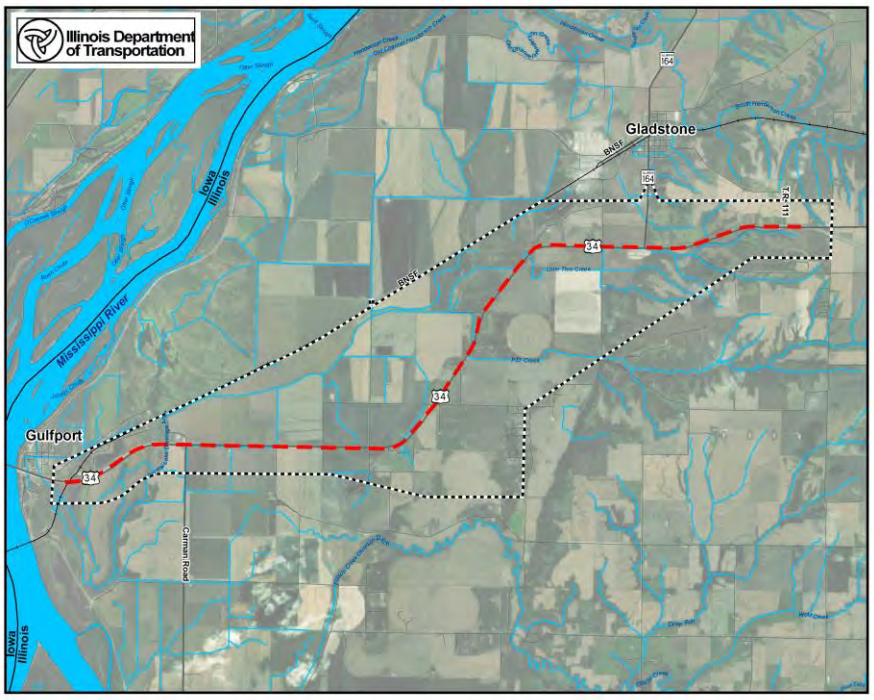


Supplemental Draft Environmental Impact Statement Appendices

U.S. Route 34 (FAP 313)
Section 7/8
West of Carman Road to East of TR 111
Henderson County
Job No. P-94-003-13

Illinois Department of Transportation

April 2020

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Appendix A
2003 FEIS Record of Decision

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RECORD OF DECISION

U.S. Route 34 (FAP 313)
Carman Road (east of Gulfport) to Monmouth, Illinois
Henderson and Warren Counties, Illinois

FHWA-IL-EIS-01-01-F

August 18, 2003

1. BACKGROUND

History: In 1969, the Illinois Legislature authorized the selling of bonds for the purpose of improving primary routes in Illinois and for financing of the Illinois Supplemental Freeway System. The Illinois Division of Highways was then directed to prepare Corridor Location Reports for the purpose of evaluating and selecting corridors for the supplemental freeway system.

One of the corridors evaluated and approved was the U.S. Route 34 corridor from west of Gladstone to east of Monmouth, designated as Supplemental Freeway F-404. This corridor was approved in 1970. The corridor from the Mississippi River to west of Gladstone had been approved as a separate action in 1967.

The Mississippi River Bridge for U.S. Route 34 from Burlington, Iowa to Gulfport, Illinois was completed in 1994. The bridge and its approaches were constructed to freeway standards connecting to the U.S. Route 34 freeway through Burlington, Iowa. The four-lane expressway section in Gulfport from Chinn Avenue to east of Carman Road has also now been completed.

U.S. Route 34 east of Monmouth was constructed as a freeway in 1987 from the Galesburg area to the Monmouth area. This freeway improvement connects a four-lane divided highway (expressway) which carries U.S. Route 34 and U.S. Route 67 traffic around the north and west sides of Monmouth. The majority of the expressway improvements were constructed in 1972. South of Monmouth, U.S. Route 67 was constructed and opened to traffic in 1995, as a four-lane expressway. An interchange at U.S. Route 34 and U.S. Route 67 southwest of Monmouth was constructed at that time.

Purpose and Need: The Purpose and Need for the proposed action is to improve system capacity, improve system continuity, and improve travel safety for local and through traffic along U.S. Route 34 between the existing freeway at Gulfport in the vicinity of Carman Road and the existing freeway just east of Monmouth in Henderson and Warren Counties, Illinois. U.S. Route 34 is a key regional corridor for the east/west movement of people and goods in, and through, west central Illinois. An interruption in four-lane facilities currently exists along U.S. Route 34 between Gulfport and Monmouth. The proposed action will improve the function and continuity of this regional highway.

Between January 1996 and December 1998, 295 accidents occurred on U.S. Route 34 between Carman Road and Illinois Route 164 east of Monmouth resulting in four fatalities. Also, the following five high accident locations have been identified within the U.S. Route 34 study area; the intersections of U.S. Route 34 at Carman Road and Illinois Route 94 (Biggsville) in Henderson County; Eleventh Avenue, Broadway Street (Illinois Route 164), and at Harlem Avenue in Warren County.

Traffic volumes on U.S. Route 34 from Gulfport to Monmouth are variable, with 2001 average daily traffic (ADT) of 11,400 west of Carman Road; ranging from 7,500 ADT east of Carman Road to 4,000 ADT west of the U.S. Route 67 interchange; and from 7,300 to 10,200 ADT along the expressway portion of the Route near Monmouth. The existing traffic facility would provide a Level of Service (LOS) C or D for most portions of the route in the design year 2025.

2. DECISION

The Selected Alternative provides a continuous four-lane link between the existing freeway at Gulfport, IL in the vicinity of Carman Road and the existing freeway just east of Monmouth, IL. The Federal Highway Administration's (FHWA) decision concludes that the Selected Alternative: 1) best satisfies Purpose and Need, 2) poses the least impacts to the natural and human environment, 3) has been selected based on processes in compliance with the National Environmental Policy Act (NEPA) and other applicable requirements, and 4) may be advanced through detailed design and construction. The FHWA's decision is based upon full consideration of information contained in the Draft Environmental Impact Statement (DEIS), the Final Environmental Impact Statement (FEIS), public input received at various public information meetings held over a period of years, and a public hearing held on April 18, 2002. The decision is also based on public and agency comments pertaining to the proposed action, the other alternatives considered, the respective environmental consequences, and the measures taken to achieve avoidance and minimization of impacts; and balancing these considerations against the Purpose and Need for the project.

The Selected Alternative is a partially limited access, four-lane facility from the U.S. Route 34/Carman Road intersection in Henderson County to just east of Monmouth in Warren County that includes a bypass to the community of Biggsville. The Selected Alternative is approximately 40 km (24.9 mi) in length and utilizes 240 ha (593 ac) of existing U.S. Route 34 right-of-way and requires 278 ha (687 ac) of new right-of-way. The Selected Alternative includes the reconstruction and widening of the existing U.S. 34 to a 4-lane divided expressway with partial-access control. Grade-separated interchanges would be provided at Carman Road, IL 164, and IL 116/IL 94. In addition, the existing U.S. 34/U.S. 67 interchange south of Monmouth will be modified. All other crossroads would have at-grade intersections with U.S. 34. The Selected Alternative would provide direct access to and from homes and farm operations. Some movements to and from residences and farm entrances would be right-turn in and out only. Median crossovers would be provided at an average of approximately 0.8 km (0.5 mi) apart. Commercial access directly to the expressway would not be permitted, but would be provided at the nearest crossroad.

Beginning at the western terminus, the Selected Alternative connects to the recently completed four-lane improvement west of Carman Road, continues east along the existing right-of-way until approximately CH15, also known as Lock-and-Dam Road where it angles northeast paralleling and west of existing U.S. Route 34. The Selected Alternative then turns due east along existing U.S. Route 34 holding the south right-of-way line, crossing the bluffs of the Mississippi River at approximately Illinois Route 164. Continuing to the east, the Selected Alternative uses existing right-of-way until passing the east Bogus Hollow Road access, approximately 5.3 km (3.3mi) east of Biggsville, at which point the alignment turns southeast to approximately 0.8 km (0.5 mi) south of existing U.S. Route 34 then turns due east along property lines south of Union School and south of Biggsville. An interchange is proposed where the bypass intersects Illinois Route 116/Illinois Route 94 south of Union School. At approximately TR150, the Selected Alternative turns northeast until meeting the existing right-of-way 2.1 km (1.3mi) east of Biggsville. The alignment then carries east along existing U.S. Route 34 using the existing right-of-way to approximately south of Kirkwood where it heads north and then east along the existing 'S-curve' around Kirkwood and then easterly along existing U.S. Route 34 using the existing right-of-way to the

existing U.S 34/U.S 67 interchange southwest of Monmouth. Improvements to the existing four-lane facility from this interchange around Monmouth to the project's east terminus east of Illinois Route 164 will involve implementation of Transportation System Management (TSM) actions including intersection improvements at West-Broadway, West Harlem, North Main, North 6th Street, and North 11th Streets, and rehabilitation of the existing pavement. Intersection improvements may include new traffic signals, traffic signal modifications, additional turn-lanes, and access control improvements to the side roads such as relocating access drives.

Additional TSM and Intelligent Transportation System (ITS) elements proposed at Monmouth include signalization and signal modernization. These items will be incorporated into the Phase II contract plans at locations that will benefit from this technology.

3. ALTERANTIVES CONSIDERED

Alternatives Selected for Evaluation in the DEIS: The following alternatives were evaluated to determine the type and location of transportation improvements appropriate for the corridor:

No Action Alternative: The No Action Alternative would result in no changes to the existing roadway system in the vicinity of the proposed project. Normal maintenance and resurfacing of the affected roadways would continue to be carried out by the Illinois Department of Transportation (IDOT) as warranted. Generally, there would be no need for any additional right-of-way for the No Action Alternative.

Mass Transit Alternative: The Mass Transit Alternative was preliminarily examined early in the alternative development and evaluation processes. The concept of mass transit was investigated to evaluate the feasibility of a mass transit to meet the transportation demands within the project corridor.

TSM Alternative: The TSM actions, such as signaling and phasing and rerouting of traffic along the existing roadway system were evaluated as a stand-alone alternative.

Upgrading of Existing Facility: Upgrading of the existing facility between Carman Road and U.S. Route 67 was also evaluated. This alternative would consist of sustaining a two-lane facility through the design year 2025.

Build Alternates on New or Partial New Location: Numerous Build Alternates were developed and evaluated for an improved four-lane expressway facility between Carman Road and U.S. Route 67. These alternates involved alignments on new and partial new location. During Phase I of the alternative development and evaluation, the project corridor was initially divided into six sections to provide a thorough examination of preliminary study alternates. The number of preliminary study alternates was reduced through the examination of potential impacts to socioeconomics, cultural resources, land use (especially agricultural land), and the natural environment, engineering considerations, and the projected ability to meet the stated transportation goals and objectives outlined in the project Purpose and Need. As a result, these six sections were subsequently reorganized into four sections for Phase II of the alternative development and evaluation. The following is a description of the four sections in which alternates were evaluated:

Section I (Carman Road in Gulfport to TR94): Six build alternates were evaluated for Section I.

Section II (TR94 to TR26 at the West Edge of Kirkwood): Five build alternates were evaluated for Section II.

Section III (TR 26 to U.S. Route 34/67 Interchange): Six build alternates were evaluated for Section III.

Section IV (U.S. Route 34/67 Interchange to East of Monmouth): Monmouth improvement concepts were developed which included freeway and expressway concepts.

Comparative Analysis of Alternatives: The project Purpose and Need serves as the basis for comparing all alternatives. The alternatives selected for a detailed evaluation emerged from the screening process as the alternatives that best satisfy the project Purpose and Need. A comparison between the features and impacts of the alternatives follows.

No Action Alternative: The No Action Alternative would not increase capacity, improve access, reduce congestion, increase safety, address safety concerns at the high accident locations in Monmouth, or improve route continuity. Consequently, the No Action Alternative was eliminated as this alternative did not satisfy the Purpose and Need for the proposed project.

Mass Transit Alternative: No mass transit systems operate between, or within, the project termini. Burlington-Northern does operate a rail line that transverses the project corridor. Rail traffic is primarily freight oriented, with some through traffic on Amtrak. There are no documented plans by the local planning organizations or the regional planning agency to implement a mass transit system in the foreseeable future. The Mass Transit Alternative was eliminated from further consideration as this alternative did not satisfy the Purpose and Need.

TSM Alternative: The TSM actions were eliminated as a stand-alone alternative because this alternative failed to adequately address the objectives of the project Purpose and Need (i.e., this approach would not relieve congestion on existing U.S. Route 34, improve route continuity, etc.). However, pertinent aspects of this alternative will contribute to an increased efficiency of the local and regional transportation system in the urbanized area of Monmouth. Consequently, TSM improvements are being proposed as components of the Selected Alternative. Those TSM elements included in the Selected Alternative include new traffic signals, traffic signal modifications, additional turn-lanes, and access control improvements to the side roads such as relocating access drives. Due to the rural nature of the study area, Intelligent Transit Systems (ITS) were not considered a viable stand-alone option for the proposed project.

Upgrading of Existing Facility: A capacity analysis, with traffic projected to the year 2005 and year 2025, concluded that an improved two-lane facility would not efficiently carry projected traffic over much of the project corridor, with design year volumes falling to LOS C and D. Consequently, an improved two-lane highway would not meet the project Purpose and Need to improve system capacity, system continuity, and travel safety and was eliminated from further study.

Build Alternates on New or Partial New Location: A rigorous evaluation process was conducted which examined the viability of study alternates relative to the potential of impacting known and potential cultural resources, agricultural land, threatened and endangered species, recreational properties, wetlands, floodplains, and known or suspected, special waste sites. Other elements of evaluation included the crossing of areas with severe topography, the crossing of surface water

bodies, and the severance of agricultural properties. Analysis of the study alternates became more in-depth during Phase II. A primary refinement to the evaluation criteria involved the introduction of additional agricultural impact criteria. The evaluation of the study alternates during Phase II resulted in the Selected Alternative. The following paragraphs briefly discuss the alternates during the second phase, which utilized the (reorganized) four sections of the U.S. Route 34 project.

Section I (Carman Road in Gulfport to TR94): Of the six build alternatives evaluated for Section I (1B2B, 1E2E, 1F2C, 1H2C, 1I2E, and 1M2B), five were eliminated for one or more of the following reasons:

- Higher probability of impacts to Native American burial mounds and other archaeological sites (1F2C, 1H2C);
- Higher number of farm residential displacements (1B2B, 1F2C, 1H2C);
- Higher number of residential displacements (1B2B, 1I2E);
- Higher impacts to Illinois Natural History Survey (INHS) Botanical Site #3 (a grade C to C- sand hill prairie and potential habitat for the western hognose snake, a state threatened species) (1E2E, 1I2E);
- Higher impacts to wetlands (1E2E, 1I2E);
- Less use of existing right-of-way (1F2C, 1H2C);
- Higher impacts to farm owners and operations (1B2B, 1F2C, 1H2C);
- Required an interchange in the vicinity of TR66 (1150E) at the base of the bluff line due to steepness of grade (1F2C, 1H2C);
- Required the upgrade of TR66 to state highway standards from the improved facility to existing U.S. Route 34 (1F2C, 1H2C); and
- Conflicted with several township roads due to the location to the east of the existing route, which created access impacts to a high number of businesses/residences (1B2B).

The alternate recommended (1M2B) as part of the Selected Alternative does not have the least impact to wetlands and floodplain. The alternate, known as 1F2C in the FEIS, has the least impacts to wetlands and floodplains. However, alternate 1F2C was not selected because it had the highest probability of impacts to Native American burial mounds, utilized the least amount of existing right-of-way, required an interchange in the vicinity of TR66 (1150E) at the base of the bluff line due to steepness of grade, and required the upgrade of TR66 to state highway standards from the improved facility to existing U.S. Route 34. The alternate recommended (1M2B) as part of the Selected Alternative is the overall environmentally preferred alternate for Section I.

Section II (TR94 to TR26 at the West Edge of Kirkwood): Of the five build alternates evaluated for Section II (3C4C, 3E4B, 3G4B, 3H4C, and 3I4B), four alternates were eliminated for one or more of the following reasons:

- Elimination of connecting alignments in Section I (3I4B, 3C4C);
- Higher impacts to agricultural land (3H4C, 3C4C);
- Higher amounts of floodplain encroachment (3H4C);
- Higher amounts of wetland impacts (3C4C, 3E4B);
- Less use of existing right-of-way (3H4C);
- Greater residential and business displacements (3E4B); and
- Greater number of uneconomical remnants (3E4B).

The alternate recommended (3G4B), as part of the Selected Alternative, is the environmentally preferred alternate for Section II as this alternate has the least impacts to wetlands.

Section III (TR 26 to U.S. Route 34/67 Interchange): Of the six build alternates evaluated in Section III (5A, 5B, 5C, 5E, 5G, and 5H), five were eliminated for one or more of the following reasons:

- Elimination of connecting alignments in Section II (5C, 5G, 5H);
- Higher number of diagonal severances (5A);
- Greater excavation for borrow (5E);
- Less use of existing right-of-way (5A, 5C, 5E, 5G);
- More stream crossings (5A, 5C, 5E, 5G, 5H);
- Greater impacts to wetlands (5A, 5C, 5G, 5H); and
- Greater impacts to agricultural land (5C, 5G, 5H).

The alternate recommended (5B), as part of the Selected Alternative, is the environmentally preferred alternate for Section III as this alternate has the least impacts to floodplains and wetlands.

Section IV (U.S. Route 34/67 Interchange to East of Monmouth): Improvement concepts evaluated for this section were freeway and expressway concepts. The Selected Alternative utilizes the upgraded expressway concept. The freeway concept was eliminated for the following reasons:

- Higher number of displacements;
- Higher cost;
- Greater right-of-way requirements;
- Access limitations;
- Potential Section 4(f) resource involvement; and
- Greater adverse travel.

Section IV is an urban area that is not anticipated to involve wetlands or floodplains due to minimal right-of-way acquisition.

Summary of Selected Alternative: The evaluation of consequences of each of the study alternates resulted in the recommendation of a single Selected Alternative. The Selected Alternative is the environmentally preferred alternative and best satisfies the Purpose and Need while overall avoiding and minimizing impacts to cultural resources, agricultural land, and the human and natural environment.

4. MITIGATION, COMMITMENTS AND MEASURES TO MINIMIZE HARM

Throughout the process of identifying and evaluating alternates, considerable effort has been made to minimize the social, economic, and environmental impacts of the project while fulfilling the project Purpose and Need. The FHWA and IDOT commit to the mitigation measures for this project as described in the following section.

Wetlands: In compliance with Executive Order 11990 (Protection of Wetlands) and the Illinois Interagency Wetland Policy Act, all practicable measures to minimize harm to wetlands have been implemented. However, there is no practicable alternative to the Selected Alternative that does not result in some wetland loss.

Alternates recommended as part of the Selected Alternative either avoided wetlands or had the relatively smaller wetland impact, except for the alternate recommended as part of the Selected Alternative within Section I. Alternates that minimized wetland impacts within Section I had the highest probability of impacts to burial mounds, utilized the least amount of existing right-of-way, required an interchange in the vicinity of TR66 (1150E) at the base of the bluff line due to steepness of grade, and required the upgrade of TR66 to state highway standards from the improved facility to existing U.S. Route 34; therefore these alternates were eliminated.

The Selected Alternative was further refined by shifting horizontal alignments to reduce wetland impacts, whenever possible. During the final design process, additional opportunities to minimize wetland impacts will be sought.

Offsite (out-of-basin) wetland mitigation will be used for compensatory purposes. The mitigation site will be the LaGrange Wetland Bank, located in the northeast corner of Brown County, Illinois, approximately 4.8 km (3 mi) southwest of Beardstown, Illinois. From a hydrologic perspective, the La Grange Wetland Bank is located in the southeastern tip of the LaMoine River drainage basin, and is bounded by the LaMoine River to the north and Illinois River to the east.

Wetland compensation following the guidelines of the Illinois Interagency Wetland Policy Act requires individual wetland impacts measuring less than 0.2 ha (0.5 ac) to be mitigated at an offsite (out-of-basin) ratio of 3.0 to 1.0. Based upon a total wetland impact of 0.17 ha (0.42 ac), the total compensation area measures 0.51 ha (1.26 ac).

Agricultural Lands: The project corridor is characterized predominantly by agriculture. Agriculture is an important economic element within both Henderson and Warren Counties. Throughout the study, alternate development, and evaluation process, considerable effort was made to avoid and minimize impacts to agricultural lands. The total area of impacted agricultural land, length and number of severances, number of farm residential displacements, agricultural business displacements, number of affected owners, and number of affected operators were considered during the alternate evaluations.

The Selected Alternative has maximized the utilization of existing right-of-way to every extent practicable to minimize right-of-way requirements. To the greatest extent possible, property lines have been paralleled, decreasing the number of severance management zones (SMZs), severed farms and farm operations, and landlocked parcels. Uneconomical remnants and landlocked parcels will be considered when choosing borrow pit locations and will be utilized as necessary for tree replacement.

The Selected Alternative also utilizes partial access control design to decrease adverse travel, landlocked parcels, and the amount of land necessary for frontage (or access) roads. Field access points and at-grade crossings for farm machinery will be constructed where deemed practical. In addition, field entrances will be widened at the request of the Illinois Farm Bureau, to allow room for semi-trucks to enter and exit from the fields.

Although the alternate development and evaluation process minimized impacts to agricultural lands, it is not feasible to locate a rural highway corridor that will not, to some extent, affect farming operations or prime and important farmlands. The Selected Alternative will result in 17.9 km (11.1 mi) of adverse

travel per trip to access farm fields, 28 severed farm operations by tract, 7 farmstead displacements, 2 landlocked parcels, and 23 uneconomical remnants. Approximately 274 ha (677 ac) of agricultural land will be required for right-of-way. Of this, 274 ha (677 ac) of agricultural land, 191 ha (471 ac) or 70 percent of the total area being converted is prime farmland. During the final design, efforts will continue to minimize impacts to agricultural lands.

Floodplains: The project corridor is located within the designated 100-year floodplain (Zone A) associated with the Mississippi River and South Henderson Creek. During the development of study alternates, a primary objective was to maximize, to the extent practicable, the use of existing right-of-way of U.S. Route 34. The objective was identified as an overall means to avoid and minimize impacts to the environment including floodplains. Because the Mississippi River and South Henderson Creek are in a general north-south direction, while the proposed project is in a general west-east direction, all build alternates considered had to be located within the Mississippi River and South Henderson Creek floodplains. Other alternates within Sections I and II were developed that required less floodplain area than those chosen as part of the Selected Alternative, but were eliminated due to impacts to burial mounds, sensitive botanical sites, greater impacts to wetlands, greater farm impacts, and/or greater residential displacements.

The Selected Alternative will transversely encroach on five Federal Emergency Management Agency (FEMA) designated floodplain sites (Zone A) and longitudinally encroach on one FEMA designated floodplain site. The limits of construction for new right-of-way required by the Selected Alternative will impact a total of 6.9 ha (17.0 ac) of designated 100-year floodplain (Zone A) with a length of 1,315 m (4,314 ft) or 1.3 km (0.8 mi).

With regards to the Mississippi River floodplain, the modifications to drainage structures will result in an insignificant change in their capacity to carry floodwater. This change will cause a minimal increase in flood heights and flood limits. These minimal increases will not result in any significant adverse impacts on the natural and beneficial floodplain values; there will be no significant change in flood risks; and there will be no significant increase in potential for interruption or termination of emergency service or emergency evacuation routes; therefore, it has been determined that this encroachment is not significant.

With regards to the South Henderson Creek floodplain, the bridge is proposed to span nearly the entire South Henderson Creek 100-year floodplain which would have no impact on flood heights or flood limits at or upstream of the bridge. The proposed bridge will not have significant adverse impacts on the natural and beneficial floodplain values. This bridge will not result in any significant change in flood risks or damage nor have significant potential for interruption or termination of emergency routes.

The FHWA finds that the only practicable alternative is to locate the project in floodplain areas. The limits of the Illinois regulatory floodway will be determined during project design, as there are no mapped FEMA floodways within the project corridor. The appropriate portions of the Selected Alternative will be elevated above the 50-year floodplain. During final design, continuous efforts will be made to minimize potential harm to or within the floodplain.

Archaeological Sites and Historic Structures: Cultural resource surveys focusing on archaeological sites, historic sites, and historic structures were conducted within the project corridor, which encompassed the developed alternates. There are no sites within the project corridor listed on the National Register of Historic Places.

The preliminary Phase I archaeological survey performed by the University of Illinois, Champaign-Urbana, under contract to IDOT, identified numerous prehistoric and historic period sites. Results of

these surveys indicate that the sites in the project corridor range from small, surface lithic scatters to small villages with intact cultural deposits.

All of the sites, which merit further evaluation, have potential National Register significance due to the data that they may yield concerning prehistoric life-ways in this region of Illinois (Criterion D). No archaeological sites that merit preservation in place will be impacted by the Selected Alternative.

The final survey report served as the basis for FHWA, in consultation with the Illinois Historic Preservation Agency (IHPA – Illinois SHPO), to determine whether the archaeological resources that will be impacted by the Selected Alternative can be processed under the September 2002 - FHWA, IHPA and IDOT Programmatic Agreement for the Mitigation of Adverse Effects to Illinois Archaeological Habitation Sites (PA). The PA allows for the systematic evaluation of archaeological sites as access for subsurface testing becomes available through either agreements with property owners or land acquisition by the state.

As required by the PA, the FHWA, in consultation with the IHPA and IDOT, will prepare a data recovery plan with a research design that is consistent with the Secretary of Interior's *Standards for the treatment of Historic Properties* and *Standards and Guidelines for Archaeological and Historic Preservation*; and the Advisory Council on Historic Preservation's *Treatment of Archaeological Properties: A Handbook.*

The FHWA will forward a copy of the PA, the final archaeological survey, and the data recovery plan to the Peoria tribe for their review and comments. The Peoria tribe represents the lineal descendants of the Illinois tribe who are known to have historical ties to this area of the state. Upon completion of the data recovery effort, a final data recovery report will be provided to the Peoria tribe for their files.

An evaluation of historic architectural structures by IDOT indicated 34 structures within the project corridor were potentially eligible for the National Registry of Historic Places (NRHP). The Selected Alternative will displace none of these structures. However, right-of-way and/or a temporary construction easement will be required from the surrounding properties of three of these structures. These three structures are potentially eligible for inclusion in the NRHP due only to their architectural features. If these properties were to be added to the NRHP in the future, the boundary for the structures would be limited to the footprint of the structure, which would be outside of the right-of-way required by the Selected Alternative. The Selected Alternative would have no effect on the characteristics that make these structures potentially eligible for the NRHP.

The June 27, 2002 letter from the Illinois State Historic Preservation Officer (SHPO) indicates that the proposed alignment will have no effect on historic and architectural properties subject to protection under the National Historic Preservation Act of 1966, as amended.

Noteworthy Plant Communities: The INHS conducted a botanical field survey to assess the natural quality of vegetative communities within the project corridor. Six sites within the project corridor contained noteworthy, plant communities. Five sites were prairie communities, and one site was a dry-mesic upland forest/seep.

Botanical Site #3 is the only noteworthy plant community that falls within the right-of-way of the Selected Alternative. This small sand hill prairie has been identified as having a diverse mixture of prairie grasses and forbs, but has been disturbed with recent grazing. The best quality occurs just north of U.S. Route 34, and the quality degrades northward. Approximately 0.65 ha (1.61 ac) out of a total 1.56 ha (3.85 ac), or nearly 42 percent of Botanical Site #3, will be directly impacted by the limits of construction for the Selected Alternative in this high quality area just north of the existing roadway.

In an attempt to minimize the impact to Botanical Site #3, both the roots and seeds of the better species of plants, such as the wild blue larkspur and other prairie plants, will be relocated to a suitable area prior to construction. In addition, the top 15 cm (6 in) of topsoil will be removed and stockpiled until the desired grade is achieved.

Water Quality: Erosion and sediment control measures identified in the IDOT manuals, "Standard Specifications for Road and Bridge Construction" and "Special Provisions for Temporary Project Water Pollution Control" will be utilized to help reduce the effects of roadway construction on surface water resources. Construction impacts on water quality will be minimized with the installation of appropriate erosion and sediment control measures in accordance with IDOT's "Joint Design/Construction Procedure Memorandum on Erosion and Sediment Control" prior to the commencement of activities that disturb and expose existing soil. Those areas where erosion and sediment controls will require special consideration are presented in DEIS Table 4-16.

Measures for highly erodible soils will consist of either vegetative soil stabilization or non-vegetative soil stabilization. Vegetative soil stabilization includes temporary seeding, permanent seeding, sodding, ground cover, or dormant seeding. Non-vegetative soil stabilization includes mulching and aggregate cover. Perimeter silt fencing and ditch checks will be used to protect adjacent properties during construction. Non-intrusion fencing will also be used in any active pastures to divert livestock from the affected area. Diversion of "clear" water flowing through the construction site away from disturbed areas will be achieved by standard temporary diversion methodologies including ridge diversions, (berms and dikes), and diversion swale/excavated type diversion.

Drainage: All existing surface and subsurface drainage will be maintained. During construction, field tiles draining to or intersected by the highway right-of-way will be located by means of trenching, and the associated drainage will be accommodated to assure that proper field drainage is maintained. Bridges or culverts will be constructed over drainage channels thus preserving the existing aquatic and wildlife corridors.

Construction Noise: Construction noise will be controlled in accordance with Article 107.35 of the IDOT Standard Specifications for Road and Bridge Construction.

Tree Replacement: A Tree Mitigation Plan will be prepared during final roadway design to provide guidelines for the replacement of trees removed greater than 6 inches in diameter due to construction impacts. A total of 3,428 trees within the proposed right-of-way will be replaced. Specifications regarding species selection, planting locations, and planning methodology will be consistent with IDOT's Tree Mitigation Policy. Uneconomical remnants and landlocked parcels will be utilized as necessary for tree replacement. No additional right-of-way will be purchased for the sole purpose of tree mitigation or floodplain storage.

Monitoring and Enforcement Program: Monitoring and enforcement of the project commitments and impact minimization/mitigation measures will be accomplished through standard procedures to assure compliance. Specifically, individuals responsible for preparing the construction plans and those overseeing and monitoring their work will be provided a copy of this Record of Decision, the DEIS, and FEIS to help ensure that required environmental avoidance and mitigation measures are included in the plans and specifications prepared for the project. The Resident Engineers overseeing the construction of the project also will receive a copy of these documents and will be responsible for assuring that all commitments are met.

5. COMMENTS ON THE FEIS

The Notice of Availability for the FEIS document was published by the U. S. Environmental Protection Agency (USEPA) in the February 21, 2003, Federal Register with a close of public comments date of March 24, 2003.

Three letters were received from federal agencies, two from the USEPA and one from the Department of Health & Human Services. One letter was received from a State agency, the Illinois Environmental Protection Agency (IEPA).

USEPA Comments: The first letter from the USEPA, dated March 12, 2003, expressed concern over the amount of information in the FEIS with regard to water quality and the projects potential to impact impaired sections of water bodies in the study area.

Response to Comments: Based on conversations between the USEPA, IDOT, and FHWA, the second letter from the USEPA, dated April 3, 2003, amended the concerns and recommendations expressed in their March 12, 2003 letter. It also stated the agency had no remaining significant environmental concerns with the preferred alternative.

Department of Health & Human Services: The letter from the Department of Health & Human Services stated the FEIS had adequately addressed potential health concerns on the human population.

Response to Comments: No response necessary.

IEPA Comments: The IEPA letter, dated March 4, 2003, stated that they had no objections to the project and informed IDOT that construction activities would require a National Pollutant Discharge Elimination System permit.

Response to Comments: No response necessary.

6. CONCLUSION

The FHWA has reached its decision based upon information and analysis contained in the FEIS and outlined in this document. Based on these considerations, the FHWA has determined that the Selected Alternative: 1) best satisfies Purpose and Need, 2) poses the least impacts to the natural and human environment, 3) has been selected based on processes in compliance with NEPA and other applicable requirements, and 4) may be advanced through detailed design and construction.

Date: August 18, 2003

Signed: _____

Norman R. Stoner, P.E.
Division Administrator
Federal Highway Administration

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Appendix B

Executive Order 2006-05

(Construction Activities in Special Flood Hazard Areas)

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2006-05

CONSTRUCTION ACTIVITIES IN SPECIAL FLOOD HAZARD AREAS

WHEREAS, the State of Illinois has programs for the construction of buildings, facilities, roads, and other development projects and annually acquires and disposes of lands in floodplains; and

WHEREAS, federal financial assistance for the acquisition or construction of insurable structures in all Special Flood Hazard Areas requires State participation in the National Flood Insurance Program; and

WHEREAS, the Federal Emergency Management Agency has promulgated and adopted regulations governing eligibility of State governments to participate in the National Flood Insurance Program (44 C.F.R. 59-79), as presently enacted or hereafter amended, which requires that State development activities comply with specified minimum floodplain regulation criteria; and

WHEREAS, the Presidential Interagency Floodplain Management Review Committee has published recommendations to strengthen Executive Orders and State floodplain management activities;

NOW THEREFORE, by virtue of the authority vested in me as Governor of the State of Illinois, it is hereby ordered as follows:

1. For purpose of this Order:

   A. “Critical Facility" means any facility which is critical to the health and welfare of the population and, if flooded, would create an added dimension to the disaster. Damage to these critical facilities can impact the delivery of vital services, can cause greater damage to other sectors of the community, or can put special populations at risk. The determination of Critical Facility will be made by each agency.

      Examples of critical facilities where flood protection should be required include:
      Emergency Services Facilities (such as fire and police stations)
      Schools
      Hospitals
      Retirement homes and senior care facilities
      Major roads and bridges
      Critical utility sites (telephone switching stations or electrical transformers)
      Hazardous material storage facilities (chemicals, petrochemicals, hazardous or toxic substances)

      Examples of critical facilities where flood protection is recommended include:
      Sewage treatment plants
      Water treatment plants
      Pumping stations

   B. "Development" or "Developed" means the placement or erection of structures (including manufactured homes) or earthworks; land filling, excavation or other alteration of the ground surface; installation of public utilities; channel modification; storage of materials or any other activity undertaken to modify the existing physical features of a floodplain.

   C. "Flood Protection Elevation" means one foot above the applicable base flood or 100-year frequency flood elevation.

   D. "Office of Water Resources" means the Illinois Department of Natural Resources, Office of Water Resources.

   E. "Special Flood Hazard Area" or "Floodplain" means an area subject to inundation by the base or 100-year frequency flood and shown as such on the most current Flood Insurance Rate Map published by the Federal Emergency Management Agency.

   F. "State Agencies" means any department, commission, board or agency under the jurisdiction of the Governor; any board, commission, agency or authority which has a majority of its members appointed by the Governor; and the Governor's Office.

2. All State Agencies engaged in any development within a Special Flood Hazard Area shall undertake such development in accordance with the following:

   A. All development shall comply with all requirements of the National Flood Insurance Program (44 C.F.R. 59-79) and with all requirements of 92 Illinois Administrative Code Part 700 or 92 Illinois Administrative Code Part 708, whichever is applicable.

   B. In addition to the requirements set forth in preceding Section A, the following additional requirements shall apply where applicable:

      1. All new Critical Facilities shall be located outside of the floodplain. Where this is not practicable, Critical Facilities shall be developed with the lowest floor elevation equal to or greater than the 500-year frequency flood elevation or structurally dry floodproofed to at least the 500-year frequency flood elevation.

      2. All new buildings shall be developed with the lowest floor elevation equal to or greater than the Flood Protection Elevation or structurally dry floodproofed to at least the Flood Protection Elevation.

      3. Modifications, additions, repairs or replacement of existing structures may be allowed so long as the new development does not increase the floor area of the existing structure by more than twenty (20) percent or increase the market value of the structure by fifty (50) percent, and does not obstruct flood flows. Floodproofing activities are permitted and encouraged, but must comply with the requirements noted above.

3. State Agencies which administer grants or loans for financing development within Special Flood Hazard Areas shall take all steps within their authority to ensure that such development meets the requirements of this Order.

4. State Agencies responsible for regulating or permitting development within Special Flood Hazard Areas shall take all steps within their authority to ensure that such development meets the requirements of this Order.

5. State Agencies engaged in planning programs or programs for the promotion of development shall inform participants in their programs of the existence and location of Special Flood Hazard Areas and of any State or local floodplain requirements in effect in such areas. Such State Agencies shall ensure that proposed development within Special Flood Hazard Areas would meet the requirements of this Order.

6. The Office of Water Resources shall provide available flood hazard information to assist State Agencies in carrying out the responsibilities established by this Order. State Agencies which obtain new flood elevation, floodway, or encroachment data developed in conjunction with development or other activities covered by this Order shall submit such data to the Office of Water Resources for their review. If such flood hazard information is used in determining design features or location of any State development, it must first be approved by the Office of Water Resources.

7. State Agencies shall work with the Office of Water Resources to establish procedures of such Agencies for effectively carrying out this Order.

8. **Effective Date**. This Order supersedes and replaces Executive Order Number 4 (1979) and shall take effect on the first day of.

_____
Rod R. Blagojevich, Governor

Issued by Governor: March 7, 2006
Filed with Secretary of State: March 7, 2006

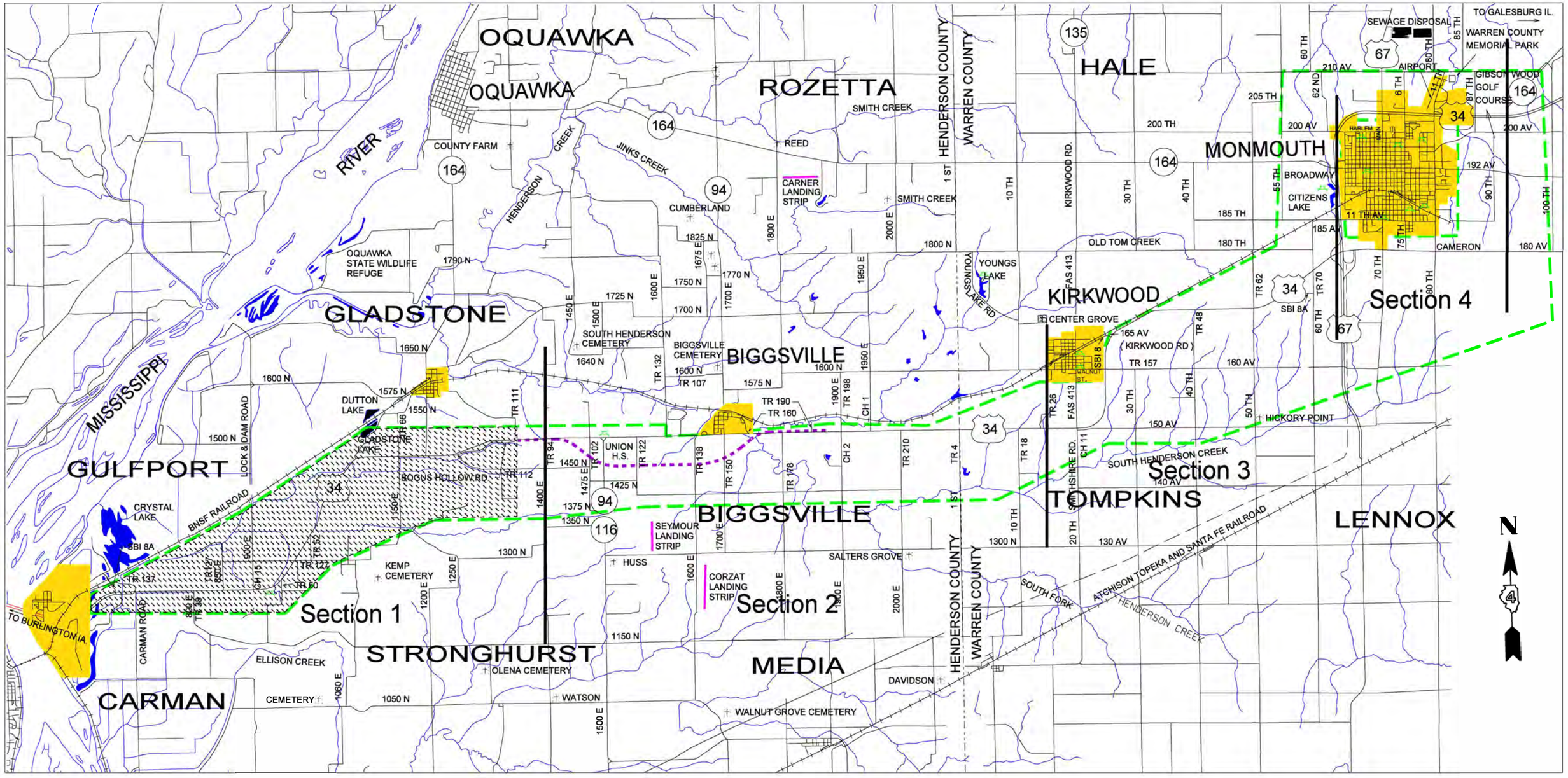
Appendix C

2003 FEIS Study Area Exhibits

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Exhibit 1

Location/Corridor Map



LEGEND

- U.S. Hwy 34
- U.S. Hwy 67
- 4-Lane U.S. Hwys
- Illinois State Hwy
- Primary Roads
- Streams & Creeks
- Electric Transmission Line
- County Line
- Railroad
- Parks
- Airport / Landing Strip
- City / Village Limits
- Study Corridor
- SEIS Area
- Biggsville Bypass (open to traffic: fall 2014)

2 0 2
MILES

2 0 2 4
KILOMETERS

Revised: 04/ 15 / 15

Illinois Department of Transportation

U.S. Route 34
Gulfport to Monmouth

U.S. ROUTE 34
LOCATION/CORRIDOR MAP
EXHIBIT 1

Exhibit 2

US Route 34
Ottumwa, Iowa to Galesburg, Illinois

4 - Lane

2 - Lane

Exhibit 2

Appendix D

US Route 34 Re-Evaluation of Termini

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McLuckie, Michael A

From: Matt.Fuller@dot.gov
Sent: Thursday, December 06, 2012 7:24 AM
To: Lacy, Thomas A; Heidi.Liske@dot.gov; Stevenson, Jerry; Piland, Janis; Kohler, Jon-Paul; Staggs, Mike
Cc: Addis, Maureen M; McLuckie, Michael A; Lewis, Mike; Larson, Greg V
Subject: RE: US 34 - Alignment alternate re-evaluation (Carman Rd. to TR 111)

Tom – Thanks for providing the information about the re-evaluation and the proposed termini.

The paper recommends that the eastern terminus for the Supplemental EIS be TR 111, the western terminus of the Biggsville Bypass. The recommendation is made based on the two alternates (2g and 2d) that were originally studied in the EIS are not considered feasible based on engineering and environmental factors.

The scope of the Supplemental EIS may also need to consider alternatives that were not considered in the original EIS, and we want to be sure that if the eastern terminus for the Supplemental EIS is selected as TR 111, we do not restrict the range of reasonable alternatives to be considered.

Could you please include in the termini paper a discussion of the rationale for identifying TR 111 as the eastern terminus for the Supplemental EIS and whether it would fulfill the requirement to not unnecessarily restrict the range of reasonable alternatives (including those that were not studied in the original EIS)?

Please provide the justification as soon as possible. If we agree with the rationale, we would be able to take action on the current request for authorization to proceed with the Biggsville Bypass project. Thanks!
Matt

From: Lacy, Thomas A [mailto:Thomas.Lacy@illinois.gov]
Sent: Wednesday, December 05, 2012 3:07 PM
To: Liske, Heidi (FHWA); Stevenson, Jerry (FHWA); Piland, Janis (FHWA); Fuller, Matt (FHWA); Kohler, Jon-Paul (FHWA); Staggs, Mike (FHWA)
Cc: Addis, Maureen M; McLuckie, Michael A; Lewis, Mike; Larson, Greg V
Subject: US 34 - Alignment alternate re-evaluation (Carman Rd. to TR 111)

Heidi - Attached is the Districts documentation Report entitled "US Route 34 Re-evaluation of termini (Carman Road to TR111) . Also attached are the following exhibits which supplement the Report :

- *Exhibit A (US 34 floodplain)*
- *US 34 Study Alternates Map*
-

The District would like to arrange a meeting at your office next week if possible to explain the report and discuss report content and format in regard to FHWA needs .Please let me know of available dates.

In consideration that for the January letting the FHWA authorization is December 6 th , the District is requesting that FHWA grant conditional approval to go to letting and let us advertise as scheduled . The conditional approval would be based on coming to agreement on the attached report alignment alternates to be studied for the levee desertification study in conjunction with the Biggsville Bypass project on the January 2013 letting. . If this is not accomplished in a timely manner then the job will be pulled by District 4 off the January letting . Please let the District know if this approach is acceptable with your office

Thanks you for your input and cooperation

Tom A. Lacy
Studies and Plans Engineer
District 4 / Region 3
Peoria, IL 61602
(309) 671-3493

From: Heidi.Liske@dot.gov [mailto:Heidi.Liske@dot.gov]
Sent: Friday, November 30, 2012 3:03 PM
To: Addis, Maureen M; McLuckie, Michael A; Lacy, Thomas A; Lewis, Mike; Larson, Greg V
Cc: Stevenson, Jerry; Piland, Janis; Fuller, Matt; Kohler, Jon-Paul; Staggs, Mike
Subject: FW: US 34 - Follow-up on SEIS direction

District 4 staff—

This afternoon the "Biggsville Bypass" project arrived at FHWA for authorization of construction funds. We have not yet received documentation for the US 34 SEIS limits, as outlined below, and therefore cannot determine whether to proceed with the Biggsville Bypass letting or not. Until this information is provided and the determination is made, the Biggsville Bypass project will not be authorized for construction.

For the January 18, 2013, letting, projects must be authorized by FHWA no later than December 6, 2012.

Please contact me with any questions. I will be out of the office starting Tuesday the 4th, so please contact any of the other FHWA representatives (Matt Fuller, Jan Piland, or JD Stevenson) instead.

Thank you—

Heidi Liske, P.E.
Transportation Engineer – Districts 4 & 5
Federal Highway Administration – Illinois Division
3250 Executive Park Drive
Springfield, Illinois 62703
Phone: 217.492.4637
Fax: 217.492.4621
heidi.liske@dot.gov

From: Liske, Heidi (FHWA)
Sent: Wednesday, November 07, 2012 10:34 AM
To: Addis, Maureen M; 'McLuckie, Michael A'; 'Lacy, Thomas A'; Lewis, Mike; 'Larson, Greg V'
Cc: Piland, Janis (FHWA); Fuller, Matt (FHWA); Stevenson, Jerry (FHWA); Kohler, Jon-Paul (FHWA); Staggs, Mike (FHWA)
Subject: US 34 - Follow-up on SEIS direction

District 4 staff—

Due to the updated FIRM maps and decertification of the levee, the preferred alternative in the 1-15-2003 ROD no longer meets floodplain requirements under EO 11998. The purpose of a reevaluation is to determine if a supplemental EIS (SEIS) is necessary. Through IDOT/FHWA discussions it has already been determined that alternatives that will need to be studied are highly likely to result in significant impacts. Therefore, a reevaluation is not necessary, and a SEIS will be prepared.

Following are the next steps, in order:

1. Determine logical termini for SEIS

a. IDOT will document determination of termini for FHWA approval.
b. If documentation supports that the only logical terminus where Sections 1 and 2 meet at TR 111/94 is the current preferred alternative (See Figures 1 and 2); then,
    i. For Section 1, only alternatives tying into that point need to be evaluated; and
    ii. Proceed with Biggsville Bypass letting.
c. If documentation supports more than one alignment where Sections 1 and 2 meet at TR 111/94 to be logical (See Figure 2); then,
    i. Continue study into Section 2 until point of logical terminus; and
    ii. Do not proceed with Biggsville Bypass letting.

2. Evaluation of alternatives
    a. Reevaluate all alignments studied within logical termini, including those dismissed, retained, and preferred, considering new floodplain information and any changes in environmental conditions.
        i. Dismissed alignments will either be validated or determined reasonable.
    b. Evaluate any other new or partially new alignments not covered in EIS that avoid floodplains, including, but not limited to:
        i. Raising grade of alignments;
        ii. Shifting alignment out of the floodplain as much as practicable;
        iii. Levee recertification;
        iv. No-build;
        v. Evaluate impacts west of Carman Rd,
            1. Vertical grade where tying into existing US 34 at grade in Gulfport;
            2. Hydraulics and soils in Gulfport due to length of raised grade.
3. Issue new ROD with new preferred alternative.
    a. Consider issuing Statute of Limitations notice.

Figure 1 – "Begin Improvement" location as identified in documents provided to FHWA 10/24/2012



Figure 2 – Identified as Figure 2-1 in FEIS approved by FHWA 1/15/2003



Please contact me with questions or for clarification at any time. Thank you—

Heidi Liske, P.E.

Transportation Engineer – Districts 4 & 5
Federal Highway Administration – Illinois Division
3250 Executive Park Drive
Springfield, Illinois 62703

Phone: 217.492.4637
Fax: 217.492.4621

heidi.liske@dot.gov

US Route 34 Re-evaluation of Termini
(Carman Road to TR 111)
12/4/2012

The Illinois Department of Transportation (IDOT) is proposing to improve US Route 34 from the intersection of Carman Road to Monmouth extending a length of 24.85 miles. The purpose of the proposed project is to provide a high-type transportation facility for local and regional traffic in Henderson and Warren Counties, which includes a continuous four-lane link between the existing freeway at Gulfport in the vicinity of Carman Road and to east of Monmouth. The need for the project is to improve traffic safety, system continuity, and system capacity. Benefits associated with the proposed project include less congestion along the existing roadway , improved safety, and efficient travel within and through the project corridor by providing a continuous four-lane route.

The Final Environmental Impact Statement (FEIS) was approved by the FHWA on January 15, 2003. On June 18, 2010, the Mississippi River Levee near Gulfport, Illinois, was decertified, which has impacts to the proposed alignment from Chinn Avenue to Township Road 111 in Henderson County. As a result of this decertification the existing drainage conditions as stated in the FEIS have changed .Based on this change in existing conditions , IDOT now proposes to re-evaluate the proposed US 34 alignment within the area of the floodplain impacts. The floodplain area is shown shaded blue on Exhibit A . The proposed phase 1 alignment for US Route 34 from Carman Road to Township Road 111 in the approved FEIS matches into the existing four-lane expressway from Chinn Avenue to Carman Road. The proposed alignment will maintain the existing south right-of-way line until County Highway 15. The proposed alignment will follow the existing alignment for approximately 5.0 miles of total length. The remainder of the proposed roadway alignment will be on new alignment that will parallel the existing roadway alignment for approximately 3.0 miles. Where the roadway is located along new alignment, the distance between the existing and proposed alignment varies from approximately 0.1 mile to 0.25 mile. Refer to the US Route 34 Study Alternates map for alignment location.

The proposed alignment from Township Road 111 eastward to Monmouth includes a by-pass around Biggsville and continues eastward with over 11 miles of utilizing the existing US Route 34 right-of-way. The decertification of the Mississippi River Levee has no impacts to this 16± miles of the proposed alignment.

In order to provide a thorough examination of the study alternatives relative to the social, economic, and physical landscape, and the stated project goals and objectives, the original study divided the project corridor into sections. The considerations used in determining end points for these sections involved topography, logical geometric lengths and curvatures, and existing roadway locations.

In order to update the existing FEIS, the proposed alignment will be re-investigated as to floodplain encroachment based on the decertification of the Mississippi River Levee. Only two alignments investigated during the original study did not tie into the current western termini (TR 111) of the Biggsville Bypass and are identified as Alternates "2g" and "2d" on the US Route 34 Study Alternates Map

In the vicinity of Ill 164 , both Alternates "2g" and "2d" are south of existing US Route 34, 1.25 miles and 0.75 mile respectively. IL Route 164 currently connects to existing US Route 34 and would need to be extended southward to meet Alternates "2g" and "2d". The extension would be located in an area of steep terrain, undesirable profile grades, and high cost to construct. Existing US Route 34 would be retained, which would add future maintenance cost. Environmentally, the extension of IL Route 164 to connect to these alternates would disrupt existing wooded ravines and areas of potential Native American habitat. The existing US Route 34 and IL Route 164 intersection would remain the same with these alternates as compared to the four-lane improvement of the preferred alternate. This intersection location has recorded fatal crashes in which the preferred alternate would provide improved safety. Alternates "2g" and "2d" would retain the existing intersection configuration and therefore would not improve safety at this intersection; and therefore, do not satisfy the need for the project.

Both alternates "2g" and "2d" transverse from the flood plain elevation of approximately 525' eastward to the bluff area where the elevation reaches 660'. This abrupt change in elevation within 1.5 miles from the flood plain results in design issues with profile grade and embankment fill / roadway cut. The bluff area has several wooded ravines and potential Native American burial mounds. The preferred alignment and alternates similar to "1E" would avoid the bluff area. Alternates similar to "1E" will be investigated further in the re-evaluation of alignments based on levee decertification. This alternate is located east of existing US Route 34 as compared to west of existing for the Phase I preferred alignment. The location east of US Route 34 results in less flood plain encroachment for this alternate.

Alternate "2g" and "2d" use less existing right-of-way as compared to the Phase I preferred alternate. Between Carman Road and TR 111, alternates "2g" and "2d" use approximately 20 acres of existing right-of-way compared to 61 acres for the Phase I preferred alignment. These alignments also have higher agricultural acres impacted.

Henderson County is predominantly an agricultural community; and therefore, using existing right-of-way and minimizing agricultural land impacts was an important consideration in the Phase I public involvement process. Because the preferred alignment utilized existing right-of-way, farm severances are also reduced as compared to alternates "2g" and "2d".

Included in the purpose and need for this project is system continuity. Alignments "2g" and "2d" would not provide this system continuity in the area of the IL Route 164 connection. Traffic would use existing US Route 34 instead of Alternates "2g" and "2d" because it is a more direct two-lane route to northbound IL Route 164. Communities such as Gladstone would have a less direct connection to a four-lane facility

Alternates "2g" and "2d" do reduce floodplain encroachment as compared to the Phase I preferred alignment. However, alternates similar to "1E" , which avoid the bluff area impacts associated with Alternates "2g" and "2d" are more viable options to consider in reducing floodplain encroachments.

In conclusion, the District proposes to re-evaluate alternates which would reduce floodplain encroachment and do not impact the bluff area. These alternates all tie into the current Biggsville Bypass termini near TR 111. Alternates such as "2g" and "2d" which impact the bluff area are not considered viable due to associated higher impacts and lack of satisfying the project purpose and need.

Appendix E

Noise Study

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NOISE ANALYSIS TECHNICAL REPORT

US Route 34
From Carman Road East of Gulfport to East of TR 111

Henderson County, Illinois

Prepared by:

QUIGG ENGINEERING INC

May 23, 2018

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Appendix C: Field Data Sheets and Model Validation Results

1.0 Introduction

The US Route 34 (US 34) Supplemental Environmental Impact Statement (SEIS) is a study of improvements to US 34 from Carman Road to just east of Township Road (TR) 111 between Gulfport and Biggsville in Henderson County, Illinois. US 34 in the project corridor is a two-lane rural roadway between two four-lane roadway sections. US 34 is a key regional corridor for the east/west movement of people and goods in and through south central Iowa and west central Illinois. The purpose of this project is to improve transportation for local and through traffic in Henderson and Warren Counties to address the needs of system capacity, system continuity, and travel safety.

The US 34 corridor was previously studied from Carman Road near Gulfport to Monmouth, Illinois. The Final Environmental Impact Statement (FEIS) was submitted in January 2003 and a Record of Decision (ROD) was signed on August 18, 2003. The 2003 ROD is based on a proposed four-lane expressway for US 34 from Carman Road to US Route 67 (US 67), southwest of Monmouth and intersection and side road access improvements to the existing four-lane roadway around Monmouth from US 67 to IL Route 164. Since the approval of the 2003 FEIS, certain system improvements were completed along US 34, which include the four-lane Biggsville Bypass (opened to traffic in the fall of 2014) and the intersection improvement of existing US 34 and IL Route 94 near Union School at Biggsville.

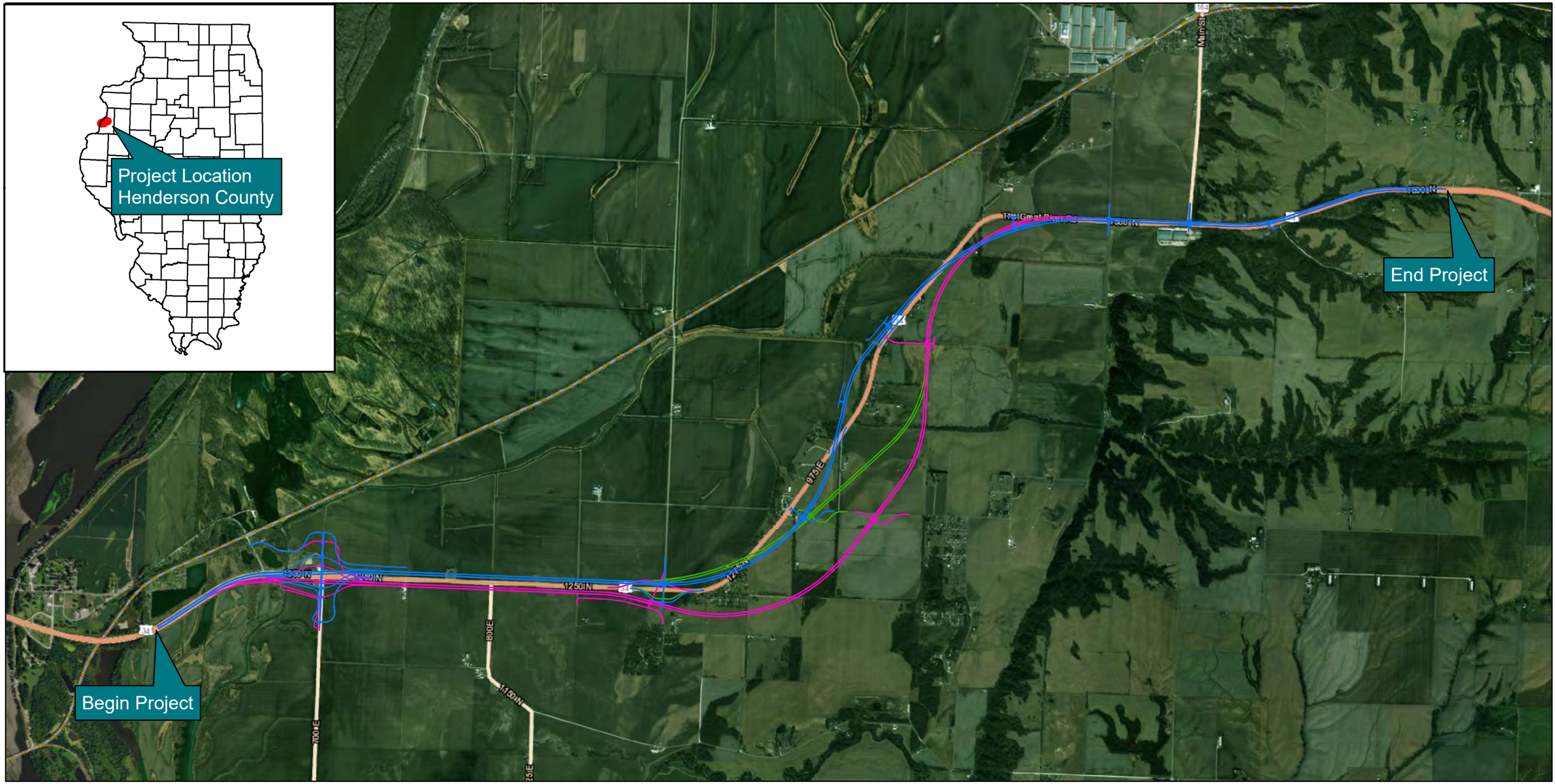
On June 18, 2010, the Federal Emergency Management Agency (FEMA) de-accredited the Henderson County Drainage District Number 1 and Number 2 levee systems. The result of the de-accreditation is reflected on the current regulatory floodplain mapping for Henderson County. The significance of the de-accreditation, as it relates to the proposed US 34 project, is that approximately 6.0 miles of the selected US 34 alignment, as identified in the 2003 FEIS and ROD, are now in a Special Flood Hazard Area protected by EO 2006-05. Due to these changes, an SEIS is being prepared for US 34 the area in this regulatory floodplain.

This traffic noise study has been conducted as part of the SEIS to evaluate traffic noise for the proposed improvements to US 34. This study considers the three build alternatives carried forward at the February 17, 2016 NEPA 404/Merger Meeting. The three alternatives are described below:

- Alternative 2: parallel to and north of existing US 34
- Alternative 5: parallel to and south of existing US 34
- Alternative 6: parallel to and north of existing US 34

The noise study area, shown in Figure 1, is in Henderson County, Illinois. The proposed study will evaluate existing and future (builds and no-build) traffic noise conditions, and if appropriate, potential noise abatement measures. The existing land use adjacent to the road is a mixture of residential and agricultural land.

This report presents the traffic noise analysis conducted for the Alternatives 2, 5, and 6. Section 2 summarizes the federal and state noise regulations. This report contains a discussion of noise sensitive receptors (Section 3), field noise monitoring (Section 4), a description of the noise analysis methodology (Section 5), the analysis of the existing and future noise levels (Section 6), the noise abatement analysis (Section 7), coordination with local officials for undeveloped lands (Section 8), construction noise (Section 9), and the noise analysis conclusion (Section 10).



QUIGG ENGINEERING INC

Service Layer Credits:
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- Alternative 2
- Alternative 5
- Alternative 6

0 2,500 5,000 10,000
Feet

N

Illinois Department of Transportation

Figure 1
Project Location Map

Noise Analysis Report
US Route 34
Henderson County, Illinois

3/5/2018

Data Provided by: http://www.fws.gov/wetlands/Data/State-Downloads.html

2.0 Noise Background and Regulations

2.1 Noise Background

Noise is unwanted or unwelcome sound usually caused by human activity and added to the natural acoustic setting of a locale. It is further defined as sound that disrupts normal activities diminishes the quality of the environment. Community response to noise is dependent on the intensity of the sound source, its duration, the proximity of noise-sensitive land uses, and the time of day the noise occurs (i.e., higher sensitivities would be expected during the quieter overnight periods).

Sound is caused by the vibration of air molecules, and is measured on a logarithmic scale using units of decibels (dB). Sound is composed of a wide range of frequencies; however, the human ear is not uniformly sensitive to all frequencies. Therefore, the "A" weighted scale was devised to correspond with the human ear's sensitivity. The A-weighting generally weights more heavily noise levels in the humanly audible range and screens out noise levels that cannot be heard but are still generated, such as a high frequency dog whistle. The A-weighted unit is used because:

- It is easily measured;
- It approximates the human ear's sensitivity to sounds of different frequencies;
- It matches attitudinal surveys of noise annoyance better than other noise measurements; and
- It has been adopted as the basic unit of environmental noise by many agencies around the world in dealing with community noise issues.

The equivalent sound level is the steady-state, A-weighted sound level, which contains the same amount of acoustic energy as the actual time-varying, A-weighted, sound level over a specified period of time. If the time period is one hour, the descriptor is the hourly equivalent sound level or $L_{eq}(h)$, which is widely used by state highway agencies as a descriptor of traffic noise. It is generally the equivalent level of sound in decibels measured in dB(A), which represents the level of sound held constant over a specified period of time. This sound reflects the same amount of energy as the actual fluctuating noise over that time period. L_{eq} is based on the energy average, not a noise level average.

2.2 Federal Regulations

Traffic noise analyses are required for all projects considered a Type I project. The Federal Highway Administration (FHWA) regulations (23 CFR Part 772) define Type I projects as follows:

- The construction of a highway on new location; or,
- The physical alteration of an existing highway where there is either:
    - *Substantial Horizontal Alteration*. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,
    - *Substantial Vertical Alteration*. A project that removes shielding therefore, exposing the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor; or,
- The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a HOV lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane; or,
- The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or,
- The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or,
- Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or,
- The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.

This proposed improvement is characterized as a Type I noise project as it includes a substantial horizontal alteration and the addition of through-traffic lanes.

The FHWA established noise abatement criteria to determine where noise abatement should be evaluated. Five separate noise abatement criteria (NAC) based upon land use are used by the FHWA to assess potential noise impacts. A traffic noise impact occurs when noise levels approach or exceed the NAC listed below in Table 1. In determining the applicable noise activity category for the study area, existing land uses were reviewed. The applicable NAC for all residential noise receptors evaluated is 67 dB(A).

Table 1. Noise Abatement Criteria – Hourly Weighted Sound Level

Activity Category	$L_{eq}(h)$	Evaluation Location	Activity Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67	Exterior	Residential.
C	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	---	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	---	---	Undeveloped lands that are not permitted.

Source: 23 Code of Federal Regulations Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise. (adopted 2010).

2.3 IDOT Policy

Based on the FHWA regulations, state highway authorities are allowed to establish the noise level determined to approach the NAC and the increase in noise levels determined to be a substantial increase. The Illinois Department of Transportation (IDOT) defines noise impacts as follows:

- Design-year traffic noise levels approach, meet or exceed the NAC, with approach defined as 66 dB(A) for the residential NAC of 67 dB(A), and 71 dB(A) for the office NAC of 72 dB(A); or
- Design-year traffic noise levels are a substantial increase over existing traffic generated noise levels, defined as an increase greater than 14 dB(A).

3.0 Noise Receptor Selection

The land use within the area is generally residential (Activity Category B) and agricultural (Activity Category F), and one archeological site (Activity Category C). Figure 2 depicts the existing land use map. Based on the existing land use along the project corridor, receptor locations were selected to represent the land uses with established NAC. For this project, this includes twelve receptor locations for Category B and one receptor location for Category C. The remaining agricultural areas along the project corridor are characterized as land use activity category F, which does not have an established NAC.

The traffic noise study evaluates the study area using common noise environments (CNEs). Within each of the CNEs, the closest receptor was selected to represent the CNE, thereby representing the worst-case traffic noise condition. The represented receptors within the CNEs will have similar traffic noise levels as the selected receptor.

Thirteen receptors have been selected to represent the study area. Some receptors are associated with a CNE. Table 2 lists the receptor number, CNE (if applicable), the receptor type, the nearest roadway, the approximate distance to the nearest roadway existing centerline, and the number of receptors represented. Figure 3 depicts the aerial photograph of the study area with the receptors and CNEs depicted. Receptor locations are between 65 feet and 235 feet from the nearest roadway existing centerline.

Two receptors (3 and 4) were initially established in locations that do not effectively represent their respective CNEs (CNE 1 and 2 respectively). They were modified and were labeled 3A and 4A respectively. Receptors 3 and 4 are retained for comparison to field reading measurements.

Table 2. Noise Receptor Locations

Receptor	CNE (if applicable)	Receptor Type	Nearest Roadway	Distance to Nearest Roadway Existing Centerline, ft*	Represented Receptors
1		SFR	US Route 34	151	1
2		AS	US Route 34	96	1
3		SFR	1245N	154	1
3A	1	SFR	1245 N	183	18
4		SFR	US Route 34	131	1
4A	2	SFR	US Route 34	235	7
5	3	SFR	US Route 34	80	10
6		SFR	1000E	65	1
7		SFR	US Route 34	134	1
8		SFR	US Route 34	203	1
9		SFR	Old Highway 34	156	1
10		SFR	Old Highway 34	106	1
11		SFR	US Route 34	220	1
12		SFR	US Route 34	106	1
13		SFR	US Route 34	156	1

SFR = Single-Family Residence
AS= Archeological Site
* Estimated from aerial photography

4.0 Field Noise Measurements

Actual noise level measurements characterize existing conditions. The traffic volumes and conditions during the actual noise level measurements need to be considered when evaluating field measurements as typical for the area. The following methodology was used to collect noise level measurements.

Traffic noise levels measured during monitoring events are representative of the traffic characteristics (volume, speed and composition) for the period of time measured. This may or may not be the peak-hour noise condition at the location being measured. In addition, the noise levels are also influenced by other noise sources in the area other than the traffic noise and the characteristics of the location, such as shielding afforded by existing berms or structures. Consequently, comparison of the noise levels between locations needs to also consider the variations in site characteristics in addition to varying traffic conditions.

Field measurements were collected at five (5) locations within the US 34 study area (see Figure 3 and Appendix C). The measurements were collected in accordance with procedures outlined in IDOT's Highway Traffic Noise Assessment Manual and the FHWA's Measurement of Highway Related Noise document. Meteorological data, such as wind, temperature, and general weather conditions were recorded during each field sampling event at each measurement location. Winds were observed to be five to nine miles per hour, and no precipitation occurred during the noise level monitoring periods. Noise level measurements were made at each of the five noise monitoring sites using a Casella CEL-633C Type I sound level meter.

The sound meter was placed on a tripod five (5) feet above ground level at locations of varying distances from existing US 34. A calibration check was performed using a Casella CEL-120/1 acoustic calibrator before and after noise level monitoring at each site. Both the noise meter and acoustic calibrators were factory calibrated and found to meet or exceed American National Standard Institute (ANSI) specifications. The meter was programmed to compute the hourly equivalent sound level (LAeqlh). LAeqlh is an expression of the constant sound level, which over a given period of time would produce an amount of acoustic energy equivalent to the variable sound levels produced over the same time period. After each sampling event, the noise data was downloaded from the meter to a laptop computer for analysis.

4.1 Traffic Volumes

Traffic volumes along US 34 were counted during field monitoring sessions at the five noise monitoring sites. The number of cars and trucks were recorded separately along with any other noise sources observed during monitoring. The traffic volumes were counted as a total for each direction during the 15-minute noise monitoring periods. The traffic volumes counted were extrapolated to an hour (60 minutes) by multiplying the fifteen-minute volumes by four to estimate the hourly traffic. The total traffic volume estimates from the noise monitoring sessions were compared to the design peak-hour traffic volume estimates that were prepared in 2014 by Quigg Engineering Inc. from data obtained from IDOT. The design hourly volume was assumed equivalent to 15% of the average daily traffic during the peak hour. Using 2014 traffic counts, the average daily traffic volume on existing US 34 between Gulfport and IL Route 164 was 6,350 vehicles per day (vpd). Multi-unit (MU) trucks made up 750 vpd of the total and single-unit (SU) trucks made up 375 vpd of the total. Therefore, using the assumption that 15% of the average daily traffic is during the peak hour, the design hourly volumes were assumed to be 952 vehicles per hour (vph) with 112 MU trucks per hour and 56 SU trucks per hour.

The traffic volume estimates recorded during the noise monitoring sessions were compared to the design hourly peak-hour volumes. Excluding field monitoring site number 2 (Field 2), the automobile volumes counted during the monitoring sessions ranged from 16.8% to 31.7% of the design hourly peak-hour volumes and the truck volumes ranged from 26.2% to 66.7% of the design hourly peak-hour

volumes. Trucks account for approximately 24% of the measured traffic during the monitoring period, compared to approximately 17.6% projected for the daily average.

4.2 Time and Day for Measurements

Noise monitoring was conducted at all sites on June 21, 2016, between the hours of 1:00 pm and 2:56 pm and on June 22, 2016 between the hours of 9:05 am and 10:30 am. Traffic was moving under free-flow conditions during the monitoring period.

4.3 Weather Conditions

Weather conditions have some effect on the noise measurement readings. Noise measurements cannot be taken if the wind speed exceeds 12 miles per hour (mph). A wind screen was used at all times during the monitoring to reduce wind noise. The conditions during the monitoring are summarized below in Tables 3 and 4:

Table 3. Weather Conditions During June 21, 2016 Noise Monitoring

Condition	Required	Actual
Pavement	Dry	Dry
Humidity	Less than 90%	50%
Temperature	14 to 112 degrees F	80 degrees F
Wind Speed	Less than 12 mph.	5 mph.

Table 4. Weather Conditions During June 22, 2016 Noise Monitoring

Condition	Required	Actual
Pavement	Dry	Dry
Humidity	Less than 90%	80%
Temperature	14 to 112 degrees F	70 degrees F
Wind Speed	Less than 12 mph.	9 mph.

The weather conditions during the noise monitoring were within the recommended ranges for all parameters listed.

4.4 Instrumentation

A Casella CEL-633C Type I sound level meter was used for monitoring the actual noise level. The L_{eq} was recorded for the "A" weighted scale. The instrument was calibrated prior to use. The instrument was set up approximately five feet from the ground and the measurement was conducted for ten (10) minutes. The noise meter was set in a location where human activity typically occurs or in a location representative of that location.

4.5 Field Noise Monitoring Results

Table 5 summarizes the noise monitoring results for the five locations monitored in the field. The impact analysis and abatement evaluation was conducted using the build traffic noise model results. Noise monitored levels ranged from 46.9 dB(A) to 67.1 dB(A).

Table 5. Noise Monitoring Results, L_{eq}

Receptor*	Distance to Nearest Roadway Centerline, ft	Noise Level Monitored, dB(A)	Modeled Existing Noise Level, dB(A)†

Receptor*	Distance to Nearest Roadway Centerline, ft	Noise Level Monitored, dB(A)	Modeled Existing Noise Level, dB(A)†
Field 1-PM	183	59.3	61.5
Field 1-AM	183	61.6	61.5
Field 2-PM	43	47.2	48.4
Field 2-AM	43	46.9	48.4
Field 3-PM	55	67.1	68.7
Field 3-AM	55	65.8	68.7
Field 4-PM	164	60.3	63.0
Field 4-AM	164	62.3	63.0
Field 5-PM	66	61.5	61.8
Field 5-AM	66	60.4	61.8

* PM readings taken between 1:00 pm and 2:56 pm on June 21, 2016

AM readings taken between 9:05 am and 10:30 am on June 22, 2016

† Modeling methodology and results are presented in Section 5 and Section 6, respectively

Monitored noise levels are within 3 dB(A) of the modeled noise levels which validates the TNM model.

5.0 Noise Analysis Methodology

Modeling of the traffic noise levels at the 13 receptors located within the project limits were conducted utilizing the FHWA approved TNM. Prediction of noise levels is one step in assessing potential noise impacts and abatement strategies. Traffic noise levels for the 13 receptor sites were predicted using existing (2014) and future (2040) traffic volumes.

Inputs into TNM include traffic volume, traffic mix (cars, heavy trucks, and medium trucks), receptor distance, elevation, and average speeds during free flowing conditions. Information sources used in the analysis are briefly described in the following subsections.

5.1 Traffic Volumes

Traffic volumes were obtained from IDOT, which included the AM and PM peak hour traffic volumes for the years 2014 and 2040 for US 34 within the study area. The design hourly traffic volumes were the same in the AM and PM peak hour in both the existing and future scenarios. The PM peak hour traffic was used as a worst-case traffic noise scenario as US 34 is the dominant noise source for a majority of the receptors.

5.2 Traffic Composition

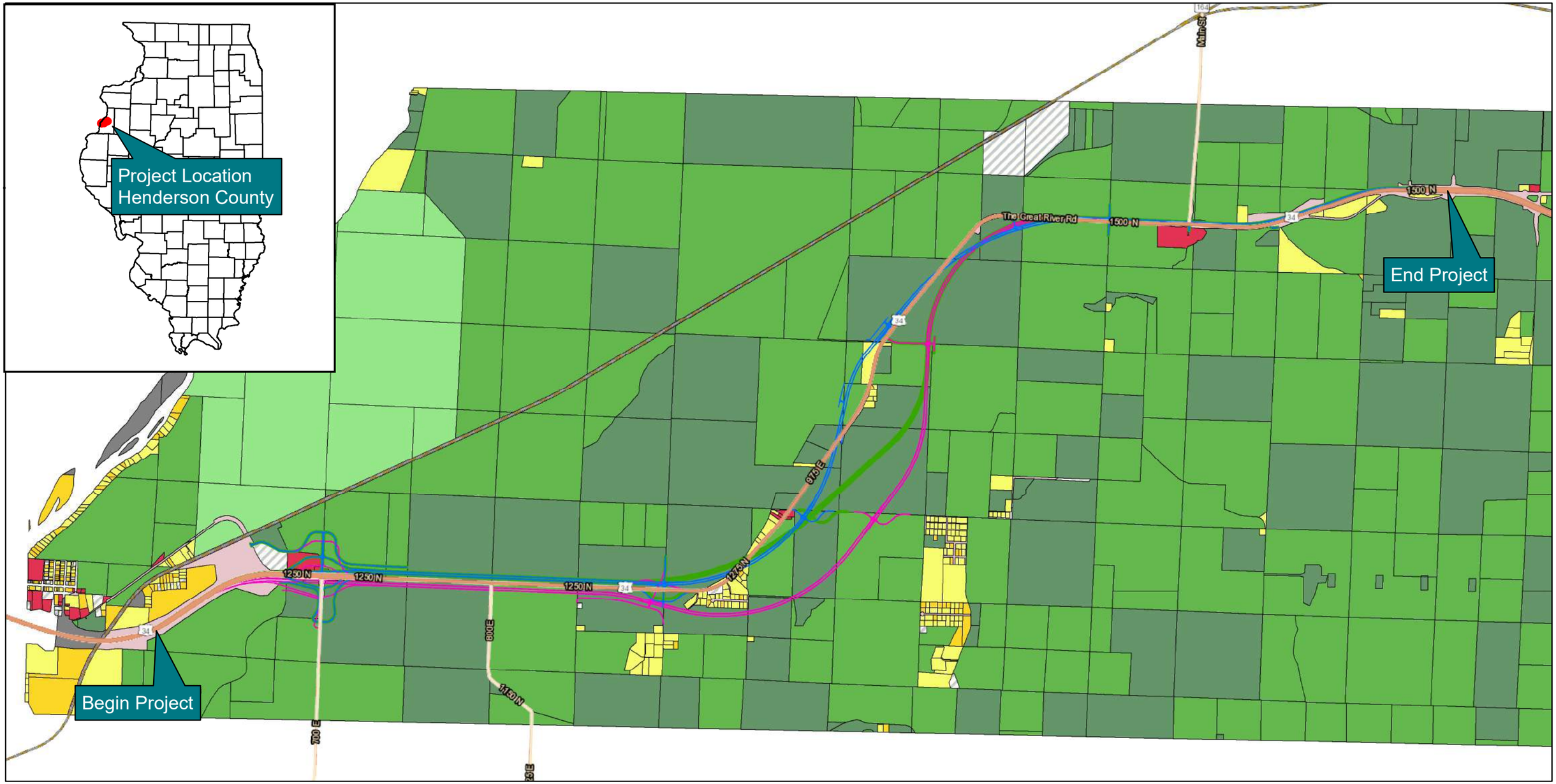
Three types of vehicles, including cars, medium trucks, and heavy trucks, are input into TNM. Along US 34, the percentage of automobiles is estimated to be 82%, with heavy trucks accounting for 12% and medium trucks accounting for 6% for a total truck percentage of 18%.

5.3 Receptor Distance/Elevation

Table 2 included the distances of the receptors from the existing centerline of the nearest roadway. The selected representative receptors include single-family residences and one archeological site. The distance and elevation of each receptor directly affects the predicted traffic noise level. These distances vary from 65 feet at Receptor 6 to 235 feet at Receptor 4A.

5.4 Speed Conditions

The average speed during free flow conditions for the individual roadways was used for the noise analysis and has been input into the model as the posted speed limit. The existing posted speed limits in the project limits are 55 mph for existing US 34. The proposed posted speed limits will remain the same.



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Legend

- Alternative 2
- Alternative 5
- Alternative 6

Landuse

- Conservation Stewardship
- Farm with Residence/Other Buildings
- Farmland
- Improved Commercial
- Improved Residential
- ROW
- Railroad
- Tax Exempt
- Unknown
- Vacant Residential Lot

0 2,500 5,000 10,000

Feet

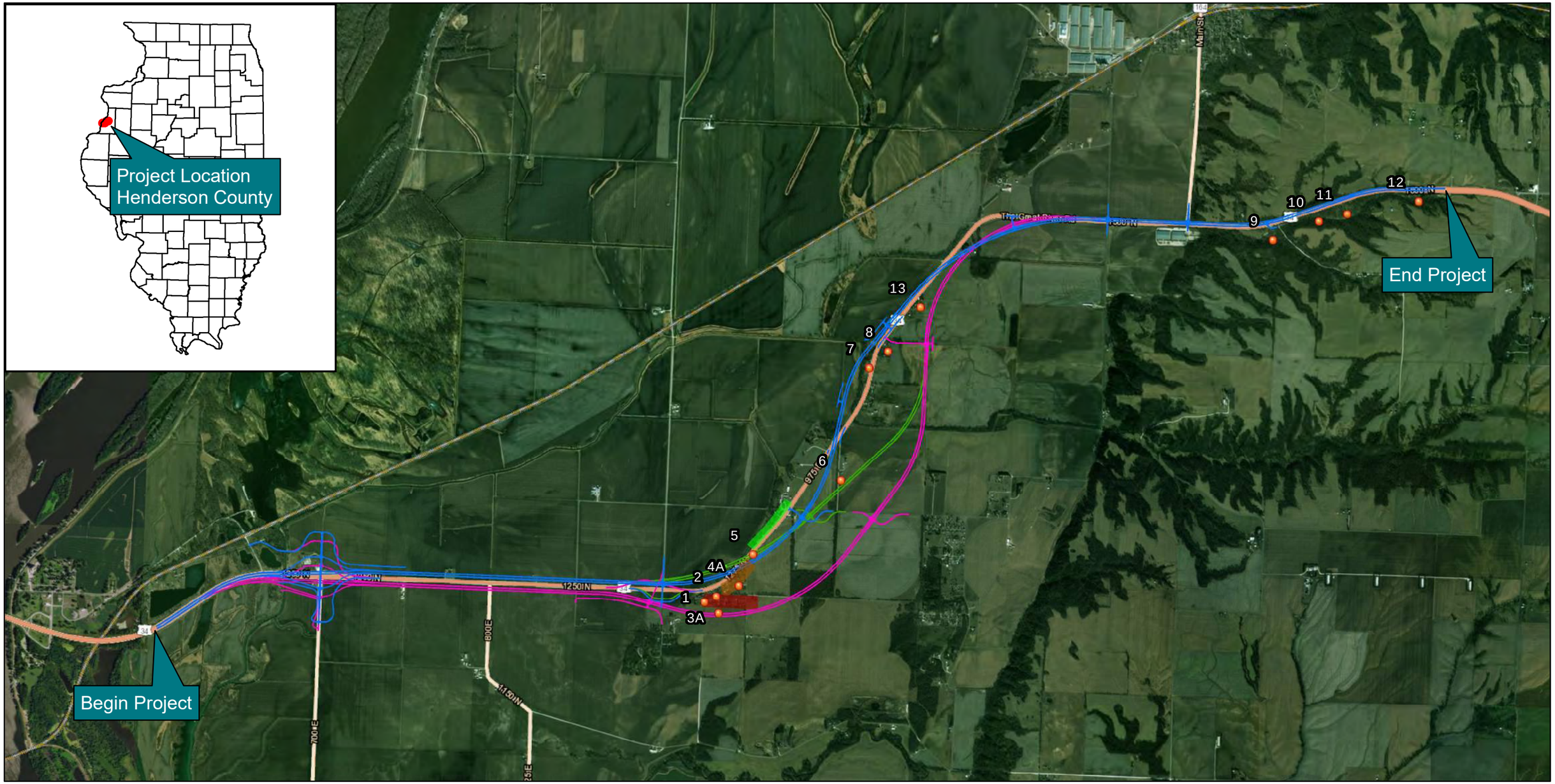
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Figure 2
Land Use Map

Noise Analysis Report
US Route 34
Henderson County, Illinois

3/5/2018



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Legend

- Noise Receptors
- CNE 1
- CNE 2
- CNE 3
- Alternative 2
- Alternative 5
- Alternative 6

0 2,500 5,000 10,000

Feet

N

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Data Provided by: http://www.fws.gov/wetlands/Data/State-Downloads.html

Illinois Department of Transportation

Figure 3
CNE and Noise Receptor Map

Noise Analysis Report
US Route 34
Henderson County, Illinois

3/5/2018

6.0 TNM Results

6.1 Existing, No-Build and Build Alternative Receptor Noise Evaluation

The 2014, No-Build (2040), and Build (2040) traffic noise levels were predicted for the 13 receptor sites utilizing TNM. Table 6 presents the 2014 and projected (2040) noise levels for the 13 receptor sites.

6.2 Existing Noise Levels

The 2014 traffic year TNM 2.5 noise model results for each CNE were compared to the NAC. CNE 3, which represents 10 noise sensitive receptors, currently experiences noise levels that meet or exceed the NAC. Existing noise levels are shown in Table 6.

6.3 Design Year Noise Levels

The No-Build 2040 TNM 2.5 noise model results for each CNE were compared to the NAC. CNE 3, which represents 10 noise sensitive receptors, would experience noise levels meeting or exceeding the NAC. The No-Build alternative results in no substantial increases in noise (14 dBA or greater) over the existing noise levels. No-Build 2040 noise levels are shown in Table 6.

The Build Alternative 2040 TNM 2.5 noise model for each CNE for Alternative 2, Alternative 5, and Alternative 6 were compared to the NAC.

For Alternative 2, there are no noise sensitive receptors that would experience noise levels that meet or exceed the NAC. Additionally, there would be no substantial increases in noise (14 dBA or greater) over the existing noise levels. The noise levels for Alternative 2 are shown in Table 6. The input and output of the TNM runs can be found in Appendix B.

For Alternative 5, there are no noise sensitive receptors that would experience noise levels that meet or exceed the NAC. Additionally, there would be no substantial increases in noise (14 dBA or greater) over the existing noise levels. The noise levels for Alternative 5 are shown in Table 6. The input and output of the TNM runs can be found in Appendix B.

There are no noise sensitive receptors that would experience noise levels meeting or exceeding the NAC for Alternative 6. Additionally, the results for Alternative 6 would not result in a substantial increases in noise (14 dBA or greater) over the existing noise levels. The noise levels for Alternative 6 are shown in Table 6. The input and output of the TNM runs can be found in Appendix B.

Table 6. Noise Impact Summary – TNM Modeling Results

(Refer to Table 2 for locations of noise sensitive receptors)

Receptor Number*	Common Noise Environment (where applicable)	Activity Category / Noise Abatement Criterion	Nearest Roadway	Dist. to Nearest Existing Roadway Centerline (ft)	Noise Levels, dB(A)					Build Alternative Increase Over Existing Noise Levels, dB(A)		
					Existing 2014	No-Build 2040	Build Alt 2 2040	Build Alt 5 2040	Build Alt 6 2040	Alt 2	Alt 5	Alt 6
1		SFR / B	US Route 34	125.0	64.3	65.7	57.1	56.6	54.6	-7.2	-7.7	-9.7
2		RA / B	US Route 34	86.0	68.1	69.5	58.9	53.9	55.4	-9.2	-14.2	-12.7
3A[1]	CNE 1[1]	SFR / B	Earl Menke St.	62.0	53.1	54.4	49.7		47.7	-3.4		-5.4
3A[2]	CNE 1[2]							63.3			10.2	
4A[3]	CNE 2[3]	SFR / B	US Route 34	118.0	63.1	64.5		49.3	62.3		-13.8	-0.8
4A[4]	CNE 2[4]						60.9			-2.2		
5	CNE 3	SFR / B	US Route 34	88.0	67.8	69.2	59.6	48.8	64.4	-8.2	-19.0	-3.4
6		SFR / B	1000E	63.0	53.9	55.3	59.7	46.8	59.5	5.8	-7.1	5.6
7		SFR / B	US Route 34	125.0	63.8	65.2	65.0	46.1	46.5	1.2	-17.7	-17.3
8		SFR / B	US Route 34	208.0	65.7	67.1	60.8	48.6	48.5	-4.9	-17.1	-17.2
9		SFR / B	Old Highway 34	149.0	59.5	60.9	58.9	58.8	58.8	-0.6	-0.7	-0.7
10		SFR / B	Old Highway 34	122.0	62.7	64.1	62.6	62.8	62.6	-0.1	0.1	-0.1
11		SFR / B	US Route 34	222.0	61.2	62.5	61.0	60.9	61.0	-0.2	-0.3	-0.2
12		SFR / B	US Route 34	102.0	64.2	65.6	64.3	64.4	64.3	0.1	0.2	0.1
13		SFR / B	US Route 34	151.0	67.9	69.3	63.7	56.5	56.4	-4.2	-11.4	-11.5

SFR = Single Family Residence
RA = Recreation Area
* Receptors 3 and 4 only provide a basis of calibration for the observed field readings and are not shown in this table.

[1] Alts 2 and 6 only
[2] Alt 5 only
[3] Alts 5 and 6 only
[4] Alt 2 only

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7.0 Abatement Analysis

Traffic noise abatement measures were not considered since no receptors approach, meet, or exceed the FHWA or IDOT NAC, as show in Table 6. The noise level increases are also less than 14 dB(A), which is considered a substantial increase in traffic noise levels. Therefore, there would be no noise impacts as a result of this project, and thus no noise abatement analysis is warranted.

8.0 Land Use

Figure 2 depicts the land use within the project limits. The areas in the project area are predominately agricultural land. The study area Figure 4 identifies the existing zoning of the undeveloped lands along the corridor. There are no comprehensive plans for the study area.

The distance from the roadway where the traffic noise levels approached the NAC [67 dB(A) for Activity Category B] in the build condition was estimated for the undeveloped agricultural land. If these were developed in the future, this is where a potential traffic noise impact would be assessed.

9.0 Construction Noise

Trucks and machinery used for construction produce noise which may affect some land uses and activities during the construction period. Residents along the alignment will at some time experience perceptible construction noise from implementation of the project. To minimize or eliminate the effect of construction noise on these receptors, mitigation measures have been incorporated into the Illinois Department of Transportation's Standard Specifications for Road and Bridge Construction as Article 107.35.

10.0 Summary

This traffic noise study has been conducted to evaluate traffic noise for the proposed improvement to US 34 from Carman Road to just east of Township Road (TR) 111 between Gulfport and Biggsville in Henderson County, Illinois. Traffic noise was evaluated at 13 receptor locations. The 2014 noise levels range from 53.1 dB(A) at Receptor 3 to 68.1 dB(A) at Receptor 2. The projected No-Build 2040 traffic noise levels range from 54.4 dB(A) at Receptor 3 to 69.5 dB(A) at Receptor 2. For Alternative 2, receptor noise levels generally decrease between 0.1 dB(A) and 9.2 dB(A) from the existing scenario due to the new horizontal and vertical alignment. For Alternatives 5 and 6, receptor noise levels generally decrease between 0.1 dB(A) and 19.0 dB(A) from the existing scenario due to the new horizontal and vertical alignment. A noteworthy exception to this is at Receptor 3, Alternative 5 would result in an increase of 10.2 dB(A).

For Alternative 2, the projected 2040 traffic noise levels range from 49.7 dB(A) at Receptor 3A to 65.0 dB(A) at Receptor 7, and the projected 2040 noise levels range from an increase of 5.8 dB(A) to a decrease of 9.2 dB(A) from the existing condition.

For Alternative 5, the projected 2040 traffic noise levels range from 46.1 dB(A) at Receptor 7 to 64.4 dB(A) at Receptor 12, and the projected 2040 noise levels range from an increase of 10.2 dB(A) to a decrease of 19.0 dB(A) from the existing condition.

For Alternative 6, the projected 2040 traffic noise levels range from 46.5 dB(A) at Receptor 7 to 64.4 dB(A) at Receptor 5, and the projected 2040 noise levels range from an increase of 5.6 dB(A) to a decrease of 17.3 dB(A) from the existing condition.

There are no receptor locations that approach, meet, or exceed the FHWA NAC; therefore, there is no warrant for noise abatement analysis.

Appendix A
CNE and Noise Receptor Location Figures



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Figure A1
CNE and Noise Receptor Locations

Illinois Department of Transportation

Noise Analysis Report
US Route 34
Henderson County, Illinois

3/5/2018



Legend

- Alt. 2 Proposed ROW
- Alt. 5 Proposed ROW
- Alt. 6 Proposed ROW
- Alt. 2 Proposed Pavement
- Alt. 5 Proposed Pavement
- Alt. 6 Proposed Pavement
- CNE 3
- Noise Receptor
- Field Reading Location

0 200 400 800

Feet

N

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Figure A2
CNE and Noise Receptor Locations

Illinois Department of Transportation

Noise Analysis Report
US Route 34
Henderson County, Illinois

3/5/2018



Legend

- Alt. 2 Proposed ROW
- Alt. 5 Proposed ROW
- Alt. 6 Proposed ROW
- Alt. 2 Proposed Pavement
- Alt. 5 Proposed Pavement
- Alt. 6 Proposed Pavement
- Noise Receptor

0 200 400 800

Feet

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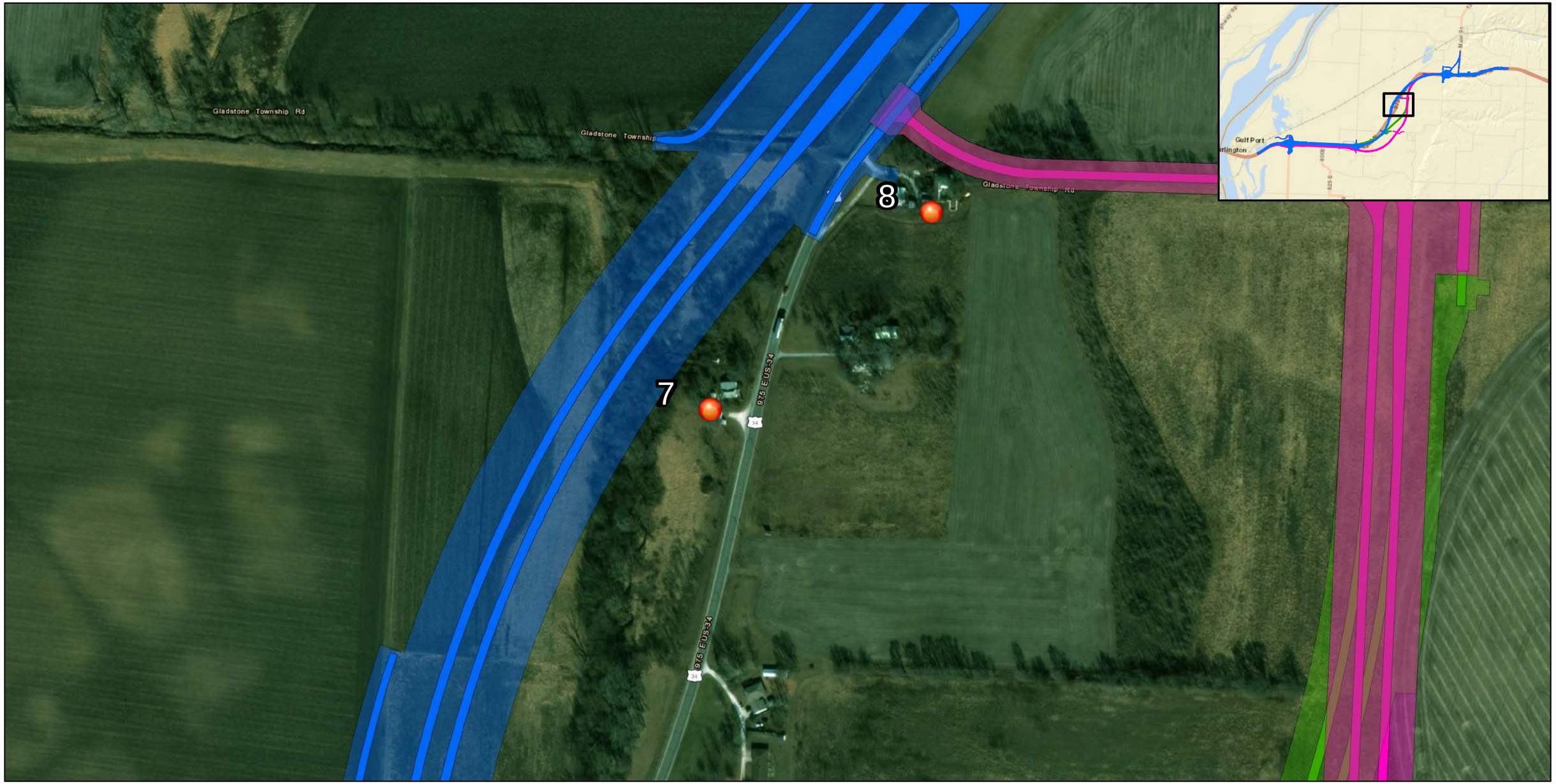
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Figure A3
Noise Receptor Locations

Noise Analysis Report
US Route 34
Henderson County, Illinois

3/5/2018



Legend

- Alt. 2 Proposed ROW
- Alt. 5 Proposed ROW
- Alt. 6 Proposed ROW
- Alt. 2 Proposed Pavement
- Alt. 5 Proposed Pavement
- Alt. 6 Proposed Pavement
- Noise Receptor

0 200 400 800

Feet

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Figure A4
Noise Receptor Locations

Noise Analysis Report
US Route 34
Henderson County, Illinois

Illinois Department of Transportation

3/5/2018



Legend

- Alt. 2 Proposed ROW
- Alt. 5 & Alt. 6 Proposed ROW
- Alt. 2 Proposed Pavement
- Alt. 5 & Alt. 6 Proposed Pavement
- Noise Receptor

0 200 400 800

Feet

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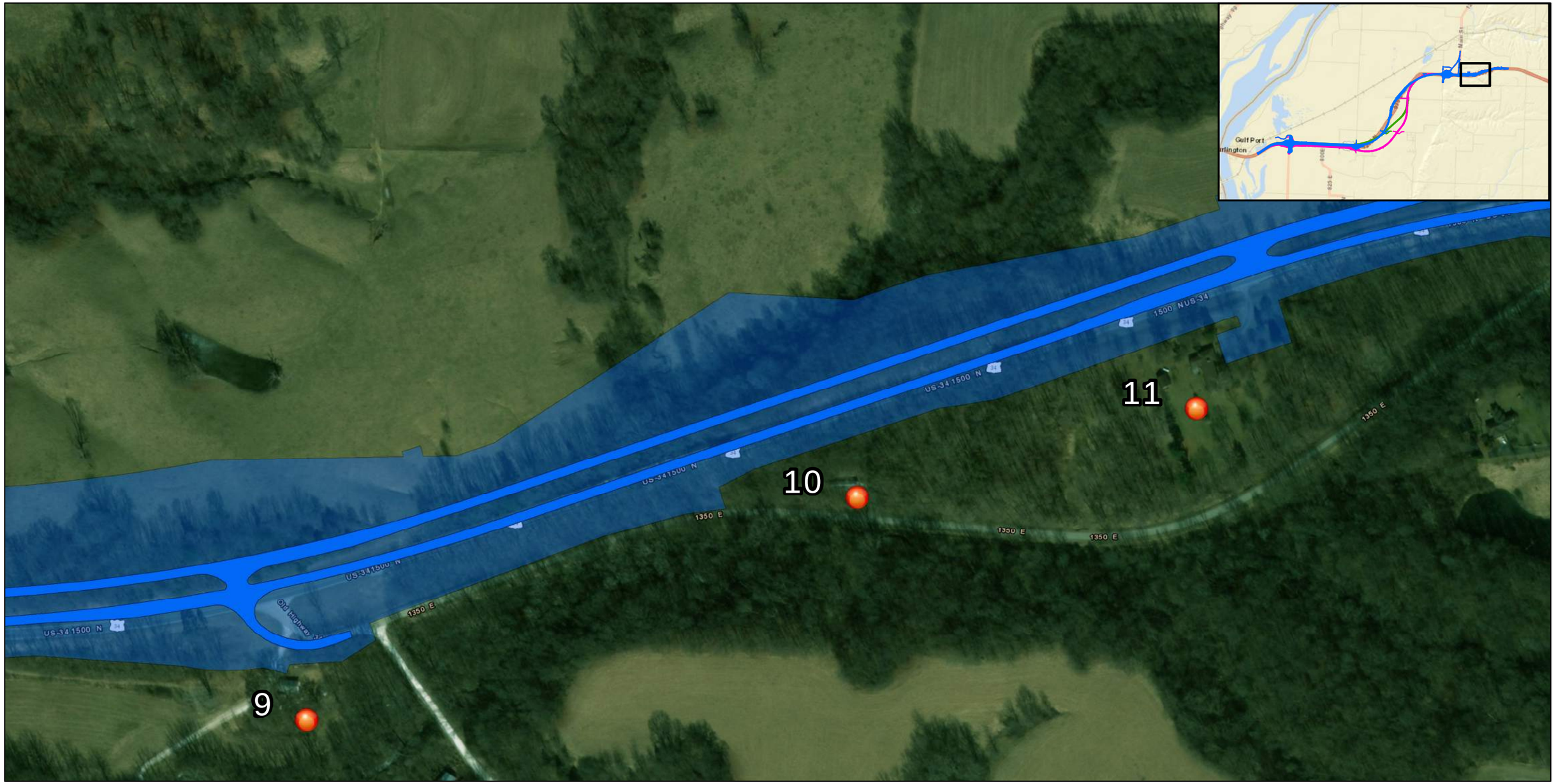
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Figure A5
Noise Receptor Locations

Noise Analysis Report
US Route 34
Henderson County, Illinois

3/5/2018



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Legend

- Proposed ROW (All Alts.)
- Proposed Pavement (All Alts.)
- Noise Receptor

0 200 400 800

Feet

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Figure A6
Noise Receptor Locations

Noise Analysis Report
US Route 34
Henderson County, Illinois

3/5/2018



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Legend

- Proposed ROW (All Alts.)
- Proposed Pavement (All Alts.)
- Noise Receptor

0 200 400 800

Feet

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Figure A7
Noise Receptor Locations

Noise Analysis Report
US Route 34
Henderson County, Illinois

3/5/2018

Appendix B
TNM Input and Output

Amec Foster Wheeler, Inc.
Richard Hart

20 April 2017
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 3202131337
RUN: US 34 Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Field 1	1	1	0.0	61.5	66	61.5	10	----	61.5	0.0	8	-8.0
Field 2	2	1	0.0	48.4	66	48.4	10	----	48.4	0.0	8	-8.0
Field 3	3	1	0.0	68.7	66	68.7	10	Snd Lvl	68.7	0.0	8	-8.0
Field 4	4	1	0.0	63.0	66	63.0	10	----	63.0	0.0	8	-8.0
Field 5	5	1	0.0	61.8	66	61.8	10	----	61.8	0.0	8	-8.0
Modeled 1	7	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
Modeled 2	8	1	0.0	68.1	66	68.1	10	Snd Lvl	68.1	0.0	8	-8.0
Modeled 3	9	1	0.0	48.8	66	48.8	10	----	48.8	0.0	8	-8.0
Modeled 4	10	1	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0
Modeled 5	11	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
Modeled 6	12	1	0.0	53.9	66	53.9	10	----	53.9	0.0	8	-8.0
Modeled 7	13	1	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
Modeled 8	14	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
Modeled 9	15	1	0.0	59.5	66	59.5	10	----	59.5	0.0	8	-8.0
Modeled 10	16	1	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0
Modeled 11	17	1	0.0	61.2	66	61.2	10	----	61.2	0.0	8	-8.0
Modeled 12	18	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
Modeled 13	19	1	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	8	-8.0
Modeled 3A	20	1	0.0	53.1	66	53.1	10	----	53.1	0.0	8	-8.0
Modeled 4A	21	1	0.0	63.1	66	63.1	10	----	63.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB

All Selected	20	0.0	0.0	0.0
All Impacted	5	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Amec Foster Wheeler, Inc.
Richard Hart

20 April 2017
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 3202131337
RUN: US 34 No-Build
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Field 1	1	1	61.5	62.9	66	1.4	10	----	62.9	0.0	8	-8.0
Field 2	2	1	48.5	49.8	66	1.3	10	----	49.8	0.0	8	-8.0
Field 3	3	1	68.7	70.1	66	1.4	10	Snd Lvl	70.1	0.0	8	-8.0
Field 4	4	1	63.0	65.0	66	2.0	10	----	65.0	0.0	8	-8.0
Field 5	5	1	61.8	63.1	66	1.3	10	----	63.1	0.0	8	-8.0
Modeled 1	7	1	64.3	65.7	66	1.4	10	----	65.7	0.0	8	-8.0
Modeled 2	8	1	68.1	69.5	66	1.4	10	Snd Lvl	69.5	0.0	8	-8.0
Modeled 3	9	1	48.8	50.2	66	1.4	10	----	50.2	0.0	8	-8.0
Modeled 4	10	1	69.4	70.8	66	1.4	10	Snd Lvl	70.8	0.0	8	-8.0
Modeled 5	11	1	67.8	69.2	66	1.4	10	Snd Lvl	69.2	0.0	8	-8.0
Modeled 6	12	1	53.9	55.3	66	1.4	10	----	55.3	0.0	8	-8.0
Modeled 7	13	1	63.8	65.2	66	1.4	10	----	65.2	0.0	8	-8.0
Modeled 8	14	1	65.7	67.1	66	1.4	10	Snd Lvl	67.1	0.0	8	-8.0
Modeled 9	15	1	59.5	60.9	66	1.4	10	----	60.9	0.0	8	-8.0
Modeled 10	16	1	62.7	64.1	66	1.4	10	----	64.1	0.0	8	-8.0
Modeled 11	17	1	61.2	62.5	66	1.3	10	----	62.5	0.0	8	-8.0
Modeled 12	18	1	64.2	65.6	66	1.4	10	----	65.6	0.0	8	-8.0
Modeled 13	19	1	67.9	69.3	66	1.4	10	Snd Lvl	69.3	0.0	8	-8.0
Modeled 3A	20	1	53.1	54.4	66	1.3	10	----	54.4	0.0	8	-8.0
Modeled 4A	21	1	63.1	64.5	66	1.4	10	----	64.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB

All Selected	20	0.0	0.0	0.0
All Impacted	6	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Amec Foster Wheeler
RCHart

20 April 2017
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 3202131337
RUN: US 34 Illinois Alt 2 Proposed
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Field 1	1	1	61.3	56.3	66	-5.0	10	----	56.3	0.0	8	-8.0
Field 2	3	1	48.2	49.4	66	1.2	10	----	49.4	0.0	8	-8.0
Field 3	5	1	68.4	59.9	66	-8.5	10	----	59.9	0.0	8	-8.0
Field 4	6	1	63.0	54.2	66	-8.8	10	----	54.2	0.0	8	-8.0
Field 5	7	1	61.6	62.4	66	0.8	10	----	62.4	0.0	8	-8.0
Modeled 1	8	1	64.1	57.1	66	-7.0	10	----	57.1	0.0	8	-8.0
Modeled 2	9	1	67.8	58.9	66	-8.9	10	----	58.9	0.0	8	-8.0
Modeled 3	10	1	48.7	49.7	66	1.0	10	----	49.7	0.0	8	-8.0
Modeled 4	11	1	69.1	75.7	66	6.6	10	Snd Lvl	75.7	0.0	8	-8.0
Modeled 5	12	1	67.5	59.6	66	-7.9	10	----	59.6	0.0	8	-8.0
Modeled 6	13	1	53.8	59.7	66	5.9	10	----	59.7	0.0	8	-8.0
Modeled 7	14	1	63.6	65.0	66	1.4	10	----	65.0	0.0	8	-8.0
Modeled 8	15	1	65.4	60.8	66	-4.6	10	----	60.8	0.0	8	-8.0
Modeled 9	16	1	59.3	58.9	66	-0.4	10	----	58.9	0.0	8	-8.0
Modeled 10	17	1	62.5	62.6	66	0.1	10	----	62.6	0.0	8	-8.0
Modeled 11	18	1	61.0	61.0	66	0.0	10	----	61.0	0.0	8	-8.0
Modeled 12	19	1	64.0	64.3	66	0.3	10	----	64.3	0.0	8	-8.0
Modeled 13	20	1	67.6	63.7	66	-3.9	10	----	63.7	0.0	8	-8.0
Modeled 3A	22	1	53.1	51.6	66	-1.5	10	----	51.6	0.0	8	-8.0
Modeled 4A	23	1	63.1	60.9	66	-2.2	10	----	60.9	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB

All Selected	20	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Amec Foster Wheeler, Inc.
RCHart

20 April 2017
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 3202131337
RUN: US 34 Alt 5
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Field 1	1	1	61.3	57.9	66	-3.4	10	----	57.9	0.0	8	-8.0
Field 2	2	1	48.2	69.0	66	20.8	10	Both	69.0	0.0	8	-8.0
Field 3	3	1	68.4	48.8	66	-19.6	10	----	48.8	0.0	8	-8.0
Field 4	4	1	63.0	46.9	66	-16.1	10	----	46.9	0.0	8	-8.0
Field 5	5	1	61.6	62.3	66	0.7	10	----	62.3	0.0	8	-8.0
Modeled 1	6	1	64.1	56.6	66	-7.5	10	----	56.6	0.0	8	-8.0
Modeled 2	7	1	67.8	53.9	66	-13.9	10	----	53.9	0.0	8	-8.0
Modeled 3	8	1	48.7	66.1	66	17.4	10	Both	66.1	0.0	8	-8.0
Modeled 4	9	1	69.1	49.3	66	-19.8	10	----	49.3	0.0	8	-8.0
Modeled 5	10	1	67.5	48.8	66	-18.7	10	----	48.8	0.0	8	-8.0
Modeled 6	11	1	53.8	46.8	66	-7.0	10	----	46.8	0.0	8	-8.0
Modeled 7	12	1	63.6	46.1	66	-17.5	10	----	46.1	0.0	8	-8.0
Modeled 8	13	1	65.4	48.6	66	-16.8	10	----	48.6	0.0	8	-8.0
Modeled 9	14	1	59.3	58.8	66	-0.5	10	----	58.8	0.0	8	-8.0
Modeled 10	15	1	62.5	62.8	66	0.3	10	----	62.8	0.0	8	-8.0
Modeled 11	16	1	61.0	60.9	66	-0.1	10	----	60.9	0.0	8	-8.0
Modeled 12	17	1	64.0	64.4	66	0.4	10	----	64.4	0.0	8	-8.0
Modeled 13	18	1	67.6	56.5	66	-11.1	10	----	56.5	0.0	8	-8.0
Modeled 3A	19	1	53.1	63.3	66	10.2	10	Sub'l Inc	63.3	0.0	8	-8.0
Modeled 4A	20	1	63.1	51.2	66	-11.9	10	----	51.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB

All Selected	20	0.0	0.0	0.0
All Impacted	3	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Amec Foster Wheeler, Inc.
RCHart

8 July 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 3202131337
RUN: US 34 Illinois Alt 6
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Field 1	1	1	61.3	54.2	66	-7.1	10	----	54.2	0.0	8	-8.0
Field 2	3	1	48.2	47.5	66	-0.7	10	----	47.5	0.0	8	-8.0
Field 3	4	1	68.4	65.3	66	-3.1	10	----	65.3	0.0	8	-8.0
Field 4	5	1	63.0	48.3	66	-14.7	10	----	48.3	0.0	8	-8.0
Field 5	6	1	61.6	62.4	66	0.8	10	----	62.4	0.0	8	-8.0
Modeled 1	7	1	64.1	54.6	66	-9.5	10	----	54.6	0.0	8	-8.0
Modeled 2	8	1	67.8	55.4	66	-12.4	10	----	55.4	0.0	8	-8.0
Modeled 3	9	1	48.7	47.7	66	-1.0	10	----	47.7	0.0	8	-8.0
Modeled 4	10	1	69.1	62.3	66	-6.8	10	----	62.3	0.0	8	-8.0
Modeled 5	11	1	67.5	64.4	66	-3.1	10	----	64.4	0.0	8	-8.0
Modeled 6	12	1	53.8	59.5	66	5.7	10	----	59.5	0.0	8	-8.0
Modeled 7	13	1	63.6	46.5	66	-17.1	10	----	46.5	0.0	8	-8.0
Modeled 8	14	1	65.4	48.5	66	-16.9	10	----	48.5	0.0	8	-8.0
Modeled 9	15	1	59.3	58.8	66	-0.5	10	----	58.8	0.0	8	-8.0
Modeled 10	16	1	62.5	62.6	66	0.1	10	----	62.6	0.0	8	-8.0
Modeled 11	17	1	61.0	61.0	66	0.0	10	----	61.0	0.0	8	-8.0
Modeled 12	18	1	64.0	64.3	66	0.3	10	----	64.3	0.0	8	-8.0
Modeled 13	19	1	67.6	56.4	66	-11.2	10	----	56.4	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	18	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0

All that meet NR Goal	0	0.0	0.0	0.0

Appendix C
Field Data Sheets and Model Validation Results

	Difference	Afternoon	TNM 2.5	Morning	Difference
Field 1	-2.2	59.3	61.5	61.6	0.1
Field 2	-1.2	47.2	48.4	46.9	-1.5
Field 3	-1.6	67.1	68.7	65.8	-2.9
Field 4	-2.7	60.3	63.0	62.3	-0.7
Field 5	-0.3	61.5	61.8	60.4	-1.4

FA01297

Certificate of Conformity and Calibration

CASELLA CEL

Instrument Model: CEL-120/1 Acoustic Calibrator
Serial Number: 4839927

Certificate #: 67365



Calibration References:

Casella CEL hereby certifies that the above listed sound measuring instrument has been tested according to the manufacturer's specifications and meets the requirements of the relevant American National Standards Institute (ANSI) Standard for Sound Calibrators S1.40 - 1983 (R1997). This instrument was calibrated against standards which are either traceable to the National Institute of Standards and Technology (NIST) or they have been derived by approved ratio techniques.

Test Conditions:

22.5 °C
71.9 %RH
1000.3 mBar

Date of Issue:- February 9, 2016
Due Date:- February 9, 2017
Service Engineer:- Ken Umbeer

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9001:2008 quality procedures. This product is certified as being compliant to the requirements of the CE Directive. Test accuracy ratio (TAR) ≥1.

Summary:

The data represents the response of the sound level meter calibrator to the reference source corrected for atmospheric conditions at the time of calibration.

	Nominal Value	Tolerance	As Received	As Adjusted
Frequency (Hz)	1000.0	±5.0	1000.0	1000.0
Level (dB)	114.0	±0.3	114.0	114.0
Level (dB)	94.0	±0.3	94.0	94.0

Standards Used in Calibration:		Serial Number	Calibration Due Date	Certificate Number
Sound Level Meter:	CEL-620.A1	5130002	1/22/2017	26119-2
Multimeter:	Fluke 45	4995184	1/26/2017	1276921

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FA01297

CASELLA

Certificate of Conformity and Calibration

Instrument Model:-	**CEL-633C**	**Preamplifier Type:-**	**CEL-495**
Serial Number	4637969	Serial Number	2088
Firmware revision	V129-09		
Microphone Type:-	**CEL-251**	As Received:-	114.0
Serial Number	256	As Adjusted:-	114.0
Instrument Class/Type:-	1		



Applicable standards:-

IEC 61672: 2002 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

Note:- *The test sequences performed in this report are in accordance with the current Sound level meter Standard - IEC61672. The combination of tests performed are considered to confirm the products electro-acoustic performance to all applicable standards including superceeded Sound Level Meter Standards - IEC60651 and IEC60804.*

Test Conditions:-	22.5 °C	**Test Engineer:-**	Ken Umbeer
	71.9 %RH	**Date of Issue:-**	February 9, 2016
	1000.3 mBar	**Date Due:-**	February 9, 2017

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to NIST in accordance with Casella's ISO 9001:2008 quality procedures. This product is certified as being compliant to the requirements of the CE Directive.

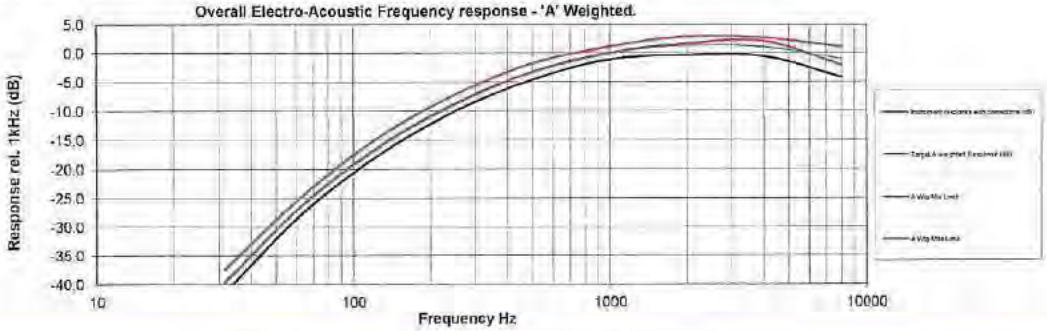
Test Summary:-

Self Generated Noise Test	**All Tests Pass**
Electrical Signal Test Of Frequency Weightings	**All Tests Pass**
Frequency & Time Weightings At 1 kHz	**All Tests Pass**
Level Linearity On The Reference Level Range	**All Tests Pass**
Toneburst Response Test	**All Tests Pass**
C-peak Sound Levels	**All Tests Pass**
Overload Indication	**All Tests Pass**
Acoustic Tests	**All Tests Pass**

Combined Electro-Acoustic Frequency Response - *A Weighted*

Combined Electro-Acoustic Frequency Response - A Weighted (IEC 61672-3:2006)

The following A-Weighted frequency response graph shows this instruments overall frequency response based upon the application of multi-frequency pressure field calibrations. The microphones Pressure to Free field correction coefficients are applied to pressure response. Reference level taken at 1kHz.



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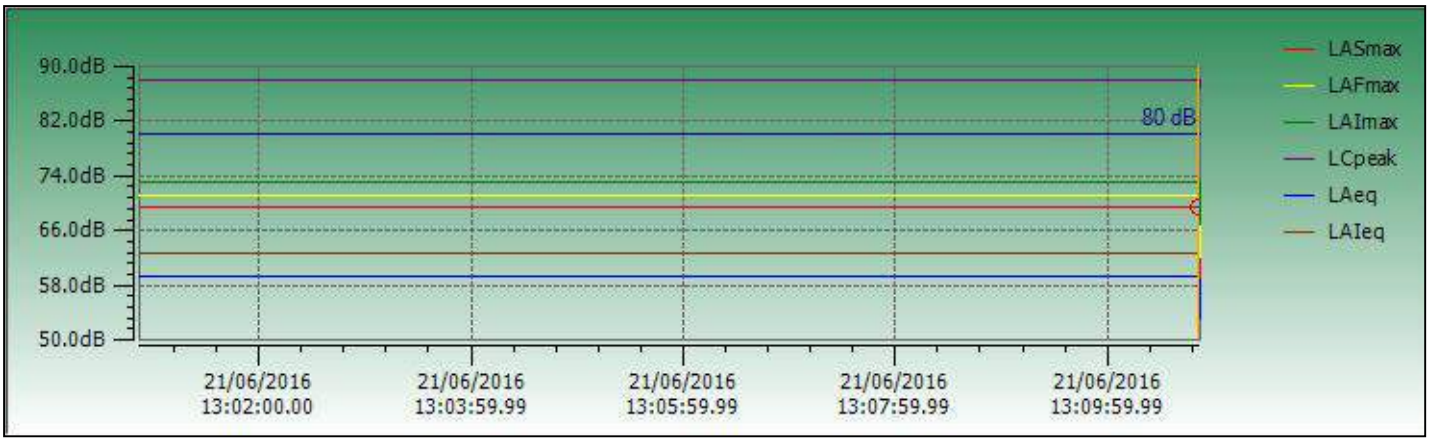
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Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633C**		
Site	Unallocated	Start Date & Time	6/21/2016 1:00:52 PM
LAeq	59.3 dB	End Date & Time	6/21/2016 1:11:05 PM
LAFmax	71.2 dB	Result	Cumulative
LAFmin	36.7 dB	Run Number	2
Person	Unallocated	Serial Number	4637969
Duration	00:10:13 HH:MM:SS		

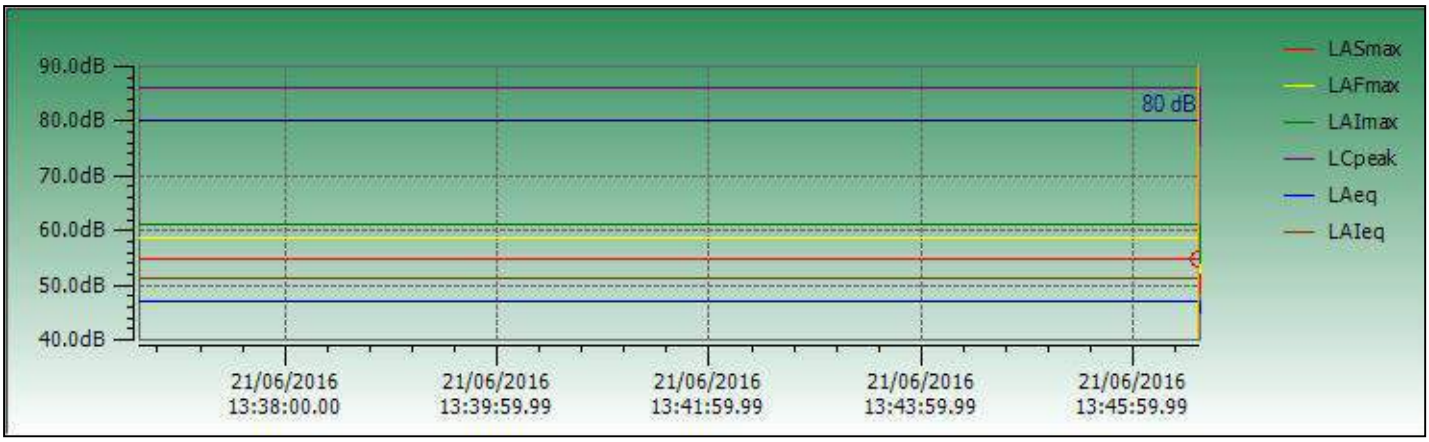


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Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633C**		
Site	Unallocated	Start Date & Time	6/21/2016 1:36:37 PM
LAeq	47.2 dB	End Date & Time	6/21/2016 1:46:43 PM
LAFmax	58.5 dB	Result	Cumulative
LAFmin	35.7 dB	Run Number	3
Person	Unallocated	Serial Number	4637969
Duration	00:10:06 HH:MM:SS		

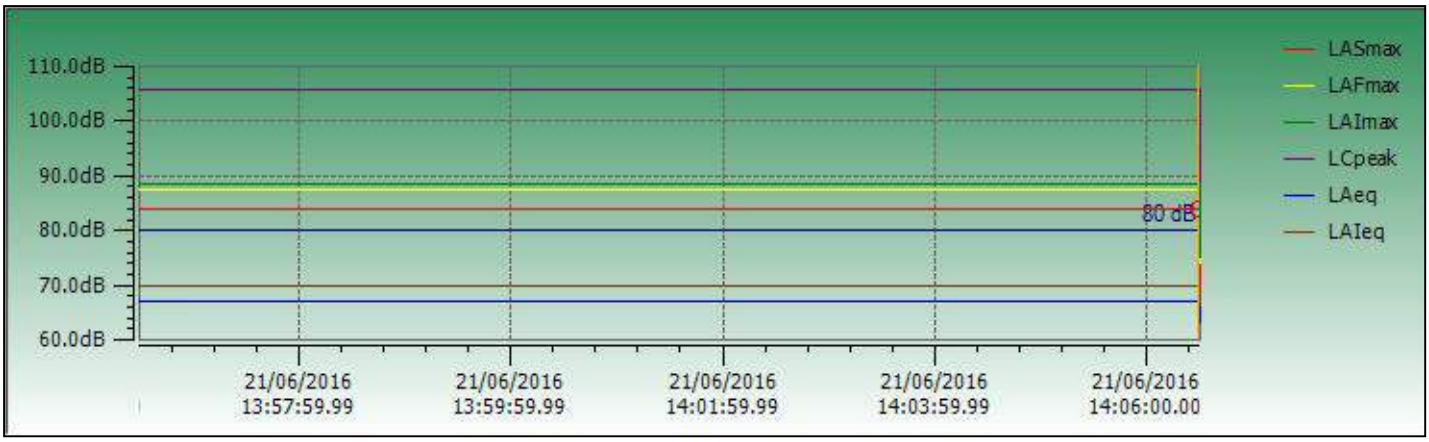


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Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633C**		
Site	Unallocated	Start Date & Time	6/21/2016 1:56:30 PM
LAeq	67.1 dB	End Date & Time	6/21/2016 2:06:36 PM
LAFmax	87.6 dB	Result	Cumulative
LAFmin	41.3 dB	Run Number	4
Person	Unallocated	Serial Number	4637969
Duration	00:10:06 HH:MM:SS		



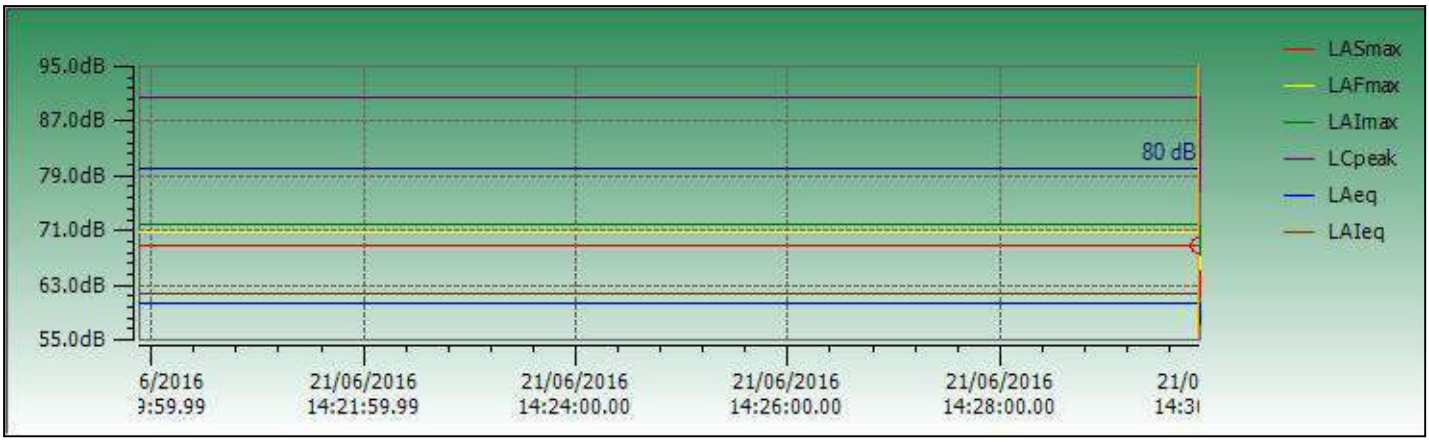
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Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633C**

Site	Unallocated	Start Date & Time	6/21/2016 2:19:53 PM
LAeq	60.3 dB	End Date & Time	6/21/2016 2:29:58 PM
LAFmax	70.9 dB	Result	Cumulative
LAFmin	44.3 dB	Run Number	5
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Duration	00:10:05 HH:MM:SS		

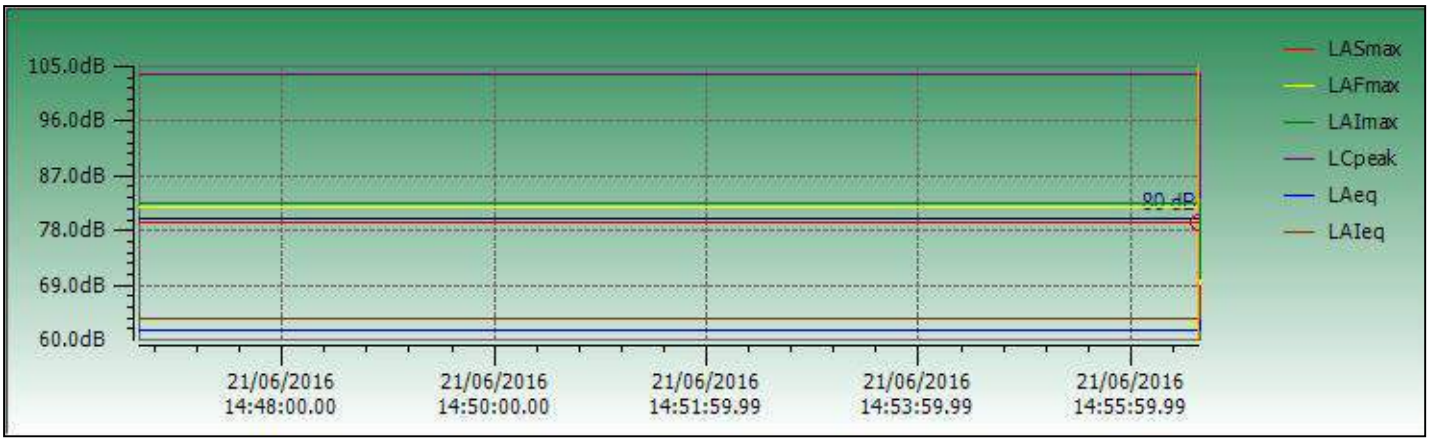


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Casella CEL Ltd.

Report On CEL-63X

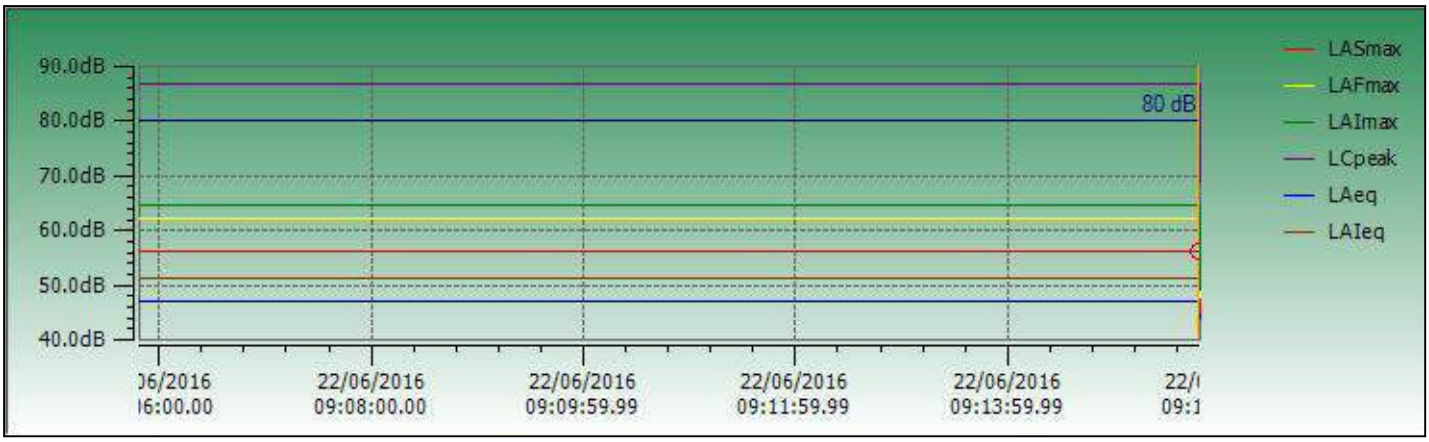
Instrument Model	**CEL-633C**		
Site	Unallocated	Start Date & Time	6/21/2016 2:46:39 PM
LAeq	61.5 dB	End Date & Time	6/21/2016 2:56:45 PM
LAFmax	82 dB	Result	Cumulative
LAFmin	32.3 dB	Run Number	6
Person	Unallocated	Serial Number	4637969
Duration	00:10:06 HH:MM:SS		



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Instrument Model	**CEL-633C**

Site	Unallocated	Start Date & Time	6/22/2016 9:05:48 AM
LAeq	46.9 dB	End Date & Time	6/22/2016 9:15:52 AM
LAFmax	62.1 dB	Result	Cumulative
LAFmin	37.4 dB	Run Number	7
Person	Unallocated	Serial Number	4637969
Duration	00:10:04 HH:MM:SS		

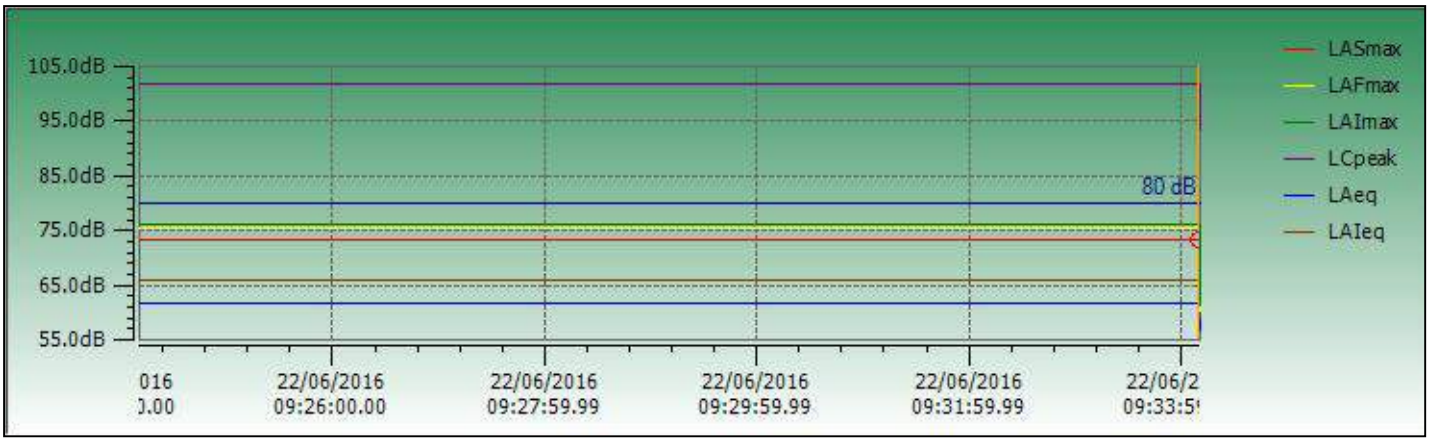


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Report On CEL-63X

Instrument Model	**CEL-633C**		
Site	Unallocated	Start Date & Time	6/22/2016 9:24:10 AM
LAeq	61.6 dB	End Date & Time	6/22/2016 9:34:14 AM
LAFmax	75.3 dB	Result	Cumulative
LAFmin	43 dB	Run Number	8
Person	Unallocated	Serial Number	4637969
Duration	00:10:04 HH:MM:SS		

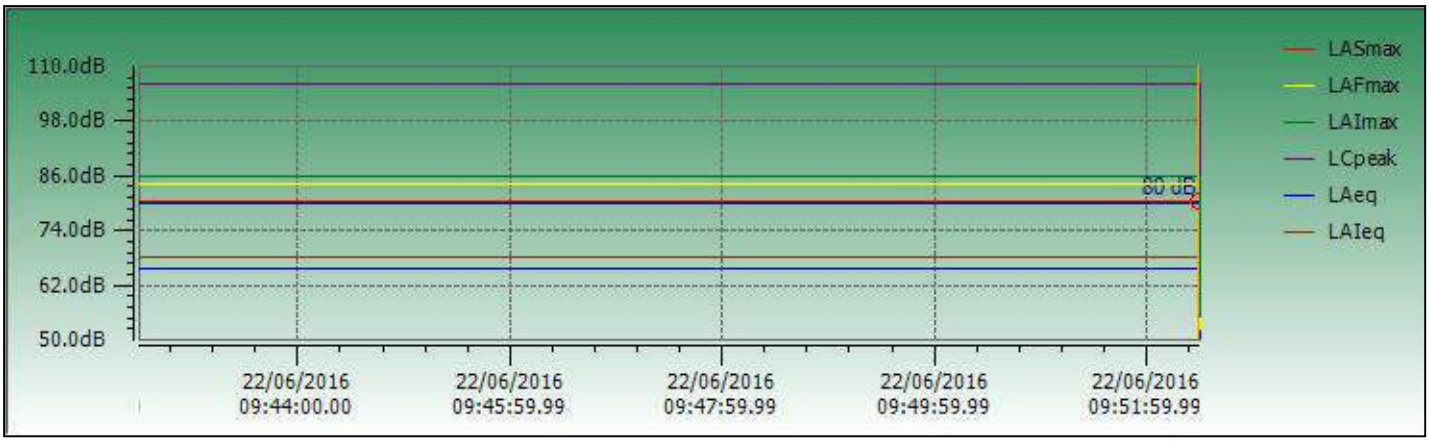


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Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633C**		
Site	Unallocated	Start Date & Time	6/22/2016 9:42:30 AM
LAeq	65.8 dB	End Date & Time	6/22/2016 9:52:32 AM
LAFmax	84.3 dB	Result	Cumulative
LAFmin	39.4 dB	Run Number	9
Person	Unallocated	Serial Number	4637969
Duration	00:10:02 HH:MM:SS		

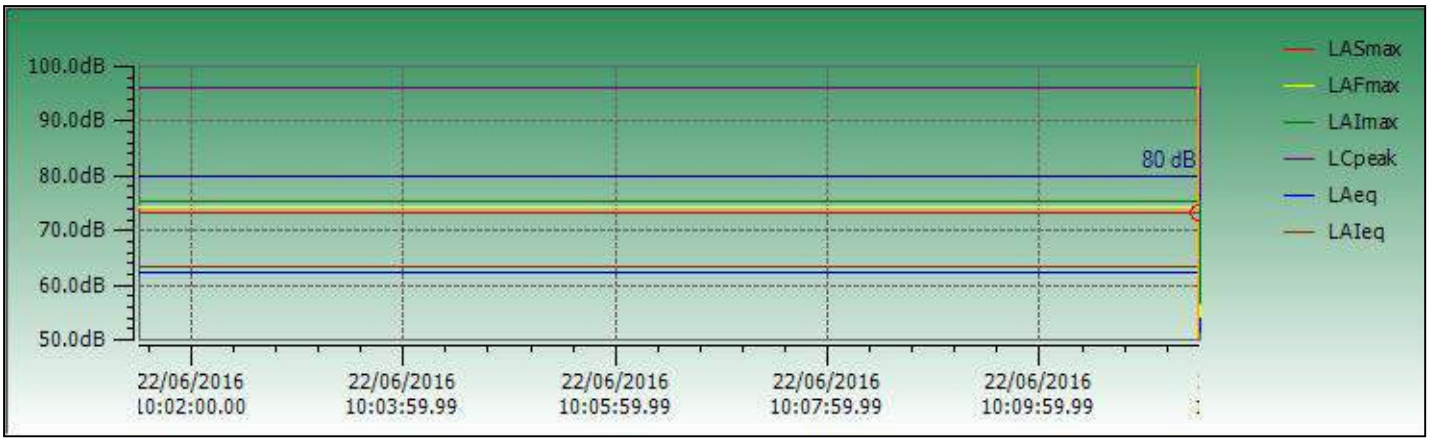


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Report On CEL-63X

Instrument Model	**CEL-633C**		
Site	Unallocated	Start Date & Time	6/22/2016 10:01:30 AM
LAeq	62.3 dB	End Date & Time	6/22/2016 10:11:32 AM
LAFmax	74.4 dB	Result	Cumulative
LAFmin	45.7 dB	Run Number	10
Person	Unallocated	Serial Number	4637969
Duration	00:10:02 HH:MM:SS		

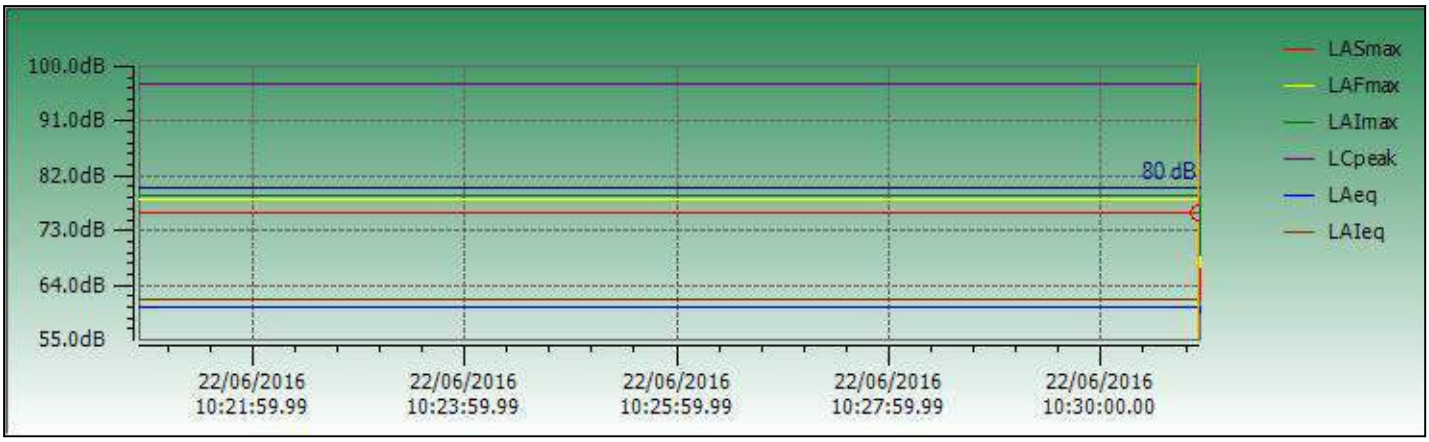


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Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633C**		
Site	Unallocated	Start Date & Time	6/22/2016 10:20:56 AM
LAeq	60.4 dB	End Date & Time	6/22/2016 10:30:59 AM
LAFmax	78.1 dB	Result	Cumulative
LAFmin	42.7 dB	Run Number	11
Person	Unallocated	Serial Number	4637969
Duration	00:10:03 HH:MM:SS		



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$T = R \tan \frac{1}{2} I$

$T = \frac{50 \tan \frac{1}{2} I}{\text{Sin. } \frac{1}{2} D}$

$\text{Sin. } \frac{1}{2}D = \frac{50}{R}$

$\text{Sin. } \frac{1}{2}D = \frac{50 \tan \frac{1}{2} I}{T}$

$R = T \cot \frac{1}{2} I$

$R = \frac{50}{\text{Sin. } \frac{1}{2} D}$

$E = R \text{ ex. sec } \frac{1}{2} I$

$E = T \tan \frac{1}{4} I$

$\text{Chord def.} = \frac{\text{chord}^2}{R}$

$\text{No. chords} = \frac{I}{D}$

$\text{Tan. def.} = \frac{1}{2} \text{ chord def.}$

The square of any distance, divided by twice the radius, will equal the distance from tangent to curve, very nearly.

To find angle for a given distance and deflection.

Rule 1. Multiply the given distance by .01745 (def. for 1° for 1 ft.) and divide given deflection by the product.

Rule 2. Multiply given deflection by 57.3, and divide the product by the given distance.

To find deflection for a given angle and distance. Multiply the angle by .01745, and the product by the distance.

GENERAL DATA

Right Angle Triangles. Square the altitude, divide by twice the base. Add quotient to base for hypotenuse.

Given Base 100, Alt. $10.10^2 \div 200 = .5$. $100 + .5 = 100.5$ hyp.

Given Hyp. 100, Alt. $25.25^2 \div 200 = 3.125$. $100 - 3.125 = 96.875$ = Base.

Error in first example, .002; in last, .045.

To find Tons of Rail in one mile of track: multiply weight per yard by 11, and divide by 7.

Leveling. The correction for curvature and refraction, in feet and decimals of feet is equal to $0.574\ d^2$, where d is the distance in miles. The correction for curvature alone is closely, $\frac{2}{3}d^2$. The combined correction is negative.

Probable Error. If d_1, d_2, d_3, etc. are the discrepancies of various results from the mean, and if Σd^2 = the sum of the squares of these differences and n = the number of observations, then the probable error of the mean = $\pm 0.6745 \sqrt{\frac{\Sigma d^2}{n(n-1)}}$

MINUTES IN DECIMALS OF A DEGREE

1'	.0167	11'	.1833	21'	.3500	31'	.5167	41'	.6833	51'	.8500
2	.0333	12	.2000	22	.3667	32	.5333	42	.7000	52	.8667
3	.0500	13	.2167	23	.3833	33	.5500	43	.7167	53	.8833
4	.0667	14	.2333	24	.4000	34	.5667	44	.7333	54	.9000
5	.0833	15	.2500	25	.4167	35	.5833	45	.7500	55	.9167
6	.1000	16	.2667	26	.4333	36	.6000	46	.7667	56	.9333
7	.1167	17	.2833	27	.4500	37	.6167	47	.7833	57	.9500
8	.1333	18	.3000	28	.4667	38	.6333	48	.8000	58	.9667
9	.1500	19	.3167	29	.4833	39	.6500	49	.8167	59	.9833
10	.1667	20	.3333	30	.5000	40	.6667	50	.8333	60	1.0000

INCHES IN DECIMALS OF A FOOT

1/16	3/32	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	7/8
.0052	.0078	.0104	.0156	.0208	.0260	.0313	.0417	.0521	.0625	.0729

1	2	3	4	5	6	7	8	9	10	11
.0833	.1667	.2500	.3333	.4167	.5000	.5833	.6667	.7500	.8333	.9167

Elan Publishing Co., Inc. Meredith, N.H. 03253

Sunny 80° 6-21-16

(1) South wind 2 Smph

RR#1 Box 183

Cars	Trucks	Buses
57	14	2

59.3dBA

(2) Mail Maps to:

47.2dBA

Larry Thompson
RR #1 Box 172
Gladstone, IL. 61437

Cars	Trucks
2	0

158 FORD ROUNDS

(3) CARS 52 | MOTOR CYCLE 1 | TRUCKS 20

67.1 dBA DOG BARKING 1st 5 min

(4) RR#1 Box 143

CARS 57 | TRUCKS 14

60.3 dBA

(5) 61.5 dBA McGEAN RR4 Box 172

CARS 42 | TRUCKS 28

RR 1 Box 13A

6-22-2016

WIND 9 MPH CLOUDY 70°

#6 RR#1 Box 172 46.9 dBA

CARS 1 TRUCKS 0

#7 ~~[illegible]~~ RR#1 Box 183

CARS 55 TRUCKS 11 61.6dBA

#8 158 FORD RANDS

CARS 38 TRUCKS 12 65.8 dBA

#9 RR#1 Box 143

CARS 33 TRUCKS ~~13~~ 14 62.3dBA

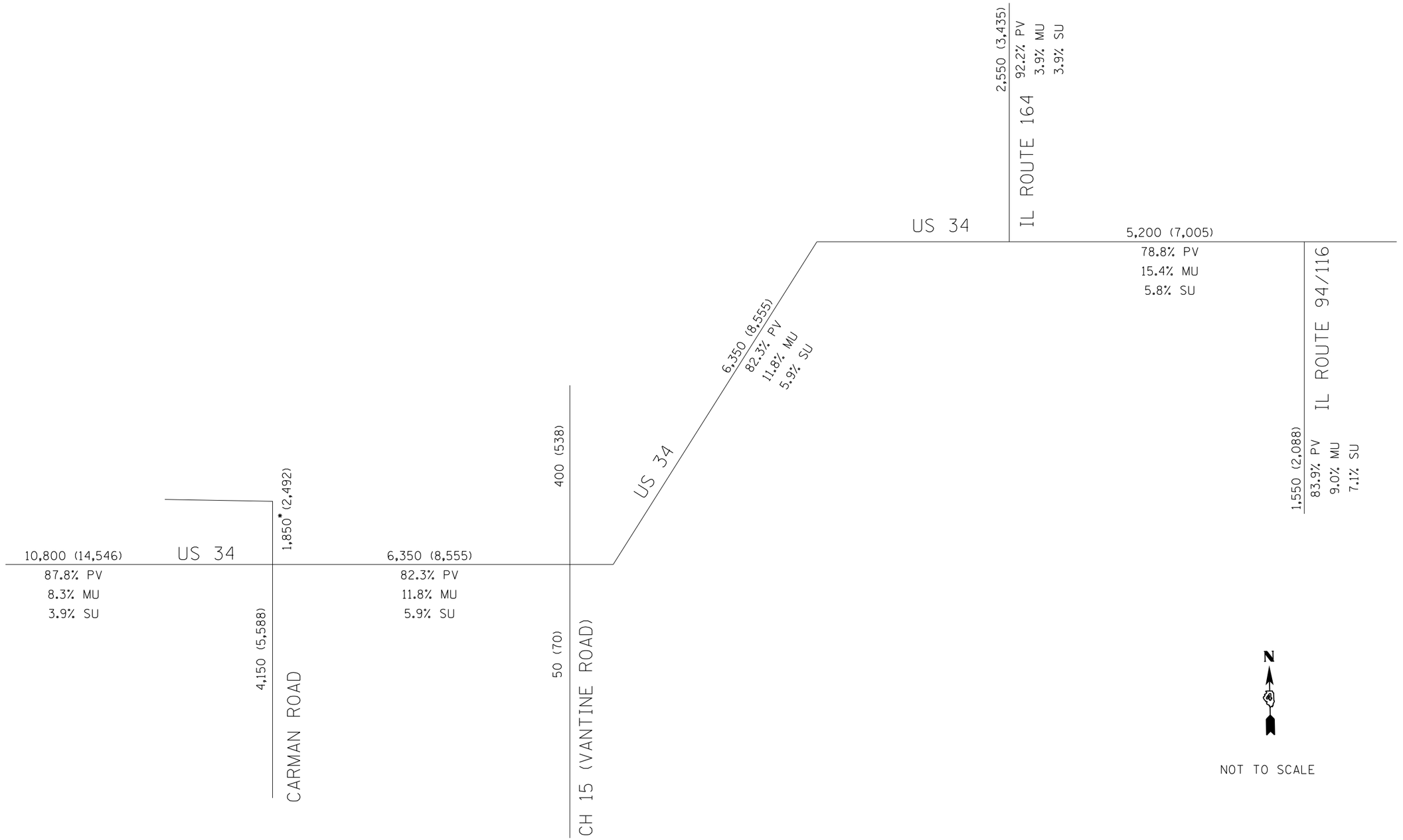
AIR CONDITIONER

#10 McGRAW RR#1 Box 134

CARS TRUCKS

36 14

60.4 dBA



NOT TO SCALE

CONSTRUCTION YEAR = 2020

DESIGN YEAR = 2040

2020 ADT (2040 ADT)

* FROM IDOT GIS TRAFFIC MAPS

FILE NAME = S:\Projects\2013 JOBS\13-19 AMEC PTB 167-026 D4 Ph I US 34\CADD\CADD Sheets\D412345 - Projected Traffic Data ADT.dgn
MODEL = Default
PLOT DRIVER = IDOT_BW.plotcfg

QUIGG ENGINEERING INC

USER NAME = mvail	DESIGNED -	REVISED -
FILE NAME = D412345 - Projected Traffic Data ADT.dgn	DRAWN -	REVISED -
PLOT SCALE = 3599.996148 ' / in.	CHECKED -	REVISED -
PLOT DATE = 11/12/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

U.S. ROUTE 34
AVERAGE DAILY TRAFFIC

SCALE: NTS | SHEET NO. OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		HENDERSON		
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

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Appendix F

Illinois State Historic Preservation Office – Correspondence

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Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

RECEIVED
JUL - 3 2019
PRESERVATION SERVICES

IHPA REVIEW
H/A A-7/24/19
AC
AR
File HEI IDOT

July 3, 2019

Henderson County
FAP 313, US 34
Gulfport to Gladstone
Preferred Alternative
Highway Construction
IDOT Sequence #238D
ISAS Log #16245
SHPO Log #008060915

FEDERAL – SECTION 106 PROJECT

Historic Architectural Resources APE and Identification – Continued Consultation

Mr. Robert F. Appleman
Deputy State Historic Preservation Officer
Illinois Department of Natural Resources
Illinois State Historic Preservation Office
1 Natural Resources Way
Springfield, Illinois 62702

Dear Mr. Appleman:

In continuing coordination with the Federal Highway Administration (FHWA) and your office for the above referenced undertaking, the Illinois Department of Transportation (IDOT) proposes to extend highway US 34 west to Gulfport in Henderson County. The preferred alignment (Alternate 2) has been selected. Please note, May 3, 2019 IDOT submitted to your office the historic architectural survey report completed by Illinois State Archaeological Survey (ISAS) architectural history staff for the Area of Potential Effect (APE) for the preferred alignment.

Your office in a letter dated May 23, 2019 requested an assessment of US Route 34 as a potential historic resource. The attached IDOT memo documents our analysis of the National Register of Historic Places (NRHP) eligible of this federal highway. The US Route 34 is not eligible for the NRHP because it is a modern highway with no associations beyond being part of the federal highway system (see attached memo for details).

The previously submitted ISAS report provides the results of the historic resources inventory, including definition of the APE, methodology, inventory table, photographs, and APE maps showing the inventoried resources. No NRHP listed or determined eligible resources are located in the project vicinity. Within the APE for the preferred alignment, ISAS identified 6 historic architectural resources that warrant consideration for listing on the NRHP:

1) Sunset Hunting and Fishing Camp, east of Orchard City lake, Carman (Survey ID 5)
2) Farmstead at 750 IL Route 34, Gladstone (Survey ID 6)

3) Farmstead at 907 Township Road 1225N, Gladstone (Survey ID 11)
4) Motel Complex at 967 & 968 US Route 34, Gladstone (Survey IDs 31/32)
5) Barn on property at 1375 Township Road 1450N, Gladstone (Survey ID 52)
6) Farmstead at 1337 Galbraith Road, Gladstone (Survey ID 55)

In coordination with the FHWA, IDOT requests the concurrence of the State Historic Preservation Office in our determination that the above listed 6 historic resources warrant NRHP consideration and that the remaining 65 historic resources are not eligible for listing on the NRHP, in addition to US Route 34.

The historic resources that warrant NRHP consideration will be treated as NRHP eligible historic properties for this project, and therefore are subject to protection under Section 106 of the National Historic Preservation Act of 1966. Assessments of the undertaking's effect to the historic properties in the APE for the chosen alternative will be completed and coordinated with your office during the next phase of this project.

In accordance with 36 CFR Part 800.3(c)(4), the FHWA will proceed to the next step in the Section 106 process if we do not receive a written response from your office within 30 days.

Sincerely,

Brad Koldehoff

Brad H. Koldehoff
Cultural Resources Unit
Bureau of Design & Environment

BK:br

Enclosures

CONCUR

By: Robert Appleman
Deputy State Historic Preservation Officer

Date: 7/29/19

Illinois Department of Transportation

Memorandum

To:	Brad H. Koldehoff
From:	Elizabeth L. Roman, IDOT Architectural Historian
Subject:	US 34, Gulfport to Gladstone – Assessment of Effects to Above-Ground/ Architectural Historic Resources
Date:	November 21, 2019

Henderson County
FAP 313, US 34 (Gulfport to Gladstone)
Highway Construction
IDOT Sequence #238D
SHPO Log #008060915

Introduction and Project Description:

This undertaking involves improvements to US 34 in Henderson County. US 34 both east and west of this undertaking is a four-lane divided highway, with both at-grade crossings and interchanges. This undertaking will link Carman Road near Gulfport to Township Road 111 near Gladstone. IDOT first proposed improvements to this section US 34 in 2000, with the EIS approved in August 2003. Since that time, the alternatives have been reconsidered, with three carried forward for further study in February 2016 and the preferred alternative chosen in January 2019.

This project (IDOT Sequence # 238D) represents the final layout of the preferred alternative for the project. As shown on the attached maps and typical cross-sections, its design involves both new road alignments and widening of existing road sections, two interchanges, and improvements to adjacent roadways as needed to connect with the new highway. Approximately 1.3 miles of existing four-lane divided highway to east of Carman Road will be reconstructed to connect with the new interchange. IL 164 will be realigned to its west for the new interchange with US 34. The new highway will be built on earthen berms, and not structurally elevated excepting where needed to cross waterways. The berm heights are greater where the alignment is within the 500-year floodplain.

The historic architectural studies conducted for this project were out of date, and the alternatives had shifted sufficiently to warrant new surveys. In support of the NEPA analysis, a database review and reconnaissance-level historic resources survey were conducted in 2017. Access to many properties was not available, so a full survey with results coordinated with the SHPO was not possible. The results of this work were utilized in the analysis of alternatives carried forward and selection of the preferred alternative. Complete historic resources identification survey per 36 CFR

800.4 was completed for the preferred alternative and coordinated with the SHPO in 2019. No other parties expressed interest in architectural historic properties or requested to be consulting parties.

Area of Potential Effect (APE):

As stipulated in 36 CFR 800.16(d), the APE is defined as the geographic area within which an undertaking may directly or indirectly cause changes in the character or use of historic properties. The APE for historic architectural resources was defined as a 0.25-mile buffer extending to either side of the centerline of the preferred alternative along the entire project corridor to encompass any properties immediately adjacent to the proposed work. Any parcel that extended into the APE was considered as falling within the APE and was included in the historic resource inventory/survey for this project.

The APE for historic architectural resources used for this study was coordinated with the IL SHPO in the Historic Resources Inventory Report (ISAS 2019), with concurrence received on May 23, 2019.

Historic Properties in the APE:

An historic resources inventory survey was completed for this project between August 2017 and December 2018 by ISAS, with additional resource evaluation completed by BDE in July 2019. The methodology employed and results of this effort are fully detailed in the following two documents: ***Historic Resources Identification Report, US 34, Gladstone to Gulfport – Preferred Alternative, Henderson County, Illinois***, M. E. Smith et. al., ISAS, April 2019; and *IDOT Memorandum* ***NRHP Eligibility Review, US 34, Gladstone Township, Henderson County***, E. L. Roman, July 2019. SHPO concurrence on the eligibility of historic architectural resources was received on July 29, 2019.

Based on the final results of the above referenced surveys, a total of 6 above-ground historic properties are located in the APE for this undertaking. All warrant NRHP consideration, and are treated as NRHP eligible historic properties by IDOT:

1) Sunset Hunting and Fishing Camp, east of Orchard City lake, Carman (Survey ID 5)
2) Farmstead at 750 US Route 34, Gladstone (Survey ID 6)
3) Farmstead at 907 Township Road 1225N, Gladstone (Survey ID 11)
4) Motel Complex at 967 & 968 US Route 34, Gladstone (Survey IDs 31/32)
5) Barn on property at 1375 Township Road 1450N, Gladstone (Survey ID 52)
6) Farmstead at 1337 Galbraith Road, Gladstone (Survey ID 55)

The locations of these historic properties, including NRHP boundaries, and their relationship to the APE limits and the proposed design of the preferred alternative are shown on the attached Historic Properties Maps.

Assessment of Effects to Historic Properties in the APE:

The effects of the undertaking on surrounding historic properties has been evaluated though application of the Criteria of Adverse Effect at 36 CFR 800.5(a)(2). An adverse effect occurs when an undertaking alters, directly or indirectly, any of the characteristics of an historic property that qualify it for inclusion on the NRHP, in a manner that diminishes its integrity, including indirect effects that change the historic character, use, or setting of the historic property. The adverse effect may be direct through physical destruction or damage to part or all of the property, alteration of the property, removal/relocation or neglect of the property, or where applicable transfer out of Federal ownership or control. Or the adverse effect may be indirect through changes to the character or use of its character-defining setting, or through introduction of visual, atmospheric or audible elements that alter or diminish the integrity of its character defining elements.

The project will have No Effect to the following historic properties, as their historic property boundaries fall outside the 0.25-mile APE:

- Farmstead at 750 US Route 34, Gladstone (Survey ID 6)
- Farmstead at 1337 Galbraith Road, Gladstone (Survey ID 55)

The four remaining historic properties fall within the APE, where direct or indirect effects may occur. There will be no direct impact or use of any of these historic properties though right-of-way take, permanent easement, or temporary easement. New elements will be introduced into the surrounding landscape of these historic properties, possible within a visible or audible distance. The US 34, Gulfport to Gladstone, project's effect to each of these four historic properties is evaluated below.

Sunset Hunting and Fishing Club (Survey ID 5): This mid-20th century private club is located on a forested property along a lake south of US 34. The property deemed further consideration as access was not granted, and it may have held local significance with recreational activities during the mid-20th century. Though the historic property boundary encompasses the entire parcel, the character-defining elements of would include the buildings and structures built for and/or used by the members of the club for hunting, fishing, and other outdoor recreation, including cabins, sheds, docks and piers, all located along the east bank of the lake at the center of the property. The entrance into the club is at the northeast corner of the property, accessed via a dirt road the meanders through farmland to the east, with the driveway continuing into the forested camp property to the buildings along the east side of the lake. The unmanaged, natural forest would not contribute excepting in locations with the driveway or foot paths.

This Sunset Hunting and Fishing Club is located at the west end of the APE, where the existing four-lane divided highway will be reconstructed. The new interchange at Carman Road is located 1 mile distant of the northeast corner of the property near its entrance, four times further away than the size of the APE. The new four-lane divided highway and new interchange will not be visible or audible from character-defining elements of this historic property due to the distance and mature forest that encompasses the remainder of the property, adjoining ROW for US 34, and neighboring parcel to its northeast. Given that there is no direct impact and the distance to the proposed new highway features, the project will not alter any character-defining elements or diminish the integrity, historic character, use, or setting of the Sunset Hunting and Fishing Club. As such, the project will have No Adverse Effect to this historic property.

Farmstead at 907 Township Road 1225N (Survey ID 11): This intact late-19th through mid-20th century farming complex contains its 1860s I-House dwelling, large barn complex with 19th century crib barn and 20th century cattle barn connected by multiple shed additions and fenced barnyard, machine shed complex, scattered sheds and silos, driveway/farm lane, and mature trees surrounding the farmhouse. The historic property boundary encompasses the buildings and associated landscape, but not the adjoining agricultural fields on the parcel. The complex is surrounded by agricultural lands that fill the deep wide floodplain of the Mississippi River, with existing US 34 to the north. A mid-20th century residential subdivision is within view along US 34 to its northeast. The complex, its land and landscape features, and its agricultural setting all contribute to its significance.

The Farmstead at 907 Township Road 1225N is located 0.22 mile southeast of the planned intersection of US 34 and Township Road 900E. It faces south, away from the existing and new routes of the highway. Here, the new four-lane divided highway will be 150 feet north of the existing alignment, moving the associated views and traffic noise further away from the complex. Existing US 34 will remain in place, but routed +/-300 feet to the south to intersect with Township Road 900E. These new and realigned roadways will be visible from the rear of the complex, but not intrusive as they will be built on berms similar to the levies that dot this floodplain landscape. Though additional roadways to the north may increase traffic noise, the bulk of the traffic will be moved further away from this property. Given that there is no direct impact, that a heavily travelled two-lane highway is already present north of this complex, with its associated noise, and the presence of levees across the landscape within view of this property, the proposed highway will not alter any character-defining elements or diminish the integrity, historic character, use, or setting of the Farmstead at 907 Township Road 1225N. As such, the project will have No Adverse Effect to this historic property.

Motel Complex at 967 & 968 US Route 34 (Survey IDs 30 & 31): This 1950s complex contains the 1-story motel building, 1-story restaurant/office building, and neon motel sign connected by a parking lot. They are located on the west side of US 34, just south of Township Road 1300N. Historically one resource, the two buildings now sit on separate parcels that extend under different ownership. The historic property boundary encompasses both buildings and the parking lot, but not the rear portion of the motel parcel which contains rented crop land. Built during the period of rapidly increasing auto travel and long-distance trucking, the complex is associated with mid-20th century trends in transportation, commerce and recreation. The buildings, sign, parking lot, and setting along a major, US numbered highway, all contribute to the significance of this historic property.

At this location, the proposed four-lane divided highway will be built approximately 450 feet east of existing US 34, with the existing highway to remain in place. Township Road 1300N will be improved to provide a safe at-grade intersection with the new divided highway. Within view of the Motel complex, the new divided roadway will by minimally raised above the existing ground level, which is not in the 100-year floodplain. Though the new highway and intersection may increase traffic noise, the high speed through traffic will move the bulk of this noise away from the historic property. Given that there is no direct impact, that a heavily travelled two-lane highway is already present fronting this complex, that its significance is gained through this siting, and that the existing highway will not be removed, the proposed highway and intersection will not alter any character-

defining elements or diminish the integrity, historic character, use, or setting of the Motel Complex at 967 & 968 US Route 34. As such, the project will have No Adverse Effect to this historic property.

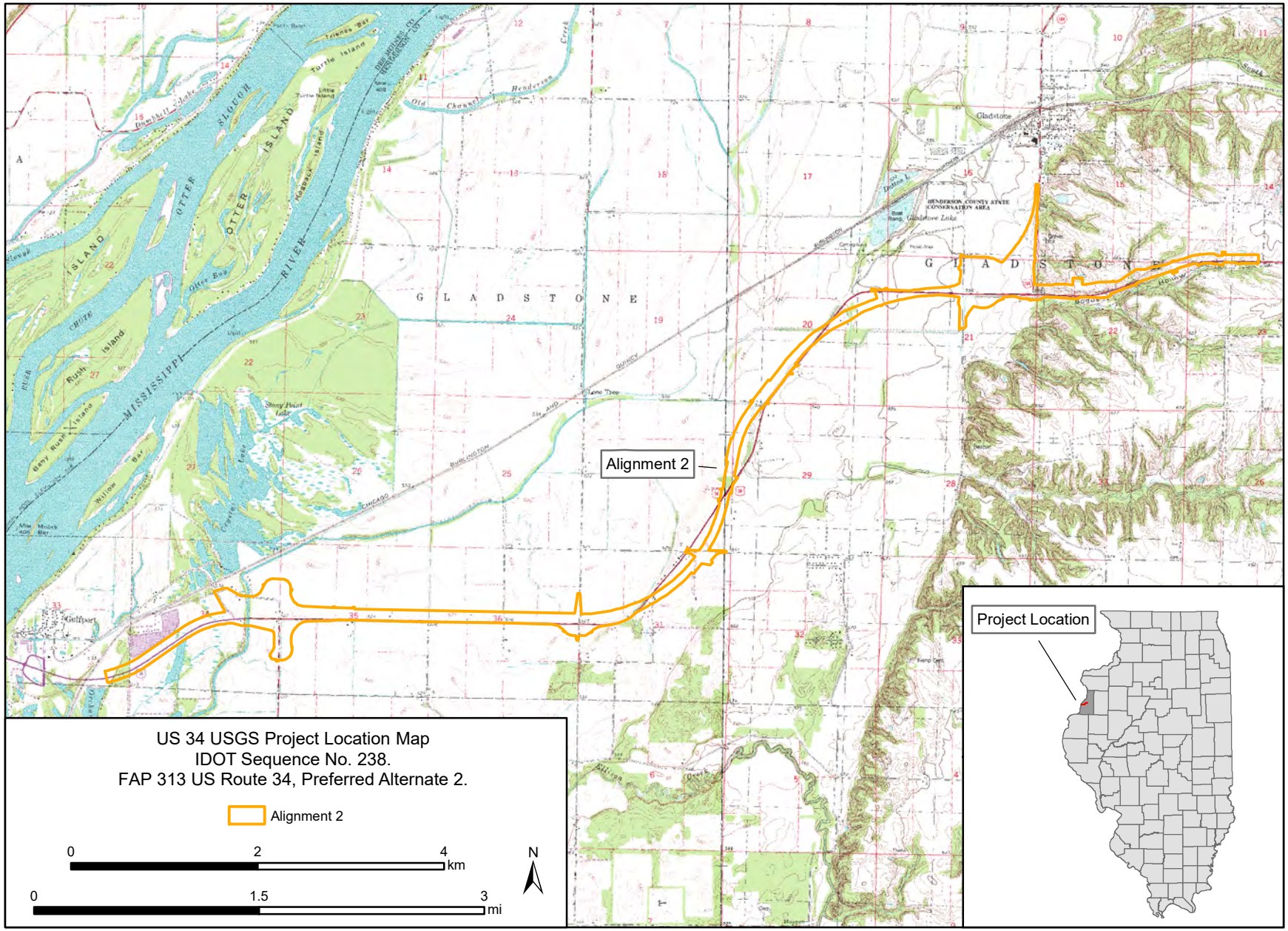
Barn on Property at 1375 Township Road 1450N (Survey ID 52): This intact 19th century Midwestern Three-Portal barn is located 530 feet south of existing and proposed US 34. It is all that remains of a 19th century farm and holds local significance as an intact early barn. The historic property encompasses the barn itself and a buffer of no more than 15 feet. It is sited on a high point at the north edge of agricultural fields. To its north is the forested ravine named Bogus Hollow and existing US 34, which cut through the agricultural landscape of the east edge of the Mississippi River valley. The barn and its agricultural setting contribute to its significance.

The proposed four-lane divided highway will follow the existing route of US 34 within view of this historic property. The east bound (south) lanes will overly the existing highway, with the west bound lanes to the north. Some of the trees in and along the north edge of Bogus Hollow will be removed to clear the proposed right-of-way. Mature forest will remain between this barn and the new highway, all on the south edge end extending south of Bogus Hollow. Given that there is no direct impact, that a heavily travelled two-lane highway is already present north of this barn, with its associated noise, and the mature forest buffer will remain partly intact, the proposed highway will not alter any character-defining elements or diminish the integrity, historic character, use, or setting of the Barn on the property at 1375 Township Road 1450N. As such, the project will have No Adverse Effect to this historic property.

Project Finding:

Given the above detailed assessment of effect through the application of the Criteria of Adverse Effect, the proposed US 34 Gulfport to Gladstone Project (the undertaking) will not cause any physical damage to or alter the character-defining elements of historic properties, nor will it introduce any new visual, atmospheric, or audible elements that diminish the setting of historic properties in the APE. As such, it is my finding that the undertaking, as designed, will have No Adverse Effect to above-ground/architectural Historic Properties.

If there are any questions concerning this finding of effects to above-ground historic properties, please contact me at Elizabeth.Roman@illinois.gov or 217-558-4752


Alignment 2
Project Location
US 34 USGS Project Location Map
IDOT Sequence No. 238.
FAP 313 US Route 34, Preferred Alternate 2.
Alignment 2
0
2
4
km
0
1.5
3
mi
N

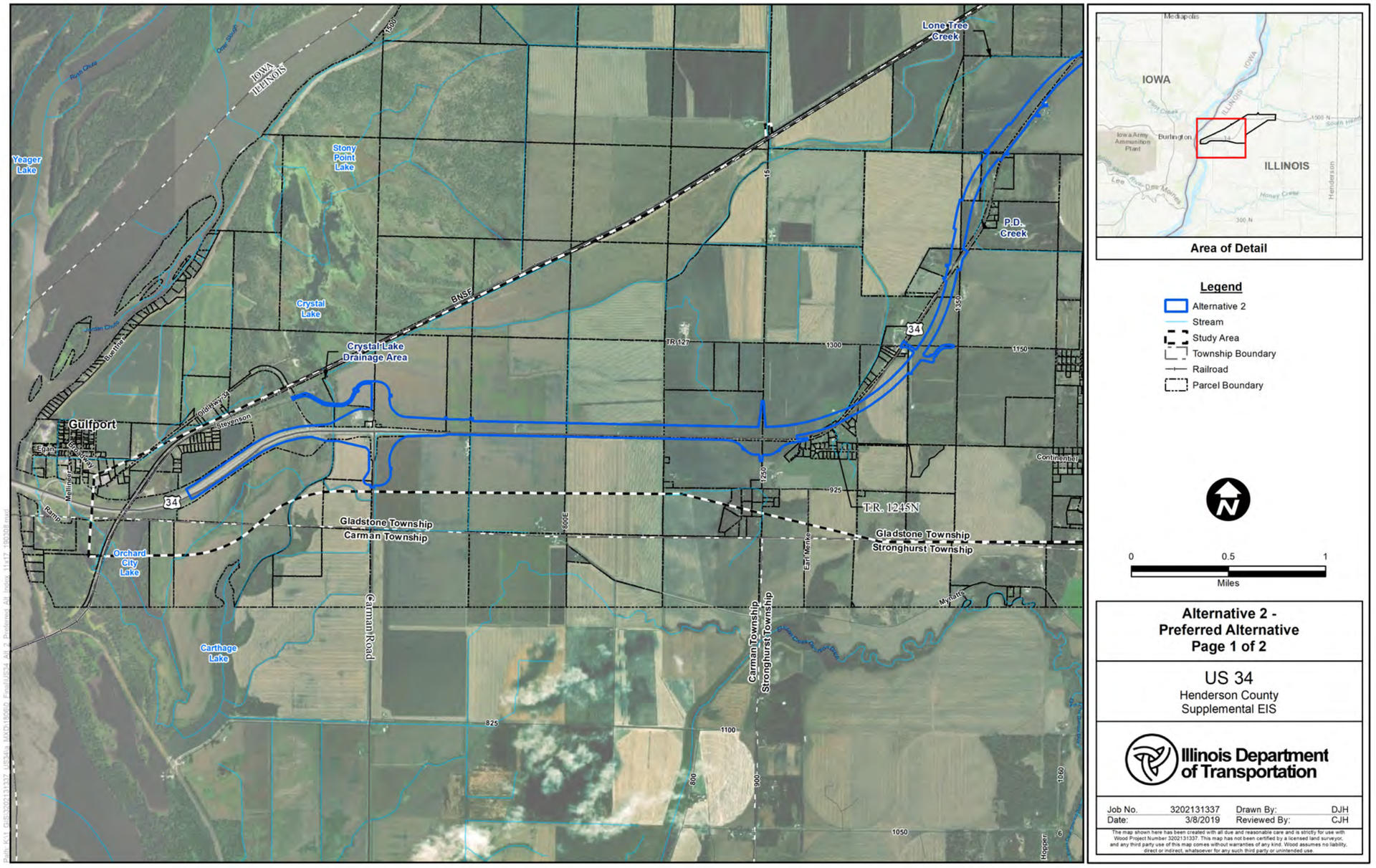


Figure 2-12. Alternative 2 – Preferred Alternative (Western Section)

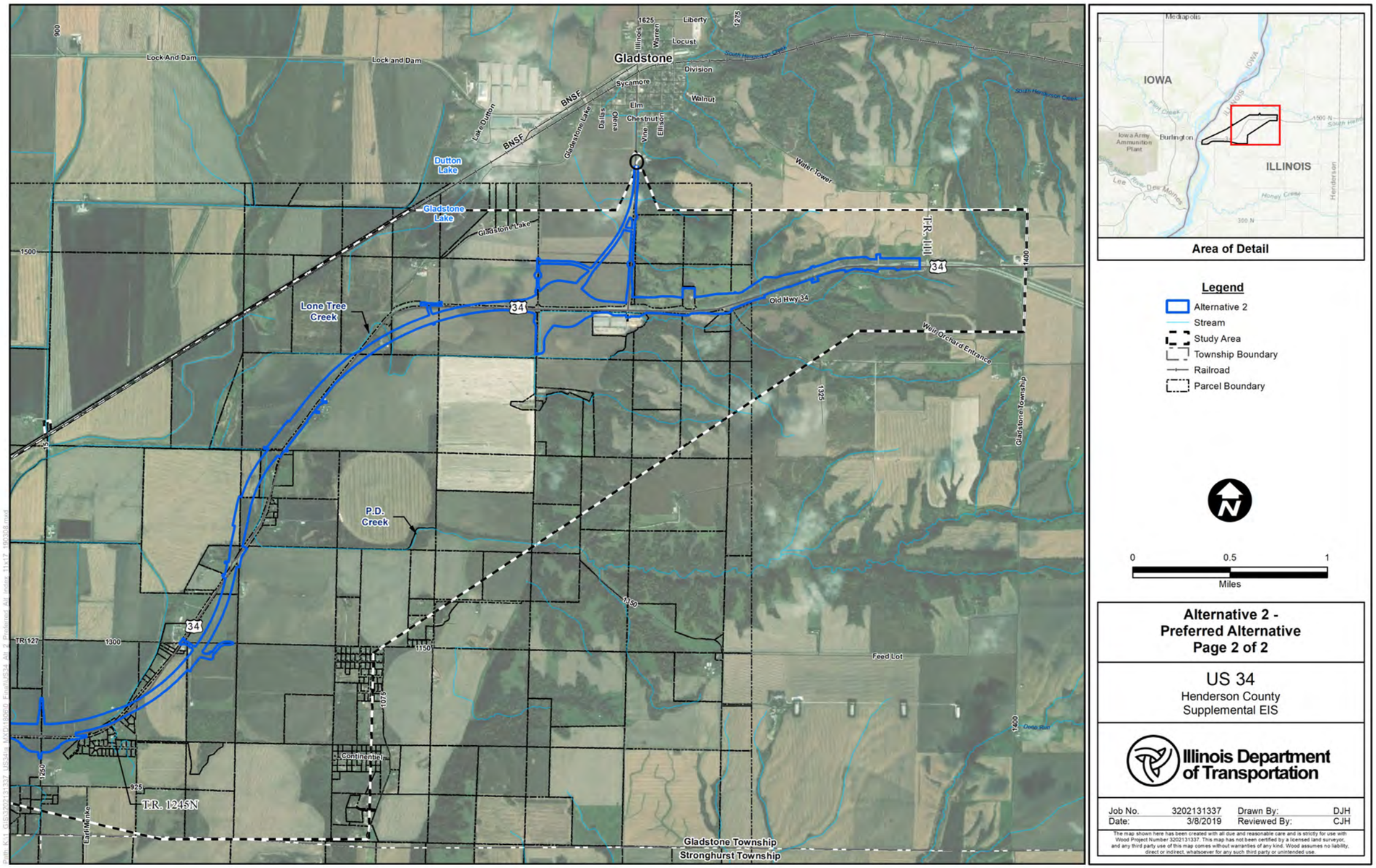


Figure 2-13. Alternative 2 – Preferred Alternative (Eastern Section)

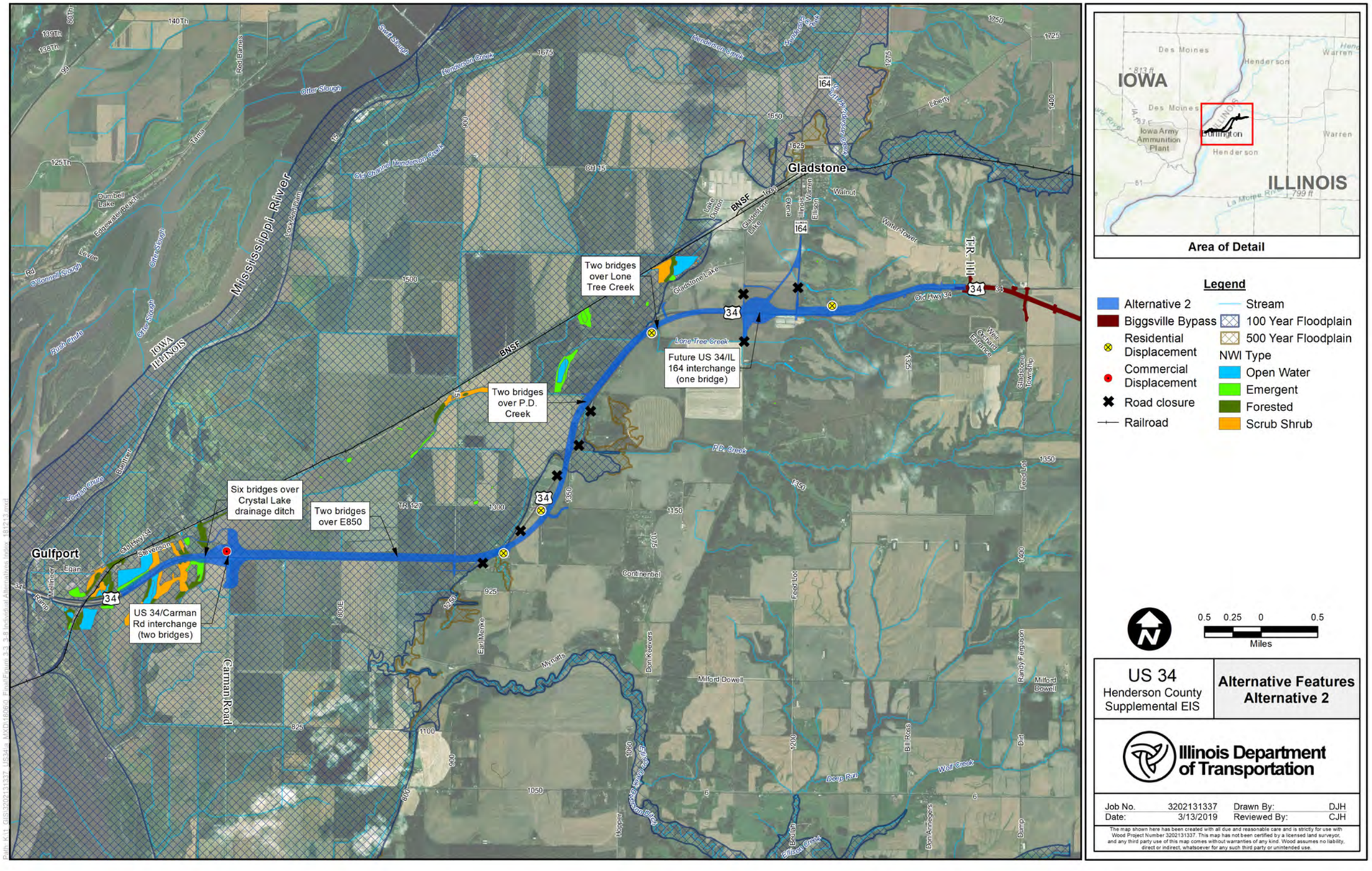
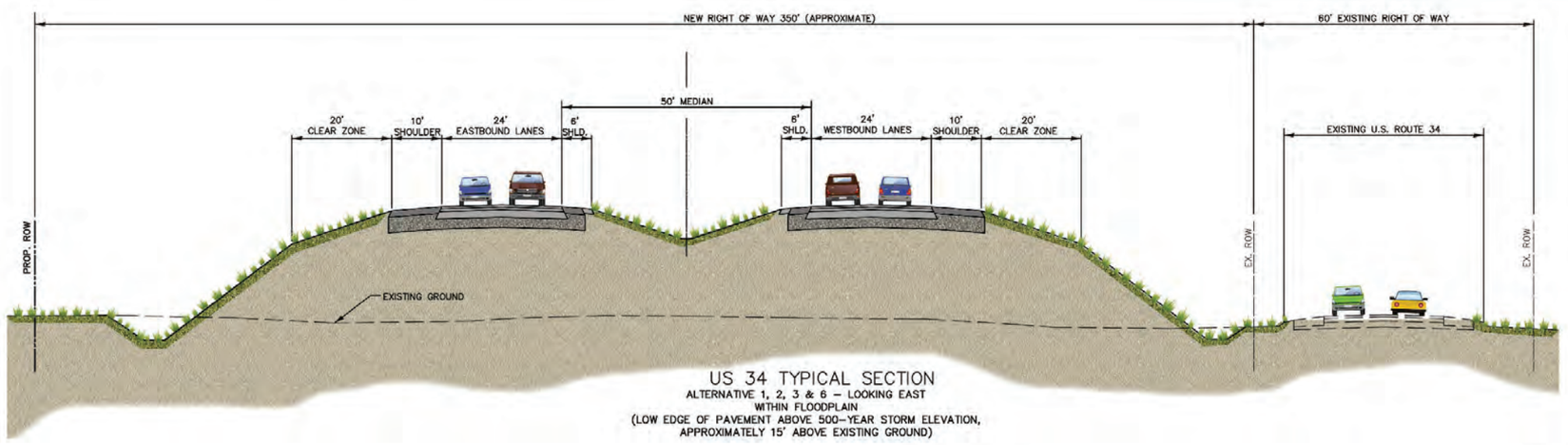
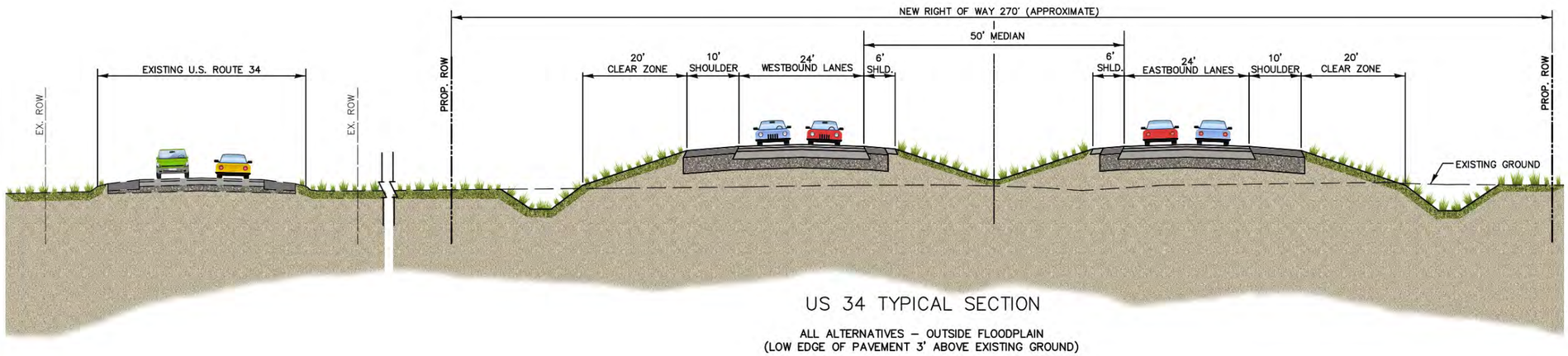


Figure 2-4. Alternative 2



US 34 TYPICAL SECTION

ALTERNATIVE 1, 2, 3 & 6 – LOOKING EAST
WITHIN FLOODPLAIN
(LOW EDGE OF PAVEMENT ABOVE 500-YEAR STORM ELEVATION,
APPROXIMATELY 15' ABOVE EXISTING GROUND)

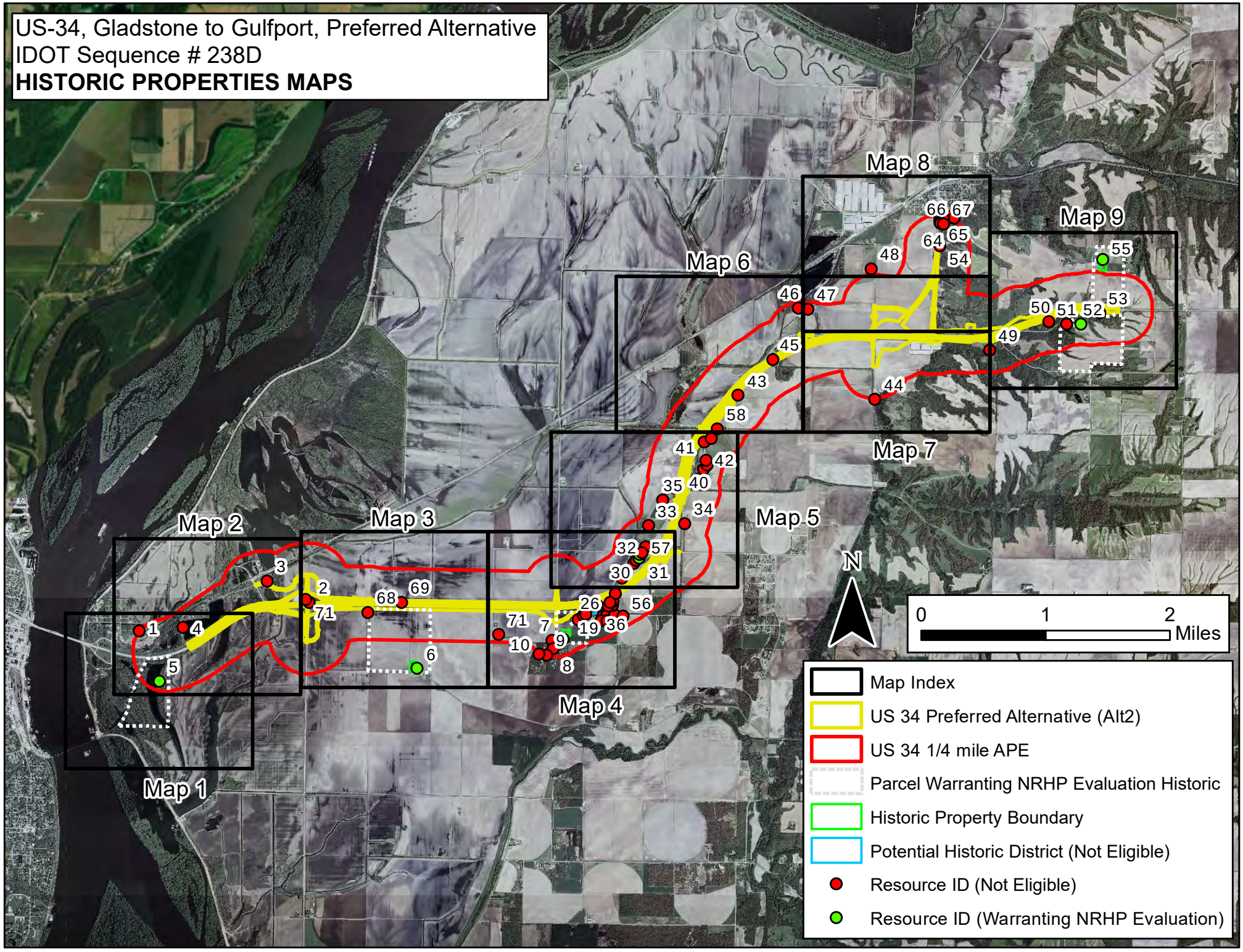


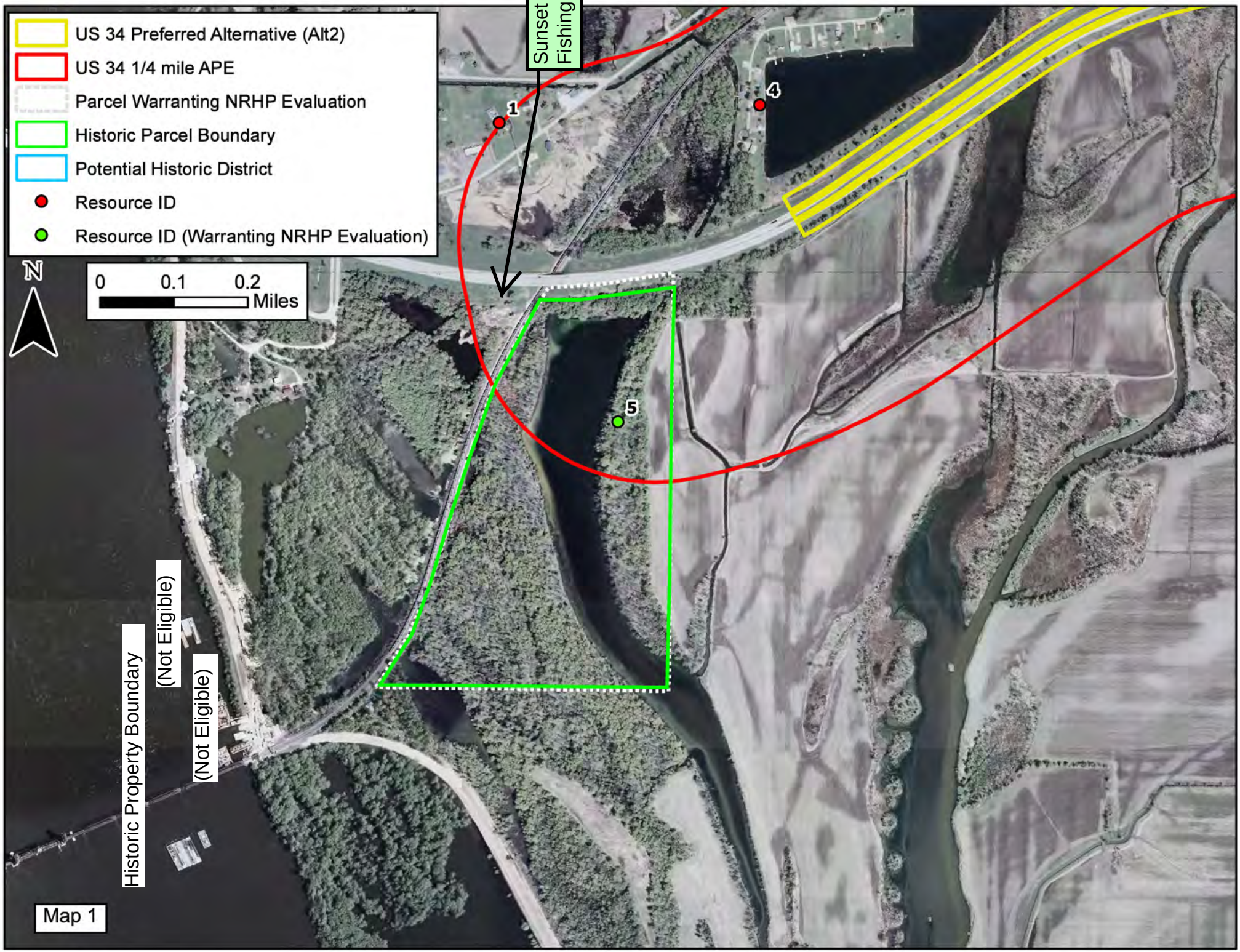
US 34 TYPICAL SECTION

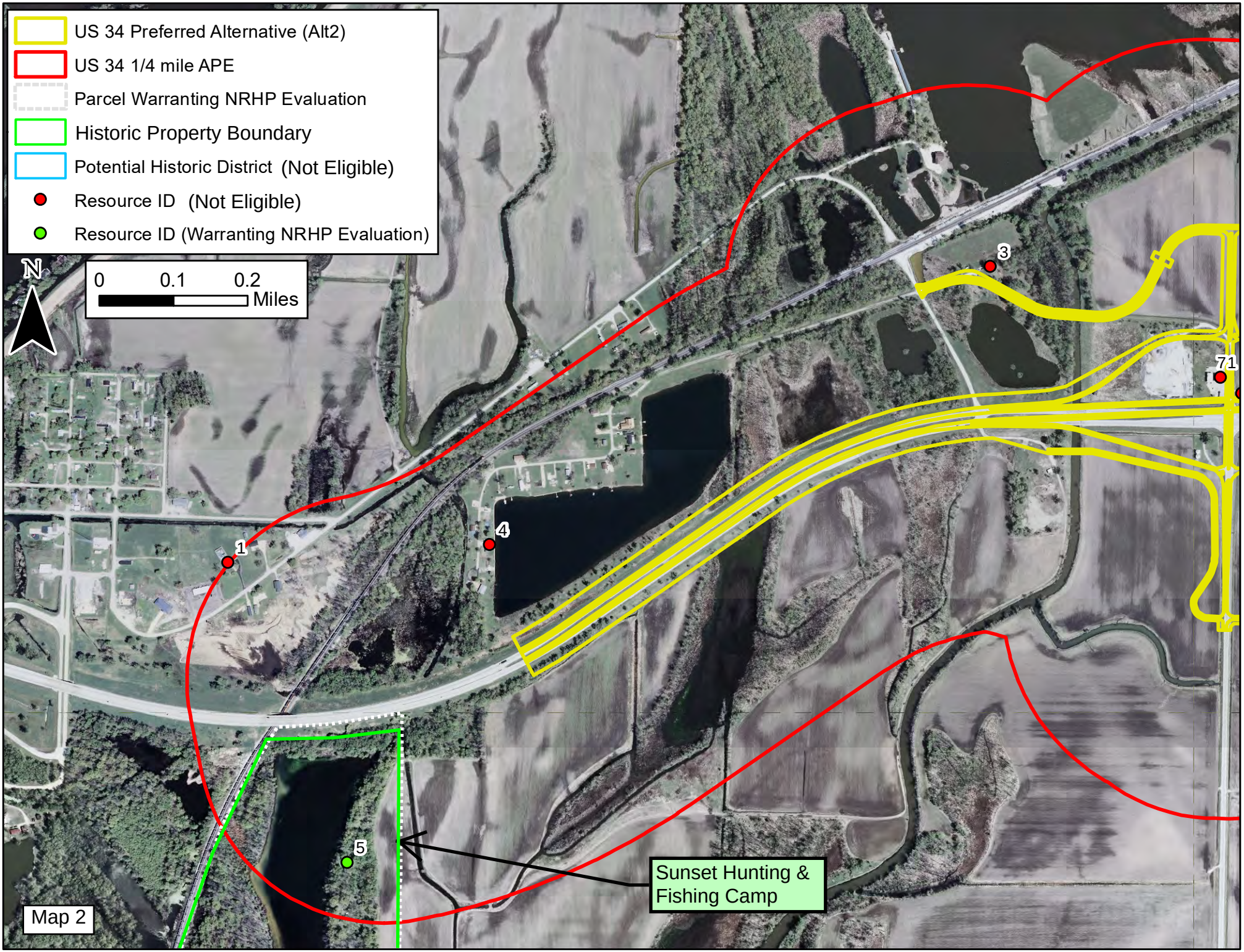
ALL ALTERNATIVES – OUTSIDE FLOODPLAIN
(LOW EDGE OF PAVEMENT 3' ABOVE EXISTING GROUND)

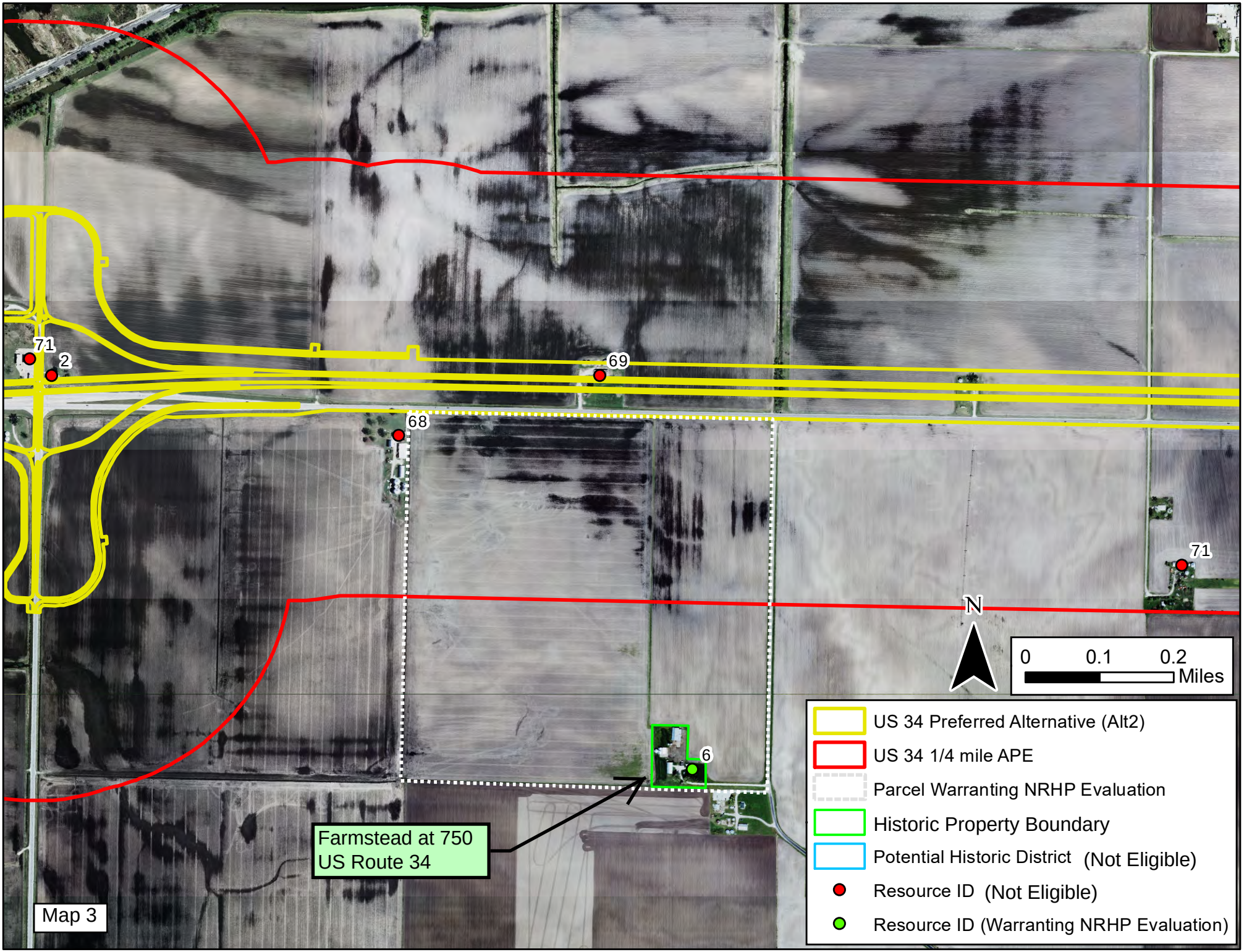
Illinois Department of Transportation

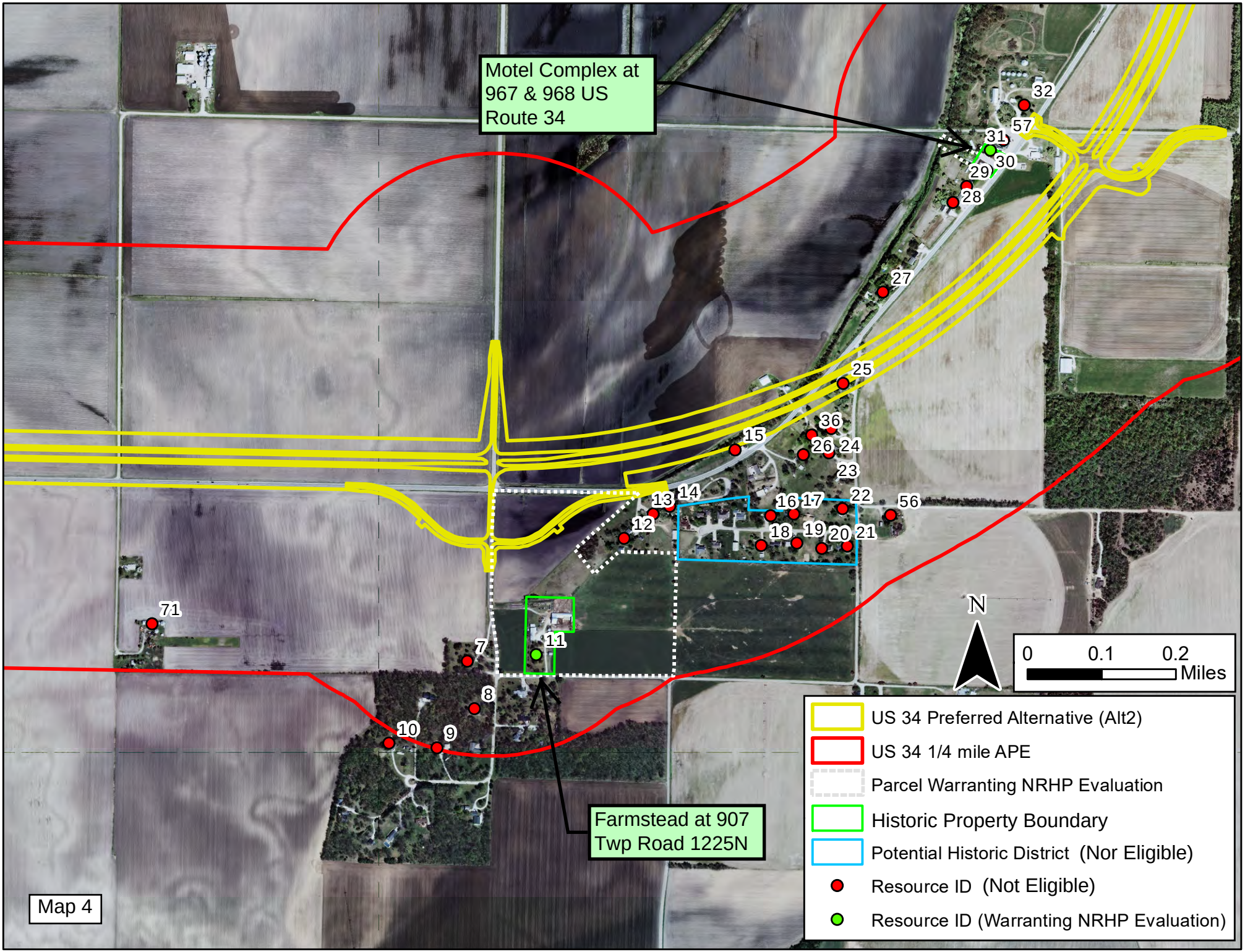
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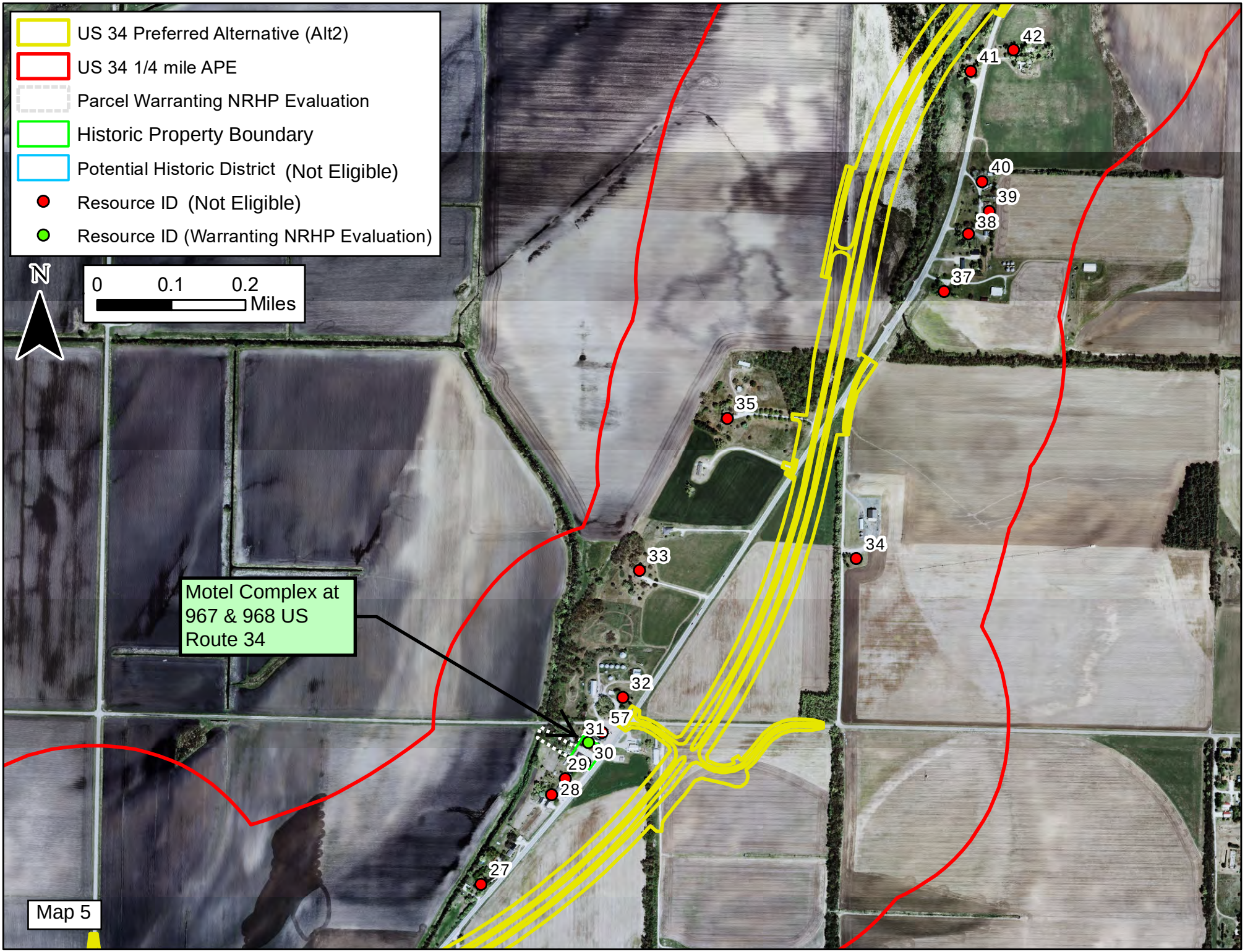

US-34, Gladstone to Gulfport, Preferred Alternative
IDOT Sequence # 238D
HISTORIC PROPERTIES MAPS
Map 1
Map 2
Map 3
Map 4
Map 5
Map 6
Map 7
Map 8
Map 9
N
0
1
2
Miles
Map Index
US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation Historic
Historic Property Boundary
Potential Historic District (Not Eligible)
Resource ID (Not Eligible)
Resource ID (Warranting NRHP Evaluation)

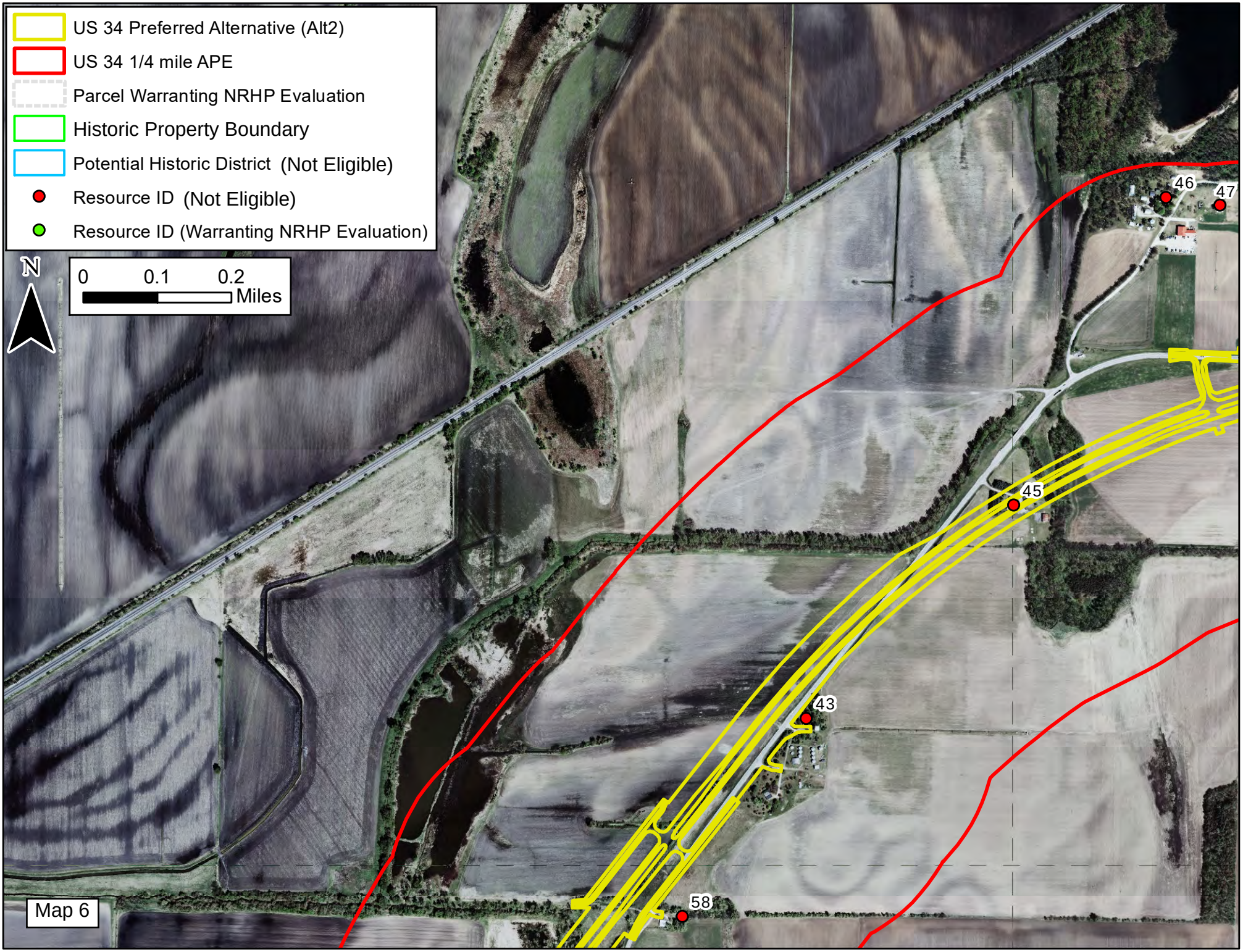

US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Parcel Boundary
Potential Historic District
Resource ID
Resource ID (Warranting NRHP Evaluation)
N
0
0.1
0.2
Miles
Sunset He
Fishing C
1
4
5
Historic Property Boundary
(Not Eligible)
(Not Eligible)
Map 1

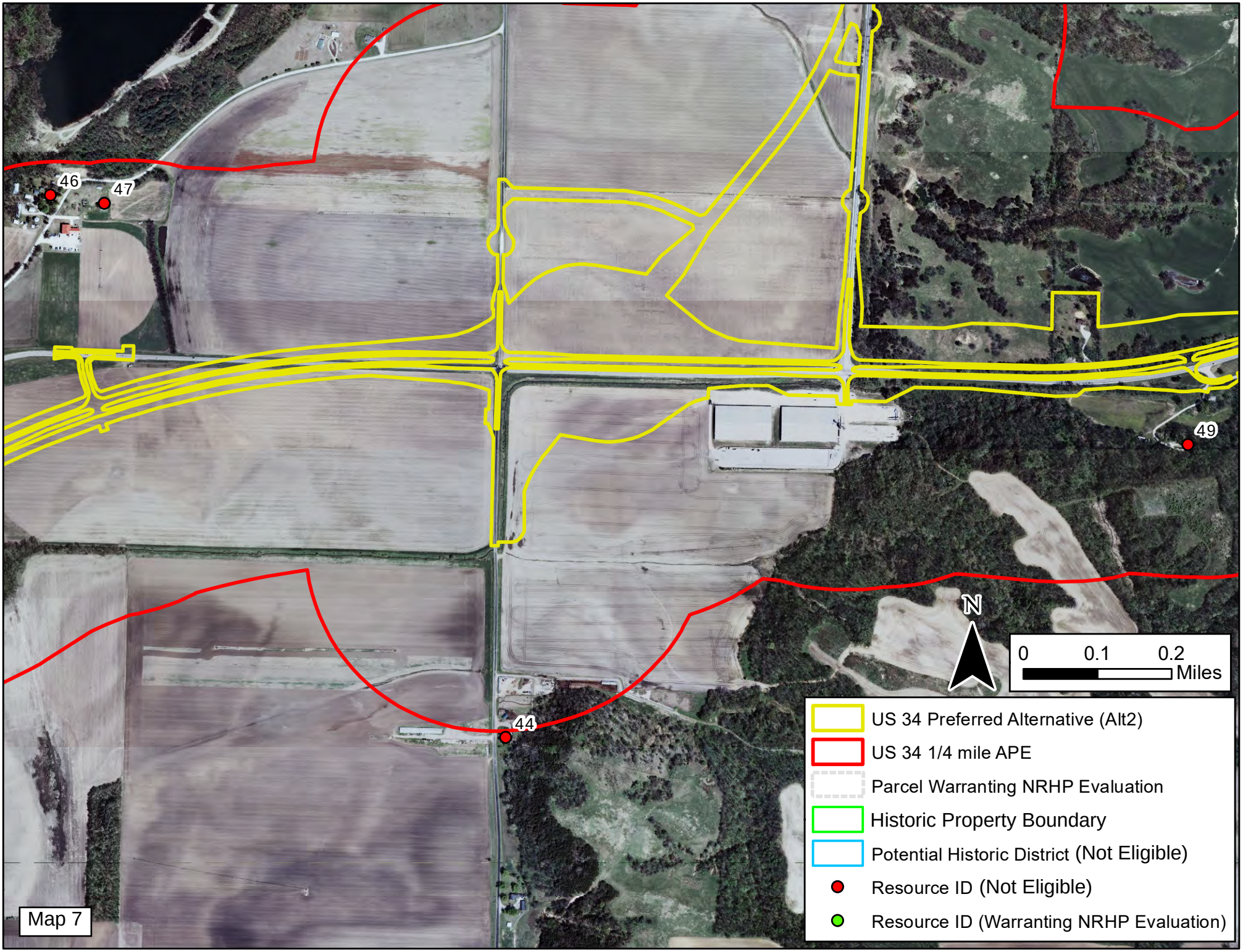

US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Property Boundary
Potential Historic District (Not Eligible)
Resource ID (Not Eligible)
Resource ID (Warranting NRHP Evaluation)
N
0
0.1
0.2
Miles
1
3
4
5
71
Sunset Hunting & Fishing Camp
Map 2

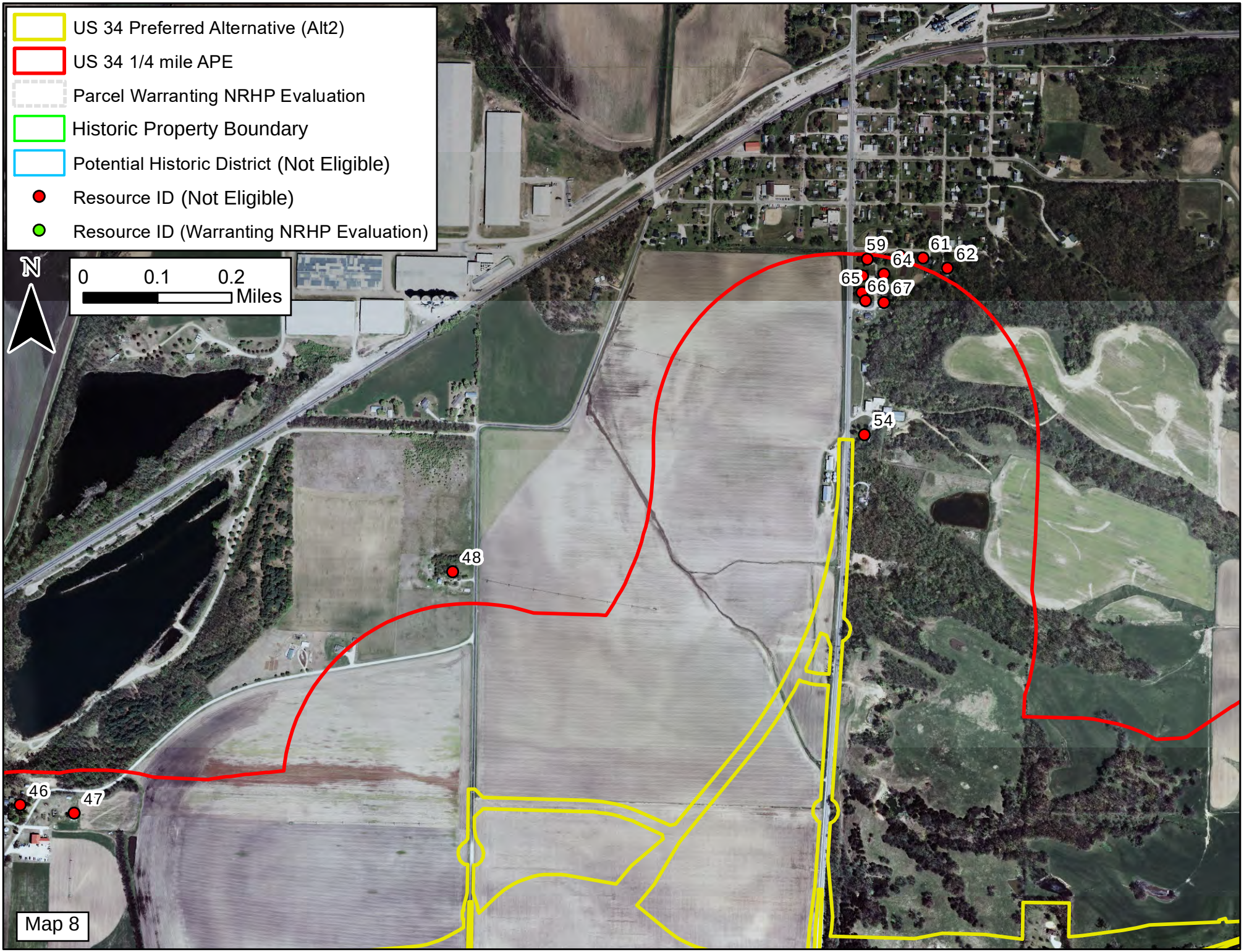

71
2
69
68
71
N
0
0.1
0.2
Miles
6
Farmstead at 750
US Route 34
Map 3
US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Property Boundary
Potential Historic District (Not Eligible)
Resource ID (Not Eligible)
Resource ID (Warranting NRHP Evaluation)

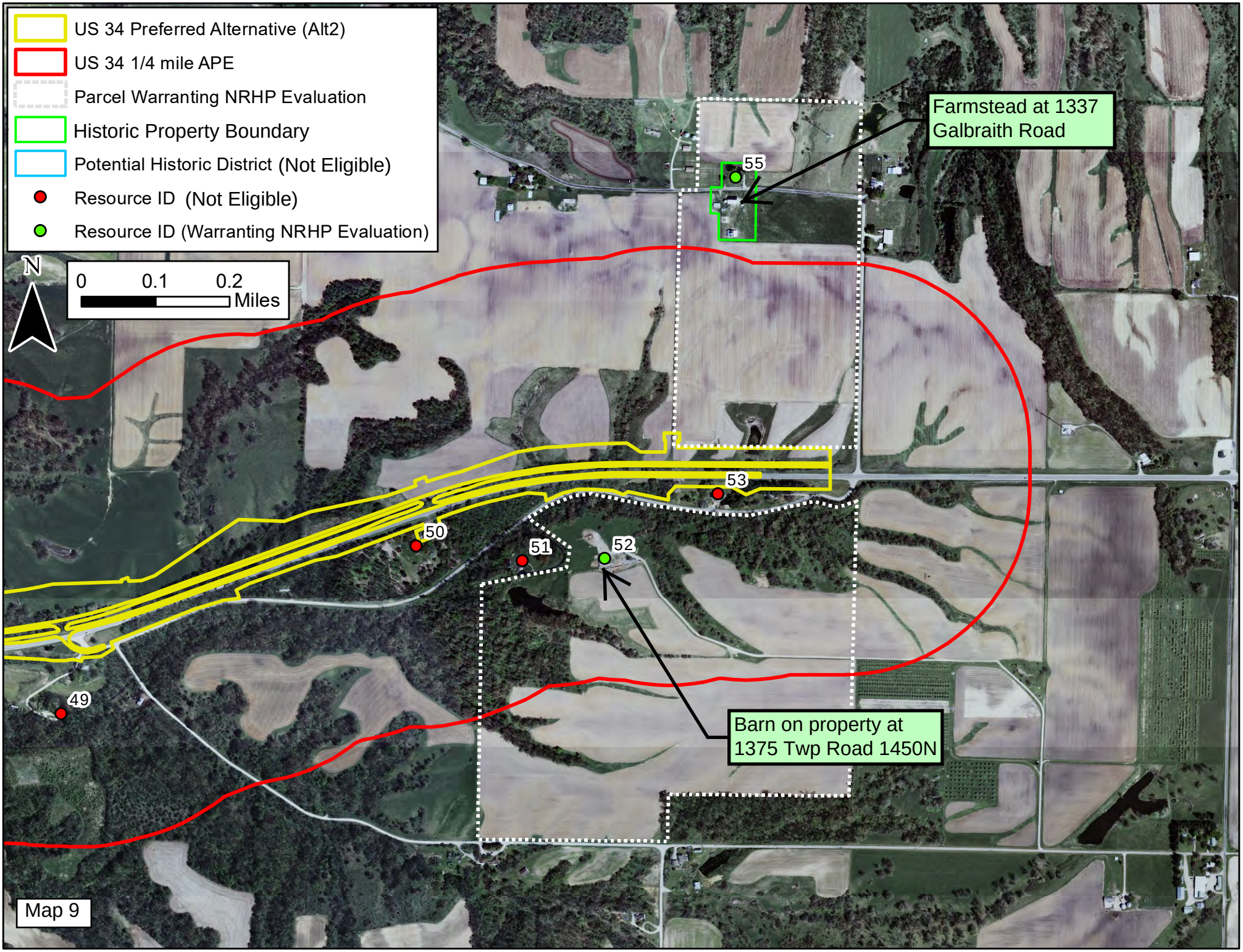

Motel Complex at 967 & 968 US Route 34
Farmstead at 907 Twp Road 1225N
Map 4
N
0 0.1 0.2 Miles
US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Property Boundary
Potential Historic District (Nor Eligible)
Resource ID (Not Eligible)
Resource ID (Warranting NRHP Evaluation)
71
7
11
8
10
9
12
13
14
15
16
17
18
19
20
21
22
56
23
26
24
36
25
27
28
29
30
31
57
32


US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Property Boundary
Potential Historic District (Not Eligible)
Resource ID (Not Eligible)
Resource ID (Warranting NRHP Evaluation)
N
0
0.1
0.2
Miles
Motel Complex at 967 & 968 US Route 34
42
41
40
39
38
37
35
34
33
32
57
31
30
29
28
27
Map 5


US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Property Boundary
Potential Historic District (Not Eligible)
Resource ID (Not Eligible)
Resource ID (Warranting NRHP Evaluation)
N
0
0.1
0.2
Miles
46
47
45
43
58
Map 6


46
47
49
44
N
0
0.1
0.2
Miles
US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Property Boundary
Potential Historic District (Not Eligible)
Resource ID (Not Eligible)
Resource ID (Warranting NRHP Evaluation)
Map 7


US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Property Boundary
Potential Historic District (Not Eligible)
Resource ID (Not Eligible)
Resource ID (Warranting NRHP Evaluation)
N
0
0.1
0.2
Miles
59
61
62
64
65
66
67
54
48
46
47
Map 8


US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Property Boundary
Potential Historic District (Not Eligible)
Resource ID (Not Eligible)
Resource ID (Warranting NRHP Evaluation)
N
0
0.1
0.2
Miles
Farmstead at 1337 Galbraith Road
55
53
50
51
52
49
Barn on property at 1375 Twp Road 1450N
Map 9

ILLINOIS
DEPARTMENT OF NATURAL RESOURCES

Illinois Department of **Natural Resources**

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov
Mailing Address: 1 Old State Capitol Plaza, Springfield, IL 62701

JB Pritzker, Governor
Colleen Callahan, Director

FAX (217) 524-7525

Henderson County
Gulfport to Gladstone
FAP 313, U.S. 34 between Gladstone and Gulfport, Roadway Improvements, Adding Additional Lanes
Sunset Hunting and Fishing Camp - East of Orchard City Lake, Carman; Farmstead at 750 IL Route 34, Farmstead at 907 Township Road 1225 North, Motel Complex at 967 and 968 U.S. Route 34, Barn on property at 1375 Township Road 1450 North, Farmstead at 1337 Galbraith Road, Gladstone; US Route 34, Gulfport to Biggsville
Sites: 11HE13, 262, 267, 269, 272, 273, 304, 322, 375, 389, 393, 395, 400, 401, 402, 417, 426, 520, 631, 536-543, 606, 615, 624, 632, 633, 644, 645,
IDOT Seq #-238D, IDOT/ISAS#-00080 19021
SHPO Log #008060915

December 20, 2019

Brad Koldehoff
Illinois Department of Transportation
Bureau of Design and Environment
2300 S. Dirksen Parkway
Springfield, IL 62764

Dear Mr. Koldehoff:

We have reviewed the historic architectural resources documentation provided for the above referenced project. This six architectural historic properties referenced above were previously determined eligible for listing on the National Register of Historic Places. In our opinion, the project meets The Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" and we concur in a finding of no adverse effect as defined in 36 CFR Part 800.5 (b) for the architectural resources ONLY. If these plans should be modified, please notify our office.

We look forward to continued consultation for the development of a Memorandum of Agreement for the adverse effects to National Register eligible archaeological sites.

Sincerely,

Robert F. Appleman
Deputy State Historic
Preservation Officer

Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

RECEIVED
MAY – 3 2019
Preservation Services

May 3, 2019

Henderson County
FAP 313, US 34
Gulfport to Gladstone
Preferred Alternative
Highway Construction
IDOT Sequence #238D
ISAS Log #19021
SHPO Log #008060915

2 COPIES RCVD & CD

IHPA REVIEW
H/A
AC Concur Jax 5/9/19
AR
File

FEDERAL – SECTION 106 PROJECT

ADVERSE EFFECT – Archaeological Resources Only

Mr. Robert F. Appleman
Deputy State Historic Preservation Officer
Illinois Department of Natural Resources
Illinois State Historic Preservation Office
1 Natural Resources Way
Springfield, Illinois 62702

Dear Mr. Appleman:

In continuing coordination with the Federal Highway Administration (FHWA) and your office for the above referenced undertaking, the Illinois Department of Transportation (IDOT) proposes to extend highway US 34 west to Gulfport in Henderson County. The preferred alignment (Alternate 2) has been selected. Attached please find the archaeological survey reports completed by Illinois State Archaeological Survey (ISAS) staff, both for the alternatives and for the 469-acre Area of Potential Effects (APE) for the preferred alignment.

Consultation with your office regarding architectural resources will be conducted separately. Identification efforts have been completed by ISAS architectural historians under ISAS Log #16245.

For the preferred alignment, ISAS archaeological staff identified 62 sites, 34 of which warrant National Register consideration. Two of these sites are mound groups that warrant preservation in place. Phased identification of archaeological resources and assessment of effects to those resources is planned, in accordance with 36 CFR Part 800.4(b)(2), because access to some parcels has been denied by landowners. When IDOT has secured access and conducted test excavations, the results will be coordinated with your office.

However, while IDOT will attempt to avoid and minimize potential impacts, it is likely that the undertaking will cause adverse effects to archaeological sites that warrant National Register consideration. Therefore, a memorandum of agreement (MOA) will be develop that stipulates IDOT will (1) complete identification, eligibility, and effects assessments for archaeological resources in consultation with your office in a phased approach, and (2) when impacts cannot be avoided, data-recovery excavations will be conducted to mitigate adverse effects.

Please note that the existing MOA for this undertaking, ratified January 6, 2010, is no longer valid. This decision was made by FHWA because a new preferred alternative was selected, requiring additional studies.

In coordination with the FHWA, IDOT requests the concurrence of the State Historic Preservation Officer in our finding that the 34 archaeological properties are subject to protection under Section 106 of the National Historic Preservation Act of 1966, and they may be adversely affected by the proposed undertaking. In consultation with your office, IDOT plans to phase identification, eligibility, and effects assessments to those resources and to develop an MOA.

In accordance with 36 CFR Part 800.3(c)(4), the FWHA will proceed to the next step in the Section 106 process if we do not receive a written response from your office within 30 days.

Sincerely,

Brad H. Koldehoff, RPA
Cultural Resources Unit Chief
Bureau of Design & Environment

CONCUR

By: Robert Appleman
Deputy State Historic Preservation Officer

Date: 5-10-19

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Appendix G

Illinois State Archaeological Survey – Historic Resources Inventory Reports

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ILLINOIS STATE
ARCHAEOLOGICAL SURVEY
PRAIRIE RESEARCH INSTITUTE

Central Offices
23 Stadium Drive • Champaign, IL 61820
T 217-244-4244 • F 217-244-7458
www.isas.illinois.edu

August 10, 2017

To: Brad H. Koldehoff, Cultural Resources Unit Chief, IDOT
Emilie M. Land, Historic Architectural Compliance Specialist, ISAS

From: Megan E. Gilbert, Historic Architectural Compliance Specialist, ISAS

Subject: US 34 Between Gladstone and Gulfport Project, Historic Resource Inventory, Henderson County, Illinois, IDOT Seq. # 238C

The US 34 Henderson County project noted above contains historic resources within the Environmental Survey Request limits for Alternative 2, 5, and 6. Based on the scope of the project, which includes new road alignments and widening of existing road sections, the Area of Potential Effect (APE) was determined to be 0.25-mile buffer spanning either side of the roadway from the centerline where widening of existing right-of-way is to occur and 0.5-mile buffer spanning either side of the roadway from the centerline where new road alignments will be constructed. Since the alignments of Alternative 2, 5, and 6 are within close proximity to one another and a preferred alignment has not been chosen, the centerlines for the APE buffer were taken from the outward most alignments to ensure a comprehensive coverage of potentially historic resources within the area.

The Illinois Department of Transportation (IDOT) Bureau of Design and Environment (BDE) Cultural Resource Unit staff has tasked the Architectural staff of the Illinois State Archaeological Survey (ISAS), a division of the Prairie Research Institute at the University of Illinois Urbana-Champaign, with completing a Historic Resource Inventory for the project APE. Within this report, resources will be assessed to ascertain which have been documented as being historic or are potentially historic based on minimal information available to our office.

Our findings show no resources that have been individually listed or listed within a district in the National Register of Historic Places (NRHP) within or directly adjacent to the APE. There are no resources found to be previously determined NRHP-eligible for listing by the Illinois State Historic Preservation Office (ISHPO) or the Keeper of the NRHP within or directly adjacent to the APE as well. Other databases such as the National Historic Landmarks listing, the Certified Local Government listings, the Illinois Historic Bridge list, and the Historic Architectural Resource Geographic Information System (HARGIS) were consulted with the same conclusion of no previously known resources. Of the 100 properties surveyed during a reconnaissance-level survey performed by ISAS Architectural staff, 7 are being recommended as warranting NRHP

consideration while 13 properties could not be assessed from the right-of-way and will need to be evaluated further if they will be impacted by the project's preferred alignment. Following this memo are maps depicting the three alternative alignments with relation to the parcels that warrant NRHP consideration and that could not be assessed during the survey. The properties that could not be assessed are as follows:

- East of Orchard City Lake, Gulfport *(08-04-200-002)*
- 661 Stevenson Lake Rd., Carman *(05-34-251-001)*
- 880 Rd 1200N, Carman *(05-36-477-001)*
- 1231 Township Rd. 900E, Carman *(05-36-426-001)*
- 997 US Route 34, Gladstone *(06-30-400-006)*
- 1286 West St., Gladstone *(06-32-253-001)*
- 1310 Township Rd. 1100E, Gladstone *(06-28-300-004)*
- 1086 US Route 34, Gladstone *(06-20-200-002)*
- Olena St., Gladstone *(06-16-237-005)*
- 1252 Bogus Hollow Rd., Gladstone *(06-22-100-008)*
- 1296 US Route 34, Gladstone *(06-22-200-004)*
- 1308 Bogus Hollow Rd., Gladstone *(06-23-100-006)*
- 1375 Township Rd. 1450N, Gladstone *(06-23-100-007)*

In accordance with 36 CFR §800.4, historic resources within and/or adjacent to the APE were identified. Based on a review of the NRHP listing, National Historic Landmark (NHL) listings, ISHPO's HARGIS database, and ISHPO files, our office has found the following historic resources in the APE. They will be categorized as either being listed on the NRHP (NRHP), previously determined to be NRHP-eligible by ISHPO or Keeper of the NRHP (NRHP-Eligible), designated NHLs (NHL), local landmarks (LL), extant HARGIS listings (HARGIS Property), and/or warrant NRHP consideration based on minimal information provided to our office (Warrants NRHP Consideration). All of the following historic resources are located in or directly adjacent to the APE for the project:

- **Alternative 2**
  - *Building*, 1326 Township Rd. 1000E, Gladstone (Warrants NRHP Consideration) *(06-29-300-001)*
  - *Building*, 896 Township Rd. 1200N, Carman (Warrants NRHP Consideration) *(05-36-477-004)*
  - *Motel and Office*, RR 1 Box 153, Gladstone (Warrants NRHP Consideration) *(06-31-201-005 & 06-31-201-004)*
  - *Building*, 1056 US Route 34, Gladstone (Warrants NRHP Consideration) *(06-20-300-001)*
  - *Building*, 1430 Township Rd. 1150E, Gladstone (Warrants NRHP Consideration) *06-21-400-002)*
  - *Building*, Southwest corner of IL 164/Main St. and Elm St., Gladstone (Warrants NRHP Consideration) *(06-16-239-001)*

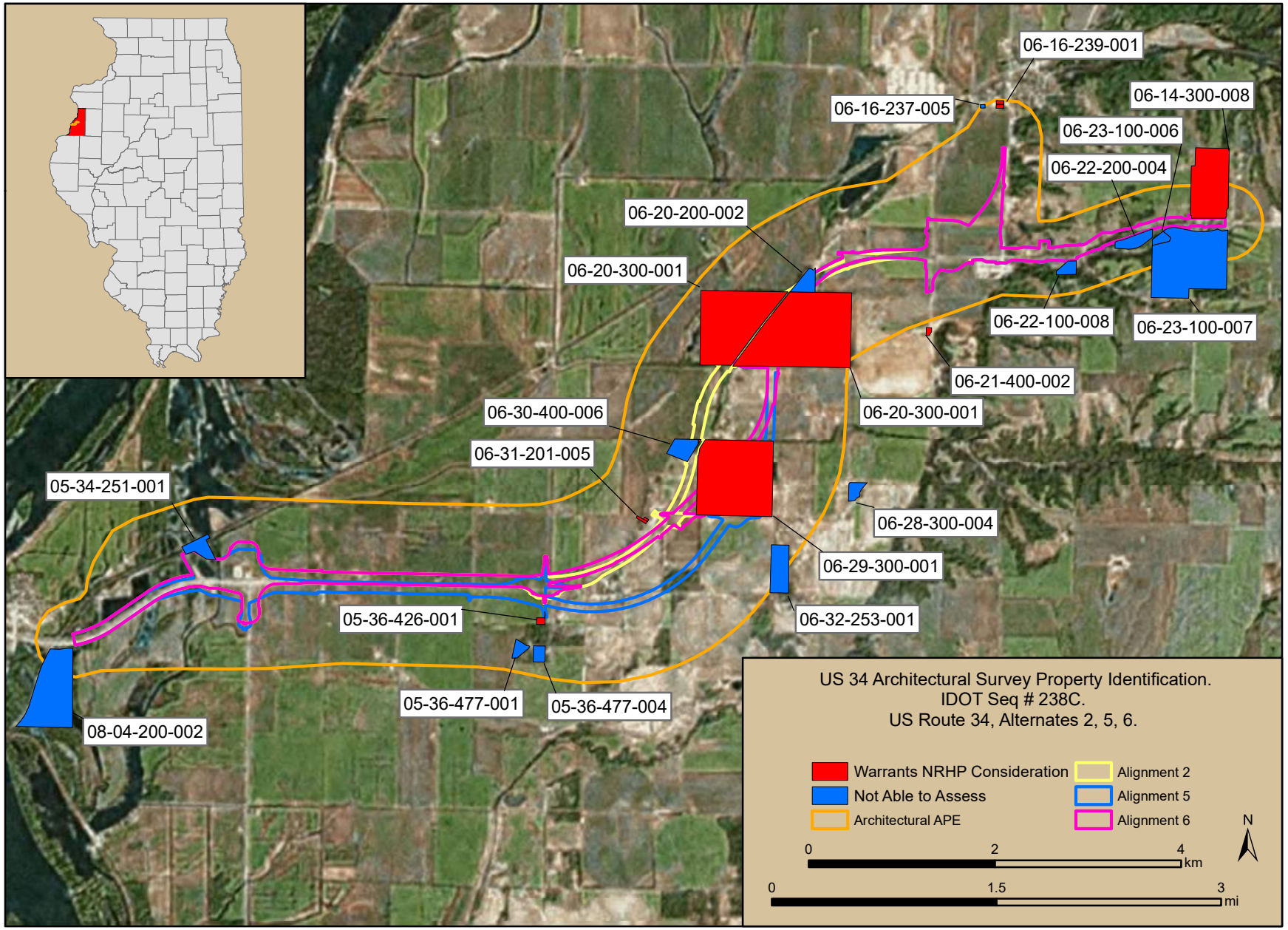
- *Farmstead*, 1337 Galbraith Rd., Gladstone (Warrants NRHP Consideration) *(06-14-300-008)*

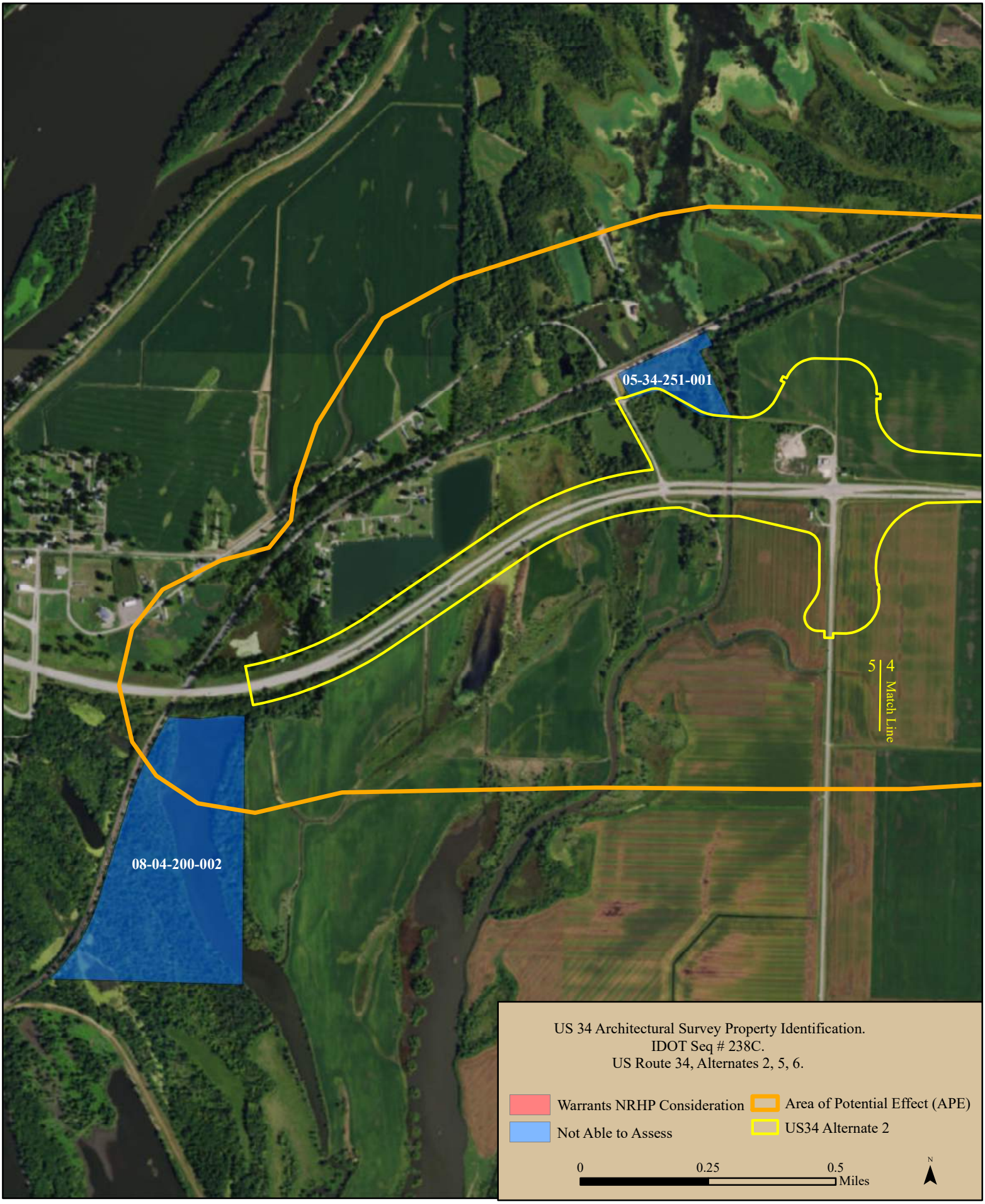
- **Alternative 5**
  - *Building*, 1326 Township Rd. 1000E, Gladstone (Warrants NRHP Consideration)
  - *Building*, 896 Township Rd. 1200N, Carman (Warrants NRHP Consideration)
  - *Motel and Office*, RR 1 Box 153, Gladstone (Warrants NRHP Consideration)
  - *Building*, 1056 US Route 34, Gladstone (Warrants NRHP Consideration)
  - *Building*, 1430 Township Rd. 1150E, Gladstone (Warrants NRHP Consideration)
  - *Building*, Southwest corner of IL 164/Main St. and Elm St., Gladstone (Warrants NRHP Consideration)
  - *Farmstead*, 1337 Galbraith Rd., Gladstone (Warrants NRHP Consideration)

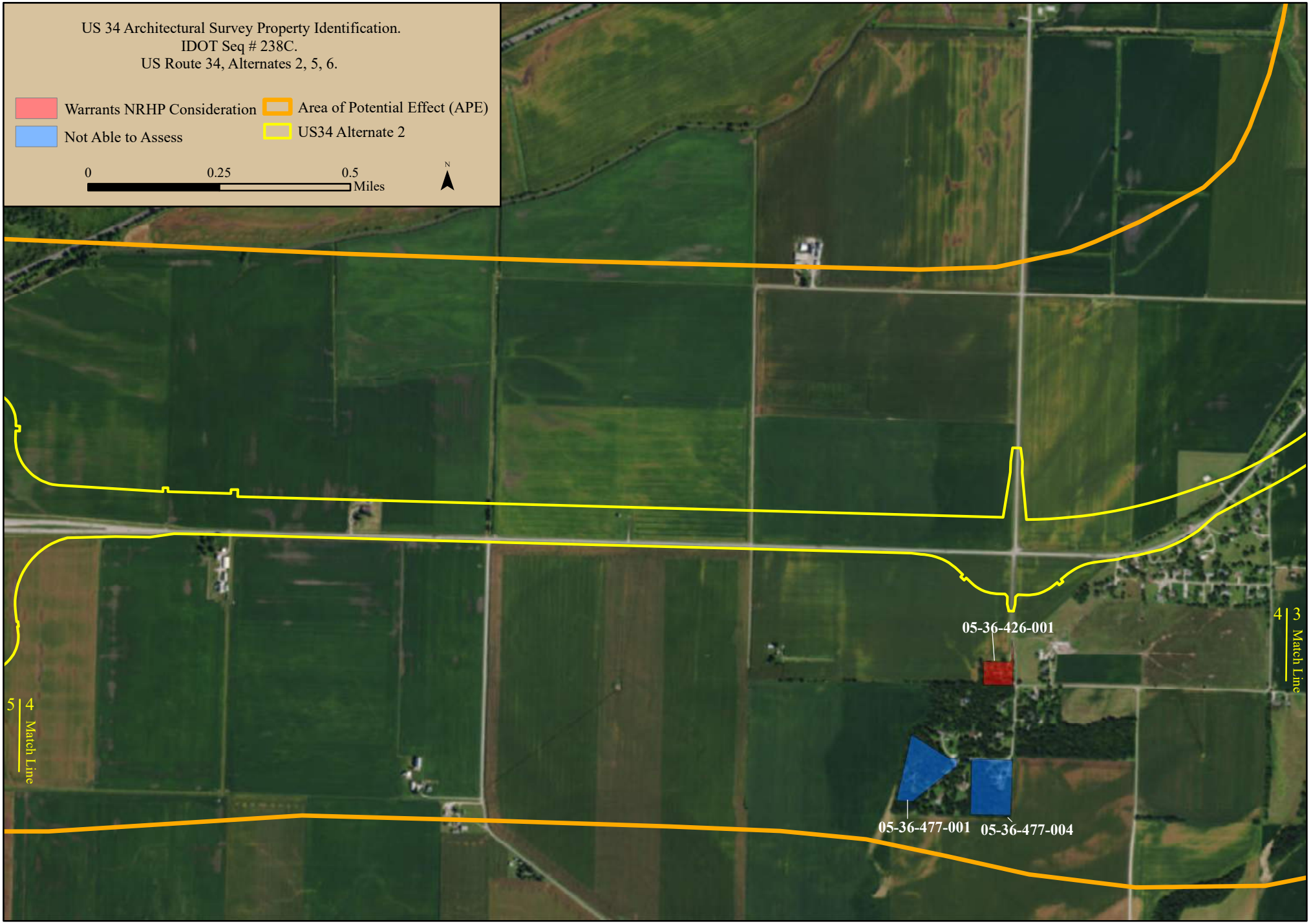
- **Alternative 6**
  - *Building*, 1326 Township Rd. 1000E, Gladstone (Warrants NHRP Consideration)
  - *Building*, 896 Township Rd., 1200N, Carman (Warrants NRHP Consideration)
  - *Motel and Office*, RR 1 Box 153, Gladstone (Warrants NRHP Consideration
  - *Building*, 1056 US Route 34, Gladstone (Warrants NRHP Consideration)
  - *Building*, 1430 Township Rd. 1150E, Gladstone (Warrants NRHP Consideration)
  - *Building*, Southwest corner of IL 164/Main St. and Elm St., Gladstone (Warrants NRHP Consideration)
  - *Farmstead*, 1337 Galbraith Rd., Gladstone (Warrants NHRP Consideration)

If there are any questions concerning this project review, please contact me at mgilber@illinois.edu or 217-244-0776.

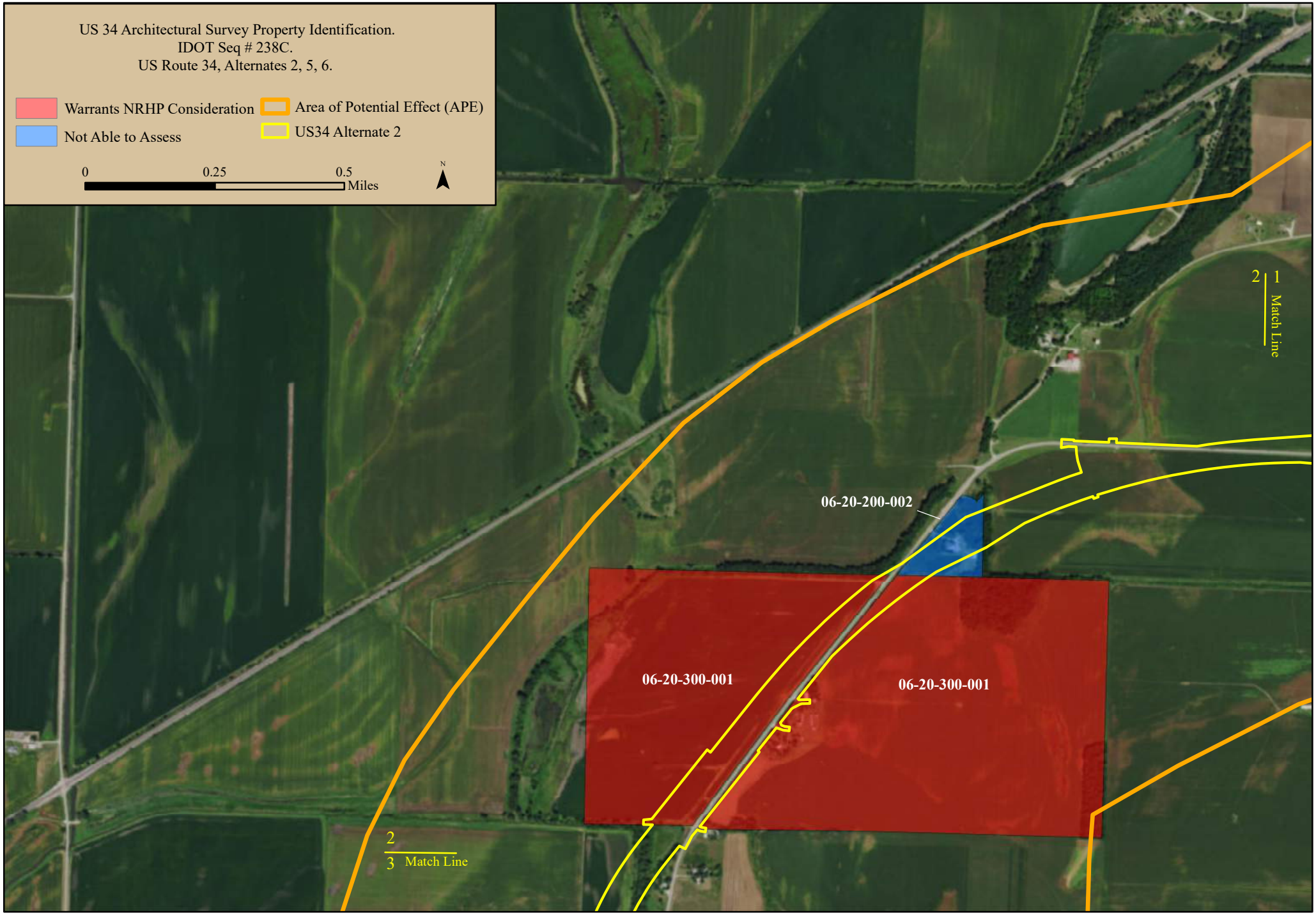
Megan E. Gilbert
Historic Architectural Compliance Specialist
Illinois State Archaeological Survey
Prairie Research Institute
University of Illinois Urbana-Champaign

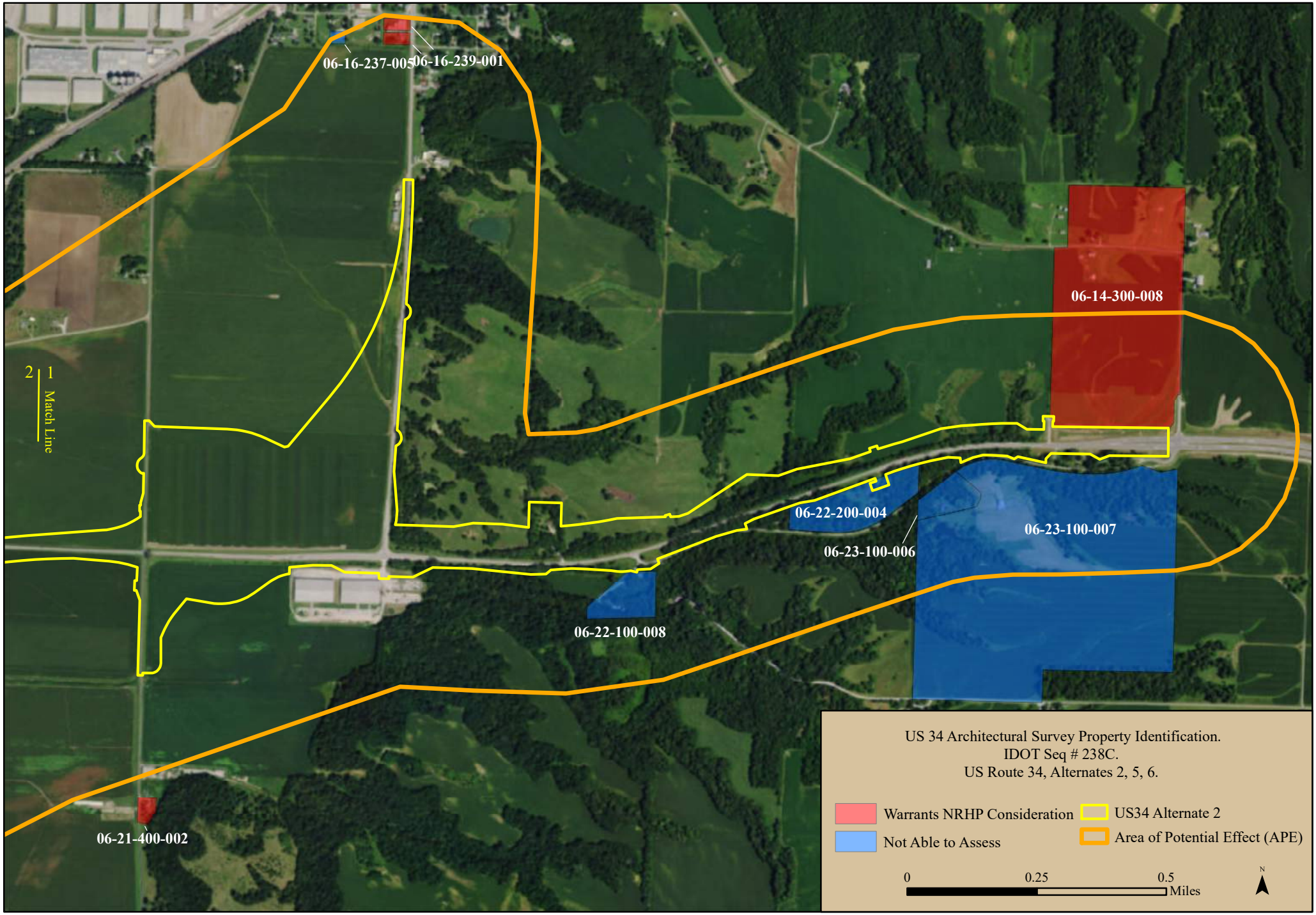

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IDOT Seq # 238C.
US Route 34, Alternates 2, 5, 6.
Warrants NRHP Consideration
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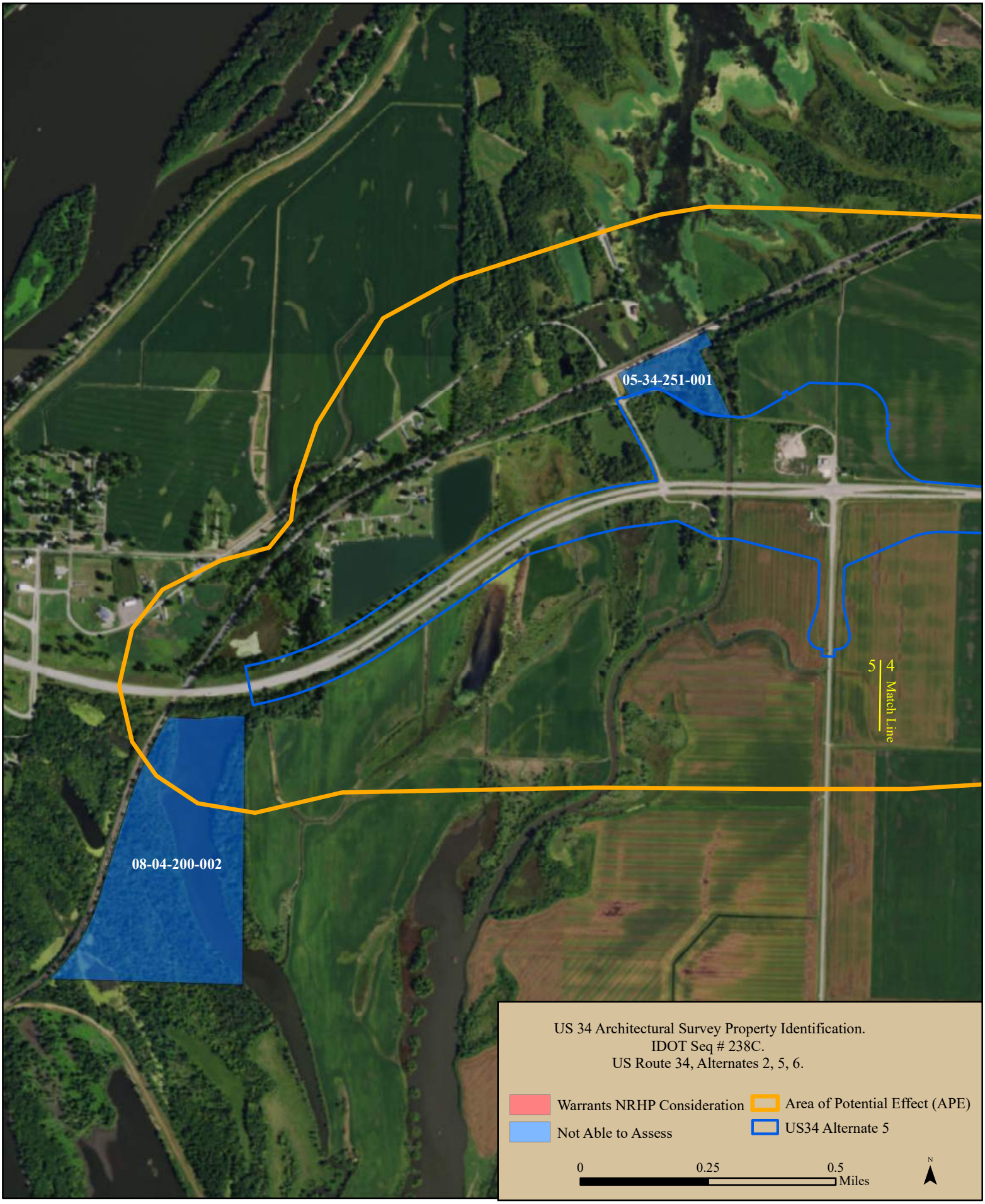

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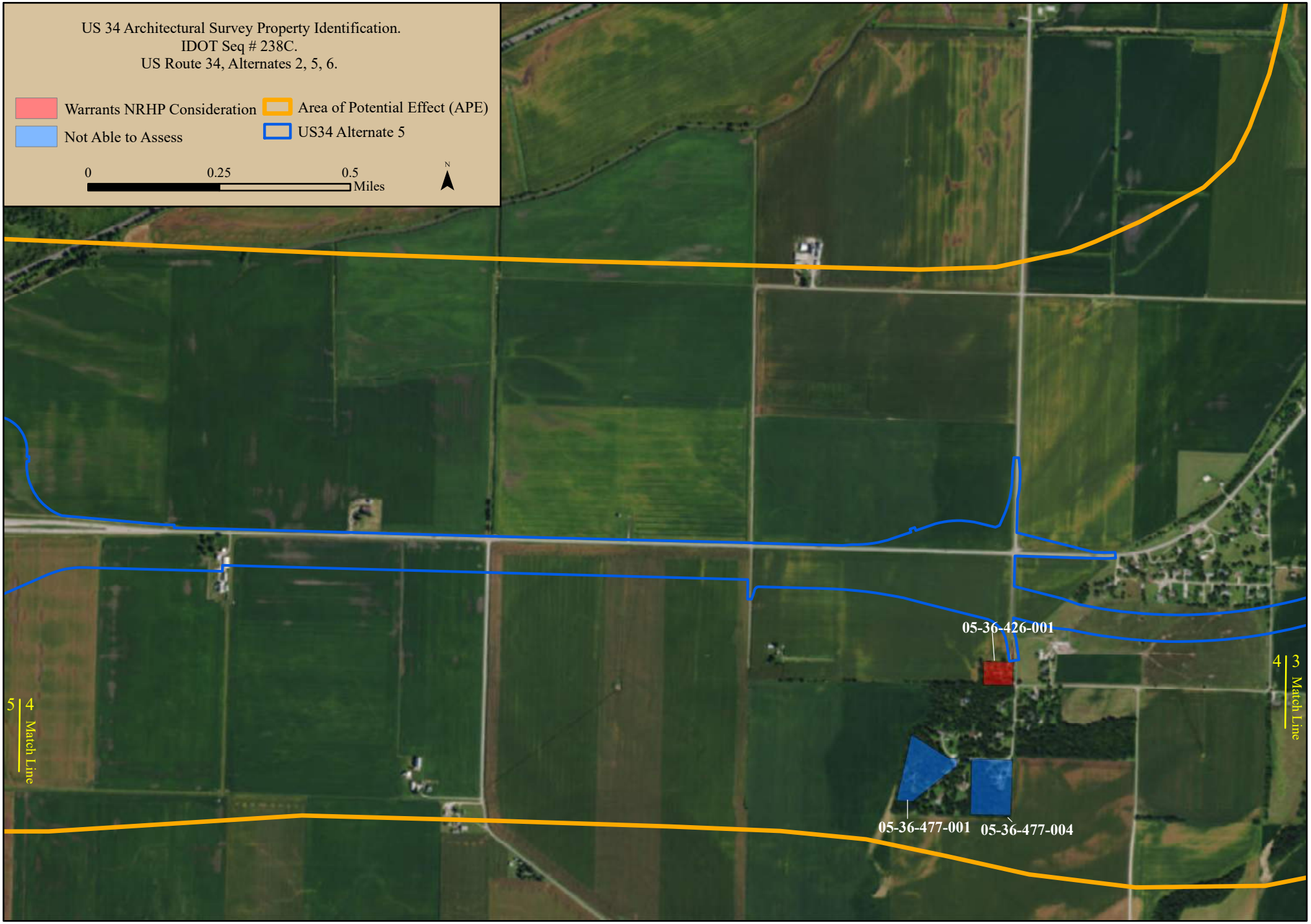

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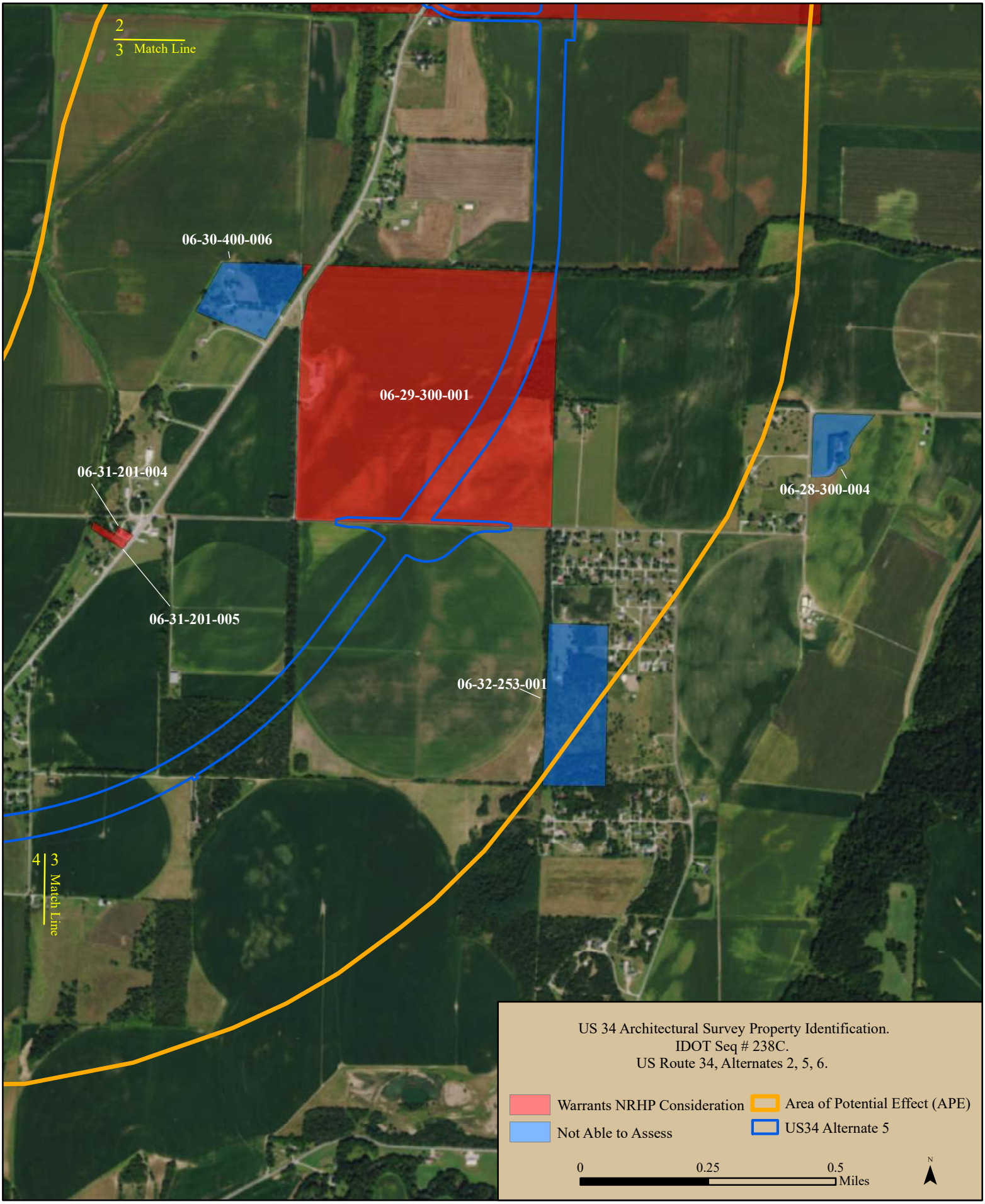

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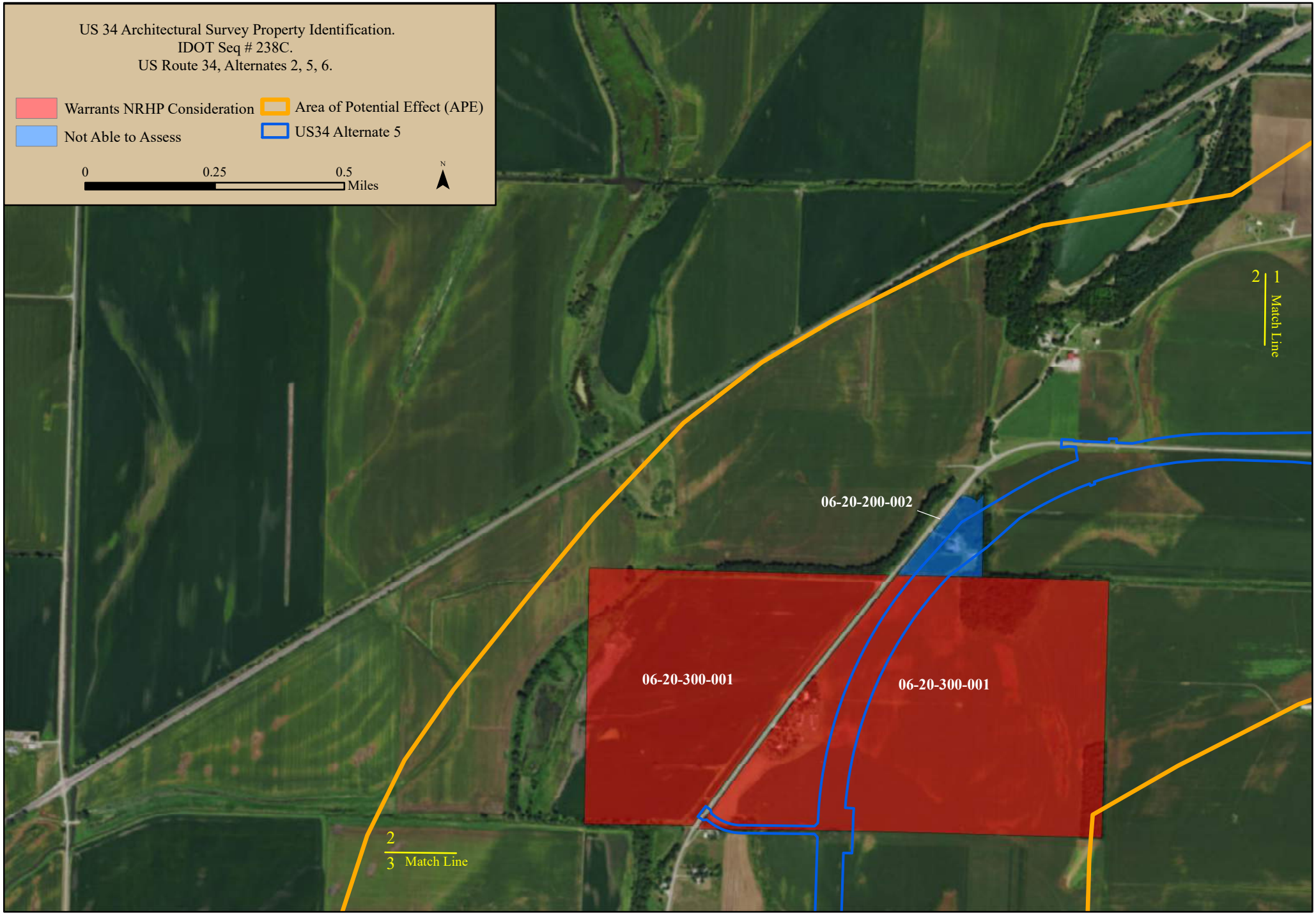

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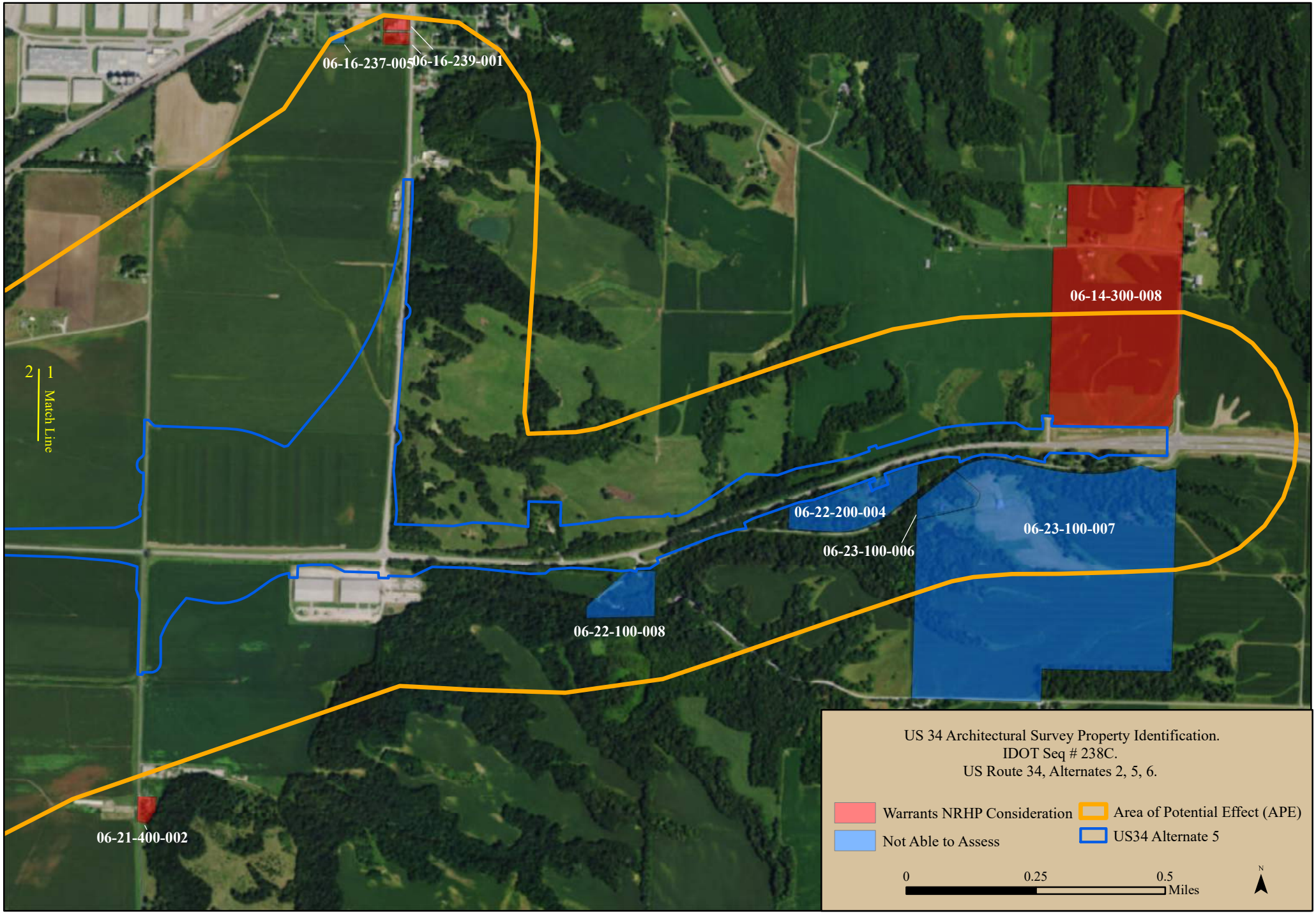

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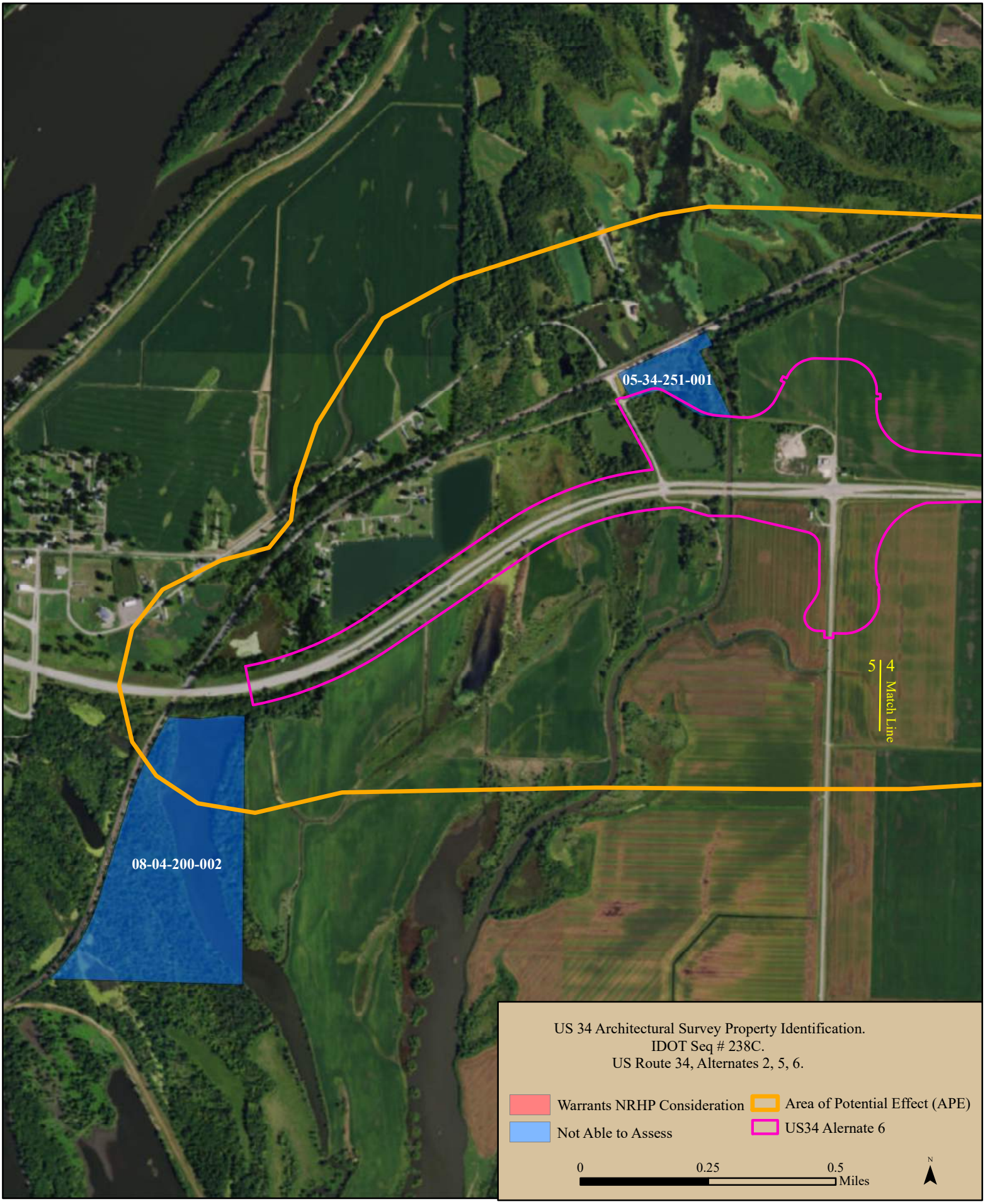

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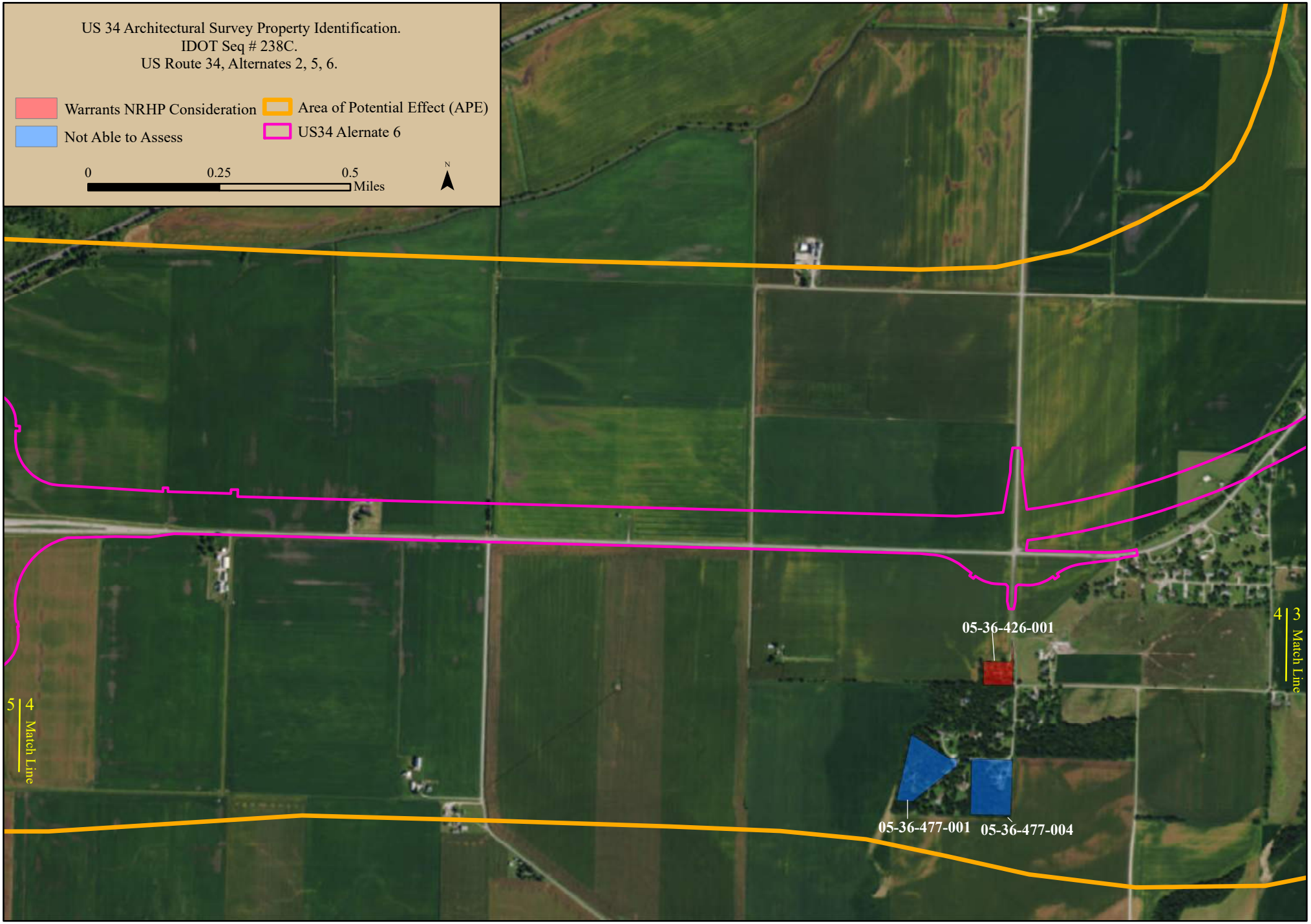

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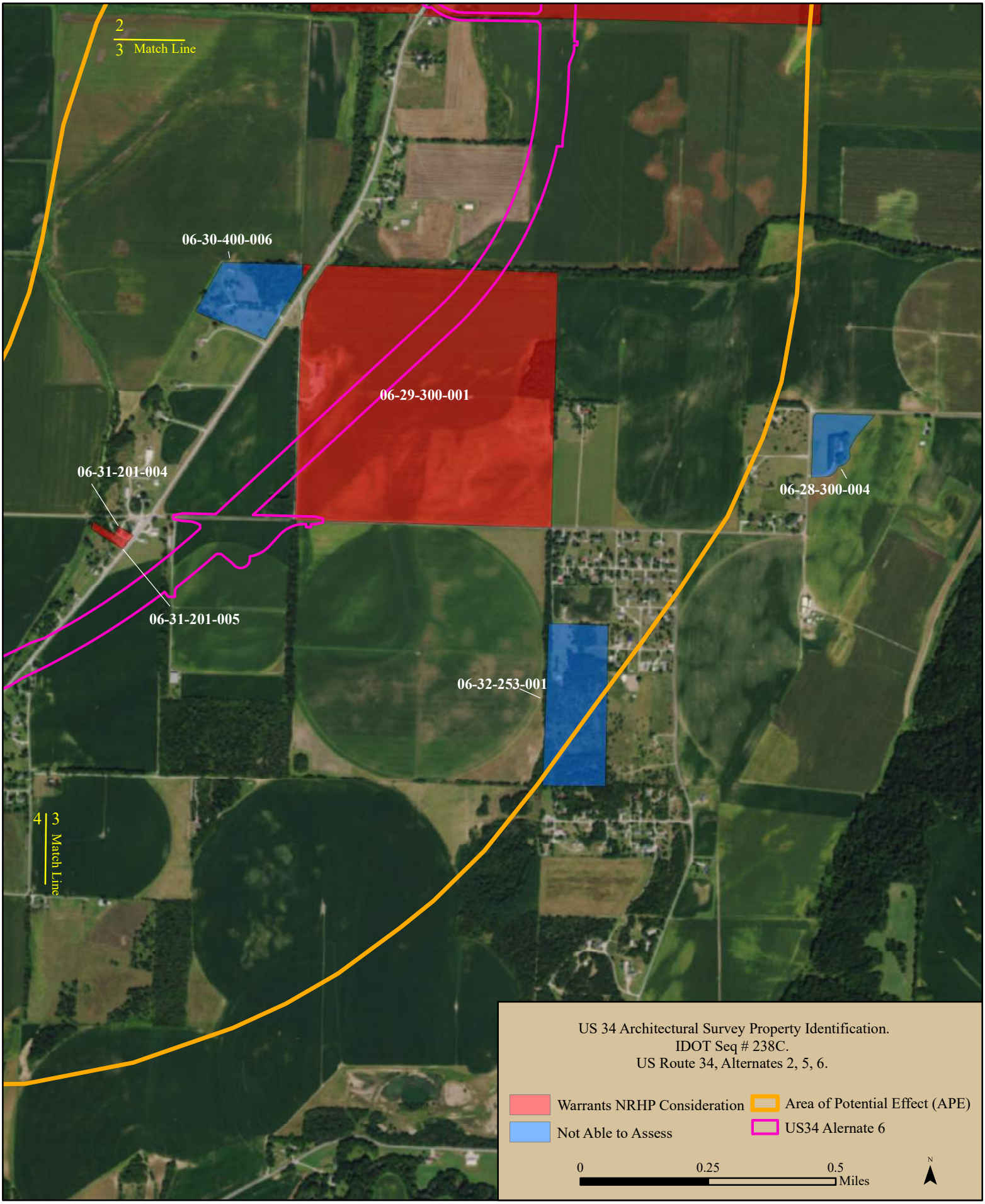

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IDOT Seq # 238C.
US Route 34, Alternates 2, 5, 6.
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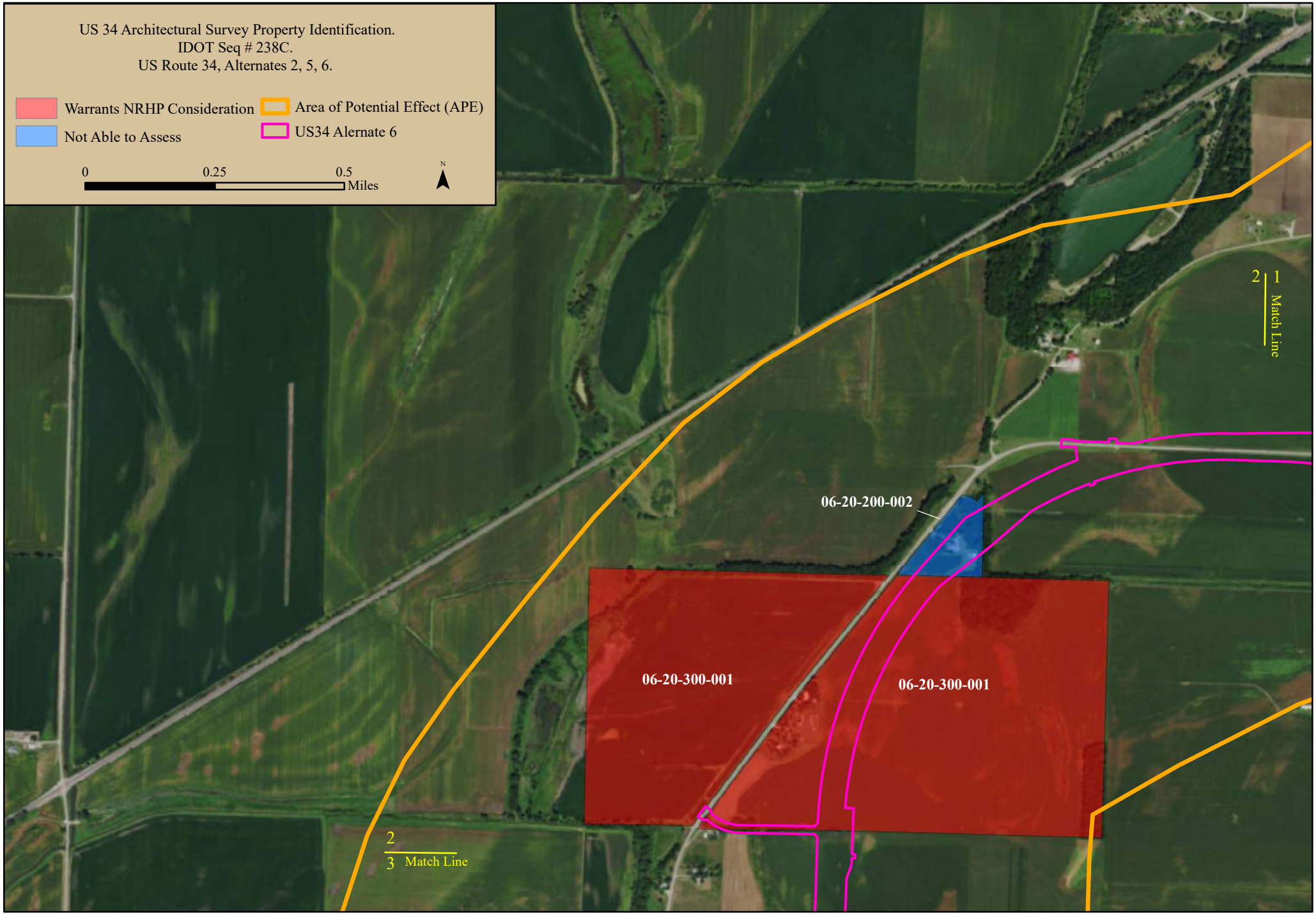

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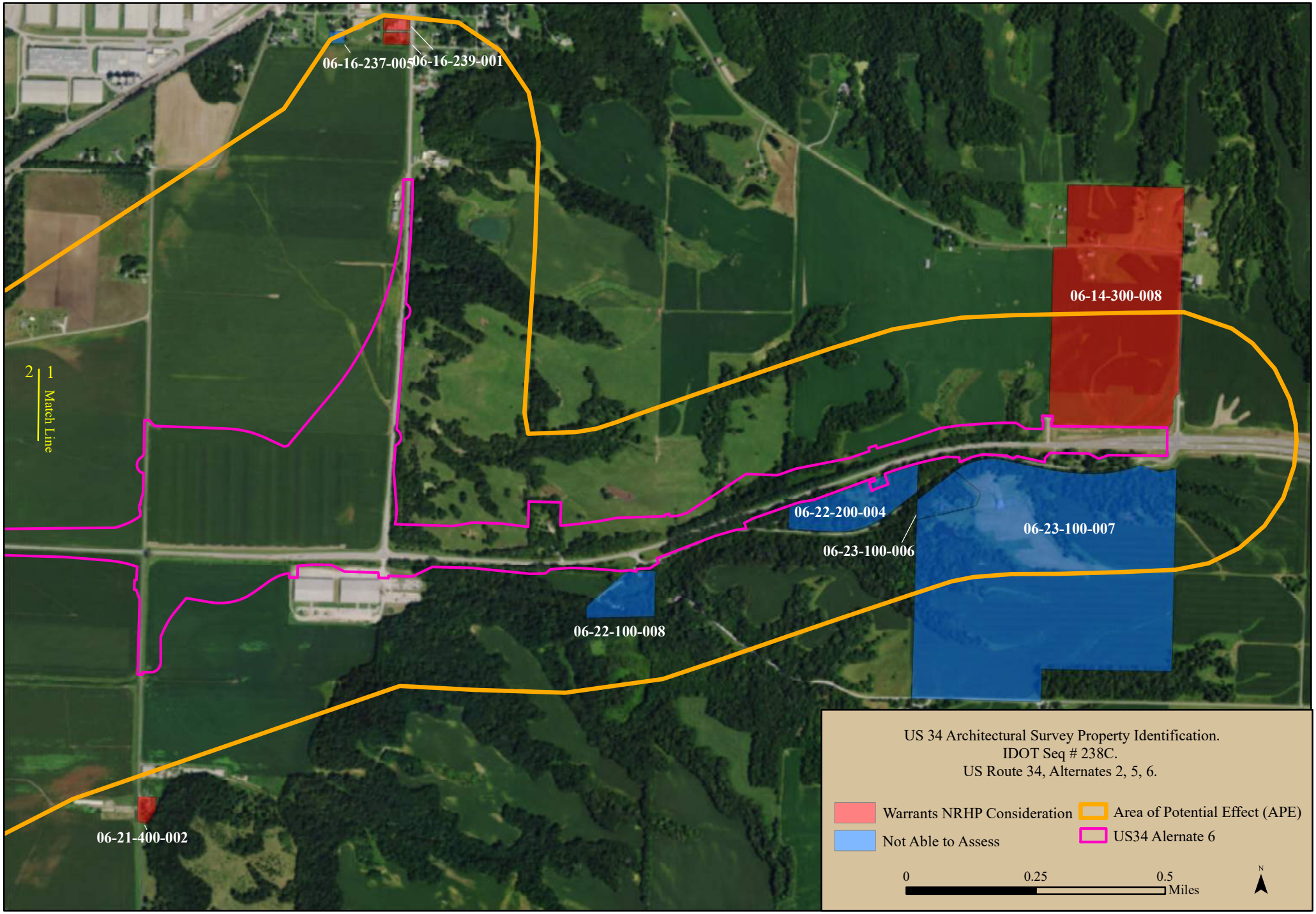

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Area of Potential Effect (APE)
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Area of Potential Effect (APE)
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Area of Potential Effect (APE)
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Historic Resources Identification Report

US 34, Gladstone to Gulfport – Preferred Alternative

Henderson County, Illinois



Prepared by
Michael E. Smith & Laura E. Williams

With contributions by
Emilie Land & Megan Gilbert

April 2019







Illinois Department of Transportation

ILLINOIS
Illinois State Archaeological Survey
PRAIRIE RESEARCH INSTITUTE

IDOT Sequence No. 238D
ISAS Architectural Log No.16245

US 34, Gladstone to Gulfport – Preferred Alternative

HISTORIC RESOURCES IDENTIFICATION REPORT

Henderson County, Illinois

IDOT Sequence # 238D
ISAS Architectural Log # 16245

March 2019
Revised April 2019



Prepared By:

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Illinois State Archaeological Survey

INTRODUCTION

This report documents the results of the historic resources survey completed for the project to improve US Route 34 (US-34) between Gladstone, Illinois and Gulfport, Illinois in Henderson County (Location Map, Appendix A). The Illinois Department of Transportation (IDOT) first proposed improvements to US-34 in 2000 (IDOT Sequence #238). This project, IDOT Sequence #238D, represents the final design change to that initial project. IDOT is proposing these improvements to US-34 using state and Federal Highway Administration (FHWA) funds. The use of federal funds makes this project a federal undertaking subject to federal and state environmental and historic preservation laws and regulations. This report identifies all historic resources within the Area of Potential Effect (APE), and provides preliminary evaluations of eligibility for listing on the National Register of Historic Places (NRHP).

This historic resources survey and report were completed in accordance with federal and state laws and regulations that protect significant cultural resources including historic and archaeological sites including: Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, and its enabling legislation, 36 CFR Part 800; the Illinois Historic Preservation Act (20 ILCS 3410), and the Illinois State Agency Historic Resources Protection Act (20 ILCS 3420).

Section 106 and Illinois state laws require that IDOT consider the effects of its project on historic properties. As such, the effects of this project to identified historic properties in the APE will be completed in an independent document to be completed after review of this historic resource survey report and its results by the Illinois State Historic Preservation Office (SHPO).

PROJECT DESCRIPTION

US-34 is an east–west highway in northern Illinois that runs from the Iowa state line, west of Galesburg, IL to Illinois Route 43 (IL 43) and Historic U.S. Route 66 at Harlem Avenue in Berwyn, IL (southwest of Chicago). The project location extends along approximately eleven miles of US Route 34 (US-34) from Gulfport, IL at the western end to 2 miles east of Gladstone, IL in Henderson County. The project involves: new road alignments and widening of existing road sections. Please note that initially three alternative alignments were considered for the US-34 project before a preferred alignment was picked in 2019. This final preferred alignment was used in delineating the current APE.

AREA OF POTENTIAL EFFECT (APE)

The APE of the proposed US-34 project was designated pursuant to 36 CFR 800. 16 (d) which is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking."

The APE for historic architectural resources has been defined as a 0.25-mile buffer extending to either side of the roadway from the centerline of the preferred alternative along the entire project corridor to encompass any properties immediately adjacent to the proposed work. Generally, any parcel that extends into the APE is considered as falling within the APE and was included in the historic resource inventory/survey for this project. Maps depicting the APE, the project corridor, known above-ground historic properties, and surveyed parcels are provided in Appendix A to this report.

Per NHPA Section 106, the lead Federal agency (in this case IDOT on behalf of the Federal Highway Administration) develops the APE in consultation with SHPO. Historic properties in the APE are identified and a determination is made of the proposed project's effect on those resources. Section 106 requires consultation with the SHPO and identified parties with an interest in historic resources during planning and development of the proposed project. The SHPO is provided an opportunity to comment on the proposed project and its effects on historic properties.

The APE contains a mixed rural and suburban landscape with development from the mid-1800s through the present day. Significant portions of the APE contain farm-land and former- farm-land parcels that have been developed in more recent years for commercial or residential use. The APE sits on the Illinois side of the Mississippi River just east of the city of Burlington, IA. The APE is adjacent to one active railroad, the Burlington Northern and Santa Fe (BNSF). The town of Gulfport which sits at the western extent of the APE has been heavily impacted by periodic flooding. Major floods in 1993 and 2008 have to contributed to the communities' declining population and the loss of structures within the built environment.

METHODOLOGY

Historic properties are resources that are either listed, or determined eligible for listing, on the NRHP by considering the NRHP Criteria for Evaluation to determine the applicability of a structure's potential historic significance. Above-ground resources include buildings, structures, sites, objects, landscapes, and historic districts. The criteria state that "the quality of significance in American history, architectural, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of persons significant in our past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or
D. That have yielded, or may be likely to yield, information important in prehistory or history."

All properties containing above-ground resources 40 years old and older were included in this historic resource survey per IDOT's standard procedures. Although fifty years is a generally accepted age criteria for historic properties, a narrower criterion has been adopted by IDOT in order to accommodate a generous period of time before work may be implemented and to allow for a broader evaluation of mid-century properties.

Available records and resources were used to identify known historic resources properties that are listed on or eligible for inclusion on the NRHP. Second, field surveys and physical observations were conducted to create a photo log of extant properties, and identify structures that met the forty-year age requirement (constructed prior to 1978).

Background research was conducted to identify known historic resources and to provide the project personnel with a general history and context for evaluating historic resources within the APE. Repositories and sources consulted include Illinois SHPO, National Park Service, and Henderson County Assessor's records; historic county and quadrangle maps; current and historic aerial views; and county and city histories available online. A list of consulted resources is provided at the end of this report.

Property site observations were conducted from the public right-of-way. A photo record of each property within the APE has been collected, and each property identified in a method consistent with the project's mapping system. Historic resources in the APE were dated based on physical details and verified through the Henderson County Assessor's database. Contemporary satellite views, historic aerials, and historic maps were also consulted for verification of a resource's age and historic use. The final preliminary evaluations of NRHP eligibility will be made by qualified staff at IDOT.

HISTORIC CONTEXT

Henderson County is bordered to the north by Mercer County, to the east by Warren County, to the south by McDonough and Hancock counties, and to the west by the Mississippi River. The county was organized in 1841, and named for Henderson County, Kentucky, where many of its early citizens had originated before migrating to Illinois. The county's bottomland along the Mississippi River is especially fertile but was historically prone to flooding until efforts to create levees and drainage systems began in the early twentieth century.

The county seat of Oquawka was laid out in 1836 on the Mississippi River. Oquawka became an important commercial port for river traffic on the upper Mississippi until railroads reached this part of the state in the 1850s. Henderson County experienced steady economic and population growth after the Civil War. However, by the 1920s, the number of small farms in Henderson County started to decline along with the general population. Despite a wartime agricultural production boom and a period of general post-war prosperity, rural communities in Henderson County often faced a lack of economic development in the twentieth century.

Three townships in Henderson County are included in the US 34 project corridor: Gladstone Township, Carman Township, and Stronghurst Township. The majority of the project area was initially developed as self-sufficient family farms during the pioneer period. Increased mechanization and greater access to markets expanded and intensified farming and land-use over the nineteenth century. By the early twentieth century, the rise of large-scale agribusiness led to a consolidation of the county's communities and a gradual depopulation of the rural landscape. In many cases, the houses, outbuildings, and barns built for small-scale farming had become obsolete and were abandoned. Some of these basic trends in land use are evident when the structurally annotated maps of Henderson County published between 1868 and 1958 are compared.

Transportation networks also influenced the settlement patterns and the development of infrastructure within the county. As railroads began to cross Henderson County in the mid-nineteenth century, they often had a dramatic impact on the landscape. Whole communities were established, moved, or abandoned according to their orientation to the rail lines. Both Gladstone and Stronghurst townships were renamed in the nineteenth century to emphasize the emerging importance of communities that served as rail hubs. Limestone quarrying, often for railroad use, remained an important industry in Gladstone Township throughout the nineteenth and twentieth centuries. Finally, the introduction of state and interstate highways in the twentieth century further centralized economic and social life within Henderson

County. Five main highways, including the section of US 34 within the APE for the project, were open in Henderson County by 1930. After World War II the development of US-34 resulted in a small number of transportation related commercial businesses along the corridor. Independently owned gas stations, motels, and auto-mechanics garages were established between Burlington, IA and Monmouth, IL to take advantage of passing highway traffic. In addition to commercial properties, at least one small subdivision and was also developed in the APE during the later twentieth century to capitalize on the growth of Burlington and the increase of commuters along the US 34 corridor.

IDENTIFICATION OF HISTORIC PROPERTIES IN THE APE

This historic resource identification survey was completed in several stages by the Illinois State Archaeological Survey (ISAS). The initial fieldwork began with the 2017 photo survey of properties along the corridor. The results of the initial survey were submitted to IDOT as a memo in August 2017. After additional research was conducted a preliminary report was submitted in November 2017 with revisions to the report requested in May 2018. A second draft report was then submitted by ISAS in January of 2019. After the selection of the preferred project alignment, additional fieldwork and APE mapping was then completed by ISAS in the spring of 2019 to confirm extant resources, supplement existing documentation, and identify additional resources not previously observed. IDOT's architectural historian Elizabeth L. Roman will make the final evaluations of NRHP eligibility, and finalize this report including the report content, inventory table, and APE mapping. The names and qualifications of personnel who contributed to this report are provided in Appendix D.

To identify above-ground historic properties that may be affected by the US-34 project, a reconnaissance level inventory of historic resources in the APE was conducted for this study. Full evaluation of NRHP eligibility that involved property access, property specific research, and comparison to other historic properties in the region, was not conducted with this project. It was determined by IDOT that the US-34 project effects to above-ground historic properties can be concluded using preliminary evaluations of NRHP eligibility.

Historic resources that appeared to hold historic and/or architectural significance and retained sufficient integrity to convey that significance were determined to Warrant NRHP Consideration as a preliminary determination of NRHP eligibility. Historic resources that failed to hold significance and that lack integrity have been determined to be NRHP Not Eligible with this survey and report.

RESULTS OF THE HISTORIC RESOURCES SURVEY

The historic resources survey revealed that the APE contains a varied mix of building stock, from 19th century farmstead remnants to late twentieth century residential subdivisions. In general, the APE has been sparsely developed, with mostly residential buildings dating from 1900 through the present.

The neighborhoods within the APE were evaluated for their historic district potential. As noted earlier in this report, about 4.5 miles east of the City of Burlington, IA, the APE contains a subdivision with homes that date from the 1970's through the early 21st century. This residential subdivision contains common building forms and styles from the last half of the 20th century, including Ranch, Split-Level and Contemporary dwellings. The subdivision does not represent part of a planned community, planned residential subdivision, or suburban center. Rather it is made up of former farms whose owners subdivided to take advantage of the small amount of suburban growth along the US-34 corridor that has occurred since the mid-20th century. As such, no subdivisions or any other neighborhoods within the APE qualify for NRHP eligibility as an historic district.

The detailed results of the historic resources survey for this project are provided in tabular format in Appendix B to this report. The table includes for each historic resource the following information: Survey ID Number; address; resource date, type and style/form; NRHP status; and brief justification and evaluation of NHRP eligibility. Photographs of each resource are also provided in the photo log (Appendix C).

Research at HARGIS and the NPS National Register websites identified no NRHP or state listed historic properties in the APE. Fieldwork and research described above, conducted from 2017 to 2019, identified 71historic resources in the APE for the project. Following evaluation of the NRHP eligibility of the resources through application of the National Register criteria for evaluation, a total of 7 historic resources, all buildings, were identified that Warrant NRHP Consideration (Table 1). The remaining 64 historic resources within the APE for this project lack the historical associations, architectural significance, and/or physical integrity to qualify for NRHP listing, and as such are determined NRHP Not Eligible with this report. No new historic districts were identified within the APE, as described fully in the previous section of this report.

Table 1 – Results of the Historic Resources Inventory Survey

Resource Type	NRHP Listed	Warrant NRHP Consideration	Not Eligible	Total
Buildings & Building Complexes	0	7	64	71

Outside of a small number of historic farmsteads, relatively few parcels were found to meet a minimum threshold of exhibiting any of the NRHP Criteria. This is due in part to the fact that the project area encompasses large tracts of traditional farmland which has been slowly and haphazardly divided and developed for residential or commercial uses over time. Many of these properties exhibited recent common forms and were listed as Not Eligible.

However, the increase in US-34 traffic during the 1950's and 1960's resulted in a small number of transportation related commercial enterprises along the corridor. Some of these properties many represent well-preserved, locally significant, expressions of post-war architecture in the Midwest.

SUMMARY OF FINDINGS

This historic resources survey conducted for the US Route 34 (US-34) between Gladstone, Illinois and Gulfport project identified 71 historic architectural resources in the APE. Of these, 7 Warrant NRHP Consideration, and the remaining 64 resources are Not Eligible for listing on the NRHP. One potential historic district was identified but determined to be Not Eligible.

A total of 7 above-ground historic properties were identified in the APE, as listed below:

Properties that Warrant NRHP Consideration:

#5 Sunset Hunting & Fishing Club, East of Orchard City Lake, Carman. 1945 Rental Cabin. (Map 1, Inv. pg. 1)
#6 – 750 US Route 34, Gladstone. C.1900 Farm Complex. (Map 3, Inv. pg. 1)
#11 – 907 Township Road 1225N, Gladstone. C.1900 Farm Complex. (Map 4, Inv. pg. 2)
#30 & #31 – Rebel Motel and Cruisers Restaurant/Bar, 967 US Route 34, Gladstone. 1950-1957 Mid Century/Ranch, Commercial Complex (Map 5, Inv. pg. 5)
#52- 1375 Township Road 1450N, Gladstone. C.1900 Extended Gable Hay Barn. (Map 9, Inv. pg. 8)
#55- 1337 Galbraith Road, Gladstone. C.1900 Farm Complex. (Map 9, Inv. pg. 8)

The US-34 between Gladstone and Gulfport project will involve new highway features that will be visible from surrounding properties, it has the potential to indirectly effect above-ground historic properties within view. The project's effects to historic properties will be evaluated in a separate document for consultation with the SHPO and any consulting parties in order to complete the Section 106 process.

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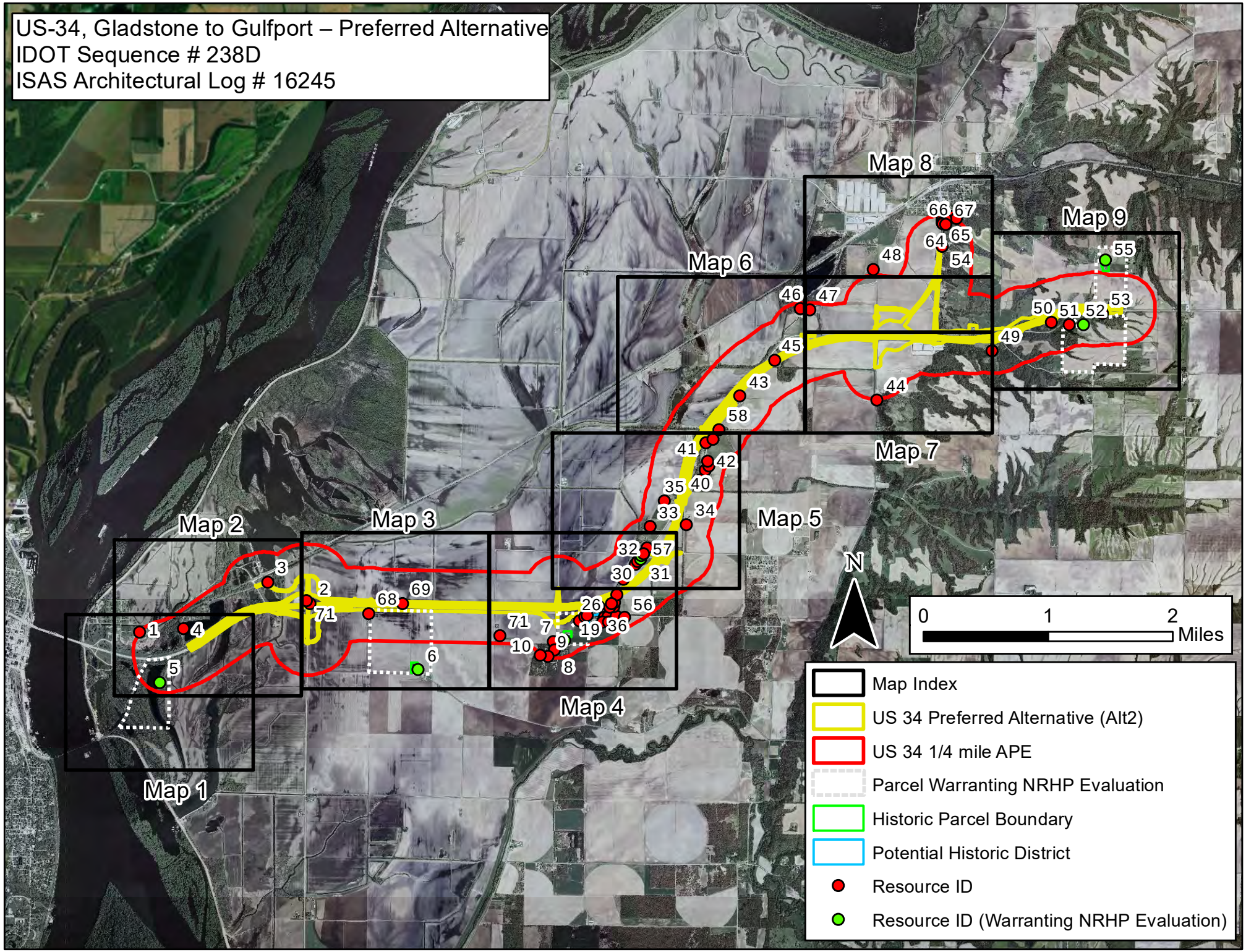
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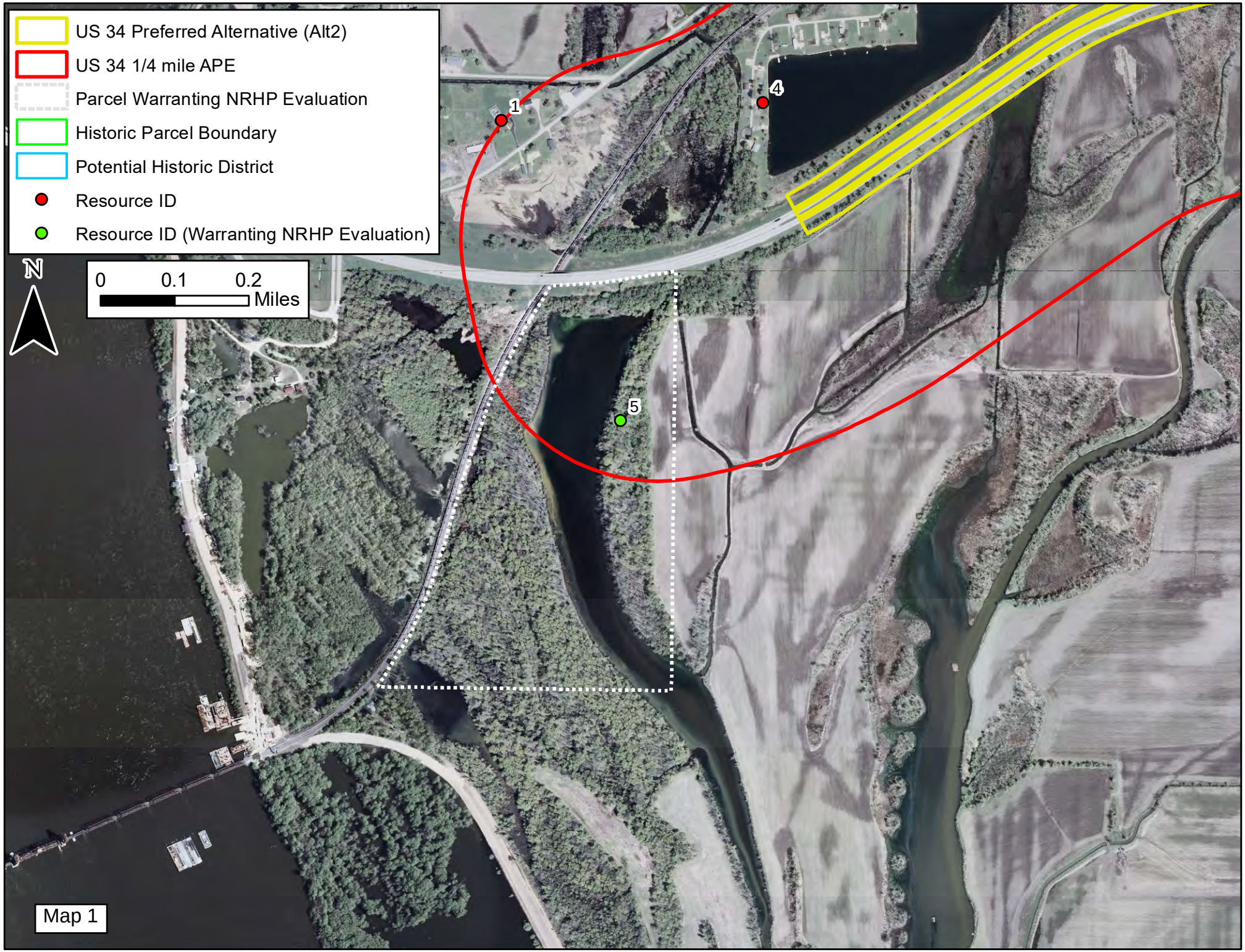
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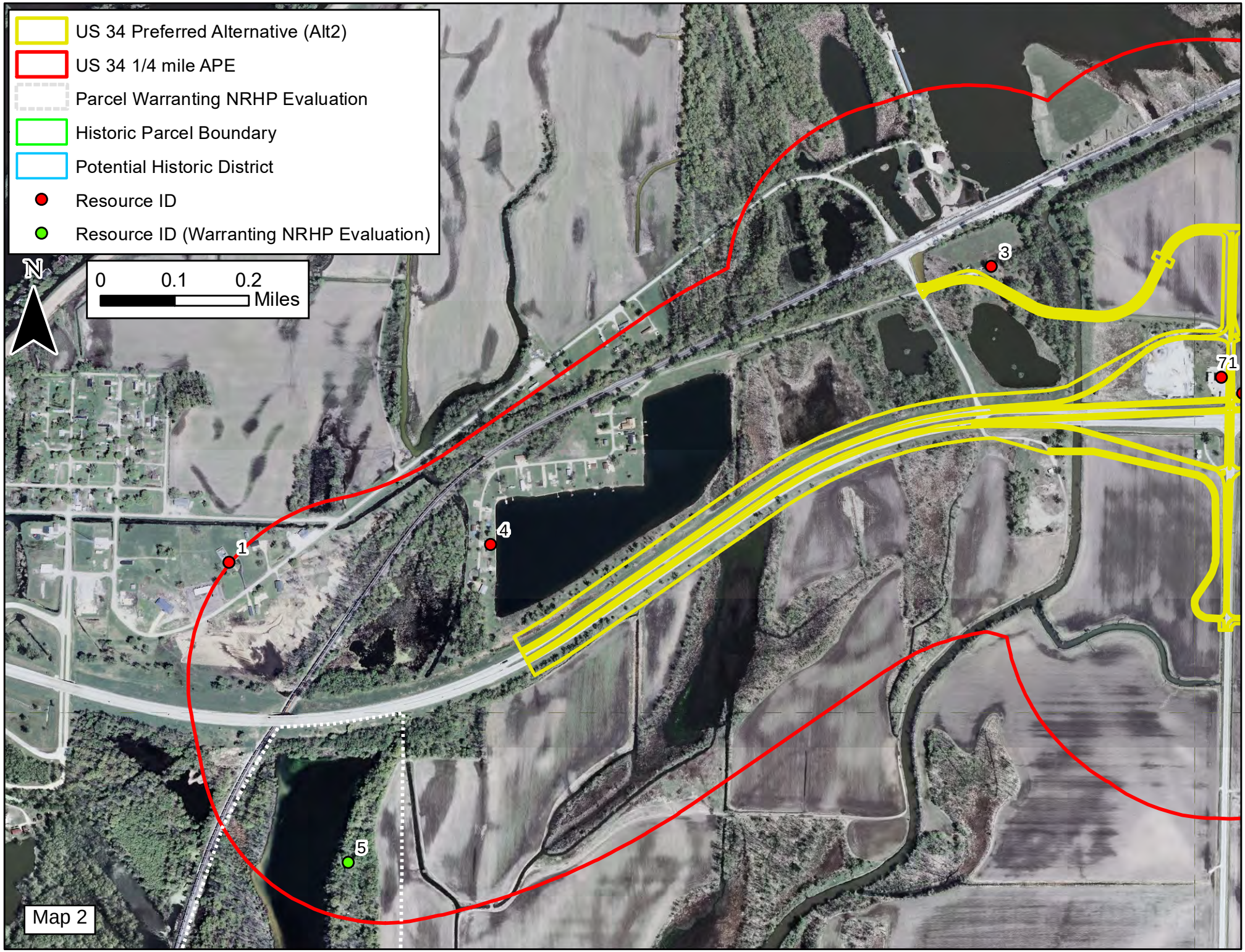
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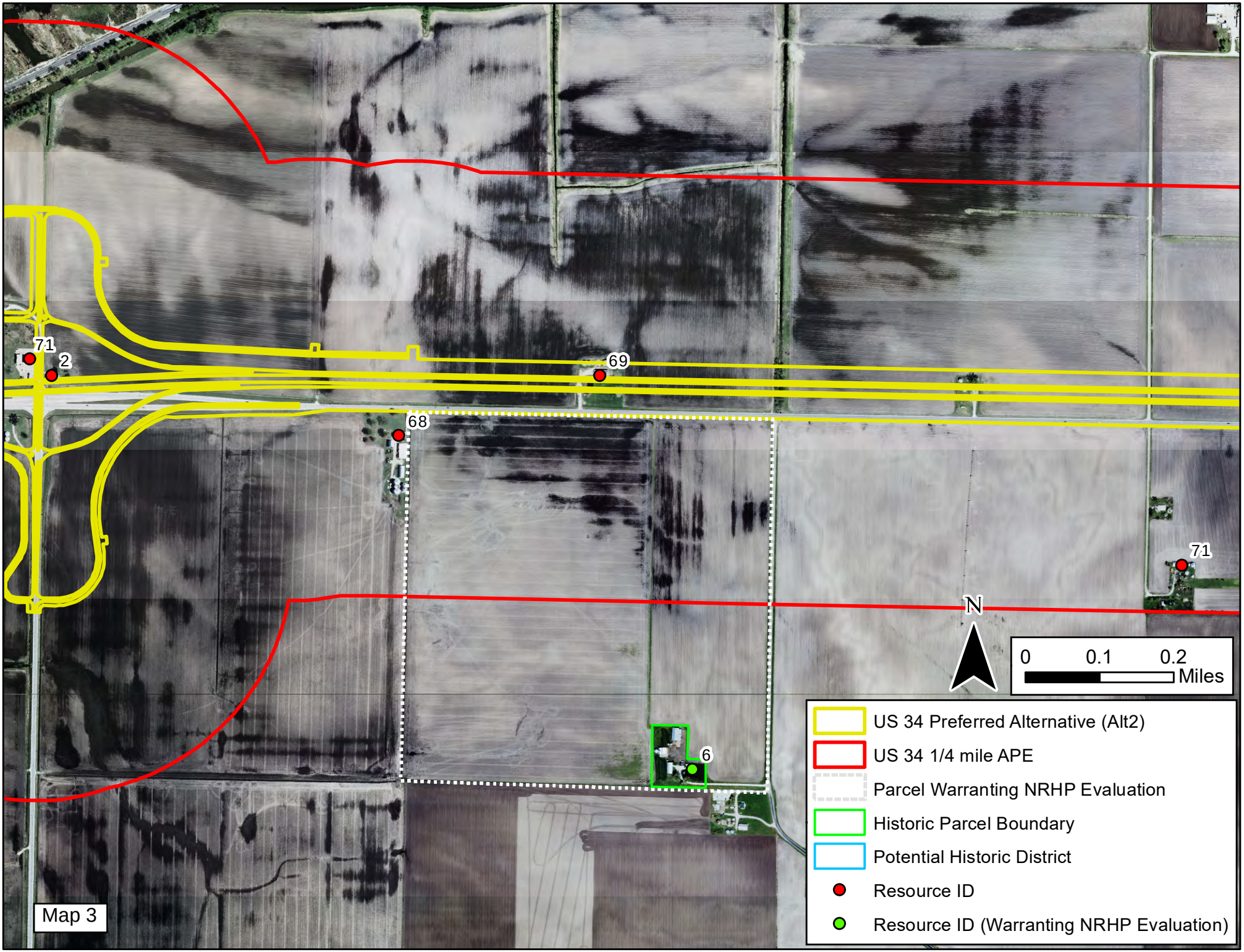
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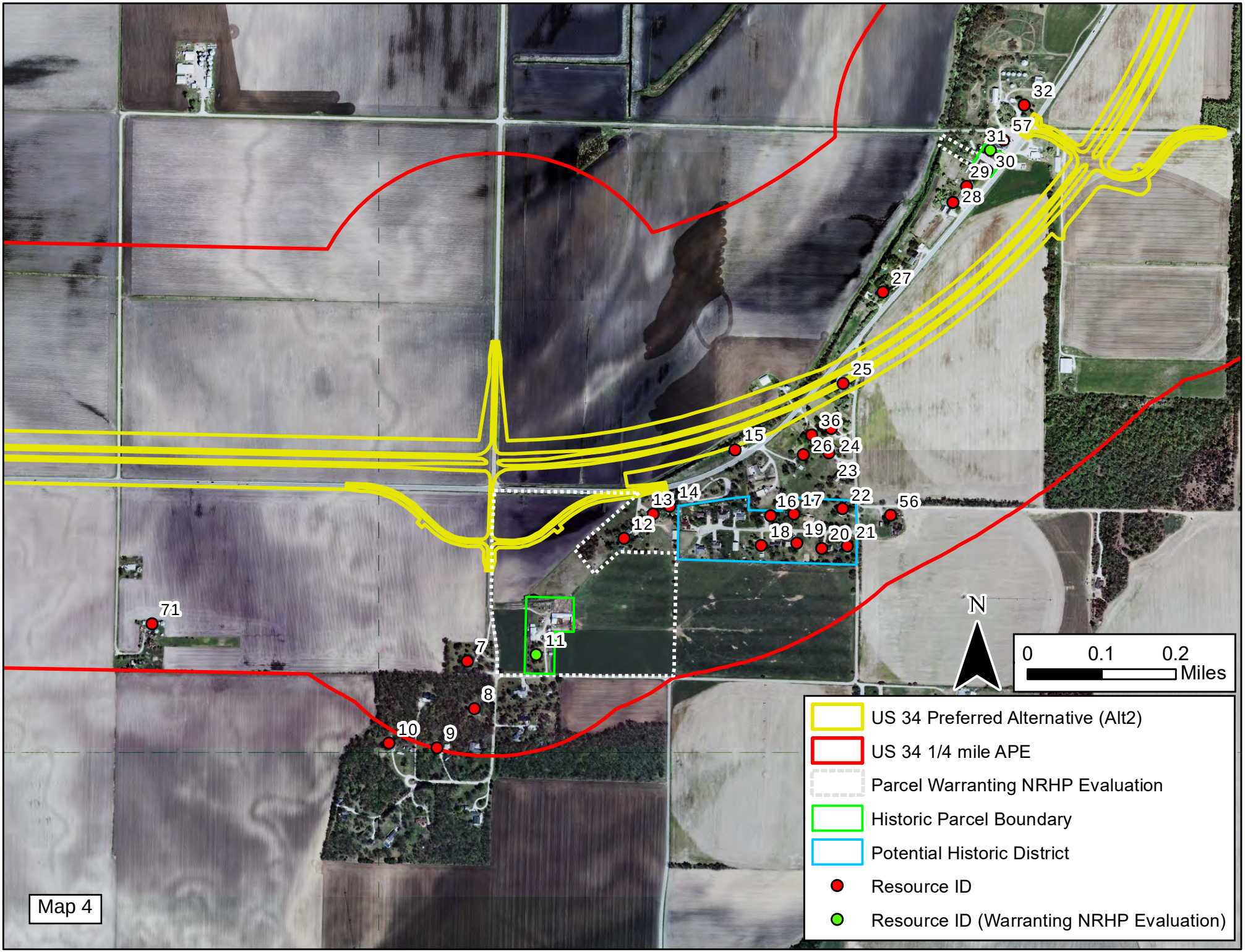
APPENDIX A – APE MAPS

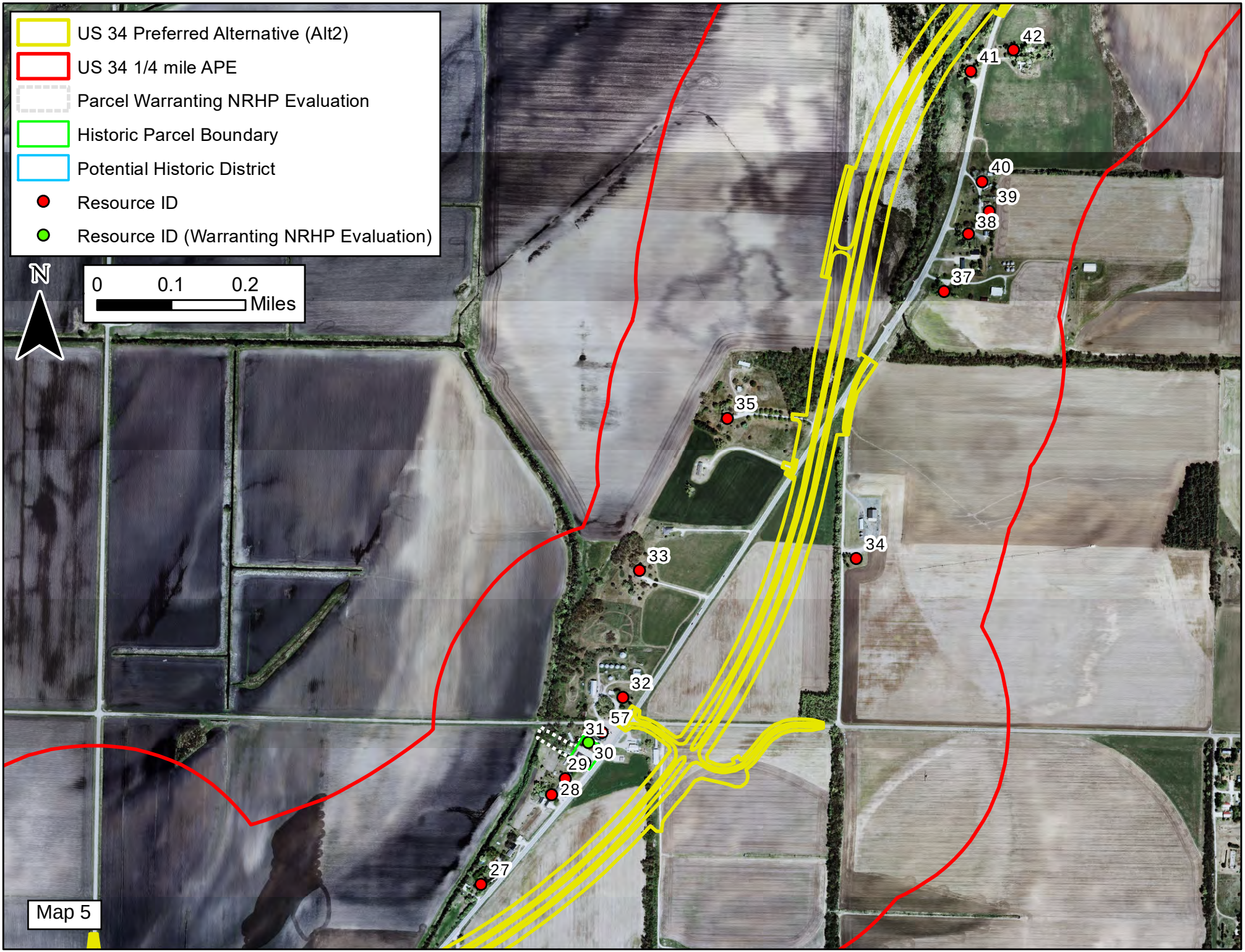

US-34, Gladstone to Gulfport – Preferred Alternative
IDOT Sequence # 238D
ISAS Architectural Log # 16245
Map 1
Map 2
Map 3
Map 4
Map 5
Map 6
Map 7
Map 8
Map 9
N
0
1
2
Miles
Map Index
US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Parcel Boundary
Potential Historic District
Resource ID
Resource ID (Warranting NRHP Evaluation)

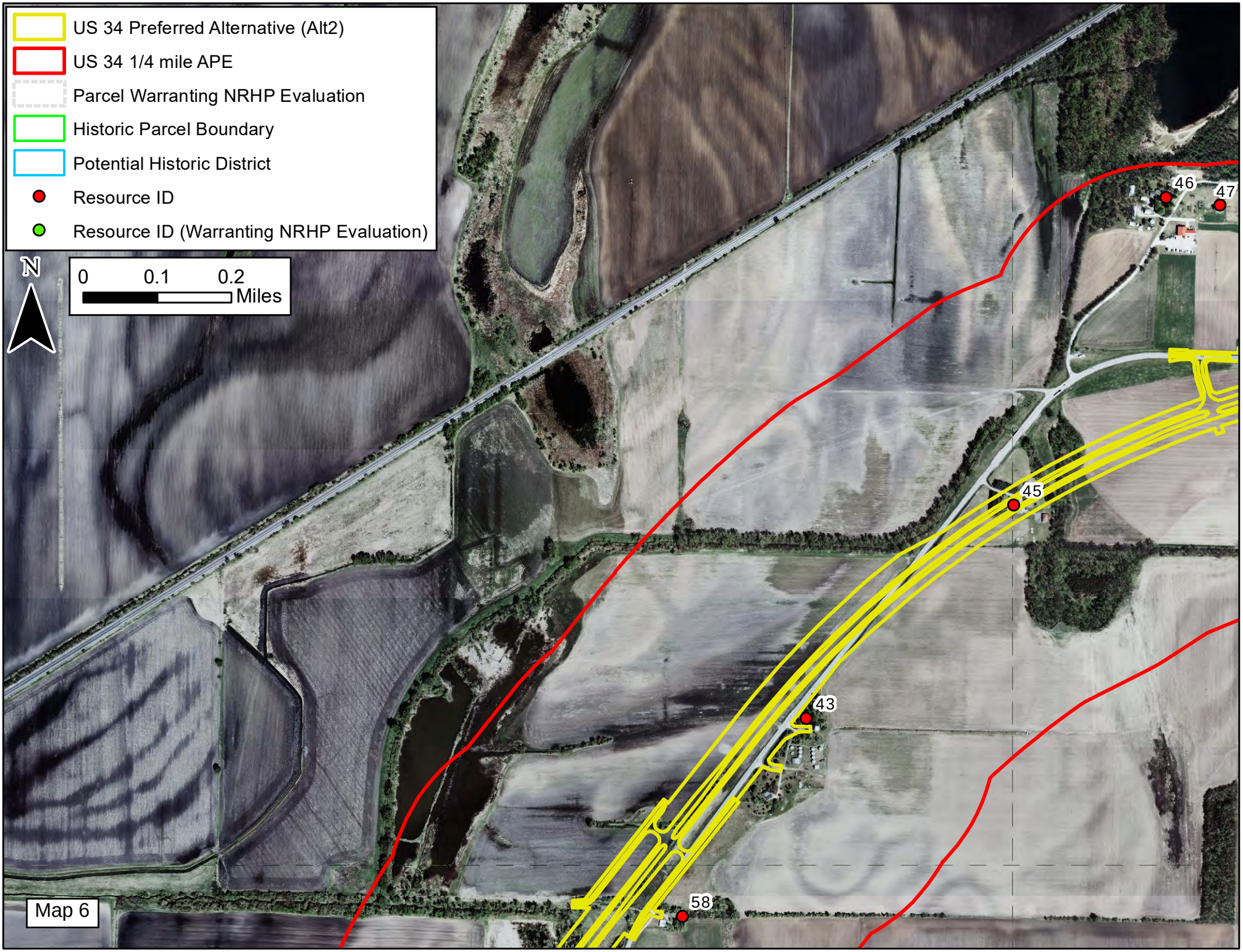

US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Parcel Boundary
Potential Historic District
Resource ID
Resource ID (Warranting NRHP Evaluation)
N
0
0.1
0.2
Miles
1
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5
Map 1

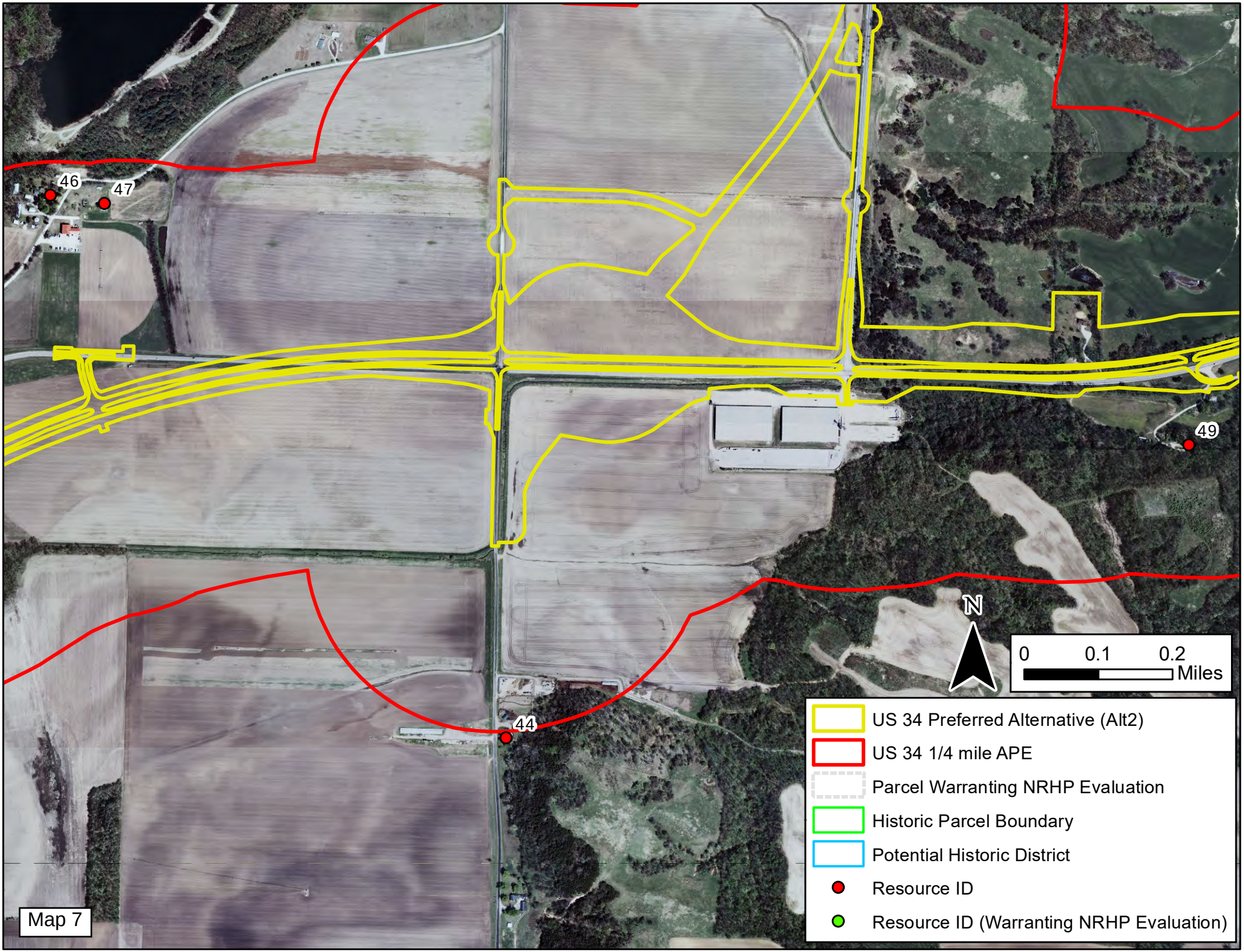

US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Parcel Boundary
Potential Historic District
Resource ID
Resource ID (Warranting NRHP Evaluation)
N
0
0.1
0.2
Miles
1
3
4
5
71
Map 2

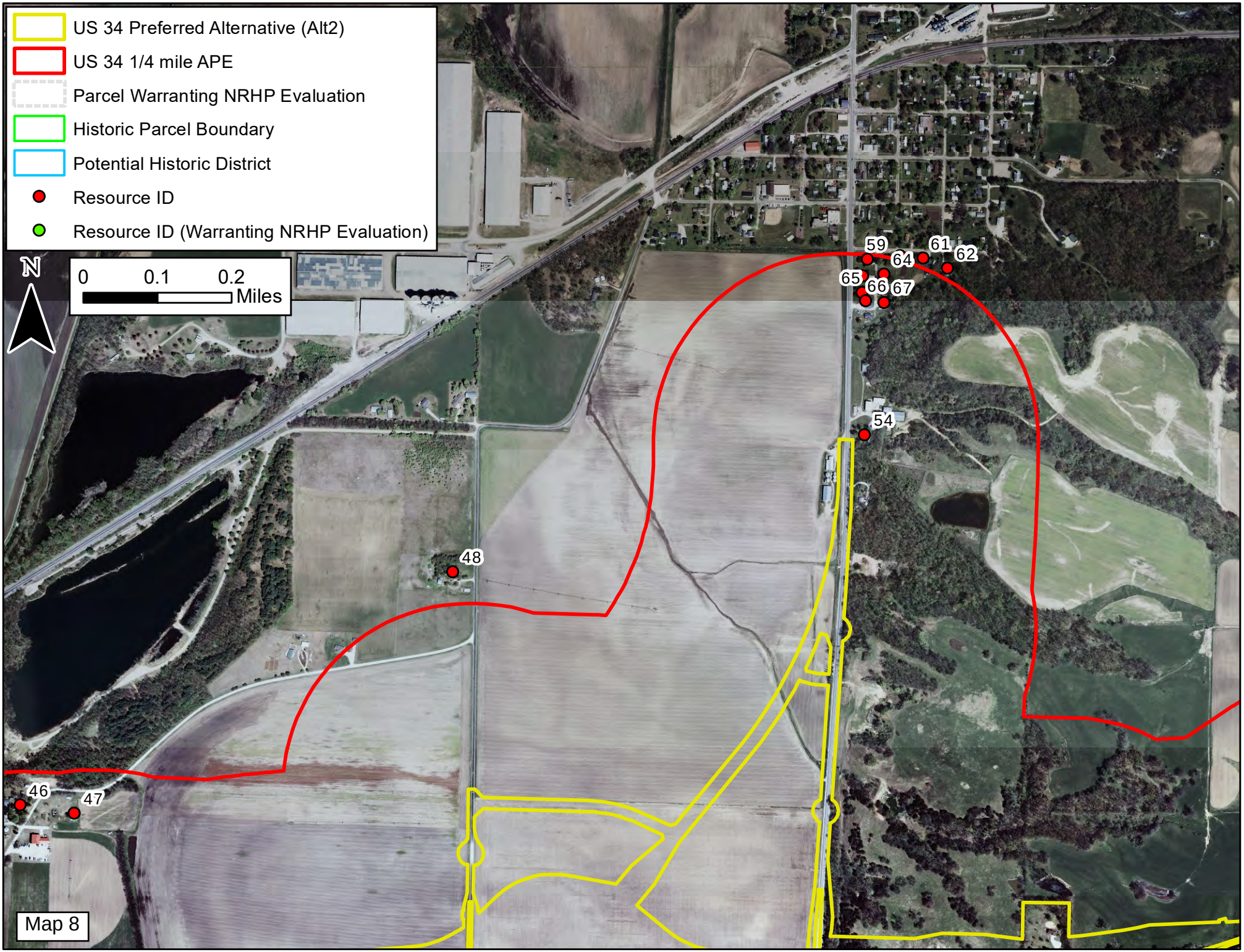

71
2
69
68
71
N
0
0.1
0.2
Miles
6
US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Parcel Boundary
Potential Historic District
Resource ID
Resource ID (Warranting NRHP Evaluation)
Map 3

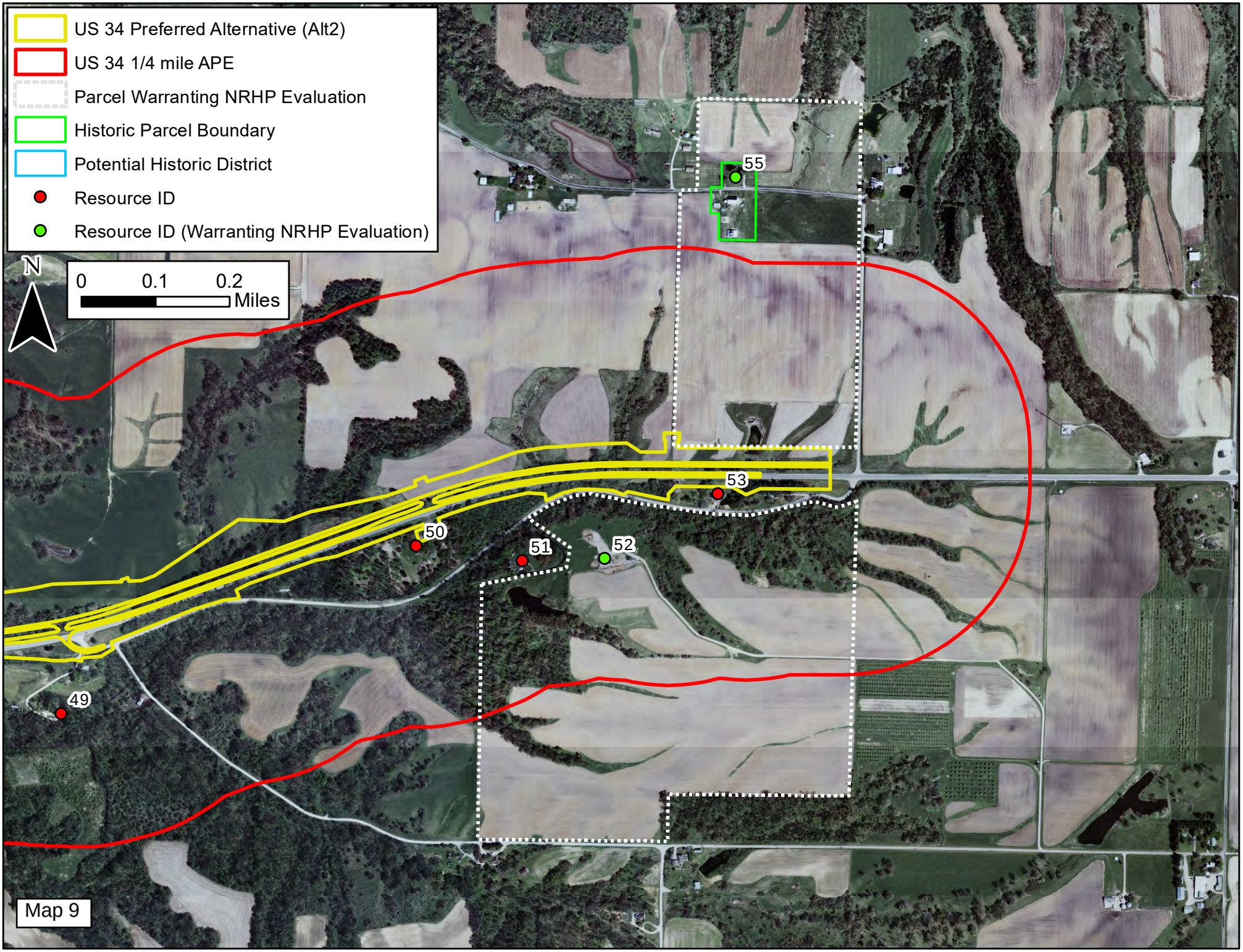

32
57
31
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28
27
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36
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26
24
23
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13
16
17
22
56
12
18
19
20
21
71
11
7
8
10
9
N
0
0.1
0.2
Miles
US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Parcel Boundary
Potential Historic District
Resource ID
Resource ID (Warranting NRHP Evaluation)
Map 4


US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Parcel Boundary
Potential Historic District
Resource ID
Resource ID (Warranting NRHP Evaluation)
N
0
0.1
0.2
Miles
42
41
40
39
38
37
35
34
33
32
57
31
30
29
28
27
Map 5


US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Parcel Boundary
Potential Historic District
Resource ID
Resource ID (Warranting NRHP Evaluation)
N
0
0.1
0.2
Miles
46
47
45
43
58
Map 6


46
47
49
44
N
0
0.1
0.2
Miles
US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Parcel Boundary
Potential Historic District
Resource ID
Resource ID (Warranting NRHP Evaluation)
Map 7


US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Parcel Boundary
Potential Historic District
Resource ID
Resource ID (Warranting NRHP Evaluation)
N
0
0.1
0.2
Miles
59
61
62
64
65
66
67
54
48
46
47
Map 8


US 34 Preferred Alternative (Alt2)
US 34 1/4 mile APE
Parcel Warranting NRHP Evaluation
Historic Parcel Boundary
Potential Historic District
Resource ID
Resource ID (Warranting NRHP Evaluation)
N
0
0.1
0.2
Miles
55
53
50
51
52
49
Map 9

APPENDIX B – HISTORIC RESOURCES SURVEY INVENTORY

Resource No	Name/ Tax Parcel #	Resource Address	Township	Property Type	Style / Form	Year Built	Comments	NRHP Status	Photo Number
1	05-33-404-003	RR 1 BOX G126. Egan Street	Gladstone	Dwelling	Ranch	1960	1 story- hipped roof, common example of a mid-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	1
2	05-35-100-002	699 US Route 34	Gladstone	Dwelling	Ranch	1965	1 story- side gable house, common mid-twentieth century housing form, lacking architectural significance and integrity.	Not Eligible	2
3	05-34-251-001	661 Stevenson Lake Road	Gladstone	Dwelling	Minimal Traditional	1940	Common mid-twentieth century 1 story frame house, with alterations to siding and windows.	Not Eligible	3
4	05-33-427-004	602 Stevenson Lake Road	Carman	Dwelling	Ranch	1977	Common example of a mid-twentieth century 1 story frame house with many alterations. Lacks architectural significance.	Not Eligible	4
5	08-04-200-002	East of Orchard City Lake	Carman	Seasonal Rental Unit	Cabin	1945	Sunset Hunting & Fishing Club- Mid twentieth century summer cabin. It was not possible to fully access this property, thus documenting structures and other possible features is limited. Using current aerial views, only 1 cabin is extant, and there is no other evidence of associated features. However, without full accesses to the property more research is need for evaluation.	Warrants NRHP Consideration	5--6
6	05-35-400-001	750 US Route 34	Gladstone	Farmstead		1900	Early twentith century farm complex, with original house and multiple original outbuildings. 1914 plat map lists owner as C.F. Buck	Warrants NRHP Consideration	7--13
				Dwelling	Gable Front and Wing	1900	Early twentith century 2 story frame farm house. The structure does have some material replacements (siding, widows, roof) but it retains historic integrity through other measures of significance; workmanship, location, feeling, design, setting, and association.		
				Barn #1 and Silo		1900	Crib barn with Elevator/Cupola. Has metal siding and metal gambrel roof. Metal storage bin/silo with conical roof is adjacent.		

Resource No	Name/ Tax Parcel #	Resource Address	Township	Property Type	Style / Form	Year Built	Comments	NRHP Status	Photo Number
				Barn #2 and Modern Shed	Dairy	1900	Large barn with 1 story lean-to. Pre-cast concrete stave silo is adjacent.		
7	05-36-426-001	1231 Township Road 900E	Gladstone	Dwelling	Ranch	1977	Common example of a late-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	14
8	05-36-476-003	1221 Township Road 900E	Gladstone	Dwelling	Split Level	1974	Common example of a late-twentieth century split level frame house, lacking architectural significance.	Not Eligible	15
9	05-36-476-004	891 Township Road 1200N	Gladstone	Dwelling	Ranch/ New Traditional	1977	This is a common late-twentieth century 1 story brick hipped roof house, lacking architectural significance.	Not Eligible	16
10	05-36-476-001	883 Township Road 1200N	Gladstone	Dwelling	Ranch	1975	Common example of a late-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	17
11	06-31-303-002	907 Township Road 1225N	Gladstone	Farmstead			1 Dwelling, 2 Barns, multiple outbuildings, Intact turn of the century farm complex, with original house and multiple original agricultural structures and features. Most structures have some alterations and material replacements. However, each building retains historic integrity through other measures of significance including; workmanship, location, feeling, design, setting, and association. Little historic information is available on the early inhabitants of the property. Therefore the property as a whole is worthy of further research and consideration. The 1900 plat map listes owner as F.M. Mellinger.	Warrants NRHP Consideration	18--23
				Dwelling	I-House	1900	This is an early twentieth century 2 story frame house with a side gable roof and multiple rear additions.		
				Barn #1 and attached outbuildings		1900	Working/ equipment Barn, directly behind dwelling		

Resource No	Name/ Tax Parcel #	Resource Address	Township	Property Type	Style / Form	Year Built	Comments	NRHP Status	Photo Number
				Barn #2 and attached outbuildings	Threshing Barn, Feeding Barn	1900	Large barn with lean-to extensions on both side elevations. Barn has wood siding, metal front gable roof, and a triangular hay hood. 2 more outbuildings are attached to the rear of the barn, 1 is a metal livestock shelter, and 1 is a feeding barn with a partial brick wall. Barnyard/fence complex is adjacent, All grouped in the rear (NE) corner of farmstead complex		
				Silos			3-6 silos, 3 are precast concrete and 3 are cylindrical metal bins		
12	06-31-301-002	912 US Route 34	Gladstone	Dwelling	Ranch	1967	Common mid- twentieth century frame house lacking architectural significance. The integrity of the house has been impacted by replacement siding and windows.	Not Eligible	24
13	06-31-302-001	914 US Route 34	Gladstone	Dwelling	Split Level	1973	Common example of a late-twentieth century split level frame house, lacking architectural significance.	Not Eligible	25
14	06-31-302-002	918 US Route 34	Gladstone	Dwelling	Split Level	1970	Common example of a late-twentieth century split level frame house, lacking architectural significance.	Not Eligible	26
15	06-31-177-003	931 US Route 34	Gladstone	Dwelling	Manufactured Home	c. 1980	Mass produced pre-fabricated home with additions, Common housing type lacking architectural significance	Not Eligible	27
16 thru 22		Township Road 1245N	Gladstone	Potential District	Subdivision	1974-2000	Common late-twentieth century suburban design, All just south of US 34, All structures are examples of common suburban housing forms, most with some alterations and additions. Additionally, all of the houses in the potential district are less than 50 years.	Not Eligible	28--34

Resource No	Name/ Tax Parcel #	Resource Address	Township	Property Type	Style / Form	Year Built	Comments	NRHP Status	Photo Number
16	06-31-326-005	939 Township Road 1245N	Gladstone	Dwelling	Ranch	1977	Common example of a late-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	28
17	06-31-326-006	941 Township Road 1245N	Gladstone	Dwelling	Ranch	1977	Common example of a late-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	29
18	06-31-327-006	936 Township Road 1245N	Gladstone	Dwelling	Ranch	1977	Common example of a late-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	30
19	06-31-327-008	942 Township Road 1245N	Gladstone	Dwelling	Ranch	1977	Common example of a late-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	31
20	06-31-327-009	946 Township Road 1245N	Gladstone	Dwelling	Split Level	1977	Common example of a late-twentieth century split level frame house, lacking architectural significance.	Not Eligible	32
21	06-31-327-010	948 Township Road 1245N	Gladstone	Dwelling	Ranch	1974	Common example of a late-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	33
22	06-31-326-009	1247 Township Road 950E	Gladstone	Dwelling	Split Level	1974	Common example of a late-twentieth century split level frame house, lacking architectural significance.	Not Eligible	34
23	06-31-177-006	1253 Township Road 950E	Gladstone	Dwelling	Ranch	1970	Common example of a late-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	35
24	06-31-177-005	1257 Township Road 950E	Gladstone	Dwelling	Ranch	1970	Common example of a late-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	36
25	06-31-177-004	1265 Township Road 950E	Gladstone	Dwelling	Ranch	1965	Common example of a mid-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	37
26	06-31-177-007	936 US Route 34	Gladstone	Dwelling	Ranch	1965	Common example of a mid-twentieth century 1 story brick house, lacking architectural significance.	Not Eligible	38

Resource No	Name/ Tax Parcel #	Resource Address	Township	Property Type	Style / Form	Year Built	Comments	NRHP Status	Photo Number
27	06-31-201-011	955 US Route 34	Gladstone	Dwelling	Ranch	1960	Common example of a mid-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	39
28	06-31-201-007	963 US Route 34	Gladstone	Dwelling	Ranch	1950	Common example of a mid-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	40
29	06-31-201-006	965 US Route 34	Gladstone	Dwelling	No Discernible Style	1945	Common mid-twentieth century 1 story frame gable end house with additions, lacking architectural significance and integrity.	Not Eligible	41
30 thru 31			Gladstone	Commercial Buildings	Mid Century Modern		These structures represent a mid twentieth century commercial complex in it's originall location with many original featues intact.	Warrants NRHP Consideration	42--50
30	Rebel Motel 06-31-201-005	967 US Route 34				1950-1957	1 story-brick, hipped roofed commercial building. This is an unmodified example of mid-twentieth century roadside motel architecture. The motel is in it's original location and may have local historical significance.		
31	Cruisers Restaurant/Bar 06-31-201-004	969 US Route 34				c.1955	This 1 story brick hipped roofed commercial building. The integrity of the building has been impacted by additions, replacement doors & windows, but it contributes as part of the original complex		
				Metal Sign		c. 1955	The neon roadside sign is currently in front of the resturant/bar but may have been the original sign for the motel.		
32	06-30-400-008	967 Township Road 1300N	Gladstone	Farmstead			1 Dwelling, 1 historic barn and multiple historic outbuildings. Also multiple modern outbuildings and silos. This farmstead complex has lost many of its original outbuildings and the dwelling has been significantly altered with additions and material replacements.	Not Eligible	51--57
				Dwelling	Bungalow	1900	1 1/2 story wood frame bungalow with many additional and alterations, Common housing type lacking national architectural significance and integrity		
				Barn		1900	Medium barn with lean-to extensions on both side elevations. Has a steeply pitched front gable metal roof with a triangular hay hood.		

Resource No	Name/ Tax Parcel #	Resource Address	Township	Property Type	Style / Form	Year Built	Comments	NRHP Status	Photo Number
33	06-30-300-002	983 US Route 34	Gladstone	Dwelling	New Traditional	1976	Common example of a late-twentieth century 2 story frame house, lacking architectural significance.	Not Eligible	58
34	06-29-300-001	1326 Township Road 1000E	Gladstone	Farmstead			1 dwelling and 2 outbuildings. This farmstead consists of the original dwelling but the integrity of the property has been impacted by the loss of all its original outbuildings.	Not Eligible	59--63
				Dwelling	I-House	1900	This is an early twentieth century 2 story frame I - house with a rear ell. The integrity of the house has been impacted by additions, replacement siding, doors, and windows.		
				Outbuilding	Modern Pole Barns and Silos	c. 1990	2 large wood frame outbuildings with metal siding and roof, 3 cylindrical grain bins/ silos with conical roofs.		
35	06-30-400-006	997 US Route 34	Gladstone	Dwelling	Split-level	1976	Common example of a late-twentieth century 2 story frame house, lacking architectural significance.	Not Eligible	64
36	06-31-177-002	940 US Route 34	Gladstone	Dwelling	Vernacular Front Gable	1920	1 1/2 story frame front gabled house. The integrity of the house has been impacted by additions, replacement siding and windows.	Not Eligible	65
37	06-29-176-001	1012 US Route 34	Gladstone	Dwelling	I-House	1875	This is a nineteenth century 2 story frame house. The integrity of the house has been impacted by replacement siding and windows.	Not Eligible	66
38	06-29-152-004	1018 US Route 34	Gladstone	Dwelling	I-House	1900	This is an early twentieth century 2 story frame house. The integrity of the house has been impacted by replacement roofing and windows.	Not Eligible	67
39	06-29-152-003	1020 US Route 34	Gladstone	Dwelling	Ranch	1966	Common example of a mid-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	68
40	06-29-152-002	1022 US Route 34	Gladstone	Dwelling	Split Level	1968	Common example of a mid-twentieth century split level frame house, lacking architectural significance.	Not Eligible	69
41	06-29-101-003	1031 US Route 34	Gladstone	Dwelling	Minimal Traditional	1940	Common mid-twentieth century 1 story frame front gable house, lacking architectural significance and integrity.	Not Eligible	70

Resource No	Name/ Tax Parcel #	Resource Address	Township	Property Type	Style / Form	Year Built	Comments	NRHP Status	Photo Number
42	06-29-102-002	1032 US Route 34	Gladstone	Dwelling	Minimal Traditional	1930	Common mid-twentieth century 1 story brick gable end house. Integrity has been impacted by additions and replacements to the windows and doors.	Not Eligible	71
43	06-20-300-001	1056 US Route 34	Gladstone	Farmstead			The house is less than 40 years old. The early-twentieth century outbuildings lack architectural significance and integrity.	Not Eligible	72--73
				Dwelling	Contemporary	1980	1 story wood frame house with a vey low pitched front gable roof with wide eaves. Also has wood siding, prominent brick chimney on the front façade, and a recessed entry		
				Barns		1920	1 Medium basic barn with lean-to on one side. Has a moderately pitched front gable metal roof. 1 small wood crib barn.		
				Silos		C. 1980	3 cylindrical metal grain bins with conical roofs.		
44	06-21-400-002	1430 Township Road 1150E	Gladstone	Farmstead	Foursquare	1910	This is an early-twentieth century 2 story frame house, lacking architectural significance. The integrity of the house has been impacted by replacement siding, windows, doors, and other additions.	Not Eligible	74--75
	06-21-400-001			Agricultural	Livestock Shelters	c. 1975	These structures are utilitarian agricultural buildings that are less than 50 years old.		
45	06-20-200-002	1086 US Route 34	Gladstone	Dwelling	Gable End and Wing	1900	This early twentieth century 2 story frame house has been impacted by additions and replacement siding and windows.	Not Eligible	76
46	06-20-200-005	1113 Randall Road	Gladstone	Dwelling	Bungalow	1923	This is an early twentieth century 1 1/2 story frame house has been impacted by additions and replacement siding and windows.	Not Eligible	77

Resource No	Name/ Tax Parcel #	Resource Address	Township	Property Type	Style / Form	Year Built	Comments	NRHP Status	Photo Number
47	06-20-200-004	1108 Randall Road	Gladstone	Agricultural	Outbuilding and Crop Storage	C. 1920	Basic wood frame barn with metal roof and cast concrete silo. These early-twentieth century outbuildings lack architectural significance and integrity.	Not Eligible	78
48	06-16-300-009	1527 Township Road 1150E	Gladstone	Dwelling	No Discernible Style	1923	Common mid-twentieth century 1 story frame gable end house, lacking architectural significance and integrity.	Not Eligible	79
49	06-22-100-008	1252 Bogus Hollow Road	Gladstone	Dwelling 1	20th Century Vernacular	1980	"Barn style" dwelling. Basic example of a mid-twentieth century 1 1/2 story frame house, lacking architectural significance.	Not Eligible	80--81
				Dwelling 2	Manufactured Home	1965	Mass produced pre-fabricated home with additions, Common housing type lacking architectural significance	Not Eligible	
50	06-22-200-004	1296 US Route 34	Gladstone	Dwelling	Ranch	1965	Common example of a mid-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	82
51	06-23-100-006	1308 Bogus Hollow Road	Gladstone	Dwelling	Ranch	1952	Common example of a mid-twentieth century 1 story house, lacking architectural significance.	Not Eligible	83
52	06-23-100-007	1375 Township Road 1450N	Gladstone	Agricultural	Barn	c.1900	Large wooden barn with a moderately pitched front gable metal roof that has a triangular hay hood. This early-twentieth century barn retains its integrity and may be historically significant. Little information is available about it's original builders. Historic maps suggest that an associated farm complex was likely razed in the late 1960's. Further research on the property is necessary for a conclusive assessment	Warrants NRHP Consideration	84--85
53	06-23-100-008	1331 Bogus Hollow Road	Gladstone	Dwelling	Ranch	1960	Basic example of a mid-twentieth century 1 story frame house, lacking architectural significance.	Not Eligible	86
54	06-15-300-001	1544 S. State Highway 164	Gladstone	Farmstead			1 Dwelling and 1 Outbuilding, The loss of the historic farm buildings associated with the dwelling has compromised the integrity of the entire complex.	Not Eligible	87--88
				Dwelling	Vernacular Queen Anne	1880	Late nineteenth century 2 story frame house. The integrity of the house has been impacted by replacement siding, doors, and windows, as well as the loss of its historic outbuildings.		

Resource No	Name/ Tax Parcel #	Resource Address	Township	Property Type	Style / Form	Year Built	Comments	NRHP Status	Photo Number
				Outbuilding	Pole Barn	C. 1960	Wood frame building with metal roof and siding. The mid-twentieth century outbuildings lack architectural significance.		
55	06-14-300-008	1337 Galbraith Road	Gladstone	Farmstead			1 Dwelling, 1 Barn and outbuildings, The loss of the original early twentieth century farm house has effected the integrity of the complex, but the intact group of original outbuildings south of the road may Warrant NRHP Consideration. The 1900 plat lists the owner as C.R. Forward.	Warrants NRHP Consideration	89--98
				Dwelling	Minimal Traditional	1950	1- story wood frame house with front gable. Common mid-twentieth century housing form with alterations.		
				Barn #1		c. 1900	Medium sized, front gable barn with double hipped roof. Also has wood siding, metal roof with a grain elevator/cupola, and roof ventilators,		
				Barn # 2 and outbuildings		c. 1900	Large front gable barn with moderately pitched metal roof and one open side elevation		
56	06-31-400-005	1246 Twp. Rd. 950E	Gladstone	Dwelling	Vernacular	1920	1-story wood frame house with, front gable hipped roof. The house has been impacted by replacements and is vacant/used for agricultural storage.	Not Eligible	99
57	06-32-201-002	972 US Rte. 34	Gladstone	Commercial	Vernacular	c. 1950	1-story Storefront with a false 2 sty façade, with attached storage area and metal garage	Not Eligible	100
58	06-29-102-01	1040 US Rte. 34	Gladstone	Dwelling	Manufactured Home	1978	Mass produced pre-fabricated home, Common housing type lacking architectural significance	Not Eligible	101--102
				Outbuilding	Pole Barn	C. 1980	Wood frame building with metal roof and siding. The late twentieth century outbuilding lacks architectural significance.		
59	06-15-151-001	101 Chestnut Street	Gladstone	Dwelling	Manufactured Home	1970	Mass produced pre-fabricated home, Common housing type lacking architectural significance	Not Eligible	103

Resource No	Name/ Tax Parcel #	Resource Address	Township	Property Type	Style / Form	Year Built	Comments	NRHP Status	Photo Number
60	06-15-152-009	105 Chestnut Street	Gladstone	Dwelling	Manufactured Home	2016	Modern manufactured home less than 40 years old.	Not Eligible	104--105
	06-15-152-001			Outbuilding	Storage Shed	c.1950	Outbuilding is located behind the dwelling is an example of a common mid-twentieth century metal shed lacking architectural significance.		
61	06-15-152-006	209 Chestnut Street	Gladstone	Dwelling	No Discernible Style	1958	Common mid-twentieth century 1 story frame gable end house, lacking architectural significance and integrity.	Not Eligible	106
62	06-15-152-007	301 Chestnut Street	Gladstone	Dwelling	No Discernible Style	1976	Common late-twentieth century 1 story frame gable end house with additions, lacking architectural significance and integrity.	Not Eligible	107

APPENDIX C – PHOTO LOG

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 1, Resource: 1
View facing NW (*Image courtesy of ISAS 2017)*



Photo: 2, Resource: 2
View facing NE *(Image courtesy of ISAS 2017)*



Photo: 3, Resource: 3
View facing NE *(Image courtesy of ISAS 2019)*



Photo: 4, Resource: 4
View facing NE *(Image courtesy of ISAS 2017)*



Photo: 5, Resource: 5
Aerial View of Parcel *(Image courtesy of Google Earth 2019)*



Photo: 6, Resource: 5
View of Access to Property, SW *(Image courtesy of ISAS 2019)*



Photo: 7, Resource: 6
Aerial View of Farm Complex *(Image courtesy of Google Earth 2019)*



Photo: 8, **Resource: 6**
Dwelling, View facing NW *(Image courtesy of ISAS 2019)*



Photo: 9, Resource: 6
Dwelling, View facing SW *(Image courtesy of ISAS 2019)*



Photo: 10, Resource: 6
Barns and Outbuildings, View facing SW (Image courtesy of ISAS 2019)



Photo: 11, Resource: 6
Barn, View facing NW (*Image courtesy of ISAS 2019*)



Photo: 12, **Resource: 6**
Outbuildings, View facing NW *(Image courtesy of ISAS 2019)*



Photo: 13, Resource: 6
Barn and Silo, View facing NW *(Image courtesy of ISAS 2019)*



Photo: 14, **Resource: 7**
View facing SE *(Image courtesy of ISAS 2017)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 15, Resource: 8
View facing SW *(Image courtesy of ISAS 2017)*



Photo: 16, Resource: 9
View facing N *(Image courtesy of ISAS 2017)*



Photo: 17, Resource: 10
View facing NW *(Image courtesy of ISAS 2017)*



Photo: 18, Resource: 11
Aerial View of Farm Complex *(Image courtesy of Google Earth 2019)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 19, Resource: 11
Dwelling, View facing NW *(Image courtesy of ISAS 2019)*



Photo: 20, Resource: 11
View facing NE, Dwelling *(Image courtesy of ISAS 2019)*



Photo: 21, Resource: 11
Carriage House, View facing NE *(Image courtesy of ISAS 2019)*



Photo: 22, Resource: 11
Barns and Outbuildings, View facing N *(Image courtesy of ISAS 2019)*



Photo: 23, Resource: 11
Barn, View facing E (Image courtesy of ISAS 2019)



Photo: 24, Resource: 12
View facing SE *(Image courtesy of ISAS 2017)*



Photo: 25, Resource: 13
View facing SE *(Image courtesy of ISAS 2017)*



Photo: 26, Resource: 14
View facing SE *(Image courtesy of ISAS 2017)*



Photo: 27, Resource: 15
View facing NE *(Image courtesy of ISAS 2017)*



Photo: 28, Resource: 16
View facing NW *(Image courtesy of ISAS 2017)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 29, Resource: 17
View facing NW *(Image courtesy of ISAS 2017)*



Photo: 30, Resource: 18
View facing SW *(Image courtesy of ISAS 2017)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 31, Resource: 19
View facing SE *(Image courtesy of ISAS 2017)*



Photo: 32, Resource: 20
View facing S *(Image courtesy of ISAS 2017)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 33, Resource: 21
View facing SE *(Image courtesy of ISAS 2017)*



Photo: 34, Resource: 22
View facing NW *(Image courtesy of ISAS 2017)*



Photo: 35, Resource: 23
View facing SW *(Image courtesy of ISAS 2017)*



Photo: 36, Resource: 24
View facing NW *(Image courtesy of ISAS 2017)*



Photo: 37, Resource: 25
View facing SW *(Image courtesy of ISAS 2017)*



Photo: 38, Resource: 26
View facing E *(Image courtesy of ISAS 2017)*

Illinois Department of Transportation
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Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 39, Resource: 27
View facing NW *(Image courtesy of ISAS 2017)*



Photo: 40, Resource: 28
View facing NW *(Image courtesy of ISAS 2017)*



Photo: 41, Resource: 29
View facing NW *(Image courtesy of ISAS 2017)*



Photo: 42, Resource: 30 & 31
Aerial view of Commercial Complex *(Image courtesy of Google Earth 2019)*

Illinois Department of Transportation
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Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 43, Resource: 30
Commercial Complex, View facing SW (*Image courtesy of Google Street View 2019*)



Photo: 44, Resource: 30
View facing W (*Image courtesy of ISAS 2019*)



Photo: 45, Resource: 30
View facing NW *(Image courtesy of ISAS 2019)*



Photo: 46, Resource: 30
View facing SE *(Image courtesy of ISAS 2019)*

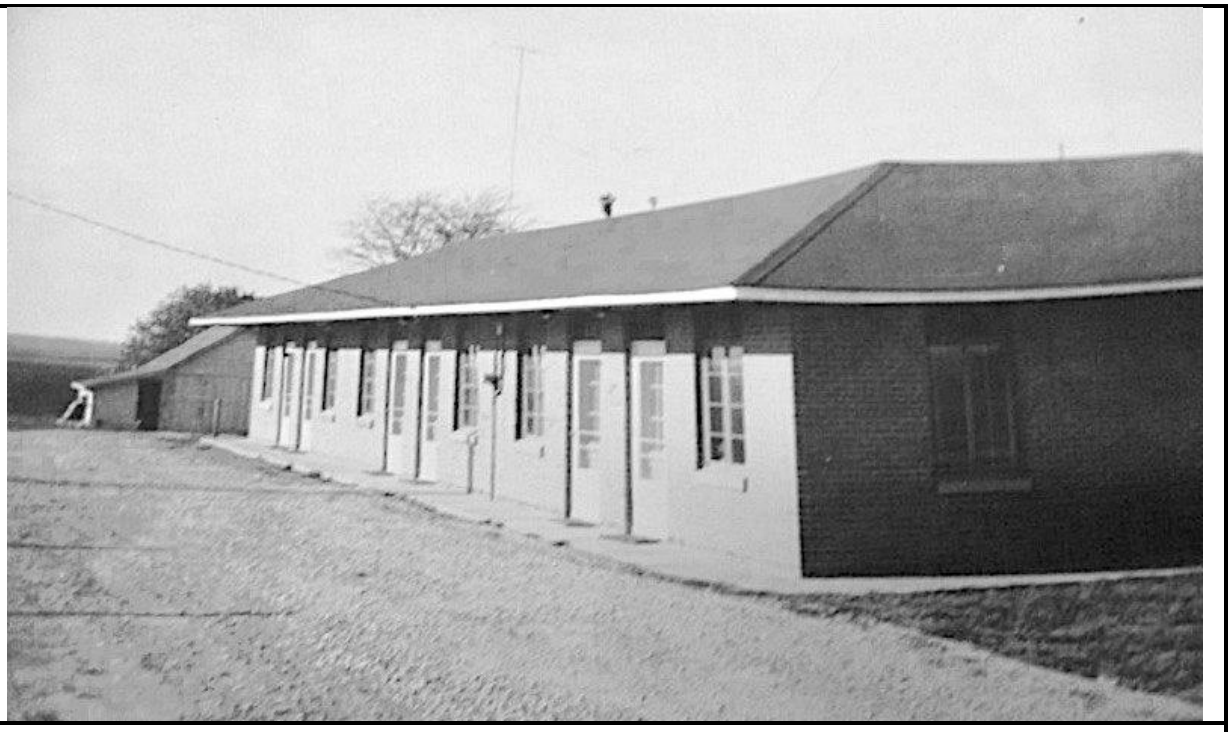


Photo: 47, Resource: 30
View facing SW, Historic Photo c.1955 *(Image courtesy of Robert Olson)*



Photo: 48, Resource: 31
View facing NW *(Image courtesy of ISAS 2019)*



Photo: 49, Resource: 31
View facing N *(Image courtesy of ISAS 2019)*



Photo: 50, Resource: 31
Sign, View facing NW *(Image courtesy of ISAS 2019)*



Photo: 51, Resource: 32
Aerial View of Farm Complex *(Image courtesy of Google Earth 2019)*



Photo: 52, Resource: 32
View facing NW, Dwelling *(Image courtesy of ISAS 2017)*



Photo: 53, Resource: 32
Dwelling, View facing NE *(Image courtesy of ISAS 2019)*



Photo: 54, Resource: 32
Outbuildings and Silos, View facing N (*Image courtesy of ISAS 2019*)



Photo: 55, Resource: 32
Outbuilding, View facing N *(Image courtesy of ISAS 2019)*



Photo: 56, Resource: 32
Outbuilding, View facing W *(Image courtesy of ISAS 2019)*



Photo: 57, Resource: 32
Barn, View facing NW *(Image courtesy of ISAS 2019)*



Photo: 58, Resource: 33
View facing W *(Image courtesy of ISAS 2017)*



Photo: 59, Resource: 34
Aerial View of Farm Complex *(Image courtesy of Google Earth 2019)*



Photo: 60, Resource: 34
Dwelling, View facing NE *(Image courtesy of ISAS 2019)*



Photo: 61, Resource: 34
Dwelling and Outbuilding, View facing NW *(Image courtesy of ISAS 2019)*



Photo: 62, Resource: 34
Outbuildings and Silos, View facing SE, *(Image courtesy of ISAS 2019)*



Photo: 63, Resource: 34
Outbuildings and Silos, View facing NE *(Image courtesy of ISAS 2019)*



Photo: 64, Resource: 35
View facing W *(Image courtesy of ISAS 2019)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 65, Resource: 36
View facing SW *(Image courtesy of ISAS 2017)*



Photo: 66, Resource: 37
View facing SE *(Image courtesy of ISAS 2017)*



Photo: 67, Resource: 38
View facing SE *(Image courtesy of ISAS 2017)*



Photo: 68, Resource: 39
View facing E *(Image courtesy of ISAS 2017)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 69, Resource: 40
View facing NE *(Image courtesy of ISAS 2017)*



Photo: 70, Resource: 41
View facing W *(Image courtesy of ISAS 2017)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 71, Resource: 42
View facing W *(Image courtesy of ISAS 2017)*



Photo: 72, Resource: 43
Dwelling, View facing E *(Image courtesy of ISAS 2019)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 73, Resource: 43
Outbuildings, Barn, and Silos, View facing NE *(Image courtesy of ISAS 2019)*



Photo: 74, Resource: 44
Dwelling, View facing E *(Image courtesy of ISAS 2019)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 75, Resource: 44
Outbuilding, View facing NE *(Image courtesy of ISAS 2019)*



Photo: 76, Resource: 45
View facing SE *(Image courtesy of ISAS 2019)*



Photo: 77, Resource: 46
View facing W *(Image courtesy of ISAS 2017)*



Photo: 78, Resource: 47
Outbuildings and Silo, View facing NE *(Image courtesy of ISAS 2017)*



Photo: 79, Resource: 48
View facing W *(Image courtesy of ISAS 2017)*



Photo: 80, Resource: 49
Dwelling 1, View facing SE *(Image courtesy of ISAS 2017)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 81, Resource: 49
Dwelling 2, View facing SE *(Image courtesy of ISAS 2019)*



Photo: 82 Resource: 50
View facing SW *(Image courtesy of ISAS 2019)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 83, Resource: 51
View facing NW *(Image courtesy of ISAS 2019)*



Photo: 84 Resource: 52
Aerial View of Parcel *(Image courtesy of Goggle Earth 2019)*



Photo: 85, Resource: 52
View facing SE *(Image courtesy of ISAS 2019)*



Photo: 86, Resource: 53
View facing NE *(Image courtesy of ISAS 2017)*



Photo: 87, Resource: 54
Dwelling, View facing E *(Image courtesy of ISAS 2017)*



Photo: 88, Resource: 54
Outbuildings, View facing NE *(Image courtesy of ISAS 2017)*



Photo: 89, Resource: 55
Aerial View of Farm Complex *(Image courtesy of Google Earth 2019)*



Photo: 90, Resource: 55
Dwelling, View facing NW *(Image courtesy of ISAS 2017)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 91, Resource: 55
Dwelling, View facing NW *(Image courtesy of ISAS 2019)*



Photo: 92, Resource: 55
Dwelling and Garage, View facing NE *(Image courtesy of ISAS 2019*



Photo: 93, Resource: 55
Barns and Outbuildings, View facing SW *(Image courtesy of ISAS 2019)*



Photo: 94, Resource: 55
Barn, View facing SE *(Image courtesy of ISAS 2019)*



Photo: 95, Resource: 55
Barns and Outbuildings, View facing SW *(Image courtesy of ISAS 2019)*



Photo: 96, Resource: 55
Barn, View facing SW *(Image courtesy of ISAS 2019)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 97, Resource: 55
Outbuildings, View facing SE *(Image courtesy of ISAS 2019)*



Photo: 98, Resource: 55
Overall View of Farm Complex, View facing NW *(Image courtesy of ISAS 2019)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 99, Resource: 56
View facing E *(Image courtesy of ISAS 2019)*



Photo: 100, Resource: 57
View facing NW *(Image courtesy of ISAS 2019)*

Illinois Department of Transportation
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Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 101, Resource: 58
Dwelling, View facing E *(Image courtesy of ISAS 2019)*



Photo: 102, Resource: 58
Outbuilding, View facing SE *(Image courtesy of ISAS 2019)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 103, Resource: 59
View facing S *(Image courtesy of ISAS 2019)*



Photo: 104, Resource: 60
Dwelling, View facing NE *(Image courtesy of ISAS 2019)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 105, Resource: 60
Outbuilding, View facing SE *(Image courtesy of ISAS 2017)*



Photo: 106, Resource: 61
View facing NE *(Image courtesy of ISAS 2017)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 107, Resource: 62
View facing SW *(Image courtesy of ISAS 2017)*



Photo: 108, Resource: 63
View facing E *(Image courtesy of ISAS 2019)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 109, Resource: 64
View facing NE *(Image courtesy of ISAS 2019)*



Photo: 110, Resource: 65
View facing SE *(Image courtesy of ISAS 2019)*



Photo: 111, Resource: 66
View facing NE *(Image courtesy of ISAS 2019)*



Photo: 112, Resource: 67
View facing SE *(Image courtesy of ISAS 2019)*



Photo: 113, Resource: 67
View facing NE *(Image courtesy of Henderson Co. Assessor's Office 2019)*



Photo: 114, Resource: 68
Outbuildings, View facing SW *(Image courtesy of ISAS 2019)*

Illinois Department of Transportation
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Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 115, Resource: 68
Outbuilding, View facing SE *(Image courtesy of ISAS 2019)*



Photo: 116, Resource: 68
Barn and Outbuildings, View facing SE *(Image courtesy of ISAS 2019)*



Photo: 117, Resource: 69
Outbuilding and Silos, View facing N *(Image courtesy of ISAS 2019)*



Photo: 118, Resource: 70
Outbuildings, View facing NE *(Image courtesy of ISAS 2019)*

Illinois Department of Transportation
Memorandum

Photograph Log
Sequence # 328D
Project: US 34, Gladstone to Gulfport



Photo: 119, Resource: 71
View facing NW *(Image courtesy of ISAS 2019)*

APPENDIX D – QUALIFICATIONS OF PERSONNEL

Personnel who meet or exceed the Secretary of Interior's Professional Qualification Standards (36 CFR Part 61) in the fields of Architectural History and Historic Architecture completed the field investigations, historic research, NRHP eligibility evaluations, and prepared the information provided in this report.

NAME	QUALIFICATION	PRIMARY RESPONSIBILITY
Megan Gilbert ISAS	M.S. Historic Preservation B.S. Architecture 3 years' experience	Fieldwork, Research, Report Writing
Emilie Land ISAS	M.S. Historic Preservation B.S. Historic Preservation 11 years' experience	Research, Report Writing
Michael E. Smith ISAS	M.A. Historical Administration B.A. Anthropology 18 years' experience	Fieldwork, Mapping, Research, Report Writing
Laura E. Williams ISAS	M.A. Historic Preservation B.A. History 10 years' experience	Research, Report Writing

Appendix H

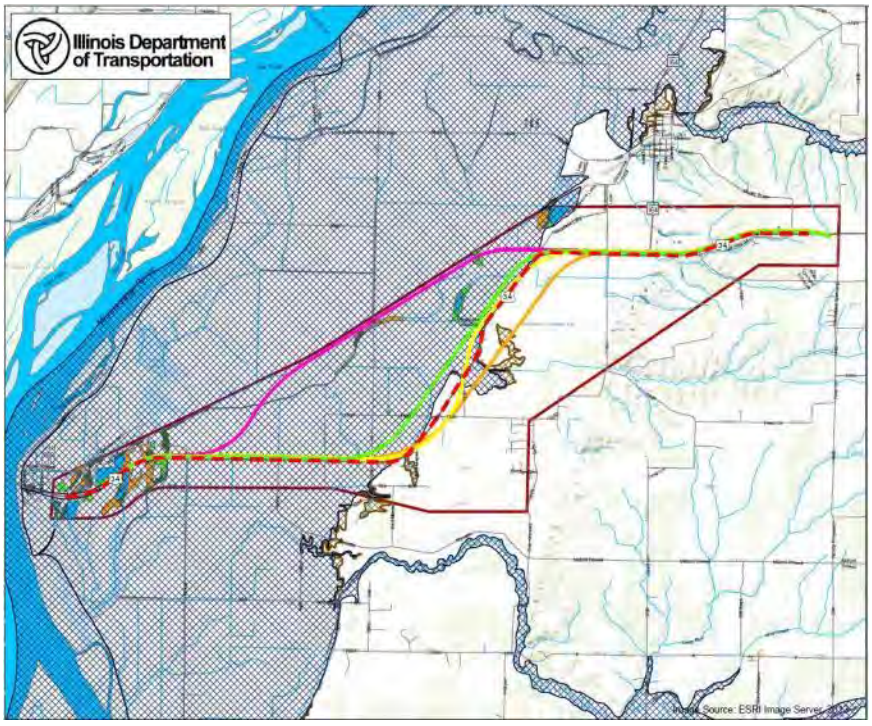
Public Involvement

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US Route34 Supplemental Environmental Impact Statement and Design Report Addendum From Approximately One Mile West of Carman Road to Just East of TR 111

Henderson County, Illinois

Draft Stakeholder Involvement Plan



US 34 Project Study Area

PTB 167-026

Prepared for Illinois Department of Transportation, District 4

Prepared by AMEC Environment & Infrastructure, Inc.

September 2014

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US 34 Supplemental EIS and Design Report Addendum
Draft Stakeholder Involvement Plan

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Appendix B – Stakeholder Groups
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Appendix D – Timeline
Appendix E – Revision History

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1.0 Introduction

1.1 Background

An Environmental Impact Statement (EIS) for the construction of a partially limited access, four-lane facility in Henderson and Warren Counties was completed and signed by the Illinois Department of Transportation (IDOT) and the Federal Highway Administration (FHWA) on January 15, 2003. The purpose of this project is to provide a continuous four-lane facility between the existing freeway at Gulfport in the vicinity of Carman Road to east of Monmouth, a distance of approximately 25 miles. The project is needed to improve system capacity, complete a 4-lane system gap, and improve travel safety for local and through traffic along US Route 34.

The Mississippi River is the primary cause of flooding in Henderson County (Strand, 2010). Approximately 5.8 miles of the project traverse the Mississippi River Floodplain. The most recent flood was in June 2008 where record flood stages for the Upper Mississippi River were recorded. After this flood, a joint evaluation of the hydrology of the Mississippi River in Henderson County was performed by the U.S. Army Corps of Engineers (USACE) and Federal Emergency Management Agency (FEMA). This evaluation confirmed it was necessary to update the Flood Insurance Rate Maps (FIRM) since the current flood control systems no longer provide adequate protection as set forth in Code of Federal Regulations, Title 44, Section 65.10 (44 CFR 65.10), entitled “Mapping of Areas Protected by Levee Systems” (Strand, 2010). FEMA decertified the Mississippi River levee that extends 15 miles from Gulfport, IL, to Gladstone, IL, on June 18, 2010. The current project is being considered in order to re-evaluate upgrades to US 34 to a 4-lane expressway due to levee decertification. The FIRM panels were revised to show flood limits based upon the flood control systems not providing protection. Based on the new FIRM maps the proposed roadway elevation needs to increase approximately 15 feet from the elevations previously established in the 2003 EIS in order to maintain travel on US 34 during a 100-year flood event (and to approximately 17 feet in order to maintain travel on US 34 during a 500-year flood event).

The Council on Environmental Quality (CEQ) and FHWA's regulations require that a Supplemental Environmental Impact Statement (SEIS) be prepared whenever changes to a proposed action, or new circumstances or information, may result in significant environmental impacts that differ from those impacts identified in the original EIS. The SEIS for US 34 in Henderson County is being prepared to assess impacts of new alternatives developed to avoid or mitigate impacts for the portion of the project affected by the levee decertification. The anticipated project termini for the SEIS are from approximately one mile west of Carman Road to just east of TR 111, all located in the Henderson County portion of the original project. The west terminus will be determined early in the project as the point where the roadway profile is equal to the 500-year floodplain elevation. The study area covers approximately nine miles of US 34 in Henderson County (See Appendix A for a location map of the study area).

1.2 Legal Requirements

1.2.1 National Environmental Policy Act (NEPA)

The FHWA and IDOT are moving forward to complete a SEIS for this project in order to satisfy NEPA requirements. The NEPA process requires federal agencies to integrate environmental values into their decision making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to these actions. This study and the supporting environmental documents will

be governed by NEPA, federal, and state regulatory requirements. The study process for this project will meet state and federal requirements meant to integrate environmental values and public interaction into transportation improvements.

1.2.2 23 United States Code of Federal Regulations Section 139

Section 139 of the U.S. Code defines the environmental review process as the project development process followed when preparing a document required under NEPA, and any other applicable federal law for environmental permit, approval, review or study required for the transportation project.

Section 139 requirements apply to all FHWA transportation projects processed as an EIS. This project will be subject to these requirements. Code 23 USC §139(g) requires the lead agency for this project to develop a coordination plan to structure public and agency participation during the environmental review process. This plan, referred to as a Stakeholder Involvement Plan (SIP), was developed to address the coordination plan requirements of 23 USC §139(g) within the context of the NEPA process.

1.2.3 Clean Water Act

The Clean Water Act (33 USC §§1251-1387) was enacted to maintain and restore the chemical, physical, and biological integrity of the waters of the U.S. Section 404 of the Clean Water Act states that it is unlawful to discharge dredged or fill material into waters of the U.S. without first receiving authorization from the US Army Corps of Engineers (USACE). The USACE jointly administers Section 404 authority with the US Environmental Protection Agency.

Opportunity for public involvement during the identification of water resources, and during the decision-making process relating to proposed water resource impacts as regulated under Section 404 of the Clean Water Act will be provided throughout the study process.

1.2.4 NEPA/404 Merger Process

Since the mid-1990's, Illinois has had a Statewide Implementation Agreement (SIA) in place that provides for concurrent NEPA and Section 404 (Clean Water Act) processes on Federal-aid highway projects in Illinois. The purpose of the SIA is to ensure appropriate consideration of the concerns of the signatory agencies as early as practical in highway project development. The signatory agencies are the U.S. Army Corps of Engineers (USACE), the U.S. Environmental Protection Agency (USEPA), the U.S. Fish and Wildlife Service (USFWS), and the U.S. Coast Guard (USCG). The intent is also to involve the Illinois Environmental Protection Agency (IEPA), the Illinois Department of Agriculture (IDOA), and the Illinois Department of Natural Resources (IDNR) at key decision points early in project development to minimize the potential for unforeseen issues arising during the NEPA or Section 404 permitting processes.

All federally funded highway projects that require an EIS, or an Environmental Assessment (EA), and an individual permit from the USACE under Section 404 of the Clean Water Act are processed under the NEPA/404 SIA. The process requires signatory agency concurrence at three key decision points in the NEPA process:

- Project Purpose and Need
- Alternatives to be carried forward
- Preferred alternative

As stated in the 2003 Record of Decision (ROD), the purpose of the proposed project is to provide a high-type transportation facility for local and regional traffic in Henderson and Warren Counties which

includes a continuous four-lane link between the existing freeway at Gulfport in the vicinity of Carman Road to east of Monmouth. The need for the project is to improve traffic safety, system continuity, and system capacity. The fundamental purpose and need for constructing the partially limited access, four-lane facility is essentially the same as when the ROD was signed in 2003. Traffic safety concerns still exist on US 34 within the project corridor and conclusions presented in the Final EIS about capacity and traffic levels of service (LOS) have changed little with the consideration of more recent traffic volume data. US Route 34 is a key regional corridor for the east/west movement of people and goods in, and through, west central Illinois and the proposed four-lane connector is needed to enhance the continuity of the regional highway system.

This SEIS is being prepared to assess potential impacts associated with the reevaluation of the original proposed alternatives as necessitated by the June 2010 levee decertification. The Purpose and Need for the project did not change as a result of levee decertification. Therefore, the FHWA and IDOT will only seek signatory agency input and concurrence at the remaining two key decision points (Alternatives to be carried forward and Preferred Alternative) in conjunction with public and agency involvement, at regularly scheduled formal concurrent NEPA/404 meetings.

2.0 Purpose of the Stakeholder Involvement Plan (SIP)

The purpose of this SIP is to provide a guide for implementing a public involvement plan for the proposed widening and reconstruction of US 34 from approximately one mile west of Carman Road to just east of TR 111 in Henderson County. As discussed above in Section 1.1, this analysis supplements the US Route 34 (FAP 313) EIS. The original EIS established the Purpose and Need when the ROD was signed on January 15, 2003. Public participation is an essential part of the preliminary design and impact assessment process and the level of involvement expected for this supplement to the 2003 EIS has been designed to be commensurate with the nature of the project.

This SIP will be used as a blueprint for defining methods and tools to educate and engage all stakeholders in the decision-making process for the project. The SIP has been designed to ensure that stakeholders are provided a number of opportunities to be informed and engaged as the project progresses.

2.1 Goals

The goal of the SIP is to actively seek the participation of communities, agencies, individual interest groups, and the general public throughout the development process. The SIP provides the framework for achieving consensus and communicating the decision-making process between the general public, public agencies, and governmental officials to identify transportation solutions for the project. Objectives of this SIP are as follows:

- Identify project stakeholders.
- Identify the roles and responsibilities of the lead agency.
- Identify cooperating agencies and agency responsibilities.
- Identify participating agencies.
- Identify the Project Study Group (PSG).
- Establish the timing and type of outreach activities with all stakeholders.
- Establish stakeholder requirements for providing timely input to the project development process.
- Provide guidelines for responding to public comments and inquiries in a timely manner.

All public comments will be incorporated into the environmental document and the project's administrative record.

2.2 Stakeholder Identification Procedures

A stakeholder is anyone who could be affected by the study or has a "stake" in its outcome. This includes property owners, business owners, state and local officials, special interest groups and motorists who utilize the facility.

Engaging the affected communities and soliciting their input was a key component to the location study process for U.S. Route 34. A Public Involvement Plan dated July 5, 1996 was prepared for the project, which outlined the planned methods of communication and the use of outreach tools. A wide variety of methods and techniques were used to solicit input and to inform the public of the project including: public meetings; establishment of a US Route 34 Focus Group; small group meetings with business owners and special interest groups; newsletters, questionnaires; and information sessions. The stakeholder list for this project will be developed from the stakeholder list identified during the previous study, current property owners within the study area, and input from local community leaders.

Stakeholders for this project may include, but are not limited to, the following:

- Elected and community leaders.
- Residents and business owners within the project limits.
- Representatives of the Illinois Farm Bureau.
- Representatives from the Henderson Levee District.

The current list of stakeholders is provided in Appendix B.

It is anticipated that new stakeholders will be added throughout the project. All stakeholders expressing interest in the project will be added to the project mailing/emailing list, and will be able to participate in the process through various public outreach opportunities including public meetings and news releases to local media among others. IDOT and/or the PSG will also be available to meet with stakeholder groups on a one-on-one basis throughout the project, if deemed necessary. The project mailing/emailing list will be updated and maintained through the duration of the project.

3.0 Agency Participation

3.1 Joint Lead Agencies

The joint-lead agencies for this project are FHWA and IDOT. As joint lead agencies, they are responsible for managing the environmental review process and preparing the environmental document for the project.

Agency Name	Role	Responsibilities
Federal Highway Administration	Lead Federal Agency	• Manage Environmental Review Process • Prepare SEIS • Provide opportunity for public and Participating/Cooperating Agency involvement
Illinois Department of Transportation	Joint-Lead Agency	• Manage Environmental Review Process • Prepare SEIS

Agency Name	Role	Responsibilities
		• Provide opportunity for public and Participating/Cooperating Agency involvement • Collect and prepare transportation and environmental data

3.2 Cooperating Agencies

Per NEPA, a cooperating agency is any federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed project. A state or local agency of similar qualifications or, when the effects are on lands of tribal interest, a Native American tribe may, by agreement with FHWA and IDOT, be a cooperating agency. Cooperating agencies are permitted to, by request of the lead agencies; assume responsibility for developing information and preparing environmental analyses for topics about which they have special expertise. Furthermore, they may adopt, without re-circulating, a lead agencies' NEPA document when, after an independent review of the document, they conclude that their comments and suggestions have been satisfied. A list of agencies invited to serve as cooperating agencies is provided in Appendix B.

3.3 Participating Agencies

A participating agency is any federal, state, tribal, regional, and local government agency that may have an interest in the project. By definition, all cooperating agencies listed in Section 3.2 will also be considered participating agencies. However, not all participating agencies will serve as cooperating agencies. A list of participating agencies and their roles and responsibilities is provided in Appendix B.

3.4 Section 106 Consulting Parties

The FHWA is responsible for involving consulting parties in findings and determination made as part of the National Historic Preservation Act's (NHPA) Section 106 process. Section 106 regulations identify the following parties as having consultative role in the process:

- State Historic Preservation Officer (SHPO).
- Indian Tribes.
- Representatives of local governments.
- Applicants for Federal assistance, permits, licenses and other approvals.
- Individuals and organizations with a demonstrated interest in the undertaking.

The FHWA will work with IDOT and the SHPO to identify potential section 106 consulting parties. Individuals or organizations may request to become a consulting party for this project by contacting Amy Martin, the director at the Illinois Historic Preservation Agency (IHPA). Consulting parties may provide input on key decision points in the Section 106 process, including the project's Area of Potential Effect (APE), determination of eligibility and finding of effect, and if applicable, consulting to avoid adverse effects to historic properties. Section 106 Consulting Parties are identified in Appendix B.

The FHWA and IDOT will utilize IDOT's public involvement procedures under NEPA to fulfill the Section 106 public involvement requirements.

4.0 Project Study Group

IDOT has formed a PSG, an interdisciplinary team, for developing the US Route 34 from Carman Road to East of TR 111 Project. The PSG will make the ultimate project recommendations and decisions on this project. This group consists of a multidisciplinary team of representatives from IDOT, FHWA, the project consultant team, and other technical agencies as appropriate.

The PSG has primary responsibility for the project development process. This group will meet throughout the study process to provide technical oversight and expertise in key areas including study process, agency procedures and standards, and technical approaches. The PSG also has primary responsibility for ensuring compliance with the SIP.

Other responsibilities of the PSG include the following:

- Expediting the project development process.
- Identifying and resolving project development issues.
- Promoting partnership with stakeholders to address identified project needs.
- Working to increase stakeholder participation and understanding.

The persons listed in Appendix C will form the PSG for this project.

5.0 Project Development Activities and Stakeholder Involvement

The intent of the public involvement requirements of NEPA, 23 U.S.C. §139, is to involve the stakeholders early and throughout the project development process. A number of transportation decisions based on the engineering analysis and data collection will be made throughout the Phase 1 process. Input from the public involvement process will be collected in a number ways. These include the following:

- Direct feedback from meetings with community officials, property owners, and interested agencies. It is anticipated that there will be approximately 10 stakeholder meetings throughout the study process. Feedback may be documented in the form of meeting minutes and/or letters.
- Two public informational meetings and a public hearing are anticipated. Comment forms will be solicited at each public informational meeting. In addition, comment cards will be solicited at the public hearing.
- Contact information will be provided at public informational meetings, stakeholder meetings, and other interactions with stakeholders and the public.
- Responses generated from public feedback from the public informational meetings will be incorporated into the Public Involvement Record for the project, and will be summarized in the SEIS.

5.1 Stakeholder Milestones

This study is expected to be completed within three years, with the Final SEIS and Record of Decision signed in March, 2017. A tentative schedule of stakeholder milestones has been developed by the PSG. Each of these milestones is followed by additional opportunity for stakeholders to provide input. This schedule is subject to change and will be updated throughout the study process. A detailed schedule is provided in Appendix D.

Project Study Group Develops SIP (September 2014)
This stage of the project development process includes various agency notifications, project organizational activities, and scoping activities. These activities include, but are not limited to the following:

- Assemble the PSG.
- Develop the SIP.
- Send participating and cooperating agency invitation letters.
- Conduct regulatory/resource agency scoping activities.
- Initial identification of stakeholders.

Public Informational Meeting (PIM) #1 (January 2015)
The purpose of the PIM is introduce the project to public stakeholders, gather any additional information on issues and concerns in the project study corridor, and to present alternatives to be considered. The PIM will also provide an opportunity for the participating agencies and the general public to provide input into the alternatives to be carried forward.

The PSG will take the input received from these efforts and make any additional refinements to the alternatives to be carried forward. If major changes are made to the alternatives to be carried forward, additional PSG meetings may be required. If additional meetings are not required, the joint lead agencies and the FHWA will take the alternatives to be carried forward to the next scheduled NEPA/404 merger meeting. Upon obtaining concurrence from the NEPA/404 merger agencies, the alternatives to be carried forward will be considered finalized for inclusion in the SEIS. FHWA and IDOT will consider input of the public and the agencies; however, the environmental review process does not require agency and public consensus on the range of alternatives chosen. Ultimately, FHWA is responsible for the final decision on the alternatives to be carried forward.

Pubic Informational Meeting #2 (October 2015)
This public meeting will take place after the development of alternatives, with the intent that the alternatives and environmental impacts will be presented to the public for their feedback. While the action of gathering input is important to the public involvement process, the incorporation of that input into the development and refinement of alternatives is more important. Furthermore, communication back to the public on their input, and its effect on the study, shows the value of their involvement in the overall process. The public's input and how it affects the development of alternatives will be communicated at this meeting.

Following this meeting, IDOT will prepare the Draft SEIS in cooperation with FHWA.

Public Hearing on Draft SEIS (June 2016)
IDOT will hold a public hearing that will be advertised in local newspapers. The public hearing will present the preferred alternative and the Draft SEIS for public feedback. The basis for selection of the preferred alternative will be communicated so the public can understand how the preferred alternative was selected. IDOT will circulate the Draft EIS for a 45-day comment period. Any substantive comments received during the comment period will be answered by letter (or email if requested to do so).

Final SEIS and Record of Decision (ROD) (March 2017)
After the public hearing, IDOT will incorporate those comments into any necessary revisions of the Final SEIS. IDOT and FHWA intend to combine the Final SEIS and ROD into one document, which will be issued concurrently. The ROD will also be included with copies of the Final EIS and used as a reference for further development and implementation of the project by IDOT.

Federal law includes a provision limiting the time period to 150 days on claims against federal agencies for certain environmental and other approval actions, provided this Statute of Limitations (SOL) notification is published in the Federal Register. The SOL applies to a permit, license, or a specified approval action such as an action related to a transportation project. IDOT and FHWA intend to publish this 150-day SOL notice for the environmental document for this project after the ROD is issued.

6.0 Modifications of the SIP

FHWA and IDOT will provide updated versions of the SIP to all stakeholders, as necessary. Agency contact information may require updating as staffing changes over time. FHWA and IDOT ask that cooperating and participating agencies provide notification of any changes to staffing and contact information.

FHWA and IDOT developed the timeline included in Appendix D of the SIP. Formal agency concurrence in the schedule is not required. Only the FHWA and IDOT may modify the established periods identified in the SIP. They may lengthen the established periods only for good cause and must document the reasons for the lengthening in the administrative record. FHWA and IDOT may only shorten the established review periods in the SIP with the concurrence of affected participating and cooperating agencies. IDOT will document the cooperating and participating agency concurrence in the administrative record.

IDOT will maintain a record of modifications to the SIP. FHWA and IDOT will make this record available to all involved agencies and the public upon request.

7.0 Public Availability of the SIP

IDOT will make the current SIP available to the public at project meetings. Availability and notification will follow the public involvement procedures established in the Public Involvement Guidelines in the IDOT Bureau of Design and Environment Manual (Chapter19) available on the IDOT website at Doing Business Manuals and Guides.

8.0 Dispute Resolution

FHWA and IDOT are committed to working with all agencies and stakeholders in the study process to identify project issues early and to seek consensus on disagreements. FHWA and IDOT are committed to building stakeholder consensus for decisions. However, if an impasse has been encountered after making good-faith efforts to address unresolved concerns, FHWA and IDOT may proceed to the next stage of project development without achieving consensus.

In the case of an unresolved dispute between the agencies, FHWA and IDOT will notify agencies of their decision and a proposed course of action. FHWA and IDOT may propose an informal or formal dispute resolution process as described below.

Informal Dispute Resolution Process

In the case of an unresolved dispute between the agencies, FHWA and IDOT will notify all agencies of their decision and proposed course of action. The decision to move an action forward without consensus does not eliminate an agency's statutory or regulatory authorities, or their right to elevate the dispute through established agency dispute resolution procedures. FHWA and IDOT recognize and accept the risk of proceeding on an action without receiving a signatory agency's concurrence and will work with any agency to attempt to resolve a dispute.

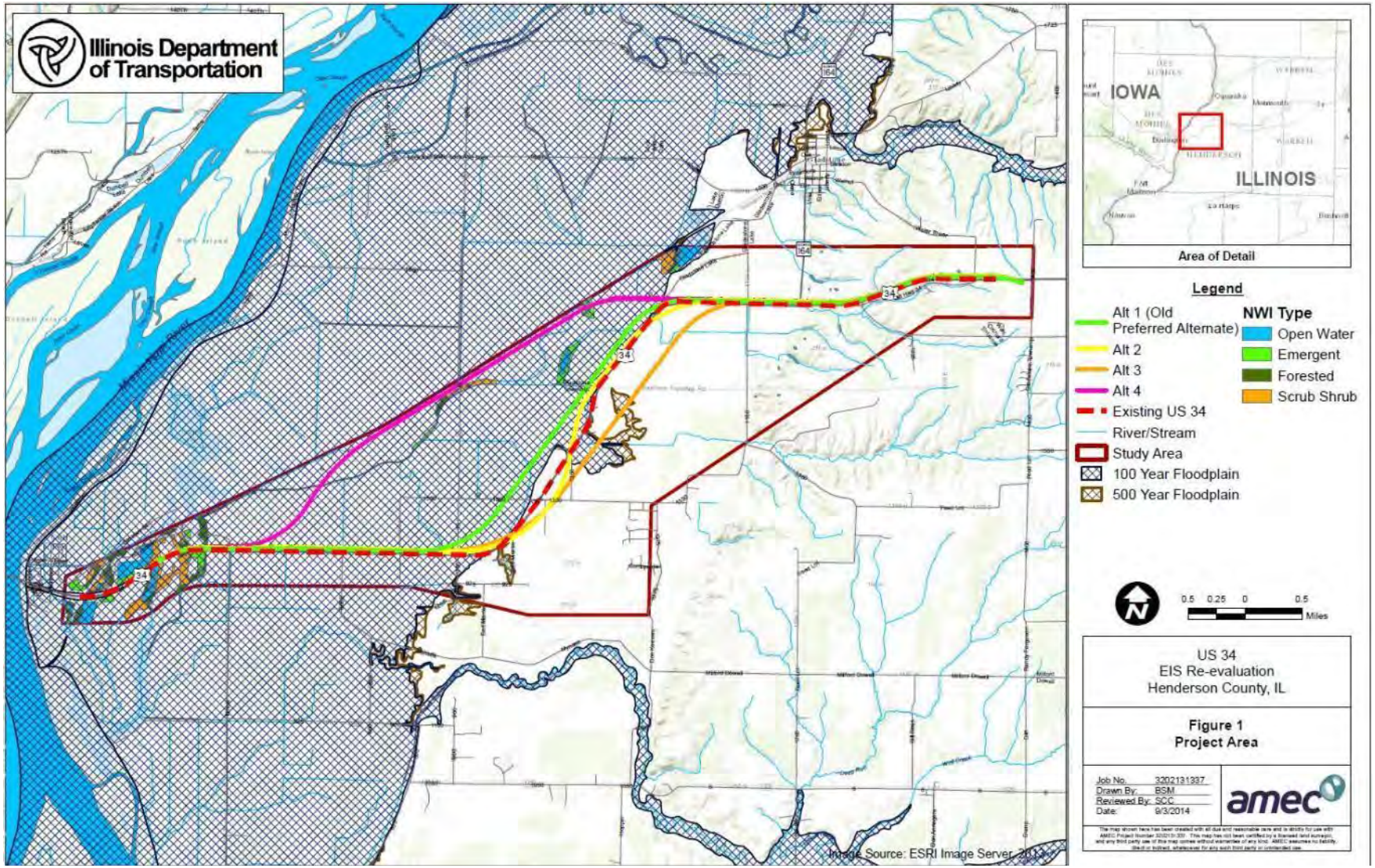
Formal Dispute Resolution Process

Code 23 USC §139(h) establishes a formal dispute resolution procedure for the environmental review process. This process is only intended for use on disputes that may delay a project or result in the denial of a required approval or permit for a project. Only the project sponsors or the Illinois governor may initiate this formal process; they are encouraged to exhaust all other measures to achieve resolution prior to initiating this process.

References:

Strand, 2010 Report for Illinois Department of Transportation, Impacts of the Decertification of the Mississippi River Levee on U.S. Route 34, Section 1.02, Strand Associates, Inc., May 2010.

Appendix A – Project Study Area



US 34 Supplemental EIS and Design Report Addendum
Stakeholder Involvement Plan
Appendix B – Stakeholder Groups

Cooperating Agencies					
Agency Name	**Requested Role**	**Response**	**Other Roles**	**Responsibilities**	**Contact**
U.S. Army Corps of Engineers	Cooperating Agency	Pending	NEPA/404 Signatory	Section 404 Permit jurisdiction; environmental reviews; wetlands/Waters of the US; provide comments on alternatives; methodologies; and preferred alternative	
U.S. Environmental Protection Agency	Cooperating Agency	Pending	NEPA/404 Signatory	Environmental reviews; provide comments on methodologies; and preferred alternative	
U.S. Fish and Wildlife Service	Cooperating Agency	Pending	NEPA/404 Signatory	Environmental reviews; provide comments on methodologies; and preferred alternative; provide review of T/E Federal species	

Participating Agencies					
Agency Name	**Requested Role**	**Response**	**Other Roles**	**Responsibilities**	**Contact**
Federal Emergency Management Agency (FEMA)	Participating Agency	Pending			
Illinois Dept. of Natural Resources (IDNR)	Participating Agency	Pending		Wetlands; State T/E species, Alternatives	
IDNR - Nature Preserves Commission	Participating Agency	Pending		Impacts to State INPs or INAI sites	
Illinois Historic Preservation Agency (IHPA)	Participating Agency	Pending		Section 106 Consultation; Alternatives	
Illinois Dept. of Agric. – Bureau of Land and Water Resources	Participating Agency	Pending		Alternatives; impacts to Farmland/Farm Operations	
Illinois EPA	Participating Agency	Pending		Water resources; Air permits	
Henderson County Highway Department	Participating Agency	Pending		Alternatives	

Section 106 Consulting Parties		
Agency Name	**Contact Person/Title**	**Contact Information**
State Historic Preservation Officer (SHPO)	Amy Martin / Deputy Officer	#1 Old State Capitol Plaza Springfield, IL 62701-1507
Indian Tribes	To be determined	

At Large Stakeholders			
Name	**Affiliation**	**Address**	**Phone / Email**

US 34 Supplemental EIS and Design Report Addendum
Stakeholder Involvement Plan
Appendix C – Project Study Group Members

Project Study Group				
Name	**Representing**	**Role**	**Phone**	**Email**
Mike McLuckie	IDOT District 4	District Project Manager	309-671-3468	mcLuckie.Michael@illinois.gov
Greg Larson	IDOT District 4	District Env. Lead	309-671-3479	greg.larson@illinois.gov
Mike Lewis	IDOT District 4		309-671-3454	mike.lewis@illinois.gov
Tom Lacy	IDOT District 4		309-671-3493	Thomas.lacy@illinois.gov
Felecia Hurley	IDOT / BDE	BDE Env. Review	217-	
Chris Fraley	FHWA	Project Review	217-492-4619	Chris.Fraley@dot.gov
Matt Fuller	FHWA	Project Review		Matt.Fuller@dot.gov
Gary Baker	AMEC	AMEC Project Manager	773-693-6030	gary.baker@amec.com
Steve Ravanesi	AMEC	Project Engineer Lead	773-693-6030	steven.ravanesi@amec.com
Petar Knezevic	AMEC	Project Engineer Roadway	773-693-6030	petar.knezovic@amec. com
Steve Coates	AMEC	Environmental Lead	636-200-5111	stephen.coates@amec.com
Wayne Ingram	AMEC	Project Engineer Drainage	309-698-7938	wayne.ingram2@amec.com
George Ryan	AMEC	Project Sponsor	309-712-1777	George.ryan@amec.com
Rich Nowack	QEI		217-670-0563	rnowack@quiggengineering.com
Mike Vail	QEI		217-670-0563	mvail@quiggengineering.com
Brad Hayes	QEI		217-670-0563	bhayes@quiggengineering.com
April Holmes	QEI		217-670-0563	aholmes@quiggengineering.com
Tyler Walker	QEI		217-670-0563	Twalker@quiggengineering.com
Joe Begue	QEI		217-670-0563	jbegue@quiggengineering.com

US 34 Supplemental EIS and Design Report Addendum
Stakeholder Involvement Plan
Appendix D – Timeline

US 34 Supplemental EIS and Design Report Addendum
Henderson County, Illinois

						Goal		Actual		
Task Name	**NEPA/404/CSS/§6002 Step-by-step Process**	**NEPA/404 Meeting Schedule**	**Activity #**	**Predecessor**	**Activity Description**	**No. of Days to Complete Activity**	**Completion Date**	**No. of Days to Complete Activity**	**Completion Date**	**Remarks**
Project Initiation	1		1		BDE sends FHWA Project Initiation letter				Early 2013	Complete
			2		District forms Project Study Group			N/A	N/A	N/A
	2		3		FHWA and IDOT develop and agree to Timeframe		8/31/2014			AMEC assisting IDOT-D4
	3		4		Project Study Group develops draft Stakeholder Involvement Plan (SIP) and sends it to FHWA and BDE for review and comment			N/A	N/A	N/A
			5		FHWA and BDE reviews and sends comments on draft SIP to District		8/31/2014			AMEC assisting IDOT-D4
	4	Sept. 2014	6	1,3,5	**FHWA publishes Notice of Intent in Federal Register**		**9/12/2014**			**(Start of timeframe goal)**
Agency Coordination	5		7	6	FHWA and IDOT prepare and send participating and cooperating agencies invitation letters.	7	9/19/2014		8/31/2012	Allow 7 days after the publishing of the NOI.
			8	7	FHWA and IDOT prepares and sends participating and cooperating agencies the draft SIP for agency review and comment (revisit as needed) and provides opportunity for participating and cooperating agencies to give input on methodologies and level of detail.	30	10/19/2014			Allow 30 days for agencies to respond to invitation letter.
			9		FHWA and IDOT address agency comments by revising SIP and Methodologies and responding to comments, as necessary, and finalize SIP and Methodologies	15	11/3/2014			
			10	8	District prepares and sends finalized SIP to participating and cooperating agencies	2	11/5/2014		9/5/2012	SEIS will be introduced at the June 2015 NEPA 404/ Merger meeting - includes scoping.

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Appendix D – Timeline

US 34 Supplemental EIS and Design Report Addendum
Henderson County, Illinois

						Goal		Actual		
Task Name	**NEPA/404/CSS/§6002 Step-by-step Process**	**NEPA/404 Meeting Schedule**	**Activity #**	**Predecessor**	**Activity Description**	**No. of Days to Complete Activity**	**Completion Date**	**No. of Days to Complete Activity**	**Completion Date**	**Remarks**
Develop Purpose and Need	6		11		District conducts stakeholder involvement to confirm Purpose and Need			N/A	N/A	Not seeking new concurrence on Purpose and Need.
			12		District prepares and submits preliminary document to FHWA and BDE for review			N/A	N/A	Not seeking new concurrence on Purpose and Need.
			13		FHWA and BDE review and issue comments on Purpose and Need documents to District			N/A	N/A	Not seeking new concurrence on Purpose and Need.
			14		District prepares and submits distribution-ready Purpose and Need packet to FHWA and BDE and Coop. Agencies			N/A	N/A	Not seeking new concurrence on Purpose and Need.
			15		District conducts stakeholder involvement to confirm Purpose and Need			N/A	N/A	Not seeking new concurrence on Purpose and Need.
			16		FHWA holds NEPA/404 merger meeting to receive concurrence on Purpose and Need			N/A	N/A	Not seeking new concurrence on Purpose and Need.
Alternatives to be Carried Forward	7		**17**	**6**	**District holds a Public Information Meeting #1 to present alternatives**	**1**	**1/20/2015**			First Public Informational Meeting
		Feb. 2015	18	6	District develops prelim. Alternatives and offers opportunity for stakeholders to provide input on those to be carried forward	150	2/9/2015			Develop alternatives to the extent that they can be evaluated against each other and the no-build.
			19	18	District prepares and submits preliminary Alternatives to be Carried Forward packet to FHWA and BDE for review	10	2/19/2015			Assumes that development of the packet will coincide with the development of alternatives.
			20	19	FHWA and BDE review and issue comments on preliminary Alternatives to be Carried Forward packet to District	30	3/21/2015			(30 days after receipt of draft packet)

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Henderson County, Illinois

						Goal		Actual		
Task Name	**NEPA/404/CSS/§6002 Step-by-step Process**	**NEPA/404 Meeting Schedule**	**Activity #**	**Predecessor**	**Activity Description**	**No. of Days to Complete Activity**	**Completion Date**	**No. of Days to Complete Activity**	**Completion Date**	**Remarks**
			21	20	District prepares and submits distribution-ready Alternatives to be Carried Forward packet to FHWA and BDE	16	4/6/2015			FHWA sends final packages to agencies
			22	21	District conducts stakeholder involvement to receive consensus on Alternatives to be Carried Forward	45	5/21/2015			Stakeholder Briefing and Public Information Meeting held to receive input from the Cooperating Agencies, Participating Agencies, and general public
		June 2015	**23**	**22**	**FHWA holds NEPA/404 merger meeting to receive concurrence on Alternatives to be Carried Forward**		**6/11/2015**			(Reference schedule for NEPA/404)
Draft Supplemental Environmental Impact Statement	8	Sept. 2015	24	23	Preparation of Prelim. Draft SEIS	90	3/9/2015			(60 days after receipt to comment)
			25	**24**	**District conducts Public Information Meeting #2 to present environmental impacts along with alternatives**	30	4/8/2015			
			26	24	District reviews Prelim. Draft SEIS	90	5/8/2015			(30 days after receipt to comment)
			27	26	District prepares and sends Draft SEIS to BDE for review	30	6/7/2015			(30 days after receipt to comment)
			28	27	BDE reviews and issues comments on Draft SEIS to District	15	6/22/2015			
		Feb. 2016	29	28	District prepares and sends Draft SEIS to FHWA and BDE	10	7/2/2015			(Recommend 10 days after receipt)
			30	29	FHWA and BDE reviews and issues comments on Draft SEIS to District (repeat step as necessary)	7	7/9/2015			
			31	30	District sends pre-signature SDEIS to Cooperating Agencies for review	21	7/23/2015			Three weeks after DEIS is signed.

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						Goal		Actual		
Task Name	**NEPA/404/CSS/§6002 Step-by-step Process**	**NEPA/404 Meeting Schedule**	**Activity #**	**Predecessor**	**Activity Description**	**No. of Days to Complete Activity**	**Completion Date**	**No. of Days to Complete Activity**	**Completion Date**	**Remarks**
	9		32	31	District sends FHWA and BDE signature-ready Draft SEIS	21	7/30/2015			Stakeholder Briefing and Public Information Meeting held to receive input from the CA's, PA's and general public
			33	31, 32	FHWA and BDE sign Draft SEIS	15	8/7/2015			
			34	33	IDOT distributes Draft SEIS	45	9/6/2015			
			35	33	FHWA publishes Notice of Availability in Federal Register					
	10		36	31	District offers opportunity for stakeholders to provide input on Draft SEIS	21	5/12/2016			Stakeholder Briefing and Public Information Meeting held to receive input from the CA's, PA's and general public
			37	**33,34**	**IDOT holds public hearing on Draft SEIS**	**15**	**6/6/2016**			
			38	**35**	**45-Day Public Comment Period**	**45**	**7/6/2016**			
Preferred Alternative	11		39	32	District prepares and submits preliminary Preferred Alternative packet to FHWA and BDE for review	30	5/21/2016			Assume that packet can be prepared while signature-ready DEIS is prepared (will need to adhere to deadlines established in the NEPA/404 Meeting Schedule)
		June 2016	40	39	FHWA and BDE review and issue comments on preliminary Preferred Alternative to District	30	6/20/2016			(30 days after receipt of draft packet)
			41	40	District prepares and submits distribution-ready Preferred Alternative Packet to FHWA and BDE	15	7/5/2016			
			42	41	District conducts Phase I project wrap-up with stakeholders	30	8/4/2016			

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US 34 Supplemental EIS and Design Report Addendum
Henderson County, Illinois

						Goal		Actual		
Task Name	**NEPA/404/CSS/§6002 Step-by-step Process**	**NEPA/404 Meeting Schedule**	**Activity #**	**Predecessor**	**Activity Description**	**No. of Days to Complete Activity**	**Completion Date**	**No. of Days to Complete Activity**	**Completion Date**	**Remarks**
		Sept. 2016	**43**	**42**	**FHWA holds NEPA/404 merger meeting to receive concurrence on Preferred Alternative**	**30**	**9/3/2016**			(Reference schedule for NEPA/404)
Final Supplemental Environmental Impact Statement	12		44	43	District prepares and sends draft Final SEIS to BDE for review	45	10/18/2016			
			45	44	BDE reviews and issues comments on the draft Final SEIS to District	30	11/17/2016			
			46	45	District prepares and sends the draft Final SEIS to FHWA and BDE for review	15	12/2/2016			
			47	46	FHWA and BDE review and issue comments on the draft Final SEIS to District	30	1/1/2017			
			48	47	District prepares and sends FHWA and BDE signature-ready Final SEIS and ROD	15	1/16/2017			
Record of Decision	13	49	48	43	FHWA coordinates with FHWA Legal Counsel to complete legal sufficiency review on Final EIS and ROD	30	2/15/2017			
	14	**50**	**49**	44	**FHWA signs signature-ready Final EIS and ROD and requests USEPA publish Notice of Availability in the Federal Register**	**28**	**3/15/2017**			
	15	51	50	45	FHWA and IDOT prepare the ROD and Statute of Limitations notice	7	3/22/2017			
	16	52	51	46	FHWA publishes Statute of Limitations notice in the Federal Register	7	3/29/2017			

US 34 Supplemental EIS and Design Report Addendum
Stakeholder Involvement Plan
Appendix E – Revision History

Version	Date	Revision Description
1		
2		
3		
4		

Project Stakeholder Meeting
US 34 Supplemental EIS, Henderson County

October 22, 2015

Location: Henderson County Public Library, Biggsville, Illinois

Attendees:		
	Terry Myers	Henderson County Board
	Gail Russell	Henderson County Board
	Albert Renkin	Henderson County Board
	Gary Gibb	Henderson County Board
	Bradley Flatt	Henderson County Board
	Marty Lafary	Henderson County Board
	Larry Russell	Henderson County Drainage District #2
	Tom Hickman	Henderson County Highway Department
	Cindy Rhinehart	Henderson County EMA
	Mike McLuckie	Illinois Department of Transportation (IDOT)
	Tom Lacy	IDOT
	Gary Baker	Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler)
	Petar Knezevic	Amec Foster Wheeler
	Steve Coates	Amec Foster Wheeler

The meeting began at 2:05 pm.

The meeting began with Gary Baker greeting the attendees, which was followed by introductions. Mr. Baker explained the purpose of this meeting is to provide information to the attendees who, as representatives of the community in the project area may get questions once the general public learns of an open house public meeting scheduled for November 18. Today's meeting will give an advance overview of the project and provide an opportunity to answer questions. Mr. Baker then made a presentation to the attendees while referencing a PowerPoint presentation, which was projected onto a screen for everyone to view. Also on display in the room, and referenced during Mr. Baker's presentation, were static display exhibits showing the six alternatives being considered and the typical roadway cross sections of the various alternatives.

Some notable points from Mr. Baker's presentation included:

- The project background and a brief recap of what has happened since the original EIS was signed in 2003.
- The study area from the original EIS from Gulfport to Monmouth.
- The purpose and need for this project:
    - System Capacity: Traffic volumes (levels of service D in the design year 2040; as much as 25% trucks);
    - Travel safety: (41% is marked no-passing; narrow shoulders; steep side slopes; multiple access points; similar crash trends as reported in 2003 EIS);
    - System continuity: (US 34 key regional corridor in Iowa and Illinois; 8-mile section west of and 12-mile section east of Biggsville bypass are only 2-lane sections from Ottumwa, IA to Galesburg, IL).
- A summary of Illinois Executive Order 2006-05 regarding construction activities in special flood hazard areas. EO 2006-05 refers to critical facilities and requires that critical facilities be located outside the 500 year frequency flood elevation. US Route 34 is considered a critical facility.

- A summary of the de-accreditation of the Henderson County Drainage District No. 1 and No. 2 levees and an explanation of the special flood hazard area in this project.
- An explanation of why the Supplemental EIS (SEIS) is being conducted. A change in the roadway profile is needed to meet the requirements of the EO-2006-05. This change spurs the need to reevaluate alternatives through the Supplemental EIS process.
- An overview of the SEIS study area showing the project limits from just west of Carman Road to the western end of the Biggsville Bypass.
- An explanation of the alternative analysis process, which includes public outreach followed by concurrence of recommendations by the FHWA and permitting agencies.
- A list of the evaluation criteria used to screen the alternatives. These included: traffic, transportation and engineering; socioeconomic, land use; natural resources; cultural resources; and agriculture.
- A map showing the six alternatives on an aerial photo background. Mr. Baker pointed out that each alternative needs to be elevated approximately 15 feet above the ground in the floodplain in order to be above the 500-year floodplain.
- Renderings of the proposed typical sections.
- Tables showing summary of impacts for each alternative. Mr. Baker noted that the intent in laying out each alternative was to minimize the amount of road closures and environmental impacts as much as possible.
- A preview of the upcoming public information open house meeting scheduled for November 18, 2015.
- The purpose of the open house public meeting is to show the purpose of the project, present the project purpose and need, present alternatives, and solicit public comment and feedback in order to reduce the number of alternatives.

After the presentation, the following questions/comments from the attendees were made:

- Q: Can fill material be dredged from the river?
  - A: This hasn't been determined yet. Usually, the determination of suitable fill material is left up to the contractor.
- Q: What does "acres of fill" mean?
  - A: It represents the footprint of the alternative that results from the placement of fill material.
- Q: Regarding Alternatives 2 and 3, can the curves be "tightened up" a little?
  - A: The curves meet Bureau of Design and Environment policy and cannot be tightened.
- Q: Has IDOT done a study to fix the levee instead of proposing all of these new highway alternatives?
  - A: There has been some discussion about this issue but IDOT is not the appropriate agency to fix or build levees. Money appropriated to IDOT must be applied to roadway and bridge construction and maintenance. A study of how to address the existing levees would need to go through the US Army Corps of Engineers and would take up to six years to complete.
- Q: Is this project funded with federal money?
  - A: Federal moneys will need to be appropriated. 80% of the funding for this project will come from the federal government and 20% will come from the state.
- Q: What was the initial cost estimate for this project?
  - A: Approximately $60 million.
- Q: What is the timetable for this study?
  - A: The study is projected to go to mid 2017, Beyond that, the schedule is a bit uncertain due to the State's current fiscal uncertainties.

- Q: Are there any plans for an overlay on US 34?
  - It's possible that some of the route will be resurfaced, but not likely the entire stretch.
- Q: What do the bridges cost?
  - A: Currently, bridges are estimated to cost $200-$250/square foot. Skewed bridges cost more.
- Q: What is the one displacement on Alternative 4?
  - A: It is a house on the east end of the project on the north side of US 34.
- Q: If money were made available, how long would the project take to design and build?
  - A: Approximately ten years.
- Comment: Gail Russell feels that Alternative 4 is the best alternative, followed by Alternative 5.

The attendees were thanked for their valuable input. The meeting concluded at approximately 3:00 pm.

Project Stakeholder Meeting #2
US 34 Supplemental EIS, Henderson County

September 14, 2016

Location: Henderson County Public Library, Biggsville, Illinois

Attendees:		
	Gail Russell	Henderson County Board
	Scott Walters	Henderson County Drainage District #1
	Larry Russell	Henderson County Drainage District #2
	Ned Adams	Henderson County Drainage District #2
	Cindy Rhinehart	Henderson County EMA
	Tammy Brokaw	Warren - Henderson Farm Bureau
	Mike McLuckie	Illinois Department of Transportation (IDOT)
	Mike Lewis	IDOT
	Gary Baker	Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler)
	Petar Knezevic	Amec Foster Wheeler
	Steve Coates	Amec Foster Wheeler

The meeting began at 2:00 pm.

The meeting began with Gary Baker, Amec Foster Wheeler Project Manager greeting the attendees, which was followed by introductions. Mr. Baker explained the purpose of this meeting is to provide information to the attendees who, as representatives of the community in the project area may get questions once the general public learns of an open house public meeting scheduled for October 4th. This meeting gave an advance overview of the project and provided an opportunity to answer questions. Mr. Baker then made a presentation to the attendees while referencing a PowerPoint presentation, which was projected onto a screen for everyone to view. Also on display in the room, and referenced during Mr. Baker's presentation, were static display exhibits showing the three alternatives that have been carried forward for further study, the typical roadway cross sections of these alternatives and a graphic showing the key evaluation criteria used to determine the alternatives carried forward.

Some notable points from Mr. Baker's presentation included:

- A brief recap of what has happened since the public information open house in November 2015.
- The study area from west of Carman Road to east of IL 164.
- A summary of the November 2015 public information open house.
    - Held at the high school in Biggsville.
    - 88 people signed in.
    - 14 comment forms were received.
    - Media representatives from The Hawk Eye, Tri-States Public Radio and Pritchard Broadcasting attended.
    - Presented the six preliminary alternatives under consideration at that time.
- A summary of the evaluation of the six preliminary alternatives:
    - No Build Alternative
        - Does not meet Purpose and Need
        - Does not comply with EO 2006-05
    - Build Alternatives
        - Six alternatives studied all meet the project Purpose and Need
        - Four-lane expressway with 50-foot grass median

        - Address existing geometric deficiencies
        - Provide system continuity
        - Provide safety access
        - Raise profile above 500-year frequency flood elevation and comply with EO 2006-05
- An overview of the SEIS study area showing the six preliminary alternatives.
- A list of the screening criteria used to evaluate the six alternatives.
- A table depicting the environmental and human impacts resulting from each of the six preliminary alternatives.
- A summary of the recommendations for alternatives carried forward for further study. Three of the alternatives were eliminated from further consideration. They are:
    - Alternative 1
        - Greatest length through the 500-year floodplain, 5.7 miles (2.9 miles is longitudinal to the floodplain);
        - Second greatest amount of fill in the floodplain, 3.0 million Cu Yds;
        - Relatively high amount of new right of way converting 224.6 acres of productive cropland/pastureland to highway use; and
        - Requires 3.7 million Cu Yds of borrow excavation.
    - Alternative 3
        - Directly impacts the only identified NRHP-eligible property in study area (listed as Site 267 in the original EIS);
        - Directly impacts 174.7 acres of prime farmland;
        - Displaces the greatest number of farm buildings (14);
        - Greater impact to farm operations – triangular remnants from severances at a higher skew; and
        - Requires 2.7 million Cu Yds of borrow excavation.
    - Alternative 4
        - Impacts 25.0 acres of wetlands, almost twice as the other alternatives;
        - Impacts 243.0 acres of productive cropland/pastureland; 2nd greatest;
        - Requires greatest amount of fill in the 500-yr floodplain, 3.7 Million Cu Yds;
        - Requires greatest amount of borrow excavation, 4.3 Million Cu Yds;
        - Crosses the floodplain in a primarily longitudinal manner, increasing severances and potential unusable remnants; and
        - Access at Lock and Dam Road complicated by proximity to railroad.
- Three alternatives were carried forward for further study. They are:
    - Alternative 2
        - Has substantially lower impact to productive cropland, 164.1 acres;
        - Crosses existing U.S. Route 34 three times;
        - It has the highest utilization of existing U.S. Route 34 ROW, 143.1 acres;
        - Requires relatively high amount of fill in the floodplain, 2.5 million Cu Yds;
        - Some longitudinal crossing of Mississippi River floodplain; and
        - Results in relatively high number of residential displacements (four).
    - Alternative 5
        - Requires least amount of borrow excavation, 2.0 Million Cu Yds;
        - Requires least amount of fill in the floodplain, 1.8 Million Cu Yds;
        - Crosses floodplain in a primarily transverse manner;
        - Requires least amount of surface water crossings;
        - Impacts greatest amount of productive cropland/pasture land, 248.0 acres; and
        - Impacts greatest amount of forest land, 17.3 acres.
    - Alternative 6

    - Crosses the floodplain in a primarily transverse manner;
    - Results in a relatively low number of farm severances (seven);
    - Least number of affected farmed parcels at 43;
    - Impacts greatest amount of prime farmland, 186.5 acres; and
    - Results in a relatively high number of residential displacements (four).
- Renderings of the proposed typical sections.
- Maps showing the three alternatives carried forward on an aerial photo background.
- The next steps in the project schedule:
    - Present Alternatives Carried Forward at Public Information Open House No. 2 in October 2016
    - Refine Alternatives Carried Forward
    - Re-Evaluate Alternatives Carried Forward
    - Identify Preferred Alternative
    - Prepare Draft EIS
    - Present at Public Hearing and consider comments, Spring 2017
    - Present recommendation for FHWA Concurrence, Spring 2017

After the presentation, the following questions/comments from the attendees were made:

- Q: If the Mississippi River levees are accredited to 500-year protection, would it void the need for this project?
    - A: No, there is still a need for this facility (which is considered a critical facility) to be constructed at the 500-year flood elevation.
- Q: Have you designed culverts to carry flow under the road?
    - A: Not yet, but culverts will be part of the final location drainage study and drainage report for the project, which will be prepared later.
- Q: If the project is constructed 17 feet above existing ground, will the two bridges on US 34 west of Carman Road be removed and replaced?
    - A: Yes, these bridges will be reconstructed. A total of six bridges will be constructed in this area (two for US 34, two for the west on/off ramps at Carman Road, and two for the frontage roads).
- Q: Who will maintain these new bridges?
    - A: IDOT will.
- Q: Where will the fill come from to construct the new road embankment?
    - A: That has not been determined yet. It will be determined in the design phase of the project.
- Q: Has this project been discussed with the Corps and IDNR and the possibility of working together to repair existing levees or build new ones?
    - A: Yes, the Corps and IDNR know about this project but there have been no discussions about working together to fix or build levees.
- Comment from one of the attendees: The Corps has done some work to recertify the levee. The Henderson County Drainage District #1 spent $225,000 to have a study done to determine the feasibility of the recertification. The conclusion was that the cost to improve the levee is much less than the cost to build an elevated road. Also, there has been some discussion with the Corps about building a flood wall on the Iowa side of the river in Burlington.
    - The study team took note of this comment and will follow up with the Corps of Engineers.
- Q: What is the difference in elevation between Alternative 4 and the BN Railroad and what are the issues with the intersection between Alternative 4 and Lock and Dam Road?

  - A: It is approximately 17 feet. The issue at Lock and Dam Road has to do with the grade difference with Alternative 4 and the very close proximity to the railroad tracks. To make this connection work, a bridge over Lock and Dam Road is required and ramps between Alternative 4 and Lock and Dam Road are required. Additionally this alternative has far greater impacts to wetlands and to cropland than other alternatives
- Q: Is there a plan to get this section of US 34 completed before the sections to the east (near Monmouth)?
  - A: No, there is no such plan. The state has no money to construct either of these sections now anyway. There may be some hardship buy-outs of property owners, but at this point, that would be the extent of what is spent on the project.
- Q: Coming from the west, Alternative 2 appears to leave the floodplain then go back into the floodplain. Why does it do this?
  - A: Our engineers tried to develop an alignment that maximizes theuse of existing Right-of-Way yet minimized displacements by threading it between the existing homes as much as possible. By doing this, it resulted in the alignment crossing through the floodplain in different locations.
- Q: Pertaining to the stretch between Carman Road and Lock and Dam Road, how will access be provided to the properties that are south of Alternative 5 and north of Alternatives 2 and 6?
  - A: Many of the specifics have yet to be fully determined, but access will be provided to these parcels either via underpass of the new embankment, or via frontage roads.
- Q: The ditches east of the Carman Road interchange aren't maintained and they fill up and create back-ups of water. Will IDOT maintain the new ditch crossings after they're built?
  - A: Yes, all new structures and ditches will be maintained by IDOT.
- Comment from one of the attendees: The Green Bay Drainage District is considering constructing a 500-year levee to provide protection for a proposed fertilizer plant.
  - The study team will look into this.

The attendees were thanked for their valuable input. The meeting concluded at approximately 3:10 pm.

Illinois Department of Transportation

Public Information Meeting Summary

US Route 34 Supplemental EIS
Henderson County, Illinois

Overview

The public information meeting was held on Wednesday November 18, 2015 at West Central High School in Biggsville, Illinois from 4:00 pm to 7:00 pm. The meeting was conducted in an open house format with a Welcome/Registration Table, aerial photo exhibits and other information exhibits. General photos of the event are shown in Figure 1, Public Meeting Photos. A comment station was also provided, which allowed attendees to provide their comments, suggestions, issues and concerns regarding the proposed roadway alignment options in the study area. The study area extends from a point west of Carman Road on the west side to the west end of the Biggsville Bypass on the east side and includes a portion of the Mississippi River floodplain.

The purpose of the meeting was to provide an overview of the project, show conceptual alignment options, view graphical and informational displays, and obtain public comments and input.

After signing in, meeting attendees were given a handout describing the purpose of the open house public meeting and a map illustrating the study area. It contained a comment form for attendees to complete and submit either at the meeting or by mail.

Invitations

Invitation letters were mailed to federal, state, regional and local officials. Recipients included U.S. and Illinois representatives and senators; Henderson County, City of Biggsville, City of Gladstone, Township officials; Federal Highway Administration; U.S. Army Corps of Engineers; Illinois state agencies; West Central School District 235; and area utility companies.

Invitation letters were also sent to 110 property owners that could be affected by the proposed improvements in the study area.

A press release was also issued. It is located in Figure 2, Correspondence.

Advertising

In order to reach a broad general audience and meet State requirements, a paid display advertisement was placed in the Burlington Hawkeye, the Henderson Quill, and the Daily Review Atlas. The ads were published twice in each publication prior to the public meeting:

- Burlington Hawkeye - November 3, 2015 and November 11, 2015;
- Hendeson Quill - November 4, 2015 and November 11, 2015; and
- Daily Review Atlas – November 3, 2015 and November 11, 2015.

See Figure 3, Meeting Ad.

Meeting Materials

Exhibits and displays provided at the meeting are shown in Figure 4, Meeting Materials.

Exhibits

- Purpose of the meeting;
- What's happened since 2003;
- What's next (including a timeline schedule); and
- Typical sections of proposed US Route 34 (in floodplain and out of floodplain).

Display Maps

Six proposed alternatives were displayed, shown on aerial photo maps, which were broken into three maps (displayed at a scale of approximately 1"=713 feet):

- Plan view of Alternatives 1 and 6;
- Plan view of Alternatives 2 and 3; and
- Plan view of Alternatives 4 and 5.

Handouts

- Project brochure (showing the study area, the six alternatives, reasons for the study, key evaluation criteria, a project timeline, what happens next and contact information).
- Comment form.

Public Attendance

Eighty-eight (88) people signed the attendance sheets at the meeting. Residents from Biggsville, Gladstone, Carman, Kirkwood, Monmouth, Roseville, Macomb, Stronghurst, Oquawka, Raritan, and Galesburg, Illinois attended the meeting as did residents from Burlington, Iowa. See Figure 5, Sign-In Sheets, for a complete list of attendees.

Media Attendance

The following media were present:

- The Hawkeye;
- Tri-States Public Radio; and
- Pritchard Broadcasting.

Study Team Attendance

Organization	Name	Title
IDOT	Mike McLuckie	Project Manager
	Tom Lacy	Project Engineer
	Greg Larson	Environmental Coordinator
	Mike Lewis	Project Engineer
	Maureen Addis	Media contact
Amec Foster Wheeler	Gary Baker	Project Manager
	Petar Knezevic	Project Engineer
	Amit Patel	Transportation Engineer
	Jay Kessen	Hydraulic Engineer
	Steve Coates	Environmental Lead
	Karen Boulware	NEPA Support
	Jeff Strickland	Public Involvement Specialist
Quigg Engineering	Rich Nowack	Traffic Engineer
	April Holmes	Engineer

Comments

One of the Public Information Handouts was a Comment Form. The study team collected fourteen comments from the public for inclusion into the public record. The public comment period remained open until December 9, 2015. Opportunities to comment included: leaving the comment with the study team at the public meeting; direct mail by letter or use of the comment form; and by email. Below is a summary of the comments received. See Figure 2, Correspondence.

Comments left at the public meeting:

- Commenter feels Alternative 4 is the best.
- Commenter prefers Alternative 3 because it avoids the floodplain as much as possible, requires less fill, and it could open up some land for development.
- Commenter likes Alternative 5.
- Commenter supports the selection of an alternative that has the best chance of withstanding a flood.
- Commenter requested a contact person for further information about the pros/cons and consequences of de-accreditation of the levees.
- Two commenters are concerned about how the project will affect their family farm. They both oppose Alternative 5 and favor Alternative 4 as it has less impact to their cattle operations.
- Commenter is concerned about safety along US 34 in the study area (no shoulders, lack of turning lanes, road surface is in poor condition, slow farm traffic). Commenter prefers Alternative 5.
- Commenter feels Alternative 4 is the best option.
- Commenter opposes Alternative 6 because it affects their family farm (which is noted by the commenter as a sesquicentennial farm). Commenter also makes claim that "Indian skeletons" were found on the east side of IL 164 at US 34.

- Commenter suggests that Alternative 5 be shifted to avoid the hillside at IL 164, which is stated to contain Indian mounds. Commenter also suggests shifting Alternative 5 about ¼ mile south of where it is shown in order to be on higher ground. Commenter also suggests building a bridge across the floodplain.
- Commenter would like to know how close their south property line is to the proposed Alternative 5.
- Commenter likes Alternative 4 because it has less intersections and road closures, it's shorter, less residential displacements, less right of way, less acres of prime farmland, and less number of farms affected. Commenter also suggests that the new road have center concrete barriers to narrow the width of the median, and also suggests to eliminate access from the side roads for better safety.
- Commenter would like to see Alternative 4 because it would have the least impact to homes and businesses.

Figure 1
Public Meeting Photos

Illinois Department of Transportation

Public Information Meeting Summary

US Route 34 Supplemental EIS
Henderson County, Illinois



Illinois Department of Transportation

Public Information Meeting Summary

US Route 34 Supplemental EIS
Henderson County, Illinois



Illinois Department of Transportation

Public Information Meeting Summary

US Route 34 Supplemental EIS
Henderson County, Illinois



Figure 2
Correspondence

State of Illinois
Bruce Rauner, Governor

Illinois Department of Transportation
Randall S. Blankenhorn, Secretary

FOR IMMEDIATE RELEASE:
November 3, 2015

CONTACT:
Brian Williamsen 309.671.4854

US 34 Public Meeting

PEORIA – The Illinois Department of Transportation (IDOT) has scheduled an open house public meeting on proposed US 34 improvements between Gulfport and T.R. 111. The roadway alignments are being re-evaluated because of the de-accredited Mississippi River levees in the area.

Wednesday, Nov. 18, 2015
4 to 7 p.m.
West Central High School
RR 1
Biggsville, Ill.

The purpose of the meeting is to provide an overview of the project, show conceptual alignment options, view graphical and informational displays, and obtain public comments and input. Department staff will be available to answer questions. All written correspondence regarding this project can be mailed to IDOT at the address below. Written comments will also be accepted at the meeting.

This meeting is accessible to individuals with special needs. Anyone needing special assistance should contact Mr. Tom Lacy, IDOT Studies and Plans Engineer at (309) 671-3333. Persons planning to attend this meeting who will need a sign language interpreter or other similar accommodations should notify IDOT at 309-671-3333 (TTY 800-526-0844; voice users 800-526-0857) at least three (3) days prior to the meeting.

Mr. Tom Lacy, Studies and Plans Engineer
RE: US 34 Improvements
Illinois Department of Transportation
401 Main St.
Peoria, IL 61602

-30-

Illinois Department of Transportation

COMMENT FORM

Region 3 / District 4
NOV 2 4 2015
Received
Bureau of Design

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

DEPARTMENT OF TRANSPORTATION
RECEIVED
NOV 23 2015
REGION 3 / DISTRICT 4
PEORIA, ILLINOIS

Comment Date: 11-19-15

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than December 9, 2015.

Option 4 is the best for Frontier Communications due to our fiber plant + Central Office locations.

We Service the Gladstone, Coulport area for Telecommunications including internet services.

We serve almost all of Warren, Henderson + Hancock Counties locally.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Kim Shutz - General Manager				
Organization:	Frontier Communications				
Address:	214 S. 1st Street				
City:	Monmouth, IL	**State:**	IL	**Zip:**	61462
Email:	Kim.Zugmaier@FTR.com				

Illinois Department of Transportation

Illinois Department of Transportation
Region 3 / District 4
NOV 24 2015
Received
Program Development

COMMENT FORM

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

ILLINOIS DEPARTMENT OF TRANSPORTATION
RECEIVED
NOV 13 2015
REGION 3 / DISTRICT 4
ILLINOIS

Comment Date: _____

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than December 9, 2015.

AFTER STUDYING THE PLANS AND THENKING ABOUT THE HWY 34 PROJECT MY PREFERNCE IS ALTERNATIVE NO 3 FOR THE FOLLOWING REASONS.

1. AVOIDS THE FLOODPLAIN AS MUCH AS POSSIBLE AND STILL KEEPS THE ROAD STRAIGHT.

2. 1 MILLION YDS, LESS FILL NEEDED THAN ALT 1 WHILE STILL HAVING STRAIGHT ROAD ALSO FILL POSSIBLY WILL BE MORE EASY TO OBTAIN AND OF BETTER QUALITY IF THE SOIL DOES NOT COME OUT OF THE FLOODPLAIN

3 ALTERNATIVE'S 3, 5, AND 6 COULD OPEN SOME LAND FOR DEVELOPMENT IN THE FUTURE SINCE THEY ARE OUT OF THE FLOOD PLAIN WHICH HENDERSON COUNTY NEEDS.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	NICK DOMASCHKO				
Organization:					
Address:	9749 S.R. 56 N.				
City:	AURORA	State:	IN	Zip:	47001
Email:					

Illinois Department of Transportation

COMMENT FORM

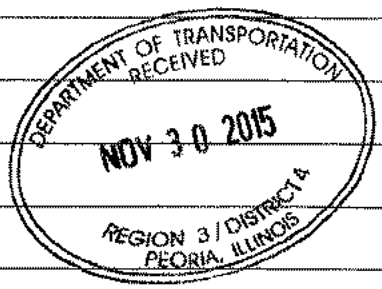
Public Informational Open House
November 18, 2015
West Central High School

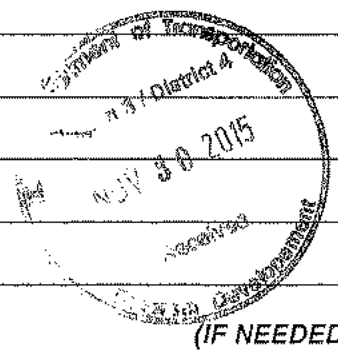
U.S. Route 34
Supplemental Environmental Impact
Statement (SEIS) And Design Report

Comment Date: 11-27-15

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
To be included in the public record, comments must be received no later than December 9, 2015.

I like alt. #5. Also happy you are raising road rather than relying on any present or future levee system!





(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Mark D. Smith				
Organization:					
Address:	RR#1 Box 96				
City:	Carman	State:	IL.	Zip:	61425
Email:					

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact
Statement (SEIS) And Design Report

Comment Date: 11-18-15

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than December 9, 2015.

I would advocate for the alternative with the best chance of withstanding a future flood and efficacious use of resources including ROW acquisition – with the priority being keeping the road open during a flood.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Mike Norris				
Organization:	SEIRPC				
Address:	211 N Gear, Ste 100				
City:	W. Burlington	State:	IA	Zip:	52655
Email:	mnorris@seirpc.com.				

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: _____

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than December 9, 2015.

Who is the contact for information about the pros & cons/ consequences of de-accreditation of levee systems

Certainly appreciate the 2020 time line.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Yvonne Knapp				
Organization:					
Address:	PO Box 12				
City:	Raritan	**State:**	IL	**Zip:**	61471
Email:	yknapp@mtcnow.net				

Illinois Department of Transportation

Office of Highways Project Implementation / Region 3 / District 4
401 Main Street / Peoria, Illinois 61602-1111

May 13, 2016

Bureau of Program Development
Studies and Plans – Phase I
FAP Route 313 (US 34)
Section 7,8
Henderson County
Job No.: P-94-003-13
Catalog No.: 032137-00P

Ms. Yvonne Knapp
P.O. Box 12
Raritan, Illinois 61471

Dear Ms. Knapp:

Thank you for your comment, dated November 18, 2015, regarding the alignments for US Route 34 between Gulfport and T.R. 111You requested contact information about the pros/cons/consequences of the de-accreditation of the levee systems.

The de-accreditation decision was based upon a determination by FEMA that the levee system no longer met the minimum federal standards for levee construction. On June 18, 2010, FEMA published revised flood plain maps for Henderson County reflecting a decision to de-accredit the Henderson County Drainage District Number 1 and Number 2 levees.

Any discussion on the pros/cons of the levee de-accreditation would have to be with the U.S. Army Corp of Engineers or the Federal Emergency Management Agency.

Thank you for your attendance and participation at the public informational meeting. Another public meeting will be held sometime in late 2016 to reduce and refine alternate alignments.

Sincerely,

Kensil A. Garnett, P.E.
Region Three Engineer

MAM:tdp\mam005_fap 313_us 34_p-94-003-13_yvonne knapp.docx
Encloures
cc: Project File (M. McLuckie)
AMEC Foster Wheeler (Attn. Mr. Gary S. Baker)

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 12-3-15

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than December 9, 2015.

We are extremely concerned about how the proposed Hwy 34 expansion is going to affected our family farm. The proposed Alternative 5 route the South route will ruin our pasture land. Raising cattle is a big part of our family farm income. Without this pasture we will no longer be able to raise cattle as this pasture needs to be close to our barns and feedlot. This will be a severe reduction to our income. Following the existing road or using Alternative 4 which is the best as it will ruin less farmland and is further away from existing residents.

DEPARTMENT OF TRANSPORTATION RECEIVED DEC 07 2015 PEORIA, ILLINOIS

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Earl Menke				
Organization:	Menke family Farm				
Address:	RR1 Box 123				
City:	Carman	State:	ILL	Zip:	61425
Email:					

Illinois Department of Transportation

COMMENT FORM

DEPARTMENT OF TRANSPORTATION RECEIVED DEC 07 2015 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 12-3-15

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than December 9, 2015.

I am writing in concern for the proposed Hwy 34 expansion. Our farming operation will be severely impacted by most of the routes. The worst scenario being the alternative 5 route or the most southern route. This route will ruin our cattle operation by cutting through our pasture land. With the loss of this pasture we will no longer be able to raise cattle which is a major part of our family farm. We need our pasture close to our barns and feedlots. This land will be irreplacable. The best routes are to follow the existing highway 34 route or to use Alternative 4 which will be away from existing homes and cut less farmland into small tracts.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Susan Menke				
Organization:	Menke family farm				
Address:	RR1 Box 123				
City:	Carman	State:	ILL	Zip:	61425
Email:					

Illinois Department of Transportation

COMMENT FORM

DEPARTMENT OF TRANSPORTATION RECEIVED DEC 04 2015 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Illinois Department of Transportation Region 3 / District 4 DEC 04 2015 Received Program Development

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: _____

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
To be included in the public record, comments must be received no later than December 9, 2015.

Thank you for showing the video. The choices for the new highway and answering our questions. This section of highway has been responsible for many deaths. There are no shoulders for safety, only a few passing lanes where cars could pull over at any moment, and the blacktop is in bad shape in areas. With the current situation many accidents can't be avoided because of poor visibility.

I believe the layout of the first choice, #5, makes the best sense. It should be finished as soon as possible.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Orval McCarroll				
Organization:					
Address:	RR#2 80AB I have in Oquawka & lot in Blackstone				
City:	Oquawka.	**State:**	IL	**Zip:**	61469
Email:					

Illinois Department of Transportation

COMMENT FORM

DEPARTMENT OF TRANSPORTATION RECEIVED DEC 04 2015 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Region 3 DEC 04 2015 System Development

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 12-1-15

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
To be included in the public record, comments must be received no later than December 9, 2015.

option 4 would be best for us (frontier)

The 3 maps with the 6 possible options were good to look at.
Do you have any way for us to get a copy in detail of those maps!
Do you have a website people can go to see detailed maps.
a detailed map is needed so we can look close at where the new road will interfere with our phone distribution system

Thank you!

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Dominick Ascone
Technical Supervisor

frontier Communications
214 S. 1st Street, Monmouth, IL 61462
Phone: (309) 734-6213 | Fax: (309) 734-5553
Mobile: (309) 371-3082
dominick.ascone@ftr.com

Name:	
Organization:	
Address:	
City:	
Email:	

IL **Zip:** 61455

Illinois Department of Transportation

COMMENT FORM

Region 3 / District 4
Received
DEC 08 2015
DEPARTMENT OF TRANSPORTATION RECEIVED
DEC 08 2015
REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: December 4, 2015

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
To be included in the public record, comments must be received no later than December 9, 2015.

My name is Donna Zurmuehlen. I am the owner of Zurmuehlen Ltd. Which is in Gladstone township. My husband (who is now deceased) and I worked many years to care for and farm the land that is now being considered for the new highway.

I attended your Public Informational Open House on November 18, 2015 at the West Central High School. I am a land owner with property in sections 15 and 16 in Gladstone township.

Your project alternative 6 will greatly affect some of my land. After the interchange the road goes northeast toward Gladstone. This road goes diagonally across a 200 acre field I own that has 2 irrigation pivots in section 16. This will be catastrophic for that field. It may also affect a machine storage building, grain bins and a machine shop as it goes back to Rte. 164 and into Gladstone. My home is east across Rte 164 and may also be affected. Part of this land is designated as a Sesquicentennial Farm as my family first purchased that land in 1848 and someone in the family has lived on this property since that time.

I also own land on the east side of the junction of Rte. 34 and 164. You are scheduled to take some of this land that has been found to have Indian skeletons on the east-west ridge at the top of the hill. These were found several years ago by your department.

I also owned land that you purchased for the four lane road located in section 24 of Gladstone township. This was property that ran diagonally across a very productive 80 acre field. It has made farming of that parcel of land very difficult.

So you have really affected my farm land and will continue to do so if this diagonal road into Gladstone if located across section 16.

Name:	Donna Zurmuehlen				
Organization:	Zurmuehlen Ltd.				
Address:	RR5 Box 2				
City:	Gladstone,	State:	IL	Zip:	61437
Email:	dondonna53@frontiernet.net				

11.

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Illinois Department of Transportation
Region 3 / District 4
Received
DEC 08 2015
DEPARTMENT OF TRANSPORTATION
RECEIVED
REGION 3 / DISTRICT 4
PEORIA, ILLINOIS

Comment Date: 12-3-15

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than December 9, 2015.

IF you use Alternative 5 Route to where it used possible to draw in the new road to join the new part of 34 already in, would saving having to remove the hillside next to 164 with the existing mound on top of the hill. Would also be a shorter Route. At same time you need to look at moving Alternative 5 about ½ mile South of where you show it. This will put you on higher land through the bottom.

I still feel you people need to take a hard look at putting a bridge across the flood plain. This would reduce the amount of land needed plus eliminate the fill needed to build & raise the roadway.

Thank you.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Joan M Brown
Organization:	
Address:	RR#1 Box 137
City:	Gladstone **State:** Ill. **Zip:** 61437
Email:	

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 12.6.15

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than December 9, 2015.

We would like to know how close to are property line on South side the Alternative Route 5 would be to are property.

Thank you.

DEPARTMENT OF TRANSPORTATION RECEIVED DEC 09 2015 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Department of Transportation Region 3 / District 4 DEC 09 2015 Received Program Development

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	LARRY THOMPSON				
Organization:	Property Owner				
Address:	RR#1, Box 172				
City:	GLADSTONE,	State:	ILL	Zip:	61437
Email:	toby and darla @ yahoo.com				

HENDERSON COUNTY
TINA DROSTE, COLLECTOR
COURT HOUSE
OQUAWKA, IL 61469
(309) 867-4141

PROPERTY NUMBER	CLASS	CODE	NUMBER
07-050-002-00	0040	07002	493

S31 T10 R5
LOT 1
BLOCK 2
SETTERGRENS MOUNDS SUBDIVISION #1

TOWNSHIP	LENDING CODE	LAND/LOT ACRES	FARM LAND ACRES	FORFEITED TAX
GLADSTONE TOWNSHIP		.55		

LAND/LOT ASSESSED	FARM LAND ASSESSED	FARM BLDG. ASSESSED	BUILDING ASSESSED	TOTAL ASSESSED
1584			31968	33552
LAND/LOT B.O.R. MULT	**FARM LAND B.O.R. MULT**	**FARM BLDG. B.O.R. MULT**	**BUILDING B.O.R. MULT**	**DEPARTMENT MULTIPLIER**
				1.00000
IMPROVMENT EXEMPTION	**DEPARTMENT EQUALIZED**	**OWNER OCCUPIED**	**HOMESTEAD/ VETERAN**	SCAFHE
	33552	6000	5000	EX=0
RETURN VETERAN	**DISABLED**	**DISABLED VETERAN**	**TAXABLE VALUE**	
	2000		**20552**	

NAME: THOMPSON LAWRENCE R & DARLA A
RR 1 BOX 172
GLADSTONE, IL 61437-9739

PROPERTY OWNER IF OTHER THAN ABOVE

2013 REAL ESTATE TAX

Illinois Department of Transportation

Office of Highways Project Implementation / Region 3 / District 4
401 Main Street / Peoria, Illinois 61602-1111

May 13, 2016

Bureau of Program Development
Studies and Plans – Phase I
FAP Route 313 (US 34)
Section 7,8
Henderson County
Job No.: P-94-003-13
Catalog No.: 032137-00P

Mr. Larry Thompson
Rural Route 1, Box 172
Gladstone, Illinois 61437

Dear Mr. Thompson:

Thank you for your comment, dated December 6, 2015, regarding the alignments being studied on US Route 34 between Gulfport and T.R. 111. In your comment you wanted to know how close Alternate 5 is to your south property line.

The right-of-way would be approximately five feet from the southeast property corner. That distance may be increased as we take a closer look at the right-of-way widths through that area.

Thank you for your attendance and participation at the public informational meeting. Another public meeting will be held sometime in late 2016.

Sincerely,

Kensil A. Garnett

Kensil A. Garnett, P.E.
Region Three Engineer

MAM:tdp\mam003_fap 313_us 34_p-94-003-13_larry thompson.docx

Encloures

cc: Project File (M. McLuckie)
AMEC Foster Wheeler (Attn. Mr. Gary S. Baker)

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Illinois Department of Transportation Region 3 / District 4
DEPARTMENT OF TRANSPORTATION RECEIVED
Received DEC 10 2015 Program Development
REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Comment Date: 12-7-15

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
To be included in the public record, comments must be received no later than December 9, 2015.

Of the alternative routes I like route 4 for the following reasons.
Less intersections
Less road Closures
Less Residential displacements
Less acres of Right-of-way
Less acres of prime farmland
Less Number of farmed Parcels affected
Would not interfere with any irrigation pivots
Could use center concrete barries to shorten the width of the road like the ones used from the Gulfport to Casman Road.
You could make it safer by eliminating access from side roads. Could also eliminate access at Lock and Dam 18 road as local traffic could use old 34 to access 4 lane 34.
Alternative 4 is a safer road do to less access from side roads.

over

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Jim Olson				
Organization:	farm land owner				
Address:	R.R 1 Box 125				
City:	Casman IL	State:	IL	Zip:	61425
Email:	JKOKA0@Gmail.com				

Alternative 4 appears to be the shortest overall route which would be in the long run:
Less Road To maintain. Less labor and equipment
Less commute time
Less fuel burned in cars and trucks
Less car and truck maintenance
Less curves to maneuver. Especially in the winter time.
Less dividing of the County as the BNSF Railway already divides this same a same area.
~~Alternative 4 would also be the best overall route to comply with the 500 year flood elevations~~

On a separate note:
If the new 4 lane Hwy is built just on the north side of old highway 34 I will lose the use of the irrigation system that waters that field.

One more note: A 4 lane highway that goes south east from the existing 4 lane road at Stevenson lake gets the new 4 lane road up on higher ground in the shortest distance.

Mr. Tom Lacy and your IDOT team have done an excellent job here and your hard work is much appreciated.

If you have questions or need additional information, please contact:

Sincerely,
Jim Olson

Mr. Tom Lacy
Studies and Plans Engineer
IDOT – District 4
401 Main Street
Peoria, IL 61602-1111
(309) 671-3333

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
November 18, 2015
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

DEPARTMENT OF TRANSPORTATION RECEIVED DEC 16 2015 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Illinois Department of Transportation Region 3 / District 4 DEC 17 2015 Received Program Development

Comment Date: 12/6/15

Thank you for attending tonight's meeting. ~~Your~~ participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
To be included in the public record, comments must be received no later than December 9, 2015.

My main involvement with the road pertains to the Edward Bailey Marital Trust Ground. A few comments I would like to make about the alternatives are: I have a business located north of highway 34 at the curve so please allow access to this blacktop. Also on the south side of the current highway we have an irrigation well and 3 center pivot irrigations in that field so understand the more of that field you take the more expenses will be encountered.

Ideally I would like to see Alternate #4 it will have the least amount of impact to homs and business along the route. However I understand running the road with #4 will increase the amount of dirt needed to raise the road above the floodplain and additional cost will be incurred by additional wetlands but this may be cheaper than cost associated with purchasing homes / businesses etc.

Thank You

Brian

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Brian Randall				
Organization:					
Address:	RR5 Box 134				
City:	Gladstone, [redacted]	State:	IL	Zip:	61437
Email:	brandall79@hotmail.com				

Illinois Department of Transportation

Office of Highways Project Implementation / Region 3 / District 4
401 Main Street / Peoria, Illinois 61602-1111

May 13, 2016

Bureau of Program Development
Studies and Plans – Phase I
FAP Route 313 (US 34)
Section 7,8
Henderson County
Job No.: P-94-003-13
Catalog No.: 032137-00P

Mr. Michael McGraw
Rural Route 1, Box 13A
Gladstone, Illinois 61437

Dear Mr. McGraw:

Thank you for your comment, dated December 3, 2015, regarding the alignments being studied on US Route 34 between Gulfport and T.R. 111. In your comment you suggested a new alignment for Alternate 5 in order to avoid a hillside and the Indian Mounds on top of that hill. You also suggested providing a bridge across the flood plains.

At the intersection of US Route 34 and IL Route 164, all alternates presented at the public meeting are the same. All of these alternates at that location represent the originally approved preferred alternate from the 2003 Environmental Impact Statement. This location does avoid impacts to the Indian Mounds you mentioned while minimizing farm severances. The alignment you proposed would increase the number of farm severances.

Regarding the implementation of a bridge across the flood plain, it is much less expensive to construct fill and raise the roadway than it is to construct a bridge over the same length, plus cheaper to maintain.

Thank you for your attendance and participation at the public informational meeting. Another public meeting will be held sometime in late 2016.

Sincerely,

Kensil A. Garnett, P.E.
Region Three Engineer

MAM:tdp\mam004_fap 313_us 34_p-94-003-13_michael mcgraw.docx
Encloures
cc: Project File (M. McLuckie)
AMEC Foster Wheeler (Attn. Mr. Gary S. Baker)

Figure 3
Meeting Ad

Illinois Department of Transportation

PUBLIC INFORMATIONAL OPEN HOUSE MEETING

U.S. ROUTE 34 IN HENDERSON COUNTY
ALIGNMENT REVIEW
FROM GULFPORT TO T.R. 111

Date: Wednesday, Nov. 18, 2015
Time: 4 p.m. to 7 p.m.
Location: West Central High School
RR 1
Biggsville, IL 61418

The Illinois Department of Transportation (IDOT) has scheduled an open house meeting on the proposed U.S. 34 improvements between Gulfport and T.R. 111. The roadway alignments are being re-evaluated because of the de-accredited Mississippi River levees in the area.

The purpose of the meeting is to provide an overview of the project, show conceptual alignment options, view graphical and informational displays, and obtain public comments and input. In addition, Department staff will be available to answer questions. All written correspondence regarding this project can be mailed to IDOT at the address below. Written comments will also be accepted at the meeting.

This meeting is accessible to individuals with special needs. Anyone needing special assistance should contact Mr. Tom Lacy, IDOT Studies and Plans Engineer at (309) 671-3333. Persons planning to attend this meeting who will need a sign language interpreter or other similar accommodations should notify IDOT at 309-671-3333 (TTY 800-526-0844; voice users 800-526-0857) at least three (3) days prior to the meeting.

Mr. Tom Lacy, Studies and Plans Engineer
Re: U.S. 34 Improvements
Illinois Department of Transportation
401 Main St.
Peoria, IL 61602

Figure 4
Meeting Materials

Purpose of Tonight's Meeting:

- Explain why IDOT is conducting this project
- Update public on study progress
- Present alternatives proposed to be carried forward
- Solicit public comments and feedback

Illinois Department of Transportation

What's Happened Since 2003?

- In 2006, Illinois executed Executive Order 2006-05, Construction Activities in Special Flood Hazard Areas. A Special Flood Hazard Area is as "an area subject to inundation by the base or 100-year frequency and shown as such on the most current Flood Insurance Rate Map published by the FEMA."
- EO 2006-05 requires that all new Critical Facilities shall be located outside of the or structurally dry to at least the 500-year frequency elevation. IDOT determined that U.S. Route 34 is a critical facility.
- On June 18, 2010, FEMA de-accredited the Henderson County Drainage District Number 1 and Number 2 levee systems.
- Result of the de-accreditation is on changes to regulatory mapping for Henderson County, which became effective in 2010.
- Approximately six miles of the U.S. Route 34 alignment selected in the 2003 FEIS and ROD, are now in an area designated a Special Flood Hazard Area protected by Executive Order 2006-05; Other alternatives must be evaluated to determine if there is a practicable alternative to the six miles of selected U.S. Route 34 alignment located in the 100-year

Illinois Department of Transportation

Project Purpose
(from the 2003 EIS)

“The purpose of the proposed action is to provide an improved transportation facility for local and through traffic in Henderson and Warren Counties to address the needs of system capacity, system continuity, and travel safety.”

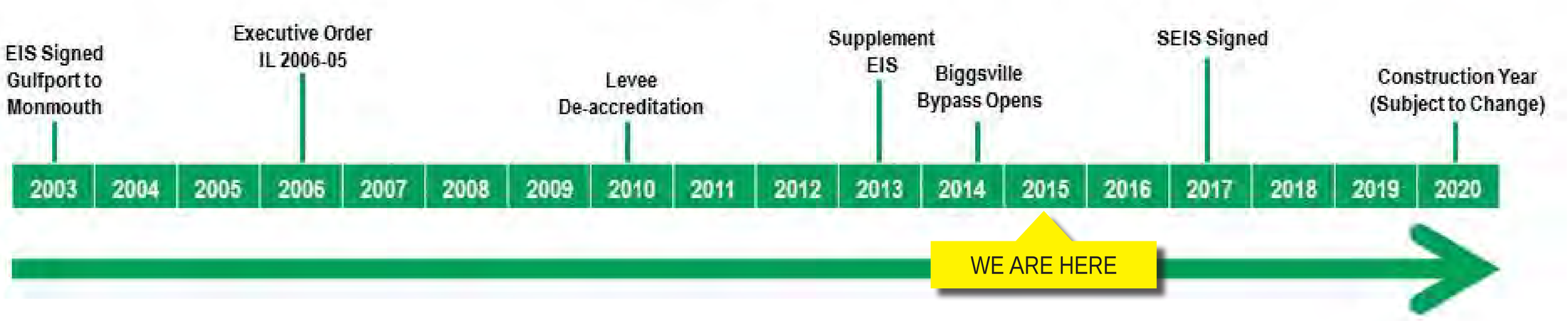
Illinois Department of Transportation

What's Next?

- Alternatives are still preliminary – need approval of FHWA and environmental resource agencies
- Study team will the alternatives and review feedback from tonight's meeting
- Field work
- Begin assembling Supplemental Environmental Impact Statement (SEIS)
- Selection of a preferred alternative
- Ongoing public involvement

.....

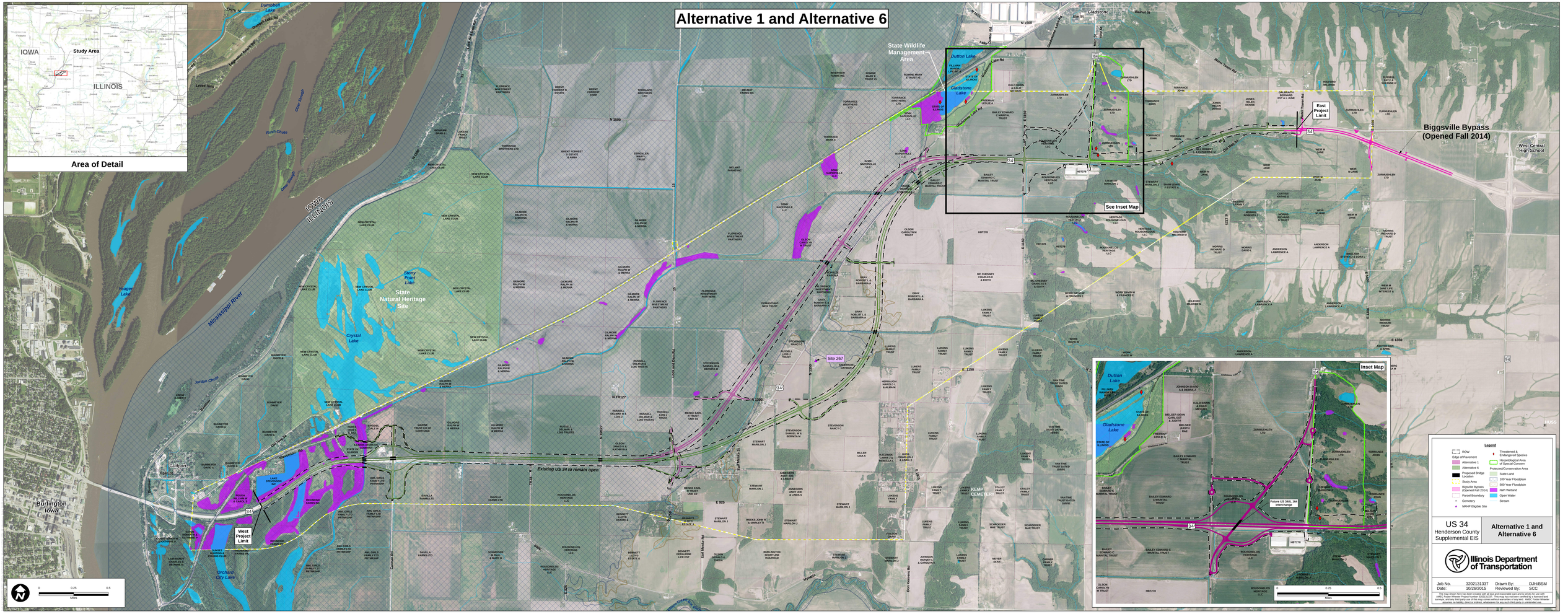
U.S. Route 34 Transportation Study
Project Timeline



Illinois Department of Transportation

Alternative 1 and Alternative 6

Area of Detail



Legend

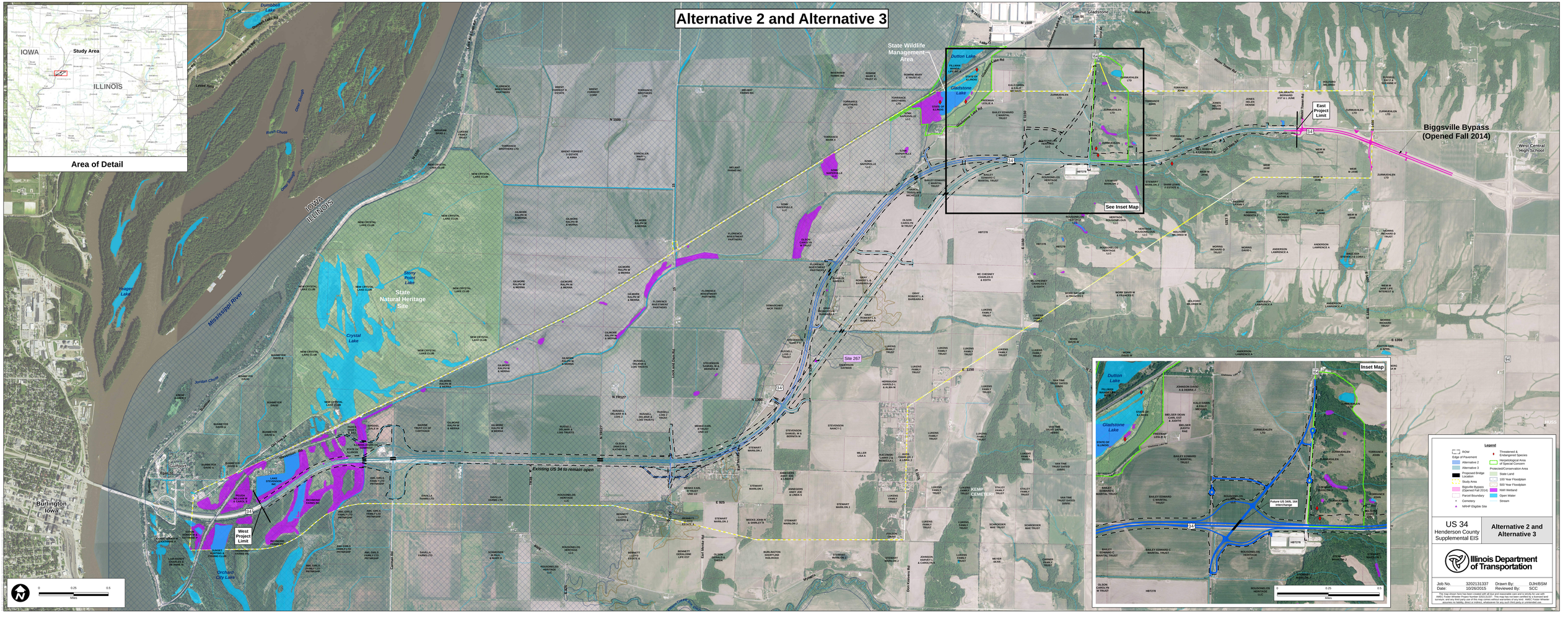
- ROW
- Edge of Pavement
- Alternative 1
- Alternative 6
- Proposed Bridge Location
- Study Area
- Biggsville Bypass (Opened Fall 2014)
- Parcel Boundary
- Cemetery
- NRHP Eligible Site
- Threatened & Endangered Species
- Herpetological Area of Special Concern
- Protected/Conservation Area
- State Land
- 100 Year Floodplain
- 500 Year Floodplain
- NWI Wetland
- Open Water
- Stream

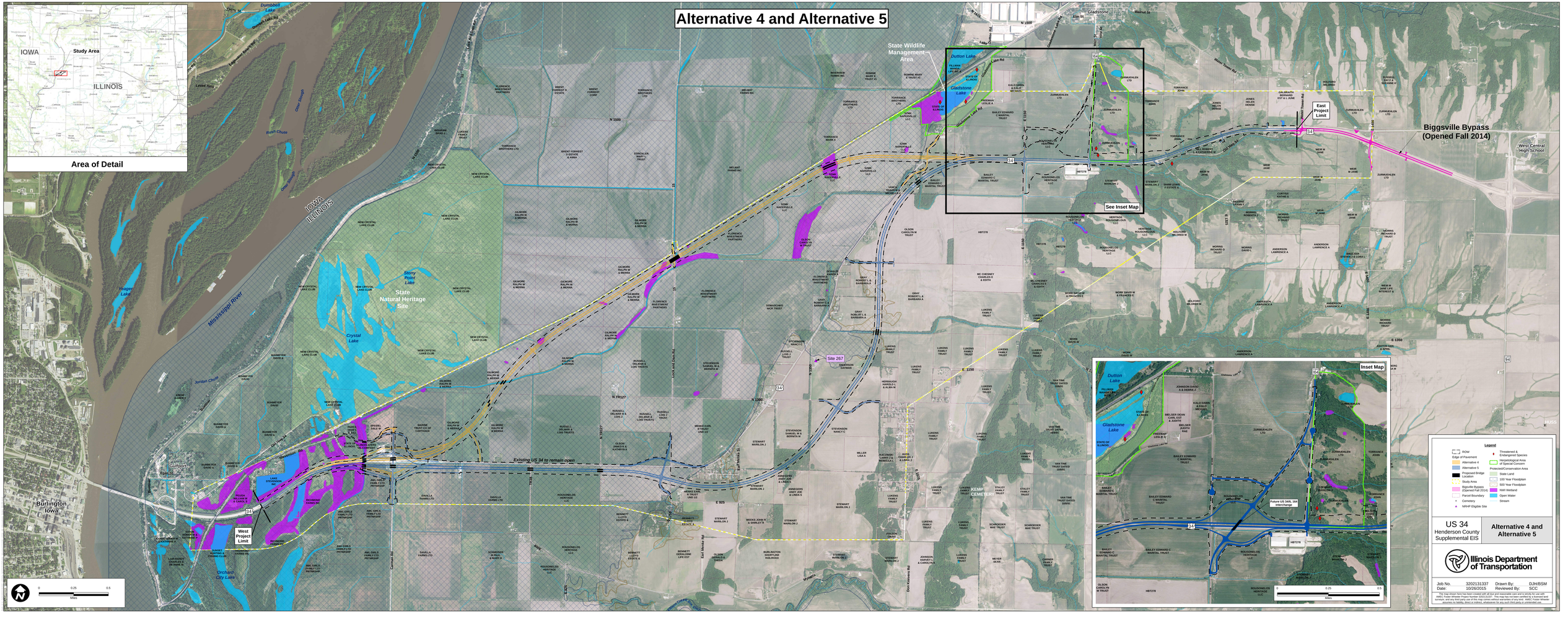
US 34 Henderson County Supplemental EIS	**Alternative 1 and Alternative 6**

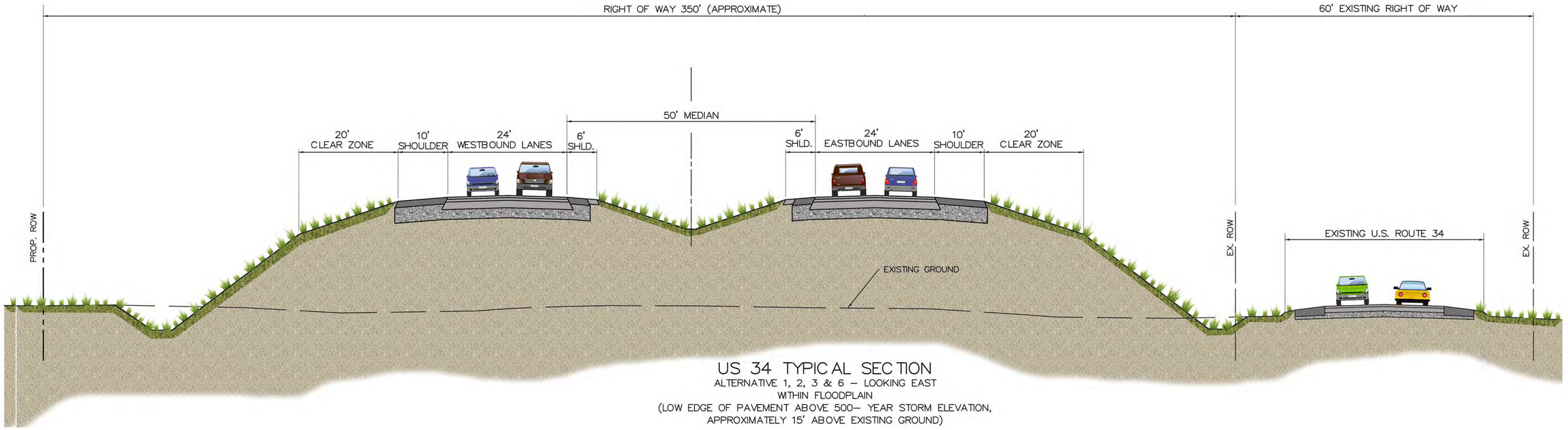
Illinois Department of Transportation

Job No.	32021313337	Drawn By:	DJH/BSM
Date:	10/26/2015	Reviewed By:	SCC

The map shown here lies mainly located both on and non-contiguous with and is entirely for use with AMEC Foster Wheeler Project Number 32013133?. This map has not been certified by a licensed land surveyor and is not intended to be used as a land boundary survey document. AMEC Foster Wheeler assumes no liability, direct or indirect, whatsoever for any such third party or unintended use.

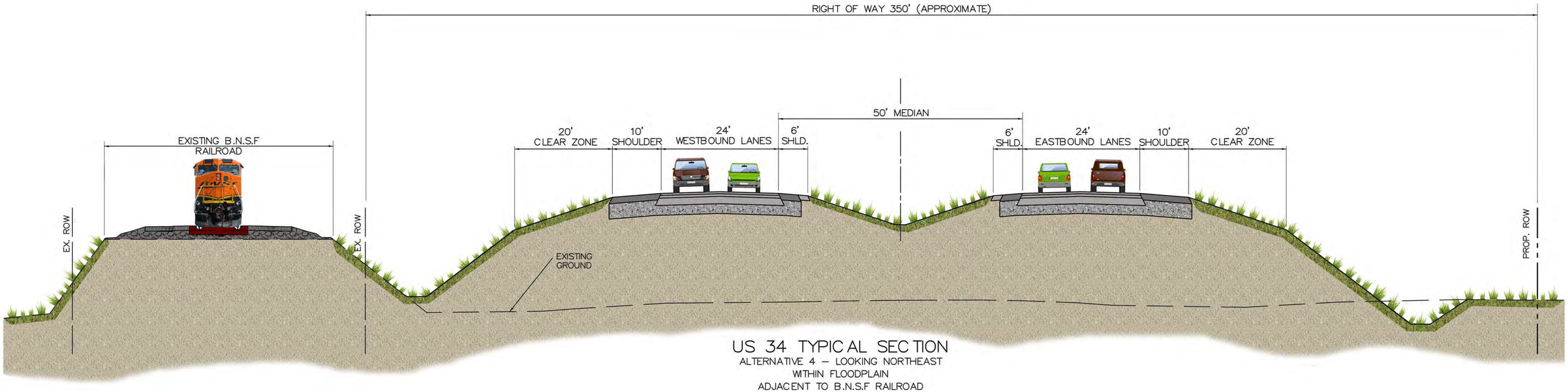

Alternative 2 and Alternative 3
Area of Detail
IOWA
Study Area
ILLINOIS
Dumbbell Lake
Quarry Creek Rd
Edgewater Beach Rd
Levee Xing
Deer Slough
Rush Chute
Deer Island
IOWA
ILLINOIS
Yeager Lake
Mississippi River
Stony Point Lake
State Natural Heritage Site
Crystal Lake
Jordan Chute
Gulfport
Burlington Iowa
Orchard City Lake
West Project Limit
Existing US 34 to remain open
State Wildlife Management Area
Dutton Lake
Gladstone Lake
Gladstone
Elm St
Walnut St
Gladstone Rd
Oakwood Lake Rd
Oakwood Lake Rd
Walnut Grove Rd
East Project Limit
Biggsville Bypass (Opened Fall 2014)
West Central High School
See Inset Map
Inset Map
Site 267
KEMP CEMETERY
Future US 34/IL 164 Interchange
Legend
ROW
Edge of Pavement
Alternative 2
Alternative 3
Proposed Bridge Location
Study Area
Biggsville Bypass (Opened Fall 2014)
Parcel Boundary
Cemetery
NRHP Eligible Site
Threatened & Endangered Species
Herpetological Area of Special Concern
Protected/Conservation Area
State Land
100 Year Floodplain
500 Year Floodplain
NWI Wetland
Open Water
Stream
US 34
Henderson County
Supplemental EIS
Alternative 2 and Alternative 3
Illinois Department of Transportation
Job No. 3202131337
Date: 10/26/2015
Drawn By: DJH/BSM
Reviewed By: SCC
Miles


Alternative 4 and Alternative 5
Area of Detail
IOWA
Study Area
ILLINOIS
Dumbbell Lake
Quarry Creek Rd
Eagle Point Road
Levee Xing
Deer Slough
Rush Chute
Deer Island
IOWA
ILLINOIS
Yeager Lake
Mississippi River
Stony Point Lake
State Natural Heritage Site
Crystal Lake
Jordan Chute
Gulfport
Burlington Iowa
Orchard City Lake
Lake Stephens
West Project Limit
Existing US 34 to remain open
State Wildlife Management Area
Dutton Lake
Gladstone Lake
See Inset Map
East Project Limit
Biggsville Bypass (Opened Fall 2014)
West Central High School
Gladstone
Site 267
KEMP CEMETERY
Inset Map
Future US 34/IL 164 interchange
Legend
IDOW
Edge of Pavement
Alternative 4
Alternative 5
Proposed Bridge Location
Study Area
Bypass Business (Opened Fall 2014)
Parcel Boundary
Cemetery
NRHP Eligible Site
Threatened & Endangered Species
Herpetological Area of Special Concern
Protected/Conservation Area
State Land
100 Year Floodplain
500 Year Floodplain
NWI Wetland
Open Water
Stream
US 34
Henderson County Supplemental EIS
Alternative 4 and Alternative 5
Illinois Department of Transportation
Job No. 3202131337
Date: 10/26/2015
Drawn By: DJH/BSM
Reviewed By: SCC
Miles



US 34 TYPICAL SECTION

ALTERNATIVE 1, 2, 3 & 6 – LOOKING EAST
WITHIN FLOODPLAIN
(LOW EDGE OF PAVEMENT ABOVE 500– YEAR STORM ELEVATION,
APPROXIMATELY 15' ABOVE EXISTING GROUND)

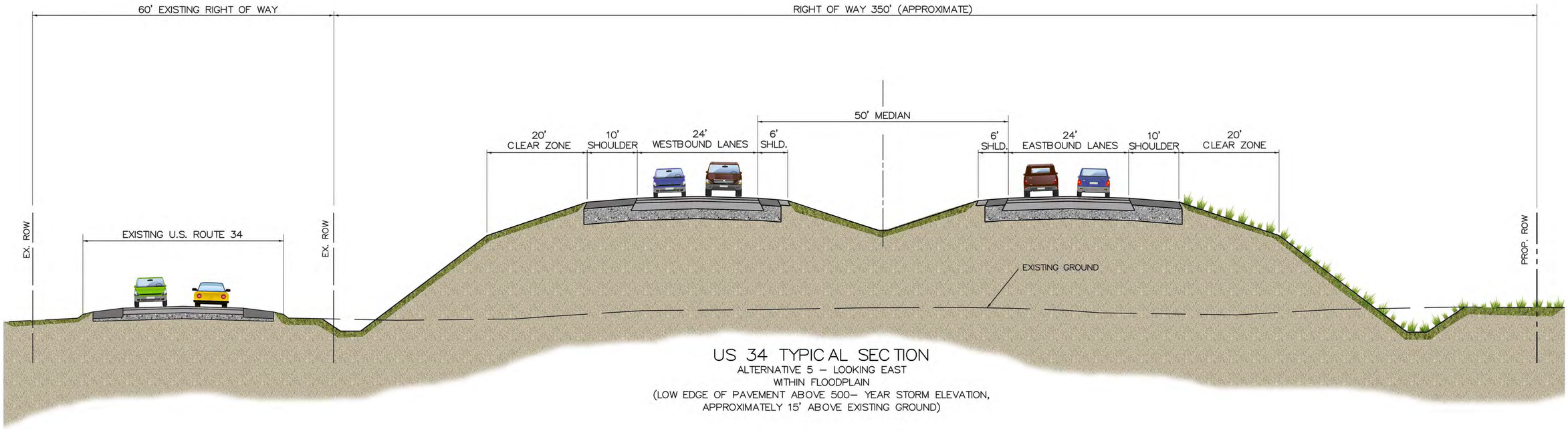


US 34 TYPICAL SECTION

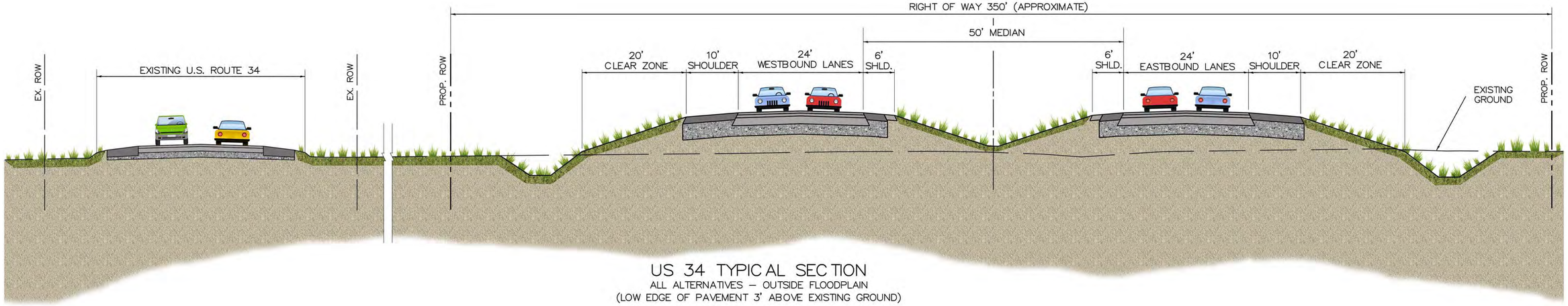
ALTERNATIVE 4 – LOOKING NORTHEAST
WITHIN FLOODPLAIN
ADJACENT TO B.N.S.F RAILROAD

Illinois Department of Transportation

34



US 34 TYPICAL SECTION
ALTERNATIVE 5 – LOOKING EAST
WITHIN FLOODPLAIN
(LOW EDGE OF PAVEMENT ABOVE 500– YEAR STORM ELEVATION,
APPROXIMATELY 15' ABOVE EXISTING GROUND)



US 34 TYPICAL SECTION
ALL ALTERNATIVES – OUTSIDE FLOODPLAIN
(LOW EDGE OF PAVEMENT 3' ABOVE EXISTING GROUND)

Illinois Department of Transportation

34

Figure 5
Sign-In Sheets

FAP Route FAP 313 (U.S. Route 34)
Section 7/8
County Henderson
Job Number P94-003-13
Description Supplemental Environmental Impact Statement (SEIS) and Design Report Addendum

Illinois Department of Transportation

November 18, 2015
Public Informational Open House
West Central High School

ATTENDANCE SHEET

PLEASE PRINT!

Name	Resident, Business Owner, Organization, etc.	Address (Street, City, State, Zip)	E-Mail	Phone
Jaime Shultz	West Central 235	RR1 Box 72 Biggsville, IL 61418	Shultz-jaime@wc235.k12.il.us	309-627-2371 work 309-224-3553 cell
Kathy Lafary	West Central 235	RR1 Box 72 Biggsville, IL 61418	Lafary-kathy@wc235.k12.il.us	309-627-2339 work 309-221-2934 cell
Nancy Stevenson		RR5 Box 154 GLADSTONE IL 61437		319-759-6990
Michael J. McEwen		RR #1 Box 13A Gladstone, Ill 61437		319-457-2141
Danny J. Gibbs	Gibbs Sinclair Convenience Store Biggsville Store	P.O. Box 86 Biggsville, IL 61418		309-267-5274 309-627-2051
Elizabeth Meyer	The Hawk Eye		emeyer@thehawkeye.com	
Michele Schricker	34 Coalition	2818 Shamrock Dr Burlington IA	Michele.schricker@MSN.com	319-754-8146
Brenda Levitt	34 Coalition Greater Burlington Partnership	610 N. 4th St. Burlington, IA 52601	blevitt@greaterburlington	319-208-0047
Kurt Fowler		323 South 1st St. Monmouth IL 61462	kurtfowler47@gmail.com	309-734-6817
Robert Bailey		RR1 Box 224		309-867-4312
Melba G. Daulla	RR #1, Box 139	Carman, Ill. 61425		
Jane Weis	RR#5 Box 25	Gladstone, Ill 61437		
Vonnie & Dan Gray	RR#5 Box 159	Gladstone Il 61437		
Thomas L Pullen	PO Box 199	Gladstone Ill 61437	thomas1pullen@frontier.net	309627 9346
Judy & Ernest Pilkington	RR1 Box 155	Gladstone IL 61437		309873-2356

FAP Route	FAP 313 (U.S. Route 34)
Section	7/8
County	Henderson
Job Number	P94-003-13
Description	Supplemental Environmental Impact Statement (SEIS) and Design Report Addendum

Illinois Department of Transportation

November 18, 2015
Public Informational Open House
West Central High School

ATTENDANCE SHEET

PLEASE PRINT!

Name	Resident, Business Owner, Organization, etc.	Address (Street, City, State, Zip)	E-Mail	Phone
NICK DOMASCHKO	LAND OWNER	9748 ST RT. 56 NORTH AURORA IN 47001		(812)438-3092
Karen Cole	Resident Landowner	RR1 Box 31 Gladstone IL 61437	Karenc@dwaq.org	319-572-2592
Ron Pritchard	Frontier	214 S First Monmouth IL 61462	Ron.Pritchard@FTR.com	309-734-7991
Kat Farago	Pritchard broadcast		Katalist20@gmail	319 750 6553
Mark D. Smith	Resident	RR#1 Box 96 Carman, IL.		
Gilbert Hennenfent	Business Owner	615 N. 6th Street, Monmouth IL	gilberthen@frontier.com	309-734-3090
Cyril Hansen-Quartey	Student	318 N. 9th Street, Monmouth IL (61462)	kwartein@gmail.com	309-569-1492
Wood Stoltzum	Resident	305 W Penn, Roseville, IL	WStoltzum@yahoo.com	309-426-1531
Jim Ferneau	City of Burlington	400 Washington Burlington, IA 52601	ferneauj@burlingtoniowa.org	319-753-8120
Hugh & Sheila Forbes	Media IL	RR Po Box 786	-	—
Paul J. & Marla Baltz	Resident	RR 5 Box 72B Gladstone, IL		
Kelly Staley	Resident	RR1 Box 66 Little York		
Larry Thompson	Resident	RR 1 Box 172 Gladstone Ill.		309-883-2274
Jim Olson	Resident	R.R 1 Box 125 Carman IL	JKOK00@Gmail.Com	309-873-2375
Rich Egger	TRI States Public Radio	1 University Circle Macomb IL 61455	RG-Egger@WIU.EDU	309-298-1248

FAP Route FAP 313 (U.S. Route 34)
Section 7/8
County Henderson
Job Number P94-003-13
Description Supplemental Environmental Impact Statement (SEIS) and Design Report Addendum

Illinois Department of Transportation

November 18, 2015
Public Informational Open House
West Central High School

ATTENDANCE SHEET

PLEASE PRINT!

Name	Resident, Business Owner, Organization, etc.	Address (Street, City, State, Zip)	E-Mail	Phone
Edward J Adams		R.R.#1 Box 117 CARMAN IL 61425		
Lyn & Nancy Heece		RR 5 Box 180 Gladstone, Il. 61437	nanflee8@yahoo.com	
Pete Fleming		RR 5 Box 182 Gladstone IL 61437		
CLARK KELLY		RR7 Box 30 Biggsville, 61418		
Albert Renker		500 W. Maple Stronghurst, IL. 61480		
VANNIE KEEVER JR.		RR5 Box 129K Gladstone, IL 61437	vtkeever@gmail.com	
John Lourcth	Hawk Eye	800 S Main St Burlington, IA 52601		
Nancy Hull		PO Box 215 Biggsville IL	njh1957@hotmail.com	
Angela McElwee	Monmouth Chamber	89 Public Square Monmouth IL.		
Mark Foster	Greater Burlington Partnership	Iowa	mfoster@greaterburlington.com	
Mark E Torrance		RR1 Box 346 Biggsville, Ill 61418		
Tim Bresnahan	Warren County Board	920 W. Clinton Monmouth IL 61462		
Gail J Russell	Henderson County	RR#1 Box 124 Biggsville IL 61418		
BRAD LARSON	WARREN COUNTY	1043 E DETROIT MONMOUTH	blars@Winegard.com	
Dominick Ascone	warren county	214 S. 1st St	monmouth	Dominick.ascone@ftr.com

FAP Route	FAP 313 (U.S. Route 34)
Section	7/8
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Illinois Department of Transportation

November 18, 2015
Public Informational Open House
West Central High School

ATTENDANCE SHEET

PLEASE PRINT!

Name	Resident, Business Owner, Organization, etc.	Address (Street, City, State, Zip)	E-Mail	Phone
Mrs Larry Eibes	Resident	RR5 Box 170 Gladstone IL	leibes170@yahoo.com	309 873-2327
Mike Boyle	Resident	RR1 Box 365 Biggsville 61418		
Mr. + Mrs. Raymond Dickey	Resident	RR5 Box 141 Gladstone, IL	dickey7@frontiernet.net	309 627-2159
Mr. + Mrs Bill Moody	Resident	1006 N. Front Oquawka Il.	villagewp2015@gmail.com	309-867-6781
Lewis + LouAnn Arnold	Resident	208 E Main Raritan Ill	wb7bnl@interow.ned	309-746-6264
Darrell & Carol Elsea	Resident	RR1 Box 118	Biggsville, Il	
Robert D. Reeder		727 S. SUNNYLANE	MONMOUTH IL.	309-734-7723
Yvonne Knapp	Resident	PO Box 12	Raritan IL.	yknapp@mtcnow.net 309-221-2783
JOE KRUPPS	RESIDENT	943 ILL. RT. 41	GALESBURG, IL	309 462-3996
Susan Menke	Resident	RR1 Box 124	Carman, ILL	Menkesusan@yahoo.com 319-572-1339
Earl Menke	Resident	RR 1 Box 123	Carman, ILL	309-873-2507
KURT McCHESNEY	GLADSTONE	RR 5 Box 128	GLADSTONE IL	KURT99C@YAHOO.COM 319 572-1938
Carol Lappie	Resident	802 S 2nd St	monmouth IL	
Robert + Jeanette Randall	Resident	RR 7 Box 269	Biggsville, IL	rfarms73@yahoo.com 309-768-2404
Brian Randell	Business Owner	RR5 Box 139	Gladstone, IL	brandall79@hotmail.com 309-627-2500

FAP Route	FAP 313 (U.S. Route 34)
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November 18, 2015
Public Informational Open House
West Central High School

ATTENDANCE SHEET

PLEASE PRINT!

Name	Resident, Business Owner, Organization, etc.	Address (Street, City, State, Zip)	E-Mail	Phone
Josh L Scott	Reg Office of Ed		jscott@roe33.com	
Joe Pilger	Assistant Principal WCE		pilger-joe@wc235.k12.il.us	
Paula Markey	W.C. #235 Superintendent		markey-paula@wc235.k12.il.us	(309)627-2371
Sam & Bernita Stevenson	R.R.#5 Box 149 Gladstone, IL.			319-759-7205
Alicia Pence	200 Blaine St. Biggsville, IL 61418		apence10@gmail.com	309-924-1872
David W. McCarron	RR 2 Box 91 Oquawka, IL. 61469			
Steve Hartman	Business: Klingner & Associates		shartman@klingner.com	319 752-3603
Melissa Wallace Tony Wallace	Resident	RR#1 Box 145 Carman, Ill 61425	tnmwallace@hotmail.com	319-850-1406
William F Pelger	Resident		pilbil@msn.com	319-759-5296
Tricia Keever	Resident	RR1 Box 129K Gladstone 61437	tkeever@gmail.com	319-592-6665
Wendell & Janet Shauman	Resident	313 U.S. Hwy 34, Kirkwood, IL 61447	wshauman@mgtcity.com	309-768-2034
Mike Morris	Planning	211 N Gear Ave Ste 100 W. Burlington, IA 52655	mmorris@seirpc.com	319-753-4310.
Dan Wiedeman	Tri State Sumet	11221 STARR'S CAVE RD BRC IA	wiededan@aol.com	319-753-5824
Donna Zurmuehlen	Business Owner	RR5 Box 2 Gladstone IL 61437	dandonna53@frontiernet.net	309-627-2476
Dan Zurmuehlen		2603 KENT AVENUE, UNIT 105, AMES, IA		

Illinois Department of Transportation

Public Information Meeting #2 Summary

US Route 34 Supplemental EIS
Henderson County, Illinois

Overview

Public information meeting #2 was held on Tuesday October 4, 2016 at West Central High School in Biggsville, Illinois from 4:00 pm to 7:00 pm. The meeting was conducted in an open house format with a Welcome/Registration Table, aerial photo exhibits and other information exhibits. General photos of the event are shown in Figure 1, Public Meeting Photos. A comment station was also provided, which allowed attendees to provide their comments, suggestions, issues and concerns regarding the proposed roadway alignment options in the study area. The study area extends from a point west of Carman Road on the west side to the west end of the Biggsville Bypass on the east side and includes a portion of the Mississippi River floodplain.

The purpose of the meeting was: to present the alternatives carried forward for further study and an explanation of the alternatives that were eliminated from further study; to give the public an opportunity to view graphical and informational displays; and to obtain public comments and input.

After signing in, meeting attendees were given a handout describing the purpose of the open house public meeting and a map showing the alternatives carried forward. It contained a comment form for attendees to complete and submit either at the meeting or by mail.

Invitations

Invitation letters were mailed to federal, state, regional and local officials. Recipients included U.S. and Illinois representatives and senators; Henderson County, City of Biggsville, City of Gladstone, Township officials; Federal Highway Administration; U.S. Army Corps of Engineers; Illinois state agencies; West Central School District 235; and area utility companies.

A press release was also issued. It is located in Figure 2, Correspondence.

Advertising

In order to reach a broad general audience and meet State requirements, a paid display advertisement was placed in the Burlington Hawkeye, the Henderson Quill, and the Daily Review Atlas. The ads were published twice in each publication prior to the public meeting:

- Burlington Hawkeye – September 19, 2016 and September 27, 2016;
- Henderson Quill - September 21, 2016 and September 28, 2016; and
- Daily Review Atlas – September 20, 2016 and September 27, 2016.

See Figure 3, Meeting Ad.

Meeting Materials

Exhibits and displays provided at the meeting are shown in Figure 4, Meeting Materials.

Exhibits

- Purpose of the meeting;
- What's happened since the last open house public meeting in November 2015;
- What's next (including a timeline schedule); and
- Typical sections of proposed US Route 34 (in floodplain and out of floodplain).

Display Maps

Three proposed alternatives were displayed (alternatives carried forward for further study), shown on aerial photo maps (displayed at a scale of approximately 1"=713 feet):

- Plan view of Alternative 2;
- Plan view of Alternative 5; and
- Plan view of Alternative 6.

Additionally, a plan view map of the eliminated alternatives (Alternatives 1, 3 and 4) was also displayed. Accompanying this map was an exhibit with reason as to why these alternatives were eliminated from consideration.

Handouts

- Project brochure (showing the alternatives eliminated, and the three alternatives carried forward, reasons for the study, key evaluation criteria, a project timeline, what happens next and contact information).
- Comment form.

Public Attendance

Ninety-seven (97) people signed the attendance sheets at the meeting. Residents from Biggsville, Gladstone, Carman, Kirkwood, Monmouth, Roseville, Macomb, Stronghurst, Oquawka, Raritan, and Quincy, Illinois attended the meeting as did residents from Burlington and Fairfield, Iowa. See Figure 5, Sign-In Sheets, for a complete list of attendees.

Media Attendance

The following media were present:

- The Hawkeye; and
- Pritchard Broadcasting (KBUR Radio).

Study Team Attendance

Organization	Name	Title
IDOT	Mike McLuckie	Project Manager
	Mike Lewis	Project Engineer
	Greg Larson	Environmental Coordinator
Amec Foster Wheeler	Gary Baker	Project Manager
	Petar Knezevic	Project Engineer
	Tom Lacy	Project Engineer
	Jay Kessen	Hydraulic Engineer
	Steve Coates	Environmental Lead
	Jeff Strickland	Public Involvement Specialist
Quigg Engineering	Frances Nelson	Engineer
	April Holmes	Engineer

Comments

One of the Public Information Handouts was a Comment Form. The study team collected 30 comments from the public for inclusion into the public record. The public comment period remained open until October 25, 2016. Opportunities to comment included: leaving the comment with the study team at the public meeting; direct mail by letter or use of the comment form; and by email. Below is a summary of the comments received. See Figure 2, Correspondence.

Comments left at the public meeting:

- Many commenters expressed support for Alternative 2, and several noted that this alternative would have the smallest impact on farmland, forest, and wetlands.
- A few commenters preferred Alternative 5
- Several comments cited safety concerns regarding the existing US 34 alignment and urge a decision to be made
- Commenter's family was personally affected by an accident on US 34 and urges action to be taken
- Commenter suggests improving the existing US 34 and use it as the two westbound lanes, then use alternative 5 as the eastbound lanes
- Commenter would encourage option 6 and encourages construction to be done before 2020.
- Prefers alternative 6 because it would require less fill
- Two commenters are concerned about impacts to their farm from Alternative 5 as it would affect their cattle operations
- Multiple commenters dislike Alternative 5.

Figure 1
Public Meeting Photos

Illinois Department of Transportation

Public Information Meeting #2 Summary

US Route 34 Supplemental EIS
Henderson County, Illinois





Illinois Department of Transportation

Public Information Meeting #2 Summary

US Route 34 Supplemental EIS
Henderson County, Illinois





Figure 2
Correspondence

State of Illinois
Bruce Rauner, Governor

Illinois Department of Transportation
Randall S. Blankenhorn, Secretary

FOR IMMEDIATE RELEASE:
September 29, 2016

CONTACT:
Brian Williamsen 309.671.4854

Public Meeting for US 34 Improvements in Henderson County

PEORIA – The Illinois Department of Transportation (IDOT) has scheduled an open house meeting on the proposed U.S. 34 improvements between Gulfport and T.R. 111. The roadway alignments are being reevaluated because of the de-accredited Mississippi River levees in the area.

Tuesday, Oct. 4, 2016
4-7 p.m.
West Central High School
RR 1
Biggsville, Ill.

The purpose of the meeting is to provide an update of the project, explain activities that have taken place since the November 2015 open house meeting, show the alternatives being carried forward, view graphical and informational displays, and obtain public comments and input.

IDOT staff will be available to answer questions. Written comments will be accepted at the meeting and by mail at the address, below. Written comments received before Oct. 25, 2016 will be included in the official project records.

This meeting is accessible to individuals with special needs. Anyone needing special assistance should contact Mr. Michael L. Lewis, IDOT Acting Studies and Plans Engineer at (309) 671-3454. Persons planning to attend this meeting who will need a sign language interpreter or other similar accommodations should notify IDOT (TTY 800-526-0844; voice users 800-526-0857) at least three days prior to the meeting.

###

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 4OCT2016

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
To be included in the public record, comments must be received no later than October 25, 2016.

Alternative 5 looks to be the most viable alternative, The US34 expansion is a vitale cog to the economic expansion in Western Illinois. With Smithfield foods and Pella windows the major employers in the area and a large amount of truck traffic moving West it is key the US34 is expanded to continue to allow these business to expand. With 3000-3500 trucks moving in and out of monmouth US 34 is truely the economic life blood of the area.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Lowell D Crow				
Organization:	City of Monmouth				
Address:	100 East Broadway				
City:	Monmouth IL	**State:**	IL	**Zip:**	61462
Email:	Lowell.crow@				

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 4 Oct 16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than October 25, 2016.

Alt 5 Seems Best, Why Clover Leaf at 164 Intersection; Why not Turn Lanes?

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Tom Galbraith				
Organization:	Galesburg Township Highway Comm				
Address:	RR 5 Box 11				
City:	Galesburg IL	**State:**	IL	**Zip:**	61437
Email:	TGTJBALER@gmail.com				

Illinois Department of Transportation

COMMENT FORM

DEPARTMENT OF TRANSPORTATION REGION 3 OCT 06 2016 REGION 3 PEORIA, ILL.
Illinois Department of Transportation Region 3 OCT 06 2016 Project Development

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: Oct 4, 2016

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than October 25, 2016.

There is so much yet so little to say about highway 34 from Burlington Ia. to West Central High School.

I live 1/2 mile from 34 and see & hear the emergency Vehicles so often. I always get a sick feeling. You see on Aug 31, 2004 my husband & Son were rear ended by a semi on that road. Our lives were changed forever that day. My husband suffered severe brain injury which eventually took his life. My son was left with permenat disability.

I can not plead enough for action on the shameful road!

Please take action!

Judith R. Bielser

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Judith R. Bielser				
Organization:	self				
Address:	1141 Randall Rd				
City:	Gladstone	**State:**	Il	**Zip:**	61437
Email:					

Illinois Department of Transportation

COMMENT FORM

DEPARTMENT OF TRANSPORTATION RECEIVED OCT 07 2016 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Illinois Department of Transportation OCT 07 2016 Received Region 3 / District 4 Dev

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 10-4-16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
To be included in the public record, comments must be received no later than October 25, 2016.

I'm sure the professionals have already chosen Alternative 5 as the best route. It is only logical.

However, my idea would be to improve the existing 34 and use it as the westbound two lane route. Then Alt 5 would be the eastbound two lanes.

This idea would not disrupt existing residences and commercial properties. (Oh, I know Alt 5 would not either) This idea would require less farmland ROW. I say the lanes do not need to be adjacent. This idea would require the westbound lanes to be 60 MPH through the residential area where it is now at 55 MPH. All people living adjacent to the westbound lanes would have to enter and go west. If they wanted to go east they would have go west first until they could make the turn to go east. Most of them now shop and go for emergency services in Burlington anyway. Then coming home they would have to go east a little further until they could make the turnaround. Consider this at Alt 5A.

This is just my idea to throw into consideration....and it may not have any credence, but give it a chance.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	DAVE WILLMER ASLA				
Organization:	(RETIRED FROM ROCKING IL PARK DIST)				
Address:	1214 MESSIAH				
City:	BURLINGTON	**State:**	IA	**Zip:**	52601
Email:	319-759-8653				

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact
Statement (SEIS) And Design Report

Comment Date: Oct 5/2016

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than October 25, 2016.

After looking at the maps I believe #2 on the Blue Route would be best. It would take less farmland, and would leave most House alone. I would love someone one possible one tractor shedy which wouldn't hurt me that much. Route #5 + #6 would be very destructive for other people.

Thank you
Samuel W. Stevens
967 Township Rd. 1300 N
Gladstone, Ill 61437-9736

DEPARTMENT OF TRANSPORTATION RECEIVED
OCT 07 2016
REGION 3 / DISTRICT 4
PEORIA, ILLINOIS

Illinois Department of Transportation
Region 3 / District 4
OCT 07 2016
Received
Program Development

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:					
Organization:					
Address:					
City:		**State:**		**Zip:**	
Email:					

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 10/5/16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
To be included in the public record, comments must be received no later than October 25, 2016.

I would encourage option 6. This needs to be done before 2020. Thank you for your communication with the community about your plans!

Please let us know what needs done and how/ what, if anything, residents of Henderson County can do to push this project through as quickly as possible.

Thank you!

DEPARTMENT OF TRANSPORTATION RECEIVED OCT 07 2016 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Illinois Department of Transportation Region 3 / District 4 OCT 07 2016 Received Program Development

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Alicia Pence				
Organization:	Family Outreach Community Center				
Address:	PO Box 265				
City:	Strongherst	**State:**	IL	**Zip:**	61480
Email:	apence10@gmail.com				

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact
Statement (SEIS) And Design Report

Comment Date: 10-6-2016

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than October 25, 2016.

I prefer Alterative Route 6 (green alignment on the map) It will require less landfill. which is one of the issues with current Route 34 just north of Bogus Hollow. The landfill for that portion of the highway was done in the 1960's and the compacting is not sufficient for today's truck traffic and size of the rigs.

DEPARTMENT OF TRANSPORTATION RECEIVED OCT 07 2016 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Illinois Department of Transportation Region 3 / District 4 OCT 07 2016 Received

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Thomas L Pullen				
Organization:					
Address:	1308 Bogus Hollow Road (PO Box 199)				
City:	Gladstone	**State:**	Ill	**Zip:**	61437
Email:	thomas1pullen@frontier.net				

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact
Statement (SEIS) And Design Report

Comment Date: October 10, 2016

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary). **To be included in the public record, comments must be received no later than October 25, 2016.**

First, the Highway 34 Coalition wishes to thank IDOT for completing the section of the US 34 Corridor known as the Biggsville Bypass. The upgrade to four-lane status has provided a safer environment for members of the West Central CUD #235 community, as well as others travelling through the area.

We also thank IDOT for moving forward with plans to complete US 34 as a four-lane from the Mississippi River to Monmouth. However, progress has not been swift enough. During the last three years there have been 159 accidents, 38 injuries and six fatalities on the highway. Most lives lost have occurred in crashes on the most dangerous section of the US 34 corridor—the Carman Road to Gladstone section. We welcomed IDOT's hosting of the public meeting on October 4 and the opportunity to comment of a preferred alignment.

The Coalition's primary objective is to support IDOT in any way possible so US 34 becomes a safer route for our families and other US 34 travelers sooner than later. The Coalition especially believes that Alignment 2 will meet the needs of system capacity and continuity and travel safety.

FIFTY YEARS IS A LONG TIME. In 1967, the US 34 corridor from the Mississippi River to west of Gladstone was selected as part of the Illinois Supplemental Freeway System, a program authorized by the Legislature which gave priority to roads that needed to be upgraded to four-lane status for safety reasons. During the almost fifty years since that designation only a couple of miles (Mississippi River-Carman Road) have been completed.

We strongly urge IDOT to continue considering the safety issues and the barriers to economic growth because of limited progress in converting the remaining two-lane highway to an expressway. Again, the Coalition intends to support IDOT's selection which it will base on public comment and its experience in providing safe highways.

We support Alignment 2 because it would seem to be the most expeditious and ameliorate the following conditions that are contributing to crashes and fatalities:

- The three high accident areas will be upgraded to meet safety standards
- The 40% of the two-lane route that is marked with no-passing zones will be eliminated
- Adequate shoulders will be constructed.
- Less farmland and wetlands will be impacted.
- Approximately 10,000 vehicles (mostly trucks) travel the current stretch of highway with projections of 17,500 by 2025. The construction of US 34 to a four-lane will complement the system capacity and continuity of Illinois' transportation plans since US 34 is a key regional corridor for the east-west movement of people and goods in and through west central Illinois and southeast Iowa.
- Improve the only evacuation/emergency corridor over the Mississippi River from the Quad Cities to the Hamilton-Keokuk area.

Thank you for your time and consideration.

Thank you for your time and consideration.

Name:	**Kurt McChesney, Chairman**				
Organization:	**Highway 34 Coalition**				
Address:	**P. O. Box 12**				
City:	**Raritan**	**State:**	**IL**	**61471**	
Email:	highway34@mtcnow.net				

If you have questions or need additional information, please contact:

Mr. Michael L. Lewis, P.E.
Acting Studies and Plans Engineer
IDOT – District 4
401 Main Street
Peoria, IL 61602-1111
(309) 671-3333

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact
Statement (SEIS) And Design Report

Comment Date: _____

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
To be included in the public record, comments must be received no later than October 25, 2016.

JUST DO SOMETHING!!!

HOW MANY MORE PEOPLE NEED TO DIE?

DEPARTMENT OF TRANSPORTATION RECEIVED OCT 12 2016 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Illinois Department of Transportation Region 3 / District 4 OCT 12 2016 Received Program Development

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:					
Organization:					
Address:					
City:		**State:**		**Zip:**	
Email:					

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

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Comment Date: 10/10/16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
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The Tri-State Development Summit represents 36 counties in the tri-state region of Iowa, Illinois and Missouri and has for 20 years. The completion of U.S. Route 34 as a 4-Lane Corridor is one of its major highway priorities. The Tri-State Development Summit is pleased the Illinois Department of Transportation (IDOT) is ready to select the preferred route for this nine-mile section between Burlington, IA and Biggsville, IL.

The Public Meeting in Biggsville on October 4, 2016 presented three alignments, all of which had merit.

The Tri-State Development Summit, acting through its Transportation Task Force, has decided to go on record in support of Alternate #2, as selected by the Highway 34 Coalition, and encourages IDOT to do everything possible to expedite the completion of this much needed improvement.

c/o Tom Boland – Chair Transportation Task Force
Tri-State Development Summit
300 civic Center Plaza, Suite 256
Quincy, IL 62301
tom@tombolandford.com

TRI-STATE DEVELOPMENT SUMMIT

DEPARTMENT OF TRANSPORTATION RECEIVED OCT 13 2016 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Illinois Department of Transportation Region 3 / District 4 OCT 13 2016 Received Program Developement

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

OCT 13 2016
REGION 3 / DISTRICT 4
PEORIA, ILLINOIS

OCT 13 2016
Received
Bureau of Local Roads & Streets

Comment Date: 10/11/16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

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We the 34 voices coalition, want to thank you for the bypass by our school, also thank you for selecting three final routes. The West Central students of the coalition support alternative 2 because not a lot of land is being taken and it is the closest to the old 34. We thankyou for coming to our school and listening to our opinions. Looking forward to approve safety.

Sincerley,
The 34 Voices Coalition
Danielle Rhinehart Alexis Tomson
Caitlyn Mertz Keaton Blevins
Annamae Brown Emilee Eldridge
Kasey Burdg and Skyler Mode Michael Stuller

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	West Central Students				
Organization:	34 Voices				
Address:	1514 US Route 34				
City:	Biggsville	**State:**	IL	**Zip:**	61418
Email:					

Illinois Department of Transportation

COMMENT FORM

Department of Transportation
Region 3 District 4
OCT 13 2016
Received

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

DEPARTMENT OF TRANSPORTATION
RECEIVED
OCT 13 2016
REGION 3 / DISTRICT 4
PEORIA, ILLINOIS

Comment Date: 10/10/16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

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After Many Years of Truck Driving & Construction Work and Driving through the Existing 34 East I have Seen Many Near Misses and Some Accidents Because of Fields, Short Curves, Blind Hills and Drive Ways.

With new Bus Dome Makes School area Safer, Turning lanes Wider and Safer.

Now What has Been Done is Great, But Bring Some thing Part Way is Not Placing the Safety of those Traveling the Heavily Used of Hwy 34 To and From Iowa and Great Lake

Therefore I am Supporting Option Number #2

Thank You
Jerry L. Hayes Sr

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Jerry L. Hayes Sr.				
Organization:	First Christian Church				
Address:	1501 Parkway Dr.				
City:	Burlington	**State:**	IA	**Zip:**	52601
Email:					

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact
Statement (SEIS) And Design Report

Comment Date: 10-11-16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
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We highly recommend that the IDOT go with the Alternate 2 plan. We have family living in Peoria and Washington, Illinois so we have travelled this road extensively for the past 38 years. We have seen many accidents and many near misses on this stretch of road and it needs to be seriously addressed. One of our friends & church members was killed in an auto accident on this road. This was a sad unnessary death that probably could have been prevented had these changes been made.

Illinois Department of Transportation
Region 3 / District 4
OCT 14 2016
Received
Program Development

DEPARTMENT OF TRANSPORTATION
RECEIVED
OCT 14 2016
REGION 3 / DISTRICT 4
PEORIA, ILLINOIS

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Robert C. Cochran + Marie L. Cochran				
Organization:	Self				
Address:	3366-190th St.				
City:	Fort Madison	**State:**	Iowa	**Zip:**	52627
Email:	bmkabyrl@geticonnect.com				

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact
Statement (SEIS) And Design Report

Comment Date: Oct. 9 2016

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
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I would like to see the alternate #2 used on Hwy 34.

I personally have lost a loved one on that stretch of Hwy to be ingroved and feel it needs to be ingroved.





(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Joyce Scheideman				
Organization:					
Address:	1706 S. 14th St.				
City:	Burlington, Iowa	**State:**	Ia.	**Zip:**	52601
Email:					

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

DEPARTMENT OF TRANSPORTATION RECEIVED OCT 17 2016 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS
Illinois Department of Transportation Region 3 / District 4 OCT 17 2016 Received Program Development

Comment Date: 10/14/16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
To be included in the public record, comments must be received no later than October 25, 2016.

The Greater Burlington Partnership supports alignment #2 for the Hwy 34 route from Gulfport to I.R.111.

Route 2 most aligns with the existing highway and impacts the least wetland and farmgroundisimpacted.

This project has been a long term goal to see completed. The importance to Burlington and the entire region cannot be stressed enough. For continued growth of business and the safety of those traveling on Highway 34 every day.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Brenda Levitt				
Organization:	Greater Burlington Partnership				
Address:	610 N. 4th St.				
City:	Burlington	**State:**	IA	**Zip:**	52601
Email:	blevitt@greaterburlington.com				

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Illinois Department of Transportation / District 4
OCT 19 2016
DEPARTMENT OF TRANSPORTATION RECEIVED OCT 19 2016 DISTRICT 4 PEORIA, ILLINOIS
Development

Comment Date: 10-19-16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
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I am writing in regards to the proposed red route. I have farmed this ground in pasture and with cattle for 50 years. We will no longer be able to do this if this route goes through. We will have a severe loss of income from this that will not be able to be replaced. The cattle pasture must be close to our barns and water. What about all the noise from a 4 lane going so close to a housing area? This will impact a lot of people. Their houses will loose value along with our farm. This route also cuts through a lot more irrigation systems again impacting a lot of farmland. The best route would be to follow the existing highway.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Earl R Menke				
Organization:	Family Farms				
Address:	907 Township Rd 1225 N				
City:	Carman	**State:**	IL	**Zip:**	61421
Email:					

Illinois Department of Transportation
Region 3 / District 4
OCT 19 2016
Received
Planning & Programming
DEPARTMENT OF TRANSPORTATION
RECEIVED
OCT 19 2016
REGION 3 / DISTRICT 4
PEORIA

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 10-18-16

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I am again writing in regards to the proposed Red alignment. This alignment will severely reduce our ability to have an income from cattle. Our cattle operation is a big part of our farming income. This route will take our pasture ground and we will no longer be able to raise cattle. Will we be Compensated for our loss of income for the next 30 years? I dont think so. Our cattle need access to our barns and water so the pasture we use must be close to these. You are also putting a 4 lane highway next to a fairly large housing area. What about all the noise and traffic going so close and Impacting all of these people. This route also Cuts through the most irrigation systems again impacting incomes of these farmers. The best

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Susan Menke				
Organization:	Family Farmer				
Address:	907 Township Rd 1225 N				
City:	Carman	**State:**	ILL	**Zip:**	61425
Email:					

route that impacts the least amount of people is blue or green route and I ask you to please take these into consideration.

If you have questions or need additional information, please contact:

Mr. Michael L. Lewis, P.E.
Acting Studies and Plans Engineer
IDOT – District 4
401 Main Street
Peoria, IL 61602-1111
(309) 671-3333

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 10/20/16

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This letter is to express my support for Alternative 2 (blue alignment) for a 4-lane extension of Highway 34 in Illinois. In reviewing the options, Alternative 2 will have a lower impact on productive farm ground (16.1 acres) and will also have the smallest impact on forest ground. In addition, Alternative 2 has the highest utilization of the existing US Route 34 with a mid-range impact to the floodplain. I feel Alternative 2 is the most environmentally friendly of the alternatives being considered. This 4-lane extension is critical to the future economic development of Burlington, eastern Iowa, and western Illinois. When coupled with the lower environmental impact, Alternative 2 makes the most logical sense. If there are any questions regarding my perspectives or support, please feel free to call on me.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	**Mark D. Richardson, President & CEO**				
Organization:	**Great River Medical Center**				
Address:	**1221 S Gear Ave.**				
City:	**West Burlington**	**State:**	**IA**	**Zip:**	**52655**
Email:	**mrichardson@grhs.net**				

If you have questions or need additional information, please contact:

Mr. Michael L. Lewis, P.E.
Acting Studies and Plans Engineer
IDOT – District 4
401 Main Street
Peoria, IL 61602-1111
(309) 671-3333

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact
Statement (SEIS) And Design Report

Comment Date: October 21, 2016

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).
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Mr. Lewis,

I was not able to attend the meeting on October 4, but because some of our students are transported to/from West Central for a variety of activities and because many of our residents travel on U.S. 34 to Burlington, I wanted to share my comments with you.

On behalf of Knoxville CUSD #202 I want to share my support for the completion of U.S. 34 to a four-lane highway. I'm sure you're aware of the many automotive accidents and fatalities that have occurred on this highway in the past. Widening this two-lane highway to four lanes will provide additional space and safety for all drivers. I understand the financial stress that exists and the decisions that have to be made regarding which projects are completed and which aren't. So please accept my comments in support of Alternative 2 for U.S. Highway 34.

Thank you for your consideration.

Sincerely,

Steve Wilder, Superintendent of Schools, Knoxville CUSD #202

809 E. Main St., Knoxville, IL 61448

swilder@bluebullets.org

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: October 21, 2016

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I am writing a comment to show my support for Alternative 2 for the completion of the Highway 34 corridor project between Monmouth, Illinois and Burlington, IA. Monmouth-Roseville students, parents and fans have occasion to use Highway 34 while passing through Warren and Henderson Counties on the way to various activities at West Central High School, located along Highway 34 in Biggsville.

As it stands there is 23.6 miles of two-lane between Monmouth, IL and Burlington, IA that is quite dangerous to drive on. In a ten-year span from 1995 – 2005, 775 accidents occurred on this two-lane segment, resulting in 353 injuries and 12 fatalities. IDOT has also identified three high-accident locations within this 23.6 mile stretch of road. According to the Traffic Safety Bureau, a 40% reduction in serious injury and fatal crashes can be expected on a highway improved from two-lanes to four-lanes.

The amount of money available for transportation projects in the State of Illinois is limited at best, but it is obvious that this project will save lives and improve driving conditions for all of us who use this road on a regular basis. Thank you for your consideration.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Ed Fletcher				
Organization:	Monmouth-Roseville School District				
Address:	105 North E Street				
City:	Monmouth	**State:**	IL	**Zip:**	61462
Email:	efletcher@mr238.org				

If you have questions or need additional information, please contact:

Mr. Michael L. Lewis, P.E.
Acting Studies and Plans Engineer
IDOT – District 4
401 Main Street
Peoria, IL 61602-1111
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Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact
Statement (SEIS) And Design Report

Comment Date: October 21st 2016

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We support Alternative 2 because in our opinion it uses the least amount of prime farm ground, impacts the least amount of forest land, it aligns better with the current highway, and we believe it will improve safety for everyone. As our office conducts regular business in Illinois and use the current highway, this decision is important to our business and we believe this is the preferred route to take.

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	**Timothy J Fencl**				
Organization:	**Danville Mutual Telephone Company**				
Address:	**102 S Main St, PO Box 158**				
City:	**Danville**	**State:**	**Iowa**	**Zip:**	**52623**
Email:	**tfencl@danvilletelco.net**				

If you have questions or need additional information, please contact:

Mr. Michael L. Lewis, P.E.
Acting Studies and Plans Engineer
IDOT – District 4
401 Main Street
Peoria, IL 61602-1111
(309) 671-3333

Knezevic, Petar D

From: McLuckie, Michael A <Michael.McLuckie@illinois.gov>
Sent: Wednesday, October 26, 2016 8:05 AM
To: Knezevic, Petar D
Subject: FW: [External] Fwd: hwy 34 blurb

Comment no.22

From: Michele Schnicker [mailto:mlschnicker@gmail.com]
Sent: Monday, October 24, 2016 2:00 PM
To: Lewis, Mike
Cc: McLuckie, Michael A
Subject: [External] Fwd: hwy 34 blurb

I am forwarding this message to you regarding comments from the Southeastern Community College. They are under a very busy schedule with a huge ground breaking! I hope this will be acceptable.
Thank you again for hosting the Public Information Meeting on Oct 4th.
Blessings,
Michele Schnicker
---------- Forwarded message ----------
From: **Jeff Ebbing** <jebbing@scciowa.edu>
Date: Mon, Oct 24, 2016 at 1:53 PM
Subject: hwy 34 blurb
To: "mlschnicker@gmail.com" <mlschnicker@gmail.com>

Michael Lewis,

Southeastern Community College joins the Highway 34 Coalition and the Tri-State Development Summit in supporting the Alternative 2 – Blue alignment of the Highway 34 expansion proposal.

Have a beautiful day,

Jeff Ebbing

Director of Marketing and Communications | Southeastern Community College

1500 West Agency Road, West Burlington, IA 52655 | D: 319-208-5060 | C: 319-750-5014

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Illinois Department of Transportation

COMMENT FORM

DEPARTMENT OF TRANSPORTATION RECEIVED OCT 20 2016 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 10-15-16

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This needs to get done!! I believe the alternate 2 is the lesser of the other alternates!

This (alternate 2) plan will provide a safe & environmentally friendly solution to a decade old problem!

Better use of Old Highway 34

Illinois Department of Transportation Region 3 / District 4 OCT 20 2016 Received Program Development

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Brad Deery				
Organization:	Deery Brothers				
Address:	200 South Geer				
City:	West Burlington	**State:**	Ia	**Zip:**	52655
Email:	BDeery@DeeryBrothers.com				

Illinois Department of Transportation

COMMENT FORM

DEPARTMENT OF TRANSPORTATION RECEIVED OCT 20 2016 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: Oct. 18, 2016

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To Start I would like to thank you for having these Meetings with the public

After studing the map sveral times I like Alternative 2 & 6 the best. The biggest reason is for the amount of farm land and wet land that will not be taken.

Out of those two I would take Alternative 6- first. Because the curves are ~~more on~~ less sharp. ~~the turns on~~

I have a feling once this is complite the amount of Semi Tarrific will increase. Which it is going to anyway. Because the Fertilizer plant Should be starting up soon. Also General Electric & The Can company are also expansening soon ~~on 136~~

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Anita Stapleton				
Organization:					
Address:	932 Road 1245 N.				
City:	Gladstone,	**State:**	IL	**Zip:**	61437
Email:					

I like Alternative #2 Because it following the old highway and it takes out the dangerest curves. This road would make it less confusing on the older people

Alternative #5 I don't like at all. Because of taking away so much farmland that is needed for their product. Also a big amount of wetland which is needed because we need to save as much of those as we can. I also don't like the closeness the highway is to the homes of in the Idiana Mound area. With traffic increasing of Semi the Safty, heacth and noise could be terrible for them. Also what would happen to the valve of the property. would not want to lose that. Spicialy the taxes are needed for the Small county.

Thanks

Anita

If you have questions or need additional information, please contact:

Mr. Michael L. Lewis, P.E.
Acting Studies and Plans Engineer
IDOT – District 4
401 Main Street
Peoria, IL 61602-1111
(309) 671-3333

Illinois Department of Transportation

COMMENT FORM

DEPARTMENT OF TRANSPORTATION RECEIVED OCT 20 2016 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: Oct. 12-16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

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I support alternative route #2 for Highway 34 expansion. I travel this particular stretch of roadway frequently, and have had several close calls with cars passing in dangerous ways, etc.

I am also married and related to several law enforcement officers, and feel that their safety is of the utmost importance. The lack of an adequate shoulder space puts them in harm's way. This alternate route would greatly improve safety for officers as well as all other drivers.

Again, I strongly support alternate route #2 for HW34.

Illinois Department of Transportation Region 3 / District 4 OCT 20 2016 Received

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Melissa Casper				
Organization:					
Address:	1112 N. 6th St.				
City:	Burlington	**State:**	IA	**Zip:**	52601
Email:					

Illinois Department of Transportation

COMMENT FORM

DEPARTMENT OF TRANSPORTATION RECEIVED OCT 20 2016 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 10-12-16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

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I support alternate #2
The road needs to be 4 lanes to reduce the number of wrecks and fatalities that occur on that roadway.

Illinois Department of Transportation Region 3 / District 4 OCT 20 2016 Received Program Developement

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Becky Black				
Organization:					
Address:	1236 Madison Ave				
City:	Burlington	**State:**	Iowa	**Zip:**	52601
Email:	beckybeach46@gmail.com				

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

DEPARTMENT OF TRANSPORTATION
RECEIVED
OCT 20 2016
REGION 3 / DISTRICT 4
PEORIA, ILLINOIS

Comment Date: 10/11/16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than October 25, 2016.

I would support alternate route 2. I travel through that area quite often. when we go to Galesburg to go shopping and when we go to Peoria to visit family and shop some more.

Illinois Department of Transportation
Region 3 / District 4
OCT 20 2016
Received
Program Development

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Katherine M. Starkey Katherine M Starkey				
Organization:					
Address:	726 Louisa St.				
City:	Burlington	**State:**	IA	**Zip:**	52601
Email:					

Illinois Department of Transportation

COMMENT FORM

DEPARTMENT OF TRANSPORTATION RECEIVED OCT 20 2016 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 10/11/16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than October 25, 2016.

I VERY MUCH SUPPORT PROPOSED ALTERNATE ROUTE 2. I TRAVEL FREQUENTLY TO MACOMB AND BUSHNELL AND FOR BOTH SAFETY AND CONVENIENCE BELIEVE A 4-LANE THOROUGHFARE IS A MUCH BETTER OPTION THAN THE CURRENT 2-WAY ROUTE FROM BURLINGTON TO MONMOUTH.

Illinois Department of Transportation Region 3 / District 4 OCT 20 2016 Received Program Development

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	SCOTT MASON				
Organization:	BCSD				
Address:	1121 ASPEN DR.				
City:	BURLINGTON	**State:**	IA	**Zip:**	52601
Email:	scottburlymca@hotmail.com				

Illinois Department of Transportation

COMMENT FORM

DEPARTMENT OF TRANSPORTATION RECEIVED OCT 20 2016 REGION 3 / DISTRICT 4 PEORIA, ILLINOIS

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

Comment Date: 10-12-'16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than October 25, 2016.

I support alternate #2.
The road needs to be 4 lanes, will help reduce accidents

Illinois Department of Transportation Region 3 / District 4 OCT 20 2016 Received Program Developement

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Donna Wyckoff				
Organization:					
Address:	1609 So 10th				
City:	Burlington	**State:**	IA	**Zip:**	52601
Email:	nonna2513@gmail.com				

30.

Illinois Department of Transportation

COMMENT FORM

Public Informational Open House
October 4, 2016
West Central High School

U.S. Route 34
Supplemental Environmental Impact Statement (SEIS) And Design Report

DEPARTMENT OF TRANSPORTATION RECEIVED
OCT 21 2016
REGION 3 / DISTRICT 4
PEORIA, ILLINOIS

Comment Date: 10-18-16

Thank you for attending tonight's meeting. Your participation is important to IDOT and will be evaluated and considered as part of the study process. Please share your comments regarding the alternative alignments, existing conditions on U.S. Route 34, and other views you may have about the project. Please return this form tonight or mail to the address provided (use additional sheets as necessary).

To be included in the public record, comments must be received no later than October 25, 2016.

WINEGARD COMPANY SUPPORTS ALTERNATIVE #2 FOR ALL THE REASONS LISTED IN KEY CHARACTERISTICS.

Illinois Department of Transportation
Region 3 / District 4
OCT 21 2016
Received
Program Development

(IF NEEDED, PLEASE USE BACK OF FORM OR ADDITIONAL PAGES)

Name:	Melodee Kennedy				
Organization:	WINEGARD COMPANY				
Address:	3000 KIRKWOOD ST.				
City:	BURLINGTON	**State:**	IA	**Zip:**	52601
Email:	MKenn@WINEGARD.COM				

Figure 3
Meeting Ad

Illinois Department of Transportation

PUBLIC INFORMATIONAL OPEN HOUSE MEETING

U.S. ROUTE 34 IN HENDERSON COUNTY
ALIGNMENT REVIEW
FROM GULF PORT TO T.R. 111

Date: Tuesday, Oct. 4, 2016
Time: 4 p.m. to 7 p.m.
Location: West Central High School
RR 1
Biggsville, IL 61418

The Illinois Department of Transportation (IDOT) has scheduled an open house meeting on the proposed U.S. 34 improvements between Gulf Port and T.R. 111. The roadway alignments are being re-evaluated because of the de-accredited Mississippi River levees in the area.

The purpose of the meeting is to provide an update of the project, explain activities that have taken place since the November 2015 open house meeting, show the alternatives being carried forward, view graphical and informational displays, and obtain public comments and input. In addition, Department staff will be available to answer questions. All written correspondence regarding this project can be mailed to IDOT at the address below. Written comments received by the Department before October 25, 2016 will be included in the official project records. Written comments will also be accepted at the meeting.

This meeting is accessible to individuals with special needs. Anyone needing special assistance should contact Mr. Michael L. Lewis, IDOT Acting Studies and Plans Engineer at (309) 671-3454. Persons planning to attend this meeting who will need a sign language interpreter or other similar accommodations should notify IDOT at 309-671-3333 (TTY 800-526-0844; voice users 800-526-0857) at least three (3) days prior to the meeting.

Mr. Michael L. Lewis, Acting Studies and Plans Engineer
Re: U.S. 34 Improvements
Illinois Department of Transportation
401 Main St.
Peoria, IL 61602

Figure 4
Meeting Materials

Purpose of Tonight's Meeting:

- Provide an update of the project
- Explain activities that have taken place since the November 2015 public meeting
- Show the alternatives being carried forward (2, 5 and 6)
- Solicit public comments and feedback

Illinois Department of Transportation

What's Happened Since Public Meeting #1?

- Evaluated preliminary alternatives and carried forward three alternatives for further evaluation
- Field surveying
- Drainage location study and hydraulic report
- Noise study and modeling
- Field work including wetlands delineation, natural resource habitat studies, archaeological and historic structures investigations
- Draft Supplemental Environmental Impact Statement (SEIS) and Design Report Addendum preparation

Project Purpose and Need

"The proposed action is to provide an improved transportation facility for local and through traffic in Henderson and Warren Counties to address the needs of system capacity, system continuity, and travel safety."

Illinois Department of Transportation

What's Next?

- Review feedback from tonight's meeting
- Refine and perform detailed evaluation of the alternatives carried forward (2, 5 and 6)
- Identify a Preferred Alternative
- Complete the Draft Supplemental Environmental Impact Statement (SEIS) and Design Report Addendum
- Ongoing public involvement
- Present Draft SEIS at Public Hearing

U.S. Route 34 Transportation Study Project Timeline

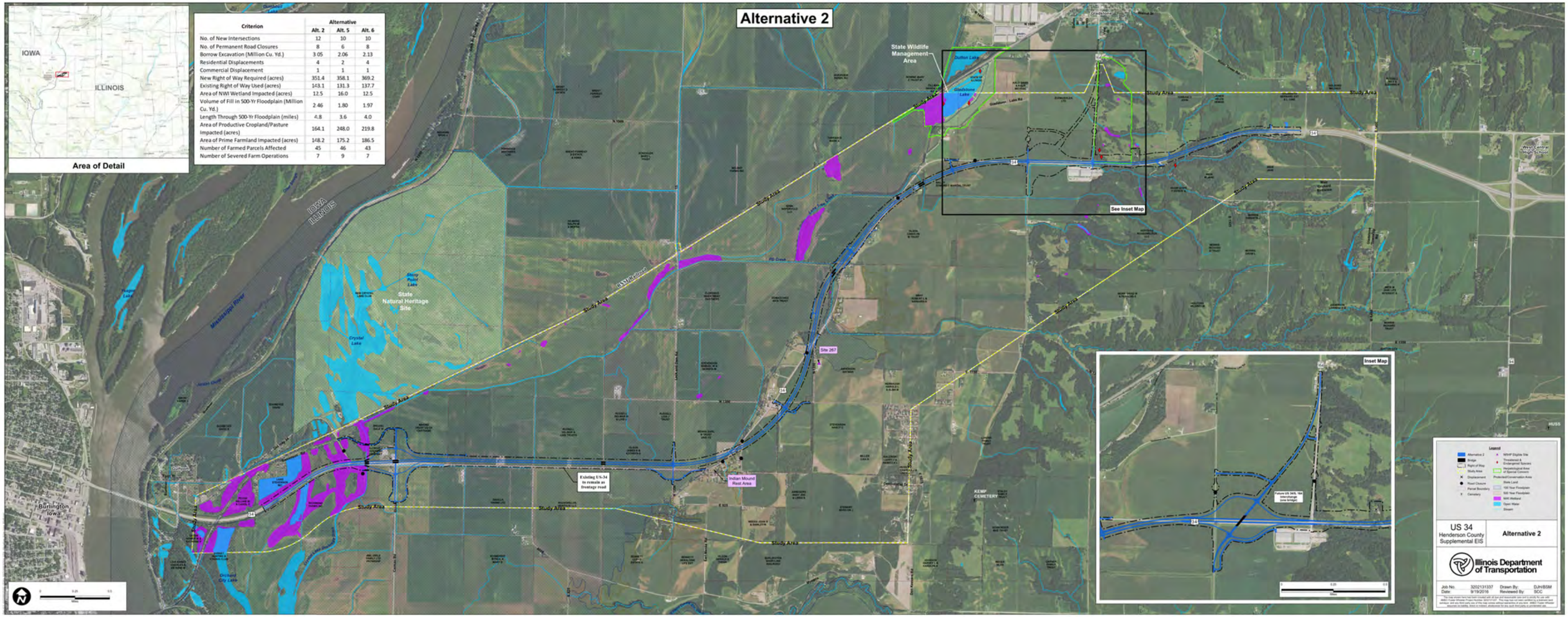


Illinois Department of Transportation

Alternative 2

Area of Detail

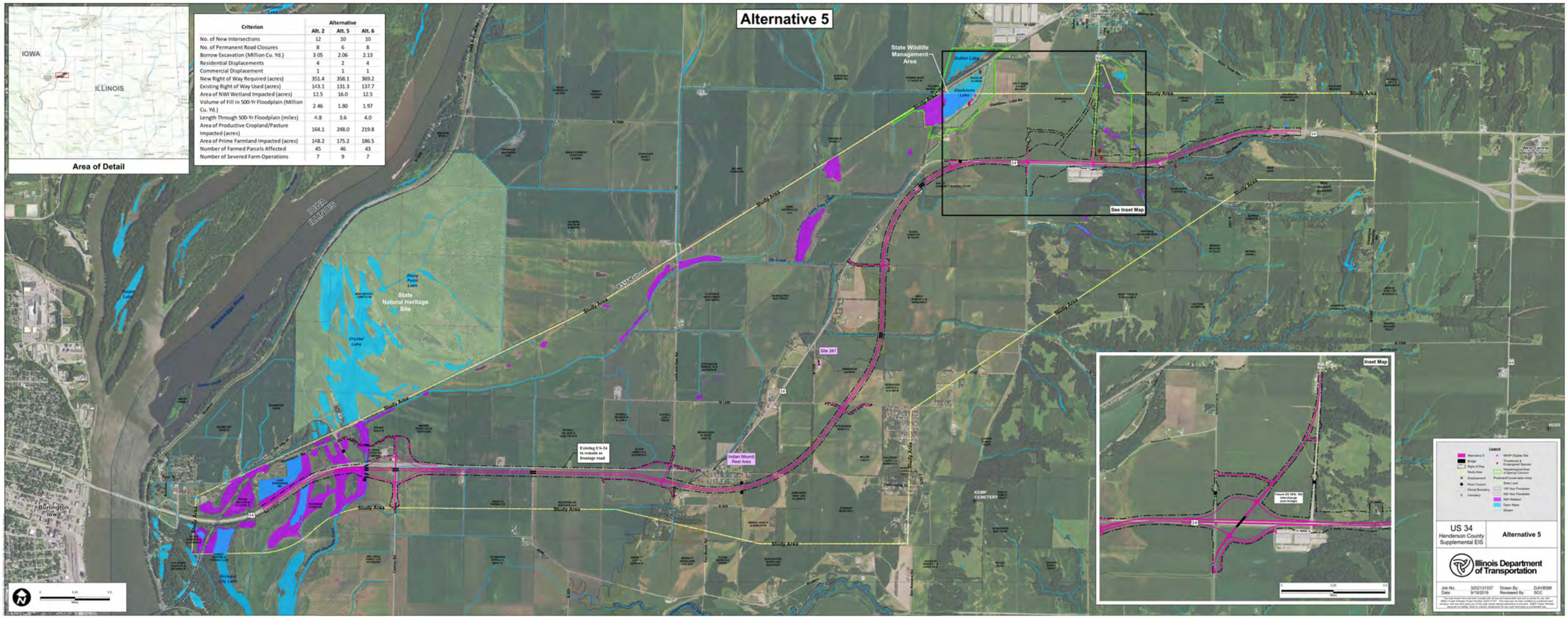
Criterion	Alternative		
	Alt. 2	Alt. 5	Alt. 6
No. of New Intersections	12	10	10
No. of Permanent Road Closures	8	6	8
Borrow Excavation (Million Cu. Yd.)	3 05	2.06	2.13
Residential Displacements	4	2	4
Commercial Displacement	1	1	1
New Right of Way Required (acres)	351.4	358.1	369.2
Existing Right of Way Used (acres)	143.1	131.3	137.7
Area of NWI Wetland Impacted (acres)	12.5	16.0	12.5
Volume of Fill in 500-Yr Floodplain (Million Cu. Yd.)	2 46	1.80	1.97
Length Through 500-Yr Floodplain (miles)	4.8	3.6	4.0
Area of Productive Cropland/Pasture Impacted (acres)	164.1	248.0	219.8
Area of Prime Farmland Impacted (acres)	148.2	175.2	186.5
Number of Farmed Parcels Affected	45	46	43
Number of Severed Farm Operations	7	9	7



Alternative 5

Area of Detail

Criterion	Alternative		
	Alt. 2	Alt. 5	Alt. 6
No. of New Intersections	12	10	10
No. of Permanent Road Closures	8	6	8
Borrow Excavation (Million Cu. Yd.)	3 05	2.06	2.13
Residential Displacements	4	2	4
Commercial Displacement	1	1	1
New Right of Way Required (acres)	351.4	358.1	369.2
Existing Right of Way Used (acres)	143.1	131.3	137.7
Area of NWI Wetland Impacted (acres)	12.5	16.0	12.5
Volume of Fill in 500-Yr Floodplain (Million Cu. Yd.)	2 46	1.80	1.97
Length Through 500-Yr Floodplain (miles)	4.8	3.6	4.0
Area of Productive Cropland/Pasture Impacted (acres)	164.1	248.0	219.8
Area of Prime Farmland Impacted (acres)	148.2	175.2	186.5
Number of Farmed Parcels Affected	45	46	43
Number of Severed Farm Operations	7	9	7



Alternative 6



Area of Detail

Criterion	Alternative		
	Alt. 2	Alt. 5	Alt. 6
No. of New Intersections	12	10	10
No. of Permanent Road Closures	8	6	8
Borrow Excavation (Million Cu. Yd.)	3.05	2.06	2.13
Residential Displacements	4	2	4
Commercial Displacement	1	1	1
New Right of Way Required (acres)	351.4	358.1	369.2
Existing Right of Way Used (acres)	143.1	131.3	137.7
Area of NWI Wetland Impacted (acres)	12.5	16.0	12.5
Volume of Fill in 500-Yr Floodplain (Million Cu. Yd.)	2.46	1.80	1.97
Length Through 500-Yr Floodplain (miles)	4.8	3.6	4.0
Area of Productive Cropland/Pasture Impacted (acres)	164.1	248.0	219.8
Area of Prime Farmland Impacted (acres)	148.2	175.2	186.5
Number of Farmed Parcels Affected	45	46	43
Number of Severed Farm Operations	7	9	7

State Wildlife Management Area

Dutton Lake

Gladstone Lake

Gladstone Lake Rd

Study Area

See Inset Map

IOWA
ILLINOIS

Mississippi River

Stony Point Lake

State Natural Heritage Site

Crystal Lake

Indian Creek

Lost Tree Creek

FD Creek

Site 267

Existing US-34 to remain as frontage road

Indian Mound Rest Area

KEMP CEMETERY

Burlington Iowa

Orchard City Lake

Inset Map

Future US 34/IL 164 Interchange (new bridge)

Legend

- Alternative 6
- Bridge
- Right-of-Way
- Study Area
- Displacement
- Road Closure
- Parcel Boundary
- Cemetery
- NRHP Eligible Site
- Threatened & Endangered Species
- Herpetological Area of Special Concern
- Protected/Conservation Area
- State Land
- 100 Year Floodplain
- 500 Year Floodplain
- NWI Wetland
- Open Water
- Stream

US 34
Henderson County
Supplemental EIS

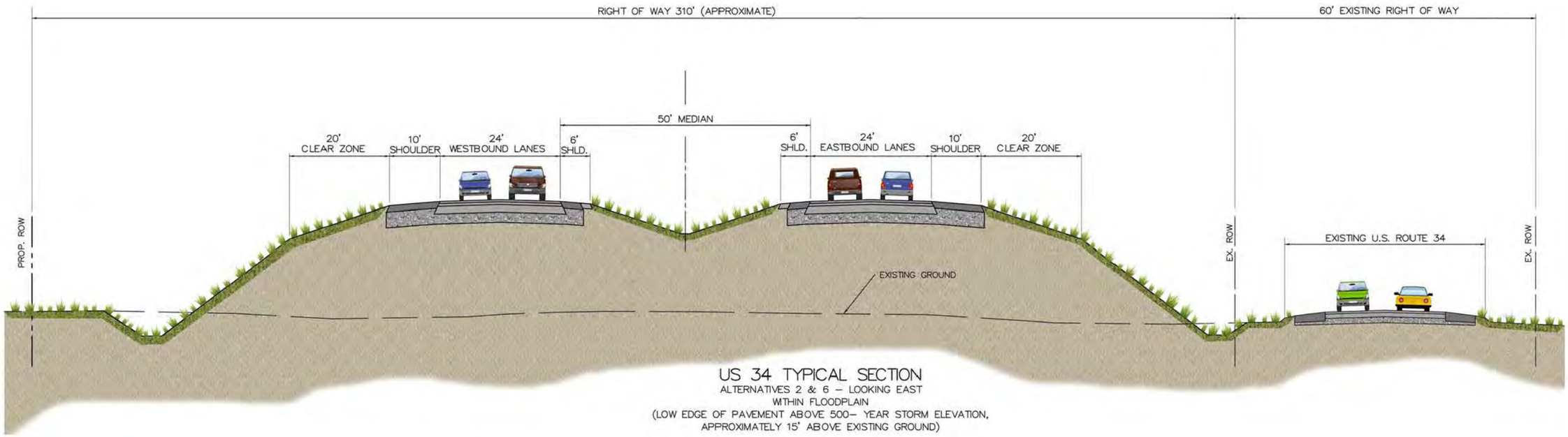
Alternative 6

Illinois Department of Transportation

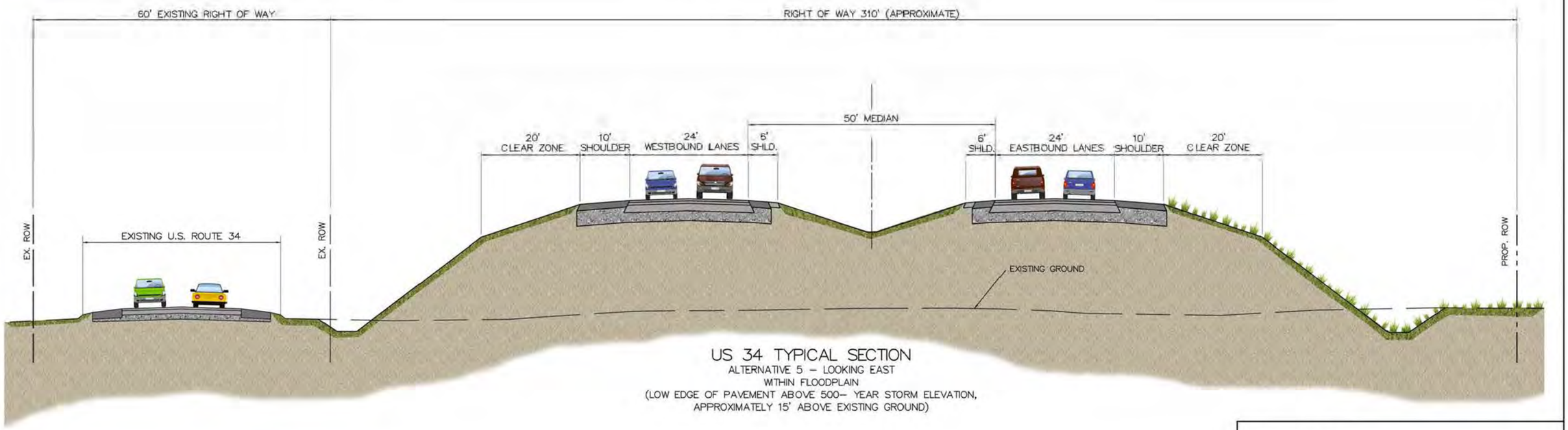
Job No. 3202131337
Date: 9/19/2016

Drawn By: DJH/BSM
Reviewed By: SCC

This map product hereby has been created with all due and reasonable care and is provided for use with IDOT Order of Master Project Number 3202131337. This map has not been certified by a licensed land surveyor and is not to be used for boundary determination. The Illinois Department of Transportation assumes no liability, direct or indirect, whatsoever for any such third party or unintended use.



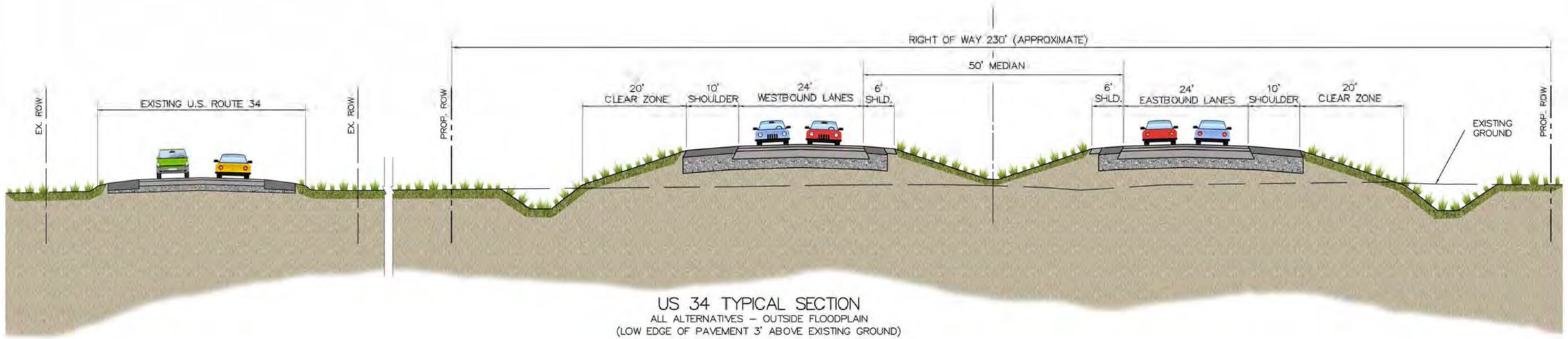
US 34 TYPICAL SECTION
ALTERNATIVES 2 & 6 – LOOKING EAST
WITHIN FLOODPLAIN
(LOW EDGE OF PAVEMENT ABOVE 500– YEAR STORM ELEVATION,
APPROXIMATELY 15' ABOVE EXISTING GROUND)



US 34 TYPICAL SECTION
ALTERNATIVE 5 – LOOKING EAST
WITHIN FLOODPLAIN
(LOW EDGE OF PAVEMENT ABOVE 500– YEAR STORM ELEVATION,
APPROXIMATELY 15' ABOVE EXISTING GROUND)

Illinois Department of Transportation

34



US 34 TYPICAL SECTION

ALL ALTERNATIVES – OUTSIDE FLOODPLAIN

(LOW EDGE OF PAVEMENT 3' ABOVE EXISTING GROUND)

Illinois Department of Transportation

34

Alternatives Eliminated from Consideration – Key Issues

Alternative 1 –

- Greatest length through the 500-year floodplain (5.7 miles)
- Second greatest amount of fill in the floodplain (3.0 million cu yd)
- Converts 224.6 acres of productive cropland/ pastureland to highway use
- Requires 3.7 million cubic yards of borrow excavation

Alternative 3 –

- Directly impacts the only identified potentially historic property in study area
- Directly impacts 174.7 acres of prime farmland
- Displaces the greatest number of farm buildings (14)
- Relatively greater impact to farm operations resulting in farm severances
- Requires 2.7 million cubic yards of borrow excavation

Alternative 4 –

- Impacts 25.0 acres of wetlands, almost twice that of other alternatives
- Impacts 243.0 acres of productive cropland/ pastureland
- Requires greatest amount of fill in the 500- year floodplain (3.7 million cu yd)
- Requires greatest amount of borrow excavation (4.3 million cu yd)
- Has a longer crossing of the floodplain, increasing farm severances and potential unusable farm remnants
- Access at Lock and Dam Road is complicated due to proximity to railroad

Alternatives Eliminated from Consideration

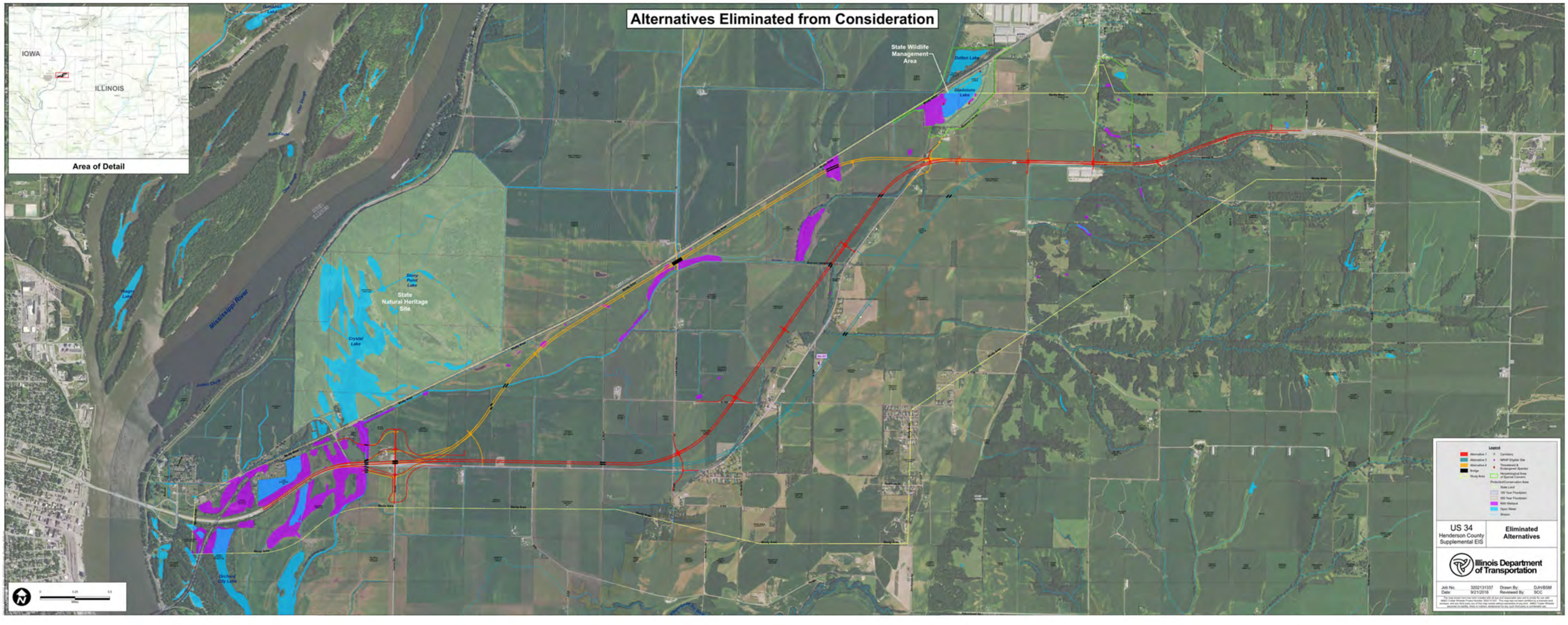


Figure 5
Sign-In Sheets

FAP Route	FAP 313 (U.S. Route 34)
Section	7/8
County	Henderson
Job Number	P94-003-13
Description	Supplemental Environmental Impact Statement (SEIS) and Design Report Addendum

Illinois Department of Transportation

October 4, 2016
Public Informational Open House
West Central High School

ATTENDANCE SHEET

PLEASE PRINT!

Name	Resident, Business Owner, Organization, etc.	Address (Street, City, State, Zip)	E-Mail	Phone
JON McGraw	Resident	RR1 Box 137A Gladstone, Ill		319-457-2141
Belinda Atlogic	Resident	POB 837 Oquawka		309-368-1825
Kurt McChesney	chairman 34 coalition	P.O. Box 200 Gladstone IL		319572-1938
Ryan Nagrocki	34 Coalition	7113 S. Gear, Burlington, IA	RNagrocki@gmail.com	319-759-2862
Gene & Karen Larkin		205 W. Penn Ave, Roseville, IL		309-426-2892
Alan Schwartz		6194 Summer St Burl		3195729887
Leigh Pirtle	Owner	10963 Oak Ridge Rd Burl IA 52601		319.759.0080
Alicia Pence	resident	300 Blaine St, Biggsville, IL 61418		309-337-8859
Danielle Covert	resident	1748 Township Rd 1150N Biggsville, IL 61418		309-333-3628
Kurt Fowler	resident	323 South 1st St. Monmouth IL.		309-734-6817
Crystal Mabe	resident	101 Lynn St Gladstone		
Bryan Bragg	Neighbor	1703 Combe St. Burlington, IA		
Dan Wiedemeier	Tri State Summit	11221 Starks Grove Rd Burl IA		319753-5824
Mark Muhlemann	Resident	709 Oakwood Drive Stronghurst IL		309-337-1725
Vannie Keever Jr	Resident	1145 Road 1550 N Gladstone, IL		(319) 572-7665

FAP Route	FAP 313 (U.S. Route 34)
Section	7/8
County	Henderson
Job Number	P94-003-13
Description	Supplemental Environmental Impact Statement (SEIS) and Design Report Addendum

Illinois Department of Transportation

October 4, 2016
Public Informational Open House
West Central High School

ATTENDANCE SHEET

PLEASE PRINT!

Name	Resident, Business Owner, Organization, etc.	Address (Street, City, State, Zip)	E-Mail	Phone
Harold Herbaugh		1055 TWP. Rd 1300 N Gladstone IL. 61437		309-627-9195
Elizabeth Meyer	The Hawk Eye		emeyer@thehawkeye.com	319-758-8151
BILL REICHON	WARREN CO BOARD	MONMOUTH		309 337 0268
John Lovett	The Hawk Eye		pl...2@thehawkeye.com	319 754 8151
Rob Sussman	KBUR		news@burlingtonradio.com	319 752 5402
RAY Hollister	self	1512 S Central Burl. IA		
Anita Stapleton	Self	932 Road 1245 N. Gladstone, Ill.		—
Judy Bielser	Self	1141 Randall Rd. Gladstone, IL 61437		319-759-3503
~~David Bubeck~~	SELF	3422 W Mt. Pleasant W. Burl. Iowa		
Jane Weir	self	1447 Twp Rd. 1400 E Gladstone, Ill. 61437		309-627-2106
~~Bob Pettigrew~~	Rep	200 E. Broadway Roseville IL 61473		309 371 3527
Michael J. Inman	CITY OFFICIAL Monmouth	232 East Jackson St Macomb, IL 61455	Mayor@macomb.com	309-833-2558
Lowell Crow	CITY Administrator	100 East Broadway Monmouth	Lowell.crow@monmouth.com	309-734-2141
~~Samuel Stevens~~		967 Lamoki; RR. 1300 N		
Larry + Darla Thompson	~~R#1 Box 172~~	R#1 Box 172 Gladstone, Il	tobyanddarla@yahoo.com	309-333-0489

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FAP Route FAP 313 (U.S. Route 34)
Section 7/8
County Henderson
Job Number P94-003-13
Description Supplemental Environmental Impact Statement (SEIS) and Design Report Addendum

Illinois Department of Transportation

October 4, 2016
Public Informational Open House
West Central High School

ATTENDANCE SHEET

PLEASE PRINT!

Name	Resident, Business Owner, Organization, etc.	Address (Street, City, State, Zip)	E-Mail	Phone
Mark Smith		CARMAN IL 61425 950 ELLISON CREEK Rd.		
Jim Armstrong	Iowa DOT	307 W. Briggs, Fairfield IA 52556	james.armstrong@dot.iowa.gov	641.469.4075
ROGER KELLY	Resident	P.O Box 227 Biggsville, IL 61418		
Dan & Carolyn Frey	Resident	P.O. Box 34, Stronghurst, IL 61480		
Glen Olsen	Resident	RR. Carman		
Sharon K. Graham	H.C. Kiwanis	1808 Township Rd. 1675E Biggsville, IL 61418	sjgraham6227@yahoo.com	
Mary-Grace Carlson	Casey State Bank-Biggsville	2307 State Rte 94, Oquawka, IL 61469	marygracecarlson@gmail.com	
Donna Zurmuehlen	Resident	1544 S St Hwy 164 Gladstone, IL 61437		
Don Wadleigh	Resident	2530 Hwy 3 Oquawka	donaldwadleigh@yahoo.com	
Bonnie Olson	Resident	P.O. Box 139 Carman, IL 61425		
Darrell & Carol Elsea	Resident	1250 State Highway 94 Biggsville IL 61418		
Jim Webb	Iowa DOT	301 W. Briggs, Fairfield, IA	james.webb@dot.iowa.gov	641.469.4075
Kathie Curtiss	Resident	108 Worthy Acres Dr Biggsville	curtiss1@hotmail.com	
Thomas L Pullen	Resident	P.O Box 199 Gladstone Il 61437	thomas1pullen@frontiernet.net	309 627 9346
JAMES RHEINSCHMIDT	BURLINGTON BUSINESS OWNER	1201 N. ROOSEVELT, BURLINGTON, IA 52601		

FAP Route FAP 313 (U.S. Route 34)
Section 7/8
County Henderson
Job Number P94-003-13
Description Supplemental Environmental Impact Statement (SEIS) and Design Report Addendum

Illinois Department of Transportation

October 4, 2016
Public Informational Open House
West Central High School

ATTENDANCE SHEET

PLEASE PRINT!

Name	Resident, Business Owner, Organization, etc.	Address (Street, City, State, Zip)	E-Mail	Phone
RICHARD GOFF	RESIDENT	203 W LINCOLN BIGGSVILLE IL 61418		309-337-2437
ROBERT SCOTT	"	1475 TWSP RD 1700E BIGGSVILLE IL 61418		
Steve Stoebell	Hiway 34 Coalition	604 N. Front St- Oquawka, IL 61469		
ERNEST PILKINGTON		963 US Route 34, GLADSTONE, IL		
Susan Menke		Carman, IL		
Robert Jeanette Randall	2040 Twp Rd 1600N	Biggsville, IL 61418		
Brian Radell	1113 Radell Rd.	Gladstone, IL 61437		309-627-2500
Yvonne Knapp	PO Box 12	Raritan IL. 61471	highway34@mtcnow.net	309-221-2743
Brenda Levit	11074 Fawn Rd.	Burlington, IA 52601	blevit#@greaterburlington.com Highway 34 Coalition	319-750-3637
Mike & Mindy Henry	1272 St Hwy 94	Biggsville IL 61418		
Blanche Shoup	Hiway 34 Coalition	~~35 US Hwy~~		
Sandy Gunter	resident/farmer for Gunter family	35 US Hwy 34 Kirkwood, IL	jsgunter@frontier.com	309-768-2117
Lisa Miller		RR5 Box 212C Gladstone IL 61437	Lisaanne1962@gmail.com	
Jill Olson	Resident	RR1 B136 Gladstone IL 61437		309-627-9009

FAP Route	FAP 313 (U.S. Route 34)
Section	7/8
County	Henderson
Job Number	P94-003-13
Description	Supplemental Environmental Impact Statement (SEIS) and Design Report Addendum

Illinois Department of Transportation

October 4, 2016
Public Informational Open House
West Central High School

ATTENDANCE SHEET

PLEASE PRINT!

Name	Resident, Business Owner, Organization, etc.	Address (Street, City, State, Zip)	E-Mail	Phone
Wyatt miller	Business	2351 monmouth IL 61462	wmiller@cootsmaterials.com	3195607405
Dale OAKS	owner	13419 Belvedere Rd.	West Burlington Ia	319-759-0429
PHIL FLEMING	RESIDENT	914 Rte 34	GLADSTONE 61437	319-850-0857
Jamie Shuck	Resident		Shuck-jaime@wc245.k12.il.us	309-224-3953
Michele Schnicker	34 Voices	2818 Shamrock Dr Burl	Michele.schnicker@msn.com	319-754-8146
Annamae Brown	34 voices resident	Stronghurst	hcfjrMiss2012@gmail.com	319-572-7915
Danielle Rhinehart	34 voices resident	Biggsville	danielle816@hotmail.com	309-299-3056
Caitlyn Martinez	34 voices resident	Oquawka	Caitlyn Martinez13@yahoo.com	309-299-6151
Dave Weimer	Contractor	Burlington Ia		319-759-8253
Jarred Lassiter	SERPC-Burlington	West Burlington, IA		
Leslie Freeman	—	1137 Randall Rd Gladstone	Lfreeman1947@gmail.com	309-299-5823
Gene Galbraith	Res.	1530 Township Rd 1350E Gladstone, IL.	bjgalbra@frontiernet.net	309-627-2516
KIM PIERCE	MAEDCO	510 N Pearl St, Ste 300 Macomb	maedco@wiu.edu	309-837-4684
Carol Eibes	Resident	942 Road 1245N Gladstone	~~cctbe~~ eibescarol@gmail.com	309-873-2327
Nancy Stevenson	Resident	965 U.S. Rte. 34 Gladstone		319-759-6990

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FAP Route	FAP 313 (U.S. Route 34)
Section	7/8
County	Henderson
Job Number	P94-003-13
Description	Supplemental Environmental Impact Statement (SEIS) and Design Report Addendum

Illinois Department of Transportation

October 4, 2016
Public Informational Open House
West Central High School

ATTENDANCE SHEET

PLEASE PRINT!

Name	Resident, Business Owner, Organization, etc.	Address (Street, City, State, Zip)	E-Mail	Phone
CHAD [illegible]	Resident	US Route 34 1235		309-299-2307
Frank Stork	Resident	1169 Work Rd Gladstone IL. 61437		309-627-2029
Melida Clark	Resident / County Employee	1801 E State Hwy 164 Kirkwood 61432		309-867-3091 work#
Lynn Schoe	Warren City Resident & Finance Co.	Monmouth, IL. 61462		309-734-7407
Mark R Hagerla	Des Moines Co.	403 N. Sunset Dr West Burlington IA.		319-752-0294
Dick Reid		100 E Adams Biggsville IL.		319-759-3591
Karen Coke	Kiwanis of Henderson Co	1403 Twp Rd 1400 East Gladstone, IL 61437	Karen c@bway.org	319-592-2592
Nancy Hull	Resident	PO Box 215, 102 E Main Biggsville	njh1957@hotmail.com	309-627-2904
Bob & Cathy Hill	Resident	R1 Box 15 Gladstone		319-759-0314
PATRICK POEPPING	Tri-State Development Council	100 S. 54th ST Quincy, IL 62305		217-223-4605
GEORGE TORRANCE	RESIDENT	100 WORTHY ACRES DR, BIGGSVILLE		
Bill Lukens	resident	RR 5 Box 95 Gladstone Il		309-627-2220
Michael Pearson	Warren County Board	216 South 7th St Monmouth, Il. 61462	mbpearson@mtcNow.net	309-734-7215
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Appendix I

Illinois Natural History Survey Wetlands Report

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ILLINOIS NATURAL HISTORY SURVEY
PRAIRIE RESEARCH INSTITUTE

WETLAND DETERMINATION REPORT

US 34 (FAP 313)
Henderson County, Illinois

IDOT Sequence Number: 238C



Prepared by:
Julie Nieset, Jenwei Tsai, William Handel, Tari Tweddale, and Dennis Skultety

INHS/IDOT Wetland Science Program

September 2017

Project Summary

A wetland survey was conducted for proposed work on US 34 (FAP 313) in Henderson County, Illinois. All potential wetlands within the specified project area were examined. Twenty sites met the three criteria of a wetland established in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (U.S. Army Corps of Engineers [USACE] 2010) and were, therefore, determined to be wetlands. Summary information regarding the wetland determination sites is presented in the wetland project report. Wetland determination forms are found in Appendix A and wetland plant species lists are included in Appendix B. Wetland boundaries were recorded using a Trimble Global Navigation Satellite System (GNSS). The spatial data have been digitally uploaded to the Illinois Site Assessment Tracking System (https://frostycap.isgs.illinois.edu/authenticate/login.asp). Locations of determination sites were overlaid on a digital aerial orthophoto using ArcGIS; the resulting figure is included in Appendix C. Additional maps and figures are also included in Appendix C.

Signed: Paul B. Marcum Date: September 8, 2017

Paul B. Marcum
Wetland Science Program
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Cover Photo: Facing southeast overlooking Site 24.

US 34 (FAP 313)
Henderson County, Illinois

Introduction

A wetland survey was conducted from June 19 – 22, 2017, for the proposed work on US 34 (FAP 313) in Henderson County, Illinois. This survey will assist in determining which of three route alternatives will be carried forward for highway expansion.

The proposed project corridor intersects with the southern boundary of a wetland constructed for compensation for Illinois Department of Transportation work for FAP 313 (US 34), Henderson County, Illinois (Wilm et al. 2004; Figure 4A). Site 9 is within this area.

Methods

All potential wetlands within the specified study area were examined. Characteristics of vegetation, soils, hydrology, and topography were evaluated during field investigation and on-site wetland determination. Locations of observation points for wetland determinations were selected based on plant community borders and topographic changes. The following sources were examined while surveying the project corridor to determine wetland locations and boundaries: aerial photographs; U.S. Geological Survey topographic map (Burlington and Gladstone 7.5 minute quadrangles); National Wetlands Inventory (NWI) website (USFWS 2017); the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987); the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (USACE 2010); the USDA-NRCS *Official Series Descriptions*; and the USDA-NRCS *Web Soil Survey*. Positional inaccuracies are known to occur with downloaded sources of digital data listed above. As presented on maps and figures in this report, data can be shifted from their actual position when compared to modern aerial photography.

Wetland determinations were conducted using definitions and guidelines established in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (USACE 2010). Data from these determinations were recorded on U.S. Army Corps of Engineers' Wetland Determination Data Forms – Midwest Region (Appendix A); a data form was completed for each wetland sampling point. All potential wetlands, including all areas mapped as wetlands by the NWI, were described using at least one sampling point. Results of these determinations are summarized in the following text. Adjacent upland areas were also investigated; forms were not completed for these areas. Comprehensive plant species lists were compiled for each wetland site and are presented in Appendix B.

Wetland location data were recorded using a Trimble Global Navigation Satellite System (model GeoExplorer 6000 Series GeoXT), with a presumed accuracy of +/- 0.5 m under optimal field conditions. Spatial data were digitally uploaded to the Illinois Site Assessment Tracking System (https://frostycap.isgs.illinois.edu/authenticate/login.asp). Locations of determination sites

were overlaid on a digital aerial orthophoto and approximate area was determined for each wetland site using ArcGIS 10.5 software (ESRI 2016). Resulting areas are calculated in acres, reported to two decimal places. Site location, with respect to the nearest road, was measured from the edge of the pavement and is reported to the nearest foot.

Each native plant species was assigned a "coefficient of conservatism" (C) (Taft et al. 1997), a subjective rating of species fidelity to undegraded natural communities, ranging from zero to ten. Conservative species - those more likely to be found in "pristine" natural areas - were assigned high numbers, whereas non-conservative species - those that occur in anthropogenically disturbed areas - were given lower numbers. Non-native species and those not identifiable to species level were not assigned a rating. The Floristic Quality Index (FQI) is computed as FQI = (mean C) X (√N), where mean C is the mean coefficient of conservatism for all native plant species at a site and N is the total number of native plant species at the site. In very general terms, higher FQI values for plant communities indicate more similarity to "pristine" natural areas, as compared to those communities with lower FQI values. Botanical nomenclature follows *Vascular Flora of Illinois* (Mohlenbrock 2002), while wetland indicator status for each species follows *National Wetland Plant List, version 3.3* (USACE 2016, Lichvar et al. 2016).

Wetland Determination Site Summaries

Site Number: 1

Community type: **Wet floodplain forest**
National Wetlands Inventory code**: PFO1A (temporarily flooded, broad-leaved deciduous, forested, palustrine wetland)**
Site location: **Approximately 110 ft north of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.03 ac**
Total site area: **0.03 ac**
Mean Coefficient of Conservatism (mean C): **2.3** Floristic Quality Index (FQI): **10.9**
Additional remarks: **Most of the PFO1A was outside of the project corridor and is an upland forest.**

Site Number: 2

Community type: **Wet meadow**
National Wetlands Inventory code**: PEM1F (semipermanently flooded, persistent emergent, palustrine wetland)**
Site location: **Approximately 140 ft north of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.03 ac**
Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **3.3** Floristic Quality Index (FQI): **14.5**
Additional remarks: **This wet meadow becomes a cattail marsh outside of the project corridor.**

Site Number: 3
Community type: **Marsh**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 78 ft north of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.09 ac**
Total site area: **0.09 ac**
Mean Coefficient of Conservatism (mean C): **2.8** Floristic Quality Index (FQI): **14.6**
Additional remarks: **The primary hydrological input into this wetland appears to be a man-made seep created by highway construction.**

Site Number: 4
Community type: **Marsh**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 50 ft north of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.06 ac**
Total site area: **0.06 ac**
Mean Coefficient of Conservatism (mean C): **2.5** Floristic Quality Index (FQI): **11.0**

Site Number: 5
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 50 ft north of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.04 ac**
Total site area: **0.04 ac**
Mean Coefficient of Conservatism (mean C): **2.4** Floristic Quality Index (FQI): **10.7**

Site Number: 6
Community type: **Wet shrubland**
National Wetlands Inventory code**: PFO1C (seasonally flooded, broad-leaved deciduous, forested, palustrine wetland)**
Site location: **Approximately 46 ft north of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.43 ac**
Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **3.0** Floristic Quality Index (FQI): **12.4**

Site Number: 7
Community type: **Marsh**
National Wetlands Inventory code**: PEM1C (seasonally flooded, persistent emergent, palustrine wetland)**
Site location: **Approximately 50 ft north of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.97 ac**
Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **2.8** Floristic Quality Index (FQI): **14.2**

Site Number: 8
Community type: **Shrubland**
National Wetlands Inventory code**: PFO1C (seasonally flooded, broad-leaved deciduous, forested, palustrine wetland)**
Site location: **Approximately 139 ft north of US Hwy 34**
Hydrophytic Vegetation? **No** Hydric Soils? **Yes** Wetland Hydrology? **No**
Is this site a wetland? **No**

Site Number: 9
Community type: **Wet meadow/Marsh**
National Wetlands Inventory code**: PEM1C (seasonally flooded, persistent emergent, palustrine wetland); PEM1F (semipermanently flooded, persistent emergent, palustrine wetland); and PUBF (semipermanently flooded, unconsolidated bottom, palustrine wetland)**
Site location: **Approximately 100 ft north of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.57 ac**
Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **3.3** Floristic Quality Index (FQI): **17.3**
Additional remarks: **The proposed project corridor intersects with the southern boundary of a wetland constructed for compensation for Illinois Department of Transportation work for FAP 313 (US 34), Henderson County, Illinois (Wilm et al. 2004; Figure 4A). Site 9 is within this area.**

Site Number: 10
Community type: **Upland forest**
National Wetlands Inventory code**: PFO1A (temporarily flooded, broad-leaved deciduous, forested, palustrine wetland)**
Site location: **Approximately 50 ft north of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **No** Wetland Hydrology? **Yes**
Is this site a wetland? **No**

Site Number: 11
Community type: **Non-native grassland**
National Wetlands Inventory code**: PEM1Cx (excavated, seasonally flooded, persistent emergent, palustrine wetland) and PUBGx (excavated, intermittently exposed, unconsolidated bottom, palustrine wetland)**
Site location: **Approximately 7 ft south of US Hwy 34**
Hydrophytic Vegetation? **No** Hydric Soils? **No** Wetland Hydrology? **No**
Is this site a wetland? **No**
Additional remarks: **The sampling point was taken on an embankment over a culverted stream that flows under US 34 at a location within the PEM1Cx NWI designation. The stream (W1 – Unnamed Tributary to Mississippi River) splits into two streams on the south side of US 34 after it emerges from the culvert under US 34. The stream has a deeply incised channel.**

Site Number: 12
Community type: **Wet floodplain forest**
National Wetlands Inventory code**: PFO1A (temporarily flooded, broad-leaved deciduous, forested, palustrine wetland)**
Site location: **Approximately 125 ft south of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.04 ac**
Total site area: **0.04 ac**
Mean Coefficient of Conservatism (mean C): **2.7** Floristic Quality Index (FQI): **12.6**
Additional remarks: **The rest of the PFO1A within the project area was investigated and determined to be non-wetland (Sampling Point 12B).**

Site Number: 13
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 70 ft south of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.12 ac**
Total site area: **0.12 ac**
Mean Coefficient of Conservatism (mean C): **2.9** Floristic Quality Index (FQI): **12.5**

Site Number: 14
Community type: **Wet shrubland**
National Wetlands Inventory code**: PSS1C (seasonally flooded, broad-leaved deciduous, scrub-shrub, palustrine wetland)**
Site location: **Approximately 75 ft south of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.16 ac**

Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **2.8** Floristic Quality Index (FQI): **14.2**

Site Number: 15
Community type: **Marsh**
National Wetlands Inventory code**: PUBG (intermittently exposed, unconsolidated bottom, palustrine wetland)**
Site location: **Approximately 70 ft south of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.74 ac**
Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **3.0** Floristic Quality Index (FQI): **12.7**

Site Number: 16
Community type: **Wet shrubland**
National Wetlands Inventory code**: PFO1C (seasonally flooded, broad-leaved deciduous, forested, palustrine wetland)**
Site location: **Approximately 60 ft south of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.13 ac**
Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **3.4** Floristic Quality Index (FQI): **16.0**

Site Number: 17
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 160 ft south of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.17 ac**
Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **2.5** Floristic Quality Index (FQI): **12.6**

Site Number: 18
Community type: **Wet meadow/Marsh**
National Wetlands Inventory code**: PFO1C (seasonally flooded, broad-leaved deciduous, forested, palustrine wetland), U (upland), and PEM1C (seasonally flooded, persistent emergent, palustrine wetland)**
Site location: **Approximately 60 ft south of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **2.20 ac**

Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **3.3** Floristic Quality Index (FQI): **19.0**

Site Number: 19
Community type: **Wet floodplain forest**
National Wetlands Inventory code**: PFO1C (seasonally flooded, broad-leaved deciduous, forested, palustrine wetland)**
Site location: **Approximately 8 ft east of Stevenson Rd /650 E**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **1.68 ac**
Total site area: **1.68 ac**
Mean Coefficient of Conservatism (mean C): **3.0** Floristic Quality Index (FQI): **15.1**
Additional remarks: **This depressional wetland in the landscape was adjacent to upland forest dominated by drier *Quercus* sp.**

Site Number: 20
Community type: **Deepwater aquatic habitat**
National Wetlands Inventory code**: PUBGh (diked/impounded, intermittently exposed, unconsolidated bottom, palustrine wetland)**
Site location: **Approximately 134 ft north of US Hwy 34**
Hydrophytic Vegetation? **No** Hydric Soils? **No** Wetland Hydrology? **No**
Is this site a wetland? **No**

Site Number: 21
Community type: **Wet floodplain forest**
National Wetlands Inventory code**: PFO1A (temporarily flooded, broad-leaved deciduous, forested, palustrine wetland)**
Site location: **Approximately 320 ft north of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.28 ac**
Total site area: **0.28 ac**
Mean Coefficient of Conservatism (mean C): **3.3** Floristic Quality Index (FQI): **16.3**
Additional remarks: **This depressional wetland in the landscape was surrounded by upland forest dominated by drier *Quercus* sp.**

Site Number: 22
Community type: **Wet shrubland**
National Wetlands Inventory code**: PEM1A (temporarily flooded, persistent emergent, palustrine wetland)**
Site location: **Approximately 110 ft north of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**

Area of site occurring within the project corridor: **0.12 ac**
Total site area: **0.12 ac**
Mean Coefficient of Conservatism (mean C): **2.3** Floristic Quality Index (FQI): **9.3**
Additional remarks: **This depressional wetland in the landscape was surrounded by upland shrubland.**

Site Number: 23
Community type: **Forbland**
National Wetlands Inventory code**: PEM1Cx (excavated, seasonally flooded, persistent emergent, palustrine wetland); R4SBCx (excavated, seasonally flooded, streambed, intermittent, riverine wetland)**
Site location: **Approximately 108 ft north of US Hwy 34**
Hydrophytic Vegetation? **No** Hydric Soils? **No** Wetland Hydrology? **No**
Is this site a wetland? **No**
Additional remarks: **The sampling point was taken at the junction of R4SBCx and PEM1Cx, north of US 34, on the bank of the stream W4 – Unnamed Tributary.**

Site Number: 24
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 400 ft west of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **2.70 ac**
Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **2.9** Floristic Quality Index (FQI): **17.0**

Site Number: 25
Community type: **Wet shrubland**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 380 ft west of US Hwy 34**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.29 ac**
Total site area: **0.29 ac**
Mean Coefficient of Conservatism (mean C): **2.9** Floristic Quality Index (FQI): **16.4**

Site Number: 26
Community type: **Upland forest**
National Wetlands Inventory code**: PFO1A (temporarily flooded, broad-leaved deciduous, forested, palustrine wetland) and R2UBHx (excavated, permanently flooded, unconsolidated bottom, lower perennial, riverine wetland)**
Site location: **Approximately 392 ft south of US Hwy 34**
Hydrophytic Vegetation? **No** Hydric Soils? **No** Wetland Hydrology? **No**

Is this site a wetland? **No**
Additional remarks: **The sampling point was taken at the junction of R2UBHx and PFO1A, on the bank of the stream W7 - Unnamed Tributary to P.D. Creek.**
Site Number: 27
Community type: **Non-native grassland**
National Wetlands Inventory code**: PUBF (semipermanently flooded, unconsolidated bottom, palustrine wetland)**
Site location: **Approximately 120 ft north of US Hwy 34**
Hydrophytic Vegetation? **No** Hydric Soils? **No** Wetland Hydrology? **No**
Is this site a wetland? **No**

Wetland Determination Site Summary Table

Site No.	NWI code	Community Type	Area (ac.)[1]	>50%[2]	FQI	Mean C
1	PFO1A	Wet floodplain forest	0.03	Yes	10.9	2.3
2	PEM1F	Wet meadow	0.03	No	14.5	3.3
3	U	Marsh	0.09	Yes	14.6	2.8
4	U	Marsh	0.06	Yes	11.0	2.5
5	U	Wet meadow	0.04	Yes	10.7	2.4
6	PFO1C	Wet shrubland	0.43	No	12.4	3.0
7	PEM1C	Marsh	0.97	No	14.2	2.8
9	PEM1C, PEM1F, and PUBF	Wet meadow/Marsh	0.57	No	17.3	3.3
12	PFO1A	Wet floodplain forest	0.04	Yes	12.6	2.7
13	U	Wet meadow	0.12	Yes	12.5	2.9
14	PSS1C	Wet shrubland	0.16	No	14.2	2.8
15	PUBG	Marsh	0.74	No	12.7	3.0
16	PFO1C	Wet shrubland	0.13	No	16.0	3.4
17	U	Wet meadow	0.17	No	12.6	2.5
18	PEM1C, U, and PFO1C	Wet meadow/Marsh	2.20	No	19.0	3.3
19	PFO1C	Wet floodplain forest	1.68	Yes	15.1	3.0
21	PFO1A	Wet floodplain forest	0.28	Yes	16.3	3.3
22	PEM1A	Wet shrubland	0.12	Yes	9.3	2.3
24	U	Wet meadow	2.70	No	17.0	2.9
25	U	Wet meadow	0.29	Yes	16.4	2.9

[1] Area within the ESR project limits. [2] In our best professional judgment is more than 50% of the total site area within the ESR project limits?

Stream Descriptions

Site Number: W1

Site Name: **Unnamed Tributary to Mississippi River**

Site Location: **Approximately 982 ft east of the intersection of US Hwy 34 and Burlington, Northern, & Santa Fe Railroad**

Community type: **Stream**

National Wetlands Inventory code: **PEM1Cx (excavated, seasonally flooded, persistent emergent, palustrine wetland) and PUBGx (excavated, intermittently exposed, unconsolidated bottom, palustrine wetland)**

USGS 8-Digit Hydrologic Unit Code (HUC): **07080104 (Upper Mississippi River, Flint-Henderson Watershed)**

Watershed area: **<1 mi^2 (USGS 2017)**

Riffles observed? **Yes** Pools observed? **Yes**

Mussel shell material observed? **Yes**

Is the stream or body of water permanent? **Perennial**

Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**

Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Additional Remarks: **USGS StreamStats (USGS 2017) only indicates that this stream flows to the west of Orchard City Lake but field observations determined that there is also flow from the northeast, flowing between Sites 2 and 3, under US 34, and into Orchard City Lake on the north east portion of the lake.**

The stream has a deeply incised channel and culverts that allow flow under US 34. The stream splits into two streams on the south side of US 34 after it emerges from the culvert under US 34. The wetland determination data sheet 11A (Appendix A) provides more information about the community type on the stream embankment in the sampling area (Figure 4A).

Site Number: W2

Site Name: **Unnamed Trbutary to Mississippi River**

Site Location: **Approximately 1,100 ft west of the intersection of US Hwy 34 and State Hwy 522**

Community type: **Stream**

National Wetlands Inventory code: **R2UBHx (excavated, permanently flooded, unconsolidated bottom, lower perennial, riverine wetland)**

USGS 8-Digit Hydrologic Unit Code (HUC): **07080104 (Upper Mississippi River, Flint-Henderson Watershed)**

Watershed area: **27.5 mi^2 (USGS 2017)**

Riffles observed? **Yes** Pools observed? **Yes**

Mussel shell material observed? **No**

Is the stream or body of water permanent? **Perennial**

Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**

Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Site Number: W3
Site Name: **Unnamed Tributary to Mississippi River**
Site Location: **As near as 40 ft east of State Hwy 522 and 30 ft south of US Hwy 34**
Community type: **Stream**
National Wetlands Inventory code: **PEM1Cx (excavated, seasonally flooded, persistent emergent, palustrine wetland) and R5UBFx (excavated, semipermanently flooded, unconsolidated bottom, unknown perennial, riverine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07080104 (Upper Mississippi River, Flint-Henderson Watershed)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Ephemeral**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**
Additional Remarks: **The stream has a deeply incised gravelly channel in the area designated as PEM1Cx and flows under US 34 from the PEM1Cx into the R5UBFx through a culvert. The steep embankment around PEM1Cx consists of upland vegetation.**

Site Number: W4
Site Name: **Unnamed Tributary to Mississippi River**
Site Location: **As near as 75 ft north of US Hwy 34**
Community type: **Stream**
National Wetlands Inventory code: **R4SBCx (excavated, seasonally flooded, streambed, intermittent, riverine wetland) and PEM1Cx (excavated, seasonally flooded, persistent emergent, palustrine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07080104 (Upper Mississippi River, Flint-Henderson Watershed)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **Yes** Pools observed? **Yes**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Perennial**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**
Additional Remarks: **The wetland determination data sheet 23A (Appendix A) provides more information about the community type on the stream embankment in the sampling area (Figure 4D). Although the stream is indicated on the National Hydrography Dataset as flowing from the subdivision south of US 34, we found no indication of this stream, only continuous upland habitat throughout.**

Site Number: W5
Site Name: **P.D. Creek**
Site Location: **Crosses US Hwy 34 approximately 2,600 ft south of Gladstone Twp Rd.**
Community type: **Stream**
National Wetlands Inventory code: **R2UBHx (excavated, permanently flooded, unconsolidated bottom, lower perennial, riverine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07080104 (Upper Mississippi River, Flint-Henderson Watershed)**
Watershed area: **11.2 mi^2 (USGS 2017)**
Riffles observed? **Yes** Pools observed? **Yes**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Perennial**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Site Number: W6
Site Name: **Unnamed Tributary to P.D. Creek**
Site Location: **As near as 103 ft west of US Hwy 34**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07080104 (Upper Mississippi River, Flint-Henderson Watershed)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **Yes**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Intermittent**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**
Additional Remarks: **This stream is a deeply incised constructed stream for farmland drainage that flows into P.D. Creek, just northeast of Sites 24 and 25.**

Site Number: W7
Site Name: **Unnamed Tributary to P.D. Creek**
Site Location: **As near as 42 ft west of US Hwy 34**
Community type: **Stream**
National Wetlands Inventory code: **PFO1A (temporarily flooded, broad-leaved deciduous, forested, palustrine wetland) and R2UBHx (excavated, permanently flooded, unconsolidated bottom, lower perennial, riverine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07080104 (Upper Mississippi River, Flint-Henderson Watershed)**
Watershed area: **3.4 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **Yes**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Perennial**

Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**
Additional Remarks: **The sampling point was taken at the junction of R2UBHx and PFO1A, on the bank of the stream. The wetland determination data sheet 26A (Appendix A) provides more information about the community type on the stream embankment in the sampling area (Figure 4G).**

Site Number: W8
Site Name: **Unnamed Tributary to P.D. Creek**
Site Location: **As near as 40 ft south of US Hwy 34**
Community type: **Stream**
National Wetlands Inventory code: **R2UBHx (excavated, permanently flooded, unconsolidated bottom, lower perennial, riverine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07080104 (Upper Mississippi River, Flint-Henderson Watershed)**
Watershed area: **1.8 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **Yes**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Intermittent**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Site Number: W9
Site Name: **Unnamed Tributary to Henderson Creek**
Site Location: **Crosses State Hwy 164 approximately 1,520 ft north of the intersection of US Hwy 34 and State Hwy 164**
Community type: **Stream**
National Wetlands Inventory code: **R4SBC (seasonally flooded, streambed, intermittent, riverine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07080104 (Upper Mississippi River, Flint-Henderson Watershed)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **Yes**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Intermittent**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**
Additional Remarks: **This deeply incised stream channel flows through a culvert under State Hwy 164.**

Site Number: W10
Site Name: **Unnamed Tributary to Henderson Creek**
Site Location: **Crosses State Hwy 164 approximately 2,978 ft north of the intersection of US Hwy 34 and State Hwy 164**
Community type: **Stream**
National Wetlands Inventory code: **R4SBC (seasonally flooded, streambed, intermittent, riverine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07080104 (Upper Mississippi River, Flint-Henderson Watershed)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **Yes**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Intermittent**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**
Additional Remarks: **This deeply incised stream channel flows through a culvert under State Hwy 164.**

Site Number: W11
Site Name: **Unnamed Tributary to P.D. Creek**
Site Location: **Crossed US Hwy 34 approximately 1,100 ft east of the intersection of US Hwy 34 and Old Hwy 34**
Community type: **Stream**
National Wetlands Inventory code: **R2UBH (permanently flooded, unconsolidated bottom, lower perennial, riverine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07080104 (Upper Mississippi River, Flint-Henderson Watershed)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **Yes**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Intermittent**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**
Additional Remarks: **This deeply incised stream channel flows through a culvert under US 34.**

Threatened/Endangered Species and Natural Communities of Special Interest
No species listed as threatened or endangered federally or in Illinois were found during our wetland survey within the project corridor. Also, no natural communities of special interest were noted.

The proposed corridor does intersect with the southern boundary of a wetland constructed for compensation for Illinois Department of Transportation work for FAP 313 (US 34), Henderson County, Illinois (Wilm et al. 2004; Figure 4A). This includes parts of Site 9 described in this report.

INHS Biotic Surveys are conducting an in-depth study of the entire project corridor for the presence of bald eagles (*Haliaeetus leucocephalus*), various herptile species, and wild blue larkspur (*Delphinium carolinianum*). Two of these reports have been submitted (Kuhns 2017 and Stodola 2017). More information can be found for the wild blue larkspur in the report to be submitted later in 2017.

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APPENDIX A

Wetland Determination Forms

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/20/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 1A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 33, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.80996 Long: -91.07804 Datum: NAD 83

Soil Map Unit Name: See Remarks NWI classification: PFO1A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No , Soil No , or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No , Soil No , or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet floodplain forest.
NRCS mapped as Fluvaquents, 0-2% slopes, frequently flooded, long duration; revised to Aquoll

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	40	Yes	FAC
2. *Morus rubra*	15	Yes	FACU
3. *Fraxinus lanceolata*	10	No	FACW
4.			
5.			
	65	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Cornus drummondii*	20	Yes	FAC
2. *Acer negundo*	1	No	FAC
3.			
4.			
5.			
	21	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Solidago gigantea*	25	Yes	FACW
2. *Phalaris arundinacea*	20	Yes	FACW
3. *Rubus occidentalis*	20	Yes	UPL
4. *Cornus drummondii*	10	No	FAC
5. *Anemone canadensis*	5	No	FACW
6. *Carex stipata*	5	No	OBL
7. *Acer saccharinum*	2	No	FACW
8. *Sanicula odorata*	2	No	FAC
9.			
10.			
	89	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☑ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3.5	10YR 3/1	100					SIL	
3.5-13.5	10YR 3/2	95	10YR 4/4	5	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☑ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches):

Water Table Present? No Depth (inches):

Saturation Present? (includes capillary fringe) No Depth (inches):

Wetland Hydrology Present? Yes

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/20/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 2A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 33, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81008 Long: -91.07758 Datum: NAD 83

Soil Map Unit Name: See Remarks NWI classification: PEM1F

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.
This wet meadow becomes a cattail marsh outside of the project corridor.
NRCS mapped as Fluvaquents, 0-2% slopes, frequently flooded, long duration; revised to Aquoll

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Leersia oryzoides*	75	Yes	OBL
2. *Phalaris arundinacea*	10	No	FACW
3. *Carex comosa*	5	No	OBL
4. *Eupatorium serotinum*	2	No	FAC
5. *Sparganium eurycarpum*	2	No	OBL
6.			
7.			
8.			
9.			
10.			
	94	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 2A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	N 3/0	95	10YR 4/4	5	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/20/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 3A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 33, T10N, R6W

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex

Slope (%): < 1 Lat: 40.81041 Long: -91.07582 Datum: NAD 83

Soil Map Unit Name: Fluvaquents, 0-2% slopes, frequently flooded, long duration NWI classification: U

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No , Soil No , or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No , Soil No , or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is marsh.
The primary hydrological input into this wetland appears to be a man-made seep created by highway construction.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	40	Yes	OBL
2. *Leersia oryzoides*	25	Yes	OBL
3. *Phalaris arundinacea*	20	No	FACW
4. *Impatiens capensis*	10	No	FACW
5. *Schoenoplectus tabernaemontani*	5	No	OBL
6. *Urtica gracilis*	5	No	FACW
7. *Carex stipata*	3	No	OBL
8.			
9.			
10.			
	108	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: (A)

Total Number of Dominant Species Across All Strata: (B)

Percent of Dominant Species That are OBL, FACW, or FAC: (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 3A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2.5	10YR 2/2	100					MK	
2.5-9.5	N 3/0	97	2.5Y 4/3	2	C	M	SICL	
2.5-9.5			5GY 4/1	1	D	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☑ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes Depth (inches): <1

Water Table Present? Yes Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes Depth (inches): 0

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: The primary hydrological input into this wetland appears to be a man-made seep created from highway construction.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/20/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 4A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 40.81250 Long: -91.07143 Datum: NAD 83

Soil Map Unit Name: See Remarks NWI classification: U

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is marsh.
NRCS mapped as Fluvaquents, 0-2% slopes, frequently flooded, long duration; revised to Aquoll

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	40	Yes	OBL
2. *Carex vulpinoidea*	25	Yes	FACW
3. *Phalaris arundinacea*	15	No	FACW
4. *Carex stipata*	10	No	OBL
5. *Persicaria amphibia*	5	No	OBL
6. *Rumex crispus*	5	No	FAC
7. *Solidago canadensis*	3	No	FACU
8.			
9.			
10.			
	103	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 4A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	2.5Y 3/1	93	7.5YR 4/4	7	C	M	SICL	
6-14	2.5Y 3/1	95	7.5YR 4/4	5	C	M	SICL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/20/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 5A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81305 Long: -91.07037 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Orthents, loamy, undulating; revised to Aquent NWI classification: U

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	35	Yes	FACW
2. *Carex stricta*	20	Yes	OBL
3. *Carex vulpinoidea*	20	Yes	FACW
4. *Juncus anthelatus*	15	No	FACW
5. *Fraxinus lanceolata*	10	No	FACW
6. *Hordeum jubatum*	5	No	FAC
7.			
8.			
9.			
10.			
	105	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 5A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					SIL	
4-12	10YR 4/1	93	7.5YR 4/4	7	C	M	SICL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☑ Sparsely Vegetated Concave Surface (B8)
- ☑ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☑ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? Yes

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/20/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 6A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81342 Long: -91.06969 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Orthents, loamy, undulating; revised to Aquent NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet shrubland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Cephalanthus occidentalis*	75	Yes	OBL
2.			
3.			
4.			
5.			
	75 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Persicaria amphibia*	30	Yes	OBL
2. *Bolboschoenus fluviatilis*	20	Yes	OBL
3. *Cephalanthus occidentalis*	10	No	OBL
4. *Phalaris arundinacea*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	65 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 6A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	2.5Y 2.5/1	100					MK	
2-8	N 3/0	98	10YR 4/4	2	C	M	MKSIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☑ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☑ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes Depth (inches): <10

Water Table Present? Yes Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes Depth (inches): 0

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/20/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 7A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81365 Long: -91.06920 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Orthents, loamy, undulating; revised to Aquoll NWI classification: PEM1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is marsh.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Bolboschoenus fluviatilis*	30	Yes	OBL
2. *Typha angustifolia*	30	Yes	OBL
3. *Leersia oryzoides*	25	Yes	OBL
4. *Lemna minor*	10	No	OBL
5. *Cephalanthus occidentalis*	5	No	OBL
6. *Sparganium eurycarpum*	5	No	OBL
7.			
8.			
9.			
10.			
	105	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 7A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	2.5Y 3/1	95	10YR 4/4	5	C	M	MKSIL	
4-7	N 3/0	95	10YR 4/4	5	C	M	MKSIL	
7-13	N 3/0	100					SL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☑ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☑ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes Depth (inches): <5

Water Table Present? Yes Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes Depth (inches): 0

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/20/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 8A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Upland Local relief (concave, convex, none): None

Slope (%): 0 Lat: 40.81444 Long: -91.06819 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Orthents, loamy, undulating; revised to Aquoll NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	No	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	No		

Remarks: Community type is shrubland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Rubus occidentalis*	50	Yes	UPL
2. *Cephalanthus occidentalis*	10	No	OBL
3. *Fraxinus lanceolata*	3	No	FACW
4.			
5.			
	63	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	40	Yes	FACW
2. *Securigera varia*	30	Yes	UPL
3. *Cirsium arvense*	10	No	FACU
4. *Solidago canadensis*	10	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	90	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☐ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **No**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 8A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	95	7.5YR 4/4	5	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/20/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 9A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81454 Long: -91.06794 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Water; revised to Aquent NWI classification: PEM1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	40	Yes	FACW
2. *Carex tribuloides*	30	Yes	OBL
3. *Bolboschoenus fluviatilis*	10	No	OBL
4. *Acer saccharinum*	5	No	FACW
5. *Lycopus americanus*	5	No	OBL
6. *Sagittaria latifolia*	5	No	OBL
7. *Spartina pectinata*	5	No	FACW
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 9A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	2.5Y 4/1	94	7.5YR 4/4	6	C	M	SIL	
3-13	2.5Y 4/1	95	7.5YR 4/4	3	C	M	SICL	
3-13			10YR 4/4	2	C	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/20/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 9B

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81479 Long: -91.06737 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Water; revised to Aquent NWI classification: PEM1F

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Bolboschoenus fluviatilis*	50	Yes	OBL
2. *Eleocharis erythropoda*	40	Yes	OBL
3. *Persicaria hydropiper*	15	No	OBL
4. *Persicaria pensylvanica*	10	No	FACW
5. *Sagittaria latifolia*	10	No	OBL
6. *Juncus acuminatus*	8	No	OBL
7. *Schoenoplectus tabernaemontani*	5	No	OBL
8.			
9.			
10.			
	138	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 9B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	2.5Y 4/1	98	10YR 4/4	2	C	M	MKSIL	
2-6	N 5/0	90	10YR 4/6	10	C	M	SIL	
6-10	N 5/0	90	10YR 4/6	10	C	M	SL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☑ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☑ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes Depth (inches): <5

Water Table Present? Yes Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes Depth (inches): 0

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/20/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 9C

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81484 Long: -91.06712 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Water; revised to Aquent NWI classification: PUBF

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is marsh.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	75	Yes	OBL
2. *Eleocharis erythropoda*	20	Yes	OBL
3. *Sagittaria latifolia*	5	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 9C

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	N 4/0	95	7.5YR 4/4	5	C	M	SICL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☑ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☑ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes Depth (inches): <5

Water Table Present? Yes Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes Depth (inches): 0

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/21/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 10A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81546 Long: -91.06374 Datum: NAD 83

Soil Map Unit Name: See Remarks NWI classification: PFO1A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	Yes		

Remarks: Community type is upland forest.
NRCS mapped as Fluvaquents, 0-2% slopes, frequently flooded, long duration; revised to Orthent

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	40	Yes	FAC
2. *Morus alba*	20	Yes	FAC
3. *Salix nigra*	10	No	OBL
4.			
5.			
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Cephalanthus occidentalis*	2	No	OBL
2. *Fraxinus lanceolata*	2	No	FACW
3.			
4.			
5.			
	4	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	90	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☑ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 10A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 5/3	100					S	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **No**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/22/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 11A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 33, T10N, R6W

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex

Slope (%): < 3 Lat: 40.80932 Long: -91.07768 Datum: NAD 83

Soil Map Unit Name: Orthents, loamy, undulating NWI classification: PEM1Cx

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	No	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is non-native grassland.
This point was taken on an embankment over a culverted stream that flows under US 34. The stream has NWI designations of PUBGx and PEM1Cx and splits into two streams on the south side of US 34 after it emerges from the culvert under US 34.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Bromus inermis*	80	Yes	FACU
2. *Securigera varia*	5	No	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	85 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals (A)	(B)
Prevalence Index = B/A =	

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☐ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **No**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 11A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100					L	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Compacted fill material

Depth (inches): 6

Hydric Soil Present? No

Remarks: This soil sample was not taken as deeply as normally would due to the presence of compacted filled material.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches):

Water Table Present? No Depth (inches):

Saturation Present? (includes capillary fringe) No Depth (inches):

Wetland Hydrology Present? No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/22/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 12A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 33, T10N, R6W

Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 40.80919 Long: -91.07667 Datum: NAD 83

Soil Map Unit Name: Sawmill SICL, undrained, 0-2% slopes, frequently flooded NWI classification: PFO1A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet floodplain forest.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	40	Yes	FAC
2. *Morus alba*	10	No	FAC
3. *Fraxinus lanceolata*	5	No	FACW
4. *Salix nigra*	3	No	OBL
5.			
	58	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Cornus drummondii*	5	Yes	FAC
2.			
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	60	Yes	FACW
2. *Geum canadense*	15	No	FAC
3. *Fraxinus lanceolata*	10	No	FACW
4. *Aster ontarionis*	5	No	FAC
5. *Cornus drummondii*	5	No	FAC
6. *Vitis riparia*	5	No	FACW
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☑ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 12A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	93	10YR 4/4	7	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☑ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/22/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 12B

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 33, T10N, R6W

Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Convex

Slope (%): < 2 Lat: 40.80897 Long: -91.07748 Datum: NAD 83

Soil Map Unit Name: See Remarks NWI classification: PFO1A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is upland forest.
Sawmill SICL, undrained, 0-2% slopes, frequently flooded; revised to Hapludoll

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	30	Yes	FAC
2. *Fraxinus lanceolata*	25	Yes	FACW
3. *Morus alba*	20	Yes	FAC
4. *Acer saccharinum*	10	No	FACW
5. *Betula nigra*	5	No	FACW
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Cornus drummondii*	20	Yes	FAC
2. *Symphoricarpos orbiculatus*	15	Yes	FACU
3. *Morus alba*	5	No	FAC
4.			
5.			
	40	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Ageratina altissima*	25	Yes	FACU
2. *Toxicodendron radicans*	25	Yes	FAC
3. *Sanicula odorata*	20	Yes	FAC
4. *Geum canadense*	15	No	FAC
5. *Aster ontarionis*	5	No	FAC
6. *Carex sp.*	5	No	-
7. *Cornus drummondii*	5	No	FAC
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1. *Toxicodendron radicans*	1	No	FAC
2.			
	1	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 75% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☑ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 12B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	100					SL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/22/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 13A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81147 Long: -91.07158 Datum: NAD 83

Soil Map Unit Name: Wabash SIC, 0-2% slopes, rarely flooded NWI classification: U

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	95	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 13A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	95	10YR 4/4	5	C	M	SIC	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☑ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes Depth (inches): <2

Water Table Present? Yes Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes Depth (inches): 0

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/22/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 14A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81226 Long: -91.06993 Datum: NAD 83

Soil Map Unit Name: Sawmill SICL, undrained, 0-2% slopes, frequently flooded NWI classification: PSS1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet shrubland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	2	No	FACW
2. *Fraxinus lanceolata*	2	No	FACW
3.			
4.			
5.			
	4	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Betula nigra*	25	Yes	FACW
2. *Cephalanthus occidentalis*	10	Yes	OBL
3. *Salix interior*	10	Yes	FACW
4. *Salix nigra*	10	Yes	OBL
5.			
	55	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	65	Yes	FACW
2. *Urtica gracilis*	15	No	FACW
3. *Cephalanthus occidentalis*	5	No	OBL
4. *Persicaria amphibia*	5	No	OBL
5. *Sagittaria latifolia*	5	No	OBL
6. *Bolboschoenus fluviatilis*	3	No	OBL
7.			
8.			
9.			
10.			
	98	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 14A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	2.5Y 3/1	92	7.5YR 4/4	8	C	M	SICL	
9-14	N 3/0	95	7.5YR 4/4	3	C	M	SICL	
9-14			10YR 4/4	2	C	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/22/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 15A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Excavated depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81260 Long: -91.06948 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Water; revised to Aquoll NWI classification: PUBG

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is marsh.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	90	Yes	OBL
2. *Lemna minor*	5	No	OBL
3. *Alisma subcordatum*	3	No	OBL
4. *Leersia oryzoides*	3	No	OBL
5. *Galium concinnum*	2	No	FACU
6. *Phalaris arundinacea*	2	No	FACW
7. *Sagittaria latifolia*	2	No	OBL
8.			
9.			
10.			
	107	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 15A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	2.5Y 2.5/1	100					MK	
3-10	N 3/0	98	2.5Y 4/3	2	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☑ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☑ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes Depth (inches): <60

Water Table Present? Yes Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes Depth (inches): 0

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/22/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 16A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81324 Long: -91.06825 Datum: NAD 83

Soil Map Unit Name: See Remarks NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet shrubland.
NRCS mapped as Wabash SIC, 0-2% slopes, rarely flooded; revised to Aquent

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Cephalanthus occidentalis*	65	Yes	OBL
2. *Acer saccharinum*	2	No	FACW
3.			
4.			
5.			
	67	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Leersia oryzoides*	60	Yes	OBL
2. *Sparganium eurycarpum*	15	No	OBL
3. *Cephalanthus occidentalis*	10	No	OBL
4. *Persicaria amphibia*	10	No	OBL
5. *Sium suave*	5	No	OBL
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)
Prevalence Index = B/A =			

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 16A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	5Y 3/1	98	2.5Y 4/3	2	C	M	MKSIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☑ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes Depth (inches): <2

Water Table Present? Yes Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes Depth (inches): 0

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/22/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 17A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81369 Long: -91.06652 Datum: NAD 83

Soil Map Unit Name: Wabash SIC, 0-2% slopes, rarely flooded NWI classification: U

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 17A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	92	10YR 4/4	8	C	M	SICL	
6-12	10YR 3/1	95	10YR 4/4	5	C	M	SIC	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☑ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? Yes

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/22/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 18A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81449 Long: -91.06502 Datum: NAD 83

Soil Map Unit Name: Sawmill SICL, undrained, 0-2% slopes, frequently flooded NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	40	Yes	FACW
2. *Geum canadense*	20	Yes	FAC
3. *Urtica gracilis*	15	No	FACW
4. *Eupatorium serotinum*	10	No	FAC
5. *Lycopus americanus*	2	No	OBL
6. *Penstemon digitalis*	2	No	FAC
7. *Persicaria amphibia*	2	No	OBL
8. *Solidago canadensis*	1	No	FACU
9.			
10.			
	92	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☑ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 18A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	92	10YR 4/4	8	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/22/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 18B

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Upland Local relief (concave, convex, none): None

Slope (%): 0 Lat: 40.81453 Long: -91.06405 Datum: NAD 83

Soil Map Unit Name: See Remarks NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is upland forest.
NRCS mapped as Sawmill SICL, undrained, 0-2% slopes, frequently flooded; revised to Orthent

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus lanceolata*	40	Yes	FACW
2. *Populus deltoides*	15	Yes	FAC
3. *Salix nigra*	10	No	OBL
4.			
5.			
	65	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Fraxinus lanceolata*	10	Yes	FACW
2.			
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Fraxinus lanceolata*	50	Yes	FACW
2. *Urtica gracilis*	15	No	FACW
3. *Geum canadense*	10	No	FAC
4. *Phalaris arundinacea*	10	No	FACW
5. *Carex vulpinoidea*	5	No	FACW
6. *Lycopus americanus*	5	No	OBL
7. *Carex cristatella*	3	No	FACW
8.			
9.			
10.			
	98	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☑ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)
Green ash (Fraxinus lanceolata) trees are dead/dying presumably due to the ash borer.

SOIL

Sampling Point: 18B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/2	100					S	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/22/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 18C

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81400 Long: -91.06476 Datum: NAD 83

Soil Map Unit Name: Sawmill SICL, undrained, 0-2% slopes, frequently flooded NWI classification: PEM1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is marsh.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	75	Yes	OBL
2. *Sagittaria latifolia*	20	Yes	OBL
3. *Carex stipata*	5	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 18C

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	N 3/0	98	10YR 4/4	2	C	M	MKSIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☑ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☑ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes Depth (inches): <1

Water Table Present? Yes Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes Depth (inches): 0

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/21/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 19A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81748 Long: -91.06426 Datum: NAD 83

Soil Map Unit Name: Fluvaquents, 0-2% slopes, frequently flooded, long duration NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet floodplain forest.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus lanceolata*	20	Yes	FACW
2. *Acer saccharinum*	15	Yes	FACW
3. *Populus deltoides*	5	No	FAC
4. *Salix interior*	3	No	FACW
5. *Betula nigra*	2	No	FACW
	45	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Betula nigra*	50	Yes	FACW
2. *Acer saccharinum*	25	Yes	FACW
3.			
4.			
5.			
	75	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Acer saccharinum*	10	Yes	FACW
2. *Fraxinus lanceolata*	10	Yes	FACW
3. *Betula alleghaniensis*	5	Yes	FAC
4. *Carex stricta*	5	Yes	OBL
5. *Phalaris arundinacea*	5	Yes	FACW
6. *Urtica gracilis*	5	Yes	FACW
7.			
8.			
9.			
10.			
	40	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 10 (A)

Total Number of Dominant Species Across All Strata: 10 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☑ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 19A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	2.5Y 3/1	95	10YR 4/4	5	C	M	SICL	
4-10	2.5Y 4/1	95	10YR 4/4	5	C	M	SICL	
10-14	N 4/0	95	10YR 4/4	5	C	M	SICL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☑ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/21/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 20A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Excavated depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81608 Long: -91.06221 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Water NWI classification: PUBGh

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	
Hydric Soil Present?	**Is the Sampled Area within a Wetland?** **No**
Wetland Hydrology Present?	

Remarks: Community type is deepwater aquatic habitat.
This site is a deepwater aquatic habitat with an average water depth greater than 2 m. According to the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) it is therefore not a wetland and the remaining fields on this form are not appropriate to describe this site.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: (A)

Total Number of Dominant Species Across All Strata: (B)

Percent of Dominant Species That are OBL, FACW, or FAC: (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals (A)	(B)	

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☐ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 20A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/21/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 21A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81620 Long: -91.06100 Datum: NAD 83

Soil Map Unit Name: Fluvaquents, 0-2% slopes, frequently flooded, long duration NWI classification: PFO1A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet floodplain forest.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	40	Yes	FACW
2. *Populus deltoides*	10	No	FAC
3. *Morus alba*	5	No	FAC
4.			
5.			
	55	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Fraxinus lanceolata*	5	Yes	FACW
2. *Cephalanthus occidentalis*	2	Yes	OBL
3.			
4.			
5.			
	7	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	40	Yes	FACW
2. *Urtica gracilis*	25	Yes	FACW
3. *Anemone canadensis*	20	No	FACW
4. *Fraxinus lanceolata*	10	No	FACW
5. *Rubus occidentalis*	5	No	UPL
6. *Solidago canadensis*	5	No	FACU
7. *Vitis riparia*	5	No	FACW
8.			
9.			
10.			
	110	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 21A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	98	10YR 4/4	2	C	M	CL	
6-12	10YR 4/2	95	10YR 4/4	5	C	M	LS	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/21/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 22A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 34, T10N, R6W

Landform (hillslope, terrace, etc.): Depression on floodplain Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.81668 Long: -91.06040 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Orthents, loamy, undulating; revised to Aquoll NWI classification: PEM1A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet shrubland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Acer negundo*	25	Yes	FAC
2. *Fraxinus lanceolata*	15	Yes	FACW
3. *Acer saccharinum*	10	Yes	FACW
4.			
5.			
	50	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Acer negundo*	5	Yes	FAC
2. *Fraxinus lanceolata*	5	Yes	FACW
3. *Phalaris arundinacea*	5	Yes	FACW
4. *Urtica gracilis*	3	No	FACW
5. *Anemone canadensis*	2	No	FACW
6. *Vitis riparia*	2	No	FACW
7.			
8.			
9.			
10.			
	22	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☑ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 22A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	97	10YR 4/4	3	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☑ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/22/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 23A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 31, T10N, R5W

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex

Slope (%): < 5 Lat: 40.81640 Long: -91.01143 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Dickinson SL, 0-2% slopes; revised to Orthent NWI classification: PEM1Cx

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No , Soil No , or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No , Soil No , or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	No	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is forbland.
This point was taken at the junction of R4SBCx and PEMC1x, north of US 34, on the bank of the stream.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Nepeta cataria*	30	Yes	FACU
2. *Ageratina altissima*	15	Yes	FACU
3. *Phalaris arundinacea*	15	Yes	FACW
4. *Ptelea trifoliata*	15	Yes	FACU
5. *Bromus inermis*	10	No	FACU
6. *Impatiens capensis*	10	No	FACW
7. *Lactuca serriola*	3	No	FACU
8.			
9.			
10.			
	98 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☐ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **No**

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation sampling taken on the bank of the stream.

SOIL

Sampling Point: 23A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100					SL	
6-13	10YR 4/2	100					SL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/21/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 24A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 29, T10N, R5W

Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): None

Slope (%): 0 Lat: 40.83518 Long: -90.99747 Datum: NAD 83

Soil Map Unit Name: Sawmill SICL, 0-2% slopes, rarely flooded NWI classification: U

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Leersia oryzoides*	55	Yes	OBL
2. *Sparganium eurycarpum*	30	Yes	OBL
3. *Eleocharis ovata var. obtusa*	15	No	OBL
4. *Schoenoplectus tabernaemontani*	5	No	OBL
5. *Alisma subcordatum*	1	No	OBL
6.			
7.			
8.			
9.			
10.			
	106	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 24A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-13	N 2.5/0	92	7.5YR 4/4	5	C	M, PL	SIC	
0-13			10YR 4/4	3	C	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☑ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☑ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? Yes

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Lemna (duckweed) present on the top of soil.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/21/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 25A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 29, T10N, R5W

Landform (hillslope, terrace, etc.): Depression on floodplain Local relief (concave, convex, none): Concave

Slope (%): < 1 Lat: 40.83570 Long: -90.99697 Datum: NAD 83

Soil Map Unit Name: See Remarks NWI classification: U

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet shrubland.
NRCS mapped as Sawmill SICL, undrained, 0-2% slopes, frequently flooded; revised to Aquent

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Salix interior*	60	Yes	FACW
2.			
3.			
4.			
5.			
	60	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	45	Yes	FACW
2. *Urtica gracilis*	15	Yes	FACW
3. *Impatiens capensis*	10	No	FACW
4. *Salix interior*	10	No	FACW
5. *Bolboschoenus fluviatilis*	5	No	OBL
6. *Carex comosa*	5	No	OBL
7. *Ranunculus sceleratus*	5	No	OBL
8.			
9.			
10.			
	95	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: (A)

Total Number of Dominant Species Across All Strata: (B)

Percent of Dominant Species That are OBL, FACW, or FAC: (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- [x] 1-Rapid Test for Hydrophytic Vegetation
- [ ] 2-Dominance Test is >50%
- [ ] 3-Prevalence Index is < or =3.0[1]
- [ ] 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 25A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/1	98	10YR 4/4	2	C	M	SIL	
3-9	2.5Y 4/2	100					SL	
9-14	10YR 3/1	98	10YR 4/4	2	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? Yes

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/21/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 26A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 20, T10N, R5W

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex

Slope (%): < 3 Lat: 40.84477 Long: -90.98471 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Coloma sand, 7-15% slopes NWI classification: PFO1A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	No	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is upland forest.
This point was taken at the junction of R2UBHx and PFO1A, on the bank of the stream.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Morus alba*	35	Yes	FAC
2. *Juglans nigra*	30	Yes	FACU
3. *Celtis occidentalis*	15	No	FAC
4.			
5.			
	80	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Lonicera maackii*	45	Yes	UPL
2.			
3.			
4.			
5.			
	45	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Elymus virginicus*	20	Yes	FACW
2. *Aster sp.*	15	Yes	-
3. *Lonicera maackii*	15	Yes	UPL
4. *Toxicodendron radicans*	10	No	FAC
5. *Ambrosia trifida*	5	No	FAC
6. *Impatiens capensis*	3	No	FACW
7.			
8.			
9.			
10.			
	68	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 40% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☐ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **No**

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 26A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/3	100					SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: US 34 (FAP 313) City/County: Henderson Sampling Date 6/20/2017

Applicant/Owner: IDOT District 4 State: IL Sampling Point 27A

Investigator(s): Nieset, Tsai, and Handel Section, Township, Range: Sec. 14, T10N, R5W

Landform (hillslope, terrace, etc.): Upland Local relief (concave, convex, none): None

Slope (%): 0 Lat: 40.85111 Long: -90.93462 Datum: NAD 83

Soil Map Unit Name: NRCS mapped as Water; revised to Orthent NWI classification: PUBGh

Are climatic/hydrologic conditions on the site typical for this time of year? Yes (If no explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	No	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is non-native grassland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Bromus inermis*	40	Yes	FACU
2. *Phalaris arundinacea*	40	Yes	FACW
3. *Trifolium pratense*	15	No	FACU
4. *Ambrosia artemisiifolia*	2	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	97 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☐ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < or =3.0[1]
- ☐ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **No**

Remarks: (Include photo numbers here or on a separate sheet.)

Area recently mown.

SOIL

Sampling Point: 27A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					SIL	
3-7	10YR 5/4	100					SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two is required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

APPENDIX B

Wetland Plant Species Lists

Site 1 - Wet floodplain forest

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Cornus drummondii	**rough-leaved dogwood**	H**S**	**FAC**	**2**
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Populus deltoides	**eastern cottonwood**	HS**T**	**FAC**	**2**
Rubus occidentalis	**black raspberry**	**H**S	**UPL**	**2**
Solidago gigantea	**late goldenrod**	**H**	**FACW**	**3**
Acer negundo	box elder	HS	FAC	1
Acer saccharinum	silver maple	HS	FACW	1
Ambrosia artemisiifolia	common ragweed	H	FACU	0
Anemone canadensis	meadow anemone	H	FACW	4
Aster lanceolatus	panicled aster	H	FAC	3
Carex molesta	field oval sedge	H	FAC	2
Carex muskingumensis	swamp oval sedge	H	OBL	6
Carex stipata	common fox sedge	H	OBL	2
Celtis occidentalis	hackberry	HST	FAC	3
Elymus virginicus	Virginia wild rye	H	FACW	4
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	HST	FACW	2
Morus rubra	red mulberry	ST	FACU	4
Parthenocissus quinquefolia	Virginia creeper	HW	FACU	2
*Poa pratensis**	Kentucky blue grass	H	FAC	-
Sanicula odorata	clustered black snakeroot	H	FAC	2
Solidago canadensis	Canada goldenrod	H	FACU	1
Urtica gracilis	stinging nettle	H	FACW	2
Vitis riparia	riverbank grape	HW	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 2.3

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 10.9

Site 2 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Anemone canadensis	meadow anemone	H	FACW	4
Apocynum cannabinum	dogbane	H	FAC	2
Carex comosa	bristly sedge	H	OBL	6
Carex lupulina	common hop sedge	H	OBL	5
Carex lurida	bottlebrush sedge	H	OBL	7
Carex molesta	field oval sedge	H	FAC	2
Cephalanthus occidentalis	buttonbush	HS	OBL	4
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	HS	FACW	2
Impatiens capensis	spotted touch-me-not	H	FACW	2
Iris shrevei	southern blue flag	H	OBL	5
*Phalaris arundinacea**	reed canary grass	H	FACW	-
*Rumex crispus**	curly dock	H	FAC	-
Sagittaria latifolia	common arrowhead	H	OBL	4
Salix nigra	black willow	HST	OBL	3
Solidago canadensis	Canada goldenrod	H	FACU	1
Solidago gigantea	late goldenrod	H	FACW	3
Sparganium eurycarpum	common bur reed	H	OBL	5
*Typha angustifolia**	narrow-leaved cattail	H	OBL	-
Urtica gracilis	stinging nettle	H	FACW	2
Vitis riparia	riverbank grape	H	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 3.3

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 14.5

Site 3 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Typha angustifolia*	**narrow-leaved cattail**	**H**	**OBL**	**-**
Apocynum cannabinum	dogbane	H	FAC	2
Bolboschoenus fluviatilis	river bulrush	H	OBL	3
Carex comosa	bristly sedge	H	OBL	6
Carex lurida	bottlebrush sedge	H	OBL	7
Carex molesta	field oval sedge	H	FAC	2
Carex pellita	wooly sedge	H	OBL	4
Carex stipata	common fox sedge	H	OBL	2
Carex vulpinoidea	brown fox sedge	H	FACW	3
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	H	FACW	2
Impatiens capensis	spotted touch-me-not	H	FACW	2
Juncus effusus var. solutus	common rush	H	OBL	4
Persicaria amphibia	water knotweed	H	OBL	3
Persicaria lapathifolia	curttop lady's thumb	H	FACW	0
*Poa pratensis**	Kentucky blue grass	H	FAC	-
Populus deltoides	eastern cottonwood	HS	FAC	2
Quercus palustris	pin oak	HS	FACW	4
*Rumex crispus**	curly dock	H	FAC	-
Salix interior	sandbar willow	HS	FACW	1
Sambucus canadensis	common elder	S	FACW	2
Schoenoplectus tabernaemontani	soft-stem bulrush	H	OBL	4
Scirpus atrovirens	dark green rush	H	OBL	4
Scirpus pendulus	red bulrush	H	OBL	3
Solidago canadensis	Canada goldenrod	H	FACU	1
Solidago gigantea	late goldenrod	H	FACW	3
Toxicodendron radicans	poison ivy	H	FAC	1
Urtica gracilis	stinging nettle	H	FACW	2
Vernonia fasciculata	common ironweed	H	FACW	5

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 2.8

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 14.6

Site 4 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Typha angustifolia*	**narrow-leaved cattail**	**H**	**OBL**	**-**
Agrostis gigantea	red top	H	FACW	0
Asclepias incarnata	swamp milkweed	H	OBL	4
Carex molesta	field oval sedge	H	FAC	2
Carex stipata	common fox sedge	H	OBL	2
Carex stricta	common tussock sedge	H	OBL	5
Carex vulpinoidea	brown fox sedge	H	FACW	3
*Dipsacus laciniatus**	cut-leaved teasel	H	UPL	-
Eleocharis erythropoda	red-rooted spike rush	H	OBL	3
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	HS	FACW	2
*Hordeum jubatum**	squirrel-tail grass	H	FAC	-
Juncus dudleyi	Dudley's rush	H	FACW	4
Juncus tenuis	path rush	H	FAC	0
Lycopus americanus	common water horehound	H	OBL	3
*Lythrum salicaria**	purple loosestrife	H	OBL	-
Persicaria amphibia	water knotweed	H	OBL	3
*Poa pratensis**	Kentucky blue grass	H	FAC	-
Populus deltoides	eastern cottonwood	HS	FAC	2
*Rumex crispus**	curly dock	H	FAC	-
Salix interior	sandbar willow	HS	FACW	1
Scirpus atrovirens	dark green rush	H	OBL	4
Scirpus pendulus	red bulrush	H	OBL	3
Solidago canadensis	Canada goldenrod	H	FACU	1
Solidago gigantea	late goldenrod	H	FACW	3
Ulmus rubra	slippery elm	S	FAC	3

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 2.5

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 11.0

Site 5 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Agrostis gigantea	red top	H	FACW	0
Ambrosia artemisiifolia	common ragweed	H	FACU	0
Anemone canadensis	meadow anemone	H	FACW	4
Asclepias incarnata	swamp milkweed	H	OBL	4
Carex frankii	bristly cattail sedge	H	OBL	4
Carex molesta	field oval sedge	H	FAC	2
Carex stricta	common tussock sedge	H	OBL	5
Carex vulpinoidea	brown fox sedge	H	FACW	3
Dichanthelium acuminatum	panic grass	H	FAC	0
Eleocharis erythropoda	red-rooted spike rush	H	OBL	3
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	HS	FACW	2
*Hordeum jubatum**	squirrel-tail grass	H	FAC	-
Juncus anthelatus	path rush	H	FACW	-
Leersia oryzoides	rice cut grass	H	OBL	3
Persicaria amphibia	water knotweed	H	OBL	3
Populus deltoides	eastern cottonwood	HS	FAC	2
*Rumex crispus**	curly dock	H	FAC	-
Salix interior	sandbar willow	HS	FACW	1
Scirpus atrovirens	dark green rush	H	OBL	4
Scirpus pendulus	red bulrush	H	OBL	3
Solidago canadensis	Canada goldenrod	H	FACU	1
Solidago gigantea	late goldenrod	H	FACW	3
*Typha angustifolia**	narrow-leaved cattail	H	OBL	-

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 2.4

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 10.7

Site 6 - Wet shrubland

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Bolboschoenus fluviatilis	**river bulrush**	**H**	**OBL**	**3**
Cephalanthus occidentalis	**buttonbush**	**HS**	**OBL**	**4**
Persicaria amphibia	**water knotweed**	**H**	**OBL**	**3**
Acer saccharinum	silver maple	HS	FACW	1
Carex vulpinoidea	brown fox sedge	H	FACW	3
Fraxinus lanceolata	green ash	HS	FACW	2
Leersia oryzoides	rice cut grass	H	OBL	3
Lycopus americanus	common water horehound	H	OBL	3
Lythrum alatum	winged loosestrife	H	OBL	5
*Phalaris arundinacea**	reed canary grass	H	FACW	-
Rumex altissimus	pale dock	H	FACW	2
Sagittaria latifolia	common arrowhead	H	OBL	4
Salix nigra	black willow	ST	OBL	3
Sium suave	water parsnip	H	OBL	5
Solidago canadensis	Canada goldenrod	H	FACU	1
Stachys tenuifolia	smooth hedge nettle	H	OBL	5
Urtica gracilis	stinging nettle	H	FACW	2
Vitis riparia	riverbank grape	H	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 3.0

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 12.4

Site 7 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Bolboschoenus fluviatilis	**river bulrush**	**H**	**OBL**	**3**
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Typha angustifolia*	**narrow-leaved cattail**	**H**	**OBL**	**-**
Acer saccharinum	silver maple	HS	FACW	1
Anemone canadensis	meadow anemone	H	FACW	4
Carex comosa	bristly sedge	H	OBL	6
Carex molesta	field oval sedge	H	FAC	2
Carex stricta	common tussock sedge	H	OBL	5
Carex vulpinoidea	brown fox sedge	H	FACW	3
Cephalanthus occidentalis	buttonbush	HS	OBL	4
Erigeron annuus	annual fleabane	H	FACU	1
Eupatorium perfoliatum	common boneset	H	OBL	4
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	HS	FACW	2
Juncus torreyi	Torrey's rush	H	FACW	3
Lemna minor	small duckweed	H	OBL	3
Lycopus americanus	common water horehound	H	OBL	3
Persicaria amphibia	water knotweed	H	OBL	3
*Phalaris arundinacea**	reed canary grass	H	FACW	-
Rubus occidentalis	black raspberry	H	UPL	2
*Rumex crispus**	curly dock	H	FAC	-
Sagittaria latifolia	common arrowhead	H	OBL	4
Salix interior	sandbar willow	HST	FACW	1
Salix nigra	black willow	T	OBL	3
Solidago canadensis	Canada goldenrod	H	FACU	1
Sparganium eurycarpum	common bur reed	H	OBL	5
Urtica gracilis	stinging nettle	H	FACW	2
Vitis riparia	riverbank grape	H	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 2.8

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 14.2

Site 9 - Wet meadow/Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Bolboschoenus fluviatilis	**river bulrush**	**H**	**OBL**	**3**
Carex tribuloides	**awl-fruited oval sedge**	**H**	**OBL**	**3**
Eleocharis erythropoda	**red-rooted spike rush**	**H**	**OBL**	**3**
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Typha angustifolia*	**narrow-leaved cattail**	**H**	**OBL**	**-**
Acer saccharinum	silver maple	HS	FACW	1
Asclepias incarnata	swamp milkweed	H	OBL	4
Betula nigra	river birch	S	FACW	4
Carex lupulina	common hop sedge	H	OBL	5
Carex molesta	field oval sedge	H	FAC	2
Cephalanthus occidentalis	buttonbush	HS	OBL	4
Fraxinus lanceolata	green ash	H	FACW	2
Galium concinnum	shining bedstraw	H	FACU	4
Juncus acuminatus	sharp-fruited rush	H	OBL	4
Juncus effusus var. solutus	common rush	H	OBL	4
Juncus torreyi	Torrey's rush	H	FACW	3
Leersia oryzoides	rice cut grass	H	OBL	3
*Lotus corniculatus**	birdsfoot trefoil	H	FACU	-
Lycopus americanus	common water horehound	H	OBL	3
Lythrum alatum	winged loosestrife	H	OBL	5
Nuphar advena	pond lily	H	OBL	6
Persicaria amphibia	water knotweed	H	OBL	3
*Persicaria hydropiper**	water pepper	H	OBL	-
Persicaria lapathifolia	curttop lady's thumb	H	FACW	0
Persicaria pensylvanica	pinkweed	H	FACW	1
Sagittaria latifolia	common arrowhead	H	OBL	4
Salix nigra	black willow	ST	OBL	3
Schoenoplectus pungens	chairmaker's rush	H	OBL	3
Schoenoplectus tabernaemontani	soft-stem bulrush	H	OBL	4
Sium suave	water parsnip	H	OBL	5
Spartina pectinata	prairie cord grass	H	FACW	4
*Ulmus pumila**	Siberian elm	S	UPL	-

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 3.3

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 17.3

Site 12 - Wet floodplain forest

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Populus deltoides	**eastern cottonwood**	HS**T**	**FAC**	**2**
Acer saccharinum	silver maple	HST	FACW	1
Anemone canadensis	meadow anemone	H	FACW	4
Aster lanceolatus	panicled aster	H	FAC	3
Aster ontarionis	Ontario aster	H	FAC	4
Betula nigra	river birch	HST	FACW	4
Carex grayi	common bur sedge	H	FACW	6
Carex molesta	field oval sedge	H	FAC	2
Carex muskingumensis	swamp oval sedge	H	OBL	6
Carex vulpinoidea	brown fox sedge	H	FACW	3
Cornus drummondii	rough-leaved dogwood	HS	FAC	2
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	HST	FACW	2
Geum canadense	white avens	H	FAC	2
Impatiens capensis	spotted touch-me-not	H	FACW	2
*Morus alba**	white mulberry	ST	FAC	-
Salix nigra	black willow	T	OBL	3
Sambucus canadensis	common elder	HS	FACW	2
Sanicula odorata	clustered black snakeroot	H	FAC	2
Teucrium canadense	germander	H	FACW	3
Toxicodendron radicans	poison ivy	H	FAC	1
Urtica gracilis	stinging nettle	H	FACW	2
Vitis riparia	riverbank grape	HW	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 2.7

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 12.6

Site 13 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Amorpha fruticosa	false indigo bush	S	FACW	6
Anemone canadensis	meadow anemone	H	FACW	4
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias incarnata	swamp milkweed	H	OBL	4
Bolboschoenus fluviatilis	river bulrush	H	OBL	3
Carex vulpinoidea	brown fox sedge	H	FACW	3
Fraxinus lanceolata	green ash	HS	FACW	2
Leersia oryzoides	rice cut grass	H	OBL	3
Lemna minor	small duckweed	H	OBL	3
Persicaria amphibia	water knotweed	H	OBL	3
Populus deltoides	eastern cottonwood	HST	FAC	2
Rubus occidentalis	black raspberry	H	UPL	2
Sagittaria latifolia	common arrowhead	H	OBL	4
Salix nigra	black willow	S	OBL	3
Solidago canadensis	Canada goldenrod	H	FACU	1
Sparganium eurycarpum	common bur reed	H	OBL	5
Toxicodendron radicans	poison ivy	H	FAC	1
*Typha angustifolia**	narrow-leaved cattail	H	OBL	-
Vitis riparia	riverbank grape	H	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 2.9

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 12.5

Site 14 - Wet shrubland

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Betula nigra	**river birch**	H**S**	**FACW**	**4**
Cephalanthus occidentalis	**buttonbush**	H**S**	**OBL**	**4**
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Salix interior	**sandbar willow**	H**S**	**FACW**	**1**
Salix nigra	**black willow**	H**S**	**OBL**	**3**
Acer saccharinum	silver maple	HST	FACW	1
Amorpha fruticosa	false indigo bush	S	FACW	6
Anemone canadensis	meadow anemone	H	FACW	4
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias incarnata	swamp milkweed	H	OBL	4
Bolboschoenus fluviatilis	river bulrush	H	OBL	3
Carex molesta	field oval sedge	H	FAC	2
Carex stipata	common fox sedge	H	OBL	2
Carex vulpinoidea	brown fox sedge	H	FACW	3
Cornus drummondii	rough-leaved dogwood	HS	FAC	2
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	ST	FACW	2
Galium concinnum	shining bedstraw	H	FACU	4
Geum canadense	white avens	H	FAC	2
Persicaria amphibia	water knotweed	H	OBL	3
Populus deltoides	eastern cottonwood	HS	FAC	2
Rubus occidentalis	black raspberry	H	UPL	2
Sagittaria latifolia	common arrowhead	H	OBL	4
Stachys tenuifolia	smooth hedge nettle	H	OBL	5
Teucrium canadense	germander	H	FACW	3
*Typha angustifolia**	narrow-leaved cattail	H	OBL	-
Urtica gracilis	stinging nettle	H	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 2.8

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 14.2

Site 15 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Typha angustifolia*	**narrow-leaved cattail**	**H**	**OBL**	**-**
Acer saccharinum	silver maple	HS	FACW	1
Alisma subcordatum	common water plantain	H	OBL	2
Amorpha fruticosa	false indigo bush	H	FACW	6
Anemone canadensis	meadow anemone	H	FACW	4
Apocynum cannabinum	dogbane	H	FAC	2
Carex molesta	field oval sedge	H	FAC	2
Carex vulpinoidea	brown fox sedge	H	FACW	3
Cornus drummondii	rough-leaved dogwood	H	FAC	2
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	HS	FACW	2
Galium concinnum	shining bedstraw	H	FACU	4
*Glechoma hederacea**	ground ivy	H	FACU	-
Leersia oryzoides	rice cut grass	H	OBL	3
Lemna minor	small duckweed	H	OBL	3
Persicaria amphibia	water knotweed	H	OBL	3
*Phalaris arundinacea**	reed canary grass	H	FACW	-
Populus deltoides	eastern cottonwood	H	FAC	2
Sagittaria latifolia	common arrowhead	H	OBL	4
Sparganium eurycarpum	common bur reed	H	OBL	5
Stachys tenuifolia	smooth hedge nettle	H	OBL	5

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 3.0

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 12.7

Site 16 - Wet shrubland

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Cephalanthus occidentalis	**buttonbush**	H**S**	**OBL**	**4**
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Acer saccharinum	silver maple	HST	FACW	1
Anemone canadensis	meadow anemone	H	FACW	4
Apios americana	ground nut	H	FACW	3
Asclepias incarnata	swamp milkweed	H	OBL	4
Carex comosa	bristly sedge	H	OBL	6
Carex haydenii	long-scaled tussock sedge	H	OBL	7
Carex molesta	field oval sedge	H	FAC	2
Carex stipata	common fox sedge	H	OBL	2
Carex vulpinoidea	brown fox sedge	H	FACW	3
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	HS	FACW	2
Galium concinnum	shining bedstraw	H	FACU	4
Persicaria amphibia	water knotweed	H	OBL	3
*Phalaris arundinacea**	reed canary grass	H	FACW	-
Sagittaria latifolia	common arrowhead	H	OBL	4
Salix nigra	black willow	T	OBL	3
Sium suave	water parsnip	H	OBL	5
Sparganium eurycarpum	common bur reed	H	OBL	5
Stachys tenuifolia	smooth hedge nettle	H	OBL	5
Urtica gracilis	stinging nettle	H	FACW	2
Vitis riparia	riverbank grape	H	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 3.4

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 16.0

Site 17 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Amaranthus tuberculatus	tall waterhemp	H	OBL	1
Ampelamus albidus	blue vine	H	FAC	1
Anemone canadensis	meadow anemone	H	FACW	4
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias incarnata	swamp milkweed	H	OBL	4
Bolboschoenus fluviatilis	river bulrush	H	OBL	3
Carex comosa	bristly sedge	H	OBL	6
Carex molesta	field oval sedge	H	FAC	2
Carex stipata	common fox sedge	H	OBL	2
Carex vulpinoidea	brown fox sedge	H	FACW	3
Chamaecrista fasciculata	golden cassia	H	FACU	1
Cyperus esculentus	field nut sedge	H	FACW	0
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	H	FACW	2
Juncus torreyi	Torrey's rush	H	FACW	3
Leersia oryzoides	rice cut grass	H	OBL	3
Lycopus americanus	common water horehound	H	OBL	3
Lythrum alatum	winged loosestrife	H	OBL	5
Persicaria amphibia	water knotweed	H	OBL	3
Persicaria pensylvanica	pinkweed	H	FACW	1
*Persicaria vulgaris**	lady's thumb	H	FACW	-
Phyla lanceolata	fog fruit	H	OBL	1
Sagittaria latifolia	common arrowhead	H	OBL	4
Sium suave	water parsnip	H	OBL	5
Toxicodendron radicans	poison ivy	H	FAC	1
Urtica gracilis	stinging nettle	H	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 2.5

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 12.6

Site 18 - Wet meadow/Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Typha angustifolia*	**narrow-leaved cattail**	**H**	**OBL**	**-**
Anemone canadensis	meadow anemone	H	FACW	4
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias incarnata	swamp milkweed	H	OBL	4
Bolboschoenus fluviatilis	river bulrush	H	OBL	3
Carex comosa	bristly sedge	H	OBL	6
Carex cristatella	crested oval sedge	H	FACW	3
Carex molesta	field oval sedge	H	FAC	2
Carex stipata	common fox sedge	H	OBL	2
Carex vulpinoidea	brown fox sedge	H	FACW	3
Cephalanthus occidentalis	buttonbush	H	OBL	4
Chamaecrista fasciculata	golden cassia	H	FACU	1
Cornus obliqua	pale dogwood	HS	FACW	4
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	HS	FACW	2
Geum canadense	white avens	H	FAC	2
Geum rivale	purple avens	H	OBL	10
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
Juncus acuminatus	sharp-fruited rush	H	OBL	4
Juncus torreyi	Torrey's rush	H	FACW	3
Leersia oryzoides	rice cut grass	H	OBL	3
Lemna minor	small duckweed	H	OBL	3
Lycopus americanus	common water horehound	H	OBL	3
Lythrum alatum	winged loosestrife	H	OBL	5
Penstemon digitalis	foxglove beard tongue	H	FAC	4
Persicaria amphibia	water knotweed	H	OBL	3
*Phalaris arundinacea**	reed canary grass	H	FACW	-
Sagittaria latifolia	common arrowhead	H	OBL	4
Schoenoplectus tabernaemontani	soft-stem bulrush	H	OBL	4
Scirpus atrovirens	dark green rush	H	OBL	4
Scirpus cyperinus	wool grass	H	OBL	5
Sium suave	water parsnip	H	OBL	5
Solidago canadensis	Canada goldenrod	H	FACU	1
Toxicodendron radicans	poison ivy	H	FAC	1
Urtica gracilis	stinging nettle	H	FACW	2
Vitis riparia	riverbank grape	H	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 3.3

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 19.0

Site 19 - Wet floodplain forest

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Acer saccharinum	**silver maple**	**HST**	**FACW**	**1**
Betula nigra	**river birch**	**HS**T	**FACW**	**4**
Fraxinus lanceolata	**green ash**	HS**T**	**FACW**	**2**
Populus deltoides	**eastern cottonwood**	HS**T**	**FAC**	**2**
Acer negundo	box elder	HST	FAC	1
Anemone canadensis	meadow anemone	H	FACW	4
Asclepias incarnata	swamp milkweed	H	OBL	4
Bolboschoenus fluviatilis	river bulrush	H	OBL	3
Carex comosa	bristly sedge	H	OBL	6
Carex molesta	field oval sedge	H	FAC	2
Carex stricta	common tussock sedge	H	OBL	5
Carex vulpinoidea	brown fox sedge	H	FACW	3
Cephalanthus occidentalis	buttonbush	HS	OBL	4
*Dipsacus fullonum**	common teasel	H	FACU	-
Impatiens capensis	spotted touch-me-not	H	FACW	2
Leersia oryzoides	rice cut grass	H	OBL	3
Lemna minor	small duckweed	H	OBL	3
*Lythrum salicaria**	purple loosestrife	H	OBL	-
Persicaria amphibia	water knotweed	H	OBL	3
*Phalaris arundinacea**	reed canary grass	H	FACW	-
*Poa pratensis**	Kentucky blue grass	H	FAC	-
Quercus palustris	pin oak	H	FACW	4
Rubus occidentalis	black raspberry	H	UPL	2
*Rumex crispus**	curly dock	H	FAC	-
Sagittaria latifolia	common arrowhead	H	OBL	4
Salix interior	sandbar willow	HST	FACW	1
Scirpus atrovirens	dark green rush	H	OBL	4
Stachys tenuifolia	smooth hedge nettle	H	OBL	5
Toxicodendron radicans	poison ivy	H	FAC	1
*Typha angustifolia**	narrow-leaved cattail	H	OBL	-
Urtica gracilis	stinging nettle	H	FACW	2
Vitis riparia	riverbank grape	HW	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 3.0

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 15.1

Site 21 - Wet floodplain forest

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Acer saccharinum	**silver maple**	HS**T**	**FACW**	**1**
Fraxinus lanceolata	**green ash**	**H**ST	**FACW**	**2**
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Urtica gracilis	**stinging nettle**	**H**	**FACW**	**2**
Acer negundo	box elder	HST	FAC	1
Anemone canadensis	meadow anemone	H	FACW	4
Carex comosa	bristly sedge	H	OBL	6
Carex emoryi	riverbank sedge	H	OBL	6
Carex lurida	bottlebrush sedge	H	OBL	7
Carex molesta	field oval sedge	H	FAC	2
Carex muskingumensis	swamp oval sedge	H	OBL	6
Carex stipata	common fox sedge	H	OBL	2
Carex vulpinoidea	brown fox sedge	H	FACW	3
Cephalanthus occidentalis	buttonbush	HS	OBL	4
Cornus obliqua	pale dogwood	HS	FACW	4
Leersia oryzoides	rice cut grass	H	OBL	3
Lycopus americanus	common water horehound	H	OBL	3
*Morus alba**	white mulberry	HST	FAC	-
Persicaria amphibia	water knotweed	H	OBL	3
Populus deltoides	eastern cottonwood	HST	FAC	2
Rubus occidentalis	black raspberry	H	UPL	2
*Rumex crispus**	curly dock	H	FAC	-
Sagittaria latifolia	common arrowhead	H	OBL	4
Sium suave	water parsnip	H	OBL	5
Solidago canadensis	Canada goldenrod	H	FACU	1
Stachys tenuifolia	smooth hedge nettle	H	OBL	5
Vitis riparia	riverbank grape	H	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 3.3

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 16.3

Site 22 - Wet shrubland

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Acer negundo	**box elder**	H**S**	**FAC**	**1**
Acer saccharinum	**silver maple**	H**S**	**FACW**	**1**
Fraxinus lanceolata	**green ash**	H**S**	**FACW**	**2**
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Anemone canadensis	meadow anemone	H	FACW	4
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias syriaca	common milkweed	H	FACU	0
Carex molesta	field oval sedge	H	FAC	2
Cephalanthus occidentalis	buttonbush	HS	OBL	4
*Festuca arundinacea**	tall fescue	H	FACU	-
*Pastinaca sativa**	wild parsnip	H	UPL	-
Persicaria amphibia	water knotweed	H	OBL	3
*Poa pratensis**	Kentucky blue grass	H	FAC	-
Rubus occidentalis	black raspberry	H	UPL	2
*Rumex crispus**	curly dock	H	FAC	-
Solidago canadensis	Canada goldenrod	H	FACU	1
Solidago gigantea	late goldenrod	H	FACW	3
Stachys tenuifolia	smooth hedge nettle	H	OBL	5
Teucrium canadense	germander	H	FACW	3
Urtica gracilis	stinging nettle	H	FACW	2
Vitis riparia	riverbank grape	HW	FACW	2

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 2.3

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 9.3

Site 24 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Eleocharis ovata var. obtusa	**blunt spike rush**	**H**	**OBL**	**2**
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Sparganium eurycarpum	**common bur reed**	**H**	**OBL**	**5**
Acer negundo	box elder	H	FAC	1
Alisma subcordatum	common water plantain	H	OBL	2
Ambrosia artemisiifolia	common ragweed	H	FACU	0
Asclepias incarnata	swamp milkweed	H	OBL	4
Bolboschoenus fluviatilis	river bulrush	H	OBL	3
Carex comosa	bristly sedge	H	OBL	6
Carex frankii	bristly cattail sedge	H	OBL	4
Carex lurida	bottlebrush sedge	H	OBL	7
Carex molesta	field oval sedge	H	FAC	2
Carex stipata	common fox sedge	H	OBL	2
Carex vulpinoidea	brown fox sedge	H	FACW	3
Cornus drummondii	rough-leaved dogwood	H	FAC	2
*Echinochloa crus-galli**	barnyard grass	H	FACW	-
Eupatorium perfoliatum	common boneset	H	OBL	4
Eupatorium serotinum	late boneset	H	FAC	1
Impatiens capensis	spotted touch-me-not	H	FACW	2
Lemna minor	small duckweed	H	OBL	3
Lobelia siphilitica	great blue lobelia	H	OBL	4
Persicaria amphibia	water knotweed	H	OBL	3
*Persicaria vulgaris**	lady's thumb	H	FACW	-
*Phalaris arundinacea**	reed canary grass	H	FACW	-
Phragmites australis	common reed	H	FACW	1
Ranunculus sceleratus	cursed crowfoot	H	OBL	3
*Rumex crispus**	curly dock	H	FAC	-
Sagittaria latifolia	common arrowhead	H	OBL	4
Salix interior	sandbar willow	H	FACW	1
Schoenoplectus tabernaemontani	soft-stem bulrush	H	OBL	4
Scirpus atrovirens	dark green rush	H	OBL	4
Solidago canadensis	Canada goldenrod	H	FACU	1
Spartina pectinata	prairie cord grass	H	FACW	4
Stachys tenuifolia	smooth hedge nettle	H	OBL	5
Ulmus americana	American elm	H	FACW	5
Urtica gracilis	stinging nettle	H	FACW	2
Vitis riparia	riverbank grape	H	FACW	2
Xanthium strumarium	cocklebur	H	FAC	0

*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 2.9

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 17.0

Site 25 - Wet shrubland

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Salix interior	**sandbar willow**	**HS**	**FACW**	**1**
Acer negundo	box elder	HS	FAC	1
Alisma subcordatum	common water plantain	H	OBL	2
Bolboschoenus fluviatilis	river bulrush	H	OBL	3
Carex comosa	bristly sedge	H	OBL	6
Carex frankii	bristly cattail sedge	H	OBL	4
Carex lurida	bottlebrush sedge	H	OBL	7
Carex molesta	field oval sedge	H	FAC	2
Carex stipata	common fox sedge	H	OBL	2
Carex vulpinoidea	brown fox sedge	H	FACW	3
Celtis occidentalis	hackberry	HS	FAC	3
Cornus drummondii	rough-leaved dogwood	HS	FAC	2
Cornus obliqua	pale dogwood	HS	FACW	4
*Echinochloa crus-galli**	barnyard grass	H	FACW	-
Eleocharis ovata var. obtusa	blunt spike rush	H	OBL	2
Eupatorium perfoliatum	common boneset	H	OBL	-
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	HS	FACW	2
Impatiens capensis	spotted touch-me-not	H	FACW	2
Leersia oryzoides	rice cut grass	H	OBL	3
Lemna minor	small duckweed	H	OBL	3
Lobelia siphilitica	great blue lobelia	H	OBL	4
Persicaria amphibia	water knotweed	H	OBL	3
*Persicaria vulgaris**	lady's thumb	H	FACW	-
Phragmites australis	common reed	H	FACW	1
Ranunculus sceleratus	cursed crowfoot	H	OBL	3
*Rumex crispus**	curly dock	H	FAC	-
Scirpus atrovirens	dark green rush	H	OBL	4
Solidago canadensis	Canada goldenrod	H	FACU	1
Sparganium eurycarpum	common bur reed	H	OBL	5
Spartina pectinata	prairie cord grass	H	FACW	4
Stachys tenuifolia	smooth hedge nettle	H	OBL	5
Toxicodendron radicans	poison ivy	H	FAC	1
Ulmus americana	American elm	HS	FACW	5
Urtica gracilis	stinging nettle	H	FACW	2
Vitis riparia	riverbank grape	HW	FACW	2

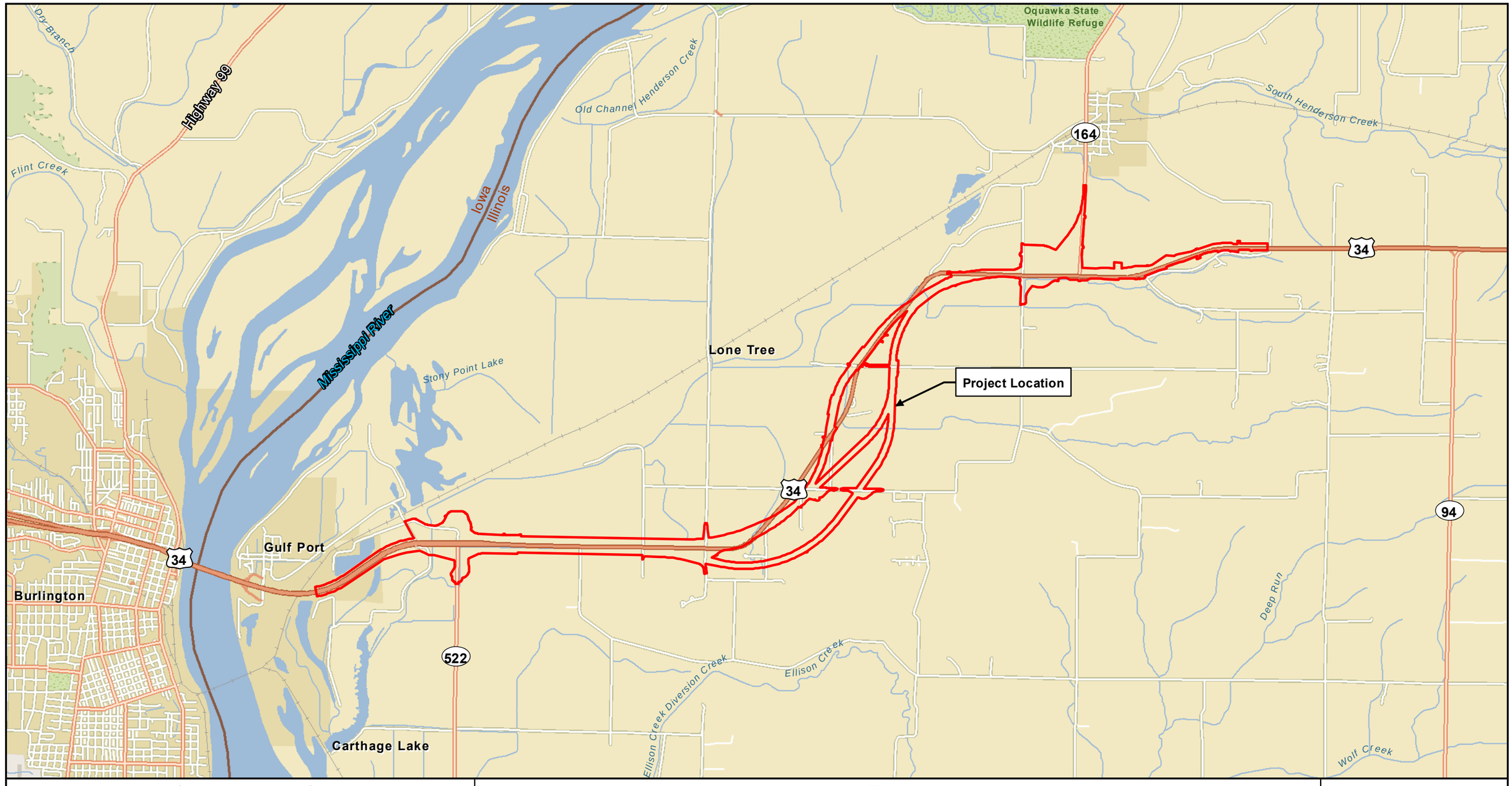
*Non-native species **Bolded species are dominant in the denoted stratum** Mean C = 2.9

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 16.4

APPENDIX C

Figures

Figure 1 – Project Location Map
Figure 2 – National Wetlands Inventory Maps
Figure 3 – Wetland Determination Overview Map
Figure 4 – Wetland Determination Maps



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Figure 1
Project Location Map
US 34 (FAP313)
Henderson County

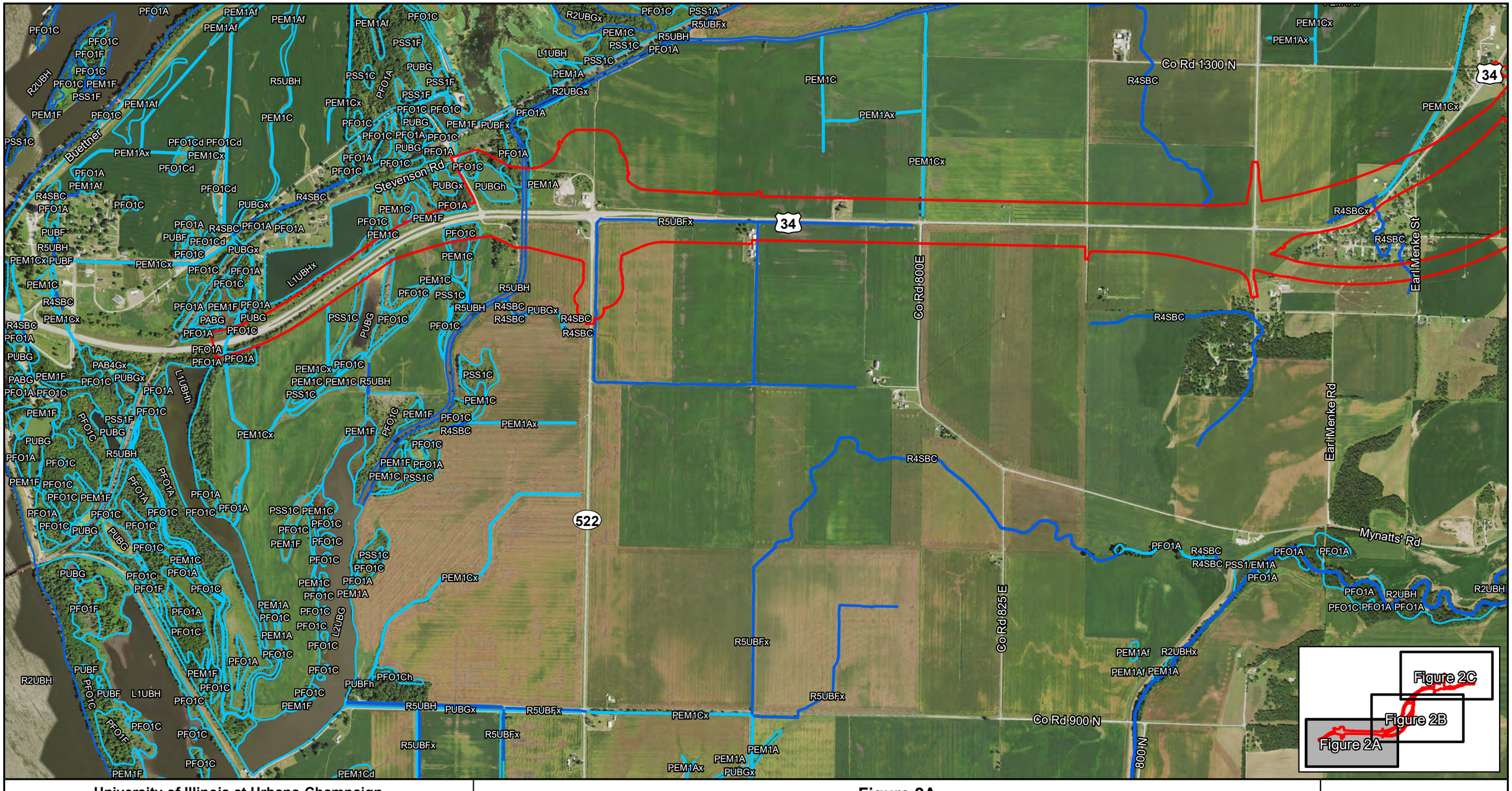
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Meters 0 750

Feet 0 3,000

September 2017

N W E S



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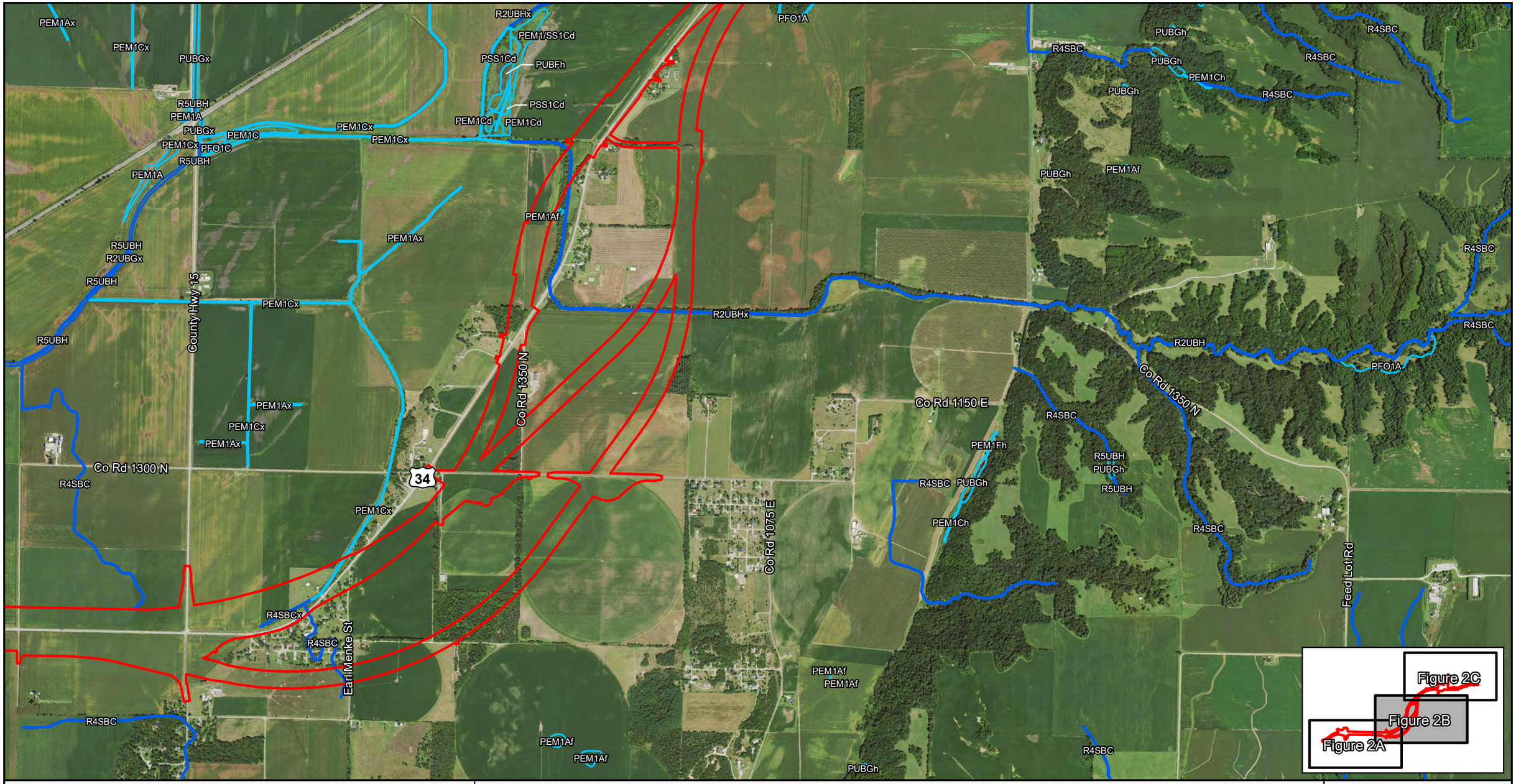
Figure 2A
National Wetlands Inventory Map
US 34 (FAP 313)
Henderson County

Seq. No: 238C

Meters 0 500

Feet 0 1,500

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Figure 2B
National Wetlands Inventory Map
US 34 (FAP 313)
Henderson County

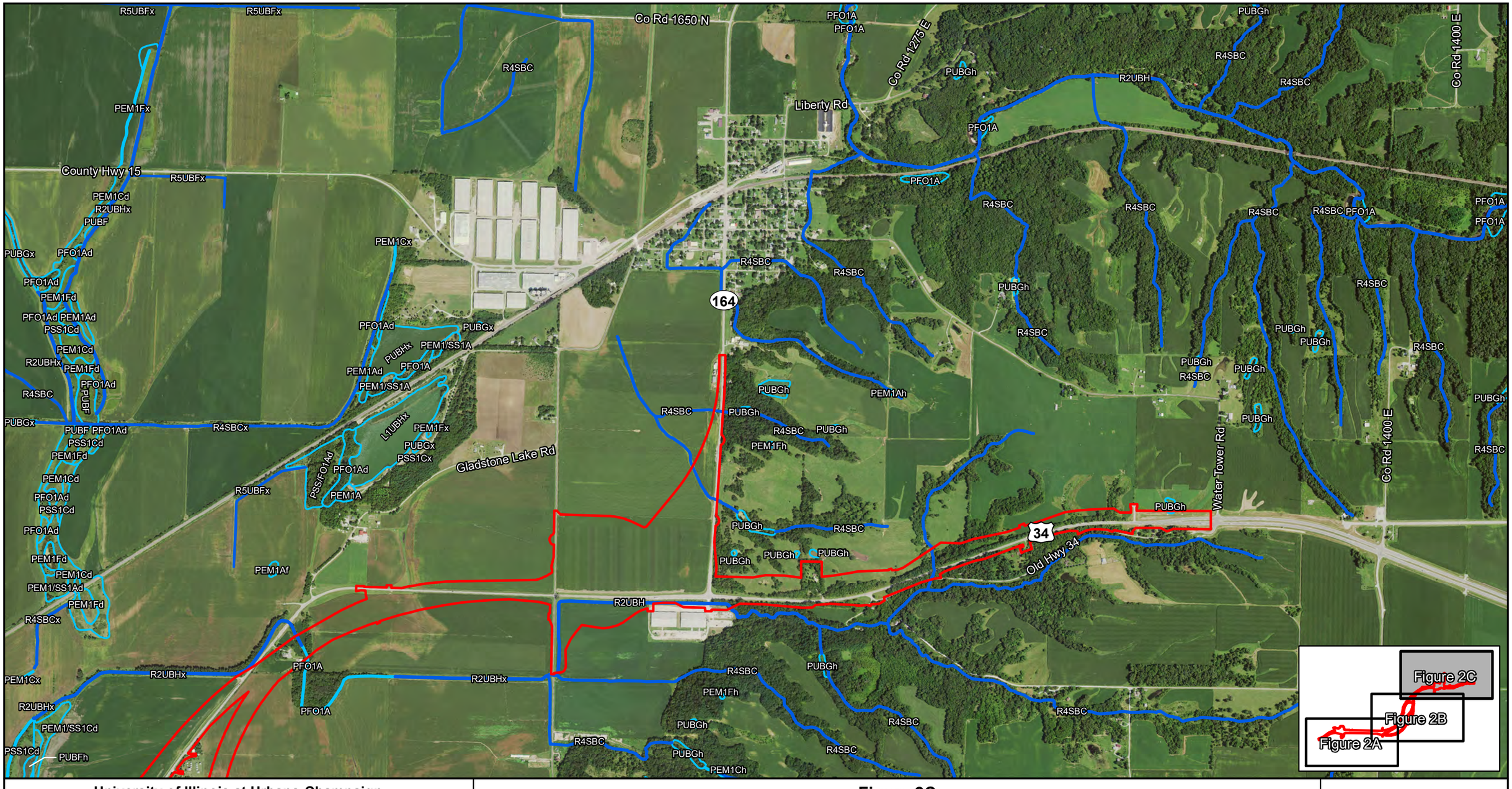
Seq. No: 238C

Meters 0 500

Feet 0 1,500

September 2017

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Figure 2C
National Wetlands Inventory Map
US 34 (FAP 313)
Henderson County

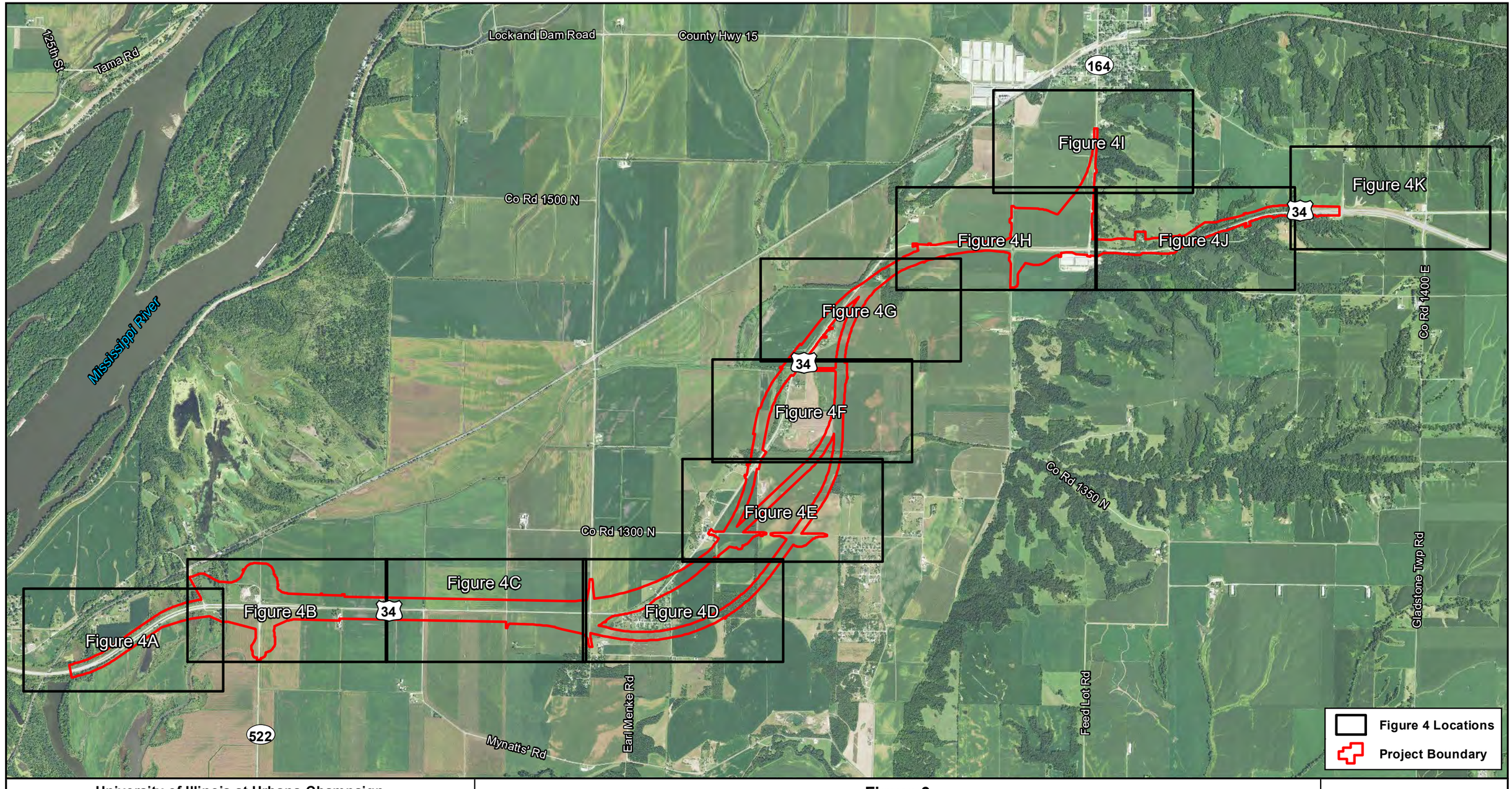
Seq. No: 238C

Meters 0 500

Feet 0 1,500

September 2017

N W E S



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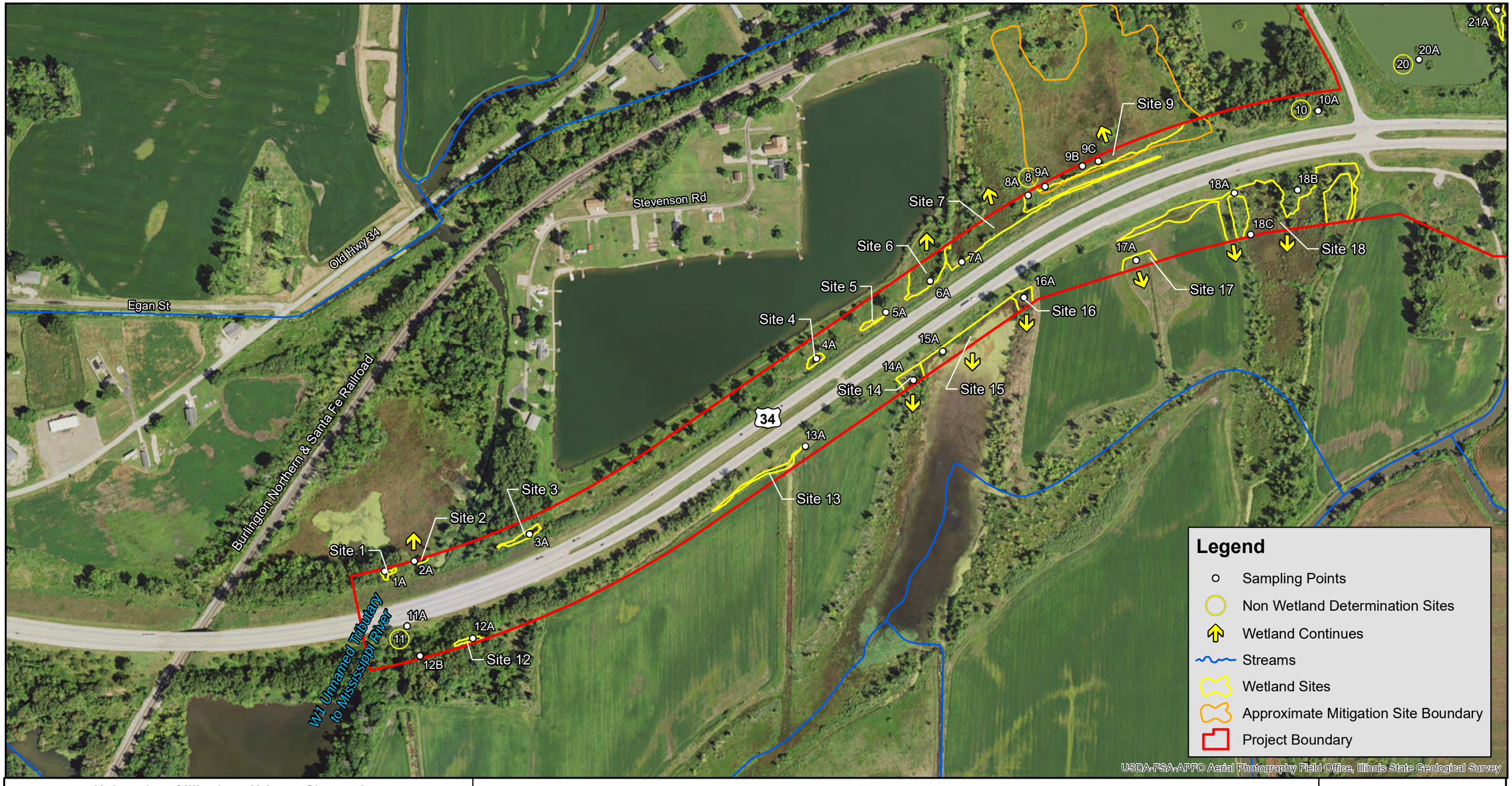
Figure 3
Wetland Determination Overview Map
US 34 (FAP 313)
Henderson County

Seq. No: 238C

Meters: 0 — 750
Feet: 0 — 3,000

September 2017

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Figure 4A
Wetland Determination Map
US 34 (FAP 313)
Henderson County

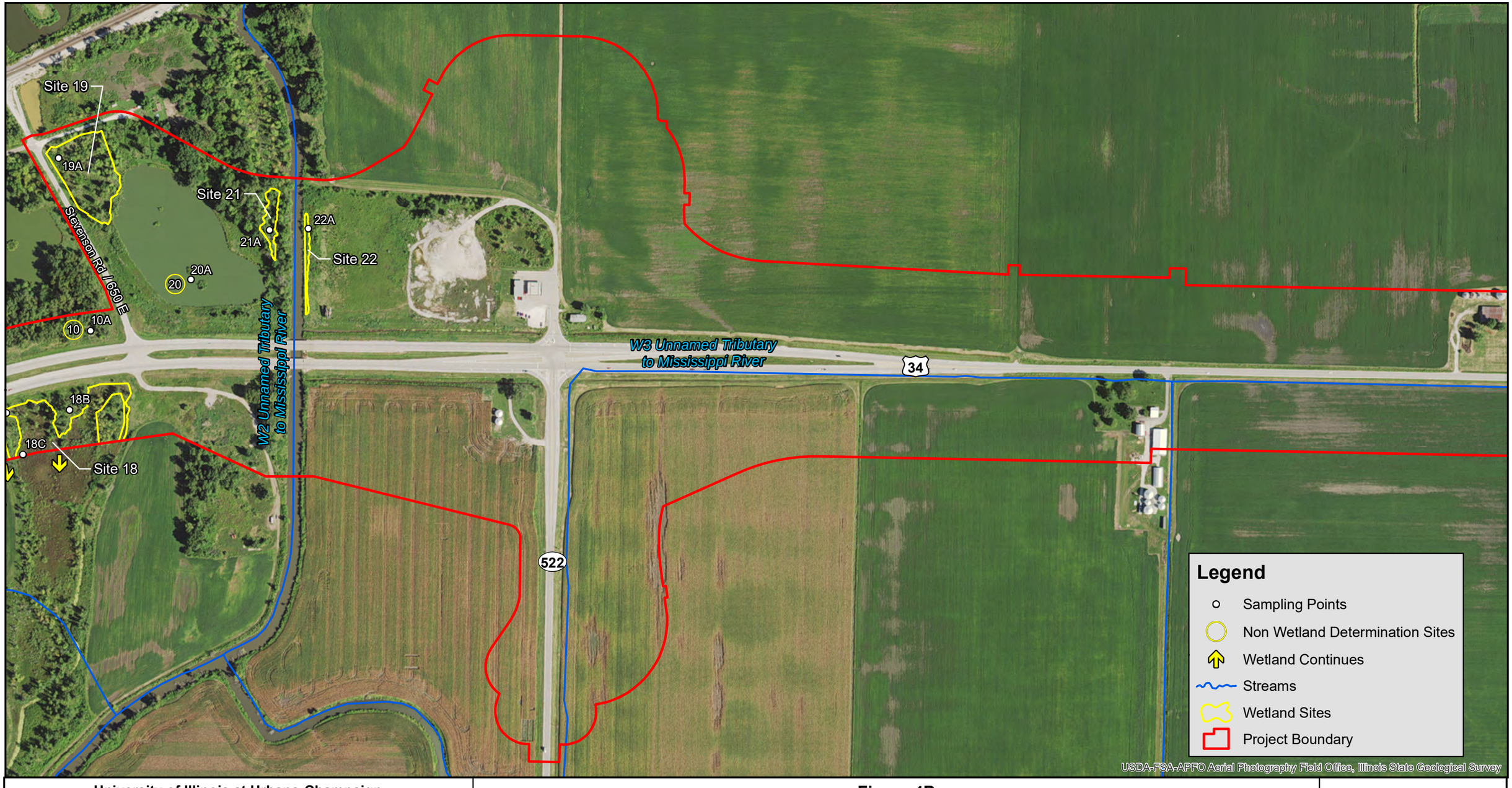
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Meters 0 100

Feet 0 400

September 2017

N W E S



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Wetland Science Program
1816 South Oak Street
Champaign, Illinois 61820

Figure 4B
Wetland Determination Map
US 34 (FAP 313)
Henderson County

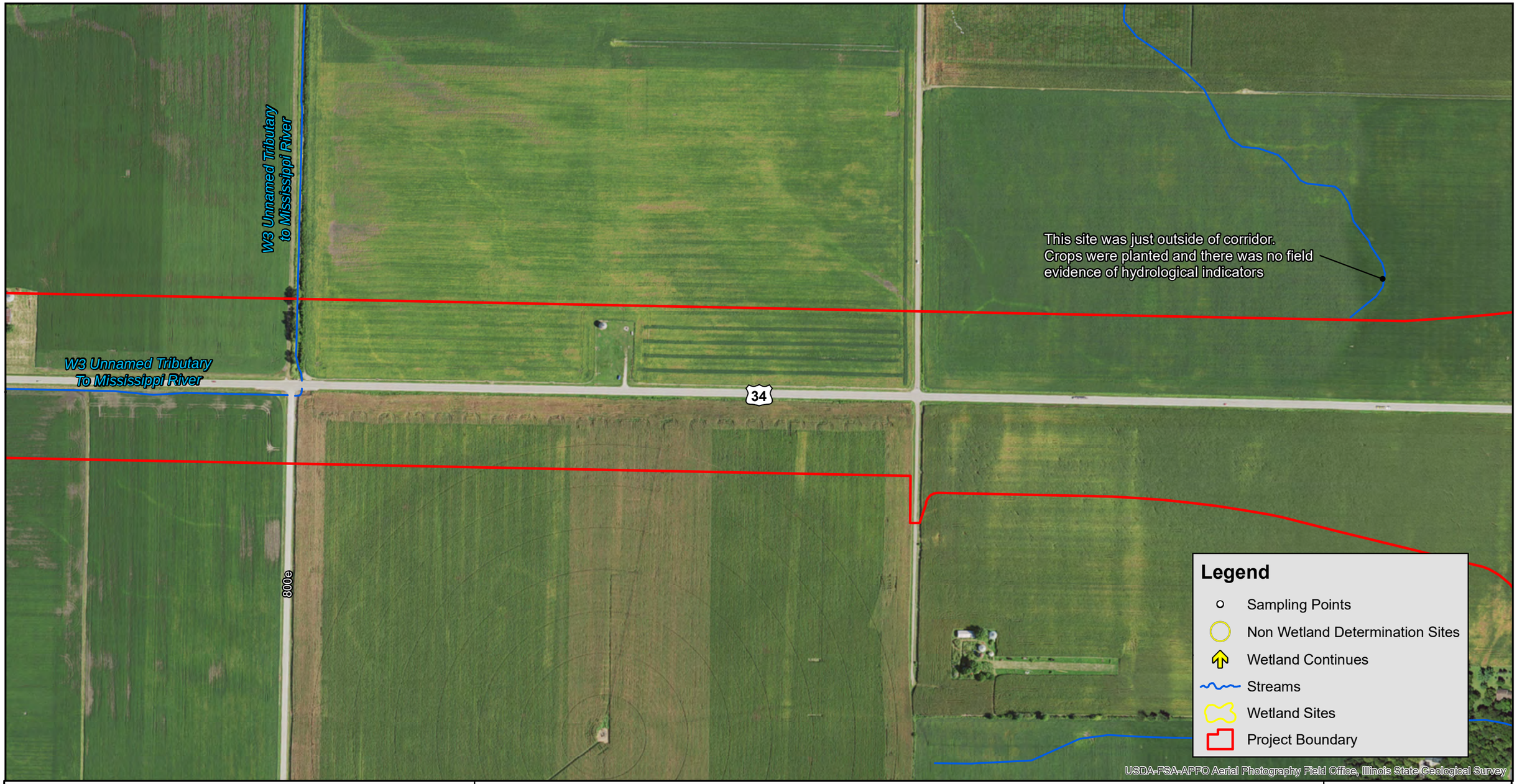
Seq. No: 238C

Meters 0 100

Feet 0 400

September 2017

N W E S



University of Illinois at Urbana-Champaign
ILLINOIS NATURAL HISTORY SURVEY
PRAIRIE RESEARCH INSTITUTE
Wetland Science Program
1816 South Oak Street
Champaign, Illinois 61820

Figure 4C
Wetland Determination Map
US 34 (FAP 313)
Henderson County

Seq. No: 238C

Meters 0 100

Feet 0 400

September 2017

N W E S



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Wetland Science Program
1816 South Oak Street
Champaign, Illinois 61820

Figure 4D
Wetland Determination Map
US 34 (FAP 313)
Henderson County

Seq. No: 238C

Meters 0 100

Feet 0 400

September 2017

N W E S



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Wetland Science Program
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Champaign, Illinois 61820

Figure 4E
Wetland Determination Map
US 34 (FAP 313)
Henderson County

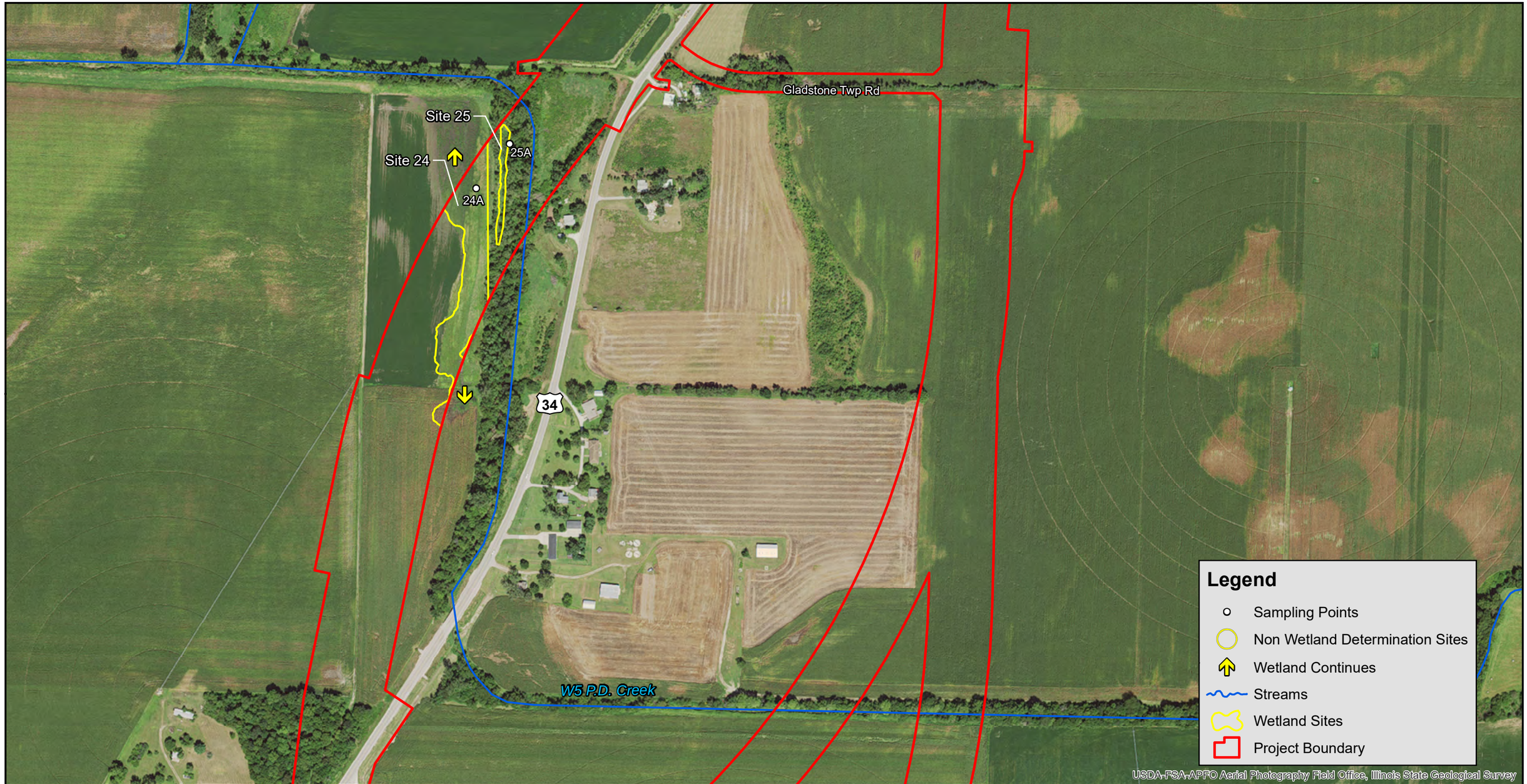
Seq. No: 238C

Meters 0 100

Feet 0 400

September 2017

N W E S



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Wetland Science Program
1816 South Oak Street
Champaign, Illinois 61820

Figure 4F
Wetland Determination Map
US 34 (FAP 313)
Henderson County

Seq. No: 238C

Meters 0 100

Feet 0 400

September 2017

N W E S



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ILLINOIS NATURAL HISTORY SURVEY
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Wetland Science Program
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Champaign, Illinois 61820

Figure 4G
Wetland Determination Map
US 34 (FAP 313)
Henderson County

Seq. No: 238C

Meters 0 100

Feet 0 400

September 2017

N W E S



University of Illinois at Urbana-Champaign

ILLINOIS NATURAL HISTORY SURVEY
PRAIRIE RESEARCH INSTITUTE

Wetland Science Program
1816 South Oak Street
Champaign, Illinois 61820

Figure 4H
Wetland Determination Map
US 34 (FAP 313)
Henderson County

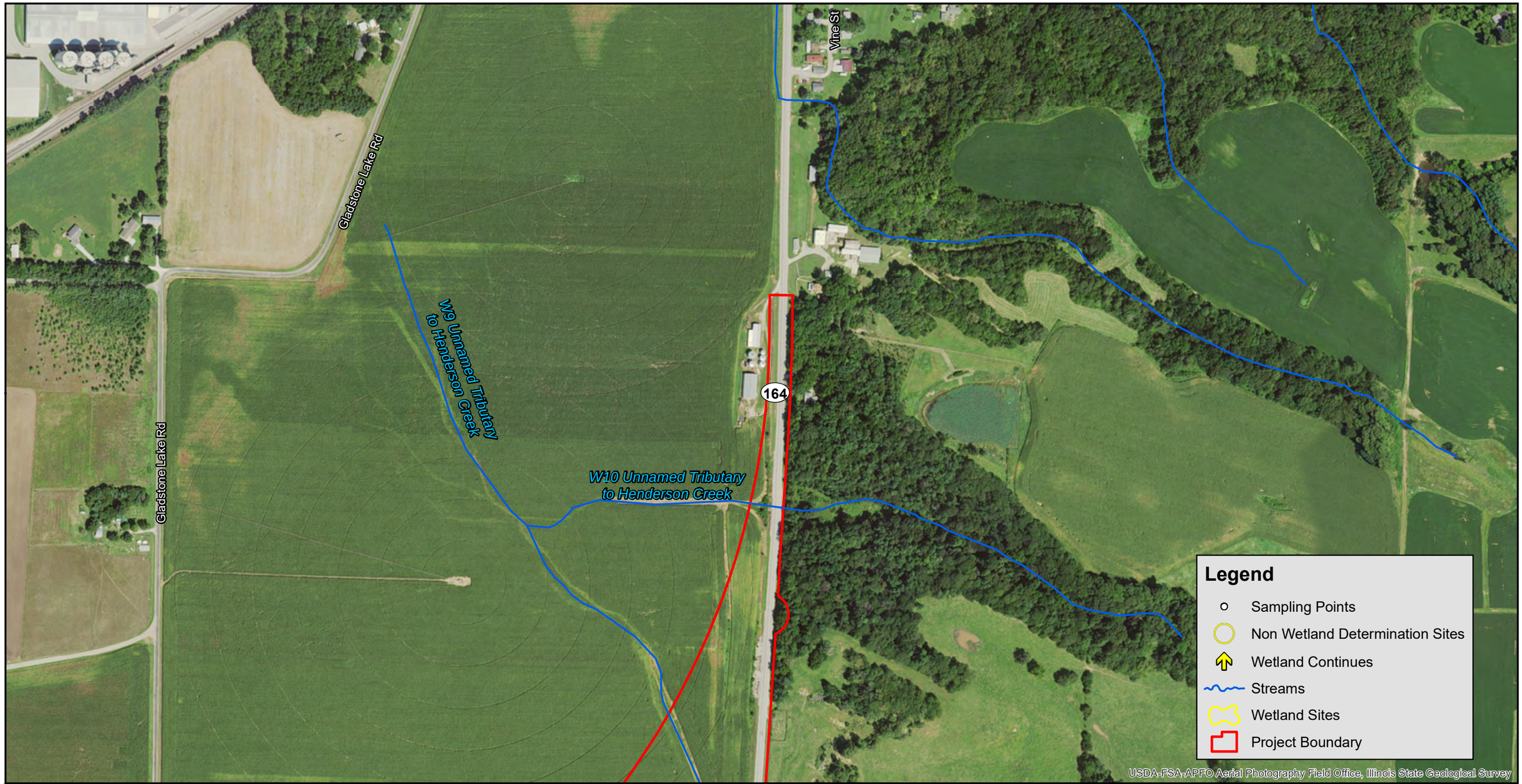
Seq. No: 238C

Meters 0 100

Feet 0 400

September 2017

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ILLINOIS NATURAL HISTORY SURVEY
PRAIRIE RESEARCH INSTITUTE

Wetland Science Program
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Champaign, Illinois 61820

Figure 4l
Wetland Determination Map
US 34 (FAP 313)
Henderson County

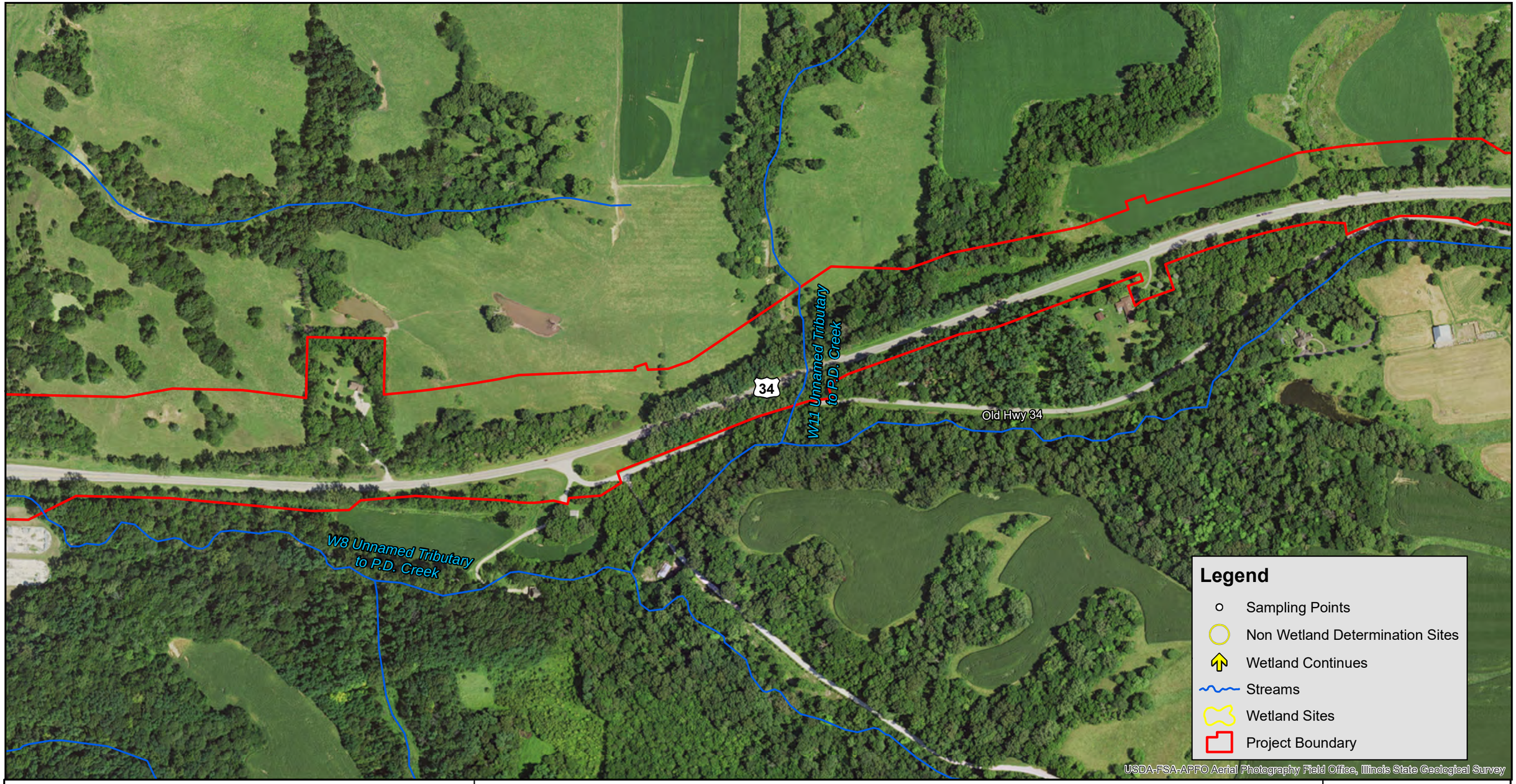
Seq. No: 238C

Meters 0 100

Feet 0 400

September 2017

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Wetland Science Program
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Champaign, Illinois 61820

Figure 4J
Wetland Determination Map
US 34 (FAP 313)
Henderson County

Seq. No: 238C

Meters 0 100

Feet 0 400

September 2017

N W E S



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ILLINOIS NATURAL HISTORY SURVEY
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Figure 4K
Wetland Determination Map
US 34 (FAP 313)
Henderson County

Seq. No: 238C

Meters 0 100

Feet 0 400

September 2017

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Appendix J

Illinois State Geological Survey – Site Assessment Letter Report

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Illinois Department of Transportation

Memorandum

Illinois Department of Transportation
Region 3 / District 4
JUN 06 2017
Received
Program Development

To:	Kensil A. Garnett	Attn:	Greg Larson
From:	Maureen M. Addis	By:	Scott E. Stitt
Subject:	PESA Review		*Scott E. Stitt*
Date:	June 2, 2017		

I.D.O.T.
Received
JUN 06 2017
Region 3 / District 4
401 Main St. Peoria, IL

Project:	FAP 313 (US 34)		
District 4:	Henderson County	Job #:	P-94-030-95
Requesting Agency:	DOH	Contract #:	Not provided
Survey Target Date:	09/01/2017	Anticipated DA:	07/01/2018
Anticipated Letting:	Not provided	Section:	4,5,6,7,8
BDE Sequence #:	00238C	ISGS #:	01040B

Attached is a copy of a *Site Assessment Letter Report* conducted by the Illinois State Geological Survey (ISGS) for the subject project as described in your Special Waste Environmental Survey Request. A full PESA report was not prepared at this time.

Databases normally associated with a PESA have been reviewed, however, no historical research or personal interviews were conducted and no regulatory files were reviewed.

Although this report does not follow the standard PESA format, and tables indicating recognized environmental conditions (RECs) and non-RECs are not included, there likely are REC sites present in this project area. Please carefully read and review the summaries of the various sites in the report.

This *Site Assessment Letter Report* is designed to meet the requirements of Departmental Policy D&E 11 and therefore the project is cleared for design approval.

If you have any questions regarding this report, please contact James R. Curtis at 217/558-4653.

Attachments

cc: Office of Chief Counsel – Rm. 313 Central Bureau of Land Acquisition – Rm. 210

ILLINOIS STATE
GEOLOGICAL SURVEY
PRAIRIE RESEARCH INSTITUTE

615 E. Peabody Drive
Champaign, IL 61820

May 25, 2017

James Curtis
Chief, Geologic & Special Waste Unit
Environment Section, Bureau of Design and Environment
Illinois Department of Transportation
2300 Dirksen Parkway, Rm. 330
Springfield, IL 62764

Dear Mr. Curtis,

Information in this letter pertains to the following project:

Project name:	FAP 313 (US 34); west of Carman Road to TR 111 (Biggsville Bypass)
County:	Henderson
Sequence #:	238C
Job No.:	P94-030-95
ISGS Project:	1040B
Survey Target Date:	September 1, 2017
Design Date:	July 1, 2018

This Site Assessment Letter Report is submitted in response to your request, received by the ISGS on November 7, 2016, to conduct such an assessment for US 34, from west of Carman Road to TR 111 (Biggsville Bypass) (Attachment 1). **This letter contains the findings of the site inspection and records search as noted, and will constitute the Final Report for this project. A site inspection has been conducted, and regulatory databases have been checked as noted, but no historical research, interviews, or regulatory file reviews were conducted.** Acquisition of additional ROW or easements and excavation or subsurface utility relocation are expected. Railroad ROW involvement and in-stream work are not anticipated for this project.

This review was performed in compliance with the IDOT-ISGS PESA Manual (Erdmann et al., 2014) and not with the All Appropriate Inquiries environmental assessment standard (40 CFR Part 312) that took effect on November 1, 2006.

Geology

Bedrock geology. The topmost bedrock unit in the project area from the western project limits to approximately IL 164 has been mapped as the Mississippian-age Meppen Limestone/Fern Glen Formation/Burlington-Keokuk Limestone, which is primarily composed of limestone. The topmost bedrock unit in the project area from approximately IL 164 to the eastern project limits has been mapped as the Devonian-age rocks of the New Albany Group which is composed of shale with limestone.

Surficial geology. The thickness of unconsolidated deposits in the project area from the western project limits to approximately 1150 East Road, ranges from 30 to 60 m (100-200 ft); from approximately 1150 East Road to IL 164, ranges from 15 to 30 m (50 to 100 ft); and from approximately IL 164 to the eastern project limits, ranges from 8 to 15 m (25 to 50 ft). Descriptions of surficial deposits will be described by project area below:

- From the western project limits to approximately 900 East Road, these deposits have been mapped as more than 6 m (20 ft) of stream-deposited silts, sands, and gravels of the Cahokia Formation underlain by more than 6 m (20 ft) of sand and gravel glacial outwash of the Henry Formation.

- From approximately 900 East Road to 0.8 km (0.5 mi) north of 1300 North Road and from 1.2 km (0.75 m) north of 1300 North Road to IL 164, these deposits have been mapped as more than 6 m (20 ft) of sand and gravel glacial outwash of the Henry Formation.

- From approximately 0.8 km (0.5 mi) north of 1300 North Road to 1.2 km (0.75 m) north of 1300 North Road, these deposits have been mapped as less than 6 m (20 ft) of stream-deposited silts, sands, and gravels of the Cahokia Formation underlain by more than 6 m (20 ft) of sand and gravel glacial outwash of the Henry Formation.

- From approximately IL 164 to the eastern project limits, these deposits have been mapped as less than 6 m (20 ft) of windblown silt of the Peoria and Roxana Silts underlain by less than 6 m (20 ft) of loamy and sandy glacially deposited material of the Glasford Formation with bedrock possibly appearing within 6 m (20 ft) of the ground surface.

Soils. Along the project ROW, the NRCS has classified the Sable Silty clay loam, 0% to 2% slopes, Selma loam, 0% to 2% slopes, Thorp silt loam, 0% to 2% slopes, Sawmill silty clay loam, 0% to 2% slopes, Fluvaquents, 0% to 2% slopes, Otter-Lawson silt loams, 0% to 2% slopes, Beaucoup silty clay loam, 0% to 2% slopes, Wabash silty clay, 0% to 2% slopes, and Ambraw clay loam, 0% to 2% slopes as containing 33% to 100% hydric components. None of the other soils in the project area have been classified by NRCS as containing more than 33% hydric components. The NRCS has classified the Hickory silt loam, 18% to 35% slopes, Sparta loamy sand, 0% to 2% slopes, Timula silt loam, 10% to 18% slopes, Seaton silt loam, 10% to 18% slopes, Rozetta silt loam, 10% to 18% slopes, Fayette silt loam, glaciated, 10% to 18% slopes, Fayette silty clay loam, 10% to 18% slopes, Coloma sand, 0% to 2% slopes, Coloma sand, 1% to 7% slopes, Coloma sand, 7% to 15% slopes, Orthents, loamy, undulating, Fayette-Hickory silt loams, 18% to 35% slopes, Fayette-Hickory silt loam, 35% to 60% slopes, Seaton-Hickory silt loams, 35% to 60% slopes, Seaton-Timula silt loams, 0% to 2% slopes, Sawmill silty clay loam, 0% to 2% slopes, and Fluvaquents, 0% to 2% slopes, as non-prime farmland.

Hydrogeology

Drainage direction. Surficial drainage in the project area is generally towards the nearest body of water relative to that area. These include Crystal Lake Ditch, P.D. Creek, Lone Tree Creek and an unnamed tributary. These bodies of water ultimately flow toward the southwest in the direction of the Mississippi River. However, since drainage ditches are present, most surficial runoff will be controlled by the drainage ditch system; such systems typically are designed to follow natural

drainage patterns.

Neither the near-surface nor the shallow unconfined groundwater flow direction was specifically determined for this project, but they generally mimic local topography.

Wellhead protection areas. This project crosses a wellhead protection recharge area for two public wells for New Crystal Lake Recreation Area and Ayerco Convenience Center #17. The wellhead protection areas are crossed by Stevenson Lake Road approximately 205 m (675 ft) north of US 34, and by US 34 approximately 300 m (1,000 ft) east and west of Carman Road.

Surficial public water supplies. The proposed project is not likely to impact surficial public water supplies.

Groundwater recharge. The project area is located in Zone 1 for groundwater recharge potential, where Zone 1 indicates the highest potential for groundwater recharge and Zone 7 indicates the lowest potential as mapped by Keefer and Berg (1990). Groundwater recharge potential information is provided for a general regional perspective only, as this map was prepared at a scale of 1:1,000,000 and is not applicable on a site-specific basis.

The project area does not fall within the Mahomet aquifer sole-source boundaries as defined by USEPA, the only sole-source aquifer in Illinois according to the USEPA's list of designated sole-source aquifers as defined by Section 1424(E) of the Safe Drinking Water Act, and so the proposed project will not affect any such aquifers in Illinois.

Groundwater protection areas. Public water wells serving New Crystal Lake Recreation Area and Ayerco Convenience Center #17 are located approximately 520 m (1,700 ft) north of the intersection of Stevenson Lake Road and US 34 and within Site 1040B-11, respectively. However, since no IDOT facilities exist or are planned for this project, there should be no impact on the 300-meter (1,000-foot) setback zones around these wells as determined by the IEPA Division of Public Water Supplies.

Potential for contamination of shallow aquifers. The project area is located in Zones AX, A2, and A5, according to the map "Potential for contamination of shallow aquifers from land burial of municipal wastes" (Berg et al., 1984). These zones will be described by project area below:

- From the western project limits to approximately 900 East Road and from approximately 0.8 km (0.5 mi) north of 1300 North Road to 1.2 km (0.75 m) north of 1300 North Road, the project area is located within Zone AX. Zone AX is described as alluvium, a mixture of gravel, sand, silt, and clay along streams, variable in composition and thickness.

- From approximately 900 East Road to 0.8 km (0.5 mi) north of 1300 North Road and from 1.2 km (0.75 m) north of 1300 North Road to IL 164, the project area is within Zone A2. Zone A2 is described as thick, permeable sand and gravel within 6 m (20 ft) of the ground surface.

- From approximately IL 164 to the eastern project limits, the project area is located within Zone A5. Zone A5 is described as permeable bedrock generally within 6 m (20 ft) of land surface; overlying materials variable but mostly till.

Zones A indicate the highest potential for contamination and Zone G the lowest. This information is provided for a general regional perspective only, as the map was prepared at a scale of 1:500,000 and is not applicable on a site-specific basis. No borings were made to a depth of 15 m (50 ft) to verify the geology of this site.

Well information. ISGS well records indicate that water in 16 wells within 60 m (200 ft) of the project area is obtained from sand and gravel west of IL 164 and limestone and shale east of IL 164 at depths ranging from 7 to 46 m (23 to 150 ft) below the surface. Because this project is located in a rural setting, most of the sites are located outside the municipal water infrastructure. Therefore, all residences could potentially have an associated private water well. Additionally, center-pivot irrigation systems were present throughout the project area. These irrigation systems could potentially have an associated private water well. Other wells not in the ISGS database may be present near the project area.

Natural Features and Hazards

No observed or known natural hazards were identified for this project.

Project Sites

Project sites will be described from west to east along US 34 below. Attachment 1 contains a project location map. Attachment 2 contains maps of all sites discussed in this report. Fieldwork for this project was conducted on April 25, 2017.

This project intersects ISGS #419, which was submitted to IDOT on December 14, 1994, from the western project limits to east of IL 164. This project intersects ISGS #1040, which was submitted to IDOT on September 14, 1999, throughout the entire project area. This project intersects ISGS #1441, which was submitted to IDOT on March 21, 2003, along IL 164. Analytical results from these earlier projects will be summarized in geographic order below.

Site 1040B-1. ROW, 600 block of US 34, unincorporated Gladstone Township (US 34 east and west of Carman Road; Attachment 2, page 1). This site is occupied by US 34 and its associated grass-covered ROW. This site includes two unpainted bridges (S.N. 036-0049 and S.N. 036-0050) that carry US 34 over Crystal Lake Ditch (Site 1040B-8).

Under the name "EMH Trucking LLC" and the address "Rte 34 .5M E Carman Rd", this site appears on the BOL list (IEPA #0710153004). Under the name "Quality Distribution Inc." and the address "US RT 34 3 Miles East of Burlington IA", this site appears on the IEMA non-LUST list (IEMA #H 2004 1230). Under the name "EMH Trucking" and the address "1/2 mi. E. of Carmen[sic] Rd. & Hwy. 34 Intersection", this site appears on the IEMA non-LUST list (IEMA #H-2016-0229).

Site 1040B-2. Stevenson Lake, 600 block of US 34, unincorporated Gladstone Township (north side of US 34 west of Stevenson Lake Road; Attachment 2, page 1). This site is occupied by a lake. Grass- and tree-covered land was present between the lake and US 34. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-3. Agricultural land, 600-700 blocks of US 34 and 1200 block of Carman Road, unincorporated Gladstone Township (south side of US 34 west of Carman Road and all four quadrants of US 34 and Carman Road; Attachment 2, page 1). This site is occupied by six areas of agricultural land. Two pole-mounted transformers were observed along the east side of Carman Road south of US 34. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-4. Pond, 600 block of US 34, unincorporated Gladstone Township (south side of US 34 west of Carman Road; Attachment 2, page 1). This site is occupied by a pond surrounded by tree-covered land. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-5. Vacant land and ponds, 600 block of US 34, unincorporated Gladstone Township (northeast and northwest corners of US 34 and Stevenson Lake Road; Attachment 2, page 1). This site is occupied by vacant grass- and tree-covered land with several small ponds scattered throughout the site. Due to the presence of dense vegetation, a complete inspection was not possible. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-6. Vacant land, 600 block of US 34, unincorporated Gladstone Township (southwest corner of US 34 and Crystal Lake Ditch; Attachment 2, page 1). This site is occupied by vacant grass- and tree-covered land. A gravel-covered lane was observed in the northeast portion of the site. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-7. Residence, 661 Stevenson Lake Road, unincorporated Gladstone Township (southeast corner of Stevenson Lake Road and BNSF Railroad; Attachment 2, page 1). This site occupied by a single-family residence and associated grass- and tree-covered land. One pole-mounted transformer was observed west of the residence. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-8. Crystal Lake Ditch, 600 block of US 34, unincorporated Gladstone Township (north and south sides of US 34 west of Carman Road; Attachment 2, page 1). This site is occupied by a stream. US 34 (Site 1040B-1) is carried over this stream on two unpainted bridges (S.N. 036-0049 and S.N. 036-0050). According to the 2016 IEPA Illinois Integrated Water Quality report, Crystal Lake Ditch has not been assessed in the project area. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-9 (1040B-A). Vacant land, 600 block of US 34, unincorporated Gladstone Township (northwest quadrant of US 34 and Carman Road; Attachment 2, page 1). This site is occupied by vacant gravel-, grass-, and brush-covered land. Several piles of sand and gravel were observed near the center of the site. Two pole-mounted transformers were observed along the south side of the site, and three pole-mounted transformers were observed along the east side of the site. Four 208-liter (55-gallon) drums and one chemical container were observed on the northeastern portion of the site. During fieldwork for ISGS #1040 in 1999, staining was observed on the gravel-covered portion of the site. No staining was present during current fieldwork. Due to the presence of gravel and dense vegetation, a complete inspection of the site's surface was not possible. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-10. Grain bins, 1241 Carman Road, unincorporated Gladstone Township

(southwest corner of US 34 and Carman Road; Attachment 2, page 1). This site is occupied by two grain bins. The address for this site was obtained from the Henderson County Assessor's website. One pole-mounted transformer was observed near the northwest corner of the site. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-11 (491-1, 1040-1). Ayerco Convenience Center, 600 block of US 34, unincorporated Gladstone Township (northwest corner of US 34 and Carman Road; Attachment 2, page 1). This site is occupied by a gas station and convenience store. Four dispensers were observed beneath a canopy east of the station building. Four USTs were observed in one pit located approximately 43 m (140 ft) north of the edge of US 34 and 18 m (60 ft) west of the edge of Carman Road. Four vent pipes were observed on the south side of the building. During fieldwork for ISGS #491 and #1040 in 1994 and 1999, respectively, the site was occupied by a gas station.

Under the name "Illinois Oil Company" and the address "Rte 34 & Carman Rd", this site appears on the BOL list (IEPA #0718020001). Under the name "Illinois Ayers Oil #17" and the address "Highway 34 and Carman Road, Carman 61425", this site appears on the LUST list (IEMA #20130880). Under the name "Ayerco Convenience Center #17" and the address "Highway 34 & Carman Road", this site appears on the UST list (OSFM #3020800).

In two boreholes completed at this site for ISGS #491 in 1994, no VOCs were detected. In four boreholes completed at this site for ISGS #1040 in 1999, VOCs were detected in all four boreholes. See ISGS #491 and #1040 for details.

Site 1040B-12. Residence, 699 US 34, unincorporated Gladstone Township (northeast corner of US 34 and Carman Road; Attachment 2, page 1). This site is occupied by a single-family residence. One pole-mounted transformer was observed at the northwest corner of the site. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-13. Agricultural land, 700-800 blocks of US 34, unincorporated Gladstone Township (north and south sides of US 34 between Carman Road and 900 East Road; Attachment 2, page 2). This site is occupied by five areas of agricultural land. A drainage ditch was observed at one of the northern areas across from 800 East Road. Three pole-mounted transformers were observed along the south side of the site on the far-east portion. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-14. Davilla Farms, 750 US 34, unincorporated Gladstone Township (south side of US 34 between Carman Road and 800 East Road; Attachment 2, page 2). This site is occupied by four agricultural buildings and five grain bins. Two pole-mounted transformers were observed at the northeast corner of the site. Four ASTs with attached dispensers were observed near the center of the site. Due to a locked gate at the site's entrance, a complete inspection was not possible. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-15. Agricultural building, 773 US 34, unincorporated Gladstone Township (north side of US 34 between Carman Road and 800 East Road; Attachment 2, page 2). This site is occupied by an agricultural building and four grain bins. The address for this site was obtained from the Henderson County Assessor's website. Two pole-mounted transformers were observed at the northwest corner of the site. This site did not appear on any of the regulatory lists checked for this

project.

Site 1040B-16. Grain bin, 827 US 34, unincorporated Gladstone Township (north side of US 34 between 800 East Road and 850 East Road; Attachment 2, page 2). This site is occupied by a grain bin and grass-covered land. The address for this site was obtained from the Henderson County Assessor's website. This site did not appear on any regulatory lists checked for this project.

Site 1040B-17. Residence, 1231 900 East Road, unincorporated Gladstone Township (northwest corner of 900 East Road and 1225 North Road; Attachment 2, page 3). This site is occupied by a single-family residence and associated outbuilding. One pole-mounted transformer was observed along the east side of the site. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-18. Agricultural land, 900 block of US 34, unincorporated Gladstone Township (northeast and southeast corners of US 34 and 900 East Road; Attachment 2, page 3). This site is occupied by two areas of agricultural land. One pole-mounted transformer was observed near the northeast corner of US 34 and 900 East Road. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-19. Farmstead, 907 1225 North Road, unincorporated Gladstone Township (northeast corner of 900 East Road and 1225 North Road; Attachment 2, page 3). This site is occupied by a farmstead consisting of a single-family residence, agricultural buildings, and grain bins. One pole-mounted transformer was observed along the east side of the site. A propane AST was observed near the center of the site. Due to the presence of fencing and dense vegetation, a complete inspection was not possible. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-20. Residences, 912-940 US 34, 929-948 1245 North Road, and 1247-1265 950 East Road, unincorporated Gladstone Township (south side of US 34 between 900 East Road and 950 East Road; Attachment 2, page 3). This site is occupied by 25 single-family residences and associated outbuildings. Three pole-mounted transformers were observed along the southeast side of US 34, one each north of 912 US 34, west of 914 US 34, and northwest of 1265 950 East Road. Three pole-mounted transformers were observed along the west side of 950 East Road, one each east of 948 1245 North Road, north of 1247 950 East Road, and south of 1257 950 East Road. Five pole-mounted transformers were observed along the south side of 1245 North Road, one each northeast of 930 1245 North Road, northwest of 932 1245 North Road, northwest of 936 1245 North Road, northwest of 942 1245 North Road, and northwest of 946 1245 North Road. Two natural gas pipeline markers were observed west of 950 East Road, one each north and south of 1245 North Road, representing a generally northeast-southwest oriented pipeline. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-21. Vacant land, 900 block of 1225 North Road, unincorporated Gladstone Township (northwest corner of 1225 North Road and 950 East Road; Attachment 2, page 3). This site is occupied by vacant grass-covered land. The site was being used as grazing land for livestock. One natural gas pipeline marker was observed near the southeast corner of the site, representing a generally northeast-southwest oriented pipeline. This site did not appear on any of the regulatory sites checked for this project.

Site 1040B-22 (1040-B). Residence, 931 US 34, unincorporated Gladstone Township (north side of US 34 between 900 East Road and 950 East Road; Attachment 2, page 3). This site is occupied by a single-family residence and associated outbuildings. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-23. Rest area, 900 block of US 34, unincorporated Gladstone Township (south side of US 34 between 900 East Road and 950 East Road; Attachment 2, page 3). This site is occupied by a rest area consisting of a gravel drive and picnic tables. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-24. Agricultural building, 941 US 34, unincorporated Gladstone Township (northwest side of US 34 between 900 East Road and 950 East Road; Attachment 2, page 3). This site is occupied by an agricultural building and grain bin. The address for this site was obtained from the Henderson County Assessor's website. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-25. Farmstead, 1246 950 East Road, unincorporated Gladstone Township (northeast corner of 1245 North Road and 950 East Road; Attachment 2, page 3). This site is occupied by a farmstead consisting of a single-family residence and associated outbuilding. An additional outbuilding in disrepair was observed near the southwest corner of the site. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-26. Residence, 955 US 34, unincorporated Gladstone Township (northwest and northeast corners of US 34 and 950 East Road; Attachment 2, page 4). This site is occupied by a single-family residence and associated outbuilding. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-27. Agricultural land, 900 block of US 34 and 900 block of 1300 North Road, unincorporated Gladstone Township (southeast side of US 34 south of 1300 North Road and south side of 1300 North Road east of US 34; Attachment 2, page 4). This site is occupied by two areas of agricultural land. One pole-mounted transformer was observed near the northeast corner of 950 East Road and 1245 North Road. Three natural gas pipeline markers were observed along the east side of 950 East Road, representing a generally north-south oriented pipeline in this area. Due to the large size and the distance of the site from publicly accessible roadways, a complete inspection was not conducted. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-28. Agricultural land, 1200 block of 950 East Road, unincorporated Gladstone Township (southeast quadrant of 1245 North Road and 950 East Road; Attachment 2, page 4). This site is occupied by agricultural land. One AST was observed near the central portion of the southern end of the site. A gravel-covered lane to access a farmstead (Site 1040B-32) was observed along the north side of the site. Due to the large size and the distance of the site from publicly accessible roadways, a complete inspection was not conducted. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-29. Agricultural land, 900 block of 1300 North Road, unincorporated Gladstone Township (south side of 1300 North Road east of US 34; Attachment 2, page 4). This site is occupied by agricultural land. This site included a gravel-covered lane that led to Site 1040B-30.

Two ASTs were observed along the east side of the site. Due to the large size and the distance of the site from publicly accessible roadways, a complete inspection was not conducted. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-30. Agricultural building, 900 block of 1300 North Road, unincorporated Gladstone Township (south of 1300 North Road east of US 34; Attachment 2, page 4). This site is occupied by an agricultural building. An AST on a trailer was observed east of the building. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-31. Vacant land, 900 block of 1300 North Road, unincorporated Gladstone Township (south side of 1300 North Road east of US 34; Attachment 2, page 4). This site is occupied by vacant tree-covered land. Various pieces of agricultural equipment in disrepair and scrap metal were observed along the north side of the site. Due to the presence of dense vegetation, a complete inspection was not possible. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-32. Farmstead, 1248 950 East Road, unincorporated Gladstone Township (east of 950 East Road south of 1300 North Road; Attachment 2, page 4). This site is occupied by a farmstead consisting of a single-family residence and associated outbuildings. Due to the presence of dense vegetation, a complete inspection was not possible. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-33 (419-2, 1040-C). Commercial building, 900 block of US 34, unincorporated Gladstone Township (southwest corner of US 34 and 1300 North Road; Attachment 2, page 5). This site is occupied by a vacant commercial building. Numerous vehicles in disrepair were observed north and east of the building. Five chemical containers and approximately 20 used tires were observed along the northeast side of the building. During fieldwork for ISGS #419 and #1040 in 1994 and 1999, respectively, this site was occupied by a truck inspection station.

Under the name "SH Transportation Corp" and the address "Hwy 34 Olsons Truck Stop", this site appears on the non-LUST list (IEMA #952063).

In two boreholes completed at this site for ISGS #491 in 1994, no VOCs were detected. See ISGS #419 for details.

Site 1040B-34. Storage building, 900 block of US 34, unincorporated Gladstone Township (southeast corner of US 34 and 1300 North Road; Attachment 2, page 5). This site is occupied by a metal storage building. Three pole-mounted transformers were observed along the west side of the site. An AST was observed along the east side of the building. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed at Sites 1040B-27 and 1040B-37 northeast and southwest of the site, and it is likely that a generally northeast-southwest oriented pipeline crosses this site as well. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-35. Storage building, 900 block of 1300 North Road, unincorporated Gladstone Township (south side of 1300 North Road east of US 34; Attachment 2, page 5). This site is occupied by a metal storage building. One pole-mounted transformer was observed north of the building. A pile of used appliances and scrap metal was observed south of the building. This site

did not appear on any of the regulatory lists checked for this project.

Site 1040B-36. Farmstead, 967 1300 North Road, unincorporated Gladstone Township (northwest corner of US 34 and 1300 North Road; Attachment 2, page 5). This site is occupied by a farmstead consisting of a single-family residence, associated outbuildings, and grain bins. Two propane ASTs were observed east of the grain bins. One diesel AST was observed near the center of the site. Two pole-mounted transformers were observed along the south side of the site. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-37. Agricultural land, 900-1000 blocks of US 34, unincorporated Gladstone Township (southeast and northwest sides of US 34 north of 1300 North Road; Attachment 2, page 6). This site is occupied four areas of agricultural land. Five natural gas pipeline markers were observed along the southeast side of US 34, representing a generally northeast-southwest oriented pipeline. Due to the large size and the distance of the site from publicly accessible roadways, a complete inspection was not conducted. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-38. Farmstead, 1326 1000 East Road, unincorporated Gladstone Township (east side of 1000 East Road between 1300 North Road and US 34; Attachment 2, page 6). This site is occupied by a farmstead consisting of a single-family residence, associated outbuildings, and grain bins. One pole-mounted transformer was observed northwest of the residence. Three ASTs with attached dispensers were observed south of the western agricultural building. Three chemical containers were observed along the south side of the eastern agricultural building. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-39. Agricultural land, 1000 block of 1300 North Road, unincorporated Gladstone Township (northeast corner of 1300 North Road and 1000 East Road; Attachment 2, page 6). This site is occupied by agricultural land. One AST was observed near the center of the site. One natural gas pipeline marker was observed along the southeast side of US 34, representing a generally northeast-southwest oriented pipeline. Due to the large size and the distance of the site from publicly accessible roadways, a complete inspection was not conducted. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-40. Vacant land, 1300 block of 1000 East Road and 1000 block of 1300 North Road, unincorporated Gladstone Township (east of 1000 East Road between 1300 North Road and US 34; Attachment 2, page 6). This site is occupied by vacant tree-covered land. Due to dense vegetation and the distance of the site from publicly accessible roadways, a complete inspection was not conducted. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-41. Residences, 993 US 34 and 900 block of US 34, unincorporated Gladstone Township (northwest side of US 34 at 1000 East Road; Attachment 2, page 6). This site is occupied by two single-family residences and associated outbuildings. One pole-mounted transformer was observed north of the lane leading to the northern residence. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-42. P.D. Creek, 1000 block of US 34, unincorporated Gladstone Township (northwest and southeast sides of US 34 north of 1000 East Road; Attachment 2, page 6).

This site is occupied by a stream and associated vacant grass- and tree-covered land along its banks. US 34 is carried over this stream on S.N. 036-0052 (Site 1040B-43). According to the 2016 IEPA Illinois Integrated Water Quality report, P.D. Creek has not been assessed in the project area. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed at Sites 1040B-39 and 1040B-44 to the southwest and northeast of this site, and it is likely that a generally northeast-southwest oriented natural gas pipeline passes through this site as well. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-43. ROW, 1000 block of US 34, unincorporated Gladstone Township (US 34 north of 1000 East Road; Attachment 2, page 6). This site is occupied by a painted bridge (S.N. 036-0052) that carries US 34 over P.D. Creek (Site 1040B-42). No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed at Sites 1040B-39 and 1040B-44 to the southwest and northeast of this site, and it is likely that a generally northeast-southwest oriented natural gas pipeline passes through this site as well. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-44. Farmstead, 1012 US 34, unincorporated Gladstone Township (southeast side of US 34 north of 1000 East Road; Attachment 2, page 6). This site is occupied by a farmstead consisting of a single-family residence, agricultural buildings, and grain bins. One pole-mounted transformer was observed near the southwest corner of the site. One natural gas pipeline marker was observed along the east side of US 34, representing a generally northeast-southwest oriented pipeline. One AST was observed near the center of the site. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-45. Residences, 1014-1022 US 34, unincorporated Gladstone Township (east side of US 34 north of 1000 East Road; Attachment 2, page 6). This site is occupied by four single-family residences. One pole-mounted transformer was observed west of 1018 US 34. Two natural gas pipeline markers were observed along the east side of US 34, representing a generally northeast-southwest oriented pipeline. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-46. Residence, 1032 US 34, unincorporated Gladstone Township (east side of US 34 north of 1000 East Road; Attachment 2, page 6). This site is occupied by a single-family residence and associated outbuildings. Two pole-mounted transformers were observed along the west side of the site. One natural gas pipeline marker was observed along the east side of US 34, representing a generally northeast-southwest oriented pipeline. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-47. Residence, 1031 US 34, unincorporated Gladstone Township (northwest side of US 34 north of 1000 East Road; Attachment 2, page 6). This site is occupied by a single-family residence, associated outbuildings, and vacant grass- and tree-covered land. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-48 (1040-2). Residence and mobile home, 1040 US 34, unincorporated Gladstone Township (southeast side of US 34 north of 1000 East Road; Attachment 2, page 6). This site is occupied by a single-family residence and mobile home that shared the same address. Several associated outbuildings were observed west of the residence and mobile home. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed

at Sites 1040B-46 and 1040B-52 to the southwest and northeast of this site, and it is likely that a generally northeast-southwest oriented natural gas pipeline passes through this site as well. During fieldwork for ISGS #1040 in 1999, one of the western outbuildings housed a pet supply store. This site did not appear on any of the regulatory lists checked for this project.

In three boreholes completed at this site for ISGS #1040, in 1999, no VOCs were detected. See ISGS #1040 for details.

Site 1040B-49. Agricultural land, 1000 block of US 34, unincorporated Gladstone Township (southeast and northwest sides of US 34 between 1000 East Road and Gladstone Lake Road; Attachment 2, page 7). This site is occupied by three areas of agricultural land and includes areas of tree-covered land. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed at Sites 1040B-46 and 1040B-52 to the southwest and northeast of this site, and it is likely that a generally northeast-southwest oriented natural gas pipeline along the southeast side of US 34 passes through this site as well. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-50 (419-3, 1040-D). Farmstead, 1056 US 34, unincorporated Gladstone Township (southeast side of US 34 between 1000 East Road and Gladstone Lake Road; Attachment 2, page 7). This site is occupied by a farmstead consisting of a single-family residence, agricultural buildings, and grain bins. This site shared the same address as Site 1040B-51. Numerous vehicles in disrepair were observed in the central portion of the site. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed at Sites 1040B-46 and 1040B-52 to the southwest and northeast of this site, and it is likely that a generally northeast-southwest oriented natural gas pipeline passes through this site as well. During fieldwork for ISGS #419 in 1994, a diesel UST and associated dispenser were observed . No USTs or dispensers were present during current fieldwork or fieldwork for ISGS #1040B in 1999. This site did not appear on any of the regulatory lists checked for this project.

In two boreholes completed at this site in 1994 for ISGS #419, no VOCs were detected. See ISGS #419 for details.

Site 1040B-51. Residence, 1056 US 34, unincorporated Gladstone Township (southeast side of US 34 between 1000 East Road and Gladstone Lake Road; Attachment 2, page 7). This site is occupied by a single-family residence. This site shared the same address as Site 1040B-50. Two pole-mounted transformers were observed at the southwest corner of the site. One AST was observed along the south end of the site. A propane AST was observed north of the residence. No natural gas pipeline markers were observed at this site. However, natural gas pipeline markers were observed at Sites 1040B-46 and 1040B-52 to the southwest and northeast of this site, and it is likely that a generally northeast-southwest oriented natural gas pipeline passes through this site as well. This site did not appear on any regulatory lists checked for this project.

Site 1040B-52. Farmstead, 1086 US 34, unincorporated Gladstone Township (southeast side of US 34 between 1000 East Road and Gladstone Lake Road; Attachment 2, page 7). This site is occupied by a farmstead consisting of a single-family residence and associated outbuildings. One natural gas pipeline marker was observed along the east side of th US 34, representing a generally northeast-southwest oriented pipeline. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-53. Agricultural land, 1100 block of US 34, unincorporated Gladstone Township (north and south sides of US 34 from Gladstone Lake Road to IL 164; Attachment 2, page 8). This site is occupied by three areas of agricultural land. Three pole-mounted transformers were observed along the south side of US 34 on the western portion of the site, three pole-mounted transformers were observed along the west side of 1150 East Road north of US 34, and three pole-mounted transformers were observed at the southeast corner of the site along the west side of 1150 East Road. Two natural gas pipeline markers were observed along the north and south sides of US 34 at the far west end of the site, representing a generally northeast-southwest oriented pipeline. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-54. Agricultural land, 1100 block of US 34, unincorporated Gladstone Township (southeast corner of US 34 and 1050 East Road; Attachment 2, page 8). This site is occupied by agricultural land. An AST was observed near the southwest corner of the site. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-55 (1040-3, 1441-C). Consolidated Grain and Barge Co., 1100 block of US 34, unincorporated Gladstone Township (southeast and southwest corners of US 34 and IL 164; Attachment 2, page 8). This site is occupied by a grain storage and transportation business consisting of two grain storage buildings, outdoor grain storage areas, a scale, a scale house, and a loading area. Five pole-mounted transformers were observed along the north side of the site, and one pad-mounted transformer was observed between the storage buildings. A propane AST and a chemical container were observed south of the eastern storage building. During fieldwork for ISGS #1040 and #1441 in 1999 and 2003, respectively, this site was occupied by a grain company.

Under the name "Gladstone Grain Co" and the address "Rte 34 & Rte 164", this site appears on the BOL list (IEPA #0718030001). Under the name "Kurt McChseney" and the address "Gladstone Grain Company", this site appears on the non-LUST list (IEMA #H-2006-0610).

Site 1040B-56. Agricultural land, 1400-1500 blocks of IL 164, unincorporated Gladstone Township (west side of IL 164 north of US 34; Attachment 2, page 9). This site is occupied by agricultural land. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-57. Agricultural buildings, 1541 IL 164, unincorporated Gladstone Township (west side of IL 164 north of US 34; Attachment 2, page 9). This site is occupied by two agricultural buildings and associated grain bins. The address for this site was obtained from the Henderson County Assessor's website. Two pole-mounted transformers were observed near the southeast corner of the site. Two ASTs on trailers were observed at the north end of the site. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-58. Residence, 1500 block of IL 164, unincorporated Gladstone Township (east side of IL 164 north of US 34; Attachment 2, page 9). This site is occupied by a single-family residence and associated outbuilding. Due to the presence of dense vegetation, a complete inspection was not possible. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-59 (1441-B). Farmstead, 1544 IL 164, unincorporated Gladstone Township (east side of IL 164 north of US 34; Attachment 2, page 9). This site is occupied by a farmstead consisting of a single-family residence and associated outbuildings. Three ASTs with attached

dispensers were observed south of the western outbuilding. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-60. Vacant land, 1400 block of IL 164 and 1200 block of US 34, unincorporated Gladstone Township (northeast corner of US 34 and IL 164; Attachment 2, page 10). This site is occupied by vacant grass- and tree-covered land. The site was being used as grazing land for livestock. Due to the presence of dense vegetation, a complete inspection was not possible. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-61. Vacant land, 1200 block of US 34, unincorporated Gladstone Township (southeast quadrant of US 34 and IL 164; Attachment 2, page 10). This site is occupied by vacant grass- and tree-covered land. Due to the presence of dense vegetation, a complete inspection was not possible. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-62. Residence, 1235 US 34, unincorporated Gladstone Township (north side of US 34 between IL 164 and Bogus Hollow Road; Attachment 2, page 10). This site is occupied by a single-family residence. Due to the presence of dense vegetation and the site's elevation above US 34, a complete inspection was not possible. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-63. Residences, 1252-1331 Bogus Hollow Road and 1296 US 34, unincorporated Gladstone Township (north and south sides of Bogus Hollow Road south of US 34; Attachment 2, page 11). This site is occupied by four single-family residences and a mobile home. The eastern residence and mobile home shared the same address. One pole-mounted transformer was observed at the south corner of the western intersection of US 34 and Bogus Hollow Road. Three propane tanks were observed, one each north of the central residence, the mobile home, and the eastern residence. Due to the presence of dense vegetation, a complete inspection was not possible.

Site 1040B-64. Agricultural land, 1200-1300 blocks of US 34, unincorporated Gladstone Township (northwest corner of US 34 and its eastern intersection with Bogus Hollow Road; Attachment 2, page 11). This site is occupied by agricultural land that is intersected by several areas of vacant tree-covered land. Due to the presence of dense vegetation, a complete inspection was not possible. This site did not appear on any of the regulatory lists checked for this project.

Site 1040B-65. ROW, 1300 block of US 34, unincorporated Gladstone Township (US 34 between the eastern and western intersections with Bogus Hollow Road; Attachment 2, page 11). This site is occupied by US 34.

Under the name "Autobahn Freight Line Limited" and the address "US Highway 34", this site appears on the non-LUST list (IEMA #H-2013-0130). Based on latitude-longitude references in the IEMA record, this incident was located at this site.

Adjoining Sites

The ISGS conducted a search of federal, state, and other environmental databases for reported

environmental concerns on sites adjoining the project. For certain resources, the search distances may have been expanded when deemed applicable in the judgment of the project manager. Refer to the Appendix for complete citations for these databases and the date of update of each database. Sites along the project are listed in the preceding section. Sites adjoining the project that do not appear on regulatory databases are not included. The following sites adjoining, but not along, the project were identified.

Federal records

SEMS: NPL, Active, and Archived
None.

RCRA sites subject to corrective action (CORRACTS)
None.

RCRA sites – non-CORRACTS TSD
None.

RCRA sites – other
None.

Brownfields pilot sites
None.

Non-LUST releases
None.

State records

Leaking underground storage tanks (LUST)
None.

Registered underground storage tanks (UST)
None.

Activity and Use Limitations (including institutional controls, engineered barriers, and Highway Authority Agreements)
None.

Brownfields
None.

IEPA Bureau of Land Inventory
None.

IEPA Site Remediation Program
None.

Non-LUST releases
None.

Municipal records
None.

Tribal records
There are no tribally owned lands in the state of Illinois; therefore, the checking of tribal records is not applicable for this report.

Orphan Sites

The following sites that may be in the project area appear on regulatory databases. Regulatory file information was not reviewed for these sites, and they may be on the project, adjoining the project, or elsewhere. Other orphan sites, not listed below, may be present in the project area as well.

Name	Address	Data source
Private Citizen	Rural Route, Gladstone	ERNS (ERNS #427106)
IDOT	Henderson County Bridges &Hwy, Various	RCRA (USEPA #ILR000129718), BOL (IEPA #0718995001)
CGB/Twomey Group	RR, Gladstone	SSTS (USEPA #110030229850)
USEPA (Spill)	Rte 34, Gulf Port	BOL (IEPA #0710153002)
Tire Chop, The	S of Rte 34, Gulf Port	BOL (IEPA #0710150001)
DEA County Wide Generic	Henderson County, Various	BOL (IEPA #0718995004)
Henderson County Tire Collect	Henderson County, Various	BOL (IEPA #0718995007)

This letter serves as the final Site Assessment Letter Report for ISGS #1040B. If you need further information concerning this project, please contact me at the telephone number or e-mail address below.

Sincerely,

Allen Cooksey
Environmental Site Assessments Section
(217) 265-8003
acooksey@illinois.edu

Approved: _____ Date: 05/25/17

Anne Ellison, P.G., State of Illinois
License #196-000546



ADDRESS LISTINGS

The following addresses along the project were evaluated for this project. Addresses of sites, if any, adjoining but not along the project are not listed here; see text and following table for these sites.

Property name and address	ISGS site #	Land use
ROW 600 block of US 34, unincorporated Gladstone Township	1040B-1	Transportation
Stevenson Lake 600 block of US 34, unincorporated Gladstone Township	1040B-2	Lake
Agricultural land 600-700 blocks of US 34 and 1200 block of Carman Road, unincorporated Gladstone Township	1040B-3	Agricultural
Pond 600 block of US 34, unincorporated Gladstone Township	1040B-4	Pond
Vacant land and ponds 600 block of US 34, unincorporated Gladstone Township	1040B-5	Vacant/ponds
Vacant land 600 block of US 34, unincorporated Gladstone Township	1040B-6	Vacant
Residence 661 Stevenson Lake Road, unincorporated Gladstone Township	1040B-7	Residential
Crystal Lake Ditch 600 block of US 34, unincorporated Gladstone Township	1040B-8	Stream
Vacant land 600 block of US 34, unincorporated Gladstone Township	1040B-9	Vacant
Grain bins 1241 Carman Road, unincorporated Gladstone Township	1040B-10	Agricultural
Ayerco Convenience Center 600 block of US 34, unincorporated Gladstone Township	1040B-11	Commercial
Residence 699 US 34, unincorporated Gladstone Township	1040B-12	Residential
Agricultural land 700-800 blocks of US 34, unincorporated Gladstone Township	1040B-13	Agricultural
Davilla Farms 750 US 34, unincorporated Gladstone Township	1040B-14	Agricultural

Agricultural building 773 US 34, unincorporated Gladstone Township	1040B-15	Agricultural
Grain bin 827 US 34, unincorporated Gladstone Township	1040B-16	Agricultural
Residence 1231 900 East Road, unincorporated Gladstone Township	1040B-17	Residential
Agricultural land 900 block of US 34, unincorporated Gladstone Township	1040B-18	Agricultural
Farmstead 907 1225 North Road, unincorporated Gladstone Township	1040B-19	Farmstead
Residence 912 US 34, unincorporated Gladstone Township	1040B-20	Residential
Residence 914 US 34, unincorporated Gladstone Township	1040B-20	Residential
Residence 918 US 34, unincorporated Gladstone Township	1040B-20	Residential
Residence 932 US 34, unincorporated Gladstone Township	1040B-20	Residential
Residence 934 US 34, unincorporated Gladstone Township	1040B-20	Residential
Residence 936 US 34, unincorporated Gladstone Township	1040B-20	Residential
Residence 940 US 34, unincorporated Gladstone Township	1040B-20	Residential
Residence 929 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 930 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 931 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 932 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 934 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 935 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential

Residence 936 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 938 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 939 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 941 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 942 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 943 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 946 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 948 1245 North Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 1247 950 East Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 1253 950 East Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 1257 950 East Road, unincorporated Gladstone Township	1040B-20	Residential
Residence 1265 950 East Road, unincorporated Gladstone Township	1040B-20	Residential
Vacant land 900 block of 1225 North Road, unincorporated Gladstone Township	1040B-21	Vacant
Residence 931 US 34, unincorporated Gladstone Township	1040B-22	Residential
Rest area 900 block of US 34, unincorporated Gladstone Township	1040B-23	Transportation
Agricultural building 941 US 34, unincorporated Gladstone Township	1040B-24	Agricultural
Farmstead 1246 950 East Road, unincorporated Gladstone Township	1040B-25	Farmstead

Residence 955 US 34, unincorporated Gladstone Township	1040B-26	Residential
Agricultural land 900 block of US 34 and 900 block of 1300 North Road, unincorporated Gladstone Township	1040B-27	Agricultural
Agricultural land 1200 block of 950 East Road, unincorporated Gladstone Township	1040B-28	Agricultural
Agricultural land 900 block of 1300 North Road, unincorporated Gladstone Township	1040B-29	Agricultural
Agricultural building 900 block of 1300 North Road, unincorporated Gladstone Township	1040B-30	Agricultural
Vacant land 900 block of 1300 North Road, unincorporated Gladstone Township	1040B-31	Vacant
Farmstead 1248 950 East Road, unincorporated Gladstone Township	1040B-32	Farmstead
Commercial building 900 block of US 34, unincorporated Gladstone Township	1040B-33	Commercial
Storage building 900 block of US 34, unincorporated Gladstone Township	1040B-34	Residential
Storage building 900 block of 1300 North Road, unincorporated Gladstone Township	1040B-35	Residential
Farmstead 967 1300 North Road, unincorporated Gladstone Township	1040B-36	Farmstead
Agricultural land 900-1000 blocks of US 34, unincorporated Gladstone Township	1040B-37	Agricultural
Farmstead 1326 1000 East Road, unincorporated Gladstone Township	1040B-38	Farmstead
Agricultural land 1000 block of 1300 North Road, unincorporated Gladstone Township	1040B-39	Agricultural

Vacant land 1300 block of 1000 East Road and 1000 block of 1300 North Road, unincorporated Gladstone Township	1040B-40	Vacant
Residence 993 US 34, unincorporated Gladstone Township	1040B-41	Residential
Residence 900 block of US 34, unincorporated Gladstone Township	1040B-41	Residential
P.D. Creek 1000 block of US 34, unincorporated Gladstone Township	1040B-42	Stream
ROW 1000 block of US 34, unincorporated Gladstone Township	1040B-43	Transportation
Farmstead 1012 US 34, unincorporated Gladstone Township	1040B-44	Farmstead
Residence 1014 US 34, unincorporated Gladstone Township	1040B-44	Residential
Residence 1018 US 34, unincorporated Gladstone Township	1040B-45	Residential
Residences 1020 US 34, unincorporated Gladstone Township	1040B-45	Residential
Residences 1022 US 34, unincorporated Gladstone Township	1040B-45	Residential
Residence 1032 US 34, unincorporated Gladstone Township	1040B-46	Residential
Residence 1031 US 34, unincorporated Gladstone Township	1040B-47	Residential
Residence 1040 US 34, unincorporated Gladstone Township	1040B-48	Residential
Mobile home 1040 US 34, unincorporated Gladstone Township	1040B-48	Residential
Agricultural land 1000 block of US 34, unincorporated Gladstone Township	1040B-49	Agricultural
Farmstead 1056 US 34, unincorporated Gladstone Township	1040B-50	Farmstead
Residence 1056 US 34, unincorporated Gladstone Township	1040B-51	Residential

Farmstead 1086 US 34, unincorporated Gladstone Township	1040B-52	Farmstead
Agricultural land 1100 block of US 34, unincorporated Gladstone Township	1040B-53	Agricultural
Agricultural land 1100 block of US 34, unincorporated Gladstone Township	1040B-54	Agricultural
Consolidated Grain and Barge Co. 1100 block of US 34, unincorporated Gladstone Township	1040B-55	Commercial
Agricultural land 1400-1500 blocks of IL 164, unincorporated Gladstone Township	1040B-56	Agricultural
Agricultural buildings 1541 IL 164, unincorporated Gladstone Township	1040B-57	Agricultural
Residence 1500 block of IL 164, unincorporated Gladstone Township	1040B-58	Residential
Farmstead 1544 IL 164, unincorporated Gladstone Township	1040B-59	Farmstead
Vacant land 1400 block of IL 164 and 1200 block of US 34, unincorporated Gladstone Township	1040B-60	Vacant
Vacant land 1200 block of US 34, unincorporated Gladstone Township	1040B-61	Vacant
Residence 1235 US 34, unincorporated Gladstone Township	1040B-62	Residential
Residence 1252 Bogus Hollow Road, unincorporated Gladstone Township	1040B-63	Residential
Residence 1277 Bogus Hollow Road, unincorporated Gladstone Township	1040B-63	Residential
Residence 1331 Bogus Hollow Road, unincorporated Gladstone Township	1040B-63	Residential
Mobile home 1331 Bogus Hollow Road, unincorporated Gladstone Township	1040B-63	Residential

Residence 1296 US 34, unincorporated Gladstone Township	1040B-63	Residential
Agricultural land 1200-1300 blocks of US 34, unincorporated Gladstone Township	1040B-64	Agricultural
ROW 1300 block of US 34, unincorporated Gladstone Township	1040B-65	Transportation

The following additional sites, adjoining but not on the project, were identified on environmental databases:

Property name	ISGS site #	Regulatory database(s)	Land use
None			

Information Sources

Website addresses listed below were accurate and active as of the date viewed or cited in the Appendix; however, websites change frequently and web addresses may be different in the future or may cease to exist entirely.

Berg, R.C., and Kempton, J.P. (1988). Stack-unit mapping of geologic materials in Illinois to a depth of 15 meters. Illinois State Geological Survey Circular 542. GIS data produced from publication plates (1995, revised 1998).

Berg, R.C., Kempton, J.P., and Cartwright, K. (1984). Potential for contamination of shallow aquifers from land burial of municipal wastes (1:500,000). Illinois State Geological Survey Circular 532.

Erdmann, A.L., Adomaitis, D.J., Bannon-Nilles, P.L., Kientop, G.A., and Schmidt, D.R. (2014). A manual for conducting preliminary environmental site assessments for Illinois Department of Transportation infrastructure projects. Illinois State Geological Survey Circular 585. 38 pp.

Geiger, J.W. (2006). Summary of former manufactured gas plants of Illinois (draft). Illinois State Geological Survey.

Henderson County Assessor (May 3, 2017): http://henderson.illinoisassessors.com.

Illinois Department of Transportation Bridge Information System: http://apps.dot.illinois.gov/bridgesinfosystem/main.aspx.

Illinois Department of Transportation Site Assessment Tracking System: https://frostycap.isgs.illinois.edu/idot_extranet/default.asp.

Illinois Emergency Management Agency (1972-1987). Incident database.

Illinois Emergency Management Agency (May 24, 2017). Incident database: http://tier2.iema.state.il.us/ FOIAHazmatSearch/.

Illinois Environmental Protection Agency, Bureau of Land (May 24, 2017). BOL database: http://epadata.epa.state.il.us/land/inventory/.

Illinois Environmental Protection Agency, Bureau of Land (February 11, 2010). Brownfields database: http://epadata.epa.state.il.us/land/brownfields.

Illinois Environmental Protection Agency, Bureau of Land (May 2, 2017). Groundwater ordinance: http://epadata.epa.state.il.us/land/gwordinance/municipality.asp.

Illinois Environmental Protection Agency, Bureau of Land (May 24, 2017). Leaking Underground Storage Tank (LUST) database: http://epadata.epa.state.il.us/land/ust/.

Illinois Environmental Protection Agency, Bureau of Land (May 24, 2017). Site Remediation

Program (SRP) database: http://epadata.epa.state.il.us/land/srp/.

Illinois Environmental Protection Agency, Bureau of Land (January 2017). State Underground Injection Control inventory, 1984-January 2017.

Illinois Environmental Protection Agency, Bureau of Water, Division of Public Water Supplies (July 2016). Restricted Status List-Public Water Supplies.

Illinois Environmental Protection Agency, Bureau of Water, Division of Public Water Supplies, Groundwater Quality Protection Program (May 2, 2017). Well site survey report.

Illinois Environmental Protection Agency, Bureau of Water (2016). Illinois Integrated Water Quality Report and Section 303(d) List: http://www.epa.state.il.us/water/water-quality/index.html.

Illinois Environmental Protection Agency, Bureau of Water (2016). Illinois Integrated Water Quality Report and Section 303(d) list: Appendix B-2. Stream Assessments: http://www.epa.illinois.gov/Assets/iepa/water-quality/watershed-management/tmdls/2016/303-d-list/appendix-b2.pdf.

Illinois Environmental Protection Agency, Bureau of Water. Resource Management Mapping Service: http://www.rmms.illinois.edu/RMMS-JSAPI/.

Illinois Environmental Protection Agency (May 2, 2017). Illinois Uniform Environmental Covenants Act (UECA) Registry: http://epa.illinois.gov/topics/cleanup-programs/ueca/registry/index.

Illinois Environmental Protection Agency, Office of Emergency Response (1972-1987). Incident lists.

Illinois State Geological Survey, Environmental Site Assessments section (2008). Summary of SEMS sites in Illinois (draft). Illinois State Geological Survey.

Illinois State Geological Survey, Environmental Site Assessments section (2008). Summary of landfill sites in Illinois (draft). Illinois State Geological Survey.

Illinois State Geological Survey, Environmental Site Assessments section (2008). Summary of LUST sites in Illinois (draft). Illinois State Geological Survey.

Illinois State Geological Survey. ILOIL Interactive Mapping System: http://maps.isgs.illinois.edu/iloil/.

Illinois State Geological Survey (August 3, 2016). Online coal maps. Directory of Coal Mines in Illinois, Henderson County: http://isgs.illinois.edu/research/coal/maps/county.

Illinois State Geological Survey (2017). Water wells

Illinois State Geological Survey. Well logs.

Illinois State Water Survey (May 2, 2017). Public water supply surface water intakes in Illinois.

Keefer, D.A. and Berg, R.C. (1990). Potential for aquifer recharge in Illinois (1:1,000,000). Illinois State Geological Survey, Miscellaneous maps: MILRecharge.

Killey, M.M., Hines, J.K., and DuMontelle, P.D. (1985). Landslide inventory of Illinois. Illinois State Geological Survey Circular 534. GIS data produced from Plate 1 (1995).

Kolata, D.R. (2005). Bedrock geology of Illinois. Illinois State Geological Survey Illinois Map 14.

Masters, J.M., Ipe, V.C., Smith, L.R., and Falter, M. (1999). Directory of Illinois Mineral Producers and Maps of Extraction Sites, 1997. Illinois State Geological Survey, Illinois Minerals 117.

National Response Center (May 21, 2017). Emergency Response Notification System (ERNS) database: http://www.nrc.uscg.mil/.

Office of the State Fire Marshal (May 24, 2017). Underground Storage Tank (UST) database: http://webapps.sfm.illinois.gov/ustsearch/Search.aspx.

Piskin, K. (1975). Glacial drift in Illinois: Thickness and character. Illinois State Geological Survey Circular 490. GIS data produced from Plate 1 (1994, revised 1998).

USDA-NAIP; Henderson County photomosaic (2015).

U.S. Department of Agriculture, Natural Resources Conservation Service web soil survey (2013). http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

U.S. Department of Transportation, Office of Pipeline Safety (2017). Pipeline Integrity Management Mapping Application: http://www.npms.phmsa.dot.gov.

U.S. Environmental Protection Agency. Asbestos ban and phaseout. https://www.epa.gov/asbestos/us-federal-bans-asbestos.

U.S. Environmental Protection Agency (May 1, 2017). Illinois Brownfields pilot sites database: http://ofmpub.epa.gov/apex/cimc/f?p=cimc:68.

U.S. Environmental Protection Agency (July 2014). Notification of PCB activity, Region 5: https://www.epa.gov/sites/production/files/2015-08/documents/national.pdf.

U.S. Environmental Protection Agency (February 2011). EPA Regulated PCB Transformer Data: https://www.epa.gov/sites/production/files/2015-10/documents/most_recent_registrations_excel_document.xls_.pdf.

U.S. Environmental Protection Agency (August 11, 2016). Listing of Illinois RCRA sites with institutional controls: Region 5.

U.S. Environmental Protection Agency (January 20, 2017). Resource Conservation and Recovery Act Information (RCRAinfo) database, CORRACTS and non-CORRACTS databases: http://www3.epa.gov/enviro/facts/rcrainfo/search.html.

U.S. Environmental Protection Agency (May 1, 2017). Section Seven Tracking System:

https://www.epa. gov/enviro/frs-query-page.

U.S. Environmental Protection Agency (May 2, 2017). Sole Source Aquifer Protection Program: http://www.epa.gov/r5water/gwdw/solesourceaquifer/index.htm. delete if no hydro

U.S. Environmental Protection Agency (May 24, 2017). Superfund Enterprise Management System (SEMS) database: https://cumulis.epa.gov/supercpad/cursites/srchsites.cfm.

U.S. Environmental Protection Agency (1982-2015). Toxics Release Inventory (TRI): https://www.epa.gov/enviro/tri-search.

U.S. Geological Survey (2014). Earthquake Hazards Program, National Seismic Hazard Map. Peak Acceleration (% g) with 2% Probability of Exceedance in 50 Years: https://earthquake.usgs. gov/hazards/hazmaps/conterminous/#2016.

U.S. Geological Survey and Illinois Environmental Protection Agency (2017). Source Water Assessment Program (SWAP) ArcIMS Mapping Tool: http://illinois-epa.maps.arcgis.com/ apps/webappviewer/index.html?id=4d37a05f5ba441f1b30dab54ccb81fc8.

Weibel, C.P. and Panno, S.V. (1997). Karst terrains and carbonate rocks of Illinois [map], in Karst regions of Illinois. Illinois State Geological Survey Open File Series 1997-2.

APPENDIX

ISGS PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT CHECKLIST

IDOT: P94-030-95 ISGS: 1040B
City: Unincorporated Gladstone Township
County: Henderson
Location Coordinates: T10N, R5W, Sections 15, 16, 20-23, 29-31; T10N, R6W, Sections 33-36

IDOT District Contact: ISGS Lead: AMC
Name: Greg Larson
Phone: (309) 671-3479

Task	Status*	Date	By
Original Material Copied	MF	11/7/16	ALE
IDOT Project Location Database – (All other projects/IDOT sites in the vicinity of the project)			
• Other Preliminary Environmental Site Assessments	MF	4/19/17	AMC
• Preliminary Site Investigations/Phase II Reports	NF	4/19/17	AMC
• Maintenance Facilities	NF	4/19/17	AMC
• Permit-Access Agreements	NF	4/19/17	AMC
• Draft Highway Authority Agreements/Highway Authority Agreements	NF	4/19/17	AMC
• Miscellaneous Sites	NF	4/19/17	AMC
Local Collections			
• County	MF	4/19/17	AMC
• City	NF	4/19/17	AMC
Geologic Information			
• ISGS Stack-Unit Map (GIS)	MF	5/2/17	AMC
• ISGS Glacial Drift in Illinois (GIS)	MF	5/2/17	AMC
• ISGS Bedrock Geology of Illinois (GIS)	MF	5/2/17	AMC
• USDA NRCS Soil Survey Maps	MF	5/2/17	AMC
• USDA NRCS Hydric Soils	MF	5/2/17	AMC
• USDA NRCS Prime Farmland Soils	MF	5/2/17	AMC
Hydrogeologic Information (non-CE projects only)			
• IEPA Restricted Status List	NF	5/2/17	AMC
• USGS-IEPA SWAP-IL Public Water Supplies	MF	5/2/17	AMC
• ISGS Wells (GIS)	MF	5/2/17	AMC
• ISWS Public Water Supply Surface Water Intakes in Illinois (GIS)	NF	5/2/17	AMC
• Potential for Aquifer Contamination Map	MF	5/2/17	AMC
• Potential for Aquifer Recharge Map	MF	5/2/17	AMC
• Sole Source Aquifer Protection Program	NF	5/2/17	AMC
Hydrogeologic Information (all projects)			
• USGS-IEPA SWAP Wellhead Protection	MF	5/2/17	AMC
• USGS-IEPA SWAP Fact Sheets /IEPA Well Site Survey Reports	MF	5/2/17	AMC
Historical Records			
• Aerial Photographs	NA	4/19/17	AMC
• USGS Topographic Maps	NA	4/19/17	AMC
• Plat Maps	NA	4/19/17	AMC
• Sanborn Fire Insurance Maps: Chadwyck-Healey Inc.	NA	4/19/17	AMC
• Sanborn Fire Insurance Maps: University Publications of America	NA	4/19/17	AMC
• Sanborn Fire Insurance Maps: Rascher Publishing Company	NA	4/19/17	AMC
• City Directories	NA	4/19/17	AMC
• Industrial Directories (optional)	NA	4/19/17	AMC
• IEPA-ISGS Summary of Former Manufactured Gas Plant Sites (GIS)	NF	4/19/17	AMC
• ISGS Draft SEMS Site Coverage (GIS)	NF	4/19/17	AMC
• ISGS Draft LUST Site Coverage (GIS)	NF	4/19/17	AMC
• ISGS Draft Landfill Site Coverage (GIS)	NF	4/19/17	AMC

Task	Status*	Date	By
Federal Records			
▸ SEMS (NPL, Active, Archived)	NF	5/24/17	AMC
▸ Mercury Site Lists	NF	5/1/17	AMC
▸ RCRA CORRACTS	NF	5/10/17	AMC
▸ RCRA Non-CORRACTS TSD Facilities	NF	5/1/17	AMC
▸ RCRA (Other)	NF	5/10/17	AMC
▸ ERNS	NF	5/24/17	AMC
▸ Brownfields Pilot Sites	NF	5/1/17	AMC
▸ Toxics Release Inventory	NF	5/1/17	AMC
▸ SSTS	MF	5/1/17	AMC
▸ PCB Transformer Registration Database/PCB Activity Quarterly Reports	NF	5/1/17	AMC
USEPA Information Request			
▸ Sent	NA	4/19/17	AMC
▸ Received	NA	4/19/17	AMC
State Records			
▸ IEPA Brownfields	NF	5/2/17	AMC
▸ IEPA Bureau of Land Inventory	MF	5/24/17	AMC
▸ IEPA Illinois Water Quality Reports	NF	5/2/17	AMC
▸ IEPA LUST	MF	5/24/17	AMC
▸ IEPA Site Remediation Program	NF	5/24/17	AMC
▸ OSFM UST	MF	5/24/17	AMC
▸ IEMA non-LUST Incidents/IEPA OER lists	MF	5/24/17	AMC
▸ Activity and Use Limitations (AULs)	NF	5/1/17	AMC
▸ Groundwater Ordinances	NF	5/2/17	AMC
▸ Cook County Bridge List	NA	5/1/17	AMC
▸ IDOT Bridge List	MF	5/1/17	AMC
▸ Landfills (GIS)	NF	5/1/17	AMC
▸ State Underground Injection Control Inventory	NF	5/1/17	AMC
IEPA BOL Information Request			
▸ Sent	NA	4/19/17	AMC
▸ Received	NA	4/19/17	AMC
OSFM Information Request			
▸ Sent	NA	4/19/17	AMC
▸ Received	NA	4/19/17	AMC
Local Records			
▸ Fire Department Records (optional)	NA	4/19/17	AMC
Mining Maps and Publications			
▸ ISGS Quadrangle/County On-Line Coal Maps and Directories	NF	5/2/17	AMC
▸ ISGS Non-Coal Underground Mines	NF	5/2/17	AMC
▸ Lead Mining	NA	5/2/17	AMC
Oil and Gas Information			
▸ ISGS Oil and Gas Fields/Oil Wells (ILOIL GIS)	NF	5/2/17	AMC
▸ USDOT OPS Pipeline Integrity Management Mapping Application	MF	5/2/17	AMC
Natural Hazards			
▸ USGS Seismic Risk Map	NF	4/19/17	AMC
▸ ISGS Landslide Inventory (GIS)	NF	4/19/17	AMC
▸ Karst Terrains and Carbonate Rocks of Illinois Maps	NF	4/19/17	AMC

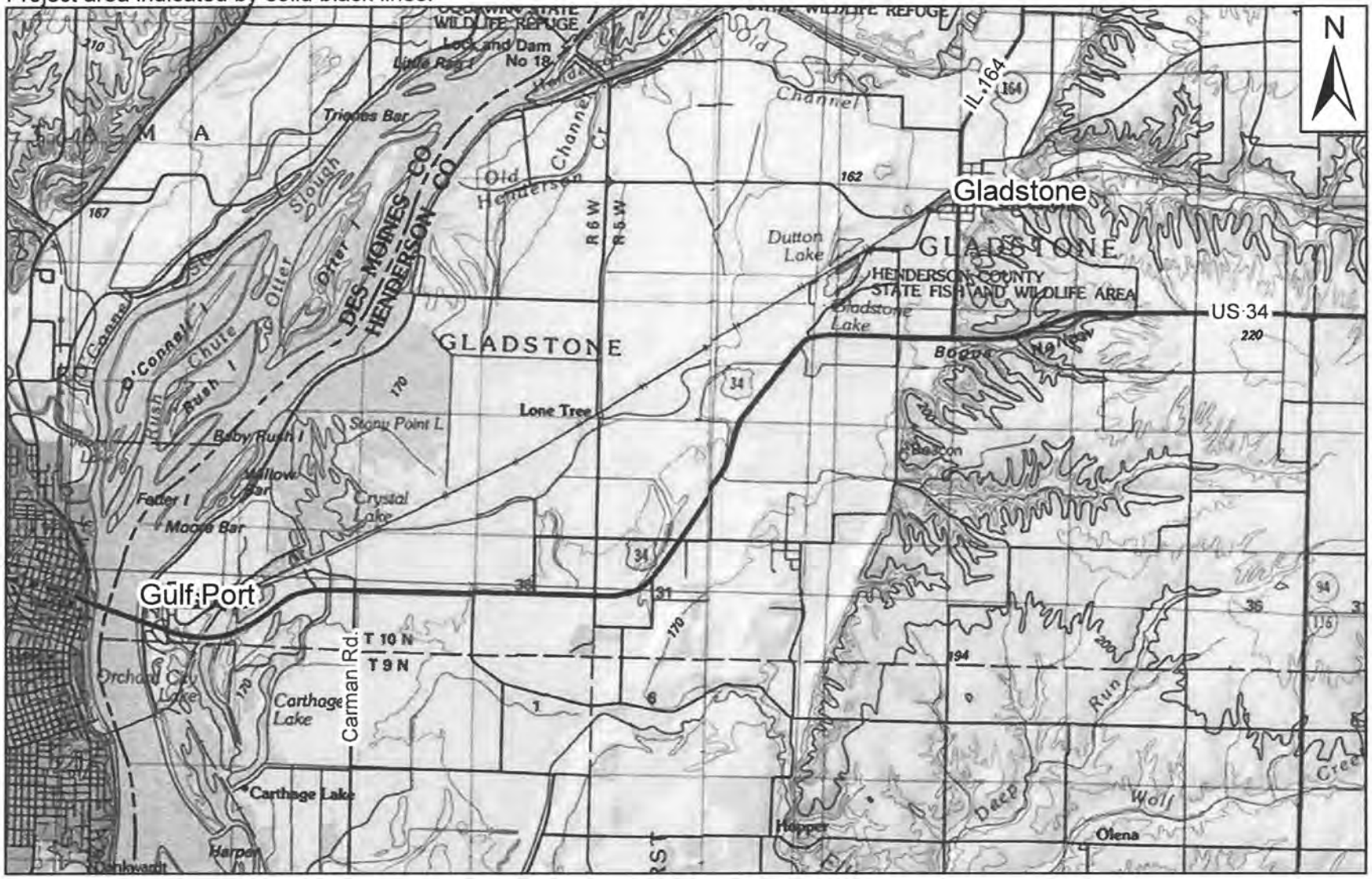
* MF = Material found within search radius; NF = Nothing found within search radius; NA = Not applicable

Date of Records Review Completion: 5/24/17

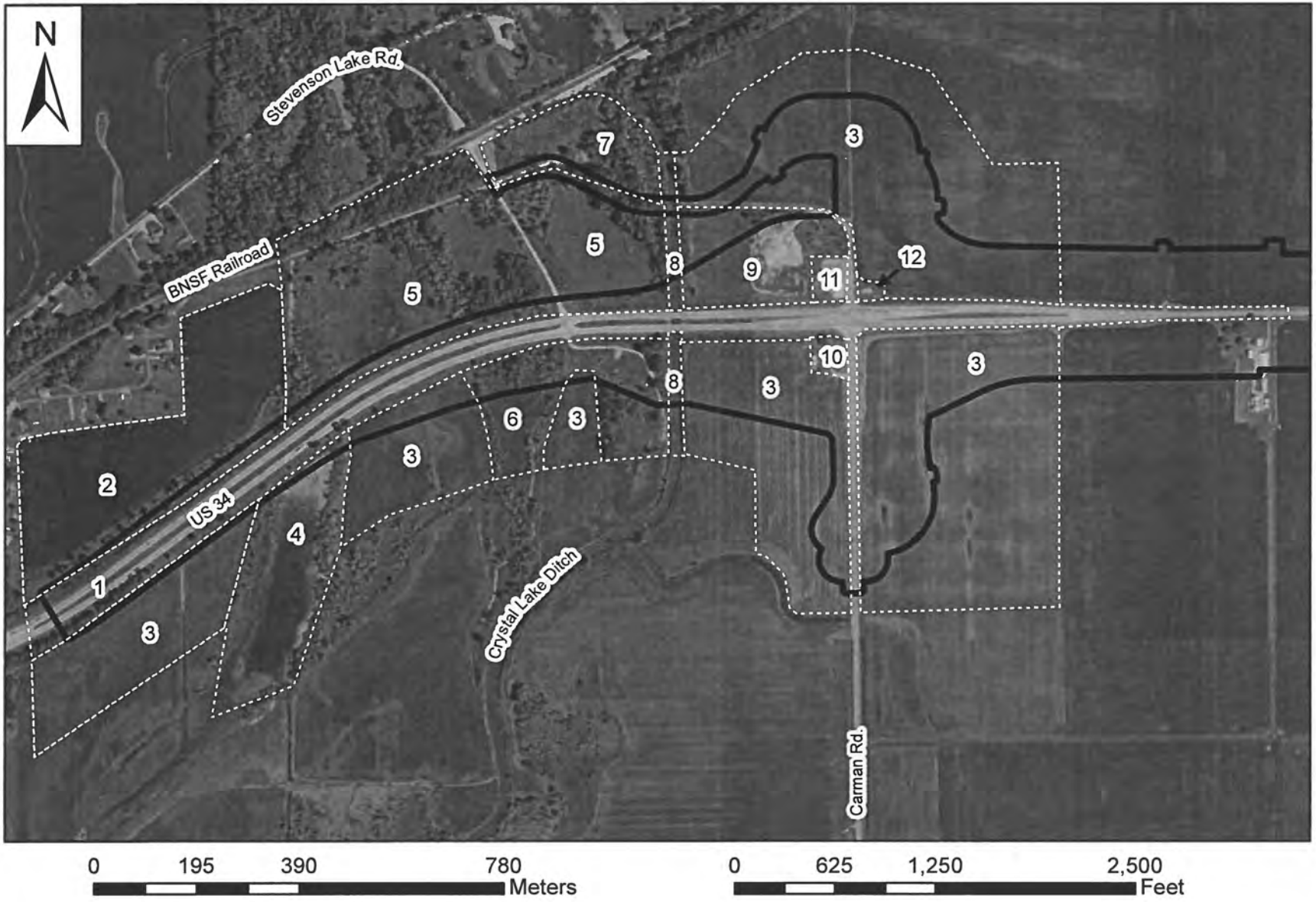
List of Attachments

1. Project location map, ISGS #1040B.
2. Site location maps (11 pages).

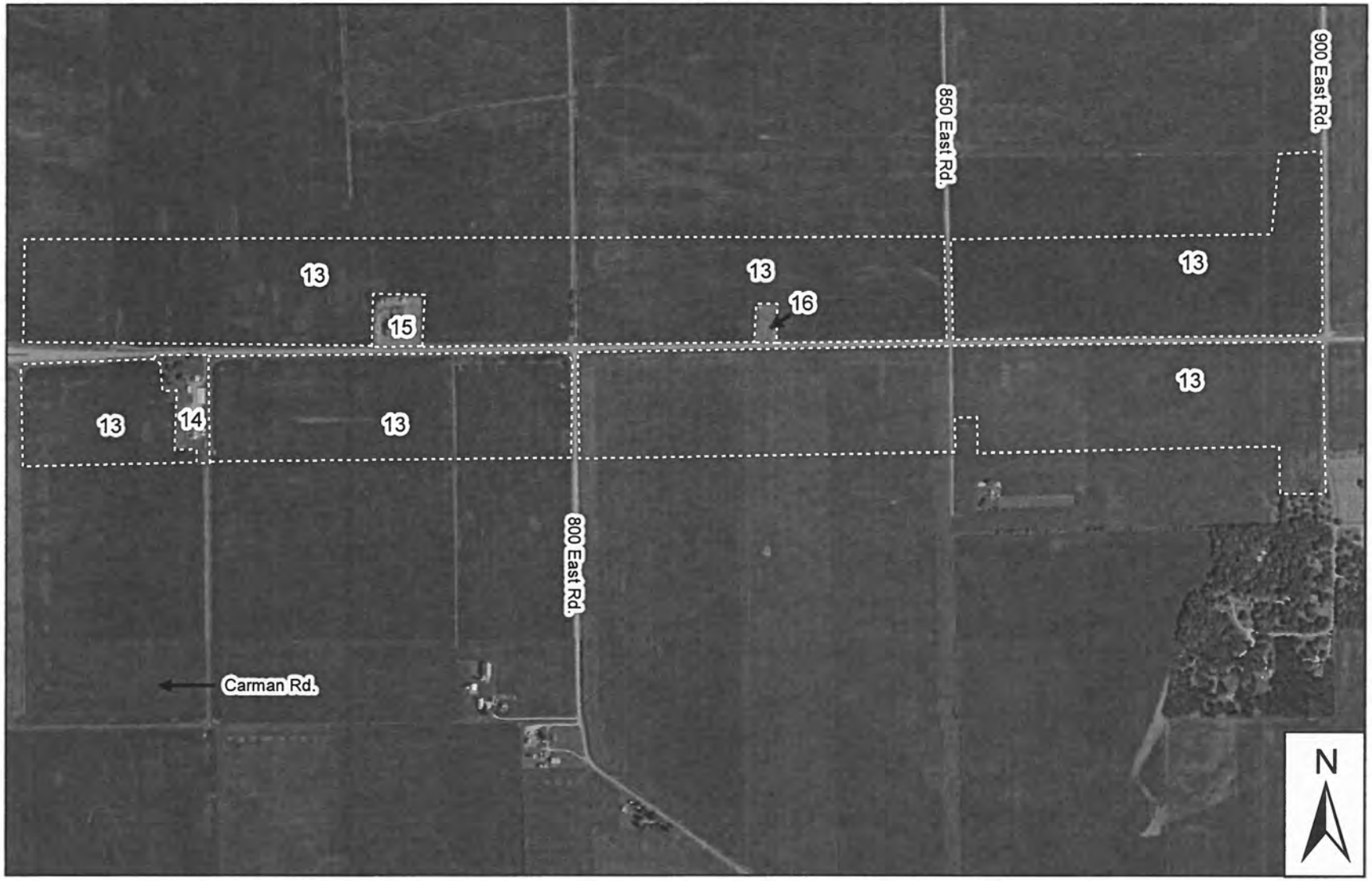
Attachment 1. Project location map, ISGS #1040B.
Project area indicated by solid black lines.



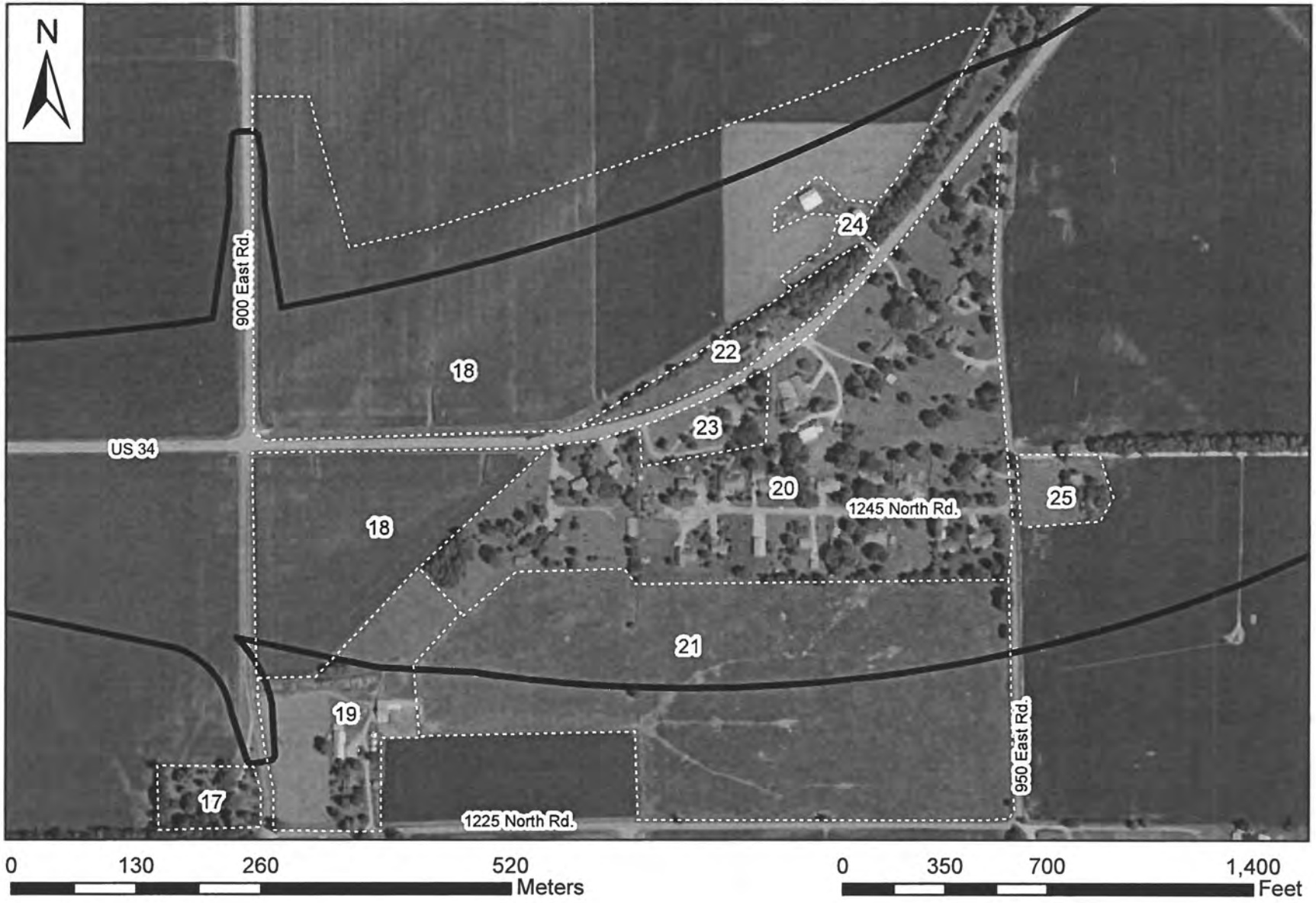
Attachment 2, page 1. Site location map, Sites 1040B-1 through 1040B-12.
All site boundaries are approximate and should not be used as actual parcel boundaries.



Attachment 2, page 2. Site location map, Sites 1040B-13 through 1040B-16.
All site boundaries are approximate and should not be used as actual parcel boundaries.



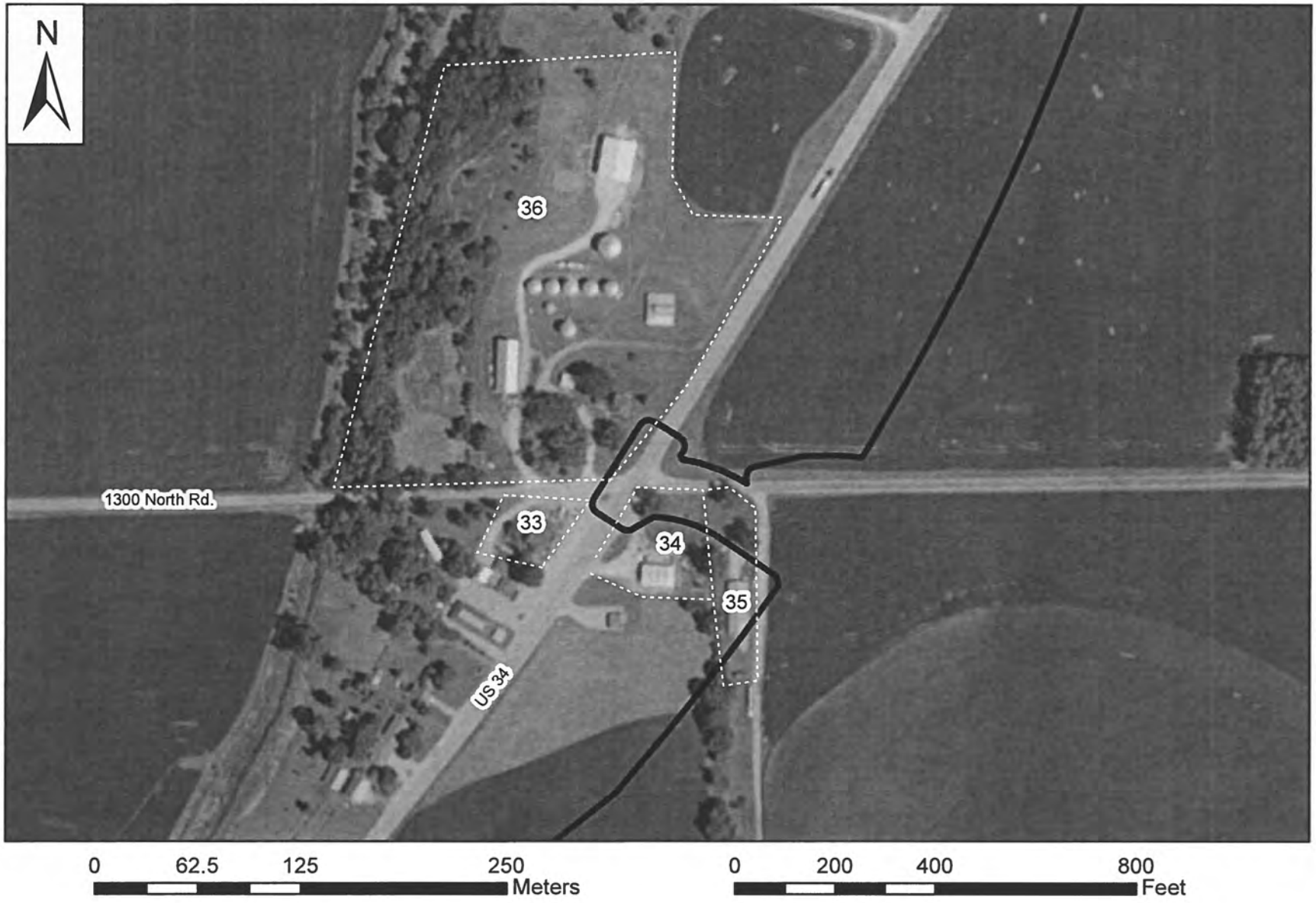
Attachment 2, page 3. Site location map, Sites 1040B-17 through 1040B-25.
All site boundaries are approximate and should not be used as actual parcel boundaries.



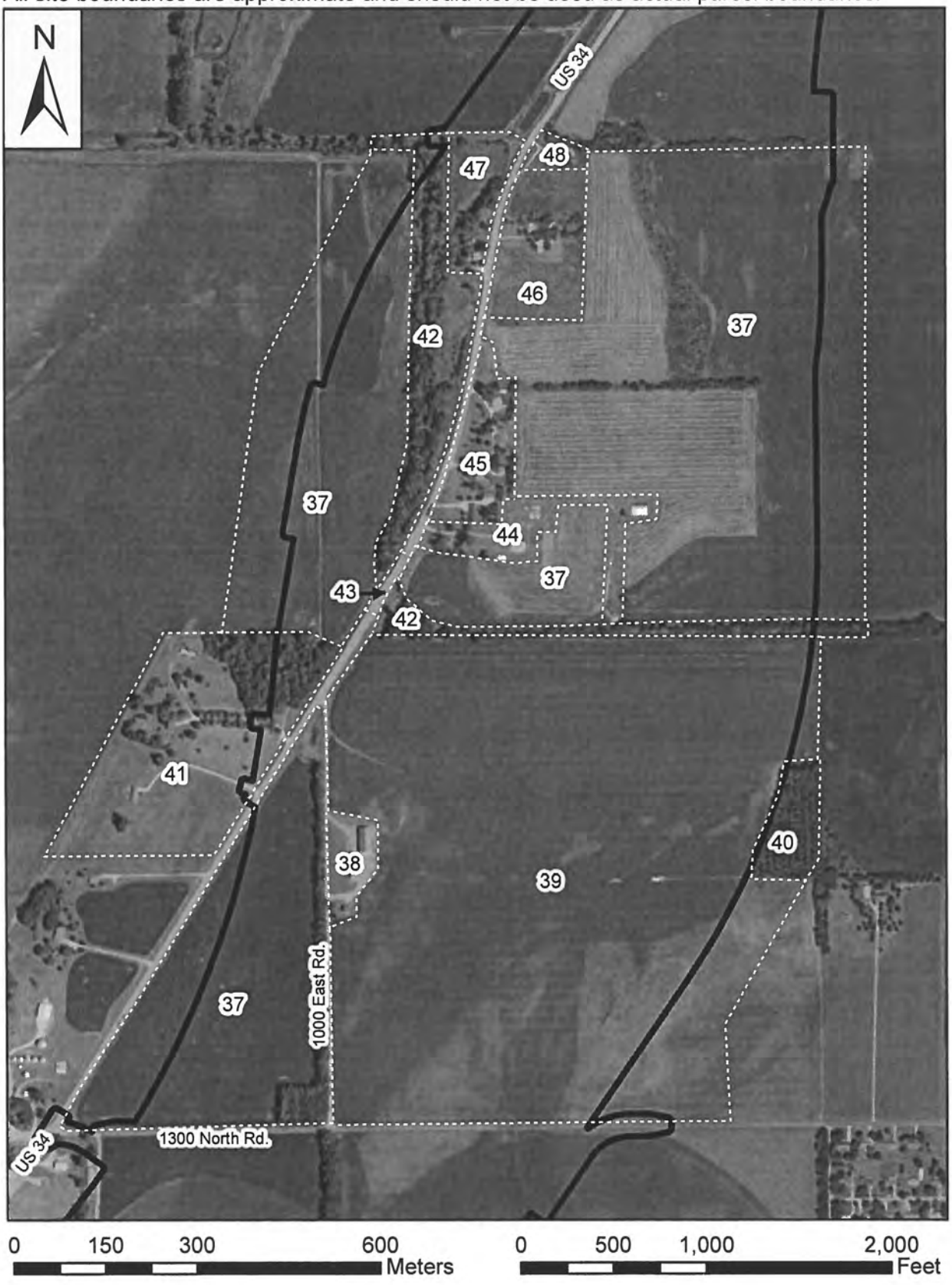
Attachment 2, page 4. Site location map, Sites 1040B-26 through 1040B-32.
All site boundaries are approximate and should not be used as actual parcel boundaries.



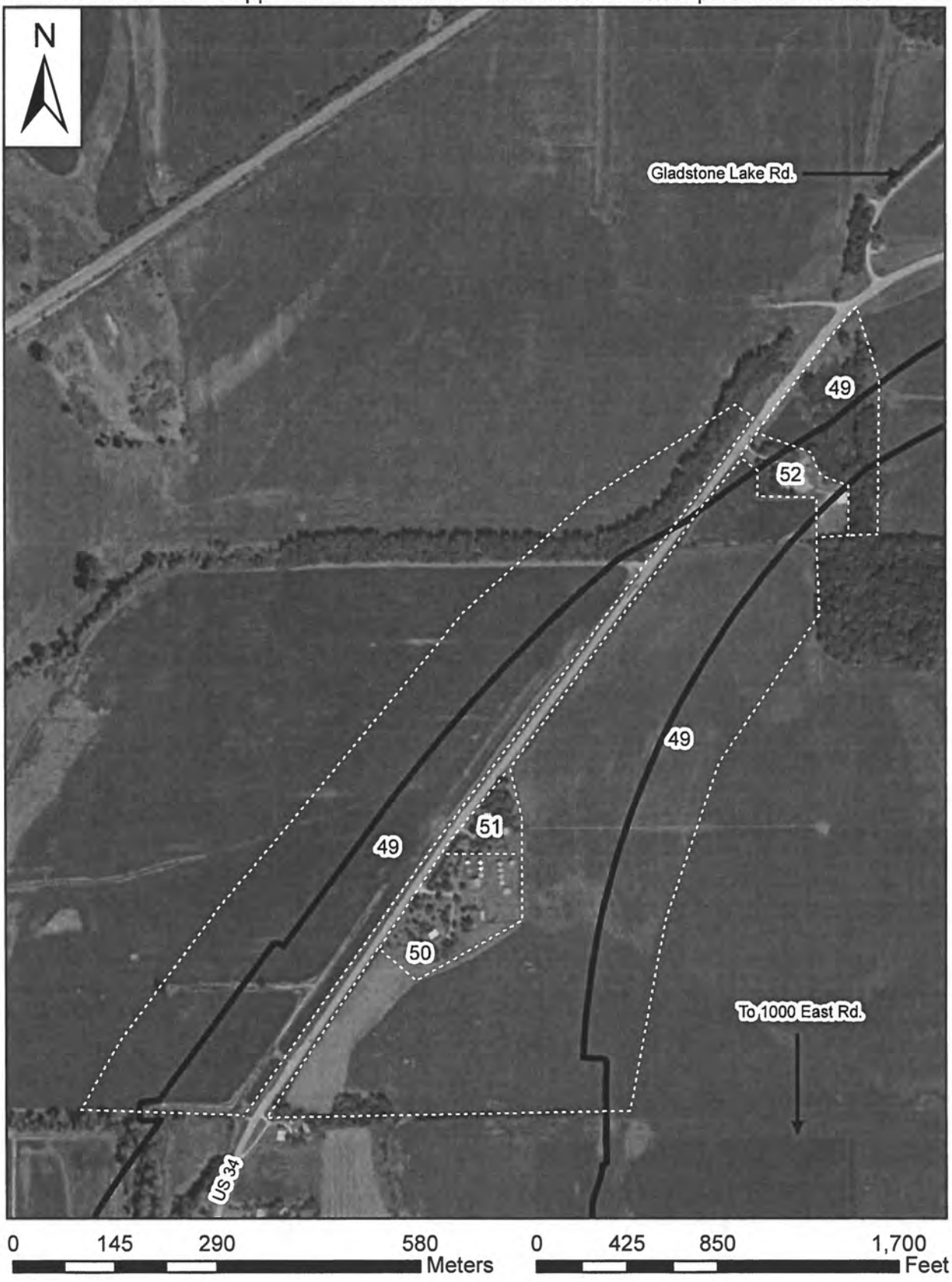
Attachment 2, page 5. Site location map, Sites 1040B-33 through 1040B-36.
All site boundaries are approximate and should not be used as actual parcel boundaries.



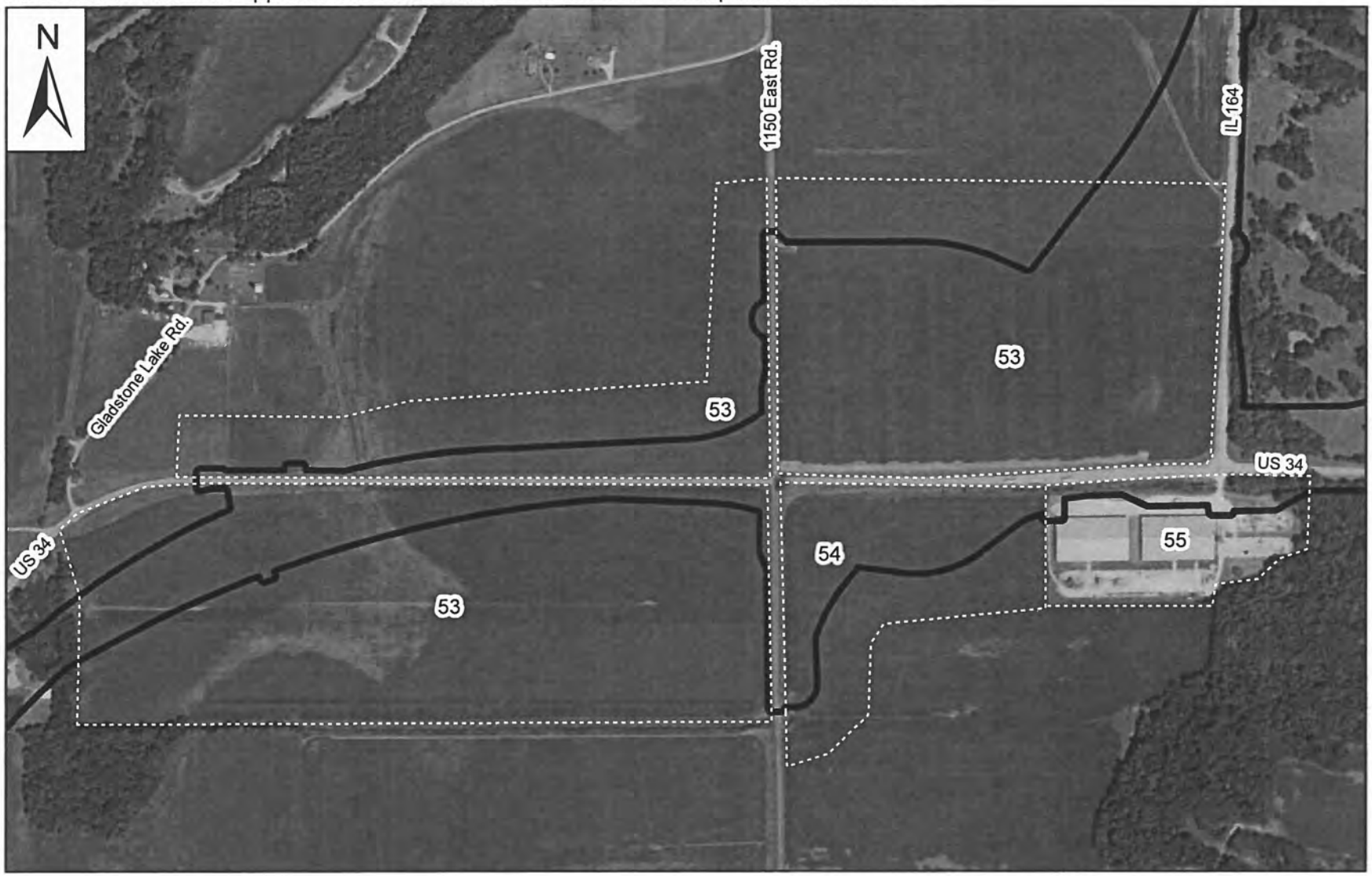
Attachment 2, page 6. Site location map, Sites 1040B-37 through 1040B-48.
All site boundaries are approximate and should not be used as actual parcel boundaries.



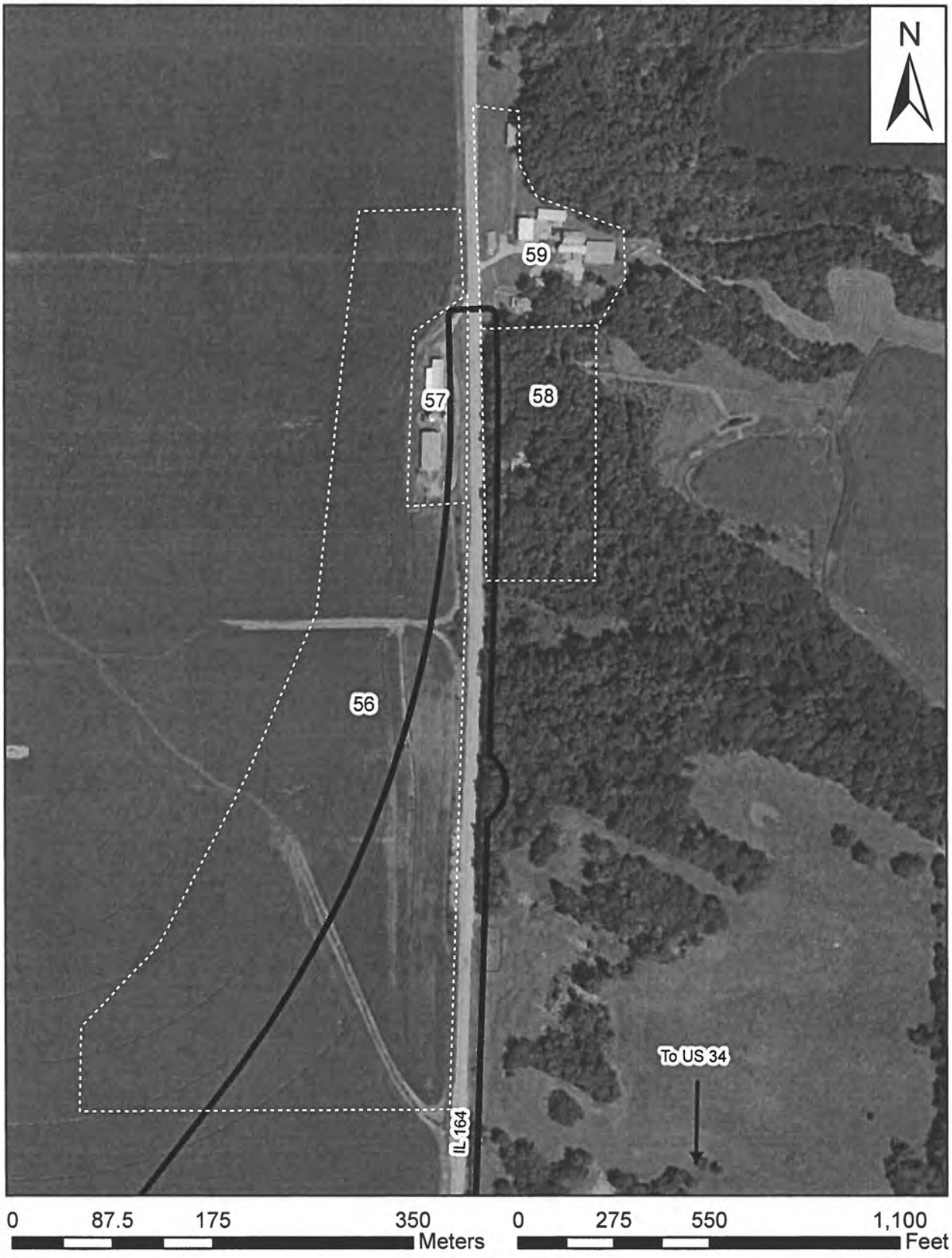
Attachment 2, page 7. Site location map, Sites 1040B-49 through 1040B-52.
All site boundaries are approximate and should not be used as actual parcel boundaries.



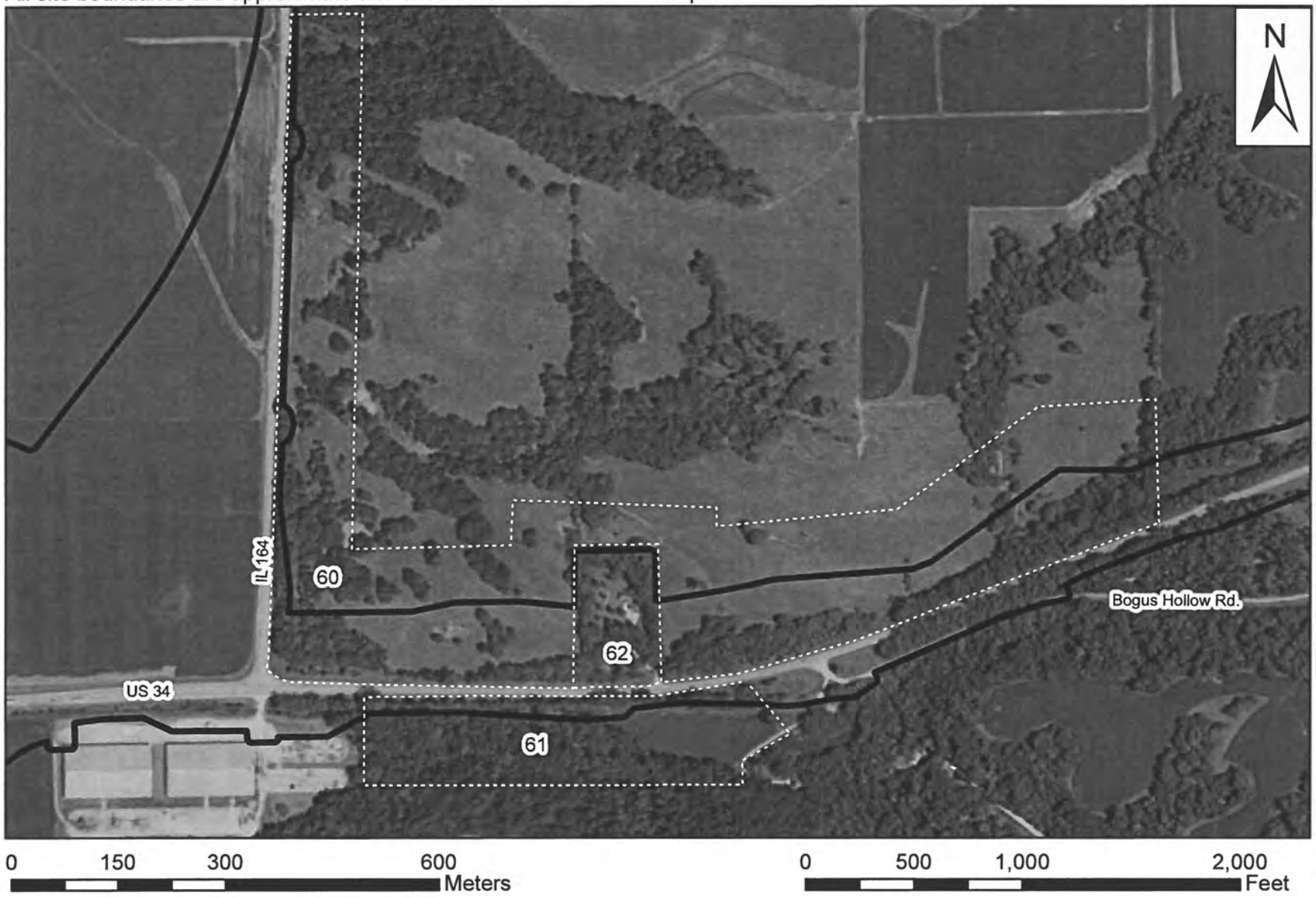
Attachment 2, page 8. Site location map, Sites 1040B-53 through 1040B-55.
All site boundaries are approximate and should not be used as actual parcel boundaries.



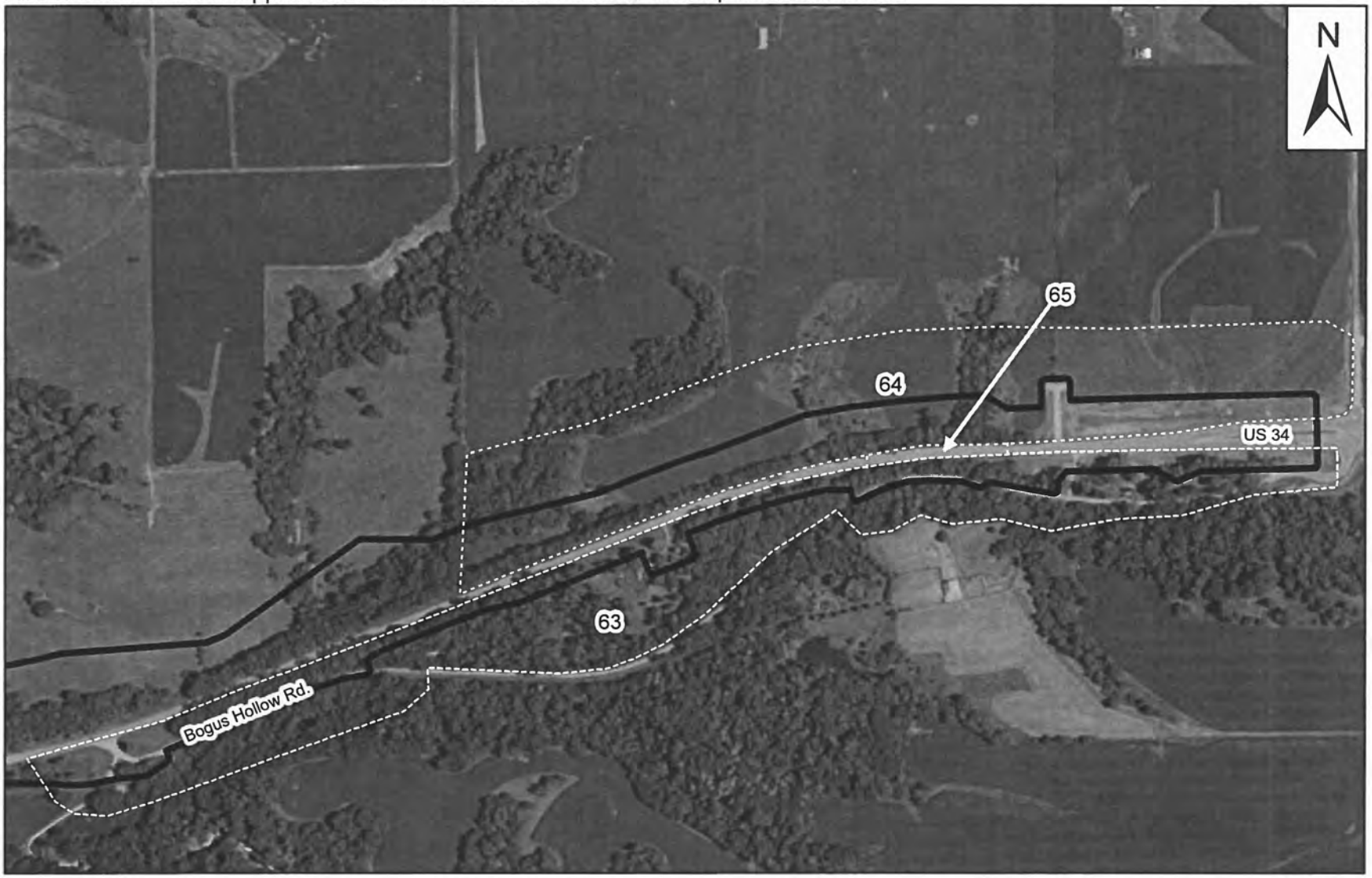
Attachment 2, page 9. Site location map, Sites 1040B-56 through 1040B-59.
All site boundaries are approximate and should not be used as actual parcel boundaries.



Attachment 2, page 10. Site location map, Sites 1040B-60 through 1040B-62.
All site boundaries are approximate and should not be used as actual parcel boundaries.



Attachment 2, page 11. Site location map, Sites 1040B-63 through 1040B-65.
All site boundaries are approximate and should not be used as actual parcel boundaries.



Appendix K

Correspondence/Coordination

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U.S. Department
of Transportation
Federal Highway Administration

Illinois Division

3250 Executive Park Dr.
Springfield, IL 62703
(217) 492-4640
www.fhwa.dot.gov/ildiv

June 9, 2015

In Reply Refer To:
HPER-IL

To Tribes That Have Expressed Interest in Illinois

Subject: U.S. Route 34 Supplemental Environmental Impact Statement
Invitation for Section 106 Consulting Party Status

Dear Primary Tribal Contact:

The Federal Highway Administration (FHWA) is requesting your agency to become a Section 106 consulting party for the Supplemental Environmental Impact Statement (SEIS) for the U.S. Route 34 project in Henderson County, Illinois. If you would like to engage in this role, please send FHWA a response prior to July 10, 2015.

THE PROJECT

The FHWA, in cooperation with the Illinois Department of Transportation (IDOT), is initiating an SEIS for the U.S. Route 34 project. The SEIS study area is located from west of Carman Road near Gulfport to east of Township Road 111 near Biggsville in Henderson County, Illinois, and covers a length of approximately nine miles. The project is a supplement to an earlier EIS completed for approximately 30 miles of U.S. Route 34 from Gulfport to Monmouth, Illinois. The Record of Decision (ROD) was signed in 2003. Due to changes in the regulatory floodplain of the Mississippi River, this SEIS is being conducted only in the area affected by the new floodplain boundaries. The remainder of the original ROD is unchanged.

The study area covers approximately 10.4 square miles and is located in the floodplain of the Mississippi River. It contains environmentally sensitive resources, including emergent and forested wetlands, perennial streams, 100-year and 500-year floodplain, prime farmland, and a historic building.

The SEIS will include an evaluation of transportation system needs across the entire study area. The technical tools used to identify transportation system needs and potential environmental impacts during the SEIS include GIS, transportation demand models, crash history data, and field studies.

The FHWA intends to issue the Final SEIS concurrently with the ROD pursuant to Pub. L. 112-141, 126 Stat. 405, Section 1319(b), which will conclude the National Environmental Policy Act (NEPA) process. The combined Final SEIS/ROD will identify the selected alternative.

SECTION 106 CONSULTING PARTY

Section 106 of the National Historic Preservation Act (Section 106) requires Federal agencies to (1) take into account the effect of their undertakings on historic properties and (2) afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The Section 106 process is outlined in 36 CFR Part 800.

These regulations require Federal agencies to identify parties entitled to be consulting parties and invite them to participate as such in the Section 106 process. Since your Tribe has expressed an interest in the counties that the project is located in, we are inviting you to be a consulting party. Consulting parties may be asked to provide information on historic properties in the project area, identify issues relating to the project's potential effects on historic properties, and if applicable, consult to resolve adverse effects to historic properties.

If you would like to be a Section 106 consulting party, please send FHWA a response within the stated deadline to engage in the project in this role.

If you have any questions or would like to discuss in more detail the study or our agencies' respective roles and responsibilities during the preparation of this SEIS please contact Ms. Janis Piland, FHWA Environmental Engineer, at (217) 492-4989 or janis.piland@dot.gov

Thank you for your cooperation and interest in this project.

Sincerely,

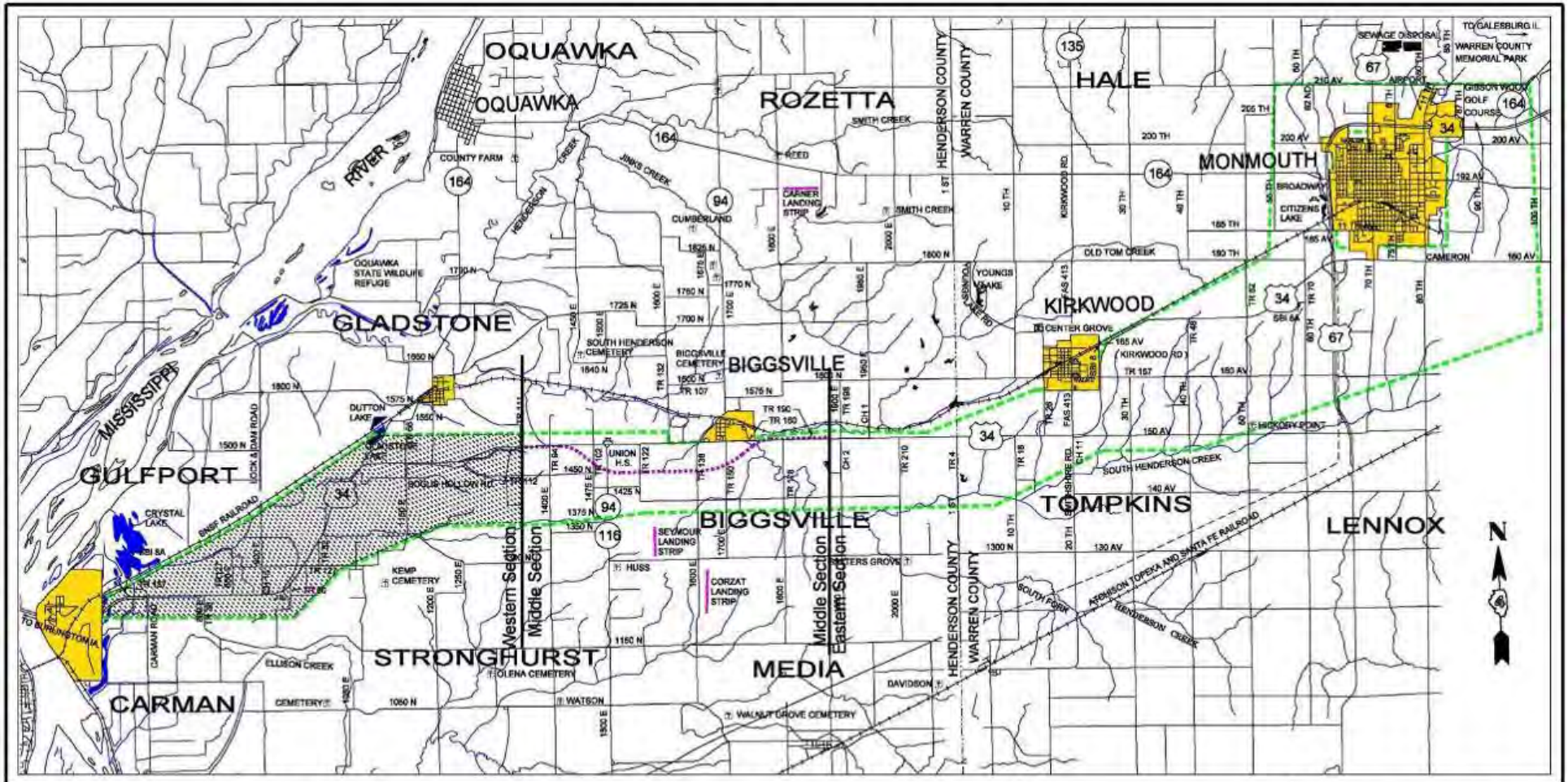
Catherine A. Batey
Division Administrator

Enclosure

ecc: Mr. Kensil Garnett, Region 3 Engineer, IDOT
Mr. John Baranzelli, Bureau of Design and Environment, IDOT

Identical Letters Sent To:
Ho-Chunk Nation
Iowa Tribe of Kansas and Nebraska
Iowa Tribe of Oklahoma
Kickapoo Traditional Tribe of Texas
Kickapoo Tribe in Kansas
Kickapoo Tribe of Oklahoma
Miami Tribe of Oklahoma
The Peoria Tribe of Indians of Oklahoma
Citizen Potawatomi Nation
Forest County Potawatomi
Hannahville Indian Community

Pokagon Band of Potawatomi Indians
Prairie Band Potawatomi Nation
Sac and Fox Tribe of Mississippi in Iowa
Sac and Fox Nation of Missouri
Sac and Fox Nation of Oklahoma



LEGEND

- U.S. Hwy 34
- U.S. Hwy 67
- 4-Lane U.S. Hwys
- Illinois State Hwy
- Primary Roads
- Streams & Creeks
- Electric Transmission Line
- County Line
- Railroad
- Parks
- Airport / Landing Strip
- City / Village Limits
- Study Corridor
- SEIS Area
- Biggsville Bypass (under constr.- est. completion: fall 2015)

2 0 2
MILES

2 0 2 4
KILOMETERS

Revised: 02/ 13 / 15

Illinois Department of Transportation

U.S. Route 34
Gulfport to Monmouth

U.S. ROUTE 34
LOCATION/CORRIDOR MAP

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Illinois-Iowa Ecological Services Field Office
Illinois & Iowa Ecological Services Field Office
1511 47th Ave
Moline, IL 61265-7022
Phone: (309) 757-5800 Fax: (309) 757-5807

In Reply Refer To:
Consultation Code: 03E18000-2020-SLI-0751
Event Code: 03E18000-2020-E-01772
Project Name: US 34 SDEIS (seq. no. 238D)

February 11, 2020

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project “may affect” listed species or critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website http://ecos.fws.gov/ipac/ at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - http://www.fws.gov/midwest/endangered/section7/s7process/index.html. This website contains step-by-step instructions which will help you

determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all wind energy projects, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.) and Migratory Bird Treaty Act (16 U.S.C. 703 et seq), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Illinois-Iowa Ecological Services Field Office
Illinois & Iowa Ecological Services Field Office
1511 47th Ave
Moline, IL 61265-7022
(309) 757-5800

Project Summary

Consultation Code: 03E18000-2020-SLI-0751

Event Code: 03E18000-2020-E-01772

Project Name: US 34 SDEIS (seq. no. 238D)

Project Type: TRANSPORTATION

Project Description: The Preferred Alternative is Alternative 2 which is an 8.7-mile, four-lane expressway divided by a 50-foot grass median. It extends from west of Carman Road to east of Illinois 164 and includes interchanges at these locations. This roadway would be elevated between 10 and 17 feet above the 500-year flood elevation in the Mississippi River floodplain for approximately 4.7 miles where the existing US 34 roadway will be utilized as a frontage road.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/40.83391929921662N90.99792907575922W



Counties: Henderson, IL

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Clams

NAME	STATUS
Higgins Eye (pearlymussel) *Lampsilis higginsii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5428	Endangered
Sheepnose Mussel *Plethobasus cyphyus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6903	Endangered
Spectaclecase (mussel) *Cumberlandia monodonta* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7867	Endangered

Flowering Plants

NAME	STATUS
Eastern Prairie Fringed Orchid *Platanthera leucophaea*	Threatened

No critical habitat has been designated for this species.

Species profile: https://ecos.fws.gov/ecp/species/601

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

- PEM1A
- PEM1C
- PEM1Cx

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1A
- PFO1C
- PSS1C

FRESHWATER POND

- PUBG
- PUBGh

RIVERINE

- R2UBGx
- R2UBH
- R2UBHx
- R4SBC
- R4SBCx
- R5UBFx

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Rock Island Field Office
1511 47th Avenue
Moline, Illinois 61265
Phone: (309) 757-5800 Fax: (309) 757-5807

IN REPLY REFER TO:
IL-IAFO

Felecia Hurley
Illinois Department of Transportation:

Electronic Mail
February 13, 2020

We have reviewed your electronic mail dated February 13, 2020, for Seq. No. 238C – Henderson County, Illinois, and have the following comments. The proposed roadway improvement project, U.S. 34, will require approximately 8.8 acres of tree clearing.

ILDOT has reviewed the list of threatened or endangered species which may be present in Henderson County and has determined that there may be suitable habitat in the project area for Indiana bats and Northern long-eared bats. A tree clearing date restriction will be included to avoid direct impacts to bat species. ILDOT used the NLEB-Ibat determination key within IPaC to determine applicability of the project with the USFWS revised programmatic biological opinion for transportation projects dated 12-15-2016 and to assess what effect the project would have on Northern long-eared bats (NLEB) or Indiana bats (Ibats). ILDOT completed an IPaC qualification interview and determined that the project is not within the scope of the programmatic biological opinion. ILDOT, therefore, has determined that the project is not likely to adversely affect the NLEB or Ibat provided the tree clearing date restriction is in place. We concur with this determination. Trees will be replaced in accordance with Departmental Policy D&E-18.

Further, ILDOT has adequately addressed the potential impacts of the project alternatives on fish and wildlife resources and federally listed threatened and endangered species in the project area.

This precludes the need for further action on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. Should this project be modified or new information indicate endangered species may be affected, consultation should be initiated.

Heidi Woeber
Fish and Wildlife Biologist
Ecological Services
U.S. Fish and Wildlife Service
1511 47th Avenue
Moline, IL 61265
309/757-5800, ext. 209
309/757-5807 Fax
heidi_woeber@fws.gov

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant:	Illinois Department of Transportation - CO	*IDNR Project Number:*	1909505
Contact:	Felecia Hurley	*Date:*	04/09/2019
Address:	2300 S. Dirksen Parkway Springfield, IL 62764	*Alternate Number:*	238D
Project:	US 34 Supplemental EIS		
Address:	US 34, Gulfport		

Description: Preferred alternative for the US 34 Supplemental EIS.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Gladstone Lake INAI Site
Mississippi River - Drew Chute INAI Site
New Crystal Lake Club INAI Site
New Crystal Lake Club Natural Heritage Landmark
Black Sandshell *(Ligumia recta)*
Black Sandshell *(Ligumia recta)*
Butterfly *(Ellipsaria lineolata)*
Higgins Eye *(Lampsilis higginsii)*
Ornate Box Turtle *(Terrapene ornata)*
Plains Hog-Nosed Snake *(Heterodon nasicus)*
Spectaclecase *(Cumberlandia monodonta)*
Wild Blue Larkspur *(Delphinium carolinianum)*

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.



County: Henderson

Township, Range, Section:
10N, 5W, 14
10N, 5W, 15
10N, 5W, 16
10N, 5W, 17
10N, 5W, 20
10N, 5W, 21
10N, 5W, 22
10N, 5W, 23
10N, 5W, 27
10N, 5W, 28
10N, 5W, 29

10N, 5W, 30
10N, 5W, 31
10N, 5W, 32
10N, 5W, 33
10N, 6W, 33
10N, 6W, 34
10N, 6W, 35
10N, 6W, 36

IL Department of Natural Resources Contact
Justin Dillard
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Department of Transportation
Felecia Hurley
2300 S. Dirksen Parkway
Springfield, Illinois 62764

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

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EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

Illinois Department of
Natural Resources
One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

JB Pritzker, Governor
Colleen Callahan, Director

June 7, 2019

Felecia Hurley
Illinois Department of Transportation – CO
2300 S. Dirksen Parkway
Springfield, IL 62764

RE: US 34 Supplemental EIS
Project Number(s): 1909505 [238D]
County: Henderson

Ms. Hurley,

The Department has received your submission for this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and *Title 17 Illinois Administrative Code Part 1075*. Additionally, the Department may offer advice and recommendations for species covered under the *Fish & Aquatic Life Code* [515 ILCS 5, et seq.]; the *Illinois Wildlife Code* [520 ILCS 5, et seq.]; and the *Herptiles-Herps Act* [510 ILCS 69].

The proposed action being reviewed in this letter consists of the review of the supplemental EIS for the preferred alternative for US 34 in Henderson County (EcoCAT submittal #1909505). EcoCAT has indicated several Illinois Natural Area Inventory (INAI) sites, an Illinois Natural Heritage Landmark, and several state- and federally- listed species within the potential footprint of this preferred alternative.

The Department concurs with IDOT on the no effect determinations for the **Gladstone Lake, Mississippi River – Drew Chute,** and **New Crystal Lake Club** INAI sites; the **New Crystal Lake Club** Natural Heritage Landmark; and the **Blanding's Turtle** (*Emydoidea blandingii*), **Ornate Box Turtle** (*Terrepene ornata*), **Plains Hog-nosed Snake** (*Heterodon nasicus*), **Black Sandshell** (*Ligumia recta*), **Higgins Eye** (*Lampsilis higginsii*), **Butterfly** (*Ellipsaria lineolata*), and **Spectaclecase** (*Cumberlandia monodonta*) for this preferred alternative.

EcoCAT has indicated records of the state-listed **Wild Blue Larkspur** (*Delphinium carolinianum*) within the footprint of the proposed project. Documents reviewed indicate the ROW of the project is assumed to impact all records for the purposes of an EIS. The Department recommends avoidance of this plant during further design, however, pursuant to the *Illinois Endangered Species Protection Act [520 ILCS 10/]*, state-listed plants belong to the landowner and their fate resides with the landowners

conservation decisions. Express written permission from the landowner should be obtained from construction companies/crews to "take" listed plants to comply with the Illinois Endangered Species Protection Act. Reviewed documents also indicate 0.5 acres of ROW within a 1.06 acre remnant loess hill prairie community. The Department recommends final plans accommodate avoidance of impact to this community. If this cannot be achieved, the Department recommends restoration and subsequent appropriate re-seeding be conducted in the impact areas upon project completion.

Documents reviewed indicate there is a prairie restoration site west of existing US 34 near PD creek crossing. Documents reviewed indicate 0.3 acres of this restoration are within the project footprint. The Department recommends final plans avoid impacts to this site, if feasible. If impacts cannot be avoided, the Department recommends comparable native prairie vegetation be re-seeded in the area of impact.

Consultation on the part of the Department is closed unless the applicant desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Thank you,



Bradley Hayes

Resource Planner
Office of Realty & Capital Planning
Illinois Dept. of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271
bradley.hayes@illinois.gov
Phone: (217) 782-0031

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Appendix L

404 Merger Meetings

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Illinois NEPA/404 Merger Meeting
March 16, 2015

Federal Highway Administration
3250 Executive Park Drive
Conference Room
Springfield, IL 62703

US Environmental Protection Agency
Lake Ontario Room, 12th Floor
77 West Jackson Boulevard
Chicago, IL 60604

9:00 am – 11:30 am

- IL 173 from IL 59 to US 41 (District 1, Lake County) (60 min)
  - Concurrence – Alternatives to be Considered

- I-55 at Airport/Lockport Road (District 1, Will County) (60 min)
  - Information – Project update, alternatives

11:30 am – 1 pm

Lunch Break

1 pm – 3 pm

- US 34 from Carman Road to Monmouth (District 4, Henderson County) (60 min)
  - Information – Supplemental EIS, project introduction

- Alton-Godfrey (District 8, Madison County) (60 min)
  - Information – Project update

Printed: March 11, 2015

Sign-in Sheet
NEPA-404 Merger Meeting
March 16, 2015
IL 173 from IL 59 to US 41
Concurrence: Alternatives to be Carried Forward

Name	Agency	e-mail address	Participation Location	Initials
Jan Piland	FHWA	Janis.Piland@dot.gov	Chicago	
Ken Westlake	USEPA	Westlake.Kenneth@epa.gov	Chicago	
Liz Pelloso	USEPA	Pelloso.Elizabeth@epa.gov	Chicago	
Mike Sedlacek	USEPA	Sedlacek.Michael@epa.gov	Chicago	
Shawn Cirton	USFWS	Shawn_Cirton@fws.gov	Chicago	
Soren Hall	USACE	Soren.G.Hall@usace.army.mil	Chicago	
Sam Mead	IDOT	Sam.mead@illinois.gov	Chicago	
Robert Stern	Exp	Robert.stern@exp.com	Chicago	
Mark Dvorak	Exp	Mark.dvorak@exp.com	Chicago	
Alicia Garcia	Exp	Alicia.garcia@exp.com	Chicago	
Vanessa Ruiz	IDOT	Vanessa.Ruiz@illinois.gov	Chicago	
Ryan Dettmann	IDOT	Ryan.Dettmann@illinois.gov	Chicago	
Steve Schilke	IDOT	Steven.Schilke@illinois.gov	Chicago	
Jennifer Kaluarachchige	IDOT	Jennifer.Kaluarachchige@illinois.gov	Chicago	
Jennifer Moraks	IDOT	Jennifer.morales@illinois.gov	Chicago	
Jessica Feliciano	IDOT	Jessica.feliciano@illinois.gov	Chicago	
John Baczek	IDOT	John.baczek@illinois.gov	Chicago	
Jim Novak	Huff & Huff	jnovak@huffnhuff.com	Chicago	

Sign-in Sheet NEPA-404 Merger Meeting March 16, 2015 IL 173 from IL 59 to US 41 Concurrence: Alternatives to be Carried Forward				
Matt Fuller	FHWA	Matt.fuller@dot.gov	Springfield	
Felecia Hurley	IDOT	Felecia.hurley@illinois.gov	Springfield	
Sheldon Fairfield	IL DNR	Sheldon.Fairfield@illinois.gov	Springfield	
John Sherrill	IDOT	John.sherrill@illinois.gov	Springfield	
Robin Helmerichs	FHWA	Robin.helmerichs@dot.gov	Springfield	
Joe Phillippe	IL Historic Pres. Agency	Joe.Phillippe@illinois.gov	Springfield	
Ken Runkle	IDOT	Ken.runkle@illinois.gov	Springfield	
Michael Hine	HFWA	Mike.hine@dot.gov	Springfield	
Thaddeus Faught	IL EPA	Thaddeus.faught@illinois.gov	Teleconference	

Sign-in Sheet
NEPA-404 Merger Meeting
March 16, 2015
I-55 at Airport/Lockport Road
Information: Project update, alternatives

Name	Agency	e-mail address	Participation Location	Initials
Jan Piland	FHWA	Janis.Piland@dot.gov	Chicago	
Ken Westlake	USEPA	Westlake.Kenneth@epa.gov	Chicago	
Liz Pelloso	USEPA	Pelloso.Elizabeth@epa.gov	Chicago	
Mike Sedlacek	USEPA	Sedlacek.Michael@epa.gov	Chicago	
Shawn Cirton	USFWS	Shawn_Cirton@fws.gov	Chicago	
Soren Hall	USACE	Soren.G.Hall@usace.army.mil	Chicago	
John Baczek	IDOT	John.baczek@illinois.gov	Chicago	
Ryan Dettmann	IDOT	Ryan.Dettmann@illinois.gov	Chicago	
Steve Schilke	IDOT	Steven.Schilke@illinois.gov	Chicago	
Vanessa Ruiz	IDOT	Vanessa.Ruiz@illinois.gov	Chicago	
Sam Mead	IDOT	Sam.mead@illinois.gov	Chicago	
Jennifer Kaluarachchige	IDOT	Jennifer.Kaluarachchige@illinois.gov	Chicago	
Jessica Feliciano	IDOT	Jessica.feliciano@illinois.gov	Chicago	
Peter Reinhofer	V3	Preinhofer@v3co.com	Chicago	
Dave Heslinga	V3	Dheslinga@v3co.com	Chicago	
Matt Fuller	FHWA	Matt.fuller@dot.gov	Springfield	
Felecia Hurley	IDOT	Felecia.hurley@illinois.gov	Springfield	
Sheldon Fairfield	IL DNR	Sheldon.Fairfield@illinois.gov	Springfield	
John Sherrill	IDOT	John.sherrill@illinois.gov	Springfield	

Sign-in Sheet NEPA-404 Merger Meeting March 16, 2015 I-55 at Airport/Lockport Road Information: Project update, alternatives				
Hassan Dastgir	FHWA	Hassan.Dastgir@dot.gov	Springfield	
Joe Phillippe	IL Historic Pres. Agency	Joe.Phillippe@illinois.gov	Springfield	
Ken Runkle	IDOT	Ken.runkle@illinois.gov	Springfield	
Michael Hine	HFWA	Mike.hine@dot.gov	Springfield	
Thaddeus Faught	IL EPA	Thaddeus.faught@illinois.gov	Teleconference	

Sign-in Sheet
NEPA-404 Merger Meeting
March 16, 2015
US 34 from Carman Road to Monmouth
Information: Supplemental EIS, Project Introduction, Purpose and Need

Name	Agency	e-mail address	Participation Location	Initials
Matt Fuller	FHWA	Matt.fuller@dot.gov	Springfield	
Sheldon Fairfield	IL DNR	Sheldon.Fairfield@illinois.gov	Springfield	
Joe Phillippe	IL Historic Pres. Agency	Joe.Phillippe@illinois.gov	Springfield	
Felecia Hurley	IDOT	Felecia.hurley@illinois.gov	Springfield	
Keith McMullen	USACE	Keith.A.McMullen@usace.army.mil	Springfield	
John Sherrill	IDOT	John.sherrill@illinois.gov	Springfield	
Mike Staggs	FHWA	Mike.staggs@dot.gov	Springfield	
Ken Runkle	IDOT	Ken.runkle@illinois.gov	Springfield	
Thaddeus Faught	IL EPA	Thaddeus.faught@illinois.gov	Teleconference	
Greg Larson	IDOT	Greg.larson@illinois.gov	Springfield	
Tom Lacy	IDOT	Thomas.Lacy@illinois.gov	Springfield	
Heidi Liske	FHWA	Heidi.Liske@dot.gov	Springfield	
Mike McLuckie	IDOT	Michael.mcluckie@illinois.gov	Springfield	
Kirsten Brown	USACE	kirsten.l.brown@usace.army.mil	Teleconference	
Heidi Woeber	USFWS	Heidi_Woeber@fws.gov	Teleconference	
Jan Piland	FHWA	Janis.Piland@dot.gov	Chicago	
Ken Westlake	USEPA	Westlake.Kenneth@epa.gov	Chicago	
Liz Pelloso	USEPA	Pelloso.Elizabeth@epa.gov	Chicago	
Mike Sedlacek	USEPA	Sedlacek.Michael@epa.gov	Chicago	

Sign-in Sheet
NEPA-404 Merger Meeting
March 16, 2015
Alton-Godfrey Connector
Information: Information, project update

Name	Agency	e-mail address	Participation Location	Initials
Matt Fuller	FHWA	Matt.fuller@dot.gov	Springfield	
Sheldon Fairfield	IL DNR	Sheldon.Fairfield@illinois.gov	Springfield	
Joe Phillippe	IL Historic Pres. Agency	Joe.Phillippe@illinois.gov	Springfield	
Felecia Hurley	IDOT	Felecia.hurley@illinois.gov	Springfield	
Keith McMullen	USACE	Keith.A.McMullen@usace.army.mil	Springfield	
John Sherrill	IDOT	John.sherrill@illinois.gov	Springfield	
Chris Fraley	FHWA	Chris.Fraley@dot.gov	Springfield	
Ken Runkle	IDOT	Ken.runkle@illinois.gov	Springfield	
Thaddeus Faught	IL EPA	Thaddeus.faught@illinois.gov	Teleconference	
Jennifer Hunt	IDOT	Jennifer.Hunt@illinois.gov	Springfield	
Brian Macias	IDOT	Brian.Macias@illinois.gov	Springfield	
Cindy Stafford	IDOT	Cindy.Stafford@illinois.gov	Springfield	
Bridgett Jacquot	Horner & Shifrin	bljacquot@hornershifrin.com	Springfield	
Steve Coates	Amec Foster Wheeler	Stephen.coates@amecfw.com	Springfield	
George Ryan	Amec Foster Wheeler	George.ryan@amecfw.com	Springfield	
Jan Piland	FHWA	Janis.Piland@dot.gov	Chicago	
Ken Westlake	USEPA	Westlake.Kenneth@epa.gov	Chicago	
Liz Pelloso	USEPA	Pelloso.Elizabeth@epa.gov	Chicago	
Mike Sedlacek	USEPA	Sedlacek.Michael@epa.gov	Chicago	

FINAL
NEPA/404 Merger Meeting Summary
March 16, 2015

IDOT District 1, Lake County
IL 173 from IL 59 to US 41
Environmental Assessment
Concurrence – Alternatives to be Carried Forward

DECISIONS:

USFWS (Cirton), IDNR (Fairfield), and IEPA (Faught) concurred with the Alternatives to be Carried Forward as presented by the project team.

The USEPA (Pelloso) and the USACE (Hall) withheld concurrence pending submittal of additional information requested for the Central 2 Section of the project corridor.

IHPA (Phillippe) withheld concurrence pending more information on the cultural resources.

NEXT STEPS:

Project team will update the documentation with the information requested for the Central 2 Section of the project corridor, with changes tracked, and submit to FHWA.

FHWA will send the revised documentation to all agencies and seek concurrence from USEPA, USACE, and IHPA.

USEPA, USACE, and IHPA will respond to the concurrence request within 30-days.

DISCUSSION:

This was the third NEPA/404 presentation of this project. The purpose of this meeting was to seek concurrence on the "Alternatives to be Carried Forward" on the Illinois Route 173 (IL 173) project. The following documents were distributed in advance of the merger meeting exhibiting the project location and study limits; the environmental inventory of the natural, cultural and agricultural resources present within the study areas; the alternatives considered and their evaluations; and the alternatives recommended to be carried forward.

Project Background and Purpose and Need

The presentation began with a summary of the background and history of the project since the last NEPA/404 Merger meeting. This included highlighting the importance of IL 173 as a Strategic Regional Arterial; defining the characteristics of the 9-mile project corridor of IL 173 from IL 59 to US 41 in Lake County as a mixture between suburban and rural areas; establishing the need for improvement through the project corridor to enhance safety, relieve congestion, improve mobility and operations, and accommodate future economic growth; defining the four sections (West, Central 1, Central 2 and East) of the project corridor that were studied in detail; and noting the use of IDOT's Context Sensitive Solutions (CSS) process for Public Involvement in developing alternatives to consider for the project.

The project background summary concluded with a reintroduction of the project Purpose and Need which received NEPA/404 Concurrence at the June 2012 Merger Meeting.

Environmental Update

Following the project background an environmental update was presented. It was established that the project would adhere to the National Environment Policy Act of 1969 to consider environmental impacts of the proposed alternatives and to avoid, minimize and mitigate impacts to environmental resources. The various environmental resources found through the project corridor were highlighted within each of the 4 sections established for the project.

West Section: the Illinois threatened Little Green Sedge and the Sequoit Creek Forest Preserve. Other sensitive areas are Antioch Hillside Cemetery, Antioch Lake, Antioch High School athletic field and Sequoit Creek. ADID and non-ADID wetlands were found at various points within this section of the project corridor. Two residential buildings which are potentially eligible for listing on the National Register of Historic Places (NRHP) were identified but are not within potential construction limits of any proposed alternative options.

Central 1 Section: the Redwing Slough INAI site, the Redwing Slough/Deer Lake Land & Water Reserve, and the Raven Glen Forest Preserve. ADID wetlands were found on either side of IL 173 adjacent to the Redwing Slough located to the north and the Raven Glen Forest Preserve located to the south. It was noted that given the location of the environmental resources on either side of IL 173, special design elements were considered to minimize impacts to the environmental resources.

Central 2 Section: agricultural lands, three residential buildings which are potentially eligible for listing on the NRHP, Ethel's Woods Forest Preserve, and Pine Dunes Forest Preserve. Non-ADID wetlands were found at various points within this section of the project corridor. It was noted that Lake County Forest Preserve District recently acquired portions of Ethel's Woods and Pine Dune Forest Preserves for the purpose of providing future connectivity from their proposed trails to the proposed multi-use path along IL 173.

East Section: two buildings (residential and barn) which are potentially eligible for listing on the NRHP, Van Patten Woods Forest Preserve, and Wadsworth Savanna Forest Preserve. Other sensitive area includes the Des Plaines River and unnamed tributary located east of US 41; and an area within Van Patten Woods Forest Preserve that has been identified as a suitable habitat for the Illinois Endangered Blanding's turtle. ADID wetlands were found along either side of IL 173 near the Des Plaines River and non-ADID wetlands were found at various points within this section of the project corridor. It was noted that given the location of the environmental resources on either side of IL 173, special design elements were considered to minimize impacts to the environmental resources.

Alternatives

After the environmental update the alternatives developed for the project corridor were outlined. A total of 17 alternatives as categorized below have been developed and analyzed:

- No-Build Alternative
- Corridor Wide Alternatives (2)
- Build Alternatives (14)

All alternatives were analyzed with respect to meeting the project purpose and need and through evaluating the impacts to the resources located along the project corridor. The No-Build

Alternative was carried forward to use as a baseline alternative to compare and evaluate the proposed alternatives. The following is a brief summary and evaluation of each of the alternatives outlined in the presentation.

Corridor Wide Alternatives: The two corridor wide alternatives consisted of 3-lane sections. It was determined that even though this would result in the least overall impacts to the properties adjacent to IL 173, these alternatives would not enhance safety nor relieve congestion and therefore did not meet the purpose and need of the project. Consequently, these alternatives were recommended to be dropped from further consideration.

West Section: four build alternatives were developed within this section, all consisting of four lanes with raised median and shared use path.

- W-1A - This alternative was designed along the existing alignment resulting in the most impacts to various environmental resources. Consequently, this alternative was recommended to be dropped from further consideration.
- W-1B - This alternative was designed along a shifted alignment to avoid permanent impacts to the various environmental resources located within this section. Consequently, this alternative was recommended to be carried forward.
- W-1C - This alternative is a variation of Alternative W-1B but with reduced lane widths, reduced shared use path width and a varying median width. This alternative was developed in an attempt to reduce impacts to homes located along the project corridor; however, this goal was not obtained. In addition, this alternative does not accommodate future economic growth nor improve mobility as well as the other alternatives. Consequently, this alternative was recommended to be dropped from further consideration.
- W-1D - This alternative is a hybrid of Alternative W-1B and W-1C. It was designed along a shifted alignment with the lane widths, the shared use path width, and the median width reduced. This alternative was developed in an attempt to reduce overall impacts to the properties located adjacent to IL 173. Consequently, this alternative was recommended to be carried forward.

Central 1 Section: three build alternatives were developed within this section, all consisting of four 11-foot lanes with a 6-foot raised median, 2-foot shoulders with parapet and a 10-foot shared use path.

- C1-4A - This alternative was designed along an alignment shifted south to avoid impacts to the Redwing Slough INAI site and the Redwing Slough/Deer Lake Land &Water Reserve which are located along the north side of IL 173. Consequently, this alternative was recommended to be carried forward.
- C1-4B - This alternative was designed along the existing alignment. This resulted in a 0.01 acres impact to the Redwing Slough INAI site; however, this alternative avoids impacts to the Redwing Slough/Deer Lake Land & Water Reserve. In addition, in comparison to Alternative C1-4A the impacts to both the Raven Forest Preserve (located on the south side of IL 173) and the ADID wetlands are reduced. Consequently, this alternative was recommended to be carried forward.
- C1-4C - This alternative was designed along an alignment shifted north to avoid impacts to the Raven Forest Preserve. A review of the impacts noted that this alternative had the

least amount of impacts to wetlands; however, this alternative impacts the Redwing Slough INAI site and Redwing Slough/Deer Lake Land & Water Reserve. Consequently, this alternative was recommended to be dropped from further consideration.

Central 2 Section: four build alternatives were developed within this section, all consisting of four 12-foot lanes with a 50-foot depressed median, 10-foot shoulders and a 14' multi-use path.

- C2-1A - This alternative was designed along the existing alignment resulting in impacts to various environmental resources and requiring the demolition of the existing North Mill Creek bridge which was recently constructed in 2003. In addition, it was noted that the ROW impacts would be greater on the properties located along the south side of IL 173 due to multi-use path. Consequently, this alternative was recommended to be dropped from further consideration.
- C2-1B - This alternative was designed along an alignment shifted 19.5 feet north in an attempt to balance the ROW impacts on either side of IL 173. In comparison to alternative C2-1A, impacts to Ethel's Woods Forest Preserve was reduced; however, this alternative will still result in the demolition of the existing North Mill Creek bridge. Consequently, this alternative was recommended to be dropped from further consideration.
- C2-1C - This alternative was designed along an alignment shifted 30 feet north to utilize the existing IL 173 roadway as the future east bound lanes of IL 173. This alternative will maintain the existing North Mill Creek bridge and would result in an overall reduction of construction time, simpler and safer maintenance of traffic during construction. Consequently, this alternative was recommended to be carried forward.
- C2-1D - This alternative was designed along an alignment shifted 67 feet north of existing at Ethel's Woods Forest Preserve and shifted 30 feet south of existing at Pine Dunes Forest Preserve to avoid permanent impacts to both of these resources. Consequently, this alternative was recommended to be carried forward.

East Section: three build alternatives were developed within this section, all consisting of four 12-foot lanes with an 18-foot raised median and a14-foot multi-use path.

- E-1A - This alternative was designed along the existing alignment. This alternative avoids impacts to the Des Plaines River tributary and the area identified as a suitable habitat for the Blanding's turtle by cantilevering the multi-use path over the tributary. In addition, this alternative has the least total acreage of proposed ROW required in comparison to the other alternatives. Consequently, this alternative was recommended to be carried forward.
- E-1B - This alternative was designed along an alignment shifted south to avoid impacts to the Des Plaines River tributary and the area identified as a suitable habitat for the Blanding's turtle without the need of cantilevering the multi-use path. Consequently, this alternative was recommended to be carried forward.
- E-1C - This alternative was designed along an alignment shifted north to avoid the displacement of commercial properties located on the south side of IL 173. This alternative would require the relocation of the Des Plaines River tributary and would impact the area identified as a suitable habitat for the Blanding's turtle. Consequently, this alternative was recommended to be dropped from further consideration.

Questions and Comments

After the presentation the following items were discussed:

USEPA (Pelloso) noted that there was a conflict between the main portion of the document distributed and Exhibit 5 for Alternative C1-4B. Exp agreed that the table in Exhibit 5 should show that 0.01 acres of the Redwing INAI site was impacted in Alternative C1-4B to reflect the analysis within the main document.

IHPA (Phillippe) questioned whether all cultural resources were considered in the environmental survey request for the development of the alternatives for the project. In addition, IHPA questioned whether any Cultural results were submitted to IHPA for review. IDOT and exp noted that Cultural resources were taken into consideration in this study and the results identified 7 buildings that were identified as potentially eligible for NRHP. IDOT is currently reviewing these properties. He requested documentation to be provided to reflect that the cultural resources have been considered and for IDOT to forward the results of the Cultural investigations.

USEPA (Pelloso) noted that off-site detention basins were proposed for the Central 1 Section alternatives. She questioned whether enough consideration has been given to their location given the various wetlands and other environmental factors of this section of the roadway. Exp replied that the locations for the detention basins have been identified and are located outside of the established wetland areas.

The USACE (Hall) had some concern on whether the proposed storm drainage system is possible to construct within the dry land bridge of the Central 1 Section of the project corridor.

IDOT (Baczek) suggested that exp ensure that the proposed drainage design is constructible and indicate how the ground improvements would be constructed

The USACE (Hall) questioned why the use of a suburban cross-section through the Central 2 Section was not proposed given that the Central 2 Section is located between 2 suburban areas within the project corridor. He suggested that this alternate should go through the screening process and an explanation should be included that describes why it was dropped from further consideration.

The USACE (Hall) noted that the document gave the impression that the recently reconstructed bridge at the I-94 interchange would be part of the improvement. He suggested that there should be clarification that the I-94 would not require additional work as part of the IL 173 improvement.

The USACE (Hall) requested that a hybrid alternative of C2-1C and C2-1D should be developed and included in the NEPA packet for the C2 Section of the project corridor. The goal of this hybrid would be to minimize the impacts to the wetlands in this section.

USEPA (Pelloso) noted that there was an error in Exhibit 5 for Alternative C2-1D; the table should show that 2 surface waters are crossed rather than 0. Exp agreed that all the alternatives within the Central 2 Section of the project should show 2 surface waters are crossed.

The USEPA (Pelloso) suggested that a field verification of the wetland delineation should be conducted this summer with the resource/regulatory agencies.

The USFWS (Cirton) asked about EFPO surveys. IDOT noted that the Wetlands didn't meet FQI to do EFPO surveys.

IDOT District 1, Will County
I-55 at Airport/Lockport Road
Environmental Assessment
Information - Project Update, Alternatives

DECISIONS:

None requested. This presentation was for informational purposes only.

NEXT STEPS:

1. Update and further develop preliminary engineering designs for remaining alternatives

2. Conduct Level 1 Screening on the remaining alternatives

3. Submit the revised Alternatives to be Carried Forward document and disposition of comments for District and FHWA/BDE review

4. Refine the selected Alternatives to be Carried Forward and present at June 2015 NEPA/404 Merger Meeting for concurrence

DISCUSSION:

V3 (Heslinga) introduced the Villages of Romeoville, Plainfield and Bolingbrook as the lead agencies for the study and presented a brief project overview of the study area and public outreach efforts. The Purpose and Need (P&N) statement, which had received concurrence at the July 12, 2013 meeting, was stated. The P&N has a singular purpose which is to provide improved access to I-55.

The process followed to evaluate alternatives was then summarized, including how the alternatives have been developed over the years through meetings with the local communities, stakeholders, community advisory group, FHWA, IDOT, and the consultant team. This resulted in 27 initial alternatives being developed for the project.

A summary of the environmental field review conducted on May 29, 2014 was then provided. The review was attended by representatives from the Federal Highway Administration (FHWA), United States Army Corp of Engineers (USACE), United States Environmental Protection Agency (USEPA), United States Fish and Wildlife Service (USFWS), IDOT and the three village sponsors. During the field review, USACE and USFWS did not view dividing the existing wetland located in the southwest or southeast quadrants of the I-55/IL 126 interchange as a reasonable alternative. USACE requested updated wetland delineations for open water locations within the study area and stated that some of the open water ponds will likely be jurisdictional. In addition, areas not previously classified as wetlands would likely be classified as a wetland area based on the current delineation guidelines. USFWS and USACE disagreed with displacements being considered as an environmental and/or engineering obstacle. USFWS stated that a preliminary stream assessment should be performed if an alternative will have

impacts on either Lily Cache Creek or Lily Cache Slough.

An updated Environmental Survey Request was submitted after the field review and the Environmental Inventory Map was updated based on the results of the survey. The map indicated new wetland areas that were identified and included open water areas, pond sites and tributaries. In addition, the floristic quality index for each wetland was updated.

Based on the comments received during the field review, a re-evaluation of the 27 initial alternatives to determine portions of the alternatives that were viable and an IDOT review of the interchange locations, several new alternatives were developed that minimize impacts. Two potential alternatives were presented at Airport Road/Lockport Street – a single point urban diamond interchange (Alternative 5) and a roundabout interchange (Alternative 30). Neither of these interchange alternatives will require right of way from the Lake Renwick Land and Water Reserve which would have been considered an environmental and/or engineering obstacle.

The two previous alternatives at IL 126 were presented – a new full diamond interchange (Alternative 18) and a new southbound on ramp/northbound off ramp at the IL 126/Essington Road intersection (Alternative 16). The new full diamond interchange was eliminated due to the considerable impacts to wetlands and open water areas. The new southbound on ramp/northbound off ramp alternative was eliminated if the ramps are to be constructed on embankments. This would bisect the existing wetlands. However, an option for the ramps to be constructed on bridge structures through the wetland areas remains under consideration as an option.

In addition, two new alternative designs were presented, each with two options, to minimize the impacts at the IL 126 interchange area – a tight diamond interchange (Alternative 28A and 28B) and a flyover interchange (Alternative 29A and 29B). One flyover interchange option proposes to utilize the existing bridge over the I-55 mainline while the other option proposes a new bridge. The existing bridge is approximately 50 years old and the remaining lifespan is being researched to determine if utilizing the bridge is cost effective.

The three step process for evaluating the alternatives was reviewed. The three steps include an environmental and engineering obstacles and purpose and need screening, a level 1 screening that will include potential environmental and displacement impacts and a level 2 screening that will include further environmental, engineering and transportation performance measures.

A brief summary of the initial Level 1 Screening was provided. The two interchange alternatives at Airport Road/Lockport Street will impact less than ¼ acre of wetlands, less than 1 acre of Section 4(f) lands, and will have no residential or business displacements. The IL 126 alternatives will impact 1 to 5 acres of wetlands, have no impact to Section 4(f) lands and will have no residential or business displacements.

USACE inquired about the interchange spacing if the two interchanges move forward. V3 stated that the spacing between US 30 and Airport Road/Lockport Street is approximately two miles, between Airport Road/Lockport Street and IL 126 is approximately two miles, and between IL 126 and Weber Road is approximately two miles. The recommended spacing between interchanges is two miles to accommodate the entering and exiting movements and minimizing

the potential weaving between interchanges.

USACE stated that details will need to be provided on the IL 126 alternative that proposes to construct a new southbound on ramp/northbound off ramp from the IL 126/Essington Road intersection along bridged structures through the wetland areas. This alternative will require further development and review. They prefer that alternatives be focused away from dividing the wetland area. There was also a concern regarding stormwater and BMP measures that will be provided along the ramp bridge structure.

The Illinois Historic Preservation Agency asked if there are any cultural resources within the study area. IDOT stated that no cultural resources were identified.

District 4, Henderson County
US 34 from Carman Road to Monmouth
Supplemental Environmental Impact Statement
Introduction – Project Introduction, Purpose and Need Overview

DECISIONS:

None requested. This presentation was for informational purposes only.

NEXT STEPS:

1. IDOT will seek concurrence on the Purpose and Need at the June 2015 merger meeting.

2. IDOT will seek concurrence on the alternatives to be carried forward at the September 2015 merger meeting.

DISCUSSION:

A Record of Decision for this study was signed on August 18, 2003. The project completed the NEPA-404 Merger process and obtained the following concurrences:

- Purpose and Need (September 29, 1997)
- Alternatives to be Carried Forward (September 25, 1998)
- Preferred Alternative (April 19, 2002)

When the 2003 Record of Decision was approved, the regulatory Mississippi River 100-year floodplain did not extend onto the landward side of the levee system. Specifically, the only areas mapped as Special Flood Hazard Areas by the Federal Emergency Management Agency (FEMA) on the landward side of the levee system were those with local tributaries and ponds.

Portions of the selected alternative for US Route 34 from Carman Road to Township Road 111 (TR 111) are within the Mississippi River floodplain, but were protected by a levee that was certified by FEMA to withstand the 100-year flood event. This levee was built in 1920 and extends 15 miles from south of Gulfport, Illinois, northeast to Gladstone, Illinois.

In 2006, the state of Illinois executed an Executive Order 2006-05, Construction Activities in Special Flood Hazard Areas, which defines a Special Flood Hazard Area as "an area subject to inundation by the base or 100-year frequency flood and shown as such on the most current Flood Insurance Rate Map published by the Federal Emergency Management Agency". The Executive Order also requires that all new Critical Facilities shall be located outside of the floodplain and where this is not practicable, Critical Facilities shall be developed with the lowest floor elevation equal to or greater than the 500-year frequency elevation.

The Federal Emergency Management Agency (FEMA) de-accredited the Mississippi River levees near Gulfport on June 18, 2010, and therefore there is a changed condition not considered in the 2003

Record of Decision. The Flood Insurance Rate Maps (FIRM) were revised to show flood limits based upon the current levee not providing protection. Furthermore, the Illinois Department of Transportation (IDOT) determined that the US Route 34 alignment fits the definition of a critical facility as described in the Executive Order. Therefore, compliance with the state of Illinois Executive Order is required because the area on the landward side of the levee was deemed a Special Flood Hazard Area (as a result of the de-accreditation of the levee system) and US Route 34 was designated a critical facility.

These changed conditions for the portion of the US Route 34 preferred alignment from Carman Road to TR 111 necessitate the preparation of a Supplemental Environmental Impact Statement (SEIS). The de-accreditation has no impacts to the preferred alignment from TR 111 to Monmouth, which is not within the mapped floodplain, and therefore, the focus of the SEIS will be on alternatives that would eliminate or reduce the floodplain encroachment within the Carman Road to TR 111 section of the project. A Notice of Intent to prepare an SEIS was published in the January 22, 2015 Federal Register.

The Biggsville Bypass, which begins near TR 111 and heads east for approximately 6 miles, was opened to traffic in the fall of 2014. Construction of this section will be completed in the fall of 2015. Construction of this section was determined to not restrict the range of alternatives that would be evaluated between Carman Road and TR 111. All reasonable alternatives in the between Carman Road and TR 111 would tie into the current Biggsville Bypass near TR 111 on existing US Route 34. In the existing EIS, only two alignments investigated did not tie into the current western termini (TR 111) of the Biggsville Bypass. Both alternates were dropped from consideration because of the steep terrain, undesirable profile grades, high construction costs, disruption of existing wooded ravines and impacts to areas of potential Native American habitat.

FHWA (Liske) discussed the construction of the Biggsville Bypass and why the study will tie into the current western terminus of that bypass. An evaluation paper of the western terminus of the Biggsville Bypass has been prepared by IDOT and approved by FHWA. In the evaluation, it was demonstrated that the range of reasonable alternatives in the SEIS could be evaluated if the eastern terminus of the alternatives tied into the existing western terminus of the Biggsville Bypass. More information on this analysis will be provided for the June 2015 NEPA meeting.

The Corp of Engineers (Brown) asked why an island was not shown being in the 100-year floodplain on Exhibit No. 7. The exhibit just showed the 100-year floodplain within the study limits, and the island is outside of those limits.

FHWA (Piland), along with IDOT (Lacy), discussed the Purpose and Need to clarify that the P&N for the SEIS would be updated to current information and would include the limits of the original EIS.

Description of Original EIS

The original US Route 34 Study area extends from west of Carman Road at the west terminus, to east of Illinois Route 164, northeast of Monmouth, as the east terminus in Henderson and Warren Counties (see Exhibit No. 1). The existing facility is a two-lane roadway from Carman Road, east of Gulfport, to US Route 67, southwest of Monmouth and a four-lane expressway around the west and north sides of Monmouth. Across the Mississippi River, US Route 34 continues west through Iowa

as a four-lane expressway to Ottumwa, Iowa (±80 miles). The eastern terminus of this study is a four-lane freeway which connects Interstate 74 (I-74) at Galesburg, Illinois. The portion of the study area from the Mississippi River east to near Gladstone is a floodplain area. The remainder of the study area is a moderately rolling bluff area with a well-defined drainageways including Henderson Creek and its various branches. The Henderson Creek valleys and other well-defined drainage valleys are well-vegetated with mature trees while the areas outside the valleys are typically farmed lands.

IDOT District 8, Madison County
Alton Godfrey Connector
Environmental Impact Statement
Information – Project Update
(Note: Project is not in the merger process because no individual permit is required; project team is electing to present for information purposed to resource and regulatory agencies.)

DECISIONS:

No decisions requested; no decisions received.

NEXT STEPS:

1. Preliminary DEIS is currently being reviewed by IDOT. FHWA will begin their review in the Spring/Summer 2015.
2. The seventh CAG meeting is expected to be held in summer 2015.
3. Present preferred alternative at September 2015 NEPA/404 Merger meeting to update the agencies.
4. Anticipated signed DEIS in Late 2015.
5. Public Hearing scheduled for early 2016.
6. Approval of FEIS/Signed ROD is anticipated for summer 2016.

DISCUSSION:

This was the fourth presentation of the project at a NEPA/404 merger meeting. The purpose of this presentation was to update the resource agencies on the project. The project has been formally removed from the NEPA/404 Merger process as there is no need for an Individual Section 404 permit.

The presentation was conducted by George Ryan and Steve Coates of Amec Foster Wheeler. Printed copies of the presentation slides were distributed to attendees.

The purpose of the project is to make improvements to the local roadway system to improve continuity and connectivity between its major traffic destinations (including Lewis & Clark Community College and the commercial area along IL Route 3/111) and IL Route 255 as well as to provide improved connectivity between IL Route 3/111 and US Route 67 as they currently do not intersect and drivers are forced to use local roads to make the connection.

The alternative development process started at a high level with wide-banded corridors (approximately 1,000 feet wide). This process began in November 2013. The process led to the development of twelve preliminary corridors; eight of which oriented north to south connecting US 67 and IL Route 3/111 in the south to IL Route 255 in the north; three oriented east to west

connecting US 67 on the west to Seminary Road on the east; and one (described as Corridor 12) which consists of a triangular area bounded by US 67, IL Route 3/111, and Alton Square Mall Drive.

The next step in the alternative development process involved the screening of these corridors for compatibility with the Purpose and Need and to check for any fatal flaws. The corridors were evaluated based on engineering, social/economic issues, environmental resources, and traffic. The results were as follows:

- Engineering
  - There are no major fatal flaws related to engineering with any of the corridors.
  - The proposed rail crossing near Big Arch Road was determined to be more challenging as the rail bed is approximately 35 feet above the ground and a bridge at this location would need to clear the railroad.
- Social / Economic Issues
  - There are no major fatal flaws related to social and economic issues with any of the corridors.
  - There will be some degree of displacements; however, at the time of the corridor analysis, the exact amount was not quantified because the corridors were still too broad of a footprint.
- Environmental Resources
  - There are no major fatal flaws related to environmental resources with any of the corridors.
  - The area around Coal Branch Creek was recognized to be more sensitive environmentally.
- Traffic
  - The east-west corridor connection between Godfrey Road and Union School Road was presented. The corridor evaluation determined the following:
    - It only attracts 2,700 vehicles per day (vpd). At a cost of $15-$20 million, this is not sufficient enough traffic to warrant the expense of the connection and the impacts associated with its construction;
    - It does not meet the Purpose and Need of the project;
    - Corridors that incorporate this connection were eliminated from further study. These included Corridors 9, 10 and 11.
  - The remaining eight north-south corridors vary in their ability to attract traffic but all meet Purpose and Need.

The next step in the alternative development process began in spring of 2014. At this point in the process, there were eight north-south corridors and Corridor 12 (the triangle corridor). Corridor 12 was developed to provide a direct connection between US Route 67 and IL Route 3/111. Within Corridor 12, three alternatives were developed. Each demonstrates a direct connection

between IL Route 3/111 and US Route 67 either through the implementation of an interchange or an at-grade intersection.

The three alternatives within Corridor 12 were discussed. Factors that were considered when developing the alternatives within Corridor 12 were:

- Improve connectivity between IL 3/111 and US 67;
- Alternatives should be compatible with potential north-south improvements;
- Consider impacts to existing and future traffic flows; and
- Consider potential residential and commercial displacements.

What is referred to as Alternative 12-1 consists of a diamond interchange connecting US 67 and IL Route 3/111. This required the bridge carrying North Alby Street over US 67 to be closed. Alternative 12-2 consists of a realignment of IL Route 3/111 to the north and a single point urban interchange connecting US 67 and IL Route 3/111. It also requires the bridge carrying North Alby Street over US 67 to be closed. Alternative 12-3 consists of a realignment of IL Route 3/111 to the north and an at-grade intersection at US 67 and IL Route 3/111. The bridge carrying North Alby Street over US 67 would remain open. It was explained that Alternative 12-3 would require a design exception to lower the speed limit to 35 mph at this intersection in order to accommodate for the tighter footprint. This was done to reduce displacements around the intersection.

The impacts of Alternatives 12-1, 12-2, and 12-3 were discussed. Alternative 12-2 requires 26 commercial and 14 residential displacements, which is more than Alternatives 12-1 or 12-3. Alternative 12-1 has three more commercial and one more residential displacement than Alternative 12-3. In addition, Community Advisory Group (CAG) members were adamant in their view that the North Alby Street bridge over US 67 should be kept open for local traffic. These same comments were shared by officials of the City of Alton and Village of Godfrey. Alternative 12-3 allows the North Alby Street bridge over US 67 to remain open. It also has the fewest total displacements and lowest cost. Therefore, the study team eliminated Alternatives 12-1 and 12-2 and retained Alternative 12-3 to be carried forward. The No-Build alternative was also carried forward for comparative purposes. Please refer to Alts to be Carried Forward packet for detailed data.

USEPA (Pelloso) asked about the level of service (LOS) for Alternative 12-3 at the proposed intersection of US 67 and IL Route 3/111 and how it compares to Alternatives 12-1 and 12-2, both of which are proposed as grade separated intersections. George Ryan stated that the proposed intersection of IL Route 3/111 and US 67 has a LOS “C” in the design year 2040.

After presentation of the alternatives in Corridor 12, the eight preliminary north-south alternatives, between US 67 and IL Route 255, were discussed. One alternative was developed within each of the eight north-south corridors and the alignments went through a process of

refinement to minimize and/or avoid impacts. These eight alternatives basically run from the south in Alton to Godfrey in the north. Each alternative features a direct connection between IL Route 3/111 and IL Route 255 either via an existing transportation corridor or on new alignment. It was also pointed out that Alternative 12-3 is included as part of these eight north-south alternatives. The eight alternatives were presented as described below.

Alternative 1 proposes to convert the existing five-lane section with a center turn lane, to a four-lane section with a median barrier along the dually-designated US Route 67 and IL Route 111. The proposed improvements would limit access and require frontage roads but would provide improved mobility.

Alternative 2 proposes to widen the existing four-lane section (the section has a striped four-foot median) to a five-lane section with a center turn lane between IL Route 255 and IL Route 3/111. The alternative proposes to elevate North Alby over the Union Pacific Railroad just south of North Humbert. In order to maintain the intersection between North Humbert Road and North Alby, North Humbert Road would need to be elevated approximately 25 feet. A 30-foot-high retaining wall is required along the properties fronting North Humbert immediately north of North Alby to avoid an additional twelve displacements.

Alternative 3 begins at IL Route 3/111 and Alton Square Mall Drive then extends north on new alignment to the east of Alton Square Mall then it heads northwest toward North Alby Street. The alternative then basically follows the east side of the North Alby Street corridor to North Humbert. The alternative includes a bridge over the Union Pacific Railroad just south of North Humbert. In order for North Alby to intersect with North Humbert, North Humbert would need to be elevated approximately 25 feet. A 30-foot-high retaining wall is required along the properties fronting North Humbert immediately north of North Alby to avoid an additional twelve displacements. The alternative would then incorporate existing infrastructure and follow existing North Humbert to the existing interchange at IL Route 255. Tolle Lane would be improved as part of this alternative and would include a grade separation over the Union Pacific Railroad with service roads to provide property access. This results in 1 commercial displacement and 1 residential displacement along Tolle Lane.

It was pointed out that the Tolle Lane grade separation is included with the Alternatives 3 through 8.

Alternative 4 is similar to Alternative 3 up to the proposed Union Pacific Railroad grade separation just south of North Humbert; however, it is slightly east of and parallel to existing North Alby Street to minimize residential displacements on the east side of North Alby. A bridge is proposed to carry Alternative 4 over the railroad and North Humbert, which eliminates the need for the retaining wall along North Humbert noted under Alternative 3. North of North Humbert, the alternative curves to the west where it then intersects at North Humbert and Tolle

Lane. The alternative then follows existing North Humbert to the existing interchange at IL Route 255.

Alternative 5 is identical to Alternative 4 up to North Humbert Road. This alternative then runs north-easterly on new alignment where it then curves to the east and intersects with Wenzel Road. A diamond interchange is proposed at Wenzel Road and IL Route 255. With the Wenzel Road interchange, Alternative 5 offers a new connection to IL Route 255. Tolle Lane would be extended east from North Humbert on new alignment to intersect with the north-south portion of this alternative.

Alternative 6 begins at IL Route 3/111 and Alton Square Mall Drive then extends north on new alignment before heading northeast toward the Union Pacific Railroad near Big Arch Road. The alternative runs northerly and crosses over the Union Pacific Railroad. The structure over the railroad would be approximately 80 feet above the ground elevation to achieve vertical clearance over the railroad and would be approximately 2,400 feet long. To the north and east of the railroad, the alternative continues northerly and passes just west of property owned by Alton High School then between Storeyland Estates and Savannah Trace and then it intersects with North Humbert Road east of North Alby Street. The alternative then continues to the north where it ends at Wenzel Road. An interchange at Wenzel Road and IL Route 255 is proposed.

The version of Alternative 6 presented at the meeting was a revised version of an alignment previously considered by the study team. The current alignment was developed in order to avoid new athletic fields being built by Alton High School. Therefore, the alignment was relocated to the west of the athletic fields. Because of this shift in alignment, Alternative 6 results in additional residential displacements at Storeyland Estates and Savannah Trace.

Alternative 7 is identical to Alternative 6 with the addition of an extension of Tolle Lane east from North Humbert Road to the north-south portion of this alternative between North Humbert and Wenzel.

Alternative 8 begins at IL Route 3/111 and Alton Square Mall Drive then goes north on new alignment before heading northeast toward the Union Pacific Railroad near Big Arch Road. The alternative runs northeast for approximately two miles toward Seminary Road. It crosses over the Union Pacific Railroad, intersects with North Humbert just south of Alton High School and intersects with Union School Road just west of Seminary Road. The alternative would continue along the existing Seminary Road corridor to the existing Seminary Road interchange at IL Route 255. The structure over the railroad would be approximately 80 feet above the ground elevation to achieve vertical clearance over the railroad and it would be approximately 1,700 feet long.

The next part of the presentation focused on the evaluation of the preliminary alternatives based on traffic, known environmental resources, and social/economic factors. It was explained that at this point in the project evaluation (which was in late summer 2014), the biological resource data from the Illinois Natural History Survey (INHS) had not yet been received.

Alternatives 1, 2, 3, and 7 were eliminated based on the following reasons. Please refer to Alts to be Carried Forward packet for detailed data.

Alternative 1:

- Not as effective addressing local traffic issues (does not attract as much traffic off of other roadways);
- Would require modifications to access;
- Results in displacements of 15 businesses;
- Requires substantial changes to access (introduction of center barrier median) and would be disruptive to the access of approximately 50 businesses;
- Opposed by Alton, Godfrey, and the CAG.

Alternative 2:

- Not as effective addressing local traffic issues (does not attract as much traffic off of other roadways);
- Retaining wall used at North Alby and North Humbert (up to 30 feet high) is very unsightly and would result in negative visual impacts to the remaining homes;
- Does not address connectivity issues;
- Opposed by Alton, Godfrey, and the CAG.

Alternative 3:

- North Alby and North Humbert intersection needs to be elevated; requires relatively high retaining wall (up to 30 feet high) is very unsightly and would result in negative visual impacts to the remaining homes;
- Has 20 more displacements and costs $30 million more than Alternative 4, which achieves the same traffic benefits as Alternative 3.
- Opposed by Godfrey because of the displacements.

Alternative 7:

- The east-west extension from Tolle to Wenzel does not provide sufficient traffic benefit as compared to Alternative 6; the extension is projected to only carry up to 2,700 vpd and would cost an additional $27 million;
- Compared to Alternative 6, doesn't yield appreciable traffic benefits to justify the expense and the impacts of the east-west extension of Tolle;
- Opposed by Alton, Godfrey, and the CAG.

In October 2014, the study team recommended the north-south Alternatives 4, 5, 6, and 8 (all of which including Alternative 12-3) and the No-Build as the alternatives to carry forward for the Alton-Godfrey Transportation Study. The No-Build Alternative will be carried forward as a basis

of comparison against the build alternatives although it is recognized as not meeting the stated objectives of the Purpose and Need.

The next portion of the presentation focused on the more in-depth evaluation of the alternatives carried forward. This more detailed evaluation was based on the receipt in November 2014 of biological and water resource field data received from INHS as requested through Environmental Survey Requests in early 2014. The evaluation criteria were grouped into four general categories for use in the detailed evaluation: (1) Roadway Construction/Maintenance; (2) Traffic; (3) Social and Economic; and (4) Environmental. Additionally, other factors such as cost and public input were included for discussion. Each of these general categories contain several subcategories that were used in the evaluation. The more in-depth evaluation also included a re-examination of the traffic data for each alternative based on more refined engineering information. Please refer to Alts to be Carried Forward packet for detailed data.

It was pointed out that an evaluation of the INHS data did not result in any reason to change or deviate from the analysis conducted in late summer 2014. The presentation covered some key points including:

- The wetland impacts for each alternative are below 0.5 acre; thus a Nationwide 14 Section 404 permit can be prepared for this project;
- Visual impacts are viewed more negatively for Alternatives 6 and 8 because of the height of the bridge over the Union Pacific Railroad;
- Alternative 5 has slightly higher forested impacts;
- Alternative 8 has only one residential displacement;
- All alternatives have the same number of commercial displacements (18)
- Alternative 5 requires slightly more right of way;
- Alternative 5 is a superior alternative in terms of traffic connectivity, safety and it attracts the largest volume of traffic (21,600 vpd) off of the existing road network;
- Alternative 8 does not perform as well as the other alternatives in that it only attracts 9,100 vpd off of the existing road network; and
- Alternatives 4 and 5 reduce traffic on North Alby by 95%, which takes most of the traffic burden off of this road and places it on a more appropriately designed facility.

The last portion of the presentation focused on the public involvement that has been carried out for this project. In summary, there have been six CAG meetings and two public meetings to date. Please refer to Alts to be Carried Forward packet for detailed data.

IHPA (Phillippe) asked why Phase I archaeological surveys had not been done on all of the alternatives carried forward to determine potential impacts to cultural resources. A short discussion took place explaining the IDOT process has been to only complete Phase I archaeological surveys on the preferred alternative because: 1) IDOT must acquire access to private property, which can be an exhaustive and unsuccessful effort prior to actual Land

Acquisition; 2) it is cost-prohibitive to carry out archaeological surveys on multiple alternatives; 3) if an archaeological resource cannott be avoided, mitigation through data recovery is always an option for archaeological sites; 4) if a significant archaeological resource is discovered within an alternative, that alternative can be revised to avoid the resource; and 5) this is a discussion that is best suited between IDOT BDE Cultural Resources and IHPA at a separate time.

USEPA (Pelloso) stated they do not need to review a preliminary DEIS.

This project's preferred alternative will be presented as an update to the agencies at the September 2015 NEPA/404 merger meeting.

Illinois NEPA/404 Merger Meeting
June 24, 2015

Federal Highway Administration
3250 Executive Park Drive
Training Room
Springfield, IL 62703

10:00 am – 12 noon

- US Route 24 Eastbound, Quincy Memorial Bridge, over the Mississippi River (District 6, Adams County, Illinois, and Marion County, Missouri) (60 min)
    - Concurrence – Purpose and Need

- US 34 from Carman Road to Monmouth (District 4, Henderson County) (60 min)
    - Concurrence – Purpose and Need

12 noon – 1 pm

Lunch

1 pm – 2 pm

- IL Route 3 Connector (District 8, St. Clair County) (60 min)
    - Concurrence – Alternatives to be Considered

Printed: June 8, 2015

FINAL
NEPA/404 Merger Meeting Summary
June 24, 2015

IDOT District 6, Adams County, Illinois and Marion County, Missouri
US Route 24 Eastbound, Quincy Memorial Bridge over the Mississippi River
Environmental Assessment
Concurrence – Purpose and Need

DECISIONS: USEPA (Sedlacek), USACE (Jones), USCG (McCaskey), IDNR (Fairfield), IDOA (Savko), IEPA (Runkel), IHPA (Phillipe) all concurred with the purpose and need.

Following the meeting, USFWS (Woeber) concurred with the purpose and need in an email dated 6/29/2015.

NEXT STEPS: Project team plans to present for concurrence on Alternatives to be Carried Forward in February 2016.

DISCUSSION:

1. After team introductions and identification of participant roles, a brief project description was provided. The Quincy Memorial Bridge was originally constructed in 1930 and is 3,512' in length with two (2) navigation spans of 628'± and 35 additional approach spans. This structure operates as a two-lane (24.8' wide) one-way facility that carries approximately 9,000 vehicles per day. The primary scope of the planning study is to evaluate alternatives for the improvement of the existing bridge. The alternatives may range from rehabilitating or reconstructing the existing bridge, to replacing it with a new bridge on its current or a new alignment.

2. This project is being processed utilizing the Context Sensitive Solution (CSS) principles and the initial public involvement meeting was conducted in December of 2014 with subsequent formation of the Community Advisory Group (CAG) and the initial CAG kick-off meeting being conducted in April 2015.

3. A listing of all the agencies that have been invited to be cooperating participants was presented.

4. A summary of the Purpose and Need developed and distributed in advance of the NEPA – 404 Merger Meeting was presented. The purpose of the US Route 24 Bridge (Quincy Memorial Bridge) project is to provide a transportation facility for eastbound traffic across the Mississippi River that is safe, reliable, structurally sound, and meets current design standards. The need for the project is to address the structural, operational and geometric deficiencies of the existing bridge. The most recent structure ratings now categorize the bridge as both "functionally obsolete" and "structurally deficient" by federal standards. After presenting the Purpose and Need, concurrence was received from all participating agencies present as shown on the decision register for this meeting.

5. The environmental surveys completed to date were mentioned. These include Tree Surveys; Wetland Determination Report; Avian Assessment Report; Mammal Survey Report; Mussels Report; and the Preliminary Environmental Site Assessment. The natural resources identified as part of these reports were shown on an exhibit and presented at the meeting. The Cultural Resources Report is still pending.

6. The Quincy Memorial Bridge is eligible for listing on the National Register of Historic Places. A formal Section 106/4(f) report is anticipated if a bridge removal alternative is selected.

7. Section 4(f) resources have been identified with the project study limits, including both parks and historic places. These locations were shown on the environmental resource exhibit presented at the meeting and were briefly discussed.

8. The preliminary alternative ideas expressed at the initial CAG meeting were presented. These alternatives included a no-build, rehabilitate existing structure, remove existing structure and construct on either current alignment or on new alignment. Possible new alignments could parallel the existing Bayview Bridge (Westbound US Route 24), maintain current connection to Maine Street or provide a new downtown street connection. The preliminary alignment ideas preferred by the Community Advisory Group include:
    a. Align With Existing Bayview Bridge
    b. Align With Vermont Street
    c. Align With Existing Memorial Bridge on Maine Street
    d. Align With York Street

9. The preliminary alternative ideas presented at the meeting will be further studied and coordinated with the CAG members and the current schedule is to present the selected alternatives to be carried forward at the February 2016 NEPA – 404 Merger Meeting.

10. The US Army Corps of Engineers suggested that the alignment alternative studies consider the proximity of Mississippi River Lock #21 downstream of the existing bridge when selecting the preferred alignment for the new structure. In order to gain more insight to the river navigation challenges, it would be beneficial to include someone from the Quincy Regional Barge District on the CAG in order for the river carriers to be represented and provide input at these meetings. Coordination should also be conducted with the potential development of the new Quincy Port to determine the possible locations for this facility and the impacts the new bridge may have on navigation.

District 4, Henderson County
US 34 from Carman Road to Monmouth
Supplemental Environmental Impact Statement
Introduction – Project Introduction, Purpose and Need Overview

DECISIONS: USEPA (Sedlacek), USACE (Jones), IDNR (Fairfield), IDOA (Savko), IEPA (Runkel), and IHPA (Phillipe) all concurred with the purpose and need.

Following the meeting, USFWS (Woeber) concurred with the purpose and need in an email dated 6/29/2015.

NEXT STEPS: The project team plans to bring the project for concurrence on Alternatives to be Carried Forward in February 2016.

DISCUSSION:

1. Gary Baker of the study team presented on the Purpose and Need for the project, with the intent of receiving concurrence from the federal and state agencies. The agencies attending (either in person or by conference call) were:
    - FHWA
    - U.S. EPA
    - U.S. Fish and Wildlife Service (concurrence received via email 6/29/15)
    - U.S. Army Corps of Engineers
    - Illinois Department of Agriculture
    - Illinois Department of Natural Resources
    - Illinois EPA
    - Illinois Historical Preservation Agency

2. The presentation outline included:
    - General Study Area Information
    - Project Purpose
    - Project Needs
    - Next Steps

3. The general study area background was presented, and included:
    a. Original project FEIS, January, 2003
        – Included Henderson and Warren Counties
        – Limits were from west of Carman Road to east of IL 164, northeast of Monmouth
        – Project length, 30 miles; 25 miles of 2-lane rural and 5 miles of 4-lane around Monmouth
    b. Record of Decision, August, 2003
    c. Illinois Executive Order 2006-5
        – In 2006, Illinois executed Executive Order 2006-05, Construction Activities in Special Flood Hazard Areas. A Special Flood Hazard Area is defined as "an area subject to inundation by the base or 100-year frequency flood and shown as such on the most current Flood Insurance Rate Map published by the FEMA."

- EO 2006-05 requires that all new Critical Facilities shall be located outside of the floodplain or structurally dry flood-proofed to at least the 500-year frequency flood elevation. IDOT determined that U.S. Route 34 is a critical facility.

d. FEMA 2010 re-mapping and levee de-accreditation
   - On June 18, 2010, FEMA de-accredited the Henderson County Drainage District Number 1 and Number 2 levee systems.
   - This is reflected on changes to regulatory floodplain mapping for Henderson County, which became effective in 2010.
   - Approximately six miles of the U.S. Route 34 alignment selected in the 2003 FEIS and ROD, are now in an area designated a Special Flood Hazard Area protected by EO 2006-05; therefore, other alternatives must be evaluated to determine if there is a practicable alternative to the six miles of selected U.S. Route 34 alignment located in the 100-year floodplain.
   - A map was presented, which showed the location of this Special Flood Hazard Area.

e. Need to initiate a Supplemental EIS (SEIS)
   - Based on new Flood Insurance Rate maps, the proposed roadway elevation needs to increase to a 500-year floodplain elevation; or, approximately 17 feet above what was previously established in 2003 EIS.
   - Due to changes in conditions, and in accordance with 23 CFR 771.130(f), a Supplemental EIS (SEIS) to evaluate impacts associated with the proposed action in the area of this regulatory floodplain change is being prepared.
   - The Purpose and Need in the 2003 EIS has been updated with the most current traffic information, latest crash analyses, and field conditions in order to confirm the Purpose and Need, in its entirety from the 2003 EIS, is applicable under current conditions for this SEIS.

f. SEIS Study Area
   - A map of the SEIS Study Area was presented
   - Limits: west of Carman Road to east of TR 111
   - Existing U.S. Route 34 is a 2-lane roadway in the Mississippi River floodplain (2010 FIRM)
   - Logical east terminus – Biggsville Bypass
     1. All alternatives tie into the Biggsville Bypass.
     2. Severe terrain and burial mounds preclude alternatives to the south.

4. The project purpose was presented. The project purpose is as follows:
"The proposed action is to provide an improved transportation facility for local and through traffic in Henderson and Warren Counties to address the needs of system capacity, system continuity, and travel safety."

5. The project needs were then presented in detail. The following points summarize the presentation to the audience. There are three principal project needs to be addressed:
   a. There is a need to improve travel safety.
      - Crash data was evaluated over a 5-year timeframe from 2009-2013.
      - The limits of analysis were from west of Carman Road to east of IL 164 (basically, the 2003 EIS limits).
      - There were 348 crashes (254 crashes on 2-lane section with 2 fatalities).
      - This is a similar trend as what was presented in 2003 FEIS.

- There is a 5% crash section from Carman Road to a point 1.03 miles east. On this section, 43 crashes occurred (12 with injuries, 1 fatal, 30 property damage only). This location was also identified in the 2003 EIS.
- There were 94 crashes on the 4-lane section with 2 fatalities.
- In the 2003 EIS, 41% of 2-lane section is marked as "no passing". This was reduced to 28% with the opening of the Biggsville Bypass.
- Other contributing factors to travel safety are: narrow shoulders, steep side slopes, and multiple access points.

b. There is a lack of regional connectivity between 4-lane sections to the east and west of the 2003 EIS study area.
   - U.S. Route 34 is a key regional corridor through south central Iowa and west central Illinois.
   - The 8-mile section west of and the 12-mile section east of the Biggsville Bypass are the only two two-lane sections of U.S. Route 34 between Ottumwa, Iowa and Galesburg, Illinois – a distance of 125 miles.
   - A map of the regional corridor was presented to the audience. The map showed the two-lane sections highlighted against a state highway map.

c. There is a need to improve system capacity.
   - The average daily traffic (ADT) volumes through the 2003 EIS study area were presented. These are shown in the table below. A design year of 2040 is being used for this project.

Roadway Section	2013 ADT	2040 ADT
West of Carman Road	10,600	13,900
Carman Road to US 67	6,350 to 3,750	8,300 to 4,900
East of US 67	7,700 to 12,600	10,750 to 16,500

   - The percentage of heavy trucks varies between 25% on the west end of the study area and 12% on the east end.
   - The level of service in the design year, 2040, varies from an LOS C to an LOS D. The IDOT policy for a rural expressway recommends an LOS B.

6. The next steps were then presented.
   - Concurrence on Purpose & Need – this meeting today.
   - Development and Evaluate Alternatives. Ongoing.
   - Prepare Alternatives to be Carried Forward packet. Ongoing.
   - Public meeting August/September 2015
   - Presentation of Alternatives to Carry Forward at a future NEPA/404 merger meeting.

7. The presentation was concluded, and the study team formally asked for concurrence on the project Purpose and Need. The attendees had no questions and there was no further discussion on the project. At that point, Matt Fuller asked the attendees for concurrence on the Draft Purpose and Need. All attendees concurred.

8. The study team received concurrence on the Purpose and Need. The meeting concluded at 11:10 am.

IDOT District 8, St. Clair County
IL Route 3 Connector
Environmental Assessment
Concurrence – Alternatives to be Carried Forward

DECISIONS: USACE (McMullen), USEPA (Pelloso), IDNR (Fairfield), IDOA (Savko) concurred with the Alternatives to be Carried Forward.

USFWS (Mangan) concurred with the Alternatives to be Carried Forward and noted that there are concerns about the impacts to wetlands and the decurrent false aster. Past actions (Il Route 3, New Mississippi River Bridge, Racetrack Expansion, Golf Course) have continued to fragment the area and this project may encourage further development. Formal consultation will be required due to the impacts to the decurrent false aster, including a potential jeopardy analysis. It was noted that avoidance and minimization of these impacts should be considered in the refinement of alternatives. These concerns apply to all alternatives, but greatest concern regarding Alternative A and Alternative E.

IHPA (Phillipe) did not concur because they feel more archaeological work should be completed before narrowing the range of alternatives and they are concerned with potential effects on the East St. Louis Mound Group.

NEXT STEPS: Following the meeting, it was agreed to arrange a field visit for the resource agencies in September, around the next NEPA-404 merger meeting.

DISCUSSION:

Jeff Frantz, James Ritter and Sarah Archer of CH2M HILL presented the IL Route 3 Connector project's Alternatives to Be Carried Forward for concurrence at the NEPA/404 merger meeting on June 24, 2015, in FHWA's Springfield office.

After introductions, the project's consultant team presented a PowerPoint providing a project overview, details of the alternatives and the screening of the alternatives, and a request for concurrence on the Alternatives to be Carried Forward (ATBCF). The agenda for the PowerPoint was as follows:

1) Project overview
2) Project study area
3) Purpose and Need of proposed action
4) Alternatives
5) Alternative Screening
6) Alternatives Eliminated
7) Local government and public input
8) Request concurrence on Alternatives to be Carried Forward
9) Anticipated NEPA/404 Merger Schedule

Presentation Summary
In addition to the No-Build Alternative, eight build alternatives (Alternative A through Alternative H) were presented and discussed during the meeting. The proposed roadway will be a two-way urban minor arterial consisting of two- 12' lanes, 6' paved shoulders with sidewalks. The paved shoulders (as on-road bicycle accommodations) and sidewalks are dependent on local cost participation and subject to change.

The eight build alternatives were screened against Purpose and Need, engineering and environmental impacts. All eight build alternatives meet the three primary benefits outlined in the IL Route 3 Connector Purpose and Need: improve accessibility; eliminate circuitous routing and improve travel time consistency. The projected 2040 traffic volumes on the proposed IL Route 3 Connector roadway range from 2,650 to 4,290 vehicles per day (vpd). Traffic volumes on the Collinsville Road connection range from 0 vpd on the C2 connection point (corridor adjacent to Kenny Bernstein Lane) to 2,190 vpd at the C1 connection point (corridor along existing Exchange Avenue). The alternatives range in estimated cost from $19M to $32M with higher costs for the alternatives that cross the Cahokia Canal and/or utilize the C2 connection point.

The environmental screening was based on a combination of field studies and published databases. Detailed field studies used (or currently under development) to screen the alternatives include:

- INHS Wetland Determination Report (October, 2014)
- INHS Avian Survey Interim Report (October, 2014)
- INHS Botanical Survey Report (December, 2014)
- INHS Aquatic Fish Survey Report (October, 2014)
- INHS Habitat Assessments, Surveys for Aquatic Macroinvertebrates and Water Quality (November, 2014)
- ISAS Archeological Sites Investigation (November, 2014)
- ISGS Preliminary Site Assessment Report (June, 2014)

A table depicting the potential environmental impacts of the alternatives was provided at the meeting. Based on the level of detail in the current alternatives development, the impacts were calculated on a direct footprint impact basis. The alternative footprints were developed based on the working profiles using an approximate 150 to 300 foot width.

Each alternative includes impacts to key resources, including wetlands, threatened and endangered species, known archeological sites, flood plains and special waste sites. All of the alternatives impact both small and large populations of the state and federally threatened decurrent false aster (*Boltonia decurrens*), which is found throughout the study area. The alternatives with the C2 Kenny Bernstein Lane connection to Collinsville Road were found to impact twice as many floodplains and two to three times as many wetlands as the alternatives with the C1 Exchange Avenue connection to Collinsville Road. The C2 connection alternatives impact higher known archeological sites and special waste sites; however, the special waste impact analysis was based on data from 2006 and will be updated as the project moves forward with the new data provided by ISGS.

Build Alternatives that connect to Collinsville Road at connection point C2 (Alternatives B, D, F, and H) were recommended for elimination. The lack of daily traffic utilizing the C2 connection, and the fact that a connection to Collinsville Road using Exchange Avenue (C1) would still exist, using connection point C2 was deemed not prudent due to the additional environmental impacts and cost that would result.

Based on the screening described above, the following Alternatives were recommended as the "Alternatives to be Carried Forward":

- *No Build Alternative*
- *Alternative A – 3N-203N-C1*
- *Alternative C – 3N-203S-C1*
- *Alternative E – 3S-203N-C1*
- *Alternative G – 3S-203S-C1*

The anticipated NEPA/404 Merger schedule was presented as:

- Alternatives to be Carried Forward Concurrence – June 2015

- Presentation for Preferred Alternative Concurrence – February 2016

Questions and Comments
The following discussion and comments were offered:

- Question (Pelloso/USEPA) – Has delineation of the wetlands been verified by the USACE?
    - Response – No
    - Post Meeting Comment - Keith McMullen (USACE) believes the comment referred to jurisdictional determination which is not normally completed for a study of this nature.

- Question (Savko/IDOA) – What is the width of the buffer zone between the curb and the sidewalk on the typical section?
    - Response – 2 feet

- Question (Phillippe/IHPA) – What is the boundary of the East St. Louis Mound Group? How is the boundary affected by these alternatives? When will the boundary be better defined?
    - Response – The approximate known archeological sites are depicted on the environmental resources mapping in the pink dashed lines. Following the selection of the Preferred Alternative, additional archaeological investigations will be completed.
    - Follow up comment (Phillippe/IHPA) – Shouldn't the boundary be used now to choose the Preferred Alternative? There has been discussion that the East Saint Louis Mound Group may be made into a national park. Whatever archeological studies that need to be performed should be performed prior to identifying the Preferred Alternative.

- Question (Pelloso/USEPA) – What is the difference between the green and the yellow on the environmental impact screening summary?
    - Response – The green indicates that the impact is more favorable when compared to other alternatives within a given resource, the yellow indicates moderate impact as compared to the other alternatives, and no shading represents the least favorable impacts as compared to other alternatives. The table aims to show another comparison among all of the alternatives to show that each includes some of the most and least favorable impacts when compared to the others.

- Question (Phillippe/IHPA) – Which alternatives have the most impact on the East St. Louis Mound Group?
    - Response – The ISAS determined that the entire study area has potential for unknown buried archeological sites and each alternative includes impacts to known archeological sites.

- Question (McMullen/USACE) – Is the full I-70 build out depicted?
    - Response – Yes, it is depicted with a black dashed line on the maps showing the ATBCF.

- Question (McMullen/USACE) – What is the length of the study area across?
    - Response – The connection from IL Route 3 to IL Route 203 is approximately 2 miles in length, depending on the alternative. This does not include the additional length of the alternative to connect to Collinsville Road either via Exchange Avenue (C1) or Kenny Bernstein Lane (C2).

- Question (McMullen/USACE) – Where is Kenny Bernstein Lane located and is it available to be utilized as a road?
    - Response – It is a private roadway owned by the Gateway Motorsports Park racetrack on the western edge of the racetrack property. It is used for circulation and vendors during racetrack events.

- Question (Mangan/USFWS) – Did you consider expanding or improving existing roadways (IL 203, IL 3, Collinsville Road, Eagle Park Drive) to meet Purpose and Need?
    - Response – Yes, in fact the alternatives we are requesting concurrence to carry forward use a portion of the not yet built relocated IL Route 3, as well as an improved Exchange Avenue as part of the IL Route 3 Connector roadway network. Other roadways such as existing IL Route 203, IL Route 3, Collinsville Road, and Eagle Park Drive are located on the periphery of the study area and do not eliminate the circuitous routing or meet the other Purpose and Need elements if improved or expanded without a new roadway connection.
    - Follow up Comment – The issue should be detailed in the environmental document and included in future discussions of project development to clarify why improvements or expansion to the existing roadway network could not meet Purpose and Need.

- Question (Mangan/USFWS) – Is there opportunities to modify the ATBCF?
    - Response – Yes, further engineering refinements will be made to try to minimize impacts.

- Question (Mangan/USFWS) – How will the roadway be constructed? Will it be elevated or at grade? Can the footprint be reduced to minimize impacts to wetlands and potentially the decurrent false aster?
    - Response – Some areas of the roadway will be required to be elevated for grade separations over railroad tracks and crossings of the Cahokia Canal and Landsdowne Ditch. Retaining walls and other engineering solutions may be utilized to minimize impacts as the ATBCF are refined and further developed. Specific attention will be made to wetlands and the decurrent false aster

- Question (Mangan/USFWS) – How are wetland impacts being calculated in the presented analysis? Is the function of the remaining wetland being impacted?
    - Response – The wetland impacts have been calculated based on the direct impact of the proposed roadway footprint developed based on the current level of design detail. Further consideration of wetland function will be analyzed going forward.

- Question (Pelloso/USEPA) – If a wetland is bisected and leaving a small piece to one side, should the small remaining remnant be considered an impact?
    - Response – As the ATBCF are further developed and the environmental analysis continues, a more detailed wetland impact assessment will be performed to include considerations for the source of hydrology or other factors that might result in identifying direct or indirect impacts beyond the footprint itself. Accordingly, bisected and small remnants of wetlands will be considered for potential impact beyond the direct footprint as necessary.

- Comment (Mangan/USFWS) – The consultant team should contact East-West Gateway Council of Governments (EWGW) and discuss their Ecological Approach to Infrastructure Development in the East St. Louis Area.
    - Response – As part of the continued data collection process, the study team will acquire the available study data and utilize it in ongoing analyses as applicable.

- Question (Westlake/USEPA) –There was discussion of whether there was uncertainty as to the full build out of I-70 at the last meeting. Did this question get resolved?
    - Response – Although the full build of I-70 is not on IDOT's six year plan, it remains on the EWGW long range plan and is a goal of IDOT District 8. IDOT does not want to preclude it from being designed and constructed when future conditions allow.

- Question (Pelloso/USEPA) – How would the projected traffic be impacted by completion of I-70 and relocated IL Route 3, and what is the timeline for these projects?
    - Response – The completion of these two projects are not in the current 6-year plan, so the timeline is undetermined at this time. Even with these projects the alternatives that are recommended to be removed from consideration would still have zero traffic on the C2 connection. For the alternatives recommended to be

carried forward, the projected traffic on the proposed roadway would increase, but the type and size of facility would still remain the same.

- Question (Pelloso/USEPA) – With the highest amount of wetland impacts, why not eliminate Alternative E at this time?
    - Response – As the alternatives are further developed there will be opportunities to pursue avoidance and minimization techniques that may reduce impacts to be in line with other alternatives. Furthermore, there are engineering challenges with the 3N connection that need to be fully resolved as the alternatives are fully developed. Carrying Alternative E forward retains alternative options if the 3N engineering challenges cannot be overcome.

- Comment (Mangan/USFWS) – Would have liked to see an alternative that avoided impacts to the decurrent false aster. It is challenging given the distribution of the populations throughout the study area.

- Question (McMullen/USACE) – What is the speed limit?
    - Response – The design speed limits is 40 MPH with an anticipated posted speed limit of 35 MPH.

- Question (McMullen/USACE) – Are there frontage roads or side roads that will be built as part of this project or following it? If so, will these be secondary impacts or future cumulative impacts?
    - Response – The proposed roadway will not be access controlled. No frontage roads will be developed or constructed for this roadway. Currently, there is existing expansion and limited redevelopment within the study area that is expected to continue regardless of this project; however enhanced economic development opportunities were considered a secondary benefit in the project's Purpose and Need. Secondary and cumulative impacts will be reviewed as the Environmental Assessment is prepared.

- Question (Phillippe/IHPA) – What development is expected?
    - Response – The adjacent properties are mostly industrial. IDOT is working with the local municipalities to incorporate their development/redevelopment plans and goals.

- Question (Mangan/USFWS) – Are there any existing IDOT mitigation sites in the project boundary area?
    - Response – No. The closest site, which is the Fairmont City site, is beyond this project's study area.

Sign-in Sheet
NEPA-404 Merger Meeting
June 24, 2015
District 6 – US Route 24 Eastbound, Quincy Memorial Bridge over the Mississippi River
Concurrence: Purpose and Need

Name	Agency	e-mail address	Participation Location	Initials
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Sign-in Sheet
NEPA-404 Merger Meeting
June 24, 2015
District 6 – US Route 24 Eastbound, Quincy Memorial Bridge over the Mississippi River
Concurrence: Purpose and Need

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Sign-in Sheet NEPA-404 Merger Meeting June 24, 2015 District 6 – US Route 24 Eastbound, Quincy Memorial Bridge over the Mississippi River Concurrence: Purpose and Need				
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Sign-in Sheet
NEPA-404 Merger Meeting
June 24, 2015
District 4 – US 34 from Carman Road to Monmouth
Concurrence: Purpose and Need

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Sign-in Sheet NEPA-404 Merger Meeting June 24, 2015 District 4 – US 34 from Carman Road to Monmouth Concurrence: Purpose and Need				
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Greg Larsen	IDOT	Greg.Larsen@illinois.gov	Springfield	
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Sign-in Sheet
NEPA-404 Merger Meeting
June 24, 2015
District 8 – IL Route 3 Connector
Concurrence: Alternatives to be Considered

Name	Agency	e-mail address	Participation Location	Initials
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Sign-in Sheet NEPA-404 Merger Meeting June 24, 2015 District 8 – IL Route 3 Connector Concurrence: Alternatives to be Considered				
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Illinois NEPA/404 Merger Meeting
February 17, 2016

Illinois Department of Transportation
Auditorium (Basement)
2300 South Dirksen Parkway
Springfield, Illinois 62764

10:30 am – 12:30 pm

- US Route 34 (District 4, Henderson County)
  - Concurrence – Alternatives to be Carried Forward
- East Peoria Bypass (District 4, Peoria, Tazewell, and Woodford counties)
  - Concurrence – Preferred Alternative

12:30 pm – 2 pm

Lunch

2 pm – 3 pm

- US Route 50, Lawrenceville to Olney (District 7, Lawrence and Richland counties)
  - Information – discuss the draft EA

Printed: January 13, 2016

Sign-in Sheet
NEPA-404 Merger Meeting
February 17, 2016

District 4 - US Route 34 (Henderson County)
Information: Project Introduction

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NEPA/404 Merger Meeting Summary
February 17, 2016

IDOT District 4, Henderson County
US Route 34
Environmental Impact Statement
Concurrence – Alternatives to be Carried Forward

DECISIONS:
Concurrence was obtained on the alternatives to be carried forward from USEPA, USACE, IDNR, IEPA, IHPA, and IDOA.

NEXT STEPS:
Public hearing – Fall 2016
Preferred alternative concurrence – Feb/June 2017

DISCUSSION:
1. Gary Baker of the study team presented on the Alternatives to be Carried Forward for the project, with the intent of receiving concurrence from the federal and state agencies. The agencies attending (either in person or by conference call) were:
    - FHWA
    - U.S. EPA
    - U.S. Army Corps of Engineers
    - Illinois Department of Agriculture
    - Illinois Department of Natural Resources
    - Illinois Department of Transportation
    - Illinois EPA
    - Illinois Historical Preservation Agency

2. The presentation outline included:
    - Project history
    - Purpose and Need for action
    - Public information open house summary
    - Alternatives evaluation and recommendations
    - Next Steps

3. Project History
    1. The project study area – from west of Carman Road to the Biggsville Bypass (a figure depicting the study area was shown on the next slide)
    2. SEIS Study Area map
        – A map of the SEIS Study Area was presented
        – Limits: west of Carman Road to east of TR 111
        – Existing U.S. Route 34 is a 2-lane roadway in the Mississippi River floodplain (2010 FIRM)
        – Logical east terminus – Biggsville Bypass
            1. All alternatives tie into the Biggsville Bypass.
            2. Severe terrain and burial mounds preclude alternatives to the south.
    3. Why the supplemental EIS has been initiated

- Illinois Executive Order 2006-05
  1. In 2006, Illinois executed Executive Order 2006-05, Construction Activities in Special Flood Hazard Areas. A Special Flood Hazard Area is defined as "an area subject to inundation by the base or 100-year frequency flood and shown as such on the most current Flood Insurance Rate Map published by the FEMA."
  2. EO 2006-05 requires that all new Critical Facilities shall be located outside of the floodplain or structurally dry flood-proofed to at least the 500-year frequency flood elevation. IDOT determined that U.S. Route 34 is a critical facility.
- FEMA 2010 re-mapping and levee de-accreditation in June 2010
  1. On June 18, 2010, FEMA de-accredited the Henderson County Drainage District Number 1 and Number 2 levee systems.
  2. This is reflected on changes to regulatory floodplain mapping for Henderson County, which became effective in 2010.
  3. Approximately six miles of the U.S. Route 34 alignment selected in the 2003 FEIS and ROD, are now in an area designated a Special Flood Hazard Area protected by EO 2006-05; therefore, other alternatives must be evaluated to determine if there is a practicable alternative to the six miles of selected U.S. Route 34 alignment located in the 100-year floodplain.

4. Project Purpose and Need (achieved concurrence on June 24, 2015)
   1. The project purpose is as follows:

      "The proposed action is to provide an improved transportation facility for local and through traffic in Henderson and Warren Counties to address the needs of system capacity, system continuity, and travel safety."

   2. There are three principal project needs to be addressed:
      - **There is a need to improve system capacity**. The no-build level of service in the design year 2040 is C to D. The policy for a rural expressway is B.
      - **There is a lack of regional connectivity**. This is one of only two short sections of 2-lane highway between Ottumwa, Iowa and Galesburg, Illinois.
      - **There is a need to improve travel safety**. There are numerous geometric deficiencies.

5. Public Information Open House Summary
   1. Held November 18, 2015 at West Central High School in Biggsville from 4 pm to 7 pm.
   2. Purpose was to provide overview of the project, show conceptual alignment options, view graphical and informational displays, and obtain public comments and input.
   3. Advertised in the Burlington Hawkeye, the Henderson Quill and the Daily Review Atlas, twice in each publication prior to the meeting.
   4. Meeting materials consisted of exhibits, display maps and handouts.
   5. 88 people signed the attendance sheets at the meeting.
   6. Media present included: The Hawkeye, Tri-States Public Radio, and Pritchard Broadcasting
   7. Summary of 14 received comment forms:
      - Public expressed support for an alternative that has best chance of withstanding a flood;
      - Alternatives 4 and 5 received the most positive support;
      - Some commenters opposed the project because one or more of the alternatives affect their family farm;
      - A commenter made claim of presence of "Indian skeletons" east of IL 164 and north of US 34;

- A commenter suggested shifting Alternative 5 further south to avoid hillside, which is alleged to contain “Indian mounds”; and
- A commenter suggested building a bridge across the entire floodplain.

6. Alternatives Evaluation and Recommendations
    1. No-Build Alternative
        - Does not meet Purpose and Need
        - Does not comply with EO 2006-05
    2. Build Alternatives
        - Six alternatives
        - Address geometric deficiencies, terrain characteristics, and access concerns
        - Attempts to minimize impacts to environmental resources, commercial/residential displacements, and disruption to current land uses.
    3. Typical section
        - Four-lane expressway separated by 50-foot grass median
        - Raised road profile to place critical facility above 500-year flood elevation per EO 2006-05
    4. Nine exhibit slides were then shown depicting the typical sections and the study alternatives
    5. The screening criteria for the alternative evaluation was presented. It included evaluation factors within the following criteria:
        - Traffic, Transportation and Engineering
        - Socioeconomic and Land Use
        - Natura Resources
        - Cultural Resources
        - Agriculture
    6. The environmental impact data was then presented in tabular form in the next four slides
    7. **Alternatives to be DROPPED**
        - **Alternative 1**
            1. Greatest length through floodplain;
            2. Second greatest amount of fill in the floodplain;
            3. Relatively greater total new right of way; and
            4. Relatively greater conversion of cropland to highway use.
            5. Even though it has low displacement total (one), it has greater impacts to floodplains and cropland.
        - **Alternative 3**
            1. Directly impacts NRHP-eligible property (Site 267);
            2. Impacts 174.7 acres of prime farmland;
            3. Displaces greatest number of farm buildings; and
            4. Relatively greater impact to farm operations.
            5. Similar benefits to Alternative 5, but greater impact to farming operations as a result of skewed severances, greater borrow and impact to NRHP-eligible property.
        - **Alternative 4**
            1. Impacts twice the amount of wetlands as other alternatives;
            2. Impacts second greatest amount of productive cropland;
            3. Requires greatest amount of fill in 500-yr floodplain;
            4. Requires greatest amount of borrow excavation;
            5. Crosses floodplain longitudinally, resulting in greater severances and potential unusable remnants; and

6. Results in complicated access to Lock and Dam Road.
7. Even though it has low displacement total (one), impacts to floodplain, wetlands, cropland, and borrow needed are among highest of the alternatives.

8. Alternatives to CARRY FORWARD

– **Alternative 2**
1. Lowest impact to cropland;
2. Crosses existing US 34 three times resulting in highest utilization of existing US 34 right of way;
3. Somewhat higher amount of fill in floodplain compared to Alternatives 3, 5 and 6;
4. Some longitudinal crossing of the floodplain; and
5. Relatively higher number of residential displacements.

– **Alternative 5**
1. Requires least amount of borrow excavation;
2. Requires least amount of fill in floodplain;
3. Crosses floodplain in more transverse manner;
4. Impacts least amount of surface water crossings;
5. Impacts least amount of farm buildings;
6. Impacts greatest amount of cropland; and
7. Impacts greatest amount of forest land.
8. Even though the impacts to cropland and forest land are greatest, it requires the least amount of borrow and has the lowest impact to floodplain.

– **Alternative 6**
1. Crosses floodplain in more transverse manner;
2. Results in relatively low number of farm severances;
3. Affects the least number of farmed parcels;
4. Impacts greatest amount of prime farmland; and
5. Results in relatively high number of residential displacements (four).
6. Even though it impacts greatest amount of prime farmland, it has a relatively lower amount of borrow excavation, a lower impact to wetlands, and the least number of farm severances.

7. The next steps were then presented.
   – Concurrence on Alternatives to be Carried Forward – this meeting today.
   – Further analyze remaining alternatives – Ongoing.
   – Present alternatives at public open house meeting – Fall 2016
   – Recommendation of a Preferred Alternative – Spring 2017.

8. The presentation was concluded. The study team then opened up the presentation for questions. The following questions were posed to the study team.

   1. Question: What is the discrepancy in wetland quantities between Alternatives 1 and 5? (*From the Corps of Engineers-Rock Island District*).

      Answer: Steve Coates responded that the discrepancy relates to the placement of these two alternatives west of Carman Road. Alternative 1 lies to the north and Alternative 5 lies to the south. There is a slightly larger impact to wetlands on the south side of existing US 34 compared to the north side. That is why the wetland impacts on Alternative 5 are slightly higher compared to Alternative 1.

   2. Question: Will the farmers be provided access to their remnant parcels and has adverse travel been considered? (*From the Illinois Department of Agriculture*).

Answer: Gary Baker responded that remnant parcels have been considered and will continue to be considered as the evaluation process moves forward. This will include an assessment of adverse travel. No remnant farm property will be left without access.

3. Comment: Alternative 2 hugs the bluff between Lock and Dam Road and IL 164. There is a higher probability of impacts to archeological sites in this area. (*From the IDOT Cultural Resources Division*).

   Response: The study team notes this comment and will monitor archeological issues closely for all alternatives moving forward.

9. The study team formally asked for concurrence on the Alternatives to be Carried Forward. Matt Fuller of FHWA asked the attendees for concurrence on the Alternatives to be Carried Forward. All attendees concurred.

10. The study team received concurrence on the Alternatives to be Carried Forward. The meeting concluded at 10:55 am.

Sign-in Sheet
NEPA-404 Merger Meeting
Feburary 17, 2016

District 4 - East Peoria Bypass (Peoria, Tazewell, and Woodford counties)
Concurrence: Preferred Alternative

Name	Agency	e-mail address	Participation Location
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IDOT District 4, Peoria, Tazewell, and Woodford counties
East Peoria Bypass
Environmental Impact Statement – Tier 1
Concurrence – Preferred Alternative

DECISIONS:
There being no further questions or comments, concurrence was then solicited from the attendees. All agencies concurred (USEPA, USACE, IDNR, IDOA, IHPA), with one exception: IEPA (Mr. Gove) did not concur, stating that Corridor D13 should be kept as an alternative because it would best avoid TMDL impacts.

FHWA (Fuller) said he would follow up with U.S. Fish & Wildlife Service and the U.S. Coast Guard because they were not present at the meeting.

NEXT STEPS:
DEIS – summer 2016
Public Hearing – summer 2016
FEIS/ROD – early 2017

DISCUSSION:
The meeting began at 11:00 am with introductions from everyone present as well as those attending via telephone. Mr. Jeff Schlotter then gave a presentation updating the group on the background and status of the proposed Eastern Bypass project.

Mr. Schlotter began his presentation by summarizing the Eastern Bypass Study's background and progress through the Tier 1 EIS development. He noted that concurrence from the NEPA/Section 404 Merger agency representatives has been achieved for the project's Purpose and Need and for its Alternatives to Carry Forward and that today's meeting was to seek concurrence on the project's Preferred Alternative.

He then explained the parameters used to carry out the Tier 1 EIS study, including explanations of the levels of detail in the analyses and the methods used to ensure compliance with regulatory agency requirements and applicable regulations.

Mr. Schlotter then spent several minutes explaining the units of measure for each of the benefit and impact categories included in the study's current comparative evaluation matrix. In addition, he provided information about the methods used to analyze each of the categories.

At that point, IDOT Central Office (Mr. Brad Koldehoff) asked a question about the source of data for cultural resources and whether it came from the IL State Historic Survey. The Illinois Historic Preservation Agency (Mr. David Halpin) also asked about data sources for historic sites and structures. Mr. Schlotter and Mr. Ryan Pettit (IDOT study team) explained that the primary source of information used in the geodatabase was gathered from National Register of Historic Places sources. IDOT District 4 (Mr. Greg Larson) explained that "boots on the ground" fieldwork for cultural resources was not considered necessary for the Tier 1 level of analysis, and

Mr. Koldehoff agreed with that conclusion. Mr. Halpin asked if the IDOT Central Office would apply a predictive model for cultural resources. Mr. Koldehoff noted that the high probability sites may not be the same as IDOT's database. It was agreed that IDOT-District 4 would place a formal request to the Central Office to provide appropriate data on high probability sites.

Turning back to the presentation, Mr. Schlotter completed his explanation of the units of measure then moved on to the subject of the comparative evaluation of the four alternative corridors that were selected to carry forward for more detailed study.

He explained that it was logical for the project's study team to compare corridors M10 and D13 directly, because they offer a choice for the easternmost part of the study area. He then explained the factors that led to IDOT recommending that D13 be dropped from further consideration.

Mr. Schlotter then stepped through a comparison of the three remaining corridor alternatives, discussing the reasons the study team concluded that each of these three should be carried forward as the preferred alternative for the Tier 1 study. He noted that the study team feels the greater level of detail provided in Tier 2 is required to adequately differentiate these three corridors' benefits and impacts.

Mr. Schlotter then reviewed the next steps in the NEPA process and opened for the floor to questions and comments.

Questions and Comments

The Illinois Department of Agriculture (IDOA - Ms. Terry Savko) said the overall footprint for the recommended preferred alternative looks okay, noting that the final alternative selected in the Tier 2 EIS could be a combination of P2, T6, and M10. She expressed concern for impacts to farmland and noted the importance of zoning and planning in the area. She commented that an alternative on the east side of Morton seems to miss the point of the project. Mr. Schlotter replied by explaining that the final alternative for the overall project will need to balance impacts to developed areas and undeveloped, agricultural areas.

The US Environmental Protection Agency (USEPA - Mr. Ken Westlake) asked for more explanation on the method used to estimate potential sprawl in the study area. Mr. Schlotter said that future land use plans were consulted to identify planned development areas. The unit of measure corresponded to how near or far an alternative was from the developed areas. Four categories of future land use were used to evaluate this measure. Mr. Schlotter explained the multipliers and percentages that were used to develop the factors used for indirect effects in the evaluation matrix.

The Illinois Environmental Protection Agency (IEPA - Mr. Darren Gove) noted that the Farm Creek watershed is a concern because of elevated levels of chloride and that Total Maximum Daily Load (TMDL) assignments will need to be considered in the selection of an preferred alternative and in the final design of the project. He noted that road salt from the proposed highway might increase chloride to unacceptable waste load levels. Alternatives further east would be best to avoid impacts to impaired streams. Jeff Schlotter noted topics like the TMDL

would be analyzed in more detail in Tier 2 of the study.

The US Army Corps of Engineers (USACE - Ms. Kirsten Brown) commented on the purpose and need for the project, expressing concern that while alternatives to the west seem to meet the project purpose far better than those to the east, the western alternatives also have much greater potential to affect wetlands and endangered species. Mr. Schlotter noted that the primary purpose of the project is to increase mobility by reducing travel times in the area, and that one of the keys in doing so would be construction of the new bridge over the Illinois River, explaining that there is 22 miles between the McClugage Bridge and the next bridge to the north, which is at Sparland/Lecan. He also mentioned that a secondary purpose of the project is the reduction of congestion in the area. He affirmed Ms. Brown's assessment that the western alternatives provide more benefit but also have greater potential impacts in various categories. He further noted that balancing impacts with benefits will require a tradeoff, and that the highest benefit alternative is not necessarily the overall best alternative.

USACE (Ms. Brown) also asked if the U.S. Coast Guard has been included in the study. Mr. Schlotter explained that the U.S. Coast Guard has indeed been included and has provided comments on the locations considered for the Illinois River bridge. Mr. Schlotter noted that the Coast Guard will continue to be consulted with as the project moves forward. Ms. Brown commented factors such as wetlands, the endangered decurrent false aster, and other natural resources will continue to be important issues as the project advances. She also asked the study team to consult with the Illinois River Carriers' Association during the project's Tier 2 stage.

USEPA (Mr. Westlake) noted that the location of the Illinois River bridge is not really a factor in the decision because all of the alternatives cross the river at the same place. Mr. Schlotter affirmed that this is true, noting that earlier in the study there were six potential Illinois River bridge locations, and that this number was reduced to two, and then ultimately to the one current crossing location. As a result of there being only one preferred bridge location, all the alternatives are basically the same for about one-third of their (northern) length.

USEPA (Ms. Liz Pelloso) noted that environmental surveys were done as part of the study done for the proposed project in the 1990s. There were twelve such surveys, and she asked if they were taken into account for the current study. Mr. Schlotter explained that the current study was begun with a "clean slate," and that current GIS databases were used to evaluate the study area. IDOT District 4 (Mr. Larson) said many of the species noted in the old surveys have since been de-listed. Mr. Schlotter added that the information in the twelve surveys was assumed to be already included in the current database information. Ms. Pelloso said she feels the old surveys should still be looked at and that USEPA would like to receive a copy of those surveys. Mr. Schlotter said shapefiles of the survey locations would be sent to USEPA.

USEPA (Ms. Pelloso) then asked for clarification about the corridor widths. Mr. Schlotter explained that corridors themselves vary greatly in width, so the area of the corridors wouldn't yield a fair comparison when evaluating potential impacts to the natural and built environment. The 500 foot wide representative bands were developed as a way of comparing the different corridors on a consistent, "apples to apples" basis, and that one "best fit" band was developed for each corridor.

USEPA (Mr. Westlake) then asked if the actual roadway width would be more like 350 feet wide, with two lanes in each direction. Mr. Schlotter confirmed that 350 feet wide is a reasonable estimate for the actual right-of-way impact for this project and that it would be two lanes in each direction.

USEPA (Ms. Pelloso) asked about the history of the project and noted that USEPA concurred on a corridor identified as B5-R2 in 1998. She also noted there were "hot spot" surveys done in the study area to identify potential archaeological sites. IDOT District 4 (Mr. Mike Lewis) acknowledged there were additional field surveys done in environmentally sensitive areas at that time and that the B5-R2 corridor from 1998 was much like the current P2 Corridor. He further noted that other current corridors also are similar to the corridors from the 1990s.

IDOT Central Office (Mr. Koldehoff) said an Environmental Survey Request is needed for the project to have a database review. He said once the request is received, the information would be available in six months. This review would provide more up-to-date archeology information. USEPA (Mr. Westlake) noted this information could be folded into the Draft Environmental Impact Statement as it is developed over the next few months.

IDNR (Mr. Sheldon Fairfield) asked if the alternatives will be pared down in the future. Mr. Schlotter explained that the three corridors still under consideration are being recommended as the preferred alternative for the Tier 1 study, forming what is, in effect, the study area for the Tier 2 stage of the project. Thus, no more reductions would be made in Tier 1, and alignments could be developed in any part of the Tier 2 study area.

USEPA (Mr. Westlake) asked if it was possible that alignments could be developed in any or all of the three corridors. Mr. Schlotter said that alignments would indeed be developed in all three corridors, and more than one could be included within each corridor.

USACE (Ms. Brown) asked if the region is under a special area management plan in which high quality wetlands and other environmentally sensitive areas located near development (and therefore threatened) are identified and planned for. Mr. Schlotter said the study team was not informed of any such plan during coordination with area governments and local agencies, nor was such a plan identified during earlier data collection efforts. USACE (Ms. Brown) said she would check to see if she could determine whether such a plan has been, or is being, developed for the area.

USEPA (Ms. Pelloso) asked if any of the corridors encroach upon the Caterpillar proving grounds. She referenced notes from the 1990s indicating that Caterpillar said it would be unacceptable for a corridor to traverse proving ground property. IDOT District 4 (Mr. Lewis) stated that while the corridors do cross Caterpillar property, they do not encroach upon the actual proving grounds where equipment is tested. Mr. Schlotter added that the Community Advisory Group for the study includes in its membership a representative from Caterpillar, and there have been no negative comments with respect to Caterpillar property at the proving grounds.

USEPA (Mr. Westlake) asked if the Community Advisory Group was in agreement about the selection of this preferred alternative and if they had identified a single preferred corridor. Mr. Schlotter said that because Community Advisory Group is large, it sometimes generates a wide

range of opinions. He noted there were originally twenty corridors, which were systematically narrowed down to fourteen, then six, then four, and then to the final three. He noted that there was some opposition to dropping the D13 (easternmost) corridor, but a strong majority favored dropping it.

Sign-in Sheet
NEPA-404 Merger Meeting
February 17, 2016

District 7 - US Route 50, Lawrenceville to Olney (Lawrence and Richland counties)
Information: Discuss the draft EA

Name	Agency	e-mail address	Participation Location
Matt Fuller	FHWA	matt.fuller@dot.gov	Springfield, IL
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Diana Shasteen	IEPA	Diana.Shasteen@illinois.gov	teleconference
Terry Savko	IDOA	Terry.Savko@illinois.gov	teleconference

IDOT District 7, Richland and Lawrence counties
US 50 Expressway Study 2.5 miles west of IL 130 to 3.5 miles east of IL 1
Environmental Assessment
Information: Project Update

DECISIONS:

None requested, none provided.

NEXT STEPS:

Public Hearing for the Environmental Assessment in June 2016

DISCUSSION:

The US 50 Expressway Study (Olney to Lawrenceville) was presented at the NEPA/Merger meeting held at IDOT Central Office on February 17, 2016.

Jeff Frantz presented the project. He explained that, in 2011, when the project was initiated, resource agencies had been in agreement with District 7's request that, since most of the project would be constructed on existing state right-of-way and a large range of reasonable alternatives to be evaluated in the NEPA process was not anticipated, therefore, coordinating one-on-one with resource agencies was appropriate rather than processing the project as part of the NEPA/Merger process. As the environmental document will soon be submitted to the agencies for review, IDOT BDE suggested that it would be beneficial to present the project for information purposes in advance of submittal of the document.

The proposed action is to upgrade the existing 2-lane roadway to a 4-lane expressway with median between Olney and Lawrenceville. The purpose of the project is to enhance roadway network continuity and system linkage, create improved economic opportunities, and improve roadway geometric deficiencies and reduce crashes. It was noted that improving connectivity and accessibility also may enhance economic development opportunities for residents and businesses within the region.

Roadway details of the project were then highlighted. Generally, the proposed improvements can be accomplished within the right-of-way owned by IDOT. This is because US 50 was one of the potential locations of a proposed east-west interstate route (what is now I-64), and IDOT purchased right-of-way at that time (mid-1960s). One location meets traffic warrants for an interchange (at IL 130 in Olney) and jughandles are proposed at six locations (at Main Street, CH 15/St. Marie Road/1400E, IL 250/CH7, CH8/Bridgeport Road/CH 18, Business 50/State Street, and IL Rte 1).

Jeff then highlighted resources in the study area, before providing additional detail about improvements in the vicinity of Red Hills State Park and the Embarras River and its associated floodplains and forested wetlands.

At Red Hills State Park, there is sufficient right-of-way to widen without impacting the park. However, during the course of natural resource investigations, habitat for the Four-toed

salamander, a State threatened species, was found on the north side of the roadway. Extensive coordination occurred with IDNR to determine how to either avoid or minimize impact to the habitat. Based on this coordination, it was agreed that IDOT would shift the roadway slightly south to avoid the habitat. In exchange for IDOT's use of park property (7.6 acres of IDNR-owned land), IDOT agreed to several conditions, including:

- Deeding to IDNR the IDOT-owned right-of-way adjacent to the park that it would no longer need for roadway purposes due to shifting the alignment (8.7 acres)
- Reconstructing a relocated south park entrance and constructing a north park entrance from US 50
- Constructing a maintenance road that would connect the north and south sides of the park via a box culvert under US 50
- Reconstructing/restoring a horse trail that would be impacted, and
- Constructing new park entrance signage

A section 4(f) public information meeting was held to gather public input. Concurrence of de minimis impact was approved by IDNR in November 2013, and by FHWA in April 2014.

Jeff then presented potential wetland impact issues in the Lawrenceville area. At the east end of the project is a large floodplain and wetland complex associated with the Embarras River. Because widening the existing route would affect wetlands, bypasses were evaluated in attempt to avoid or minimize the wetland impacts. Three bypass options, in addition to improvement on existing alignment, were evaluated. These three bypass options were located to cross the narrowest area of wetlands. Bypasses were evaluated as 2-lane split alignments: new alignment would serve traffic in one direction and existing US 50 would serve traffic in the opposite direction. It was noted that this type of design approach (2-way pairs) would be very unusual and unconventional, and had not been reviewed for engineering feasibility by FHWA. The alignment options evaluated included:

- Existing Alignment: 4-lane expressway building new westbound lanes adjacent to the existing alignment, with the existing roadway serving as the eastbound lanes
- North Option: Build westbound lanes on new alignment north of the existing alignment, with the existing roadway serving as the eastbound lanes
- South Option: Build eastbound lanes on new alignment that parallels an existing transportation corridor (CSX rail tracks) south of Lawrenceville, with the existing roadway serving as the westbound lanes ("South Option")
- Far South Option: Building eastbound lanes on new alignment further south of Lawrenceville, with the existing roadway serving as the westbound lanes

Data was presented from a comparative analysis of the options (table provided below). The following points were highlighted:

- The wetland complex surrounding Lawrenceville is substantial, and relocating the alignment any further north or south would result in longer alignments and similar impacts to resources as the 4-lane expressway alignment on existing US 50
- Even utilizing this unusual design to minimize new roadway needed (2-way pairs located a distance away from each other) results in significant wetland impacts

- If these options were, instead, 4-lane roadways, the wetland impact would be greater than utilizing the existing alignment
- The South and Far South options both impact a Superfund hazardous waste site
- The North Option introduces new roadway to a large, relatively undisturbed area of woods and wetlands, compared to the existing alignment option.
- The costs for any of the bypass options are far greater than existing alignment option.

	Existing Alignment	North	South	Far South
New ROW Needed	0	263 acres	178 acres	196 acres
Length	6.8 miles	17.2 miles	16.4 miles	16.9 miles
Construction Cost	$ 67.7 M	$111.8 M	$115.6 M	$124.9 M
NWI Wetlands	29 acres	39 acres	23 acres	37 acres
Floodplain	99 acres	167 acres	86 acres	110 acres
Embarras River Crossing	1	2	2	2
Wooded Areas >20 acres	5	8	6	7
Wooded Areas > 500 acres	1	3	2	2
Displacements	0	3	19	12
Hazardous Waste	No	No	Yes	Yes

The project team met with the USACE on February 2, 2016 to present the bypass options considered and explain why the existing alignment was preferred. The USACE agreed with this conclusion.

Several minimization efforts have been incorporated into the existing alignment's engineering design in this area. Specifically, the footprint has been reduced to the limits of construction plus 15 to 20 feet, rather than the utilizing the full right-of-way width. Further, rather than constructing an interchange at US 50 and IL Route 1, a jughandle design will be utilized.

Resource impacts for the proposed improvement were presented. It was noted that two State T&E species (Arkansas sedge and Eastern sand darter) will be impacted by the proposed improvements. Consultation with IDNR has occurred.

Jeff summarized the public involvement activities that have occurred to date, and then discussed the schedule through the end of the project.

Following the presentation, the following questions were asked by agencies:

Ken Westlake, USEPA, asked what the targeted release date for the EA was. Jeff stated that IDOT is targeting mid-year for release of the document and public hearing.

Terry Savko, IDOA, asked if the proposed improvement was an expressway design. She also asked if access would be maintained for farmers. Jeff confirmed that the proposed roadway is an expressway, and explained that the majority of field and farm access will be provided at crossroads and sideroads. He noted that there are a few farm field access points onto US 50, based on individual circumstances. Terry asked for a copy of the Powerpoint presentation. This will be provided to her.

As there were no further questions, the meeting concluded.

Illinois NEPA/404 Merger Meeting
February 14, 2019

Federal Highway Administration
3250 Executive Park Drive
Springfield, IL 62703
Training Room

9 am – 12 noon

- ~~Florence Bridge, Scott County, District 6~~
  - ~~Concurrence – preferred alternative~~

- US 34 – Gulfport to East of TR-111 near Gladston, Henderson County, District 4
  - Concurrence – preferred alternative

- ~~Peoria Eastern Bypass – Tier 1 EIS, Peoria, Woodford, and Tazewell counties~~
  - ~~Information – project update~~
  - ~~–~~
- I-80 Mississippi River Bridge Crossing in the Quad Cities, Rock Island County, IL and Scott County, IA, District 2 & Iowa DOT
  - Information – project introduction

12 noon

ADJOURN

Sign-in Sheet
NEPA-404 Merger Meeting
February 14, 2019

District 4 - US 34 from Gulfport to east of TR-111 - Gladston & Henderson counties
Concurrence - Preferred Alternative

Name	Agency	e-mail address	Participation Location
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Steve Coates	Quigg Engr. Inc.	scoates@quiggengineering.com	Springfield
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Heidi Woeber	USFWS	Heidi_Woeber@fws.gov	Teleconference
Ken Westlake	USEPA	westlake.kenneth@epa.gov	Teleconference
Mike Sedlacek	USEPA	Sedlacek.Michael@epa.gov	Teleconference

IDOT District 4, Gladston and Henderson counties
US 34 from Gulfport to East of TR-111
Supplemental Environmental Impact Statement
Concurrence – Preferred Alternative

DECISIONS:

USACE, USFWS, and USEPA concurred with the preferred alternative as presented.

NEXT STEPS:

Supplemental EIS to be release for public review in the fall of 2019.

DISCUSSION:

1. The study team presented on the Preferred Alternatives for the project, with the intent of receiving concurrence from the federal and state agencies. The agencies attending (either in person or by conference call) were:
    - Federal Highway Administration (FHWA)
    - U.S. Environmental Protection Agency (USEPA)
    - U.S. Fish and Wildlife Service (USFWS)
    - U.S. Army Corps of Engineers (USACE)

2. Gary Baker of the study team began by giving the presentation outline which included:
    - Project history
    - Purpose and Need for action
    - Public information open house I summary
    - Alternatives evaluation and recommendations
    - Public information open house II summary
    - Alternatives to carry forward evaluation and recommendations
    - Next Steps

3. Project History
    a. The project study area – from west of Carman Road to the Biggsville Bypass (a figure depicting the study area was shown on the next slide)
    b. SEIS Study Area map
        - A map of the SEIS Study Area was presented
        - Limits: west of Carman Road to east of TR 111
        - Existing U.S. Route 34 is a 2-lane roadway in the Mississippi River floodplain (2010 FIRM)
        - Logical east terminus – Biggsville Bypass
            - All alternatives tie into the Biggsville Bypass.
            - Severe terrain and burial mounds preclude alternatives to the south.

c. Why the supplemental EIS has been initiated
   - Illinois Executive Order 2006-05
     - In 2006, Illinois executed Executive Order 2006-05, Construction Activities in Special Flood Hazard Areas. A Special Flood Hazard Area is defined as "an area subject to inundation by the base or 100-year frequency flood and shown as such on the most current Flood Insurance Rate Map published by the FEMA."
     - EO 2006-05 requires that all new Critical Facilities shall be located outside of the floodplain or structurally dry flood-proofed to at least the 500-year frequency flood elevation. IDOT determined that U.S. Route 34 is a critical facility.
   - FEMA 2010 re-mapping and levee de-accreditation in June 2010
     - On June 18, 2010, FEMA de-accredited the Henderson County Drainage District Number 1 and Number 2 levee systems.
     - This is reflected on changes to regulatory floodplain mapping for Henderson County, which became effective in 2010.
     - Approximately six miles of the U.S. Route 34 alignment selected in the 2003 FEIS and ROD, are now in an area designated a Special Flood Hazard Area protected by EO 2006-05; therefore, other alternatives must be evaluated to determine if there is a practicable alternative to the six miles of selected U.S. Route 34 alignment located in the 100-year floodplain.

4. Project Purpose and Need (achieved concurrence on June 24, 2015)
   a. The project purpose is as follows:

      "The proposed action is to provide an improved transportation facility for local and through traffic in Henderson and Warren Counties to address the needs of system capacity, system continuity, and travel safety."

   b. There are three principal project needs to be addressed:
      - **There is a need to improve system capacity**. The no-build level of service in the design year 2040 is C to D. The policy for a rural expressway is B.
      - **There is a lack of regional connectivity**. This is one of only two short sections of 2-lane highway between Ottumwa, Iowa and Galesburg, Illinois.
      - **There is a need to improve travel safety**. There are numerous geometric deficiencies and a high crash segment located within the project limits.

5. Public Information Open House I Summary
   a. Held on Wednesday, November 18, 2015, to provide an overview of the project, show conceptual alignment options, view graphical and informational displays, and obtain public comments and input.
   b. 88 people signed the attendance sheets at the meeting.
   c. 14 comment forms received :
      - Support for alternative with best chance of withstanding a flood. Alternatives 4 and 5 had the most positive support (10 comments of support)
      - Concerns regarding how project will affect local farming operations

- Specific suggestions for changes to alternatives provided

6. Alternatives Evaluation and Recommendations
   a. No-Build Alternative
      - Does not meet Purpose and Need
      - Does not comply with EO 2006-05
   b. Build Alternatives
      - Six alternatives
      - Address geometric deficiencies, terrain characteristics, and access concerns
      - Attempts to minimize impacts to environmental resources, commercial/residential displacements, and disruption to current land uses.
   c. Typical section
      - Four-lane expressway separated by 50-foot grass median
      - Raised road profile to place critical facility above 500-year flood elevation per EO 2006-05
   d. Three exhibit slides were then shown depicting the typical sections and the study alternatives
   e. The screening criteria for the alternative evaluation were presented. It included evaluation factors within the following criteria:
      - Traffic, Transportation and Engineering
      - Socioeconomic and Land Use/Natural Resources/Cultural Resources
      - Agriculture
   f. The evaluation of preliminary alternatives was presented at the NEPA/404 Merger meeting in February 2016. Concurrence on the alternatives to be carried forward, as compared to dropped alternatives, was received for Alternative 2, Alternative 5 and Alternative 6.

7. Public Information Open House II Summary
   a. The second public information meeting was held on Tuesday, October 4, 2016 at West Central High School in Biggsville, Illinois from 4:00 pm to 7:00 pm.
   b. The purpose of the meeting was to: present the alternatives carried forward for further study; give the public an opportunity to view the alternatives on full-size displays; and obtain public comments and input.
   c. 97 people signed the attendance sheets at the meeting.
   d. Summary of 30 received comment forms:
      - Many commenters (20 of the 30 commenters) expressed support for Alternative 2, several noting that this alternative would have the smallest impact on farmland and forest. Among the supporters of Alternative 2 were Highway 34 Coalition, the Tri-State Development Summit, and Southeastern Community College.
      - Eight commenters expressed support for Alternatives 5 and/or 6.
      - Several comments cited safety concerns regarding the existing U.S. 34 alignment and urged a decision to be made.

- One commenter's family was personally affected by a crash on U.S. 34 and urged action to be taken.
- One commenter suggested improving the existing U.S. 34 as westbound lanes, using Alternative 5 for eastbound traffic.
- Two commenters were concerned about impacts to their farm and cattle operations from Alternative 5.
- Four commenters disliked Alternative 5, noting greater impacts to farmland.

8. Alternatives to Carry Forward Evaluation and Recommendations
   a. No-Build Alternative
      - Does not meet the project Purpose and Need
      - Does not comply with EO 2006-05
   b. Three Build Alternatives
      - Alternative 2
      - Alternative 5, and
      - Alternative 6.

      Subsequent to the NEPA/404 Merger meeting, additional minor refinements to the build alternatives were made to minimize impacts to floodplains and other environmental resources, residential displacements, and other existing land uses. Impacts to farming operations and center pivot irrigation systems were also reduced.
   c. Incorporated into the evaluation of the alternatives to carry forward:
      - Information from the natural resource field surveys conducted by the Illinois Natural History Survey (INHS).
      - Number of owners affected.
      - Number of skewed farm operations by tract.
      - Number of skewed severances created.
      - Area of productive cropland/pasture impacted.
      - Number of uneconomical remnants created.
      - Acreage of uneconomical remnants.
      - Number of center pivot irrigation impacts.
      - Acreage of center pivot irrigation impacted.
      - Number of farm buildings displaced.
      - Impacts to visual quality from adjacent residences.
   d. The environmental impact data was then presented in tabular form in the next four slides

      Gary Baker ended his portion of presentation by explaining Traffic, Transportation and Engineering impacts of Alternatives to Carry Forward. Connie Heitz started by presenting Socioeconomic/Land Use/ Natural Resources impacts. Steve Coates presented Agriculture impacts of the three alternatives. Connie Heinz continued the presentation with Water Resources/ Cultural Resources impacts.

   e. Alternative 2 is being advanced as the identified Preferred Alternative for the following reasons:
      - It has the lowest impact to (compared to the next lowest total):

- Productive cropland; (165.3 ac vs. 187.6 ac)
- Prime and important farmland; (309.8 ac vs. 318.1 ac)
- Farm severances; and (6 vs. 8)
- Irrigated (center pivot irrigation) land (44.9 ac vs. 80.0 ac).

– It requires midrange amount of new right-of-way, and it has the highest utilization of the existing U.S. 34 right-of-way
– It is favored by the general public.

f. Impact Avoidance, Minimization, and Mitigation options going forward were presented, including:
   – Avoidance
     - Reduce construction footprint (fill) near wetland sites in western part of corridor
   – Minimization
     - Reduce footprint
     - Steepen slopes to reduce fill
   – Mitigation
     - Compensatory mitigation for wetland impacts, stockpile and replace soil at prairie sites

g. It was then summarized that the study team was asking for concurrence on Alternative 2 as the Preferred Alternative.

9. The next steps were then presented:
   - Submit Preliminary Draft SEIS for review
   - Address comments, submit Draft SEIS
   - FHWA Review, signs Draft SEIS/Publish NOA in Federal Register
   - Hold Public Hearing
   - Prepare / submit Draft Final SEIS
   - Address comments / Submit Final SEIS/ROD
   - Address comments from legal review, submit Final SEIS/ROD
   - FHWA publishes NOA in Federal Register

10. The presentation was concluded. The study team then opened up the presentation for questions. The following questions were posed to the study team.

    a. Question by Ken Westlake (USEPA): What are the dates for the Next Steps?

       Answer: Connie Heitz responded:
       - Approved Draft SEIS in September 2019
       - Public Hearing in November 2019
       - Draft Final SEIS to be submitted in March 2020
       - ROD should be in June 2020

    b. Question by Kirsten Brown (USACE): Difference in cost between Alternative 2 and other alternatives is approximately $7M. Was a cost/benefit analyses performed on keeping irrigation systems intact?

Answer: Greg Larson responded that a cost/benefit analyses was not performed, and the selection was made based on a strong community support of Alternative 2 and the fact that this corridor is very much an agricultural community.

c. Question by James Kyte (FHWA): How were the uneconomical remnants determined?

Answer: Steve Coates responded that a 2 acre threshold was established as the limit for economical remnants. Access to all properties will continue to be maintained.

11. Matt Fuller (FHWA) asked the agencies if there was adequate time for review of the agenda package and if they would be able to render a decision on concurrence in spite of the federal government shutdown over past several weeks. USEPA and USFWS both said they had enough time for review. USEPA offered its concurrence on the Preferred Alternative being Alternative 2, followed by USFWS concurring as well. USACE was asked and also concurred.

The meeting concluded at 9:45 am.

Sign-in Sheet
NEPA-404 Merger Meeting
February 14, 2019

District 2 -I-80 Mississippi River Bridge Crossing in the Quad Cities (PEL) - Rock Island Co, IL and Scott Co, IA
Information - project introduction

Name	Agency	e-mail address	Participation Location
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IDOT District 2 and Iowa DOT, Rock Island County, IL and Scott County, IA
I-80 Mississippi River Bridge Crossing in the Quad Cities
Planning and Environmental Linkages (PEL) study
Information – project introduction

DECISIONS:

None requested or received.

NEXT STEPS:

Project start-up including scoping activities.

DISCUSSION:

I-80 Mississippi River Corridor: Project is located in Rock Island County, IL and Scott County, IA. I-80 is one of three major interstate routes in the Quad Cities Area (QCA). It is one of five Mississippi River crossings in the QCA (I-280, Centennial, Arsenal (not utilized for thru traffic), I-74 and I-80). I-80 carries approximately 20% of daily vehicular traffic across Mississippi in QCA and carries approximately 51% of daily MU traffic, 63% of daily SU traffic across Mississippi River in QCA.

The QCA Mississippi River crossing Traffic Volumes are as follows:

Bridge	ADT [17]	SU	MU
I-280	28,000	1,500	6,700
Centennial Bridge	26,200	350	80
I-74	69,700	1,200	775
I-80	31,600	5,000	7,700

I-80 over the Mississippi River, or the Fred Schwengel Memorial Bridge, was named for Fred Schwengel, a former U.S. Representative from Davenport, Iowa who was one of the driving forces behind the Interstate Highway Act. The bridge opened on October 27, 1966 and overlooks the Illinois Welcome center. It was originally constructed with wide-flange beams/welded plate girders on reinforced concrete piers. Deck widening occurred in 1990 and 1995. The bridge is 3,483' long with 28 spans. Recurring condition issues include:

- Emergency repairs in 2010 requiring 2 month closure of EB lanes
- Additional hardware repairs were completed
- Vibration issues due to cantilevered exterior lanes necessitated replacement of lights

Widening of the existing structure is infeasible and the existing waterway navigational channel configuration is not optimal. The Illinois approach was reconstructed 2009-2011. Six lane warrants were identified due to traffic volumes. Constricted to 4 lanes on bridge to north, I-88 interchange to south. Agreement with FHWA to construct 12' full-depth inside shoulders to

accommodate potential future six lane section. The Iowa I-80 Scott County Planning study was initiated in October 2018. It is anticipated to be processed as an EA/FONSI. It will extend from the western limits of the I-80 Mississippi River Bridge PEL study to I-280 interchange in Iowa.

I-80 Collision History

TOTAL CRASHES: TYPE AND NUMBER

		YEAR					TOTAL
		2013	2014	2015	2016	2017	
A	ANGLE		2	1		1	4
B	ANIMAL	13(1)	13(1)	11(1)	2	2	48(3)
C	PEDALCYCLIST						
D	FIXED OBJECT	11(2)	12(1)	12(3)	12(4)	6	55(10)*
E	HEAD ON		1				1
F	OTHER NON-COLLISION	1	4(2)	1	1	2	9(2)
G	OTHER OBJECT	1				1	2
H	OVERTURNED	2(2)	3	7(4)			12(6)
I	PARKED VEHICLE			1	1(1)		2(1)
J	PEDESTRIAN						
K	REAR END	16(4)	8(2)	4	1	5	34(6)
L	SIDESWIPE OPPOSITE DIRECTION						
M	SIDESWIPE SAME DIRECTION	10(1)	11(3)	8(1)	12*	5	47(6)*
N	TURNING	1					1
	TOTAL CRASHES	55(10)	54(9)	45(9)	29(5)*	22	215(34)*
INJURY TYPE	Fatal				1		1
	Type A	1	4	4			9
	Type B	5	2	5	3		15
	Type C	4	3		2		9
	WET	8	5	4	2	4	23
	DARKNESS	12	19	15	7	7	60
	ICE/SNOW OR SLUSH	6	23	15	8	3	55
	IMPAIRED DRIVER CRASH	1	1	2	1		5

( ) INDICATES NUMBER OF INJURY CRASHES

* INDICATES 1 FATAL CRASH

Fatal - A traffic crash involving a motor vehicle in which at least one person dies within 30 days of the crash.

Type A - **(Incapacitating Injury) - Any injury, other than fatal, that prevents the injured person from walking, driving, or normally continuing the activities he/she was capable of performing before the injury occurred.**

Type B - **(Non-Incapacitating Injury) – Any injury, other than a fatal or incapacitating injury, that is evident to observers at the scene of the crash.**

Type C - (Reported, Not Evident) – Any injury reported or claimed which is not either an "A" or "B" injury

IDOT decided to utilize the Planning and Environment Linkages (PEL) process for this project. Illinois and Iowa DOTs agree that a study is needed because the need for the bridge replacement is anticipated based on factors including;

- Continued annual expenditures for maintenance
- Fracture critical structural components
- Obsolete geometric configuration

There are limited engineering funds available with no future funding yet identified. IDOT would like to complete preliminary tasks that are NEPA compliant and can carry into a future Phase I study.

Parsons Team was selected (Illinois Professional Transportation Bulletin 189/020) and has begun initial scoping which includes meetings and project start-up. The PEL study components will prioritize what is most important:

- Logical termini?
- Independent utility?
- Preliminary range of alternatives?
- Cost estimation?
- Coordination with adjacent Iowa I-80 study