U-5791

Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway), Widen to Multi-Lanes, Part on New Location

Purpose and Need Study and Study Area Defined & Detailed Study Alternatives Carried Forward

Merger Concurrence Point Number 1 & 2
September 8, 2021

ATKINS

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1 Introduction

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) as part of State Transportation Improvement Project (STIP) Project No. U-5791. The first segment of Jacksonville Parkway (south of Western Boulevard) opened in 2013. The project length for U-5791 is approximately 4 miles (1.5 miles on new location and about 2 miles of widening along Ramsey Road). Completion of the Jacksonville Parkway will provide a northern loop with a continuous cross-section from the US 17 Bypass to US 17. The proposed project is broken down into two segments:

- U-5791A – Construction of a new location four-lane roadway from NC 53 (Western Boulevard) to Ramsey Road.
- U-5791B – Widening of Ramsey Road from two lanes to four lanes from the new location roadway to US 17 (New Bern Highway).

Due to potential impacts to the human and natural environment, STIP Project No. U-5791 will follow the Section 404/NEPA Merger Process.

The purpose of this Merger Team meeting is to discuss the purpose and need for the project (Concurrence Point No. 1 [CP 1]) and the preliminary study alternatives to determine which alternatives should be carried forward for detailed analysis and design (CP 2). The meeting will be held on September 8, 2021.

1.1 Project Background

The proposed project is located in the northeast portion of the City of Jacksonville, Onslow County (**Figure 1**) and is scheduled for right-of-way acquisition in 2022 and construction letting in 2024. Completion of the Jacksonville Parkway will provide a northern loop with a continuous cross-section from the US 17 Bypass to US 17.

Figure 2 shows the project study area. The study area includes the northern and western limits of the new location roadway and widening as well as the southern and eastern boundary of Western Boulevard and New Bern Highway (US 17).

The proposed project is included in the adopted NCDOT 2020-2029 State Transportation Improvement Program (STIP) as STIP No. U-5791. The project is also included in the Jacksonville Urban Area Metropolitan Planning Organization's (MPO) 2045 Metropolitan Transportation Plan (March 2020).

In 2007, a Feasibility Report was completed by NCDOT (FS-0303C) for the proposed connector "Northwest Corridor" from US 258/NC 24 to US 17. The study evaluated the feasibility for the construction of a new four-lane divided connector utilizing new location and existing sections of SR 1233 (Northwest Corridor Boulevard), SR 1470 (Western Boulevard), SR 1326 (Drummer Kellum Road), and SR 1324 (Ramsey Road). Section 2 of the project included three options – two of which connected Western Boulevard to US 17 via a new location roadway and existing Ramsey Road, and one of which connected Western Boulevard to US 17 via a new location roadway and existing Drummer Kellum Road (See **Figure 3**). At the time of the study, the traffic volume for the proposed connector was estimated to range between 8,300 to 31,700 vehicles per day (vpd) in the 2035 design year. Option B was chosen as the Preferred Alternative for Section 2, which included connecting Western Boulevard to US 17 via a new

location roadway and existing Ramsey Road, and subsequently became STIP Project U-5791. The estimated total cost for Section 2, Option B was $46,000,000 in 2007.

Figure 1. Project Vicinity Map

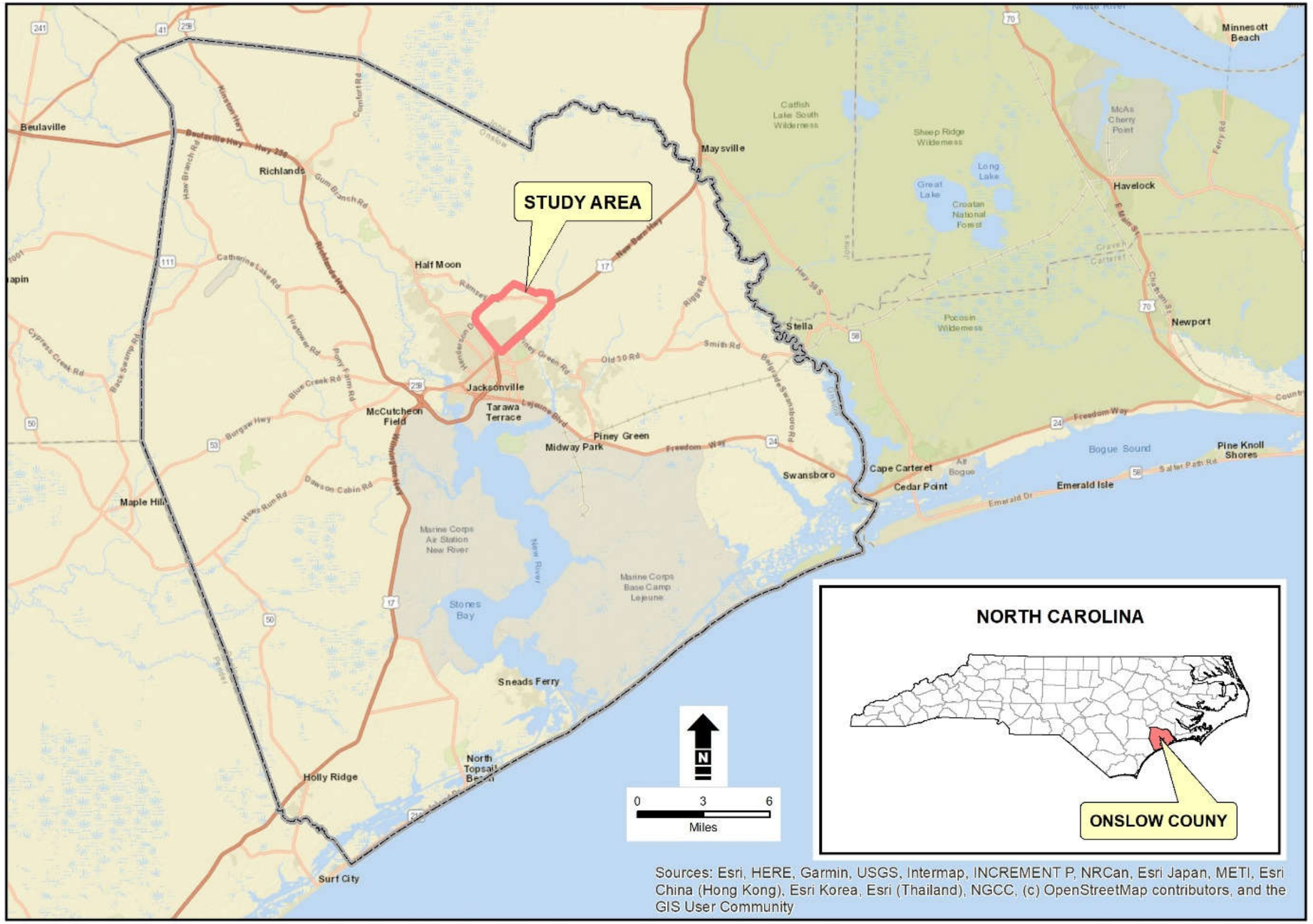


Figure 2. Project Study Area and Environmental Features Map

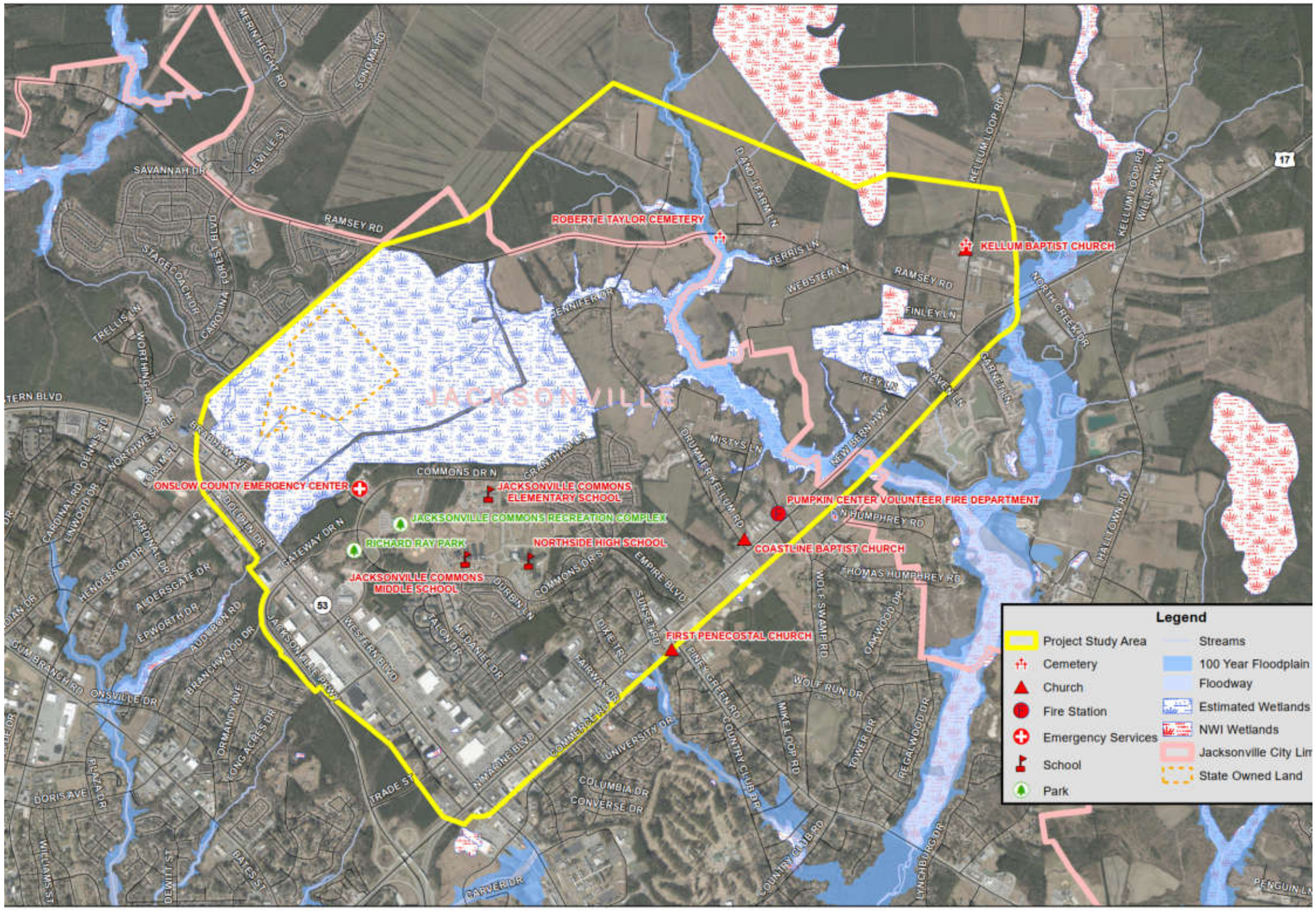
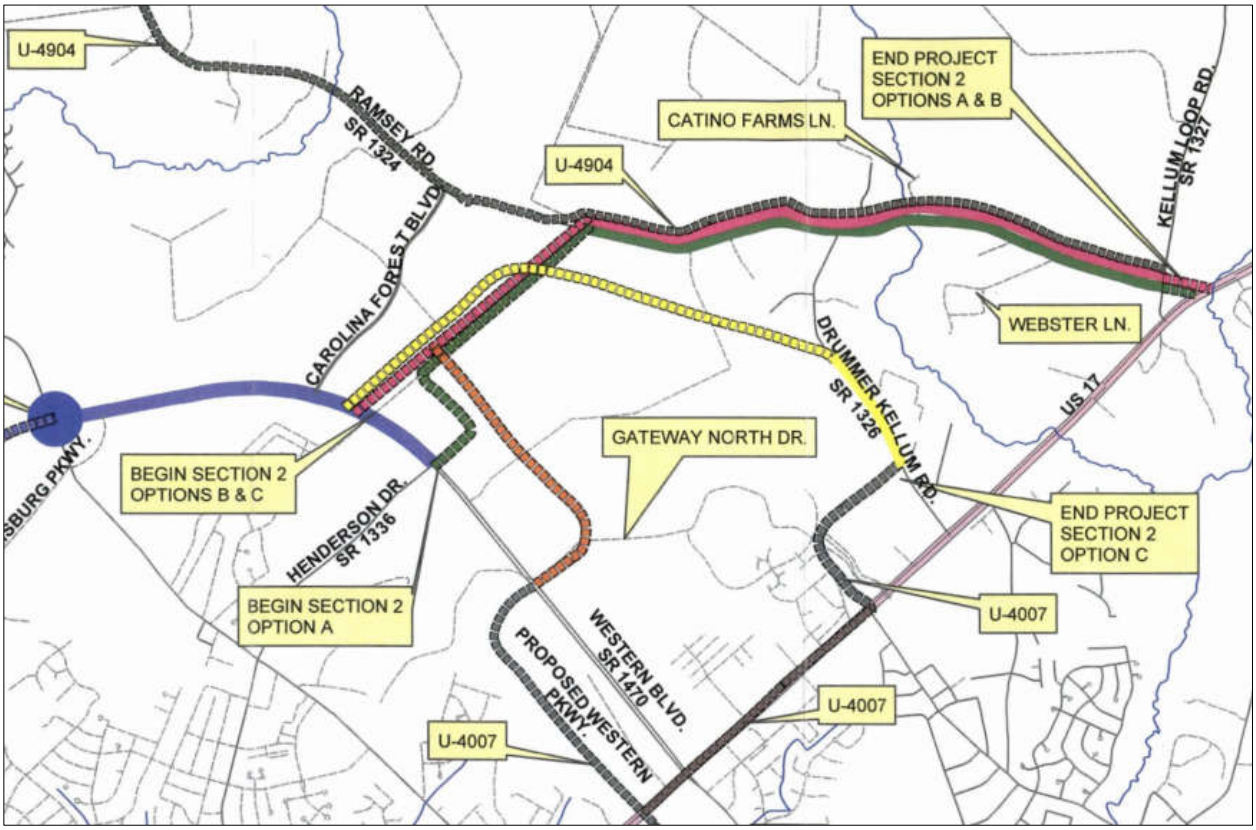


Figure 3. Portion of the Proposed Northwest Connector Feasibility Study (FS-0303C)



NOTE: This figure shows only Section 2 of the Proposed Northwest Connector Feasibility Study (FS-0303C) alternatives map (Figure 1). Section 1 of the study included a proposed connector from US 258/NC 24 to SR 1336 (Henderson Drive).

1.2 Project Setting

As shown in **Figure 1**, the project is located in northeast Jacksonville, which is located in Onslow County. The City of Jacksonville is the 14th largest city in North Carolina and is home to the largest Marine Corps base on the east coast, Camp Lejeune, and also to the Marine Corps Air Station New River. The project study area is located partially within the City of Jacksonville's limits and partially within unincorporated Onslow County.

The Department of Defense is one of the largest employers for the county, employing over 91,000 people. It is projected for the number of jobs to increase to 150,000 in Onslow County by 2045. Camp Lejeune is located approximately 5.5 miles southeast of the proposed project, and the Marine Corps Air Station is located approximately 4.5 miles southwest of the project.

Onslow County has an economy that is focused mainly on tourism and commercial activity geared toward Camp Lejeune. US 17 and US 258 are used as primary tourist commuter routes to coastal communities. The proposed project is located approximately 2.5 miles northeast of the New River and downtown Jacksonville. Jacksonville Commons and Richard Ray Park are two prominent recreational

resources located within the project vicinity, which increases the demand for bicycle, pedestrian, and transit facilities in the area.

According to Jacksonville Urban Area Metropolitan Planning Organization's (JUMPO) 2045 Metropolitan Transportation Plan (MTP), long-term goals for the area include congestion reduction, economic vitality, environmental sustainability, multimodal integration, safety and security, and system preservation.

1.3 Public Involvement

A website for U-5791 was developed in 2018 to provide information and updates to the public about the project. A project newsletter was sent to surrounding residents, elected officials, and other local officials in October of 2018. The newsletter introduced the project to the public and provided an overall summary of the need for the project and decision-making process.

A virtual public meeting was held in August 2021 to review the purpose and need and corridor alternatives.

1.4 Nearby STIP Projects and Local Transportation Plans

1.4.1 Nearby STIP Projects

The following STIP projects are located near U-5791 as listed in the 2020-2029 STIP:

- U-6081 – Upgrade NC 53 (Western Boulevard) to a superstreet from SR 1308 (Gum Branch Road) to US 17. Right-of-way acquisition is scheduled to occur in Fiscal Year (FY) 2026 with construction occurring in a future year.
- U-5903 – Upgrade SR 1336 (Henderson Road) to a superstreet from SR 1308 (Gum Branch Road) to NC 53 (Western Boulevard). Right-of-way acquisition is scheduled to occur in FY 2029 with construction occurring in a future year.
- U-5789 – Improve the intersection of NC 53 (Western Boulevard) and SR 2714 (Jacksonville Parkway). Right-of-way acquisition is currently underway, and construction is scheduled to occur in FY 2025.
- U-6200 – SR 1308 (Gum Branch Road). Williamsburg Parkway to Indian Drive. Upgrade to superstreet. Right-of-way acquisition is scheduled to occur in FY 2028 with construction occurring in a future year.
- U-4007E – NC 53. From US 17 (Marine Boulevard) to SR 2716 (Exchange Drive). Combined with U-5736 and U-5508. Right-of-way acquisition is currently underway, and construction is scheduled to occur in FY 2029.
- U-5787 – SR 2715 (Trade Street). NC 53 (Western Boulevard) to McDaniel Drive in Jacksonville. Construct roadway on new location. Right-of-way acquisition is scheduled to occur in FY 2022, and construction is scheduled to occur in FY 2024.
- U-6107 – US 17. McDaniel Drive / Workshop Lane. Upgrade Intersection. Right-of-way acquisition is scheduled to occur in FY 2025, and construction is scheduled to occur in FY 2027.
- U-5878 – Commerce Drive Extension. Commerce Drive to SR 1406 (Piney Green Road). Construct roadway on new location. Right-of-way acquisition is currently underway, and construction is scheduled to occur in FY 2022.

- U-5951 – US 17. US 17 Business (Marine Boulevard). Upgrade at-grade intersection to partial interchange. Right-of-way acquisition is scheduled to occur in FY 2027 with construction occurring in a future year.
- U-5728 - US 17 Business (Marine Boulevard). SR 1308 (Bell Fork Road) in Jacksonville. Improve intersection. Right-of-way acquisition is currently underway, and construction is scheduled to occur in FY 2025.
- U-5736 - NC 53 (Western Boulevard). US 17 (Marine Boulevard) to NC 24 (Lejeune Boulevard) in Jacksonville. Construct access management improvements.
- TD-4904 – Jacksonville Transit. Facility - Transit Center – Downtown. Construction year 2020.

1.4.2 Transportation Plans

1.4.2.1 Regional Transportation Plans

The *Jacksonville Urban Area Metropolitan Planning Organization (JUMPO) 2045 Metropolitan Transportation Plan* (MTP) includes the proposed new roadway/widening project for Jacksonville Parkway/Ramsey Road as well as the incorporation of bicycle facilities along the project corridor. These facilities include recommended bicycle lanes and sidewalks along the new location roadway and Ramsey Road and recommended wide outside lanes along Western Boulevard. The estimated cost for the proposed project is $49.4 million in this plan. Three intersections along Western Boulevard are identified in this plan as part of the top 25 intersections with crashes in the county. US 17 is classified as a principal arterial and Western Boulevard is classified as a minor arterial as part of this plan. US 17 is also a designated evacuation route for natural disasters. The Onslow County Comprehensive Transportation Plan is currently under study.

The proposed project is included in the JUMPO Transportation Improvement Program (FY 2020-2029) as U-5791 with right-of-way acquisition occurring in 2022 and construction following in 2024. The project is also mentioned in the MCB Camp Lejeune/MCAS New River Transportation Demand Management Plan (June 2011) as a TIP widening and new location project.

1.4.2.2 Transit and Pedestrian/Bicycle Plans

The JUMPO Jacksonville Bicycle and Pedestrian Transportation Plan (June 2008) includes the following recommendations within the proposed project study area:

- Proposed multi-use paths along Western Boulevard and along the new location bypass (connecting Western Boulevard to Ramsey Road).
- Proposed bicycle lanes along Henderson Drive and from Ramsey Road to large school property.
- Proposed paved shoulders along Ramsey Road and Drummer Kellum Road.

The *Jacksonville Urban Area MPO 2045 MTP* (March 2020) includes the following bicycle/pedestrian recommendations within the proposed project study area:

- Recommended bicycle paths along Jacksonville Parkway Extension and multi-use paths along Western Boulevard, Gateway Drive, and Henderson Drive.
- Sidewalks are proposed along Trade Street and Exchange Drive.
- Recommended improvements to transit system along US 17.

As part of the *City of Jacksonville Comprehensive Recreation Master Plan* (August 2011), there were two parks identified as being within the project vicinity: Jacksonville Common Complex and Richard Ray Park. The master plan calls for the expansion of the Jacksonville Commons Complex by 15 acres. The plan also recommends the implementation of a multi-use trail along the new location roadway in between Western Boulevard and Drummer Kellum Road.

1.4.2.3 Feasibility Plans

Two feasibilities were conducted for the proposed project:

Feasibility Study for Jacksonville Bypass Extension

The portion of the proposed roadway located on the eastern side of Western Boulevard recommended in the feasibility study was constructed as part of the Jacksonville Parkway project. The proposed roadway located west of Western Boulevard encompasses the U-5791 project study area. The study included an alignment that ran parallel to Ramsey Road instead of intersecting with it as is proposed with U-5791. The first segment of the Jacksonville Parkway was completed (from the Jacksonville Bypass north of US 17 to NC 53) in December of 2013.

FS-0303C Proposed Connector (Northwest Corridor) From US 258/NC 24 to US 17

The proposed project (U-5791) is included as part of a larger potential project beginning at US 258/NC 24 and ending at US 17, which is called the Northwest Corridor in Feasibility Study Number FS-0303C. The Northwest Corridor is a proposed connector to be used as an alternative route to reduce traffic congestion along US 17. Multiple alignments were proposed in this study, including connecting the extension to Drummer Kellum Road instead of Ramsey Road.

A separate corridor study (*Western Boulevard [NC 53] Corridor Study*, 2015) was also conducted south of the project along Western Boulevard (NC 53), which recommended the incorporation of a raised median along the corridor to help reduce crash and injury rates and improve traffic operations.

1.4.3 Land Use Plans

Onslow County Comprehensive Plan (CAMA Core Land Use Plan) (Oct 2009) (Amended July 2014)

The *Onslow County Comprehensive Plan (CAMA Core Land Use Plan)* was written to fulfill the Coastal Area Management Act (CAMA) requirements for the preparation of a land use plan for counties that are covered by the Act. CAMA establishes a cooperative program of coastal area management between local and state governments. Goals of CAMA include “To ensure that the development or preservation of the land and water resources of the coastal area proceeds in a manner consistent with the capability of the land and water for development, use, or preservation based on ecological considerations” and “to establish policies, guidelines, and standards for…Transportation and circulation patterns for the coastal area including major thoroughfares, transportation routes, navigation channels and harbors, and other public utilities and facilities”.

Issues identified by citizens and local officials in this plan included the loss of farmland to development, a lack of bicycle and pedestrian accommodations, a need to expand evacuation route systems, and a need to improve highway access. The proposed project is included in this land use plan as a proposed transportation improvement project under study (FS-0303C).

Onslow County is located in the Cape Fear, White Oak, and Neuse River Basins, with the proposed project being located within the White Oak River Basin.

1.5 Project Schedule

The tentative schedule is shown below. Dates are preliminary and subject to change.

- Preliminary Design — Summer 2021
- Environmental Analysis — Summer/Fall 2021
- CP2A — Winter 2021/2022
- Draft State Environmental Assessment — Winter 2021/2022
- Public Hearing — Summer 2022
- CP3 — Fall 2022
- FONSI (Anticipated) — Winter 2022/2023

The current project cost estimate is $47.6M and includes $16M for right- of-way acquisition and $31.6M for Construction.

These costs are as shown in the currently adopted State Transportation Improvement Program (2020-2029) and are subject to change.

2 Merger Concurrence Point 1 – Purpose and Need and Study Area Defined

2.1 Environmental Resources

Environmental resources in the project study area are listed below in **Table 1** and shown in **Figure 2** above. The 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 (state-owned and managed) area within the study area. The City of Jacksonville and McRae Farms (a former farm site) own the property where the new roadway alignment is proposed. Western Boulevard and New Bern Highway are heavily developed with commercial uses and new/planned development has been noted on Western Boulevard in the vicinity of the project. The residential uses are primarily located on Ramsey Road and Drummer Kellum Road. Camp Lejeune Military Base is located approximately 1.5 miles southeast of the project. Several community resources (parks and schools) are located in the western portion of the study area and are primary traffic generating facilities.

Table 1. Environmental Resources within the Project Study Area

Cultural Resources	
Archaeology	To be determined
Historic Properties	2 Historic Sites - Benjamin Lee Parker House and Kellum School (Surveyed Only)
Human Environment Resources	
Community Resources	2 Cemeteries - Robert E. Taylor Cemetery and Kellum Baptist Church Cemetery
	2 Churches - Kellum Baptist Church and Coastline Baptist Church
	3 Public Schools - Jacksonville Commons Elementary School, Jacksonville Commons Middle School, and Northside High School
	2 Fire Departments - Jacksonville Fire Department Station 4 and Pumpkin Center Volunteer Fire Department
	Jacksonville Commons Recreation Complex
Public Parks	2 Parks - Richard Ray Park and Jacksonville Commons Recreation Complex
Bicycle Routes	NC 3 Ports of Call (This route traverses North Carolina's long and varied coastline including two major sounds – the Pamlico and Albemarle Sounds. The ~300-mile route from Virginia to South Carolina passes through the major ports of the colonial era; Edenton, Bath, New Bern, Wilmington, and Southport; among numerous other coastal communities.)
Low Income Populations	Present
Minority Populations	Present
Limited English Proficiency Populations	None
Language Assistance Populations	Present

Table 1. Environmental Resources within the Project Study Area

Natural Environment Resources	
Named Streams inside project study area based on streams shapefile from Onslow County. Stream lengths are not delineated by project survey	8 named streams (38,725 lin. Ft.) - Streams include Big Northeast Creek, Little Steer Pine Branch, Hammonds Creek, Great Branch, Bucks Branch, Big Steer Pine Branch, Wolf Swamp Branch, and Bee Branch.
NWI Wetlands inside project study area based on shapefiles form National Wetland Inventory Database. Wetlands are not delineated by project survey.	7 National Wetland Inventory (NWI) areas.
Wetland resources within the project study area were evaluated using a custom desktop screening approach. This screening approach utilized information from various sources, including NCDOT Project ATLAS data, North Carolina Floodplain Mapping Program Quality Level2 Light Distance and Ranging (LiDAR) data, as well as a time series of aerial and satellite imagery with spectroscopic derivatives to identify potential locations of wetlands and streams.	11 wetlands, totaling 192 acres - Wetlands include 2 acres of Freshwater Emergent Wetlands and 190 acres of Freshwater Forested/Shrub Wetlands.
Wetland Mitigation Sites	NC Division of Mitigation Services Easement
Managed Areas	Natural Heritage Program SNHA
Water Supply Watershed Critical Areas	None

2.1.1 Existing Transportation System

2.1.1.1 Regional Network

The project is within a combination of City of Jacksonville limits, Extra Territorial Jurisdiction, and Onslow County limits. US 17 is a major north-south corridor in coastal North Carolina. Western Boulevard is a critical link in the area with heavy concentrations of various retail uses, residential development, and office and institutional uses. The City of Jacksonville is the commercial hub of Onslow county and home to Marine Corps Base Camp Lejeune and Marine Corps Air Station New River.

2.1.1.2 Existing Roadways in the Study Area

NC 53 (Western Boulevard) is a six-lane divided roadway with a posted speed limit of 45 mph. It is a critical road that links two primary arterials, US 17 and NC 24, in the City of Jacksonville and has some of the heaviest concentrations of retails uses in the City. Western Boulevard is also considered the "front door" to Marine Corps Base Camp Lejeune. North of US 17, the functional classification of Western Boulevard is a Minor Arterial while south of US 17, Western Boulevard is classified as an Other Principal Arterial. Forecasted Annual Average Daily Traffic (AADT) for the year 2018 varies along the corridor and ranges from 23,900 vehicles per day (vpd) to 46,100 vpd within the study area.

US 17 (New Bern Highway) is a four-lane divided roadway with a posted speed limit of 45 mph west of Piney Green Road and 55 mph east of Piney Green Road. The functional classification of US 17 is Other Principal Arterial. Forecasted AADT for year 2018 varies along the corridor and ranges from 15,400 vpd to 31,400 vpd.

Ramsey Road (SR 1324) is a two-lane undivided roadway with a posted speed limit of 55 mph east of Drummer Kellum Road and 45 mph west of Drummer Kellum Road. The functional classification of Ramsey Road is a Major Collector. Forecasted AADT for year 2018 varies along the corridor and ranges from 3,200 vpd to 6,400 vpd.

Carolina Forest Boulevard is a two-lane divided roadway with a posted speed limit of 25 mph. The functional classification of Carolina Forest Boulevard is a Major Collector. Forecasted AADT for year 2018 varies along the corridor and ranges from 6,900 vpd to 15,300 vpd.

Jacksonville Parkway (SR 2714) is a four-lane divided roadway with a posted speed limit of 45 mph. The functional classification of Jacksonville Parkway is Other Freeway. Year 2018 forecasted AADT along Jacksonville Parkway is 16,000 vpd.

Henderson Drive (SR 1336) is a two-lane and three-lane undivided roadway with a posted speed limit of 35 mph. The extension of Henderson Drive as part of this project will provide access to areas of future development as well as to regional amenities such as Jacksonville High School and major shopping destinations. The functional classification of Henderson Drive is a Minor Arterial. Year 2018 forecasted AADT along Henderson Drive is 15,400 vpd south of NC 53 and 3,400 vpd north of NC 53.

Gateway Drive North and Gateway Drive South are four-lane undivided roadways with a posted speed limit of 25 mph. The functional classifications of Gateway Drive North and Gateway Drive South are Minor Collectors. Forecasted AADT for year 2018 along Gateway Drive North is 9,200 vpd. Forecasted AADT for year 2018 along Gateway Drive South is 3,700 vpd.

Commons Drive is a two-lane undivided roadway with a posted speed limit of 25 mph. The functional classification of Commons Drive is a Minor Collector. Forecasted AADT for year 2018 varies along the corridor and ranges from 3,700 vpd to 7,400 vpd.

Exchange Drive (SR 2716) is a two-lane undivided roadway with a posted speed limit of 35 mph. The functional classification of Exchange Drive is a Local Roadway. Year 2018 forecasted AADT on Exchange Drive south of NC 53 is 6,100 vpd and north of NC 53 is 6,400 vpd.

Trade Street (SR 2715) is a two-lane undivided roadway with a posted speed limit of 35 mph. The functional classification of Trade Street is a Local Roadway. Forecasted AADT for year 2018 on Trade Street is 1,600 vpd south of NC 53 and 7,400 vpd north of NC 53.

McDaniel Drive is a two-lane undivided roadway with a posted speed limit of 25 mph. The function classification of McDaniel Drive is a Minor Collector. Year 2018 forecasted AADT along McDaniel Drive is 8,700 vpd.

Piney Green Road (SR 1406) is a four-lane divided roadway with a posted speed limit of 45 mph. The functional classification of Piney Green Road is a Minor Arterial. Year 2018 forecasted AADT along Piney Green Road is 15,500 vpd.

Drummer Kellum Road (SR 1326) is a two-lane undivided roadway with a posted speed limit of 45 mph. The functional classification of Drummer Kellum Road is a Minor Collector. Year 2018 forecasted AADT along Drummer Kellum Road is 4,200 vpd.

Kellum Loop Road (SR 1327) is a two-lane undivided roadway with a posted speed limit of 45 mph. South of Ramsey Road, the functional classification of Kellum Loop Road is a Major Collector while north of Ramsey Road, Kellum Loop Road is classified as a Local Roadway. Year 2018 forecasted AADT on Kellum Loop Road north of Ramsey Road is 1,500 vpd and south of Ramsey Road is 3,900 vpd.

Most of the remaining roadways in the study area are two-lane roads that are classified as either a collector or a local road within the NCDOT Functional Classification database.

The study area also consists of the following intersections:

- NC 53 at Carolina Forest Drive-signalized
- NC 53 at Forum Road-signalized
- NC 53 at Henderson Road-signalized
- NC 53 at Marlin Drive-unsignalized
- NC 53 at Jacksonville Parkway-signalized
- NC 53 at Gateway Drive South-signalized
- NC 53 at Exchange Drive-signalized
- NC 53 at Circuit Lane-signalized
- NC 53 at Trade Street-signalized
- NC 53 at US 17-signalized
- US 17 at McDaniel Drive-signalized
- US 17 at Piney Green Road-signalized
- US 17 at Drummer Kellum Road-unsignalized
- US 17 at Kellum Loop Road-unsignalized
- Kellum Loop Road at Ramsey Road-unsignalized
- Ramsey Road at Drummer Kellum Road-unsignalized
- Ramsey Road at Carolina Forest Boulevard-signalized
- Gateway Drive North at Commons Drive North-unsignalized
- Gateway Drive South at Commons Drive South-unsignalized

2.2 Need for Project

2.2.1 Project Need

The Jacksonville Urban Area MPO's (JUMPO) 2045 Metropolitan Transportation Plan (MTP) states that the Jacksonville Parkway Extension Project is an important connection needed to enhance mobility, improve accessibility, and provide an alternative 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.**

  There are several intersections along the Western Boulevard corridor that currently operate under congested conditions and "fair" to "poor" Level of Service (LOS) at peak hours (AM or PM). LOS D (approaching unstable flow) is considered "fair" conditions. LOS E (unstable flow) and LOS F (breakdown in flow) are considered "poor" conditions.

  Along the Western Boulevard corridor, the following intersections operate under congested conditions at peak hours (2018 existing conditions):

  - Western Boulevard and Carolina Forest Boulevard – LOS D (AM)/LOS D (PM)
  - Western Boulevard and Henderson Drive – LOS E (AM)/LOS D (PM)
  - Western Boulevard and Marlin Drive (northbound) – LOS F (AM)/LOS F (PM)

- Western Boulevard and Jacksonville Parkway – LOS E (AM)/LOS E (PM)
- Western Boulevard and Gateway Drive South – LOS D (AM)/LOS D (PM)
- Western Boulevard and Exchange Drive – LOS C (AM)/LOS D (PM)
- Western Boulevard and US 17 (New Bern Highway) – LOS D (AM)/LOS E (PM)

Along the US 17 corridor, the following intersections operate under congested conditions at peak hours:

- US 17 and McDaniel Drive – LOS D (AM)/LOS D (PM)
- US 17 and Drummer Kellum Road (eastbound) – LOS F (AM)/LOS F (PM)
- US 17 and Kellum Loop Road (eastbound) – LOS F (AM)/LOS F (PM)

In addition, traffic along Western Boulevard is expected to increase 24-57% in the next 20 years. Traffic along US 17 is expected to increase 37-69% during this same time period.

While traffic operations along Ramsey Road do not indicate congested conditions at this time, traffic levels along Ramsey Road are expected to increase 100-225% over the next 20 years. These increases in traffic are expected to worsen traffic conditions along the roadway in the future and decrease LOS along the roadway.

- **New Bern Highway (US 17) is a primary north south route, and it is a major corridor in the local and state transportation system.**

  US 17 is a Principal Arterial that runs north/south through the project area. US 17 is a Key Economic Development Highway from Virginia to South Carolina and is of high importance as both a regional and statewide corridor. It serves as an important link to the tourism industry as it provides access to North Carolina's beach and coastal communities. US 17 is also vital to the military as it provides access to the Camp Lejeune Military Base. The Average Annual Daily Traffic (AADT) along US 17 in the project area ranges from 15,400 to 31,400 vehicles per day (vpd). These volumes are forecasted to rise over the next 20 years to approximately 23,300 to 44,900 vpd using US 17 in the project area.

- **There are limited options for transportation access in this area of Jacksonville.**

  Western Boulevard is one of the area's primary commercial and employment corridors. As such, it serves as a major east/west commuter route. As noted above, US 17 serves as a major north/south route within the project area and through-out the state. There are limited alternative routes within the project study area, and most traffic is forced onto one of these two roads for most trips to work, school, home, or shopping.

2.3 Proposed Project Purpose

2.3.1 Project Purpose

The primary purposes of the proposed project are to:

- **Provide an alternate route to alleviate existing and future congestion along existing roadways.** The project will help alleviate congestion along existing roadways by distributing vehicles to the alternative route as well as by increasing roadway capacity along Ramsey Road.

- **Provide an alternative route to enhance mobility along Western Boulevard and US 17.**
  The new location roadway will provide an alternative route for drivers to avoid congestion along existing roadways.
- **Provide additional access to development.**
  The new location roadway will provide additional access to existing and planned development in the project area, including Jacksonville Commons and the Onslow County Emergency Services complex.

2.3.1.1 Existing and Future Traffic Volumes

Major roadway corridors in the study area including Western Boulevard, Ramsey Road, and US 17 are anticipated to experience significant growth within the next 20 years. **Table 2** below outlines the Existing 2018 and No-Build 2040 traffic volumes for the roadways within the study area as well as the percent growth anticipated.

Table 2. Existing and Future No-Build Traffic Volumes, Growth Rates

Roadway	Location	2018 Existing AADT	2040 No-Build AADT	% Growth
Western Boulevard	West of Carolina Forest Boulevard	23,900	37,600	57%
	From Carolina Forest Boulevard to Forum Road	33,700	52,000	54%
		35,000	53,900	54%
	From Forum Road to Henderson Drive	37,000	57,200	55%
	From Henderson Drive to Marlin Drive	43,800	67,800	55%
	From Marlin Drive to Jacksonville Parkway	46,100	71,300	55%
	From Jacksonville Parkway to Gateway Drive South	30,100	45,400	51%
	From Gateway Drive South to Exchange Drive	30,400	45,700	50%
	From Exchange Drive to Circuit Lane	32,100	48,000	50%
	From Circuit Lane to Trade Street	34,900	51,700	48%
	From Trade Street to US 17	35,300	51,600	46%
	East of US 17	34,800	43,300	24%
US 17	North of Kellum Loop Road	15,900	25,300	59%
	From Kellum Loop Road to Drummer Kellum Road	15,400	23,300	51%
	From Drummer Kellum Road to Piney Green Road	19,000	31,300	65%
	From Piney Green Road to McDaniel Drive	27,000	45,500	69%
	From McDaniel Drive to Western Boulevard	27,800	44,900	62%
		31,400	44,500	42%
	South of Western Boulevard	30,700	42,200	37%

Table 2. Existing and Future No-Build Traffic Volumes, Growth Rates

Roadway	Location	2018 Existing AADT	2040 No-Build AADT	% Growth
Ramsey Road	West of Carolina Forest Boulevard	5,200	16,900	225%
	From Carolina Forest Boulevard to Drummer Kellum Road	6,400	15,100	136%
	From Drummer Kellum Road to Kellum Loop Road	3,200	6,400	100%
Carolina Forest Boulevard	North of Ramsey Road	6,900	8,600	25%
	From Ramsey Road to Western Boulevard	8,500	16,400	93%
		15,300	20,800	36%
	South of Western Boulevard	2,700	3,400	26%
Forum Road	North of Western Boulevard	2,600	3,400	31%
	South of Western Boulevard	3,400	4,700	38%
Henderson Drive	North of Western Boulevard	3,400	6,500	91%
	South of Western Boulevard	15,400	16,300	6%
Marlin Drive	South of Western Boulevard	3,300	4,300	30%
Gateway Marketplace Driveways	North of Western Boulevard	-	8,400	-
	East of Jacksonville Parkway Extension	-	2,800	-
Jacksonville Parkway /Gateway Drive North	Commons Drive to Gateway Marketplace Driveway	-	14,200	-
	North of Western Boulevard	9,200	14,200	54%
	South of Western Boulevard	16,000	23,700	48%
Commons Drive	North of Recreation Loop	3,700	6,400	73%
	From Recreation Loop to Gateway Drive South	6,200	8,400	35%
	East of Gateway Drive South	7,400	9,200	24%
Recreation Loop	East of Commons Drive	1,100	1,400	27%
	North of Commons Drive	1,300	1,400	8%
Gateway Drive South	North of Western Boulevard	3,700	6,400	73%
	South of Western Boulevard	8,000	9,100	14%
Exchange Drive	North of Western Boulevard	6,400	7,300	14%
	South of Western Boulevard	6,100	7,000	15%
Circuit Lane	North of Western Boulevard	5,600	6,400	14%
	South of Western Boulevard	6,800	8,500	25%
Trade Street	North of Western Boulevard	7,400	8,400	14%
	South of Western Boulevard	1,600	3,100	94%
Kellum Loop Road	North of Ramsey Road	1,500	2,400	60%
	From Ramsey Road to US 17	3,900	8,000	105%
Drummer Kellum Road	From Ramsey Road to US 17	4,200	9,300	121%
	East of US 17	800	900	13%
Piney Green Road	West of US 17	700	900	29%
	East of US 17	15,500	36,100	133%
McDaniel Drive	West of US 17	8,700	11,300	30%
	East of US 17	3,700	4,100	11%

2.3.1.2 Existing and Future No-Build Traffic Conditions

As described in Section 2.2.1, congestion along existing roadways within the study area is projected to worsen with future growth and development. Traffic along Western Boulevard is expected to increase 24-57% in the next 20 years. Traffic along US 17 is expected to increase 37-69% during this same time period.

While traffic operations along Ramsey Road do not indicate congested conditions at this time, traffic levels along Ramsey Road are expected to increase 100-225% over the next 20 years. These increases in traffic are expected to worsen traffic conditions along the roadway in the future and decrease LOS along the roadway.

2.3.1.3 Existing Crash Data

Mid-block and intersection crash data was used to assess existing crash rates along the US 17 and NC 53 (Western Boulevard) corridors. Crash data reports were collected by NCDOT between 2016 and 2021. During the five-year reporting period, there was a total of 1,262 crashes within the study area. Of these, 304 were reported as injury crashes with no fatalities. **Table 3** provides a summary of the total number of crashes recorded along the corridor, the Average Annual Daily Traffic (AADT) volumes, the crash rate, the critical crash rate (for segments), and the safety ratio. The crash rate is the number of crashes per 100 million vehicles. The critical crash rate is a statistically derived number which serves as a screening measure to identify locations where crash occurrence is higher than should be expected for a given facility type and for which safety measures should be considered. The safety ratio is the critical crash rate divided by the actual crash rate. A ratio less than one may indicate a safety problem.

The mid-block crash rate analysis shows that half of the segments within the study area have a higher rate of total crashes than the average rate for similar facilities in North Carolina. The majority of crashes that occurred along the segments were rear-end collisions which are typically associated with congestion and a lack of turn lanes into driveways and intersections. None of the segments appear on the North Carolina Highway Safety Improvement Program (HSIP) list of potentially hazardous section locations.

An intersection critical crash rate cannot be determined because a statewide average intersection crash rate is not available. Over the five-year span, the intersection with the highest number of crashes and crash rate was US 17 at Western Boulevard. The majority of the crashes at this intersection were angle and rear-end crash types. The intersections of Western Boulevard at Marlin Drive, Western Boulevard at Exchange Drive, Western Boulevard at Trade Street, and US 17 at McDaniel Drive appear in the North Carolina Highway Safety Improvement Program (HSIP) list of potentially hazardous intersections.

Table 3. Mid-block and Intersection Crash Data for 2016-2021

Corridor	Segment	Length (miles)	AADT	Total Crashes (2016-2021)	Actual Crash Rate[1]	Critical Crash Rate[1]	Safety Ratio
US 17	Western Blvd to McDaniel Dr	0.30	32,000	69	779.40	494.61	0.63
	McDaniel Dr to Piney Green Rd	0.64	33,000	75	387.20	414.08	1.07
	Piney Green Rd to Drummer Kellum Rd	0.41	22,000	16	192.90	503.18	2.61
	Drummer Kellum Rd to Kellum Loop Rd	1.24	15,000	37	217.40	424.97	1.95
	North of Kellum Loop Rd	0.03	15,000	0	0.00	1704.20	>1.00

Table 3. Mid-block and Intersection Crash Data for 2016-2021

Corridor	Segment	Length (miles)	AADT	Total Crashes (2016-2021)	Actual Crash Rate[1]	Critical Crash Rate[1]	Safety Ratio
NC 53 (Western Blvd)	Henderson Dr to Marlin Dr	0.15	48,000	56	834.70	591.07	0.71
	Marlin Dr to Jacksonville Pkwy	0.21	48,000	93	996.00	542.77	0.54
	Jacksonville Pkwy to Gateway Dr	0.22	37,000	46	610.50	572.99	0.94
	Gateway Dr to Exchange Dr	0.18	37,000	20	323.40	604.54	1.87
	Exchange Dr to Circuit Ln	0.19	37,000	40	613.30	595.67	0.97
	Circuit Ln to Trade St	0.18	37,000	28	452.70	604.54	1.34
	Trade St to US 17	0.15	37,000	43	831.40	636.65	0.77
Intersections	Western Blvd at Henderson Dr	-	48,300	34	234.48	-	-
	Western Blvd at Marlin Dr	-	49,600	85	570.83	-	-
	Western Blvd at Jacksonville Pkwy	-	53,300	84	524.96	-	-
	Western Blvd at Gateway Dr	-	39,600	48	403.75	-	-
	Western Blvd at Exchange Dr	-	42,600	53	414.42	-	-
	Western Blvd at Circuit Lane	-	42,300	57	448.85	-	-
	Western Blvd at Trade St	-	41,300	66	532.31	-	-
	Western Blvd at US 17	-	64,500	207	1069.01	-	-
	US 17 at McDaniel Dr	-	37,100	53	475.85	-	-
	US 17 at Piney Green Rd	-	42,500	32	250.80	-	-
	US 17 at Drummer Kellum Rd	-	28,000	8	95.17	-	-
	US 17 at Kellum Loop Rd	-	16,800	12	237.93	-	-

Source: NCDOT Traffic Safety Unit

1. For segments, the crash rate is in crashes per 100 million vehicle miles, and for intersections, the crash rate is in crashes per 100 million entering vehicles.

Note: Intersection crash rate and safety ratio cannot be determined because a statewide average crash rate is not available.

2.3.1.4 Population and Economic Data

2.3.1.4.1 Population Trends and Projections

Data was obtained from the American Community Survey (ACS) 5-Year Estimates from the US Census Bureau. Population within the project study area is notably increasing, with an annualized growth rate of 3.6 percent within the Demographic Study Area (DSA), as compared to Onslow County's annualized growth rate of 1.7 percent. According to census data, the population within the study area increased from 16,175 in 2000 to 22,998 in 2010 (US Census, 2010). This population increase can be attributed to the construction of multiple new residential neighborhoods within the study area along with the addition of new commercial areas.

The North Carolina Office of State Budget and Management (OSBM) estimates that North Carolina's population is expected to be 12.9 million in 2039, with an annualized growth rate of 0.5 percent. Onslow County's population is expected to grow to 251,707 by 2039 from its current count of 186,869 in 2010.

2.3.1.4.2 Economic Data

Census data indicates a notable presence of minority and low-income populations meeting the criteria for Environmental Justice. The average median family income within the JUMPO study area was $49,833 (JUMPO. 2020). Also, within the JUMPO study area, 4.3 percent of households have zero vehicles.

Major employers within Onslow County are listed below:

- Department of Defense
- Onslow County Board of Education
- Camp Lejeune Marine Corps Community Services
- Onslow Memorial Hospital
- County of Onslow
- Wal-Mart Associates, Inc.

Other key employers within the area are Coastal Carolina Community College and several businesses in the commercial food industry. Employment in the county increased through 2011 which was mainly due to an increase in active-duty troops and civil servants employed at Camp Lejeune as well as the expansion of the base itself. According to Woods and Pole Economics, the total number of jobs in Onslow County is anticipated to be 150,000 in 2045 based on the 5.2 percent employment growth rate predicted by the Bureau of Labor Statistics (JUMPO. 2020)

Within the JUMPO study area, 54 percent of residents in the study area work within the study area, and approximately 49 percent of the jobs within the study area are filled by workers who also live within it. In addition, the average approximate travel time to work within the study area was 21.2 minutes in 2018. The longest average travel time for one census tract located near the northwestern edge of the study area between NC 111 and NC 53 was 32 minutes.

2.4 Project Study Area

The proposed study area developed to address the purpose and need of U-5791 is shown in **Figure 2** above. The project team developed the study area in a manner to fully evaluate options for extending Jacksonville Parkway and also improving the existing Western Boulevard and US 17 corridor. The study area encompasses five conceptual roadway corridors between the Western Boulevard/Jacksonville Parkway intersection and Kellum Loop Road/US 17 intersection. The corridors were developed based on conceptual roadway alignments which were buffered 250 feet on either side of the alignment.

The proposed study area allows for traffic to be more efficiently distributed along Western Boulevard, US 17, Jacksonville Parkway, and Ramsey Boulevard in addition to creating access to present and future developments. It also includes sufficient area to pursue alignment shifts and apply avoidance and minimization measures during design development.

The Concurrence Point 1 concurrence form, which includes the proposed purpose and need and project study area, is attached to this package in Appendix C.

3 Merger Concurrence Point 2 – Detailed Study Alternatives Carried Forward

The identification, consideration, and analysis of alternatives are key to the NEPA process and the goal of objective decision making. Consideration of alternatives leads to a solution that satisfies the transportation need and avoids and minimizes adverse impacts to environmental and community resources. For this project, three screening levels were used to identify and carry forward the Detailed Study Alternatives (DSA) to be analyzed in the Environmental Assessment (EA).

3.1 Overview of Alternatives Development and Screening Process

This section provides an overview of the alternatives development and evaluation process. A systematic multi-step alternatives screening process has been applied to recommend the Detailed Study Alternatives (DSA) to be included in the project's Environmental Assessment (EA). Below is a summary of the three levels of alternative screening.

1. First Screening – General Approaches – evaluates the ability of an alternative approach to meet the project's purpose and need based on the established screening criteria.
2. Second Screening – Corridor Analysis – evaluates the ability of each of the five potential corridors to meet the project's purpose and need based on the established screening criteria as well as design considerations, traffic operations, and impacts to the human and natural environments. Compares corridor concepts and eliminates those that are unreasonable, impractical, and/or have higher impacts or less improvement to traffic flow.
3. Third Screening – Alignment Analysis – compares the corridors that passed the second screening process in more detail. Conceptual designs of the two alignments were prepared with preliminary slope stakes plus 25 linear feet to further analyze impacts. The Alternative 1b alignment included a design for the symmetrical, northern, and southern widening of Ramsey Road. This third screening process will allow for an evaluation of a narrower footprint to compare impacts.

The First Screening determined which general concepts should be eliminated from further consideration based on whether they meet the purpose and need. In addition to the No-Build, five general approaches were considered, including system strategies (Travel Demand Management [TDM] and Transportation System Management [TSM]), mass transit, new location alternatives, and improvements to the existing roadway.

General approaches that passed the First Screening (new location alternatives and improvements to the existing roadway) passed through to the Second Screening. The Second Screening included the development and evaluation of multiple new location and existing project corridors.

The Second Screening determined which potential corridors should be eliminated from further consideration based on whether they meet the purpose and need and are included in local plans. In addition to the No-Build Alternative, five build corridors were considered, including a new northwestern alignment and Ramsey Widening with various intersection options (Alternatives 1a and 1b), a new southeastern alignment with tie-in to Drummer Kelly Road and widening of Ramsey Road (Alternative

2a), a complete new southeastern alignment with a direct tie-in to US 17 (Alternative 2b), and improvements to the existing roadways (Alternative 3). **Table 5** includes a summary of potential corridor impacts.

The goal of the Third Screening is to narrow down the number of alignments qualitative and quantitative environmental analysis and traffic operations analysis. Only conceptual designs that are most reasonable and feasible, with the approval of NCDOT, will be recommended to move forward as the Detailed Study Alternatives (DSAs) to be included in the EA and evaluated in more detail.

3.2 First Level Screening – General Approaches

3.2.1 Methodology

The First Screening looked at several general approaches to improving the corridor. The No-Build Alternative was also included in the First Screening. The No-Build Alternative was retained as a baseline for comparison purposes.

The First Screening identified those approaches that appeared to be able to be developed to meet the project purpose and need. The following two evaluation criteria, based on purpose and need, were applied to the analysis of each alternative approach:

- *Does the alternative approach address the need to relieve existing and future congestion along Western Boulevard and US 17?*
- *Does the alternative approach provide additional access to current and future development?*

Only these general approaches that met all elements of the purpose and need (with the exception of the No-Build Alternative) were advanced into the next screening level.

3.2.2 First Level Screening – General Approaches to Improving the Corridor

The First Screening evaluated the range of alternative approaches suggested in the FHWA Technical Advisory T 6640.8A (1987) (listed below) that should be considered when determining reasonable alternatives. These are:

- No-Build or No-Action Alternative
- Transportation Demand Management Alternative
- Transportation System Management Alternative
- Mass Transit and Multi-Modal Alternatives
- Build Alternatives, including Improving Existing Corridor and New Location Alternatives

The First Screening objective was to narrow the range of alternatives to advance to the more detailed screening evaluation.

No-Build Alternative

What is it? The No-Build Alternative serves as the baseline comparison for the design year (2040). This alternative assumes that the transportation system for Onslow County would evolve as currently planned in the Jacksonville Urban Metropolitan Planning Organization's (JUMPO) 2045 Metropolitan Transportation Plan (MTP) (March 2020) (JUMPO Web site: http://jumpo-nc.org/) but without major improvements to the Western Boulevard/US 17 corridor in the project area.

Why was the No Build Alternative retained? Although it is evident that the No-Build Alternative would not meet the project purpose and need, the No-Build Alternative is retained and will be given full consideration in the EA for detailed study to provide a baseline for comparison in accordance with 40 CFR 1502.14(d) and FHWA guidance (FHWA Technical Advisory T 6640.8A, 1987).

Transportation Demand Management (TDM) Alternative

What is it? The TDM Alternative approach includes measures and activities that change traveler behavior and that do not involve major capital improvements. The TDM Alternative can include employer-based measures such as staggered work hours or flex time, carpools/vanpools, and freeway management systems (dynamic message boards, real time traveler information systems, conversion of lanes to HOV lanes, etc.).

Why was the TDM Alternative eliminated? The TDM Alternative was eliminated from further study in the First Screening because it does not meet the project's purpose and need.

Transportation System Management (TSM) Alternative

What is it? The TSM Alternative approach typically consists of low-cost, minor transportation improvements to increase the capacity of an existing facility. TSM improvements can be operational (i.e., traffic law enforcement, access control, turn prohibitions, speed restrictions, traffic signal timing optimization, etc.) or physical (i.e., turn lanes, intersection realignment, improved warning and information signs, new signals or stop signs, intersection geometric and signalization improvements, ramp metering, etc.).

Why was the TSM Alternative eliminated? TSM improvements such as intersection realignment/geometric improvements and minor improvements to ramp acceleration and deceleration lanes can be incorporated to improve overall operations at intersections. However, these improvements would not address the substantial congested conditions along both Western Boulevard and New Bern Highway without substantial investment at each intersection. In summary, the TSM approach was eliminated from further consideration in the First Screening as it would not meet all the elements of the purpose and need.

Mass Transit Alternative/Multi-Modal Alternative

What is it? The Mass Transit Alternative includes bus or rail passenger service. Mass transit can provide high-capacity, energy-efficient movement in densely travelled corridors. In addition, mass transit serves high-density areas by offering an option for automobile owners who do not wish to drive as well as service to those without access to an automobile. The Multi-Modal Alternative includes combining mass transit with existing corridor improvements such as TSM measures.

One transit agency (Jacksonville Transit) has bus routes that cross US 17 but does not use US 17 as part of any of their existing routes. Jacksonville Transit does have one bus route that partially uses the northern portion of Western Boulevard but stops at the recreation complex.

A rail corridor is not present within the study area; there are two regional bus stops from Amtrak and Greyhound that can be connected to by Jacksonville Transit.

Why was the Mass Transit/Multi-Modal Alternative eliminated? The Mass Transit/Multi-Modal Alternative was eliminated from further study in the First Screening. Mass transit likely would not divert any substantial traffic volumes from the project corridor or improve traffic flow on Western Boulevard

or US 17 as existing and planned transit routes only use a portion of Western Boulevard and none of US 17. Incorporating mass transit into a multi-modal alternative with measures such as TSM improvements would increase the cost of the alternative but would not address traffic flow on Western Boulevard nor US 17.

Improve Existing Corridor Alternative

What is it? The Improve Existing Corridor Approach would include capacity improvements to Western Boulevard and US 17 as well as rehabilitating/reconstructing intersections along the corridor in order to correct geometric and conditions deficiencies.

Why was the Improve Existing Corridor Alternative retained? The Improve Existing Corridor Alternative would meet elements of the purpose and need. This approach is carried forward to the Second Screening, where options for improving the corridor are evaluated.

Due to the urbanized, densely developed nature of the Western Boulevard and US 17 Corridor, this alternative would have extremely high impacts to the built environment and would not be reasonable nor would this alternative provide additional access to existing and future development in the area.

New Location Alternative

What is it? The New Location Alternative concept would involve construction of a new roadway on new location between Western Boulevard and Ramsey Road.

Why was the New Location Alternative retained? The New Location Alternative would meet all the elements of the purpose and need. This approach is carried forward to the Second Screening, where various options for improving the corridor are evaluated.

3.2.3 Summary of First Screening Results

Concepts that were eliminated in the First Screening were the TDM concept, TSM concept, and the Mass Transit/Multi-Modal alternatives. The results revealed that improving the New Location Alternative would fulfill the identified needs and meet the purpose of the project. Although the Improve Existing Corridor Alternative does not meet all elements of the purpose and need, it was retained as an additional comparison to the New Location Alternative as well as to the No Build Alternative.

As shown in **Table 4**, the results of the First Screening recommended that the Improve Existing Corridor Alternative and New Location Alternative should advance to the Second Screening because they were consistent with the purpose and need of the project.

Table 4. First Screening Results – General Approaches

General Approaches	Relieve existing and future congestion	Provide additional access to development	Retain for Second Screening?
No-Build	X	X	Yes – See note
Transportation Demand Management	X	X	No
Transportation System Management (TSM)	X	X	No
Mass Transit/Multi-Modal	X	X	No
Improve Existing Corridor	X	X	Yes – See note
New Location Alternatives	✓	✓	Yes

X – the alternative approach cannot meet this element of purpose and need
✓ – the alternative approach does meet, or could be designed to meet, this element of purpose and need
Note: No-Build Alternative would not meet the project purpose and need but is retained for the EA as a baseline for comparison in accordance with 40 CFR 1502.14(d) and FHWA guidance (FHWA Technical Advisory T 6640.8A, 1987). The Improve Existing Corridor Alternative would not meet elements of the purpose and need but is retained as another comparison for new corridor impacts.

3.3 Second Level Screening – Corridor Concept Alternatives Analysis

3.3.1 Second Level Screening Methodology

The following General Approaches from the First Screening were carried forward to the Second Screening:

- No-Build
- Improve Existing Corridor
- New Location Alternatives

For the Second Screening, five potential corridor concepts were developed for the project area. A 250-foot buffer was created around each corridor's centerline for a total of 500 feet.

Features and resources in the project study area that could be impacted or could affect the designs were considered in developing the corridor concepts. **Figure 4**shows the location of the corridor concepts. Each of the five corridor concepts are described below, with a summary table included in Section 3.3.4.

3.3.2 No-Build Alternative

The No-Build Alternative is the baseline comparative alternative for the design year (2040). The No-Build Alternative would not provide any improvements to the roadway network in the project study area.

3.3.3 Build Alternatives – Corridor Concept Alternatives Analysis

Five Corridor Concepts were developed for the Build Alternatives for this project for further analysis as part of the second level screening process (**Figure 4**). The Typical Section of the main roadway can be seen in **Figure 5**. The corridors are described below.

3.3.3.1 Alternative 1a: New Northwestern Location and Ramsey Widening

Alternative 1A (**Figure 6**) of the corridor concepts includes the construction of a new location roadway (Jacksonville Parkway) that will connect Western Boulevard to Ramsey Road from the intersection of Jacksonville Parkway and Western Boulevard (with an extension of Henderson Drive) to east of the Terry Lee Lanier Drive and Ramsey Road intersection. From there, Ramsey Road would then be widened from the new intersection of Jacksonville Parkway to US 17. Alternative 1A would meet all elements of the purpose and need as well as that of local plans. However, this alternative would cross into an EPA Wetland Mitigation Site, which consists of 18.59 acres of wetlands. In addition to the Wetland Mitigation Site, the alternative would potentially impact 97 acres of wetlands, 2 acres of open water, and 2,134 linear feet of streams. The Natural Heritage Program (SNHA) has managed areas within this project corridor, and 83.31 acres of those managed areas would potentially be impacted by this alternative (this is separate from the 18 acres of the Wetland Mitigation site). **Table 5** below provides a summary of potential corridor impacts. Due to the impacts to the EPA Wetland Mitigation Site, it is NCDOT's recommendation that this alternative should be eliminated from detailed study.

3.3.3.2 Alternative 1b: New Northwestern Location and Ramsey Widening

Alternative 1b (**Figure 7**) of the corridor concepts includes the construction of a new location roadway (Jacksonville Parkway) that will connect Western Boulevard to Ramsey Road near the intersection of Jacksonville Parkway and Western Boulevard (with an extension of Henderson Drive). From there, Ramsey Road would then be widened from the new intersection of Jacksonville Parkway to US 17. Alternative 1b follows a similar route as Alternative 1a, however, it veers in such a way to completely avoid the EPA Wetland Mitigation site located within the project area. Alternative 1b also meets all elements of the purpose and need as well as that of local plans. This alternative would improve the travel time from Western Boulevard to the intersection of Ramsey Road and US 17 by 4.6 minutes in comparison to using US 17 to access Ramsey. Average travel speeds along the corridor would also improve to 43.3 miles per hour (mph) in comparison to 25.6 miles per hour (mph) along existing Western and US 17. **Table 5** below provides a summary of potential corridor impacts. This alternative will potentially impact 95 acres of wetlands, 2 acres of open water, and 2,292 linear feet of streams. This alternative will, however, avoid the EPA Wetland Mitigation Site and will impact only half the amount of acres of SNHA managed areas as compared to Alternative 1a. As this alternative provides a large improvement to mobility and travel times, in addition to minimizing environmental impacts, it is NCDOT's recommendation that this alternative be retained for detailed study.

3.3.3.3 Alternative 2a: New Southeastern Location and Ramsey Widening

Alternative 2a (**Figure 8**) of the corridor concepts includes the construction of a new location roadway (Jacksonville Parkway) that will connect Western Boulevard to Drummer Kellum Road and, from there, Ramsey Road. Alternative 2a starts from the same intersection as Alternatives 1a and 1b (Jacksonville Parkway/Western Boulevard intersection with extension of Henderson Drive), but instead of connecting directly to Ramsey Road, it takes a more eastern route that intersects Drummer Kellum Road. From there, the project would continue to Ramsey Road from Drummer Kellum Road and would widen Ramsey from the Drummer Kellum Road intersection to US 17. Alternative 2a meets all elements of the purpose and need but is not in line with local plans as it does not directly connect to/will not widen Ramsey Road. This alternative would improve the travel time from Western Boulevard to Ramsey by 4.2 minutes in comparison to using US 17 to reach the Ramsey Road/US 17 intersection. This alternative would not impact the EPA Wetland Mitigation site, but it would still potentially impact 78 acres of wetlands, 1.05 acres of open water, and 1,822 linear feet of streams. Also, this alternative has the highest number of properties potentially impacted, with 98 residential structures and 21 business

structures. This alternative would also potentially impact more Farmlands of Statewide Importance. Due to this alternative not being aligned with local plans as well as the amount of impacts to the natural and human environment, it is NCDOT's recommendation to eliminate this alternative from detailed study.

3.3.3.4 Alternative 2b: New Southeastern Location to US 17

Alternative 2b (**Figure 9**) of the corridor concepts includes the construction of a new location roadway (Jacksonville Parkway) that will connect Western Boulevard to US 17. Alternative 2b starts from the same intersection as others listed above and is a completely new location roadway that intersects Drummer Kellum Road then continues on to connect to US 17 via Key Lane. This alternative fulfills all elements of the purpose and need but is not line with local plans as it does not directly connect to/will not widen Ramsey Road. This alternative would improve travel time from Western Boulevard to US 17 by 4.8 minutes in comparison to taking Western all the way to US 17. Alternative 2b would potentially impact 86 acres of wetlands, 1 acre of open water, and 1,040 linear feet of streams. This alternative would impact the least number of residential and business structures but would have the second highest impact to Farmlands of Statewide Importance and the 100 Year Floodplain. As this alternative has potentially the lowest amount of impacts to streams and structures and would provide the fastest mobility times, it is NCDOT's recommendation that this alternative be carried forward for detailed study.

3.3.3.5 Alternative 3: Improve Existing Western Boulevard and US 17

Alternative 3 (**Figure 10**) of the corridor concepts includes improving existing Western Boulevard and US 17. This alternative does not fulfill all elements of the purpose and need and is not in line with local plans. The average travel speed for this alternative would be almost half of the other alternatives (25.6 mph) and would have almost double the travel time. However, this project would have the least amount of impacts to wetlands and the SNHA managed areas. This alternative also has the highest amount of acres potentially impacted of Farmlands of Statewide Importance and is the only alternative with potential UST/Hazmat Sites. As this alternative does not meet the purpose and need in addition to its impacts to the natural and human environment, it is NCDOT's recommendation for this alternative to be eliminated from detailed study.

3.3.4 Summary of Second Level Screening Results

Table 5 below compares the potential impacts of each of the corridor concept alternatives. Based on the analysis above, NCDOT recommends that the following corridor concept alternatives be carried forward to the third level screening process:

- Alternative 1b – New Northwestern Alignment and Ramsey Widening
- Alternative 2b – New Southeastern Alignment

NCDOT recommends that the following corridor concept alternatives be eliminated from further study:

- Alternative 1a – New Northwestern Alignment and Ramsey Widening
- Alternative 2a - New Southeastern Alignment and Ramsey Widening
- Alternative 3 – Improve Existing Western Boulevard and New Bern Highway

Table 5. Corridor Concept Alternatives Analysis Impact Summary

Corridor Concept Alternative (includes Henderson Dr Ext to ensure equal comparison)[1]	1a New Northwestern Alignment and Ramsey Road Widening	1b New Northwestern Alignment and Ramsey Road Widening	2a New Southeastern Alignment and Ramsey Road Widening	2b New Southeastern Alignment	3 Improve Existing Western Blvd and New Bern Hwy
F E A T U R E					
Alternative Length (miles)	3.85	4.18	3.85	3.03	4.92
Fulfills Purpose and Need	**Yes**	**Yes**	**Yes**	**Yes**	**No**
M O B I L I T Y					
Average Speed (mph)	43.5	43.3	39.7	40.1	25.6
Travel Time (min)	5	5	5.4	4.8	9.6
E N V I R O N M E N T A L R E S O U R C E S P R E S E N T					
Wetland Impacts[2] (Estimated) (acres)	75.73	91.84	78.51	82.94	6.24
Wetland Impacts[2] (NWI)(acres)	22.96	5.3	1.82	4.11	4.02
Wetland Mitigation Sites[2] (acres)	18.59	0	0	0	0
Ponds[2] (acres)	1.6	1.6	1.05	1.46	1.91
Stream Impacts[2] (linear ft)	2,134	2,292	1,822	1,040	935
Ditches[2] (linear ft)	37,012	35,139	27,568	17,820	16,634

Table 5. Corridor Concept Alternatives Analysis Impact Summary

Corridor Concept Alternative (includes Henderson Dr Ext to ensure equal comparison)[1]	1a New Northwestern Alignment and Ramsey Road Widening	1b New Northwestern Alignment and Ramsey Road Widening	2a New Southeastern Alignment and Ramsey Road Widening	2b New Southeastern Alignment	3 Improve Existing Western Blvd and New Bern Hwy
S T R U C T U R E S P R E S E N T					
Residential	80	80	98	34	24
Business	21	21	21	12	96
Recreational Areas/Parks[3]	2	2	2	2	0
Schools	0	0	0	0	1 Non-public school
Cemeteries	1	1	2	1	0
Churches	0	0	0	0	3

NOTES: 1. Corridor width evaluated is 500 foot.
2. Wetland acreage determined through desktop evaluation process in coordination with the USACE. Jurisdictional status of wetlands, streams, and ditches will be determined during field delineations of the selected alternative.
3. http://ncnhde.natureserves.org/content/map

Figure 4. Overall Corridor Concept Alternatives

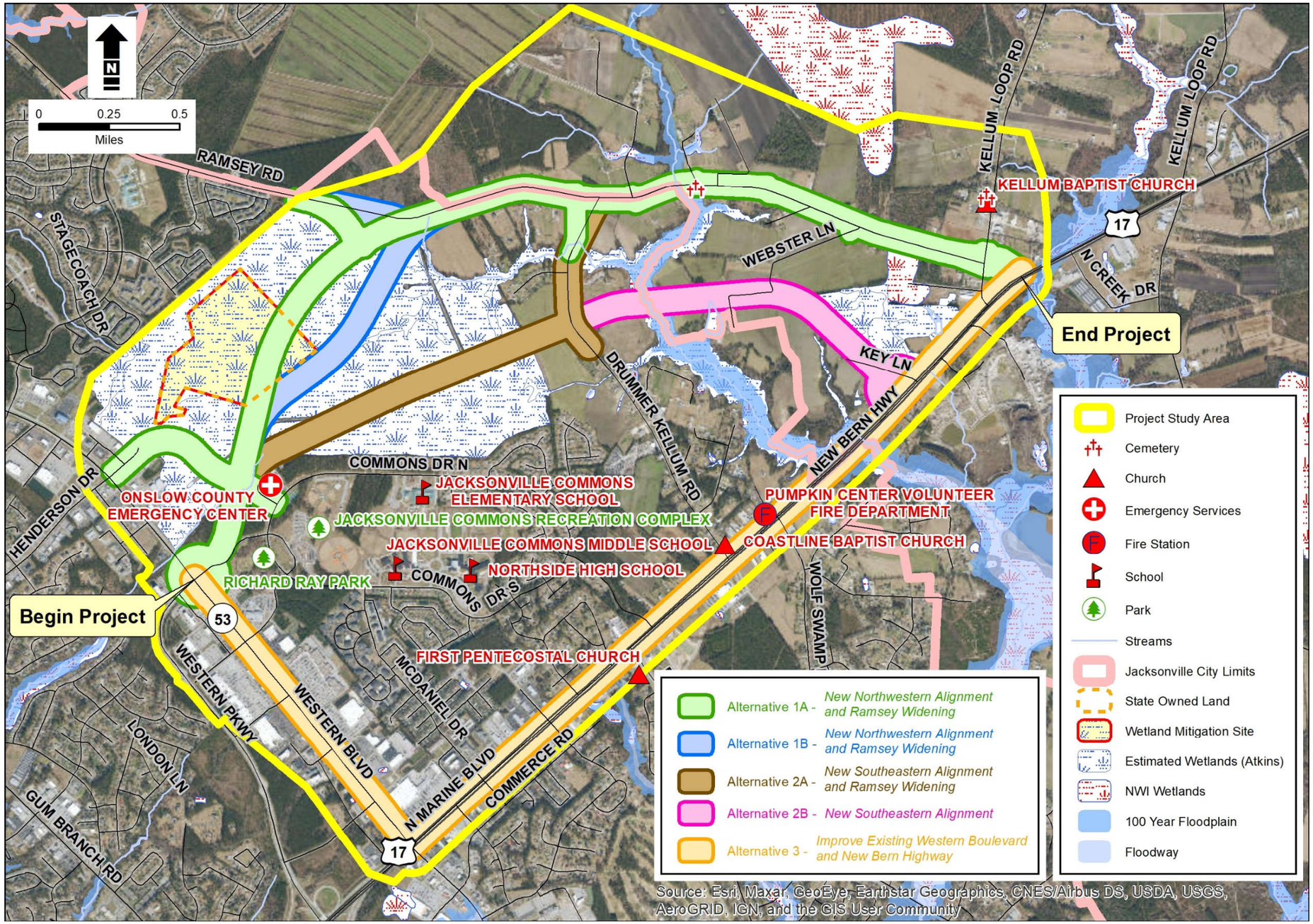


Figure 5. Jacksonville Parkway Extension Typical Section

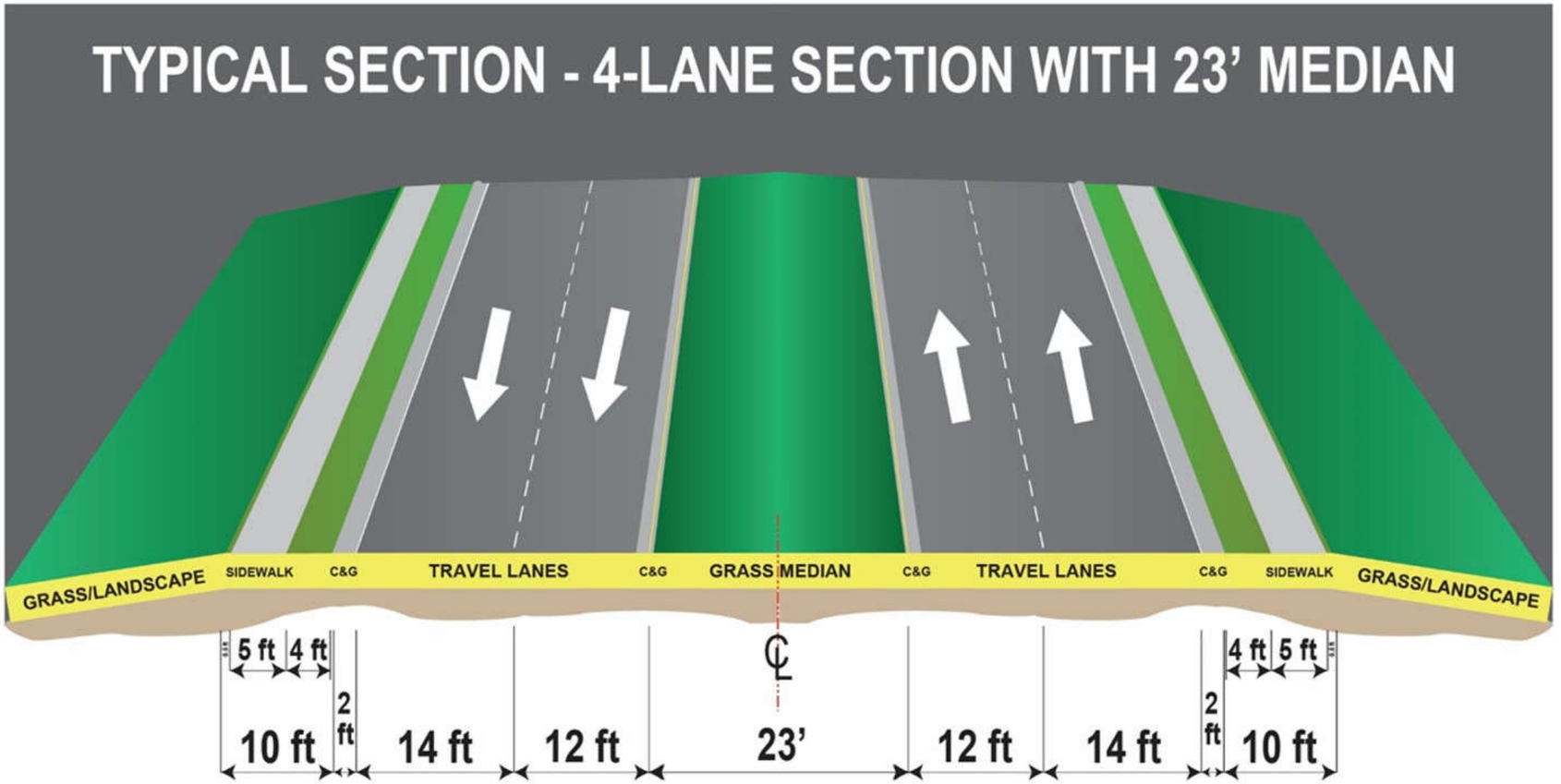


Figure 6. Corridor Concept Alternative 1a: New Northwestern Location and Ramsey Road Widening

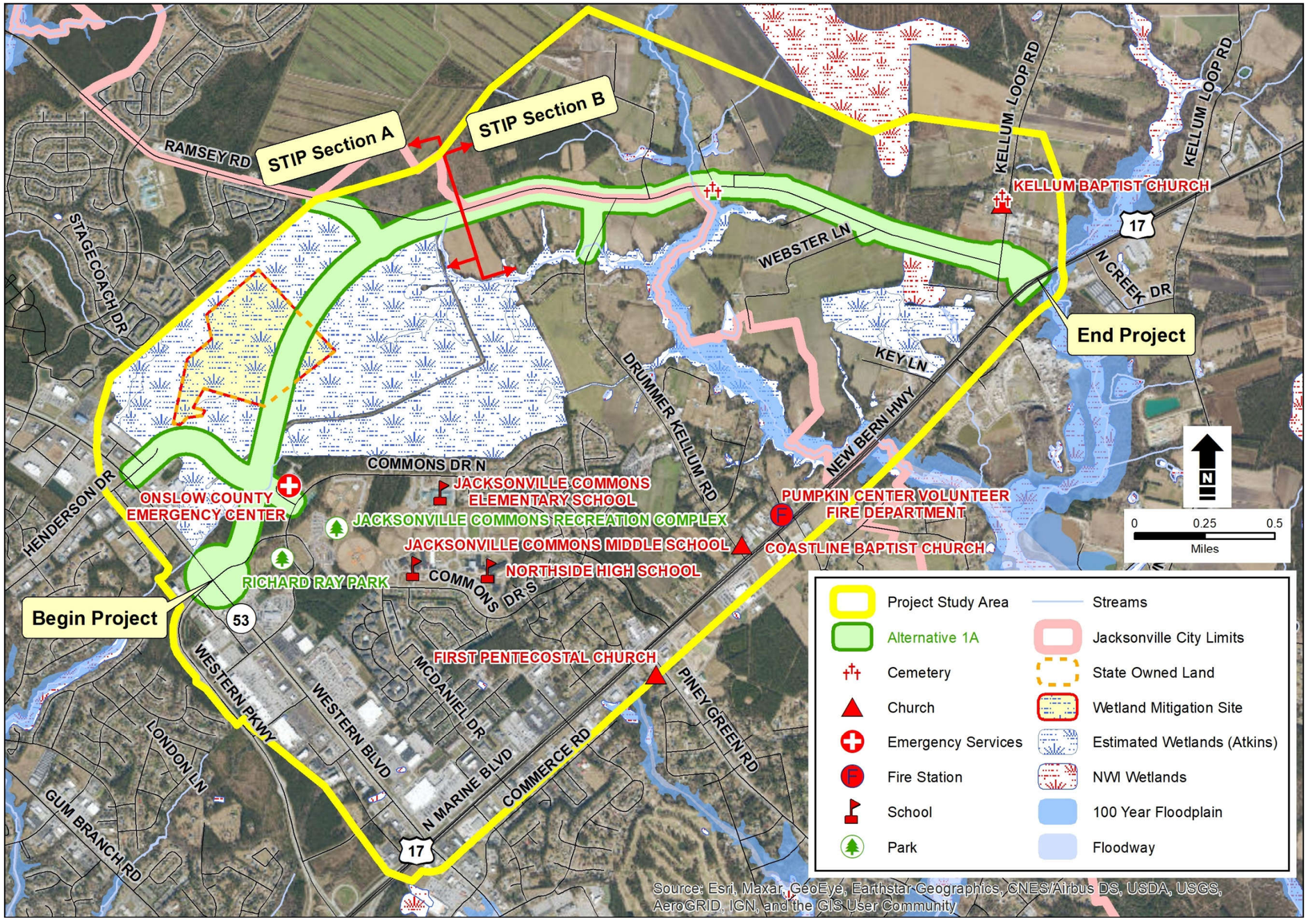


Figure 7. Corridor Concept Alternative 1b: New Northwestern Alignment and Ramsey Road Widening

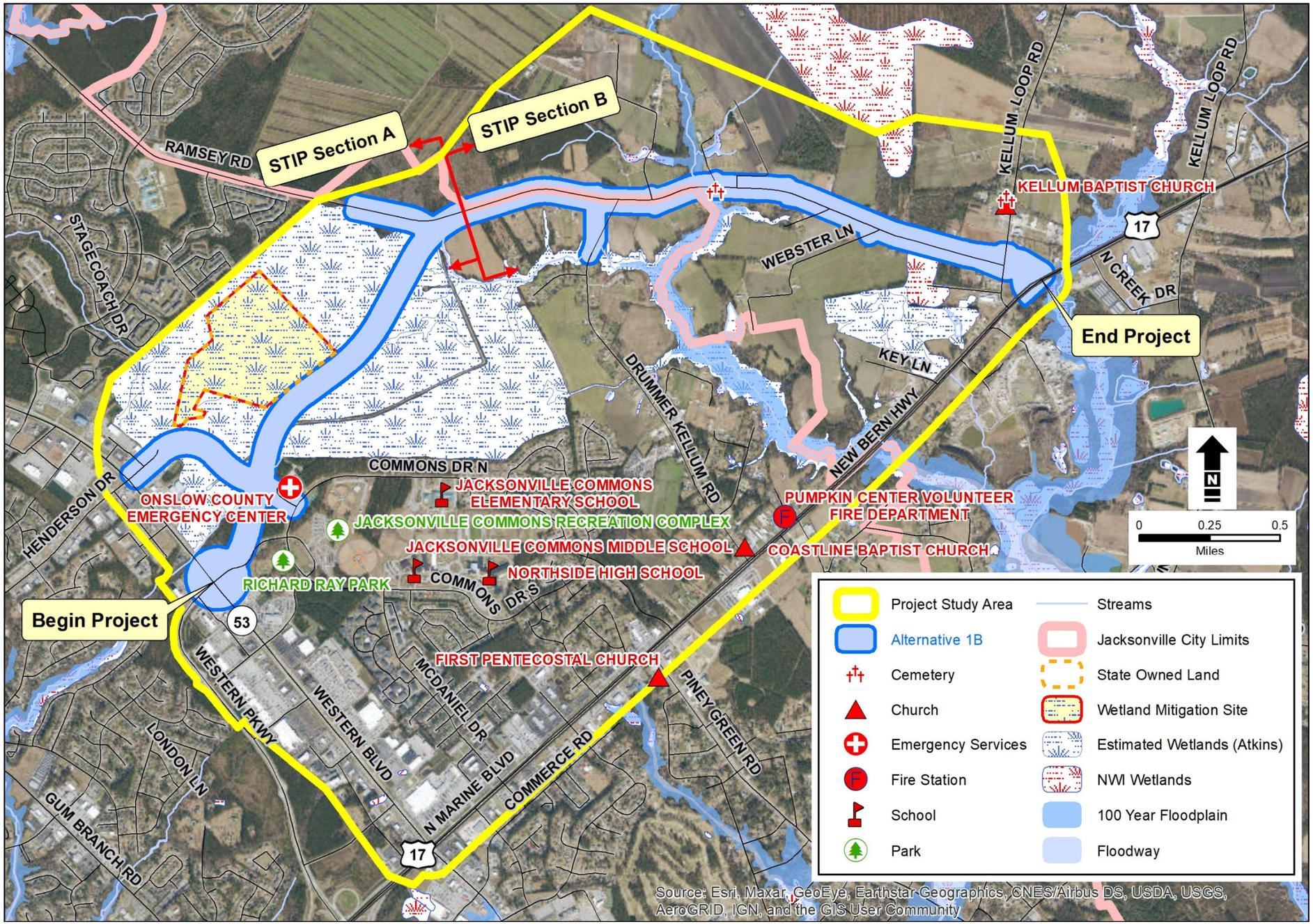


Figure 8. Corridor Concept Alternative 2a: New Southeastern Alignment and Ramsey Road Widening

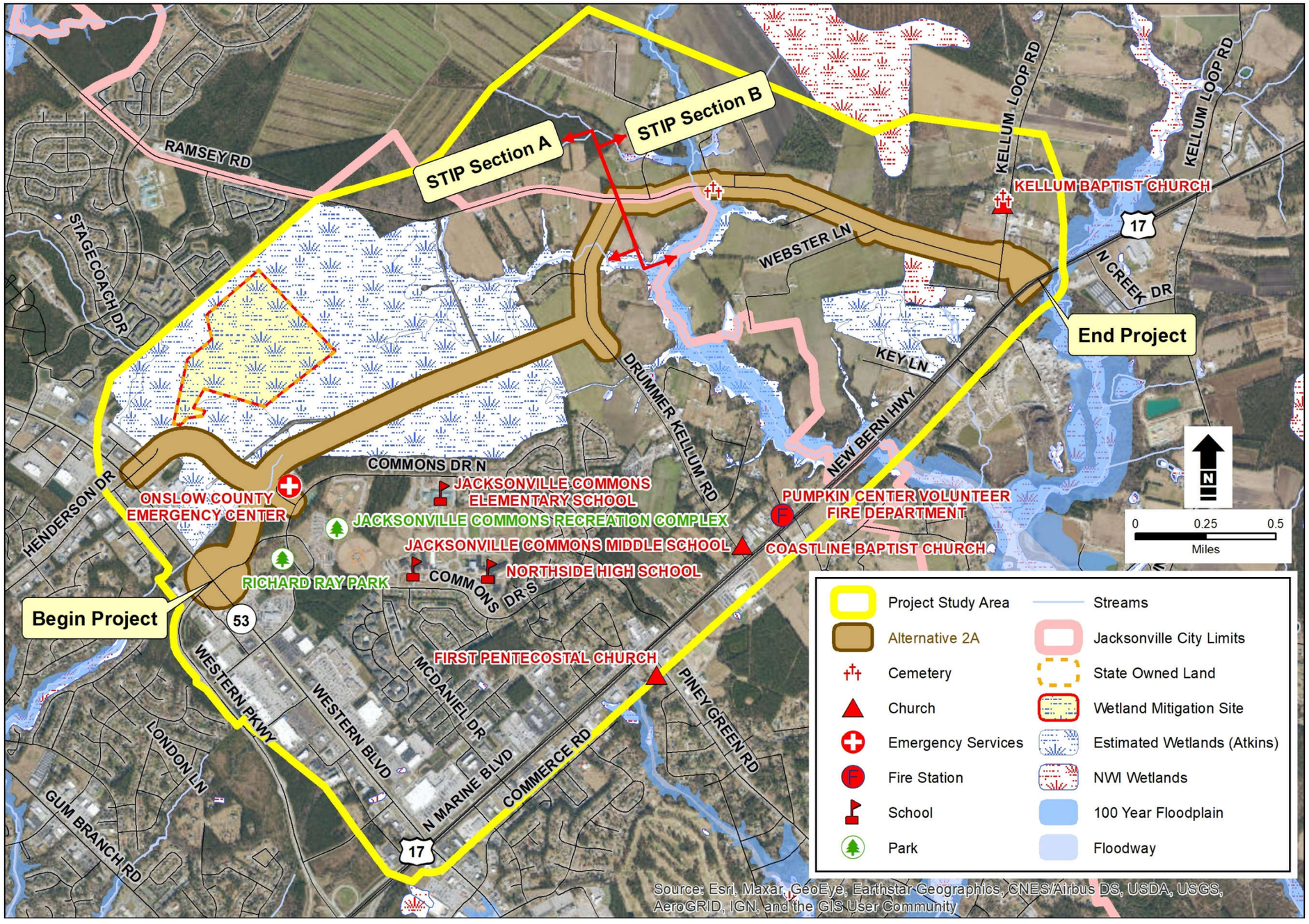


Figure 9. Corridor Concept Alternative 2b: New Southeastern Alignment

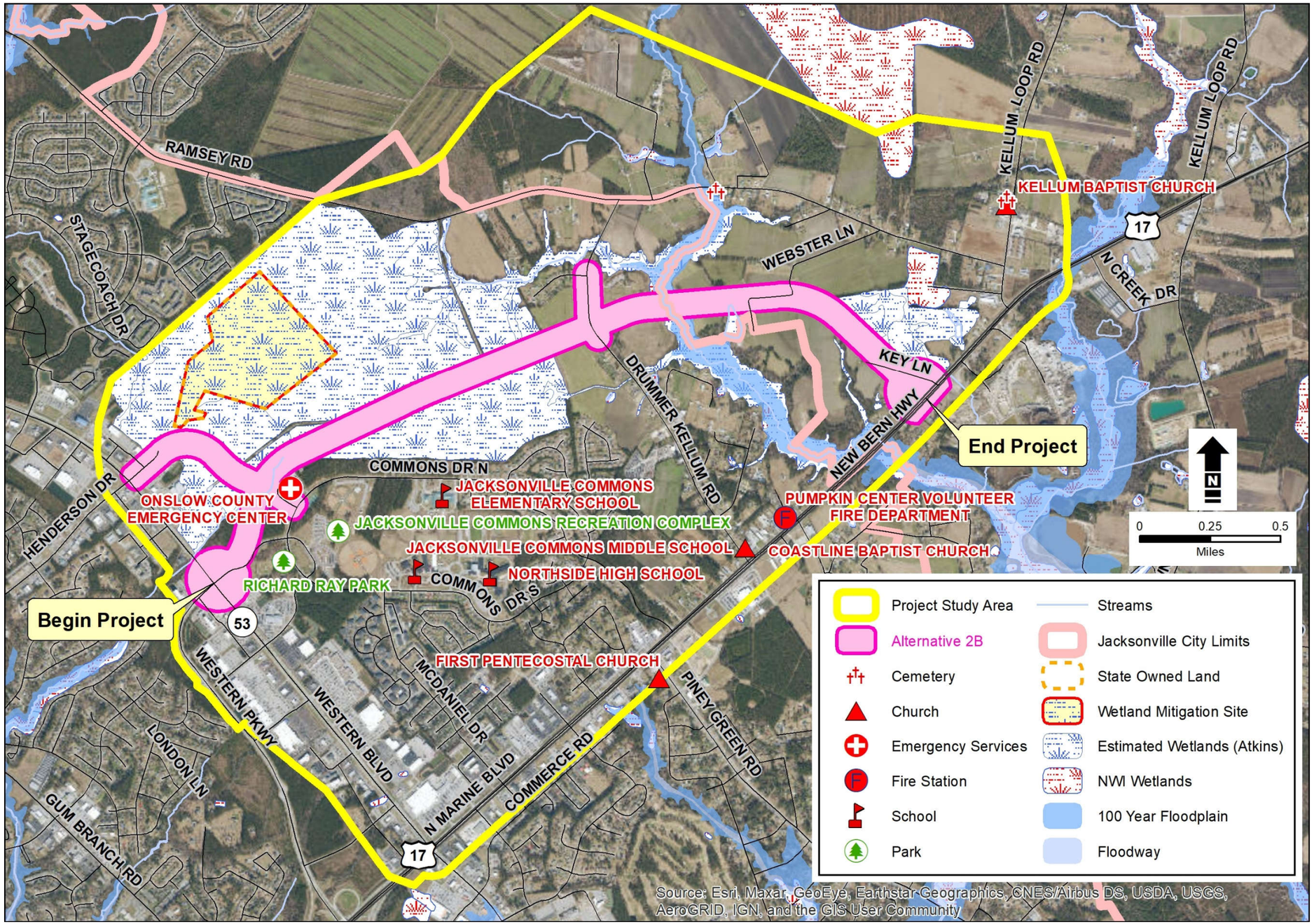
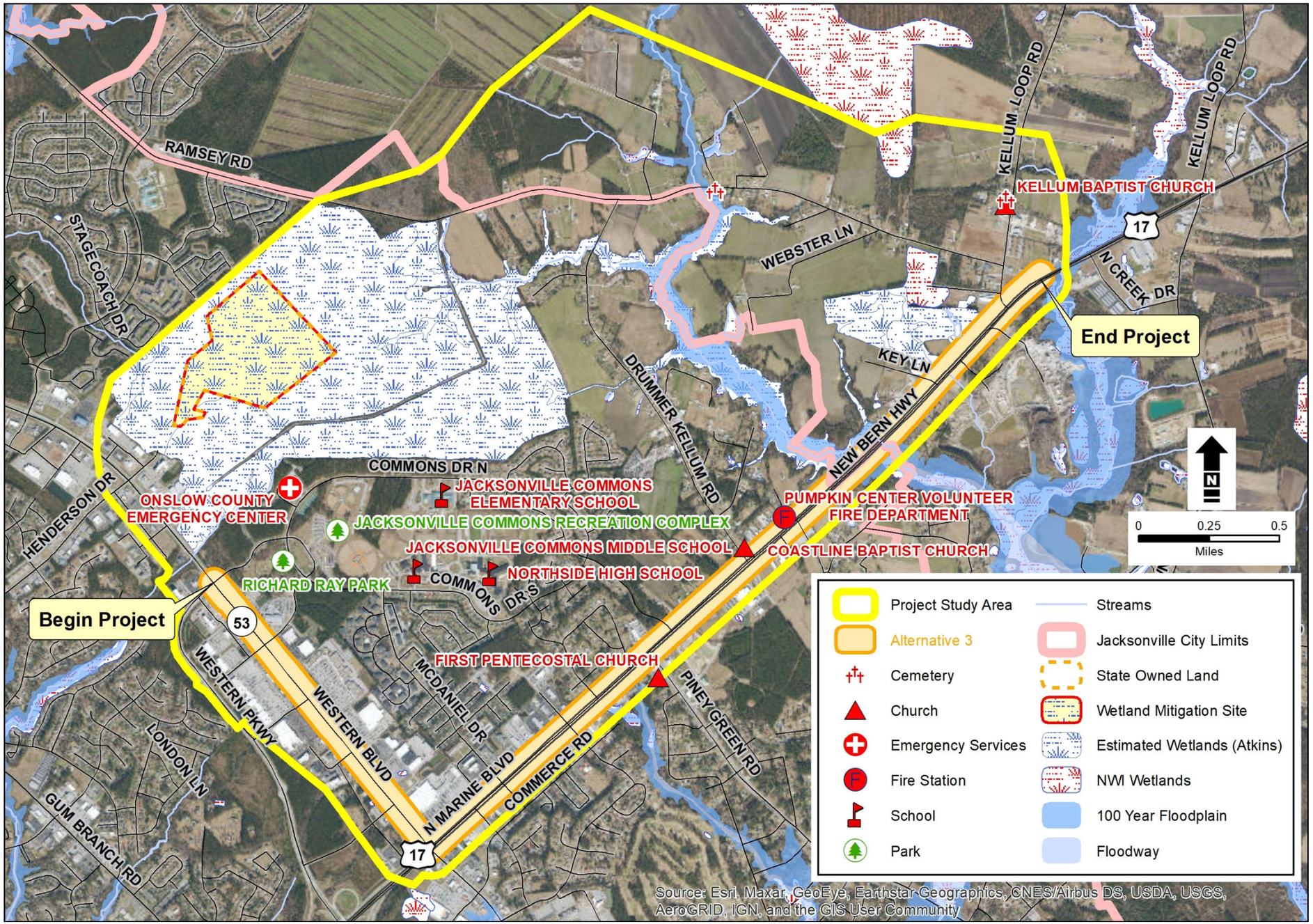


Figure 10. Corridor Concept Alternative 3: Improve Existing Western Boulevard and US 17



3.4 Third Level Screening – Alignment Alternatives Analysis

3.4.1 Third Level Screening Methodology

For the Third Screening, the project team developed conceptual designs with preliminary slope stakes plus 25 linear feet for the two corridor alignments from the Second Screening. Since Alternative 1b included the widening of Ramsey Road, northern, southern, and symmetrical alignment designs were developed to better evaluate impacts.

The alternatives evaluated in the Third Screening are:

- Alternative 1b – New Northwestern Alignment and Symmetrical Ramsey Road Widening
- Alternative 1b-N – New Northwestern Alignment and Northern Ramsey Road Widening
- Alternative 1b-S – New Northwestern Alignment and Southern Ramsey Road Widening
- Alternative 2b – New Southeastern Alignment

3.4.2 Build Alternatives – Alignment Alternatives Analysis

3.4.2.1 Alternative 1b – New Northwestern Alignment and Symmetrical Ramsey Road Widening

Alternative 1b (**Appendix A**) of the alignment analysis includes the construction of a new location roadway (Jacksonville Parkway) that will connect Western Boulevard to Ramsey Road near the intersection of Jacksonville Parkway and Western Boulevard (with an extension of Henderson Drive). From there, Ramsey Road would then be widened symmetrically from the new intersection of Jacksonville Parkway to US 17. Alternative 1b will potentially impact approximately 26 acres of wetlands, less than 1 acre of open water, and approximately 550 linear feet of streams within the project corridor. Approximately 62 acres of prime farmland are located within the project corridor, 2.8 acres of which are considered farmlands of statewide importance. Low-income, minority, and language-assistance populations are present within this corridor. Structures present within this alternative corridor include 11 residential structures and 1 business structure. As this alternative offers the least amount of potential impacts to structures located off of Ramsey Road in comparison to the other 1b alternatives, it is NCDOT's recommendation that this alternative be carried forward for detailed study in the environmental document.

3.4.2.2 Alternative 1b-N – New Northwestern Alignment and Northern Ramsey Road Widening

Alternative 1b-N (**Appendix A**) of the alignment analysis includes the construction of a new location roadway (Jacksonville Parkway) that will connect Western Boulevard to Ramsey Road near the intersection of Jacksonville Parkway and Western Boulevard (with an extension of Henderson Drive). From there, Ramsey Road would then be widened slightly north of the existing roadway from the new intersection of Jacksonville Parkway to US 17. Alternative 1b-N will potentially impact approximately 26 acres of wetlands, less than 1 acre of open water, and approximately 559 linear feet of streams within the project corridor. Approximately 63 acres of prime farmland are located within the project corridor, 2.8 acres of which are considered farmlands of statewide importance. Low-income, minority, and language-assistance populations are present within this corridor. Structures present within this alternative corridor include 16 residential structures and 1 business structure. As this alternative has the highest number of structures potentially impacted as well as the highest number of stream impacts in

comparison to the other 1b alternatives, it is NCDOT's recommendation that this alternative be eliminated from further study.

3.4.2.3 Alternative 1b-S – New Northwestern Alignment and Southern Ramsey Road Widening

Alternative 1b-S (**Appendix A**) of the alignment analysis includes the construction of a new location roadway (Jacksonville Parkway) that will connect Western Boulevard to Ramsey Road near the intersection of Jacksonville Parkway and Western Boulevard (with an extension of Henderson Drive). From there, Ramsey Road would then be widened slightly south of the existing roadway from the new intersection of Jacksonville Parkway to US 17. Alternative 1b-S will potentially impact approximately 26 acres of wetlands, less than 1 acre of open water, and approximately 543 linear feet of streams within the project corridor. Approximately 62 acres of prime farmland are located within the project corridor, 2.8 acres of which are considered farmlands of statewide importance. Low-income, minority, and language-assistance populations are present within this corridor. Structures present within this alternative corridor include 14 residential structures and 1 business structure. It is NCDOT's recommendation that this alternative be eliminated from further study due to its potential impacts to structures in comparison to other 1b alternatives.

3.4.2.4 Alternative 2b – New Southeastern Alignment

Alternative 2b (**Appendix A**) of the corridor concepts includes the construction of a new location roadway (Jacksonville Parkway) that will connect Western Boulevard to US 17. Alternative 2b starts from the same intersection as others listed above and is a completely new location roadway that intersects Drummer Kellum Road then continues on to connect to US 17 via Key Lane. Alternative 2b will potentially impact approximately 30 acres of wetlands, less than 1 acre of open water, and approximately 576 linear feet of streams within the project corridor. Approximately 39 acres of prime farmland are located within the project corridor, 3.5 acres of which are considered farmlands of statewide importance. Low-income, minority, and language-assistance populations are present within this corridor. Structures present within this alternative corridor include 6 residential structures and 2 business structure. As this alternative offers the least amount of potential impacts to wetlands, farmlands, and structures, it is NCDOT's recommendation that this alternative be carried forward for detailed study in the environmental document.

3.4.3 Summary of Third Level Screening Results

Table 6 below compares the potential impacts of each of the alignment alternatives. **Appendix B** includes the conceptual designs of the alignment alternatives. Based on the analysis above, NCDOT recommends that the following alignment alternatives be carried forward for detailed study:

- Alternative 1b – New Northwestern Alignment and Symmetrical Ramsey Road Widening
- Alternative 2b – New Southeastern Alignment

NCDOT recommends that the following corridor concept alternatives be eliminated from further study:

- Alternative 1b-N – New Northwestern Alignment and Northern Ramsey Road Widening
- Alternative 1b-S – New Northwestern Alignment and Southern Ramsey Road Widening

The Concurrence Point 2 concurrence form, which includes the detailed study corridor concept alternatives carried forward, is attached to this package in Appendix B.

Table 6. Alignment Alternatives Analysis Impact Summary

Alignment Alternative[1]	1b New Northwestern Alignment and Symmetrical Ramsey Road Widening	1b - N New Northwestern Alignment and Northern Ramsey Road Widening	1b-S New Northwestern Alignment and Southern Ramsey Road Widening	2b New Southeastern Alignment
F E A T U R E				
Alternative Length (miles)	3.85	4.18	3.85	3.03
Fulfills Purpose and Need	**Yes**	**Yes**	**Yes**	**Yes**
E N V I R O N M E N T A L R E S O U R C E S P R E S E N T				
Wetland Impacts[2] (Estimated)(acres)	26.06	26.1	25.88	29.2
Wetland Impacts (NWI)(acres)	0.14	0.14	0.14	0.82
Ponds[2] (acres)	0.97	0.97	0.97	0.02
Stream Impacts[2] (linear ft)	550	559	543	577
Ditches[2] (linear ft)	18,296	18,454	18,230	9,641
S T R U C T U R E S P R E S E N T				
Residential	11	16	14	6
Business	1	1	1	2
Recreational Areas/Parks[3]	2	2	2	2
Schools	0	0	0	0
Cemeteries	1	1	1	1
Churches	0	0	0	0
P A R C E L S P R E S E N T				
Parcels located within Alignment Corridor	130	129	131	47

NOTES: 1. Corridor width is based on conceptual designs with preliminary slope stakes plus 25 linear feet.
2. Wetland acreage determined through desktop evaluation process in coordination with the USACE. Jurisdictional status of wetlands, streams, and ditches will be determined during field delineations of the selected alternative.
3. http://ncnhde.natureserves.org/content/map

4 References

4.1 References

North Carolina Department of Transportation (NCDOT)

NCDOT 2020-2029 State Transportation Improvement Program (STIP)

NCDOT Crash Data Reports (2016-2021)

NCDOT Feasibility Study for Jacksonville Bypass Extension

NCDOT FS-0303C Proposed Connector (Northwest Corridor) From US 258/NC 24 to US 17 (November 2007)

NCDOT FS-1003A: NC 53 (Western Boulevard) from US 17 to NC 24 (June 2016)

MPO Documents

JUMPO Jacksonville Bicycle and Pedestrian Transportation Plan (June 2008)

Jacksonville Urban Area Metropolitan Planning Organization (JUMPO) 2045 Metropolitan Transportation Plan (March 2020)

JUMPO Western Boulevard (NC 53) Corridor Study (January 2015)

Local Plans and Documents

MCB Camp Lejeune/MCAS New River Transportation Demand Management Plan (June 2011)

Onslow County Comprehensive Plan (CAMA Core Land Use Plan) (Oct 2009)

Socio-Economic Data Sources

US Census Bureau American Community Survey (ACS) 5-Year Estimate (2011-2015)

US Census Bureau 2000, 2010

NC Office of State Budget and Management

4.2 Supporting Documentation

2018, August Traffic Forecast for U-5791 (SR 2714 (Jacksonville Parkway Extension) from NC 24 to US 17) and U-6081 (NC 53 (Western Boulevard) Improvements) Onslow County. Prepared by Patriot Transportation Engineering.

2019, August NCDOT Alternatives Analysis Meeting Minutes. Prepared by Atkins

Appendix A. Alignment Alternatives

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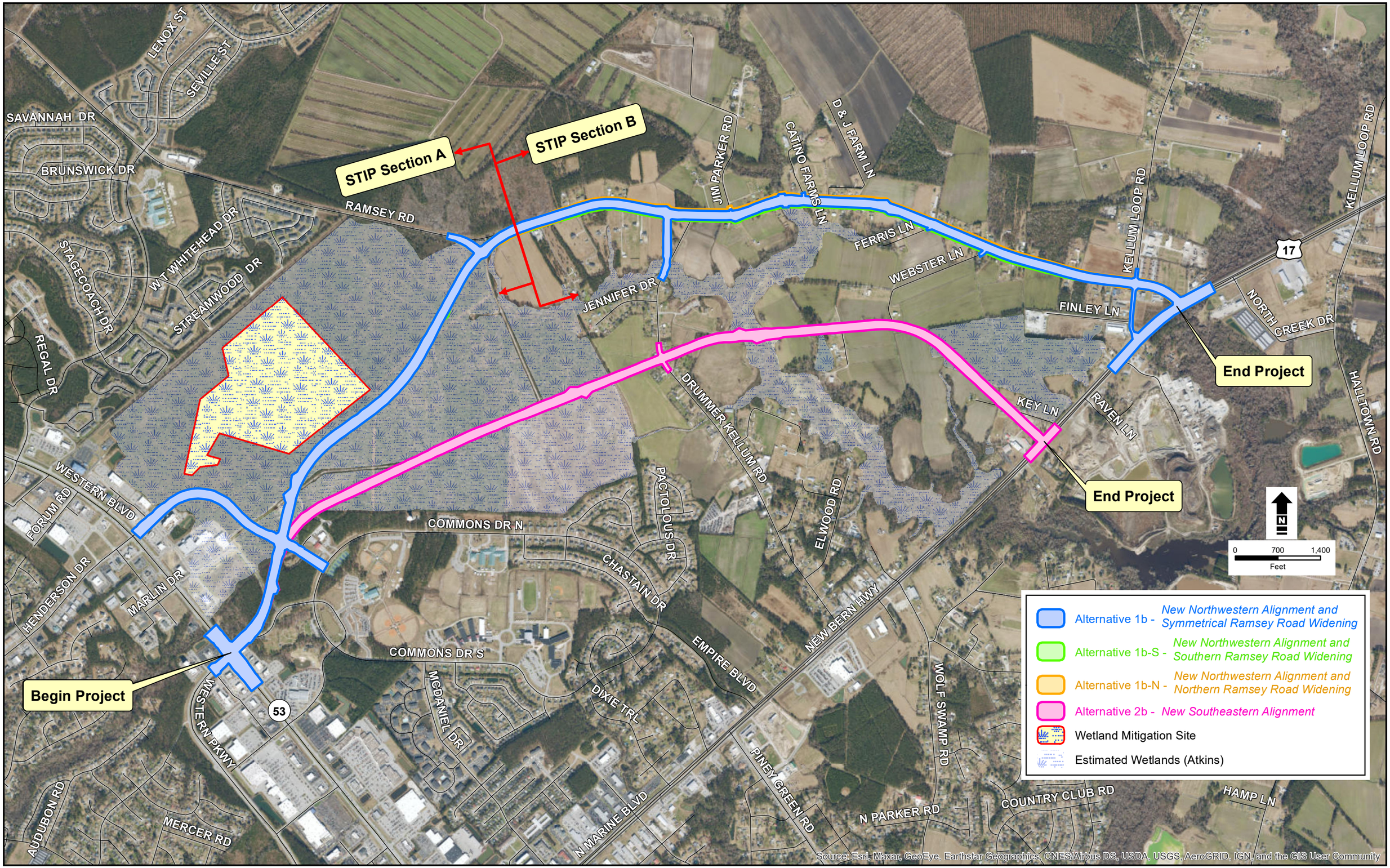

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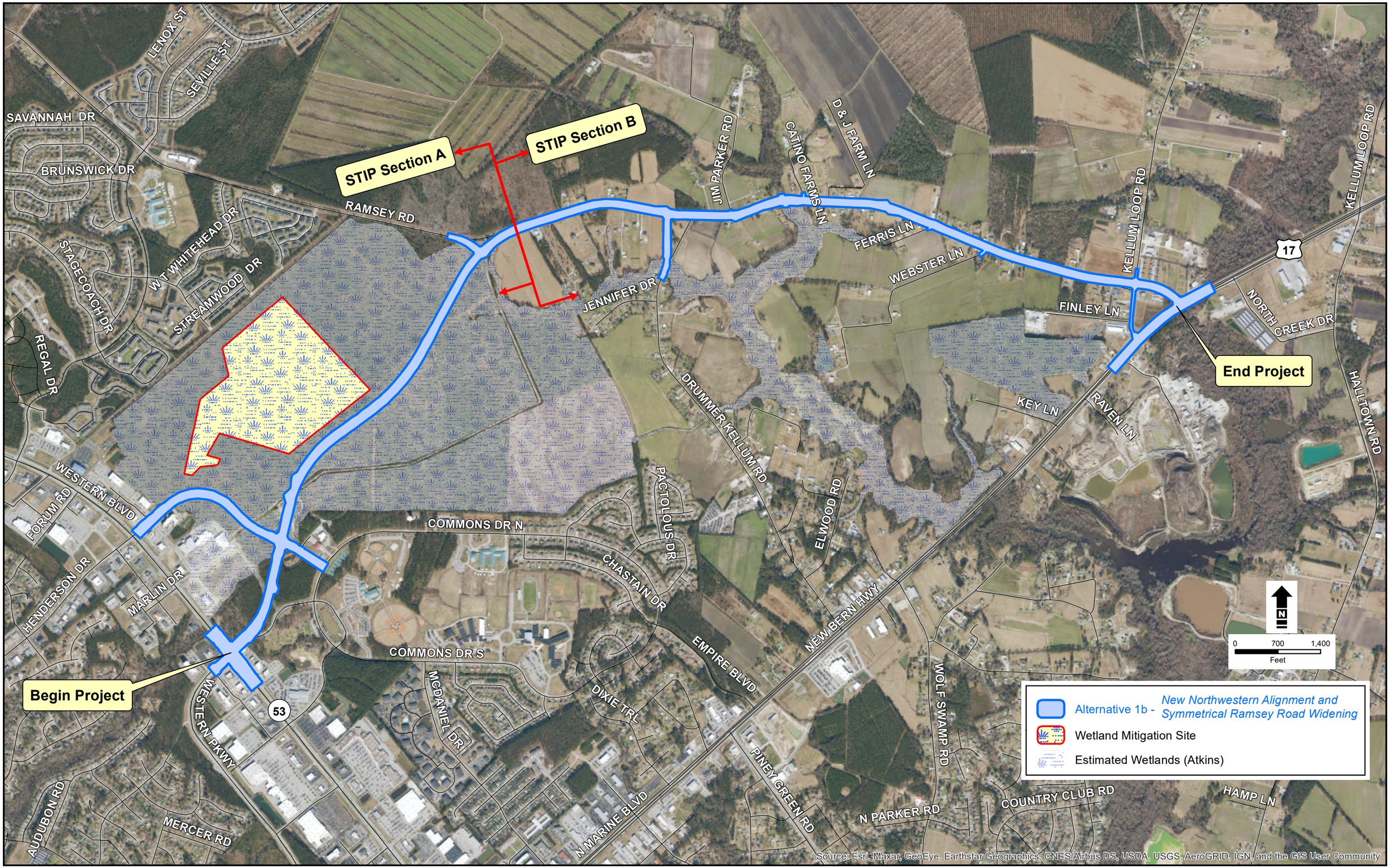

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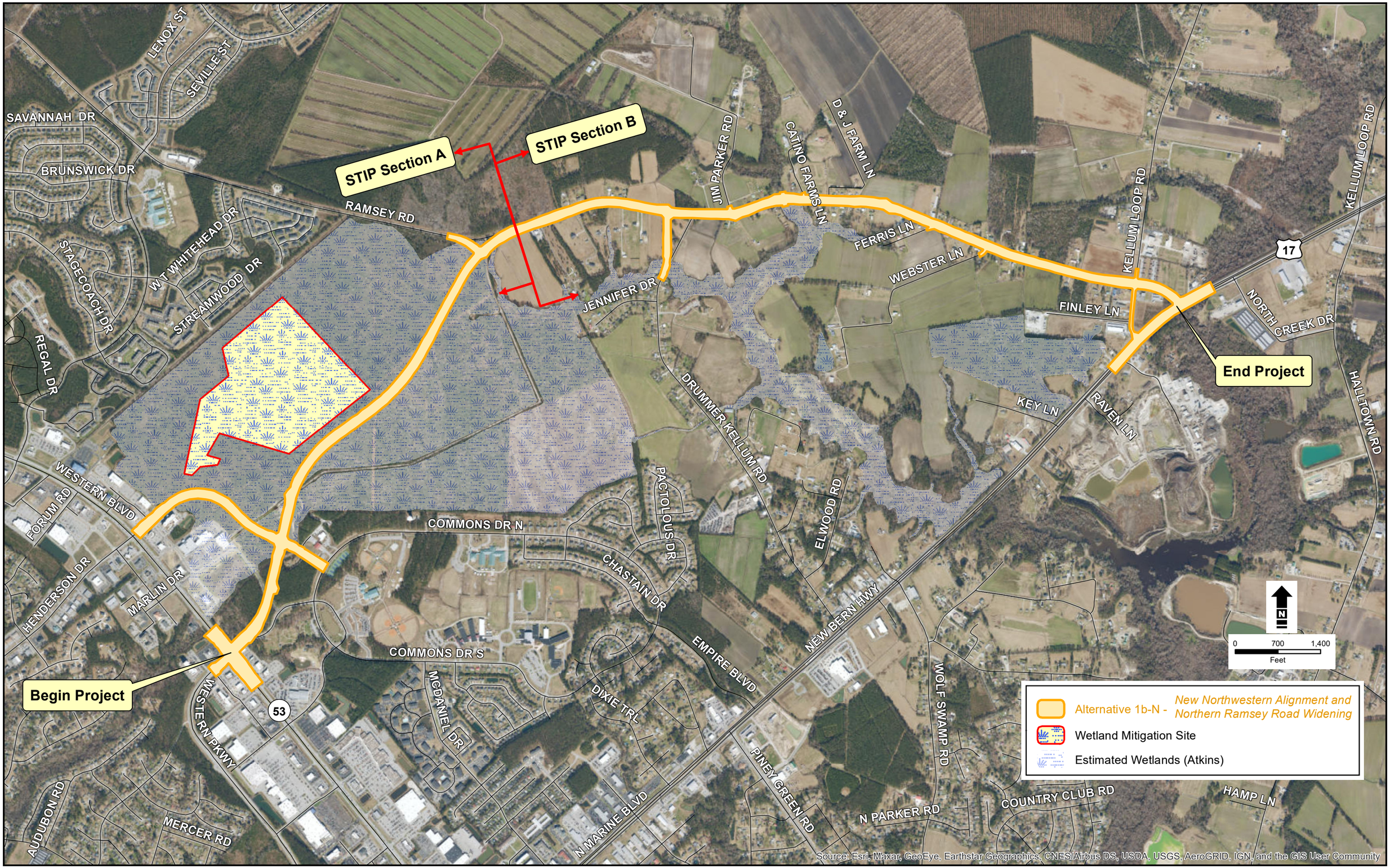

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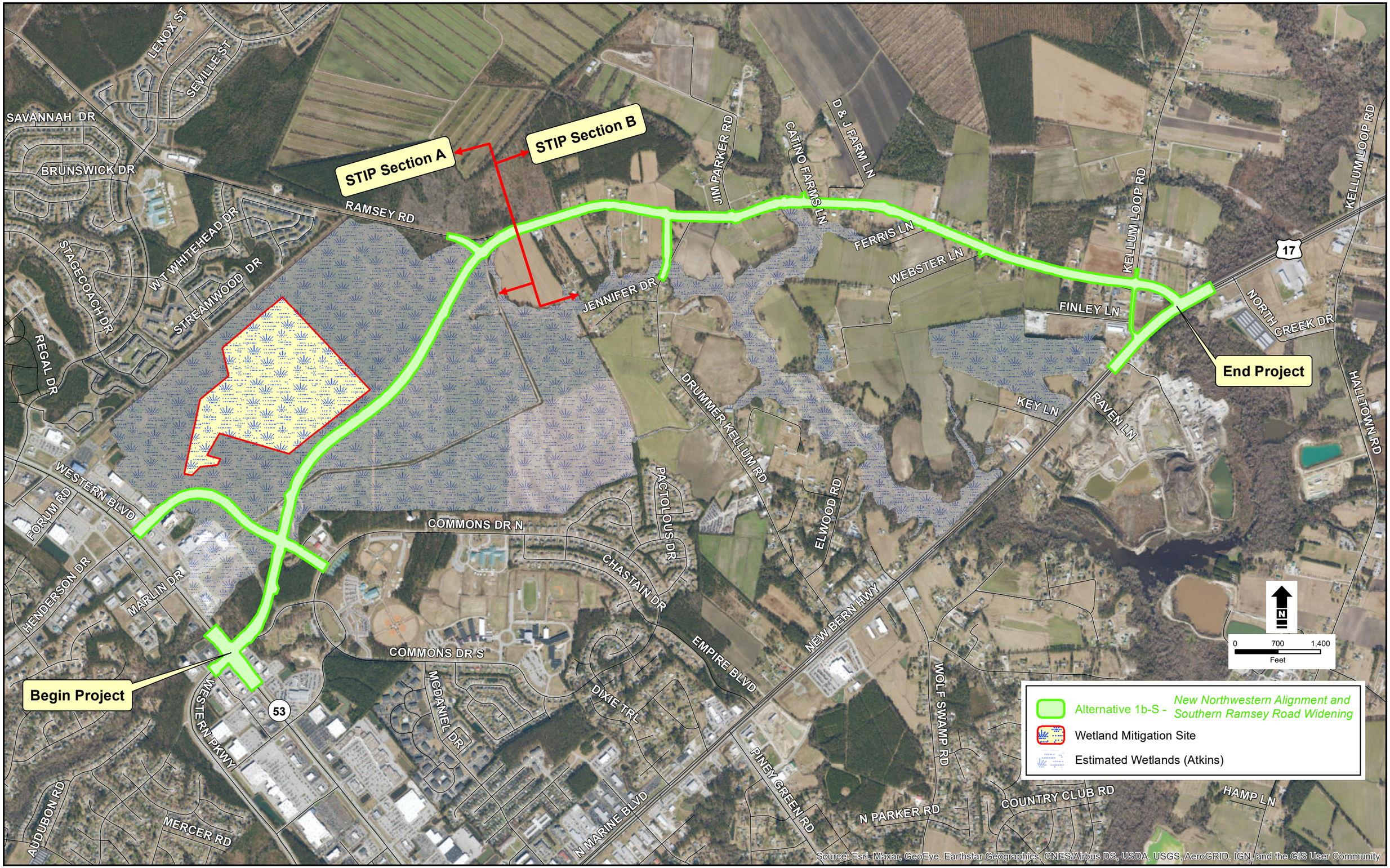

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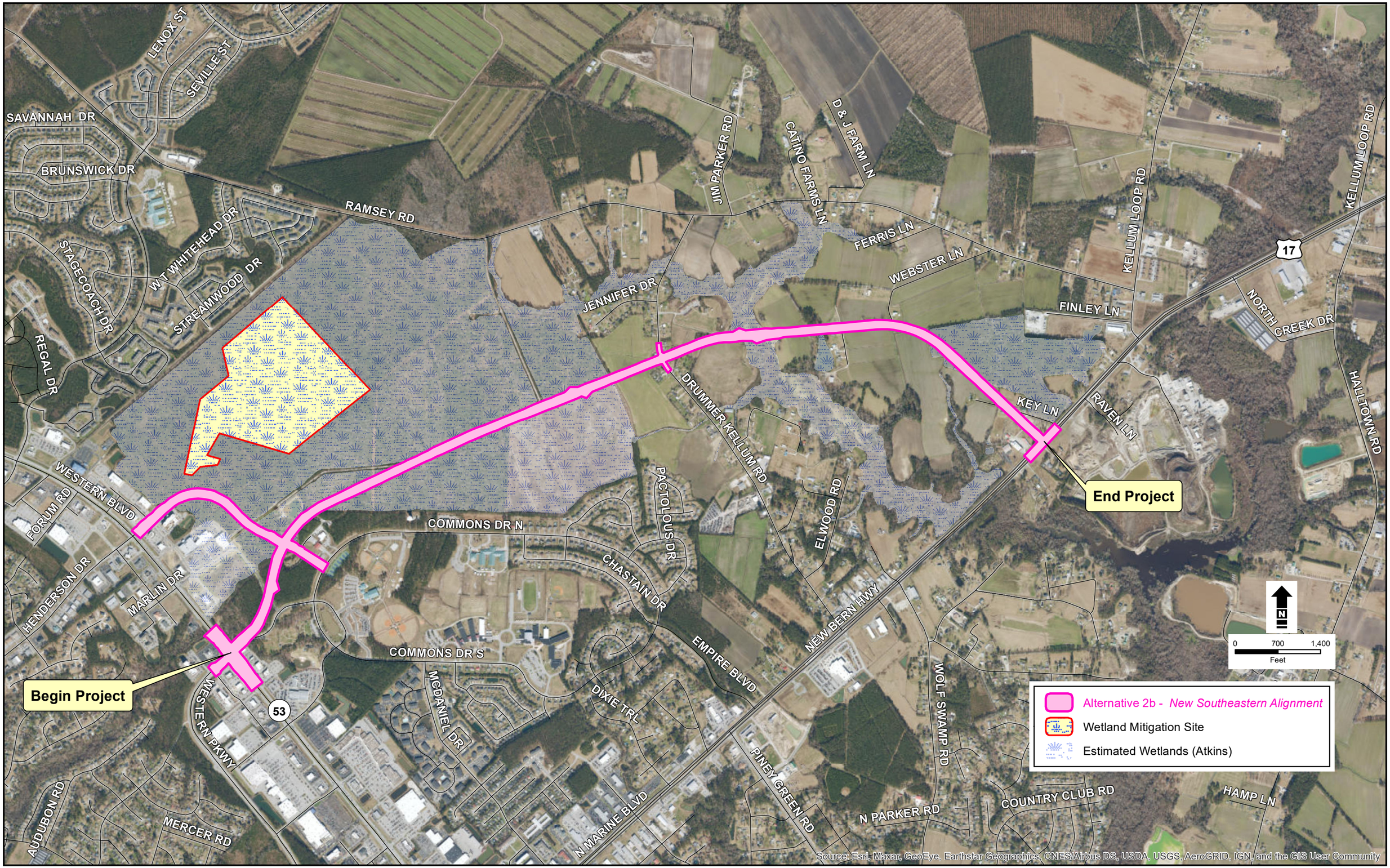
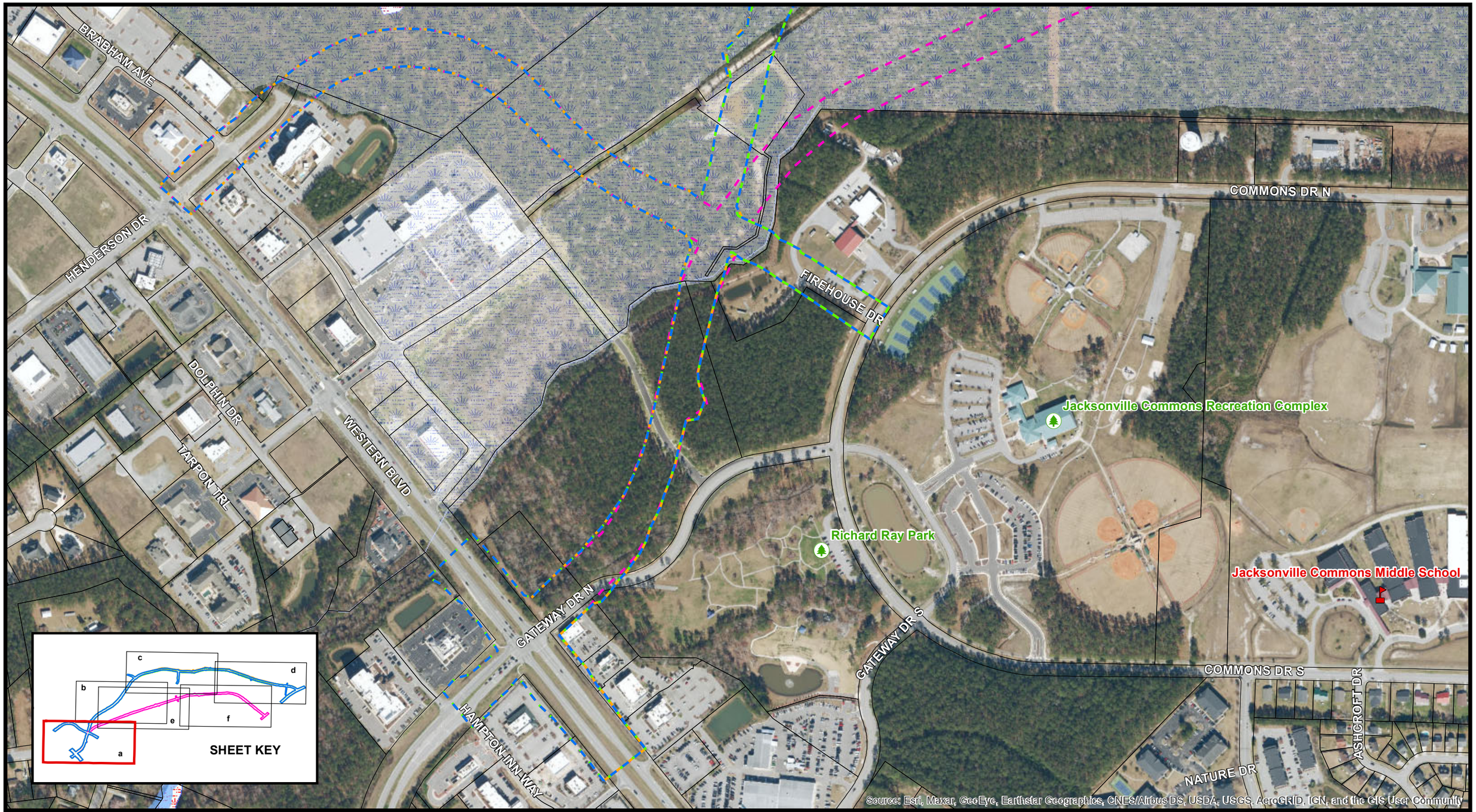


Appendix B. Conceptual Designs of Alignment Alternatives



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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Feet

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Source: ESRI, NCDOT, Onslow County, NCOneMap, City of Jacksonville.
Aerial Photo: http://goto.arcgisonline.com/maps/World_Imagery

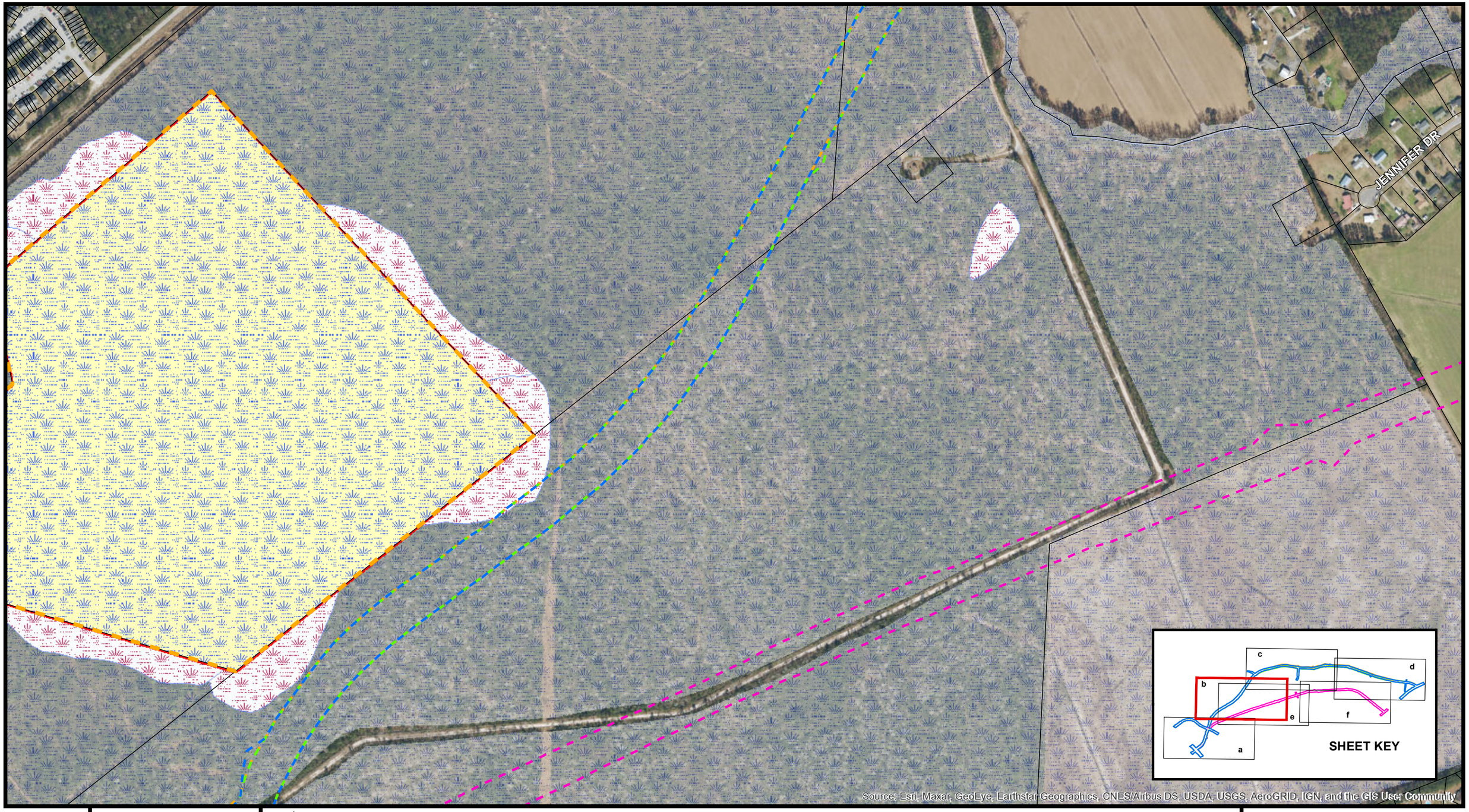
LEGEND

- Church
- School
- Park
- Alternative 1b - *New Northwestern Alignment and Symmetrical Ramsey Road Widening*
- Alternative 1b-N - *New Northwestern Alignment and Northern Ramsey Road Widening*
- Alternative 1b-S - *New Northwestern Alignment and Southern Ramsey Road Widening*
- Alternative 2b - *New Southeastern Alignment*
- Parcels
- State Owned Land
- Wetland Mitigation Site
- Streams
- 100 Year Floodplain
- Floodway
- Estimated Wetlands (Atkins)
- NWI Wetlands

ALIGNMENT ALTERNATIVES

JACKSONVILLE PARKWAY EXTENSION
NC 53 (WESTERN BLVD.) TO US 17
STIP PROJECT NO. U-5791

SHEET 11a



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Source: ESRI, NCDOT, Onslow County, NCOneMap, City of Jacksonville. Aerial Photo: http://goto.arcgisonline.com/maps/World_Imagery

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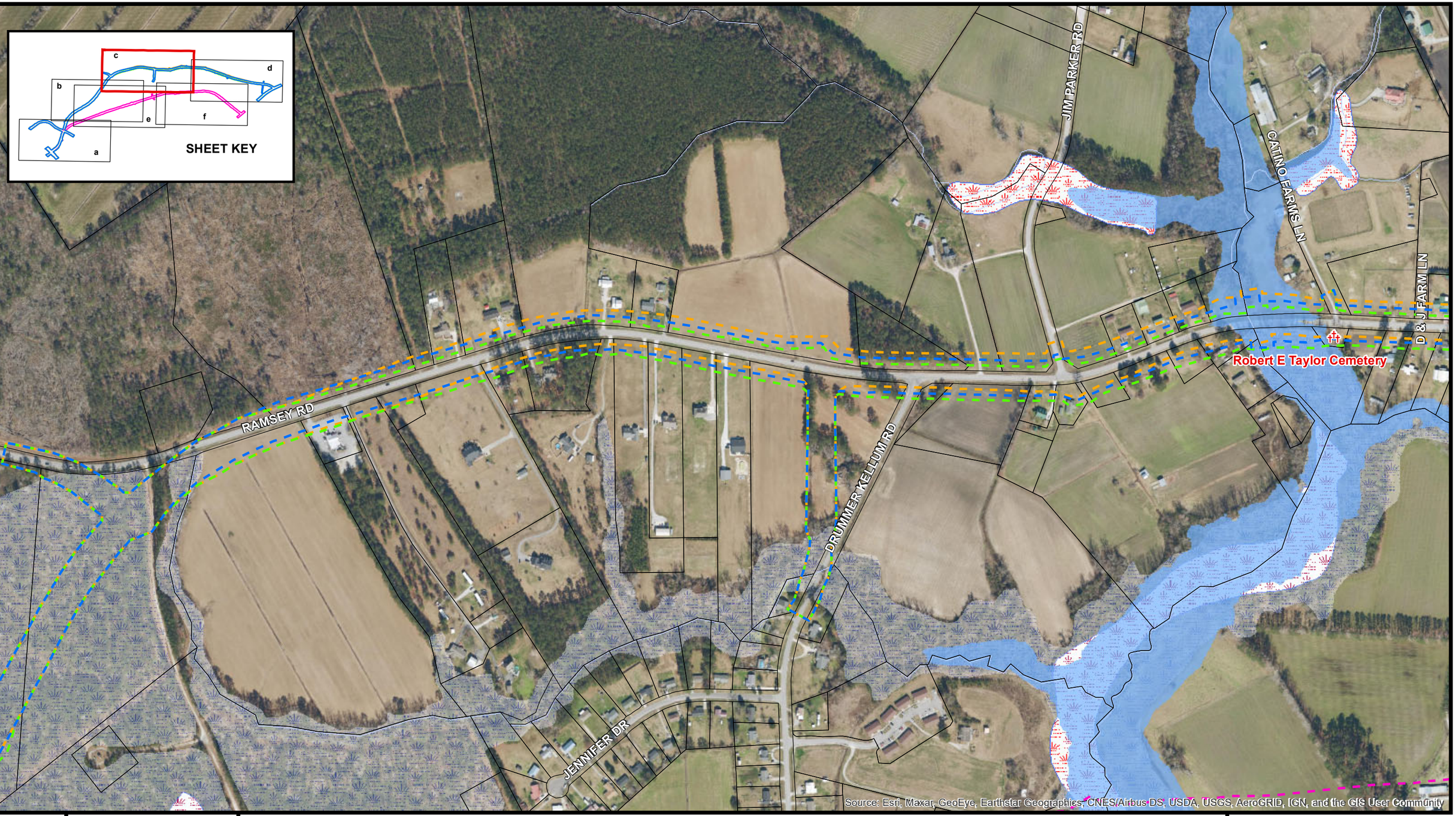
- Streams
- 100 Year Floodplain
- Floodway
- Estimated Wetlands (Atkins)
- NWI Wetlands

ALIGNMENT ALTERNATIVES

JACKSONVILLE PARKWAY EXTENSION
NC 53 (WESTERN BLVD.) TO US 17
STIP PROJECT NO. U-5791

SHEET 11b



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LEGEND

- Church
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- Parcels
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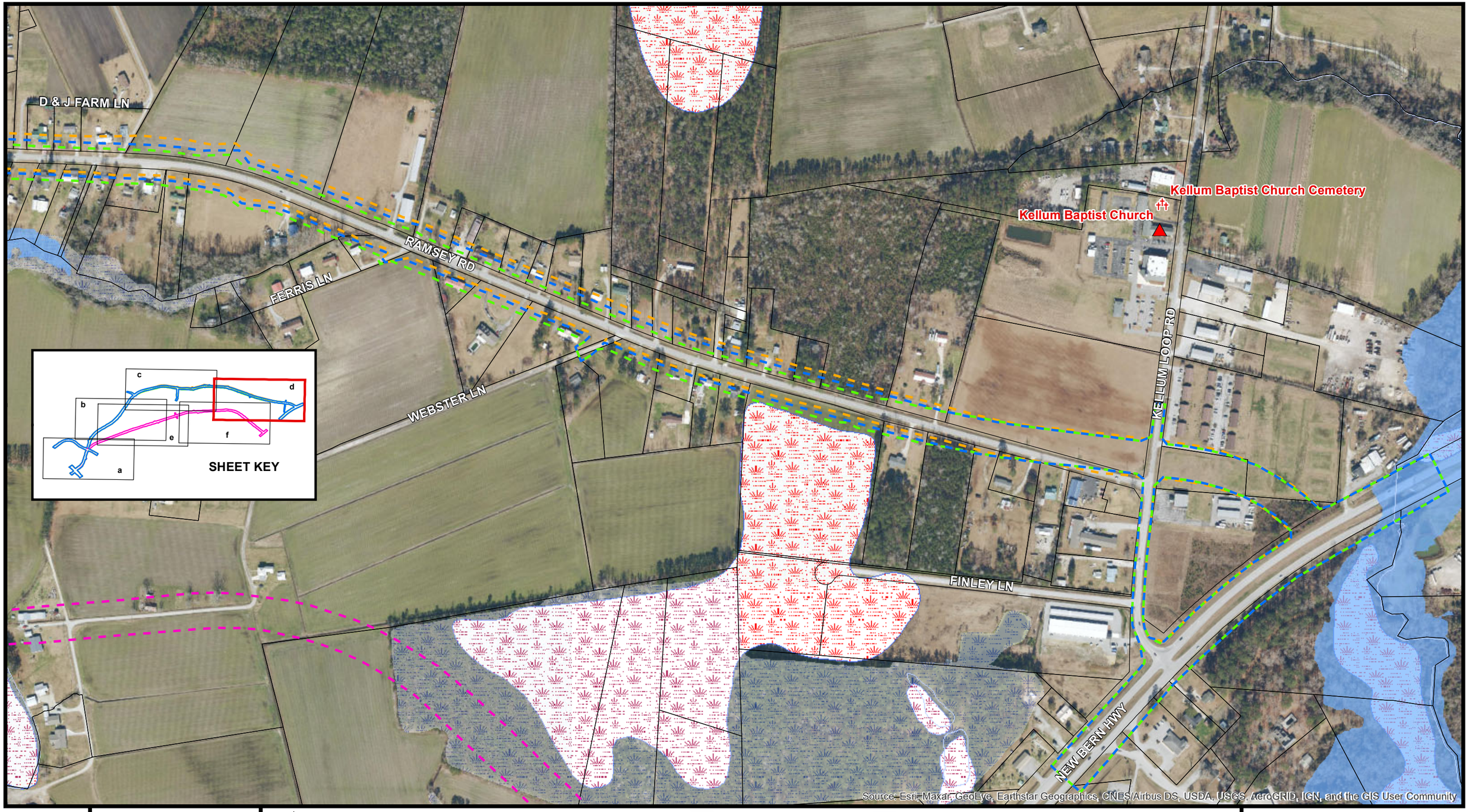
- Streams
- 100 Year Floodplain
- Floodway
- Estimated Wetlands (Atkins)
- NWI Wetlands

ALIGNMENT ALTERNATIVES

JACKSONVILLE PARKWAY EXTENSION
NC 53 (WESTERN BLVD.) TO US 17
STIP PROJECT NO. U-5791

SHEET 11c



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Aerial Photo: http://goto.arcgisonline.com/maps/World_Imagery

LEGEND

- Church
- School
- Park
- Alternative 1b - *New Northwestern Alignment and Symmetrical Ramsey Road Widening*
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ALIGNMENT ALTERNATIVES

JACKSONVILLE PARKWAY EXTENSION
NC 53 (WESTERN BLVD.) TO US 17
STIP PROJECT NO. U-5791

SHEET 11d

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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Source: ESRI, NCDOT, Onslow County, NCOneMap, City of Jacksonville. Aerial Photo: http://goto.arcgisonline.com/maps/World_Imagery

LEGEND

- Church
- School
- Park

- Alternative 1b - *New Northwestern Alignment and Symmetrical Ramsey Road Widening*
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- Alternative 1b-S - *New Northwestern Alignment and Southern Ramsey Road Widening*
- Alternative 2b - *New Southeastern Alignment*

- Parcels
- State Owned Land
- Wetland Mitigation Site
- Streams

- 100 Year Floodplain
- Floodway
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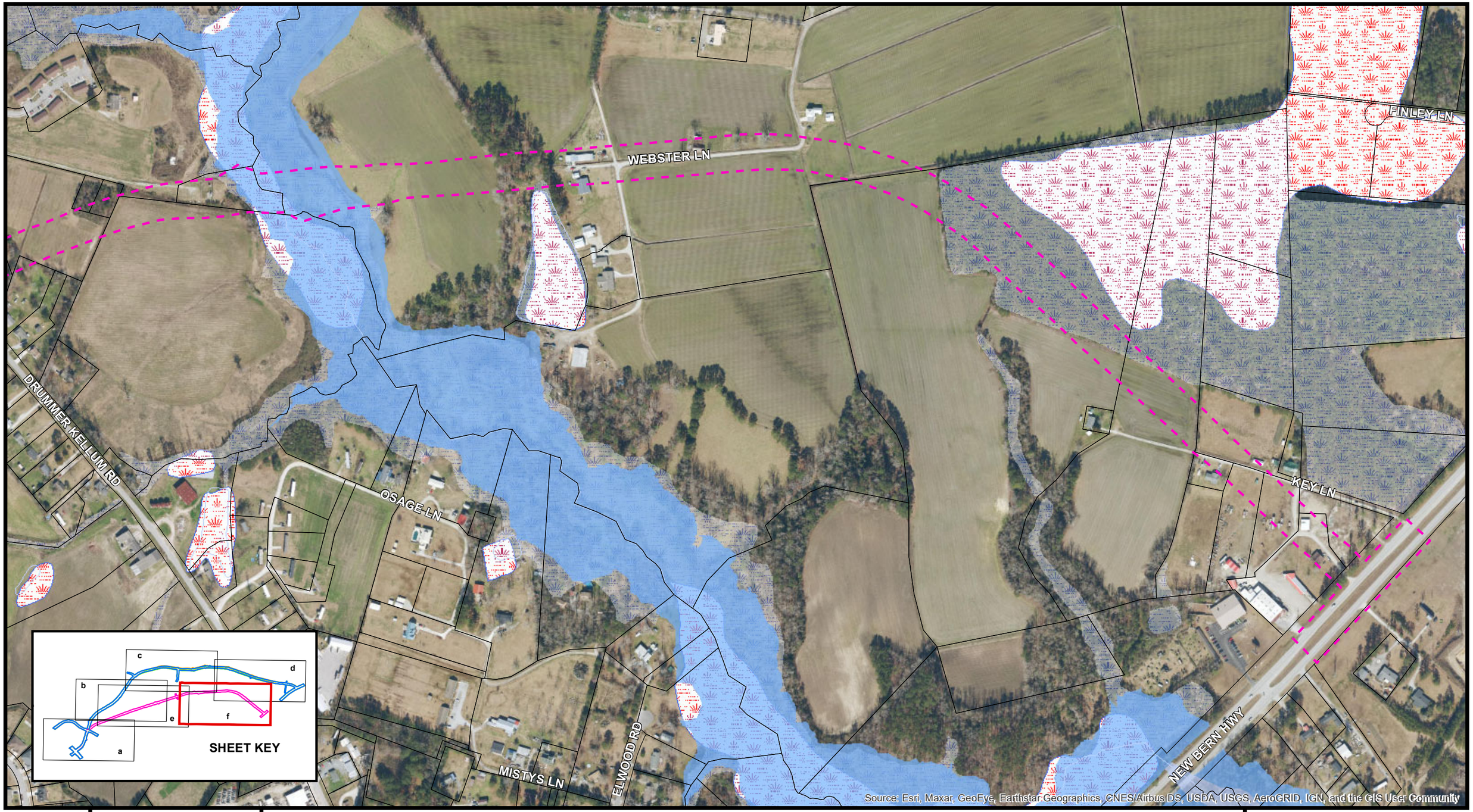
ALIGNMENT ALTERNATIVES

JACKSONVILLE PARKWAY EXTENSION
NC 53 (WESTERN BLVD.) TO US 17
STIP PROJECT NO. U-5791

SHEET 11e



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LEGEND

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- School
- Park

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- Alternative 1b-N - *New Northwestern Alignment and Northern Ramsey Road Widening*
- Alternative 1b-S - *New Northwestern Alignment and Southern Ramsey Road Widening*
- Alternative 2b - *New Southeastern Alignment*

- Parcels
- State Owned Land
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ALIGNMENT ALTERNATIVES

JACKSONVILLE PARKWAY EXTENSION
NC 53 (WESTERN BLVD.) TO US 17
STIP PROJECT NO. U-5791

SHEET 11f

Appendix C. Concurrence 1 and 2 Forms

Section 404/NEPA Merger Team Meeting Agreement

Concurrence Point No. 1
Project Purpose & Need and Proposed Study Area

Project Name/Description: Extension of Jacksonville Parkway (SR 2714) from Western Boulevard (NC 53) to New Bern Highway (US 17) in Onslow County. The proposed project would include U-5791A: the construction of a new location four-lane divided roadway from Western Boulevard (NC 53) to Ramsey Road (SR 1324) and U-5791B: the widening of Ramsey Road from 2 lanes to 4 lanes from the new location roadway to New Bern Highway (US 17). The southern piece of Jacksonville Parkway from US 17 to Western Boulevard was completed in December 2013.

WBS No. 44363.1.1, STIP Project No. U-5791A and U-5791B.

Purpose and Need of Proposed Project

The needs to be addressed by this project can be summarized as follows:

- 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.
- There are limited options for transportation access in this area of Jacksonville.

The purpose of the proposed project is to provide an alternate route to alleviate some existing and future congestion along existing roadways, provide an alternative route to enhance mobility along Western Boulevard and US 17, and provide additional access to existing and future development.

Project Study Area

The proposed project study area was developed to address the above-stated purpose and need for U-5791. The project study area boundaries are fully depicted on Figures 1 and 2 of the Merger packet.

The Merger Team members have concurred, on this date of September 8, 2021, on the project purpose and need as stated above and the project study area fully depicted in Figures 1 and 2 of the Merger packet.

USACE_____ FHWA_____

USEPA_____ NCDOT_____

USFWS_____ NOAA Fisheries_____

NCDWR_____ NCHPO_____

NCWRC_____ JUMPO_____

NCDCM_____

Section 404/NEPA Merger Team Meeting Agreement

Concurrence Point No. 2
Detailed Study Alternatives Carried Forward

Project Name/Description: Extension of Jacksonville Parkway (SR 2714) from Western Boulevard (NC 53) to New Bern Highway (US 17) in Onslow County. The proposed project would include U-5791A: the construction of a new location four-lane divided roadway from Western Boulevard (NC 53) to Ramsey Road (SR 1324) and U-5791B: the widening of Ramsey Road from 2 lanes to 4 lanes from the new location roadway to New Bern Highway (US 17).

WBS No. 44363.1.1, STIP Project No. U-5791A and U-5791B.

Alignment Alternatives Carried Forward:

_____ Alternative 1b – New Northwestern Alignment and Symmetrical Ramsey Road Widening

_____ Alternative 1b-N - New Northwestern Alignment and Northern Ramsey Road Widening

_____ Alternative 1b-S – New Northwestern Alignment and Northern Ramsey Road Widening

_____ Alternative 2b – New Southeastern Alignment

The Merger Team members have concurred, on this date of September 8, 2021, on the above identified detailed study alternatives to be carried forward for STIP Project U-5791.

USACE_____ FHWA_____

USEPA_____ NCDOT_____

USFWS_____ NOAA Fisheries_____

NCDWR_____ NCHPO_____

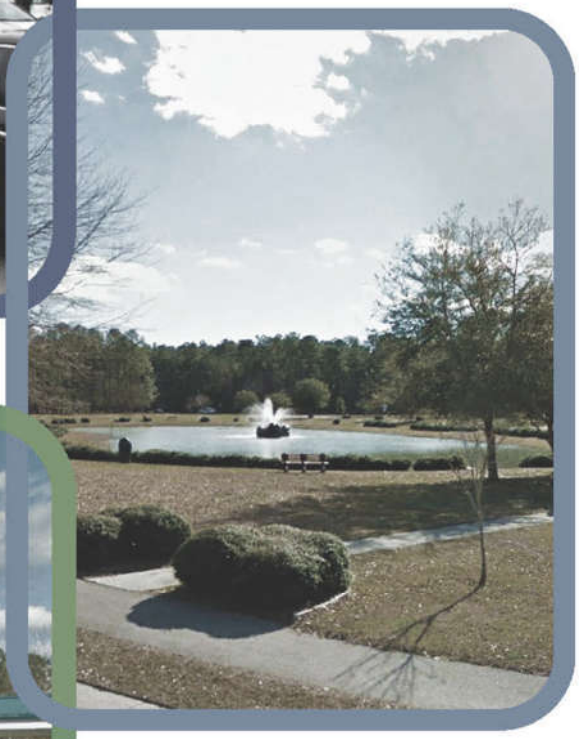
NCWRC_____ JUMPO_____

NCDCM_____

U-5791

Jacksonville Parkway Extension

NC 53 (Western Boulevard) to US 17 (New Bern Highway), Widen to Multi-Lanes, Part on New Location



ATKINS