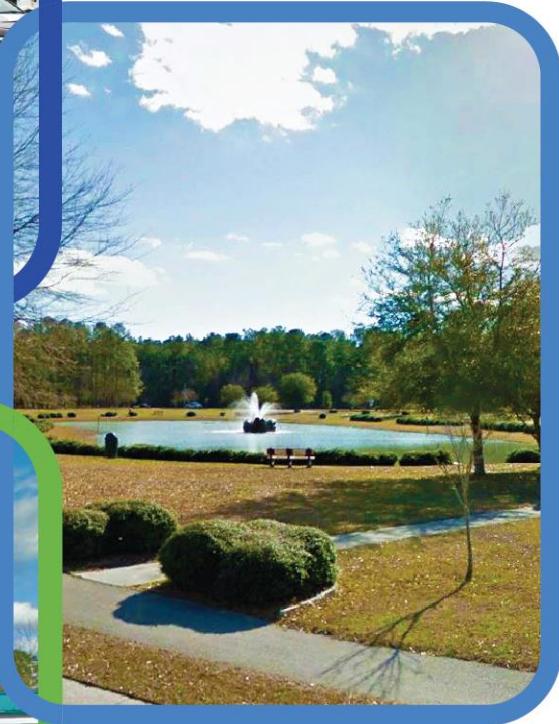


U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)

Concurrence Point #3 Least Environmentally Damaging Practicable Alternative (LEDPA) / Preferred Alternative Selection



February 2026

AtkinsRéalis





LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE (LEDPA)/ PREFERRED ALTERNATIVE SELECTION

Jacksonville Parkway Extension
NC 53 (Western Boulevard) to US 17 (New Bern Highway)

Jacksonville, Onslow County

STIP Project U-5791
WBS No.: 44363.1.1

North Carolina Department of Transportation

Division 3



MERGER CONCURRENCE POINT NUMBER 3
February 2026



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I. Introduction

A. Project Location

Lead federal agency: US Army Corps of Engineers

Primary points of contact for the subject project are:

Agency	Name
U.S. Army Corps of Engineers	Matt Martin
North Carolina Department of Water Resources (NCDWR)	Holly Snider
North Carolina Department of Transportation – Division 3	Zach Howard
AtkinsRéalis	Robert Boot

The purpose of this meeting is to reach concurrence on the Least Environmentally Damaging Practicable Alternative (CP3) for the subject project.

B. Project Description

The North Carolina Department of Transportation (NCDOT) proposes to extend Jacksonville Parkway (SR 2714) from Western Boulevard (NC 53) to US 17 (New Bern Highway) (**Exhibit 1**). The first segment of Jacksonville Parkway (south of Western Boulevard) opened in 2013. Multiple new-location alternatives are being considered for the project. The Jacksonville Parkway extension will be designed as a four-lane median divided facility.

As seen in **Figure 1**, the project study area contains a mix of undeveloped, forested lands and developed parcels (commercial, residential, institutional, and public). There are also agricultural uses, open space, and a large wetland mitigation site (state owned and managed area).

Completion of the Jacksonville Parkway will serve as an important connector to Western Boulevard and US 17, improving overall mobility in the area.

The extension of Henderson Drive (connecting Henderson Drive with Jacksonville Parkway Extension) is included in this project to help to alleviate congestion identified along Western Boulevard and to minimize additional intersection improvements at Jacksonville Parkway/Western Boulevard.

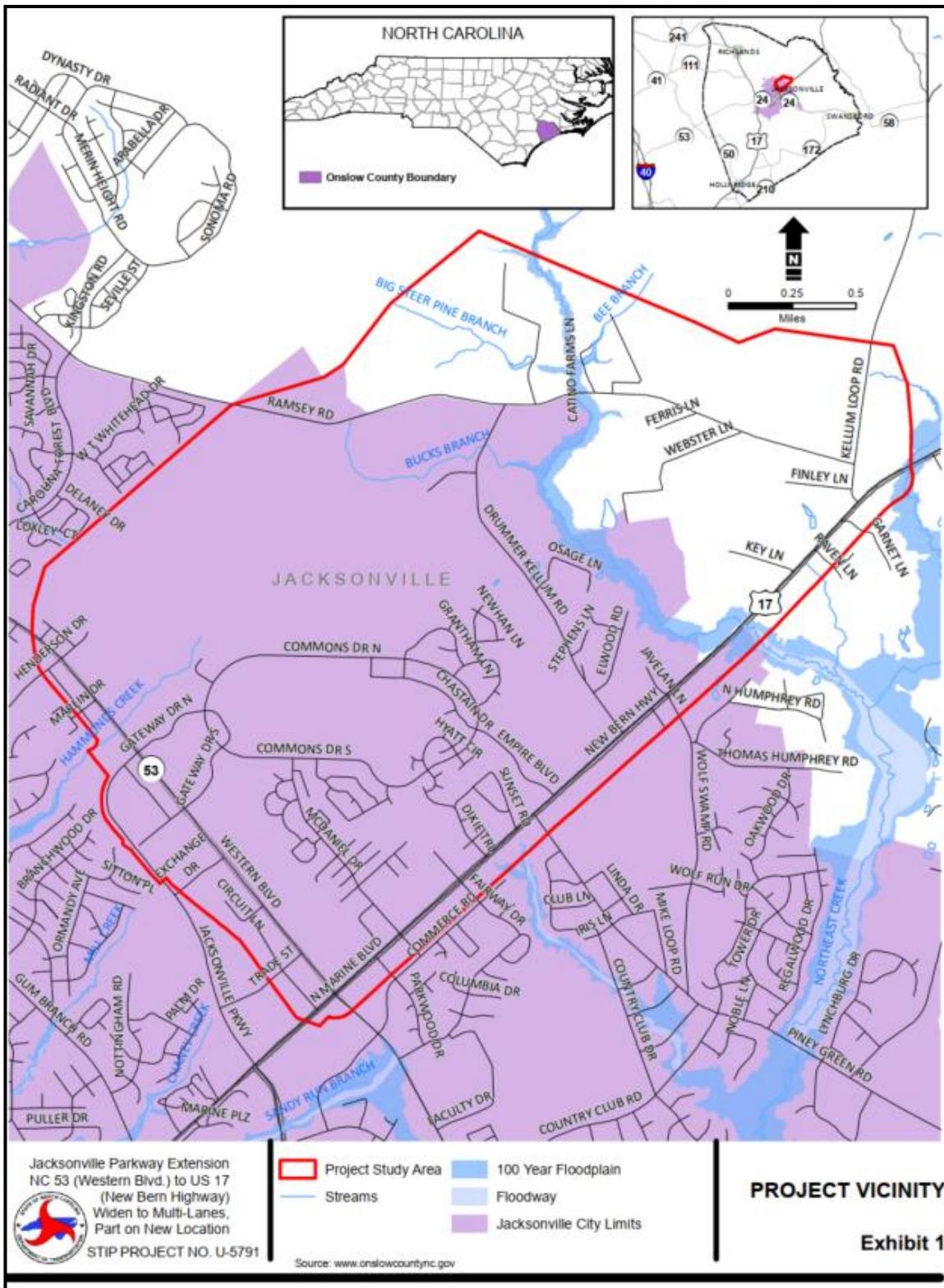


U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)



Exhibit 1. Project Vicinity Map





U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)



C. Project History and Merger Plan

The proposed project is included in the adopted *NCDOT 2024-2033 State Transportation Improvement Program (STIP)* approved by the NCDOT Board of Transportation July 2025, as well as the most recently revised October 2025. In the current STIP, the overall project is broken into two sections. Section A is the new location roadway from NC 53 (Western Boulevard) to SR 1324 (Ramsey Road), and Section B is the widening of Ramsey Road to US 17 (New Bern Highway). However, alternatives are being considered that are completely on new location. The current STIP cost estimate is presented in **Table 1**. The current project schedule is included in **Table 2**. The schedule and cost estimates are preliminary and subject to change.

Table 1. Current STIP Cost

	Right-of-Way	Utilities	Construction
U-5791A – NC 53 (Western Boulevard) to SR 1324 (Ramsey Road)	\$16.3M	\$0.85M	\$62.7M
U-5791B – SR (Ramsey Road) to US 17 (New Bern Highway)	\$7.9M	\$4.1M	\$22.6M
Total	\$24.2M	\$4.95M	\$85.3M
Project Total		\$114.45M	

Table 2. U-5791 Project Schedule

Milestone	Format	Anticipated Date
CP1 and CP2	Virtual Meeting	October 2021
CP2 Update and CP2A	Virtual Meeting	April 2023
CP3	In Person Meeting	February 2026
Finding of No Significant Impact (FONSI)	Electronic Distribution	August 2026
CP4A	Virtual Meeting / Packet Concurrence	June 2026
CP4B	Virtual Meeting	Spring 2027
CP4C	Virtual Meeting	Fall 2028
Begin ROW Acquisition	--	Summer 2027
Begin Construction	--	Summer 2029



D. Past Merger Meetings Summary

Combined CP1 and CP2

On September 8, 2021, the project team meet with the Merger Team for a combined Concurrence Point No. 1 (CP1) to discuss the purpose and need and project study area, and Concurrence Point No. 2 (CP2) for the Detailed Study Alternatives Carried Forward. As a result of this meeting, additional information was needed in order for the Merger Team to concur with CP1. A new alternative was also requested by the City of Jacksonville to be included in the alternative analysis.

On October 20, 2021, the project team met with the Merger Team to review the revised information that was submitted as a result of the previous CP1 and CP2 merger meeting held on September 8, 2021. As a result of the discussion, the Merger Team concurred with CP1 and CP2.

CP2 Update and CP2a

On April 19, 2023, the project team met with the Merger Team to review updated information (including alignment changes) on the alternatives since their concurrence of CP2 on October 20, 2021. This meeting also reviewed information for Concurrence Point No. 2a (CP2a) for Bridging Decisions and Alignment Review. As a result of this meeting, the Merger Team concurred with CP2 and CP2a. See **Appendix A** for the signed concurrence forms.

Public Involvement

2018

A newsletter was mailed to over 2,000 addresses in October of 2018 introducing the public to the project and opportunities to provide comments.

2021

In August of 2021, a virtual public meeting was held via the project website due to the COVID pandemic to provide the public with an update on the project status and ability to comment on the project's alternatives. The website had a recorded video presentation that went through the project's purpose and need, alternative screening process, alternatives, and overall planning process and schedule.

A postcard was mailed to approximately 7,500 people inviting them to review the project website and provide comments on the corridor alternatives that were developed. The website had over 3,000 views and 366 responders. Over 150 people provided comments through the website or phone calls. Overall, comments included concerns with impacts to property, traffic, environmental, and community impacts and costs. The preference for the alternatives was: Alternative 1a (79%), Alternative 1b (73%), Alternative 3 (72%), Alternative 2b (71%), Alternative 2a (63%).

There were numerous changes to project alternatives and designs due to new information and developments, which delayed additional public outreach.

2023

A project website update was completed in April 2023 to provide responses to comments received and provide updates to the design.



U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)



2024-2025

Environmental studies were completed to determine impacts to natural and human environments. Traffic analyses were updated.

The project website was updated in July 2025 to inform the public on the Detailed Study Alternatives that were being analyzed.

A Combined Public Hearing was held on October 28, 2025, to announce the completion of the State Environmental Assessment and provide the public an opportunity to review the Detailed Study Alternatives. The hearing included an open house followed, formal presentation by NCDOT and the public comment forum.

A total of 82 citizens signed in at the Combined Public Hearing, and 19 people provided formal verbal comments and two people provided written comments. A total of 51 comments were received through the website or emailed, and seven phone calls were received during the comment period (September 28, 2025-November 28, 2025).

A post Combined Public Hearing meeting was held on December 16, 2025, to discuss and address comments received from the public. The most common comment was regarding property impacts. There are residents that live along each corridor who are concerned about property impacts, increased traffic noise, and limited access to their properties. Comments were also received voicing concerns that this project would not meet the project purpose of relieving congestion in the area. Concerns were also voiced about having access to community resources such as Fire Station 4 shopping along Western Boulevard, and the Jacksonville Commons Recreation Complex. There were also a number of participants who mentioned that Ramsey Road is recommended to be widened by the City of Jacksonville regardless of this project, so they questioned why Alternative 2 or 3 would be selected if the Ramsey Road widening will potentially be happening regardless.

The Combined Public Hearing Maps showing the DSAs can be viewed at the following location:

U-5791 Alternative 1

<https://connect.ncdot.gov/site/Preconstruction/division/div03/U-5791/Project%20Development/Public%20Hearing%20Meeting%20Materials%20-%20Oct%202028%2C%202025?Web=1>

U-5791 Alternative 2

<https://connect.ncdot.gov/site/Preconstruction/division/div03/U-5791/Project%20Development/Public%20Hearing%20Meeting%20Materials%20-%20Oct%202028%2C%202025?Web=1>

U-5791 Alternative 3

<https://connect.ncdot.gov/site/Preconstruction/division/div03/U-5791/Project%20Development/Public%20Hearing%20Meeting%20Materials%20-%20Oct%202028%2C%202025?Web=1>



II. Purpose and Need

A. Project Need

The population within the project study area has increased 34.2% from 2008 to 2022 resulting in an annualized growth rate of 3.0%. The overall population of Onslow County increased 15.4% during this same period with an annualized growth rate of 1.4%. This data indicates that the study area has grown approximately 2-3 times the rate of Onslow County. This growth is likely the result of newer development in the area, a transition in the region from agriculture to urban development, and proximity of the area to commercial development and military facilities.

According to the Jacksonville Urban Area MPO (JUMPO), the Jacksonville Parkway Extension Project is an important connection needed to enhance mobility and provide an alternate connection to US 17. The specific needs for the proposed project are described below.

- There is congestion along existing roadways within the project study area (Western Boulevard and US 17), and it is projected to worsen in the future with growth and development.
- New Bern Highway (US 17) is a primary north/south route serving as a major travel corridor in the local and state transportation systems.
- There are limited options for transportation access in this area of Jacksonville.

B. Project Purpose

The purpose of the proposed project is to improve the transportation network within the study area by alleviating existing and future congestion along existing roadways and improving mobility. Completion of Jacksonville Parkway will provide a northern loop from existing Jacksonville Parkway (US 17 Bypass) to US 17 to the north.



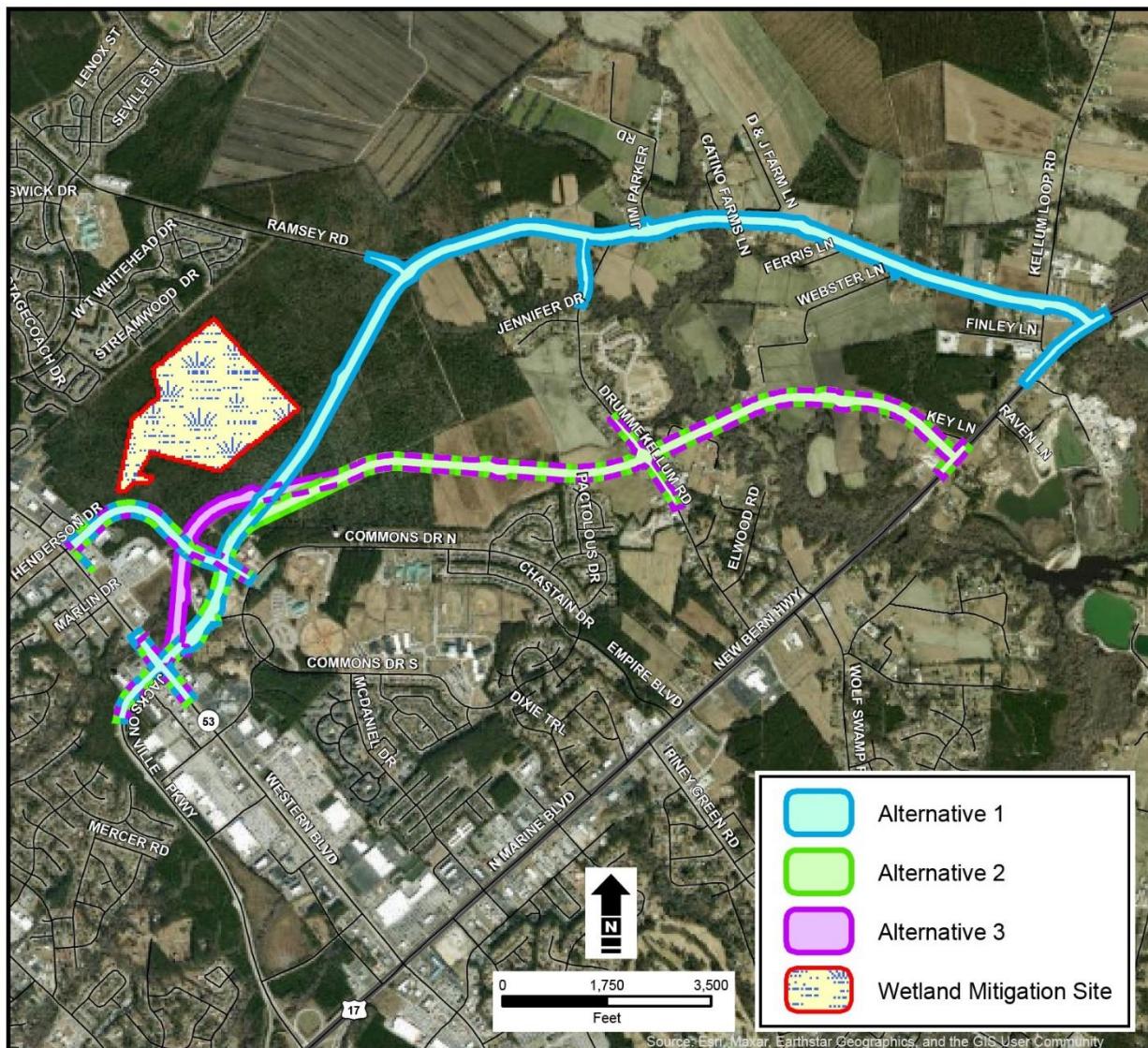
III. Detailed Study Alternatives and Impacts

Three (3) alternatives were carried forward for detailed study (**Exhibit 2**) and summarized in **Table 3**.

Table 3. Detailed Study Alternatives

Build Alternative CP2A	Build Alternative 2025	Description
1b Revised	1 (Blue)	New Northern Location Roadway and Ramsey Widening Connection
2b Revised	2 (Green)	New Southern Location Roadway connecting to US 17
2c Revised	3 (Purple)	Variation of the New Southern Location Roadway to US 17. Follows the same alignment as Alt 2 (Green) north of Jacksonville Commons.

Exhibit 2. Detailed Study Alternatives





A. Alternative Designs

This section describes the alternatives and summarizes the impacts of each of the three (3) Detailed Study Alternatives on the natural and human environments within the study area. A comparison of the alternatives and their impacts is also included in Table 6. These alternatives were previously named Alternative 1b Revised, Alternative 2b Revised, and Alternative 2c Revised as included in the CP2A concurrence forms, however, to streamline the naming convention for the public, they were revised to Alternatives 1, 2, and 3.

Alternative 1 (Blue)

This alternative begins at the existing Jacksonville Parkway/Western Boulevard intersection and proceeds north on new location to Ramsey Road. It will then widen Ramsey Road connecting to US 17. The alternative will also include the extension of Henderson Drive from the existing Henderson Drive/Western Boulevard intersection connecting to the Jacksonville Parkway extension.

Alternative 2 (Green)

This alternative begins at the existing Jacksonville Parkway/Western Boulevard intersection and proceeds north on all new location connecting to US 17 south of Key Lane. The alternative will also include the extension of Henderson Drive from the existing Henderson Drive/Western Boulevard intersection connecting to the Jacksonville Parkway extension.

Alternative 3 (Purple)

This alternative is a slight variation of Alternative 2 (Green) in that after leaving the intersection of Western Boulevard and existing Jacksonville Parkway, the alignment is slightly west of Alternative 2. The alternative will also include the extension of Henderson Drive from the existing Henderson Drive/Western Boulevard intersection connecting to the Jacksonville Parkway extension.

Typical Section

All alternatives include a four lane twenty-three-foot median divided roadway that is carried throughout each alternative (along proposed new location and existing roadways) with bulb outs for U-turns at various locations along the alignment. **Exhibit 3** and **Exhibit 4** show the typical sections for Jacksonville Parkway, Ramsey Road, and Henderson Drive.



U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)



Exhibit 3. Typical Section – Jacksonville Parkway / Ramsey Road

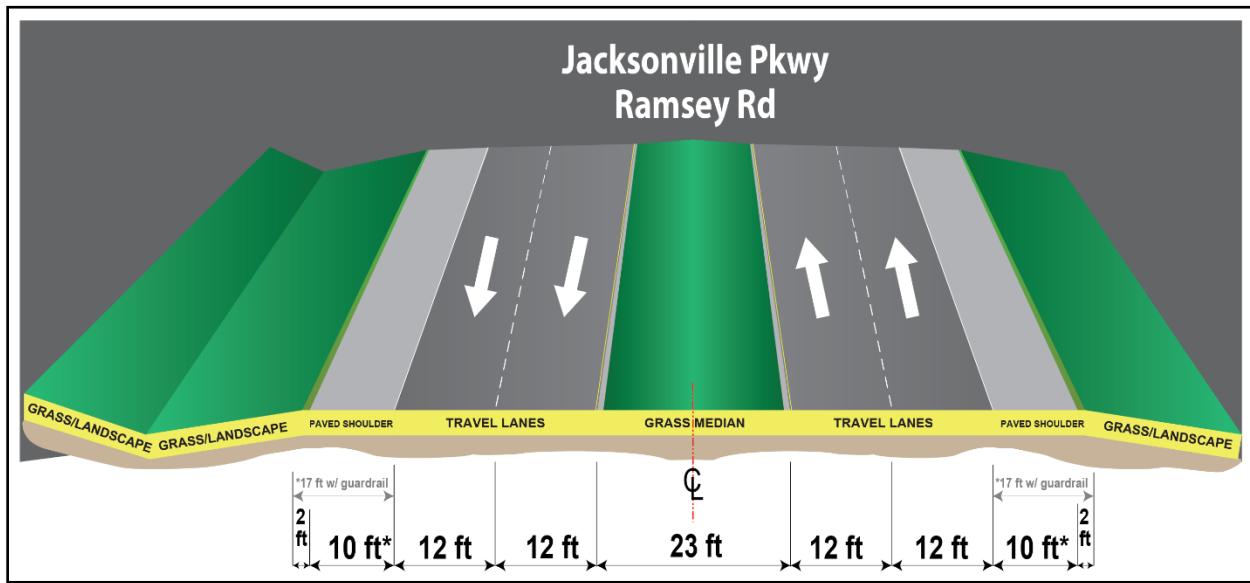
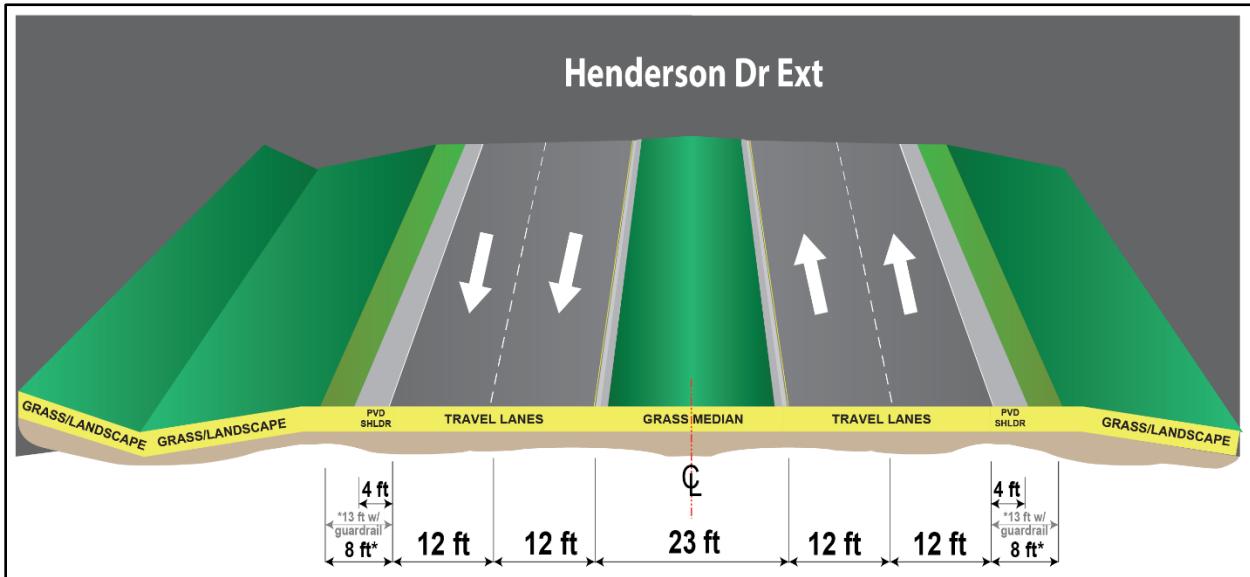


Exhibit 4. Typical Section – Henderson Drive



B. Alternative Impacts

Table 4 shows an overall comparison of the impacts for the three (3) alternatives to the human and natural resources. The preliminary designs and associated impacts of the alternatives are based on slope stakes plus 25 linear feet.



U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)



Table 4. Alternative Impacts Comparison Table

Impact Category	Alternative 1 ¹	Alternative 2 ¹	Alternative 3 ¹
Schools	Temporary impacts to during construction	Temporary impacts during construction	Temporary impacts during construction
Places of Worship and Cemeteries	Temporary construction easements at the Parker-Kellum Cemetery	Impacts to private cemetery along Drummer Kellum Road	Impacts to private cemetery along Drummer Kellum Road
Recreational Areas / Parks	Temporary access impacts, minor ROW needed, no impacts to park amenities	Temporary access impacts, minor ROW needed, no impacts to park amenities	Temporary access impacts, minor ROW needed, no impacts to park amenities
Emergency Service Facilities	Temporary access impacts and delays during construction	Temporary access impacts and delays during construction	Temporary access impacts and delays during construction
Historic Properties	No Impacts	No Impacts	No Impacts
Low Income Population	Title VI Disparate Impacts	Title VI Disparate Impacts	Title VI Disparate Impacts
Minority Population	Present	Present	Present
Wetland²	18.15 acres	18.73 acres	19.99 acres
Open Water²	0.14 acres	0.14 acres	0.00 acres
Streams²	1,270 LF	1,145 LF	1,005 LF
Jurisdictional Ditches (Tributaries)²	2,589 LF	4,581 LF	8,327 LF
Travel Time Savings	11.29 min	12.25 min	12.25 min
Percent of Intersections with LOS C or better (AM/PM)	83% / 74%	97% / 79%	97% / 79%
Proposed ROW	109.6 acres	100.3 acres	100.2 acres
Residential Relocations	33	15	15
Commercial Relocations	7	6	5
Farmlands	51.2 acres	46.63 acres	45.35 acres
100-Year Floodplains	1.9 acres	1.5 acres	1.5 acres
# of Major Hydraulic Structures	2 (Bucks Branch and Wolf Swamp)	1 (Wolf Swamp)	1 (Wolf Swamp)
Noise Receptors	32	18	18
Hazardous Material Sites	6	3	3
Cost³	\$196.5 million	\$170.8 million	\$142.1 million

Notes: 1. Alternative width is based on preliminary design with slope stakes plus 25 linear feet.

2. Wetland, open water, stream, ditches impacts determined through field delineations and USACOE PJD.

3. Cost estimates completed in 2025



U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)



Impacts to individual jurisdictional resources (wetlands, open waters, streams, and tributaries) for each alternative are shown in **Table 5** and shown in **Appendix A, B, and C**.

Table 5. Jurisdictional Resources Impacts

Jurisdictional Resource	Alternative 1 Impacts	Alternative 2 Impacts	Alternative 3 Impacts
Jurisdictional Wetland Impacts			
Riparian Wetlands Impacts (acres)	2.1	2.72	3.76
Non-Riparian Wetland Impacts (acres)	16.06	16.0	16.23
Total Wetland Impacts (acres)	18.15	18.73	19.99
CAMA AECs (acres)	0.00	0.00	0.00
High NCWAM Impacts (acres)	17.53	8.29	8.01
Jurisdictional Open Water Impacts			
Open Water Impacts (acres)	0.14	0.14	0.00
Jurisdictional Stream Crossings			
Total Stream Crossings (#)	7	8	6
Stream Impacts (linear feet)	1,270	1,145	1,005
Jurisdictional Ditches (Tributaries) Impacts			
Jurisdictional Ditches (Tributaries) Impacts (linear feet)	2,589	4,581	8,327

Notes: 1. Alternative width is based on preliminary design with slope stakes plus 25 linear feet.

2. Wetland, open water, stream, ditches impacts determined through field delineations and USACOE PJD.



U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)



Individual wetland impacts for each alternative are highlighted in **Table 6** and shown in the figures in **Appendix A, B, and C**. Alternative 3 has the highest impacts with 20 acres. Alternative 2 has 18.72 acres and Alternative 1 has 18.16 acres of impact.

Table 6. Wetland Impacts

Map ID (Wetland Name)	NCWAM Classification	Hydrologic Classification	NCWAM Wetland Rating	Total Acreage	Alternative 1 Impacts (acres)	Alternative 2 Impacts (acres)	Alternative 3 Impacts (acres)
WA	Pine Flat	Non-	High	11.83	4.52	4.52	4.7
WB	Pine Flat	Non-	High	24.12	8.87	0.0	0.0
WC	Pine Flat	Non-	Medium	6.68	0.00	0.00	0.00
WD	Pine Flat	Non-	Medium	3.3	0.28	0.00	0.00
WE	Pine Flat	Non-	Low	0.47	0.00	0.04	0.04
WF	Pine Flat	Non-	Low	12.24	0.00	2.87	2.87
WG	Pine Flat	Non-	Low	39.13	0.00	6.19	6.19
WH	Bottomland Hardwood Forest	Riparian	High	0.9	0.34	0.00	0.00
WI	Bottomland Hardwood Forest	Riparian	High	0.27	0.001	0.00	0.00
WJ	Bottomland Hardwood Forest	Riparian	High	0.13	0.004	0.00	0.00
WK	Bottomland Hardwood Forest	Riparian	Medium	0.15	0.00	0.09	0.08
WL	Bottomland Hardwood Forest	Riparian	Low	2.47	0.00	0.00	0.00
WM	Bottomland Hardwood Forest	Riparian	Low	9.51	0.00	0.66	0.66
WN	Bottomland Hardwood Forest	Riparian	Low	0.35	0.00	0.25	0.25
WO	Bottomland Hardwood Forest	Riparian	High	0.38	0.00	0.00	0.00
WP	Bottomland Hardwood Forest	Riparian	High	0.16	0.00	0.00	0.00



U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)



Map ID (Wetland Name)	NCWAM Classification	Hydrologic Classification	NCWAM Wetland Rating	Total Acreage	Alternative 1 Impacts (acres)	Alternative 2 Impacts (acres)	Alternative 3 Impacts (acres)
SAW- 2018- 02190 WA	Headwater Forest	Riparian	Low	0.01	0.00	0.00	0.00
SAW- 2018- 02190 WB	Headwater Forest	Riparian	Low	0.03	0.00	0.00	0.00
SAW- 2018- 02190 WC	Bottomland Hardwood Forest	Riparian	Low	6.89	0.00	0.00	0.00
SAW- 2014- 01338 WA	Pine Flat	Non- Riparian	High	6.13	2.38	2.38	2.43
SAW- 2015- 00746 WA	Bottomland Hardwood Forest	Riparian	Low	0.08	0.00	0.00	0.00
SAW- 2015- 00746 WB	Bottomland Hardwood Forest	Riparian	Low	0.001	0.01	0.01	0.00
SAW- 2015- 00746 WC	Bottomland Hardwood Forest	Riparian	Low	0.36	0.00	0.00	0.10
SAW- 2015- 00746 WD	Bottomland Hardwood Forest	Riparian	High	1.12	0.21	0.21	0.34
SAW- 2015- 00746 WD-1	Headwater Forest	Riparian	Medium	0.34	0.33	0.33	0.10
SAW- 2015- 00746 WE	Headwater Forest	Riparian	Medium	0.20	0.00	0.00	0.00



U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)



Map ID (Wetland Name)	NCWAM Classification	Hydrologic Classification	NCWAM Wetland Rating	Total Acreage	Alternative 1 Impacts (acres)	Alternative 2 Impacts (acres)	Alternative 3 Impacts (acres)
SAW- 2015- 00746 WF	Headwater Forest	Riparian	High	0.13	0.09	0.09	0.00
SEGi 2022 WA	Headwater Forest	Riparian	High	2.54	1.11	1.09	0.54
SEGi 2022 WB	Headwater Forest	Riparian	Medium	10.64	0.00	0.00	1.69
SEGi 2022 WC	Headwater Forest	Riparian	High	0.02	0.00	0.00	0.00
SAW- 2010- 0362 WA	Headwater Forest	Riparian	Low	0.12	0.00	0.00	0.00
SAW- 2010- 0362 WB	Headwater Forest	Riparian	Medium	0.05	0.00	0.00	0.00
SAW- 2010- 0362 WC	Headwater Forest	Riparian	Medium	0.10	0.00	0.00	0.00
SAW- 2010- 0362 WD	Headwater Forest	Riparian	Low	0.06	0.00	0.00	0.00
SAW- 2010- 0362 WE	Headwater Forest	Riparian	Low	0.06	0.00	0.00	0.00
Total Impacts – Wetlands (acres)					18.15	18.73	19.99

Notes: 1. Alternative width is based on preliminary design with slope stakes plus 25 linear feet.

2. Wetland, open water, stream, ditches impacts determined through field delineations and USACOE PJD.



U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)



Individual open water impacts for each alternative are highlighted in **Table 7** and shown in the figures in **Appendix A, B, and C**. Both Alternative 1 and 2 impact open water PD and PE, while Alternative 3 has no impact to open waters.

Table 7. Open Water Impacts

Map ID (Open Water Name)	Total Acreage	Alternative 1 Impacts (acres)	Alternative 2 Impacts (acres)	Alternative 3 Impacts (acres)
PA	0.35	0.00	0.00	0.00
PB	2.9	0.00	0.00	0.00
PC	1.29	0.00	0.00	0.00
PD	0.07	0.07	0.07	0.00
PE	0.14	0.07	0.07	0.00
PF	0.2	0.00	0.00	0.00
PG	0.06	0.00	0.00	0.00
PH	0.35	0.00	0.00	0.00
PI	0.19	0.00	0.00	0.00
Total Impacts – Open Waters (acres)		0.14	0.14	0.0

Notes: 1. Alternative width is based on preliminary design with slope stakes plus 25 linear feet.

2. Wetland, open water, stream, ditches impacts determined through field delineations and USACOE PJD.



Individual stream impacts for each alternative are highlighted in **Table 8** and shown in the figures in **Appendix A, B, and C**.

Table 8. Physical and Jurisdictional Characteristics of Impacted Streams

Map ID	Stream Name	NCDWR Index Number	Best Usage Classification	Bank Height (feet)	Bankfull Width (feet)	Water Depth (inches)	Length in Study Area (feet)	Jurisdictional Classification	Alternative 1 Impacts (If)	Alternative 2 Impacts (If)	Alternative 3 Impacts (If)
SA	UT1 to Wolf Swamp	19-16-1	C; NSW	2.5	4	2	498	Intermittent	279.81	0.00	0.00
SB	UT2 to Wolf Swamp	19-16-1	C; NSW	5	6	2	595	Intermittent	0.00	207.37	195.43
SC	UT3 to Wolf Swamp	19-16-1	C; NSW	5	5	6	2,868	Perennial	0.00	96.76	96.76
SD	UT4 to Wolf Swamp	19-16-1	C; NSW	2	6	5	553	Perennial	78.48	0.00	0.00
SE	UT5 to Wolf Swamp	19-16-1	C; NSW	1.5	4	2	501	Intermittent	0.00	0.00	0.00
SF	UT6 to Wolf Swamp	19-16-1	C; NSW	4	2	4	230	Intermittent	0.00	203.86	229.9
SG-Per	UT7 to Wolf Swamp	19-16-1	C; NSW	2.5	6	6	678	Perennial	0.00	218.43	218.43
SH	UT8 to Wolf Swamp	19-16-1	C; NSW	10	6	18	761	Intermittent	378.37	0.00	0.00
Northeast Creek	Northeast Creek	19-16-(0.5)	SC; NSW	5	30	1.5	1,249	Perennial	0.00	0.00	0.00
Wolf Swamp Lower	Wolf Swamp	19-16-1	C; NSW	4	6	1	456	Perennial	0.00	45.85	45.85
Wolf Swamp Upper	Wolf Swamp	19-16-1	C; NSW	4	6	1	2,570	Perennial	157.42	0.00	0.00
SAW-2010-0362 SA	UT1 to Mill Creek	19-16-9	SC; NSW	2.5	3.5	3	125	Perennial	0.00	0.00	0.00
SAW-2010-0362 SB	UT1 to Mill Creek	19-16-9	SC; NSW	1	2	1	96	Intermittent	0.00	0.00	0.00
SAW-2010-0362 SC	UT1 to Mill Creek	19-16-9	SC; NSW	0.5	1.5	0	52	Intermittent	0.00	0.00	0.00
SAW-2015-00746 SA	UT1 to Mill Creek	19-16-9	SC; NSW	2.5	3.5	2	1,086	Perennial	182.68	183.45	218.41
SAW-2015-00746 SB	UT1 to Mill Creek	19-16-9	SC; NSW	4.5	8	12	92	Perennial	65.3	60.29	0.00
SAW-2015-00746 SC	UT1 to Mill Creek	19-16-9	SC; NSW	2	3	3	129	Intermittent	127.44	129.35	0.00
Total Impacts – Streams (linear feet)									1,270	1,145	1,005

Notes: 1. Alternative width is based on preliminary design with slope stakes plus 25 linear feet.
2. Wetland, open water, stream, ditches impacts determined through field delineations and USACOE PJD.



U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)



Individual jurisdictional ditches (tributaries) impacts for each alternative are highlighted in **Table 9** and shown in the figures in **Appendix A, B, and C**.

Table 9. Jurisdictional Ditches (Tributaries) Impacts

Map ID (Jurisdictional Ditches - Tributaries Name)	Total Length (linear feet)	Alternative 1 Impacts (lf)	Alternative 2 Impacts (lf)	Alternative 3 Impacts (lf)
TA	390	0.00	163.3	165.99
TB	1,091	0.00	200.93	197.1
TC	1,308	0.00	0.00	0.00
TD	595	0.00	0.00	0.00
TE	224	60.38	0.00	0.00
TF	420	162.5	0.00	0.00
TG	324	0.00	0.00	0.00
TH	497	173.12	0.00	0.00
TI	1,078	0.00	0.00	0.00
TJ	1,068	0.00	0.00	0.00
TK	879	0.00	207.69	206.34
TL	766	0.00	0.00	0.00
TM	327	0.00	0.00	0.00
TN	247	0.00	0.00	0.00
TO	615	0.00	0.00	0.00
TP	105	0.00	0.00	0.00
TQ	588	0.00	199.08	198.96
TR	252	94.51	0.00	0.00
TS	254	97.29	0.00	0.00
TT	228	0.00	40.69	41.9
SEGi 2022 TA	5,661	492.72	1,305.04	3,239.10
SEGi 2022 TB	5,740	498.6	1,579.39	3,473.93
SEGi 2022 TC	242	0.00	0.00	11.74
SEGi 2022 TD	524	232.52	183.71	126.72
SEGi 2022 TE	870	183.14	0.00	0.00
SEGi 2022 TF	536	9.54	181.62	153.23
SEGi 2022 TG	1,081	229.61	0.00	72.99
SEGi 2022 TH	305	0.00	146.4	72.62
SEGi 2022 TI	796	255.21	84.65	84.85
SEGi 2022 TJ	210	0.00	50	50.18
SEGi 2022 TK	518	100.23	0.00	0.00
SEGi 2022 TL	445	0.00	184.53	180.47
SEGi 2022 TM	193	0.00	0.00	0.00
SEGi 2022 TN	370	0.00	54.21	51.22
SEGi 2022 TO	220	0.00	0.00	0.00
Total Impacts – Jurisdictional Ditches (Trib) (linear feet)	2,589		4,581	8,327

Notes: 1. Alternative width is based on preliminary design with slope stakes plus 25 linear feet.

2. Wetland, open water, stream, ditches impacts determined through field delineations and USACOE PJD.



IV. Preferred Alternative / LEDPA

A comparative evaluation of the No-Build Alternative and the Build Alternatives has been completed to demonstrate the relative effectiveness of the Build Alternatives compared to the No-Build Alternative. The No-Build Alternative provides a baseline for comparing the alternatives.

The No-Build Alternative does not meet the purpose and need as it does not relieve existing and predicted congestion along existing roadways nor does it improve mobility in the area. Improvements to existing Western Boulevard and US 17 were also evaluated but had the same determination of not meeting the project purpose and need. The Build Alternatives will meet the project purpose and need and will provide a northern loop from the existing Jacksonville Parkway (US 17 Bypass) to US 17 to the north.

Based on the evaluation of the impacts and benefits of each alternative, Alternative 3 has been identified as NCDOT's Preferred Alternative. As shown in previous **Table 4**, impacts for each alternative are slightly different per resource, but there are a few resources which stand out. The benefits for each alternative are very similar for travel timing savings and the percentage of intersections with LOS C or better; although Alternative 2 and 3 are slightly better for each.

Alternative 1 has a higher cost and twice as many noise impacts and residential relocations (and associated costs with these ROW impacts). Alternative 1 also impacts a newly constructed community resource (One Place, 501(c)3 nonprofit) that will provide resources for childcare, early education, and child abuse prevention and intervention for the community. Alternatives 2 and 3 have similar impacts for natural resources, farmlands, floodplain impacts, and noise impacts. Alternative 2 has lower impacts to wetlands and jurisdictional ditches (tributaries), while Alternative 3 has lower impacts to open waters and streams. Alternative 2 has slightly higher cost compared to Alternative 3 and impacts a newly constructed community resource (One Place). Alternative 3 does not impact One Place.

When determining the alternative that is the Least Environmentally Damaging Practicable Alternative (LEDPA), the environmental impacts and the practicability of each alternative must be considered. Typical considerations include availability, cost, existing technology, logistics, and environmental impacts. The considerations are summarized in **Table 10**.

**Table 10. Least Environmentally Damaging Practicable Alternative Considerations**

	Alternative 1	Alternative 2	Alternative 3
Availability	Highest amount of proposed ROW, relocations, including relocation of community resource One Place	Second highest amount of proposed ROW, relocations, including relocation of community resource One Place	Least amount of proposed ROW, relocations
Cost	Highest Cost	Second Highest Cost	Lowest Cost
Existing Technology	No unique methodologies	No unique methodologies	No unique methodologies
Logistics	Temp access impacts to community resources, disruption of services provided by One Place, lowest traffic operations performance	Temp access impacts to community resources, disruption of services provided by One Place, best (tied) traffic operations performance	Temp access impacts to community resources, best (tied) traffic operations performance
Environmentally Damaging	Highest impacts to streams, lowest impacts to overall wetlands but highest impacts to high quality wetlands	Second highest impacts to streams, overall wetlands, and to high quality wetlands	Lowest impacts to streams, highest impacts to overall wetlands but lowest impacts to high quality wetlands

Availability

Availability considerations for the alternatives include proposed right-of-way, residential and commercial relocations. Alternative 1 has the highest amount of proposed ROW needed (109.6 acres) and the highest residential (33) and commercial (7) relocations. Alternative 2 has the second highest amount of proposed ROW needed (100.3 acres) and commercial (6) relocations and ties with Alternative 3 on residential relocations (15). Alternatives 1 and 2 will include the relocation of the newly constructed facility for One Place. Alternative 3 has the least amount of proposed ROW needed (100.2 acres) and commercial (5) relocations. Based on this information, Alternative 3 has the fewest availability concerns.

Cost

Alternative 3 is the lowest cost alternative, primarily due to the lowest number of commercial relocations and avoidance of One Place.

Existing Technology

There are many similarities in the construction practices and approach to delivering the Jacksonville Parkway project, therefore a determination regarding the alternative with the lowest existing technology concerns cannot be made.



Logistics

Evaluating the three alternatives from a logistics perspective involves reviewing the community impacts. All three alternatives will have temporary access impacts and delays to schools, emergency services, and recreational facilities, and will also have impacts to low income and minority populations. Alternatives 2 and 3 have higher traffic operation performance. Alternatives 1 and 2 will involve the relocation of the newly constructed One Place, which will cause a disruption of services provided by the nonprofit until temporary accommodations can be made. Based on this information, Alternative 3 has the lowest logistical concerns.

More Environmentally Damaging

Considering impacts to environmental categories (wetlands, open water, streams, and jurisdictional ditches), each alternative does better in some categories than others. Wetlands will be largest permitting constraint, and Alternative 1 has the highest impacts to wetlands rated High using NCWAM, while Alternative 3 has the lowest impacts to wetlands rated High using NCWAM (see **Table 5**).

Alternative 2 is in the middle for impacts to streams and wetlands. However, when considering the human environment impacts and practicability, it has a higher number of commercial relocations, impacts to One Place, and higher overall cost compared to Alternative 3.

Therefore, NCDOT is recommending Alternative 3 as the Least Environmentally Damaging **Practicable** Alternative LEDPA. Alternative 3 has the following:

- Fewest commercial relocations
- Half the number of residential relocations than Alternative 1, equal residential relocations to Alternative 2
- Lowest cost
- Fewest impacts to wetlands rated High using NCWAM
- Fewest open water impacts
- Fewest stream impacts
- Fewest farmland impacts
- Avoids impacts to One Place, a newly constructed community resource center



V. Merger Plan Review / Next Steps

Based on the Merger Plan for the project, NCDOT proposes the next Merger Meeting will be CP 4A (Avoidance and Minimization Measures). Prior to the next Merger Meeting, NCDOT will complete impact analyses based on refined designs and reduced slope stake limits. It is anticipated that the CP 4A meeting will be held in six months; Merger Team members will be notified of any changes that require a revision of this timetable.

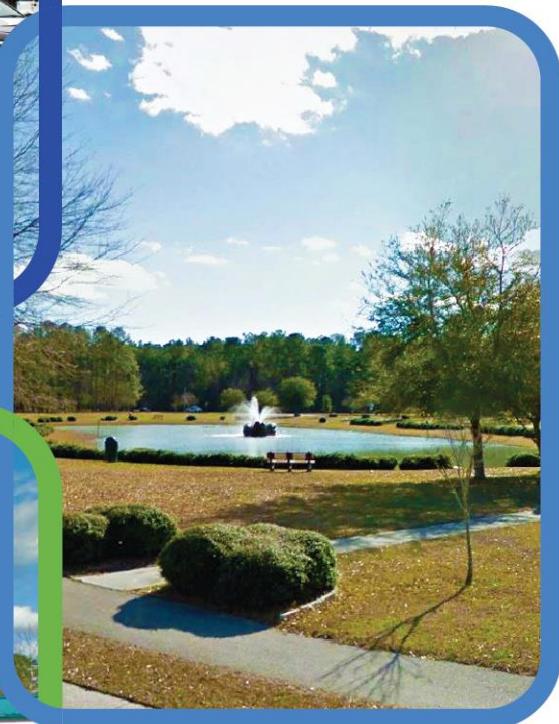


U-5791 Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway)

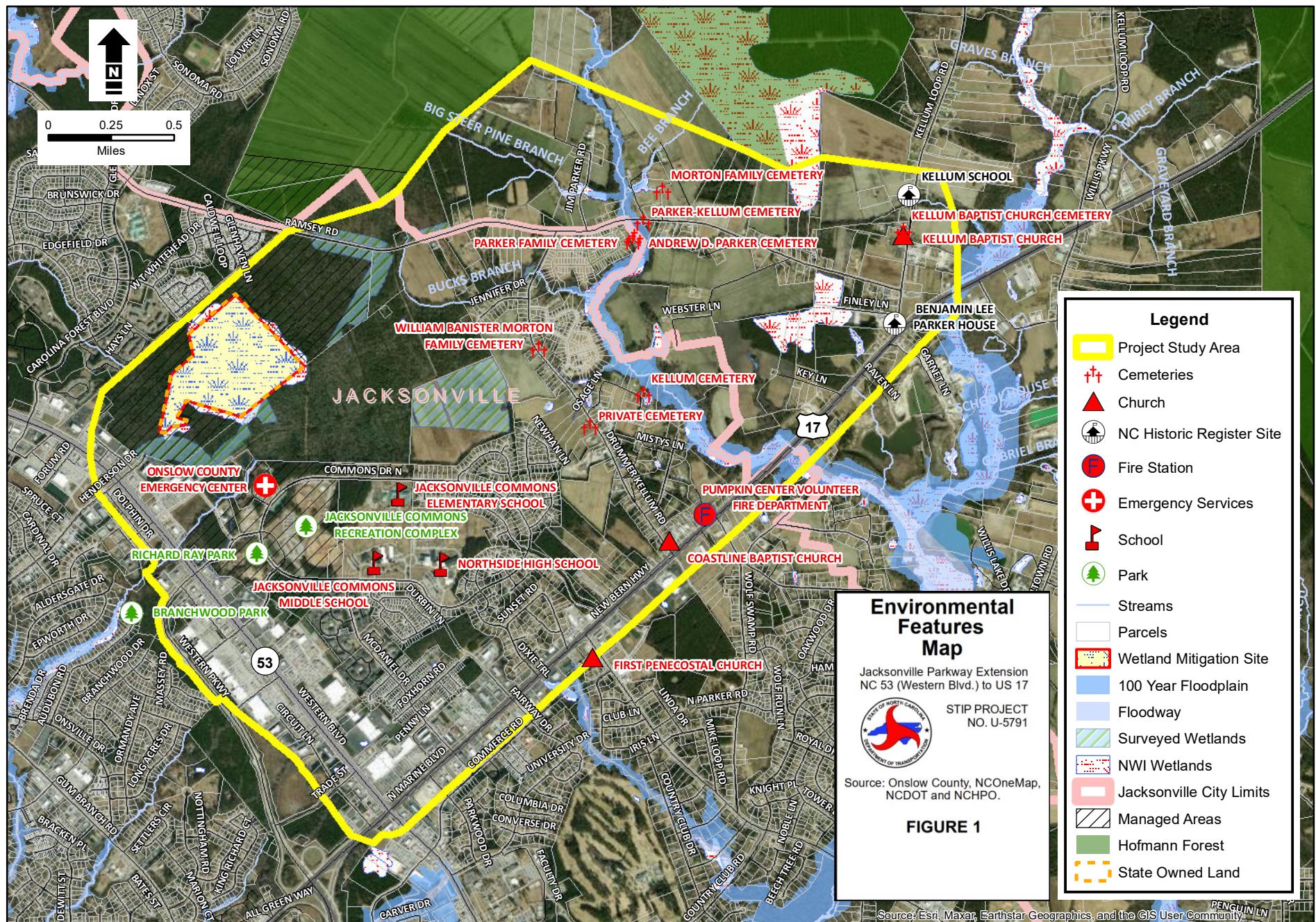


VI. Figures



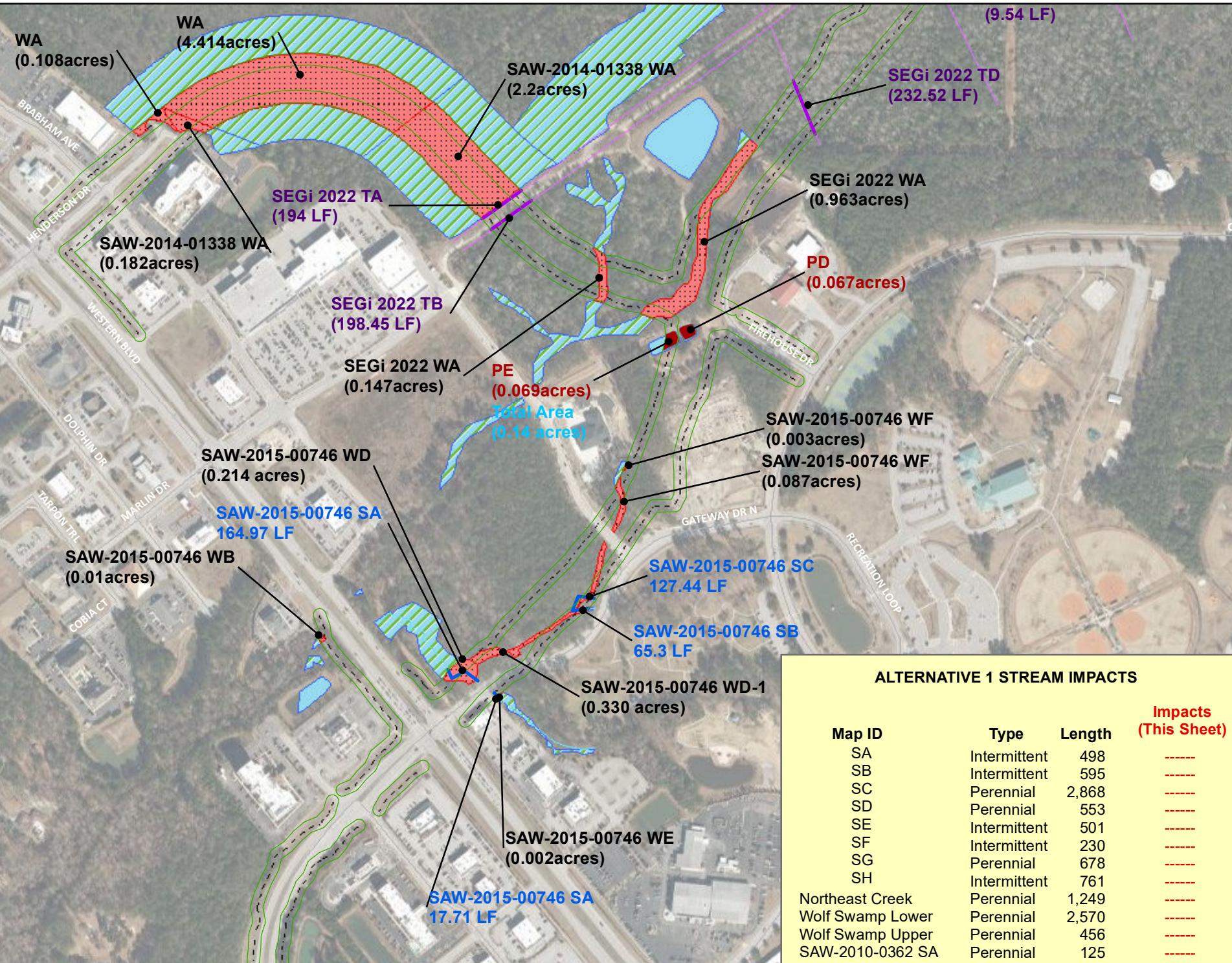
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Appendix A. Alternative 1 – Jurisdictional Resources Impacts





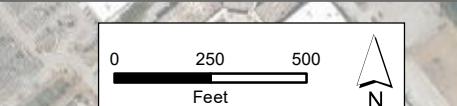
ALTERNATIVE 1 OPEN WATER IMPACTS

Name	Acreage	Impacts (This Sheet)
PA	0.35	-----
PB	2.90	-----
PC	1.29	-----
PD	0.07	0.07
PE	*0.14	0.07
PF	0.20	-----
PG	0.06	-----
PH	0.35	-----
PI	0.19	-----

* Slope stakes buffer cross pond.

Alternative 1 Impact Totals

Stream Impact = 1,269.47 LF
 Tributary Impact = 2,589.37 LF
 Wetland Impact = 18.17 Acres
 Open Water Impact = 0.14 Acres
 (0.21 Acres if entire pond is taken)



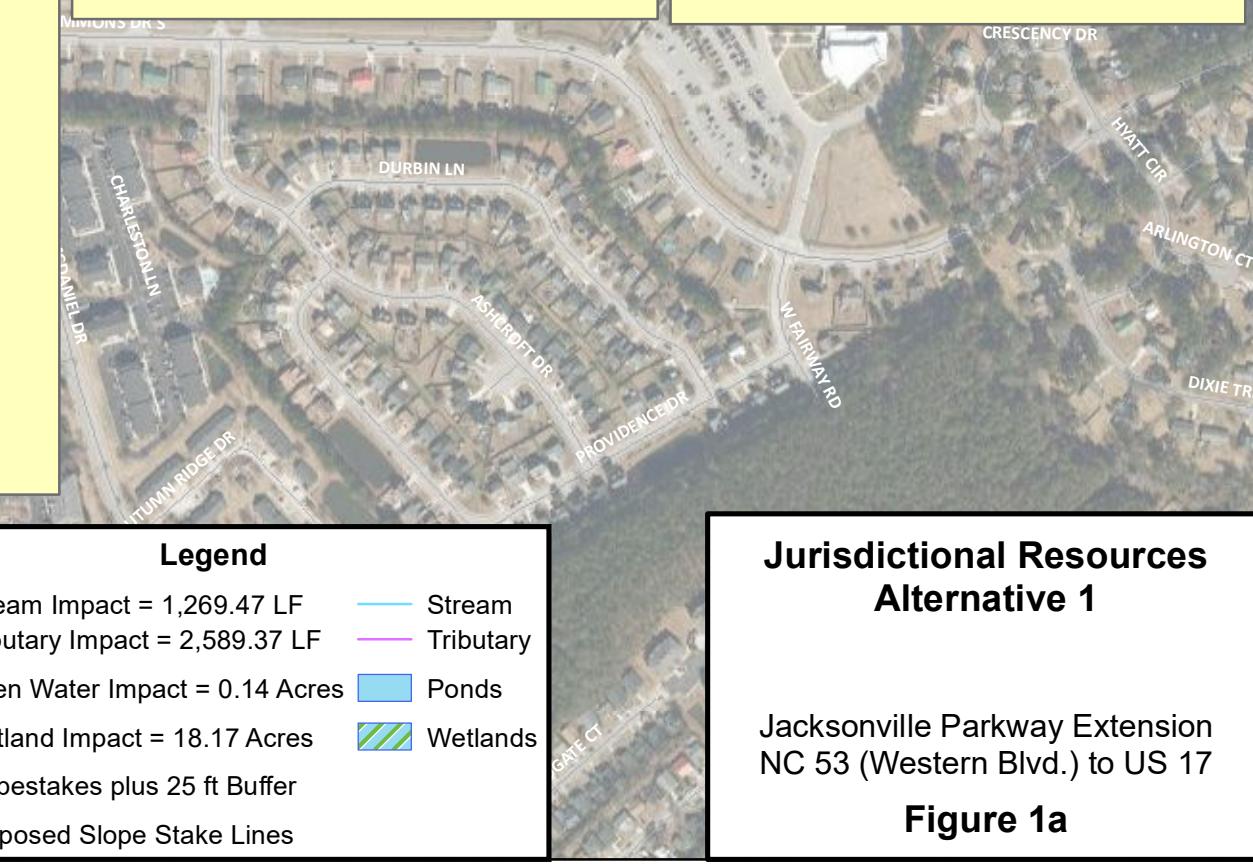
Sheet Key

ALTERNATIVE 1 WETLAND IMPACTS

Map ID	Acreage	Impacts (This Sheet)
WA	11.83	4.52
WB	24.12	-----
WC	6.68	-----
WD	3.30	-----
WE	0.47	-----
WF	12.24	-----
WG	39.13	-----
WH	0.90	-----
WI	0.27	-----
WJ	0.13	-----
WK	0.15	-----
WL	2.47	-----
WM	9.51	-----
WN	0.35	-----
WO	0.38	-----
WP	0.16	-----
SAW-2010-0362 WA	0.12	-----
SAW-2010-0362 WB	0.05	-----
SAW-2010-0362 WC	0.10	-----
SAW-2010-0362 WD	0.06	-----
SAW-2010-0362 WE	0.06	-----
SAW-2014-01338 WA	6.13	2.38
SAW-2015-00746 WA	0.08	-----
SAW-2015-00746 WB	0.00	0.01
SAW-2015-00746 WC	0.36	-----
SAW-2015-00746 WD	1.12	0.21
SAW-2015-00746 WD-1	0.34	0.33
SAW-2015-00746 WE	0.20	0.00
SAW-2015-00746 WF	0.13	0.09
SAW-2018-02190 WA	0.01	-----
SAW-2018-02190 WB	0.03	-----
SAW-2018-02190 WC	6.89	-----
SEGi 2022 WA	2.54	1.11
SEGi 2022 WB	10.64	-----
SEGi 2022 WC	0.02	-----

ALTERNATIVE 1 TRIBUTARY IMPACTS

Name	Length LF	Impacts (This Sheet)
TA	390	-----
TB	1,091	-----
TC	1,308	-----
TD	595	-----
TE	224	-----
TF	420	-----
TG	324	-----
TH	497	-----
TI	1,078	-----
TJ	1,068	-----
TK	879	-----
TL	766	-----
TM	327	-----
TN	247	-----
TO	615	-----
TP	105	-----
TQ	588	-----
TR	252	-----
TS	254	-----
TT	228	-----
SEGi 2022 TA	5,661	194
SEGi 2022 TB	5,740	198
SEGi 2022 TC	242	-----
SEGi 2022 TD	524	232
SEGi 2022 TE	870	-----
SEGi 2022 TF	536	-----
SEGi 2022 TG	1,081	-----
SEGi 2022 TH	305	-----
SEGi 2022 TI	796	-----
SEGi 2022 TJ	210	-----
SEGi 2022 TK	518	-----
SEGi 2022 TL	445	-----
SEGi 2022 TM	193	-----
SEGi 2022 TN	370	-----
SEGi 2022 TO	220	-----



ALTERNATIVE 1 STREAM IMPACTS

Map ID	Type	Length	Impacts (This Sheet)
SA	Intermittent	498	-----
SB	Intermittent	595	-----
SC	Perennial	2,868	-----
SD	Perennial	553	-----
SE	Intermittent	501	-----
SF	Intermittent	230	-----
SG	Perennial	678	-----
SH	Intermittent	761	-----
Northeast Creek	Perennial	1,249	-----
Wolf Swamp Lower	Perennial	2,570	-----
Wolf Swamp Upper	Perennial	456	-----
SAW-2010-0362 SA	Perennial	125	-----
SAW-2010-0362 SB	Intermittent	96	-----
SAW-2010-0362 SC	Intermittent	52	-----
SAW-2015-00746 SA	Perennial	1,086	182.68
SAW-2015-00746 SB	Perennial	92	65.3
SAW-2015-00746 SC	Intermittent	129	127.44

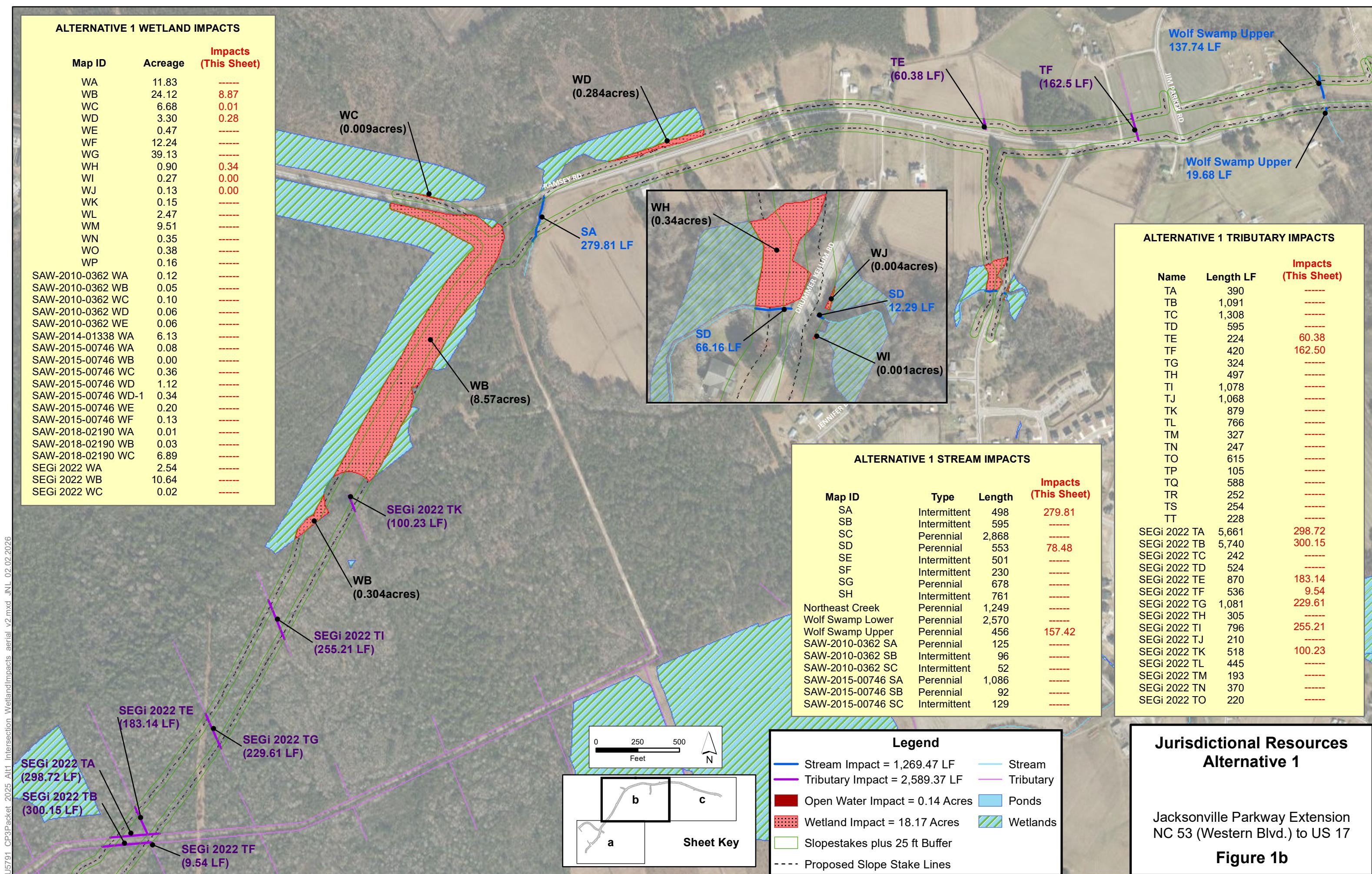
Legend

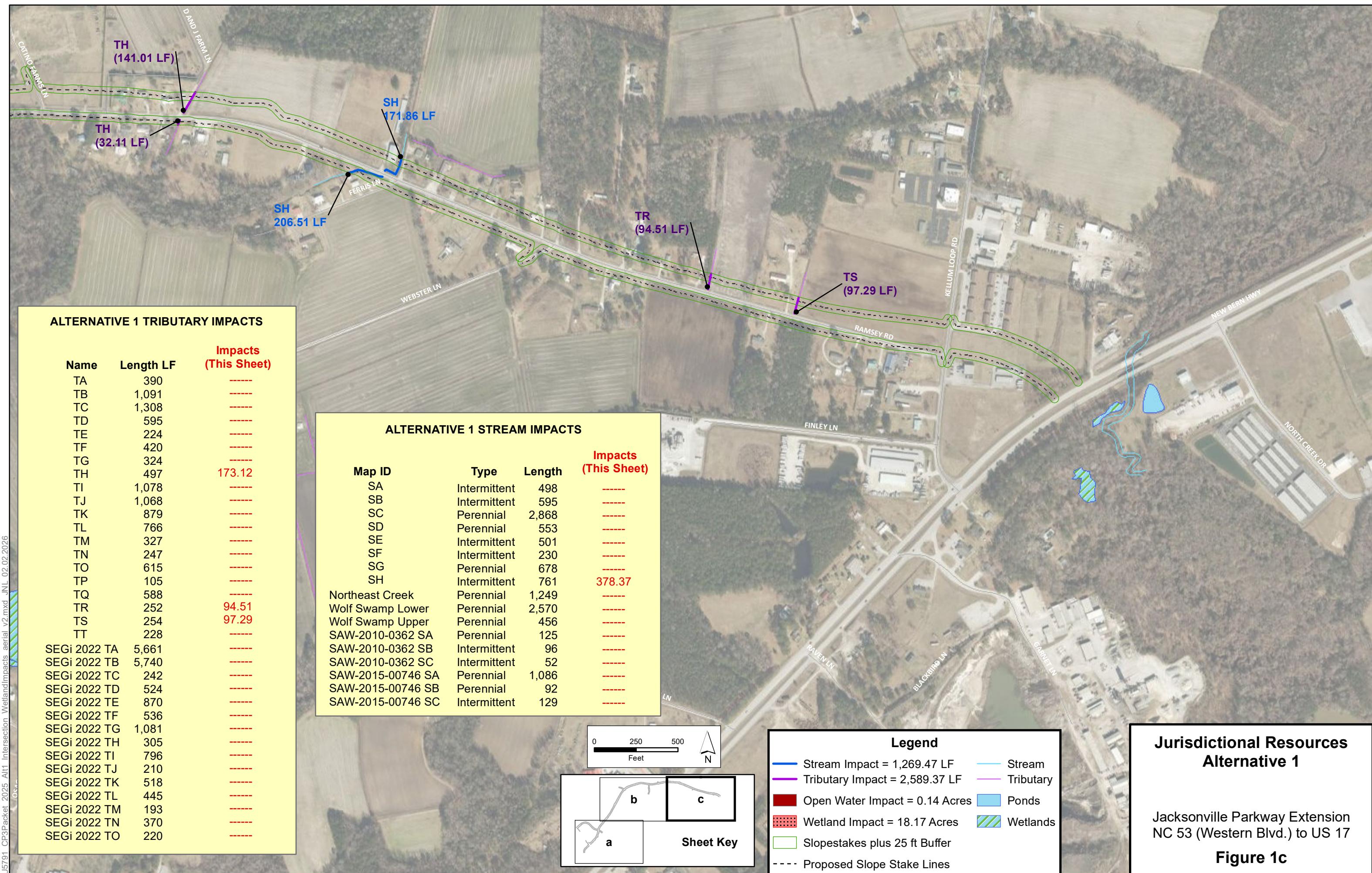
- Stream Impact = 1,269.47 LF
- Tributary Impact = 2,589.37 LF
- Open Water Impact = 0.14 Acres
- Wetland Impact = 18.17 Acres
- Stream
- Tributary
- Ponds
- Wetlands
- Slopestakes plus 25 ft Buffer
- Proposed Slope Stake Lines

Jurisdictional Resources Alternative 1

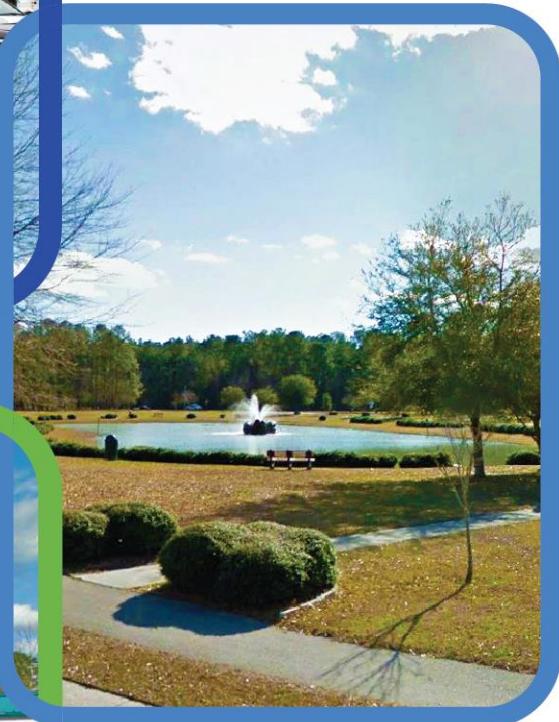
Jacksonville Parkway Extension
 NC 53 (Western Blvd.) to US 17

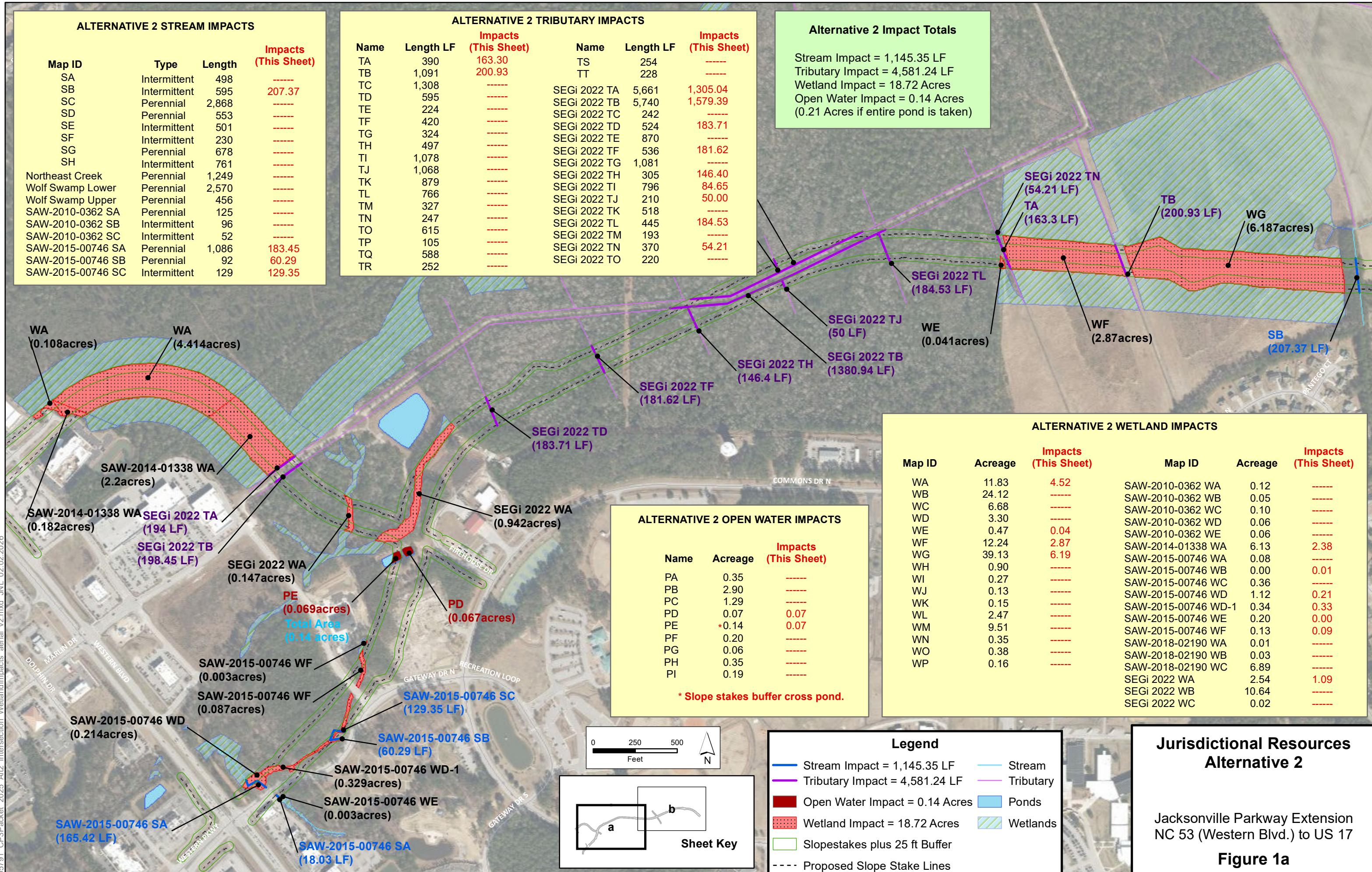
Figure 1a





Appendix B. Alternative 2 – Jurisdictional Resources Impacts





ALTERNATIVE 2 TRIBUTARY IMPACTS

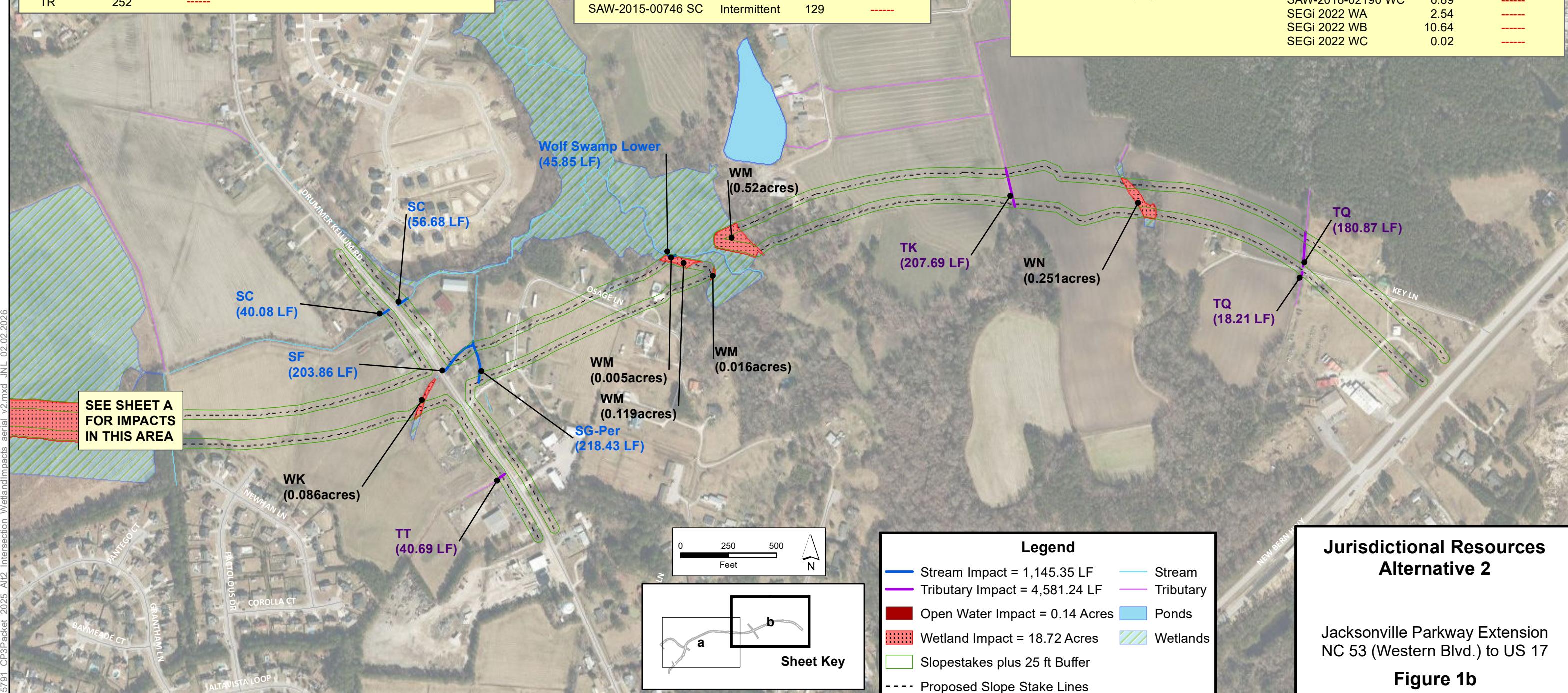
Name	Length LF	Impacts (This Sheet)	Name	Length LF	Impacts (This Sheet)
TA	390	-----	TS	254	-----
TB	1,091	-----	TT	228	40.69
TC	1,308	-----	SEGi 2022 TA	5,661	-----
TD	595	-----	SEGi 2022 TB	5,740	-----
TE	224	-----	SEGi 2022 TC	242	-----
TF	420	-----	SEGi 2022 TD	524	-----
TG	324	-----	SEGi 2022 TE	870	-----
TH	497	-----	SEGi 2022 TF	536	-----
TI	1,078	-----	SEGi 2022 TG	1,081	-----
TJ	1,068	-----	SEGi 2022 TH	305	-----
TK	879	207.69	SEGi 2022 TI	796	-----
TL	766	-----	SEGi 2022 TJ	210	-----
TM	327	-----	SEGi 2022 TK	518	-----
TN	247	-----	SEGi 2022 TL	445	-----
TO	615	-----	SEGi 2022 TM	193	-----
TP	105	-----	SEGi 2022 TN	370	-----
TQ	588	199.08	SEGi 2022 TO	220	-----
TR	252	-----	SEGi 2022 SC	-----	-----

ALTERNATIVE 2 STREAM IMPACTS

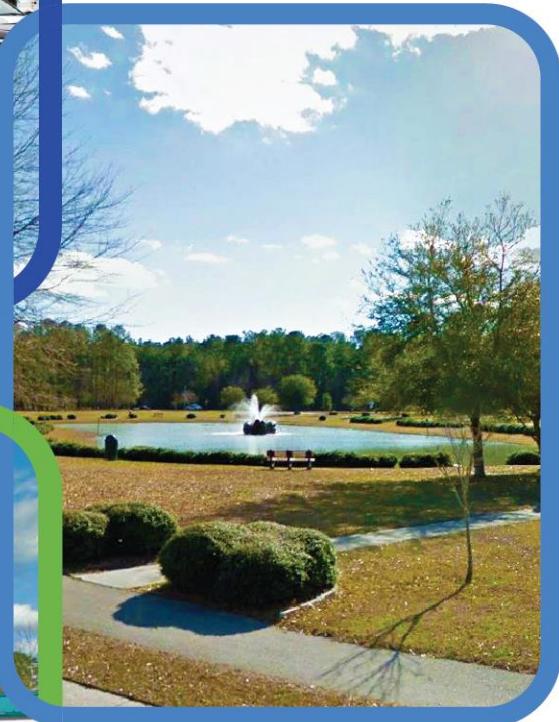
Map ID	Type	Length	Impacts (This Sheet)
SA	Intermittent	498	-----
SB	Intermittent	595	-----
SC	Perennial	2,868	96.76
SD	Perennial	553	-----
SE	Intermittent	501	-----
SF	Intermittent	230	203.86
SG	Perennial	678	218.43
SH	Intermittent	761	-----
Northeast Creek	Perennial	1,249	-----
Wolf Swamp Lower	Perennial	2,570	45.85
Wolf Swamp Upper	Perennial	456	-----
SAW-2010-0362 SA	Perennial	125	-----
SAW-2010-0362 SB	Intermittent	96	-----
SAW-2010-0362 SC	Intermittent	52	-----
SAW-2015-00746 SA	Perennial	1,086	-----
SAW-2015-00746 SB	Perennial	92	-----
SAW-2015-00746 SC	Intermittent	129	-----

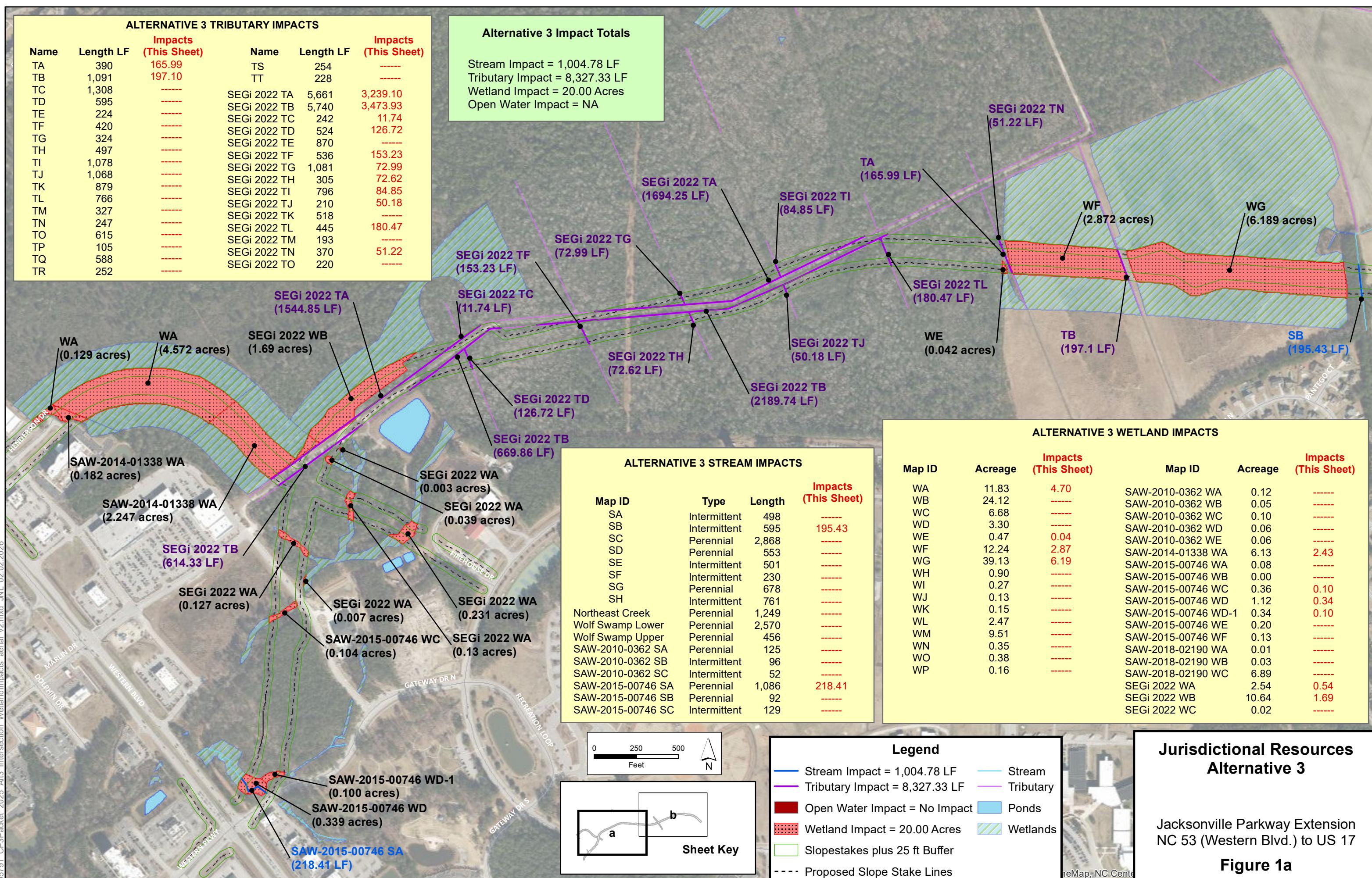
ALTERNATIVE 2 WETLAND IMPACTS

Map ID	Acreage	Impacts (This Sheet)	Map ID	Acreage	Impacts (This Sheet)
WA	11.83	-----	SAW-2010-0362 WA	0.12	-----
WB	24.12	-----	SAW-2010-0362 WB	0.05	-----
WC	6.68	-----	SAW-2010-0362 WC	0.10	-----
WD	3.30	-----	SAW-2010-0362 WD	0.06	-----
WE	0.47	-----	SAW-2010-0362 WE	0.06	-----
WF	12.24	-----	SAW-2014-01338 WA	6.13	-----
WG	39.13	-----	SAW-2015-00746 WA	0.08	-----
WH	0.90	-----	SAW-2015-00746 WB	0.00	-----
WI	0.27	-----	SAW-2015-00746 WC	0.36	-----
WJ	0.13	-----	SAW-2015-00746 WD	1.12	-----
WK	0.15	0.09	SAW-2015-00746 WD-1	0.34	-----
WL	2.47	-----	SAW-2015-00746 WE	0.20	-----
WM	9.51	0.66	SAW-2015-00746 WF	0.13	-----
WN	0.35	0.25	SAW-2018-02190 WA	0.01	-----
WO	0.38	-----	SAW-2018-02190 WB	0.03	-----
WP	0.16	-----	SAW-2018-02190 WC	6.89	-----
SEGi 2022 WA	2.54	-----	SEGi 2022 WB	10.64	-----
SEGi 2022 WB	10.64	-----	SEGi 2022 WC	0.02	-----



Appendix C. Alternative 3 – Jurisdictional Resources Impacts





ALTERNATIVE 3 TRIBUTARY IMPACTS

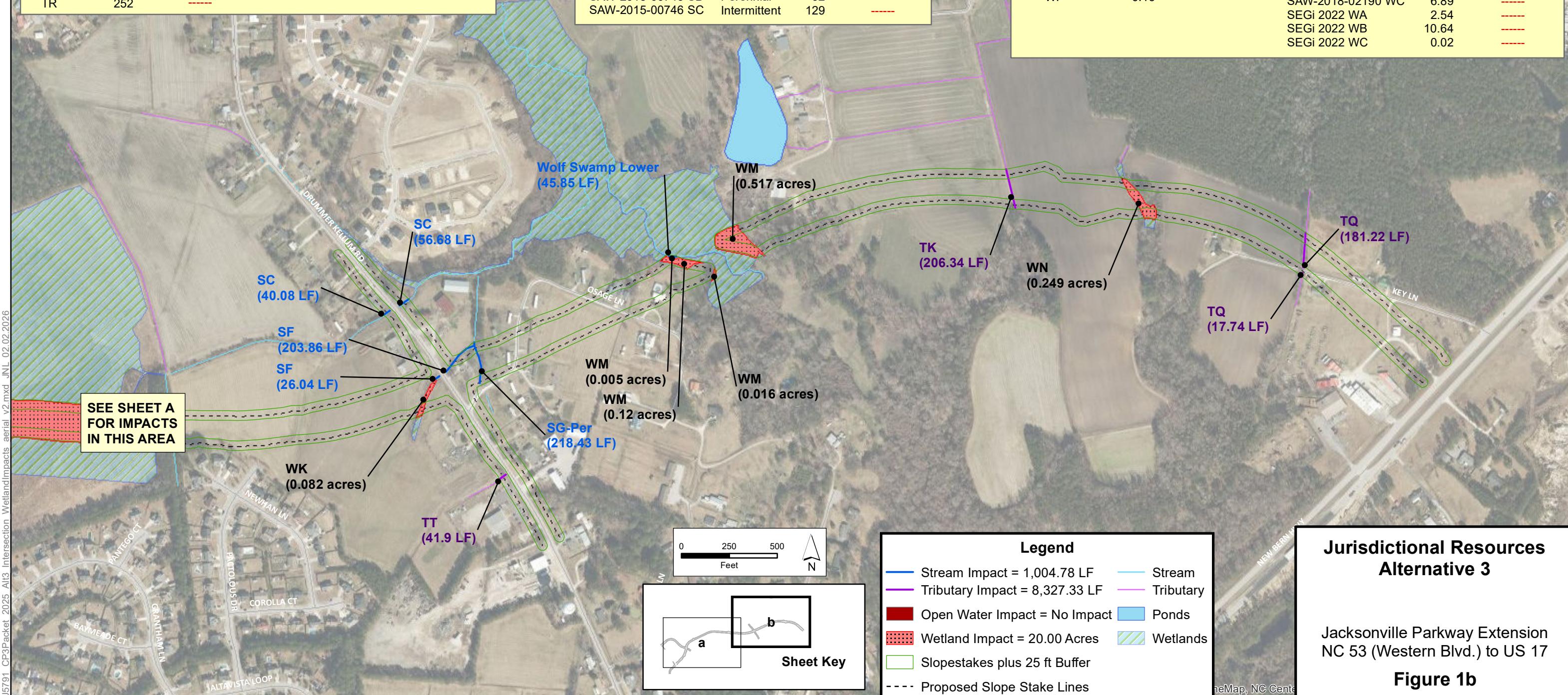
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TA	390	-----	TS	254	-----
TB	1,091	-----	TT	228	41.90
TC	1,308	-----	SEGi 2022 TA	5,661	-----
TD	595	-----	SEGi 2022 TB	5,740	-----
TE	224	-----	SEGi 2022 TC	242	-----
TF	420	-----	SEGi 2022 TD	524	-----
TG	324	-----	SEGi 2022 TE	870	-----
TH	497	-----	SEGi 2022 TF	536	-----
TI	1,078	-----	SEGi 2022 TG	1,081	-----
TJ	1,068	-----	SEGi 2022 TH	305	-----
TK	879	206.34	SEGi 2022 TI	796	-----
TL	766	-----	SEGi 2022 TJ	210	-----
TM	327	-----	SEGi 2022 TK	518	-----
TN	247	-----	SEGi 2022 TL	445	-----
TO	615	-----	SEGi 2022 TM	193	-----
TP	105	-----	SEGi 2022 TN	370	-----
TQ	588	198.96	SEGi 2022 TO	220	-----
TR	252	-----	SEGi 2022 SC	-----	-----

ALTERNATIVE 3 STREAM IMPACTS

Map ID	Type	Length	Impacts (This Sheet)
SA	Intermittent	498	-----
SB	Intermittent	595	-----
SC	Perennial	2,868	96.76
SD	Perennial	553	-----
SE	Intermittent	501	-----
SF	Intermittent	230	229.90
SG	Perennial	678	218.43
SH	Intermittent	761	-----
Northeast Creek	Perennial	1,249	-----
Wolf Swamp Lower	Perennial	2,570	45.85
Wolf Swamp Upper	Perennial	456	-----
SAW-2010-0362 SA	Perennial	125	-----
SAW-2010-0362 SB	Intermittent	96	-----
SAW-2010-0362 SC	Intermittent	52	-----
SAW-2015-00746 SA	Perennial	1,086	-----
SAW-2015-00746 SB	Perennial	92	-----
SAW-2015-00746 SC	Intermittent	129	-----

ALTERNATIVE 3 WETLAND IMPACTS

Map ID	Acreage	Impacts (This Sheet)	Map ID	Acreage	Impacts (This Sheet)
WA	11.83	-----	SAW-2010-0362 WA	0.12	-----
WB	24.12	-----	SAW-2010-0362 WB	0.05	-----
WC	6.68	-----	SAW-2010-0362 WC	0.10	-----
WD	3.30	-----	SAW-2010-0362 WD	0.06	-----
WE	0.47	-----	SAW-2010-0362 WE	0.06	-----
WF	12.24	-----	SAW-2014-01338 WA	6.13	-----
WG	39.13	-----	SAW-2015-00746 WA	0.08	-----
WH	0.90	-----	SAW-2015-00746 WB	0.00	-----
WI	0.27	-----	SAW-2015-00746 WC	0.36	-----
WJ	0.13	-----	SAW-2015-00746 WD	1.12	-----
WK	0.15	0.08	SAW-2015-00746 WD-1	0.34	-----
WL	2.47	-----	SAW-2015-00746 WE	0.20	-----
WM	9.51	0.66	SAW-2015-00746 WF	0.13	-----
WN	0.35	0.25	SAW-2018-02190 WA	0.01	-----
WO	0.38	-----	SAW-2018-02190 WB	0.03	-----
WP	0.16	-----	SAW-2018-02190 WC	6.89	-----
SEGi 2022 WA	2.54	-----	SEGi 2022 WB	10.64	-----
SEGi 2022 WB	10.64	-----	SEGi 2022 WC	0.02	-----



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