ADMINISTRATIVE ACTION

FINDING OF NO SIGNIFICANT IMPACT/FINAL SECTION 4(F) EVALUATION

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

AND

FLORIDA DEPARTMENT OF TRANSPORTATION

FINANCIAL PROJECT ID NUMBERS: 207818-1 AND 210024-1 FEDERAL AID PROJECT NUMBER: XA-400-1(43) SR-20 FROM US-301 TO CR-315 ALACHUA AND PUTNAM COUNTIES, FLORIDA

THIS PROJECT PROPOSES WIDENING SR-20 FROM ITS CURRENT TWO-LANE CONFIGURATION, TO A FOUR-LANE, DIVIDED FACILITY FROM EAST OF US-301 IN THE TOWN OF HAWTHORNE, TO CR-315 IN THE TOWN OF INTERLACHEN, A DISTANCE OF 12.2 MILES.

SUBMITTED PURSUANT TO 42 U.S.C. 4332(2)(C) AND 49 USC 303.

A Federal agency may publish a notice in the Federal Register, pursuant to 23 USC §139(I), indicating that one or more Federal agencies have taken final action on permits, licenses, or approvals for a transportation project. If such notice is published, claims seeking judicial review of those Federal agency actions will be barred unless such claims are filed within 150 days after the date of publication of the notice, or within such shorter time period as is specified in the Federal laws pursuant to which judicial review of the Federal agency action is allowed. If no notice is published, then the periods of time that otherwise are provided by the Federal laws governing such claims will apply.

3-17-15

Division Administrator Federal Highway Administration

THIS FINDING OF NO SIGNIFICANT IMPACT (FONSI) WAS PREPARED IN ACCORDANCE WITH THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) OF 1969. THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT), IN CLOSE COORDINATION WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA), IS PROPOSING TO WIDEN THE EXISTING TWO LANE SR-20 TO A FOUR LANE DIVIDED FACILITY. IMPACTS FROM THE PREFERRED ALTERNATIVE ARE NOT ANTICIPATED TO BE SIGNIFICANT ON THE NATURAL, PHYSICAL, SOCIAL, OR CULTURAL ENVIRONMENTS. THIS FONSI IS BASED ON THE ENVIRONMENTAL ASSESSMENT (EA) AND DOCUMENTS THE RATIONALE FOR THE DECISION AND FINDINGS.

Table of Contents

A.	Statement of No Significant Impact	1
B.	Project Location	1
C.	Purpose And Need	1
D.	Recommended Alternative	3
E.	Relocation and Right-Of-Way	6
F.	Environmental Justice	6
G.	Cultural Resources/Section 4(f)	6
S	ection 106 Consultation	7
Ν	Iemorandum of Agreement	8
S	ection 4(f) Finding	9
H.	Air Quality	9
I.	Noise	9
J.	Floodplain Finding	9
K.	Wetland Finding 1	0
L.	Water quality 1	0
Р	ond Siting1	0
M.	Wildlife and Habitat 1	1
N.	Essential Fish Habitat 1	1
О.	Farmlands 1	1
P.	Contamination 1	1
Q.	Coastal Zone Consistency 1	2
R.	Public Involvement 1	2
S.	Statement of Public Availability	2
T.	Project Funding 1	2

List of Figures

Figure 1: Project Location Map	. 2
Figure 2: Build Alternative Typical Section	
Figure 3: Build Alternative Option 4 Typical Section	

List of Tables

Table 1: Project Funding	3
--------------------------	---

A. STATEMENT OF NO SIGNIFICANT IMPACT

Federal Highway Administration (FHWA) has determined that this project (Revised Build Alternative) will not have any significant impact on the human environment. The Finding of No Significant Impact is based on the attached *Environmental Assessment* (EA), which has been independently evaluated by FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. The FHWA takes full responsibility for the accuracy, scope, and contents of the attached EA.

B. PROJECT LOCATION

The proposed project will widen the two-lane rural SR-20 roadway, connecting the towns of Hawthorne and Interlachen. This segment of roadway extends from just east of US-301 (Hawthorne) in Alachua County, Florida to CR-315 (Interlachen) in Putnam County, Florida. This project will widen the 12.2-mile segment to a four-lane divided facility. The project location map (Figure 1) illustrates the location and limits of the study.

State Road 20 combines with SR-26, SR-19, and SR-207 to connect Florida's east and west coasts. This combined east-west route begins on Florida's west coast at US-98/19 in Gilchrist County as SR-26 and extends east until SR-26 intersects with SR-20. From this point, SR-20 continues the combination route, transitioning to SR-19 and SR-207 before interchanging with I-95 on Florida's east coast. Along with Interstate 10, this SR-20 combination route is one of two major east-west thoroughfares in northeastern/north-central Florida.

State Road 20 also serves as a regional link connecting the communities of Gainesville, Hawthorne, Interlachen, and Palatka. In addition to carrying regional traffic, SR-20 serves as a commuter route from the Town of Interlachen to the adjacent cities of Gainesville and Palatka. On a statewide spectrum, SR-20 functions to connect these communities with areas along Florida's east coast and serves as an evacuation route for the coastal communities of Flagler and St. Johns counties.

C. PURPOSE AND NEED

The purpose and need for this project are to increase capacity, provide a safer roadway, and connect existing widening projects to facilitate east/west movements across the state. By 2017, the entire segment of SR-20 will degrade to an unacceptable LOS. By the design year, 2040, the entire segment of SR-20 will be operating at Level of Service (LOS) "F". Providing additional capacity along this stretch of roadway will provide a safer and more efficient roadway.

This project proposes to widen the existing roadway to a four lane divided typical section with a raised median. Providing a raised median and designated median openings with left turn lanes, has proven to significantly reduce the number of rear end, head-on, angle, and left turn crashes. This project will also bring the horizontal and vertical geometry up to current design standards through the rolling terrain. Doing so will provide the necessary sight distance that several of the existing curves do not currently provide. These improvements, coupled with additional capacity that the four lane roadway will provide, will reduce the overall number of crashes on this segment of SR-20 and at three high crash intersections.



Figure 1: Project Location Map

From a regional perspective, SR-20 provides a major east/west movement. Currently, between Ocala and Jacksonville there are no roadways other than SR-40 in Ocala and I-10 in Jacksonville that provide a direct east/west connection from I-75 to I-95. It is approximately 80 miles between I-10 and SR-40. Providing additional capacity will enhance the entire regions ability to serve east/west traffic.

Due to the deficiencies, congestion and high crash rates previously discussed, the existing SR-20 roadway requires widening from US-301 to CR-315. This project also connects the adjacent widening projects on SR-20. It provides the missing link that closes the gap and thus enhances the corridors ability to provide major east/west movements across the state.

D. RECOMMENDED ALTERNATIVE

The recommended Build Alternative is the Revised Build Alternative. The Build Alternative consists of a 180-foot urban typical section (Figure 2) with a design speed of 55 mph. The typical section has a five-foot sidewalk on the north side and a 10-foot sidewalk on the south side and 6.5-foot bicycle lanes on both sides of the roadway. This typical section is proposed for the majority of the project.

The Build Alternative shifts off the existing alignment in three locations. Two of these locations are due to existing horizontal geometry not meeting current design standards for 55 mph. Minor deviations are needed to provide acceptable horizontal geometry at these two locations. The third shift off the existing alignment is near Clear Lake and Lake Galilee. The Build Alternative proposed new alignment will shift SR-20 away from Clear Lake and Lake Galilee. When SR-20 was originally constructed, SR-20 split Clear Lake. This new alignment will reduce floodplain impacts compared to remaining on the existing alignment. This new alignment was shown at a public meeting held December 8, 2011 and again at a public hearing held on September 12, 2013. Several property owners who live along the lakes expressed support of the proposed alignment.

Between Lake Chipco and the Interlachen Historic District the Build Alternative shifts from a 180-foot urban typical to a 150-foot urban typical section (Figure 3) noted as Option 4. Option 4, as part of the Build Alternative, has been determined to be the preferred option for this segment of SR-20. The local community strongly supports Option 4. In consultation with FHWA, SHPO, and the community, a Memorandum of Agreement (MOA) was executed and Option 4 was carried forward as the preferred option.

The Build Alternative will require pond sites to treat the stormwater runoff. As part of the project, 22 potential pond sites have been selected with the average pond size being four acres. The pond sites were shown at the public hearing held September 12, 2013. It is expected that the pond sites will result in no significant impact; however, as the project progresses, pond locations may be modified based on coordination with the property owners.



Figure 2: Build Alternative Typical Section



Figure 3: Build Alternative Option 4 Typical Section

E. RELOCATION AND RIGHT-OF-WAY

The Build Alternative will impact 15 residences and nine businesses and the 22 proposed potential pond sites may impact an additional seven residences. The Build Alternative is not anticipated to have any negative effects on populations or displacements of a significant number of persons (including minority populations or special populations). Relocation impacts to minorities and low income populations will be avoided whenever possible. As a part of the proposed project, all displacees will be offered relocation assistance benefits that are provided for in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act). This assistance will include advisory services and other benefits available to eligible residential and non-residential displacees.

F. ENVIRONMENTAL JUSTICE

This project has been developed to be compliant with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and related federal and state nondiscrimination authorities. No person shall, on the grounds of race, color, religion, sex, national origin, marital status, handicap, or family composition be excluded from participation in, or be denied the benefits of, or be otherwise subject to discrimination in any federally funded program, service or activity. The Build Alternative will have no negative effects on populations or displacements of a significant number of persons (including minority populations or special populations).

G. CULTURAL RESOURCES/SECTION 4(f)

In accordance with the procedures contained in 36 CFR, Part 800, a Cultural Resource Assessment Survey (CRAS), including background research and a field survey coordinated with the State Historic Preservation Officer (SHPO), was performed for this project. As a result of the assessment, 110 sites were identified, 22 sites were determined eligible for listing or are listed on the National Register of Historic Places (NRHP). The 110 historic resources are described and shown by the master site file number in Section 4.2 of the EA.

The CRAS is included with the Technical Discipline Reports on the included DVD. . The SHPO concurrence letters are included in Appendix D of the EA. The original Phase 1 CRAS was completed in January 2001 and included buildings constructed prior to 1951. The updated Phase 1 CRAS was completed in November 2009 and included buildings constructed prior to 1965. A memorandum covering the new alignment portion was completed in October 2011 and also included any buildings constructed prior to 1967. Two memorandums covering the pond sites were completed in December 2012 and March 2014. Between these surveys, all buildings within the APE that are 48 years or older have been recorded and evaluated. The surveys were conducted for the build alternatives to evaluate the effect that construction will have on resources listed or potentially eligible for listing on the NRHP for local, regional, or national significance.

Archaeological surveys were conducted as part of this project. The surveys concluded, based upon the opinion of the Principal Investigator that none of the archaeological sites or archaeological occurrences were considered eligible for listing on the National Register of Historic Places and no further work was recommended.

Section 106 Consultation

Coordination with the SHPO began with the Advance Notification Process. On October 14, 1999, the SHPO requested that FDOT conduct a Cultural Resource Survey. This survey was completed in January 2001. On August 10, 2001, the SHPO concurred with the findings of the survey, which are described in Section 4.2 of the EA. The SHPO concurrence letter is included in Appendix D of the EA.

In reaching these conclusions and identifying potential impacts, meetings were held with the SHPO and interested members of the public. On September 13, 2000, a meeting was held in Interlachen with FDOT, the SHPO, and concerned citizens to discuss the merits of the bypass options as well as the merits of the existing alignment options. The FDOT reiterated their position that a bypass around Interlachen was not a feasible and prudent alternative.

A formal Section 106 meeting was held December 7, 2000 in Tallahassee, Florida to discuss the findings of the Cultural Resource Survey. Representatives attended this meeting from FDOT, FHWA, the SHPO, and several citizens from Interlachen. The boundaries of the Interlachen Historic District were discussed as well as potential impacts to the district. There was also a general discussion on measures to minimize harm.

On April 5, 2001, the FDOT and FHWA went to Interlachen for a meeting with interested citizens. At this meeting, Option 1-Right was presented and the minimization attributes of this alternative were discussed at length. The SHPO representative was unable to attend this meeting. The citizens requested FDOT to develop a new wider typical section alternative that would create a buffer between the expanded roadway and the Interlachen Historic District. That alternative is called "Option 4".

On October 2, 2001, representatives of the FDOT went to Interlachen and presented Option 4, developed as a result of the April 5, 2001 meeting requested by the citizens. At that time, the FDOT stated it was preparing an EA analyzing both options. It was also stated that after circulation of the EA and FDOT received comments from the SHPO, local officials and the general public, a recommendation would be made as to which typical section (Option 1- Right or Option 4) would be constructed through Interlachen.

During discussions with the local community, FHWA, and the SHPO, it was decided that the long-term impacts from Option 1-Right to the overall historic district would be more damaging than Option 4. It is likely that the acquisition of the backyards of the remaining four buildings, as Option 1-Right does, would result in either their conversion to commercial interests or even possibly demolition, to accommodate new commercial construction. As a result, the local community strongly supports Option 4. In consultation with FHWA, the SHPO, and the community, Option 4 was carried forward as the locally preferred option for the MOA.

On August 9, 2011, representatives of FDOT went to Interlachen to present, at that time, a proposed MOA with SHPO to the Town of Interlachen. The MOA states that FDOT will transfer any right-of-way that will not eventually be used or necessary for the project to the Town of Interlachen. The additional right-of-way will be used for the expansion of the existing linear park. The Town of Interlachen accepted the proposal. The MOA is included in Appendix C of the EA.

In addition to these meetings, which were directly related to the Section 4(f) issues; numerous other meetings have been held. Refer to Section 6.2 in the EA for a full discussion of public involvement on this project.

Memorandum of Agreement

Through the application of the Criteria of Adverse Effect, the Federal Highway Administration, in consultation with the SHPO, concluded that the project would have an adverse impact on the houses located within the Town of Interlachen, Florida located at: 1172 SR-20 (8PU1297), 418 Atlantic Avenue (8PU1298), 426 Atlantic Avenue (8PU1299), 432 Atlantic Avenue (8PU1300), and 440 Atlantic Avenue (8PU1301), each such property being eligible for inclusion in the National Register of Historic Places. Based on these conclusions, a MOA was developed, and approved by the Federal Highway Administration, the SHPO, and FDOT on November 8, 2011 (see Appendix C).

The MOA states that as part of Option 4, FDOT will adversely affect the houses located within the Town of Interlachen, Florida located at: 1172 SR-20 (8PU1297), 418 Atlantic Avenue (8PU1298), 426 Atlantic Avenue (8PU1299), 432 Atlantic Avenue (8PU1300), and 440 Atlantic Avenue (8PU1301), each such property being eligible for inclusion in the National Register of Historic Places. The FHWA and the Department consulted with the local community, the record property owners of the affected houses, members of the public and with the SHPO, in accordance with Section 106 of the National Historic Preservation Act.

As part of the project, and as defined as mitigation in the MOA for the Interlachen Historic District, the Department shall acquire the historic house located at 440 Atlantic Avenue (8PU1301). The Department shall relocate the house to an as yet undetermined location, preferably within the Interlachen Historic District, and, thereafter restore the exterior of the home. The house shall be encumbered with a preservation covenant (prepared by the department) and offered for sale to the former owner after relocation and restoration are complete. If the former owner does not purchase the home, the Department will offer the home for sale to the Town and thereafter to the general public.

The remaining four homes will be encumbered with a preservation covenant and thereafter offered for sale to the former owners. Homes not purchased by the respective former owners shall be offered for sale to the general public. The Department will implement a marketing plan, for a period of six months, which may include listing the houses in area newspapers; posting flyers at local community centers such as churches and historical societies; informing local civic and religious leaders about the houses; and informing local, regional, and state-wide preservation groups for posting on their website or list-server. The Department may demolish any house not purchased within the six-month marketing period.

The Department will transfer any right-of-way that will not eventually used or necessary for the project to the Town of Interlachen. The additional right-of-way will be used for the expansion of the existing linear park. After completion of the project, the Department will install landscaping in the area between SR-20 and the boundary of the proposed expansion of the park.

Section 4(f) Finding

Based upon the above considerations, there is no feasible and prudent alternative to the use of land from the Interlachen Historic District and the proposed action includes all possible planning to minimize harm to the Interlachen Historic District resulting from such use.

H. AIR QUALITY

The predicted worst case 1-hour and 8-hour CO concentrations for Build Alternative do not exceed the NAAQS limits. The air report, completed in May 2012, is included on the DVD. The project is located in an area which is designated attainment for all of the National Ambient Air Quality Standards (NAAQS) under the criteria provided in the Clean Air Act. Therefore, the Clean Air Act conformity requirements do not apply for the project.

I. NOISE

An assessment of noise impacts was conducted for this project according to Title 23, Code of Federal Regulations (C.F.R.), Part 772: Procedures for Abatement of Highway Traffic Noise and Construction Noise (July 13, 2010), Part II, Chapter 17 of the Florida Department of Transportation (FDOT) Project Development and Environment (PD&E) Manual (May 24, 2011) and Chapter 335.17, Florida Statutes. This assessment also adheres to Federal Highway Administration (FHWA) traffic noise analysis guidelines contained Report FHWA-HEP-10-025, "Highway Traffic Noise: Analysis and Abatement Guidance", (January 2011). The analysis is fully documented in the project's Noise Study Report (June 2012) which is included with the Technical Discipline Reports on the included DVD.

As it is expected along a controlled-access facility like SR 20, numerous driveways and side streets access the roadway. All noise barriers must therefore, have access openings, resulting in barrier systems comprised of shorter wall segments. Likewise, areas where only a single-impacted receptor is located inherently cannot achieve the FHWA requirement that a minimum of *two* impacted sites must benefit from an analyzed noise barrier.

The noise analysis for the revised build alternative shows noise is expected to increase in proximity to the project corridor. However, there appears to be no feasible and reasonable solutions available to mitigate the noise impacts at any of the impacted receptors. The noise study report will be circulated to the appropriate local planning/zoning officials for Alachua and Putnam Counties for their use in lane use control once Location and Design Concept Acceptance approval occurs.

J. FLOODPLAIN FINDING

In accordance with Executive Order 11988 "Floodplain Management", United States DOT Order 5650.2, and Chapter 23, CFR 650A, impacts to floodplains from the proposed improvements have been considered. The Build Alternative will minimize the floodplain impacts to Clear Lake by constructing the roadway on new alignment. The floodplain impact locations are classified as a transverse impact and are virtually unavoidable because of the floodplain crossing the existing SR-20 alignment. The floodplain mitigation measures include constructing compensating floodplain ponds that are hydraulically connected to the floodplain areas. These ponds will store a volume of water equal to the floodplain volume displaced by the expanded SR-20 typical section.

It has been determined, through consultation with local, state, and federal water resources and floodplain management agencies that there is no regulatory floodway involvement on the proposed project and that the project will not support base floodplain development that is incompatible with existing floodplain management programs.

Pursuant to Executive Order 11988 "Floodplain Management", the proposed action was determined to be within the base floodplain. Impacts associated with the encroachment have been evaluated and determined to be minimal. Therefore, the proposed action will not constitute a significant encroachment.

K. WETLAND FINDING

In accordance with Executive Order 11990, special considerations were taken in developing and evaluating the Build Alternative to avoid and minimize impacts associated with the proposed project. The Build Alternative traverses or is adjacent to 29 wetland locations resulting in a potential direct impact of 7.5 (D/F) and 70.5 (No D/F) acres. The proposed pond sites will result in a potential direct impact of less than 1.0 (D/F) acres. The potential wetland impact acreages are preliminary and subject to change. All practicable measures will be taken to minimize harm to wetland areas. A more detailed analysis of wetland impacts is presented in Section 4.3.5 of the EA.

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

L. WATER QUALITY

The existing SR-20 corridor has rural drainage provided in roadside swales and ditches. *No stormwater treatment or peak attenuation is currently provided*. Stormwater runoff from SR-20 outfalls to many land-locked lakes as well as Little Orange Creek and Fowler's Prairie.

A Water Quality Impact Evaluation (WQIE) checklist (June 2012) has been completed for the proposed project and is included in the DVD. The project will enhance water quality by capturing and treating the stormwater runoff in a permitted stormwater facility. The treatment will be a wet or dry retention/detention area that will effectively reduce the nutrients, heavy metals, oils, grease, and sediments from the SR-20 stormwater prior to discharge or infiltration.

Pond Siting

As part of the Build Alternative, stormwater runoff from SR-20 will be collected and conveyed to stormwater ponds before being discharged. The proposed stormwater facility design will include, at a minimum, the water quantity requirements for water quality impacts, as required by the St. John's River Water Management District's Rule 40C-4. All of the drainage basins are closed except for Little Orange Creek and Fowler's Prairie. Therefore, most of the ponds will be required to meet the pre versus post-development volumetric requirements for closed basins. The post-development volumetric runoff must not exceed the pre-development volumetric runoff for each individual basin. The treatment will be a wet or dry retention/detention area that will effectively reduce the nutrients, heavy metals, oils, grease, and sediments from the SR-20 stormwater prior to discharge or infiltration.

As described above, the runoff from the revised build alternative will be collected in adjacent ditches and conveyed to storm sewer inlets, then conveyed to ponds or swales through storm sewer systems. The pond drainage basins are defined by roadway high points, ditch berm and pond berm. The proposed pond locations were selected based on the existing drainage patterns and topography, aerial photos and topography survey, USDA-NCRS Soil Survey maps of Alachua and Putnam Counties, USGS topographic maps, tax maps, FDOT right-of-way maps, site contamination reports, and FEMA flood insurance rate maps. In addition, minimization of wetland impacts, residential and business relocations, cost and constructability were factored into the location of the ponds.

A total of 22 pond sites have been identified with the average size being four acres. There is a total of less than one acre of wetland impacts associated with the proposed pond sites and seven additional relocations. The pond sites however, will not result in any significant impact to the natural or man-made environment.

M. WILDLIFE AND HABITAT

This project has been evaluated for potential impacts to state and federally listed threatened and endangered species. An Environmental Species Biological Assessment (ESBA) and Wildlife and Habitat Report (May 2012) were prepared to document any potential involvement with listed species and/or critical habitat and are included with the Technical Discipline Reports on the attached DVD. These reports document the search results and analysis based on the latest USFWS county species lists as well as current Florida Natural Areas Inventory (FNAI) database searches of known, likely, or potential occurrences of listed species and their potential involvement with this project. Various GIS resources from FNAI, FWC, and USFWS were used to aid in potential project involvement. The studies identified a total of seven federally listed plant and animal species that the Build Alternative may potentially involve. The USFWS reviewed the ESBA and concurred (letter dated 6-20-2012, See Appendix D) that the proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C 1531 et seq.).

N. ESSENTIAL FISH HABITAT

The proposed project will not directly impact wetland areas that support essential fish habitat (EFH) or National Oceanic and Atmospheric Administration (NOAA) trust fishery resources. Therefore, the project will not adversely affect areas identified as EFH and consultation is not required.

O. FARMLANDS

Through coordination with the Natural Resources Conservation Service (See Appendix D of the 2005 EA, located on the included DVD), it has been determined that no farmlands, as defined by 7 CFR 658, are located in the project vicinity.

P. CONTAMINATION

The Build Alternative will impact ten sites. Seven of the sites were ranked Low. Based on all available information, there is no reason to believe that there would be any involvement with contamination at these locations and further investigation is not recommended at this time. Three

of the sites were ranked High. Level two testing is recommended for these sites as roadway design proceeds. Resolution of problems associated with contamination will be coordinated with the appropriate regulatory agencies and appropriate action will be taken, where applicable.

Q. COASTAL ZONE CONSISTENCY

The Department of Community Affairs has determined that this project is consistent with the Florida Coastal Zone Management Plan (See Appendix B of the 2005 EA, located on the included DVD).

R. PUBLIC INVOLVEMENT

Public Involvement has been an integral part of the project. Since March of 1999, eight public meetings have been held for this project. In addition, a Public Hearing was held on September 12th, 2013. All meetings were advertised in local newspapers and a mailing list was utilized to inform interested parties of all public meetings. All meetings were held in Hawthorne or Interlachen and averaged from 65 to 375 participants. The overall response to the proposed alternative indicates that the Revised Build Alternative is the locally preferred alternative. A copy of the Public Hearing Transcript is on the included DVD.

S. STATEMENT OF PUBLIC AVAILABILITY

The approved EA addresses all of the viable alternatives that were studied during project development. The environmental effects of all alternatives under consideration were evaluated when preparing the assessment. The document was made available to the public before the public hearing and the *Finding of No Significant Impact* was made after consideration of all comments received as a result of public availability and the public hearing.

T. PROJECT FUNDING

The project is broken into three different segments for design, right-of-way, and construction. The western most segment is from US-301 to Putnam County Line (FPID No. 207818-2), the middle segment is from the Alachua County Line to SW 56th Avenue (FPID No. 210024-4), and the eastern segment is from SW 56th Avenue to CR-315 (FPID No. 210024-5). The project is located in a rural area and not in a Metropolitan Planning Organization (MPO) and therefore is only included in the State Transportation Improvement Plan (STIP) and not the Transportation Improvement Plan (TIP).

Using state and federal funding sources, the design (<2014-2015) and right-of-way (<2014->2017) phases for each segment is fully funded in the STIP plan as shown in Table 1. The total project cost is \$158 million (See Table 3-1 of the EA). The construction phase for all segments is identified in the Strategic Intermodal System (SIS) unfunded needs plan in the second five years.

	FPID No. 207818-2 FPID No. 210024-4		FPID No. 210024-5		Funding		
	STIP \$	Fiscal Year	STIP \$	Fiscal Year	STIP \$	Fiscal Year	Type (all segments)
Design	\$227,453	<2014/2014	\$1,492,925	<2014/2014	\$696,619	<2014 /2014/ 2015	State/Federal
ROW	\$1,397,449	<2014/2014 /2015	\$21,598,440	<2014/2014/ 2015/2016/ 2017/>2017	\$14,443,029	2014/ 2015/ 2016/ 2017	State/Federal
Environmental	\$108,111	2015	\$918,000	2016	\$250,000	>2017	State/Federal
Railroads and Utilities	\$1,525,000	<2014/2015	\$3,600,000	>2017	\$3,450,000	>2017	State/Federal
Const.	\$16,941,379	2016/2017/ >2017	\$52,741,962	>2017	\$35,047,164	>2017	State/Federal

Table 1: Project Funding

ENVIRONMENTAL ASSESSMENT/SECTION 4(f) EVALUATION

THIS ENVIRONMENTAL ASSESSMENT IS UPDATED AND IS APPENDED TO THE FINDING OF NO SIGNIFICANT IMPACT. IT CONTAINS ENGINEERING, SOCIAL, ECONOMIC AND ENVIRONMENTAL INFORMATION IN SUPPORT OF THE PROJECT FINDING. THIS ENVIRONMENTAL ASSESSMENT HAS BEEN UPDATED SINCE THE OFFICIAL PROJECT PUBLIC HEARING WHICH WAS HELD SEPTEMBER 12, 2013."

Table of Contents

SECTION 1: DESCRIPTION OF THE PROPOSED ACTION	1-1
1.1 Project Introduction	
1.2 Proposed Action	
1.3 Background	
SECTION 2: NEED FOR IMPROVEMENT	2-1
2.1 Overview	
2.2 System Linkage	
2.3 Modal Interrelationships 2.3.1 Transit System 2.3.2 Pedestrian and Bicycle Facilities	
 2.4 Local Government support 2.4.1 Consistency with Alachua and Putnam County Comprehensive Plans 2.4.2 Consistency with the State Transportation IMprovement Program 	2-2
2.5 Capacity Needs	
2.6 Safety	2-3
2.7 Summary of Project Need	
SECTION 3: ALTERNATIVES CONSIDERED	
3.1 No-Build Alternative	
3.2 Transportation System Management Alternative	
3.3 Multimodal Build Alternatives	
 3.4 Build Alternatives 3.4.1 Approved 2005 EA Build Alternative 3.4.2 Revised Build Alternative 3.4.3 Locally Preferred Option through the Town of Interlachen 3.4.4 Alignment Modifications Minor Deviations New Alignment Segment 3.4.5 Alternative Matrix 	3-8 3-8 3-8 3-8 3-8 3-8 3-8 3-12
SECTION 4: IMPACTS	4-1
 4.1 Social and Economic Impacts 4.1.1 Community Impact Assessment Social Impacts Community Cohesion Community Facilities and Services Mobility Land Use Impacts 4.1.2 Utilities and Railroads 	4-1 4-1 4-1 4-2 4-5 4-5 4-5 4-6
4.1.3 Relocations 2005 EA Build Alternative Option 1 Right	

Residential Relocations	
Business Relocations	4-7
2005 EA Build Alternative Option 4	4-7
Residential Relocations	4-7
Business Relocations	4-7
Revised Build Alternative Option 1 Right	4-8
Residential Relocations	4-8
Business Relocations	4-8
Revised Build Alternative Option 4	4-9
Residential Relocations.	4-9
Business Relocations	4-9
Relocation Matrix	4-9
4.1.4 Environmental Justice	4-10
4.2 Cultural and Historical Resources	
2005 EA Build Alternative	
Option 1 Right	
Option 4	
Revised Build Alternative	
Option 1 Right	
Option 4	
Locally Preferred Option through the Town of Interlachen	
4.2.1 Section 106 Consultation	
Coordination	
Memorandum of Agreement (MOA)	
4.2.2 Recreational/Parkland	4-19
4.3 Natural and Physical Impacts	4-20
4.3.1 Pedestrian/Bicycle Facilities	
2005 EA Build Alternative	
Revised Build Alternative	
4.3.2 Visual/Aesthetics	
Option 1-Right	
Option 4	
4.3.3 Air Quality	
4.3.4 Noise	
2005 EA Build Alternative	
Revised Build Alternative	
Impact Analysis	
Noise Abatement Consideration	
Barrier Analysis	
Statement of Likelihood	
4.3.5 Wetlands	
2005 EA Build Alternative	
Revised Build Alternative	
Wetlands Impact Analysis	
Wetland Impacts	
Wetlands Classification	
Lakes (520)	
Mixed Wetland Hardwoods (617)	
Hydric Pine Flatwoods (625)	
Wetland Forested Mixed (630)	
Wetland Shrub (631)	
Freshwater Marshes (641)	
Wet Prairies (643)	4-38

Fowler's Prairie	4-38
Wetland Functional Analysis	4-38
Avoidance and Minimization	4-39
Permitting and Coordination	4-39
Conceptual Mitigation & Impact Summary	4-40
4.3.6 Aquatic Preserves	
4.3.7 Water Quality	
Pond Siting	
4.3.8 Outstanding Florida Waters	4-42
4.3.9 Contamination	4-42
2005 EA Build Alternative	4-42
Revised Build Alternative	
4.3.10 Wild and Scenic Rivers	
4.3.11 Floodplains	
4.3.12 Coastal Zone Consistency	
4.3.13 Coastal Barrier Resources	
4.3.14 Wildlife and Habitat	
2005 EA Build Alternative	
Revised Build Alternative	
Federally Listed Species	
Impact Summary	
4.3.15 Essential Fish Habitat	
4.3.16 Farmlands	
4.3.17 Scenic Highways	
4.3.18 Construction	
4.3.19 Secondary and Cumulative Impacts	4-55
SECTION 5: SECTION 4(f)	E 1
5.1 Summary of Alternatives Considered	5-1
5.2 Section 4(F) Resources	
5.3 Section 4(F) Evaluation –Town of Interlachen Historic district	
5.3.1 Engineering Alternative Analyses Overview	
Segment 14 and 15 Analysis	
Summary	
5.3.2 Section 4(f) Evaluation: Option 1-Right	
5.3.3 Section 4(f) Evaluation: Option 4	
5.4 Avoidance Alternatives	F 10
5.4 Avoidance Alternatives	
5.4.1 Alternate corruors	
5.5 Measures to Minimize Harm	5-18
5.5.1 Option 1-Right	5-19
5.5.2 Option 4	5-19
5.6 Coordination and Memorandum of Agreement	5-19
5.6.1 Coordination	
5.6.2 Memorandum of Agreement	
5.7 Section 4(f) Summary	
SECTION 6: COMMENTS AND COORDINATION	6-1
6.1 Advance (AN) Notification Process	
6.1.1 Department of Environmental Protection (October 1, 1999)	
6.1.2 Florida Fish And Wildlife Conservation Commission (September 13, 1999)	

6.1.3 Division of Historical Resources (October 14, 1999)	6-4
6.1.4 Northeast Florida Regional Planning Council (October 22, 1999)	
6.1.5 North Central Florida Regional Planning Council (September 24, 1999)	
6.1.6 Continuing Agency Coordination	6-6
6.2 Public Participation	6-7
6.2.1 Public Meetings	6-7
6.2.2 Elected Official, Agency, and Organized Group Meetings	6-7
6.2.3 Public Hearing	6-8
6.3 Public Comments	6-8
6.3.1 The Historical Society of Interlachen, Florida, Inc. (October 4, 2001)	6-8
6.3.2 Citizens Advisory Committee - Town of Interlachen (October 5, 2001)	6-9
6.3.3 Town of Interlachen (October 24, 2001)	
6.3.4 Town of Interlachen (August 10, 2011)	6-9
6.3.5 City of Hawthorne (April 24, 2012)	
SECTION 7: COMMITMENTS AND RECOMMEDATIONS	

List of Figures

Figure 1-1: Project Location Map	1-2
Figure 1-2: Strategic Intermodal System	1-4
Figure 2-1: Alachua County Crash Locations	2-4
Figure 2-2: Putnam County Crash Locations	2-5
Figure 3-1: Project Segments	
Figure 3-2: Existing Typical	
Figure 3-3: Option 1 Right	
Figure 3-4: Option 4	3-5
Figure 3-5: Option 1 Right Footprint	
Figure 3-6: Option 4 Footprint	
Figure 3-7: 2005 Approved EA Rural Typical Section	3-9
Figure 3-8: 2005 Approved EA Urban Typical	3-10
Figure 3-9: Revised Build Alternative	
Figure 4-1: Community Features	4-4
Figure 4-2: Cultural Resource Sites	4-17
Figure 4-3: Noise Impacts	4-31
Figure 4-4: Wetland Impacts	4-35
Figure 4-5: Contamination Sites	4-45
Figure 4-6: Floodplains	4-47
Figure 5-1: Section 4(f) Resources	5-4
Figure 5-2: Concrete Block Billboard	5-5
Figure 5-3: First United Methodist Church, View facing southeast	5-5
Figure 5-4: Historic Portion of the First United Methodist Church, View facing northeast .	5-5
Figure 5-5: Butler Beach, View facing north	5-6
Figure 5-6: Butler Beach, View facing northwest	5-6
Figure 5-7: Robert Henry Jenkins, Jr. Memorial Park	5-7
Figure 5-8: Robert Henry Jenkins, Jr. Memorial Park	5-7
Figure 5-9: Hastings Park, View looking southwest	5-8
Figure 5-10: Hastings Park, View facing southeast	5-8
Figure 5-11: Option 1 Right; Right-of-Way Required	5-13
Figure 5-12: Option 4; Right-of-Way Required	5-14

List of Tables

Table 2-1: Funding for Future Phases	2-2
Table 2-2: No-Build Level of Service (LOS)	2-3
Table 2-3: Alachua County Crash Data	2-3
Table 2-4: Putnam County Crash Data	2-6
Table 3-1: Alternative Project Cost	3-12
Table 3-2: Evaluation Matrix	3-13
Table 4-1: Existing Demographic Information	4-1
Table 4-2: Existing Community Features	4-3
Table 4-3: Relocation Matrix	4-10
Table 4-4: Project Segments by Census Block Groups	4-11
Table 4-5: Cultural Resource Sites	4-16
Table 4-6: Cultural Resource Sites Impacted	4-17
Table 4-7: Hourly A-Weighted Noise	4-24
Table 4-8: Noise Impact Summary, Segments 1-13	4-26
Table 4-9: Noise Impact Summary, Segments 14-15, Option 1 Right	4-29
Table 4-10: Noise Impact Summary, Segments 14 and 15, Option 4	4-30
Table 4-11: Barrier Analysis Summary	4-33
Table 4-12: Wetland Classification and Impacts	4-36
Table 4-13: Contamination Sites Impacted	4-43
Table 4-14: Contamination Risk Evaluation Summary	4-44
Table 4-15: Threatened and Endangered Species	4-49
Table 5-1: Corridor Comparison Matrix	5-16
Table 6-1: List of Agencies	6-2

Appendices

Appendix A: Future Land Use Maps

Appendix B: City of Hawthorne Letter Regarding Little Orange Creek Nature Park

Appendix C: State Historic Preservation Office Memorandum of Agreement

Appendix D: Agency Coordination Letters

Appendix E: FHWA Planning Consistency Form

SECTION 1: DESCRIPTION OF THE PROPOSED ACTION

1.1 PROJECT INTRODUCTION

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study for a 12.2-mile segment of State Road (SR) 20. This segment extends from east of US-301 in Alachua County to CR-315 in Putnam County. The project location map (Figure 1-1) illustrates the location and limits of the study.

State Road 20 combines with SR-26, SR-19, and SR-207 to connect Florida's east and west coasts. This combined east-west route begins on Florida's west coast at US-98/19 in Gilchrist County as SR-26 and extends east until SR-26 intersects with SR-20. From this point, SR-20 continues the combination route, transitioning to SR-19 and SR-207 before interchanging with I-95 on Florida's east coast. Along with Interstate 10 (I-10), this SR-20 combination route is one of two major east-west thoroughfares in northeastern/north-central Florida.

State Road 20 serves as a regional link connecting the communities of Gainesville, Hawthorne, Interlachen, and Palatka. In addition to carrying regional traffic, SR-20 serves as a commuter route from the Town of Interlachen to the adjacent cities of Gainesville and Palatka. On a statewide spectrum, SR-20 functions to connect these communities with areas along Florida's east coast and serves as an evacuation route for the coastal communities of Flagler and St. Johns counties.

1.2 PROPOSED ACTION

The project segment of SR-20 is currently a two-lane, rural roadway connecting the towns of Hawthorne and Interlachen. The FDOT proposes widening this 12.2-mile segment to a four-lane divided facility. There are no major bridges within the project limits.

1.3 BACKGROUND

The Florida Intrastate Highway System (FIHS) was created in 1990 to provide high-speed and high-volume traffic movements within the state. The primary function of the system is to serve interstate and regional commerce and long-distance trips.

State Road 20 was included as part of the FIHS system, thus, FDOT focused on improving the entire SR-20 corridor from Gainesville to Palatka. The western and eastern segments between Gainesville and Hawthorne, and Interlachen to US-19 in Palatka have recently been improved to a four-lane roadway.

This PD&E project is the final connecting link between the widening projects and will provide a continuous four-lane roadway between Gainesville and Palatka.



Figure 1-1: Project Location Map

This PD&E Study was started in 1997 and in the initial stages of the study, several options to bypass the Town of Interlachen were analyzed and compared with the nobuild alternative as well as widening the existing alignment. A public meeting was held on May 2, 2000 to present the no-build, existing alignment, and three bypass options. After considering the public input, FDOT selected the existing alignment through the Town of Interlachen. SR-20 through Interlachen can be widened with less impact as compared to the bypass options. Each of the bypass options would have a substantial impact to existing residential neighborhoods.

As part of the study, alternatives have been developed for the build alternative on the existing alignment with several typical sections. A 230-foot wide rural typical section with a design speed of 70-mph was proposed for the rural areas from Hawthorne to Interlachen. Near Interlachen, a 130-foot urban typical section was proposed with a design speed of 45-mph. A narrowed 104-foot typical section, identified as Option 1 Right, has been developed to minimize impacts to Lake Chipco and the Interlachen Historic District. These alternatives were presented to the public at meetings held on August 22, 2000 in Interlachen and August 24, 2000 in Hawthorne.

As a result of public input from the August 2000 meetings, an additional alternative was developed between Lake Chipco and the Interlachen Historic District. The additional alternative, labeled Option 4, proposes a 150-foot urban typical. The wider typical section will require the relocation of four residences and one business.

In addition, an Environmental Assessment (EA) was approved by FHWA in 2005, documenting both the bypass alternatives and the build alternatives. The 2005 approved EA is included with the technical discipline reports on the attached DVD. The EA carried forward a build alternative with a 230-foot rural typical in the rural areas and a 130-foot urban typical near Interlachen and two options between Lake Chipco and the Interlachen Historic District: Option 1 Right and Option 4. Two public hearings were held on the Build Alternative as shown in the 2005 EA on May 9th and 11th, 2006. Environmental concerns were raised at the meetings on the need for wildlife crossings near Little Orange Creek and Fowler's Prairie and to minimize impacts to Fowler's Prairie. Right-of-Way (ROW) funding was deferred for the project after the hearings and therefore a Finding of No Significant Impact (FONSI) was never circulated.

In 2003, the Florida legislature created Florida's Strategic Intermodal System (SIS) (Figure 1-2). Building on the work designating the FIHS in the 1990's, the SIS introduced a new approach for planning transportation. The SIS is composed of high-priority network or transportation facilities, critical to Florida's economic competiveness and quality of life. The SIS comprises the state's largest and most strategic transportation facilities, including major air, space, water, rail, and highway facilities. The SIS facilities are the primary means for moving people and freight between Florida's diverse regions, as well as, between Florida and other states and nations. The SIS is Florida's highest statewide priority for transportation capacity improvements.



Figure 1-2: Strategic Intermodal System

The 2005 SIS Strategic Plan defined policies and processes needed to move the SIS from concept to implementation. The plan focused the state's primary role in transportation on supporting travel and transport between Florida's regions and between Florida and other states and nations. It also establishes processes for designating SIS facilities and planning SIS investments. SR-20 is designated a SIS facility.

The Florida Legislature eliminated the FIHS in 2012. This leaves the SIS as the only means to provide policies and processes for statewide transportation facilities in the state of Florida. A minimum 50-mph design speed was established as part of the criteria for a SIS facility. With this change in the design criteria, FDOT developed a new high speed urban typical section with a design speed of 50-55 mph. Previously, an urban typical section could not be designed with a design speed greater than 45 mph.

Based on the public comments to minimize the impacts to Fowler's Prairie and the new SIS design criteria, FDOT proposed a revised typical section for this study. The revised typical is a 180-feet wide, high speed urban typical section. The revised typical section will reduce impacts to Fowler's Prairie and provide a consistent typical throughout the limits of the project. In addition, this typical section is better suited for the abundance of driveways located along the corridor and will accommodate future growth that will take place along the corridor. This Revised Build Alternative was presented to the public on December 8, 2011. The meeting was attended by 196 people. The comments primarily focused on median opening locations, right-of-way needs, and ensuring the posted speed will be 55 mph.

This EA documents the changes between the 2005 approved EA Build Alternative and the proposed Revised Build Alternative.

SECTION 2: NEED FOR IMPROVEMENT

2.1 OVERVIEW

The purpose of this project is to correct deficiencies, improve mobility both locally and regionally, and improve safety on SR-20 from Hawthorne to Interlachen. The operational efficiency of SR-20 is important on a national, state, regional and local level because SR-20 is a regionally significant corridor and part of the SIS.

2.2 SYSTEM LINKAGE

The operational efficiency of SR-20 is important on a national, state, regional, and local level because it is part of the National Highway System (NHS) and Florida's SIS. State Road 20 combines with SR-26, SR-19, and SR-207 to connect Florida's east and west coasts. This combined east-west route begins on Florida's west coast at US-98/19 in Gilchrist County as SR-26 and extends east until SR-26 intersects with SR-20. From this point, SR-20 continues the combination route, transitioning to SR-19 and SR-207 before interchanging with I-95 on Florida's east coast. Along with Interstate 10 (I-10), this SR-20 combination route is one of two major east-west thoroughfares in northeastern/north-central Florida.

State Road 20 serves as a regional link connecting the communities of Gainesville, Hawthorne, Interlachen, and Palatka. In addition to carrying regional traffic, SR-20 serves as a commuter route from the Town of Interlachen to the adjacent cities of Gainesville and Palatka. On a statewide spectrum, SR-20 functions to connect these communities with areas along Florida's east and west coasts and serves as an evacuation route for coastal communities of Flagler and St. Johns counties. This project closes the gap and is the missing link between Gainesville and Palatka to provide a continuous four-lane roadway.

2.3 MODAL INTERRELATIONSHIPS

2.3.1 TRANSIT SYSTEM

There are no regular fixed-route public transit services provided along the corridor within both Alachua and Putnam Counties.

2.3.2 PEDESTRIAN AND BICYCLE FACILITIES

Currently, there are no pedestrian or bicycle facilities along SR-20 within the project limits. There are existing pedestrian and bicycle facilities located at the eastern and western limits of this project that were constructed with the previous widening projects.

2.4 LOCAL GOVERNMENT SUPPORT

The following findings of consistency for the SR-20 PD&E Study are provided below. The FHWA Planning Requirements for Environmental Document Approval Spreadsheet is located in Appendix E. 2.4.1 CONSISTENCY WITH ALACHUA AND PUTNAM COUNTY COMPREHENSIVE PLANS This proposed project is consistent with the 2011 Alachua and 2010 Putnam County Comprehensive Plans.

2.4.2 CONSISTENCY WITH THE STATE TRANSPORTATION IMPROVEMENT PROGRAM

The project is broken into three different segments for design, right-of-way, and construction. The western most segment is from US-301 to Putnam County Line (FPID No. 207818-2), the middle segment is from the Alachua County Line to SW 56th Avenue (FPID No. 210024-4), and the eastern segment is from SW 56th Avenue to CR-315 (FPID No. 210024-5). The project is located in a rural area and not in a Metropolitan Planning Organization (MPO) and therefore is only included in the State Transportation Improvement Plan (STIP) and not the Transportation Improvement Plan (TIP).

Using state and federal funding sources, the design (<2014-2015) and right-of-way (<2014 - >2017) phases for each segment is fully funded in the STIP plan as shown in Table 2-1. The total project cost is \$158 million (See Table 3-1 of the EA). The construction phase for all segments is identified in the Strategic Intermodal System (SIS) unfunded needs plan in the second five years.

	FPID No.	No. 207818-2 FPID No. 210024-4 FPID No				210024-5	Funding	
	STIP \$	Fiscal Year	STIP \$	Fiscal Year	STIP \$	Fiscal Year	Type (all segments)	
Design	\$227,453	<2014/2014	\$1,492,925	<2014/2014	\$696,619	<2014/2014 /2015	State/ Federal	
ROW	\$1,397,449	<2014/2014 /2015	\$21,598,440	<2014/2014/ 2015/2016/ 2017/>2017	\$14,443,029	2014/2015/ 2016/2017	State/ Federal	
Environmental	\$108,111	2015	\$918,000	2016	\$250,000	>2017	State/ Federal	
Railroads and Utilities	\$1,525,000	<2014/2015	\$3,600,000	>2017	\$3,450,000	>2017	State/ Federal	
Const.	\$16,941,379	2016/2017/ >2017	\$52,741,962	>2017	\$35,047,164	>2017	State/ Federal	

Table 2-1: Funding for Future Phases

2.5 CAPACITY NEEDS

Level of service (LOS) is a qualitative assessment of a roadway's operating conditions or the average driver's perception of the quality of traffic flow. Six levels of service are defined for each facility type and are given designations ranging from "A" to "F", with LOS "A" representing the most free flow and LOS "F" representing the least free flow. This study portion of the SR-20 corridor is currently operating at LOS C and D. However, all of the roadway segments are predicted to decline to LOS "F" by the 2040 design year unless improvements are made.

The 2010 Putnam County Comprehensive Plan states that the minimum LOS for SR-20 is LOS C as a two-lane roadway. According, to the plan, once the roadway is widened to four or six lanes, the minimum LOS is raised to LOS B. To meet this level of service

requirement, SR-20 needs to be widened from its current two-lane configuration to four lanes.

With the additional lanes, the capacity along the project corridor will be improved and the associated congestion will decrease. Table 2-2 presents the predicted levels of service along the project corridor without the proposed project improvements.

Project Segment	Current	Year	Year Below LOS				
	LOS	LOS C	LOS D	LOS E	2040 Design Year LOS		
Hawthorne to SR-21	LOS C	2013	2018	2019	LOS F		
SR-21 to CR-21	LOS C	2017	2022	2024	LOS F		
CR-21 to CR-315	LOS D	*	2014	2016	LOS F		
* = Segment currently operates below LOS							

 Table 2-2: No-Build Level of Service (LOS)

2.6 SAFETY

The Alachua county segment of SR-20 within the project limits had 9 crashes from 2006 thru 2010. Crash rates are a way to analyze segments of roadway based on the number of crashes and the amount of traffic on the roadway. Comparing the roadway segments crash rate to the statewide average crash rate for similar type roadways with similar traffic volumes provides a means to determine how safe or unsafe a roadway segment is, compared to similar facilities. The crash frequency for this segment of roadway is 1.8 crashes per year. This segment of SR-20 has a crash rate of 0.451 crashes per million vehicle miles while the average statewide crash rate for similar roadways is 0.604 crashes per million vehicle miles. The crashes are shown by milepost in Figure 2-1. Forty percent of the crashes have been caused by head on, vehicles turning left, and vehicles being sideswiped.

Year	2006	2007	2008	2009	2010	TOTAL
No. of Crashes	1	0	2	3	3	9
No. of Injuries	1	0	1	2	2	6
No. of fatalities	0	0	0	0	0	0
Economic Loss						\$3,330,909

 Table 2-3: Alachua County Crash Data

Source FDOT 2011

The Putnam County segment of the corridor has a high number of crashes, averaging 39.4 crashes per year. Review of crash data indicates that 55.9 percent of the Putnam County crashes are due to rear-end, head-on, angled, or left turn collisions. These crashes are attributed to several conditions such as insufficient stopping sight distances due to the curving/rolling nature of the roadway west of Interlachen and the lack of a median. This segment of SR-20 has a crash rate of 1.121 crashes per million vehicle miles while the average statewide crash rate for similar roadways is 0.604 crashes per million vehicle miles. The crashes are shown by milepost in Figure 2-2.





Figure 2-2: Putnam County Crash Locations

Year	2006	2007	2008	2009	2010	TOTAL		
No. of Crashes	32	48	52	32	33	197		
No. of Injuries	35	52	47	29	34	197		
No. of fatalities	1	1	1	1	0	4		
Economic Loss						\$73,373,892		

 Table 2-4: Putnam County Crash Data

Source FDOT 2011

The crash data shows that there are three primary high crash intersections on this segment of SR-20 are:

- CR-20A/SR-21
- Baden Powell Rd./CR-21
- CR-315

At these three locations there are two primary types of collisions that account for 71 percent of the crashes. Angle collisions account for 53 percent of the crashes and 18 percent were due to left turn collisions. The angle and left turn crashes are attributed to high volume roadways not generating enough gaps to safely accommodate the demand for vehicles desiring to make a turn and also not providing the proper intersection sight distance.

2.7 SUMMARY OF PROJECT NEED

By 2017, the entire segment of SR-20 will degrade to an unacceptable LOS. By the design year, 2040, the entire segment of SR-20 will be operating at LOS "F". Providing additional capacity along this stretch of roadway will provide a safer and more efficient roadway.

This project proposes to widen the existing roadway to a four lane divided typical section with a raised median. Providing a raised median and designated median openings with left turn lanes, has proven to significantly reduce the number of rear end, head-on, angle, and left turn crashes. This project will also bring the horizontal and vertical geometry up to standards through the rolling terrain. Doing so will provide the necessary sight distance that several of the existing curves do not currently provide. These improvements coupled with the additional capacity that the four lane roadway will provide, will reduce the overall number of crashes on this segment of SR-20 and at the three high crash intersections.

On a regional perspective, SR-20 provides a major east/west movement. Currently, between Ocala and Jacksonville there are no roadways other than SR-40 in Ocala and I-10 in Jacksonville that provide a direct east/west connection from I-75 to I-95. It's approximately 80 miles between I-10 and SR-40. Providing additional capacity will enhance the entire corridor's ability to serve east/west traffic.

Due to the deficiencies, congestion and high crash rates previously discussed, the existing SR-20 roadway requires widening from US-301 to CR-315. This project is also necessary to connect the adjacent widening projects on SR-20, thus enhancing the corridors ability to provide major east/west movements across the state.

SECTION 3: ALTERNATIVES CONSIDERED

3.1 NO-BUILD ALTERNATIVE

The No-Build Alternative keeps the existing typical section (Figure 3-2) and makes no improvements to the roadway except normal maintenance activities. With this alternative, SR-20 experiences increased congestion before the 2040 project design year, the roadway's level of service becomes an unacceptable LOS "F", and the crash rates along the facility will continue to increase. Additionally, there are no facilities for pedestrians or bicycles along this segment of SR-20.

3.2 TRANSPORTATION SYSTEM MANAGEMENT ALTERNATIVE

Transportation System Management (TSM) alternatives involve smaller scale projects that result in safer and more efficient operations of the existing transportation network. TSM improvements will be incorporated into this project where appropriate; however, the projected traffic volumes exceed the maximum capacity of the roadway even with TSM improvements in place. SR-20's high crash areas are not in a concentrated area. They are scattered throughout the corridor. TSM improvements will not correct the long-term capacity deficiencies on SR-20 and will not substantially improve the safety on the corridor.

3.3 MULTIMODAL BUILD ALTERNATIVES

There are no multimodal systems along the SR-20 corridor within the project limits. There are Amtrak and Greyhound stations located in Palatka and Gainesville that provide a wide-range of destinations. Due to the rural land use surrounding the corridor, no additional multimodal alternatives have been considered to meet the needs identified for this project.

3.4 BUILD ALTERNATIVES

Two Build Alternatives have been developed for this study: the Build Alternative from the approved 2005 EA and a Revised Build Alternative consistent with 2012 SIS design criteria. Due to the project's considerable length, segmentation is necessary to facilitate the engineering and environmental analyses. The 12.2-mile corridor is divided into 15 segments, as shown in Figure 3-1. References to the segmentation are made throughout this document.

The 2005 EA Build Alternative originally proposed Option 1 Right through Segment 14. Option 1 Right is a 104-foot urban typical (Figure 3-3) with a design speed of 45 mph and a 22-foot median. For segment 14, Option 1 Right includes a retaining wall to minimize the impacts to Lake Chipco and the Interlachen Historic District. As a result of public input from the August 2000 meetings, an additional alternative was developed between Lake Chipco and the Interlachen Historic District. The additional alternative, labeled Option 4, proposes a 46-foot median within 150-feet of ROW (Figure 3-4). The wider typical will require the relocation of four additional residences and one business. These two options: Option 1 Right and Option 4 are included with both Build Alternatives. The footprints of Option 1 Right and Option 4 are shown in Figure 3-5 and Figure 3-6, respectively.



Figure 3-1: Project Segments


Figure 3-2: Existing Typical

Note: 4 - foot paved shoulder varies in Putnam County



Figure 3-3: Option 1 Right



Figure 3-4: Option 4



Figure 3-5: Option 1 Right Footprint



Figure 3-6: Option 4 Footprint

Both build alternatives provide a 10-foot sidewalk on the south side of the road for the entire project limits. The wide sidewalk is a request from the Putnam County Commission.

3.4.1 APPROVED 2005 EA BUILD ALTERNATIVE

The 2005 EA Build Alternative consists of two primary typical sections. In the rural areas between Hawthorne and Interlachen (Segments 1-6), a general 230-foot wide rural typical section is proposed with a 70-mph design speed (Figure 3-7). The 230-foot wide rural typical will also have a 10-foot sidewalk on the south side. Near Interlachen (Segments 7-13), a 130-foot urban typical section with a five-foot sidewalk on the north side and a 10-foot sidewalk on the south side and undesignated four-foot bicycle lanes is proposed with a 45-mph design speed (Figure 3-8). In segment 14, both Option 1 Right and Option 4 were included in the Build Alternative. Segment 15 is a transition to connect to the existing four-lane section east of CR-315. Segment 15 does not require any additional ROW to tie into the existing 4-lane section for either option.

3.4.2 REVISED BUILD ALTERNATIVE

The Revised Build Alternative consists of a 180-foot urban typical section with a design speed of 55 mph (Figure 3-9). The typical section has a five-foot sidewalk on the north side and a 10-foot sidewalk on the south side and a 6.5 foot bicycle lanes on both sides of the roadway for the entire project limits. This typical section is proposed for Segments 1 through 13. As previously discussed Option 1 Right and Option 4 were proposed for Segment 14. Segment 15 will transition from Segment 14 to connect to the existing four-lane section east of CR-315. Segment 15 does not require any additional ROW to tie into the existing four-lane section for either option.

3.4.3 LOCALLY PREFERRED OPTION THROUGH THE TOWN OF INTERLACHEN

Option 4 has been determined to be the preferred option for this study. It is the opinion of the local community, FHWA, and State Historic Preservation Officer (SHPO) that the long-term impacts from Option 1 Right to the overall historic district would be more damaging than Option 4. It is likely that the taking of the backyards of the remaining four buildings, as Option 1 Right does, would result in either their conversion to commercial interests or even possible demolition to accommodate new commercial construction. As a result, the local community strongly supports Option 4. In consultation with FHWA, SHPO, and the community, Option 4 was carried forward as the locally preferred option and a Memorandum of Agreement (MOA) was executed.

3.4.4 ALIGNMENT MODIFICATIONS

Minor Deviations

Both build alternatives shift from the existing alignment in Segment 4. The existing horizontal geometry around Cowpen Lake in segment 4 does not meet current design standards for 55 or 70 mph. A minor deviation is needed to provide acceptable horizontal geometry for both Build Alternatives.



Figure 3-7: 2005 Approved EA Rural Typical Section



Figure 3-8: 2005 Approved EA Urban Typical



Environmental Assessment, SR-20, Alachua and Putnam Counties

Figure 3-9: Revised Build Alternative

The Revised Build Alternative slightly shifts from the existing alignment in Segments 9 and 10. The existing horizontal geometry associated with the reverse curve does not meet current design standards for 55 mph. The minor shift in alignment is needed to provide acceptable horizontal geometry for the 55 mph design speed.

New Alignment Segment

The Revised Build Alternative is on new alignment in Segments 6 through 8 in order to minimize environmental impacts. The proposed new alignment will shift SR-20 away from Clear Lake and Lake Galilee. When SR-20 was originally constructed, SR-20 split Clear Lake. The 2005 EA Build Alternative transitions to an urban typical through segment 7, only requiring 30-feet of ROW, to minimize the impacts to the floodplains associated with Clear Lake. The Revised Build Alternative will require 80-feet of ROW through these segments. This change in alignment will reduce the floodplain impacts compared to the 2005 EA Build Alternative.

A sinkhole is located approximately 300 feet north of the 2005 EA Build Alternative. The Revised Build Alternative is located approximately 600 feet north of the sinkhole. Due to potential additional environmental impacts, a decision was made to re-align SR-20 away from Clear Lake and Lake Galilee. This new alignment was shown at the public meeting held December 8, 2011. Several property owners who lived along the lakes expressed their support of the new alignment.

3.4.5 ALTERNATIVE MATRIX

An evaluation matrix is included in Table 3-1 and Table 3-2.

Alternative	Construction Cost	Right-of-Way Cost	Wetland Mitigation Cost	Engineering/ Design/CEI Cost	Total Cost
2005 EA Option 1 Right	\$86,399,600	\$31,518,400	\$10,281,000	\$12,960,100	\$141,159,100
2005 EA Option 4	\$86,521,700	\$34,784,200	\$10,281,000	\$12,978,400	\$144,565,300
Revised Build Option 1 Right	\$101,145,800	\$31,290,200	\$7,460,000	\$15,171,900	\$155,067,900
Revised Build Option 4	\$101,267,900	\$34,333,600	\$7,460,000	\$15,190,200	\$158,251,700

Table 3-1: Alternative Project Cost

Table 3-2: Evaluation Matrix

SEGMENT	Option	Segment Length (miles)	Estimated Construction Cost	Estimated ROW Cost	Wetland Mitigation Cost	Engineering Design/CEI Cost	Total Cost	Total No. of Parcels Impacted	Residential Relocations	Business Relocations	Wetland Impacts (acres)	Floodplain Impacts (# of floodplains)	Cultural Resource Sites Impacted	Contamination Sites Impacted
1	2005 Build EA	2.354	\$25,654,800	\$1,530,000	\$10,190,000	\$3,864,700	\$41,349,500	11	0	0	10.19	3	0	0
1	Revised Build	2.321	\$28,855,400	\$1,550,200	\$7,460,000	\$4,344,800	\$42,320,400	10	0	0	7.46	3	0	0
2	2005 Build EA	0.466	\$2 <i>,</i> 509,600	\$1,038,200	\$0	\$376,400	\$3,924,200	4	0	0	0	0	0	0
2	Revised Build	0.503	\$3,424,800	\$967,700	\$0	\$513,700	\$4,906,200	6	0	0	0	0	0	0
2	2005 Build EA	0.813	\$4,378,400	\$3,276,500	\$0	\$656,800	\$8,311,700	16	0	0	0	0	0	0
3	Revised Build	0.813	\$5,975,000	\$1,721,800	\$0	\$896,300	\$8,593,100	14	0	0	0	0	0	0
4	2005 Build EA	1.005	\$5,412,400	\$5,819,600	\$13,000	\$811,900	\$12,056,900	41	7	4	0.13	1	0	2
4	Revised Build	1.005	\$7,386,100	\$3,990,400	\$0	\$1,107,900	\$12,484,400	40	2	4	0	1	0	2
	2005 Build EA	2.446	\$13,172,900	\$10,187,300	\$52,000	\$1,975,900	\$25,388,100	53	8	2	0.52	2	0	3
5	Revised Build	2.446	\$17,976,600	\$6,177,200	\$0	\$2,696,500	\$26,850,300	62	1	3	0	2	0	3
C	2005 Build EA	0.492	\$2,649,700	\$1,307,000	\$7,000	\$397,500	\$4,361,200	18	2	0	0.07	1	1	0
6	Revised Build	0.561	\$4,123,000	\$2,173,000	\$0	\$618,500	\$6,914,500	17	2	0	0	0	0	0
-	2005 Build EA	0.698	\$4,971,800	\$491,200	\$1,000	\$745,800	\$6,209,800	13	0	0	0.01	2	0	1
7	Revised Build	0.625	\$4,593,400	\$1,810,600	\$0	\$689,000	\$7,093,000	8	0	0	0	0	0	0
0	2005 Build EA	0.314	\$2,236,600	\$757,000	\$3,000	\$335,500	\$3,332,100	24	0	0	0.03	1	0	0
8	Revised Build	0.354	\$2,608,300	\$2,557,300	\$0	\$391,200	\$5,556,800	18	3	0	0	0	0	0
0	2005 Build EA	1.525	\$10,862,400	\$906,200	\$15,000	\$1,629,400	\$13,413,000	19	0	0	0.15	1	0	1
9	Revised Build	1.528	\$11,258,300	\$2,890,900	\$0	\$1,688,700	\$15,837,900	26	0	0	0	1	0	0
10	2005 Build EA	0.418	\$2,977,400	\$526,800	\$0	\$446,600	\$3,950,800	18	0	0	0	0	0	0
10	Revised Build	0.420	\$3,094,500	\$496,800	\$0	\$464,200	\$4,055,500	8	0	0	0	0	0	1
11	2005 Build EA	0.314	\$2,236,600	\$1,334,200	\$0	\$335,500	\$3,906,300	18	0	0	0	0	0	1
11	Revised Build	0.319	\$2,350,400	\$2,467,100	\$0	\$352,600	\$5,170,100	3	1	0	0	0	0	1
12	2005 Build EA	0.311	\$2,215,200	\$1,445,300	\$0	\$332,300	\$3,992,800	17	0	0	0	0	0	2
12	Revised Build	0.306	\$2,254,600	\$788,200	\$0	\$338,200	\$3,381,000	3	0	1	0	0	0	0
12	2005 Build EA	0.504	\$3,589,900	\$488,200	\$0	\$538,500	\$4,616,600	6	0	0	0	0	1	0
13	Revised Build	0.504	\$3,713,500	\$1,185,600	\$0	\$557,000	\$5,456,100	13	0	0	0	0	1	1
	2005 Build EA Option 1 Right	0.408	\$2,906,100	\$2,410,900	\$0	\$435,900	\$5,752,900	16	1	1	0	1	2	0
	2005 Build EA Option 4	0.411	\$3,028,200	\$5,676,700	\$0	\$454,200	\$9,159,100	16	5	2	0	1	6	0
14	Revised Build Option 1 Right	0.408	\$2,906,100	\$2,513,400	\$0	\$435,900	\$5,855,400	16	1	1	0	1	2	0
	Revised Build Option 4	0.411	\$3,028,200	\$5,556,800	\$0	\$454,200	\$9,039,200	13	5	2	0	1	6	0
15	2005 Build EA	0.070	\$515,800	\$0	\$0	\$77,400	\$593,200	0	0	0	0	0	0	1
15	Revised Build	0.070	\$515,800	\$0	\$0	\$77,400	\$593,200	0	0	0	0	0	0	1

SECTION 4: IMPACTS

As part of the EA, several detailed studies of potential impacts to various social, economic, cultural, historic, natural and physical qualities for the proposed build alternatives have been conducted and are summarized in this section.

4.1 SOCIAL AND ECONOMIC IMPACTS

4.1.1 COMMUNITY IMPACT ASSESSMENT

A community impact assessment was performed for this project and a summary is provided below.

Social Impacts

Social impacts that may occur as the result of proposed transportation improvements include: impacts to community cohesion, community facilities and services, mobility, and safety.

Community Cohesion

According to the 2010 U.S. Census, the project study area is located within four census tracts: Tract 20 in Alachua County, Tracts 9503, 9504, and 9505 in Putnam County. Table 4-1 summarizes the 2010 Census Data for the four tracts.

Category	Census Tract 20	Census Tract 9503	Census Tract 9504	Census Tract 9505	Alachua County	Putnam County
Population	5,657	6,618	2,912	6,576	247,336	74,364
Race – Caucasian	4,377	5,424	2,342	5,792	172,156	57,468
Black	1,085	710	475	321	50,282	12,030
Asian	17	28	12	30	13,235	455
Other	178	456	83	433	4,211	2,705
Hispanic	178	671	75	686	20,752	6,706
Households	2,796	3,437	1,721	3,088	112,766	37,337
Renter- Occupied	410	560	200	442	45,748	7,076
Owner- Occupied	1,936	2,148	1,029	2,068	54,768	22,333
Vacant	450	729	492	578	12,250	7,928
Avg. Household Size	2.02	1.93	1.69	2.13	2.32	2.48

Table 4-1: Existing Demographic Information

Source: U.S. Census Bureau – 2010 Census

The build alternatives will not result in the isolation or separation of communities, ethnic groups, or social groups. This is further documented in Section 4.1.4.

Community Facilities and Services

Community features are shown in Figure 4-1 and described in Table 4-2. Impacts to these features are discussed below.

School Districts

The two developed areas within the study corridor are Hawthorne and Interlachen. Each town has its' own individual school district. The public schools in Hawthorne are not located along the project portion of SR-20. The Interlachen public schools are located along CR-315. Neither Putnam nor Alachua Counties plan new schools within the study area. The proposed widening project will have no significant impact to nearby public schools, or to current school boundaries. In Segment 15, pedestrian safety will be improved with the project's proposed median, bicycle lanes, and sidewalks in all of the build alternatives under consideration.

A private facility, the Children's Academy of Interlachen, is located on the south side of SR-20 at Commonwealth Avenue in Segment 14. This facility, located in the old Post Office building, lies within the proposed right of way of Option 4 for both build alternatives. There are several suitable locations along SR-20, CR-315, and Old Gainesville Highway for the Academy to relocate.

Recreation Areas

Within the project corridor, there are several public recreation facilities. The Seventh Day Adventist Camp, a private recreational facility, is located south of SR-20 in Segment 5. The campground consists of cabins and houses scattered throughout the property and along a private lake. The build alternatives will widen SR-20 to the north in this segment, thereby avoiding any direct impact to the campground itself; however, traffic noise impacts are predicted to occur at this site with the widened typical section. (Refer to the noise impact discussion later in this section.)

The City of Hawthorne is in the process of developing the planned Little Orange Creek Nature Park in eastern Alachua and western Putnam Counties. The 1,205 acre proposed park property, recently acquired by the City in 2011, is located north and south of SR-20. Both build alternatives will impact the proposed property. Detailed information documenting the impacts and prior coordination is included in Section 4.2.2.

On the south bank of Lake Chipco, adjacent to SR-20 in Segment 14, is Butler Beach. This park is owned by the Town of Interlachen. The build alternatives will have no impact to this park. Single-family residences are scattered along the east and north banks of Lake Chipco; some having boat docks. The lake and park are within the northern boundary of the Interlachen Historic District. In talks with the Town of Interlachen, the Town stated that their currently is very limited use of the park since there are no parking, benches, outdoor facilities, or sidewalks to/from the park; therefore, noise impacts have not been analyzed. Both build alternatives will shift the travel lanes further from the park and provide sidewalks and bike lanes that will enhance the park.

ID #	Facility Name	Location			
	Schools and Day	/cares			
1	The Children's Academy of Interlachen	SR-20/Commonwealth Ave., Interlachen			
2	Interlachen Elementary School	251 CR-315, Interlachen			
3	C.H. Price Middle School	140 N. CR-315, Interlachen			
4	Interlachen High School	126 N. CR-315, Interlachen			
5	RCMA Walker Head Start	157 S CR-21, Hawthorne			
	Religious Institu	utions			
6	Trinity United Missionary Baptist	Gilgal Rd, Hawthorne			
7	Zion Hill Seventh Day Adventist	100 Chesser Monroe Rd, Hawthorne			
8	Iglesia Pentecostal	1416 SR-20, Interlachen			
9	Kingdom Hall of Jehovah's Witness	1404 SR-20, Interlachen			
10	Church of God	1259 SR-20 Interlachen			
11	St. Johns Catholic	106 N. Manitoba Ave, Interlachen			
12	First United Methodist Church	200 E. Boylston St., Interlachen			
	Emergency Ser	vices			
13	Interlachen Police Department	1212 SR-20, Interlachen			
14	Putnam County Volunteer Fire Department	202 Commonwealth Ave. Interlachen			
	Recreation Faci	ilities			
15	Seventh Day Adventist Camp	1771 SR-20, Hawthorne			
16	Robert Henry Jenkins, Jr. Memorial Park	312 Atlantic Ave, Interlachen			
17	Butler Beach	1184 SR-20, Interlachen			
18	Hastings Park	311 Atlantic Ave, Interlachen			
19	Proposed Little Orange Creek Nature Park	24115 N.E. 6 th Ave			

 Table 4-2: Existing Community Features

Also within the Interlachen Historic District (Segments 14 and 15) are two public recreational areas. Robert Henry Jenkins, Jr. Memorial Park is located along Atlantic Avenue from Francis Street to CR-315. This park contains a sidewalk and is used for passive recreation. Hastings Park is located south of the Robert Henry Jenkins Jr Memorial Park between Boyleston St. and Tropic Ave. and consists of a children's playground. Neither typical section options will have a direct impact on these two park facilities. Visual impacts may occur with the removal of trees along the proposed right-of-way; however, FDOT will provide appropriate landscaping wherever possible. Visual impacts to Hastings Park and Robert Henry Jenkins, Jr. Memorial Park from Typical section Option 4 will be minimized with a landscaped barrier, planted between Prospect Street and CR-315. The two parks were evaluated for potential noise impacts and were both found to not approach or exceed noise abatement criteria. In addition, the sidewalks and bike lanes proposed as part of the build alternative will enhance both parks.



Figure 4-1: Community Features



Churches

There are several religious institutions located throughout the project study area. Both build alternatives will impact one institution. The Zion Hill Seventh Day Adventist Church is within the proposed right-of-way for the 2005 EA Build Alternative Segment 5, and will be acquired as part of the project's right-of-way acquisition program. The acquisition of this institution will not be required for the Revised Build Alternative. The Church of God will be acquired as part of the project's right-of-way acquisition program for the Revised Build Alternative.

Police and Fire Protection

Both the Town of Interlachen Police headquarters and the Putnam County Volunteer Fire Department station are located on SR-20. Neither will be impacted by the project. No other police or fire stations are located within the project corridor.

<u>Mobility</u>

Mobility will not be adversely affected. The Build Alternatives will increase the capacity of SR-20, resulting in decreased travel times and increased reliability for users. Full median openings in the rural areas of the project will be spaced at 0.5-mile intervals. Directional openings will be spaced at 0.25-mile intervals. Within urban areas, full median openings will be spaced at 0.25-mile intervals with directional openings spaced at 660-foot intervals.

Land Use Impacts

The primary land uses west of SR-21 are agricultural with pine plantations being the dominant use. This area is scattered with rural single-family residential areas. From SR-21 to CR-315, existing land use is primarily low to medium density residential with scattered commercial uses along SR-20. The Town of Hawthorne is located at the project's western terminus while the Town of Interlachen has developed at the eastern end of the project. The communities of Colegrove, Cone, Mt. Meekin, Coopers Mill and Johnson are small areas of development located adjacent to the project corridor. There are also several churches and two cemeteries along the corridor. Greater concentration of commercial use is located within the Town of Interlachen.

From discussions with the Alachua and Putnam County Planning Departments, there are no new developments planned within the corridor. Consequently, the Future Land Use Maps contained within the respective Comprehensive Plans indicate that land uses within the corridor will remain virtually unchanged, with only more scattered individual residential home sites forecasted. Future Land Use Plans for Alachua County, Putnam County, the City of Hawthorne, and the Town of Interlachen are located in Appendix A.

The proposed project will have little impact to the future land uses within the corridor. At most, new owners may revitalize the currently vacant commercial buildings/properties at the various SR-20 intersections when the widened facility is completed.

This secondary economic impact will be beneficial to the small communities located adjacent to the corridor. In addition, the widened roadway will allow easier access to employment and shopping centers in Gainesville, Interlachen, and Hawthorne.

In terms of safety, the proposed project will provide a smoother, safer traffic flow by adding additional lanes that will accommodate both agricultural and industrial trucks, as well as, automobiles.

4.1.2 UTILITIES AND RAILROADS

The utility companies listed below have facilities in the project vicinity. The abandoned railroad south of SR-20 will not be impacted by the project. Overhead and underground utilities may have to be relocated as part of the project but no major utility impacts are anticipated.

- Florida Power and Light transmission line
- The Town of Interlachen water main
- Windstream Florida, Inc telephone line
- Comcast Cable Communications cable TV line
- Clay electric transmission line
- Florida Cable, Inc. cable TV line
- Gainesville Regional Gas gas line
- Putnam County Public Works sewer line
- AT&T Distribution telephone line

4.1.3 RELOCATIONS

A Conceptual Stage Relocation Plan (CSRP), completed in April 2012, was prepared for the proposed widening project consistent with Chapter 11 of the PD&E Manual and is included with the Technical Discipline Reports on the attached DVD. The CSRP addresses both residential, institutional, and business relocations required for the Build Alternatives, as summarized in the following sections. An addendum to the CSRP was prepared due to the selection of the pond sites for the Revised Build Alternative Option 4 and is included with the Technical Discipline Reports on the attached DVD.

2005 EA Build Alternative Option 1 Right

Residential Relocations

The 2005 EA Build Alternative Option 1 Right will displace eighteen households. Of the residential displacements, five households appear to be tenant occupied, while thirteen households appear to be owner occupied, as a homestead exemption is indicated with the Putnam County Property Appraiser. Of the displacements, all but four of the households reside in conventionally constructed dwellings, with the other households residing in mobile homes. The oldest of the conventional dwellings was constructed in 1886 and is 126 years old. The average age is 44 years old, as of 2012. The oldest mobile home was placed at its current location in 1965 and the newest in 2004. The average age of the mobile homes is 25 years old, as of 2012. In addition, the presence

of a wheelchair ramp was noted on one of the single family dwellings that will be impacted by this alternative, indicating a potential disabled resident.

This alternative will only impact one of the homes that have been identified as historic within the Town of Interlachen.

Business Relocations

Seven businesses will be displaced by this alternative: a storage facility, small thrift store, two miscellaneous retail stores, church, nightclub and a real estate business. Four of the businesses (storage facility, small thrift store & two miscellaneous retail stores) are located at one location, in a small plaza located near Cowpen Lake. There is a possibility that the storage facility could remain at this location, as one of the storage buildings will not be impacted by this alternative, while another storage building will be slightly impacted and may be able to be cut and refaced for continued operation. Even though the storage business may be able to continue to operate at this site, it is still considered a business relocation, due to the storage office and resident managers' office being impacted by this alternative.

The nightclub is located in the small community of Johnson, midway between the towns of Hawthorne and Interlachen. The church is located west of Johnson. The real estate business is located within the Town of Interlachen.

2005 EA Build Alternative Option 4

Residential Relocations

The 2005 EA Build Alternative Option 4 will displace twenty-two households. Of the residential displacements, six households appear to be tenant occupied, while sixteen households appear to be owner occupied, as a homestead exemption is indicated with the Putnam County Property Appraiser. Of the displacements, all but four of the households reside in conventionally constructed dwellings, with the other households residing in mobile homes. There are two conventional dwellings which were constructed in 1886 (126 years old) and are the oldest conventional dwellings for this alternative. The average age is 53 years old as of 2012. The oldest mobile home was placed at its current location in 1965 and the newest in 2004. The average age of the mobile homes is 25 years old as of 2012. In addition, the presence of a wheelchair ramp was noted on one of the single family dwellings that would be impacted by this alternative, indicating a potential of a disabled residence.

This alternative will impact all five of the homes identified as historic within the Town of Interlachen. This alternative has the highest number of residential relocation impacts of all alternatives under consideration.

Business Relocations

Eight businesses will be displaced by this alternative: a storage facility, small thrift store, two miscellaneous retail stores, church, nightclub, preschool and a real estate business. Four of the businesses (storage facility, small thrift store & two miscellaneous retail stores) are located at one location, in a small plaza located near Cowpen Lake. There is

a possibility that the storage facility could remain at this location, as one of the storage buildings will not be impacted by this alternative, while another storage building will be slightly impacted and may be able to be cut and refaced for continued operation. Even though the storage business may be able to continue to operate at this site, it is still considered a business relocation, due to the storage office and resident managers' office being impacted by this alternative.

The nightclub is located in the small community of Johnson, midway between the towns of Hawthorne and Interlachen. In addition, a church is located west of Johnson. The preschool and real estate business are both located within the Town of Interlachen.

Revised Build Alternative Option 1 Right

Residential Relocations

The Revised Build Alternative Option 1 Right will displace eleven households. Of the residential displacements, seven households appear to be tenant occupied, while four households appear to be owner occupied, as a homestead exemption is indicated with the Putnam County Property Appraiser. Of the displacements, all but two of the households reside in conventionally constructed dwellings, with the other households residing in mobile homes. The oldest of the conventional dwellings was constructed in 1886 and is 126 years old. The average age is 50 years old as of 2012. The two mobile homes were placed at their current locations in 1969 and 1986.

This alternative will only impact one of the homes that have been identified as historic within the Town of Interlachen. Of note, this alternative will impact the lowest number of households of all alternatives that are under consideration.

Business Relocations

Eight businesses will be displaced by this alignment alternative: a storage facility, small thrift store, two miscellaneous retail stores, nightclub, lounge, church and a real estate business. Four of the businesses (storage facility, small thrift store & two miscellaneous retail stores) are located at one location, in a small plaza located near Cowpen Lake. There is a possibility that the storage facility could remain at this location, as two of the storage buildings will not be impacted by this alternative. Even though the storage business may be able to continue to operate at this site, it is still considered a business relocation, due to the storage office and resident managers' office being impacted by this alternative.

The nightclub is located in the small community of Johnson, midway between the towns of Hawthorne and Interlachen. The lounge, church and real estate business are all located within or just outside the Town of Interlachen.

Revised Build Alternative Option 4

Residential Relocations

The Revised Build Alternative Option 4 will displace fifteen households. Of the residential displacements, eight households appear to be tenant occupied, while seven households appear to be owner occupied, as a homestead exemption is indicated with the Putnam County Property Appraiser. Of the displacements, all but two of the households reside in conventionally constructed dwellings, with the other households residing in mobile homes. There are two conventional dwellings which were constructed in 1886 (126 years old) and are the oldest conventional dwellings for this alternative. The average age is 59 years old as of 2012. The two mobile homes were placed at their current locations in 1969 and 1986.

The pond sites associated with the Revised Build Option 4 will require an additional seven households and no additional businesses. Of the residential displacements, three households appear to be tenant occupied, while four households appear to be owner occupied, as a homestead exemption is indicated with the Putnam County Property Appraiser. Of the displacements, all but one of the households resides in conventionally constructed dwellings, with the other household residing in a mobile home. The average age of the conventional dwellings is forty-five years old as of 2013. The mobile home was placed at its current location in 1990.

This alternative will impact all five of the homes that have been identified as historic within the Town of Interlachen.

Business Relocations

Nine businesses will be displaced by this alignment alternative: a storage facility, small thrift store, two miscellaneous retail stores, nightclub, lounge, church, preschool and a real estate business. Four of the businesses (storage facility, small thrift store & two miscellaneous retail stores) are located at one location, in a small plaza located near Cowpen Lake. There is the possibility that the storage facility could remain at this location, as two of the storage buildings will not be impacted by this alternative. Even though the storage business may be able to continue to operate at this site, it is still considered a business relocation, due to the storage office and resident managers' office being impacted by this alternative.

The nightclub is located in the small community of Johnson, midway between the towns of Hawthorne and Interlachen. The lounge, church, preschool and real estate business are all located within or just outside the Town of Interlachen.

Relocation Matrix

A relocation matrix is shown in Table 4-3 that shows impacts for both build alternatives.

Segment	Alternative	2005 EA Build ternative Option 1 Right Right Revised Build Alternative Option 1 Right Alternative Option 1 Right		Alternative Option 1			Revised Alternative	
S	Residential	Business	Residential	Business	Residential	Business	Residential	Business
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	7	4	2	4	7	4	3	4
5	8	2	3	1	8	2	4	1
6	2	0	2	0	2	0	3	0
7	0	0	0	0	0	0	0	0
8	0	0	3	0	0	0	3	0
9	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0
11	0	0	0	1	0	0	1	1
12	0	0	0	1	0	0	0	1
13	0	0	0	0	0	0	0	0
14	1	1	1	1	5	2	8	2
15	0	0	0	0	0	0	0	0
TOTAL	18	7	11	8	22	8	22*	9

Table 4-3: Relocation Matrix

*Includes seven additional relocations that are required for the pond sites

4.1.4 ENVIRONMENTAL JUSTICE

This project has been developed without regard to race, color, national origin, age, sex religion, disability, or family status. Special accommodations have been offered to anyone wishing to attend the public meetings or reviewing the project materials, as required under the ADA.

Table 4-1 summarizes the 2010 Census Data for four tracts within the project study limits: Census Tract 20 in Alachua County and Census Tracts 9503, 9504, and 9505 in Putnam County. The racial and ethnic characteristics are very similar in the project area compared to Alachua and Putnam County as a whole, except there is a lower Asian population in the project area. The data additionally shows that the project area contains a higher percentage of owner occupied households.

There are nine Census Block Groups along the project corridor. Table 4-4 identifies the Census Block Group and each project Segment within the Block Group.

Census Block	Project Segment
120010020005	1
121079503003	1, 2, 3
121079504001	1, 2, 3, 4, 5
121079503004	3, 4, 5
121079503005	5, 6, 7, 8, 9, 10, 11
121079505005	5, 6, 8, 9
121079505002	9, 10
121079505004	10, 11, 12, 13, 14,
	15
121079503002	11, 12, 13, 14, 15

Table 4-4: Pro	ject Segments k	v Census Bloc	k Groups
	jool ooginionto k	<i>y</i> concac bioc	

Based on 2010 American Community Survey data within the project area there are 112 individuals (1.1%) who speak English "not well" and 91 individuals (<1%) that speak English "not at all." While FDOT has extensive verbal and written Limited English Proficiency (LEP) services, the low number of LEP in the project area suggest little, if any, need for document translation assistance. Nevertheless, FDOT will provide interpretation services upon reasonable request, free of charge.

There are fifteen Census Blocks within the study area that are approaching or are at a majority percentage for minority populations. These minority populations are throughout the entire project corridor and can be found in all segments except for Segment 13.

Out of the 4,164 households in the project area, there are 654 households that are below poverty level of which 38 receive public assistance. The majority of populations below poverty level were evaluated at Block Group level in Census Tracts 9503, Block Group 2; Census Tract 9503, Block Group 3; and Census Tract 9505, Block Group 2; which indicated that the populations within these communities were 24 percent, 21 percent, and 31 percent below poverty level, respectively. These populations mainly reside in the communities of Hawthorne and Interlachen.

Relocations will be required for this project and are discussed in Section 4.1.3. Neither of the build alternatives is anticipated to have any negative effects on populations, displacements of a significant number of persons (including minority populations or special populations). Relocation impacts to minorities and low income populations will be avoided whenever possible. As a part of the proposed project all displacees will be offered the relocation assistance benefits provided for in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act). This assistance will include advisory services and other benefits available to eligible residential and non-residential displacees. Many aspects of this project are considered enhancements to the standard of living for residents in the study area, minority or otherwise, and users of surrounding facilities. The proposed improvements include accommodations for pedestrians and bicyclists with the inclusion of bike lanes throughout the entire project and sidewalks in the urban sections as outlined in Section 4.3.1. All proposed pedestrian facilities will include ADA accessible features to the extent required by FDOT's design standards, which meet or exceed the 2010 Standards for Accessible Design.

Widening SR-20 will also reduce travel times and delay all motorists currently experience as they travel the corridor. In addition, widening SR-20 will provide a safer commute for all motorists. The proposed designated bicycle and pedestrian features will enhance the connectivity and mobility for all residents in the study area. The improvements provided by this project will enhance the standard of living for all residents in the study area.

Therefore, the FDOT does not anticipate that the proposed project will result in any disproportionate adverse impacts to any distinct minority, ethnic, elderly or handicapped groups, and/or low-income households. Title VI information was made available at the Public Hearing.

4.2 CULTURAL AND HISTORICAL RESOURCES

In accordance with the procedures contained in 36 CFR, Part 800, a Cultural Resource Assessment Survey (CRAS), including background research and a field survey coordinated with the State Historic Preservation Officer (SHPO), was performed for this project. As a result of the assessment, 110 sites were identified, 22 sites were determined eligible for listing or are listed on the National Register of Historic Places (NRHP). The 110 historic resources are described and shown by the Florida Master Site File Number (FMSF) in Table 4-5 and Figure 4-2, respectively.

The CRAS is included with the Technical Discipline Reports on the attached DVD. The SHPO concurrence letters are included in Appendix D. The original Phase 1 CRAS was completed in January 2001 and included buildings constructed prior to 1951. The updated Phase 1 CRAS was completed in November 2009 and included buildings constructed prior to 1965. A memorandum covering the new alignment portion was completed in October 2011 and also included any buildings constructed prior to 1967. Two memorandums covering the pond sites were completed in December 2012 and March 2014. Between these surveys, all buildings within the APE that are 48 years or older have been recorded and evaluated. The surveys were conducted for the build alternatives to evaluate the effect that construction will have on resources listed or potentially eligible for listing on the NRHP for local, regional, or national significance.

Within the Town of Interlachen, a historic district was identified that borders the SR 20 project. Through consultation with FHWA and SHPO the district was determined to be eligible for listing in the NRHP and while the district has not been listed or designated as such, throughout the EA document it is referred to as the Interlachen Historic District.

Table 4-5: Cultural Resource Sites

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Map ID	FMSF #	Segment	Site Name/Resource	Use	Evaluation	NRHP Status
1	8AL4181	1	Hawthorne Cemetery	Cemetery	Determined eligible by SHPO concurrence in 2001	Eligible
2	8AL4797	1	23602 SR 20	Residence	Moved, lack of historical & architectural significance	Not Eligible
3	8AL4798	1	24060 SR-20	Demolished Residence	Demolished/moved	Not Eligible
4	8AL5484	1	23119 SE Hawthorne Rd.	Residence	Lack of historical & architectural significance	Not Eligible
5	8PU00104	13	Wemberly House	Residence	Not Evaluated	Not evaluated by SHPO
6	8PU00479	East of CR-315	1215 St. Johns Ave	Residence	Not Evaluated	Not evaluated by SHPO
7	8PU00747	East of CR-315	1167 Old Gainesville Hwy	Residence	Severe non-historic alterations	Not Eligible
8	8PU00749	East of CR-315	Crews Residence	Residence	Lack of historical & architectural significance	Not Eligible
9	8PU00776	15	501 Atlantic Ave	Office	Lack of historical & architectural significance	Not Eligible
10	8PU00779	East of CR-315	1235 Old Gainesville Hwy	Residence	Lack of historical & architectural significance	Not Eligible
11	8PU00791	East of CR-315	1209 Old Gainesville Hwy	Residence	Lack of historical & architectural significance	Not Eligible
12	8PU00798	East of CR-315	Zitz/Giffee House	Residence	Lack of historical & architectural significance	Not Eligible
13	8PU0799	14/15	Micanopy to Palatka Rd.	Atlantic Ave	Severe non-historic alterations	Not Eligible
14	8PU0800	1/14/15	Florida Southern Railway	Trail/Atlantic Ave/Railroad	Lacks sufficient historic integrity	Not Eligible
15	8PU0801	East of CR-315	1132 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
16	8PU0802	15	Sid Martin Building	School	Determined eligible by SHPO concurrence in 1993	Found to be individually NR eligible
17	8PU1216	13	215 Atlantic Ave	Community Center	Listed on NHRP in 2000	Listed on NRHP
18	8PU1252	2	110 Gordon Chapel Rd	Residence	Lack of historical & architectural significance	Not Eligible
18	8PU1252 8PU1253	4	100 Gilgal Rd.	School	Lack of historical & architectural significance	Not Eligible
20	8PU1253 8PU1254	4	1912 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
20	8PU1255	4	1912 SR-20 100 W. Cowpen Lake Rd.	Residence	Lack of historical & architectural significance	Not Eligible
21	8PU1255 8PU1256	5	1841 SR-20			
		-		Residence	Lack of historical & architectural significance	Not Eligible
23	8PU1257	5	1831 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
24	8PU1258	5	2235 SR-20	Demolished	Demolished/moved	Not Eligible
25	8PU1259	5	1771 SR-20	Church Camp	Lack of historical & architectural significance	Not Eligible
26	8PU1260	5	1771 SR-20	Storage Shed	Lack of historical & architectural significance	Not Eligible
27	8PU1261	5	1749 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
28	8PU1262	5	1741 SR-20	Vacant	Lack of historical & architectural significance	Not Eligible
29	8PU1263	5	1742 SR-20	Demolished	Demolished/moved	Not Eligible
30	8PU1264	5	1739 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
31	8PU1265	5	Napoleon Lane	Demolished	Demolished/moved	Not Eligible
32	8PU1266	5	1723 SR-20	Demolished	Demolished/moved	Not Eligible
33	8PU1267	5	1724 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
34	8PU1268	5	1702 SR-20	Bar	Lack of historical & architectural significance	Not Eligible
35	8PU1269	5	1647 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
36	8PU1270	8	1503 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
37	8PU1271	8	1494 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
38	8PU1272	8	1491 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
39	8PU1273	9	1488 SR-20	Office	Lack of historical & architectural significance	Not Eligible
40	8PU1274	8	1488 SR-20	Storage	Lack of historical & architectural significance	Not Eligible
41	8PU1275	9	1470 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
42	8PU1276	9	1446 SR-20	Demolished	Demolished/moved	Not Eligible
43	8PU1277	9	1464 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
44	8PU1278	9	1462 SR-20	Demolished	Demolished/moved	Not Eligible
45	8PU1279	9	1460A SR-20	Demolished	Demolished/moved	Not Eligible
46	8PU1280	9	1460 SR-20	Demolished	Demolished/moved	Not Eligible
47	8PU1281	9	1458 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
48	8PU1282	9	1431 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
49	8PU1283	13	Pineview Cemetery	Cemetery	Determined eligible by SHPO concurrence in 2001	Eligible
50	8PU1284	13	1205 SR-20	Church	Lack of historical & architectural significance	Not Eligible
51	8PU1285	13	111 S. Francis St.	Church	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district
52	8PU1286	13	104 S. Francis St.	Residence	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district
53	8PU1280	13	104 S. Handis St. 104 Boyleston St	Residence	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district & individually eligible
54	8PU1287	13	104 Boyleston St	Residence	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district & individually eligible
			•			
55	8PU1289	13	109 Columbus Ave	Boy Scout Building	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district & individually eligible
56	8PU1290	14	200 E. Boylston St.	Church	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district & individually eligible
57	8PU1291	14	221 Boyleston St	Residence	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district & individually eligible
58	8PU1292	14	108 Commonwealth Ave	Residence	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district & individually eligible
59	8PU1293	14	110 Commonwealth Ave	Business	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district & individually eligible

Map ID	FMSF #	Segment	Site Name/Resource	Use	Evaluation	NRHP Status
60	8PU1294	14	308 E. Boylston St.	Residence	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district
61	8PU1295	14	1177 SR-20	Real Estate Office	Severe non-historic & non-sympathetic alterations	Not Eligible
62	8PU1296	14	318 Atlantic Ave	Grocery	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district
63	8PU1297	14	1173 SR-20	Residence	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district
64	8PU1298	14	418 Atlantic Ave	Residence	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district
65	8PU1299	14	426 Atlantic Ave	Residence	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district
66	8PU1300	14	432 Atlantic Ave	Residence	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district
67	8PU1301	14	440 Atlantic Ave	Residence	Determined eligible by SHPO concurrence in 2001	Eligible as a contributing resource to a NR district
68	8PU1302	East of CR-315	442 Atlantic Ave	Residence	Lack of historical & architectural significance	Not Eligible
69	8PU1449	14	107 S 2 nd Ln	Residence	Not Evaluated	Not Evaluated by SHPO
70	8PU1459	13, 14, 15	Interlachen Historic District	Historic District	Determined eligible by SHPO concurrence in 2001	Eligible
71	8PU1498	14	CSX Caboose	Railroad Car	Lack of historical & architectural significance	Not Eligible
72	8PU1546	6	SR-20 Billboard	Billboard	Determined eligible by the Keeper of NRHP	Eligible
73	8PU1575	5	1771 SR-20	Church Camp	Lack of historical & architectural significance	Not Eligible
74	8PU1576	4	1945 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
75	8PU1577	4	1941 SR-20	Residence	Insufficient Information	Not Eligible
76	8PU1578	4	1917 SR-20	Store	Lack of historical & architectural significance	Not Eligible
77	8PU1579	5	1847 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
78	8PU1580	5	1746 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
79	8PU1581	5	1737 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
80	8PU1582	5	D&M Auto Service – 1729 SR-20 Unit 1	Auto Repair	Lack of historical & architectural significance	Not Eligible
81	8PU1583	5	1729 SR-20 Unit 2	Residence	Lack of historical & architectural significance	Not Eligible
82	8PU1584	5	1726 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
83	8PU1585	5	1644 SR-20	Vacant	Lack of historical & architectural significance	Not Eligible
84	8PU1586	5	Magnolia M.B Church 1631 SR-20	Vacant	Lack of historical & architectural significance	Not Eligible
85	8PU1587	7	1537 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
86	8PU1588	7	1535 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
87	8PU1589	8	301 SW 45 th St	Vacant	Lack of historical & architectural significance	Not Eligible
88	8PU1590	9	1482 SR-20	Real Estate Office/Residence	Lack of historical & architectural significance	Not Eligible
89	8PU1591	9	1473 SR-20	Mobile Home	Lack of historical & architectural significance	Not Eligible
90	8PU1592	9	1456 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
91	8PU1593	9	1450 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
92	8PU1594	9	1420 SR-20	Store	Lack of historical & architectural significance	Not Eligible
93	8PU1595	9	1418 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
94	8PU1596	9	1414 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
95	8PU1597	9	1410 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
96	8PU1598	11	1281 SR-20	Bar	Lack of historical & architectural significance	Not Eligible
97	8PU1599	12	102 Grant Dr	Mobile Home	Lack of historical & architectural significance	Not Eligible
98	8PU1600	14	1162 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
99	8PU1601	5	1771 SR-20 Representative #1	Cabin	Lack of historical & architectural significance	Not Eligible
100	8PU1602	5	1771 SR-20	Cabin	Lack of historical & architectural significance	Not Eligible
101	8PU1641	8	1501 SR-20	Detached Garage	Lack of historical & architectural significance	Not Eligible
102	8PU1642	7	117 Lake Galilee Drive	Mobile Home	Lack of historical & architectural significance	Not Eligible
103	8PU1708	5	102 E. Cowpen Lake Road	Utility	Lack of historical & architectural significance	Not Eligible
104	8PU1709	5	105 Rose Lane	Residence	Lack of historical & architectural significance	Not Eligible
105	8PU1710	5	118 Jenkins Lane	Residence	Lack of historical & architectural significance	Not Eligible
106	8PU1711	14	109 Stock Ave	Residence	Lack of historical & architectural significance	Not Eligible
107	8PU1712	9	103 Lakeview Trail	Residence	Lack of historical & architectural significance	Not Eligible
108	8PU1713	9	1440 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
109	8PU1714	5	1680 SR-20	Residence	Lack of historical & architectural significance	Not Eligible
110	8PU1717	9	1481 SR-20	Residence	Lack of historical & architectural significance	Not Eligible



Figure 4-2: Cultural Resource Sites

As a result of the archaeological surveys conducted as part of this project, 13 archaeological sites (8AL3883, 8AL4750, 8PU1305-1312, 8PU01702, 8PU01716, and 8PU01718) and ten archaeological occurrences were documented along the APE. The surveys concluded, based upon the opinion of the Principal Investigator that none of the 13 archaeological sites or ten archaeological occurrences was considered eligible for listing on the National Register of Historic Places and no further work was recommended.

2005 EA Build Alternative

It should be noted that after the 2005 EA was approved, a Concrete Block Billboard was identified within the projects APE. The billboard was determined to be eligible for listing in the *National Register of Historic Places*. The 2005 EA Build Alternative previously impacted this resource. While developing the Revised Build Alternative after the determination, the Revised Build Alternative has been designed to avoid impacts to the billboard. Furthermore, the 2005 EA Build Alternative would also be redesigned to avoid the billboard if the alternative was still being pursued.

Option 1 Right

The 2005 EA Build Alternative Option 1 Right will impact two sites and also the historic district (8PU1459) in Segments 13 and 14. The two sites are the Concrete Block Billboard (8PU1546) located in Segment Six and a residence (8PU1301) located at 440 Atlantic Avenue in Segment 14 that is individually eligible.

Option 4

The 2005 EA Build Alternative Option 4 will impact six sites and also the historic district (8PU1459) in Segments 13 and 14. The six sites, of which five are residences (8PU1297, 8PU1298, 8PU1299, 8PU1300, and 8PU1301), are all located in Segment 14 while the Concrete Block Billboard (8PU1546) is located in Segment Six.

Revised Build Alternative

Option 1 Right

The Revised Build Alternative Option 1 Right will impact a residence (8PU1301) in Segment 14 and also the historic district (8PU1459) in Segments 13 and 14.

Option 4

The Revised Build Alternative Option 4 will impact five sites and also the historic district (8PU1459) in Segments 13 and 14. The five sites are residences (8PU1297, 8PU1298, 8PU1299, 8PU1300, and 8PU1301) that are all located in Segment 14.

Locally Preferred Option through the Town of Interlachen

Option 4 has been determined to be the preferred option for this study. It is the opinion of the local community, FHWA, and SHPO that the long-term impacts from Option 1 Right to the overall historic district would be more damaging than Option 4. It is likely that the taking of the backyards of the remaining four buildings, as Option 1 Right does, would result in either their conversion to commercial interests or even possible demolition to accommodate new commercial construction. As a result, the local community strongly supports Option 4. In consultation with FHWA, SHPO, and the

community, Option 4 was carried forward as the locally preferred option and a MOA was executed. A comparison of impacts to the various alternatives and resources is shown in Table 4-6.

Segment	2005 EA Build Alternative Option 1 Right	Revised Build Alternative Option 1 Right	2005 EA Build Alternative Option 4	Revised Build Alternative Option 4
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	1	0	1	0
7	0	0	0	0
8	0	0	0	0
9	0	0	0	0
10	0	0	0	0
11	0	0	0	0
12	0	0	0	0
13	1	1	1	1
14	2	2	6	6
15	0	0	0	0
TOTAL	4	3	8	7

 Table 4-6: Cultural Resource Sites Impacted

4.2.1 SECTION 106 CONSULTATION

Coordination

Coordination with the SHPO began with the Advance Notification Process. On October 14, 1999, the SHPO requested the FDOT conduct a Cultural Resource Survey. This survey was completed in January 2001. On August 10, 2001, the SHPO concurred with the findings of the survey, which were previously described in Section 4.2 of this Environmental Assessment. The SHPO concurrence letter is included in Appendix D.

In reaching these conclusions and identifying potential impacts other meetings were held with the SHPO and interested members of the public. On September 13, 2000, a meeting was held in Interlachen with FDOT, the SHPO, and concerned citizens to discuss the merits of the bypass options as well as the merits of the existing alignment options. The FDOT reiterated their position that a bypass around Interlachen was not a feasible and prudent alternative.

A formal Section 106 meeting was held December 7, 2000 in Tallahassee, Florida to discuss the findings of the Cultural Resource Survey. Representatives attended this meeting from FDOT, FHWA, SHPO, and several citizens from Interlachen. The boundaries of the Interlachen Historic District were discussed as well as potential impacts to the district. There was also as a general discussion on measures to minimize harm.

On April 5, 2001, the FDOT and FHWA went to Interlachen for another meeting with interested citizens. At this meeting Option 1-Right was presented and the minimization attributes of this alternative were discussed at length. The SHPO representative was unable to attend this meeting. The citizens requested FDOT to develop a new wider typical section alternative that would create a buffer between the expanded roadway and the Interlachen Historic District. That alternative is called "Option 4" in this EA.

On October 2, 2001, representatives of the FDOT again went to Interlachen and presented Option 4, developed as a result of the April 5, 2001 meeting request by the citizens. At that time the FDOT stated it was preparing an EA that would analyze both options. It was also stated that after circulation of the EA and FDOT receives comments from the SHPO, local officials and the general public, a recommendation would be made as to which typical section (Option 1- Right or Option 4) would be constructed through Interlachen.

During discussions with the local community, FHWA, and SHPO it was decided that the long-term impacts from Option 1 Right to the overall historic district would be more damaging than Option 4. It is likely that the taking of the backyards of the remaining four buildings, as Option 1 Right does, would result in either their conversion to commercial interests or even possible demolition to accommodate new commercial construction. As a result, the local community strongly supports Option 4. In consultation with FHWA, SHPO, and the community, Option 4 was carried forward as the locally preferred option for the MOA.

On August 9, 2011, representatives of FDOT went to Interlachen to present, at that time, a proposed MOA with SHPO to the Town of Interlachen. The MOA states that FDOT will transfer any right-of-way that will not eventually be used or necessary for the project to the Town of Interlachen. The additional right-of-way will be used for the expansion of the existing linear park. The Town of Interlachen accepted the proposal. The MOA is included in Appendix C.

In addition to these meetings, which were directly related to the Section 4(f) issues; numerous other meetings have been held. Refer to Section 6.2 for a full discussion of public involvement on this project.

Memorandum of Agreement (MOA)

Through the application of the Criteria of Adverse Effect, the Federal Highway Administration, in consultation with the SHPO, concluded that the project would have an adverse impact on the houses located within the Town of Interlachen, Florida located at:

1172 SR-20 (8PU1297), 418 Atlantic Avenue (8PU1298), 426 Atlantic Avenue (8PU1299), 432 Atlantic Avenue (8PU1300), and 440 Atlantic Avenue (8PU1301), each such property being eligible for inclusion in the National Register of Historic Places. Based on these conclusions, a MOA was developed, and approved by the Federal Highway Administration, the SHPO, and FDOT on November 8, 2011 (see Appendix C).

The MOA states that as part of Option 4, FDOT will adversely affect the houses located within the Town of Interlachen, Florida located at: 1172 SR-20 (8PU1297), 418 Atlantic Avenue (8PU1298), 426 Atlantic Avenue (8PU1299), 432 Atlantic Avenue (8PU1300), and 440 Atlantic Avenue (8PU1301), each such property being eligible for inclusion in the National Register of Historic Places. The FHWA and the Department consulted with the local community, the record property owners of the affected houses, members of the public and with the SHPO, in accordance with Section 106 of the National Historic Preservation Act.

As part of the project, and as defined as mitigation in the MOA for the Interlachen Historic District, the Department shall acquire the historic house located at 440 Atlantic Avenue (8PU1301). The Department shall relocate the house to an as yet undetermined location, preferably within the Interlachen Historic District, and, thereafter restore the exterior of the home. The house shall be encumbered with a preservation covenant (prepared by the department) and offered for sale to the former owner after relocation and restoration are complete. If the former owner does not purchase the home, the Department will offer the home for sale to the Town and thereafter to the general public.

The remaining four homes will be encumbered with a preservation covenant and thereafter offered for sale to the former owners. Homes not purchased by the respective former owners shall be offered for sale to the general public. The Department will implement a marketing plan, for a period of six months, which may include listing the houses in area newspapers; posting flyers at local community centers such as churches and historical societies; informing local civic and religious leaders about the houses; and informing local, regional, and state-wide preservation groups for posting on their website or list-server. The Department may demolish any house not purchased within the sixmonth marketing period.

The Department will transfer any right-of-way that will not eventually used or necessary for the project to the Town of Interlachen. The additional right-of-way will be used for the expansion of the existing linear park. After completion of the project, the Department will install landscaping in the area between SR-20 and the boundary of the proposed expansion of the park.

4.2.2 RECREATIONAL/PARKLAND

The City of Hawthorne is in the process of developing a planned park, Little Orange Creek Nature Park, in eastern Alachua and western Putnam Counties. The 1,205 acre park property, recently acquired (2011) by the City, is located to the north and south of SR-20, within the limits of this project. The planned park is shown in Figure 4-2.

It should be noted that at the time the 2005 Approved EA was circulated, there were no plans to construct a park at Little Orange Creek and the land was owned by a private entity. FDOT began working with the Putnam Land Conservancy (PLC) in 2006 to plan for the park development.

In 2006, the newly formed PLC, working with the Alachua Conservation Trust and the City of Hawthorne, began the plan for land acquisition and park development. On December 20, 2006, the City met with FDOT and the PLC to present the plan and request FDOT's participation. FDOT's potential role in facilitating the proposed elements of the park, as part of the roadway improvements was discussed. Four subsequent meetings were held on June 30, 2009, March 7, 2011, October 12, 2011, and July 26, 2012. These meetings further defined viable solutions to enhance the park and allow for future widening of SR-20. Coordination documentation is located in Appendix B.

FDOT is committed to constructing a bridge over Little Orange Creek. The bridge will provide pedestrian, equestrian, and canoe/kayak access underneath SR-20, connecting the northern and southern portions of the Nature Park. The bridge also serves as a wildlife crossing. In addition, wildlife crossing will be enhanced through structures located at Fowler's Prairie. With the widening of SR-20, sidewalks and bicycle lanes are planned on both the north and south side of the roadway. These sidewalks and bicycle lanes will connect Hawthorne and Interlachen and provide additional recreational facilities to the park. All these features will enhance the park and are consistent with the purpose of the Little Orange Creek Nature Park. FDOT and the City of Hawthorne will continue to work together throughout the duration of this project, to facilitate the goals of the Little Orange Creek Nature Park. The right-of-way needs for the widening of SR-20 are considered in the Master Plan for the park. An easement for SR-20 has been set aside for transportation purposes and will be designated as such once the exact ROW need has been determined during the design phase.

As of May 2013, the park has not opened to the public and is still in the planning process. Additional funds are needed for permits and engineering plans before the park can officially open.

4.3 NATURAL AND PHYSICAL IMPACTS

The following discussion presents the anticipated impacts to the natural and physical environment as a result of the proposed project. Physical impacts relate to air quality and noise.

4.3.1 PEDESTRIAN/BICYCLE FACILITIES

Currently, there are no pedestrian or bicycle facilities along SR-20 within the project limits. There are existing pedestrian and bicycle facilities located at the eastern and western limits of this project that were constructed with the previous widening projects. All proposed pedestrian facilities will include ADA accessible features to the extent required by FDOT's design standards, which meet or exceed the 2010 Standards for Accessible Design.

2005 EA Build Alternative

The 2005 EA Build Alternative will provide a 10-foot undesignated bicycle lane along the south side of SR-20 in the rural sections of the project (Segments 1 through 6). In the urban sections (Segments 7 through 15), five-foot bicycle lanes, a five-foot sidewalk north of SR-20, and a 10-foot sidewalk south of SR-20 are proposed along both sides of SR-20. The 10-foot sidewalk was requested by Putnam County.

Revised Build Alternative

The Revised Build Alternative will provide 6.5-foot bicycle lanes (Segments 1 through 13), 4-foot bicycle lanes (Segments 13 through 15), 10-foot sidewalk on the south side of SR-20 (Segments 13 through 15), and a 5-foot sidewalk on the north side of SR-20 (Segments 13 through 15).

4.3.2 VISUAL/AESTHETICS

The aesthetic quality of a community comprises physical features that make up the visible landscape and include land, water, vegetation, and man-made features (such as buildings, roadways, and structures). The project corridor contains many of these visual resources. Lakes are scattered on either side of SR-20; dense vegetation is present through most of the project area; and the Interlachen Historic District borders the roadway in Segments 14 and 15. Therefore, visual impacts must be considered from both the vantage point of the motoring public and of those who reside, work, and shop within the two communities.

By using the existing alignment for the widening effort, both build alternatives avoid impacts to the adjacent lakes and too much of the roadside vegetation that lies outside the existing right-of-way. Moreover, the grassed median will enhance the beauty of the SR-20 corridor by providing a visual relief for the motorist from the additional pavement required with the Build Alternative.

During the series of public meetings held for this project, citizens expressed specific concern for retaining the character of Interlachen and its quality of life. The project is designed to minimize negative impacts to the essential quality of life features. It maintains the existing 45 mph speed limit through downtown Interlachen (Segments 14 and 15) and the existing at-grade intersection at CR-315. Though two additional travel lanes will be added as part of the project, the speed at which vehicles travel and current traffic flow at the intersection will remain as it is today. Inclusion of sidewalks and curb and gutter features will enhance the visual appeal of the roadway itself.

There are two typical section options being considered through Segments 14 and 15. The following discussion presents the visual impacts to the Town of Interlachen as they relate to these two options.

Option 1-Right

Under this option, the proposed alignment around Lake Chipco requires the removal of several large trees on the south side of the roadway, but the motorist's view of the lake remains unchanged. The removal of the Nicosia Realty building will improve the view of the Interlachen Historic District from SR-20.

The view of Lake Chipco from the Interlachen Historic District will be altered under Option 1-Right. With the removal of the trees, the lake will be more visible, as will SR-20. However, the proposed grassed median will help diminish the effect of the additional travel lanes. To enhance this area and the view of the lake, the median could be planted with native trees and shrubbery.

Sidewalks and bicycle lanes will provide safe access to both the lake and the Interlachen Historic District, and to the schools and shopping along CR-315.

Option 1-Right will not have an aesthetic or visual impact on the two parks contained within Interlachen's Historic District, Robert Henry Jenkins, Jr. Memorial Park and Hastings Park.

Option 4

This option consists of a wider median through Segments 14 and 15 and requires the acquisition of property along the northern boundary of the Interlachen Historic District. Like Option 1-Right, the wider median could be landscaped to provide a visual barrier from the westbound traffic lanes, while maintaining the Interlachen Historic District's view of Lake Chipco. In addition, landscaping could be provided within the FDOT right-of-way south of SR-20 to form a green space compatible with the Interlachen Historic District.

Secondary aesthetic impacts with Option 4 pertain to the Interlachen Historic District itself. A buffer will be created between the roadway and the Interlachen Historic District. Remnant land not used for the roadway will be protected from future non-conforming construction. The integrity of the Interlachen Historic District may, therefore, be enhanced by Option 4.

Option 4 will also have positive aesthetic impacts to Robert Henry Jenkins, Jr. Memorial Park and Hastings Park. As part of this option, the proposed landscaped buffer will shield the parks from view of widened SR-20.

4.3.3 AIR QUALITY

Both Alachua and Putnam Counties are currently designated as being in attainment for the following Clean Air Act National Ambient Air Quality Standards (NAAQS): ozone, nitrogen dioxide, particulate matter (2.5 microns in size and 10 microns in size), sulfur dioxide, carbon monoxide (CO), and lead. Therefore, the Clean Air Act conformity requirements do not apply for the project.

The CO Florida 2012 model screening test shows that the highest project-related CO 1hour and CO 8-hour levels are not predicted to meet or exceed the NAAQS under either of the analyzed alternatives. The air report, completed in May 2013, is included as part of the Technical Discipline Reports on the attached DVD. In addition to the criteria for air pollutants for which NAAQS have been promulgated, the Environmental Protection Agency also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g. airplanes), area sources (e.g. dry cleaners) and stationary sources (e.g. factories or refineries). Mobil Source Air Toxics (MSATs) are a subset of the 188 air toxics defined by the Clean Air Act. The MSATs are compounds emitted from highway vehicles and non-road equipment.

The Build Alternative AADT traffic volumes along the project corridor are predicted to be approximately equal to the No-Build between the Build Year (2020) and Design Year (2040). In addition, Build Alternative traffic speeds are predicted to be 55mph which is commensurate with the current posted/ No-Build Alternative traffic speed. The Level of Service along SR20 is predicted to be LOS C with the Build Alternative, as opposed to LOS F with the No-Build Alternative in the 2040 Design Year. Based on these data, the project is expected to result in reduced congestion levels.

For the Build Alternative, the amount of MSATs emitted would be proportional to the vehicle miles traveled (VMT). The VMT of the Build Alternative is expected to be only slightly higher that for the No-Build Alternative, because the additional capacity increases the efficiency of the roadway, reduces congestion and increases vehicle speeds. This increase in VMT would normally lead to higher overall Build Alternative MSAT emissions along the corridor. However this overall increase is expected to be somewhat offset by lower MSAT emission rates due to increased vehicle speeds; according to EPA's MOVES2010b model, emissions o f all of the priority MSATs decrease as speed increases. Because the estimated VMT for the Build Alternative and No-Build Alternative are nearly the same, it is expected there would be no appreciable difference in overall MSAT emissions. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 80 percent between 2010 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated as part of the Build Alternative will have the effect of moving some traffic closer to nearby homes, schools, and businesses; therefore, there may be localized areas where ambient concentrations of MSAT could be higher than the No-Build Alternative. However, the magnitude and the duration of these potential increases compared to the No-Build alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions

that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

4.3.4 NOISE

2005 EA Build Alternative

The 2005 EA Build Alternative traffic noise analysis identified sixty-eight noise sensitive receptors, represented by twenty-eight representative receptors, as having a potential impact from elevated traffic noise. Fourteen representative receptors were found to approach or exceed FDOT and FHWA Noise Abatement Criteria (NAC). Four were unable to accommodate barriers sufficient to provide abatement. Barriers were analyzed for the remaining eight receptors but were found to greatly exceed cost reasonableness guidelines. It was concluded that there were no apparent solutions to mitigate the noise impacts as a result of the 2005 EA Build Alternative.

Revised Build Alternative

An assessment of noise impacts was conducted for this project according to Title 23, Code of Federal Regulations (C.F.R.), Part 772: Procedures for Abatement of Highway Traffic Noise and Construction Noise (July 13, 2010), Part II, Chapter 17 of the Florida Department of Transportation (FDOT) Project Development and Environment (PD&E) Manual (May 24, 2011) and Chapter 335.17, Florida Statutes. This assessment also adheres to Federal Highway Administration (FHWA) traffic noise analysis guidelines contained Report FHWA-HEP-10-025, "Highway Traffic Noise: Analysis and Abatement Guidance", (January 2011). The analysis is fully documented in the project's Noise Study Report (June 2012) which is included with the Technical Discipline Reports on the attached DVD.

Noise abatement measures are considered whenever predicted noise levels exceed or approach within one decibel of the FHWA Noise Abatement Criteria (NAC), or when project noise impacts increase substantially (15 dB(A) or more) over existing noise levels. Table 4-7 lists these criteria by land use activity category.

Activity Category	FHWA Abatement Criteria	FDOT Approach Criteria	Evaluation Location	Description of Activity Category
А	57.0	56.0	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need; and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
В	67.0	66.0	Exterior	Residential.

 Table 4-7: Hourly A-Weighted Noise

С	67.0	66.0	Exterior	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, golf courses, places of worship, playgrounds, public meeting rooms, public/non- profit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52.0	51.0	Interior	Auditoriums, daycare centers, hospitals libraries, medical facilities, places of worship, public meeting rooms, public/nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72.0	71.0	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	-	-	-	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical) and warehousing.
G	-	-	-	Undeveloped lands that are not permitted.

Impact Analysis

FHWA's Traffic Noise Model (TNM) – version 2.5 was used to predict traffic noise levels for this project and to determine critical noise contours. These contours represent the approximate distance at which the NAC will be approached by the Design Year 2040. For Segments 1 through 13, the critical noise contour distance is 202 feet from the nearest proposed edge of pavement for land use activity categories B and C, and 102 feet for category E. For Option 1-Right and Option 4 in Segments 14 and 15, the critical noise contour distances are 190 feet for categories B and C, and 96 feet for category E.

One hundred fifty-five (155) residences (Category B), sixteen (16) special use sites (Category C), and four commercial sites (Category E) were analyzed for project noise impacts. To facilitate the noise analysis, 92 receptors were identified to represent these combined 175 total sites. These representative receptors were selected on the basis of noise sensitivity, roadway proximity, and homogeneity (i.e., representative of other similar sites in the project study area). These representative receivers are presented in Table 4-8 for Segments 1-13 and Table 4-9 and Table 4-10 for Option 1-Right and Option 4, respectively. The locations of the representative receptors are shown graphically on Figure 4-3.
					yzed Scenar				
	Representative Noise Receptor		Year 2 Existing S		Year 2040 No-Build	Ye	ear 2040 Build		ment
Receptor ID	Sites Represented Single-family (sf)/ multi- family (mf)	Impact Criterion	Distance from SR 20 Edge of Pavement	Projected Noise Level (dB(A))	Projected Noise Level (dB(A))	Distance from SR 20 Edge of Pavement	Projected Noise Level (dB(A))	Change From Existing (dB(A))	Consider Abatement
Project S	Segment 1								
A1	2 sf	66.0	323'	54.6	56.5	281'	61.6	7.0	
A2	2 sf	66.0	114'	64.8	66.8	72'	70.4	5.6	\checkmark
A3	4 sf	66.0	83'	66.5	68.4	41'	72.4	5.9	
A4	1 sf	66.0	80'	67.5	69.4	28'	73.8	6.3	\checkmark
A5	1 sf	66.0	178'	61.1	63.0	126'	67.2	6.1	\checkmark
A6	2 sf	66.0	119'	65.3	67.3	66'	71.2	5.9	\checkmark
A7	Hawthorne Cemetery	66.0	108'	65.5	67.4	73'	70.7	5.2	
A8	1 Commercial	71.0	171'	61.0	62.9	141'	66.8	5.8	
Project S	egment 3								
P1	1 sf	66.0	294'	55.6	57.5	215'	62.7	7.1	
P2	1 sf	66.0	165'	61.8	63.7	93'	69.7	7.9	
P3	2 sf	66.0	172'	61.3	63.3	165'	66.2	4.9	
P4	2 sf	66.0	304'	55.8	57.7	220'	62.8	7.0	
Project S	egment 4								
P5	4 sf	66.0	348'	54.7	56.6	277'	61.3	6.6	
P6	3 sf	66.0	190'	60.8	62.7	142'	68.0	7.2	
P7	1sf	66.0	257'	57.5	59.5	185'	65.6	8.1	
P8a P8b	1 sf & Trinity United	66.0	478'	50.3	52.2	402'	57.2	6.9	
P9a	7 sf	66.0	181'	60.5	62.4	95'	69.8	9.3	\checkmark
P9b	2sf	66.0	181'	60.5	62.4	95'	69.8	9.3	
P10	1 sf	66.0	129'	64.4	66.3	129'	67.5	3.1	
Project S	egment 5								•
P11	2 sf	66.0	178'	60.1	62.6	99'	70.1	10.0	
P12	3 sf	66.0	125'	65.1	67.5	122'	68.4	3.3	
P13	3 sf	66.0	170'	61.3.	63.7	165'	65.4	4.1	

Table 4-8: Noise Impact Summary, Segments 1-13

					yzed Scenar	_			
	epresentative oise Receptor		Year 2 Existing S		Year 2040 No-Build	Ye	ear 2040 Build		lent
Receptor ID	Sites Represented Single-family (sf)/ multi-family (mf)	Impact Criterion (dB(A))	Distance from SR 20 Edge of Pavement	Projected Noise Level (dB(A))	Projected Noise Level (dB(A))	Distance from SR 20 Edge of Pavement	Projected Noise Level (dB(A))	Change From Existing (dB(A))	Consider Abatement
Project Segn	nent 5 Continued								
P14	1 sf	66.0	293'	55.0	57.4	214'	63.5	8.5	
P15	1 sf	66.0	145'	62.2	64.7	62'	72.1	9.9	\checkmark
P16	Mt. Zion Church	66.0	99'	62.4	64.8	52'	71.9	9.5	\checkmark
P17	4 sf	66.0	283'	55.1	57.6	218'	63.7	8.6	
P18	6 sf	66.0	181'	62.4	64.9	104'	71.8	9.4	
P19	Campground	66.0	58'	66.7	69.1	55'	70.5	3.8	
P20	2 sf	66.0	71'	67.3	69.7	67'	71.2	3.9	
P21	1 sf	66.0	175'	60.5	63.0	170'	64.7	4.2	
P22	Christian Center	66.0	70'	67.3	69.8	69'	71.2	3.9	\checkmark
P23	1 sf	66.0	279'	55.8	58.2	275'	60.5	4.7	
P24	1 sf	66.0	314'	54.7	57.1	274'	63.1	8.4	
P25	3 sf	66.0	114	65.0	67.4	74'	71.7	6.7	\checkmark
P26	1 sf	66.0	93'	66.2	68.6	50'	72.2	6.0	
P27	Removed from an	alysis. I	Receptor in F	ROW					
Project Segn	nent 6								
P28	1 sf	66.0	228'	58.1	60.5	185'	64.4	6.3	
P29	1 sf	66.0	145'	63.9	66.3	357'	58.0	-5.9	
P30	1 sf	66.0	776'	44.7	47.1	230'	62.6	17.9	
P31	1 sf	66.0	>1000'	41.0	43.4	354'	58.2	17.2	
Project Segn	nent 7								
P32	1 sf	66.0	>1000'	40.3	42.7	209'	63.7	23.4	
P33	1 sf	66.0	>1000'	42.2	44.6	56'	72.3	30.1	
P34	1 sf	66.0	649'	47.6	50.0	178'	64.6	17.0	\checkmark
Project Segn	nent 8					·			
P35	1 sf	66.0	482'	50.6	53.0	136'	67.7	17.1	
P36	4 sf	66.0	198'	59.6	62.1	184'	64.2	4.6	
P37a	5 mf sites	66.0	108'	65.2	67.6	104'	69.8	4.6	
Project Segn									
P37b	7 mf sites	66.0	201'	59.6	62.0	198'	64.2	4.6	

Table 4-8 continued: Noise Impact Summary, Segments 1-13

					yzed Scenar	_			
	Representative Noise Receptor		Year 2 Existing S		Year 2040 No-Build	Ye	ear 2040 Build		nent
Receptor ID	Sites Represented Single-family (sf)/ multi-family (mf)	Impact Criterion (dB(A))	Distance from SR 20 Edge of Pavement	Projected Noise Level (dB(A))	Projected Noise Level (dB(A))	Distance from SR 20 Edge of Pavement	Projected Noise Level (dB(A))	Change From Existing (dB(A))	Consider Abatement
Project Seg	gment 9 Continued								
P38	5 sf	66.0	91'	66.0	68.5	88'	70.8	4.8	
P39	1 sf	66.0	261'	56.7	59.1	256'	61.9	5.2	
P40	2 sf	66.0	113'	64.8	67.2	107'	69.5	4.7	
P41	4 sf	66.0	354'	53.0	55.5	352'	58.5	5.5	
P42	1 sf	66.0	142'	62.7	65.1	135'	67.4	4.7	
P43	1 sf	66.0	292'	55.5	58.0	206	63.6	8.1	-
P44	2 sf	66.0	227'	57.5	59.9	224'	62.7	5.2	
P45	United Pentecostal	66.0	65'	67.6	70.0	62'	72.5	4.9	
P46	1 sf	66.0	119'	64.5	66.9	112'	69.5	5.0	
P47	United Methodist	66.0	261'	56.1	58.5	257'	61.6	5.5	
P48	2 sf	66.0	246'	56.4	58.8	242'	62.2	5.8	
P49	1 sf	66.0	188'	59.1	61.5	183'	65.2	6.1	
P50	2 sf	66.0	79'	64.8	67.2	76'	71.3	6.5	
Project Seg	gment 10								
P51	4 sf	66.0	169'	62.5	63.6	175'	64.9	2.4	
P52	4 sf	66.0	351'	55.0	56.1	330'	59.2	4.2	
P53	1 sf	66.0	248'	58.5	59.7	205'	63.6	5.1	
Project Seg			0.01	00 T	07.0	1071			
P54	5 sf	66.0	98'	66.7	67.9	127'	68.2	1.5	-
Project Seg									
P55	Church of God	66.0	118'	65.7	66.9	117'	68.7	3.0	√
P56	5 sf	66.0	179'	61.6	62.7	186'	64.7	3.1	
P57	1 sf	66.0	85'70	68.3	69.5	82'	71.0	2.7	 Image: A start of the start of
P58	1 sf	66.0	276'	57.2	58.4	292'	60.7	3.5	
P59	1 sf	66.0	64'	68.6	69.7	75'	71.2	2.6	
Project Seg			10-1			4.5.1	0 7 /		
P60	Johnsons Funeral	66.0	165'	62.7	63.8	151'	67.1	4.4	
P61	Pineview Cemetery	66.0	66'	68.1	69.2	40'	73.3	5.2	
P62	Church playground	66.0	348'	54.1	55.2	265'	61.0	6.9	
P63	Masters Funeral	66.0	185'	61.7	62.8	182'	64.5	2.8	
P64	1 sf	66.0	77'	69.6	70.7	72'	72.2	2.6	
P65	Ball Court	66.0	123'	65.9	67.1	118'	68.2	2.3	\checkmark

Table 4-8 continued: Noise Impact Summary, Segments 1-13

	Representative			Anal	yzed Scenar	io/Alternativ	/e		
	Noise Receptor		Year 2 Existing S	-	Year 2040 No-Build	Ye	ear 2040 Build		nent
Receptor ID	Sites Represented Single-family (sf)/ multi- family (mf)	Impact Criterion (dB(A))	Distance from SR 20 Edge of Pavement	Projected Noise Level (dB(A))	Projected Noise Level (dB(A))	Distance from SR 20 Edge of Pavement	Projected Noise Level (dB(A))	Change From Existing (dB(A))	Consider Abatement
Project Seg	ment 13 Continued								
P66	1 sf	66.0	114'	64.5	65.7	95'	65.2	0.7	
P67	2 sf	66.0	222'	58.3	59.4	203'	59.8	1.5	
P68	1 sf	66.0	233'	57.6	58.7	235'	59.5	1.9	

Table 4-8 continued: Noise Impact Summary, Segments 1-13

Table 4-9: Noise Impact Summary, Segments 14-15, Option 1 Right

				Analyz	ed Scenario	/Alternati	ve		
	Representative Noise Receptor		Year 2012 Existing Scenario No-Build			Year 2040 Build – Option 1Right			atement
Receptor ID	Sites Represented Single-family (sf)/ multi-family (mf)	Impact Criterion (dB(A))	Distance from SR 20 Edge of Pavement	Projected Noise Level (dB(A))	Projected Noise Level (dB(A))	Distance from SR 20 Edge of Pavement	Projected Noise Level (dB(A))	Change From Existing (dB(A))	Consider Abatement
Project	Segment 14								
P69	First United Methodist Church	66.0	140'	62.6	63.8	96'	63.2	0.6	
P70	Removed from anal	ysis. R	eceptor in l	ROW					
P71	1 sf	66.0	204'	58.5	59.7	172'	59.9	1.4	
P72	1 sf	66.0	338'	54.1	55.2	311'	56.2	2.1	
P73	3 sf	66.0	199'	59.2	60.3	150'	60.2	1.0	
P73-C	Commercial	71.0	200'	60.6	61.7	135'	61.9	1.3	
P74	Picnic Area	66.0	348'	53.7	54.8	302'	55.8	2.1	
P75	5 sf	66.0	134'	63.2	64.3	103'	63.1	-0.1	
P76	Hastings Park	66.0	321'	54.6	55.8	273'	56.5	1.9	
P77	4 sf	66.0	367'	53.7	54.9	313'	56.4	2.7	
P78	1 sf	66.0	32'	68.7	69.8	60'	72.2	3.5	\checkmark
P79	1 sf	66.0	100'	64.6	65.8	112'	68.5	3.9	\checkmark
P80	Commercial	71.0	46'	67.2	68.4	60'	71.0	3.8	
P81	2 sf	66.0	140'	62.6	63.7	145'	65.7	3.1	
P82	2 sf	66.0	270'	54.3	55.5	280'	58.4	4.1	
Project	Segment 15								
P83	Commercial	71.0	148'	62.1	63.2	128'	66.5	4.4	

				Analyze	ed Scenario	/Alternat	ive		
	Representative Noise Receptor			2012 Scenario	Year 2040 No-Build		ear 2040 d – Optic		atement
Receptor ID	Sites Represented Single-family (sf)/ multi- family (mf)	Impact Criterion (dB(A))	Distance from SR 20 Edge of Pavement	Projected Noise Level (dB(A))	Projected Noise Level (dB(A))	Distance from SR 20 Edge of Pavement	Projected Noise Level (dB(A))	Change From Existing (dB(A))	Consider Abatement
Project Se	gment 14								
P69	First United Methodist Church	66.0	140'	62.6	63.8	64'	69.2	6.3	√
P70	Removed from and	alysis. I	Receptor ir	n ROW					
P71	1 sf	66.0	204'	58.5	59.7	134'	64.7	6.2	
P72	1 sf	66.0	338'	54.1	55.2	272'	59.1	5.0	
P73	3 sf	66.0	199'	59.2	60.3	112'	66.2	7.0	
P73-C	Commercial	71.0	200'	60.6	61.7	88'	67.9	7.3	
P74	Picnic Area	66.0	348'	53.7	54.8	261'	59.1	5.4	
P75	5 sf	66.0	134'	63.2	64.3	In R	ight of W	/ay	
P76	Hastings Park	66.0	321'	54.6	55.8	221'	60.6	6.0	
P77	4 sf	66.0	367'	53.7	54.9	262'	59.4	5.7	
P78	1 sf	66.0	32'	68.7	69.8	56'	70.2	1.5	
P79	1 sf	66.0	100'	64.6	65.8	119'	67.1	2.5	
P80	Commercial	71.0	46'	67.2	68.4	60'	70.2	3.0	-
P81	2 sf	66.0	140'	62.6	63.7	140'	65.3	2.7	
P82	2 sf	66.0	270'	54.3	55.5	270'	57.8	3.5	
Project Se	gment 15								
P83	Commercial	71.0	148'	62.1	63.2	127'	66.6	4.5	

 Table 4-10: Noise Impact Summary, Segments 14 and 15, Option 4



Figure 4-3: Noise Impacts

Noise Abatement Consideration

The only viable abatement method for this project is the construction of noise barriers.

When analyzing noise barriers two main factors are considered: feasibility and reasonableness. A feasible barrier must achieve at least 5 dB(A) in noise reduction at a minimum of two impacted receptors. A barrier is considered reasonable if construction costs do not exceed \$42,000 per benefited receptor.

As is expected along a controlled-access facility like SR 20, numerous driveways and side streets access the roadway. All noise barriers must therefore, have access openings, resulting in barrier systems comprised of shorter wall segments. Likewise, areas where only a single-impacted receptor is located inherently cannot achieve the FHWA requirement that a minimum of *two* impacted sites must benefit from an analyzed noise barrier. The following receptors were removed from further abatement consideration due to these two factors.

٠	A2	• A3	• A4	• A5	• A6	• P2
٠	P3	• P6	• P9a	• P9b	• P10	• P11
٠	P12	• P15	• P18	• P20	• P22	• P25
٠	P26	 P30 	 P31 	• P32	• P33	• P34
٠	P35	• P37a	• P38	• P40	• P42	• P45
٠	P46	 P50 	• P54	• P55	• P57	 P59
٠	P60	• P64	• P65	• P66	• P69	• P78
•	P79	 P80 				

Barrier Analysis

For Segments 1-13 barriers are feasible for receptors A7 (Hawthorne Cemetery), P16 (Mt. Zion Church), P19 (Campground), and P61 (Pineview Cemetery). Under Option 4, a barrier is feasible at receptor P73. However, the barriers analyzed for these noise sites have been determined to exceed current FDOT cost guidelines. A summary of the barrier analysis is provided in Table 4-11.

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction dB(A)		rson Irs	ft²/person hr	Cost/pers	son hr/ ft²	Exceeds Abatement Cost Criteria
A7 - Haw	thorne Cem	etery – Specia	l Use					
12	649	7.0	28	3.57	187.95	\$7,89	3,900	Yes
P16 – Mt	Zion Churc	h – Special Us	se					
11	552	11.4	64	4.29	94.45	\$3,97	6,040	Yes
P19 – Se	venth Day A	dventist Camp	oground – Sp	pecial Use				
11	1,244	8.3	11	15.2	118.78	\$4,98	8,958	Yes
P61 – Pir	neview Ceme	etery – Specia	l Use					
10	537	10.1	28	3.57	187.57	\$7,89	3,900	Yes
		·						
Barrier Height (feet)	Barrier Length (feet)	Average Noise Reduction dB(A)	Total Cost	Impacted Receptors Benefited	Non- Impacted Receptors Benefited	Total Benefited Receptors	Cost per Benefited Receptor*	Exceeds Abatement Cost Criteria
P73 – Op	tion 4							
12	414	8.5	\$149,116	2	0	2	\$74,558	Yes

 Table 4-11: Barrier Analysis Summary

Source: Noise Study Report (NSR) 2012

Statement of Likelihood

The noise analysis for the revised build alternative shows noise is expected to increase in proximity to the project corridor. However, there appears to be no feasible and reasonable solutions available to mitigate the noise impacts at any of the impacted receptors identified in the Noise Impact Summary Table 4-8, Table 4-9, Table 4-10 and Table 4-11. The noise study report will be circulated to the appropriate local planning/zoning officials for Alachua and Putnam Counties for their use in lane use control once Location and Design Concept Acceptance approval occurs.

4.3.5 WETLANDS

2005 EA Build Alternative

The 2005 EA Build Alternative wetlands analysis identified 11.1 acres of potential wetland impact. Wetland types consist of emergent, herbaceous, mixed hardwood, wet pine flatwoods, scrub shrub, and littoral zone. Of the total impact acreage it was estimated that approximately 9.2 acres of impact would occur within Fowler's Prairie.

Revised Build Alternative

In accordance with Executive Order 11990, special considerations were taken in developing and evaluating the Revised Build Alternative to avoid and minimize impacts associated with the proposed project. A *Wetlands Evaluation Report* (WER), completed in May 2012, was completed for this project and is included with the Technical Discipline Reports on the attached DVD.

The majority of the project corridor is located in areas classified as uplands, most of which are agricultural lands, low density/rural residential, and undeveloped. Wetlands with possible direct project involvement occur exclusively in Segment 1 of the project and consist of isolated and contiguous herbaceous, scrub, and forested wetlands. The majority of wetlands in the eastern segments are intermixed herbaceous/scrub systems associated with various sand hill lakes common to this area and are not anticipated to be directly impacted as a result of the Revised Build Alternative.

Wetlands Impact Analysis

Wetlands in the project area were identified and classified using Geographic Information Systems (GIS) desktop analysis. GIS resources (National Wetlands Inventory, Hydric Soils, 2009 Land Use, 7.5 minute topographic maps, and soils surveys) were attained from the Florida Geographic Data Library (FGDL) and the St. Johns River Water Management District (SJRWMD) to aid in the identification project wetlands. Infrared aerial photography dated 2009 was used as a backdrop for the on screen analysis. Wetlands identified in the NWI (National Wetlands Inventory) data are classified using the USFWS (United States Fish and Wildlife Service) methodology with the wetlands identified in the 2009 Land Use data being classified according to the FDOT Florida Land Use, Cover and Forms Classification (FLUCFCS) system.

Field evaluations were conducted November 30 and December 1, 2011 to verify the accuracy and appropriateness of the desktop analysis. The definitions, guidelines, and methodologies contained in the FDOT FLUCFCS (1999) manual, U.S. Army Corps of Engineers *Wetland Delineation Manual* (1987) and *Interim Regional Supplement* (2008), *The Florida Wetlands Delineation Manual* (Gilbert, et al., 1995), and other field guides were used in the field to aid in the identification of wetlands. Three parameters (vegetative composition, hydrologic regime, and soil classification) were used to determine the presence and type of wetlands within the project area. Wetland assessment areas for the Revised Build Alternative are shown on Figure 4-4.

Wetland Impacts

Permanent impacts to wetlands will occur during the construction of the proposed project. Wetlands impacted by the proposed project have been classified according to the FLUCFCS and are shown in Table 4-12 and discussed below in the Wetlands Classification section. The total potential Direct Dredge and Fill (D/F) and Direct Non-Dredge and Fill (Non D/F) impacts to forested and non-forested wetlands within and adjacent to the Revised Build Alternative right-of-way are estimated, as shown. The potential wetland impact acreages are preliminary and subject to change. The permanent impacts to wetlands may vary based on design phase information, pond site locations, and permitting requirements. As the project moves though subsequent phases, detailed wetland delineation and evaluation will be performed.

The Revised Build Alternative traverses or is adjacent to 29 wetland locations resulting in a potential direct impact of 7.5 (D/F) and 70.5 (No D/F) acres. All D/F impacts occur and a majority of the No D/F impact areas occur within Segment 1. Additional No D/F impact areas have been identified in Segments 4, 5, 6, 8, 9, 11, and 14.



Figure 4-4: Wetland Impacts

						Build Alternati	ve
Segment	Wetland ID	FLUCFCS Code	USFWS Classification	UMAM Score	Non D/F Impacts (Ac.)	D/F Impacts (Ac.)	D/F Functional Loss Units
1	W1	643	PEM1F	0.67	1.13	0.00	0
1	W2	643	PEM1F	0.67	0.45	0.00	0
1	W3	617	PEM1/FO1C	0.80	1.01	0.00	0
1	W4	617	PEM1/FO1C	0.80	7.56	0.30	0.24
1	W5	641	PEM1F	0.80	1.52	0.00	0
1	W6	641	PEM1F	0.80	0.53	0.13	0.104
1	W7	641	PEM1F	0.80	0.77	0.00	0
1	W8	630	PF04C/F01C	0.63	0.71	0.00	0
1	W9	625	PF04A	0.63	0.35	0.27	0.1701
1	W10	617	PEM1/FO1C	0.80	1.14	0.47	0.376
1	W11	641	PEM1F	0.80	1.83	0.50	0.4
1	W12	631	PEM1/SS1B	0.73	8.06	1.23	0.8979
1	W13	617	PEM1/FO1C	0.80	4.52	3.14	2.512
1	W14	617	PEM1/FO1C	0.80	1.72	0.25	0.2
1	W15	631	PEM1/SS1B	0.73	11.69	0.98	0.7154
1	W16	617	PEM1/FO1C	0.80	1.65	0.19	0.152
4	W17	643	PEM1F	0.67	1.01	0.00	0
4	W18	643	PEM1F	0.67	2.41	0.00	0
5	W19	643	PEM1F	0.67	4.11	0.00	0
5	W20	630	PF04C/F01C	0.67	0.49	0.00	0
5	W21	641	PEM1F	0.70	1.07	0.00	0
5	W22	643	PEM1F	0.67	5.55	0.00	0
5	W23	641	PEM1F	0.63	0.08	0.00	0
6	W24	641	PEM1F	0.63	0.12	0.00	0
8	W25	643	PEM1F	0.67	0.55	0.00	0
9	W26	643	PEM1F	0.67	4.52	0.00	0
9	W27	641	PEM1F	0.73	4.52	0.00	0
11	W28	641	PEM1F	0.73	0.26	0.00	0
14	W29	643	PEM1F	0.67	1.07	0.00	0
				Totals*	70.5	7.5	5.8

Table 4-12: Wetland Classification and Impacts

Source: Wetland Evaluation Report (WER), 2012

*Note: Totals rounded to nearest ½ acre/unit

Wetlands Classification

<u>Lakes (520)</u>

The high central Florida ridge traversed by the study area is characterized by a large number of lakes of varying sizes. The water levels in most of these lakes have receded in recent decades due to low precipitation. One small former lake just east of Cowpen Lake is now classified as a marsh (W21). Most lakes are ringed by a narrow fringe of Wet Prairie habitat (643). None of the lakes fall within the direct impact area of the build alternative.

Mixed Wetland Hardwoods (617)

Two large and significant wetland systems occur within the study area near the Alachua/Putnam County boundary. These are known as Fowlers Prairie and Little Orange Creek. The forested portions of these systems consist of mixed wetland hardwood habitat (W3, W4, W10, W13, W14, and W16). Dominant species include red maple (*Acer rubrum*), swamp tupelo (*Nyssa sylvatica* var. *biflora*), loblolly bay (*Gordonia lasianthus*), sweetbay magnolia (*Magnolia virginiana*), cinnamon fern (*Osmunda cinnamomea*), royal fern (*O. regalis*), laurel oak (*Querous laurifolia*), and some slash pine (*Pinus elliottii*).

Hydric Pine Flatwoods (625)

One small area near 65th Lane in Alachua County is classified as this habitat type (W9). It is dominated by slash pine, gallberry (*Ilex glabra*), Virginia chain fern (*Woodwardia virginica*), swamp tupelo, and loblolly bay.

Wetland Forested Mixed (630)

Two small wetlands (W8 and W20) consist of this habitat type. This habitat is characterized by slash pine, red maple, swamp tupelo, and sweetbay magnolia. W8 is a small wetland near 65th Lane in Alachua County associated with W9 (a Hydric Pine Flatwood habitat), and W20 is a small forested area associated with a lakeshore near the center of the project.

Wetland Shrub (631)

The non-forested portions of Fowlers Prairie that occur within the study area consist of this habitat type. This habitat is overgrown with shrubs and vines, and has little canopy cover, making it neither a marsh, wet prairie, nor a forested wetland type. Dominant species include wild grape (*Vitis rotundifolia*), greenbrier (*Smilax* spp.), sweetbay magnolia, loblolly bay, red maple, and wax myrtle (*Myrica cerifera*). In the study area, this habitat type includes W12 and W15.

Freshwater Marshes (641)

Portions of Fowlers Prairie and the edges of some lakes consist of this habitat type. Marsh areas associated with lake edges or dried lakes likely formed from the lake bed as the water level receded. Dominant species include soft rush (*Juncus effusus*), wooly bulrush (*Scirpus cyperinius*), broomgrass (*Andripogon spp.*), maidencane (*Panicum hemitomon*), yellow eyed grass (*Xyris* spp.), buttonbush (*Cephalanthus occidentalis*),

and yellow Spanish needles (*Bidens mitis*). Wetlands consisting of this habitat type include W5, W6, W7, W11, W21, W23, W24, W27 and W28.

<u>Wet Prairies (643)</u>

This habitat type occurs at the upper edges of lakeshores, and like the Freshwater Marshes habitat, also formed as the lakes receded. Dominant species include St. Johns wort (*Hypericum* spp.), maidencane, broomgrass, and yellow Spanish needles. Wetlands W1, W2, W17, W18, W19, W22, W25, W26, and W29 consist of this habitat type.

Fowler's Prairie

Fowler's Prairie is part of a larger wetland system which includes Fowlers Lake, Stanley's Prairie, Little Orange Creek totaling nearly 2,600 acres with Fowler's Prairie comprising approximately 1,400 acres. The existing SR20 corridor traverses the extreme southern portion of this system. Both the 2005 EA Alternative and the Revised Build Alternative propose to add additional roadway to the north of the existing roadway. Wetland habitat types within the Revised Build Alternative footprint include palustrine emergent, scrub/shrub, and forested wetlands

The wetlands associated with the prairie to the south of SR20 total approximately 100 acres and are bound by a railroad track and rural roadway. Within this area there exists a remnant bog habitat of approximately 5 acres in size and was most likely formed subsequent to the construction of the original roadway and culvert. Over time the culvert allowed for appropriate hydrologic conditions to facilitate the formation of the bog. Various species of hypericums, grasses, sundews, pitcher plants, and mosses appropriate for this type of habitat were historically observed. Based on field observations it is apparent that the lack of fire control combined with lower than average rainfall over the recent past has lead to a diminishing of the vitality of the bog and greatly reduced or eliminated the species historically observed. Since the Revised Build Alternative will be located to the north of the existing roadway it is anticipated that there will be no impact to the remnant bog habitat. Furthermore, detailed hydrological analysis will be performed during the design and permits phases to ensure appropriate culvert sizing and placement.

The 2005 EA Alternative proposed impacts of approximately 9.2 acres of wetlands within the prairie while it is estimated that the Revised Build Alternative may impact approximately 6.8 acres of wetlands within the prairie. This equates to a reduction of nearly 2.4 acres of wetland impacts.

Wetland Functional Analysis

Potential wetland impacts were evaluated in the field and a functional analysis was completed using the Uniform Mitigation Assessment Method (UMAM). UMAM was adopted by the Florida legislature in February 2004 [373.414 (18), F.S.] to determine the amount of mitigation that is required to offset impacts to wetlands and other surface waters.

UMAM provides a standardized procedure for assessing the functions (location and landscape, water environment, and vegetative community structure) provided by wetlands and other surface waters, and the amount (expressed as a ratio) that those functions are reduced by a proposed impact. Once it is determined that mitigation is necessary, the UMAM methodology is also used to quantify the amount of mitigation necessary to offset the impact. This can be expressed in units or as credits from a mitigation bank or regional mitigation provider.

An assessment for each wetland habitat with potential direct impact from the Revised Build Alternative was performed for functional value and loss and is summarized in Table 4-12. The direct functional loss of wetlands in units is a product of the assessment score and the direct impact acreage. Functional losses due to Non D/F impacts are not calculated. Details of the UMAM are provided in the WER. Supplementary UMAM evaluations will be completed when the project enters the permitting phase.

Avoidance and Minimization

Wetland avoidance and minimization has been a major consideration throughout all phases of the SR20 corridor development and environmental studies. One major reason for revision of the 2005 EA Alternative was based on public input regarding the wetlands associated with Little Orange Creek, Fowlers Prairie, and the lakes located along the south side of the existing roadway. The Revised Build Alternative typical section reduced the ROW footprint by 50 feet thus further minimizing the total potential impacts from the Revised Build Alternative as compared to the 2005 EA Alternative. The 2005 Environmental Assessment indicated approximately 11.1 acres of D/F wetland impacts. Approximately 7.5 acres of D/F wetland impacts are anticipated as a result of the Revised Build Alternative. This represents nearly 33% reduction in impacts.

This reduced typical section will minimize impacts to wetlands associated with Fowlers Prairie by approximately 2.5 acres as compared to the 2005 EA Alternative. FDOT has committed to reducing wetland impacts to Little Orange Creek by constructing a bridge instead of a culverted crossing. Furthermore, the Revised Build Alternative will be located further from the lakes and floodplain areas in eastern segments of the project.

As the project advances through subsequent phases, avoidance and minimization of wetland impacts will continue to be employed to the maximum extent practicable.

Permitting and Coordination

The SJRWMD and USACE (United States Army Corps of Engineers) regulate wetlands within the project limits. Other agencies, including the USFWS, USEPA (United States Environmental Protection Agency), National Marine Fisheries Service (NMFS), FWC (Florida Fish and Wildlife Conservation Commission), and FDEP (Florida Department of Environmental Protection), will review and comment on all wetland permitting. It is anticipated that the following permits will be required from the appropriate agencies for this project:

- Environmental Resource Permit (ERP) SJRWMD
- Section 404 Dredge and Fill Permit USACE
- National Pollutant Discharge Elimination System Permit (NPDES) USEPA and FDEP

The WER and *Endangered Species Biological Assessment* (ESBA) have been submitted to the USFWS for their review and concurrence. FDOT is committed to continued coordination with the USFWS, FWC, and other applicable resource agencies in regard to sensitive sites and potential of endangered or threatened species habitat involvement in the project area throughout future project phases.

Conceptual Mitigation & Impact Summary

The Revised Build Alternative is the only alternative that meets the purpose and need, which is defined in Section Two, and in accordance with Executive Order 11990, special considerations have been taken to avoid and minimize wetland impacts associated with the proposed project. It is estimated that permanent wetland impacts could total approximately 7.5 acres (D/F) for the Revised Build Alternative. All wetlands within the project boundary exhibit hydrologic connectivity to each other or adjacent wetlands; therefore, the impacts fall under the purview of the SJRWMD and USACE. Based on the wetland evaluation, it has been determined that there are no practicable alternatives to avoiding wetland impacts.

The project has been evaluated from the perspective of reducing adverse wetland impacts. Through exhaustive alternate alignment and typical section analyses, the Revised Build Alternative not only reduces the overall quantity of wetland impacts, but also the amount of impacts to high quality on-site wetlands. The results of the UMAM analysis exhibit a comparably lower project loss total with the potential losses that could have resulted from the 2005 EA Alternative.

FDOT is committed to the mitigation of all wetlands impacted as a result of this project. Mitigation strategies to fulfill the project mitigation needs may include the use of approved wetland mitigation banks, the Regional Wetlands Mitigation Program (Senate Bill 1986, 373.4137 F.S.) through SJRWMD, preservation, restoration, enhancement, and/or creation. Any mitigation proposed will be completed in compliance with, and to the satisfaction of, all state and federal regulatory requirements.

Secondary impacts, or impacts not directly attributed to the fill of the adjacent wetlands, were assessed. These impacts can include noise, stormwater runoff, or wildlife/vehicular collisions. Secondary impacts to wildlife movement and highway mortality will be reduced through the use of culvert underpasses where possible. Improving habitat connectivity in the Fowler's Prairie corridor will be accomplished through appropriate culvert structures that will be determined during the design and permitting phase.

Additional wetland impact avoidance and minimization will be examined in the design phase of the project. All feasible opportunities to reduce direct impacts to wetland resources will be considered. FDOT is committed to the mitigation of all wetlands impacted as a result of this project. Based upon the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

4.3.6 AQUATIC PRESERVES

There are no designated Aquatic Preserves located within the vicinity of the proposed project. Therefore, the proposed project will not adversely affect any designated Aquatic Preserve.

4.3.7 WATER QUALITY

The existing SR-20 corridor has rural drainage provided in roadside swales and ditches. *No stormwater treatment or peak attenuation is currently provided.* Stormwater runoff from SR-20 outfalls to many land-locked lakes as well as Little Orange Creek and Fowler's Prairie.

A Water Quality Impact Evaluation (WQIE) checklist (June 2012) has been completed for the proposed project and is included in the DVD. The project will enhance water quality by capturing and treating the stormwater runoff in a permitted stormwater facility. The treatment will be a wet or dry retention/detention area that will effectively reduce the nutrients, heavy metals, oils, grease, and sediments from the SR-20 stormwater prior to discharge or infiltration.

Pond Siting

As part of the Build Alternative, stormwater runoff from SR-20 will be collected and conveyed to stormwater ponds before being discharged. The proposed stormwater facility design will include, at a minimum, the water quantity requirements for water quality impacts, as required by the St. John's River Water Management District's Rule 40C-4. All of the drainage basins are closed except for Little Orange Creek and Fowler's Prairie. Therefore, most of the ponds will be required to meet the pre versus post-development volumetric requirements for closed basins. The post-development volumetric runoff must not exceed the pre-development volumetric runoff for each individual basin.

As described above, the runoff from the revised build alternative will be collected in adjacent ditches and conveyed to storm sewer inlets, then conveyed to ponds or swales through storm sewer systems. The pond drainage basins are defined by roadway high points, ditch berm and pond berm. The proposed pond locations were selected based on the existing drainage patterns and topography, aerial photos and topography survey, USDA-NRCS Soil Survey maps of Alachua and Putnam Counties, USGS topographic maps, tax maps, FDOT right-of-way maps, site contamination reports, and FEMA flood insurance rate maps. In addition, minimization of wetland impacts, residential and business relocations, cost and constructability were factored into the location of the ponds.

A total of 22 pond sites have been identified with the average size being four acres. There is a total of less than one acre of wetland impacts associated with the proposed pond sites and seven additional relocations. The pond sites however, will not result in any significant impact to the natural or man-made environment.

The pond sites were shown at the public hearing held September 12, 2013. As the right-of-way phase progresses, pond locations may be modified based on coordination with the property owners.

4.3.8 OUTSTANDING FLORIDA WATERS

There are no designated Outstanding Florida Water located within the vicinity of the proposed project. Therefore, the proposed project will not adversely affect any designated Outstanding Florida Waters.

4.3.9 CONTAMINATION

A Contamination Screening Evaluation Report (December 2009) was prepared for this project and is included with the Technical Discipline Reports on the attached DVD. Based on the information gathered during this investigation for the presence of potential contamination at the 28 sites identified, one was ranked "no" (Site 23), seventeen were ranked "Low" (Sites 1, 2, 4, 7, 8, 9.1, 9.2, 12, 13, 13.1, 15, 16, 17, 18, 19, and 21), five were ranked "Medium" (Sites 3, 12.1, 14, 16.1, and 20), and the remaining five sites were ranked "High" (Sites 5, 6, 10, 11, and 22). Table 4-13 shows the contamination sites impacted by the two build alternatives. Table 4-14 lists these contamination sites and Figure 4-5 provides the location of these contamination sites with the project study area.

2005 EA Build Alternative

The 2005 EA Build Alternative Option 1 right and Option 4 will impact twelve sites. The impacted sites are sites: 6, 8, 9, 9.1, 10, 12, 13, 16.1, 17, 19, 20, 22. Seven of the sites (8, 9, 9.1, 12, 13, 17, 19) were ranked Low. Based on all available information, there is no reason to believe that there would be any involvement with contamination at these locations and further investigation is not recommended at this time. Two of the sites (16.1, 20) were ranked medium and three of the sites were ranked High (6, 10, 22). Level 2 testing is recommended for the sites ranked High and Medium as roadway design proceeds.

Revised Build Alternative

The Revised Build Alternative Option 1 right and Option 4 will impact ten sites. The impacted sites are sites: 6, 8, 9, 9.1, 10, 12, 16, 17, 21, 22. Seven of the sites (8, 9, 9.1, 12, 16, 17, 21) were ranked Low. Based on all available information, there is no reason to believe that there would be any involvement with contamination at these locations and further investigation is not recommended at this time. Three of the sites were ranked High (6, 10, 22). Level 2 testing is recommended for these sites as roadway design proceeds.

Results of this evaluation will be utilized in the selection of a preferred alternative. When a specific alternative is selected for implementation, a site assessment will be performed to the degree necessary to determine levels of contamination, and, if necessary, evaluate the options to remediate along with the associated costs. Resolution of problems associated with contamination will be coordinated with the appropriate regulatory agencies and, prior to ROW acquisition, appropriate action will be taken, where applicable.

Segment	2005 EA Build Alternative Option 1 Right	Revised Build Alternative Option 1 Right	2005 EA Build Alternative Option 4	Revised Build Alternative Option 4
1	0	0	0	0
2	0	0	0	0
3	1	1	1	1
4	2	2	2	2
5	3	3	3	3
6	0	0	0	0
7	1	0	1	0
8	0	0	0	0
9	1	0	1	0
10	0	1	0	1
11	1	1	1	1
12	2	0	2	0
13	0	1	0	1
14	0	0	0	0
15	1	1	1	1
TOTAL	12	10	12	10

Table 4-13: Contamination Sites Impacted

Project Segment	Site No.	Site Name	Contamination Concerns	Evaluation Rating
3	1	Anderson Columbia #10	Fuel, Lubricants	Low
3	2	Interlachen Cabinets	Solvents, Paints	Low
3	3	FP&L Substation	PCBs	Medium
3	4	Clay Electric Substation	PCBs	Low
3	5	Kangaroo (formerly Handy Way #2006)	Petroleum	High
3	6	Vacant lot	Petroleum	High
4	7	Super Food Mart	Petroleum	Low
4	8	AJ Weatherworks/ Mini storage	Petroleum	Low
4	9	Former Dock 20 Nightclub – Vacant Lot	Petroleum	Low
5	9.1	The Lake Place Nursery	Petroleum, Fertilizers, Pesticides	Low
5	9.2	J.A.W. Construction – Soil Mine	Petroleum	Low
5	10	Former Strickland's Gas	Petroleum, Waste oil	High
5	11	D&M Auto Service	Petroleum	High
5	12	Johnson Road Nightclub	Petroleum	Low
5	12.1	Small Building South of Johnson Road Nightclub	Petroleum	Medium
7	13	Joe's Welding Shop	Petroleum, Waste Oil	Low
9	13.1	Matt Davis Dirt Contracting & Construction	Petroleum, Waste Oil	Low
9	14	Matchett Gas & Appliance	Petroleum	Medium
10	15	Interlachen Solid Waste Landfill and Transfer Station	Landfill Wastes	Low
10	16	Former Melrose Motors	Petroleum, Waste Oil	Low
9	16.1	TAZ Automotive Repairs and RECO's Transmission	Petroleum, Waste Oil, Solvents	Medium
11	17	McCauley's Tavern & Package Drive Thru	Petroleum	Low
11	18	Florida Rock (Sand Pit)	Petroleum, Waste Oil	Low
12	19	Former Interlachen Tire Shop N Food Store	Petroleum, Waste Oil	Low
12	20	Town Tire and Barber Shop	Petroleum, Waste Oil, Solvents	Medium
13	21	FP&L Substation	PCBs	Low
15	22	Handy Way #1234	Petroleum	High
15	23	Discount Auto Parts	Waste Oil, Antifreeze, Lubricants	No

 Table 4-14: Contamination Risk Evaluation Summary



Figure 4-5: Contamination Sites

4.3.10 WILD AND SCENIC RIVERS

This project does not involve any rivers listed in the National Park Service Southeastern Rivers Inventory, and therefore, the coordination requirement for the Wild and Scenic Rivers Act does not apply to this project.

4.3.11 FLOODPLAINS

In accordance with Executive Order 11988 "Floodplain Management", United States DOT Order 5650.2, and Chapter 23, CFR 650A, impacts to floodplains from the proposed improvements have been considered. Flood Insurance Rate Maps (FIRM) were obtained for Alachua and Putnam Counties. The following maps have been used: 12001C0505D, 12001C0510D, 12107C0235C, 12107C0255C, 12107C0139C, 12107C0256C, 12107C0143C, 12107C0257C, 12107C1044C. The floodplains are shown on Figure 4-6.

There are three open basins that SR-20 crosses: Little Orange Creek, Little Orange Lake, and Fowler's Prairie. There are 16 other land locked lakes and/or basins that abut the existing SR-20 facility. Additionally, 28 cross drains are found along the project corridor. The cross drains range in size from a double 10-foot wide barrel bridge culvert to an 18-inch corrugated metal pipe.

The largest floodplain impact is to Fowler's Prairie in Segment 1. The Clear Lake floodplain, in Segment 6, is bisected by the existing alignment of SR-20. As previously mentioned the Revised Build Alternative will minimize the floodplain impacts to Clear Lake by constructing the roadway on new alignment. All floodplain impact locations are classified as a transverse impact and are virtually unavoidable because of the floodplains crossing the existing SR-20 alignment. The floodplain mitigation measures may include constructing compensating floodplain ponds that are hydraulically connected to the floodplain areas. These ponds could store a volume of water equal to the floodplain volume displaced by the expanded SR-20 typical section. Detailed mitigation efforts will be determined during the design phase of the project when survey data is available.

As part of the proposed widening project, the cross drains will need to be extended. These modifications are classified as a Category 4 floodplain involvement for which the following statement applies:

The proposed structures will perform hydraulically in a manner equal to or greater than the existing structure, and backwater surface elevations are not expected to increase. As a result, there will be no significant adverse impacts on natural and beneficial flood plain values, there will be no significant change in flood risks, and there will be no significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that these encroachments are not significant.



Figure 4-6: Floodplains

The construction of the drainage structures proposed for this project will cause changes in flood stage and flood limits. These changes will not result in any significant adverse impacts on the natural and beneficial floodplain values or any significant changes in flood risk or damage. These changes have been reviewed by the appropriate regulatory authorities who have concurred with the determination that there will be no significant impacts. There will not be significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.

It has been determined, through consultation with local, state, and federal water resources and floodplain management agencies that there is no regulatory floodway involvement on the proposed project and that the project will not support base floodplain development that is incompatible with existing floodplain management programs.

4.3.12 COASTAL ZONE CONSISTENCY

The Department of Community Affairs has determined that this project is consistent with the Florida Coastal Zone Management Plan (See Appendix B of the 2005 EA, located on the included DVD).

4.3.13 COASTAL BARRIER RESOURCES

There are no designated Coastal Barrier Resources located within the project vicinity. Therefore, this project will have no involvement with any designated Coastal Barrier Resources.

4.3.14 WILDLIFE AND HABITAT

2005 EA Build Alternative

The 2005 EA Build Alternative Endangered Species Biological Assessment (ESBA) and wildlife and habitat analysis identified seven federal and 52 state listed endangered or threatened species with the potential to occur in the project area. The federal species list consisted of two plants (*Schwalbea americana* – chaffseed and *Conrandina etonia* – Etonia rosemary), one reptile (*Drymarchon corais couperi* - Eastern indigo snake), and four bird (*Aphelocoma coerulescens* – Florida Scrub-jay, *Picoides borealis* – Red-cockaded woodpecker, *Haliaeetus leucocephalus* – Southern bald eagle, and *Mycteria americana* – wood stork). Based on the lack of appropriate habitat, lack of documented species observance, and that standard protection measures and mitigation would be used and offered, it was concluded that the 2005 EA Build Alternative would have no effect on any of the species listed above.

Revised Build Alternative

This project area and habitat has been evaluated for potential impacts to state and federally listed threatened and endangered species including the pond sites in compliance with Section 7 of the Endangered Species Act. An ESBA and Wildlife and Habitat Report (May 2012) were prepared to document any potential involvement with listed species and/or critical habitat and are included with the Technical Discipline Reports on the attached DVD. These reports document the search results and analysis based on the latest USFWS county species lists as well as current Florida Natural

Areas Inventory (FNAI) database searches of known, likely, or potential occurrences of listed species and their potential involvement with this project. Various GIS resources from FNAI, FWC, and USFWS were used to aid in potential project involvement.

A total of seven federally listed plant and animal species with potential involvement are listed in Table 4-15 and are further discussed below. The USFWS has reviewed the ESBA for the project area and habitat including the pond sites and concurred (letter dated 6-20-2012, See Appendix D) that the proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C 1531 et seq.).

Scientific Name	Common Name	Federal Status	State Status	Probability of Occurrence
Plants				
Agrimonia incisa	Incised Groove-bur	-	E	Moderate
Andropogon arctatus	Pinewoods Bluestem	-	Т	Moderate
Balduina atropurpurea	Purple Honeycomb-head	-	E	Moderate
Brickellia cordifolia	Flyr's Nemesis	-	E	Low
Callirhoe papaver	Poppy Mallow	-	E	Moderate
Calydorea coelestina	Bartram's Ixia	-	E	Low
Coelorachis tuberculosa	Piedmont Jointgrass	-	Т	Moderate
Conradina etonia	Etonia Rosemary	E	E	None
Ctenium floridanum	Florida Toothache Grass	-	E	Low
Drosera intermedia	Spoon-leaved Sundew	-	Т	Moderate
Helianthus carnosus	Lakeside Sunflower	-	E	Low
Litsea aestivalis	Pondspice	-	E	Low
Najas filifolia	Narrowleaf Naiad	-	Т	Moderate
Pecluma plumula	Plume Polypody	-	E	Low
Pteroglossaspis ecristata	Giant Orchid	-	Т	Moderate
Pycnanthemum floridanum	Florida Mountainmint	-	Т	Moderate
Salix floridana	Florida Willow	-	E	Low
Sideroxylon lyciodes	Buckthorn	-	E	Low
Stylisma abdita	Scrub Stylisma	-	E	Low
Amphibians				
Notophthalmus perstriatus	Striped Newt	С	-	Low
Rana capito	Gopher Frog	-	SSC	Moderate
Reptiles			•	•
Drymarchon corais couperi	Eastern Indigo Snake	Т	Т	High
Gopherus polyphemus	Gopher Tortoise	С	Т	Observed
Lampropeltis extenuata	Short-tailed Snake	-	Т	Low

Table 4-15: Threatened and Endangered Species

Scientific Name	Common Name	Federal Status	State Status	Probability of Occurrence
Pituophis melanoleucus mugitus	Florida Pine Snake	-	SSC	High
Birds				
Amphelocoma coerulescens	Florida Scrub-jay	Т	Т	None
Aramus guarauna	Limpkin	-	SSC	Moderate
Athene cunicularia floridana	Florida Burrowing Owl	-	SSC	Low
Egretta caerulea	Little Blue Heron	-	SSC	Moderate
Egretta thula	Snowy Egret	-	SSC	Moderate
Egretta tricolor	Tricolored Heron	-	SSC	Moderate
Eudocimus albus	White Ibis	-	SSC	Moderate
Falco sparverius paulus	Southeastern American Kestrel	-	Т	Moderate
Grus canadensis pratensis	Florida Sandhill Crane	-	Т	Observed
Mycteria americana	Wood Stork	E	E	Moderate
Pandion haliaetus	Osprey	-	SSC	Moderate
Picoides borealis	Red-cockaded Woodpecker	E	E	Low
Mammals				
Podomys floridanus	Florida Mouse	-	SSC	Low
Sciurus niger shermani	Sherman's Fox Squirrel	-	SSC	Moderate
Ursus americanus floridanus	Florida Black Bear	-	Т	Moderate
Note: C = Candidate E = Endance	ered, SSC = Species of Special Conc	ern T = Threate	ned	

Federally Listed Species

Vascular Plants

One federally listed vascular plant species Etonia rosemary (*Conrandina etonia*), is listed as Endangered by the USFWS for Putnam County. No plant species are listed for Alachua County. Etonia rosemary is small flowering shrub that only occurs in open white sand scrub with sand pine, scrub oaks, and palmetto. It is restricted to Etonia State Forest and its immediate vicinity which is approximately nine miles northeast of the project corridors eastern terminus. The species has not been documented as occurring within the study area. Furthermore, the species was not observed nor does appropriate habitat exist within the Revised Build Alternative corridor. It has no likelihood of occurrence; therefore, has been determined to have no effect from this project.

Amphibians

The striped newt (*Notophtalmus peristriatus*) is a small salamander that resides in sandhill habitat bordering wetlands, and breeds in isolated ponds and marshes lacking fish. Several documented occurrences of striped newts are known north of the study area, with the closest being approximately four miles away. The striped newt requires

high quality habitats that are usually fire-maintained. No striped newts are documented as occurring in the study area, and none were observed. This species is therefore given a low likelihood of occurrence. The striped newt is listed as a Candidate species and, therefore, is not currently afforded protection under ESA. Should the striped newt be listed prior to the time construction commences, an effects determination will be made in coordination with FWS. Furthermore, compliance with all applicable regulations, guidelines, survey protocol, etc., will be adhered to.

Reptiles

<u>Eastern indigo snake</u>

The Eastern indigo snake (Drymarchon corais couperi) occurs throughout Florida.

GIS resources including data from FNAI and FWC were used to screen for potential indigo sightings within or adjacent to the project area. According to FNAI, one documented occurrence is known approximately 3.1 miles north of the study area. No documented occurrences were found in the FWC data.

This species is dependent on xeric habitat, and the habitat suitability is most easily determined by the presence of gopher tortoise burrows. The total of onsite xeric wildlife habitat is 39.45 acres. It is anticipated that when the project enters the design and permits phases this acreage will decrease upon the utilization of detailed design and data collection.

Two FLUFCFS codes, Longleaf Pine – Xeric Oak (412) habitat and Xeric Oak (421), comprise the xeric habitat within the study area. Due to the minimal habitat functions they provide, areas of Longleaf Pine – Xeric Oak and Xeric Oak that are within existing maintained ROW are not included in the total acreage of xeric wildlife habitat. Similarly, areas of Low Density Residential land use that were formerly natural xeric habitats are not included in the total acreage of xeric wildlife habitat. One active gopher tortoise burrow was observed within the Revised Build Alternative study area, and due to the presence of large areas of adjacent suitable habitats, other burrows are likely present as well. No indigo snakes were observed during field evaluations.

FDOT is committed to the utilization of the FWS *Survey Protocol for the Eastern Indigo Snake* during the design/permits phases, if applicable, as well as the *Standard Protection Measures for the Eastern Indigo Snake* during the construction phase. Additionally, FDOT is committed to continued coordination with FWS as the project moves though subsequent project phases. It has been determined that this project may affect, but is not likely to adversely affect the Eastern indigo snake.

<u>Gopher tortoise</u>

The gopher tortoise (*Gopherus polyphemus*) is a large tortoise that excavates deep burrows. The tortoise burrows are home to a number of commensal species that depend on the microhabitat to survive the Florida's weather extremes. A number of documented gopher tortoise occurrences are recorded within five miles of the study area. This species is dependent on xeric or dry habitat, and its presence is indicated by the presence of its characteristic burrows. A preliminary survey for potential gopher tortoise habitat was conducted. During this survey, it was noted that the majority of the undeveloped upland habitats within the Revised Build Alternative have the potential to support tortoises, and one occupied tortoise burrow was observed. The gopher tortoise is listed as a Candidate species and therefore, is not currently afforded protection under ESA. Should the gopher tortoise be listed prior to the time construction commences, an effects determination will be made in coordination with FWS. Furthermore, compliance with all applicable regulations, guidelines, survey protocol, etc., will be adhered to and FDOT is committed to continued coordination with FWS and FWC as the project moves though subsequent project phases.

Birds

<u>Red-Cockaded woodpecker</u>

The red-cockaded woodpecker (*Picoides borealis*) is a non-migratory bird that is located in clusters around the state (USFWS, 1993). The woodpecker prefers forested areas with little midstory vegetation, with fire an important factor in keeping the subcanopy relatively free of trees and shrubs (FWS, 1993). The species typically prefers to colonize in forested areas consisting of longleaf pine (*Pinus palustris*) that is older than 60 years and are infected with a fungus called *Phellinus pini*.

The majority of the forests containing pine in the Revised Build Alternative are Longleaf Pine – Xeric Oak habitats, which include longleaf pine and moderate to dense midstory vegetation consisting of xeric oak species. These are not ideal habitat types for RCWs, and during a preliminary survey, no RCWs or their signs were observed. Furthermore, appropriate RCW habitat (open, mature flatwoods with mature longleaf pine trees) does not occur in the study area. While RCWs are known to occur in Putnam County, no RCWs are documented as occurring in the study area.

Due to lack of appropriate foraging and nesting habitat, lack of documented occurrences, as well as no direct observance of the species or sign within the Revised Build Alternative corridor, it has been determined that the project will have no effect on the Red-cockaded woodpecker.

<u>Florida Scrub-jay</u>

The Florida scrub-jay (*Amphelocoma coerulescens*) is restricted to xeric oak scrub vegetation, which grows only on well drained sandy soils.

Habitats within the study area include several xeric habitats, including Longleaf Pine – Xeric Oak habitat (FLUCFCS 412; also known as sandhill) and some areas of scrublike habitat. The habitats approximating scrub [Xeric Oak habitat (421)] appear to be derived from disturbed sandhill, and lack many of the features required by scrub-jays. Specifically, wiregrass is present and bare ground is rare. Xeric oak species consist mainly of live oak, bluejack oak, and turkey oak (all sandhill species), and typical scrub species of oaks (see species listed under the description of scrub-jay habitat above) are

absent or rare. Sand pine is also rare. Therefore, all xeric habitats in the study area are considered marginal scrub-jay habitats.

No Florida scrub-jays were observed, and the species is not documented as occurring within or adjacent to the Revised Build Alternative study area. Based on the FWS 2007 5-Year review, the species is considered extirpated from Alachua County and functionally extirpated from Putnam County.

Since the Revised Build Alternative study area lacks suitable habitat combined with the known fact that the species has been determined by FWS to have been extirpated from Alachua and Putnam Counties, it is anticipated that the Revised Build Alternative will have no effect the Florida Scrub-jay.

Wood stork

The wood stork (*Mycteria americana*) is a wetland dependent wading bird. The wood stork requires areas that have long hydroperiods that allow for its prey to reproduce, while droughts are needed to concentrate its prey into small pools making it easier to catch. In north Florida, the Core Foraging Area (CFA) for each documented wood stork colony is defined by FWS as all wetlands suitable for foraging within a 13 mile radius of the colony location.

One documented occurrence of the wood stork (from 1989) is located approximately 4.9 miles north of the study area. One documented wood stork colony is located approximately 10.8 miles southwest of the western end of the project (the River Styx colony #605011); however, this colony was considered inactive during the most recent 1999 nesting survey and has been determined to have remained inactive since. Since the colony is considered inactive, there is no corresponding CFA.

All wetlands in the study area were surveyed for wood storks using visual and aural means. No wood storks were observed. Though not within a designated CFA, wetlands within the project study area may qualify as Suitable Foraging Habitat (SFH). If during future project phases it is deemed that project wetlands are considered SFH, appropriate mitigation will be offered to offset all wetland impacts deemed SFH for wood storks.

Since the Revised Build Alternative study area is not within a designated CFA, no documented occurrences have been found, and appropriate mitigation will be offered to offset any impacts to suitable wetland habitat, it has been determined that the project may affect, but is not likely to adversely affect the wood stork.

Impact Summary

Detailed research, analysis, and field surveys have been conducted to document the potential affects this project may have on listed species and habitat. One active gopher tortoise (*Gopherus polyphemus*) burrow was located within the proposed right-of-way. The eastern indigo snake (*Drymarchon corais couperi*) is often associated with gopher tortoise habitats and burrows. The approved Standard Protection Measures for the Eastern Indigo Snake will be included in the construction documents to insure that the

project will have no impact this species. The appropriate permitting process will be followed for potential impacts to gopher tortoise.

FDOT has determined that the Revised Build Alternative may affect, but is not likely to adversely affect the threatened eastern indigo snake and endangered wood stork. Additionally, it has been determined that the project will have no affect on the endangered Etonia rosemary, endangered red-cockaded woodpecker, and threatened Florida scrub-jay. The project is not located in areas designated as "Critical Habitat" by the USFWS. The USFWS has reviewed the ESBA for the project area and habitat including the pond sites and concurred (letter dated 6-20-2012, See Appendix D) that the proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C 1531 et seq.).

FDOT is committed to the avoidance, minimization, and mitigation of habitat impacts as well the utilization of all applicable state and federal guidelines, protocols and regulations regarding listed species and habitat. Furthermore, FDOT is committed to continued coordination with all applicable resource agencies as this project moves though subsequent project phases.

4.3.15 ESSENTIAL FISH HABITAT

The proposed project will not directly impact wetland areas that support essential fish habitat (EFH) or National Oceanic and Atmospheric Administration (NOAA) trust fishery resources. Therefore, the project will not adversely affect areas identified as EFH and consultation is not required.

4.3.16 FARMLANDS

Through coordination with the Natural Resources Conservation Service (See Appendix D of the 2005 EA, located on the included DVD), it has been determined that no farmlands, as defined by 7 CFR 658, are located in the project vicinity.

4.3.17 SCENIC HIGHWAYS

There is no Federal, State, or locally designated or proposed scenic highway within the vicinity of this project. Therefore, this project will have no involvement with any designated scenic highway.

4.3.18 CONSTRUCTION

Construction activities for the proposed project will have air, noise, vibration, water quality, traffic flow, and visual impacts for those residents and travelers within the immediate vicinity of the build alternatives. These impacts will be controlled by FDOT's *Standard Specifications for Road and Bridge Construction* and through the use of Best Managed Practices.

Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays throughout the project. Signs will be used as appropriate to provide notice of road closures and other pertinent information to the traveling public. The local activities, which could excessively inconvenience the community so that motorists, residents, and business persons can plan travel routes.

4.3.19 SECONDARY AND CUMULATIVE IMPACTS

Indirect and cumulative impacts to wetlands, wildlife and habitat, and water quality are addressed in Sections 4.3.5, 4.3.14, and 4.3.7, respectively. The non-dredge and fill wetland impacts associated with the Build Alternatives are evaluated and are subject to review by regulatory agencies during the permitting process. All indirect wetland impacts will be addressed by mitigation of impacts within the same drainage basin along with the direct wetland impacts. During the final design process, consideration will be given to appropriately size cross drains to maintain hydrological integrity of the existing wetlands and the potential wildlife usages to assist in the movement of terrestrial wildlife within the conservation lands adjacent to the project.

Cumulative impacts to wetlands and wildlife are most likely to be associated with further impact to areas of contiguous wetlands and habitat. Neither the proposed project nor any other future development within the affected drainage basin will affect water quality or stormwater management systems. In accordance with both state and federal guidelines, impacts to wetlands from dredge and fill activities will be mitigated within the same drainage basin.

SECTION 5: SECTION 4(f)

Section 4(f) of the Department of Transportation Act (49 U.S.C. 303 and 23 U.S.C. 138) as amended, reads as follows: It is hereby declared to be the national policy that special effort should be made to preserve the natural beauty of the countryside and public parks and recreation lands, wildlife and waterfowl refuges, and historic sites. The Secretary of Transportation shall cooperate and consult with the Secretaries of the Interior, Housing and Urban Development and Agriculture, and with the States in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of the lands traversed. The Secretary shall not approve any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance as determined by the Federal, state or local officials having jurisdiction thereof, or any land from a historic site of national, state, or local significance as determined by such officials unless (1) there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such land.

5.1 SUMMARY OF ALTERNATIVES CONSIDERED

Two build alternatives have been derived from the Project Development and Environment (PD&E) Study that was started in 1997. In the initial stages of the study, several options to bypass the Town of Interlachen were studied and compared with the no-build alternative and widening on the existing alignment. A public meeting was held on May 2, 2000 to present the existing alignment, no-build, and three bypass options. After considering the public input, FDOT selected the existing alignment through the Town of Interlachen. SR-20 through Interlachen could be widened with less impact to nearby residences, as compared to bypass options. Each of the bypass options will have a substantial impact to existing residential neighborhoods as well as environmental impacts. The bypass alternatives are discussed in Section 5.4.1 and further documented in the Environmental Assessment (EA) that was approved by FHWA in 2005 and is included with the technical discipline reports on the attached DVD.

As part of the study, alternatives have been developed for the build alternative on the existing alignment with several typical sections. A 230-foot wide rural typical section with a design speed of 70-mph was proposed for the rural areas from Hawthorne to Interlachen. Near Interlachen, a 130-foot urban typical section was proposed with a design speed of 45-mph. A narrowed 104-foot typical section, identified as Option 1 Right, has been developed to minimize impacts to Lake Chipco and the Interlachen Historic District. These alternatives were presented to the public at meetings held on August 22, 2000 in Interlachen and August 24, 2000 in Hawthorne.

As a result of public input from the August 2000 meetings, an additional alternative was developed between Lake Chipco and the Interlachen Historic District. The additional alternative, labeled Option 4, proposes a 150-foot urban typical. The wider typical section will require the relocation of four residences and one business.

An EA was approved by FHWA in 2005, documenting both the bypass alternatives and the build alternatives. The EA carried forward a build alternative with a 230-foot rural typical in the rural areas and a 130-foot urban typical near Interlachen and two options between Lake Chipco and the Interlachen Historic District: Option 1 Right and Option 4. Two public hearings were held on the Build Alternative as shown in the 2005 EA on May 9th and 11th, 2006. Environmental concerns were raised on the need for wildlife crossings near Little Orange Creek and Fowler's Prairie and to minimize impacts to Fowler's Prairie. Right-of-Way (ROW) funding was deferred for the project after the hearings and therefore a Finding of No Significant Impact (FONSI) was never circulated.

In 2003, the Florida legislature created Florida's Strategic Intermodal System (SIS). Building on the work designating the Florida Intrastate Highway System (FIHS) in the 1990's, the SIS introduced a new approach for planning transportation. The SIS is composed of high-priority network or transportation facilities, critical to Florida economic competiveness and quality of life. The SIS comprises the state's largest and most strategic transportation facilities, including major air, space, water, rail, and highway facilities. The SIS facilities are the primary means for moving people and freight between Florida's diverse regions, as well as, between Florida and other states and nations. The SIS is Florida's highest statewide priority for transportation capacity improvements.

The 2005 SIS Strategic Plan defined policies and processes needed to move the SIS from concept to implementation. The plan focused the state's primary role in transportation on supporting travel and transport between Florida's regions and between Florida and other states and nations. It also establishes processes for designating SIS facilities and planning SIS investments. SR-20 is designated a SIS facility.

The Florida Legislature eliminated the FIHS in 2012. This leaves the SIS as the only means to provide policies and processes for statewide transportation facilities in the state of Florida. A minimum 50-mph design speed was established as part of the criteria for a SIS facility. With this change in the design criteria, FDOT developed a new high speed urban typical section with a design speed of 50-55 mph. Previously, an urban typical section could not be designed with a design speed greater than 45 mph.

Based on the public comments to minimize the impacts to Fowler's Prairie and the new SIS design criteria, FDOT proposed a revised typical section for this study. The revised typical is a 180-foot high speed urban typical section. The revised typical section will reduce impacts to Fowler's Prairie and provide a consistent typical throughout the limits of the project. In addition, this typical section is better suited for the abundance of driveways located along the corridor and will accommodate future growth that will take place along the corridor. This Revised Build Alternative was presented to the public on December 8, 2011. The meeting was attended by 196 people. The comments primarily focused on median opening locations and ensuring the posted speed will be 55 mph.

The 2005 approved EA build alternative and the Revised Build Alternative have been carried forward for environmental assessment.

5.2 SECTION 4(F) RESOURCES

The Section 4(f) resources within the project study area, classified as historic sites include: the Hawthorne Cemetery in Segment 1; the Concrete Block Billboard in Segment 6; the Pineview Cemetery in Segment 13; and the First United Methodist Church of Interlachen in Segment 14. The Interlachen Historic District is eligible for listing in the *National Register of Historic Places* and is located in Segments 13, 14 and 15. The segments are identified in Figure 3-1.

There are also four parks owned by the Town of Interlachen all of which are located in Segment 14 and are within the Interlachen Historic District. The Robert Henry Jenkins Jr. Memorial Park runs along the abandoned railroad corridor from Francis Street to CR-315. Hastings Park is located south of the Robert Henry Jenkins Jr. Memorial Park between Boyleston St. and Tropic Ave. Butler Beach is located north of SR 20 adjacent to Lake Chipco. The City of Hawthorne is in the process of developing the Little Orange Creek Nature Park, in eastern Alachua and western Putnam Counties. Refer to the Figure 5-1 which illustrates the location of all these Section 4(f) resources.

An evaluation by FDOT including coordination with the State Historic Preservation Office determined that the build alternatives will have either a no effect or no adverse effect on all of the identified Section 4(f) resources except for the Interlachen Historic District. In addition, the build alternatives will not physically take property from the Robert Henry Jenkins Jr. Memorial Park, Hastings Park, or Butler Beach. It has been determined that this project will not have a constructive use on these three properties either.

The build alternatives widen SR-20 to the south of the Hawthorne Cemetery which is located north of SR-20. Widening to the south does not require any additional right-of-way and a "no effect" determination has been made for the historic portion of the Cemetery, therefore Section 4(f) does not apply.

A "no effect" determination was also made for the Pineview Cemetery due to the distance from the proposed road widening to the historic portion of the cemetery. The historic portion of the cemetery has been identified in the Determination of Eligibility (DOE) as a 240 by 205 foot parcel located along the northern portion of the cemetery. Therefore, it was determined that the proposed project will have no indirect impacts to or constructive use of this resource, and that Section 4(f) does not apply.





Figure 5-1: Section 4(f) Resources

After the 2005 EA was approved, a Concrete Block Billboard (see Figure 5-2) was identified within the projects APE. The billboard was determined to be eligible for listing in the National Register of Historic The 2005 EA Build Alternative Places. previously impacted this resource. While developing the Revised Build Alternative after the determination, the Revised Build Alternative has been designed to avoid impacts to the billboard. Furthermore, the 2005 EA Build Alternative would also be redesigned to avoid the billboard if the alternative still being pursued. was Therefore, it was determined that Section 4(f) does not apply to the billboard.



Figure 5-2: Concrete Block Billboard



Figure 5-3: First United Methodist Church, View facing southeast



Figure 5-4: Historic Portion of the First United Methodist Church, View facing northeast

The United Methodist Church of Interlachen (see Figure 5-3) was determined to be individually eligible for the National Register of Historic Places. The Determination of Eligibility (DOE) completed for the church shows that the eligible portion of the church is the structure that was constructed in 1894 and its 1937 addition (shown in Figure 5-4), not the entire parcel. The SHPO has determined that there will be "no adverse effect" to this church. Neither typical section option will directly use land from the historic church nor will they result in a constructive or indirect use. The church has been analyzed as part of the noise study and found to not approach or exceed noise abatement criteria. It has been determined that Section 4(f) does not apply.

On the south bank of Lake Chipco, adjacent to SR-20 in Segment 14, is Butler Beach which is shown in Figure 5-5 and This park is owned by the Figure 5-6. Town of Interlachen. Single-family residences are scattered along the east and north banks of Lake Chipco; some having boat docks. The lake and park are within the northern boundary of the Interlachen Historic District. In talks with the Town of Interlachen, the Town stated that their currently is very limited use of the park since there are no parking, benches, outdoor facilities, or sidewalks to/from the park; therefore, noise impacts have not been analyzed. Both build alternatives will shift the travel lanes further from the park and provide sidewalks and bike lanes that will enhance the park. The landscaping buffer proposed for the historic district as part of the MOA may provide a mechanism to enhance the visual qualities of the park. Neither Option 1 Right nor Option 4 will directly use land from Butler Beach nor will they result in a constructive or indirect use. Therefore, it has been determined that Section 4(f) does not apply to Butler Beach.



Figure 5-5: Butler Beach, View facing north



Figure 5-6: Butler Beach, View facing northwest


Figure 5-7: Robert Henry Jenkins, Jr. Memorial Park



Figure 5-8: Robert Henry Jenkins, Jr. Memorial Park

The Robert Henry Jenkins, Jr. Memorial Park, shown in Figure 5-7 and Figure 5-8, runs along the abandoned railroad corridor from Francis Street to CR-315. This park contains a sidewalk and is used for passive recreation. Visual impacts will be minimized with the proposed landscaping buffer for the Interlachen Historic District. Potential noise impacts were evaluated and found to not approach or exceed noise abatement criteria. In addition, the sidewalks and bike lanes proposed as part of the build alternative will enhance the park. Neither typical section option will directly use land from this park nor will they result in a constructive or indirect use. A determination has been made that Section 4(f) does not apply to the Robert Henry Jenkins Jr. Memorial Park.

Hastings Park, shown in Figure 5-9 and Figure 5-10, is located south of the Robert Henry Jenkins Jr. Memorial Park, location in Segment 14, between Boyleston St. and Tropic Ave. and consists of a children's playground. Visual impacts will be minimized with the proposed landscaping buffer for the Interlachen Historic District. Hastings Park was evaluated for potential noise impacts and found to not approach or exceed noise abatement criteria. In addition, the sidewalks and bike lanes proposed as part of the build alternative will enhance the park. Neither typical section option will have a direct impact on this park. Neither Option 1 Right nor Option 4 will directly use land from Hastings Park nor will they result in a constructive or indirect use. Therefore, it has been determined that Section 4(f) does not apply to Hastings Park.



Figure 5-9: Hastings Park, View looking southwest



Figure 5-10: Hastings Park, View facing southeast

Section 4(f) will apply to the Interlachen Historic District. Both build alternatives will result in a "use" because property from the Interlachen Historic District would be permanently acquired and incorporated into the proposed widening of SR-20 under either Option 1-Right or Option 4. Section 5.3 describes in detail the Section 4(f) evaluation for the Interlachen Historic District.

This determination, summarized in the following sections, has been reviewed by and received concurrence from, the SHPO as required by the Section 106 process. Documentation of the Section 106 process is included in the technical discipline reports on the attached DVD. The Memorandum of Agreement (MOA) is included in Appendix C.

The 1,205 acre Little Orange Creek Nature Park, recently acquired (2011) by the City of Hawthorne, is located to the north and south of SR-20, within the limits of this project. There were no plans to construct a park at Little Orange Creek and the land was owned by a private entity at the time the 2005 Approved EA was circulated. FDOT began working with the Putnam Land Conservancy (PLC) in 2006 to plan for the park development. Detailed information documenting the prior coordination is included in Section 4.2.2. As of May 2013, the park has not opened to the public and is still in the planning process. Additional funds are needed for permits and engineering plans before the park can officially open.

The 2005 Approved EA recommended a 230-foot wide rural typical section through this section. In order to minimize impacts to the park, the Revised Build Alternative typical section has been reduced to a 180-foot urban typical section.

FDOT is committed to constructing a bridge over Little Orange Creek. The bridge will provide pedestrian, equestrian, and canoe/kayak access underneath SR-20, connecting the northern and southern portions of the Nature Park. The bridge also serves as a wildlife crossing. In addition, wildlife crossing will be enhanced through structures located at Fowler's Prairie. With the widening of SR-20, sidewalks and bicycle lanes are planned on both the north and south side of the roadway. These sidewalks and bicycle lanes will connect Hawthorne and Interlachen and provide additional recreational facilities to the park. All these features will enhance the park and are consistent with the purpose of the Little Orange Creek Nature Park. FDOT and the City of Hawthorne will continue to work together throughout the duration of this project, to facilitate the goals of the Little Orange Creek Nature Park. The right-of-way needs for the widening of SR-20 are considered in the master plan for the park. An easement for SR-20 has been set aside for transportation purposes and will be designated as such once the exact ROW need has been determined during the design phase.

Section 4(f) will not apply to the Little Orange Creek Nature Park since FDOT has utilized prior planning by being a partner to the City of Hawthorne to facilitate the goals of the Little Orange Creek Nature Park. The prior coordination is documented in Section 6.1.6. FDOT has enhanced the park as described above and the right-of-way needs are considered in the master plan for the park.

5.3 SECTION 4(F) EVALUATION – TOWN OF INTERLACHEN HISTORIC DISTRICT

FHWA, in consultation with the SHPO, has determined that the Interlachen Historic District is eligible for listing in the *National Register of Historic Places*. Figure 5-1 shows the relationship of the historic district to the existing highway. SR-20 bisects the district for approximately 1,000 feet along the northern boundary adjacent to Section 4(f) resource, Butler Beach. Interlachen's entire historic district is approximately 163 acres and is comprised of over 106 structures of which 69 are potentially contributing to the historic value of district. Most of these structures are in private ownership; however, some of the property within the Interlachen Historic District is in public ownership (e.g., Butler Beach, Henry Jenkins Memorial Park, and Hastings Park).

The district is mainly a residential neighborhood with the majority of the structures being single family homes, but some businesses and institutional buildings are located within its boundaries. Access to the Interlachen Historic District is mainly by motor vehicle.

5.3.1 ENGINEERING ALTERNATIVE ANALYSES OVERVIEW

Both build alternatives analyzed in this document currently contain two typical section options through the Town of Interlachen (Segments 14 and 15). These two typical sections were narrowed from a field of four. Typical Section Options 1, 2, and 3 were initiated by FDOT while Typical Section Option 4 was initiated by the general public. The following discussion summarizes the alignment and typical section alternative analysis undertaken for Segments 14 and 15.

Segment 14 and 15 Analysis

FDOT evaluated numerous typical section and alignment alternatives (documented in the 2005 EA) within the existing corridor through Segments 14 and 15. It was determined that despite the typical section or alignment used, widening SR-20 to any degree in this segment would result in an impact to some portion of the Interlachen Historic District. For instance, alternatives that acquire land to the south or to the right of existing SR-20 would have no direct impact to Butler Beach, but would in turn, impact the historic properties abutting SR-20 to the south. Conversely, alternatives that acquire land to the north or left of existing SR-20 would have no direct impact to the south acquire land to the north or left of existing SR-20 would have no direct impact to those same properties within the Interlachen Historic District, but would instead impact Butler Beach.

To minimize potential impacts to both the Butler Beach and the Interlachen Historic District Section 4(f) resources, FDOT initially developed three alignment alternatives (left, center, right) and three typical sections (Options 1, 2 and 3). The left and center alignment alternatives coupled with any of the three typical section options, would require bridging of the Lake Chipco floodplain to avoid a significant longitudinal floodplain impact and would result in substantially impacting Butler Beach. This would also result in four business relocations. In addition, the status of Lake Chipco is of paramount importance to the citizens of Interlachen and each of the alternatives that would have expanded the right-of-way to the north was strongly opposed.

Therefore the center and left alignment alternatives were eliminated from further consideration and the right alignment alternative was considered the most prudent.

The three typical section options were then evaluated with the remaining right alignment alternative. To help distinguish this analysis from the previous analyses, the typical sections were renamed for the right alignment alternative: Option 1-Right, Option 2-Right, and Option 3-Right. All three options were similar except for the following: Option 1-Right had a 22-foot median with sidewalks; Options 2-Right had a 16.5-foot median with sidewalks; and Option 3-Right had a 16.5-foot median with sidewalks.

Each of these typical section options would have no direct impact to Butler Beach but would in turn, have different degrees of impacts to the historic properties abutting SR-20 to the south. All options require land from the Interlachen Historic District and the relocation of one residence and one business. The amount of land required for each typical section option would also be similar. Option 1-Right would require approximately 38 feet of additional right-of-way along existing SR-20; Option 2-Right approximately 33 feet; and Option 3-Right approximately 24 feet.

Although Option 1-Right would take the most land, its impacts, when compared with Option 2-Right and Option 3-Right, are similar in that the tree canopy along the south side of the road would be removed and the view of the lake from the Interlachen Historic District would be altered. However, a retaining wall would minimize impacts to Lake Chipco and Interlachen's historic district.

All of the alignment alternatives and typical section options were presented to local elected officials and the general public for input. As a result of extensive public involvement and with strong public desire for sidewalks on both sides of the widened roadway and a landscaped median, FDOT declared Option 1-Right the most prudent and feasible typical section/alignment combination. This determination was based on a Section 4(f), environmental, economic and engineering perspective. The 16.5 foot median proposed with Options 2-Right and 3-Right was too narrow to properly protect left turning vehicles and provides minimal space for landscaping, whereas Option 1-Right provided for both. Therefore, Options 2-Right and 3-Right were dropped from further consideration.

Refer to previous Figure 3-3 for an illustration of the Option 1-Right typical section and Figure 5-11 which depicts the right-of-way required from the Interlachen Historic District to accommodate the Option 1-Right typical section.

After further review of Option 1-Right by local elected officials and the public, FDOT was requested to develop an additional typical section option. This additional option, designated Option 4 and shown previously on Figure 3-4, accommodates a wider median and requires more land to be taken from the Interlachen Historic District. Under this option, SR-20 would be widened to the south to accommodate the same four travel lanes, sidewalks, and bike lanes as Option 1-Right, but would instead have a 46-foot median within a 150-foot FDOT right-of-way. Option 4 was developed at the request of the local citizens at the April 5, 2001 meeting. The citizens prefer Option 4 because they believe it will result in fewer long term impacts to the Interlachen Historic District than Option 1-Right. The local support for Option 4 is documented in a letter from the Citizens Advisory Committee dated October 5, 2001 which is in Appendix E of the 2005 EA. Figure 5-12 illustrates the required right-of-way for Option 4 as it affects the Interlachen Historic District. No additional right-of-way is needed in Segment 15 for either option.

Option 1-Right and Option 4 are both considered prudent and feasible alternatives for Segment 14 and 15; thus both will be evaluated in this Section 4(f) analysis. Option 1-

Right and Option 4 incorporate similar engineering features. Option 1-Right will cost more, but when considered with the overall cost of the entire 12.2-mile project, this increase is not substantial. For further reference, refer to Section 3.4 of this document where these alternatives are described in more detail.

Summary

Both the Option 1-Right and Option 4 will impact the northern boundary of the Interlachen Historic District. Within this area, six structures will be affected, five of which are considered contributing structures to the historic value of the district. No properties impacted by the project are individually eligible for listing on the National Register of Historic Places. The local citizens prefer Option 4 since it will result in fewer long term impacts to the Interlachen Historic District than Option 1-Right, Option 4 is the locally preferred alternative.



Figure 5-11: Option 1 Right; Right-of-Way Required



Figure 5-12: Option 4; Right-of-Way Required

5.3.2 SECTION 4(F) EVALUATION: OPTION 1-RIGHT

The entire Interlachen Historic District takes up 163 acres, of which Option 1-Right would require 2.3 acres. This right-of-way requirement represents 1.4 percent of the land within the Interlachen Historic District that would be incorporated into the expanded SR-20 right-of-way. A retaining wall will be utilized to minimize additional right-of-way needs. Within the Interlachen Historic District, there are 69 contributing resources. Direct impacts in the form of land acquisition and relocation are also expected. Land acquisition is required at five contributing resources with portions of their property within the limits of the proposed rights-of-way. These five resources are identified in Table 4-5 and Figure 4-2 as 8PU1297, 8PU1298, 8PU1299, 8PU1300, and 8PU1301. However, 8PU1301 requires total property acquisition and the relocation of a resident whereas the remaining four resources require partial property acquisition to accommodate Option 1-Right.

Option 1-Right requires the removal of the existing tree buffer between SR-20 and the northern edge of the Interlachen Historic District, visual impacts in the form of increased visibility of SR-20 will occur. As part of Option 1-Right, creation of a new visual buffer and mitigating landscaping, shown previously on Figure 5-12 will occur within the proposed right-of-way in keeping with the current aesthetics of the Interlachen Historic District's landscape.

Temporary impacts may occur during construction to properties within the temporary construction easement for Option 1-Right. Such impacts may include changes in contour required for the Build Alternative to meet the existing ground. Construction crews may require room to work on the proposed roadway widening. Finally, the temporary construction easement may be used to maintain and control traffic during construction.

5.3.3 SECTION 4(F) EVALUATION: OPTION 4

The wider Option 4 typical section will require 7 acres or 4.3 percent of the total 163 acres within the Interlachen Historic District. Permanent impacts in the form of land acquisition are expected to be the same for the five contributing resources also impacted by Option 1-Right; however, as shown in Figure 5-12, all of these resources: 8PU1297, 8PU1298, 8PU1299, 8PU1300, and 8PU1301 would require full property acquisition and relocation of the residents to accommodate the Option 4 road widening effort. This is further discussed in Section 5.6. This land, once vacated, will be planted with trees and plants and ultimately become the northern boundary of the Interlachen Historic District, as previously illustrated on Figure 5-11.

Construction impacts under Option 4 will be less than Option 1-Right. Some temporary impact to properties north of SR-20 may occur during construction due to contour changes required for the Build Alternative to meet the existing ground. Construction crews may also require room to work on the proposed roadway widening in this area. Finally, the temporary construction easement may be used to maintain and control traffic during construction.

Option 4 has been determined to be the preferred option for this study. Compared to Option 1 Right, Option 4 will provide a wider landscaped median that will help to minimize visual impacts to the Interlachen Historic District while maintaining the vista toward Lake Chipco. Additionally, the taking of the backyards of the remaining four buildings, as Option 1 Right does, would result in either their conversion to commercial interests or even possible demolition to accommodate new commercial construction if the properties were to remain under private ownership. Option 4 will prevent the commercial conversion along the corridor. In addition, any land associated with these properties that is not needed for this project will be used to expand the Robert Henry Jenkins, Jr Park. Therefore, Option 4 causes the least overall harm to the Interlachen Historic District.

It is the opinion of the local community, FHWA, and State Historic Preservation Officer (SHPO) that the long-term impacts associated with Option 4 would cause the least overall harm to the overall historic district than Option 1 Right. A MOA between the FDOT, FHWA, and SHPO was signed on November 8, 2011.

Based upon the above considerations, there is no feasible and prudent alternative to the use of land from the Interlachen Historic District and the proposed action includes all possible planning to minimize harm to the Interlachen Historic District resulting from such use.

5.4 AVOIDANCE ALTERNATIVES

FDOT analyzed not only the No-Build Alternative, but several alternate alignments to bypass downtown Interlachen and avoid impacting the Interlachen Historic District. The No-Build Alternative inherently serves as an avoidance alternative because it maintains SR-20 in its existing two-lane configuration, on the existing alignment. However, with the No-Build Alternative, SR-20 will not only experience increased congestion before the 2040 project design year as the roadway's level of service becomes unacceptable at LOS F, but the high crash rates along the facility will continue to increase. In addition, there are no facilities for pedestrians or bicycles along SR-20 through the Town of Interlachen. Therefore, the No-Build Alternative does not meet the purpose and need of the project.

5.4.1 ALTERNATE CORRIDORS

Three alternate corridors were developed to bypass the Town of Interlachen. Two of the alternate corridors pass north of Interlachen while one corridor passes south of town. All three of the bypass options have a 230-foot wide limited access typical section. These bypass options are shown and described in more detail in Section 3.3.1 of the 2005 Approved EA.

After the comparison matrix shown in Table 5-1 was completed back in 2000, FDOT held a series of corridor public meetings at which time the public opposed the two north bypass corridors. Support was equally mixed for the existing alignment and south bypass corridor alternate. Due to this the two northern corridors were eliminated from further study.

			-		
Corridor		Existing Corridor	Option A (North)	Option B (North)	Option C (South)
Relocations	Residential	2	31	47	26
	Business	7	3	4	1
Total Cost		\$22,700,000	\$30,000,000	\$30,400,000	\$28,200,000
Wetland Impact Area (acres)		0	0	0	13.0
Community Impacts		High	High	High	High
Contamination Potential		Medium	Low	Low	Low
Cultural Resources		High	Medium	Medium	Low
Floodplain Involvement		High	Low	Low	Medium
Special Land Uses		High	Low	Medium	Low
Traffic Noise		Medium	High	High	High
Wildlife Habitat		Medium	Medium	Medium	Low

 Table 5-1: Corridor Comparison Matrix

*Data included in the table was produced in 2000

Compared to staying on the existing alignment, the southern option had six less business relocations but 24 more residential relocations. Staying on the existing alignment is 24 percent cheaper (\$5.5 million) than the southern bypass option. With the bypass option, existing SR-20 would remain as an active roadway and would still require maintenance resulting in an increased operational cost over the life of the project. Throughout the years the operational and maintenance costs would be substantial and burden both the local maintaining agency as well as FDOT.

SR-20 has been in its present location for many years and the adjacent land has developed over time in response to the presence of the roadway. Several businesses front SR-20 within the Town of Interlachen. Constructing a bypass option would cause severe economic impacts to these businesses.

Residents in the vicinity of the southern bypass option are strongly against its construction. They believe any improvements to capacity should be made on the existing alignment. Some of the residences in the area surrounding the southern bypass option are low-income.

The bypass option would also require existing commercial and residential land to be converted to a transportation use. This will substantially change the fabric of the land use in the vicinity of Interlachen. In addition to the land use, the bypass would also cause traffic patterns in the area to change. The bypass option would be constructed as limited access and traffic on the bypass would not have access to the local roadway network except at the connections of the existing alignment and the bypass. This would result in splitting the loose-knit neighborhoods south of Interlachen disrupting access to this area by emergency services. The southern bypass option would tie back into existing SR-20 approximately 1.85 miles east of CR-315. Since the public meetings back in 2000, SR-20 has been widened to four lanes east of CR-315. Constructing the bypass option would essentially results in the throwaway in the investment of converting the segment east of CR-315 from two to four lanes.

The existing alignment will not impact any wetlands while the southern bypass option will have 13 acres of impacts. These include moderate to high quality systems. Receiving a permit for this impact will be very challenging since there is a viable avoidance alternative. In regards to water quality, currently runoff from the existing alignment is discharging into Lake Chipco. If the existing alignment is widened, stormwater would be treated. The bypass option will introduce stormwater runoff to various surface water bodies in the area, although it will be treated, that do not receive runoff today.

Secondary impacts associated with the bypass alternatives to the residential areas were also a concern. Constructing a new roadway through a natural environment introduces substantial traffic noise to the currently-quiet ambient noise level. Although noise impacts would be mitigated, traffic noise will still be introduced to residential areas that are not experiencing noise today.

After considering public input the existing corridor was selected for the following reasons: the existing alignment is 24 percent cheaper than the bypass option; the existing alignment would tie into the existing four lane section east of CR-315 and also result in lower maintenance cost since only one roadway will have to be maintained; it will substantially reduce residential relocations; it will avoid substantial wetland impacts to moderate and high quality systems; and it will not promote urban sprawl. As discussed in this section the southern bypass option would result in severe social, economic and environmental impacts as well as severe disruption to the local community.

The southern bypass option may be feasible but is not considered prudent for the issues discussed above. In summary, the southern bypass is not prudent because after reasonable mitigation it causes severe social, economic, and environmental impacts as well as severe disruption to established communities. In addition, the bypass option lacks public acceptance, is not consistent with the Putnam County comprehensive plan, and creates access disruptions to the local roadway network.

5.5 MEASURES TO MINIMIZE HARM

After concluding that the existing SR-20 alignment was preferable to a bypass alignment, and after receiving input from the public, FDOT developed a variation of the Build Alternative through Interlachen (Segment 14 and 15). The two typical section options, Option 1-Right and Option 4, each traverse the Interlachen Historic District with varying degrees of impact.

5.5.1 OPTION 1-RIGHT

Impacts to the Interlachen Historic District will be minimized with Option 1-Right through the use of a narrowed urban typical section that requires less right-of-way than that shown in Figure 3-3. Impacts to the Interlachen Historic District will also be minimized through the use of retaining walls and Best Management Practices during construction. All construction-related impacts will be remedied by either replacing the damaged sod or landscaping, or by creating similar new landscaped areas. These landscaped areas will help to maintain the character of the district and enhance the current views of Lake Chipco.

5.5.2 OPTION 4

The Interlachen Historic District may benefit from Option 4's wider landscaped buffer at its northern boundary. This boundary will appropriately tie into the adjacent park system located along Atlantic Avenue. The wider landscaped median will also help to minimize visual impacts to the Interlachen Historic District while maintaining the vista toward Lake Chipco. Additionally, the landscape buffer will protect the long term viability of the northern boundary which might be vulnerable to transitioning to commercial land use if the properties were to remain under private ownership. The possibility also exists under Option 4 to relocate these acquired homes to vacant lots within the Interlachen Historic District, thus limiting to some extent, the possibility of future incompatible construction and/or land uses within the district.

5.6 COORDINATION AND MEMORANDUM OF AGREEMENT

5.6.1 COORDINATION

Coordination with the SHPO began with the Advance Notification Process. On October 14, 1999, the SHPO requested the FDOT conduct a Cultural Resource Survey. This survey was completed in January 2001. On August 10, 2001, the SHPO concurred with the findings of the survey, which were previously described in Section 4.2 of this Environmental Assessment.

In reaching these conclusions and identifying potential impacts other meetings were held with the SHPO and interested members of the public. On September 13, 2000, a meeting was held in Interlachen with FDOT, the SHPO, and concerned citizens to discuss the merits of the bypass options as well as the merits of the existing alignment options. The FDOT reiterated their position that a bypass around Interlachen was not a feasible and prudent alternative.

A formal Section 106 meeting was held December 7, 2000 in Tallahassee, Florida to discuss the findings of the Cultural Resource Survey. Representatives attended this meeting from FDOT, FHWA, SHPO, and several citizens from Interlachen. The boundaries of the Interlachen Historic District were discussed as well as potential impacts to the district. There was also as a general discussion on measures to minimize harm.

On April 5, 2001, the FDOT and FHWA went to Interlachen for another meeting with interested citizens. At this meeting Option 1-Right was presented and the minimization

attributes of this alternative were discussed at length. The SHPO representative was unable to attend this meeting. The citizens requested FDOT to develop a new wider typical section alternative that would create a buffer between the expanded roadway and the Interlachen Historic District. That alternative is called "Option 4" in this EA.

On October 2, 2001, representatives of the FDOT again went to Interlachen and presented Option 4, developed as a result of the April 5, 2001 meeting request by the citizens. At that time the FDOT stated it was preparing an EA that would analyze both options. It was also stated that after circulation of the EA and FDOT receives comments from the SHPO, local officials and the general public, a recommendation would be made as to which typical section (Option 1- Right or Option 4) would be constructed through Interlachen.

During discussions with the local community, FHWA, and SHPO it was decided that the long-term impacts from Option 1 Right to the overall historic district would be more damaging than Option 4. It is likely that the taking of the backyards of the remaining four buildings, as Option 1 Right does, would result in either their conversion to commercial interests or even possible demolition to accommodate new commercial construction. As a result, the local community strongly supports Option 4. In consultation with FHWA, SHPO, and the community, Option 4 was carried forward as the locally preferred option for the MOA.

On August 9, 2011, representatives of FDOT went to Interlachen to present, at that time, a proposed MOA with SHPO to the Town of Interlachen. The MOA states that FDOT will transfer any right-of-way that will not eventually be used or necessary for the project to the Town of Interlachen. The additional right-of-way will be used for the expansion of the existing linear park. The Town of Interlachen accepted the proposal. The MOA is included in Appendix C and summarized in Section 5.6.2.

The Draft Section 4(f) Evaluation including the signed MOA was sent to the Department of Interior (DOI) on January 16, 2014 and they were given 45 days to provide comments per 23 CFR 774.5(a). No comments were received from the Department of Interior as part of the coordination. Since the Housing and Urban Development (HUD) and the United States Department of Agriculture (USDA) did not have an interest in or jurisdiction over the Section 4(f) resources, there was no coordination between the agencies.

In addition to these meetings, which were directly related to the Section 4(f) issues, numerous other meetings have been held. Refer to Section 6.2 for a full discussion of public involvement on this project.

5.6.2 MEMORANDUM OF AGREEMENT

The MOA between the FDOT, FHWA, and SHPO was signed on November 8, 2011. The MOA states that as part of Option 4, FDOT will adversely affect the houses located within the Town of Interlachen, Florida located at: 1172 SR-20 (8PU1297), 418 Atlantic

Avenue (8PU1298), 426 Atlantic Avenue (8PU1299), 432 Atlantic Avenue (8PU1300), and 440 Atlantic Avenue (8PU1301), each such property being eligible for inclusion in the National Register of Historic Places; however, none of the properties are individually eligible. The FHWA and the Department consulted with the local community, the record property owners of the affected houses, members of the public and with the SHPO, in accordance with Section 106 of the National Historic Preservation Act.

As part of the project, and as defined as mitigation in the MOA for the Interlachen Historic District, the Department shall acquire the historic house located at 440 Atlantic Avenue (8PU1301). The Department shall relocate the house to an as yet undetermined location, preferably within the Interlachen Historic District, and, thereafter restore the exterior of the home. The house shall be encumbered with a preservation covenant (prepared by the department) and offered for sale to the former owner after relocation and restoration are complete. If the former owner does not purchase the home, the Department will offer the home for sale to the Town and thereafter to the general public.

The remaining four homes will be encumbered with a preservation covenant and thereafter offered for sale to the former owners. Homes not purchased by the respective former owners shall be offered for sale to the general public. The Department will implement a marketing plan, for a period of six months, which may include listing the houses in area newspapers; posting flyers at local community centers such as churches and historical societies; informing local civic and religious leaders about the houses; and informing local, regional, and state-wide preservation groups for posting on their website or list-server. The Department may demolish any house not purchased within the sixmonth marketing period.

The Department will transfer any right-of-way that will not eventually used or necessary for the project to the Town of Interlachen. The additional right-of-way will be used for the expansion of the existing linear park. After completion of the project, the Department will install landscaping in the area between SR-20 and the boundary of the proposed expansion of the park.

5.7 SECTION 4(F) SUMMARY

Option 4 was developed at the request of the local citizens at the April 5, 2001 meeting. Based on feedback received, the citizens prefer Option 4 because they believe it will result in fewer long term impacts to the Interlachen Historic District. The local support for Option 4 is documented in a letter from the Citizens Advisory Committee dated October 5, 2001 which is in Appendix E of the 2005 EA.

Option 4 has been determined to be the preferred option for this study. As stated above Option 4 would require full property acquisition and relocation of the residents of five resources (8PU1297, 8PU1298, 8PU1299, 8PU1300, and 8PU1301) that are contributing to the historic district however these resources are not individually eligible. Compared to Option 1 Right, Option 4 will provide a wider landscaped median that will

help to minimize visual impacts to the Interlachen Historic District while maintaining the vista toward Lake Chipco. Additionally, the taking of the backyards of the remaining four buildings, as Option 1 Right does, would result in either their conversion to commercial interests or even possible demolition to accommodate new commercial construction if the properties were to remain under private ownership. Option 4 will prevent the commercial conversion along the corridor. In addition, any land associated with these properties that is not needed for this project will be used to expand the Robert Henry Jenkins, Jr Park. Therefore, Option 4 causes the least overall harm to the Interlachen Historic District.

It is the opinion of the local community, FHWA, and State Historic Preservation Officer (SHPO) that the long-term impacts associated with Option 4 would cause the least overall harm to the overall historic district than Option 1 Right. A MOA between the FDOT, FHWA, and SHPO was signed on November 8, 2011.

Based upon the above considerations, there is no feasible and prudent alternative to the use of land from the Interlachen Historic District and the proposed action includes all possible planning to minimize harm to the Interlachen Historic District resulting from such use.

SECTION 6: COMMENTS AND COORDINATION

A Public Involvement Program has been developed and is being carried out as an integral part of the project. The purpose of this program is to establish and maintain communication with the general public and governmental agencies concerned with the project and its potential impacts. To ensure open communication and agency and public input, the FDOT has provided early in the project process, an Advance Notification (AN) package to State and Federal agencies, and other interested parties, defining the project and describing anticipated issues and impacts. In addition, to expedite the project development processes, eliminate unnecessary work, and provide a substantial issue identification and/or problem solving effort, the FDOT has carried out the scoping process as required by the Council on Environmental Quality (CEQ) Finally, to resolve all identified issues, the FDOT has conducted an Guidelines. extensive interagency coordination and consultation effort, and public participation process. This section of the Environmental Assessment details the FDOT's program to fully identify, address, and resolve all project-related issues identified through the Public Involvement Program.

6.1 ADVANCE (AN) NOTIFICATION PROCESS

The FDOT, through the Advance Notification (AN) Process, informed a number of federal, State, regional, and local agencies of the SR-20 PD&E Study. The FDOT initiated early project coordination in August 1999 by distribution of an Advance Notification package. Table 6-1 lists the agencies that received the packages. An asterisk (*) indicates those agencies that responded to the package. Summaries of comments received by the FDOT and the appropriate response are provided after the list. All comments received from agencies are contained in Appendix A of the 2005 EA (located on the included DVD).

FEDERAL					
Environmental Protection Agency - Region IV*	U.S. Army Corps of Engineers				
Federal Emergency Management Agency - Natural Hazards Branch	U.S. Fish and Wildlife Service				
STATE					
Florida Fish and Wildlife Conservation Commission *					
REGIONAL					
Northeast Florida Regional Planning Council*					
LOCAL					
Alachua County Commission	Putnam County Engineer				
Putnam County Commission	City of Hawthorne Commission				
Town of Interlachen Council	Alachua County Public Works				
Alachua County Environmental Protection Department					
* = Responses and comments received.					
** = Responses received. No comment to the State Clearinghouse.					

Table 6-1: List of Agencies

6.1.1 DEPARTMENT OF ENVIRONMENTAL PROTECTION (OCTOBER 1, 1999)

- COMMENT: The proposed widening provides an opportunity to restore both natural and human communities that were fragmented by the original SR-20 construction. The bypass [alternative] should bridge wildlife crossings and wetlands and provide bike and pedestrian crossings. There is a potential that a southern or northern bypass around Interlachen would...impact area wetlands and lakes. The E.A...should also evaluate the potential secondary and cumulative impacts to land uses within the project area *and* east of the project's terminus in Interlachen.
- RESPONSE: The bypass alternative has been dismissed as a potential alternative, due in part to the potential environmental impacts. Secondary and cumulative impacts are analyzed as part of this document

6.1.2 FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (SEPTEMBER 13, 1999) COMMENT: The project will result in the loss of habitat for many species associated with the

sandhill vegetation type. This sensitive upland community is fast disappearing in

Florida due to its high development potential. Many species supported by this vegetation type are listed because of reduced population levels due to long-term habitat loss. In addition, the roadway will create a formidable barrier to wildlife movement, and the increased vehicular traffic and speeds will result in higher road kill numbers. Additionally, the water quality of the sandhill lakes could be degraded due to pollutants contained in roadside runoff. We recommend that the following points be addressed during the [PD&E] Study in order to reduce impacts to fish and wildlife resources.

- The study should include a complete accounting, by acres, of all upland and wetland habitats impacted as a result of road expansion. An assessment should be made of potential impacts to species listed by our agency as endangered, threatened, or species of special concern. The mitigation plan should include measures to avoid or minimize impacts to listed species, and include compensatory action to mitigate for lost or degraded habitat, including uplands.
- Requirements for permits from our agency for relocation or incidental take of the gopher tortoise should be evaluated, and our office should be contacted for further coordination
- Sites within the project area slated for drainage retention areas, borrow pits, and equipment staging areas should be identified and surveyed for the presence of listed species, and impacts should be evaluated and addressed.
- Potential impacts to the black bear should be evaluated in terms of the road acting as a regional barrier to movement, or creating conditions for increased road kills.
- Provisions should be made to maintain habitat connectivity for species using the adjacent wetland and upland habitat systems. Bridges in the project area should be designed to span the stream, floodplain wetlands, and an appropriate area of the adjoining uplands in order to maintain hydrological functions, and also provide and uninterrupted travel corridor for the movement of wildlife species which utilize riparian systems.

RESPONSE: In addition to the E.A. document itself, the following documents were prepared which identify the project's impact to species and habitat: Wildlife and Habitat Impact Evaluation, Endangered Species Biological Assessment, and Wetlands Evaluation Report, all dated October 2000. Additionally, an Eastern Indigo Snake and Gopher Tortoise Protection Plan is contained within the Wildlife and Habitat Impact Evaluation.

During the field surveys, a total of 11 active and inactive gopher tortoise burrows were located in four distinct areas, totaling 2.95 acres of habitat within the proposed right-of-way. Provisions will be included in the construction contract to advise the contractor of the potential presence of species associated with these burrows, their protection status, and avoidance measures. Adherence to this protection plan (contained in section 9 of the project's Endangered Species Biological Assessment, October 2000) in the construction contract should avert any impact or involvement with the gopher tortoise, indigo snake, Florida pine snake, gopher frog, or Florida mouse species.

6.1.3 DIVISION OF HISTORICAL RESOURCES (OCTOBER 14, 1999)

- COMMENT: Conditioned upon the FDOT undertaking a cultural resource survey, and appropriately avoiding, minimizing, or mitigating project impacts to any identified significant archaeological or historic sites, the proposed project will have no effect on historic properties listed, or eligible for listing, in the National Register, or otherwise of historical or architectural value. If these conditions are met, the project will also be consistent with the historic preservation aspects of Florida's Coastal Management Program.
- RESPONSE: On September 21, 2004 a meeting was held at the offices of the Florida Division of Historical Resources (FDHR), Room 307, 500 South Bronough Street, R.A. Grey Building, Tallahassee, Florida. Representatives from the FDOT, FHWA and DHR discussed the options and potential effects for the State Road 20 improvements from Hawthorne to Interlachen. Two roadway alternatives in the vicinity of the Interlachen Historic District were discussed.

The narrow alternative (Option 1 Right) would impact portions of the rear properties of four houses and would take one house completely. Because of the narrow width and steep slopes along this area, a retaining wall would be required between the roadway and the right of way line, thereby limiting landscaping, changing vistas and increasing noise.

The wide alternative (Option 4) would take all five historic houses and move the highway slightly south away from Lake Chipco. This alternative would allow for landscaping and the vacant unused property would serve as a buffer to the existing linear park and remaining historic community. The wide alternative was actually developed based on comments from the citizens of Interlachen and individuals of the historic council.

FDOT can build either alternative; engineering and cost considerations are similar. Through continued public input and consultation, both alignments will be presented in the Environmental Assessment and at the public hearing. Comments and input will then be evaluated to determine which alternative best suits the needs of the citizens and the potential historic.

FDOT will complete the Environmental Assessment report for submittal to FHWA. The report will include both alternatives in Interlachen that will impact the Interlachen Historic District. The report will be circulated for comments and a public meeting will be held identifying both alternatives. Results will then be used as a Case Report for Section 106 requirements and development of a Section 4F evaluation.

6.1.4 NORTHEAST FLORIDA REGIONAL PLANNING COUNCIL (OCTOBER 22, 1999)

- COMMENT: Based on the information contained in the Project Description and after a review of the Comprehensive Regional Policy Plan goals and policies, the staff finds the proposal to be consistent with the regional policy.
- RESPONSE: None required.

6.1.5 NORTH CENTRAL FLORIDA REGIONAL PLANNING COUNCIL (SEPTEMBER 24, 1999) COMMENT: We find the project consistent with the Future Traffic Circulation Element of the Alachua County Comprehensive Plan: 1991 to 2011.

RESPONSE: None required.

6.1.6 CONTINUING AGENCY COORDINATION

The original SR-20 EA was approved by FHWA in November 2005. After the EA was approved and the public hearings were held on May 9 and 11, 2006. Funding for the project was deferred and therefore a FONSI was never circulated. FDOT decided that since the project was still a priority to the local residents, to continue coordinating with the agencies regarding the primary issues associated with the project. The primary issues were the Section 106 Consultation and the coordination with the proposed Little Orange Creek Nature Park. The continuous coordination that occurred after the 2005 EA was signed to date is documented below:

Section 106 Consultation Coordination:

FDOT staff met with staff from FHWA and the SHPO on September 20, 2006. The purpose of the meeting was to discuss the impacts and benefits associated with Option 1 Right and Option 4 and to provide a general overview of the project. On October 23, 2006, SHPO mailed a letter stating their preferences regarding what needed to be accomplished for them to support the locally preferred Option 4 alternative. On August 24, 2007, SHPO provided a letter stating that they would need additional information before they could enter into an agreement prior to entering into a Memorandum of Agreement (MOA). In a letter dated April 9, 2010, SHPO concurred with the findings of the Phase I Cultural Resource Assessment Survey. FDOT sent a letter on February 28, 2011 to FHWA/SHPO to approve the approach for the development of the MOA. SHPO and FHWA both approved the approach from the February 28, 2011 FDOT letter. FDOT presented the MOA to the Town of Interlachen on August 9, 2011. The town provided a letter in support of the MOA on August 10, 2011. FDOT prepared the final MOA and it was approved on November 8, 2011.

Little Orange Creek Nature Park Coordination:

In 2006 the newly formed PLC, working with the Alachua Conservation Trust, and the City of Hawthorne began the plan for land acquisition and park development. The City met with the PLC and FDOT on December 20, 2006 to present the plan and request FDOT's participation. FDOT's potential role in facilitating the proposed elements of the park, as part of the roadway improvements was discussed. Three subsequent meetings (June 30, 2009, March 7, 2011, and October 12, 2011) were held to further define viable solutions that would enhance the park and allow the future widening of SR-20. Representatives from the Florida Fish and Wildlife Conservation Commission and St. Johns River Water Management District participated in these meetings. On April 24, 2012 the City of Hawthorne provided FDOT a letter documenting the FDOT commitments and the city's willingness to provide ROW for the SR-20 widening. A meeting was held July 26, 2012 with the PLC and Florida Lake Watch staff regarding their concerns with the proposed widening of SR-20. Additional commitments were made based on their concerns and are documented in the EA.

Additional Agency Coordination:

- On April 14, 2009, FDOT staff provided the Interlachen Town Council an update on the project.
- On March 29, 2012 met with FHWA and provided an update on the project and the on-going coordination with the stakeholders.

- On December 8, 2011 FDOT held a public workshop to update the stakeholders on the status of the project and to present the changes that have taken place since the public hearings in 2006.
- FDOT submitted the Endangered Species Biological Assessment (ESBA) to U.S. Fish and Wildlife Service (USFWS) on May 24, 2012. USFWS concurred with the ESBA on June 20, 2012.

6.2 PUBLIC PARTICIPATION

6.2.1 PUBLIC MEETINGS

Since March of 1999, eight public meetings have been held for this project. All meetings were advertised in local newspapers and a mailing list was utilized to inform interested parties of all public meetings. All meetings were held in Hawthorne or Interlachen and averaged from 65 to 375 participants. The following is a summary of these meetings

March 30, 1999 (Hawthorne): April 20, 1999 (Interlachen): May 2, 2000 (Interlachen):	The FDOT presented the results of the PLEMO study and described the aspects of the up-coming PD&E study. The FDOT presented the results of the PLEMO study and described the aspects of the up-coming PD&E study The FDOT presented the findings of its study related to by- passing Interlachen and took comments from the public.
August 22, 2000 (Interlachen):	An alternatives meeting was held which presented build alternatives for the entire 12 mile project. It was also announced that by-passing Interlachen was no longer under consideration.
August 24, 2000 (Hawthorne):	An alternatives meeting was held which presented build alternatives for the entire 12 mile project.
May 9, 2006 (Hawthorne):	A public hearing was held which presented the 2005 EA Build Alternative.
May 11, 2006 (Interlachen):	A public hearing was held which presented the 2005 EA Build Alternative.
December 8, 2011 (Interlachen):	A public workshop was held by FDOT that presented the Revised Build Alternative.
September 12, 2013 (Interlachen):	A public hearing was held by FDOT that presented the Revised Build Alternative.

6.2.2 ELECTED OFFICIAL, AGENCY, AND ORGANIZED GROUP MEETINGS

In addition to the public meetings listed above, the FDOT also attended numerous meetings with elected officials, agencies, organized groups, and individuals throughout this study effort. The following is a list of this coordination effort followed by identification of the participants/attendees.

May 31, 2000:	Interlachen - Interested Citizens
June 11, 2000:	Interlachen - Town Council
July 11, 2000:	Putnam County Chamber of Commerce - open meeting

6.2.3 PUBLIC HEARING

A subsequent public hearing was held on September 12, 2013 to provide the public with information about the project, the results of the environmental assessment of alternatives under consideration, project scheduling, the status of the study, and to solicit comments from the public. Notices of the public hearing were mailed to all property owners within 300 feet of the project centerline. In addition, the public hearing was advertised in the *Palatka Daily News* on August 21 and September 3, 2013, *Gainesville Sun* on August 21 and September 2, 2013, and on the *Florida Administrative Register* website on August 21, 2013. The hearing was held at the Seventh Day Adventist Southeast Conference Center 1771 SR-20 Hawthorne, FI and 143 participants attended. The doors were opened at 4:30 for the open house. A formal presentation and a public comment period were held at 6:30 to receive input on the project.

There were eleven speakers that spoke at the hearing. Their primary concerns were the schedule, Fowler's Prairie, and the proximity of the proposed widening to the Zion Hill Seventh Day Adventist Church. Based on input received at the public hearing, FDOT will further investigate ways to improve the hydrology of the Fowler's Prairie drainage structure to improve the ecosystem for the pitcher plants in the bog located south of SR-20 during the design phase. The public hearing transcript is included on the attached DVD.

6.3 PUBLIC COMMENTS

6.3.1 THE HISTORICAL SOCIETY OF INTERLACHEN, FLORIDA, INC. (OCTOBER 4, 2001)

The Historical Society has gone on record endorsing Option 4. In their letter (refer to Appendix E of the 2005 EA) the Society recommends that FDOT develop a green space with trees and grass as a compatible buffer between SR-20 and the Interlachen Historic District. They expressed concern that should the four contributing homes be left in their current location (as is proposed under Option 1-Right), the reduction in their property size will lead to deterioration or demolition by homeowners. By relocating these

resources, the Society feels the historic character of these resources will be maintained and the overall character of the district preserved.

6.3.2 CITIZENS ADVISORY COMMITTEE - TOWN OF INTERLACHEN (OCTOBER 5, 2001)

In their letter to FDOT (Appendix E of the 2005 EA), the Advisory Committee favors Option 4 if the five impacted historic homes are relocated elsewhere in the or near the Interlachen Historic District, and if there is a full taking of the land between Prospect and CR-315 north of Atlantic Avenue and said land be planted with trees and vegetation to become the northern boundary of the Interlachen Historic District. They would also like the removal of the commuter parking lot west of CR-315.

6.3.3 TOWN OF INTERLACHEN (OCTOBER 24, 2001)

Through correspondence (Appendix E of the 2005 EA), the Town of Interlachen requested FDOT to consider Option 4 with several recommendations. First, relocate in or adjacent to the Interlachen Historic District, the homes between Prospect Avenue and CR-315, and arrange for the acquired property to be used as parkland in perpetuity. Second, create an entrance to Robert Henry Jenkins, Jr. Memorial Park that is landscaped to ensure the Town's beauty at the corner of CR-315 South and SR-20.

6.3.4 TOWN OF INTERLACHEN (AUGUST 10, 2011)

In their letter to FDOT (Appendix D), the Town of Interlachen approved the proposed donation of property by FDOT as part of the MOA. The property referred to is, the unused portion of property parcels acquired for the expansion of State Road 20, south of the proposed new road right of way and adjacent and north of the Robert Henry Jenkins, Jr., Memorial Parkway. The town committed to accepting the unused property for the expansion of the park for public use.

6.3.5 CITY OF HAWTHORNE (APRIL 24, 2012)

In their letter to FDOT (Appendix B), the City of Hawthorne stated FDOT's commitments to construct a bridge over Little Orange Creek to provide pedestrian, equestrian, and canoe/kayak access underneath SR-20 to connect the northern and southern portions of the Nature Park. The bridge will also serve as a wildlife crossing. The letter also documents prior coordination with the city that has been ongoing since 2006. Details of the coordination efforts between FDOT and the City of Hawthorne are in Section D.

SECTION 7: COMMITMENTS AND RECOMMEDATIONS

In order to minimize impacts of the proposed project on the human and natural environment, the FDOT is committed to the following measures:

- Wetland impacts that will result from the construction of the project will be mitigated to satisfy all mitigation requirements pursuant to Section 373.4137, F.S., of Part IV, Chapter 373, F.S. and 33 CFR Parts 325 and 332, Section 404 of the Clean Water Act (33 U.S.C 1344).
- To assure the protection of the Eastern indigo snake during construction, FDOT will incorporate the guideline "*Standard Protection Protocols for the Eastern Indigo Snake*" into the final project design and will require that the construction contractor abide strictly to the guidelines during construction.
- In accordance with the FDOTs *Standard Specifications for Road and Bridge Construction*, all Best Management Practices for erosion control and water quality considerations will be adhered to during the construction phase of the project.
- FDOT will obtain a Gopher Tortoise Relocation Permit from the Florida Fish and Wildlife Conservation Commission for this project.
- During the design phase, FDOT will further investigate ways to improve the hydrology of the Fowler's Prairie drainage structure to improve the ecosystem for the pitcher plants in the bog located south of SR-20.

As part of this project, FDOT made commitments for the Interlachen Historic District and also the Little Orange Creek Nature Park. Coordination between FDOT and the City of Hawthorne has been ongoing since 2006 and is documented in Section 0. Commitments for the Little Orange Creek Nature Park are part of an ongoing joint planning effort between the FDOT and the City of Hawthorne.

Commitments made for the Little Orange Creek Nature Park:

- FDOT shall construct a bridge over Little Orange Creek for the Little Orange Creek Nature Park. The bridge will provide pedestrian, equestrian, and canoe/kayak access underneath SR-20, connecting the northern and southern portions of the Nature Park.
- FDOT is committed to constructing a driveway (south of the existing driveway) for the Little Orange Creek Nature Park and constructing a right turn lane into this driveway.
- FDOT shall construct any proposed pond that requires right-of-way from the Little Orange Creek Nature Park with a more natural appearance through design, vegetative planting (type and location to be determined later, the Putnam Land Conservancy would have input), and ensuring that the ponds do not require a fence around the exterior.

Commitments made for the Interlachen Historic District as defined in the MOA (included in Appendix C):

- As part of the Project, the Department shall acquire the historic house located within the Town of Interlachen at 440 Atlantic Avenue (8PU1301) in accordance with the provisions of Chapter 73, Florida Statues (2011), and other applicable The Department shall relocate the house to an as yet undetermined law. location, preferably within the Interlachen Historic District, and thereafter, restore the exterior of the home. The house shall be encumbered with a preservation covenant (prepared by the Department) and offered for sale to the former owner after relocation and restoration are complete. If the former owner does not purchase the home, the Department will offer the home for sale to the Town and thereafter to the general public. Before the house is moved, the FHWA shall document the condition of the house in its existing setting and context by updating the house's Florida Master Site File Form (8PU1301) and submitting no less than ten (10), and no more than twenty (20), black and white digital photographs of the house and associated property. Copies of all such photographs shall be provided to the Department. The house shall be moved in accordance with the applicable approaches/recommendations in Moving Historic Buildings (John Obed Curtis 1991 reprint) by an experienced professional mover who is capable of moving historic structures. The Department and FHWA shall ensure that the house is properly secured from the date the Department takes physical possession of the house until such time as ownership of the house is transferred from the Department.
- As part of the project, the Department shall acquire the four (4) houses located within the Town at 1172 SR 20 (8PU1297), 418 Atlantic Ave (8PU1298), 426 Atlantic Avenue (8PU1299) and 432 Atlantic Avenue (8PU1300). Each of the homes shall be encumbered with a preservation covenant (prepared by the Department) and thereafter offered for sale to the former owners. Homes not purchased by the respective former owners shall be offered for sale to the general public, subject to terms and conditions acceptable to the Department. The Department shall implement a marketing plan which may include listing the houses in area newspapers; posting flyers at local community centers such as churches and historical societies; informing local civic and religious leaders about the houses; and informing local, regional, and state-wide preservation groups for posting on their website or list-server. The houses will be offered as individual houses or as a collection. The Department shall market the houses for a period of six (6) months from the date of acquisition of the last house. Each of these houses shall be relocated by the acquiring party to an as yet undetermined location, preferably within the Interlachen Historic District. The Department may demolish any house not purchased within the six-month marketing period and, in such case, the Department shall not be required to perform any further mitigation.
- In consultation with FHWA and the SHPO, the Department will ensure efforts to avoid, minimize or mitigate adverse effects to any discoveries of significant archaeological resources during the Project shall be addressed according to 36 CFR 800.13(b). All records resulting from archaeological discoveries shall be

submitted to the SHPO. Should unmarked human remains be encountered during construction of the Project, the Department will ensure that they are treated in accordance with the applicable provisions of Chapter 872, Florida Statutes.

- No later than October 1 of each year following the execution of the MOA, until it expires or is terminated, the Department shall provide the parties to the MOA a summary report detailing work undertaken pursuant to its terms. Such report shall also include any scheduling changes proposed, any problems encountered, and any disputes and objections received in the Department's efforts to carry out the terms of the MOA. The Department shall ensure that its annual report is made available for public inspection, that potentially interested members of the public are made aware of its availability, and the interested members of the public are invited to provide comments to the signatories to this Agreement. The signatories to the MOA shall review the annual report and provide comments to the Department. Non-signatories to the MOA may review and comment on the annual report at their discretion. At the time the request of any signatory to the MOA, the Department shall ensure that a meeting or meetings are held to facilitate review and comment, to resolve questions, or to resolve adverse comments. Based on this review, the signatories to the MOA shall determine whether the MOA shall continue in force, be amended, or be terminated. Failure to provide such summary report may be considered noncompliance with the terms of the MOA.
- The Department has or will acquire additional right of way in order to construct the Project. To the extent permissible under applicable law, the Department shall transfer, and the Town shall accept, such portions of the additionally acquired right of way that are not eventually used or necessary for the Project, if any, to the Town. Any such excess right of way transferred to the Town shall be utilized by the Town solely for the public purpose of expanding the existing linear park located along SR 20 within the Town ("park").
- After completion of the project, the Department will install basic landscaping in the area between SR 20 and the boundary of the proposed expansion of the Park. Maintenance of the landscaping within the Department's right of way will be performed by the Department during its regularly scheduled maintenance of those portions of SR 20 lying within the Town. Maintenance of the landscaping outside the Department's right of way will be performed by the Town.
- After completion of the Project, in consultation with the Town, the Department will install basic landscaping in the proposed expansion area of the Park. The landscaping shall be maintained by the Town.

Appendices

Appendix A: Future Land Use Maps

Appendix B: City of Hawthorne Letter Regarding Little Orange Creek Nature Park

Appendix C: State Historic Preservation Office Memorandum of Agreement

Appendix D: Agency Coordination Letters

Appendix E: FHWA Planning Consistency Form

Appendix A: Future Land Use Maps







Appendix B: City of Hawthorne Letter Regarding Little Orange Creek Nature Park



6700 SE 221st Street PO Box 1270 Hawthorne, FL 32640 Telephone (352) 481-2432 Fax (352) 481-2437

Bill Henderson District Planning and Environmental Manager Florida Department of Transportation 1109 South Marion Avenue Lake City, Florida 32025

April 24, 2012

Documentation of Coordination with the City of Hawthorne at Little Orange Creek

Mr. Henderson,

The City of Hawthorne is in the process of developing the planned Little Orange Creek Nature Park in eastern Alachua and western Putnam Counties. The 1,205 acre park property, recently acquired by the City, is located to the north and south of State Road (SR) 20. The Florida Department of Transportation (FDOT) has been coordinating with the City as part of a Project Development and Environment Study (PD&E) to widen SR-20 to 4-lanes from Hawthorne to Interlachen.

The City of Hawthorne and FDOT began coordination on this project during the public involvement component of the PD&E Study. In 2006 the newly formed Putnam Land Conservancy (PLC), working with the Alachua Conservation Trust and the City of Hawthorne, began the plan for land acquisition and park development. The City met with the PLC and the FDOT on December 20, 2006 to present the plan and request FDOT's participation. FDOT's potential role in facilitating the proposed elements of the park, as part of the roadway improvements was discussed. Three subsequent meetings were held on June 30, 2009, March 7, 2011 and October 12, 2011. These meetings were to further define viable solutions that would enhance the park and allow the future widening of SR-20.

FDOT has committed to construct a bridge over Little Orange Creek that will provide pedestrian, equestrian, and canoe/kayak access underneath SR-20 to connect the northern and southern portions of the Nature Park. The bridge will also serve as a wildlife crossing. In addition, wildlife crossing will be enhanced through a structure located at Fowler's Prairie. With the widening of SR-20, sidewalks and bicycle lanes are planned on both the north and south side of the roadway. These sidewalks and bicycle lanes will connect Hawthorne and Interlachen and provide additional recreational facilities to the park. All of these features will enhance the park and are consistent with the purpose of the Little Orange Creek Nature Park.

The City of Hawthorne is willing to provide the right of way in the vicinity of the park required by FDOT to construct the project improvements. The City of Hawthorne and FDOT will continue to work together in order to facilitate the goals of the Little Orange Creek Nature Park. Please contact me with any questions or concerns.

Sincerely

Samuel Wynkoop Parks and Recreation Director City of Hawthorne

Appendix C: State Historic Preservation Office Memorandum of Agreement
MEMORANDUM OF AGREEMENT

BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION AND THE FLORIDA STATE HISTORIC PRESERVATION OFFICER PURSUANT TO 36 CFR PART 800 REGARDING ADVERSE EFFECTS TO THE INTERLACHEN HISTORIC DISTRICT FROM THE STATE ROAD 20 IMPROVEMENT PROJECT PUTNAM COUNTY, FLORIDA

THIS MEMORANDUM OF AGREEMENT ("Agreement") is made and entered into by and between the Federal Highway Administration ("FHWA") and JuDee L. Dawkins, Interim Florida State Historic Preservation Officer ("SHPO"), with the Florida Department of Transportation ("Department") concurring.

- RECITALS -

A. The FHWA proposes to provide financial assistance to the Department for the State Road 20 improvement project, Department Financial Project Numbers: 207818-1 and 210024-1 (the "Project"); and

B. The FHWA, in consultation with the SHPO and the Department, determined that the Project will adversely affect the houses located within the Town of Interlachen, Florida ("Town") located at 1172 SR 20 (8PU1297), 418 Atlantic Avenue (8PU1298), 426 Atlantic Avenue (8PU1299), 432 Atlantic Avenue (8PU1300) and 440 Atlantic Avenue (8PU1301), each such property being eligible for inclusion in the National Register of Historic Places ("NRHP"); and

C. The FHWA and the Department consulted with the local community, the record property owners of the affected houses, members of the public and with the SHPO, in accordance with Section 106 of the National Historic Preservation Act ("NHPA"), 16 U.S.C. § 470, and its implementing regulations, 36 CFR Part 800.6(b)(1), to resolve the Project's adverse effects on the Interfachen Historic District; and

D. The Department was invited to concur in this Agreement.

NOW THEREFORE, in consideration of the foregoing recitals and the mutual covenants and conditions contained in this Agreement, the FHWA, SHPO and the Department acknowledge and agree as follows:

1. RECITALS & EXHIBITS

The recitals set forth above and exhibits attached hereto are specifically incorporated by reference and made part of this Agreement.

2. EFFECTIVE DATE

The effective date of the Agreement shall be the date the last of the parties to be charged executes the Agreement ("Effective Date").

3. TRANSFER OF EXCESS RIGHT OF WAY

The Department has or will acquire additional right of way in order to construct the Project. To the extent permissible under applicable law, the Department shall transfer, and the Town shall accept, such portions of the additionally acquired right of way that are not eventually used or necessary for the Project, if any, to the Town. Any such excess right-of-way transferred to the Town shall be utilized by the Town solely for the public purpose of expanding the existing linear park located along SR 20 within the Town ("Park"). See the Town's letter of commitment attached hereto as Exhibit "A".

4. LANDSCAPING BETWEEN SR 20 AND PARK EXPANSION AREA

After completion of the Project, the Department will install basic landscaping in the area between SR 20 and the boundary of the proposed expansion of the Park. Maintenance of the landscaping within the Department's right-of-way will be performed by the Department during its regularly scheduled

Page 1 of 4

maintenance of those portions of SR 20 lying within the Town. Maintenance of the landscaping outside the Department's right of way will be performed by the Town.

5. PARK EXPANSION AREA LANDSCAPING

After completion of the Project, in consultation with the Town, the Department will install basic landscaping in the proposed expansion area of the Park. The landscaping shall be maintained by the Town.

6. RELOCATION OF HOUSE LOCATED AT 440 ATLANTIC AVENUE (8PU1301)

A. As part of the Project, the Department shall acquire the historic house located within the Town at 440 Atlantic Avenue (8PU1301) in accordance with the provisions of Chapter 73, Florida Statutes (2011), and other applicable law. The Department shall relocate the house to an as yet undetermined location, preferably within the Interlachen Historic District, and, thereafter, restore the exterior of the home. The house shall be encumbered with a preservation covenant (prepared by the department) and offered for sale to the former owner after relocation and restoration are complete. If the former owner does not purchase the home, the Department will offer the home for sale to the Town and thereafter to the general public.

B. Before the house is moved, the FHWA shall document the condition of the house in its existing setting and context by updating the house's Florida Master Site File Form (8PU1301) and submitting no less than ten (10), and no more than twenty (20), black and white digital photographs of the house and associated property. Copies of all such photographs shall be provided to the Department.

C. The house shall be moved in accordance with the applicable approaches / recommendations in *Moving Historic Buildings* (John Obed Curtis 1991 reprint) by an experienced professional mover who is capable of moving historic structures.

D. The FHWA shall ensure that relocation of the house does not adversely affect any archaeological or other historic property, otherwise this Agreement shall be amended to provide for data recovery or other appropriate mitigation of impact on such property.

E. The Department and FHWA shall ensure that the house is properly secured from the date the Department takes physical possession of the house until such time as ownership of the house is transferred from the Department.

7. RELOCATION OF ADDITIONAL HOUSES LOCATED ON SR 20 & ATLANTIC AVENUE

A. As part of the Project, the Department shall acquire the four (4) houses located within the Town at 1172 SR 20 (8PU1297), 418 Atlantic Avenue (8PU1298), 426 Atlantic Avenue (8PU1299), and 432 Atlantic Avenue (8PU1300). Each of the houses shall be encumbered with a preservation covenant (prepared by the Department) and thereafter offered for sale to the former owners.

B. Homes not purchased by the respective former owners shall be offered for sale to the general public, subject to terms and conditions acceptable to the Department. The Department shall implement a marketing plan which may include listing the houses in area newspapers; posting flyers at local community centers such as churches and historical societies; informing local civic and religious leaders about the houses; and informing local, regional and state-wide preservation groups for posting on their website or list-server. The houses will be offered as individual houses or as a collection. The Department shall market the houses for a period of six (6) months from the date of acquisition of the last house.

C. Each of these houses shall be relocated by the acquiring party to an as yet undetermined location, preferably within the Interlachen Historic District.

D. The Department may demolish any house not purchased within the six-month marketing period and, in such case, the Department shall not be required to perform any further mitigation.

Page 2 of 4

8. ARCHEOLOGICAL MONITORING / DISCOVERIES

A. In consultation with FHWA and the SHPO, the Department will ensure efforts to avoid, minimize or mitigate adverse effects to any discoveries of significant archaeological resources during the Project shall be addressed according to 36 CFR 800.13(b). All records resulting from archaeological discoveries shall be submitted to the SHPO.

B. Should unmarked human remains be encountered during construction of the Project, the Department will ensure that they are treated in accordance with the applicable provisions of Chapter 872, Florida Statutes.

9. MONITORING AND REPORTING

A. No later than October 1 of each year following the execution of this Agreement, until it expires or is terminated, the Department shall provide the parties to this Agreement a summary report detailing work undertaken pursuant to its terms. Such report shall also include any scheduling changes proposed, any problems encountered, and any disputes and objections received in the Department's efforts to carry out the terms of this Agreement.

B. The Department shall ensure that its annual report is made available for public inspection, that potentially interested members of the public are made aware of its availability, and that interested members of the public are invited to provide comments to the signatories to this Agreement.

C. The signatories to this Agreement shall review the annual report and provide comments to the Department. Non-signatories to this Agreement may review and comment on the annual report at their discretion.

D. At the request of any signatory to this Agreement, the Department shall ensure that a meeting or meetings are held to facilitate review and comment, to resolve questions, or to resolve adverse comments.

E. Based on this review, the signatories to this Agreement shall determine whether this Agreement shall continue in force, be amended, or be terminated. Failure to provide such summary report may be considered noncompliance with the terms of this Agreement.

10. AMENDMENTS AND NONCOMPLIANCE

If any signatory to this Agreement determines that its terms will not or cannot be carried out, or that an amendment to its terms must be made, that party shall provide a written explanation for such determination to all signatories and consult with the other signatories to develop an amendment to this Agreement. If the signatories cannot reach an agreement as to the terms of an amendment, any one of the signatories unilaterally may terminate the Agreement.

11. ANNUAL APPROPRIATION / FUNDING

Pursuant to §339.1365(6)(a), Florida Statutes, the Department's obligation to fund, construct or otherwise participate in the Project is contingent upon annual appropriation by the Florida Legislature. This Agreement may be terminated by the Department without liability to the other signatories if sufficient funds are not appropriated to the Department. The provisions of §339.135(6)(a), Florida Statutes, are set forth herein verbatim and made part of this Agreement, to wit:

"The department, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The department shall require a statement from the comptroller of the department that funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding 1 year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the department which are for an amount in excess of \$25,000 and which have a term for a period of more than 1 year."

12. VENUE AND JURISDICTION

A. Venue for any and all actions arising out of or in any way related to the interpretation, validity, performance or breach of this Agreement shall lie exclusively in a state court of appropriate jurisdiction in Leon County, Florida.

B. The signatories to this Agreement consent to personal jurisdiction in the State of Florida with respect to any proceeding related to the interpretation, validity, performance or breach of this Agreement.

13. WAIVER

The failure of any signatory to insist on the strict performance or compliance with any term or provision of the Agreement on one or more occasions shall not constitute a waiver or relinguishment thereof and all such terms and provisions shall remain in full force and effect unless waived or relinguished in writing.

14. INTERPRETATION

No term or provision of the Agreement shall be interpreted for or against any signatory because that signatory or that signatory's legal representative drafted the provision.

15. CAPTIONS

Paragraph title or captions contained herein are inserted as a matter of convenience and reference and in no way define, limit, extend or describe the scope of the Agreement, or any provision hereof.

16. SEVERENCE

If any section, paragraph, clause or provision of the Agreement is adjudged by a court, agency or authority of competent jurisdiction to be invalid, illegal or otherwise unenforceable, all remaining parts of the Agreement shall remain in full force and effect.

<u>17. MODIFICATION OF AGREEMENT</u>

A modification or waiver of any of the provisions of the Agreement shall be effective only if made in writing and executed with the same formality as the Agreement.

Execution of this Agreement, consisting of four (4) pages excluding exhibits, and the implementation of its terms evidences that FHWA has satisfied the requirements of 16 USC §470(F).

FEDERAL HIGHWAY ADMINISTRATION

By: Martin C. Knopp

FHWA Division Administrator

ATE HISTORIC PRESERVATION OFFICER FLORIDA Date: 10/27/11

Bv: Robert Bendus

Florida State Historic Preservation Officer

CONCURRING: FLORIDA DEPARTMENT OF TRANSPORTATION

By:

Date:

Nick Tsengas, P.E FDOT District Two Interim Secretary

Date: 10/(3)

Page 4 of 4

Appendix D: Agency Coordination Letters

TOWN OF INTERLACHEN "Between the Lakes" Mayor ~ John D. Lyles **311 ATLANTIC AVENUE** Chairman ~ D. Wayne Corbin INTERLACHEN, FLORIDA 32148 Vice-Chairman ~ John K. Larsen Phone: 386-684-3811 • Fax: 386-684-3812 Council ~ Judi Costanzo www.interlachen-fl.gov Council ~ Frances C. Martin Council ~ Janet C. Medler The Town Council Meets the Second Tuesday of Each Month at 7:00 p.m. FDOT D2 August 10, 2011 PLEMO DEPARTMENT Ms. Terri B. Newman Contamination & Cultural Resources Coordinator 1109 South Marion Avenue Lake City, Florida 32025-5874 Re: Town of Interlachen - SR 20 FDOT of Unused Property Adjacent to Robert Henry Jenkins, Jr., Memorial Parkway Dear Ms. Newman: Please be advised that during the August 9, 2011, Town Council Meeting, the Interlachen Town Council approved: The Town of Interlachen through the Town Council and with public input has reviewed and discussed the proposed donation of property by the Florida Department of Transportation presented at the public meeting on August 9, 2011. The property referred to is the unused portion of property parcels acquired for the expansion of State Road 20, south of the proposed new road right of way and adjacent and north of Robert Henry Jenkins, Jr., Memorial Parkway. The Town of Interlachen commits to accepting the unused property for the expansion of the park for public use. The Department of Transportation has agreed to work with the Town of Interlachen to provide landscaping in this area consistent and complimentary to the park and Town prior to the transfer of said property." If you have any questions, please contact our office at (386) 684-3811. Sincerely, Pamela S. Wilburn, Town Clerk Town of Interlachen psw (word/DOT donation of property.doc)



Proposed Action

coastal communities of Flagler and St. Johns counties.

FDOT proposes to widen this 12.2-mile segment from a two-lane undivided facility to a four-lane divided facility.

Project Need

The purpose of this project is to correct deficiencies, improve mobility both locally and regionally, and improve safety on SR-20 from Hawthorne to Interlachen. The operational efficiency of SR-20 is important on a national, state, regional and local level because SR-20 is a key component and part of the SIS.

On a regional perspective, SR-20 provides a major east/west movement. Currently, between Ocala and Jacksonville there are no roadways other than SR-40 in Ocala and I-10 in Jacksonville that provide a direct east/west connection from I-75 to I-95. It's approximately 80 miles between I-10 and SR-40. Providing additional capacity will enhance the entire corridor's ability to serve east/west traffic.

Due to the deficiencies, congestion and high crash rates, the existing SR-20 roadway requires widening from US-301 to CR-315. This project is also necessary to connect the adjacent widening projects on SR-20 to enhance the corridors ability to provide major east/west movements across the state

Background

The original PD&E Study was started in 1997. In the initial stages of the study, several options to bypass the Town of Interlachen were studied and compared with the no-build alternative and widening on the existing alignment.

An Environmental Assessment (EA) was approved by FHWA in 2005, documenting both the bypass alternatives and the build alternatives. The 2005 EA carried forward a build alternative with a 230-foot rural typical in the rural areas and a 130-foot urban typical near Interlachen and two options (Option 1 Right and Option 4) near the projects eastern terminus. Public hearings were held on the Build Alternative as shown in the 2005 EA on May 9th and 11th, 2006. ROW funding was differed for the project after the hearings and therefore a Finding of No Significant Impact (FONSI) was never written.

Revised Build Alternative

During the EA public involvement process, substantial comment was received expressing concern for the value of and need to protect the Fowler's Prairie and Little Orange Creek system. Changes to the FDOT Strategic Intermodal Systems (SIS) design criteria allow for a reduced typical, thereby reducing overall corridor width from 230 feet to 180 feet.

FDOT is proposing a revised typical section for this current study. The revised typical consists of a 180foot urban typical section with curb and gutter. The typical section has a 5-foot sidewalk on the north side and a 10-foot sidewalk on the south side and 6 $\frac{1}{2}$ foot bicycle lanes on both sides of the roadway for the entire project limits.

The revised typical will reduce impacts to Fowler's Prairie and Little Orange Creek, provide a consistent typical throughout the limits of the project. In addition, this typical is better suited for the abundance of driveways located along the corridor and will accompany future growth that will take place along the corridor. This Revised Build Alternative was presented to the public on December 8, 2011. There were 196 people who attended the meeting. The comments provided primarily focused on median opening locations and ensuring that the posted speed would be 55 mph.

The revised build alternative proposes new alignment in Segments 6 through 8. The proposed new alignment will shift SR-20 away from Clear Lake and Lake Galilee and will reduce the floodplain impacts compared to the 2005 EA build alternative. The new alignment section was shown at the public meeting held December 8, 2011. Several property owners who lived along the lakes expressed their support of the new alignment.

Threatened/Endangered Species

As a result of detailed literature research, data collection and field reviews, the Department has determined that the proposed project may affect, but is not likely to adversely affect the threatened Eastern indigo snake (*Dymarchon corais couperi*) and the endangered wood stork (*Mycteria americana*). Furthermore, it has been determined that the proposed project will have no affect on the endangered Etonia rosemary (*Conrandina etonia*), endangered red-cockaded woodpecker (*Picoides borealis*), and threatened Florida scrub-jay (*Amphelocoma coerulescens*). The project is not located in areas designated as Critical Habitat by the FWS.

FDOT is committed to the mitigation of all wetland and habitat impacts as well as the utilization of all applicable state and federal guidelines, protocols and regulations regarding listed species and habitat. The FWS *Survey Protocol for the Eastern Indigo Snake* will be used, if applicable, during the design/permits phases. Additionally, the FWS *Standard Protection Measures for the Eastern Indigo Snake* will be used during project construction.

In closing, FDOT is committed to continued coordination with FWS and all other applicable resource agencies as this project moves though subsequent project phases. When the project enters the permits phase, specific mitigation plans, options, costs, etc. will be developed. The amount and type of mitigation required will be identified and negotiated with all applicable regulatory agencies.

The Department would appreciate receiving your review comments and a letter of concurrence with the findings of the document within 30 days. Additionally, should you deem it necessary, the Department will conduct a project field review at your convenience. If you have questions regarding the report please contact me at 386-961-7524.

Sincerely

Jason Cornell Environmental Supervisor

CC: Pete Southall (FDOT – D2 Environmental Administrator) Project File

Enclosure(s): ESBA - WER



Environmental Assessment, SR-20, Alachua and Putnam Counties

0040 MEMBER OF THE FLORIDA CABINET DIVISIONS OF FLORIDA DEPARTMENT OF STATE Office of the Secretary State Board of Education Trustees of the Internal Improvement Trust Fund Administration Commission Office of International Relations Division of Elections Florida Land and Water Adjudicatory Commission Siting Board Division of Bond Finance Division of Corporations Division of Cultural Affairs Department of Revenue Department of Revenue Department of Law Enforcement Department of Highway Safety and Motor Vehicles Department of Veterans' Affairs Division of Historical Resources Division of Library and Information Services Division of Library and Information Services Division of Administrative Services FLORIDA DEPARTMENT OF STATE Katherine Harris Secretary of State DIVISION OF HISTORICAL RESOURCES June 5, 2001 Mr. James E. St. John Federal Highway Administration 227 N. Bronough Street, Room 2015 Tallahassee, Florida 32301 Received March 7, 2001 DHR Project File No. 2001-02287 Re: SR 20 from Hawthorne to Interlachen Cultural Resources Assessment Report and Determinations of Eligibility FIN: 207818-1 and 210024-1 FAP: XA 400-1(43) Alachua and Putnam Counties, Florida Dear Mr. St. John: This office completed our review of the results of the cultural resource assessment survey for the referenced project to identify and evaluate resources with the project area of potential effect. Our review was undertaken in accordance with the procedures contained in 36 CFR, Part 800 ("Protection of Historic Properties"), as well as the provisions contained in Chapter 267.061, Florida Statutes. We note that ten (10) archaeological sites (8AL3883, 8AL4750, 8PU1305-1312) and five archaeological occurrences were encountered and evaluated. This office concurs that none of the archaeological sites are eligible for listing in the National Register of Historic Places (National Register). In addition to the archaeological resources, fifty-nine (59) historic resources were identified and evaluated. Four of the resources were determined to be eligible for inclusion in the National Register: the Interlachen Academy (8PU802), Criteria A and C; the Pineview Cemetery, (8PU1293), Criteria A, B and C; the Hawthorne Cemetery (8AL4181), Criteria A, B and C; and the Interlachen Historic District, consisting of approximately sixty-nine contributing properties, Criteria A and C. This office concurs that the four referenced properties are eligible for inclusion in the National Register. R.A. Gray Building • 500 South Bronough Street • Tallahassee, Florida 32399-0250 • http://www.flheritage.com □ Director's Office (850) 485-1480 • FAX: 488-3355 (850) 487-2299 • FAX: 414-2207 (850) 487-2333 • FAX: 922-0496 Historical Museums (850) 488-1484 * FAX: 921-2503 Tampa Regional Office (813) 272-3843 • FAX: 272-2340 St. Augustine Regional Office (904) 825-5045 • FAX: 825-5044 □ Historic Pensacola Preservation Board (850) 595-5985 • FAX: 595-5989 □ Palm Beach Regional Office (561) 279-1475 • FAX: 279-1476

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Mr. James St. John June 5, 2001 Page 2

We note that a Determination of Eligibility (DOE) was completed for the First United Methodist Church (8PU1290), Criteria A and C, located at 200 Boylston Street, Interlachen. While it is certainly a contributing historic property in the Interlachen Historic District, it also appears to be individually eligible for inclusion in the National Register. This office concurs that the church property appears to be individually eligible for the National Register, as are several other outstanding historic properties in the Interlachen Historic District. However, we do not have sufficient information or justification to concur with the proposed historic boundary for the First United Methodist Church property as depicted in the DOE that includes only the 1894 church and its 1937 addition

If you have any questions concerning our comments, please do not hesitate to contact Laura Kammerer, Historic Preservationist Supervisor for Compliance and Review, at (850) 487-2333 or (800) 847-7278. Thank you for your interest in protecting Florida's historic properties.

Sincerely,

Anet Sny der Usethans

Jane Snyder Matthews, Ph.D. Director, Division of Historical Resources and State Historic Preservation Officer

JSM/lk

JSM/lk Xc: C. Leroy Irwin, FDOT-CEMO Bill Henderson, FDOT-District 2

	FLORIDA DEPARTMENT OF STATE Kurt S. Browning Secretary of State DIVISION OF HISTORICAL RESOURCES
Feder 545 Jo	Cathy KendallApril 9, 2010al Highway DepartmentApril 9, 2010ohn Knox Road, Suite 200April 9, 2010hassee, FL 323033200
RE:	 DHR Project File Number: 2010-1041(B) Received by DHR: March 2, 2010/Additional Information Received: April 2, 2010 Project: Phase I Cultural Resource Assessment Survey of State Road 20 from Hawthorn to Interlachen, Alachua and Putnam Counties, Florida Financial Project ID: 207818-1 and 210024-1
Dear l	Ms. Kendail:
Histor Preser out th proper with t as am of any	ational Historic Preservation Act of 1966 as amended, 36 CFR Part 800: Protection of ic Properties, and Chapter 267, Florida Statutes. It is the responsibility of the State Historic vation Officer to advise and assist, as appropriate, Federal and State agencies in carrying eir historic preservation responsibilities; to cooperate with agencies to ensure that historic rties are taken into consideration at all levels of planning and development; and to consult he appropriate agencies in accordance with the National Historic Preservation Act of 1966 ended, on undertakings that may affect historic properties and the content and sufficiency plans developed to protect, manage, or to reduce or mitigate harm to such properties.
Road initial within that 1 Places Acade (8PU1	(CR) 315 in Putnam County to a four-lane divided highway. The project corridor was ly surveyed in 2000 (DHR No.: 2000-8240) and, as a result of this effort, 43 resources a the area of potential effects (APE) were documented and assessed. This office determined 5 of the documented resources were eligible for listing in the National Register of Historic 6 (NRHP). These resources include: Hawthorne Cemetery (8AL4181); Interlachen my/Side Martin Building (8PU802); Pineview Cemetery (8PU1283); the SR 20 Billboard 546); Interlachen Historic District (8PU1459); 8PU1285; 8PU1286; 8PU1290; 8PU1294; 296; 8PU1297; 8PU1298; 8PU1299; 8PU1300; and 8PU1301.
on doo the in archae effort initial histori	urrent submittal serves as an update and addendum to the 2000 survey report and focused cumenting and assessing any unrecorded buildings that had reached the 45-year mark since itial survey, as well as updating resources recorded during that survey. No additional cological fieldwork was conducted during the present survey effort. The recent survey noted that nine previously-recorded resources were either moved or demolished since the 2000 survey. This survey also resulted in the identification and recordation of 29 new ic-age resources. All of the 29 newly identified resources within the project APE were mended as ineligible for listing in the NRHP due to lack of historic and architectural
	500 S. Bronough Street • Tallahassee, FL 32399-0250 • http://www.fiheritage.com
	, , , , , , , , , , , , , , , , , , , ,

Ms. Cathy Kendall DHR Project File Number: 2010-1041(B) April 9, 2010 Page 2 import. Additionally, the report recommended that the 15 resources within the APE that were previously determined to be significant retain their status an NRHP eligible. This office reviewed the submitted survey report and, in letter dated March 29, 2010, noted that one previously-identified resource that appeared to extend into the APE was not included in survey effort. We therefore requested that additional investigations of 8AL5230/8PU14 be undertaken so that the site's significance could be ascertained. However, a letter submitted to our office by the Florida Department of Transportation, District 2 on April 2, 2010 indicated that no evidence of historic fabric associated with the resource group was identified within the project area. Based on the information contained in this correspondence, this agency rescinds its request for additional investigations of 8AL5230/8PU14. The Federal Highway Administration (FHWA) determined that the following 15 resources were eligible for listing in the NRHP: Hawthorne Cemetery (8AL4181); Interlachen Academy/Side Martin Building (8PU802); Pineview Cemetery (8PU1283); the SR 20 Billboard (8PU1546); Interlachen Historic District (8PU1459); 8PU1285; 8PU1286; 8PU1290; 8PU1294; 8PU1294; 8PU1297; 8PU1298; 8PU1299; 8PU1300; and 8PU1301. Based on the information contained in the submitted report, this office concurs with the FHWA's determinations and finds this report sufficient and complete. Please note, as stated in our letter dated March 29, 2010, that there is not enough information available at this time for this office to find that 8PU1577 is ineligible for listing in the NRHP. This office therefore requests that we be notified if any new information regarding this resource's significance is uncovered. If there are any questions concerning our comments or recommendations, please contact Jennifer Ross, Architectural Historian, by phone at 850.245.6333, or via electronic mail at jrross@dos.state.fl.us. Sincerely, Laura h. Kammarer Laura A. Kammerer Deputy State Historic Preservation Officer For Review and Compliance PC: Terri Newman, FDOT District 2, Lake City Elizabeth Chambless, SEARCH, Pensacola Roy Jackson, FDOT CEMO, Tallahassee/MS #5500

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Florida De	partment of Transportation
	1109 S. Marion Ave., MS 2007 ANANTH PRASAD, P.E.
RICK SCOTT GOVERNOR October 6, 2011 Mr. Martin C. Knopp U.S. Department of Transportation Federal Highway Administration Florida Division Office 545 John Knox Road, Suite 200 Tallahassee, FL 32303 RE: Cultural Resource Assessm County, Florida Financial Management # 210 Dear Mr. Knopp: 37 7 11 1:29FM Enclosed please find the copy of Assessment Survey of Three Areas a documents have also been included: • One additional bound copy o • One SHPO package containi set of Florida Master Site Fil Sheet, and accompanying do This technical memorandum details to SR 20 in Putnam County, Florida of SR 20 from Hawthorne to Inte	ANANTH PRASAD, P.E. SECRETARY FDOT D2 PLEMO DEPARTMENT RECEIVED ON DOV. D2, 201 Tent Survey of Three Areas along State Road 20, Putnam 2024-1-22-01 Ananth PRASAD, P.E. SECRETARY The technical memorandum entitled <i>Cultural Resource</i> along State Road 20, Putnam County, Florida. The following of the final technical memorandum. ing one unbound copy of the final tech memo, one complete le forms and labeled photographs, one completed Survey Log cumentation. the results of a CRAS in support of proposed improvements a. In 2001, a CRAS was prepared for the proposed widening erlachen in Alachua and Putnam Counties. In 2009, the
documentation for historic structures FDOT District 2 has refined the pro realigned, requiring additional right- of SR 20 between Cowpen Lake	erlachen in Alachua and Putnam Counties. In 2009, the s along the corridor was updated. Since the previous surveys, oject plans such that three segments of SR 20 will be slightly -of-way. These areas include a 640-meter (0.4-mile) segment Road and San Jose Boulevard, a 2,000-meter (1.3-mile) Royal Way, and an 800-meter (0.5-mile) segment between
realignment areas between Hawt 8PU01308, was identified with two previous site boundary. Site 8PU01	the excavation of 150 shovel tests within the three proposed horne and Interlachen. One previously recorded site, positive shovel tests, resulting in a slight modification to the 1308 had been previously determined not eligible for NRHP results of the present survey, it is the opinion of the Principal

Mr. Knopp, FHWA SR Tech Memo Three Areas October 6, 2011 Page 2

Investigator that 8PU01308 remains not eligible for the NRHP. Six shovel tests were excavated within the boundary of previously recorded site 8PU01312, all of which were negative for cultural material.

The architectural survey resulted in the identification and evaluation of seven historic resources. Five of these resources (8PU01255, 8PU01270, and 8PU01587–8PU01589) were previously recorded while the remaining two resources (8PU01641 and 8PU01642) were newly identified during the current survey. All of the historic resources lack the architectural distinction or significant historical associations necessary to be considered for listing in the NRHP and are recommended ineligible. No potential NRHP districts were located due to the lack of concentration of historic structures. No further work is recommended within the SR 20 Realigned Areas APE.

I respectfully request your concurrence with the findings of the enclosed report. Should you concur, please indicate such in the signature box below and submit the unbound copy of this document along with the accompanying Survey Log Sheet and electronic Florida Master Site File forms to the Florida State Historic Preservation Officer, for review and comment.

If you have any questions or need further assistance, please contact Terri B. Newman (386) 961-7713.

Sincerely,

William R. Henderson District Planning and Environmental Manager

Pc: Terri Newman, FDOT Cultural Resources Coordinator Stephen Browning, FDOT

Mr. Knopp, FHWA SR Tech Memo Three Areas October 6, 2011 Page 3

The FHWA finds the attached Cultural Resources Assessment Report complete and sufficient and ✓ approves / ____ does not approve the above recommendations and findings.

The FHWA requests the SHPO's opinion on the sufficiency of the attached report and the SHPO's opinion on the recommendations and findings contained in this cover letter and in the comment block below.

FHWA Comments:

PLASE ADDRESS COMMENTS OPINION TO PHUA UNDA ANDBESON. P: 850-553-2226 E: linde, anderson a dot. gov. PLOASE (C: TORRI NEWNAN POT D'2. GREE HALL FHINA , AND ROY JACKSON FOOT CAMO.

(C

For: Martin C. Knopp **Division Administrator Florida** Division Federal Highway Administration

10-24-11 Date

The Florida State Historic Preservation Officer:

finds the attached report complete and sufficient and _____ concurs/ ____ does not concur with the findings and recommendations contained in this cover letter.

does not find the attached report complete and sufficient and requires additional information in order to provide an opinion on the potential effects of the proposed project on historic resources.

a. Kapamerer, Deputy 11. 22. 2011 Date aura **Robert Bendus**

Florida State Historic Preservation Officer

201 04845 DHR No.



Mr. Knopp SR 20 Proposed Ponds Fowlers Prairie December 7, 2012 Page 2

Register of Historic Places (NRHP). No historic resources were identified during the architectural history survey.

Based on the results of this investigation, it is the opinion of the District that the proposed undertaking will have no effect on historic resources listed or eligible for listing in the NRHP. I respectfully request your concurrence with the findings of the enclosed report. Should you concur, please indicate such in the signature box below and submit the unbound copy of this document along with the accompanying Survey Log Sheet and electronic Florida Master Site File forms to the Florida State Historic Preservation Officer, for review and comment.

If you have any questions or need further assistance, please contact Terri B. Newman (386) 961-7713.

Sincerely,

William R. Henderson District Planning and Environmental Manager

Pc: Terri Newman, FDOT Cultural Resources Coordinator

Mr. Knopp SR 20 Proposed Ponds Fowlers Prairie December 7, 2012 Page 3 The FHWA finds the attached Historic Structures Assessment Survey complete and sufficient and ____ approves / ____ does not approve the above recommendations and findings. The FHWA requests the SHPO's opinion on the sufficiency of the attached report and the SHPO's opinion on the recommendations and findings contained in this cover letter and in the comment block below. **FHWA Comments:** PLEASE ADDRESS COMMENTS (PINON TO LINDA ANDERSON FILMA e: linda and ensors @ det.gov, P: 850-553-2226 PLEASE CC. TARRI HOWMAN, FOOT D2; GREG HALL, FHUN, AND ROY JACKSON FORT CAMO. 1/8/13 For: Martin C. Knopp **Division Administrator Florida Division Federal Highway Administration** The Florida State Historic Preservation Officer: finds the attached report complete and sufficient and 🗹 concurs/ ____ does not concur with the findings and recommendations contained in this cover letter. does not find the attached report complete and sufficient and requires additional information in order to provide an opinion on the potential effects of the proposed project on historic resources. DSIPO 1/29/13 Date /s/ low Florida State Historic Preservation Officer 20130195 DHR No. www.dot.state.fl.us



Mr. Christian SR 20 Ponds and FPCs Revised report June 2014 June 25, 2014 Page 2

The architectural survey resulted in the identification and evaluation of 20 historic resources. Historic resources included 10 previously recorded structures (8PU01255, 8PU01267, 8PU01268, 8PU01546, 8PU01576, 8PU01576, 8PU01577, 8PU01584, and 8PU01600–8PU01602), one previously recorded cemetery (8PU01283), and one previously recorded resource group (8PU01575), in addition to eight newly identified structures (8PU01708–8PU01714 and 8PU01717).

None of the eight newly identified structures (8PU01708–8PU01714 and 8PU01717) are recommended eligible for the National Register of Historic Places (eligible). Of the 10 previously recorded structures (8PU01255, 8PU01267, 8PU01268, 8PU01546, 8PU01576, 8PU01576, 8PU01577, 8PU01584, and 8PU01600–8PU01602), only 8PU01546 is eligible for listing in the NRHP. The Florida SHPO has concurred with the original recommendation for the previously recorded cemetery (8PU01283), and this resource remains eligible for the NRHP. The present survey did not find any new information that would alter the ineligible determination of the previously recorded resource group, 8PU01575. 8PU01575 remains ineligible for the NRHP.

8PU01546, the NRHP-eligible historic billboard, is located within the APE of Basin 8, Alt. 4. The proposed improvements within Basin 8, Alt. 4 consist of an underground drainage pipe. This underground drainage system will have no visual or physical effects to 8PU01546.

In regard to the previously recorded cemetery (8PU01283), previous investigations at the cemetery identified no unmarked graves in Basin 5, Alt. 1 (FMSF Survey No. 19761.). The research conducted during the 2001 and 2009 CRAS reports as well as the 2012 GPR survey revealed no historic usage of the proposed pond footprint. Further, the GPR survey identified no anomalies indicative of unmarked graves. It is the opinion of the District that construction of the proposed Basin 5, Alt. 1 pond will have no effect on 8PU01283.

The archaeological survey resulted in the identification of five archaeological occurrences (isolated finds) and two newly recorded sites (8PU01716 and 8PU01718), and amended the boundary of the previously recorded site (8PU01311). None of these resources are recommended eligible for the NRHP. No additional archaeological survey is recommended.

Based on the results of this study, it is the opinion of the District that construction of the preferred SR 20 ponds will have no effect on NRHP-listed or -eligible historic properties. No further work is recommended.

I respectfully request your concurrence with the findings of the enclosed report. Should you concur, please indicate such in the signature box below and submit the unbound copy of this document along with the accompanying Survey Log Sheet and electronic Florida Master Site File forms to the Florida State Historic Preservation Officer, for review and comment.

Mr. Christian SR 20 Ponds and FPCs Revised report June 2014 June 25, 2014 Page 3

If you have any questions or need further assistance, please contact Terri B. Newman (386) 961-7713.

Sincerely,

1

William R. Henderson District Planning and Environmental Manager

cc: Terri Newman, FDOT Cultural Resources Coordinator

Mr. Christian SR 20 Ponds and FPCs Revised report June 2014 June 25, 2014 Page 4 FLONG WINT THE ATTHCHED 4/17/14 MEMO AND 5/15/14 MEMO) The FHWA finds the attached report complete and sufficient and / approves / ____ does not approve the above recommendations and findings. The FHWA requests the SHPO's opinion on the sufficiency of the attached report and the SHPO's opinion on the recommendations and findings contained in this cover letter and in the comment block below. **FHWA Comments:** NONE FINA'S APPROVAL OF THE MARCH DOLY TECH. MEMO, GRAS AND SHIPU'S OBJECTOUS IN IT'S LETTER OF MAY 272014. - REASE PROVIDE COMMENTS OPINION TO LINDA AUDITUSU FILMA. P: 850-553-2226 E: lindh and enouce do Tijou - PLASE CC: TERRINEWHAN FOOT DZ. CREG HALL FAMA, AND Roy JACICSON FOOT COMO 6/シテ/14 Date 1stil Kand For: James Christian **Acting Division Administrator Florida Division Federal Highway Administration** The Florida State Historic Preservation Officer: finds the attached report complete and sufficient and <u>concurs</u>/ does not concur with the findings and recommendations contained in this cover letter. does not find the attached report complete and sufficient and requires additional information in order to provide an opinion on the potential effects of the proposed project on historic resources. 7/7/14 1st obert f. Bendus For: Robert Bendus Florida State Historic Preservation Officer 2014.1816B DHR No. www.dot.state.fl.us



Appendix E: FHWA Planning Consistency Form

Document Date:	t Information: 7/24/20	13		Docume	ent Type:	EA Document Status: F
Project Na	ime:	5R-20				FM #: 207818-1 & 21002
Project Lin	nits:	US-301 to CR-315				ETDM #: N/A
Are the lin	nits consistent	with the plans	7	Yes		
ldentify M	IPO(s) (if appli	cable):	N/A			Original PD&E FAP# xA-400-1(43)
	nformation:	Western Segment	Strapping and			
Segment L Currently	lmits:	US-301 to Pu	tnam County I	line		Segment FM #: 207818-2
Adopted CFP-LRTP		_			COMMENTS	
	Project is not locat	ed within a MPO bou	ndary			
F	PHASE	Currently Approved	Currently Approved	STIP	STIP	COMMENTS
PE (Final D	esign)	TIP -	STIP Y	\$	FY < 2014/2014	STIP - Page 2 & 3
R/W			Y	\$1,397,449	<2014/2014/2015	STIP - Page 2 & 3
Environme	ental	<u> </u>	Y	\$1,397,449	2014/2014/2015	STIP - Page 2 & 3
						STIP - Page 2 & 3
Constructi	and Utilities		Y	\$1,525,000 \$16,941,379	<2014/2015 2016/2017/> 2017	511P - Page 2 & 3
construction			1.2.1.1.2.	\$10,941,379	2016/2017/2017	
Segment In Segment L	nformation:	Middle Segment Alachua Coun	tu line to CW	E Gala Aurona		
Currently Adopted		Alachua Coun	ity Line to Sw	Sotn Avenue	COMMENTS	Segment FM #: 210024-4
CFP-LRTP						·····
	Project is not locat	ed withing a MPO box	undary			-
P	PHASE	Currently Approved TIP	Currently Approved STIP	STIP \$	STIP FY	COMMENTS
PE (Final De	esign)		Y	\$1,492,925	< 2014/2014	STIP - Page 462 &463
	esign)				<2014/2014/2015/	STIP - Page 462 &463 STIP - Page 462 & 463
R/W		-	Y	\$21,598,440	<2014/2014/2015/ 2016/2017/>2017	STIP - Page 462 & 463
R/W Environme	ental	-	Y Y	\$21,598,440 \$918,000	<2014/2014/2015/ 2016/2017/>2017 2016	
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R/W Environme Railroads a Construction Segment Li Currently Adopted CFP-LRTP - PE (Final De R/W Environme	ental and Utilities on formation: imits: Project is not locate Project is not locate HASE esign)	Eastern Segment SW 56th Aver ed withing a MPO bou Currently Approved TIP	Y Y Y Y Approved STIP Y Y Y	\$21,598,440 \$918,000 \$3,600,000 \$52,741,962 STIP \$ \$696,619 \$14,443,029 \$250,000	<2014/2014/2015/ 2016/2017/>2017 2016 >2017 > 2017 > 2017 COMMENTS STIP FY 2014/2015/<br 2014/2015/ 2014/2015/ 2016/2017 >2017	STIP - Page 462 & 463 STIP - Page 462 & 463 STIP - Page 462 & 463 STIP - Page 462 & 463 Segment FM #: 210024-5 COMMENTS STIP - Page 464 STIP - Page 464
R/W Environme Railroads a Construction Segment Li Segment Li Currently Adopted CFP-LRTP - P PE (Final Do R/W Environme Railroads a	ental and Utilitles on formation: imits: Project is not locate Project is not locate Project is not locate and locate esign) intal	Eastern Segment SW 56th Aver ad withing a MPO box Currently Approved TIP	Y Y Y Y Hue to CR-315 ndary Currently Approved STIP Y Y Y Y	\$21,598,440 \$918,000 \$3,600,000 \$52,741,962 571P \$ \$696,619 \$14,443,029 \$250,000 \$3,450,000	<2014/2014/2015/ 2016/2017/>2016 >2017 >2017 >2017 >2017 >2017 COMMENTS STIP FY STIPFY<2014/2015/ 2014/2015/ 2016/2017>2017>2017	STIP - Page 462 & 463 STIP - Page 462 & 463 STIP - Page 462 & 463 STIP - Page 462 & 463 Segment FM #: 210024-5 COMMENTS STIP - Page 464 STIP - Page 464 STIP - Page 464
R/W Environme Railroads a Construction Segment Li Currently Adopted CFP-LRTP - PE (Final De R/W Environme	ental and Utilitles on formation: imits: Project is not locate Project is not locate Project is not locate and locate esign) intal	Eastern Segment SW 56th Aver ed withing a MPO bou Currently Approved TIP	Y Y Y Y Approved STIP Y Y Y	\$21,598,440 \$918,000 \$3,600,000 \$52,741,962 STIP \$ \$696,619 \$14,443,029 \$250,000	<2014/2014/2015/ 2016/2017/>2017 2016 >2017 > 2017 > 2017 COMMENTS STIP FY 2014/2015/<br 2014/2015/ 2014/2015/ 2016/2017 >2017	STIP - Page 462 & 463 STIP - Page 462 & 463 STIP - Page 462 & 463 STIP - Page 462 & 463 Segment FM #: 210024-5 COMMENTS STIP - Page 464 STIP - Page 464
R/W Environme Railroads a Construction Segment Li Segment Li Currently Adopted CFP-LRTP - P P E (Final De R/W Environme Railroads a Construction	Intal and Utilities on information: imits: Project is not locate PHASE esign) intal ind Utilities	Eastern Segment SW 56th Aver ed withing a MPO bou Currently Approved TIP	Y Y Y Y Aute to CR-315 Currently Approved STIP Y Y Y Y Y Y	\$21,598,440 \$918,000 \$3,600,000 \$52,741,962 571P \$ \$696,619 \$14,443,029 \$250,000 \$3,450,000	<2014/2014/2015/ 2016/2017/>2016 >2017 >2017 >2017 >2017 >2017 COMMENTS STIP FY STIPFY<2014/2015/ 2014/2015/ 2016/2017>2017>2017	STIP - Page 462 & 463 STIP - Page 462 & 463 STIP - Page 462 & 463 STIP - Page 462 & 463 Segment FM #: 210024-5 COMMENTS STIP - Page 464 STIP - Page 464 STIP - Page 464

/24/2013 13.13.50 8RSTIP-1	0 / 0 / 0 *****************************	ALL YEARS		8,467,012 843,907 9,310,919 9,310,919	*SIS* *SIS* RUCT 2/ 2/ 2	ALL YEARS		178,224	586,664 176,015 633,617 1,153	1,500,000	8,361,276 342,979 1,856,400 6,380,724
DATE RUN: 07/24/2013 TIME RUN: 13.13.50 MERSTIP-1	OF WORK: FUNDING ACTION LANES EXIST/IMPROVED/ADDED:	GREATER THAN 2017		91,001 0 91,001 91,001	*SIS OF WORK:ADD LANES & RECONSTRUCT LANES EXIST/IMPROVED/ADDED: 2/	GREATER THAN 2017		0	0000	0	0 204,612 0
	TYPE OF WORK:FU LANES EXIS	2017		8,376,011 8,376,011 8,376,011	TYPE OF WORK:AD LANES EXIS	2017		0	0000	0	28,075 0 0
FLORIDA DEPARTMENT OF TRANSPORTATION OFFICE OF WORK PROGRAM ====================================	.000	2016		0 843,907 843,907 843,907	TO PUTNAM C/L 1.460MI	2016		FDOT 0	0000	0	8,361,276 110,292 1,856,400 6,380,724
EPARTMENT OF TR FICE OF WORK PR STIP REPORT ====================================	TARGET RURAL : ALACHUA PROJECT LENGTH:	2015		· FDOT 0	301 3TH:	2015		Managed by 0	· FDOT 23,296 0 0	: Managed by FDOT 1,500,000	· FDOT 0
FLORIDA D OF	- CO	2014		AGENCY: Managed by 0 0	20 FROM COUNTY	2014		RESPONSIBLE AGENCY: 6,563	AGENCY: Managed by 236,179 44,522 0	SPONSIBLE AGENCY: Man 0 1	AGENCY: Managed by 0 0 0
	PROJECT DESCRIPTION:ALACHUA COU	LESS THAN 2014	<n a=""></n>	r / RESPONSIBLE AGENCY: 0 0 0	PROJECT DESCRIPTION:SR	LESS THAN 2014	<n a=""></n>	ENGINEERING / RH 171,661	/ RESPONSIBLE 327,189 131,493 633,617 1,153	UTILITES / RESPON 0	/ RESPONSIBLE 0 0 0
2	ITEM NUMBER:207762 1 P DISTRICT:02 ROADWAY ID:	FUND CODE	FEDERAL PROJECT NUMBER:	PHASE: CONSTRUCTION DDR DS L <n a=""> L 207762 1</n>	ITEM NUMBER:207818 2 P) DISTRICT:02 ROADWAY ID:26080000	FUND CODE	FEDERAL PROJECT NUMBER:	PHASE: PRELIMINARY . DIH	PHASE: RIGHT OF WAY DDR DIH DIRS DS	PHASE: RAILROAD & U LF	PHASE: CONSTRUCTION DDR DIH SA SL

4/2013 .13.50 TIP-1	108,111 20,125,163	49,229 49,229	25,000 25,000 20,199,392	*NON-SIS* 2/ 0/ 0	ALL YEARS	27,574 15,673	5,000	147,248 33,546 301,395 301,836
DATE RUN: 07/24/2013 TIME RUN: 13.13.50 MBRSTIP-1	20,		20,3	*NO *DDED: 2,				
DATE RI TIME	0 204,612	00	0 204,612	OF WORK:LANDSCAPING LANES EXIST/IMPROVED/ADDED:	GREATER THAN 2017	00	0	00000
-	0 28,075	00	0 28,075	LANDSCAPING TYPE OF WOR LANES	2017	00	0	00000
FLORIDA DEPARTMENT OF TRANSPORTATION OFFICE OF WORK PROGRAM STIP REPORT ====================================	0 16,708,692	FDOT 0	0 16,708,692	INTERCHANGE LANDS: 1.486MI	2016	FDOT 0	0	00000
DA DEPARTMENT OF TR OFFICE OF WORK PR STTIP REPORT HIGHMAYS HIGHMAYS	ed by FDOT 108,111 1,631,407	NCY: Managed by 0 0	Managed by FDOJ 0 1,631,407	26 @ SR 200 (US 301) IN COUNTY:ALACHUA PROJECT LENGTH:	2015	NCY: Managed by 0 0	AGENCY: Managed by FDOT 0	a by FDOT 0
FLORI	JE AGENCY: Managed 0 287,264	RESPONSIBLE AGENCY: Managed by FDOT 0 0	P RESPONSIBLE AGENCY: Managed by FDOT 0 0 287,264 1,631,407	26 @ SR COUNTY	2014	RESPONSIBLE AGENCY 0 0	PONSIBLE AGENCY: 0	3 AGENCY: Managed by 0 11,329 11,329 11,329
	NTAL / RESPONSIB 0 1,265,113	ER: 4226 039 P RY ENGINEERING / 49,229 49,229		PROJECT DESCRIPTION:SR	LESS THAN 2014 	JJECT NUMBER: <n a=""> PRELIMINARY ENGINEERING / DDR 27,574 DIH 15,673</n>	& UTILITES / RES 5,000	ION / RESPONSIBL 147,248 22,217 72,795 290,507 290,507
PAGE 3	PHASE: ENVIRONMENTAL / RESPONSIBLE SA 1,265,113 TOTAL <n a=""></n>	FEDERAL PROJECT NUMBER: 4226 039 P PHASE: PRELIMINARY ENGINEERING ACNP TOTAL 4226 039 P 49,229	FEDERAL PROJECT NUMBER: 4226 040 PHASE: RALLROAD & UTILITES / SL SL 25,000 TOTAL 4226 040 P TOTAL 207818 2 1,339,342	ITEM NUMBER:207831 4 DISTRICT:02 ROADWAY ID:26130000	FUND CODE	FEDERAL PROJECT NUMBER: PHASE: PRELIMINARY I DDR DIH	PHASE: RAILROAD & DDR	PHASE: CONSTRUCTION / RESPONSIBLE AGENCY: DDR 147,248 DIH 22,217 11,3 DS 72,795 11,3 TOTAL 207831 4 290,507 11,1

N 1 2 2 2 2 4		FLORIDA	FLORIDA DEPARTMENT OF TRANSPORTATION OFFICE OF WORK PROGRAM ====================================	RANSPORTATION PROGRAM ET ====		DATE RUN: 07/24/2013 TIME RUN: 13.13.50 MBRSTIP-1	07/24/2013 : 13.13.50 MBRSTIP-1
6 ITEM NUMBER:210020 6 DISTRICT:02 ROADWAY ID:76030000	PROJECT DESCRI	IPTION:SR 15 (US 17) FRO COUNTY:PUTNAM PROJECT	17) FROM SR 100 TO : PUTNAM PROJECT LENGTH:	.934MI	TYPE OF WORK:LA LANES EXIS	OF WORK:LANDSCAPING LANES EXIST/IMPROVED/ADDED:	*SIS* 0: 4/ 0/ 0
FUND CODE	LESS THAN 2014	2014	2015	2016	2017	GREATER THAN 2017	ALL YEARS
FEDERAL PROJECT NUMBER:	<n a=""></n>						
PHASE: PRELIMINARY DIH	NY ENGINEERING / 7,639	' RESPONSIBLE AGENCY: Managed 2,545	γď	FDOT 0	0	0	10,184
PHASE: DESIGN BUILD DDR DIH TOTAL <n a=""> TOTAL 210020 6</n>	/ RESPONSIB 140,670 1,759 150,068 150,068	LE AGENCY: Managed by FDOT 17,516 20,061 20,061	oy FDOT 0 0	0000	0000	0000	140,670 19,275 170,129 170,129
ITEM NUMBER:210024 1 DISTRICT:02 ROADWAY ID:76050000	PROJECT DESCRI	IPTION:SR 20 FROM ALACHUA C/L COUNTY:PUTNAM PROJECT LENGI	TO IH:	CR 315 IN INTERLACHEN TY 10.785MI	PE OF WOR LANES	OF WORK:PD&E/EMO STUDY LANES EXIST/IMPROVED/ADDED:	*SIS* 0: 3/ 2/ 0
FUND CODE	LESS THAN 2014	2014	2015	2016	2017	GREATER THAN 2017	ALL YEARS
FEDERAL PROJECT NUMBER:	ßR: <n a=""></n>						
PHASE: P D & E / DDR DIH DS DS	/ RESPONSIBLE AGE 8,343 573,165 112,839	AGENCY: Managed by FDOT 8,874 0	10 0 0 0	000	000	000	8,343 582,039 112,839
PHASE: PRELIMINARY DIH TOTAL <n a=""> TOTAL 210024 1</n>	Y ENGINEERING / 11,420 705,767 705,767	<pre></pre>	AGENCY: Managed by FI 0 0	FDOT 0 0	000	000	11,420 714,641 714,641

24/2013 2.13.50 5TTP-1	*SIS* *SIS* RUCT 2/2/2	ALL YEARS		322,441	201,664 565,200	19,900,804 1,687,636 10,000	3,600,000	52,741,962	918,000 79,947,707 79,947,707	
DATE RUN: 07/24/2013 TIME RUN: 13.13.50 MBRSTIP-1	<pre>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	GREATER THAN 2017		0	00	0 19, 345,670 1,	3,600,000 3,	52,741,962 52,	0 56,687,632 56,687,632 79,	
	OF WORK: ADD LAN LANES EXIST/IMF			0	00		0 3,60	0 52,74		
NC	TYPE	2017				12,087,527 997,008			0 13,084,535 13,084,535	
TRANSPORTATIC PROGRAM ORT ===== ====		2016		0	FDOT 0	5,000,000 254,620 0	0	0	918,000 6,172,620 6,172,620	
FLORIDA DEPARTMENT OF TRANSPORTATION OFFICE OF WORK PROGRAM STIP REPORT ================ HIGHWAYS ================		2015		TC 0	Y: Managed by 0 0	by FDOT 2,813,277 84,409 0	anaged by FDOT 0	by FDOT 0	by FDOT 2,897,686 2,897,686	
FLORIDA	IPTION:SR 20 FROM ALACHUA C/L TO COUNTY: PUTNAM PROJECT LENGTH:	2014		<i>l</i> : Managed by FDOT 0	RESPONSIBLE AGENCY: Managed by FDOT 28,614 0	LE AGENCY: Managed by FDOT 0 2,813.7 0 84.7 3,615	RESPONSIBLE AGENCY: Managed by 0	LE AGENCY: Managed by 0	AGENCY: Managed 0 32,229 32,229	
	PROJECT DESCRIPTI	LESS THAN 2014	<n a=""></n>	/ RESPONSIBLE AGENCY: Managed 322,441	-	/ RESPONSIB 0 5,929 6,385	& UTILITES / RESPON 0	CONSTRUCTION / RESPONSIBLE P ACNP 0	PHASE: ENVIRONMENTAL RESPONSIBLE AGBNCT: Managed by FDOT ACNP 0 0 0 0 0 2,997,61 L ANA> 1,073,005 32,229 2,897,61 2,897,61 L 210024 1,073,005 32,229 2,897,61 2,751 2,897,61	
	4	FUND CODE	FEDERAL PROJECT NUMBER:	PD&E DI	PHASE: PRELIMINARY ENGINEERING DIH 173,050 DS 565,200 DS	PHASE: RIGHT OF WAY ACNP DIH DS	PHASE: RAILROAD & U ACNP		ENVIRONMENTA ACNP 124 4	
PAGE 463	ITEM NUMBER:210024 DISTRICT:02 ROADWAY ID:76050000		EDERAL PR	PHASE:	PHASE:	PHASE:	PHASE:	PHASE:	PHASE: ENV AC TOTAL <n a=""> TOTAL 210024 4</n>	

DATE RUN: 07/24/2013 TIME RUN: 13.13.50 MBRSTIP-1	*SIS* *SIS* RECONSTRUCT D/ADDED: 2/ 2/ 2	ALL YEARS		305,078	18,053 208,304 470,262	732,944	3,450,000	35,047,164	250,000 40,481,805		12,541,671 913,731 254 623	13,710,085 54,191,890	
DATE RUN TIME R	ACHEN * * * * * * * * * * * * * * * * * * *	GREATER THAN 2017		0	000	0	3,450,000	35,047,164	250,000 38,747,164		000	0 38,747,164	
	5 IN INTERLACHEN TYPE OF WORK LANES E	2017		0	000	0	0	0	00		4,931,429 0	4,931,429 4,931,429	
FLORIDA DEPARTMENT OF TRANSPORTATION OFFICE OF WORK PROGRAM STIP REPORT ====================================	TO CR 315 IN IN 3.431MI	2016		0	FDOT 0	41,180	0	0	41,180		7,352,085 0	7,393,265	
DA DEPARTMENT OF TR OFFICE OF WORK PR STID REPORT ======== HIGHMAYS	0 FROM SW 56TH AVENUE COUNTY: PUTNAM PROJECT LENGTH:	2015		FDOT 0	AGENCY: Managed by 0 8,555	d by FDOT 627,519	Managed by FDOT 0	d by FDOT 0	ed by FDOT 636,074		d by FDOT 258,157 913,731	1,171,888 1,807,962	
FLORI	PROJECT DESCRIPTION:SR 20 FROM SW 56TH AVENUE COUNTY:PUTNAM PROJECT LENGTH:	2014		NCY: Managed by 0	RESPONSIBLE AGE 0 2,811 0	E AGENCY: Managed 64,245	PONSIBLE AGENCY: 0	E AGENCY: Managed 0	LE AGENCY: Manag 0 67,056		E AGENCY: Managed 0 251 £23	254,603 254,683 321,739	
	PROJECT DESCRI	LESS THAN 2014	3R: <n a=""></n>	<pre>E / RESPONSIBLE AGENCY: Managed by FDOT 305,078</pre>	PRELIMINARY ENGINEERING / DDR 18,053 DIH 205,493 DS 461,707	/ RESPONSIBL	& UTILITES / RESI 0	CONSTRUCTION / RESPONSIBL	PHASE: ENVIRONMENTAL / RESPONSIBLE AGENCY: Managed by FDOT ACNP 0 0 0 0 L <n a=""> 990,331 67,056 636,0</n>	3R: 4002 024 P	PHASE: RIGHT OF WAY / RESPONSIBLI ACNP DIS 0 0 0	990,331	
464	ITEM NUMBER:210024 5 DISTRICT:02 ROADWAY ID:76050000	FUND CODE	FEDERAL PROJECT NUMBER:	PHASE: P D & E / DI	PHASE: PRELIMINAF DDR DIH DS DS	PHASE: RIGHT OF WAY DIH	PHASE: RAILROAD & ACNP	PHASE: CONSTRUCTI ACNP	lase: environmen acnp <n a=""></n>	FEDERAL PROJECT NUMBER:	ASE: RIGHT OF V ACNP DIS CA	TOTAL 4002 024 P TOTAL 210024 5	
PAGE	ITEM N DISTRI ROADWA		FEDERA	Ηđ	Ħď	Hđ	Hđ	Hđ	PH TOTAL	FEDERA	Hd	TOTAL TOTAL	



Environmental Assessment, SR-20, Alachua and Putnam Counties

MAP ID	FACILITY	DESCRIPTION	2019	2020	2021	2022	2023	TOTAL DISTRICT MANAGED	TOTAL STATE MANAGED	TOTAL Local Funds	PD&E	Ы
229383 F	FC OUTER BELTWAY FROM SR 15 (US 17) TO SR 21	New Road	\$247	\$0	\$0	\$0	\$0	\$0	\$247			
130012 I	-10 (SR 8) FROM WEST OF CR 125 TO W.OF SR 121 (6-LANING)	Project Development & Environme	\$5,085	\$0	\$0	\$0	\$0	\$5,085	\$0			•
	-10 (SR 8) FROM WEST OF SR 121 TO NASSAU C/L (MANAGE LN)	Add 2 Lanes to build 6 Lanes	\$4,005	\$0	\$0	\$0	\$0	\$4,005	\$0			•
	-10 (SR 8) FROM NASSAU/DUVAL C/L TO US 301 (MANAGED LANE)	Add 2 Lanes to build 6 Lanes	\$2,669	\$0	\$0	\$0	\$0	\$2,669	\$0			•
	-10 (SR 8) FROM BAKER C/L TO DUVAL C/L (6 LANING)	Project Development & Environme		\$0	\$0	\$0	\$0	\$231	\$0			•
	-295 (SR 9A) FROM SOUTHSIDE CONNECTOR TO SR 202 JTB	Add 2 Lanes to build 6 Lanes	\$10,038	\$0	\$0	. ,	\$0	\$13,038	\$22,489			•
	SR 20 FROM ALACHUA C/L TO SW 56TH AVENUE	Add 2 Lanes to build 4 Lanes	\$56,342	\$0	\$0	\$0	\$0	\$0	\$56,342			-
	SR 20 FROM SW 56TH AVENUE TO CR 315 IN INTERLACHEN	Add 2 Lanes to build 4 Lanes Modify Interchange	\$38,747	\$0 \$0	\$0	\$0 \$660	\$0 \$0	\$0 \$660	\$38,747		•	•
	SR 200 (A1A) @ US17/CR 107/CHESTER RD. SR 200 (A1A) FROM I-95 TO W.OF STILL QUARTERS RD	Add 2 Lanes to build 6 Lanes	\$0 \$286	\$0	\$0 \$0	\$000	\$0	\$000	\$0 \$0		-	-
	SR 200 (US301) FROM SOUTH OF BALDWIN TO NO.OF BALDWIN (BYPASS)	New Road	\$200	\$0	\$869	\$57,772	\$0	\$200	\$58,640			-
	SR 26 CORRIDOR FROM GILCHRIST C/L TO CR 26A E OF NEWBERRY	New Road	\$5,008	\$25,981	\$0	\$0	\$0	\$5,008	\$25,981			•
		ANNUAL TOTALS	\$122,658	\$25,981	\$869	\$83,921	\$0	\$30,982	\$202,446			

Environmental Assessment, SR-20, Alachua and Putnam Counties



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