US Department of Transportation
Federal Railroad Administration

Montgomery Intermodal Container Transfer Facility

Environmental Assessment

July 2024

Notice

Montgomery Intermodal Container Transfer Facility

Environmental Assessment

Prepared For:

US Department of Transportation
Federal Railroad Administration

Prepared by:

Volkert, Inc.

Pursuant to:

National Environmental Policy Act (42 USC § 4321 et seq.) and implementing regulations (40 CFR Part 1500 et seq.), Section 4(f) of the US Department of Transportation Act (49 U.S.C. § 303(c)), FRA Procedures for Considering Environmental Impacts (64 Fed. Reg. 28545, May 26, 1999); National Historic Preservation Act (54 USC § 300101 et seq.) and implementing regulations (36 C.F.R. Part 800); Clean Air Act, as amended (42 USC § 7401 et seq.) and implementing regulations (40 C.F.R. Parts 51 and 93); the Endangered Species Act of 1973 (16 U.S.C. §t 1531 et seq.) and implementing regulations (50 C.F.R. Part 402); and the Clean Water Act (33 U.S.C. §1251 et seq.) and implementing regulations (33 C.F.R. Part 320 et seq. and 40 C.F.R. Part 230).

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Stephanie Perez-Arrieta — Date

Chief, RRD-32, Environmental Review Division
Federal Railroad Administration

Table of Contents

List of Figures

List of Tables

Appendices

List of Acronyms and Abbreviations

ACS	American Community Service
ADCNR	Alabama Department of Conservation and Natural Resources
ADECA	Alabama Department of Economic and Community Affairs
ADEM	Alabama Department of Environmental Management
AHC	Alabama Historical Commission
ALDOT	Alabama Department of Transportation
APE	Area of Potential Effect
ASPA	Alabama State Port Authority
BS	Biological Study
BGEPA	Bald and Golden Eagle Protection Act
BMPs	Best Management Practices
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CH4	Methane
CLOMR	Conditional Letter of Map Revision
CO2	Carbon Dioxide
CRA	Cultural Resources Assessment
CRISI	Consolidated Rail Infrastructure and Safety Improvements
CSXT	CSX Transportation
CWA	Clean Water Act
dB	Decibel Unit
bBA	A-weighted Decibel Unit
EA	Environmental Assessment
EIS	Environmental Impact Statement
EJ	Environmental Justice
EMS	Emergency Medical Service
EO	Executive Order
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impacts
FPPA	Farmland Protection Policy Act
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GCR	General Conformity Rule
GHG	Green House Gas
HHS	Health and Human Services
I-65	Interstate 65
I-85	Interstate 85
ICTF	Intermodal Container Transfer facility
IPAC	Information for Planning and Consultation
LOD	Limits of Disturbance
LWCF	Land and Water Conservation Fund Act
MBTA	Migratory Bird Treaty Act
MHI	Median Household Income
NAAQS	National ambient Air Quality Standards

NAC	Noise Abatement Criteria
NEPA	National Environmental Protection Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NOx	Nitrous Oxides
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
PPV	Peak Particle Velocity
Port	Port of Mobile
REC	Recognized Environmental Condition
ROW	Right of Way
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
TEU	Twenty-foot Units
TMDL	Total Maximum Daily Load
TNM	Traffic Noise Model
USACE	U.S. Army Corps of Engineers
USDA	US Department of Agriculture
USDOT	US Department of Transportation
USEPA	US Environmental Protection Agency
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
WOTUS	Waters of the United States

Executive Summary

The Alabama State Port Authority (ASPA) in partnership with the city of Montgomery and CSX Transportation (CSXT) intends to develop an inland intermodal container transfer facility (ICTF or Project) to include trackage, loading/unloading and stacking areas to be located in south Montgomery, Montgomery County, Alabama. ASPA will use congressionally appropriated funds, administered by the Federal Railroad Administration (FRA), for pre-construction project development activities, such as an environmental review that is compliant with the National Environmental Policy Act (NEPA) and federal laws, engineering design, and construction of this facility. Therefore, FRA must comply with the NEPA (42 U.S.C. § 4321 et seq.) to authorize ASPA to use funds and implement the Project. NEPA requires federal agencies to consider the impacts of their actions on the natural, social, economic, and cultural environment and to disclose those considerations in a public document. The NEPA process helps public officials make decisions based on an understanding of the environmental consequences and take actions that protect, restore, and enhance the environment (40 C.F.R. § 1500.1).

What is the Purpose of the Project? The purpose of the Project is to reduce congestion at the Port of Mobile (Port) and provide an alternate shipping option for existing Port customers in central Alabama.

How can I get involved or comment on the Environmental Assessment (EA)? Public comments are now being solicited on this EA. FRA is accepting public comments related to this EA during a public comment period that will extend for a minimum of 30 days after publication of the EA. Comments may be submitted via email to MontgomeryICTFproject@ALports.com or physical mail to:

Volkert, Inc.
1680 West 2nd Street,
Suite B
Gulf Shores, AL 36542

What happens next? Once the comment period closes, the FRA will review comments from the public and agencies and issue a Finding of No Significant Impact (FONSI) or determine the Project has the potential for one or more significant impacts to the human environment, thereby requiring the preparation of an Environmental Impact Statement (EIS).

Table 1: Summary of Impacts and Mitigation Measures

Resource	Project Anticipated Impacts	Project Mitigation Measures
Air Quality, Greenhouse Gas (GHG), Climate Change	Project is located in an area that is currently in attainment for all NAAQS criteria pollutants. Air quality impacts during construction would be *de minimis*. Construction and operation of the Project will generate GHG; however, the Project will shift freight from less efficient highways to more efficient rail transportation having a positive impact by reducing overall GHG emission.	Best management practices will be implemented to minimize combustion engine emissions and fugitive dust during construction.
Noise and Vibration	Temporary increase in noise anticipated during construction.	Construction noise control measures will be implemented during construction.
Farmland Resources	Project is in an area designated as urban development and is therefore exempt from the FPPA.	No mitigation.
Water Quality	No decrease in water quality is anticipated with adherence to state and federal permitting requirements.	Best management practices will be utilized during construction to minimize impacts to water quality.
Wetlands and Watercourses	Permanent impact to 0.42 acre of jurisdictional wetlands and 0.05 acre (217 linear feet) of perennial stream.	Mitigation credits will be purchased from an USACE approved mitigation bank to compensate for unavoidable impacts.
Threatened and Endangered Species, Migratory Birds, and Bald and Golden Eagles	May affect but not likely to adversely affect the tricolored bat (*Perimyotis subflavus*).	Conservation measures will be implemented to minimize potential impacts.
Floodplains	Minor impacts to the regulated floodplain are anticipated.	Impacts will meet all local, state, and federal requirements; therefore, no mitigation.
Cultural and Historic Resources	Site 1Mt565 will be adversely affected.	Draft MOA prepared for data recovery, reporting, and education.
Section 4(f)/6(f) and Parks and Recreation	No impacts to Section 4(f)/6(f) properties.	No mitigation.
Hazardous Material and Hazardous Waste	No hazardous waste concerns.	No mitigation; however, should waste be encountered during construction, it will be disposed of properly.

Table 1: Summary of Impacts and Mitigation Measures

Resource	Project Anticipated Impacts	Project Mitigation Measures
Land Use	Land use will change from unimproved pastureland to light industrial use, but will be consistent with current zoning. Approximately 0.97 acre of permanent ROW and 0.21 acre of temporary construction easement required.	ROW and easement acquisitions will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
Community Facilities	No impacts to community facilities.	No mitigation.
Aesthetics and Visual	The Project would be consistent with the surrounding visual environment and would not substantially change the existing visual character of the surrounding area.	No mitigation.
Demographics and Environmental Justice	Direct and positive impact on local EJ populations by providing employment in the form of construction jobs and new opportunities when the ICTF becomes operational.	No mitigation, positive impact.
Public Health, Safety and Security	Minimal impacts during construction of intersection improvements.	Traffic control plan will be implemented during construction to provide safe and efficient road user flow in the work zone.
Transportation	Decrease in interstate traffic, slight increase in local traffic.	No substantial impact to the local roadway/highway network; therefore, no mitigation.
Energy Use and Utilities	No increase in power demand at the Project site during construction. Additionally, the Project is not expected to have a substantial impact on energy consumption and availability once in operation. Two power poles to be relocated and water and sewer lines to be replaced.	Utility relocations will be coordinated with utility owners prior to construction.
Construction Period Impacts	Minor impacts to water quality, air, noise, and energy use are anticipated during construction.	Soil erosion best management practices to reduce water quality issues, well maintained equipment to reduce air and noise impacts.
Indirect and Cumulative Impacts	There is a potential for indirect impacts in the form of land use and natural resources. No cumulative impacts are anticipated.	No mitigation.

1.0 Introduction

The Alabama State Port Authority (ASPA), in partnership with the city of Montgomery and CSX Transportation (CSXT), intends to develop an inland intermodal container transfer facility (ICTF or Project) to include trackage, loading/unloading and stacking areas to be located in south Montgomery, Montgomery County, Alabama. ASPA will use Fiscal Year 2022 Congressionally Directed Consolidated Rail Infrastructure and Safety Improvements (CRISI) funding, administered by the Federal Railroad Administration (FRA), for pre-construction project development activities, including environmental review and engineering design, and construction of the facility. Therefore, FRA must comply with the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.). NEPA requires federal agencies to consider the impacts of their actions on the natural, social, economic, and cultural environment and to disclose those considerations in a public document. The NEPA process helps public officials make decisions based on an understanding of the environmental consequences and take actions that protect, restore, and enhance the environment (40 C.F.R. § 1500.1).

As required by NEPA, FRA prepared this Environmental Assessment (EA) to provide the public with a full accounting of the environmental impacts of the alternatives developed to meet the Project's purpose and need. This EA serves as the primary document to facilitate review of the Project by federal, state and local agencies, and the public. The purpose of the EA process is to evaluate the potential impacts of implementing the ICTF Project on the physical and human environment and determine if there would be adverse impacts requiring the preparation of an Environmental Impact Statement (EIS). FRA is the lead federal agency for the preparation of this EA. The Federal Aviation Administration (FAA) is a cooperating agency. Participating agencies include the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), the Alabama Department of Transportation (ALDOT), the Alabama Department of Environmental Management (ADEM), the Alabama Department of Conservation and Natural Resources (ADCNR), and the city of Montgomery.

Intermodal shipping incorporates multiple modes of transportation to move goods, both domestically and internationally, through a mix of trains, trucks, and ships.[1] Inland intermodal shipping utilizes trains for the long-haul portion of the shipment, due to the efficiency of rail, while trucks are used to transport goods a short distance to and from the ICTF and to the final destination. The ICTF removes, segregates (if required) and stores goods upon delivery by one mode of transportation until a second mode of transportation out of the facility is available.

1.1 Project History and Background

In 2001, the ASPA developed a master plan for container intermodal assets comprised of three interconnected and interrelated elements: a marine container terminal, an ICTF, and a logistics park utilizing parcels of land adjacent to the Port of Mobile (Port). Phase I operations of the marine terminal commenced in late 2008, with consistent growth yearly that supported terminal

[1] CSXT Intermodal 101 website, https://intermodal.com/index.cfm/resource-center/information-kits/intermodal-101/, Accessed March 10, 2023

expansion. The expansion added super post-Panamax crane capability[2], capacity, and innovation programs to provide more efficient customer service.

The ASPA's Mobile ICTF opened in 2016 with rail service into Memphis, Chicago and Canada. More recently, the ASPA has been working towards the further expansion and development of its container intermodal assets. This new initiative included the addition of an ICTF inland from the Port.

In January 2022, the ASPA Board of Directors approved the purchase of approximately 272 acres adjacent to the existing CXST rail line and in close proximity to Interstate 65 (I-65) and Interstate 85 (I-85) in Montgomery, Alabama to construct an ICTF to support the growing operations of the Port. The location of the proposed Montgomery ICTF relative to the Port, I-65 and I-85 is illustrated on **Figure 1**. In March 2022, the ASPA received funding for the Project through the Consolidated Rail Infrastructure and Safety Improvements (CRISI) Grant Program, Fiscal Year 2022 Congressionally Directed Spending for pre-construction project development activities, engineering design and construction of the facility.

1.2 Project Description

The Project consists of the construction of an ICTF on an approximately 272-acre property owned by the ASPA in Montgomery, Alabama. The facility will consist of two 3,500 linear feet process rail tracks, one 3,500 linear feet support rail track, a maintenance building, and an administration building. Container stacking areas will be provided adjacent to the process tracks. Rubber tired gantry cranes will be employed to load and unload trains and trucks at the facility. Ten thousand linear feet of lead track will also be constructed parallel to the existing CSXT main line to provide rail access into the ICTF. Truck access into the facility will be provided through intersection improvements within the ALDOT right of way (ROW) at US Highway 31 (US 31) and Green Leaf Drive. Once operational, the Montgomery ICTF is anticipated to be open from 6:00 a.m. to 6:00 p.m. Monday through Friday.

1.3 Project Area

The Project Area is illustrated on **Figure 2.** Surrounding land uses include the Montgomery Regional Airport, Southlawn Baptist Church, Kingdom Hall of Jehovah Witness, Cathedral of Restoration, Southlawn Middle School, light industrial, commercial, medium density residential and pastureland.

[2] *"Super post-Panamax cranes have a capacity of 100 long tons and can handle container loads 22 to 23 units wide, stacked 10 units high on deck."*, per article on *Crane Market* website, June 26, 2017, https://cranemarket.com/blog/two-new-massive-zpmc-super-post-panamax-cranes-arrived-in-mobile-alabama-on-saturday-afternoon-from-china/.

Figure 1: Project Location

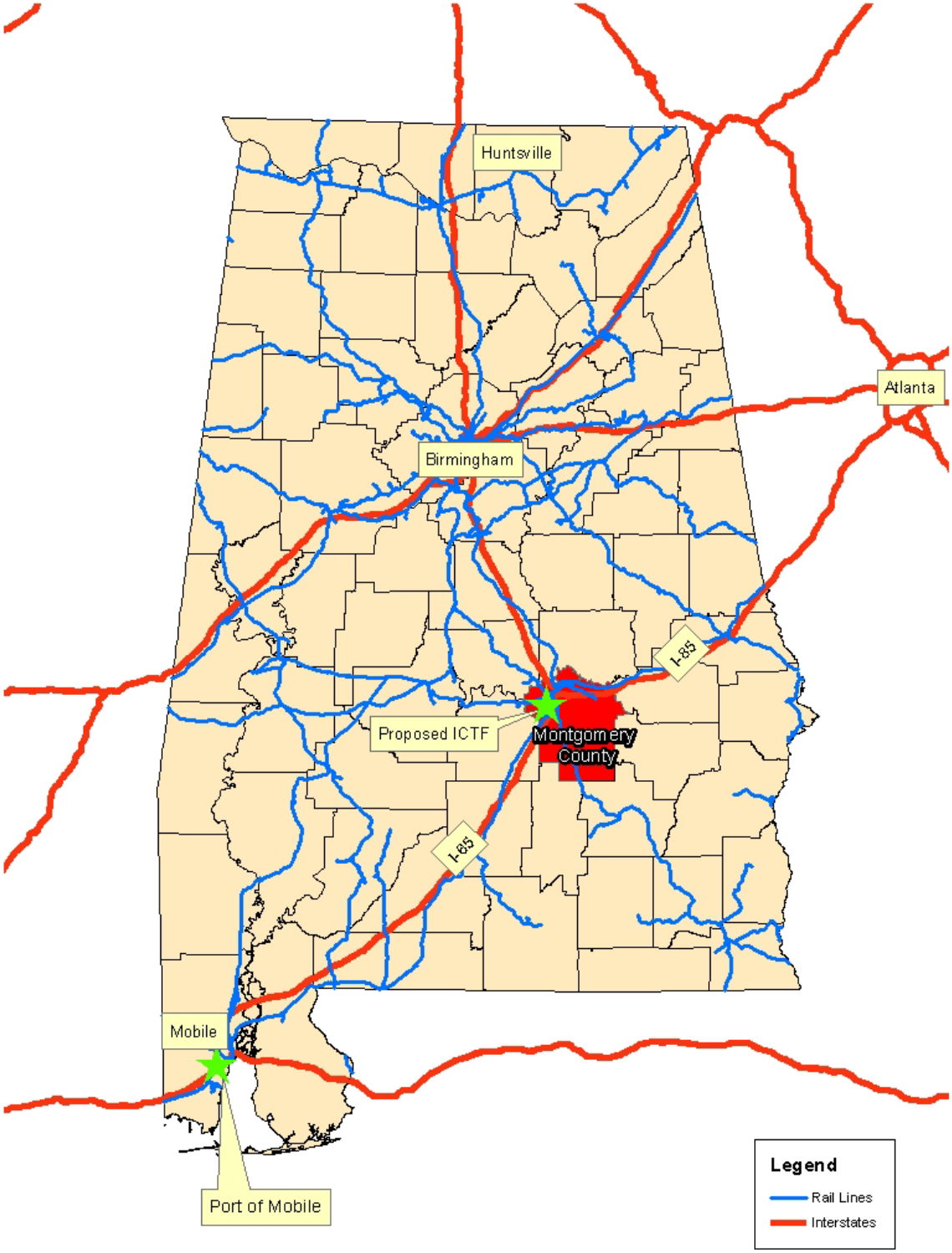
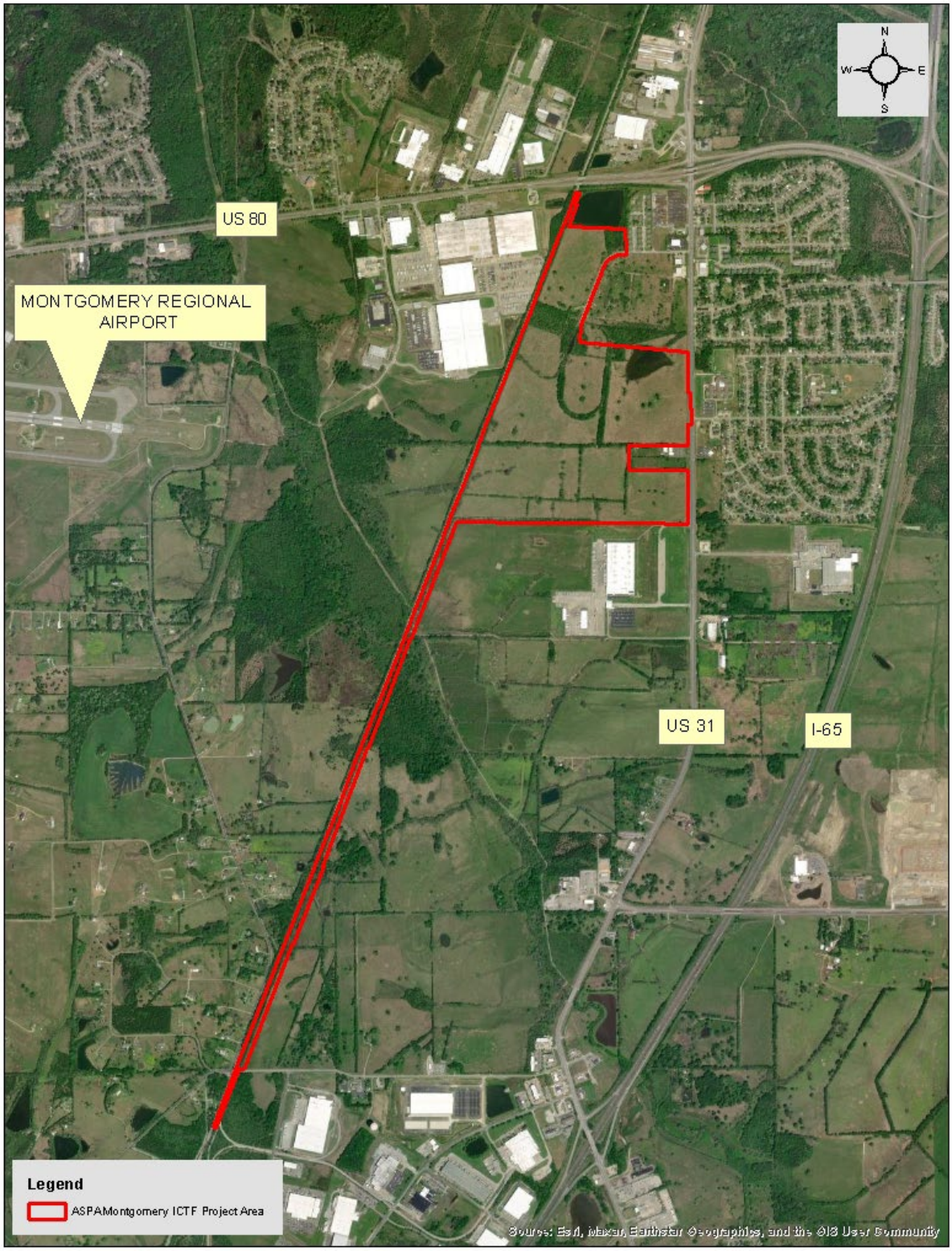


Figure 2: Project Area



2.0 Purpose and Need

2.1 Project Purpose

The purpose of the proposed Project is to reduce congestion at the Port and provide an alternate shipping option for existing Port customers in central Alabama.

2.2 Project Need

The two primary needs for the Project are to increase container storage and handling capacity, as well as provide an alternative shipping option between the Port and Montgomery, Alabama. The following paragraphs describe the needs for the project.

2.2.1 Increase Container Storage and Handling Capacity

The Port has been the fastest growing container terminal in the US over the past several years. July 2022 was the busiest month ever for containerized cargo, breaking fifty thousand twenty-foot equivalent units (TEU) for the first time since container port operations began in 2008. These figures reflect a year-over-year growth rate of 184.7 percent for intermodal cargo and 35.8 percent for dry and refrigerated cargo. July 2022 also marked the Port's seventh consecutive month of double and triple-growth for overall throughput volume and intermodal rail volume, respectively[3]. As a result of this growth, container storage capacity at the Port has become overly congested, slowing the movement of imports and exports, as well as sorting and handling times. The Montgomery ICTF would relieve congestion at the Port by moving some of the intermodal transfer activities inland and away from the Port. The new ICTF would also provide an additional access point to the regional interstate network and a space to sort, handle, and store containers.

2.2.2 Provide an Alternate Shipping Option

Currently, Port customers in the central region of Alabama primarily utilize trucks to transport containers to and from the Port. Truck deliveries can be delayed due to interstate congestion and accidents. The Montgomery ICTF would provide customers an alternate shipping option that would utilize the existing rail infrastructure between the Port and Montgomery, Alabama for the long-haul portion of the shipment, while employing trucks to transport the shipment a short distance within the Montgomery region. This option would provide a more efficient shipping option for local customers and could reduce delivery times.

[3] "*Container Terminal Delivers Strongest Month In History*", Port of Mobile/Alabama Port Authority website, August 15, 2022, https://www.alports.com/container-terminal-delivers-strongest-month-in-history/

3.0 Alternatives

This EA includes the review of two alternatives, the No-Action or No-Build Alternative and the Project or Build Alternative.

3.1 No-Build Alternative

The No-Build Alternative is required by federal regulations to be evaluated in an EA. The No-Build Alternative provides a baseline against which other project alternatives are compared.

The No-Build Alternative involves taking no action to increase container storage and handling capacity and provide an alternate shipping option. The No-Build Alternative would fail to meet the purpose and need for the Project, and container storage capacity at the Port would remain congested, slowing the movement of imports and exports, as well as sorting and handling times. Port customers in the central region of Alabama would continue to primarily utilize trucks to transport containers to and from the Port.

3.2 Build Alternative

The Project site was selected for several reasons, including:

- Location - The site is centrally located in the state of Alabama with access to I-65 and I-85.
- Rail access – The CSXT rail line directly borders the site to the west.
- Highway access – US 31 is an existing five-lane minor arterial roadway in the vicinity of the site.
- Property size – The site is approximately 272 acres. This will allow for future expansion of the facility if needed.
- Current zoning – The site is zoned light industrial.

The Project will meet the purpose and need by providing the following elements:

- Two 3,500 linear feet process rail tracks.
- One 3,500 linear feet support rail track.
- Container stacking areas.
- A maintenance building.
- An administration building.
- 10,000 linear feet of lead track constructed parallel to the CSXT main line to provide access into the ICTF.
- Main entrance road and secondary entrance road.
- Employee and visitor parking.
- Installation of a right turn lane on US 31 and signal improvements.
- High mast facility lighting and entrance road lighting.

Figure 3 reflects the preliminary design for the ICTF, while **Figure 4** reflects the 10,000 linear feet lead track. Proposed construction activities for the Project include clearing and grubbing, installation of utilities, grading, access road and parking lot paving, rail track installation, administration and maintenance building erection, permanent site stabilization, and intersection/signalization improvements on US 31. ASPA anticipates construction will take 24 months.

Figure 3: ICTF Preliminary Design

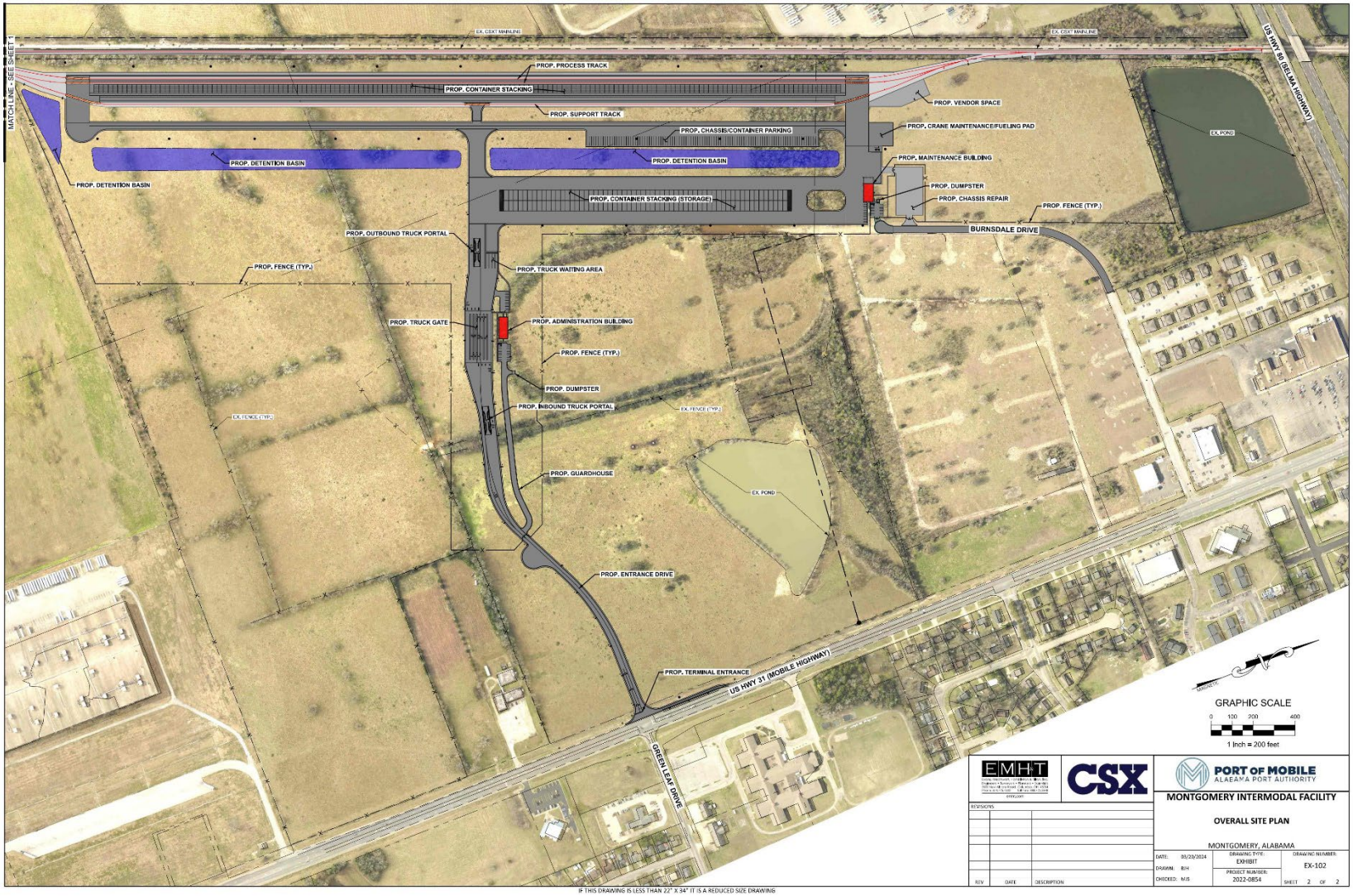


Figure 4: Lead Track Preliminary Design

4.0 Affected Environment and Environmental Consequences

This chapter includes the descriptions and evaluation of the existing Project Area conditions and provides a baseline for analyzing potential impacts to environmental resources from implementing the Project, as well as mitigation measures to offset impacts. This EA addresses those resources that have the potential to be affected by the Project. Resources covered in this section are grouped into the following areas: natural environment, human environment, construction period impacts, and indirect and cumulative impacts.

> The **natural environment** includes subjects like air and noise, farmland and forest, wetlands and water resources, and threatened and endangered species.
> The **human environment** includes subjects like cultural and historic resources, parks and recreation, hazardous waste, land use and demographics, public health and safety, and transportation.
> **Construction period impacts** relate to the temporary impacts that may result during the building process.
> **Indirect impacts** are those impacts that are further removed in time or space while **cumulative impacts** represent an accumulative impact to a resource.

The following sections will discuss the Project's impact on the environment. The No-Build Alternative would have minimal, if any, impacts and is briefly mentioned in each resource section. To keep this document concise, detailed information, where applicable, can be found in the Appendices.

4.1 Resources Not Included in the Analysis

Through initial investigation and background research it was determined that the following resources do not have a reasonable likelihood to be beneficially or adversely affected by the Project and, therefore, will not be evaluated further:

- Coastal Zone Management – The Project Area is not within a coastal zone.
- Geology and Seismic Issues – Due to the limited scope of work, no geologic or seismic analysis was completed.
- Wild and Scenic Rivers – There are no Wild or Scenic Rivers in or adjacent to the Project Area.

4.2 Natural Environment

The purpose of this section is to describe the characteristics of the natural environment within the area affected by the Project.

4.2.1 Air Quality, Greenhouse Gases, and Climate Change

Identification

The US Environmental Protection Agency (USEPA) established National Ambient Air Quality Standards (NAAQS) for six commonly found air pollutants (criteria pollutants) in the Clean Air Act (CAA). USEPA's General Conformity Rule (40 CFR Part 93 Subpart B) ensures that federal actions comply with the NAAQS and requires the lead federal agency to demonstrate that every action it undertakes, approves, permits or supports conforms to the State Implementation Plan (SIP). Federal agencies responsible for an action occurring in a nonattainment area are required to determine if the action conforms to the applicable SIP. The CAA General Conformity Rule (GCR) requires that any federal action does not create a new violation of NAAQS or delay the timely attainment of any NAAQS or milestones in the state's SIP.

A federal action is exempt from the GCR if the action's total net emissions are below the *de minimis* threshold or are otherwise exempt per 40 CFR 51.153. There are two main components to the overall process: an applicability analysis to determine whether a conformity determination is required and, if required, a conformity determination to demonstrate that the action conforms to the SIP.

The Project is located in Montgomery County, Alabama, which is currently in attainment for all NAAQS criteria pollutants; therefore, a conformity determination is not required for the Project.

Impacts and Mitigation

The Project was assessed for impacts from construction air quality, operational air quality, greenhouse gas emissions, and Mobile Source Air Toxics (MSATs). Results indicated that the project is consistent with the attainment of clean air quality in Alabama and is in compliance with both state and federal air quality standards. The Project was found to be a "Project with Low Potential MSAT Effect." More details on the Air Quality analysis and mitigation measures are included in **Appendix A**.

4.2.2 Noise and Vibration

Identification

Rail Noise

In accordance with the FTA Transit Noise and Vibration Impact Assessment Manual (September 2018), a rail noise analysis was performed for the Project. The process includes three types of analyses including a screening analysis, a general analysis or a detailed analysis. The screening analysis involves identification of the study area, which is based on the appropriate screening distance for the project type. If no noise-sensitive land uses are identified within the study area, no further analysis is needed. If one or more noise-sensitive land uses are identified within the study area, a general noise assessment is required. A general noise assessment involves identification of noise sensitive receptors

and use of FTA's noise calculation model to analyze project noise. Should the project fall under the threshold, no further analysis is required.

A rail noise screening analysis was conducted for the Project. In accordance with the FTA Transit Noise and Vibration Assessment Manual Table 4-7, Screening Distance for Noise Assessments, a screening distance of 1,600 feet from the existing rail crossing at Wasden Road (rail road crossing with horns and bells), 1,000 feet from the nearest rail track in the proposed rail yard (yards and shops), and 750 feet from the proposed lead track (rail mainline) was evaluated to determine the existence of noise-sensitive land uses. Eighteen noise-sensitive land uses were identified within the noise screening distance for the existing rail crossing and lead track, with 17 being Land Use Category 2 (Residential) properties and one being Land Use Category 3 (Institutional). No noise-sensitive land uses were identified within the noise screening distance for the rail yard. **Figure 5** below illustrates the locations of the noise sensitive land uses that were modeled as part of the rail noise analysis.

The existing ambient noise level (minus current rail operations) for each receptor within the study area was estimated using Table 4-17 from the FTA Transit Noise and Vibration Impact Assessment Manual based on the distance from the existing rail line.

The contribution of existing rail operations to the existing ambient noise level was calculated using the FTA Noise Impact Assessment Spreadsheet. Existing rail operations, provided by CSXT, along the CSXT mainline consist of (on average) 10 daytime and eight nighttime train pass-bys with three diesel locomotives per train, 130 rail cars, and a speed of 50 mph on a continuous welded track. In addition, the train horns were considered to be active within 0.25-mile of the at-grade crossing of Wasden Road. The existing noise levels are included in **Table 2** below.

Figure 5 : Rail Noise Receptor Locations

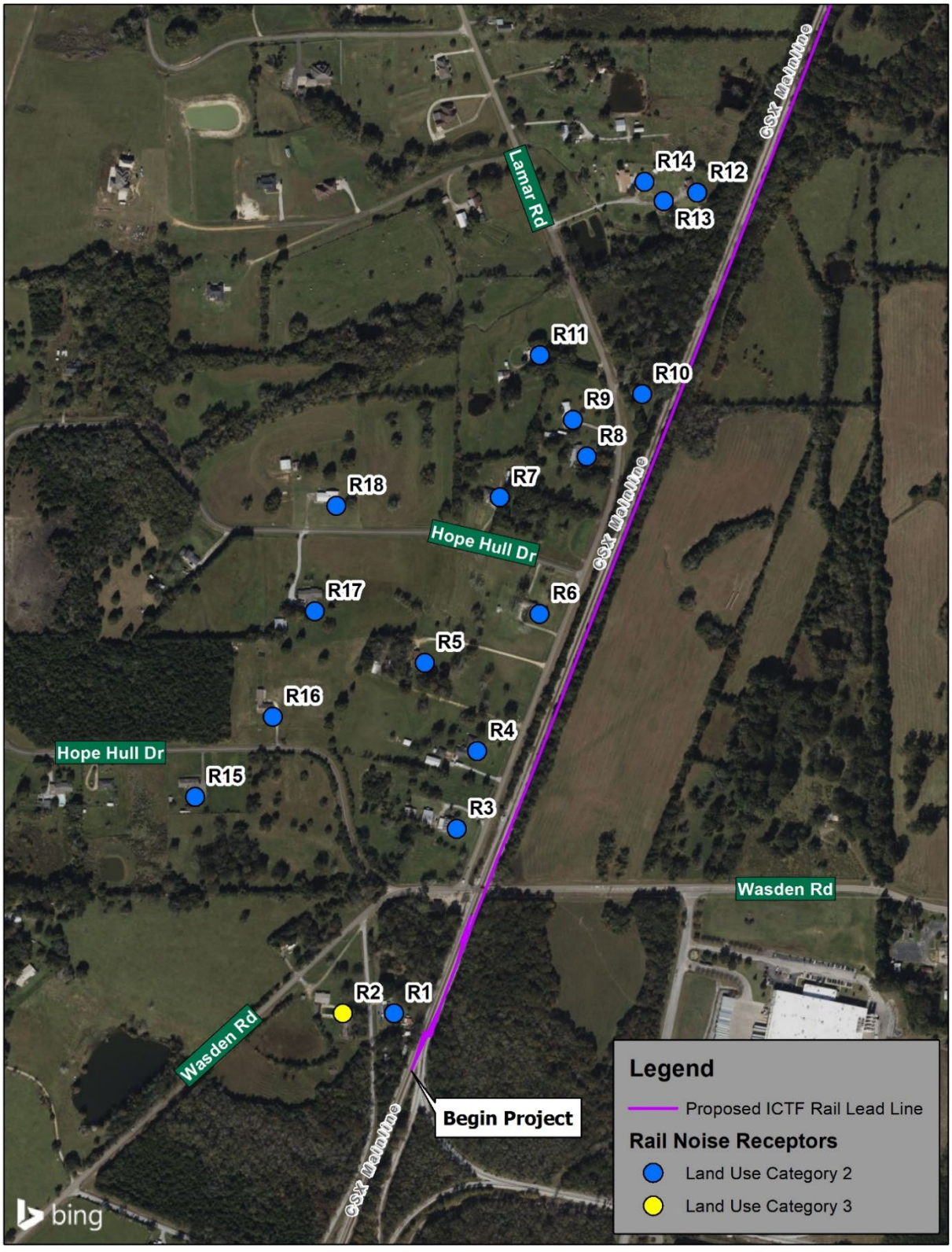


Table 2: Rail Noise Receptors and Existing Noise Levels

Receptor	Land Use Category	Distance from Rail Line (feet)	Estimated Existing Ambient Noise (dBA)*	Calculated Existing Rail Noise Exposure (dBA)**	Total Existing Noise Level (dBA)**	Existing Noise Levels Compared to FTA Criteria
R1	Category 2 (Residential)	160	60	74	74	Severe
R2	Category 2 (Residential)	370	55	68	68	Moderate
R3	Category 2 (Residential)	200	60	72	72	Severe
R4	Category 2 (Residential)	250	55	72	72	Severe
R5	Category 2 (Residential)	600	50	65	65	Severe
R6	Category 2 (Residential)	215	60	72	72	Severe
R7	Category 2 (Residential)	560	50	58	59	Moderate
R8	Category 2 (Residential)	265	55	63	64	Severe
R9	Category 2 (Residential)	363	55	61	62	Severe
R10	Category 2 (Residential)	140	60	67	68	Severe
R11	Category 2 (Residential)	615	50	58	58	Moderate
R12	Category 2 (Residential)	235	60	64	66	Severe
R13	Category 2 (Residential)	352	55	61	62	Severe
R14	Category 2 (Residential)	460	55	60	61	Moderate
R15	Category 2 (Residential)	1,288	45	55	56	Moderate
R16	Category 2 (Residential)	1,120	45	56	57	Moderate
R17	Category 2 (Residential)	1,108	45	56	57	Moderate
R18	Category 2 (Residential)	1,187	45	56	56	Moderate

*Source: Table 4-17 (Estimating Existing Noise Exposure for General Noise Assessment), FTA Transit Noise and Vibration Impact Assessment Manual.
**Calculated using the FTA Noise Impact Assessment Spreadsheet.
***Based on Figure 4-3, FTA Transit Noise and Vibration Impact Assessment Manual.

Traffic Noise

The criteria for highway noise impacts (relevant due to the construction of a roadway on new location for the access road form US 31 to the ICTF) are included in the FHWA Procedures for Abatement of Highway Traffic Noise and Construction Noise (23 CFR Part 772). In accordance with the FHWA regulations, a traffic noise analysis is required only for projects that include: construction of a new highway, reconstruction of an existing highway with a substantial change in the horizontal alignment or vertical profile or an increase in the number of through traffic lanes. If impacts are identified, noise abatement must be considered. In addition, FHWA guidance regarding the physical alteration of an existing highway states "changes in the horizontal alignment that reduce the distance between the source and the receiver by half or more result in a Type 1 project"[4]. A Type 1 project is defined in 23 CFR 772 as a proposed federal or federal-aid highway project for the construction of a highway at new location or the physical alteration of an existing highway that significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes. FHWA requires identifying highway traffic noise impacts and examining potential abatement measures for all Type 1 projects receiving federal funds. The Project is considered a Type 1 traffic noise project in accordance with the FHWA noise regulation, Procedures for Abatement of Highway Traffic and Construction Noise, 23 CFR 772 due to the construction of a roadway on new location for the access road form US 31 to the ICTF.

Table 3 describes the FHWA Noise Abatement Criteria (NAC) threshold values. The FHWA defines seven noise activity categories based on land uses and existing sound levels. Each land use has its own NAC. If the project would result in LAeq(h) levels higher than the NAC threshold values, abatement measures must be evaluated.

Table 3 : FHWA Noise Abatement Criteria

Activity Category	Threshold Values [$LA_{eq}(h)$]**	Evaluation Location	Description of Activity Category
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B*	67	Exterior	Residential.

[4] U.S. National Archives and Records Administration, Office of Federal Register.
2010. Title 23, Code of Federal Regulations, Part 772. Procedures for Abatement of Highway Traffic Noise and Construction Noise.

Activity Category	Threshold Values [$LA_{eq}(h)$]**	Evaluation Location	Description of Activity Category
C*	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structure, radio stations, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structure, radio studios, recording studios, schools, and television studios.
E*	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D, or F.
F	–––	–––	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	–––	–––	Undeveloped lands that are not permitted.

Source: FHWA, 23 CFR, Part 722
*Includes undeveloped lands permitted for this activity category.
**The Laeq(h) values are for impact determination for each Activity Category.

ALDOT is responsible for implementing FHWA regulations in Alabama. The traffic noise study was also conducted in accordance with ALDOT's Highway Traffic Noise Analysis and Abatement (ALDOT's noise policy). According to ALDOT's noise policy, the study area for Type 1 noise projects is 500-feet from the nearest travel lane of the road. If there are impacts predicted at 500-feet, the noise analysis must consider receptors beyond 500-feet until there are no additional impacts determined to be associated with the project. A total of five noise sensitive land uses for traffic noise were located within the study area for the traffic noise analysis of which four were classified as Activity Category C and one as Activity Category E. **Figure 6** illustrates the locations of the noise sensitive land uses that were modeled as part of this traffic noise analysis.

The traffic noise analysis conducted for the Project consists of a comparison of computer modeled noise levels for existing and future conditions. The computer software used for the noise analysis was the FHWA's approved Traffic Noise Model (TNM) Version 2.5 program. Traffic data, roadway geometry, and receptor site location information were entered into this computer model. The TNM model results yield an hourly equivalent steady-state sound level at each receptor. The traffic data used in the models was obtained from the April 2023 Traffic Impact Study prepared by Skipper Consulting (**Appendix B**) and is provided in **Table 4, Table 5,** and **Table 6.**

Table 4: Existing Condition Peak Hour Traffic Volumes

Roadway	AM Peak Hour Volume (Veh/Hr)	AM Peak Cars/Medium Trucks/Heavy Trucks	PM Peak Hour Volume (Veh/Hr)	PM Peak Cars/Medium Trucks/Heavy Trucks	Posted Speed (MPH)
US-31 from Southlawn Dr to School Exit Southbound	452	369 / 35 / 48	466	380 / 36 / 50	45
US-31 from School Exit to Green Leaf Dr Southbound	465	379 / 36 / 50	495	404 / 38 / 53	45
US-31 from Green Leaf Dr to Hyundai Blvd Southbound	215	175 / 17 / 23	331	270 / 26 / 35	45
US-31 from Hyundai Blvd to Green Leaf Dr Northbound	442	361 / 34 / 47	624	509 / 48 / 67	45
US-31 from Green Leaf Dr to School Exit Northbound	548	447 / 42 / 59	822	671 / 63 / 88	45
US-31 from School Exit to Southlawn Dr Northbound	691	564 / 53 / 74	799	652 / 62 / 85	45

Table 5: 2045 No-Build Alternative Condition Peak Hour Traffic Volumes

Roadway	AM Peak Hour Volume (Veh/Hr)	AM Peak Cars/Medium Trucks/Heavy Trucks	PM Peak Hour Volume (Veh/Hr)	PM Peak Cars/Medium Trucks/Heavy Trucks	Posted Speed (MPH)
US-31 from Southlawn Dr to School Exit Southbound	563	459 / 44 / 60	580	473 / 45 / 62	45
US-31 from School Exit to Green Leaf Dr Southbound	579	472 / 45 / 62	616	503 / 47 / 66	45
US-31 from Green Leaf Dr to Hyundai Blvd Southbound	268	219 / 20 / 29	412	336 / 32 / 44	45
US-31 from Hyundai Blvd to Green Leaf Dr Northbound	550	449 / 42 / 59	777	634 / 60 / 83	45

Roadway	AM Peak Hour Volume (Veh/Hr)	AM Peak Cars/Medium Trucks/Heavy Trucks	PM Peak Hour Volume (Veh/Hr)	PM Peak Cars/Medium Trucks/Heavy Trucks	Posted Speed (MPH)
US-31 from Green Leaf Dr to School Exit Northbound	682	557 / 52 / 73	1,023	835 / 79 / 109	45
US-31 from School Exit to Southlawn Dr Northbound	860	702 / 66 / 92	995	812 / 77 / 106	45

Table 6: 2045 Project Condition Peak Hour Traffic Volumes

Roadway	AM Peak Hour Volume (Veh/Hr)	AM Peak Cars/Medium Trucks/Heavy Trucks	PM Peak Hour Volume (Veh/Hr)	PM Peak Cars/Medium Trucks/Heavy Trucks	Posted Speed (MPH)
US-31 from Southlawn Dr to School Exit Southbound	603	492 / 46 / 65	605	494 / 46 / 65	45
US-31 from School Exit to Green Leaf Dr Southbound	566	462 / 44 / 60	603	492 / 46 / 65	45
US-31 from Green Leaf Dr to Hyundai Blvd Southbound	280	228 / 22 / 30	417	340 / 32 / 45	45
US-31 from Hyundai Blvd to Green Leaf Dr Northbound	552	450 / 43 / 59	766	625 / 59 / 82	45
US-31 from Green Leaf Dr to School Exit Northbound	725	592 / 56 / 77	1,037	846 / 80 / 111	45
US-31 from School Exit to Southlawn Dr Northbound	897	732 / 69 / 96	1,005	820 / 77 / 108	45
New Location Access Road for Project	140	114 / 11 / 15	91	74 / 7 / 10	45

Model Validation Analysis

To evaluate the model's ability to accurately portray the existing noise environment, noise validation measurements were collected at two sites along the Project. Existing traffic noise levels that were measured in the field were compared to TNM model results to

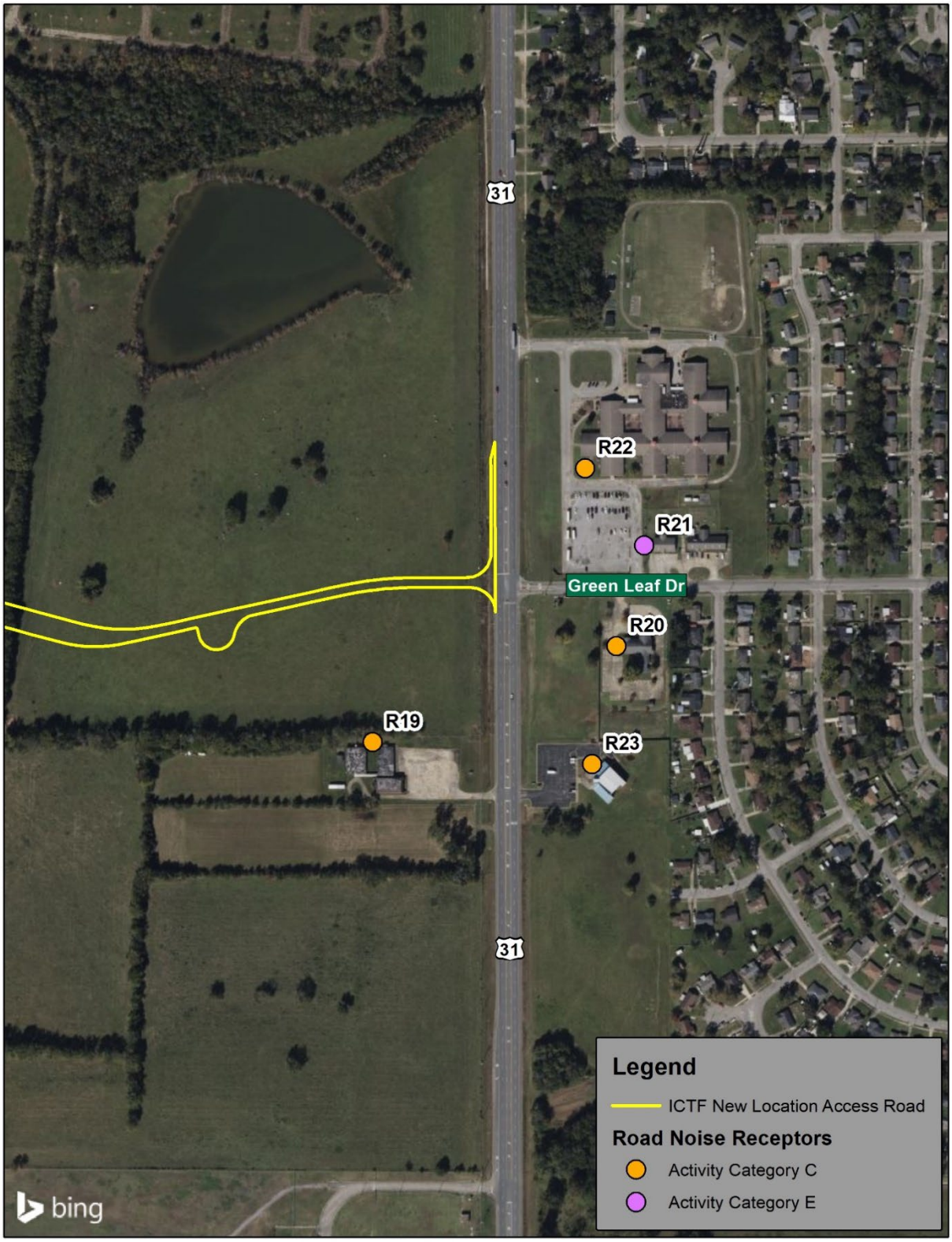
assess the accuracy of the model. The model calculates noise levels based on user-supplied data including traffic volumes, roadway geometry, vehicle speeds, and site parameters that affect transmission and dissipation of acoustic energy. The measurements were collected in accordance with procedures outlined in FHWA's Measurement of Highway Related Noise document. Fifteen-minute noise level measurements were made at each measurement site. The validation analyses results were found to be within the three dBA tolerance limit considered acceptable. The model validation results indicate that the TNM 2.5 noise model developed for this study is capable of accurately predicting noise levels within the acceptable +/- 3 dBA range. Results from the validation analysis are included in **Table 7**.

Table 7: Noise Model Validation Results

Measurement Location	Distance from Existing Pavement (feet)	Average Measured Sound Level | TNM 2.5 Model Validation Sound Level (dBA)	Variation (dBA)
Southlawn Baptist Church	50	62.9 | 64.9	2.0
Southlawn Elementary and Middle School	125	64.0 | 64.7	0.7

.

Figure 6 : Traffic Noise Receptor Locations



Impacts and Mitigation

Rail Noise

Rail noise exposure levels as a result of the Project were calculated with the FTA Noise Impact Assessment Spreadsheet using the Rail Noise Source Parameters provided by CSXT. For the Project, the only change from the existing train operations is an increase in the average number of rail cars from 130 to 180.

Table 8 presents the calculated noise exposure levels as a result of the Project. The FTA Noise Impact Assessment Spreadsheets for each receptor are included in **Appendix C**. The noise sensitive receptors within the rail noise screening distance (R1-R18) for the Project are all adjacent to the existing rail crossing at Wasden Road and the proposed lead track, which are located along the existing CSXT mainline. The number of train passes or locomotives is not anticipated to increase due to the Project from what is currently on the CSXT mainline, however, the Project will increase the average number of rail cars per train on the CSXT mainline by 50. This increase in rail cars from the Project will not contribute to a change in FTA noise impact criteria level at the receptors from what is already being experienced from existing train operations. Therefore, no impact from rail noise is anticipated as a result of the Project.

Table 8: Rail Noise Receptors Noise Levels

Receptor	Land Use Category	Distance from Rail Line (feet)	Estimated Existing Ambient Noise (dBA)*	Calculated Existing Rail Noise Exposure (dBA)**	Total Existing Noise Level (dBA)**	Calculated Future Project Noise Level (50 add'l cars per train) (dBA)	Total Future Noise Level (dBA)	Severe Impact from Project?**
R1	Category 2 (Residential)	160	60	74	74	74	74	No
R2	Category 3 (Institutional)	370	55	60	62	61	62	No
R3	Category 2 (Residential)	200	60	72	72	72	73	No
R4	Category 2 (Residential)	250	55	72	72	72	72	No
R5	Category 2 (Residential)	600	50	65	65	65	66	No
R6	Category 2 (Residential)	215	60	72	72	72	72	No
R7	Category 2 (Residential)	560	50	58	59	60	60	No
R8	Category 2 (Residential)	265	55	63	64	64	65	No
R9	Category 2 (Residential)	363	55	61	62	62	63	No
R10	Category 2 (Residential)	140	60	67	68	69	69	No

Receptor	Land Use Category	Distance from Rail Line (feet)	Estimated Existing Ambient Noise (dBA)*	Calculated Existing Rail Noise Exposure (dBA)**	Total Existing Noise Level (dBA)**	Calculated Future Project Noise Level (50 add'l cars per train) (dBA)	Total Future Noise Level (dBA)	Severe Impact from Project?***
R11	Category 2 (Residential)	615	50	58	58	59	59	No
R12	Category 2 (Residential)	235	60	64	66	65	66	No
R13	Category 2 (Residential)	352	55	61	62	63	63	No
R14	Category 2 (Residential)	460	55	60	61	61	62	No
R15	Category 2 (Residential)	1,288	45	55	56	56	56	No
R16	Category 2 (Residential)	1,120	45	56	57	57	57	No
R17	Category 2 (Residential)	1,108	45	56	57	57	57	No
R18	Category 2 (Residential)	1,187	45	56	56	56	57	No

*Source: Table 4-17 (Estimating Existing Noise Exposure for General Noise Assessment), FTA Transit Noise and Vibration Impact Assessment Manual.
**Calculated using the FTA Noise Impact Assessment Spreadsheet.
***Based on Figure 4-3, FTA Transit Noise and Vibration Impact Assessment Manual.

Traffic Noise

In accordance with the FHWA Title 23 CFR Part 772 guidelines, ALDOT defines traffic noise impacts as occurring under the following circumstances:

- When predicted build condition noise levels approach, meet, or exceed values defined by the NAC criteria listed in **Table 3.** FHWA has deferred to the State agencies to define the noise level that "approaches" the NAC. ALDOT has defined "approach" as one dBA less than the NAC, or
- When predicted build condition noise levels increase over the existing condition by 15 dBA, regardless of the NAC.

A summary of the traffic noise levels for the 2023 existing, 2045 No-Build Alternative, 2045 Project scenarios is provided in **Table 9**.

Table 9: Traffic Noise Analysis Results

				No-Build	**No-Build**	**No-Build**	**Project**	**Project**	**Project**	**Project**
Site	No. of Receptors Represented	Activity Category	NAC	Dist. From nearest Highway (feet)	2023 Noise Level (dBA)*	2045 No-Build Noise Level (dBA)*	Dist. From nearest Highway (feet)	2045 Build Noise Level (dBA)*	Diff. Between Existing and Build (dBA)	Noise Impact?
R19	1	C (Southlawn Baptist Church)	67	372	54.2	55.1	372	55.5	1.3	No
R20	1	C (Kingdom Hall)	67	300	56.6	57.5	300	57.6	1.0	No
R21	1	E (Hair Salon)	72	395	54.8	55.7	395	55.8	1.0	No
R22	1	C (Southlawn Elementary and Middle School)	67	215	60.5	61.4	215	61.5	1.0	No
R23	1	C (Cathedral of Restoration)	67	228	59.0	60.0	228	60.0	1.0	No

*Calculated using FHWA TNM 2.5

As shown in **Table 9**, none of the noise receptor sites experience noise levels that approach, meet, or exceed the NAC for the 2023 Existing, 2045 No-Build, or 2045 Project conditions. In addition, the 2045 No-Build and 2045 Project scenario results indicate that no substantial increases in noise (15 dBA or greater) over existing noise levels will occur.

In accordance with 23 CFR Part 772, when traffic noise associated with a project is predicted to approach, meet or exceed the NAC or a substantial increase (15 dBA) in noise from the existing noise levels occurs at a noise sensitive receptor, noise abatement must be considered. The predicted design year 2045 Project condition noise levels will not approach, meet or exceed the NAC and no substantial increases in noise levels are predicted to occur; therefore, an analysis of noise abatement is not required for the Project for traffic noise.

Construction Noise

The noise levels generated by construction equipment vary greatly depending on factors such as type of equipment, the equipment model, the operation being performed, and the condition of the equipment. Typically, the dominant source of noise from most construction equipment is the engine, often a diesel engine, which usually does not have sufficient muffling. In other cases, such as impact pile-driving or pavement-breaking, noise generated by the process dominates. Using the methodology in the FTA Transit Noise and Vibration Impact Assessment manual, a quantitative construction noise assessment (Option A: General Assessment) was used to estimate construction noise for the Project. A general assessment of construction noise is warranted for projects in an early assessment stage when the equipment roster and schedule are undefined and only a rough estimate of construction noise levels is practical. The construction noise assessment was performed on

three components of the Project: The ICTF lead track, the ICTF, and the ICTF new access road.

The residential receptor nearest to the ICTF lead track construction zone is located at R10 (270 Lamar Road), which is approximately 140 feet away. The commercial receptor nearest to the construction zone is located at 7621 Bill Joseph Parkway, which is approximately 1,370 feet away from the ICTF lead track construction zone. Sound levels at these two closest receptors were assessed by evaluating the cumulative noise impact of the two loudest pieces of equipment (rail saw and scraper). These sound levels were compared to limits listed by the FTA, which are 80 dBA for residential receptors and 100 dBA for commercial receptors. Results outlined in **Table 10** indicate that sound levels at the residential receptor closest to the ICTF lead track will be above the FTA construction noise limits. The commercial receptors closest to the ICTF lead track construction activity will be below the FTA construction noise limits. Construction noise calculations are included in **Appendix C**.

The residential receptor nearest to the ICTF construction zone is located at 5145 Mobile Highway, which is approximately 3,064 feet away from the midpoint of the construction zone. The commercial receptor nearest to the ICTF construction zone is located at 4919 Westport Boulevard, which is approximately 762 feet away from the midpoint of the construction zone. Sound levels at these two closest receptors were assessed by evaluating the cumulative noise impact of the two loudest pieces of equipment (impact pile driver and sonic pile driver). These sound levels were compared to limits listed by the FTA, which are 80 dBA for residential receptors and 100 dBA for commercial receptors. Results outlined in **Table 10** indicate that sound levels at residential and commercial receptors closest to the ICTF construction activity will be below the FTA construction noise limits. Construction noise calculations are included in **Appendix C.**

The residential receptor nearest to the ICTF new access road construction zone is located at 5300 Cathy Drive, which is approximately 1,530 feet away. The commercial receptor nearest to the ICTF new access road construction zone is located at 5340 Mobile Highway, which is approximately 685 feet away from the midpoint of the construction zone. Sound levels at these two closest receptors were assessed by evaluating the cumulative noise impact of the two loudest pieces of equipment (jack hammer and paver). These sound levels were compared to limits listed by the FTA, which are 80 dBA for residential receptors and 100 dBA for commercial receptors. Results outlined in **Table 10** indicate that sound levels at residential and commercial receptors closest to the ICTF new access road construction activity will be below the FTA construction noise limits. Construction noise calculations are included in **Appendix C.**

Table 10 : Construction Noise Impact Assessment

Project Component	Receptor	Use	Distance from Construction Zone (ft)	Predicted Sound Level (dBA)*	Applicable Limit (dBA)**	Impact?
ICTF Lead track	270 Lamar Rd.	Residential	140	82	80	Yes

Project Component	Receptor	Use	Distance from Construction Zone (ft)	Predicted Sound Level (dBA)*	Applicable Limit (dBA)**	Impact?
ICTF Lead track	7621 Bill Joseph Pkwy.	Commercial	1,310	63	100	No
ICTF	5145 Mobile Hwy.	Residential	3,064	66	80	No
ICTF	4919 Westport Blvd.	Commercial	762	78	100	No
ICTF New Access Road	5300 Cathy Dr.	Residential	1,530	60	80	No
ICTF New Access Road	5340 Mobile Hwy.	Commercial	685	67	100	No

*Calculated using Table 7-1 (Construction Equipment Noise Emission Levels), Equation 7-1, FTA Transit Noise and Vibration Impact Assessment Manual; and decibel addition of the two loudest pieces of construction equipment.
**Source: Table 7-2 (General Assessment Construction Noise Criteria)

ASPA will minimize construction noise by implementing specific measures to help mitigate the noise at the source. BMPs to minimize construction equipment noise require regular and thorough maintenance procedures for all construction equipment. The following mitigation measures will be implemented by ASPA for construction noise.

Construction Noise Mitigation Measures

ASPA will monitor construction noise to verify compliance with the limits. ASPA will provide the contractor with the flexibility to meet the FTA construction noise limits in the most efficient and cost-effective manner. The contractor would have the flexibility of either prohibiting certain noise-generating activities during nighttime hours or providing additional noise control measures to meet the noise limits. To meet required noise limits, the following noise control mitigation measures will be implemented by ASPA as necessary, for nighttime and daytime:

- Avoid nighttime construction in residential neighborhoods.
- Locate stationary construction equipment as far as possible from noise-sensitive sites.
- Re-route construction-related truck traffic along roadways that will cause the least disturbance to residents.
- Monitor and maintain equipment to meet noise limits.
- Limit or avoid certain noisy activities during nighttime hours.
- Use equipment with properly working mufflers for all engines.
- Replacement of failing or ineffective muffling and exhaust systems, periodic lubrication of moving parts, and properly tuned engines are necessary in order to keep construction equipment noise emissions to a minimum. Proper scheduling and implementing duration limits for the noisiest construction events can reduce the severity of noise impacts during the construction phase.

Vibration

According to the FTA Transit Noise and Vibration Impact Assessment Manual, the factors considered in a general assessment for rail vibration include train speed, trainset composition, track system/support, track structure, propagation characteristics, coupling-to-building foundation, and type of building/receiver location in a building. Vibration levels at receptors are determined by estimating the overall vibration velocity level as a function of distance from the track and applying adjustments to account for factors such as track support systems, vehicle speed, type of build, and track and wheel conditions. The vibration level base for each identified receptor was assessed from the base curve provided in Figure 6-4 of the FTA Transit Noise and Vibration Impact Assessment Manual. The locomotive powered passenger or freight curve was used for this analysis and then adjustments were applied to each receptor to develop project-specific vibration projections. For this analysis, the following adjustments were made to each receptor:

- Geologic Conditions: +10 dB
- One story wood frame houses: -3 dB

Inventory of existing and build condition vibration levels from the CSXT mainline at the six receptors is included in **Table 11.**

Table 11: Existing Vibration Levels along CSXT Mainline

Receptor	Distance from Rail Line (feet)	RMS Velocity Level from Base Curve (VdB)*	Adjustment (VdB)**	Calculated Vibration Level for Existing and Build Conditions (VdB)
R1	160	74	+7	81
R3	200	72	+7	79
R4	250	69	+7	76
R6	215	71	+7	78
R10	140	75	+7	82
R12	235	70	+7	77

*Source: Figure 6-4 (Generalized Ground Surface Vibration Curves), FTA Transit Noise and Vibration Assessment Manual.

**Source: Table 6-11 (Source Adjustment Factors for Generalized Predictions of GB Vibration and Noise) and Table 6-12 (Path Adjustment Factors for Generalized Predictions of GB Vibration and Noise), FTA Transit Noise and Vibration Assessment Manual.

Since the CSXT mainline track is currently utilized by trains that contribute vibration to the study area, Section 6.2, Step 3b of the in the FTA's Transit Noise and Vibration Impact Assessment Manual was utilized to determine the vibration impact criteria. The CSXT mainline track would be categorized as "heavily used" since there are currently more than 12 trains per day that pass through the study area. According to Table 6-5 Impact Criteria Considering Existing Conditions of the FTA's Transit Noise and Vibration Impact

Assessment Manual, the Project will have no vibration impact if the existing vibration exceeds the standard vibration criteria, the number of train events does not increase significantly, and the project vibration does not exceed the existing vibration by 3 dB or more. Due to existing vibration exceeding the standard vibration criteria of 80 dB for residences and buildings where people normally sleep at two locations and the amount of train events not increasing, the Project is anticipated to have no impact on vibration.

Construction Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used. While ground vibrations from construction activities do not often reach the levels that can damage structures, fragile buildings must receive special consideration. The FTA construction vibration criteria include consideration of the building condition. The construction vibration assessment for the Project is summarized in **Table 12** and discussed further below.

Table 12: Construction Vibration Assessment

Project Component	Nearest Structure	Distance from Construction Zone (ft)	Highest Construction Equipment PPV in/sec*	Allowable Vibration Limit (PPV in/sec)**	Impact?
ICTF Lead track	270 Lamar Rd.	140	0.016	0.5	No
ICTF	5145 Mobile Hwy.	762	0.009	0.5	No
ICTF New Access Road	5300 Cathy Dr.	685	0.001	0.5	No

*Calculated using Table 7-4 (Vibration Source Levels for Construction Equipment) and Equation 7-2, FTA Transit Noise and Vibration Impact Assessment Manual.
**Source: Table 7-5 (Construction Vibration Damage Criteria, FTA Transit Noise and Vibration Impact Assessment Manual

The nearest structure to the construction of the ICTF lead track is located at 270 Lamar Road, which is approximately 140 feet away from the construction zone. At this distance, the highest Peak Particle Velocity (PPV) for the structure is predicted to be 0.016 inches/second (in/s). According to the FTA 2018 Noise and Vibration Impact Assessment Manual, the allowable vibration limit for a structure of similar construction is 0.5 in/s; therefore, construction vibration levels at the nearest structure to the center of the ICTF lead track construction activity will be below the FTA limits. Construction vibration calculations are included in **Appendix C**.

The nearest structure to the construction of the ICTF is located at 4919 Westport Boulevard, which is approximately 762 feet away from the midpoint of the construction zone. At this distance, the highest PPV for the structure is predicted to be 0.009 in/s. According to the FTA 2018 Noise and Vibration Impact Assessment Manual, the allowable vibration limit for a structure of similar construction is 0.5 in/s; therefore, construction vibration levels at the nearest structure to the center of the ICTF construction activity will be below the FTA limits. Construction vibration calculations are included in **Appendix C**.

The nearest structure to the construction of the ICTF new access road is located at 5340 Mobile Highway, which is approximately 685 feet away from the midpoint of the construction zone. At this distance, the highest PPV for the structure is predicted to be 0.001 in/s. According to the FTA 2018 Noise and Vibration Impact Assessment Manual, the allowable vibration limit for a structure of similar construction is 0.5 in/s; therefore, construction vibration levels at the nearest structure to the center of the ICTF new access road construction activity will be below the FTA limits. Construction vibration calculations are included in **Appendix C**.

Based on the calculations mentioned above for each project component, no adverse impacts are expected from vibrations during construction of the proposed project. Construction vibration will temporarily increase vibration levels in the immediate vicinity of the construction site. However, it should be noted that most construction equipment is moving, thereby limiting the exposure of any one location to prolonged construction vibration.

4.2.3 Farmland Resources

Identification

The US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) administers the Farmland Protection Policy Act (FPPA) to ensure that federal programs minimize unnecessary and irreversible conversion of farmland soils to non-agricultural uses. For the purpose of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land. A review of the Project Area revealed that, while no active agriculture is present, prime and other important farmlands are present on the site.

A FPPA request was submitted to the NRCS on April 10, 2023. They responded stating that the project site is in an area designated as urban development and is therefore exempt from the FPPA. NRCS coordination can be found in **Appendix D**.

Impacts and Mitigation

Under the Project, prime farmland would be impacted; however, due to the project site being located in an area designated as urban development, no further coordination is necessary, and no mitigation is required.

Under the No-Build Alternative, the ASPA would not construct or operate the ICTF. The Project site would remain unimproved pastureland and railroad ROW; therefore, there would be no changes to existing farmland resources.

4.2.4 Water Quality

Identification

Surface Water

The ADEM is responsible for monitoring, assessing, and regulating surface water quality in Alabama. The results of their assessment are published periodically in the Alabama Integrated Water Quality Monitoring and Assessment Report and 303(d) List, which identifies water bodies that do not meet the Alabama Surface Water Quality Standards designed for their use, as required by Clean Water Act (CWA) Section 305(b) and 303(d) (ADEM 2022).

According to the April 1, 2022, Alabama Integrated Water Quality Monitoring and Assessment Report – Alabama 303(d) List, there are no water bodies in the vicinity of the Project Area that qualify as a 303(d) listed impaired stream or waterbody. The nearest impaired stream is Catoma Creek, which is approximately three miles downstream from the Project Area. ADEM issued total maximum daily loads (TMDLs)[5] for organic enrichment/low dissolved oxygen in July 2005 and pathogens (fecal coliform) in September 2009 for Catoma Creek.

There is one named perennial stream (Caney Branch), two unnamed perennial streams, one intermittent stream, 13 ephemeral streams, 31 wetlands, and one pond located in the Project Area. See **Section 4.2.5** for more detailed information on these features.

Groundwater

The US Geological Survey (USGS) in cooperation with the Alabama Department of Economic and Community Affairs (ADECA) maintains a groundwater monitoring well (K 107-MTG-3) located approximately three miles north of the Project Area. Data from this well has been collected since August 7, 1952. The water level statics indicate that the lowest water level recorded is 31.88 feet below land surface (FBLS), the highest water level recorded is 13.95 FBLS, and the median water level is 24.35 FBLS.

The USEPA's Sole Source Aquifer Map was accessed to identify the location of any sole aquifers in the proposed Project Area. There were no sole source aquifers identified.

Impacts and Mitigation

Direct water quality impacts to surface water bodies could result from the Project during the construction phase and the operational phase. Stormwater discharges from the Project will generally be to Caney Branch. The discharges will be subject to a National Pollutant Discharge Elimination System (NPDES) General Permit for constriction activities that result in a total land disturbance of one acre or greater issued by ADEM. BMPs, including, but not limited to, silt fencing, wattles, inlet protection and stormwater detention basins will be utilized during construction to minimize impacts to water quality. Additionally,

[5] https://www.epa.gov/tmdl/overview-total-maximum-daily-loads-tmdls

permanent vegetation will be installed on all exposed soils to stabilize disturbed areas post construction. Therefore, the Project would not significantly impact water quality.

No direct impacts would occur to groundwater resources because of the Project as construction would occur entirely above the groundwater table.

Under the No-Build Alternative, the ASPA would not construct or operate the ICTF. The Project site would remain unimproved pastureland and railroad ROW; therefore, there would be no changes to existing water quality.

4.2.5 Wetlands and Watercourses

Identification

Waters of the United States (WOTUS) are regulated by the USACE and USEPA under Section 404 of the CWA of 1972. ADEM regulates water resources through Section 401 of the CWA. In addition to the CWA, wetlands are protected under Executive Order (EO) 11990 which requires Federal agencies to minimize the loss or destruction of natural wetlands and encourages preservation and enhancement of their natural and beneficial values.

Wetlands and streams were identified through a combination of onsite investigations and secondary source data including topographic quadrangles, soil mapping, aerial photography, National Wetlands Inventory, and other available mapping for the area in order to determine the presence of regulated/non-regulated resources within the Project Area. Regulated, also known as jurisdictional, WOTUS within the Project Area include eight wetlands (approximately 1.81 acres total), one intermittent stream (approximately 1295 linear feet (0.13 acre)), three perennial streams (approximately 2435 linear feet (0.42 acre) combined), and one pond (approximately 6.49 acres). Twenty-three non-jurisdictional wetlands (approximately 3.70 acres total) and 13 non-jurisdictional ephemeral channels (approximately 4338 linear feet (0.31 acre) combined) are also present within the Project Area. An approved jurisdictional determination request was submitted to the USACE on April 19, 2023. The USACE issued an approved jurisdictional determination on January 17, 2024. The approved jurisdictional determination including resource mapping is located in **Appendix E**.

Impacts and Mitigation

Project impacts to wetlands and watercourses are itemized in **Table 13** and **Table 14.**

Table 13: Wetland Impact Table

Wetland	Total Acres	Acres of Impact	Jurisdictional/Non-Jurisdictional
W-5	0.20	0	Jurisdictional
W-6	0.09	0	Jurisdictional
W-7	0.27	0	Jurisdictional

Wetland	Total Acres	Acres of Impact	Jurisdictional/Non-Jurisdictional
W-9	0.32	0	Jurisdictional
W-16	0.27	0	Jurisdictional
W-18	0.06	0	Jurisdictional
W-28	0.10	0	Jurisdictional
W-29	0.50	0.42	Jurisdictional
W-1	0.13	0	Non-Jurisdictional
W-2	0.01	0	Non-Jurisdictional
W-3	0.25	0	Non-Jurisdictional
W-4	0.09	0	Non-Jurisdictional
W-8	0.03	0	Non-Jurisdictional
W-10	0.05	0	Non-Jurisdictional
W-11	1.09	1.09	Non-Jurisdictional
W-12	0.35	0.35	Non-Jurisdictional
W-13	0.11	0.11	Non-Jurisdictional
W-14	0.28	0.28	Non-Jurisdictional
W-15	0.08	0.08	Non-Jurisdictional
W-17	0.03	0	Non-Jurisdictional
W-19	0.06	0	Non-Jurisdictional
W-20	0.37	0.37	Non-Jurisdictional
W-21	0.04	0.04	Non-Jurisdictional
W-22	0.24	0.24	Non-Jurisdictional
W-23	0.11	0.11	Non-Jurisdictional
W-25	0.13	0	Non-Jurisdictional
W-26	0.02	0.02	Non-Jurisdictional
W-27	0.21	0.22	Non-Jurisdictional
W-30	0.02	0.02	Non-Jurisdictional
W-31	0.02	0	Non-Jurisdictional
W-32	0.02	0	Non-Jurisdictional

Table 14: Watercourse Impact Table

Watercourse	Total Acres	Acres of Impact	Total Linear Feet	Linear Feet of Impact	Jurisdictional/Non-Jurisdictional
P-1	0.08	0.05	132.7	70 (Temporary)	Jurisdictional
P-2	0.31	0	2214.0	173	Jurisdictional
P-3	0.03	0	88.5	44	Jurisdictional
I-1	0.13	0	1295.1	0	Jurisdictional
E-1	0.04	N/A	431.3	0	Non-Jurisdictional
E-2	0.01	N/A	164.2	161	Non-Jurisdictional
E-3	0.01	N/A	223.0	218	Non-Jurisdictional
E-4	0.006	N/A	86.3	86.3	Non-Jurisdictional
E-5	0.003	N/A	54.9	54.9	Non-Jurisdictional
E-6	0.008	N/A	124.9	201	Non-Jurisdictional
E-7	0.009	N/A	83.0	0	Non-Jurisdictional
E-8	0.004	N/A	64.4	61	Non-Jurisdictional
E-9	0.11	N/A	1578.8	1577	Non-Jurisdictional
E-10	0.01	N/A	276.5	0	Non-Jurisdictional
E-11	0.02	N/A	297.3	269	Non-Jurisdictional
E-13	0.04	N/A	496.0	493.0	Non-Jurisdictional

Watercourse	Total Acres	Acres of Impact	Total Linear Feet	Linear Feet of Impact	Jurisdictional/Non-Jurisdictional
E-14	0.002	N/A	26.0	26.0	Non-Jurisdictional
E-1	0.04	N/A	431.3	0	Non-Jurisdictional
OW-1	6.49	0	N/A	N/A	Jurisdictional

There are no practicable alternatives to the Project and all practicable measures to minimize harm to the wetlands have been included in the design. The total permanent jurisdictional impacts for the Project include approximately 0.42 acre of wetlands and 217 linear foot (0.05 acre) of perennial stream. An additional 70 linear foot (0.08 acre) of perennial stream would be temporarily impacted. Non-jurisdictional wetlands totaling approximately 2.93 acres and 3,147 linear feet of ephemeral stream will also be impacted by the Project. The Project impacts to WOTUS will be permitted though the USACE Nationwide Permit program that includes ADEM Section 401 water quality certification. In accordance with the Compensatory Mitigation Rule (33 CFR Part 332), compensatory mitigation for unavoidable permanent impacts to jurisdictional features will be provided through the purchase of credits from a USACE approved mitigation bank.

The No-Build Alternative would have no impact on wetlands and watercourses. ASPA would neither construct nor operate the ICTF. The Project site would remain unimproved pastureland and railroad ROW.

4.2.6 Threatened and Endangered Species, Migratory Birds, and Bald and Golden Eagles

Identification

Threatened and Endangered Species

Threatened and endangered plant and animal species are protected under the Endangered Species Act of 1973 (16 U.S.C. Part 1531 et seq.) (ESA), as codified in 50 CFR Part 17. The ESA was enacted to protect endangered and threatened species from becoming extinct. This includes importing, exporting, selling, and transporting species. The law also provides for the designation of critical habitat and prohibits destruction of that habitat. “Take” as defined under the ESA means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” 16 U.S.C. Part 1532(19). An incidental take is an unintentional, but not unexpected, taking.

An official list of threatened and endangered species that may occur within the Project Area or be affected by the Project was obtained through the US Fish and Wildlife Service’s (USFWS) Information for Planning and Consultation (IPaC) tool prior to initiating field surveys in January and February 2023. An updated official species list was obtained from the USFWS on May 9, 2024. Five species (alligator snapping turtle, southern clubshell, monarch butterfly, northern long-eared bat, and tricolored bat) were identified as having the potential to occur within the Project Area. **Table 15** reflects the five species that were identified, their status, and their preferred habitat.

Table 15: Federally Protected Species

Species	Federal Status	Habitat Description
Alligator Snapping turtle (*Macrochelys temminckii*)	Proposed Threatened	The alligator snapping turtle is almost exclusively aquatic and tends to stay submerged and motionless for so long that algae begins to grow on their shells. Except for egg-laying females, these turtles almost never come on land. River systems, lakes, and wetlands comprise their preferred habitats.
Southern clubshell (*Macrochelys temminckii*)	Endangered	This mussel prefers clean, loose sand and gravel in medium to small rivers and streams. This mussel will bury itself in the bottom substrate to depths of up to four inches. Reproduction requires a stable, undisturbed habitat and a sufficient population of fish hosts to complete the mussel's larval development.
Monarch butterfly (*Danaus plexippus*)	Candidate	Individual monarchs in temperate climates, such as eastern and western North America, undergo long-distance migration, and live for an extended period of time. In the fall, in both eastern and western North America, monarchs begin migrating to their respective overwintering sites. The monarch requires undisturbed fields to reproduce.
Northern Long-eared bat (*Myotis septentrionalis*)	Endangered	The northern long-eared bat habitat includes forested wooded habitats and some adjacent non forested habitats such as emergent wetlands and agricultural fields. Potential roosts consist of live trees or snags with greater than 3 inches dbh and have exfoliating bark, cracks, or crevices
Tricolored bat (*Perimyotis subflavus*)	Proposed Endangered	During the winter, tricolored bats are found in caves and mines, although in the southern United States, where caves are sparse, tricolored bats are often found roosting in road-associated culverts. During the spring, summer and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves.

Field evaluations were conducted by qualified biologists in January and February of 2023 to identify potentially suitable habitat for federally threatened and endangered species protected by the ESA. A Biological Study (BS) was prepared and was coordinated with the USFWS via email on May 21, 2024. See **Appendix F** for the USFWS coordination package. The BS found, and the FRA determined, that the Project will have "No Effect" on the alligator snapping turtle, southern clubshell, northern long-eared bat, and monarch butterfly. However, the Project "May Affect but is Not Likely to Adversely Affect" the tricolored bat. The USFWS concurred with the BS findings on June 21, 2024. USFWS concurrence is located in **Appendix F**.

The ADCNR was contacted via email to provide comments, responses, studies or

methodologies on those areas within the special expertise or jurisdiction of their agency. ADCNR responded that it does not appear that this Project will adversely affect any state or federally protected species if BMPs are followed. Additionally, they replied that the state and federally protected southern clubshell (*Pleurobema decisum*) and state protected Brazilian free-tailed bat (*Tadarida brasiliensis*) are known to occur within three miles of the project. ADCNR correspondence is found in **Appendix K**.

Migratory Birds

The Migratory Bird Treaty Act (MBTA) protects migratory and resident bird species by prohibiting taking, attempting to take, capturing, killing, selling/purchasing, possessing, transporting, and importing of migratory birds (including ground-nesting species), their eggs, parts, and nests.

Bald and Golden Eagles

The Bald and Golden Eagle Protection Act (BGEPA) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds. Under the BGEPA, a "take" of an eagle is defined as to "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb."

Impacts and Mitigation

The FRA determined and the USFWS concurred that the Project "May Affect but is Not Likely to Adversely Affect" the tricolored bat. Conservation measures to be implemented by the ASPA include no tree or vegetation clearing between December 15 - February 15 and May 1 - July 15 to avoid removal of suitable roosting trees during pup season. If this tree clearing timing is not achievable, a mist-netting survey will be conducted to determine presence or absence of this species prior to any clearing activities. Additionally, no nesting migratory birds, eagles, or other raptors or suitable habitat for these species were observed within the Project Area.

The No-Build Alternative would have no impact on federal threatened or endangered species, migratory birds or bald and golden eagles. There would be no construction or operation of the ICTF. The Project site would remain unimproved pastureland and railroad ROW.

4.2.7 Floodplains

Identification

The National Flood Insurance Program (NFIP) defines regulations for construction-related activities within floodplains designated by Federal Emergency Management Agency (FEMA) and as defined by a Flood Insurance Rate Map (FIRM). Section 60.3 (d)(3) of the NFIP regulations states that a community is to "prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic

analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base (100-year) flood discharge." EO 11988 – Floodplain Management directs each federal agency to take action to reduce the risk of losses associated with floods, to minimize the impact of floods on human health and safety, and to preserve the beneficial values of floodplains. Compliance with EO 11988 is required for projects that are federally undertaken, financed, or assisted and that involve a floodplain encroachment, which is an action within the limits of the base (100-year) floodplain.

The Project Area is located within portions of Zone AE (100-year floodplain) and Zone X (areas of minimal flood hazard) as identified on FEMA FIRM panel 01101C0211J (effective 1/7/2015). In addition to the floodplains, Caney Branch within the Project Area has been designated as a regulated floodway by FEMA.

Impacts and Mitigation

The Project would involve placing bridge piers and piles within the 100-year floodplain and the regulated floodway. It is anticipated that the Project will result in a 0.2' rise in the floodplain elevation. A Conditional Letter of Map Revision (CLOMR) will be prepared and submitted to FEMA for review to determine that the Project, if built as proposed, or proposed hydrology changes would meet minimum NFIP standards.

The city of Montgomery regulates development of floodplains within the city limits. All work within the floodplains will be done in accordance with the requirements of the city of Montgomery's Floodplain Development Ordinance as adopted by the city of Montgomery, and with all other applicable federal, state, and local regulations. It is anticipated that a "Floodplain Development Permit" will be submitted to the city of Montgomery for their review and approval prior to initiating construction.

Impacts of the Project on the hydrology, drainage, and flooding conditions of Caney Branch will meet all local, state, and federal standards; therefore, mitigation is not required.

The No-Build Alternative would have no impact on floodplains. Under the No-Build Alternative, ASPA would neither construct nor operate the ICTF. The Project site would remain unimproved pastureland and railroad ROW.

4.3 Human Environment

The purpose of this section is to describe the characteristics of the human environment within the area affected by the Project.

4.3.1 Cultural and Historic Resources

Identification

Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, protects properties that are listed or eligible for listing in the National Register of Historic Places (NRHP). Approval of the Project requires compliance with Section 106 of the NHPA and the regulations of Title 36 in the CFR Part 800. Pursuant to the CFR, the process involves identification of proper consulting parties including the State Historic Preservation Officer (SHPO), who is the Executive Director of the Alabama Historical Commission (AHC).

The Area of Potential Effect (APE) of the Project was set at 0.4 km (1/4 mile) beyond the edge of the limits of disturbance (LOD) of the ICTF facility within the Project Area and 0.2 km (1/8 mile) beyond the proposed centerline of the linear railway portion of the Project Area to account for potential physical visual, atmospheric, and auditory effects.

A Phase I cultural resources assessment (CRA) was conducted on February 1-17 and April 3-5, 2023 by a qualified archaeologist meeting the Secretary of the Interior's Qualifications Standards at 36 CFR Part 61. The CRA was guided by procedural standards created by the Alabama Council of Professional Archaeologists in accordance with the Alabama Historical Commission's (2002) specifications as outlined in the Policy for Archaeological Surveying and Testing in Alabama and the Alabama Historical Commission Section 106 Architectural Resources Guidelines. The archaeological survey was conducted within the LOD, and survey for above-ground resources was conducted within the APE, inclusive of the LOD.

As a result of the investigations, three new archaeological sites were identified and recorded (1Mt565, 1Mt566, and 1Mt567), see **Table 16**. Phase II testing was recommended for site 1Mt565/Falkner's Siding.

Table 16: Archaeological Sites Identified

Site Number	Site Name	Cultural Affiliation	Recommendation
1Mt565	Falkners Siding	Early to Mid-Twentieth Century Nonaboriginal	Undetermined
1Mt566	Baler Barn	Early to Mid-Twentieth Century Nonaboriginal	Not Eligible; NFW*
1Mt567	Circle H Ranch	Unknown Aboriginal Secondary Deposition, Mid-Twentieth Century	Not Eligible; NFW*

* No Further Work

Twelve individually recorded historic structures, including the Southlawn Baptist Church and the Hope Hull Recreation Center, were assessed during the survey. Additionally, the English Village and Southlawn Estates Historic District and an approximate two-mile

segment of the Selma to Montgomery National Historic Trail were identified in the APE. Section 106 consultation was initiated by the FRA with the Alabama SHPO via email on September 8, 2023. See **Appendix G** for correspondence. FRA determined that site 1Mt565/Falkner's Siding would require further testing to determine its eligibility for listing in the NRHP. FRA also determined that the Hope Hull Recreation Center, the English Village and Southlawn Estates Historic District, the Southlawn Baptist Church, and the Selma to Montgomery National Historic Trail are eligible for listing in the NRHP; however, the Project would have no adverse effect to these resources. The SHPO responded in a letter dated October 6, 2023 that they concurred with the FRA findings.

Phase II testing of site 1Mt565 occurred from November 6 to November 9 and November 20 to December 13, 2023. Two subsurface features were identified in addition to numerous domestic and railroad-related late-nineteenth through mid-twentieth century artifacts, demonstrating that the site had good integrity. The FRA determined that site 1Mt565/Falkners Siding was eligible for listing in the NRHP for Criteria A and D under the areas of Ethnic History-Black, Social History, Transportation, and Archaeology-Historic-Non-Aboriginal; and that it is potentially eligible under Criterion C for design.

Impacts and Mitigation

Site 1Mt565 is located within the LOD of the Project. FRA discussed Project redesign with the ASPA to avoid the site; however, the ASPA determined that there is no feasible and prudent alternative to avoid the site while still meeting the Project's Purpose and Need. Therefore, the Project will have an adverse effect on historic properties.

On May 22, 2024, the FRA made a submittal to the Advisory Council on Historic Preservation (ACHP) notifying them of an adverse effect finding and the FRA's intention to enter into a Memorandum of Agreement (MOA) to resolve the adverse effects. The ACHP responded on June 30, 2024, that based on the information provided, they concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of their regulations, "Protection of Historic Properties" (36 CFR Part 800) implementing Section 106 of the NHPA, does not apply to this undertaking. Accordingly, they did not believe their participation in the consultation to resolve adverse effects is needed. See **Appendix G** for ACHP coordination.

The FRA, in coordination with the ASPA and the Alabama SHPO, prepared a draft MOA that includes mitigation measures to mitigate the adverse effects to Site 1Mt565. A copy of the draft MOA can be found in **Appendix G**. Mitigation measures include Phase III archaeological field investigations, Phase III reporting, and academic publication.

The No-Build Alternative would have no impact on cultural resources. There would be no impact to historic properties because the Project site would remain unimproved pastureland and railroad ROW.

4.3.2 Section 4(f)/6(f) and Parks and Recreation

Identification

Section 4(f) refers to Section 4(f) of the US Department of Transportation (USDOT) Act of 1966 codified in Federal law at 49 U.S.C. 303. Section 4(f) specifies that USDOT agencies, including FRA, cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or historical sites of national, state, or local significance unless there is no feasible and prudent alternative to the use of the land and the Project includes all possible planning to minimize harm to the property.

There are no publicly owned parks, recreational areas, or wildlife and waterfowl refuges located within or adjacent to the Project Area. Site 1Mt565/Falkners Siding, was discovered within the LOD. The FRA determined that this resource is eligible for listing on the NRHP.

Section 6(f) of the Land and Water Conservation Fund Act (LWCF) of 1965 provides matching funds to states and municipalities for improvement or acquisition of outdoor recreational facilities. Section 6(f) is independent from Section 4(f) but must be considered during Section 4(f) compliance.

No Section 6(f) properties were identified within the Project Area.

Impacts and Mitigation

Although site 1Mt565 was found to be eligible for listing in the NRHP, the FRA, in consultation with the SHPO, determined that the resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place. Therefore, Section 4(f) does not apply to this resource.

There are no 6(f) facilities located within the Project Area.

The No-Build Alternative would have no impact on Section 4(f)/6(f) resources or parks and recreation because the Project would not be constructed and the Project site would remain unimproved pastureland and railroad ROW.

4.3.3 Hazardous Waste and Hazardous Material

Identification

A Phase I Environmental Site Assessment (ESA) was conducted for the Project Area in order to identify any potential recognized environmental conditions (RECs). A regulatory database search conducted by Envirosite Corporation was reviewed as well as records found in the ADEM's eFile system and the USEPA's EnviroMapper for Envirofacts website. There were no RECs recorded for the Project Area. In addition, a field survey of the Project Area was completed for presence of potential RECs. No RECs were

identified. The Phase I ESA is found in **Appendix H.**

CSXT transports hazardous materials on the existing rail line in accordance with all federal regulations prescribed by the USDOT. Pursuant to these regulations, each rail shipper is required to provide shipment information for any hazardous material offered which must include a 24-hour contact which can provide information for responders in the event of an emergency involving the shipment. Rail cars containing hazardous materials will remain on the existing CSXT rail line and/or proposed sidetrack, adjacent to the Montgomery ICTF. No hazardous materials will be loaded or offloaded at the ICTF.

Impacts and Mitigation

The Phase I ESA did not reveal the presence of hazardous waste within the Project Area. Should contaminated materials be encountered during construction, ASPA will dispose of all materials properly and in accordance with all federal, state, and local regulations. Once in operation, it is not anticipated that there will be an increase in hazardous waste passing through the Project Area.

The No-Build Alternative would have no impact on hazardous waste or hazardous material. Under the No-Build Alternative, ASPA would neither construct nor operate the ICTF. The Project site would remain unimproved pastureland and railroad ROW.

4.3.4 Land Use

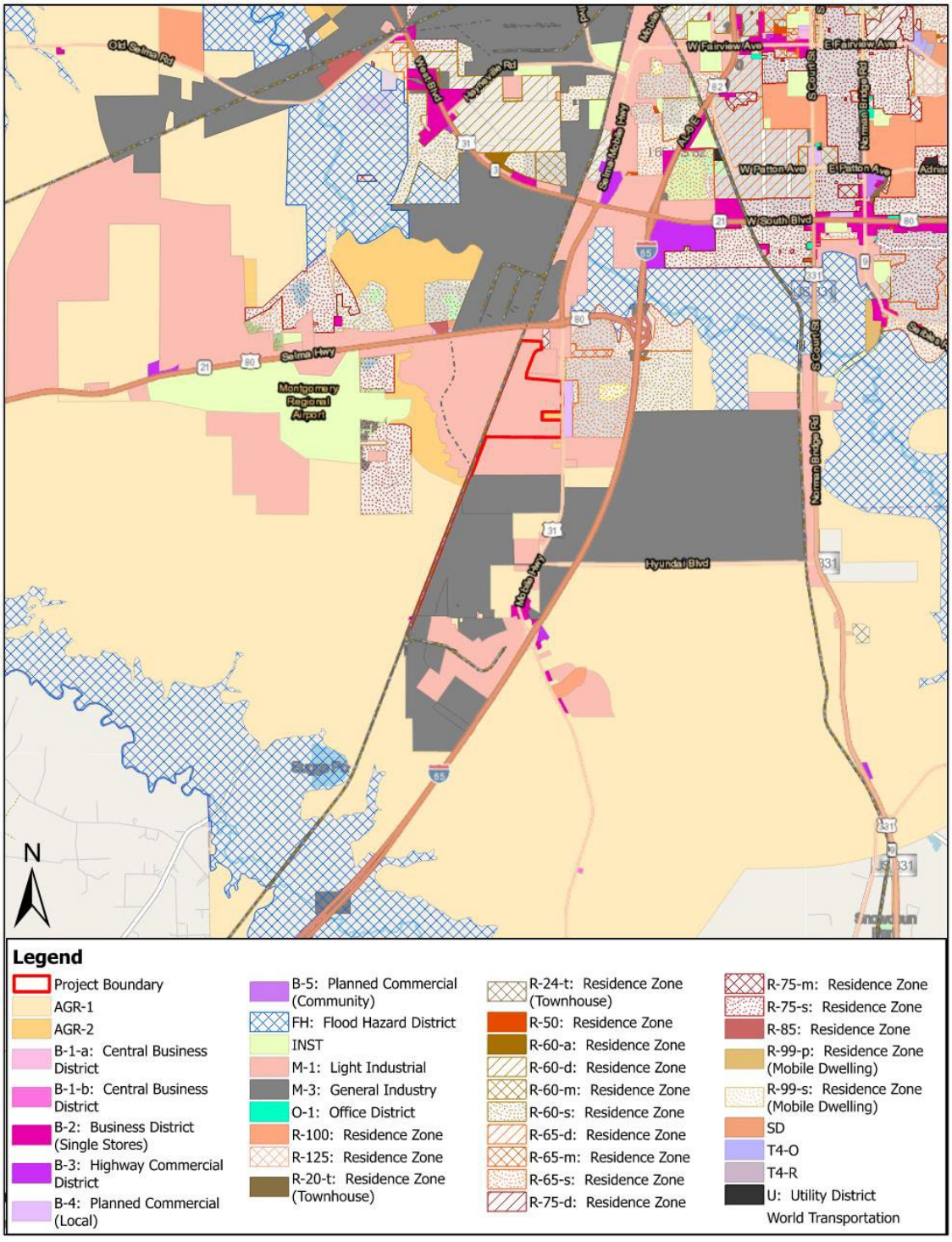
Identification

The Project Area is located in an urbanized area of the city of Montgomery. Surrounding land uses include industrial, commercial, and residential land uses. The land use within the Project Area is unimproved pastureland and railroad ROW. The parcel and adjacent parcels are zoned M-1 (light industrial) with the exception of an approximate 10-acre parcel that abuts the Project Area in the southeast corner zoned as AGR-2 (agricultural area (general agriculture)). Zoning within the Project Area is shown on **Figure 7**. Approximately 0.97 acre of permanent ROW and 0.21 acre of temporary construction easement will be acquired from two property owners to construct the parallel lead track. The ROW and the easement are both undeveloped pieces of land that are zoned for industrial use.

Impacts and Mitigation

Construction of the Project will change the current land use from unimproved pastureland to light industrial which is consistent with current zoning. All ROW acquisitions will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. No private residences or structures will be relocated, and there will be no displacement of any residential or commercial uses. The No-Build Alternative will have no impact on current land use or zoning. Under the No-Build Alternative, ASPA would neither construct nor operate the ICTF. The Project site would remain unimproved pastureland and railroad ROW.

Figure 7: City of Montgomery Zoning Map



4.3.5 Community Facilities

Identification

Community facilities are important attributes of society and often serve to unify people that would otherwise not associate with one another. Examples of community facilities include, but are not limited to, schools, churches and public recreation areas. Community facilities in the immediate vicinity of the Project include the Southlawn Baptist Church, the Kingdom Hall, the Cathedral of Restoration, and Southlawn Middle School.

Impacts and Mitigation

Social interaction patterns will not be altered, and community facilities will not be physically impacted by the construction of the Project; therefore, it is not anticipated that the Project will negatively impact existing community facilities.

The No-Build Alternative will have no impact on community facilities. Under the No-Build Alternative, ASPA would neither construct nor operate the ICTF. There would be no change to social interaction patterns at existing community facilities.

4.3.6 Aesthetics and Visual

Identification

Aesthetics and visual resources are defined as features comprised of both the man-made and natural environment that make up the visual landscape. Examples of these resources can include parks, natural areas, scenic routes, open vistas, water bodies, and other landscape features. Cultural resources including historic landmarks and historic districts can also be considered aesthetics and visual resources. These resources create aesthetic qualities that are valued by the public that views the features. Viewers may include neighbors (who occupy land adjacent to or visible to the Project) and travelers (who may view the Project using existing transportation). The surrounding properties and roadways within the line of site of the Project were analyzed for aesthetics and visual impacts.

The Project is in an urbanized area of city of Montgomery. The site is bordered to the west by the Montgomery Regional Airport, light industry and the CSXT rail line; to the north by commercial development and US 80; to the east by the English Village and Southlawn Estates neighborhoods, the Cathedral of Restoration Church, Southlawn Middle School, and US 31; and to the south by a Southland Baptist Church, pastureland, and light industry. The Project site gradually slopes back to the west and is unimproved pastureland and railroad ROW.

As discussed in **Section 4.3.1**, the English Village and Southlawn Estates neighborhoods were determined to be a NRHP-eligible historic district under Section 106. The Southlawn Baptist Church was also determined to be eligible for the NRHP. **Figure 8** reflects the

location of these resources to the Project.

Impacts and Mitigation

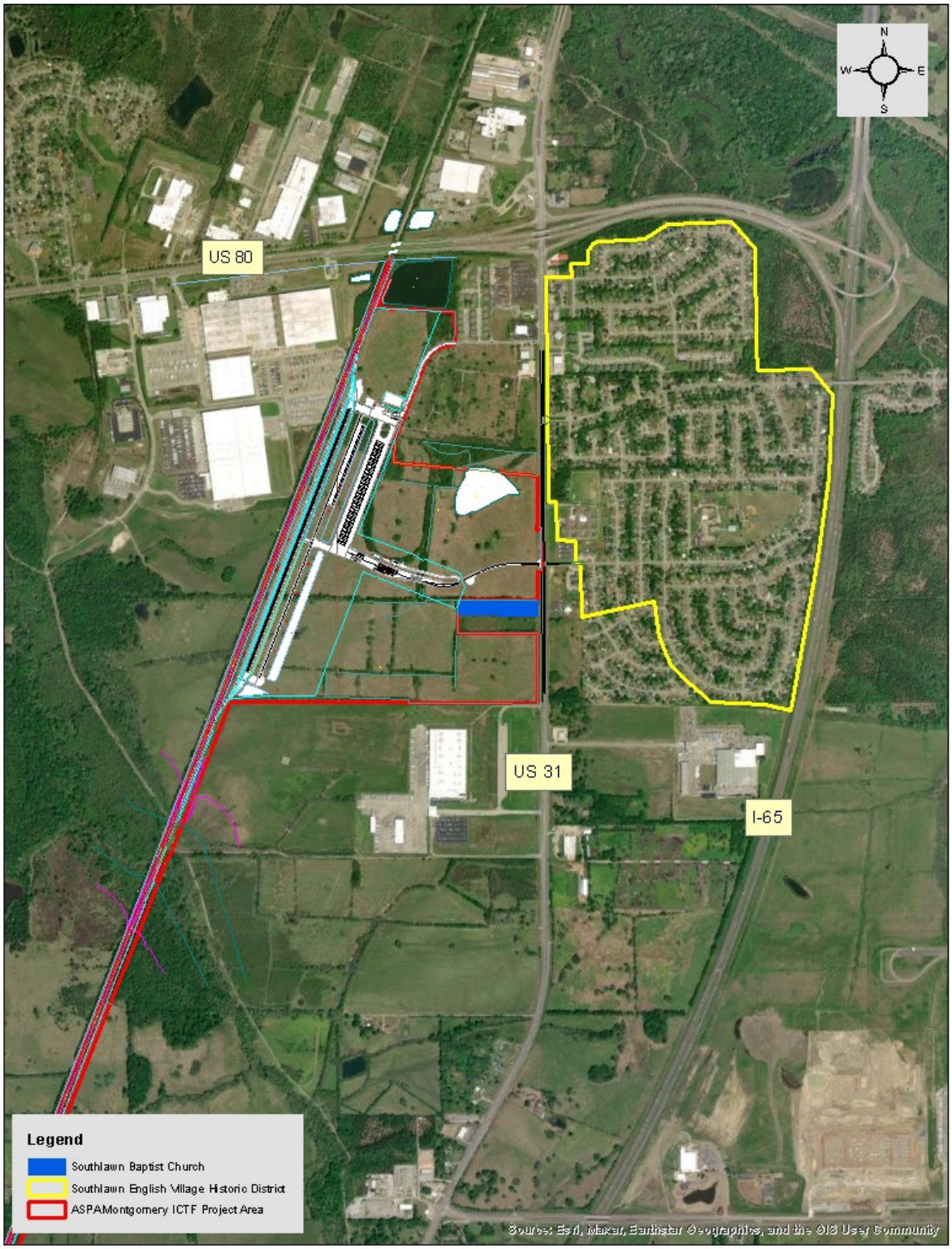
Views of the Project would be converted from unimproved pastureland to light industrial in nature. Highly visible elements of the Project include intersection improvements at US 31 and Green Leaf Drive and the entrance road into the ICTF. The ICTF would be less visible as it is located approximately 0.5-mile west of US 31.

As discussed in **Section 4.3.4**, the Project is consistent with existing light industrial land uses in the area. The Montgomery Regional Airport and other light industrial facilities are located within the vicinity of the Project; therefore, the Project would be consistent with the surrounding visual environment and would not substantially change the existing visual character of the surrounding area. Existing tree lined fence rows and stands of trees would provide a buffer between the Project and the surrounding properties and roadways. Therefore, no mitigation is required.

FRA assessed potential effects on the English Village and Southlawn Estates Historic District and the Southlawn Baptist Church under Section 106. FRA found that the Project would be visible from a very limited portion (the southwestern edge) of the English Village and Southlawn Estates Historic District. Due to the large scale of the historic district, minor intersection improvements, and the access road and facility location, FRA found that it is unlikely that there will be visual changes to the physical features within the historic district's setting that contributes to its historical significance or the introduction of visual elements that would diminish the district's significant historic features. The Southlawn Baptist Church faces east away from the Project. A tree-lined fence row visually separates the church from the proposed intersection improvements and access road. FRA found that it is unlikely that there will be a visual change to the physical features or the introduction of visual elements that would diminish the church's significant historic features. The Alabama SHPO concurred with FRA's findings.

Under the No-Build Alternative, ASPA would not construct or operate environment would remain unchanged. Views from the surrounding area would continue to be of unimproved pastureland and railroad ROW.

Figure 8: NRHP Eligible Resources Within Project Line of Sight



4.3.7 Demographics/Environmental Justice

Identification

This assessment evaluated the potential for Environmental Justice (EJ) impacts that could be associated with the construction of the Project. The USEPA defines EJ as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies". Fair treatment means that no specific group of people should be disproportionately affected by negative consequences that occur as a result of industrial, governmental, and commercial operations or programs and policies.

The methodology used to conduct this EJ Assessment was based on requirements set forth in EO 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, EO 14096 – Revitalizing Our Nation's Commitment to Environmental Justice for All, CEQ's Report Environmental Justice under the National Environmental Policy Act, and USDOT Order 5610.2(a) – Final DOT Environmental Justice Order.

EO 12898, and USDOT Order 5610.2(a) provide the following important definitions of minority and low-income populations:

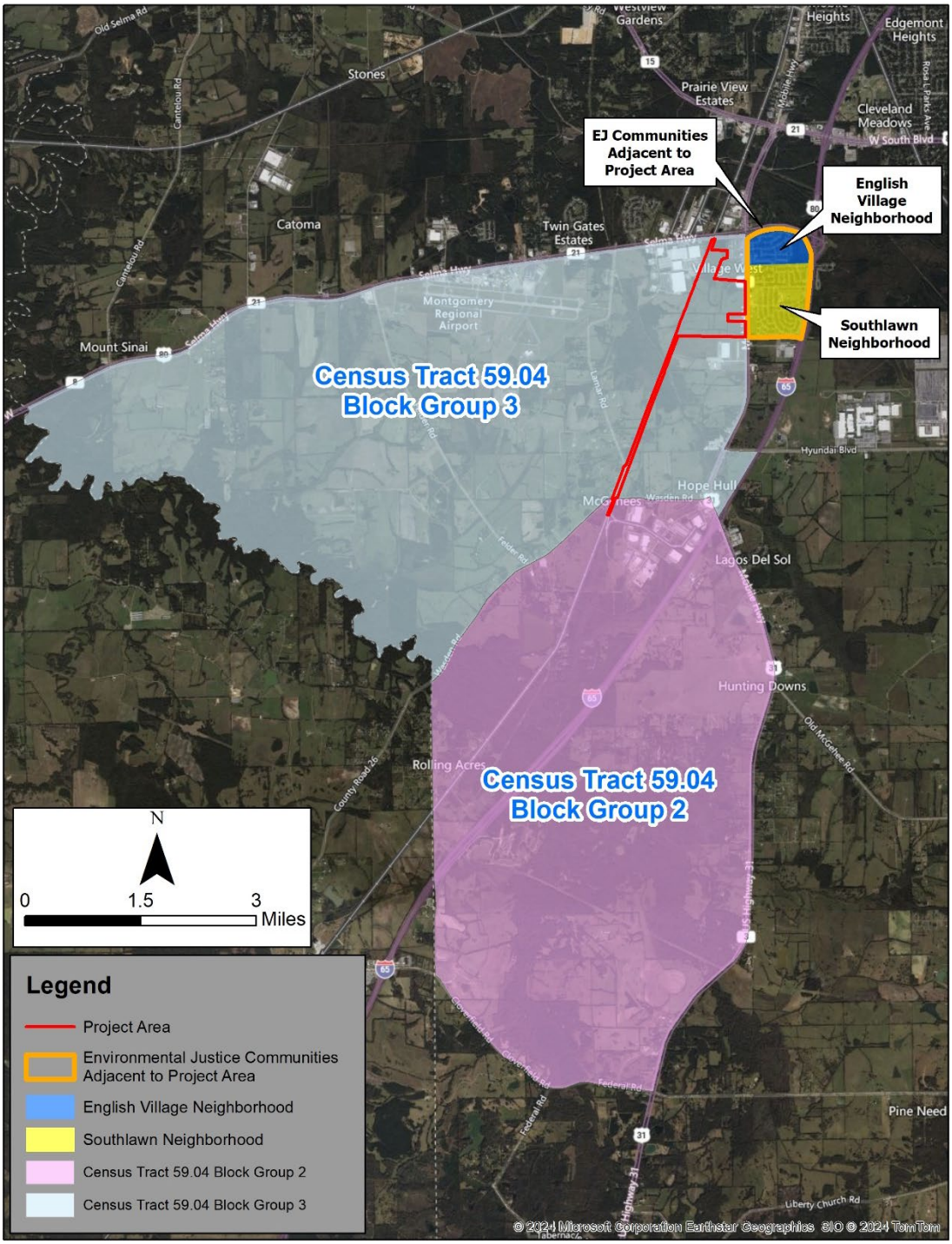
- Minority: Minority means "a person who is Black (having origins in any of the black racial groups of Africa); Hispanic or Latino (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race); Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); American Indian and Alaskan Native (having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition); or Native Hawaiian and Other Pacific Islander (a person having origins in any of the original peoples of Hawaii, Guam, Samoa or other Pacific Islands)".
- Low-Income: Low-income means "a median household income (MHI) at or below the US Department of Health and Human Services (HHS) Poverty Guidelines." The US Census Bureau provides household income information.
- Population: Any readily identifiable group of minority and/or low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons of those groups (such as migrant workers, homeless persons, or Native Americans) who will be similarly affected by a proposed USDOT program, policy, or activity.

The Project is in Montgomery, Montgomery County, Alabama within Census Tract 59.04, Block Groups 2 and 3. The limits of Bock Groups 2 and 3 were used for the EJ assessment.

Figure 9 illustrates the census tract and block groups relative to the Project Area. Most of

the Project Area and proposed improvements including the ICTF, maintenance building, administration building, container stacking area and most of the lead track (9,000 feet) will be constructed within Block Group 3. The remaining 1,000 feet of the lead track will be constructed within Block Group 2.

Figure 9: US Census Bureau Census Tract 59.04, Block Groups 2 and 3



During the preparation of this EA, additional EJ communities, including the Southlawn and English Village neighborhoods, were identified across US 31 from the proposed ICTF access road. These communities are located east of the Project Area in Census Tract 59.02. The locations of these communities relative to the Project Area are illustrated on **Figure 9**. As mentioned in **Section 5.1** of this EA, outreach to these EJ communities during a public involvement meeting held on March 16, 2023, from 5:00 p.m. to 7:00 p.m. in the Southlawn Middle School cafeteria located at 5333 Mobile Highway, Montgomery, Alabama. Eighteen comments and one petition signed by 270 residents of the Southlawn and English Village communities were received. The public expressed concern over site security, increases in traffic and noise, and the potential for hazardous materials to be offloaded at the ICTF. In addition to the public involvement meeting, at the request of the Southlawn Community Organization, representatives of the ASPA and their consultants attended their May 11, 2023, meeting. Members of the community further expressed their concerns over the potential for increased traffic and noise impacts from the Project.

Regarding the aforementioned EJ communities' concerns about the Project, a traffic analysis was prepared which indicates that the Project will not result in unacceptable traffic conditions. Noise impacts (**Section 4.2.2**) are not anticipated to occur because of the Project. Rail cars containing hazardous materials **(Section 4.3.3**) will remain on the existing CSXT rail line and/or proposed sidetrack, adjacent to the Montgomery ICTF. No hazardous materials will be loaded or offloaded at the ICTF. Controlled gates, cameras, lights and fencing will be incorporated to ensure the security of the ICTF (**Section 4.3.8**).

Socioeconomic and demographic data was gathered for Census Tract 59.04, Block Groups 2 and 3 from the US Census Bureau American Community Survey (ACS) and the USEPA's EJScreen website in January 2024. Block groups are statistical divisions of census tracts used to present data and are generally defined to contain between 600 and 3,000 people. A block group consists of clusters of blocks within the same census tract. For comparison purposes, data were also compiled for the city of Montgomery, Montgomery County, and state of Alabama.

Minority Populations: For the purposes of this EJ assessment, census block groups where the minority populations are greater than the county percent were considered high concentration minority areas. Based on information from the US Census Bureau ACS, the total population for Block Group 2 is 902 whereas the total population for Block Group 3 is 681. The ACS indicates that Block Group 2 has a minority population of 43 percent and Block Group 3 has a minority population of 67 percent. Comparatively, the minority population within the city of Montgomery is 71 percent, the minority population within Montgomery County is 68 percent, and the minority population within the state of Alabama is 31 percent. The minority population data is displayed in **Table 17.**

Low-Income Populations: For the purposes of this EJ assessment, census block groups where the low-income populations are greater than the county percent were considered high concentration low-income areas. Based on information from the US Census Bureau ACS and USEPA's EJScreen, the low-income population for Block Group 2 is 28 percent

whereas the low-income population for Block Group 3 is 67 percent. Comparatively, the low-income population within the city of Montgomery is 71 percent, the low-income population within Montgomery County is 68 percent, and the low-income population for the state of Alabama is 16 percent. Demographic data for the Project is displayed in **Table 17.**

Table 17: Environmental Justice Analysis

Geography	Minority	Low Income
Alabama	31%	16%
Montgomery County	68%	38%
City of Montgomery	71%	41%
Census Tract 59.04	58%	24%
Block Group 2	43%	28%
Block Group 3	67%	32%

According to the results of this EJ assessment, the Project is not located within a minority or low-income area because the percentages of minority and low-income populations within Census Tract 59.04, Block Group 2 and Block Group 3 are less than Montgomery County.

Impacts and Mitigation

The Project would have a direct and positive impact on local EJ populations by providing employment in the form of construction jobs and new opportunities when the ICTF becomes operational. The job creation would also benefit the local and state economy.

No residential or commercial relocations are anticipated to occur because of the Project. Also, the Project would not bisect communities, would not adversely affect community cohesion, and no road closures are anticipated during construction. A traffic analysis was prepared for the Project which indicates that the Project will not result in unacceptable traffic conditions (**Section 4.3.9**). In addition, air quality (**Section 4.2.1**) and noise (**Section 4.2.2**) impacts are not anticipated to as a result of increased rail or vehicular traffic from the Project. Visual impacts (**Section 4.3.6**) are not anticipated to occur due to a tree-lined fence row which will visually separate the EJ communities from the proposed intersection improvements and ICTF access road. As a result, it is anticipated that minority and low-income populations will not experience disproportionate adverse impacts from the Project. In addition, it is anticipated that there would be no decrease in property values based on the lack of impacts to the adjacent EJ communities, therefore no mitigation is proposed.

The No-Build Alternative would have no impact (positive or negative) on the communities in the vicinity of the Project because the ASPA would neither construct nor operate the ICTF. The Project site would remain unimproved pastureland and railroad ROW.

4.3.8 Public Health, Safety, and Security

Identification

The evaluation of public health, safety, and security considers any activities, occurrences, or operations that will have the potential to affect the health, safety, or well-being of members of the public. Public health, safety and security during construction related activities are associated with construction traffic, as well as on-site construction areas. Operational safety and security measures refer to the actual use of the ICTF.

The Project is served by the city of Montgomery Police and Fire Departments. The Project is in an urbanized area of the city of Montgomery. The current Project land use is unimproved pastureland and railroad ROW. Currently, there is a fence surrounding the Project to minimize trespassing.

Impacts and Mitigation

Construction of the ICTF will not impact fire, police, medical, or transportation services because the number of employees and visitors during construction will be minimal compared to the overall existing population served. Most of the construction activities will be confined to the Project area. Minor improvements to the existing roadway network will be constructed. A traffic control plan will be implemented during construction to provide continuity of safe and efficient road user flow in the work zone.

While in operation, it is not anticipated that the ICTF would pose a threat to public health, safety and security. It will be designed to incorporate safety and security measures, such as controlled gates, cameras, lights and fencing. The ICTF would not be open to the general public and Transportation Worker Identification Credential (TWIC) cards will be required for access. All employees would be trained in safety and security protocols. Truck traffic approaching the Project from the north will utilize the dedicated right turn lane to access the facility, while truck traffic approaching from the south will utilize the US 31 center turn lane. It is not anticipated that additional truck trips will cause backups for emergency services traveling along US 31. Therefore, the Project would not impact public health, safety, and security.

Under the No-Build Alternative, ASPA would neither construct nor operate the ICTF and there would be no change to existing public health, safety, and security.

4.3.9 Transportation

Roadway

Identification

I-65 serves as a major north/south connector route from the Port to the Montgomery area; while US 31 is a five-lane minor arterial roadway with a two-way left turn lane and a posted speed limit of 45 miles per hour in the immediate vicinity of the Project. In this area, the

roadway is oriented in a north/south direction. The access road to the Project would intersect with US 31 at the existing signalized intersection with Green Leaf Drive.

Impacts and Mitigation

The FHWA projects that I-65 throughout the state of Alabama will become a high-volume truck route (10,000+trucks per day) subject to peak period congestion prior to 2035[6]. It is anticipated that once the Montgomery ICTF is constructed, 100 trucks per weekday will be diverted from I-65 to rail along the 165-mile route from the Port to Montgomery. This number is expected to grow by eight trucks per weekday each year post-construction.[7] According to a projected economic impact and environmental, safety, and infrastructure benefits study prepared by Martin Associates, the current average vehicle-miles-traveled (VMT) between the Port and beneficial cargo owner clusters in and around the Montgomery area is 234.4. Once the ICTF is constructed, it is anticipated that the number will be reduced to 78 VMT plus an additional 1.5 VMT for drayage between the Port's container terminal and the Mobile ICTF. That translates into a 155.125 VMT savings by transferring containers from heavy diesel trucks to rail. This study can be found in **Appendix I**.

A traffic impact study was prepared by Skipper Consulting to assess potential impacts to US 31 in the vicinity of the Project. The purpose of the traffic study was to:

- Assess existing traffic conditions in the vicinity of the Project;
- Estimate the amount of traffic expected to be generated by the Project;
- Estimate the directional distribution of Project related traffic and assigned such traffic to the Project access;
- Assess the access needs of the Project;
- Assess future traffic conditions within the Project vicinity assuming the Project in place; and
- Project future traffic conditions under the No-Build condition.

The peak hour traffic volumes for existing conditions (**Table 18**) , 2025 Project conditions at the completion of construction (**Table 19**), 2045 No-Build conditions (**Table 20**), and 2045 Project conditions (**Table 21**) are shown below. Future traffic volumes were estimated using a growth rate of one percent per year. According to Table 4 in **Appendix B**, the Project is expected to generate a combined total of approximately 157 morning peak hour vehicle trips [74 vehicles entering (59 trucks and 15 passenger vehicles) and 83 vehicles exiting (59 trucks and 24 passenger vehicles)] and approximately 103 afternoon peak hour vehicle trips [51 entering (38 trucks and 13 passenger vehicles) and 52 vehicles exiting (37 trucks and 15 passenger vehicles)] in the design year 2045 Project condition.

The signalized US 31 and Green Leaf Drive intersection currently operates at a The Level-

[6] https://ops.fhwa.dot.gov/freight/freight_analysis/freight_story/congestion.htm

[7] City of Montgomery, Montgomery Alabama Inland Intermodal Facility INFRA Grant Application. March 2021

of-Service (LOS) of B or better. The signalized US 31 and Green Leaf Drive/ICTF new access road intersection is projected to operate at a LOS of B or better during the opening year 2025 Project condition. The signalized US 31 and Green Leaf Drive/ICTF new access road intersection is projected to operate at a LOS of B or better during the design year 2045 Project condition.

Table 18: Existing Conditions Peak Hour Traffic Volumes

Roadway	AM Peak Hour Volume (Veh/Hr)	AM Peak Cars/Medium Trucks/Heavy Trucks	PM Peak Hour Volume (Veh/Hr)	PM Peak Cars/Medium Trucks/Heavy Trucks	Posted Speed (MPH)
US-31 from Southlawn Dr to School Exit Southbound	452	369 / 35 / 48	466	380 / 36 / 50	45
US-31 from School Exit to Green Leaf Dr Southbound	465	379 / 36 / 50	495	404 / 38 / 53	45
US-31 from Green Leaf Dr to Hyundai Blvd Southbound	215	175 / 17 / 23	331	270 / 26 / 35	45
US-31 from Hyundai Blvd to Green Leaf Dr Northbound	442	361 / 34 / 47	624	509 / 48 / 67	45
US-31 from Green Leaf Dr to School Exit Northbound	548	447 / 42 / 59	822	671 / 63 / 88	45
US-31 from School Exit to Southlawn Dr Northbound	691	564 / 53 / 74	799	652 / 62 / 85	45
Total	**2,813**	**2,295 / 217 / 301**	**3,537**	**2,886 / 273 / 378**	**N/A**

Table 19: 2025 Project Conditions at Completion of Construction Peak Hour Traffic Volumes

Roadway	AM Peak Hour Volume (Veh/Hr)	AM Peak Cars/Medium Trucks/Heavy Trucks	PM Peak Hour Volume (Veh/Hr)	PM Peak Cars/Medium Trucks/Heavy Trucks	Posted Speed (MPH)
US-31 from Southlawn Dr to School Exit Southbound	471	381 / 38 / 52	484	392 / 39 / 53	45

Roadway	AM Peak Hour Volume (Veh/Hr)	AM Peak Cars/Medium Trucks/Heavy Trucks	PM Peak Hour Volume (Veh/Hr)	PM Peak Cars/Medium Trucks/Heavy Trucks	Posted Speed (MPH)
US-31 from School Exit to Green Leaf Dr Southbound	480	389 / 38 / 53	511	414 / 41 / 56	45
US-31 from Green Leaf Dr to Hyundai Blvd Southbound	228	185 / 18 / 25	343	278 / 27 / 38	45
US-31 from Hyundai Blvd to Green Leaf Dr Northbound	442	358 / 35 / 49	459	372 / 37 / 50	45
US-31 from Green Leaf Dr to School Exit Northbound	573	464 / 46 / 63	847	686 / 68 / 93	45
US-31 from School Exit to Southlawn Dr Northbound	719	580 / 60 / 79	824	667 / 66 / 91	45
New Location Access Road for Project	36	29 / 3 / 4	26	21 / 2 / 3	45
Total	**2,949**	**2,386 / 238 / 325**	**3,494**	**2,830 / 280 / 384**	**N/A**

Table 20: 2045 No-Build Alternative Conditions Peak Hour Traffic Volumes

Roadway	AM Peak Hour Volume (Veh/Hr)	AM Peak Cars/Medium Trucks/Heavy Trucks	PM Peak Hour Volume	PM Peak Cars/Medium Trucks/Heavy Trucks	Posted Speed (MPH)
US-31 from Southlawn Dr to School Exit Southbound	563	459 / 44 / 60	580	473 / 45 / 62	45
US-31 from School Exit to Green Leaf Dr Southbound	579	472 / 45 / 62	616	503 / 47 / 66	45
US-31 from Green Leaf Dr to Hyundai Blvd Southbound	268	219 / 20 / 29	412	336 / 32 / 44	45
US-31 from Hyundai Blvd to Green Leaf Dr Northbound	550	449 / 42 / 59	777	634 / 60 / 83	45
US-31 from Green Leaf Dr to School Exit Northbound	682	557 / 52 / 73	961	835 / 79 / 109	45

Roadway	AM Peak Hour Volume (Veh/Hr)	AM Peak Cars/Medium Trucks/Heavy Trucks	PM Peak Hour Volume	PM Peak Cars/Medium Trucks/Heavy Trucks	Posted Speed (MPH)
US-31 from School Exit to Southlawn Dr Northbound	860	702 / 66 / 92	995	812 / 77 / 106	45
Total	**3,502**	**2,858 / 269 / 375**	**4,341**	**3,593 / 340 / 470**	**N/A**

Table 21: 2045 Project Conditions Peak Hour Traffic Volumes

Roadway	AM Peak Hour Volume (Veh/Hr)	AM Peak Cars/Medium Trucks/Heavy Trucks	PM Peak Hour Volume	PM Peak Cars/Medium Trucks/Heavy Trucks	Posted Speed (MPH)
US-31 from Southlawn Dr to School Exit Southbound	603	492 / 46 / 65	605	494 / 46 / 65	45
US-31 from School Exit to Green Leaf Dr Southbound	566	462 / 44 / 60	603	492 / 46 / 65	45
US-31 from Green Leaf Dr to Hyundai Blvd Southbound	280	228 / 22 / 30	417	340 / 32 / 45	45
US-31 from Hyundai Blvd to Green Leaf Dr Northbound	552	450 / 43 / 59	766	625 / 59 / 82	45
US-31 from Green Leaf Dr to School Exit Northbound	725	592 / 56 / 77	1,037	846 / 80 / 111	45
US-31 from School Exit to Southlawn Dr Northbound	897	732 / 69 / 96	1,005	820 / 77 / 108	45
New Location Access Road for Project	140	114 / 11 / 15	91	74 / 7 / 10	45
Total	**3,763**	**3,070 / 291 / 402**	**4,524**	**3,691 / 347 / 486**	**N/A**

In response to neighborhood concerns with large trucks operating in/out from a fourth leg at the signalized intersection of US 31 and Green Leaf Drive, the traffic study evaluated a southern access location (approximately 1,600 linear feet south) to determine its traffic operational feasibility. The study concluded that it would be likely that the southern access location would operate as a four-leg intersection in the long term, as there is a 9.5-acre undeveloped parcel immediately across US 31. The four-leg intersection would need to be operated as a signalized intersection to operate effectively. In the short term, the Peak

Hour Vehicular Volume threshold is not met to warrant a four-leg intersection for either 2025 or 2045 when assessing the traffic generated solely by the ICTF. A non-signalized access roadway at this location would present an operational traffic and safety concern for ASPA and its associated entering and existing traffic to and from US 31 to the ICTF. Therefore, it was recommended that an alternative signal operation known as side street "Split Phasing" be implemented at the improved intersection of US 31 and Green Leaf Drive to limit the traffic operational interaction between the neighborhood generated traffic and the Project generated truck traffic. A copy of the study is located in **Appendix B**.

The Project would improve inbound and outbound reach for products for existing and future industries, increase competition, and relieve congestion on the interstate highway system. While interstate traffic would decrease, local traffic would increase slightly. It is anticipated that there would be no substantial impact to the local roadway/highway network from the Project.

Minor increases in traffic are anticipated to occur during construction because no vehicular traffic currently accesses the Project site. It is anticipated that intersection improvements at US 31 and Green Leaf Drive will be implemented early in the construction phase to control construction traffic entering and exiting the site.

Air

Identification

The Montgomery Regional Airport and Dannelly Field Air National Guard Base are located to the west of the Project. The airport averages ten arriving and ten departing commercial domestic flights daily. Dannelly Field is home to the active-duty US Air Force 377th Fighter Squadron and the Alabama National Guard 187th Fighter Wing.

Impacts and Mitigation

Due to the Project being in proximity the Montgomery Regional Airport and Dannelly Field, the FAA requested that an Obstruction Evaluation/Airport Airspace Analysis be performed during the EA process to determine potential impacts to airspace. FAA 7460-1 forms were prepared for all proposed lighting poles and rubber-tired gantry cranes and were submitted for the review and approval. Upon review, the FAA requested that four lighting poles be lowered. These modifications were made and were resubmitted back to FAA for final approval. FAA approval letters are found in **Appendix J**. There are no anticipated impacts to airport operations from the Project.

Rail

Identification

The CSXT mainline runs northeast/southwest along the western border of the Project. On average, daily train traffic consists of 10 daytime and eight nighttime train pass-bys with three diesel locomotives and 130 rail cars per train traveling at a speed of 50 mph.

Impacts and Mitigation

The Project would not increase the number of trains that currently occur along the CSXT mainline rail track; therefore, the project will not impact rail traffic. Additional rail cars will be added to the existing trains. Trains offloading at the ICTF will utilize the 10,000 linear feet lead track and will not stop on the mainline; therefore, it is not anticipated that the existing rail crossing at Wasden Road will be affected.

Under the No-Build Alternative, ASPA would not construct the transload facility, and the Project site would remain unchanged. There would be no increase in rail or truck traffic to and from the Project site. Interstate use would increase causing further congestion without the construction of the ICTF because as demand for goods grows, area businesses would rely on trucking as the sole means of delivering cargo long distance.

4.3.10 Energy Use and Utilities

Identification

Alabama Power Company and PowerSouth provide electricity to Montgomery and the surrounding areas. Alabama Power provides service to 1.4 million homes, businesses and industries in the southern two-thirds of Alabama. More than 78,000 miles of power lines carry electricity to customers throughout 44,500 square miles. Alabama Power is one of four U.S. utilities operated by Southern Company and is its second largest subsidiary. PowerSouth is a generation and transmission (G&T) cooperative providing the wholesale power needs of 20 distribution members that include 16 electric cooperatives and four municipal electric systems in Alabama and northwest Florida. With combined generating capacity of more than 2,000 megawatts, PowerSouth owns and operates six generation facilities and holds ownership interest in an additional facility. PowerSouth maintains long-term purchased power agreements to ensure economic and reliable power supply for members.[8]

Impacts and Mitigation

There are two existing power poles in the western ROW of the intersection of US 31 and Green Leaf Drive that will need to be moved prior to initiating intersection improvements. Additionally, there are water and sewer lines in the vicinity of the lead track work that will need to be replaced. ASPA will coordinate with the respective utility owners throughout the design phase, and identified utility conflicts will be resolved prior to beginning construction.

During construction of the ICTF and related roadway and rail improvements, the prime contractor and their subcontractors would use indirect energy, including electricity, gasoline, and diesel fuel, to power construction equipment and to install building materials

[8] https://www.montgomerychamber.com/utilities#:~:text=Two%20utilities%20provide%20electricity%20to,Company%20and%20PowerSouth%20Energy%20Cooperative

(concrete, steel, etc.) It is anticipated that all contractors would be responsible for providing their own power to accomplish assigned tasks, most likely using gas or diesel operated generators for powering all non-motorized construction equipment. Therefore, there would be no increase in the electric power demand at the Project site during construction.

During operation, electricity would be used to power the lighting, ventilation, and heat at the ICTF. Diesel fuel would be used to power the rubber-tired gantry cranes. While the Project would result in an increase in energy use compared to existing conditions, electric power would be available from existing sources. Long term fuel savings would be recognized through the reduction of vehicle miles traveled due to the shifting of container freight from truck to rail. Therefore, the Project is not expected to have a substantial impact on energy consumption and availability and there are no mitigation measures required.
Under the No-Build Alternative, ASPA would neither construct nor operate the ICTF; therefore, no changes to existing utilities or energy use would occur.

4.4 Construction Period Impacts

Identification

Construction of the Project has a preliminary start date of June 2025 and is anticipated to take approximately 24 months to complete. Resources that may experience short-term construction period impacts include:

Economy and employment - construction would generate employment opportunities including consulting oversight and construction jobs.
Water quality – minor water quality impacts would occur from land disturbing activities.
Air quality – minor air quality impacts would occur from construction equipment exhaust emissions and dust. The impact would be temporary and resolve at the end of construction.
Noise levels – minor noise impacts would occur from the operation of construction equipment as described in **Section 4.2.2**. The impact would be temporary and resolve at the end of construction.
Energy use – impacts would occur from the use of fossil fuels during the operation of construction equipment.

Impacts and Mitigation

The Project would have minor, short-term construction period impacts on the local economy and employment, water quality, air quality, noise levels, and energy use. While temporary impacts related to water quality, air quality, noise levels, and energy use would be negative in nature, there would be positive impacts to the economy and employment due to the creation of construction jobs.

ASPA would implement BMPs to minimize construction equipment noise including regular and thorough maintenance procedures for all construction equipment. Replacement of failing or ineffective muffling and exhaust systems, periodic lubrication of moving parts, and properly tuned engines are necessary in order to keep construction equipment noise emissions to a minimum.

Proper scheduling and implementing duration limits for the noisiest construction events can reduce the severity of noise impacts during the construction phase.

Dust can be a major cause of air emissions during construction. ASPA would implement typical dust-control measures during construction including:

- Scheduling
- Erosion Control – vegetative cover and mulch
- Other Potential Components – sprinkling, barriers, calcium chloride, spray-on adhesives, stone, and street cleaning.

ASPA would minimize air emissions from construction equipment by shutting equipment off when not in use or limiting idling time.

A Construction Best Management Practices Plan would be prepared by ASPA for all phases of construction that would specify BMPs to be implemented to minimize impacts to water quality. The plan would be prepared using guidance found in the Alabama Handbook or Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas.

Under the No-Build Alternative, construction would not take place. Therefore, no construction-related impacts would occur.

4.5 Indirect and Cumulative Impacts

CEQ *Regulations for Implementing the Procedural Provisions of the NEPA* (40 CFR §1500-1508) requires that not only direct impacts, but indirect and cumulative impacts (ICI) also be evaluated for the Project. **Sections 4.1** through **4.4** described the potential direct impacts the Project may have on resources located within the Project Area. This section describes the potential ICI the proposed project may have on resources in the vicinity of the Project.

Identification

Indirect Impacts

CEQ regulations (40 CFR § 1508.8) define indirect impacts as those that are "caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." Indirect impacts differ from direct impacts in that they are secondary or induced changes that result in changed patterns of social and economic activities. CEQ regulations (40 CFR § 1508.8) also define direct impacts as caused by the action and occur at the same time and place. Indirect impacts are usually determined by land-use policies, development objectives, and the physical location of the Project. Indirect impacts are either adverse or beneficial.

Cumulative Impacts

CEQ regulations (40 CFR § 1508.8) define cumulative impacts as being "impacts on the

environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time."

Montgomery is strategically located at the intersection of several transportation corridors including I-65, I-85, multiple state highways and CSXT mainline railroads. Air service to the area is also provided by Montgomery Regional Airport and Maxwell Air Force. Access to these alternative modes of transportation has made the area in the vicinity of the Project attractive destinations for investment and economic growth. The appeal of the area is demonstrated by the multitude of past actions shown in **Table 22.** Actions that are currently under design or construction, including new infrastructure projects, are also shown in the table. Economic development is expected to continue with several corporations including Amazon, Hyundai, and Coca-Cola recently announcing that they would construct new facilities in the vicinity of the Project in the future. In addition, according to an article in the Montgomery Independent in 2023, CSXT also named a 230-acre property just south of the Project as the only "Gold Level" site in the nation. CSXT defines Gold Level sites as industrial sites that are prepared to compete for the top industrial projects in the world. Potential future infrastructure and development projects are also shown in **Table 22**.

Table 22: Past, Present, Future Actions in the Vicinity of the Project

Type	Past	Present	Future
Transportation	CSXT Mainline, US 80, US 31, I-65, SR 42/Wasden Road, Lamar Road, Burnsdale Road	US 31 (Resurfacing and Widening – adding additional lane from southbound I 65 ramp and US 31 to Hyundai Boulevard)	I 65 Widening
Social/Health	Hope Hull Recreational Center	-	-
Institutional/ Religious	Southlawn Baptist Church, Southlawn Middle School, New Life Church, Cathedral of Restoration	-	-
Residential	West Point Apartments, Pine Oaks Apartments, Southlawn Estates	-	-
Agricultural	Circle H Ranch, Pastureland	-	-
Commercial	Southlawn Shopping Center (Winn Dixie, Dollar Tree, China Pavilion), CVS, Church's Texas Chicken, Dollar General, O'Reilly Auto Parts, RV Park, Family Dollar, Wow Buffalo Wings	-	-
Industrial	Coca-Cola Warehouse, Big Lots Distribution Center, Dollar General Distribution Center, Falkner's Siding	Project Tide / Project South (Diageo Americas Supply, Inc. and Manna Beverages & Ventures, LLC)	Amazon Distribution Center, Coca-Cola, FedEx, Hyundai Transys

Impacts and Mitigation

Indirect Impacts and Mitigation

As previously discussed, the purpose of the Project is to reduce congestion at the Port and provide

an alternative shipping option for existing Port customers. The ICTF is not intended to serve new clients and no planned developments are linked to the Project. Industrial development exists in the area and several large corporations including Amazon, Hyundai, and Coca-Cola have recently announced plans to construct new facilities in the area independent from the ICTF construction. However, it is possible that the multimodal railroad access provided by the ICTF could attract new industrial development to the area. As discussed in **Section 4.3.4 Land Use**, the Project is consistent with the existing zoning regulations. Additionally, several large tracts of undeveloped land surrounding the ICTF site are zoned M-1 (light industrial) and are the most likely location for any subsequent industrial development as a result of the ICTF. Therefore, adverse indirect impacts to planned land-use or development objectives in the area would not be expected.
Adverse indirect impacts to natural resources could occur from subsequent development; however, no planned developments are linked to the Project. In addition, any new development would have to comply with state and federal laws and any impacts would be offset with mitigation. As a result, it is expected that any indirect impacts to natural resources would be minimal and mitigation for indirect impacts is not recommended.

Potential beneficial indirect economic impacts could occur if new industrial development occurs in the area. However, no planned industrial developments are linked to the Project.

Cumulative Impacts and Mitigation

Resources reviewed in detail for cumulative impacts are those that would be impacted by the Project. Resources included in this cumulative impact analysis include wetlands and watercourses and archaeological resources. Resources not impacted by the Project were not included in this cumulative impact analysis including air quality, farmland, water quality, threatened and endangered species, floodplains, historic properties, parks and recreation, land use, demographics and environmental justice populations, transportation, and energy. In addition, adverse impacts from hazardous materials and hazardous waste, noise, and vibration, or from construction period impacts are not anticipated.

As discussed in **Section 4.2.5**, the Project will directly impact 0.42-acre of jurisdictional wetland and 0.05-acre (217 linear feet) of perennial stream. Any impacts to wetlands and watercourses associated with current and future actions listed in **Table 22** would require mitigation; therefore, these actions along with the Project, would not result in cumulative adverse impacts to wetlands and watercourses.

As discussed in **Section 4.3.1**, an NRHP-eligible archaeological site (Site1 Mt565/Falkner's Siding) will be directly impacted by the Project. The FRA, in coordination with the ASPA, has prepared a draft Memorandum of Agreement (MOA) that includes mitigation measures to offset unavoidable impacts to Site 1Mt565. As a result, the Project will not contribute to adverse cumulative impacts to additional archaeological sites.

The No-Build Alternative would have no indirect or cumulative impacts as the Project would not be constructed.

5.0 Coordination and Consultation

5.1 Public Involvement

ASPA held a public involvement meeting on March 16, 2023, from 5:00 p.m. to 7:00 p.m. in the Southlawn Middle School cafeteria located at 5333 Mobile Highway, Montgomery, Alabama. Twenty members of the public attended the meeting. Eighteen comments and one petition signed by 270 residents of the Southlawn and English Village communities were received. The public expressed concern over site security, increases in traffic and noise, and the potential for hazardous materials to be offloaded at the ICTF. They also commented that there are three schools and three churches in the vicinity of the US Highway 31 and Green Leaf intersection with significant historical ties to the community. These were listed as Southlawn Elementary School, Southlawn Middle School, Southlawn Day Care, Southlawn Baptist Church, the Cathedral of Restoration, and the Kingdom Hall of Jehovah's Witness. A summary of the public involvement meeting is included in the Public Involvement Meeting Report included in **Appendix K**.

At the request of the Southlawn Community Organization, representatives of the ASPA and their consultants attended their May 11, 2023 meeting. Members of the community further expressed their concerns over the potential for increased traffic and noise impacts from the Project.

5.2 Agency Coordination

Cooperating or participating agency invitation letters were sent to the following agencies/local government on October 30, 2023:

- USACE - Cooperating
- FHWA - Cooperating
- Federal Emergency Management Agency (FEMA) Region IV - Cooperating
- FAA - Cooperating
- ALDOT - Cooperating
- ADEM - Participating
- ADCNR - Participating
- City of Montgomery Floodplain Administrator – Participating
-

Feedback received from agencies or local government include the following organizations:

- FAA
- ADCNR
- City of Montgomery Floodplain Administrator
- ADEM
- FHWA
- ALDOT

Agencies that declined the invitation include:

- USACE
- FEMA

Specific coordination was undertaken by FRA with the following:

- Alabama SHPO related to Section 106 Consultation
- USDA NRCS related to FPPA soils
- USFWS related to threatened and endangered species

Agency correspondence is included in **Appendix K**.

5.3 Tribal Coordination

FRA initiated consultation with the federally recognized Tribes listed below. FRA invited these Tribes to participate in the Project as a consulting party in the Section 106 process. FRA requested Tribal input regarding any historic properties that have religious and cultural significance to them and may be affected by the Project. The Section 106 documentation packages were sent by FRA via email on July 27, 2023. The coordination letters described the Project location, purpose and need, and project description. The coordination letters also listed the APE, and the results of the Phase I CRA conducted on archaeology and historic properties within the Project Area. A copy of the letters sent are included in **Appendix L**. The responses received from the Tribes are also included in **Appendix L.**

FRA contacted the following Native American Tribes concerning the Project:

- Absentee-Shawnee Tribe
- Choctaw Nation of OK
- Mississippi Band of Choctaw Indians
- Thlopthlocco Tribal Town
- Alabama-Coushatta
- Tribe of TX
- Alabama-Quassarte Tribe of OK
- Cherokee Nation
- Chickasaw Nation
- Coushatta Tribe of Louisiana
- Eastern Band of the Cherokee Nation
- Eastern Shawnee Tribe of Oklahoma
- Kialegee Tribal Town
- Muscogee (Creek) Nation
- Poarch Band of Creek Indians
- Seminole Nation of OK
- Seminole Tribe of FL
- Tunica-Biloxi Tribe of Louisiana

- United Keetoowah Band of the Cherokee Indians in Oklahoma
- Jena Band of Choctaw Indians

5.4 EA Distribution List

The EA is being made available digitally on the FRA website. Public notification was made on the FRA website and the Montgomery Advertiser. Hard copies will not be distributed. An email announcing the EA's availability was sent to the following federal, state, and local entities:

- FAA
- ADCNR
- City of Montgomery Floodplain Administrator
- ADEM
- FHWA
- ALDOT
- USACE

6.0 List of Preparers

Volkert, Inc.

Paige Felts, Environmental Permitting and Compliance Manager, (B.S.) University of Alabama
20 years' experience. Contributions: EA Author, Project Manager

Jason Goffinet, Environmental Planning/NEPA Manager, (B.S.) Ohio Northern University
28 years' experience. Contributions: Environmental Justice, Indirect and Cumulative Impacts, QA/QC

Casey Nowell, Environmental Scientist, (B.S., M.S.) Auburn University
4 years' experience. Contributions: Wetlands and Water Resources, Threatened and Endangered Species, Hazardous Waste

Thomas Lee, Environmental Planner, (B.S., M.S.) Auburn University, University of West Florida
18 years' experience. Contributions: Air Quality, GHG and Climate Change; Highway and Rail Noise and Vibration

All Phases Archaeology

Jon Glass, All Phases Archaeologist, (B.S., M.S.) University of Alabama, University of Maryland
20 years' experience. Contributions: Cultural Resources

Appendices

Appendix A – Air Quality

Appendix B – Traffic Impact Study

Appendix C – Noise Impact Assessment Spreadsheets and Calculations

Appendix D – USDA NRCS Coordination

Appendix E – USACE Approved Jurisdictional Determination

Appendix F – Threatened and Endangered Species Coordination

Appendix G – Section 106 Consultation and Supporting Documentation

Appendix H – Hazardous Waste Phase I Environmental Site Assessments

Appendix I – Projected Economic Impact and Environmental, Safety, and Infrastructure Benefits Study

Appendix J – Obstruction Evaluation/Airport Airspace Analysis Results

Appendix K – Public and Agency Coordination

Appendix L – Tribal Coordination