 (5), the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646) and the established guidelines by which these programs are administered.

As mentioned in the census tract analysis Section of Reference 1, the project will be displacing a number of residences in the Seminole Heights sub-division. Five of these residences have been identified by the Historic Tampa/Hillsborough County Preservation Board as being contributory to the Historic District. It has been determined that the District is eligible for inclusion in the National Register of Historic Places. These impacts to the Historic District are discussed in Attachment B-2.

There are approximately 54 potential hazardous waste or pollutant-contaminated sites that may affect the road improvements. This issue is addressed in Attachment C-5. The majority of these sites are typical service station/auto repair establishments which use underground gasoline and waste oil-storage tanks.

The effects on remaining property values, after the acquisition, are expected to remain relatively stable according to a County Property Appraiser Supervisor. Those properties which are severed and left unbuildable will remain marketable due to the assemblage value to the adjacent properties. As indicated earlier, land use lines should move back after the take, creating more commercial uses and, in turn, creating demand for the remainder lots as additions. Further, there will be no impact on the tax base due to the loss of taxable property as the result of this project.

In assessing the impact this transportation project will have on the local communities, it is noted that construction of this major project will have minimum disruption of neighborhood ties. Also, no major shopping centers, hospitals, schools, or other related establishments will be displaced, further minimizing disruption of the community.

In summary, negative community impact created by this project will be insignificant due to the relatively small number and types of displacements spread over the length of the project. Available resources are plentiful and all displacees will be able to relocate near the project area. Positive effects will be created by improved traffic flow in general, specifically at the intersection of Hillsborough and Florida Avenues and over the Hillsborough River. Additionally, the lane-widening and addition of a median will improve overall motor safety.

ATTACHMENT A-4
CHURCHES AND SCHOOLS

There are no public schools contiguous to Hillsborough Avenue within the proposed project limits.

There are four churches located in the immediate vicinity of Hillsborough Avenue. The first of these is St. Lawrence Parish, 5223 North Himes Avenue. The parish offices are located near West Hillsborough; however, all access is off of Himes Avenue and the church sanctuary and fellowship halls are located several hundred feet south of Hillsborough Avenue.

The West Hillsborough Baptist Church is located on the northeast corner of the intersection of rough Baptist Church is located on the northeast corner of the intersection of Habana and Hillsborough. An estimated 23+ feet of additional right-of-way will be required on the north side of Hillsborough Avenue in the vicinity of the church. The church sanctuary is presently about 55 feet from the edge of pavement; after the widening, it will be about 33 feet away. Worst case 1988 ambient noise levels are estimated at 68 dBA (Leq). This slightly exceeds the level at which FHWA requires consideration of noise abatement measures for this category of land use. Year 2010 predicted Leq noise levels for the No Build and Build Alternates are 68 and 71 dBA, respectively. This represents a probable 3 dBA increase in noise due to the project. An increase of only 3 dBA is considered insignificant. This slight increase in noise is considered an unavoidable adverse impact due to the proximity of the building to the existing and proposed right-of-way lines.

Bethel Temple is located on the south side of Hillsborough Avenue, east of Rome. An additional 40+ feet of right-of-way is proposed to be taken on the south side of Hillsborough Avenue, in the vicinity of the church. This will result in the loss of approximately 74 parking spaces, or about 47% of their existing parking. However, additional vacant land south of the church is available for mitigation of this loss. With respect to probable noise impacts, 1988 worst case estimated noise levels are approximately 66 dBA (Leq). The noise levels associated with the year 2010 No Build and Build Alternates are 66 and 69 dBA, respectively, or a 3 dBA+ increase due to the proposed project. This slight increase is considered an unavoidable adverse impact due to the proximity of the building to the existing and proposed right-of-way.

The third church is Seminole Heights Baptist Church, located on the south side of Hillsborough Avenue, between I-275 and Nebraska. No right-of-way acquisition is planned adjacent to the church. 1988 worst case estimated noise levels are predicted to be about 69 dBA (Leq). Year 2010 No-Build and Build noise levels are predicted to be 69 and 72 dBA, or a probable 3 dBA increase. This slight increase is considered an unavoidable adverse impact due to the proximity of the church to the existing right-of-way.

ATTACHMENT A-5
TITLE VI CONSIDERATIONS

This project has been developed in accordance with the Civil Rights Act of 1964, as amended by the Civil Rights Act of 1968.

The recommended roadway alignment is not based on following the path of the lowest property values which take principally low income housing or minority neighborhoods. For those areas which are residential contiguous to the project, the recommended alignment is based on the need to avoid a Section 4(f) impact (a public park) and to avoid relocation of a multi-million dollar telephone exchange facility (on the southeast corner of Florida Avenue and Hillsborough Avenue).

The proposed improvements do not discriminate in providing access and egress to any neighborhoods based on race, color, religion, sex, national origin, marital status, handicap or family composition.

ATTACHMENT A-6
CONTROVERSY POTENTIAL
COMMENTS AND COORDINATION SUMMARY

A Public Involvement Program has been developed and is being carried out as an integral part of this project. The purpose of this program is to establish and maintain communication with the public at large, individuals and agencies concerned with the project and its potential impacts. To ensure open communication and agency and public input, the Department has provided an early notification package to State and federal agencies, and other interested parties defining the project and, in cursory terms, describing anticipated issues and impacts. Finally, in an effort to resolve all issues identified, the Department has conducted an extensive interagency coordination and consultation effort, and public participation program. This section of the document details the Department's program to fully identify, address and resolve all project related issues identified through the public involvement process.

A. Agency Responses to Advance Notification Package

An advance notification package was forwarded to national, State and local agencies having permitting, environmental or other interests in the project on August 8, 1984. The agencies contacted through this process are listed below:

| <u>Response Received</u> | <u>Federal Agencies</u> |
|--------------------------|---|
| X | Environmental Protection Agency U.S. Fish and Wildlife Service National Marine Fisheries Service U.S. Army Corps of Engineers National Park Service |
| X | Soil Conservation Service |
| X | U.S. Coast Guard Federal Highway Administration |

Response Received

Federal Agencies (Cont'd)

U.S. Dept. of Housing and Urban
Development

Federal Aviation Administration

State Agencies

X Department of Environmental Regulation

X Office of the Governor, Office of
Planning and Budgeting

X Department of State, Division of
Archives, History and Records
Management

X Game and Freshwater Fish Commission
Florida Recreational Trails Council

Regional Agencies

X Tampa Bay Regional Planning Council

X Seaboard System Railroad*

Local Agencies

X Hillsborough County Aviation Authority

City of Tampa Land Development
Coordination Division

Hillsborough County Department of
Development Coordination*

*These agencies were notified by letter
instead of an Advance Notification Package.

Attachment A-6

Page 2 of 11

Response ReceivedLocal Agencies (Cont'd)

| | |
|---|---|
| X | Hillsborough County Sheriff's Dept.* |
| X | All affected utility companies* |
| X | Hillsborough County Parks & Recreation Dept.* |
| X | Hillsborough County Dept. of Emergency Medical Services* |
| | Hillsborough County School Board* |
| | Bureau of Emergency Management* |
| | Hillsborough County Fire Dept.* |
| | City of Tampa Police Department* |
| | Hillsborough County Administrator* |
| | Hillsborough County Engineering Dept.* |
| | Hillsborough County City-County Planning Commission* |
| | City of Tampa Dept. of Inspectional Services* |
| | City of Tampa Administrator of Water Resources and Public Works* |
| | City of Tampa Dept. of Planning* |
| | City of Tampa Dept. of Parks and Recreation* |

Responses to agencies' concerns about particular impacts or issues are provided below:

1. State Department of Environmental Regulation

Comments: Concerns were expressed regarding potential impacts to wetlands and flood prone areas; mitigation for loss of wetlands was requested. Information was requested with respect to water quality, air quality, noise impacts, and stormwater management system design. In addition, it was requested that any replacement bridge over the Hillsborough River "be at least as long as the existing bridge to

avoid additional filling in the floodplain", and that "the new bridge should span historical floodplain limits with removal of any wetlands fill placed during original approach construction". Existing roads should be utilized for detour routes and bridges should be constructed without the use of work roads".

Response: Wetland and floodplain impacts are discussed in Attachments C-1 and C-7, respectively. Water quality, air quality, and noise impacts are discussed in Attachments C-3, D-2, and D-1, respectively.

The replacement bridge over the Hillsborough River is planned to be slightly longer than the existing bridge; however, it is not practical nor desirable to span the historical floodplain limits as this would have adverse effects on property owners upstream/downstream of the existing bridge. At the present time, there are no plans to utilize detour routes or work roads; traffic is to be maintained at all times through the use of stage construction of the replacement bridge.

2. Florida Game and Fresh Water Fish Commission

Comments: General concerns were expressed with respect to threatened and endangered species, avoidance of wetlands and mitigation for unavoidable adverse environmental impacts.

Response: Same response as for number one above. In addition, threatened and endangered species are discussed in Attachment C-10.

3. U.S. Environmental Protection Agency

Comments: General concern was expressed with respect to potential adverse effects on wetlands, water quality, air quality, noise, and construction impacts.

Response: Same response as item number 1; in addition, construction impacts are discussed in Attachment D-3.

4. Tampa Bay Regional Planning Council

Comments: a) The proposed project was found to be consistent with Council policy of giving priority to the reconstruction and maintenance of the existing highway system to protect and maintain existing investments.

b) Issues of concern include protection of established neighborhoods, relocation of residents and commercial activities, protection of wetlands, water quality, improving level of service to LOS C to improve air quality and reduce accidents.

Response: a) None required.

b) Neighborhood cohesion impacts are discussed in Attachment A-2; relocation impacts are discussed in Attachment A-3; wetlands and water quality are discussed in Attachments C-1 and C-3, respectively. The level of service (LOS) will be improved, but it is not possible to achieve LOS C with an at-grade general access arterial.

B. Public Involvement and Interagency Coordination

This section summarizes chronologically the Department's coordination efforts involving both the public and various Federal, state and local agencies.

| | |
|-------------------|---|
| April 4, 1984 | Kick-off presentation given to Hillsborough County Board of County Commissioners. |
| April 5, 1984 | Kick-off presentation given to Tampa City Council. |
| August 8, 1984 | Advance Notification Package distributed by the Department to various federal, State, and local agencies. |
| December 23, 1985 | Design traffic report provided to Tampa Urban Area Transportation Study (TUATS) staff for review. |
| January 6, 1986 | MPO Staff Administrator indicated that the design traffic volumes are "consistent with the MPO's long range plan and projected volumes". |
| February 18, 1986 | Coordination meeting held between Department's consultant and officials of Hillsborough Area Rapid Transit (HART) to inform them of the project. |
| November 13, 1986 | Presentation given to TUATS Technical Advisory Committee (TAC) concerning the proposed project. |
| November 25, 1986 | Slide Presentation given to Hillsborough County Metropolitan Planning Organization (MPO) concerning engineering alternatives for Hillsborough Avenue. |

December 4, 1986

Public Information Workshop held in Community Room at Tampa Bay Center in Tampa, from 2:00 to 8:00 p.m. Prior to the workshop, public officials, the media, and all affected property owners were notified by letter. The workshop was attended by approximately 110 people, including radio and TV reporters.

Blue-line rolls of the various design alternates were on display along with other graphics. Two different alternates were displayed for the segment between Dale Mabry and Armenia: a six-lane alternate and an eight-lane alternate. For the proposed bridge replacement at the Hillsborough River, design concepts were shown for both the bascule and the high-level fixed-span alternates. In addition, a two-page handout was distributed which summarized the results of the studies to date.

During the workshop and the public comment period which followed, a total of seven comments from five (5) statement forms (or letters) were received. The types of comments received can be generalized as follows:

| <u>Type of Comment</u> | <u>Number of</u> |
|--|------------------|
| "Much needed improvement" | 1 |
| "8-lane alternate preferred" .. | 1 |
| "Opposed to raised median -- TWLTL preferred" | 1 |
| "Opposed to median design which restricts left turns from minor cross streets" | 1 |
| "Take an equal amount of land from both sides" | 1 |
| "Concerned about damages to my business" (loss of parking, etc.) | 2 |

With respect to the comments concerning the median design, the special channelization recommended is designed to prevent left turn egress from driveways and minor cross streets. This is an access control technique which is expected to result in a safer design and smoother traffic flow on Hillsborough Avenue.

January 8, 1987

Department's consultant met with TUATS TAC to respond to TAC's comments and concerns regarding the proposed project.

January 13, 1987

Department's consultant attended TUATS TAC subcommittee meeting to discuss the six-lane versus eight-lane alternatives, etc.

January 20, 1987

The MPO discussed the six-lane vs eight-lane issue at their regular monthly meeting; no specific recommendation was made.

March 24, 1987

Coordination meeting held between the Department and FHWA.

April 20, 1987

Presentation given by the Department to the Tampa Urban Area Metropolitan Planning Organization's (MPO) Technical Advisory Committee (TAC) concerning six versus eight lane alternates and the two bridge type alternates at the Hillsborough River.

May 5, 1987

Drawings transmitted to the City and the County showing alternates involving six-laning the north and south approaches on Himes and Armenia Avenue at Hillsborough Avenue.

| | |
|-------------------|--|
| August 18, 1987 | Coordination meeting held with FHWA. |
| September 1, 1987 | Revised bridge alternatives economic analysis sent to MPO Staff Administrator requesting concurrence by the MPO. |
| October 8, 1987 | Presentation given to MPO's TAC recommending bascule replacement bridge. At the end of the meeting, the committee narrowly voted to support the bascule bridge recommendation. |
| October 14, 1987 | Presentation given to MPO's Citizens Advisory Committee (CAC) regarding bridge replacement alternatives; CAC voted to support high-level fixed span bridge. |
| October 20, 1987 | Presentation given to the MPO concerning the bridge replacement alternatives; MPO voted to support the bascule bridge concept. |
| October 20, 1987 | Coordination meeting held with FHWA. |
| November 3, 1987 | "Thirteen Points" (of engineering agreement) sent to FHWA and FDOT for review and comments. |
| December 15, 1987 | Coordination meeting held with FHWA. |
| January 6, 1988 | Revised Permit Coordination Report sent to Department's general PD&E consultant. |
| March 2, 1988 | Responses to Permit Coordination Report received. (Only major comment was the mention of the presence of the manatee in the Hillsborough River). |
| March 10, 1988 | Meeting held with representative of Seminole Heights Civic Association to discuss various environmental concerns. |
| May 11, 1988 | Copies of preliminary engineering report, Traffic Report, and conceptual design drawings sent to FHWA. |
| May, 1988 | Coordination initiated with the Historic Tampa/Hillsborough County Preservation Board. |

| | |
|----------------|--|
| May 19, 1988 | Presentation given to MPO's TAC regarding project update. |
| June 14, 1988 | Presentation given to the MPO concerning the proposed project. |
| June 28, 1988 | Public Hearing held at St. Lawrence Parish, 5223 North Himes Avenue, Tampa, Florida. (A separate report is available which summarizes comments contained in the transcript and includes responses to significant comments.) |
| July 14, 1988 | Meeting held between the Department and representatives of the Seminole Heights Civic Association. |
| Sept. 20, 1988 | Meeting held between the Department and representatives of the Seminole Heights civic association. The citizens were told that the highway had to be six-laned through Seminole Heights, and that: <ul style="list-style-type: none"> (a) buffer walls/berms and landscaping would be provided on both sides of Hillsborough Avenue (b) the median would be modified to eliminate breaks at intersections between Florida & Central Avenues (c) mitigation for impacts to the proposed historic district would be pursued and a Memorandum of Agreement would be developed involving all affected agencies. |
| Oct. 6, 1988 | Tampa City Council passed a resolution asking that the segment of Hillsborough Avenue through Seminole Heights remain four lanes. |
| Oct. 10, 1988 | The Tampa Urban Area Metropolitan Planning Organization (MPO) voted to proceed with widening Hillsborough Avenue including the segment through Seminole Heights. |

December 6, 1988 Coordination meeting held with representatives of the Historic Tampa/Hillsborough County Preservation Board regarding Seminole Heights.

December 8, 1988 Presentation given by FDOT to City Councilman Ronnie Mason and representatives of the Seminole Heights Civic Group regarding proposed wall and landscaping design concepts.

December 14, 1988 Presentation given to Seminole Heights Civic Association members regarding proposed wall and landscaping design concepts.

January 3, 1989 Presentation given by the Departments' consultant to the full Historic Preservation Board regarding proposed wall/landscaping concepts.

April 4, 1989 Presentation given to the MPO concerning proposed design concepts for buffer wall and landscaping. MPO members expressed support for the proposed design concepts.

May 10, 1989 Meeting held with a representative of the Historic Preservation Board to discuss design alternatives for period street lighting.

ATTACHMENT B-1
SECTION 4(f) LANDS
AND RECREATION AREAS

In accordance with Section 4 (f) of the Department of Transportation Act of 1966, the proposed action has been evaluated for potential impact to public parks, recreation areas, wildlife and waterfowl refuges, and significant historic sites.

There are two City parks contiguous to Hillsborough Avenue which would be considered Section 4(f) lands:

- o Horizon Park, on the south side of Hillsborough Avenue between Dale Mabry and Himes Avenue, and
- o River Boulevard Park (an unimproved park) on the south side of Hillsborough Avenue, on the east bank of the Hillsborough River.

The proposed project will not use property from either of these parks; therefore, it has been determined that Section 4(f) does not apply to these resources.

A separate Section 4(f) statement has been prepared with respect to the Seminole Heights Historic District (see Attachment B-2).

ATTACHMENT B-2
HISTORIC SITES/DISTRICT

In accordance with Section 4(f) of the Department of Transportation Act of 1966 and Section 106 of the National Historic Preservation Act of 1986, the proposed action has been evaluated with respect to its potential impact to significant historic sites.

As a result of coordination among the Department, FHWA, Seminole Heights civic group representatives, the Historic Tampa/Hillsborough County Preservation Board, and the State Historic Preservation Officer, the Department has prepared a Section 4(f) Statement and Memorandum of Agreement (signed in December, 1988).

This attachment summarizes highlights from the above document.

The Seminole Heights Historic District has been determined to be eligible for listing on the National Register of Historic Places. In the vicinity of Hillsborough Avenue, the District extends from Suwannee Avenue to Central Avenue. Impacts to the District are unavoidable due to the geographical layout of the District.

There are five bungalow-style residences on the north side of Hillsborough Avenue which would have to be either relocated or demolished as a result of the proposed widening:

| | <u>Address</u> | <u>Year Constr.</u> | <u>Description</u> |
|----|----------------|---------------------|----------------------|
| 1. | 5401 Suwannee | 1923 ₊ | Typical bungalow |
| 2. | 5402 Branch | 1922 ₊ | Japanese bungalow |
| 3. | 5401 Seminole | 1922 ₊ | Boom Period bungalow |
| 4. | 5402 Seminole | 1922 ₊ | Bungalow |
| 5. | 5403 Seminole | 1922 ₊ | Side gable bungalow |

The effects of alternate corridors, typical sections, and alignments on the historic district are discussed extensively in both the Preliminary Engineering Report and the Section 4(f) Statement. Noise impacts to Seminole Heights are discussed in Attachment D.

As a result of coordination with the various groups involved, the Department has proposed the following measures to help mitigate impacts of the proposed project on the Seminole Heights Historic District:

- 1) At the request of the owners and provided that it is structurally feasible, the Department will move the buildings to new site, within or close to the historic district. Before such a move, the house will be documented with photos, plans and specifications. The relocation and reconstruction will be done according to those plans and specifications, upon approval by the SHPO, FHWA and FDOT. All documentation will be permanently filed in the Florida Master Site File at the Florida Division of Archives, History and Records Management.
- 2) If the owner does not request relocation, the Department will purchase the structure and in consultation with the SHPO will prepare an individual marketing plan for each of the adversely affected buildings which will include the following elements:
 - a. an information package about the building including but not limited to:
 - i. photographs of the building
 - ii. information on the building's historic significance
 - iii. information on the building's cost
 - iv. information on financial assistance for moving the building
 - v. information on moving requirements
 - vi. notification that the purchaser will have to sign an agreement to maintain the building in accordance with the recommended approaches in the Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (U.S. Department of the Interior, National Park Service, 1983)
 - b. a distribution list of potential purchasers or transferees.
 - c. an advertising plan and schedule
 - d. a schedule for receiving and reviewing offers

Upon SHPO's agreement with the marketing plan, FDOT will implement this plan.

- 3) FDOT will review all offers in consultation with the SHPO prior to acceptance. The buildings shall be moved in accordance with approaches recommended in the Department of Interior's "Moving Historic Buildings" and consultation with the SHPO.
- 4) If there is no acceptable offer which will conform to the requirements of rehabilitation and maintenance, FDOT, with the approval of the SHPO, may transfer the building or buildings without preservation restrictions. In this event proper photographic documentation will be provided and recorded. All negatives and prints will be processed archivally. Historic American Building Survey quality drawings of the property will accompany the photographic documentation.
- 5) Whether a northern or southern R/W taking, the roadway alignment will be centered in the R/W limits as much as possible, with landscaping on both sides of the Avenue. This will lessen visual impact of the new wider facility.

The proposed 17.5 ft. landscaped median, continuous between Florida and Central Avenues, will be pedestrian friendly, providing safer crossing between signals.

In order to mitigate noise impacts created by the improved facility, 8 ft. high brick walls will be constructed on both sides of Hillsborough Avenue, thus reducing future noise levels to below the present noise levels, as well as discouraging commercial development along the Historic District.

- 6) The Department will work together with the Historic Tampa/Hillsborough County Preservation Board to enhance the Seminole Heights segment with architectural features characteristic of 1910 and 1920 Tampa.

If engineering feasibility determines that lamp posts characteristic of this period can be used, they will be added in this segment of Hillsborough Avenue.

Other, similar features recommended by the Preservation Board will also be considered, thus lessening the social/historic impacts that the widening is creating.

ATTACHMENT C-1
WETLANDS ASSESSMENT

In compliance with Executive Order 11990, "Protection of Wetlands" and U.S. Department of Transportation (DOT) order 5660.1a, the following report provides an evaluation of the proposed impacts to wetland sites along the six mile improvements to Hillsborough Avenue (S.R. 580/600) between Eisenhower Boulevard (S.R. 589) and Nebraska Avenue (S.R. 45/U.S. 41).

Seven (7) wetlands were identified within or adjacent to the proposed right-of-way which will be directly or indirectly impacted by the proposed improvements (Figure 1). The sites evaluated in this report include: one river crossing, three ditches or canals, one remnant cypress swamp, one shallow emergent wetland, and one willow wetland.

Each wetland site was identified according to the U.S. Fish and Wildlife Services Classification of Wetlands and Deep Water Habitats of the United States (1979). An evaluation of the current and historical condition and design alternatives to determine mitigative measures is enumerated on a site-by-site basis as required by the FHWA Technical Advisory T6640.8. The objectives of this report are to evaluate the effects of the proposed improvements on the stability, function, and quality of each wetland. In those instances where the impacts are long-term in duration and substantial, mitigative measures are provided. Mitigative measures include creation, enhancement, restoration or preservation. Current regulatory policies generally accept a 1:1 replacement of a similar type in the area of the impacted wetland. If there is sufficient area within the right-of-way, mitigation can be proposed in the roadside drainage system, in medians, or major interchanges. When considering extensive wetland encroachments, mitigation could be offered either near or contiguous to the impacted wetland or possibly off-site.

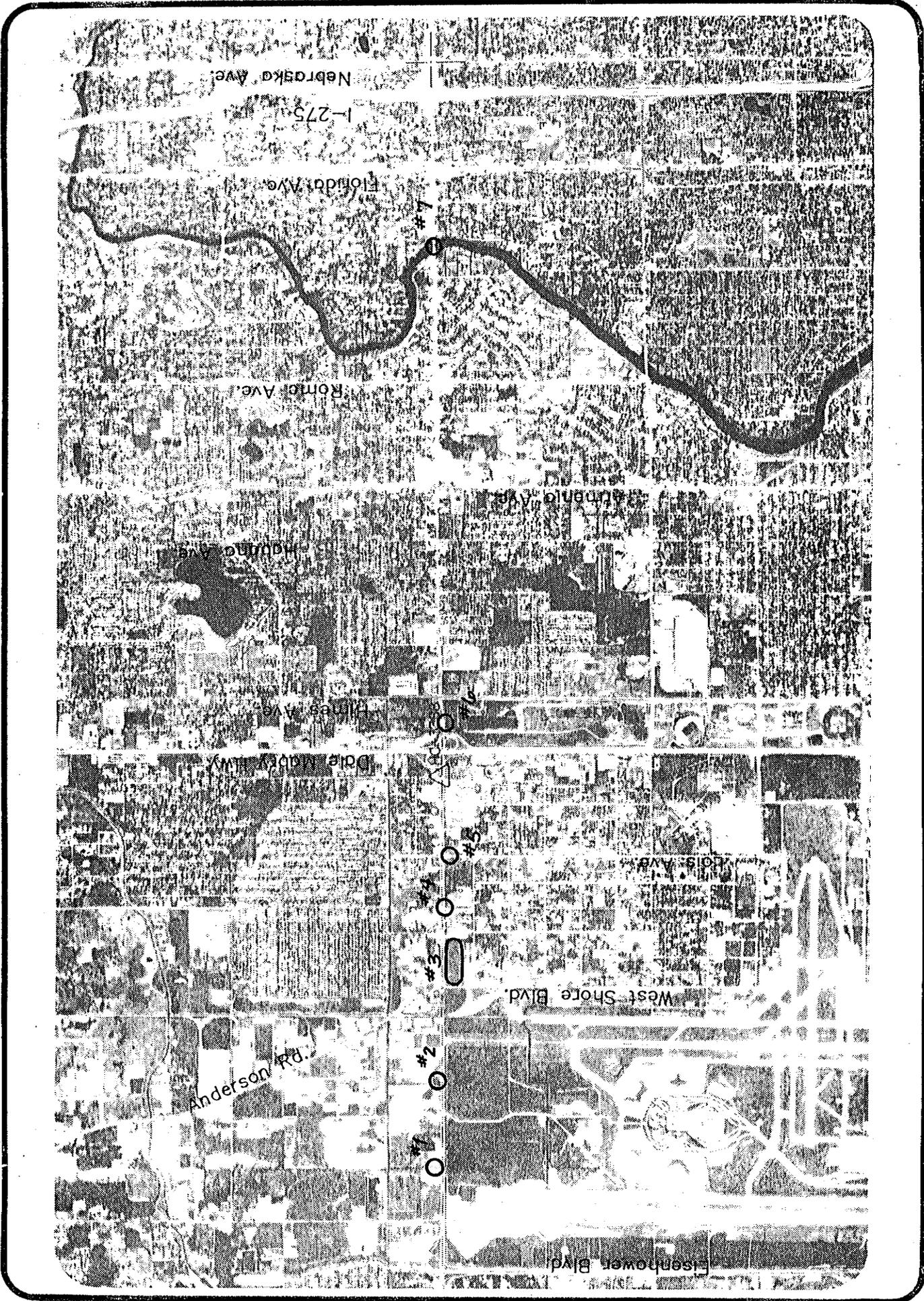


FIGURE 1 - WETLAND LOCATIONS

All wetlands within the proposed Hillsborough Avenue improvements have been previously impacted by the road, drainage improvements, or encroachments from development. Wetlands provide many valuable functions: flood and sediment control, water quality beneficial, ground water recharge, and fish and wildlife habitat. The wetlands (except the Hillsborough River) to be impacted by this road have been extensively impacted in the past years and are not unique to the region nor provide quality habitat for threatened or endangered species.

Each wetland has been evaluated by considering a variety of factors inherent in each wetland: primary wetland functions, regional and local significance, uniqueness, size, and productivity. The following summary provides an analysis of the impacts to each wetland along the proposed Hillsborough Avenue right-of-way.

Wetland #1 is a freshwater marsh succeeding to Carolina willow wetland. Historically this was designated as poorly drained soils. A ditch was dug through this area to provide positive drainage to the Henry Street Canal to the north. The wetland area within the right-of-way is sparsely covered by herbaceous species. The project will impact .002 acres of this wetland which provides minor stormwater quality treatment, flood water storage, and wildlife habitat. No mitigation is proposed.

Wetland #2 is a shallow ditch, dominated by herbaceous species, that provides positive drainage north to the Henry Street Canal. This ditch was cut through a formerly isolated cypress wetland which has been dewatered and is outside of the right-of-way. The proposed project will impact .01 acres of this ditch, which provides minimal wetland benefits for stormwater treatment or storage or wildlife habitat. No mitigation is proposed.

Wetland #3 is the remnant of a larger cypress swamp that was bisected by the initial construction of Hillsborough Avenue. A shallow berm separates the roadside ditch from the wetland. This wetland is the remains of several forested wetlands in the general region. At least 20 acres of wildlife habitat, flood control, and groundwater recharge have been lost to development in this locality. Further impacts to this wetland will result in significant long term loss of wildlife habitat. The impacts can be avoided by not encroaching into the wetland to relocate the roadside ditch and using guard rails along the top of bank of the ditch. No mitigation is proposed as the roadway design can be modified.

Wetland #4 is a drainage ditch that extends to the north and south of the roadway. It appears to be an upland cut ditch that connects to the Henry Street Canal. This ditch is dominated by nuisance and exotic species. The ditch provides minimal water quality benefits, floodwater storage or wildlife habitat. The project will cause only short term impacts to .04 acres of this ditch. No mitigation is proposed.

Wetland #5 is the intersection of the roadside ditches and a north-south ditch that is contiguous with the Henry Street Canal. The intersection of this ditch is concrete lined with a substratum of sand which supports nuisance and exotic species. This artificial wetland provides insignificant wetland functions. No mitigation is proposed.

Wetland #6 is sometimes referred to as the Horizon Canal and becomes the Henry Street Canal to the north. This is a major canal that drains several square miles of urban lands. Most of this canal was dug in the uplands to reroute or drain isolated areas to the north of the airport and/or away from the Hillsborough River. This canal is a primary means of routing stormwater. The size of the drainage basin of the canal significantly diminishes the functional value for providing water quality

treatment and flood storage. This project will require .04 acres of fill on the north side of the road. This reduction of the canal surface area will cause only minor short term impacts. No mitigation is proposed.

Wetland #7 is the Hillsborough River, which is under the influence of the tidal changes in Hillsborough Bay. The existing structure will be replaced by a bascule structure on the north side. The Hillsborough River provides many significant wetland functions especially habitat for threatened and endangered species (see Section C-10). The bridge replacement is proposed to eliminate any filling other than the pilings. The construction of the new structures will cause only short term impacts due to turbidity which can be controlled by floating turbidity curtains. No other mitigative actions are proposed.

A total of less than one-third acre of wetlands will be lost or impacted along the six mile project as a result of proposed construction activities, as shown in Table 1.

TABLE 1 - SUMMARY OF POTENTIAL WETLAND IMPACTS

| Site No. | Approximate Location | Wetland North or South (N) (S) | | Classification of Wetland | Potential Impacted Area | | |
|----------|-------------------------------------|--------------------------------|--|---------------------------|-------------------------|-----------------|--------------------------|
| | | | | | Existing R/W (SF) | Addit. R/W (SF) | Total (acres) |
| 1 | 1300' East of Benjamin Road | N | | Marsh (Ditch) | 100 | 0 | 0.002 |
| 2 | 800' East of Hoover Blvd. | N | | Marsh (Ditch) | 500 | 0 | 0.01 |
| 3 | Between West Shore & Hesperides | S | | Swamp | 0 | 0 | 0* |
| 4 | 650' East of Hesperides | N/S | | Marsh (Ditch) | N-1300 S- 380 | 0 0 | N-0.03 S-0.01 |
| 5 | SE Corner at Lois & Hillsborough | S | | Marsh (Ditch) | 680 | 0 | 0.02 |
| 6 | East Side of Dale Mabry Interchange | N/S | | Marsh (Canal) | 1740 | 0 | 0.04 |
| 7 | At Hillsborough River | N/S | | Riverine | NW-400 NE-500 | 5000 3400 | NW-0.12*** NE-0.09*** |
| | | | | | | | 0.32 |

* The ditch section within the existing right-of-way on the south side would remain intact as part of the proposed design concept.

** Most widening would occur in the median area.

*** Exclude submerged wetlands at the river.

Wetland impacts will be minimized by utilizing the existing corridor since this area has already been subject to disturbances associated with previous roadway construction and development. Short term impacts due to construction activities will be minimized by adherence to Section 104 of the FDOT Standard Specifications for Road and Bridge Construction.

There are no practical alternatives to impacting wetlands since all of the impacted areas involve transverse crossings of ditches, canals, or the Hillsborough River. Based on the foregoing evaluation of wetland impacts, it has been determined that the proposed project will have no significant short or long term adverse impacts to wetlands, that there is no practicable alternative to construction in wetlands, and all measures have been taken to minimize harm to wetlands.

ATTACHMENT C-3
WATER QUALITY

Water bodies contiguous to this segment of Hillsborough Avenue consist of the Hillsborough River as well as a series of drainage ditches, as described in Attachment C-1. Several of these waters are classified as Class III Waters of the State (but not Outstanding Florida Waters).

The major concern with respect to water quality is for the potentially adverse effects of stormwater runoff due to vehicular related pollutants associated with highway runoff.

The Florida Department of Transportation has coordinated with the Southwest Florida Water Management District and provided them with a preliminary coordination package describing the conceptual design of the stormwater management system for this project. As a result of that coordination, the Department is developing a stormwater treatment system for the project in accordance with Chapter 17-25, F.A.C. The Department will continue the coordination effort during subsequent project development stages to ensure compliance with Chapter 17-25, F.A.C. The coordination does not relieve the Department of the necessity to acquire permits under 17-25, F.A.C. nor does the preliminary review ensure a favorable permitting review.

Because of the state of the art in highway stormwater research, it is not possible at this time to determine the impact of this drainage on the water quality of the Hillsborough River, etc. The appropriate Best Management Practices will be used during the construction phase for erosion control and water quality consideration. Any additional stormwater treatment measures found necessary over and above Best Management Practices in order to obtain Chapter 17-25 F.A.C. compliance will be State funded.

The impacts of the proposed project on surface water quality of the site environs will essentially be limited to the adverse effects of erosion during construction. These potentially adverse effects of construction are considered temporary and minimal. This project is not expected to have any effect on groundwater, recharge areas or public water supplies. This will be effected by adherence to Chapters 17-3 and 17-25 of the Florida Administrative Code and Section 104 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction.

ATTACHMENT C-5
HAZARDOUS MATERIALS SITES

SUMMARY

Potential hazardous materials problems associated with the proposed right-of-way acquisition needed for Hillsborough Avenue improvements have been evaluated and documented in separate Reports.^{1,2} This attachment is a brief summary of those reports.

Potential hazardous waste sites adjacent to Hillsborough Avenue were identified through field inspections and through coordination with the Florida Department of Environmental Regulation (FDER) and the Hillsborough County Environmental Protection Commission (HCEPC). Suspected sites were studied in detail including field inspections and follow-up telephone surveys with the owners or managers.

A total of fifty four (54) sites were identified in the corridor that require further investigation. Forty three (43) are potentially contaminated and eleven (11) are known to be contaminated with petroleum pollutants. None of the sites identified present a hazardous waste problem, but warrant further investigation as a result of current or past pollutant contamination by petroleum products from above and underground storage tanks.

¹Hazardous Waste Evaluation Report for Hillsborough Avenue (S.R. 580/600) prepared for FDOT by DSA Group, Inc. June, 1988, Revised 11/88.

²Hazardous Waste and Pollutant Contamination Screening Addendum for Hillsborough Avenue, prepared by FDOT District 7 PD&E staff. March, 1989; Revised May, 1989.

These investigations should begin during the next production phase, prior to the appraisal and acquisition of right-of-way and project construction, to allow for proper determination of the extent of clean-up (if any) and all costs associated with it. Detailed descriptions and photographs of each site are included in the referenced reports.

The risk evaluation has been done according to the PD&E Guidelines Manual, Chapter 22 discussion in conjunction with the District Seven's "Potential Risk Evaluation Guideline." A distinction has been made between hazardous waste and pollutant waste (Florida Statutes F.S. 367.031 (12)) as used by FDER in their petroleum contamination assessments and remediation policy (Florida Administrative Code, Chapter 17-61).

RECOMMENDATIONS AND CONCLUSIONS

The fifty four (54) sites identified and summarized in Table 1A will require further investigation to establish/dismiss the presence/extent of contamination that would impact the project.

The following steps are recommended to be followed as part of the in-depth investigation and determination of the pollutant involvement/clean-up prior to the appraisal and acquisition of right-of-way and construction phases:

- Step 1: A thorough field investigation for each identified site.
- Step 2: Soil and water sampling and testing of potential sites determined by Step 1.
- Step 3: Using the results of Step 2, area exposure assessment made for each contaminated site.
- Step 4: Using the results of Step 3, establish cost estimates for remediation.
- Step 5: Prepare specifications for clean-up, restoration and monitoring services.
- Step 6: Utilize results of Steps 5 and 6 during the Phase 30 of project development and for further budgetary considerations.

**TABLE 1A
 SCREENED PROPERTIES WITH POTENTIAL CONTAMINATION
 ALONG PREFERRED CORRIDOR**

Hillsborough Avenue: Eisenhower Blvd. to Nebraska Avenue

| Folio # | Physical Site Address | Current Owner/Address | Current Tenant/ Operator | FDOT DSA | | Land Use/ Bus. Acty | Risk Ranking |
|-------------|---------------------------|---|--|----------|--------|--------------------------------|-----------------|
| | | | | File # | File # | | |
| 27634.0000 | 5755 W. Hillsborough Ave. | Hillsborough County Aviation Authority c/o Tampa Int'l Airport P.O. Box 22287 Tampa, FL 33622 | Vacant | 15 | - | n/a | M |
| 27653.0000 | 5509 W. Hillsborough Ave. | Jack Scantamburlo 5501 W. Hillsborough Ave. Tampa, FL 33614 | West Coast Fence, Inc. | 20 | 1 | Storage Yard/ Auto Salvage | M |
| 102814.0000 | 5015 W. Hillsborough Ave. | Lindsey Stores, Inc. c/o Real Estate Dept 6917 Collins Ave. Miami Beach, FL 33141 | Lindsey Home Care Center (closed 1988) | 27 | 2 | Lumber Yard/ Bldg. supplies | M |
| 102812.0000 | 4901 W. Hillsborough Ave. | Neuman Oil Company 4901 W. Hillsborough Ave. Tampa, FL 33614 | Neuman Oil Co. | 30 | 4 | Oil Wholesaler | M |
| 102784.0000 | 4801 W. Hillsborough Ave. | Landmark Bank of Tampa P.O. Box 17235 Tampa, FL 33682 | Citizen's & Southern Bank | 34 | - | Financial | M |
| 102787.0000 | 4703 W. Hillsborough Ave. | Super Test Oil & Gas P.O. Box 14900 Rowlett, TX 75088 | Charter Food Store #1410 | 35 | 5 | Convenience/ Gas station | M* |
| 102802.0000 | 4505 W. Hillsborough Ave. | McKesson Wine & Spirits P.O. Box 24807 Tampa, FL 33623 | McKesson Wine & Spirits | 41 | 6 | Wholesaler/ Distributor | M |
| 107606.1000 | 4150 W. Hillsborough Ave. | David C. Montgomery P.O. Box 13834 Philadelphia, PA 19101 | Sparky's Gas (Texaco #136) | 58 | 10 | Convenience/ Gas Station | M* |
| 102926.0000 | 3909 W. Hillsborough Ave. | Enterprise Leasing Co. 3909 W. Hillsborough Ave. Tampa, Fl 33614 | Enterprise Leasing Co. | 79 | 12 | Car Leasing/ Rental | M* |
| 107615.0000 | 3800 W. Hillsborough Ave. | Jeffrey Wooley 3800 W. Hillsborough Ave. Tampa, FL 33614 | Superior Pontiac/ GMC | 85 | 13 | Auto Sales/ Service | M** |

* Applied/approved for FDER EDI state reimbursed contamination assessment/remediation.

** Site with active FDER compliance enforcement case.

TABLE 1A (CONT.)

| Folio # | Physical Site Address | Current Owner/Address | Current Tenant/ Operator | FDOT DSA | | Land Use/ Bus. Acty | Risk Ranking |
|-------------|-----------------------------|--|--|----------|--------|-----------------------------|-----------------|
| | | | | File # | File # | | |
| 102938.0000 | 3601 W. Hillsborough Ave. | Exxon Company USA P.O. Box 53 Houston, TX 77001 | Raley Exxon #3866 | 90 | 14 | Service Station | M* |
| 102972.0000 | 3343 W. Hillsborough Ave. | Thomas S. Hester 5802 Lincoln Ave. Tampa, FL 33682 | Vacant | 97 | - | n/a | M |
| 103324.0000 | 3155 W. Hillsborough Ave. | Leroy/Dianne Gonzalez, Jr. 612 Chastain Road Seffner, FL 33584 | Multistate Transmissions & Meineke Muffler | 111 | 18 | Auto Repair | M |
| 103322.0000 | 3143 W. Hillsborough Ave. | Harvey L. Britt 3101 W. Hillsborough Ave. Tampa, FL 33614 | Paul's Spur | 115 | 19 | Convenience/ Gas Station | M |
| 103000.0000 | 3049 W. Hillsborough Ave. | Gordon L. Jr. & William Finch 2101 N. Dundee Street Tampa, FL 33629 | Mad Hatter Mufflers | 121 | 20 | Auto Repair | M |
| 107194.0000 | 3024 W. Hillsborough Ave. | Land O'Sun Realty 5800 N.W. 74th Ave. Miami, FL 33166 | Farm Store #396 | 122 | 21 | Convenience/ Gas Station | M |
| 102997.0000 | 3017-19 W Hillsborough Ave. | Williams D. Collins III 3400 W. Kennedy Blvd. Tampa, FL 33609 | AAMCO Transmissions | 128 | 22 | Auto Repair | M |
| 107183.0000 | 2902 W. Hillsborough Ave. | Patriot Premium Distribtr 701 43rd St. South St. Petersburg, FL 33711 | "D's" Auto Sales | 137 | 24 | Auto Sales | M |
| 103030.0000 | 2901 W. Hillsborough Ave. | Leroy Gonzalez, Jr. 2901 W. Hillsborough Ave. Tampa, FL 33614 | Goodyear Tire Center | 138 | 25 | Auto Repair | M |
| 103258.0000 | 2701 W. Hillsborough Ave. | H.P. & Barbara Bland 2701 W. Hillsborough Ave. Tampa, FL 33614 | Huey's Garage | 142 | 26 | Auto Repair | M |
| 106427.0000 | 2502 W. Hillsborough Ave. | Gas Kwik, Inc. 2004 Durham Street Tampa, FL 33605 | Allied Discount Tire | 157 | 28 | Auto Repair | M |
| 103160.0000 | 5410 N. Armenia Ave. | William & Gloria Davis 5410 N. Armenia Ave. Tampa, FL 33603 | Davis Brake Service | 158 | - | Auto Repair | M |

* Applied/approved for FDER EDI state reimbursed contamination assessment/remediation.

** Site with active FDER compliance enforcement case.

TABLE 1A (CONT.)

| Folio # | Physical Site Address | Current Owner/Address | Current Tenant/ Operator | FDOT DSA | | Land Use/ Bus. Acty | Risk Ranking |
|-------------|---------------------------|--|--|----------|--------|-----------------------------|-----------------|
| | | | | File # | File # | | |
| 105074.0000 | 2356 W. Hillsborough Ave. | BP Oil Company P.O. Box 94563 Cleveland, OH 44101 | Gulf #00375915 | 165 | 30 | Convenience/ Gas Station | M* |
| 104607.0000 | 2345 W. Hillsborough Ave. | Bernard & William West c/o Florida Choice P.O. Box 5 Maitland, FL 32751 | Economy Insurance/ Check Cashing Mart | 167 | - | Misc. Store | M |
| 105177.0000 | 1798 W. Hillsborough Ave. | Juan Diaz 8508 W. Ridge Road Tampa, FL 33615 | Johnny's A-1 Body Shop | 182 | - | Auto Repair | M |
| 106009.0000 | 1762 W. Hillsborough Ave. | Knerly Emerick 1762 W. Hillsborough Ave. Tampa, FL 33603 | Fuller's Marine Sales/Service | 185 | 34 | Outboard Motor | M |
| 104587.0000 | 1799 W. Hillsborough Ave. | Guillermo & Amanda Suarez 1801 W. Louisiana Ave. Tampa, FL 33603 | Bay Auto Sales | 188 | 31 | Auto Sales | M |
| 103488.0000 | 1537 W. Hillsborough Ave. | Peter S. & Florence Conte 3102 Arch St. Tampa, FL 33607 | Stereo Workshop | 203 | 36 | Car Sound Systems | M |
| 103630.0000 | 1510 W. Hillsborough Ave. | Bethel Temple Assembly Of God, Inc. 1510 W. Hillsborough Ave. Tampa, FL 33603 | Bethel Temple | 207 | - | Church | M |
| 105356.0000 | 1002 W. Hillsborough Ave. | Joseph M. & Louise Dibbs c/o Circle K Corp. P.O. Box 52084 Phoenix, AZ 85072 | Circle K #4232 | 230 | 37 | Convenience/ Gas Station | M* |
| 104837.0000 | 803 W. Hillsborough Ave. | Ralph Perez 3704 N. Nebraska Ave. Tampa, FL 33603 | AC Auto Freeze | 238 | 38 | Auto Repair | M |
| 104844.0000 | 701 W. Hillsborough Ave. | Alan J. & Nancy L. Thompson 3450 Blanca Ave. Tampa, FL 33606 | Discount Tire Town | 241 | 39 | Auto Repair | M |
| 165312.0000 | 202 W. Hillsborough Ave. | L. Marcotrigiano Sr. et. al. 17509 Meadow Bridge Dr. Tampa, FL 33604 | Tire World | 256 | 42 | Auto Repair | M |

* Applied/approved for FDER EDI state reimbursed contamination assessment/remediation.

** Site with active FDER compliance enforcement case.

TABLE 1A (CONT.)

| Folio # | Physical Site Address | Current Owner/Address | Current Tenant/ Operator | FDOT DSA | | Land Use/ Bus. Acty | Risk Ranking |
|----------------------------|---|--|--|----------|--------|-------------------------------|-----------------|
| | | | | File # | File # | | |
| 164455.0000 164455.1000 | 203-09 W. Hillsborough Ave. | C. Leslie & Bruce Crumpler 203 W. Hillsborough Ave. Tampa, FL 33604 | Les' Import Auto | 264 | 41 | Auto Repair | M |
| 165313.0000 | 124 W. Hillsborough Ave. | Alvin and Loyce Ayers 18306 Sunset Blvd. Redington Shores, FL 33708 | Muffler & Brake City | 265 | 43 | Auto Repair | M |
| 165316.0000 | 116 W. Hillsborough Ave. | Lyle M. Graham 116 W. Hillsborough Ave. Tampa, FL 33604 | Ayer's Auto Air | 267 | 45 | Auto Repair | M |
| 164949.0000 | 5320 N. Florida Ave. | Circle K Corp. P.O. Box 918 Mango, FL 33550 | Circle K (Holly's Corner) | 284 | 47 | Convenience/ Gas Station | M* |
| 164471.0000 | 111 W. Hillsborough Ave. | Chas. R. & Mamye O. Flynt 111 W. Hillsborough Ave. Tampa, FL 33604 | Rental Tool Co. | 289 | - | Contractor's Equip. Rental | M |
| 164472.0000 | 105 W. Hillsborough Ave. | Miller & Holmes, Inc. 501 Lafayette Road St. Paul, MN 55101 | M & H Self-Serve Gas Station | 290 | 46 | Convenience/ Gas Station | M* |
| 164633.0000 | 102 E. Hillsborough Ave. | General Telephone Co. of Florida P.O. Box 110 MC29 Tampa, FL 33601 | GTE - Seminole Hgts Switching Station | 294 | 48 | Communications Station | M* |
| 164213.0000 | 414 E. Hillsborough Ave. | Cumberland Farms c/o VSH Realty, Inc. 777 Dedham St. Canton, MA 02021 | Cumberland Farms #1011 | 311 | 49 | Convenience/ Gas Station | M |
| 164547.0000 | 501 E. Hillsborough Ave. | Amoco Oil Co. P.O. Box 5077 Atlanta, GA 30302 | Amoco #463 | 313 | 50 | Service Station | M |
| 164316.0000 | 502 E. Hillsborough Ave. (northside of road) | Gulf Products Division B.P. Oil Co. Midland Bldg. Cleveland, OH 44115 | Gulf #00375204 | 314 | 51 | Service Station | M* |
| 164310.0000 | 512 E. Hillsborough Ave. | James & Jane Long 123 Ridgedale Road Temple Terrace, FL 33617 | Leroy's 4X4 Auto Center | 318 | 52 | Auto Repair | M |

* Applied/approved for FDER EDI state reimbursed contamination assessment/remediation.

** Site with active FDER compliance enforcement case.

TABLE 1A (CONT.)

| Folio # | Physical Site Address | Current Owner/Address | Current Tenant/ Operator | FDOT DSA | | Land Use/ Bus. Acty | Risk Ranking |
|-------------|---|--|------------------------------------|----------|--------|---------------------------------|-----------------|
| | | | | File # | File # | | |
| 164324.0000 | 806 E. Hillsborough Ave. | Ozdemir Dokumaci 806 E. Hillsborough Ave. Tampa, FL 33604 | Interstate Hills- borough Shell | 321 | 53 | Service Station | M |
| 164321.0000 | 808 E. Hillsborough Ave. | A.L. Boyd P.O. Box 2177 Ft. Myers, FL 33902 | Fuel Savers Oil Shops | 322 | 55 | Auto Repair/ Service | M |
| 164499.0000 | 815 E. Hillsborough Ave. | Alvin & Margaret Ayers 18306 Sunset Blvd. Redington Shores, FL 33708 | Muffler & Brake City | 323 | 54 | Auto Repair | M |
| 171474.0000 | 901 E. Hillsborough Ave. (5319 N. Nebraska Ave.) | Discount Auto Parts, Inc. P.O. Box 8080 Lakeland, FL 33802 | Discount Auto Parts | 324 | - | Auto Parts | M |
| 171483.0000 | 5209 N. Nebraska Ave. | Richard & Barbara Warner 5205 N. Nebraska Ave. Tampa, FL 33603 | Warner's Plumbing | 325 | 58 | Plumbing Supp- lies (vacant) | M |
| 171041.0000 | 902 E. Hillsborough Ave. | Victorine Byrd/A.G.Elching Attn.: Tax Dept. P.O. Box 2 Dallas, TX 75221 | Mobil #02-A67 | 336 | 56 | Service Station | M* |
| 171461.0000 | 5301 N. Nebraska Ave. | Delio & Ernestine Carrera 5301 N. Nebraska Ave. Tampa, FL 33603 | Nebraska Avenue Body Shop | 338 | 57 | Auto Repair | M |
| 171481.0000 | 1015 E. Hillsborough Ave. | John and Waunda Hagan 301 S. Riverhills Dr. Temple Terrace, FL 33617 | Superior Auto Sales | 345 | - | Auto Sales | M |
| 171253.0000 | 1101 E. Hillsborough Ave. | David Heinz 1101 E. Hillsborough Ave. Tampa, FL 33604 | David Heinz Auto Repair | 357 | - | Auto Repair | M |
| 171251.0000 | 1115 E. Hillsborough Ave. | David Heinz 1101 E. Hillsborough Ave. Tampa, FL 33604 | David Heinz Used Cars | 358 | - | Auto Sales | M |

* Applied/approved for FDER EDI state reimbursed contamination assessment/remediation.

** Site with active FDER compliance enforcement case.

ATTACHMENT C-7
FLOODPLAIN ASSESSMENT

In compliance with Executive Order 11988, "Floodplain Management", the proposed action has been evaluated to determine the extent of potential impacts associated with base floodplain encroachment.

Flood Insurance Rate Maps (FIRM), The Flood Insurance Study (FIS) for the City of Tampa, Florida Department of Transportation drainage maps and field reviews were utilized to identify potential floodplain and floodway encroachments. A review of the above sources indicates that the proposed project crosses the 100-year floodplain (base floodplain) at the Hillsborough River for a total transverse distance of approximately 570 feet (Figure 1). Additionally, the FIS has designated the natural channel as a floodway in this area of the Hillsborough River.

Construction of the Tampa Bypass Canal and Lower Hillsborough Flood Detention Area, upstream of Hillsborough Avenue allows for diversion of and detention of all floods up to and including the 500 year event. As a result, downstream of the Tampa Waterworks Dam the water surface elevation in the river is influenced by tidal cycles from Hillsborough Bay, as evidenced by a base flood elevation equal to that of the Bay (El. 11.0).

The existing roadway is slightly above the 11' elevation associated with the base floodplain (Zone A10). Widening of the transverse base floodplain encroachment is anticipated due to construction of a wider replacement bridge. However, since flood elevations at this site are under tidal influence, widening of the bridge to accommodate additional lanes will have no impact on base flood elevations.

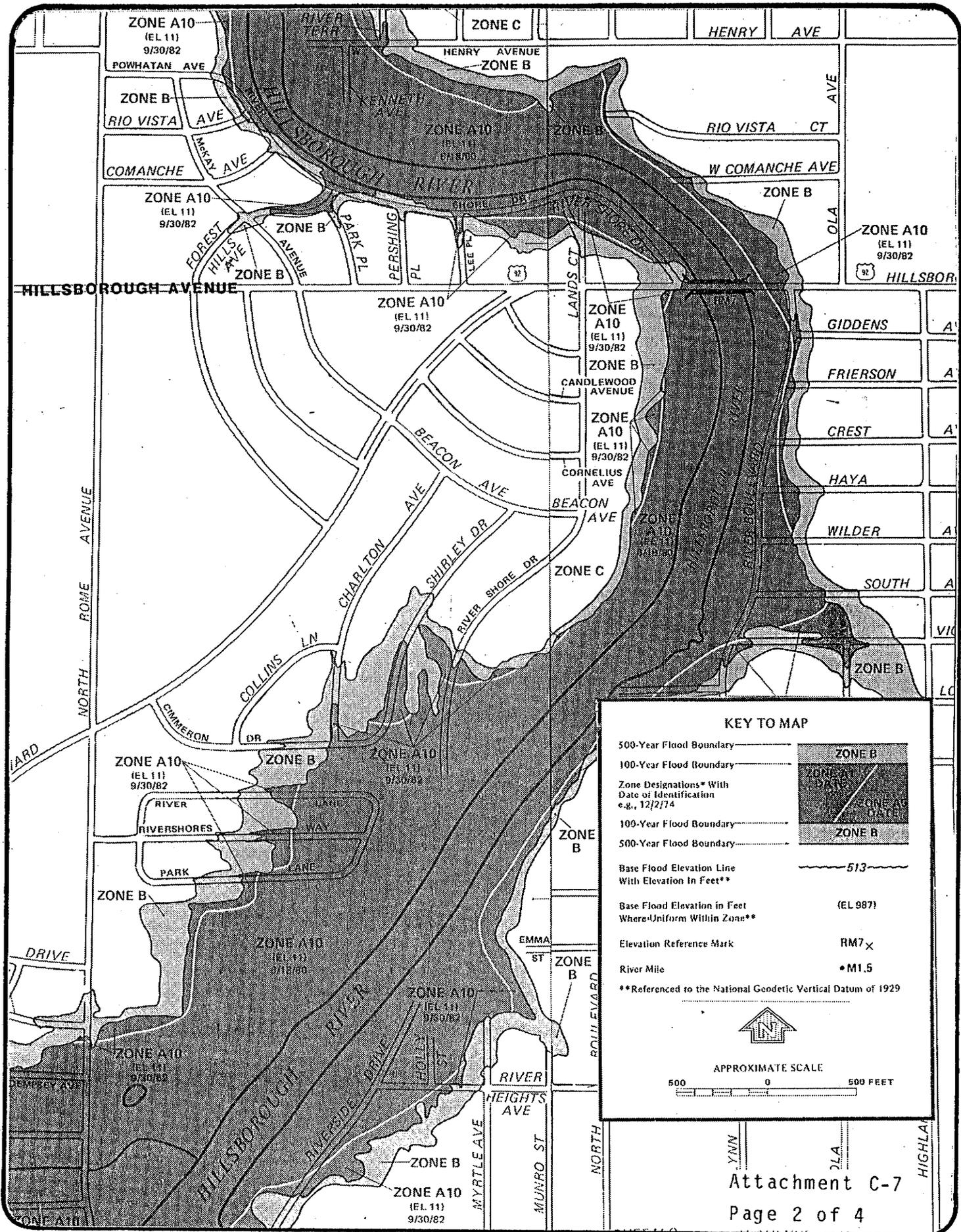


FIGURE 1 - 100 YEAR AND 500 YEAR FLOOD ZONES

Theoretically, tidal control of water surface elevation on the Hillsborough River in this area would tend to encourage consideration of shortening the proposed bridge length for economic reasons, which would entail placement of additional fill within the main channel. Channel reduction is not felt to be a feasible design consideration due to the presence of Manatees along this portion of the Hillsborough River. Increasing the likelihood of injury to this endangered species by forcing them into the main navigational channel would pose serious permitting difficulties on both a state and federal level (see also Attachment C-10). No economic or risk analysis was performed at this site; proposed bridge length has no effect on base floodplain elevation and cannot be reduced due to constraints inherent in the Endangered Species Act.

Alternative alignments to reduce potential floodplain encroachment would entail realignment of Hillsborough Avenue in the vicinity of the bridge, significantly increasing right-of-way costs and impacts to adjacent property owners. From a cost/benefit standpoint, alternative bridge alignments are not feasible.

Hillsborough Avenue is designated as an emergency evacuation route serving both Pinellas and Hillsborough Counties. In addition, Hillsborough Avenue is a major artery for emergency services vehicles. The grade of the proposed bascule bridge would exceed both the 100-year (Zone A) and the 500-year (Zone B) flood elevations; thus, overtopping of the proposed facility is not an area of concern, and the proposed action would not result in the interruption of this evacuation route.

The proposed replacement bridge structure would be designed in such a way as to accommodate the design flood with no significant damage to the highway facility and to minimize any adverse impacts to the floodplain, including effects on property owners both upstream and downstream of the proposed bridge. The proposed project would not increase the base flood elevation (or increase the flood zone area). The new structure will be designed to bridge the floodway.

The proposed action would result in the additional filling of approximately 0.6 acres of floodplain. No adverse impacts to natural and beneficial floodplain values would occur other than loss of open space. The proposed action is not expected to encourage any additional floodplain development, since the corridor is already urbanized. Due to the areal extent of the 100-year floodplain, alternate alignments would not avoid or significantly lessen floodplain encroachment.

Based on the Florida Department of Transportation Drainage Manual criteria, the floodplain encroachment and risk evaluation for the proposed project is Category 4: "Projects on existing alignment involving replacement of existing drainage structures with no record of drainage problems." The proposed structure will perform hydraulically in a manner equal to or greater than the existing structure, and backwater surface elevations are not expected to increase. As a result, there will be no significant adverse impacts on natural and beneficial floodplain values. There will be no significant change in flood risk, and there will not be a significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.

ATTACHMENT C-10
THREATENED AND ENDANGERED SPECIES

In compliance with the Endangered Species Act of 1973 and amendments thereto, the project area was field reviewed by a qualified biologist for the purpose of evaluating possible impacts upon endangered and threatened species. Based on studies and investigations at this stage of design, the proposed action will not jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of the habitats of any such species. The proposed project is located in an area designated as critical habitat (Hillsborough River) by the U.S. Department of the Interior.

Based on field reviews and a knowledge of preferred habitat and range¹, a total of four species classified as endangered or threatened by the U.S. Fish and Wildlife Service (U.S.F.W.S.) may occur within the corridor. These species are listed in Table 1.

TABLE 1 - THREATENED AND ENDANGERED SPECIES

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Likelihood of Occurrence</u> | <u>Suitable Habitat On-Site</u> | <u>Federal Listing</u> |
|---------------------------------------|---------------------|---------------------------------|---------------------------------|------------------------|
| <u>Mycteria americana</u> | Wood Stork | low | Freshwater marshes | Endangered |
| <u>Falco pergrinus</u> | Peregrine Falcon | low | Freshwater marshes | Endangered |
| <u>Haliaeetus l. leucocephalus</u> | Southern Bald Eagle | low | Streams | Endangered |
| <u>Trichechus manatus latirostris</u> | West Indian Manatee | sighted | Hillsborough River | Endangered |

¹Florida Committee on Rare and Endangered Biota of Florida. Peter C.H. Pritchard, Series Ed. (Vols. 1-VI) 1979.

None of these four species were observed during any of the field investigations conducted, however the West Indian Manatee has been sighted in the Hillsborough River at least to Sulfer Springs. Because of the high concentration of human activity in the project area, it is very unlikely that any of these species have significant populations in the study area or that the roadway expansion will have a significant impact on their populations.

The freshwater marshes along the project corridor could provide foraging habitat for wood storks. The wetlands and ditch systems that will be displaced or altered by the proposed multi-laning, however, are not regionally significant to wood storks. Of the approximately 20 nesting colonies known to exist in Florida, none occur in the project area.

The West Indian manatee (Trichechus manatus latirostris) is considered endangered by the United States Fish and Wildlife Service (50CFR 17.11-12) and the Florida Game and Fresh Water Fish Commission (Chapter 39-27.03-1-05 F.A.C.). The Florida Legislature designated the mouth of the Alafia River, the discharge canal of the Tampa Electric Company Big Bend power plant, and the northern residential canals of Apollo Beach as manatee sanctuaries with permanent warning signs. The Hillsborough River has not been designated as a sanctuary, however the manatee has been sighted recently as far upstream as Sulfer Springs. Sulfur Springs, a permanent "warm" water discharge in the Hillsborough River, is approximately 2.7 miles upstream from the Hillsborough Avenue crossing.

The construction of a new bascule bridge could potentially jeopardize health and/or habitat of the manatee. The new bridge is proposed to be constructed in stages with the existing bridge being removed and replaced. The new structure will be approximately 25' north of the existing. There is no filling being proposed within the landward extent of the river at this time. The major danger to the manatee will be from the boats and barges concentrated in the river around the existing and proposed bridges. Contact was made with Mr. David L. Ferrell, Field Supervisor, of the U.S. Fish and Wildlife Service and the following mitigative measures are proposed pursuant to Section 7

of the Endangered Species Act of 1973, to prevent injuring or interfering with the migration of the manatee in the Hillsborough River:

1. Post permanent manatee special speed zones up and downstream of the project.
2. Include a section in the contract stating the presence of the manatee in the project area and quote the Florida Manatee Act (Section 370, 12 Subsection 2, F.S.) and the Endangered Species Act of 1973 (PL 93#205).
3. Create a guide for the contractors and subcontractors on the status of the manatee and provide guidance on ways to plan construction activities to avoid injurious situations.
4. Have trained personnel patrolling in the water during construction related activities to watch for manatees from 15 November to 31 March to ensure that injurious activities are suspended when manatees are in the area and to ensure manatees are not injured or trapped in the turbidity screens.
5. Post the Florida Manatee Hot Line telephone number (1-800-342-1821) and the Department of Interior Fish and Wildlife Service number (1-305-562-3909) for reports of injury.
6. Attempt to reduce the number of vessels in the water from 15 November to 31 March.
7. Attempt to concentrate the vessels in one general location from 15 November to 31 March.

Other endangered or threatened species listed in Table 1 lack sufficient suitable habitat within the immediate project area and are considered to have a low likelihood of occurrence. No endangered or threatened plant species is expected to occur along the Hillsborough Avenue alignment. All endangered or threatened plant species found within the region have specific and restricted habitat requirements and none of these habitats occur along the project corridor.

Based on the above evaluation, it has been determined that the proposed project will not impact any federally-listed threatened or endangered species or affect or modify any critical habitat. A determination of "no effect" has been made, and the project is consistent with the Endangered Species Act of 1973 and amendments thereto.

ATTACHMENT D-1
NOISE IMPACTS

This attachment is a brief summary of the Noise Study Reports which have been prepared for the proposed project.^{1,2,3} The purpose of the noise analysis is to evaluate potential impacts of the proposed project on noise-sensitive sites and to evaluate potential noise abatement measures, where appropriate. Alternatives evaluated include existing (1987) conditions, year 2010 No Build and year 2010 Build alternatives.

Representative noise-sensitive sites (receptors) where exterior ambient noise readings were taken are illustrated in Figure 2-2. Field measured readings were compared to computer predictions to validate the noise model (FHWA's Noise Barrier Cost Reduction Procedure, STAMINA 2.0, March 1983). Predicted values differ from field measured values by three dBA or less. Modelled worst-case conditions are based on level of service C volumes at posted speeds, with adjustments for type of vehicle. (The hour most representative of modelled conditions typically occurs between mid-morning and mid-afternoon).

Table 1 summarizes the computer-predicted existing and future noise levels for each of the nine modelled sites.

For existing (1987) conditions, six (6) of the nine (9) modelled sites already experience noise levels which exceed FHWA noise abatement criteria for Activity Category B uses.

¹Noise Study Report for Hillsborough Avenue (S.R. 580/600) prepared for FDOT by DSA GROUP, INC., June, 1988.

²Addendum to Noise Study Report for Hillsborough Avenue. December 22, 1988. Prepared by DSA Group, Inc.

³Supplemental Noise Study Report for Seminole Heights Area at Hillsborough Avenue. December 27, 1988. Prepared by DSA Group, Inc.

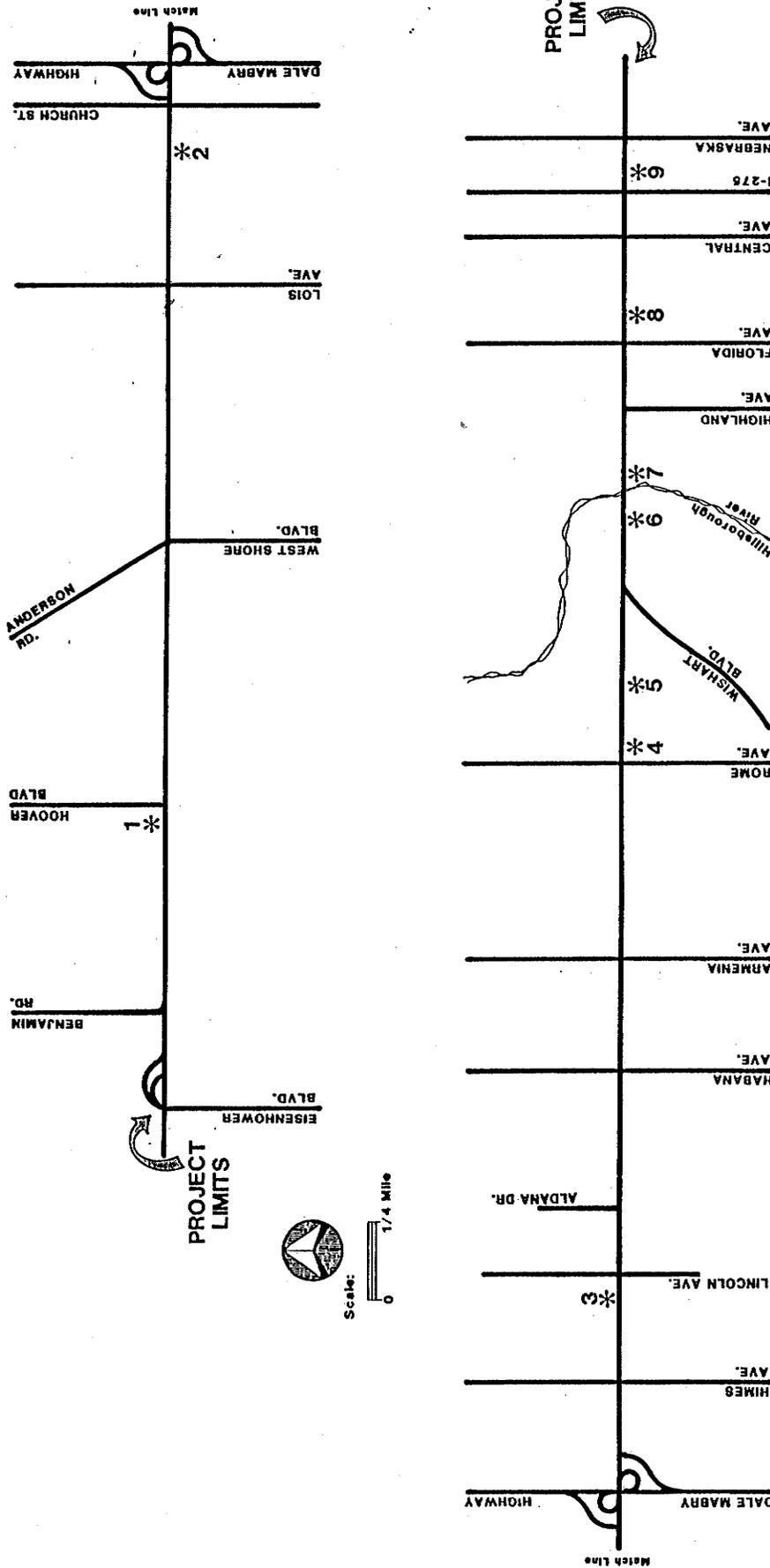


Figure 2-2 AMBIENT NOISE MEASUREMENT SITES

HILLSBOROUGH AVENUE

Source: DSA GROUP, INC., 1988

TABLE 1 - NOISE LEVELS ESTIMATED BY STAMINA

| Receptor Site No. | Use Description | Existing Distance to Edge of Pavement(Ft.) | Existing Worst Case Estimate of Leq (1) (dBA) | Year 2010 Estimates of Leq (dBA) | | Change Due to Project | FHWA Design Noise Levels (Leq) (Exterior) |
|-------------------|------------------------------|--|---|----------------------------------|-------|-----------------------|---|
| | | | | No-Build | Build | | |
| 1 | Airport Office Park | 46 | 70* | 70 | 71 | +1 | 72 |
| 2 | Hillsborough Cinema | 98 | 70* | 70 | 71 | +1 | 67 |
| 3 | Tampa Business College | 55 | 68* | 68 | 71 | +3 | 67 |
| 4 | Bethel Temple | 138 | 66 | 66 | 69 | +3 | 67 |
| 5 | Residence | 28 | 71* | 71 | N/A | N/A | 67 |
| 6 | Moon River Apartments | 23 | 71* | 71 | 67 | -4 | 67 |
| 7 | River Blvd. Park | 91 | 63 | 63 | 63 | 0 | 67 |
| 8 | Residence | 10 | 73* | 73 | 73** | 0 | 67 |
| 9 | Seminole Hts. Baptist Church | 36 | 69* | 69 | 72 | +3 | 67 |

(1) As predicted by STAMINA Version 2.0.

*Currently exceeds level for FHWA noise abatement criteria.

**Without any noise barriers; with 8' walls, noise levels are expected to drop as shown in Table 2.

For the Year 2010 No Build Alternate, the following numbers of Activity Category B type land uses are predicted to experience Leq noise levels in excess of 67 dBA:

| <u>Number of</u> | <u>Type of Land Use</u> |
|------------------|--------------------------|
| 23 | Low-density residential |
| 2 | High-density residential |
| 7 | Motels/hotels |
| 1 | School |
| <u>3</u> | Churches |
| 36 | Total |

For the Year 2010 Build Alternate, Leq noise levels are predicted to increase between 0 and 3 dBA above the No Build case. An increase of 3 dBA is not considered significant. The Build Alternate is expected to result in the following number of Category B-type land uses with Leq noise levels in excess of 67 dBA:

| <u>Number of</u> | <u>Type of Land Use</u> |
|------------------|--------------------------|
| 60 | Low density residential |
| 2 | High density residential |
| 7 | Motels/hotels |
| 1 | School |
| <u>3</u> | Churches |
| 73 | Total |

The slight increases in noise levels are primarily due to the changes in right-of-way requirements and the expected increase in traffic volumes and speeds (due to the wider lane widths). The majority of the impacts occur between Dale Mabry and Nebraska Avenue, with residential uses predicted to be more adversely affected than other uses, particularly between Rome and Central Avenues.

Various noise abatement measures were considered since 73 sites are expected to have noise levels in excess of FHWA design criteria for Activity Category B land uses. These measures include:

- o traffic management (e.g. restriction of truck traffic)
- o change in alignment
- o land use and zoning controls
- o vegetative and structural barriers
- o right-of-way acquisition

Restriction of truck traffic is considered impractical since the reduction in noise would be insufficient and since Hillsborough Avenue is a principal arterial serving as a primary east-west route throughout much of Hillsborough County.

Changing the alignment is considered impractical since major shifts would be required (which would generally result in greater wetland impacts) and a change in alignment would tend to shift the noise impacts to alternate receptors.

Land use and zoning controls are not considered an effective abatement measure because of the extent of existing development. They could be effective, however, for future development for vacant parcels and for areas likely to experience redevelopment.

Vegetative barriers (e.g. trees) are generally impractical, since an approximate 100 foot wide dense foliage barrier is required to achieve even a 5 dBA reduction in noise levels. Structural barriers (e.g. walls and/or berms) are generally not considered cost effective or practical, since the additional right-of-way required would be expensive and breaks in the barriers for driveways and intersections would greatly diminish their effectiveness.

The relatively minor change in noise levels between the year 2010 No-Build and Build alternative does not justify the cost of acquiring additional right-of-way for noise reduction. Additional acquisition would result in further displacements of residences.

The predicted changes in Leq noise levels between the No-Build and Build Alternatives vary from 0 to 3 dBA. These changes are considered to have little or no adverse impact on the adjacent land uses. Several locations such as Tampa College and the West Hillsborough Baptist Church either currently or are predicted to experience noise levels in excess of the FHWA design noise level of 67 dBA. However, these situations are considered unavoidable adverse impacts due to the buildings proximity to existing and proposed right-of-way.

Additional analysis was conducted for the Seminole Heights area (between Florida and Central Avenues) due to the residential nature of the land use and the controversy of the project associated with its impacts to the proposed historic district. The Department has made a commitment to construct "buffer walls" on either side of Hillsborough Avenue through the Seminole Heights area, between one-half block east of Florida Avenue and Central Avenue. These walls would be used in conjunction with extensive landscaping improvements to:

- o provide privacy and noise attenuation
- o buffer residential uses from the public use (highway) and thereby help discourage the possibility of strip commercial development occurring

A noise barrier analysis was done using the STAMINA/OPTIMA computer programs; twenty widely scattered receptors were modelled to test various spatial effects of various height walls for both continuous and noncontinuous walls (breaks at intersections). The results of the analysis are included in Table 2. An 8' high wall has been recommended based on aesthetic, architectural, and noise abatement considerations. Based on the current plan to use an 8' high wall, with breaks in the wall at intersections, an eight-foot wall is expected to result in an average overall reduction in noise of about four decibels (Leq), as shown in Table 2. While a continuous wall (with no breaks at the intersecting streets) would result in a greater insertion loss, the Department has recommended that these side streets not be closed due to various problems which would result if they were closed.

TABLE 2 - Projected Noise Levels for 8' Continuous or Noncontinuous Walls

| Receptor No. | Map ID | Side N=North S=South | Appx. Dist. from future Roadway Centerline (feet) | Projected Noise Level without barriers (dBA) | (Rounded nearest (dBA)) Projected Worst - Case Noise Levels with 8' Barriers (Leq) | | Differences: Continuous vs. Noncontinuous | | | |
|-----------------|-----------|----------------------------|---|---|---|---------------|---|----|------|---|
| | | | | | Continuous | Noncontinuous | | | | |
| 1 | R1 | N | 105 | 69 | 67 | 67 | 0 | | | |
| 2 | R2 | N | 100 | 69 | 64 | 68 | 4 | | | |
| 3 | MBR | S | 100 | 68 | 63 | 64 | 1 | | | |
| 4 | R3 | S | 85 | 70 | 64 | 65 | 1 | | | |
| 5 | R4 | N | 118 | 68 | 63 | 63 | 0 | | | |
| 6 | R5 | N | 140 | 66 | 62 | 63 | 1 | | | |
| 7 | R6 | N | 195 | 64 | 61 | 61 | 0 | | | |
| 8 | R7 | S | 115 | 67 | 63 | 66 | 3 | | | |
| 9 | FYR | S | 102 | 68 | 63 | 67 | 4 | | | |
| 10 | PNR | N | 110 | 68 | 63 | 63 | 0 | | | |
| 11 | R8 | N | 85 | 71 | 64 | 64 | 0 | | | |
| 12 | R9 | S | 83 | 70 | 64 | 69 | 5 | | | |
| 13 | R10 | S | 109 | 68 | 63 | 66 | 3 | | | |
| 14 | R11 | N | 106 | 68 | 63 | 67 | 4 | | | |
| 15 | R12 | S | 91 | 70 | 64 | 68 | 4 | | | |
| 16 | R13 | N | 116 | 68 | 63 | 65 | 2 | | | |
| 17 | R14 | N | 94 | 70 | 58* | 64 | 6 | | | |
| 18 | R15 | S | 82 | 70 | 64 | 64 | 0 | | | |
| 19 | R16 | S | 95 | 69 | 65 | 66 | 1 | | | |
| 20 | R17 | N | 120 | 68 | 63 | 65 | 2 | | | |
| Avg. | | | | 69 | Avg. | 63 | Avg. | 65 | Avg. | 2 |

Notes: 1. Based on 50% traffic directional split

2. Determined using STAMINA/OPTIMA Version 3.0

* Receptor is only 1-2 feet behind noise wall for the continuous wall case.

ATTACHMENT D-2
AIR QUALITY ANALYSIS

This attachment is a brief summary of the Air Quality Report which was prepared for this project¹.

Both a graphical screening test and a computer model (TEXIN) were used to estimate changes in carbon monoxide (CO) concentrations for both the No-Build and Build alternatives. The graphical screening test consists of a series of curves which are generated by computer models based on various "worst case" assumptions regarding meteorology, traffic, and site conditions. These curves are used to determine the "critical distance" (the closest a receptor can be to an intersection without any chance of a significant air quality impact).

Baseline conditions (1984) were compared to year 2010 projected conditions for both the "no-build" and "build" alternatives. The intersection of Himes Avenue and Hillsborough Avenue was selected as the "worst case" intersection for air quality. For "existing conditions", receptors were established in the northwest and northeast quadrants where activity occurs on a more frequent basis. For Years 2000 and 2010 "Build" conditions, additional receptors were added in the northwest and southeast quadrants where bus bays are planned.

The results of the air quality screening tests are summarized in Table 1 for baseline and Year 2010 conditions only. For both baseline and Year 2010 conditions, activity occurs within the critical distances (at existing parking area on northeast corner and at future bus bays on northwest and southeast corners). Due to this condition, a more sophisticated analysis was performed using the TEXIN computer model to predict CO concentrations.

¹Air Quality Report for Hillsborough Avenue (S.R. 580/600). Prepared for FDOT by DSA Group, Inc., June, 1988.

TABLE 1 - SUMMARY OF AIR QUALITY SCREENING TESTS RESULTS
FOR THE INTERSECTION OF HIMES AND HILLSBOROUGH

| Scenario & Year | Inter-section Leg | Peak Hour Traffic Volume | Average Link Speed (MPH) | Critical Distance (FT) | Nearest Receptor (FT) | Notes |
|---------------------------|-------------------|--------------------------|--------------------------|------------------------|-----------------------|------------------|
| Baseline Conditions: 1984 | N | 1346 | 30 | <10 | 80+ | gas pump is land |
| | E | 2536 | 45 | 12 | 5-10 | bank parking |
| | S | 1875 | 40 | <10 | - | vacant land |
| | W | 2708 | 45 | 18 | - | vacant land |
| No-Build: 2010 | N | 2496 | 30 | <10 | 80+ | |
| | E | 2848 | 45 | <10 | 5-10 | |
| | S | 2400 | 40 | <10 | - | |
| | W | 3040 | 45 | <10 | - | |
| Build: 2010 | N | 2608 | 30 | <10 | 40+ | |
| | E | 4192 | 45 | <10 | <10 | (bus bay) |
| | S | 2448 | 40 | <10 | - | |
| | W | 4512 | 45 | <10 | <10 | (bus bay) |

Figures 2-2 and 2-3 show assumed geometric conditions and receptor locations for existing and future conditions. The results of the computer modelling are presented in Table 2 for baseline and Year 2010 conditions only (results for 1990 and 2000 are available in the AQR).

As shown in Table 2, CO estimates are anticipated to meet State and National standards for all receptors for all years. Existing conditions generally have higher CO concentrations than later years with or without the project; improvements in vehicle emissions are expected to more than offset increased emissions due to higher traffic volumes. Therefore, the project is not expected to have a significant impact on air quality. In addition, the proposed project is not estimated to significantly change air quality in comparison with the No-Build Alternative.

Construction activities will cause minor short-term air quality impacts in the form of dust from earthwork, emissions from heavy equipment and smoke from open burning. These impacts will be minimized by adherence to all state and local regulations and to the DOT Standard Specifications for Road and Bridge Construction.

The proposed project is located in an area which is "non-attainment for ozone", and an area where the State Implementation Plan (SIP) does not contain any transportation control measures. Therefore, the conformity procedures of 23 CFR 770 do not apply to this project. The project is in conformance with the SIP because it will not cause violations of air quality standards and will not interfere with any transportation control measures.

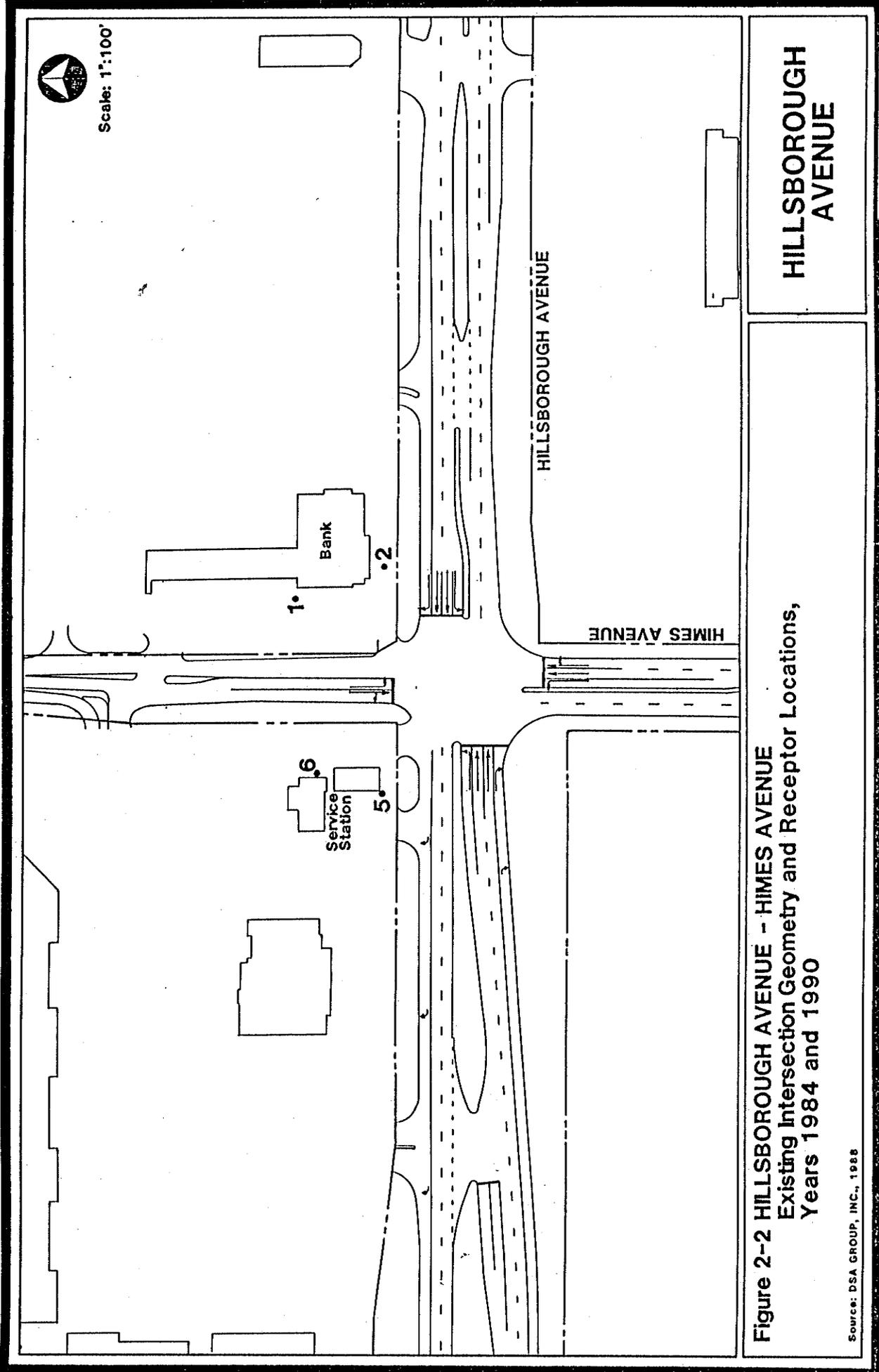


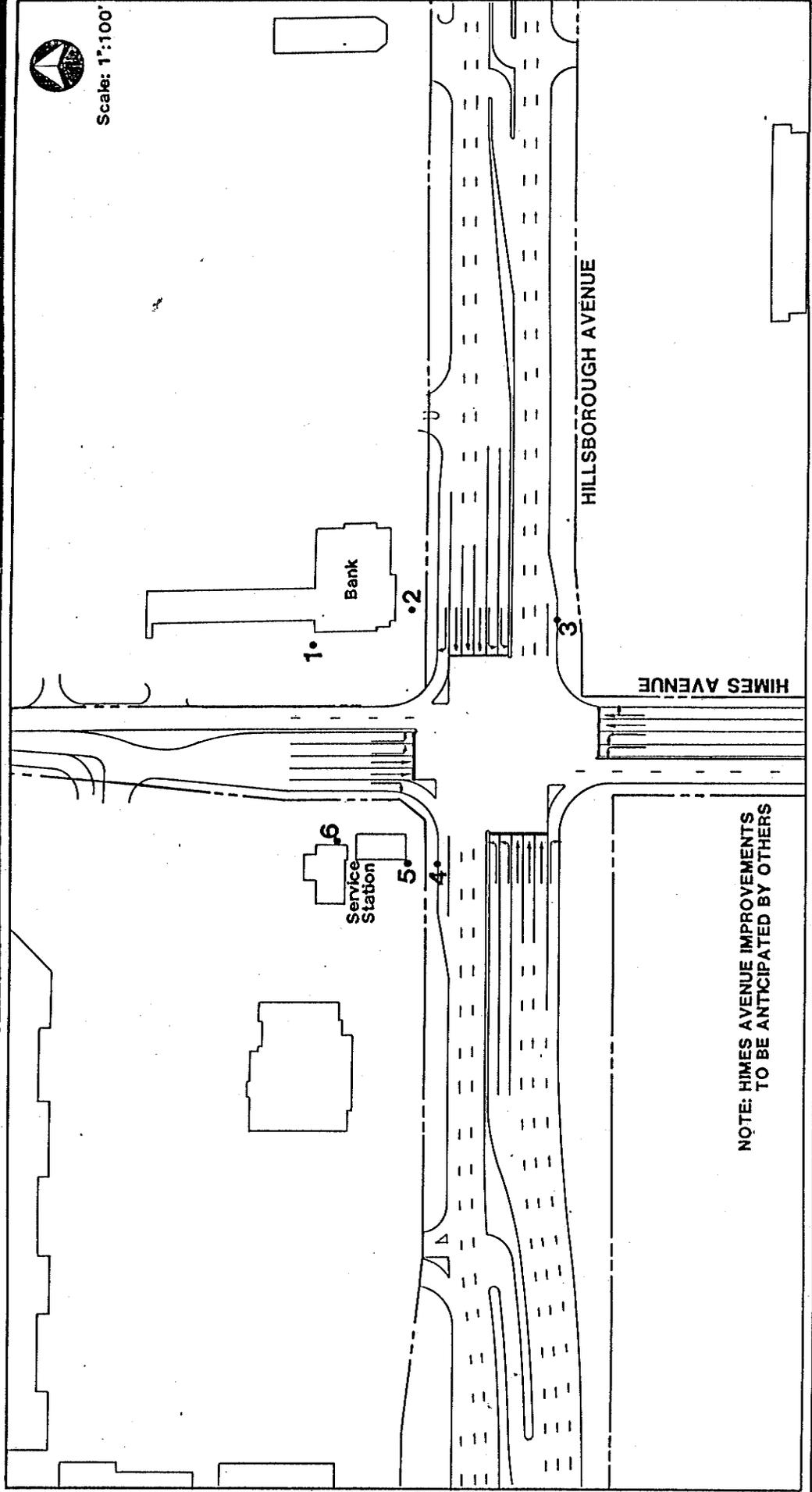
Figure 2-2 HILLSBOROUGH AVENUE - HIMES AVENUE
 Existing Intersection Geometry and Receptor Locations,
 Years 1984 and 1990

Source: DSA GROUP, INC., 1988

HILLSBOROUGH AVENUE



Scale: 1"=100'



NOTE: HIMES AVENUE IMPROVEMENTS
TO BE ANTICIPATED BY OTHERS

Figure 2-3 HILLSBOROUGH AVENUE - HIMES AVENUE
Proposed Intersection Geometry and Receptor Locations,
Year 2000

Source: DSA GROUP, INC., 1988

HILLSBOROUGH AVENUE

TABLE 2 - RESULTS OF TEXIN MODEL AIR QUALITY ANALYSIS
(INTERSECTION OF HIMES AVENUE & HILLSBOROUGH AVENUE)

| Receptor Number | Concentration | Estimated CO Concentration (PPM)* | | NAAQS** (PPM) | Year 2010 Change Due to Project (PPM) | Receptor | |
|-----------------|---------------|-----------------------------------|---------------|---------------|---------------------------------------|------------|--------------------|
| | | 1984 Baseline | 2010 No-Build | | | 2010 Build | Quad. |
| 1 | 1-Hour | 11.1 | 6.6 | 8.0 | +1.4 | NE | Sidewalk near bank |
| | 8-Hour*** | 6.7 | 4.0 | 4.8 | +0.9 | | |
| 2 | 1-Hour | 11.7 | 7.7 | 9.4 | +1.0 | NE | Sidewalk near bank |
| | 8-Hour | 8.2 | 4.6 | 5.6 | +0.6 | | |
| 3 | 1-Hour | N/A | 8.5 | 10.4 | +1.9 | SE | Bus Bay |
| | 8-Hour | N/A | 5.1 | 6.2 | +1.1 | | |
| 4 | 1-Hour | N/A | 8.9 | 10.7 | +1.8 | NW | Bus Bay |
| | 8-Hour | N/A | 5.3 | 6.4 | +1.1 | | |
| 5 | 1-Hour | 13.1 | 7.6 | 9.3 | +1.7 | NW | Service Station |
| | 8-Hour | 7.9 | 4.6 | 5.6 | +1.0 | | |
| 6 | 1-Hour | 12.3 | 7.1 | 8.6 | +1.5 | NW | Service Station |
| | 8-Hour | 7.4 | 4.3 | 5.2 | +0.9 | | |

* Concentration estimates based on worst wind angle.

** NAAQS = National Ambient Air Quality Standards.

*** 8-Hour CO concentrations are based on a meteorological persistence factor of 0.6.

ATTACHMENT D-3
CONSTRUCTION IMPACTS

Construction activities for the proposed widening of Hillsborough Avenue will have air, noise, water quality, traffic flow and visual impacts for those residents and travelers within the immediate vicinity of the project.

The air quality impact will be temporary and will primarily be in the form of emissions from diesel powered construction equipment and dust from embankment and haul road areas. Air pollution associated with the creation of airborne particles will be effectively controlled through the use of watering or the application of calcium chloride in accordance with FDOT's "Standard Specifications for Road and Bridge Construction", as directed by the FDOT Project Manager.

Noise and vibrations impacts will be from the heavy equipment movement and construction activities such as pile driving and vibratory compaction of embankments. Noise control measures will include those contained in FDOT's "Standard Specifications for Road and Bridge Construction" in addition to those recommended in the Noise Impact section of this document.

Water quality impacts resulting from erosion and sedimentation will be controlled in accordance with FDOT's "Standard Specifications for Road and Bridge Construction" and through the use of Best Management Practices.

Maintenance of traffic and sequence of construction will be planned and scheduled so as to minimize traffic delays throughout the project. Signs will be used as appropriate to provide notice of road closures and other pertinent information to motorists. Local news media and emergency services will be notified in advance of road closings and other construction-related activities which could excessively inconvenience the community so that motorists, residents, and businesses can plan their day and travel routes in advance.

A sign providing the name, address and telephone of a Department contact person will be displayed on site to assist the public in obtaining immediate answers to questions and logging complaints about project activity.

Access to all businesses and residences will be maintained to the extent practical through controlled construction scheduling. Traffic delays will be controlled to the extent possible where many construction operations are in progress at the same time. The contractor will be required to maintain two lanes of traffic in each direction of Hillsborough Avenue at all times and to comply with the Best Management Practices of FDOT.

For the residents living along the right-of-way, some of the materials stored for the project may be displeasing visually; however, this is a temporary condition and should pose no substantial problem in the short term.

Construction of the roadway requires excavation of unsuitable material (muck), placement of embankments and use of materials such as limerock, asphaltic concrete and portland cement concrete. Demucking is anticipated at most of the wetland sites and would be controlled by Section 120 of the FDOT Standard Specifications. Disposal would be on site in detention areas or off site. The removal of structures and debris will be in accordance with local and state regulation agencies permitting this operation. The contractor is responsible for his methods of controlling pollution on haul roads, in borrow pits, other materials pits and areas used for disposal of waste materials from the project. Temporary erosion control features as specified in the FDOT's standard specifications, Section 104, will consist of temporary grassing, sodding, mulching, sandbagging, slope drains, sediment basins, sediment checks, artificial coverings and berms. Turbidity curtains will be used in the Hillsborough River during the bridge replacement construction.