



***Project
Development
and
Environment
(PD&E) Study***

Noise Study Report

***S.R. 574 (Martin Luther King Jr. Boulevard)
from C.R. 579 to McIntosh Road
Hillsborough County, Florida***

**WPI Segment No. 255893 1
FAP No. 2081-018P**



**Florida Department of Transportation - District 7
Tampa, Florida**

August 2002



Florida Department of Transportation
Project Development and Environment (PD&E) Study

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Submitted to:

**Florida Department of Transportation - District 7
Tampa, Florida**

Submitted by:

In Association with:

ESA | Environmental
Science
Associates

AYRES
ASSOCIATES

August 2002



Final Report

Final Report on the Study of
the Effect of the
Implementation of the
Florida Department of Transportation

W. J. [Name]
[Address]

Submitted to

Florida Department of Transportation
Tallahassee, Florida

Submitted by

[Name]



Department of Transportation
Federal Highway Administration (FHWA)



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EXECUTIVE SUMMARY

This Noise Study Report (NSR) was prepared for a 3.6 mile segment of S.R. 574 (Martin Luther King Jr. Boulevard), from CR 579 (Mango Road) to east of McIntosh Road in Hillsborough County, Florida. The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study to aid in determining the type, design and location of improvements to the existing facility, and to evaluate the impacts, if any, associated with the alternatives for the proposed improvements. The objective of the PD&E Study is to provide documented environmental and engineering information as well as analyses necessary for the FDOT and the Federal Highway Administration (FHWA) to reach a decision regarding the type, conceptual design and location of the necessary improvements for the S.R. 574 corridor.

Seventy-five noise sensitive sites were identified adjacent to the S.R. 574 corridor as having the potential to be affected by traffic noise. Of the 75 sites, 3 are religious facilities (Mt. Calvary Baptist Church, AME Church, and Freedom Baptist Church), 1 is a daycare facility (Aunt Fannie's Achievement Center) and 71 are single-family residences. The residential sites and the daycare facility were evaluated as Activity Category "B". As such, noise abatement measures were considered if predicted exterior traffic noise levels with the proposed improvements were 66 decibels (dB) on the "A" scale (dBA) or higher. The religious facilities were evaluated as Activity Category "E". As such, abatement measures were considered if predicted interior traffic noise levels were 51 dBA or higher.

In the year 2025, with the build alternative, predicted exterior traffic noise levels at the residential sites and the daycare facility range from 54.7 to 74.0 dBA with levels above the FHWA's Noise Abatement Criteria (NAC) at 19 of the single-family residences and the daycare facility. The predicted interior traffic noise levels at the religious facilities range from 41.9 to 47.1 dBA--levels below the NAC. The results also indicate that the maximum increase in either exterior or interior traffic noise levels would be 7.2 dBA when compared to existing levels. As such, traffic noise is not predicted to increase substantially at any of the noise sensitive sites because of the S.R. 574 improvements.

Noise abatement measures were considered for the noise sensitive sites predicted to experience traffic noise levels approaching, meeting, or exceeding the NAC. The measures were traffic management, alternative roadway alignment, property acquisition, and noise barriers. None of the measures was determined feasible and reasonable to reduce predicted traffic noise levels. As such, there are no apparent solutions to abate (reduce) traffic noise levels with the S.R. 574 improvements. Construction of the improvements will have a temporary impact on sensitive sites adjacent to the project corridor.

In order to reduce the potential of additional noise related affects on sensitive properties adjacent to S.R. 574; noise contours were developed for the future improved roadway facility. The results of the analysis indicate that a traffic noise level of 66 dBA or more is predicted to extend 80 to 90 ft from the improved roadway edge-of-pavement.

EXECUTIVE SUMMARY

The study was designed to determine the effect of the addition of a 10% water-soluble polymer to the feed of rainbow trout, *Oncorhynchus mykiss*, on the growth, survival, and feed conversion of the fish. The fish were fed a diet consisting of 10% protein, 10% lipid, and 80% carbohydrate. The addition of the polymer to the feed resulted in a significant increase in the growth of the fish, as measured by the length and weight of the fish at the end of the study. The feed conversion ratio of the fish was also improved, indicating that the fish were able to utilize the feed more efficiently. The survival of the fish was not affected by the addition of the polymer to the feed. The results of the study suggest that the addition of a 10% water-soluble polymer to the feed of rainbow trout can improve growth and feed conversion, which may be beneficial for aquaculture.

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1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study to document the preliminary engineering concept for improvements to S.R. 574 (Martin Luther King Jr. Boulevard) from C.R. 579 (Mango Road) to east of McIntosh Road in central Hillsborough County. The length of the study corridor is approximately 3.6 miles. The purpose of the PD&E Study is to provide environmental and engineering information, as well as the analyses necessary for the FDOT and the Federal Highway Administration (FHWA) to reach a decision regarding the type, design and location of the improvements to S.R. 574; and the impacts, if any, associated with the project.

The objectives of the Noise Study Report (NSR) are:

- To identify existing activities, developed lands, and undeveloped lands for which development is planned, designed and programmed, which may be affected by noise from the roadway;
- To determine traffic noise levels (existing levels and future levels with and without the roadway improvements) and noise impacts; and
- To evaluate alternative noise abatement measures for reducing or eliminating any traffic noise impacts.

Additional objectives include the evaluation of construction noise impacts and the prediction of noise impact "zones" adjacent to the corridor.

2.0 PROJECT DESCRIPTION

Within the S.R. 574 corridor, S.R. 574 is an east/west urban minor arterial. The limits of the study corridor are from C.R. 579 (Mango Road) to McIntosh Road, a distance of approximately 3.6 miles. The project is located in central Hillsborough County and extends through the communities of Mango, Seffner and Dover. A project location map is shown in Figure 2-1.

The existing land use adjacent to the S.R. 574 corridor transitions through two areas of generalized land use characteristics. From the western terminus eastward, the land uses transition from dense development (medium scale shopping centers, office/professional office, medical facilities, service stations, restaurants and community facilities) to low density development (a mixture of agricultural, commercial, and planned and residential developments). Although vacant land exists within the study corridor, future developments are planned for most of this area. Figures 2-2 and 2-3 illustrated the existing and future land use for the corridor.

S.R. 574 is currently a six-lane urban section west of C.R. 579, which transitions to a three-lane rural section (with a two-way left-turn lane) east of Highview Road. The three-lane section continues to Kingsway Road, where the roadway transitions to a



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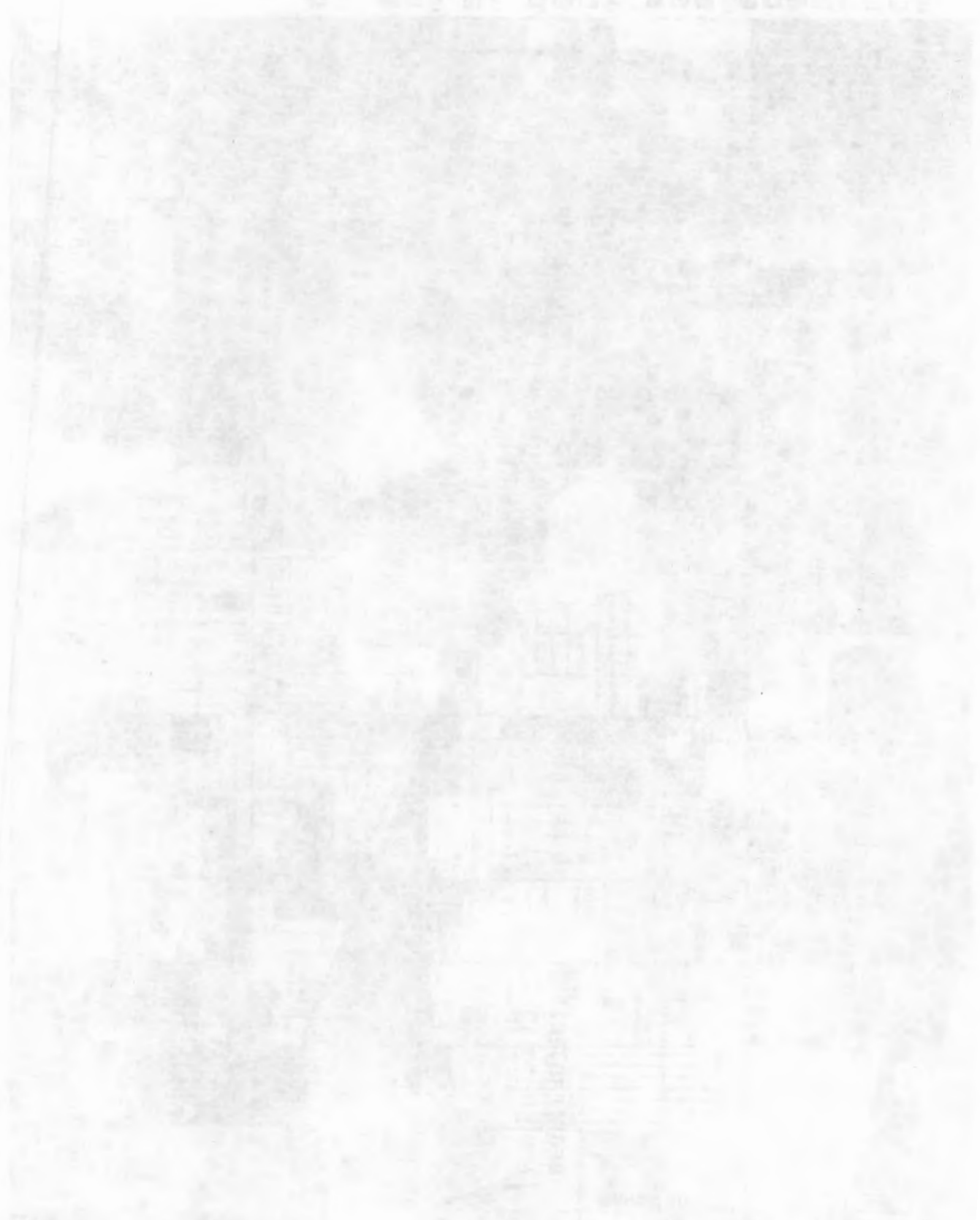
PROJECT LOCATION MAP

Figure 2-1



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RECORD

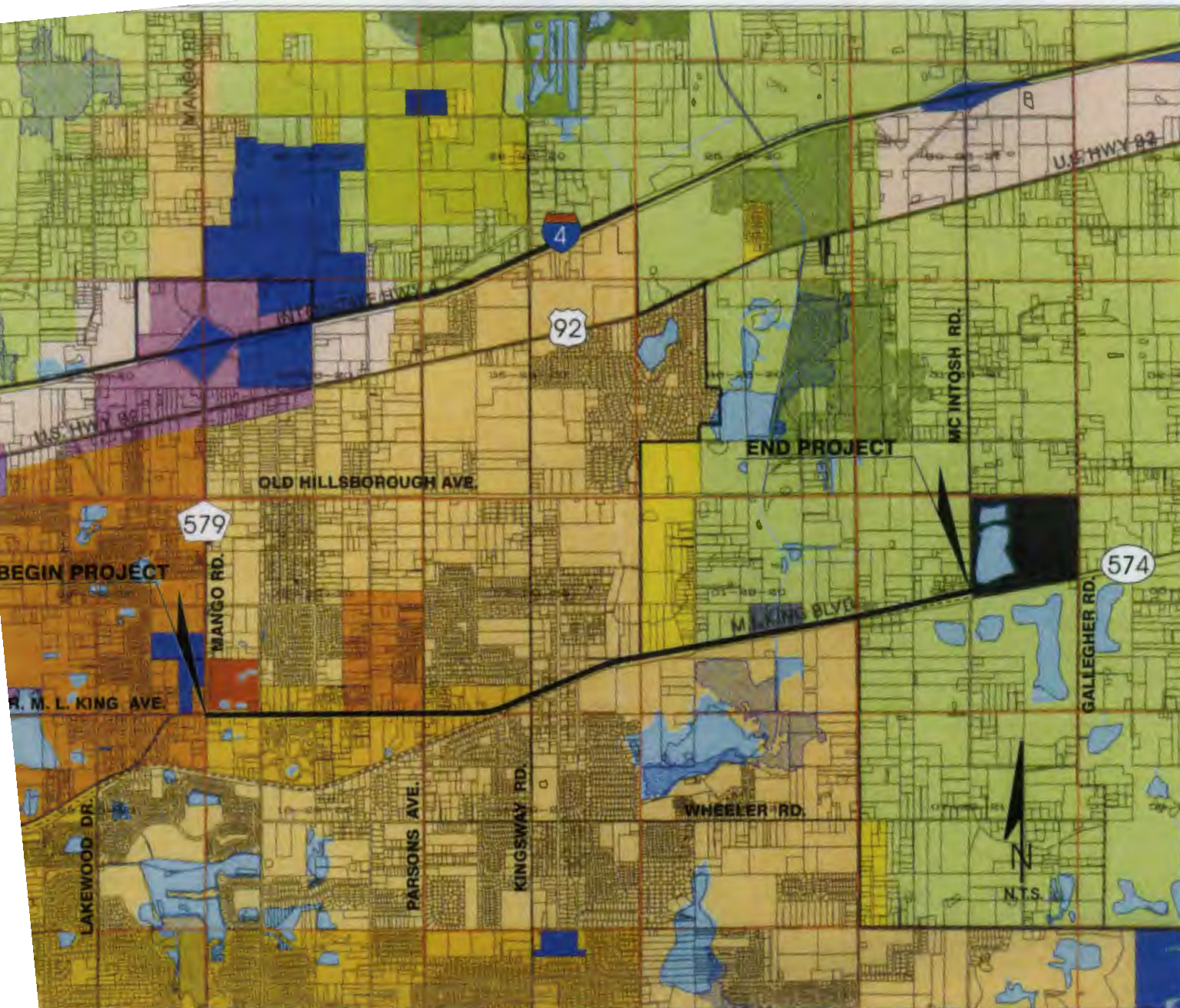
ADOPTED 2015 FUTURE LAND USE

October 27, 1994

Effective: Jul 15, 2000

LEGEND

- AGRICULTURAL/MINING-1/20 (.25 FAR)
- AGRICULTURAL-1/10 (.25 FAR)
- AGRICULTURAL/RURAL-1/5 (.25 FAR)
- AGRICULTURAL ESTATE-1/2.5 (.25 FAR)
- RESIDENTIAL-1 (.25 FAR)
- RESIDENTIAL-2 (.25 FAR)
- RESIDENTIAL PLANNED-2 (.35 FAR)
- RESIDENTIAL-4 (.25 FAR)
- RESIDENTIAL-6 (.25 FAR)
- RESIDENTIAL-9 (.35 FAR)
- RESIDENTIAL-12 (.35 FAR)
- RESIDENTIAL-20 (.35 FAR)
- NEIGHBORHOOD MIXED USE-4 (3) (.35 FAR)
- SUBURBAN MIXED USE-6 (.35 FAR)
- COMMUNITY MIXED USE-12 (.60 FAR)
- URBAN MIXED USE-20 (1.0 FAR)
- REGIONAL MIXED USE-36 (2.0 FAR)
- OFFICE COMMERCIAL-20 (.75 FAR)
- RESEARCH CORPORATE PARK (1.0 FAR)
- LIGHT INDUSTRIAL PLANNED (.60 FAR)
- LIGHT INDUSTRIAL (.60 FAR)
- HEAVY INDUSTRIAL (.60 FAR)
- PUBLIC/QUASI-PUBLIC
- NATURAL PRESERVATION
- WATER
- ENVIRONMENTALLY SENSITIVE AREAS
- SIGNIFICANT WILDLIFE HABITAT
- WETLANDS
- ROADS AND BOUNDARY LINES
- Cookrooch Bay Aquatic Preserve Boundary
- COUNTY BOUNDARY
- JURISDICTION BOUNDARY
- TAMPA SERVICE AREA
- URBAN SERVICE AREA
- EXISTING MAJOR ROAD NETWORK
- LIMITED ACCESS ROADS
- PLANNING AREA BOUNDARY
- COASTAL HIGH HAZARD AREA LIMIT



MLK
S.R. 574 BLVD
PD&E Study

S.R. 574 (Martin Luther King Jr. Blvd.)
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FUTURE LAND USE

Figure 2-3

two-lane section up to McIntosh Road. The existing posted speed limits along S.R. 574 are 45 mph and 50 mph.

The recommended alignment for the multi-laning of S.R. 574 from C.R. 579 to east of McIntosh Road can be described with three typical roadway sections. The portion of the project between C.R. 579 and Parsons Avenue is proposed to be widened to a 5-lane urban typical section (40 mph design speed) that includes a two-way left turn lane. A 4-lane suburban typical section (45 mph design speed) is proposed in the portion of the project from east of Parsons Avenue to east of Kingsway Avenue. The remaining portion of the project from east of Kingsway Road to east of McIntosh Road is proposed to be a 4-lane suburban typical section (60 mph design speed). Both 4-lane suburban typical sections can be expanded to 6-lanes, and the right-of-way (ROW) requirements are 123.5 feet (ft) and 131.5 ft. for the 45 mph and 60 mph design speeds, respectively. Figures 2-4 through 2-6 illustrate the preferred alignment typical sections.

The recommended alignment generally follows the existing centerline of the roadway with some realignment to reduce impacts to established commercial properties and to avoid a historical cemetery in the western portion of the project. The recommended alignment for the eastern portion of the project considered a 25 ft offset from the proposed ROW line to the centerline of the existing, active CSX railroad track.

3.0 TRAFFIC NOISE EVALUATION CRITERIA

Noise levels presented in this report represent hourly equivalent sound levels, L_{Aeq1h} . A L_{Aeq1h} is a steady-state sound level that contains the same amount of acoustic energy as an actual time-varying sound level over a one-hour period. The L_{Aeq1h} is expressed in decibels on the "A" scale (dBA) for the analysis of highway noise.

The FDOT conducts traffic noise evaluations that conform to the regulations of Title 23, Chapter 1, Part 772 of the Code of Federal Regulations (23 CFR 772). These regulations provide procedures for noise studies and consideration of noise abatement (reduction) measures. 23 CFR 772 also establishes requirement that information be provided to local officials for their use in planning and local land use decisions.

Following 23 CFR 772, a noise sensitive site is determined to be affected by a roadway improvement project when predicted traffic noise levels "approach" or exceed the FHWA's NAC or when the predicted traffic noise level substantially exceeds the existing noise level. The FHWA's NAC are provided in Table 3-1.

Page 1

Page 2

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. This is essential for ensuring the integrity of the financial system and for providing a clear audit trail.

2. The second part of the document outlines the procedures for handling incoming payments. It is crucial that all payments are recorded promptly and accurately to avoid any discrepancies in the accounts.

3. The third part of the document describes the process for issuing invoices. Invoices should be generated and sent to customers in a timely manner to facilitate payment.

4. The fourth part of the document details the methods for reconciling bank statements. Regular reconciliation is necessary to identify and correct any errors or unauthorized transactions.

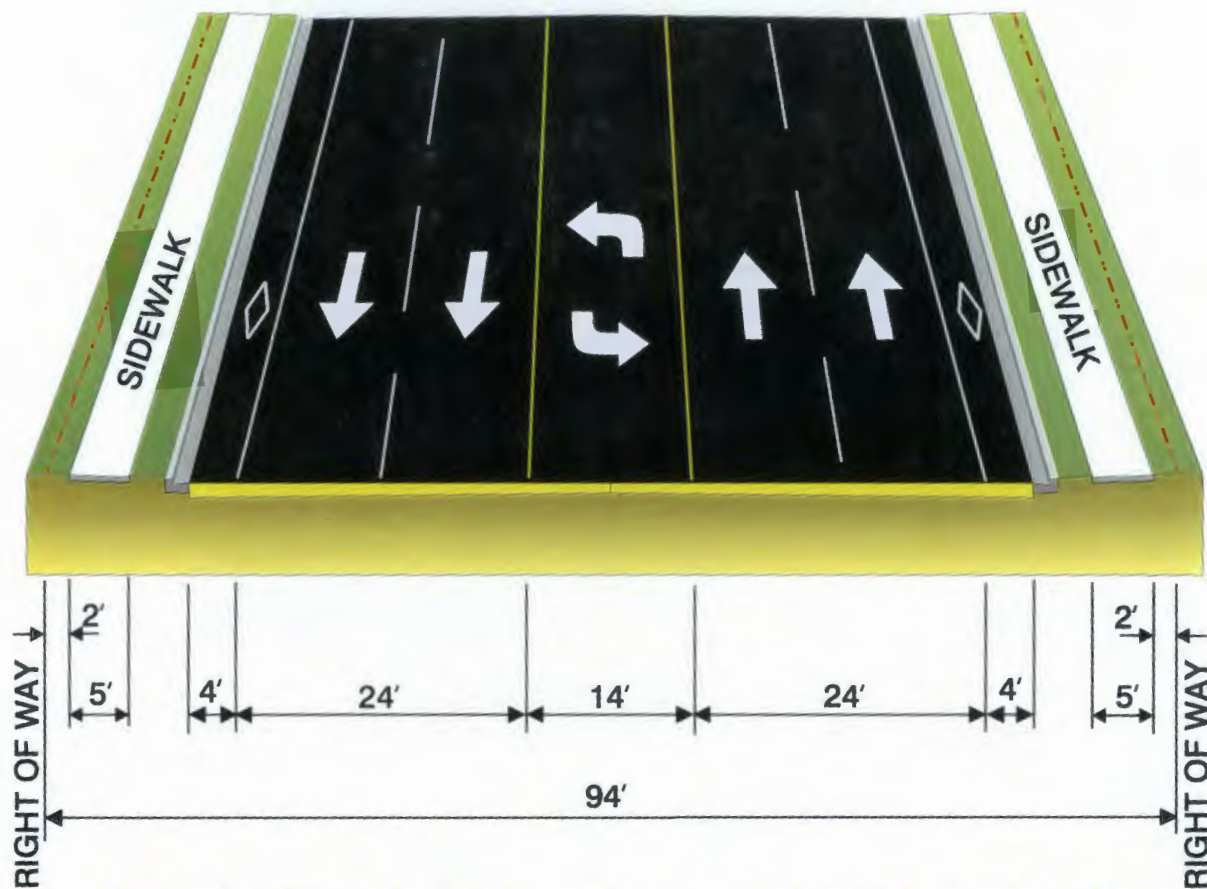
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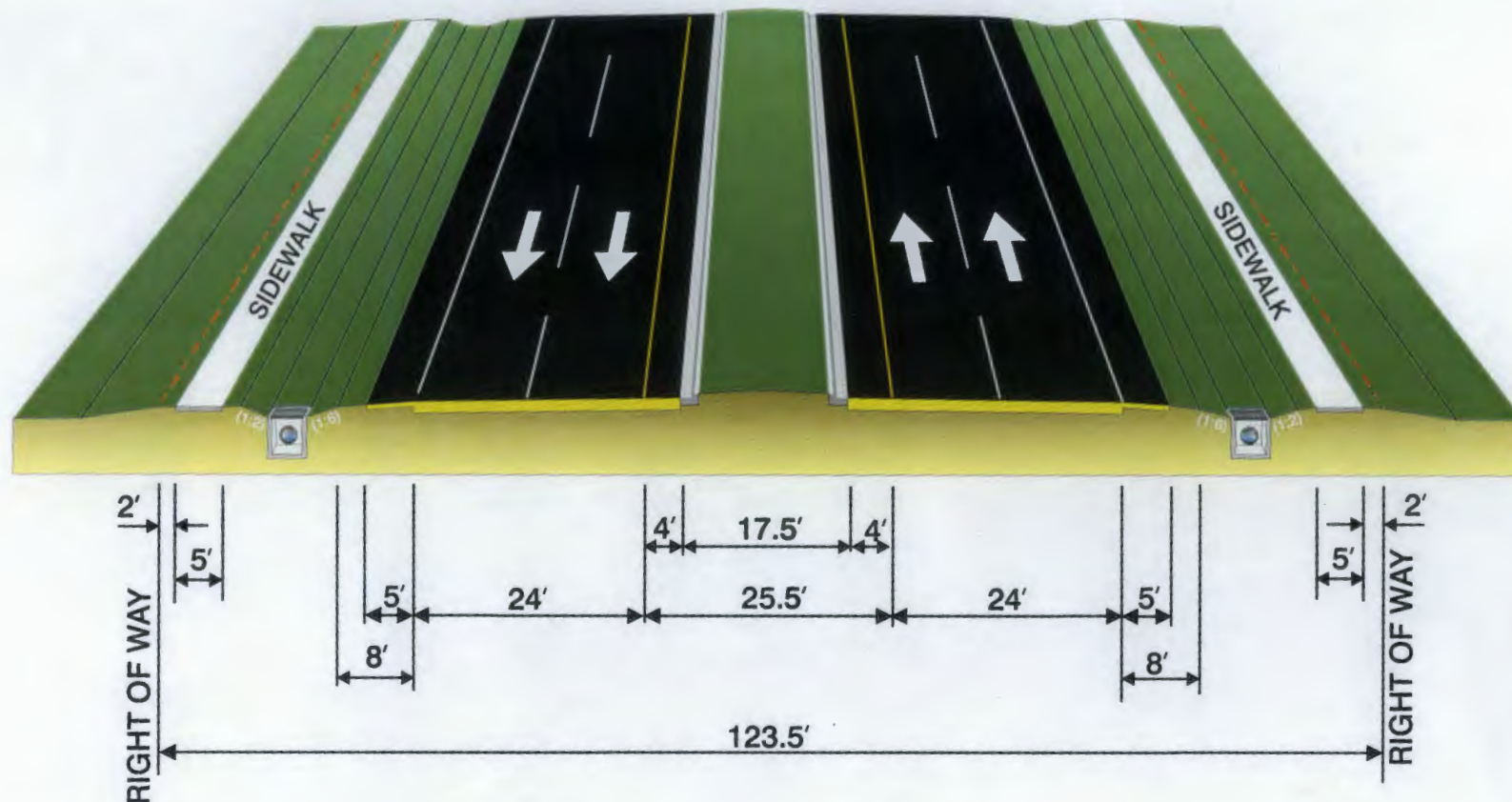
7. The seventh part of the document discusses the importance of maintaining up-to-date financial statements. These statements provide a snapshot of the company's financial health at any given time.

8. The eighth part of the document outlines the procedures for handling outgoing payments. It is important to ensure that all payments are made to the correct recipients and at the agreed-upon times.

9. The ninth part of the document describes the process for conducting a financial review. This review should be performed regularly to assess the company's overall financial performance and to identify areas for improvement.

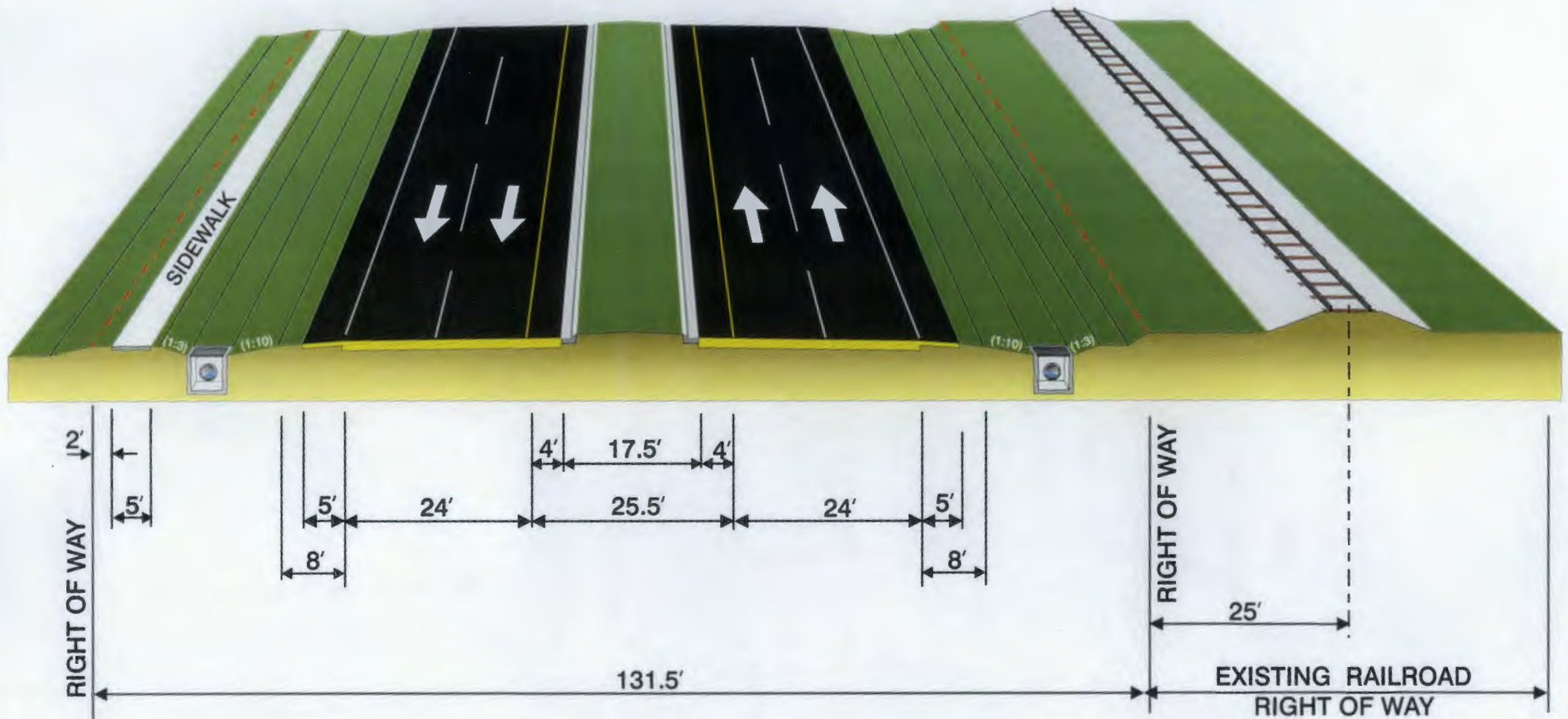


HIGHVIEW ROAD TO PARSONS AVENUE (40 MPH DESIGN SPEED)



PARSONS AVENUE TO KINGSWAY ROAD (45 MPH DESIGN SPEED)





KINGSWAY ROAD TO McINTOSH ROAD

(60 MPH DESIGN SPEED)



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RECOMMENDED ALTERNATIVE 4 - LANE SUBURBAN ROADWAY TYPICAL SECTION

Figure 2-6

Table 3-1: FHWA Noise Abatement Criteria

Activity Category	Description	LAeq1(h)
A	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	57 (Exterior)
B	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries and hospitals.	67 (Exterior)
C	Developed lands, properties or activities not included in Categories A or B above.	72 (Exterior)
D	Undeveloped lands.	N/A
E	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums.	52 (Interior)

Source: Code of Federal Regulations, Title 23, Part 772 (April 1, 2001)

FDOT evaluates traffic noise using Chapter 17 of the PD&E Manual. The most recent version of Chapter 17 (January 10, 2001) defines noise levels that “approach” the FHWA’s NAC as being within 1 dBA of the NAC. A “substantial traffic noise increase” is defined as an increase of 15 or more dBA above existing noise levels.

According to the PD&E Manual, the noise abatement measures that may be incorporated in a roadway project to reduce traffic noise include:

- Traffic management measures (e.g., traffic control devices and reduced speed limits),
- Roadway realignment,
- Acquisition of property (predominately unimproved property) to serve as a buffer to preempt development which would be adversely affected by traffic noise, and
- Construction of noise barriers.

When considering abatement measures, 23 CFR 772 requires agencies to give weight to both the benefits and cost of the abatement measures. Consideration to the overall social, economic and environmental affects of the measures is also required. When abatement measures are evaluated, every reasonable effort is made to obtain a substantial noise reduction.

3.1 Traffic Noise Abatement Considerations

Reasonableness and feasibility factors are evaluated relative to each alternative abatement measure. The following briefly describes the factors outlined in Chapter 17 of the PD&E Manual.

3.1.1 Feasibility Factors

Feasibility factors include issues that relate to the ability of the FDOT to actually implement a noise abatement measure. These issues include the following:

- Insertion loss (noise reduction) - This is the lowering of a noise level resulting from an abatement measure. A normal design goal is to reduce traffic noise levels 10 dBA or more with a minimum 5 dBA reduction in traffic noise required for the sites immediately adjacent to the roadway.
- Constructability - Constructability issues relate only to noise barriers and include an evaluation of factors that may affect the placement of a barrier in a desired location. These factors include terrain, utilities, bridges, and overpasses.
- Maintainability - Maintainability issues also relate only to noise barriers and involve an evaluation of barrier materials and any potential graffiti problems.
- Safety - Safety is a critical factor in determining whether a particular abatement measure is viable. Maintaining a clear recovery zone is critical, as is sight distance. While a noise barrier can be placed adjacent to the shoulder of the road in some locations, safety factors must be considered so that merging traffic can be seen, and fire access, emergency, and disabled vehicles can be accommodated.
- Accessibility - Accessibility issues relate mainly to noise barriers and include an evaluation of access to/from local sidewalks and an evaluation of normal routes of travel for pedestrians.
- ROW Requirements - For noise barriers, ROW requirements include the need for access rights (air, light, view, and ingress/egress) from the affected property owners. For roadway realignments, ROW requirements would include any additional ROW purchases that are necessary and related directly to the abatement measure. The costs associated with ROW purchases are also considered in the evaluation.
- Utilities - The effect of noise barriers on utilities such as overhead power lines, underground water, sewer, gas, and oil lines must be considered and can have a significant impact on abatement costs and design options.
- Drainage - Drainage is another factor that generally relates only to noise barriers. Directing water along, under, or away from a noise barrier can be costly and cause construction and maintenance problems.
- Cost - For noise barriers, the cost includes the cost of construction (material and labor) and associated costs less the cost of designing the barrier. The cost also includes the cost of any additional ROW purchases that are necessary and related directly to the abatement measure. For purposes of evaluating the cost of an abatement measure, the FDOT uses a cost per benefited receiver guideline. A benefited receiver is a noise sensitive site that is provided a reduction in noise of at least 5 dBA due to an abatement measure. Currently, the FDOT considers a cost of \$30,000 per benefited receiver as an upper limit, for the use of public funds in providing noise abatement measures. The cost of a noise barrier is calculated using the current cost per square foot factor for cost estimating purposes. Effective October 1, 2000, all FDOT noise studies use a cost factor of \$25 per square foot for this purpose.

- Other Environmental Impacts - Other environmental impacts can include the effect of a noise barrier on animal migratory paths, bird/wall collisions, groundwater and surface water impacts, wetland destruction, and air quality.

3.1.2 Reasonableness Factors

Reasonableness factors are evaluated to determine if an abatement measure is a prudent use of public funds.

- Relationship of future levels to the abatement criteria - Does the predicted future noise level with the project just approach the NAC or do levels exceed (or far surpass) the NAC?
- Community Desires - The desires of a community for the abatement measure are extremely important. In the case of noise barriers, the affected property owners must be solicited to determine if a barrier is desired or not.
- Land Use Stability - The consideration of any abatement measure requires an evaluation of the stability of the land uses for the area in which the measure is proposed. If the noise sensitive sites were not likely to remain in the area for a reasonable amount of time, the abatement measure would be considered unreasonable.
- Local Controls - This factor involves a review of local ordinances to determine what measures local zoning and planning agencies have taken to control noise sensitive land uses adjacent to roadways.
- Views of Local Officials - Consideration is given to the views of local politicians who may be asked to represent the views of concerned citizens within the area.
- Future Build/No-Build Traffic Noise Levels - If the difference in predicted levels between the future build and no-build alternatives is 1 to 2 dBA, an abatement measure may be considered less reasonable as differences of 1 to 2 dBA in traffic noise are inaudible to most people.
- Antiquity - Homes that are constructed after the "Date of Public Knowledge" for a project are given less consideration for abatement as it is generally considered that someone who builds or buys a noise sensitive site along an existing highway probably did not consider noise a significant factor in choosing the location. A project's "Date of Public Knowledge" is the date when the PD&E Study's environmental document is approved by the FHWA.
- Aesthetics - This refers to the physical appearance of a noise barrier on both the highway side and the affected property side. This factor also incorporates the view of the property owner and local requirements relative to color, height, style, and materials.
- Additional Considerations - Additional considerations are those that could seriously affect whether a noise barrier is reasonable at a given location. One example is the effect of a barrier on a nearby hospital heli-pad used for emergency medical transport.

Under Environmental Impact - One of the most important aspects of the EIA is the assessment of the potential impacts of the proposed project on the environment. This includes the assessment of the project's impacts on the environment, the assessment of the project's impacts on the environment, and the assessment of the project's impacts on the environment.

3.15 - Environmental Impact

Environmental impact is the change in the environment that is caused by a project. It is the change in the environment that is caused by a project. It is the change in the environment that is caused by a project.

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4.0 METHODOLOGY

4.1 Computer Model

The traffic noise evaluation for the S.R. 574 improvements was performed using the FHWA's computer model for highway traffic noise prediction and analysis--the Traffic Noise Model (TNM--Version 1.0b, July 1999). The TNM propagates sound energy, between highways and receivers taking the intervening ground's acoustical characteristics and topography, rows of buildings, and heavy vegetation into consideration.

4.1.1 Model Validation

Existing and future noise levels (with and without the proposed improvements) were modeled using the TNM. To insure that these predictions are as accurate as possible, the computer model was validated using measured noise levels at locations adjacent to the project corridor. Traffic and meteorological data including motor vehicle volumes, vehicle mix, vehicle speeds and wind/cloud conditions were recorded during each measurement period.

The field measurements for S.R. 574 were conducted in accordance with the FHWA's Measurement of Highway-Related Noise. Each field measurement was obtained using a Larson Davis Dosimeter (Model 700). The Dosimeter was calibrated before and after each monitoring period with a Larson Davis Sound-Level Calibrator.

The measured data was used as input for the TNM to determine if, given the topography and actual site conditions of the area, the computer model would "recreate" the measured levels. Following the FDOT guidelines, a noise prediction model is validated if measured and predicted noise levels are within a tolerance standard of 3 dBA.

Table 4-1 presents the field measurements and the validation results for S.R. 574. As shown, the ability of the model to accurately predict noise levels for the project was confirmed as the differences between the measured and modeled traffic noise levels were less than 3 dBA.

Table 4-1: Validation Data

Location	Measurement Period	Noise Level (dBA)		
		Measured	Modeled	Difference
Site 1 - N. of S.R. 574/E. Aunt Fannie's Achievement Center	1	61.5	61.3	0.2
	2	61.0	60.7	0.3
	3	62.0	61.3	0.7
Site 2 - S. of S.R. 574/E. of Lake Dr	1	63.5	63.5	0.0
	2	63.0	64.1	1.1
	3	63.0	62.6	0.4

4.1 Composite Model

The composite model is a two-stage process. In the first stage, the model is trained on a set of input-output pairs. The input is a vector of features, and the output is a scalar value. The model is trained using a set of input-output pairs, and the output is a scalar value. The model is trained using a set of input-output pairs, and the output is a scalar value.

4.2 Model Validation

The model is validated using a set of input-output pairs. The input is a vector of features, and the output is a scalar value. The model is trained using a set of input-output pairs, and the output is a scalar value. The model is trained using a set of input-output pairs, and the output is a scalar value.

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Table 4-1: Validation Data

Input	Output	Input	Output
1	0.1	1	0.1
2	0.2	2	0.2
3	0.3	3	0.3
4	0.4	4	0.4
5	0.5	5	0.5
6	0.6	6	0.6
7	0.7	7	0.7
8	0.8	8	0.8
9	0.9	9	0.9
10	1.0	10	1.0

4.2 Traffic Data

The existing and forecast traffic data used in the TNM to predict traffic noise levels adjacent to S.R. 574 are presented in Table 4-2.

Table 4-2: Traffic Data

Roadway Segment	Scenario	LOS C/ Demand	ADT	% K	% D	DHV		Posted Speed (mph)
						% MT	% HT	
C.R. 579 (Mango Rd) to Highview Rd	Existing/No-Build	LOS C	15,600	9.9	54	2	1	45
	5-Lane Urban	LOS C	33,200	9.9	54	2	1	45
Highview Rd to Parsons Ave	Existing/No-Build	LOS C	15,600	9.9	54	2	1	45
	4-Lane Suburban	LOS C	33,200	9.9	54	2	1	45
Parsons Ave to Kingsway Ave	Existing/No-Build	LOS C	15,600	9.9	54	2	1	45
	4-Lane Suburban	Demand	32,200	9.9	54	2	1	45
Kingsway Ave to McIntosh Rd	Existing	Demand	12,957	9.9	54	2	1	50
	No-Build	LOS C	15,600	9.9	54	2	1	50
	4-Lane Suburban	Demand	22,750	9.9	54	2	1	50

%K = Percent ADT in peak hour, %D = Directional distribution, % MT = Percent Medium Truck, % HT = Percent Heavy Trucks

Because noise levels are low when traffic volumes are low (LOS "A" or "B") or when traffic is so congested that movement is slow (LOS "D", "E" or "F"), the maximum hourly noise level occurs between these two conditions. Therefore, traffic volumes used in the analysis reflect the demand volume (if forecast demand levels meet the LOS "A" or "B" criteria) or the design LOS "C" volumes, whichever is less.

5.0 TRAFFIC NOISE ANALYSIS

5.1 Noise Sensitive Sites

Seventy-five noise sensitive sites were identified adjacent to the S.R. 574 corridor as having the potential to be affected by traffic noise. Of the 75 sites, 3 are religious facilities (Mt. Calvary Baptist Church, AME Church, and Freedom Baptist Church), 1 is a daycare facility (Aunt Fannie's Achievement Center) and 71 are single-family residences. Six of the 71 single-family residences are located on one lot (a single-family home and 5 small cottages) and 14 of the 71 residences are mobile homes (Scarab Trailer Park). The locations of the noise sensitive sites are shown on Figure 5-1.

The residential sites and the daycare facility were evaluated as Activity Category "B". As such, noise abatement measures were considered if predicted exterior traffic noise levels with the proposed improvements were 66 dBA or higher. The religious facilities were evaluated as Activity Category "E". As such, abatement measures were considered if predicted interior traffic noise levels were 51 dBA or higher.

The station and traffic data for the TBM is presented in Table 4.2. The station and traffic data for the TBM is presented in Table 4.2.

Table 4.2 Station and Traffic Data

Station	Direction	Volume	Speed	Weight
1	North	100	30	1.0
2	South	100	30	1.0
3	North	100	30	1.0
4	South	100	30	1.0
5	North	100	30	1.0
6	South	100	30	1.0
7	North	100	30	1.0
8	South	100	30	1.0
9	North	100	30	1.0
10	South	100	30	1.0
11	North	100	30	1.0
12	South	100	30	1.0
13	North	100	30	1.0
14	South	100	30	1.0
15	North	100	30	1.0
16	South	100	30	1.0
17	North	100	30	1.0
18	South	100	30	1.0
19	North	100	30	1.0
20	South	100	30	1.0

The station and traffic data for the TBM is presented in Table 4.2. The station and traffic data for the TBM is presented in Table 4.2. The station and traffic data for the TBM is presented in Table 4.2.

4.2 TRAFFIC NOISE ANALYSIS

4.2.1 Station and Traffic Data

The station and traffic data for the TBM is presented in Table 4.2. The station and traffic data for the TBM is presented in Table 4.2. The station and traffic data for the TBM is presented in Table 4.2.

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CSX R.R.

MARTIN LUTHER KING JR. BLVD.

McINTOSH ROAD

MCLEROY PLACE

PRIVATE RES.

PRIVATE RES.

PRIVATE RES.

HAROLD'S FARM SUPPLY

PRIVATE RESIDENCE

PRIVATE RESIDENCE

51

52

53

54

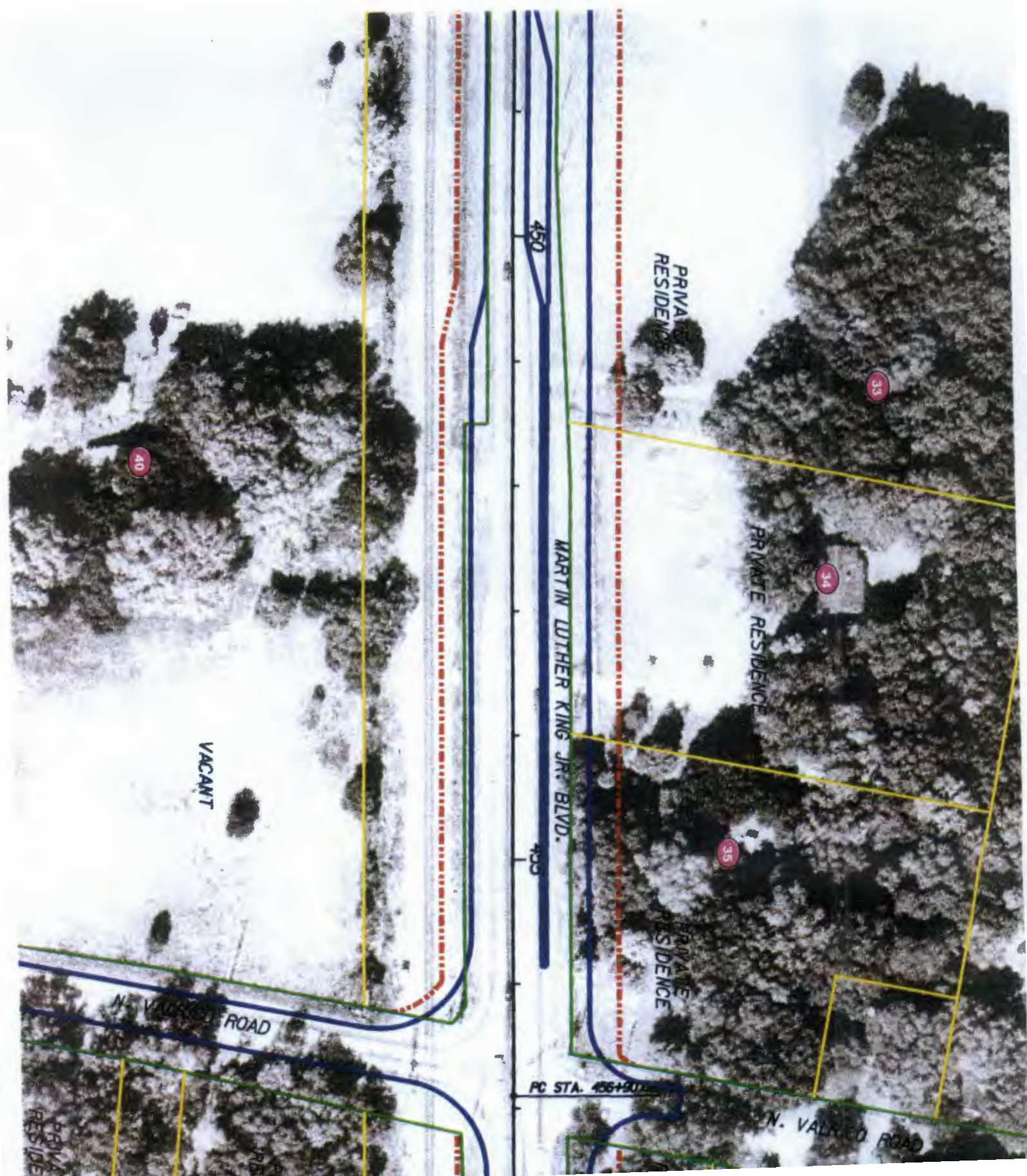
55

56

57

480

485



VACANT

PRIVATE
RESIDENCE

PRIVATE
RESIDENCE

465

470

46

47

PT

QV

CSX R.R.

52.8

59.46

43

44

45





MARTIN LUTHER KING JR. BLVD.

CSX R.R.

31

32

425

MARTIN LUTHER KING JR. BLVD.

C&J TRACTOR
SALES

VACANT

MARTIN LUTHER KING JR. BLVD.

CSX R.R.





METRO STORAGE UNITS

360

PT STA. 360+54.57

370

VACANT

MARTIN LUTHER KING JR. BLVD.

CSX R.R.

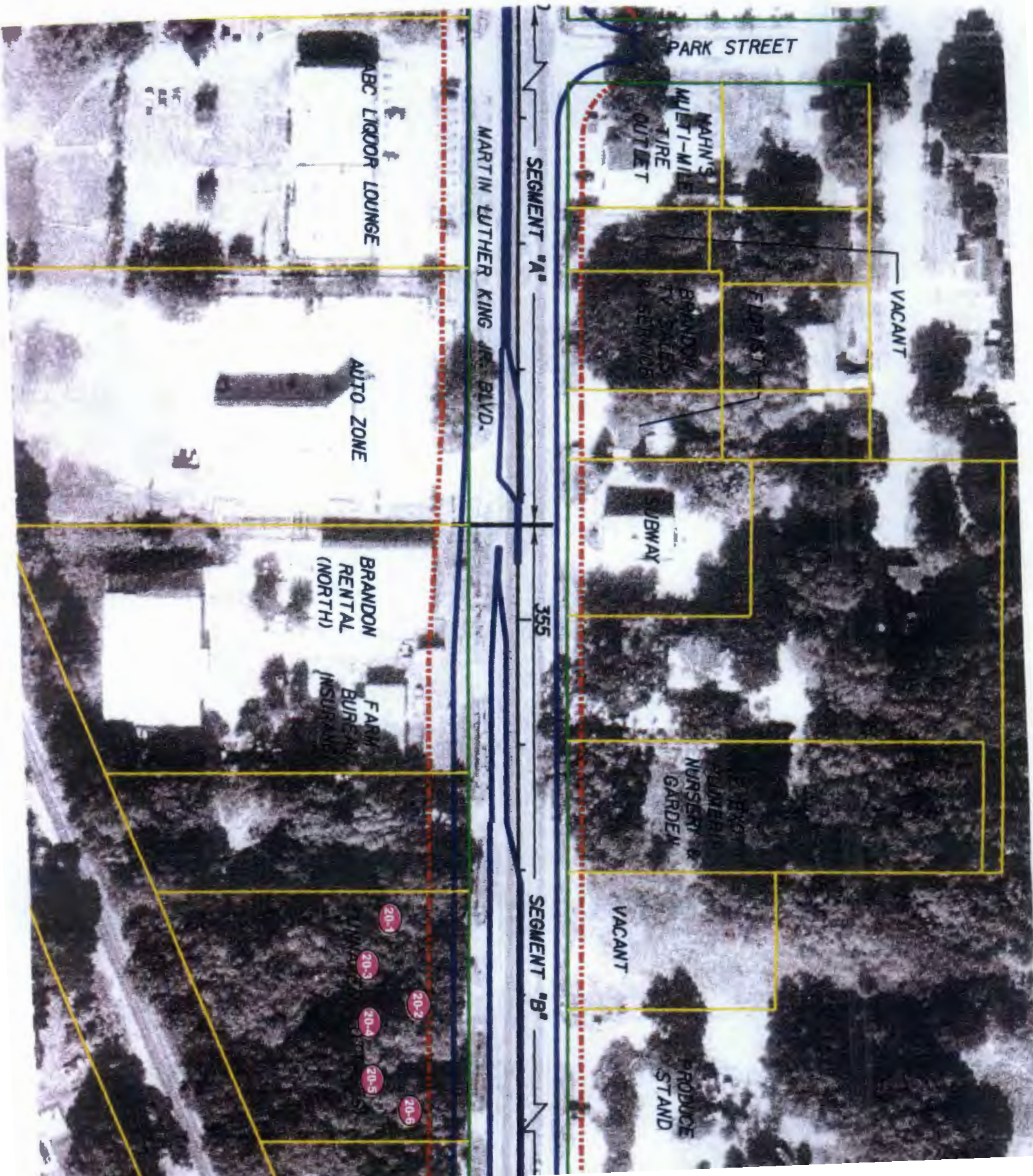
ELITE POOL
& SPA

BLACK'S PLUMBING
SUPPLY

WATCH LINE
(SEE SHEET NO. B)

LEDS SEPTIC
TANKS

KINGSWAY ROAD



PARK STREET

MAHNS
MULTI-MILE
TIRE
OUTLET

VACANT

FELTON ST

BRANDON
TV SALES
REPAIR SERVICE

SUBWAY

FELTON
NURSERY &
GARDEN

VACANT

PRODUCE
STAND

SEGMENT "A"

355

SEGMENT "B"

MARTIN LUTHER KING JR. BLVD.

ABC LIQUOR LOUNGE

AUTO ZONE

BRANDON
RENTAL
(NORTH)

FARM
BUREAU
(INSURANCE)

20-1

20-3

20-2

20-4

20-5

20-6

DOM
ST
CH

SUNCOAST SCHOOLS
FEDERAL CREDIT
UNION

SEEFNE
PROF.
CENTER

KENTUCKY
FRIED
CHICKEN

DOCTOR'S
WALK-IN
CLINIC

NORTH GROVE
SHOPPING CENTER

340

MARTIN LUTHER KING JR. BLVD. 346

NATIONS BANK

PARSONS VILLAGE
SQUARE

TAO BELL

WALGREEN
PHARMACY

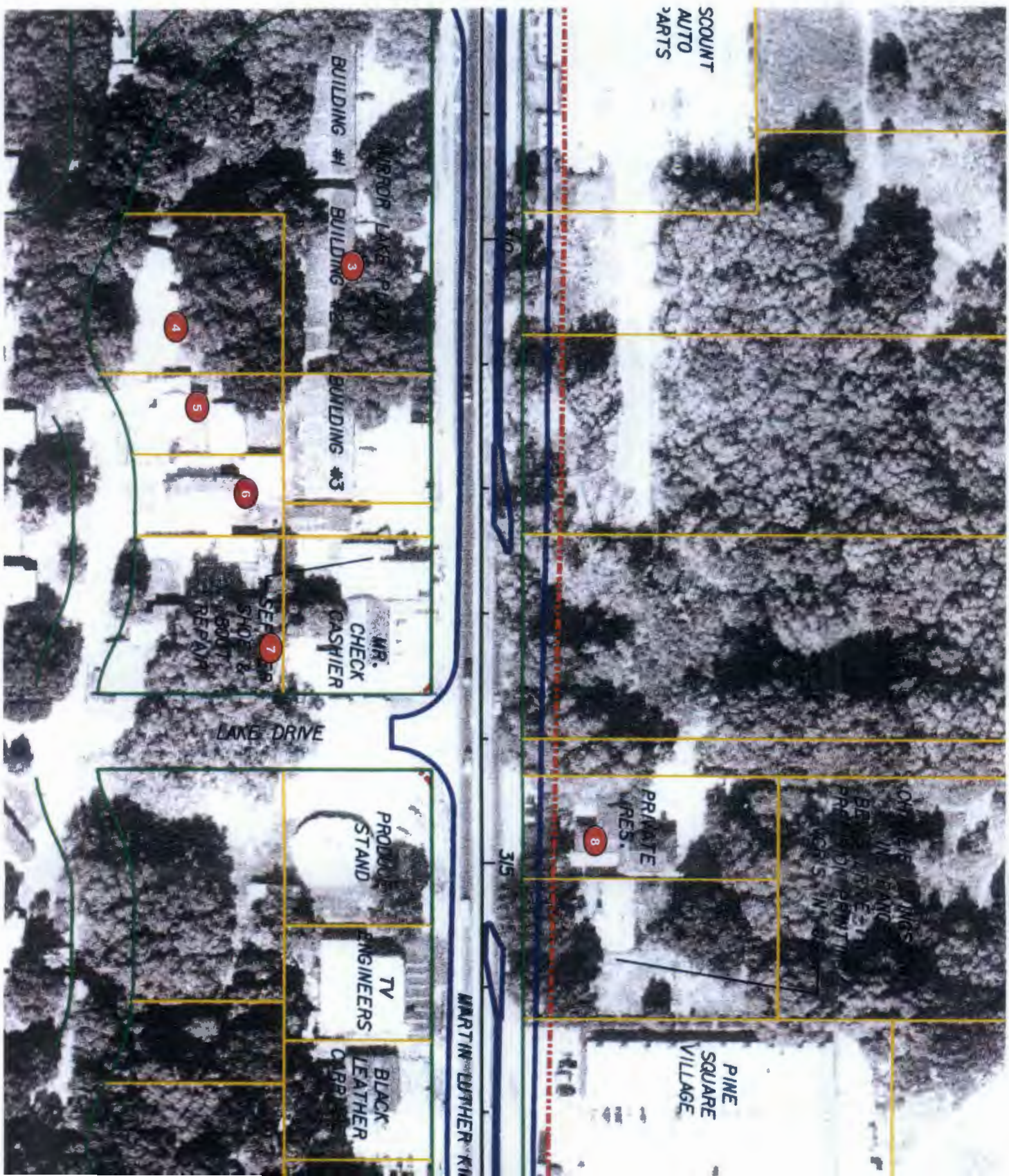
SCARA 18-12
18-11
18-10
18-9
18-13
18-14

MATCH LINE
(SEE SHEET NO. 5)





SCOUT
AUTO
PARTS



315

MARTIN LUTHER KING

MIRROR LAKE PLAZA
BUILDING #1 BUILDING #2

BUILDING #3

MR. CHECK CASHIER

SEFFER
SHOE &
BOOT
REPAIR

LAKE DRIVE

PRODUCE
STAND

TV
ENGINEERS

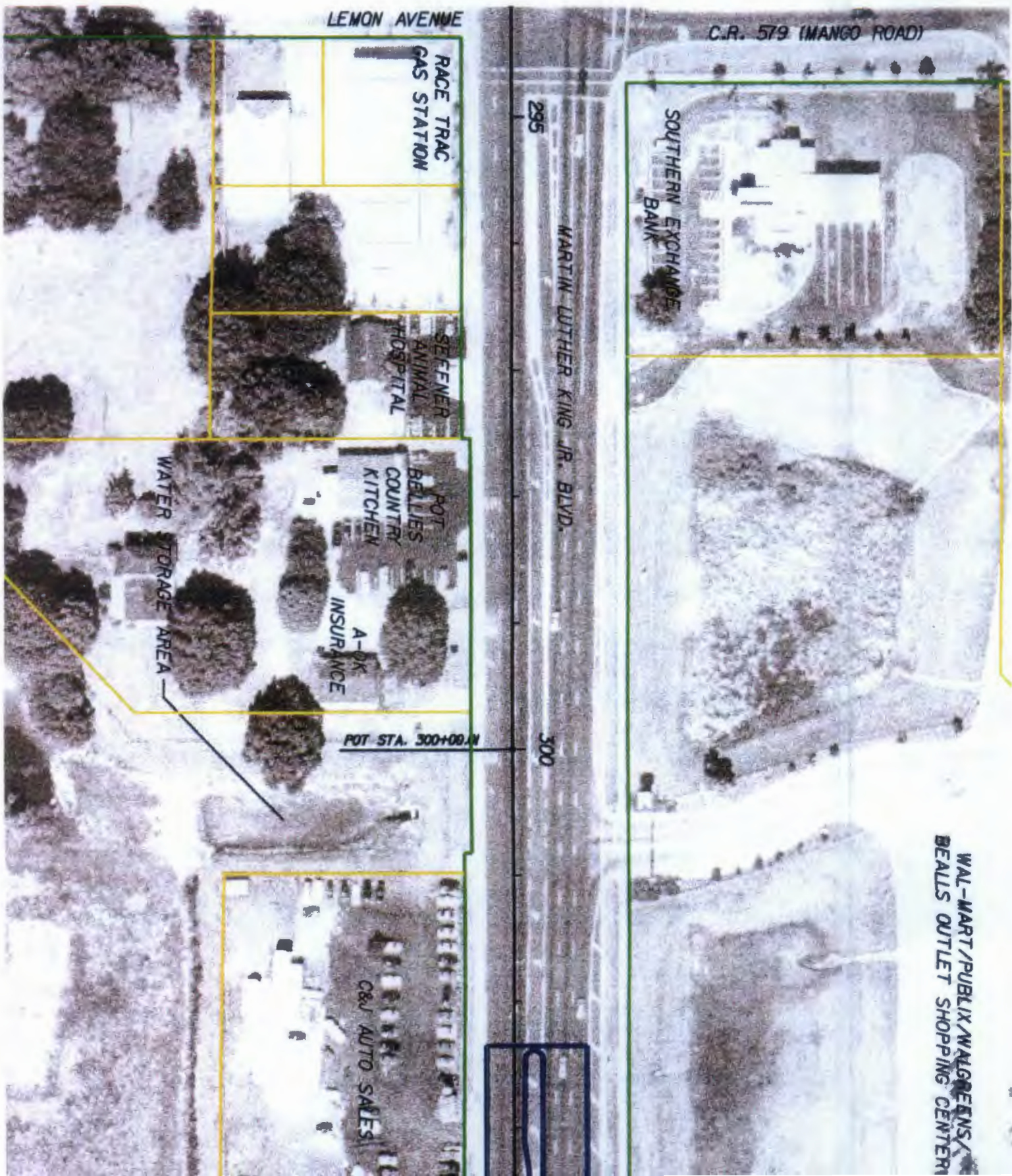
BLACK
LEATHER
CARRIAGE

PRIVATE
RES.

PINE
SQUARE
VILLAGE

OFFICE BUILDING
IN BACK
BEHIND THE
PINE SQUARE
VILLAGE





LEMON AVENUE

C.R. 579 (MANGO ROAD)

295

MARTIN LUTHER KING JR. BLVD.

300

POT STA. 300+00.00

RACE TRAC
GAS STATION

SEFFNER
ANIMAL
HOSPITAL

POT
BELLIES
COUNTRY
KITCHEN

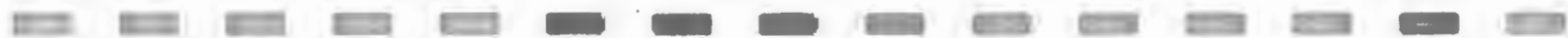
A-OK
INSURANCE

WATER STORAGE AREA

SOUTHERN EXCHANGE
BANK

WAL-MART / PUBLIX / ALGREENS /
BEALLS OUTLET SHOPPING CENTER

C&J AUTO SALES



5.2 Traffic Noise Levels

Table 5-1 presents the predicted existing "worst-case" traffic noise levels and the predicted future traffic noise levels with and without the proposed improvements to S.R. 574.

As shown, the existing exterior traffic noise levels at the residential sites and the daycare facility range from 51.8 to 68.2 with levels above the NAC at 5 of the single-family residences (Sites 1, 8, 9, 46, and 18-11). The predicted existing interior traffic noise levels at the religious facilities range from 38.4 to 43.8 dBA--levels below the NAC.

In the year 2025, with the no-build alternative, predicted exterior traffic noise levels at the residential sites and the daycare facility range from 52.4 to 69.0 dBA with levels above the NAC at 5 of the single-family residences (Sites 1, 8, 9, 46, and 18-11) and the daycare facility (Site 38). The predicted interior traffic noise levels at the religious facilities range from 38.4 to 43.8 dBA--levels below the NAC.

In the year 2025, with the build alternative, predicted exterior traffic noise levels at the residential sites and the daycare facility range from 54.7 to 74.0 dBA with levels above the NAC at 19 of the single-family residences (Sites 1, 8, 9, 10, 18 (5 mobile homes), 20 (the single family home and 5 cottages), 30, 36, 37, 38, and 46) and the daycare facility (Site 38). The predicted interior traffic noise levels at the religious facilities range from 41.9 to 47.1 dBA--levels below the NAC. The results also indicate that the maximum increase in either exterior or interior traffic noise levels would be 7.2 dBA with the improvements when compared to existing levels. As such, traffic noise is not predicted to increase substantially at any of the noise sensitive sites because of the S.R. 574 improvements.

6.0 EVALUATION OF ABATEMENT ALTERNATIVES

The FHWA requires that noise abatement measures be considered when predicted traffic noise levels approach, meet, or exceed the NAC. The measures considered for S.R. 574 were traffic management, alternative roadway alignment, property acquisition, and noise barriers. The following discusses the feasibility and reasonableness of each measure.

6.1 Traffic Management

Traffic management measures that limit motor vehicle speeds and reduce volumes can be effective noise mitigation measures. However, these measures also negate a project's ability to accommodate forecast traffic volumes. For example, if the posted speed on S.R. 574 were reduced, the capacity of the roadway to handle the forecast motor vehicle demand would also be reduced. Therefore, reducing traffic speeds and/or traffic volumes is inconsistent with the goal of increasing the capacity of the roadway to handle the forecast volumes. As such, although feasible, traffic management measures are not considered a reasonable noise mitigation measure for the project.

Table 5-1: Predicted Traffic Noise Levels

Noise Sensitive Site	Land Use	LAeq1h (dBA)			Approaches, Meets Exceeds NAC?
		Existing	2025 No-Build	2025 Build	
1	SF Residential	66.5	66.5	69.2	Y
2	SF Residential	60.7	60.7	63.7	
3	Mt. Calvary Baptist Church	43.4	43.4	46.8	
4	SF Residential	56.0	56.0	59.4	
5	SF Residential	56.8	56.8	60.2	
6	SF Residential	58.1	58.1	61.6	
7	SF Residential	58.8	58.8	62.4	
8	SF Residential	67.2	67.2	74.0	Y
9	SF Residential	68.0	68.0	73.2	Y
10	SF Residential	64.6	64.6	69.2	Y
11	SF Residential	60.4	60.4	64.6	
12	SF Residential	60.4	60.4	64.7	
13	SF Residential	58.5	58.5	62.7	
14	SF Residential	56.6	56.6	60.6	
15	SF Residential	54.7	54.7	58.6	
16	AME Church	43.8	43.8	47.1	
17	Freedom Baptist Church	38.4	38.4	41.9	
18-1	Scarab Trailer Park	64.7	64.7	71.4	Y
18-10	Scarab Trailer Park	57.5	57.5	62.0	
18-11	Scarab Trailer Park	66.3	66.3	73.5	Y
18-12	Scarab Trailer Park	62.8	62.8	68.8	Y
18-13	Scarab Trailer Park	60.2	60.2	65.3	
18-14	Scarab Trailer Park	57.9	57.9	62.5	
18-2	Scarab Trailer Park	62.5	62.5	68.5	Y
18-3	Scarab Trailer Park	60.8	60.8	66.3	Y
18-4	Scarab Trailer Park	59.3	59.3	64.4	
18-5	Scarab Trailer Park	57.9	57.9	62.7	
18-6	Scarab Trailer Park	56.7	56.7	61.2	
18-7	Scarab Trailer Park	59.6	59.6	64.7	
18-8	Scarab Trailer Park	59.1	59.1	64.0	
18-9	Scarab Trailer Park	58.3	58.4	63.1	
19	SF Residential	52.9	52.9	55.8	
20-1	House and 5 Cottages	64.2	64.2	70.2	Y
20-2	House and 5 Cottages	65.7	65.7	72.8	Y
20-3	House and 5 Cottages	62.4	62.4	67.8	Y
20-4	House and 5 Cottages	62.5	62.5	67.9	Y
20-5	House and 5 Cottages	62.5	62.5	67.9	Y
20-6	House and 5 Cottages	65.3	65.3	72.0	Y
21	SF Residential	53.3	53.7	55.4	
22	SF Residential	58.1	58.6	60.4	
23	SF Residential	54.7	55.2	58.1	
24	SF Residential	51.8	52.4	54.7	
25	SF Residential	54.1	54.8	57.4	
26	SF Residential	56.5	57.2	60.3	

Table 1 - Spectral Data

Wavelength (nm)	Intensity (a.u.)	Wavelength (nm)	Intensity (a.u.)
200	0.00	300	0.00
210	0.00	310	0.00
220	0.00	320	0.00
230	0.00	330	0.00
240	0.00	340	0.00
250	0.00	350	0.00
260	0.00	360	0.00
270	0.00	370	0.00
280	0.00	380	0.00
290	0.00	390	0.00
300	0.00	400	0.00
310	0.00	410	0.00
320	0.00	420	0.00
330	0.00	430	0.00
340	0.00	440	0.00
350	0.00	450	0.00
360	0.00	460	0.00
370	0.00	470	0.00
380	0.00	480	0.00
390	0.00	490	0.00
400	0.00	500	0.00
410	0.00	510	0.00
420	0.00	520	0.00
430	0.00	530	0.00
440	0.00	540	0.00
450	0.00	550	0.00
460	0.00	560	0.00
470	0.00	570	0.00
480	0.00	580	0.00
490	0.00	590	0.00
500	0.00	600	0.00
510	0.00	610	0.00
520	0.00	620	0.00
530	0.00	630	0.00
540	0.00	640	0.00
550	0.00	650	0.00
560	0.00	660	0.00
570	0.00	670	0.00
580	0.00	680	0.00
590	0.00	690	0.00
600	0.00	700	0.00
610	0.00	710	0.00
620	0.00	720	0.00
630	0.00	730	0.00
640	0.00	740	0.00
650	0.00	750	0.00
660	0.00	760	0.00
670	0.00	770	0.00
680	0.00	780	0.00
690	0.00	790	0.00
700	0.00	800	0.00
710	0.00	810	0.00
720	0.00	820	0.00
730	0.00	830	0.00
740	0.00	840	0.00
750	0.00	850	0.00
760	0.00	860	0.00
770	0.00	870	0.00
780	0.00	880	0.00
790	0.00	890	0.00
800	0.00	900	0.00
810	0.00	910	0.00
820	0.00	920	0.00
830	0.00	930	0.00
840	0.00	940	0.00
850	0.00	950	0.00
860	0.00	960	0.00
870	0.00	970	0.00
880	0.00	980	0.00
890	0.00	990	0.00
900	0.00	1000	0.00

Table 5-1: Predicted Traffic Noise Levels (Continued)

Noise Sensitive Site	Land Use	LAeq1h (dBA)			Approaches, Meets Exceeds NAC?
		Existing	2025 No-Build	2025 Build	
27	SF Residential	55.7	56.5	58.0	
28	SF Residential	54.8	55.5	57.9	
29	SF Residential	53.8	54.5	56.4	
30	SF Residential	63.5	64.2	68.4	Y
31	SF Residential	58.2	58.9	61.5	
32	SF Residential	57.4	58.1	60.7	
33	SF Residential	54.9	55.6	57.9	
34	SF Residential	56.5	57.2	59.7	
35	SF Residential	60.3	61.0	64.0	
36	SF Residential	64.9	65.6	69.2	Y
37	SF Residential	63.8	64.5	67.5	Y
38	Aunt Fannie's Achievement Cntr	65.7	66.5	69.9	Y
39	SF Residential	59.7	60.5	62.6	
40	SF Residential	54.4	55.1	56.3	
41	SF Residential	58.0	58.7	60.3	
42	SF Residential	56.6	57.4	59.3	
43	SF Residential	56.3	57.0	59.5	
44	SF Residential	56.2	56.9	59.7	
45	SF Residential	55.2	56.0	58.6	
46	SF Residential	68.2	69.0	70.2	Y
47	SF Residential	55.7	56.4	57.7	
48	SF Residential	62.1	62.9	64.1	
49	SF Residential	60.3	61.1	62.3	
50	SF Residential	57.2	57.9	59.3	
51	SF Residential	62.7	63.5	64.7	
52	SF Residential	58.6	59.4	60.7	
53	SF Residential	59.4	60.2	61.4	
54	SF Residential	61.6	62.4	63.6	
55	SF Residential	55.0	55.7	56.8	
56	SF Residential	55.7	56.4	57.6	
57	SF Residential	53.7	54.5	55.5	

6.2 Alternative Roadway Alignment

The proposed alignment seeks to minimize the need for additional ROW within the project corridor. Noise sensitive sites predicted to experience noise levels approaching or exceeding the NAC are located to the north and south of S.R. 574. Therefore, shifting the roadway to lessen noise levels on one side of the roadway has the potential to shift impacts to other noise sensitive sites. As such, an alternative roadway alignment is not considered a reasonable noise mitigation measure.

6.3 Property Acquisition

To be considered reasonable, the FDOT guidelines suggest that the cost to abate (reduce) predicted noise levels should not exceed \$30,000 per benefited receiver. The cost to acquire the affected properties would far exceed this guideline.

6.4 Noise Barriers

To be effective in reducing traffic noise impacts, a noise barrier must be relatively long, continuous (with no intermittent openings), and sufficiently high to provide a reasonable reduction in noise levels. To be considered a reasonable traffic noise abatement measure, the FDOT requires that a noise barrier be predicted to provide a minimum 5 dBA insertion loss (reduction in noise) with a 10 dBA reduction desired.

Noise barriers must also be economically reasonable. As previously stated, the FDOT established a cost guideline that indicates the funds to be expended for noise abatement should not exceed \$30,000 per benefited receiver (a benefited receiver is a site that receives at least a 5 dBA reduction in noise). The current estimated cost to construct a noise barrier (materials and labor) is \$25.00 ft².

During the year 2025 with the proposed improvements (the build alternative), noise levels are predicted to be above the NAC at 19 single-family residences (Sites 1, 8, 9, 10, 18 (5 mobile homes), 20 (a single family home and 5 cottages), 30, 36, 37, 38, and 46) and a daycare facility (Site 38). The following presents the results of the analysis to determine if noise barriers are a reasonable and feasible noise abatement measure for any of the sites.

6.4.1 Site 1

Site 1 is a single-family residence located in the southwest quadrant of the S.R. 574/Highview Road intersection (Figure 6-1). A noise barrier, 275 ft in length was evaluated for the residence. The height of the barrier was evaluated from 8 to 22 ft. As shown in Table 6-1, the goal of reducing predicted traffic noise levels 10 dBA could not be achieved with the barrier. As also shown, the minimum required 5 dBA insertion loss was predicted to be achieved with a barrier height of 12 ft. However, the cost of the barrier at this height (\$82,500) exceeds the FDOT cost reasonable guideline of \$30,000 per benefited receiver. As such, although feasible, a noise barrier is not a reasonable noise mitigation measure to reduce predicted traffic noise for the residence.



S.R. 574 (Martin Luther King Jr. Blvd.)
Project Development & Environment (PD&E) Study
Hillsborough County, Florida
WPI Segment No. 255893 1
FAP No. 2081-018P



SITE 1

1 Site Number

Figure 6-1

Table 6-1: Noise Barrier Results - Site 1

Barrier Height (ft)	Receivers With Predicted Insertion Loss of (dBA)						Number of Benefited Receivers			Total Estimated Cost	Cost Per Benefited Receiver
	5	6	7	8	9	10 or >	Affected	* Other	Total		
8	0	0	0	0	0	0	0	0	0	--	--
10	0	0	0	0	0	0	0	0	0	--	--
12	1	0	0	0	0	0	1	0	1	\$82,500	\$82,500
14	1	0	0	0	0	0	1	0	1	\$96,250	\$96,250
16	1	0	0	0	0	0	1	0	1	\$110,000	\$110,000
18	1	0	0	0	0	0	1	0	1	\$123,750	\$123,750
20	1	0	0	0	0	0	1	0	1	\$137,500	\$137,500
22	1	0	0	0	0	0	1	0	1	\$151,250	\$151,250

* Other = Receivers determined to be unaffected by the project (traffic noise levels less than 66 dBA) but benefited by the noise barrier.

6.4.2 Site 8

Site 8 is a single-family residence located north of S.R. 574 and west of Pine Street (Figure 6-2). A noise barrier was evaluated for the residence in three segments to accommodate the existing circular drive on to S.R. 574. The cumulative length of the barrier was 65 ft. The height of the barrier was evaluated from 8 to 22 ft. The minimum required 5 dBA insertion loss could not be achieved with the noise barrier. As such, a noise barrier is not considered a feasible noise abatement measure to reduce predicted traffic noise for the residence.

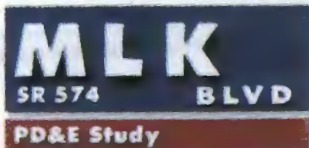
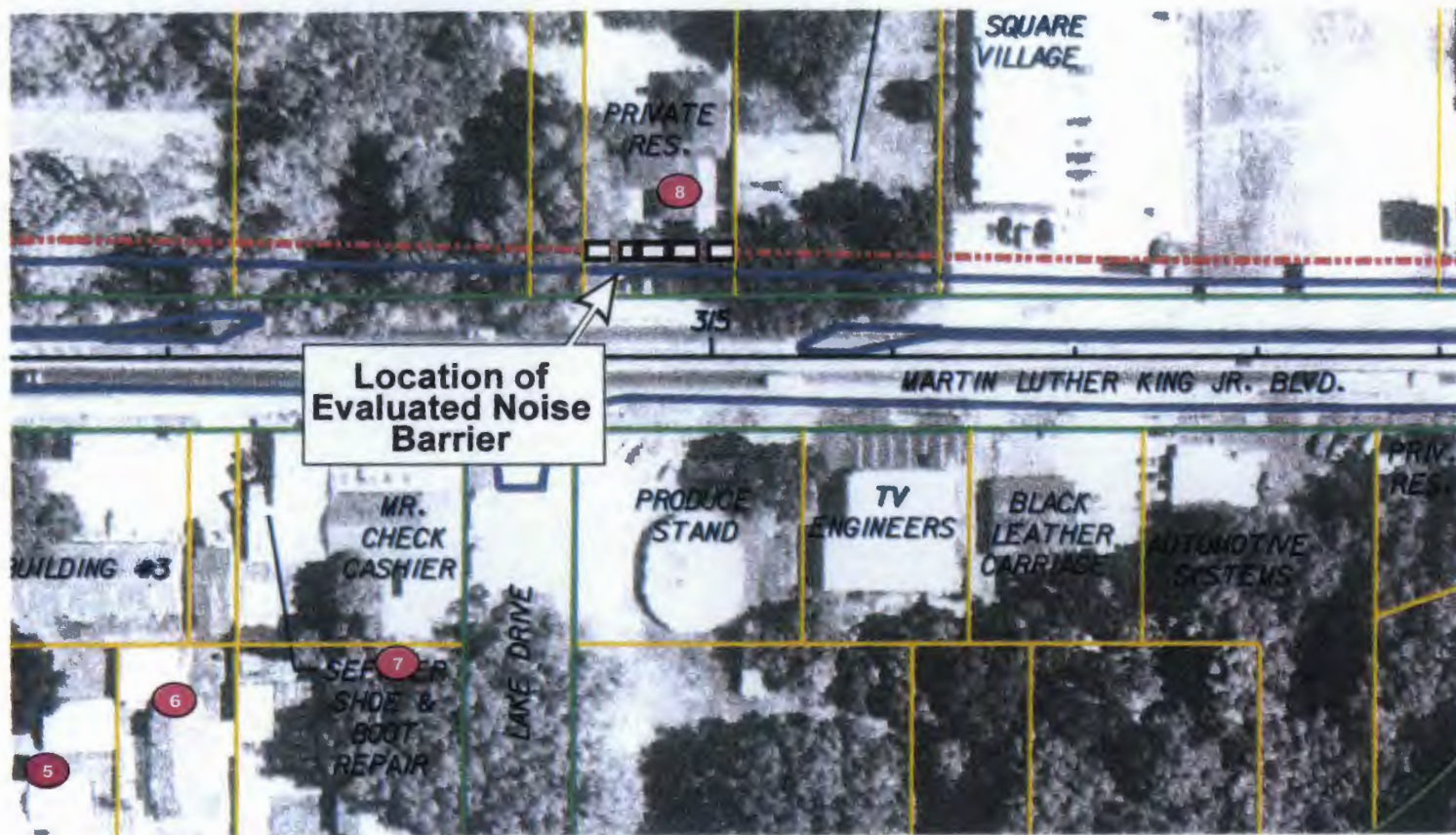
6.4.3 Sites 9 and 10

Sites 9 and 10 are single-family residences located in the southeast quadrant of the S.R. 574/Pine Street intersection (Figure 6-3). A noise barrier was evaluated for the residences in two segments to accommodate access to Site 10 from S.R. 574. The cumulative length of the barrier was 93 ft. The height of the barrier was evaluated from 8 to 22 ft. The minimum required 5 dBA insertion loss could not be achieved with the noise barrier. As such, a noise barrier is not considered a feasible noise abatement measure to reduce predicted traffic noise for the residences.

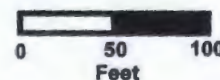
6.4.4 Site 18

Site 18 consists of 5 mobile homes within the Scarab Trailer Park that is located south of S.R. 574 and east of Taylor Road (Figure 6-4). A noise barrier was evaluated for the homes in three segments to accommodate the existing driveways on to S.R. 574. The cumulative length of the barrier was 306 ft. The height of the barrier was evaluated from 8 to 22 ft.

As shown in Table 6-2, the goal of reducing predicted traffic noise levels by 10 dBA was predicted to be achieved with a barrier height of 14 ft for one of the affected homes. However, the cost of the barrier at this height would exceed the FDOT cost reasonable guideline.



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SITE 8

1 Site Number

Figure 6-2



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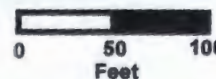
1 Site Number

SITES
9 - 10

Figure 6-3



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SITE 18

1 Site Number

Figure 6-4

Table 6-2: Noise Barrier Results - Site 18

Barrier Height (ft)	Receivers With Predicted Insertion Loss of (dBA)						Number of Benefited Receivers			Total Estimated Cost	Cost Per Benefited Receiver
	5	6	7	8	9	10 or >	Affected	*	Total		
8	1	0	1	0	0	0	2	0	2	\$61,200	\$30,600
10	1	0	0	1	0	0	2	0	2	\$76,500	\$38,250
12	0	1	0	0	1	0	2	0	2	\$91,800	\$45,900
14	1	1	0	0	0	1	2	1	3	\$107,100	\$35,700
16	2	1	0	0	0	1	2	2	4	\$122,400	\$30,600
18	2	1	0	0	0	1	2	2	4	\$137,700	\$34,425
20	2	1	0	0	0	1	2	2	4	\$153,000	\$38,250
22	2	0	1	0	0	1	2	2	4	\$168,300	\$42,075

* Other = Receivers determined to be unaffected by the project (traffic noise levels less than 66 dBA) but benefited by the noise barrier.

As also shown, the minimum required 5 dBA insertion loss was predicted to be achieved with barrier height of 8 ft. However, the cost of the barrier at this height (\$30,600) also exceeds the FDOT cost reasonable guideline of \$30,000 per benefited receiver. Notably, while the cost is just over the guideline, the barrier would only achieve a 5 and 7 dBA insertion loss for 2 of the 5 affected mobile homes. As such, although feasible, a noise barrier is not considered a reasonable noise mitigation measure to reduce predicted traffic noise for the mobile homes.

6.4.5 Site 20

Site 20 consists of one single-family residence and 5 small cottages located south of S.R. 574 and east of Parsons Avenue (Figure 6-5). A noise barrier was evaluated for the house and cottages in three segments to accommodate the existing driveways on to S.R. 574. The cumulative length of the barrier was 160 ft. The height of the barrier was evaluated from 8 to 22 ft.

As shown in Table 6-3, the goal of reducing predicted traffic noise levels 10 dBA was predicted to be achieved with a barrier height of 8 ft for one of the affected homes (the single-family residence). However, the cost of the barrier at this height would exceed the FDOT cost reasonable guideline.

Table 6-3: Noise Barrier Results - Site 20

Barrier Height (ft)	Receivers With Predicted Insertion Loss of (dBA)						Number of Benefited Receivers			Total Estimated Cost	Cost Per Benefited Receiver
	5	6	7	8	9	10 or >	Affected	*	Total		
8	0	0	0	0	0	1	1	0	1	\$32,000	\$32,000
10	1	0	0	0	0	1	2	0	2	\$40,000	\$20,000
12	1	0	0	0	0	1	2	0	2	\$48,000	\$24,000
14	1	0	0	0	0	1	2	0	2	\$56,000	\$28,000
16	0	1	0	0	0	1	2	0	2	\$64,000	\$32,000
18	0	1	0	0	0	1	2	0	2	\$72,000	\$36,000
20	0	1	0	0	0	1	2	0	2	\$80,000	\$40,000
22	1	1	0	0	0	1	3	0	3	\$88,000	\$29,333

* Other = Receivers determined to be unaffected by the project (traffic noise levels less than 66 dBA) but benefited by the noise barrier.



The results of the experiments are shown in Figures 1 and 2. The graphs show that the relationship between $\log_{10} \frac{1}{\rho}$ and $\log_{10} \frac{1}{\rho}$ is non-linear. The data points are connected by a series of lines, showing a non-linear relationship. The results of the experiments are shown in Figures 1 and 2. The graphs show that the relationship between $\log_{10} \frac{1}{\rho}$ and $\log_{10} \frac{1}{\rho}$ is non-linear. The data points are connected by a series of lines, showing a non-linear relationship.

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SITE 20

1 Site Number

Figure 6-5

As also shown, at a barrier height of 10 to 14 ft, the insertion loss was predicted to be 5 to 6 dBA for one of the cottages and 12 to 13 dBA for the single-family residence. At these heights, the cost of the barrier per benefited receiver would be below the FDOT's cost reasonable guideline.

Because the barrier would provide at least the minimum required 5 dBA insertion loss for one of the affected residences and the cost of the barrier would be below the FDOT's cost reasonable guideline, the barrier was evaluated further. Table 6-4 presents the results of the evaluation.

Based on the evaluation, it appears that it is feasible to construct a barrier at the analyzed location. However, as stated in Table 6-4, a majority of the land adjacent to S.R. 574 in this segment of the project study area is currently developed in commercial land uses. The property located east of the affected site is a car wash. The properties immediately west of the affected site up to and including properties at Parsons Avenue are also commercial. Additionally, the properties on the north side of S.R. 574 are also currently in commercial use (see Figure 5-1). As such, it is likely that the use of the affected property will change from the current residential use to a non-noise sensitive commercial use sometime in the future. For this reason, although it appears feasible to construct a barrier for the affected residences, a noise barrier is not considered a reasonable noise mitigation measure to reduce predicted noise levels for the single-family residence and the cottages.

6.4.6 Site 30

Site 30 is a single-family residence located north of S.R. 574 and east of Chastain Road (Figure 6-6). A noise barrier, 111 ft in length was evaluated for the residence. The height of the barrier was evaluated from 8 to 22 ft. The minimum required 5 dBA insertion loss could not be achieved with a noise barrier. As such, a noise barrier is not considered a feasible noise abatement measure to reduce predicted traffic noise levels for the residence.

6.4.7 Sites 36 through 38

Sites 36 and 37 are single-family residences. Site 38 is a daycare facility (Aunt Fannie's Achievement Center). The sites are located north of S.R. 574 and east of North Valrico Road (Figure 6-7). A noise barrier was evaluated for the residence and the daycare facility in five segments to accommodate the existing driveways on to S.R. 574. The cumulative length of the barrier was 355 ft. The height of the barrier was evaluated from 8 to 22 ft.

As shown in Table 6-5, the goal of reducing predicted traffic noise levels by 10 dBA could not be achieved with the barrier. As also shown, the minimum required 5 dBA insertion loss was predicted to be achieved with a barrier height of 14 ft. However, the cost of the barrier (\$124,250) exceeds the FDOT cost reasonable guideline. As such, although feasible, a noise barrier is not considered a reasonable noise mitigation measure to reduce predicted traffic noise for the residences or the daycare facility.

As the ground at a distance of 100 feet from the point of impact was examined, it was found that the ground was composed of a soft, silty material, and that the impact had caused a considerable amount of disturbance in the soil.

The ground at the point of impact was found to be composed of a soft, silty material, and that the impact had caused a considerable amount of disturbance in the soil.

The ground at the point of impact was found to be composed of a soft, silty material, and that the impact had caused a considerable amount of disturbance in the soil.

4.4. Site 30

The site is a 200-foot wide area, and is located at the intersection of the main road and the side road. The ground is composed of a soft, silty material, and the impact had caused a considerable amount of disturbance in the soil.

4.5. Site 31 through 35

The sites are 200-foot wide areas, and are located at the intersection of the main road and the side road. The ground is composed of a soft, silty material, and the impact had caused a considerable amount of disturbance in the soil.

The sites are 200-foot wide areas, and are located at the intersection of the main road and the side road. The ground is composed of a soft, silty material, and the impact had caused a considerable amount of disturbance in the soil.

Table 6-4: Noise Barrier Evaluation - Site 20

Item	Comment
Relationship of future levels to the abatement criteria	Both benefited residences are predicted to experience traffic noise levels exceeding the NAC (67.9 and 72.8 dBA).
Predicted Insertion loss (noise reduction)	At a height varying from 10 to 14 ft, the traffic noise reduction with the barrier ranges from 5 to 6 dBA for one cottage and from 12 to 13 dBA for the residence.
Safety	Clear zone and line-of-sight requirements would be met by constructing the barrier along or near the proposed ROW line.
Accessibility	The barrier was designed to allow access to/from the property from S.R. 574. As such, accessibility would not be an issue.
Land Use Stability	The property located just east of the affected site is a car wash with the properties west of the affected site up to Parsons Avenue being all commercial. The properties on the north side of S.R. 574 in this segment are also all currently in commercial use. As such, it is likely that the use of the property will change from the current residential use to a non-noise sensitive commercial use in the future.
Local Controls	Hillsborough County does not have specific ordinances relating to the control of traffic noise.
Views of Local Officials	Local officials were provided the opportunity to comment on the noise barriers proposed for the project. No comments were received.
Future Build/No-Build Traffic Noise Levels	When compared to the no-build condition, the improvements to S.R. 574 are predicted to increase traffic noise at the benefited residences 5 and 7 dBA. This increase is above the level considered readily detectable (5 dBA).
Antiquity	The residence was constructed in 1949. The cottages were constructed in 1949 and 1951. The last recorded sale of the property was in 2001 (see Appendices).
Constructability	No constructability issues or need for specialized equipment is anticipated since the barrier location would be accessible, is within the project's grading limits, and is well set back from the travel lanes.
Maintainability	The barrier would be located 5 ft within the FDOT's ROW. As such, there appear to be no maintainability issues.
Aesthetics	At a height of 10 to 14 ft, the barrier could appear formidable to the residents. At a height greater than 10 ft, the barrier may be aesthetically out of proportion for the area in which it would be located (suburban arterial).
ROW Requirements	There are no additional ROW requirements for the barrier.
Cost	The cost of the barrier is below the FDOT's cost reasonable guideline.
Utilities	No utility impacts (specifically related to a potential barrier) are anticipated.
Drainage	Off-site drainage could be accomplished by yard drains or grate inlets along the back of the barrier. No impacts are anticipated to the proposed roadway drainage system (longitudinal swales) if the barrier is constructed.
Other Environmental Impacts	The barrier would restrict airflow to/from the affected properties. There appear to be no other environmental impacts.
Additional Considerations	There are several large oak trees on the property. Construction of a barrier could possibly injure/destroy trees that are close to the barrier location.



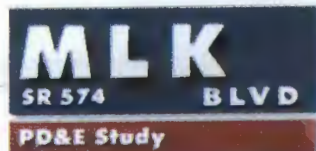
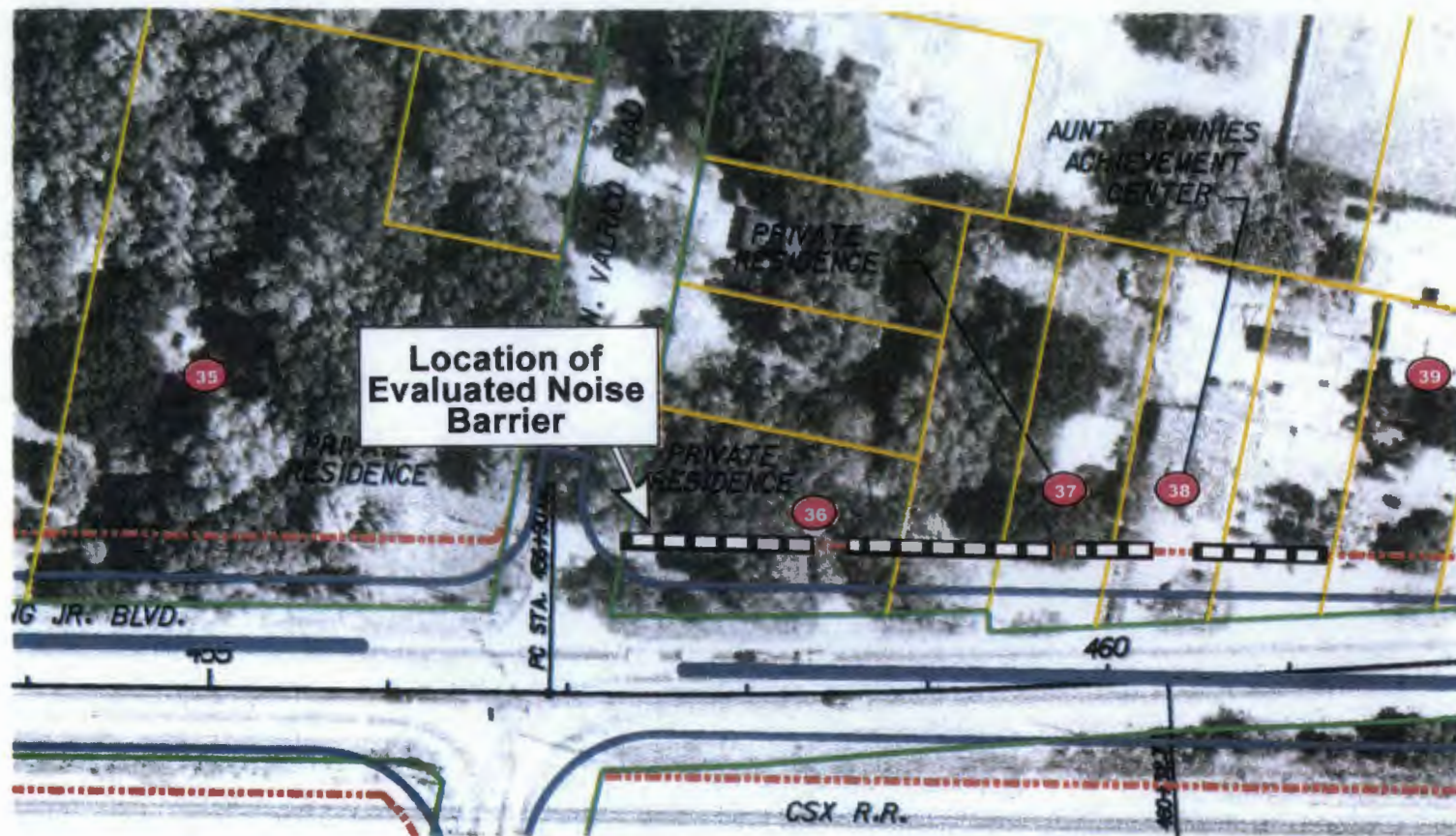
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1 Site Number

SITE 30

Figure 6-6



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1 Site Number

SITES
36 - 38

Figure 6-7

Table 6-5: Noise Barrier Results - Sites 36 - 38

Barrier Height (ft)	Receivers With Predicted Insertion Loss of (dBA)						Number of Benefited Receivers			Total Estimated Cost	Cost Per Benefited Receiver
	5	6	7	8	9	10 or >	Affected	* Other	Total		
8	0	0	0	0	0	0	0	0	0	--	--
10	0	0	0	0	0	0	0	0	0	--	--
12	0	0	0	0	0	0	0	0	0	--	--
14	1	0	0	0	0	0	1	0	1	\$124,250	\$124,250
16	1	0	0	0	0	0	1	0	1	\$142,000	\$142,000
18	1	0	0	0	0	0	1	0	1	\$159,750	\$159,750
20	1	0	0	0	0	0	1	0	1	\$177,500	\$177,500
22	1	0	0	0	0	0	1	0	1	\$195,250	\$195,250

* Other = Receivers determined to be unaffected by the project (traffic noise levels less than 66 dBA) but benefited by the noise barrier.

6.4.8 Site 46

Site 46, a single-family residence, is also located north of S.R. 574 and east of North Valrico Road (Figure 6-8). A noise barrier, 289 ft in length was evaluated for the residence. The height of the barrier was evaluated from 8 to 22 ft.

As shown in Table 6-6, the goal of reducing predicted traffic noise levels 10 dBA could not be achieved with the barrier. As also shown, the minimum required 5 dBA insertion loss was predicted to be achieved with a barrier height of 14 ft. However, the cost of the barrier (\$101,150) exceeds the FDOT cost reasonable guideline. As such, although feasible, a noise barrier is not considered a reasonable noise mitigation measure to reduce predicted traffic noise for the residence.

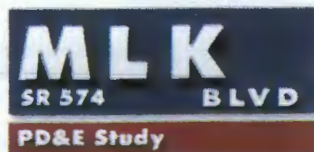
Table 6-6: Noise Barrier Results - Site 46

Barrier Height (ft)	Receivers With Predicted Insertion Loss of (dBA)						Number of Benefited Receivers			Total Estimated Cost	Cost Per Benefited Receiver
	5	6	7	8	9	10 or >	Affected	* Other	Total		
8	0	0	0	0	0	0	0	0	0	--	--
10	0	0	0	0	0	0	0	0	0	--	--
12	0	0	0	0	0	0	0	0	0	--	--
14	1	0	0	0	0	0	1	0	1	\$101,150	\$101,150
16	1	0	0	0	0	0	1	0	1	\$115,600	\$115,600
18	1	0	0	0	0	0	1	0	1	\$130,050	\$130,050
20	1	0	0	0	0	0	1	0	1	\$144,500	\$144,500
22	1	0	0	0	0	0	1	0	1	\$158,950	\$158,950

* Other = Receivers determined to be unaffected by the project (traffic noise levels less than 66 dBA) but benefited by the noise barrier.

6.5 Summary

Noise abatement measures were considered for the noise sensitive sites predicted to experience traffic noise levels approaching, meeting, or exceeding the FHWA's NAC. The measures were traffic management, alternative roadway alignment, property acquisition, and noise barriers. None of the measures was determined feasible and reasonable to reduce predicted traffic noise levels. As such, there are no apparent solutions to abate (reduce) traffic noise levels with the S.R. 574 improvements.



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1 Site Number

SITE 46

Figure 6-8

7.0 PUBLIC COORDINATION

The Alternatives Public Workshop was held after feasible alternative concepts were developed and fully analyzed. The Workshop took place on Thursday, June 14, 2001, at Colson Elementary School, 1520 Lakeview Avenue, Seffner, Florida. The purpose of the workshop was to acquaint the public with the reasonable project alternatives and to receive public input. Approximately 119 people attended.

Notification letters were mailed to elected officials and agency representatives at least 21 days prior to the Workshop. Property owners whose property lies in whole or in part within 300 feet from the centerline of the proposed project were notified of the Workshop 21 days in advance, in accordance with the Florida Statutes and the PD&E Manual. Interested citizens were also notified by letter. A legal display advertisement for the Workshop was published on June 7, 2001 in the Hillsborough County Edition of the Tampa Tribune. A copy of the handout from the Workshop is provided in Appendix F of this report.

A Public Hearing was held on Thursday, May 23, 2002 at Colson Elementary School. The focus of the Hearing was to present to the property owners, public officials, agencies, and interested citizens, the Recommended "Build" Alternative along with a "No Build" alternative based on the environmental and engineering analyses to date. The Hearing also gave the opportunity for attendees to express their views concerning the proposed recommendations. Approximately 94 people attended. A copy of the handout from the Hearing is also provided in Appendix F.

No comments were received at the Workshop or the Hearing pertaining to traffic noise.

8.0 CONSTRUCTION NOISE

Construction activities may result in temporary noise effects to the residents in the immediate vicinity of the project. The effects will be controlled in accordance with FDOT's Standard Specifications for Road and Bridge Construction.

9.0 NOISE CONTOURS

As previously discussed, land uses such as residences, motels, schools, churches, recreation areas and parks are considered incompatible with highway noise levels above 66 dBA. In order to reduce the potential of additional noise related affects on sensitive properties adjacent to S.R. 574; noise contours were developed for the future improved roadway facility. The noise contours delineate the distance from the improved roadway edge of pavement where the FDOT and FHWA Activity Category "B" NAC is expected to occur in the year 2025 with the S.R. 574 improvements.

As shown in Table 9-1, from Highview Road to McIntosh Road, a traffic noise level 66 dBA or more is predicted to extend 80 to 90 ft from the improved roadway edge-of-pavement.

Table 9-1: 66 dBA Noise Contour

Roadway Segment	Distance to 66 dBA* (in ft) From Edge-of-Pavement
Highview Rd to Parsons Ave	90
Parsons Ave to Kingsway Rd	85
Kingsway Rd to McIntosh Rd	80
* Distances do not reflect any reduction in noise levels that would result from existing structures (shielding).	

Figure 9-1 illustrates the noise zones.

10.0 REFERENCES

23 CFR 772 (April 1, 2001). Federal Highway Administration, U.S. Department of Transportation, "Procedures for Abatement of Highway Traffic Noise and Construction Noise." *U.S. Code of Federal Regulations*.

Florida Department of Transportation (January 10, 2001). *Project Development and Environment Manual*, Part 2, Chapter 17 - Noise.

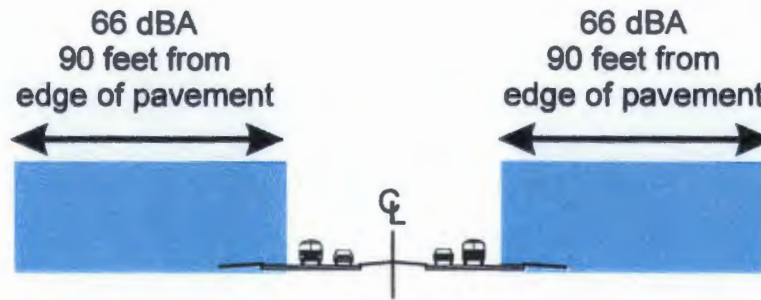
Table 2-1: 60 dBA Noise Contour

Receptor Location	Distance to Highway (ft)	Distance to Highway (m)	Distance to Highway (mi)
Receptor A	100	30	0.06
Receptor B	150	45	0.09
Receptor C	200	60	0.12
Receptor D	250	75	0.15
Receptor E	300	90	0.18
Receptor F	350	105	0.21
Receptor G	400	120	0.24
Receptor H	450	135	0.27
Receptor I	500	150	0.30
Receptor J	550	165	0.33
Receptor K	600	180	0.36
Receptor L	650	195	0.39
Receptor M	700	210	0.42
Receptor N	750	225	0.45
Receptor O	800	240	0.48
Receptor P	850	255	0.51
Receptor Q	900	270	0.54
Receptor R	950	285	0.57
Receptor S	1000	300	0.60

Figure 2-1: Illustration of the noise contour

10.0 REFERENCES

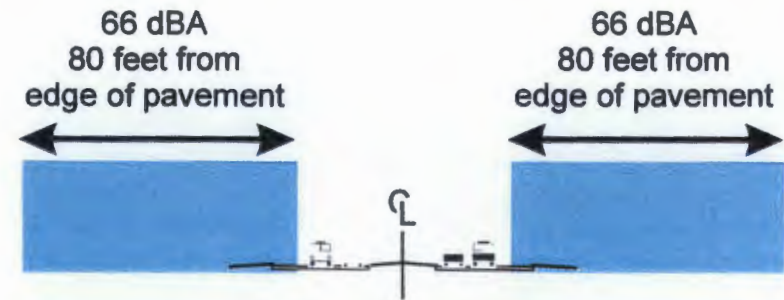
- U.S. DOT (2004). (2004). Federal Highway Administration. U.S. Department of Transportation. "Procedures for Estimation of Highway Traffic Noise." U.S. Department of Transportation, U.S. Code of Federal Regulations, Title 23, Part 655, Subpart 655.101.
- U.S. Department of Transportation. (2004). "U.S. Code of Federal Regulations, Title 23, Part 655, Subpart 655.101." U.S. Department of Transportation, U.S. Code of Federal Regulations, Title 23, Part 655, Subpart 655.101.



Highview Road to Parsons Avenue



Parsons Avenue to Kingsway Road



Kingsway Road to McIntosh Road

Distances do not reflect any reduction in noise levels that would result from existing structures (shielding)



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NOISE CONTOURS

Figure 9-1

APPENDICES
(Appendix A through E Published Separately)

APPENDIX

CONTENTS

A	Computer Model Validation Data
B	TNM Input/Output
C	TNM Results - Noise Barriers
D	Property Appraiser Data - Site 20
E	TNM Results - Noise Contours
F	Public Involvements

APPENDICES (Appendix A through E listed separately)

APPENDIX	CONTENTS
A	Computer Model Validation Data
B	Model Input Data
C	Model Results - Model Comparison
D	Property Assignment Data - Model
E	Model Results - Model Comparison
F	Model Results

APPENDIX F

ALTERNATIVES PUBLIC WORKSHOP

S.R. 574 (MARTIN LUTHER KING, JR. BLVD.)

PROJECT DEVELOPMENT & ENVIRONMENT (PD&E) STUDY
FROM C.R. 579 TO MCINTOSH ROAD / HILLSBOROUGH COUNTY, FLORIDA
WPI SEG. NO. 255893 1 / FAP NO. 2081-018P



JUNE 14, 2001

WELCOME

The Florida Department of Transportation (FDOT) welcomes you to tonight's Alternatives Public Workshop for the proposed improvements to S.R. 574. The purpose of this Workshop is to present information about the S.R. 574 PD&E Study and to give you an opportunity to ask questions and offer comments about the alternatives that are being studied.

This Alternatives Public Workshop addresses the proposed capacity and safety improvements for S.R. 574 from the vicinity of C.R. 579 (Mango Road) to the vicinity of McIntosh Road, a distance of approximately 3.6 miles. The project is located in the communities of Seffner, Mango, and Dover in central Hillsborough County, Florida.

WORKSHOP FORMAT

Tonight's Workshop will be conducted in an informal setting, with no formal presentation. During the Workshop, we encourage you to:

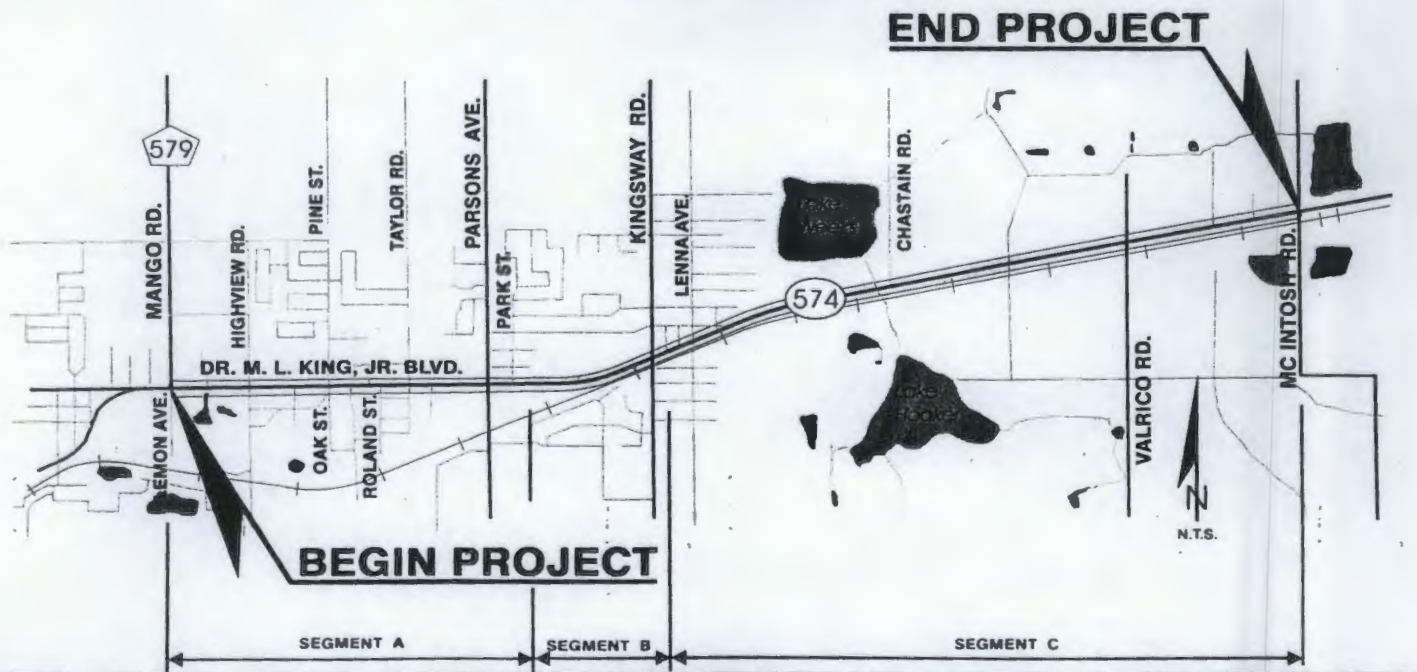
- View the continuously running video presentation
- Review the materials that are on display
- Discuss any questions or concerns with Department representatives
- Provide your written comments on the project

PROJECT DESCRIPTION AND NEED

S.R. 574 (Martin Luther King, Jr. Boulevard) is an east/west urban minor arterial facility. The existing roadway is a six-lane urban section at C.R. 579, which transitions to a three-lane rural section (with a two-way left-turn lane) east of Highview Road. The three-lane section is retained until Kingsway Road, where the roadway transitions to a two-lane rural section, which proceeds to McIntosh Road. Right of way varies from 40 feet at McIntosh Road to 133 feet at C.R. 579. The CSX railroad abuts S.R. 574 from west of Kingsway Road to the end of the project.

The need for this project has been identified by the Hillsborough County Metropolitan Planning Organization (MPO) in its 2020 Long Range Transportation Plan (LRTP) and the Hillsborough County Comprehensive Plan. The year 2000 existing daily traffic volume ranges from 9,400 vehicles per day (VPD) in Segment C to 33,100 VPD in Segment A. By the year 2025, these volumes are projected to increase to 16,500 and 58,300 VPD in their respective segments.

PROJECT LOCATION MAP



PROPOSED IMPROVEMENTS

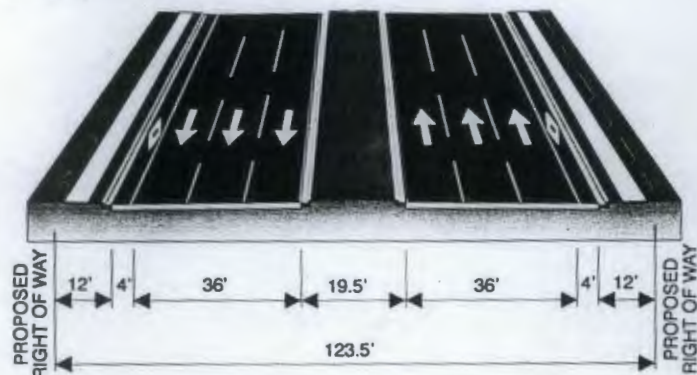
The Study corridor was divided into three segments:

- Segment A extends from C.R. 579 to east of Parsons Avenue (1.1 miles)
- Segment B extends from east of Parsons Avenue to east of Kingsway Road (0.6 mile)
- Segment C extends from east of Kingsway Road to east of McIntosh Road (1.9 miles)

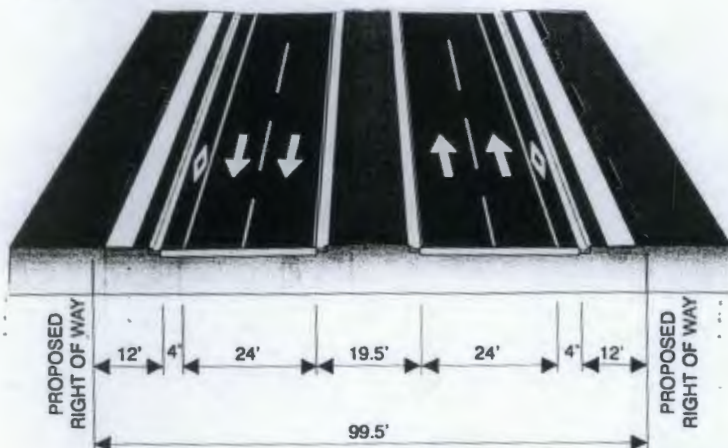
Three "Build" Alternatives for Segments A and B and one "Build" Alternative for Segment C are considered viable and are presented here tonight along with the "No Build" Alternative.

The "Build" Alternatives consist of multi-lane urban and suburban typical sections. These alternatives are considered the "best fit" alignment for the length of the corridor.

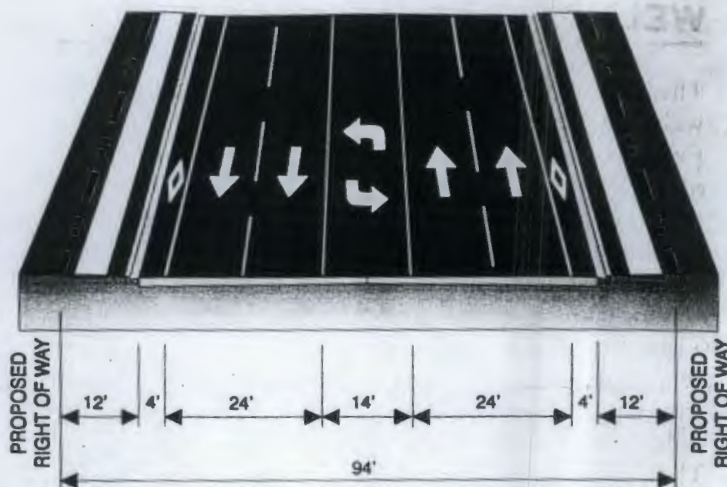
Alternative 1 for Segments A and B is a six-lane divided urban curb and gutter typical section which consists of three-12 ft travel lanes, a 4 ft bicycle lane, a 12 ft border width, which includes a 5 ft sidewalk in each direction, separated by a raised 19.5 ft median, within 123.5 ft of proposed right of way.



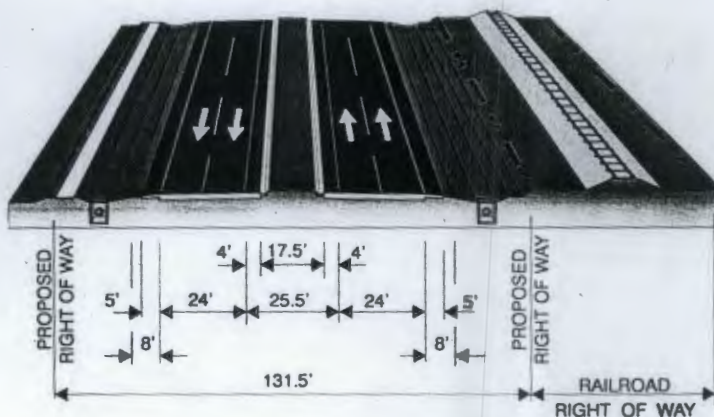
Alternative 2 for Segments A and B is a proposed 4-lane divided urban curb and gutter typical section that consists of two-12 ft travel lanes, a 4 ft bicycle lane, a 12 ft border width, which includes a 5 ft sidewalk in each direction separated by a raised 19.5 ft median within 99.5 ft of proposed right of way.



Alternative 3 for Segments A and B is a proposed 5-lane undivided urban curb and gutter typical section that consists of two-12 ft travel lanes, a 4 ft bicycle lane, a 12 ft border width, which includes a 5 ft sidewalk in each direction, separated by a continuous 14 ft two-way left turn lane within 94 ft of proposed right of way.



The "Build" Alternative for Segment C is a proposed 4-lane divided suburban typical section. It consists of two-12 ft travel lanes, an 8 ft outside shoulder, of which 5 ft is paved in each direction, open drainage ditches, and a 5 ft sidewalk on the northside of the roadway separated by a raised 25.5 ft median which includes a 4 ft paved inside shoulder, within 131.5 ft of proposed right of way adjacent to the CSX Transportation railroad.



There are advantages and disadvantages to the "Build" Alternatives.

Advantages include:

- Less traffic congestion;
- Improved levels of service on the roadway network;
- Lower roadway maintenance costs; and
- Consistency with the local transportation plans for the portion of the project from C.R. 579 to Kingsway Road.

PROPOSED IMPROVEMENTS

The following are the proposed improvements:

- The existing 12' wide sidewalk will be widened to 15'.
- The existing 12' wide sidewalk will be widened to 15'.
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The proposed improvements will be implemented in the following manner:

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Disadvantages include:

- Design, right of way, and construction costs;
- Temporary disruption to traffic during construction activities; and
- Minimal environmental effects.

The "No Build" Alternative, which consists of not constructing the proposed improvements and would limit any improvements to routine maintenance only, will remain a viable alternative throughout the duration of this Study.

As with the "Build" Alternatives, there are advantages and disadvantages associated with the "No Build" Alternative.

Advantages include:

- No new design, right of way, or construction costs; and
- No temporary disruption to traffic due to construction activities.

Disadvantages include:

- Increased traffic congestion resulting in increased road user costs;
- Unacceptable levels of service on the existing roadway network;
- Deterioration of air quality caused by traffic congestion and delays;
- Increased roadway maintenance; and
- Not consistent with the local transportation plans

The major parameters by which each of the Alternatives were evaluated are summarized in the Evaluation Matrix on the back page of this brochure.

FEDERAL-STATE PARTNERSHIP IN HIGHWAYS

Through a series of Congressional Acts, the Federal-Aid Highway Program was conceived and developed as a joint federal-state partnership. The success of this partnership is evident in the thousands of miles of highways and bridges comprising the nation's transportation network.

The FDOT, in consultation with the Federal Highway Administration (FHWA), and in accordance with federal and state laws, makes final decisions for the location and design, construction, and maintenance of Florida's highways.

The FHWA, in accordance with federal law cooperates with the State of Florida in planning and developing federal-aid transportation improvements. The FHWA reviews and approves all federal-aid actions proposed by the FDOT.

When present at a Public Workshop or Public Hearing, FHWA representatives serve as observers and technical advisors regarding federal requirements and procedures.

TITLE VI AND VIII COMPLIANCE

This Workshop is being held to afford all citizens the opportunity to understand the project and comment on their concerns to the FDOT. The Workshop is being held in compliance with Title VI of the Civil Rights Act of 1964 and Title VIII of the Civil Rights Act of 1968, as amended.

Public participation at this Workshop is encouraged and solicited without regard to race, color, creed, religion, sex, age, national origin, disability, or family status.

Persons wishing to express their concerns relative to FDOT compliance with Title VI and/or Title VIII, may do so by contacting the FDOT, District Seven, Title VI and VIII Program Officer, MS 7-500, 11201 N. McKinley Drive, Tampa, Florida, 33612-6456, which is represented here tonight, or the Florida Department of Transportation Minority Program Affairs Office, 605 Suwanee Street, MS 65, Tallahassee, Florida 32399. All inquiries or complaints will be handled according to FDOT procedure and in an expeditious manner.

TENTATIVE FDOT 5-YEAR WORK PROGRAM

(FISCAL YEAR 2001 / 2002 - 2005 / 2006)

PHASE	C.R. 579 TO KINGSWAY ROAD	KINGSWAY ROAD TO McINTOSH ROAD
Design Phase	2002 / 2003	Not Currently Funded
Right of Way (Reserve)	2004 / 2005	Not Currently Funded
Construction	Not Currently Funded	Not Currently Funded

RIGHT OF WAY ACQUISITION AND RELOCATION

The FDOT has developed a Right of Way (ROW) and Relocation Program in accordance with Section 339.09, Florida Statutes, and the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (Public Law 91-646, as amended by Public Law 100-170). Brochures which describe in detail the FDOT's relocation assistance and right of way acquisition program are: Your Relocation: Residential; Your Relocation: Business, Farm, and Non-Profit Organization; and The Real Estate Acquisition Process. These brochures are available this evening, as are representatives from our ROW office. Questions on ROW may also be addressed by contacting: Mr. Joe Thompson, District Right of Way Manager, Florida Department of Transportation, MS 7-900, 11201 N. McKinley Drive, Tampa, Florida 33612-6456. Phone (800) 226-7220.

WHAT HAPPENS NEXT

Your comments are very important. Please feel free to express your comments on the Comment Form included in this handout. All comments received will be taken into consideration before a final recommendation is made. You may drop the form in the comment box provided tonight or mail it to the address provided on the form by June 28, 2001. Comments received from the public, local governments, review agencies and from the Workshop will help the FDOT select the recommended alternative to be presented at a Public Hearing tentatively scheduled for Fall 2001. The PD&E Study will be completed when Location and Conceptual Design Acceptance is received from the FHWA in Winter 2002.

EVALUATION MATRIX

EVALUATION FACTORS	Alternative 1		Alternative 2		Alternative 3		Alternatives 1, 2, & 3
	URBAN DIVIDED 6-LANE		URBAN DIVIDED 4-LANE		URBAN 5-LANE		SUBURBAN 4-LANE
	SEGMENT A	SEGMENT B	SEGMENT A	SEGMENT B	SEGMENT A	SEGMENT B	SEGMENT C
POTENTIAL RELOCATIONS							
Business	25	7	16	4	16	5	5
Residential	3	1	2	0	2	0	3
COMMUNITY FACILITIES INVOLVEMENT							
Churches, schools, medical facilities, etc.	0	0	0	0	0	0	0
NOISE EFFECTS							
Number of noise sensitive sites*	6	6	6	6	6	6	5
CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS INVOLVEMENT							
Number of historic sites/structures within or adjacent to proposed ROW	2	0	2	0	2	0	1
Number of public parks within or adjacent to proposed ROW	0	0	0	0	0	0	0
NATURAL ENVIRONMENT INVOLVEMENT							
Total wetland involvement area (acres)	0.2	0.1	0.1	0.1	0.1	0.1	4.1
Area of base floodplain encroachment (acres)	0	0	0	0	0	0	0
POTENTIAL HAZARDOUS MATERIAL AND PETROLEUM POLLUTANT CONTAMINATED SITES							
Number of potential sites within or adjacent to proposed ROW	1	5	1	5	1	5	1
ESTIMATED COSTS (MILLION DOLLARS)							
ROW acquisition cost**	56.3	13.4	32.2	9.7	31.0	9.4	21.4
Engineering cost (15%)	0.6	0.4	0.5	0.3	0.6	0.3	1.3
Construction cost	4.0	2.4	3.6	2.1	3.7	2.1	8.5
Construction engineering and inspection cost (15%)	0.6	0.4	0.5	0.3	0.6	0.3	1.3
Total	61.5	16.6	36.8	12.4	35.9	12.1	32.5

*Within the 66 dBA Isopleth

**Pond sites, though final locations have not been determined, are included in the estimated ROW acquisition costs

RIGHT OF WAY ACQUISITION AND RELIATION

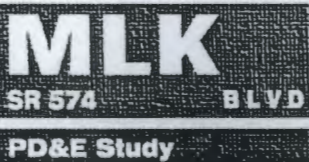
The RIGHT OF WAY (ROW) and Reliotion Rights are defined in Section 110 of the Public Access to the Waterfront Act and the Public Access to the Waterfront Act. The ROW is the right to use the land for the purpose of the project. The Reliotion Rights are the rights to use the land for the purpose of the project. The ROW is the right to use the land for the purpose of the project. The Reliotion Rights are the rights to use the land for the purpose of the project.

WHAT HAPPENS NEXT

The next step is to determine the ROW and Reliotion Rights. This is done by the project owner. The project owner must determine the ROW and Reliotion Rights. This is done by the project owner. The project owner must determine the ROW and Reliotion Rights. This is done by the project owner.

EVALUATION MATRIX

Criteria	Evaluation Matrix			
	1	2	3	4
1. Project Description				
2. Project Location				
3. Project Size				
4. Project Complexity				
5. Project Risk				
6. Project Cost				
7. Project Timeline				
8. Project Impact				
9. Project Feasibility				
10. Project Viability				
11. Project Sustainability				
12. Project Resilience				
13. Project Adaptability				
14. Project Innovation				
15. Project Leadership				
16. Project Team				
17. Project Communication				
18. Project Stakeholder Engagement				
19. Project Transparency				
20. Project Accountability				
21. Project Integrity				
22. Project Honesty				
23. Project Fairness				
24. Project Justice				
25. Project Equity				
26. Project Inclusion				
27. Project Participation				
28. Project Collaboration				
29. Project Partnership				
30. Project Alliance				
31. Project Coalition				
32. Project Network				
33. Project Community				
34. Project Society				
35. Project World				
36. Project Universe				
37. Project Cosmos				
38. Project Galaxy				
39. Project Planet				
40. Project Moon				
41. Project Star				
42. Project Sun				
43. Project Galaxy				
44. Project Universe				
45. Project Cosmos				
46. Project Galaxy				
47. Project Universe				
48. Project Cosmos				
49. Project Galaxy				
50. Project Universe				



PUBLIC HEARING

S.R. 574 (MARTIN LUTHER KING, JR. BLVD.)
PROJECT DEVELOPMENT & ENVIRONMENT (PD&E) STUDY
FROM C.R. 579 TO MCINTOSH ROAD / HILLSBOROUGH COUNTY, FLORIDA
WPI SEG. NO. 255893 1 / FAP NO. 2081-018P



MAY 23, 2002

Welcome to the Public Hearing for S.R. 574 (Martin Luther King, Jr. Boulevard) in Hillsborough County. This Hearing is being held to offer you the opportunity to obtain information and to comment on the proposed improvements to this portion of S.R. 574.

The Florida Department of Transportation (FDOT) is conducting a Project Development & Environment (PD&E) Study for the proposed capacity and safety improvements for S.R. 574 from the vicinity of C.R. 579 (Mango Road) to the vicinity of McIntosh Road, a distance of approximately 3.6 miles. The focus of this evening's meeting is to present the Recommended "Build" Alternative, along with a "No Build" Alternative that are based on the environmental and engineering analyses performed to date.

The schedule for tonight's Hearing is as follows:

INFORMAL HEARING 4:30 P.M. TO 6:00 P.M.

Representatives from the FDOT are available to discuss the project, answer questions, and receive comments. Conceptual plans, reports, a continuous informational video, and supporting materials are available for review. A court reporter is available to receive comments in a one-to-one setting.

FORMAL HEARING 6:00 P.M.

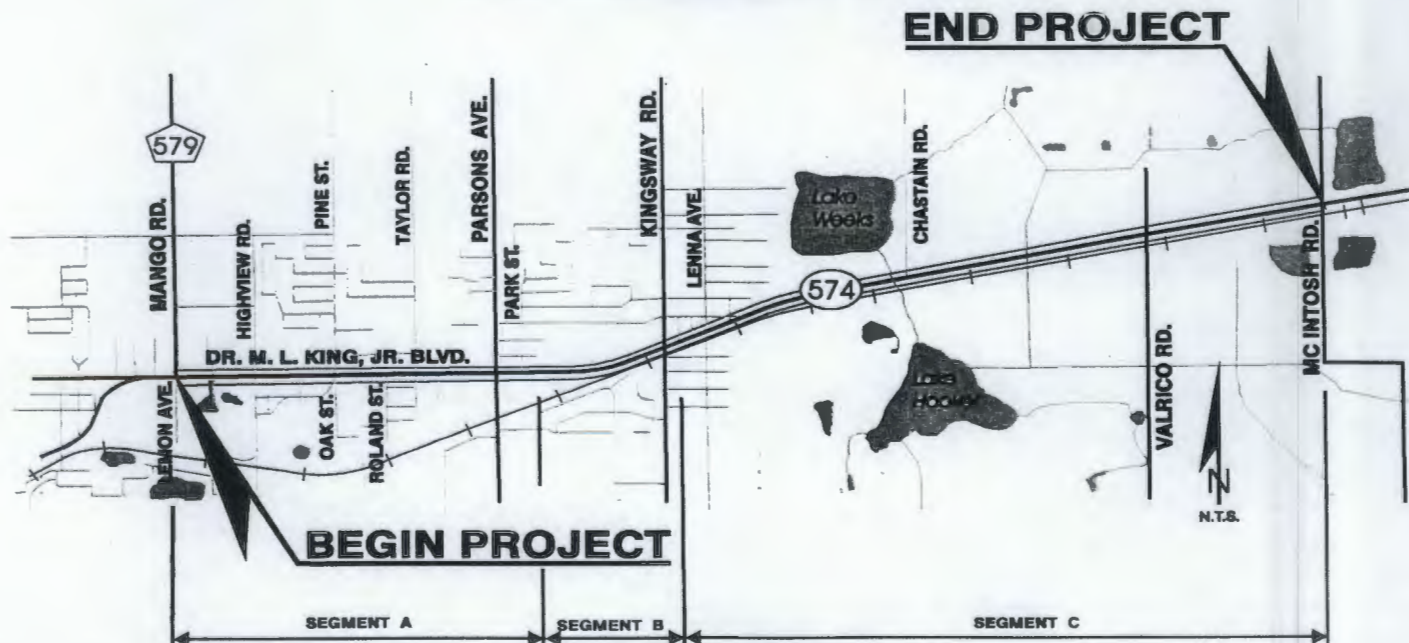
The Department will make a presentation regarding the project and its associated environmental effects. An opportunity to provide formal public comment will follow the presentation. If you would like to provide public comment during this time, please complete one of the speaker cards available at the sign-in table.

Following the formal portion of the Hearing, the informal portion will resume and continue until 7:30 p.m. All comments received, verbal or written, will be considered equally and documented in the Official Public Hearing Record.

PROJECT HISTORY

The S.R. 574 (Martin Luther King, Jr. Boulevard) PD&E Study began in February of 2000, and following the analysis of future traffic projections, accident history, and environmental effects several alternatives were developed. These alternatives were presented to the public in an Alternatives Public Workshop at Colson Elementary School on June 14, 2001. Tonight, based on the response to public comments, continued study analysis, and coordination with the local government, the Department is presenting the Recommended "Build" Alternative.

PROJECT LOCATION MAP





PUBLIC HEARING

E.H. 574 (MARTIN) / OTHER KING JR. EMD)
PROJECT DEVELOPMENT / ENVIRONMENTAL STUDY
APPLICANT: THE UNIVERSITY OF ALABAMA
FOR THE STATE OF ALABAMA
FEDERAL HIGHWAY DEPARTMENT



HEARING 5:00 PM

The purpose of this hearing is to provide an opportunity for the public to comment on the proposed project. The project is located in the area of the University of Alabama. The project is a highway interchange. The project is a highway interchange. The project is a highway interchange.

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PROJECT HISTORY

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PROJECT LOCATION MAP



HEARING 5:00 PM

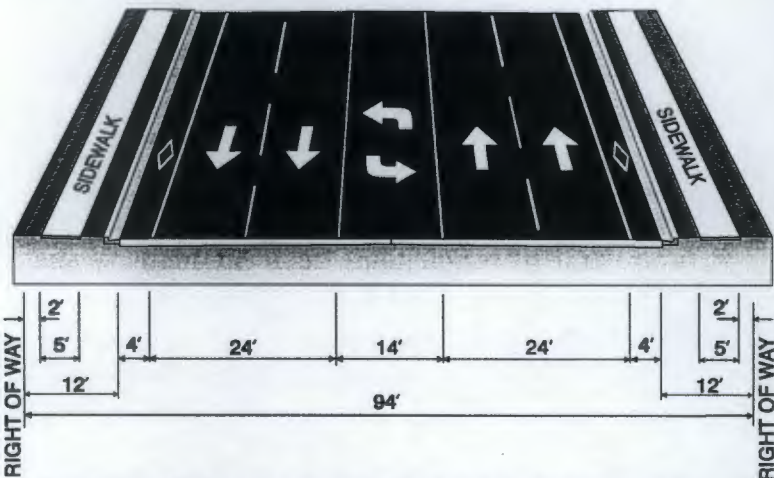
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RECOMMENDED BUILD ALTERNATIVE

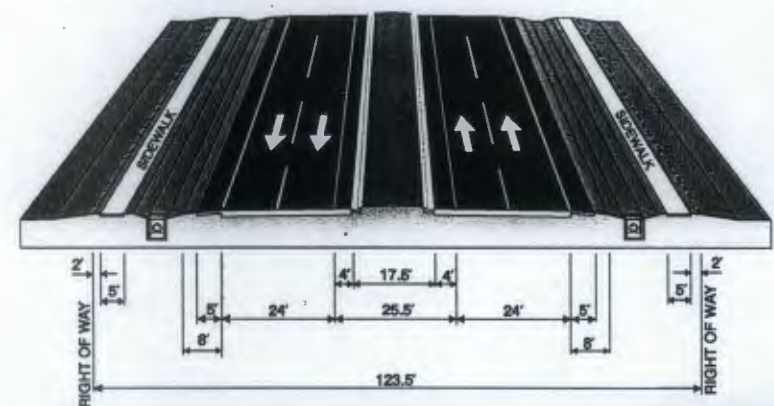
For analysis purposes, this project was divided into three segments. The segments are identified as follows:

- Segment A extends from C.R. 579 to east of Parsons Avenue (1.1 miles)
- Segment B extends from east of Parsons Avenue to east of Kingsway Road (0.6 mile)
- Segment C extends from east of Kingsway Road to east of McIntosh Road (1.9 miles)

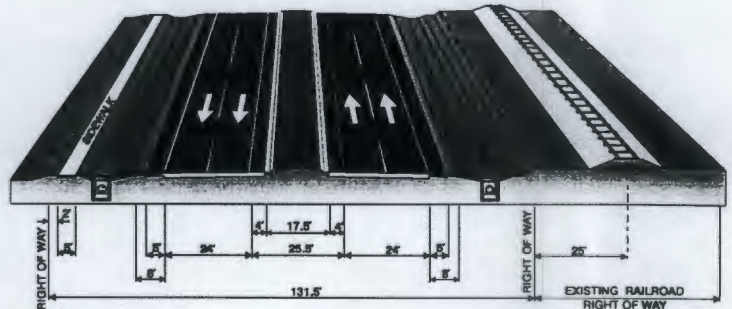
Segment A from C.R. 579 to east of Parsons Avenue: the Recommended "Build" Alternative is a 5-lane undivided urban curb and gutter typical section with a 50 mph design speed. It consists of two-12 ft travel lanes, a 4 ft bicycle lane, a 12 ft border width, which includes a 5 ft sidewalk in each direction, separated by a continuous 14 ft two-way left turn lane within 94 ft of proposed right of way.



Segment B from east of Parsons Avenue to east of Kingsway Road: the Recommended "Build" Alternative is a 4-lane divided suburban typical section with a 45 mph design speed. It consists of two-12 ft travel lanes, an 8 ft outside shoulder, of which 5 ft is paved in each direction, open drainage ditches, and a 5 ft sidewalk in each direction. It has a 25.5 ft traffic separation which includes a raised 17.5 ft curb and gutter median, and a 4 ft paved inside shoulder in each direction, within 123.5 ft of proposed right of way.



Segment C from east of Kingsway Road to east of McIntosh Road: the Recommended "Build" Alternative is a 4-lane divided suburban typical section, with a 60 mph design speed. It consists of two-12 ft travel lanes, an 8 ft outside shoulder, of which 5 ft is paved in each direction, open drainage ditches, and a 5 ft sidewalk on the north side of the roadway. It has a 25.5 ft traffic separation which includes a raised 17.5 ft curb and gutter median, and a 4 ft paved inside shoulder in each direction, within 131.5 ft of proposed right of way adjacent to the CSX Transportation railroad.



The recommended alignment generally follows the existing centerline of the roadway with several shifts to reduce impacts to properties and to avoid a cemetery in the western portion of the project. The recommended alignment for the eastern portion of the project is controlled by a twenty-five foot offset between the proposed roadway right-of-way and the centerline of the active CSX railroad tracks.

Advantages of the Recommended "Build" Alternative include:

- Less traffic congestion;
- Improved levels of service on the roadway network; and
- Consistency with the local government plans for the portion of the project from C.R. 579 to Kingsway Road.

Disadvantages include:

- Design, right of way, and construction costs;
- Temporary disruption to traffic during construction activities;
- Right-of-way acquisition and relocations; and
- Environmental effects (minimal).

NO BUILD ALTERNATIVE

The "No Build" Alternative consists of not constructing the proposed improvements and limiting any improvements to routine maintenance only. It will remain a viable alternative throughout the duration of this Study.

Advantages of the Recommended "No Build" Alternative include:

- No new design, right of way acquisition and relocations, or construction costs;
- No temporary disruption to traffic due to construction activities; and
- No direct effects to the adjacent natural and human environment.

Disadvantages include:

- Increased traffic congestion resulting in increased road user costs;
- Unacceptable levels of service on the existing roadway network;
- Deterioration of air quality caused by traffic congestion and delays;
- Not consistent with the local government plans.

TITLE VI AND VIII COMPLIANCE

This Hearing is being held to afford all citizens the opportunity to understand the project and express concerns about the projects to the Department. This Hearing complies with Title VI of the Civil Rights Act of 1964 and Title VIII of the Civil Rights Act of 1968, as amended.

Public participation at this Hearing is encouraged and solicited without regard to race, color, creed, religion, sex, age, national origin, disability, or family status.

Persons wishing to express their concerns relative to FDOT compliance with Title VI and/or Title VIII, may do so by contacting the District Seven Title VI and VIII Program Officer, Attn: Jeraldo Comellas, Jr., P.E., Florida Department of Transportation, MS 7-500, 11201 N. McKinley Drive, Tampa, Florida, 33612-6456, or the Florida Department of Transportation Minority Program Affairs Office, 605 Suwannee Street, MS 65, Tallahassee, Florida 32399. All inquiries or complaints will be handled according to FDOT procedure and in an expeditious manner.

RIGHT OF WAY ACQUISITION AND RELOCATION

The FDOT has developed a Right of Way (ROW) and Relocation Program in accordance with Section 339.09, Florida Statutes, and the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (Public Law 91-646, as amended by Public Law 100-170). Brochures which describe in detail the FDOT's relocation assistance and right of way acquisition program are: Your Relocation: Residential; Your Relocation: Business, Farm, and Non-Profit Organization; and The Real Estate Acquisition Process. These brochures are available this evening, as are representatives from our ROW office. Questions on ROW may also be addressed by contacting: Mr. Joe Thompson, District Right of Way Manager, Florida Department of Transportation, MS 7-900, 11201 N. McKinley Drive, Tampa, Florida 33612-6456. Phone (800) 226-7220.

FDOT 5-YEAR TENTATIVE WORK PROGRAM

(FISCAL YEAR 2002 / 2003 - 2006 / 2007)

PHASE	C.R. 579 TO PARSONS AVENUE	PARSONS AVENUE TO KINGSWAY ROAD	KINGSWAY ROAD TO MCINTOSH ROAD
Design Phase	2002 / 2003	Not Currently Funded	Not Currently Funded
Right of Way (Reserve)	2004 / 2005	Not Currently Funded	Not Currently Funded
Construction	Not Currently Funded	Not Currently Funded	Not Currently Funded

ALTERNATIVE

The following information is provided for the purpose of comparing the various alternatives and to assist in the selection of the preferred alternative.

Advantages of the Alternatives are listed below.

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ALTERNATIVE IV AND VIII COMPLIANCE

The following information is provided for the purpose of comparing the various alternatives and to assist in the selection of the preferred alternative.

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1995 5-YEAR TENTATIVE WORK PROGRAM

FISCAL YEAR 2002 - 2003 - 2004 - 2005

ALTERNATIVE	TO	WARRANTY	TO	WARRANTY
ALTERNATIVE	TO	WARRANTY	TO	WARRANTY
ALTERNATIVE	TO	WARRANTY	TO	WARRANTY
ALTERNATIVE	TO	WARRANTY	TO	WARRANTY
ALTERNATIVE	TO	WARRANTY	TO	WARRANTY

The following information is provided for the purpose of comparing the various alternatives and to assist in the selection of the preferred alternative.

WE INVITE YOUR COMMENTS

If you would like to make a comment as part of the Official Public Hearing Record, you may comment in one of the following four ways:

- First, you can complete one of the speaker cards available at the sign-in table in order to make an oral statement during the formal portion of this Hearing;
- Second, you can make an oral statement to the court reporter in a one-to-one setting during the informal portion of the Hearing;
- Third, you can complete the Comment Form provided in this brochure and submit it to the court reporter or drop it in one of the "Comment" boxes; or
- Fourth, you can complete and mail written comments to the address listed on the enclosed Comment Form.

WHAT HAPPENS NEXT?

You will have the opportunity to present your views concerning the proposed improvements during this Hearing and for 10 days afterward. Comments must be postmarked by Monday, June 3, 2002, to be included in the Official Public Hearing Record for this project. Comments may be mailed to the following address: Kenneth Hartmann, P.E., District Seven Secretary, Attn: Robert M. Clifford, AICP, District Planning Manager, Florida Department of Transportation, MS 7-340, 11201 N. McKinley Drive, Tampa, Florida 33612-6456. Based upon the comments received during the Public Involvement process and continued coordination with governmental agencies, the Department will recommend an alternative to the FHWA for its approval. Approval is expected in the Summer of 2002. All individuals on the Public Involvement mailing list will be notified of the alternative approved by the FHWA. If you have any further questions about this project, you may contact Mark Clasgens, E.I., Project Manager, at (813) 975-6450 / (800) 226-7220 or by email at mark.clasgens@dot.state.fl.us.

EVALUATION MATRIX

EVALUATION FACTORS	SEGMENT "A" (URBAN 5-LANE, 50 MPH DESIGN SPEED)	SEGMENT "B" (SUBURBAN 4-LANE, 45 MPH DESIGN SPEED)	SEGMENT "C" (SUBURBAN 4-LANE, 60 MPH DESIGN SPEED)
POTENTIAL RELOCATIONS			
Business	22	6	8
Residential	4	7	6
COMMUNITY FACILITIES INVOLVEMENT			
Churches, schools, medical facilities, etc.	0	0	0
NOISE EFFECTS			
Number of noise sensitive sites*	6	6	5
CULTURAL/HISTORIC RESOURCES INVOLVEMENT			
Number of historic sites/structures adjacent to proposed ROW	1	0	1
NATURAL ENVIRONMENT INVOLVEMENT			
Total wetland involvement area (acres)	0	0	2,649
Area of base floodplain encroachment (acres)	0	0	0
POTENTIAL HAZARDOUS MATERIAL AND PETROLEUM POLLUTANT CONTAMINATED SITES			
Number of potential sites adjacent to Proposed ROW	1	5	1
ESTIMATED COSTS (MILLION DOLLARS)			
ROW acquisition cost**	37.8	26.8	29.2
Engineering cost	0.6	0.4	1.0
Construction cost	4.3	2.7	6.6
Construction engineering and inspection cost	0.6	0.4	1.0
Total	43.3	30.3	37.8

Within the 66 dBA Isopleth

Includes recommended pond sites

Segment "A" Limits: C.R. 579 to East of Parsons Avenue

Segment "B" Limits: East of Parsons Avenue to East of Kingsway Road

Segment "C" Limits: East of Kingsway Road to East of McIntosh Road

Noise Study Report

PRR - PRICE LIST	
8 1/2 X 11 - Single @ .15 cents	Five (5) pages or less - no cost (24 X 36)
3+1+5+4+1+1+2+1+2+10	24 x 36 - Single @ \$1.00
(30) \$4.50	
8 1/2 X 11 - Double @ .15 cents	
	Ten (10) pages or less for any smaller size - no cost
8 1/2 X 11 - Color @ .15 cents	
2+3+3+1+3+1+2+1+1+	
(17) \$2.55	
8 1/2 X 14 - Single @ .15 cents	
8 1/2 X 14 - Double @ .15 cents	
8 1/2 X 14 - Color @ .15 cents	
11 X 17 - Single @ .15 cents	
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