#### FEDERAL HIGHWAY ADMINISTRATION DOCUMENTATION OF SECTION 106 FINDING OF ADVERSE EFFECT SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER PURSUANT TO 36 CFR 800.6(a)(3) I-69 EVANSVILLE TO INDIANPOLIS TIER 2 STUDIES: SECTION 2, SR 64 NEAR OAKLAND CITY TO US 50 EAST OF WASHINGTON DES. NO.: 0300378 FEDERAL PROJECT NO.: IN10(005)

#### **1.0 DESCRIPTION OF THE UNDERTAKING**

#### **1.1 Project Description**

The Indiana Department of Transportation (INDOT) with funding from the Federal Highway Administration (FHWA) is proposing the construction of Section 2 of Interstate 69 (I-69) from Evansville to Indianapolis, which begins at SR 64 near Oakland City, Indiana, and continues to US 50 east of Washington, Indiana. Section 2 is approximately 29 miles in length and is proposed to be a four-lane facility built to interstate standards. The I-69 Evansville to Indianapolis project, which is 142 miles in length, is a component of the congressionally designated National I-69 corridor extending more than 2,100 miles from the Canadian border to the Mexican border.

The Tier 1 Environmental Impact Statement (EIS) for the I-69 Evansville to Indianapolis project concluded in March 2004, when the Federal Highway Administration (FHWA) selected a corridor – Alternative 3C – in its Record of Decision (ROD) and divided the corridor into six sections for detailed study in Tier 2. Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470f), mandates federal agencies to take into account the effects of their undertakings, i.e., projects wholly or partially funded, permitted, or licensed by a Federal agency, on historic properties. On December 15, 2008 the FHWA signed a finding of adverse effect for Section 2 of the I-69 project. Construction of Section 2 will result in an adverse effect on the Patoka Bridges Historic District. Mitigation for the adverse effect will take place per the stipulations in a Memorandum of Agreement (MOA) between the FHWA and the Indiana State Historic Preservation Officer (SHPO).

Since the finding of effect was signed, changes to the scope of work have occurred. The changes extend beyond the approved Area of Potential Effects (APE) for Section 2. This revised document has been prepared to detail the recent changes in the project. The revised design of Section 2 requires flood easement acquisition areas along the refined preferred alternative. The flood easements involve the acquisition of easements on land acreage not presented in the Final Environmental Impact Study (FEIS). These acquisition areas will accommodate the increased backwater generated during the regulatory flood resulting from the final design of the below-referenced hydraulic bridge structures in Section 2. All easement areas are located adjacent to or in the immediate vicinity of areas currently subject to flooding. This minor increase in flooding for the regulatory event (for which property owners will receive compensation) results in a significant construction cost savings with only a minor increase in water levels during regulatory flood events.

Listed from south to north the flood easements in Section 2 are at the following locations: East Fork Keg Creek; Buck Creek; Hurricane Creek, Unnamed Tributary Flat Creek; Unnamed Tributary Lick Creek; Mud Creek; East Fork White River; Veale Creek; Unnamed Tributary Veale Creek; LSR-24; Hurricane Branch; Unnamed Tributary Hurricane Branch. These areas of Section 2 are not located within or directly adjacent to any cities or towns. The existing land use within these flood easements are predominately agricultural areas and some small wooded areas, which would not change as a result of the flood easements.

The flood easements are being acquired for areas where the I-69 and new local access road bridge designs result in increased backwater exceeding 0.14 feet during the regulatory flood (the allowable limit identified in the Flood Control Act – IC 14-28). The bridge designs all comply with FHWA approved design standards which allow a maximum backwater increase of 1.0 foot during the regulatory flood. The regulatory flood is defined as "a flood having a one percent (1%) probability of being equaled or exceeded in a year as calculated by a method and procedure that is approved by the [Natural Resources Commission]. The regulatory flood is equivalent to the base flood or the 100-year frequency flood" (312 IAC 10-2-35). As defined, the flood event that produces backwater on these flood easement parcels is a low probability or infrequently occurring event. Based on the hydraulic modeling completed to analyze these bridge structures and flooding, the duration of the increased backwater on the newly inundated areas will be less than 24 hours during any single event.

### **1.2** Area of Potential Effects

The Area of Potential Effects (APE) is "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties. The APE is influenced by the scale and nature of an undertaking..." [36 CFR 800.9(a)].

FHWA, in consultation with the Indiana State Historic Preservation Officer (SHPO), determined the APE for the corridor alternatives studied during Tier 1. The APE for the selected corridor was carried forward and modified for Tier 2 above-ground studies.

The APE for above-ground resources in Section 2 is centered on the Tier 1 Alternative 3C, a 2,000-foot-wide, approximately 29-mile-long corridor that was selected as the preferred Tier 1 alternative to advance to the Tier 2 Study. FHWA defined the width of the APE as one mile on either side of the 2,000-foot wide corridor because of the relatively flat topography in the area, except at the Patoka River Valley, where it is heavily wooded, and in Petersburg, where buildings will shield the view of the undertaking (Refer to Original 800.11(e) for map and FHWA Findings and Determinations). The SHPO concurred with this definition of the APE on June 18, 2004, and the formal FHWA's Section 106 Findings and Determinations of APE and Eligibility Determinations on November 23, 2005 (See Appendix C in original 800.11).

As a result of more information becoming available regarding the location of potential access roads and interchanges, the APE was subsequently expanded in three areas:

1) Along US 50 east of Washington in Daviess County, 2) Along Blackburn Road north of Petersburg in Pike County, and 3) At State Road (SR) 61 southeast of Petersburg in Pike County. Originally, a realignment of SR 61 was considered both north and south of the I-69 interchange, but an extension of the APE was necessary only to the south. Subsequent to the field survey in

this area, the preferred alternative was modified to utilize a proposed interchange on existing SR 61, with no realignment, thereby limiting all project construction for the SR 61 interchange to the original APE.

On March 2, 2007, SHPO "agree[d] with the rationales for, and the boundaries of, the three additions to the area of potential effects" and "further agree[d] that none of the properties that you examined within those expansion areas is eligible for inclusion in the National Register of Historic Places" (See Appendix C in original 800.11).

All flood easement areas are located within the previously approved APE for Section 2, with the exception of the flood easements located at the East Fork White River. A portion of the flood easement extends outside of the approved APE for Section 2. Therefore, a review of historic properties was completed and a newly defined APE was established. The findings and determinations of effect related to the flood easement areas are examined in this document. Due to the short duration and infrequent nature of the additional backwater resulting from the regulatory flood, and minimal associated visual impacts, the new APE at the East Fork White River is restricted to the outer limits of the flood easement areas, which consist of the existing river floodplain (See Appendix B).

The APE for archaeological resources, per 36 CFR 800.16 (d), has been defined, through consultation with the SHPO as the construction right-of-way for the preferred alternative–Build Alternative A (subsection alternatives: 1-6, 8-9) and Build Alternative B (subsection 7). In Section 2, the construction right-of-way for the preferred alternative measures approximately 330 feet in width. The Phase Ia field reconnaissance and limited Phase Ic subsurface reconnaissance were conducted for the preferred alternative right-of-way only.

The APE defined for archaeological resources for the flood easement areas is defined as the existing floodplain and outer limits of the flood easements.

### 2.0 EFFORTS TO IDENTIFY HISTORIC PROPERTIES

Historic properties were identified and evaluated in accordance with Section 106, National Historic Preservation Act (NHPA) of 1966, as amended, and 36 CFR Part 800 (2009). Section 106 requires the federal government to "take into account" the effect of its proposed actions on historic properties. Historic properties are those properties that are listed or eligible for listing in the National Register of Historic Places (NRHP). Such properties include buildings, structures, sites, objects, and/or districts. All Section 106 work within the original APE established by FHWA and the revised APE encompassing the flood easement areas, was conducted by professional historians and archaeologists in accordance with the Secretary of the Interior's Professional Standards.

### 2.1 Data Collection – Above - Ground Resources

Documentary research and a field survey of the original and revised APE were conducted to collect data to develop a historic context and to identify and evaluate historic properties. The survey was completed in accordance with the *Secretary of the Interior's Standards and Guidelines*, the professional standards pertinent to this type of historic property identification and evaluation.

**Documentary Research**: To initiate research on above-ground historic properties for Section 2, the project historians were provided data on all potentially eligible or listed historic properties identified during the Tier 1 Study. Additional sources consulted included USGS 7.5 topographic maps showing the locations of buildings, structures, sites, districts, and objects inventoried with DHPA, IHSS Inventory forms, the *Interim Reports* of Gibson and Daviess counties (Pike County does not have an *Interim Report*), the NRHP nomination files, and the Indiana State Register of Historic Sites and Structures.

Regarding the flood easement areas located outside of the original APE, the *National Register of Historic Places* (NRHP) and *Indiana Register of Historic Sites and Structures* (State Register) were checked and no above-ground resources within the flood easement areas appear in either list. The *Daviess County Interim Report* (Historic Landmarks Foundation of Indiana, 1987; Appendix F) was consulted; one resource, identified as Indiana Historic Sites and Structures Inventory (IHSSI) #027-571-35011 was located within the flood easement areas, however, the Pratt Through Truss Bridge No. 242 is no longer extant (see photos 9 and 10 in Appendix E). An interim report for Pike County has not been published. The "Indiana Historic Bridge Inventory Volume 2: Listing of Historic and Non-Historic Bridges" (Mead & Hunt, February 2009) was also reviewed. No historic bridges are listed within the flood easement areas.

Additional documentary research was conducted to develop the historic context and to gather information on individual above-ground resources in the APE. Research was conducted at the Indiana State Library, the Indiana State Archives, and the Indiana Historical Society in Indianapolis. Sources examined at these locations consisted of county histories, newspaper clipping files, censuses, historic aerial photographs, and Pike and Daviess county atlases and maps. The history and genealogical collections at the Barrett Memorial Library in Petersburg and the Washington Public Library were examined for county histories, atlases, and maps, newspaper clipping files, genealogy sources, cemetery surveys, and census records. In addition, deed research was conducted at the Pike and Daviess county recorders' offices.

*Field Survey*: Within the original APE, project historians drove all public roads in the APE to identify and document above-ground resources. All properties 50 years of age or older were noted on field maps and photographed. For properties retaining low to moderate or higher integrity, the historians took field notes, recording address, location, style, and type, and comments regarding integrity. The location of each surveyed above-ground resource, whether previously or newly inventoried, was recorded using a global positioning satellite (GPS) unit. The GPS coordinates were used to plat the inventoried above-ground resources on project mapping. In addition to buildings and structures, the project historians also documented cemeteries within the APE. (While cemeteries generally are not protected under Section 106 unless they meet the requirements to be eligible for the NRHP, Indiana state law (IC 23-14-44) requires avoidance of cemeteries. The information regarding cemeteries will be provided to the Indiana Department of Natural Resources – Division of Historic Preservation and Archaeology [IDNR-DHPA] for their records.)

Above-ground resources that were previously inventoried for the Gibson and Daviess counties surveys and included in their *Interim Reports* were documented based on current conditions with new inventory forms. Pike County does not have an *Interim Report*, but the potentially eligible properties from Tier 1 were re-surveyed and forms were prepared for them.

Above-ground resources within the APE were evaluated to determine their eligibility for listing in the NRHP based on their integrity – location, design, setting, materials, workmanship, feeling, and association.

Regarding the areas located outside of the original APE, field reviews of structures located within and adjacent to the proposed flood easement areas were completed on June 28 and July 7, 2010. Of the 16 properties that appeared to be at least 50 years old, six warranted a "contributing" rating and none were recommended eligible for listing in the National Register (please see Appendix E for photo key maps, photos, and surveyed properties table). For these reasons, it has been determined that the flood easement areas result in no change to the original determination of potential effects on above-ground resources.

#### 2.2 Data Collection – Archaeological Resources

As part of the phased approach to Tier 2 archaeological studies, initial research focused on literature research, a site files check at IDNR-DHPA, and archival research at various repositories for the Alternative 3C corridor. Recordation forms for all archaeological sites were copied and site locations marked on project maps and entered into the Section 2 project Geographic Information System (GIS). The sites were considered in the alternative selection process.

Once the preferred alternative (Build Alternative A in subsections 1-6, 8-9, and Build Alternative B in subsection 7) was identified, Phase Ia field survey, and Phase Ic subsurface reconnaissance were conducted for the entire APE. The Phase Ia field investigations employed a combination of field methods: shovel testing at 10 meter intervals where surface visibility was less than 30%, pedestrian survey where surface visibility was greater than 30%, visual inspection in areas with slope or excessive disturbance, and auger testing in alluvial soils. All methods were in compliance with Indiana *Guidebook for Indiana Historic Sites and Structures Inventory – Archaeological Sites*, issued by IDNR-DHPA.

Field notes and map notations were employed to record area designations, field conditions, located sites, and methods of investigation. Similar notes were taken for each site and included observations, methods of investigation, site size, and slope gradient and direction. Notes were retained for all shovel probes, and included information on Munsell soil color, soil texture, presence/absence of cultural materials, and stratigraphy. All artifacts located in the field were bagged, with the date and provenience marked on the bag. At least one shovel probe was excavated at each site surveyed, even if it was discovered by surface survey, to gain information on site stratigraphy. All sites were recorded by GPS to sub-meter accuracy.

Phase Ia archaeological investigations of the Section 2 APE delineated six previously recorded sites and identified 51 unrecorded sites. The sites recorded include: 14 prehistoric isolated finds, 19 prehistoric lithic scatters, 16 historic sites, and 6 sites with both prehistoric and historic components. An historic cemetery (the Battle Cemetery, 12Pi738) is also located at the edge of the APE. Two of these sites (12Pi103 and 12Da1462) were recommended for additional investigations or avoidance. Phase II research was completed at Site 12Da1462 the results of which indicated that the site is not NRHP eligible, and SHPO concurred with that recommendation.

Phase Ic subsurface reconnaissance was recommended at four locations in the APE using a phased methodology, which was outlined in a scope-of-work submitted to SHPO for review. SHPO concurred with the locations of and methods for Phase Ic. The locations were selected based primarily on their potential for including and preserving buried archaeological materials. The first level of research for Phase Ic involved coring at three of the four locations (Prides Creek, East Fork White River, and Veale Creek). Landowners access could not be secured for coring at the Patoka River crossing and a portion of Veale Creek. Additional Phase Ic investigations utilizing backhoe trenching was recommended for Prides Creek and the East Fork White River. Backhoe trenching was completed at Prides Creek; however, access for backhoe trenching was denied by landowners at the East Fork White River. Phase Ic investigations will occur at the Patoka River, East Fork White River, portions of Veale Creek, and at Site 12Pi103 upon receipt of access rights to the property for the project and will be documented in an MOA.

Cores extracted in the subsurface investigations were continuous solid 2- to 3-inch cores pulled with a Geoprobe to the depth of basal unconsolidated Quaternary deposits. The goal of the coring was to document the stratigraphic sequence of deposits. Cores were located horizontally by GPS and surface elevation determined so that cross-sections can be constructed. A total of 37 cores were excavated at 60-meter intervals within the Section 2 Build Alternative APE: five at Prides Creek, 28 at East Fork White River, and four at Veale Creek. Five backhoe trenches were also excavated at Prides Creek following SHPO guidelines.

In regard to archaeological resources for the flood easement areas, a review was conducted by Gray & Pape, Inc. This analysis identified that the areas have historically and prehistorically been subjected to inundation. Any additional flooding would be of short duration and infrequent recurrence. A more detailed review of the White River floodplain was also completed. The amount of additional temporary flooding in the White River bottomland (as shown in the appendices) relative to the natural flooding along the river is miniscule (~14.88 ac. out of ~ 4,000 ac. which is less than 0.1% of the total). As this is along the periphery of the flooded area, temporary flood waters would not be in a heavy flow zone, but rather in a slackwater area. As described above, additional flooding would result in less impact to any archaeological resource than the annual cultivation of these bottomland fields. For these reasons, no further archaeological investigations of the flood easement areas are needed and it has been determined that the flood easement areas result in no change to the original determination of potential effects on archaeological resources.

### 2.3 Consideration of the SR 257 Bridge over Veale Creek

During the identification and evaluation phase for Section 106 for this project, Section 2 historians initially recommended that the SR 257 Bridge over Veale Creek in Daviess County, Indiana, was not eligible for listing in the NRHP. Additional field work, consultation, and research found that the steel, Warren pony truss bridge built in 1938 meets the standards for eligibility set forth in *Guidelines for Assessing the Cultural Significance of Indiana's Extant Metal Bridges (1872-1942)*. Since this discovery occurred after the issuance and review by consulting parties of the *Historic Properties Report* and the *Identification of Effects Report*, the information concerning the SR 257 Bridge over Veale Creek was handled as a separate submittal for consulting party review (see reports in Appendix E of original 800.11).

INDOT now intends to rehabilitate or replace the SR 257 Bridge over Veale Creek as part of a separate project. Because that project is not related to the I-69 Section 2 project, a separate Section 106 review (Des. No. 0100917) has been completed for that undertaking. A separate Memorandum of Agreement was signed in May 2009 for the SR 257 Bridge project.

## 2.4 Timeline of Consultation

The following paragraphs document the chronological history of Section 106 consultation for the Section 2 portion of I-69.

**May 18, 2004** – FHWA sent a letter and response card to potential consulting parties, including 13 Native American Tribes, inviting them to participate as consulting parties for Tier 2. The letter directed invitees to the Advisory Council on Historic Preservation (ACHP) website to obtain more information about the Section 106 process.

June 3, 2004 – Map of the Section 2 Area of Potential Effects (APE) sent to the SHPO for review.

**June 9, 2004** – Invitations sent to responding consulting parties having an identified interest in the Section 2 project area notifying them of the first scheduled Section 2 consulting party meeting. A map of the APE and a list of potentially eligible properties identified in the Tier 1 study were included with each invitation.

**June 18, 2004** – SHPO submitted a letter commenting that, based on currently available information, the Section 2 APE "appears to be appropriate."

June 25, 2004 – First consulting party meeting held.

June 29, 2004 – FHWA sent SHPO a list of consulting parties for review.

**June 30, 2004** – Section 2 Project Office held an Open House, at which visitors were advised of the Section 106 process and encouraged to take a copy of the "Protecting Historic Properties" booklet.

July 15, 2004 – Minutes of first consulting party meeting sent to consulting parties.

**August 12, 2004** – Tier 2 early coordination with the SHPO initiated: The first Tier 2 environmental resource agency coordination meeting was held to which representatives of all Tier 2 project sections and participating government agencies, including the SHPO, were invited. The SHPO's office was represented at this meeting.

 $December \ 2004$  – Historians called local knowledgeable persons and consulting parties for additional information.

February 15, 2005 – Coordination occurred with the SHPO to discuss the Historic Property Reports.

February 23-24, 2005 – Coordination with the SHPO continued via the second environmental

resource agency coordination meeting and field trip with all Tier 2 project sections. The SHPO's office was represented at this meeting.

**March 29, 2005** – FHWA invited consulting parties to attend the second consulting party meeting to discuss findings of eligibility. The invitation included the executive summary, discussion of eligible and listed historic properties and the surveyed properties table from the *Draft Historic Property Report* (HPR).

March 30, 2005 – *Draft* HPR sent to the SHPO.

April 13, 2005 – Second consulting party meeting held to discuss the findings of eligibility.

April 22, 2005 – Minutes of second consulting party meeting mailed to consulting parties.

May 17, 2005 - SHPO sent comment letter regarding the conclusions of the *Draft* HPR stating "we agree with the proposed findings of eligibility and non-eligibility for the properties identified in the report."

**September 28, 2005** – Coordination with the SHPO continued. A webcast meeting held to review Section 2's Statement of Purpose and Need and preliminary alternatives. Representatives of all participating government agencies, including the SHPO, were invited. However, the SHPO's office did not participate in the meeting.

October 18, 2005 – *Final* HPR submitted to SHPO.

**October 19, 2005** – FHWA signed Findings and Determinations of Area of Potential Effects and Eligibility for above-ground resources.

October 19, 2005 – FHWA invited consulting parties to attend the third consulting party meeting; a CD containing the *Final* HPR, a copy of FHWA's signed Section 106 Findings and Determinations of APE and Eligibility Determinations, and a *Draft Identification of Effects* report was enclosed with the mailing.

**November 2, 2005** – Third consulting party meeting held to discuss the findings of the APE and eligibility and the *Draft Identification of Effects* report.

November 14, 2005 – Minutes of the third consulting party meeting mailed to consulting parties.

**November 23, 2005** – SHPO issued letter concurring with FHWA's Section 106 Findings and Determinations of APE and Eligibility Determinations and said that the staff "in general we agree with" the *Draft Identification of Effects Report* but requested further information.

**February 22, 2006** – FHWA issued invitation to the fourth consulting party meeting, and submitted for review to SHPO and to consulting parties the *Identification of Effects Report* for Section 2 and a Conceptual Mitigation Worksheet.

**March 9, 2006** – Fourth consulting party meeting held to discuss the effects of the undertaking and potential mitigation at the Patoka Bridges Historic District.

**March 15, 2006** – Project Management Consultant (PMC) sent a follow-up electronic mail to consulting parties listing Patoka Bridges Historic District mitigation ideas discussed at the consulting party meeting and requesting further input.

March 23, 2006 – Minutes of the fourth consulting party meeting mailed to consulting parties.

**April 11, 2006** – Phase Ia archaeology literature review for Section 2 Study Corridor submitted to SHPO.

May 11, 2006 – The SHPO sent a letter concurring with the *Identification of Effects Report*, and summarizing their suggestions for mitigation at the Patoka Bridges Historic District, and recommending against the installation of noise barriers on the new bridges at that location due to concerns about visual impacts.

**May 31, 2006** – Coordination with the SHPO continued. A webcast meeting was held to review Section 2's Preliminary Alternatives and Screening Package. Representatives of all participating government agencies, including the SHPO, were invited, and the IDNR was represented by an NEPA Coordinator and Environmental Review staff.

**September 22, 2006** – Phase Ic archaeological subsurface reconnaissance scope-or-work submitted to SHPO.

**November 30, 2006** – Letter report mailed to the consulting parties regarding the eligibility of the SR 257 Bridge over Veale Creek.

**December 18, 2006** – SHPO sent a letter agreeing with the recommendation that the SR 257 Bridge over Veale Creek is eligible for inclusion in the National Register.

**December 20, 2006** – SHPO sent a letter concurring with Phase Ic archaeological subsurface reconnaissance scope of work.

**January 5, 2007** – SHPO sent a letter commenting on Phase Ia archaeology literature review for Section 2 Study Corridor.

**February 9, 2007** – Letter mailed to the consulting parties regarding expanding the APE at certain locations where the proposed alternatives extended beyond the defined project corridor.

**March 1, 2007** – Coordination with the SHPO continued via a fourth environmental resource agency coordination meeting with all Tier 2 project sections. The SHPO office was represented by three DHPA staff members.

**March 2, 2007** – SHPO sent a letter concurring with the recommended boundaries for the three additions to the APE, and further agreeing that the recommendation that there are no properties eligible for inclusion in the NRHP within these three areas.

**March 26, 2007** – Letter mailed to the consulting parties regarding the findings of eligibility of the SR 257 Bridge over Veale Creek and the recommendation of a finding of No Adverse Effect.

**March 27, 2007** – Letter sent to SHPO transmitting the identification of effects for the SR 257 Bridge over Veale Creek.

**April 20, 2007** – SHPO transmits letter requesting additional information regarding possible impacts to the SR 257 Bridge over Veale Creek.

**April 20, 2007** – E-mail sent to SHPO providing additional information regarding possible impacts to SR 257 Bridge over Veale Creek.

**April 24, 2007** – SHPO issued a letter agreeing with the determination that neither alternative would adversely affect the historic SR 257 Bridge over Veale Creek.

**September 23, 2008** – FHWA and INDOT met with SHPO to discuss avoidance and minimization measures considered for Patoka Bridges Historic District and possible future mitigation measures.

**December 15, 2008** – FHWA signed Section 106 Findings and Determinations of Area of Potential Effects, Eligibility Determinations, and Effect Finding for above-ground resources (submitted with DEIS).

**February 3, 2009** – The Section 106 documentation was distributed to consulting parties and to the SHPO.

**February 11-13-25, March 4-11, 2009** – Public notice of adverse effect published in the *Washington Times*.

**March 9, 2009** – SHPO sent a letter agreeing with the finding of the 800.11(e) documentation and with FHWA's Section 106 Findings and Determinations.

March 19, 2009 – The Public Hearing was held and included a discussion of the Section 106 documentation.

March 25, 2009 – The Section 106 documentation review period was extended to May 8, 2009.

March 25, 2009 – FHWA, INDOT and its consultants met with SHPO to discuss public comments and consulting party comments that have been received and potential mitigation measures for the Patoka Bridges Historic District.

June 17, 2009 – Phase Ia archaeological report submitted to SHPO.

**June 26, 2009** – The SHPO sent formal concurrence with the Draft Environmental Impact Statement (EIS), stating "We agree with the conclusions in the DEIS regarding the identification of historic resources (above-ground properties) within the Section 2 study area that are eligible for inclusion in the National Register of Historic Places and with the conclusions regarding the impacts that this project will have on those historic resources." The letter also stated "In regards to archaeology, we concur with the archaeological information presented in the DEIS for the 'Cultural Overview', 'Archaeology', and 'Archaeological Site Analysis'."...

July 6, 2009 – Phase II work plan for Site 12Da1462 submitted to SHPO.

July 24, 2009 – SHPO sent a letter on the Phase Ia archaeological report, concurring with recommendations, and requesting revisions to the final report.

August 5, 2009 – SHPO sent a letter concurring with Phase II work plan for Site 12Da1462.

**November 10, 2009** – SHPO sent a letter concurring with Phase II research and the recommendation that Site 12Da1462 is not NRHP eligible.

**September 2010** – Consulting Parties sent copies of revised 800.11(e) documentation with Section 2 Flood Easement information included for a 30-day comment period.

#### 2.5 Consulting Parties

In accordance with Section 106 requirements, the general public, local governments, recognized Native American Tribes with an interest in the area, and members of the community knowledgeable about its history were invited to provide input into the historic resources survey and report. All consulting parties from the Tier 1 EIS were invited to become consulting parties in Section 2 of the Tier 2 Study. In addition, brochures about the Section 106 consulting party process ("A Citizens Guide to Section 106") were made available to persons visiting the Section 2 project office or attending project-related meetings. Also, individuals and representatives of organizations with an interest in historic properties as well as representatives of local governmental bodies were invited to become consulting parties.

The Section 106 process requires coordination with recognized Native American Tribes with an interest in the project area. From the list of consulting parties who participated in the Tier 1 Study, 13 tribes were invited to become consulting parties in Section 2. Five tribes – the Delaware Nation, the Peoria Tribe of Indians of Oklahoma, the Prairie Band Potawatomi Nation, the Miami Tribe of Oklahoma, and the Shawnee Tribe of Oklahoma – responded affirmatively to the invitation.

**Identification of Consulting Parties -**In mid-May 2004, the Section 2 project team, composed of the section consultant and the Project Management Consultant (PMC), began identifying potential participants in the Section 106 consulting party process. On May 18, 2004, invitations to join consultation, which included response postcards, were mailed to consulting parties who participated in the Tier 1 Studies and to Native American tribes (see FHWA invitation dated May 18, 2004 in Appendix D of original 800.11).

Responses to the invitation to join consultation were tabulated. Four representatives of organizations/local government did not respond to the invitation, and 21 agreed to serve as a consulting party for Section 2. In addition to the responses from the SHPO, affirmative responses were received from the representatives of the following organizations: City of Washington Mayor's Office, Delaware Nation, Peoria Tribe of Indians of Oklahoma, Prairie Band Potawatomi Nation, Shawnee Tribe of Oklahoma, Historic Landmarks Foundation of Indiana, Historic Landmarks Foundation of Indiana Western Regional Office, Hoosier Environmental Council, Citizens for Appropriate Rural Roads (CARR), Pike County Historical Society, Owen County CARR/Owen County Preservations, Canal Society of Indiana, Warner Real Estate –

Historical Society, Mayor of Oakland City, and Traditional Arts Indiana (see Appendix D in original 800.11).

**June 9, 2004: Invitations to First Consulting Party Meeting** – FHWA issued an invitation to consulting parties to attend the first meeting on June 25, 2004, in Petersburg to discuss the Section 106 consultation process and the APE. FHWA sent an informational packet with the invitation to each consulting party, which included a map of the Section 2 APE, a list of potentially-eligible properties identified in the Tier 1 study, and an agenda for the June 25, 2004 meeting. Anyone who did not attend the meeting was asked to submit written comments to FHWA or INDOT (see Appendix D in original 800.11 for consulting party invitation).

**June 25, 2004**: **Consulting Party Meeting on the APE -** Seven consulting parties attended the meeting. This meeting followed an agenda that included a discussion of the NHPA and its purpose, an overview of the four steps in the Section 106 process, the role of consulting parties in the process, a discussion of the Tier 1 Memorandum of Agreement, a description of the APE, a discussion of NRHP-listed and potentially-eligible properties identified in Tier 1, an overview of archaeological resources in the area, an outline of the next steps in the process, and an opportunity for questions and comments.

Consulting parties raised general questions about historic resources. The inquiries ranged from efforts to evaluate and/or avoid cemeteries and churches, and whether abandoned railroad lines are considered historic. Consulting parties did not comment on the APE or provide information on above-ground resources that were not previously identified. FHWA emphasized the importance of input from consulting parties during the identification phase of the Section 106 process.

Appendix D in the original 800.11 includes the attendance roster and minutes of the meeting.

**March 29, 2005: Invitation to Second Consulting Party Meeting** – FHWA issued an invitation to consulting parties to attend an April 13, 2005, meeting at the Section 2 project office in Petersburg to discuss the findings of eligibility from the *Draft* HPR. An informational packet accompanied the invitation to each consulting party. The packet included: (1) the executive summary of the *Draft* HPR; (2) descriptions of all listed and eligible NRHP properties; (3) a map indicating the locations of all properties surveyed in the APE; (4) a table listing all newly-inventoried properties (those properties not previously listed in an *Interim Report*); and (5) a map showing the location of the project office. Anyone who could not attend the meeting was asked to submit written comments to FHWA or INDOT (see Appendix D in original 800.11 for meeting invitation and informational packet).

**April 13, 2005: Consulting Party Meeting on Eligibility** – Sixteen people attended the meeting. This meeting followed an agenda that included a review of the NHPA and the four steps in the Section 106 process, the role of consulting parties in this stage of the process, a discussion of the NRHP criteria and elements of integrity, a description of listed and eligible properties, an update on the archaeology studies, an outline of the next steps in the process, and a discussion and question-and-answer period.

Consulting parties made general comments and discussed specific above-ground resources. Several comments pertained to evaluating the significance of above-ground resources in the vicinity of the Patoka River. In particular, a consulting party recommended expanding the historic context with a discussion of ditching and dredging operations along the Patoka River. In response to this comment, additional discussion of drainage projects in the Wabash Lowlands and its effect on agriculture in the region was added to the final version of the HPR. Consulting parties also asked questions about the archaeological field survey and evaluations. FHWA explained that all the comments would be considered and encouraged the consulting parties to provide additional written comments.

Written comments were received from one consulting party, who recommended the eligibility of a few above-ground resources that the *Draft* HPR recommended as ineligible and provided information on historical subjects pertaining to the historic context. Appendix D in the original 800.11 document includes the agenda, attendance roster, presentation, minutes of the meeting, and consulting party comment letter.

**October 19, 2005: Invitation to Third Consulting Party Meeting** – FHWA mailed an invitation to consulting parties to attend a November 2, 2005, meeting at the project office in Petersburg to discuss the Section 106 Findings and Determinations of APE and Eligibility Determinations, as well as the effects of Section 2 alternatives on historic properties. An information packet accompanied each invitation. The packet included: (1) the draft *Identification of Effects Report*; (2) a CD copy of the revised HPR; (3) the Section 106 Findings and Determinations of APE and Eligibility Determinations; and (4) a map showing the location of the Section 2 project office. Consulting parties were asked to direct any questions, comments, or written correspondence to FHWA or the Section 2 project office (see Appendix D in the original 800.11 for invitation).

**November 2, 2005: Meeting to Discuss Findings of APE and Eligibility -** Eleven people attended the meeting. The meeting followed an agenda that included review of the NHPA and Section 106 process, review of the APE and eligibility determinations for above-ground resources, a review of the APE and the records check for archaeology, a discussion of effects of the undertaking on above-ground resources, other issues and next steps, and a discussion and question-and-answer period.

During the discussion/question-and-answer period, consulting parties inquired about whether the construction of I-69 would "disqualify" the Patoka Bridges Historic District from listing in the NRHP. During the discussion, it was identified that there are no known examples in Indiana of a property listed in the NRHP having been removed from the NRHP due to an alteration of its setting, and there is not an expectation that construction of I-69 would in any way affect the property's continued eligibility for listing in the NRHP. Appendix D in the original 800.11 document includes the agenda, attendance roster, presentation, and minutes of this meeting.

**February 22, 2006: Invitation to Fourth Consulting Parties Meeting** – FHWA next invited consulting parties on February 22, 2006, to attend a March 9, 2006, meeting at the project office in Petersburg for an update of the effects of the Section 2 alternatives on historic properties and to discuss possible ways to resolve adverse effects on the Patoka Bridges Historic District. An informational packet accompanied the invitation. The packet included: (1) the *Identification of Effects Report* for Section 2 on CD; (2) a Conceptual Mitigation Worksheet; and (3) a map showing the location of the Section 2 project office. Consulting parties were asked to direct any questions, comments, or written correspondence to FHWA or the Section 2 project office (see

Appendix D in the original 800.11 document for invitation).

March 9, 2006: Consulting Party Meeting on Effects – Twelve people attended the meeting. The meeting followed an agenda that included an archaeological update, review of findings of adverse effects on the Patoka Bridges Historic District, a discussion of ways to resolve adverse effects on the Historic District, and other issues and next steps.

The discussion centered on the findings of adverse effects on the Patoka Bridges Historic District and efforts to minimize or mitigate the effects. The agenda, attendance roster, presentation, minutes for this meeting, and follow-up e-mail regarding mitigation are provided in Appendix D of the original 800.11 document.

**September 2010:** All Consulting Parties were sent copies of this revised 800.11(e) document with the Section 2 Flood Easement information included for comment. The consulting parties will be given 30-days to comment on historic resources and potential effects associated with the flood easement areas located outside of the previously approved Section 2 APE.

# 3.0 DESCRIBE POTENTIALLY AFFECTED HISTORIC PROPERTIES

Four above-ground properties in the original APE are listed in, or eligible for listing in, the NRHP; and two archaeological resources have been identified as potentially eligible for listing in the NRHP. No above-ground resources eligible or listed in the NRHP were identified within or adjacent to the revised APE and no change in the effects on previously identified resources will occur as a result of the flood easement areas.

### 3.1 Patoka Bridges Historic District

There is one historic district located within the Section 2 APE that is listed in the NRHP, the Patoka Bridges Historic District on Pike County Road 300 West just north of the Gibson County line. It was listed in the NRHP under Criteria A and C on March 25, 2005, one year after the March 24, 2004 Tier 1 Record of Decision approving the Alternative 3C for the project,. The District consists of three contributing resources: Pike County Bridges Nos. 81 and 246 (Pike 20005) and the 1,600-foot-long stretch of County Road 300 West between the two bridges. The boundary of the district extends 25 feet beyond the bridges at the north and south ends, and includes the roadway between the bridges including 15 feet along either side for a total width of approximately 46 feet, and an overall length of approximately 1,750 feet. Bridge No. 246 spans the Patoka River and is a variation of a Pratt through truss. It was built in 1884 of wrought and cast iron with pinned connections. Bridge No. 81 was built in 1924 to span Houchins Ditch, the new channel of the Patoka River, and is a steel Camelback through truss with bolted connections. County Road 300 West is now a narrow gravel road which at some previous time had been paved with asphalt. The path of the original roadway may date to as early as 1825. The District is significant in the area of transportation as an illustration of the continuing evolution of transportation systems in the Patoka Bottoms area and in the areas of social history and ethnic heritage for its association with local Underground Railroad (Criterion A). The bridges are also significant in the area of engineering for embodying two stages of through truss bridge design and fabrication (Criterion C). Per the NR listing, the period of significance of the District is 1851-1936.

Presently, the bridges are open for traffic, the southernmost one, Pike Co. Bridge No. 246, having recently been repaired by Pike County.

## **3.2 Thomas C. Singleton Round Barn**

Located at the southwest corner of the intersection of SR 57 and County Road 450 South, the Thomas C. Singleton Round Barn is eligible for the NRHP under the Multiple Property Documentation Form Round and Polygonal Barns of Indiana The barn meets Criteria A and C for embodying the efforts to improve the efficiency and productivity of farm operations through innovative agricultural building design during Indiana's "golden age" of agriculture (1881–1920) (Criterion A) and as a highly intact example of the round barn type (Criterion C). It was built in 1908 as a true circular barn with a central driveway. The wood frame barn stands on a concrete foundation and is clad with board and batten siding. It features a ventilator with louvered vents, several small windows, and a two-pitch gambrel roof. The period of significance of the barn is 1908–1955 (see FHWA's Section 106 Findings and Determinations in Appendix B of the original 800.11 document).

### 3.3 Chapman-Allison Farmstead

The Chapman-Allison Farmstead encompasses the northwest and southwest corners of the intersection of County Road 50 East and County Road 400 South in Daviess County. It is eligible for the NRHP under Criterion A for its association with the early settlement of Veale Township, and for embodying a turn of the twentieth century livestock farm in Daviess County. The Chapman-Allison Farmstead consists of a circa-1845 two-story, side-gabled vernacular house, which has a few elements of the Greek Revival style, two large circa-1900 barns for sheltering and feeding cattle, several circa-1900–1940 agricultural outbuildings for storage of feed and machinery, and several circa-1900–1940 domestic outbuildings. The farmstead's period of significance is 1845–1955 (see FHWA's Section 106 Findings and Determinations in Appendix B of the original 800.11 document).

### 3.4 SR 257 Bridge over Veale Creek

This bridge is located on State Road 257 over Veale Creek in Daviess County. It is eligible for the NRHP under Criterion C in the area of engineering as a surviving example of a steel Warren pony truss on the state system. The bridge is a two-lane, single-span, steel, Warren pony truss bridge with flat top chords. The trusses have a total span of 84 feet. The bridge rests on concrete abutments with wing walls. The bridge was constructed in 1938 by Indiana fabricator Bergen & Bergen of Franklin, Indiana, and rehabilitated in 1977. INDOT is currently planning to replace this deficient structure, under a separate, unrelated Section 106 review. Per the MOA, the existing bridge will be dismantled. INDOT will advertise the bridge and if no entity wishes to claim it, INDOT will store it for 10 years. (see FHWA's Section 106 Findings and Determinations in Appendix B of the original 800.11 document).

### 3.5 Site 12Pi103

Site 12Pi103 is a previously recorded prehistoric lithic scatter that was re-located during the Phase Ia archaeological investigations of the Section 2 APE. Artifacts recovered from the site include: a Riverton point, a prismoidal bannerstone fragment, eight debitage, and three utilized

flakes. Based on the results of the Phase Ia survey, project archaeologists recommended limited Phase Ic subsurface testing to determine if buried deposits are present at the site. The results of that research will be used to evaluate NRHP eligibility of the site under Criterion D. A Phase Ic work plan will be submitted to SHPO for approval.

# 4.0 DESCRIBE THE UNDERTAKING'S EFFECTS ON THE HISTORIC PROPERTIES

A preferred alternative has been recommended for implementation within Section 2. The following discussion describes the effects of the preferred alternative on each of the four properties in the APE which are listed in or eligible for listing in the NRHP. None of the eligible sites will be newly converted to a transportation use.

### 4.1 Patoka Bridges Historic District

In the vicinity of the Patoka Bridges Historic District, the study corridor selected by the Tier 1 Record of Decision was substantially narrowed and precisely located to avoid future impacts to the Patoka River National Wildlife Refuge and to minimize wetland, forest and floodplain impacts by crossing the Patoka Bottoms area where these resources would be least impacted. Since the early 1990's, the US Fish and Wildlife Service (USFWS) and the Indiana Department of Transportation (INDOT) have conducted joint development planning and coordination to establish the location of the highway corridor through the Patoka River National Wildlife Refuge. The Final Environmental Impact Statement (FEIS) for the Refuge project (published in 1994) provided general mapping of proposed alternate routes for I-69. A more specific location for I-69 to cross the Patoka River was first identified during a field trip with INDOT, FHWA, and federal and state agencies held on June 4 - 5, 2002 This location was defined in the Tier 1 DEIS published in July, 2002, as a corridor 420 feet wide and was subsequently approved as such in the Tier 1 ROD on March 24, 2004<sup>1</sup> At the time of this approval, the NRHP nomination form for the Patoka Bridges Historic District had not yet been submitted to the SHPO.<sup>2</sup> Because of the quite narrow corridor in this location, there was very little difference in the location of alternatives where they pass closest to the Historic District. The preferred alternative was the alternative located furthest from the Historic District

#### EFFECTS:

<u>Visual Effects</u>: The undertaking will result in an adverse visual effect on the Patoka Bridges Historic District; it will introduce large, non-period, twin interstate highway bridges within the setting of the District. The nearest of the twin bridges would be in proximity to the District (the shortest distance between the District boundaries and the near edge of the nearest bridge is estimated to be 242 feet at this location), and with relatively limited vegetation separating the

<sup>&</sup>lt;sup>1</sup> The approved corridor for I-69 typically is 2,000 feet wide. A significantly narrower corridor (420 ft) was identified at this location to minimize impacts to sensitive natural areas and aquatic resources in and near the Refuge. The USFWS comment letter on the Tier 1 DEIS asked for more elaboration to ensure that 4(f) did not apply to three other properties, but did not cite the Patoka refuge in this context. This implies that the USFWS felt the 4(f) issue with regard to the Refuge is satisfactorily addressed by the DEIS/FEIS location of the 3C corridor, and that there are no 4(f) concerns with the corridor location.

 $<sup>^2</sup>$  In the Tier 1 FEIS, these two bridges and roadway connecting them were identified as a "potentially eligible individual historic property." See Table 8-2a (p. 8-38), where it is listed in Pike County with ID# 20005. It is one of 50 potentially eligible historic properties proximate to one or more Tier 1 alternative.

new twin bridges from the District, the structures would be partially to almost entirely visible from the District. At night there will be light from traffic on the structures.

Auditory Effects: The preferred alternative would introduce audible elements that would have an auditory effect on the Patoka Bridges Historic District. For evaluation of noise effects, the project team used the most current INDOT Highway Traffic Noise Policy (October 15, 1997), updated to INDOT Traffic Noise Policy (February 26, 2007). The INDOT Traffic Noise Policy indicates that highway noise impacts occur if either of two conditions is met: 1) the predicted Leq(h) levels "approach" or "exceed" the appropriate noise abatement criteria for the land use identified, or 2) the predicted highway Leq(h) noise levels substantially exceed the existing noise level. "Approach or exceed" is defined as levels higher than 1 dBA Leq(h) below the appropriate noise abatement criteria. "Substantially exceed" means predicted traffic noise levels exceed existing noise levels by 15 dBA or more. Existing or ambient noise levels were determined using sound level meters placed at representative locations throughout the corridor in 2005. Predicted design year noise levels at these locations were produced in 2006 using the FHWA TNM 2.5 computer program. Based on this detailed noise modeling, predicted Year 2030 noise levels at the boundary of the Historic District (63.8 dB) were determined to not approach or exceed the appropriate absolute noise abatement criteria for that type of land use (67 dB); however it was determined at that time that the predicted future noise levels would substantially exceed the measured existing noise levels (47.9 dB), by 15.6 dB. This finding of an adverse noise effect was published in the final Identification of Effects report in February, 2006 (see Appendix E in the original 800.11 document) and coordinated with the Consulting Parties.

However, in subsequent, more-detailed analyses conducted for the Draft EIS, several refinements were made that have resulted in a change to those published findings. These refinements have included more accurate mapping of the boundaries of the Patoka Bridges Historic District, and more detailed computer noise modeling, including more detail on the existing acoustic environment and on the noise reduction effects of the barriers along the proposed bridge. Details of these changes are discussed further on pages 28 and 29 in, *Measures to Minimize Harm*, *Patoka Bridges Historic District*, (see Appendix E in the original 800.11 document for a copy of the report). As a result of those changes, new noise level projections have been developed. The projected Year 2030 noise level at the District boundary is now estimated to be 62.3 dBA. This projected noise level is an increase of 14.4 decibels over the measured ambient level at the District boundary, and below the 15decibel increase that the INDOT noise policy identifies as the threshold for an adverse noise impact. The latest projected noise level, therefore, does not constitute an adverse noise impact on the District, contrary to the finding previously published in the *Identification of Effects* report and circulated to the Consulting Parties.

<u>Other Considerations</u>: In the event that construction traffic would use County Road 300 West and the bridges, this project-related activity could have the potential to damage the road and/or the bridges, which would cause an adverse effect on the District. However, any loads in excess of the posted load limits would require special approval from the County prior to the use of the road or bridges and construction documents will include language prohibiting construction traffic from using the bridges. Pike Co. Bridge No. 246 has recently undergone repairs by the county in order to maintain traffic along County Road 300 West.

#### 4.2 Thomas C. Singleton Round Barn

### EFFECTS:

<u>Visual Effects</u>: The shortest distance between the property's boundaries and the project right-ofway for the preferred alternative is 3,365 feet. There would therefore be no visual effect on the Thomas C. Singleton Round Barn. The woods and hilly topography will mask views of the undertaking from all portions of the historic property in any season. Additionally, these natural and topographical features, in combination with the far distance will diffuse any light from the undertaking. Lights from traffic on SR 57, directly adjacent to the property, would make it even more difficult to discern the lights from traffic on I-69.

<u>Auditory Effects</u>: The undertaking will have no auditory effect on the Thomas C. Singleton Round Barn. The distance of the right-of-way of the undertaking from the barn is approximately 3,365 feet; therefore, TNM 2.5 noise modeling was not conducted in the vicinity of the historic property.

#### 4.3 Chapman-Allison Farmstead

#### EFFECTS:

<u>Visual Effects</u>: The undertaking will have no visual effect on the Chapman-Allison Farmstead. Across this portion of Daviess County, the undertaking would be built on fill, gradually rising in height above the existing topography to about 20 feet above ground at the shortest distance between its proposed right-of-way and the farmstead's boundaries, which is 5,340 feet. The undertaking is not likely to be visible from the farmstead even though it is proposed to be built on fill. Moreover, the woods west of the farmstead would shield views of the undertaking from the historic property in any season. The distance and surrounding natural features also would help to maintain the low ambient light levels at the property by dispersing considerable amounts of light from interstate traffic. Therefore, the preferred alternative would not affect the farmstead's setting by introducing intrusive physical and atmospheric elements.

<u>Auditory Effects</u>: The undertaking would have no auditory effect on the integrity of the Chapman-Allison Farmstead. TNM 2.5 noise modeling was not conducted for this property because the distance from the proposed project right-of-way to the farmstead is approximately 5,340 feet. The preferred alternative would likely result in no discernible increase in ambient noise levels in the vicinity of the farmstead because the farmstead is so far removed from the proposed highway alternative.

### 4.4 SR 257 Bridge over Veale Creek

#### EFFECTS:

<u>Visual Effects</u>: The undertaking would have a visual effect on the SR 257 Bridge over Veale Creek, but it would not be an adverse effect. The land south, west, and northwest of the historic bridge consists of flat, open agricultural fields. North and east of the bridge is a wood lot. The undertaking would be clearly visible from the bridge at all times of the year, and would therefore constitute a change in the setting of the SR 257 Bridge. However, this effect would not change any features or characteristics that qualify the bridge for the National Register and therefore would not be adverse.

The undertaking is not anticipated to cause a change in setting as a result of future development; the nearest interchange would be located at US 50, which is approximately 1.77 miles away.

<u>Auditory Effects</u>: The undertaking would not cause a traffic noise impact on the SR 257 Bridge over Veale Creek. Furthermore, this bridge is on an existing state highway where noise, or lack thereof, will not influence the setting and, thus, the integrity of this bridge. After consultation with the Indiana SHPO, it was determined that noise modeling on this bridge was not necessary.

#### 4.5 Site 12Pi103

The proposed project involves the construction of a new interstate highway with a construction right-of-way approximately 330-feet-wide. The preferred build alternative cannot avoid Site 12Pi103 which will be destroyed by the undertaking.

#### 5.0 EXPLAIN APPLICATION OF CRITERIA OF ADVERSE EFFECT – INCLUDE CONDITIONS FOR FUTURE ACTIONS TO AVOID, MINIMIZE AND MITIGATE ADVERSE EFFECTS

The criterion of adverse effect applies to the Patoka Bridges Historic District. The criterion does not apply to: Thomas C. Singleton Round Barn, Chapman-Allison Farmstead, and SR 257 Bridge over Veale Creek.

According to CFR 800.5(a)(1), the criteria of adverse effect applies when the "undertaking [will] alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity ..." Per CFR 800.5(a)(2)(v), it has been determined that there will be an "[i]ntroduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features." This effect is to the Patoka Bridges Historic District.

#### 5.1 Patoka Bridges Historic District

Within Section 2, the criteria of adverse effect apply only to the Patoka Bridges Historic District. There will be no "[p]hysical destruction of or damage to all or part of the property." CFR 800.5(a)(2)(i) does not apply.

There will be no "[a]lteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access". CFR 800.5(a)(2)(ii) does not apply.

None of the elements of the District will be removed from their historic locations, so CFR 800.5(a)(2)(iii) does not apply.

Under CFR 800.5(a)(2)(iv), there will be a change "of physical features within the property's setting that contribute to its historic significance." This change will be the construction and use of the proposed new twin interstate highway bridges. Details of these changes and the efforts to avoid, minimize and mitigate the effects of those changes are presented in the paragraphs following this review of the application of the criteria of adverse effect.

Under CFR 800.5(a)(2)(v), there will be an "[i]ntroduction of visual, atmospheric or audible components that diminish the integrity of the property's significant historic features." These changes are discussed further below.

There are no elements of the proposed preferred alternative that would contribute to the "[n]eglect of a property which causes its deterioration", and thus CFR 800.5(a)(2)(vi) does not apply. County Road 300 West and both bridges are presently open to traffic. Pike County has not identified any plan to close the bridges or County Road 300 West based on the construction and operation of I-69. Also, the construction and operation of I69 does not require closing either the bridges or the road within the District.

There will be no "[t]ransfer, lease, or sale of [the] property as part of the proposed project, and thus CFR 800.5(a)(2)(vii) does not apply.

The proposed undertaking will result in an adverse effect on the District through the introduction of visual elements that diminish the integrity of the property's significant features. The project will not directly alter nor require the removal or relocation of any structures within the District. The proposed undertaking will result in an adverse visual effect on the Patoka Bridges Historic District due to the introduction of modern twin bridge structures over 4,000 feet long within the immediate vicinity of the District. At their nearest point, the new twin bridges would be approximately 242 feet from the District boundary. Although the final design and height of the new bridges have not yet been determined, they will likely have an overall structure depth of approximately 10 feet or more, and may be elevated above existing ground level on the order of as much as 40 to 50 feet. Present views westward from much of the District toward the I-69 corridor include a thin stand of young trees and some undergrowth along County Road 300 West and a flat, open field. When the trees along the road are bare, rows of trees that line the Patoka River are visible at the far edge of the open field. The proposed new bridges will extend more than 4,000 feet from southwest to northeast through much of the open field west of the Historic District across the entire width of the floodplain.

Based on computer noise modeling conducted at that time, the February 2006 *Identification of Effects Report* stated that the undertaking would result in an adverse audible effect on the District by increasing future year noise levels substantially over existing noise levels in the District (i.e., when predicted traffic noise levels exceed existing noise levels by 15 dBA or more). However, more detailed noise modeling conducted since that time, as described above, now indicates that predicted future noise levels will not be sufficiently high to constitute an adverse impact within the setting of the District.

The following efforts were made to avoid, minimize, and mitigate the adverse visual effects on the District, and to reduce the noise effects:

Shifting of the I-69 alignment westward away from the Patoka Bridges Historic District was considered as one means to reduce the visual and auditory effects on the District. At that location, however, the I-69 corridor was limited to a total width of only 420 feet. This corridor width and precise location was set by the I-69 Tier 1 Record of Decision, and had been established based on joint development coordination with the USFWS and other agencies. Because of the narrow width of the approved corridor, the preferred alignment could be shifted only a few feet further from the District boundary. The study team also investigated the

possibility of shifting just the northbound lanes even further to the west, thereby reducing the separation between the two proposed structures to a feasible minimum of only 12 feet. Taken together, these two measures would reduce projected noise levels at the District boundary by less than one decibel. These shifts would thus have no perceptible effect on the noise levels in the District, and only a very minor effect on the visual effects.

Consideration was also given to shifting the preferred alignment even further to the west, to a position outside the approved corridor defined in the Tier 1 Record of Decision. The greatest shift possible would be approximately 900 feet to the west, to the near edge of the closest property that the USFWS has already acquired for the Patoka River National Wildlife Refuge. Any further shift into this Refuge property would impact a property protected by Section 4(f) of the Department of Transportation Act of 1966. A "medium" shift of approximately 300 feet was also evaluated. While these shifts would reduce estimated future noise levels at the District by approximately 6.9 and 3.9 decibels, respectively, both would substantially increase impacts to core forests in the Patoka Bottoms and to wetlands, since the Tier 1 corridor location was originally located to minimize wetland and forest impacts in the Patoka Bottoms. It is likely that the new I-69 structures would still constitute a visual intrusion on the District even with this further shift, particularly during the winter when the foliage is off the trees. Details of all the various measures considered to reduce impacts on the District are presented in Appendix E of the original 800.11 document, *Measures to Minimize Harm – Patoka Bridges Historic District*.

The possibility of constructing noise barriers along the twin bridge parapets was also investigated. Based on the initial noise modeling conducted in 2006, it was originally thought that the noise barriers would have to be 15 feet or more in height to reduce noise levels in the District below the impact threshold. Installing barriers of that height on structures of that length would be costly, and would add greatly to the visual intrusion caused by the new structures. In their letter of May 11, 2006, concurring with the *Identification of Effects* report, the SHPO indicated that the staff was not in favor of this mitigation, stating "we believe this may introduce more visual effect on the Patoka Bridges Historic District and would not be appropriate." However, the revised noise modeling now indicates that the addition of approximately 4 more feet to the standard 4foot safety barrier would provide a noise reduction at the District of nearly five decibels. See Table O-4 in *Measures to Minimize Harm – Patoka Bridges Historic District* in Appendix E in the original 800.11 document for additional information.

The SHPO's office also recommended in their letter of May 11, 2006, ideas for conceptual mitigation: make funding available for the Pike County Commissioners for repairs to Bridges No. 246 and No. 81; prohibit construction traffic on Bridge No. 246 and No. 81; plant vegetation to screen the new bridges from the Patoka Bridges Historic District to reduce audible and visual effects and public interpretation and education.

Regardless of the posted load limits on the bridges, a commitment has been included as a part of the project to preclude any I-69 construction traffic from using the bridges. No other commitments to specific mitigation measures have yet been made. There will be further evaluation of the measures listed above. Planting trees in the Patoka floodplain to provide additional visual screening will be investigated during final design, in coordination with the National Wildlife Refuge officials.

A Memorandum of Agreement (MOA) developed in consultation with the SHPO and with

consulting parties will address the identified adverse effects that will result from the undertaking. The MOA will be provided to the ACHP to conclude the Section 106 process and documentation will be revised as appropriate.

#### 5.2 Thomas C. Singleton Round Barn

In regards to the Thomas C. Singleton Round Barn, the criteria of adverse effect do not apply.

There will be no "[p]hysical destruction of or damage to all or part of the property." CFR 800.5(a)(2)(i) does not apply.

There will be no "[a]lteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access". CFR 800.5(a)(2)(ii) does not apply.

The barn will not be removed from its historic location, so CFR 800.5(a)(2)(iii) does not apply.

Under CFR 800.5(a)(2)(iv), there will be no change "of physical features within the property's setting that contribute to its historic significance", and thus this criterion does not apply.

Under CFR 800.5(a)(2)(v), there will be no "[i]ntroduction of visual, atmospheric or audible components that diminish the integrity of the property's significant historic features", so therefore this criterion does not apply.

There are no elements of the proposed preferred alternative that would contribute to the "[n]eglect of a property which causes its deterioration", and thus CFR 800.5(a)(2)(vi) does not apply.

There will be no "[t]ransfer, lease, or sale of [the] property as part of the proposed project, and thus CFR 800.5(a)(2)(vii) does not apply.

#### 5.3 Chapman-Allison Farmstead

The criteria of adverse effect do not apply to the Chapman-Allison Farmstead.

There will be no "[p]hysical destruction of or damage to all or part of the property." CFR 800.5(a)(2)(i) does not apply.

There will be no "[a]lteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access". CFR 800.5(a)(2)(ii) does not apply.

None of the resources of the farmstead will be removed from their historic locations, so CFR 800.5(a)(2)(iii) does not apply.

Under CFR 800.5(a)(2)(iv), there will be no change "of physical features within the property's setting that contribute to its historic significance", and thus this criterion does not apply.

Under CFR 800.5(a)(2)(v), there will be no "[i]ntroduction of visual, atmospheric or audible components that diminish the integrity of the property's significant historic features", so therefore this criterion does not apply.

There are no elements of the proposed preferred alternative that would contribute to the "[n]eglect of a property which causes its deterioration", and thus CFR 800.5(a)(2)(vi) does not apply.

There will be no "[t]ransfer, lease, or sale of [the] property as part of the proposed project, and thus CFR 800.5(a)(2)(vii) does not apply.

### 5.4 SR 257 Bridge over Veale Creek

The criteria of adverse effect do not apply to the SR 257 Bridge over Veale Creek.

There will be no "[p]hysical destruction of or damage to all or part of the property" as a result of this undertaking. CFR 800.5(a)(2)(i) does not apply. (As noted previously, as a project totally independent from this undertaking, INDOT plans to remove this bridge and replace it with a modern structure. A separate Section 106 review has occurred for this bridge replacement project.)

There will be no "[a]lteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access". CFR 800.5(a)(2)(ii) does not apply.

The bridge will not be removed from its historic location as a result of this undertaking, so CFR 800.5(a)(2)(iii) does not apply.

Under CFR 800.5(a)(2)(iv), there will be a change "of physical features within the property's setting" but this setting does not "contribute to its historic significance", and thus this criterion does not apply.

Under CFR 800.5(a)(2)(v), an adverse effect is judged to occur if there will be an "[i]ntroduction of visual, atmospheric or audible components that diminish the integrity of the property's significant historic features". As discussed in 4.4 above, the undertaking's visual effect on the bridge would change the character of physical features within the property's setting, primarily the expanse of adjacent agricultural fields. However, the bridge is eligible for the NRHP under Criterion C as an excellent example of its bridge type, and, although in a rural setting, the bridge is not in an isolated location. It is located on a state highway and not far from the US 50 bypass around Washington. Although the bridge's setting is a component of its integrity, setting does not contribute to the bridge's significant historic features. Changes to the bridge's setting would not alter any of the qualities of the bridge for which it is eligible for the NRHP. The undertaking would have a visual effect on the bridge, but the effect would not be adverse. The proposed undertaking would not cause a traffic noise impact at the SR 257 Bridge over Veale Creek because the new highway will not increase noise levels at the bridge substantially over existing levels, nor will it produce noise levels above the INDOT noise abatement criteria level. Furthermore, this bridge is on an existing state highway where noise, or lack thereof, will not influence the setting and, thus, the integrity of this bridge. After consultation with the Indiana SHPO, it was determined that noise modeling on this bridge was not necessary.

There are no elements of the proposed preferred alternative that would contribute to the "[n]eglect of a property which causes its deterioration", and thus CFR 800.5(a)(2)(vi) does not apply.

There will be no "[t]ransfer, lease, or sale of [the] property as part of the proposed project, and thus CFR 800.5(a)(2)(vii) does not apply.

## 5.6 Sites 12Pi103

The undertaking will have an adverse effect on Site 12Pi103 under CFR 800.5(a)(2)(i). A Phase Ic work plan is currently in development for Site 12Pi103 to assess the potential for buried deposits at the site. The Phase Ic research is intended to evaluate the site under Criterion D. Depending on the results of the Phase Ic, additional research may be required to mitigate adverse effects.

# 6.0 SUMMARY OF CONSULTING PARTIES AND PUBLIC VIEWS

Consultation has occurred on an ongoing basis, as summarized in Section 2.3, *Timeline of Consultation*. The following is a summary of the views of the SHPO and the consulting parties and the public.

In a letter dated June 18, 2004, the SHPO concurred that "the proposed area of potential effects ("APE") for Section 2 appears to be appropriate" (see correspondence in Appendix C of the original 800.11 document).

The first consulting party meeting was held on June 25, 2004, in Petersburg to discuss the Section 106 consultation process and the APE. Consulting parties raised general questions about historic resources. The inquiries ranged from efforts to evaluate and/or avoid cemeteries and churches, and whether abandoned railroad lines are considered historic. One questioned how all of the different issues (wetlands, historic properties, etc.) are factored into the decision-making process. The consulting parties did not comment on the definition of the APE or provide information on above-ground resources that were not previously identified (see meeting minutes in Appendix D – original 800.11).

In a letter dated April 5, 2005, the Peoria Tribe of Indians of Oklahoma stated that they are "unaware of any documentation directly linking Indian Religious Sites to the proposed construction" and that they have "no objection to the proposed construction" (see correspondence in Appendix D – original 800.11).

The second consulting party meeting was held on April 13, 2005, at the Section 2 project office in Petersburg to discuss the findings of eligibility from the *Draft* HPR. Sixteen people attended the meeting. Consulting parties made general comments and discussed specific above-ground resources. Several comments pertained to evaluating the significance of above-ground resources in the vicinity of the Patoka River. Consulting parties also asked questions about the archaeological field survey and evaluations. Kevin Enright, the Monroe County Surveyor and an observer at the meeting, asked about evaluation of borrow pits during construction and if these

potential sites would also be evaluated during the Tier 2 work. He indicated that this should be considered a secondary impact of the project, as future development around borrow pits is common. Dr. Edith Sarra asked if Dongola was to be evaluated for potential archaeological significance, and noted that Cheryl Ann Munson had information of a work camp associated with the canal in that location. Mr. Joe Tamalavic asked about the evaluation of the Hargrave property, as he had been told by Historic Landmarks Foundation of Indiana that the property was eligible for listing in the NRHP. Sarra thought the HPR unclear in describing the Patoka Bridges Historic District. Sarra stated that she believed that canal and ditch embankments should be considered, as well as the new dredged channel. Sarra also questioned the recommendation of the Logan Cemetery as not eligible. Enright expressed concern regarding a concentration of features near the Patoka River where the APE is constricted. One consulting party wrote to recommend the eligibility of a few above-ground resources that the HPR recommended as ineligible, and to comment and provide information on historical subjects pertaining to the historic context. Specific properties that Sarra thought should be re-evaluated for eligibility were Pike County Bridge No. 32 (Miller Bridge), Ropp farmstead, Houchins Ditch, Loveless farmstead, and Lemuel Hargrove house. Additional details on the issues discussed at the meeting are included in the minutes of the meeting in Appendix D of the original 800.11 document. There was no discussion of potential impacts to the Chapman-Allison Farmstead or the Thomas C. Singleton Round Barn (see minutes in Appendix D – original 800.11).

In a letter dated May 4, 2005, Dr. Edith Sarra, Consulting Party, commented on the content and methodology of the Draft HPR for Section 2, offered corrections and additions to the minutes of the second consulting party meeting, and commented on the conduct of the Section 106 review process for Section 2 (see correspondence in Appendix D of the original 800.11 document; see also in Appendix D the "Consulting Party Comment Form <u>(Comments Received Prior to Publication of DEIS)</u>" for a summary of the comments and the action taken to address this and all further comments).

In a letter dated May 17, 2005, the SHPO stated that "we agree with the proposed findings of eligibility and non-eligibility for the properties identified" in the Section 2 draft Tier 2 HPR (see Appendix C of the original 800.11 document for correspondence; see Appendix D for Consulting Party Comment Form).

On October 19, 2005, the FHWA published Section 106 Findings and Determinations (see Appendix B of original 800.11). FHWA asked for comments within 30 days. The SHPO concurred with the APE and eligibility (see correspondence in Appendix C – original 800.11).

The third consulting party meeting was held on November 2, 2005, at the project office in Petersburg to discuss the Section 106 Findings and Determinations of APE and Eligibility, as well as the effects of Section 2 alternatives on historic properties. Eleven people attended the meeting. During the discussion/question and answer period, consulting parties inquired whether the construction of I-69 would "disqualify" the Patoka Bridges Historic District. Mr. John Carr, IDNR, raised questions about the proximity of the alignments to the Patoka Bridges Historic District and enquired about the possibility of shifting the alignments further away. Ms. Pauline Spiegel asked how prior information provided was used in updating the HPR from draft to final. Ms. Spiegel asked if the Tamalavic property was reconsidered after the last consulting party meeting. Project historians indicated that additional information on the property had been obtained and the property reconsidered, but had still concluded that the property was not eligible.

Additional details on the issues discussed at the meeting are included in the minutes of the meeting in Appendix D of the original 800.11 document. There was no discussion of potential impacts to the Chapman-Allison Farmstead or the Thomas C. Singleton Round Barn (see minutes of meeting in Appendix D – original 800.11).

The fourth consulting party meeting was held on March 9, 2006, at the Section 2 project office in Petersburg to discuss an update of the effects of the Section 2 alternatives on historic properties and to discuss possible ways to resolve adverse effects on the Patoka Bridges Historic District. Twelve people attended the meeting. In regard to interpretive or educative mitigation measures, Mr. John Carr reminded the parties that signage about the Historic District was considered as possible mitigation in Tier 1. Suggested themes for interpretation and education may include the Underground Railroad, the Wabash & Erie Canal, Dongola, bridge engineering, and ditching, which could all be developed for exhibits, brochures, or school curricula. Additional details on the issues discussed at the meeting are included in the minutes of the meeting in Appendix D of the original 800.11. There was no discussion of potential impacts to the Chapman-Allison Farmstead or the Thomas C. Singleton Round Barn (see minutes of meeting in Appendix D – original 800.11).

On March 15, 2006, the study team sent e-mail communication to consulting parties listing mitigation ideas discussed at the prior consulting party meeting and requesting further input (see e-mail correspondence in Appendix D – original 800.11). No further input was received.

In a letter dated May 11, 2006, SHPO advised FHWA that they did not have any concerns with the *Identification of Effects* report. The staff also provided preferred conceptual mitigation ideas, which included making funding available for the Pike County Commissioners for repairs to Pike County Bridges No. 246 and No. 81, not allowing construction traffic to use these two bridges, and planting vegetation to provide a screen between the new bridge and the Patoka Bridges Historic District to reduce audible and visual effects. They also advised that they thought adding noise barriers to the new bridge would have greater visual effect on the District, and would not be appropriate (see correspondence in Appendix C – original 800.11).

In a letter dated December 13, 2006, the Peoria Tribe of Indians of Oklahoma responded to the letter report mailed to the consulting parties regarding the eligibility of the SR 257 Bridge over Veale Creek and stated that they are "unaware of any documentation directly linking Indian Religious Sites to the proposed construction" and that they have "no objection to the proposed construction" (see correspondence in Appendix D – original 800.11).

In a letter dated December 18, 2006, the SHPO stated that "[w]e agree with.....your conclusion that the SR 257 Bridge over Veale Creek is eligible for inclusion in the National Register of Historic Places under Criterion C" (see correspondence in Appendix C – original 800.11).

In a letter dated December 20, 2006, the SHPO concurred with the Phase Ic scope-of work for Section 2. In a letter dated January 5, 2007, the SHPO made comments regarding the archaeological literature review document and requested additional information (see correspondence in Appendix C – original 800.11).

On March 2, 2007, the SHPO concurred with the three proposed additions to the APE and agreed with the recommendation that none of the properties examined within those areas was considered

eligible (see correspondence in Appendix C – original 800.11).

In a letter dated February 13, 2007, the Peoria Tribe of Indians of Oklahoma responded to a letter mailed to the consulting parties regarding expanding the APE at certain locations where the proposed alternatives extended beyond the original defined project corridor. The Tribe stated that they have "no objection to the proposed construction" (see correspondence in Appendix D – original 800.11).

In a letter dated March 29, 2007, the Peoria Tribe of Indians of Oklahoma responded to a letter mailed to the consulting parties regarding the findings of eligibility of the SR 257 Bridge over Veale Creek and the recommendation of a finding of No Adverse Effect. The Tribe stated that they have "no objection to the proposed construction" (see correspondence in Appendix D – original 800.11).

In a letter dated April 24, 2007, the SHPO stated "we believe that the intrusions that either Alternative A or Alternative B would introduce into the setting of the SR 257 Veale Creek Bridge are not likely to 'diminish the integrity of the property's significant historic features' (*see* 36 C.F.R. § 800.5[a][2][v]). Consequently, we agree with your opinion that neither Alternative A nor Alternative B would adversely affect this historic bridge." SHPO also commented regarding archaeology within Section 2 by saying "a review of our records indicates that the proposed project alternative areas are in an environmental setting that is suitable to contain archaeological resources. All necessary archaeological investigations will be conducted in the chosen project alternative area prior to project construction" (see correspondence in Appendix C – original 800.11).

In a letter dated April 25, 2007, the Prairie Band Potawatomi Nation responded to a letter mailed to the consulting parties regarding the findings of eligibility of the SR 257 Bridge over Veale Creek and the recommendation of a finding of No Adverse Effect. The Tribe stated that they have "no objections" to the SR 257 Bridge project (see correspondence in Appendix D – original 800.11). No other comments were received relative to potential impacts to the SR 257 Bridge.

On September 23, 2008, FHWA, INDOT and the Project Management Consultants met with the staff of SHPO at the IDNR office to discuss the various measures that have been considered to avoid, minimize and mitigate impacts to the Patoka Bridges Historic District. It was agreed at this meeting that all construction traffic would be prohibited from using the historic bridges (see minutes of the meeting in Appendix C – original 800.11).

Three individuals visited the Section 2 project office to obtain information on the mapping of project alternatives, the general process of consideration of historic properties, and the locations of specific historic properties. Besides these visits seeking information, no comments concerning historic properties were provided by the general public through visits to the Section 2 project office or at open houses, public information meetings, or other written comments prior to publication of the DEIS.

On February 11-25 and March 4-11, 2009, a Legal Notice of Section 106 Effect Findings was published in the *Washington Times-Herald*, requesting public comments by March 9, 2009 on the effects on the historic property (see Appendix B – original 800.11). (In response to two requests received from the public, the comment period was subsequently extended to May 8,

2009.) The documentation specified in 36 CFR 800.11(e) was mailed to all consulting parties, and was also included as Appendix F in the Tier 2 Draft Environmental Impact Statement for Section 2, which was made available at a number of public locations within the study area, including the Section 2 project office in Washington, Indiana. A public hearing was also held during the public comment period, on March 19, 2009, at Pike Central High School.

Comments received on the Section 106 Effect Findings are summarized below and are presented in a Table entitled "<u>Consulting Party Comments Received Following Publication of DEIS</u>" in <u>Appendix D of the original 800.11 document. This table includes responses to consulting party</u> <u>and public comments</u>.

In a letter dated February 12, 2009, the Peoria Tribe of Indians of Oklahoma stated that they are "unaware of any documentation directly linking Indian Religious Sites to the proposed construction" and that they have "no objection to the proposed construction" (see correspondence and Consulting Party Comment Form-Comments <u>Received Following Publication</u> in Appendix D – original 800.11.

In a letter dated February 18, 2009, the Miami Tribe of Indians of Oklahoma stated that they are "not currently aware of existing documentation directly linking specific Miami religious cultural, or historic sites to the above referenced construction/project site(s)" and that the "Miami Nation offers no objection to the proposed construction/project at this time." (See correspondence in Appendix D – original 800.11).

In a letter dated March 7, 2009, Sandra Tokarski, writing on behalf of Citizens for Appropriate Rural Roads (CARR), commented that the review period is too short and requested an additional 60 days (which was subsequently provided). She further commented on the conduct of the Section 106 process, the degree of impact on the Patoka Bridges Historic District, and voiced support for the SHPO recommendation to "make funding available for the Pike County Commissioners for repairs to the bridges, to prohibit construction traffic on the bridges." (See correspondence and Consulting Party Comment Forms in Appendix D – original 800.11).

In an e-mail dated March 9, 2009, Jan and Bill Boyd commented that the review period is too short and requested an additional 60 days (which was subsequently provided). They also commented on the conduct of the Section 106 process, noted that "there appear to be structures overlooked that could be of significant historical value", pointed out that Section 106 must be applied to all areas where borrow material is obtained, and commented on the degree of impact on the Patoka Bridges Historic District. (See correspondence and Consulting Party Comment Forms in Appendix D – original 800.11).

In a letter dated March 9, 2009, Dr. Edith Sarra commented on the several measures discussed for mitigation of effects on the Patoka Bridges District and voiced support for the SHPO suggestions for mitigation (see correspondence and Consulting Party Comment Forms in Appendix D – original 800.11). She also inquired about documentation for the September 23, 2008, meeting between FHWA, INDOT, and the SHPO to discuss avoidance, minimization, and mitigation measures for the Patoka Bridges Historic District. Minutes of the SHPO meeting are included in Appendix C – original 800.11.

On March 25, 2009, FHWA, INDOT and its consultants, and SHPO met to discuss comments

that had been received from the public and from consulting parties regarding the Patoka Bridges Historic District. The group further discussed mitigation stipulations that might be included in the Memorandum of Agreement (see meeting minutes in Appendix C – original 800.11).

In a letter dated May 6, 2009, the Peoria Tribe of Indians of Oklahoma stated that they are "unaware of any documentation directly linking Indian Religious Sites to the proposed construction" and that they have "no objection to the proposed construction" (see correspondence in Appendix D – original 800.11).

In a letter dated May 7, 2009, the Miami Tribe of Indians of Oklahoma stated that they are "not currently aware of existing documentation directly linking specific Miami religious cultural, or historic sites to the above referenced construction/project site(s)" and that the "Miami Nation offers no objection to the proposed construction/project at this time" (see correspondence in Appendix D – original 800.11).

In an e-mail dated June 8, 2009, John Smith submitted a public comment regarding the Patoka Bridges Historic District that stated that in 2002, he "had a revelation that I was in one of the holiest of Shinto places that I have ever experienced in the USA ... The fact that the Wabash Erie Canal that cost thousands of humans their lives ... had a town Dongola perhaps 1/8th mile away and the fact of this being a crossing point of the Underground Railway for northbound slaves fulfills the importance of the spirits of the ancestors that is part of the Shinto Faith" (see e-mail correspondence in Appendix D – original 800.11).

In an e-mail dated June 27, 2009, Dr. Edith Sarra reiterated her comments from her letter of March 9, 2009, and added additional comments regarding potential effects on remnants of the Wabash and Erie Canal (see correspondence and response to comment in the Consulting Party Comment Form in Appendix D – original 800.11).

On July 24, 2009, SHPO sent a letter on the Phase Ia archaeological report, concurring with recommendations, and requesting revisions to the final report.

On October 21, 2009, the Phase II report for Site 12Da1462 was submitted to SHPO for review.

All comments received on historic properties through this process have been incorporated into this documentation, and all comments received were considered in the development of the MOA to address the adverse effect identified.

#### **APPENDICES (For Flood Easement Areas Only)**

- Appendix A Revised FHWA Findings & Determinations
- Appendix B General Maps of Flood Easements
- Appendix C Detailed Flood Easement Maps
- Appendix D Detailed White River Flood Easement Maps
- Appendix E Photo Key Map and Photos / Surveyed Properties Table
- Appendix F Relevant Pages from Daviess County Interim Report

\*Please Refer to Original 800.11(e) For All Original Appendices\*

# Appendix A

Revised FHWA Findings & Determinations

#### FEDERAL HIGHWAY ADMINISTRATION'S SECTION 4(f) COMPLIANCE REQUIREMENTS (for historic properties) AND SECTION 106 FINDINGS AND DETERMINATIONS AREA OF POTENTIAL EFFECT ELIGIBILITY DETERMINATIONS EFFECT FINDING I-69 EVANSVILLE TO INDIANAPOLIS TIER 2 STUDY: SECTION 2, SR 64 TO US 50 DES. NO.: 0300378 FEDERAL PROJECT NO.: IN10(005)

#### **AREA OF POTENTIAL EFFECT**

Pursuant to 36 CFR Section 800.4(a)(1), the Area of Potential Effects (APE) for aboveground resources is centered on a 2,000-foot-wide corridor that was selected at the end of the Tier 1 Study to advance to the Tier 2 Study. The Section 2 corridor begins just north of SR 64 and ends just north of US 50 (approximately 28.5 miles) with an additional one mile at each end for analysis. The width of the APE extends one mile on either side of the 2,000-footwide corridor except at the Patoka River Valley and at Petersburg where it is narrower because of reduced impact of the project. During the course of the Tier 2 Study, this original APE was expanded in three specific areas to accommodate changes to the project alternatives under consideration. Additionally, the final design of Section 2 requires flood easement acquisition areas along the refined preferred alternative. Due to the short duration and infrequent nature of the additional backwater resulting from the regulatory flood, and minimal associated visual impacts, the new APE at the East Fork White River is restricted to the outer limits of the flood easement areas, which consist of the existing river floodplain.

The APE for the Phase Ia literature review for archaeology is the 2,000-foot corridor. The APE for the Phase Ia reconnaissance was the preferred alternative. The APE defined for archaeological resources for the flood easement locations is defined as the existing floodplain and outer limits of the flood easements.

#### ELIGIBILITY DETERMINATIONS

Pursuant to 36 CFR 800.4(c)(2), the APE includes four aboveground historic properties. Patoka Bridges Historic District, which is listed in the National Register of Historic Places, consists of: Pike County Bridge No. 246, a variation of a Pratt through truss (1884); Pike County Bridge No. 81, a Camelback through truss (1924); and the one-quarter-mile-long segment of Pike County Road 300 West between the two bridges. The property was listed under Criteria A and C for its association with local transportation history, for its association with local Underground Railroad history, and for embodying two stages of through truss bridge design and fabrication. This property was listed in the Register on March 25, 2005.

The APE also contains three National Register-eligible aboveground resources. 1) The Thomas C. Singleton Round Barn (1908) is a wood frame round barn, 64 feet in diameter. It is eligible for the National Register under Criteria A and C for its associations with agriculture and architecture. The barn is eligible under the Multiple Property Documentation Form Round and Polygonal Barns of Indiana. 2) The Chapman-Allison Farmstead consists of a two-story vernacular house (circa 1845), two large barns (circa 1900), and other outbuildings (circa 1900-1940). The Chapman-Allison Farmstead is eligible for the National Register under Criterion A for its association with agriculture and early settlement. 3) The State Route 257 Bridge over Veale Creek (027-663-30046) is a single-span, steel, Warren pony truss bridge (1938) with flat top cords and a total span of 84 feet. The bridge is eligible for the National Register under Criteria C in the area of engineering.

No change in the effects on previously identified resources will occur as a result of the flood easement areas. Additionally, no above-ground resources eligible or listed in the NRHP were identified within or adjacent to the revised APE.

Eligibility for archaeology is still on-going for Section 2.

#### EFFECT FINDING

Patoka Bridges Historic District - Adverse Effect.

Thomas C. Singleton Round Barn - No Adverse Effect.

Chapman-Allison Farmstead. - No Adverse Effect.

State Route 257 Bridge over Veale Creek - No Adverse Effect.

FHWA has determined an Adverse Effect finding is appropriate for this undertaking.

#### SECTION 4(f) COMPLIANCE REQUIREMENTS (for historic properties)

Patoka Bridges Historic District -- This undertaking will not convert property from the Patoka Bridges Historic District, a section 4(f) historic property, to a transportation use that is permanent, temporary or constructive; FHWA has determined the appropriate Section 106 finding is "Adverse Effect"; therefore no Section 4(f) evaluation is required for the Patoka Bridges Historic District. FHWA respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of "Adverse Effect".

Thomas C. Singleton Round Barn -- This undertaking will not convert property from the Thomas C. Singleton Round Barn, a section 4(f) historic property, to a transportation use that is permanent, temporary or constructive; FHWA has determined the appropriate Section 106 finding is "No Adverse Effect"; therefore no Section 4(f) evaluation is required for the Thomas C. Singleton Round Barn. FHWA respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of "No Adverse Effect".

Chapman-Allison Farmstead -- This undertaking will not convert property from the Chapman-Alison Farmstead, a section 4(f) historic property, to a transportation use that is permanent, temporary or constructive; FHWA has determined the appropriate Section 106 finding is "No Adverse Effect"; therefore no Section 4(f) evaluation is required for the Chapman-Allison Farmstead. FHWA respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of "No Adverse Effect".

State Route 257 Bridge over Veale Creek -- This undertaking will not convert property from the State Route 257 Bridge over Veale Creek, a section 4(f) historic property, to a transportation use that is permanent, temporary or constructive; FHWA has determined the appropriate Section 106 finding is "No Adverse Effect"; therefore no Section 4(f) evaluation is required for the State Route 257 Bridge over Veale Creek. FHWA respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of "No Adverse Effect".

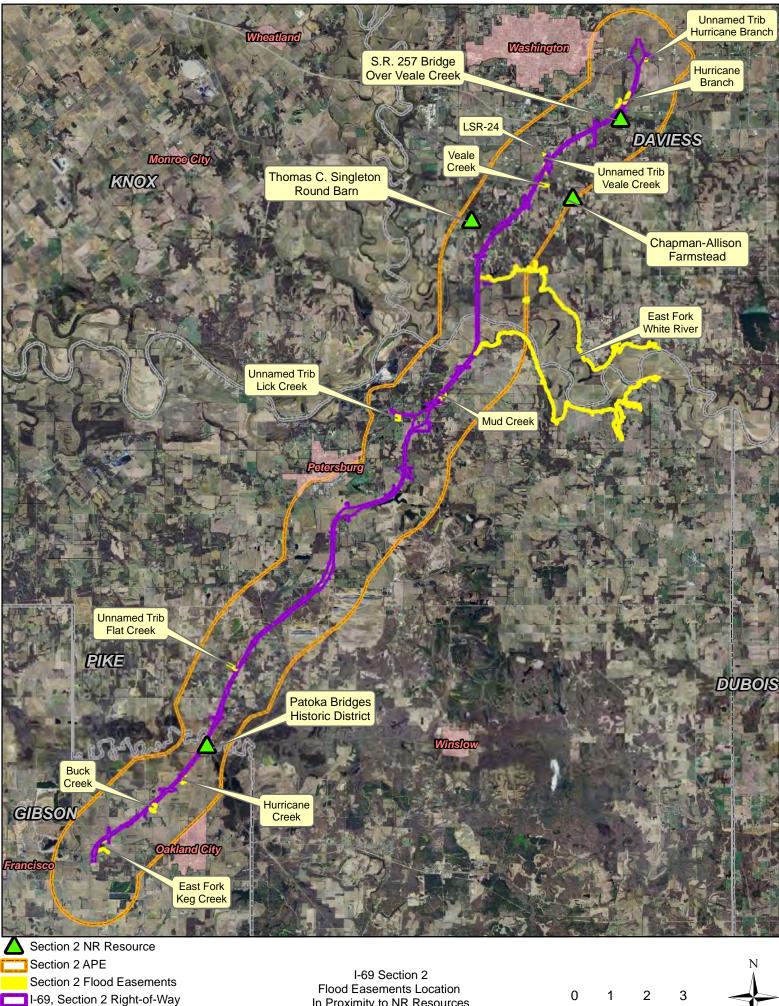
Consulting parties will be provided a copy of FHWA's findings and determinations in accordance with FHWA's Section 106 procedures. Comments will be accepted for 30-days upon receipt of the findings.

Robert F. Tally, Jr., P.E. Administrator FHWA-IN Division

Approved Date

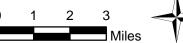
# Appendix B

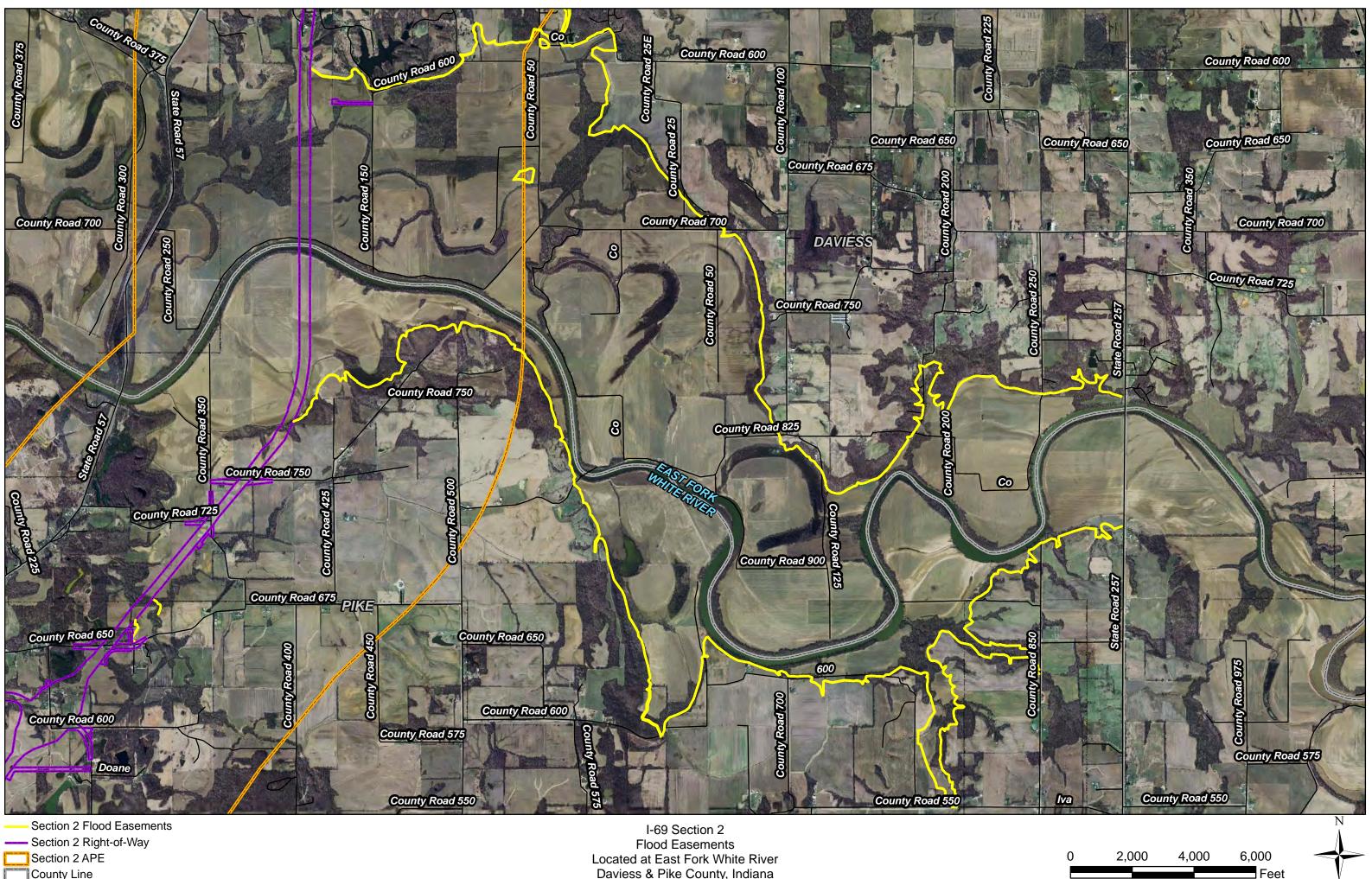
# General Maps of Proposed Flood Easements



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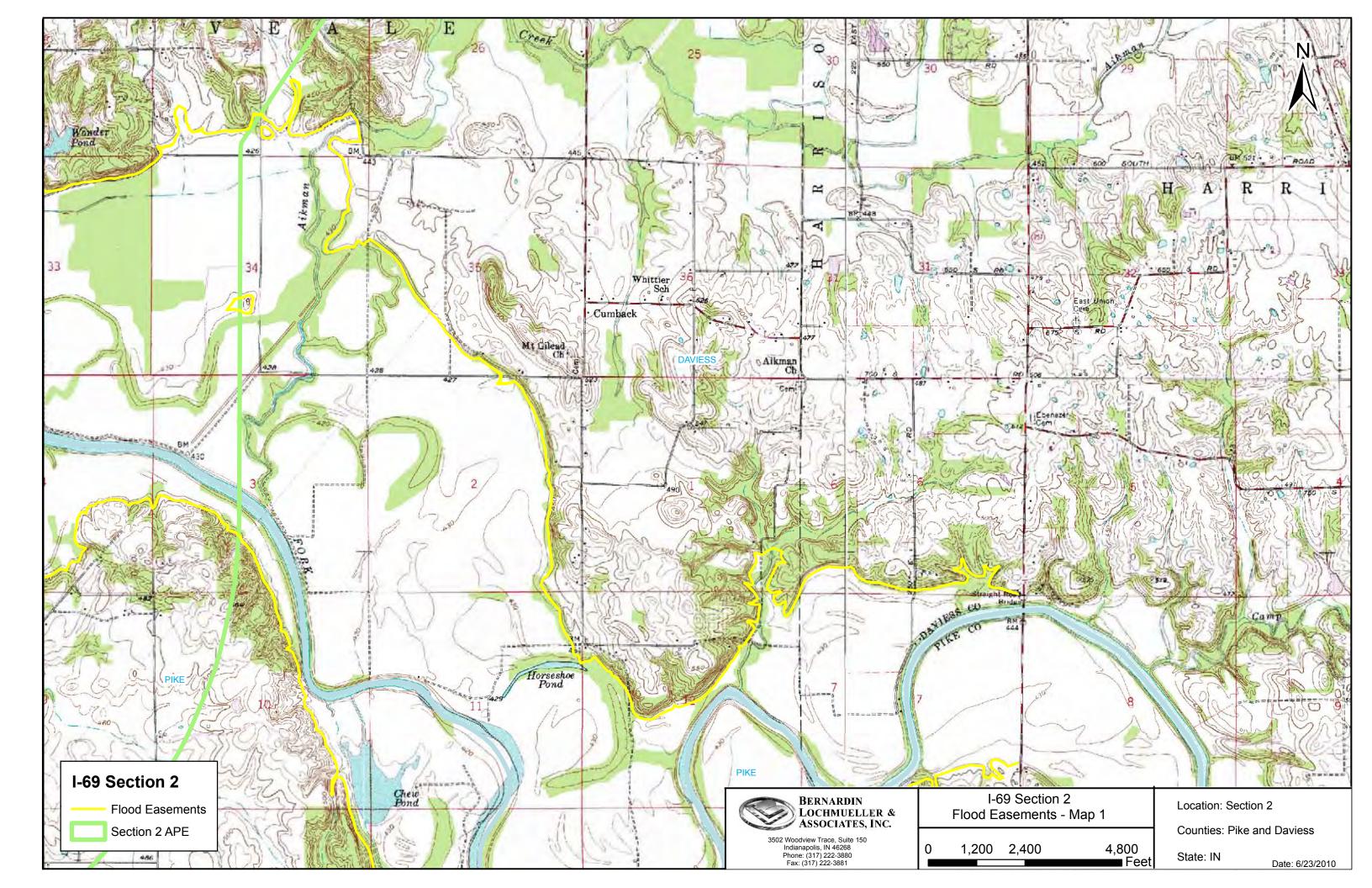
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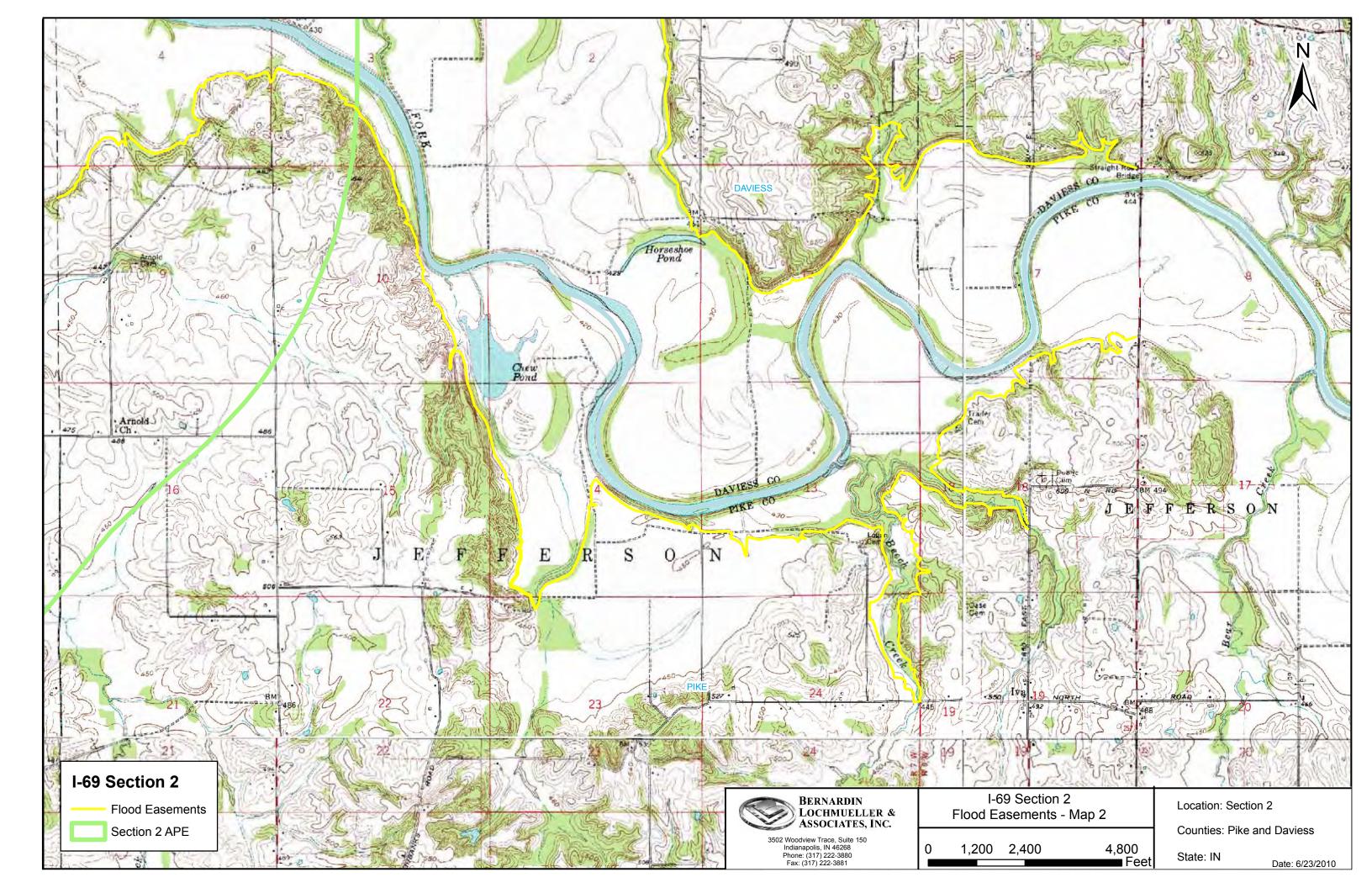


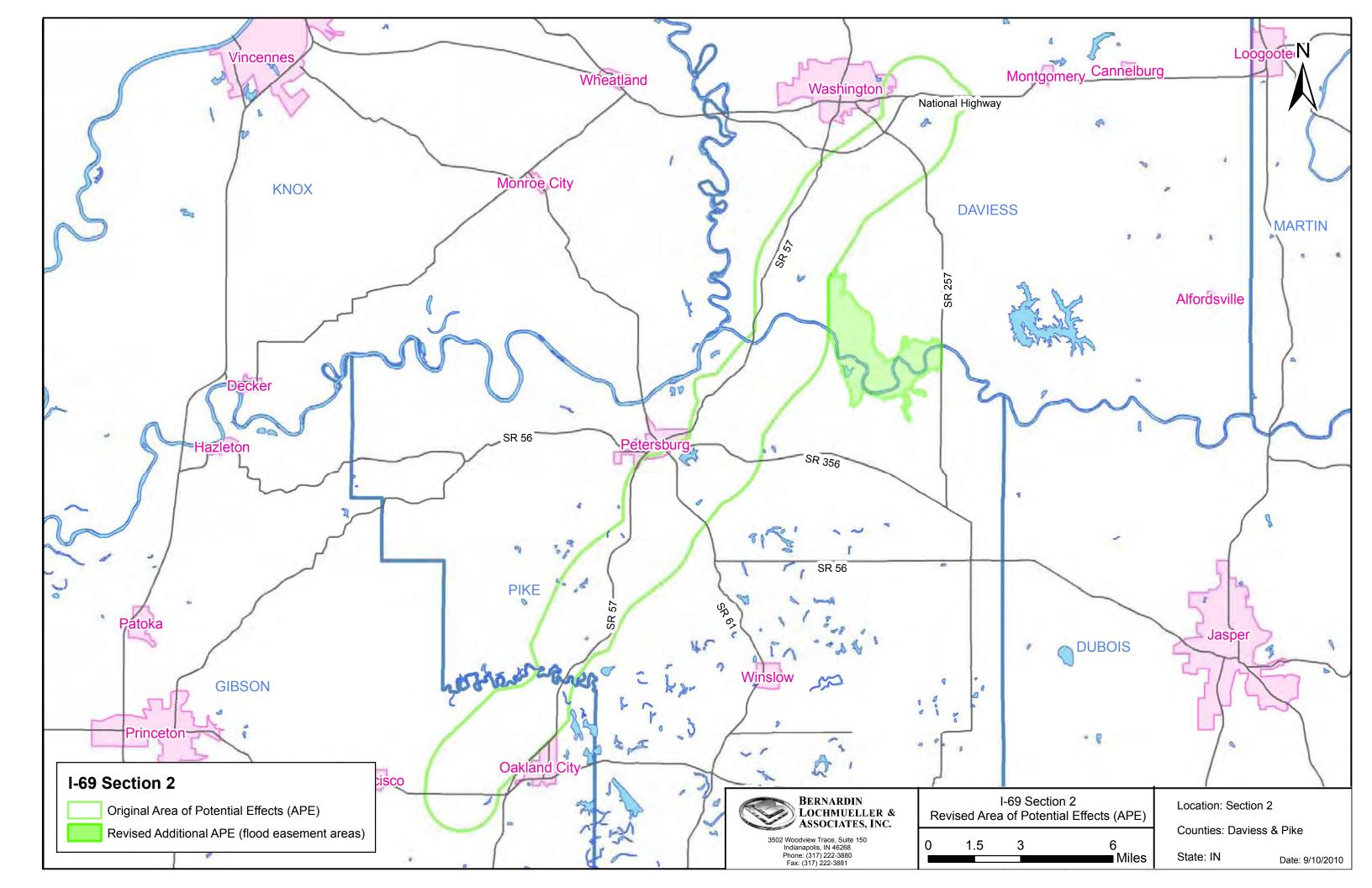


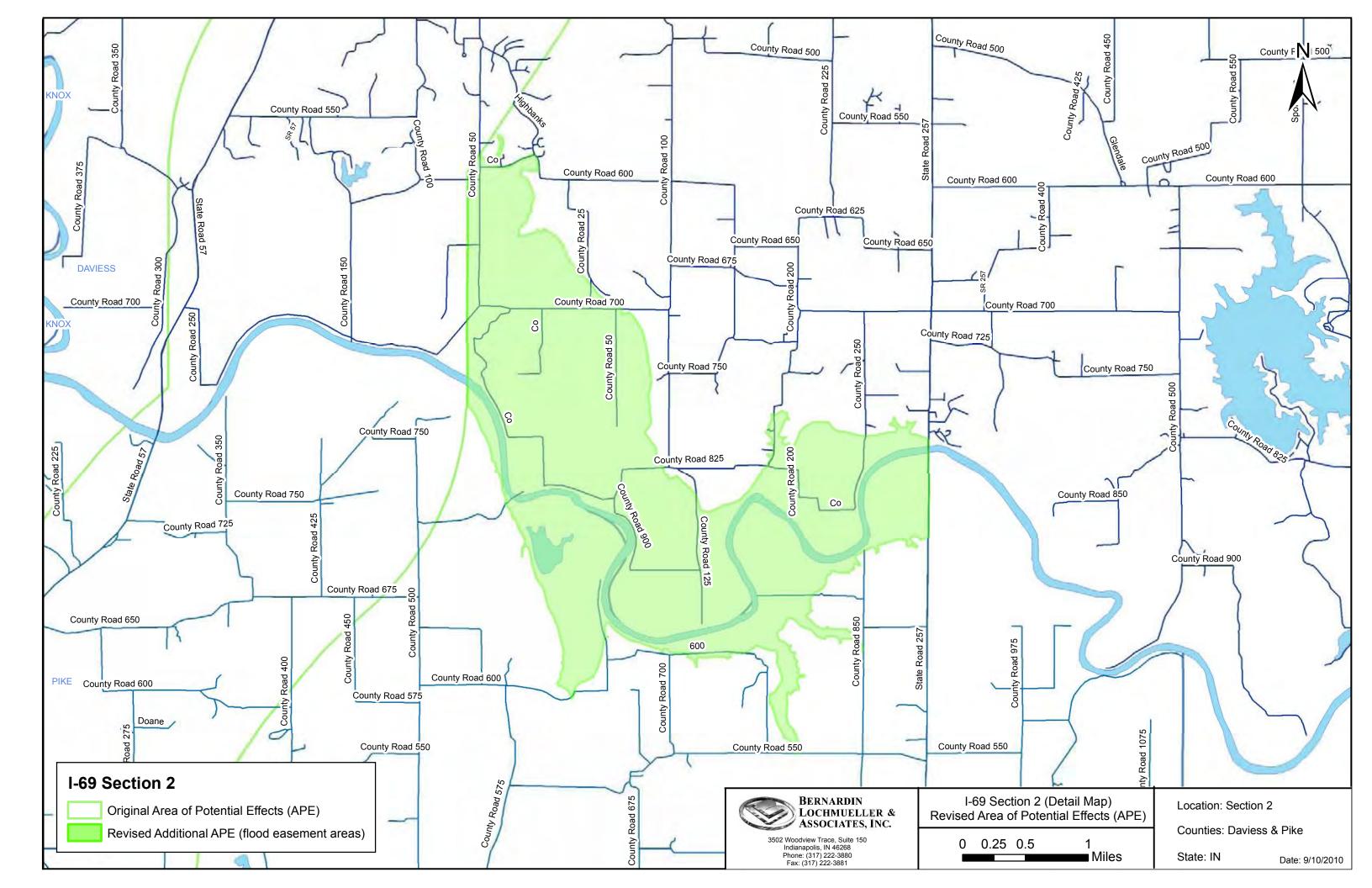
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Daviess & Pike County, Indiana







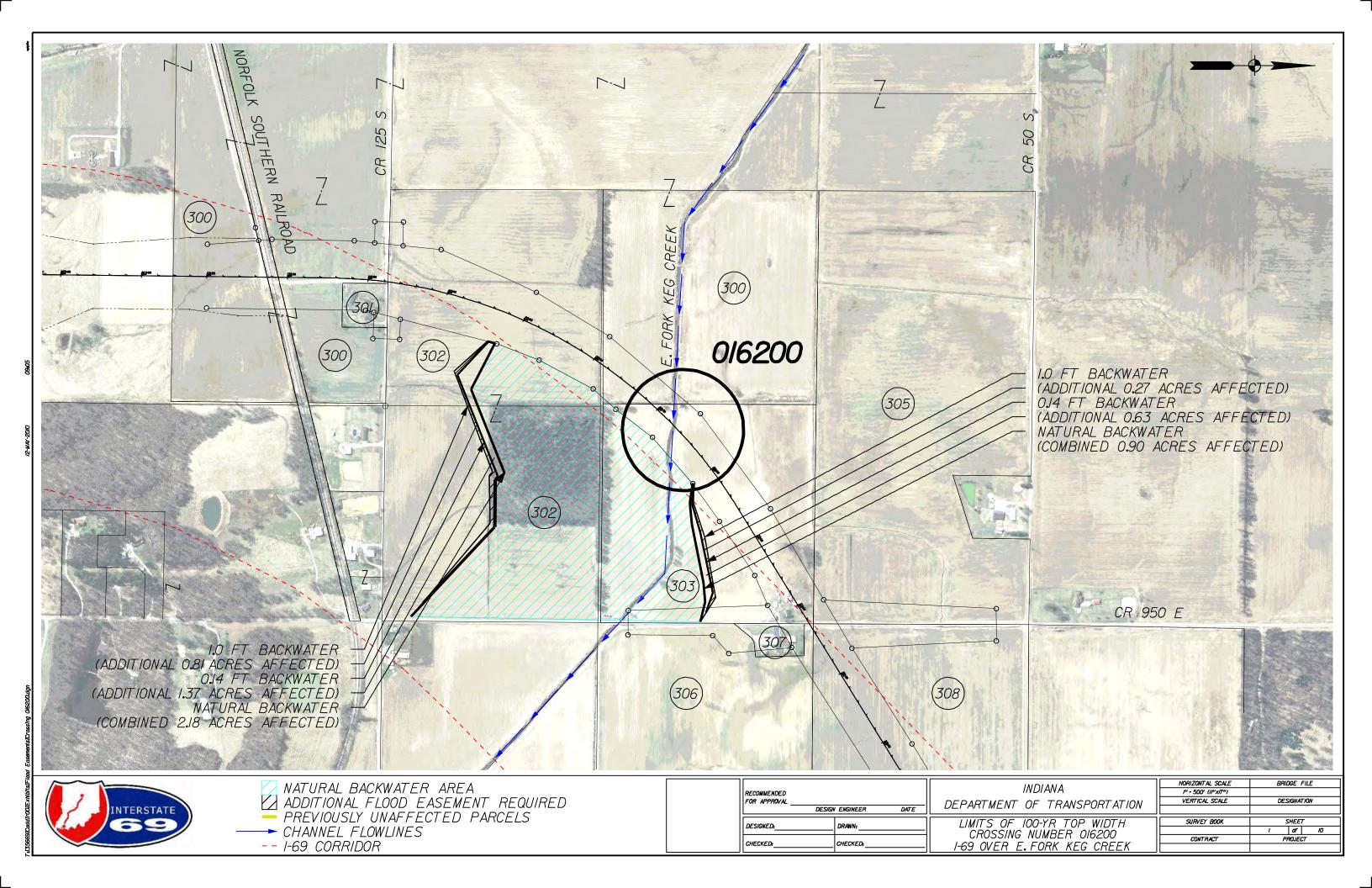


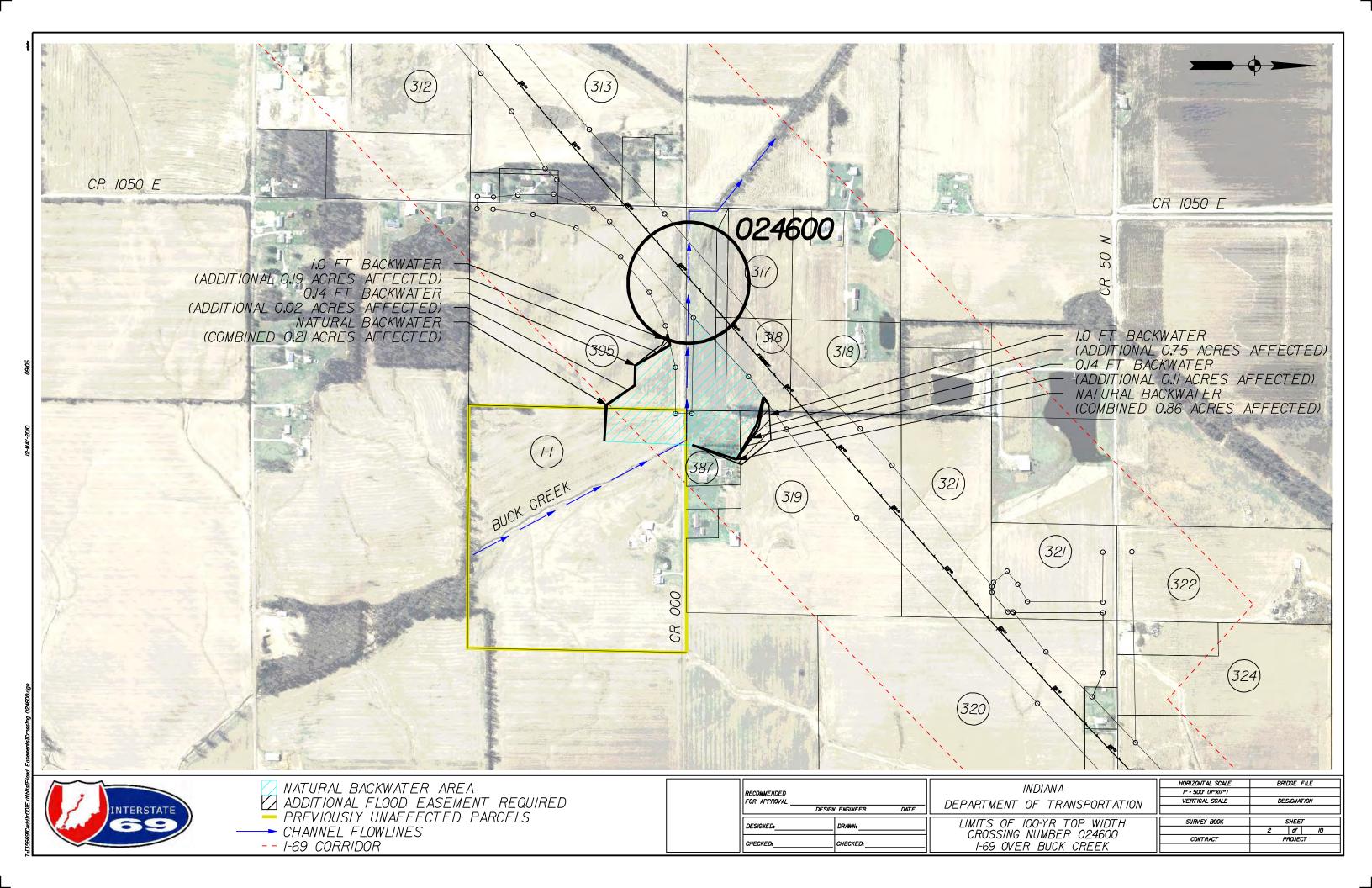
# Appendix C

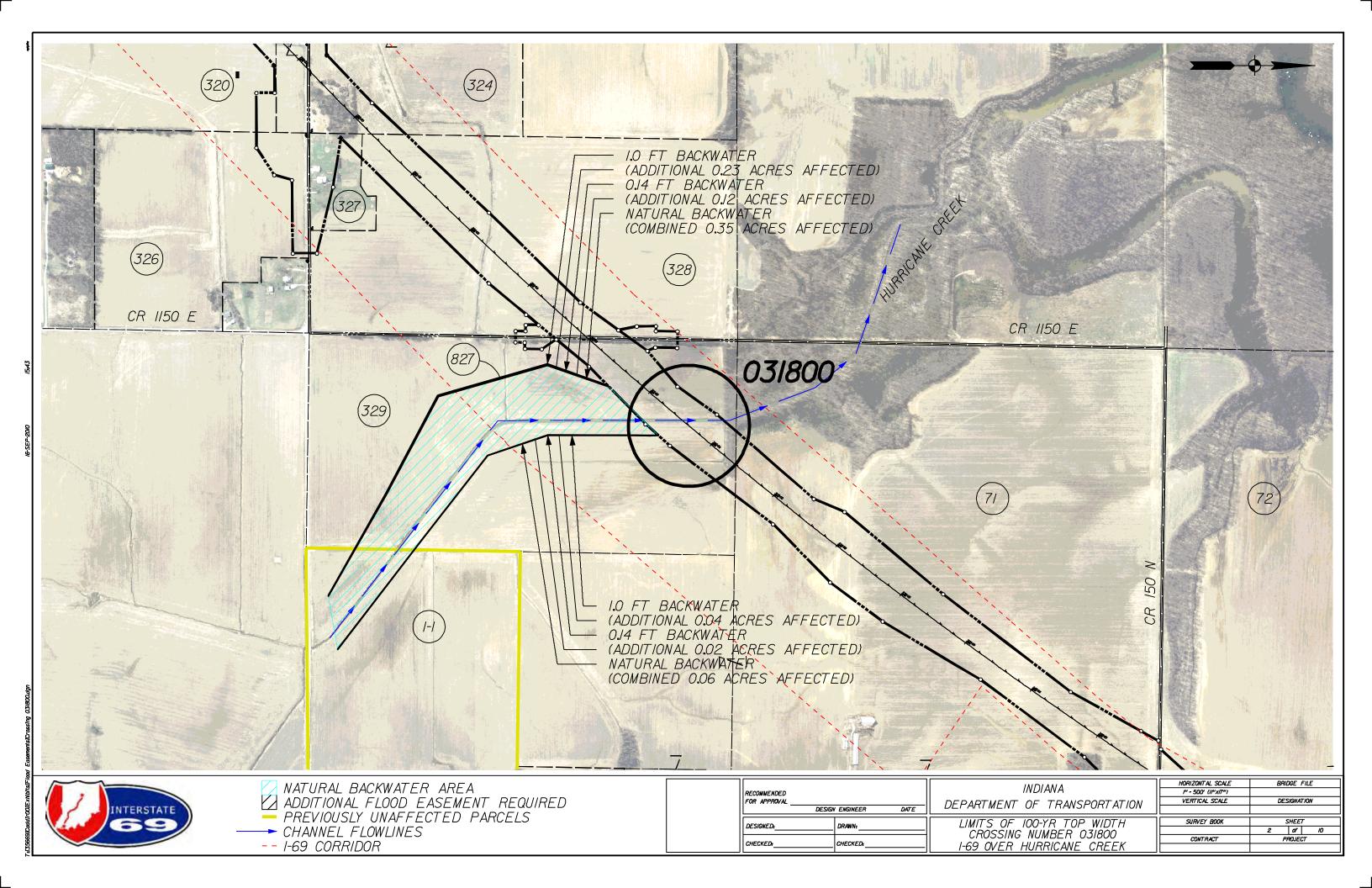
**Detailed Flood Easement Maps** 

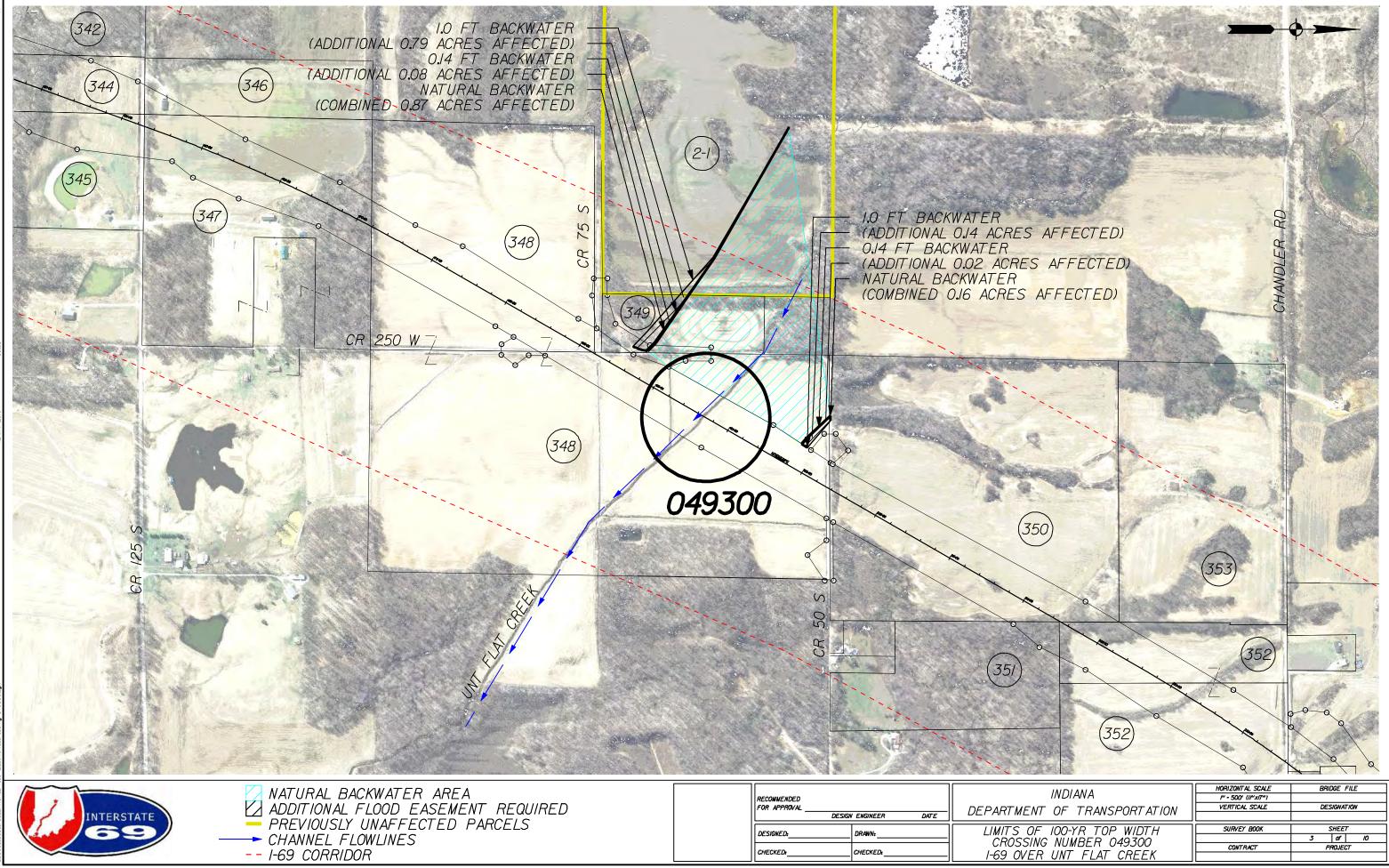








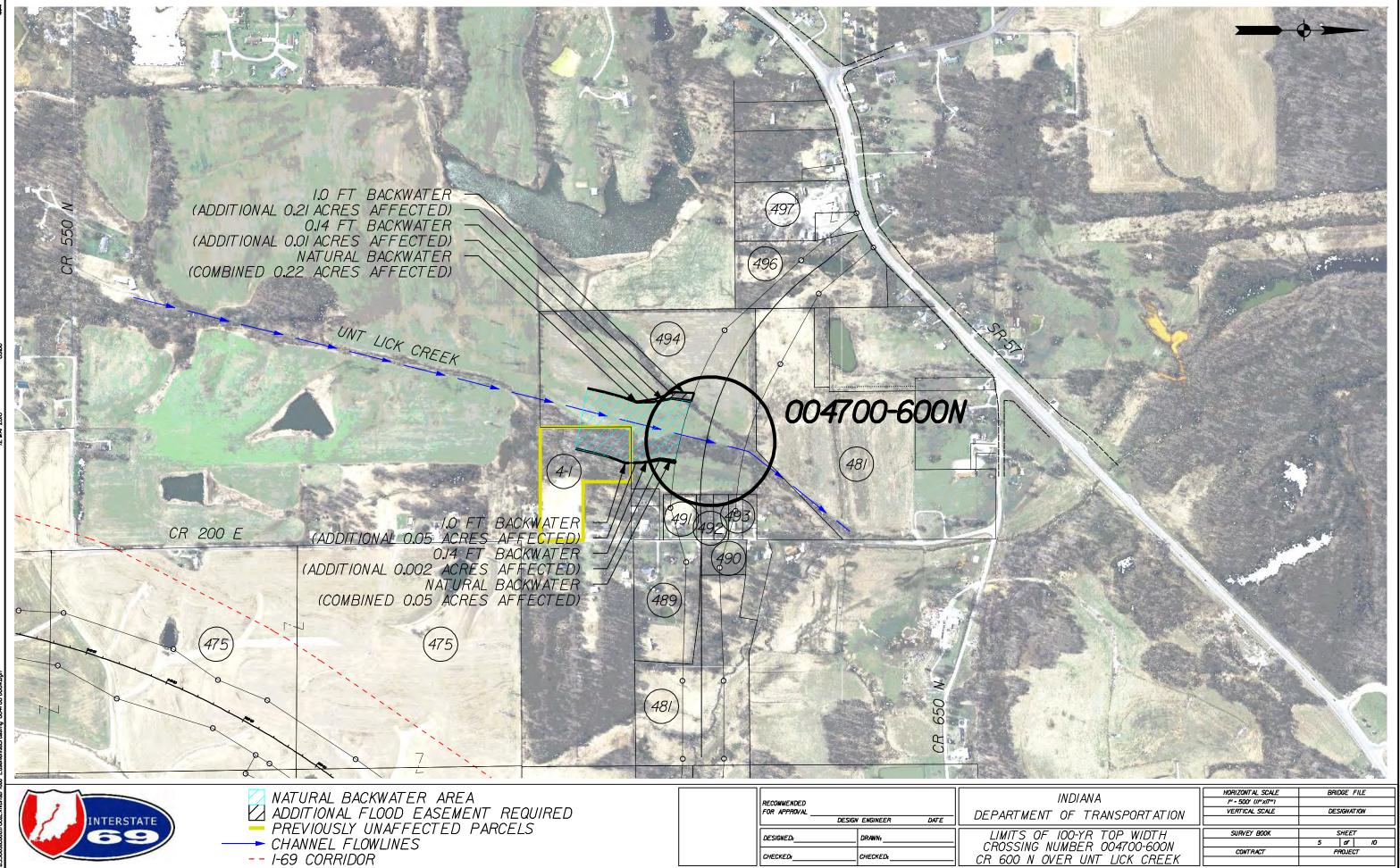




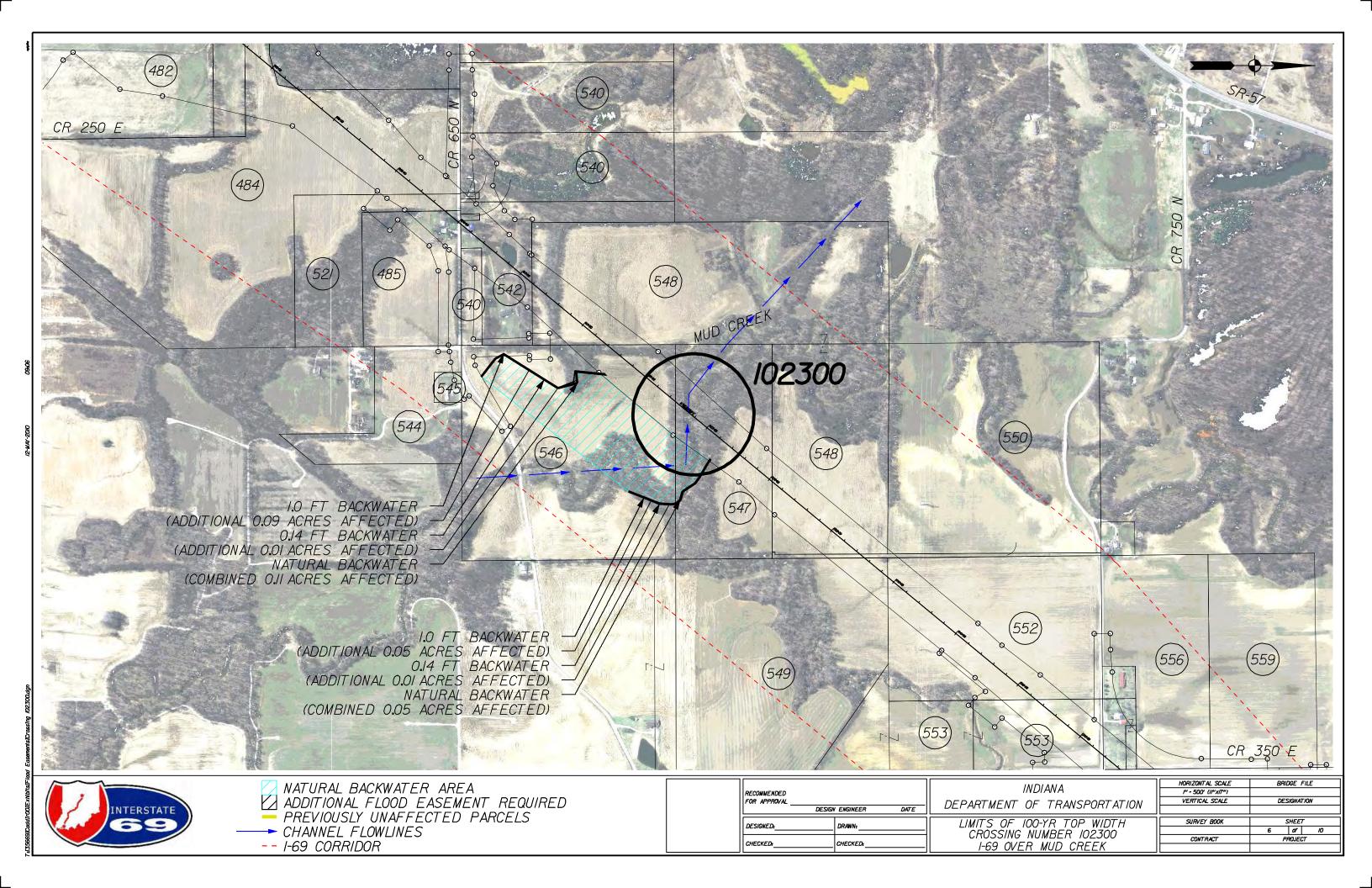
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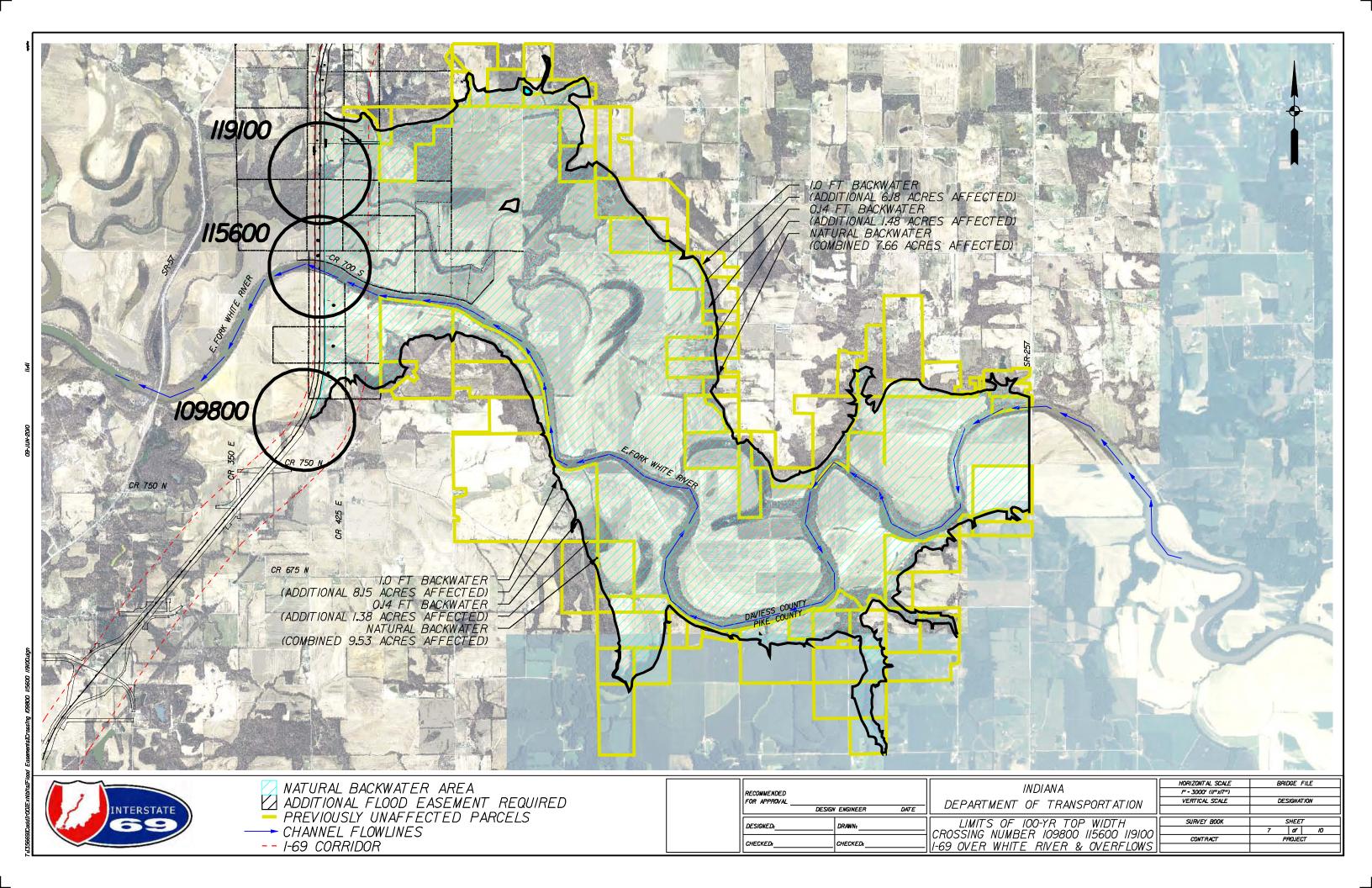
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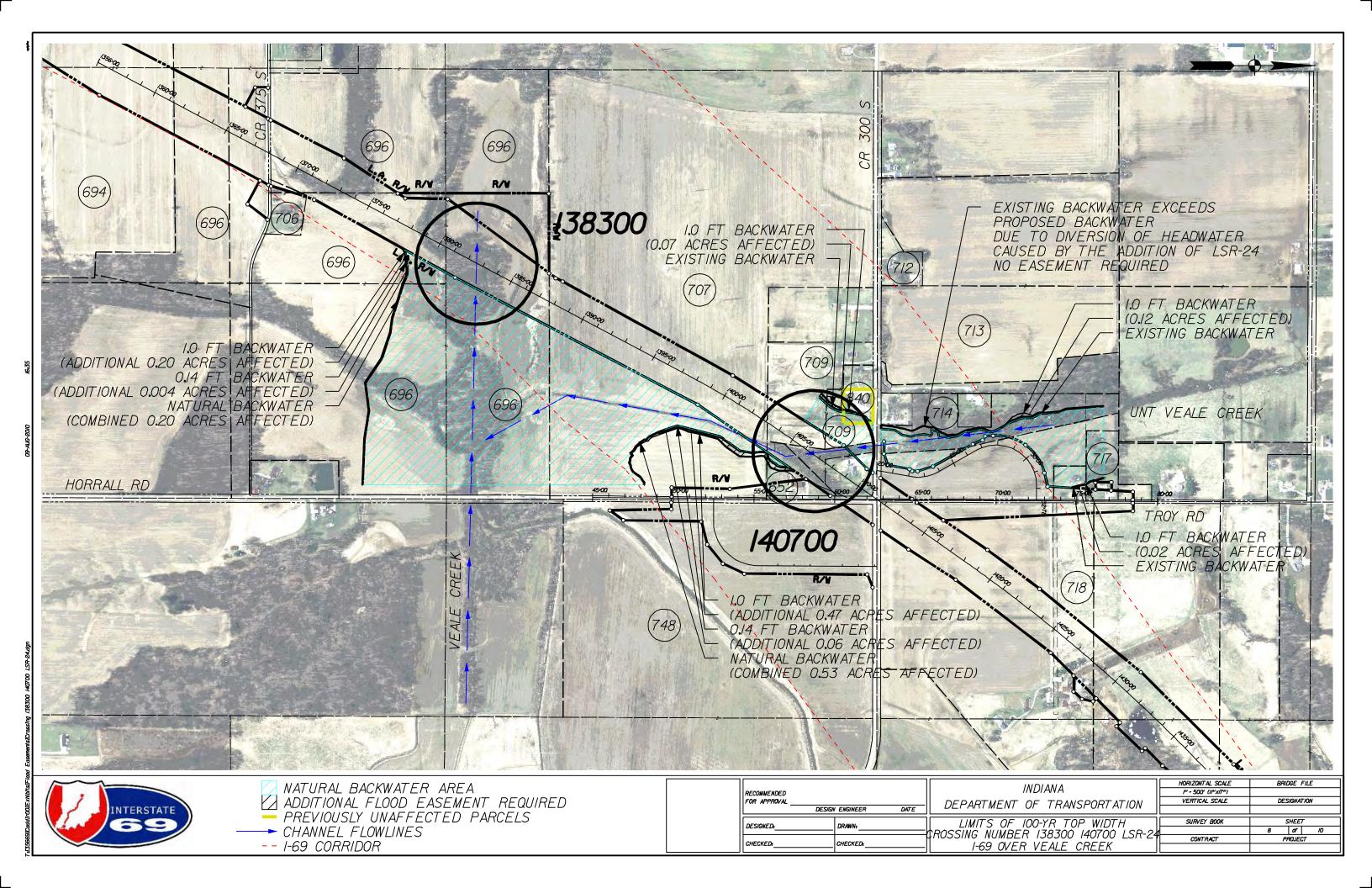
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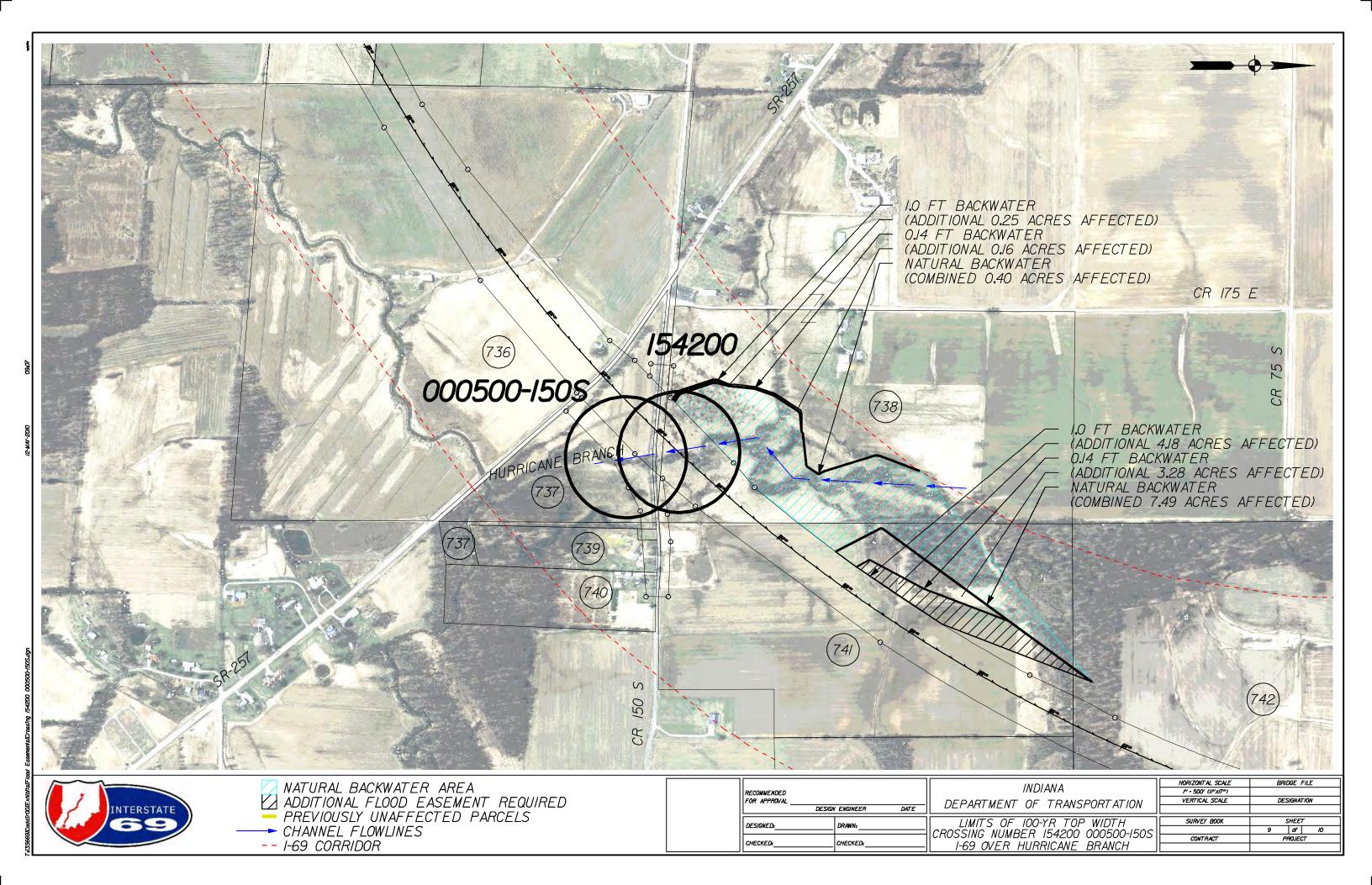


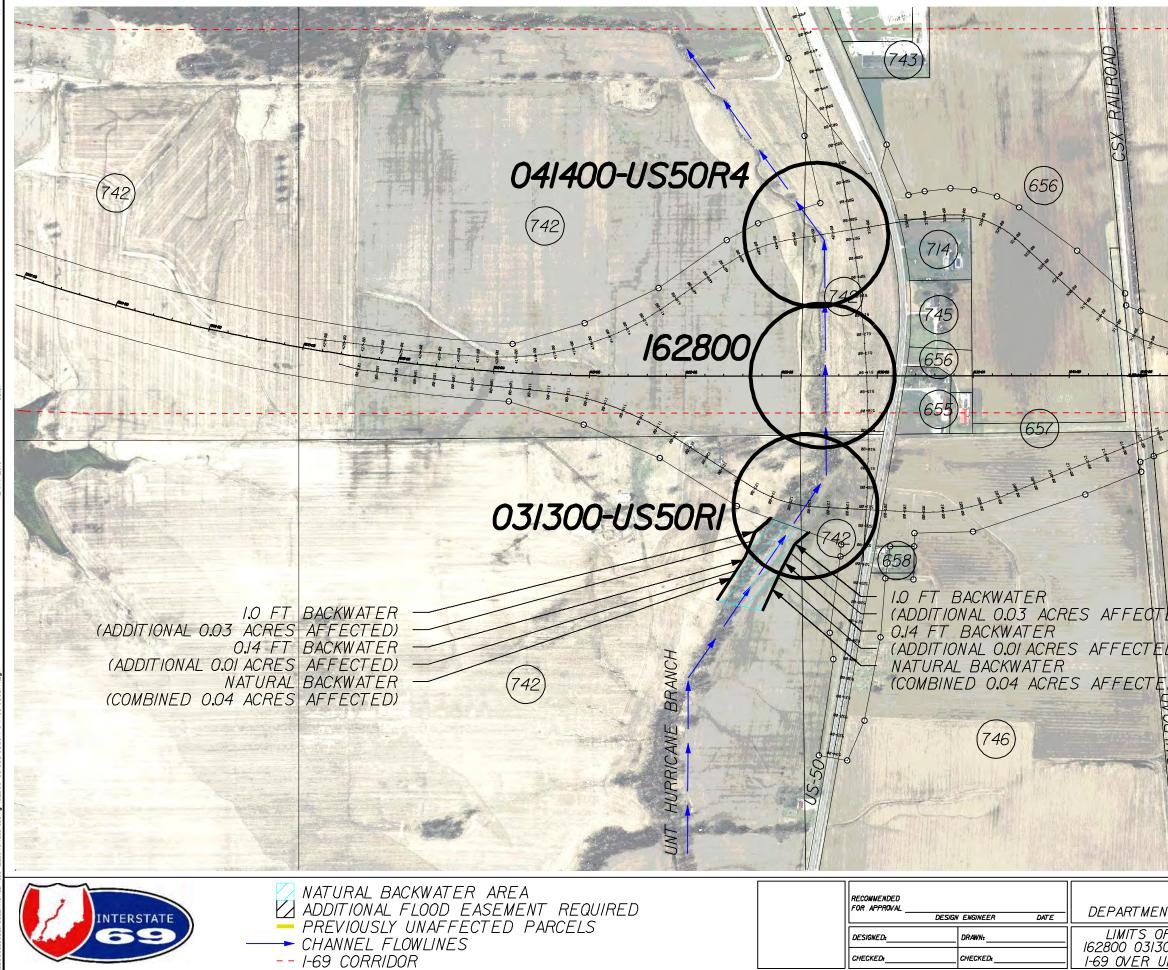
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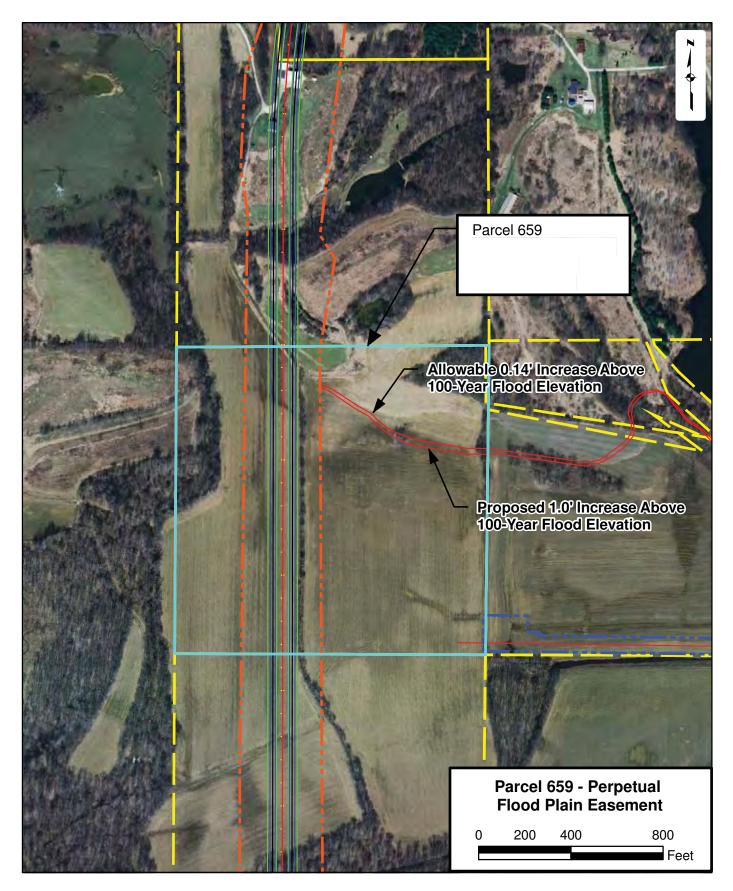


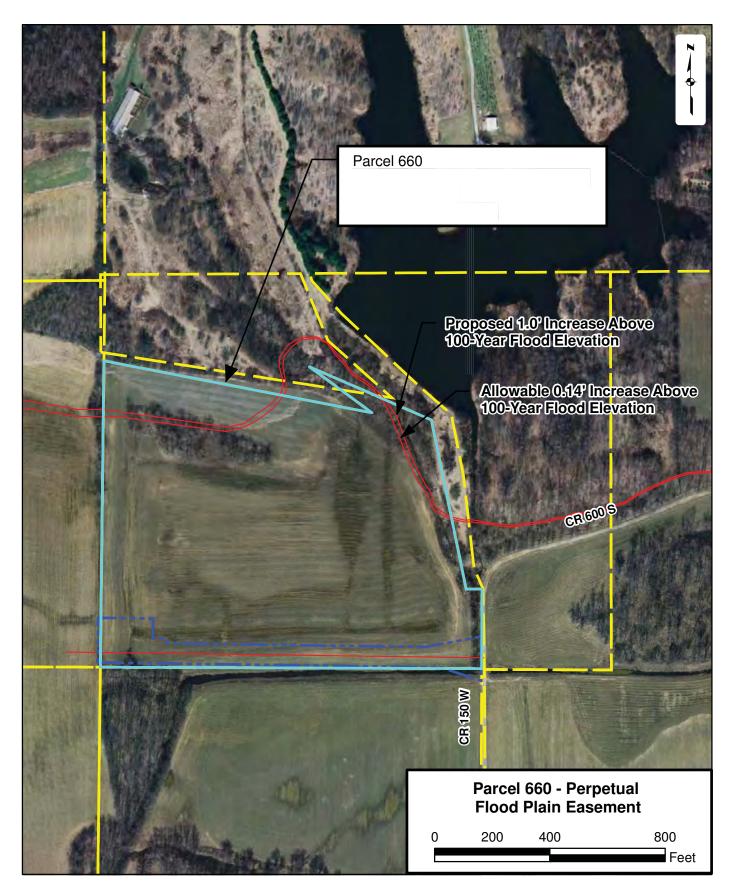


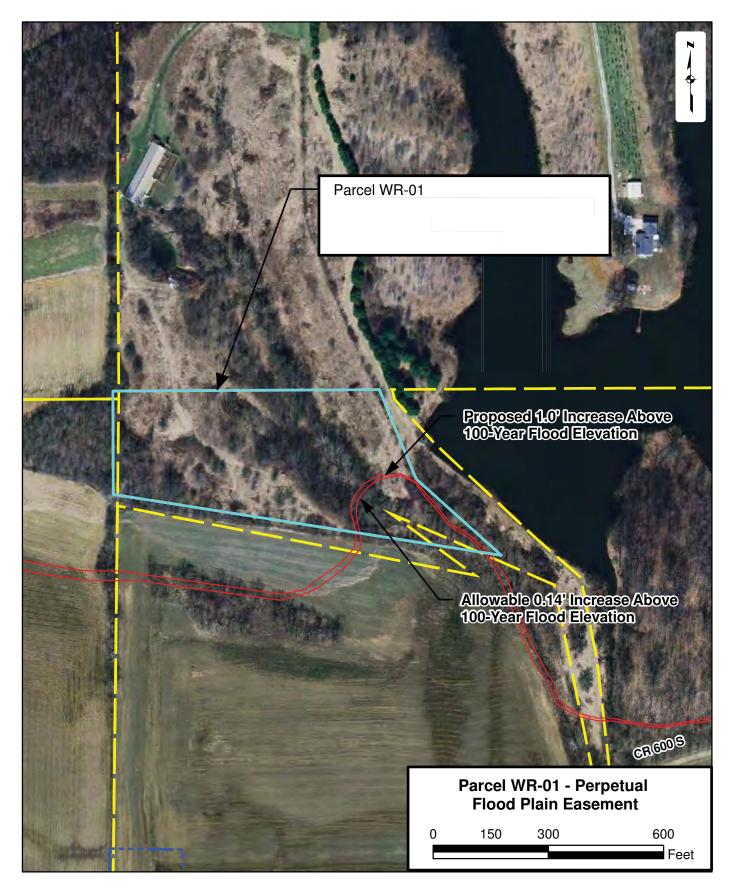
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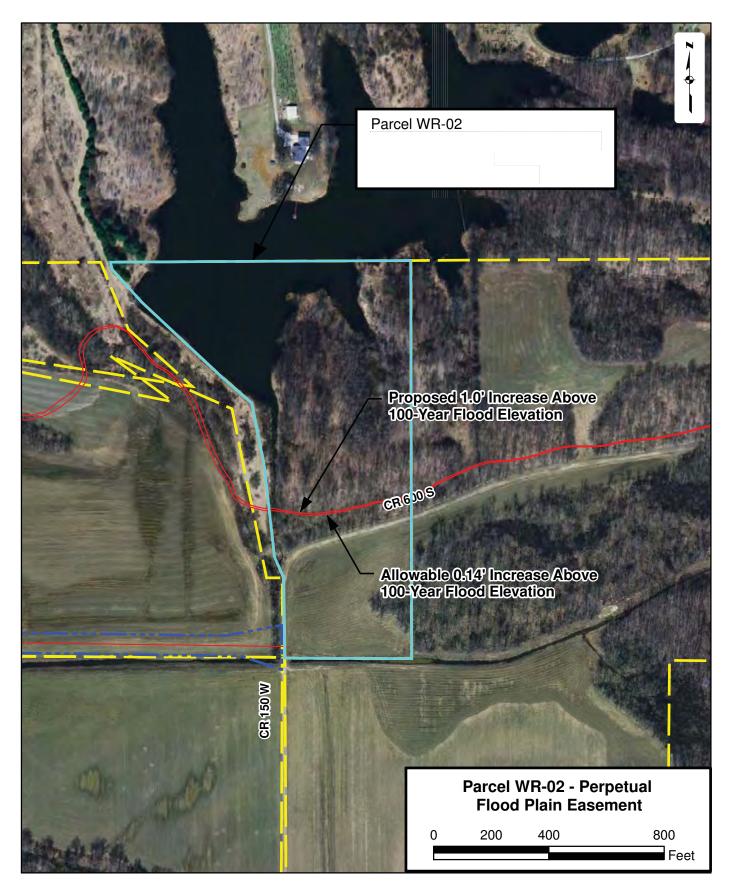
# Appendix D

## Detailed White River Flood Easement Maps

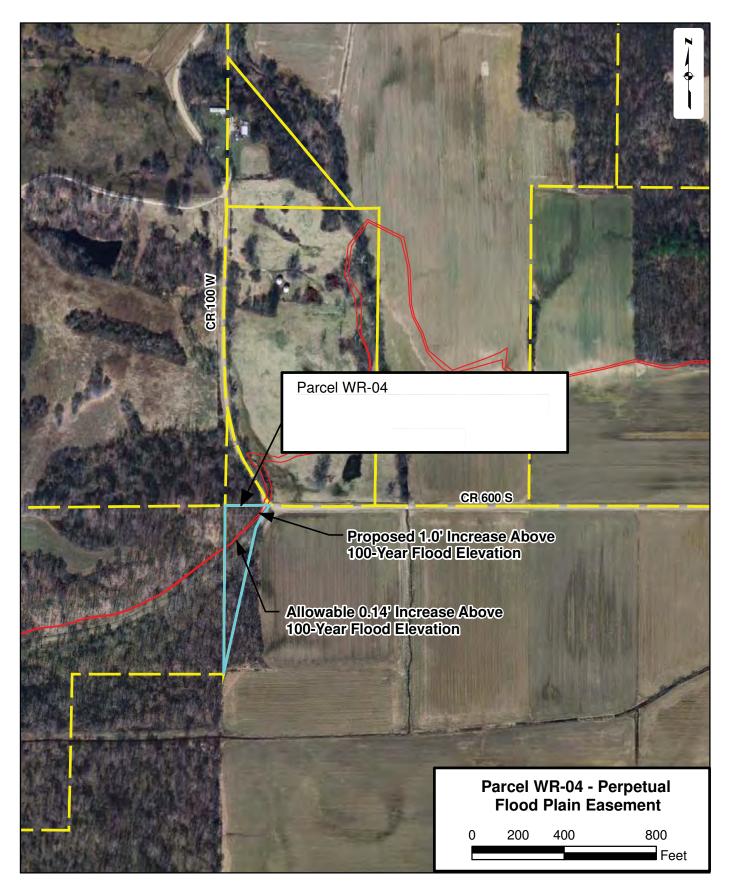


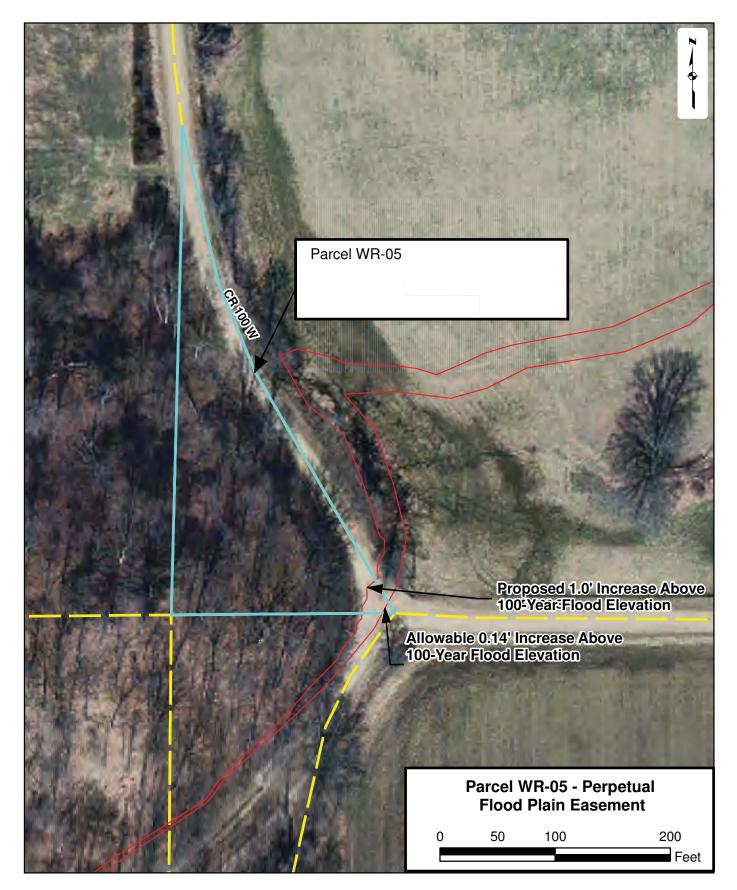


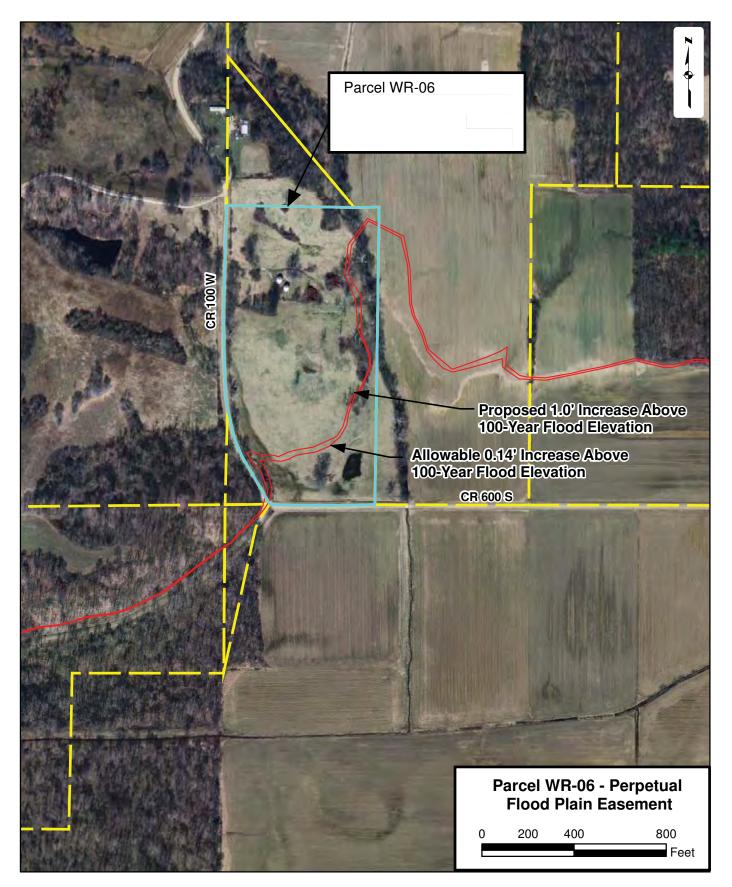


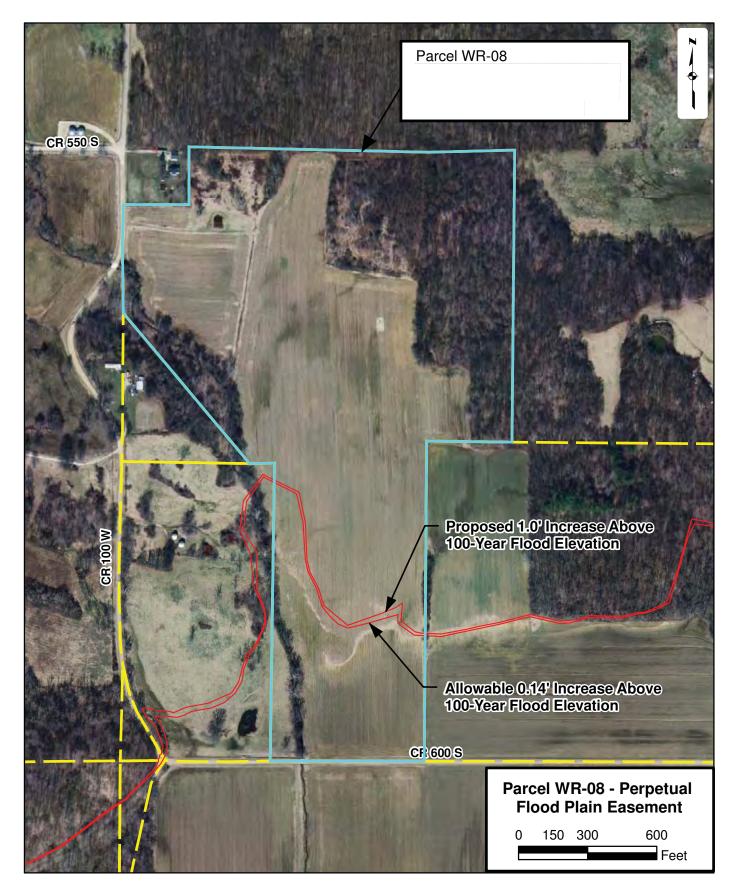


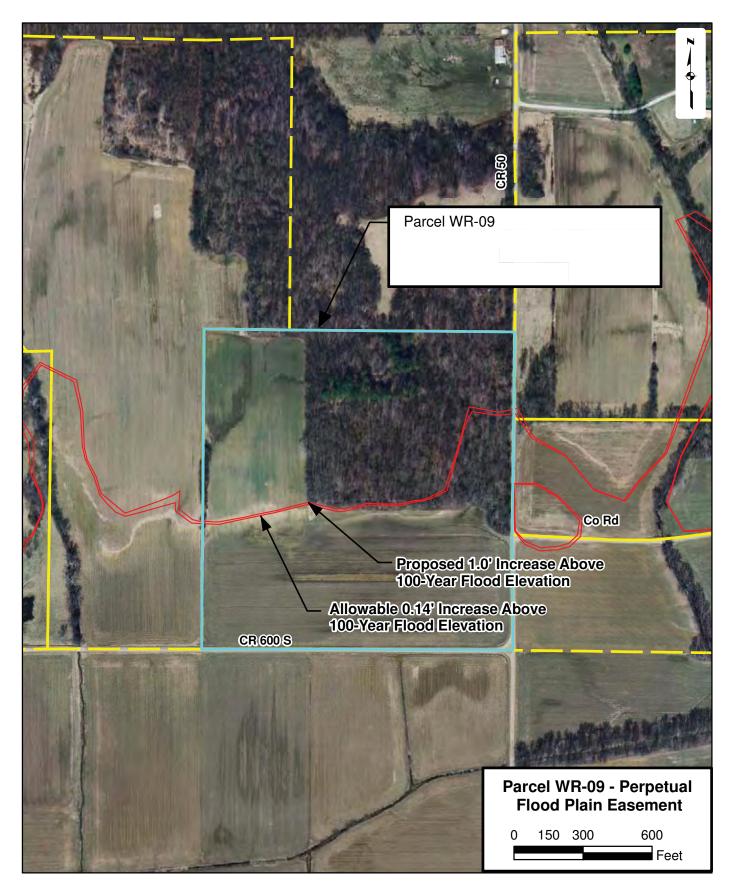




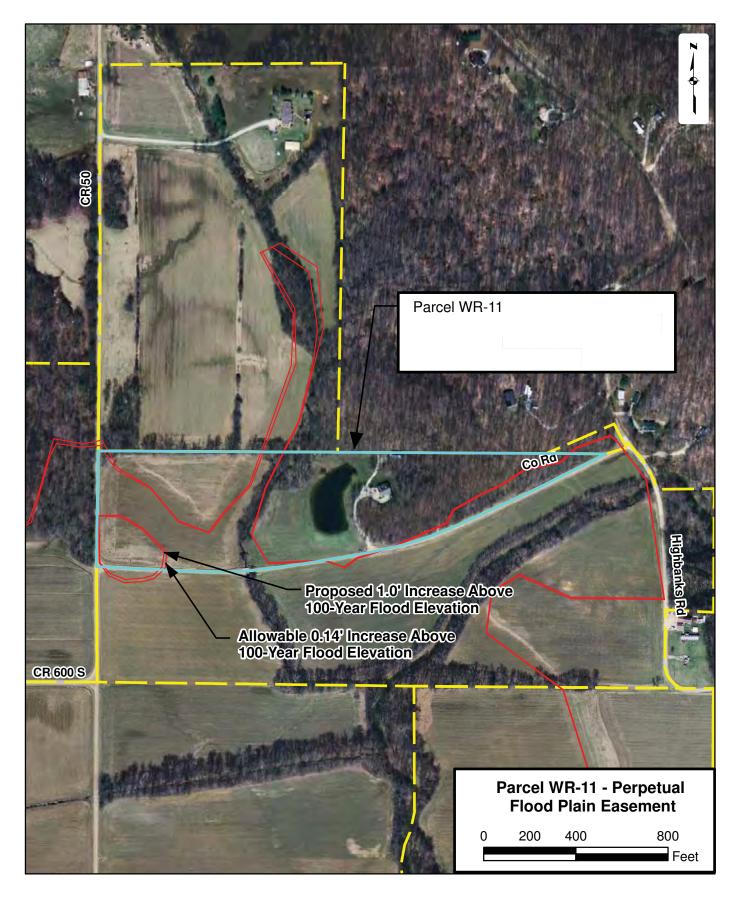


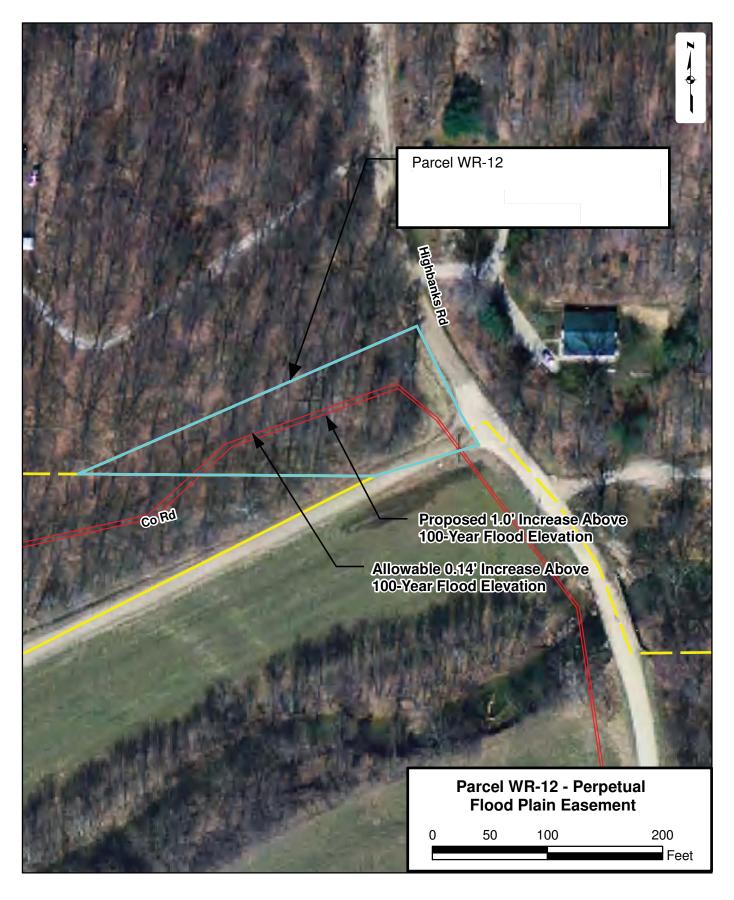




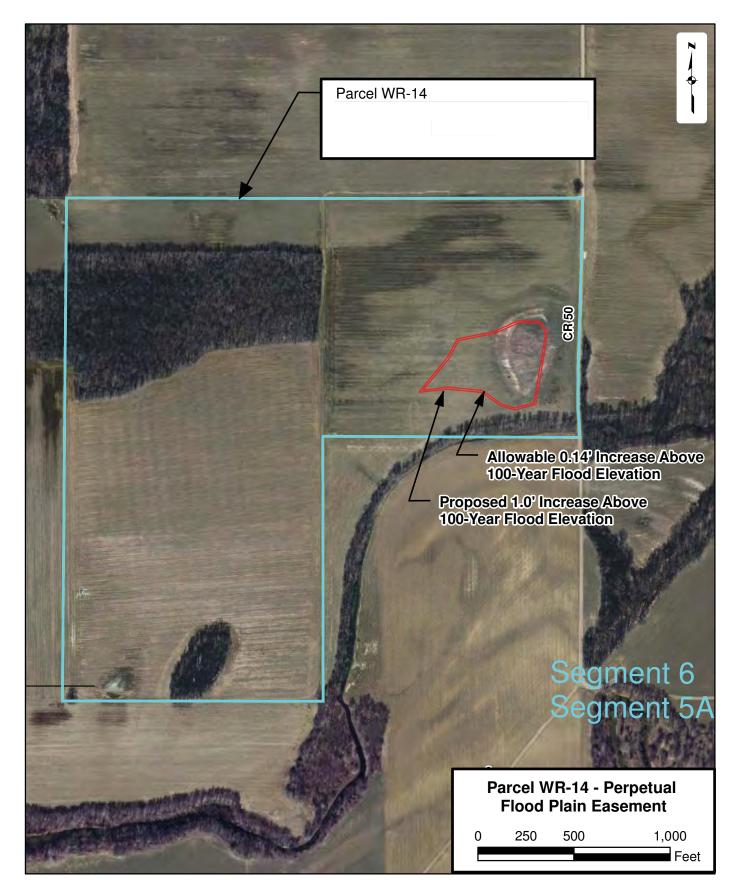


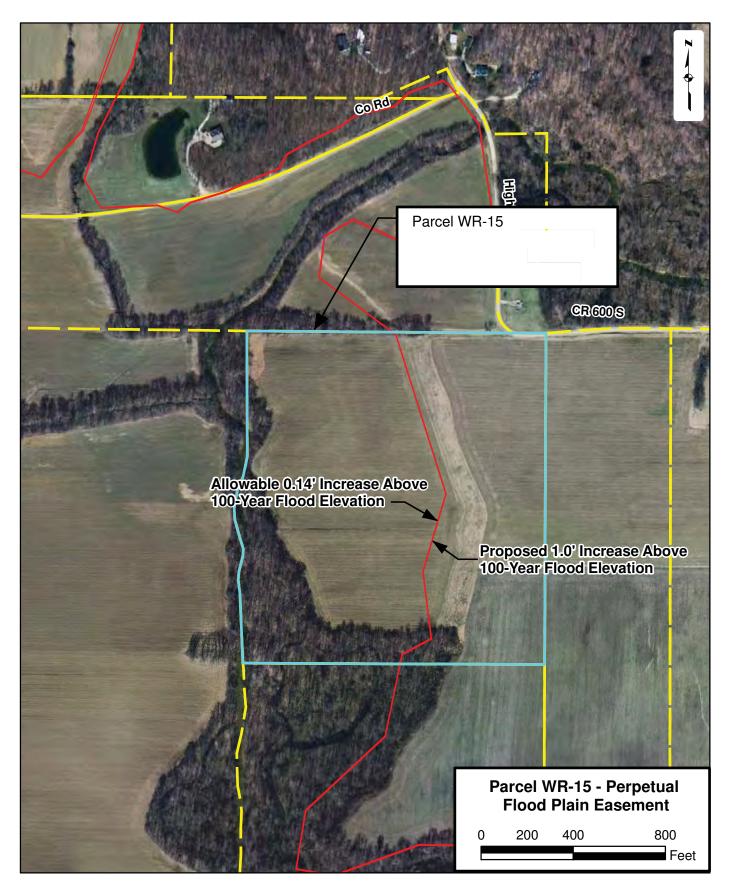


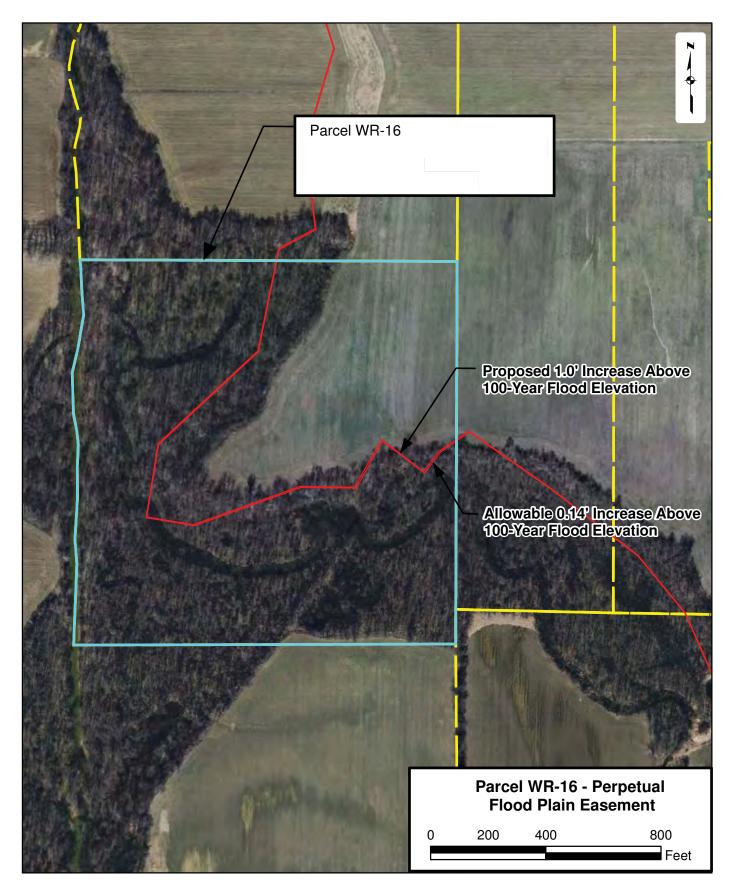


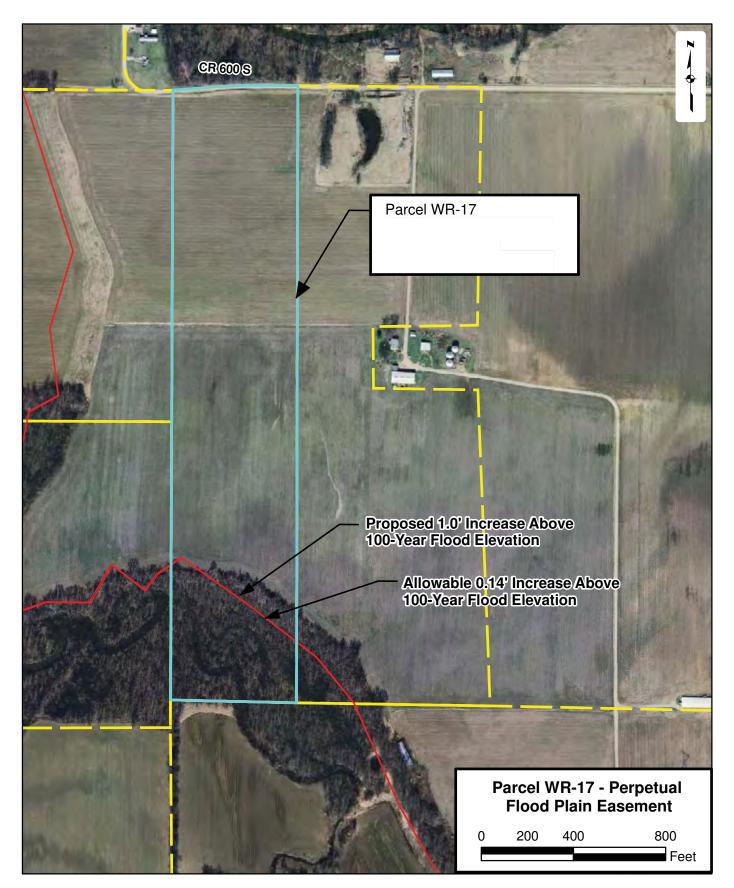


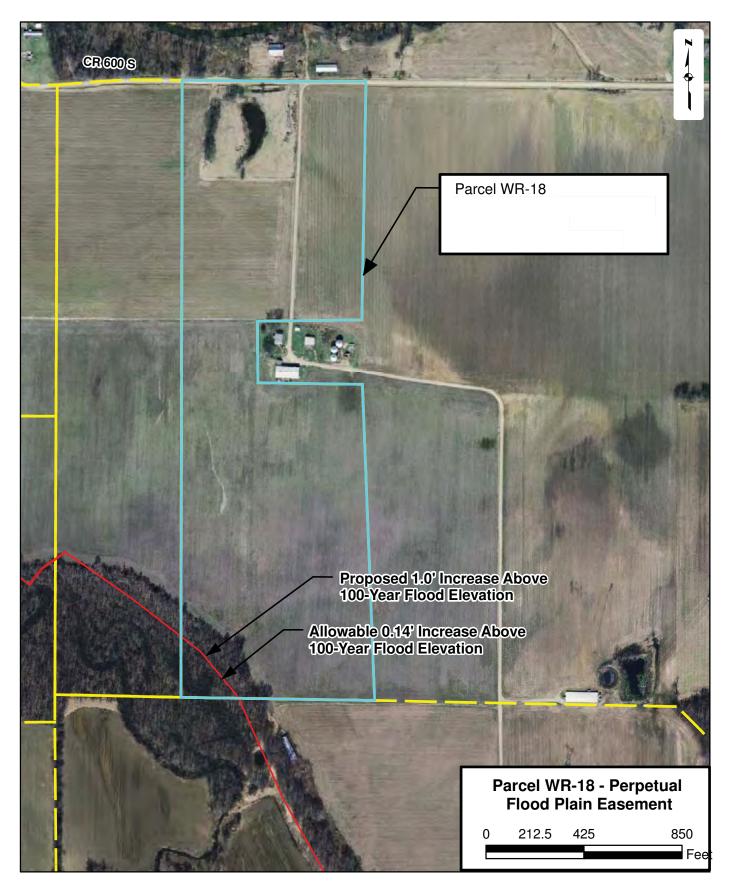


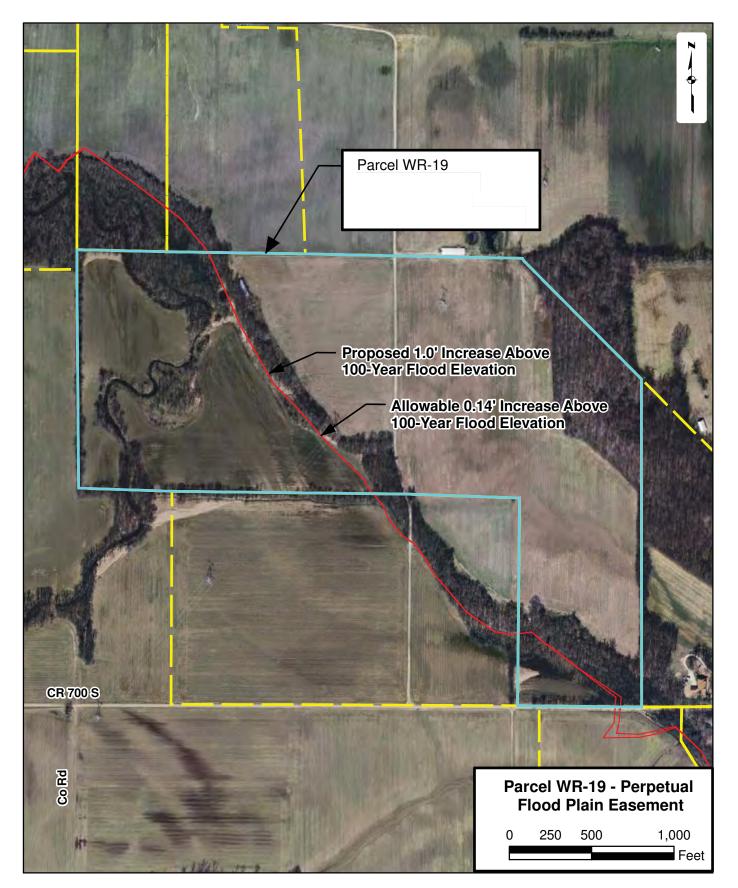


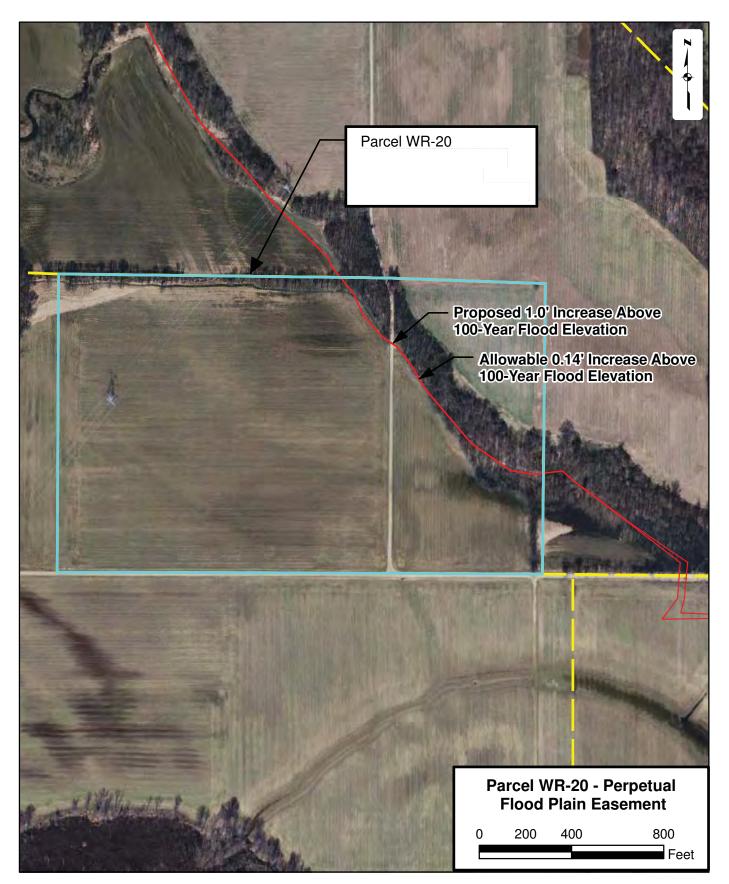


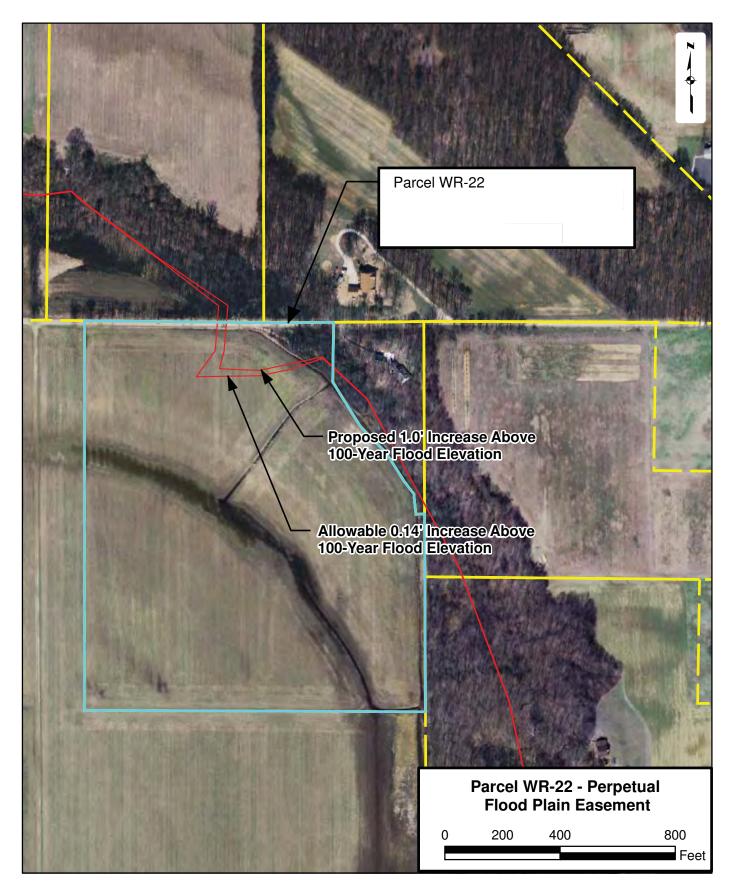


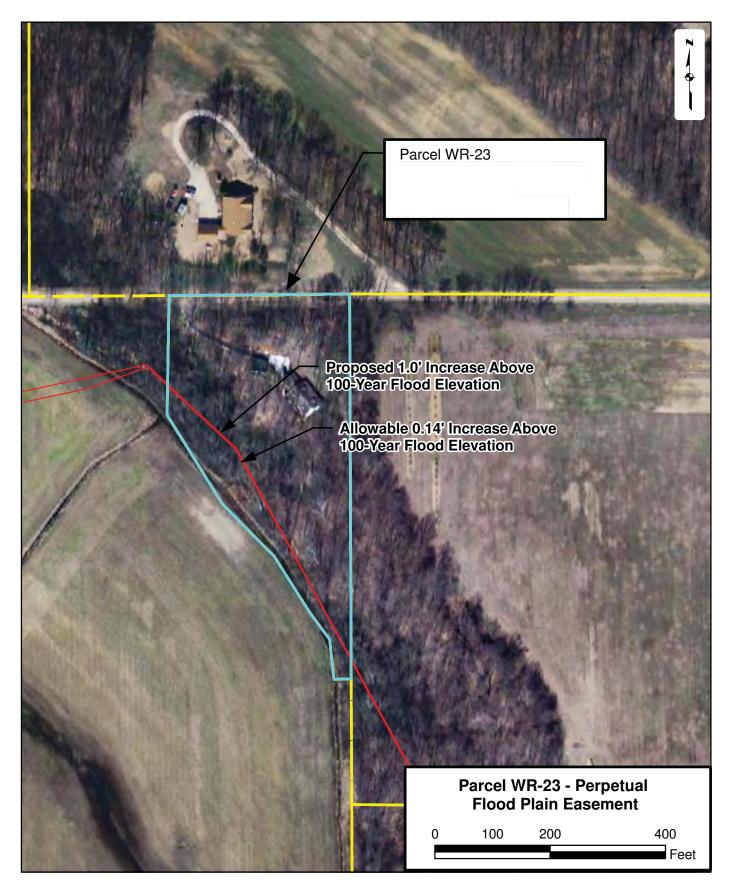


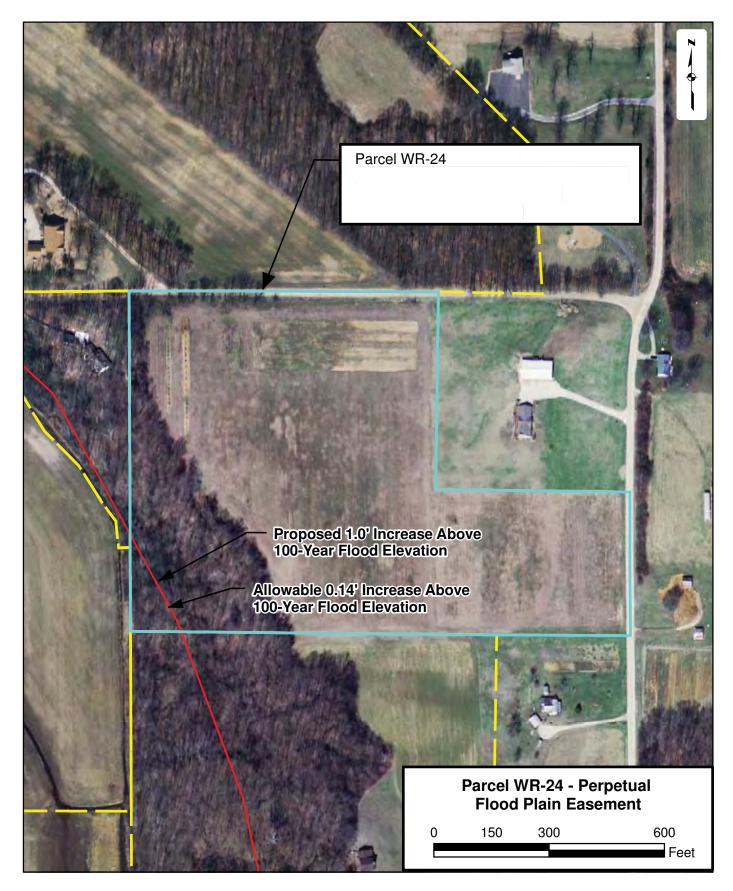


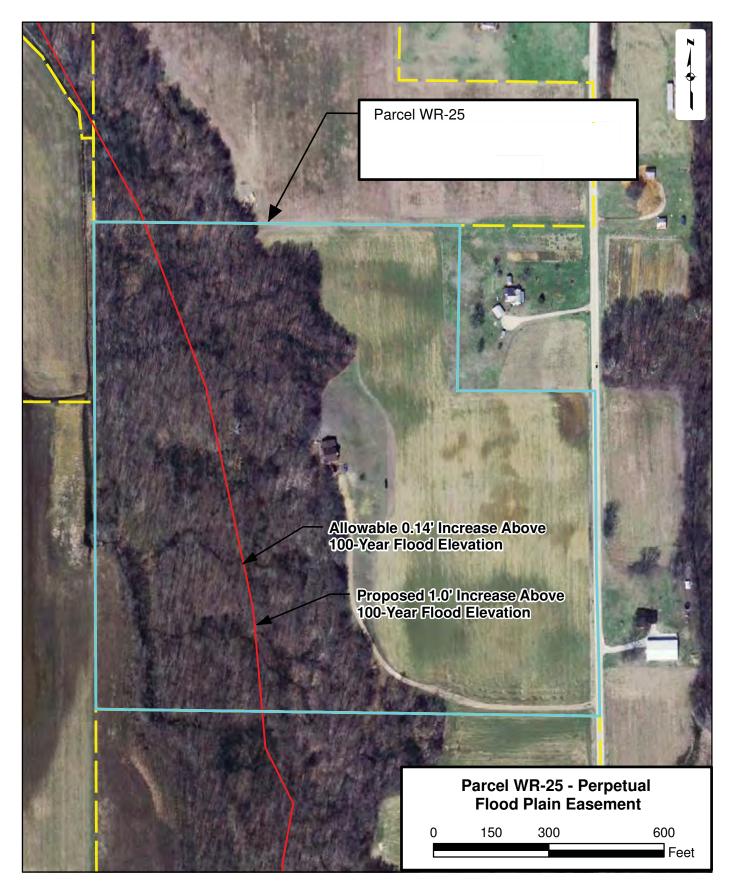


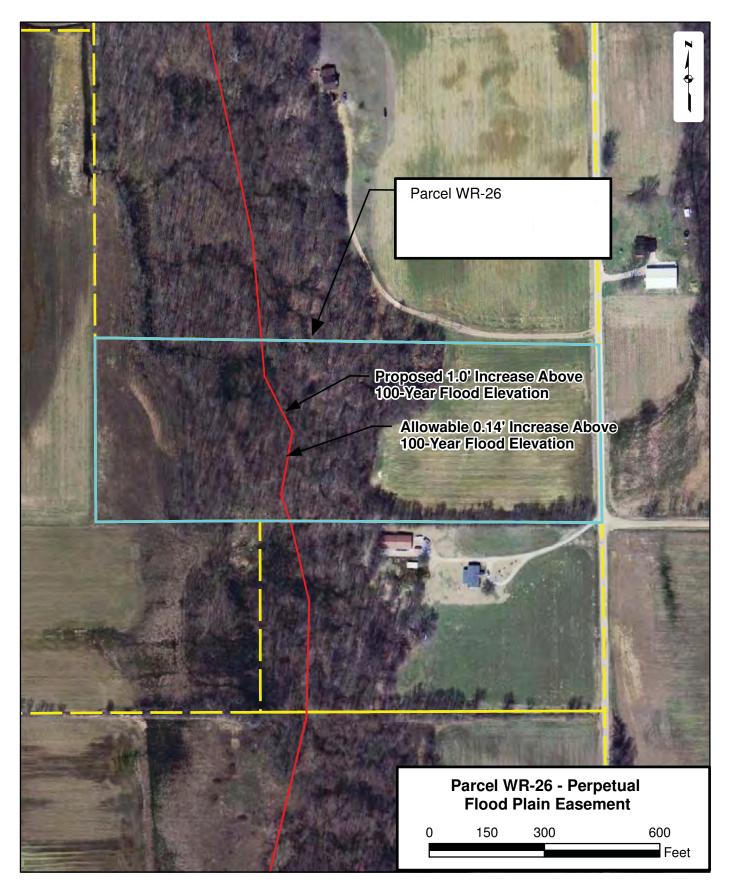


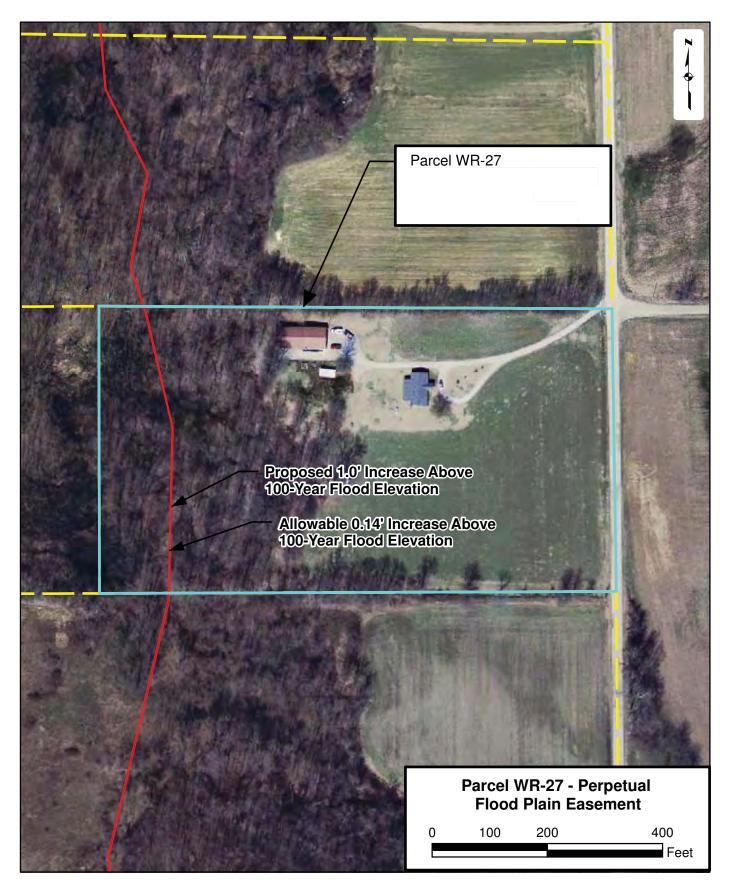


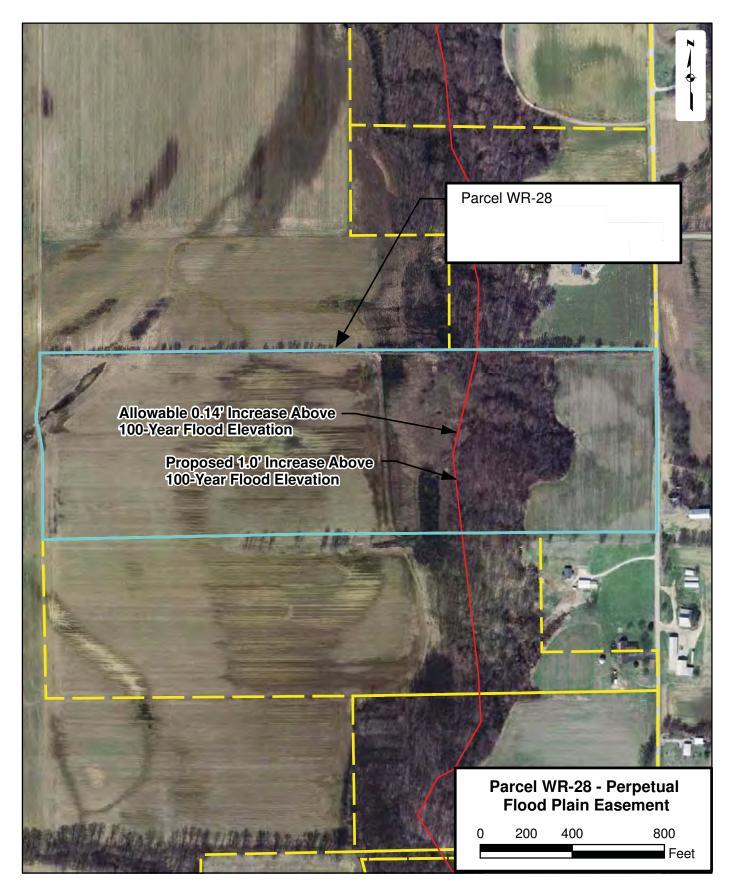


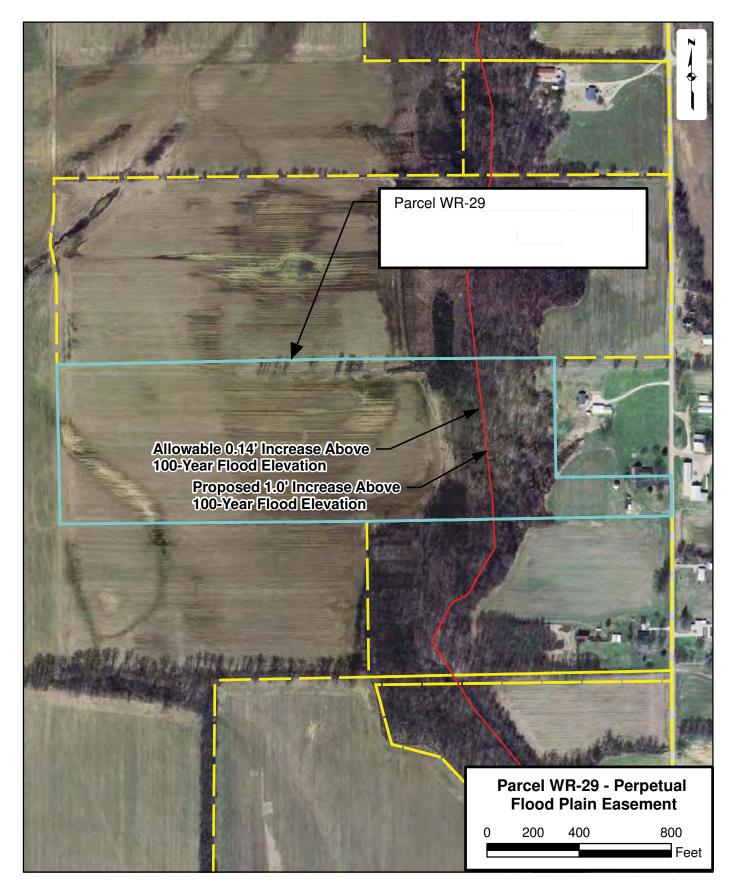


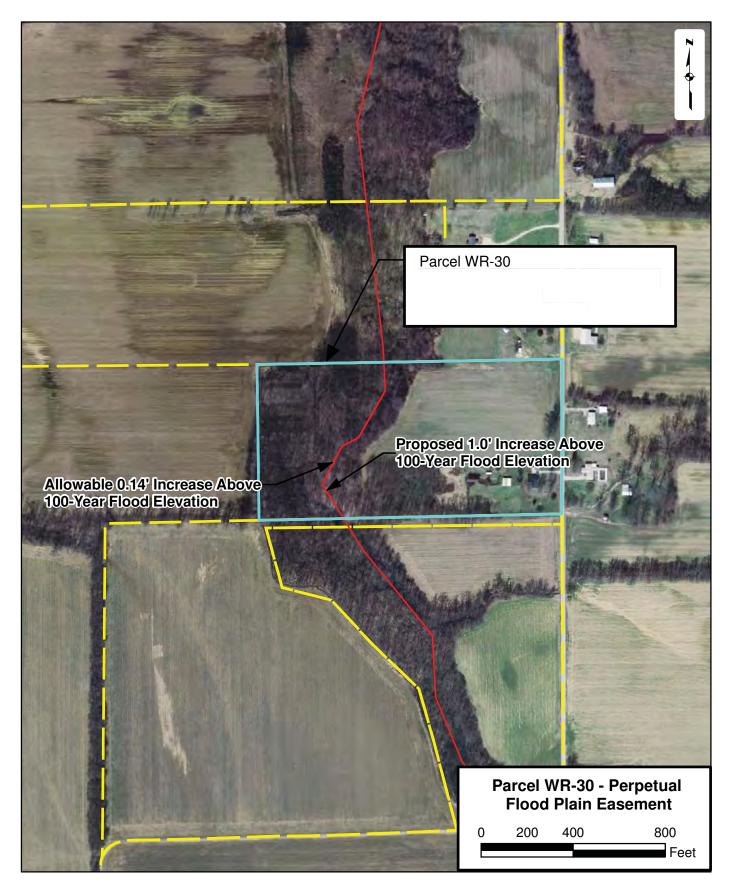


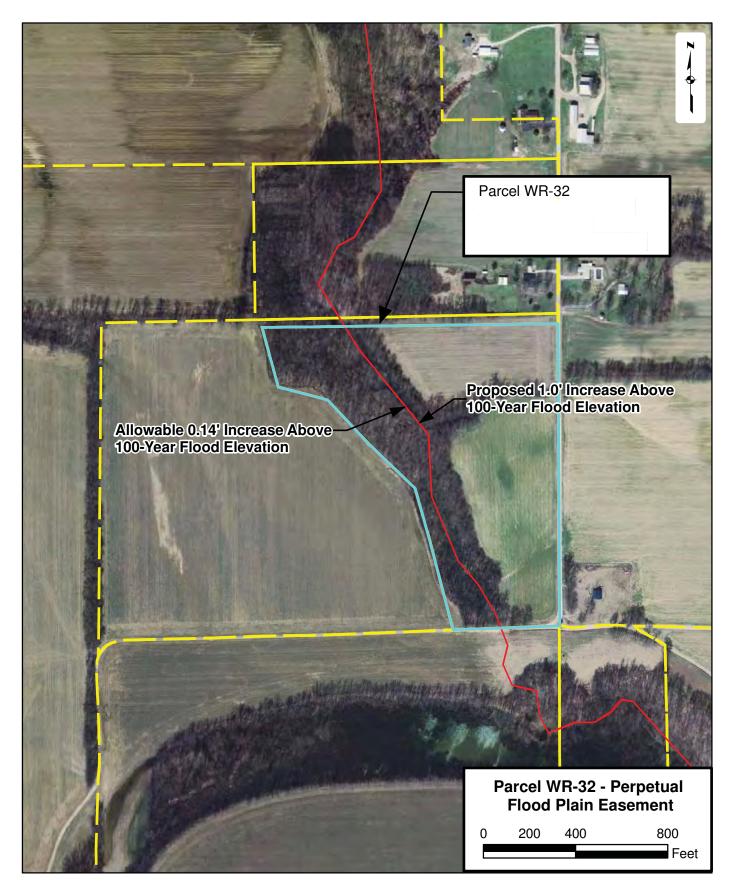




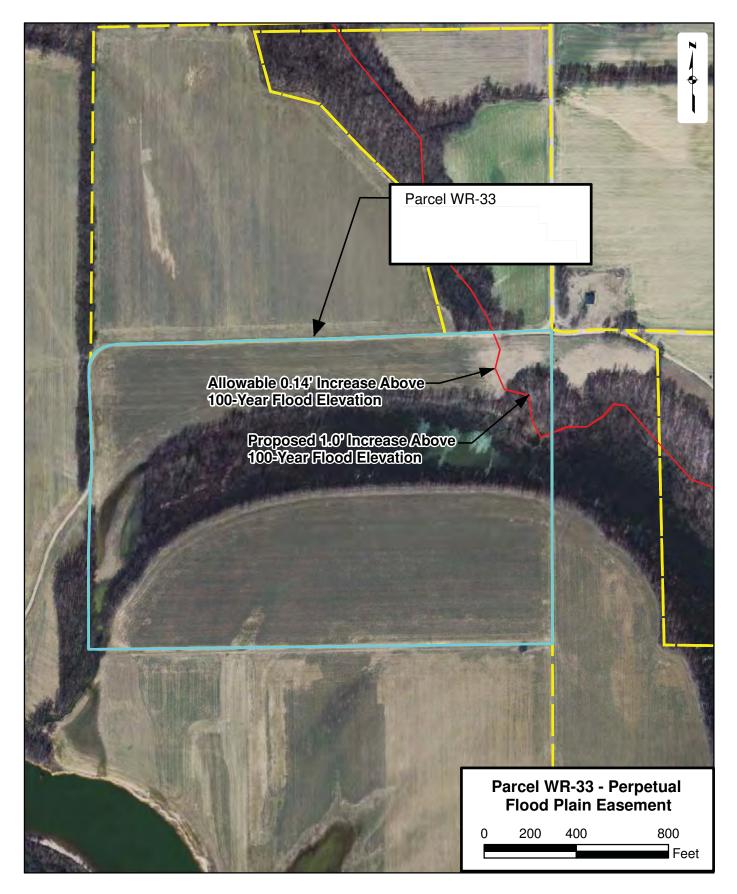




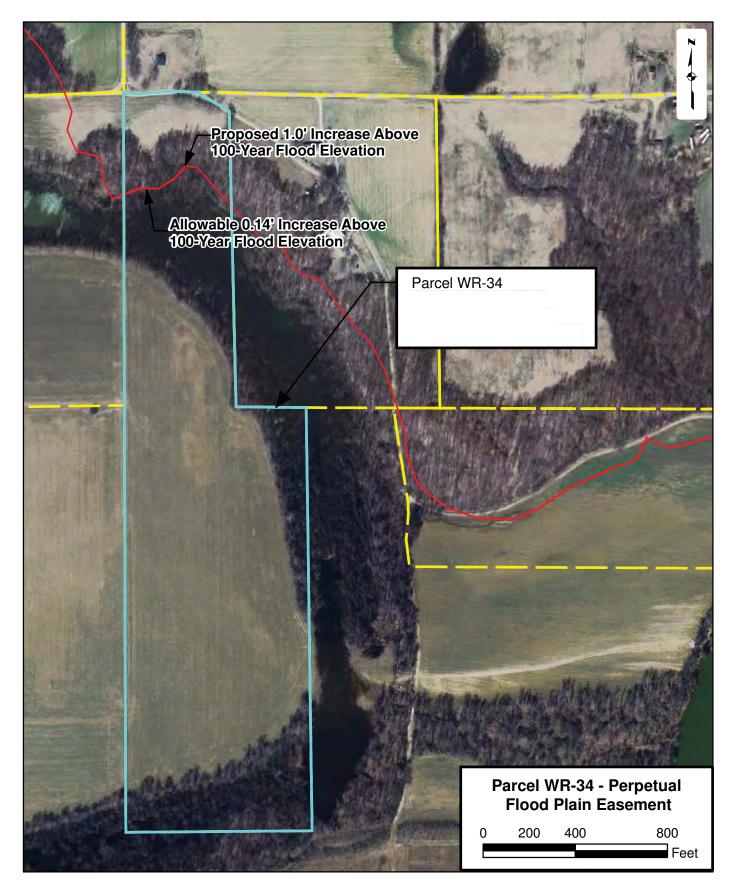


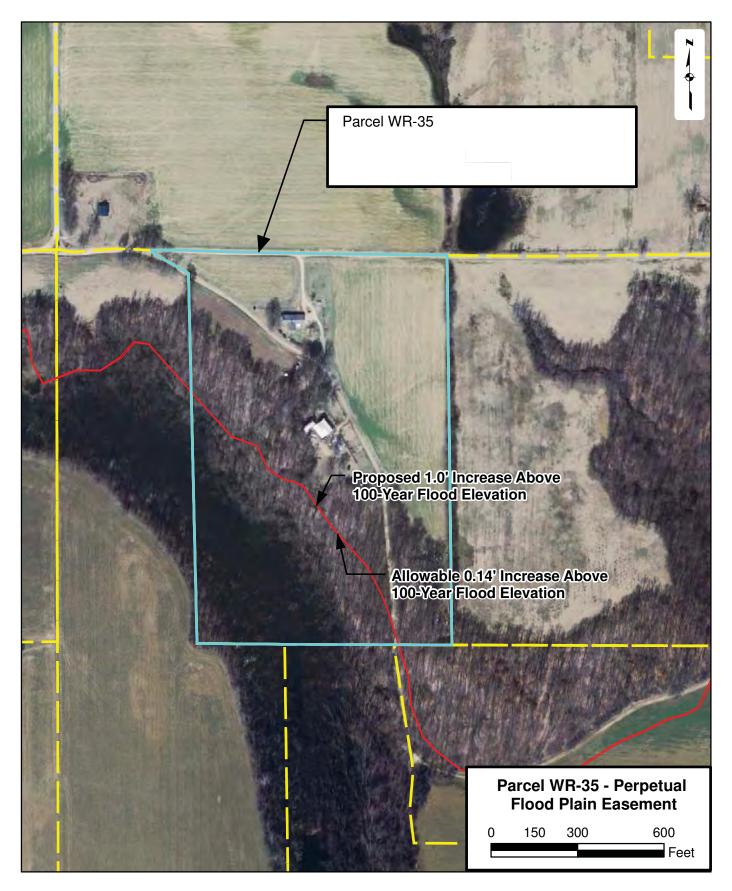


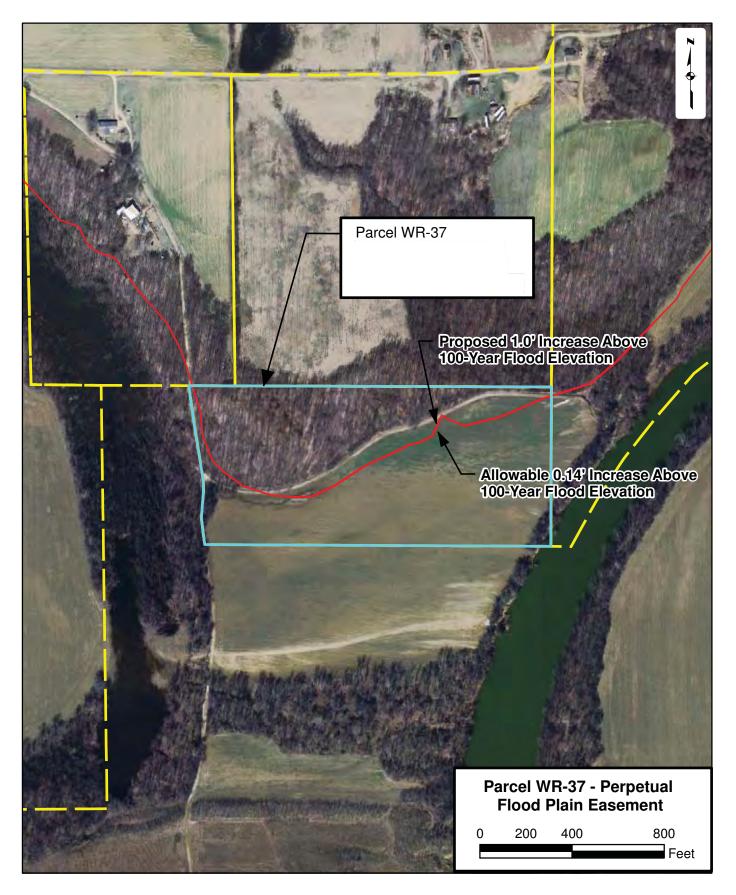
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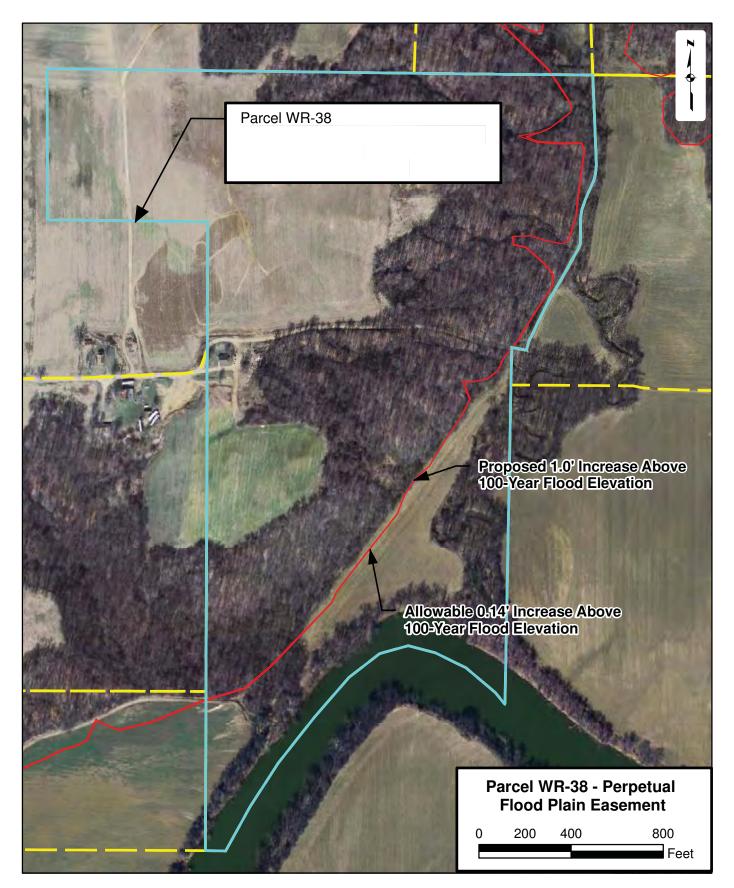


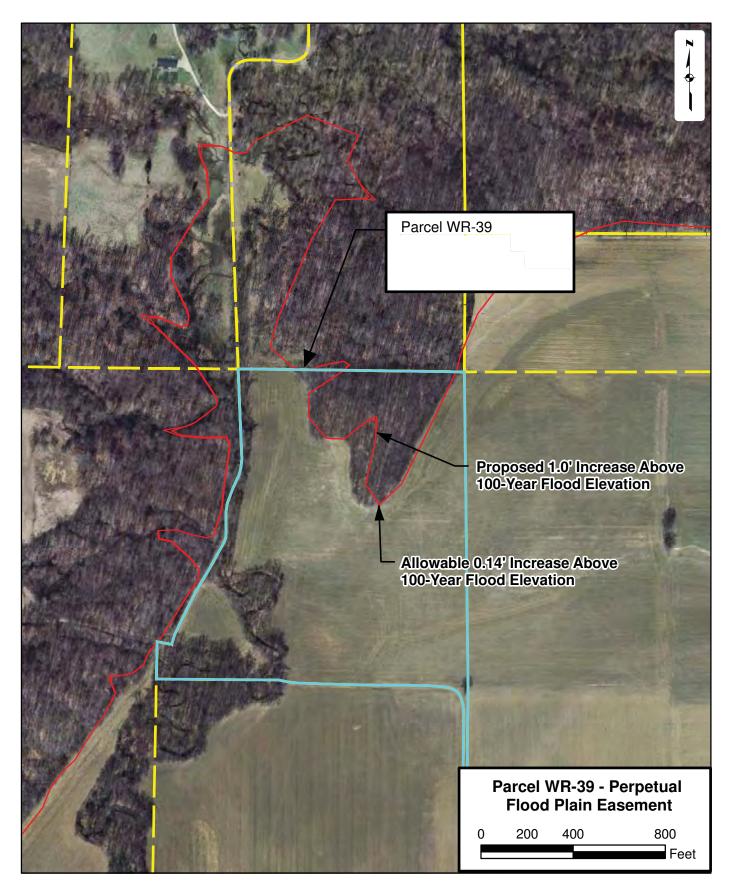
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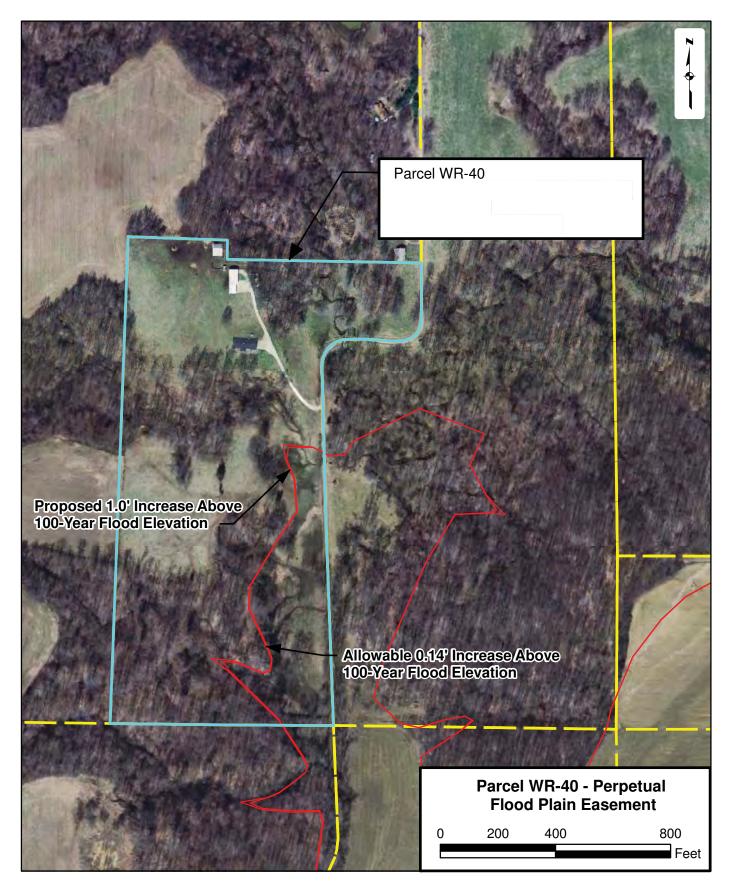


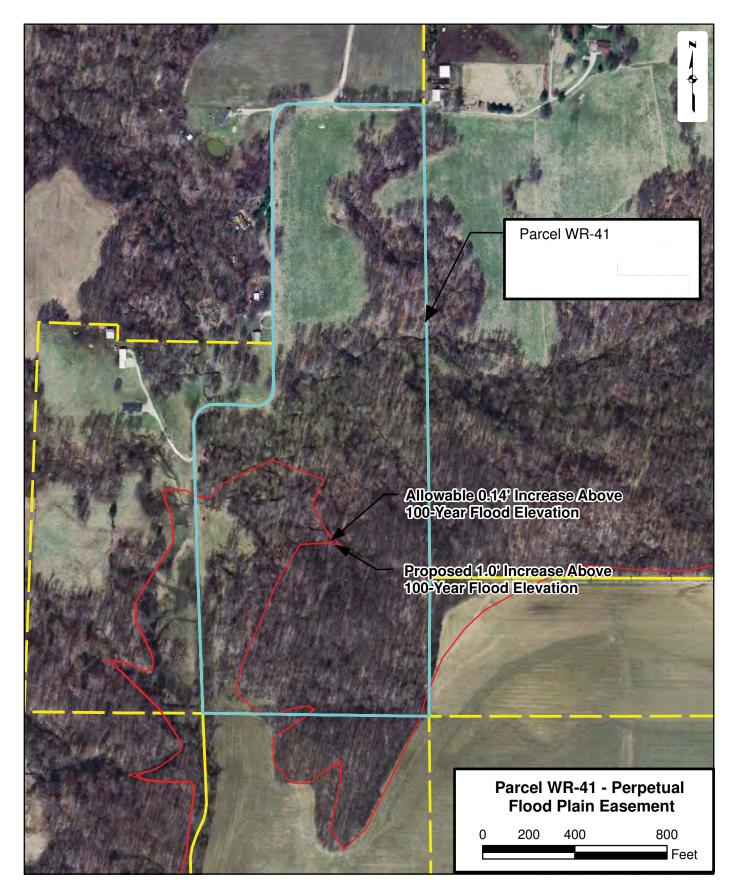




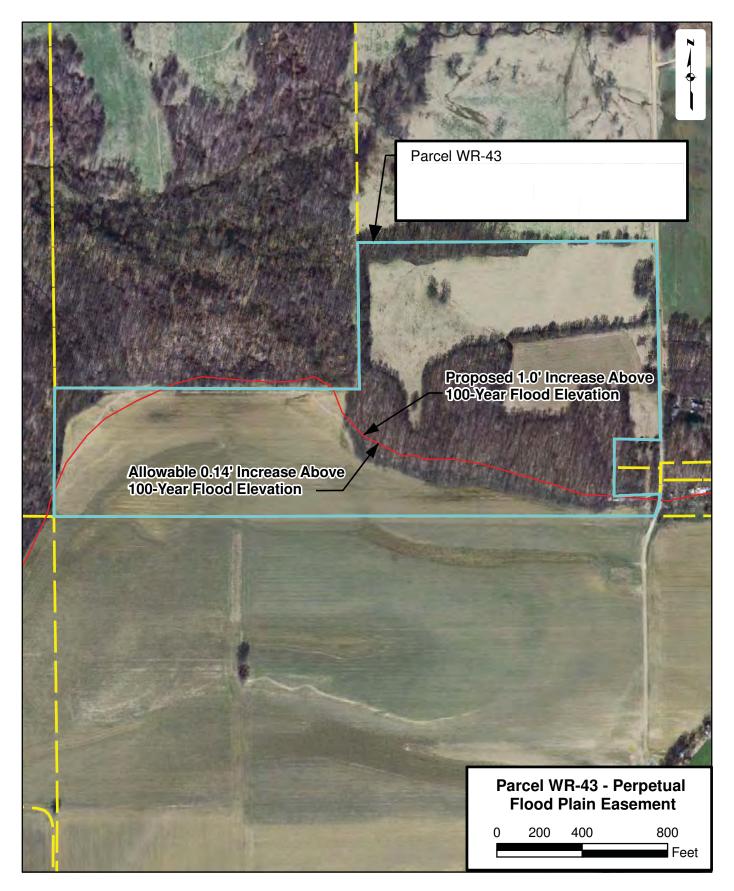


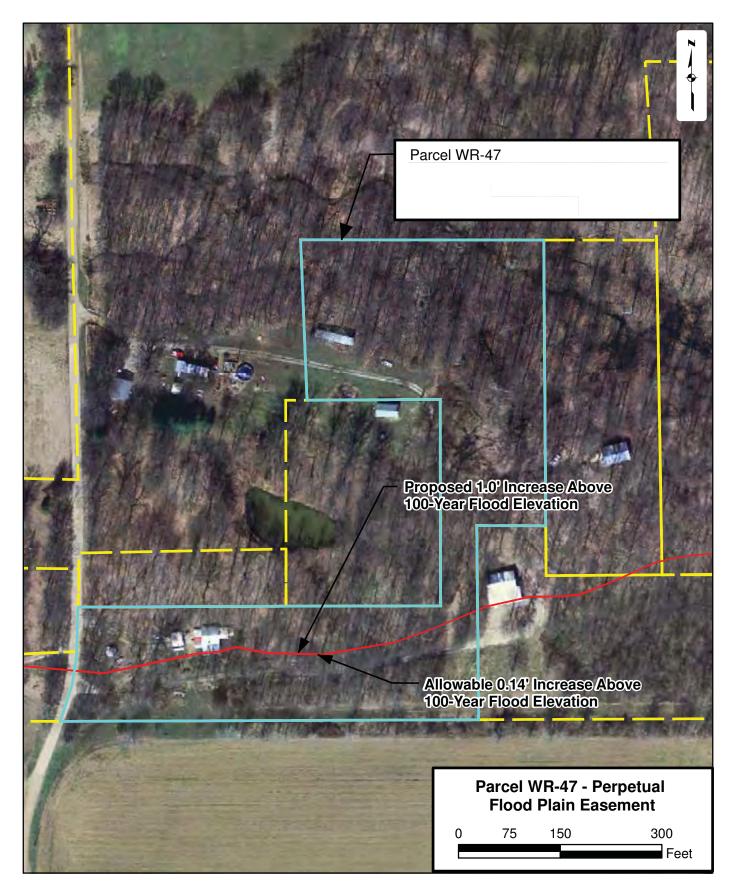




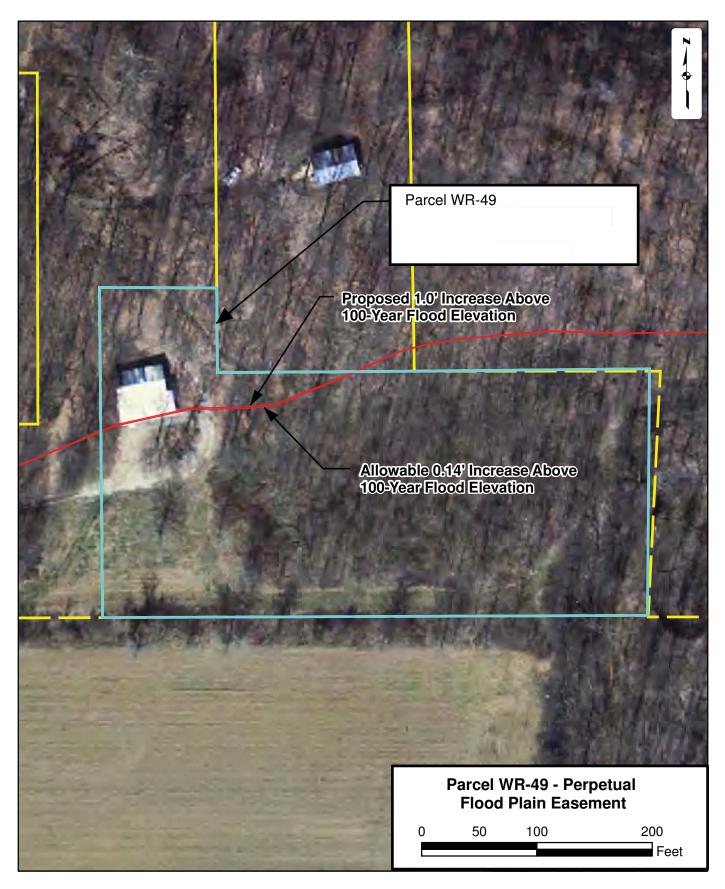


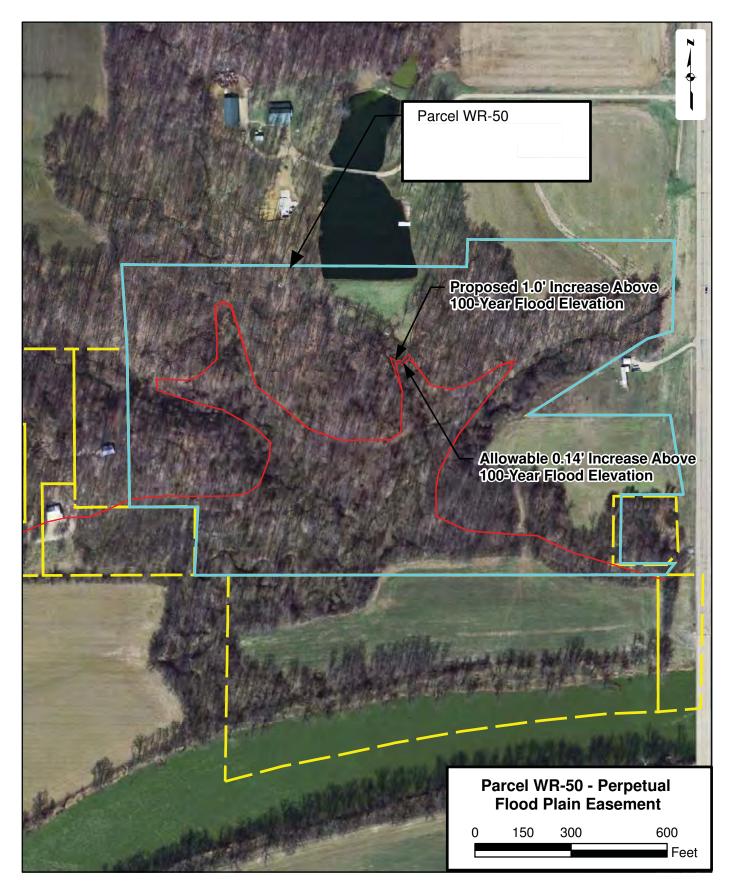


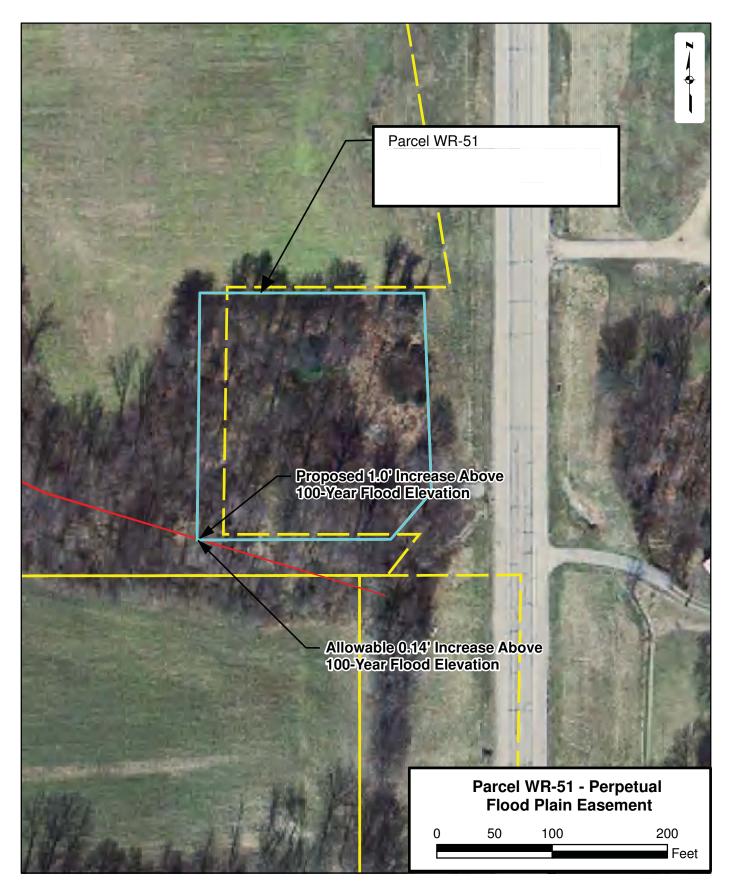


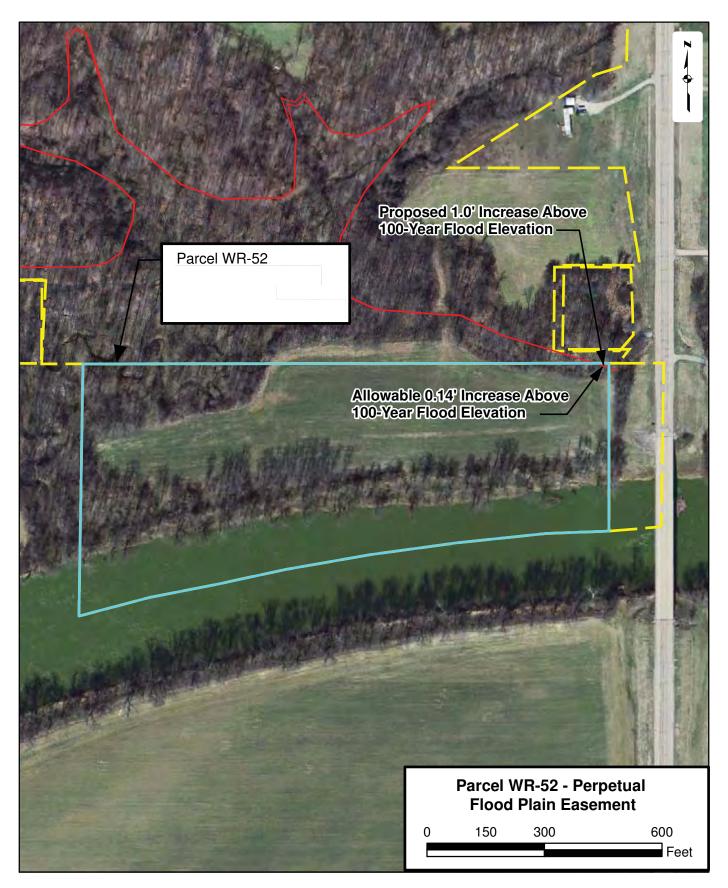




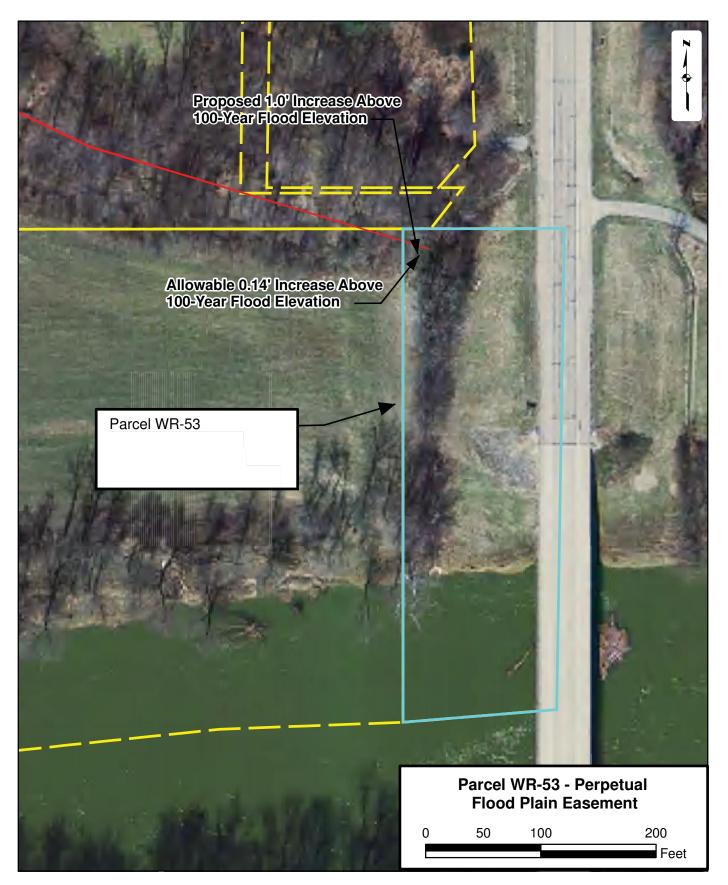


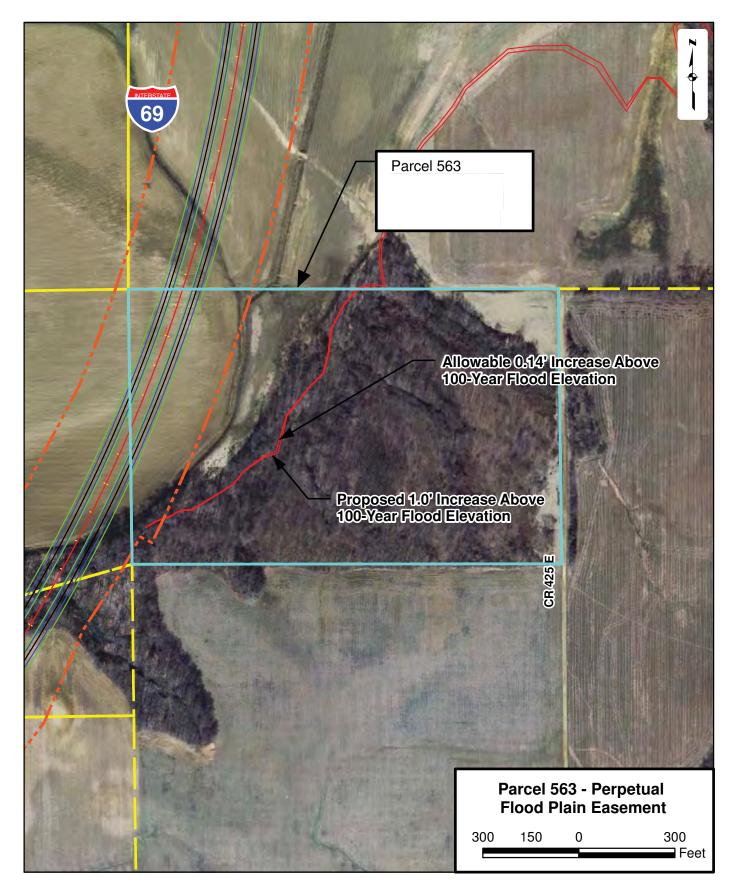


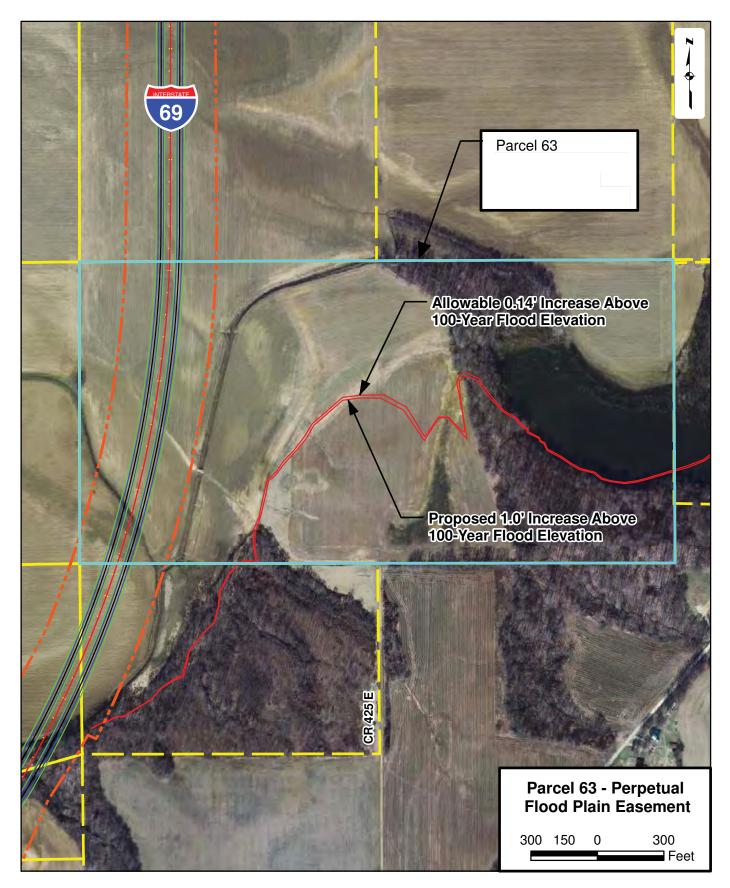


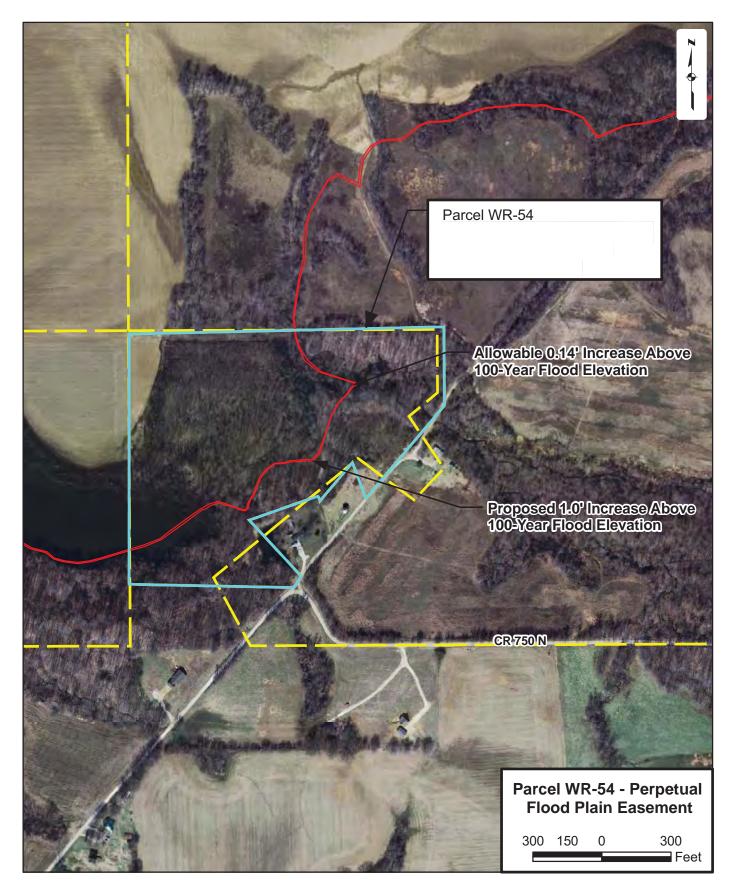


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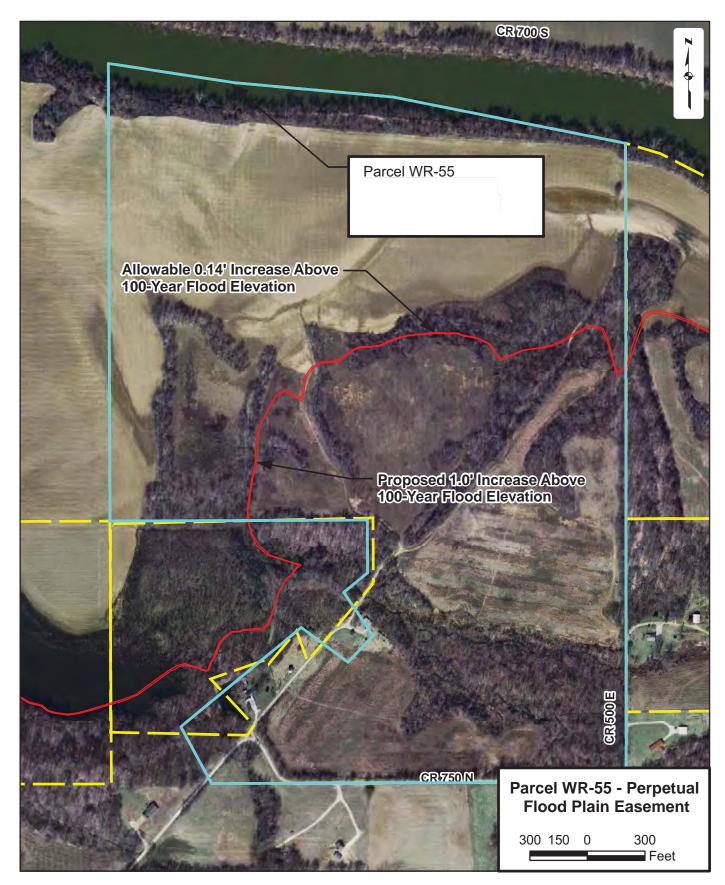


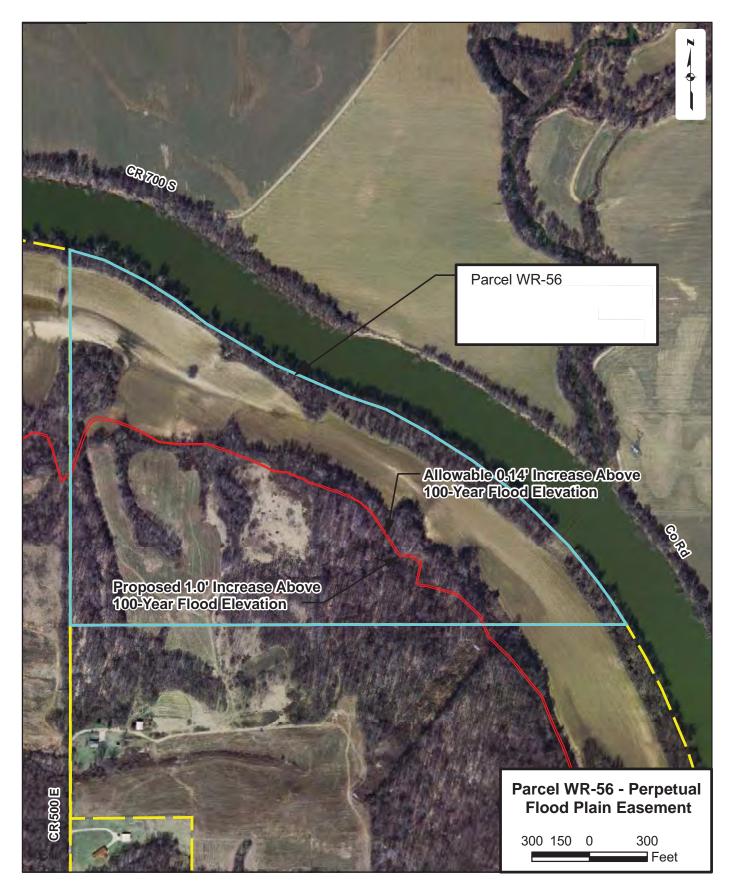


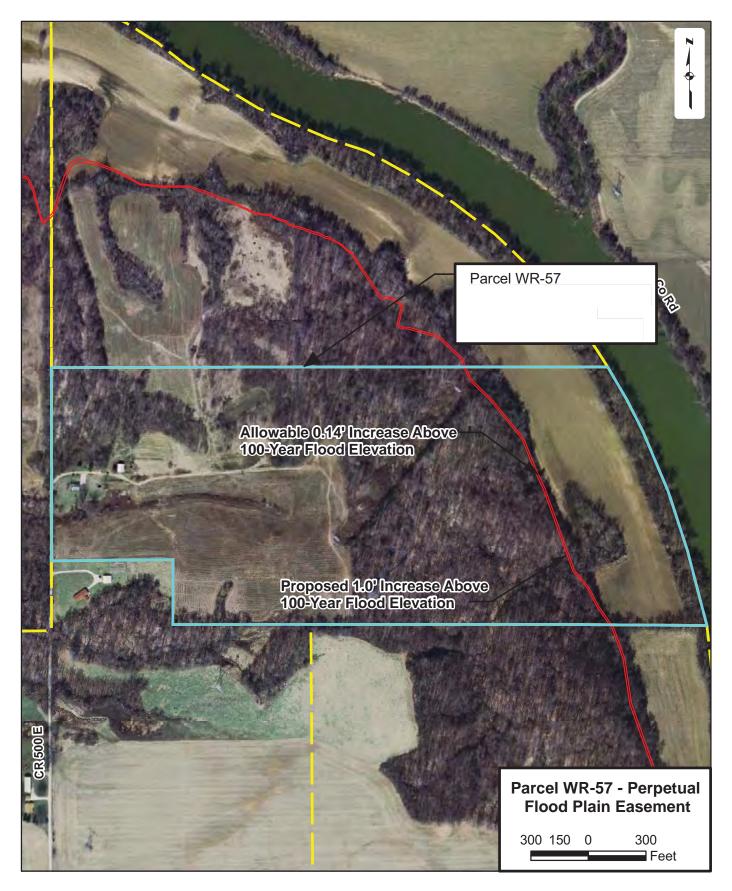


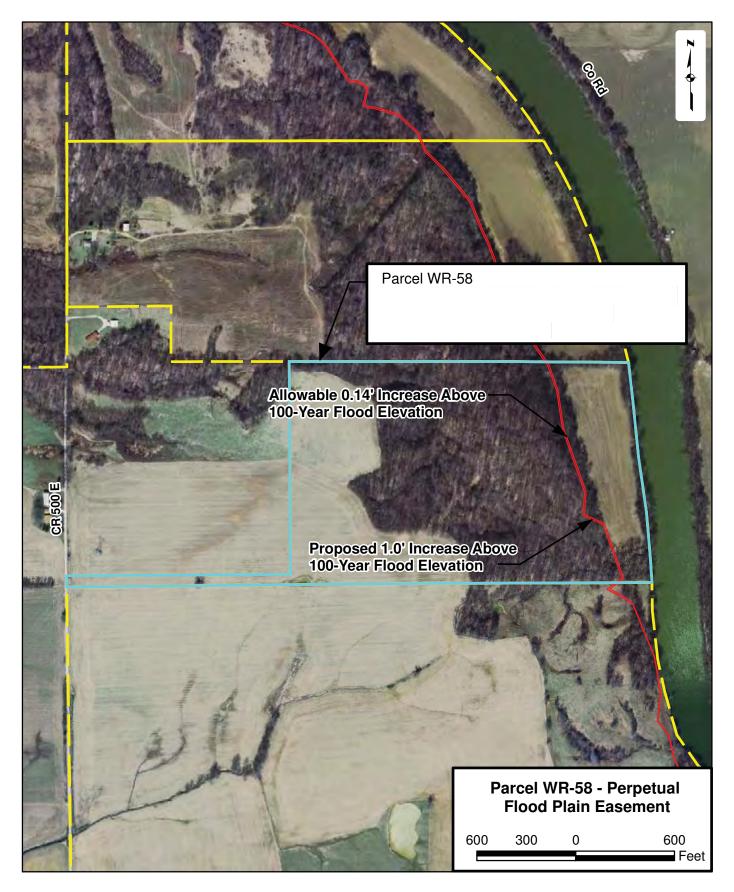


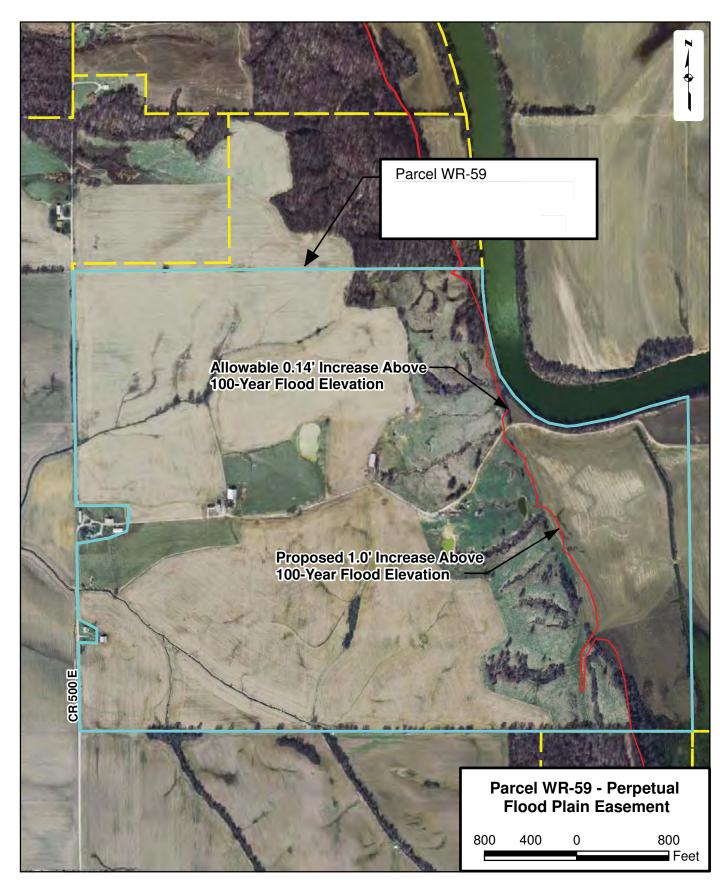
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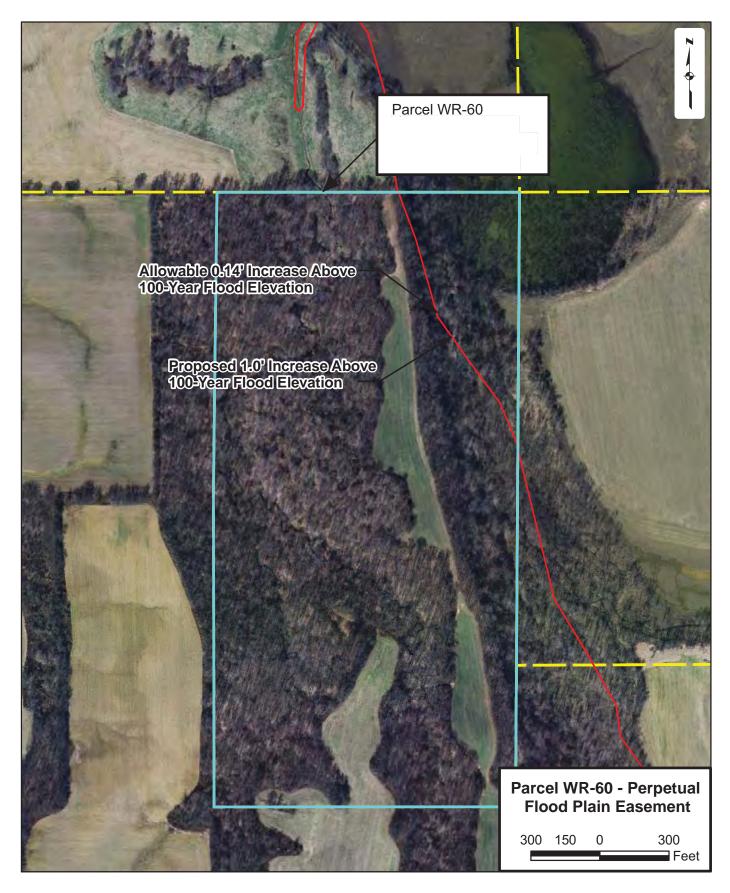


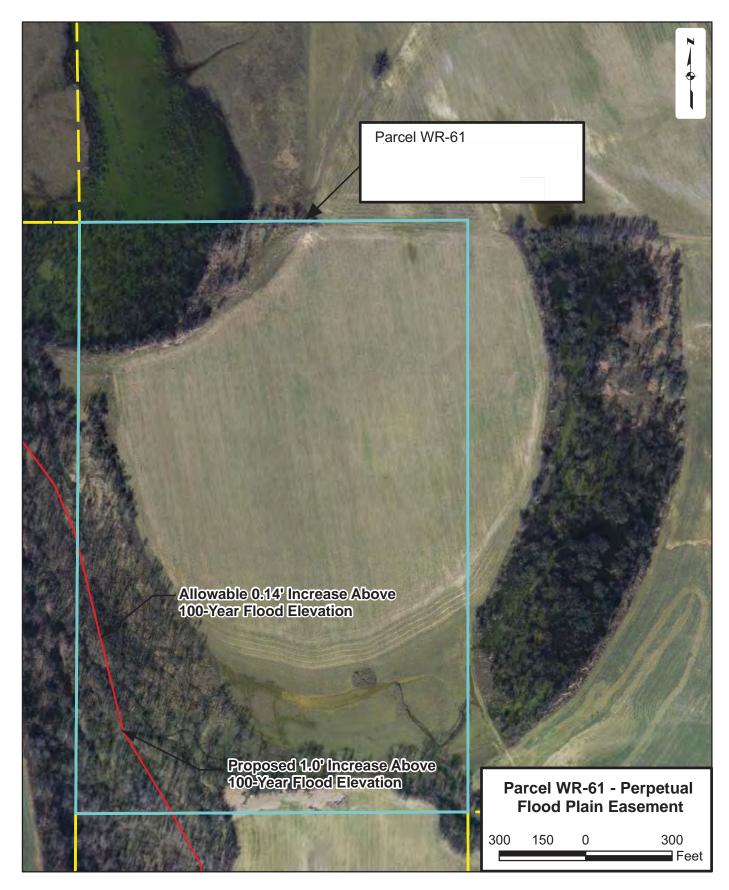


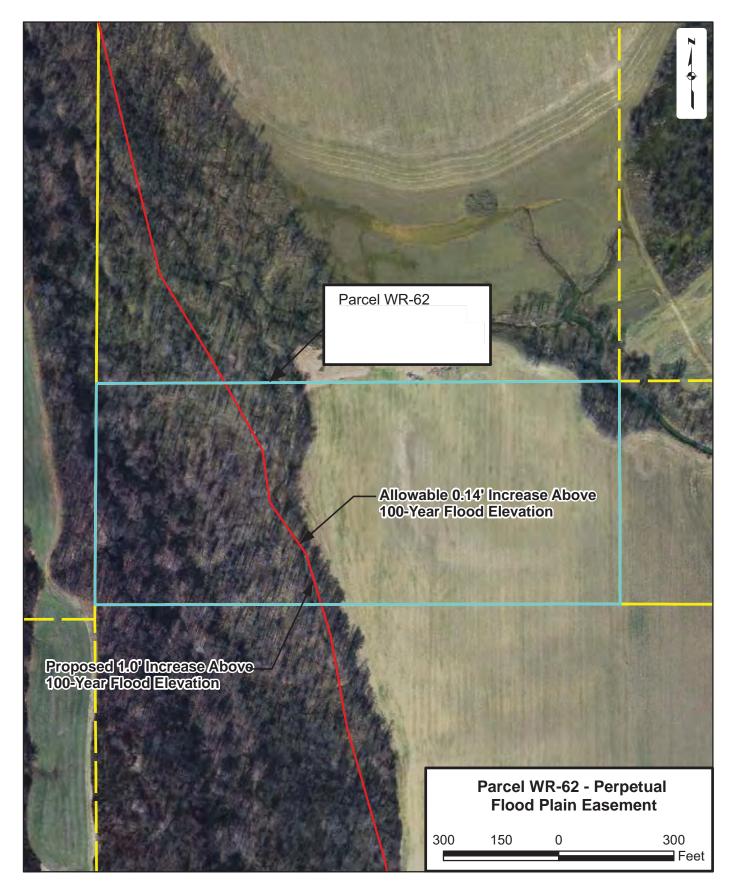


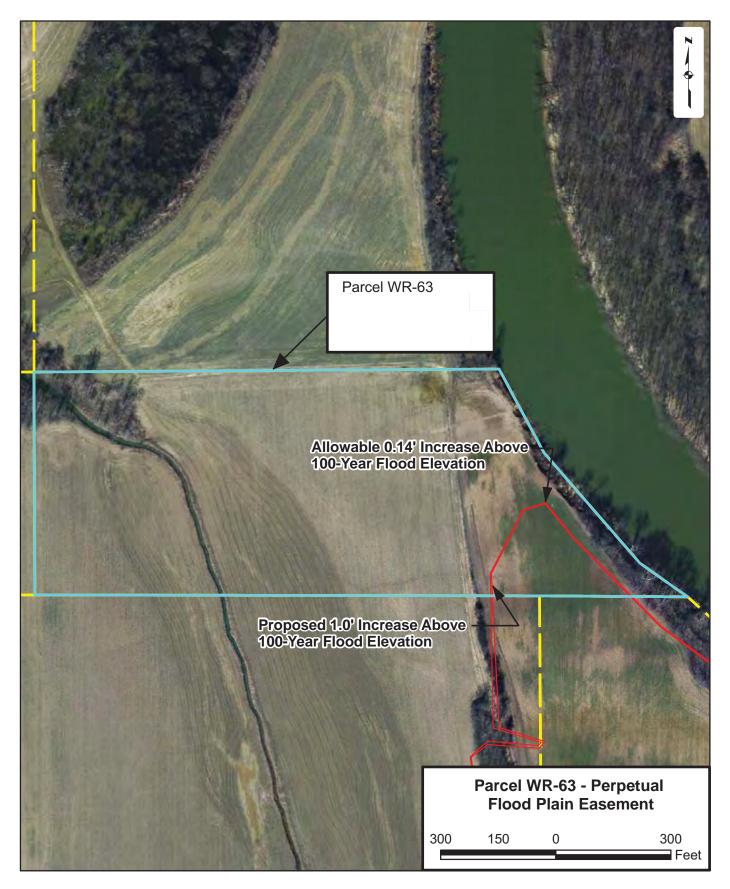


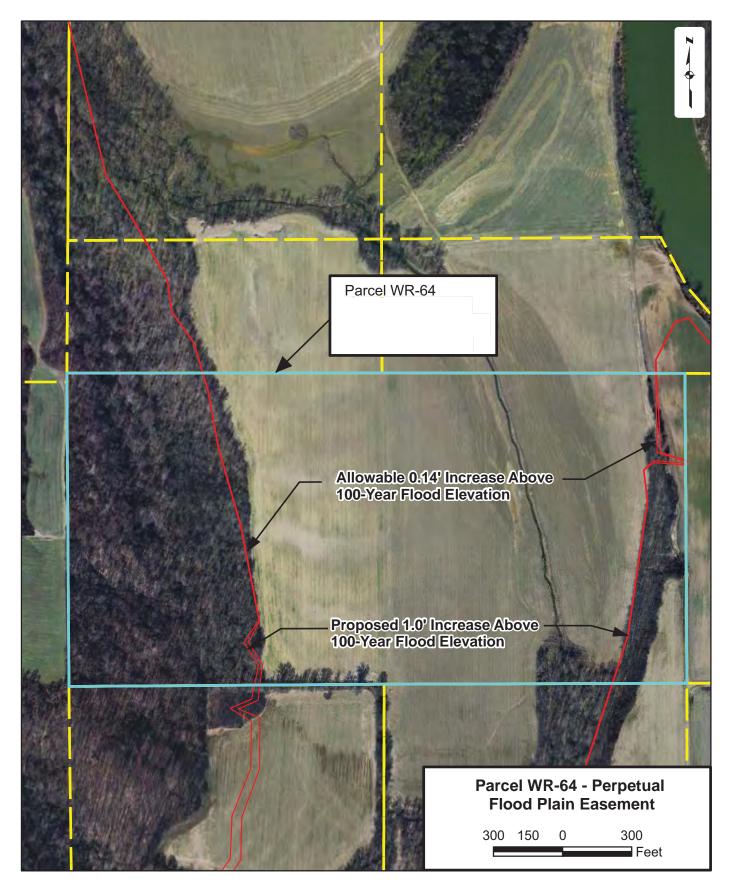


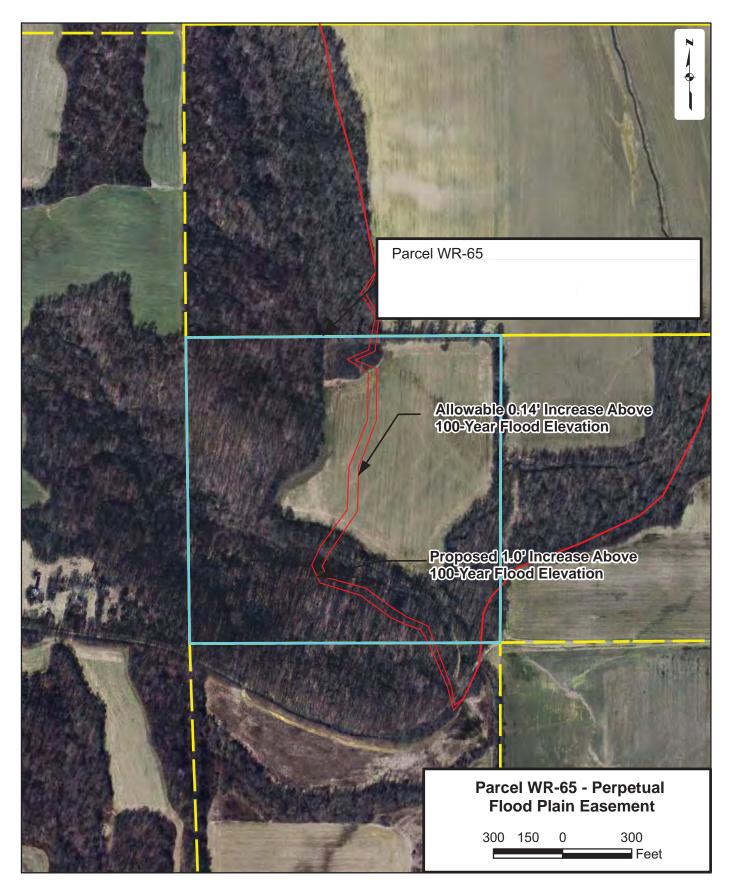


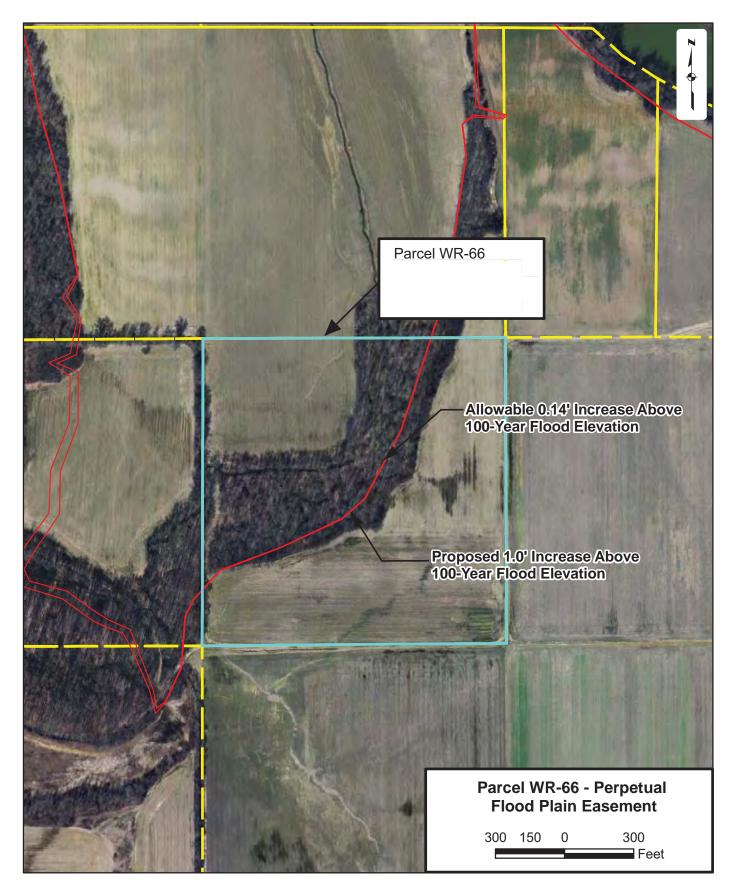


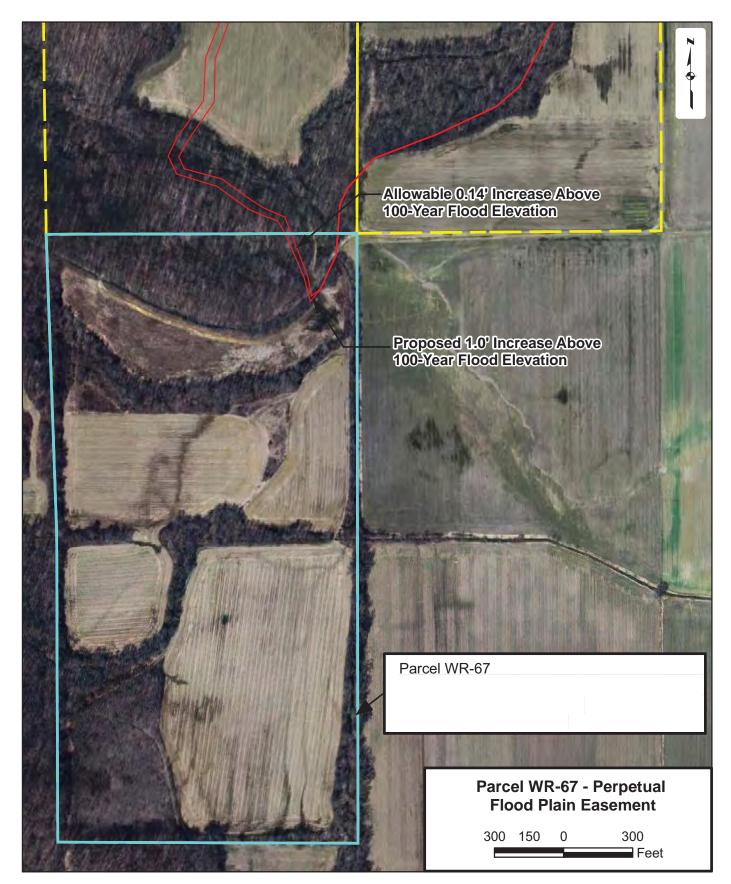


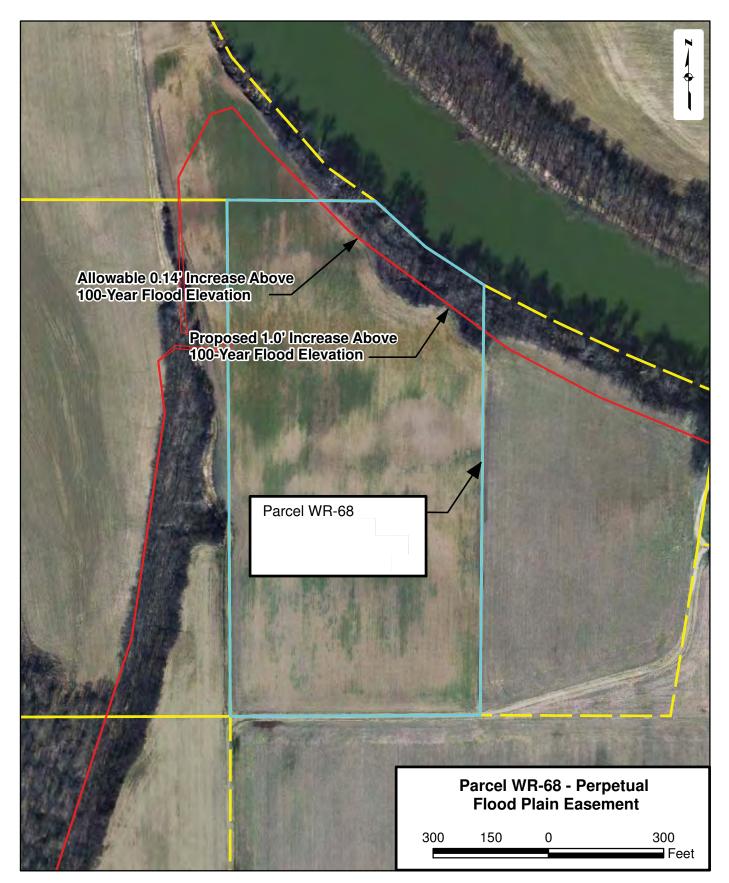


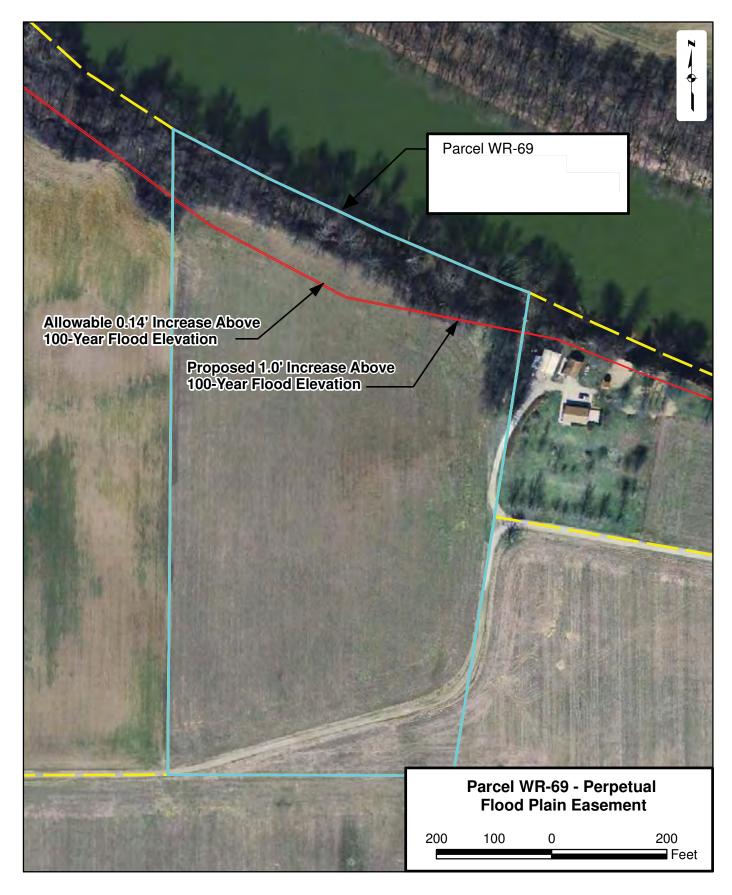


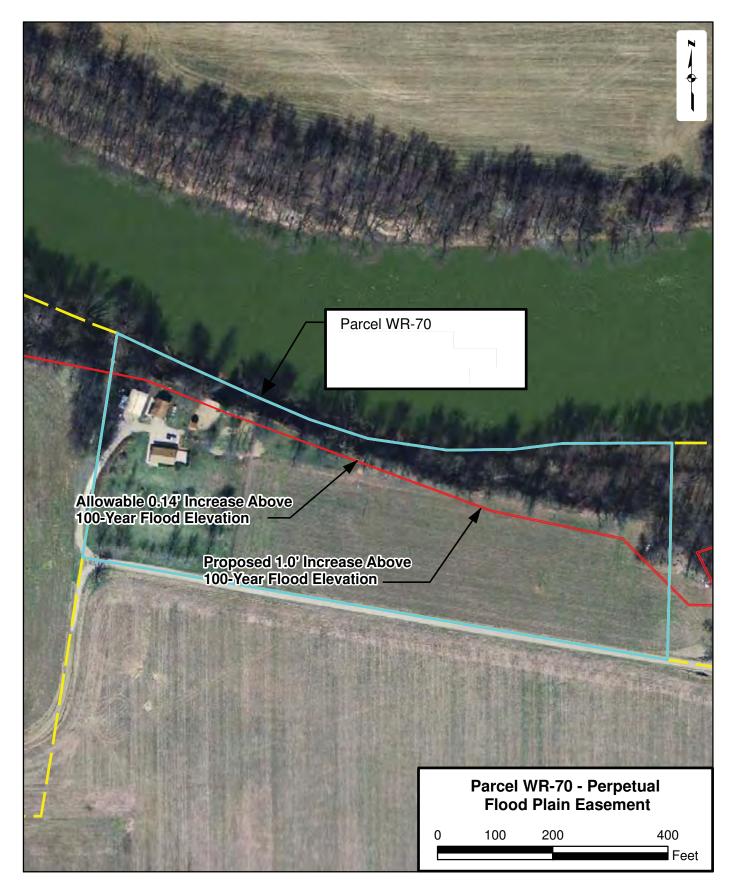


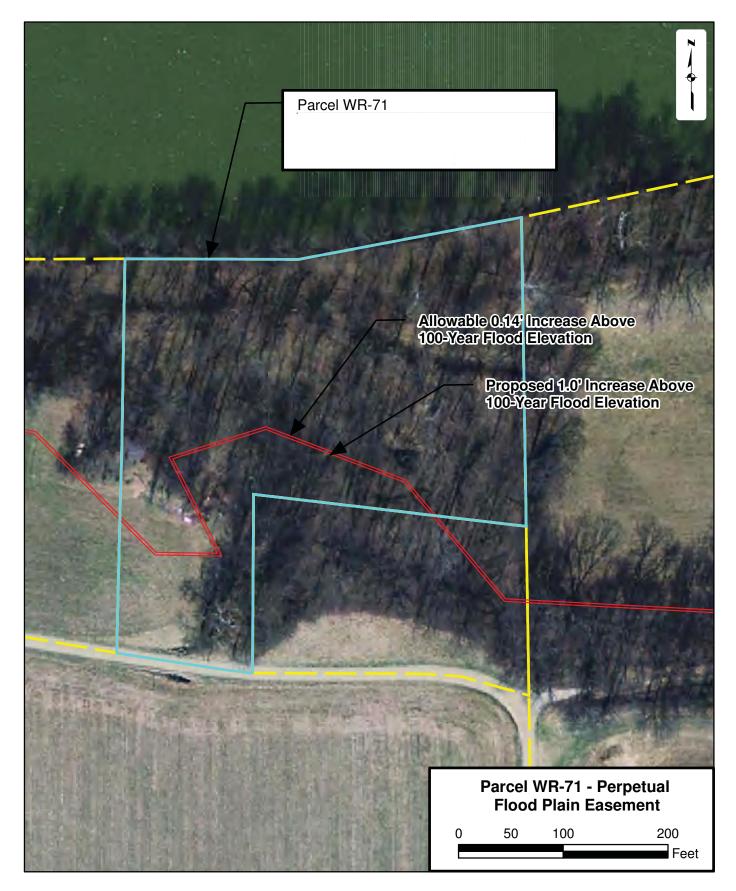


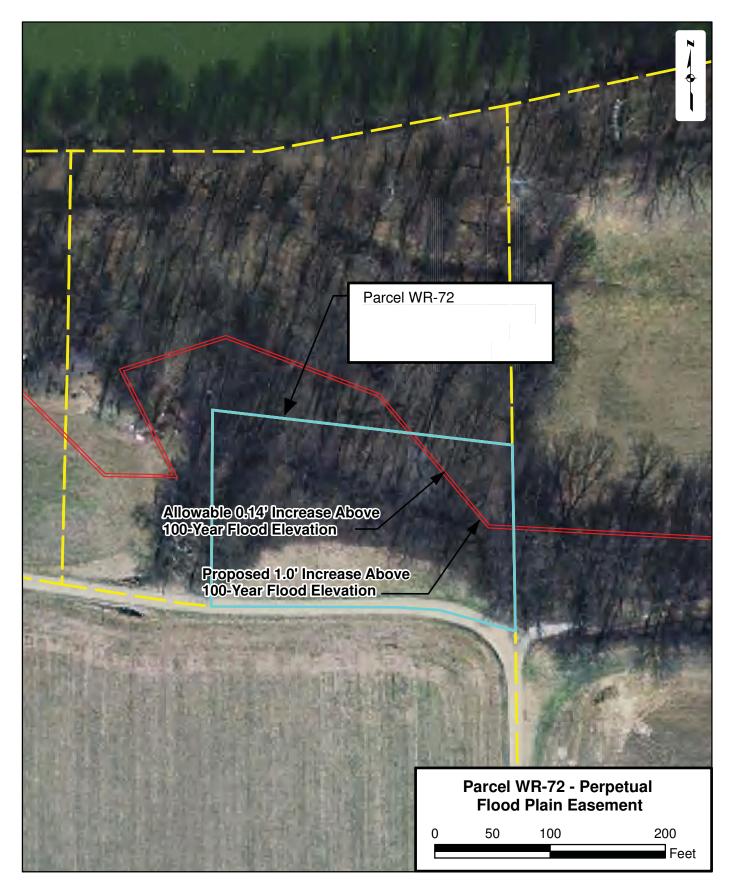


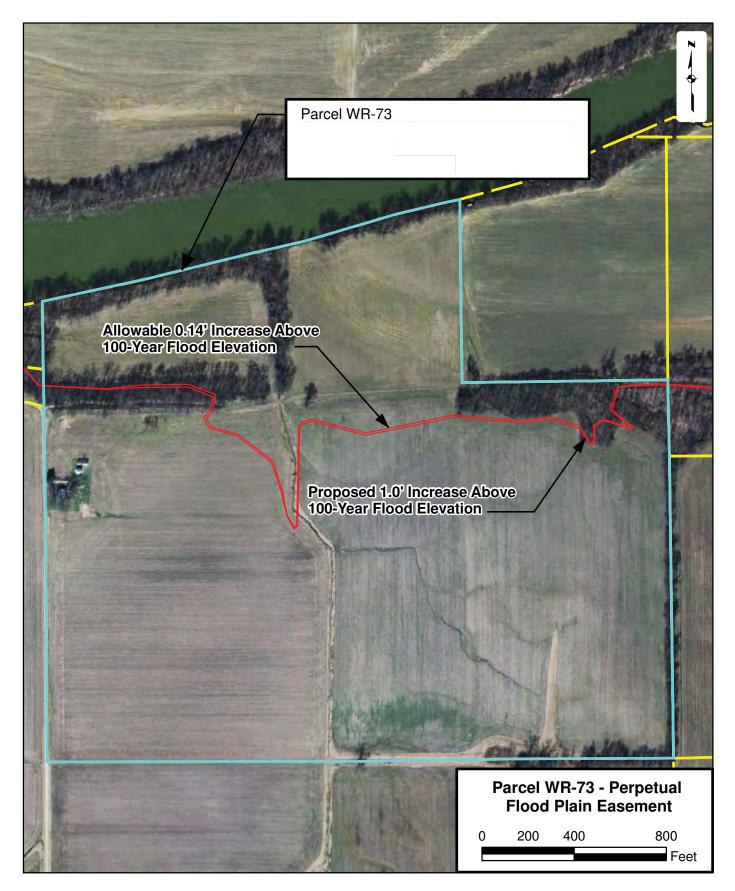


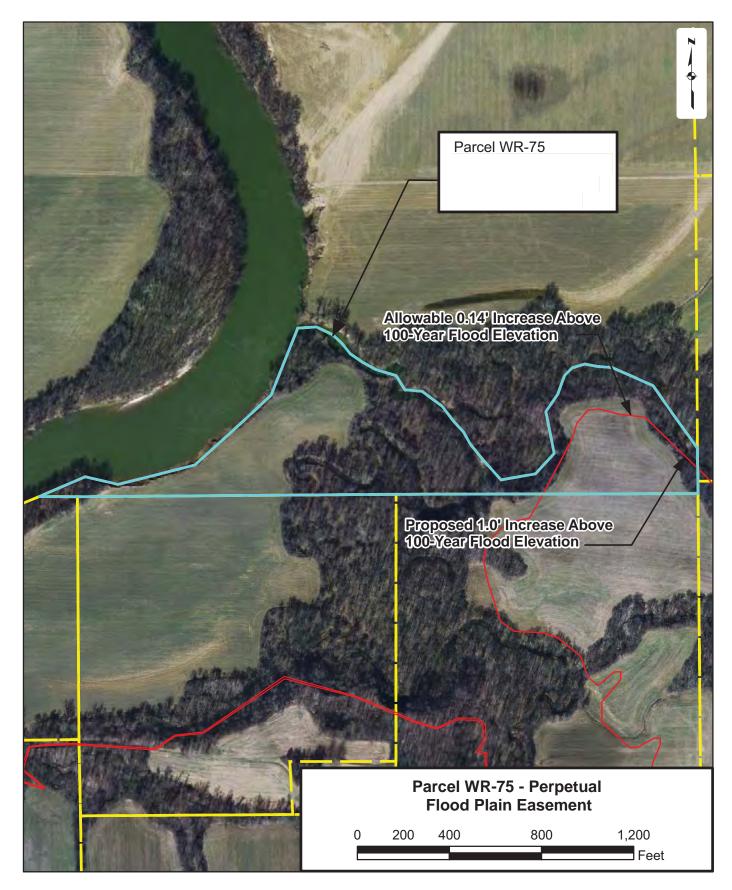


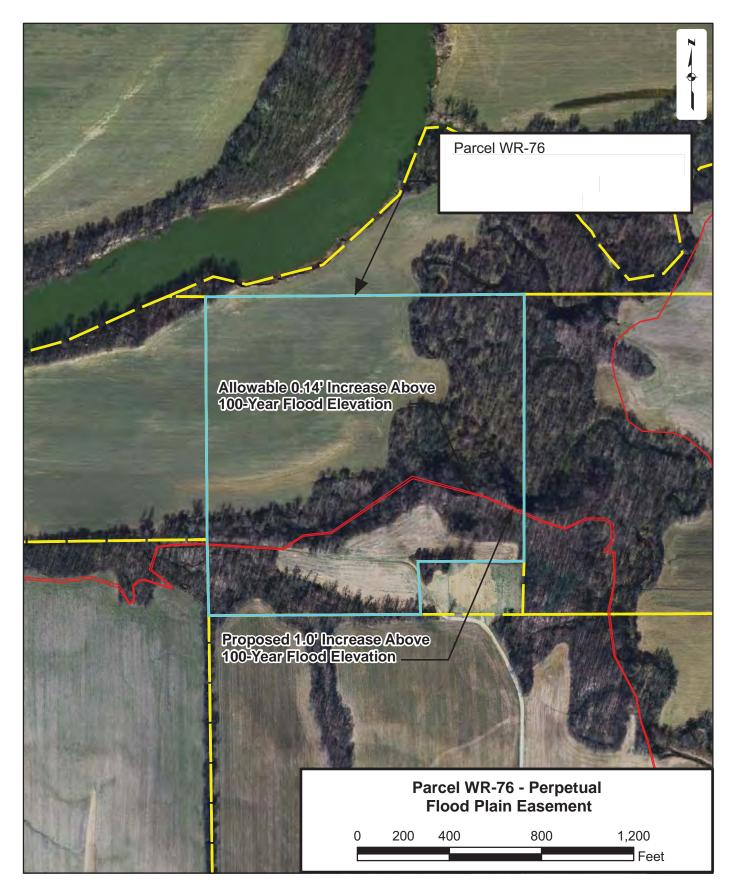


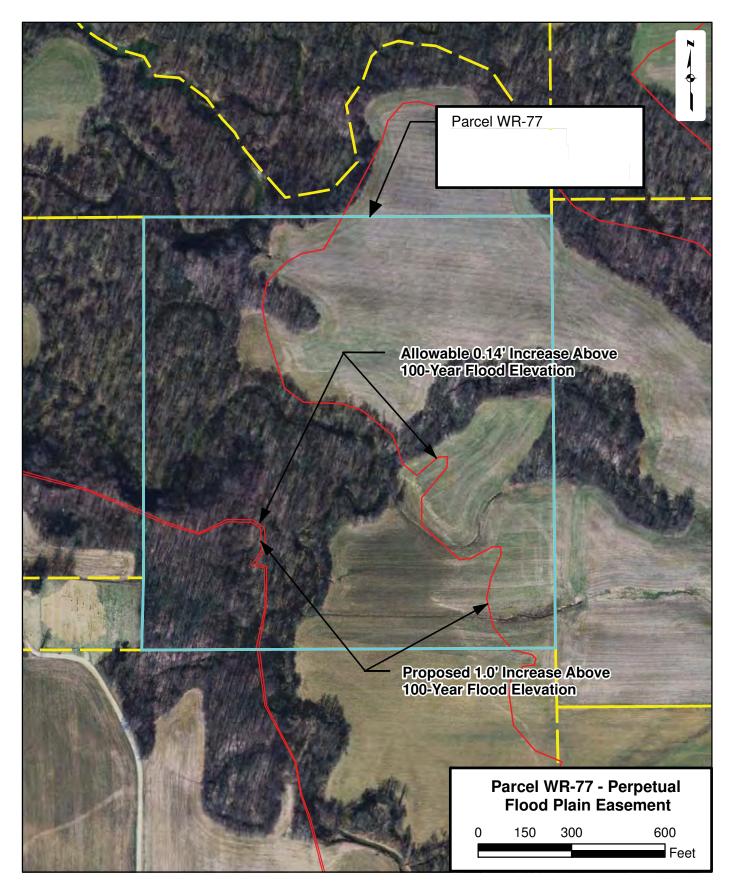


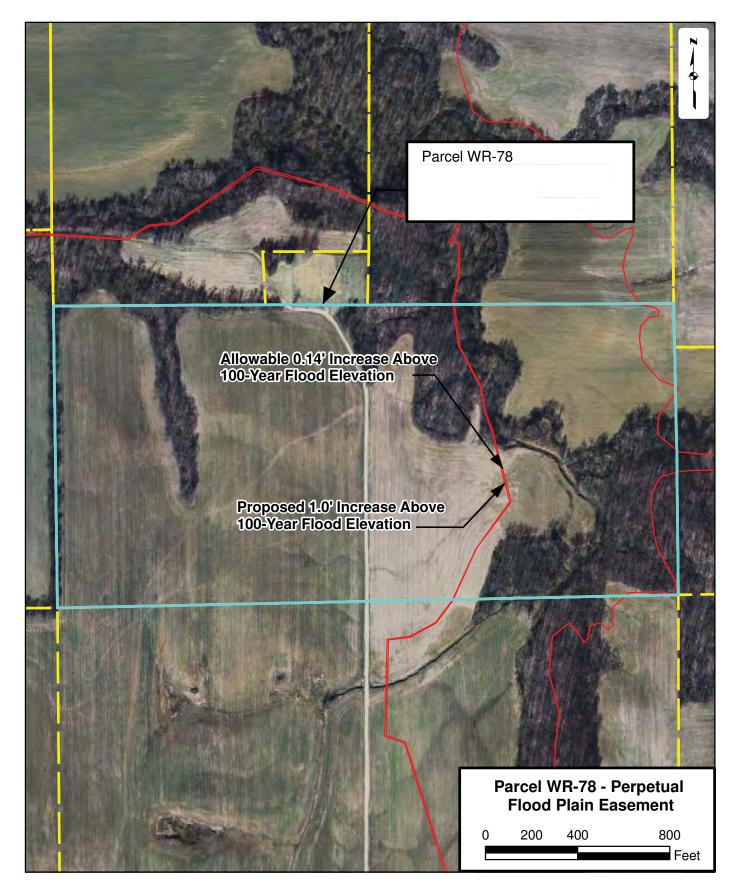


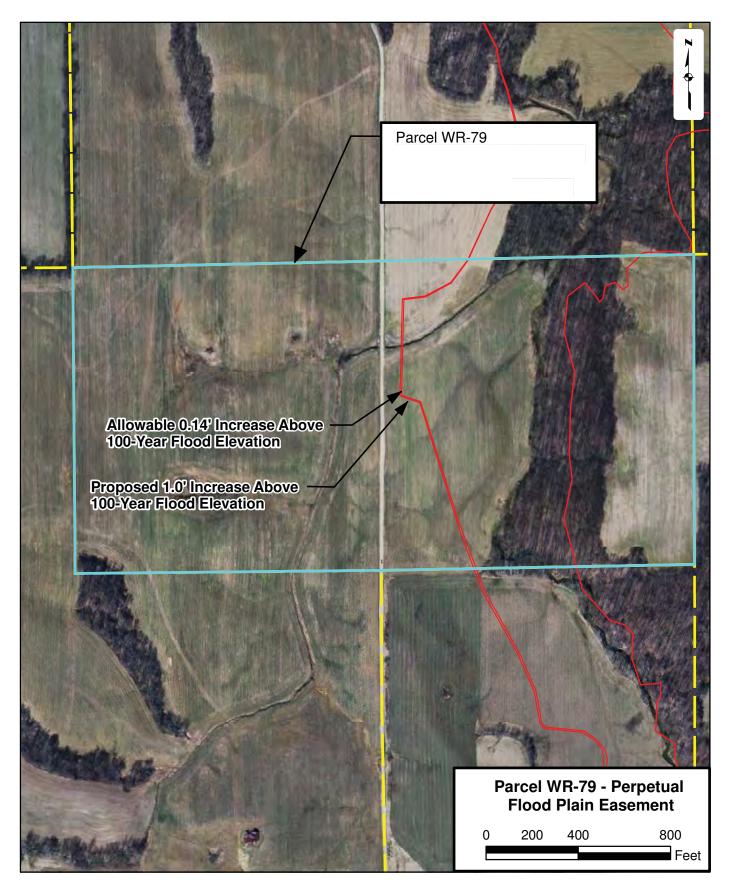


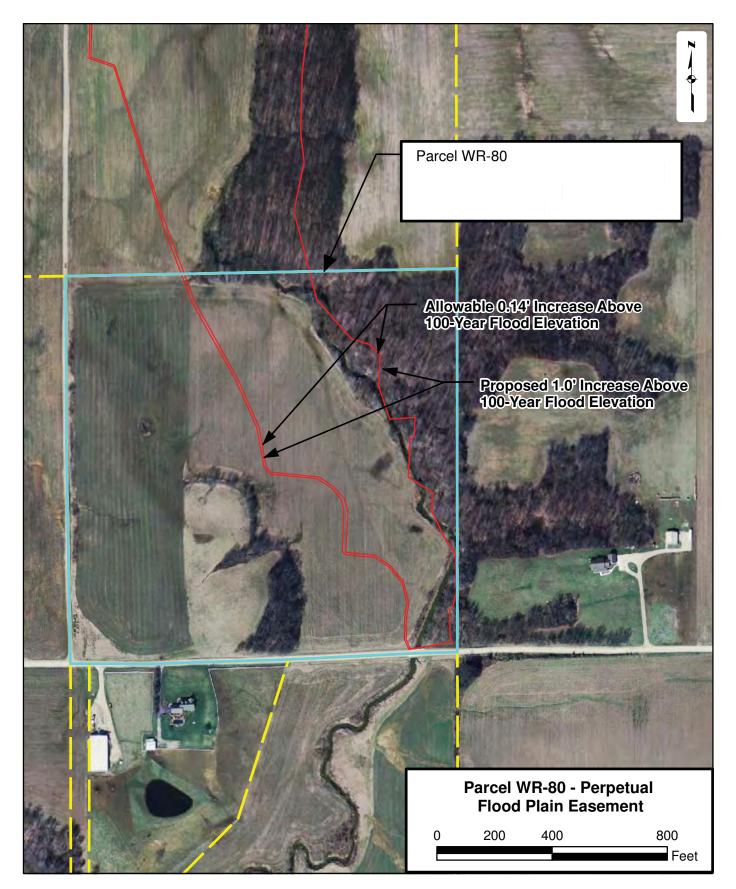


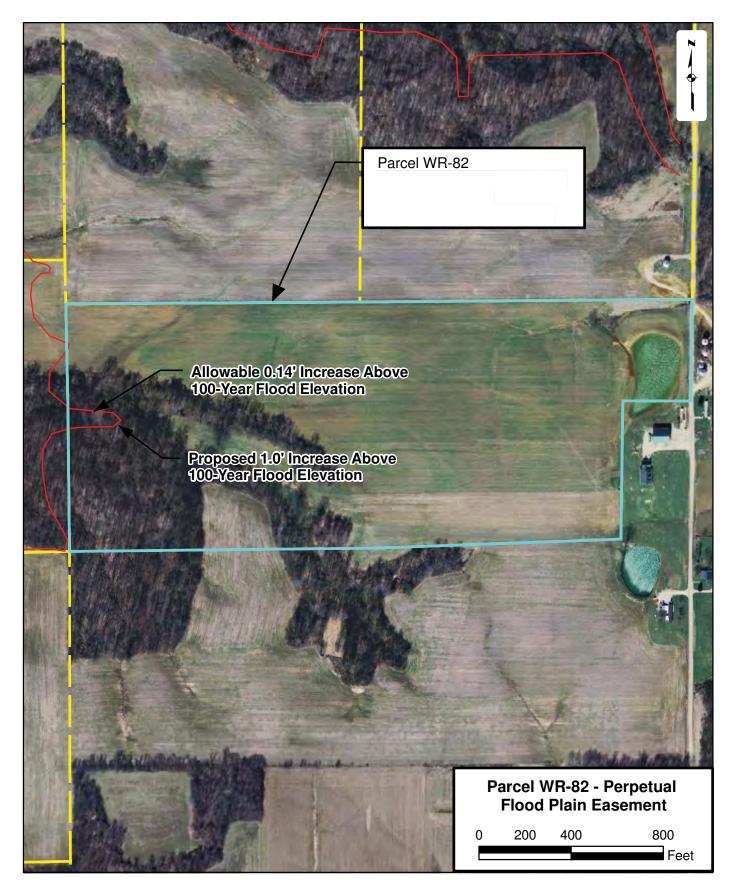


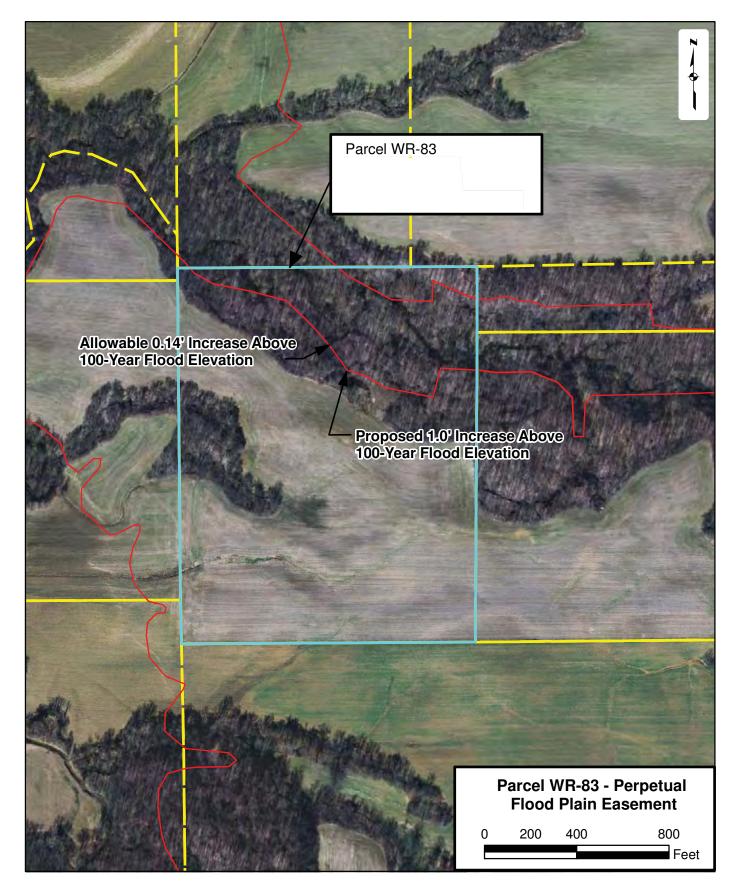


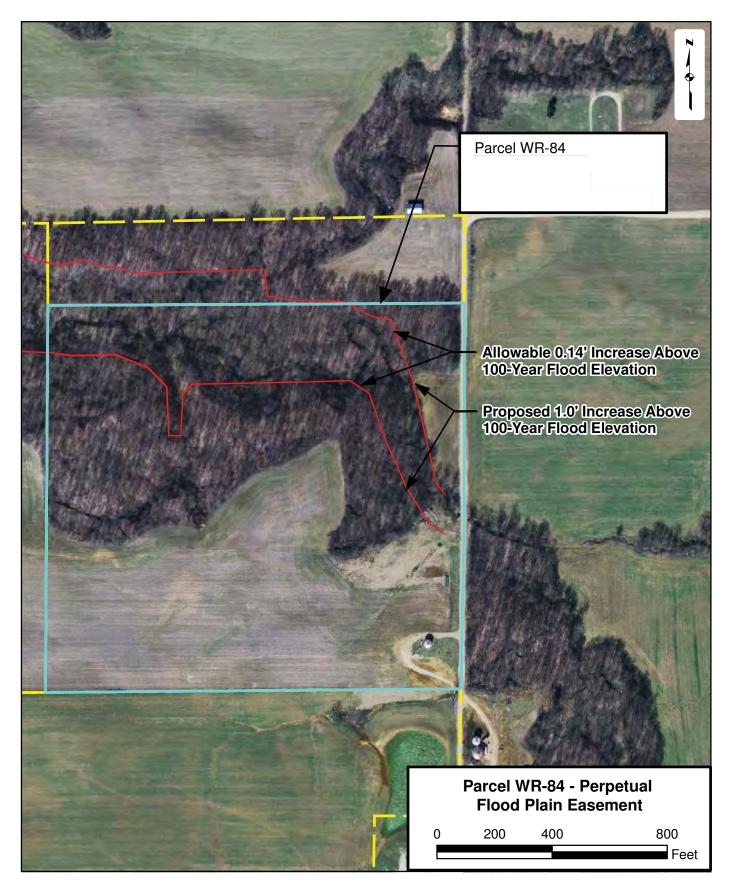


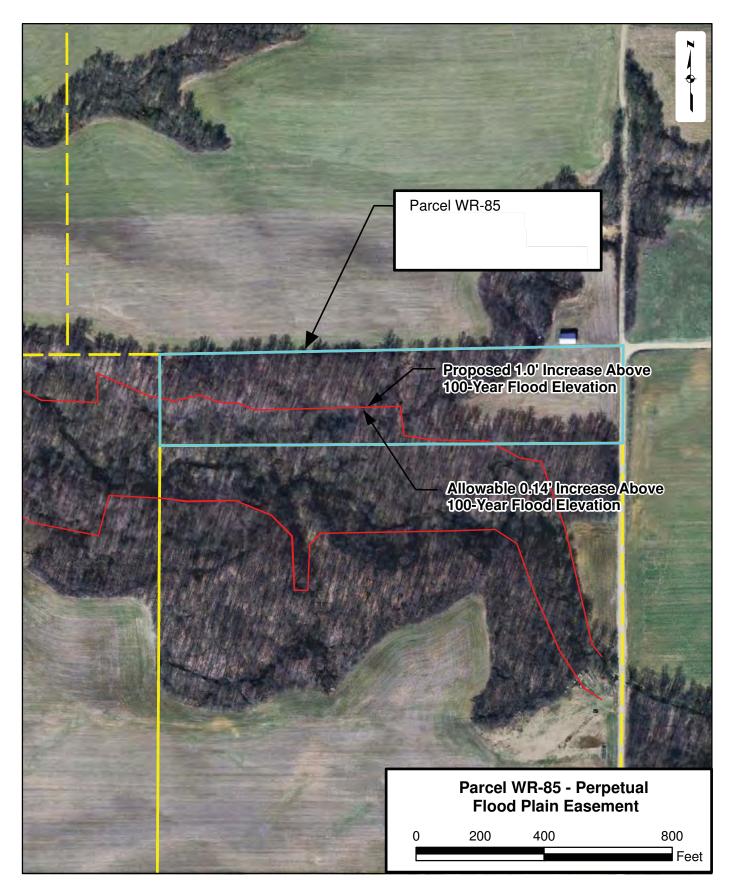


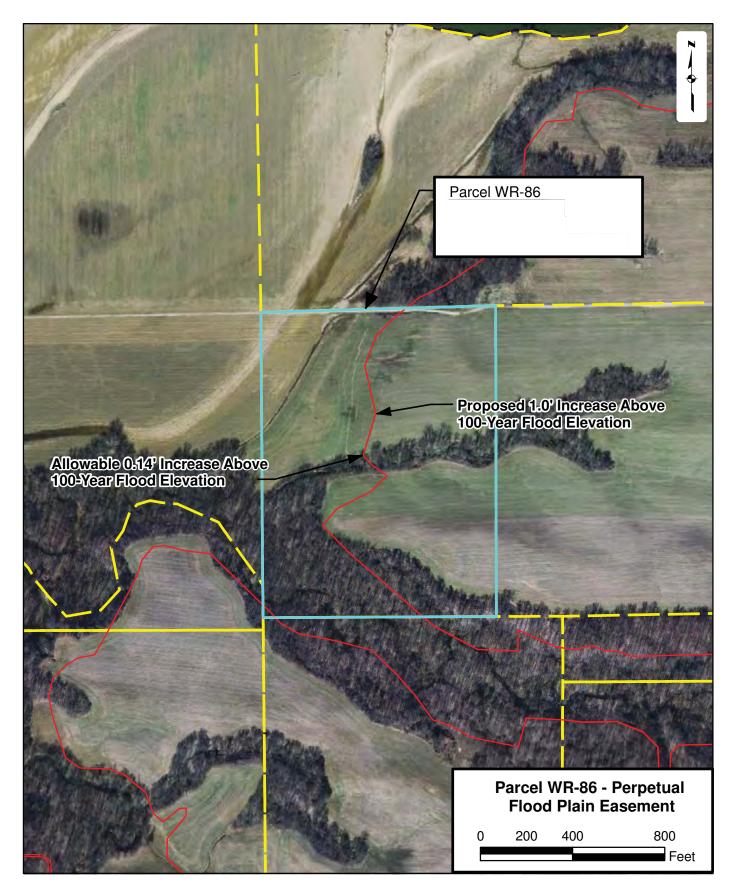


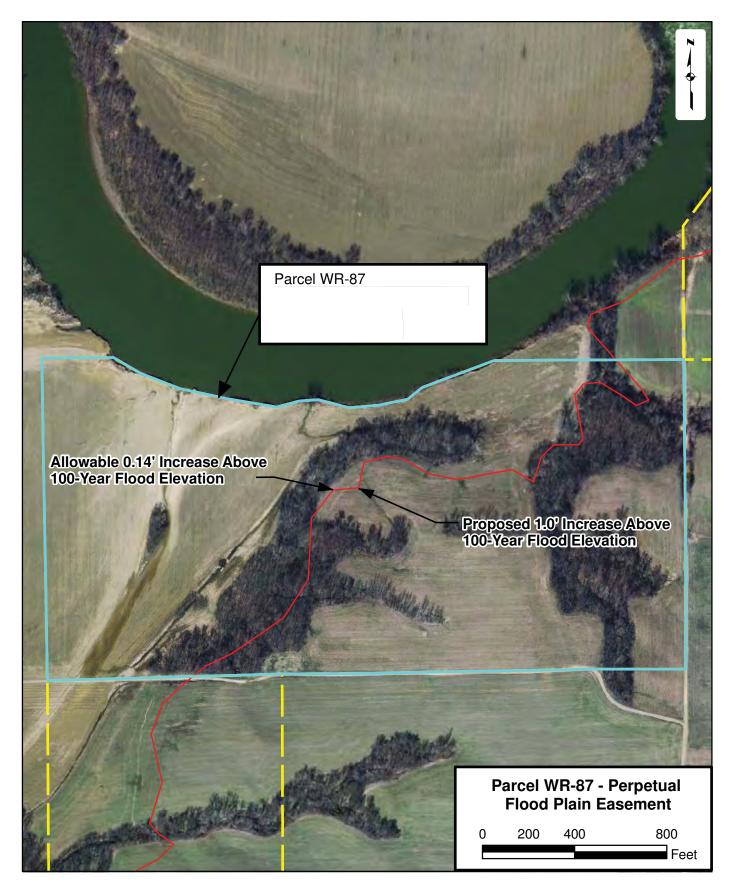


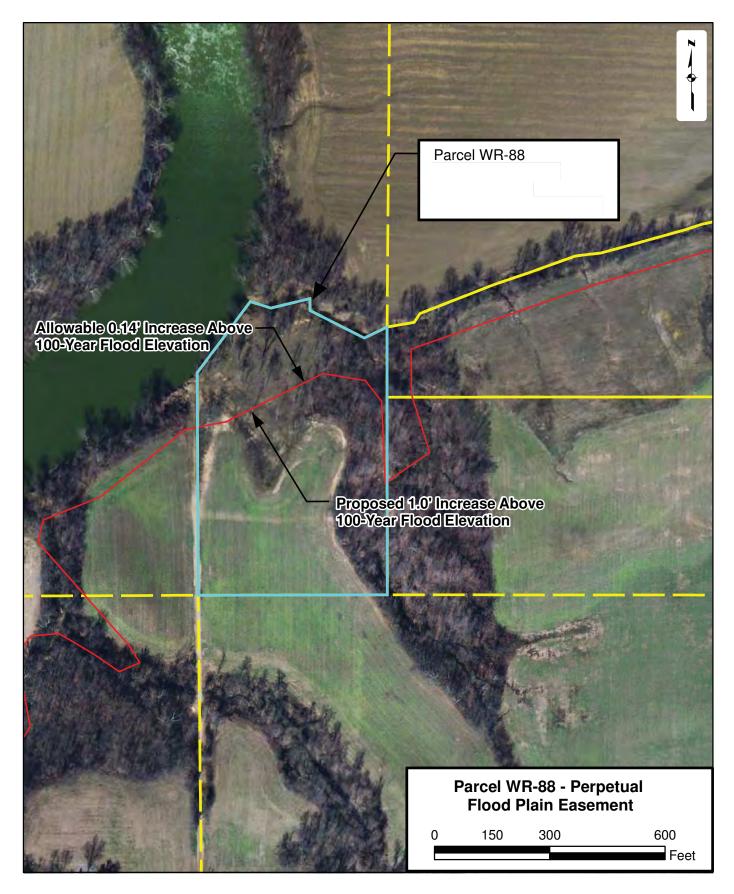


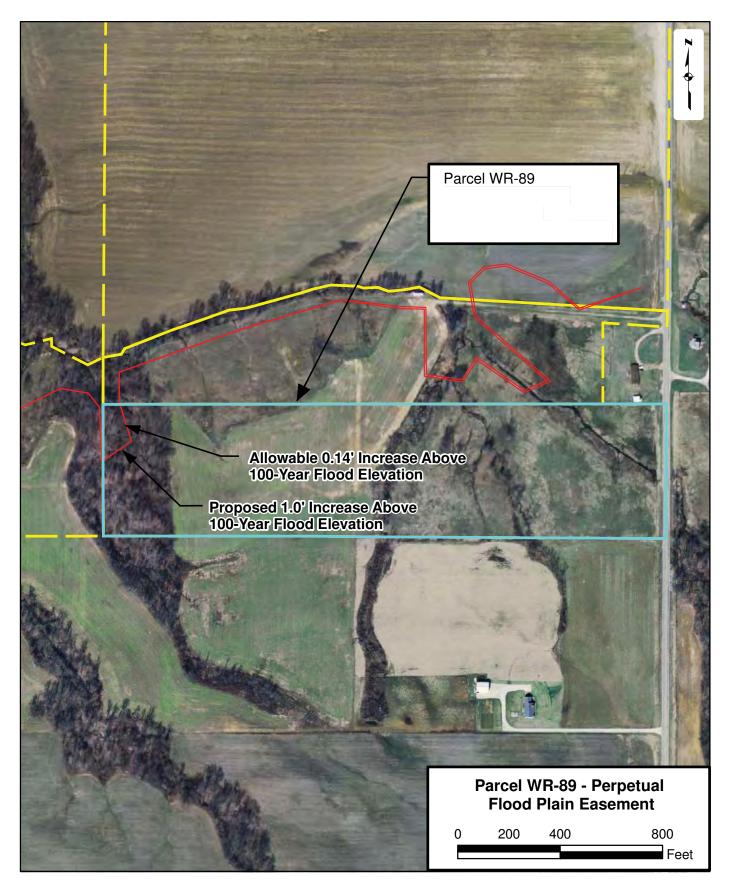


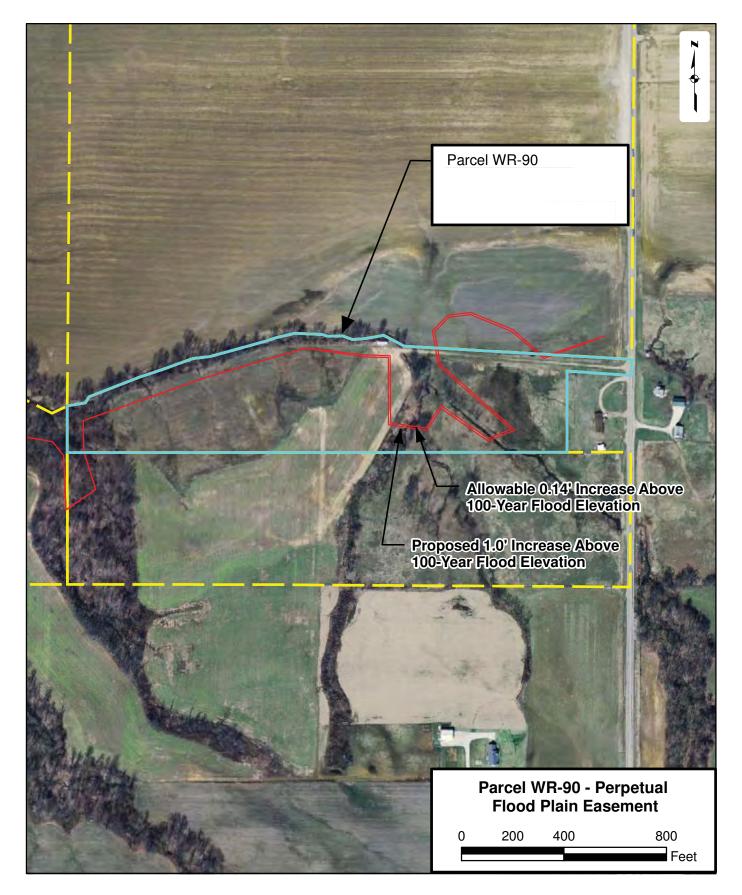


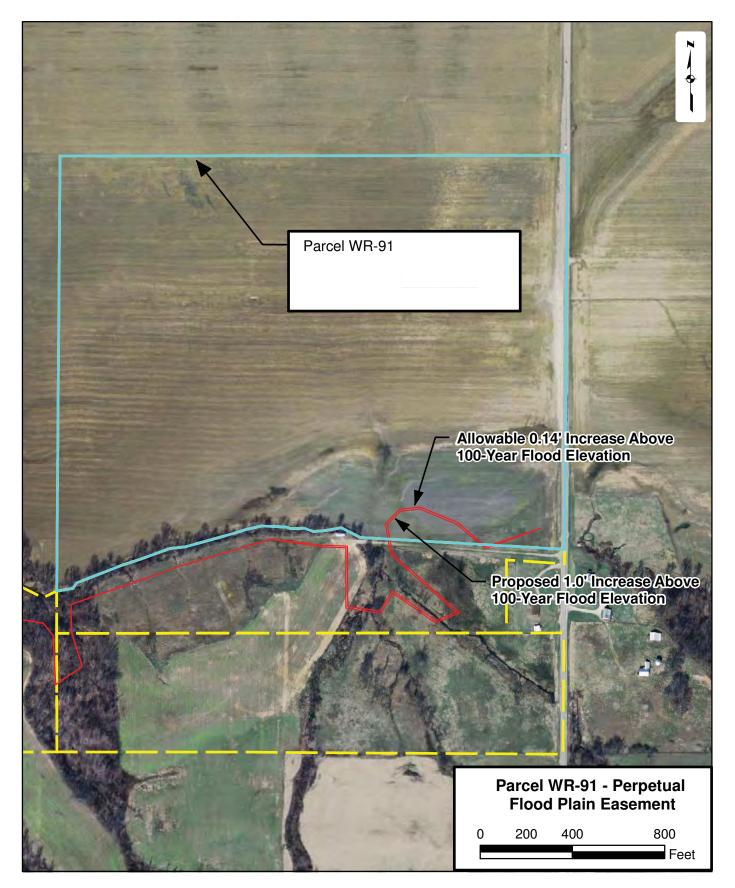






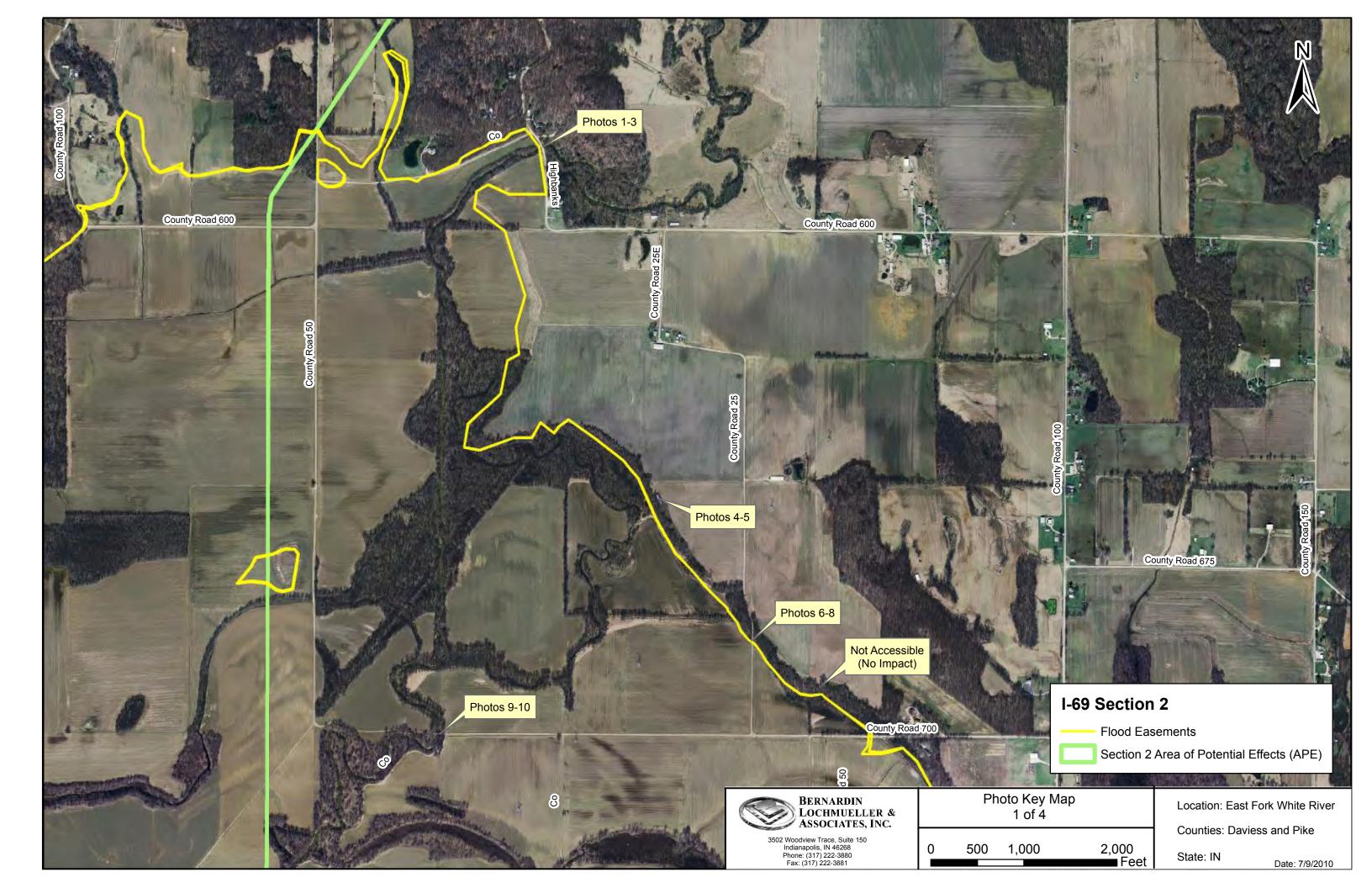


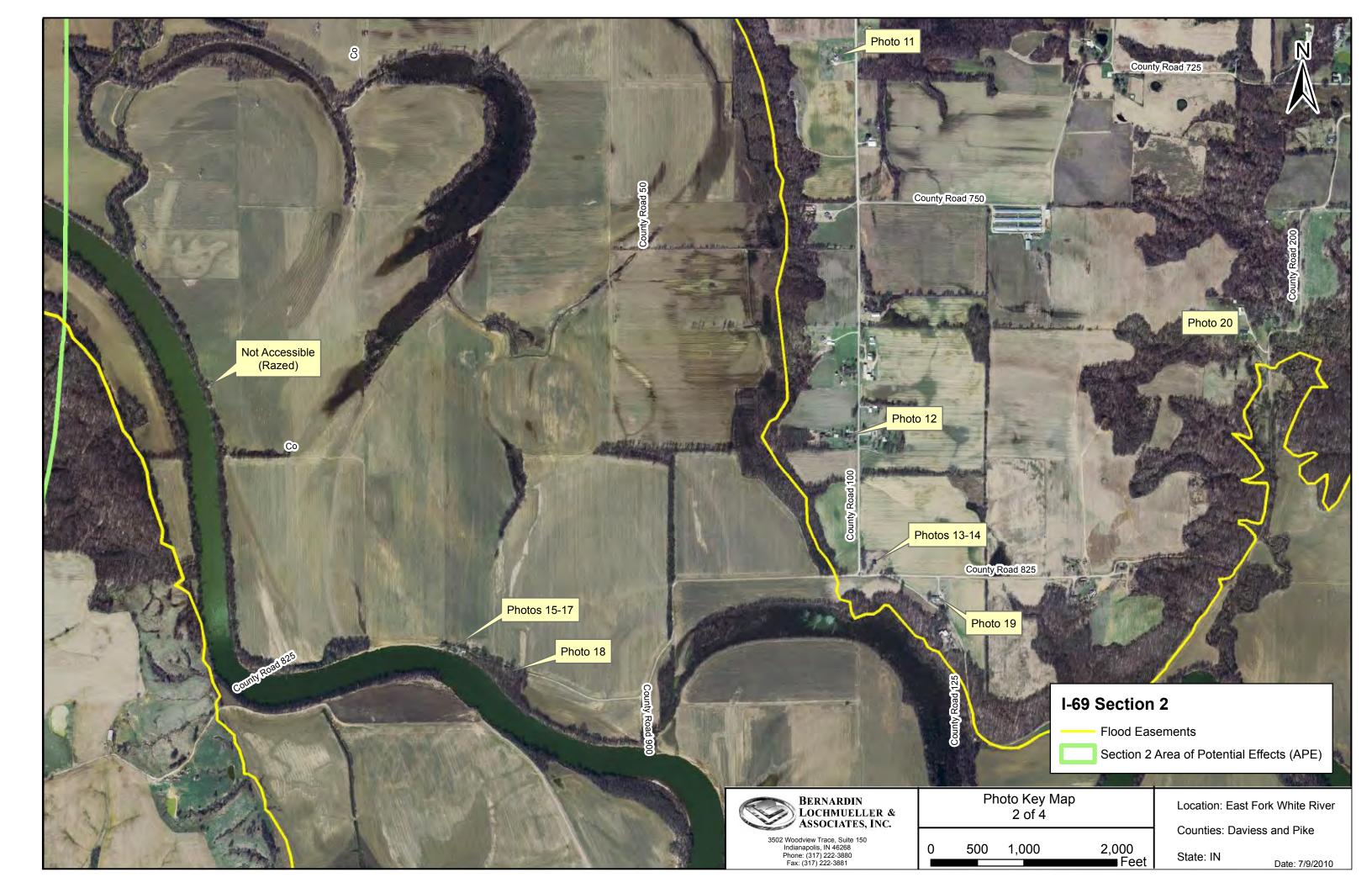


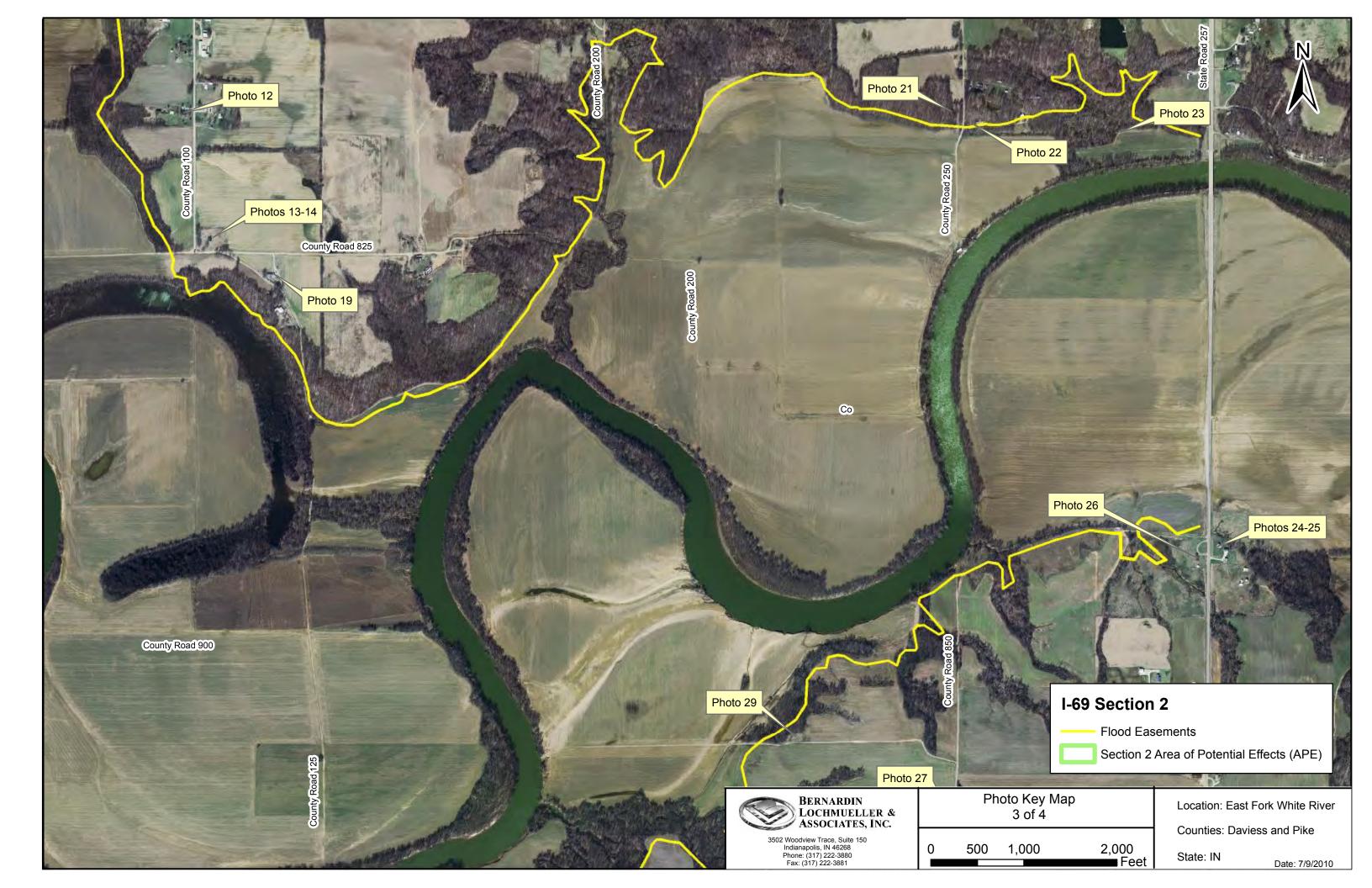


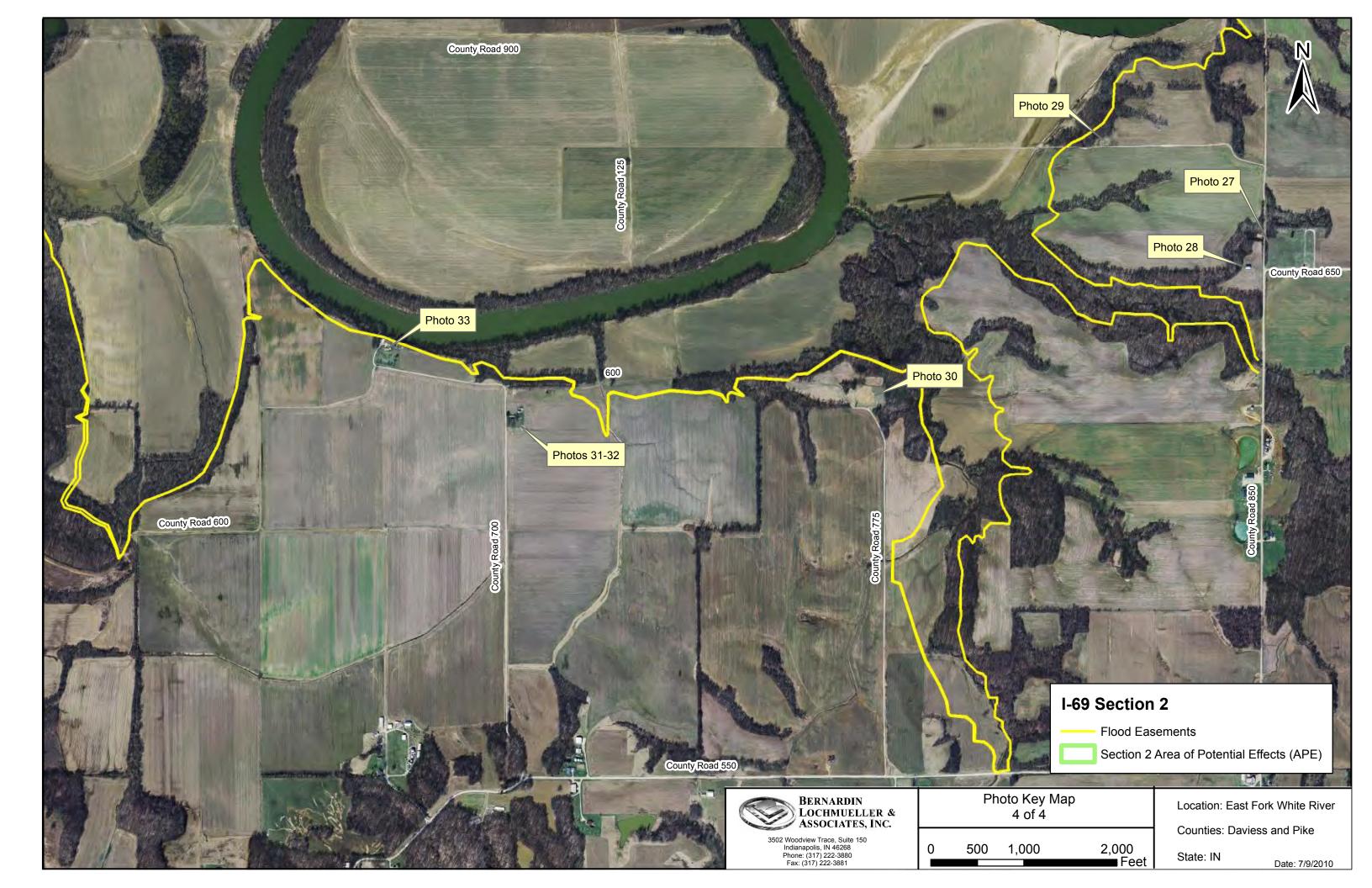
# Appendix E

Photo Key Map and Photos Surveyed Properties Table White River Flood Easements Outside Original Section 2 APE









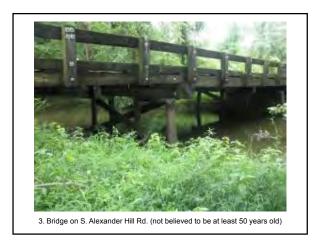








2. Bridge on S. Alexander Hill Rd. (not believed to be at least 50 years old)















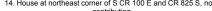










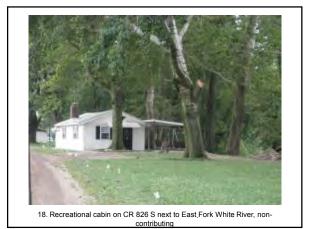








17. Recreational cabin on CR 826 S next to East Fork White River, contributing













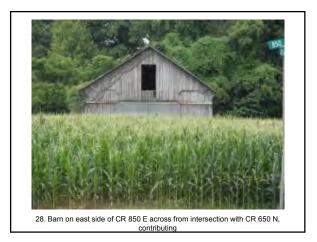






26. House on west side SR 257, not believed to be at least 50 years old













32. 6226 N. CR 700 E, contributing



łd	Photo # 4-5	Description	Date R c.1955	IR Rating	Notes Integrity compromised with	Contributing/ Non-Contributing Non-contributing
	) 2	0			replacement metal siding and missing doors/windows.	0
11 Do	Do	Double-pen house	c.1870		Integrity compromised with the addition of vinyl siding, replacement windows and missing front door opening.	Non-contributing
12 Minimal I hous	Minir h	imal ranch house	c.1950		Part of a farm; integrity compromised with the addition of vinyl siding, replacement windows, and enclosed front integral porch	Non-contributing
13-14 Gabl hc	Gabl hc	Gable-front house	c.1900		Recently undergone extensive, unsympathetic renovation. The original house has several additions, vinyl siding, and replacement windows.	Non-contributing
15-17 Recre	Recre	Recreational houses	c.1960		Located adjacent to the East Fork White River. Two of the structures are c.1960 concrete-block minimal ranch type houses. One structure displays exposed rafter tails and a small shed-roof porch and both appear to retain original doors and windows.	Contributing; Not recommended eligible for the National Register due to lack of architectural distinction

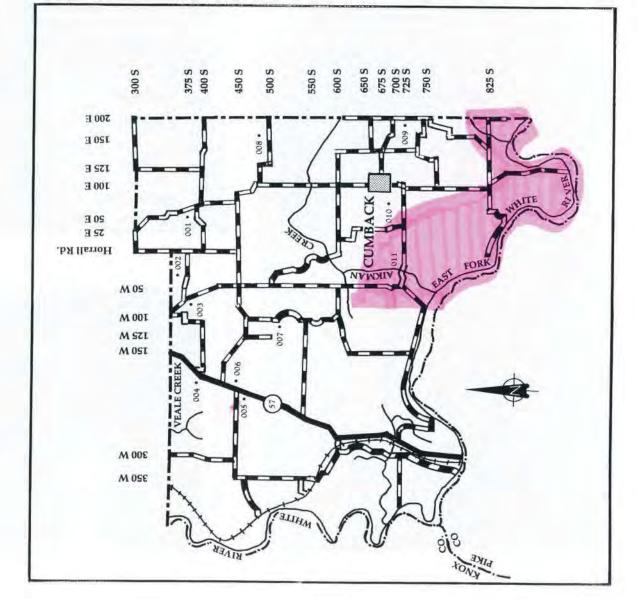
Photograph	Photo #	Description	Date	IR Rating	Notes	Contributing/ Non-Contributing
	24-25	I-house	c.1870	o '	Integrity compromised with the addition of "Dutch lap" vinyl siding, replacement windows and front door, replacement porch, and additions.	Non-contributing
	27	lva Public Cemetery	Mid-19 <sup>th</sup> Century- present	· ·	Cemeteries are ordinarily not eligible for listing in the National Register; this cemetery does not appear to derive significance from "graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events" and is therefore not recommended eligible for listing in the National Register.	Contributing; Not recommended eligible for the National Register (see notes)
	28	Transverse- frame barn	c.1900		Retains original siding but has replacement sliding doors.	Contributing; Not recommended eligible for the National Register due to lack of architectural distinction and because it is not part of a larger collection of farm buildings.
	30	Logan Cemetery	Mid-19 <sup>th</sup> Century- present		Cemeteries are ordinarily not eligible for listing in the National Register; this cemetery does not appear to derive significance from "graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events" and is therefore not recommended eligible for listing in the National Register.	Contributing; Not recommended eligible for the National Register (see notes)

Contributing/ Non-ContributingdContributing;doContributing;overNot recommended eligibledofor the National Register due to alterations and lack of architectural distinction.	lition Non-contributing	r the on a the -8 in ed by	area. tion 09 ndix
Notes Retains original wood siding and architectural details in the canopy over the stoop. Windows and the front door have been replaced.	Integrity compromised with the addition of vinyl siding.	Located adjacent to, but not within the flood easement area. It is located on a ridge approximately 60 feet from the flood easement. The ridge is approximately 30 ft. higher than the flood easement area (see photos 6-8 in Appendix D) and will not be impacted by the proposed flood easements.	Located within the flood easement area However, the structure at this location has been razed as seen on the 2009 Daviess County aerial photo (Appendix D).
IR Rating	1	- 1	1
<b>Date</b> c.1915	c.1960	- 1	
Description Side-gable house	Minimal ranch house	Not accessible at the time field work was completed due to high waters.	Not accessible at the time field work was completed due to high waters.
Photo # 31-32	33	See Photo Key Map 1	See Photo Key Map 2
Photograph		1	

## Appendix F

Relevant Pages from *Daviess County* Interim Report

Verle Township (35001-011)



Daviess to 18 1987

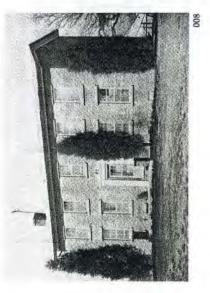
Located immediately south of Washington Township, bordered on the west and south by forks of the White River, Veale Township was one of the first four to be designated in the county. Named after an early resident, the township encompassed much of the same area it does today, except for that portion which was given over in 1840 to create Harrison Township. Veale was settled in about 1812 by the Palmer, Coleman and Lett families, as well as William and Elijah Chapman, Moses Morgan, Thomas Wallace and of course, James C. Veale, for whom the township was named.

railroad crossing. Of the other two towns (or but has looked toward Washington for these settlement was in the northern section of the population and commerce center of its own, services. As mentioned previously, the first county spawned the development of Sandy Hook Station, first a camp and then a depot Thus, Veale Township has never enjoyed a township. Examples of buildings from the took place and today it is only the site of a period of the canal are present in the John post office locations) which once existed, of the railroad, but no further expansion only Cumback still appears on the maps. The Chapman/Allison House (35001) on Horall House (35002) and the George W. Aikmans Creek Cemetery (35009). The Troy Road dates to this period as does development of the canal through the White Farm (35008). What is probably the county's most outstanding agricultural structure is located in Veale Township. The Thomas C. Singleton Round Barn (35005), built just after

the turn of ture century, combines many elements of good design and agricultural function.

- No. Rtg. Description
- 001 C Chapman/Allison House, Troy Road; Carpenter-Builder, 1813; Architecture, Exploration/Settlement (571)
- 002 C John A. Horall House, 350 S; Carpenter-Builder, c.1860; Architecture (571)
- 003 C Bethel M.E. Church and Cemetery,
  50 W; Carpenter-Builder,
  1870-Church, c.1840-Cemetery;
  Architecture,
  Exploration/Settlement, Religion (571)
- 004 C Mt. Olive Cemetery, State Road 57; c.1835; Exploration/Settlement, Religion (571)
- 005 O Thomas C. Singleton Round Barn, 450 S; 1908; Architecture, Agriculture (571)

- 007 C Colbert House, 100 W; Carpenter-Builder, 1885; Architecture (571)
- 008 O George W. White Farm, 500 S; Federal, c.1850; Architecture (571)



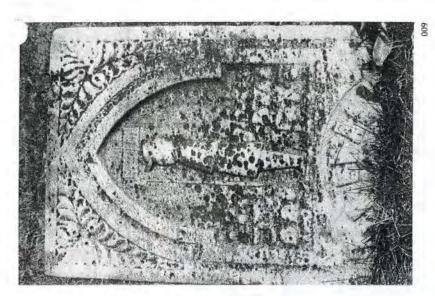
 N Aikmans Creek Baptist Church and Cemetery, 200 W; Gothic Revival, 1896-Church, c.1820-Cemetery; Architecture, Exploration/Settlement, Religion (571)

600

Mt. Gilead Church and Cemetery, Through Truss, 1900; Engineering, Exploration/Settlement, Religion Troy Road; Twentieth Century Cemetery-1845; Architecture, Bridge No. 242, 700 S; Pratt Functional, Church-1939, Transportation (571) (571) 010 C N 110 No longer Not within easement area. flood



extant

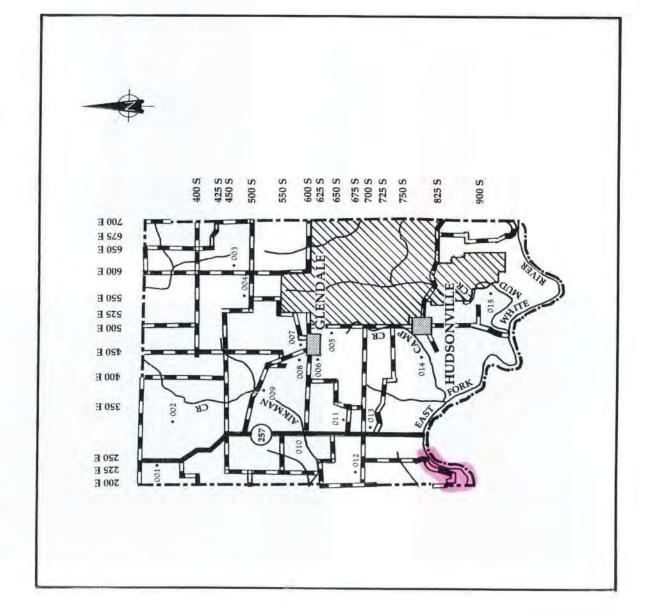




110

005

## Hurrison Township (40001-015)



Located between Reeve and Veale Townships and bounded on the south by the east fork of the White River, Harrison Township is one of the smallest in Daviess County. Today an extensive amount of its area is taken up by the Glendale State Fish and Game Reserve and by Dogwood Lake, a large water resource which was created as part of the Reserve. Additionally, large sections of the township are presently being strip mined, thus limiting the available area for historic resources. Harrison Township was formed in 1840 from lands which were once part of the two townships now surrounding it. Settlement in this vicinity along the southern border of the county was early. Arriving as early as 1812, the Jones, Gregory and Cower families from South Carolina found its rolling hills and rich bottom land favorable. Others from Kentucky and Ohio moved here during the first two or three decades of the nineteenth century.

The township was not served by rail or canal during its early years but St. Patrick's Glencoe Cemetery (40004), which dates to 1840, contains the graves of many Irish immigrants from Wexford who contributed to the development of the county with their labor on the canal and as miners.

Hudsonville, one of two towns in the township, was laid out in 1856 but never developed. Glendale, at the center of the township, once contained half a dozen dwellings, a schoolhouse, church and stores. The Glendale Methodist Episcopal Church (40007), now vacant, is a visible reminder of

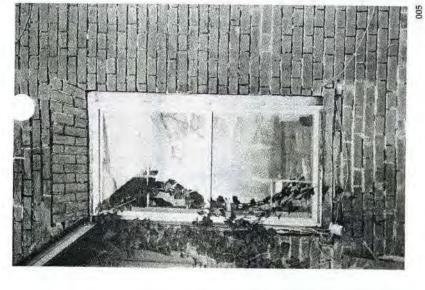
those year s is the Conley Post Office (40006).

Other resources in the township include the farm and log building (40009) on 600 S and the Allen House (40005), now badly deteriorated, along with several cemeteries (40011,014) dating to the first half of the nineteenth century.

Today much of the local economy serves a recreational market which is developing around Dogwood Lake fishing area.

- No. Rtg. Description
- 001 C House State Road 257; Carpenter-Builder, c.1900; Architecture (241)
- 002 C Smoke House, off State Road 257; Nineteenth Century Functional, c.1880; Architecture (241)
- 003 C House, 600 E; Carpenter-Builder, c.1890; Architecture (241)
- 004 C St. Patrick's Glencoe Cemetery, 300 S; c.1840; Exploration/Settlement, Religion, Social/Ethnicity (241)
- 005 N Allen House, 600 S; Federal, c.1840; Architecture (241)
- 006 C Conley Post Office, 600 S; Nineteenth Century Functional, c.1880; Architecture, Commerce, Politics/Government (241)
- 007 N Glendale M.E. Church, 600 S; Greek Revival/Carpenter-Builder, c.1800; Architecture, Religion (241)
- 008 C House, 500 S; Carpenter-Builder, c.1880; Architecture (241)
- 009 N Farm, 600 S; Pioneer/Carpenter-Builder, c.1840; Vernacular Construction (241)
- 010 C Bridge No. 3016, State Road 257;
  Warren Pony Truss, c.1930;
  Transportation, Engineering (241)

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- 011 C East Union Cemetery, 675 S; c,1848; Exploration/Settlement, Religion (241)
- 012 C Iby and Mason Jones House, 700 S; Carpenter-Builder, c.1900; Architecture (241)
- 013 C Ebenezer M.E. Cemetery, State Road 257; C. 1840; Religion, Exploration/Settlement (241)
- 014 C Cemetery, off 500 E; c.1850; Exploration/Settlement, Religion (241)
- 015 C Himsel House, 900 S; Federal, c.1830-1850; Architecture (241)

