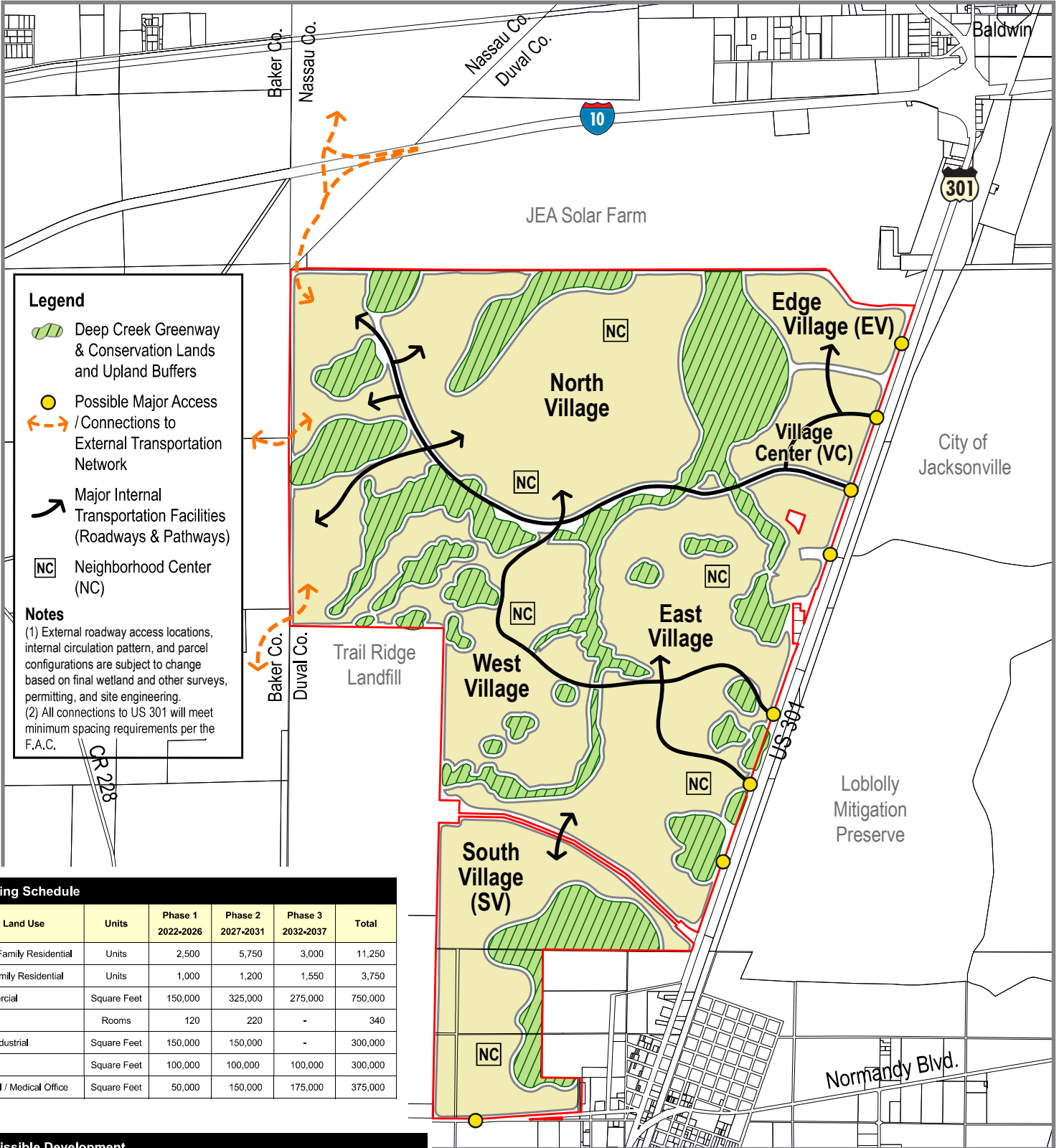


301 Villages

Conceptual Master Plan



Phasing Schedule					
Land Use	Units	Phase 1 2022-2026	Phase 2 2027-2031	Phase 3 2032-2037	Total
Single Family Residential	Units	2,500	5,750	3,000	11,250
Multi-family Residential	Units	1,000	1,200	1,550	3,750
Commercial	Square Feet	150,000	325,000	275,000	750,000
Hotel	Rooms	120	220	-	340
Light Industrial	Square Feet	150,000	150,000	-	300,000
Office	Square Feet	100,000	100,000	100,000	300,000
Hospital / Medical Office	Square Feet	50,000	150,000	175,000	375,000

Permissible Development							
Land Use	Single Family (Units)	Multi-family (Units)	Commercial (Sq. Feet)	Office (Sq. Feet)	Flex Industrial (Sq. Feet)	Hotel (Rooms)	Hospital/Medical (Sq. Feet)
Total	11,250	3,750	750,000	300,000	300,000	340	375,000
Edge Village		•	•		•		
Village Center	•	•	•	•	•	•	•
West Village	•	•	•	•	•		
North Village	•	•	•	•			
East Village	•	•	•	•		•	
South Village	•	•			•		

• Denotes land use is permissible within the village

November 2, 2021



PROSSER

Permissible Development							
Land Use	Single Family (Units)	Multi-family (Units)	Commercial (Sq. Feet)	Office (Sq. Feet)	Flex Industrial (Sq. Feet)	Hotel (Rooms)	Hospital/ Medical (Sq. Feet)
Total	11,250	3,750	750,000	300,000	300,000	340	375,000
Edge Village		•	•		•		
Village Center	•	•	•	•	•	•	•
West Village	•	•	•	•	•		
North Village	•	•	•	•			
East Village	•	•	•	•		•	
South Village	•	•			•		

- Denotes land use is permissible within the village

Phasing Schedule					
Land Use	Units	Phase 1 2022-2026	Phase 2 2027-2031	Phase 3 2032-2036	Total
Single Family Residential	Units	2,500	5,750	3,000	11,250
Multi-family Residential	Units	1,000	1,200	1,550	3,750
Commercial	Square Feet	150,000	325,000	275,000	750,000
Hotel	Rooms	120	220	-	340
Light Industrial	Square Feet	150,000	150,000	-	300,000
Office	Square Feet	100,000	100,000	100,000	300,000
Hospital / Medical Office	Square Feet	50,000	150,000	175,000	375,000

Notes:

- (1) Unused development rights from a particular phase carry over into the subsequent phase until build-out.
- (2) The Developer shall be permitted to convert between land uses based on the conversion table contained in the PUD-MU that allows for the exchange of land uses based upon trip generation for each land use.

The entire Property shall be subject to a PUD-MU district that will provide the land use controls for the distribution, location, densities, and intensities of permissible residential and non-residential development. Incremental development plans shall be submitted for individual portions of the 301 Villages in conjunction with corresponding construction plans. These plans must demonstrate consistency with the Conceptual Master Plan and compliance with all sections of the PUD-MU district subject to the City’s PUD verification process.

In the event future development plans necessitate revising the Conceptual Master Plan, an amendment may be sought by the owner of the parcel which is the subject of the amendment but only with the written consent of the Master Developer of Record. Amendment to the adopted PUD-MU district may be accomplished through either an administrative modification, minor modification to the PUD, or by filing an application for rezoning as authorized by the PUD-MU or by Section 656.341 of the *Zoning Code*.

Conservation areas are shown as generalized areas on the Conceptual Master Plan and are subject to final design, road crossings, surveys and permitting. A key element of the Conceptual Master Plan is the preservation and enhancement of the Deep Creek Swamp and its tributaries. To protect water quality and preserve natural wetland functions, the Developer shall maintain a minimum fifteen (15) foot-wide upland buffer between developed areas contiguous to Category I and II Wetlands, except for those circumstances where an averaging of the buffer width, because of an unavoidable buffer reduction, achieves a greater overall upland buffer width.

The Developer shall provide a site within the Property to serve the water and sewer service needs of 301 Villages for potable water and wastewater. Centralized utilities for water and sewer service will be provided by a utility service system authorized by law. The projected water and wastewater demand are specified below. Prior to the commencement of Phase 1 development, the City shall amend its Water Supply Facilities Work Plan to identify phased facilities to provide water and wastewater service for 301 Villages.

	Potable Water Demand (MGD)	Non-Potable Water (Irrigation) Demand (MGD)	Total Water Demand (MGD)	Total Wastewater Generation (MGD)
Phase 1	0.937	0.547	1.483	1.013
Phases 1 & 2	2.787	1.742	4.529	3.053
Build-out	4.017	2.441	6.458	4.369

To create a mobility-friendly community, the project’s transportation network will accommodate the intensity and density of development that is interconnected through a network of pedestrian amenities and roadway network. The plan seeks to reduce the travel distance necessary for day-to-day activities. The plan consists of Villages, and a larger mix-use Village Center. Each Village will have multiple residential neighborhoods connected to one or more Neighborhood Centers that will support the Villages. The Villages will be linked to the Village Center by roadways and a pedestrian system consisting of sidewalks and multi-purpose paths. The major parkways(s) from US 301 will access all the Villages as well as the Village Center. The parkways(s) will include a multi-purpose pathway on one side with an extensive street tree and landscape treatment.

Coordination will continue with the FDOT and the City pursuant to the letter dated July 7, 2021 (attached). The Applicant conducted a traffic impact assessment dated September 2, 2021 (attached) of the existing and expected roadway operating conditions of the immediately surrounding transportation network for the Conceptual Master Plan. The methodologies and assumptions were agreed upon by the City and FDOT.

Coordination will continue with the FFWCC pursuant to the letter dated January 21, 2021 (attached) providing technical assistance information in the design of the Conceptual Master Plan and for future project planning.

Traffic Monitoring Reports

The Master Developer, his successor or assigns, shall be responsible for preparing a Traffic Monitoring Report (the "TMR") for the entire Subject Property biennially (every two years) until build-out. The TMR shall be provided to the City of Jacksonville Planning and Development Department (the "PDD") and Florida Department of Transportation, District 2 Urban Office (the "FDOT"). The TMR shall assess the traffic generated by all development located within the Subject Property, not any individual portion or section.

The first TMR shall be commenced no later than twenty four (24) months from the commencement of Phase 1. All subsequent TMRs shall be due on March 1 biennially thereafter. The following information shall be included in each TMR:

- (i) A description of current development by land use, type, location, number of residential units, and amount of square footage of non-residential, together with the proposed construction schedule for the ensuing reporting period, including AM, PM and Daily trip generation, any applicable trip conversions and all corresponding maps.
- (ii) Traffic counts, turning movements, signal warrants and actual levels of service for the past twenty-four (24) months and projected for the ensuing 24 months, including AM and PM peak hour traffic volume estimates for all internal roads and intersection as well as the following external roads and intersections. Intersection Control Evaluation will be required for all connections of significant impact to the State roadway system. The TMR will distinguish between project-related traffic and total traffic volumes:

Road Segments:

- US 301 from Primary Entrance to Subject Property to Interstate 10
- US 301 from Primary Entrance to Subject Property to SR 228/Normandy Boulevard
- Interstate 10 from US 301 to SR 228/Fifth Street (in Macclenny)
- Interstate 10 from US 301 to SR 23 (First Coast Expressway)
- Interstate 10 from SR 23 (First Coast Expressway) to Chaffee Road
- Interstate 10 from Chaffee Road to Hammond Boulevard/Greenland Avenue
- Interstate 10 from Hammond Boulevard/Greenland Avenue to Interstate 295

Intersections:

- Project entrance(s) at US 301
- US 301 at Interstate 10 interchange

Note: Actual FDOT traffic counts will be used where possible. If actual FDOT counts are not available for a particular road or intersection, the Master Developer, his successors or assigns, will retain, at its expense, a traffic engineering firm to collect the necessary counts. FDOT seasonal adjustment factors will be used when adjusting traffic counts.

- (iii) Based upon the results of Section (ii), the TMR will identify new and/or improved roadways, traffic control devices, pedestrian facilities or other transportation facility improvements to be constructed or provided by Developer or governmental entity to accommodate the total existing and anticipated traffic demands. Roadway and/or intersection improvement options will be evaluated for consideration and discussed between FDOT, PDD and the Master Developer.
 - i. When a roadway/and or intersection improvement project has been identified for an "immediate need" (within the next TMR period) the Master Developer will prepare a

Participation Agreement for execution between the Master Developer, FDOT and the City, that defines: the scope of the proposed work, estimated cost, determination of proportionate impacts (pursuant to the most recent TMR), funding arrangements, and the timing of future improvements.

- ii. Transportation improvements that are the responsibility of the Master Developer must be constructed/or funded by the time indicated in the subsequent TMR in order to obtain additional building permits from the City.

US 301 Villages Conversion Factor Table

Created 10/7/2021

LUC	Description	Converting To						
		Lt Industrial	SF Residential	Mid Apt/Condo	Hotel	Hospital	Gen Office	Commercial
Converting From	110 General Light Industrial	1.00000	0.39633	0.76051	0.45030	0.25872	0.21550	0.09240
	210 Single Family Residential	2.52315	1.00000	1.91887	1.13617	0.65279	0.54373	0.23314
	221 Mid-Rise Apartment/Condo	1.31491	0.52114	1.00000	0.59210	0.34020	0.28336	0.12150
	310 Hotel	2.22075	0.88015	1.68890	1.00000	0.57456	0.47856	0.20520
	610 Hospital	3.86517	1.53188	2.93949	1.74048	1.00000	0.83293	0.35714
	710 General Office	4.64045	1.83915	3.52909	2.08958	1.20058	1.00000	0.42878
	820 Shopping Center	10.82247	4.28928	8.23057	4.87333	2.80000	2.33220	1.00000

LUC	Land Use Type	Proposed	Units	Min	Max	Trip Rate
110	General Light Industrial	300,000	1000 SF GFA	0	600,000	0.29667
210	Single Family Residential	11,250	DU	5,625	11,250	0.74853
221	Mid-Rise Apartment/Condo	3,750	DU	1,875	3,750	0.39009
310	Hotel	340	Room	0	680	0.65882
610	Hospital	375,000	1000 SF GFA	0	750,000	1.14667
710	General Office	300,000	1000 SF GFA	150,000	600,000	1.37667
820	Shopping Center	750,000	1000 SF GLA	375,000	1,500,000	3.21067

Example:

To convert 50 Single Family Residential Dwelling Units to Shopping Center, multiply $50 * 0.23314 = 11,657$ SF
 Check: $(50 * 0.74853) = 37$ PHT $(11,657 * 3.21067) = 37$ PHT

Source: PM Peak Hour Rates and Equations, "Trip Generation", 11th Edition, ITE.

Based on no ITE pass-by or internal capture reduction.

Note: After conversion, revise the Trip Generation calculation using ITE pass-by and internal capture reduction for the entire development.



Florida Department of Transportation

RON DESANTIS
GOVERNOR

2198 Edison Avenue MS 2806
Jacksonville, FL 32204-2730

KEVIN J. THIBAUT, P.E.
SECRETARY

July 7, 2021

Kristen Reed, Chief
Community Planning Division
City of Jacksonville
214 North Hogan Street
Edward Ball Building, Suite 300
Jacksonville, FL 32202

SUBJECT: City of Jacksonville Proposed Comprehensive Plan Amendment (20-16ESR)

Dear Ms. Reed,

Per your request, this letter serves as documentation that I did speak with Prosser, Inc regarding the traffic analysis requirements for the above-mentioned Comprehensive Plan Amendment. Per the City's standard procedures for the Mixed Use land use, within one year of adoption of L-5457-20A, a traffic impact assessment will be required and initiated as part of the conceptual master plan. The assessment will include analysis of existing and expected roadway operating conditions of the immediately surrounding transportation network impacted by the development outlined in the Detailed Conceptual Master Plan. The analysis will also include identification of the major internal transportation facilities necessary to serve the future land uses and how the major internal roadways will connect to the external transportation network. Identification of methodologies and assumptions shall be agreed upon by the City and FDOT and the analysis shall be completed within 3 years after it begins.

Thank you.

If you have any questions, please do not hesitate to contact me by email:
brian.austin@dot.state.fl.us or call: (904) 360-5664.

Sincerely,

A handwritten signature in blue ink that reads "Brian Austin". The signature is written in a cursive, slightly slanted style.

Brian Austin
Transportation Planner
FDOT District Two

Improve Safety, Enhance Mobility, Inspire Innovation
www.fdot.gov

1



**Florida Fish
and Wildlife
Conservation
Commission**

Commissioners
Rodney Barreto
Chairman
Coral Gables

Michael W. Sole
Vice Chairman
Tequesta

Steven Hudson
Fort Lauderdale

Gary Lester
Oxford

Gary Nicklaus
Jupiter

Sonya Rood
St. Augustine

Robert A. Spottswood
Key West

Office of the
Executive Director
Eric Sutton
Executive Director

Thomas H. Eason, Ph.D.
Assistant Executive Director

Jennifer Fitzwater
Chief of Staff

Division of Habitat and
Species Conservation
Melissa Tucker
Director

(850) 488-3831
(850) 921-7793 FAX

Managing fish and wildlife
resources for their long-
term well-being and the
benefit
of people.

620 South Meridian Street
Tallahassee, Florida
32399-1600
Voice: 850-488-4676

Hearing/speech-impaired:
800-965-8771 (T)
800-965-8770 (V)

MyFWC.com

January 21, 2021

Kristen Reed
City of Jacksonville
214 North Hogan Street
Edward Ball Building, Suite 300
Jacksonville, FL 32202
kreed@coj.net

Re: Duval-Jacksonville 20-16ESR (2020-598-E), Comprehensive Plan Amendment

Dear Ms. Reed:

Florida Fish and Wildlife Conservation Commission (FWC) staff reviewed the above-referenced comprehensive plan amendment package and provides the following comments and recommendations for your consideration in accordance with Chapter 163.3184, Florida Statutes. While there are no objections to the amendment, the following technical assistance information is provided to assist the Department of Economic Opportunity, the County, and any applicants during the amendment review and future project planning.

Project Description

This amendment would result in a change to the Future Land Use Map of the City of Jacksonville Comprehensive Plan wherein approximately 7,002 acres of lands currently designated as Agriculture-1, Agriculture-2, and Agriculture-3 will be designated as Multi-Use. This amendment would allow for a planned mixed-use development consisting of 11,250 single family residences, 3,750 multi-family residences, 340 rooms of hotel/lodging, 750,000 square feet of commercial, 300,000 square feet of office, 300,000 square feet of light industrial, and 375,000 square feet of hospital. The project area is located west of and adjacent to US 301 and approximately 1.3 miles south of the US 301 and I-10 interchange. The dominant land covers on the site consist of coniferous plantation (3,573.7 acres), mixed hardwood coniferous swamps (1,018.2 acres), hydric pine flatwoods (917.3 acres), improved pasture (386.5 acres), field crops (314.1 acres), and mixed wetland hardwoods (284.2 acres).

Potentially Affected Resources

A *Listed Wildlife and Habitat Assessment Report* (September 2020) by LG2 Environmental Solutions, Inc. was provided in support of the application. Following a review of online databases, general wildlife surveys were conducted on the project area on September 3-4, 2020, to assess the potential presence of listed and managed wildlife and their associated habitats. Field surveys confirmed the presence of the bald eagle (*Haliaeetus leucocephalus*) and Florida sandhill crane (*Antigone canadensis pratensis*, State Threatened [S1]) on-site. The potential for the following species was also addressed:

Kristen Reed
Page 2
January 21, 2021

- Gopher tortoise (*Gopherus polyphemus*, ST),
- Florida sandhill crane (*Antigone canadensis pratensis*, ST),
- Black Creek crayfish (*Procambarus pictus*, ST)
- Eastern indigo snake (*Drymarchon corais couperi*, Federally Threatened [FT])
- Frosted flatwoods salamander (*Ambystoma cingulatum*, FT)
- Red-cockaded woodpecker (*Picoides borealis*, Federally Endangered)
- Wood stork (*Mycteria americana*, FT)
- Rufa red knot (*Calidris canutus rufa*, FT)

FWC staff conducted a geographic information system analysis of the project area which found that the project area is also located near, within, or adjacent to:

- Potential habitat for state-listed species:
 - Little blue heron (*Egretta caerulea*, ST)
 - Tricolored heron (*Egretta tricolor*, ST)
- Potential habitat for the Florida black bear (*Ursus americanus floridanus* – North Bear Management Unit)

Comments and Recommendations

Gopher Tortoise

The project area has potential habitat for the gopher tortoise and FWC has issued approximately 40 gopher tortoise relocation permits within 2 miles of the project site. The applicant should refer to the FWC's Gopher Tortoise Permitting Guidelines (Revised July 2020) (<http://www.myfwc.com/license/wildlife/gopher-tortoise-permits/>) for survey methodology and permitting guidance prior to any development activity. Specifically, the permitting guidelines include methods for avoiding impacts as well as options and state requirements for minimizing, mitigating, and permitting potential impacts of the proposed activities. If you have any questions regarding gopher tortoise permitting, please contact Eric Seckinger by phone at (850) 921-1029 or at Eric.Seckinger@MyFWC.com.

Florida Sandhill Crane

The applicant's consultants observed Florida sandhill cranes during the site assessment, which occurred outside of the nesting season. The improved pasture and field crops on-site may provide foraging habitat for Florida sandhill crane and the scrub-shrub wetlands and marshes on-site may provide potential nesting habitat for this species. FWC staff recommends that surveys for nesting Florida sandhill cranes be conducted prior to construction activities and during the December through August breeding season. If construction occurs over several years, it may be necessary to conduct surveys each year as Florida sandhill cranes do not nest in the same location every year. If active nests are identified on-site, the Florida Sandhill Crane Species Conservation Measures and Permitting Guidelines recommend that the nest site be buffered by 400 feet to avoid disturbance by human activities. If nesting is discovered after construction has begun or

Kristen Reed
Page 3
January 21, 2021

if maintaining the recommended buffer is not possible, the applicant can contact FWC staff identified below to discuss potential permitting needs. Additional information and guidance for conducting Florida sandhill crane surveys can be found in the Florida Sandhill Crane Species Conservation Measures and Permitting Guidelines (<https://myfwc.com/media/11565/final-florida-sandhill-crane-species-guidelines-2016.pdf>).

State-listed Wading Birds

The potential exists for wading bird nesting activity in the wetlands on the project site. FWC staff recommends that specific surveys be conducted for wading birds in potential nesting areas prior to the commencement of any clearing, grading, or filling activities. Surveys should be conducted during their breeding season, which extends from March through August. Additional information and guidance for conducting surveys can be found in the Species Conservation Measures and Permitting Guidelines for state-threatened wading birds (<https://myfwc.com/media/18634/threatenedwadingbirds-guidelines.pdf>). If there is evidence of nesting during this period, FWC staff recommends that any wading bird nest sites be buffered by 100 meters (330 feet) to avoid disturbance by human activities. If nesting is discovered after site activities have begun, if the removal or trimming of trees with active nests is unavoidable, or if maintaining the recommended buffer is not possible, the applicant may contact the FWC staff identified below to discuss potential permitting alternatives.

This project may create or maintain appropriate habitat for wading birds on-site and the following guidelines may be used to help enhance this habitat within the development:

- Maintain vegetated visual buffers around nesting colonies and feeding areas to protect birds from human disturbance,
- Include islands with suitable nesting habitat when constructing new ponds,
- Leave shrubs around the edges of ponds to provide nesting and foraging habitat and for bank stabilization, and
- Minimize fertilizer, herbicide, and pesticide runoff into wetlands.

Black Creek Crayfish

Black Creek crayfish inhabit freshwater streams nearby in Duval and Clay Counties. Specifically, there have been 16 documented observations of the species within 5 miles of the project site and the species could also be found within Deep Creek, a stream that is present within the project area. The Black Creek crayfish requires perennial streams that have cool, highly oxygenated water, sufficient streamside vegetation for cover and food, and canopy to regulate water temperature. The presence of vegetation within and along creek banks as well as tree roots and submerged detritus are important shelter and food sources for the crayfish. This species is particularly susceptible to pollution, changes in water temperature, siltation, and other changes in water quality. FWC staff recommends dipnet surveying for Black Creek crayfish if construction activities have the potential to impact areas of suitable habitat within Deep Creek. If Deep Creek is found to have the Black Creek crayfish or suitable habitat, FWC staff recommends the applicant refer to the 2018 Species Conservation Measures and Permitting Guidelines for the Black Creek Crayfish (<https://myfwc.com/media/11560/black-creek-crayfish-guidelines.pdf>).

Kristen Reed
Page 4
January 21, 2021

Florida Black Bear

The FWC has received 31 reports of human-bear conflicts within a 5-mile radius of the project site since 2002. Florida black bears are common in this area which is within the North Bear Management Unit identified in the 2019 Bear Management Plan. While black bears tend to shy away from people, they are adaptable and will take advantage of human-provided food sources. This includes sources that are currently available near this site, sources that may be available during construction, and sources available after construction, including unsecured garbage, pet food, and bird seed. Once bears become accustomed to finding food around people, their natural wariness is reduced to the point that there can be an increased risk to public safety or private property.

Proactive planning may help prevent or reduce future conflicts with bears. Site designs for larger developments should locate conservation areas along the borders of developed areas to avoid encouraging bears to forage within developed areas (<http://myfwc.com/wildlifehabitats/managed/bear/crossings/>). If a homeowners' association or community covenants are planned, by-laws that would require residents to take measures to prevent attracting bears into the neighborhood are recommended. Sample by-law language used by other Florida communities is available at (<http://myfwc.com/wildlifehabitats/managed/bear/living/community-group/bylaw/>).

During construction, construction sites should be kept clean, with refuse that might attract bears kept separate from construction debris and stored securely in bear-resistant containers or removed daily from the construction site before dark. Refuse that might attract bears includes all food and drink-related materials, as well as any items with strong scents like cleaning agents. Once the development is completed, residents should be provided with bear-resistant garbage cans as part of their regular waste service, and any larger waste storage containers should also be bear-resistant. Providing residents with information on how to avoid human-bear conflicts is also recommended. This information can include:

- Options for keeping garbage secure can include using bear-resistant garbage containers, modifying regular containers to be bear-resistant, or keeping containers secure in a garage or sturdy shed and then placing garbage on the curb the morning of pick-up rather than the night before (<http://myfwc.com/wildlifehabitats/managed/bear/living/attractants/>);
- Removing bird and wildlife feeders, or modifying them to exclude bears (<http://myfwc.com/wildlifehabitats/managed/bear/wildlife-feeders/>);
- Using electric fencing to secure outdoor attractants like fruiting trees/shrubs, gardens, compost, and small livestock (<https://myfwc.com/media/1886/electricfence.pdf>);
- Proper composting in bear range (<https://myfwc.com/media/1888/howtocompostinbearcountry.pdf>);
- Keeping pets safe (<https://myfwc.com/wildlifehabitats/wildlife/bear/living/protect-pets/>); and
- Cleaning and securing barbecue grills.

Kristen Reed
Page 5
January 21, 2021

Information should also include guidelines for how residents should respond to bears in the area, such as

- What to do if they encounter a bear, whether from a distance or at close range,
- How to keep pets and livestock safe in bear range, and
- When and how to contact the FWC regarding a bear issue.

FWC staff is available to assist with residential planning to incorporate the above features. Additional information about Florida black bears can be found on FWC's website at <http://www.myfwc.com/wildlifehabitats/managed/bear>.

Conceptual Master Plan

Based on discussions with the City of Jacksonville staff, the applicant will be required by the Comprehensive Plan to produce a conceptual master plan prior to the start of development. FWC staff provide technical assistance during development of master plans throughout Florida to avoid, minimize, or mitigate for any potential impacts to federally or state-listed species. Early coordination can also reduce the need for listed species permitting. To initiate coordination with FWC regarding the conceptual master plan, the applicant may submit a request to ConservationPlanningServices@MyFWC.com.

Lakes and Ponds

Based on the type of development proposed within the application, the applicant will likely create or modify several lakes and ponds for stormwater management, to support conservation lands, or for resident use. The creation of these waterbodies could provide potential wildlife habitat as well as a recreational area for fishing and wildlife viewing. Ponds can be managed for both fish production and wildlife habitat, including wading birds and waterfowl. Pond construction at a 3:1 slope to two (2) feet below normal water levels and with the slope seeded and mulched to minimize erosion is ideal for wildlife use. The addition of native wetland plants along this gradual slope could provide a vegetated littoral fringe which could increase the habitat value of the site and possibly provide foraging or nesting areas for several wading bird species. Littoral fringe habitat may also provide spawning habitat for fish which would enhance future recreational fishing opportunities for the community. FWC staff recommend a commitment to long-term maintenance and development of a plan for managing exotic invasive plant species that can significantly degrade habitat values and impact ponds, wetlands and nearby natural areas. The Florida Wildlife Conservation Guide provides more information on this topic with suggested guidelines for construction and management of stormwater ponds (<http://myfwc.com/conservation/you-conserve/recreation/pond-management/>).

Federal Species

This site may also contain habitat suitable for the federally listed species identified above. FWC staff recommends that the applicant coordinates with the USFWS North Florida Ecological Services Office (ESO) as necessary for information regarding potential impacts to these species. The USFWS North Florida ESO can be contacted at (904) 731-3336 for additional information.

Kristen Reed
Page 6
January 21, 2021

FWC staff appreciates the opportunity to review these projects and will continue to be available to assist throughout the permitting process. For specific technical questions regarding the content of this letter, please contact Sean Greene at (386) 406-0814 or by email at Sean.Greene@MyFWC.com. All other inquiries may be directed to ConservationPlanningServices@MyFWC.com.

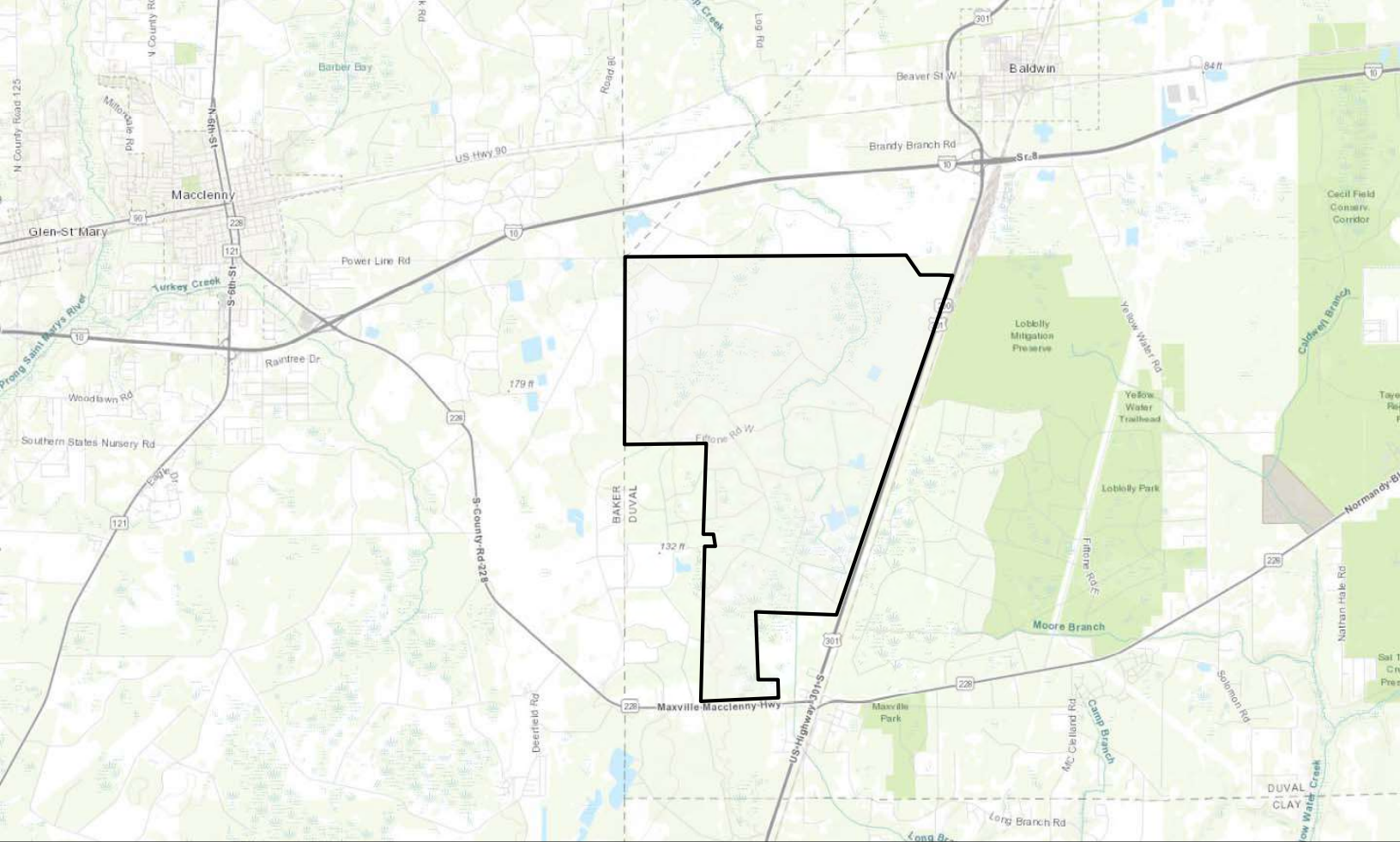
Sincerely,



Jason Hight
Land Use Planning Program Administrator
Office of Conservation Planning Services

jh/spg
Duval-Jacksonville 20-16ESR_43085_01212021

cc: Ray Eubanks, Florida Department of Economic Opportunity,
DCPexternalagencycomments@deo.myflorida.com



Prepared for:

301 Capital Partners

&



Prepared by:



Chindalur Traffic Solutions, Inc.
8833 Perimeter Park Boulevard, Suite 103
Jacksonville, FL 32216
904.619.3368

301 Villages

**Traffic Impact
Assessment**

Duval County, Florida

Project No.: 1138-210-039

Date: 09/02/2021

Revised On File

Page 13 of 154

Table of Contents

	Introduction	1
	Project Development Plan	1
	Study Area and Existing Conditions	2
	Trip Generation	2
	Future Background Traffic Volumes	3
	Project Traffic Distribution and Assignment	3
	Build-Out Conditions Roadway Segment Analysis	3
	Operational Analysis	4
	Summary and Conclusions	5
	Figures	
Figure 01	Location Map	
Figure 02	Year 2026 Phase 01 Development – Project Traffic Distribution and Assignment	
Figure 03	Year 2031 Phase 02 Development – Project Traffic Distribution and Assignment	
Figure 04	Year 2037 Phase 03 Development – Project Traffic Distribution and Assignment	
	Tables	
Table 01	Development Quantities and Project Schedule	
Table 02	Study Area Roadway Segments and Existing Conditions	
Table 03	Phase 01 Year 2026 Trip Generation	
Table 04	Phase 02 Year 2031 (Cumulative) Trip Generation	
Table 05	Phase 03 Year 2037 (Cumulative) Trip Generation	
Table 06	Study Roadway Segments – Future Background Traffic Volumes (AADTS)	
Table 07	Study Roadway Segments – Project Traffic Distribution and Daily Traffic Assignment	
Table 08	Year 2026 Phase 01 Development – Roadway Segment Analysis	
Table 09	Year 2031 Phase 02 Development – Roadway Segment Analysis	
Table 10	Year 2037 Phase 03 Development – Roadway Segment Analysis	
Table 11	Mobility Fee Calculations	
	Appendix	
Attachment A	301 Villages – Conceptual Site Plan (Source: Prosser, Inc.)	
Attachment B	Methodology Document	
Attachment C	FDOT Traffic Counts, LOS Summary Reports & Generalized Service Volume Tables	
Attachment D	Internal Capture Worksheets	
Attachment D1	Phase 01 Year 2026 Development Internal Capture Worksheets	
Attachment D2	Phase 02 Year 2031 Development Internal Capture Worksheets	
Attachment D3	Phase 03 Year 2037 Development Internal Capture Worksheets	
Attachment E	Socio-Economic Zdata Variables	
Attachment F	Travel Demand Model Plots	
Attachment F1	Year 2025 Travel Demand Model Plots	
Attachment F2	Year 2030 Travel Demand Model Plots	
Attachment F3	Year 2035 Travel Demand Model Plots	
Attachment G	FDOT D2 Long Range Cost Feasible Plan FY 2029 - 2045	

Introduction:

A mixed-use development anticipated to include 11,250 single-family dwelling units, 3,750 multi-family dwelling units, 750,000 SF commercial/retail, 340 rooms hotel, 300,000 SF light industrial, 300,000 SF office and 375,000 SF hospital/medical office uses is proposed for construction. The project will be built in three (3) phases. The proposed development will be located on the southwest quadrant of I-10 and US 301 interchange. Access to the proposed development will be provided via several driveways and roadways on US 301. **Figure 01** shows the location of the proposed development. A copy of the conceptual site plan provided by Prosser, Inc. is included as **Attachment A**.

The proposed development is seeking Concept Site Plan approved by the City of Jacksonville (COJ). A traffic study determining the project impacts on the roadway segments in the vicinity of the proposed development is required to be submitted to COJ for approvals. This traffic study is consistent with the methodology that was submitted to COJ and Florida Department of Transportation (FDOT) on 07/16/2021. A copy of the methodology is included as **Attachment B**.

Project Development Plan:

The proposed development is planned for construction in three (3) phases. **Table 02** shows a summary of the project phasing schedule.

Phase 01 development (2022 – 2026) is anticipated to include the following:

- 150,000 SF of General Light Industrial
- 2,500 Single-family Dwelling Units
- 1,000 Multi-family Dwelling Units
- 150,000 SF Commercial/Retail
- 100,000 SF Office
- 120 Rooms Hotel
- 50,000 SF Medical Office

Phase 02 (2027 – 2031) development is anticipated to include the following:

- 150,000 SF of General Light Industrial
- 5,750 Single-family Dwelling Units
- 1,200 Multi-family Dwelling Units
- 325,000 SF Commercial/Retail
- 100,000 SF Office
- 220 Rooms Hotel
- 150,000 SF Hospital/Medical Office

Phase 03 (2032 – 2037) development is anticipated to include the following:

- 3,000 Single-family Dwelling Units
- 1,550 Multi-family Dwelling Units
- 275,000 SF Commercial/Retail
- 100,000 SF Office
- 175,000 SF Medical Office

Study Area and Existing Conditions:

As discussed at the methodology meeting and included in the document, the study includes the following roadway segments.

- US 301 – South of Normandy Boulevard
- US 301 – Normandy Boulevard to I-10
- US 301 – I-10 to Beaver Street
- Normandy Boulevard – US 301 to CR 217
- Normandy Boulevard – CR 217 to Yellow Water Road
- Normandy Boulevard – Yellow Water Road to POW-MIA Memorial Parkway
- I-10 – West of Baker County Line
- I-10 – Baker County Line to Duval County Line
- I-10 – Duval County Line to US 301
- I-10 – US 301 to SR 23 (First Coast Expressway)
- I-10 – SR 23 (First Coast Expressway) to Chaffee Road
- I-10 – Chaffee Road to Hammond Boulevard
- I-10 – Hammond Boulevard to I-295

The existing conditions details of the above stated study segments were obtained from the FDOT Traffic Counts Online Portal and FDOT D2 LOS Manual. **Table 02** summarizes the existing conditions for the above stated roadway segments. The FDOT D2 LOS Manual provides the roadway segments adopted LOS Standard and the peak hour Maximum Service Volumes (MSVs). The corresponding Daily MSVs were obtained from the FDOT Q-LOS Generalized Standard Volumes Tables. **Attachment C** includes copies of the traffic counts data obtained from the FDOT Traffic Counts Online Portal, FDOT D2 LOS Manual and the FDOT Q-LOS Generalized Standard Volumes Tables.

Trip Generation:

Daily, AM peak and PM peak trip generation for the proposed development under each of the development phases was estimated using the rates and equations included in the Trip Generation Manual 10th Edition, published by the Institute of Transportation Engineers.

Due to the mixed-use nature of the proposed development, internal capture trips were estimated

using the internal capture rates included in the Trip Generation Manual. Internal capture trips were estimated using the NCHRP Report 684 Internal Capture Estimator for mixed-use developments. Pass-by trips for the commercial development was estimated using the pass-by rates included in the Trip Generation Manual. ITE does not provide daily pass-by trip rates. Hence, the average rate of Mid-Day and PM peak pass-by trip rate was used to determine the daily pass-by trips.

Tables 03, 04 and 05 summarizes the Daily, AM Peak and PM Peak trip generation, internal capture and pass-by trips for each of the three (3) project development phases. **Attachment D** includes NCHRP 684 Internal Capture Worksheets.

Future Background Traffic Volumes:

The year 2026, 2031 and 2037 background conditions AADT were estimated using the year 2025, 2030, 2035 and 2040 AADT projections included in the FDOT D2 LOS Manual. **Table 06** summarizes the year 2026, 2031 and 2037 background conditions AADT and LOS on each of the study area roadway segments. Previously stated **Attachment C** includes the FDOT D2 LOS summary for each of the study area roadway segments.

Project Traffic Distribution and Assignment:

Project traffic distribution for the proposed development under each of the three (3) phases was determined by running the interim year 2025, year 2030 and year 2035 model sets of the NERPM_AB travel demand model developed as part of the Year 2045 Long Range Transportation Plan by the North Florida Transportation Planning Organization (NFTPO).

Each of the interim year model sets was verified to ensure the Trails Mixed Use development (on the southside of Normandy Boulevard and east of US 301) was included. Additionally, the proposed 301 Villages development under each of the development phases was included to the travel demand model. **Attachment E** includes the socio-economic variables data that were verified and included in each of the interim year 2025, year 2030 and year 2035 travel demand model sets.

Table 07 summarizes the project traffic distribution and daily traffic assignment on each of the study roadway segments under each of the three (3) project development phases. **Attachment F** includes copies of the travel demand model plots showing project traffic distribution each of the project development phases. The project traffic distribution for each of the development phases was multiplied by the daily net external trips for each of the project development phases estimated in previously stated **Tables 03, 04 and 05** respectively. **Figures 02, 03 and 04** summarize the project traffic distribution and daily traffic assignment on each of the study roadway segments.

Build-Out Conditions Roadway Segment Analysis:

Build-out conditions Roadway Segment Analysis includes the future year background traffic volumes and project traffic assignment on each of the study roadway segments under each of the three (3) development phases.

Table 08 summarizes the year 2026 Phase 01 development conditions roadway segments analysis. As summarized in this table, all of the study roadway segments are anticipated to operate under the adopted level of service with the exception of I-10 between US 301 to SR 23 (First Coast Expressway).

Table 09 summarizes the year 2031 Phase 02 development conditions roadway segments analysis. As summarized in this table, all of the study roadway segments are anticipated to operate under the adopted level of service with the exception of the following roadway segments:

- US 301 - 301 Villages Project Entrances to I-10
- I-10 - West of Baker County Line
- I-10 - US 301 to SR 23 (First Coast Expressway)
- I-10 - SR 23 (First Coast Expressway) to Chaffee Road
- I-10 - Chaffee Road to Hammond Boulevard/Greenland Avenue/I-295
- I-10 - Hammond Boulevard/Greenland Avenue to I-295

Table 10 summarizes the year 2037 Phase 03 development conditions roadway segments analysis. As summarized in this table, all of the study roadway segments are anticipated to operate under the adopted level of service with the exception of the following roadway segments:

- US 301 - 301 Villages Project Entrances to I-10
- I-10 - West of Baker County Line
- I-10 - US 301 to SR 23 (First Coast Expressway)
- I-10 - SR 23 (First Coast Expressway) to Chaffee Road
- I-10 - Chaffee Road to Hammond Boulevard/Greenland Avenue/I-295
- I-10 - Hammond Boulevard/Greenland Avenue to I-295

Please note that FDOT’s Long Range Cost Feasible Plan (FY 2029 -2045) includes widening of I-10 between CR 125 and I-295 between the year 2040 and 2045. **Attachment G** includes a copy of the FDOT D2 Long Range Cost Feasible Plan FY – 2029 – 2045.

Please note that the development quantities used in this analysis is under the maximum development density worst-case scenario and the proposed development density may not be possible.

Table 11 shows potential mobility fee calculations for the proposed development. These fees could be potentially used to provide some of the impacted roadway segments.

Operational Analysis:

A detailed operational analysis at all the project access intersections on US 301 will be submitted to both FDOT and COJ at the time of 10-set review submittals.

Summary and Conclusions:

A mixed-use development anticipated to include 11,250 single-family dwelling units, 3,750 multi-Family dwelling units, 750,000 SF commercial/retail, 340 rooms hotel, 300,000 SF light industrial, 300,000 SF office and 375,000 SF hospital/medical office uses is proposed for construction. The project will be built in three (3) phases. The proposed development will be located on the southwest quadrant of I-10 and US 301 interchange. Access to the proposed development will be provided via several driveways and roadways on US 301.

The proposed development is seeking Concept Site Plan approved by the City of Jacksonville (COJ). A traffic study determining the project impacts on the roadway segments in the vicinity of the proposed development is required to be submitted to COJ for approvals.

The existing conditions details of the above stated study segments were obtained from the FDOT Traffic Counts Online Portal and FDOT D2 LOS Manual. The FDOT D2 LOS Manual provides the roadway segments adopted LOS Standard and the peak hour Maximum Service Volumes (MSVs). The corresponding Daily MSVs were obtained from the FDOT Q-LOS Generalized Standard Volumes Tables.

Daily, AM peak and PM peak trip generation, internal capture and pass-by trips for the proposed development under each of the development phases was estimated using the rates and equations included in the Trip Generation Manual 10th Edition, published by the Institute of Transportation Engineers.

The year 2026, 2031 and 2037 background conditions AADT were estimated using the year 2025, 2030, 2035 and 2040 AADT projections included in the FDOT D2 LOS Manual.

Project traffic distribution for the proposed development under each of the three (3) phases was determined by running the interim year 2025, year 2030 and year 2035 model sets of the NERPM_AB travel demand model developed as part of the Year 2045 Long Range Transportation Plan by the North Florida Transportation Planning Organization (NFTPO).

Build-out conditions Roadway Segment Analysis includes the future year background traffic volumes and project traffic assignment on each of the study roadway segments under each of the three (3) development phases.

Under the year 2026 Phase 01 development conditions, all of the study roadway segments are anticipated to operate under the adopted level of service with the exception of I-10 between US 301 to SR 23 (First Coast Expressway).

Under the year 2031 Phase 02 development conditions, all of the study roadway segments are anticipated to operate under the adopted level of service with the exception of the following roadway segments:

- US 301 - 301 Villages Project Entrances to I-10
- I-10 - West of Baker County Line
- I-10 - US 301 to SR 23 (First Coast Expressway)
- I-10 - SR 23 (First Coast Expressway) to Chaffee Road
- I-10 - Chaffee Road to Hammond Boulevard/Greenland Avenue/I-295
- I-10 - Hammond Boulevard/Greenland Avenue to I-295

Under the year 2037 Phase 03 development conditions, all of the study roadway segments are anticipated to operate under the adopted level of service with the exception of the following roadway segments:

- US 301 - 301 Villages Project Entrances to I-10
- I-10 - West of Baker County Line
- I-10 - US 301 to SR 23 (First Coast Expressway)
- I-10 - SR 23 (First Coast Expressway) to Chaffee Road
- I-10 - Chaffee Road to Hammond Boulevard/Greenland Avenue/I-295
- I-10 - Hammond Boulevard/Greenland Avenue to I-295

Please note that FDOT's Long Range Cost Feasible Plan (FY 2029 -2045) includes widening of I-10 between CR 125 and I-295 between the year 2040 and 2045.

Please note that the development quantities used in this analysis is under the maximum development density worst-case scenario and the proposed development density may not be possible.

A detailed operational analysis at all the project access intersections on US 301 will be submitted to both FDOT and COJ at the time of 10-set review submittals.

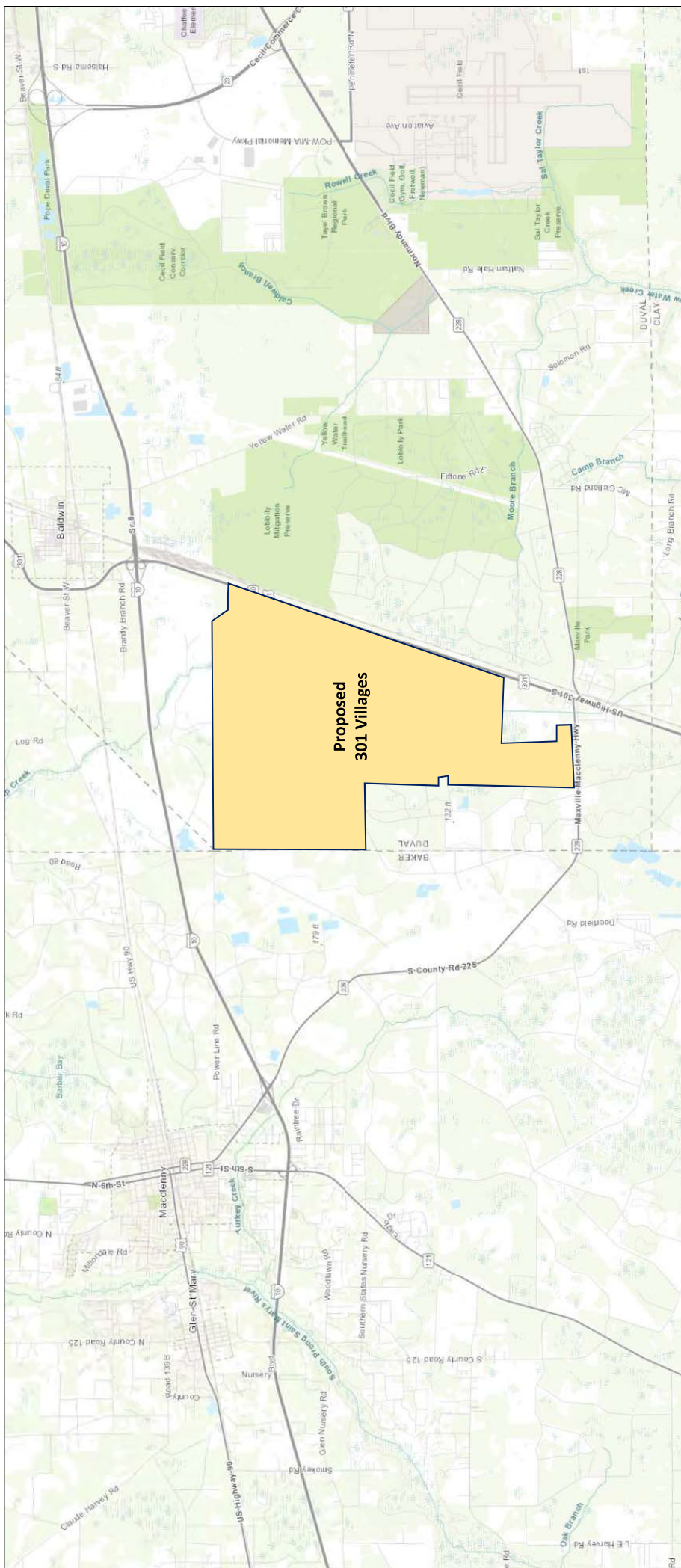


Figure 01 – Project Location Map
 301 Villages – Traffic Impact Assessment
 Duval County, Florida



Chindalur Traffic Solutions, Inc.
 8833 Perimeter Park Blvd., Suite 103
 Jacksonville, FL 32216
 (904) 651-3368 | www.trafficolutions.com

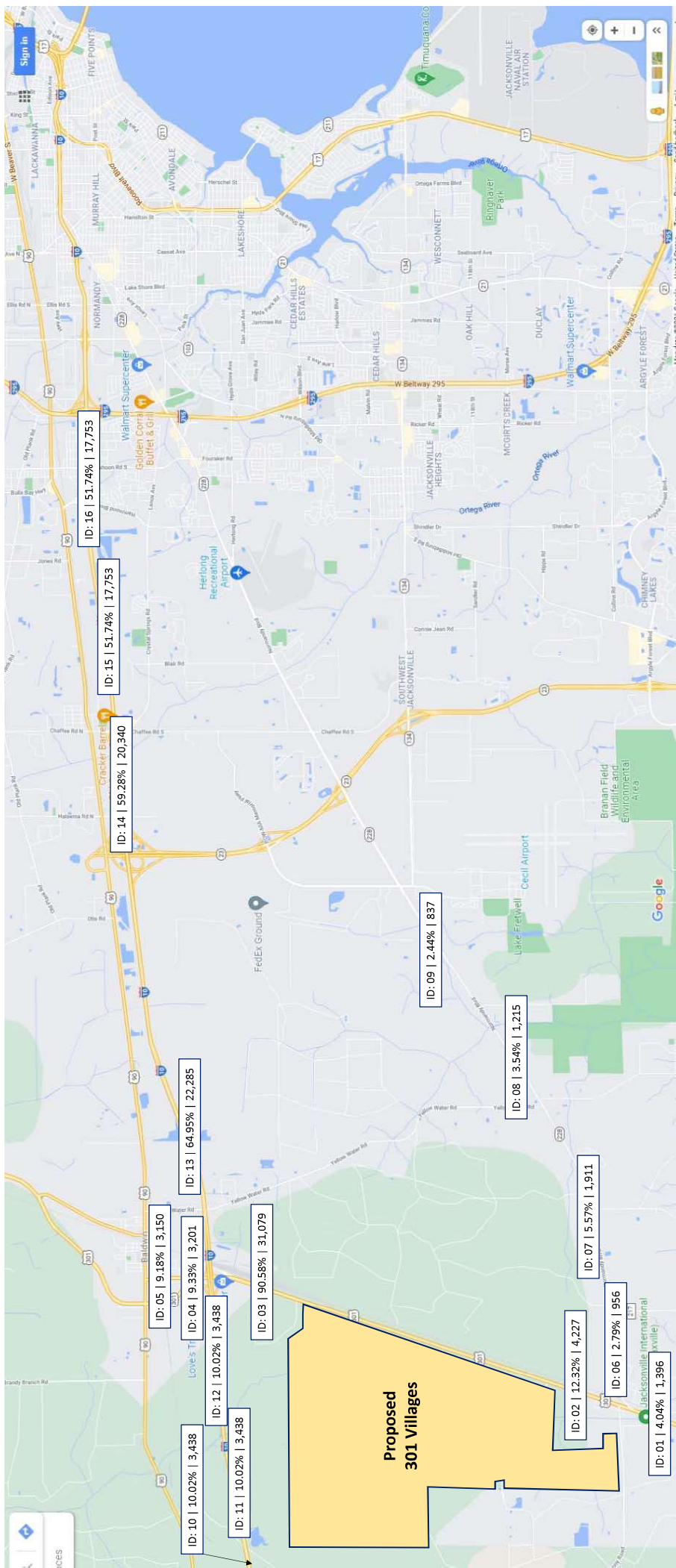


Figure 02 – Year 2026 Phase 01 Project Traffic Distribution and Assignment
 301 Villages – Traffic Impact Assessment
 Duval County, Florida

XX - Roadway Segment ID
 XX% - Project Traffic Distribution
 XXXX - Project Traffic Assignment

CSIS
 Chindalur Traffic Solutions, Inc.
 8833 Perimeter Park Blvd., Suite 103
 Jacksonville, FL 32216
 (904) 675-3588 | www.ctrafficsolutions.com

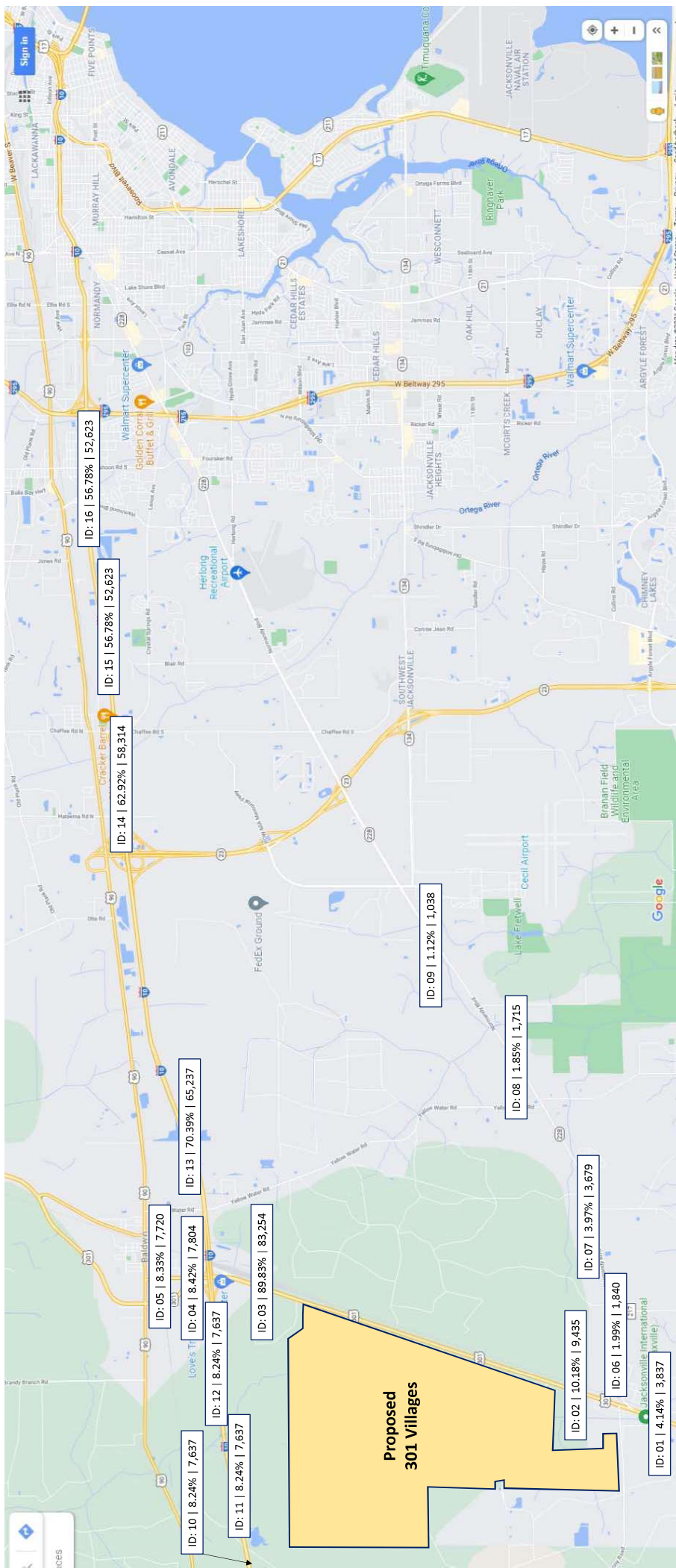


Figure 03 – Year 2031 Phase 02 Project Traffic Distribution and Assignment
 301 Villages – Traffic Impact Assessment
 Duval County, Florida

XX - Roadway Segment ID
 YY% - Project Traffic Distribution
 ZZ% - Project Traffic Assignment

CSI
 Chindalur Traffic Solutions, Inc.
 8833 Perimeter Park Blvd., Suite 103
 Jacksonville, FL 32216
 (904) 619-3388 | www.traffic-solutions.com

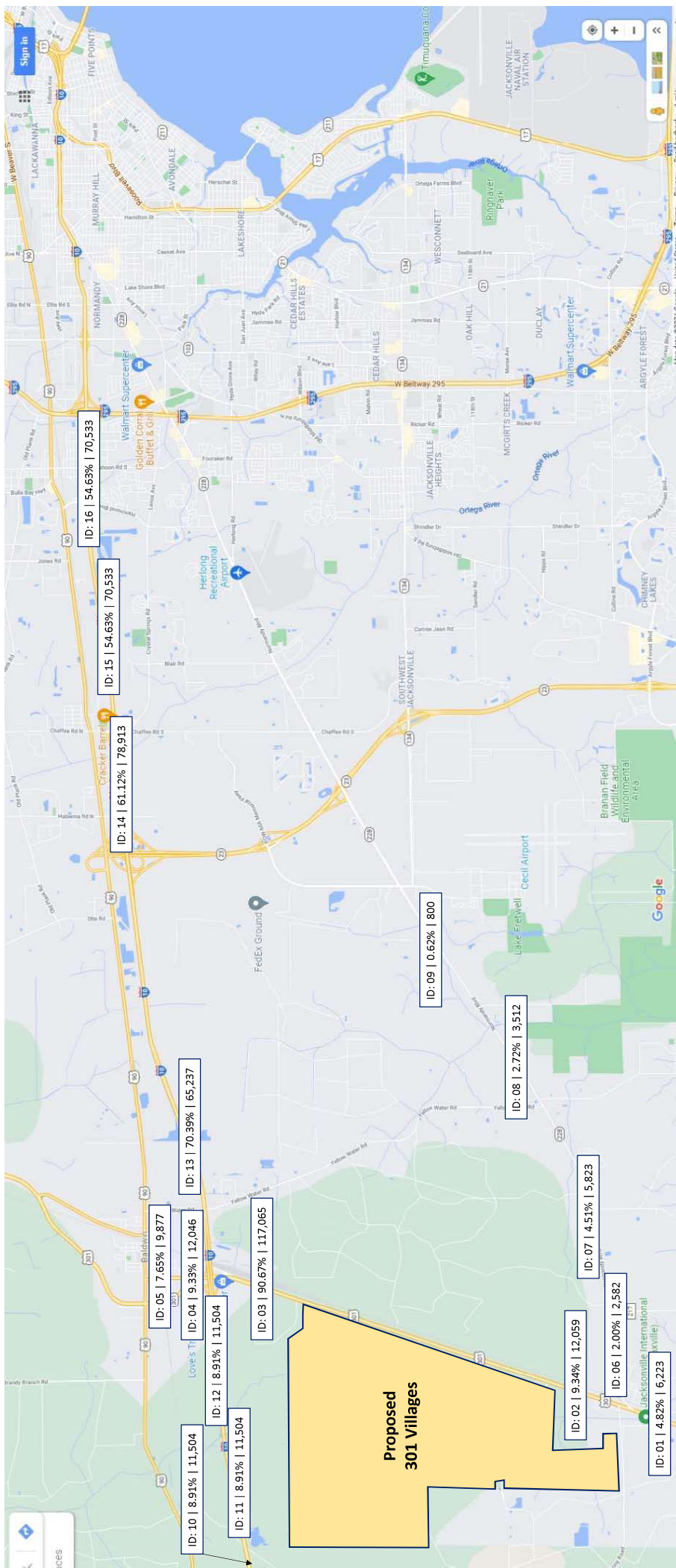


Figure 04 – Year 2037 Phase 03 Project Traffic Distribution and Assignment
 301 Villages – Traffic Impact Assessment
 Duval County, Florida

XX - Roadway Segment ID
 XX% - Project Traffic Distribution
 XXXX - Project Traffic Assignment



Chindalur Traffic Solutions, Inc.
 8833 Perimeter Park Blvd., Suite 103
 Jacksonville, FL 32216
 (904) 619-3388 | www.ctrafficsolutions.com

Table 01
Project Phasing Schedule
301 Villages - Traffic Impact Assessment, Duval County, FL

Land Use	Units	Phase 01 2022-2026	Phase 2 2027-2031	Phase 3 2032-2037	Total
Single Family Residential	Dwelling Units	2,500	5,750	3,000	11,250
Multi-family Residential	Dwelling Units	1,000	1,200	1,550	3,750
Commercial	Square Feet	150,000	325,000	275,000	750,000
Hotel	Rooms	120	220	-	340
Light Industrial	Square Feet	150,000	150,000	-	300,000
Office	Square Feet	100,000	100,000	100,000	300,000
Hospital/Medical Office	Square Feet	50,000	150,000	175,000	375,000

Source: Attachment A - Site Plan

Table 02
Study Roadway Segments - Existing Conditions and Future Conditions
301 Villages - Traffic Impact Assessment

Road ID	Roadway	Termini	Number of Lanes	Roadway Classification	Area Type	FDOT Adopted LOS Standard	Adopted Peak Hour MSV	Adopted Daily MSV	2019 AADT	2020 AADT	2025 AADT	2030 AADT	2035 AADT	2040 AADT
1	US 301	South of Normandy Boulevard	4	Highway	Urban	D	5,960	66,200	19,800	21,500	22,104	24,024	25,945	27,865
2	US 301	Normandy Boulevard to Project Entrance	4	Highway	Urban	D	5,960	66,200	15,100	17,800	17,322	19,174	21,026	22,878
3	US 301	Project Entrance to I-10	4	Highway	Urban	D	5,960	66,200	15,100	17,800	17,322	19,174	21,026	22,878
4	US 301	I-10 to City Limit of Baldwin	4	Arterial	Urban	D	3,580	39,800	7,400	7,900	11,744	12,421	13,098	13,775
5	US 301	City Limit of Baldwin to Beaver Street	4	Arterial	Urban	D	3,580	39,800	8,300	8,200	9,276	10,458	11,639	12,821
6	Normandy Boulevard	US 301 Ramp	2	Highway	Urban	D	2,180	24,200	6,400	5,300	7,027	7,549	8,071	8,593
7	Normandy Boulevard	US 301 Ramp to McClelland Road	2	Highway	Urban	D	2,180	24,200	12,000	11,000	12,519	13,515	14,511	15,507
8	Normandy Boulevard	McClelland Road to Jax Equestrian Center	2	Highway	Urban	D	2,180	24,200	13,200	12,400	14,368	15,726	17,083	18,441
9	Normandy Boulevard	Jax Equestrian Center to POW-MIA Memorial Pkwy	4	Highway	Urban	D	5,960	66,200	13,200	12,400	14,717	16,078	17,439	18,800
10	I-10	West of Baker County Line	4	Freeway	Rural	C	5,040	48,000	38,000	35,000	40,189	42,085	43,980	45,876
11	I-10	Baker County Line to Duval County Line	4	Freeway	Transitioning	C	5,780	59,000	38,000	35,000	40,280	42,180	44,080	45,980
12	I-10	Duval County Line to US 301	4	Freeway	Transitioning	C	5,780	59,000	38,000	35,000	40,280	42,180	44,080	45,980
13	I-10	US 301 to SR 23 (First Coast Expressway)	4	Freeway	Urban	D	6,800	83,200	56,000	52,500	60,378	64,148	67,918	71,689
14	I-10	SR 23 (First Coast Expressway) to Chaffee Road	6	Freeway	Urban	D	10,220	123,600	56,000	52,500	63,695	70,107	76,520	82,932
15	I-10	Chaffee Road to Hammond Boulevard/Greenland Avenue/I-295	6	Freeway	Urban	D	10,220	123,600	82,500	75,500	91,710	100,432	109,154	117,876
16	I-10	Hammond Boulevard/Greenland Avenue to I-295	6	Freeway	Urban	D	10,220	123,600	102,000	95,500	104,204	105,093	105,982	106,871

Source: FDOT Traffic Counts Online Portal and FDOT D2 LOS Summary Reports (Attachment C)

Table 03
 Trip Generation - Phase 01
 301 Villages - Traffic Impact Assessment, Duval County, FL

ITE Land Use Code	Description	Quantity	Units	Time Period	Rate or Equation	Percent Traffic		Project Trips		Internal Capture		External Trips		Pass-by		Net External Trips	
						Entering	Exiting	Total	Entering	Exiting	Total	Entering	Exiting	Percentage	Trips	Total	Entering
110	General Light Industrial	150,000	SF	Daily	$T = 3.79(X) + 57.96$	50%	626	313	313	-	-	626	626	0%	-	626	313
210	Single Family Home Detached	2,500	Dwelling Units	Daily	$\ln(T) = 0.92 \ln(X) + 2.71$	50%	20,093	10,047	10,046	414	413	19,266	19,266	0%	-	19,266	9,633
220	Multi-Family Residential (Townhomes)	1,000	Dwelling Units	Daily	$T = 7.56(X) - 40.86$	50%	7,519	3,760	3,759	155	154	7,210	7,210	0%	-	7,210	3,605
820	Commercial/Retail	150,000	SF	Daily	$\ln(T) = 0.68 \ln(X) + 5.57$	50%	7,921	3,961	3,961	933	933	6,055	6,055	30%	1,817	4,238	2,119
710	General Office	100,000	SF	Daily	$T = 9.74(X)$	50%	974	487	487	88	87	799	799	0%	-	799	400
310	Hotel	120	Rooms	Daily	$T = 11.29(X) - 426.97$	50%	928	464	464	93	92	743	743	0%	-	743	372
720	Medical Office Building	50,000	SF	Daily	$T = 38.42(X) - 87.62$	50%	1,833	917	459	202	202	1,429	1,429	0%	-	1,429	715
Total							39,894	19,949	17,094	1,881	1,881	36,128	36,128		1,817	34,311	17,154
110	General Light Industrial	150,000	SF	AM Peak	$\ln(T) = 0.74 \ln(X) + 0.39$	88%	60	53	7	-	-	60	60	0%	-	60	53
210	Single Family Home Detached	2,500	Dwelling Units	AM Peak	$T = 0.71(X) + 4.80$	25%	1,780	445	1,335	9	18	1,753	1,753	0%	-	1,753	438
220	Multi-Family Residential (Townhomes)	1,000	Dwelling Units	AM Peak	$\ln(T) = 0.95 \ln(X) - 0.51$	23%	425	98	327	7	5	418	418	0%	-	418	96
820	Commercial/Retail	150,000	SF	AM Peak	$T = 0.50(X) + 151.78$	62%	227	141	86	32	19	224	176	26%	46	130	81
710	General Office	100,000	SF	AM Peak	$T = 1.16(X)$	86%	116	100	16	10	4	101	101	0%	-	101	87
310	Hotel	120	Rooms	AM Peak	$T = 0.50(X) - 5.34$	59%	55	32	23	9	9	46	46	0%	-	46	27
720	Medical Office Building	50,000	SF	AM Peak	$\ln(T) = 0.89 \ln(X) + 1.31$	78%	121	94	27	10	8	104	104	0%	-	104	81
Total							2,784	963	1,821	63	63	2,658	2,658		46	2,612	1,749
110	General Light Industrial	150,000	SF	PM Peak	$\ln(T) = 0.69 \ln(X) + 0.43$	13%	49	6	43	-	-	49	49	0%	-	49	6
210	Single Family Home Detached	2,500	Dwelling Units	PM Peak	$\ln(T) = 0.96 \ln(X) + 0.20$	63%	2,233	1,407	826	85	64	2,084	2,084	0%	-	2,084	1,313
220	Multi-Family Residential (Townhomes)	1,000	Dwelling Units	PM Peak	$\ln(T) = 0.89 \ln(X) - 0.02$	63%	458	289	169	18	13	427	427	0%	-	427	269
820	Commercial/Retail	150,000	SF	PM Peak	$\ln(T) = 0.74 \ln(X) + 2.89$	48%	734	352	382	68	113	553	365	34%	188	365	175
710	General Office	100,000	SF	PM Peak	$T = 1.15(X)$	16%	115	18	97	13	14	88	88	0%	-	88	14
310	Hotel	120	Rooms	PM Peak	$T = 0.75(X) - 26.02$	51%	64	33	31	10	5	49	49	0%	-	49	25
720	Medical Office Building	50,000	SF	PM Peak	$T = 3.39(X) + 2.02$	28%	172	48	124	33	18	121	121	0%	-	121	34
Total							3,825	2,153	1,672	227	227	3,371	3,371		188	3,183	1,836

Mid-Day Peak Pass-by for Commercial 26%
 PM Peak Pass-by for Commercial 34%
 Daily Pass-by for Commercial 30%
 Source: Trip Generation Manual, 10th Edition, ITE
 Internal Capture Calculations - Attachment C

Table 04
Trip Generation - Phase 02 (Cumulative)
301 Villages - Traffic Impact Assessment, Duval County, FL

ITE Land Use Code	Description	Quantity	Units	Time Period	Rate or Equation	Percent Traffic		Project Trips		Internal Capture		External Trips		Pass-by Trips		Net External Trips	
						Entering	Exiting	Total	Entering	Exiting	Total	Entering	Exiting	Percentage	Trips	Total	Entering
110	General Light Industrial	300,000	SF	Daily	$T = 3.79(X) + 57.96$ $\ln(T) = 0.92 \ln(X) + 2.71$	50%	50%	1,195	598	-	-	0.00%	1,195	-	-	1,195	598
210	Single Family Home Detached	8,250	Dwelling Units	Daily	$T = 7.56(X) - 40.86$	50%	50%	60,266	30,133	983	982	3.26%	58,301	-	-	58,301	29,151
220	Multi-Family Residential (Townhomes)	2,200	Dwelling Units	Daily	$\ln(T) = 0.68 \ln(X) + 5.57$	50%	50%	16,591	8,296	271	270	3.26%	16,050	-	-	16,050	8,025
820	Commercial/Retail	475,000	SF	Daily	$T = 9.74(X)$	50%	50%	17,345	8,673	4,337	2,528	29.15%	12,289	3,687	3,687	8,602	4,301
710	General Office	200,000	SF	Daily	$T = 11.29(X) - 426.97$	50%	50%	1,948	974	487	180	18.48%	1,588	-	-	1,588	794
310	Hotel	340	Rooms	Daily	$T = 38.42(X) - 87.62$	50%	50%	3,412	1,706	853	314	18.41%	2,784	-	-	2,784	1,392
720	Medical Office Building	50,000	SF	Daily	$T = 5.88(X) + 2723.70$	50%	50%	1,833	917	459	205	22.35%	1,423	-	-	1,423	712
610	Hospital	150,000	SF	Daily		50%	50%	3,616	1,808	904	440	24.34%	2,736	-	-	2,736	1,368
	Total						106,206	53,105	46,065	4,921	4,919	9.27%	96,366	3,687	3,687	92,679	46,338
110	General Light Industrial	300,000	SF	AM Peak	$\ln(T) = 0.74 \ln(X) + 0.39$	88%	12%	101	89	-	-	0.00%	101	-	-	101	89
210	Single Family Home Detached	8,250	Dwelling Units	AM Peak	$T = 0.71(X) + 4.80$	25%	75%	5,862	1,466	18	48	1.12%	5,796	-	-	5,796	1,449
220	Multi-Family Residential (Townhomes)	2,200	Dwelling Units	AM Peak	$\ln(T) = 0.95 \ln(X) - 0.51$	23%	77%	899	207	3	7	1.12%	889	-	-	889	204
820	Commercial/Retail	475,000	SF	AM Peak	$T = 0.50(X) + 151.78$	62%	38%	389	241	148	39	32.90%	261	68	68	193	120
710	General Office	200,000	SF	AM Peak	$T = 1.16(X)$	86%	14%	232	200	32	29	12.60%	203	-	-	203	174
310	Hotel	340	Rooms	AM Peak	$T = 0.50(X) - 5.34$	59%	41%	165	97	68	24	14.55%	141	-	-	141	83
720	Medical Office Building	50,000	SF	AM Peak	$\ln(T) = 0.89 \ln(X) + 1.31$	78%	22%	121	94	27	10	14.13%	104	-	-	104	81
610	Hospital	150,000	SF	AM Peak	$T = 0.74(X) + 126.36$	68%	32%	237	161	76	38	15.89%	159	-	-	159	136
	Total						8,006	2,555	5,451	156	156	3.90%	7,694	68	68	7,626	2,336
110	General Light Industrial	300,000	SF	PM Peak	$\ln(T) = 0.69 \ln(X) + 0.43$	13%	87%	79	10	-	-	0.00%	79	-	-	79	10
210	Single Family Home Detached	8,250	Dwelling Units	PM Peak	$\ln(T) = 0.96 \ln(X) + 0.20$	63%	37%	7,025	4,426	214	165	5.40%	6,646	-	-	6,646	4,187
220	Multi-Family Residential (Townhomes)	2,200	Dwelling Units	PM Peak	$\ln(T) = 0.89 \ln(X) - 0.02$	63%	37%	925	583	28	22	5.40%	875	-	-	875	551
820	Commercial/Retail	475,000	SF	PM Peak	$\ln(T) = 0.74 \ln(X) + 2.89$	48%	52%	1,721	826	166	271	25.39%	1,284	437	437	847	407
710	General Office	200,000	SF	PM Peak	$T = 1.15(X)$	16%	84%	230	37	193	56	24.36%	174	-	-	174	28
310	Hotel	340	Rooms	PM Peak	$T = 0.75(X) - 26.02$	51%	49%	229	117	34	17	22.27%	178	-	-	178	91
720	Medical Office Building	50,000	SF	PM Peak	$T = 3.39(X) + 2.02$	28%	72%	172	48	33	20	30.56%	119	-	-	119	33
610	Hospital	150,000	SF	PM Peak	$T = 0.84(X) + 100.56$	37%	63%	227	73	50	25	32.78%	153	-	-	153	49
	Total						10,608	6,120	4,488	550	550	10.37%	9,508	437	437	9,071	5,356

Mid-Day Peak Pass-by for Commercial 26%
PM Peak Pass-by for Commercial 34%
Daily Pass-by for Commercial 30%
Source: Trip Generation Manual, 10th Edition, ITE
Internal Capture Calculations - Attachment C

Table 05
Trip Generation - Phase 03 (Cumulative)
301 Villages - Traffic Impact Assessment, Duval County, FL

ITE Land Use Code	Description	Quantity	Units	Time Period	Rate or Equation	Percent Traffic		Project Trips		Internal Capture		External Trips		Pass-by Trips		Net External Trips	
						Entering	Exiting	Total	Entering	Exiting	Total	Entering	Exiting	Percentage	Trips	Total	Entering
110	General Light Industrial	300,000	SF	Daily	$T = 3.79(X) + 57.96$ $\ln(T) = 0.92 \ln(X) + 2.71$	50%	50%	1,195	598	-	1,352	1,195	1,195	0%	-	1,195	598
210	Single Family Home Detached	11,250	Dwelling Units	Daily	$T = 7.56(X) - 40.86$	50%	50%	80,168	40,084	2,703	1,351	77,465	38,733	0%	-	77,465	38,733
220	Multi-Family Residential (Townhomes)	3,750	Dwelling Units	Daily	$\ln(T) = 0.68 \ln(X) + 5.57$	50%	50%	28,309	14,155	954	477	27,355	13,678	0%	-	27,355	13,678
820	Commercial/Retail	750,000	SF	Daily	$T = 9.74(X)$	50%	50%	23,663	11,832	6,950	3,475	16,713	5,960	30%	5,014	11,699	5,849
710	General Office	300,000	SF	Daily	$T = 11.29(X) - 426.97$	50%	50%	2,922	1,461	513	257	2,409	1,205	0%	-	2,409	1,205
310	Hotel	340	Rooms	Daily	$T = 38.42(X) - 87.62$	50%	50%	3,412	1,706	708	354	2,704	1,352	0%	-	2,704	1,352
720	Medical Office Building	100,000	SF	Daily	$T = 5.88(X) + 2723.70$	50%	50%	3,754	1,877	804	402	2,950	1,475	0%	-	2,950	1,475
610	Hospital	275,000	SF	Daily	$T = 0.74(X) + 126.36$	50%	50%	4,351	2,176	1,088	508	3,334	1,667	0%	-	3,334	1,667
	Total							147,774	73,889	64,362	6,823	134,125	64,558	9.24%	5,014	129,111	64,553
110	General Light Industrial	300,000	SF	AM Peak	$\ln(T) = 0.74 \ln(X) + 0.39$	88%	12%	101	89	-	-	101	89	0%	-	101	89
210	Single Family Home Detached	11,250	Dwelling Units	AM Peak	$T = 0.71(X) + 4.80$	75%	25%	7,992	1,998	89	24	7,903	1,976	0%	-	7,903	1,976
220	Multi-Family Residential (Townhomes)	3,750	Dwelling Units	AM Peak	$\ln(T) = 0.95 \ln(X) - 0.51$	77%	23%	1,492	343	16	4	1,476	339	0%	-	1,476	339
820	Commercial/Retail	750,000	SF	AM Peak	$T = 0.50(X) + 151.78$	62%	38%	527	327	179	123	348	258	26%	90	348	160
710	General Office	300,000	SF	AM Peak	$T = 1.16(X)$	86%	14%	348	299	44	30	304	262	0%	-	304	262
310	Hotel	340	Rooms	AM Peak	$T = 0.50(X) - 5.34$	59%	41%	165	97	68	31	134	79	0%	-	134	79
720	Medical Office Building	100,000	SF	AM Peak	$\ln(T) = 0.89 \ln(X) + 1.31$	78%	22%	223	174	49	17	192	150	0%	-	192	150
610	Hospital	275,000	SF	AM Peak	$T = 0.74(X) + 126.36$	68%	32%	330	224	106	22	278	189	0%	-	278	189
	Total							11,178	3,551	7,627	221	10,736	3,244	3.95%	90	10,646	7,402
110	General Light Industrial	300,000	SF	PM Peak	$\ln(T) = 0.69 \ln(X) + 0.43$	13%	87%	79	10	-	-	79	10	0%	-	79	10
210	Single Family Home Detached	11,250	Dwelling Units	PM Peak	$\ln(T) = 0.96 \ln(X) + 0.20$	63%	37%	9,462	5,961	533	295	8,929	5,625	0%	-	8,929	5,625
220	Multi-Family Residential (Townhomes)	3,750	Dwelling Units	PM Peak	$\ln(T) = 0.89 \ln(X) - 0.02$	63%	37%	1,487	937	84	46	1,403	884	0%	-	1,403	884
820	Commercial/Retail	750,000	SF	PM Peak	$\ln(T) = 0.74 \ln(X) + 2.89$	48%	52%	2,414	1,159	598	227	1,816	576	34%	617	1,403	623
710	General Office	300,000	SF	PM Peak	$T = 1.15(X)$	16%	84%	345	55	78	37	267	43	0%	-	267	43
310	Hotel	340	Rooms	PM Peak	$T = 0.75(X) - 26.02$	51%	49%	229	117	52	34	177	90	0%	-	177	90
720	Medical Office Building	100,000	SF	PM Peak	$T = 3.39(X) + 2.02$	28%	72%	341	95	98	63	243	68	0%	-	243	68
610	Hospital	275,000	SF	PM Peak	$T = 0.84(X) + 100.56$	37%	63%	332	106	103	71	229	73	0%	-	229	73
	Total							14,689	8,440	6,249	773	13,143	7,369	10.52%	617	12,526	5,157

Mid-Day Peak Pass-by for Commercial 26%
PM Peak Pass-by for Commercial 34%
Daily Pass-by for Commercial 30%

Source: Trip Generation Manual, 10th Edition, ITE
Internal Capture Calculations - Attachment C

Table 06
Study Roadway Segments - Future Background Traffic Volumes
301 Villages - Traffic Impact Assessment

Road ID	Roadway	Termini	Number of Lanes	Roadway Classification	Area Type	FDOT Adopted LOS Standard	Adopted Daily MSV	Year 2026 Background AADT	Year 2026 Background LOS	Year 2031 Background AADT	Year 2031 Background LOS	Year 2037 Background AADT	Year 2037 Background LOS
1	US 301	South of Normandy Boulevard	4	Highway	Urban	D	66,200	22,488	B	24,408	B	26,713	B
2	US 301	Normandy Boulevard to Project Entrance	4	Highway	Urban	D	66,200	17,692	B	19,544	B	21,767	B
3	US 301	Project Entrance to I-10	4	Highway	Urban	D	66,200	17,692	B	19,544	B	21,767	B
4	US 301	I-10 to City Limit of Baldwin	4	Arterial	Urban	D	39,800	11,879	C	12,556	C	13,369	C
5	US 301	City Limit of Baldwin to Beaver Street	4	Arterial	Urban	D	39,800	9,512	C	10,694	C	12,112	C
6	Normandy Boulevard	US 301 Ramp	2	Highway	Urban	D	24,200	7,131	B	7,653	B	8,280	B
7	Normandy Boulevard	US 301 Ramp to McClelland Road	2	Highway	Urban	D	24,200	12,718	C	13,714	C	14,909	C
8	Normandy Boulevard	McClelland Road to Jax Equestrian Center	2	Highway	Urban	D	24,200	14,640	C	15,997	C	17,626	C
9	Normandy Boulevard	Jax Equestrian Center to POW-MIA Memorial Pkwy	4	Highway	Urban	D	66,200	14,989	B	16,350	B	17,983	B
10	I-10	West of Baker County Line	4	Freeway	Rural	C	48,000	40,588	C	42,464	C	44,738	C
11	I-10	Baker County Line to Duval County Line	4	Freeway	Transitioning	C	59,000	40,660	B	42,560	B	44,840	B
12	I-10	Duval County Line to US 301	4	Freeway	Transitioning	C	59,000	40,660	B	42,560	B	44,840	B
13	I-10	US 301 to SR 23 (First Coast Expressway)	4	Freeway	Urban	D	83,200	61,132	C	64,902	C	69,426	C
14	I-10	SR 23 (First Coast Expressway) to Chaffee Road	6	Freeway	Urban	D	123,600	64,977	B	71,390	C	79,085	C
15	I-10	Chaffee Road to Hammond Boulevard/Greenland Avenue/I-295	6	Freeway	Urban	D	123,600	93,454	C	102,176	D	112,643	D
16	I-10	Hammond Boulevard/Greenland Avenue to I-295	6	Freeway	Urban	D	123,600	104,382	D	105,271	D	106,338	D

Source: Table 02
Year 2026 Traffic Volumes Interpolated from Year 2025 and Year 2030 AADT
Year 2031 Traffic Volumes Interpolated from Year 2030 and Year 2035 AADT
Year 2037 Traffic Volumes Interpolated from Year 2035 and Year 2040 AADT

Table 07
Study Roadway Segments - Project Traffic Distribution and Daily Traffic Assignment
301 Villages - Traffic Impact Assessment

Road ID	Roadway	Termini	Project Traffic Distribution			Daily Project Traffic Assignment		
			A	B	C	Phase 01 Year 2026	Phase 02 Year 2031	Phase 03 Year 2037
			2025	2030	2035	A * 34,311	B * 92,679	C * 129,111
1	US 301	South of Normandy Boulevard	4.07%	4.14%	4.82%	1,396	3,837	6,223
2	US 301	Normandy Boulevard to Project Entrance	12.32%	10.18%	9.34%	4,227	9,435	12,059
3	US 301	Project Entrance to I-10	90.58%	89.83%	90.67%	31,079	83,254	117,065
4	US 301	I-10 to City Limit of Baldwin	9.33%	8.42%	9.33%	3,201	7,804	12,046
5	US 301	City Limit of Baldwin to Beaver Street	9.18%	8.33%	7.65%	3,150	7,720	9,877
6	Normandy Boulevard	US 301 Ramp	2.79%	1.99%	2.00%	956	1,840	2,582
7	Normandy Boulevard	US 301 Ramp to McClelland Road	5.57%	3.97%	4.51%	1,911	3,679	5,823
8	Normandy Boulevard	McClelland Road to Jax Equestrian Center	3.54%	1.85%	2.72%	1,215	1,715	3,512
9	Normandy Boulevard	Jax Equestrian Center to POW-MIA Memorial Pkwy	2.44%	1.12%	0.62%	837	1,038	800
10	I-10	West of Baker County Line	10.02%	8.24%	8.91%	3,438	7,637	11,504
11	I-10	Baker County Line to Duval County Line	10.02%	8.24%	8.91%	3,438	7,637	11,504
12	I-10	Duval County Line to US 301	10.02%	8.24%	8.91%	3,438	7,637	11,504
13	I-10	US 301 to SR 23 (First Coast Expressway)	64.95%	70.39%	69.70%	22,285	65,237	89,990
14	I-10	SR 23 (First Coast Expressway) to Chaffee Road	59.28%	62.92%	61.12%	20,340	58,314	78,913
15	I-10	Chaffee Road to Hammond Boulevard/Greenland Avenue/I-295	51.74%	56.78%	54.63%	17,753	52,623	70,533
16	I-10	Hammond Boulevard/Greenland Avenue to I-295	51.74%	56.78%	54.63%	17,753	52,623	70,533

Source: Attachment F and Tables 03, 04 and 05

Table 08
Phase 01 Development - Roadway Segment Analysis
301 Villages - Traffic Impact Assessment

Road ID	Roadway	Termini	Number of Lanes	Roadway Classification	Area Type	FDOT Adopted LOS Standard	Adopted Daily MSV Table 02	Year 2026 Background AADT Table 02	Year 2026 Background LOS	Year 2026 Project Traffic Distribution Table 07	Year 2026 Project Traffic Assignment B * 34,311	Year 2026 Phase 01 Total Traffic AADT A + C	Year 2026 Phase 01 Total Traffic LOS
1	US 301	South of Normandy Boulevard	4	Highway	Urban	D	66,200	22,488	B	4.07%	1,396	23,884	B
2	US 301	Normandy Boulevard to Project Entrance	4	Highway	Urban	D	66,200	17,692	B	12.32%	4,227	21,919	B
3	US 301	Project Entrance to I-10	4	Highway	Urban	D	66,200	17,692	B	90.58%	31,079	48,771	C
4	US 301	I-10 to City Limit of Baldwin	4	Arterial	Urban	D	39,800	11,879	C	9.33%	3,201	15,080	C
5	US 301	City Limit of Baldwin to Beaver Street	4	Arterial	Urban	D	39,800	9,512	C	9.18%	3,150	12,662	C
6	Normandy Boulevard	US 301 Ramp	2	Highway	Urban	D	24,200	7,131	B	2.79%	956	8,087	B
7	Normandy Boulevard	US 301 Ramp to McClelland Road	2	Highway	Urban	D	24,200	12,718	C	5.57%	1,911	14,629	C
8	Normandy Boulevard	McClelland Road to Jax Equestrian Center	2	Highway	Urban	D	24,200	14,640	C	3.54%	1,215	15,855	C
9	I-10	Jax Equestrian Center to POW/MIA Memorial Pkwy	4	Highway	Urban	D	66,200	14,989	B	2.44%	837	15,826	B
10	I-10	West of Baker County Line	4	Freeway	Rural	C	48,000	40,568	C	10.02%	3,438	44,006	C
11	I-10	Baker County Line to Duval County Line	4	Freeway	Transitional	C	59,000	40,660	B	10.02%	3,438	44,098	B
12	I-10	Duval County Line to US 301	4	Freeway	Transitional	C	59,000	40,660	B	10.02%	3,438	44,098	B
13	I-10	US 301 to SR 23 (First Coast Expressway)	4	Freeway	Urban	D	83,200	61,132	C	64.95%	22,285	83,417	E
14	I-10	SR 23 (First Coast Expressway) to Chaffee Road	6	Freeway	Urban	D	123,600	64,977	B	59.38%	20,340	85,317	C
15	I-10	Chaffee Road to Hammond Boulevard/Greenland Avenue/I-295	6	Freeway	Urban	D	123,600	93,454	C	51.74%	17,753	111,207	D
16	I-10	Hammond Boulevard/Greenland Avenue to I-295	6	Freeway	Urban	D	123,600	104,382	D	51.74%	17,753	122,135	D

Source: Tables 02, 06 and 07

Table 09
Phase 02 Development - Roadway Segment Analysis (Cumulative)
301 Villages - Traffic Impact Assessment

Road ID	Roadway	Termini	Number of Lanes	Roadway Classification	Area Type	FDOT Adopted LOS Standard	Adopted Daily MSV Table 02	Year 2031 Background AADT Table 02	Year 2031 Background LOS	Year 2031 Project Traffic Distribution Table 07	Year 2031 Project Traffic Assignment B = 92,879	Year 2031 Phase 02 Total Traffic AADT A + C	Year 2031 Phase 02 Total Traffic LOS
1	US 301	South of Normandy Boulevard	4	Highway	Urban	D	66,200	24,408	B	4.14%	3,837	28,245	B
2	US 301	Normandy Boulevard to Project Entrance	4	Highway	Urban	D	66,200	19,544	B	10.18%	9,435	28,579	B
3	US 301	Project Entrance to I-10	4	Highway	Urban	D	66,200	19,544	B	89.83%	83,254	102,798	F
4	US 301	I-10 to City Limit of Baldwin	4	Arterial	Urban	D	39,800	12,556	C	8.42%	7,804	20,360	C
5	US 301	City Limit of Baldwin to Beaver Street	4	Arterial	Urban	D	39,800	10,694	C	8.33%	7,720	18,414	C
6	Normandy Boulevard	US 301 Ramp	2	Highway	Urban	D	24,200	7,653	B	1.99%	1,840	9,493	B
7	Normandy Boulevard	US 301 Ramp to McClelland Road	2	Highway	Urban	D	24,200	13,714	C	3.97%	3,679	17,393	C
8	Normandy Boulevard	McClelland Road to Jax Equestrian Center	2	Highway	Urban	D	24,200	15,997	C	1.85%	1,715	17,712	C
9	Normandy Boulevard	Jax Equestrian Center to POW/MIA Memorial Pkwy	4	Highway	Urban	D	66,200	16,350	B	1.12%	1,038	17,388	B
10	I-10	West of Baker County Line	4	Freeway	Rural	C	48,000	42,464	C	8.24%	7,637	50,101	D
11	I-10	Baker County Line to Duval County Line	4	Freeway	Transitional	C	59,000	42,560	B	8.24%	7,637	50,197	C
12	I-10	Duval County Line to US 301	4	Freeway	Transitional	C	59,000	42,560	B	8.24%	7,637	50,197	C
13	I-10	US 301 to SR 23 (First Coast Expressway)	4	Freeway	Urban	D	83,200	64,902	C	70.39%	65,237	130,139	F
14	I-10	SR 23 (First Coast Expressway) to Chaffee Road	6	Freeway	Urban	D	123,600	71,390	C	62.92%	58,314	129,704	E
15	I-10	Chaffee Road to Hammond Boulevard/Greenland Avenue/I-295	6	Freeway	Urban	D	123,600	102,176	D	56.78%	52,623	154,799	F
16	I-10	Hammond Boulevard/Greenland Avenue to I-295	6	Freeway	Urban	D	123,600	105,271	D	56.78%	52,623	157,894	F

Source: Tables 02, 06 and 07

Table 10
Phase 03 Development - Roadway Segment Analysis (Cumulative)
301 Villages - Traffic Impact Assessment

Road ID	Roadway	Termini	Number of Lanes	Roadway Classification	Area Type	FDOT Adopted LOS Standard	Adopted Daily MSV Table 02	Year 2037 Background AADT Table 02	Year 2037 Background LOS	Year 2037 Project Traffic Distribution Table 07	Year 2031 Project Traffic Assignment B * 129,111	Year 2031 Phase 02 Total Traffic AADT A + C	Year 2031 Phase 02 Total Traffic LOS
1	US 301	South of Normandy Boulevard	4	Highway	Urban	D	66,200	24,408	B	14.82%	16,223	30,631	B
2	US 301	Normandy Boulevard to Project Entrance	4	Highway	Urban	D	66,200	19,544	B	9.34%	12,059	31,603	B
3	US 301	Project Entrance to I-10	4	Highway	Urban	D	66,200	19,544	B	90.67%	117,065	136,609	F
4	US 301	I-10 to City Limit of Baldwin	4	Arterial	Urban	D	39,800	12,556	C	9.33%	12,046	24,602	C
5	US 301	City Limit of Baldwin to Beaver Street	4	Arterial	Urban	D	39,800	10,694	C	7.65%	9,877	20,571	C
6	Normandy Boulevard	US 301 Ramp	2	Highway	Urban	D	24,200	7,653	B	2.00%	2,582	10,235	B
7	Normandy Boulevard	US 301 Ramp to McClelland Road	2	Highway	Urban	D	24,200	13,714	C	4.51%	5,823	19,537	D
8	Normandy Boulevard	McClelland Road to Jax Equestrian Center	2	Highway	Urban	D	24,200	15,997	C	2.72%	3,512	19,509	D
9	Normandy Boulevard	Jax Equestrian Center to POW/MIA Memorial Pkwy	4	Highway	Urban	D	66,200	16,350	B	0.62%	800	17,150	B
10	I-10	West of Baker County Line	4	Freeway	Rural	C	48,000	42,464	C	8.91%	11,504	55,968	D
11	I-10	Baker County Line to Duval County Line	4	Freeway	Transitional	C	59,000	42,560	B	8.91%	11,504	54,064	C
12	I-10	Duval County Line to US 301	4	Freeway	Transitional	C	59,000	42,560	B	8.91%	11,504	54,064	C
13	I-10	US 301 to SR 23 (First Coast Expressway)	4	Freeway	Urban	D	83,200	64,902	C	69.70%	89,990	154,892	F
14	I-10	SR 23 (First Coast Expressway) to Chaffee Road	6	Freeway	Urban	D	123,600	71,390	C	61.12%	78,913	150,303	E
15	I-10	Chaffee Road to Hammond Boulevard/Greenland Avenue/I-295	6	Freeway	Urban	D	123,600	102,176	D	54.63%	70,533	172,709	F
16	I-10	Hammond Boulevard/Greenland Avenue to I-295	6	Freeway	Urban	D	123,600	105,271	D	54.63%	70,533	175,804	F

Source: Tables 02, 06 and 07

Table 11
Preliminary Mobility Fee Calculations
301 Villages - Traffic Impact Assessment

Project Phase	Daily Net External Trip Generation	Mobility Zone	Year 2021 Base Cost Per VMT	Internal VMT Factor	Development Area	VMT Per Development Area	Estimated Mobility Fees Cumulative (Year 2021 \$)
Phase 01	34,311	6	\$ 79.04	0.61	Rural	7.71	\$ 12,754,803.49
Phase 02 (Cumulative)	92,679	6	\$ 79.04	0.61	Rural	7.71	\$ 34,452,578.84
Phase 03 (Cumulative)	129,111	6	\$ 79.04	0.61	Rural	7.71	\$ 47,995,844.88

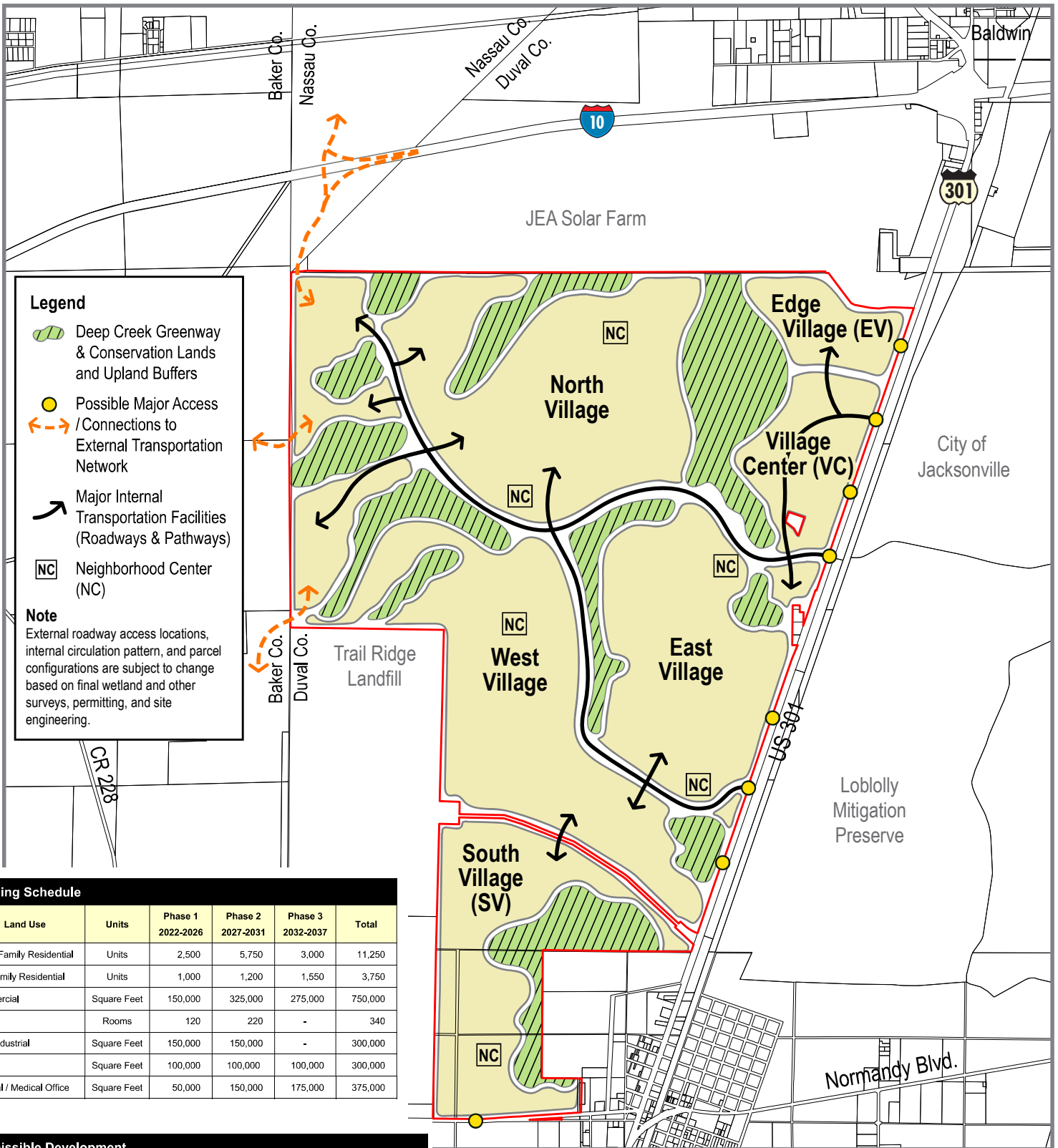
A yearly inflation factor of 3.3% will be applied for future payments

Attachment A

Conceptual Site Plan
(Source: Prosser, Inc.)

301 Villages

Conceptual Master Plan



Phasing Schedule					
Land Use	Units	Phase 1 2022-2026	Phase 2 2027-2031	Phase 3 2032-2037	Total
Single Family Residential	Units	2,500	5,750	3,000	11,250
Multi-family Residential	Units	1,000	1,200	1,550	3,750
Commercial	Square Feet	150,000	325,000	275,000	750,000
Hotel	Rooms	120	220	-	340
Light Industrial	Square Feet	150,000	150,000	-	300,000
Office	Square Feet	100,000	100,000	100,000	300,000
Hospital / Medical Office	Square Feet	50,000	150,000	175,000	375,000

Permissible Development							
Land Use	Single Family (Units)	Multi-family (Units)	Commercial (Sq. Feet)	Office (Sq. Feet)	Flex Industrial (Sq. Feet)	Hotel (Rooms)	Hospital/Medical (Sq. Feet)
Total	11,250	3,750	750,000	300,000	300,000	340	375,000
Edge Village		•	•		•		
Village Center	•	•	•	•	•	•	•
West Village	•	•	•	•	•		
North Village	•	•	•	•			
East Village	•	•	•	•		•	
South Village	•	•			•		

• Denotes land use is permissible within the village

June 14, 2021



Attachment B

Study Methodology Document

City of Jacksonville

Laurie Santana
Chief of Transportation Planning Division
LSantana@coj.net

Christopher W. LeDew, P.E.
Chief of Traffic Engineering
CLedew@coj.net

John Kolczynski E.I.
Traffic Technician Senior
JohnFK@coj.net

Florida Department of Transportation

Tom Cavin, P.E.
Jacksonville Studies Engineer/Access Management
Tom.cavin@dot.state.fl.us

Julian McKinley P.E.
Maintenance Program Engineer/D2 Jax Maintenance
Julian.McKinley@dot.state.fl.us

A mixed-use development anticipated to include 11,250 single-family dwelling units, 3,750 multi-family dwelling units, 750,000 SF commercial/retail, 340 rooms hotel, 300,000 SF light industrial, 300,000 SF office and 375,000 SF hospital/medical office uses is proposed for construction. The project will be built in 3 phases. The proposed development will be located on the southwest quadrant of I-10 and US 301 interchange.

A site location and conceptual master plan (Provided by Prosser, Inc.) is attached. The City of Jacksonville (COJ) Planning Department is requiring a traffic impact memo summarizing an assessment of the currently identified and expected roadway operating conditions of the immediately surrounding transportation network. This memo provides a summary of the methodology that will be adopted in performing the traffic impact assessment.

Trip Generation:

Trip generation and internal capture for the proposed development will be estimated using the rates, equations and procedures included in the Trip Generation Manual, 10th Edition published by the Institute of Transportation Engineers (ITE).

Study Area:

The study will include the following roadway segments:

- US 301 – South of Normandy Boulevard
- US 301 – Normandy Boulevard to I-10
- US 301 – I-10 to Beaver Street
- Normandy Boulevard – US 301 to CR 217
- Normandy Boulevard – CR 217 to Yellow Water Road
- Normandy Boulevard – Yellow Water Road to POW-MIA Memorial Parkway
- I-10 – West of Baker County Line
- I-10 – Baker County Line to Duval County Line
- I-10 – Duval County Line to US 301

- I-10 – US 301 to SR 23 (First Coast Expressway)
- I-10 – SR 23 (First Coast Expressway) to Chaffee Road
- I-10 – Chaffee Road to Hammond Boulevard
- I-10 – Hammond Boulevard to I-295

Planned and Programmed Improvements:

The Northeast Florida Transportation Planning Organization (NFTPO) Long Range Transportation Plan (LRTP), Priority Projects List (PPL), Transportation Improvement Program (TIP) and the Florida Department of Transportation (FDOT) Work Program will be reviewed to identify any roadway projects within the vicinity of the study area of the proposed development and incorporated in the analysis.

Analysis Time Period:

Analysis for the proposed development will be performed based on daily traffic volumes under existing year 2021, year 2026 (Phase 01), year 2031 (Phase 02) and year 2036 (Phase 03) development conditions.

Data Collection:

Existing traffic AADTs will be obtained from the Florida Traffic Online (FTO) website and COJ Planning Department. Future conditions AADT on the study area roadway segments will be obtained from the FDOT LOS Summary Manual

Project Traffic Distribution and Assignment:

Project traffic distribution for the proposed development will be provided using the Northeast Regional Planning Model Activity-Based (NERPMAB) travel demand model. This distribution will be used to determine the project traffic assignment on the study segments. The travel demand model will be validated to include the following projects:

- The Trails PUD: Mixed use development with approximately 4,850 DU and 230,000 square feet commercial located south of Normandy Boulevard (SR 228) between Maxville-Middleburg Road and Solomon Road

Background and Build-Out Traffic Volumes:

Background traffic volumes will be estimated by applying a growth factor obtained from the NERPMAB travel demand model to the existing traffic volumes. Buildout traffic volumes will include background traffic volumes and project traffic assignment for the proposed development.

Roadway Segment Analysis:

Segment analysis of the above stated roadway segment will include future background conditions traffic plus the project traffic from the proposed development. Any impacts to the study area roadway segments will be identified and summarized.

Access and Study Area Intersection Analysis:

Project access intersections and study area intersection analysis will be provided during project PUD and 10-set submittal process.

Traffic Study Report:

A traffic study report summarizing the above tasks and the study findings will be submitted to FDOT and COJ for review and approval.

Thank you and please let me know if you have any questions.

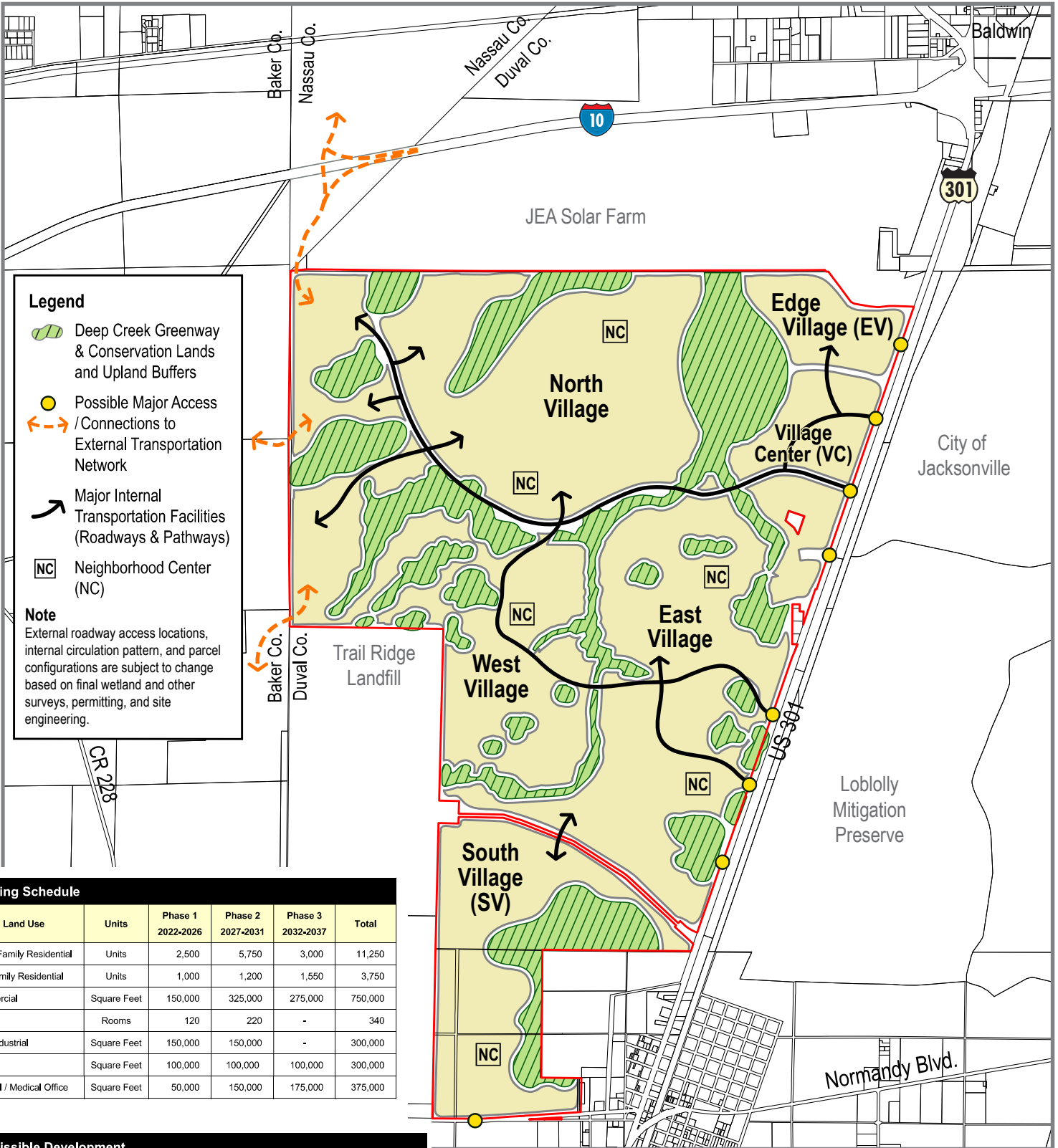
Sincerely,
Chindalur Traffic Solutions, Inc.



Rajesh Chindalur, P.E., PTOE
Chindalur Traffic Solutions, Inc.
8833 Perimeter Park Boulevard, Suite 103, Jacksonville, FL 32216
chindalur@ctrfficsolutions.com

301 Villages

Conceptual Master Plan



Phasing Schedule					
Land Use	Units	Phase 1 2022-2026	Phase 2 2027-2031	Phase 3 2032-2037	Total
Single Family Residential	Units	2,500	5,750	3,000	11,250
Multi-family Residential	Units	1,000	1,200	1,550	3,750
Commercial	Square Feet	150,000	325,000	275,000	750,000
Hotel	Rooms	120	220	-	340
Light Industrial	Square Feet	150,000	150,000	-	300,000
Office	Square Feet	100,000	100,000	100,000	300,000
Hospital / Medical Office	Square Feet	50,000	150,000	175,000	375,000

Permissible Development							
Land Use	Single Family (Units)	Multi-family (Units)	Commercial (Sq. Feet)	Office (Sq. Feet)	Flex Industrial (Sq. Feet)	Hotel (Rooms)	Hospital/Medical (Sq. Feet)
Total	11,250	3,750	750,000	300,000	300,000	340	375,000
Edge Village		•	•		•		
Village Center	•	•	•	•	•	•	•
West Village	•	•	•	•	•		
North Village	•	•	•	•	•		
East Village	•	•	•	•	•	•	
South Village	•	•			•		

• Denotes land use is permissible within the village

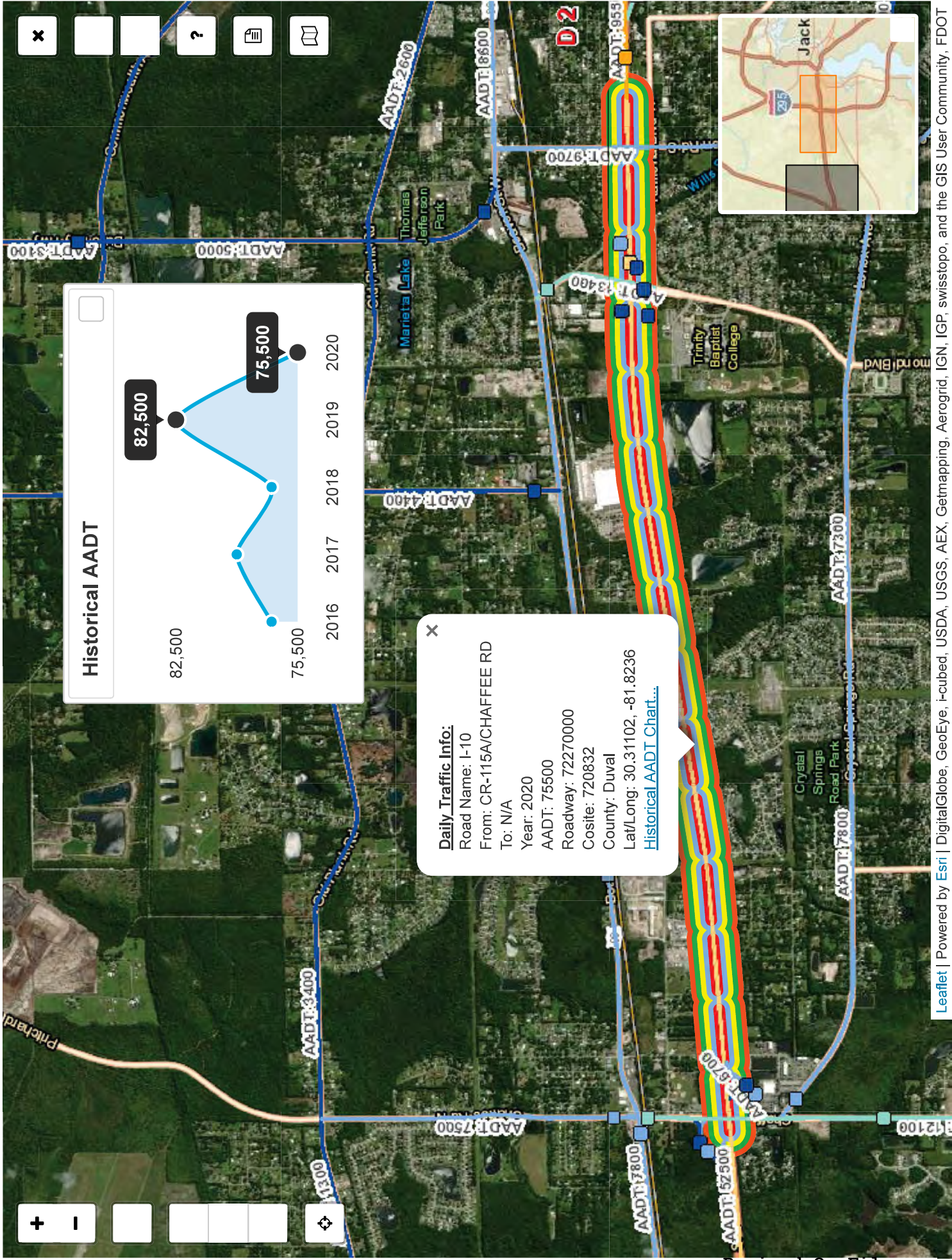
August 30, 2021



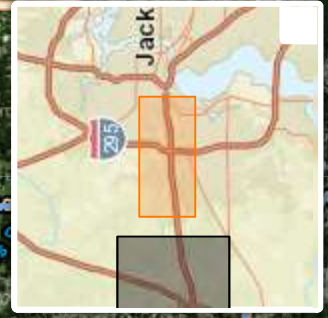
PROSSER

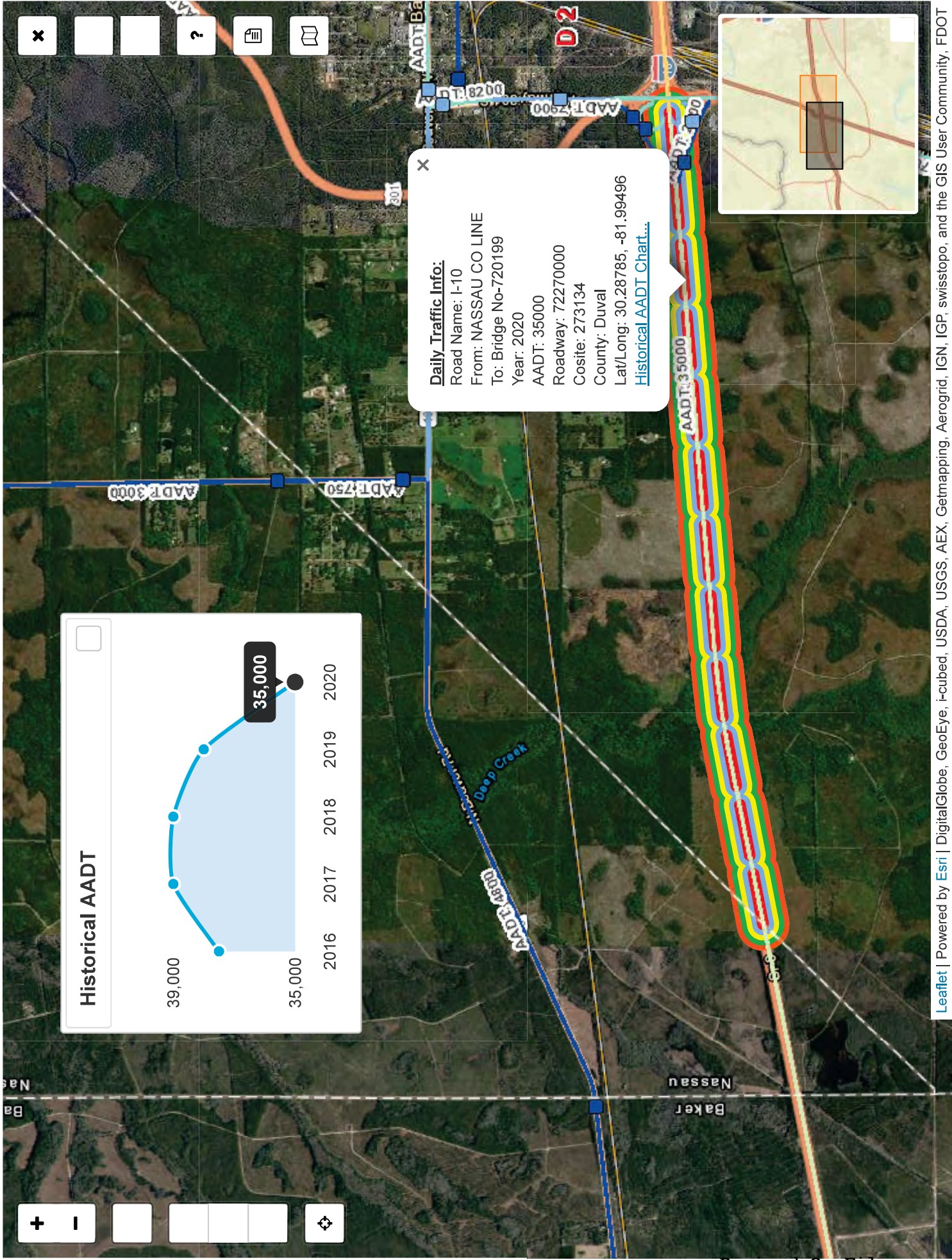
Attachment C

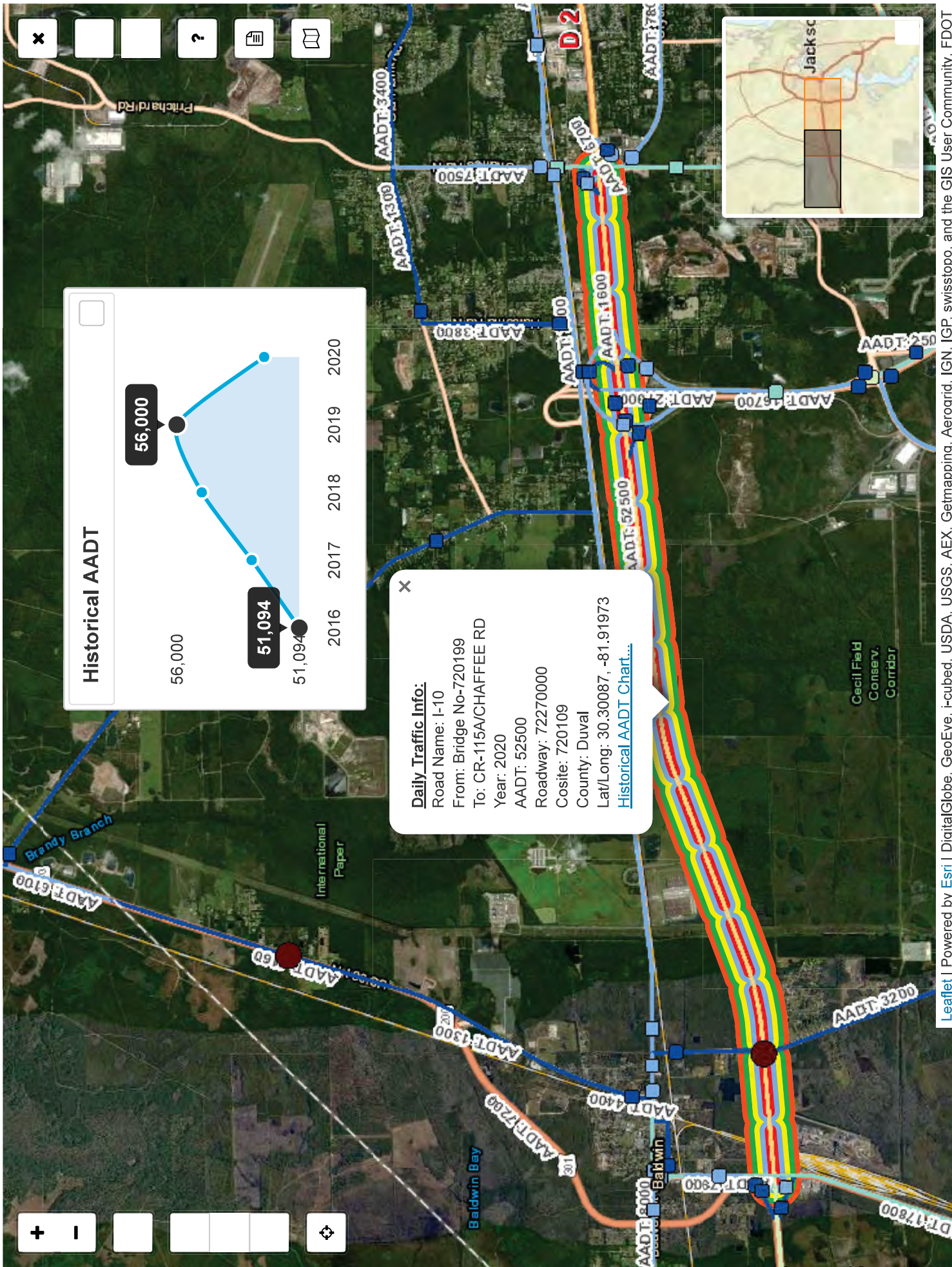
FDOT Traffic Counts Data,
Historical AADT, FDOT D2 LOS
Summary Reports, QLOS
Generalized Service Volumes
Tables

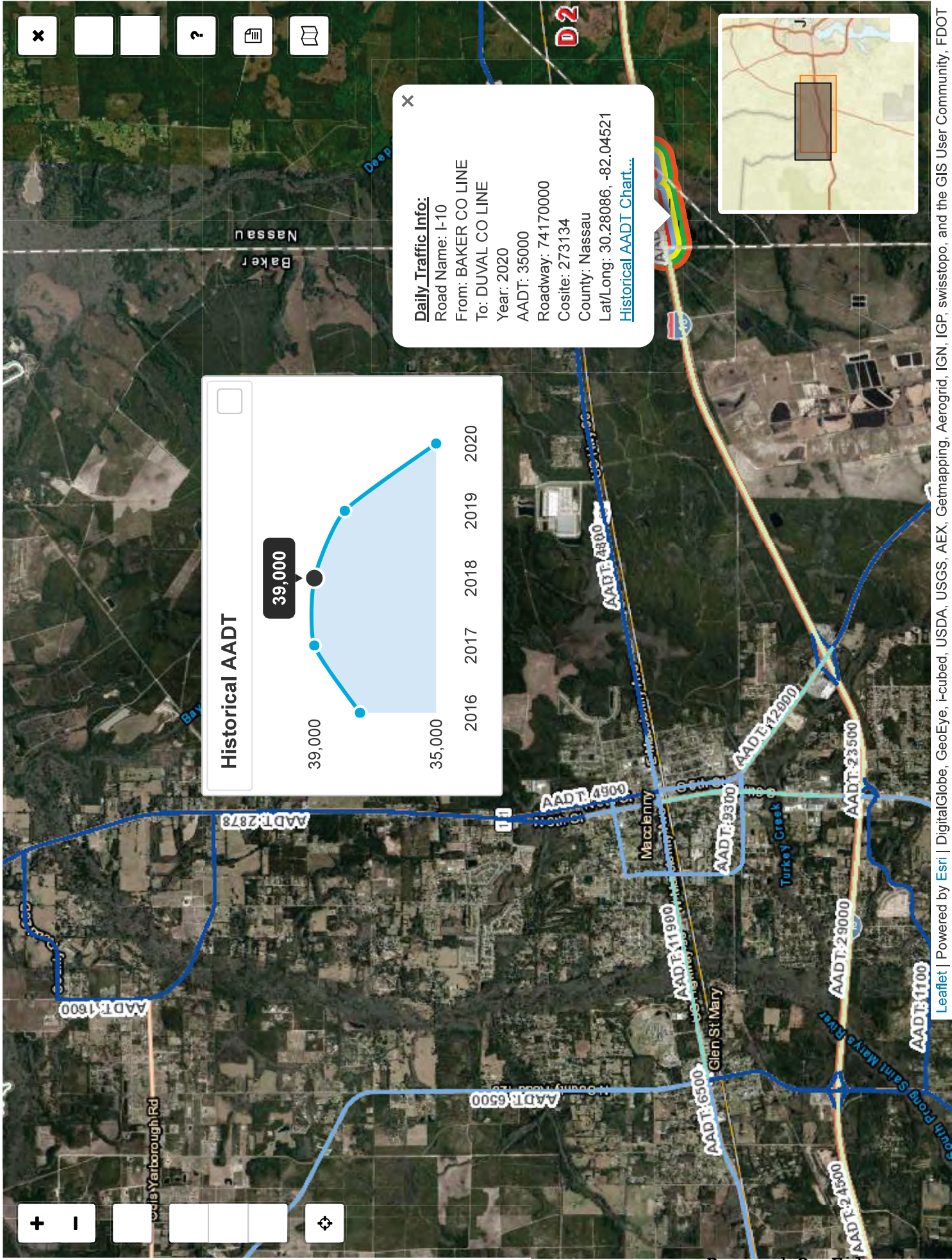


Daily Traffic Info:
 Road Name: I-10
 From: CR-115A/CHAFFEE RD
 To: N/A
 Year: 2020
 AADT: 75500
 Roadway: 72270000
 Cosite: 720832
 County: Duval
 Lat/Long: 30.31102, -81.8236
[Historical AADT Chart...](#)



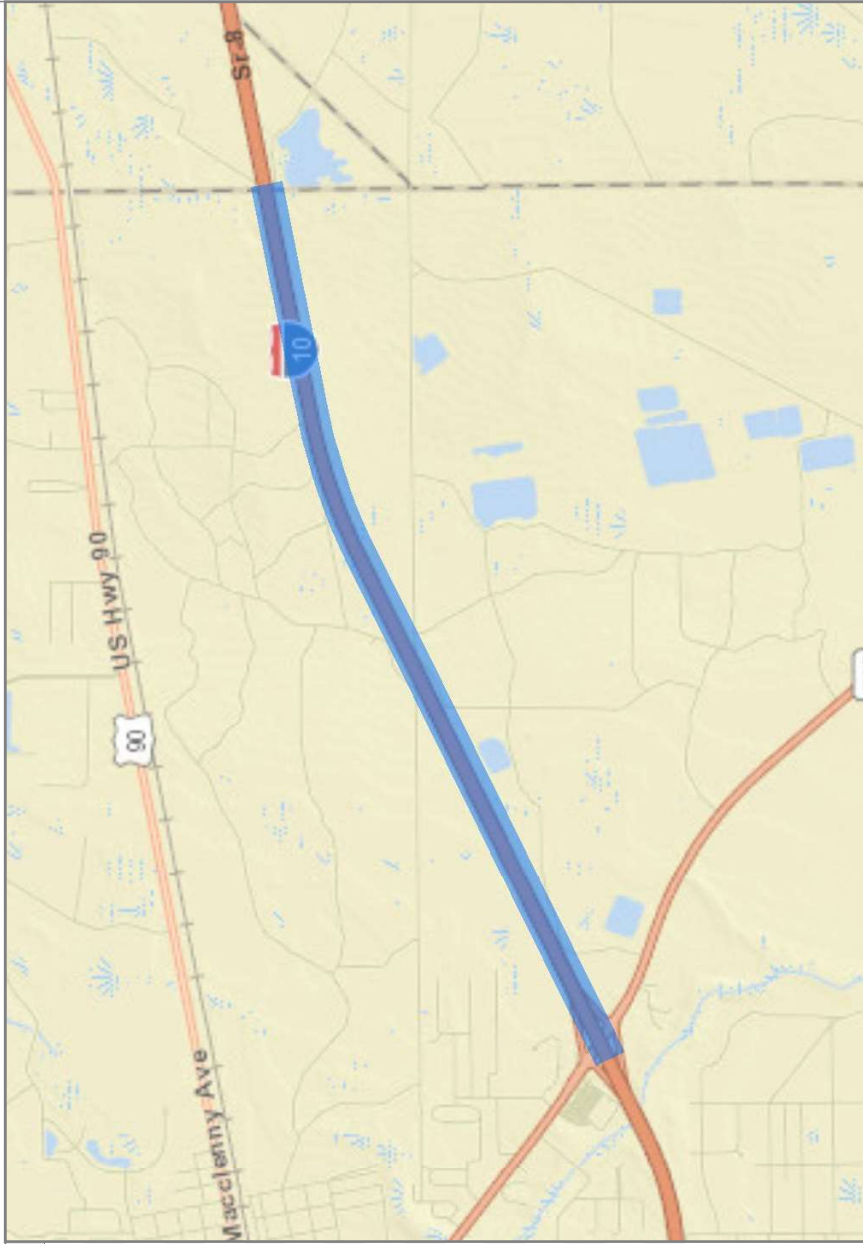








I-10 from SR 228 to Nassau Co. Line



Attribute	Value
Segment ID:	1043
Segment Length (miles):	3.600 mi
Location:	Baker County
County:	Baker
Roadway ID:	27090000
Begin MP:	21.862
End MP:	25.462
SIS:	Yes
SIS Type:	SIS Highway Corridor
Median Treatment:	Divided
Directionality:	Two-Way
Posted Speed:	70 mph
Facility Type:	Freeway
Area Type:	Rural
Standard K:	10.5%
FDOT LOS Standard:	C
Max. Service Vol. Adj. Factor:	0.00

Data Sources: RCi; TCI; NERPM AB; GUATS; FLSWM

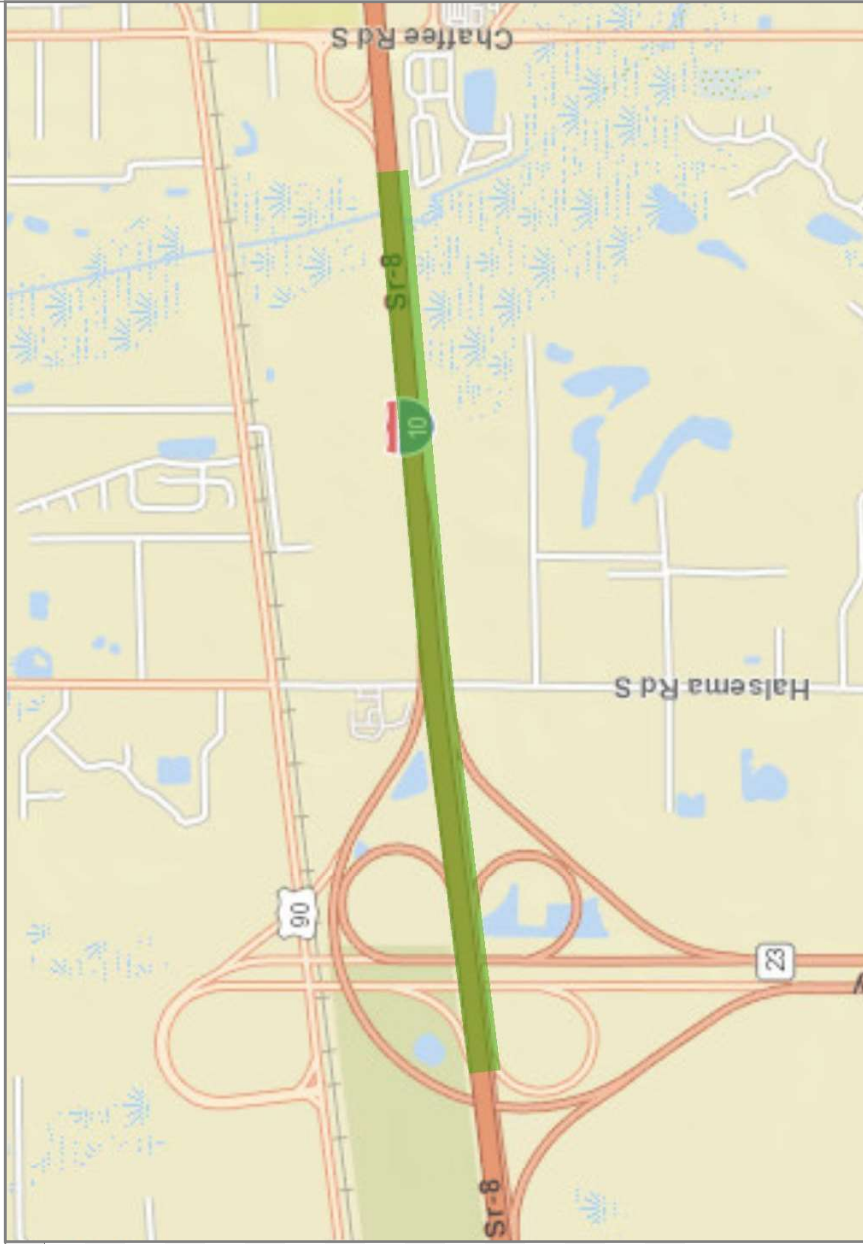
Google Street View:
<http://maps.google.com/maps?q=&layer=c&cbll=30.27399398667,-82.0781764265482>

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	4	4	4	4	4	8	8
AADT	37,914	38,293	40,189	42,085	43,980	45,876	47,772
Peak Hour Maximum Service Volume at LOS Standard	5,040	5,040	5,040	5,040	5,040	9,490	9,490
Peak Hour Traffic Volume	3,981	4,021	4,220	4,419	4,618	4,817	5,016
Peak Hour LOS	C	C	C	C	C	B	B

Notes: Eight lanes by 2040 per CFP (add four lanes); Managed lanes were treated as general purpose lanes to simplify the capacity.



I-10 from SR 23 to Chaffee Rd



Attribute	Value
Segment ID:	3030
Segment Length (miles):	1.741 mi
Location:	Jacksonville
County:	Duval
Roadway ID:	72270000
Begin MP:	9.514
End MP:	11.256
SIS:	Yes
SIS Type:	SIS Highway Corridor
Median Treatment:	Divided
Directionality:	Two-Way
Posted Speed:	70 mph
Facility Type:	Freeway
Area Type:	Urbanized
Standard K:	9.0%
FDOT LOS Standard:	D
Max. Service Vol. Adj. Factor:	0.00

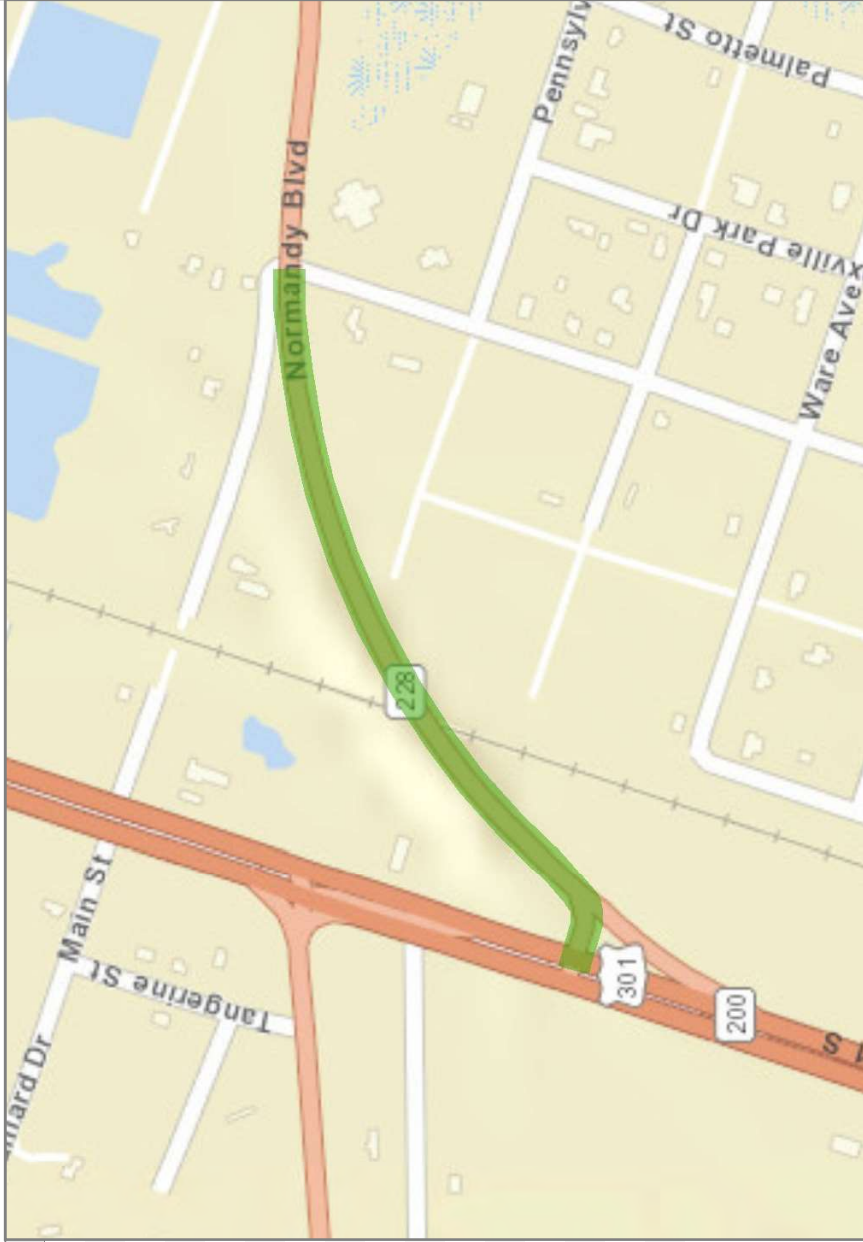
Data Sources: RCI; TCI; NERPM AB; GUATS; FLSWM
 Google Street View:
<http://maps.google.com/maps?q=&layer=c&cbll=30.3076369771431,-81.8674131737383>

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	6	6	6	6	6	10	10
AAAT	56,000	57,282	63,695	70,107	76,520	82,932	89,344
Peak Hour Maximum Service Volume at LOS Standard	10,220	10,220	10,220	10,220	10,220	17,040	17,040
Peak Hour Traffic Volume	5,040	5,155	5,733	6,310	6,887	7,464	8,041
Peak Hour LOS	B	B	B	C	C	B	B

Notes: Ten lanes by 2040 per CFP (add four lanes); Managed lanes were treated as general purpose lanes to simplify the capacity.



SR 228 / Normandy Blvd. from US 301 to McClelland Rd



Attribute	Value
Segment ID:	4481
Segment Length (miles):	0.372 mi
Location:	Jacksonville
County:	Duval
Roadway ID:	72120201
Begin MP:	0.000
End MP:	0.373
SIS:	Yes
SIS Type:	SIS Highway Corridor
Median Treatment:	Undivided
Directionality:	Two-Way
Posted Speed:	35 mph
Facility Type:	Highway
Area Type:	Urbanized
Standard K:	9.0%
FDOT LOS Standard:	D
Max. Service Vol. Adj. Factor:	0.00

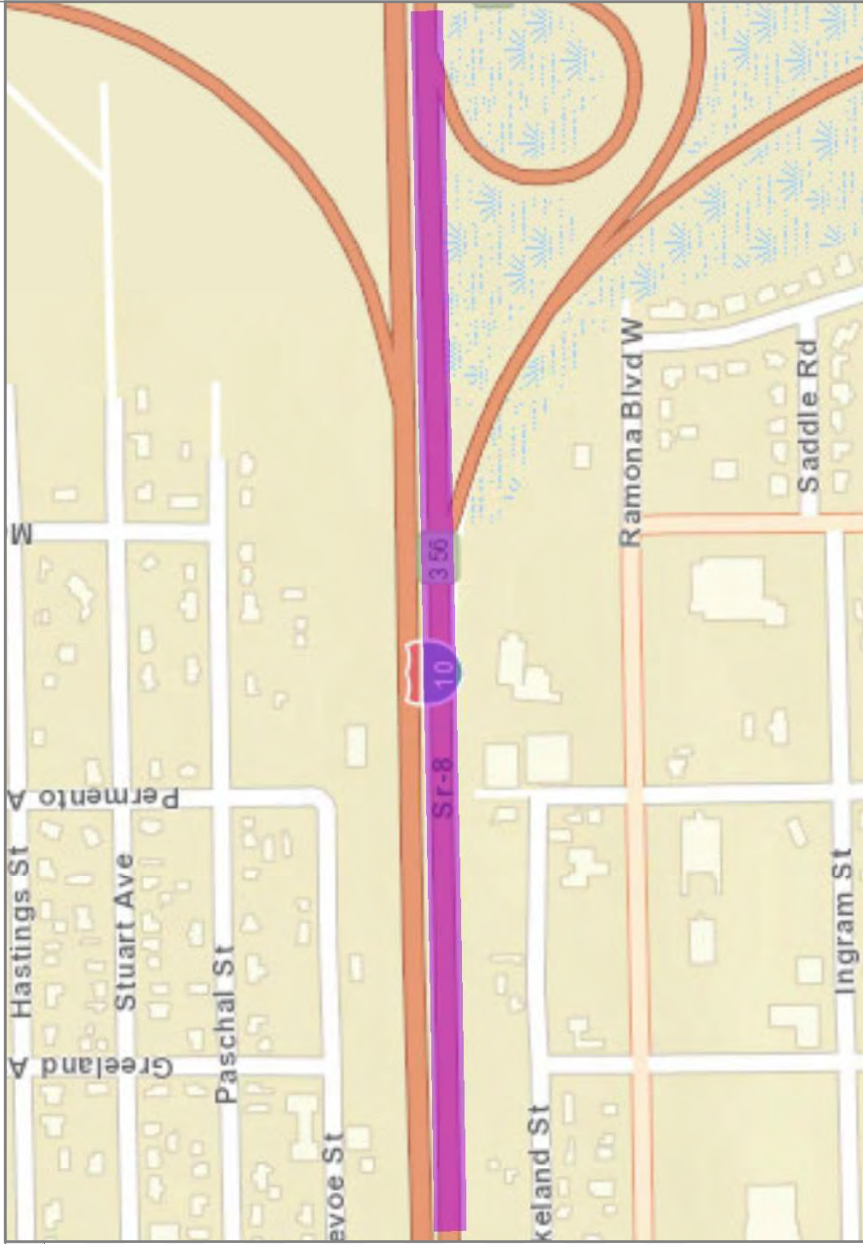
Data Sources: RCI; TCI; NERPM AB; GUATS; FLSWM
 Google Street View:
<http://maps.google.com/maps?q=&layer=c&cbll=30.2016255242882,-82.0125828183902>

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	2	2	2	2	2	2	2
AADT	6,400	6,504	7,027	7,549	8,071	8,593	9,115
Peak Hour Maximum Service Volume at LOS Standard	2,180	2,180	2,180	2,180	2,180	2,180	2,180
Peak Hour Traffic Volume	576	585	632	679	726	773	820
Peak Hour LOS	B	B	B	B	B	B	B

Notes:



I-10 from Greenland Ave to I-295



Attribute	Value
Segment ID:	4547
Segment Length (miles):	0.586 mi
Location:	Jacksonville
County:	Duval
Roadway ID:	72270000
Begin MP:	15.601
End MP:	16.187
SIS:	Yes
SIS Type:	SIS Highway Corridor
Median Treatment:	Divided
Directionality:	Two-Way
Posted Speed:	55 mph
Facility Type:	Freeway
Area Type:	Urbanized
Standard K:	9.0%
FDOT LOS Standard:	D
Max. Service Vol. Adj. Factor:	0.00

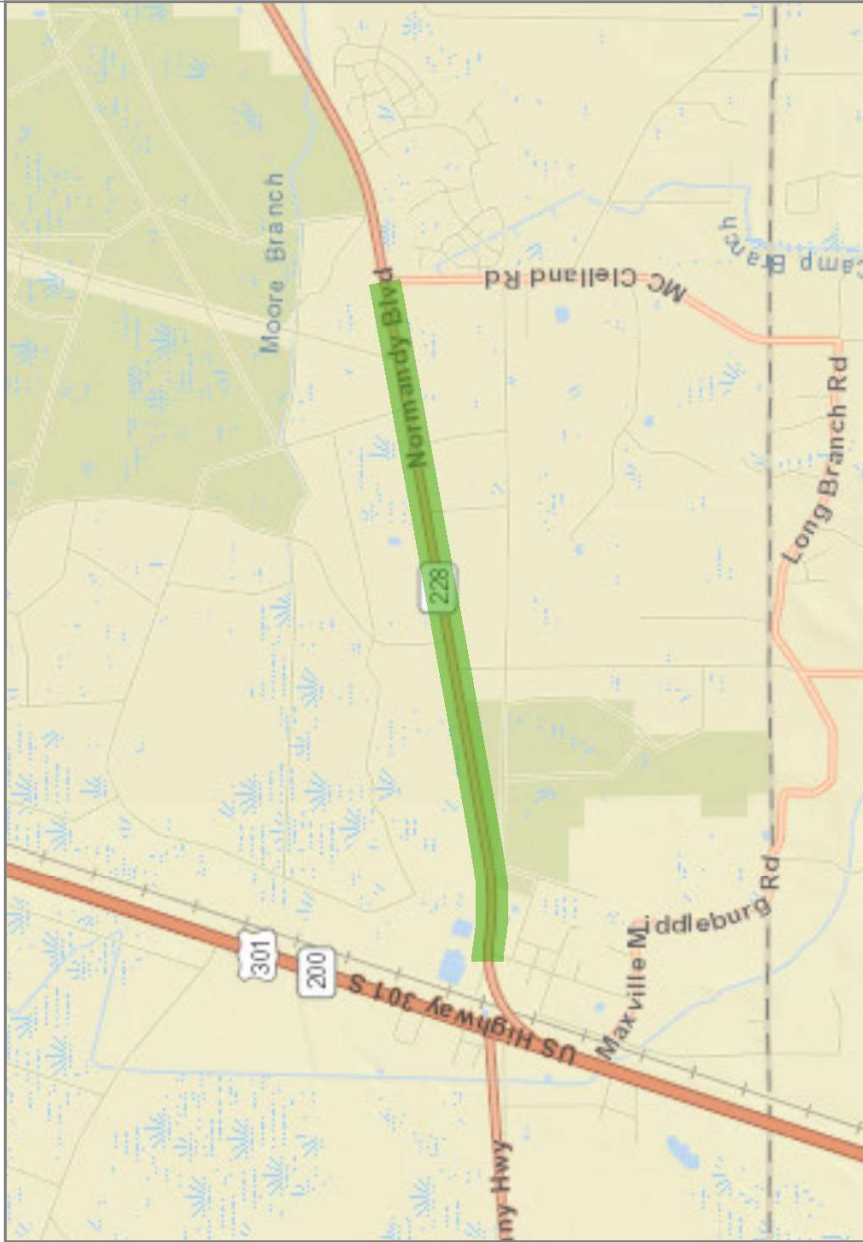
Data Sources: RCJ; TCI; NERPM AB; GUATS; FLSWM
 Google Street View:
<http://maps.google.com/maps?q=&layer=c&cbll=30.3150344425531,-81.7757269472387>

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	6	6	6	6	6	10	10
AADT	103,137	103,315	104,204	105,093	105,982	106,871	107,760
Peak Hour Maximum Service Volume at LOS Standard	10,220	10,220	10,220	10,220	10,220	17,040	17,040
Peak Hour Traffic Volume	9,282	9,298	9,378	9,458	9,538	9,618	9,698
Peak Hour LOS	D	D	D	D	D	B	B

Notes: Ten lanes by 2040 per CFP (add four lanes); Managed lanes were treated as general purpose lanes to simplify the capacity.



SR 228 / Normandy Blvd. from US 301 to McClelland Rd



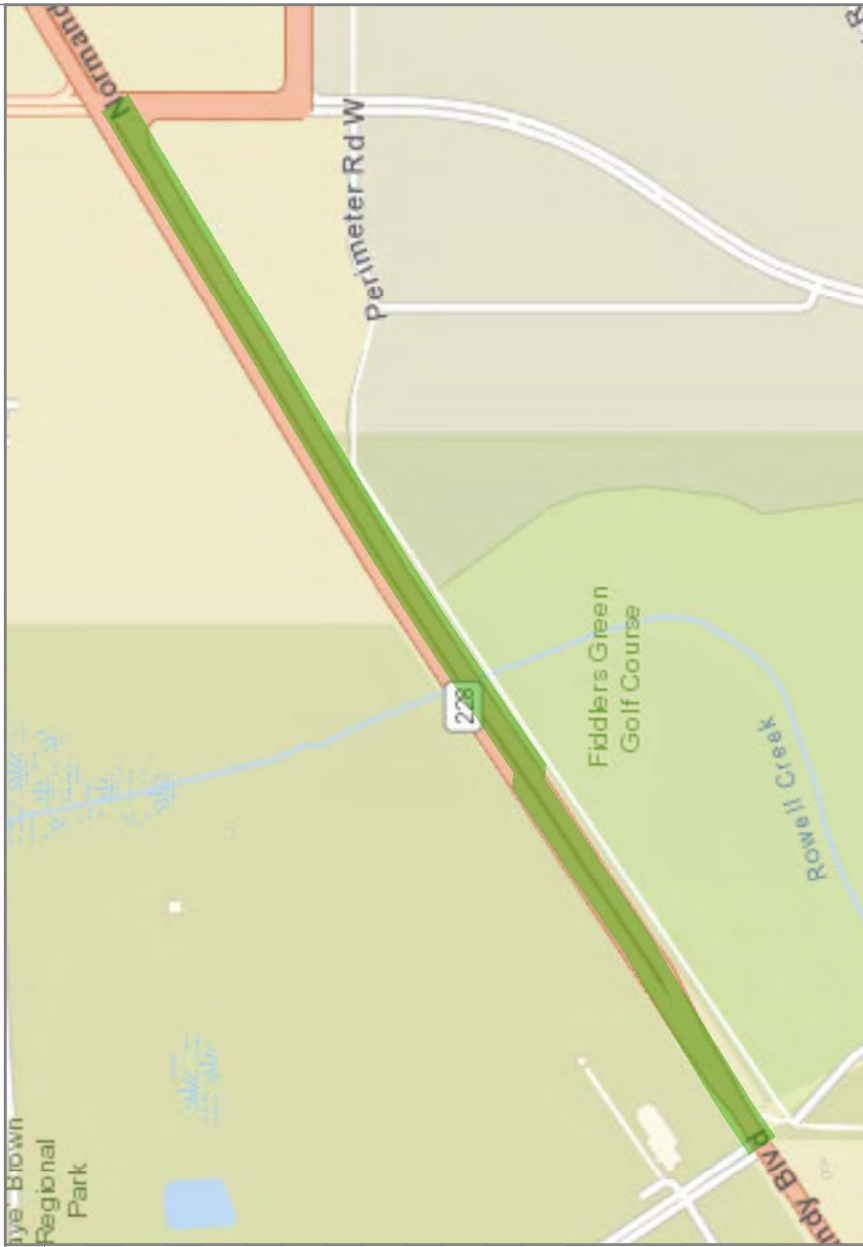
Attribute	Value
Segment ID:	481
Segment Length (miles):	2.652 mi
Location:	Jacksonville
County:	Duval
Roadway ID:	72120000
Begin MP:	2.576
End MP:	5.228
SIS:	No
SIS Type:	Non SIS
Median Treatment:	Undivided
Directionality:	Two-Way
Posted Speed:	45-60 mph
Facility Type:	Highway
Area Type:	Urbanized
Standard K:	9.0%
FDOT LOS Standard:	D
Max. Service Vol. Adj. Factor:	0.00
Data Sources:	RCI; TCI; NERPM AB; GUATS; FLSWM
Google Street View:	http://maps.google.com/maps?q=&layer=c&cbll=30.2046451400147,-81.9881277824091

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	2	2	2	2	2	2	2
AAAT	11,323	11,522	12,519	13,515	14,511	15,507	16,504
Peak Hour Maximum Service Volume at LOS Standard	2,180	2,180	2,180	2,180	2,180	2,180	2,180
Peak Hour Traffic Volume	1,019	1,037	1,127	1,216	1,306	1,396	1,485
Peak Hour LOS	B	B	C	C	C	C	C

Notes:



SR 228 / Normandy Blvd. from Jax Equestrian Center to SR 134



Attribute	Value
Segment ID:	482
Segment Length (miles):	1.180 mi
Location:	Jacksonville
County:	Duval
Roadway ID:	72120000
Begin MP:	9.606
End MP:	10.787
SIS:	No
SIS Type:	Non SIS
Median Treatment:	Divided
Directionality:	Two-Way
Posted Speed:	50-55 mph
Facility Type:	Highway
Area Type:	Urbanized
Standard K:	9.0%
FDOT LOS Standard:	D
Max. Service Vol. Adj. Factor:	0.00

Data Sources: RCJ; TCI; NERPM AB; GUATS; FLSWM
 Google Street View:
<http://maps.google.com/maps?q=&layer=c&cbll=30.244229223904,-81.8948876710151>

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	4	4	4	4	4	4	4
AADT	13,084	13,356	14,717	16,078	17,439	18,800	20,161
Peak Hour Maximum Service Volume at LOS Standard	5,960	5,960	5,960	5,960	5,960	5,960	5,960
Peak Hour Traffic Volume	1,178	1,202	1,325	1,447	1,569	1,692	1,814
Peak Hour LOS	B	B	B	B	B	B	B

Notes:



I-10 from Nassau Co. Line to US 301



Attribute	Value
Segment ID:	545
Segment Length (miles):	3.220 mi
Location:	Jacksonville
County:	Duval
Roadway ID:	72270000
Begin MP:	0.000
End MP:	3.220
SIS:	Yes
SIS Type:	SIS Highway Corridor
Median Treatment:	Divided
Directionality:	Two-Way
Posted Speed:	70 mph
Facility Type:	Freeway
Area Type:	Transition
Standard K:	10.5%
FDOT LOS Standard:	C
Max. Service Vol. Adj. Factor:	0.00

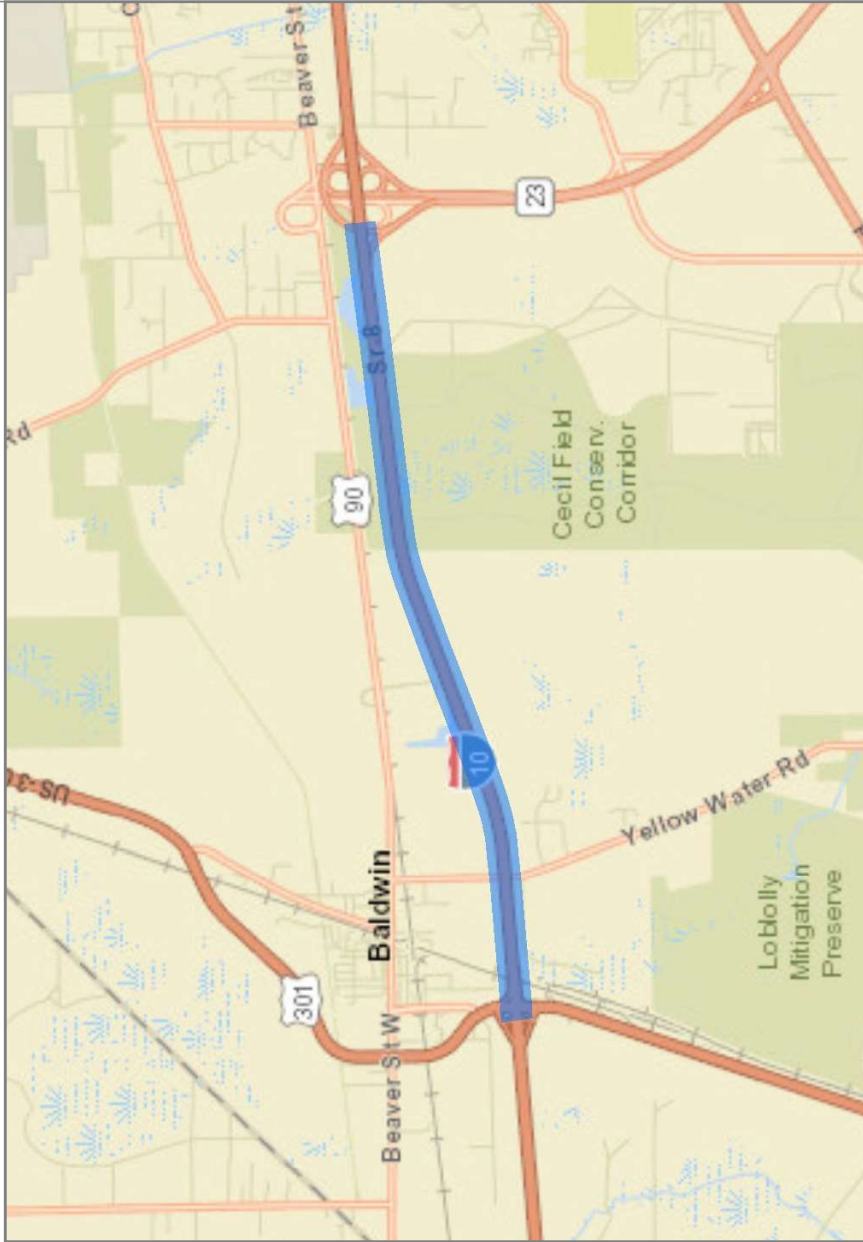
Data Sources: RCI; TCI; NERPM AB; GUATS; FLSWM
 Google Street View:
http://maps.google.com/maps?q=&layer=c&cbll=30.2867679698219_-82.0114642985243

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	4	4	4	4	4	8	8
AAAT	38,000	38,380	40,280	42,180	44,080	45,980	47,880
Peak Hour Maximum Service Volume at LOS Standard	5,780	5,780	5,780	5,780	5,780	11,220	11,220
Peak Hour Traffic Volume	3,990	4,030	4,229	4,429	4,628	4,828	5,027
Peak Hour LOS	B	B	B	C	C	B	B

Notes: Eight lanes by 2040 per CFP (add four lanes); Managed lanes were treated as general purpose lanes to simplify the capacity.



I-10 from US 301 to SR 23



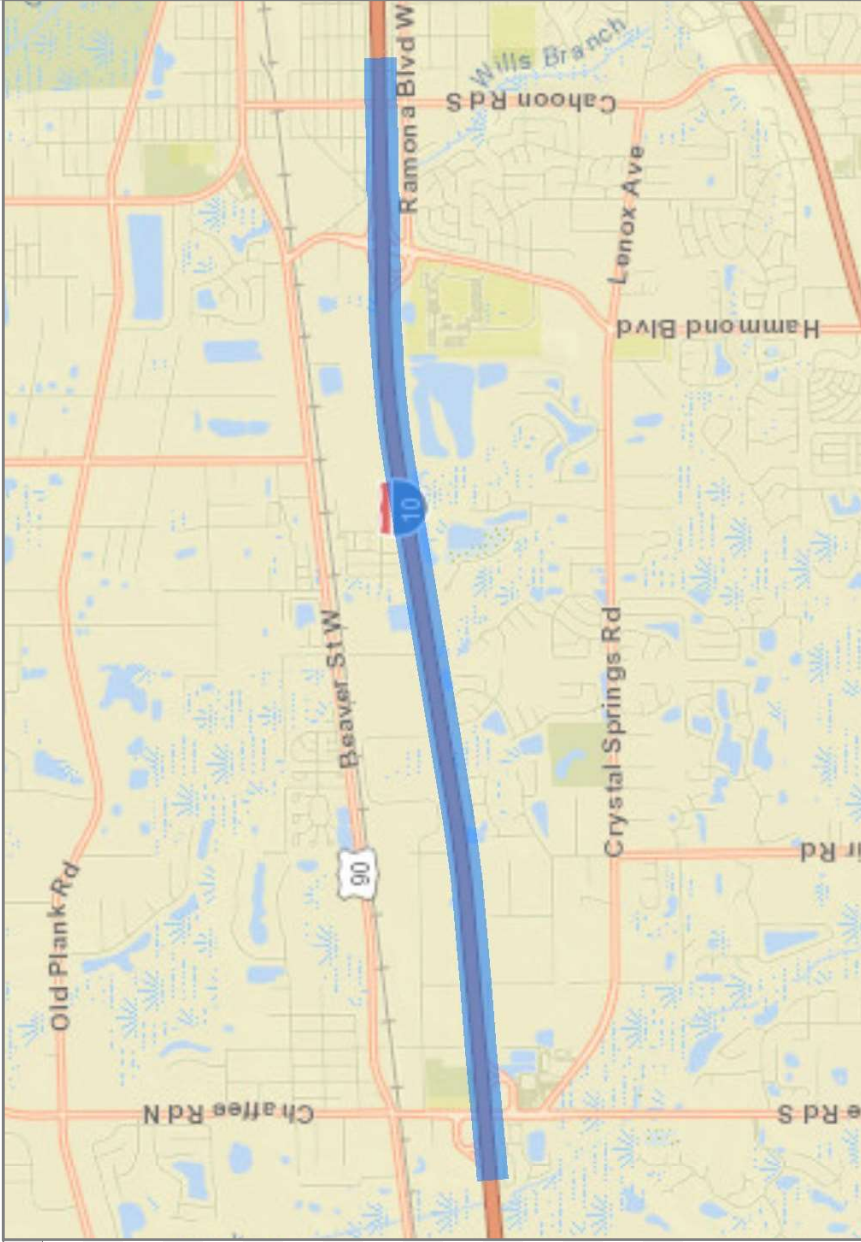
Attribute	Value
Segment ID:	546
Segment Length (miles):	6.293 mi
Location:	Jacksonville
County:	Duval
Roadway ID:	72270000
Begin MP:	3.220
End MP:	9.514
SIS:	Yes
SIS Type:	SIS Highway Corridor
Median Treatment:	Divided
Directionality:	Two-Way
Posted Speed:	70 mph
Facility Type:	Freeway
Area Type:	Urbanized
Standard K:	9.0%
FDOT LOS Standard:	D
Max. Service Vol. Adj. Factor:	0.00
Data Sources:	RCI; TCI; NERPM AB; GUATS; FLSWM
Google Street View:	http://maps.google.com/maps?q=&layer=c&cbll=30.298797229445,-81.9337018700864

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	4	4	4	4	4	8	8
AADT	55,854	56,608	60,378	64,148	67,918	71,689	75,459
Peak Hour Maximum Service Volume at LOS Standard	6,800	6,800	6,800	6,800	6,800	13,620	13,620
Peak Hour Traffic Volume	5,027	5,095	5,434	5,773	6,113	6,452	6,791
Peak Hour LOS	C	C	C	D	D	B	B

Notes: Eight lanes by 2040 per CFP (add four lanes); Managed lanes were treated as general purpose lanes to simplify the capacity.



I-10 from Chaffee Rd. to Greenland Ave



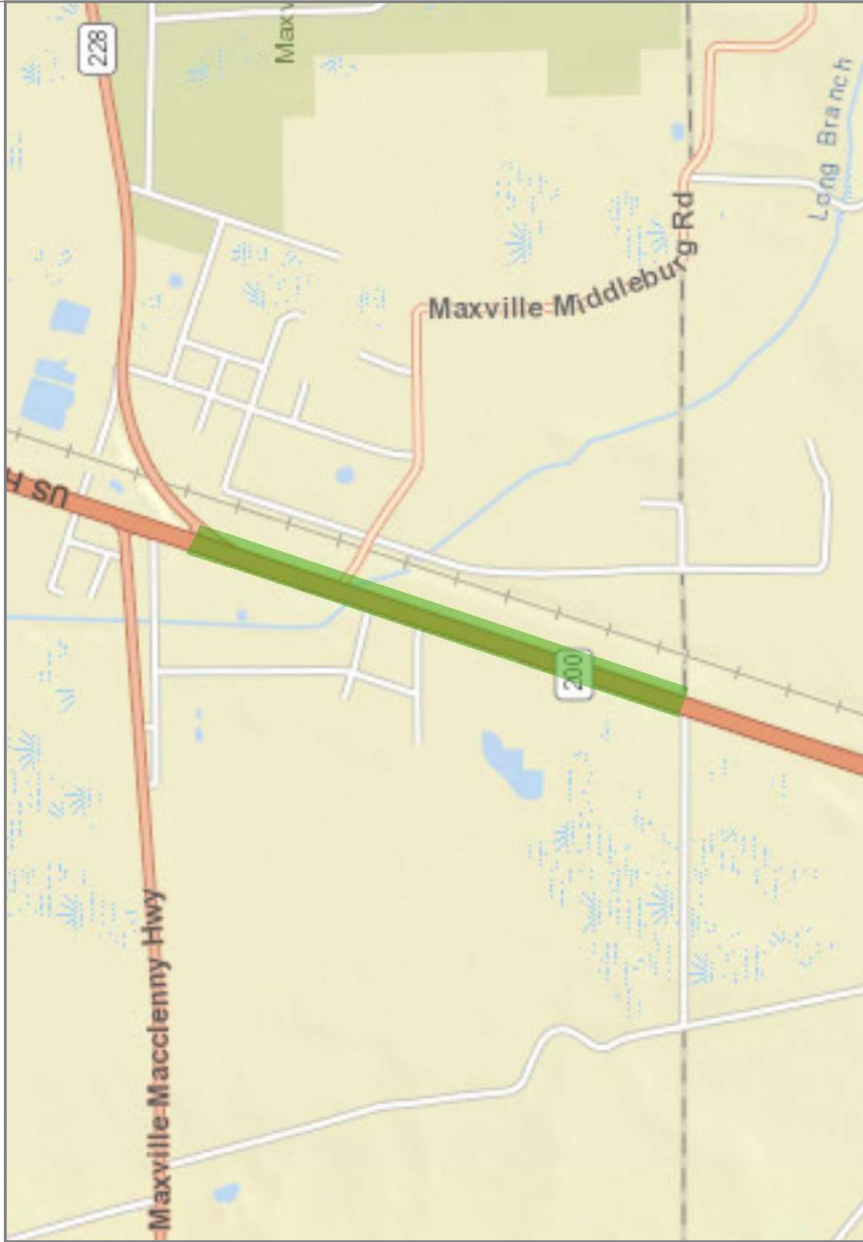
Attribute	Value
Segment ID:	547
Segment Length (miles):	4.345 mi
Location:	Jacksonville
County:	Duval
Roadway ID:	72270000
Begin MP:	11.256
End MP:	15.601
SIS:	Yes
SIS Type:	SIS Highway Corridor
Median Treatment:	Divided
Directionality:	Two-Way
Posted Speed:	55-70 mph
Facility Type:	Freeway
Area Type:	Urbanized
Standard K:	9.0%
FDOT LOS Standard:	D
Max. Service Vol. Adj. Factor:	0.00

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	6	6	6	6	6	10	10
AADT	81,244	82,988	91,710	100,432	109,154	117,876	126,598
Peak Hour Maximum Service Volume at LOS Standard	10,220	10,220	10,220	10,220	10,220	17,040	17,040
Peak Hour Traffic Volume	7,312	7,469	8,254	9,039	9,824	10,609	11,394
Peak Hour LOS	C	C	C	D	D	C	C

Notes: Ten lanes by 2040 per CFP (add four lanes); Managed lanes were treated as general purpose lanes to simplify the capacity.



US 301 from Clay Co. Line to SR 228 / Normandy Blvd



Attribute	Value
Segment ID:	602
Segment Length (miles):	0.989 mi
Location:	Jacksonville
County:	Duval
Roadway ID:	72140000
Begin MP:	0.000
End MP:	0.989
SIS:	Yes
SIS Type:	SIS Highway Corridor
Median Treatment:	Divided
Directionality:	Two-Way
Posted Speed:	45-60 mph
Facility Type:	Highway
Area Type:	Urbanized
Standard K:	9.0%
FDOT LOS Standard:	D
Max. Service Vol. Adj. Factor:	0.00

Data Sources: RCJ; TCI; NERPM AB; GUATS; FLSWM

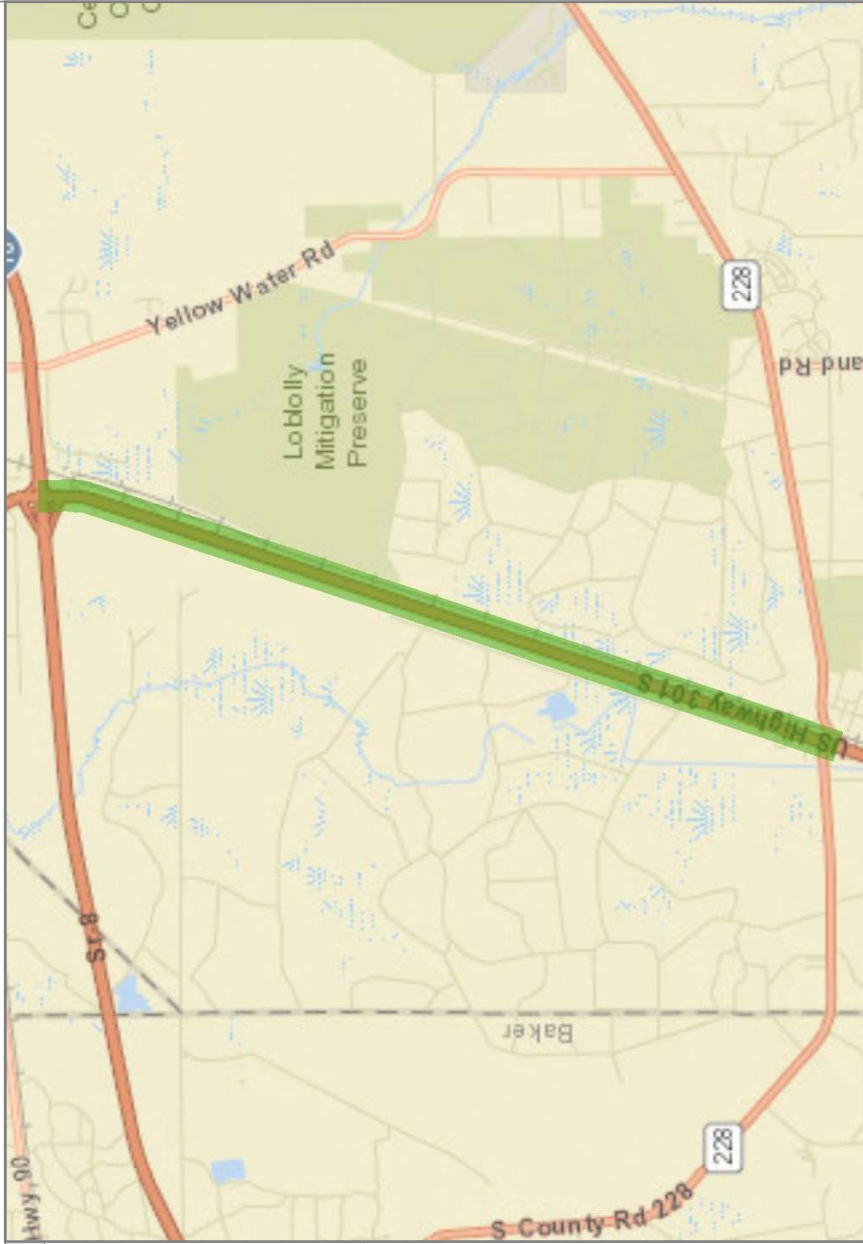
Google Street View:
<http://maps.google.com/maps?q=&layer=c&cbll=30.1935032531446,-82.0176799449741>

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	4	4	4	4	4	4	4
AADT	19,800	20,184	22,104	24,024	25,945	27,865	29,785
Peak Hour Maximum Service Volume at LOS Standard	5,960	5,960	5,960	5,960	5,960	5,960	5,960
Peak Hour Traffic Volume	1,782	1,817	1,989	2,162	2,335	2,508	2,681
Peak Hour LOS	B	B	B	B	B	B	B

Notes:



US 301 from SR 228 / Normandy Blvd to I-10



Attribute	Value
Segment ID:	603
Segment Length (miles):	6.424 mi
Location:	Jacksonville
County:	Duval
Roadway ID:	72140000
Begin MP:	0.989
End MP:	7.413
SIS:	Yes
SIS Type:	SIS Highway Corridor
Median Treatment:	Divided
Directionality:	Two-Way
Posted Speed:	45-65 mph
Facility Type:	Highway
Area Type:	Urbanized
Standard K:	9.0%
FDOT LOS Standard:	D
Max. Service Vol. Adj. Factor:	0.00

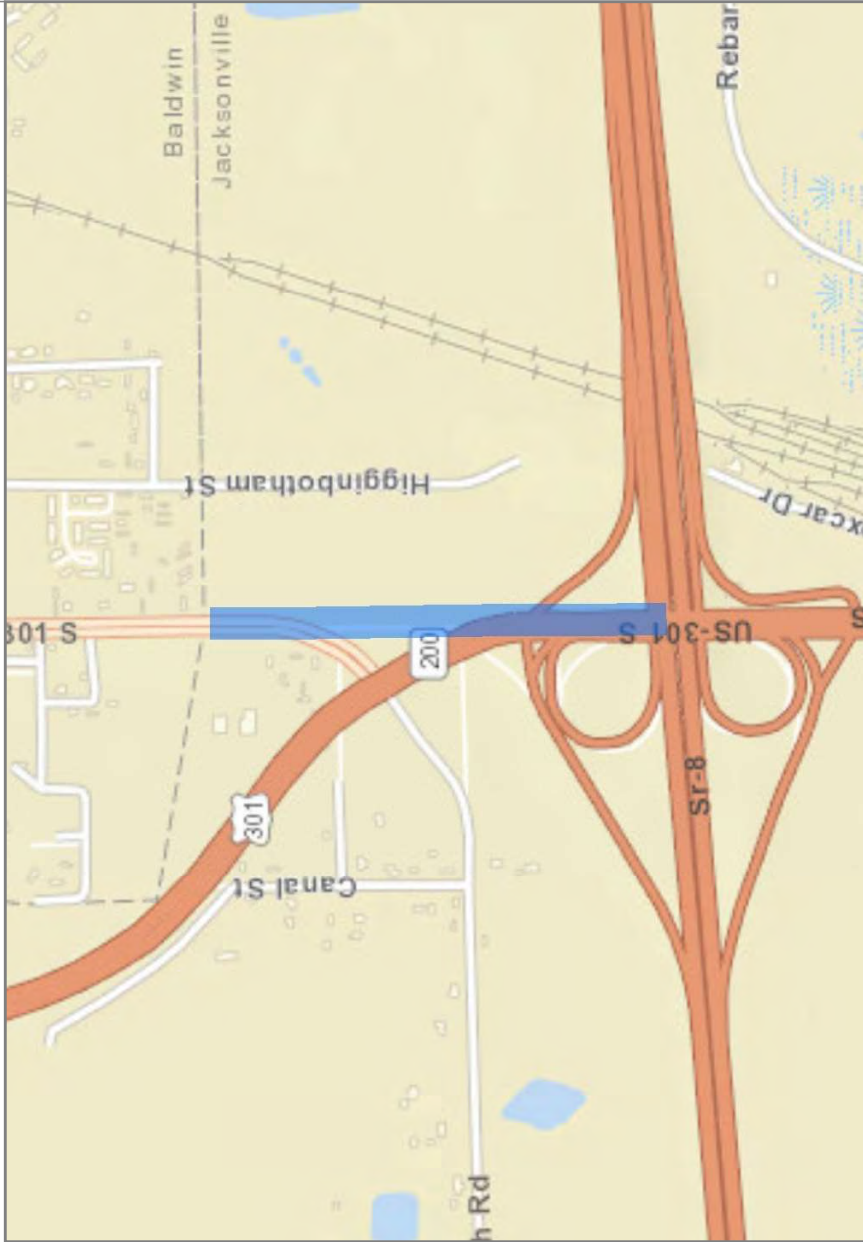
Data Sources: RCI; TCI; NERPM AB; GUATS; FLSWM
 Google Street View:
<http://maps.google.com/maps?q=&layer=c&cbll=30.2445622422753,-81.9980365123601>

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	4	4	4	4	4	4	4
AAAT	15,100	15,470	17,322	19,174	21,026	22,878	24,729
Peak Hour Maximum Service Volume at LOS Standard	5,960	5,960	5,960	5,960	5,960	5,960	5,960
Peak Hour Traffic Volume	1,359	1,392	1,559	1,726	1,892	2,059	2,226
Peak Hour LOS	B	B	B	B	B	B	B

Notes:



US 301 from I-10 to S. City Limit of Baldwin



Attribute	Value
Segment ID:	604
Segment Length (miles):	0.435 mi
Location:	Jacksonville
County:	Duval
Roadway ID:	72140000
Begin MP:	7.413
End MP:	7.849
SIS:	Yes
SIS Type:	SIS Highway Corridor
Median Treatment:	Divided
Directionality:	Two-Way
Posted Speed:	45 mph
Facility Type:	Arterial
Area Type:	Urbanized
Standard K:	9.0%
FDOT LOS Standard:	D
Max. Service Vol. Adj. Factor:	0.00

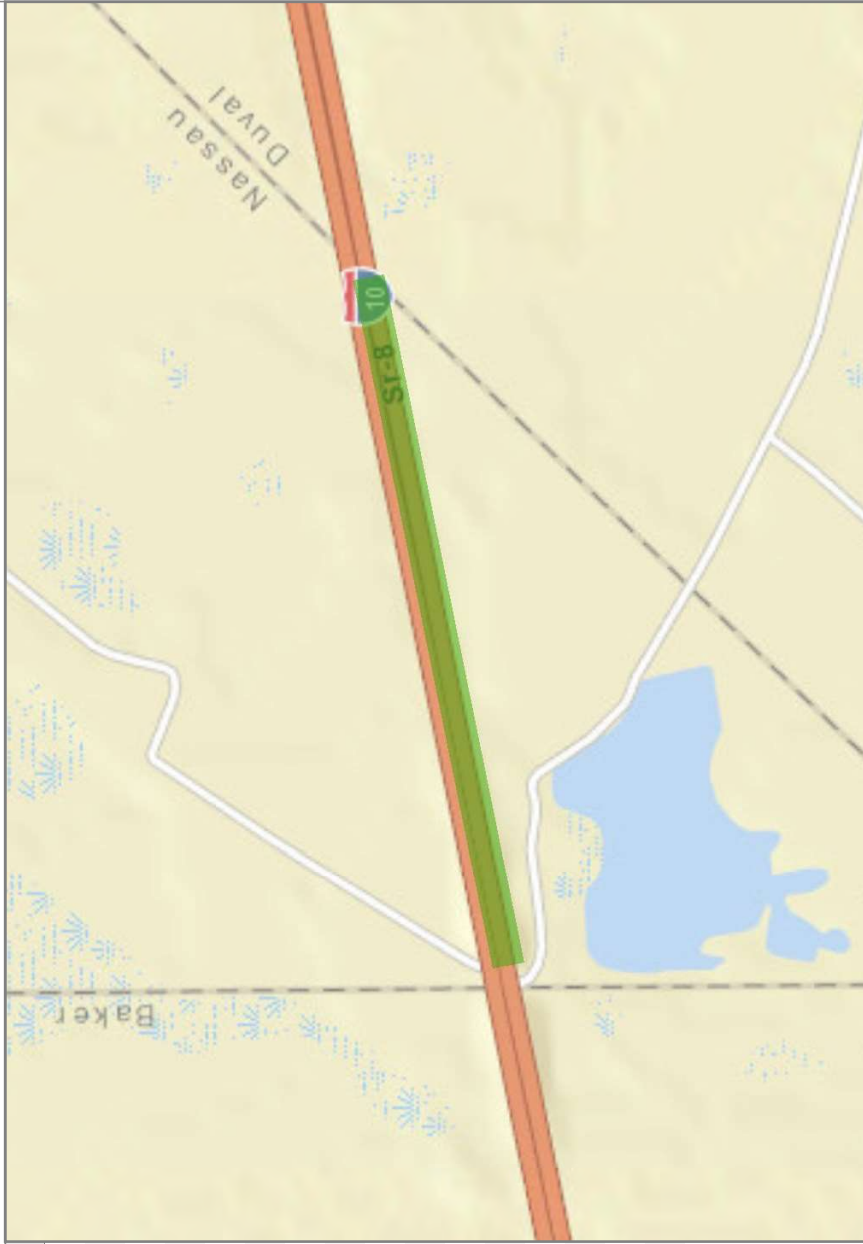
Data Sources: RCI; TCI; NERPM AB; GUATS; FLSWM
 Google Street View:
<http://maps.google.com/maps?q=&layer=c&cbll=30.2922491230002,-81.982828396909>

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	4	4	4	4	4	4	4
AAAT	10,932	11,067	11,744	12,421	13,098	13,775	14,452
Peak Hour Maximum Service Volume at LOS Standard	3,580	3,580	3,580	3,580	3,580	3,580	3,580
Peak Hour Traffic Volume	984	996	1,057	1,118	1,179	1,240	1,301
Peak Hour LOS	C	C	C	C	C	C	C

Notes:



I-10 from Baker Co. Line to Duval Co. Line



Attribute	Value
Segment ID:	746
Segment Length (miles):	0.675 mi
Location:	Nassau County
County:	Nassau
Roadway ID:	74170000
Begin MP:	0.000
End MP:	0.676
SIS:	Yes
SIS Type:	SIS Highway Corridor
Median Treatment:	Divided
Directionality:	Two-Way
Posted Speed:	70 mph
Facility Type:	Freeway
Area Type:	Transition
Standard K:	10.5%
FDOT LOS Standard:	C
Max. Service Vol. Adj. Factor:	0.00

Data Sources: RCI; TCI; NERPM AB; GUATS; FLSWM

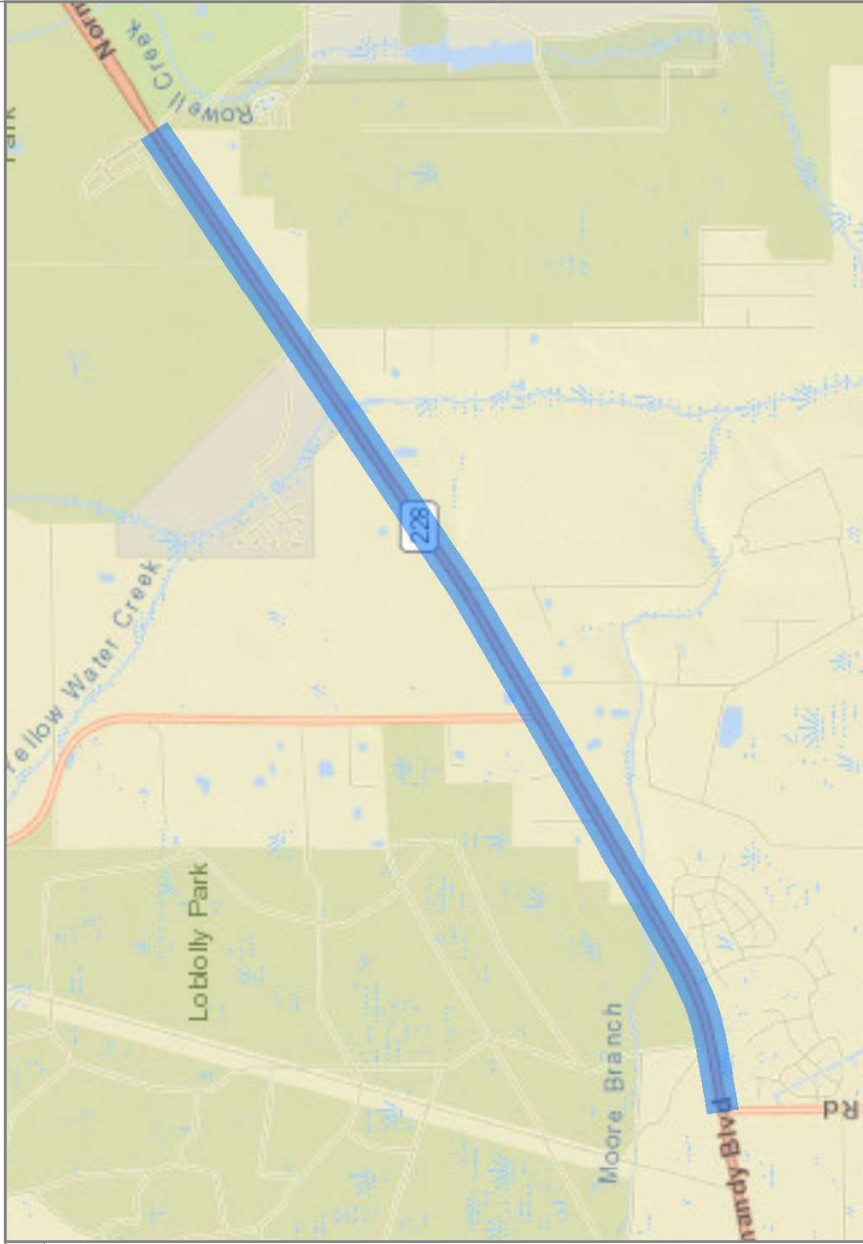
Google Street View:
<http://maps.google.com/maps?q=&layer=c&cbll=30.2823775647025,-82.0436267562776>

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	4	4	4	4	4	8	8
AADT	38,000	38,380	40,280	42,180	44,080	45,980	47,880
Peak Hour Maximum Service Volume at LOS Standard	5,780	5,780	5,780	5,780	5,780	11,220	11,220
Peak Hour Traffic Volume	3,990	4,030	4,229	4,429	4,628	4,828	5,027
Peak Hour LOS	B	B	B	C	C	B	B

Notes: Eight lanes by 2040 per CFP (add four lanes); Managed lanes were treated as general purpose lanes to simplify the capacity.



SR 228 / Normandy Blvd. from McClelland Rd to Jax Equestrian Center



Attribute	Value
Segment ID:	7481
Segment Length (miles):	4.377 mi
Location:	Jacksonville
County:	Duval
Roadway ID:	72120000
Begin MP:	5.228
End MP:	9.606
SIS:	No
SIS Type:	Non SIS
Median Treatment:	Undivided
Directionality:	Two-Way
Posted Speed:	55-60 mph
Facility Type:	Highway
Area Type:	Urbanized
Standard K:	9.0%
FDOT LOS Standard:	D
Max. Service Vol. Adj. Factor:	0.00

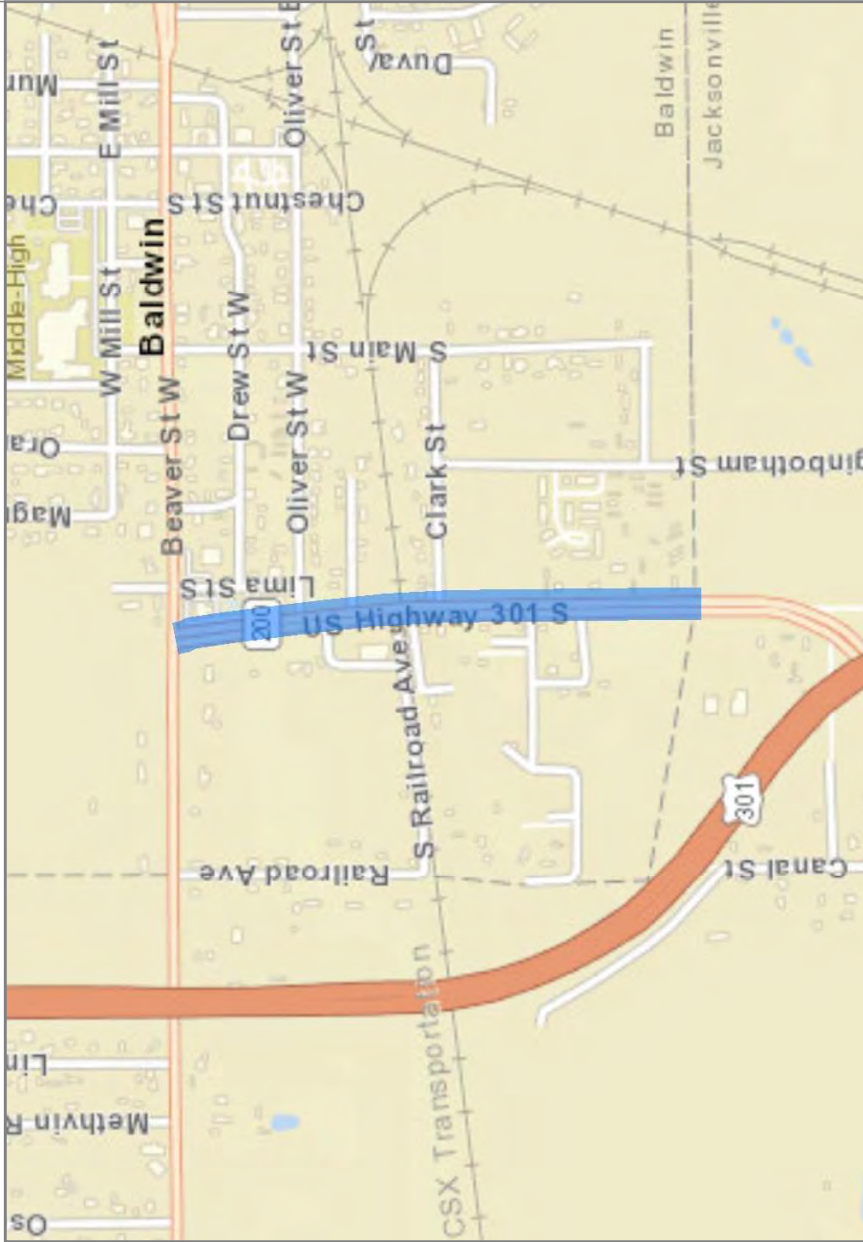
Data Sources: RCJ; TCI; NERPM AB; GUATS; FLSWM
 Google Street View: <http://maps.google.com/maps?q=&layer=c&cbll=30.2219480710645,-81.9336434914948>

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	2	2	2	2	2	2	2
AADT	12,739	13,011	14,368	15,726	17,083	18,441	19,799
Peak Hour Maximum Service Volume at LOS Standard	2,180	2,180	2,180	2,180	2,180	2,180	2,180
Peak Hour Traffic Volume	1,147	1,171	1,293	1,415	1,538	1,660	1,782
Peak Hour LOS	C	C	C	C	C	D	D

Notes:



US 301 from S. City Limit (580' S. of Lyons Ln) to US 90



Attribute	Value
Segment ID:	7604
Segment Length (miles):	0.505 mi
Location:	Baldwin
County:	Duval
Roadway ID:	72140000
Begin MP:	7.849
End MP:	8.354
SIS:	Yes
SIS Type:	SIS Highway Corridor
Median Treatment:	Divided
Directionality:	Two-Way
Posted Speed:	35-45 mph
Facility Type:	Arterial
Area Type:	Urbanized
Standard K:	9.0%
FDOT LOS Standard:	D
Max. Service Vol. Adj. Factor:	0.00
Data Sources:	RCI; TCI; NERPM AB; GUATS; FLSWM
Google Street View:	http://maps.google.com/maps?q=&layer=c&cbll=30.2990817756942,-81.9829158517044

Projected Values	2019	2020	2025	2030	2035	2040	2045
Number of Lanes	4	4	4	4	4	4	4
AAAT	7,858	8,094	9,276	10,458	11,639	12,821	14,002
Peak Hour Maximum Service Volume at LOS Standard	2,920	2,920	2,920	2,920	2,920	2,920	2,920
Peak Hour Traffic Volume	707	728	835	941	1,048	1,154	1,260
Peak Hour LOS	C	C	C	C	C	C	C

Notes:

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 72 - DUVAL

SITE: 0002 - SR 200 .1 MI. N. OF BRANDY BRANCH RD.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	7900 C	N 3900	S 4000	9.00	54.00	33.10
2019	7400 C	N 3800	S 3600	9.00	53.60	30.50
2018	9600 C	N 5000	S 4600	9.00	53.50	29.30
2017	9600 C	N 4800	S 4800	9.00	54.20	26.10
2016	9800 C	N 5200	S 4600	9.00	53.90	28.90
2015	7400 C	N 3900	S 3500	9.00	54.00	29.50
2014	8600 C	N 4400	S 4200	9.00	54.30	28.20
2013	7800 C	N 4200	S 3600	9.00	56.10	30.30
2012	7800 C	N 4100	S 3700	9.00	54.60	33.00
2011	8500 C	N 4500	S 4000	9.00	55.90	29.40
2010	7400 C	N 3900	S 3500	10.26	59.82	27.80
2009	7600 C	N 4000	S 3600	10.44	58.40	29.50
2008	9400 C	N 5700	S 3700	10.42	58.89	31.00
2007	9600 C	N 5100	S 4500	10.41	58.88	31.80
2006	8100 C	N 4200	S 3900	10.57	59.47	27.90
2005	9700 C	N 5000	S 4700	10.60	58.50	26.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 72 - DUVAL

SITE: 0109 - SR-8/I-10, @CR-217 OVERPASS, E. OF BALDWIN, DUVAL CO.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	52500 X	0	0	8.00	54.70	15.20
2019	56000 E	0	0	8.00	54.60	13.50
2018	55000 S	0	0	9.00	54.80	20.80
2017	53000 F	0	0	9.00	54.20	20.80
2016	51094 C	E 25151	W 25943	9.00	54.20	20.80
2015	50626 C	E 25213	W 25413	9.00	54.20	20.80
2014	47284 C	E 23570	W 23714	9.00	54.10	19.10
2013	44500 F	E 0	W 0	9.00	54.20	20.60
2012	43700 C	E 21717	W 21983	9.00	54.20	20.60
2011	43827 C	E 21758	W 22069	9.00	54.50	19.80
2010	44967 C	E 22329	W 22638	9.58	54.22	20.00
2009	44483 C	E 22158	W 22325	9.53	55.46	20.50
2008	43854 C	E 21629	W 22225	9.27	54.92	21.00
2007	48745 C	E 24298	W 24447	9.27	54.92	20.50
2006	49337 C	E 24665	W 24672	9.27	54.92	22.40
2005	47674 C	E 24036	W 23638	9.10	60.80	23.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 72 - DUVAL

SITE: 0736 - SR 228 .1 MI. W. OF YELLOW WATER RD.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	11000 C	E	0	9.00	55.40	6.70
2019	12000 C	E	0	9.00	55.90	6.80
2018	10500 C	E	0	9.00	55.80	7.00
2017	11000 C	E	0	9.00	56.10	6.60
2016	9900 C	E	0	9.00	56.20	6.00
2015	8600 C	E	0	9.00	56.30	5.70
2014	8100 C	E	0	9.00	56.40	5.30
2013	8000 C	E	0	9.00	57.10	5.60
2012	7100 C	E	0	9.00	57.80	6.00
2011	7800 C	E	0	9.00	56.60	4.80
2010	8100 C	E	0	9.75	56.38	4.90

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 72 - DUVAL

SITE: 0140 - SR 228 W. OF PINE ST.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	6000 C	E	0	9.00	55.40	6.70
2019	7300 C	E	0	9.00	55.90	6.80
2018	6500 C	E	0	9.00	55.80	7.00
2017	6200 C	E	0	9.00	56.10	6.60
2016	5400 C	E	0	9.00	56.20	6.00
2015	4700 C	E	0	9.00	56.30	5.70
2014	4600 C	E	0	9.00	56.40	5.30
2013	4500 C	E	0	9.00	57.10	5.60
2012	4300 C	E	0	9.00	57.80	6.00
2011	4600 C	E	0	9.00	56.60	4.80
2010	4800 C	E	0	9.75	56.38	4.90
2009	5300 C	E	0	9.48	57.48	4.60
2008	4900 C	E	0	9.68	57.27	6.20
2007	5600 C	E	0	9.26	57.87	5.70
2006	6600 C	E	0	9.52	57.03	1.50
2005	5300 C	E	0	9.00	56.50	5.30

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 72 - DUVAL

SITE: 1006 - SR 228 E. OF JAX EQUESTRIAN CENTER

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	12400 C	E	6100	9.00	55.40	6.70
2019	13200 C	E	6000	9.00	55.90	6.80
2018	12800 C	E	6100	9.00	55.80	7.00
2017	13400 C	E	6400	9.00	56.10	6.60
2016	12500 C	E	6100	9.00	56.20	6.00
2015	10200 C	E	5000	9.00	56.30	5.70
2014	9800 C	E	4800	9.00	56.40	5.30
2013	9800 C	E	4800	9.00	57.10	5.60
2012	9400 C	E	4600	9.00	57.80	6.00
2011	11800 C	E	6000	9.00	56.60	4.80
2010	10500 C	E	5100	9.75	56.38	4.90
2009	11200 C	E	5400	9.48	57.48	4.60
2008	10500 C	E	5000	9.68	57.27	6.20
2007	11300 C	E	5600	9.26	57.87	5.70
2006	12500 C	E	6200	9.52	57.03	1.50
2005	12600 C	E	6100	9.00	56.50	5.30

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 72 - DUVAL

SITE: 0612 - SR 200/US 301 .3 MI. N. OF SR 228

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	17800 C	N 9000	S 8800	9.00	54.00	32.20
2019	15100 C	N 8100	S 7000	9.00	53.60	31.10
2018	16200 C	N 8600	S 7600	9.00	53.50	30.10
2017	18000 C	N 8900	S 9100	9.00	54.20	25.80
2016	15800 C	N 7700	S 8100	9.00	53.90	29.50
2015	14100 C	N 8200	S 5900	9.00	54.00	29.50
2014	14000 C	N 7100	S 6900	9.00	54.30	28.20
2013	13700 C	N 7300	S 6400	9.00	56.10	30.30
2012	12600 C	N 6200	S 6400	9.00	54.60	33.00
2011	12300 C	N 6200	S 6100	9.00	55.90	31.00
2010	13400 C	N 6700	S 6700	10.26	59.82	31.60
2009	14300 C	N 7600	S 6700	10.44	58.40	29.50
2008	15700 C	N 8500	S 7200	10.42	58.89	31.00
2007	16500 C	N 8800	S 7700	10.41	58.88	31.80
2006	16700 C	N 8200	S 8500	10.57	59.47	27.90
2005	15400 F	N 8100	S 7300	10.60	58.50	35.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 27 - BAKER

SITE: 3134 - I-10 200' E. OF SR 228

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	35000 C	E 17500	W 17500	10.50	54.70	34.20
2019	38000 C	E 19000	W 19000	10.50	54.80	34.90
2018	39000 C	E 19500	W 19500	9.50	54.80	35.70
2017	39000 C	E 19500	W 19500	9.50	55.00	35.80
2016	37500 C	E 19000	W 18500	10.50	54.60	29.70
2015	35500 C	E 18000	W 17500	10.50	54.90	27.10
2014	20000 C	E 10000	W 10000	10.50	54.70	33.90
2013	21000 C	E 10500	W 10500	10.50	54.90	32.00
2012	21500 C	E 11000	W 10500	10.50	54.10	30.60
2011	28000 C	E 14500	W 13500	10.50	53.80	29.00
2010	31500 C	E 16000	W 15500	12.38	54.01	24.50
2009	31500 C	E 16000	W 15500	12.02	58.35	26.50
2008	25000 C	E 12500	W 12500	12.29	59.86	35.80
2007	28000 C	E 14500	W 13500	11.44	61.76	34.40
2006	44000 C	E 21500	W 22500	11.42	53.10	29.70
2005	26500 F	E 13500	W 13000	11.90	57.40	26.50

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 72 - DUVAL

SITE: 3547 - SR 200 .1 MI. S. OF SR 228 (NORMANDY BLVD)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	21500 C	N 11000	S 10500	9.00	54.00	32.20
2019	19800 C	N 9900	S 9900	9.00	53.60	31.10
2018	21500 C	N 11000	S 10500	9.00	53.50	30.10
2017	22500 C	N 11500	S 11000	9.00	54.20	25.80
2016	20500 C	N 10500	S 10000	9.00	53.90	29.50
2015	15000 C	N 8200	S 6800	9.00	54.00	29.50
2014	16300 C	N 8500	S 7800	9.00	54.30	28.20
2013	17100 C	N 9000	S 8100	9.00	56.10	30.30
2012	14900 C	N 7500	S 7400	9.00	54.60	33.00
2011	15600 C	N 8100	S 7500	9.00	55.90	31.00
2010	16200 C	N 8500	S 7700	10.26	59.82	31.60
2009	17800 C	N 9400	S 8400	10.44	58.40	29.50
2008	15900 C	N 8500	S 7400	10.42	58.89	31.00
2007	19400 C	N 9900	S 9500	10.41	58.88	31.80
2006	18800 C	N 8300	S 10500	10.57	59.47	27.90
2005	21000 F	N 11000	S 10000	10.60	58.50	5.30

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 72 - DUVAL

SITE: 5020 - I-10 500' WEST OF I-295 RAMPS

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	95500 C	E 47000	W 48500	8.00	54.70	15.20
2019	102000 C	E 51000	W 51000	8.00	54.60	13.50
2018	100000 C	E 50000	W 50000	9.00	54.80	13.70
2017	98500 C	E 49500	W 49000	9.00	55.00	13.60
2016	96500 C	E 48500	W 48000	9.00	54.20	17.10
2015	72500 C	E 36500	W 36000	9.00	54.20	17.10
2014	66500 C	E 33500	W 33000	9.00	54.10	16.40
2013	62500 C	E 31000	W 31500	9.00	54.70	10.60
2012	64000 C	E 32500	W 31500	9.00	54.20	15.00
2011	72000 T	0	0	9.00	54.00	16.30
2010	72000 S	E 37000	W 35000	10.99	53.09	16.40
2009	74000 F	E 38000	W 36000	10.82	57.31	16.70
2008	76500 C	E 39500	W 37000	12.29	59.86	17.80
2007	79000 C	E 40500	W 38500	11.44	61.76	20.50
2006	87500 C	E 44000	W 43500	10.39	53.93	22.40
2005	67500 C	E 31500	W 36000	10.50	60.40	23.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

TABLE 1

Generalized **Annual Average Daily** Volumes for Florida's Urbanized Areas

January 2020

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES																							
STATE SIGNALIZED ARTERIALS						FREEWAYS																							
Class I (40 mph or higher posted speed limit)						Core Urbanized																							
Lanes	Median	B	C	D	E	Lanes	B	C	D	E																			
2	Undivided	*	16,800	17,700	**	4	47,600	66,400	83,200	87,300																			
4	Divided	*	37,900	39,800	**	6	70,100	97,800	123,600	131,200																			
6	Divided	*	58,400	59,900	**	8	92,200	128,900	164,200	174,700																			
8	Divided	*	78,800	80,100	**	10	115,300	158,900	203,600	218,600																			
						12	136,500	192,400	246,200	272,900																			
Class II (35 mph or slower posted speed limit)						Urbanized																							
Lanes	Median	B	C	D	E	Lanes	B	C	D	E																			
2	Undivided	*	7,300	14,800	15,600	4	45,900	62,700	75,600	85,400																			
4	Divided	*	14,500	32,400	33,800	6	68,900	93,900	113,600	128,100																			
6	Divided	*	23,300	50,000	50,900	8	91,900	125,200	151,300	170,900																			
8	Divided	*	32,000	67,300	68,100	10	115,000	156,800	189,300	213,600																			
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						Freeway Adjustments																							
Non-State Signalized Roadways - 10%						<table border="0"> <tr> <td colspan="3">Auxiliary Lanes</td> <td colspan="3">Ramp</td> </tr> <tr> <td colspan="3">Present in Both Directions</td> <td colspan="3">Metering</td> </tr> <tr> <td colspan="3">+ 20,000</td> <td colspan="3">+ 5%</td> </tr> </table>						Auxiliary Lanes			Ramp			Present in Both Directions			Metering			+ 20,000			+ 5%		
Auxiliary Lanes			Ramp																										
Present in Both Directions			Metering																										
+ 20,000			+ 5%																										
Median & Turn Lane Adjustments						UNINTERRUPTED FLOW HIGHWAYS																							
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Lanes	Median	B	C	D	E																		
2	Divided	Yes	No	+5%		2	Undivided	11,700	18,000	24,200	32,600																		
2	Undivided	No	No	-20%		4	Divided	36,300	52,600	66,200	75,300																		
Multi	Undivided	Yes	No	-5%		6	Divided	54,600	78,800	99,400	113,100																		
Multi	Undivided	No	No	-25%		Uninterrupted Flow Highway Adjustments																							
-	-	-	Yes	+ 5%		Lanes	Median	Exclusive left lanes		Adjustment factors																			
One-Way Facility Adjustment Multiply the corresponding two-directional volumes in this table by 0.6						2	Divided	Yes		+5%																			
						Multi	Undivided	Yes		-5%																			
						Multi	Undivided	No		-25%																			
BICYCLE MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						¹ Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.																							
Paved Shoulder/Bicycle Lane Coverage						² Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.																							
		B	C	D	E	³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.																							
0-49%		*	2,900	7,600	19,700	* Cannot be achieved using table input value defaults.																							
50-84%		2,100	6,700	19,700	>19,700	** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.																							
85-100%		9,300	19,700	>19,700	**	Source: Florida Department of Transportation Systems Implementation Office https://www.fdot.gov/planning/systems/																							
PEDESTRIAN MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)																													
Sidewalk Coverage																													
		B	C	D	E																								
0-49%		*	*	2,800	9,500																								
50-84%		*	1,600	8,700	15,800																								
85-100%		3,800	10,700	17,400	>19,700																								
BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)																													
Sidewalk Coverage																													
		B	C	D	E																								
0-84%		> 5	≥ 4	≥ 3	≥ 2																								
85-100%		> 4	≥ 3	≥ 2	≥ 1																								

TABLE 1
(continued)

**Generalized Annual Average Daily Volumes for Florida's
Urbanized Areas**

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities				Interrupted Flow Facilities					
	Freeways	Core Freeways	Highways		State Arterials				Class I	
					Class I		Class II		Bicycle	Pedestrian
ROADWAY CHARACTERISTICS										
Area type (urban, rural)	urban	urban								
Number of through lanes (both dir.)	4-10	4-12	2	4-6	2	4-8	2	4-8	4	4
Posted speed (mph)	70	65	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	70	55	55	50	55	35	35	50	50
Auxiliary Lanes (n,y)	n	n								
Median (d, twlt, n, nr, r)				d	n	r	n	r	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l	l
% no passing zone			80							
Exclusive left turn lane impact (n, y)			[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)					n	n	n	n	n	n
Facility length (mi)	3	3	5	5	2	2	1.9	1.8	2	2
TRAFFIC CHARACTERISTICS										
Planning analysis hour factor (K)	0.090	0.085	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.550	0.560	0.565	0.560	0.565	0.565
Peak hour factor (PHF)	0.95	0.95	0.95	0.95	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	2,400	1,700	2,200	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	4.0	4.0	2.0	2.0	1.0	1.0	1.0	1.0	2.5	2.0
Speed Adjustment Factor (SAF)	0.975	0.975		0.975						
Capacity Adjustment Factor (CAF)	0.968	0.968		0.968						
% left turns					12	12	12	12	12	12
% right turns					12	12	12	12	12	12
CONTROL CHARACTERISTICS										
Number of signals					4	4	10	10	4	6
Arrival type (1-6)					3	3	4	4	4	4
Signal type (a, c, p)					c	c	c	c	c	c
Cycle length (C)					120	150	120	120	120	120
Effective green ratio (g/C)					0.44	0.45	0.44	0.44	0.44	0.44
MULTIMODAL CHARACTERISTICS										
Paved shoulder/bicycle lane (n, y)									n, 50%, y	n
Outside lane width (n, t, w)									t	t
Pavement condition (d, t, u)									t	
On-street parking (n, y)										
Sidewalk (n, y)										n, 50%, y
Sidewalk/roadway separation(a, t, w)										t
Sidewalk protective barrier (n, y)										n
LEVEL OF SERVICE THRESHOLDS										
Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus		
	Density	Two-Lane	Multilane	Class I	Class II	Score	Score	Buses/hr.		
		%ffs	Density						ats	ats
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6		
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4		
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3		
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2		

% ffs = Percent free flow speed ats = Average travel speed

TABLE 2

Generalized **Annual Average Daily** Volumes for Florida's
 Transitioning Areas and
 Areas Over 5,000 Not In Urbanized Areas¹

January 2020

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES						
STATE SIGNALIZED ARTERIALS						FREEWAYS						
Class I (40 mph or higher posted speed limit)						Lanes	B	C	D	E		
Lanes	Median	B	C	D	E	4	45,100	59,000	70,300	72,600		
2	Undivided	*	14,400	16,200	**	6	65,300	86,600	104,100	108,900		
4	Divided	*	34,000	35,500	**	8	85,900	114,500	138,100	145,300		
6	Divided	*	52,100	53,500	**	10	101,600	135,600	161,900	181,800		
Class II (35 mph or slower posted speed limit)						Freeway Adjustments						
Lanes	Median	B	C	D	E	Auxiliary Lanes			Ramp			
2	Undivided	*	6,500	13,300	14,200	Present in Both Directions			Metering			
4	Divided	*	9,900	28,800	31,600	+ 20,000			+ 5%			
6	Divided	*	16,000	44,900	47,600							
Non-State Signalized Roadway Adjustments												
(Alter corresponding state volumes by the indicated percent.)												
Non-State Signalized Roadways - 10%												
Median & Turn Lane Adjustments												
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors								
2	Divided	Yes	No	+5%								
2	Undivided	No	No	-20%								
Multi	Undivided	Yes	No	-5%								
Multi	Undivided	No	No	-25%								
-	-	-	Yes	+ 5%								
One-Way Facility Adjustment												
Multiply the corresponding two-directional volumes in this table by 0.6												
BICYCLE MODE²						UNINTERRUPTED FLOW HIGHWAYS						
(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						Lanes	Median	B	C	D	E	
Paved Shoulder/Bicycle Lane Coverage						2	Undivided	11,300	17,300	23,400	31,600	
0-49%						4	Divided	34,600	49,900	63,000	71,700	
50-84%						6	Divided	51,700	74,800	94,600	107,400	
85-100%												
Bicycle Mode Volumes												
0-49%												
50-84%												
85-100%												
PEDESTRIAN MODE²						Uninterrupted Flow Highway Adjustments						
(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						Lanes	Median	Exclusive left lanes	Adjustment factors			
Sidewalk Coverage						2	Divided	Yes	+5%			
0-49%						Multi	Undivided	Yes	-5%			
50-84%						Multi	Undivided	No	-25%			
85-100%												
BUS MODE (Scheduled Fixed Route)³												
(Buses in peak hour in peak direction)												
Sidewalk Coverage												
0-84%												
85-100%												

¹Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

²Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

³Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
 Florida Department of Transportation
 Systems Implementation Office
<https://www.fdot.gov/planning/systems/>

TABLE 2
(continued)

Generalized **Annual Average Daily** Volumes for Florida's
Transitioning Areas and
Areas Over 5,000 Not In Urbanized Areas

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities			Interrupted Flow Facilities					
				State Arterials			Class I		
	Freeways	Highways		Class I	Class II		Bicycle	Pedestrian	
ROADWAY CHARACTERISTICS									
Area type (urban, rural)	urban								
Number of through lanes (both dir.)	4-10	2	4-6	2	4-6	2	4-6	4	4
Posted speed (mph)	70	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	55	55	50	55	35	35	50	50
Auxiliary lanes (n,y)	n								
Median (d, n, nr, r)			d	n	y	n	y	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l
% no passing zone		60							
Exclusive left turn lane impact (n, y)		[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)				n	n	n	n	n	n
Facility length (mi)	6	5	5	1.8	2	2	2	2	2
TRAFFIC CHARACTERISTICS									
Planning analysis hour factor (K)	0.098	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.55	0.55	0.55	0.550	0.570	0.570	0.565	0.570	0.570
Peak hour factor (PHF)	0.92	0.92	0.92	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	1,700	2,200	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	9.0	4.0	4.0	2.0	3.0	2.0	3.0	3.0	3.0
Speed Adjustment Factor (SAF)	0.975		0.975						
Capacity Adjustment Factor (CAF)	0.968		0.968						
% left turns				12	12	12	12	12	12
% right turns				12	12	12	12	12	12
CONTROL CHARACTERISTICS									
Number of signals				5	4	10	10	4	6
Arrival type (1-6)				4	3	4	4	4	4
Signal type (a, c, p)				c	c	c	c	c	c
Cycle length (C)				120	150	120	150	120	120
Effective green ratio (g/C)				0.44	0.45	0.44	0.45	0.44	0.44
MULTIMODAL CHARACTERISTICS									
Paved shoulder/bicycle lane (n, y)								n, 50%, y	n
Outside lane width (n, t, w)								t	t
Pavement condition (d, t, u)								t	
On-street parking (n, y)								n	n
Sidewalk (n, y)									n, 50%, y
Sidewalk/roadway separation (a, t, w)									t
Sidewalk protective barrier (n, y)									n
LEVEL OF SERVICE THRESHOLDS									
Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus	
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Score	Score	Buses/hr.	
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6	
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4	
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3	
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2	

% ffs = Percent free flow speed ats = Average travel speed

TABLE 3

Generalized **Annual Average Daily** Volumes for Florida's
Rural Undeveloped Areas and
Developed Areas Less Than 5,000 Population¹

January 2020

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	12,900	14,200	**	4	34,800	48,000	56,700	63,200	
4	Divided	*	29,300	30,400	**	6	48,900	69,000	82,600	94,800	
6	Divided	*	45,200	45,800	**	8	62,900	90,400	108,400	126,400	
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.) Non-State Signalized Roadways - 10%						Freeway Adjustments Auxiliary Lanes Present in Both Directions + 20,000					
Median & Turn Lane Adjustments						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Rural Undeveloped					
2	Divided	Yes	No	+5%		Lanes	Median	B	C	D	E
2	Undivided	No	No	-20%		2	Undivided	4,600	8,600	14,000	28,500
Multi	Undivided	Yes	No	-5%		4	Divided	31,200	44,900	55,700	62,700
Multi	Undivided	No	No	-25%		6	Divided	46,800	67,600	83,500	94,200
-	-	-	Yes	+ 5%		Developed Areas					
One-Way Facility Adjustment Multiply the corresponding two-directional volumes in this table by 0.6						Lanes	Median	B	C	D	E
						2	Undivided	10,300	15,700	21,300	28,500
						4	Divided	29,300	42,300	54,000	61,600
						6	Divided	44,000	63,600	81,200	92,400
						Passing Lane Adjustments Alter LOS B-D volumes in proportion to the passing lane length to the highway segment length					
BICYCLE MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						Uninterrupted Flow Highway Adjustments					
Rural Undeveloped						Lanes	Median	Exclusive left lanes	Adjustment factors		
Paved Shoulder/Bicycle Lane Coverage						2	Divided	Yes	+5%		
0-49%						Multi	Undivided	Yes	-5%		
50-84%						Multi	Undivided	No	-25%		
85-100%											
Developed Areas											
Paved Shoulder/Bicycle Lane Coverage											
0-49%											
50-84%											
85-100%											
PEDESTRIAN MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)											
Sidewalk Coverage											
0-49%											
50-84%											
85-100%											

¹Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

²Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
<https://www.fdot.gov/planning/systems/>

TABLE 3
(continued)

Generalized **Annual Average Daily** Volumes for Florida's
Rural Undeveloped Areas and
Developed Areas Less Than 5,000 Population

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities					Interrupted Flow Facilities				
	Freeways	Highways				Arterials	Bicycle	Pedestrian		
		Undeveloped	Developed	Undeveloped	Developed					
ROADWAY CHARACTERISTICS										
Area type (urban, rural)	rural									
Number of through lanes (both dir.)	4-8	2	4-6	2	4-6	2	4-6	4	4	2
Posted speed (mph)	70	55	55	50	50	45	45	55	45	45
Free flow speed (mph)	75	60	60	55	55	50	50	60	50	50
Auxiliary lanes (n,y)	n									
Median (d, n, nr, r)			d		d	n	r	r	r	n
Terrain (l,r)	1	1	1	1	1	1	1	1	1	1
% no passing zone		20		60						
Exclusive left turn lanes (n, y)		[n]	y	[n]	y	y	y	y	y	y
Exclusive right turn lanes (n, y)						n	n	n	n	n
Facility length (mi)	18	10	10	5	5	1.9	2.2	4	2	2
TRAFFIC CHARACTERISTICS										
Planning analysis hour factor (K)	0.105	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.550	0.550	0.570	0.570	0.550
Peak hour factor (PHF)	0.88	0.88	0.88	0.88	0.88	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	1,700	2,200	1,700	2,200	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	12.0	5.0	12.0	5.0	8.0	3.0	3.0	6.0	3.5	3.0
Speed Adjustment Factor (SAF)	0.975		0.975		0.975					
Capacity Adjustment Factor (CAF)	0.968		0.968		0.968					
% left turns						12	12		12	12
% right turns						12	12		12	12
CONTROL CHARACTERISTICS										
Number of signals						5	6	2	4	4
Arrival type (1-6)						3	3	3	3	3
Signal type (a, c, p)						c	c	a	a	a
Cycle length (C)						90	90	60	90	90
Effective green ratio (g/C)						0.44	0.44	0.37	0.44	0.44
MULTIMODAL CHARACTERISTICS										
Paved shoulder/bicycle lane (n, y)								n,50%,y	n,50%,y	n
Outside lane width (n, t, w)								t	t	t
Pavement condition (d, t, u)								t	t	
Sidewalk (n, y)										n,50%,y
Sidewalk/roadway separation(a, t,w)										t
Sidewalk protective barrier (n, y)										n
LEVEL OF SERVICE THRESHOLDS										
Level of Service	Freeways	Highways								
		Two-Lane ru		Two-Lane rd	Multilane ru	Multilane rd				
	Density	%tsf	ats	%ffs	Density	Density				
B	≤ 14	≤ 50	≤ 55	> 83.3	≤ 14	≤ 14				
C	≤ 22	≤ 65	≤ 50	> 75.0	≤ 22	≤ 22				
D	≤ 29	≤ 80	≤ 45	> 66.7	≤ 29	≤ 29				
E	≤ 36	> 80	≤ 40	> 58.3	≤ 34	≤ 34				
Level of Service	Arterials		Bicycle		Pedestrian					
	Major City/Co.(ats)		Score		Score					
B	> 31 mph		≤ 2.75		≤ 2.75					
C	> 23 mph		≤ 3.50		≤ 3.50					
D	> 18 mph		≤ 4.25		≤ 4.25					
E	> 15 mph		≤ 5.00		≤ 5.00					

%tsf = Percent time spent following %ffs = Percent of free flow speed ats = Average travel speed ru = Rural undeveloped rd = Rural developed

TABLE 4

Generalized **Peak Hour Two-Way** Volumes for Florida's Urbanized Areas¹

January 2020

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (40 mph or higher posted speed limit)						Core Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	1,510	1,600	**	4	4,050	5,640	6,800	7,420	
4	Divided	*	3,420	3,580	**	6	5,960	8,310	10,220	11,150	
6	Divided	*	5,250	5,390	**	8	7,840	10,960	13,620	14,850	
8	Divided	*	7,090	7,210	**	10	9,800	13,510	17,040	18,580	
						12	11,600	16,350	20,930	23,200	
Class II (35 mph or slower posted speed limit)						Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	660	1,330	1,410	4	4,130	5,640	7,070	7,690	
4	Divided	*	1,310	2,920	3,040	6	6,200	8,450	10,510	11,530	
6	Divided	*	2,090	4,500	4,590	8	8,270	11,270	13,960	15,380	
8	Divided	*	2,880	6,060	6,130	10	10,350	14,110	17,310	19,220	
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.) Non-State Signalized Roadways - 10%						Freeway Adjustments Auxiliary Lanes Present in Both Directions + 1,800 Ramp Metering + 5%					
Median & Turn Lane Adjustments						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Lanes	Median	B	C	D	E
2	Divided	Yes	No	+5%		2	Undivided	1,050	1,620	2,180	2,930
2	Undivided	No	No	-20%		4	Divided	3,270	4,730	5,960	6,780
Multi	Undivided	Yes	No	-5%		6	Divided	4,910	7,090	8,950	10,180
Multi	Undivided	No	No	-25%		Uninterrupted Flow Highway Adjustments					
-	-	-	Yes	+ 5%		Lanes	Median	Exclusive left lanes	Adjustment factors		
One-Way Facility Adjustment Multiply the corresponding two-directional volumes in this table by 0.6						2	Divided	Yes	+5%		
BICYCLE MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						Multi	Undivided	Yes	-5%		
Paved						Multi	Undivided	No	-25%		
Shoulder/Bicycle						PEDESTRIAN MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Lane Coverage	B	C	D	E		Sidewalk Coverage	B	C	D	E	
0-49%	*	260	680	1,770		0-49%	*	*	250	850	
50-84%	190	600	1,770	>1,770		50-84%	*	150	780	1,420	
85-100%	830	1,700	>1,770	**		85-100%	340	960	1,560	>1,770	
BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)						Footnotes: ¹ Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual. ² Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility. ³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow. * Cannot be achieved using table input value defaults. ** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults. <i>Source:</i> Florida Department of Transportation Systems Implementation Office https://www.fdot.gov/planning/systems/					
Sidewalk Coverage	B	C	D	E							
0-84%	> 5	≥ 4	≥ 3	≥ 2							
85-100%	> 4	≥ 3	≥ 2	≥ 1							

TABLE 4
(continued)

Generalized **Peak Hour Two-Way** Volumes for Florida's
Urbanized Areas

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities				Interrupted Flow Facilities					
	State Arterials			Class I			Class I			
	Freeways	Core Freeways	Highways	Class I	Class II	Bicycle	Pedestrian			
ROADWAY CHARACTERISTICS										
Area type (urban, rural)	urban	urban								
Number of through lanes (both dir.)	4-10	4-12	2	4-6	2	4-8	2	4-8	4	4
Posted speed (mph)	70	65	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	70	55	55	50	55	35	35	50	50
Auxiliary Lanes (n,y)	n	n								
Median (d, twlt, n, nr, r)				d	n	r	n	r	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l	l
% no passing zone			80							
Exclusive left turn lane impact (n, y)			[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)					n	n	n	n	n	n
Facility length (mi)	3	3	5	5	2	2	1.9	1.8	2	2
TRAFFIC CHARACTERISTICS										
Planning analysis hour factor (K)	0.090	0.085	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.550	0.560	0.565	0.560	0.565	0.565
Peak hour factor (PHF)	0.95	0.95	0.95	0.95	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	2,400	1,700	2,200	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	4.0	4.0	2.0	2.0	1.0	1.0	1.0	1.0	2.5	2.0
Speed Adjustment Factor (SAF)	0.975	0.975		0.975						
Capacity Adjustment Factor (CAF)	0.968	0.968		0.968						
% left turns					12	12	12	12	12	12
% right turns					12	12	12	12	12	12
CONTROL CHARACTERISTICS										
Number of signals					4	4	10	10	4	6
Arrival type (1-6)					3	3	4	4	4	4
Signal type (a, c, p)					c	c	c	c	c	c
Cycle length (C)					120	150	120	120	120	120
Effective green ratio (g/C)					0.44	0.45	0.44	0.44	0.44	0.44
MULTIMODAL CHARACTERISTICS										
Paved shoulder/bicycle lane (n, y)									n, 50%, y	n
Outside lane width (n, t, w)									t	t
Pavement condition (d, t, u)									t	
On-street parking (n, y)										
Sidewalk (n, y)										n, 50%, y
Sidewalk/roadway separation(a, t, w)										t
Sidewalk protective barrier (n, y)										n
LEVEL OF SERVICE THRESHOLDS										
Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus		
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Score	Score	Buses/hr.		
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6		
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4		
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3		
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2		

% ffs = Percent free flow speed ats = Average travel speed

TABLE 5

Generalized **Peak Hour Two-Way** Volumes for Florida's
 Transitioning Areas and
 Areas Over 5,000 Not In Urbanized Areas¹

January 2020

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES						
STATE SIGNALIZED ARTERIALS						FREEWAYS						
Class I (40 mph or higher posted speed limit)						Lanes	B	C	D	E		
Lanes	Median	B	C	D	E	4	4,420	5,780	6,890	7,110		
2	Undivided	*	1,300	1,460	**	6	6,400	8,490	10,200	10,670		
4	Divided	*	3,060	3,200	**	8	8,420	11,220	13,530	14,240		
6	Divided	*	4,690	4,820	**	10	9,960	13,290	15,870	17,820		
Class II (35 mph or slower posted speed limit)						Freeway Adjustments						
Lanes	Median	B	C	D	E	Auxiliary Lanes			Ramp			
2	Undivided	*	580	1,200	1,280	Present in Both Directions			Metering			
4	Divided	*	890	2,590	2,850	+ 1,800			+ 5%			
6	Divided	*	1,440	4,040	4,280							
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)												
Non-State Signalized Roadways - 10%												
Median & Turn Lane Adjustments												
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors								
2	Divided	Yes	No	+5%								
2	Undivided	No	No	-20%								
Multi	Undivided	Yes	No	-5%								
Multi	Undivided	No	No	-25%								
-	-	-	Yes	+ 5%								
One-Way Facility Adjustment Multiply the corresponding two-directional volumes in this table by 0.6												
BICYCLE MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)												
Paved Shoulder/Bicycle Lane Coverage						B	C	D	E			
0-49%						*	140	550	1,760			
50-84%						170	500	1,650	>1,760			
85-100%						670	1,760	>1,760	**			
PEDESTRIAN MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)												
Sidewalk Coverage						B	C	D	E			
0-49%						*	*	250	850			
50-84%						*	150	780	1,410			
85-100%						340	950	1,540	>1,760			
BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)												
Sidewalk Coverage						B	C	D	E			
0-84%						> 5	≥ 4	≥ 3	≥ 2			
85-100%						> 4	≥ 3	≥ 2	≥ 1			
						UNINTERRUPTED FLOW HIGHWAYS						
						Lanes	Median	B	C	D	E	
						2	Undivided	1,020	1,560	2,110	2,840	
						4	Divided	3,110	4,490	5,670	6,450	
						6	Divided	4,650	6,730	8,510	9,670	
						Uninterrupted Flow Highway Adjustments						
						Lanes	Median	Exclusive left lanes	Adjustment factors			
						2	Divided	Yes	+5%			
						Multi	Undivided	Yes	-5%			
						Multi	Undivided	No	-25%			
						¹ Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.						
						² Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.						
						³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.						
						* Cannot be achieved using table input value defaults.						
						** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.						
						Source: Florida Department of Transportation Systems Implementation Office https://www.fdot.gov/planning/systems/						

TABLE 5
(continued)

Generalized **Peak Hour Two-Way** Volumes for Florida's
Transitioning Areas and
Areas Over 5,000 Not In Urbanized Areas

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities			Interrupted Flow Facilities					
	Freeways	Highways		State Arterials			Class I		
		Class I	Class II	Bicycle	Pedestrian				
ROADWAY CHARACTERISTICS									
Area type (urban, rural)	urban								
Number of through lanes (both dir.)	4-10	2	4-6	2	4-6	2	4-6	4	4
Posted speed (mph)	70	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	55	55	50	55	35	35	50	50
Auxiliary lanes (n,y)	n								
Median (d, n, nr, r)			d	n	y	n	y	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l
% no passing zone		60							
Exclusive left turn lane impact (n, y)		[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)				n	n	n	n	n	n
Facility length (mi)	6	5	5	1.8	2	2	2	2	2
TRAFFIC CHARACTERISTICS									
Planning analysis hour factor (K)	0.098	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.55	0.55	0.55	0.550	0.570	0.570	0.565	0.570	0.570
Peak hour factor (PHF)	0.92	0.92	0.92	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	1,700	2,200	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	9.0	4.0	4.0	2.0	3.0	2.0	3.0	3.0	3.0
Speed Adjustment Factor (SAF)	0.975		0.975						
Capacity Adjustment Factor (CAF)	0.968		0.968						
% left turns				12	12	12	12	12	12
% right turns				12	12	12	12	12	12
CONTROL CHARACTERISTICS									
Number of signals				5	4	10	10	4	6
Arrival type (1-6)				4	3	4	4	4	4
Signal type (a, c, p)				c	c	c	c	c	c
Cycle length (C)				120	150	120	150	120	120
Effective green ratio (g/C)				0.44	0.45	0.44	0.45	0.44	0.44
MULTIMODAL CHARACTERISTICS									
Paved shoulder/bicycle lane (n, y)								n, 50%, y	n
Outside lane width (n, t, w)								t	t
Pavement condition (d, t, u)								t	
On-street parking (n, y)								n	n
Sidewalk (n, y)									n, 50%, y
Sidewalk/roadway separation (a, t, w)									t
Sidewalk protective barrier (n, y)									n
LEVEL OF SERVICE THRESHOLDS									
Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus	
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Score	Score	Buses/hr.	
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6	
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4	
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3	
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2	

% ffs = Percent free flow speed ats = Average travel speed

TABLE 6

Generalized **Peak Hour Two-Way** Volumes for Florida's
Rural Undeveloped Areas and
Developed Areas Less Than 5,000 Population¹

January 2020

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	1,220	1,350	**	4	3,650	5,040	5,950	6,640	
4	Divided	*	2,790	2,890	**	6	5,130	7,250	8,670	9,950	
6	Divided	*	4,300	4,350	**	8	6,600	9,490	11,380	13,270	
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.) Non-State Signalized Roadways - 10%						Freeway Adjustments Auxiliary Lanes Present in Both Directions + 1,800					
Median & Turn Lane Adjustments						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Rural Undeveloped					
2	Divided	Yes	No	+5%		Lanes	Median	B	C	D	E
2	Undivided	No	No	-20%		2	Undivided	440	820	1,330	2,710
Multi	Undivided	Yes	No	-5%		4	Divided	2,960	4,270	5,290	5,960
Multi	Undivided	No	No	-25%		6	Divided	4,450	6,420	7,930	8,950
-	-	-	Yes	+5%		Developed Areas					
One-Way Facility Adjustment Multiply the corresponding two-directional volumes in this table by 0.6						Lanes	Median	B	C	D	E
						2	Undivided	980	1,490	2,020	2,710
						4	Divided	2,780	4,020	5,130	5,850
						6	Divided	4,180	6,040	7,710	8,780
BICYCLE MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						Passing Lane Adjustments Alter LOS B-D volumes in proportion to the passing lane length to the highway segment length					
Rural Undeveloped						Uninterrupted Flow Highway Adjustments					
Paved Shoulder/Bicycle Lane Coverage						Lanes	Median	Exclusive left lanes	Adjustment factors		
						2	Divided	Yes	+5%		
						Multi	Undivided	Yes	-5%		
						Multi	Undivided	No	-25%		
						¹ Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.					
						² Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.					
						* Cannot be achieved using table input value defaults.					
						** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.					
						Source: Florida Department of Transportation Systems Implementation Office https://www.fdot.gov/planning/systems/					
Developed Areas						PEDESTRIAN MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Paved Shoulder/Bicycle Lane Coverage						B	C	D	E		
						*	220	460	1,480		
						170	430	1,270	>1,760		
						560	1,760	>1,760	**		
						B	C	D	E		
						*	*	220	840		
						*	120	780	1,390		
						320	940	1,560	>1,820		

TABLE 6
(continued)

**Generalized Peak Hour Two-Way Volumes for Florida's
Rural Undeveloped Areas and
Developed Areas Less Than 5,000 Population**

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities					Interrupted Flow Facilities				
	Freeways	Highways				Arterials	Bicycle	Pedestrian		
		Undeveloped	Developed	Undeveloped	Developed					
ROADWAY CHARACTERISTICS										
Area type (urban, rural)	rural									
Number of through lanes (both dir.)	4-8	2	4-6	2	4-6	2	4-6	4	4	2
Posted speed (mph)	70	55	55	50	50	45	45	55	45	45
Free flow speed (mph)	75	60	60	55	55	50	50	60	50	50
Auxiliary lanes (n,y)	n									
Median (d, n, nr, r)			d		d	n	r	r	r	n
Terrain (l,r)	l	l	l	l	l	l	l	l	l	l
% no passing zone		20		60						
Exclusive left turn lanes (n, y)		[n]	y	[n]	y	y	y	y	y	y
Exclusive right turn lanes (n, y)						n	n	n	n	n
Facility length (mi)	18	10	10	5	5	1.9	2.2	4	2	2
TRAFFIC CHARACTERISTICS										
Planning analysis hour factor (K)	0.105	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.550	0.550	0.570	0.570	0.550
Peak hour factor (PHF)	0.88	0.88	0.88	0.88	0.88	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	1,700	2,200	1,700	2,200	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	12.0	5.0	12.0	5.0	8.0	3.0	3.0	6.0	3.5	3.0
Speed Adjustment Factor (SAF)	0.975		0.975		0.975					
Capacity Adjustment Factor (CAF)	0.968		0.968		0.968					
% left turns						12	12		12	12
% right turns						12	12		12	12
CONTROL CHARACTERISTICS										
Number of signals						5	6	2	4	4
Arrival type (1-6)						3	3	3	3	3
Signal type (a, c, p)						c	c	a	a	a
Cycle length (C)						90	90	60	90	90
Effective green ratio (g/C)						0.44	0.44	0.37	0.44	0.44
MULTIMODAL CHARACTERISTICS										
Paved shoulder/bicycle lane (n, y)								n,50%,y	n,50%,y	n
Outside lane width (n, t, w)								t	t	t
Pavement condition (d, t, u)								t	t	
Sidewalk (n, y)										n,50%,y
Sidewalk/roadway separation(a, t,w)										t
Sidewalk protective barrier (n, y)										n
LEVEL OF SERVICE THRESHOLDS										
Level of Service	Freeways	Highways								
		Two-Lane ru		Two-Lane rd	Multilane ru	Multilane rd				
		Density	%tsf	ats	%ffs	Density	Density			
B	≤ 14	≤ 50	≤ 55	> 83.3	≤ 14	≤ 14				
C	≤ 22	≤ 65	≤ 50	> 75.0	≤ 22	≤ 22				
D	≤ 29	≤ 80	≤ 45	> 66.7	≤ 29	≤ 29				
E	≤ 36	> 80	≤ 40	> 58.3	≤ 34	≤ 34				
Level of Service	Arterials		Bicycle		Pedestrian					
	Major City/Co.(ats)		Score		Score					
	B	> 31 mph	≤ 2.75		≤ 2.75					
C	> 23 mph	≤ 3.50		≤ 3.50						
D	> 18 mph	≤ 4.25		≤ 4.25						
E	> 15 mph	≤ 5.00		≤ 5.00						

%tsf = Percent time spent following %ffs = Percent of free flow speed ats = Average travel speed ru = Rural undeveloped rd = Rural developed

Attachment D

Internal Capture Worksheets

Attachment D1

Phase 01 Year 2026 Development Internal Capture Worksheets

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	301 Villages	Organization:	Chindalur Traffic Solutions
Project Location:	Duval County, FL	Performed By:	Rajesh Chindalur
Scenario Description:	Phase 01	Date:	8/15/2021
Analysis Year:	2022 - 2026	Checked By:	
Analysis Period:	AM Street Peak Hour	Date:	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office	710 & 720	150,000	SF	237	194	43
Retail	820	150,000	SF	227	141	86
Restaurant				0		
Cinema/Entertainment				0		
Residential	210 & 220	3,500	Dwelling Units	2,205	543	1,662
Hotel	210	120	Rooms	55	32	23
All Other Land Uses ²	110	150,000	SF	60	53	7
				2,784	963	1,821

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		12	0	0	0	0
Retail	8		0	0	11	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	6	17	0	0		0
Hotel	6	3	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	2,784	963	1,821
Internal Capture Percentage	5%	7%	3%
External Vehicle-Trips ⁵	2,658	900	1,758
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	10%	28%
Retail	23%	22%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	2%	1%
Hotel	0%	39%

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

⁶Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	301 Villages
Analysis Period:	AM Street Peak Hour

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	194	194	1.00	43	43
Retail	1.00	141	141	1.00	86	86
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	543	543	1.00	1662	1662
Hotel	1.00	32	32	1.00	23	23

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		12	27	0	0	0
Retail	25		11	0	12	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	33	17	332	0		0
Hotel	17	3	2	0	0	

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		45	0	0	0	0
Retail	8		0	0	11	0
Restaurant	27	11		0	27	1
Cinema/Entertainment	0	0	0		0	0
Residential	6	24	0	0		0
Hotel	6	6	0	0	0	

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	20	174	194	174	0	0
Retail	32	109	141	109	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	11	532	543	532	0	0
Hotel	0	32	32	32	0	0
All Other Land Uses ³	0	53	53	53	0	0

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	12	31	43	31	0	0
Retail	19	67	86	67	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	23	1639	1662	1639	0	0
Hotel	9	14	23	14	0	0
All Other Land Uses ³	0	7	7	7	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A
²Person-Trips
³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator
*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	301 Villages	Organization:	Chindalur Traffic Solutions
Project Location:	Duval County, FL	Performed By:	Rajesh Chindalur
Scenario Description:	Phase 01	Date:	8/15/2021
Analysis Year:	2022 - 2026	Checked By:	
Analysis Period:	PM Street Peak Hour	Date:	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office	710 & 720	150,000	SF	287	66	221
Retail	820	150,000	SF	734	352	382
Restaurant				0		
Cinema/Entertainment				0		
Residential	210 & 220	3,500	Dwelling Units	2,691	1,696	995
Hotel	210	120	Rooms	64	33	31
All Other Land Uses ²	110	150,000	SF	49	6	43
				3,825	2,153	1,672

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		28	0	0	4	0
Retail	8		0	0	99	6
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	38	35	0	0		4
Hotel	0	5	0	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	3,825	2,153	1,672
Internal Capture Percentage	12%	11%	14%
External Vehicle-Trips ⁵	3,371	1,926	1,445
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	70%	14%
Retail	19%	30%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	6%	8%
Hotel	30%	16%

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made.

⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

⁶Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Project Name:	301 Villages
Analysis Period:	PM Street Peak Hour

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	66	66	1.00	221	221
Retail	1.00	352	352	1.00	382	382
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	1696	1696	1.00	995	995
Hotel	1.00	33	33	1.00	31	31

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		44	9	0	4	0
Retail	8		111	15	99	19
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	40	418	209	0		30
Hotel	0	5	21	0	1	

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		28	0	0	68	0
Retail	20		0	0	780	6
Restaurant	20	176		0	271	23
Cinema/Entertainment	4	14	0		68	0
Residential	38	35	0	0		4
Hotel	0	7	0	0	0	

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	46	20	66	20	0	0
Retail	68	284	352	284	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	103	1593	1696	1593	0	0
Hotel	10	23	33	23	0	0
All Other Land Uses ³	0	6	6	6	0	0

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	32	189	221	189	0	0
Retail	113	269	382	269	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	77	918	995	918	0	0
Hotel	5	26	31	26	0	0
All Other Land Uses ³	0	43	43	43	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

²Person-Trips

³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Attachment D2

Phase 02 Year 2031 Development
Internal Capture Worksheets

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	301 Villages	Organization:	Chindalur Traffic Solutions
Project Location:	Duval County, FL	Performed By:	Rajesh Chindalur
Scenario Description:	Phase 01	Date:	8/15/2021
Analysis Year:	2022 - 2026	Checked By:	
Analysis Period:	AM Street Peak Hour	Date:	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office	B10, 710 & 720	400,000	SF	590	455	135
Retail	820	475,000	SF	389	241	148
Restaurant				0		
Cinema/Entertainment				0		
Residential	210 & 220	10,450	Dwelling Units	6,761	1,673	5,088
Hotel	210	340	Rooms	165	97	68
All Other Land Uses ²	110	300,000	SF	101	89	12
				8,006	2,555	5,451

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		38	0	0	0	0
Retail	18		0	0	21	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	14	41	0	0		0
Hotel	14	10	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	8,006	2,555	5,451
Internal Capture Percentage	4%	6%	3%
External Vehicle-Trips ⁵	7,694	2,399	5,295
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	10%	28%
Retail	37%	26%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	1%	1%
Hotel	0%	35%

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

⁶Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	301 Villages
Analysis Period:	AM Street Peak Hour

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	455	455	1.00	135	135
Retail	1.00	241	241	1.00	148	148
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	1673	1673	1.00	5088	5088
Hotel	1.00	97	97	1.00	68	68

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		38	85	0	1	0
Retail	43		19	0	21	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	102	51	1018	0		0
Hotel	51	10	6	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		77	0	0	0	0
Retail	18		0	0	33	0
Restaurant	64	19		0	84	4
Cinema/Entertainment	0	0	0		0	0
Residential	14	41	0	0		0
Hotel	14	10	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	46	409	455	409	0	0
Retail	89	152	241	152	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	21	1652	1673	1652	0	0
Hotel	0	97	97	97	0	0
All Other Land Uses ³	0	89	89	89	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	38	97	135	97	0	0
Retail	39	109	148	109	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	55	5033	5088	5033	0	0
Hotel	24	44	68	44	0	0
All Other Land Uses ³	0	12	12	12	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A
²Person-Trips
³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator
*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	301 Villages	Organization:	Chindalur Traffic Solutions
Project Location:	Duval County, FL	Performed By:	Rajesh Chindalur
Scenario Description:	Phase 01	Date:	8/15/2021
Analysis Year:	2022 - 2026	Checked By:	
Analysis Period:	PM Street Peak Hour	Date:	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office	510, 710 & 720	400,000	SF	629	158	471
Retail	820	475,000	SF	1,721	826	895
Restaurant				0		
Cinema/Entertainment				0		
Residential	210 & 220	10,450	Dwelling Units	7,950	5,009	2,941
Hotel	210	340	Rooms	229	117	112
All Other Land Uses ²	110	300,000	SF	79	10	69
				10,608	6,120	4,488

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		66	0	0	9	0
Retail	18		0	0	233	20
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	90	83	0	0		14
Hotel	0	17	0	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	10,608	6,120	4,488
Internal Capture Percentage	10%	9%	12%
External Vehicle-Trips ⁵	9,508	5,570	3,938
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	68%	16%
Retail	20%	30%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	5%	6%
Hotel	29%	15%

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made.

⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

⁶Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Project Name:	301 Villages
Analysis Period:	PM Street Peak Hour

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	158	158	1.00	471	471
Retail	1.00	826	826	1.00	895	895
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	5009	5009	1.00	2941	2941
Hotel	1.00	117	117	1.00	112	112

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		94	19	0	9	0
Retail	18		260	36	233	45
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	118	1235	618	0		88
Hotel	0	18	76	0	2	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		66	0	0	200	0
Retail	49		0	0	2304	20
Restaurant	47	413		0	801	83
Cinema/Entertainment	9	33	0		200	1
Residential	90	83	0	0		14
Hotel	0	17	0	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	108	50	158	50	0	0
Retail	166	660	826	660	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	242	4767	5009	4767	0	0
Hotel	34	83	117	83	0	0
All Other Land Uses ³	0	10	10	10	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	75	396	471	396	0	0
Retail	271	624	895	624	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	187	2754	2941	2754	0	0
Hotel	17	95	112	95	0	0
All Other Land Uses ³	0	69	69	69	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

²Person-Trips

³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Attachment D3

Phase 03 Year 2037 Development Internal Capture Worksheets

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	301 Villages	Organization:	Chindalur Traffic Solutions
Project Location:	Duval County, FL	Performed By:	Rajesh Chindalur
Scenario Description:	Phase 01	Date:	8/15/2021
Analysis Year:	2022 - 2026	Checked By:	
Analysis Period:	AM Street Peak Hour	Date:	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office	B10, 710 & 720	675,000	SF	901	697	204
Retail	820	750,000	SF	527	327	200
Restaurant				0		
Cinema/Entertainment				0		
Residential	210 & 220	15,000	Dwelling Units	9,484	2,341	7,143
Hotel	210	340	Rooms	165	97	68
All Other Land Uses ²	110	300,000	SF	101	89	12
				11,178	3,551	7,627

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		57	0	0	0	0
Retail	28		0	0	28	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	21	56	0	0		0
Hotel	21	10	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	11,178	3,551	7,627
Internal Capture Percentage	4%	6%	3%
External Vehicle-Trips ⁵	10,736	3,330	7,406
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	10%	28%
Retail	38%	28%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	1%	1%
Hotel	0%	46%

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

⁶Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	301 Villages
Analysis Period:	AM Street Peak Hour

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	697	697	1.00	204	204
Retail	1.00	327	327	1.00	200	200
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	2341	2341	1.00	7143	7143
Hotel	1.00	97	97	1.00	68	68

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		57	129	0	2	0
Retail	58		26	0	28	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	143	71	1429	0		0
Hotel	51	10	6	0	0	

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		105	0	0	0	0
Retail	28		0	0	47	0
Restaurant	98	26		0	117	4
Cinema/Entertainment	0	0	0		0	0
Residential	21	56	0	0		0
Hotel	21	13	0	0	0	

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	70	627	697	627	0	0
Retail	123	204	327	204	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	28	2313	2341	2313	0	0
Hotel	0	97	97	97	0	0
All Other Land Uses ³	0	89	89	89	0	0

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	57	147	204	147	0	0
Retail	56	144	200	144	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	77	7066	7143	7066	0	0
Hotel	31	37	68	37	0	0
All Other Land Uses ³	0	12	12	12	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A
²Person-Trips
³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator
*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	301 Villages	Organization:	Chindalur Traffic Solutions
Project Location:	Duval County, FL	Performed By:	Rajesh Chindalur
Scenario Description:	Phase 01	Date:	8/15/2021
Analysis Year:	2022 - 2026	Checked By:	
Analysis Period:	PM Street Peak Hour	Date:	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office	510, 710 & 720	675,000	SF	1,018	256	762
Retail	820	750,000	SF	2,414	1,159	1,255
Restaurant				0		
Cinema/Entertainment				0		
Residential	210 & 220	15,000	Dwelling Units	10,949	6,898	4,051
Hotel	210	340	Rooms	229	117	112
All Other Land Uses ²	110	300,000	SF	79	10	69
				14,689	8,440	6,249

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		93	0	0	15	0
Retail	25		0	0	326	20
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	146	116	0	0		14
Hotel	0	18	0	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	14,689	8,440	6,249
Internal Capture Percentage	11%	9%	12%
External Vehicle-Trips ⁵	13,143	7,667	5,476
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	67%	14%
Retail	20%	30%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	5%	7%
Hotel	29%	16%

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made.

⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

⁶Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Project Name:	301 Villages
Analysis Period:	PM Street Peak Hour

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	256	256	1.00	762	762
Retail	1.00	1159	1159	1.00	1255	1255
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	6898	6898	1.00	4051	4051
Hotel	1.00	117	117	1.00	112	112

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		152	30	0	15	0
Retail	25		364	50	326	63
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	162	1701	851	0		122
Hotel	0	18	76	0	2	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		93	0	0	276	0
Retail	79		0	0	3173	20
Restaurant	77	580		0	1104	83
Cinema/Entertainment	15	46	0		276	1
Residential	146	116	0	0		14
Hotel	0	23	0	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	171	85	256	85	0	0
Retail	227	932	1159	932	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	341	6557	6898	6557	0	0
Hotel	34	83	117	83	0	0
All Other Land Uses ³	0	10	10	10	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	108	654	762	654	0	0
Retail	371	884	1255	884	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	276	3775	4051	3775	0	0
Hotel	18	94	112	94	0	0
All Other Land Uses ³	0	69	69	69	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

²Person-Trips

³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Attachment E

Socio-Economic Data Variables

Tre Trails Trip Generation

Parcel	LUC	Size	Unit	ADT	Passby			AM			PM			NEW PM PHT				
					Enter (%)	Exit (%)	Enter	Enter (%)	Exit (%)	Enter	Enter (%)	Exit (%)	Enter	Passby	Exit	Total		
A	210	48	SFDU	529	0%	25%	529	10	29	39	63%	0%	31	19	50	31	0%	50
B	820	180,000	SF	8,966	34%	62%	5,918	150	92	242	48%	52%	402	437	839	265	34%	554
C	820	30,000	SF	2,651	34%	62%	1,750	103	64	167	48%	52%	107	116	223	71	34%	147
D	210	744	SFDU	6,588	0%	25%	6,588	133	400	533	63%	0%	439	259	698	439	0%	698
E	210	804	SFDU	7,076	0%	25%	7,076	144	432	576	63%	0%	473	278	751	473	0%	751
F	820	20,000	SF	2,012	34%	62%	1,328	100	62	162	48%	52%	79	86	165	52	34%	109
G	210	222	SFDU	2,166	0%	25%	2,166	40	122	162	63%	0%	137	81	218	137	0%	218
H	210	1,850	SFDU	15,231	0%	25%	15,231	329	989	1,318	63%	0%	1,053	619	1,672	1,053	0%	1,672
I	210	1,097	SFDU	9,417	0%	25%	9,417	196	588	784	63%	0%	638	375	1,013	638	0%	1,013
J	210	78	SFDU	827	0%	25%	827	15	45	60	63%	0%	50	30	80	50	0%	80
K	210	7	SFDU	90	0%	25%	90	2	8	10	63%	0%	5	3	8	5	0%	8
				55,553			50,919	1,222	2,831	4,053			3,414	2,303	5,717	3,214		5,300

Source: City of Jacksonville, Planning Department

MEETING SUMMARY

The Trails PUD | SR 228 Corridor Study

December 7, 2020

2:00 PM – 2:31 PM

Attendees:	COJ: Laurie Santana, Soliman Salem, John Kolczynski FDOT: Scott Clem, Brian Austin Benesch: Martha Moore Absent: Chris LeDew, Tom Cavin
-------------------	--

DISCUSSION ITEMS:

1. Status of data collection and study

Martha Moore: The study limits are SR 228 from US 301 to SR 23. At the request of Scott Clem, we also included the intersection of SR 134 (103rd St) at POW-MIA Pkwy (fka New World Ave) and at SR 23.

The turning movement counts (TMCs) were conducted on September 23, 2020. Pre Covid volume counts (February 2020) on SR 228 were obtained from FDOT. These counts were in proximity to the proposed count locations in the scope and were used in lieu of new counts.

A TMC was taken at the SR 228 and Winding Mare Blvd intersection, which is the entrance to the Winchester Ridge subdivision. The directional distribution will be used to assign traffic from The Trails project; counts indicate that 85%-90% of trips will originate to the east.

Scott Clem stated that he is comfortable with the study area, which focuses on SR 228 and not US 301. He also stated that traffic from The Trails will head east to reach I-10 rather than west.

2. Covid adjustment for traffic counts

Martha Moore: The date of the TMCs is after the start of school and two days prior to the declaration by Governor Ron DeSantis of the beginning of the Phase 3 of the Reopening Plan on September 25, 2020. As per a prior discussion with Tom Cavin, FDOT is not requiring Covid adjustment in Phase 3. This means that the study counts are likely close to baseline. As a check for the validity of the count data, Benesch compared the peak hours and volumes from the pre-Covid FDOT SR 228 counts to the study counts.

- AM – The AM peak hours counted occurred 15-30 minutes later than the pre-Covid AM peaks. The Benesch counts were an average of 16% lower than the FDOT pre-Covid counts so all the AM counts will be adjusted up by 16%.
- PM – The Benesch SR 228 counts were an average of 7% higher than the FDOT pre-Covid counts. The PM peak hour was similar as well. No adjustment is proposed in the PM.

Laurie Santana: Summarize and discuss the methodology with Chris LeDew, since he is not in the meeting.

[UPDATE FROM MARTHA] Martha and Chris discussed the methodology on December 31, 2020. Chris is agreeable to it.

3. Socioeconomic data included in NERPM.

Soliman Salem confirmed that The Trails data is in the NERPM-AB.

4. Status of I-10/US 301 development (301 Capital Partners) FLUM

Soliman Salem confirmed that the Prosser plan (attached) is not in the NERPM-AB.

Scott Clem: Some level of development, maybe not all, for 301 Villages should be included in the socioeconomic data. How much is the decision of the City.

Laurie Santana will check with Bill Killingsworth and forward the information. Soliman has a tool to edit the DAYSIM files and will coordinate with Benesch on how to use it.

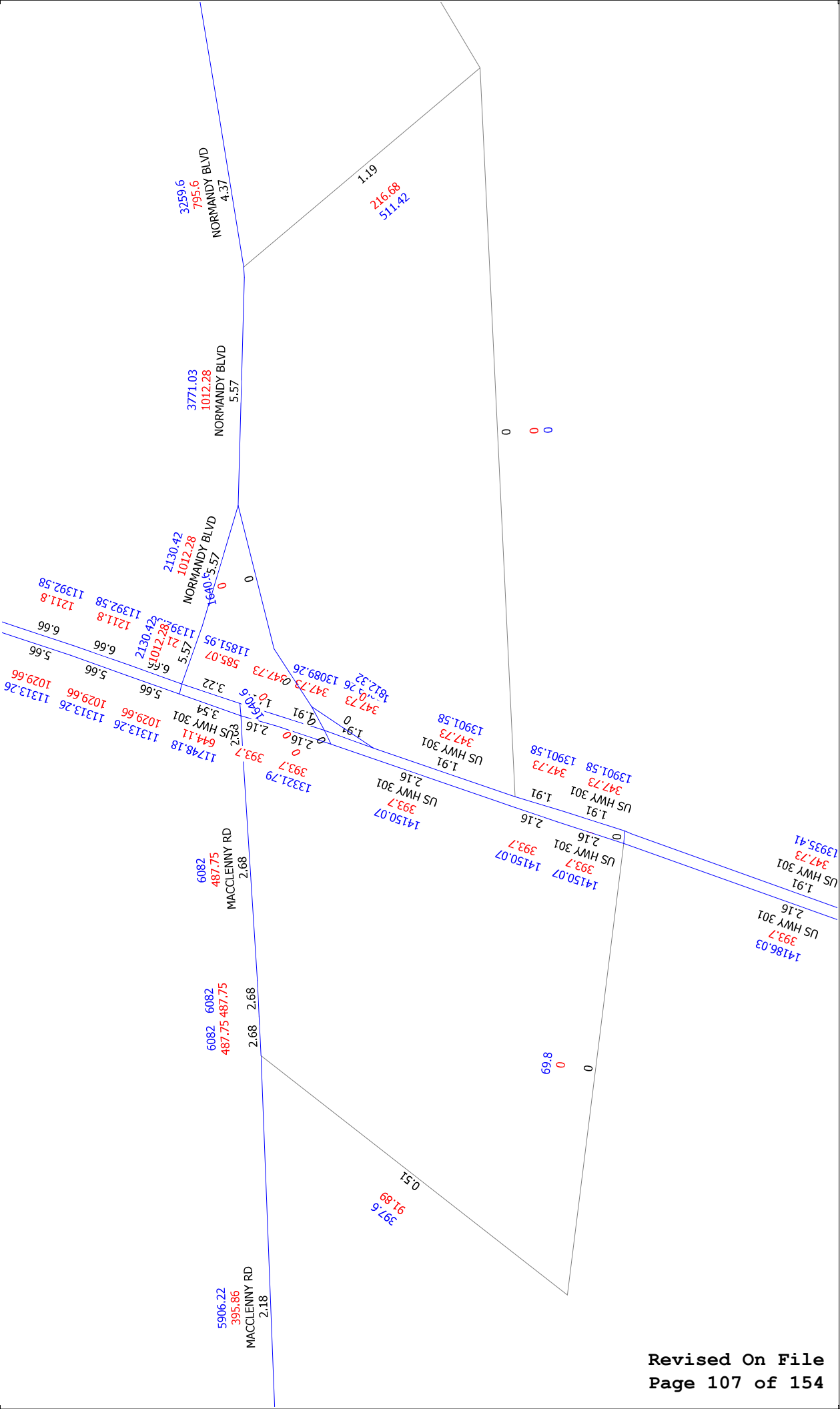
[UPDATE FROM LAURIE] Bill Killingsworth wants all the 301 Village development included. As per Scott Clem, the interchange with I-10 will not be added to the model.

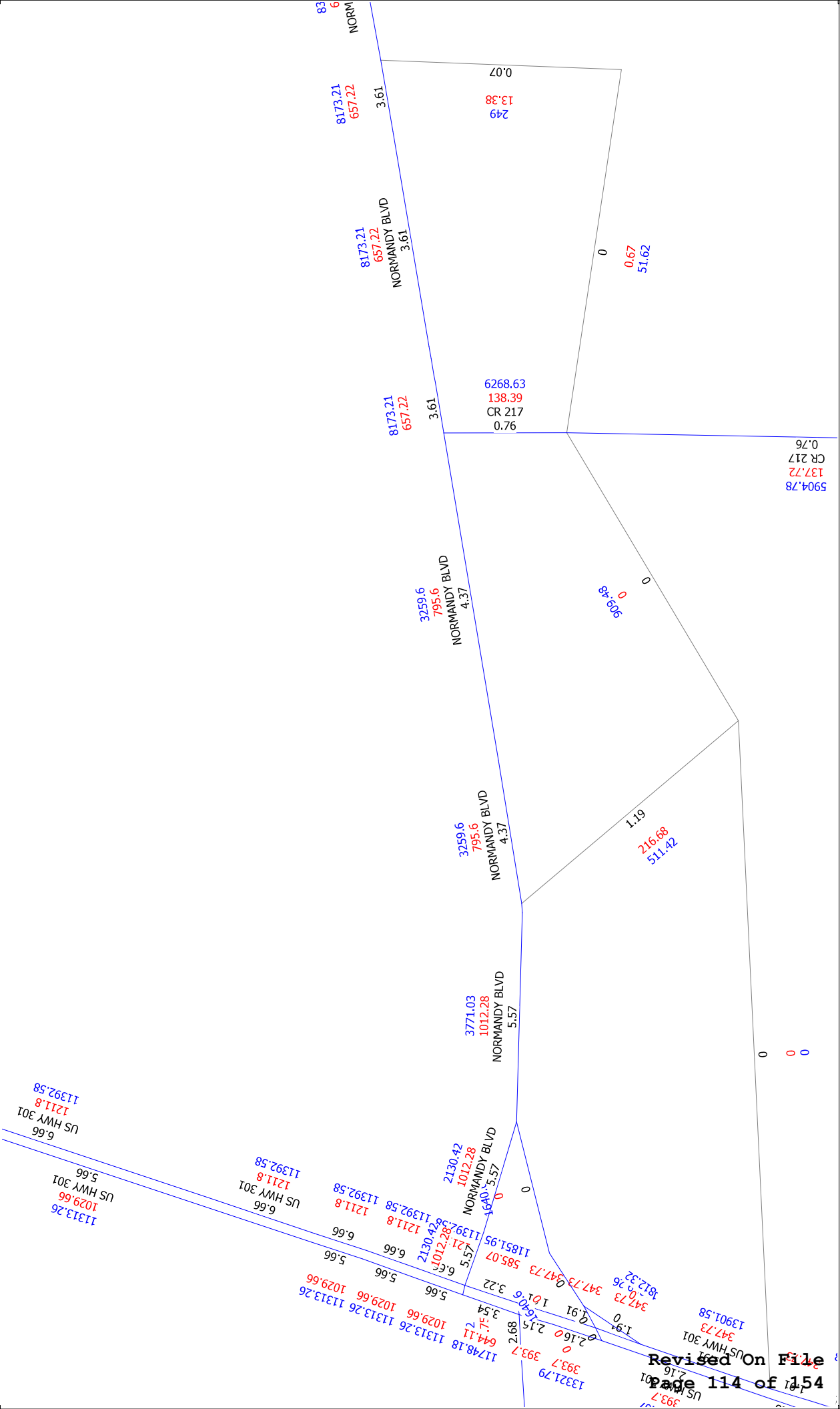
Attachment F

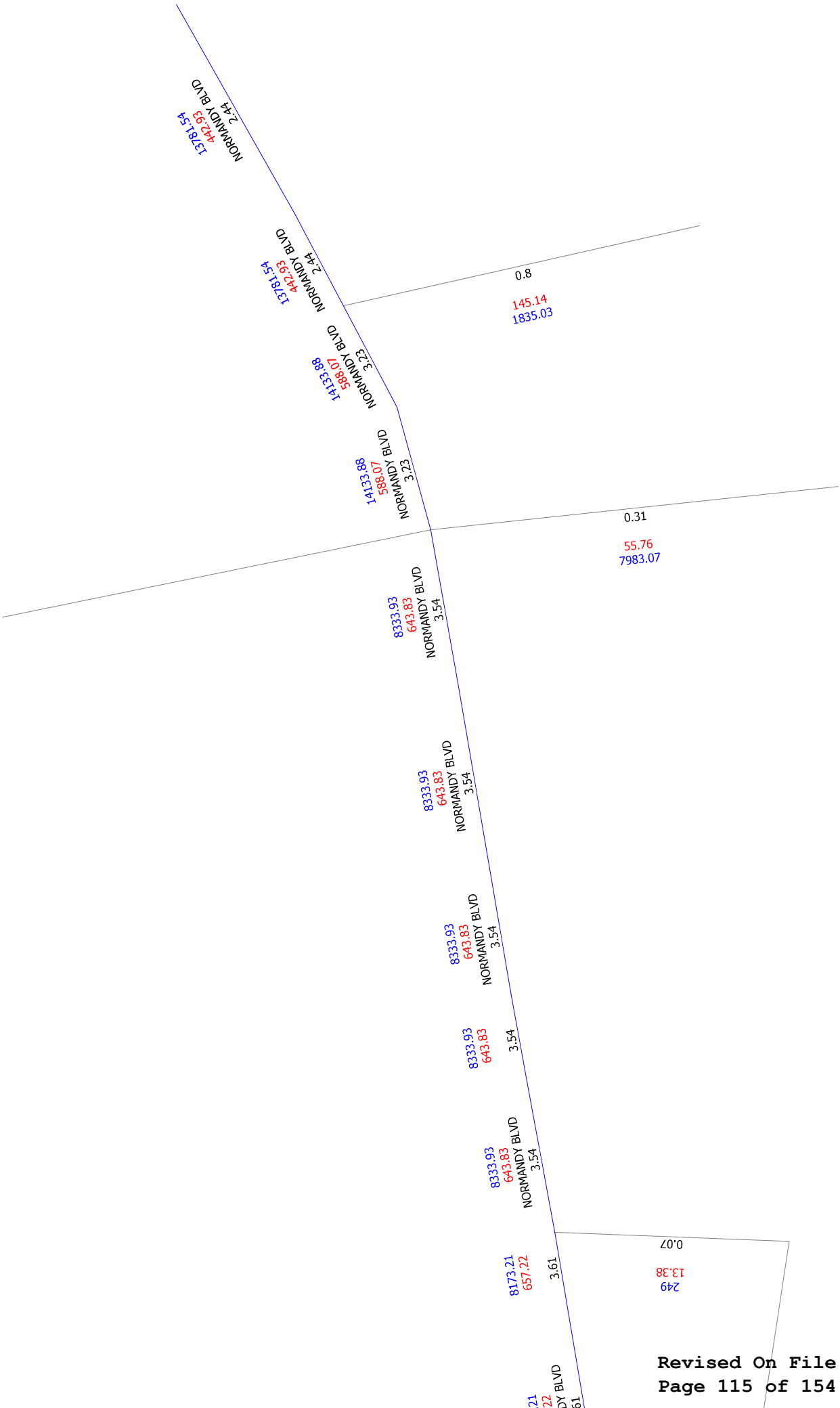
NERPM_Abv3 Travel Demand Model Plots

Attachment F1

Year 2025 NERPM_Abv3 Travel
Demand Model Plots







21035.99	8611.65
904.42	0
1-10	0
4.97	0
	0
	0
5.05	3545.87
1-10	0
917.98	
25733.43	



29,34
1-10
5335.49
35472.28

29691.81
3927.37
1-10
21.59
11100.59
1891.93
10.4

3.62
659.14
4804.15

29691.81
3927.37
1-10
21.59
11100.59
1891.93
10.4

3.62
659.14
4804.15

39923.44
4817.05
1-10
26.49

7913.36
551.63

3.03

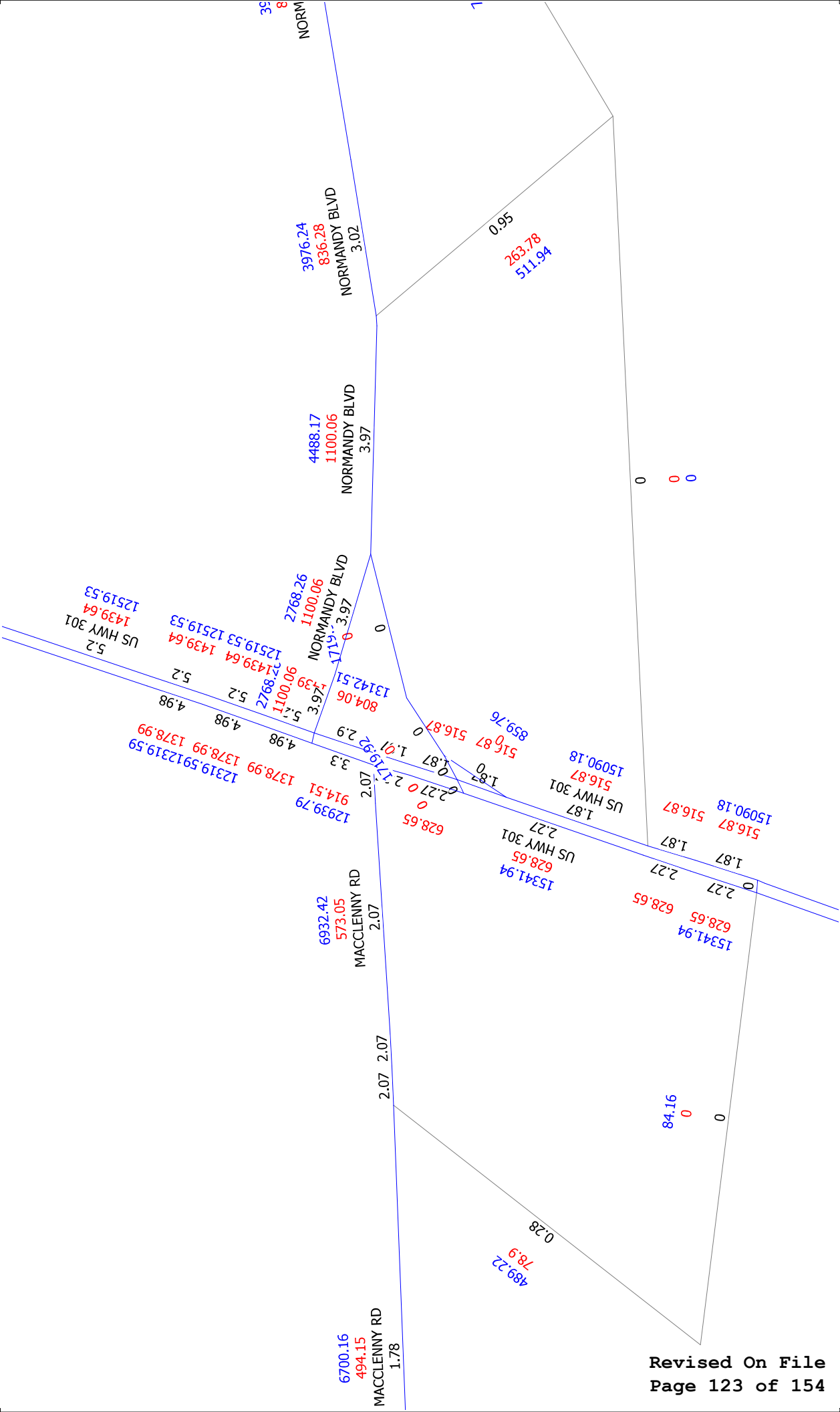
3.62

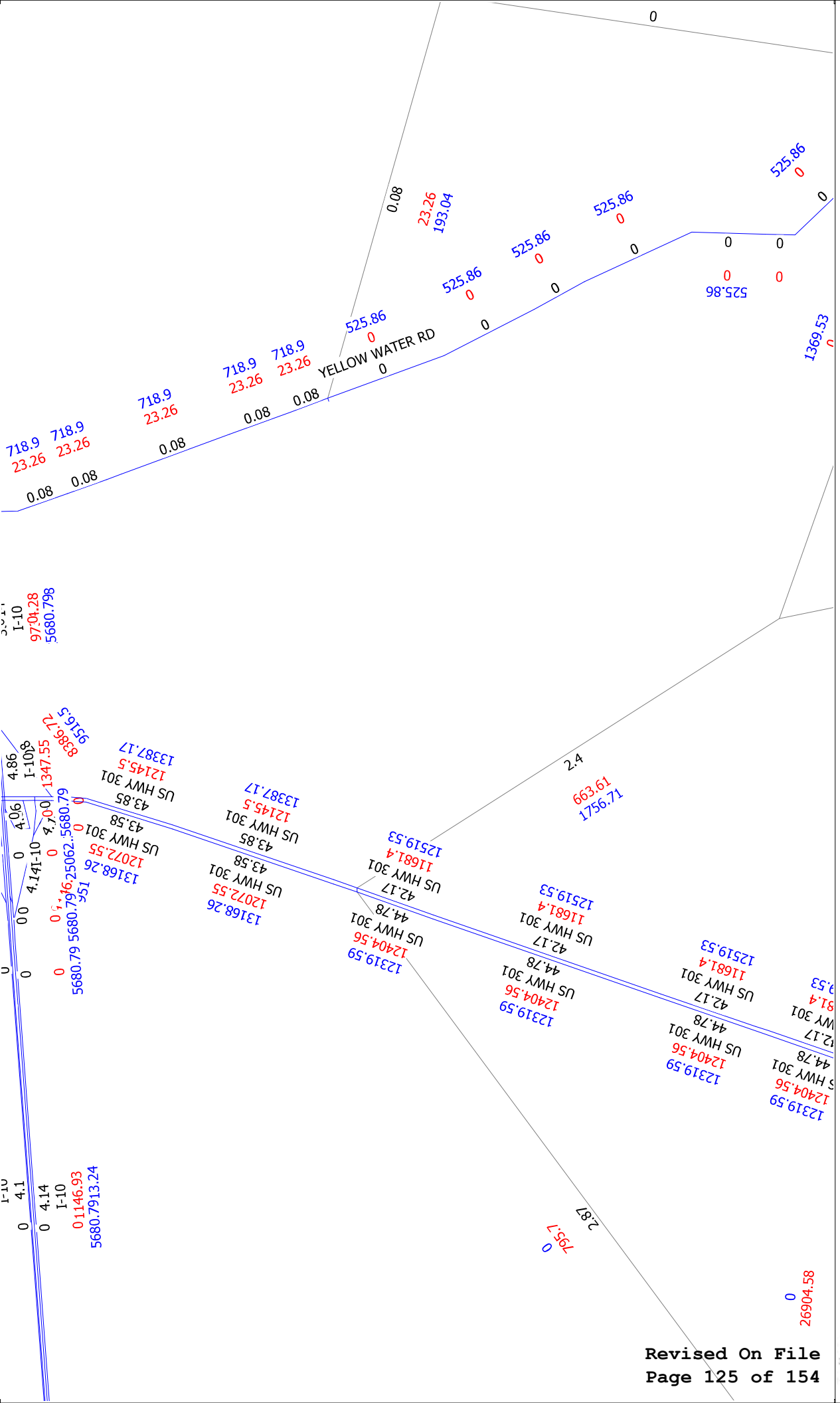
659.14
11564.84

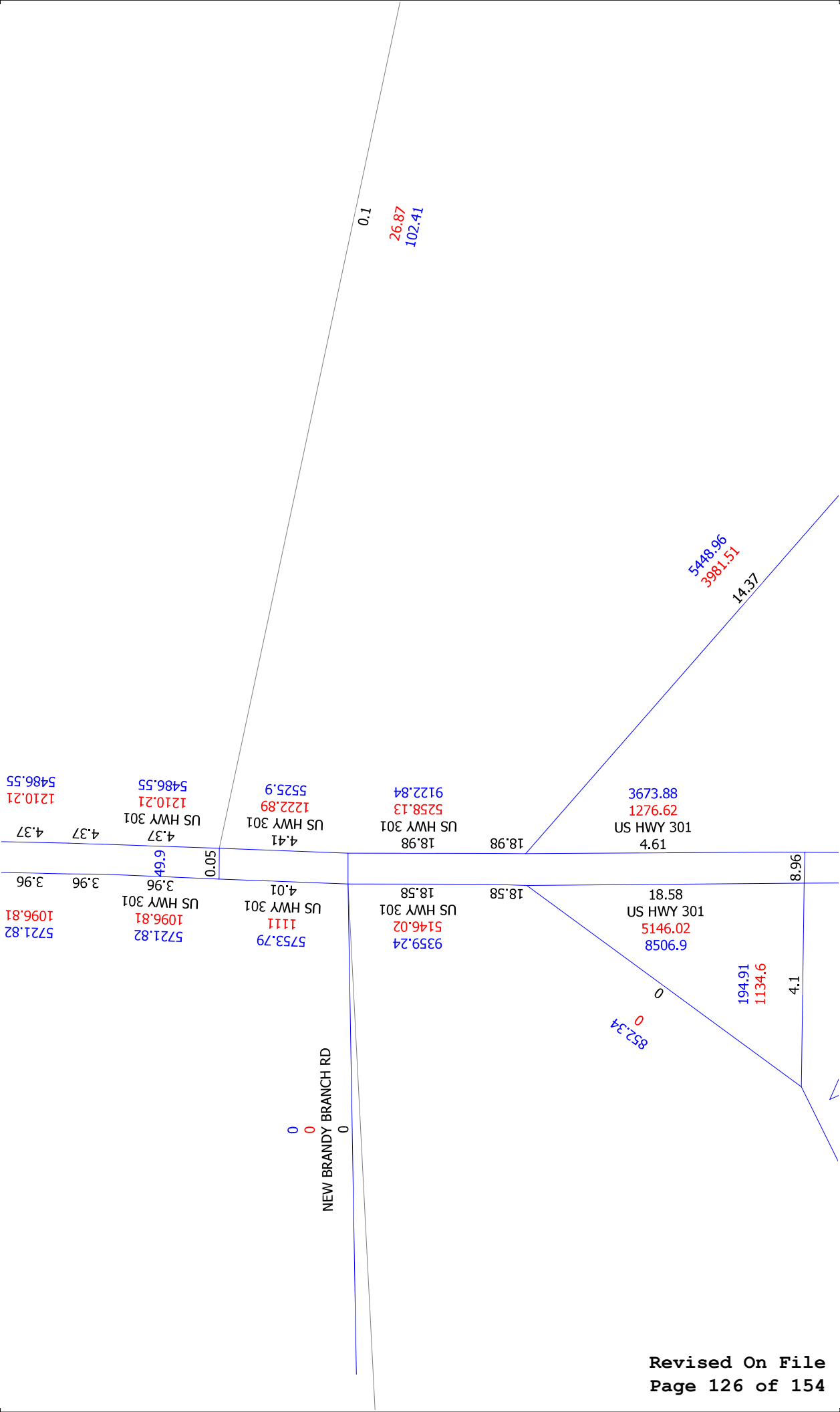
26.14
1-10
4753.93
38257.7

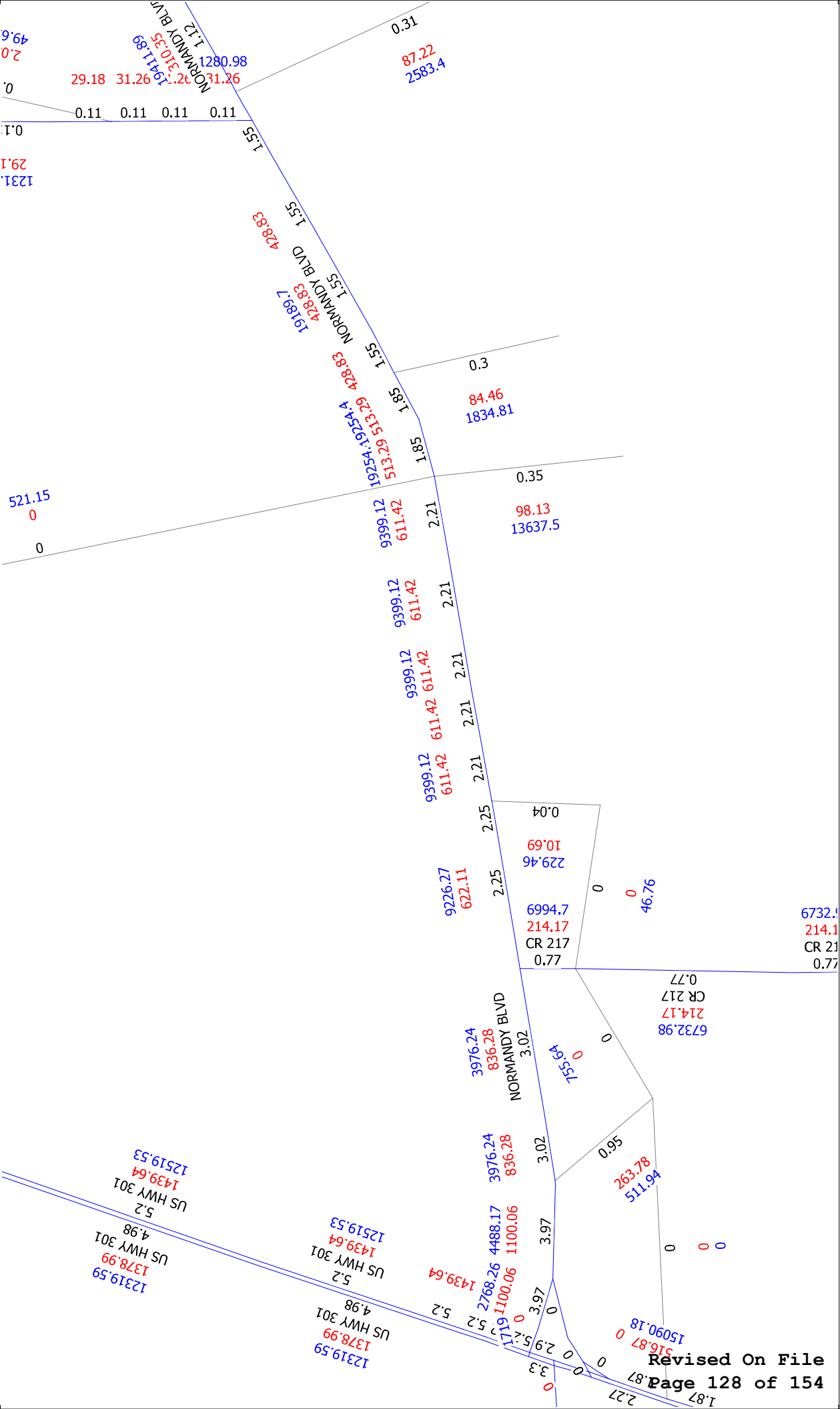
Attachment F2

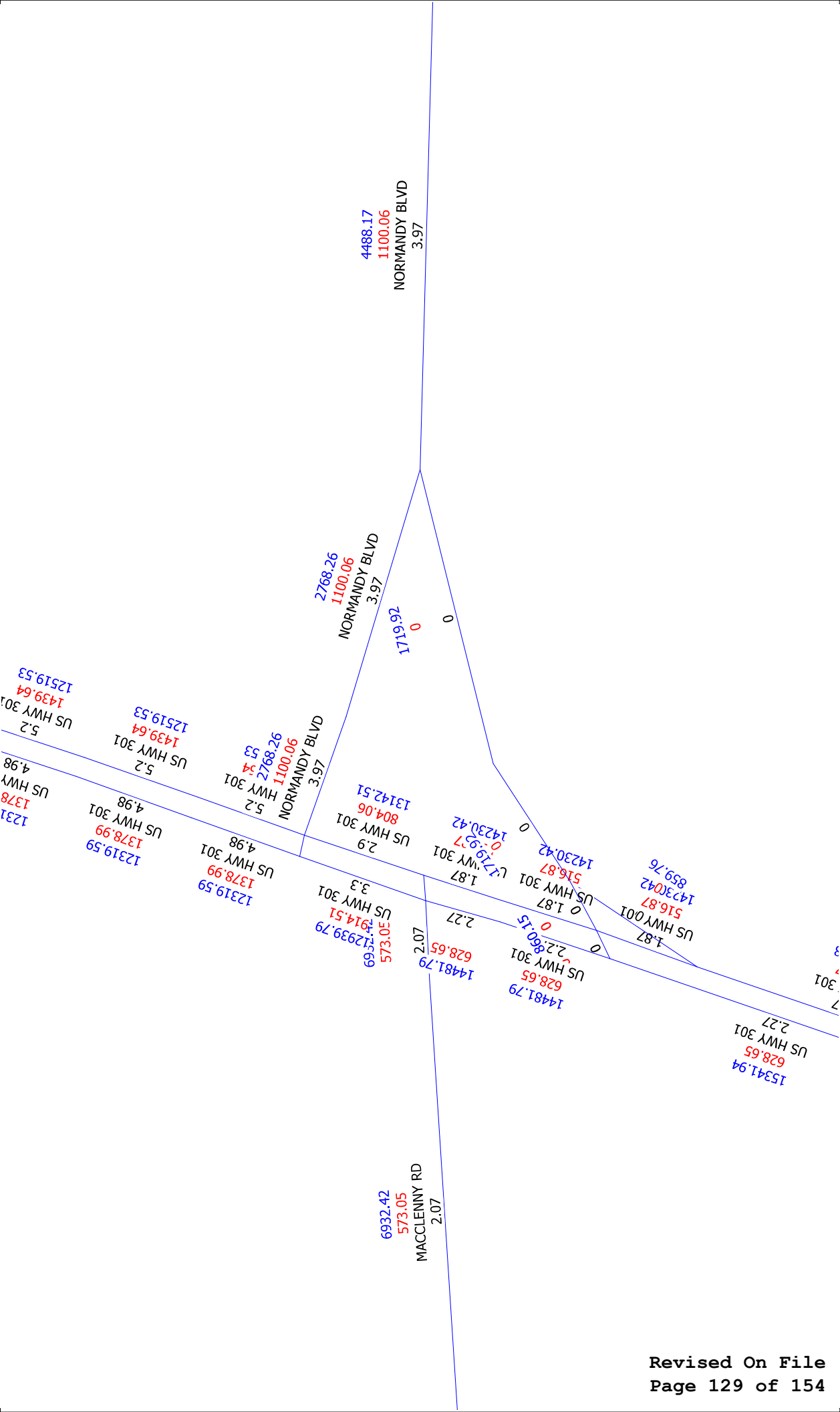
Year 2030 NERPM_Abv3 Travel
Demand Model Plots

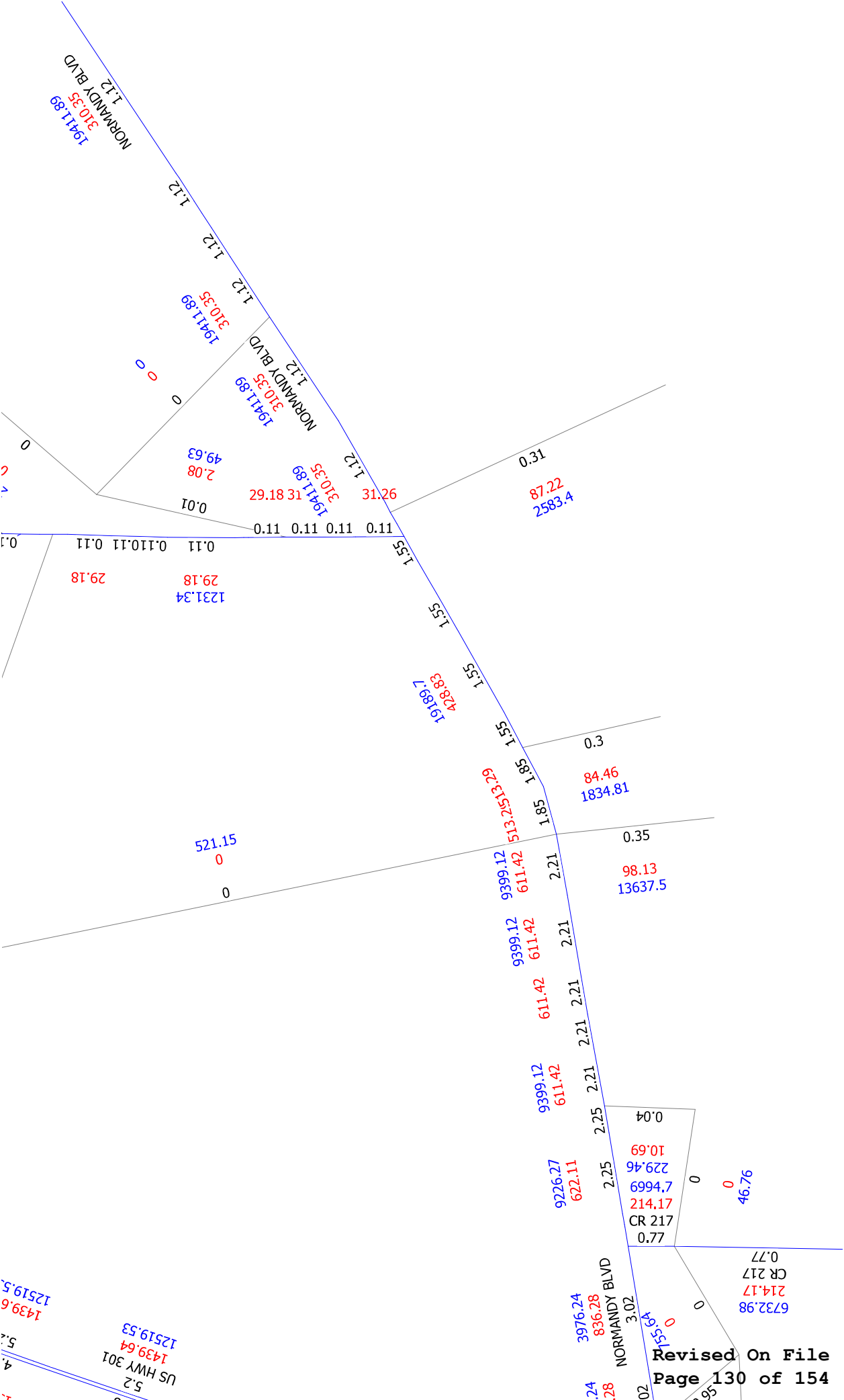












9426.39	22796.9
0	1134.6
0	I-10
0	4.1
0	4.14
0	I-10
5680.79	1146.93
	26013.24

9426.39	22796.9
0	1134.6
0	I-10
0	4.1
0	
0	4.14
0	I-10
5680.79	1146.93
	26013.24

29.54
1-10
8181.45
35699.53

29945.62
6337.52
I-10
22.88

12845.79
3423.59

12.36

5.61

1552.83
7017.95

41872.05
7798.56
I-10
28.15

9359.58
986.63

3.56

5.61

1552.83
15127.99

25.6
I-10
7092.25
38807.14

48005.2
6871.81
I-10
24.81

9359.58
986.63

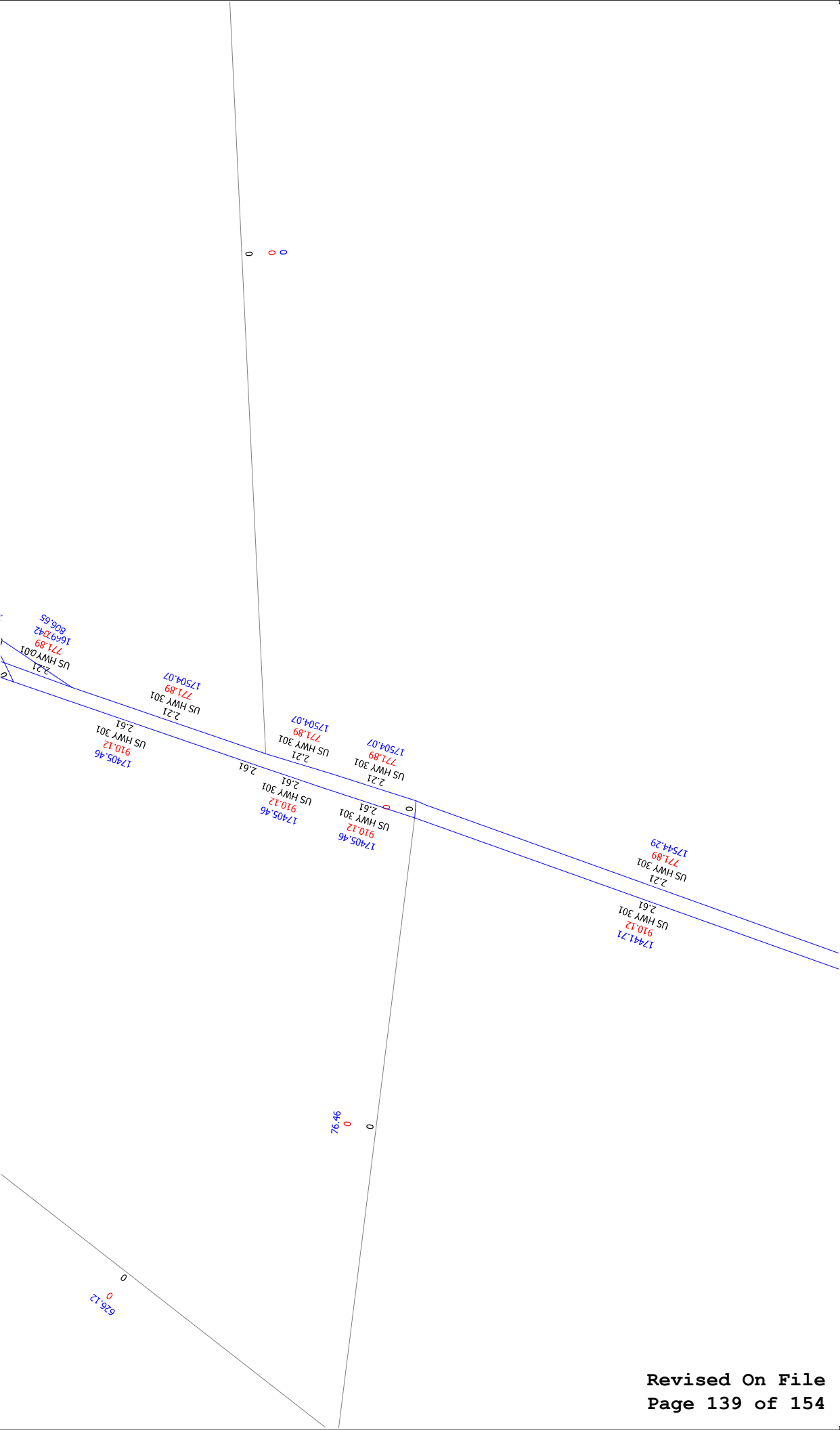
3.56

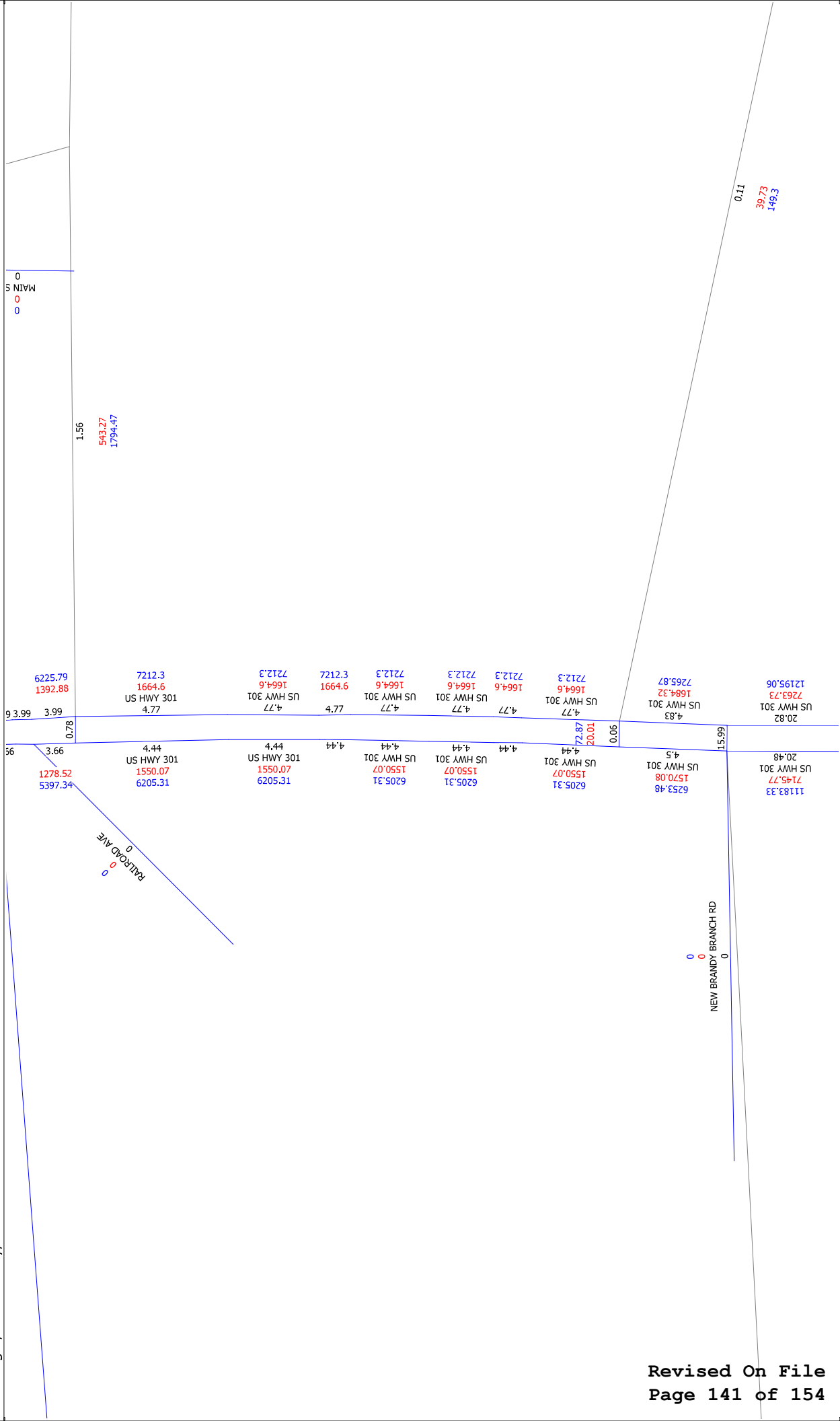
5.61

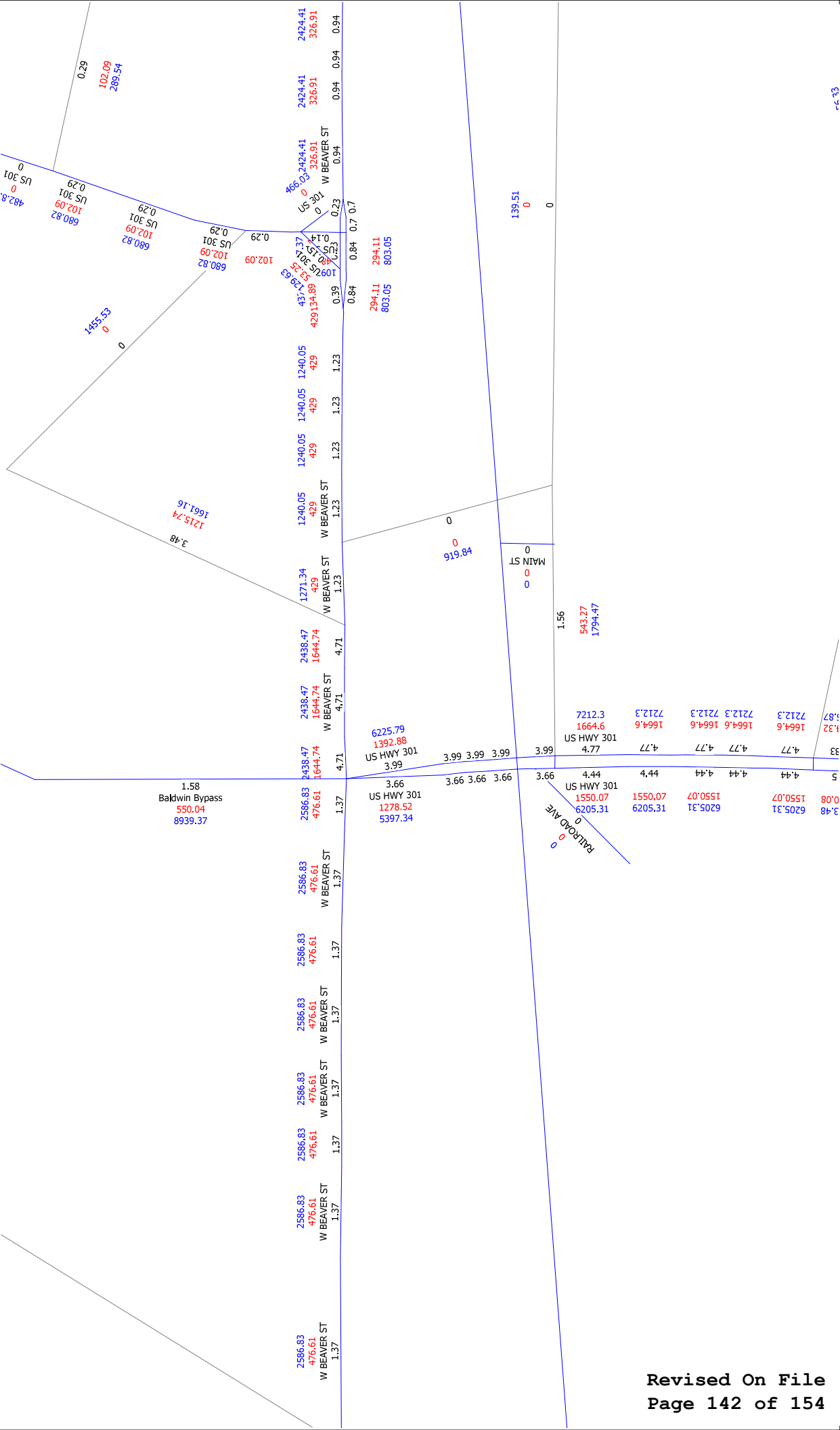
22.8 1552.83
I-10 15127.99
6314.29
46515.52

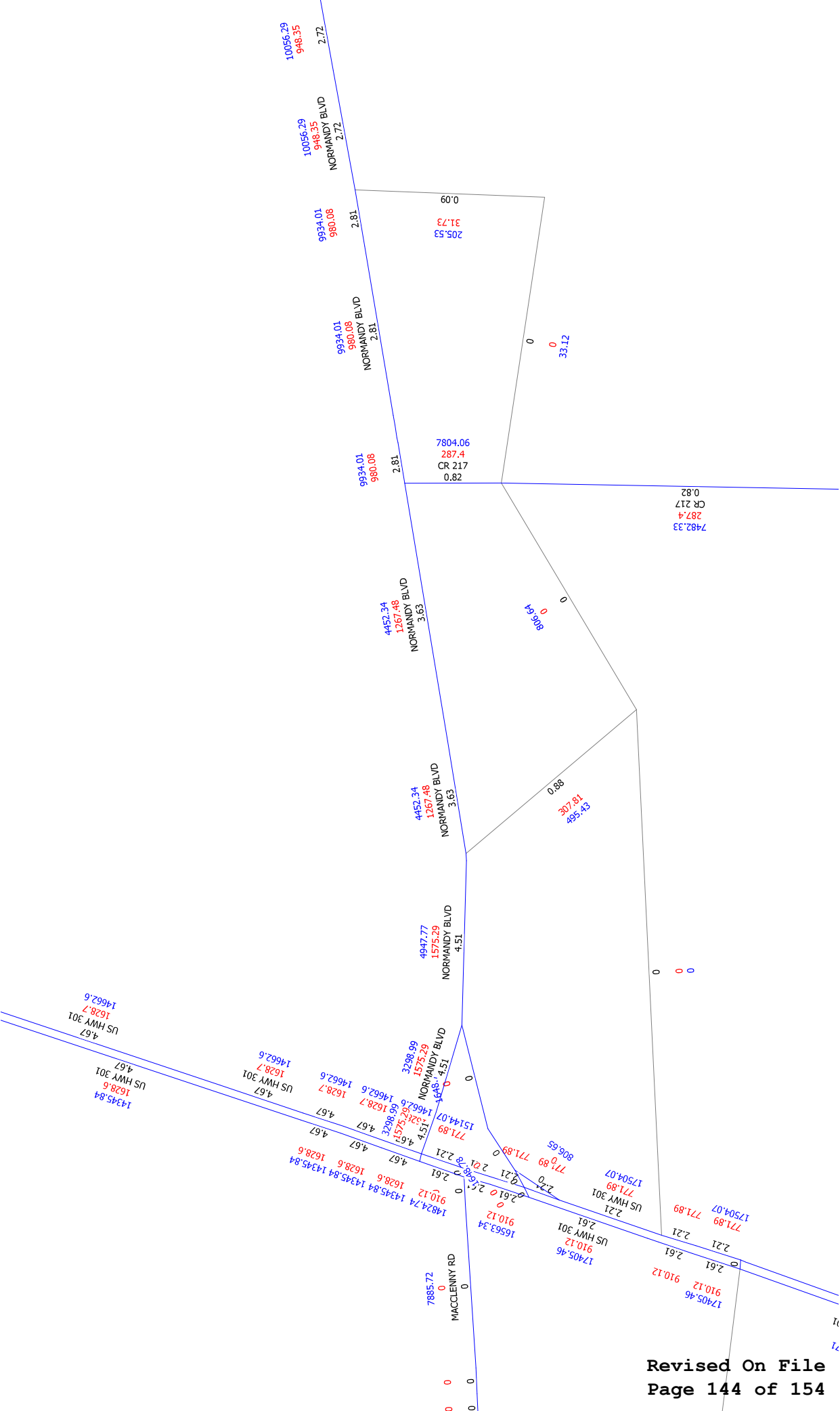
Attachment F3

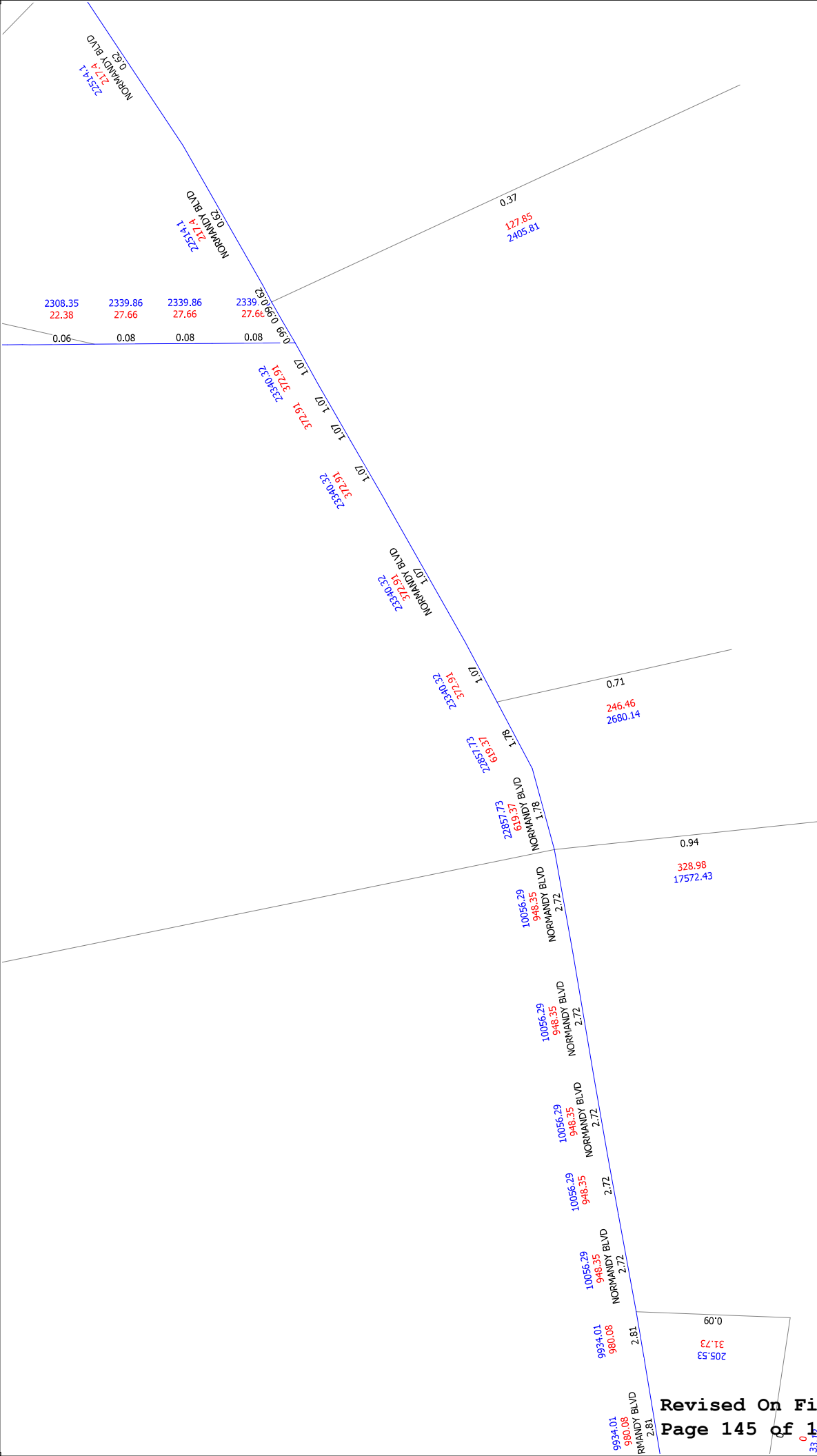
Year 2037 NERPM_Abv3 Travel
Demand Model Plots

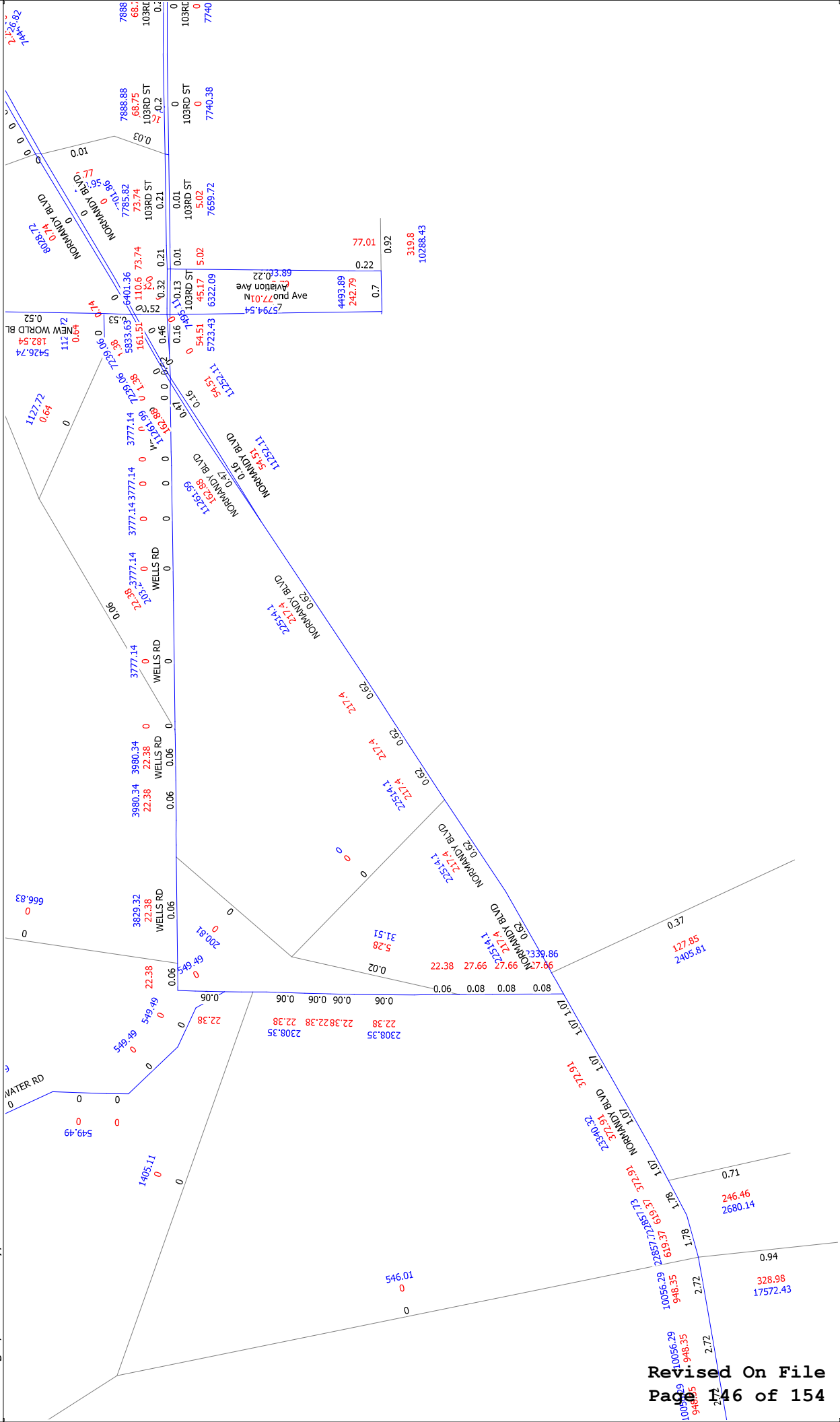


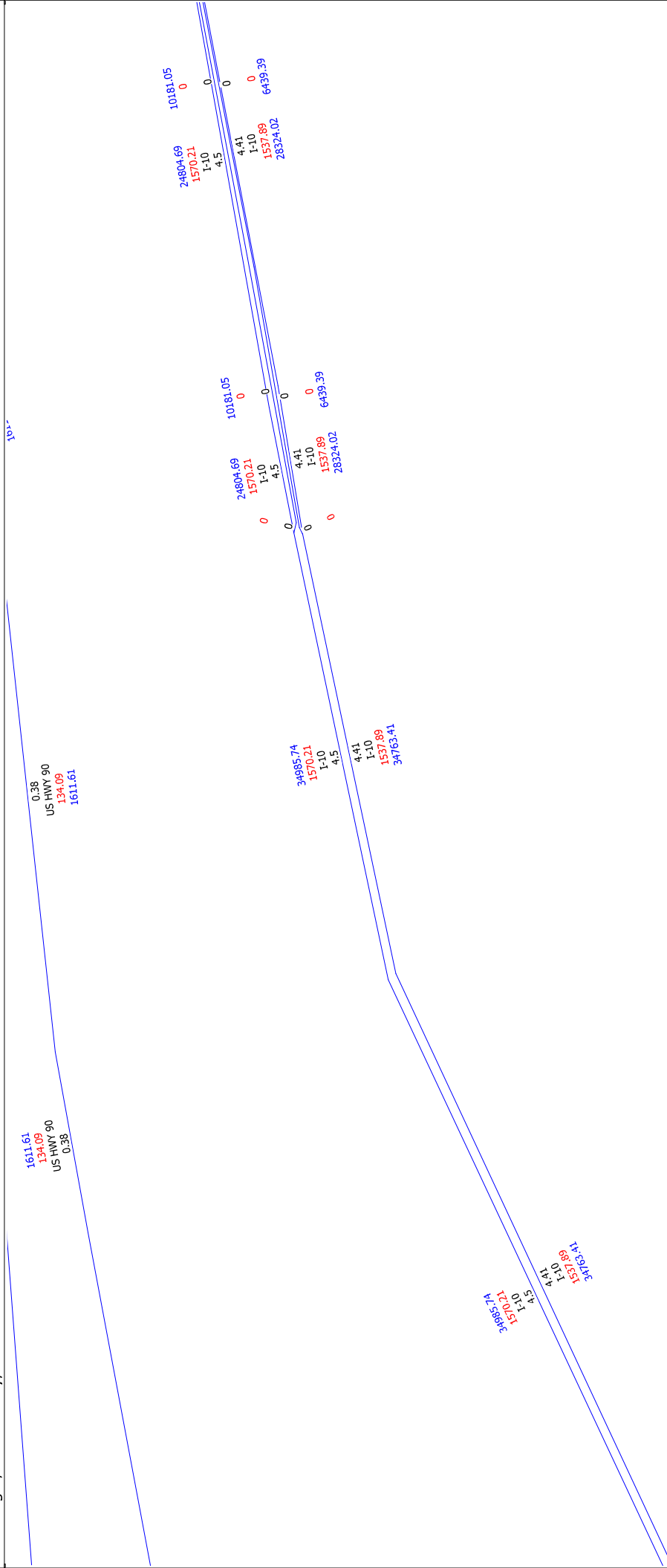


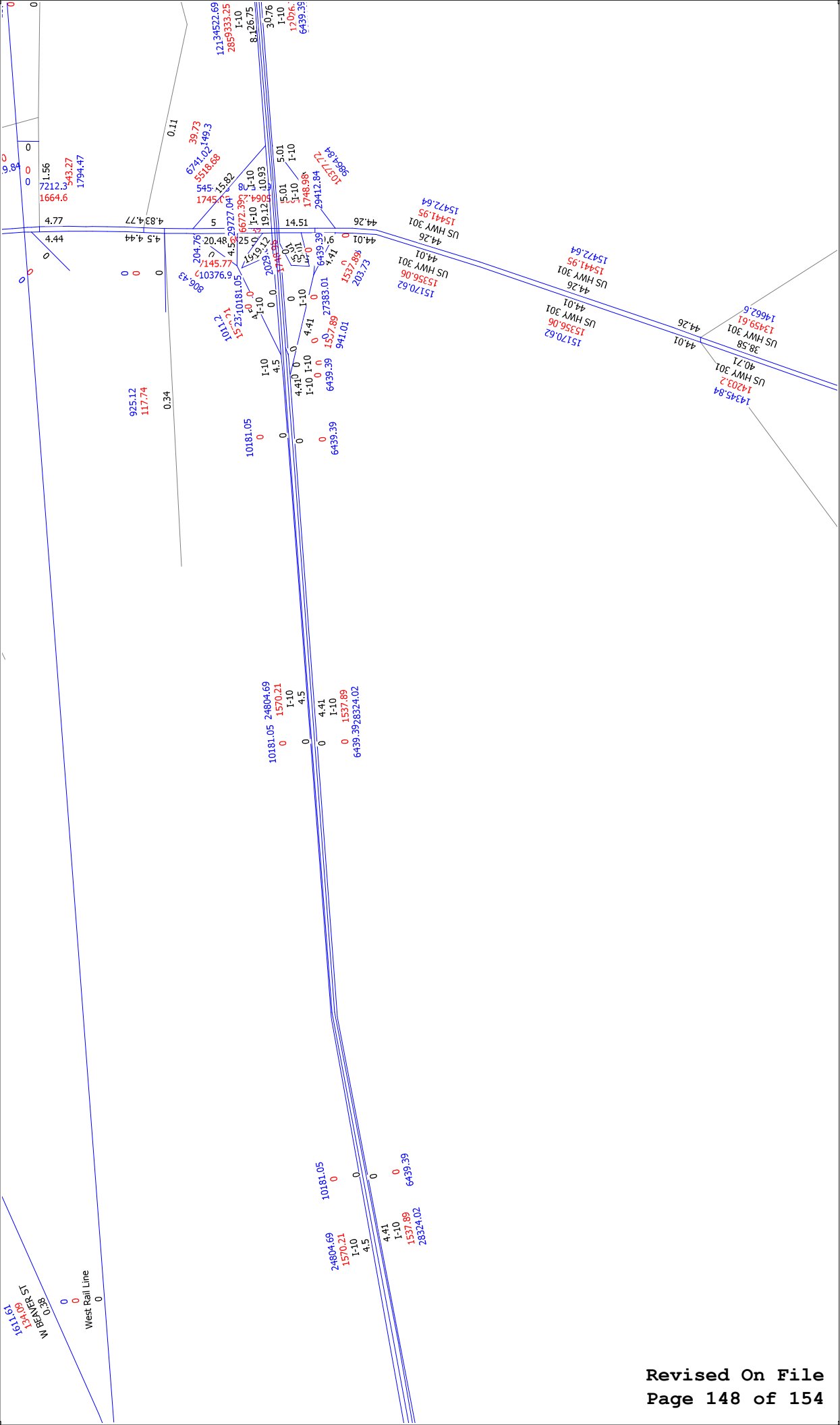


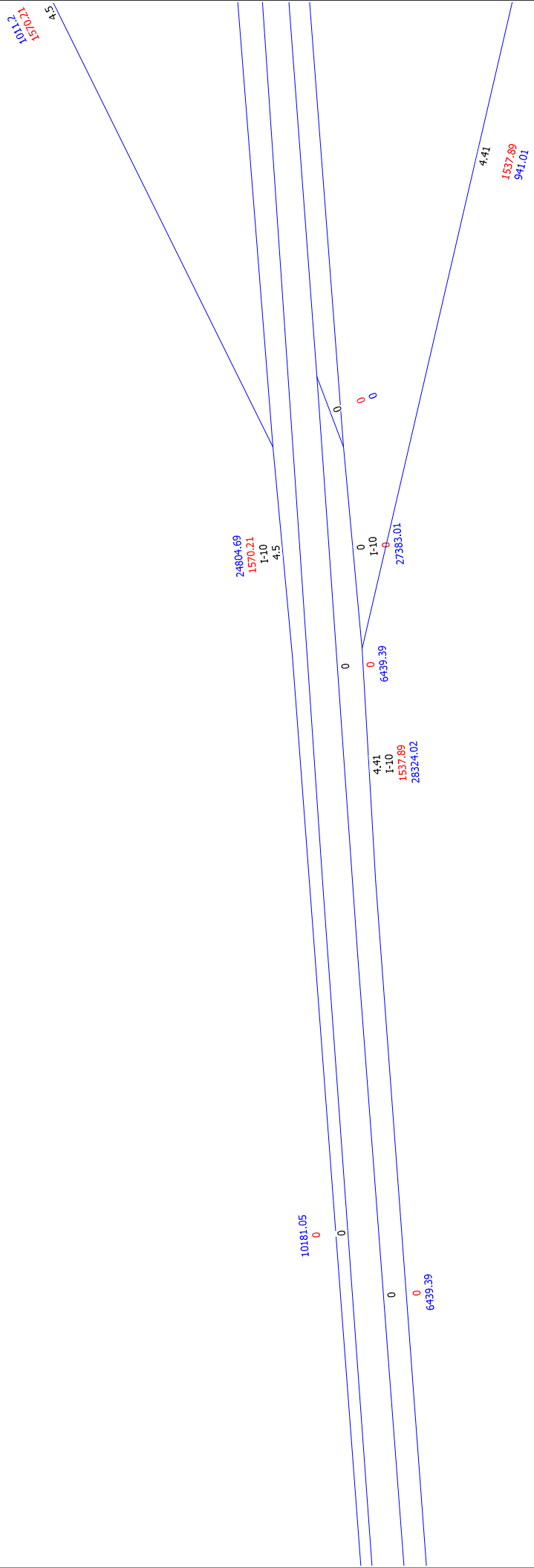












44692.82
9503.42
1-10
27.24

11608.02
1308.89
3.75

44692.82
9503.42
1-10
27.24

24.68
1-10
8610.49
41430.58

5.45
1903.06
17328.32

24.68
1-10
8610.49
41430.58

Attachment G

FDOT D2 Long Range Cost Feasible Plan FY 2029 - 2045

ID	FACILITY	FROM	TO	PDE	Design		TOTAL	Right of Way / Construction		P3 Funds COST	P3 Funds Begin Yr #/Yrs	Other Funds TOTAL	IMPRV TYPE	
					PE	ROW		CON	TOTAL					
965	I-10	W of SR-121	Nassau C/L		4,250	921	4,250	135,510	136,431				MGLANE	
3303	I-10	SR-23	I-295		21,250	3,950	21,250	433,542	437,492				MGLANE	
950	I-10	US-301	SR 23-Cecil Commerce Ctr Pkwy		10,250		10,250	266,968	266,968				MGLANE	
3309	I-10	at SR-121			5,000	5,000	5,000	29,932	34,932				M-INCH	
946	I-10	W of SR-125			5,050		5,050	125,873	131,264				MGLANE	
947	I-10	Baker C/L	Duval C/L		860	2,900	860	31,287	34,187				MGLANE	
948	I-10	Duval C/L	US-301		3,450	3,588	3,450	128,645	132,233				MGLANE	
1167	I-295	N of Commonweath	N of New Kings Rd		126,781		126,781	90,268	92,967				MGLANE	
3261	I-295	I-95	Southside Connector/SR-113		4,515	16,204	4,515	486,269	502,473				MGLANE	
1169	I-295	N of Collins Rd Interchange	N of Commonweath	750	16,538	3,785	16,538	382,345	386,130				MGLANE	
1168	I-295	N of New Kings Rd	S of I-95 N Interchange		8,136		8,136	14,629	22,765				M-INCH	
1154	I-75	at SR-121 (Williston Rd)			1,515		1,515						MGLANE	
3419	I-75	N of US-90	N of I-10 Interchange		13,159	5,365	13,159	802,843	808,632				MGLANE	
3301	I-75	SR-222 (NW 39th Ave)	US-441 (Alachua)		33,096	5,789	33,096						MGLANE	
3418	I-75	SR-121 (Williston Rd)	SR-222 (NW 39th Ave)		17,936	1,856	17,936		1,856				MGLANE	
3312	I-75	US 441 (Alachua)	US-41/US-441 Ellenville		36,690	12,055	36,690		12,055				MGLANE	
3305	I-75	Marion/Alachua County Line	SR-121/Williston Rd		21,253	5,278	21,253	534,742	540,020				MGLANE	
3445	I-95	N of SR-115 (MLK)	SR-121/Williston Rd		20,937		20,937						MGLANE	
3308	I-95	S of Duval Co Line	SR-202 (J Butler Blvd)		12,184	11,602	12,184	670,829	682,431				MGLANE	
3311	I-95	I-10	S of SR-115 (MLK)		750		750	202,046	202,046				M-INCH	
3310	I-95	at SR-16						11,462	11,462				A2-4	
911	SR 26	Gilchrist C/L- CR-337	CR-26A-Newberry Lane					29,454	29,454				A2-4	
3302	US 17	Collins Rd	NAS Birmingham Gate		1,125	1,250	1,125	40,052	41,302				A1-AUX	
Funded CFP Totals										4,512,465				Total CFP Funds= 4,890,637

LEGEND

- FY 2028/2029 - 2034/2035
- FY 2035/2036 - 2039/2040
- FY 2040/2041 - 2044/2045
- Mega Projects Phased Over Time

NOTES

- Values in thousands of dollars in the year of expenditure, inflated to the middle year of each band.
- All phase costs shown as supplied by each District.
- ROW includes both Construction (CON52) and Construction Support (CEI).
- ROW includes both Right-of-Way Acquisition/Mitigation (ROY/49/45) and Right-of-Way Support.
- "P3 Funds" - Used to fund Public-Private Partnership projects over a specified number of years.
- Revenue forecast provides separate values for PDE and PE than for ROW and CON.
- Other Funds - assumed to be toll revenue or partner funded.

IMPROVEMENT TYPES

- A1-3: Add 1 Lane to Build 3
- A2-4: Add 2 Lanes to Build 4
- A2-6: Add 2 Lanes to Build 6
- A2-8: Add 2 Lanes to Build 8
- A4-12: Add 4 Lanes to Build 12
- A1-AUX: Add 1 Auxiliary Lane
- A4-SUL: Add 4 Special Use Lanes

ACCESS: Access
BRIDGE: Bridge
FRTCAP: Freight Capacity
GRASEP: Grade Separation
HWYCAP: Highway Capacity
PTERM: Passenger Terminal
ITS: Intelligent Transp. Sys
STUDY: Study
UP: Ultimate Plan

M-INCH: Modify Interchange
N-INCH: New Interchange
NR: New Road
PDE: Project Dev. Env.
SERVE: Add Svc/Front/CD System
STUDY: Study
UP: Ultimate Plan

