

Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Attachment A

Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

This page is intentionally left blank.



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

This attachment to the Project ROD describes the mitigation measures that will be undertaken by FTA and NICTD as part of the West Lake Corridor Project. The mitigation measures identified for the Project in the ROD must be implemented if the Project proceeds with FTA financial assistance.

These mitigation measures are now incorporated into the definition of the Project. NICTD is prohibited from withdrawing or substantially changing any of the mitigation measures identified in the FEIS and ROD without written approval by FTA. In addition, any changes to the Project that are inconsistent with the ROD must be evaluated in accordance with 23 CFR Parts 771.129 and 771.130, and, if required therein, they must be approved by FTA in writing before NICTD can proceed with the change.

Upon FTA's signing of the ROD, FTA will require that NICTD establish a mitigation monitoring program to monitor and track mitigation measures. The mitigation monitoring program will provide a means for FTA and NICTD to track progress in accomplishing the mitigation measures. The mitigation monitoring program will also describe the timing of the mitigation measures and the close-out procedures. The mitigation monitoring program will consist of these activities:

- NICTD will maintain and update the status of the mitigation measures in this attachment.
- NICTD will add mitigation measures to the list resulting from consultations and coordination; permits and/or approvals issued by federal, state, county, or city agencies; and new information that becomes available and known during engineering or construction phases.
- NICTD will track the status of implementation of each mitigation measure.
- FTA and NICTD will conduct guarterly reviews of the mitigation monitoring program.

The table of mitigation measures in this attachment will assist NICTD in meeting its responsibilities by providing a summary list of the mitigation measures stipulated in the Project's environmental record. However, the FEIS and other parts of the ROD provide the details about each item listed in this table and reflect the specifics of the mitigation measures. NICTD will incorporate these mitigation measures into the Project's design, specifications, and contract documents as appropriate. Using its monitoring program, NICTD will track the implementation and completion of each mitigation measure during the appropriate engineering, construction, and/or operational action periods.



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Project Mitigation Measures

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Public Transportation	 Operating Phase (Long-term): No mitigation is required because no long-term adverse impacts would occur. Construction Phase (Short-term): Minimize disruption to the existing transit service to the extent reasonably feasible. Coordinate with transit authorities to develop work zone traffic control plans. Provide advance warning for lane closures and detours. Issue construction updates and post to Project website. Establish 24-hour construction hotline. Prepare materials with information about construction. Assign staff to serve as liaisons between the public and contractors during construction. Post information at bus stops and regional transit centers indicating temporary stop closures or detour details. Publish information in advance on Metra's website and in its on-board brochure. 	NICTD and Metra	Engineering and Construction
Freight Rail	 Operating Phase (Long-term): No mitigation required because the placement of bridge structure piers will be resolved in the Project's engineering phase as the freight railroad entities will review design plans, minimizing any long-term adverse impacts. Third-party agreements will be executed for use of property not owned by CSX, NS, or IHB. Construction Phase (Short-term): Develop construction staging plans that will be submitted for approval by the freight railroad entities. Work with affected freight rail entities to sequence construction to reduce effects on freight rail. Use flaggers to allow freight rail operations to continue during construction. 	NICTD	Engineering and Construction



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Bicycle and Pedestrian	Operating Phase (Long-term): • Fencing will be provided to prohibit pedestrians and bicyclists from crossing the track where east-to-west facilities do not exist or where NICTD deems fencing important for safety.	NICTD	Engineering and Construction
	 All railroad-highway grade crossings will include east-to-west pedestrian access to maintain the sidewalk network's existing continuity. 		
	Signs will be provided at Russell Street and the Project directing bicyclists and pedestrians to the north or south.		
	Construction Phase (Short-term):		
	 A plan to manage the closure of pedestrian crossings and other restrictions on nonmotorized transportation facilities will be developed for construction. 		
	Alternative crossings will be provided for temporary crosswalk closures.		
	 Sidewalks and crosswalks will be required to meet minimum standards for accessibility and to be free of slipping and tripping hazards. 		
	 Special facilities such as temporary handrails, fences, barriers, ramps, and walkways will be implemented to maintain bicyclist and pedestrian safety as needed. 		
	 A plan for appropriate access provisions in the work zone, traffic control plans, and best management practices (BMPs) to manage debris will be developed for construction. 		



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Traffic	Operating Phase (Long-term): NICTD will coordinate with agencies having jurisdiction over and/or maintenance responsibility for affected roadways as well as emergency services and school districts regarding railroad-highway grade crossings, road closures, and changes to the roadway network connectivity. Existing traffic signal at Sheffield Avenue and Main Street in Munster and Dyer will be upgraded to accommodate the parking lot driveway as a fourth leg to the intersection. Intersection of 173rd Street and Harrison Avenue near South Hammond Station will be restriped to provide a shared left-turn/through lane and a right-turn lane to maintain acceptable LOS. Traffic operations of the roundabout at Hohman Avenue and Chicago Street being built by the City of Hammond near Hammond Gateway Station will be monitored by the City of Hammond. Signalized intersections within 200 feet of the railroad-highway grade crossings will be upgraded to include traffic signal interconnection with the rail warning system. Russell Street in Hammond will be converted to a two-way street from Hohman Avenue to Lyman Avenue and from the Project track to Oakley Avenue. Signs will direct pedestrians and bicyclists to safe crossings. The traffic signal, signage, and striping at Hohman Avenue and Russell Street will be modified accordingly. Construction Phase (Short-term): Work zone traffic-control plans will be coordinated with agencies having jurisdiction over and/or maintenance responsibility for affected roadways as well as emergency services, and will identify requirements for maintaining access to businesses and medical and emergency facilities. Lane closures required for construction will be limited to off-peak hours of traffic operation to the extent feasible.	NICTD, City of Hammond	Engineering and Construction



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Parking	 Operating Phase (Long-term): No on-street parking space loss in Hammond will be mitigated because of the availability of off-street parking at Russell Street and no demand for on-street parking on Hanover Street. NICTD will work with municipalities to address the potential for parking to spill over onto nearby streets from new stations in Dyer, Munster and Hammond. Mitigation measures by the 	NICTD	Engineering and Construction
	municipalities will include the use of signs and enforcement of parking restrictions. All NICTD parking lots can be expanded should demand exceed capacity. Construction Phase (Short-term):		
	 Work zone traffic-control plans will be coordinated with the agency having jurisdiction over the road, as appropriate. Advance warning for parking restrictions will be provided in accordance with the work zone traffic-control plans. 		



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Land Use and Zoning	 Operating Phase (Long-term): NICTD will make improvements to four intersections to reduce congestion and access impacts; Sheffield Avenue and Main Street (upgraded traffic signal), 173rd Street and Harrison Avenue (striped to include right-turn lane), Russell Street and Hohman Avenue (modified traffic signal), and new roundabout in Hammond (monitored by the City of Hammond for traffic operations). For safety, noise, and vibration concerns that would disrupt land use patterns, mitigation measures will include noise barriers or receiver-based treatments to specific buildings, ballast mats, sleeper pads or other track support system modifications as described in the evaluations for those resources in Sections 4.8, 5.2, and 5.3 of the FEIS. NICTD will collaborate with community stakeholders, local elected officials, and the state and 	NICTD	Engineering and Construction
	 Where the alternative would be incompatible with existing zoning designations, NICTD will work with local officials during the engineering phase to make the alternative compatible, to the extent feasible and practical, with the intended purposes and design standards of the applicable zoning. Construction Phase (Short-term): NICTD will develop a <i>Maintenance and Protection of Traffic Plan</i> to address disruptions to travel. BMPs for minimizing visual changes, noise and vibration levels, dust, and fumes due to traffic detours, staging areas, and maintaining safety of construction sites will be implemented. 		



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Land Acquisitions and Displacements	Operating Phase (Long-term): Acquisition and displacements will be done in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 USC § 4601). Relocation advisory assistance will be provided to eligible persons. Ample notice will be given to those being relocated. Minimum 90 days written notice to vacate prior to requiring possession. Reimbursement for moving and reestablishment expenses will be provided. Relocation planning and services will be provided to businesses. NICTD will continue proactive communication, coordination, and engagement with local community organizations to work with displaced business owners to: Identify preferred relocation options and prepare for a smooth transition to a new location for both the business and its employees; and Provide information to the communities where businesses will be displaced about the businesses' new locations, with transit options to access the new business location and/or other options to meet their needs. Construction Phase (Short-term): NICTD will restore properties affected through a temporary easement to an acceptable preconstruction condition following construction activities, in accordance with the individual easement agreements.	NICTD	Engineering and Construction



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Socioeconomics and Economic Development	Operating Phase (Long-term): • Mitigation will include identifying and promoting redevelopment, infill, and economic-development opportunities as well as proactive policies to relocate businesses near their existing location to offset any potential loss of property tax revenue.	NICTD	Engineering and Construction
	 Construction Phase (Short-term): Temporary and short-term socioeconomic impacts will be mitigated through the following measures: NICTD will coordinate with individual businesses to ensure that critical business activities are not disrupted and that reasonable access during regular operating hours is maintained. NICTD will notify property owners, businesses, and residences of major construction activities on a real-time basis. NICTD will coordinate with the affected utility companies to minimize disruption of service. 		



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Neighborhoods and Community Resources	 Operating Phase (Long-term): Noise and vibration mitigation measures will include noise barriers or receiver-based treatments to specific buildings, ballast mats, sleeper pads or other track support system modifications. NICTD will conduct ongoing coordination and collaboration with community stakeholders and local elected officials to mitigate impacts that would diminish the value of community resources or pose a nuisance to residents. NICTD will make improvements to four intersections to reduce traffic congestion and access impacts. NICTD will collaborate with community stakeholders, local elected officials, and the state and county transportation departments on proposed station parking lots. Displaced businesses and residents will be relocated in accordance with the Uniform Act. NICTD will continue to coordinate with affected residents, businesses, and community facilities to identify strategies to minimize the effects on the employees and customers of the displaced businesses. 	NICTD	Engineering and Construction



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Neighborhoods and Community Resources (cont.)	 Construction Phase (Short-term): Work zone traffic-control plans will be coordinated with agencies having jurisdiction over and/or maintenance responsibility for affected roadways. The plans will identify requirements for maintaining access to neighborhoods, businesses, medical facilities, and emergency facilities. BMPs for minimizing visual changes, noise and vibration levels, dust, and fumes and for maintaining safety of construction sites will be implemented including those from United States Environmental Protection Agency (USEPA). NICTD will coordinate with the jurisdictional agency of the roadway regarding the construction and detour plan. The State Archaeologist at the Indiana State Preservation Office (SHPO), represented by the INDNR Division of Historic Preservation and Archaeology (DHPA), reviewed and concurred with the Oak Hill Cemetery Development Plan on December 8, 2017. In accordance with the MOA between FTA, NICTD, and Indiana SHPO, if any prehistoric or historic archaeological artifacts or human remains are discovered during construction: All work would cease immediately. The SHPO and the County Coroner would be contacted. All state and federal laws regarding human burial remains would be followed, including state law (Indiana Code 14-21-1-27 and -29), that require the discovery be reported to the INDNR within 2 business days. The Memorandum of Agreement between FTA, NICTD, and Indiana SHPO is included in Appendix B of the FEIS. 		



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Cultural Resources	 Operating Phase (Long-term): Implement the December 12, 2017 Section 106 Memorandum of Agreement. Mitigation measures will include: Prior to any alterations to or demolition of the OK Champion Building, Historic American Building Survey documentation of the existing building will be completed by a Secretary of the Interior–qualified professional in history or architectural history (36 CFR Part 61). A public exhibit discussing the history and context of the OK Champion Building, specifically highlighting the industrial development of Hammond, will be designed in consultation with a qualified historian who meets the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) and who will assess the context and presentation to ensure that the important history and associations that contribute to the significance of the property are incorporated into the exhibit. A National Register of Historic Places (NRHP) nomination for the P.H. Mueller Sons Hardware Building at 416–418 Sibley Street in Hammond will be completed. 	FTA, NICTD, Indiana Historic Preservation Office	Engineering and Construction
	Construction Phase (Short-term): • Appropriate noise- and vibration-control measures and BMPs will be implemented by NICTD to minimize any potential temporary impacts during construction of the Project.		



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Visual Resources	 Operating Phase (Long-term): Operational effects on the visual environment will be minimized or mitigated through high-quality design and construction. NICTD will coordinate with the local communities and responsible agencies to create visual design guidelines for the Project, such as through the selection of landscape treatments, which will be consistent with applicable local policies and will be compatible with the character of the affected community. NICTD will coordinate with affected viewers and will consider strategies to avoid or minimize and mitigate visual effects. 	NICTD	Engineering and Construction
	Construction Phase (Short-term): • Short-term construction effects will be minimized or mitigated by carefully managing construction activities, including minimizing lighting during nighttime work, limiting work to daytime hours in the vicinity of particularly sensitive receptors, and restoring staging areas following Project completion.		



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Resource Safety and Security	Operating Phase (Long-term): NICTD will implement a Safety and Emergency Preparedness Plan (SEPP) and a Safety and Security Management Plan (SSMP) to consider safety and security, operational staff training, and emergency response measures. NICTD police and local law enforcement will maintain safety and security during Project construction and operations. To reduce potential risks in station areas, NICTD will include security cameras and will work closely with municipal police services to develop and implement measures to deter loitering and criminal activity. Pedestrian safety in station areas will be enhanced through improved intersections and crosswalks in key locations. Pedestrian safety at Munster/Dyer Main Street Station will be enhanced by constructing a pedestrian underpass under the CSX railroad from the "Park-and-Ride" lot to allow access to the platform. At this station, a pedestrian bridge will also be constructed over the station driveway to allow platform access from the south. Pedestrian safety at the Hammond Gateway Station will be accommodated by a paved plaza area under the elevated Project track to access the SSL platform from the parking lot to the south. Construction Phase (Short-term): NICTD will develop and implement a Construction and Site Safety Plan to address key topics including road closures, lane closures, bridge construction, excavations, access control, worker safety, public safety, and other relevant safety topics. NICTD will provide construction barriers, signs, and fences to secure construction sites and staging areas and will evaluate the need for additional security measures such as security personnel. If temporary road closures are necessary, advance notice will be provided to neighbors and local businesses, and alternative routes and detours will be clearly identified. To minimize inconvenience to the local population, the duration of closures will be limited to the extent	Responsible Party NICTD	Timing Engineering, Construction, and Operation
	 feasible. NICTD will comply with each freight railroad operator's access, safety, and operational requirements during Project construction on or near the respective freight railroad operator's property. 		



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Environmental Justice	Operating Phase (Long-term): NICTD will work with displaced business owners to (1) identify preferred relocation options and prepare for a smooth transition to a new location for both the business and its employees and (2) provide information to the communities where businesses will be displaced about the businesses' new locations, with transit options to access the new business location and/or other options to meet their needs. Construction Phase (Short-term): NICTD will: (1) develop construction staging plans that maintain access to all businesses during construction to the extent possible, (2) incorporate noise- and dust-control measures that minimize environmental effects on businesses adjacent to project construction activities,	NICTD	Engineering and Construction
	and (3) continually communicate with affected businesses prior to and during construction to understand and address their needs and concerns.		



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Noise	Operating Phase (Long-term): Receiver-based treatments will be applied as follows: For 2 single-family homes in Dyer, between mileposts (MP) 61.5 and 61.6 For 5 single-family homes in Hammond, between MP 66.9 and 67.2 Barriers ranging in height from 4 to 5 feet above top-of-rail will be constructed as follows: In Munster: Between MP 63.4 and 63.6, a barrier approximately 1,210 feet long on the eastern side of the Project alignment Between MP 63.7 and 63.9, a barrier approximately 1,330 feet long on the western side of the Project alignment. In Hammond: Between MP 65.3 and 65.5, a barrier approximately 580 feet long on the western side of the Project alignment. Between MP 66.3 and 66.4, a barrier approximately 700 feet long on the eastern side of the Project alignment. A noise barrier wall 370 feet long and 3 feet above the top-of-rail will be constructed in the vicinity of the Jefferson Hotel in Hammond south of MP 68.1. This noise barrier will be on the western side of an elevated portion of the Project alignment. Construction Phase (Short-term): NICTD will include noise performance specifications in the construction contract documents and will develop a construction noise management plan.	NICTD	Engineering, Construction, and Operation



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Vibration	 Operating Phase (Long-term): Between MP 63.7 and 63.9 in Munster, ballast mats or other track support system modifications will be implemented. This treatment will extend the length of one full trainset on either side of the affected receptor, which will result in approximately 2,360 feet of treatment. Between MP 66.3 and 66.4 in Hammond, ballast mats or other track support system modifications will be implemented. This treatment will extend the length of one full trainset on either side of the affected receptor, which will result in approximately 1,360 feet of treatment. Construction Phase (Short-term): NICTD will include vibration performance specifications and will specify vibration limits for construction activities in the construction contract documents. NICTD will develop a construction vibration management plan. 	NICTD	Engineering and Construction
Air Quality	Operating Phase (Long-term): No mitigation has been identified or recommended. Construction Phase (Short-term): NICTD will be required to prepare and implement a dust-control plan, a work zone trafficmanagement plan, and a strategy to control emissions from diesel-powered equipment. Mitigation measures will include the following: Limit idling of construction equipment during periods of inactivity. Maintain construction equipment in proper working condition. Use water or other dust suppressants to ensure that fugitive dust does not leave the construction site. Limit the speed of construction vehicles on unpaved areas. Promptly clean up spills and dirt tracked onto paved roads. NICTD will require the construction contractor to monitor construction activities near residential areas to help ensure that construction does not become a nuisance to nearby residents.	NICTD	Construction



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Energy	Operating Phase (Long-term): No mitigation has been identified or recommended. Construction Phase (Short-term): NICTD will require the construction contractor to limit idling of machinery and optimize construction methods and staging areas in order to reduce fuel use in trucks and construction equipment.	NICTD	Construction
Soils, Geologic Resources, and Farmlands	 Operating Phase (Long-term): No impacts have been identified; therefore, no mitigation is required. Construction Phase (Short-term): Impacts will be minimized through the implementation of BMPs and erosion and sediment control plans. The Project will comply with applicable permit conditions. NICTD will follow INDNR recommendations where appropriate, including revegetation, clearing of trees and brush, stabilizing soils with temporary vegetation, debris and materials management, use of erosion controls, and application of seed mixes on disturbed areas at the time of restoration. On-site soil and geotechnical investigations will be completed by NICTD to identify soils within the Project footprint showing limitations for suitability. Soils with limited suitability will require additional engineering and special design in order to minimize poor performance and high maintenance. 	NICTD	Engineering and Construction



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Water Resources	Operating Phase (Long-term): Only fill of jurisdictional wetlands within the construction limits requires mitigation. A total of 3.43 acres of wetlands would be affected by the Project in the USACE NEPA concurrence letter dated January 9, 2018 (Appendix D of the FEIS), USACE stated that jurisdictional palustrine emergent wetlands would be required to be mitigated at a minimum 1.5:1 ratio and jurisdictional palustrine forested wetlands would need to be mitigated at a 3:1 ratio. Based on these mitigation ratios, a minimum of 6.56 acres of wetland mitigation will be provided to ensure no net loss of wetlands. Impacts on nonjurisdictional wetlands are not included in wetland impact calculations for mitigation as because they are human-made bioretention areas that are do not fall under federal or state jurisdiction. Track that spans the Grand Calumet River and Little Calumet River will have no piers or abutments in the river channel. The relocated Monon Trail bridge will use new support structures that will fully span the river. No abutments, piers, or sheet pile walls will be constructed in the river channel. The well near Munster/Dyer Main Street Station will be acquired by NICTD and will be properly capped and abandoned. In addition to detention facilities, other practices such as vegetated basins/buffers, infiltration basins, and bioswales will be evaluated to minimize transport of sediment, heavy metals, and other pollutants. Necessary regional stormwater detention storage per watershed will be developed to ensure that the overall watershed release rate to the designated waterway crossings is not increased. Construction Phase (Short-term): Erosion- and sediment-control plans will be included with the contract drawings to prevent or reduce the displacement of soil and other sediments via stormwater runoff within the land development area.	NICTD with USACE and other appropriate jurisdictions and regulatory agencies	Engineering and Construction



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Biological Resources	 Operating Phase (Long-term): Threatened and Endangered Species: Indiana Bat and Northern Long-eared Bat: Only candidate roost trees showing no or low potential for bats exist within the Project footprint. No mitigation is proposed. Amphibians and Reptiles: INDNR does not have any record of northern leopard frogs (state species of concern) or Blanding's turtles (state endangered) within the Project Area, nor does it foresee any impacts on these species as a result of the Project. No mitigation is proposed. Insects: No suitable habitat for the federally endangered Karner blue butterfly exists in the Project footprint. No mitigation is proposed. State-listed Plant Species: INDNR did not suggest any long-term mitigation for state-listed plant species. However, measures were taken to avoid potential impacts to Bebb's sedge during Project design. Bebb's sedge can grow only in wetland habitats, and impacts to wetlands were avoided where possible. Woodland Habitat: To mitigate the loss of trees as a result of Project construction, NICTD will continue to coordinate with INDNR regarding the appropriate mitigation for tree replacement. NICTD will comply with INDNR's tree-replacement guidelines. Construction Phase (Short-term): Construction impacts include removal of woodland habitat and suitable habitat for state-listed plant species, but are not anticipated to affect the northern leopard frog, Blanding's turtle, or state-listed plant species. No mitigation is proposed. 	NICTD	Engineering and Construction



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Hazardous Materials	Operating Phase (Long-term): NICTD's safety plan will establish procedures and staff training for proper use, storage, and maintenance of equipment and disposal of regulated materials.	NICTD	Engineering, Construction, and Operation
	All regulated materials generated as part of maintenance will be disposed of in accordance with state and local guidelines.		
	Construction Phase (Short-term):		
	• To address contamination identified in the Phase II Environmental Site Assessment (ESA) at Areas of Concern (AOCs) 2, 3, and 4, a <i>Contaminated Media Management Plan</i> and <i>Health and Safety Plan</i> will be prepared by NICTD and will include special provisions beyond normal construction recommendations. These provisions may include detailed handling and disposal requirements and additional safety measures to limit worker exposure to contaminated media.		
	NICTD will provide additional coordination of construction activity and mitigation measures at AOC 2 (Northern Indiana Public Service Company [NIPSCO] Corporation manufactured gas plant site) since the property is undergoing active remediation with engineering controls in place.		
	• Disturbance of the protective cap installed by USEPA, located within the Grand Calumet River and along the northern side of AOC 2, will be avoided during construction and operation by NICTD.		
	 Prior to property acquisition and construction, NICTD will provide subsurface investigation of AOC 1 and 5 after site access is granted. These sites will be evaluated relative to the original work plan submitted for the Phase II ESA for the Project. Any remediation and construction safety measures needed following the investigation will be incorporated with the construction plans. 		
	If inactive water wells, underground storage tanks, or hazardous materials/wastes are encountered during Project planning or construction, Project construction will cease and they will be properly closed and removed in accordance with state and local requirements.		



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Utilities	Operating Phase (Long-term):		Engineering and Construction
	 NICTD will coordinate with public and private utility owners to identify utility facilities that would conflict with the Project and to develop conceptual plans and cost estimates for the expected relocation, replacement, or protection of such utilities. 		
	• Where the Project would conflict with overhead power lines, the lines will be raised by the utility owner to ensure vertical clearance from the track.		
	 Ongoing coordination will continue as the engineering phase progresses to identify additional conflicts and minimize service disruptions, in coordination with utility owners and appropriate local agencies. 		
	 Existing utilities will be surveyed during the engineering phase and efforts will be made to avoid or limit conflicts with existing utilities when practical. Where the Project may conflict with existing utilities, the utilities will be protected in place, relocated, replaced, or abandoned (if possible) in consultation with the utility owner. 		
	 Where relocation would be required, efforts will be made to consolidate existing utilities where practical as permitted by the utility owners. 		
	 To the extent possible, NICTD will minimize utility service outages and schedule them with the utility owner and customers such that they will present the least inconvenience. Special measures may be incorporated to ensure continuous service to life safety functions such as hospitals, fire protection, emergency response, and other facilities providing critical support such as private medical offices/care facilities 		
	Construction Phase (Short-term):		
	 Prior to any construction, NICTD will use the Indiana utility-locating service (811now.com) to identify and mark underground utilities within the Project footprint. 		
	 NICTD will continue to coordinate with utility companies and customers throughout the Project to minimize temporary effects during construction. 		
	 Planned service interruptions will be limited in duration and geographic area. NICTD will provide those affected with advance notification. 		
	 NICTD will develop a project construction, education, and outreach plan that will identify how NICTD will educate the public and stakeholders about ongoing and upcoming construction and construction impacts. 		



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Secondary and Cumulative Impacts	 Operating-Phase (Long-Term): NICTD and the City of Hammond will coordinate to assess and address the potential cumulative effects of the Project and the Chicago Street Improvement Project on the north Hammond residential area. NICTD will make every reasonable effort to coordinate with other project sponsors on new or ongoing projects in our near the Project area to avoid or minimize and mitigate the Project's role in potentially causing cumulative effects in affected communities. To ensure that noise levels at sensitive receptors are not adversely increased, construction of the Project will be coordinated with nearby projects. Construction-Phase (Short-Term): None identified. 	NICTD, City of Hammond	Engineering and Construction
Section 4(f) Resources	 Operating Phase (Long-term): The loss of the OK Champion Building will be documented, and an appropriate display or interpretive material depicting the OK Champion Building will be prepared. In addition, a nomination to the National Register of Historic Places will be prepared for the P.H. Mueller Sons Hardware Building. Construction Phase (Short-term): The Pennsy Greenway and Path will be treated in a manner that continues their availability for public use after interruptions attributable to construction. 	NICTD	Engineering and Construction
Section 6(f) Resources	Operating-Phase (Long-Term): • None identified. Construction-Phase (Short-Term): • None identified.	N/A	N/A



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

Resource	Summary of Commitments and Mitigation Measures	Responsible Party	Timing
Other	NICTD commits to using Michigan DOT's "Green Sheets" for this project. These sheets describe in a simple format the required mitigation for the project and provide a phone number to call if residents think NICTD is not in compliance. NICTD will prepare a Green Sheet for use prior to and during construction. NICTD will keep these Green Sheets on file with each of the towns and on the project website.		

Source: HDR 2017a.



Attachment A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

This page is intentionally left blank.