ENVIRONMENTAL ASSESSMENT

Indiana
GATEWAY PROJECT

NORFOLK SOUTHERN AMTRAK U.S. Department of Transportation Federal Railroad Administration

Modifications to Indiana Gateway Project No. 7

Location: Pine Yard in Gary, Lake County, Indiana

Federal Railroad Administration

Indiana Department of Transportation

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Table of Contents

Figures iv
Tables iv
Glossary iv
I. Introduction 1
A. Executive Summary 1
B. Proposed Action Context 7
1. Indiana Gateway Project 7
2. Indiana Gateway Project # 7 8
3. Proposed Action 8
C. Regulatory and Procedural Background 9
1. Mitigation Measures 10
a. Dune and Swale 11
b. State Protected Species 11
c. Fragmentation of Habitat 11
d. Wetlands 11
e. Wetland Mitigation Plan 12
f. Mitigation Monitoring 12
g. Construction Impacts 12
h. Construction Related Erosion Control 12
II. Purpose and Need 13
III. Alternatives 14
A. Pine Yard Lead Track Design 14
B. Stormwater Management System Design 17
C. Construction Measures 17
D. Alternative Track Alignments 17
1. No-Build Alternative 18
2. Preferred Alignment 19
3. Alternative A 19
4. Alternative B 19
5. Alternative C 19
6. Alternative D 20
7. Alternative E/Proposed Alternative 20

IV. Environmental Resources, Impacts and Mitigation 22
A. Physical Environment 22
1. Air Quality and Energy 22
2. Flood Plains 24
3. Noise and Vibration 24
4. Visual Resources 26
5. Agriculture 26
B. Ecological Systems 26
1. Wetlands and Waters of the United States 27
2. Water Quality and Water Resources 33
3. Threatened and Endangered Species 33
4. Special Lands, including 4(f) Properties 34
C. Human Environment 34
1. Transportation 34
2. Land Use and Socioeconomics, including Environmental Justice 35
3. Public Health and Safety 38
4. Hazardous Materials and Waste 39
5. Cultural Resources 39
D. Construction Impacts 40
E. Indirect and Cumulative Impacts 40
F. Permits and Mitigation 41
1. Mitigation 41
a. Mitigation Objectives 42
b. Mitigation Debits and Credits 42
c. Mitigation Area 42
d. Performance 45
e. Monitoring Plan 45
f. Legal Protection 46
g. Adaptive Management Plan 46
h. Financial Assurances 47
V. Comments and Coordination 47
A. Coordination 47
VI. Distribution of this EA 48
VII. References 48

VIII. Appendices..... 51

FIGURES

Figure 1 - Proposed Action Vicinity

Figure 2 - Proposed Action Vicinity

Figure 3 - East End of Pine Yard showing Existing Siding to be Extended

Figure 4 - Pine Yard Indiana Gateway Schematics Existing and Proposed

Figure 5 - Alternative E/Proposed Alternative alignment for Pine Yard Lead Track to permit access to Pine Yard from the East

Figure 6 - Overview Map of Wetlands and Alternative Centerlines

Figure 7 - Overview Map of Alternative E/Proposed Alternative

Figure 8 - National Wetland Inventory Mapped Wetlands within the Proposed Action Vicinity

Figure 9 - National Wetland Inventory Mapped Wetlands within the Proposed Action Area

Figure 10 - Two and Three Mile Radius from Project Area

Figure 11 - Demographics, Census Block 103.04, Lake County, Indiana, compared to State and Federal Demographics

TABLES

Table 1 - Screening Distance for Noise Assessments

Table 2 - Wetland Summary Table

Table 3 - Alternatives Impact Summary

Table 4 - Mitigation Debits and Credits

GLOSSARY

Alternative E/Proposed Alternative – The alternative the INDOT and FRA propose be selected.

Preferred Alignment – The alignment proposed on March 25, 2015 as submitted to the U.S. Army Corps of Engineers for a Section 404 permit. This alignment included modifications to the original plans submitted by NSRC and approved by FRA in the 2009 Categorical Exclusion.

Project – The Indiana Gateway Project # 7. This Environmental Assessment addresses a modification to the original Indiana Gateway Project # 7. That modification will be referred to as the "Proposed Action."

Proposed Action – The movement of the existing access road and stormwater management ditch several feet to the north of the previously approved Pine Yard Siding Extension and the addition of a Pine Yard Lead Track to Pine Yard.

Proposed Action Area – The geographical location of the Proposed Action.

Proposed Action Vicinity – The geographical area within which impacts of the Proposed Action are analyzed in this document.

I. INTRODUCTION

This Environmental Assessment (EA) has been prepared to address two minor modifications related to previously approved plans proposed for the Indiana Gateway Project # 7 (Project), specifically the (1) movement of the existing access road and stormwater management ditch several feet to the north of the previously approved Pine Siding Extension, and (2) addition of a Pine Yard Lead Track to allow for access from the new Pine Siding Extension and two existing mainlines to the existing Pine Yard (Proposed Action).

Several alternatives, including a no action alternative, are assessed in this EA. Direct, indirect, and cumulative effects are also analyzed.

A. Executive Summary

The Indiana Department of Transportation (INDOT), in coordination with other private and public entities, proposes modifying one component, Indiana Gateway Project # 7, of the Indiana Gateway Project. The Indiana Gateway Project addresses congestion on the Chicago Line in Northwest Indiana, one of the most delay-prone intercity rail passenger corridor in the country and an important passenger route providing service to and from the Chicago metropolitan area and critical passenger destinations in Northern Indiana. The Indiana Gateway Project will provide both stand-alone congestion relief benefits, as well as a path towards development of the corridor as a high-speed corridor within the Chicago Hub Network.

The Indiana Gateway Project, a Public Private Partnership between Norfolk Southern Railway Company (NSRC), Amtrak, INDOT, and Federal Railroad Administration (FRA), received federal funding under the American Reinvestment and Recovery Act (ARRA), Pub. L. 111-5, in 2009. NSRC is a Class I freight railroad company operating in interstate commerce and the owner of the Chicago Line. Through a trackage rights agreement, Amtrak operates 14 scheduled passenger trains each day on the Chicago Line. NSRC serves as developer and contractor for the Indiana Gateway Project # 7 and the Proposed Action for INDOT.

As proponents of an action supported by federal funds, INDOT and 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 considerations in a public document. The NEPA process is intended to help public officials make decisions based on an understanding of the environmental consequences and to take actions that protect, restore, and enhance the environment. 40 C.F.R. § 1500.1.

FRA approved construction of the Indiana Gateway Project # 7, one component of the Indiana Gateway Project, in 2009. The Indiana Gateway Project # 7 plans included a four-mile segment of signalized third track to serve as a passing and holding track and provide connection improvements at the east and west ends of Pine Yard. These previously approved plans are not assessed in this EA, as FRA approved those plans under a categorical exclusion on August 21, 2009 in accordance with NEPA (2009 Categorical

Exclusion).[1] This EA analyzes only (1) the addition of the Pine Yard Lead Track and (2) the movement of the existing access road and stormwater management ditch four to six feet to the north. The Pine Yard Lead Track and movement of the access road will hereinafter be referred to as the Proposed Action.

The Proposed Action is necessary to effectively accomplish the purpose and need for the Indiana Gateway Project # 7. The Proposed Action, along with the Indiana Gateway Project # 7, will mitigate congestion and improve the reliability of passenger rail service on one of the most highly congested passenger and freight rail corridors in the United States.

The location of the Proposed Action is adjacent to NSRC's Chicago Line, located between Porter, Indiana and the Indiana/Illinois state line. The Proposed Action's boundaries are within the city of Gary in Lake County, Indiana and extend from CP-479 (just east of Porter at railroad milepost CD 479.3) to Clark Road (Proposed Action Area). The Proposed Action is located within an industrialized area. Land use consists mostly of railroads, steel mills, industrial facilities, and roads. Figures 1 and 2 show the geographical area within which impacts of the Proposed Action are analyzed in this document (Proposed Action Vicinity).

[1] Pursuant to the Council of Environmental Quality's NEPA regulations, 40 C.F.R. § 1508.4: "'Categorical exclusion' means a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of these regulations (Sec. 1507.3) and for which, therefore, neither an environmental assessment nor an environmental impact statement is required. An agency may decide in its procedures or otherwise, to prepare environmental assessments for the reasons stated in Sec. 1508.9 even though it is not required to do so. Any procedures under this section shall provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect."

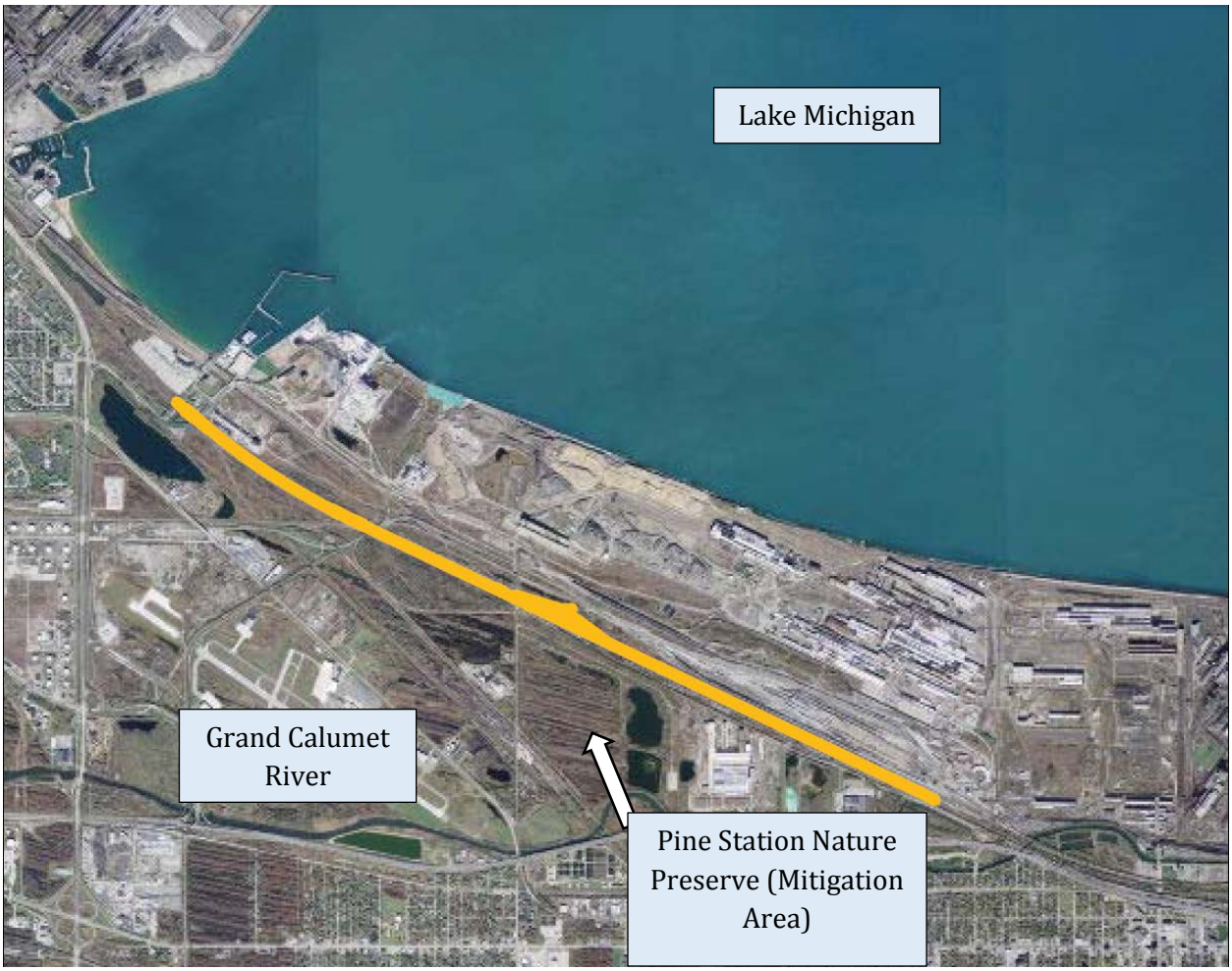

Figure 1– Proposed Action Vicinity

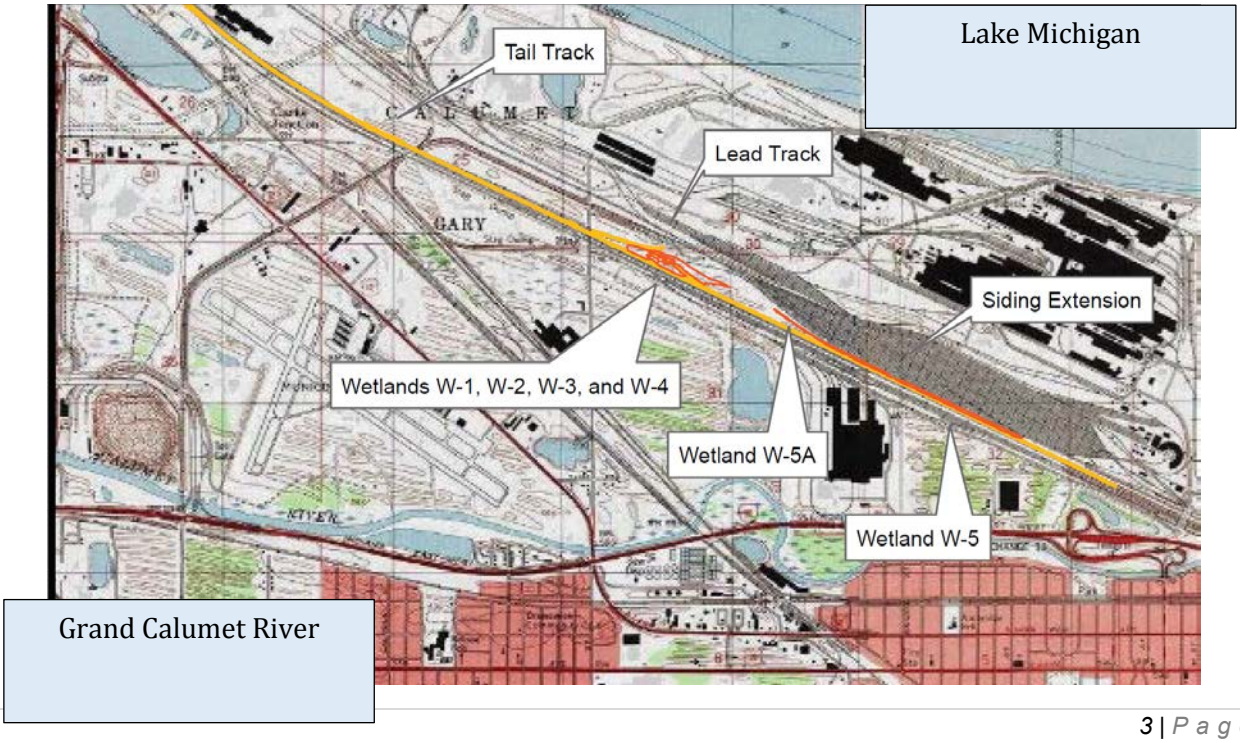

Figure 2 – Proposed Action Vicinity

The Proposed Action is approximately 900 feet from the Grand Calumet River and 6,000 feet from Lake Michigan. For over a century, the area has served industrial purposes, and the specific property involved has been operating rail property used by Class I freight rail in interstate commerce. The property was part of an acquisition of a portion of Conrail assets by NSRC in 1997, as approved by the Surface Transportation Board on July 23, 1998. Figure 3 is a current aerial view of the eastern half of Pine Yard.

Figure 3: East end of Pine Yard showing existing siding to be extended
(The extension has been previously approved and not subject to this EA analysis)

This EA assesses seven alternatives. All direct, indirect, and cumulative environmental effects of these alternatives are analyzed in this EA. Impacts of concern associated with the alternatives identified by resource agencies and the public are described in Section I.C, Regulatory Background, below. Resource agencies and public groups identified the potential presence of dune and swale habitat in the Proposed Action Area, including state protected upland plant species, and mitigation for impacts to waters of the United States (WOTUS), as issues of concern associated with the Proposed Action. Alternative E, described in detail in Section III, is identified as the Proposed Alternative. For this reason, this EA refers to Alternative E as "Alternative E/ Proposed Alternative."

Alternative E/Proposed Alternative was an outgrowth of the Section 404 permitting process for the Proposed Action under the Clean Water Act (CWA). Generally, the production of an EA occurs prior to the CWA permitting process. NSRC began the Section 404 permitting process for the Proposed Action in March 2015. As part of its application, NSRC described the Proposed Action and the original Indiana Gateway Project # 7 plans as complying with NEPA under a categorical exclusion. Although FRA approved the Indiana Gateway Project # 7 as a categorical exclusion under NEPA and INDOT, NSRC, and FRA discussed approving the Proposed Action as a categorical exclusion in 2015, FRA did not approve the Proposed Action as a categorical exclusion. Instead, because of comments received during the Section 404 permitting process, FRA and INDOT determined that the Proposed Action should be evaluated under this EA.

As part of its application for a Section 404 permit under the CWA, NSRC identified a preferred alignment for the Pine Yard Lead Track that would have impacted 0.153 acre of higher quality wetland area, following minimization and avoidance activities including placement of the lead track on existing rail roadbed. This original alignment selected by NSRC is referred to in the permitting application and documents and this EA as the

"Preferred Alignment." The Preferred Alignment, however, is not the alternative which FRA and INDOT (as joint lead agencies for this EA) believe would fulfill their statutory missions and responsibilities, giving consideration to economic, environmental, technical, and other factors.[2] As a result of consultation with the agencies and receipt of agency and public comments as part of the Section 404 permitting process and this EA, the alignment FRA and INDOT believe would fulfill their statutory missions and responsibilities is the alignment identified as Alternative E during the Section 404 permitting process, and referred to as Alternative E/Proposed Alternative in this EA. Alternative E/Proposed Alternative is the southerly and easterly most alignment feasible in light of railroad engineering requirements and constraints and avoids upland areas which the Indiana Department of Natural Resources (IDNR) identified as having the presence of upland state protected plant species. Agencies and public commenters involved in the Section 404 permitting process preferred Alternative E/Proposed Alternative over the Preferred Alignment. Alternative E/Proposed Alterative would increase the total impacts to higher quality wetlands by 0.436 acre over the Preferred Alignment, for a total impact to higher quality wetlands of 0.589 acre.

Alternative E/Proposed Alternative would impact a total of 1.352 acres of features identified as WOTUS in this EA and in permit processes. The majority of these identified impacts to WOTUS are 0.763 acre related to the placement of the stormwater management rail ditch within the southern boundary of the Proposed Action Area for the Pine Siding Extension.[3] The existing stormwater management rail ditch was developed for stormwater management and assessed in 2009 and 2015 as having low floristic and environmental quality, dominated by *Phragmites australis* (Common Reed) and *Typha* x

[2] The Council on Environmental Quality's Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, defines an "agency's preferred alternative" as "the alternative which the agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical and other factors." Question 4a. This EA uses the phrase Proposed Alternative to refer to the alternative the joint lead agencies, FRA and INDOT, believe would fill their statutory missions and responsibilities, giving consideration to economic, environmental, technical and other factors, in order to reduce confusion with the term Preferred Alignment.

[3] During the pendency of this project, the Corps and EPA proposed significant revisions to the regulatory definition of waters of the United States ("WOTUS"). In order to avoid regulatory uncertainty and potential project delay which, due to federal funding restrictions would preclude completion of this ARRA project, NSRC identified all possible features as WOTUS for the purpose of permitting, and proposed mitigation for all features at a high quality dune and swale mitigation site location, IDNR's Pine Station, where NSRC proposes enhancement, restoration, and rehabilitation of 45 acres of high quality and rare dune and swale habitat. NSRC's request for preliminary non-binding jurisdictional determination included the rail ditch as a WOTUS, and accordingly the proposed WOTUS rule and associated litigation has no effect on the regulatory status or NEPA analysis for the Proposed Action. The rail ditch, which was identified in the preliminary jurisdictional determination request and is identified in this EA as a WOTUS, is part of a stormwater management system exempt from the definition of WOTUS. *See* 33 C.F.R. § 328.3(a)(8) and 40 C.F.R. 122.2(g); *see also* 48 Fed. Reg. 41,217 (Nov. 13, 1986); *see also* Clean Water Rule: Definition of Waters of the United States, Final Rule; 80 Fed. Reg. 37,054 (June 29, 2015) (identifying transportation ditches as exempt from the Definition of Waters of the United States)(suspended on October 9, 2015, ***State of Ohio et al. v. U.S. Army Corps of Engineers***, No. 15-3799/3822/3887 (6th Cir. Oct. 9, 2015)). As discussed in greater detail below, assessment of the ditch indicated a low Floristic Quality Index (FQI) of 15.7 and 15.3 for 2015 assessments and a mean C of 2.7 and 3.7. Assessments of the same area in 2009 indicated FQIs of 15.9, 24.8, and 13.1 for the rail ditch. These FQIs represent very low quality floristic communities, consistent with stormwater management features.

glauca (Hybrid Cattail). The existing stormwater management ditch and existing access road are proposed to be moved four to six feet to the north to accommodate the Pine Siding Extension along the existing two mainline tracks. The majority of the proposed grading for the access roadbed is situated on the existing access road. No comments or concerns have been raised during consultation or the comment processes regarding impacts related to the access road or the stormwater management rail ditch. The remaining 0.589 acre of impacts to WOTUS are associated with the addition of the Pine Yard Lead Track, as described above.

In addition to the WOTUS impacts, Alternative E/Proposed Alternative would impact a total of 0.281 acre of upland area considered dune and swale habitat.

Alternative E/Proposed Alternative would avoid, to the extent practicable, areas considered dune and swale habitat by placing the Pine Yard Lead Track at the most southerly and easterly location permissible under engineering and safety constraints, while still meeting the purpose and need for the Proposed Action. Additionally, Alternative E/Proposed Alternative would address impacts to WOTUS through a mitigation plan (Wetland Mitigation Plan or Mitigation Plan) that uses ratios provided by the U.S. Army Corps of Engineers (USACE or Corps) Chicago District and in consultation with IDEM. The Mitigation Plan would address impacts associated with the stormwater management rail ditch and result in 45 acres of enhancement, restoration and rehabilitation at IDNR's Pine Station Nature Preserve. *See* Attachment A - October 26, 2015, IDNR Division of Nature Preserves Letter of Support. This 45 acres represents ratios ranging from 15 to 1 to 60 to 1, with a 10% margin included to address IDNR's recommended acreage for Pine Station.

In December 2015, the Corps issued a Section 404 permit for the Alternative E/Proposed Alternative. If, at the conclusion, of this EA, FRA selects a Proposed Action alternative other than the Alternative E/Proposed Alternative, the selected alternative would be required to comply with the Section 404 permitting process.

B. Proposed Action Context

1. Indiana Gateway Project

The Indiana Gateway Project was selected by the FRA, with financial assistance from the INDOT and other federal and state entities, as a recipient of ARRA funds for national transportation improvements. The purpose of the Indiana Gateway Project is to optimize and promote rail efficiency in the Indiana Gateway area, specifically to provide for passenger (Amtrak) use of existing freight rail lines in the Indiana/Chicago corridor and improve freight rail transportation. This corridor is recognized as one of the most congested rail corridors in the United States. Passenger and rail freight delays are well known and recognized. *See* Attachment B, 2009 Categorical Exclusion.

The Indiana Gateway consists of independent infrastructure improvement projects at seven locations on the NSRC Chicago Line, and one location on the Amtrak Michigan Line at Porter, Indiana. The eight independent projects are each designed to provide improved operational flexibility within each location, thus enabling intercity passenger and freight traffic to be routed in a more efficient and fluid manner than currently possible on

this highly congested line segment. Congestion-related train delay will be reduced in each location and the intercity passenger service; on-time performance will also be improved.

Improvements include: relocation, reconfiguration, and addition of high-speed crossovers and related signal system improvements, minor rail line additions at two locations achieved by lengthening and rehabilitation of existing sidings, and the creation of a new parallel passing siding. All construction work, including the minor rail line additions, will take place within the existing railroad right-of-way. No use of public lands or property will be required. The improvement elements will have independent utility and can be constructed and placed into service on an individual and independent basis, thus providing immediate benefits in each proposed location as full implementation progresses.

2. Indiana Gateway Project # 7

The Indiana Gateway Project # 7 is one component project of the larger Indiana Gateway Project. The original Indiana Gateway Project # 7 plans consisted of a series of improvements to NSRC's Pine Yard, including:

- Rebuilding signals and installing a high speed turn out to Pine Yard Extension;
- Extending existing siding track by two-miles;
- Installing a power turnout to access Pine Yard; and
- Adding a new passing siding extension and high speed turnout.

The purpose of the Indiana Gateway Project # 7 is to reduce overall rail congestion and promote more efficient and fluid routing of passenger and freight trains along the lines adjacent to Pine Yard by providing track and access for passing / temporary storing of multiple trains of up to 11,000 ft. in length and creating additional capacity on the Chicago Line segment, adjacent to Pine Yard, by allowing for passing of passenger trains around stopped freight traffic. With the improvements, two tracks can be utilized for through traffic movement at any time should one of the tracks – the existing two mainlines plus the new four mile Pine Siding Extension – be out-of-service or blocked for maintenance.

3. Proposed Action

In 2015, NSRC proposed two modifications to the Indiana Gateway Project # 7 to support the Project's purpose. The first modification includes moving the existing access road serving the Pine Siding Extension and an existing stormwater management ditch four to six feet to the north of its current location. This shift is necessary to allow the construction of part of the new, two-miles of the Pine Siding Extension on the existing access road and to still have an access road to provide access to the adjacent lines for maintenance activities. The second modification is the addition of the Pine Yard Lead Track, which will connect the Pine Yard Siding Extension to the east side of the Pine Yard. This addition will allow trains to access the Pine Yard from the east and will create more capacity for passing/temporary storage and additional capacity on the Chicago Line.

C. Regulatory and Procedural Background

This EA is developed in accordance with NEPA to assess two modifications to the previously approved and authorized Indiana Gateway Project # 7. This EA supplements the 2009 Categorical Exclusion for the Indiana Gateway Project # 7, comprised of improvements to Pine Yard.[4] *See* Attachment B, August 21, 2009 Categorical Exclusion. As discussed in detail below, the modifications are necessary to meet the purpose and need for the Indiana Gateway Project # 7.

Both the Project and the Proposed Action, require permits and authorizations for construction, specifically related to construction stormwater discharges regulated under the Clean Water Act (CWA), 33 U.S.C. § 1251 *et seq.* National Pollutant Discharge Elimination System (NPDES) permitting program. NSRC has received authorization under Section 402 of the CWA from the Indiana Department of Environmental Management (IDEM), the state entity authorized to implement the CWA NPDES permitting program.[5] This authorization applies to both the Indiana Gateway Project # 7 and the Proposed Action. Attachment C, IDEM Rule 5 NPDES Authorization.

Because the Proposed Action will result in discharge of fill material into WOTUS, it also requires authorization from the Corps under Section 404 of the CWA, 33 U.S.C. § 1344(a). A Section 404 permit is required for any action that will result in a discharge of dredged or fill material into WOTUS. Section 404 authorization also requires a Section 401 Water Quality Certification and a consistency determination regarding impacts to coastal areas, discussed below. Because the Project approved by the 2009 Categorical Exclusion did not discharge dredge or fill material to WOTUS, it did not require a Section 404 permit. NSRC applied for authorization for a Section 404 permit for the Proposed Action on March 25, 2015.

Consultation and public comment received in relation to the CWA Section 404 permit application for the Proposed Action identified dune and swale habitat in the Proposed Action Area and adequate mitigation for impacts to WOTUS as issues of concern. In July and August of 2015, NSRC and its consultants responded to these issues by conducting additional site studies, exploring alternative alignments, developing detailed engineering design revisions for the Proposed Action and additional detail regarding alignment alternatives, performing soil borings, additional wetland boundary surveys, and inventory of upland and aquatic species on site and at an alternative mitigation site identified by IDNR in August, the Pine Station Nature Preserve. On August 27, 2015, the Corps provided information regarding desired mitigation ratios, and NSRC submitted revised final Mitigation Plans and supporting data and analysis to IDEM, the Corps, and IDNR on September 4, 2015, October 9, 2015, and October 30, 2015. The October 9,

[4] The Pine Yard improvements proposed by the Indiana Gateway Project # 7 were assessed under NEPA and qualified for treatment as a categorical exclusion. The 2009 Categorical Exclusion was approved by the FRA in accordance with NEPA and in consultation with the U.S. Fish and Wildlife Service (USFWS) and the Indiana Department of Natural Resources (IDNR).

[5] National Pollutant Discharge Elimination System (NPDES) authorization under the CWA for construction stormwater discharges under Section 402 has been obtained under IDEM Rule 5, which is a General Permit. *See* 325 Indiana Administrative Code (IAC) 15-1 *et seq.*

2015 final Mitigation Plan was developed in consultation with the IDNR, which provided comment and has issued a letter in support of the proposal which provides for restoration, enhancement and rehabilitation of 45 acres located within IDNR's Pine Station Nature Preserve, an area of high quality and important dune and swale habitat protected by the State of Indiana and located adjacent to the Proposed Action Area. *See* Attachment D - Mitigation Plan (October 9, 2015). As a result of these efforts, Alternative E/Proposed Alternative received a Section 404 permit from the USACE on December 21, 2015. *See* Attachment E, December 21, 2015 Corps Authorization LRC 2015-213. Although the Mitigation Plan specifically corresponds with Alternative E/Proposed Alternative as permitted by the Corps, any alternative selected for the Proposed Action would likely include similar mitigation.

Alternative E/Proposed Alternative has also received Water Quality Certification in accordance with Section 401 of the CWA. *See* Attachment F, December 10, 2015 Section 401 Water Quality Certification 2015-592-45-MTM-A. Alternative E/Proposed Alternative has also received a determination that it is consistent with the Coastal Zone Management Act from the Indiana Lake Michigan Coastal Program. *See* Attachment G, January 26, 2016 Federal Consistency Review under Indiana Lake Michigan Coastal Program.

If, at the conclusion, of this EA, FRA selects a Proposed Action alternative other than the Alternative E/Proposed Alternative, the selected alternative would be required to comply with the Section 404 permitting process.

Based upon consultation with state and federal resource agencies and numerous assessments and studies of the site, no other authorizations are required for the Proposed Action. No federally protected species of concern or their critical habitat have been identified as impacted by the Proposed Action, as confirmed by the USFWS and IDNR. No historic resources have been identified as impacted by the Proposed Action or existing within the area of potential effect governed by the 54 U.S.C. § 300101 *et seq.* (known as the Section 106 process under the National Historic Preservation Act), also confirmed by the Indiana Historic Preservation and Archeology Division. NSRC has avoided impacts to state protected resources, and included mitigation and protection as part of the Proposed Action.

Comments received and information shared during consultation associated with these regulatory processes are included in this EA. Issues regarding potential presence of dune and swale habitat in the Proposed Action Area were raised and are assessed in this EA. Alternative E/Proposed Alternative, *inter alia*, addresses these concerns through movement of the Pine Yard Lead Track away from identified areas of concern; design and construction measures; avoiding and minimizing impacts; and mitigation which includes enhancement of 45 acres of dune and swale habitat in partnership with the IDNR at its Pine Station Nature Preserve located adjacent to the Proposed Action Area.

1. Mitigation Measures

The Proposed Action would not have significant adverse effects on the human or natural environment if adequate mitigation measures are followed. As noted below, the Proposed

Action would have positive effects in providing for optimized and increased rail transportation efficiency, reducing congestion, increasing passenger rail capabilities, reducing greenhouse gas and other emissions through enhancements to passenger rail and freight rail. The following mitigation measures would be included in Alternative E/Proposed Alternative to avoid, minimize, and/or mitigate impacts to the human and natural environment associated with construction and implementation of the Proposed Action. Although the mitigation measures described below specifically correspond with Alternative E/Proposed Alternative permitted by the Corps, any alternative selected for the Proposed Action would likely include similar mitigation.

a. Dune and Swale

Alternative E/Proposed Alternative would avoid and minimize impact to potential dune and swale habitat. Regarding upland dune habitat, the Preferred Alignment would impact 0.636 acre of upland area which resource agencies identified as remnant dune habitat. *See* Section IV, Table 3. The Alternative E/Proposed Alternative would impact 0.281 acre of upland area. *See* Section IV, Table 3; *see also* Attachment H – Alternatives Analysis (November 4, 2015). The Alternative E/Proposed Alternative was developed in response to comments regarding impact to upland areas which were considered dune and swale.

b. State Protected Species

Alternative E/Proposed Alternative would avoid and minimize impact to state protected species through minimization and avoidance of both aquatic and upland state protected species. Specifically with regard to upland state protected plant species, the Alternative E/Proposed Alternative would impact 0.281 acre of upland area. *See* Attachment H – Alternatives Analysis (November 4, 2015); *see also* Section IV, Table 3. In contrast, the Preferred Alignment would impact 0.636 acre of upland area, specifically an existing railroad bed upon which state protected plant species had colonized. The Alternative E/Proposed Alternative was developed in response to comments regarding impact to upland areas which contained state protected plant species. There are no federally protected species or their critical habitat in the Proposed Action Area or in the Proposed Action Vicinity (*See* Attachments L and O).

c. Fragmentation of Habitat

Alternative E/Proposed Alternative would avoid and minimize fragmentation of habitat to the extent possible. To address potential concerns regarding fragmentation of dune and swale habitat, Alternative E/Proposed Alternative moves to the most southerly and westerly location permissible under engineering and safety constraints while still meeting the purpose and need for the Proposed Action. Alternative E/Proposed Alternative reduces impacts to dune and swale habitat from 0.636 acre to 0.281 acre.

d. Wetlands

Alternative E/Proposed Alternative would avoid wetlands where possible and minimize impacts to the extent practicable. Wetlands were avoided in Alternative E/Proposed Alternative design and alignment to the maximum extent possible, in light of concerns raised by the public and resource agencies regarding preservation of upland state

protected plant species. Where impacts are necessary, NSRC has narrowed the Alternative E/Proposed Alternative footprint to the maximum extent possible, within rail safety and geotechnical constraints. Additional proposed mitigation for wetland impacts is part of the Wetland Mitigation Plan.

e. Wetland Mitigation Plan

The Wetland Mitigation Plan associated with Alternative E/Proposed Alternative would mitigate the unavoidable impacts to wetlands as required by permitting agencies. As on-site mitigation is impractical, in accordance with EPA and Corps guidelines a suitable location with more preferable existing and future land uses and permanent protections has been proposed. NSRC will enhance, restore, and rehabilitate 45 acres of wetlands at the Pine Station Nature Preserve, which represents in-kind, permittee-responsible mitigation, at ratios ranging from 15:1 to 60:1. *See* Attachment D - Mitigation Plan (October 9, 2015). The Mitigation Plan responds to comments regarding adequacy of mitigation. IDNR supports the proposed mitigation, and the Mitigation Plan has been approved by the Corps and IDEM. *See* Attachment A - October 26, 2015, IDNR Division of Nature Preserves Letter of Support; Attachment F - December 10, 2015 Section 401 Water Quality Certification 2015-592-45-MTM-A Attachment E - December 21, 2015 Corps Authorization LRC 2015-21.

f. Mitigation Monitoring

NSRC, through a consultant, would monitor the mitigation site annually for five (5) continuous years to determine if it is meeting identified success criteria. *See* Attachment D – October 9, 2015 Mitigation Plan.

g. Construction Impacts

In order to minimize disturbance from construction, Alternative E/Proposed Alternative would require completion of all approved construction related discharges to wetlands no later than two (2) years of the date of issuance of the Section 401 Water Quality Certification (December 10, 2015) (Attachment F), subject to a one (1) year extension by submittal of a written request ninety (90) days prior to the deadline.

h. Construction Related Erosion Control

NSRC would install erosion control methods prior to any soil disturbance to prevent soil from leaving the construction site. Appropriate erosion control methods are identified in the stormwater pollution prevention plan and in accordance with Indiana Rule 5, 327 IAC 15-5 in administration of the CWA's NPDES requirements for discharges of stormwater from construction sites. 40 C.F.R. § 450; 40 C.F.R. § 122.26. NSRC does not anticipate producing any dredged material, but any deposit of dredged material will be contained within an upland disposal area to prevent sediment runoff.

II. PURPOSE AND NEED

This EA assesses modifications of design plans developed and previously approved for construction under the August 21, 2009 Categorical Exclusion to (1) include Pine Yard Lead Track and (2) move the existing access road and stormwater management ditch several feet to the north of the previously approved Pine Siding Extension. This EA does not reassess features previously approved by the 2009 Categorical Exclusion.

Minor modifications to the 2009 Indiana Gateway Project # 7 plans are required to meet the purpose and need for that Project. The need for the Indiana Gateway Project # 7 is to address traffic congestion and constrained operational fluidity on the Chicago Line located adjacent to Pine Yard. The Chicago Line currently experiences traffic congestion and constrained operational fluidity because freight and passenger train traffic share this track and must navigate around each other to operate.

The purpose of Indiana Gateway Project # 7 is to mitigate traffic congestion and improve operational fluidity on the Chicago Line adjacent to Pine Yard by improving switching operations at Pine Yard, providing track and access for passing / temporary storing of multiple trains of up to 11,000 ft. in length and enabling Pine Yard to be more easily accessed, creating additional capacity on the adjacent line segment by allowing for passing of passenger trains around stopped freight traffic. With the Proposed Action, two tracks can be utilized for through traffic movement at any time should one of the tracks – the existing two mainline tracks or the new four mile Pine Siding Extension – be blocked for maintenance or out-of-service.

Additionally, movement of the existing access road and stormwater ditch will provide an access road to for the maintenance of the two mainline tracks to the east of Pine Yard and the Pine Siding Extension. An access road is essential for maintaining tracks in good repair.

III. ALTERNATIVES

The Proposed Action consists of two modifications to the Indiana Gateway Project # 7 plans. The original Indiana Gateway Project # 7 plans approved by the 2009 Categorical Exclusion did not provide access to Tracks # 6-10 from the east end of Pine Yard. Those plans proposed upgrading an existing yard turnout just west of Clark Road to a power turnout to improve switching operations.

Due to signal and electrical complications associated with placing a power turnout close to a road crossing with active warning devices, the layout of the Proposed Action has been revised to eliminate this power turnout and include a Pine Yard Lead Track. The addition of the Pine Yard Lead Track will allow access to these tracks from the east end of Pine Yard. Without the addition of the Pine Yard Lead Track, switching operations would occupy Main Track #1 at the west end of Pine Yard. The addition of the Pine Yard Lead Track increases capacity for switching operations.

The Indiana Gateway Project # 7 plans reviewed by the 2009 Categorical Exclusion also did not include movement of the existing access road and existing stormwater management ditch several feet to the north for the Pine Siding Extension. An access road is required for rail operations, and access is necessary for delivering crews to trains, maintenance access, and emergency access on the railroad corridor. In order to ensure the Project includes an appropriate access road, the Proposed Action proposes moving an existing rail stormwater ditch and access road four to six feet to the north for portions of the Proposed Action. The stormwater management ditch is necessary to provide adequate drainage, which is required under federal transportation regulations for safety and maintenance reasons. The land underlying the existing access road will be used as the roadbed for the Pine Siding Extension. Figure 7 shows the Alternative E/Proposed Alternative alignment for Pine Yard. The access road and stormwater management ditch would be located between the Pine Siding Extension and the Pine Lead Track.

Study and analysis of the alternatives for the Pine Yard Lead Track alignment and various impacts is included in this section. Additional construction design related alternatives to mitigate, avoid, or minimize impacts are also discussed in this section. Finally, analysis of the movement of the access road and stormwater ditch is also discussed in this section.

A. Pine Yard Lead Track Design

Design features of the Pine Yard Lead Track include the roadbed supporting the new track and the width of the roadbed.

NSRC standard roadbed sections provide adequate geotechnical support for new tracks to be constructed on various types of soil. To minimize the wetland impacts of the Proposed Action, NSRC considered use of alternative roadbed sections. Alternatives considered included standard NSRC roadbed sections; precast concrete T-Wall, precast concrete block wall, cast-in-place concrete wall, steel sheet pile wall, gabion basket wall, and steep side slopes with rip-rap armor.

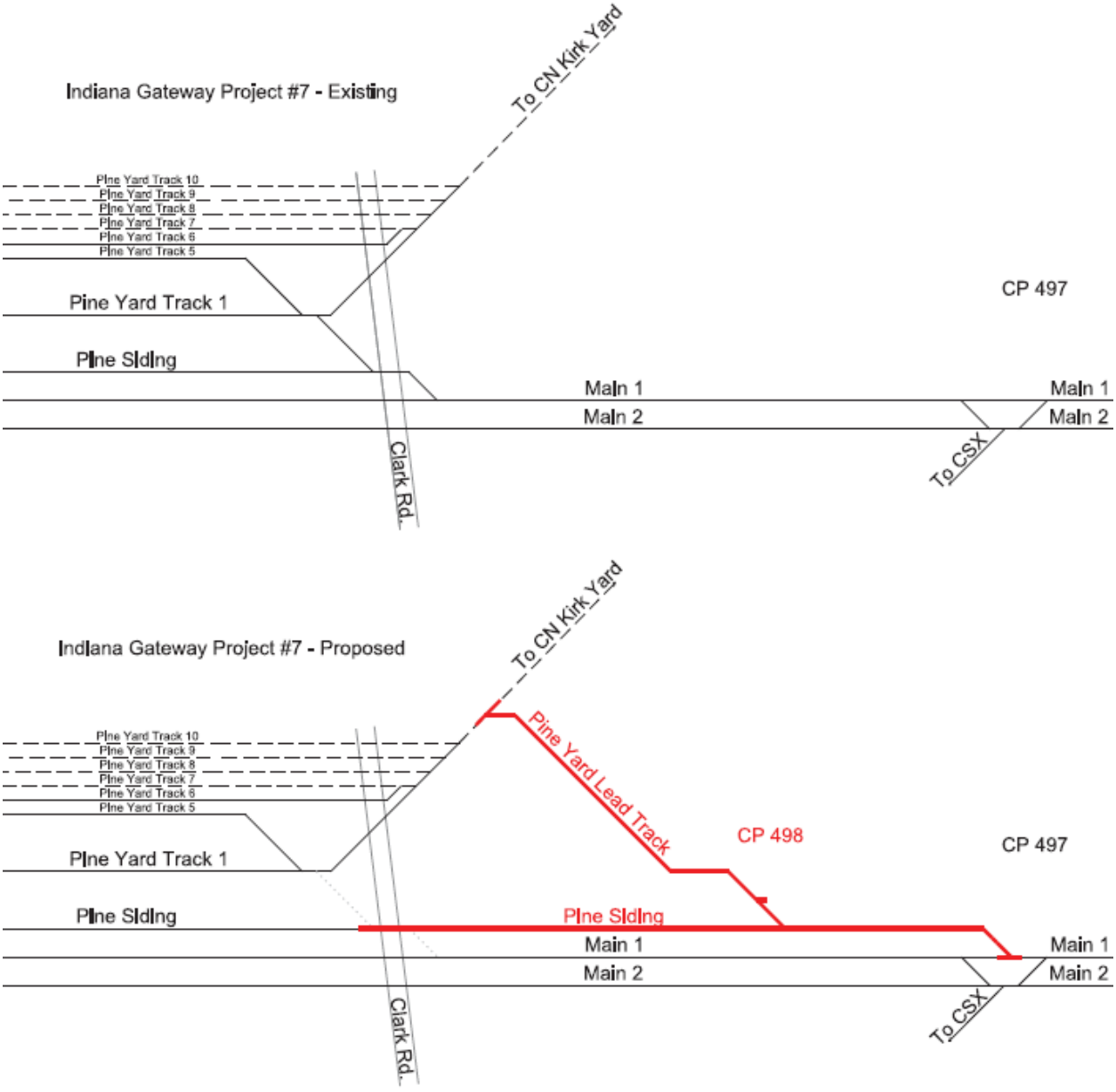

Figure 4 – Pine Yard Indiana Gateway Schematics, Existing and Proposed

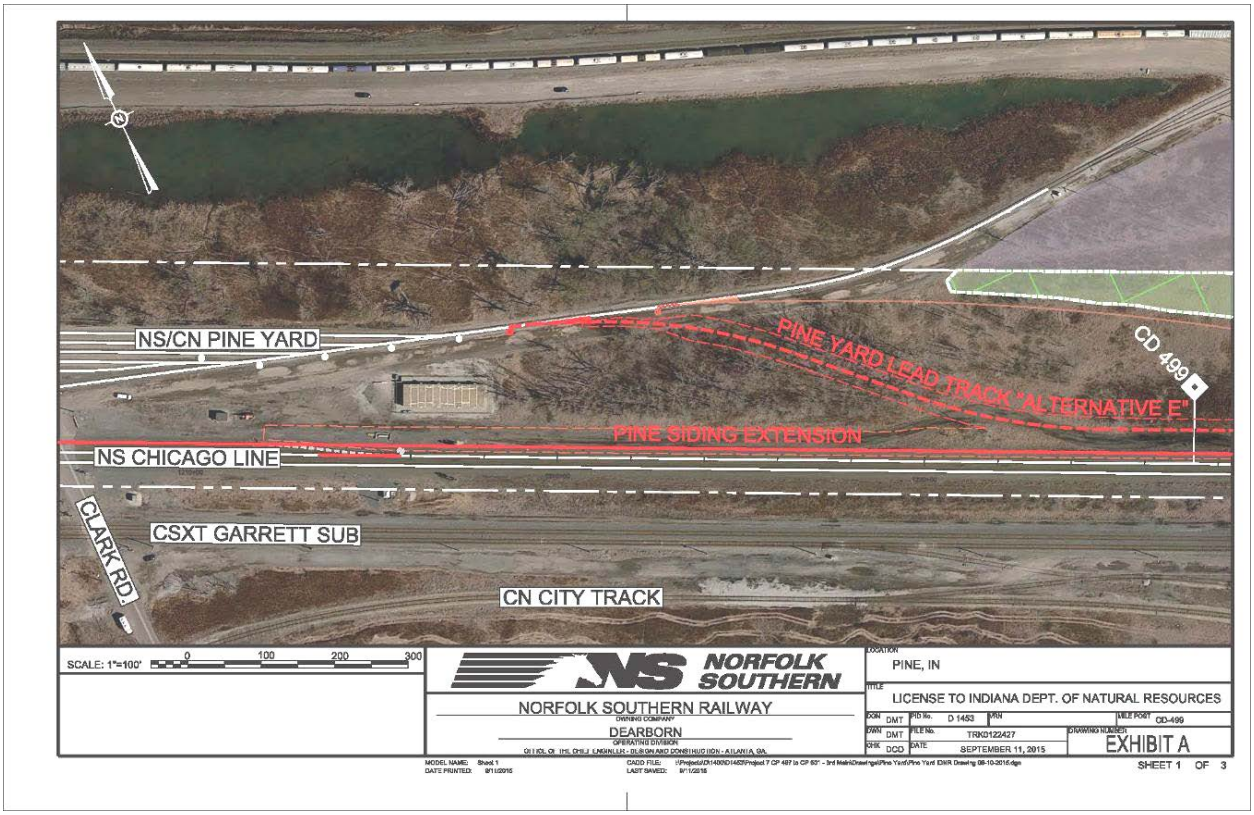

Figure 5 - Alternative E/Proposed Alternative alignment for Pine Yard Lead Track to permit access to Pine Yard from the East

The use of T-wall, precast concrete block wall, and retaining measures such as steel sheet pile was determined to be unnecessary due to topographic features and alignment. In some instances, use of these features would require temporary construction impacts in wetland areas, and extensive de-watering during construction. Also, existing buried fiber optic cable ducts are present in the construction area. Protection or relocation of this infrastructure would result in temporary wetland disturbances. Of all the roadbed section alternatives considered, a steepened side slope with rip rap armor was found to have the least wetland impacts.

Alternatives for the width of Pine Yard Lead Track roadbed within the adjacent wetland areas have also been evaluated. In order to mitigate impacts to wetlands and upland areas, including remnant dune and swale, NSRC applied minimum track widths within engineering safety and operational constraints. Specifically, NSRC narrowed the walkway shoulder from the standard NSRC rail sections, which in turn narrows the footprint of the Proposed Action in both upland and wetland areas. Upland impacts were minimized to 0.281 acre within upland area for the Proposed Action Alternative E/Proposed Alternative for the Pine Yard Lead Track. Wetland impacts applying this approach were reduced to 0.636 acre.

All roadbed, sub ballast, and ballast material will consist of clean material in accordance with Section 404 and IDEM requirements.

B. Stormwater Management System Design

Railroad facilities are required to maintain drainage through a system of stormwater management measures, which include extensive use of rail ditches. Standard rail ditch design requires capacity to handle 100-year rainfall events, which prevents saturation of the track roadbed.

NSRC has attempted to use existing stormwater management features to the maximum extent possible. In addition, for the Pine Siding Extension, NSRC has proposed moving the existing stormwater management rail ditch the minimum distance possible, approximately 4 to 6 feet from the existing stormwater management rail ditch. This in turn minimizes footprint as well as disturbance during construction.

C. Construction Measures

Stormwater features, appurtenances, and Best Management Practices (BMPs) have been designed to comply with applicable local, state, and federal stormwater and erosion control rules and regulations while avoiding impacts to WOTUS. Construction stormwater discharge will be compliant with the requirements of CWA, Section 402 as set forth by the IDEM National Pollutant Discharge Elimination System (NPDES) General Permit Rule for Storm Water Discharges Associated with Construction Activity under the NPDES (General Permit Rule 327 IAC 15-5 (Rule 5)), as well as with the applicable Gary Storm Water Management District rules, regulations, and erosion control measures as practicable.

Adjacent wetland areas will be marked in the field with high-visibility orange construction fencing to locate the areas for the contractor to keep equipment, access points, and stockpiled material from inadvertently impacting these wetland areas.

Construction planning and design has minimized and avoided temporary wetland impacts.

D. Alternative Track Alignments

NSRC considered six (6) alignments for the configuration of the Pine Yard Lead Track alignment and the no action alternative (No-Build Alternative). The six alternatives are based on alternatives previously designed as part of the Section 404 permitting process in 2015. Those alternatives did not address the movement of the existing access road and stormwater ditch. For the purposes of this EA, the six alternatives described below include the movement of the existing access road and stormwater management ditch 4-6 feet north of its current location. The No Build Alternative does not contemplate the addition of the Pine Yard Lead Track or the movement of the existing access road and stormwater management ditch.

Figure 6 depicts the wetlands and alternative centerlines of each of the six alternative alignments.

Figure 6 - Overview Map of Wetlands and Alternative Centerlines

1. No-Build Alternative

The No-Build Alternative was considered in lieu of adding the Pine Yard Lead Track and the movement of the access road and stormwater management rail ditch. The No-Build Alternative does not achieve the purpose and need of the Proposed Action. Without the Pine Yard Lead Track, switching operations would occupy Main Track #1 at the west end of Pine Yard and congestion would continue and could increase due to the inability to

hold and pass trains clear of the two main tracks. The east end of the yard could not be efficiently accessed. Without moving the access road and the stormwater rail ditch, the Pine Siding Extension would be constructed on top of the existing access road and ditch and no replacement access road or ditch would support the Pine Siding Extension.

2. Preferred Alignment

This is the original alignment that NSRC generated for the Pine Yard Lead Track in March 2015. The proposed track follows a former track roadbed, and has the least amount of impacts to wetlands at 0.153 acre. This alignment meets the purpose and need of the Proposed Action while minimizing impacts to WOTUS. As noted below, however, based upon resource agency comments and comments from the public, a preference for protection of upland state protected plant species resulted in a preference for Alternative E/Proposed Alternative.

The Preferred Alignment also includes moving the existing access road and stormwater ditch 4-6 feet north of its current location.

3. Alternative A

Alternative A has optimal track geometry from a track design standpoint. The track extends as a straight line from the turnout near the main line, and minimizes track curvature. The yard turnout is shifted as far west along the Canadian National Railway (CN) track as possible. There are greater wetland impacts associated with this alignment as compared to the Preferred Alignment. Alternative A impacts wetlands W-1, W-2, W-3, and W-4, which have state listed species identified in the Floristic Quality Analysis (FQA) performed in October 2015.

Alternative A also includes moving the existing access road and stormwater ditch 4-6 feet north of its current location.

4. Alternative B

Alternative B avoids disturbance of the former track roadbed area. The proposed track parallels the main line until wetland impacts are encountered. Then, the track diverges from the main lines and crosses wetlands in order to reach the CN track. There are significant wetland impacts associated with this alignment as compared to the Preferred Alignment. Alternative B impacts wetlands W-1 and W-4, which have state listed species identified in the FQA analysis.

Alternative B also includes moving the existing access road and stormwater ditch 4-6 feet north of its current location.

5. Alternative C

Alternative C avoids the former track roadbed area. The track parallels the main line, impacts the edge of a wetland area, and curves to meet the location of the turnout in the CN track. There are significant wetland impacts associated with this alignment as compared to the Preferred Alignment. Alternative C impacts wetlands W-1 and W-4, which have state listed species identified in the FQA analysis.

Alternative C also includes moving the existing access road and stormwater ditch 4-6 feet north of its current location.

6. Alternative D

Alternative D parallels the main line, impacts the edge of a wetland area, and diverges to meet the turnout in the CN track. The yard turnout is shifted as far west along the CN track as possible. There are significant wetland impacts associated with this alignment as compared to the Preferred Alignment. Alternative D would still impact wetlands W-1 and W-4, which have state listed species identified in the FQA analysis.

Alternative D also includes moving the existing access road and stormwater ditch 4-6 feet north of its current location.

7. Alternative E/Proposed Alternative

Alternative E/Proposed Alternative is shifted as far south and west as possible, to address concerns of bisecting dune and swale terrain on railroad right-of-way. There are greater wetland impacts associated with this alignment as compared to the Preferred Alignment. Alternative E/Proposed Alternative impacts wetlands W-1 and W-4, which have state listed species identified in the FQA analysis. Although wetland impacts are increased by Alternative E/Proposed Alternative, the wetlands that would be impacted are of lower quality than those impacted by the Preferred Alignment as identified in FQA scores and indices developed for the Proposed Action. Although this alignment does not minimize impacts to WOTUS, interested agencies and stakeholders prefer Alternative E/Proposed Alternative because it avoids state protected plant species located on the rail roadbed.

Alternative E/Proposed Alternative also includes moving the existing access road and stormwater ditch 4-6 feet north of its current location.

Alternative E/Proposed Alternative is the alternative favored by the USACE, IDNR, stakeholders, and public commenters. Based upon avoidance of impact to state protected species, the Alternative E/Proposed Alternative is the Least Environmentally Damaging Practicable Alternative ("LEDPA"), as defined in EPA's Section 404 guidelines, 40 C.F.R. § 230.10(a), meeting the purpose and need for this Proposed Action. *See* Attachment D, Mitigation Plan, at Appendix C, Floristic Quality Assessment (CARDNO, July 2015). *See also* Attachment I, March 25, 2015 Application for Authorization pursuant to Section 404 of the CWA; Attachment J – June 23, 2015 Supplement to March 25, 2015 Application for Authorization pursuant to Section 404 of the CWA; Attachment K – August 10, 2015 Waters of the U.S. Summary Report – Pine Siding Extension, Lead Track and Tail Track. Figure 9 below shows details of Alternative E/Proposed Alternative in relation to the wetlands identified.

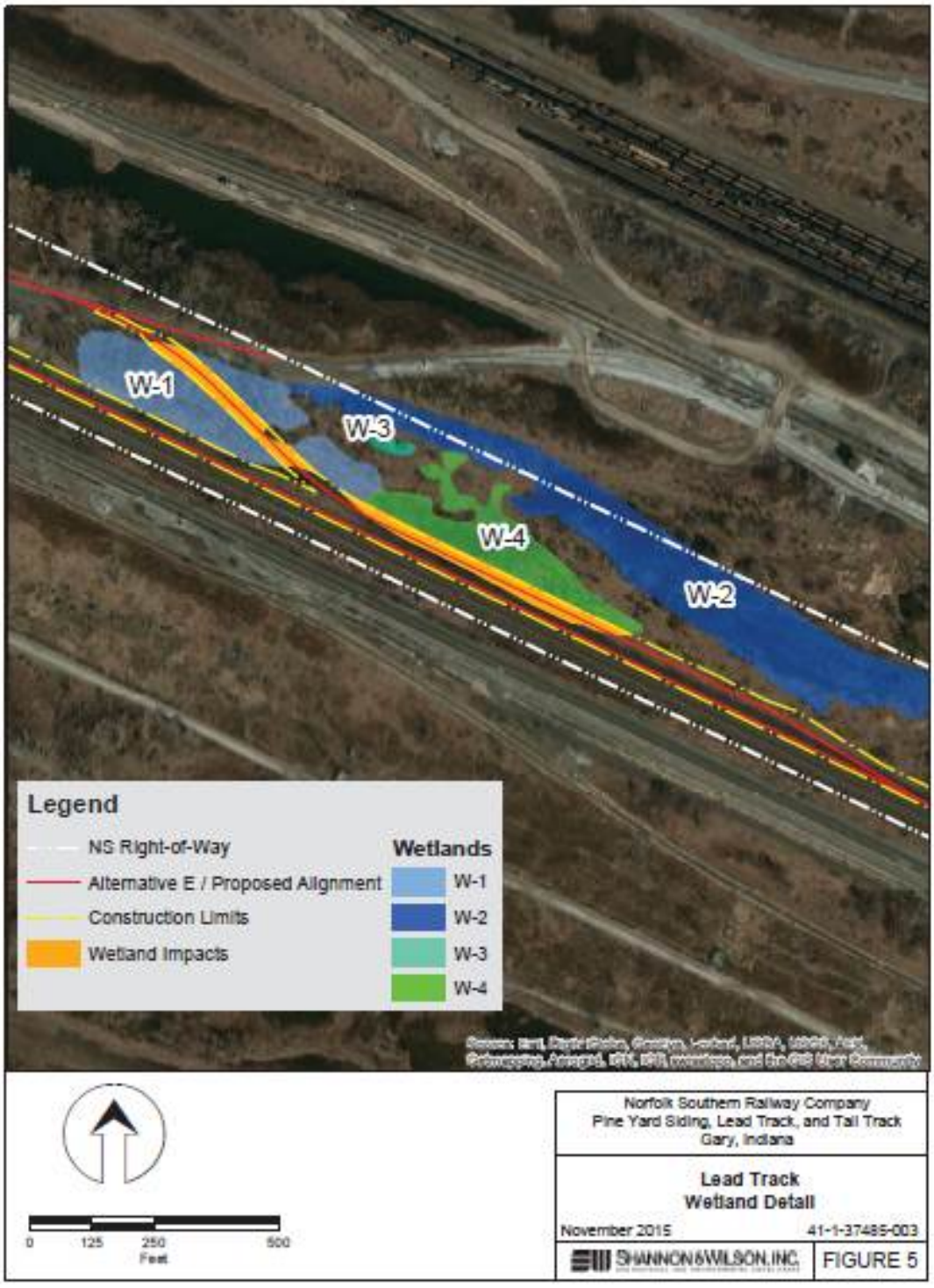

Figure 7 - Overview Map of Alternative E/Proposed Alternative

To address the concerns of commenting agencies and organizations, Alternative E is the Proposed Alternative.

Following minimization and avoidance in accordance with IDEM regulations and guidance, as well as USACE's requirements at 40 C.F.R. Part 230 and 33 C.F.R. Part 325, total impacts to WOTUS resulting from Alternative E/Proposed Alternative are

1.352 acres. Of this total impact, 0.763 acre results from the movement of the access road the stormwater ditch. The remainder, 0.589 acre, results from the addition of the Pine Yard Lead Track.

Attachment H - Alternatives Analysis provides conceptual plans for the Preferred Alignment, Alternatives A-D, and Alternative E/Proposed Alternative.

IV. ENVIRONMENTAL RESOURCES, IMPACTS AND MITIGATION

This section describes the existing environmental resources within the Proposed Action Vicinity and analyzes the potential beneficial and adverse impacts to these resources from the alternatives described in Section III. The Proposed Action Area is the area of direct effects (e.g. construction and placement of fill, land disturbance). The Proposed Action Vicinity includes the geographical locations surrounding the Proposed Action Area. The Proposed Action Vicinity differs depending upon the resource being analyzed and physical characteristics of the area. For example, noise and vibration is analyzed to Federal Transit Authority baseline screening levels, which are closer to the Proposed Action Area than Environmental Justice analysis which extends further from the Proposed Action Area. The geographic scope of analysis is identified in each resource area, below.

In this section, the Preferred Alignment, Alternatives A-D, and Alternative E/Proposed Alternative will be referred to as the Proposed Action or Proposed Action alternatives. The No-Build Alterative is considered individually. The environmental resources and impacts have been categorized into three groups: the physical environment, ecological systems, and the human environment. The resource categories of timber and mineral resources are not applicable to this analysis due to the geographic location and physical aspects of the Proposed Action and Proposed Action Vicinity and are therefore not included in the following sections.

A. Physical Environment

1. Air Quality and Energy

In accordance with the federal Clean Air Act, EPA has classified the Lake County area as in attainment for National Ambient Air Quality Standards (NAAQS) for pollutants including sulfur dioxide, carbon monoxide (Unclassifiable/Attainment), and particulate matter (PM10 and PM 2.5). 40 C.F.R. § 81.315.

The Lake County Area was previously designated as nonattainment for the 1-hour ozone standard. At the time the 8-hour ozone standard became effective, however, the 1-hour ozone standard was revoked effective June 15, 2005. U.S. EPA issued a finding of attainment on January 29, 2009 and the area was effectively redesignated to attainment under the 8-hour ozone standard on May 10, 2010. *See* http://www.in.gov/idem/airquality/2339.htm. *See* Approval and Promulgation of Implementation Plans and Designation of Areas for Air Quality Planning Purposes; Indiana; Redesignation of Lake and Porter Counties to Attainment of the 2008 Eight-Hour Ozone Standard, Final Rule, 75 Fed. Reg. 26113 (Tuesday, May 11, 2010); http://www.gpo.gov/fdsys/pkg/FR-2010-05-11/html/2010-11009.htm.

EPA regulations identify the Chicago-Naperville, IL-IN-WI area as in marginal nonattainment for the 2008 8-hour ozone standard. *See* 40 C.F.R. § 81.315.

The purpose of the Proposed Action is to reduce congestion and improve operational fluidity on the Chicago Line adjacent to Pine Yard. The Proposed Action has been identified as reducing passenger rail congestion by improving switching operations and promoting transportation by passenger rail. Therefore, implementation of any of the Proposed Action alternatives would reduce air emissions through greater operational efficiency and increased utilization of rail as compared to personal vehicles and truck traffic, which will decrease emissions of airborne pollutants.

Improving operational efficiency includes increasing on-time performance and service reliability of the 14 daily Amtrak trains using this corridor, which would result in environmental benefits due to the retention of existing Amtrak ridership and increase diversion of new riders from private automobiles. Analysis of the Proposed Action by Rail Traffic Controller (RTC) modeling software indicates that these improvements would collectively reduce fuel consumption of Amtrak trains by 332 gallons per week (cumulative) and fuel consumption of freight trains by 430 gallons per week (cumulative). These decreases in consumption would also result in emission reductions (which have not been quantified).

Air emissions may also indirectly benefit from increased utilization of passenger rail in lieu of automobile travel, causing reduction in (1) greenhouse gas emissions, (2) fuel and energy usage, and (3) associated emissions. Average passenger automobile emissions of carbon dioxide are 0.964 pounds CO2/passenger mile. For passenger rail, emissions of carbon dioxide range average 0.239 pounds CO_2/passenger mile. See Public Transportation's Role in Responding to Climate Change, Federal Transit Administration (FTA, 2007).

The Proposed Action will have no significant adverse impacts on air quality. There is no direct impact on air quality or air emissions from the Proposed Action. The Proposed Action will not result in additional freight or passenger train traffic or trips. By relieving congestion and increasing operational fluidity, the Proposed Action will result in reduced air emissions due to reduced diesel locomotive idling time, reduced train movements, and increased track downtime.

The Proposed Action would have no significant cumulative effects on air quality and air emissions.[6] Past, present, and future improvements to the rail transportation will have similar incremental beneficial impacts on air emissions as the Proposed Action. The net cumulative impact from future actions, which may include additional passenger rail utilization, would displace greenhouse gas emissions through more efficient and lower emitting passenger rail. Similarly, any future improvements to freight rail system and

[6] The President's Council on Environmental Quality ("CEQ") defines a cumulative impact as: "…the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7.

utilization would displace greenhouse gas emissions from other non-rail modes of freight transportation.

The No-Build Alternative would not achieve the emissions reductions that would occur with the Proposed Action alternatives.

2. Flood Plains

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map ("FIRM") Community Panel Number 180132 0017C, the Proposed Action is located in a Zone C or upland area. There are no floodplains within the limits of the Proposed Action Vicinity. (*See* Attachment B, 2009 Categorical Exclusion). The Proposed Action alternatives, including the No-Build Alternative, will not have any indirect or cumulative impacts on floodplains.

3. Noise and Vibration

FRA relies on the Federal Transit Administration's guidance on assessing noise and vibration impacts for the evaluation of improvements to conventional passenger rail lines and stationary rail facilities. Transit Noise and Vibration Impact Assessment, FTA-VA-90-1003-06, Federal Transit Authority May 2006 ("FTA 2006"). These guidelines require screening for three categories of noise- and vibration-sensitive uses: highly sensitive (locations requiring exceptional quiet, such as outdoor theaters, recording studios, concert halls, or national historic landmarks), residential (residences and buildings in which people would be sleeping), and institutional (facilities with primarily daytime use, such as houses of worship and educational facilities). FTA guidance indicates that in commercial or industrial use area, the activities within buildings are compatible with higher noise levels.

As indicated in Table 1, noise screening distances for improvement to conventional passenger rail lines and stationary rail facilities, including commuter and rapid transit rail projects extend to a maximum of 1,600 feet. For vibration, the screening distances are 600 feet for highly vibration-sensitive buildings, 200 feet for residential buildings, and 120 feet for institutional buildings. The guidelines assume that if any noise- or vibration-sensitive locations are within the screening distances, impacts are likely to occur and a minimum of a general assessment is required.

The Proposed Action Area is located within NSRC's Pine Yard in Gary, Indiana, north of I-90 near the Gary-Chicago International Airport. The areas adjacent to Pine Yard are characterized by dense industrial development. *See* Attachment B, 2009 Categorical Exclusion.

Type of Project			Screening Distance* (ft) Unobstructed	Intervening Buildings
Fixed Guideway Systems:				
Commuter Rail Mainline			750	375
Commuter Rail Station	With Horn Blowing		1,600	1,200
	Without Horn Blowing		250	200
Commuter Rail-Highway Crossing with Horns and Bells			1,600	1,200
Rail Rapid Transit			700	350
Rail Rapid Transit Station			200	100
Light Rail Transit			350	175
Access Roads			100	50
Low- and Intermediate-Capacity Transit		Steel Wheel	125	50
		Rubber Tire	90	40
		Monorail	175	70
Yards and Shops			1000	650
Parking Facilities			125	75
Access Roads			100	50
Ancillary Facilities				
Ventilation Shafts			200	100
Power Substations			250	125
Bus Systems:				
Busway			500	250
BRT on exclusive roadway			200	100
Bus Facilities		Access Roads	100	50
		Transit Mall	225	150
		Transit Center	225	150
		Storage & Maintenance	350	225
		Park & Ride Lots w/Buses	225	150
Ferry Boat Terminals:			300	150

*Measured from centerline of guideway/roadway for mobile sources; from center of noise generating activity for stationary sources.

Table 1: Screening Distance for Noise Assessments (FTA, 2006)

No noise sensitive receptors exist within the applicable screening distances. There are no known residential receptors of noise and vibration within one mile of the Proposed Action location. One industrial building is located approximately 1,500 feet to the north, on the other side of Canadian National Railway's Kirk Yard, part of the U.S. Steel Gary Steel Works. A second industrial building is located 2,100 feet to the south, part of the Central Illinois Steel Company property. Other potential receptors include the Gary Airport, nearly one mile from the Proposed Action Area, construction companies, and other industrial areas.

The Proposed Action would not have significant impacts with respect to noise or sound exposure. The Pine Yard Lead Track would serve as a low speed access point for trains, with minimal noise and vibration. Additionally, due to a lack of receptors, and the surrounding area's industrial use, the Proposed Action would not have a significant effect on noise and vibration. Environmental Protection Agency, "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety," Report No. 550/9-74-004, Washington DC, March 1974.

Indirect and cumulative effects on noise and vibration also would be insignificant. The Proposed Action is intended to address existing passenger and freight rail traffic, and accordingly is not intended to increase passenger and freight rail traffic and associated noise and vibration. Even without the Proposed Action, this area currently experiences and will continue to experience rail traffic from passenger and freight rail. The Proposed Action will not result in an increased number of train operations or increased speeds or new stationary noise sources.

Because the Indiana Gateway Project purpose is to reduce rail congestion and increase use of passenger rail with associated reduction in highway utilization, indirect effects in terms of reduction of noise and vibration may be realized in highway areas.

The No-Build Alternative would not result in noise and vibration impacts.

4. Visual Resources

The Proposed Action will be located within existing rail right-of-way at Pine Yard in Gary, Indiana. The areas adjacent to Pine Yard are characterized by dense industrial development. *See* Attachment B, 2009 Categorical Exclusion. The Proposed Action will not change the viewshed or aesthetic nature of the area.

The Proposed Action is intended to address existing passenger and freight rail traffic, and accordingly is will not increase passenger and freight rail traffic or result in associated visual effects. The Pine Yard Lead Track will provide a location for ingress and egress at the east end of Pine Yard, in addition to the access point at the west end of Pine Yard. Having two access points is expected to reduce time required for train movements. Reduction in rail congestion might result in shorter residence time for trains in the area.

No indirect or cumulative impacts to visual resources are expected to result from the proposed action.

The No-Build Alternative would not result in impacts to visual resources.

5. Agriculture

No farmland soils or active farmlands were identified in the Proposed Action Area or Proposed Action Vicinity. All work is confined within the existing NSRC right-of-way and does not have the potential to impact farmland. The Proposed Action will not have any indirect or cumulative impacts on farmland.

The No-Build Alternative would not result in impacts to agricultural land.

B. Ecological Systems

The Proposed Action is located within the Calumet River – Frontal Lake Michigan HUC: 0404000106 watershed. The Proposed Action Area is approximately 900 feet from the Grand Calumet River which is across I-90 to the South and 6,000 feet from Lake Michigan. There are no Designated Salmonid Waters, Outstanding National Resource Waters, or Outstanding State Waters within the Proposed Action Vicinity

The Proposed Action is located in Northern Indiana, where the USACE conducted a 2006 Study which determined that 2,000 acres of dune and swale still exist within the 30,000 acres of strandplain. U.S. Army Corps of Engineers 2006. Status, Trends, and Potential of Biological Communities of the Grand Calumet River Basin (Moye et al, U.S. Army Corps of Engineers Environmental and Social Analysis Branch Chicago District).

The USFWS has confirmed that the Proposed Action is not likely to affect federally protected species or their critical habitat under the Endangered Species Act, 16 U.S.C.

1531 *et seq. See* August 6, 2015 Comments from USFWS, attached hereto as Attachment L.

As discussed below, IDNR identified the potential presence of state protected plant species as an issue of concern. NSRC consultants performed additional studies, including FQA analysis (see below) to identify potential state or federal, protected plant species.

NSRC consultants also assessed geotechnical conditions for the original alignment. As noted in Attachment M, August 10, 2015 NSRC Comment Letter to USACE, geotechnical borings found presence of fill material, slag, stone, and other typical material utilized for rail roadbed in the Proposed Action Vicinity at the original Preferred Alignment for the Pine Yard Lead Track. *See* Attachment N – Geotechnical Report (August 10, 2015).

1. Wetlands and Waters of the United States

Figure 10 depicts the National Wetland Inventory (NWI) Mapped Wetlands within the Proposed Action Vicinity.

Figure 8 - National Wetland Inventory Mapped Wetlands within the Proposed Action Vicinity

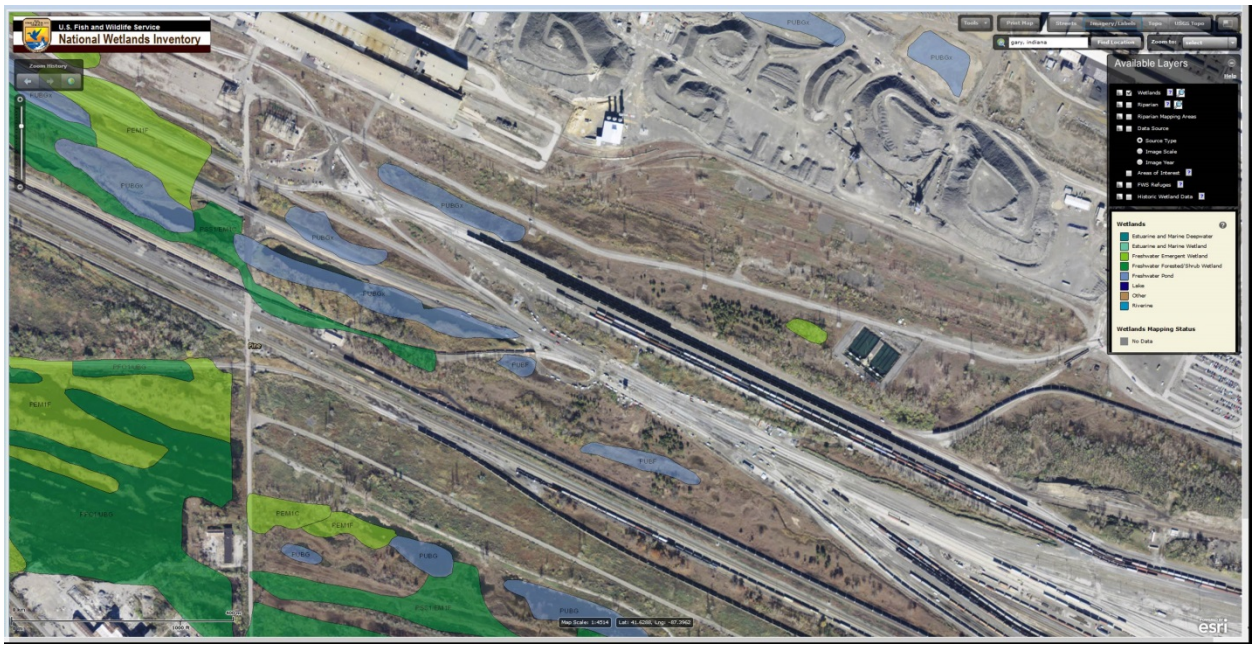

Figure 9 - National Wetland Inventory Mapped Wetlands within the Proposed Action Area

In order to verify and confirm wetland areas, WOTUS, and their boundaries, the Proposed Action Vicinity was inspected on June 6 and August 7, 2014 by Shannon & Wilson and June 5 and July 21, 2015 by CARDNO. Additional site visits for the purpose of assessing environmental conditions, including presence of WOTUS, were conducted with resource agencies in March 2015, July 2015 and September 2015. The USACE was present at the July 21, 2015 site visit and the boundaries presented in this revised supplemental report represent boundaries marked as directed by the USACE. The boundary markings directed by the USACE were surveyed for the purpose of producing a summary report of all jurisdictional boundaries. The methods and data collected have been analyzed and submitted to the USACE and IDEM. *See* Attachment K, Waters of the U.S. Summary Report - Pine Siding Extension, Lead Track and Tail Track, Gary, Indiana (August 10, 2015).

Based upon site visits by NSRC consultants, subsequent site visits by IDEM, IDNR, and USACE, six wetlands were identified within the Proposed Action Vicinity.

No streams or channels with ordinary high-water mark and/or bed and bank were determined to be present within the Proposed Action Vicinity. No ponds or other open waters were observed within the Proposed Action Vicinity.

Table 2 summarizes the wetlands in the Proposed Action Vicinity.

Wetland Name	Wetland Type	Latitude/Longitude (Decimal Degrees)	Approximate Wetland Area(Acres)	Delineation Points
W-1	Forested (PFO)	41.624070 / -87.350113	1.73	DP-1, DP-2
W-2	Scrub-Shrub (PSS)	41.623918 / -87.389482	3.25	DP-1, DP-2
W-3	Scrub-Shrub (PSS)	41.623734 / -87.389213	0.04	DP-1, DP-2
W-4	Scrub-Shrub (PSS)	41.623380 / -87.388472	1.37	DP-1, DP-2
W-5A	Emergent (PEM)	West End 41.618478 / -87.375492 East End 41.617450 / -87.372903	1.4	DP-1, DP-4
W-5	Emergent (PEM)	West End 41.617287 / -87.372470 East End 41.613365 / -87.361275	2.6	DP-2, DP-3

Table 2 – Wetland Summary Table

Table 3 presents the earthwork excavation, total stone fill, wetland impact, non-wetland/upland impact, and the total fill impact as a result of each of the alternative alignments, with descriptions of each of the alternatives.

Alternative	Earthwork Excavation (CY)	Total Crushed Stone Fill (CY)	Wetland Impact (Acre)	Upland Impact (Acre)	Total Impact (Acre)
Preferred Alignment	405	1,722	0.153	0.636	0.789
A	671	3,551	0.412	0.805	1.217
B	1,079	1,877	0.326	0.522	0.848
C	978	1,958	0.491	0.309	0.800
D	868	2,194	0.660	0.282	0.942
Alternative E/Proposed Alternative	***995***	***2,573***	***0.589***	***0.281***	***0.870***

Table 3 – Alternatives Impact Summary

All of the alternatives considered, except the No-Build Alternative, would result in impacts to wetlands, and state-listed wetland and upland species. The original Preferred Alignment minimized wetland impact areas and was located on an existing rail roadbed which was the former location of a lead track to Pine Yard. However, public comments indicated concern that this alternative would bisect upland plant species and habitat and indicated that Alternative E/Proposed Alternative would satisfy concern regarding bisection of plant communities. Comments were raised regarding upland plant species quality. After receipt of comments from the public, interested groups and resource agencies, NSRC proposes Alternative E/Proposed Alternative instead of the original Preferred Alignment. Wetland impacts associated with this alignment are greater as compared to the Preferred Alternative, however, selecting Alternative E/Proposed Alternative satisfies concerns for upland impacts raised by commenters and resource agencies.

Attachment H provides detailed information including Floristic Quality Assessment of wetlands and WOTUS in the Proposed Action Vicinity. Attachment H - Alternatives Analysis, dated November 4, 2015.

Following minimization and avoidance in accordance with 40 C.F.R. Part 230 and 33 C.F.R. Part 325, Alternative E/Proposed Alternative would impact 1.352 acres of waters identified as WOTUS. Impacts would be limited to Wetlands 1, 4, 5A, and 5 are discussed in further detail below:

Wetland 1 (0.247 acre of impact) is a forested wetland located at the northwestern edge of the Proposed Action. Wetland 1 has a heavy shrub/forest layer of *Populus deltoides* (Cottonwood), *Salix* spp, (Willows), and *Cornus* spp (Dogwood), likely suppressing most of the herbaceous layer, which was dominated by *Calamagrostis canadensis* (Blue Joint Grass). A few diverse and high C-value pockets are sprinkled among the thickets, but *Lythrum salicaria* (Purple Loosestrife), *Phragmites australis* (Common reed), and *Rhamnus frangula* (Glossy Buckthorn) are starting to dominate these thickets. State listed species observed include: *Carex aurea* (Golden Sedge, Rare), *Hypericum kalmianum* (Kalm's St. John's Wort, Watch List), *Juncus balticus* var. *littoralis* (Lake Shore Rush, Rare), and *Rhus aromatica* var. *arenaria* (Dwarf Fragrant Sumac, Rare). Wetland 1 has a native mean C value of 4.1 (3.5 with adventives) and a native FQI of 21.9 (20.2 with adventives). A total of 33 species were identified with 28 (84%) being native to the Chicago Region.

Wetland 4 (0.342 acre of impact) is a complex of scrub-shrub, emergent wetland, and panne. Large patches of *Phragmites australis* (Common Reed) and *Rhamnus frangula* (Glossy Buckthorn) are present. A high quality panne is present at the northern-end of this wetland. Several state listed species were observed (mostly in the panne). These include, *Aster ptarmicoides* (Stiff Aster, Rare), *Betula papyrifera* (Paper Birch, Watch List), *Buchnera americana* (Blue Hearts,State Endangered), *Carex aurea* (Golden Sedge, Rare), *Carex crawei* (Early Fen Sedge, Threatened), *Hypericum kalmianum* (Kalm's St. John's Wort, Watch List), *Juncus balticus* var. *littoralis* (Lake Shore Rush, Rare), *Sisyrinchium montanum* (Mountain Blue-Eyed Grass, State Endangered). Wetland 4 has a native mean C value of 5.7 (5.3 with adventives) and a native FQI of 44.2 (42.8 with

adventives). A total of 65 species were identified with 61 (94%) being native to the Chicago Region.

Wetland 5A (0.049 acre of impact) is a linear wet ditch running adjacent to the access road and railroad, approximately 4 to 8 feet wide and ¾ mile long. It is almost completely dominated by *Phragmites australis* (Common Reed), but a few individual specimens of higher quality native plants are still present. No state listed species were observed. Wetland 5A has a native mean C value of 2.7 (2.0 with adventives) and a native FQI of 15.7 (13.4 with adventives). A total of 45 species were identified with 33 (73%) being native to the Chicago Region.

Wetland 5 (0.714 acre of impact) is a linear ditch that was considered an "Exempt Ditch" in a 2010 delineation. The wetland is a low quality linear ditch dominated by *Phragmites australis* (Common Reed) and *Typha* x *glauca* (Hybrid Cattail). No state listed species were observed in wetland 5. Wetland 5 has a native mean C value of 3.7 (3.3 with adventives) and a native FQI of 15.3 (14.5 with adventives). A total of 19 species were identified with 17 (90%) being native to the Chicago Region.

Wetland W-5 and W-5A are within the Pine Siding Extension portion of the Proposed Action, and are part of a manmade drainage ditch for the two main line tracks East of Pine Yard. This wetland coincides with Shaw Environmental Inc.'s 2010 Routine Wetland Assessment wetlands #37, #38, and #39 which describes the wetlands as constructed ditch and "exempt" wetlands. NSRC identified W-5 and W-5A as waters of the United States out of an abundance of caution, has mitigated for impacts as dune and swale impacts at the Pine Station mitigation bank.

Graphic depictions of impacted areas of Waters of the United States are found in Attachment H, Alternatives Analysis, and Attachment K - Waters of the United States Summary Report – Pine Yard Siding Extension, Lead Track and Tail Track.

Following minimization and avoidance, and as the result of alternatives analysis and comments from the public regarding the Section 404 permit LRC-2015-213, the Proposed Action will have no impacts to wetland W-3 and W-4.

Wetland 3 (No impact) is a small wetland with a tiny "upland" island/hummock running through. East side is dense with Phragmites australis in standing water. West side is dense with shrubs, very diverse, and has some standing water. A single specimen of the wetland shrub *Hypericum kalmianum* was noted, it is located in the portion of the wetland to be impacted. *H. kalmianum* (Kalm's St. John's Wort) is on Indiana state watch list. Rhus aromatica var. arenaria (Beach Sumac), a state rare plant, was also observed. Wetland 3 has 36 total species, 33 native. Native Mean C = 5.1. FQI = 29.4.

Wetland 4 (No impact) is a complex of scrub shrub, emergent wetland, and panne. Large patches of Phragmites australis and Rhamnus fragula were present. A high quality panne is present at the northern end of this wetland. Several state listed species were observed (mostly in the panne): Aster ptarmicoides (Stiff Aster, Rare), Betula papyrifera (Paper Birch, Watch List), Buchnera americana (Blue Hearts,State Endangered), Carex aurea (Golden Sedge, Rare), Carex crawei (Early Fen Sedge, Threatened), Hypericum kalmianum (Kalm's St. John's Wort, Watch List), Juncus balticus var. littoralis (Lake

Shore Rush, Rare), Sisyrinchium montanum (Mountain Blue-Eyed Grass, State Endangered). Wetland 4 has 65 total species, 61 native. Native Mean C = 5.7. Native FQI = 44.2.

2. Water Quality and Water Resources

The Proposed Action is approximately 900 feet from the Grand Calumet River and 6,000 feet from Lake Michigan. There are no Designated Salmonid Waters, Outstanding National Resource Water, or Outstanding State Waters within the Proposed Action Vicinity.

No streams or channels with ordinary high-water mark and/or bed and bank were determined to be present within the Proposed Action Vicinity. No ponds or other open waters were observed within the Proposed Action Vicinity. No impacts to jurisdictional channels, streams, or open waters are anticipated for this Proposed Action.

None of the Proposed Action alternatives, once completed, would result in additional water runoff, generation of wastewater, or change the existing drainage or groundwater recharge patterns of the area. Therefore, no long-term negative impact on local groundwater or surface water quality will occur as a result of the Proposed Action. There are no streams or other watercourses located within the Proposed Action Vicinity. The Proposed Action will have no effect on essential fish habitats. Accordingly, the Proposed Action will have no indirect or cumulative impacts on water quality.

The No-Build alternative would have not impacts on water quality or water resources.

3. Threatened and Endangered Species

The USFWS determined that no federally listed species exist within the Proposed Action Vicinity, including the Indiana bat (*Myotis sodalis*) or Northern Long-Eared bat (*Myotis septentrionalis*). *See* the August 6, 2015 Comments from USFWS, attached hereto as Attachment L. The USFWS has confirmed that the Proposed Action is not likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or directly or indirectly destroy or adversely modify the critical habitat of such species. Therefore, no direct, indirect, or cumulative impacts are expected to result to federally listed species or their critical habitat as a result of the Proposed Action.

Coordination letters were also sent to the Bloomington Field Office of the USFWS and to the IDNR Environmental Review Coordinator. State protected plant species are identified in the Proposed Action Area. According to the IDNR Natural Heritage Data Center, there are 43 species which have some level of state protection potentially located within the vicinity of the Indiana Gateway Project # 7. Other than one state endangered mammal (*Spermophilus franklinii*) and one state endangered turtle (*Emydoidea blandingii*), the potentially impacted species are all plants or insects, including six state endangered species, 10 state threatened species, and 25 state rare species. All the Proposed Action alternatives would involve relocating the access road and stormwater management ditch and constructing a portion of the Pine Yard Lead Track adjacent to the existing track and

within rail right-of-way, minimizing impact to these species. *See* March 18, 2015 IDNR's response dated (Attachment O). However, all the Proposed Action alternatives have the potential to impact these state protected species.

In consultation with the USACE, IDNR, and IDEM, the Alternative E/Proposed Alternative was identified as minimizing potential impacts to these upland state protected plant species. Despite the potential presence of state protected species, IDNR's Division of Natural Preserves has expressed its support for the Alternative E/Proposed Alternative. *See* October 26, 2015, IDNR Division of Nature Preserves Letter of Support (Attachment A). In the Division of Natural Preserves' view, Alternative E//Proposed Alternative impacts wetlands of lower quality than the other alternatives and avoids bisecting areas IDNR considers significant. The Division of Natural Preserves and NSRC have worked closely to develop the Alternative E/Proposed Alternative design and mitigation options that conserve natural resources in this area. The potential impacts to state endangered or threatened species resulting from Alternative E/Proposed Alternative have been minimized to the greatest extent possible. Therefore, any impacts to state endangered or threatened species or their critical habitat connected with the Alternative E/Proposed Alternative would not be significant. Further, it is not expected that the Alternative E/Proposed Alternative will have any indirect or cumulative impacts on state threatened or endangered species or their critical habitat.

The No-Build Alternative would not have any impacts on federally listed species or state protected species at the Proposed Action area. The benefits associated with the mitigation associated with Alternative E/Proposed Alternative would not be realized with the No-Build Alternative.

4. Special Lands, including 4(f) Properties

No Section 4(f) or 6(f) properties were identified within the Proposed Action Vicinity. The Proposed Action will not impact any Section 4(f) or 6(f) properties. The Proposed Action is located within a designated coastal zone (Lake Michigan) pursuant to the Coastal Zone Management Act, 16 U.S.C. § 1451-1464. NSRC has received coastal zone consistency certification under the Coastal Zone Management Act for Alternative E/Proposed Alternative. *See* Attachment G - Federal Consistency Review under Indiana Lake Michigan Coastal Program January 26, 2016.

C. Human Environment

1. Transportation

As previously discussed, it is anticipated that the Proposed Action alternatives would have a positive impact on transportation, most importantly ameliorating congestion issues experienced in the rail corridor. The Proposed Action alternatives would increase passenger and freight transportation capacity, accessibility, and mobility for all rail travel. It would not negatively impact road traffic. *See* Section II: "Purpose and Need for Proposed Action" above.

As discussed in Section II, the project will have beneficial effects on transportation. The Proposed Action is designed to relief passenger and freight rail congestion. The project

will specifically permit freight trains to be moved to the siding extension track, made possible by the movement of the access road. This movement of freight trains from the mainline will allow the faster passenger trains to pass, meeting passenger transportation scheduling and transportation goals.

The project will also benefit freight transportation, providing for access to Pine Yard. As previously discussed, Pine Yard is located in one of the most congested portions of the national rail system. The lead and tail track are designed to provide access to Pine Yard facilitating ingress and egress.

The No-Build Alternative would have no positive impacts on transportation and would result in continued congestion on the Chicago Line.

2. Land Use and Socioeconomics, including Environmental Justice

The Proposed Action Vicinity is identified as industrial, with properties to the north including railroad, current and former steel, and manufacturing facilities. IDNR owns and manages the Pine Station Nature Preserve, located adjacent from the Proposed Action Area (see Figure 2). The Proposed Action is consistent with the current and future use of the Proposed Action Vicinity. The Proposed Action Vicinity is home to industrial activities including U.S. Steel, the Gary-Chicago International Airport, Gary Jetport, Olympic Steel, South Shore Slag, and Canadian National Railway's Kirk Yard.

Socioeconomic impacts of the Proposed Action are limited because the Proposed Action would not disrupt existing surrounding uses, including the industrial use of the area and existing businesses. The Proposed Action may increase the number of jobs in the area. Federal Highway Administration ("FHWA") guidance estimates one man-year of employment results from each $100,000 investment in infrastructure construction.[7] Proposed Action parameters indicate that this Indiana Gateway Project # 7, including the Proposed Action, would result in the estimated creation of 703 jobs during the construction phase.

Direct, indirect and cumulative socioeconomic benefits including increased efficiency of passenger and freight rail transportation, associated reductions in economic costs for regional transportation, reductions in greenhouse gas emissions and other pollutants, reductions in highway traffic congestion, and reduced highway maintenance are anticipated benefits of the Indiana Gateway Project. As noted above in Section II, Purpose and Need, the Proposed Action is a central and critical component for achieving the clearance necessary for passenger and freight rail in the Northern Indiana area to achieve national transportation policy goals, and the Proposed Action is also critical to efficient passenger rail operations and achieving high speed passenger rail goals set forth by INDOT, FRA, and Congress in accordance with the ARRA. The INDOT describes the Indiana Gateway Program (including the Proposed Action) as a program to improve intercity passenger rail service.[8] The INDOT states that each individual project is coordinated to provide train dispatchers with additional alternatives when planning train

[7] http://www.in.gov/indot/files/IndianaGatewayHSIPRApplicationTrack1a.pdf

[8] http://www.in.gov/indot/3373.htm.

meetings and passings in and out of Chicago. In addition to passenger service, the INDOT specifies the following Program benefits:

- Improved fluidity in Northwest Indiana for both train traffic and the travelling public;
- A reduction in lengthy crossing blockages because the train dispatchers will have alternatives to keep trains moving; and
- Improvements in passenger service to the east, towards South Bend, Elkhart, and Waterloo, Indiana, and beyond for Amtrak Capitol Limited to/from Washington and Lake Shore Limited to\from New York and Boston.

Title VI of the Civil Rights Act of 1964 addresses discrimination issues associated with federally funded projects. No groups or individuals have been or will be excluded from participation in public involvement activities, denied the benefit of the project, or subjected to discrimination in any way on the basis of race, color, age, sex, national origin, disability, or religion.

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations (1994), directs federal agencies to "promote nondiscrimination in federal programs substantially affecting human health and the environment, and provide minority and low-income communities access to public information on, and an opportunity for public participation in matters relating to human health or the environment." The Council on Environmental Quality (CEQ) responded to this order by issuing guidance for agencies on how to address environmental justice under NEPA. The Department of Transportation (DOT) issued an update to Departmental Order 5610.2(a) (Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) (originally published April 15, 1997) on May 2, 2012. The Order updates and clarifies environmental justice procedures for the DOT in response to the Memorandum of Understanding on Environmental Justice signed by heads of Federal agencies on August 4, 2011, DOT's revised environmental justice strategy issued on March 2, 2012, and Executive Order 12898.

The Proposed Action would not have disproportionately high or adverse impacts on minority or low impact populations.

The total percentage of minority populations within a one mile radius of the study area is 97%, compared to 45.3% for Lake County, and 19% for the State of Indiana. The total residential population in this heavily industrialized area is low, however, with a total of three residences identified within the one mile radius, 4,140 within a two mile radius, and 29,824 within the 3 mile radius which includes a portion of East Chicago.[9] Figure 12.

[9] https://ejscreen.epa.gov/mapper/

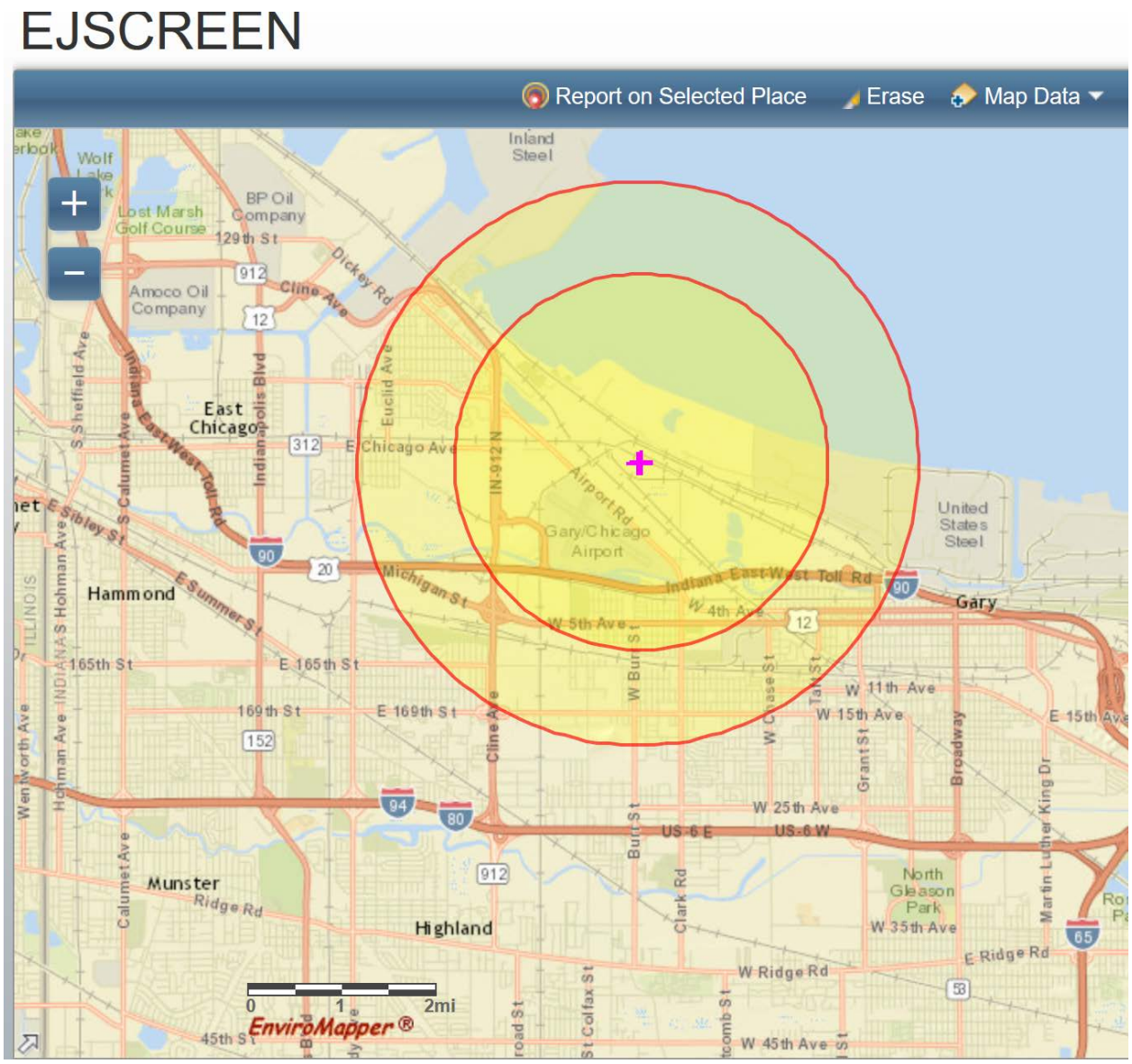

Figure 10: Two and Three Mile Radius from Proposed Action Area

The Proposed Action will be located in Census Block 103.04, Lake County, Indiana. Census Block 103.04, Lake County, Indiana population of 3,149 has the following demographic characteristics (Figure 13):

POPULATION, RACE					
White alone	Map	**278**	319,412	5,467,906	223,553,265
Black or African American alone	Map	**2,610**	128,263	591,397	38,929,319
American Indian and Alaska Native alone	Map	**6**	1,628	18,462	2,932,248
Asian alone	Map	**10**	6,142	102,474	14,674,252
Native Hawaiian and Other Pacific Islander alone	Map	**2**	108	2,348	540,013
Some Other Race alone	Map	**166**	28,792	173,314	19,107,368
Two or More Races	Map	**77**	11,660	127,901	9,009,073

Figure 11: Demographics, Census Block 103.04, Lake County, Indiana compared to State and Federal Demographics[10]

Total low income populations are 59% for the one mile radius from the Project Area, 59% for the two mile radius from the Project Area, and 61% for the three mile radius for the Project Area, compared to 34% for the State of Indiana.[11]

Although the local environmental justice populations examined were higher than the county or state averages, none of the populations would be impacted by the Proposed Action, primarily due to the distance between these populations and the Proposed Action Area. No acquisitions would be required and no community resources would be impacted or displaced. Native American tribes (either federally recognized or other) are not located within the Proposed Action Vicinity. The Proposed Action would not result in any property acquisitions of residences or businesses or relocations, and no temporary or permanent road or crossing closures would be associated with the Proposed Action. Accordingly, no disproportionate or adverse impact on minority or low-income populations are anticipated.

3. Public Health and Safety

No safety or security concerns were identified in the Proposed Action Vicinity. As noted in Section I, the area is currently heavy industrial with substantial rail operational traffic. Rail safety provisions and requirements will apply to the Pine Yard Lead Track in the same manner as applied to the current Mainline # 1 and # 2, and Pine Yard operational areas.

NSRC safety provisions and personnel will serve in the same capacity for the Proposed Action as other portions of the rail system. Public access is prohibited in operating rail property areas. Passenger rail safety matters will be addressed by Amtrak. The location for proposed facilities has avoided crossings to the maximum extent possible, and will not result in increased crossings from current baseline conditions.

The Proposed Action is expected to have positive indirect and cumulative effects on public health and safety. By increasing efficiency and capacity of passenger rail transportation, the Proposed Action will substantially reduce roadway congestion. Reducing roadway congestion is associated with improvements in safety and fuel efficiency.[12]

[10] *http://www.usboundary.com/Areas/Census%20Tract/Indiana/Lake%20County/Census%20Tract%20103.04/456667#Data*

[11] https://ejscreen.epa.gov/mapper/

[12] Cambridge Systematics, Inc. 2005. Traffic Congestion and Reliability: for the FWHA, September 1, 2005.

The No-Build Alternative would have no impact on the current, safe operation of Pine Yard and would not realize the positive indirect and cumulative effects on public health and safety.

4. Hazardous Materials and Waste

Construction of the Proposed Action alternatives would not involve the use or handling of hazardous materials. All wastes would be properly handled in accordance with the requirements of applicable law.

NSRC is a common carrier with respect to materials. The Proposed Action will not affect the type of materials transported. The Proposed Action addresses current freight and rail passenger traffic congestion and constrained operational fluidity, as discussed in Section II. Purpose and Need.

A site visit and EPA enviromapper database review indicated that no hazardous materials were present on or adjoining to the Proposed Action Vicinity. The BMI facility located at 1100 North Clark Street is listed as a Resource Conservation and Recovery Act (RCRA) generator of hazardous waste and is located more than 1,000 feet to the south of the central portion of the Proposed Action. Due to the relative distance of this facility and based on no evidence of contamination, it is unlikely that this site represents a concern. The BMI property will not be impacted by the Proposed Action and no acquisition of right-of-way is required. No indication of violations, corrective actions or enforcement actions exists for this facility. *See* Attachment B, 2009 Categorical Exclusion.

This Proposed Action is not expected to have either indirect or cumulative impacts relating to hazardous materials and wastes.

The No-Build Alternative would have no impacts on hazardous materials and waste.

5. Cultural Resources

The National Register of Historic Places (NRHP) database maintained by the Department of the Interior/National Park Service indicates there are no cultural, historic, or archaeological resources properties listed on the NRHP in proximity to the Proposed Action Vicinity, and therefore on December 4, 2015, the IDNR Division of Historic Preservation and Archaeology ("DHPA") confirmed the absence of known archeological or historic resources in the area. *See* Attachment P. The Proposed Action will be completed entirely within NSRC right-of-way. The IDNR's finding is supported by the 2009 determination that no cultural, historic, or archaeological resources were located in the immediate vicinity of the Proposed Action. *See* Attachment B, 2009 Categorical Exclusion. Therefore, the Proposed Action will not have any indirect or cumulative impacts on cultural or historical resources.

http://www.ops.fhwa.dot.gov/congestion_report/congestion_report_05.pdf.

D. Construction Impacts

Construction impacts would be of a relatively short duration during active construction. Depending upon the finalization of this NEPA process, impacts will occur in spring of 2016 and be completed within three months.

The Proposed Action alternatives may result in temporary construction-related increases in vehicle exhaust and emissions, and airborne particulate matter during equipment operation and the hauling of material. Construction dust associated with exposed soils would be controlled, if necessary, with the application of water and other approved dust palliatives. Any hydrocarbons, NO_2, SO_2 emissions, as well as airborne particulates created by fugitive dust plumes, would be rapidly dissipated. Overall, there could be a short-term, temporary degradation of local air quality during construction activities. Standard best management practices (BMPs) would be utilized during the construction process in order to minimize dust. Construction of the Build Alternative could improve air quality in the region in the long-term, if fewer automobiles are utilized in the region and more people choose rail as a transportation option.

During construction of the improvements, additional energy would be expended beyond what would be used for normal operations. This additional energy would be consumed on a short-term basis as required for movement of the access road and stormwater management ditch, and construction of the new lead track. Energy by vehicles in the Proposed Action Vicinity where the proposed improvements would take place may increase during construction due to possible traffic delays. However, once the Proposed Action is operational, long-term energy savings are expected from more energy-efficient operations throughout the Proposed Action Vicinity.

A NPDES permit authorization for the construction work has been obtained from the IDEM. The NPDES permit includes a stormwater pollution prevention plan with best management practices for erosion and sediment control, construction, and dust and noise suppression have been developed and will be implemented as part of the construction. Debris and spoil disposal, if generated, will be removed according to state and local regulations. If contaminated soil is encountered, it will be segregated and sampled prior to disposal. Accordingly, no long-term indirect effects are expected to result from the construction of this Proposed Action. No cumulative effects are expected to result from the construction of this Proposed Action.

E. Indirect and Cumulative Impacts

Indirect impacts are impacts caused by the action that occur later in time or farther removed in distance from the action, but are still reasonably foreseeable. Cumulative impacts are impacts on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. Indirect and cumulative impacts analysis is provided in each resource area in Section IV, Environmental Resources, Impacts and Mitigation. Except for impacts to WOTUS and associated dune and swale habitat, which would be mitigated at an IDNR preserve, the Proposed Action has no indirect or cumulative impacts.

CN owns and operates a rail yard to the north of the Project Area, Kirk Yard. A separate project, the Kirk Yard project, includes construction of rail tracks and bridges. The project affects 7.17 acres of wetlands identified as significantly degraded. The USACE, USFWS, IDEM and other resource agencies assessed the environmental effects of the Kirk Yard project. A permit was issued in 2013 authorizing the project with conditions including recreation of over 7 acres of wetlands at the yard location. Additionally, offsite mitigation was included for a total of 41.5 acres of mitigation. The impacts of the Kirk Yard project when added to the Proposed Action could result in cumulative effects primarily to areas identified as jurisdictional Waters of the United States and dune/swale habitat. However, with regulatory agency and public involvement in both projects, mitigation as a condition of authorization, cumulative effects to wetland and dune/swale habitat would be effectively mitigated (see discussion below regarding mitigation for the Proposed Action).

Indirect and cumulative effects to other resources are not anticipated. The location of the Kirk Yard project is in a heavily industrialized area near U.S. Steel facilities with very low residential population. Kirk Yard ingress and egress run on different rail lines. As noted, the Proposed Action does not include grade crossings, property acquisition, or other potential effects relating to transportation. The Proposed Action also includes passenger rail components, which are not present with the Kirk Yard project.

F. Permits and Mitigation

NSRC has obtained authorization from IDEM for discharge of stormwater from construction activities under Section 402 of the CWA. NSRC has also obtained authorization from the USACE for impacts to WOTUS under Section 404 of the CWA, 33 U.S.C. § 1344. *See* Attachment E, December 21, 2015 Authorization LRC 2015-213. IDEM issued a Section 401 Water Quality Certification for the Proposed Action on December 10, 2015. Attachment F – December 10, 2015 Section 401 Water Quality Certification 2015-592-45-MTM. No additional permits are required for the Proposed Action.

This EA addresses the mitigation of environmental and community impacts, and all reasonable steps taken to minimize adverse effects in accordance with NEPA and the FRA's Procedures for Considering Environmental Impacts. 64 Fed. Reg. 28545. In addition, mitigation options discussed herein for a particular type of impact, as well as any comments received on a particular impact and its mitigation have been considered in order to select appropriate mitigation options.

1. Mitigation

NSRC prepared a detailed Mitigation Plan per the USACE and IDEM associated with Alternative E/Proposed Alternative, discussed in greater detail below. The final Mitigation Plan is attached hereto as Attachment D.

The proposed alternative, Alternative E/Proposed Alternative, will impact 1.352 acres of wetlands. As mitigation, 45 acres of habitat with similar or greater value than the impacted wetlands will be enhanced. The enhancement of critical dune and swale at the Pine Station Nature Preserve serves to enhance and protect a declining critical habitat type through the proposed strategically selected compensatory mitigation site.

If this EA does not result in the selection of Alternative E/Proposed Alternative, similar mitigation measures may be prepared and adopted in association with the selected alternative.

a. Mitigation Objectives

The goal is to institute an ecologically sound, well-developed and feasible wetland mitigation plan that fulfills compensatory mitigation requirements and the environmental/ecological objectives of the USACE[13] and IDEM[14] to enhance, restore and rehabilitate critical dune and swale habitat.

b. Mitigation Debits and Credits

To compensate for 1.352 acres of impact due to construction activities, NSRC proposes to receive credit for enhancing 45 acres of dune and swale habitat at the Pine Station Nature Preserve. Table 4 shows wetland impacts and corresponding required mitigation:

Impacted Wetland	Impact Area (Acres)	Native FQI	Quality	Mitigation Ratio	Enhancement Credit Factor	Effective Ratio	Required Mitigation Area (Acres)
Wetland 1	0.247	21.9	Medium	3:1	10%	30:1	7.410
Wetland 4	0.342	44.2	High	6:1	10%	60:1	20.520
Wetland 5A	0.049	15.7	Low	1.5:1	10%	15:1	0.735
Wetland 5	0.714	15.3	Low	1.5:1	10%	15:1	10.710
Total	**1.352**						**39.375**

Table 4 - Mitigation Debits and Credits

c. Mitigation Area

This Mitigation Plan is developed in accordance with USACE's Final Mitigation Rule (http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/final_mitig_rule.pdf; USACE/EPA, Compensatory Mitigation for Losses of Aquatic Resources; Final Rule, 73 Fed. Reg. 19,594 (Apr. 10, 2008)) ("2008 Mitigation Rule").[15] USACE's 2008 Mitigation Rule provides that the District Engineer consider the likelihood for ecological success and sustainability of the mitigation site selection, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project. 33 C.F.R. § 332.3(a). The plan provides for permittee-responsible, in-kind mitigation for the difficult-to-replace dune and swale habitat totaling 0.589 acre (Wetlands 1 and 4).

The 0.763 acre of impacts associated with the stormwater managment ditch (Wetlands 5 and 5a), which does not show evidence of remnant dune and swale habitat (mean C 2.7,

[13] Compensatory Mitigation for Losses of Aquatic Resources; Final Rule, 70 Fed. Reg. 19,594 (April 10, 2008); *see also* http://www.lrc.army.mil/Missions/Regulatory/MitigationRequirements.aspx.

[14] http://www.in.gov/idem/wetlands/2352.htm, 327 IAC 17-1-5 Compensatory mitigation.

[15] Message from Corps Chicago District, August 27, 2015.

3.7; FQI 15.3, 15.7), is also being mitigated as if it were dune and swale as a conservative mitigation approach. USACE Chicago District guidance provides that compensatory mitigation will be accomplished by establishing a minimum ratio of 1.5 acres of mitigation for every 1.0 acre of impact to WOTUS.[16] IDEM guidance references a maximum 4 to 1 ratio for higher quality wetlands. *See* http://www.in.gov/idem/wetlands/2352.htm.

USACE Chicago District personnel provided some general guidance regarding mitigation. A recent project included a 1.5 acre to 1 (15:1) mitigation ratio for impacts to low quality wetlands, 3:1 for high-quality or forested wetland impacts, and 6:1 for wetlands with state-listed species and exhibiting exceptionally high mean C-values and FQI values for in-kind restoration of dune and swale.[17] These ratios provided by USACE Chicago District assumed that the mitigation will be an in-kind restoration project, involving grading and hydrologic modification. Less credit is given to preservation and enhancement. Based upon a recent Mitigation Banking Interagency Coordination Agreement (ICA), credit of 10-15% was provided for preservation versus restoration or creation.[18] USACE Chicago District indicated that enhancement activities, which are included in this plan, can potentially generate more credit. An amount of 10-25% credit was identified as appropriate and within the range of the ICA.[19] NSRC applied the more conservative 10% credit figure to total impacts of 1.352 acres of WOTUS, including rail transportation ditches.[20]

Mitigation will be performed at the Pine Station Nature Preserve. The Pine Station Nature Preserve is a 253 acre nature preserve owned and managed by the State of Indiana under its system of nature preserves.[21] The Pine Station Nature Preserve is a resource which is located within the watershed, in close proximity to the impact area, but outside of rail operational properties. As existing dune and swale habitat, the Pine Station Nature Preserve represents in-kind mitigation for difficult-to-replace resources. Land use for the

[16] http://www.lrc.usace.army.mil/Portals/36/docs/regulatory/pdf/RPP20 12.pdf.

[17] Message from USACE Chicago District, August 27, 2015. This document is available upon request.

[18] http://www.lrc.usace.army.mil/Portals/36/docs/regulatory/pdf/MBICAJun2008.pdf.

[19] For example, where state protected species are involved and where the mitigation site involved preservation and enhancement, a 6:1 mitigation ratio is required. Where the mitigation is enhancement and preservation, USACE indicated a 15% credit should be given for preservation and 25% for enhancement (giving NSRC a 40% total credit). Under this example, USACE indicated that if six acres of restoration were required, then 15 acres of preservation and enhancement would be the final required mitigation ratio (i.e. 6/0.40 = 15).

[20] The USACE and EPA recently confirmed that rail transportation ditches are exempt from the definition of WOTUS. As set forth in the preamble to the CWA Rule: Definition of "Waters of the United States," 80 Fed. Reg. 37,054 (Jun. 29, 2015), the USACE and EPA stated that exclusions included in the final rule address the vast majority of roadside and other transportation ditches. The agencies go on to state that ditches "associated with modes of transportation, such as roadways, airports, and rail lines" are intended to be exempt from the definition of WOTUS. 80 Fed. Reg. at 37,098. The WOTUS rule has been challenged, and on October 9, 2015 the U.S. Court of Appeals for the 6th Circuit suspended the WOTUS rule. *State of Ohio et al. v. U.S. Army Corps of Engineers*, No. 15-3799/3822/3887 (6th Cir. Oct. 9, 2015).

[21] http://www.state.in.us/dnr/naturepreserve/4698.htm.

Pine Station Nature Preserve is consistent with long-term successful mitigation. Adequate acreage is available for enhancement, restoration, and rehabilitation to achieve policy goals regarding consolidation of compensatory mitigation projects and support IDNR financial planning and scientific expertise.

The Pine Station Nature Preserve already serves as an USACE-approved mitigation location for other permittee responsible mitigation, specifically for the same type of resources (i.e. dune and swale) potentially impacted by Alternative E/Proposed Alternative. IDNR has indicated that the enhancement, restoration, and rehabilitation activities under this plan are necessary and IDNR has assisted in the development of this plan through provision of baseline data and information and identification of appropriate resource management needs. This plan satisfies USACE mitigation requirements and policies and also supports IDNR policies, IDNR land management objectives and goals, and develops a partnership between NSRC and IDNR.

Common reed (*Phragmites australis*) and cattail (*Typha* spp.) will be treated throughout the 45 acre mitigation area over a period of five years. Herbicides shall be applied by state licensed applicators or licensed operators working under the direct supervision of a licensed applicator. The contractor shall demonstrate that all persons applying herbicides will have a current herbicide applicator/operator license. Target species will be treated as follows:

Herbicide Products

- Target species will be treated with AquaNeat® or an approved equal
- 5% solution for foliar applications
- 10% solution for hand-wicking solutions
- 2% non-ionic surfactant, such as Invade 90 or approved equal
- 0.5% Tracer dye, such as Trail Lite 264 or approved equal

Herbicide Storage

- Herbicides may not be stored onsite. They are allowed to be delivered to and from the site each day by the contractor.
- Herbicides may be mixed onsite within areas designated by the IDNR property manager.
- Herbicides must be adequately secured while onsite so as not to allow public exposure.

Treatment Timing

- A minimum of two treatments will be made during each year of the mitigation.
- The initial treatment for all species will be made between June 1 and July 31 of each year.
- A second follow-up treatment for all species will be made between August 1 and August 31 of each year.
- Additional treatments may be needed to ensure performance standards are met.

Application Techniques

- All species will be hand-wicked to avoid collateral damage to native vegetation.
- If the contractor believes an area can be foliar treated without causing collateral damage, foliar treatment can occur only following consultation and receiving permission for the IDNR property manager.
- American reed (*Phragmites americana*) occurs within the mitigation area and within population of common reed. Care will be taken to minimize damage to American reed populations onsite.

d. Performance

The following standards will be used to determine the success of the enhancement area:

- Target species will be reduced from current levels (baseline) by 97% by the end of the monitoring period.
- Target species should be reduced by 90% by the end of year 1.
- Common reed (*Phragmites australis*) and cattail (*Typha* spp.) will have a combined coverage of less than 5% areal cover with 10m square area(s) of the mitigation area by the end of the monitoring period.

e. Monitoring Plan

A qualified wetland scientist will monitor the enhancement areas once annually (September), for a period of five years. A baseline sampling visit will be performed during the first year and prior to treatment, and a report will be submitted to the USACE, IDEM, and IDNR by December 31 of the calendar year.

Prior to commencement of the enhancement work a sampling visit will be made to establish baseline conditions for which the subsequent sampling visits will be compared. During the baseline visit all populations of the target species will be mapped. Within sparse populations (less than 10% areal coverage) stem counts will be made for target species. Within dense population (more than 10% areal coverage) permanent transects will be established. Along each transect permanent 1m² quadrats will be placed, and quadrats will be set at measured intervals (with a measuring tape) along each transect. Within each quadrat the percent areal coverage of each target species will be recorded and stem counts for each target species will be made and recorded. Permanent photo stations will be established to visually record the progress of enhancement work and photographs will be taken from the beginning of each permanent transect. During subsequent visits the monitoring inspections will include the following:

- Mapping of populations of target species.
- Transect/quadrat sampling of dense populations of target species to determine percent coverage.
- Stem counts in sparse population of target species.

- Photographs from the beginning of each transect and from established photo stations.

Annual monitoring reports will provide a discussion of enhancement based on percent cover and/or stem counts of target plant species and other aforementioned success criteria. The report will also include location and site maps, and representative site photographs.

f. Legal Protection

The mitigation area is currently owned and managed by the IDNR Division of Nature Preserves and will continue to be managed as one of their properties following restoration. A long-term maintenance plan through the monitoring period will be followed for the proposed mitigation area. Maintenance may include any combination of selective herbicide applications. Additional management tools and procedures may be considered as the site develops and adaptive strategies evolve.

Maintenance shall be provided for a period of five consecutive years. Maintenance shall be provided by the applicant until regulatory signoff is received, and will be conducted beyond the regulatory monitoring period by the landowner, if necessary. Only under *force majeure* conditions, such as tornado damage, major flood damage, and other Acts of God, shall the applicant deviate from the mitigation and maintenance plan.

Party Responsible for Site Protection and Maintenance through Monitoring Period:

Norfolk Southern Railway Company
1200 Peachtree Street NE, Box 7-142
Atlanta, Georgia 30309
ATTN: Mike M. Wigley
404-529-1332

Party Responsible for Long-Term Preservation and Maintenance of the Site:

Indiana Department of Natural Resources
402 West Washington Street
Indianapolis, Indiana 46204

g. Adaptive Management Plan

The applicant will promptly notify the USACE, IDEM, and IDNR if the mitigation project cannot be performed as detailed in the Mitigation Plan. Significant modification to the plan will require approval from the USACE, IDEM, and IDNR. In addition, NSRC will notify these agencies if monitoring or other site information indicates that additional measures are recommended to address performance standards. The USACE, IDEM, and IDNR, in consultation with NSRC, will evaluate if the mitigation is meeting the objectives as detailed in the Mitigation Plan and assist in determining the appropriate measures to correct any deficiencies. Corrective measures will be designed to provide ecological functions and values comparable to those described in the Mitigation Plan.

Performance standards may be revised to reflect any changes in management strategy or objectives. No other revisions to performance standards will be allowed by the agencies except in the case of natural disasters.

Responsible Party:

Norfolk Southern Railway Company
1200 Peachtree Street NE, Box 7-142
Atlanta, Georgia 30309
ATTN: Mike M. Wigley
404-529-1332

h. Financial Assurances

Due to the funding source for this Proposed Action, financial assurances and other assurances and restrictions will be applied in accordance with funding source requirements and limitations. Consideration will be given to construction, monitoring, long-term remedial actions, maintenance, and potential replacement mitigation. Following the site's release from monitoring by the regulatory agencies, it is anticipated that responsibility for management of the site will be transferred to the IDNR.

Responsible Party:

Norfolk Southern Railway Company
1200 Peachtree Street NE, Box 7-142
Atlanta, Georgia 30309
ATTN: Mike M. Wigley

V. COMMENTS AND COORDINATION

A. Coordination

Development of the Proposed Action alternatives was coordinated through a number of resource agencies. The Indiana Gateway Project # 7 received authorization in 2009 from the INDOT and FRA and in consultation with the Corps, USFWS, IDEM, IDNR, and other resource agencies. *See* Attachment B, Categorical Exclusion. The Pine Yard Lead Track and movement of the access road and stormwater management ditch represent modifications to the original design, as discussed in Section I. Due to impacts upon WOTUS resulting from these modifications, NSRC consulted with and applied for appropriate authorizations from IDEM and the Corps. NSRC has worked closely with these agencies, and the IDNR, in the development of the Proposed Action, specifically analysis of alternatives and the Alternative E/Proposed Alternative. This consultation included development of additional data and factual information regarding impacts of the Proposed Action. NSRC worked closely with IDNR to develop a suitable mitigation approach, which was approved by IDEM and the Corps. *See* December 10, 2015 Section 401 Water Quality Certification (Attachment F) and December 21, 2015 Authorization LRC 2015-213 (Attachment E).

During the public notice for the Corps Permit LRC-2015-213, three agencies (IDNR, IDEM, and U.S. EPA) and two environmental organizations (Save the Dunes and The Nature Conservancy) commented on the Proposed Action. The comments are attached as Attachment Q. Comments were directed to the Pine Yard Lead Track and raised issues relating to dune and swale, protected state species, and inquired regarding alternative alignments. The Alternative E/Proposed Alternative is a direct outgrowth of these comments and responds and addresses the concerns through movement of the alignment to a southerly location. Correspondence has been received from the EPA concerning the impacts to wetlands, which can be found in Attachment R (August 10, 2015 Swenson Correspondence). Correspondence was received from the IDNR, which can be found at Attachments S and T (May 15, 2015 Early Coordination/Environmental Assessment and August 7, 2015 Correspondence from IDNR (Emily Stork), respectively).

VI. DISTRIBUTION OF THIS EA

This EA will be made available to the public on the FRA website. Based on the extensive consultation undertaken as part of the Section 404 permitting process for the Proposed Action, however, FRA will not solicit comments on this EA. The EA will also be distributed to the following agencies who commented on the USACE permit and the development of the Proposed Action alternatives:

- U.S. Army Corps of Engineers Chicago District
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- Indiana Department of Environmental Management
- Indiana Department of Natural Resources – Division of Nature Preserves
- Indiana Department of Natural Resources - Division of Historic Preservation and Archaeology
- Save the Dunes
- The Nature Conservancy

VII. REFERENCES

Technical references used in describing key elements of the affected environment and impact analyses include the following:

Conservation Research Institute/Conservation Design Forum. October 2000. Floristic Quality Assessment Program, Version 1.0.

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United States Environmental Protection Agency / U.S. Army Corps of Engineers. Clean Water Rule: Definition of Waters of the United States, Final Rule; 80 Fed. Reg. 37,054

(June 29, 2015), suspended State of Ohio et al. v. U.S. Army Corps of Engineers, No. 15-3799/3822/3887 (6th Cir. Oct. 9, 2015) (USEPA 2015).

United States Environmental Protection Agency Approval and Promulgation of Implementation Plans and Designation of Areas for Air Quality Planning Purposes; Indiana; Redesignation of Lake and Porter Counties to Attainment of the 2008 Eight-Hour Ozone Standard, Final Rule, 75 Fed. Reg. 26113 (Tuesday, May 11, 2010); http://www.gpo.gov/fdsys/pkg/FR-2010-05-11/html/2010-11009.htm (USEPA 2010).

United States Environmental Protection Agency. "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety," Report No. 550/9-74-004, Washington DC, March 1974 (USEPA 1974).

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VIII. APPENDICES

Attachment A - Indiana Department of Natural Resources Division of Nature Preserves Letter of Support (J. Bacone, October 26, 2015).

Attachment B - August 21, 2009 Categorical Exclusion

Attachment C – IDEM Rule 5 NPDES Authorization

Attachment D - Mitigation Plan, dated October 9, 2015

Attachment E - December 21, 2015 Corps Authorization LRC 2015-213

Attachment F - December 10, 2015 Section 401 Water Quality Certification 2015-592-45-MTM-A

Attachment G - January 26, 2016 Federal Consistency Review under Indiana Lake Michigan Coastal Program

Attachment H - Alternatives Analysis, dated November 4, 2015

Attachment I - March 25, 2015 Application for Authorization pursuant to Section 404 of the CWA, 33 U.S.C. § 1344, under the Indiana Regional General Permit No. 001

Attachment J - June 23, 2015 Supplement to March 25, 2015 Application for Authorization pursuant to Section 404 of the CWA, 33 U.S.C. § 1344, under the Indiana Regional General Permit No. 001 (June 23, 2015)

Attachment K - August 10, 2015 Waters of the U.S. Summary Report- Pine Yard Siding Extension, Lead Track and Tail Track, Gary IN (August 10, 2015)

Attachment L - Comments from United States Fish and Wildlife Service (August 6, 2015)

Attachment M - August 10, 2015 NSRC Comment Letter to USACE

Attachment N - Geotechnical Report, dated August 10, 2015

Attachment O - Indiana Natural Heritage Data Center Response (March 18, 2015)

Attachment P - December 4, 2015 Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology Correspondence

Attachment Q – Public Notice Comments from IDNR, IDEM, U.S. EPA, Save the Dunes and The Nature Conservancy

Attachment R - Comments received from U.S. Environmental Protection Agency (Swenson Correspondence, August 10, 2015)

Attachment S - Indiana Department of Natural Resources Correspondence: Early Coordination/Environmental Assessment (May 15, 2015)

Attachment T - Correspondence from Indiana Department of Natural Resources (August 7, 2015)