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PRELIMINARY ENGINEERING REPORT

SW 62nd Boulevard from 43rd Street/Clark Butler Boulevard to SW 52nd Street

FM Number: 211365-6-22-01

Federal Aid Project Number: 4220-025-C

ETDM Number: 14336



March 2018



SW 62nd Boulevard
from SW 43rd Street/Clark Boulevard to SW 52nd
Street

Alachua County, Florida
Financial Project ID Number 211365-6-22-01

Prepared for:



Florida Department of Transportation – District 2
1109 South Marion Avenue, Lake City, FL 32025

Prepared by:

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This preliminary engineering report contains detailed engineering information that fulfills the purpose and need for the SW 62nd Boulevard from SW 43rd Street/Clark Butler Boulevard to SW 52nd Street in Alachua County, Florida.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

Name: Imran Ghani, PE

Signature: _____

P.E. Number: 58616

Date: _____

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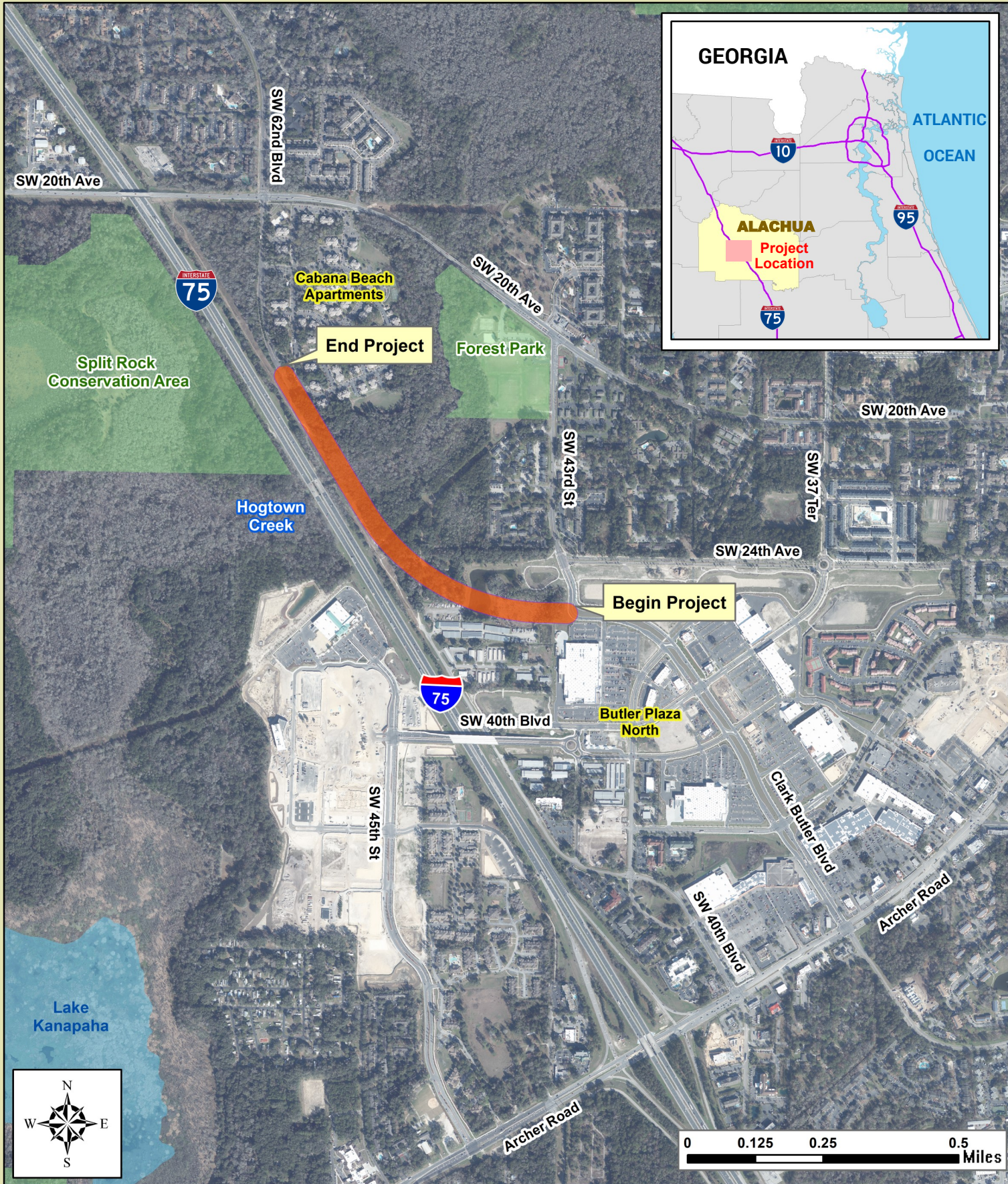
1.0 PROJET SUMMARY

This preliminary engineering report contains detailed engineering information that fulfills the purpose and need for the improvements to SW 62nd Boulevard from SW 43rd Street/Clark Butler Boulevard to SW 52nd Street in Alachua County, Florida. This project hereinafter will be referred to as the SW 62nd Boulevard Extension in this document.

This preliminary engineering report includes existing conditions, alternatives analysis, and recommendations for SW 62nd Boulevard.

1.1 Project Description

The proposed project is located in the City of Gainesville, Alachua County, Florida and connects SW 43rd Street/Clark Butler Boulevard to SW 52nd Street near Interstate 75 (I-75) (see **Figure 1-1**). This connection will provide an additional north-south roadway between two existing major east-west arterials: SW Archer Road (SR 24) and SW 20th Avenue.



SW 62nd Blvd from SW 43rd
Street/Clark Butler Blvd to
SW 52nd Street

Legend

- Project Limits
- Lakes
- Parks, Conservation Areas

Figure 1-1
Project Location Map

1.2 Purpose & Need

The purpose of the project is to reduce traffic congestion on nearby roadways by linking SW 43rd Street/Clark Butler Boulevard to SW 52nd Street near I-75. The project would provide a direct connection between commercial developments such as the Oaks Mall and Butler Plaza to residential communities along SW 62nd Boulevard and SW 20th Avenue and reduce traffic congestion on nearby roadways. The study area is currently served by seven transit routes and the project would allow for additional transit routes between commercial and residential developments further reducing congestion on nearby roadways.

The need for the project is based on existing and proposed commercial/residential developments in the study area and the projected population growth in Alachua County (from 247,336 in 2010 to 305,400 by 2040). This influx of population and development will overwhelm the existing limited transportation infrastructure in the area and will result in many of the roadways operating at Level of Service (LOS) F.

1.2.1 System Linkage

The area of Alachua County that is bounded by SW 75th Street (Tower Road) to the west, SW 34th Street to the east, Newberry Road (SR 26) to the north and SW Archer Road (SR 24) to the south is home to some of the largest commercial and residential developments in Alachua County and the City of Gainesville. Developments include the Oaks Mall, Celebration Pointe, Butler Plaza, North Florida Regional Medical Center and numerous residential/apartment complexes primarily for students attending the University of Florida. The area is currently served by three major north-south roadways, SW 75th Street (Tower Road), SW 34th Street and I-75. Access on I-75 is restricted to the SW Archer Road (SR 24)/I-75 interchange and the Newberry Road (SR 26)/I-75 interchange, leaving the remaining two arterials to serve intermediate destinations between Newberry Road (SR 26) and SW Archer Road (SR 24). The distance between SW 75th Street (Tower Road) and SW 34th Street is approximately 3 miles, forcing residents, workers and students to drive approximately 1.5 miles east or west to travel north or south. This current condition results in congestion on many east-west roadways such as SW 20th Avenue due to motorists traveling east-west in order to get to north-south roadways such as SW 34th Street.

A third incomplete north-south roadway exists in the form of 62nd Boulevard from Newberry Road (SR 26) to SW 20th Avenue and SW 52nd Street from south of 20th Avenue to SW 18th Place. This left an approximate 1.5-mile gap between the terminus of SW 52nd Street and SW Archer Road (SR 24). The recent construction of Clark Butler Boulevard from SW Archer Road (SR 24) to SW 42nd Street has decreased the gap to 0.8 miles.

The extension of SW 43rd Street/Clark Butler Boulevard to SW 52nd Street would complete a third north-south roadway in the area and would relieve traffic congestion on I-75, SW 75th Street

SECTION 1 –PROJECT SUMMARY

(Tower Road) and SW 34th Street. The extension would also relieve traffic on east-west roadways such as SW 20th Avenue.

1.2.2 Capacity

Several of the east-west and north-south roadways are currently operating at LOS E and F (see **Table 1-1**). By 2040, the population is expected to increase by another 20% and the majority of north-south and east-west roadways will operate at LOS F, resulting in severe congestion during peak periods and a higher number of crashes.

Table 1-1: AADT Traffic (2016 and 2040)							
Roadway	From	To	Number of Lanes	2016		2040	
				AADT	Level of Service	AADT	Level of Service
Newberry Road (SR 26)	NW 75 th Street (Tower Road)	I-75	4	51,000	F	67,000	F
Newberry Road (SR 26)	I-75	NW 8 th Street	6	53,000	D	78,000	F
Newberry Road (SR 26)	NW 8 th Street	SW 34 th Street	4	37,000	D	45,000	F
SW Archer Road (SR 24)	SW 75 th Street (Tower Road)	I-75	4	29,500	C	56,000	F
SW Archer Road (SR 24)	I-75	SW 34 th Street	6	57,000	C	58,000	D
SW 20 th Avenue	SW 62 nd Blvd	SW 34 th Street	2	20,500	F	29,000	F
Tower Road (SW 75 th Street)	Newberry Road (SR 26)	SW 20 th Avenue	2	20,500	F	37,000	F
Tower Road (SW 75 th Street)	SW 20 th Avenue	SW Archer Road (SR 24)	2	15,500	E	19,000	F
SW 34 th Street	SW Archer Road (SR 24)	SW 20 th Avenue	6	39,500	C	54,000	C
SW 34 th Street	SW 20 th Avenue	Newberry Road (SR 26)	6	41,000	C	61,000	F

1.2.3 Social Demands and Economic Development

SW 75th Street (Tower Road), SW 34th Street and I-75 are the main north-south roadways within the study area. The projected increase in traffic over the next 20 to 25 years is directly related to population changes in Alachua County and the City of Gainesville. The population of Alachua County is expected to increase from 247,336 (in 2010) to 305,400 (in 2040), an increase of 20%. The population of the City of Gainesville is expected to increase from 124,354 (in 2010) to 153,300 (in 2040), an increase of 23% (see **Table 1-2**).

Table 1-2: Population Statistics for Alachua County and City of Gainesville

Year	Alachua County Population	City of Gainesville Population
2010	247,336 ¹	124,354 ¹
2040	305,400 ²	153,300 ²
% increase between 2010 and 2040	20%	23%

¹ 2010 Census

² Gainesville Metropolitan Planning Organization 2040 Long Range Transportation Plan

The growth in population is due to a number of large scale commercial and residential developments. In addition, the University of Florida campus is located adjacent to SW 34th Street and is a major traffic generator. Many of the residential developments are multi-family apartments/homes accommodating the student population of the University of Florida.

Other large-scale commercial/residential developments in proximity of the study area include:

- **Butler Plaza** – Butler Plaza is a commercial/retail development located along the north side of SW Archer Road (SR 24) between I-75 and SW 34th Street.
- **Oaks Mall and Vicinity** – The Oaks Mall is located along the south side of Newberry Road (SR 26) between I-75 and SW 62nd Boulevard. Other commercial developments as well as several medical land uses are also located along the east side SW 62nd Boulevard south of Newberry Road (SR 26) near the Oaks Mall.
- **North Florida Regional Medical Center** – The North Florida Regional Medical Center is located along Newberry Road (SR 26), just east of NW 62nd Boulevard. The North Florida Regional Medical Center is a major traffic generator and employment center and has significantly expanded over the last several years and is planned for additional growth.
- **Residential Developments** – Several multi-family residential developments are located within the study area. The primary market for these developments is for student housing. Examples of these developments include Melrose Apartments and the Cabana Beach apartment complex located near the intersection of SW 62nd Boulevard and SW 20th Avenue.

Future traffic demand within the study area is expected to increase substantially as a result of the additional multi-family residential, commercial and retail development. Major developments include:

- **Butler Plaza North** – There will continue to be an expansion and densification of the commercial districts along SW Archer Road (SR 24) associated with Butler Plaza. Construction is underway for the Butler Plaza North development that includes 2,500,000

SECTION 1 –PROJECT SUMMARY

square feet of commercial use, 50,000 square feet of office use, 1,000 residential units and 500 room hotel. These new land uses are anticipated to result in an estimated 37,500 new average trips per day.

- **Celebration Pointe** – Celebration Pointe is a walkable mixed-use development consisting of 430,000 square feet of office, 320,000 square feet of retail, restaurant or entertainment, 960 apartments, a 420 room hotel, 150 urban flats and 150 senior living units.

See **Figure 1-2** for map of major residential and commercial developments.

1.2.4 Modal Interrelationships

The Gainesville Regional Transit System (RTS) currently operates several bus routes within the study area. The Student Village Transportation Study indicates that transit currently serves 23% of travelers within the study area. During the morning peak hour, as many as 35% of trips are transit trips within the study area. This travel is primarily associated with the substantial student populations living within the study area who use bus service for travel to the University of Florida.

A new RTS transfer facility recently opened in Butler Plaza, and SW 62nd Boulevard is directly served by seven routes. These seven routes serve more than 2 million riders each year (based on 2014 data).

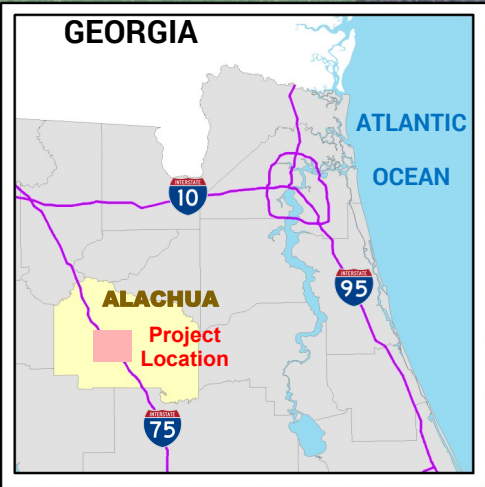
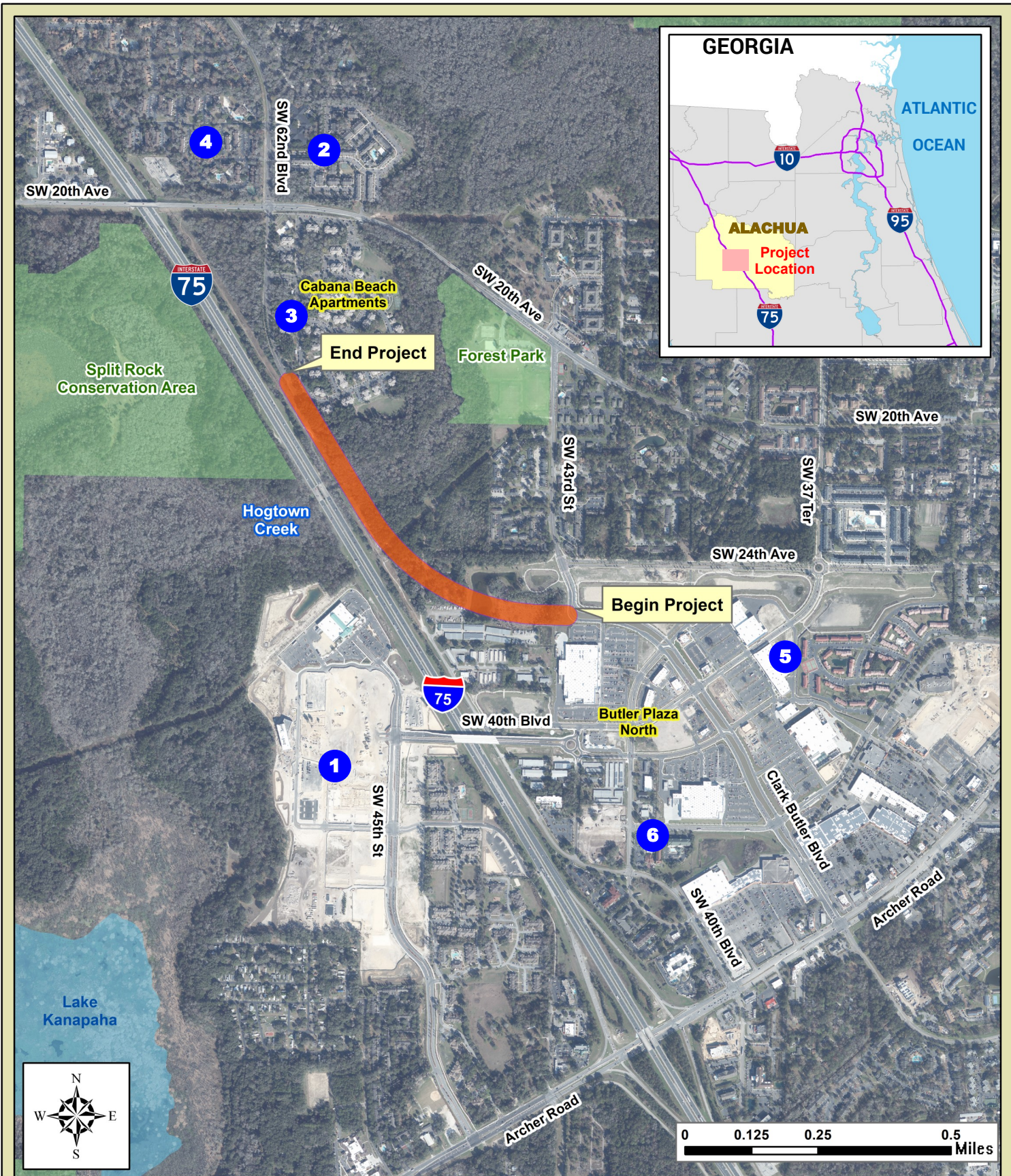
- Route 5 – 466,131 riders per year
- Route 20 – 1,124,947 riders per year
- Route 23 – 153,186 riders per year
- Route 62 – 15,537 riders per year
- Route 75 – 265,624 riders per year
- Route 76 – 34,335 riders per year
- Route 77 – 16,828 riders per year

Providing an additional north-south roadway would allow RTS to provide additional bus transit routes connecting commercial developments such as the Oaks Mall and Butler Plaza to residential communities along SW 62nd Boulevard and SW 20th Avenue.

1.3 Commitments and Recommendations

FDOT would implement the Standard Protection Measures for the *Eastern Indigo Snake* during site preparation and project construction.

A Secretary of the Interior qualified archaeological monitor will be required to be present during the initial ground disturbing activities that occur within the boundaries of site 8AL04800.



SW 62nd Blvd from SW 43rd Street/Clark Butler Blvd to SW 52nd Street

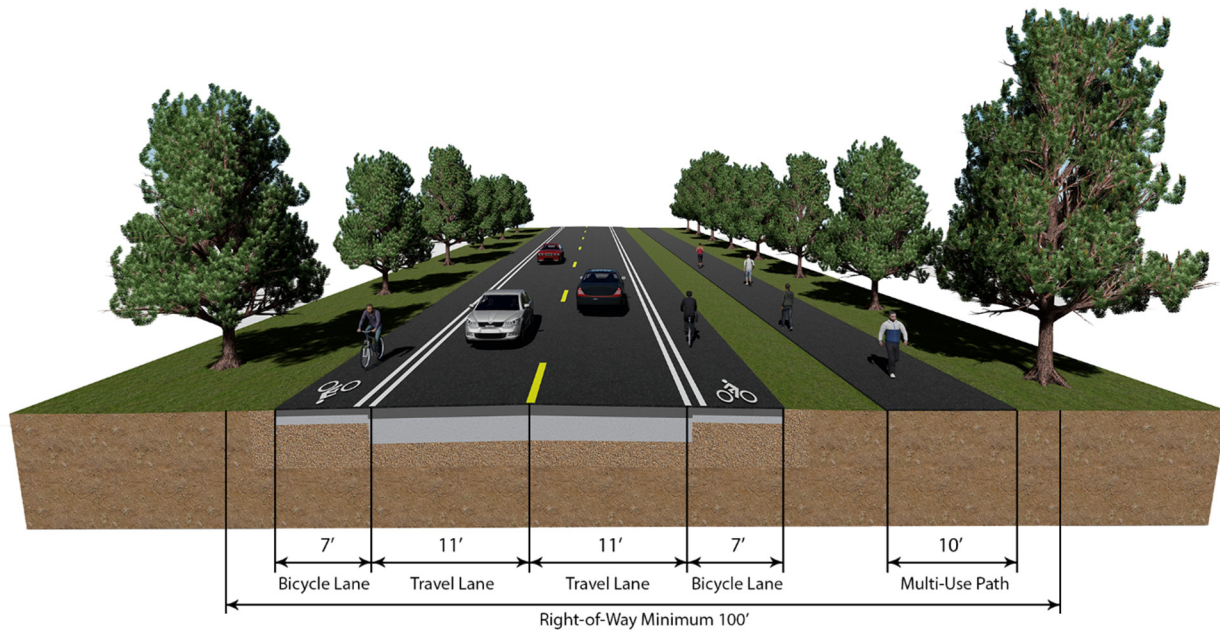
- Legend**
- Project Limits
 - Conservation Areas
 - 1 Celebration Pointe
 - 2 Woodlands of Gainesville Apts.
 - 3 Cabana Beach Apts.
 - 4 Pavilion on 62nd Apts.
 - 5 Butler Plaza North
 - 6 Butler Plaza

**Figure 1-2
Residential and
Commercial Developments**

1.4 Description of Proposed Action

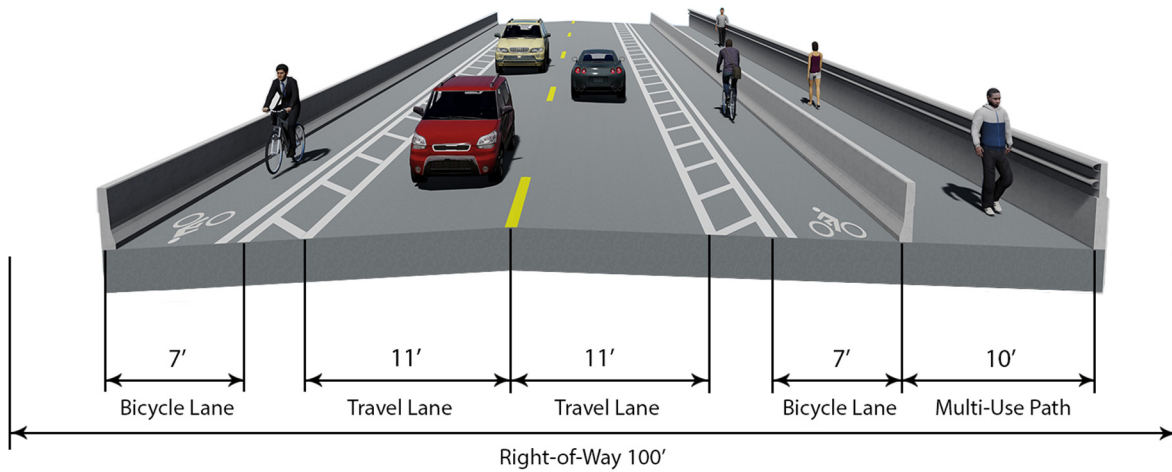
The proposed project involves the construction of a new two-lane roadway from SW 43rd Street/Clark Butler Boulevard to the southern terminus of SW 52nd Street, a length of 0.81 miles. The proposed project would consist of two 11-foot travel lanes, a 7-foot bicycles lane in each direction and a 10-foot multi-use path on the east side (see **Figure 1-3**).

Figure 1-3: Proposed Roadway Typical Section



The proposed project would also include a bridge over Hogtown Creek. The proposed bridge typical section would consist of two 11-foot travel lanes, a 7-foot bicycle lane (in each direction) and a 10-foot multi-use path (on the east side) separated by a 36" single slope traffic railing.

Figure 1-4: Proposed Hogtown Creek Bridge Typical Section



SECTION 1 –PROJECT SUMMARY

The proposed project would also include two new stormwater ponds to meet water quality and attenuation requirements. Additional right-of-way (ROW) would be required to construct the project.

2.0 EXISTING CONDITIONS

2.1 Typical Sections

The SW 62nd Boulevard Extension would be a new roadway facility.

2.2 Right-of-Way

The SW 62nd Boulevard Extension would be a new roadway and ROW would be acquired for construction.

2.3 Roadway Classification

The SW 62nd Boulevard Extension would be a new roadway facility.

2.4 Adjacent Land Use

The existing land use around the proposed project consists primarily of medium/high density residential, conservation lands, planned development and business industrial. See **Figure 2-1** for the existing land use map.

2.5 Pedestrian Accommodations

The proposed SW 62nd Boulevard Extension would be a new roadway facility. Currently, sidewalks exist along both sides of Clark Butler Boulevard and also along the northbound lane of SW 52nd Street.

2.6 Bicycle Facilities

The SW 62nd Boulevard Extension would be a new roadway facility. Currently, bicycle lanes exist along both sides of Clark Butler Boulevard and SW 52nd Street.

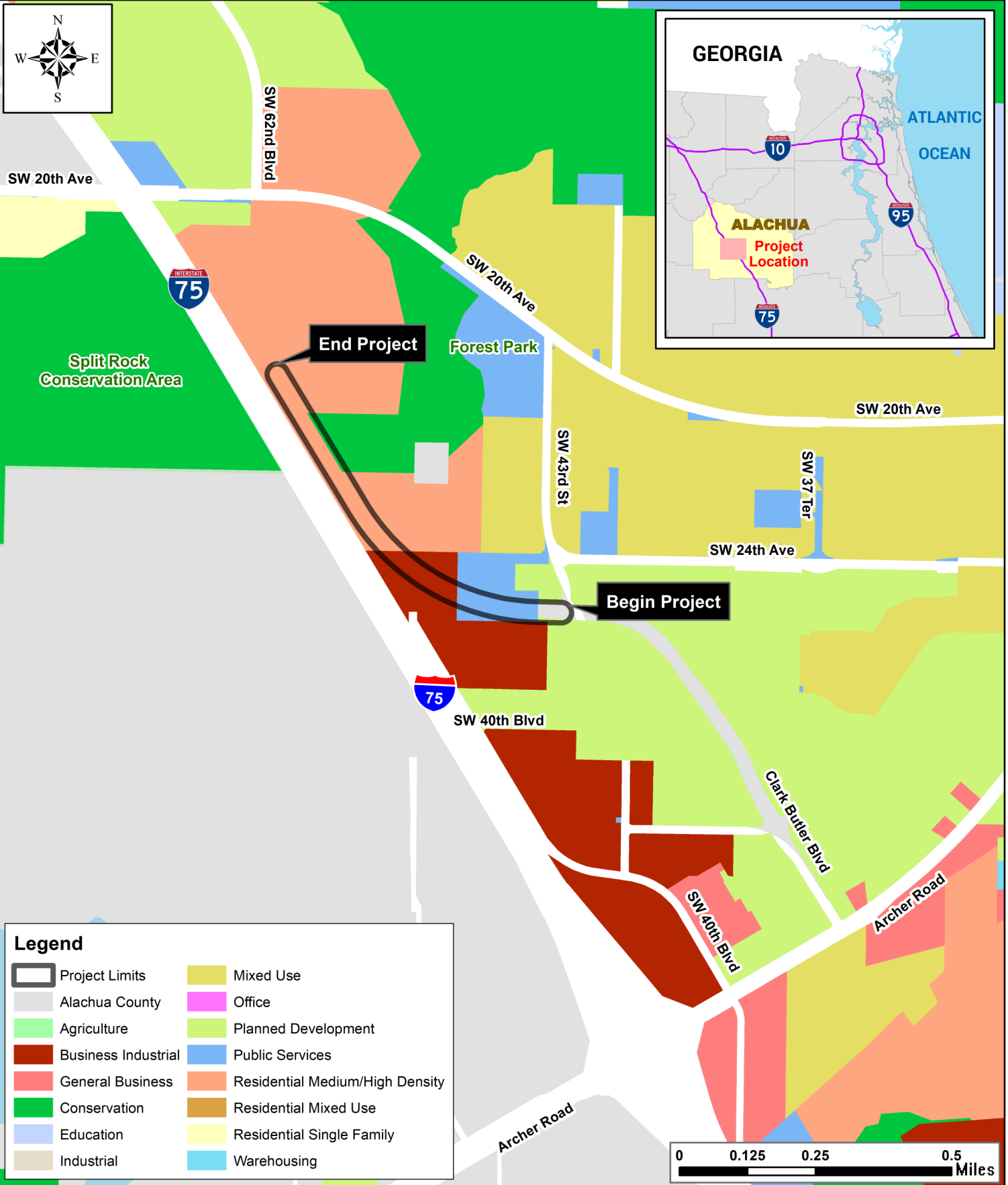
2.7 Intersection Layout and Traffic Control

The SW 62nd Boulevard Extension would be a new roadway facility. There are two major intersections at the north and south ends of the proposed project.

At the north end of the project is the SW 62nd Boulevard and SW 20th Avenue intersection. This is a signal controlled intersection and the intersection geometry is shown in **Figure 2-2**.

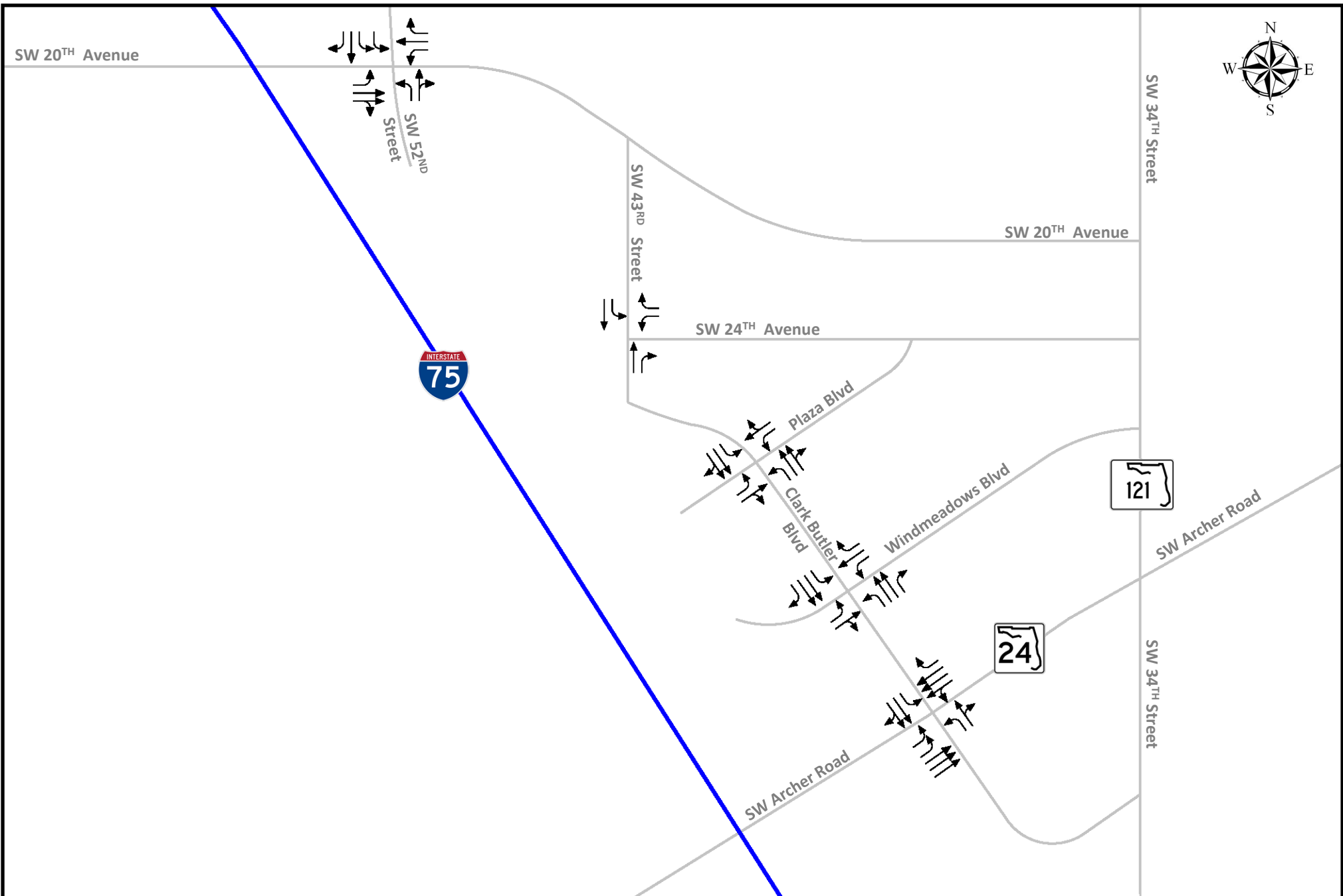
At the south end of the project is the SW 43rd Street/Clark Butler Boulevard intersection. This is also a signal controlled intersection and the intersection geometry is shown in **Figure 2-2**.

South of SW 43rd Street, the proposed SW 62nd Boulevard Extension would connect to Clark Butler Boulevard which intersects with Plaza Boulevard, Windmeadows Boulevard, and SW Archer Road (SR 24). All intersections are signal controlled and their intersection geometry is shown in **Figure 2-2**.



SW 62nd Blvd from SW 43rd
 Street/Clark Butler Blvd to
 SW 52nd Street

Figure 2-1
 Existing Land Use Map



SW 62nd Blvd PD&E Study
 Alachua County, Florida
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Intersection Geometry

Figure 2-2

2.8 Design and Posted Speeds

The current posted speed on SW 52nd Street is 35 MPH and the posted speed on Clark Butler Boulevard is 30 MPH.

2.9 Railroad Crossings

There are no railroad crossings within the study area.

2.10 Drainage System

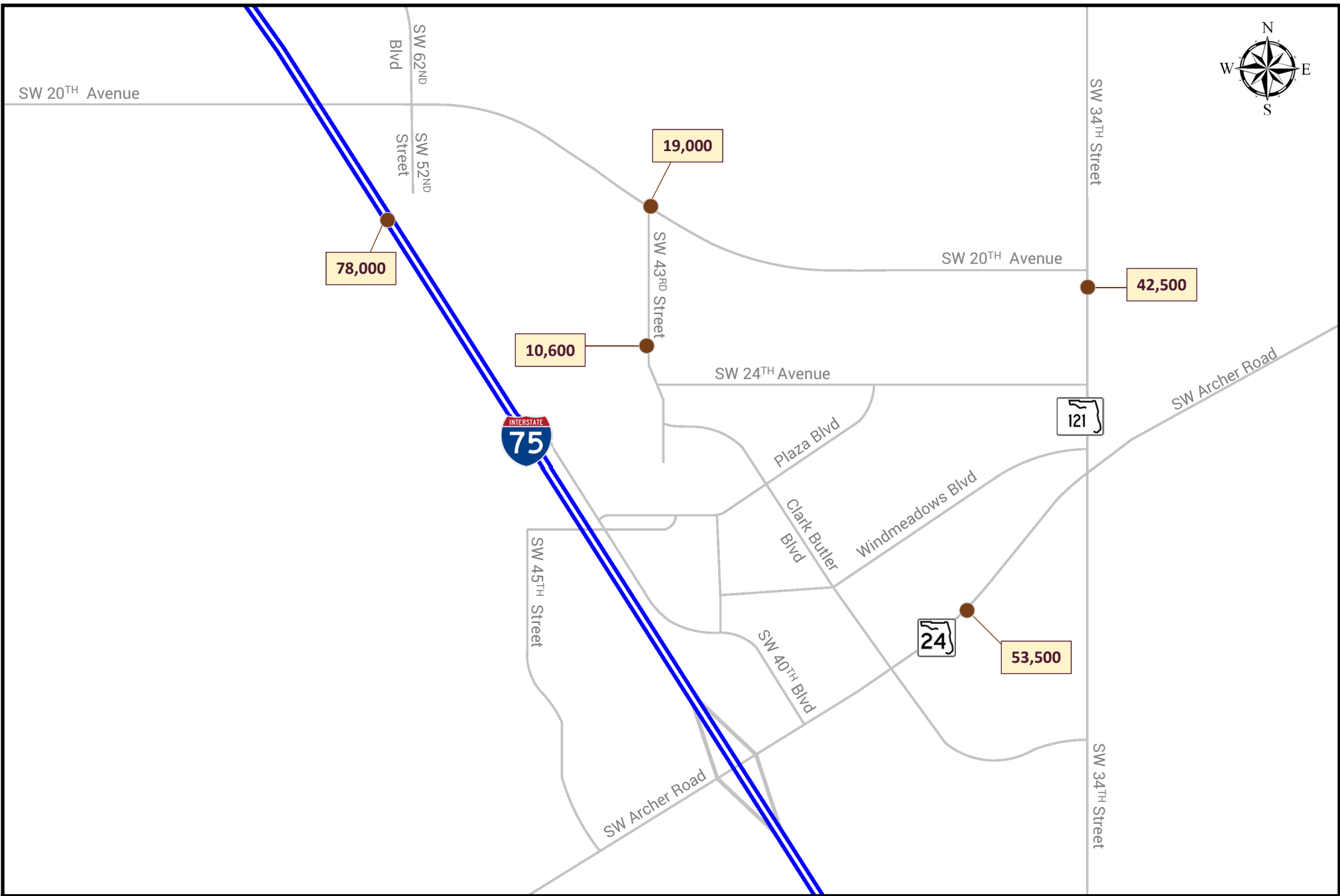
The existing drainage patterns within the study area consists of predominately overland flow draining into Hogtown Creek. The drainage basin of Hogtown Creek accepts runoff from the majority of northwest Gainesville and a portion of the extreme northeast Gainesville urban area. With the headwaters of the Hogtown Creek drainage basin starting in northeast Gainesville, Hogtown Creek drains to Sugarfoot Prairie located north of SW 20th Avenue. From Sugarfoot Prairie, Hogtown Creek flows south under an existing 150-foot bridge at SW 20th Avenue into the Hogtown Prairie Reach drainage basin. South of SW 20th Avenue, Hogtown Creek passes under existing dual 150-foot bridges at I-75. From I-75, Hogtown Creek flows through the Kanapaha Prairie and terminates into Haile Sink. The drainage basin exhibits hydrogeologic characteristics associated with karst topography. Hogtown Creek basin is a closed drainage basin that is hydraulically connected to the underlying confined aquifer via Haile Sink.

Within the project limits, existing roadways provide drainage by means of curb and gutters along with inlets and pipes. These drainage structures collect and convey runoff to treatment systems within the Hogtown Creek basin.

The proposed project is located within the Hogtown Creek Drainage Basin which is within the Ocklawaha Planning Unit. Hogtown Creek was previously identified by the US Environmental Protection Agency and the Florida Department of Environmental Protection as an Impaired Water Body (IWB # 2698; Group 1) for dissolved oxygen (due to high nutrients) and fecal coliform. Hogtown Creek has since been delisted as of the January 27, 2014 assessment. This project is within the Alachua Sensitive Karst Area Basin, as identified in Chapter 40C-41, F.A.C. No additional water quality treatment is required for projects within this area, but the treatment system design must comply with more stringent criteria to preclude the formation of solution pipe sinkholes and other potential problems associated with karst features.

2.11 Traffic Volumes and Characteristics

Existing and projected traffic volumes along with traffic characteristics are documented in the *Project Traffic Analysis Report*, available under a separate cover. The 2015 Annual Average Daily Traffic (AADT) on the roadway adjacent to the proposed project is presented in **Figure 2-3**.



SW 62nd Blvd PD&E Study
 Alachua County, Florida
 FM Number: 211365-6

2015 Annual Average Daily Traffic

Figure 2-3

2.12 Utilities

Based on a Sunshine State One Call, the existing utility owners in **Table 2-1** were identified as being located within the study area.

Gainesville Regional Utilities (GRU) maintains an easement for overhead electric transmission lines adjacent to I-75 that will abut the proposed right-of-way for this project near Hogtown Creek bridge. The easement width varies from 15-ft near SW 40th Boulevard to 100-ft south of SW 20th Avenue.

Table 2-1: Existing Utility Agencies/Owners		
Utility Agency/Owner	Facilities	Contact Information
AT&T/Distribution	Telephone	Dino Farruggio (561) 997-0240
City of Gainesville Public Works	Electric and Stormwater	James Roberts (352) 393-8153
Cox Cable	Cable TV	Larry Taylor (850) 857-4559
Gainesville Regional Utilities Sewer	Sewer	Tony Smith (352) 393-6484
Gainesville Regional Utilities Fiber	Fiber	Michael Chappell (352) 393-6923
Gainesville Regional Gas	Gas	Philip Lancaster (352) 393-6078
Gainesville Regional Utilities	Electric	Yosef Yariv (352) 393-1542
Gainesville Regional Utilities	Water and Sewer	Tony Smith (352) 393-6484

2.13 Soils and Geotechnical Data

The United States Department of Agriculture (USDA) National Resources Conservation Service (NRCS) Soil Survey of Gainesville was consulted for soils information within the project corridor.

Major soils within the study area are listed in **Table 2-2**.

SECTION 2 – EXISTING CONDITIONS

Table 2-2: Soil Data	
Soil Name	Hydrologic Group
Candler fine sand	A
Arredondo fine sand	A
Arredondo Urban land complex	A
Apopka Sand	A
Kanapaha sand	A/D
Millhopper sand	A
Millhopper Urban land complex	A
Pomona sand	A/D
Pompano sand	A/D
Wauchula Urban land complex	C/D
Monteocha loamy sand	A/D
Tavares sand	A
Samsula muck	A/D
Urban land	Unranked
Lochloosa fine sand	A
Kendrick sand	B
Bivans sand	C/D
Zolfo sand	A
Pits and Dumps	Unranked
Bonneau fine sand	C
Blichton-Urban land complex	C/D
Norfolk loamy fine sand	B

Hydrologic Group Legend

Group A – High Infiltration Rate (low runoff potential) when thoroughly wet

Group B – Moderate Infiltration Rate when thoroughly wet

Group C – Soils having a slow infiltration rate when thoroughly wet

Group D – Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

3.0 PLANNING PHASE/CORRIDOR ANALYSIS

The 2040 Long Range Transportation Plan (LRTP) produced by the Gainesville Metropolitan Planning Organization (MTPO) served as the initial planning phase for this project. The proposed project is consistent with the 2040 Gainesville LRTP (approved October 5, 2015).

4.0 ALTERNATIVES ANALYSIS

4.1 No-Build Alternative

The No-Build Alternative is being considered for this PD&E study and serves as the baseline for comparison against other alternatives.

The No-Build Alternative would leave a 0.8-mile gap between Clark Butler Boulevard and the southern terminus of SW 52nd Street and not connect the two roadways. Residents living along SW 20th Avenue would continue to be forced to seek alternative routes such as SW 43rd Street, SW 38th Terrace or SW 34th Street to access commercial development in the Butler Plaza complex. A potential one-mile trip could take as much 3.25 miles to reach the same destination.

4.2 Transportation System Management and Operations Alternative

The Federal Highway Administration (FHWA) defines Transportation Systems Management and Operations (TSM&O) as "*an integrated program to optimize the performance of existing multimodal infrastructure through implementation of systems, services, and projects to preserve capacity and improve the security, safety, and reliability of our transportation system.*" The TSM&O alternative seeks to optimize the efficiency of the current transportation systems by implementing low-cost strategies such as:

- Adding turning and auxiliary lanes and converting High Occupancy Vehicle (HOV) lanes to reversible lanes
- Optimizing traffic signals (improves overall operation), including signalization coordination
- Improving interchange termini
- Milling and resurfacing to extend pavement life
- Improving roadway signage and pavement markings
- Implementing traffic management strategies
- Enhancing pedestrian facilities

As part of the prior study efforts, three recommended TSM&O improvements were constructed at three locations: at SW 20th Avenue and SW 43rd Street, SW Archer Road (SR 24) and SW 40th Boulevard, and a Smart Bus Bay on SW 20th Avenue.

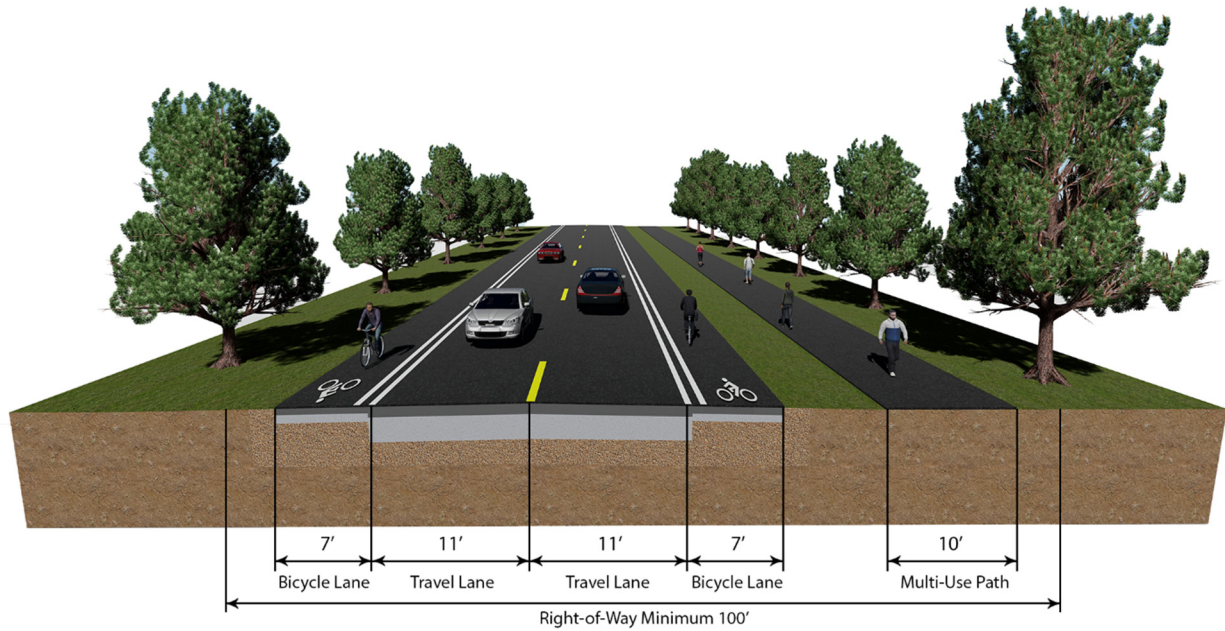
These TSM&O improvements did not fulfill the purpose and need for the project and additional TSM&O improvements would also not meet the need for the project.

4.3 Build Alternative

The Build Alternative would propose construction of a new two-lane roadway from SW 43rd Street/Clark Butler Boulevard to the southern terminus of SW 52nd Street, a length of 0.81 miles. The proposed project would consist of two 11-foot travel lanes, a 7-foot bicycles lane in each direction and a 10-foot multi-use path on the east side

The Build Alternative would include two new stormwater ponds. Additional ROW would be required to construct the Build Alternative. **Figure 4-1** shows the typical section for the Build Alternative.

Figure 4-1: Build Alternative Typical Section



4.4 Evaluation Matrix

Table 4-1 compares the ability of each alternative to meet the project purpose and need, impacts to social and natural environment, and project cost for the No-Build Alternative and the Build Alternative.

Table 4-1: Evaluation Matrix		
Criteria	No-Build Alternative	Build Alternative
General Description	No proposed construction	Construct a 2-lane roadway from Sw 43 rd Street/Clark Butler Boulevard to SW 52 nd Street
Purpose and Need Elements		
System Linkage		
System Linkage	Leaves a 0.8-mile gap between Clark Butler Boulevard and SW 52 nd Street	Connects SW 43 rd Street to the southern terminus of SW 52 nd Street.
Capacity		
Total Vehicle Miles Traveled per day (2040)	10,730,911	10,654,483
Total Vehicle Hours Traveled per day	333,784	322,235
Transportation Demand		
Consistency with LRTP	Inconsistent with 2040 LRTP	Consistent with 2040 LRTP
Impacts to Natural and Social Environment		
Social Environment		
Right-of-Way Parcels	0	9
Right-of-Way Relocations	0	2 residential relocations and no business relocations
Natural Environment		
Wetland Impacts	0	4.86 acres
Project Cost		
Design	\$ 0	\$1,104,327.17
Wetland Mitigation	\$ 0	\$607,500.00
Right-of-Way	\$ 0	\$6,250,857.00
Construction	\$ 0	\$11,043,271.70
Construction Engineering & Inspection	\$ 0	\$1,325,192.60
Total Project Cost	\$ 0	\$20,331,148.47

4.4.1 Recommended Alternative

The No-Build Alternative would not improve the system linkage within the study area by connecting Clark Butler Boulevard to the southern terminus of SW 52nd Street. The area around I-75 from Newberry Road (SR 26) and SW Archer Road (SR 24) is home to large commercial developments such the Oaks Mall and Butler Plaza Complex. The No-Build Alternative would continue to force motorists to use other congested roads such as SW 43rd Street and SW 34th

SECTION 4 – ALTERNATIVES ANALYSIS

Street to reach their destinations. A one-mile trip could take as much 3.25 miles to reach the same destination.

The No-Build Alternative is also inconsistent with the Gainesville 2040 LRTP. This plan, approved by the Gainesville MTPO on October 5, 2015 represents the MTPO's vision on how this area transportation network should develop in the next 25 years.

The Build Alternative addresses the system linkage issue by connecting Clark Butler Boulevard to the southern terminus of SW 52nd Street. This provides another north-south roadway connecting SW Archer Road (SR 24) to SW 20th Ave. Traffic analysis documented in the *Project Traffic Analysis Report* shows that the Build Alternative would reduce the vehicle miles travelled by 76,428 and vehicle hours travelled by 11,549. This means that the construction of the Build Alternative would provide a "short cut" for many motorists and therefore, the same number of trips are now being accommodated by driving less miles in less time.

The Build Alternative is also consistent with the Gainesville 2040 LRTP and is an interim improvement prior to the ultimate four-lane project.

Therefore, the Build Alternative is selected as the recommended alternative, because it is only alternative that addresses system linkage and capacity needs while being consistent with Gainesville 2040 LRTP.

5.0 RECOMMENDED ALTERNATIVE

The recommended alternative would construct a two-lane north-south roadway from Clark Butler Boulevard to the southern terminus of SW 52nd Street.

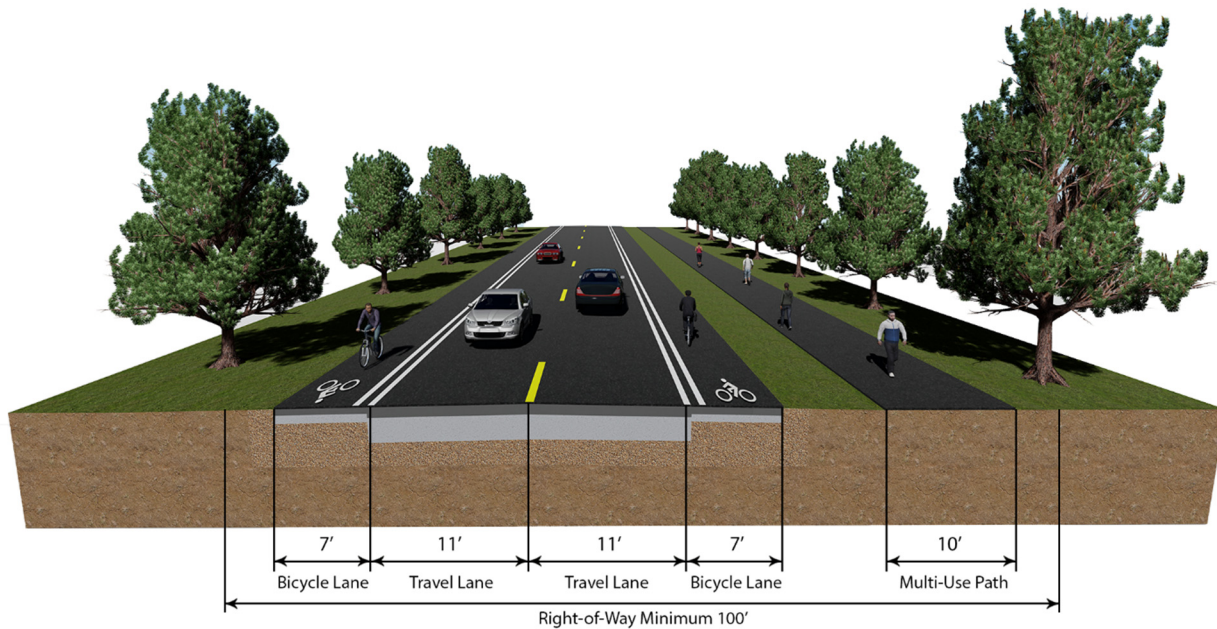
The recommended alternative would include construction of two new stormwater ponds to meet water quality and attenuation requirements. Additional ROW would be required to construct the recommended alternative.

5.1 Engineering Details of Recommended Alternative

5.1.1 Roadway

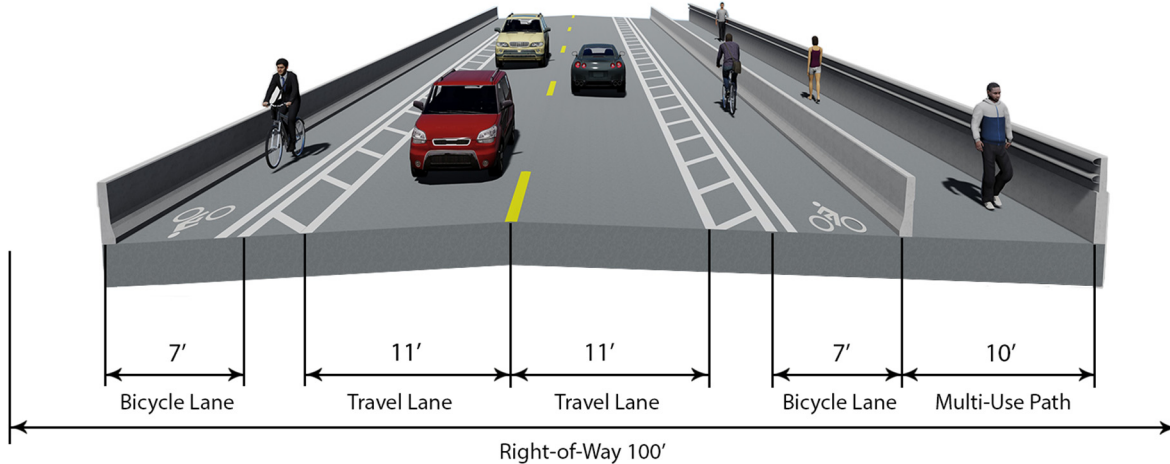
The new two-lane roadway would consist of two 11-foot travel lanes, a 7-foot buffered bicycle lane in each direction, and a 10-foot multi-use path on the east side. The recommended roadway typical section is show in **Figure 5-1**.

Figure 5-1: Recommended Roadway Typical Section



5.1.2 Bridge

The recommended alternative would also include a bridge over Hogtown Creek. The overall bridge length would be 330 feet, with an out-to-out width distance of 55 feet 8 inches. The recommended bridge typical would consist of two 11-foot travel lanes, a 7-foot bicycle lane in each direction, and a 10-foot multi-use path on the east side separated by a 36" single slope traffic railing (see **Figure 5-2**).

Figure 5-2: Recommended Hogtown Creek Bridge Typical Section

5.1.3 Horizontal and Vertical Alignment

The detailed horizontal and vertical geometry is shown in **Figure 5-3**.

5.1.4 Right-of-Way

The recommended alternative would impact 9 parcels and would require 2 residential relocations and no business relocations. Two of the impacted parcels are owned by the City of Gainesville. Impacted parcels that will require ROW acquisition are shown in **Figure 5-3**.

5.1.5 Utilities

The recommended alternative impacts an existing Gainesville Regional Utilities (GRU) easement for overhead electric transmission lines adjacent to I-75 that will abut the proposed ROW for this project. A temporary construction easement and long-term maintenance agreement would be required (see **Figure 5-3**). The City of Gainesville has been coordinating efforts to reach a long-term maintenance agreement with GRU.










5.1.6 Traffic Control Concepts

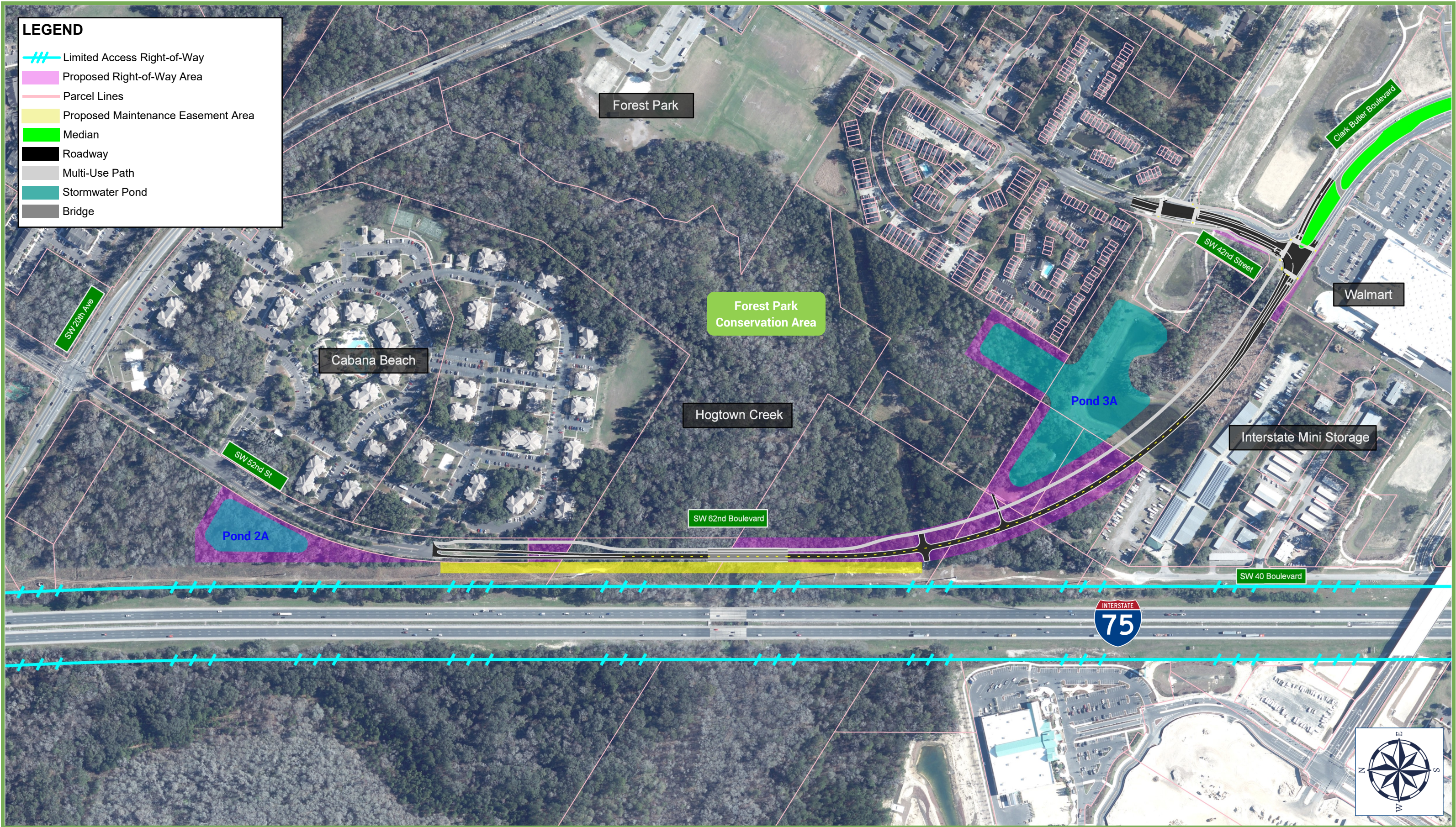
The recommended alternative would be a new roadway. Therefore, minimal traffic disruptions would be anticipated.

5.1.7 Bicycle and Pedestrian Accommodations

The recommended alternative includes 7-ft buffered bicycle lanes in both directions, and a 10-ft multi-use path along the east side of the corridor.

LEGEND

-  Limited Access Right-of-Way
-  Proposed Right-of-Way Area
-  Parcel Lines
-  Proposed Maintenance Easement Area
-  Median
-  Roadway
-  Multi-Use Path
-  Stormwater Pond
-  Bridge



SW 62nd Blvd from SW 43rd Street/Clark Butler Blvd to SW 52nd Street

Figure 5-3
Recommended Alternative

5.1.8 Access Management

The recommended alternative will be owned and maintained by the City of Gainesville. Therefore, FDOT access management rules do not apply to this roadway.

5.1.9 Preliminary Drainage

A *Pond Siting Report (PSR)* and *Water Quality Impact Evaluation (WQIE) Checklist* were prepared to document the recommended type, design, and location of stormwater treatment and attenuation systems.

The stormwater design will be governed by the criteria of the City of Gainesville, the St. Johns River Water Management District (SJRWMD) and the FDOT. Hogtown Creek is considered a closed lake basin and is classified as Class III waters by the SJRWMD.

The required treatment volume is the greater of either one inch of runoff over the drainage area or 2.5 inches times the impervious area (excluding water bodies). Wet detention ponds shall recover one-half of the applicable treatment volume within 24-30 hours following the storm event.

Two new stormwater ponds are recommended to meet water quality and attenuation requirements. Pond 2A (see **Figure 5-3**) will utilize the existing pond owned and maintained by the City of Gainesville that provides treatment and attenuation for SW 24th Avenue Project. This pond was originally designed as a dry retention pond, however, due to the clay soils found in the area, the pond currently functions as a wet pond. The existing pond will be expanded to the north and is proposed as a wet detention pond.

Pond 3A (see **Figure 5-3**) is proposed as a dry retention pond. Pond 3A is located on the west side of SW 52nd Street and will provide compensating treatment and attenuation volume for the impacted existing pond.

Pond sizing calculations and supporting drainage information is documented in the *Pond Siting Report* available under a separate cover.

5.1.10 Floodplain Analysis

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) for Alachua County show the proposed project encroaching Zone AE (areas subject to inundation by 1% annual chance flood) with a base flood elevation of 61ft NAVD (see **Figure 5-4**).

The proposed project would impact 2.53 acres of floodplains. The bridge over Hogtown Creek has been hydraulically designed to achieve a no-rise (or net impact) to flood elevation. The no-rise model was accepted by SJRWMD and therefore, no compensatory ponds are required.

5.1.11 Cost Estimate

The construction cost estimate was developed using the FDOT Long Range Estimate (LRE) system. The Design cost and Construction Engineering & Inspection (CEI) cost was estimated to be 10%

SECTION 5 – RECOMMENDED ALTERNATIVE

and 12% of the construction cost estimate, respectively. Wetland Mitigation was estimated at \$125,000 per acre.

The total cost of the project is 20.3 million (see **Table 5-1**).

Phase	2 Lane Alternative
Design	\$1,104,327.17
Wetland Mitigation	\$607,500.00
ROW	\$6,250,857.00
Construction	\$11,043,271.70
CEI	\$1,325,192.60
Total	\$20,331,148.47

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **Floodways** have been determined, users are encouraged to consult the Flood Profiles, Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.7 North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **Floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 17. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NGA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3391

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quads (DOQs) produced at a scale of 1:12,000 from photography dated 1994 or later.

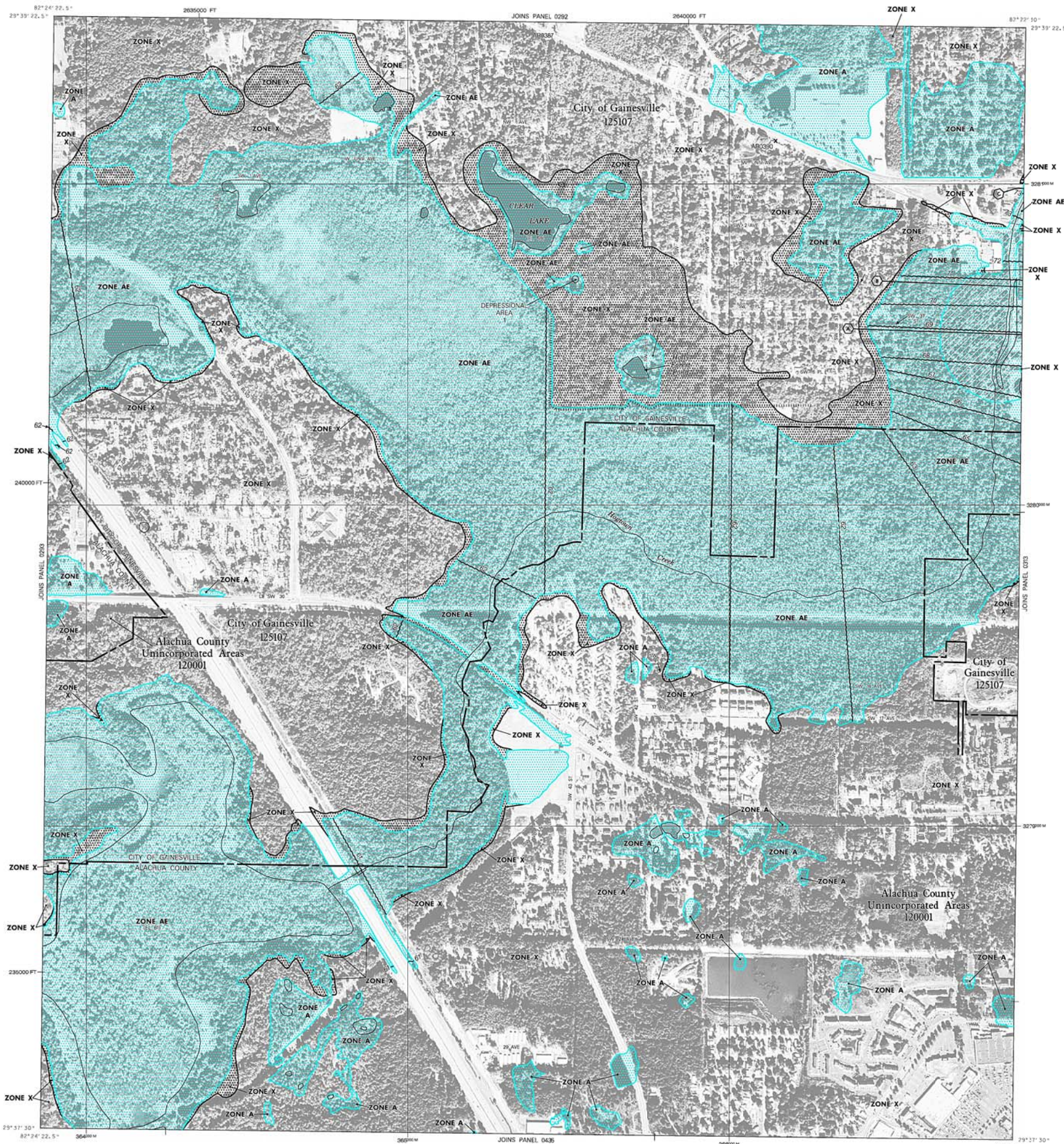
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limits locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-368-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-368-9620 and their website at www.fema.gov/msc.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA website at www.fema.gov.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, APF, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently identified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE APF Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
0.2% annual chance floodplain boundary
Floodway boundary
Zone D boundary
CBRS and OPA boundary
Boundary dividing Special Flood Hazard Areas Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
Base Flood Elevation line and value; elevation in feet*
(EEL 0827)
*Referenced to the North American Vertical Datum of 1988

— A — A — Cross section line
— 22 — 22 — Transect line
91°07'30", 32°22'30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4279990M 1000-meter Universal Transverse Mercator grid values, zone 17
600000 FT 5000-foot grid ticks; Florida State Plane coordinate system, north zone (FIPSZONE 903), Lambert Conformal Conic projection
DX5510 X Bench mark (see explanation in Notes to Users section of this FIRM panel)
●M1.5 River Mile
MAP REPOSITORY Refer to listing of Map Repositories on Map Index
EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP JUNE 16, 2006
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-618-6620.

MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS

FIGURE 5-4 - FLOOD INSURANCE RATE MAP

NFIP PANEL 0294D

FIRM FLOOD INSURANCE RATE MAP
ALACHUA COUNTY, FLORIDA AND INCORPORATED AREAS

PANEL 294 OF 640
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:	COMMUNITY	NUMBER	PANEL	SUFFIX
	ALACHUA COUNTY	120001	0294	D
	GAINESVILLE CITY OF	125107	0294	D

Notice to User: The **Map Number** shown below should be used when placing map orders. The **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER 12001C0294D
EFFECTIVE DATE JUNE 16, 2006

Federal Emergency Management Agency

5.2 Environmental Impacts

5.2.1 Noise

An assessment of noise impacts was conducted for this project and is documented in the Noise Study Report (February 2018) available at the FDOT District Office located at 1109 South Marion Avenue, Lake City, Florida 32025.

A total of 97 noise-sensitive sites in the Hailey Gardens, Southfork Oaks and Cabana Beach development were identified. The majority of the sites fall within FHWA Noise Abatement Category (NAC) Activity Category B - residential land use.

At Hailey Gardens, the proposed project will increase noise levels an average of 1.2 dB(A) over existing conditions, but none of the condominiums exceed the 66 dB(A) threshold for Category B land use.

At Southfork Oaks, the proposed project will increase noise levels an average of 5.2 dB(A) over existing conditions, but none of the condominiums exceed the 66 dB(A) threshold for Category B land use.

Therefore, no further noise evaluation was required for Hailey Gardens and Southfork Oaks.

At Cabana Beach, two noise barrier scenarios were evaluated to abate the traffic noise impacts for the 23 impacted Cabana Beach apartments. Neither of the two analyzed barrier scenarios can achieve both the 7.0 dB(A) noise reduction design goal and be constructed within the \$42,000 cost per benefited receptor guideline. Consequently, noise abatement for these impacts is not considered reasonable.

5.2.2 Air

The project is located in Alachua County which is an attainment area for all six criteria pollutants. Therefore, Alachua County meets all National Ambient Quality Standards (NAAQS) in accordance with the Clean Air Act.

5.2.3 Section 4(f)

Section 4(f) refers to the Department of Transportation Act of 1966, which stipulates that the FDOT cannot approve the use of land from publicly owned parks, recreation areas, wildlife and waterfowl refuges, or public and private historic sites unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land
- The action includes all possible planning to minimize harm to the property resulting from use.

The proposed project is located adjacent to the Forest Park Conservation Area. The Forest Park Conservation Area is identified as a conservation property and was acquired with funds from the

SECTION 5 – RECOMMENDED ALTERNATIVE

Florida Communities Trust by the City of Gainesville. The Forest Park Conservation Area is also identified as a section of the Hogtown Creek Greenway which was established by the City of Gainesville to be a linear open space system envisioned as a network of trails for hiking, biking, and canoeing that linked neighborhoods to parks and places for shopping and employment. Therefore, the Forest Park Conservation Area meets the criteria for a “Public Parks and Recreation Areas” Section 4(f) protected resource.

While the proposed project is located adjacent to the Forest Park Conservation Park, there would be no impacts. The proposed project would not require any permanent or temporary acquisition of land, no change to access, and no proximity impacts that rise to the level of substantial impairment to the protected resource.

A Section 4(f) No Use Determination Form was completed and approved by the FDOT Office of Environmental Management on January 30, 2018 and is included in **Appendix B**.

5.2.4 Wetlands

A Natural Resources Evaluation (NRE) Report was prepared to identify, map and evaluate jurisdictional wetlands within both the corridor and proposed pond sites, and to briefly assess the function and value of each wetland area. The NRE was prepared in accordance with Executive Order 11990, Protection of Wetlands, and FDOT PD&E Manual Part 2 Chapter 9, Wetlands and Other Surface Waters (2017).

The area within the project ROW plus the additional ROW required for the proposed stormwater ponds was assessed for the presence of wetlands, and a functional analysis of those wetlands was performed. The functional value of the wetlands was evaluated using the Uniform Mitigation Assessment Methodology (UMAM), which determines the amount of mitigation required to offset impacts to wetlands and other surface waters.

The proposed project would impact approximately 4.86 acres of wetlands. The initial PD&E study (2007-2012) evaluated numerous alternatives to first avoid and then minimize wetland impacts. The proposed project would tie into existing roadways to minimize wetland impacts. However, a new crossing over Hogtown Creek is required to extend SW 62nd Boulevard; therefore, there is no practicable alternative to construction in the wetlands.

A coordination meeting with SJRWMD was held on November 8, 2017 to review wetland impacts. Wetland impacts which would result from the construction of this project would be mitigated pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 33 U.S.C. §1344.

The project is located in the Northern Ocklawaha River Basin of the SJRWMD. However, there are no approved mitigation banks available within the basin. Various strategies will be considered during permitting to fulfill mitigation needs for all wetland impacts resulting from the construction

of the proposed project, including the use of approved mitigation banks or restoration, enhancement, preservation, and/or creation of wetlands, either on or off-site. In addition to on-site mitigation options (such as restoration, enhancement, or creation), mitigation within the SJRWMD Orange Creek Mitigation Bank using Senate Bill 1986 funds may be considered during project design and permitting. Any mitigation proposed will be completed in compliance with, and to the satisfaction of all state and federal regulatory requirements.

5.2.5 Contamination Sites

A *Level 1 Contamination Screening Technical Memorandum* (CSTM) was prepared for this project to identify and evaluate known or potential contamination problems.

No known contamination sites were identified during the screening review. Archer Road Automotive, a former conditional exempt small quantity generator (EPA ID FLD984241190) was identified approximately 500 feet south of the proposed alignment. The site is currently Billy's Auto Repair and Towing and no spills or releases of hazardous materials have been reported at this location. No other sites of concern were identified within 2,000 feet of the project corridor.

5.2.6 Cultural Resources

A number of Cultural Resource Assessment Surveys (CRAS) have been conducted to locate, identify and bound archaeological resources, historic structures and potential districts within the project's Area of Potential Effect (APE) and assess their potential for listing in the National Register of Historic Places (NRHP).

September 2009: A CRAS was conducted in support of proposed alignments for a four-lane connector (including SW 62nd Boulevard) from SW Archer Road (SR 24) to Newberry Road (SR 26). The survey documented nine archaeological sites, two archaeological occurrences, four historic structures, a historic road, and a historic railroad corridor within the project APE. Only one archaeological site (8AL4800) within the project APE had been previously determined eligible for listing the NRHP. Large portions of the overall site had been subject to extensive and destructive looting activities. Therefore, Phase II investigations were recommended for the portion of 8AL4800 within the project ROW to determine if intact portions of the site existed within the project's APE. The State Historic Preservation Officer (SHPO) concurred with these findings on March 13, 2009.

March 2012: A Phase II investigation at archaeological site (8AL4800) was completed that tested the portion of the site within the proposed ROW for the project. The investigation recommended that the portion of the site within the proposed ROW lacked diagnostic criteria, had poor integrity, and diminished ability to contribute to understanding of the site or region (Criterion D, National Register eligibility). On September 27, 2012, the Federal Highway Administration agreed that while 8AL4800 overall remained eligible for the NRHP, the portion of the site within the project ROW had lost integrity to such a degree that no further archaeological work was needed. SHPO concurred with this finding on October 11, 2012.

September 2016: The CRAS was updated in September 2016 to address proposed ROW associated with an interim improvement alternative and to survey ROW not covered in 2009 (approximately SW 43rd Street to SW 52nd Street). One new archaeological site was recorded (8AL05736), but was determined ineligible for the NRHP. No new architectural historic resources were recorded. The CRAS recommended that the proposed interim alternative would have no effect on cultural resources listed or eligible for listing in the NRHP. SHPO concurred with these findings on October 10, 2016.

The proposed project alignment matches the APE for the four-lane interim project surveyed in the CRAS addendum from September 2016. No further cultural resource survey is recommended.

5.2.7 Recreation Areas

Two recreation areas adjacent to the proposed project were identified. The first recreation area is Forest Park, a county park, located at the southwest corner of SW 20th Avenue/SW 43rd Street intersection. This recreation area is approximately 0.5 miles away from the proposed project and would not be impacted.

The second recreation area is the Forest Park Conservation Area and is located adjacent to the proposed project. This area is identified as a conservation property and established by the City of Gainesville to be a linear open space system envisioned as a network of trails for hiking, biking, and canoeing. The proposed project would also not impact the Forest Park Conservation Area.

5.2.8 Threatened and Endangered Species

A NRE was prepared to document any potential impacts to wildlife and habitat resources, including state and federal species, in accordance with Section 7 of the Endangered Species Act (ESA, 1973), as amended, Preservation of Native Flora of Florida (Chapter 5B-40, F.A.C.), Rules Relating to Endangered or Threatened Species (Chapter 68A-27, F.A.C.), and FDOT PD&E Manual Part 2, Chapter 16: *Protected Species and Habitat* (June 2017).

Federally and state listed species potentially occurring within the project area were identified through literature reviews, agency databases, agency coordination, and field surveys of potential habitat areas (see **Table 5-2**).

Table 5-2: Potential Federal & State Listed Species within Project Area

Scientific Name	Common Name	Status*	Preferred Habitat	Habitat Present	Probability of Occurrence
Plants					
<i>Brickellia cordifolia</i>	Flyr's brickell-bush	SE	Dry, upland pine-oak woods	Yes	Low
<i>Forestiera godfreyi</i>	Godfrey's Swamp privet	SE	Calcareous hammocks	Yes	High
<i>Gonolobus suberosus</i>	Angle pod	ST	Upland to floodplain hardwood forests	Yes	Moderate
<i>Lobelia cardinalis</i>	Cardinal flower	ST	Floodplain forests	Yes	High
<i>Matelea floridana</i>	Florida spiny-pod	SE	Upland hardwood Forests	Yes	Moderate
<i>Monotropa hypopithys</i>	Pinesap	SE	Mesic hammocks	Yes	Moderate
<i>Najas filifolia</i>	Narrowleaf naiad	ST	Fresh water ponds and Creeks	Yes	Low
<i>Triphora trianthophora</i>	Three-birds orchid	ST	Moist hardwood Hammocks	Yes	Low
Reptiles					
<i>Drymarchon corais couperi</i>	Eastern indigo snake	FT	Various natural habitats; linked to xeric habitats and gopher tortoise burrows	Yes	Moderate
<i>Gopherus polyphemus</i>	Gopher tortoise	C/ST	Sandhill, scrub, flatwoods, ruderal areas	Yes	Moderate
<i>Pituophis melanoleucus mugitus</i>	Florida pine snake	ST	Well-drained sandy soils with moderate to open canopy	Yes	Low
Birds					
<i>Egretta caerulea</i>	Little blue heron	ST	Swamps, estuaries, ponds, lakes, and rivers	Yes	High
<i>Egretta tricolor</i>	Tricolored heron	ST	Fresh and saltwater marshes, estuaries, mangrove swamps, lagoons, and river deltas	Yes	High
<i>Falco sparverius paulus</i>	Southeastern American kestrel	ST	Open pine habitats, woodland edges, prairies, and pastures	Yes	Low
<i>Mycteria americana</i>	Wood stork	FT	Freshwater and wetlands; estuaries	Yes	High

*Status: C = Candidate for Federal listing; FT = Federally Threatened; SE = State Endangered; ST = State Threatened

The project may affect, but is not likely to adversely affect the federally-listed eastern indigo snake and the wood stork. No adverse effect is anticipated for the following state-listed species: Flyr's brickell-bush, Godfrey's swamp privet, angle pod, cardinal flower, Florida spiny-pod, pinesap, narrowleaf naiad, three-birds orchid, gopher tortoise, Florida pine snake, little blue heron, tricolored heron and southeastern American kestrel.

SECTION 5 – RECOMMENDED ALTERNATIVE

To protect eastern indigo snakes which may be present within the project area, the U.S. Fish and Wildlife Service (USFWS) *Standard Protection Measures for the Eastern Indigo Snake* will be *implemented* during site preparation and project construction.

Therefore, the proposed project is expected to have no significant impacts on the protected species and habitat.

6.0 PUBLIC INVOLVEMENT & PROJECT COORDINATION

6.1 Efficient Transportation Decision Making (ETDM)

The project was entered into the Environmental Screening Tool (EST) and was released for Environmental Technical Advisory Team (ETAT) review on October 20, 2017, as *ETDM Project #14336*, SW 62nd Boulevard from SW 52nd Street to SW 43rd Street. A 45-day review period was provided and ended on December 14, 2017. A Final Programming Summary Report was published on February 13, 2018.

As shown in the **Figure 6-1**, the degree of effect varied from no involvement to moderate.

Based on the GIS buffer analysis, a moderate degree of effect was assigned to: Social, Historic and Archaeological Sites, Wetlands and Surface Waters, Water Quality and Quantity, Floodplains and Wildlife and Habitat.

SECTION 6 – PUBLIC INVOLVEMENT & PROJECT COORDINATION

Figure 6-1: ETDM Summary of Impacts

#14336 SW 62nd Boulevard from SW 52nd Street to SW 43rd Street

District: District 2

County: Alachua

Planning Organization: FDOT District 2

Plan ID: Not Available

Federal Involvement: FHWA Funding Other Federal Permit

LAP Agency: City of Gainesville

Agency Completing NEPA Document: FDOT

Phase: Programming Screen

From: SW 52nd Street

To: SW 43rd Street

Financial Management No.: 211365-6-22-01

Contact Information: Stephen Browning (386) 961-7455 stephen.browning@dot.state.fl.us

Snapshot Data From: Programming Screen Summary Report Re-published on 02/13/2018 by Wendy Lasher
Issues and Categories are reflective of what was in place at the time of the screening event.

	Social and Economic						Cultural			Natural				Physical							
	Land Use Changes	Social	Relocation Potential	Farmlands	Aesthetic Effects	Economic	Mobility	Section 4(f) Potential	Historic and Archaeological Sites	Recreation Areas	Wetlands and Surface Waters	Water Quality and Quantity	Floodplains	Wildlife and Habitat	Coastal and Marine	Noise	Air Quality	Contamination	Infrastructure	Navigation	Special Designations
Alternative #1 - SW 62nd Boulevard From: SW 52nd Street To: SW 43rd Street Re-Published: 02/13/2018 Reviewed from 10/30/2017 to 12/14/2017	2	3	2	N/A	2	1	1	0	3	0	3	3	3	3	N/A	2	2	2	2	N/A	2

Degree of Effect Legend

Color Code	Meaning	ETAT	Public Involvement
N/A	Not Applicable / No Involvement	There is no presence of the issue in relationship to the project, or the issue is irrelevant in relationship to the proposed transportation action.	There is no community opposition to the planned project. No adverse effect on the community.
0	None (after 12/5/2005)	The issue is present, but the project will have no impact on the issue; project has no adverse effect on ETAT resources; permit issuance or consultation involves routine interaction with the agency. The <i>None</i> degree of effect is new as of 12/5/2005.	No community opposition to the planned project. Minimum adverse effect on the community.
1	Enhanced	Project has positive effect on the ETAT resource or can reverse a previous adverse effect leading to environmental improvement.	Affected community supports the proposed project. Project has positive effect.
2	Minimal	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
2	Minimal to None (assigned prior to 12/5/2005)	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
3	Moderate	Agency resources are affected by the proposed project, but avoidance and minimization options are available and can be addressed during development with a moderated amount of agency involvement and moderate cost impact.	Project has adverse effect on elements of the affected community. Public Involvement is needed to seek alternatives more acceptable to the community. Moderate community interaction will be required during project development.
4	Substantial	The project has substantial adverse effects but ETAT understands the project need and will be able to seek avoidance and minimization or mitigation options during project development. Substantial interaction will be required during project development and permitting.	Project has substantial adverse effects on the community and faces substantial community opposition. Intensive community interaction with focused Public Involvement will be required during project development to address community concerns.
5	Potential Dispute (Planning Screen)	Project may not conform to agency statutory requirements and may not be permitted. Project modification or evaluation of alternatives is required before advancing to the LRTP Programming Screen.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
5	Dispute Resolution (Programming Screen)	Project does not conform to agency statutory requirements and will not be permitted. Dispute resolution is required before the project proceeds to programming.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
	No ETAT Consensus	ETAT members from different agencies assigned a different degree of effect to this project, and the ETDM coordinator has not assigned a summary degree of effect.	
	No ETAT Reviews	No ETAT members have reviewed the corresponding issue for this project, and the ETDM coordinator has not assigned a summary degree of effect.	

6.2 Public Involvement

A comprehensive Public Involvement Program was initiated for this project. This program is in compliance with the *FDOT PD&E Manual*, Section 339.155, Florida Statutes; Executive Orders 11990 and 11988; Council on Environmental Quality Regulations for implementing the procedural provisions of the National Environmental Policy Act; and 23 Code of Federal Regulations (CFR) 771.

Public involvement for the project included public meetings, a project website and a public hearing.

6.2.1 Project Website

A project website, “www.gainesvillepublicworks.org/sw-62nd-blvdst” was set up to provide project information, meeting times and dates.

6.2.2 Public Meetings

The PD&E study for the SW 62nd Boulevard Extension was initially started in 2007 by the City of Gainesville to fulfill a requirement of the SAFETEA-LU legislation. As part of the PD&E study, several alternative corridors were developed to provide a north-south corridor between SW 20th Avenue and SW Archer Road (SR 24). Several public meetings were held where adjacent property owners and interested stakeholders were able to review concepts and provide input. These included:

- Corridor Alternatives Public Meeting held on November 29, 2007
- Alternatives Public Meeting held on October 17, 2008

6.2.3 Public Hearing

To be completed after the Public Hearing.

APPENDIX A

LRE Cost Estimates

Date: 1/24/2018 10:58:50 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 211365-6-32-01

Letting Date: 01/2099

Description: SW 62nd Blvd Connector

District: 02 County: 26 ALACHUA

Market Area: 06 Units: English

Contract Class: Lump Sum Project: N

Design/Build: N Project Length: 0.900 MI

Project Manager:

Version 9 Project Grand Total

\$11,043,271.70

Description: Modified Option B, No walls, horizontal shift

Sequence: 1 NDU - New Construction, Divided, Urban

Net Length: 0.042 MI
220 LF

Description: 62nd Blvd Urban section north of bridge

Special Includes drainage basins for entire project.

Conditions:

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	100.00 / 100.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.056
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.02	AC	\$10,000.00	\$10,200.00
120-6	EMBANKMENT	1,573.89	CY	\$12.00	\$18,886.68
Earthwork Component Total					\$29,086.68

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	16.00 / 16.00
Structural Spread Rate	165
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,035.32	SY	\$5.22	\$5,404.37
285-706	OPTIONAL BASE,BASE GROUP 06	782.85	SY	\$21.45	\$16,792.13
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	64.58	TN	\$118.36	\$7,643.69
337-7-43	ASPH CONC FC,TRAFFIC C,FC- 12.5,PG 76-22	64.58	TN	\$235.00	\$15,176.30

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	6.00	EA	\$3.94	\$23.64
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.33	GM	\$1,000.85	\$330.28

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 10.00
Bike Path Structural Spread Rate	150
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	342.50	SY	\$5.22	\$1,787.85
285-701	OPTIONAL BASE,BASE GROUP 01	244.64	SY	\$13.07	\$3,197.44
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	18.35	TN	\$175.00	\$3,211.25

Roadway Component Total

\$53,566.95

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	13.25 / 10.25
Total Outside Shoulder Perf. Turf Width L/R	11.00 / 8.00
Sidewalk Width L/R	0.00 / 0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	220.18 LF	\$20.00	\$4,403.60
520-1-10	CONCRETE CURB & GUTTER, TYPE F	220.18 LF	\$20.00	\$4,403.60
570-1-2	PERFORMANCE TURF, SOD	464.82 SY	\$2.65	\$1,231.77

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	440.35 LF	\$1.36	\$598.88
104-11	FLOATING TURBIDITY BARRIER	10.42 LF	\$9.46	\$98.57
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	10.42 LF	\$4.25	\$44.28
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$3,000.00	\$3,000.00
104-18	INLET PROTECTION SYSTEM	3.00 EA	\$97.71	\$293.13
107-1	LITTER REMOVAL	1.06 AC	\$39.03	\$41.37
107-2	MOWING	1.06 AC	\$75.83	\$80.38

Shoulder Component Total

\$14,195.59

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	15.00
Performance Turf Width	10.50

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	440.35 LF	\$29.45	\$12,968.31
570-1-2	PERFORMANCE TURF, SOD	256.87 SY	\$2.65	\$680.71
Median Component Total				\$13,649.02

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	0.75 CY	\$1,268.89	\$951.67
425-1-351	INLETS, CURB, TYPE P-5, <10'	2.00 EA	\$4,780.48	\$9,560.96
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00 EA	\$7,212.04	\$7,212.04
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00 EA	\$4,011.87	\$4,011.87
425-2-41	MANHOLES, P-7, <10'	1.00 EA	\$3,872.06	\$3,872.06
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	112.00 LF	\$87.18	\$9,764.16
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00 LF	\$113.21	\$1,811.36
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	216.00 LF	\$173.12	\$37,393.92

570-1-1	PERFORMANCE TURF	12.68 SY	\$0.31	\$3.93
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Retention Basin 1

Description	Value
Size	2 AC
Multiplier	1
Depth	6.00
Description	Pond 3A is 1.87 AC. INCLUDES COMPENSATORY TREATMENT FROM SW 52ND.

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.00	AC	\$10,000.00	\$20,000.00
120-1	REGULAR EXCAVATION	19,360.00	CY	\$8.00	\$154,880.00
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	\$1,268.89	\$22,840.02
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	\$4,234.67	\$4,234.67
425-2-71	MANHOLES, J-7, <10'	3.00	EA	\$6,319.64	\$18,958.92
570-1-1	PERFORMANCE TURF	9,680.00	SY	\$0.31	\$3,000.80

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD Comment: 256-FT OF 24" PIPE. ALSO INCLUDES 850- FT OF 24" PIPE FOR COMPENSATORY TREATMENT FROM 52ND.	1,112.00	LF	\$87.18	\$96,944.16
430-982-129	MITERED END SECT, OPTIONAL RD, 24" CD Comment: FOR COMPENSATORY TREATMENT FROM 52ND.	1.00	EA	\$1,442.65	\$1,442.65

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
0110 4 10	REMOVAL OF EXISTING CONCRETE Comment: REMOVE EXISTING CURB & GUTTER	188.90	SY	\$12.50	\$2,361.25
0520-1-10	CONCRETE CURB & GUTTER, TYPE F Comment: 850-ft of C&G type F. Cost is an average between Area 6 and 6 months moving historical cost data.	850.00	LF	\$20.72	\$17,612.00
160-4	TYPE B STABILIZATION Comment: FOR 4-FT WIDE PAVEMENT REPAIR. COST PER LRE.	244.44	SY	\$5.22	\$1,275.98
285-706	OPTIONAL BASE GROUP, GROUP 06 Comment: FOR 4-FT WIDE PAVEMENT REPAIR. COST PER LRE.	244.44	SY	\$21.47	\$5,248.13
334-1-53	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG76-22 Comment: FOR 4-FT WIDE PAVEMENT REPAIR. COST PER LRE.	40.34	TN	\$117.44	\$4,737.53
337-7-43	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC C, FC-12.5,	20.17	TN	\$118.72	\$2,394.58

PG76-22, PMA

Comment: FOR 4-FT WIDE PAVEMENT REPAIR. COST PER LRE.

425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00 EA	\$7,101.50	\$7,101.50
	Comment: INLETS, CURB, TYPE J-5, <10'			

Retention Basin 2

Description	Value
Size	5 AC
Multiplier	1
Depth	6.00
Description	Pond 2A (1). Pond is 7.56 acres. This is for 5 AC

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	\$10,000.00	\$50,000.00
120-1	REGULAR EXCAVATION	48,400.00	CY	\$8.00	\$387,200.00
400-2-2	CONC CLASS II, ENDWALLS	30.00	CY	\$1,268.89	\$38,066.70
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	\$4,234.67	\$4,234.67
425-2-71	MANHOLES, J-7, <10'	2.00	EA	\$6,319.64	\$12,639.28
570-1-1	PERFORMANCE TURF	24,200.00	SY	\$0.31	\$7,502.00

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, O	456.00	LF	\$87.18	\$39,754.08
	Comment: PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 24"S/CD				

Retention Basin 3

Description	Value
Size	2.5 AC
Multiplier	1
Depth	6.00
Description	Pond 2A (2). Pond is 7.56 acres. This is for 2.5 AC

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50	AC	\$10,000.00	\$25,000.00
120-1	REGULAR EXCAVATION	24,200.00	CY	\$8.00	\$193,600.00
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	\$1,268.89	\$22,840.02
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	\$6,394.20	\$6,394.20
425-2-71	MANHOLES, J-7, <10'	1.00	EA	\$6,319.64	\$6,319.64
570-1-1	PERFORMANCE TURF	12,100.00	SY	\$0.31	\$3,751.00

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, O	256.00	LF	\$87.18	\$22,318.08
	Comment: PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 24"S/CD				

Retention Basin 4

Description	Value
Size	.5 AC
Multiplier	1
Depth	6.00
Description	Pond 2A (3). Pond is 7.56 acres. This is for 0.5 AC

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	\$10,000.00	\$5,000.00
120-1	REGULAR EXCAVATION	4,840.00	CY	\$8.00	\$38,720.00
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	\$1,268.89	\$22,840.02
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	\$4,234.67	\$4,234.67
425-2-71	MANHOLES, J-7, <10'	1.00	EA	\$6,319.64	\$6,319.64
570-1-1	PERFORMANCE TURF	2,420.00	SY	\$0.31	\$750.20

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, O Comment: PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 24"S/CD	256.00	LF	\$87.18	\$22,318.08

Retention Basin 5

Description	Value
Size	.5 AC
Multiplier	1
Depth	2.00
Description	Compensatory treatment conveyance

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	\$10,000.00	\$5,000.00
120-1	REGULAR EXCAVATION	1,613.33	CY	\$8.00	\$12,906.64
425-2-71	MANHOLES, J-7, <10'	3.00	EA	\$6,319.64	\$18,958.92
570-1-1	PERFORMANCE TURF	7,260.00	SY	\$0.31	\$2,250.60

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION Comment: ADDITIONAL EXCAVATION FOR ASPHALT PAVEMENT REMOVAL.	122.22	CY	\$8.00	\$977.76
425-1-549	INLETS, DT BOT, TYPE D, MODIFY Comment: INLETS, DT BOT, TYPE D, MODIFY	1.00	EA	\$3,670.68	\$3,670.68
430-175-118	PIPE CULV, OPT MATL, ROUND, 18"S/CD Comment: 1100-ft of 18" pipe.	1,104.00	LF	\$71.97	\$79,454.88
430-982-125	MITERED END SECT, OPTIONAL RD, 18" CD Comment: MITERED END SECTION, OPTIONAL ROUND, 18" CD	2.00	EA	\$1,240.18	\$2,480.36

EX-Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
0110-4-10	REMOVAL OF EXISTING CONCRETE Comment: REMOVE EXISTING CONCRETE SIDEWALK FOR 550 LF AND 1/2 OF THE LENGTH AT 6-FT WIDE AND THE OTHER HALF AT 5-FT WIDE. ALSO INCLUDES 550 LF AND 2-FT WIDTH FOR CURB & GUTTER	458.33 SY	\$12.50	\$5,729.12
0430173115	PIPE CULVERT OPTIONAL MATERIAL, ROUND, 15", GUTTER DRAIN Comment: PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 24"S/CD. Price per FDOT 6-month historical moving.	56.00 LF	\$89.40	\$5,006.40
0520-1-10	CONCRETE CURB & GUTTER, TYPE F Comment: 550-ft of C&G type F. Cost is an average between Area 6 and 6 months moving historical cost data.	550.00 LF	\$20.72	\$11,396.00
160-4	TYPE B STABILIZATION Comment: FOR 4-FT WIDE PAVEMENT REPAIR. COST PER LRE.	244.44 SY	\$5.22	\$1,275.98
285-706	OPTIONAL BASE, BASE GROUP 06 Comment: FOR 4-FT WIDE PAVEMENT REPAIR. COST PER LRE.	244.44 SY	\$21.47	\$5,248.13
334-1-53	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG76-22 Comment: FOR 4-FT WIDE PAVEMENT REPAIR. COST PER LRE.	40.34 TN	\$117.44	\$4,737.53
337-7-43	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC C, FC-12.5, PG76-22, PMA Comment: FOR 4-FT WIDE PAVEMENT REPAIR. COST PER LRE.	20.17 TN	\$118.72	\$2,394.58
425-1-351	INLETS, CURB, TYPE P-5, <10' Comment: PRICE PER LRE DRAINAGE COST BUT INCLUDED WITH THE COMPENSATORY POND.	3.00 EA	\$4,890.79	\$14,672.37
425-1-601	INLETS, DT BOT, TYPE J, <10' Comment: INLETS, DT BOT, TYPE J, <10' (Estimated from similar item from statewide rolling 6-mo avg historical cost)	1.00 EA	\$5,500.00	\$5,500.00
430-175-124	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 24"S/CD Comment: PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 24"S/CD	200.00 LF	\$87.18	\$17,436.00
430-982-129	MES OPTIONAL RD, 24" CD Comment: MITERED END SECT, OPTIONAL RD, 24" CD (Used Area 6 rolling 6-mo avg historical cost)	1.00 EA	\$1,200.00	\$1,200.00
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" Comment: 550 LF of 4" Sidewalk half at 6-ft wide and other half at 5-ft wide. Cost is an average between Area 6 and 6 months moving historical cost data.	336.11 SY	\$45.29	\$15,222.42
Drainage Component Total				\$1,572,934.82

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00 AS	\$299.33	\$598.66
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	\$667.48	\$667.48
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00 AS	\$5,333.72	\$5,333.72
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00 AS	\$8,901.23	\$8,901.23
Signing Component Total				\$15,501.09

LIGHTING COMPONENT**Conventional Lighting Subcomponent**

Description	Value			
Spacing	MIN			
Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	220.18 LF	\$6.55	\$1,442.18
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	43.70 LF	\$20.07	\$877.06
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	2.00 EA	\$637.37	\$1,274.74
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	804.14 LF	\$4.35	\$3,498.01
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	2.00 EA	\$5,000.00	\$10,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	2.00 EA	\$535.41	\$1,070.82
Subcomponent Total				\$18,162.81
Lighting Component Total				\$18,162.81

Sequence 1 Total **\$1,717,096.96**

Sequence: 2 NDR - New Construction, Divided, Rural**Net Length:** 0.083 MI
440 LF**Description:** 62nd Blvd Rural section north of bridge.**Special** Shared Use Path entered as median component.**Conditions:****EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	100.00 / 100.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.083
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	4 to 1 / 4 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.01	AC	\$10,000.00	\$20,100.00
120-6	EMBANKMENT	3,549.42	CY	\$12.00	\$42,593.04
Earthwork Component Total					\$62,693.04

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	165
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,150.25	SY	\$5.22	\$11,224.30
285-706	OPTIONAL BASE,BASE GROUP 06	1,237.37	SY	\$21.45	\$26,541.59
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	96.76	TN	\$118.36	\$11,452.51
337-7-43	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	96.76	TN	\$235.00	\$22,738.60

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt

Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	11.00 EA	\$3.94	\$43.34
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.67 GM	\$1,000.85	\$670.57

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 10.00
Bike Path Structural Spread Rate	150
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	684.17 SY	\$5.22	\$3,571.37
285-701	OPTIONAL BASE,BASE GROUP 01	488.69 SY	\$13.07	\$6,387.18
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	36.65 TN	\$175.00	\$6,413.75

Roadway Component Total

\$89,043.22

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	3.00 / 3.00
Paved Outside Shoulder Width L/R	7.00 / 7.00
Structural Spread Rate	165
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	T
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	716.42 SY	\$21.45	\$15,367.21
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	56.44 TN	\$118.36	\$6,680.24
570-1-1	PERFORMANCE TURF	293.22 SY	\$0.31	\$90.90

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,143.54 LF	\$1.36	\$1,555.21

104-11	FLOATING TURBIDITY BARRIER	20.82 LF	\$9.46	\$196.96
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	20.82 LF	\$4.25	\$88.48
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$3,000.00	\$3,000.00
104-18	INLET PROTECTION SYSTEM	1.00 EA	\$97.71	\$97.71
107-1	LITTER REMOVAL	2.02 AC	\$39.03	\$78.84
107-2	MOWING	2.02 AC	\$75.83	\$153.18
Shoulder Component Total				\$27,308.74

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	12.00
Performance Turf Width	8.50
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	T
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	415.39	SY	\$0.31	\$128.77

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	440.00	LF	\$29.45	\$12,958.00

Median Component Total **\$13,086.77**

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.50	CY	\$1,268.89	\$1,903.34
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00	EA	\$4,519.20	\$4,519.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	72.00	LF	\$97.97	\$7,053.84
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	32.00	LF	\$87.18	\$2,789.76
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	\$113.21	\$2,717.04
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00	EA	\$1,195.12	\$4,780.48
524-1-1	CONCRETE DITCH PAVT, NR, 3"	166.60	SY	\$68.35	\$11,387.11
570-1-1	PERFORMANCE TURF	58.64	SY	\$0.31	\$18.18

Drainage Component Total

\$35,168.95

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	\$299.33	\$299.33
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	\$667.48	\$1,334.96
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$4,901.04	\$4,901.04
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	\$5,333.72	\$5,333.72
Signing Component Total					\$11,869.05

Sequence 2 Total

\$239,169.77

Sequence: 3NDR - New Construction, Divided, Rural**Net Length:** 0.206 MI
1,085 LF**Description:** SW 62nd Blvd from south bridge approach to north bridge approach**Special** Shared Use Path entered as median component.**Conditions:****EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	100.00 / 100.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	0.059
Top of Structural Course For Begin Section	69.00
Top of Structural Course For End Section	69.00
Horizontal Elevation For Begin Section	69.00
Horizontal Elevation For End Section	54.00
Front Slope L/R	4 to 1 / 4 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Alignment Number	2
Distance	0.095
Top of Structural Course For Begin Section	68.00
Top of Structural Course For End Section	64.50
Horizontal Elevation For Begin Section	53.00
Horizontal Elevation For End Section	60.00
Front Slope L/R	4 to 1 / 4 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.99	AC	\$10,000.00	\$49,900.00
120-6	EMBANKMENT	27,008.00	CY	\$12.00	\$324,096.00
Earthwork Component Total					\$373,996.00

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	11.00 / 11.00
Structural Spread Rate	165
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
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160-4	TYPE B STABILIZATION	6,269.12 SY	\$5.22	\$32,724.81
285-706	OPTIONAL BASE,BASE GROUP 06	2,811.46 SY	\$21.45	\$60,305.82
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	218.82 TN	\$118.36	\$25,899.54
337-7-43	ASPH CONC FC,TRAFFIC C,FC- 12.5,PG 76-22	218.82 TN	\$235.00	\$51,422.70

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-6	SHOULDER GUTTER- CONCRETE	750.00 LF	\$74.30	\$55,725.00
530-3-3	RIPRAP- RUBBLE, BANK AND SHORE	2,030.00 TN	\$98.03	\$199,000.90
530-74	BEDDING STONE	723.00 TN	\$87.85	\$63,515.55
536-8-13	APPROACH TRANS CONN TO RIGID BA, F&I, 3	2.00 EA	\$2,393.28	\$4,786.56
536-85-22	GUARDRAIL END ANCH ASSY/END TREA- FLARED	1.00 EA	\$2,442.21	\$2,442.21
536-85-25	GUARDRAIL END ANCH ASSY/END TRE- TYPE II	1.00 EA	\$952.31	\$952.31

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	28.00 EA	\$3.94	\$110.32
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.64 GM	\$1,000.85	\$1,641.39

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	25.00 TN	\$229.61	\$5,740.25
521-72-40	SHLDR CONC BARRIER,38" or 44" Height	950.00 LF	\$250.00	\$237,500.00
536-1-1	GUARDRAIL- ROADWAY, GEN TL- 3	750.00 LF	\$19.32	\$14,490.00

Roadway Component Total

\$756,257.36

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	10.00 / 10.00
Structural Spread Rate	165
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	T
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	2,490.77	SY	\$21.45	\$53,427.02
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	198.92	TN	\$118.36	\$23,544.17

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,821.10	LF	\$1.36	\$3,836.70
104-11	FLOATING TURBIDITY BARRIER	51.38	LF	\$9.46	\$486.05
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	51.38	LF	\$4.25	\$218.36
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$3,000.00	\$3,000.00
104-18	INLET PROTECTION SYSTEM	2.00	EA	\$97.71	\$195.42
107-1	LITTER REMOVAL	4.98	AC	\$39.03	\$194.37
107-2	MOWING	4.98	AC	\$75.83	\$377.63

Shoulder Component Total

\$85,279.73

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	10.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	5.00 / 5.00
Paved Median Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	165
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	T
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-701	OPTIONAL BASE,BASE GROUP 01	1,285.17	SY	\$13.07	\$16,797.17
334-1-13	SUPERPAVE ASPHALTIC CONC,	99.46	TN	\$175.00	\$17,405.50

TRAFFIC C

Median Component Total

\$34,202.67

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.70 CY	\$1,268.89	\$4,694.89
425-1-551	INLETS, DT BOT, TYPE E, <10'	2.00 EA	\$4,519.20	\$9,038.40
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	168.00 LF	\$97.97	\$16,458.96
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	72.00 LF	\$87.18	\$6,276.96
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	64.00 LF	\$113.21	\$7,245.44
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	9.00 EA	\$1,195.12	\$10,756.08
524-1-1	CONCRETE DITCH PAVT, NR, 3"	411.00 SY	\$68.35	\$28,091.85
570-1-1	PERFORMANCE TURF	144.67 SY	\$0.31	\$44.85
Drainage Component Total				\$82,607.43

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	\$299.33	\$299.33
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00 AS	\$667.48	\$3,337.40
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,901.04	\$4,901.04
700-2-15	MULTI- POST SIGN, F&I GM, 51- 100 SF	2.00 AS	\$5,333.72	\$10,667.44
Signing Component Total				\$19,205.21

BRIDGES COMPONENT**Bridge 011234**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	270.00
Width (LF)	55.67
Type	Low Level
Cost Factor	0.80
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$125.00
Factored Cost per SF	\$100.00
Final Cost per SF	\$109.60

Basic Bridge Cost **\$1,503,090.00**
 Description USED LRE DEFAULT UNIT PRICE PER SQ. FT.

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	123.71	CY	\$410.74	\$50,812.65
415-1-9	REINF STEEL- APPROACH SLABS	21,649.25	LB	\$0.95	\$20,566.79

Bridge X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-5-13	CONC TRAF RAIL- BRIDGE, 36" SING SLOPE	660.00	LF	\$71.00	\$46,860.00
521-6-11	CONC PARAPET, PED/BIKE, 27"	330.00	LF	\$79.13	\$26,112.90

Bridge 011234 Total \$1,647,442.34

Bridges Component Total \$1,647,442.34

MISCELLANEOUS COMPONENT**EX-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
515-4-1	BULLET RAIL, SINGLE	530.00	LF	\$49.51	\$26,240.30
515-4-2	BULLET RAIL, DOUBLE RAIL	1,070.00	LF	\$55.00	\$58,850.00

Miscellaneous Component Total \$85,090.30

Sequence 3 Total \$3,084,081.04

Sequence: 4 NUR - New Construction, Undivided, Rural**Net Length:** 0.285 MI
1,502 LF**Description:** Rural section west of the NB turn lane for the intersection.**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.284
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	4 to 1 / 4 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.44	AC	\$10,000.00	\$34,400.00
120-6	EMBANKMENT	9,270.37	CY	\$12.00	\$111,244.44
Earthwork Component Total					\$145,644.44

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	11.00 / 11.00
Structural Spread Rate	165
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	7,010.08	SY	\$5.22	\$36,592.62
285-706	OPTIONAL BASE,BASE GROUP 06	3,782.11	SY	\$21.45	\$81,126.26
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	302.94	TN	\$118.36	\$35,855.98
337-7-43	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	302.94	TN	\$235.00	\$71,190.90

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	38.00	EA	\$3.94	\$149.72
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.14	GM	\$1,000.85	\$1,140.97
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.57	GM	\$420.57	\$239.72

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 12.00
Bike Path Structural Spread Rate	150
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,670.51	SY	\$5.22	\$13,940.06
285-701	OPTIONAL BASE,BASE GROUP 01	2,002.88	SY	\$13.07	\$26,177.64
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	150.22	TN	\$175.00	\$26,288.50

Roadway Component Total

\$292,702.37

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	3.00 / 3.00
Paved Outside Shoulder Width L/R	7.00 / 7.00
Structural Spread Rate	165
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	0
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	2,446.85	SY	\$21.45	\$52,484.93
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	192.78	TN	\$118.36	\$22,817.44
570-1-2	PERFORMANCE TURF, SOD	1,001.44	SY	\$2.65	\$2,653.82

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,905.62	LF	\$1.36	\$5,311.64
104-11	FLOATING TURBIDITY BARRIER	71.12	LF	\$9.46	\$672.80
104-12	STAKED TURBIDITY BARRIER-	71.12	LF	\$4.25	\$302.26

104-15	NYL REINF PVC SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$3,000.00	\$3,000.00
107-1	LITTER REMOVAL	3.45 AC	\$39.03	\$134.65
107-2	MOWING	3.45 AC	\$75.83	\$261.61
Shoulder Component Total				\$87,639.15

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.12 CY	\$1,268.89	\$6,496.72
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	232.00 LF	\$97.97	\$22,729.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00 LF	\$113.21	\$5,434.08
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	12.00 EA	\$1,195.12	\$14,341.44
570-1-1	PERFORMANCE TURF	200.29 SY	\$0.31	\$62.09
Drainage Component Total				\$49,063.37

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	\$299.33	\$299.33
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00 AS	\$667.48	\$4,004.88
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,901.04	\$4,901.04
Signing Component Total				\$9,205.25

Sequence 4 Total **\$584,254.58**

Sequence: 5NUR - New Construction, Undivided, Rural**Net Length:** 0.110 MI
580 LF**Description:** Rural Section including turn lane, just west of urban section.**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.110
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	4 to 1 / 4 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.33	AC	\$10,000.00	\$13,300.00
120-6	EMBANKMENT	5,877.05	CY	\$12.00	\$70,524.60
Earthwork Component Total					\$83,824.60

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	3
Roadway Pavement Width L/R	11.00 / 22.00
Structural Spread Rate	165
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,414.05	SY	\$5.22	\$17,821.34
285-706	OPTIONAL BASE,BASE GROUP 06	2,168.24	SY	\$21.45	\$46,508.75
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	175.37	TN	\$118.36	\$20,756.79
337-7-43	ASPH CONC FC,TRAFFIC C,FC- 12.5,PG 76-22	175.37	TN	\$235.00	\$41,211.95

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	59.00	EA	\$3.94	\$232.46
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.44	GM	\$1,000.85	\$440.37
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.44	GM	\$420.57	\$185.05

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 12.00
Bike Path Structural Spread Rate	150
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,030.66	SY	\$5.22	\$5,380.05
285-701	OPTIONAL BASE,BASE GROUP 01	772.99	SY	\$13.07	\$10,102.98
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	57.97	TN	\$175.00	\$10,144.75

Roadway Component Total

\$152,784.49

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	3.00 / 3.00
Paved Outside Shoulder Width L/R	7.00 / 7.00
Structural Spread Rate	165
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	0
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-706	OPTIONAL BASE,BASE GROUP 06	944.34	SY	\$21.45	\$20,256.09
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	74.40	TN	\$118.36	\$8,805.98
570-1-2	PERFORMANCE TURF, SOD	386.50	SY	\$2.65	\$1,024.23

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,507.33	LF	\$1.36	\$2,049.97
104-11	FLOATING TURBIDITY BARRIER	27.45	LF	\$9.46	\$259.68
104-12	STAKED TURBIDITY BARRIER-	27.45	LF	\$4.25	\$116.66

104-15	NYL REINF PVC SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$3,000.00	\$3,000.00
107-1	LITTER REMOVAL	1.33 AC	\$39.03	\$51.91
107-2	MOWING	1.33 AC	\$75.83	\$100.85
Shoulder Component Total				\$35,665.37

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.98 CY	\$1,268.89	\$2,512.40
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	88.00 LF	\$97.97	\$8,621.36
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00 LF	\$113.21	\$2,717.04
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	5.00 EA	\$1,195.12	\$5,975.60
570-1-1	PERFORMANCE TURF	77.30 SY	\$0.31	\$23.96
Drainage Component Total				\$19,850.36

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	\$299.33	\$299.33
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00 AS	\$667.48	\$2,002.44
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,901.04	\$4,901.04
Signing Component Total				\$7,202.81

Sequence 5 Total **\$299,327.63**

Sequence: 6 NDR - New Construction, Divided, Rural**Net Length:** 0.053 MI
280 LF**Description:** Traffic Separator and curb for west of urban section. Roadway components in sequence 5.**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	3.25 / 3.25
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.053
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	4 to 1 / 4 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.04	AC	\$10,000.00	\$400.00
Earthwork Component Total					\$400.00

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	166.04	SY	\$0.31	\$51.47

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	727.58	LF	\$1.36	\$989.51
104-11	FLOATING TURBIDITY BARRIER	13.25	LF	\$9.46	\$125.35
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	13.25	LF	\$4.25	\$56.31
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$3,000.00	\$3,000.00

104-18	INLET PROTECTION SYSTEM	1.00 EA	\$97.71	\$97.71
107-1	LITTER REMOVAL	1.28 AC	\$39.03	\$49.96
107-2	MOWING	1.28 AC	\$75.83	\$97.06
Shoulder Component Total				\$4,467.37

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	6.50
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	280.00	LF	\$38.39	\$10,749.20

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	340.00	LF	\$29.45	\$10,013.00

Median Component Total **\$20,762.20**

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	0.95	CY	\$1,268.89	\$1,205.45
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00	EA	\$4,519.20	\$4,519.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	48.00	LF	\$97.97	\$4,702.56
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	24.00	LF	\$87.18	\$2,092.32
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	\$113.21	\$1,811.36
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	3.00	EA	\$1,195.12	\$3,585.36
524-1-1	CONCRETE DITCH PAVT, NR, 3"	106.00	SY	\$68.35	\$7,245.10
570-1-1	PERFORMANCE TURF	37.31	SY	\$0.31	\$11.57

Drainage Component Total **\$25,172.92**

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	\$299.33	\$299.33
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	\$667.48	\$1,334.96
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$4,901.04	\$4,901.04
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	\$5,333.72	\$5,333.72
Signing Component Total					\$11,869.05
<hr/>					
Sequence 6 Total					\$62,671.54
<hr/>					

Sequence: 7 NDU - New Construction, Divided, Urban**Net Length:** 0.027 MI
142 LF**Description:** SW 62nd Urban Section West of Intersection.**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	105.00 / 105.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.064
Top of Structural Course For Begin Section	104.50
Top of Structural Course For End Section	104.50
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	4 to 1 / 4 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.69	AC	\$10,000.00	\$6,900.00
120-6	EMBANKMENT	6,128.99	CY	\$12.00	\$73,547.88
Earthwork Component Total					\$80,447.88

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	3
Roadway Pavement Width L/R	11.00 / 22.00
Structural Spread Rate	165
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	683.65	SY	\$5.22	\$3,568.65
285-706	OPTIONAL BASE,BASE GROUP 06	520.78	SY	\$21.45	\$11,170.73
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	42.96	TN	\$118.36	\$5,084.75
337-7-43	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	42.96	TN	\$235.00	\$10,095.60

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2

Skip Stripe No. of Stripes 1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	7.00	EA	\$3.94	\$27.58
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.22	GM	\$1,000.85	\$220.19
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.05	GM	\$420.57	\$21.03

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 12.00
Bike Path Structural Spread Rate	150
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	252.50	SY	\$5.22	\$1,318.05
285-701	OPTIONAL BASE,BASE GROUP 01	189.38	SY	\$13.07	\$2,475.20
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	14.20	TN	\$175.00	\$2,485.00

Roadway Component Total

\$36,466.78

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	7.25 / 42.25
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 40.00
Sidewalk Width L/R	0.00 / 0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	142.03	LF	\$20.00	\$2,840.60
520-1-10	CONCRETE CURB & GUTTER, TYPE F	142.03	LF	\$20.00	\$2,840.60
570-1-2	PERFORMANCE TURF, SOD	710.16	SY	\$2.65	\$1,881.92

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	284.06	LF	\$1.36	\$386.32
104-11	FLOATING TURBIDITY BARRIER	6.72	LF	\$9.46	\$63.57
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	6.72	LF	\$4.25	\$28.56

104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$3,000.00	\$3,000.00
104-18	INLET PROTECTION SYSTEM	2.00 EA	\$97.71	\$195.42
107-1	LITTER REMOVAL	0.68 AC	\$39.03	\$26.54
107-2	MOWING	0.68 AC	\$75.83	\$51.56
Shoulder Component Total				\$11,315.09

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	8.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	142.00 LF	\$38.39	\$5,451.38
Median Component Total				\$5,451.38

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	0.48 CY	\$1,268.89	\$609.07
425-1-351	INLETS, CURB, TYPE P-5, <10'	1.00 EA	\$4,780.48	\$4,780.48
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00 EA	\$7,212.04	\$7,212.04
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00 EA	\$4,011.87	\$4,011.87
425-2-41	MANHOLES, P-7, <10'	1.00 EA	\$3,872.06	\$3,872.06
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	72.00 LF	\$87.18	\$6,276.96
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	8.00 LF	\$113.21	\$905.68
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	136.00 LF	\$173.12	\$23,544.32
570-1-1	PERFORMANCE TURF	8.18 SY	\$0.31	\$2.54
Drainage Component Total				\$51,215.02

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	\$299.33	\$299.33
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	\$667.48	\$667.48
700-2-15	MULTI- POST SIGN, F&I GM, 51- 100 SF	1.00 AS	\$5,333.72	\$5,333.72
700-2-16	MULTI- POST SIGN, F&I GM, 101- 200 SF	1.00 AS	\$8,901.23	\$8,901.23

Signing Component Total

\$15,201.76

LIGHTING COMPONENT**Conventional Lighting Subcomponent**

Description				Value	
Spacing				MIN	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	
				Extended Amount	
630-2-11	CONDUIT, F& I, OPEN TRENCH	142.03	LF	\$6.55	\$930.30
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	28.19	LF	\$20.07	\$565.77
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	1.00	EA	\$637.37	\$637.37
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	518.74	LF	\$4.35	\$2,256.52
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	1.00	EA	\$5,000.00	\$5,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	1.00	EA	\$535.41	\$535.41
Subcomponent Total					\$9,925.37
Lighting Component Total					\$9,925.37

Sequence 7 Total

\$210,023.28

Sequence: 8 NUU - New Construction, Undivided, Urban**Net Length:** 0.035 MI
185 LF**Description:** 62nd and 43rd Intersection**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	100.00 / 100.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.035
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.85	AC	\$10,000.00	\$8,500.00
120-6	EMBANKMENT	5,457.90	CY	\$12.00	\$65,494.80
Earthwork Component Total					\$73,994.80

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	47.00 / 47.00
Structural Spread Rate	165
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,036.09	SY	\$5.22	\$10,628.39
285-706	OPTIONAL BASE,BASE GROUP 06	1,930.13	SY	\$21.45	\$41,401.29
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	159.24	TN	\$118.36	\$18,847.65
337-7-43	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	159.24	TN	\$235.00	\$37,421.40

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	5.00	EA	\$3.94	\$19.70
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.14	GM	\$1,000.85	\$140.12
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.07	GM	\$420.57	\$29.44

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Roadway Component Total

\$108,487.99

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	13.25 / 49.25
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 40.00
Sidewalk Width L/R	6.00 / 7.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	184.80	LF	\$20.00	\$3,696.00
520-1-10	CONCRETE CURB & GUTTER, TYPE F	184.80	LF	\$20.00	\$3,696.00
527-2	DETECTABLE WARNINGS	266.93	SF	\$28.63	\$7,642.21
570-1-2	PERFORMANCE TURF, SOD	924.00	SY	\$2.65	\$2,448.60

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	369.60	LF	\$1.36	\$502.66
104-11	FLOATING TURBIDITY BARRIER	8.75	LF	\$9.46	\$82.78
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	8.75	LF	\$4.25	\$37.19
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$3,000.00	\$3,000.00
104-18	INLET PROTECTION SYSTEM	2.00	EA	\$97.71	\$195.42
107-1	LITTER REMOVAL	0.42	AC	\$39.03	\$16.39
107-2	MOWING	0.42	AC	\$75.83	\$31.85

Shoulder Component Total

\$21,349.10

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	0.63	CY	\$1,268.89	\$799.40
425-1-351	INLETS, CURB, TYPE P-5, <10'	2.00	EA	\$4,780.48	\$9,560.96
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00	EA	\$7,212.04	\$7,212.04
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	\$4,011.87	\$4,011.87
425-2-41	MANHOLES, P-7, <10'	1.00	EA	\$3,872.06	\$3,872.06
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	88.00	LF	\$87.18	\$7,671.84
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	8.00	LF	\$113.21	\$905.68
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	176.00	LF	\$173.12	\$30,469.12
570-1-1	PERFORMANCE TURF	10.64	SY	\$0.31	\$3.30
Drainage Component Total					\$64,506.27

INTERSECTIONS COMPONENT**Intersection 1**

Description	Value
Mainline No. of Left Turn Lanes	1
Mainline No. of Right Turn Lanes	0
Mainline Design Speed	45
Cross Street Thru Lanes	1
Cross Street No. of Left Turn Lanes	1
Cross Street No. of Right Turn Lanes	1
Cross Street Design Speed	35
T-Intersection?	Y
Multiplier	1
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.56	AC	\$10,000.00	\$5,600.00
120-1	REGULAR EXCAVATION	591.89	CY	\$8.00	\$4,735.12
160-4	TYPE B STABILIZATION	696.00	SY	\$5.22	\$3,633.12
160-4	TYPE B STABILIZATION	1,577.21	SY	\$5.22	\$8,233.04
285-706	OPTIONAL BASE,BASE GROUP 06	696.00	SY	\$21.45	\$14,929.20
285-709	OPTIONAL BASE,BASE GROUP 09	1,577.21	SY	\$24.92	\$39,304.07
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	216.87	TN	\$175.00	\$37,952.25
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	57.42	TN	\$118.36	\$6,796.23
337-7-83	ASPH CONC FC,TRAFFIC C,FC- 12.5,PG 76-22	63.09	TN	\$235.00	\$14,826.15
520-1-10	CONCRETE CURB & GUTTER, TYPE F	508.00	LF	\$20.00	\$10,160.00
522-1	CONCRETE SIDEWALK AND	282.22	SY	\$44.45	\$12,544.68

522-2	DRIVEWAYS, 4" CONCRETE SIDEWALK AND DRIVEWAYS, 6"	86.94 SY	\$85.00	\$7,389.90
570-1-1	PERFORMANCE TURF	282.22 SY	\$0.31	\$87.49

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
337-7-43	ASPH CONC FC,TRAFFIC C,FC- 12.5,PG 76-22	27.84 TN	\$235.00	\$6,542.40

Intersections Component Total \$172,733.65

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	\$299.33	\$299.33
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	\$667.48	\$667.48
700-2-15	MULTI- POST SIGN, F&I GM, 51- 100 SF	1.00 AS	\$5,333.72	\$5,333.72

Signing Component Total \$6,300.53

LIGHTING COMPONENT**Conventional Lighting Subcomponent****Description**

Spacing

Value

MAX

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	184.80 LF	\$6.55	\$1,210.44
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	24.12 LF	\$20.07	\$484.09
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	1.00 EA	\$637.37	\$637.37
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	626.74 LF	\$4.35	\$2,726.32
715-4-13	LIGHT POLE COMPLETE, F&I- STD, 40'	1.00 EA	\$5,000.00	\$5,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	1.00 EA	\$535.41	\$535.41
Subcomponent Total				\$10,593.63

Lighting Component Total \$10,593.63

Sequence 8 Total \$457,965.97

Sequence: 9NDU - New Construction, Divided, Urban**Net Length:** 0.041 MI
216 LF**Description:** SW 62nd Blvd East of Intersection**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	70.00 / 70.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.076
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.70	AC	\$10,000.00	\$7,000.00
120-6	EMBANKMENT	13,562.37	CY	\$12.00	\$162,748.44
Earthwork Component Total					\$169,748.44

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	26.00 / 59.00
Structural Spread Rate	165
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,287.17	SY	\$5.22	\$11,939.03
285-709	OPTIONAL BASE,BASE GROUP 09	2,039.55	SY	\$24.92	\$50,825.59
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	168.26	TN	\$175.00	\$29,445.50
337-7-83	ASPH CONC FC,TRAFFIC C,FC- 12.5,PG 76-22	168.26	TN	\$235.00	\$39,541.10

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2

Skip Stripe No. of Stripes

2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	17.00	EA	\$3.94	\$66.98
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.33	GM	\$1,000.85	\$330.28
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.16	GM	\$420.57	\$67.29
Roadway Component Total					\$132,215.77

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	11.25 / 9.25
Total Outside Shoulder Perf. Turf Width L/R	3.00 / 0.00
Sidewalk Width L/R	6.00 / 7.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	215.95	LF	\$20.00	\$4,319.00
520-1-10	CONCRETE CURB & GUTTER, TYPE F	215.95	LF	\$20.00	\$4,319.00
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	311.93	SY	\$44.45	\$13,865.29
570-1-2	PERFORMANCE TURF, SOD	71.98	SY	\$2.65	\$190.75

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,050.00	SY	\$44.45	\$46,672.50
570-1-2	PERFORMANCE TURF, SOD	525.00	SY	\$2.65	\$1,391.25

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	431.90	LF	\$1.36	\$587.38
104-11	FLOATING TURBIDITY BARRIER	10.22	LF	\$9.46	\$96.68
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	10.22	LF	\$4.25	\$43.44
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$3,000.00	\$3,000.00
104-18	INLET PROTECTION SYSTEM	3.00	EA	\$97.71	\$293.13
107-1	LITTER REMOVAL	1.04	AC	\$39.03	\$40.59
107-2	MOWING	1.04	AC	\$75.83	\$78.86
Shoulder Component Total					\$74,897.87

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	63.50
Performance Turf Width	59.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	431.90	LF	\$29.45	\$12,719.46
570-1-1	PERFORMANCE TURF	1,415.69	SY	\$0.31	\$438.86
Median Component Total					\$13,158.32

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	0.74	CY	\$1,268.89	\$938.98
425-1-351	INLETS, CURB, TYPE P-5, <10'	2.00	EA	\$4,780.48	\$9,560.96
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00	EA	\$7,212.04	\$7,212.04
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	\$4,011.87	\$4,011.87
425-2-41	MANHOLES, P-7, <10'	1.00	EA	\$3,872.06	\$3,872.06
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	112.00	LF	\$87.18	\$9,764.16
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	\$113.21	\$1,811.36
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	208.00	LF	\$173.12	\$36,008.96
570-1-1	PERFORMANCE TURF	12.43	SY	\$0.31	\$3.85
Drainage Component Total					\$73,184.24

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	\$299.33	\$299.33
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	\$667.48	\$667.48
700-2-15	MULTI- POST SIGN, F&I GM, 51- 100 SF	1.00	AS	\$5,333.72	\$5,333.72
700-2-16	MULTI- POST SIGN, F&I GM, 101- 200 SF	1.00	AS	\$8,901.23	\$8,901.23
Signing Component Total					\$15,201.76

LIGHTING COMPONENT**Conventional Lighting Subcomponent**

Description				Value	
Spacing				MIN	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	215.95	LF	\$6.55	\$1,414.47
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	42.86	LF	\$20.07	\$860.20
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	2.00	EA	\$637.37	\$1,274.74
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	788.72	LF	\$4.35	\$3,430.93
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	2.00	EA	\$5,000.00	\$10,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	2.00	EA	\$535.41	\$1,070.82
Subcomponent Total					\$18,051.16
Lighting Component Total					\$18,051.16
<hr/>					
Sequence 9 Total					\$496,457.56
<hr/>					

Sequence: 10 NDU - New Construction, Divided, Urban**Net** 0.074 MI
Length: 393 LF**Description:** 43rd Street North of Intersection.**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	70.00 / 70.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.074
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.26	AC	\$10,000.00	\$12,600.00
120-6	EMBANKMENT	6,003.05	CY	\$12.00	\$72,036.60
Earthwork Component Total					\$84,636.60

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	30.50 / 30.50
Structural Spread Rate	165
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,112.98	SY	\$5.22	\$16,249.76
285-706	OPTIONAL BASE,BASE GROUP 06	2,662.53	SY	\$21.45	\$57,111.27
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	219.66	TN	\$118.36	\$25,998.96
337-7-43	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	106.50	TN	\$235.00	\$25,027.50

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-23	MILLING EXIST ASPH PAVT, 6" AVG DEPTH	12,576.00	SY	\$7.30	\$91,804.80
Comment: Remove existing Structural and Friction Course for resurfacing.					

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	30.00	EA	\$3.94	\$118.20
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.60	GM	\$1,000.85	\$600.51
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.30	GM	\$420.57	\$126.17

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 10.00
Bike Path Structural Spread Rate	150
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	611.07	SY	\$5.22	\$3,189.79
285-701	OPTIONAL BASE,BASE GROUP 01	436.48	SY	\$13.07	\$5,704.79
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	32.74	TN	\$175.00	\$5,729.50

Roadway Component Total

\$231,661.25

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	8.25 / 22.25
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 20.00
Sidewalk Width L/R	6.00 / 0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	392.83	LF	\$20.00	\$7,856.60
520-1-10	CONCRETE CURB & GUTTER, TYPE F	392.83	LF	\$20.00	\$7,856.60
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	261.89	SY	\$44.45	\$11,641.01
570-1-2	PERFORMANCE TURF, SOD	872.96	SY	\$2.65	\$2,313.34

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	785.66	LF	\$1.36	\$1,068.50
104-11	FLOATING TURBIDITY BARRIER	18.60	LF	\$9.46	\$175.96
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	18.60	LF	\$4.25	\$79.05
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$3,000.00	\$3,000.00
104-18	INLET PROTECTION SYSTEM	4.00	EA	\$97.71	\$390.84
107-1	LITTER REMOVAL	1.89	AC	\$39.03	\$73.77
107-2	MOWING	1.89	AC	\$75.83	\$143.32
Shoulder Component Total					\$34,598.99

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	7.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	393.00	LF	\$38.39	\$15,087.27
Median Component Total					\$15,087.27

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.34	CY	\$1,268.89	\$1,700.31
425-1-351	INLETS, CURB, TYPE P-5, <10'	3.00	EA	\$4,780.48	\$14,341.44
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00	EA	\$7,212.04	\$7,212.04
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	\$4,011.87	\$4,011.87
425-2-41	MANHOLES, P-7, <10'	1.00	EA	\$3,872.06	\$3,872.06
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	200.00	LF	\$87.18	\$17,436.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	\$113.21	\$2,717.04
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	376.00	LF	\$173.12	\$65,093.12
570-1-1	PERFORMANCE TURF	22.62	SY	\$0.31	\$7.01
Drainage Component Total					\$116,390.89

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	\$299.33	\$598.66
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	\$667.48	\$667.48
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	\$5,333.72	\$5,333.72
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	\$8,901.23	\$8,901.23
Signing Component Total					\$15,501.09

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description				Value	
Spacing				MIN	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	392.83	LF	\$6.55	\$2,573.04
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	77.97	LF	\$20.07	\$1,564.86
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	\$637.37	\$1,912.11
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,434.73	LF	\$4.35	\$6,241.08
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	3.00	EA	\$5,000.00	\$15,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00	EA	\$535.41	\$1,606.23
Subcomponent Total					\$28,897.31
Lighting Component Total					\$28,897.32

Sequence 10 Total **\$526,773.41**

Sequence: 11 RSU - Resurfacing, Undivided**Net Length:** 0.053 MI
278 LF**Description:** SW 43rd Street M&R Section, North of project.**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	28.00 / 28.00
Structural Spread Rate	0
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	1,731.37 SY	\$2.83	\$4,899.78
337-7-43	ASPH CONC FC, TRAFFIC C, FC-12.5, PG 76-22	142.84 TN	\$235.00	\$33,567.40

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-11	CONCRETE CURB & GUTTER, VAR HT TYPE F Comment: Curb and Gutter Type F along west side of roadway	278.00 LF	\$33.24	\$9,240.72
570-1-2	PERFORMANCE TURF, SOD Comment: Sod between curb and sidewalk.	1,529.00 SY	\$2.65	\$4,051.85

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	7.00 EA	\$3.94	\$27.58
710-11-101	PAINTED PAVT MARK, STD, WHITE, SOLID, 6"	0.21 GM	\$1,000.85	\$210.18
710-11-131	PAINTED PAVT MARK, STD, WHITE, SKIP, 6"	0.11 GM	\$420.57	\$46.26

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0

Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Roadway Component Total

\$52,043.77

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	0
Friction Course Spread Rate	0
Total Width (T) / 8" Overlap (O)	T
Rumble Strips No. of Sides	0

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	255.00 SY	\$44.45	\$11,334.75

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-11	FLOATING TURBIDITY BARRIER	5.27 LF	\$9.46	\$49.85
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	5.27 LF	\$4.25	\$22.40
104-18	INLET PROTECTION SYSTEM	1.00 EA	\$97.71	\$97.71
107-1	LITTER REMOVAL	0.13 AC	\$39.03	\$5.07
107-2	MOWING	0.13 AC	\$75.83	\$9.86

Shoulder Component Total

\$11,519.64

Sequence 11 Total

\$63,563.41

Date: 1/24/2018 10:58:53 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 211365-6-32-01

Letting Date: 01/2099

Description: SW 62nd Blvd Connector

District: 02 County: 26 ALACHUA

Market Area: 06 Units: English

Contract Class: Lump Sum Project: N

Design/Build: N Project Length: 0.900 MI

Project Manager:

Version 9 Project Grand Total

\$11,043,271.70

Description: Modified Option B, No walls, horizontal shift

Project Sequences Subtotal**\$7,741,385.15**

102-1	Maintenance of Traffic	7.00 %	\$541,896.96
101-1	Mobilization	10.00 %	\$828,328.21

Project Sequences Total**\$9,111,610.32**

Project Unknowns	20.00 %	\$1,822,322.06
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Justification for high %: MOT% includes 2% for MOT and 5% additional contingency for drainage unknowns.

Design/Build	0.00 %	\$0.00
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Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	\$109,339.32	\$109,339.32

Project Non-Bid Subtotal**\$109,339.32****Version 9 Project Grand Total****\$11,043,271.70**

APPENDIX B

Section 4(f)

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) NO USE DETERMINATION

650-050-49
Environmental
Management
06/17

Project Name:	SW 62nd Boulevard from SW 52nd Street to SW 43rd Street/Clark Butler Boulevard		
FM#:	211365-6-22-01	ETDM#:	14336
FAP#:			
Project Review Date:	12/15/2017		
FDOT District:	2		
County(ies):	Alachua		

Project Description including Section 4(f) Specific Information:

The Florida Department of Transportation (FDOT), District Two, in cooperation with the City of Gainesville, is conducting a Project Development & Environment (PD&E) Study to evaluate the extension of Southwest 62nd Boulevard/Southwest 52nd Street as a two-lane roadway from the newly constructed intersection of Southwest 43rd Street and Butler Boulevard to the existing terminus of Southwest 62nd Boulevard/Southwest 52nd Street, a length of 0.79 miles.

The proposed project runs along the southwest boundary of the Forest Park Conservation Area as shown on the attached map. The project does not require any right-of-way (ROW) acquisition from the Conservation Area on a temporary or permanent basis, and will not constitute a "use" of the property within the meaning of Section 4(f).

Type of Property: Public Parks and Recreation Areas

Description of Property: The Forest Park Conservation Area is identified as a conservation property and was acquired with funds from the Florida Communities Trust by the City of Gainesville. The Forest Park Conservation Area is also identified as a section of the Hogtown Creek Greenway which was established by the City to be a linear open space system envisioned as a network of trails for hiking, biking, and canoeing that linked neighborhoods to parks and places for shopping and employment. Currently the Conservation Area does not have any designated recreational facilities but has the opportunity for mountain biking and hiking through the forest. There are no designated parking areas or access from SW 62nd Boulevard or SW 20th Avenue. These trails are likely accessed from Forest Park, but there are no designated entrances.

Establishing Section 4(f) Use of the Property

Will the property be "used" as defined in **Section 4(f)** Resources chapter of the FDOT PD&E Manual? Examples of a "use" include but are not limited to new right of way, new easements, and temporary occupancy?

Yes

No

An explanation of the relationship between the Section 4(f) property and the project:

A portion of the project is located adjacent to the Forest Park Conservation Area, but there will be no "use" within the meaning of Section 4(f) to the Conservation Area. There will be no permanent or temporary acquisition of land, no changes to access, and no proximity impacts that rise to the level of substantial impairment to the protected resource.

Documentation

The following items **must** be attached to this form to ensure proper documentation of the Section 4(f) No Use:

1. DOA form and documentation (*Including the Form and Attachments*)
2. Required communications with the OWJ

Signatures

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) NO USE DETERMINATION

650-050-49
Environmental
Management
06/17

Signature: Wendy L. Lasher 1/25/2018
Preparer Date

Signature: Juli Newman 1/25/2018
Environmental Manager, or designee Date

**OEM
Concurrence:**

Signature: [Signature] 1/30/18
Director of OEM, or designee Date

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
Environmental
Management
06/17

Project Name:	SW 62nd Boulevard from SW 52nd Street to SW 43rd Street/Clark Butler Boulevard		
FM#:	211365-6-22-01	ETDM#:	14336
Project Review Date:	12/15/2017	FAP#:	
FDOT District:	2		
County(ies):	Alachua		

A DOA IS REQUIRED FOR EACH SECTION 4(f) PROPERTY AND PROPOSED ALTERNATIVE.

Project Description including Section 4(f) Specific Information:

The Florida Department of Transportation (FDOT), District Two, in cooperation with the City of Gainesville, is conducting a Project Development & Environment (PD&E) Study to evaluate the extension of Southwest 62nd Boulevard/Southwest 52nd Street as a two-lane roadway from the newly constructed intersection of Southwest 43rd Street and Butler Boulevard to the existing terminus of Southwest 62nd Boulevard/Southwest 52nd Street, a length of 0.79 miles.

The proposed project runs along the southwest boundary of the Forest Park Conservation Area as shown on the attached map. The project does not require any right-of-way (ROW) acquisition from the Conservation Area on a temporary or permanent basis, and will not constitute a "use" of the property within the meaning of Section 4(f).

Type of Property

Check all that apply:

- Public Parks and Recreation Areas
- Wildlife and Waterfowl Refuges
- Historic Sites

Description of Property: The Forest Park Conservation Area is identified as a conservation property and was acquired with funds from the Florida Communities Trust by the City of Gainesville. The Forest Park Conservation Area is also identified as a section of the Hogtown Creek Greenway which was established by the City to be a linear open space system envisioned as a network of trails for hiking, biking, and canoeing that linked neighborhoods to parks and places for shopping and employment. Currently the Conservation Area does not have any designated recreational facilities but has the opportunity for mountain biking and hiking through the forest. There are no designated parking areas or access from SW 62nd Boulevard or SW 20th Avenue. These trails are likely accessed from Forest Park, but there are no designated entrances.

Criteria of Selected Property Type(s):

Public Parks and Recreation Areas

- Must be publicly owned which refers to ownership by local, state or federal government
 - Ownership can also include permanent easements and long-term lease agreements
- Must be open to the public during normal hours of operation
- The major purpose must be for park or recreation activities
- Must be designated or function as a significant park or recreational area.
 - Applies to the entire park or recreation area not just a specific feature

Wildlife and Waterfowl Refuge

- Must be publicly owned which refers to ownership by local, state or federal government;
 - Ownership can also include permanent easements and long-term lease agreements;
- Must be open to the public but **refuges are able to restrict access for the protection of refuge habitat and species;**

FLORIDA DEPARTMENT OF TRANSPORTATION
SECTION 4(F) DETERMINATION OF APPLICABILITY

650-050-45
Environmental
Management
06/17

- The major purpose must be for wildlife and waterfowl refuges;
- Must be designated or function as a significant as a wildlife and waterfowl refuges; -
 - Applies to the entire wildlife and waterfowl refuges not just a specific feature

Historic Sites- includes historic buildings, historic transportation facilities, archeological sites, traditional cultural places, historic & archeological districts and historic trails.

- Must be of national, state or local significance and it must be eligible for listing or is listed on the National Register of Historic Places (NRHP); or
- If a site is determined not to be eligible OEM may determine that the application of Section 4(f) is otherwise appropriate when an official (such as the Mayor, president of a local historic society) provides information to support that the historic site is of local importance.

Does the identified resource meet all of the criteria for the selected property type?

Yes, continue to complete the form

No, STOP Section 4(f) does not apply

Identify the Official(s) with Jurisdiction (OWJ) contacted: City of Gainesville

Date correspondence sent to the OWJ: 11/30/2017

Has the Official(s) with Jurisdiction (OWJ) responded?

Yes No

Has the 30 day response period passed since the initial OWJ correspondence was sent?

Yes No

Please answer the questions below about the resource:

Note: A potential source for this information can include the property management plan, resource website and/or communications with the OWJ (*be sure to document these communications in writing*).

What is the size and location of the property (include a map of the resource)?

23.69 acres

Who/what organization owns/manages the property?

City of Gainesville

What is the primary function (activities, features and attributes) within the meaning of Section 4(f) of the facility or property?

The primary function is a natural conservation area, but undesignated mountain biking and hiking opportunities are available.

Please describe the location of available appurtenances and facilities (e.g. tennis courts, pools, shelter houses, sports fields, beaches) on the property:

There are no existing appurtenances and facilities.

What is the function of/or the available activities on the property?

FLORIDA DEPARTMENT OF TRANSPORTATION
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Public conservation area, but undesignated mountain biking and hiking opportunities are available.

Access and Usage of the property by the Public:

There are no designated parking areas or access from SW 62nd Boulevard or SW 20th Avenue. These trails are likely accessed from Forest Park, but there are no designated entrances.

Relationship to other similarly used lands/facilities in the vicinity:

This conservation area adjoins Forest Park and part of Hogtown Creek Greenway.

Are there any unusual characteristics of the property that either limit or enhance the value of the resource? If so please explain:

Located in Hogtown Creek basin inclusive of Hogtown Creek.

Describe project activities that could potentially "use" the resource:

The proposed project is a new roadway that runs along the southwest boundary of the Forest Park Conservation Area as shown on the attached map. The project does not require any right-of-way (ROW) acquisition from the Conservation Area on a temporary or permanent basis, and will not constitute a "use" of the property within the meaning of Section 4(f). The project will not change, or impact, access to the Conservation Area.

If applicable, give a general description of the history of the Historic Site, Archaeological Site or Historic District:

N/A

Based on the above information the recommended level of Section 4(f) evaluation for this property is:

Select the level of Section 4(f) evaluation: No Use

Reason the selected level is appropriate:

A portion of the project is located adjacent to the Forest Park Conservation Area, but there will be no "use" within the meaning of Section 4(f) to the Conservation Area. There will be no permanent or temporary acquisition of land, and no proximity impacts that rise to the level of substantial impairment to the protected resource.

Supporting Documentation

The following items **must** be attached to this form:

1. A map of the resource based on the guidelines in the PD&E Manual Part 2, Chapter 7, including the proposed alternative being evaluated.
2. Statement of Significance from OWJ or FDOT's presumption of significance.
3. Determination of Eligibility or Listing in the National Register of Historic Places, Archaeological Site (*include criterion of eligibility*) or a Historic District if applicable.

Signatures

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

Signature: Wendy G. Lecker
Preparer

: 1/25/2018
Date

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Signature: *Juli Newman*
Environmental Manager, or designee

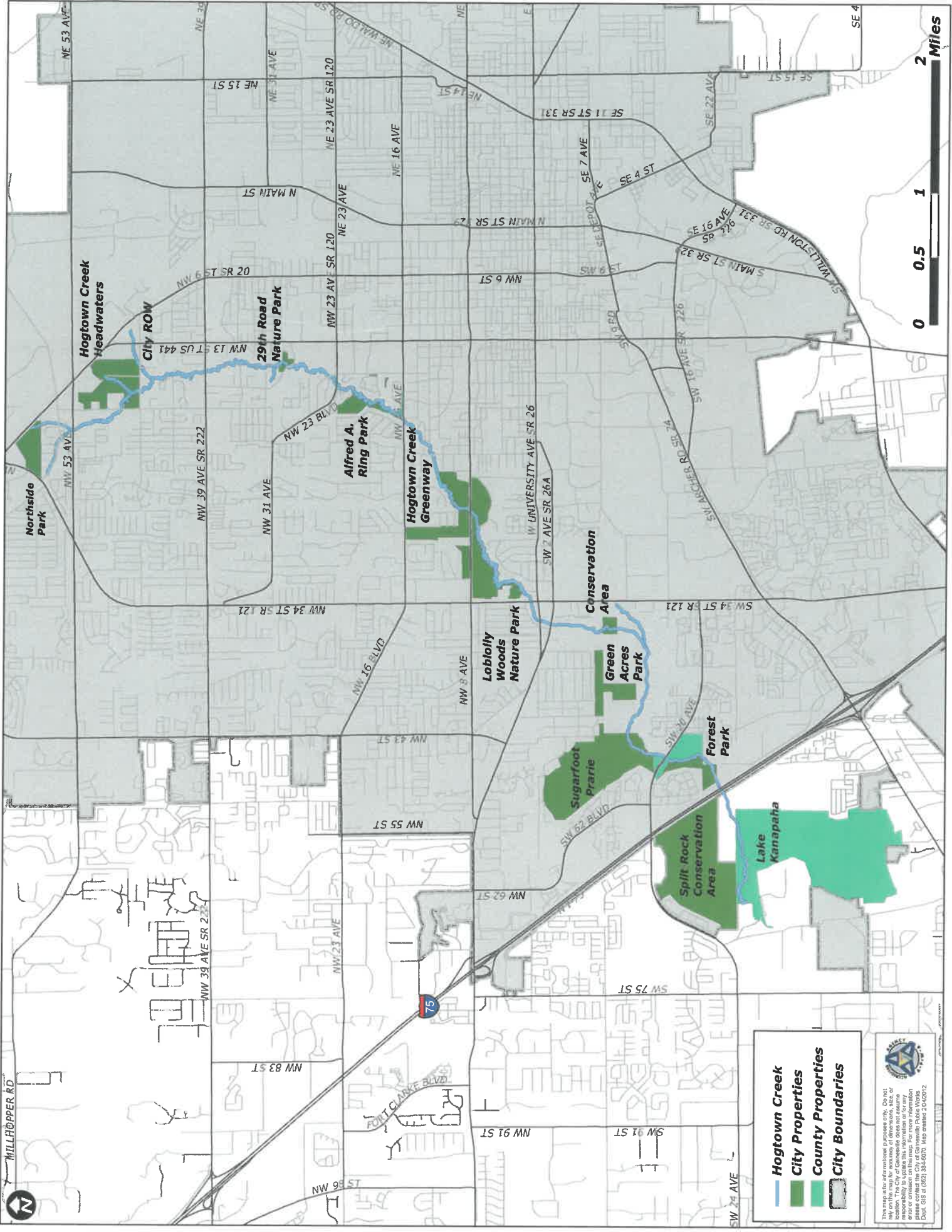
1/25/2018
Date

OEM
Concurrence: *[Signature]* 1/30/2018

Signature: *[Signature]*
Director of OEM, or designee

1/
Date





— Hogtown Creek
■ City Properties
■ County Properties
 City Boundaries



This map is for informational purposes only. Do not rely on the map for accuracy of dimensions, area, or responsibility to update this information or for any error or omission on this map. For more information, contact the City of Raleigh GIS Department at (919) 394-5070. Map created 2/04/2012.



Florida Department of Transportation

RICK SCOTT
GOVERNOR

1109 S. Marion Ave.
Lake City, FL 32025

MIKE DEW
SECRETARY

November 30, 2017

Mr. Stefan Broadus, PE, Project Engineer
City of Gainesville
Public Works
306 NE 6th Avenue
Gainesville, FL 32601

Subject: SW 62nd Boulevard from SW 52nd Street to SW 43rd Street/Clark Butler Boulevard
Section 4(f) Coordination
FPID: 211365-6-22-01
Alachua County, Florida

Dear Mr. Broadus:

The Florida Department of Transportation (FDOT), District Two, in cooperation with the City of Gainesville, is conducting a Project Development & Environment (PD&E) Study to evaluate extension of Southwest 62nd Boulevard/Southwest 52nd Street as a two-lane roadway from the newly constructed intersection of Southwest 43rd Street and Butler Boulevard to the existing terminus of Southwest 62nd Boulevard/Southwest 52nd Street, a length of 0.79 miles.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the FDOT pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration (FHWA) and FDOT. As part of the compliance with the National Environmental Policy Act (NEPA), FDOT must evaluate whether the proposed project will use lands protected by Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. Section 303 and Title 23 U.S.C. Section 138, as amended). Section 4(f) typically applies to publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance. It also applies to historic or archaeological sites of national, state, or local significance regardless of ownership. The term "significance" for the purposes of Section 4(f) when applying it to the Forest Park Conservation Area means that, when comparing the recreational, ecological, and historic preservation functions of the Conservation Area with the recreational and historic preservation objectives of the City of Gainesville for this area and its surrounding communities, the Forest Park Conservation Area plays an important role in meeting those objectives. It is our determination that the Forest Park Conservation Area, due to its public ownership and existing uses, meet Section 4(f) definition of a significant facility.


A portion of the project is located adjacent to the Forest Park Conservation Area, but there will be no impact to the Conservation Area as shown on the attached map. During the Class of Action meeting

SW 62nd Boulevard from SW 52nd Street to SW 43rd Street/Clark Butler Boulevard
Mr. Broadus
Page 2

between the FDOT and FHWA on October 14, 2009 there was concurrence that there are no constructive use impacts to the Forest Park Conservation Area.

The purpose of this letter is to establish a dialogue with you to seek your concurrence with the assessment that Forest Park Conservation Area meets Section 4(f) definition of a significant facility and that the project will not impact this resource. If you concur, please sign and date the concurrence block at the bottom of this letter, confirming its significance, and return it to Terri Newman at the address below or by email at: terri.newman@dot.state.fl.us.

We thank you in advance for your input. If you have any questions about this project, Section 4(f), the issues raised in this letter, or if you would like any clarifications of the questions or issues, please contact Terri Newman at (386) 961-7713 or via email at terri.newman@dot.state.fl.us.

Concurrence	
 <small>Digitally signed by Stefan M Broadus Date: 2017.12.04 13:28:55-05'00'</small>	<u>12/04/2017</u>
<i>(Signature)</i> City of Gainesville	<i>(Date)</i>
<input checked="" type="checkbox"/> property is significant	<input type="checkbox"/> property is not significant

Sincerely,


Stephen Browning,
FDOT District 2 Planning and Environmental Manager

Attachments: SW 62nd Boulevard Proposed Alternative Map

APPENDIX C

Letter from State Historic Preservation
Office (SHPO)

APPENDIX D

Letter from US Fish and Wildlife Service