

FORM 508-01
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 04/86 Rev. 7/88

Florida Department of Transportation
 ENVIRONMENTAL DETERMINATION

1. GENERAL INFORMATION

County: Hillsborough and Pasco

Project Name: North Dale Mabry Highway (S.R. 597; see Figure 1)

Project Limits: Vicinity of Van Dyke Rd. in Hillsborough County to Vicinity of U.S. 41

Project Numbers: <u>10160-1510 &</u>	<u>F-295-1(7)</u>	<u>7113328 &</u>	in Pasco
State	Federal	WPA	County
14040-1503		7115882	

2. PROJECT DESCRIPTION

- a. Existing: (see page 2 of 3)
- b. Proposed Improvements: (see page 2 of 3)

3. CLASS OF ACTION

- | | |
|---|--|
| a. Class of Action | b. Other Actions |
| <input type="checkbox"/> Environmental Assessment | <input type="checkbox"/> Section 4(f) Statement |
| <input type="checkbox"/> Environmental Impact Statement | <input type="checkbox"/> Section 106 Consultation |
| <input checked="" type="checkbox"/> Categorical Exclusion | <input type="checkbox"/> Endangered Species Assessment |

c. Public Involvement

- 1. A public hearing is not required, therefore, approval of this Categorical Exclusion constitutes acceptance of the location and design concepts for this project.
- 2. A public hearing was held on June 21, 1988, and a transcript is included with the environmental determination. Approval of this Categorical Exclusion determination constitutes acceptance of the location and design concepts for this project.
 - An opportunity for a public hearing was afforded and a certification of opportunity is included with the environmental determination. Approval of this Categorical Exclusion determination constitutes acceptance of the location and design concepts for this project.
- 3. A public hearing will be held and the public hearing transcript will be provided at a later date. Approval of this Categorical Exclusion DOES NOT constitute acceptance of the project's location and design concepts.
 - An opportunity for a public hearing will be afforded and a certification of opportunity will be provided at a later date. Approval of this Categorical Exclusion determination DOES NOT constitute acceptance of the project's location and design concepts.

4. REVIEWERS' SIGNATURE BLOCK:

<u><i>David A. Lewis</i></u> FDOT Project Engineer	<u>9/20/89</u> Date
<u><i>Augusto S. Rodriguez</i></u> FDOT Environmental Specialist	<u>9/20/89</u> Date
<u><i>D. E. Walker</i></u> FHWA Area Engineer	<u>11/3/89</u> Date

5. FHWA CONCURRENCE BLOCK

<u><i>Demetrius D. Luber</i></u> (For) Division Administrator	<u>11/6/89</u> Date
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North Dale Mabry Highway (Continued)

2. PROJECT DESCRIPTION

- a. **Existing:** Two-lane rural highway offset in 200 foot right-of-way. Land use mostly undeveloped and agricultural with scattered residential and commercial uses. There are numerous (mostly cypress) wetlands contiguous to North Dale Mabry. Dale Mabry is classified as rural minor arterial in this area.
- b. **Proposed Improvements:** (See also Second Draft Preliminary Engineering Report, Rev. 5-27-88). Interim Stage: Constructing two additional lanes to create a 4-lane divided rural highway with a 57'+ depressed, grass median, within existing right-of-way. Ultimate stage improvements (to be State funded) consist of constructing a 4-lane urban "expressway" with two-lane, two-way frontage roads (See Figure 2). A later ultimate stage would entail adding interchanges and converting to one-way frontage roads. Ultimate stage improvements would involve right-of-way acquisition.

FOUR LANE "EXPRESSWAY" WITH FRONTAGE ROADS AND POSSIBLE STAGE CONSTRUCTION

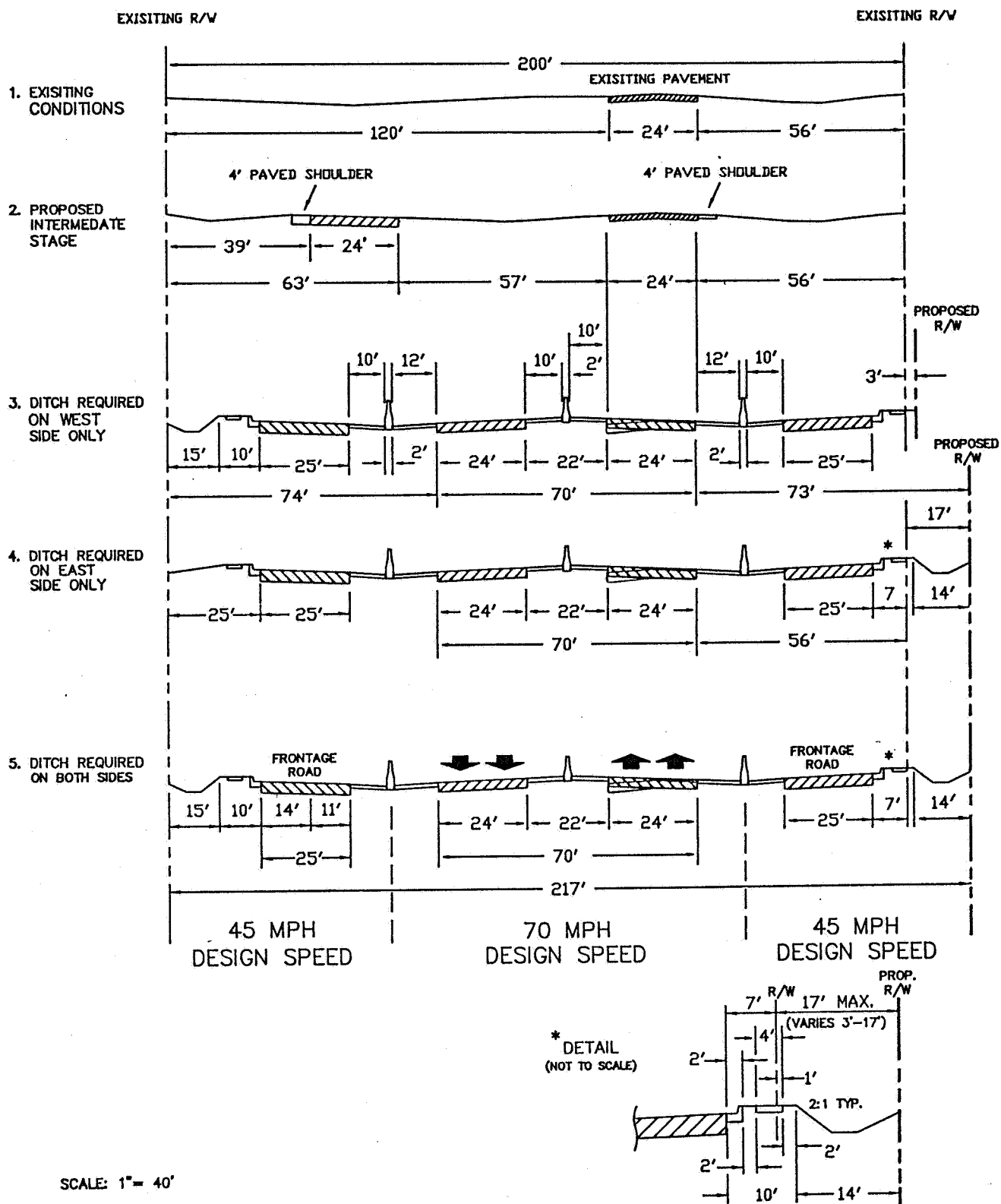





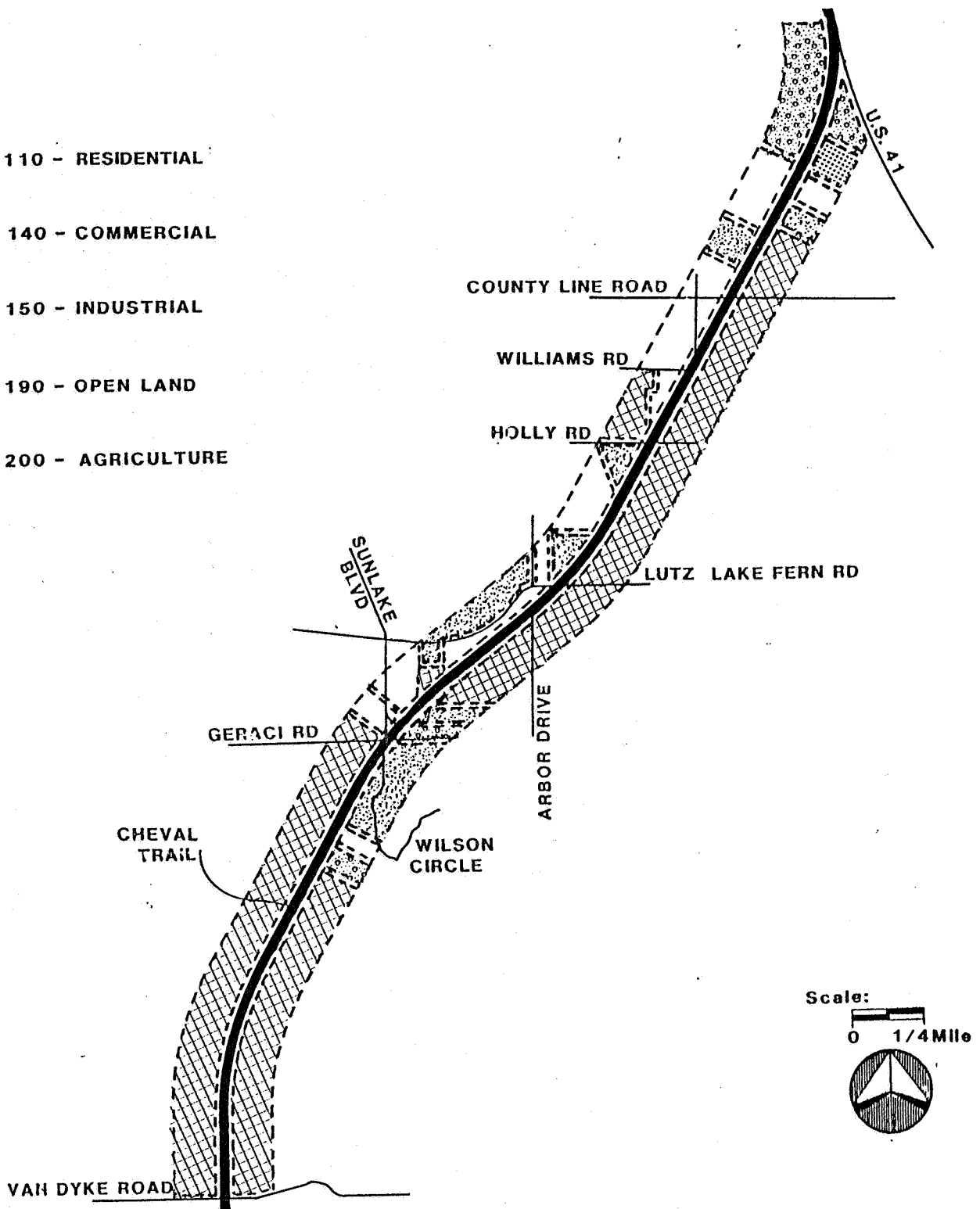


FIGURE 2 RECOMMENDED ALTERNATE NORTH OF N.W. EXPRESSWAY

DALE MABRY HIGHWAY

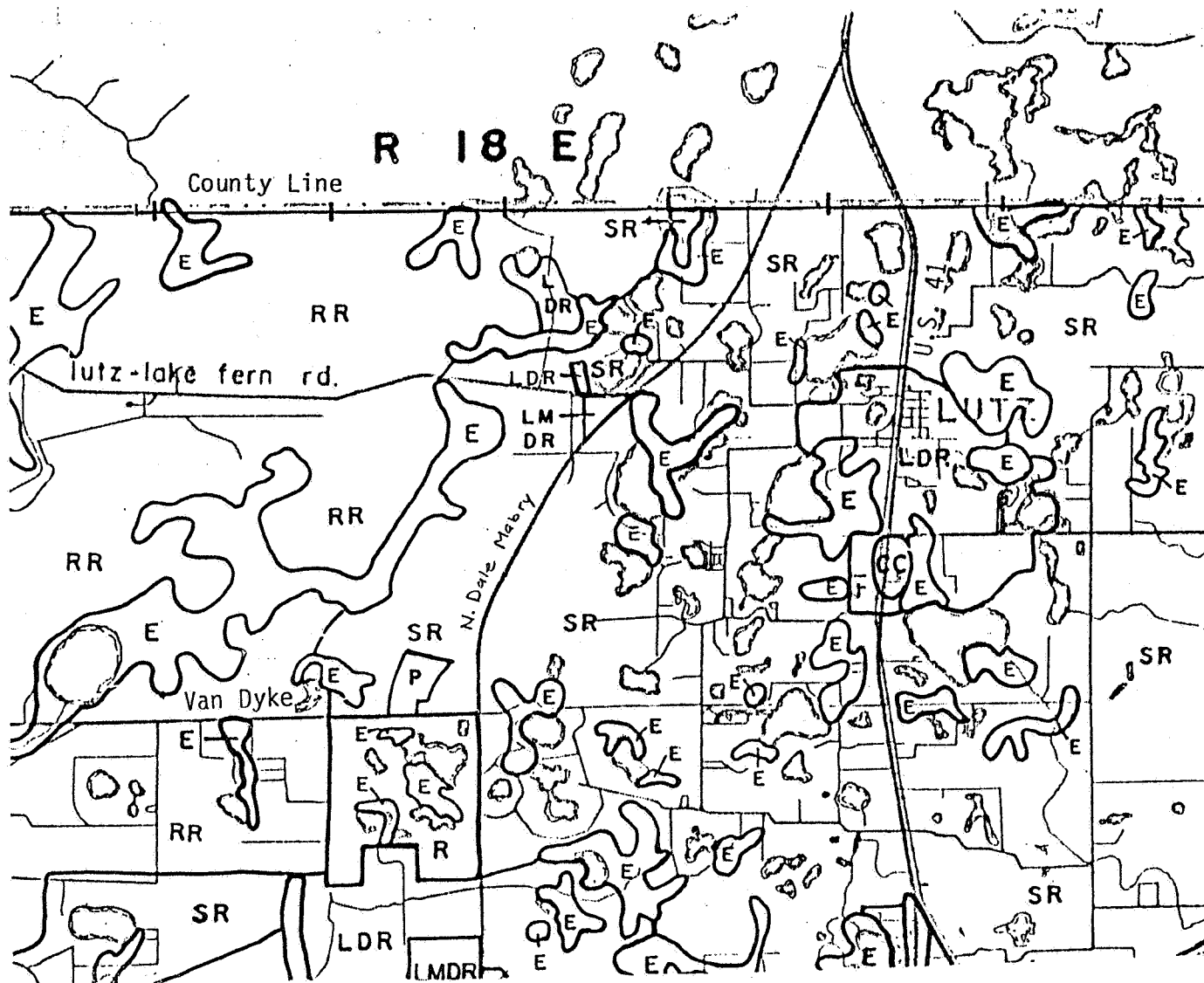
Legend:

-  110 - RESIDENTIAL
-  140 - COMMERCIAL
-  150 - INDUSTRIAL
-  190 - OPEN LAND
-  200 - AGRICULTURE



Source: DSA GROUP, INC., 1988

Figure A-1-1 EXISTING LAND USE



Legend: SR= Suburban Residential (2 du/gross acre)
 E= Environmentally Sensitive Areas
 LMDR= Low-Medium Density Residential (12 du/gross acre)
 RR= Rural Residential (1 du/gross acre)

SOURCE: Hillsborough County City County Planning Commission

Map (Revised 2-3-88)

FIGURE A-1-2 LONG RANGE LAND USE PLAN MAP

ATTACHMENT A-3
RELOCATION POTENTIAL

For the proposed interim stage improvements (four-laning) no relocations are expected of either businesses or residences.

For the proposed ultimate stage improvements (four-lane expressway with frontage roads) the following number of relocations are probable:

Residential Owners	3
Business Owners	<u>4</u>
Total Relocations	7

The community impact of these displacements will be small due to the low number of displacements. Available resources are plentiful and all displacees will be able to relocate near the project area or on the remainders, if desired. (Back-up documentation for these statements is available elsewhere).¹

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.

¹Conceptual Stage Relocation Plan for North Dale Mabry Highway. Prepared by Kaiser Engineers for the Florida Department of Transportation, April 8, 1988.

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 November 29, 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 Soil Conservation Service

Response Received

Federal Agencies (Cont'd)

U.S. Dept. of Housing and Urban
Development
Federal Railroad Administration
Federal Emergency Management Agency

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
Game and Freshwater Fish Commission

Regional Agencies

X Tampa Bay Regional Planning Council
Southwest Florida Water Management
District
X Seaboard System Railroad*

Local Agencies

X New Port Richey/West Pasco County
Metropolitan Planning Organization
X Tampa Urban Area Metropolitan Planning
Organization
Pasco County Planning Department
X City of Tampa Land Development
Coordination Division
X City of Tampa Department of Public
Works, Transportation Division
Hillsborough County Department of
Development Coordination

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

Response Received

Local Agencies (Cont'd)

X	Hillsborough County Sheriff's Dept.*
X	All affected utility companies*
X	Hillsborough County Parks & Recreation Dept.*
X	Tampa Sports Authority*
	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 and noise impacts.

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

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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.

2. 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. Particular concern was expressed with respect to wetland impacts.

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

3. Tampa Bay Regional Planning Council

Comments: a) The proposed project was found to be consistent with Council policy of converting urban arterials to controlled or limited access facilities being preferable to construction of new freeway facilities.

b) A recommendation was made that Hillsborough County and the City of Tampa evaluate their development regulations to prevent greater intensification of land use along the urbanized portion of the study corridor (so as to ensure that any new facilities be able to meet future traffic demand).

Response: a) None required.

b) This recommendation applies to areas south of Van Dyke, outside of the project area.

B. Public Involvement and Interagency Coordination

This section summarizes chronologically the Department's coordination efforts involving both the public and various 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.
November 29, 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.
February 18, 1986	Coordination meeting held between Department's consultant and officials of Hillsborough Area Rapid Transit (HART) to inform them of the project.
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 proposed design concepts. The concept of adding frontage roads as part of the ultimate stage improvements was presented. No opposition to this concept was voiced.

May 5, 1987

Prints of the proposed conceptual design were transmitted to Hillsborough County Road Department Engineering for review and comment.

June 12, 1987

A slide presentation concerning proposed design concepts for various segments of Dale Mabry Highway was given to the MPO at a special workshop held at Tampa City Council Chambers in downtown Tampa. The concept of frontage roads as a part of the ultimate stage improvements was presented; no opposition to this concept was voiced at the meeting.

June 17, 1987

Sketches of proposed typical sections were transmitted to Pasco and Hillsborough County staff for review and comment.

June 26, 1987

Comments were received from Hillsborough County concerning proposed design concepts; comments concerned mostly minor engineering details.

July 2, 1987

Comments were received from the Tampa MPO Staff Administrator, Joseph Kubicki, concerning proposed design concepts. Chief comment was that the ultimate typical section should be designed to be expandable to six lanes on the mainline section. The Department's response was that once interchanges are ultimately added, the available highway capacity will be in excess of the traffic demand. In addition, the narrower typical section is designed to minimize both right-of-way taking and impacts to wetlands.

August 18, 1987

Another coordination meeting held with FHWA to review proposed design concepts.

November 5, 1987

Field meeting held with Department's consultant and representatives from Florida Department of Environmental Regulation (DER) and Southwest Florida Water Management District (SWFWMD) to discuss alternative design concepts for North Dale Mabry and impacts to wetlands. The DER and SWFWMD representatives requested that:

- a) roadway expansion be limited to that which can be justified.
- b) construction be limited as much as possible to the existing right-of-way (to minimize wetland impacts).
- c) an urban section be used instead of a rural section to minimize impacts to cypress wetlands.
- d) stormwater runoff be treated in adjacent upland areas.

The Department's response is that the ultimate stage improvements (involving frontage roads) will not be constructed until warranted by traffic demand, and the recommended design alternate utilizes urban typical sections to minimize wetland impacts.

December 15, 1987

Another coordination meeting held with FHWA.

December 22, 1987

Draft of "13 Points" of engineering agreement transmitted to FHWA.

January 28, 1988

Public information workshop held from 5:00 - 8:00 p.m. at Gaither High School in Tampa, Florida. It was attended by approximately 75 property owners and interested citizens. (Prior to the workshop, notification was made to elected and appointed public officials, the news media, and property owners and other interested parties). Significant concerns received during and subsequent to the workshop include:

a) "Why are the frontage roads needed?"

Response: to prevent the degradation of level of service to road users caused by frequent driveways, as has occurred on Dale Mabry further south.

b) "Why not use the existing wetlands for stormwater detention?"

Response: to some extent they will be used since any proposed detention areas will ultimately have to outfall to receiving waters. In any event, stormwater management systems will be designed to comply with all local and state regulations related to water quality and quantity.

c) "The proposed ultimate design is not consistent with the MPO's Year 2010 highway plan which designates this segment of Dale Mabry as a six-lane, general access arterial highway."

Response: The Department is currently working with the MPO staff to resolve this issue.

- d) "The intersection of the west leg of Lutz Lake Fern with Dale Mabry (in the ultimate stage) should be moved farther north to intersect Dale Mabry at its present location."

Response: Subsequent to the workshop, the conceptual design drawings were changed to comply with this request.

March 14, 1988

Permit Coordination Reports distributed to various local and State agencies. Major comments received include the following:

- a) Southwest Florida Water Management District

Comment: Project design must demonstrate compliance with Chapter 40D-4, FAC.

Response: Comment noted.

- b) Tampa Bay Regional Planning Council
Comments: The following concerns should be addressed during project development:

- o Protection of ground and surface water quality;
- o Avoidance of minimizing impact to wetlands;
- o Mitigation for all unavoidable impacts by replacement in-kind;
- o Protection of plant and animal species and their habitats;
- o Maintenance of floodplain areas;
- o Maintenance of hurricane evacuation routes; and,
- o Protection of archaeological and historical resources.

Response: Water quality is addressed in Attachment C-3.

Wetland impacts are addressed in Attachment C-1.

Endangered and threatened species are addressed in Attachment C-10.

Floodplain impacts are addressed in Attachment C-7.

Hurricane evacuation routes will be maintained since maintenance of traffic will be required at all times during construction.

No significant archaeological or historical resources are expected to be impacted based on a letter from the SHPO dated June 4, 1984.

A public hearing was held on June 21, 1988 at Gaither High School in Tampa, Florida. A summary of major comments and responses is included here; similar comments have been grouped together for ease of response. Unless noted otherwise, all comments pertain to the proposed ultimate stage improvements involving the frontage road system.

Comments: "Closing off Geraci Road would cause a major inconvenience to local residents". Another citizen "likes the idea of closing off Geraci Road and the two-way frontage road system."

Response: Under the ultimate stage improvements, local residents, on some roadways, would experience some inconvenience due to the need to tee local roads into the frontage road system. As long as the frontage roads remain two-way, extra travel will be kept to a minimum.

Comment: Concern was expressed with respect to the expressway's impact on future development patterns.

Response: This is addressed in Attachment A-1, "Land Use Changes."

Comment: "Frontage road design is not consistent with Dale Mabry south of Van Dyke or with the MPO's year 2010 transportation plan."

Response: Due to the proposed Northwest Expressway (under design in 1988), the character of traffic north of Van Dyke is expected to be different than traffic south of Van Dyke. To some extent, Dale Mabry north of the Northwest Expressway is expected to serve as a functional continuation of the expressway, and therefore an ultimate limited access facility will be compatible with the Northwest Expressway. The MPO amended its

Attachment A-6

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long-range transportation plan on July 18, 1989, such that the Departments' proposed improvements are now consistent with the MPO's plan.

Comment: "Frontage roads are not needed ... six laning would be more feasible."

Response: The frontage road system will not be constructed until warranted by increased traffic demand brought on by continuing development in northwest Hillsborough County and southern Pasco County. A four-lane "expressway" will have the advantage of being able to accommodate higher volumes than a six-lane arterial by eventually adding interchanges. An expressway will also provide a better level of service to road users due to smoother traffic flow resulting from lack of interference from driveway and minor intersection traffic.

Comment: "Dale Mabry should at least be six lanes between Van Dyke and to where the frontage roads would start" (north of the proposed Northwest Expressway).

Response: Recent revisions were made in the conceptual design plans to change at least a portion of this segment to a six lane arterial.

Comment: "No planning for any cloverleafs ... situation will be like the intersection of Dale Mabry and Waters Avenue is today."

Response: The ultimate stage has been designed such that it will be possible at some future date (beyond year 2010) to add diamond-type interchanges without having to acquire additional right-of-way (beyond that which is required anyway for the frontage roads).

Comment: "Lutz-Lake Fern Road should cross Dale Mabry further south ... property on the corner at Lutz-Lake Fern is high and dry and better suited for development than for stormwater detention areas."

Response: Prior to the public information workshop held in January, 1988, Lutz-Lake Fern was realigned to intersect Dale Mabry south of where it intersects today. However, this intersection was relocated back to the existing location in response to a number of citizen comments made during and subsequent to the workshop.

Comment: "A visual and sound buffer, such as trees, should be part of the design to lessen the impact on the environment and cut down on the pollution."

Response: The suitability of vegetation for a noise barrier is discussed in Attachment D-1. The feasibility of providing landscaping for aesthetic purposes should be evaluated during the design phase for the ultimate stage improvements.

Comment: "An overpass is needed at the intersection of Dale Mabry with the Northwest Expressway."

Response: This is currently (July, 1988) being evaluated by the Department, the Expressway Authority, and their consultants.

Comment: "There are likely to be noise impacts to houses along Holly Lane due to the frontage road system ... a privacy wall should be considered."

Response: Noise impacts are discussed in Attachment D-1. A "privacy wall" would be ineffective for noise abatement due to the need to provide breaks in the wall for driveways to these homes. In addition, six-foot privacy walls commonly in

use are not effective for noise abatement due to their inadequate height.

Comment: "Frontage roads should stay two-way and not be converted to one-way later on ... one-way frontage roads would significantly increase travel miles on both the expressway and on the frontage roads and hamper response by emergency vehicles."

Response: The issue of whether the frontage roads should eventually be converted to one-way operation will be re-examined at some future date, after the two-way frontage roads have been constructed and prior to the construction of any interchanges.

Comment: "Go directly to the ultimate stage now ... it will be more expensive to build it in the future."

Response: The interim stage four-laning is expected to satisfy traffic demand for the foreseeable future; it would not be cost-effective to construct the ultimate stage now. However, right-of-way acquisition and/or reservation for the ultimate stage is recommended to take place as soon as possible, to

minimize future right-of-way and business damage costs.

Comment: "I'm concerned about future probable increase in traffic on Lutz-Lake Fern due to the frontage road system" (northbound motorists on Dale Mabry won't be able to turn onto Sun Lake Blvd. as they do now).

Response: Many motorists would be expected to get onto the west side frontage road at Calusa Trace and take it to Sun Lake Blvd., in order to minimize their travel distance. Therefore, the increase in traffic on Lutz-Lake Fern due to the proposed frontage road system may not be that significant.

Comment: "An excessive amount of land is proposed to be taken by the frontage roads at County Line Road; roads should be in closer to Dale Mabry..."

Response: The conceptual geometric design at this intersection area is predicated on the following three requirements:

- 1) the need to keep all intersections spaced several hundred feet apart for operational and safety reasons;

- 2) the need to tie the west front-age road into an existing street (Holly Lane), and
- 3) the need to avoid impacts to two small wetlands on the east side of Dale Mabry.

Comment: "Residents in the vicinity of Crenshaw Lake (south of Van Dyke, east of Dale Mabry) are concerned about possible effects of the project on water quality and quantity of the lake."

Response: As described in Attachment C-3, a stormwater management system will be designed in compliance with all State and local requirements. In addition, during construction, the requirements contained in the FDOT Standard Specifications for Road and Bridge Construction will be used to minimize any short-term water quality impacts.

ATTACHMENT C-1
WETLANDS ASSESSMENT

In compliance with Executive Order 11990, Protection of Wetlands and Florida Department of Transportation (DOT) Order 5660.1a, the following report of Wetlands Findings evaluates the impacts on wetland sites along the four mile Dale Mabry Highway (S.R. 597) corridor, between Van Dyke Road (Hillsborough County) and S.R. 45 (U.S. 41) (Pasco County).

Twenty-nine wetlands were identified as impacted, directly and/or indirectly, by the proposed right-of-way construction. The sites evaluated in this report include: five cypress wetlands greater than two acres, eleven cypress wetlands less than two acres, six scrub-shrub wetlands less than three acres, three grass ponds less than one acre, two acre remnant willow swamp and two ditches. See Map A for wetland site location and Table A for a site - specific summary of wetland involvement.

Each wetland site is identified according to the U.S. Fish and Wildlife Services Classification of Wetlands and Deepwater Habitats of the United States (1979), an evaluation of the current and historical status and need for mitigation is enumerated site-by-site as set out by the FHWA Technical Advisory T 6640.8.

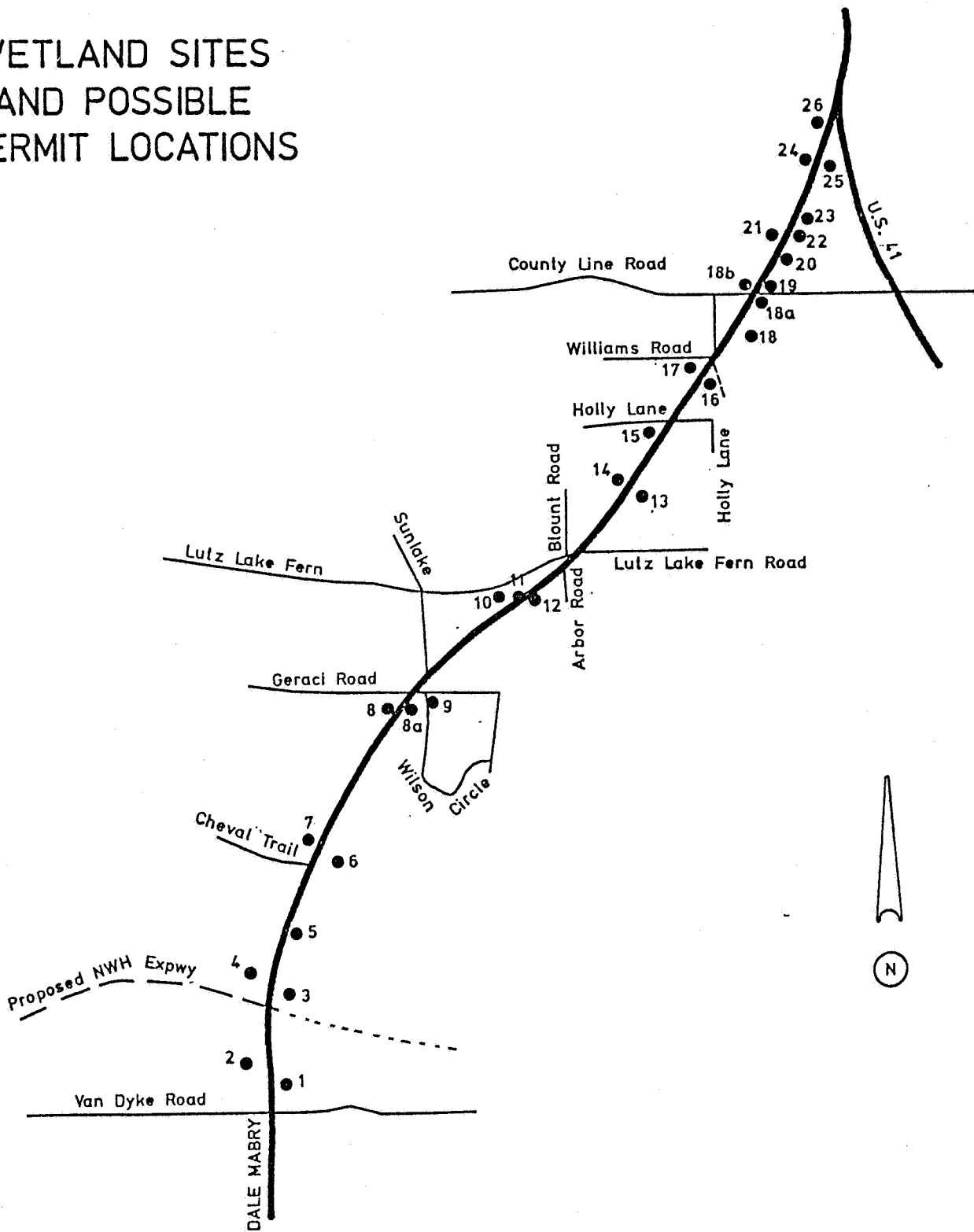
The objectives of this report are to determine what effects the proposed improvements will have on wetland stability, function, and quality and to identify sites substantially impacted by the project which might require mitigation.

Mitigative measures include a variety of options: replacement, creation, enhancement, restoration, and preservation. Wetland mitigation is examined on a site-by-site basis. Present mitigation philosophy calls for 1:1 in-kind replacement in the area of the impacted wetland. If sufficient area in the right-of-way is present, then the creation of a new in-kind wetland is proposed along the roadside areas, highway median, or in interchange areas. When considering more extensive wetlands, the replacement could be offered either near or contiguous to the impacted wetland, which will enhance the remaining system. All wetlands investigated had previous encroachments by the construction and maintenance of Dale Mabry. Some of the existing wetland systems have sufficiently recovered to qualify as productive wetlands. These wetlands serve many useful

functions; flood control, sediment and pollution control, ground water recharge and fish and wildlife habitat. The impacted wetlands evaluated in this report are not considered unique to the region or critical to any one endangered species, due to the extensive wetland network in the surrounding area.

Each wetland was evaluated considering a variety of factors inherent in each wetland: primary wetland functions, significance, uniqueness, size and productivity. The following summary will discuss each impacted wetland along the Dale Mabry right-of-way.

WETLAND SITES AND POSSIBLE PERMIT LOCATIONS



**BIOLOGICAL RESEARCH
ASSOCIATES, INC.**
TAMPA, FL

**NORTH DALE MABRY
MAP A**

DESIGNED BY:	NJH	PROJECT #:	DSA08BRC
DRAWN BY:	DSH	DATE:	23 FEB. 1988
CHECKED BY:	NJH	SHEET	_____ OF _____

WETLAND INVOLVEMENT BY SITE
TABLE A

SITE	DESCRIPTION	MAXIMUM ACREAGE OF INVOLVEMENT	TOTAL WETLAND ACREAGE	% IMPACT
1	Cypress Wetland	.06 acres	4.36 acres	.3%
2	Cypress Wetland/Emergent Wetland	.80 acres	20.66 acres	2%
3	Cypress Wetland/Emergent Wetland	.50 acres	11.49 acres	23%
4	Cypress Wetland/Emergent Wetland	1.20 acres	35.12 acres	4%
5	Cypress Wetland	1.24 acres	.49 acres	60%
6	Cypress Wetland/Emergent Wetland	.14 acres	15.15 acres	12%
7	Cypress Wetland/Emergent Wetland	.04 acres	27.09 acres	.9%
8	Cypress Wetland/Emergent Wetland	1.00 acres	2.07 acres	42%
8a	Scrub-Shrub Wetland	1.00 acres	1.15 acres	38%
9	Cypress Wetland	.30 acres	4.59 acres	2%
10	Scrub-Shrub Wetland	.34 acres	2.39 acres	25%
11	Emergent Wetland/Ditch	2.04 acres	2.60 acres	16%
12	Cypress Wetland	.53 acres	18.36 acres	11%
13	Scrub-Shrub Wetland	.60 acres	1.38 acres	21%
14	Scrub-Shrub Wetland	1.20 acres	12.86 acres	42%
15	Cypress Wetland	.80 acres	5.05 acres	2%
16	Freshwater Marsh		2.84 acres	
17	Freshwater Marsh		2.84 acres	
18	Scrub-Shrub Wetland		36.27 acres	
18a	Emergent Wetland/Ditch		.46 acres	
18b	Emergent Wetland/Ditch		.50 acres	
19	Emergent Wetland		.23 acres	
20	Cypress Wetland	.80 acres	2.30 acres	35%
21	Cypress Wetland	2.80 acres	8.26 acres	34%
22	Emergent Wetland	.08 acres	.11 acres	72%
23	Cypress Wetland	.21 acres	1.61 acres	13%
24	Cypress Wetland	.92 acres	1.38 acres	67%
25	Scrub-Shrub Wetland	.09 acres	.23 acres	39%
26	Willow Swamp	.57 acres	2.75 acres	21%
TOTAL		± 17.30	± 224.00	7.7%

Wetland Site 1 is a \pm 4.3 acre, cypress wetland. This cypress system is in the Brushy Creek surface water drainage basin, contiguous with a series of natural, unnamed lakes and Saddleback Lake. This system is connected by historical cypress stands which have been channelized to the North-lakes subdivision drainage system, emptying into a major east-west canal to Brushy Creek. The wetland is classified as: System: Palustine, Class: Forested Wetland, Subclass: Needle-leaved Deciduous, and Water Regime: Seasonally Flooded. The neighboring land is low-lying improved cattle pasture. This wetland functions as wildlife habitat for the developed portion of the area (i.e. cattle pasture). No substantial impacts are proposed by the project. The replacement of an existing culvert connecting Site 1 with Site 2 is already completed as part of the 6 - laning "south of Van Dyke". The forested component of the wetland was not disturbed and should remain undisturbed in the future construction.

Wetland Site 2 is a \pm 20.7 acre cypress wetland with emergent vegetation within the right-of-way on the east side of the stand, between the existing cypress and pavement. This cypress system, along with wetland Site 1, is in the Brushy Creek drainage basin, contiguous with a series of natural unnamed lakes, and Saddleback Lake. The entire system is connected by historical cypress stands which have been channelized to the Northlakes subdivision drainage system emptying into a major east-west canal to Brushy Creek. The wetland is classified as: System: Palustine, Class: Forested Wetland, Subclass: Needle-leaved Deciduous, and Water Regime: Semipermanently Flooded. The surrounding land is low-lying improved pasture. The emergent portion of this wetland is due to the initial construction of North Dale Mabry. This wetland functions primarily in providing wildlife habitat, stormwater detention, and water quality treatment. Approximately .06 acres of emergent wetland will be impacted by the proposed right-of-way. No cypress are within the project corridor. Expected impacts are not considered substantial. The short-term impacts of the project in the emergent portion of the site would consist of temporary increases in surface turbidity due to the replacement of the existing culvert. This work has been completed as part of the 6 - laning "south of Van Dyke". The forested wetland will not be involved and should continue to perform its primary ecological functions. No mitigation is proposed.

Wetland Site 3 is a ± 11.5 acre cypress stand with emergent vegetation between the cypress and Dale Mabry. Site 3 is connected by a culvert to Site 4. The two wetlands were historically one waterbody which was bisected by the initial construction of North Dale Mabry. The lack of forested area within the right-of-way is due to the previous construction of North Dale Mabry. They appear to be within the hydrological basin of Rocky Creek. The wetland is classified as : System: Palustine, Class: Forested Wetland, Subclass: Needle-leaved Deciduous, and Water Regime: Semipermanently Flooded. Low-lying improved pasture surrounds the existing wetland. The emergent portion of the wetland is wading bird feeding habitat. The proposed project will not involve any of the forested portion of the wetland in Site 3. Replacement of a culvert will produce short-term impacts which will consist of temporary increases in turbidity and disturbance of marginal vegetation and wading birds by construction activities within the right-of-way. No long-term impacts are expected. No mitigation is proposed.

Wetland Site 4 is a ± 35.1 acre isolated, cypress wetland. Site 4 appears to be in an isolated surface water basin, along with Site 3 in the hydrologic basin of Rocky Creek. This wetland is classified as: System: Palustine, Class: Forested Wetland, Subclass: Needle-leaved Deciduous, and Water Regime: Semipermanently Flooded. The neighboring land is low-lying improved cattle pasture of Site 4. The primary function, along with the other wetlands in the proximity, is to provide a corridor for the movement of fish and wildlife, wetland and non-wetland species, and an important refuge from near by developed portions (i.e. cattle pastures) of land, water quality treatment, and flood control. Approximately .80 acres of the emergent wetland located within the right-of-way is proposed to be filled with replacement of the existing culvert. The short-term impacts to wetland 4 would consist of temporary increases in surface water turbidity, disturbance of vegetation, and disturbance of wildlife utilization. Expected impacts are not considered substantial due to the contiguous nature with wetland Site 3. Both wetlands have emergent plant communities bordering between the cypress stand and Dale Mabry. The pipe connecting the two wetlands will still function as a corridor for fish, reptiles and amphibians. Wading birds which frequent these roadside emergent marsh areas, will still have access to the area on the east side of Dale Mabry. The wetlands primary functions (flood control, wildlife habitat, water quality beneficiation, erosion control) should continue and the wetland characteristics and functions should not diminish. No mitigation is proposed.

Wetland Site 5 is a small, apparently undisturbed isolated .49 acre cypress stand. The wetland is classified as: System: Palustine, Class: Forested Wetland, Subclass: Needle-leaved Deciduous, and Water Regime: Semipermanently Flooded. The cypress trees and understory vegetation provides optimal wildlife habitat for wading birds, birds of prey, reptiles, amphibians and small mammals. This wetland site is not within the proposed right-of-way, due to road realignment. Short-term indirect impacts to Site 5 would consist of temporary disturbance of wildlife and siltation during construction of Dale Mabry. No mitigation is proposed.

Wetland Site 6 is a \pm 15.2 acre cypress wetland contiguous with Site 7. Both Site 6 and Site 7 are contiguous with another cypress wetland in the isolated surface water basin of wetland Site 3 and Site 4. The site is classified as: System: Palustine, Class: Forested wetland, Subclass; Needle-leaved Deciduous, and Water Regime: Semipermanently Flooded. The neighboring land is poorly drained improved pasture. Approximately .50 acres of emergent wetland will be impacted by filling and extension of culvert. No cypress is within the project corridor due to clearing by the initial construction of North Dale Mabry. The short-term impacts of the project will consist of disturbance of vegetation, increase water turbidity, and temporary wildlife displacement near the culvert. Previous construction of Dale Mabry, routine maintenance, and water run-off have all impacted Site 6. This wetland has appeared to recover from these previous impacts and continues to perform its primary functions. The proposed impacts are not considered substantial as the remaining wetland system will provide flood control and valuable wildlife habitat. No mitigation is proposed.

Wetland Site 7 is a \pm 27.0 acre cypress wetland connected to wetland Site 6. A culvert and the previous construction of Dale Mabry maintain a perennial water course between the two wetlands. Historically, this area was designated as hydric - extremely poorly drained soil. The installation of a culvert and the original construction of North Dale Mabry has caused this area to develop into an emergent plant community. No cypress are within the proposed project right-of-way. Site 7 has been previously disturbed by the development to the south and the initial construction and maintenance of Dale Mabry. Site 7 and Site 6 are contiguous with a cypress wetland in the isolated surface water basin of wetland Sites 3 and 4. The site is classified as: System: Palustine, Class: Forested Wetland, Subclass: Needle-leaved Deciduous, and Water Regime:

Semipermanently Flooded. The neighboring land to the south is the Cheval Golf and Polo Club residential development. Land use to the north is upland, used for farming. Approximately 1.20 acres of emergent wetland between the cypress and Dale Mabry will be impacted by fill and replacement of existing culvert. Site 7 will have short-term impacts to surface water quality and disturbance of vegetation. Site 7 continues to provide adequate flood control, water quality benefits and wildlife habitat. The expected loss of the emergent marsh community relative to availability in the region is not regionally substantial. No mitigation is proposed.

Wetland Site 8 is formerly an isolated cypress swamp, historically approximately \pm 2.1 acres, in an isolated surface water drainage basin. Site 8 is now connected to wetlands 8a and 9 by ditches and culverts. The wetland is classified as: System: Palustine, Class: Forested Wetland, Subclass: Needle-leaved Deciduous, and Water Regime: Semipermanently Flooded. Neighboring land is farm land and undeveloped upland pasture. Approximately 1.2 acres of the wetland will be impacted due to road-widening of Dale Mabry. This wetland functions primarily to control flood waters, biological treatment of water and habitat for fish and wildlife species. The short-term impacts of the project on Site 8 would consist of substantial increases in surface water turbidity, disturbance of vegetation, and permanent displacement wildlife using the area. Long-term impacts would be loss of \pm 60% of the cypress swamp, loss of fish and wildlife habitat, increased run-off, and degradation of regional surface water quality. The proposed impacts are considered substantial due to the loss of stormwater storage for the drainage basin outside the road right-of-way. This loss increases the rate of run-off which in turn causes water quality degradation due to loss of detention time for biological treatment of the water. Minimum mitigation for this impact is proposed as equivalent recreation of this wetland community at a ratio of 1:1 replacement, contiguous to the existing wetland.

Wetland Site 8a is a small \pm 1.2 acre scrub-shrub swamp. Site 8a was historically a section of wetland 8. Site 8a is indirectly connected to 8 by a ditch to wetland 9 which is connected by ditches and a culvert to Site 8. Wetland Sites 8, 8a, and 9 are all currently in the Rocky Creek drainage basin. The site is classified as: System: Palustine, Class: Scrub-shrub wetland, Subclass: Broad-leaved Deciduous, Water Regime: Saturated. The surrounding area is developed

into residential housing. Approximately .14 acres of Site 8a will be impacted by the right-of-way of Dale Mabry. This wetland function is primarily in providing a corridor for wildlife. Site 8a has been previously disturbed by the existing highway. Short-term impacts of the project on Site 8a would be disturbance of vegetation along the western edge of the wetland within the right-of-way and temporary disturbance of wildlife. The expected loss of this wetland community is not regionally significant. No mitigation is proposed.

Wetland Site 9 is a cypress wetland which has been dewatered by the canal system dug contiguously with Lake Thomas. The Lake Thomas system is in the Rocky Creek surface water drainage basin. The wetland is classified as: System: Palustine, Class: Forested Wetland, Subclass: Needle-leaved Deciduous, and Water Regime: Intermittently Flooded. Neighboring residential housing surrounds the wetland system and canal network. Approximately .04 acres of disturbed vegetation is in the proposed right-of-way. The primary function of this wetland has been lost due to dewatering and previous road encroachment which has caused the site to be dominated by nuisance species. There is no outstanding uniqueness that would contribute to the wetlands importance. This site has very limited value, due to its disturbed condition, small size, and artificial nature. No mitigation is proposed.

Wetland Site 10 is an isolated \pm 2.4 acre scrub-shrub wetland in the hydrological drainage basin of Lake Allen. Historically this site was an extremely poorly drained area adjacent to an isolated cypress swamp. The original construction of North Dale Mabry has impounded the surface water flow and created this disturbed wetland. The current vegetation is undesirable nuisance species having little or no value in biological treatment of water or wildlife utilization. The wetland is classified as: System: Palustine, Class: Scrub-shrub wetland, Subclass: Broad-leaved Deciduous, Water Regime: Intermittently Flooded. The land adjacent to this site include mixed scrub-shrub emergent wetland, forested wetland, and planted citrus groves. The project proposes to fill 1.0 acre of site 10. This site provides poor quality wildlife habitat due to its disturbed condition caused by its impoundment by Dale Mabry. The poor quality and small size of this site limit the value and functional utility of this system. No substantial short or long-term impacts are anticipated. No mitigation is proposed.

Wetland Site 11 is an outfall canal from Lake Allen through Site 12, contiguous to Lake Thomas. Site 11 is estimated to include 2.6 acres of drainage canal dominated with emergent vegetation. The wetland is classified as: System: Palustine, Class: Emergent Wetland, Subclass: Persistent, Water Regime: Intermittently Exposed. The neighboring land uses include: Forested Wetland, Scrub-shrub communities, upland pasture, and residential housing. Approximately 1.0 acre of Site 11 will be filled and the existing culvert will be replaced and extended. The drainage canal on the west side of the highway has no emergent vegetation within 25 feet of the culvert. The canal on the eastern side of Dale Mabry has a dense emergent plant community. Site 11 functions primarily in providing fish and wildlife corridor and flood routing. The short-term impacts of the project on Site 11 would be primarily temporary increases in turbidity from filling and culvert replacement, disturbance of emergent plant species, and minor disturbance to wildlife and fish in the immediate vicinity. This disturbed site has recovered from previous disturbances caused by the initial construction of North Dale Mabry, and should again rebound to perform its primary function as a conduit to pass stormwater. Mitigation is not proposed for Site 11.

Wetland Site 12 is a \pm 18.4 acre cypress wetland, contiguous and part of the historical flood plain of Lake Thomas. The site is classified as: System: Palustine, Class: Forested Wetland, Subclass: Needle-leaved Deciduous, Water Regime: Semipermanently Flooded. Neighboring land is planted citrus groves. Approximately .30 acres will be filled by this proposed project. This wetland functions primarily in providing fish and wildlife a habitat corridor, flood control, and biological treatment for stormwater. The short-term impacts, by this project on Site 12, would result in disturbance to vegetation and wildlife, and temporary increases in water turbidity. No substantial long-term effects are expected. This wetland should continue to perform its primary ecological functions and retain its wetland characteristics. No mitigation is proposed.

Wetland Site 13 is a contiguous \pm 1.4 acre shrub-scrub wetland and a conduit for discharge for 26 acre Lake Brooker. Direction of flow is west to the lake chain of Allan, Mary Lou and Virginia, which are in the Rocky Creek drainage basin. Site 13 is part of the floodplain of Lake Brooker. This wetland is classified as: System: Palustine, Class: Scrub-shrub wetland, Subclass: Broad-leaved Deciduous, and Water Regime: Semipermanently Flooded. The neighboring land

is cultivated for citrus production. Approximately .34 acres will be impacted by the proposed improvements. The project proposes to add fill and extend the existing culvert. This wetland functions primarily in flood control, limited biological water treatment and poor wildlife and fish habitat. Site 13 has been previously bisected by North Dale Mabry, and is regarded as disturbed. The existing vegetation is characteristic of a disturbed site, having limited wildlife value and poor biological water treatment abilities. The short-term impacts to Site 13 would consist of increases in water turbidity, and disturbance to vegetation and wildlife. The proposed impacts are not considered substantial in view of the contiguous relationship to the other lakes, small size, and regional abundance of this community type. No mitigation is proposed.

Wetland Site 14 is a \pm 13 acre shrub-scrub wetland contiguous with an unnamed 16 acre lake through which the Lake Brooker outfall was created. This wetland is contiguous with Site 13, the Lake Allen, Mary Lou and Virginia chain. Historical size of the wetland in the project area is approximately 1.0 acre. The remaining area to be impacted has been created by the construction of North Dale Mabry and probably the regrading of the roadside for positive drainage. The wetland is classified as: System: Palustine, Class: Forested Wetland, Subclass: Needle-leaved Deciduous, Water Regime: Semipermanently Flooded. The neighboring land is cultivated for citrus production. The project proposes to impact 2.0 acres of disturbed wetland by adding fill and replacing the existing culvert. The overall impacts of the project on Site 14 include: increased water turbidity, loss of moderate amounts of wetland vegetation and wildlife disturbance during construction activities. The man-altered community of nuisance species is not representative of a stable aquatic community which would enhance wildlife habitat and biological treatment of water. In view of the contiguous nature of this wetland to Site 13 and the lake chain, this wetland will still be able to function as a wildlife and fish corridor and provide flood volume attenuation. No mitigation is proposed.

Wetland Site 15 is a \pm 5.0 acre isolated cypress wetland formerly contiguous with the Lake Allen, Mary Lou and Virginia chain. It has been isolated by the construction of Holly Lane Road. Planted citrus groves border the wetland to the north and south. This wetland is classified as: System: Palustine, Class: Forested Wetland, Subclass: Needle-leaved Deciduous, and Water Regime: Semi-

permanently Flooded. Approximately .53 acres of Site 15 will be impacted by the right-of-way construction. This wetland functions primarily in providing wildlife habitat, floodwater retention, and water quality beneficiation. The short-term impacts of the project on Site 15 would consist of vegetation and wildlife disturbance, and increase in turbidity and erosion. No substantial long-term impacts are expected. The regional benefits provided by this wetland will not be diminished by this project. No mitigation is proposed.

Wetland Site 16 is a contiguous \pm 2.9 acre grass pond. Site 16 and Site 17 contiguous by a culvert, were formerly one isolated surface water grass pond. They are in the hydrologic basin of Lake Brooker. This wetland is classified as: System: Palustine, Class: Aquatic Bed, Subclass: Rooted Vascular, Water Regime: Intermittently Flooded. Upland pasture and roads surround Site 16. The existing grass pond serves as flood water retention and habitat for fish and small wildlife. The deep sloping banks of the pond prove to be undesirable habitat for wading birds. The proposed project will impact .60 acres of this previously bisected grass pond. Short-term impacts include temporary increased water turbidity and disturbance to flora and fauna communities along the western edge of the grass pond. The majority of the pond will still be in tact and perform its existing ecological function of flood control and fish and wildlife habitat. No mitigation is proposed.

Wetland Site 17 is a \pm 2.9 acre grass pond contiguous with Site 16 by a culvert. Historically, Site 17 and 16 were one isolated surface water grass pond in the hydrologic basin of Lake Brooker. This wetland is classified as: System: Palustine, Class: Aquatic Bed, Subclass: Rooted Vascular, Water-Regime: Intermittently Flooded. Site 17 is bordered by roadways and citrus groves. Forty-two (42) percent of the previously impacted grass pond is proposed to be eliminated by the project. The primary function of this grass pond is flood water control, water quality treatment, and habitat for fish, birds, amphibian, and reptiles. The impact by the project will be the replacement of the existing culvert and the addition of fill. Short-term impacts include temporary increases in turbidity and loss of emergent vegetation. Long-term impacts include the permanent loss of \pm 1 acre of shallow wetland. The proposed mitigation would include equivalent recreation of this wetland community at a ratio of 1:1 contiguous to the westside of the existing shallow wetland.

Wetland Site 18 is an scrub-shrub wetland contiguous with an unnamed grass pond and ± 36 acre cypress wetland which is contiguous with Lake Brooker in the Rocky Creek drainage basin. The wetland is classified as: System: Palustine, Class: Scrub-shrub wetland Subclass: Broad-leaved Deciduous, and Water Regime: Saturated. The neighboring land is planted citrus groves and upland pasture. Approximately .80 acres of transitional plant species, bordering the remaining system and North Dale Mabry, will be impacted by construction activities. The entire wetland system functions as a wildlife habitat and considerable flood water control system. Short-term impacts to Site 18 would consist of disturbance of vegetation and temporary displacement of wildlife using the area. No substantial long term impacts are expected for site 18. This wetland system is expected to continue to perform its primary ecological functions and retain its wetland characteristics. No mitigation is proposed.

Wetland Site 18a is an isolated emergent ditch formerly designated as a wet spot (Hillsborough County Soil Survey). The ± .5 acre ditch is classified as: System: Palustine, Class: Emergent Wetland, Subclass: Persistent, Water-Regime: Intermittently Flooded. The neighboring land is citrus groves, and scrub-shrub wetland. This emergent wetland has been previously disturbed by the original construction of Dale Mabry. The project proposes to fill the entire ditch. Site 18a is a low quality wetland not extensively used by wildlife. This wetland, along with Site 18b, is located near the proposed highway interchange area. The proposed interchange areas will handle stormwater run-off and any surface water problems in the area. The proposed impacts are not considered substantial due to the small, low quality characteristics of this wetland. No mitigation is proposed.

Wetland Site 18b is a small, isolated, emergent ditch. This site and Site 18a are both designated as a wet spot by the Hillsborough County Soil Survey. The wetland is classified as: System: Palustine, Class: Emergent wetland, Subclass, Persistent, Water-Regime: Intermittently Flooded. Neighboring land is pasture and roadways. This small, ± .30 acre site has little wetland value. The proposed project will impact the entire emergent vegetative community. The project proposes interchange ramps at this location. Sites 18b and 18a stormwater and road run-off, will be accounted for in the interchange area. The projects impacts on this small emergent wetland are not considered substantial. No mitigation is proposed.

Wetland Site 19 is a small, .23 acre pond with emergent vegetation. The wetland is classified as: System: Palustine, Class: Emergent wetland, Subclass: Non-persistent, Water-Regime: Intermittently Exposed. The wetland pond is surrounded by improved cattle pasture. The pond functions primarily in providing water for cattle. It provides minimal wildlife habitat. The project plans to indirectly impact the pond by alignment of an off ramp to the east of the pond. Impacts are not considered substantial. No mitigation is proposed.

Wetland Site 20 was historically a larger wetland bisected by North Dale Mabry. It was an isolated cypress marsh with an open water component. This wetland is in the Lake Como hydrologic basin. Site 20 is classified as: System: Palustine, Class: Forested wetland, Subclass: Needle-leaved Deciduous, Water-Regime: Intermittently Exposed. The neighboring land is improved cattle pasture and scrub-shrub community. Approximately .80 acres of the existing \pm 2.3 acre wetland will be impacted by fill for a frontage road. This wetland functions primarily as quality wildlife habitat, stormwater storage, and water quality treatments. Currently this system is used by a nesting pair of Florida Sandhill Cranes (Grus canadensis pratensis). The Florida Sandhill Crane is listed as a threatened species by the Florida Game and Freshwater Fish Commission (FGFWFC), Pursuant to Section 39-27.003-005 FAC. The project will indirectly impact the nest site. Grus canadensis pratensis generally establishes 3-4 nest sites within a wetland network. The nest site for a particular year depends on the water level and available vegetative cover in the wetland. The extensive wetland network in the surrounding area does not limit the sandhill crane to nesting in any one wetland year often year. Seasonal habitat conditions, especially changing water levels, are the determining factor when choosing a nesting site. In order to minimize impact on the sandhill cranes two mitigative strategies could be implemented. Construction activities should not be scheduled during the four month period of sandhill crane nesting activities, February through May. Secondly, the impacts can be off set by the creation of suitable wetland habitat through mitigation, on the opposite side of the existing wetland. Long term impacts include loss of water quality benefits, flood water control and wildlife and fish habitat.

Wetland Site 21 was historically part of Site 20 as one isolated cypress marsh with a open water component. Previously separated by the original construction of Dale Mabry, this \pm 8.3 acre wetland is in the Lake Como hydrologic basin. This wetland is classified as: System: Palustine, Class: Forested wetland, Subclass: Needle-leaved Deciduous, Water-Regime: Intermittently Exposed. The neighboring land is a network of lakes and wetlands. Approximately 2.8 acres of the system will be impacted by fill for the improved right-of-way. This wetland function is providing flood attenuation, water quality benefits and wildlife habitat. Short-term impacts of the project on Site 21 would consist of degradation of water quality within the system from run-off and filling activities, along with disturbance of vegetation and wildlife. Long-term impacts would include a loss of substantial open water component and the quality of the remaining wetland. The minimum of 1:1 mitigation would be necessary to compensate for these impacts similaly proposed for wetland 20 to be accomplished preferably adjacent to wetland 20.

Wetland Site 22 is a \pm .11 acre, isolated grass pond. The wetland is classified as: System: Palustine, Class: Emergent Wetland, Subclass: Persistent, Water-Regime: Intermittently Exposed. The surrounding land is private, residential upland property. The wetland functions primarily in providing a minor amount of flood control and minimal wildlife habitat. The proposed impact by filling is not considered substantial, due to the nuisance plant community which limit water treatment abilities and have very little wildlife benefits and the small size of the wetland. No mitigation is proposed.

Wetland Site 23 is a cypress wetland, remnants of an isolated cypress wetland. The 1.61 acre cypress wetland is contiguous with wetland 24 and 25 by a road side ditch, contiguous with Lake Como. This wetland is classified as: System: Palustine, Class: Forested wetland, Subclass: Needle-leaved Deciduous, Water-Regime: Semipermanently Flooded. The neighboring land is scrub-shrub, emergent wetland and citrus groves. Approximately .21 acre will be impacted by the proposed project in the form of fill. This wetland functions as flood water storage, biological treatment of run-off, and fish and wildlife habitat. The short-term impacts of the project on Site 23 would consist of temporary increases in turbidity and disturbances to vegetation and wildlife by construction activities. This wetland system is expected to recover and continue to perform its ecological functions. No mitigation is proposed.

Wetland Site 24 is a small \pm 1.38 acre contiguous cypress wetland. Site 24 is contiguous with Sites 23 and 25 by a roadside ditch which is contiguous with Lake Como. This wetland is classified as: System: Palustine, Class: Forested Wetland, Subclass: Needle-leaved Deciduous, Water-Regime: Semipermanently Flooded. The neighboring land is urban development and cypress wetlands. The proposed project will impact .92 acres with fill and an extended culvert. Site 24 has been previously disturbed by the original construction of Dale Mabry and remains in a disturbed condition dominated by a nuisance species community, limiting its primary function of water quality benefits and wildlife habitat. This disturbed wetland provides stormwater storage and has limited wildlife habitat qualities. Short-term effects in Site 24 include temporary increase in turbidity and removal of disturbed vegetation. Loss of stormwater storage in Site 24 will be off-set by the addition of a stormwater detention area in the new roadway design. No mitigation is proposed.

Wetland Site 25 is \pm .23 acre scrub-shrub wetland contiguous with Site 23 and 24 by a roadside ditch which is contiguous with Lake Como. This wetland is classified as: System: Palustine, Class: Scrub-Shrub, Subclass: Broad-leaved Deciduous, Water-Regime: Seasonally Flooded. The neighboring land is urban development, citrus groves and disturbed pasture. Approximately .09 acres will be impacted by fill and replacement of the existing culvert. Site 25 primarily functions in controlling stormwater movement. Short-term impacts would consist of increased turbidity and disturbance of vegetation. The proposed stormwater detention area in the new roadway design should offset any loss in stormwater control. No mitigation is proposed.

Wetland Site 26 appears to be the remnants of a willow swamp. This site is a \pm 2.7 acre isolated wetland. This wetland is classified as: System: Palustine, Class: Scrub-shrub wetland, Subclass: Broad-leaved Deciduous, Water-Regime: Saturated. The neighboring land has been developed, except for land to the west which is scrub-shrub vegetation. The proposed project will impact .57 acre of Site 26. The primary function of Site 26 is wildlife habitat due to its location in the developed portion of the area. Short-term impacts would consist of disturbance of vegetation and wildlife in the area during construction activities. This disturbed site may recover and provide a limited refuge for urban wildlife in a developed area. No mitigation is proposed.

In accordance with Executive Order 11990, wetlands were given special consideration in developing and evaluating alternates for the proposed action. The proposed project, to improve the North Dale Mabry Highway, will result in a total of approximately 17.3 acres of wetland. The 17.3 acres represent 8% of the total ± 224 acres of wetlands along the 4 mile section of North Dale Mabry. All twenty-nine (29) wetlands involved have been previously impacted by the initial construction and routine maintenance of North Dale Mabry.

Most of the wetland systems proposed to be impacted by the project are not regionally substantial. These wetlands are still important in providing valuable benefits and functions which include: flood control, sediment control, water recharge and fish and wildlife habitat. The acreage of wetland involvement and mitigation may change once the permit process is initiated. Efforts have been made during this report to provide approximations of wetland involvement and reasonable mitigation.

Based upon the above consideration, it is determined that there is no practicable alternative to the proposed new construction in wetlands and the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

ATTACHMENT C-3

WATER QUALITY

The only surface waters contiguous to this segment of North Dale Mabry Highway consist of a series of both isolated and inter-connected wetlands, as described in Attachment C-1. Several of these wetlands would be 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 possibly 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 quality of these wetlands. 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-7
FLOODPLAIN ASSESSMENT

In accordance with Executive Order 11988, Floodplain Management, and the requirements set forth in F.H.P.M. 6-7-3-2, paragraph 7, a field review of the proposed project site was made. This review, in conjunction with a preliminary hydraulic analysis, allowed determination of the extent of any impacts to the base floodplain resulting from the proposed roadway improvements to S.R. 597 (Dale Mabry Highway).

The proposed improvement involves an initial expansion of 4.6 miles of North Dale Mabry from a 2 lane rural to a 4 lane rural facility, between the vicinities of Van Dyke Road and U.S. 41. When development of the corridor warrants further capacity, the roadway will be expanded to a four-lane urban limited access facility with two-way frontage roads on either side, beginning north of the proposed Northwest Expressway. Due to the substantial difference in both typical sections and method of drainage, potential impacts to the base floodplain resulting from the initial and ultimate roadway improvement were evaluated separately.

Base floodplains along much of the project are located east of the existing roadway and are quite extensive. Since the interim 4 lane section will involve use of the existing two lanes with addition of two lanes to the west, there will be minimal involvement through this area. The ultimate expansion will entail longitudinal floodplain encroachments through this area due to widening along the east side as well as isolated, transverse encroachments in the vicinity of wetlands. The existing roadway traverses a large base floodplain throughout the northernmost 1.6 miles of this project. In this area, both the interim and ultimate stage improvements will entail encroachments. However, these floodplains are extensive and will not be measurably impacted by relatively minor longitudinal encroachments; reduction in storage

capacity resulting from roadway fill will be minor. (There are no floodway maps in print covering this area; F.E.M.A. in Atlanta stated that a study is scheduled to begin within six months.)

In summary, there are extensive Zone A base floodplains located east of the existing roadway throughout the southernmost three miles of the project. The northernmost 1.6 miles of roadway lie within the Zone A base floodplain. Expansion of this roadway facility along the existing alignment, in both the interim and ultimate phases, is the most practical and cost effective design alternative and involves no measurable reduction in base floodplain storage capacity. The only means of completely avoiding these encroachments would be to completely realign the roadway or bridge the base floodplains. Neither one of these alternatives is economically viable or warranted, due to the insignificant base floodplain impacts resulting from the minor reduction in storage capacity associated with the proposed interim and ultimate roadway improvements recommended herein.

The initial 4 lane roadway expansion will encroach into the base floodplain only through the northern end of the project, while the ultimate limited access facility with frontage roads will encroach throughout most of the project limits. However, as mentioned previously, the floodplains in question are extensive and will not be measurably impacted by relatively minor longitudinal encroachments. Neither will the transverse encroachments at crossdrain locations adversely impact the base floodplain elevation due to increased losses in longer runs of pipe. Final determination of hydraulic adequacy and raising of the roadway grade will be made during the design process.

The proposed ultimate stage improvements will result in the encroachment (filling) of approximately 20 acres of floodplain. Floodplain values which would be impacted include the provision of habitat for various species of plants, fish, and wildlife. The areas of the 100-year floodplain which are crossed by the project

corridor are used for agriculture or open space. Mitigation for the loss of natural floodplains is recommended at wetland sites 17, 20 and 21. Any minor construction related impacts will be effectively minimized by strict adherence to Section 104 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction⁽⁴⁾ as well as local codes and ordinances.

The multi-laning of North Dale Mabry Highway will widen and improve an existing roadway through the floodplain. Due to increased accessibility, it can be expected that there will be an acceleration of development and that some of this development could occur within the limits of the base floodplain. Such development, however, would continue with or without the proposed action. In addition, as a participant in the National Flood Insurance Program, Hillsborough County has adopted regulations to prevent incompatible floodplain development. The appropriate authority has been granted to the County permitting officials to enforce the above requirement, thereby controlling incompatible floodplain development.

Based on the Florida Department of Transportation Drainage Manual criteria, the floodplain encroachment and risk evaluation for the proposed interim project would be classified as Category 4: "Projects on existing alignment involving replacement of existing drainage structures with no record of drainage problems". The proposed structures will perform hydraulically in a manner equal to or greater than the existing structures 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.

The proposed ultimate stage improvements would likely be classified as Category 5: "Projects on existing alignment involving replacement of drainage structures in heavily urbanized floodplains". Replacement drainage structures for this ultimate stage project will be limited to hydraulically equivalent structures. The limitations to the hydraulic equivalency being proposed are basically due to restrictions imposed by the geometrics of design, existing development, cost feasibility, or practicability. An alternative encroachment location is not considered in this category since it defeats the project purpose or is economically unfeasible. Since flooding conditions in the project area are inherent in the topography or are a result of other outside contributing sources, and there is no practical alternative to totally eradicate flood impacts or even reduce them in any significant amount, existing flooding will continue, but not be increased. The proposed structures will be hydraulically equivalent to or greater than the existing structures and backwater surface elevations are not expected to increase. As a result, the project will not affect existing flood heights or floodplain limits. This project will not result in any new or increased adverse environmental impacts. There will be no 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 OR ENDANGERED SPECIES

This project has been evaluated for impacts on threatened and endangered species, including a literature review as well as field surveys.

Field reviews conducted on February 9, 10, 17, 22 and March 7, 1988 indicated no endangered fauna or flora species present in the twenty-nine wetland sites inspected, except a nesting pair of Florida sandhill cranes (Grus canadensis pratensis). The Florida sandhill crane is listed as a threatened species by the Florida Game and Freshwater Fish Commission (FGFWFC), pursuant to section 39-27.003-005 FAC.

The nest is located on the east side, outside of the proposed road right-of-way. The road proximity will indirectly impact the nest site. The Florida sandhill crane generally establishes 3-4 nest sites within a wetland network. The nest site for a particular year depends on the water level and available vegetative cover in the wetland. The extensive wetland network in the surrounding area does not limit the sandhill crane to nesting in any one wetland year after year. The birds move around in response to seasonal habitat conditions, especially changing water levels. The Florida sandhill cranes' preferred feeding habitats are: wet prairies, marshy lake margins, shallow flooded open areas, and low-lying improved cattle pastures. Florida sandhill cranes are actively nesting during a four month duration, February through May. In order to minimize impact on the sandhill cranes, two objectives should be implemented. Construction activities should not be scheduled during the four month period of sandhill crane nesting activities, February through May. Secondly, the impacts can be offset by the creation of suitable wetland habitat through mitigation, on the east side of the existing wetland. This may provide more wildlife habitat than presently exists.

Thirteen of the remaining twenty-eight wetlands to be impacted have emergent marsh communities suitable for wading bird feeding habitat. There are three species of wading birds listed by the FGFWFC which may utilize these areas. Two of the species are of special concern and one endangered: Little blue heron (Egretta caerulea), Snowy egret (Egretta thula), and Wood stork (Mycteria americana), respectively. Mycteria americana is also listed as endangered by the United States Fish and Wildlife Service (USFWS).

Wading bird foraging habitat which will be lost due to filling for these road improvements can be recreated adjacent to any of the existing wetlands. This may provide more wildlife habitat than presently exists.

Based on the above evaluation, it has been determined that neither the interim nor the ultimate stages of construction will 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 C-11

FARMLANDS

A farmlands evaluation has been performed for this project in compliance with the Farmland Protection Policy Act of 1984. Through coordination with the Soil Conservation Service of the U.S. Department of Agriculture, it has been determined that there is insignificant impact on farmlands as defined by 7 CFR 658.

ATTACHMENT D-1
NOISE IMPACTS

This attachment is a brief summary of the Noise Study Report which has been prepared for the proposed project.¹ 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 (1988) conditions, year 2010 No Build and year 2010 Build alternatives.

Representative noise-sensitive sites (receptors) where 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 seven modelled sites.

For the year 2010 No Build alternate, a total of five (5) residential sites between Van Dyke and U.S. 41 are predicted to experience Leq noise levels in excess of 67 dBA (FHWA noise abatement criteria level for activity category B). These locations are shown on Figure 2-3.

¹Noise Study Report for North Dale Mabry Highway (S.R. 597) prepared for FDOT by DSA GROUP, INC., June, 1988.

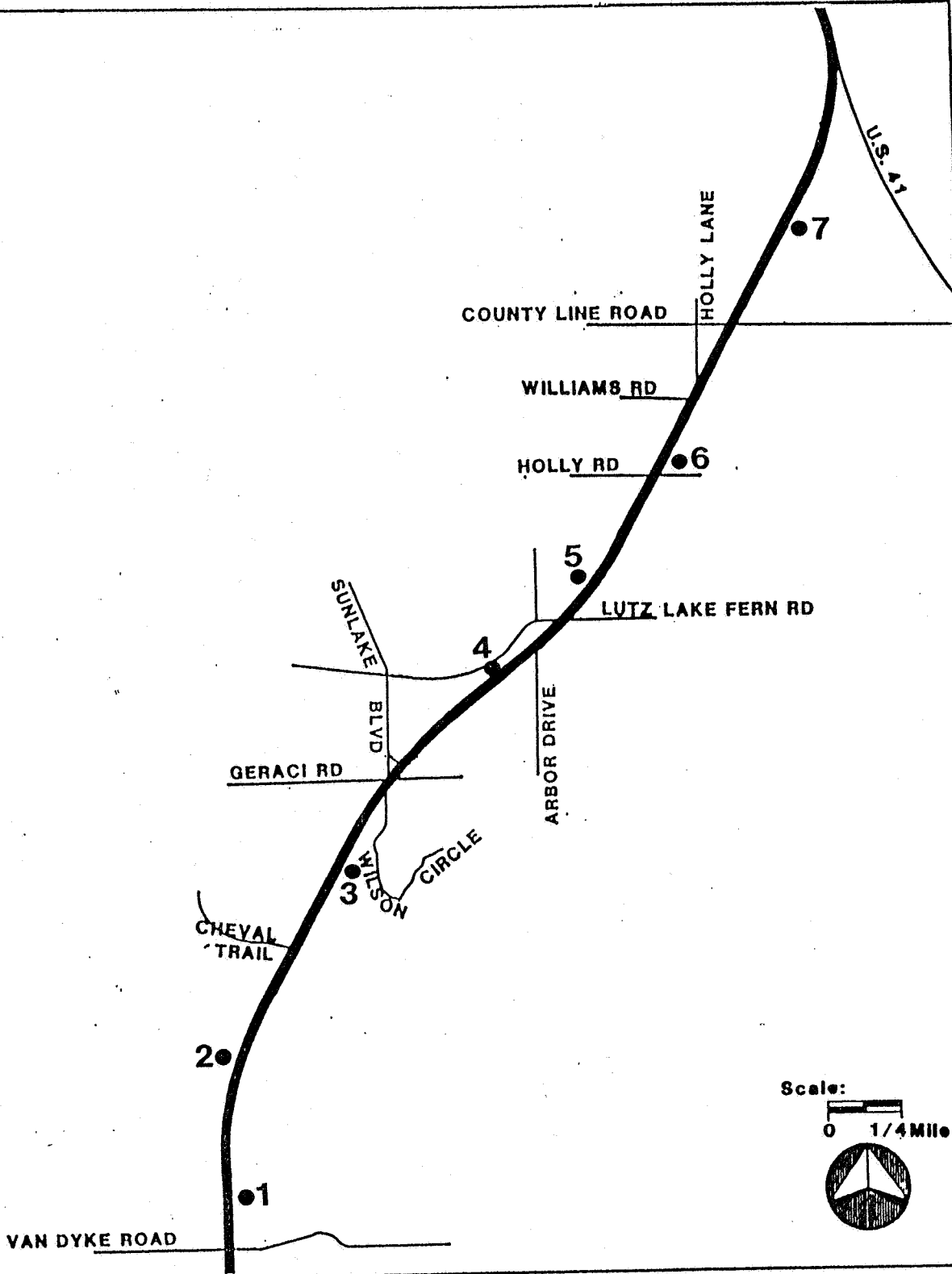


Figure 2-2 AMBIENT NOISE MEASUREMENT SITES

DALE MABRY HIGHWAY

Source: DSA GROUP, INC., 1988

TABLE 1 - NOISE LEVELS ESTIMATED BY STAMINA

Receptor Site No.	Use Description	Existing Distance to Edge of Pavement	Existing 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	Open Land	50	68*	72	73	+1	67 (2)
2	Open Land	116	64	66	73	+7	67 (2)
3	Business	50	69	72	75	+3	72
4	Open Land	126	63	67	73	+6	67 (2)
5	Residence	120	63	67	73	+6	67
6	Residence/ Farm	50	69*	74	75	+1	67
7	Residence	50	70*	72	74	+2	67

*Currently exceeds level for FHWA noise abatement criteria.

(1) As predicted by STAMINA Version 2.0.

(2) Future land use for these areas is designated as "suburban residential" development.

Legend:

⊗ NO-BUILD and BUILD ALTERNATIVE

○ BUILD ALTERNATIVE

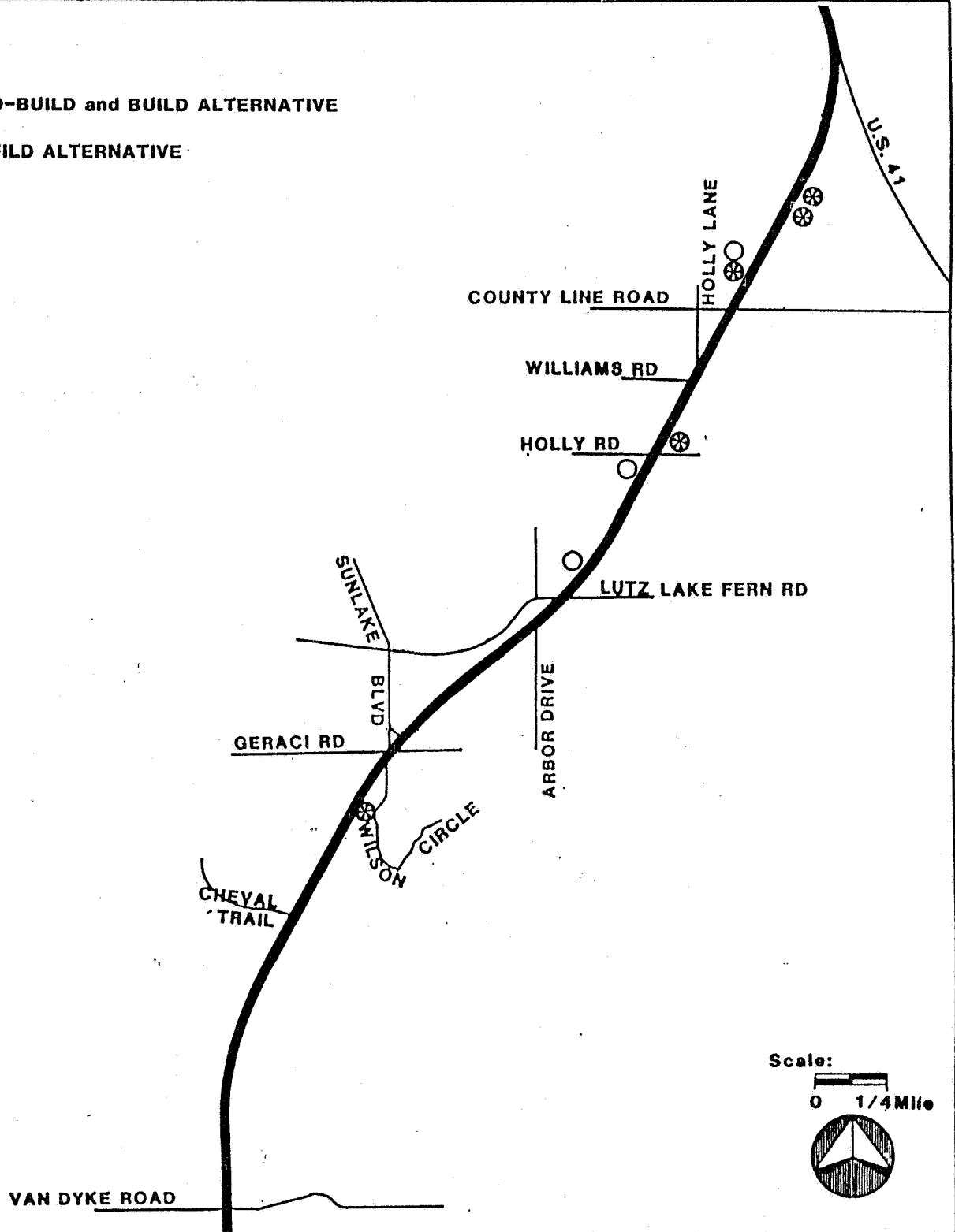


Figure 2-3 LOCATIONS WITH NOISE LEVEL IMPACTS IN EXCESS OF FHWA DESIGN NOISE CRITERIA FOR ACTIVITY CATEGORY B LAND USES

Source: DSA GROUP, INC., 1988

DALE MABRY HIGHWAY

For the year 2010 Build Alternate, a total of eight (8) residential sites are expected to have noise levels in excess of 67 dBA, as shown in Figure 2-3. Three of these residences are expected to be displaced as a result of construction of the ultimate stage improvements. Noise levels for the Build alternate are predicted to be slightly higher than both existing conditions and the No-Build alternate.

A comparison of year 2010 No-Build and Build alternates reveals that noise levels are estimated to increase from 1 to 7 dBA due to the proposed project, as shown in Table 1. A change in noise levels of 1 dBA is not considered significant and changes in the 5 to 10 dBA range are considered "minor".

Various noise abatement measures were considered since eight sites are expected to have noise levels in excess of FHWA design criteria. 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 North Dale Mabry is a principal arterial and there are no alternate north-south routes serving this same area.

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 offer the most effective means to minimize future noise impacts, since large areas contiguous to North Dale Mabry are still undeveloped.

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 not considered cost effective or practical, since the additional right-of-way required would be expensive and result in greater wetland impacts and land is available to control noise impacts through lane use and zoning controls. In addition, breaks in the barrier for driveways and cross streets would greatly diminish its effectiveness.

The relatively minor change in noise levels between the year 2010 No-Build and Build alternatives does not justify the cost of acquiring additional right-of-way for noise reduction.

ATTACHMENT D-2
AIR QUALITY ANALYSIS

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

A graphical screening test was 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).

Existing conditions (1988) were compared to year 2010 projected conditions for both the "no-build" and "build" alternatives. The intersection of North Dale Mabry and Lutz Lake Fern was selected as the "worst case" intersection for air quality. The results of the air quality screening tests are summarized in Table 1. An inspection of this table reveals that in all cases the distance to the nearest sensitive receptor exceeds the critical distance from the roadway. 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 and unpaved roads 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.

¹Air Quality Report for North Dale Mabry Highway. Prepared for FDOT by DSA Group, Inc., June, 1988.

TABLE 1 - SUMMARY OF AIR QUALITY SCREENING TESTS RESULTS

Scenario & Year	Land Use	Inter-section Leg	Peak Hour Traffic Volume	Average Link Speed (MPH)	Critical Distance (FT)	Nearest Receptor (FT)	Notes
Existing Conditions: 1988	Rural	N	1080	40	<10	160	
		E	270	25	<10	-	
		S	1008	40	<10	-	
		W	349	25	<10	500	
No-Build: 2010	Urban	N	2592	40	<10	40	1
		E	378	25	<10	40	1
		S	2520	40	<10	40	1
		W	702	25	<10	40	1
Build: 2010	Urban	N	2232	40	<10	340	2
		E	522	10	<10	270	
		S	2160	40	<10	400	2
		W	846	10	<10	200	

Notes

1. Based on planned "suburban residential" development (receptors are residences).
2. Volumes on Dale Mabry are lower than No-Build case because some of the traffic has been assigned to the frontage roads.

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.

ATTACHMENT D-3
CONSTRUCTION IMPACTS

Construction activities for the proposed S.R. 597 (North Dale Mabry Highway) project 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 traffic in each direction of S.R. 597 at all times and to comply with the Best Management Practices of FDOT.

For the residents living along S.R. 597 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.

HAZARDOUS MATERIALS SITES

Potential hazardous materials problems associated with the proposed right-of-way acquisition needed for the ultimate stage improvements have been evaluated and documented in a separate Hazardous Waste Evaluation Report.¹ This attachment is a brief summary of that report.

For the proposed interim stage improvements (four-laning within the existing 200 foot right-of-way), no impacts to potential hazardous waste sites are expected.

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

A total of ten (10) sites were identified in the corridor which have potential hazardous waste materials or be associated with soil or ground water contamination (see Figure 3-1 and Table 4-1). Six of these sites are likely to be impacted by the construction of the proposed ultimate stage improvements, as shown in Table 4-1.

The Marine Store (map key no. 1) is currently vacant but was previously used as a boat repair shop. The ultimate stage proposed right-of-way encroaches on the front portion of the building. Several glass jars containng fiberglass resin and epoxy materials were observed on the site as well as several empty drums. Other than a single spilled jar of fiberglass resin, there was no physical evidence to indicate potential soil or groundwater contamination.

¹Hazardous Waste Evaluation Report prepared for FDOT by DSA Group, Inc. January, 1988 (Revised February 10, 1989).

Legend:

○ Business not anticipated to be affected by proposed project.

● Business anticipated to be affected by the proposed project.

2 Site Number.
See Table 4-1 for description.

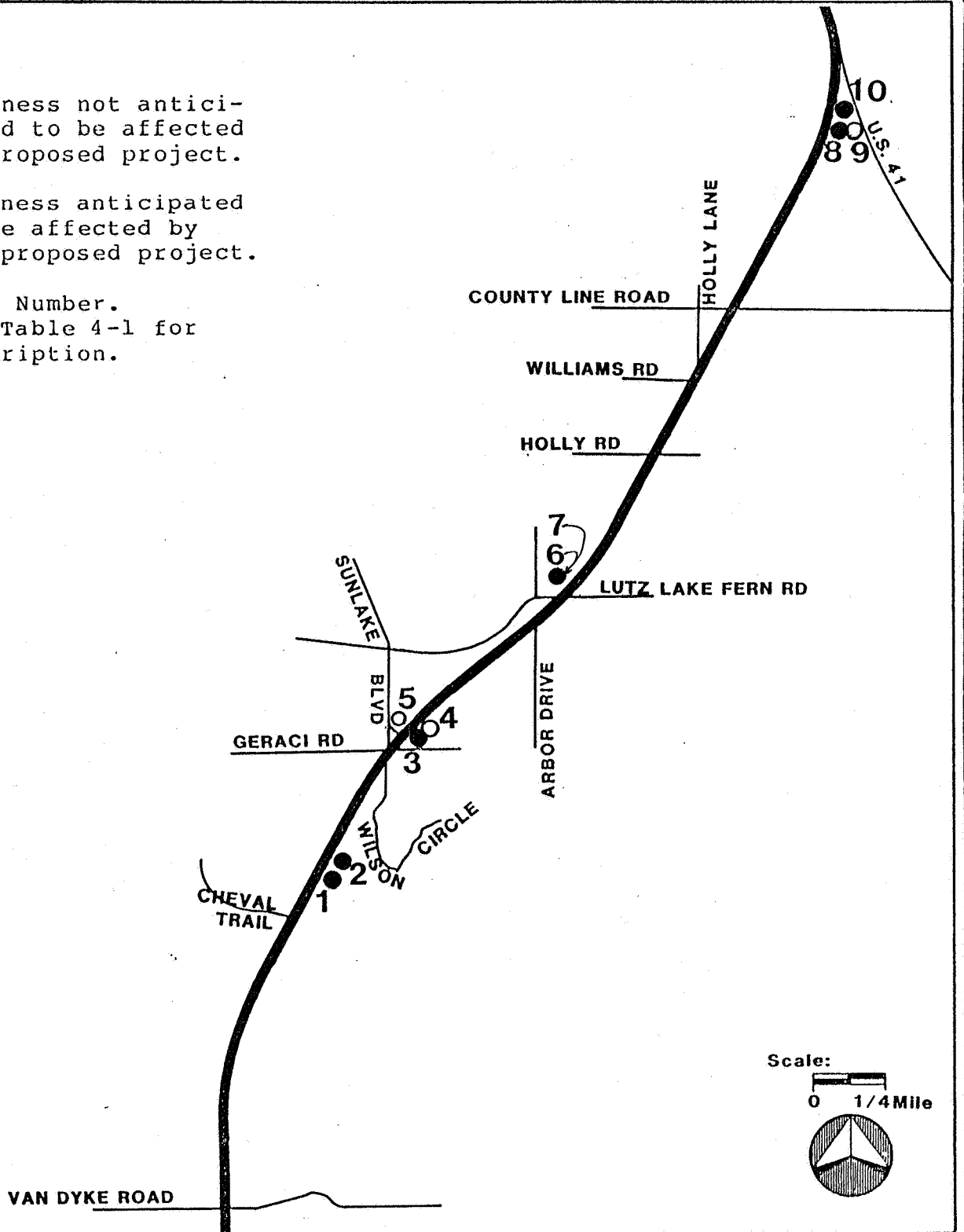


Figure 3-1
POTENTIAL HAZARDOUS
WASTE SITES THAT EXIST
ALONG THE PROPOSED PROJECT

Source: DSA Group, Inc., 1988.

DALE MABRY HIGHWAY

Table 4-1. Potential Hazardous Waste Sites that Exist in the Project Area.

Rev. 2-8-89

Map Key Number (#)	Address	Business Name	Potential Hazardous Waste Situation	Located Within Planned Right-of-Way	*Risk Evaluation	Recommended Action
1	18611 N. Dale Mabry Highway	Marine Packagers Inc.	Waste Materials	Yes	Medium	Verify location of septic system obtain samples for laboratory analysis for solvents and hardner compounds.
2	18613 N. Dale Mabry Highway	Rose Bush Plants	Waste Herbicides and Pesticides	Yes	Low	None.
3	18901 N. Dale Mabry Highway	Pick Kwik #87	4 UG Fuel Tanks	Yes	Medium	Detailed site and tank system review and continue to review ground water monitoring records.
4	18905 N. Dale Mabry Highway	Al's Lawn Care Products and Service, Inc.	Waste Oils and Solvents	No	Low	None.
5	18902 N. Dale Mabry Highway	"7" Eleven	4 UG Fuel Tanks	No	Low	None.
6	19350 N. Dale Mabry Highway	Joy's Print Shop	Waste Ink/Septic Tank	Yes	Low	None
7	19350 N. Dale Mabry Highway	Welding Repair Shop	Waste Materials	No	Low	None
8	1616 U.S. Highway 41	Mr. "V" Gas & Convenience Store	4 UG Fuel Tanks	Yes	Medium	Detailed site and tank system review any monitoring records
9	1626A N. Dale Mabry Highway	Soap Opera Laundromat	Waste Solvents and Filters	No	Low	None.
10	1714 N. Dale Mabry Highway	Amcon Concrete	1 UG/1 AG Fuel Tank	Yes	Medium	review of any ground water monitoring records.

Notes: UG: under ground
AG: above ground

* Site ranking based on Risk Assessment Guidelines. (1/27/89); basis for ratings are contained in Table 4-2.

Source: DSA Group, Inc., 1988.
Florida Department of Transportation, 1989

Table 4-2. Basis for Risk Rating

Map Key Number (#)	Business Name	Point Assignment for Various Risk Components					TOTAL POINTS	Risk Rating *
		Proximity to R/W	Land Use History	Current Conditions	Materials Storage	Violation Record		
1	Marine Packagers Inc.	3	2	4	2	4	15	Medium
2	Rose Bush Plants	2	2	3	1	0	8	Low
3	Pick Kwik #87	3	2	2	2	4	13	Medium
4	Al's Lawn Care Products and Service, Inc.	0	2	3	0	0	5	Low
5	"7" Eleven	0	2	2	2	0	6	Low
6	Joy's Print Shop	2	2	2	2	1	9	Low
7	Welding Repair Shop	0	2	2	2	2	8	Low
8	Mr. "V" Gas & Convenience Store	2	2	2	2	2	10	Medium
9	Soap Opera Laundromat	0	2	2	0	0	4	Low
10	Amcon Concrete	2	2	2	2	2	10	Medium

* Point Total Risk Categorization
 >19 points or a single 5 point score in any one component is ranked as a high risk site.
 10-18 points at a site has been ranked as medium risk.
 <10 points at a site has been ranked as a low risk site.

Source: DSA Group, Inc., 1989.
 Florida Department of Transportation, 1989

Rose Bush Plants (map key no. 2) is a small-scale retail operation that handles a very small number (usually less than two dozen) plants. Other activities on the site include sale of used boats and miscellaneous used merchandise (similar to a flea market operation). In addition, horses are kept in a small pen on the site. There was no visible physical evidence to indicate the presence of contamination.

A review of FDER records indicates that the Pick Kwik convenience store (map key no. 3) has been under review and observation by FDER for possible tank leakage, although only fumes have been detected so far, according to the FDER records. The proposed right-of-way encroaches on the existing pump island and underground fuel tanks.

Joy's Print Shop (map key no. 6) falls within the proposed ultimate stage right-of-way. This is a small scale operation which uses ink in one-pound cans. According to the owner, primary wastes generated include paper and aluminum plates, which are recycled at Reynolds Aluminum. Small quantities of ink are disposed of through the County's waste collection system.

Mr. V Gas and Convenience Store (map key no. 8), currently vacant, was formerly a typical convenience store with fuel facilities. There are four underground fuel tanks which are located near the proposed right-of-way line. There are no records of or obvious indications of leakage.

The Amcon concrete batch plant (map key no. 10) has both an aboveground as well as an underground fuel storage tank located near the northwest boundary of the site. These tanks appear to be close to but not within the limits of the proposed right-of-way taking for the ultimate stage.

In summary, for the interim stage four laning, no impacts are expected to potential hazardous waste sites. For the proposed ultimate stage improvements (involving construction of frontage roads), six of the ten potential hazardous waste sites are expected to be directly impacted. Specific recommendations for each site are included in Table 4-1. In addition, Table 4-2 includes a basis for the assigned risk ratings.

This proposed project contains no known significant hazardous material involvement.

KAISER ENGINEERS
TAMPA OFFICE

AUG 23 1989

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