

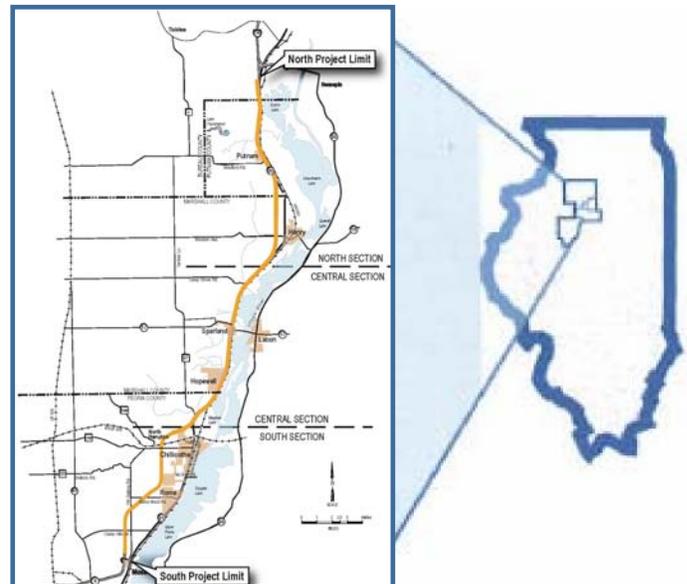


Final **Combined Design Report**

Volume 1

**Combined Design Report Text and
Appendices A, B and C**

**Job No. P-94-009-01 &
P-94-019-02
PTB/Item No. 118/056
A & B
FAP Route 318 (IL 29)
Between Illinois Route 6 and I-180
Catalog No. 032469-00P**



**Peoria, Marshall, Putnam and
Bureau Counties, Illinois**



Illinois Department of Transportation

June 2010



Illinois Department of Transportation

Memorandum

To: Joseph E. Crowe
From: Scott E. Stitt *Scott Stitt*
Subject: IL 29 Study – Final Combined Design Report
Date: July 26, 2010

FAP 318 (IL 29)
IL 6 to I-180
Section 1,2,3,4,5,20,21,72-11,6VB & 6,8,9,10
Peoria, Marshall, Putnam & Bureau Counties
P-94-019-01 & P-94-019-02
Combined Design Report

We have completed our review of the above Combined Design Report submitted June 28, 2010. Additional documentation was requested and received July 20, 2010. The proposed project would upgrade existing IL 29 to a four-lane roadway.

Approval of the Combined Design Report for IL 29, from IL 6 to I-180, is hereby granted.

Should you have any questions, please contact Paul Niedernhofer at (217) 524-1651.

Final Report

**Illinois 29 Combined Design
Report
Volume 1
Combined Design Report Text
and
Appendices A, B, and C**

Prepared for
Illinois Department of Transportation

June 2010

CH2MHILL

Table of Contents

1	Introduction.....	1
1.1	Description and Location of the Project	1
1.2	Project History.....	1
1.3	Project Development Process.....	2
2.	Purpose and Need	3
2.1	Conditions on the Existing Highway Network.....	3
2.1.1	Characteristics of the Existing Highway	3
2.1.2	Travel Efficiency	3
2.2	Purpose and Need	13
2.2.1	System Linkage, Facility Continuity, and Route Importance	13
2.2.2	Modal Interrelationships	14
2.2.3	Economic Stability	15
3.	Existing Conditions/Setting	17
3.1	Description of the Project Area.....	17
3.2	Existing Development.....	17
3.3	Environmentally-Sensitive Areas.....	17
3.4	Development Constraints.....	18
4.	Alternatives Considered	21
4.1	Alternative Alignment Studies	21
4.2	No-Build Alternative.....	21
4.2.1	Alternative Modes.....	22
4.2.2	Alternative Corridors.....	22
4.3	Proposed Highway Design Guidelines	23
4.3.1	Roadway Type	23
4.3.2	Typical Sections	23
4.3.3	Design Criteria	24
4.3.4	Access Control	34
4.4	Build Alternatives Considered	34
4.4.1	South Section Alternatives	34
4.4.2	Central Section Alternatives	36
4.4.3	North Section Alternatives.....	37
5.	Detailed Description and Analysis of the Build Alternative.....	41
5.1	Attainment of Purpose and Need	41
5.2	Description of Build Alternative	41
5.2.1	South Section.....	41
5.2.2	Central Section	43
5.2.3	North Section	48
5.2.4	Design Exceptions	50
5.3	Summary of Proposed Drainage Plan	62
5.3.1	Existing Drainage System Summary	62
5.3.2	Proposed Drainage Plan Summary.....	63
5.4	Geotechnical Considerations	63
5.5	Wildlife Crossings	64
5.6	Utilities Involvement.....	66
5.6.1	Power Lines.....	66

5.6.2	Water Lines	66
5.6.3	Gas Lines	66
5.6.4	Telephone.....	66
5.6.5	Television Cable	67
5.6.6	Oil Pipeline	67
5.7	Bicycle Accommodations	67
5.8	Traffic Maintenance Plan	68
5.8.1	South Section	68
5.8.2	Central Section	68
5.8.3	North Section.....	70
5.9	Estimate of Cost.....	72
5.10	Analysis of the Build Alternative.....	78
5.10.1	Traffic Service and Operations.....	78
5.10.2	Social, Economic and Environmental Effects.....	79
5.10.3	Potential Mitigation Measures	79
6.	Coordination and Public Involvement	81
6.1	Early Coordination.....	81
6.1.1	Cooperating Agencies	81
6.2	State and Federal Agency Coordination.....	81
6.2.1	NEPA / 404 Process	81
6.2.2	Resource Agency Technical Committee	82
6.2.3	Other Agency Coordination	84
6.3	Community Involvement.....	86
6.3.1	Community Officials	86
6.4	Public Involvement.....	90
6.4.1	First Set of Public Meetings	90
6.4.2	Second Set of Public Meetings	91
6.4.3	Public Hearing.....	91
6.4.4	Sparland Public Meeting.....	92
6.4.5	Project Newsletters	92
6.5	Project Commitments	93
6.5.1	Agriculture.....	93
6.5.2	Cultural	93
6.5.3	Noise and Air Quality	93
6.5.4	Geology, Soils, and Surface Water Resources	94
6.5.5	Wetlands, Floodplains, and Designated Lands	95
6.5.6	Plant Communities and Wildlife Resources	97
6.5.7	Threatened and Endangered Species	101
6.5.8	Special Waste.....	101
6.5.9	Visual Resources	101
6.5.10	Section 4(f).....	102
6.5.11	Additional Commitments	102

LIST OF TABLES	Page No.
2-1 Existing (2001) Traffic on IL Route 29	3
2-2 Existing and Design Year Traffic Comparison	4
2-2A Forecasted Traffic (ADT) on Illinois Route 29.....	5
2-3 Truck Percentages in IL 29 Traffic Stream.....	6
2-4 Level of Service Design Guidelines (Roadway Mainline).....	7
2-5 Comparison of Existing and Future Level of Service on IL 29	7
2-6 Crash Analysis Segments.....	9
2-7 Crash Summary, 2001 Through 2003	9
2-8 Crash Severity Summary, 2001 Through 2003	10
2-9 Percent of Injury, Multi-Vehicle and Animal Crashes by Segment: 2001 Through 2003	10
2-10 Crash Severity and Vehicle Type Involvement	12
2-11 Employee Travel Characteristics for 1990 and 2000.....	16
4-1 Design and Geometric Criteria.....	24
5-1 Design Exceptions - IL 29 South Section	50
5-2 Design Exceptions - IL 29 Central Section	53
5-3 Design Exceptions - IL 29 North Section.....	59
5-4 Wildlife Crossing Location Summary	64
5-5 Unit Costs	72
5-6 South Section Cost Summary	73
5-7 Central Section Cost Summary	75
5-8 North Section Cost Summary	77
6-1 Resource Agency Technical Committee Membership.....	83
6-2 Resource Agency Technical Committee Meetings	83
6-3 Other Agency Coordination	84
6-4 Community Officials	87
6-5 Railroad Coordination.....	88

LIST OF FIGURES

1-1 Project Study Area	
2-1 Existing and Future Traffic on Proposed IL 29	
2-2 Total Illinois 29 Crash Rate vs. State Wide Average Rate	
2-3 Total Illinois 29 Crash Rate vs. State Wide Critical Rate	
2-4 All Crashes by Crash Severity -- 2001	
2-5 All Crashes by Crash Severity - 2002	
2-6 All Crashes by Crash Severity -- 2003	
2-7 Fatal and "A" Injury Crashes -- 2001	
2-8 Fatal and "A" Injury Crashes -- 2002	
2-9 Fatal and "A" Injury Crashes -- 2003	
2-10 High Accident Locations (HAL) - 2001-2002	
3-1S Constraint Map South Section	

3-1C Constraint Map Central Section
 3-1N Constraint Map North Section
 4-1 Project Area Sections
 4-2 1972 Corridor Study Project Area
 4-2A Alternative Alignments – South Section
 4-3 Location Map- Central Section
 4-4 Alternative Alignments – Central Section, Segment 1
 4-5 Alternative Alignments – Central Section, Segment 2
 4-6 Alternative Alignments – Central Section, Segment 3
 4-7 Location Map – North Section
 4-8 Alternative Alignments – North Section, Segment 1
 4-9 Alternative Alignments – North Section, Segment 2
 4-10 Alternative Alignments – North Section, Segment 3
 5-1 Cedar Hills Drive and Proposed Illinois 29 Alignment
 5-2 Rome West and Proposed Illinois 29 Alignment
 5-3 Proposed Knox Street in Rome
 5-4 County Highway 19, Truitt Road and Proposed Illinois 29 Alignment
 5-5 Chillicothe and Proposed Illinois 29 Alignment
 5-6 Sparland and Proposed Illinois 29 Alignment
 5-7 Sparland IL-17 Conceptual Drawing
 5-8 Sparland – School Street at North Street Conceptual Drawing
 5-9 Sparland – Railroad Street at IL-17 Conceptual Drawing
 5-10 Sparland – Ramp D Conceptual Drawing
 5-11 Putnam and Proposed Illinois 29 Alignment
 5-12 Putnam- IL 29
 5-13 Miller Anderson Woods and Proposed Illinois 29 Alignment

LIST OF APPENDICES

Volume I

- Appendix A-1 – State and Federal Agency Coordination
- Appendix A-2 – Federal and State Agency Coordination Approvals
- Appendix B – Public Coordination
- Appendix C – Public Involvement

Volume II

- Appendix D – Design Study Plans

Volume III

- Appendix E- Interchange/Intersection Design Studies & Approvals

Volume IV

- Appendix F – Stage Construction & Maintenance of Traffic

Volume V

- Appendix G – Project Reports

Volume VI

- Appendix H – Cross Sections

Accompanying Report

- Location Drainage Report – December 2009 (Submitted Separately)

Introduction

1.1 Description and Location of the Project

The Illinois Department of Transportation (IDOT) initiated a study in 2001 to examine alternatives for improving Illinois Route 29 from Illinois Route 6 in Peoria County to I-180 in Bureau County – a study that will lead to selection of a preferred alignment, preliminary design, and environmental documentation.

The proposed Illinois Route 29 improvement project extends approximately 35 miles from Illinois Route 6 near Mossville to I-180 in Hennepin. See Figure 1-1. Including Peoria, there are four principal communities in the study area with a combined population (2000 census) of approximately 122,000: Peoria, Chillicothe, Sparland and Henry. Smaller communities in the study area include Mossville, Rome, North Hampton, Hopewell and Putnam.

The proposal to improve Illinois Route 29 involves upgrading the facility to a four-lane divided fully-access controlled freeway from Illinois Route 6 to Chillicothe, and a four-lane partially access-controlled expressway from Chillicothe to I-180. Access to a freeway would only be permitted via grade-separated interchange ramps. For an expressway, direct access would be allowed to residences and farms, but not to commercial land uses. Grade separated interchanges would be provided at all state marked routes and county highways where justified by the cross street traffic volume, as well as other major crossroads where traffic signals would be warranted within 9 years from initial construction. At-grade intersections would be provided on an expressway at most county and township roads.

1.2 Project History

The proposal to improve Illinois Route 29 north of Peoria has been considered for more than 35 years. After completion of the initial interstate system, IDOT and the state recognized the need for a section of interstate highway extending from I-74 in Peoria to I-180 at Hennepin and sent a request for this route to the Federal Bureau of Public Roads (now the FHWA) in 1968. In 1969, the General Assembly passed legislation instituting the statewide Supplemental Freeway System and included Supplemental Freeway F-5 (later known as FA 405), extending west of the Illinois River from Peoria to Hennepin. Following passage of this legislation, a number of separate studies of a highway improvement in this area have been conducted.

Corridor Report for FA 405 completed in 1972

Draft and Final Environmental Impact Statements for the section of FA 405 between I-74 and Cedar Hills Drive near Mossville completed in 1976

Draft Environmental Impact Statement for section of FA 405 between Cedar Hills Drive and Hennepin suspended in 1976. Construction of FA 405 between I-74 and Mossville completed in 1986

Feasibility Study of a Chillicothe Bypass and upgrade of IL 29 north of Chillicothe completed in 1986

Heart of Illinois Highway Feasibility Study, investigating the feasibility of constructing a new highway directly linking Peoria and Chicago, completed in 1995

Heart of Illinois Highway Phase I Study evaluating alternatives within the Feasibility Study corridors, conducted in 2000

The findings and recommendations of these studies, except for the two recent Heart of Illinois Highway Studies, are presented in the *Corridor Reevaluation Report* prepared by the CH2M HILL team for the current project. In general, the prior studies considered a corridor along the present alignment of Illinois Route 29 as well as others on high ground to the west. Several alternative bypasses of Chillicothe were also explored.

1.3 Project Development Process

This Design Report is a summary of the study of engineering alternatives, including the No-Action Alternative. The study includes the selection of a highway alignment and design features based on the best combination of social, environmental and engineering aspects of the project. In order to assure that final decisions on the project are made in the best overall public interest, public input was an important element of this study.

To accomplish the task of alternative analysis and selection, the following process was used:

- Establish and study preliminary alignments within the study corridor based on preliminary engineering, environmental and socio-economic aspects of the project.
- Present preliminary alternatives to the public and obtain public information and comments.
- Evaluate the final engineering, environmental, and socio-economic aspects of the project along with public input. Prepare the Draft Environmental Impact Statement (DEIS) and present the most desirable improvement alternative(s) at a public hearing.
- Complete the Design Report and Environmental Impact Statement (EIS). Evaluate public comments, circulate the final EIS for approval, and submit the Design Report for approval.
- The Illinois Department of Transportation and Federal Highway Administration approved the DEIS on April 24, 2006, the FEIS on April 23, 2009, and the Record of Decision on January 19, 2010. Copies of the approval pages can be found in Appendix A-2.

SECTION 2

Purpose and Need

2.1 Conditions on the Existing Highway Network

2.1.1 Characteristics of the Existing Highway

For the most part, existing Illinois Route 29 conforms to IDOT design criteria for a two-lane rural arterial highway. In the early 1990's, nearly the entire alignment from the railroad viaduct in Chillicothe to I-180 in Bureau County was improved to 3-R standards. The roadway width is 24 feet (two 12-foot wide lanes) with 8-foot shoulders and an 18-foot wide clear zone on each side. There are no deficient vertical or horizontal curves.

2.1.2 Travel Efficiency

Improvements to IL 29 would result in more efficient and reliable transportation service. Increasing travel efficiency and reliability on IL 29 would reduce transportation costs for commuters, commercial trips, and other trips through the study area, and improve traffic flow. Reliable travel along IL 29 is impeded by a combination of factors discussed below.

Existing and Future Traffic

TABLE 2-1
Existing (2001) Traffic on IL Route 29

County	IL 29 Section	ADT	mu	%mu	su	%su
Peoria	IL 6 to Truitt Ave.	16,900				
	Truitt Ave. to Moffitt St.	10,600	375	4	525	5
	Moffitt St. to Yankee Ln.	8,700	375	4	275	3
Marshall	Yankee Ln. to Oak St. (Sparland)	8,100	350	4	250	3
	Oak St. (Sparland) to IL 17 (Ferry St.)	7,500	425	6	275	4
	IL 17 (Ferry St.) to IL 17 (Hilltop Dr.)	5,600	400	7	400	7
	Between Sparland and Henry	3,650 to 3,950	275 to 300	7 to 8	175 to 200	4 to 5
	(Henry) Spruce St. to IL 18	4,400	275	6	200	5
	(Henry) IL 18 to Old Indian Town Rd.	5,600	200	4	450	8
	Old Indian Town Rd. to Marshall CL	3,650	350	10	250	7
Putnam	Marshall CL to Putnam	3,100	325	10	175	6
Bureau	Putnam to Kentville Rd.	3,050	350	11	150	5
	Kentville Rd. to I-180 Interchange	3,050	400	13	200	7

ADT = Average Daily Traffic, mu = multi-unit truck, su = single-unit truck

Year 2001 traffic volumes on Illinois Route 29 and crossroads were furnished by IDOT. The data included average daily traffic (ADT) along with the estimated number of multi-unit trucks (mu) and single unit trucks (su) for each roadway segment. Table 2-1 summarizes the counts of existing (2001) traffic on Illinois Route 29.

Mainline (Illinois Route 29) traffic ranges from approximately 3,000 vehicles per day (vpd) at the north end of the project near I-180, to more than 10,000 vpd in Chillicothe near Truitt Avenue. Crossroad traffic is generally light except on intersecting State Highways (IL 17 and IL 18) and Truitt Avenue in Chillicothe.

Existing traffic and forecast traffic for 2032 under the No-Build Alternative show that traffic is expected to increase over time. The predicted increase in traffic volumes by 2032 would reduce travel reliability by causing slower travel speeds and further interference with local commercial and residential activity. The increase would make it more difficult to enter the highway from driveways and side roads and reduce safe passing opportunities, thereby increasing the potential for accidents. Table 2-2 summarizes existing traffic and forecast traffic on IL 29 for the design year, which represents the end of the planning period within which traffic forecasts can reasonably be made. The highest existing and forecast traffic volumes (under the No-Build Alternative) are for the section between IL 6 and IL 17 in Sparland.

Figure 2-1 and Table 2-2A also show future traffic on proposed Illinois Route 29 (2032 build), including the Chillicothe Bypass and the Henry Bypass. Forecast traffic between Sparland and Henry is lower than forecast volumes within the communities themselves. Forecast volumes in Henry are similar to those in Sparland. North of Henry, traffic volumes

TABLE 2-2
Existing and Design Year Traffic Comparison

IL 29 Section	Existing ADT (2001)	Design Year ADT (2032) (No-Build Alt.)	% Increase (No-Build Alt.)	Expected Year 4-Lane Threshold Would Be Met
Peoria County				
Chillicothe: IL 6 to Truitt Avenue	16,900	26,400	56	Already met
Chillicothe: Truitt Avenue to Wood Street	10,600	14,700	39	Already met
Chillicothe: Wood Street to Yankee Lane	8,700	12,100	39	Already met
Marshall County				
Yankee Lane to Oak Street (Sparland)	8,100	12,900	59	Already met
Oak Street to IL 17 South (Sparland)	7,500	11,900	59	2019
IL 17 South to IL 17 North (Sparland)	5,600	10,300	84	2019
Between Sparland and Henry	3,650–3,950	6,700–7,300	68–102	Beyond 2032
Henry: Spruce Street to IL 18	4,400	8,100	84	2031
Henry: IL 18 to Old Indian Town Road	5,600	10,300	84	2019
Old Indian Town Rd. to Marshall Co. line	3,650	6,700	84	Beyond 2032
Putnam County				
Marshall Co. line to Putnam	3,100	5,700	84	Beyond 2032
Putnam and Bureau Counties				
Putnam to I-180 Interchange	3,050	5,600	84	Beyond 2032

TABLE 2-2A
Forecasted Traffic (ADT) on Illinois Route 29

County	IL 29 Section	Existing (2001)	2012 No Build	2032 No Build	2032 Build Proposed Facility*	2032 Build Existing Facility
Peoria	IL 6 to Truitt Ave.	16,900	18,100	26,400	9,200-14,200	21,800
	Truitt Ave. to Moffitt St.	10,600	12,500	14,700	5,200	14,400
	Moffitt St. to Yankee Ln.	8,700	10,200	12,100	11,500	
Marshall	Yankee Ln. to Oak St. (Sparland)	8,100	9,500	12,900	15,600	
	Oak St. to IL 17 (Ferry St.)	7,500	8,800	11,900	14,500	
	IL 17 (Ferry St.) to IL 17 (Hilltop Dr.)	5,600	7,000	10,300	12,000	
	Between Sparland and Henry	3,650 to 3,950	4,550 to 5,000	6,700 to 7,300	7,800 to 8,600	
	(Henry) Spruce St. to IL 18	4,400	5,500	8,100	9,500	1,000
	(Henry) IL 18 to Old Indian Town Rd.	5,600	7,000	10,300	8,000	5,300
	Old Indian Town Rd. to Marshall CL	3,650	4,550	6,700	8,000	950
Putnam	Marshall CL to Putnam	3,100	3,850	5,700	7,000	
Putnam & Bureau	Putnam CL to Kentville Rd.	3,050	3,850	5,700	7,500	
	Kentville Rd. to I-180 Interchange	3,050	3,800	5,600	7,500	

ADT = Average Daily Traffic

*Includes bypasses at Chillicothe and Henry. The ADT shown is for the bypass facility in sections where bypasses are proposed.

increase by more than 80 percent between 2001 and 2032, but in terms of ADT remain the lowest in the study corridor.

IDOT's roadway design guidelines specify 8,000 to 10,000 ADT as the threshold volume that can be handled at an acceptable service level on a 2-lane rural highway. In the study area, that threshold is already exceeded in the 16-mile section between the south project terminus and the south side of Sparland (Figure 2-1). North of Sparland the 8,000 to 10,000 ADT threshold would not be exceeded until after 2032 with the exception of Henry. Traffic volumes in Henry would meet the 4-lane threshold in 2019. It should be noted that while traffic volumes decline north of Sparland and north of Henry those areas also have the highest percentage of trucks in the traffic stream (Table 2-3).

Truck Traffic

The number of heavy trucks in the traffic stream affects traffic operations and safety and contributes to the level of congestion. Heavy trucks are slower, occupy more roadway space, require more turning room, and consequently have a greater effect on the roadway than passenger vehicles. The overall effect of one truck on traffic operation is equivalent to 2 to 5 passenger cars. Thus, the larger the proportion of trucks in the traffic stream, the greater the traffic load and highway capacity required (Transportation Research Board 2000). Table 2-3 summarizes truck traffic in the study area.

TABLE 2-3
Truck Percentages in IL 29 Traffic Stream

Section	Percentage of Trucks in ADT ^a
Truitt Avenue to IL 17	7 to 10
IL 17 to TR 13	11 to 14
TR 13 to Kentville Road	16 to 20

^aBased on year 2001 ADT

Trucks on IL 29 account for 7 to 20 percent of the total ADT in the study corridor. The high percentage of trucks using IL 29 confirms its importance as a major commercial route and important connection in the regional transportation system. On an average weekday, truck traffic varies from about 600 per day at the north end of the corridor to 900 per day at the south end. In 2032, truck volumes would be expected to increase to 1,100 trucks per day at the north end of the corridor (an 83 percent increase) and 1,300 per day at the south end (a 45 percent increase). Given that trucks are the equivalent of 2 to 5 passenger cars on a 2-lane highway, the substantial predicted increase in truck traffic would increase the number of potential conflicts between trucks and other vehicles throughout the corridor.

The predicted increase in traffic volumes by 2032 would reduce travel reliability by causing slower travel speeds and further interference with local commercial and residential activity. The increase would make it more difficult to enter the highway from driveways and side roads and reduce safe passing opportunities, thereby increasing the potential for crashes.

Highway Operations

Level of service (LOS) is a qualitative measure of operational conditions within a traffic stream as perceived by motorists. A designated LOS is described in terms of average travel speed, density, traffic interruptions, comfort, convenience, and safety.

Because drivers will accept different driving operational conditions including lower travel speeds on different facilities, it is not practical to establish one LOS for application to every type of highway. Therefore, IDOT has established several levels for the various classes and types of highway. The values of speed and design hourly volume used in each case to identify a level of service are the lowest acceptable speed and the highest obtainable volume for that specific level.

LOS designations range from “A” to “F,” with “A” representing free-flow traffic, and “F” representing gridlock conditions. Table 2-4 summarizes IDOT level of service design guidelines for various types of highways. IL 29 is a rural principal arterial highway in the study corridor, except for short sections in Chillicothe, Sparland, and Henry that may be considered suburban/urban conditions. As shown in Table 2-4, LOS B is the appropriate guideline for the rural parts of the highway, and LOS C is the applicable guideline for the suburban/urban areas.

Table 2-5 summarizes the existing and future LOSs along IL 29 for the existing number of travel lanes (or “No-Build” Alternative), compared to IDOT’s guidelines. As shown in Table 2-5, peak traffic conditions along some segments of IL 29 already exceed applicable IDOT LOS guidelines. Two segments, one in Sparland and one north of Henry, currently operate at LOS E, which represents maximum capacity. Under 2032 peak traffic conditions, there would be a further decline so that 4 of the 11 sections of IL 29 would be LOS E, and the intersection at IL 18 would exceed capacity (LOS F). For roadways approaching or at maximum capacity, traffic flow is unstable, minor disruptions may cause traffic backups, and freedom to maneuver safely is compromised.

TABLE 2-4
Level of Service Design Guidelines (Roadway Mainline)

Highway Type	Applicable Design Level of Service	
	Rural	Suburban/Urban
Freeway/Expressway	B	C
Principal Arterial	B	C
Minor Arterial	C	C
Collector	C	D

LOS A—Free flow with low volumes and high speeds

LOS B—Reasonably free-flow, but speeds beginning to be restricted by traffic conditions.

LOS C—In stable flow zone, but speed selection is restricted.

LOS D—Approaching unstable flow; driver freedom to maneuver is restricted

LOS E—Unstable flow, short stoppages (represents maximum capacity)

LOS F—Breakdown flow, gridlock

Source: *Bureau of Design and Environment Manual, Part V*, Illinois Department of Transportation, Division of Highways, January 2000.

TABLE 2-5
Comparison of Existing and Future Level of Service on IL 29

Applicable LOS Guidelines	Existing LOS (2001)	Future LOS (2032)
Chillicothe: IL 6 to South of Cloverdale Road (Suburban/Urban; LOS C)	NA ^a	NA ^a
Chillicothe: South of Cloverdale to Moffit Street ^b (Suburban/Urban; LOS C)	LOS A	LOS B
Cloverdale Intersection	LOS B	LOS C
Walnut Intersection	LOS B	LOS C
Truitt Intersection	LOS B	LOS C
Moffit Street to Yankee Lane (Rural; LOS B)	LOS D	LOS D
Yankee Lane to Oak Street (Sparland) (Rural; LOS B)	LOS D	LOS E
Oak Street to IL 17 South (Sparland) (Suburban/Urban; LOS C)	LOS C	LOS D
IL 17 South Intersection ^c	LOS B	LOS D
IL 17 South to IL 17 North (Sparland) (Suburban/Urban; LOS C)	LOS E	LOS E
Between Sparland and Henry (Rural; LOS B)	LOS B	LOS C

TABLE 2-5 (cont.)
Comparison of Existing and Future Level of Service on IL 29

Applicable LOS Guidelines	Existing LOS (2001)	Future LOS (2032)
Spruce Street to IL 18 (Henry) (Suburban/Urban; LOS C)	LOS D	LOS E
IL 18 Intersection ^d	LOS B	LOS F
IL 18 to Old Indian Town Road (Henry) (Suburban/Urban; LOS C)	LOS B	LOS C
Old Indian Town Road to Marshall County line (Rural; LOS B)	LOS E	LOS E
Marshall County line to Putnam (Rural; LOS B)	LOS B	LOS C
Putnam to I-180 Interchange (Rural; LOS B) ^e	LOS B	LOS C

Note: Results are based on IL 29 being a Class I Highway. Assumed free flow speeds determined from HI-STAR automatic traffic recorder data furnished by IDOT. The LOS data are based on peak hour traffic volumes for existing (2001) and future (2032) conditions under the No-Build Alternative. LOS was calculated using McTrans Highway Capacity Software (HCS) version 4.1f.

^aChillicothe: IL 6 to Truitt Avenue was not analyzed because it is an existing urban divided 4-lane arterial while other sections are 2- to 4-lane undivided arterials.

^bSouth of Cloverdale Road to Moffit Street is an existing urban 4-lane undivided section. It was analyzed using Synchro to account for LOS at intersections as well as along the segment.

^cIL 17 in Sparland is an existing all-way stop that was analyzed as an isolated intersection.

^dIL 18 in Henry is an existing all-way stop that was analyzed as an isolated intersection.

^ePutnam has several intersections, but IL 29 does not stop; therefore, it was not analyzed as an isolated intersection, but may have a slower speed than the rest of the segment.

Existing Highway Characteristics

Existing conditions along IL 29 were examined to identify deficiencies and to provide a basis for defining future roadway requirements capable of meeting the future transportation demand in the corridor.

Access Points – There are numerous access points (local roads and driveways) in Chillicothe and Henry and to a lesser extent in Sparland and Putnam. Turning movements to and from access points conflict with the highway’s function as a principal rural arterial. The increased traffic volume expected on IL 29 would make access to and from the highway more difficult for both local and through traffic in the future.

Speed Limits – The posted speed limit along IL 29 outside the communities is generally 55 mph, while within communities the speed limit is typically lowered to 30 to 45 mph. The five traffic signals between the IL 6/IL 29 intersection and the north side of Chillicothe and the four-way stop in Sparland (at Ferry Street) and Henry (at IL 18) also contribute to less efficient travel in the study area and higher vehicle operating costs caused by speed change cycles.

Farm Equipment – The width of IL 29 forces slow-moving farm equipment, particularly in the Henry to Putnam part of the study area, to use the travel lane, causing conflicts with and slowing the faster moving through traffic. This poses a safety hazard to both farmers and passing motorists. A 4-lane facility would provide better travel service by reducing or eliminating potential conflicts with agricultural equipment.

Crash History— IDOT provided average daily traffic (ADT) for Illinois Route 29 (Figure 2-1) along with data on statewide crash rates and critical rates by location and type of highway (Figures 2-2 and 2-3).

Summaries of crashes that occurred on Illinois Route 29 between Illinois Route 6 (Peoria County) and I-180 (Bureau County) were furnished by IDOT for calendar years 2001, 2002, and 2003. Figures 2-4, 2-5 and 2-6 show the locations of crashes by severity that occurred on IL 29 and contiguous sections of IL 17 and IL 18 during 2001, 2002 and 2003, respectively. Annual crash summaries were then created for each county's accidents in 2001, 2002 and 2003.

In preparing the crash summaries, the following crash characteristics were developed by segment for each year:

- Severity—Property Damage Only (PDO) or Injury, and number injured
- Involvement—Single-vehicle or multi-vehicle
- Type—Turning, rear-end, fixed object, sideswipe, angle, animal, or other

For purposes of the crash analysis, Illinois Route 29 was divided into segments by county as shown in Table 2-6:

TABLE 2-6
Crash Analysis Segments

Segment	County	Mile Post	Mile Post	ADT
IL 6—Rome West Rd.	Peoria	125.09	129.91	16,900
Rome West Rd. —Truitt Ave.	Peoria	129.91	133.25	10,600
Truitt Ave. —Yankee Lane	Peoria	133.25	135.30	8,700
Yankee Lane—Marshall CL	Peoria	135.30	137.33	8,100
Marshall CL—IL 17	Marshall	137.33	141.50	7,500
IL 17—Camp Grove Road	Marshall	141.50	144.26	3,650
Camp Grove Road—IL 18	Marshall	144.26	148.29	3,950
IL 18 (Western) —Putnam CL	Marshall	148.29	150.83	5,600
Putnam CL—CH 13 (Putnam)	Putnam	150.83	153.70	3,100
CH 13—I-180	Putnam/Bureau	153.70	158.90	3,050

Crash information for the study area from IDOT's Division of Traffic Safety for 2001 through 2003 is shown on Tables 2-7 and 2-8. A total of 75 crashes were single vehicle crashes, 170 crashes involved more than one vehicle, and 242 crashes involved deer during this period.

TABLE 2-7
Crash Summary, 2001 Through 2003

County	Single Vehicle Involving Animals	Single Vehicle Involving Other	Multiple Vehicle Involving Animal	Multiple Vehicle Involving Other	Total Crashes
Peoria	53	47	0	144	244
Marshall	119	14	1	21	155
Putnam	55	9	0	2	66
Bureau	14	5	0	2	21
Total	241 (50%)	75 (15%)	1 (0%)	169 (35%)	486 (100%)

TABLE 2-8
Crash Severity Summary, 2001 Through 2003

County	Fatalities	Severe Injury (Type A)	Other Injury (Types B & C)	Property Damage Only	Total Crashes
Peoria	0	20	45	178	244
Marshall	0	5	15	135	155
Putnam	0	2	3	61	66
Bureau	0	1	3	17	21
Total	0 (0%)	28 (6%)	66 (14%)	391 (80%)	486 (100%)

A summary showing the proportions of crashes by severity and involvement, as well as the percentage of crashes involving an animal for each analysis segment is presented in Table 2-9. For example, in Peoria County between Yankee Lane and the Marshall/Peoria county line, 14.8% of the crashes involved injuries, 29.6% involved more than one vehicle, and 59.3% involved collision with an animal.

TABLE 2-9
Percent of Injury, Multi-Vehicle and Animal Crashes by Segment: 2001 Through 2003

Segment	Percent Injury	Percent Multi-Vehicle	Percent Animal
Illinois 6—Rome West Road	30.6	41.7	29.2
Rome West Road—Truitt Avenue	30.8	81.3	1.0
Truitt Avenue—Yankee Lane	20.4	42.9	34.7
Yankee Lane—Marshall/Peoria CL	14.8	29.6	59.3
Total: Peoria County	27.1	57.3	21.6
Marshall/Peoria CL—Illinois 17	13.5	14.3	76.2
Illinois 17—Camp Grove Road	5.3	2.6	92.1
Camp Grove Road—Illinois 18	20.0	12.5	72.5
Illinois 18—Marshall/Putnam CL	15.0	40.0	50.0
Total: Marshall County	13.4	14.3	75.9
Marshall/Putnam CL—CH 13	33.33	0.0	88.9
CH 13—I-180 (Bureau County)	9.8	5.9	76.5
Total: Putnam/Bureau Counties	17.9	3.8	80.8

Severity. National research indicates that the expected distribution of crashes by severity on two-lane rural highways would be approximately 32 percent fatal and injury, and 68 percent property damage only.¹ Except for the segment between Marshall/Putnam County Line and CH 13, crash experience on Illinois Route 29 indicated less severity than the national norm. It is believed that the better than expected crash severity performance for segments of Illinois Route 29 north of Truitt Avenue is a result of the substantially high incidence of animal crashes in this area.

¹ Harwood, D.W. et al, *Prediction of the Expected Safety Performance of Rural Two-Lane Highways*, Table 1, FHWA-RD-99-207, Office of Safety Research and Development, Federal Highway Administration, McLean, Virginia, December 2000

During the three-year period from 2001-2003 there were 28 crashes that involved severe “A” type injuries on Illinois Route 29 between Illinois Route 6 and I-180. There were no fatalities during this time frame. Figures 2-7, 2-8 and 2-9 show the locations of A injury crashes on IL 29 and contiguous sections of IL 17 and IL 18 for the years 2001, 2002 and 2003, respectively. Seventeen of the A injury crashes, or 61 percent, occurred on the section of IL 29 between IL 6 and Senachwine Creek north of Chillicothe. The remainder took place on the 2-lane rural section of IL 29 between Chillicothe and I-180. The most prevalent crash type was collision with a fixed object (32%), followed by overturned vehicle (21%), and rear-ends (18%). During the three year period, only one severe injury crash involved collision with an animal. There was one side swipe (opposite direction), but no head-on collision. Approximately 80 percent of A injury crashes occurred under conditions of dry pavement. One half of the crashes occurred at an intersection.

Involvement—National research also indicates that approximately one-third of all crashes on two-lane rural highways would typically involve two or more vehicles.² As was evidenced above for crash severity, there were significantly fewer multi-vehicle crashes on the northernmost segments of Illinois Route 29, than those farther south. Again, the difference between 3-year crash experience on Illinois Route 29 and the national experience may be attributed to the higher than normal animal crashes on Illinois Route 29. The distribution of crashes by type, as reported in the national research, shows 31 percent collisions with an animal in contrast to percentage involvement of from 50 percent to 92 percent on Illinois Route 29 in Marshall, Putnam, and Bureau Counties.

Comparison with Statewide Average and Critical Rates—Statewide averages for crash frequency and crash rates for various highway types covering the period from 2001 to 2003 were obtained from IDOT. The Department also furnished statewide critical values for crash frequency and crash rates covering the same period. Critical values for crash rates are calculated by adding the average rate and one standard deviation. If the location is a non-signalized intersection, the critical value is doubled to identify high crash locations.

Illinois Route 29 crash experience for a 3-year period (2001-2003) was tabulated to obtain crash rates by segment. Figure 2-2 shows the 3-year composite crash rate by segment (excluding deer crashes and intersection crashes) compared with the statewide average rate for highways of the same cross section. The statewide average rate for two-lane rural highways is 0.65 crashes per million vehicle miles (MVM) and 0.54 crashes/MVM for the four-lane rural portions of Illinois Route 29 between Illinois Route 6 and Riverview Road. The statewide average rate for the four-lane urban section between Riverview Road and Gail Avenue is 1.71 crashes/MVM and 1.03 crashes/MVM for the two-lane urban section between Gail Avenue and Senachwine Creek.

The only segments of Illinois Route 29 where crash rates were approximately equal to the statewide average were between the Peoria/Marshall County Line and Illinois Route 17 and between Camp Grove Road and Illinois 18.

The statewide critical rate (excluding deer crashes and intersection crashes) for two-lane rural highways is 1.76 crashes per million vehicle miles (MVM) and 1.69 crashes/MVM for the four-lane rural portions of Illinois Route 29 between Illinois Route 6 and Riverview

² *ibid.*, Table 2-9

Road. The statewide critical rate for the four-lane urban section between Riverview Road and Gail Avenue is 3.61crashes /MVM and 2.97 crashes/MVM for the two-lane urban section between Gail Avenue and Senachwine Creek. Figure 2-3 compares crash experience on Illinois Route 29 with the statewide critical rates.

Illinois Routes 17 and 18—Crash history on sections of Illinois Route 17 in Sparland and Illinois Route 18 in Henry was analyzed in a manner similar to that described above for Illinois Route 29. Table 2-10 presents results of the investigation as to severity and involvement.

TABLE 2-10
Crash Severity and Vehicle Type Involvement

Segment	(2001-2003) 3-Year Total	Injury/Fatality		Single Vehicle	Multi- Vehicle	Percent Multi-Vehicle
		Number	Percent			
IL 17—East of IL 29 in Sparland	7	1	14.3	5	2	28.6
IL 17—West of IL 29 in Sparland	28	4	14.3	21	7	25.0
IL 18—In Henry	31	3	9.7	15	16	51.6
Total	66	8	12.1	14	25	37.9

As would be expected, there were few animal crashes on these roadway segments -- a total of only 14, or 21 percent, over the 3-year analysis period. Instead the crashes were more typical of an urban, rather than rural, condition.

High Crash Locations—The IDOT Bureau of Safety has identified two high crash locations in the Illinois Route 29 study area. These are the intersections of Illinois Route 29 and Walnut Street in Chillicothe and Illinois Route 6 and Old Galena Road/State Street/CH 59 in Peoria County. Figure 2-10 is a copy of the IDOT High Accident Location sheet for these locations.

Conclusion.—The only high crash locations identified by IDOT in the study corridor are located south of Senachwine Creek in Chillicothe and Mossville. Therefore, it may be concluded that an alternate route, or Chillicothe bypass, would be beneficial in diverting future traffic growth from this section of the highway.

The predominant existing safety problem on Illinois Route 29 north of Senachwine Creek is frequency of collisions with animals (deer). These types of occurrences are especially prevalent on the two-lane sections of highway north of Chillicothe. Fortunately, experience has shown that the deer collisions are usually not severe. Over the 3-year analysis period, only 8 of 288 deer related accidents (2.8 percent) involved a personal injury of any type. The rest were property damage only.

The prevalence of vehicle/animal collisions under present conditions still clearly indicates the importance of providing accommodations for safe animal crossings on an improved Illinois Route 29.

Conversion of a large section of rural 2-lane IL 29 to a 4-lane divided expressway will result in a safer travel route. The statewide average and critical rural crash rates are lower for a 4-lane divided highway than for a 2-lane facility. Certain types of crashes such as head-on

collisions and sideswipes by vehicles traveling in opposite directions will be essentially eliminated. Improved shoulders and roadsides also will reduce the number and severity of collisions with fixed objects.

2.2 Purpose and Need

The purpose of the proposed action is to improve transportation continuity, facilitate modal interrelationships, improve travel efficiency, and enhance economic stability within the IL 29 corridor from IL 6 in Peoria County to I-180 in Bureau County. The proposed facility will provide an efficient highway that will serve existing and future travel demand for both regional and local travelers while minimizing disturbance to the natural and built environment. The need for the proposed action is based on a combination of factors related to:

- Project history
- Travel efficiency, which includes existing and future traffic, highway operations, and existing highway characteristics
- System linkage, facility continuity, and route importance
- Modal interrelationships
- Economic stability

The first two of these factors have been addressed earlier in this report. The remainder of this section discusses the three other factors.

2.2.1 System Linkage, Facility Continuity, and Route Importance

System linkage and continuity are major considerations in determining the need for the proposed improvement. IL 29 is an important connecting link in the regional transportation system. Since the construction of I-180 and IL 6, IL 29 has functioned as the only direct connection between them. It has, however, served as an inadequate replacement for the state's original vision of a "supplemental four-lane highway" connecting I-74 and I-180. The 2-lane IL 29 connection fails to meet the level of travel reliability and safety of IL 6 and I-180, and interrupts or interferes with the continuity of travel between those points. Closing the gap in the high-type highway network between IL 6 and I-180 would have system wide benefits, including improving route continuity and reducing travel times for those traveling to and from the study area.

Further evidence of the importance of IL 29 in the regional transportation system is reflected in the designation the route has been given by the state and FHWA. The state and FHWA included IL 29 between IL 6 and I-180 in Illinois's part of the National Highway System. The National Highway System (NHS) was created by The National Highway System Designation Act of 1995. That legislation designated 161,000 miles of roads throughout the country as the NHS. The NHS includes the interstate system as well as rural and urban principal arterial highways serving major population centers, international border crossings, intermodal transportation facilities, and major travel destinations. The principal arterial highways (like IL 29) in the NHS account for 57 percent of the system's total miles.

In September 2005, the U.S. Secretary of Transportation designated parts of IL 29 a National Scenic Byway, called the Illinois River Road: Route of the Voyagers Scenic Byway. The scenic byway unifies and connects a number of different geological regions, natural areas, plant communities, and wildlife habitats unique to the Illinois River Valley.

Although the NHS includes only 4 percent of the nation's roads, it carries more than 40 percent of all highway traffic, 75 percent of heavy truck traffic, and 90 percent of tourist traffic. The lack of a 4-lane connection along IL 29 hinders travel and transport opportunities for study area communities, thereby interfering with the ability of IL 29 to fully meet the purposes of a principal arterial and NHS route.

IL 29 is the only 2-lane NHS route in the study area. Using IL 6 and I-180, it is the only non-interstate NHS connection between I-74 and I-80, which confirms the importance of the connection it provides between IL 6 and I-180.

2.2.2 Modal Interrelationships

Industrial and agricultural interests in the study corridor ship and receive products using the highway network, rail network (Lincoln & Southern Railroad and CSX), and barge terminal (Illinois River Waterway terminals). IL 29 serves barge terminals in Chillicothe, Lacon (in conjunction with IL 17 and IL 26), Henry, and Hennepin. The reach of the Illinois River in the study area is part of the Illinois River Waterway that extends 350 miles from Lake Michigan to the upper Mississippi River. Peoria docks are the northernmost regional docks that remain open the entire year. According to the U.S. Army Corps of Engineers (USACE), the 109 million tons shipped to, from, and within Illinois on barges in 1999 had a value of more than \$16.5 billion.

IL 29 also serves industries in Henry's industrial park that have direct connections to the Lincoln & Southern Railroad and CSX. The Iowa Interstate Railroad operates more than 500 miles of railroad between Omaha, Nebraska and Chicago, with a 43-mile branch line from Bureau Junction to Peoria on the Lincoln & Southern tracks within the study area. Between Henry and Chicago, the Iowa Interstate has trackage rights on the CSX's Rock Subdivision. The Iowa Interstate Railroad primarily transports grain, agricultural products, steel, scrap, appliances, intermodal containers and trailers, chemicals, and forest products.

The following connections between IL 29 and barge and rail service exist within the study area:

- United Suppliers, located in Henry's industrial park, is a storage and distribution facility for anhydrous ammonia. The plant receives all its anhydrous ammonia and nitrogen solution by barge, and ships its entire product out by semi trailer (about 3,000 trips annually). About 80 percent of the outbound trips travel northbound on IL 29 and 15 percent travel southbound on IL 29. United Suppliers provides same-day deliveries to customers generally within a 70-mile radius of the plant.
- The International Steel Group (ISG), which purchased the former LTV steel plant in Hennepin, has 70 percent of its unfinished steel coil barged to Hennepin and then trucked to the plant. The remaining 30 percent comes by rail. Ninety percent of the plant's finished steel is trucked out, with a number of trips bound for industries in the Peoria area on IL 29.

- A large percentage of the corn grown between IL 29 and the Kewanee area is shipped by truck to barge terminals in Hennepin, Henry, Lacon, or Chillicothe, requiring trips of various lengths on IL 29. Farmers would also use IL 29 to reach the grain elevator in Putnam, which does not have a barge terminal. Proposed improvements to IL 29 that would reduce travel inefficiencies (such as traveling through communities within the project area) could improve the economics for shippers by allowing them to make one additional trip to barge terminals or grain elevators per day.
- Gravel, sand, and bulk salt are barged to and from the project area requiring use of IL 29.
- A fertilizer producer in the Henry industrial park receives raw materials by truck and the Iowa Interstate Railroad. It ships its finished product by truck throughout the U.S. and Canada and uses IL 29 to access I-180 and the interstate system.

In addition, two potential projects in and near Henry's industrial park – a sand quarry and an ethanol plant – would increase truck traffic on IL 29.

Improvements along IL 29 would provide a safer, more efficient facility that would maximize the benefits of existing intermodal connectivity in the project area and provide greater options for the project area's industrial employers, agri-industries, and their suppliers.

2.2.3 Economic Stability

Two major goals of the state's transportation system are to enhance the state's economic advantage and to retain existing economic bases (including the viability of the agricultural sector) and employment in rural areas. Ensuring economic stability in the project corridor and improving IL 29 are closely linked. Commercial and industrial uses in Chillicothe, Sparland, Lacon, Henry, and Hennepin stimulate transportation demand by increasing the number of workers commuting to and from work, the customers traveling to and from services areas, and the products being shipped between producers and consumers.

In today's competitive economy, agricultural and industrial products and parts produced in the study area must move quickly and safely throughout the state, the country, and the world. Businesses and agricultural interests in the study area depend on an efficient highway system with connections to rail and barge facilities to meet their shipping needs. The transport of raw materials and finished products is a large part of the business costs borne by manufacturers and agricultural interests. Expanding IL 29 from 2 to 4 lanes would benefit agricultural interests and existing commercial and industrial development in the study area by decreasing transportation costs and making transportation more reliable. By eliminating the deficiencies of IL 29 and maximizing existing intermodal connections, commercial and industrial development and area farmers can transport raw and finished products at less cost. As a result of reduced transportation costs, businesses in the study area could experience greater profitability or increased market share.

Residents could benefit when travel becomes more efficient and transportation costs are lowered. Besides the inherent value of increased mobility associated with improvements to IL 29, study area residents would benefit from the increased efficiency in commuting to employment outside their county of residence or increased employment options as their range of feasible commuting is expanded. Table 2-11 indicates the high percentage of study

area residents that commute outside their county of residence. According to the 2000 Census, more than one-half of the workers in Marshall and Putnam counties worked outside their county of residence. Between 1990 and 2000 the number of workers in all study area counties had increased, as did the number of workers working outside their county of residence. While the 2000 Census did not indicate where, exactly, the workers are commuting to, given the amount of employment offered in Peoria, Mossville, Chillicothe, Lacon, Henry, and Hennepin, it is reasonable to assume that most are bound for employment centers in those areas by way of IL 29.

TABLE 2-11
Employee Travel Characteristics for 1990 and 2000

County	Number of Workers		Worked Outside County		Percent of Total	
	1990	2000	1990	2000	1990	2000
Bureau	16,015	17,184	4,868	6,337	30.4	36.9
Marshall	5,765	6,492	2,502	3,292	43.4	50.7
Peoria	80,525	84,003	11,542	12,492	14.3	14.9
Putnam	2,599	2,777	1,351	1,662	52.0	59.8

Source: 1990 and 2000 Censuses

The supply of labor to study area employers could increase as more potential employees fall within their commuting range. With a high quality labor force and competitive labor costs already in place, the elimination of transportation inadequacies is critical to enhancing economic stability.

Existing Conditions/Setting

3.1 Description of the Project Area

The project area spans portions of four counties in central Illinois: Peoria, Marshall, Putnam and Bureau. It passes through ten townships and encompasses eight communities: Mossville, Rome, Chillicothe, Hopewell, Sparland, Lacon, Henry, and Putnam. The project area focuses on Illinois 29 from the north side of Peoria to I-180 (approximately 35 miles), which is located west of and generally parallel to the Illinois River.

The flat topography, which is characteristic of central Illinois, is interrupted by the Illinois River in the study area. The river valley provides the areas greatest topographic relief, which can range from 200 to 400 feet. Throughout much of the project area, bluffs rise from the river valley just west of the existing highway.

Land use in the project area is primarily influenced by the Illinois River on the east side and its suitability for agriculture and livestock, especially near the Illinois River. The Illinois River runs parallel to IL 29 on its east side. On the west side of IL 29, land is mostly agricultural broken up by bluffs and tributaries of the Illinois River and towns located along the roadway. Public lands can be found on the west side of the road in the north and central sections of the project corridor.

3.2 Existing Development

The largest employer in the study area is Caterpillar's Mossville Facility near the south terminus of the project. Other large employers include Butler Technical Group and Mediacom, in Chillicothe, International Steel in Hennepin, Meta-Tec in Lacon, and Poly One in Henry. Large lots of land owned by gravel mining and processing companies dot the landscape in the south end of the project corridor. There are two quarry companies located on the north side of Chillicothe.

Hopewell, Putnam and Sparland residential areas are on the west side of IL 29. Henry's residential area is east of the proposed corridor. Henry's downtown area, the central business district (CBD), is not adjacent to IL 29, but also located in the eastern part of the town near the Illinois River.

3.3 Environmentally-Sensitive Areas

There are extensive environmentally sensitive areas in the IL 29 corridor including Natural Areas, Nature Preserves and Wildlife Areas.

Six designated Illinois Natural Areas occur within the project area, and one additional site occurs outside the project area but within a one-mile buffer area.

- Root Cemetery (Hallock Township)
- County Line Hill Prairie (Private)
- Hopewell Estates Hill Prairies (Private)
- Marshall County Hill Prairie (Public/Private)
- Sparland (Public)
- Miller Anderson Woods (Public/Private)

Two of the Illinois Natural Areas are privately-owned, two are publicly-owned, and two are a combination of public and private ownership.

There are five dedicated Nature Preserves within the study area.

- Singing Woods Nature Preserve (west of Mossville)
- Root Cemetery Savanna Nature Preserve (near Truitt Avenue)
- The Hopewell Hill Prairie Nature Preserve (adjacent to Hopewell)
- Oak Bluff Savanna Nature Preserve (near Camp Grove Road)
- Miller-Anderson Woods Nature Preserve (north of Putnam)

There is one wildlife area administered by the U.S. Fish and Wildlife Service in the project area, the Cameron/Billsbach Unit of the Illinois River National Wildlife and Fish Refuge. An additional area, owned and operated by the IDNR, is the Marshall County State Fish & Wildlife Area, which includes the Marshall unit, Spring Branch Unit and Sparland Unit. The Audubon Wildlife Area is privately owned and does not have a development plan.

3.4 Development Constraints

Identification of development constraints was an early step in the determination and refinement of alternative alignments. Constraints would include sensitive environmental resources such as wetlands, designated parks or natural areas, habitats of threatened and endangered species, and historical/archaeological sites, as well as man-made obstacles such as cemeteries, railroads, public utilities, schools and major public/commercial developments. The geographical information system (GIS) database was the key tool used in this analysis.

The locations of some of the major constraints to the location of an alignment for Illinois Route 29 are shown in Figures 3-1S, 3-1C and 3-1N. These are, by no means the only development constraints, but they are some that exerted a significant influence in arriving at feasible alignments. The following is a brief description of each constraint, keyed to Figure 3-1 and proceeding from south to north.

1. Mossville School - located on the west side of Old Galena Road just north of Illinois Route 6.
2. Camp Wokanda - Boy Scout camp located south of Cedar Hills Drive
3. Caterpillar Mossville Plant- located near the intersection of Old Galena Road and Cedar Hills Drive.
4. CILCO utility towers located throughout the project area.

5. Singing Hills Nature Preserve on and near the bluffs located west of Ivy Lane.
6. Audubon Wildlife Area – located north of Caterpillar on Old Galena Road.
7. Illinois Valley Central High School, South Primary School and Chillicothe Cemetery – all located in Chillicothe along IL 29.
8. Root Cemetery Nature Preserve– an old settler’s cemetery that has preserved an unusual and intriguing remnant of the original Illinois landscape. It is located in Peoria County approximately one mile northwest of Chillicothe.
9. Galena Road Gravel, Inc. – gravel pit located northwest of Chillicothe.
10. Riverside Materials, Inc. – gravel pit located north of Chillicothe, on the east side of IL 29.
11. Chillicothe Recreational Area – north of Chillicothe, on the east side of IL 29.
12. Proposed Chillicothe Golf Course (Southport Development, Inc.) – a new golf course shown on the Town’s Comprehensive Plan to be located north of Chillicothe.
13. Hammet Cemetery – located in the southwest quadrant of IL 29 and Yankee Lane.
14. Marshall County State Fish and Wildlife Area – located east of existing IL 29 from north of Chillicothe to north of Sparland.
15. Iowa Interstate and CSX Railroad tracks – located adjacent to and east of existing IL 29 nearly continuously in Marshall, Putnam and Bureau Counties.
16. County Line Hill Prairie – located south of Hopewell on the west side of IL 29.
17. Hopewell Estates Hill Prairie Natural Area – located on the west side of IL 29 south of Hopewell Drive.
18. Village of Hopewell – development is well removed from IL 29 on the west, but access is difficult due to steep grades along the bluff that parallels existing IL 29.
19. Historic bridge across Barville Creek.
20. Retaining wall south of Sparland – one-half mile long, tied-back retaining wall supports existing IL 29 adjacent to bluffs approximately one-quarter mile south of Sparland.
21. Marshall County Hill Prairie Land and Water Reserve -- located on the west side of IL 29 across from the IDNR Boat Launch, south of Sparland.
22. Wightman Lake – located east of IL 29 and the railroad tracks south of IL 17.
23. Village of Sparland – commercial and residential development on existing IL 29 confined by the railroad tracks on the east and bluffs on the west. Steep grades to the west of IL 29 also cause difficulties in locating potential alignments.
24. Wiffle Tree House – historic house located in Sparland.
25. The west bluff also causes difficulties in locating potential alignments.

26. Goose Lake (South) – the smallest of the natural lakes associated with the western edge of the Illinois River. It is located one and one-half miles northeast of Sparland.
27. Bonham Cemetery – located along 1100E, south of Camp Grove Road.
28. Sparland Unit Natural Area – located north of Sparland, east of the railroad tracks across from the intersection with 1100E.
29. Cameron Billsbuck Natural Wildlife Refuge – located east of IL 29 between Sparland and Henry near Crow Creek.
30. City of Henry -- commercial development along existing IL 29 on the west side of the City of Henry.
31. Marshall County Fairgrounds – located on the west side of IL 29 in Henry just north of IL 18.
32. Henry Senachwine Consolidated High School – located on the east side of IL 29, north of IL 18 in Henry. Main access to the High School is from IL 29.
33. Calvary Cemetery and St. Patrick Cemetery – located west of existing IL 29, north of Western Avenue.
34. Henry Cemetery – located on the west side of IL 29 on the north edge of the Town of Henry.
35. Hoyt Cemetery - located on the west side of IL 29 just north of Henry Cemetery.
36. CILCO Gas Pipeline Facility – located on the east side of IL 29 just north of the Henry Cemetery.
37. Town of Putnam/Grain Elevators – residential development on the west side of IL 29 coupled with grain elevators on the east side.
38. Putnam Ball Field – located west of IL 29 between High Street and Main Street.
39. Chief Senachwine Burial Mounds –approximately seven to eight acres on the east side of IL 29 north of Putnam (east of the CSX Railroad) is covered by burial mounds of the Pottawatomie tribe. It is believed that more than 1000 Native Americans (perhaps including Chief Senachwine) are buried there.
40. Putnam Cemetery – located east of Putnam on County Highway 13 (Senachwine Lake Road).
41. Goose Lake (North) – lies directly east of Miller Anderson Woods (see below) and directly west of Hennepin.
42. Miller Anderson Woods Nature Preserve and Natural Area– an especially valuable natural area owned and operated by the Illinois Department of Natural Resources and the Illinois Nature Preserves Commission. It is located on the west side of IL 29 south of Kentville Road.

Alternatives Considered

4.1 Alternative Alignment Studies

The IL 29 improvement project will enhance transportation continuity between Illinois Route 6 and I-180 by improving Illinois Route 29 to a safe and efficient high-type highway that will serve existing and future travel demand while minimizing disturbance to the natural and built environment. From Illinois Route 6 to approximately Hardscrabble Road, north of Chillicothe, the alternative alignments would either follow the present alignment of Illinois Route 29, or proceed on a new alignment bypassing Chillicothe on the west. From north of Chillicothe to I-180, the improvement would generally follow the present alignment of Illinois Route 29 with possible bypasses of Hopewell, Sparland, Henry and Putnam.

The alternatives are the product of an alignment study that considered and evaluated a broad range of alternative alignments (*Alignment Study Report*, March 2003). The development and screening of alternative alignments was a collaborative process, involving input from public agencies, municipal officials, business leaders, the farm community, and interested citizens. Other resources, such as prior highway studies conducted in the study area, were also used in the consideration of possible alternatives. Numerous resources were incorporated to develop alternatives that provided for efficient travel with minimal disruption to communities and environmental resources.

The Alignment Study considered alternatives separately in three study sections as shown in Figure 4-1.

- South Section - from IL 6 near Mossville to north of Chillicothe.
- Central Section - from north of Chillicothe to south of Henry
- North Section - from south of Henry to I-180 in Bureau County

4.2 No-Build Alternative

The No-Build Alternative is defined as doing nothing to existing Illinois Route 29 other than continued routine maintenance. Improvements implemented under this alternative would be limited to short-term restoration activities (maintenance improvements) needed to ensure continued use of IL 29 between IL 6 and I-180. The design of the existing roadway, including location, geometric features, and current capacity limitations, would remain unchanged. Under this alternative, some minor improvements could be anticipated at high volume intersections. Generally, there would be no need for any additional right-of-way for the No-Build Alternative, and there would be no displacements or farm severance. Expenditures for improvements would not be required, but costs would still be incurred for continued maintenance and eventual replacement of the existing roadway and structures.

The No-Build Alternative would lead to growing travel inefficiencies along the IL 29 corridor as traffic volumes increase in coming years. The communities along and beyond

the project corridor would remain without the high-type facility that is needed to enhance the economic stability and growth of this sector of Illinois.

4.2.1 Alternative Modes

Presently, there is no public transportation service in the study area. The area is essentially rural, characterized by low population density and relatively long user trip lengths. Even if bus service was provided, it is unlikely that persons with origins and/or destinations in the study area would use this service enough to noticeably reduce auto trips. Thus, bus service is not considered a viable means of responding to future travel demand.

There are large industries in Mossville (Caterpillar), Henry (Noveon and Farmland Industries) and Hennepin (International Steel Group opened fall 2002) where Transportation Demand Management (TDM) techniques such as ridesharing and vanpools may be applicable. However, the potential travel diversion to these alternative modes would not be great enough to measurably reduce auto trips. Therefore, although TDM is a desirable transportation objective, it is not considered to be a viable alternative in this setting.

4.2.2 Alternative Corridors

In 1969, the Illinois General Assembly passed legislation enabling major highway improvements statewide. An important part of that legislation was the Supplemental Freeway system. One of the freeways included in the enabling legislation was Supplemental Freeway F-5 (later known as FA 405). There were three selected corridors for Supplemental Freeway F-5, each located west of Illinois Route 29 and extending from the junction of I-74/I-474 to I-180 southwest of Bureau Junction.

Following passage of the legislation, The Illinois Division of Highways in 1972 prepared a Corridor Report for FA 405. This project considered a corridor on the east side of the Illinois River. However factors such as the extensive cost of two additional river crossings (without improving service to the large communities along the west side of the river) eliminated this alternate from the detailed study.

The 1972 study considered three corridors, one of which (Corridor C shown on Figure 4-2) would be located generally about 1 mile west of Illinois Route 40 (then designated Illinois Route 88). This corridor, the westernmost of the alternatives studied, would cause little disruption to communities, but would affect some farms. However, it also would serve the lowest volume of traffic and provide the least traffic service to proposed industries along the Illinois River. This corridor also would pass through some recreational and nature preserve areas. For these reasons, and lack of any public support, it was not considered feasible to construct an Illinois Route 29 improvement so far west.

A western corridor along Illinois Route 40 (then designated Route 88) was also considered in the Heart of Illinois Highway Feasibility Study (1995). This corridor was withdrawn, however, in the first round of screening. The reasons given for withdrawal were that a corridor along Illinois Route 40 would involve adverse travel between Peoria and Chicago, and would not be shorter or faster than travel using existing freeways. These reasons still hold under current conditions.

The easternmost of the corridors considered in the 1972 study was Corridor A, which generally followed Illinois Route 29 bypassing the communities of Chillicothe, Sparland, Henry and Putnam on their western outskirts. This corridor was dismissed due primarily to difficulties in bringing the route to full access control (freeway) standards.

Corridor B as considered in the 1972 study would be located generally west of Illinois 29 on the higher ground on top of the Illinois River bluff. This was the corridor approved in 1972 and later in the 1990's included in Phase I engineering of the Heart of Illinois (HOI) Study. The HOI study re-named this corridor, Corridor A. In 2000, alignments within this corridor were presented to the public. Both the alignments and the location of the corridor met with strong opposition from the public and local officials. Due to this opposition, legislators mandated that Corridor A be relinquished in favor of a corridor basically following Illinois Route 29.

The current corridor being studied is shown in Figure 4-2. The IL 29 corridor is a combination of Corridors A and B from the 1972 Corridor Study. The selection of the IL 29 Study Corridor was based on reevaluation of the three 1972 corridors, public input and concerns of the cities within the study area.

4.3 Proposed Highway Design Guidelines

4.3.1 Roadway Type

Build alternatives consider the expansion of IL 29 to a 4-lane divided facility. Roadway types considered were a freeway and an expressway.

The recommended highway type for IL 29 in the section from IL 6 to north of Chillicothe would be a fully access controlled freeway. Drivers would only be able to enter or leave the highway at a grade-separated interchange. There would be no driveway or field entrance access along the highway between interchanges.

From north of Chillicothe to I-180, the recommended highway type would be a partially access-controlled expressway, except within 1500 feet of an interchange where there would be full control of access. Grade-separated interchanges would be provided at all U.S. and state marked routes, where justified by the cross traffic volume. Improved IL 29 would be a "no stop" highway. Except near interchanges, direct access would be granted for homes and farm operations, but there would be no commercial access except at crossroads.

4.3.2 Typical Sections

The typical section for improved IL 29 (either freeway or expressway) would have two travel lanes in each direction separated by a grass median. The typical right-of-way width required for the roadway would be 300 feet. The typical section includes 24-foot dual roadways separated by a typical 50-foot grass median, with a typical paved shoulder width of 10 feet for the right shoulder and 6 feet for the left shoulder. Roadside ditches would be provided for drainage as appropriate. The overall right-of-way needs will be slightly greater in hilly terrain where larger roadway cuts or fills are required.

Detailed typical sections are found in Appendix D.

4.3.3 Design Criteria

Design and geometric criteria for this project are presented in Table 4-1. The minimum design speed will be 70 mph for both an expressway and a freeway. Maximum vertical gradient would be from 3 to 4 percent. The desirable minimum grade would be 0.5 percent. Design and geometric criteria applied to any required improvements or connections to State and U.S. Highways, as well as county, township, or municipal highways, are also summarized in Table 4-1.

TABLE 4-1
Design and Geometric Criteria

A. Freeway or Expressway Mainline		
Topic	Criteria	Source¹
Design Speed		
Mainline	70 mph	BDE, Fig. 45-4A <i>BDE Fig. 44-5A</i>
Level of Service		
Mainline	LOS B	BDE, Fig. 45-4A <i>BDE Fig. 44-5A</i>
Horizontal Alignment		
Maximum Superelevation Rate	6%	BDE, Fig. 45-4C <i>BDE Fig. 44-5D</i>
Minimum Radius Curve	2050 ft.	BDE, Fig. 32-2E
Desirable Radius Curve	≥3000 ft.	BDE, Fig. 45-4C, <i>BDE Fig. 44-5D</i> BDE, Sect. 45-2.02(1), <i>BDE Sect. 44-2.02(1)</i>
Minimum Curve Length, $\Delta \geq 5^\circ$	500 ft.	BDE, Fig. 32-2G
Maximum Curve Length	1 mile	BDE, Sect. 32-2.06
Design Vehicle	WB-65	BDE, Fig. 36-1R
Vertical Alignment		
Maximum Grade		
Level	3%	BDE, Fig. 45-4C <i>BDE Fig. 44-5A</i>
Rolling	4%	BDE, Fig. 45-4C <i>BDE Fig. 44-5A</i>
Minimum Grade		
Desirable	0.5%	BDE, Fig. 45-4C <i>BDE Fig. 44-5A</i>
With Special Ditching	0.0%	BDE, Fig. 45-4C <i>BDE Fig. 44-5A</i>
Rate of Vertical Curvature, k		
Crest Vertical Curve	247	BDE, Fig. 45-4C <i>BDE Fig. 44-5A</i>
Sag Vertical Curve	181	BDE, Fig. 45-4C <i>BDE Fig. 44-5A</i>
Vertical Curve Length, Crest		
Minimum	350 ft	BDE, Sect. 33-4.01(a)(3)
Desirable Minimum	1000 ft.	BDE, Sect. 33-4.01(a)(3)
Vertical Curve Length, Minimum, Sag	350 ft.	BDE, Sect. 33-4.02(a)(3)
Minimum PGL Elevation above Natural Ground in Level Terrain		
	3 ft.	BDE, Sect. 33-6.04(e)
Vertical Clearance		
Mainline and Ramps		
Below New and Replaced Structures	16.5 ft.	BDE, Fig. 45-4A <i>BDE Fig. 44-5A</i>
Below Existing Structures	16.0 ft.	BDE, Fig. 45-4A <i>BDE Fig. 44-5A</i>
All Structures Over Railroad	23.0 ft.	BDE, Fig. 45-4A <i>BDE Fig. 44-5A</i>
Sight Distance		
Stopping Sight Distance		
Minimum, Cars on Level Grade	730 ft.	BDE, Fig. 45-4C <i>BDE Fig. 44-5D</i>
Decision Sight Distance		
Minimum	1105 ft.	BDE, Fig. 45-4C <i>BDE Fig. 44-5D</i>
Intersection Sight Distance	See BDE	BDE, Sec. 36-6

Note: Sources shown in italics are freeway criteria. If a separate criterion is not indicated, the expressway criterion also applies to freeways.

TABLE 4-1
Design and Geometric Criteria

A. Freeway or Expressway Mainline

Cross Section Elements

Wide Median (Freeway)		
Min. Median Width (Depressed)	55 ft.	<i>BDE Fig. 44-5A</i>
Total Shoulder Width		
Left	8 ft.	<i>BDE Fig. 44-5A</i>
Right	10 ft.	<i>BDE Fig. 44-5A</i>
Paved Shoulder Width		
Left	6 ft.	<i>BDE Fig. 44-5A</i>
Right	10 ft.	<i>BDE Fig. 44-5A</i>
Wide Median (Expressway)		
Min. Median Width (Depressed)	50 ft.	<i>BDE, Fig. 45-4A</i>
Total Shoulder Width		
Left	6 ft.	<i>BDE, Fig. 45-4A</i>
Right	10 ft.	<i>BDE, Fig. 45-4A</i>
Paved Shoulder Width		
Left	4 ft.	<i>BDE, Fig. 45-4A</i>
Right	10 ft.	<i>BDE, Fig. 45-4A</i>
Narrow Median (Expressway Only)		
Median Width (Flush, CMB)	22 ft.	<i>BDE, Fig. 45-4A</i>
Total Shoulder Width		
Left	9 ft.-10½ in.	<i>BDE, Fig. 45-4A</i>
Right	10 ft.	<i>BDE, Fig. 45-4A</i>
Paved Shoulder Width		
Left	9 ft.-10½ in.	<i>BDE, Fig. 45-4A</i>
Right	10 ft.	<i>BDE, Fig. 45-4A</i>
Traveled Way Width	2 at 24 ft. each	<i>BDE, Fig. 45-4A BDE Fig. 44-5A</i>
Cross Slopes - Normal Section		
Travel Lanes, Adjacent to Crown	3/16"/ft. (1.5%)	<i>BDE, Fig. 45-4A BDE Fig. 44-5A</i>
Shoulders	1/2"/ft. (2.0%)	<i>BDE, Fig. 45-4A BDE Fig. 44-5A</i>
Maximum Shoulder Rollover	8%	<i>BDE, Sect. 32-3.04(a)</i>
Clear Zone, Foreslopes	30 ft.	<i>BDE, Fig. 38-3A</i>
Earth Slopes		
Fill		
Foreslope		
Without Barrier		
Within Clear Zone	6:1	<i>BDE, Fig. 45-4A BDE Fig. 44-5A</i>
Beyond Clear Zone	3:1 Max	<i>BDE, Fig. 45-4A BDE Fig. 44-5A</i>
Fill > 30 ft., use barrier	2:1 Max	<i>BDE, Fig. 45-4A BDE Fig. 44-5A</i>
Cut		
Foreslope		
Back Slope	6:1	<i>BDE, Fig. 45-4A BDE Fig. 44-5A</i>
Within Clear Zone		
Beyond Clear Zone	3:1	<i>BDE, Fig. 45-4A BDE Fig. 44-5A</i>
Height > 10 ft.	2:1 Max	<i>BDE, Fig. 45-4A BDE Fig. 44-5A</i>
Rock Cuts		
	0.25:1, or as required by rock	<i>BDE Fig. 34-4E</i>
Median Slope	6:1	<i>BDE, Fig. 45-4A BDE Fig. 44-5A</i>
Ditch Bottom Width ²		
At Rock Cuts	4 ft. Min	<i>BDE, Fig. 45-4A BDE Fig. 44-5A</i>
	1'-8" + width for falling rock	<i>BDE Fig. 34-4E</i>
Access Control (Expressway)		
Along Facility	Partial	<i>BDE, Fig. 45-4A</i>
Minimum Distance from End of Ramp		
Merging Taper to Nearest Point of Access or to Median Crossover ³	1500 ft.	<i>BDE, Fig. 35-2J</i>

Note: Sources shown in italics are freeway criteria. If a separate criterion is not indicated, the expressway criterion also applies to freeways.

TABLE 4-1

Design and Geometric Criteria

A. Freeway or Expressway Mainline			
Distance from Resid./Agric. Entrance to Median Opening	0 ft. or ≥ 300 ft.		BDE, Sect. 45-2.09(a)
Minimum Distance between Two Resid. Entrances on Same Side of Expressway	500 ft.		BDE, Sect. 45-2.09(a)
Desirable Average Max. Number of Resid./Agric. Entrances on Same Side of Expy. per $\frac{1}{4}$ Mile, as Measured betw. Adjacent Crossroad Intersections or Interchanges	1		BDE, Sect. 45-2.09(a)
Average Spacing between Median Openings			
New Roadway is Parallel and Adjacent to Existing Roadway	0.5 mi.		BDE, Sect. 45-2.06(b)
New Roadway Alignment is Independent of Existing Alignment ⁴	1 mi.		BDE, Sect. 45-2.06(b)
Minimum Distance from Median Crossover:			
To Overhead Bridge Structure	750 ft.		BDE, Sect. 45-2.06(b)
To End of Mainline Bridge	750 ft.		BDE, Sect. 45-2.06(b)
Driveway Design (Resid. & Agric.- Expressway Only)			
Width	12 ft.– 24 ft.		PPADSH, Illus. 3
Field Entrance Roadbed Width	16 ft. Min		MHDLRS, Attach. 5-8I
Radius of Flare	10 ft.– 40 ft.		PPADSH, Illus. 3
Angle of Drive			
Desirable	90°		PPADSH, Sect. IV-C(5)
Minimum	60°		PPADSH, Sect. IV-C(5)
Grade			
Drains Away from Highway at:	Shldr. Grade		
	(1.5% Min, 8% Max)		PPADSH, Sect. IV-C(1)
Remaining Grade	12% Max		PPADSH, Sect. IV-C(1)
Drainage			
Roadway			
Minimum Elevation of Roadway Pavement Crown Above Highwater			DRM, Table 1-304
50 Year Storm ⁵	3 ft.		
Bridge Freeboard			DRM, Table 1-304
50 Year Storm	2 ft.		
Highest Recorded Flood Elevation	0 ft.		
Climbing Lanes			
Climbing Lane on Multi-Lane Highways is Generally Warranted if the Following Conditions are Satisfied:			
<ul style="list-style-type: none"> • The critical length of grade is exceeded for the 10 mph speed reduction curve on BDE, Fig. 33-2A; and • The directional service volume exceeds 1000 veh/h; and • One of the following exists: <ul style="list-style-type: none"> + The level of service (LOS) on the upgrade is E or F, or + There is a reduction of one or more LOS when moving from the approach segment to the upgrade; and • The construction costs and construction impacts are considered reasonable. 			
B. Interchange Ramps			
Horizontal Alignment			
Design Speed			
Loop Ramps	Desirable	30 mph	BDE, Sect. 37-4.04
	Minimum	25 mph	
Outer Connector Ramps	Desirable	50 mph	BDE, Sect. 37-4.04
	Minimum	45 mph	
Note: Sources shown in italics are freeway criteria. If a separate criterion is not indicated, the expressway criterion also applies to freeways.			

TABLE 4-1
Design and Geometric Criteria

B. Interchange Ramps			
Horizontal Alignment			
Semi-Directional Ramps	Minimum	50 mph	BDE, Sect. 37-4.04
Directional Ramps (incl. Diamond)	Minimum	50 mph	BDE, Sect. 37-4.04
Controlled Ramp Terminal Approach	Desirable	40 mph	BDE, Sect. 37-4.04
	Minimum	25 mph	
Maximum Superelevation Rate	8%		BDE, Fig. 37-4F
Exit Ramp Curve Approaching			
Controlled Terminal	6%		BDE, Fig. 32-3A
Minimum Radius Curve ($e_{max}=8\%$)			BDE, Fig. 37-4F
Design Speed:	25 mph	170 ft.	
	30 mph	250 ft.	
	35 mph	350 ft.	
	40 mph	465 ft.	
	45 mph	600 ft.	
	50 mph	760 ft.	
Design Vehicle		WB-65	
Vertical Alignment			
Maximum Upgrade	4%		BDE, Fig. 37-4F
Maximum Downgrade	6%		BDE, Fig. 37-4F
Rate of Vertical Curvature, k (Design Speed = 50 mph)			BDE, Fig. 37-4F
Crest Vertical Curve	84		
Sag Vertical Curve	96		
Cross Section Elements			
Traveled Way Width			
1-Lane Ramp	16 ft.		BDE, Sect. 37-4.06
Cross Slope – Normal Section			
Traveled Way	3/16"/ft. (1.5%)		BDE, Sect. 37-4.06
Shoulder	1/2"/ft. (2.0%)		BDE, Sect. 37-4.06
Total Shoulder Width (1-Lane Ramp)			
Left	6 ft.		BDE, Sect. 37-4.06
Right	8 ft.		BDE, Sect. 37-4.06
Paved Shoulder Width (1-Lane Ramp)			
Left	4 ft.		BDE, Sect. 37-4.06
Right	6 ft.		BDE, Sect. 37-4.06
Clear Zone, Foreslopes	20 ft.-26 ft. and varies		BDE, Fig. 38-3A
Entrance and Exit Ramp			
Terminals	See BDE		BDE, Sect. 37-6
Minimum Acceleration/Deceleration			
Lengths	See AASHTO		GB-90, Tables X-4 & X-6
Interchange Design	See BDE		BDE Chapter 37
Drainage	See Mainline		
C. State and U.S. Highways⁶--Two-Lane Principal Arterials			
Design Speed			
Principal Arterial	70 mph		BDE, Fig. 47-2J
Horizontal Alignment			
Maximum Superelevation Rate			
New Construction	6%		BDE, Fig. 47-2M
To Remain in Place	8%		BDE, Fig. 47-2M
Minimum Radius Curve			
6% Max. Super. (New)	2050 ft. Minimum		BDE, Fig. 47-2M
	3000 ft. Desirable		BDE, Fig. 47-2M

TABLE 4-1

Design and Geometric Criteria

C. State and U.S. Highways⁶--Two-Lane Principal Arterials

8% Max. Super. (To Remain)	1825 ft.	BDE, Fig. 32-2D
Minimum Curve Length, $\Delta \geq 5^\circ$	500 ft.	BDE, Fig. 32-2G
Maximum Curve Length	0.5 mile	BDE, Sect. 32-2.06
Design Vehicle	WB-65	BDE, Fig. 36-1R
Vertical Alignment		
Maximum Grade		
Level Terrain		
New Construction	3%	BDE, Fig. 47-2M
To Remain in Place	4%	BDE, Fig. 47-2M
Rolling Terrain		
New Construction	4%	BDE, Fig. 47-2M
To Remain in Place	5%	BDE, Fig. 47-2M
Approaching Intersection w/IL 29	2%, Draining away	BDE, Sect. 36-1.06(a)
Through Controlled Ramp		
Intersections	2%	BDE, Sect. 37-5.01
Minimum Grade		
Desirable	0.5%	BDE, Fig. 47-2M
With Special Ditching	0%	BDE, Fig. 47-2M
Rate of Vertical Curvature, k		
Crest Vertical Curve	247	BDE, Fig. 47-2M
Sag Vertical Curve	181	BDE, Fig. 47-2M
Vertical Clearance		
Below New and Replaced Structures	16.5 ft.	BDE, Fig. 47-2J
Below Existing Structures	16.0 ft.	BDE, Fig. 47-2J
Over Railroads	23.0 ft.	BDE, Fig. 47-2J
Stopping Sight Distance		
Minimum, Cars on Level Grade	730 ft.	BDE, Fig. 47-2M
Cross Section Elements		
Traveled Way Width		
New Construction	24 ft.	BDE, Fig. 47-2J
To Remain in Place	22 ft.	BDE, Fig. 47-2J
Flush TWLTL Width		
New Construction	14 ft.	BDE, Fig. 47-2J
To Remain in Place	12 ft.	BDE, Fig. 47-2J
Total Shoulder Width		
New Construction	10 ft.	BDE, Fig. 47-2J
To Remain in Place	8 ft.	BDE, Fig. 47-2J
Paved Shoulder Width		
New Construction	10 ft.	BDE, Fig. 47-2J
To Remain in Place	8 ft.	BDE, Fig. 47-2J
Auxiliary Lanes		
Lane Width		
New Construction	12 ft.	BDE, Fig. 47-2J
To Remain in Place	11 ft.	BDE, Fig. 47-2J
Shoulder Width		
	4 ft. (Paved)	BDE, Fig. 47-2J
Cross Slopes (Normal Section)		
Travel Lanes	3/16"/ft. (1.5%)	BDE, Fig. 47-2J
Auxiliary Lanes	1/4"/ft. (2.0%)	BDE, Fig. 47-2J
Shoulders		
New Construction	1/2"/ft. (4%)	BDE, Fig. 47-2J
To Remain in Place	1/2"/ft. to 3/4"/ft. (4%-6%)	BDE, Fig. 47-2J
Maximum Shoulder Rollover	8.0%	BDE, Sect.32-3.04(a)
Clear Zone, Foreslopes	28 ft.-30 ft. and varies	BDE, Fig. 38-3A
Earth Slopes		
New Construction	See Expressway Mainline	

TABLE 4-1
Design and Geometric Criteria

C. State and U.S. Highways⁶--Two-Lane Principal Arterials

To Remain in Place		
Fill		
Foreslope		
Without Barrier		
Within Clear Zone	4:1	BDE, Fig. 34-4A
Beyond Clear Zone	3:1 Max	BDE, Fig. 34-4A
Fill > 30 ft., use barrier	2:1 Max	BDE, Fig. 34-4A
Cut		
Foreslope	4:1	BDE, Fig. 34-4C
Back Slope		
Within Clear Zone	3:1	BDE, Fig. 34-4C
Beyond Clear Zone		
Height > 10 ft.	2:1 Max	BDE, Fig. 34-4C
Ditch Bottom Width ²		
New Construction	4 ft.	BDE, Fig. 47-2J
To Remain in Place	2 ft.	BDE, Fig. 34-4C
Access Control		
Along Arterial	Partial or None	
Adjacent to Controlled Ramp Terminals ⁷		
Approaching On-Ramp Terminal, Min. Dist. from End of Radius Flare of Access Connection to Ramp Intersection P.I.	600 ft.	BDE, Fig. 35-2B
Beyond Off-Ramp Terminal, Min. Dist. from End of Radius Flare of Ramp to End of Radius Flare of Access Connect.		
Arterial Design Speed = 70 mph	600 ft.	BDE, Fig. 35-2A, 2B
Arterial Design Speed = 60 mph	550 ft.	BDE, Fig. 35-2A, 2B
Adjacent to Expressway Intersection ⁷		
Along 2-Lane Divided Crossroad, Min. Distance from Expressway to Access Connection	To end of Channelization	BDE, Sect. 35-2.03(a)
Along Undivided Crossroad, Min. Distance from Edge of Expressway to Radius Return of Access Connection	300 ft.	BDE, Fig. 35-2B
Along Crossroad, Min. Distance from Edge of Expressway to Radius Return of:		
Existing Single Family Private Entrance or One Existing Field Entrance	100 ft.	BDE, Sect. 35-2.03(a)
Existing Low-Volume Commercial Entrance ⁸	200 ft.	BDE, Sect. 35-2.03(a)
Railroad: Minimum Distance from Proposed Arterial Stop Bar to Closest Rail (Desirable)	81 ft.	BDE, Sect. 36-8
Driveway Design (Resid. & Agric.)	See Expressway Mainline	

D. State and U.S. Highways⁶--Two-Lane Minor Arterials and Two-Lane Collectors

Design Speed		
2-Lane Minor Arterial	60 mph	BDE, Fig. 47-2K
2-Lane Collector	60 mph	BDE, Fig. 47-2L
Horizontal Alignment		
Maximum Superelevation Rate		
New Construction	6%	BDE, Fig. 47-2M
To Remain in Place	8%	BDE, Fig. 47-2M
Minimum Radius Curve		
6% Max. Super. (New)	1340 ft. Minimum	BDE, Fig. 47-2M

TABLE 4-1

Design and Geometric Criteria

D. State and U.S. Highways⁶--Two-Lane Minor Arterials and Two-Lane Collectors

	3000 ft. Desirable	BDE, Fig. 47-2M
8% Max. Super. (To Remain)	1205 ft.	BDE, Fig. 32-2D
Minimum Curve Length, $\Delta \geq 5^\circ$	400 ft.	BDE, Fig. 32-2G
Maximum Curve Length	0.5 mile	BDE, Sect. 32-2.06
Design Vehicle	WB-65	BDE, Fig. 36-1R
Vertical Alignment		
Maximum Grade		
Level Terrain		
New Construction	3%	BDE, Fig. 47-2M
To Remain in Place	4%	BDE, Fig. 47-2M
Rolling Terrain		
New Construction	4%	BDE, Fig. 47-2M
To Remain in Place	5%	BDE, Fig. 47-2M
Approaching Intersection w/IL 29	2%, Draining away	BDE, Sect. 36-1.06(a)
Through Controlled Ramp		
Intersections	2%	BDE, Sect. 37-5.01
Minimum Grade		
Desirable	0.5%	BDE, Fig. 47-2M
With Special Ditching	0%	BDE, Fig. 47-2M
Rate of Vertical Curvature, k		
Crest Vertical Curve	151	BDE, Fig. 47-2M
Sag Vertical Curve	136	BDE, Fig. 47-2M
Vertical Clearance		
Below New and Replaced Structures		
Minor Arterial	16.5 ft.	BDE, Fig. 47-2K
Collector	14.75 ft.	BDE, Fig. 47-2L
Below Existing Structures		
Minor Arterial	16.0 ft.	BDE, Fig. 47-2K
Collector	14.0 ft.	BDE, Fig. 47-2L
Over Railroads	23.0 ft.	BDE, Fig. 47-2J
Stopping Sight Distance		
Minimum, Cars on Level Grade	570 ft.	BDE, Fig. 47-2M
Cross Section Elements		
Traveled Way Width		
New Construction	24 ft.	BDE, Fig. 47-2K
To Remain in Place	22 ft.	BDE, Fig. 47-2L
Flush TWLTL Width		
New Construction	14 ft.	BDE, Fig. 47-2K
To Remain in Place	12 ft.	BDE, Fig. 47-2L
Total Shoulder Width		
New Construction		
Minor Arterial	10 ft.	BDE, Fig. 47-2K
Collector	8 ft.	BDE, Fig. 47-2L
To Remain in Place		
Minor Arterial	8 ft.	BDE, Fig. 47-2K
Collector	6 ft.	BDE, Fig. 47-2L
Paved Shoulder Width		
New Construction		
New Construction	4 ft.	BDE, Fig. 47-2K, L
To Remain in Place		
Minor Arterial	4 ft.	BDE, Fig. 47-2K
Collector	2 ft.	BDE, Fig. 47-2L
Auxiliary Lanes		
Lane Width		
New Construction	12 ft.	BDE, Fig. 47-2K, L
To Remain in Place	11 ft.	BDE, Fig. 47-2K, L

TABLE 4-1
Design and Geometric Criteria

D. State and U.S. Highways⁶--Two-Lane Minor Arterials and Two-Lane Collectors

Shoulder Width	4 ft. (Paved)	BDE, Fig. 47-2K, L
Cross Slopes (Normal Section)		
Travel Lanes	3/16"/ft. (1.5%)	BDE, Fig. 47-2K, L
Auxiliary Lanes	1/4"/ft. (2.0%)	BDE, Fig. 47-2K, L
Shoulders		
New Construction	1/2"/ft. (4%)	BDE, Fig. 47-2K, L
To Remain in Place	1/2"/ft. to 3/4"/ft. (4%-6%)	BDE, Fig. 47-2K, L
Maximum Shoulder Rollover	8.0%	BDE, Sect.32-3.04(a)
Clear Zone, Foreslopes	26 ft.-30 ft. and varies	BDE, Fig. 38-3A
Earth Slopes		
New Construction - Minor Arterial	See Expressway Mainline	
New Construction – Collector, and To Remain in Place – Arterial & Collector		
Fill		
Foreslope		
Without Barrier		
Within Clear Zone	4:1	BDE, Fig. 47-2K, L
Beyond Clear Zone	3:1 Max	BDE, Fig. 47-2K, L
Fill > 30 ft., use barrier	2:1 Max	BDE, Fig. 47-2K, L
Cut		
Foreslope	4:1	BDE, Fig. 47-2K, L
Back Slope		
Within Clear Zone		
New Construction	4:1	BDE, Fig. 47-2L
To Remain in Place	3:1	BDE, Fig. 47-2K, L
Beyond Clear Zone		
Height > 10 ft.	2:1 Max	BDE, Fig. 47-2L
Ditch Bottom Width ²		
New Construction		
Minor Arterial	4 ft.	BDE, Fig. 47-2K
Collector	6 ft.	BDE, Fig. 47-2L
To Remain in Place	1.5 ft.	BDE, Fig. 47-2K, L
Access Control		
Along Crossroad	Partial or None	
Adjacent to Controlled Ramp Terminals: ⁷		
Approaching On-Ramp Terminal, Min. Dist. from End of Radius Flare of Access Connection to Ramp Intersection P.I.	600 ft.	BDE, Fig. 35-2B
Beyond Off-Ramp Terminal, Min. Dist. from End of Radius Flare of Ramp to End of Radius Flare of Access Connect. (Crossroad Design Speed = 60 mph)	550 ft.	BDE, Fig. 35-2A, 2B
Adjacent to Expressway Intersection ⁷		
Along 2-Lane Divided Crossroad, Min. Distance from Expressway to Access Connection	To end of Channelization	BDE, Sect. 35-2.03(a)
Along Undivided Crossroad, Min. Distance from Edge of Expressway to Radius Return of Access Connection	300 ft.	BDE, Fig. 35-2B
Along Crossroad, Min. Distance from Edge of Expressway to Radius Return of:		
Existing Single Family Private Entrance or One Existing Field Entrance	100 ft.	BDE, Sect. 35-2.03(a)
Existing Low-Volume Commercial Entrance ⁸	200 ft.	BDE, Sect. 35-2, 03(a)

TABLE 4-1

Design and Geometric Criteria

D. State and U.S. Highways⁶--Two-Lane Minor Arterials and Two-Lane Collectors

Railroad: Minimum Distance from Proposed

Arterial Stop Bar to Closest Rail

(Desirable)

81 ft.

BDE, Sect. 36-8

Driveway Design (Resid. & Agric.)

See Expressway Mainline

E. Local, Township, and County Highways⁹**Design Speed¹⁰**

50 mph

APLRS, Fig. 5-8a

Horizontal Alignment

Maximum Superelevation Rate

8%

APLRS, Attach. 5-8D

Minimum Radius Curve

765 ft.

APLRS, Fig. 5-8b

Minimum Curve Length

300 ft.

APLRS, Attach. 5-8B

Design Vehicle

WB-50

BDE, Fig. 36-1R

Vertical Alignment

Maximum Grade

Locals and Collectors

6%

APLRS, Fig. 5-8b

Arterials

4%

APLRS, Fig. 5-8b

Approaching Intersection w/IL 29

4%, draining away

BDE, Sect. 36-1.06(a)

Rate of Vertical Curvature, k

Crest Vertical Curve

110

APLRS, Attach. 5-8G

Sag Vertical Curve

90

APLRS, Attach. 5-8F

Vertical Clearance

Below New and Replaced Structures

14.75 ft.

BDE, Fig. 47-2L

Below Existing Structures

14.0 ft

BDE, Fig. 47-2L

Over Railroads

23.0 ft.

BDE, Fig. 47-2I

Stopping Sight Distance

Local, Township and County Hwys.

400 ft.

APLRS, Fig. 5-8b

Cross Section Elements

Surface Width

Varies, 22 ft.– 24 ft.

APLRS, Fig. 5-8a

Shoulder Width - Gravel

Varies, 4 ft.– 8 ft.

APLRS, Fig. 5-8a

Median Width at Channelized

Intersection Approaches

18 ft.

BDE, Fig. 36-3L

Cross Slopes - Normal Section

1/8"/ft.-1/4"/ft. (1.0%-2.0%)

APLRS, Fig. 5-8c

Maximum Shoulder Rollover

8.0 %

APLRS, Fig. 5-8a

Clear Zone, Foreslopes

10 ft.-26 ft. and varies

BDE, Fig. 38-3A

Earth Slopes¹¹

Foreslope

4:1

MHD LRS, Fig. 5-8a

Back Slope

3:1

MHD LRS, Fig. 5-8a

Ditch Design¹¹

Varies

MHD LRS, Fig. 5-8a

Access Control

Along Crossroad

None

Adjacent to Expressway Intersection⁷

Along 2-Lane Divided Crossroad, Min.

Distance from Expressway to Access
ConnectionTo end of
Channelization

BDE, Sect. 35-2.03(a)

Along Undivided Crossroad, Min. Distance
from Edge of Expressway to Radius
Return of Access Connection

300 ft.

BDE, Fig. 35-2B

Along Crossroad, Min. Distance from Edge
of Expressway to Radius Return of:Existing Single Family Private Entrance
or One Existing Field Entrance

100 ft.

BDE, Sect. 35-2.03(a)

TABLE 4-1
Design and Geometric Criteria

E. Local, Township, and County Highways⁹		
Existing Low-Volume Commercial Entrance ⁸	200 ft.	BDE, Sect. 35-2.03(a)
Railroad: Minimum Distance from Proposed Arterial Stop Bar to Closest Rail (Desirable)	81 ft.	BDE, Sect. 36-8
Driveway Design		
Radius of Flare		
Normal	10 ft.	APLRS, Attach. 5-81
High Volume Traffic Generator	50 ft.	APLRS, Attach. 5-81
Other Criteria	See Expressway Mainline	
F. Railroad		
Horizontal Alignment		
Maximum Degree of Curve	1°30'	
Cross Section Elements		
Min. Offset from CL of Outside or Single Track to Nearest Obstacle		
For Off-Track Maintenance Equipment, 1 Side Only	22 ft.	BDE, Fig. 39-5S, T
For Heavy and Drifting Snow	30 ft.	BDE, Fig. 39-5S, T
	25 ft.	BDE, Fig. 39-5S, T
Sources for Design Criteria		
BDE-- Bureau of Design and Environment Manual , Illinois Department of Transportation, 2002.		
MHDLRS¹²--Metric Highway Design for Local Roads and Streets , Bureau of Local Roads and Streets, Illinois Department of Transportation, May 1994.		
APLRS--Administrative Policies for Local Roads and Streets , Bureau of Local Roads and Streets, Illinois Department of Transportation, 1989.		
GB-94--A Policy on Geometric Design of Highways and Streets , AASHTO, 1994.		
PPADSH--Policy on Permits for Access Driveways to State Highways , Illinois Department of Transportation, 1990.		
DRM--Drainage Manual , Illinois Department of Transportation, 2004.		

**Notes*

¹See list of sources following table for key to source abbreviations.

²A wider ditch may be used where detention storage of storm water is an important consideration.

³Applies to both sides of expressway.

⁴Closer spacing may be provided for severed farm tracts.

⁵It is desirable to use roadway EOP rather than crown for overtopping criteria. Roadway elevation criteria would therefore be 0.2 ft. higher for normal sections and 1.4 ft. higher for fully superelevated sections.

⁶Applies to Rural State Highway System arterials, not including freeways and expressways.

⁷See BDE, Section 35-2 for further information, and for required spacing between other ramp terminals and access connections.

⁸See BDE Section 35-2.03(a) for further qualifications.

⁹Highways under the jurisdiction of local governmental agencies.

¹⁰Design speeds vary for these highway types based on highway classification and traffic volumes. Design criteria, therefore, also vary. See "Administrative Policies for Local Roads and Streets" for further information. Design criteria shown in the table are for a representative design speed of 50 mph.

¹¹See "Administrative Policies for Local Roads and Streets" for further information.

¹²English reference is not available.

* Shown in italics are freeway criteria. If a separate criteria is not indicated, the expressway criteria applies to freeways.

4.3.4 Access Control

As indicated earlier, IL 29 would be designed as a fully access controlled freeway from IL 6 to north of Chillicothe. The remainder of the route would be designed as an expressway.

For the expressway portion of the project, grade-separated interchanges would be provided at U.S. and state-marked routes, where justified by cross traffic volume, and at other major crossroads where traffic signals would be warranted within nine years after initial construction. The expressway would be fully access controlled for a distance of 1500 feet on either side of each interchange.

Direct access to the expressway would be permitted for homes and farm operations, except in the vicinity of grade-separated interchanges. Some movements to and from driveways or side roads would be right turn in/right turn out only. Median openings would be provided at an average of one mile apart on new alignment and one-half mile apart on existing alignment to allow for U-turns. Commercial driveway access would not be permitted; access to commercial uses would be at the nearest crossroad.

4.4 Build Alternatives Considered

Various build alternatives were considered in the Alignment Study phase of this project. Alternatives considered are summarized below and are also documented in the *Alignment Study Report*.

Build alternatives consider the expansion of IL 29 to a four-lane expressway both on existing alignment as well as construction of an expressway facility on new alignment. Sections of the project, which would be fully access-controlled freeway, would be constructed entirely on new alignment.

4.4.1 South Section Alternatives

The South Section extends from Illinois Route 6 in Mossville approximately 10 miles north to a junction with the Central Section at about Hart Lane, north of Chillicothe.

Six alternative alignments that would bypass Chillicothe on the west were considered in the South Section. See Figure 4-2A. In addition, consideration was also given to the feasibility of improving existing Illinois Route 29 to expressway/freeway standards between Illinois Route 6 and Hart Lane, north of Chillicothe.

All of the alternative alignments, except improvement on the existing alignment, would begin at the north stub of the partially completed trumpet interchange with the Illinois Route 6 freeway near Mossville.

The alignment located farthest west (near Singing Woods Nature Preserve) is referred to as **S-1**. This alignment would form a large bow to the west generally following Ivy Lane along the toe of the bluffs west of Mossville. It would then head northeast, crossing the BNSF Railroad below North Hampton, and then tie into IL 29 near Hart Lane. Alignment S-1 was dismissed because it did not appear to afford significant benefits and would be extremely disruptive to Singing Hills Nature Preserve and farming operations.

Alternatives **S-2**, **S-3**, **S-4** and **S-5**, would be coincidental between the IL 6 spur and Wayne Road. These alignments would cross diagonally over the intersection of Old Galena Road and Cedar Hills Drive, splitting into four separate routes at Wayne Road. The north-south route taken from this point is described below for each of the alignments.

Alignment **S-2** approximately follows Wayne Road north across the BNSF railroad tracks, and then northeast to meet the Central Section alignments near Hart Lane. This alignment was dismissed because it would have the greatest environmental and social impacts, and highest cost.

Alignments **S-3a/S-3b** generally follow Krause Road north to just south of Truitt Road where the alignments split. S-3a would continue north, joining the alignment of S-2. The other alignment, S-3b, would take a diagonal route along the north side of the Chillicothe recreational area, to the vicinity of Hart Lane near Ratcliffe Road. These alignments were dismissed because they would impact residences, farmsteads and businesses, and would require a large number of local access points.

The southern tip of **S-4** would begin at Illinois Route 6, continue north until it reached the northern side of the eastern Caterpillar site and then would veer in a northeasterly direction between the two Caterpillar sites. When reaching Wayne Road, it would turn in a northerly direction and continue beyond the intersection of Wayne Road and Rome West Road. The southern segment of S-4 was dismissed because the local community preferred S-6.

Alignments **S-4a** and **S-4b** differ on the north at the crossing of Senachwine Creek. The Root Cemetery and nature preserve is also located in this area. It was decided to drop **S-4a** due to potential impacts on the Root Cemetery and nature preserve, and to retain **S-4b**, but in a modified form that minimizes impact to the Senachwine Creek floodplain.

Variations between alignments **S-5a** and **S-5b** also occur on the north near the crossing of Senachwine Creek. These alternatives presented the least environmental impacts and would be compatible with the Chillicothe Comprehensive Plan. There would be impacts, however, to the Galena Road Gravel pit and the Chillicothe Recreational Area. It was finally decided to drop alignment **S-5b** due to increased impacts to the recreational area and greater difficulty in providing an interchange with Truitt Rd.

Alignment **S-6** would begin at Illinois Route 6 and would continue northward crossing and interchanging with Cedar Hills Drive west of the existing Caterpillar site. North of Caterpillar, S-6 would turn to the northeast crossing Old Galena Road and then join **S-4** at the intersection of Wayne Road and Rome West Road. Alignment S-6 was added in response to comments received after the first Public Information Meeting.

Finally, the alternative along existing IL 29 from Mossville to Truitt Avenue in Chillicothe was also dismissed from further consideration. There is substantial roadside development along existing IL 29 between Mossville and Chillicothe, and there are numerous crossroads accessing the highway. Conversion of this route to an expressway would be extremely costly and disruptive to existing residential and commercial development. It also would essentially split the Town of Chillicothe.

4.4.2 Central Section Alternatives

The Central Section has been divided into three segments, labeled 1, 2, and 3, with Segment 1 being the southernmost and Segment 3 the northernmost. See Figure 4-3.

Central Section—Segment 1

Segment 1 of the Central Section is located just north of Chillicothe. From a connection with the South Section at the Chillicothe Bypass, Segment 1 extends approximately 4.4 miles north to a junction with Segment 2 near Hopewell. Alternative alignments considered in Segment 1 of the Central Section are shown in Figure 4-4.

Five alternative alignments were considered on the bluff west of the Illinois River. These alignments (**C-1, C-1a, C-2, C-2a and C-2c**), which would be disruptive to farming operations, are especially unpopular with local residents. The westerly alignments would also affect more forested lands. Although more costly, an alignment along the present route of IL 29 would be more efficient to operate and would provide better traffic service to the local communities, particularly Sparland.

Alignment **C-3** would begin at the proposed Chillicothe Bypass just south of Hart Lane, joining existing Illinois Route 29 at approximately Hardscrabble Road, and continuing from there along the present Illinois Route 29 alignment to meet Segment 2 at Hopewell.

Central Section—Segment 2

Segment 2 of the Central Segment begins at Hopewell and extends to north of Sparland. There are seven alternative alignments in this segment. See Figure 4-5. Two of the alternative alignments are on high ground west of Hopewell and Sparland, and the others generally follow existing Illinois Route 29.

Alignment **C-2**, the easternmost of the bluff alignments, would generally follow Hardscrabble Road. Alignment **C-1** would be parallel and approximately one-half mile west of Alignment **C-2**. As mentioned earlier, Alignments **C-1** and **C-2** were developed as an alternative to potentially impacting IDNR land, as would an alignment along existing IL 29.

Both bluff alignments would be disruptive to farm operations and especially unpopular with local residents. Each would also affect more forested lands than an alternate closer to the existing highway. It was concluded that an alignment along the present route of IL 29 would be more efficient to operate and would provide better service to local communities, particularly Sparland, than would a route farther west upon the bluffs.

Alternatives **C-3a, C-3b, C-3c, C-3d**, and **C-3e** are each a variation of alignment and interchange type through Sparland.

Alignment **C-3a** would relocate both IL 29 and the Iowa Interstate Railroad tracks to the east of their present locations. A diamond interchange would be provided between IL 29 and re-aligned Illinois Route 17.

Alignment **C-3b** would retain the railroad in its existing location. An IL 29 expressway would be constructed west of the Iowa Interstate Railroad tracks. A diamond interchange would be provided between IL 29 and re-aligned IL 17.

Alignment **C-3c** would incorporate a split-diamond interchange in Sparland. The mainline of IL 29 would cross the Iowa Interstate Railroad tracks both south and north of Sparland. Ramps to and from the south would be provided south of Sparland, and ramps to and from the north would be located north of Sparland. IL 17 would remain on its present alignment, and would be grade-separated with the re-located mainline of IL 29. A variation of Alignment C-3c, which would avoid floodplain buy-outs, was also considered.

Alignment **C-3d** would re-locate IL 29 to the east of the Iowa Interstate Railroad tracks. There would be a diamond interchange with IL 17.

Alignment **C-3e** would realign IL 17, and provide at-grade intersections between IL 29 and IL 17. The IL 29 improvement would be constructed entirely on the west side of the Iowa Interstate Railroad tracks.

With either alignment C-3a, C-3b or C-3e, Illinois Route 17 would be relocated in Sparland. At present, IL 17 is discontinuous; the route jogs on Illinois Route 29 in Sparland between Ferry Street on the south and Hilltop Drive on the north. Three options were investigated to eliminate this discontinuity.

1. Extend Ferry Street (IL 17) westward from the IL 17/IL 29 intersection through the rough terrain west of Sparland to a new connection with Hilltop Drive west of Highway Street.
2. Connect Hilltop Drive and Ferry Street in the area east of the Iowa Interstate Railroad where the Post Office and City Hall are now located.
3. Retain and improve Hilltop Drive and Ferry Street in their existing locations.

The third of these options was selected and is shown on the alternative alignment plans. This option would be compatible with the split-diamond interchange plan (C-3c) selected to be carried forward in Segment 2. The westward extension of Ferry Street (Number 1, above) was dropped because of the exceptionally difficult terrain west of Sparland.

Central Section—Segment 3

Section 3 of the Central Section extends from north of Sparland to a junction with the North Section, south of Henry near Crow Creek. The alternative alignments in Segment 3 consist of an improvement along existing Illinois Route 29, as well as links between IL 29 and the alternative alignments located on high ground west of Sparland. See Figure 4-6.

The links between both westerly alignments were dismissed along with the bluff alignments.

4.4.3 North Section Alternatives

The North Section was divided into three Segments, labeled 1, 2, and 3, with Segment 1 being the southernmost and Segment 3 the northernmost. See Figure 4-7.

North Section—Segment 1

Segment 1 of the North Section is located in the vicinity of Henry. From a connection with the Central Section, south of Henry, Section 1 extends approximately 6.4 miles north (along existing Illinois Route 29) to a common point north of Henry with Segment 2. See Figure 4-8.

Initially, three alternative alignments were established in Segment 1. Alignment H-5 would essentially follow existing Illinois Route 29 through Henry; this through-town alternative was eliminated because improving IL 29 to expressway standards in Henry would have resulted in numerous commercial displacements south and north of Western Avenue and impacts to the fairgrounds and the high school. As the alternatives development progressed, it was determined that two more alignments should be considered, one farther west of Alignment H-2 (named Alignment **H-1**) and one closer to Henry, between Alignments H-5 and H-3 (named Alignment **H-4**). Finally, the initial route for Alignment H-2 had been bent to the east to avoid an existing warehouse development on IL 29. It was decided that consideration should be given to yet another alignment (named Alignment **H-2a**) which would straighten this section.

With each of the alternative alignments, a grade-separated interchange would be provided between IL 29 and IL 18 (Western Avenue/County Highway 6).

Alignment H-4 was selected to be carried forward. This alternative alignment would be the closest to Henry, except for Alignment H-5. It would also take less farmland than any of the alternatives except Alignment H-5, and would make good use of the existing state-owned right-of-way. The total length of the route through the Henry area would be about midway between the longest (Alignment H-5) and the shortest (Alignment H-1).

North Section—Segment 2

Segment 2 of the North Section extends from a junction with Segment 1 north of Henry to a common point with Segment 3 north of Lake Thunderbird Road. Total length of Segment 2 is approximately 4.3 miles.

The alignments that were considered in Segment 2 (see Figure 4-9) might be generally described in three categories:

- Alignments west of the railroad tracks.
- Alignments east of the railroad tracks.
- Split alignments with the southbound lanes along existing IL 29 west of the railroad tracks, and the northbound lanes east of the railroad.

For alignments *west of the railroad tracks*, there are also differentiators:

- Connection to a Segment 1 alignment—either at existing IL 29 (Segment 1 Alignments H-5 and H-4)—called location **b**—or at the location where the other Section 1 bypass alignments (Alignments H-3, H-2 and H-1) come together—termed location **a**.
- Cross section through Putnam—a normal (250 feet) cross section was considered through Putnam, but dismissed at an early stage due to extensive disruption. Instead, the cross section of the alternative alignment in Putnam (**N-2**) would be constrained (190 to 200 feet) by minimizing the depth of longitudinal ditches. The cross section north of Putnam would be normal (250-300 feet).

For alignments *east of the railroad tracks*, the options are:

- From either of the possible connections to Segment 1 (see above) bypassing Putnam and then parallel to the railroad tracks east of the several homes north of Putnam (**N-4**).

- From either of the possible connections to Segment 1 (see above) bypassing Putnam and the several homes north of Putnam and then parallel to the railroad tracks (**N-5**).

For the *one-way split alignments*, the options are:

- From either of the possible connections to Segment 1 (see above, both northbound and southbound lanes would cross the railroad, bypassing Putnam on the east. The southbound lane would cross back over the railroad north of Putnam (**N-3**).
- Another one-way alternative was also considered wherein from either of the possible connections to Segment 1 (see above), the northbound roadway would cross the railroad, bypassing Putnam and then proceed parallel and east of the railroad. The southbound roadway would be located west of the railroad through Putnam. This alternative alignment was dismissed due to traffic circulation problems that it would create in Putnam.

Alternative alignments **N-2** which would follow and improve existing Illinois Route 29 through Putnam was retained for further study and consideration, but the constrained cross section was not adopted due to the desire to retain a wide median considering the high truck volume.

North Section—Segment 3

Segment 3 of the North Section would extend northward from a connection with Segment 2 to tie into the I-180 interchange near Hennepin. Total length of Segment 3 would be roughly 2.0 miles.

The alignment alternatives in Segment 3 (See Figure 4-10) were as follows:

West of the railroad tracks:

N-2—constrained cross section (150 feet) with a 22-foot wide median

East of the railroad tracks:

N-4— Either constrained cross section (170 feet with a 22-foot wide median) or normal cross section (250 feet with a 50-foot wide median)

One-way pair:

N-3—Split alignment with northbound lanes east of the railroad

After consideration given to the various environmental features and geological conditions unique to Segment 3 alignments west of the railroad tracks, five more detailed options subsequently emerged and were renamed, N-2A through N-2E. All five contain proposals for two 12-foot wide lanes in each direction and a 10-foot wide paved shoulder on each side of the road. Differences are between the width of the median and whether or not guardrails or concrete barriers would be provided and which kind. An additional element concerns storm water storage on the east side of the road with the railroad located adjacent to the roadway. Any proposed expansion of the roadway either requires the relocation of the railroad to provide enough area on the east side of the road for storm water to collect there or a narrower median. The unique features of each alignment would be as follows:

- **N-2A** – N-2A would have a 50-foot wide median and 100 foot relocation of the railroad further to the east. No concrete barriers or guardrails would be installed.
- **N-2B** – N-2B would maintain the 50-foot wide median, but would relocate the railroad less than would the N-2A option (44 feet). A guardrail would be installed on the west side and a concrete barrier would be installed on the east side.
- **N-2C** – the median in N-2C would be the same as the first two alignments, 50-foot wide, but the railroad relocation would be 28 feet, smaller than the previous alignments. Concrete barriers would be provided on both sides of the road.
- **N-2D** – N-2D is one of the two alignment alternatives that would not propose to relocate the railroad. As such, the median width would be narrower at 47 feet. To compensate for not having adequate storm water storage, a pipe to collect and direct storm water would be placed underground on the east side of the road. Concrete barriers would also be provided on each side of the road.
- **N-2E** – Finally, N-2E would be the other alignment alternative that would not propose to relocate the railroad. Therefore, to provide adequate storm water storage on the east side, the median width would be the narrowest at 22 feet. Concrete barriers were originally proposed for each side of the road, but moving forward, a guardrail would be proposed for the west side of the road. A concrete barrier would still be proposed for the east side of the road. Alignment N-2E was selected as the alignment to be carried forward primarily because it presents the least amount of impacts to environmentally sensitive features.

Detailed Description and Analysis of the Build Alternative

5.1 Attainment of Purpose and Need

The Build Alternative selected for detailed study would fulfill the project purpose – to enhance transportation continuity between the freeway connections at Illinois Route 6 and I-180 by improving Illinois Route 29 to be a safe and efficient high-type highway that will serve existing and future travel demand while minimizing disturbance to the natural and built environment. When combined with existing freeway connections south and north of the project area, the Build Alternatives would serve as an integral link in a high-type north-south highway on the west side of the Illinois River north of Peoria.

5.2 Description of Build Alternative

As described in Sections 4.3 and 4.4, the Build Alternative for this project would provide for the construction of a four-lane partially- and fully-access-controlled highway between Illinois Route 6 and I-180. Direct access to the partially controlled expressway sections will be permitted for residential and agricultural properties, with median openings provided at an average spacing of one-half to one mile to allow for U-turns. Also on expressway sections, grade separated interchanges will be provided at state marked highways. The freeway sections of the facility will have full access control.

Plan and profile and typical proposed cross sections for the Build Alternative are shown in Appendix D. A description of the Build Alternative considered in detail, along with the rationale affecting development of the alternatives is included below.

5.2.1 South Section

The proposed project begins at the IL 6 interchange with the focus of the work there being ramp related. The curve on the westbound to southbound entrance ramp (Ramp A) will be flattened to improve driving conditions, and the taper rate of the exit and entrance ramps will be brought up to standard. The westbound to northbound entrance ramp (Ramp C) will be completed to match the proposed roadway. Ramp A, the southbound entrance ramp, will be designed to match the existing alignment before the bridge overpass at Mossville Road in order to avoid reconstruction of this bridge.

North of the existing IL 6 terminus, the new IL 29 mainline will begin. A 56-foot wide median will be provided for the entire stretch of freeway matching the existing median width as per As-Built Plans. The IDOT BDE Manual shows the median section for this type of facility under the future traffic projections to be 55-foot minimum. A taper will be created north of Benedict Street to tie into the 50-foot median of the expressways to the north.

The 4-lane divided freeway section will extend within IDOT's existing right of way to Cedar Hills Drive. Dickison Lane and Boy Scout Road will be closed east of the proposed alignment. Access to properties west of the alignment will be provided via a 2-lane frontage road that would extend from Mossville Road to Cedar Hills Drive. The proposed bridge at Dickison Run will be designed to accommodate a wildlife crossing.

At Cedar Hills Drive an interchange will be constructed with a loop ramp in the southwest quadrant. See Figure 5-1. With a loop ramp, the interchange will mainly be located south of Cedar Hills Drive within IDOT's existing right-of-way. This form of interchange also accommodates the heaviest projected traffic movements. IL 29 will pass under Cedar Hills Drive. An existing CILCO tower located in the southwest quadrant of the interchange will be re-located. A 4-lane divided section with raised median will be provided on Cedar Hills Drive east of the interchange to match the 4-lane section east of the intersection with Old Galena Road. West of the interchange, Cedar Hills Drive will be designed as a 4-lane roadway tapering down to match the existing two-lane roadway.

In locating IL 29 near the south extremity of the improvement, the design attempts to make maximum use of existing IDOT right of way. South of Cedar Hills Drive, the project matches the previously planned centerline for the extension of IL 6 (F.A.P Route 405). Deviation from this centerline begins as the alignment crosses Cedar Hills Drive. North of Cedar Hills Drive, the proposed project is located on new alignment west of Caterpillar's Tech Center. North of the Tech Center, IL 29 curves northeast toward Old Galena Road and continues northeasterly to Rome West Road. IL 29 will pass over Old Galena Road immediately south of the undeveloped Audubon Wildlife Area. Care was taken to avoid impacts (other than visual) to the Wildlife Area. A new service road will be located east of IL 29 to provide Old Galena Road access to landlocked properties. Existing CILCO towers east of Old Galena Road will have to be relocated. East of the Audubon Wildlife Area, IL 29 will be located on a 5000' radius curve to the north meeting a new tangent which will carry it far enough west of the Galena Knolls subdivision to reduce noise effects to an acceptable level and also allow for a perpendicular crossing at the McGrath Street interchange. The east extension of McGrath Street to existing IL 29 will be done by others.

Proposed IL 29 crosses Wayne Road south of its existing intersection with Rome West Road. A diamond interchange is proposed at Rome West Road, which will pass over IL 29. See Figure 5-2. A new frontage road will be provided connecting Wayne Road (at Rome West Road) to Krause Road east of the proposed interchange. A new service road will be located off Krause Road east of IL 29 to provide access to parcels that would otherwise be land locked. Approximately one mile east of this interchange, Knox Street will be extended westerly and re-aligned to intersect with Rome West Road. See Figure 5-3. The extension will be on new alignment north of the residential properties on North 6th Street and tie into existing Knox Street east of the IL 29 intersection.

Past Galena Knolls subdivision, IL 29 curves to the north to run east of successive property lines minimizing severance of multiple properties. The east edge of these properties was chosen because as the proposed roadway proceeds northward, conflicts with utilities near Truitt Road and the Galena Road Gravel quarry will be minimized.

A conventional diamond interchange will be provided at McGrath Street, which will be extended west to Krause Road, but will not be extended east of the interchange in this

project. The proposed alignment then passes under Cloverdale Road and Sycamore Street. Cloverdale Road will be re-aligned to the north to provide access to properties on the south side of the road.

A partial cloverleaf interchange with a loop in the southeast quadrant will be provided at Truitt Road. See Figure 5-4. The loop is intended to minimize potential construction difficulties and costs resulting from quarry excavation. A service road will be located in the northwest quadrant of the Truitt Road interchange to provide access to an existing CILCO easement and Galena Road Gravel, Inc. A service road will be located in the Southeast quadrant to avoid landlocking farm land. Access to the CILCO property on the south side of Truitt Road will be provided from an entrance on Krause Road, north of Sycamore Road.

North of Truitt Road, IL 29 will cross over the BN&SF railroad and continue north and east crossing Senachwine Creek (south). An overpass of the railroad was selected instead of an underpass because it would avoid having to provide a railroad runaround, would not conflict with railroad operations, would cost less, would not interfere with Hallock Creek and will allow for a fourth through track. The near proximity of the existing quarry does not create stability concerns for the BNSF railroad. An existing railroad signal located west of the Root Cemetery will be relocated east of the overpass to improve sight distance for train operations. The Senachwine Creek Bridge will be lengthened to provide for a wildlife crossing and to allow farm equipment access to the south side of the highway. North of the creek crossing, IL 29 will bend east and be aligned parallel to and over a portion of Ratliff Road. The alignment was shifted as far north as possible to minimize encroachment in the Senachwine Creek floodplain. Two additional culverts east of Senachwine Creek will accommodate wildlife crossings.

Continuing east, the proposed freeway project in the South Section ends east of the relocated Benedict Street Bridge. Benedict Street will overpass IL 29 and will be re-aligned to meet existing Benedict Street north of Hart Lane. A new Benedict Street bridge over Senachwine Creek will provide a wildlife crossing.

5.2.2 Central Section

The proposed project in the Central Section begins east of the relocated Benedict Street Bridge. East of the Benedict Street Bridge, the facility converts from freeway to expressway (with a 50' median) and continues for a short segment before entering the north Chillicothe interchange area. A trumpet interchange is planned for the area between Hart Lane and existing IL 29. See Figure 5-5. The interchange will be located as far northwest as possible to minimize impacts to the floodplain and the Riverside Materials, Inc. gravel pit. The interchange location also allowed retention of the present alignment of Hart Lane.

The trumpet interchange is designed to allow free-flow movement for travel between Chillicothe and Sparland which constitutes the majority of the traffic in the area. Southbound traffic leaving Sparland, will enter Chillicothe using the interchange's directional flyover ramp. Northbound traffic from the bypass, will enter Chillicothe on existing IL 29 from an exit ramp.

Improvements to existing IL 29 within Chillicothe are planned between Truitt Avenue and the north Chillicothe interchange. South of Truitt Avenue the existing IL 29 cross-section contains two lanes in each direction plus a center two-way left turn lane (TWLTL) and

sidewalks on either side. North of the Truitt Avenue intersection to Wilmot Street, existing IL 29 (referred to as the *IL 29 Connector* in the plans) contains two lanes in each direction with a 5-foot traversable median. The 5-foot median will be widened to 12 feet to accommodate left turning vehicles. Sidewalks will be provided on both sides of the road and the outside lane in each direction will be widened from 12-feet to 14-feet between Truitt Avenue and Wilmot Street to accommodate bicycles. North of Wilmot Street, where the existing cross-section narrows to two lanes (under the existing viaduct), the IL 29 Connector will be widened to the west and contain two lanes in each direction with an 18-foot wide raised median to the north Chillicothe interchange. The existing south railroad viaduct will be reconstructed and the existing north railroad viaduct will be removed. A strip of new right of way will be acquired from the residences in Chillicothe between Truitt Avenue and just north of the railroad viaduct. Five residences (and two garages) west of IL 29 will be displaced. The strip of new right of way will create a continuous sidewalk between Truitt Avenue and just north of the railroad viaduct (for access to the Chillicothe Recreational Area). The proposed sidewalk under the viaduct will provide for both pedestrians and bicycles on the west side of IL 29 (10 feet wide) and for bicycles only on the east side (8 feet wide). North of the Chillicothe Recreational Area and along proposed IL 29, bicycles will be accommodated on the 10-foot wide outside paved shoulder on both sides of the roadway.

The south railroad viaduct over the IL 29 Connector will be reconstructed to accommodate two lanes of traffic in each direction with a center bridge pier (within an 18 foot wide raised median). A guardrail will be installed adjacent to the outside travel lanes (under the viaduct) separating the traffic from the sidewalks on the east and west sides of IL 29. Continuing north, the existing north viaduct will be demolished requiring a realignment of the BNSF yard track and access road over the reconstructed south viaduct. The reconstructed south viaduct will carry the two existing through tracks, one yard track and an access road, but the viaduct design will allow for the future addition of a third track.

North of the reconstructed south viaduct, existing IL 29 will be expanded to a four-lane divided facility with an 18-foot raised median as it approaches the trumpet interchange. IL 29 will be widened to the west in this section to avoid impacts to Support Terminal Services as well as a steep up-grade that would otherwise have required construction of a retaining wall. Widening to the west also facilitates maintenance of traffic by allowing traffic to be retained on the existing two-lane roadway while the new southbound lanes are being constructed. This west shift also allows construction of the railroad viaduct. A proposed service road just north of Senachwine Creek, parallel to and east of existing IL 29, will provide access to one farm and Riverside Materials, Inc. Widening of the *IL 29 Connector* will shift to the east north of the Chillicothe Recreational Area to avoid impacting an existing CILCO tower. The existing Senachwine Creek bridge will be replaced and widened and will accommodate a wildlife crossing.

North of the trumpet interchange, Hart Lane will be extended on new alignment west of IL 29 and tied into realigned Boehle Road. Realigned Boehle Road will partially parallel existing IL 29, and then continue north along existing alignment to Hardscrabble Road. This design will create a new connection from Hart Lane to Hardscrabble Road. The existing Boehle Road Bridge will be reconstructed over Coon Creek. A new intersection connecting Hart Lane, Boehle Road, and Hardscrabble Road to IL 29 is proposed 1500 feet north of the existing Yankee Lane/Hart Lane intersection with IL 29. Because the new connection

follows Boehle Road at this point, adequate spacing will be provided between the connection and IL 29. Two new bridges on IL 29 over Coon Creek will provide wildlife crossings. On the east side of proposed IL 29, Yankee Lane will be realigned to tie into a frontage road serving the Chillicothe Driving Range property. Yankee Lane and frontage road traffic would access IL 29 at the intersection serving Hart Lane, and Boehle and Hardscrabble Roads.

Some existing railroad grade crossings north of Chillicothe have been eliminated due to sight distance concerns that were raised by the railroad company. This has resulted in 745 acres of landlocked property east of the railroad tracks.

Several wildlife crossings will be included in the design of box culverts and bridges from Benedict Street at the south end of the Central Section to Crow Creek located on the north end of the Central Section. See Table 5-4 for wildlife crossing locations. Box culverts will be widened to provide a two-foot wide ledge for animals that is above the 2-year storm water elevation. Bridges will be extended 10 to 25 feet to accommodate large mammals.

The proposed project will widen IL 29 to the east across the Chillicothe Sportsman property, the Chillicothe Driving Range, and the IDOT rest area. North of the rest area, the IL 29 median will transition from a 50-foot wide grass median to a 22-foot wide concrete barrier median. In this area, IL 29 will be widened to the west to minimize impacts to natural areas and IDNR property on both sides of IL 29 south of Sparland as well as impacts to the Lincoln and Southern Railroad tracks on the east side of IL 29. On the west side of IL 29 opposite the IDOT rest area, a small section of Crew Lane will be reconstructed, and the existing south intersection of Crew Lane and IL 29 will be closed. A new intersection will be constructed at the north driveway of the IDOT rest area and a new connection will be constructed to Crew Lane. The Rest Area Service Road will provide an area for weighing trucks, including access to IDNR land and private property located south of the Rest Area. The proposed project will displace four residences located between existing IL 29 and Crew Lane on the west side of existing IL 29.

Between the IDOT rest area and the Sparland interchange, seven railroad grade crossings will be removed and four crossings will either be relocated or reconstructed at their existing locations.

A split profile typical section (southbound lanes at a higher elevation than the northbound lanes) will commence 0.6 miles north of the existing intersection with Crew Lane and continue 0.7 miles north to reduce impacts to County Line Hill Prairie Natural Area and to minimize disruption of the bluff on the west side. The split profile typical section will have a 36-inch high concrete median barrier or a retaining wall in the median and a retaining wall that would be up to 7 feet high along the west side of IL 29. There will also be a split profile typical section from 1,100 feet south of the Hopewell Estates Hill Prairies Natural Area to 800 feet south of the Hopewell entrance. The typical split profile will have a 3- to 10-foot retaining wall in the median and a retaining wall on the west side of IL 29 that will be up to 14 feet high. The new bridge over the Illinois River Tributary, located 0.6 miles south of Hopewell Drive, will provide a wildlife crossing. Because IL 29 would be widened to the west, the entrance drive to the Village of Hopewell will be realigned. The Hopewell Drive realignment will maintain the existing grade and improve stopping sight distance along IL 29. A median opening will be constructed at the entrance to Hopewell to allow access for

northbound and southbound travel. The new bridge over Rattlesnake Hollow Creek will provide a wildlife crossing.

A split profile and retaining wall is proposed between 1,300 feet north of the Barrville Drive entrance and the north limits of the Marshall County State Hill Prairie Natural Area. The split profile section will be approximately 3400 feet long with a 3- to 10- foot high retaining wall in the median and a retaining wall along the west side of IL 29 that will be up to 7-feet high. The widening to the west will displace the historic Barrville Bridge and one residence near the IL 29/Barrville Drive intersection. On Barrville Drive, access to one parcel on the south side of Barrville Creek will require construction of a creek crossing by others. North of Barrville Drive, widening continues on the west side to a point approximately one-half mile south of Sparland. The existing entrance to the Marshall State Fish and Wildlife Area west of IL 29 would be widened and extended for 900 feet south of the existing entrance. The driveway for the IDNR boat launch area east of IL 29 will be relocated to the south to improve the safety of the railroad crossing in that area. The present profile of IL 29 will be retained for the northbound travel lanes to allow continued use of the existing tie-back retaining wall located on the east side from north of the IDNR boat launch area to just south of the proposed Sparland interchange.

North of the Marshall County State Hill Prairie Natural Area the split profile typical section ends as the project enters the Sparland interchange area. A split diamond interchange, separating the northbound exit and southbound entrance ramps from northbound entrance and southbound exit ramps, is proposed. The project will transition to west of existing IL 29 starting about 2500 feet south of the Sparland corporate limits. It will then move to the east and cross over existing IL 29 and the Lincoln & Southern Railroad tracks on a bridge. East of the railroad tracks, the alignment will cross the agricultural field on the south side of Sparland on approximately 25 to 35 feet of fill. The alignment will be located between floodplain buyout properties so as not to impact them. The alignment will cross over Gimlet Creek and IL 17 east of the Whiffle Tree House and continue north passing west of Sparland's treatment ponds, where the fill slope is approximately 30 feet west of the treatment plant berm. See Figure 5-6. The alignment will then cross over Thenius Creek and the Lincoln & Southern railroad for the second time. The northbound entrance ramp and the southbound exit ramp will be located north of Thenius Street, providing access to Sparland. The southbound exit ramp will be elevated over Thenius Street and Thenius Creek. Bikes traveling on the outside paved shoulder will be directed off the project onto existing IL 29 within the Sparland interchange. Figures 5-7, 5-8, 5-9 and 5-10 are artist's concepts of proposed IL 29 in the vicinity of Sparland.

Even though the existing roadways in Sparland are below the 50-year design flood level, IL 17 and existing IL 29 will be reconstructed at their existing elevations. The existing IL 29 cross section will be widened slightly to allow turn lanes, but access to businesses and/or residences from IL 17 and IL 29 will not change. A two-lane, left-turn bay will be provided on IL 17 at the IL 29/IL 17/Ferry Street intersection and one residence will be displaced in the southeast quadrant of the intersection. The Gimlet Creek Bridge will be widened to accommodate left turning vehicles. Left turns into Center Street from IL 17 will be prohibited. A signal will be installed at the existing IL 29/IL 17 intersection. Due to the low expected traffic volume, Ferry Street traffic would operate on an actuated signal phase. Existing IL 29 on the south side of Sparland will be terminated south of Willow Street to

provide for the entrance and exit ramps to and from proposed IL 29. A roundabout will be constructed at the west IL 17/IL 29 intersection. Two existing railroad grade crossings in Sparland (Water Street and IL 17) will be retained. Access to Water Street will be right-in/right-out only.

Just north of IL 17, the existing ground line is lower than Thenius or Gimlet creeks. Therefore, roadway run-off from IL 29 will be contained in ditches to percolate into the soil.

North of the Sparland Interchange, to minimize cuts into the bluff, a split profile commences and continues to the existing intersection with 1100E. Five residences will be displaced along the southbound exit ramp. The retaining wall on the west side of IL 29 will be 2- to 3-foot high while the median wall will be up to 18 feet high. Also north of Sparland, widening resumes on the west side of existing IL 29 and the 22-foot wide concrete median barrier will be used.

The south intersection of Road 1100E with IL 29 will be closed. A new intersection will be constructed approximately 3000 feet north of the intersection to be closed to provide a connector road between 1100E and IL 29. A new railroad crossing will be located at this intersection. Three residences along the west side of IL 29 north of the proposed intersection will be displaced. Approximately 2,000 feet south of the intersection, the median will begin to transition from 22 feet wide with a concrete median barrier to a 50 foot wide grass median. In this section, IL 29 will be widened to the west to allow a wider median. The widening will continue to the west through the Camp Grove Road intersection displacing a residence and two commercial storage buildings. At the Camp Grove Road intersection, a service drive will be provided on the east side of IL 29. Alignment of the service road will be curved to provide an acceptable gradient at the railroad crossing.

North of Sparland, no railroad grade crossings will be removed. Five crossings will be reconstructed at the following locations:

- Approximately 3100 feet south of the new 1100E intersection (Y-type crossing to IDNR boat launch).
- At the new 1100E intersection (provides access to two residences).
- Opposite Camp Grove Road (provides access to three properties).
- Approximately 3450 feet north of Camp Grove Road (existing field entrance).
- Approximately 4800 feet north of Camp Grove Road (existing field entrance and access to the US F&WS Cameron/Billsbach Unit of the Illinois River National Wildlife and Fish Refuge).

A new bridge will be constructed at the Crow Creek crossing. This bridge will be lengthened to provide for a wildlife crossing. The profile will be raised to meet flood requirements, and the alignment will be shifted west to allow continued use of existing ditches next to the railroad. North of the new Crow Creek bridge three residences west of IL 29 will be displaced. To limit wetland and floodplain impacts west of IL 29, a guardrail and steeper side slopes will be used in the Crow Creek area. Retaining walls will be installed on the west side at three higher quality wetland locations to further reduce the

width of the roadway footprint. The elevation of IL 29 in this area will be increased by approximately 10 feet to raise the travel lanes above the 50-year design water elevation.

5.2.3 North Section

A new culvert will be constructed at the north end of the Crow Creek slough to replace the existing culvert under IL 29. That culvert will continue to drain to another culvert under the railroad tracks. Two small animal wildlife crossings will be provided near the north crossing of Crow Creek.

North of the proposed culvert and the Crow Creek slough, widening continues on the west side of IL 29 through the IL 29/Old IL 29 (1150 N) intersection displacing a residence south of the intersection. That intersection will be realigned to the south to improve sight distance at the intersection by providing a 90 degree angle of intersection. The realignment will provide access to a lumber warehouse located in the northwest quadrant of the intersection with the proposed alignment. An existing railroad crossing will be relocated to align with the new intersection.

North of the Old IL 29 intersection, widening continues to the west, and the proposed project will realign the IL 29/1300E intersection to the north to improve sight distance. The west and east connection will be realigned to connect to the new intersection. The west widening will cross the Ag View FS Coop property displacing the warehouse, office and storage tanks.

The existing railroad crossing at 1300E will be relocated north to the new location of 1300E. An existing railroad crossing approximately 1800 feet north of existing 1300E will be removed. All other railroad crossings between Crow Creek and Henry will remain. To the north, the proposed IL 29 alignment will displace a farm residence before leaving the existing IL 29 alignment and veering northward across farm land (at the south end of the Henry bypass). Bikes will be diverted from the proposed alignment to existing IL 29 at this location and continue through Henry to the north side of Henry.

At the south end of the Henry Bypass, no connection will be provided between Existing and Proposed IL 29 because it is felt that operations will be safer if that movement is made instead at the Western Avenue interchange. To accommodate local IL 29 traffic on the south side of Henry, a cul-de-sac will be provided on existing IL 29 approximately ½ mile south of IL 18 (measured along existing IL 29).

The proposed alignment will proceed north on new alignment through farm fields toward Western Avenue (County Highway 6). The alignment was developed so that the east right-of-way line of IL 29 matches an existing property line. This location minimizes the number of property severances, and the number of properties from which acquisitions are necessary. Impacts to irrigation systems were also minimized. A diamond interchange will be constructed at Western Avenue approximately 0.5 mile west of Henry. IL 29 will overpass Western Avenue. The alignment of IL 29 through the Western Avenue interchange requires the acquisition of fewer properties than if the alignment were slightly farther east. On the south side of Western Avenue, the proposed interchange will displace two residences and landlock a property in the southwestern quadrant. One residence will be landlocked and displaced in the northeast quadrant of the interchange. A service road will be developed in the northwest quadrant to provide access to a commercial property. A cattle underpass will

be provided north of the Western Avenue interchange to allow passage from the east side to the west side of proposed IL 29.

North of the proposed Western Avenue interchange relocated IL 29 remains on new alignment crossing through farm fields. Two large outbuildings will be displaced. The proposed alignment will cross under Old Indian Road and intersect Whitefield Road at grade. North of the Whitefield Road intersection the route remains on new alignment through the Marshall/Putnam County line and rejoins the existing IL 29 alignment approximately 2,400 feet north of Dry Hollow Creek. Bikes will be realigned from existing IL 29 to the outside paved shoulder of the proposed alignment. The proposed bridge at Dry Hollow Creek will be lengthened to provide a wildlife crossing. Existing railroad crossings between Henry and Putnam will remain.

After rejoining the existing IL 29 alignment, widening will continue on the west side of the highway as it approaches Putnam. See Figure 5-11. A new connection between IL 29 and Center Street is proposed south of Bradford Road. Within Putnam, the 50-foot wide median will be widened to 68' at the Bradford Road intersection to provide an increased median storage width for truck crossing IL 29. Widening will be to the west and will displace five residences and one business. Guardrail will be used on the east side of the expressway in Putnam to separate IL 29 from the grain elevator property. The IL 29/Bradford Road intersection will be realigned slightly to the south and a new railroad crossing will replace an existing crossing located 100 feet to its north. Bradford Road will be extended east of IL 29 across the railroad tracks. It will be aligned east of the grain elevator and a residential area, and intersect with Senachwine Lake Road (County Highway 13). Existing Senachwine Lake Road will be closed across the railroad tracks between the Bradford Road intersection and IL 29. The Bradford Road extension will provide access to the east side of the Putnam grain elevator. The Douglas, Courtland, and Main Street intersections on the west side of IL 29 will be closed, leaving access to Putnam at Bradford Road and High Street (west side), which will be realigned slightly to the south to improve sight distance at the intersection. Figure 5-12 is an artist's concept of proposed IL 29 near the grain elevator in Putnam.

North of Putnam, the alignment transitions slightly closer to the railroad to reduce impacts on the west side. Widening continues west of existing IL 29 through the Senachwine Valley Road intersection, which will be realigned slightly to the north. Widening continues on the west through the Cabin Hill Road intersection to a restaurant and residences north of Cabin Hill Road. There the median begins to transition from a 50-foot open, grass median to a 22-foot concrete barrier median to minimize impacts in the Miller-Anderson Woods area. A service road is proposed to provide access to the restaurant and adjacent residential properties on the west side.

North of the restaurant, the alignment shifts to the east side of IL 29 close to the Iowa Interstate Railroad to avoid the nature preserve. See Figure 5-13. To avoid changes to the roadway foreslope and ditch along the west side of IL 29 adjacent to the nature preserve, a guardrail will be located on the west shoulder of the road. Due to the east shift, a maximum 18-foot high retaining wall will be constructed on the east side to limit the amount of right of way needed from the railroad. Up to 28 feet of railroad right-of-way will be used to accommodate the shift to the east.

On the north end of the IL 29 project, the mainline profile begins to rise, from a point 1300 feet south of Kentville Road to I-180, to improve the intersection sight distance and the existing profile grade. The intersection of Kentville Road will be approximately 15 feet higher than the existing intersection and the intersection angle with IL 29 will be improved to increase the stopping sight distance and improve safety of turning movements. South of Kentville Road, two railroad crossings will be relocated and one will be removed. All other railroad crossings will remain.

5.2.4 Design Exceptions

Improvements to IL 29 were developed in compliance with design and geometric criteria described in Section 4.3 of this report. Design exceptions were considered in locations where accommodating the design criteria would result in significant impacts to adjacent lands or a substantial increase in project cost. In these cases, alternative solutions were developed and evaluated.

Design exceptions for the Build Alternative are summarized in Tables 5-1, 5-2 and 5-3 for the South, Central and North Sections, respectively.

TABLE 5-1
Design Exceptions – IL 29 South Section

Horizontal and Vertical Alignment		
Location	Design Feature	Justification
WB Cedar Hills Dr. left turn lane at West Frontage Rd.	Existing taper length does not meet IDOT policy for 55 mph design. BDE requires 240' taper length. Current design has 201 ft.	It is not feasible to move the intersection to the west due to existing bluffs west of Ivy Lake Rd.
NB Existing IL 29 right turn lane at Knox St.	Existing taper and storage lengths do not meet IDOT policy for 60 mph design. BDE requires 265' for each. Current design has 250' taper and 240' of storage.	Additional construction required to meet IDOT policy is not cost-effective.
SB Existing IL 29 right turn lane at Knox St.	Existing taper length does not meet IDOT policy for 60 mph design. BDE requires 265' taper length. Current design has 190'.	Additional construction required to meet IDOT policy is not cost-effective.
NB Existing IL 29 left turn lane at Main St. (near Knox St.)	Storage length does not meet IDOT policy for 60 mph design. BDE requires 265' storage length. Current design has 180'.	Additional storage length is not feasible due to the proximity of the Knox St. intersection. Turn volume is very low.
West Frontage Rd. SB Bridge Approach (at Dickison Run) Sta. 98+00	Guardrail length is substandard. BDE requires 200', current design allows for 75'	Geometric constraints; the Boy Scout Rd. intersection interrupts the guardrail length.

Interchanges		
Location	Design Feature	Justification
Rome West Rd. Interchange Ramps A and C	Ramp curves are located too far from ramp terminals. Curves end 1660' to 1770' from end of entrance taper. BDE requires 1150' spacing.	Curve locations are dictated by the skew of Rome West Road and the desire to minimize the interchange footprint by not providing greater ramp intersection spacing than is required.

TABLE 5-1
Design Exceptions – IL 29 South Section

Access Control at Crossroads		
Location	Design Feature	Justification
Cedar Hills Dr. at West Frontage Rd./Ivy Lake Rd. intersection	Access control length of 490' between FR/Ivy Lake Rd. and west ramp intersections does not meet IDOT policy of 600' minimum spacing.	Bluff to the northwest prevents the shift of this intersection.
Access Control at Frontage Roads and Service Drives		
Location	Design Feature	Justification
Service Rd. (3) at Rome West Rd. Sta. 38+08	Proposed PE's located 77' from Rome West Rd. do not meet IDOT policy of 100' minimum spacing	Locations of the PE's are dictated by the close proximity of the two residences being served to Rome West Rd.
Service Rd. (4) at Krause Rd. Sta. 91+92	Service Rd. curve beginning 69' from Krause Rd. does not meet IDOT policy of 100' minimum spacing	Location of existing residence prevents the modification of the Service Rd. alignment.
Drainage		
Location	Design Feature	Justification
IL 29, Sta. 2692+00 to Sta. 2701+00 Right	Ditch grade is 0.15% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 2780+00 to Sta. 2805+73 Left	Ditch grade is 0.15% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 2790+00 to Sta. 2805+73 Right	Ditch grade is 0.21% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 2934+70 to Sta. 2962+00 Right	Ditch grade is 0.28% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 3074+18 to Sta. 3096+13 Left	Ditch grade is 0.20% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 3074+18 to Sta. 3096+13 Right	Ditch grade is 0.17% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 3096+13 to Sta. 3101+00 Right	Ditch grade is 0.29% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 3120+00 to Sta. 3125+00 Right	Ditch grade is 0.23% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available

TABLE 5-1
Design Exceptions – IL 29 South Section

IL 29, Sta. 3236+45 to Sta. 3244+06 Right	Ditch grade is 0.25% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 3236+46 to Sta. 3244+06 Left	Ditch grade is 0.15% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Proposed West Frontage Rd., Sta. 93+01 to Sta. 97+79 Left	Ditch grade is 0.14% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Cedar Hills Dr., Sta. 80+00 to Sta. 85+17 Left	Ditch grade is 0.15% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Cedar Hills Dr., Sta. 80+00 to Sta. 85+17 Right	Ditch grade is 0.15% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Rome West Rd. Interchange Ramp D, Sta. 0+00 to Sta. 21+25 Right	Ditch grade is 0.27% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Wayne Rd. Extension, Sta. 43+00 to Sta. 67+00 Right	Ditch grade is 0.13% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Wayne Rd. Extension, Sta. 49+00 to Sta. 67+00 Left	Ditch grade is 0.13% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Wayne Rd. Extension, Sta. 73+50 to Sta. 80+00 Left	Ditch grade is 0.10% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Wayne Rd. Extension, Sta. 73+50 to Sta. 77+00 Right	Ditch grade is 0.21% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Wayne Rd. Extension, Sta. 79+00 to Sta. 88+60 Left	Ditch grade is 0.25% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Wayne Rd. Extension, Sta. 80+00 to Sta. 88+60 Right	Ditch grade is 0.24% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
McGrath St. Interchange Ramp C, Sta. 0+44 to Sta. 5+99 Right	Ditch grade is 0.07% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
McGrath St. Interchange Ramp D, Sta. 0+00 to Sta. 14+00 Right	Ditch grade is 0.21% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Truitt Rd. Interchange Ramp D, Sta. 2+19 to Sta. 11+69 Right	Ditch grade is 0.20% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available

TABLE 5-2
Design Exceptions – IL 29 Central Section

Horizontal and Vertical Alignment		
Location	Design Feature	Justification
IL 29 Connector at Truitt Rd., in Chillicothe	Horizontal curve length of 190' does not meet IDOT policy of minimum curve length of 250' for a 45 mph design speed	Shorter curve length minimizes impact to adjacent properties, which are located in an urban area. Existing alignment is being retained.
Proposed East Service Rd., north of Chillicothe	Horizontal curve length of 161' does not meet IDOT policy of minimum curve length of 300' for a 50 mph design speed	Shorter curve length minimizes impact to adjacent property and ties to existing road at intersection with the Proposed East Service Road Connector, which would have a stop condition.
Proposed Service Rd. South at Boehle Rd. Connector, Sta. 403+00	Horizontal curve radius of 100' does not meet IDOT policies of minimum curve radius of 305' for a 30 mph design speed	Tighter curve radius minimizes impact to adjacent property (Chillicothe Sportsmen's Club) and ties into existing Yankee Lane while maintaining as much of existing Yankee Lane as possible, where vehicles would be moving at low speeds
Hardscrabble Rd., Sta. 352+00 to Sta. 352+98	Proposed profile grade of 9.36% does not meet BLRS policy of a 9% maximum grade for a 2-lane rural highway with a 30 mph design speed	The proposed profile grade matches the existing grade at the limit of construction in order to avoid significant impacts to adjacent residential property
Proposed Crew Lane Connector	Storage platforms approximately 10' long approaching Crew Lane and IL 29 do not meet IDOT policy of minimum 50' length	The shorter platforms allow a reduced profile grade, less reconstruction of Crew Lane and a lower retaining wall
Hopewell Dr.	Design speed of 15 mph does not meet the BLRS policy of 40 mph for this classification of road	The existing rugged horizontal and vertical alignments cannot be improved without major impacts to existing residential development
Hopewell Dr.	Superelevation development is based on low-speed urban streets, which does not meet IDOT policy of using the method for open roadway conditions for this rural road	The proposed rugged horizontal and vertical alignments and the low speed limit are more consistent with low-speed urban streets than with open roadway conditions
Hopewell Dr., Sta. 45+00	Horizontal curve radius of 34' does not meet IDOT policy of minimum curve radius of 42' for a 15 mph design speed	Due to the proposed widening of IL 29 to the west into the bluff, applying tighter curve radius allows the new alignment to maintain the existing profile grade. Proposed curve radius is the same as existing.
SB IL 29 left turn lane at Hopewell Dr.	Storage length of 100' does not meet IDOT policy of 305' for a 70 mph design	Design is provided due to very low turn volumes and because most users would be familiar with the area. Safety would be improved by reducing conflicts with high-speed through traffic.

TABLE 5-2
Design Exceptions – IL 29 Central Section

Barville Dr., Sta. 46+00 and Sta. 48+00	Horizontal curve lengths of 111' and 108' do not meet IDOT policy of minimum curve length of 200' for a 40 mph design speed	Short curves are used in order to limit the length of reconstruction. The curvature is very flat.
NB IL 29 left turn lane at Barville Dr.	Taper and storage lengths of 240' each do not meet IDOT policy of 310' taper and 305' of storage for a 70 mph design.	Design is consistent with a 55 mph design speed, and is provided despite very low turn volumes to improve safety by reducing conflicts with high-speed through traffic.
SB IL 29 left turn lane at Barville Dr.	Storage length of 100' does not meet IDOT policy of 305' for a 70 mph design	Design is provided due to very low turn volumes and because most users would be familiar with the area. Safety would be improved by reducing conflicts with high-speed through traffic.
Barville Dr.	Sag vertical curve at Sta. 46+45 with a K-value of 29.61 does not meet IDOT policy of K=64 for a 40 mph design speed	The proposed grade ties to existing ground as early as possible to minimize the amount of impact to the surrounding properties
Willow Rd. approach to Existing IL 29, Sparland	Sag vertical curve at Sta. 47+35 with a K-value of 7.02 does not meet IDOT policy of K=49 for a 35 mph design speed	The shorter vertical curve reduces the length of reconstruction and reduces the elevation difference at the existing PE's at Sta. 47+40 and Sta. 47+67.
Elm St., Sparland	Sag vertical curve at Sta. 6+50 with a K-value of 9.26 does not meet IDOT policy of K=17 for a 20 mph design speed	The shorter vertical curve limits the length of reconstruction and reduces impacts to residential properties
Ferry St. approach to Existing IL 29, Sparland	Ferry St. pavement does not slope away from Existing IL 29 intersection	The proposed intersection matches existing conditions. Sloping the Ferry St. pavement away from intersection would cause greater impacts
Ferry St. approach to Existing IL 29, Sparland	Proposed profile grade of 13.90% does not meet BLRS policy of 9% maximum grade for a local road with a 35 mph design speed	The proposed grade matches the existing grade on Ferry St.
Ferry St. approach to Existing IL 29, Sparland	Sag vertical curve at Sta. 40+04 with a K-value of 3.90 does not meet IDOT policy of K=12 for a 35 mph design speed	The proposed design improves existing conditions. A larger K-value would cause greater impacts
Main St. approach to Existing IL 29, Sparland	Main St. pavement does not slope away from Existing IL 29 intersection	The proposed intersection matches existing conditions. Sloping the Main St. pavement away from intersection would cause greater impacts.
Main St. approach to Existing IL 29, Sparland	Proposed profile grade of 13.64% does not meet BLRS policy of 10% maximum grade for a local road with a 25 mph design speed	The proposed grade matches the existing grade on Main St.
Main St. approach to Existing IL 29, Sparland	Sag vertical curve at Sta. 4+45 with a K-value of 5.15 does not meet IDOT policy of comfort K-value = 6 for a 25 mph design speed	The proposed design matches existing conditions

TABLE 5-2
Design Exceptions – IL 29 Central Section

North St. approach to Existing IL 29, Sparland	North St. pavement does not slope away from existing IL 29 intersection	The proposed intersection matches existing conditions. Sloping the North St. pavement away from intersection would cause greater impacts.
North St. approach to Existing IL 29, Sparland	Sag vertical curve at Sta. 4+65 with a K-value of 5.09 does not meet IDOT policy of comfort K-value = 6 for a 25 mph design speed	The proposed design matches existing conditions
Thenius St. approach to Existing IL 29, Sparland	Sag vertical curve at Sta. 46+00 with a K-value of 19.86 does not meet IDOT policy of K=49 for a 35 mph design speed	Meeting policy would extend the limit of construction for this low volume road.
Thenius St. approach to Existing IL 29, Sparland	Crest vertical curve at Sta. 47+75.50 with a K-value of 26.83 does not meet IDOT policy of K=29 for a 35 mph design speed	Meeting policy would extend the limit of construction for this low volume road.
1100E Connector	Design speed of 25 mph does not meet the BLRS policy of 40 mph for this classification of road	Due to the 33-ft elevation difference between existing IL 29 and 1100E, a long, curved alignment is needed to reduce the required profile.
1100E Connector	Superelevation development is based on low-speed urban streets, which does not meet IDOT policy of using the method for open roadway conditions for this rural road	The proposed rugged horizontal and vertical alignments and the low speed limit are more consistent with low-speed urban streets than with open roadway conditions
SB IL 29 left turn lane at 1100E Connector	Storage length of 100' does not meet IDOT policy of 305' for a 70 mph design	Design is provided due to very low turn volumes and because most users would be familiar with the area. Safety would be improved by reducing conflicts with high-speed through traffic.
Proposed East Service Rd. Connector, at 1100E Connector	Storage platform at IL 29 approach does not meet IDOT policy of minimum 50' length	The shorter platform allows the Connector to meet the elevation of the railroad crossing using a flatter profile grade
NB IL 29 right turn lane and SB IL 29 left turn lane at Camp Grove Rd.	Storage lengths of 100' do not meet IDOT policy of 305' for a 70 mph design	Design is provided due to very low turn volumes and because most users would be familiar with the area. Safety would be improved by reducing conflicts with high-speed through traffic.
NB IL 29 left turn lane and SB IL 29 right turn lane at Camp Grove Rd.	Taper and storage lengths of 240' for both turn lanes do not meet IDOT policy of 310' taper and 305' of storage for a 70 mph design	Design is consistent with a 55 mph design speed, and is provided despite very low turn volumes to improve safety by reducing conflicts with high-speed through traffic.
Proposed East Service Drive at Camp Grove Rd.	Storage platform at IL 29 approach does not meet IDOT policy of minimum 50' length	The proposed profile grade is reduced and the Connector meets the elevation of the railroad crossing
Camp Grove Rd.	Sag vertical curve at Sta. 47+00 with a K-value of 43.94 does not meet IDOT policy of K=96 for a 50 mph design speed	The shorter vertical curve reduces the length of reconstruction and reduces the elevation difference at the existing PE at Sta. 46+72.

TABLE 5-2
Design Exceptions – IL 29 Central Section

Camp Grove Rd.	Crest vertical curve at Sta. 48+30 with a K-value of 55.48 does not meet IDOT policy of K=84 for a 50 mph design speed	The shorter vertical curve reduces the length of reconstruction and reduces the elevation difference at the existing PE at Sta. 46+72.
SB IL 29 right turn lane at SBI 29	Storage length of 100' does not meet IDOT policy of 305' for a 70 mph design	Design is provided due to very low turn volumes and because most users would be familiar with the area. Safety would be improved by reducing conflicts with high-speed through traffic.

Interchanges

Location	Design Feature	Justification
IL 29/IL 29 Connector interchange, north of Chillicothe, Ramp B	Tangent length of 318' provided near ramp exit gore does not meet IDOT policy of 140' length	Longer tangent was provided in order to allow a better ramp profile
IL 29/IL 29 Connector interchange, north of Chillicothe, Ramp C	Tangent length of 415' provided near ramp entrance gore does not meet IDOT policy of 200' length	Longer tangent was provided in order to allow a better ramp profile
IL 29/IL 29 Connector interchange, north of Chillicothe, Ramp C	Taper length of 390' for Ramp C divergence from IL 29 Connector does not meet IDOT policy of 420'	Taper rate of 30:1 is met, but length is shortened because IL 29 Connector starts a curve to the left
Sparland Interchange Ramp D	Ramp merge taper of 20:1 at Existing IL 29 does not meet IDOT policy of 30:1 for a minor convergence	Design provides required offset from end of taper to roundabout while allowing the steep downgrade of the ramp to be within IDOT standards

Median Crossovers

Location	Design Feature	Justification
IL 29 Connector at East Service Rd. Connector, Sta. 77+00	Distance of 300' between crossover at East Service Rd. Connector and Senachwine Creek bridge parapet does not meet IDOT policy of 750'	Intersection must be located a minimum distance from the IL 29 interchange. The parapets do not preclude desirable sight distance.
IL 29 at Boehle Rd., Sta. 3328+00	Distance of 500' between crossover at Boehle Rd. Connector and Coon Creek bridge parapet does not meet IDOT policy of 750'	Relocating intersection would cause greater impacts and construction costs or would reduce access control length on Boehle Rd. Connector. The parapets do not preclude desirable sight distance.
IL 29 at Hopewell Dr., Sta. 3485+00	Distance of 250' between crossover at Hopewell Dr. and Rattlesnake Hollow bridge parapet does not meet IDOT policy of 750'	Proposed design matches existing conditions. Cost for realigning cross street and/or creek would not be justified. The parapets do not preclude desirable sight distance.
IL 29 at Barville Rd., Sta. 3517+00	Distance of 100' between crossover at Barville Rd. and Barville Creek bridge parapet does not meet IDOT policy of 750'	Proposed design matches existing conditions. Cost for realigning cross street and/or creek would not be justified. The parapets do not preclude desirable sight distance.

TABLE 5-2
Design Exceptions – IL 29 Central Section

IL 29 at Camp Grove Rd., Sta. 3788+00	Distance of 550' between crossover at Camp Grove Rd. and Crow Creek bridge parapet does not meet IDOT policy of 750'	Proposed design matches existing conditions. Cost for realigning cross street and/or creek would not be justified. The parapets do not preclude desirable sight distance.
IL 29 at SBI 29 Service Dr., Sta. 3807+00	Service Drive is not located at a median opening and, therefore, does not meet IDOT policy	Providing a median opening would violate IDOT policy of 0.5-mile minimum spacing between median openings. The other near-by openings will accommodate resident movements to/from the service drive.

Access Control at Crossroads

Location	Design Feature	Justification
Proposed Boehle Rd. Connector	Relocated Boehle Road located 240' from edge of IL 29 does not meet IDOT policy of a minimum spacing of 300'	Increasing the spacing would cause Relocated Boehle Road to be located in the bluff, which would require high retaining walls
Barville Rd.	Proposed PE located 255' from edge of IL 29 does not meet IDOT policy of a minimum spacing of 300'	The PE for the Holocker property is allowed to remain 110' from IL 29 in order to avoid landlocking it. The PE offset by 255' is allowed to remain as a design exception to avoid impacting the residential property by realigning the PE.
Willow Rd., Sparland	Intersections at Elm St., Maple St. Extended and two PE's that are located within 300' of Existing IL 29 do not meet IDOT policy	Closing or relocating these low volume local roads would impact the adjoining residential properties
1100E Connector	Proposed West Service Dr. located 185' from edge of IL 29 does not meet IDOT policy of a minimum spacing of 300'	It is not feasible to increase intersection spacing due to rugged terrain and complex proposed horizontal and vertical geometry

Private Entrances and Field Entrances

Location	Design Feature	Justification
Hart Ln. at Sta. 304+39 Left	PE grade of 15.82% does not meet IDOT policy of a maximum 12% grade	Proposed grade matches existing driveway grade
Hart Ln. at Sta. 310+43 Left	PE grade of 16.00% does not meet IDOT policy of a maximum 12% grade	Proposed grade matches existing driveway grade
Relocated Boehle Rd. at Sta. 335+22 Left	PE grade of 16.31% does not meet IDOT policy of a maximum 12% grade	Proposed grade matches existing driveway grade
Hardscrabble Rd. at Sta. 352+46 Right	PE grade of 14.39% does not meet IDOT policy of a maximum 12% grade	Proposed grade matches existing driveway grade
IL 29 at Sta. 3401+00 Left	PE grade of 12.28% does not meet IDOT policy of a maximum 12% grade	Proposed grade allows desirable flattening of grade at IL 29 approach
Existing IL 29, Sta. 63+17 Left	PE grade of 12.25% does not meet IDOT policy of a maximum 12% grade	Proposed grade matches existing driveway grade

TABLE 5-2
Design Exceptions – IL 29 Central Section

Location	Design Feature	Justification
IL 29 at Sta. 3700+00 Left	FE serving IDOT property with proposed profile grade of 25.58% does not meet IDOT policy of 12% maximum grade for field entrances	The proposed grade matches the existing grade of the field entrance in place
Drainage		
IL 29, Sta. 3339+00 to Sta. 3344+00 Right	Ditch grade is 0.22% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 3602+00 to Sta. 3604+00 Right	Ditch grade is 0.19% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 3613+00 to Sta. 3618+50 Right	Ditch grade is 0.22% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 3817+00 to Sta. 3822+00 Right	Ditch grade is 0.23% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 3824+00 to Sta. 3843+00 Right	Ditch grade is 0.28% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 3849+00 to Sta. 3851+00 Right	Ditch grade is 0.19% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29/IL 29 Connector interchange, north of Chillicothe, Ramp A, Sta. 15+65 to Sta. 21+13 Right	Ditch grade is 0.17% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Barville Rd., Sta. 46+20 to Sta. 49+35 Left	Ditch grade is 0.03% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Sparland Interchange Ramp A, Sta. 0+00 to Sta. 3+60 Right	Ditch grade is 0.27% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Sparland Interchange Ramp A, Sta. 0+00 to Sta. 3+66 Left	Ditch grade is 0.26% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Sparland Interchange Ramp B, Sta. 18+27 to Sta. 22+27 Left	Ditch grade is 0.21% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Existing IL 29, Sparland, Sta. 52+00 to Sta. 59+00 Right	Ditch grade is 0.10% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Proposed West Service Dr. at 1100E Connector, Sta. 50+50 to Sta. 53+00 Left and Right	Ditch grades are 0.23% which do not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available

TABLE 5-3
Design Exceptions – IL 29 North Section

Horizontal and Vertical Alignment		
Location	Design Feature	Justification
SB IL 29 left turn lane at Old IL Route 29 (1150N)	Storage length of 100' does not meet IDOT policy of 305' for a 70 mph design	Design is provided due to very low turn volumes and because most users would be familiar with the area. Safety would be improved by reducing conflicts with high-speed through traffic.
NB and SB IL 29 left turn lanes and right turn lanes at 1300E (TR 60A)	Storage lengths of 240' and taper lengths of 240' do not meet IDOT policy of 305' of storage and 310' taper for a 70 mph design	Design is consistent with a 55 mph design speed, and is provided despite very low turn volumes to improve safety by reducing conflicts with high-speed through traffic
Western Ave. Interchange East Service Rd.	Design speed of 15 mph does not meet IDOT policy of 40 mph for this classification of road	Sharp curvature is proposed in order to minimize impacts to, and land acquisition from, residential properties
NB IL 29 left turn lane and SB IL 29 right turn lane at Whitefield Rd.	Storage lengths of 240' and taper lengths of 240' do not meet IDOT policy of 305' of storage and 310' taper for a 70 mph design	Design is consistent with a 55 mph design speed, and is provided despite very low turn volumes to improve safety by reducing conflicts with high-speed through traffic
NB and SB IL 29 left turn lanes and right turn lanes at Marshall / Putnam County Line Rd.	Storage lengths of 240' and taper lengths of 240' do not meet IDOT policy of 305' of storage and 310' taper for a 70 mph design	Design is consistent with a 55 mph design speed, and is provided despite very low turn volumes to improve safety by reducing conflicts with high-speed through traffic
NB IL 29 left turn lane and SB IL 29 right turn lane at Proposed Connection to Old IL 29 at Sta. 5303+50	Storage lengths of 240' and taper lengths of 240' do not meet IDOT policy of 305' of storage and 310' taper for a 70 mph design	Design is consistent with a 55 mph design speed, and is provided despite very low turn volumes to improve safety by reducing conflicts with high-speed through traffic
NB IL 29 left turn lane at Proposed Connection to Old IL 29 at Sta. 5303+50	Storage length of 100' does not meet IDOT policy of 305' for a 70 mph design	Design is provided due to very low turn volumes and because most users would be familiar with the area. Safety would be improved by reducing conflicts with high-speed through traffic.
Bradford Rd.	Design speed of 35 mph and superelevation design based on low speed urban streets do not meet the BLRS policy of 40 mph for this classification of road, and typical superelevation design for rural roads	Low traffic volumes, a high percentage of heavy grain trucks, and rolling terrain justify a lower design speed and superelevation designed for low speeds and urban areas
Bradford Rd. Extension	Design speed of 30 mph and superelevation design based on low speed urban streets do not meet the BLRS policy of 40 mph for this classification of road, and typical superelevation design for rural roads	Low traffic volumes, a high percentage of heavy grain trucks, and the desire to reduce severance impacts by using a curving alignment justify a lower design speed and superelevation designed for low speeds and urban areas

TABLE 5-3
Design Exceptions – IL 29 North Section

NB IL 29 right turn lane and left turn lane, and SB IL 29 left turn lane at Senachwine Valley Rd.	Storage lengths of 240' and taper lengths of 240' do not meet IDOT policy of 305' of storage and 310' taper for a 70 mph design	Design is consistent with a 55 mph design speed, and is provided despite very low turn volumes to improve safety by reducing conflicts with high-speed through traffic
Senachwine Valley Rd.	Superelevation transition length of 60' at west end of curve on west leg of Senachwine Valley Rd. does not meet IDOT policy of 72'	Shorter transition allows a design that avoids adding superelevated pavement to the existing Senachwine Creek bridge
Senachwine Valley Rd.	Sag vertical curve at Sta. 46+82 with a K-value of 30.15 does not meet IDOT policy of K=96 for a 50 mph design speed.	Vertical curve length is restricted to avoid profile change on the existing Senachwine Creek bridge. Proposed design meets comfort criteria for a sag vertical curve with a 50 mph design speed (K=25).
TR 18 (East leg of Senachwine Valley Rd. intersection)	Storage platforms on TR 18 at IL 29 and railroad approaches do not meet IDOT policy of minimum 50' length	The design allows a profile grade of 7.29% on TR 18 while meeting the elevation of the railroad crossing
NB IL 29 left turn lane and SB IL 29 right turn lane at Cabin Hill Rd.	Storage lengths of 240' and taper lengths of 240' do not meet IDOT policy of 305' of storage and 310' taper for a 70 mph design	Design is consistent with a 55 mph design speed, and is provided despite very low turn volumes to improve safety by reducing conflicts with high-speed through traffic
SB IL 29 left turn lane at Cabin Hill Rd.	Storage length of 100' does not meet IDOT policy of 305' for a 70 mph design	Design is provided due to very low turn volumes and because most users would be familiar with the area. Safety would be improved by reducing conflicts with high-speed through traffic.
IL 29 East Leg at Kentville Rd. intersection	Design speed of 50 mph does not meet IDOT policy of 60 mph for this classification of road	Lower design speed allows a more desirable intersection angle for this leg than is existing
NB and SB IL 29 left turn lanes at Kentville Rd.	Storage lengths of 240' and taper lengths of 240' do not meet IDOT policy of 305' of storage and 310' taper for a 70 mph design	Design is consistent with a 55 mph design speed, and is provided despite very low turn volumes to improve safety by reducing conflicts with high-speed through traffic

Median Crossovers

Location	Design Feature	Justification
IL 29 from Bradford Rd. to High St.	Median crossover spacing of 2400' does not meet IDOT policy of at least 0.5 miles for existing alignments, measured between intersections	Providing 240' of additional spacing does not justify the additional cost and poorer operations resulting from relocating one or both intersections
IL 29 at Senachwine Creek	Distance of 240' between median crossover at Senachwine Valley Rd. and bridge parapet at Senachwine Creek does not meet IDOT policy of 750'	Proposed locations and distance are the same as currently exist. A single bridge is provided without a median barrier so that sight lines are not blocked.

TABLE 5-3
Design Exceptions – IL 29 North Section

Access Control at Crossroads		
Location	Design Feature	Justification
Center St. Connector	Proposed crossroad located 250' from edge of IL 29 does not meet IDOT policy of a minimum spacing of 300'	Increasing the spacing by 50' would not justify realigning existing Center St., or increasing ROW acquisition by moving the connection southward
Bradford Rd. West leg	Proposed crossroad located 200' from edge of IL 29 does not meet IDOT policy of a minimum spacing of 300'	Realigning existing Center St. to increase the spacing would impact existing development, most likely including the historic Condit House Library, and increase construction costs
Senachwine Valley Rd. West leg	Two proposed FE's located within 300' of the edge of IL 29 does not meet IDOT policy which allows only one	The locations of the FE's are proposed due to the short frontages of both properties and the proximity of the existing bridge and creek, and to avoid placing FE's on IL 29
Cabin Hill Rd. West leg	Proposed PE located 155' from edge of IL 29 does not meet IDOT policy of a minimum spacing of 300'	Increasing the spacing by shifting the PE westward is not proposed due to rugged terrain to the west. The PE replaces an existing one that is accessed from IL 29.
Access Control at Frontage Roads and Service Drives		
Location	Design Feature	Justification
Proposed West Service Rd. at Western Ave, Sta. 36+97	Proposed intersections located 100' north and 155' south of Western Ave. do not meet IDOT policy of a minimum spacing of 300'	Increasing the intersection spacing to 300' would require acquisition of additional residential property and would cause inefficient circulation patterns. The service road currently serves only several residences.
Private Entrances and Field Entrances		
Location	Design Feature	Justification
IL 29 at Sta. 5000+00 Right	Storage platforms on FE at IL 29 and railroad approaches do not meet IDOT policy of minimum 50' length	The shorter platforms allow the FE to meet the elevation of the railroad crossing using a flatter profile grade
IL 29 at Sta. 5031+30 Right, opposite Old IL Route 29 (1150N)	Storage platforms on FE at IL 29 and railroad approaches do not meet IDOT policy of minimum 50' length	The shorter platforms allow the FE to meet the elevation of the railroad crossing using a flatter profile grade
IL 29 at Sta. 6174+59 Right, opposite Cabin Hill Rd.	Storage platforms on PE at IL 29 and railroad approaches do not meet IDOT policy of minimum 50' length	The design allows a profile grade of 7.93% on the PE while meeting the elevation of the railroad crossing

TABLE 5-3
Design Exceptions – IL 29 North Section

Drainage		
Location	Design Feature	Justification
IL 29, Sta. 5037+00 to Sta. 5073+00 Right	Ditch grade is 0.27% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 5288+00 to Sta. 5342+92 Left	Ditch grade is 0.20% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 6062+00 to Sta. 6086+00 Left	Ditch grade is 0.10% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 6210+00 to Sta. 6213+00 Right	Ditch grade is 0.17% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 6242+00 to Sta. 6248+10 Right	Ditch grade is 0.10% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
IL 29, Sta. 6255+00 to Sta. 6264+00 Right	Ditch grade is 0.20% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available
Western Ave. Interchange Ramp B, Sta. 0+00 to Sta. 9+25 Right	Ditch grade is 0.28% which does not meet the IDOT policy of 0.30% minimum	There is little ground elevation difference in this area, and few drainage outlets are available

5.3 Summary of Proposed Drainage Plan

5.3.1 Existing Drainage System Summary

The surface topography of the IL Route 29 project area varies from primarily level along the South Section and portions of the North Section, to moderately and steeply sloping within the Central Section. The roadway is situated between bluffs to the west, and the Illinois River to the east. Because of this constant feature, drainage patterns for the entire project limits typically flow from west to east towards the river. The bluffs are situated away from the existing and proposed roadway for the South Section and specific portions of the North Section; however, they are immediately adjacent to the roadway in the Central Section. An existing railroad track runs between the roadway and the Illinois River. Within the limits of the project they are found adjacent to the roadway within the Central and North Sections.

Ground surface elevations for the project range from approximately 475 feet along the flatlands of the South Section, up to 540 feet near the northern project limits. The median elevation within the project limits range from approximately 480 to 485 feet.

The primary land use within the project limits of the corridor is agricultural, intermixed with sparse residential and commercial buildings and lots along the existing roadway, with the exceptions of the Villages of Chillicothe, Sparland, Henry, and Putnam, of which portions are located within the project limits. In addition, there are significant woodland

and environmentally sensitive areas within the area of study; however, these areas have been identified and will not be impacted as a result of the proposed improvements.

Existing IL 29 is generally drained by a series of ditches and swales of varying size and capacities, collected by larger creeks or streams, all of which ultimately drain into the Illinois River. Drainage structures along the corridor include bridge structures, culverts, and field tile. Also, pipe underdrain systems exist within the bluffs adjacent to the roadway along portions of the Central Section, collecting subsurface drainage from the shales prior to outletting into the ditches situated between the roadway and the railroad. In several areas, inadequate ditches and drainage structure sizes preclude adequate drainage of stormwater runoff. In addition, there are several detention areas which exist within the project limits. No drainage problems exist at these locations at this time. These areas are to be maintained under the proposed improvements.

There are eleven identified base floodplains within the study area of existing IL Route 29, one in the South Section, eight in the Central Section, and two in the North Section.

5.3.2 Proposed Drainage Plan Summary

Proposed roadway profiles and ditch summits were set to maintain existing drainage patterns where practical and to provide positive drainage along the proposed IL Route 29 corridor. Ditches will be constructed along both sides of IL Route 29 parallel to the embankment and within the proposed right-of-way. The proposed ditches will be a minimum of 3.0 feet deep, and shall be trapezoidal in shape with a flat bottom of 4 feet. Ditches will outlet at improved cross road culverts or at bridge crossing locations. At specific locations as identified within the Location Drainage Study, drainage structures will be sized for wildlife crossings in addition to providing for the adequate design drainage.

Detention areas will be present within the project, as a result of the proposed improvements, as well as existing detention areas which shall be maintained under the proposed conditions. All detention areas shall be maintained to provide adequate clearance below the proposed roadway profile, and shall not cause adverse impacts to any valuable property as a result of the presence of these areas.

Longitudinal encroachment has been determined to be present as a result of the proposed improvements due to fill in the floodplain. However, the encroachments have been determined to be within the prescribed limits applicable to the project; therefore, no compensation will be required to be provided as a portion of this project. Transverse floodplain encroachments are anticipated at each identified floodplain within the proposed alignment. The proposed roadway and profile will be designed to provide adequate freeboard below the roadway surface.

5.4 Geotechnical Considerations

The project area is generally bounded by the Illinois River on the east and by relatively un-eroded uplands above the Illinois River valley wall to the west. Existing IL 29 follows the base of the eroded bluffs of the Illinois River valley wall throughout most of the area. Parts of the bluff slopes are continually eroding and have marginal slope stability. The existing geologic and geotechnical conditions within the project study area are described in a

separate Technical Report, *Illinois Route 29 Geotechnical Review*, prepared by CH2M HILL and submitted to IDOT in September, 2003.

A significant part of the information presented in the Geotechnical Report is compiled from previous studies by ISGS and IDOT (Willman 1973, Willman et al. 1975, and Goodfield 1978, among others). ISGS has prepared a detailed three-dimensional model of subsurface conditions within the project study area (ISGS 2002). The model is based on an extensive database of soil boring and well logs compiled by ISGS. Using the model, ISGS has generated maps and GIS data layers that represent bedrock topography, thickness of unconsolidated deposits, surficial geology, and soil parent materials in the project study area.

5.5 Wildlife Crossings

Different sizes of underpass crossings were included as part of the roadway design for large animals (deer) and small animals (raccoons, frogs, snakes, etc.). Locations of wildlife crossings (WLC) were based on IDOT animal hit surveys, IDOT recommendations and analysis of adjacent terrain at specific sites.

IDOT provided a chart titled, “Comparison of Animal Hits, IDOT Animal Accidents & Pathway Survey – All Types,” spanning a two-year period from 2001 to 2002 along the length of IL 29 between Chillicothe and I-180. This chart indicates the wildlife kills along IL 29 by type of animal killed, number killed and location of hits. The preferred areas selected for wildlife crossings were those having the highest frequency of hits. IDOT then conducted field surveys in 2003 and 2004, and recommended WLC sites.

After IDOT identified the preliminary WLC locations, the CH2M HILL team determined the feasibility of a crossing at each location and developed the crossing size. In general, spacing of WLC’s was set at one-half mile intervals for both large and small animals. Selection of each site was based on the animal hit survey, the adjacent topography and land use. A 6:10 ratio was used to size each site ((width x height) : length). Design criteria for WLC’s are presented in a Technical Memorandum covering this design element. Locations and type of WLC’s are summarized in Table 5-4.

TABLE 5-4
Wildlife Crossing Location Summary

Station/Creek	Bridge/Culvert	Animal Size
South Section		
2743+00/Dickison Run	Bridge	Large
2744+00/Frontage Road	Bridge	Large
3176+50/Senachwine Creek South	Bridge	Large
3214+00	Culvert	Large
3236+37	Culvert	Large
Benedict Street (50+00) at Senachwine Creek	Bridge	Large

TABLE 5-4
Wildlife Crossing Location Summary

Station/Creek	Bridge/Culvert	Animal Size
Central Section		
3269+50	Culvert	Large
3322+00/Coon Creek	Bridge	Large
Existing IL 29/Boehle Road	Bridge	Large
3324+00/Service road	Bridge	Large
3330+00	Culvert	Small
3344+00	Culvert	Small
IL 29 connector (72+50)/Senachwine Creek	Bridge	Large
3372+36	Culvert	Small
3391+00	Culvert	Small
3440+20	Culvert	Small
3452+87/Illinois River Tributary	Bridge	Large
3488+35/Rattlesnake Hollow	Bridge	Large
3515+20/Barville Creek	Bridge	Large
3545+64	Culvert	Small
3583+40	Culvert	Large
Existing IL 29/Gimlet Creek	Bridge	Large
3629+50/Gimlet Creek	Bridge	Large
Existing IL 29/Thenius Creek	Bridge	Large
3653+50/Thenius Creek	Bridge	Large
3709+40	Culvert	Large
3753+11	Culvert	Small
3758+58	Culvert	Small
3778+00	Culvert	Large
3795+00/Crow Creek	Bridge	Large
3833+50	Culvert (Dry)	Small
North Section		
5015+60	Culvert (Dry)	Small
5020+26/Crow Creek Overflow	Culvert (Extension)	Small
5024+60	Culvert (Dry)	Small
5287+00/Dry Hollow Creek	Bridge	Large
6088+80	Culvert	Large

TABLE 5-4
Wildlife Crossing Location Summary

Station/Creek	Bridge/Culvert	Animal Size
6118+60/Senachwine Creek Overflow	Bridge	Large
6132+00/Senachwine Creek	Bridge	Large
6159+30	Culvert	Large
6179+20	Culvert	Large
6213+15	Culvert	Small
6225+30	Bridge	Large
6255+50	Culvert	Small
6273+25	Bridge	Large

5.6 Utilities Involvement

There are a number of utility facilities located within the project area. Utility location information was obtained from the utility companies and through field investigation.

5.6.1 Power Lines

AmerenCILCO provides electric service throughout the entire project area. Its electric installations include transmission lines throughout the project area as well as high voltage towers and lines located in the southern portion of the project area.

5.6.2 Water Lines

The City of Chillicothe, Village of Hopewell, Village of Sparland, City of Henry, and Village of Putnam all provide water services along the proposed project corridor. Additionally, the City of Chillicothe, Village of Sparland, and City of Henry also provide sanitary sewer services.

5.6.3 Gas Lines

AmerenCILCO provides residential gas service throughout most of the project area, with Nicor Gas providing residential service at the northern end of the corridor. Additionally, there is an AmerenCILCO natural gas transmission line crossing the proposed corridor twice in the southern portion of the alignment, once near Boy Scout Lane and once near Old Galena Road. Also, the alignment crosses two AmerenCILCO natural gas transmission lines in the northern portion of the corridor, near Old Indian Road and Whitefield Road.

5.6.4 Telephone

Verizon North, Inc. provides telephone service throughout the project corridor. There are underground phone and fiber optic cables adjacent to existing IL 29 throughout much of the proposed alignment.

5.6.5 Television Cable

Insight Communications and Mediacom provide cable television service in the project corridor.

5.6.6 Oil Pipeline

Norco, which is owned by Buckeye Pipe Line Company, has high-pressure petroleum pipelines that cross the proposed corridor in two locations: near Old Galena Road and north of Truitt Road west of Chillicothe. BP Pipelines operates two petroleum lines that cross the proposed alignment northwest of Chillicothe, adjacent to Senachwine Creek.

5.7 Bicycle Accommodations

Accommodations for cyclists are provided along improved Illinois Route 29 from Chillicothe to I-180. There will be no bicycle accommodations on the route between Illinois Route 6 and the interchange north of Chillicothe. The bike lanes will be located on the 10-ft. wide outside shoulder, in each direction, except as follows:

1. *In Chillicothe, from Truitt Avenue to south side of the BN&SF Viaduct* - the outside lane (Lane #2) of the IL 29 Connector will be widened by 2' (in both directions) for the bike area.
2. *Under the Viaduct* -
 - West Side of IL 29 Connector - the 10-ft wide shoulder on the west side of the IL 29 Connector will be used for two-way bike traffic (to and from the Chillicothe Recreation Center). This will be a shared use area with pedestrians. A guardrail will be placed between the travel lanes and the sidewalk.
 - East Side of IL 29 Connector - the 8-ft wide shoulder on the east side of the IL 29 connector will be used for northbound bike traffic only. A guardrail will be placed between the travel lanes and the sidewalk.
3. *Viaduct to Chillicothe Interchange* - the 10-ft wide paved shoulders on the IL 29 Connector will be used for bike traffic.
4. *Chillicothe Interchange* - accommodations for bikes will be located on the outside 8-ft wide paved shoulder of the ramps that enter and exit Chillicothe.
5. *Sparland Interchange* - bike facilities will not be located on IL 29 within the limits of the interchange. Instead, bikes will be directed to existing IL 29 along the ramps. The ramp shoulder will be 8-ft wide and paved. The southbound lane on existing IL 29 will be widened by 2 feet for the bike area and will be striped. The proposed 8-ft wide shoulder on the east side (adjacent to the retaining wall separating IL 29 from the Iowa Interstate Railroad) will be a shared shoulder and bike area.
6. *Henry Bypass* - the bikeway will be located on existing IL 29 starting on the south at approximate Station 5088+25 and ending on the north side of Henry at approximate Station 5303+45.

Pavement marking of the bike area will be limited to sections of existing IL 29 in Chillicothe and Sparland. The bike area along existing IL 29 in Henry will be located along the existing shoulder that will be paved for bike accommodations.

Appropriate signing will be placed along IL 29 and along the IL 29 Connector (in Chillicothe) to identify the bike accommodations. Within interchanges, the signing will direct bikers to existing IL 29.

5.8 Traffic Maintenance Plan

Traffic maintenance plans are contained in Appendix F. The following is a brief description of the proposed traffic maintenance strategy.

5.8.1 South Section

IL 29 traffic will remain on existing IL 29 from IL 6 through Chillicothe during construction of the South Section of IL 29. Traffic on Cedar Hills Drive, Rome West and Truitt Avenue will be maintained by on-site detours during construction of these interchanges. Traffic on other local roads such as Wayne Road and Krause Road will be maintained on alternate roads during construction. Traffic will be maintained on alternate parallel roads during construction of overpasses for Cloverdale Road and Sycamore Road. Railroad traffic on the BN&SF Railroad will be maintained at all times during construction of the IL 29 overpass. Traffic on Benedict Street will be closed during construction of the bridges over IL 29 and over Senachwine Creek. On the north side of Chillicothe, proposed IL 29 will narrow to two-lanes and connect with existing two-lane IL 29. Existing IL 29 in Chillicothe, will be realigned from the existing BNSF RR overpass and connect with proposed IL 29.

5.8.2 Central Section

Maintenance of traffic for this section of IL 29 resulted in six segments of construction staging.

Segment 1—Illinois 29 Connector - Truitt Road to Wilmot Street in Chillicothe.

An arterial street reconstruction. Coordinate stage construction with Segment 2 maintaining two-way traffic at all times. Local access must also be maintained.

Segment 2—Illinois 29 Connector - Gail Avenue in Chillicothe to south of the Senachwine Creek bridge approach.

This segment also includes the BNSF RR overpass.

Prior to any roadway construction the BNSF RR overpass and associated railroad work will be constructed and the existing viaduct demolished under a separate contract as part of Pre-Stage 1.

Upon completion of the railroad construction, the Illinois 29 Connector will be constructed in two stages:

Stage 1 consists of constructing the proposed southbound lanes to Sta. 67+00 while maintaining two-way traffic on the existing pavement.

Stage 2 consists of shifting the two-way traffic to the newly constructed southbound lanes and reconstructing existing IL 29 as the proposed northbound lanes to Sta. 67+00. Construction of realigned Moffit Street east of IL 29 is also included in Stage 2.

Segment 3—North Chillicothe Interchange

The interchange will be constructed in two stages following advance roadway construction done co-incidentally with the railroad construction (Pre-Stage 1). The south section of the newly constructed IL 29 and the temporary connection to IL 29 will be the existing roadway.

During Pre-Stage 1, two-way traffic will be maintained on the south section, the IL 29 temporary connection, and existing IL 29.

Pre-Stage 1 consists of constructing the northbound lanes of the proposed IL 29 Connector from Sta. 67+00 to Sta. 78+00 (including the east half of the bridge over Senachwine Creek), the proposed East Service Road Connector, and the proposed East Service Road to Sta. 213+00. Also included in Pre-Stage 1 is the construction of the northbound lanes of the proposed IL 29 from Sta. 3290+00 to Sta. 3338+00, the proposed South Service Road, parts of the Boehle Road Connector and part of Relocated Boehle Road.

During Stage 1, two-way traffic will be maintained on the existing IL 29 pavement, the newly constructed south section of IL 29, the on-site detour (NB IL 29 Connector to East Service Road), the newly constructed East Service Road, and the IL 29 Temporary Connection.

Temporary crossovers will also be constructed in Stage 1 to allow for shifting traffic from the IL 29 south section for the Stage Construction of the IL 29 connector bridge over IL 29 mainline.

After the crossovers are completed, traffic will be switched to the newly constructed part of northbound IL 29 Connector from STA. 3290+00 to STA. 3345+00. The crossover at the south section will be used to transition the traffic from the southbound lanes of the south section of IL 29 onto the northbound lanes. The southbound and northbound lanes of the temporary connection to existing IL 29 will be closed.

Stage 1 consists of constructing the southbound lanes of the proposed IL 29 Connector from Sta. 78+00 to the Sta. 98+00 including the west half of the bridge over Senachwine Creek, the northbound lanes of the proposed IL 29 Connector from Sta. 78+00 to Sta. 98+00, the southbound lanes of proposed IL 29 from Sta. 3293+00 to north of Hardscrabble Road (Sta. 3355+00), parts of Ramps A, B, C, and D, the rest of the Boehle Road Connector, and Hardscrabble Road. Stage 1 also consists of constructing the north half of the IL 29 Connector Bridge over IL 29 mainline from STA. 100+00 to STA. 103+00.

During Stage 2, maintain two-way traffic on the newly constructed southbound IL 29 Connector north to the East Service Road Connector and continue to use the on-site detour (NB IL 29 Connector to East Service Road), the newly constructed East Service Road, and the IL 29 temporary connection. Traffic from the south section will also be maintained. The newly constructed northbound and southbound lanes of IL 29 east of the IL 29 Connector Bridge will be used. Traffic will be switched from the northbound lanes onto the southbound lanes using the crossovers. The connection to Hart Lane will also be closed.

Traffic will be maintained on the newly constructed Boehle Road Connector and access will be maintained to Hart Lane using standard lane closures. North of the Boehle Road Connector two-way traffic will be maintained on the newly constructed southbound IL 29.

Stage 2 consists of constructing the south half of the IL 29 Connector Bridge over IL 29 mainline, the remaining parts of IL 29 Connector and Ramps A, B, C, and D.

Also included in Stage 2 is the construction of Hart Lane, Yankee Lane and the rest of relocated Boehle Road.

Segment 4—Illinois 29 between the North Chillicothe Interchange and the Sparland Interchange.

This segment will be constructed in two stages. Stage 1 consists of constructing the southbound lanes of proposed IL 29 while maintaining two-way traffic on the existing IL 29 pavement. Also included in Stage 1 is the construction of relocated Crew Lane, Crew Lane Connector South, Hopewell Drive and Barville Drive. Stage 2 consists of shifting the two-way traffic to the newly constructed southbound lanes, reconstructing the existing Illinois 29 as the proposed northbound lanes, and constructing the Service Road North (Rest Area). Also included in Stage 2 is the construction of Spring Branch Access.

Segment 5—Sparland Interchange

The interchange will basically be constructed in two stages. During Stage 1, two-way traffic will be maintained on the existing IL 29 pavement. Stage 1 consists of constructing the southbound lanes of proposed IL 29 to Sta. 3600+00, Ramp A with a temporary connection to existing IL 29 (Railroad Street) at the north end of the ramp, the southbound lanes of proposed IL 29 from Sta. 3670+00 to the north, Ramp D with a temporary connection to existing IL 29 (Railroad Street) at the south end of the ramp.

During Stage 2, two-way traffic will be maintained along newly constructed southbound IL 29, Ramp A, Railroad Street (existing IL 29), Ramp D and newly constructed southbound IL 29. Shoulders will be used on Ramps A and D to maintain two-way traffic. Stage 2 consists of constructing the rest of the interchange, including the southbound lanes of proposed IL 29 from Sta. 3600+00 to Sta. 3673+00, the northbound lanes of proposed IL 29 through the interchange, Ramp B, Ramp C, the north and south crossing overpasses and the IL 17 crossing overpass. Following construction of the interchange, Railroad Street, IL 17 and the local streets will be stage constructed to allow access to local properties.

Segment 6—Illinois 29 from the Sparland Interchange to the north limit of the project.

This segment will be constructed in two stages. Stage 1 consists of constructing the southbound lanes of proposed IL 29 while maintaining two-way traffic on the existing IL 29 pavement. Stage 2 consists of shifting the two-way traffic to the newly constructed southbound lanes and constructing the northbound lanes of proposed IL 29 while maintaining access to local properties.

5.8.3 North Section

Maintenance of traffic for this section of IL 29 resulted in four segments of construction staging.

Segment 1—South end of this section to the south end of the proposed IL 29 Bypass of Henry.

This segment will be constructed in two stages. During Stage 1, two-way traffic will be maintained on the existing IL 29 pavement. Stage 1 construction consists of constructing the southbound lanes of proposed IL 29 and also constructing Old Route 29 (1150 N) and 1300 E. Road west of the southbound lanes..

During Stage 2, two-way traffic will be maintained on the newly constructed southbound lanes. Stage 2 construction consists of constructing the northbound lanes of proposed IL 29 and also constructing 1300 E. Road east of the northbound lanes.

Segment 2—Proposed IL 29 Bypass of Henry

This segment will be constructed in two stages. During both stages, two-way traffic will be maintained on the existing IL 29 pavement. Stage 1 construction will consist of constructing Western Avenue/CH6, the proposed drive and the proposed service roads while maintaining traffic on Western Avenue by the use of temporary widening. The construction of Old Indian Town Road and overpass while closing existing Old Indian Town Road to traffic is also included in this stage. Old Indian Town Road traffic will be diverted to Western Avenue/CH6 or Whitefield Road. Stage 2 construction consists of constructing both the northbound and southbound lanes of proposed IL 29 including the Western Avenue/CH6 interchange ramps. Additionally, Whitefield Road and Marshall/Putnam County Line Road will be constructed in this stage, while alternating road closures.

Segment 3—North end of the proposed IL 29 Bypass of Henry to 0.5 mile north of Cabin Hill Road

This segment will be constructed in two stages. During Stage 1, two-way traffic will be maintained on the existing IL 29 pavement. Stage 1 construction consists of constructing the southbound lanes of proposed IL 29. Also included is the construction of the Center Street Connection, Bradford Road, High Street, Senachwine Valley Road and Cabin Hill Road west of the southbound lanes. In addition, the Bradford Road Extension east of existing IL 29 will be constructed.

During Stage 2, two-way traffic will be maintained on the new southbound lanes. Stage 2 construction consists of constructing the northbound lanes of proposed IL 29. Also included is the construction of the south and north end connections to 665N Road east of the northbound lanes (opposite of Senachwine Valley Road). Alternate road closures of the connections to IL 29 to maintain access to 665N Road.

Segment 4—0.5 mile north of Cabin Hill Road to I-180

This segment will be constructed in two stages. During Stage 1, two-way traffic will be maintained on existing IL 29 pavement and existing southbound I-180 to a temporary crossover at the north limit. Stage 1 construction consists of constructing the northbound lanes of proposed IL 29 and reconstructing the northbound lanes of I-180. Also included is the construction of Kentville Road/IL 29 east of the northbound lanes of proposed IL 29 and I-180, while existing IL 29 is closed east of I-180.

During Stage 2, two-way traffic will be maintained on the new northbound lanes of IL 29 and I-180 to a temporary crossover at the north limit. Stage 2 construction consists of reconstructing the southbound lanes of proposed IL 29 and reconstructing the southbound lanes of I-180. Also included is the construction of Kentville Road west of the southbound lanes of proposed IL 29 and I-180.

5.9 Estimate of Cost

Cost opinions have been prepared for the build alternative based on 2006 unit costs. The cost estimates include construction, right-of-way, relocation compensation, wetland mitigation, utility conflicts, engineering and contingencies. The costs of handling hazardous waste, if encountered, are not included. Unit prices used to develop the estimates are shown in Table 5-5. Summaries of cost estimates by Section as defined earlier are presented in Table 5-6 for the South Section, Table 5-7 for the Central Section and Table 5-8 North Section. The following is a summary of total cost of the build alternative.

TABLE 5-5
Unit Costs

ITEM	UNIT	UNIT COST
Mainline Pavement	SY	\$55
Local Roads Pavement	SY	\$45
Earthwork	CY	\$6
Pavement Removal	SY	\$8
Concrete Barrier Wall	LF	\$50
Bridges	SF	\$115-\$140
Retaining Walls		
MSE Walls	SF	\$50
Concrete Cantilevered Walls	SF	\$60
Soldier Pile Walls	SF	\$65
Soldier Pile Walls (Anchored)	SF	\$80
Bridge Removal	SY	\$90
Real Estate		
Undeveloped Land	ACRE	\$5,000
Developed Land	ACRE	\$12,000
Relocations - Commercial	EACH	\$300,000
Relocations - Residential	EACH	\$100,000
Wetland Mitigation	ACRE	\$20,000
Compensatory Storage/Floodplain Encroachment	ACRE	\$60,000

*Note: Costs are at 2006 price levels

South Section	\$177,612,000
Central Section	270,785,000
North Section	<u>137,040,000</u>
TOTAL	\$585,437,000

TABLE 5-6
South Section Cost Summary

Item	Unit	Unit Cost	Quantity	Cost
1. Pavement				
Mainline	SY	\$55	601,280	\$33,070,000
Local Roads ¹	SY	\$45	231,875	\$10,434,000
2. Earthwork				
Mainline	CY	\$6	3,667,667	\$22,006,000
Local Roads ¹	CY	\$6	1,204,500	\$7,227,000
3. Pavement Removal	SY	\$8	114,600	\$917,000
4. Concrete Barrier Wall	FT	\$50	1,740	\$87,000
5. Guardrail	FT	\$30	17,800	\$534,000
6. Drainage	L SUM	\$3,032,000	1	\$3,032,000
7. Other Roadway Items ²				\$10,050,000
8. Bridges				
IL 29 over Dickison Run	SF	\$120	11,400	\$1,368,000
Frontage Road over Dickison Run	SF	\$120	3,300	\$396,000
Cedar Hills Drive over IL 29	SF	\$120	22,300	\$2,676,000
IL 29 over Old Galena Road	SF	\$120	11,900	\$1,428,000
Rome West Road over IL 29	SF	\$120	17,600	\$2,112,000
Krause Road over IL 29	SF	\$120	12,600	\$1,512,000
McGrath Road over IL 29	SF	\$120	14,300	\$1,716,000
Cloverdale Road over IL 29	SF	\$120	7,400	\$888,000
Sycamore Street over IL 29	SF	\$120	7,400	\$888,000
Truitt Road over IL 29	SF	\$120	15,600	\$1,872,000
IL 29 over BN&SF Railroad	SF	\$120	35,500	\$4,260,000
IL 29 over Senachwine Creek	SF	\$120	25,400	\$3,048,000
Benedict Street over IL 29	SF	\$120	7,000	\$840,000
Benedict Street over Senachwine Creek	SF	\$120	8,300	\$996,000
9. Retaining Walls				
MSE Walls	SF	\$50	13,970	\$699,000
Cantilevered Concrete Walls	SF	\$60	1,360	\$82,000
Soldier Pile Walls	SF	\$65	1,670	\$109,000
Soldier Pile Walls (Anchored)	SF	\$80	4,310	\$345,000
10. Bridge Removal	SY	\$90	640	\$58,000
11. Incidental Structure Items (10% of Items 7-9) ³				\$2,529,000
12. Utility Relocation ⁴				\$2,304,000
13. CILCO Tower Relocation	L SUM	\$300,000	1	\$300,000
14. Gas Pipeline Adjustment	L SUM	\$1,410,000	1	\$1,410,000
14. Construction Incidentals ⁵				\$11,919,000
15. Total Construction Cost				\$131,112,000
16. Design Engineering and Construction Supervision				\$19,667,000
17. SUBTOTAL				\$150,779,000

TABLE 5-6
South Section Cost Summary

Item	Unit	Unit Cost	Quantity	Cost
18. Real Estate				
Undeveloped Land	ACRE	\$5,000	449	\$2,245,000
Developed Land	ACRE	\$12,000	21	\$252,000
Relocations - Commercial	EACH	\$300,000	0	\$0
Relocations - Residential	EACH	\$100,000	3	\$300,000
19. Wetland Mitigation	ACRE	\$20,000		\$0
20. Compensatory Storage/Flood Plain Encroachment	ACRE	\$60,000		\$0
21. Sub-Total				\$153,576,000
22. Contingencies				\$23,036,000
23. Railroad Construction Costs ⁶				\$1,000,000
TOTAL				\$177,612,000

Assumptions:

- 3% Erosion Control (percent of roadway costs)
- 4% Traffic Control During Construction (percent of roadway costs)
- 4% Lighting (percent of roadway costs)
- 2% Signing and Pavement Marking (percent of roadway costs)
- 2% Utility Relocation (percent of roadway and structure costs)
- 10% Incidental Items (percent of all construction items)
- 15% Design Engineering and Construction Supervision (percent of total construction cost)
- 15% Contingencies (percent of total project cost)

Notes:

- ¹ Local Roads includes all other roadways, including paved shoulders (cross roads, frontage roads, new access roads, etc.)
- ² Other Roadway Items includes erosion control, traffic control during construction, lighting, and signing and pavement marking items in the percentage of roadway costs as shown above.
- ³ Incidental Structure Items are added to the structural costs to account for special roadway work, including sequence of construction, maintenance of traffic, drainage, and other items incidental to the structures.
- ⁴ Utility Relocation costs are computed using the percentage shown above. This item does not consider any specific utility conflict, but instead approximates the costs to relocate the various other utilities that will likely be encountered during construction activities
- ⁵ Construction Incidentals includes any items not already accounted for by quantity or percentage above.
- ⁶ Railroad construction costs include the costs associated with reconstructing a new railroad signal east of the IL 29 structure of the BN&SF railroad

TABLE 5-7
Central Section Cost Summary

Item	Unit	Unit Cost	Quantity	Cost
1. Pavement				
Mainline	SY	\$55	673,200	\$37,026,000
Local Roads ¹	SY	\$45	175,300	\$7,889,000
2. Earthwork				
Mainline	CY	\$6	2,147,300	\$12,884,000
Local Roads ¹	CY	\$6	303,500	\$1,821,000
3. Pavement Removal	SY	\$8	213,000	\$1,704,000
4. Concrete Barrier Wall	FT	\$50	62,700	\$3,135,000
5. Guardrail	FT	\$30	39,800	\$1,194,000
6. Drainage	L			
	SUM	\$6,150,000	1	\$6,150,000
7. Other Roadway Items ²				\$14,361,000
8. Bridges				
IL 29 Connector over Senachwine Creek	SF	\$115	21,300	\$2,450,000
IL 29 Connector over IL 29	SF	\$115	19,300	\$2,220,000
West Frontage Road over Coon Creek	SF	\$115	4,700	\$541,000
IL 29 over Coon Creek	SF	\$115	14,500	\$1,668,000
East Frontage Road over Coon Creek	SF	\$115	3,000	\$345,000
IL 29 over Creek South of Hopewell	SF	\$115	6,100	\$702,000
IL 29 over Rattlesnake Hollow	SF	\$115	10,300	\$1,185,000
IL 29 over Barrville Creek	SF	\$115	9,300	\$1,070,000
IL 29 over Railroad and Ramp B	SF	\$130	25,600	\$3,328,000
IL 29 over Gimlet Creek and IL 17	SF	\$130	23,300	\$3,029,000
Railroad Street over Gimlet Creek	SF	\$115	7,200	\$828,000
Railroad Street over Thenius Creek	SF	\$115	2,600	\$299,000
IL 29 over Thenius Creek, Railroad, and Ramp C	SF	\$140	54,500	\$7,630,000
Ramp D over Thenius Creek and Thenius Street	SF	\$115	13,400	\$1,541,000
Access Drive over Thenius Creek	SF	\$115	2,200	\$253,000
IL 29 over Crow Creek	SF	\$115	38,000	\$4,370,000
9. Retaining Walls				
MSE Walls	SF	\$50	372,450	\$18,623,000
Cantilevered Concrete Walls	SF	\$60	35,260	\$2,116,000
Soldier Pile Walls	SF	\$65	107,500	\$6,988,000
Soldier Pile Walls (Anchored)	SF	\$80	151,000	\$12,080,000
10. Bridge Removal	SY	\$90	2,900	\$261,000
11. Incidental Structure Items (10% of Items 7-9) ³				\$7,153,000
12. Utility Relocation ⁴				\$8,242,000
13. Construction Incidentals ⁵				\$17,309,000
14. Total Construction Cost				\$190,395,000
15. Design Engineering and Construction Supervision				\$28,559,000
16. SUBTOTAL				\$218,954,000
17. Real Estate ⁶				

TABLE 5-7
Central Section Cost Summary

Item	Unit	Unit Cost	Quantity	Cost
Undeveloped Land	ACRE	\$5,000	919	\$4,595,000
Developed Land	ACRE	\$12,000	26	\$312,000
Relocations - Commercial	EACH	\$300,000	2	\$600,000
Relocations - Residential	EACH	\$100,000	19	\$1,900,000
18. Wetland Mitigation	ACRE	\$20,000		\$0
19. Compensatory Storage/Flood Plain Encroachment	ACRE	\$60,000		\$0
20. Sub-Total				\$226,361,000
21. Contingencies				\$33,954,000
22. Railroad Construction Costs (Provided by Benesch, 2007 Price Levels) ⁷				\$10,470,000
TOTAL				\$270,785,000

Assumptions:

- 5% Erosion Control (percent of roadway costs)
- 8% Traffic Control During Construction (percent of roadway costs)
- 4% Lighting (percent of roadway costs)
- 3% Signing and Pavement Marking (percent of roadway costs)
- 5% Utility Relocation (percent of roadway and structure costs)
- 10% Incidental Items (percent of all construction items)
- 15% Design Engineering and Construction Supervision (percent of total construction cost)
- 15% Contingencies (percent of total project cost)

Notes:

- ¹ Local Roads includes all other roadways, including paved shoulders (cross roads, frontage roads, new access roads, etc.)
- ² Other Roadway Items includes erosion control, traffic control during construction, lighting, and signing and pavement marking items in the percentage of roadway costs as shown above.
- ³ Incidental Structure Items are added to the structural costs to account for special roadway work, including sequence of construction, maintenance of traffic, drainage, and other items incidental to the structures.
- ⁴ Utility Relocation costs are computed using the percentage shown above. This item does not consider any specific utility conflict, but instead approximates the costs to relocate the various other utilities that will likely be encountered during construction activities.
- ⁵ Construction Incidentals includes any items not already accounted for by quantity or percentage above.
- ⁶ Includes real estate needed for roadway right-of-way, and the purchase of landlocked parcels.
- ⁷ Railroad construction costs include the cost associated with reconstructing the viaduct (minus retaining walls) and the costs associated with the railroad relocation at approximately Sta. 3543+00 (\$199,000).

TABLE 5-8
North Section Cost Summary

Item	Unit	Unit Cost	Quantity	Cost
1. Pavement				
Mainline	SY	\$55	643,900	\$35,415,000
Local Roads ¹	SY	\$45	104,600	\$4,707,000
2. Earthwork				
Mainline	CY	\$6	1,836,000	\$11,016,000
Local Roads ¹	CY	\$6	134,700	\$808,000
3. Pavement Removal	SY	\$8	242,200	\$1,938,000
4. Concrete Barrier Wall	FT	\$50	16,600	\$830,000
5. Guardrail	FT	\$30	19,100	\$573,000
6. Drainage	L SUM	\$2,442,000	1	\$2,442,000
7. Other Roadway Items ²				\$9,237,000
8. Bridges				
Western Road over IL 29	SF	\$120	14,000	\$1,680,000
Old Indian Road over IL 29	SF	\$120	7,200	\$864,000
IL 29 over Dry Hollow Creek	SF	\$120	11,200	\$1,344,000
IL 29 over Senachwine Creek Overflow	SF	\$120	8,700	\$1,044,000
IL 29 over Senachwine Creek	SF	\$120	23,000	\$2,760,000
IL 29 over Unnamed Stream	SF	\$120	8,000	\$960,000
IL 29 over Unnamed Stream	SF	\$120	7,000	\$840,000
9. Retaining Walls				
MSE Walls	SF	\$50	146,800	\$7,340,000
Cantilevered Concrete Walls	SF	\$60	8,000	\$480,000
Soldier Pile Walls	SF	\$65	0	\$0
Soldier Pile Walls (Anchored)	SF	\$80	0	\$0
10. Bridge Removal	SY	\$90	0	\$0
11. Incidental Structure Items (10% of Items 7-9) ³				\$1,731,000
12. Utility Relocation ⁴				\$3,440,000
13. Gas Pipeline Adjustment	L SUM	\$1,450,000	1	\$1,450,000
14. Construction Incidentals ⁵				\$9,090,000
15. Total Construction Cost				\$99,989,000
16. Design Engineering and Construction Supervision				\$14,998,000
17. SUBTOTAL				\$114,987,000
18. Real Estate				
Undeveloped Land	ACRE	\$5,000	306	\$1,530,000
Developed Land	ACRE	\$12,000	4	\$48,000
Relocations - Commercial	EACH	\$300,000	4	\$1,200,000
Relocations - Residential	EACH	\$100,000	14	\$1,400,000
19. Wetland Mitigation	ACRE	\$20,000		\$0
20. Compensatory Storage/Flood Plain Encroachment	ACRE	\$60,000		\$0
21. Sub-Total				\$119,165,000

TABLE 5-8
North Section Cost Summary

Item	Unit	Unit Cost	Quantity	Cost
22. Contingencies				\$17,875,000
TOTAL				\$137,040,000

Assumptions:

- 3% Erosion Control (percent of roadway costs)
- 8% Traffic Control During Construction (percent of roadway costs)
- 3% Lighting (percent of roadway costs)
- 2% Signing and Pavement Marking (percent of roadway costs)
- 4% Utility Relocation (percent of roadway and structure costs)
- 10% Incidental Items (percent of all construction items)
- 15% Design Engineering and Construction Supervision (percent of total construction cost)
- 15% Contingencies (percent of total project cost)

Notes:

- ¹ Local Roads includes all other roadways, including paved shoulders (cross roads, frontage roads, new access roads, etc.)
- ² Other Roadway Items includes erosion control, traffic control during construction, lighting, and signing and pavement marking items in the percentage of roadway costs as shown above.
- ³ Incidental Structure Items are added to the structural costs to account for special roadway work, including sequence of construction, maintenance of traffic, drainage, and other items incidental to the structures.
- ⁴ Utility Relocation costs are computed using the percentage shown above. This item does not consider any specific utility conflict, but instead approximates the costs to relocate the various other utilities that will likely be encountered during construction activities
- ⁵ Construction Incidentals includes any items not already accounted for by quantity or percentage above.

5.10 Analysis of the Build Alternative

5.10.1 Traffic Service and Operations

At the south end of the proposed project, improved traffic service is provided to the large Caterpillar, Inc. facility near Cedar Hills Drive and Old Galena Road. Between Illinois Route 6 and Benedict Street, the proposed alignment of IL 29 bypasses Rome and Chillicothe thereby relieving traffic congestion on existing IL 29. North of Chillicothe, the proposed route provides direct access to Hopewell.

In Sparland, the alignment diverts from the existing route, allowing through traffic to pass through Sparland via a bypass and interchange located east of existing IL 29 without impacting traffic operations on local streets.

In Henry, the proposed alignment bypasses the community on the west, but still affords traffic service via Western Avenue to nearby businesses, the High School and County Fairgrounds.

North of Henry, the proposed alignment passes through Putnam without disrupting traffic service to local businesses and residences, or the existing grain elevator facility. From Putnam IL 29 proceeds north to join I-180 north of an intersection with Kentville Road.

5.10.2 Social, Economic and Environmental Effects

Social, Economic and Environmental consequences are discussed fully in the *Final Environmental Impact Statement* prepared for this project (CH2M HILL, 2009). The following is a summary of the unavoidable adverse impacts as presented in the EIS.

- A total of 48 properties, 44 residences and 4 businesses, will be displaced by the proposed project.
- Wetland impacts will amount to 20 acres of wetlands disturbed.
- One state-endangered plant species (Arrowwood) will be impacted.
- The historic Barrville Creek Bridge will have to be removed.
- The proposed project will landlock approximately 746 acres of property.
- Noise levels will increase at residential sites close to the alignment.
- Direct loss of agricultural land and disruption of many farming operations will occur.

5.10.3 Potential Mitigation Measures

Measures to compensate for acknowledged impacts of the proposed improvement are described in detail in the Final EIS and Section 6.5 (Project Commitments). The following is a brief summary of some of the actions that are proposed:

- In addition to using landlocked parcels (approximately 746 acres) for environmental mitigation, the areas currently in cropland or nonnative grasses would be investigated for use as borrow areas. This could reduce impacts to additional agricultural areas during construction.
- Contractors will be required to implement sedimentation and erosion control measures to minimize loss of topsoil into streams and roadside ditches. They would also maintain proper field drainage during construction.
- Contractors will be required to adhere to guidelines for screening stationary equipment, exhaust noise, noise from loose equipment parts, and excessive tailgate banging. Motorized equipment will not be operated between 10 p.m. and 6 a.m. without approval.
- Measures will be taken to control dust during construction. Pavement material batch plants will be located considering air quality standards.
- To minimize animal-vehicle collisions and the effects of retaining walls/median barriers on wildlife movement, 44 wildlife passages have been incorporated into the design of the proposed project. See Section 5.5.
- Benching of high cut and fill slopes is proposed, where necessary, to minimize soil erosion and long-term maintenance including sloughing. Areas susceptible to subsidence from abandoned mines will be overcome through appropriate design and construction techniques.

- Unavoidable wetland loss will be fully compensated. A specific wetland mitigation plan will be developed.
- None of the floodplain crossings have significant potential to interrupt or terminate a transportation facility needed for emergency vehicles or the community's only evacuation route.
- Disturbed vegetation within the highway right of way and trees lost as a result of impacts to upland forest will be replaced in accordance with IDOT policy.
- Potentially impacted Arrowwood (state-threatened) will be transplanted to suitable habitat that will not be impacted.
- Action will be taken to dispose of contamination at five potential sites in the area of effect for the proposed project. If other contaminated soils are encountered during construction, contaminated materials will be removed and disposed of.
- A traffic management plan will be developed and implemented during the construction phase of the project to provide reliable access to agricultural fields, residences, businesses, community facilities and services, and local roads. See Section 5.8
- Owners of residential and business properties affected by the proposed project will receive just compensation for property acquisition and relocation assistance.
- All waste and demolition material from the project will be disposed of in accordance with applicable regulations.

SECTION 6

Coordination and Public Involvement

IDOT provided regular opportunities for residents of the project area, local government officials, and state and federal agencies to become familiar with and participate in the IL 29 study through a structured coordination and communication program designed to encourage input. Participation was open to any interested persons. No one was excluded because of income, race, color, religion, national origin, sex, age, or handicap. This section summarizes the agency coordination and public involvement activities that occurred during preparation of this document, including the early coordination process, coordination activities with resource agency officials, and meetings with area officials, interested groups, and the public.

6.1 Early Coordination

6.1.1 Cooperating Agencies

The Notice of Intent to prepare an EIS for the project appeared in the *Federal Register* on July 24, 2002. In August and September 2002, a preliminary scoping document was mailed to federal and state agencies. State and federal agencies that agreed to serve as cooperating agencies for the project include the USEPA, USACE, USFWS, IDOA, and IDNR.

On August 29, 2002, the USEPA responded to the scoping document by recommending development of the EIS. Appendix A contains the coordination letters under Early Coordination (Agency Scoping Packet). The letter recommended that the EIS be developed so as to include a purpose and need statement, include a comprehensive analysis of a sufficient number of reasonable alternatives, describe the affected environment, describe government-owned resources in the Peoria Wilds in the affected environment, avoid impacts to the government-owned resources and other resources in the Peoria Wilds, describe all possible impacts caused by the reasonable alternatives, estimate impacts caused by induced growth, and analyze potential cumulative impacts, if any.

6.2 State and Federal Agency Coordination

6.2.1 NEPA / 404 Process

The project was coordinated under the Statewide Implementation Agreement for Concurrent National Environmental Policy Act (NEPA)/404 Process, which was designed to involve key agencies early and to avoid possible oversights. The process involved regular meetings between state and federal resource agencies to discuss the project. The NEPA/404 process involved three formal concurrence points: purpose and need and alternatives to be carried forward, alternatives to be evaluated in detail in the Draft EIS, and the preferred alternative.³ Appendix A-1 contains documentation of activities and correspondence

³ Concurrence means written determination that information is adequate to agree that the project can be advanced to the next stage of the project development; and agencies agree not to revisit the previous process steps unless conditions change.

relating to the process under State and Federal Agency Coordination: NEPA/404 Merger Process.

On April 19, 2002, IDOT held an interagency meeting with FHWA, USEPA, USFWS, IDNR, and the USACE to discuss the differences between this study and the Heart of Illinois study, which included a corridor to the west of the project area. IDOT explained that the current study focuses on connecting the 4-lane facilities north and south of IL 29 to enhance transportation efficiency for local and regional traffic west of the Illinois River, whereas the Heart of Illinois study investigated regional traffic connections between Peoria and I-39 and I-55. IDOT also requested agency concurrence to use a new format for the EIS, which combined the affected environment and impact discussions by resource topic in one chapter. All the cooperating agencies agreed to the new EIS format.

On April 28, 2003, IDOT held the first merged NEPA/Section 404 meeting to discuss the project and to obtain concurrence for “purpose and need” and “alternatives selected to be carried forward.” In addition to IDOT, agencies in attendance included FHWA, USEPA, USFWS, and IDNR. At the meeting, the group concurred with the purpose of and need for the project and the alternatives recommended for further study. IDNR also requested that the eagle habitat and natural areas within IDOT’s right of way near Miller-Anderson Woods Nature Preserve be looked at closely and avoided to the extent practicable. A separate meeting was held on April 25, 2003, with the USACE covering the same issues as at the April 28 meeting. The USACE concurred with the purpose of and need for the project and the alternatives recommended for further study.

On March 29, 2005, IDOT conducted the project’s second merged NEPA/Section 404 meeting to update agencies on the project alternatives, and to obtain input and concurrence on alternatives to be evaluated in detail in the Draft EIS. As part of the alternatives update, IDOT recommended eliminating the Bluff Alignment from further consideration because it would not “attract” enough traffic to address transportation problems on existing IL 29 and thus not meet the project’s purpose and need (see Section 2). Agencies in attendance besides IDOT included FHWA, USEPA, USFWS, IDNR, and USACE. The interagency group deferred concurrence on eliminating the Bluff Alignment until they received more information on how future traffic volumes along existing IL 29 and the Bluff Alignment were determined. IDOT prepared a memorandum discussing the traffic volumes associated with improvements on IL 29 and the Bluff Alignment and sent it to the agencies on April 26, 2005. On May 31, 2005, the agencies concurred with the memorandum’s recommendation that the Bluff Alignment be eliminated from further consideration.

On October 3, 2006, FHWA distributed a Preferred Alternative Concurrence Package regarding the selection of the Preferred Alternative. The signatories, USEPA, USACE, and USFWS concurred with the Preferred Alternative discussed in the Concurrence Package. Overall, the interagency group commented that the Preferred Alternative accomplished the project purpose and need with the least impact to environmental resources.

6.2.2 Resource Agency Technical Committee

A Technical Advisory Committee comprising local, state, and federal resource agencies was formed at the beginning of the project. The committee included representatives from the

agencies listed in Table 6-1. The role of committee members was to communicate regulatory requirements associated with resources in the study area, to provide input on alternatives and impacts, and to review technical aspects of the study.

Six resource agency technical committee meetings were held during the study to discuss project progress and to provide input at key project decision points. Table 6-2 summarizes the meetings. Appendix A-1 contains the meeting minutes under State and Federal Agency Coordination: Resource Agency Technical Committee.

A technical memorandum providing background information on the indirect and cumulative impact analysis to be completed for the project was distributed to cooperating agency representatives following the June 2004 meeting of the Technical Advisory Committee to solicit input and concurrence on the proposed methodology and geographical boundaries for the analysis. The feedback provided by the USEPA and USACE was taken into consideration during the assessment of indirect and cumulative impacts.

TABLE 6-1
Resource Agency Technical Committee Membership

U.S. Environmental Protection Agency ^a
U.S. Fish and Wildlife Service ^a
U.S. Army Corp of Engineers ^a
USDA Natural Resources Conservation Service
University of Illinois–ITARP
Illinois Department of Agriculture
Illinois Department of Natural Resources ^a
Illinois Natural History Survey
Bureau County Farm Bureau
Marshall-Putnam Farm Bureau
Peoria County Farm Bureau

^aAlso participates in the NEPA/404 process.

TABLE 6-2
Resource Agency Technical Committee Meetings

Meeting	Topics
September 2002	Introduction to study, roles of committee members, summary of environmental features in the study area, overview of studies under way (biological surveys, archaeological investigations, boundaries of natural areas, land and water reserve and nature preserves, bird surveys), and preliminary alignments.
November 2002	Process for developing and refining alternative alignments, review of typical sections near Miller-Anderson Woods Nature Preserve, project need considerations, designated IDNR properties in the study area (such as natural areas, nature preserves), and preliminary alternative alignments.
May 2003	Review of purpose and need and of alternative alignments in the north, central, and south sections to be carried through the EIS.
January 2004	Summary of input from Public Information Meeting 1 and NEPA/404 Meeting 1, overview of field studies, overview/status of preliminary alternative alignments, summary of alternative impacts, and review of next steps in the process.
June 2004	Current resource studies, refinements to the alternative alignments in the north, central and south sections, review of alternatives to minimize impacts in Senachwine Creek and Crow Creek floodplains, wildlife crossings, and next steps in the process.
June 2006	Selection of and refinements to the Preferred Alternative in the north, central, and south sections, review of the Preferred Alternative’s impacts to natural and socioeconomic resources, review of proposed mitigation and enhancement measures, and next steps in the process.

6.2.3 Other Agency Coordination

IDOT corresponded with and held several meetings with various local, state and federal agencies. Table 6-3 summarizes the results of that coordination. Meeting minutes and correspondence can be found in Appendix A-1.

The following technical reports were prepared in conjunction with the study. The technical reports are available at IDOT's Peoria office.

- The consultant team collected Farm Service Agency information for completion of the USDA/NRCS AD 1006 form. IDOA prepared the USDA/NRCS AD 1006 form, based on input from and coordination between IDOT, IDOA, and NRCS.
- The Illinois Natural History Survey prepared an assessment of wetland and biological resources in the study area.
- The ISGS prepared hydrology studies along part of Miller-Anderson Woods Nature Preserve and also three preliminary environmental site assessments summarizing the special and hazardous waste in the project area.
- The ISGS provided IDOT with data about geology and soils in the project area. The consultant team prepared a geotechnical report from this information.
- The consultant team prepared a photo log of historic structures and submitted it to IDOT's Cultural Resources Unit. The University of Illinois's Transportation Archaeological Research Program investigated archaeological resources and prepared an interim report summarizing its findings. The consultant team prepared a report identifying structures on or potentially eligibility for the National Register of Historic Place. Cultural resources subject to the provisions of Section 106 of the Historic Preservation Act of 1966 and Section 4(f) of the Department of Transportation Act of 1966 were coordinated with the Illinois Historic Preservation Agency, as discussed in Section 3.4 (Cultural Resources) of the Final EIS.
- A Biological Assessment was prepared and distributed to IDNR and USFWS. The assessment concluded the proposed project is not likely to have an adverse effect on threatened and endangered species or state natural areas. Both the IDNR and the USFWS reviewed the Biological Assessment/ Detailed Action Report. The USFWS, based on its review, offered no additional comments pertaining to threatened and endangered species. The IDNR offered one recommendation and has closed consultation under the Illinois Endangered Species Act.

TABLE 6-3
Other Agency Coordination

Meeting/ Correspondence Date	Agencies Involved	Topics
May 17, 2002	Illinois State Geologic Survey (ISGS)	IDOT Memorandum-PESA Review.
May 21, 2002	IDNR	Memorandum from IDNR providing clarification to questions on the IDNR Action Report. (Attached to this memorandum is a transmittal memorandum from IDOT dated June 24, 2002.)

TABLE 6-3
Other Agency Coordination

Meeting/ Correspondence Date	Agencies Involved	Topics
November 6, 2002	ISGS	IDOT Memorandum-PESA Review.
November 8, 2002	ISGS	Letter transmittal of ISGS deliverables to the IL 29 project.
April 16, 2003	IDNR-INHS	Letter transmittal of the Assessment of the Biological Resources Report from IDNR.
July 21, 2003	Marshall-Putnam Soil and Water Conservation District	Letter from Marshall-Putnam Soil and Water Conservation District opposing the proposed improvements.
February 2, 2004	IDNR	Letter from IDNR requesting a hydrology study along parts of the Miller-Anderson Woods Nature Preserve.
March 12, 2004	IDNR, INPC, ISGS	Meeting to discuss groundwater equilibrium concern that could arise from widening IL 29 from two to four lanes in the area of Miller-Anderson Woods.
May 3, 2004	Bureau County Farm Service, Marshall and Putnam County Farm Service, Peoria County Farm Service	Letter to county farm services requesting information for agricultural assessment.
May 11, 2004	IDNR	Meeting to solicit input on current and future access points to their property. (minutes not included)
August 26, 2004	ISGS	IDOT Memorandum-PESA Review.
September 14, 2004	INPC, IDNR, Illinois Emergency Management Agency	Meeting to discuss process and procedures to determine floodplain impacts and compensation along IL 29 corridor.
October 4, 2004	IDNR	Meeting to present the current IL 29 design, discuss potential impacts to IDNR properties and natural areas, and to receive feedback on potential mitigation. In late 2003, a field review was conducted with IDNR to refine the boundaries of IDNR properties and natural areas south of Sparland.
October 5, 2004	USFWS	Letter from USFWS identifying species, listed or proposed to be listed, that may be present in project area.
November 9, 2004	Section 4(f) Applicability Review-FHWA	Meeting to discuss the applicability of the Section 4(f) regulations to the parks, recreation and wildlife refuges, and historic properties in the project area.
November 23, 2004	FHWA	Meeting to discuss the potential floodplain impacts associated with the proposed improvements.
December 15, 2004	NRCS	Meeting to discuss potential project impacts on NRCS improvements along Crow Creek, Senachwine Creek, and other environmental features in the project area.
January 26, 2005	IDNR, Office of Water Resources	Letter from the Office of Water Resources concerning four potential longitudinal encroachments associated with proposed improvements and applicability of Part 3700 floodway construction rules.
March 3, 2005	IDNR, Office of Water Resources	E-mail from the Office of Water Resources indicating that the areas near Route 29 bypass crossing and longitudinal encroachment along Senachwine Creek (South) is rural. Therefore rural area floodway criteria would apply to the floodway/floodplain filling along Senachwine Creek (South).

TABLE 6-3
Other Agency Coordination

Meeting/ Correspondence Date	Agencies Involved	Topics
March 7, 2005	Illinois Historic Preservation Agency (IHPA)	Concurrence from IHPA that four of the five structures in the project area identified as potentially eligibility to the National Register of Historic Place do not to meet the criteria for listing. The fifth property, Whiffle Tree Place, was identified as significant under Criterion C, but not affected.
March 15, 2005	IDOT/IHPA	Legal Notice for the removal of the Barrville Creek Bridge
August 19, 2005	ISGS	IDOT Memorandum—Hazardous Waste Waiver Request.
December 12, 2005	Natural Resource Conservation Service	Letter from IDOT transmitting agricultural impact information.
December 16, 2005	ISGS	IDOT Memorandum—PESA Re-evaluation.
December 29, 2005	FHWA	Programmatic Section (4f) Evaluation
December 29, 2005	FHWA	Memorandum of Agreement, Barrville Creek Bridge
January 3, 2006	FHWA, Advisory Council on Historic Preservation	Letter from FHWA notifying Advisory Council on Historic Preservation on the adverse effect on the historic Barrville Bridge.
January 13, 2006	IHPA	Concurrence from IHPA that the relocation of a driveway to construct the Western Avenue interchange on the west side of Henry would not impact any historic properties.
July 31, 2006	ISGS	IDOT Memorandum—PESA Reevaluation.
August 15, 2006	IDNR	MOA between IDOT and IDNR describing land transfer from IDOT to IDNR, public use enhancements, prairie restorations, and wetland and endangered plant mitigation.
December 13, 2006	Peoria Tribe of Indians of Oklahoma	Notification from the Tribe that no known Indian Religious Sites are located where construction is proposed. The Tribe cautions that construction must be halted and communication with the Tribe resumed if any items falling under the Native American Graves Protection and Repatriation Act are uncovered.
March 23, 2009	IDNR	Notification from IDNR that they evaluated the natural resources review provided by EcoCAT and determined that the project would not have adverse impacts on protected resources. IDNR's consultation is valid for two years.

6.3 Community Involvement

6.3.1 Community Officials

Numerous meetings were held with community and elected officials during the course of the study to understand their issues and concerns. The meetings included representatives from Marshall County, Lacon, Henry, Sparland, and Chillicothe. Table 6-4 summarizes the meetings and the correspondence received from local agencies. Appendix B contains meeting minutes and related correspondence as described in Table 6-4.

TABLE 6-4
Community Officials

Meeting/ Correspondence Date	Community	Topics
October 2, 2002	Chillicothe, Henry, Lacon, Sparland, Marshall County	Letter from project team identifying meeting date to introduce the study, discuss existing traffic patterns, and any proposed city plans.
October 2, 2002	Meta Tec, Hardin Industries	Letters of support to improving IL 29 to Marshall County Board.
October 3, 2002	Marshall County Airport	Letter of support for widening IL 29.
October 4, 2002	Marshall County Airport Board	Letter of support for widening IL 29.
October 8, 2002	Lacon	Letter of support for widening IL 29.
October 8, 2002	Marshall County	Letter and resolution of support for widening IL 29 along its existing alignment.
May 12, 2003	Henry	Resolution in support of the IL 29 improvements.
June 2, 2003	Princeton	Resolution in support of the IL 29 improvements
June 5, 2003	Marshall County	Resolution in support of the IL 29 improvements
June 10, 2003	Bureau County	Resolution of support for IL 29 improvements.
July 3, 2003	Chillicothe	Meeting to discuss the study progress, proposed alternatives, and proposed city plans.
August 20, 2003	Henry Senachwine Community School District 5	Resolution of support for IL 29 improvements.
September 8, 2003	Chillicothe	Letter of support for improvements to IL 29; includes a bypass resolution survey conducted by the Chillicothe Area Chamber of Commerce.
July 7, 2004	Chillicothe, Henry, Lacon, Sparland, Marshall County	Preview of the materials to be presented at Public Information Meeting #2. (minutes not included)
July 14, 2004	Bureau County	Letter supporting the IL 29 project.
July 19, 2004	Sparland	Letter opposing improvements to IL 29; notes that if the improvements are built the City supports an alignment west or east of Sparland.
August 10, 2004	Henry Township	Resolution not in support of the project.
August 31, 2004	Henry Township	Letter distributing a resolution not supporting the improvement of IL 29.
September 16, 2004	Chillicothe	Meeting to discuss growth issues and the project's potential to cause secondary development.
November 18, 2004	Senachwine Township and Henry	Senachwine Township: meeting to better assess the applicability of Section 4(f) to the Putnam Pavilion site and ball field at the former Putnam grade school. Henry: meeting to discuss the project's potential to cause secondary development.

TABLE 6-4
Community Officials

Meeting/ Correspondence Date	Community	Topics
January 27, 2005	Sparland	Meeting to review the status of the project, and discuss the project's potential to cause secondary development in Sparland.
December 22, 2005	Senachwine Township	Letter from the project team concerning the status of the Putnam baseball field.
January 12, 2006	Senachwine Township	Meeting to discuss the applicability of Section 4(f) at the baseball field at the former Putnam grade school.
June 1, 2006	Sparland	Meeting to present the recommended action, the reasons that the bluff alternative was dismissed, and Sparland's improvements in more detail.
June 8, 2006	Senachwine Township	Meeting to discuss the proposed IL29/Bradford Road intersection as well as access to Putnam's maintenance garage.
January 3, 2008	Sparland	Meeting with Sparland Village Board to discuss design changes.

Meetings were held with various organizations to discuss how the proposed improvements may affect their organization, including railroad companies, Caterpillar, Henry Fire Protection District, Senachwine and Crow Creek Watershed committees, and the Peoria Park District.

Railroad Coordination

The project team coordinated with representatives of railroad companies potentially affected by the proposed improvements several times throughout project development. Table 6-5 summarizes the coordination points.

TABLE 6-5
Railroad Coordination

Meeting/ Correspondence Date	Company	Topics
March 11, 2003	Poly One Corporation	Letter introducing the project and the potential relocation of their tracks associated with the proposed improvements.
May 13, 2003	Poly One Corporation	Telephone conversation follow-up to letter of March 11, 2003. Poly One concurred that it would be acceptable for its tracks to be relocated, with IDOT paying for the relocation.
July 23, 2003	Lincoln & Southern Railroad Co.	Letter expressing ongoing interest in the study and concern that the drainage conditions along their right of way not deteriorate as a consequence of the proposed improvements.
November 10, 2004	Lincoln & Southern Railroad Co., Poly One Corporation, Iowa Interstate RR, URS/CSXT	Meeting to gain general understanding of the railroad companies and their operations, identify the proximity of the railroad tracks to proposed construction, obtain right of way, identify drainage / flooding issues, identify a future contact from each company regarding future information and reviews, and discuss the procedure for and cost to IDOT for railroads to review plan sets.

TABLE 6-5
Railroad Coordination

Meeting/ Correspondence Date	Company	Topics
December 6, 2004	IDOT Bureau of Railroads	Progress meeting
January 27, 2005	IDOT Bureau of Railroads	Meeting to finalize railroad crossing locations and design.
January 30, 2007	Burlington Northern/Santa Fe (BNSF) Railroad Co.	Meeting to discuss the proposed reconstruction of the railroad viaduct over IL29 on the north side of Chillicothe and the proposed IL 29 bridge over the BNSF railroad track north of Truitt Road.
July/August 2007	Burlington Northern/Santa Fe (BNSF) Railroad Co.	Correspondences regarding the decisions to relocate the railroad signal to the east of the proposed IL 29 overpass north of Truitt Road, prepare the railroad overpass in Chillicothe to BNSF railroad design criteria, and provide for two railroad tracks in the design of the overpass north of Truitt Avenue and underpass in Chillicothe.
May 12, 2008 and January 7, 2009	Burlington Northern/Santa Fe (BNSF) Railroad Co.	Correspondence requesting comments from BNSF on a TS&L for the proposed railroad viaduct at the north edge of Chillicothe.

BNSF Railroad Viaduct

In regards to the BNSF Railroad viaduct at the north edge of Chillicothe on existing IL 29, no final determination for the proposed structure design was agreed upon with the railroad. Draft TS&L drawings were given to the BNSF Railroad, but no comments were received. The current design for the railroad viaduct is a 107-foot long, 2-span railroad bridge over the IL 29 connector. The structure would be 84 feet wide to accommodate two main tracks, one yard lead track, and an access road. The typical section for IL Route 29 below the railroad would have four, 12-foot wide lanes with a center median. Bicycle/pedestrian accommodations would also be included on each side of the highway facility. The documents for this location currently consist of a draft TS&L package, including TS&L drawings, staging plans, cross sections, a bridge condition report, a structure report, a preliminary bridge design and hydraulic report, a railroad drainage report, a structure geotechnical report, and a cost estimate.

Henry Fire Protection District

Study staff met with representatives of the Henry Fire Protection District on April 23, 2004, regarding the proposed improvements and to understand how they may affect the fire district's operations. The consensus among district officials was that the proposed improvements would not adversely affect operations. See Appendix B.

Senachwine Creek Watershed Committee

Staff met with representatives of the Senachwine Creek Watershed Committee on May 6, 2004, regarding the proposed improvements and to understand how they may affect projects planned by the committee. The committee has received funds to install holding basins, detention ponds, willows, and terraces to minimize the effects of hard rains and flooding. After reviewing the design plans, representatives commented that they would like to work with IDOT on any planned mitigation in the area. See Appendix B.

Caterpillar

On January 5, 2004, IDOT received a letter from Caterpillar confirming a phone conversation of December 23, 2003. During the phone conversation Caterpillar representatives expressed support for an alternative that would pass to the west and north of the Caterpillar property, identified as alignment S-6 on Exhibit 2-7 of the Final EIS. (At the time of the telephone conversation this alignment was referred to as Alignment 1.) See Appendix B.

Peoria Park District

Staff met with representatives of the Peoria Park District on September 9, 2004, to learn more about their concerns expressed following the second public information meeting. In a letter dated August 27, 2004, IDOT requested more information from the Park District on their facilities along the south portion of the study corridor. During the September meeting the park district provided additional information on its three properties near the project's south section, Camp Wokanda, Singing Woods Nature Preserve, and Audubon Wildlife Area. See Appendix B.

Crow Creek Watershed Committee

Staff met with representatives of the Crow Creek Watershed Committee on February 23, 2005, to update the committee on the proposed improvements to IL 29 adjacent to Crow Creek (Camp Grove Road to Old IL 29) and to confirm that the project would not affect projects funded by the committee in the watershed. See Appendix B.

6.4 Public Involvement

Two series of public meetings and one series of public hearings were held to solicit public input and to address public concerns and questions. Due to the project length and number of communities involved, each public meeting and public hearing was held in two locations in the project corridor. An additional public meeting was held in Sparland to apprise local residents of recent changes to the proposed design in Sparland. The sessions were held in an open house format. Full documentation of each of these meetings and the public hearing, along with associated correspondence is contained in Appendix C.

6.4.1 First Set of Public Meetings

The project's first open-house public information meetings were held on June 11th and 12th, 2003 from 4:00 p.m. to 7:00 p.m. The June 11th meeting was held in Henry at Henry-Senachwine High School and was attended by approximately 326 people. Approximately 427 attended the meeting on June 12th at Three Sisters Park in Chillicothe. The meetings were publicized through advertisements in eight local newspapers: the *Peoria Journal Star*, the *Chillicothe Times Bulletin*, the *Chillicothe Independent*, the *Lacon Home Journal*, the *Henry News Republican*, the *Bureau County Republican*, the *Bureau Valley Chief* and the *New Tribune*. The purpose of the public information meetings was to provide project-area residents with the general status of the project, obtain public input on the preliminary and reasonable range of alternatives, and offer a forum for people to ask questions.

The same information was presented at both meetings, including alignments proposed to be carried forward for additional study, as well as those proposed for elimination, possible typical sections for the different sections of the corridor, a project newsletter and meeting handout. Aerial exhibits detailing the location of corridor alternatives were presented for public review. A table and comment box was available for those who wanted to leave project comments at the meeting. Project staff from IDOT and CH2M HILL was available to answer questions and discuss the project alternatives.

Approximately 115 written comments were received at the public information meeting held in Henry, and 190 at the meeting in Chillicothe. Comments at the first meetings included:

- Questions as to the need for the project.
- Concerns about impacts to wetlands and natural areas.
- Concerns about bypasses of Henry, Putnam, Sparland, Hopewell and Chillicothe.
- Concerns as to farmland impacts.

Approximately 250 comments were submitted following the two meetings, for a total of 555. Meeting comments are found on the CD in the Final EIS.

6.4.2 Second Set of Public Meetings

The project's second open-house public information meetings were held on July 14th and 15th, 2004 from 4:00 p.m. to 7:00 p.m. The July 14th meeting was held in Henry at Henry-Senachwine High School and was attended by approximately 176 people. Approximately 408 attended the meeting on July 15th at Three Sisters Park in Chillicothe. The purpose of the public information meetings was to provide project-area residents with the general status of the project, obtain public input on the range of alternatives currently under consideration as well as those removed from further consideration, and offer a forum for people to ask questions.

The same information was presented at both meetings, including alignments proposed to be carried forward for additional study, as well as those proposed for elimination since the first public information meeting, possible typical sections for the different sections of the corridor, a project newsletter and meeting handout. Announcement of the meetings was published in the same newspapers as for the first set of meetings. A table and comment box was available for those who wanted to leave project comments at the meeting. Project staff from IDOT and CH2M HILL was available to answer questions and discuss the project alternatives. Meeting comments are found on the CD in the Final EIS.

6.4.3 Public Hearing

During the 60-day Draft EIS public comment period (which ended June 25, 2006), a public hearing was held on June 14, 2006, in Chillicothe and on June 15 in Henry to present the Draft EIS to project-area residents and to offer a forum for people to ask questions and to provide comments. The meetings were publicized through advertisements in nine local newspapers. Project newsletters announcing the meeting were sent to property owners, local units of government, utilities, state agencies, elected officials, and other interest groups. The same information was presented at both meetings. Meeting exhibits included aerial photography of the project area depicting the project alternatives, conceptual drawings of project area aesthetic improvements, typical sections and information on project impacts. Copies of the

Draft Environmental Impact Statement (DEIS) were available for review. A court reporter was present to record oral comments from attendees, a comment box was provided for those wishing to provide written statements, and a comment form with a self-addressed return mailing label was provided for those who wanted to mail their comments. The meeting in Chillicothe was attended by 346 people, the meeting in Henry by 180 people. Comments from the public hearing are found on the CD in the Final EIS

6.4.4 Sparland Public Meeting

On January 23, 2008, a public meeting was held to inform Sparland residents about recent changes to the proposed design in Sparland. The meeting was held in an open house format between 4:30 and 7:00 P.M. IDOT personnel and consultant staff was available to discuss the proposed changes and answer questions. Exhibits showing the proposed design were available for attendees to view. Discussion topics included changes in access to specific residences, the ability of the roundabout to accommodate expected traffic volumes, benefits of roundabouts for trucks, and safety concerns regarding the IL 29/Thenius Road intersection.

6.4.5 Project Newsletters

Project newsletters were prepared and distributed during the course of the study. The newsletters were sent to local units of government (county, municipal, drainage districts, and townships), review agencies, federal and state officials, utilities, and project area residents.

The first newsletter (June 2003) introduced the project, the study team, and the first public information meeting. It provided an overview of the project development process and where this study was relative to that process, described the features of the study, explained the public and agency involvement process, and announced the study schedule. The newsletter contained a self-addressed form for submitting comments. It also provided a project contact name and telephone number.

The second newsletter (June 2004) announced the dates and locations of the second public meetings, described the corridor alternatives that would be presented, and provided a map detailing alternatives. It also contained the self-addressed form for submitting comments, and a contact name and telephone number.

The third newsletter (June 2006) informed recipients that the DEIS was signed and announced the dates and locations of the public hearings. It also provided an overview and map of the Build Alternative and outlined the next steps in the current preliminary phase. The newsletter included a self-addressed form for submitting comments as well as a contact name and telephone number.

A fourth newsletter was distributed in May 2009 to inform recipients on the results of the NEPA process.

6.5 Project Commitments

The following section summarizes the measures to minimize harm and additional commitments for the Preferred Alternative. Final mitigation plans would be incorporated into final engineering plans and specifications prepared for the proposed highway.

6.5.1 Agriculture

- The alignments were designed to parallel property lines, where feasible, to keep farm severances, severance management zones, and uneconomical remnants to a minimum.
- Where practical, field access roads will be constructed to maintain access to farm fields.
- Existing surface and subsurface drainage will be maintained.
- Subsurface field tiles draining to, or intersected by, the proposed highway's right of way will be located by trenching in order to ensure that proper field drainage is maintained during construction.
- Areas of cropland and nonnative grasses on landlocked parcels will be investigated for use as borrow areas. If suitable, they will be given priority as sources of borrow, thereby reducing additional impacts to agricultural lands.
- Agricultural impacts will be lessened by using landlocked parcels for mitigation purposes.

6.5.2 Cultural

- Under the stipulations of a Programmatic Agreement for Historic Bridges ratified by IHPA and FHWA in 2004, a Memorandum of Agreement was formulated and signed by IHPA, FHWA, and IDOT in November of 2005 which specifies mitigation measures for the adverse effects of the removal of SN 062-0011 Barrville Creek Bridge (Appendix A-1, Other Agency Coordination, Notification of Adverse Effect, Barrville Creek Bridge). The measures include attempting to find a suitable relocation venue for the bridge and if unsuccessful, to locate a similar bridge that can substitute for the displaced Barrville Creek Bridge.
- All the archaeological sites that have moderate or high research potential located within the construction limits of the Preferred Alternative will be subjected to subsurface evaluations (test excavations).

6.5.3 Noise and Air Quality

- To reduce the potential for noise impacts during construction, IDOT will require contractors to adhere to the latest edition of the *Standard Specifications for Road and Bridge Construction*. These specifications include guidelines for screening stationary equipment, exhaust noise, noise from loose equipment parts, and excessive tailgate banging.
- Special provisions will require that motorized construction equipment not be operated between 10 P.M. and 6 A.M. without prior written approval of the project engineer.

- Dust control during construction will be accomplished in accordance with the *Standard Specifications for Road and Bridge Construction* which requires application of water or approved dust control measures during grading operations and on haul roads.
- The location of pavement material batch plants will be in accordance with the *Standard Specifications* or any special provisions developed during coordination with the IEPA regarding air quality standards and emissions.
- Open burning of construction waste or brush will be done in accordance with local ordinances.
- Demolition and disposal of structures is regulated under the *Standard Specifications for Road and Bridge Construction*.

6.5.4 Geology, Soils, and Surface Water Resources

- High cut and fill slopes will be benched, where necessary, to minimize soil erosion and long-term maintenance including sloughing.
- The use of split profiles for certain segments of the project will reduce the disturbance to erodible soils, the risk of landslides and the risk of encountering abandoned mines.
- Principles and standards from IDOT's *Construction Procedure Memorandum on Erosion and Sediment Control* and other erosion control best management practices will be used to minimize soil erosion. An erosion control plan has been developed as part of this study that will reflect IDOT's erosion control practices. The preliminary plan includes the following concepts:
 - **Temporary Ditch Checks**
 - Ditch check material will vary according to velocity of flow in ditch.
 - Spacing of ditch checks will be adjusted according to ditch slope.
 - **Ditch Linings**
 - Temporary linings (excelsior blankets) will be installed according to ditch velocity during construction activities (prior to revegetation).
 - Permanent linings (paved ditches, riprap) will be installed according to ditch velocity after construction activities (after revegetation).
 - **Culverts** – Downstream channels will be protected as required using riprap, energy dissipater basins, and so on, according to culvert outlet velocities.
 - **Perimeter Erosion Barrier** will be installed in areas where sediments run off the construction area in sheet flow.
 - **Inlet and Pipe Protection** will be installed immediately after inlets and pipes are constructed until surrounding area is paved or revegetated.
 - **Stormwater Detention Ponds** will be installed at several locations in the project area to allow sediments to settle out of highway runoff. Five detention facilities are proposed along the Preferred Alternative: on the east side of Old Galena Road opposite the Audubon Wildlife Area, on the east side of Krause Road northeast of

the proposed Rome West Road interchange, in the southwest quadrant of the proposed McGrath Road interchange, on the south side of Senachwine Valley Road near Senachwine Creek (North), and south of Putnam near Center Street.

- Basic erosion control principles and best management practices that will be used on the project include the following:
 - The size of disturbed area exposed at any one time and the duration of exposure will be minimized. Construction contracts will include limits on the amount of soil that can be exposed at any one time, measures to prevent erosion during spring thaw if construction is not completed before winter, and specifications to complete grading as soon as possible and revegetate with temporary and permanent cover.
 - Control methods will be used to prevent erosion and sedimentation in sensitive areas. Such methods include proper design of drainage channels with respect to width, depth, gradient, side slopes, and energy dissipation; protective ground cover such as vegetation, mulch, erosion mat, or riprap; dikes and intercepting embankments to divert sheet flow away from disturbed areas; and sediment control devices such as ditch checks, erosion bales, and silt fences, and retention or detention basins.

If a stream enhancement was impacted during construction it would be replaced in-kind.

6.5.5 Wetlands, Floodplains, and Designated Lands

The location of wetlands, floodplains, and designated lands referred to below by letter-number designation are shown in the Aerial Exhibits (Sheets 1-18) of the Final EIS.

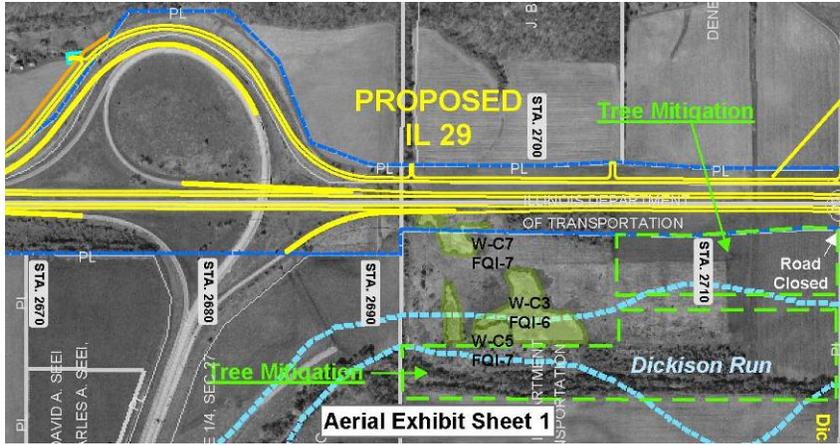
- The Preferred Alternative incorporates alignment shifts where practicable to minimize wetland impacts.
- To minimize impacts on wetlands, floodplains, and designated lands, a 22-foot median will be used between Crew Lane (rest area) north of Chillicothe and approximately 580 feet north of the IL 29/1100E intersection (Final EIS Aerial Exhibit sheets 8 to 11) and where IL 29 is adjacent to Miller-Anderson Woods (Aerial Exhibit sheets 17 and 18).
- By maintaining the eastern edge of pavement along the 2-mile stretch of W-16 south of the IDNR property, the impact to W-16 has been limited to the 0.2 acre on the south side of the IDNR boat launch.
- By not providing access to the Barnes/Barnes & Kidder property south of the proposed IL 29 and IL 17 interchange, the impact to W-26 has been limited to the 1.3 acres along realigned IL 29 in Sparland.
- To minimize impacts at W-52 and W-53 and floodplains in the Crow Creek area a retaining wall was used to reduce the impacts from 4.6 acres to 2.3 acres, and 2.0 acres to 1.6 acres, respectively.
- To minimize impacts at W-C2 (north of Cabin Hill Road) a retaining wall was used to reduce the impact from 0.1 acre to 0.03 acre.
- The mitigation measures listed in the soils and surface water discussion of the Final EIS will minimize sedimentation into wetlands.

- Several structures, such as the proposed IL 29 Bridge (north of Chillicothe) and the Crow Creek Bridge, are designed to have fewer bridge piers in the water than the existing structures.
- In the Illinois River floodplain, 657 acres located east of IL 29, from just south of the Peoria/Marshall County Line to just north of Sparland, will be purchased by IDOT to mitigate the project's environmental impacts. The property east of IL 29, which will be transferred to IDNR, includes 294 acres of forested floodplain wetlands, which have a high native character and are an environmental asset (FQI greater than 20) and 27 acres of forested floodplain wetlands with FQIs of 16 to 19. This land will be transferred to IDNR in order to protect the high quality floodplain wetlands. Three farm fields within the floodplain east of IL 29 will be converted to wetlands. (See Final EIS Aerial Exhibit sheets 8 to 10.)
- Wetlands W-C3, W-C5 and W-C6 located northeast of the existing IL 6 interchange near Mossville (see Final EIS Aerial Exhibit sheet 1) and wetlands W-B1 and W-B2 in the northeastern quadrant of the proposed Western Avenue/IL 29 interchange in Henry (see Final EIS Aerial Exhibit sheet 14) will be expanded to create new wetlands.
- The following design measures will be implemented to minimize impacts to the County Line Hill Prairie Natural Area, Hopewell Estates Hill Prairie Natural Area, Marshall County State Hill Prairie, Marshall County State Land and Water Reserve, Marshall State Fish and Wildlife Area Spring Branch, Marshall State Fish and Wildlife Area – Sparland Unit, and Miller-Anderson Woods Nature Preserve:
 - **Split Profile** – Long stretches of the Preferred Alternative from the IDOT rest area north of Chillicothe to the IL 29/Camp Grove Road intersection will be designed so that proposed southbound lanes are higher in elevation than northbound lanes. This strategy reduces the expansion into the bluff and the impact on designated lands west of IL 29. (Split profile design would not benefit Miller-Anderson Woods Nature Preserve and so is not proposed in that area.)
 - **Narrowed Median** – A 22-foot median will be used adjacent to the designated lands north of Chillicothe to reduce impacts and near the Miller-Anderson Woods Nature Preserve.
 - **Retaining Walls, Barrier, and Guardrail** – Several retaining wall, barrier, and guardrail designs will be incorporated into the Preferred Alternative to minimize the amount of new right of way required from designated lands and other uses.
 - **Alignment Shift** – During the alignment studies, the proposed widening of IL 29 was shifted to the east to minimize impacts to the natural areas and nature preserves west of existing IL 29.
- The following measures will be implemented to minimize and mitigate impacts to land owned by IDNR :
 - Four landlocked parcels immediately west of IL 29 and north of IL 17 will be transferred to IDNR. The parcels total 32 acres. The exact size of the land will be determined after the design phase of the project is completed. Jurisdictional transfer

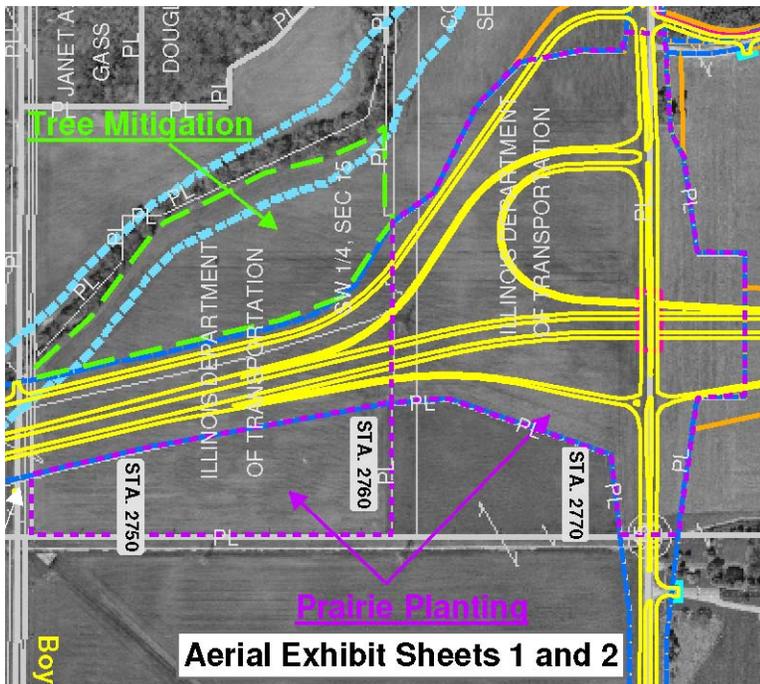
- of 59 acres of IDOT property adjacent to these landlocked parcels to IDNR is also proposed. This would place a total of 91 acres containing oak upland forests with an FQI of 33.4 under the protection of IDNR.
- Several parcels located east of IL 29, between the railroad and the Illinois River, will be purchased by IDOT and used to mitigate the project's environmental impacts. The parcels, which total 657 acres, consists of 57 acres of cropland, 321 acres of forested wetlands, and 267 acres of backwater of the Illinois River. Of the 321 acres of forested wetlands, 294 acres located south of Sparland are of exceptional quality with FQI ratings of 22 and 24. The 27 acres of forested wetlands north of Sparland also are of high quality with an FQI of 19.
 - Ownership of these parcels will be transferred to IDNR. These lands, combined with two parcels owned by IDNR, will provide a continuous strip of IDNR land from roughly 0.75 mile south of IL 17 in Sparland to Senachwine Creek north of Chillicothe.
 - Transfer of these lands will increase IDNR land holdings in the unique environmental setting by about 748 acres.
 - The landlocked parcel located north of the BNSF Railroad (and the proposed Truitt Road interchange) will be transferred to IDNR. The parcel, which is 15 acres in size, is located east of IDNR's Root Cemetery Nature Preserve and Natural Area. Several populations of arrowwood (*Viburnum molle*), an Illinois threatened plant, are located on the parcel, and IDNR could expand the boundaries of the Root Cemetery Nature Preserve and Natural Area to encompass the land.
 - IDOT, in conjunction with IDNR, will enhance the hill prairies at the Hopewell Hill Prairie and the Marshall County Hill Prairie Land and Water Reserve.
 - IDOT, in conjunction with IDNR, will restore a 15-acre old field community within the boundaries of Miller-Anderson Woods Nature Preserve.
 - IDOT, in conjunction with IDNR, will implement for weed control measures at Miller-Anderson Woods Nature Preserve.
 - IDOT will construct a 40- by 60-foot gravel parking lot located off the existing entrance road to Miller-Anderson Woods Nature Preserve.
 - Excess right of way at the south end of Miller-Anderson Woods Nature Preserve will be transferred to IDNR.
 - As a precautionary measure, culvert invert elevations would not be lowered or capacities increased through Miller-Anderson Woods Nature Preserve. If for engineering reasons this commitment cannot be met, the effects on groundwater conditions would need to be re-evaluated and coordinated with IDNR.
 - All potential borrow sites, waste areas, and other contractor generated use areas will require biological, wetland, and cultural resource clearances from IDOT.

6.5.6 Plant Communities and Wildlife Resources

IDOT has identified the following mitigation measures for upland plant communities and wildlife habitat.



38 acres of trees will be planted on land currently owned by IDOT northeast of the existing IL 6 interchange near Mossville.



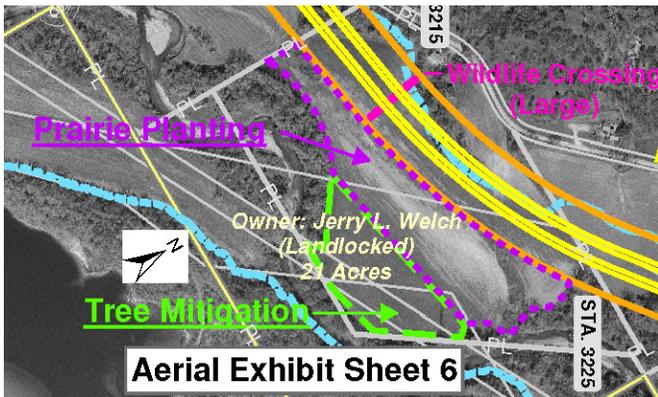
14 acres of trees and 43 acres of prairie will be planted on land currently owned by IDOT at the proposed Cedar Hills Drive interchange.



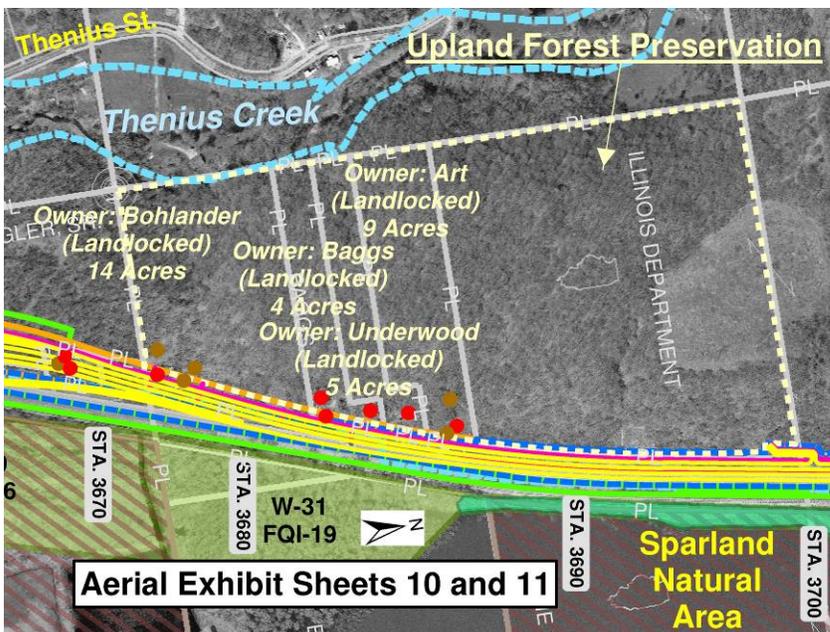
8 acres of prairie grass will be planted on a landlocked parcel between Stations 2876 and 2888.



4 acres of trees will be planted on a landlocked parcel north of the BNSF Railroad.



8 acres of trees and 4 acres of prairie will be planted on a landlocked parcel located along Senachwine Creek between Stations 3210 and 3224.



Roughly 32 acres of high quality upland forest on landlocked parcels north of IL 17 and 59 acres on land currently owned by IDOT will be protected from development by transferring the land to IDNR.

- In accordance with BD&E Procedure Memo #14-00, the backslopes of the proposed roadway will be seeded with Class 4 and Class 5 seed mixture where appropriate. These are prairie seed mixes. This will result in roughly 200 acres of prairie.
- IDOT, in conjunction with IDNR, will enhance the hill prairies at the Hopewell Hill Prairie and the Marshall County Hill Prairie Land and Water Reserve.
- Several parcels east of IL 29, between the railroad and the IL River, will be purchased by IDOT and used to mitigate the project's environmental impacts. The parcels east of IL 29, which total 657 acres, consist of 57 acres of cropland, 321 acres of forested wetlands and 267 acres of backwater of the Illinois River. The transfer of land, along with two parcels owned by IDNR, will protect a continuous strip of wildlife habitat land from 0.75 mile south of IL 17 in Sparland to Senachwine Creek north of Chillicothe.
- Expanding IL 29 adjacent to the existing facility from north of Chillicothe to Camp Grove Road and in the Miller-Anderson Woods Nature Preserve will limit impacts to the project area's prime wildlife habitat to edge impacts, thus minimizing loss of wildlife habitat.
- The use of a narrowed typical section for about 11 miles along the Preferred Alternative will help to minimize wildlife habitat impacts, although the split profile narrowed typical section may pose barriers for wildlife crossing the Preferred Alternative.
- To minimize the animal-vehicle collisions and the effects of retaining walls/median barriers on wildlife movement, roughly 44 wildlife passages (spaced at 0.5-mile intervals) have been incorporated into the design of the Preferred Alternative. Wildlife passages consist of bridges and culverts. At all 21 proposed bridges, the bridge length/opening will be extended an additional 10 to 25 feet to provide a sufficiently wide dry crossing area adjacent to the stream for large animals. Large and small culverts also will be used as wildlife passages. The large culverts, meant to accommodate deer and smaller wildlife, would be at least 10 feet high and sufficiently wide to attract and accommodate deer. Provisions would be made for allowing daylight into culverts that would pass beneath the median as a means of attracting deer. The culverts for smaller mammals (raccoon, muskrat, and fox) and amphibians/reptiles would be about 5 feet high. Because the culverts also will be used for drainage, there will be occasions when the water level in the culvert may be a deterrent to use by some species. However, the culverts have been designed to provide a 2-foot-wide ledge to allow dry crossings for up to a 2-year storm. Two small dry culvert crossings will be provided at the north crossing of Crow Creek to allow smaller animals to cross under IL 29 without crossing the highway.
- To minimize the effect of median barriers on wildlife movement, medians that do not trap wildlife are being considered at several locations throughout the project area. Openings in the barrier about 2 feet wide would allow smaller species to move along the barrier to those locations and then cross through the barrier.
- Tree removal will not be allowed between April 15 and August 15 of any given year.

6.5.7 Threatened and Endangered Species

- Several arrowwood plants, an Illinois threatened species, are in jeopardy of being disrupted by mining operations. The proposed improvement would landlock 15 acres of Galena Road Gravel property thereby protecting the plants. The landlocked part of the property would be transferred to IDNR for future protection and management. IDOT will also move, to the extent possible, the 500 adult and 500 juvenile Arrowwood plants potentially affected by the Preferred Alternative to a location such as the landlocked part of the Galena Road Gravel property that will be transferred to IDNR.
- The decurrent false aster, a federal and state threatened species, will be relocated to an agricultural field in the environmental mitigation area east of IL 29. Unlike the other fields in the mitigation area, this field will not be used for wetland mitigation. All the environmental mitigation parcels will be transferred to IDNR for management and protection. Through an agreement with IDOT, IDNR will maintain the fields of decurrent false asters. The *Decurrent False Aster Recovery Plan* published by the U.S. Department of Interior, U.S. Fish and Wildlife Service in 1990, lists three criteria for recovery of the species. Criterion 2 states “Twelve geographically distinct self-sustaining natural or established populations of the species must be protected through purchase in fee, easement or by cooperative management agreements.” This mitigation measure would meet Criterion 2 of the Recovery Plan. Criterion 3 of the plan states “Populations must be monitored for a period of five years to determine if they are self-sustaining.” To meet this criterion, INHS will monitor the decurrent false aster fields for 5 years.

6.5.8 Special Waste

IDOT would manage and dispose of areas of contamination in accordance with applicable federal and state laws and regulations, and in a manner that would protect human health and the environment. After real-estate acquisition and prior to construction, a Preliminary Site Investigation will be performed at buildings to determine if asbestos is present. If asbestos is present it will be removed according to established environmental regulations.

6.5.9 Visual Resources

Although the visual scale of the highway will increase, landscaping features within and adjacent to the highway right of way would minimize adverse effects. A landscaping plan that will be developed during a future engineering phase could include the following provisions:

- Preserve the existing vegetation as much as possible.
- Perform landscape planting, including trees and prairie plant species, and natural revegetation of cut and fill slopes.
- Landscape along the right of way in Putnam and Sparland.
- Replace vegetation cleared from the existing or proposed rights of way with grasses (except at habitat loss mitigation areas).

6.5.10 Section 4(f)

- Under the stipulations of a Programmatic Agreement for Historic Bridges ratified by IHPA and FHWA in 2004, a Memorandum of Agreement was formulated and signed by IHPA, FHWA, and IDOT in November 2005 that specifies mitigation measures for the adverse effects of the removal of SN 062-0011 Barrville Creek Bridge (Appendix A-1, Other Agency Coordination, Notification of Adverse Effect, Barrville Creek Bridge).
- IDOT also will ensure that a bridge in Illinois analogous to the Barrville Creek Bridge will be sought and substituted for the adversely affected bridge on the Illinois Historic Bridge Survey. No bridges similar to structure SN 062-0011 were located within Marshall County.

6.5.11 Additional Commitments

Traffic

The traffic management plan developed for this project would be implemented during the construction phase of the project to provide reliable access to agricultural fields, residences, businesses, community facilities and services, and local roads. Local roads intersected by the Preferred Alternative will remain open to traffic with minor interruptions during construction. IDOT will coordinate construction activities, sequencing, and traffic management plans with fire, police, and emergency rescue services to minimize delays and response times during the construction period. Lengthy detours will be minimized, but it is expected that, for various durations, side road connections will be closed to accommodate construction activities.

Property Acquisition

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, provides for payment of just compensation of private property acquired for a federal-aid project. Offers of just compensation for residential and business properties will be based upon approved estimates of fair market value supported and documented by professional real estate appraisals obtained by the acquiring agency, the IDOT. In addition to the just compensation for the acquired property, the Act also provides for certain relocation assistance and payment to displaced homeowners, residential tenants, and businesses that are required to relocate because of the project. IDOT will offer and provide relocation assistance to each displaced family and business. Each displaced family and business will be contacted by IDOT to address specific needs and problems that it may have. Displaced families will be eligible for moving costs and may also be eligible for replacement housing payments. Displaced businesses will be eligible for searching and moving costs to relocate to a replacement business site. IDOT's acquisition and relocation agents will be available to present and explain both the acquisition program and the relocation program to each displaced family and business.

Septic tanks, drain fields, irrigation systems, or wells on acquired properties would be abandoned in accordance with state regulations and local zoning standards.

Figures

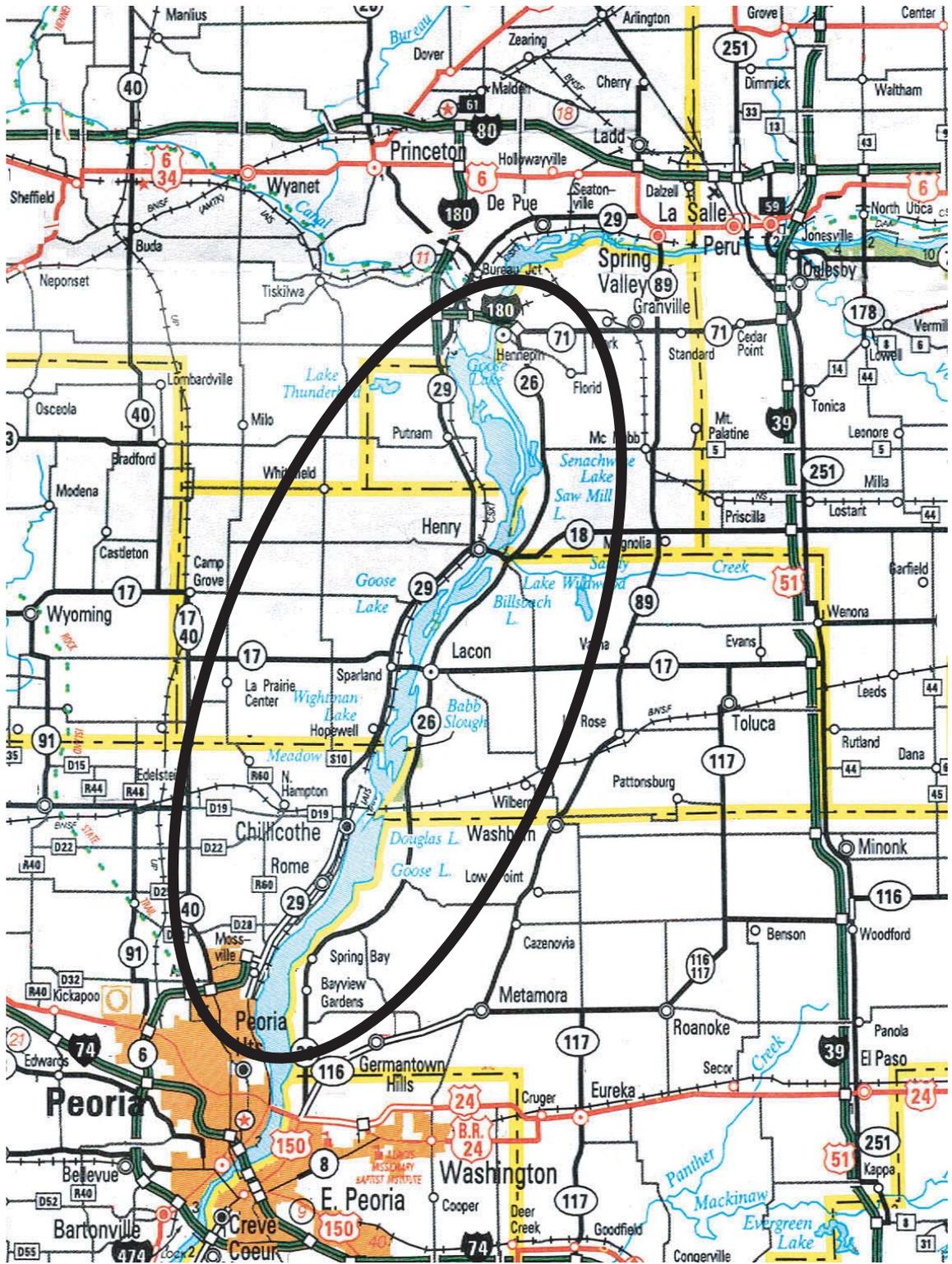
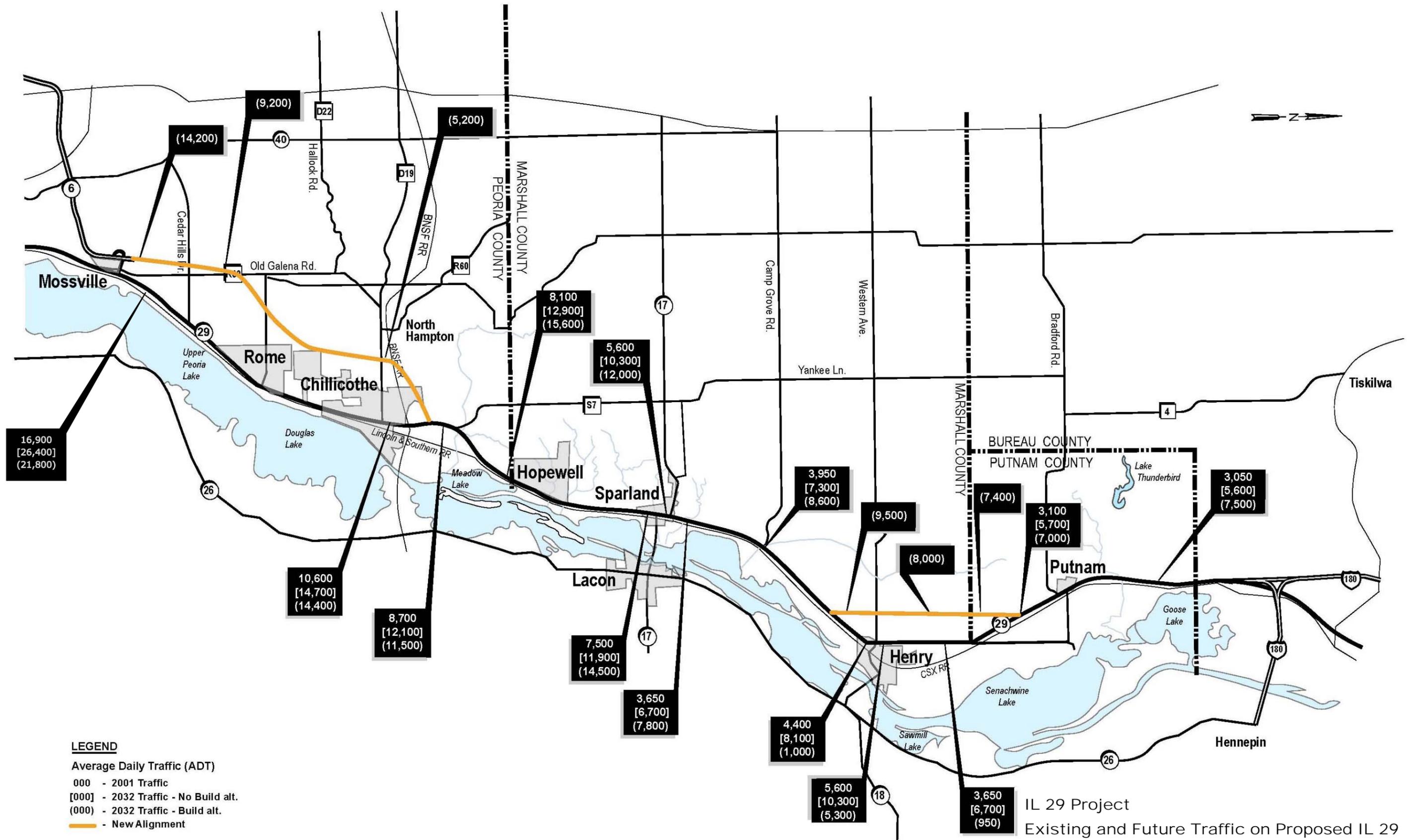


Figure 1-1
Project Study Area



IL 29 Project
 Existing and Future Traffic on Proposed IL 29
 Figure 2-1

Figure 2-2
Illinois Route 29 Crash Analysis
Total Illinois 29 Crash Rate excluding Animal and Intersection crashes vs. State Wide Average Rate
2001-2003

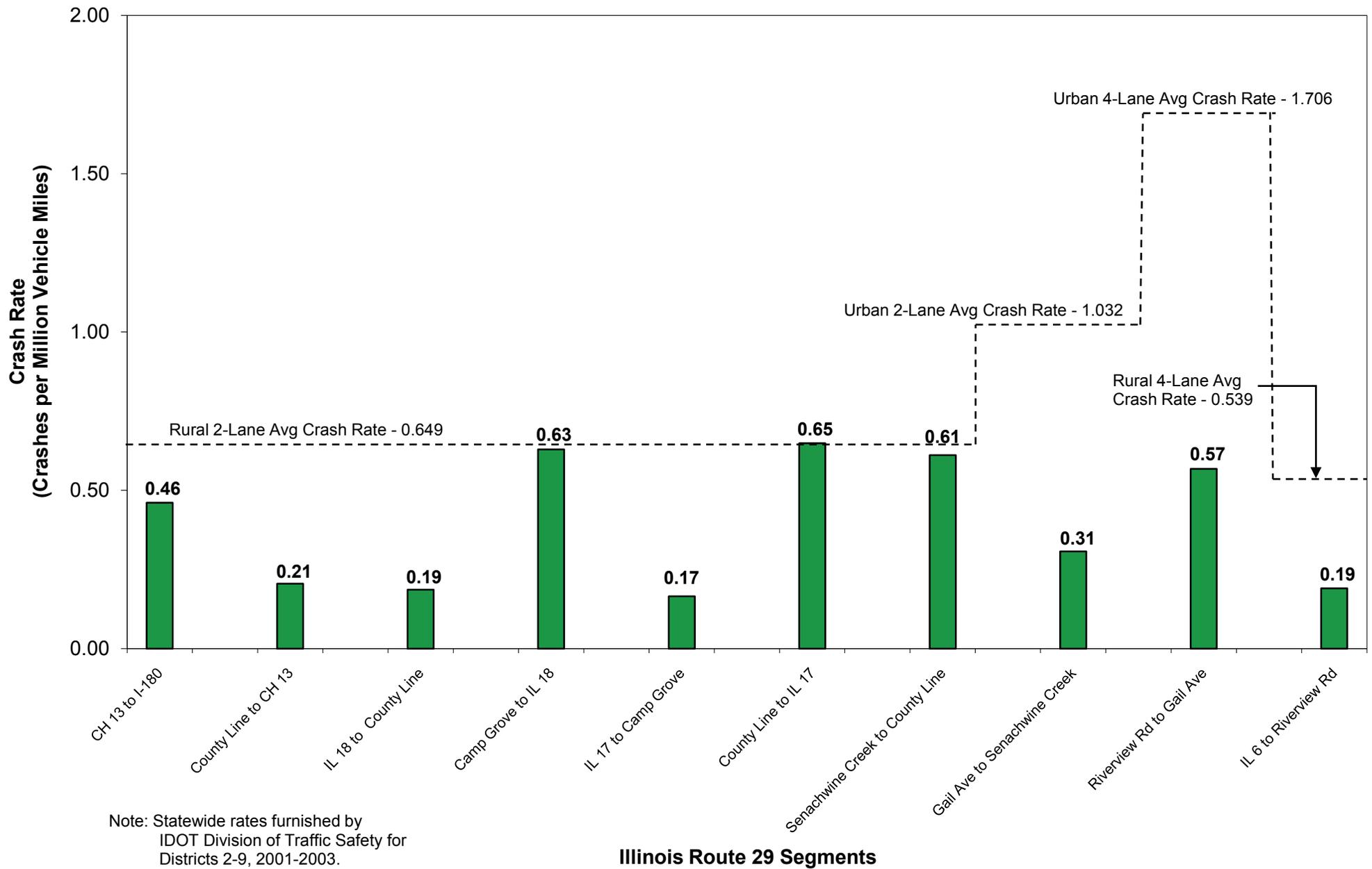
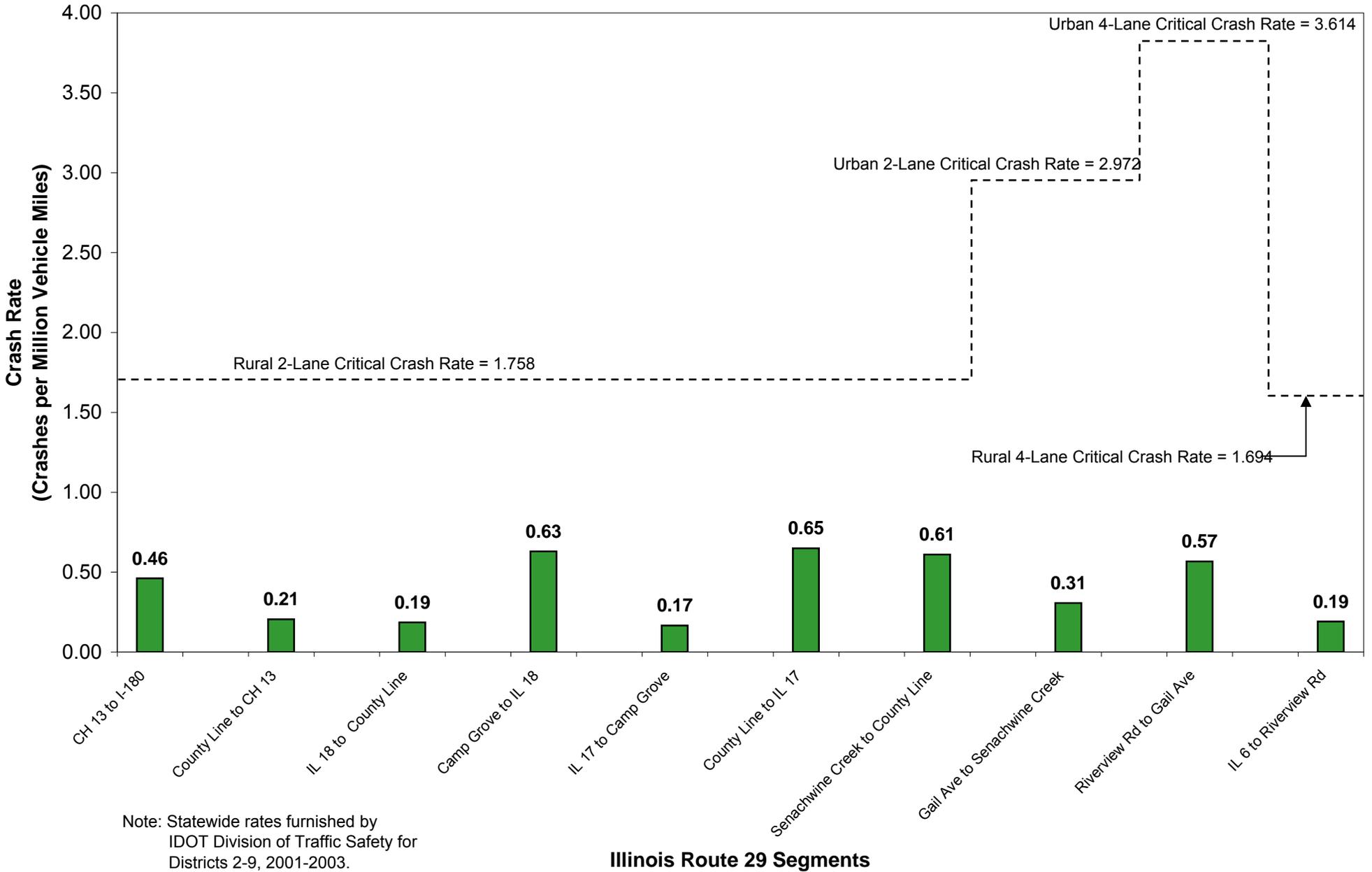
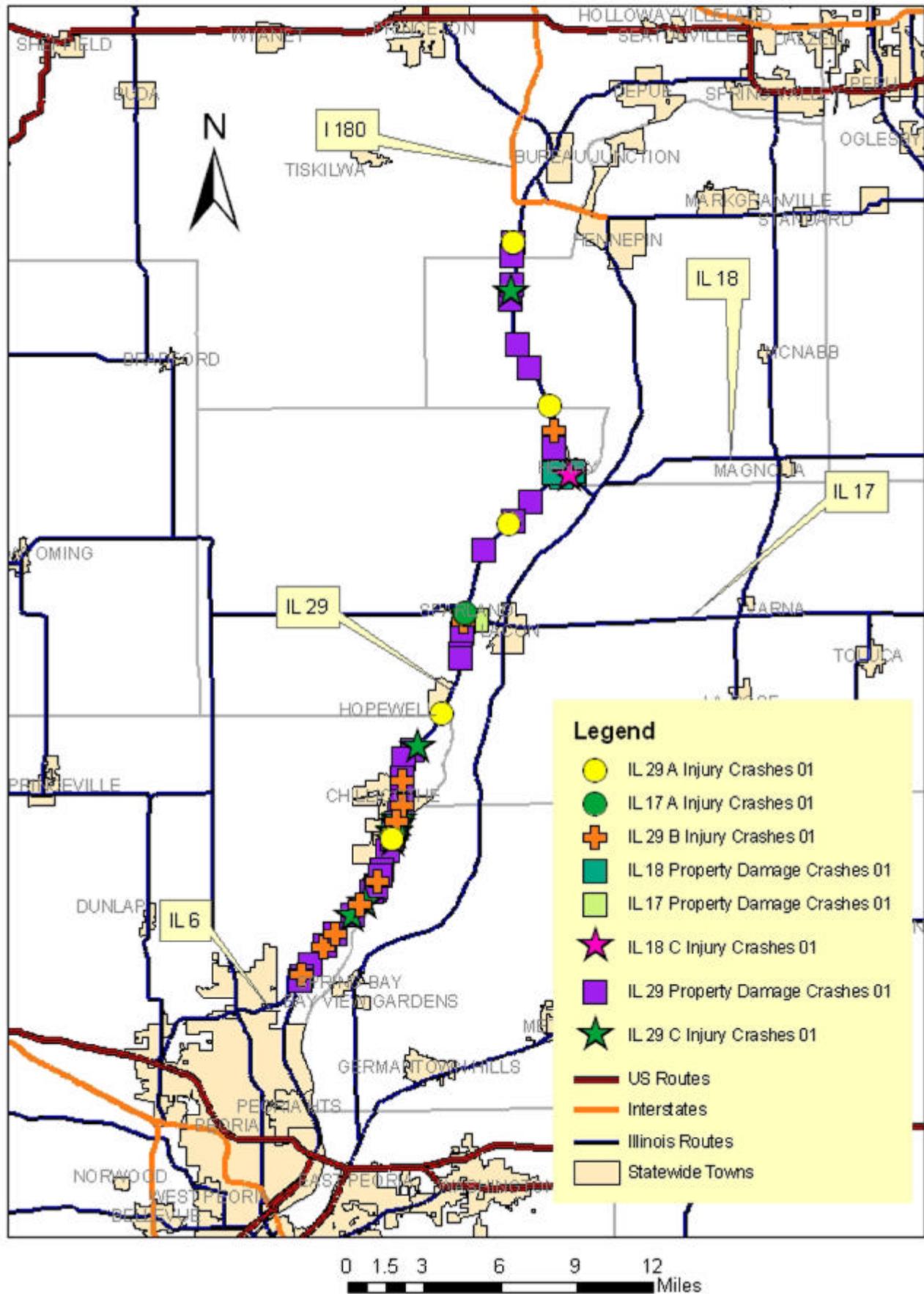


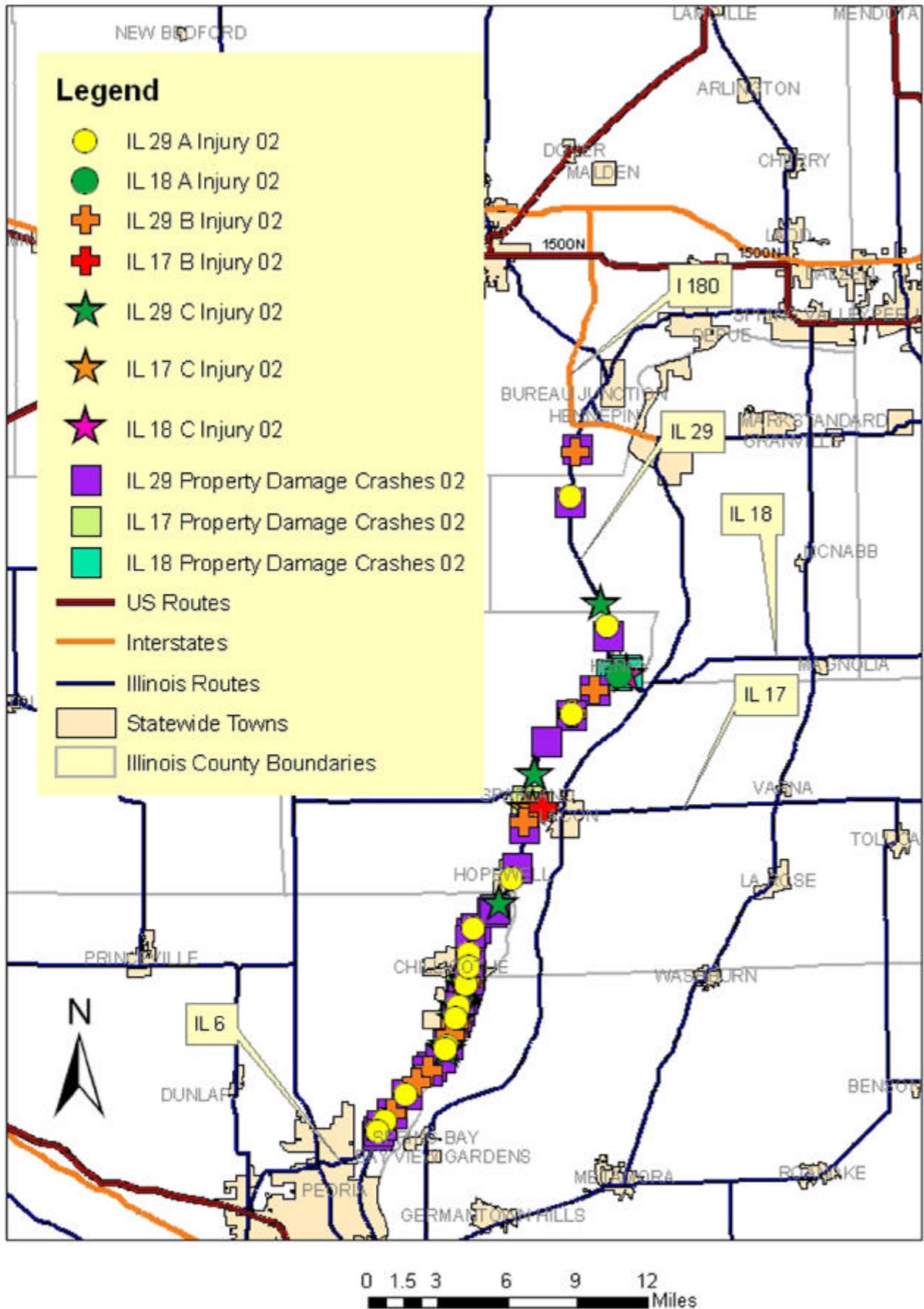
Figure 2-3
Illinois Route 29 Crash Analysis
Total Illinois 29 Crash Rate excluding Animal and Intersection crashes vs. State Wide Critical Rate
2001-2003





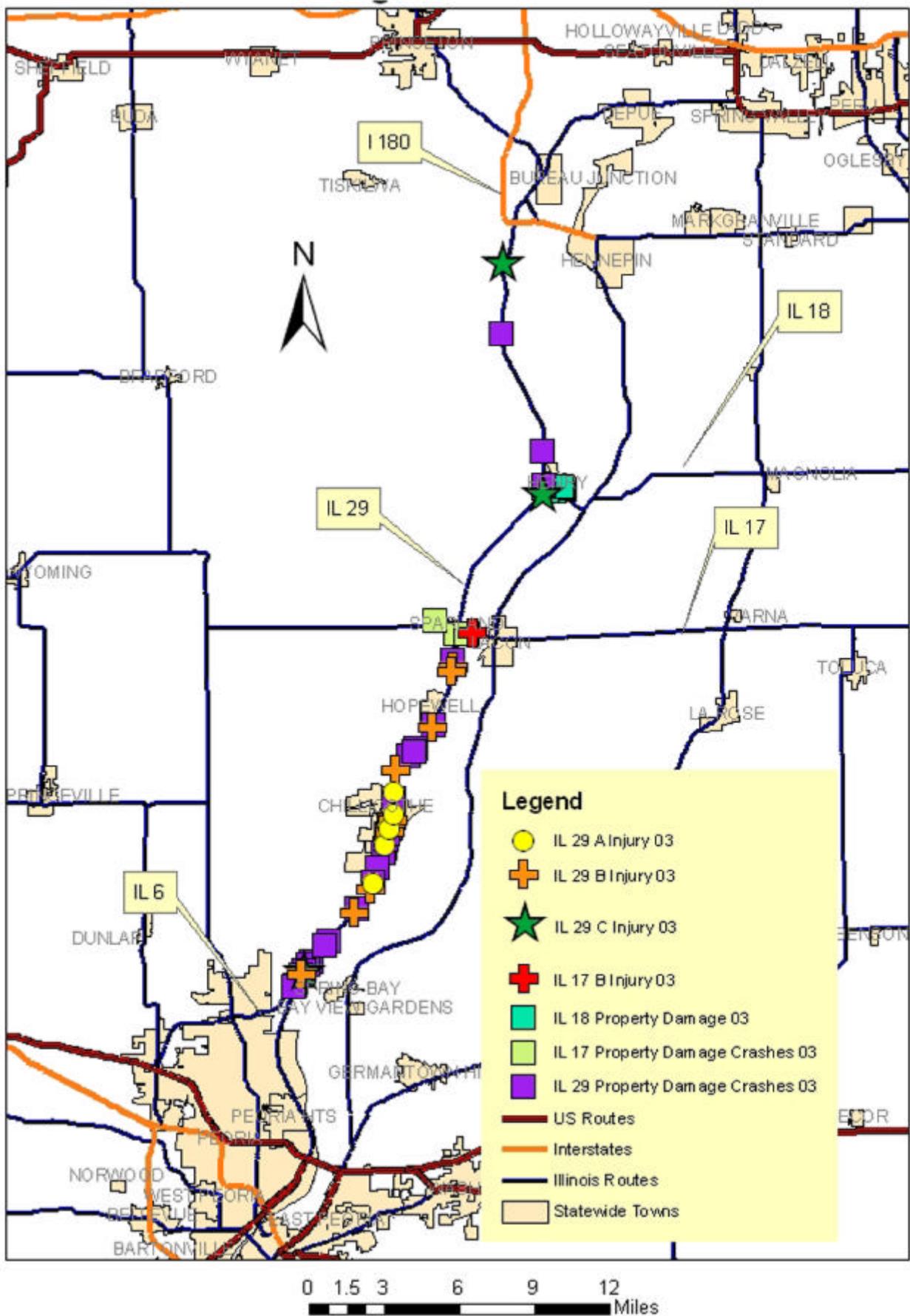
**IL 29 Project by Crash Severity 2001
Excluding Animal Crashes**

Figure 2-4



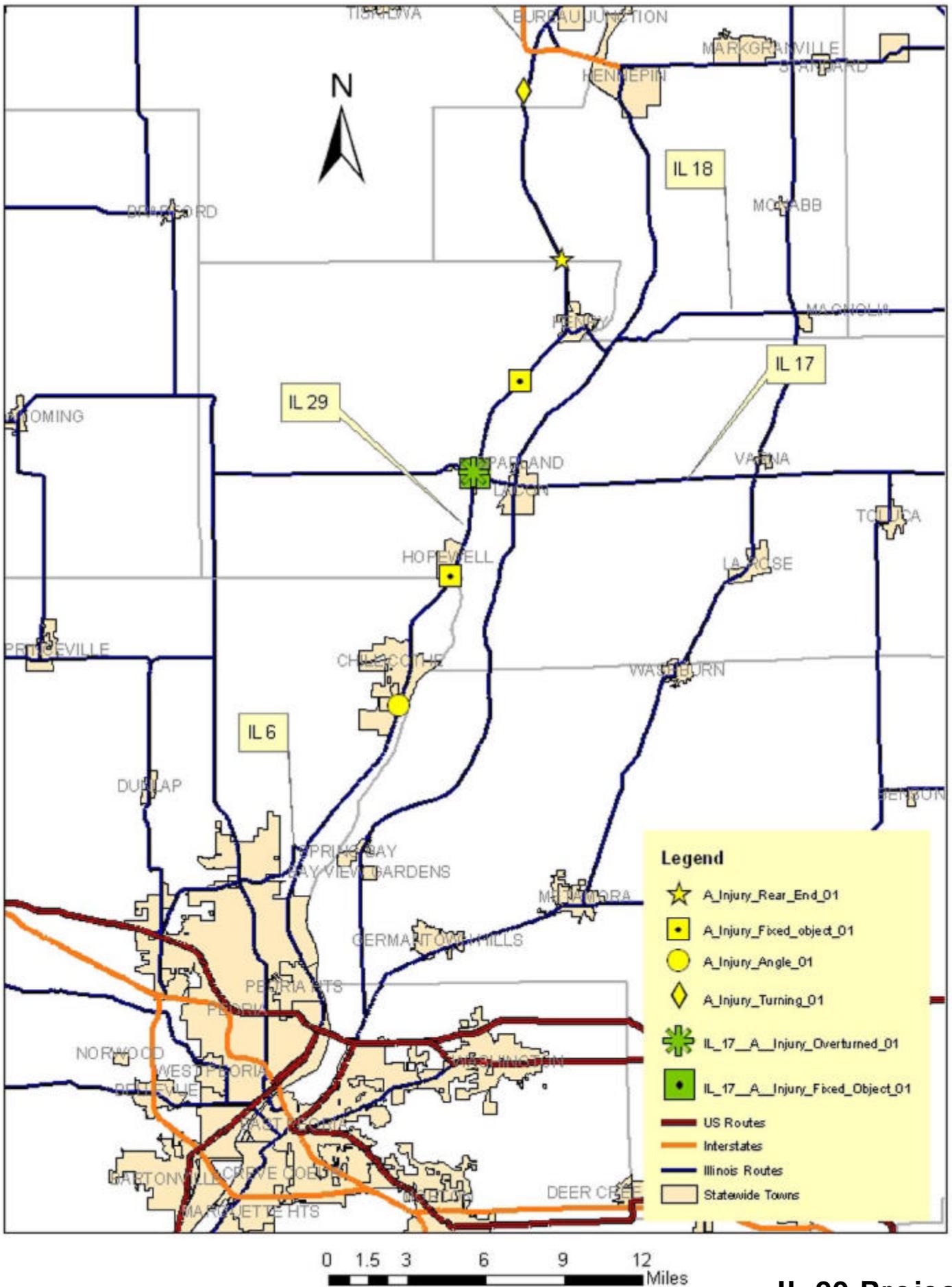
**IL 29 Project by Crash Severity 2002
Excluding Animal Crashes**

Figure 2-5



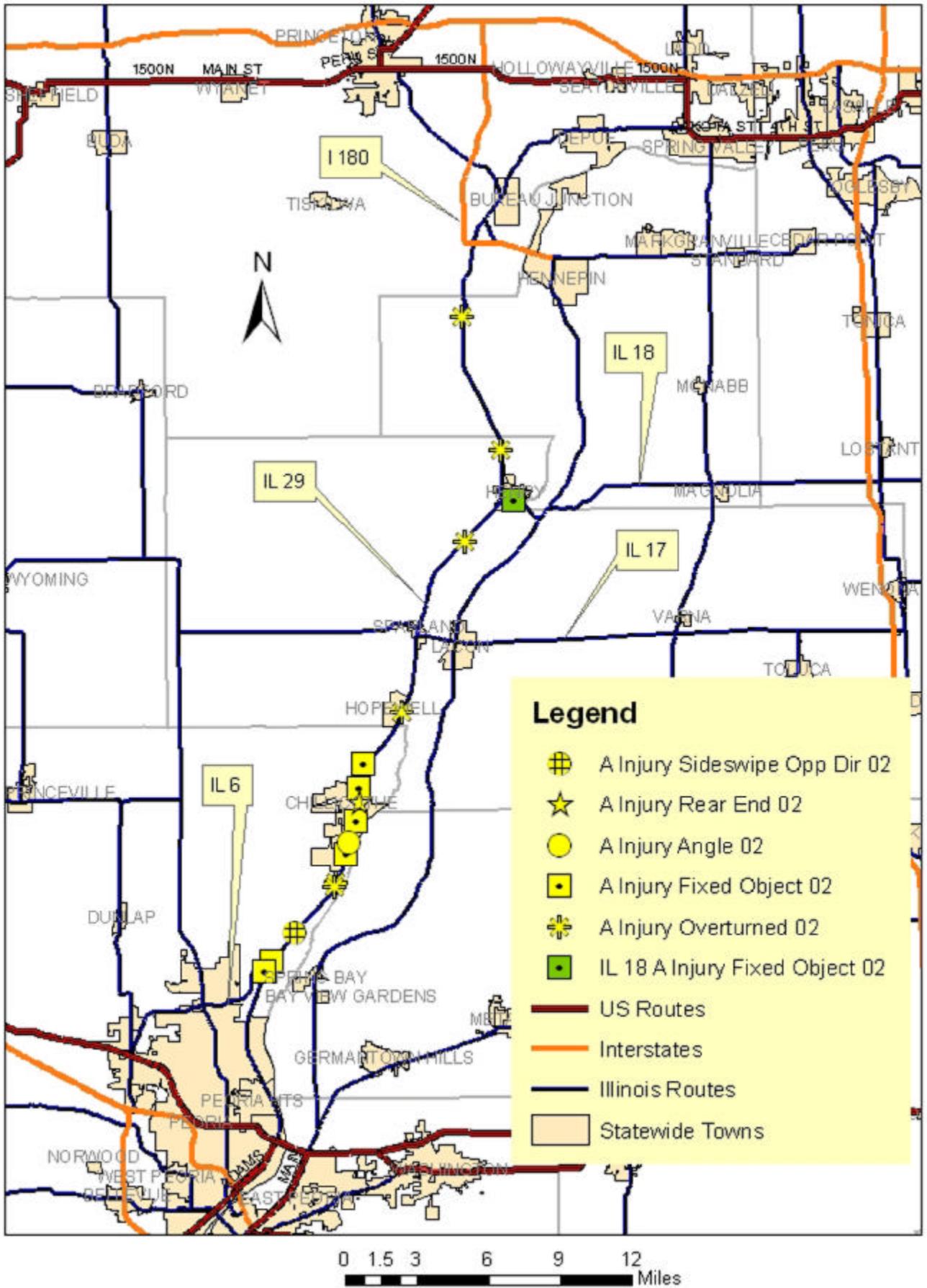
**IL 29 Project by Crash Severity 2003
Excluding Animal Crashes**

Figure 2-6

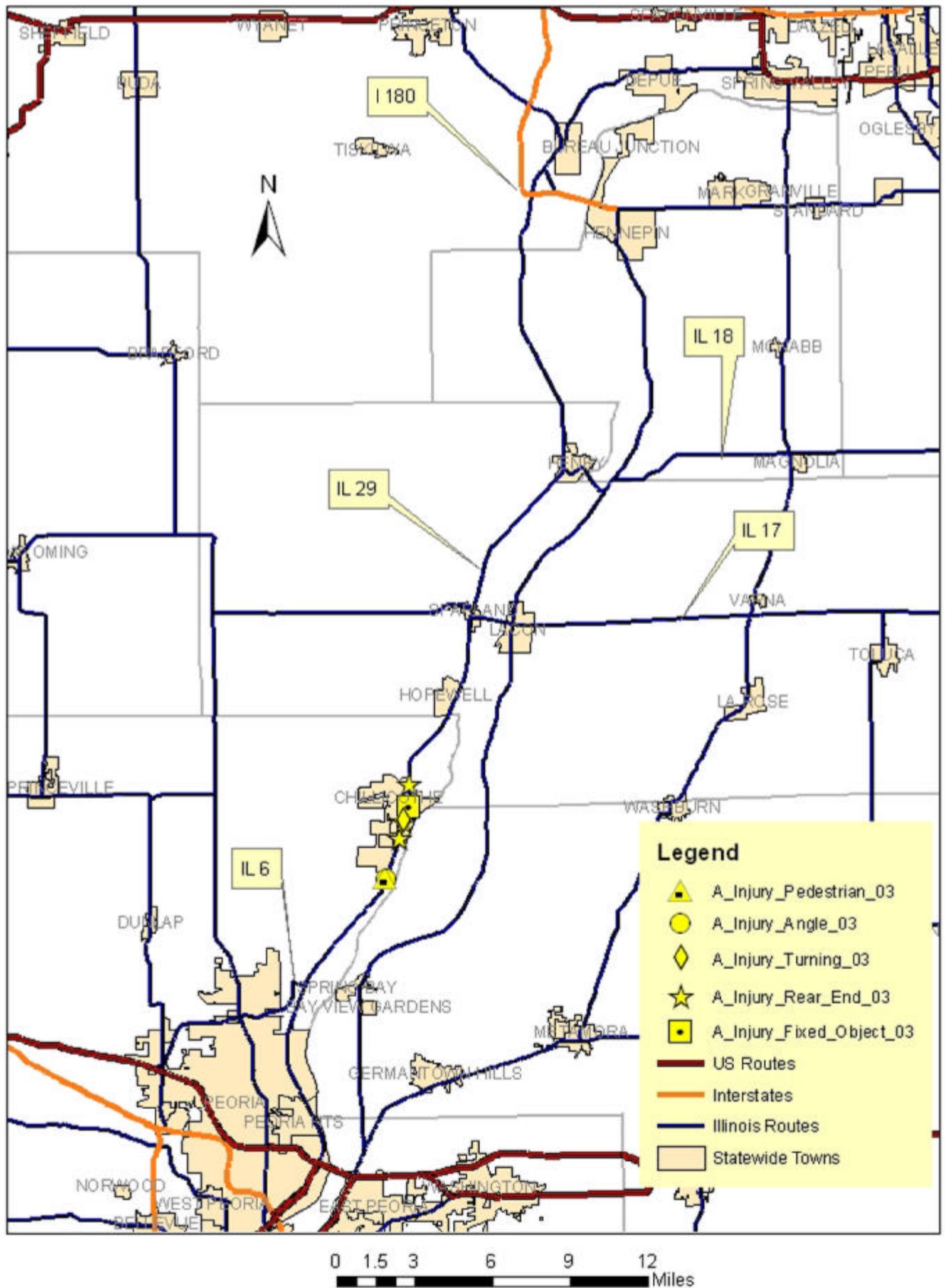


**IL 29 Project
Fatal and "A" Injury Crashes 2001**

Figure 2-7



**IL 29 Project
Fatal and "A" Injury Crashes 2002**
Figure 2-8



**IL 29 Project
Fatal and "A" Injury Crashes 2003**

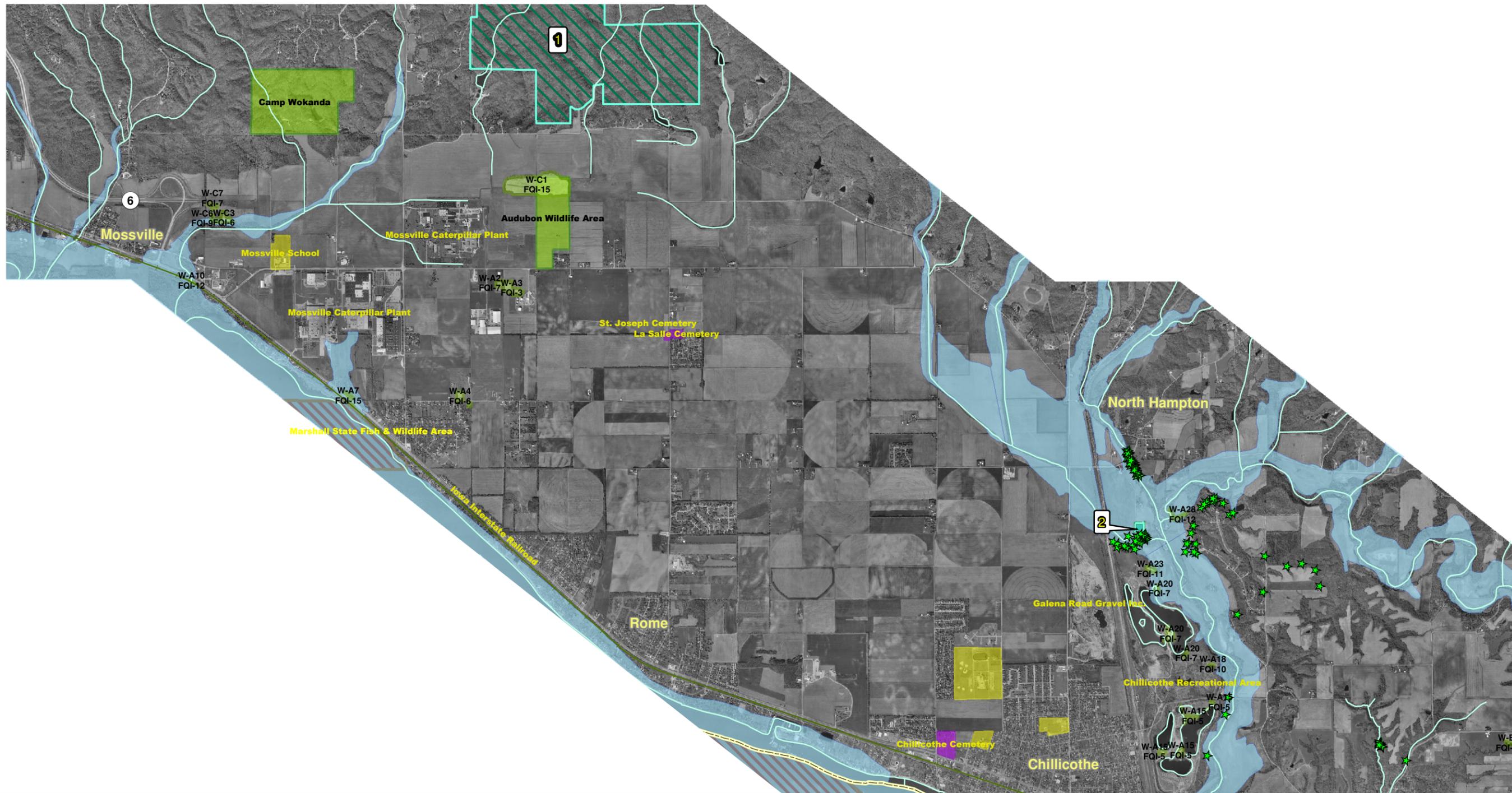
Figure 2-9

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF TRAFFIC SAFETY
HIGH ACCIDENT LOCATION IDENTIFICATION SYSTEM
***** DISTRICTS 2-9 2001-2003 NO DEER *****
DISTRICT # 4

COUNTY	ROUTE	BEGIN	END	CITY	INTERSECTING ROAD		ROAD DISTANCE		LOCATION		ROAD TYPE	
		MILE	MILE				FROM BEGIN MILE	DIR	TYPE			
KNOX	US -150	37.81	37.81	GALESBURG	ACADEMY ST.	300W			AT	SIG INTER	4LANE BIDR	URB
		AADT	FREQ	CRITICAL FREQ	RATE	CRITICAL RATE	EPDO	CRITICAL EPDO	DELTA CHANGE	CRITICAL DELTA CHANGE	LOCATION NUMBER	COLOR
	TOTAL	17100	18	42.26	0.960	0.901	7.000	6.287	-0.050	0.258	0480006	
	2001		8									
	2002		3									
	2003		7									
PEORIA	ILL- 6	10.01	10.01		OLD GALENA RD	STATE ST CH 59		0.00	AT	NON SIG IN	4LANE FWY	RUR
		AADT	FREQ	CRITICAL FREQ	RATE	CRITICAL RATE	EPDO	CRITICAL EPDO	DELTA CHANGE	CRITICAL DELTA CHANGE	LOCATION NUMBER	COLOR
	TOTAL	15300	16	2.56	0.960	0.124	11.000	8.312	-0.090	0.030	0720025	
	2001		6									
	2002		7									
	2003		3									
PEORIA	ILL- 29	32.50	32.50	CHILLYCOTHE	R-WALNUT			0.00	AT	SIG INTER	4LANE BIDR	URB
		AADT	FREQ	CRITICAL FREQ	RATE	CRITICAL RATE	EPDO	CRITICAL EPDO	DELTA CHANGE	CRITICAL DELTA CHANGE	LOCATION NUMBER	COLOR
	TOTAL	17400	10	42.26	0.520	0.901	6.400	6.287	0.020	0.258	0720032	
	2001		2									
	2002		5									
	2003		3									

High Accident Locations (HAL)-2001-2003

Figure 2-10



 Illinois Department of Transportation
  CH2MHILL



Feet
 0 4,000 8,000

Legend

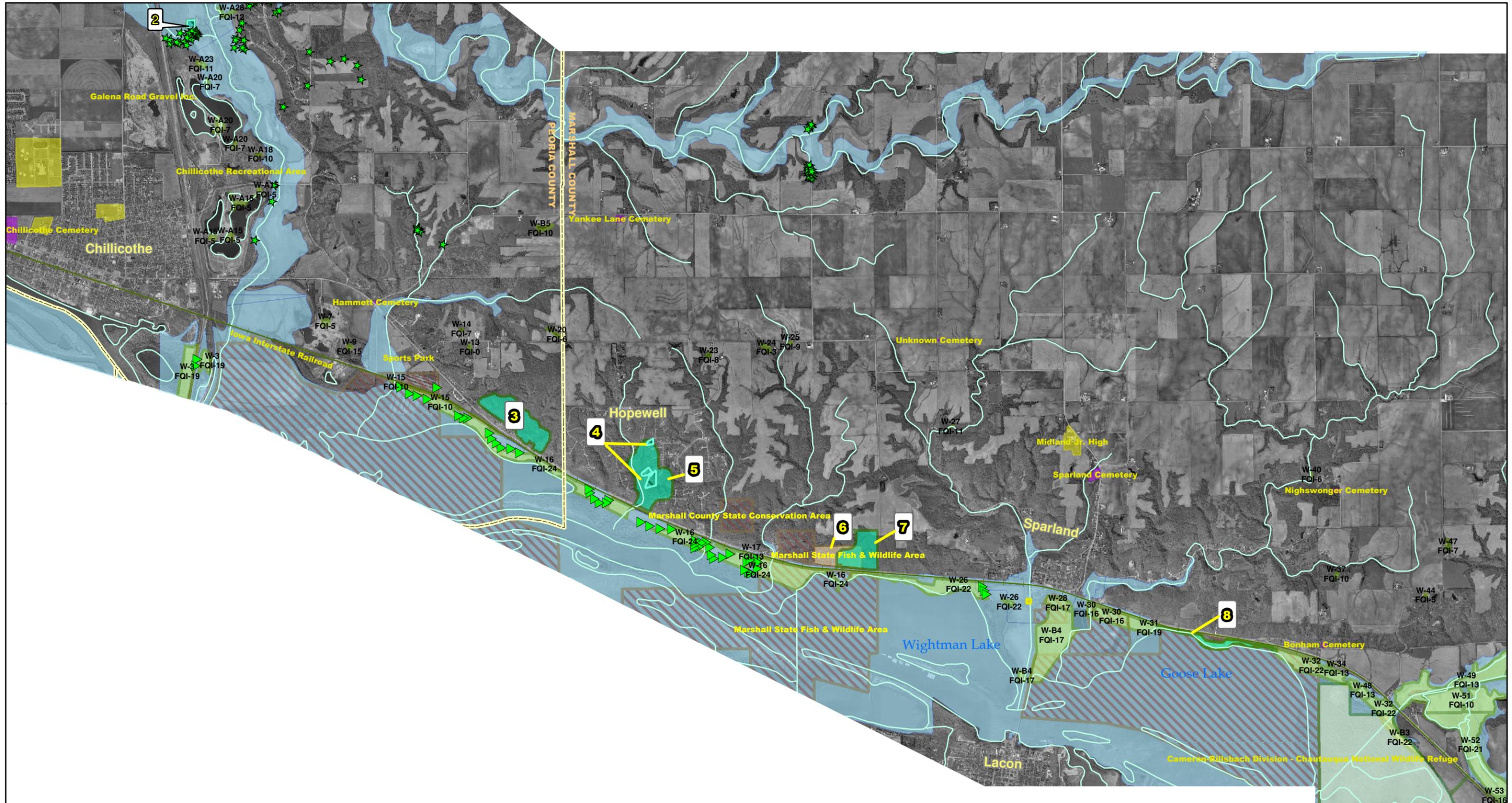
 County Boundary	 Arrowwood	 INHS Surveyed Wetlands
 Railroads	 Decurrent False Aster	 Nature Preserves
 Potentially Historic Sites/Historic Bridges	 Queen-of-the-Prairie	 State Natural Areas
 Streams		 Other IDNR Managed Lands
 100 Year Flood Zone		 Land & Water Reserves
 Cemetery		 Federal Managed Lands
 School		

Natural Area/Nature Preserve

1 - Singing Woods Nature Preserve
2 - Root Cemetery Nature Preserve

IL 29 Preliminary Engineering Study
CONSTRAINTS MAP
South Section

Figure 3-1S








Feet
 0 4,000 8,000

Legend

County Boundary	Arrowwood	INHS Surveyed Wetlands
Railroads	Decurrent False Aster	Nature Preserves
Potentially Historic Sites/Historic Bridges	Queen-of-the-Prairie	State Natural Areas
Streams		Other IDNR Managed Lands
100 Year Flood Zone		Land & Water Reserves
Cemetery		Federal Managed Lands
School		

Natural Area/Nature Preserve

2 - Root Cemetery Nature Preserve	7 - Marshall County State Hill Prairie Natural Area
3 - County Line Hill Natural Area	8 - Sparland Unit Natural Area
4 - Hopewell Hill Prairie Nature Preserve	
5 - Hopewell Hill Prairie Natural Area	
6 - Marshall County State Hill Prairie Land and Water Reserve	

IL 29 Preliminary Engineering Study
CONSTRAINTS MAP
Central Section

Figure 3-1C



Legend

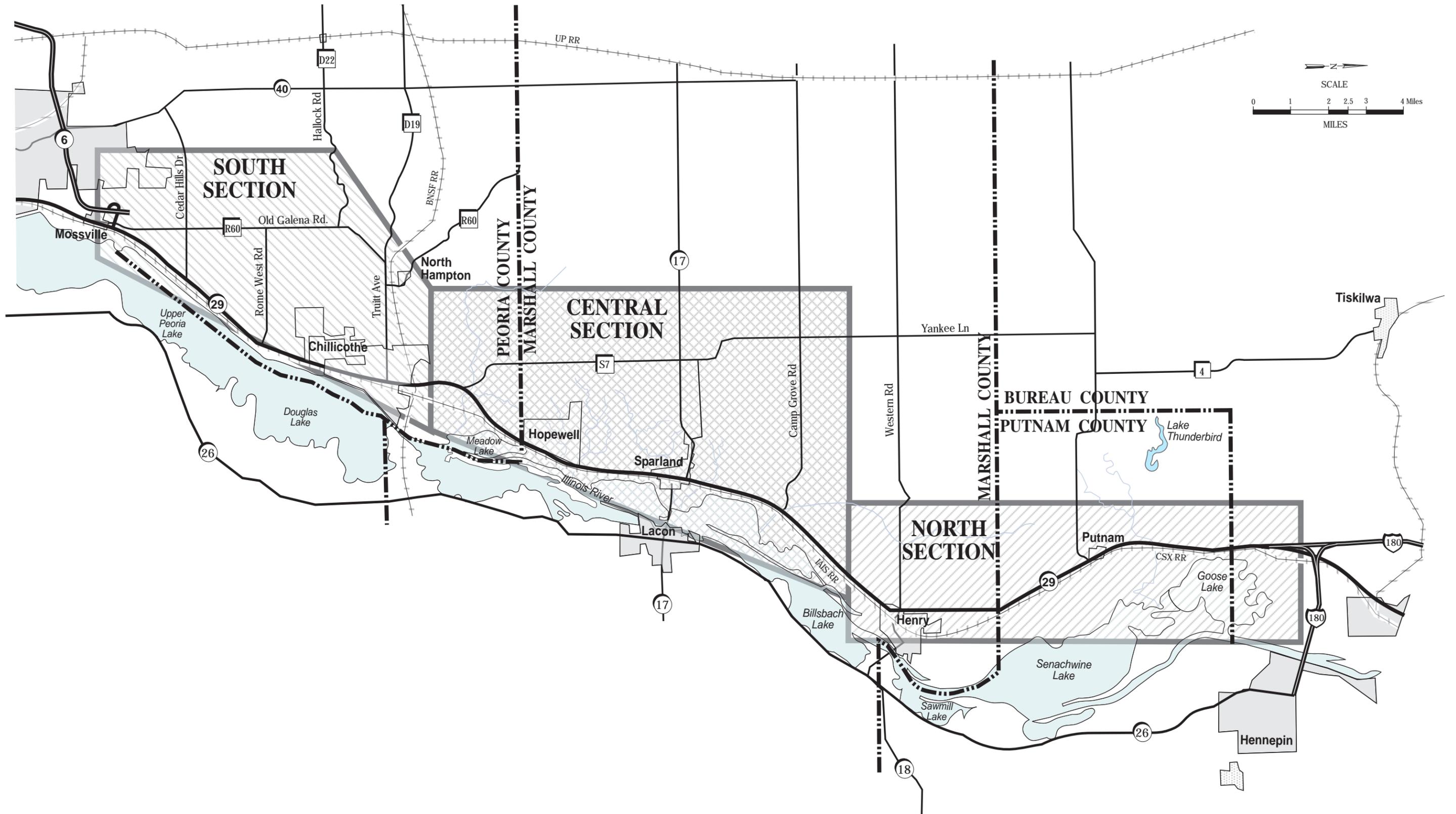
- County Boundary
- Railroads
- Potentially Historic Sites/Historic Bridges
- Streams
- 100 Year Flood Zone
- Land Use Constraints**
 - Cemetery
 - School
- T&E Species**
 - ★ Arrowwood
 - ▲ Decurrent False Aster
 - ◆ Queen-of-the-Prairie
- Natural Area/Nature Preserve**
 - INHS Surveyed Wetlands
 - Nature Preserves
 - State Natural Areas
 - Other IDNR Managed Lands
 - Land & Water Reserves
 - Federal Managed Lands

Natural Area/Nature Preserve

- 8A** - Oak Bluff Natural Area & Proposed Nature Preserve
- 9** - Miller Anderson Woods Natural Area & Nature Preserve

IL 29 Preliminary Engineering Study
CONSTRAINTS MAP
North Section

Figure 3-1N



Project Area Sections

Figure 4-1

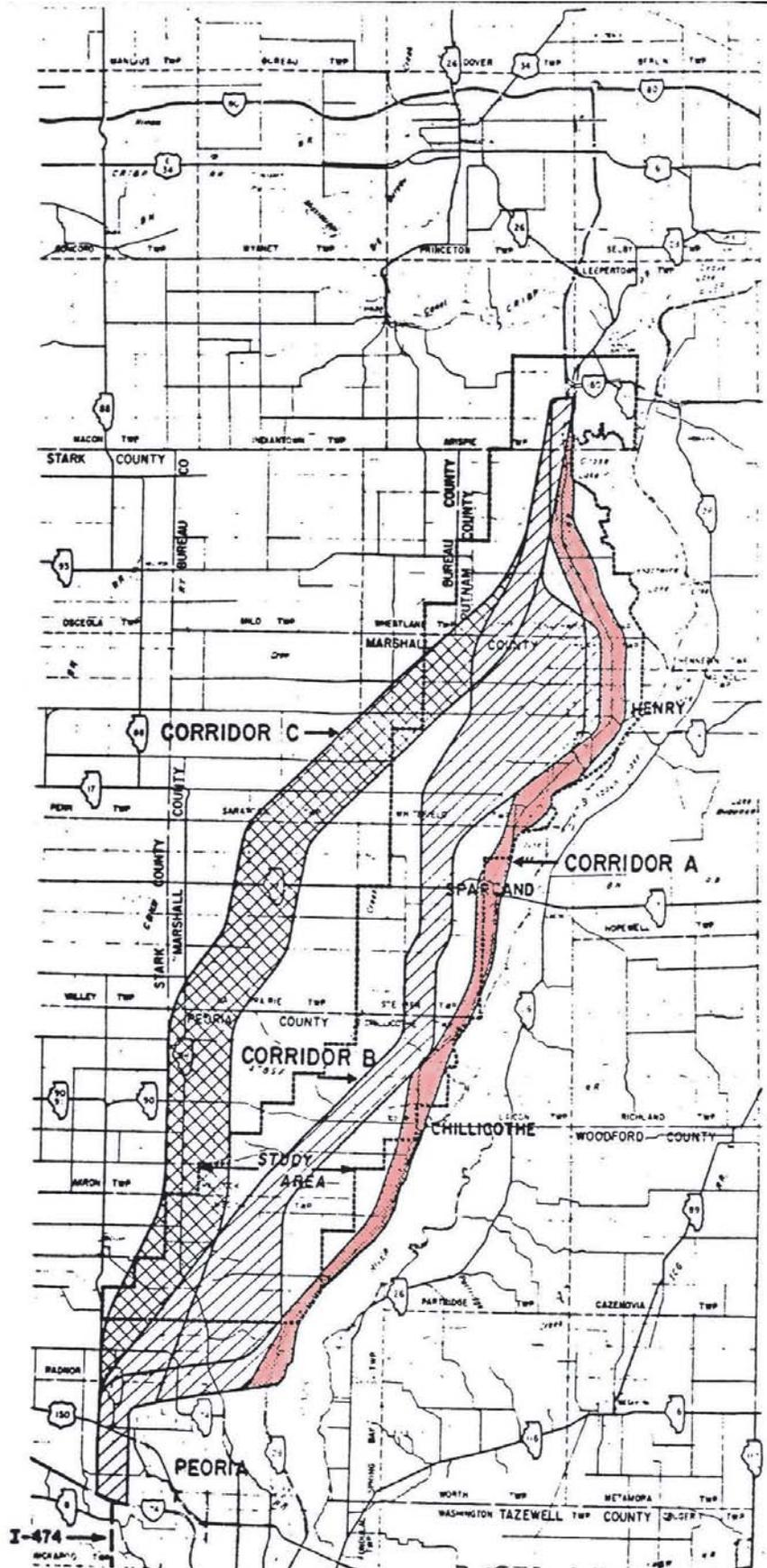
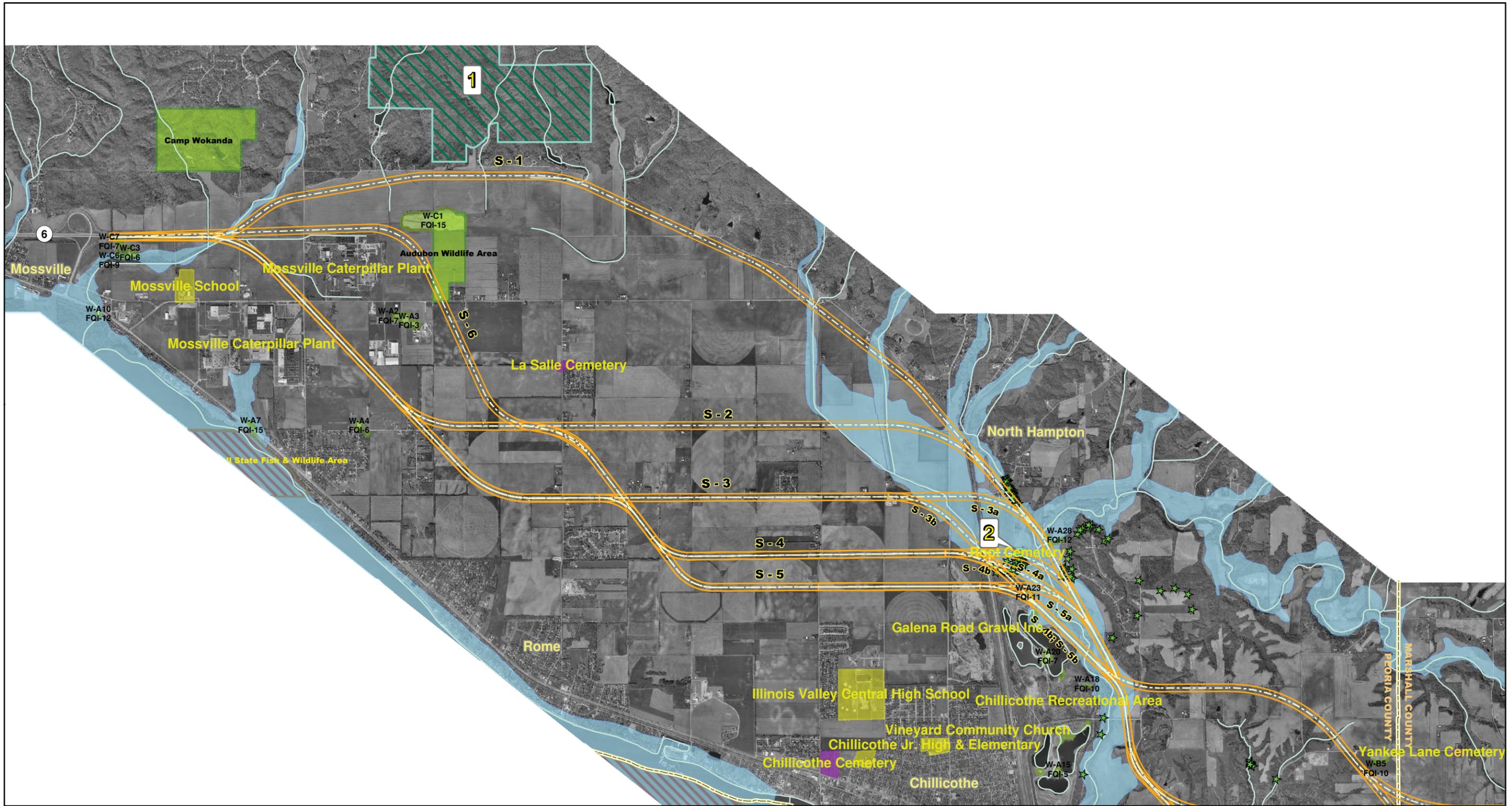


Figure 4-2
1972 Corridor Study Project Area

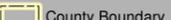
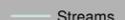
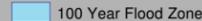
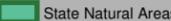
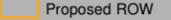
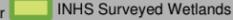
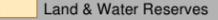
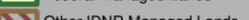







Feet
 0 4,000 8,000

Legend

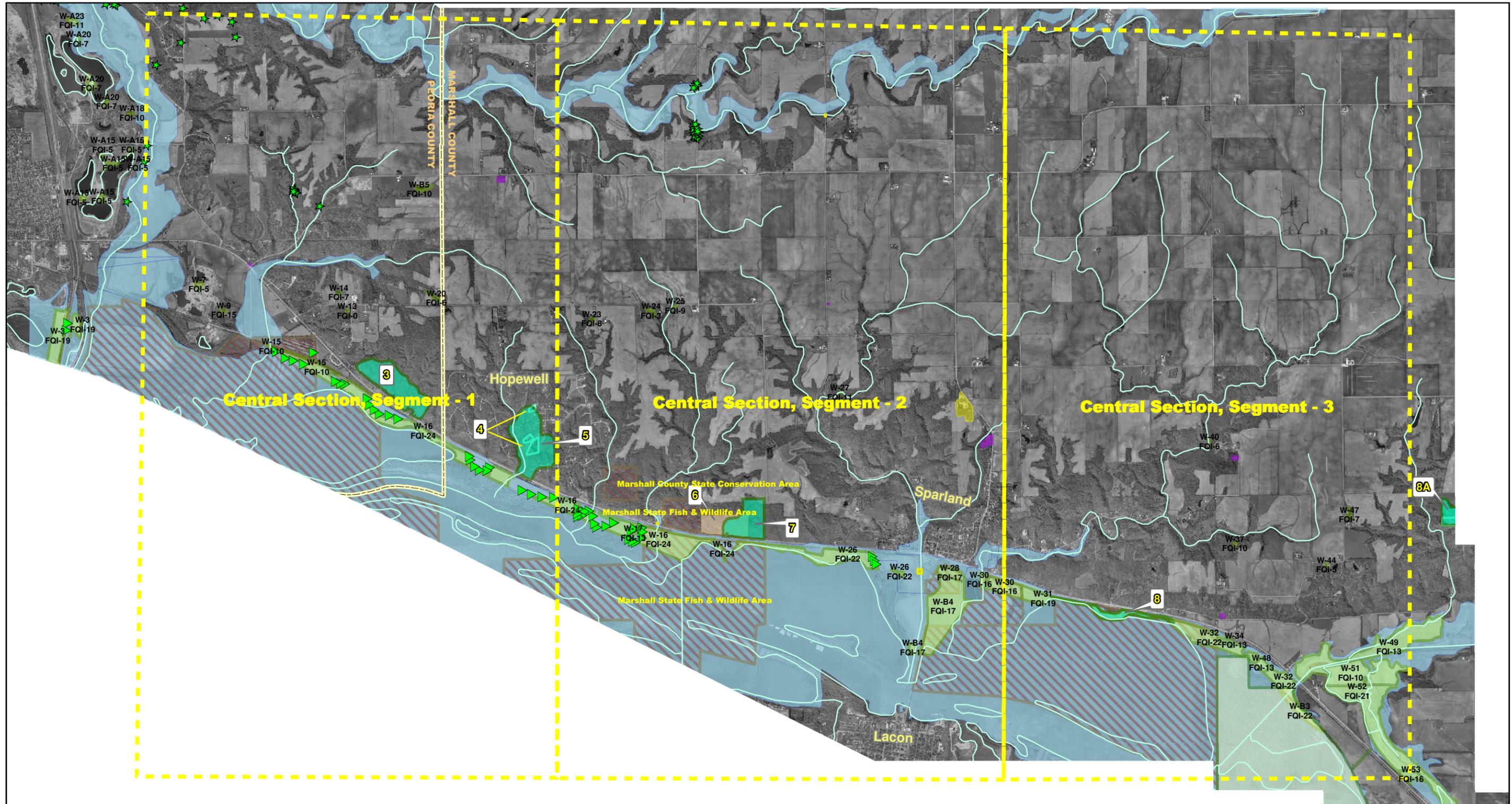
 County Boundary	T&E Species	 Streams	 Nature Preserves
 Proposed Centerline	 Arrowwood	 100 Year Flood Zone	 State Natural Areas
 Proposed ROW	 Decurrent False Aster	 INHS Surveyed Wetlands	 Land & Water Reserves
Land Use Constraints	 Queen-of-the-Prairie	 Potentially Historic Sites/Historic Bridges	 Federal Managed Lands
 Cemetery			 Other IDNR Managed Lands
 School			

Natural Area/Nature Preserve

 1 - Singing Woods Nature Preserve
 2 - Root Cemetery Nature Preserve

IL 29 Preliminary Engineering Study
ALTERNATIVES ALIGNMENTS
South Section

Figure 4-2A




 Illinois Department of Transportation
 
 CH2MHILL



 Feet
 0 4,000 8,000

Legend

County Boundary	Streams
Section Boundary	100 Year Flood Zone
Potentially Historic Sites/Historic Bridges	INHS Surveyed Wetlands
Land Use Constraints	Nature Preserves
Cemetery	State Natural Areas
School	Land & Water Reserves
	Federal Managed Lands
	Other IDNR Managed Lands

T&E Species

Arrowwood
Decurrent False Aster
Queen-of-the-Prairie

Natural Area/Nature Preserve

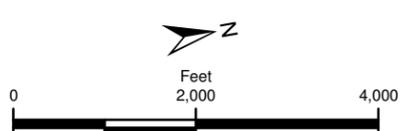
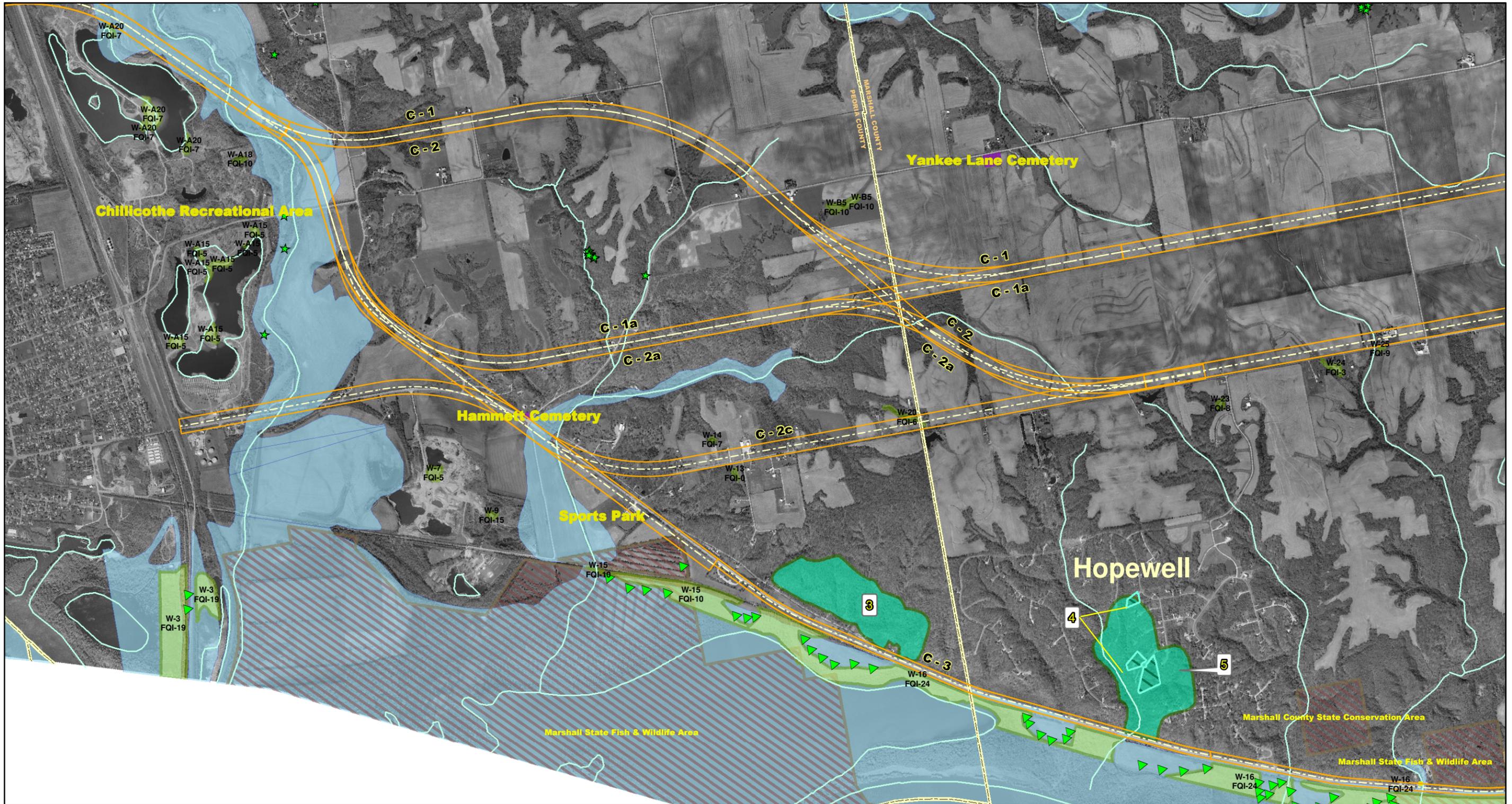
- County Line Hill Natural Area	- Marshall County State Hill Prairie Natural Area
- Hopewell Hill Prairie Nature Preserve	- Sparland Unit Natural Area
- Hopewell Hill Prairie Natural Area	- Oak Bluff Natural Area & Proposed Nature Preserve
- Marshall County State Hill Prairie Land and Water Reserve	

IL 29 Preliminary Engineering Study

LOCATION MAP

Central Section

Figure 4-3



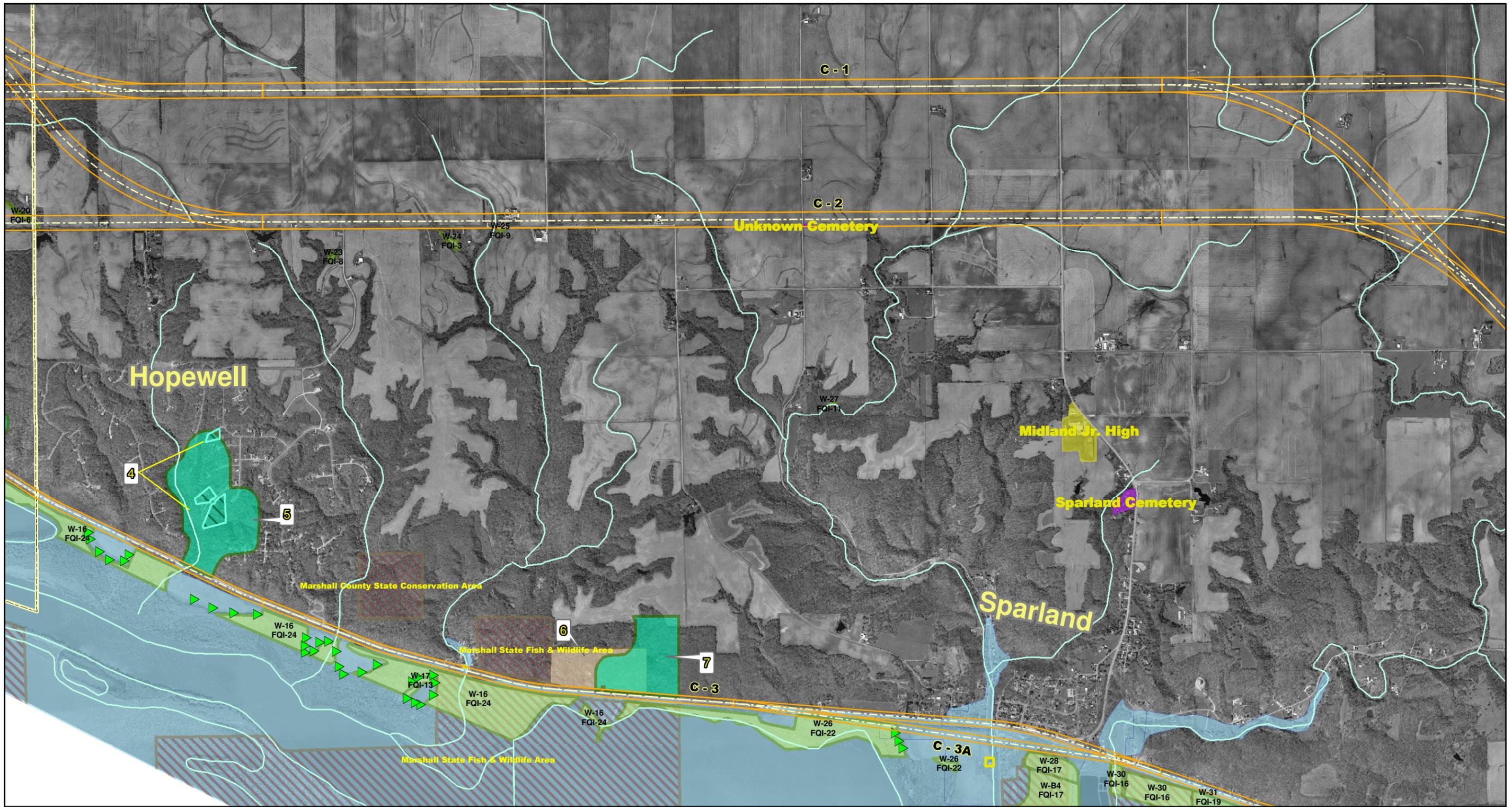
Legend

- | | | |
|---|-----------------------|-----------------------------|
| County Boundary | Arrowwood | Nature Preserves |
| Proposed Centerline | Decurrent False Aster | State Natural Areas |
| Proposed ROW | Queen-of-the-Prairie | Land & Water Reserves |
| Potentially Historic Sites/Historic Bridges | | Federal Managed Lands |
| Streams | | Other IDNR Managed Lands |
| 100 Year Flood Zone | | Land Use Constraints |
| INHS Surveyed Wetlands | | Cemetery |
| | | School |

- County Line Hill Natural Area
- Hopewell Hill Prairie Nature Preserve
- Hopewell Hill Prairie Natural Area

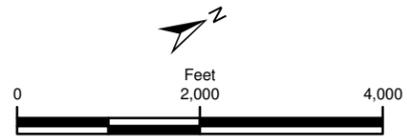
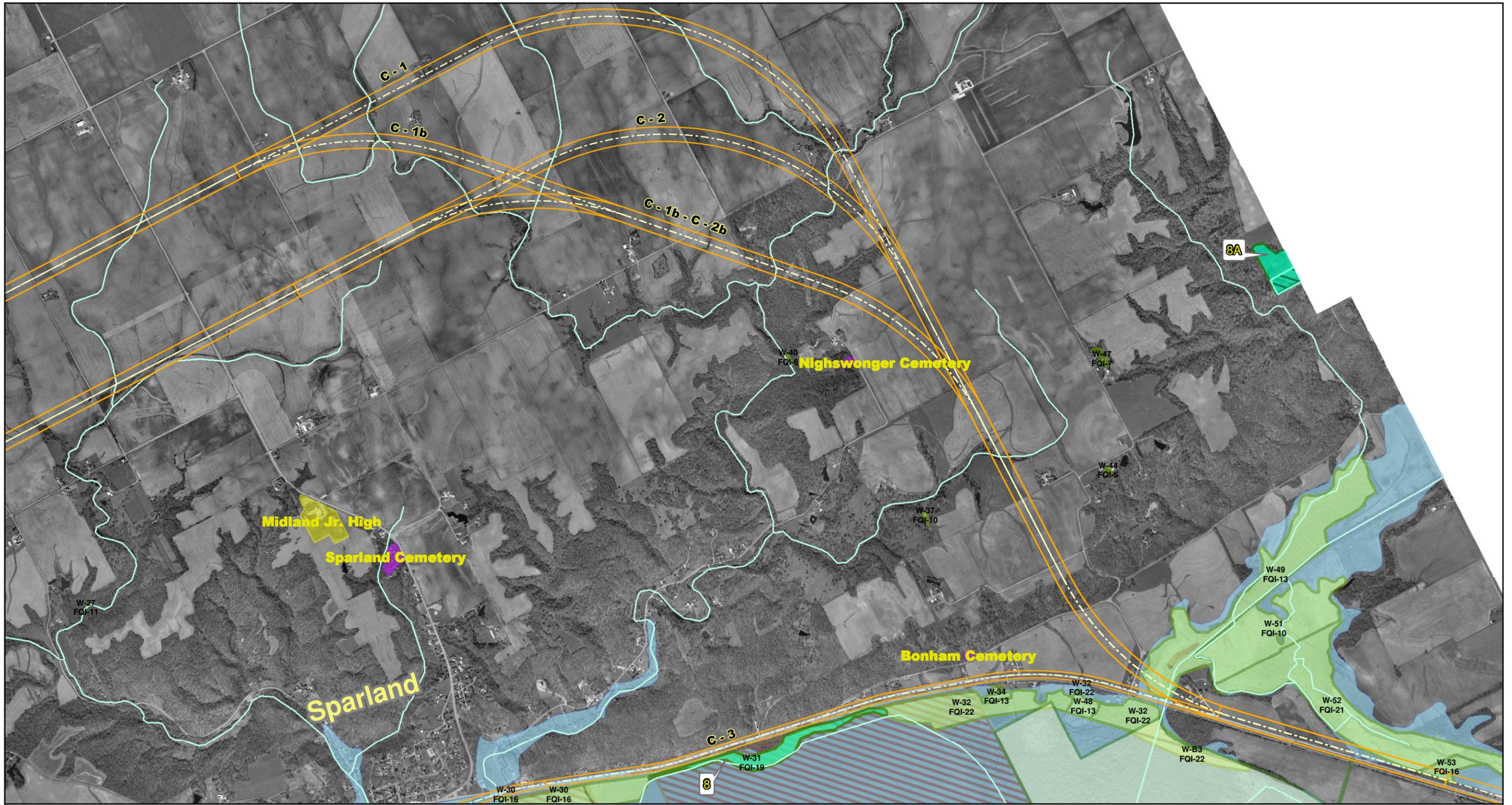
**IL 29 Preliminary Engineering Study
ALTERNATIVES ALIGNMENTS
Central Section, Segment - 1**

Figure 4-4



	Legend	T&E Species <ul style="list-style-type: none"> Arrowwood Decurrent False Aster Queen-of-the-Prairie 	<ul style="list-style-type: none"> Nature Preserves State Natural Areas Land & Water Reserves Federal Managed Lands Other IDNR Managed Lands Cemetery School 	<ul style="list-style-type: none"> 4 - Hopewell Hill Prairie Nature Preserve 5 - Hopewell Hill Prairie Natural Area 6 - Marshall County Hill Prairie Land and Water Reserve 7 - Marshall County State Hill Prairie Natural Area 	IL 29 Preliminary Engineering Study ALTERNATIVES ALIGNMENTS Central Section, Segment - 2
	<ul style="list-style-type: none"> County Boundary Proposed Centerline Proposed ROW Potentially Historic Sites/Historic Bridges Streams 100 Year Flood Zone INHS Surveyed Wetlands 	Land Use Constraints			

Figure 4-5



Legend

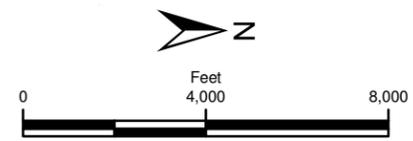
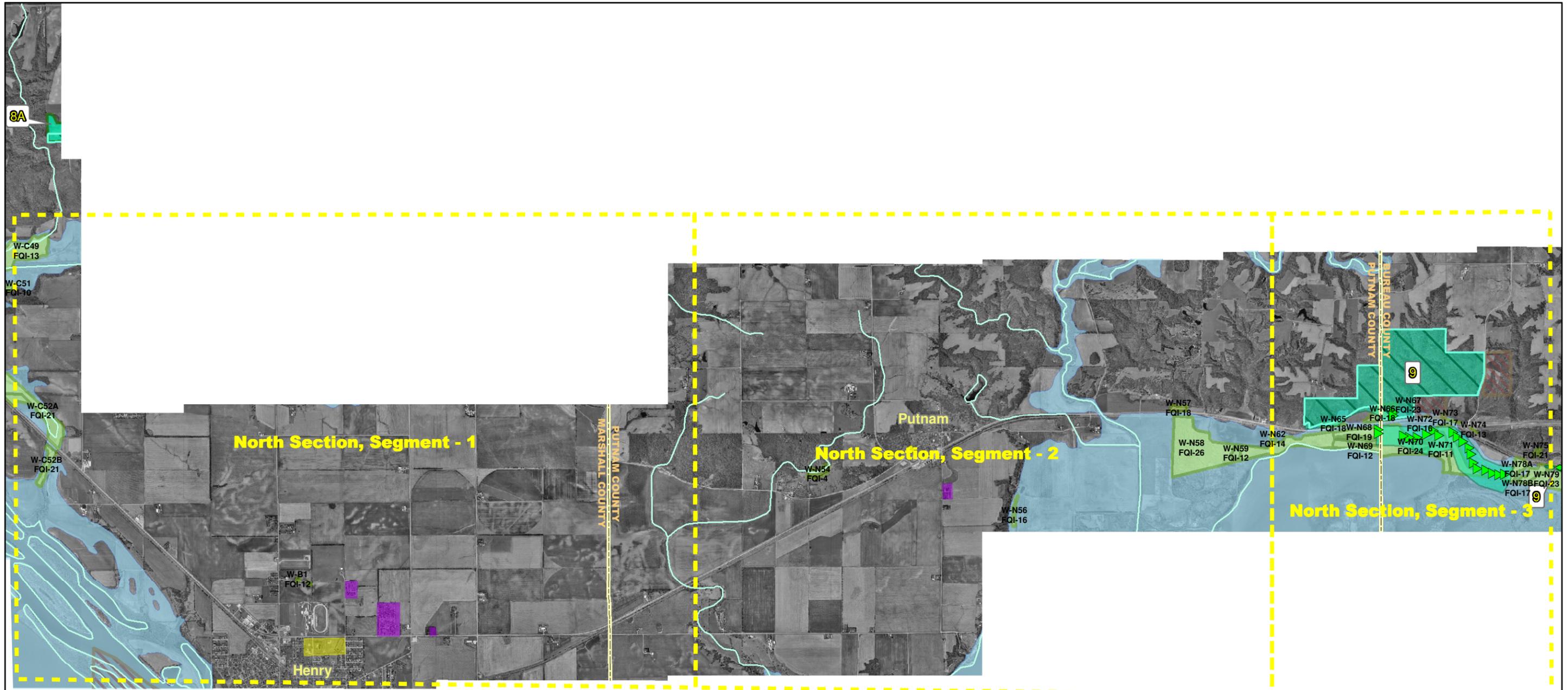
- County Boundary
 - Proposed Centerline
 - Proposed ROW
 - Potentially Historic Sites/Historic Bridges
 - Streams
 - 100 Year Flood Zone
 - INHS Surveyed Wetlands
-
- T&E Species**
 - Arrowwood
 - Decurrent False Aster
 - Queen-of-the-Prairie
-
- Nature Preserves
 - State Natural Areas
 - Land & Water Reserves
 - Federal Managed Lands
 - Other IDNR Managed Lands
-
- Land Use Constraints**
 - Cemetery
 - School

- Sparland Unit Natural Area

- Oak Bluff Natural Area & Proposed Nature Preserve

**IL 29 Preliminary Engineering Study
ALTERNATIVES ALIGNMENTS
Central Section, Segment - 3**

Figure 4-6

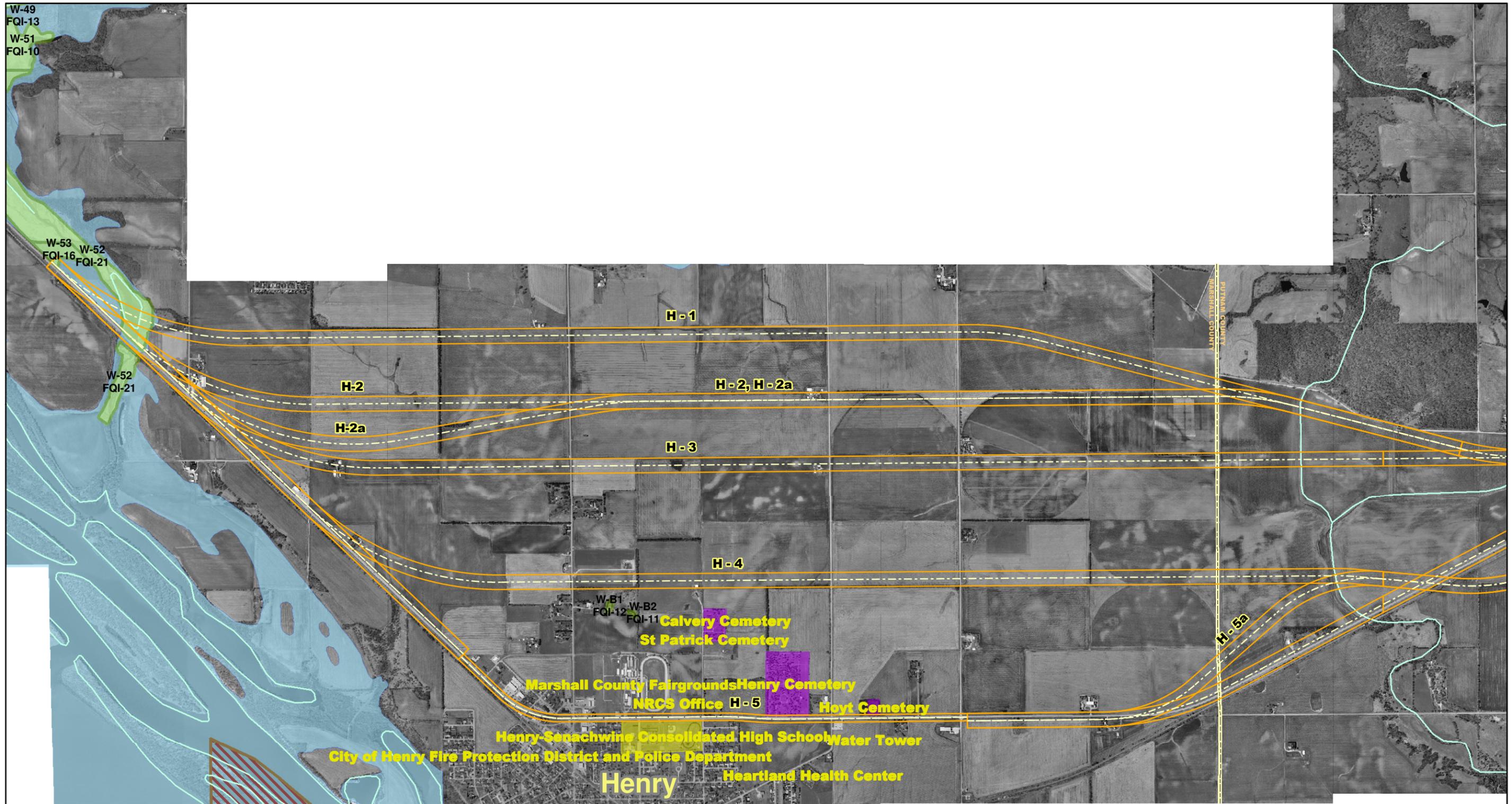


Legend

- County Boundary
- Section Boundary
- Potentially Historic Sites/Historic Bridges
- Cemetery
- School
- T&E Species**
- Arrowwood
- Decurrent False Aster
- Queen-of-the-Prairie
- Streams
- 100 Year Flood Zone
- INHS Surveyed Wetlands
- Nature Preserves
- State Natural Areas
- Land & Water Reserves
- Federal Managed Lands
- Other IDNR Managed Lands
- Oak Bluff Natural Area & Proposed Nature Preserve
- Miller Anderson Woods Nature Preserve/Natural Area

**IL 29 Preliminary Engineering Study
LOCATION MAP
North Section**

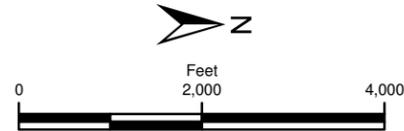
Figure 4-7



Illinois Department of Transportation



CH2MHILL

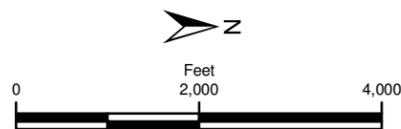
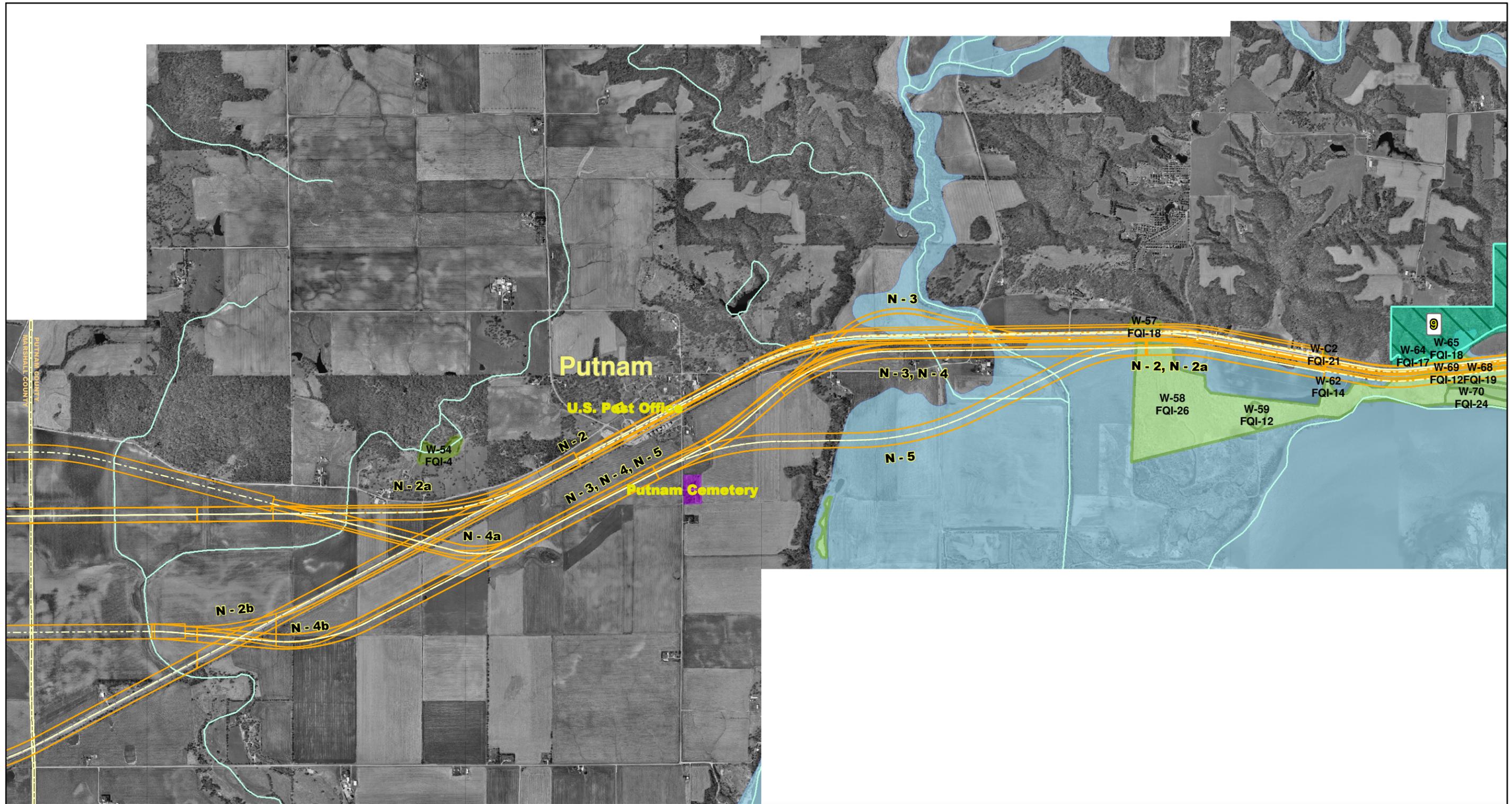


Legend

- | | | |
|---|-----------------------|-----------------------------|
| County Boundary | T&E Species | Nature Preserves |
| Proposed Centerline | Arrowwood | State Natural Areas |
| Proposed ROW | Bald Eagle | Land & Water Reserves |
| Potentially Historic Sites/Historic Bridges | Decurrent False Aster | Federal Managed Lands |
| Streams | Queen-of-the-Prairie | Other IDNR Managed Lands |
| 100 Year Flood Zone | | Land Use Constraints |
| INHS Surveyed Wetlands | | Cemetery |
| | | School |

**IL 29 Preliminary Engineering Study
ALTERNATIVES ALIGNMENTS
North Section, Segment - 1**

Figure 4-8



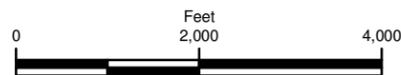
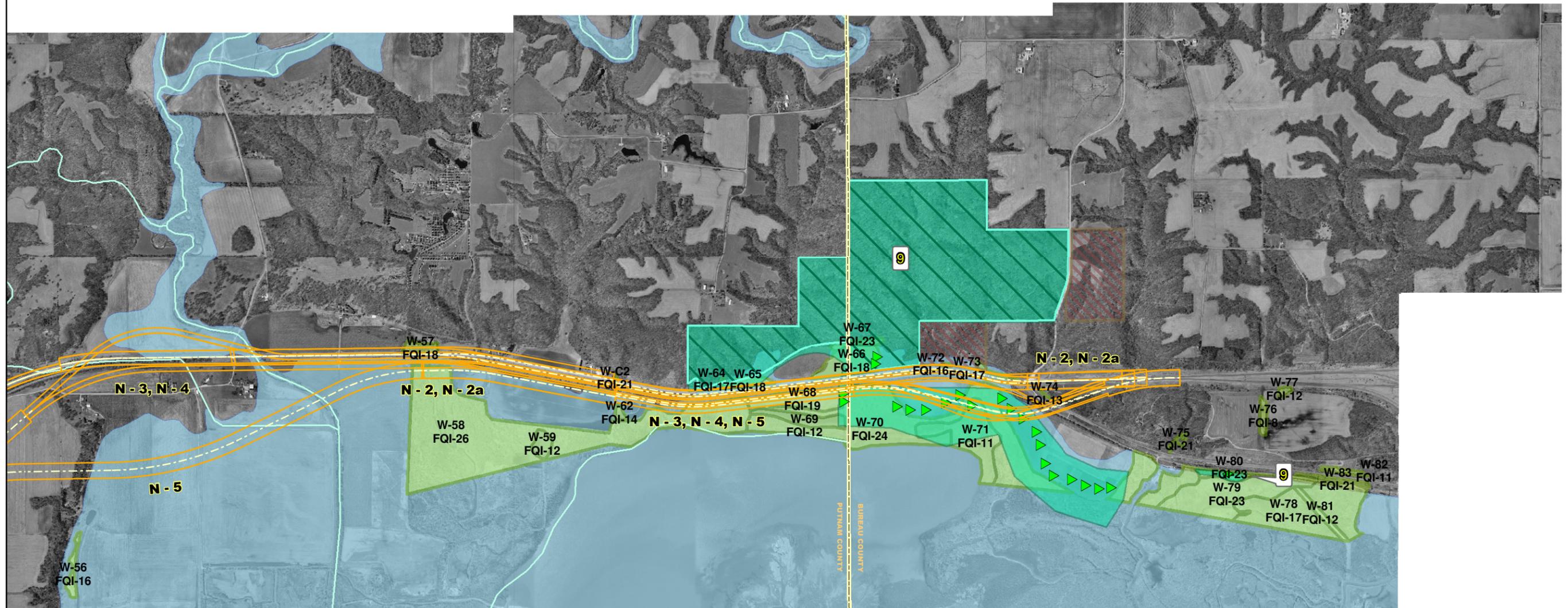
Legend

- County Boundary
 - Proposed Centerline
 - Proposed ROW
 - Potentially Historic Sites/Historic Bridges
 - Streams
 - 100 Year Flood Zone
 - INHS Surveyed Wetlands
-
- T&E Species**
 - ★ Arrowwood
 - ▲ Decurrent False Aster
 - ◆ Queen-of-the-Prairie
-
- Nature Preserves
 - State Natural Areas
 - Land & Water Reserves
 - Federal Managed Lands
 - Other IDNR Managed Lands
-
- Land Use Constraints**
 - Cemetery
 - School

Miller Anderson Woods Nature Preserve/Natural Area

**IL 29 Preliminary Engineering Study
ALTERNATIVES ALIGNMENTS
North Section, Segment - 2**

Figure 4-9



Legend

- County Boundary
- Proposed Centerline
- Proposed ROW
- Potentially Historic Sites/Historic Bridges
- Streams
- INHS Surveyed Wetlands

T&E Species

- Arrowwood
- Decurrent False Aster
- Queen-of-the-Prairie

Nature Preserves

- State Natural Areas
- Land & Water Reserves
- Federal Managed Lands
- Other IDNR Managed Lands

Land Use Constraints

- Cemetery
- School



- Miller Anderson Woods Nature Preserve/Natural Area

**IL 29 Preliminary Engineering Study
ALTERNATIVES ALIGNMENTS
North Section, Segment - 3**

Figure 4-10



Cedar Hills Drive and Proposed Illinois 29 Alignment



Rome West and Proposed Illinois 29 Alignment

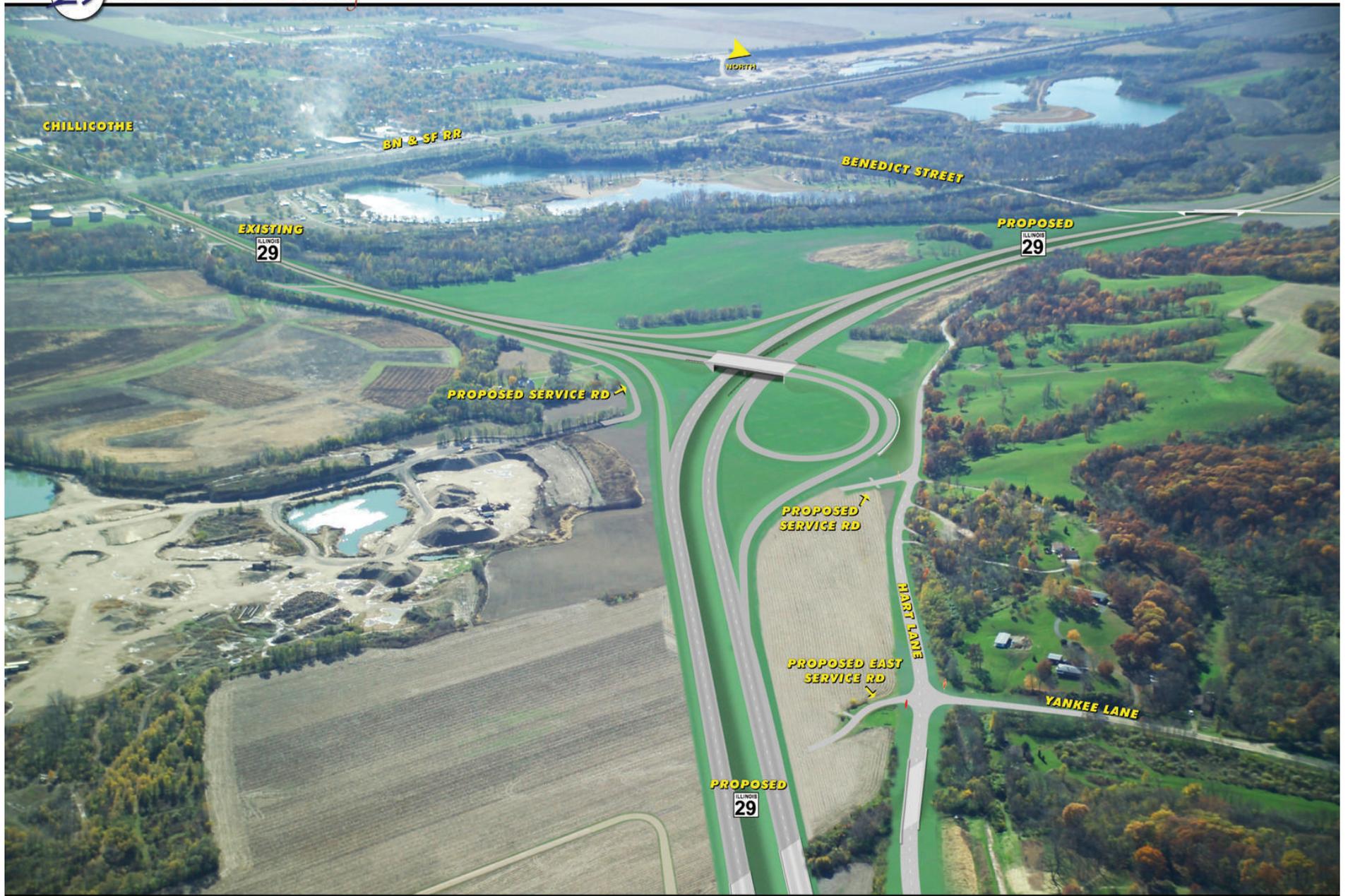


Proposed Knox Street in Rome
Figure 5-3



County Highway 19, Truitt Road and Proposed Illinois 29 Alignment

Figure 5-4



Chillicothe and Proposed Illinois 29 Alignment

Figure 5-5



Sparland & Proposed Illinois 29 Alignment
Figure 5-6



Sparland - IL-17 Conceptual Drawing
East of Proposed IL-29, Looking West

Figure 5-7



**Sparland - School Street at North Street Conceptual Drawing
East of Proposed IL-29, Looking East**

Figure 5-8



**Sparland - Railroad Street at IL-17 Conceptual Drawing
Looking East**
Figure 5-9



**Sparland - Ramp D Conceptual Drawing
Looking South**
Figure 5-10



Putnam and Proposed Illinois 29 Alignment

Figure 5-11



Putnam - IL 29
Looking North
Figure 5-12



Miller - Anderson Woods and Proposed Illinois 29 Alignment
Figure 5-13

Appendix A-1

State and Federal Agency Coordination

Meeting and/or Correspondence	Date
Kick-off Meeting Minutes	December 24, 2001
NEPA/404 Merger Process	
Merger Meeting Minutes (New Format for EIS)	April 19, 2002
Merger Meeting Minutes (Special Meeting with COE)	April 25, 2003
First NEPA/404 Coordination Meeting (Purpose & Need Concurrence & Alternates to Carry Forward)	April 28, 2003
Analysis of Bluff Alignment	March 2005
Second NEPA/404 Coordination Meeting (Concurrence on Alt. Eval. Detail in DEIS) Minutes	March 29, 2005
E-Mail from FHWA	April 26, 2005
E-Mail from FHWA (Agency Concurrence on Pref. Alternative)	May 31, 2005
Third NEPA/404/ Merger Meeting Minutes	September 28, 2006
Preferred Alternative Concurrence Package to Fed. Agencies	October 3, 2006
E-Mail from Agencies (Final Concurrence on Pref. Alternative)	January 2007
Resource Agency Technical Committee	
Meeting Minutes	September 11, 2002
Meeting Minutes	November 13, 2002
Meeting Minutes	May 19, 2003
Meeting Minutes	January 20, 2004
Meeting Minutes	June 9, 2004
E-Mail Correspondence to COE and USFWS	June 18, 2004
E-Mail Correspondence from USEPA	July 1, 2004
E-Mail Correspondence from COE	July 2, 2004
Meeting Minutes	June 1, 2006
Other Agency Coordination	
IDOT Memorandum – PESA Review	May 17, 2002
Memorandum from IDNR (Includes June 24, 2002 IDOT Letter)	June 24, 2002
IDOT Memorandum – PESA Review	November 6, 2002
Letter from ISGS	November 8, 2002
Letter of Transmittal of Biological Resources Report	April 16, 2003
Letter from Marshall-Putnam Soil & Water Cons. District	July 21, 2003
Letter from IDNR	February 2, 2004
Meeting Minutes – IDNR Groundwater Coordination	March 12, 2004

Letters to County Farm Service Agencies	May 3, 2004
IDOT Memorandum - PESA Review	August 26, 2004
Floodplain Impacts and Compensation Workshop	September 14, 2004
Meeting Minutes - IDNR Coordination Meeting	October 4, 2004
Letter from USFWS	October 5, 2004
Meeting minutes - FHWA Section 4(f) Applicability Review	November 9, 2004
Meeting Minutes - IDNR Potential Floodplain Impacts	November 23, 2004
Meeting Minutes - NRCS Potential Project Impacts	December 15, 2004
Letter from IDNR	January 26, 2005
E-Mail from IDNR-OWR	March 3, 2005
Concurrence Letter from IHPA	March 7, 2005
Legal Notice - Barrville Creek Bridge	March 15, 2005
IDOT Memorandum - Hazardous Waste Waiver Request	August 19, 2005
Farmland Conversion Impact Rating Forms	December 12, 2005
2005 PESA Re-Evaluation	December 16, 2005
Programmatic Section 4(f) Evaluation - Barrville Creek Bridge	December 29, 2005
Memorandum of Agreement, Barrville Creek Bridge	December 29, 2005
Notification of Adverse Effect, Barrville Creek Bridge	January 3, 2006
SHPO Concurrence re Richard Bazyn House	January 11, 2006
IDOT Memorandum - PESA Re-Evaluation	July 31, 2006
IDOT/IDNR MOA - Mitigation/Enhancement for Expansion of Illinois Route 29	August 24, 2006
Transmittal of Letter from Peoria Tribes of Oklahoma	December 13, 2006
IDNR Natural Resources Review	March 23, 2009

Of course, the south segment will have to be revised to accommodate consideration of the proposed new connection to Illinois Route 6.

CH2M HILL proposes beginning the study of preliminary alignment alternatives in the northernmost segment. Martinez has been directed to begin preparation of orthodigital photo mosaics for this segment. There are three basic alternatives in the north segment:

- Along existing Illinois Route 29 between the bluffs and the railroad,
- Along existing Illinois Route 29 but with the railroad relocated eastward, and
- East of the railroad with crossovers north of Henry and south of I-180.

A draft of an introductory newsletter was furnished for IDOT review and comment. It was suggested that a section be added to the newsletter explaining prior study activity in the corridor such as setting aerial survey targets and geological/archaeological surveys. It was also suggested that the newsletter be sent to public officials a few days before it goes out to the general public. IDOT will get back to CH2M HILL regarding the newsletter.

CH2M HILL is to send out agency coordination letters. IDOT will furnish samples. Contact letters will be sent to U.S. Fish & Wildlife, school districts, etc.

NEPA/404 Merger Process

APR 20 2003 14:31 1000013430 1000013430 1000013430

April 19th NEPA Coordination Meeting Minutes
District 4

U.S 34 Discussion

Paula Green gave a brief overview of the U.S. 34 project. She discussed the amount of existing ROW utilized and the amount of new ROW that will be required. Paula described and showed the areas where proposed U.S. 34 would diverge from the existing alignment. An overview of the environmental impacts was given.

Paula discussed removing this project from the NEPA process because an individual permit would not be required. The minimal wetland impacts would be considered isolated.

John Betker of the Rock Island COE questioned wetland number 40 & 41. He wanted to know if there was a perennial stream associated with them or were they isolated. John said there was no clear direction on how they are operating with the new isolated wetland ruling. He said they would determine this when a permit was submitted. It was mentioned that IDOT D4 would like to know before the permit was submitted.

John asked if there were any cultural impacts on the project. Paula explained that there would be some small areas that will require excavation, but they were insignificant and the digs were fact finding only.

USEPA questioned the use of a freeway or expressway around Monmouth. Paula explained that it has been an expressway for many years. She gave a brief description of the developed area near the existing expressway. She explained why it would not be feasible to make the bypass a freeway due to the number and proximity of businesses near the expressway.

Concurrence

Each agency was then asked if they concurred with the preferred alternative.

- Newton Ellens and Ken Westlake - U.S. EPA: concurred with the preferred alternative.
- Steve Hamer - IDNR: concurred with the preferred alternative
- John Betker - concurred with the preferred alternative, and stated that he had no problem with the project but if something comes up at a later time, we can revisit.
- Heidi Woeber - U.S. FWS concurred with the preferred alternative
- Terry Savko - IDOA concurred with the preferred alternative

A Final EIS is in preparation and will be submitted to IDOT and FHWA by mid-2002.

IL 29 Discussion

Paula Green gave a brief overview of the project. Paula discussed the difficulties of the project and all of the environmental resources that are and could be present.

The purpose for bringing this project to the meeting was to discuss the use of a new format for the EIS. A handout outlining the new format for the EIS was distributed and Paula discussed it.

John Betker asked if there was any legal constraint to doing it this way.

Kathy Ames explained the only difference would be the organization of the document. All of the required sections would be in it. She explained that Jeff Bruce has looked into the policy and finds nothing against this new format.

Kathy said that IL 29 would be used as a pilot project for the new EIS format. If it works out well then there would be policy change statewide.

John Betker said that he likes the flow of the new format. All the cooperating agencies agreed to the use of the new EIS format.

USEPA questioned the routes on the displays. Paula described the new bypass alternatives around Chillicothe, Spauld, and Henry.

Mike Bruns explained the differences between this study and the previous one. He said the previous study was a regional one and that this study is simply a study of a northern route out of Peoria.

Paula asked the agencies if they felt a separate scoping meeting for this project would be needed. No definite answer was given from the agencies.

April 25, 2003 – Special Meeting with John Betker, USCOE
NEPA/404 Merger Meeting Minutes
IL 29 Study
Peoria, Marshall Putnam and Bureau Counties
P-94-009-01

Concurrence Point: Purpose and Need and Alternatives to Carry Forward

A list of those in attendance is attached:

The purpose of this meeting and the April 28, 2003 meeting with the other members of the nepa/404 Merger Team was to obtain concurrence on the Purpose and Need for the IL 29 Study.

Paula Green (IDOT) opened the meeting with an overview of Purpose & Need and then provided a more detailed description of the Purpose & Need. Following the presentation, there was a brief question and answer period. This discussion is summarized below.

John Betker, US Corps of Engineers, concurred with the Purpose & Need.

Dick Stafford (CH2M Hill) presented the alternative alignments that have been developed during the study. He described the impacts of these alignments and the reasons for some to be dropped from further study and others to be retained.

Mr. Betker didn't see any significant differences in the impacts of the alternative alignments shown in the southern section.

In the central section, there was particular discussion held regarding the railroad relocation to the east at Sparland. Charles Perino (IDOT) noted this relocation would be a longitudinal impact to the floodplain. It was asked if decurrent false aster was found near of Sparland. Ms. Green responded that yes, there is a newly found population which would be impacted.

In the north section, Ms. Green noted the wetlands south of Henry are the same for the various alternatives. They are located along IL 29 at Crow Creek and have an FQI of 21

Charles Perino asked if the west right of way line would remain as it is today along the Miller-Anderson Woods Nature Preserve. He wondered if the road could be moved west, thereby avoiding relocating the railroad. It was noted one of the current alternatives uses a compressed design with a barrier median and retaining walls to get the proposed improvement between Miller-Anderson Woods Nature Preserve and the railroad.

Point of Concurrence: In regards to the overall project and the alternates to carry through the public meetings, John Betker said he understood the elimination of the through-town alternates in Chillicothe and Henry. He felt the alternate that goes through Putnam should be kept until after comments are received from the public meetings. Mr. Betker also agreed with keeping two alternates in Sparland and the other alternates shown. Concurrence was received on the alternates to carry forward.

It was noted that there will be another alternates to carry forward meeting as the current alternates are refined and further developed.

April 28, 2003
 NEPA/404 Merger Meeting Minutes
IL Route 29 Study
 Peoria, Marshall, Putnam and Bureau Counties
 P-94-009-01

Concurrence Point: Purpose and Need & Alternatives to Carry Forward

A list of those in attendance is attached:

Mike Lewis (IDOT) introduced the project and CH2M HILL, the project's consultants.

Dan Dupies, of CH2M Hill, presented the agenda of items to be covered. Mr. Dupies explained that the proposed EIS format would combine the Affected Environment Section and Environmental Consequences Section into one section (Chapter 3). This is the only departure in the traditional EIS format that is contemplated.

Mr. Dupies then gave a short project overview. Following the project overview, he presented the project's Purpose and Need.

Newton Ellens (U.S. EPA) asked whether traffic characteristics on IL 29 today are representative of the characteristics of other highways on the National Highway System (NHS). Mr. Dupies explained that we do not have at hand study area statistics comparable to the national statistics to answer this question.

Heidi Woeber (US Fish & Wildlife Service) asked whether the project might be phased to defer four-lanes on some portions until warranted by demand for additional capacity. It was noted that while traffic volumes on the portion of IL 29 between Sparland and Henry would not reach IDOT's 4-lane threshold until after 2032, the volumes in the Henry would reach the threshold before 2032. In the interest of improving continuity and not creating a patchwork of highway, it was suggested that it would be more prudent to widen the Sparland-Henry segment even though it does not meet the 4-lane standard. Additionally Paula Green (IDOT) noted that highway studies must have logical termini. For this project the logical termini are IL 6 and I-180, each of which is a 4-lane facility. Even if the widening of certain portions IL 29 between these termini were constructed at a later date it is necessary to study the entire length at this time.

Point of Concurrence: J. D. Stevenson (FHWA) noted a separate meeting was held on April 25, to present the Purpose and Need to John Betker (US Army Corps of Engineers). Mr. Stevenson asked if Mr. Betker concurred with the Purpose and Need. Ms. Green said Mr. Betker had given his concurrence on April 25, 2003. Concurrence was received for the Purpose and Need statement as presented.

Dick Stafford (CH2M HILL) then presented the alternatives that were studied, indicating the reasons that some were dropped, along with the reasons others were retained and the expected impacts of the alternatives to be carried further. The discussion proceeded from the South Section to the Central Section to the North Section.

A question was raised as to whether the acreage of wetlands presented for the alternatives included both the INHS surveyed wetlands and the NWI wetlands as shown on the exhibits in the handout. The answer was that it does. In areas where surveys have been conducted by the Illinois Natural History Survey (INHS), only the INHS wetland delineations were used. However, surveys by INHS have not been completed for all of the alignments to be carried forward. In areas that haven't been surveyed by INHS the NWI wetland limits were used.

In response to a question about the typical section of the preliminary alternatives, Mr. Stafford answered that the right-of-way width used for this level of comparison was 300 feet wide, but narrower bands (approximately 150 feet wide) were assumed where there was a need to either avoid or minimize impacts to important environmental features or communities.

Newton Ellens (USEPA) asked whether going through Sparland and the other small communities would be similar to going through Chillicothe. Mr. Stafford answered that the residential and commercial impacts would be substantially less in Sparland because it is not as large or densely developed as Chillicothe. Also nearly all of the residential development is located west of IL 29. Relocating the railroad to the east, if possible, would substantially reduce displacements in Sparland. In Chillicothe, however, commercial and residential development are located both sides of the existing IL 29. Therefore, through Chillicothe significant impacts can't be avoided by shifting either east or west. Greg Larson (IDOT) also pointed out that Hopewell sits on the top of the bluff and is not bisected by IL 29.

Steve Hamer (IDNR) asked which IDNR properties/natural areas were being affected in the central section and the amount of impact by property. After some checking, Mr. Dupies noted that it would be best to review the GIS database results and send a breakdown of the impacts to Mr. Hamer. (A copy of the revised breakdown as related to IDNR land and Natural Areas is included with these minutes.)

Todd Bittner (IDNR) indicated his concerns with the alternatives proposed to be carried forward in the North Section. In the vicinity of Miller-Anderson Woods a breeding bald eagle's nest is located east of the railroad. All three alternatives would remove a natural visual barrier of trees between IL 29 and the eagle nest. Mr. Bittner passed out an aerial showing areas of importance in or near Miller-Anderson Nature Preserve. These included the boundaries of: the winter eagle roost areas, a seep/wet prairie complex, locations of *Boltonia decurrens*, Goose Lake Botanical Area (a new INA site), and the expanded boundaries of Miller-Anderson Woods Natural Area limits which are associated with the *Boltonia decurrens* and an eagle nest. The natural area associated with the bald eagles nest encompasses the existing IL 29 and all of the alternatives go through this expanded new limit of Miller-Anderson Woods Natural Area. Mr. Bittner noted that it's not the acres of natural area affected by the highway improvement, but the disturbance to the eagles caused by the removal of the tree barrier and construction activity.

Mr. Hamer (IDNR) asked what the current status is for bald eagles. Heidi Woeber explained eagles are in the process of being de-listed, but the process may take awhile. It was noted that this project should continue under the premise that they are listed as threatened since that is the current status. This would change if the eagle's status changes in the future.

Charles Perino (IDOT) pointed out that the impact matrix tables should list the bald eagle as a potential impact for all of the proposed alternatives since construction activity and/or normal highway traffic of each one might cause the eagle to abandon its nest. Mr. Perino noted in the impact analysis section of the EIS, a determination would be made of how the reasonable alternatives would affect the bald eagle, and whether the impact would be contrary to the State or Federal eagle recovery plans. Mr. Perino also said he is planning to investigate the eagle population in the region and state to assess the impact of possibly losing this one nest. It was also noted that the eagle may not be harmed by the roadway improvement, but may just move to another location if disturbed.

Mr. Bittner said he didn't understand why any option on IL 29 is being considered since the improvement would run through the critical habitat for the bald eagle. J. D. Stevenson (FHWA) explained that although impacts to the critical habitat are important, they are not enough to stop considering these alternatives at this time. More investigation is necessary regarding the eagle habitat. Mr. Hamer advised that we proceed with caution.

Mr. Bittner noted changes have occurred in the last two months and several locations of *boltonia decurrens* have been located between the railroad and the river. He wondered what may be done to avoid this federally endangered plant. Heidi Woeber noted the *boltonia decurrens* respond well to disturbance and there are ways to move the plant and mitigate for the impact without jeopardizing the continued existence of the species.

Ms. Green asked if there is something that can be done to enhance the area and make it better habitat for bald eagles. Short of not building an improvement, there were few suggestions. Heidi Woeber said there are construction guidelines that are available to help reduce potential impacts to eagles.

Mr. Bittner is also concerned that there are natural areas within the IDOT right-of-way that are not accounted for in the impact summary. The two new areas, which expanded Miller-Anderson Woods Natural Area, were not factored in the impact tables. The tables will be revised to reflect the new boundaries. Dick Stafford also explained there was no intention to move the edge of roadway or shoulder farther west than it already exists in the vicinity of Miller-Anderson Woods. A field investigation to attempt to actually locate the boundaries of the natural areas in relationship to the roadway right of way has been scheduled for May 7, 2003. Hopefully this will eliminate questions regarding impacts to Natural Areas.

Point of Concurrence: Concurrence on the alternatives to carry forward was requested. Mr. Stevenson asked if John Betker had concurred on this point at the separate meeting held with IDOT on April 25th. Ms. Green said Mr. Betker had concurred. Concurrence was granted. Steve Hamer asked that along with this concurrence the eagle habitat and natural areas within IDOT's right of way near Miller-Anderson Woods Nature Preserve be looked at closely and due caution be taken.

Illinois Route 29 Study

Analysis of the Bluff Section Alignment

Introduction

The purpose of this memorandum is to discuss the Bluff Alignment (Alternative C-2 in the Central Section of the IL 29 Study) and whether it should continue to be included in the project's reasonable range of alternatives to be carried forward.

In the Central Section, the bluff alignment concept was introduced to the study because there were concerns that significant adverse impacts to Section 4(f) property, Natural Areas, IDNR lands, wetlands and woodlands may occur if existing IL 29 were to be widened. During the project's alignment development phase, several alignments were evaluated on the bluff west of Sparland. In the end one alignment, the Alternative C-2, was identified as the representative "bluff alignment".

To date, the project team has avoided applying the "reasonableness" test to the Bluff Alignment that it has to other alternatives. Having completed the study's second public information meeting and developed the Bluff Alignment and the project's other remaining alternatives to a 90 percent design level, the project team has sufficient information to evaluate whether the Bluff Alignment would meet the project's purpose and need and whether it is a prudent alternative that should be included in the reasonable range of alternatives.

Purpose and Need

The purpose of the proposed action is to enhance transportation continuity between the freeway connections at IL 6 and I-180 by improving IL 29 to be a safe and efficient highway that will serve existing and future travel demand while minimizing disturbance to the natural and built environment. The proposed highway facility will improve transportation continuity, facilitate modal interrelationships, improve travel efficiency and enhance economic stability.

As part of the study, the project team evaluated the amount of traffic that would be carried by either an improvement on IL 29 or by the Bluff Alignment in the design year 2032. The analysis found that between 8,600 and 15,600 vehicles per day would use a widened facility along existing IL 29 in the Central Section. The Bluff Alignment was predicted to carry between 2,850 and 3,800 vehicles daily and would leave 5,700 to 11,900 vehicles per day on the existing 2-lane IL 29. In addition, under a No Build scenario, it is anticipated that in 2032 approximately 12,200 vehicles per day would utilize the existing IL 29 roadway south of IL 29. Under either a No Build or Bluff Alignment alternatives consideration of a 4-lane improvement on IL 29, south of IL 17, would be warranted before 2011. Please refer to the enclosed traffic maps and Table 1.

Table 1 – 2032 Average Daily Traffic Volumes

Roadway	Average Daily Traffic South of IL 17	Average Daily Traffic North of IL 17
No Build	12,200	7,400
Bluff Alignment	3,500	2,850
IL 29 – 2 lane With the Bluff Alignment	11,900	5,700
IL 29 – 4 lane Without the Bluff Alignment	15,600	8,600

Marshall County residents living east of the Illinois River utilize the IL 17 River Bridge to access the west side of the river. For residents west of the Illinois River, IL 17 provides access to Marshall County and a direct connection to I-39 or I-55. Alternate river crossings are located either 7 miles north on IL 18 or 24 miles south on US 24/US 150. The traffic projections in Table 1 and on the traffic maps are based on an approximate 70/30 per cent split in traffic. The split takes into account that 70% of the travelers would be frequent users (also referred to as local traffic) and 30% would be through travelers.

To better understand the rationale of traffic estimates with the Bluff Alignment in place, the various traffic movements may be viewed separately. In the following discussion, all traffic volumes are expressed as average daily traffic (ADT) in the design year 2032.

- Through traffic between the North Section and the South Section (approximately 2000 ADT): It is assumed that all of this traffic would utilize the Bluff Alignment.
- Traffic between the East via Lacon and the South Section (approximately 8,000 ADT): This is the largest single segment of traffic demand. From the IL 29/IL 17 intersection in Sparland to the north side of Chillicothe, travel time would be about two minutes longer via the Bluff Alignment than on existing IL 29. It is predicted that most drivers (about 7000 ADT) would elect to use the existing route. This single traffic flow would account for nearly two-thirds of the projected volume on existing IL 29 between Sparland and Chillicothe.
- Traffic between the East via Lacon and the North Section (approximately 3500 ADT): It is assumed that all of this traffic would utilize existing IL 29.
- Through traffic on IL 17 between the East via Lacon and the West (approximately 3000 ADT): This traffic would utilize neither the Bluff Alignment nor existing IL 29.
- Traffic between the West on IL 17 and the North and South Sections (less than 1000 ADT): It is assumed that all of this traffic would utilize the Bluff Alignment.
- Local Sparland, Hopewell, Chillicothe, etc. (approximately 2000 ADT to 3000 ADT depending on location): It is assumed that all of this traffic would utilize IL 29.

- Local traffic on the Bluff Alignment (less than 1000 ADT): Since the area abutting the Bluff Alignment is primarily farmland it is anticipated that this would be a low traffic generation.

Based on an aggregation of these individual traffic forecasts it has been estimated that the 2032 traffic volume with the On IL 29 alignment between Chillicothe and Sparland would be approximately three times greater than the projected volume on the Bluff Alignment. Also, North of Sparland, the On IL 29 alignment would carry approximately twice the traffic estimated for the Bluff Alignment. Please refer to Figures 1 and 2.

If the Bluff Alignment were constructed, the route of choice for the majority of travelers would still be the existing IL 29. Motorists are only likely to alter their routes if they perceive the route is more efficient. The Bluff Alignment requires motorists go through additional stop controlled intersections, traffic signals and through residential areas. This coupled with additional adverse travel makes diversion less likely. Frequent or recurring travelers from east of the Illinois River working, visiting or doing business in Sparland, Chillicothe or Peoria will use the route that is most reasonable to them. This would be either the existing IL 29 or a widened IL 29.

The failure of the Bluff Alignment to attract travelers and alleviate future congestion on existing IL 29 means that it would not fulfill the purpose statement of providing a safe and efficient highway that would serve existing and future travel demands.

Impacts

As stated at the beginning of this Technical Memorandum, the bluff alignment concept was introduced to the study because there were concerns about adverse impacts to Section 4(f) property, Natural Areas, IDNR lands, wetlands and woodlands may occur if existing IL 29 were to be widened. Due to this concern, engineering studies have emphasized the need to minimize impacts of the On IL 29 alignment. The use of atypical design features such as utilizing a 22 ft. barrier median as opposed to the usual 50 ft. open median, utilizing a split profile design through constricted or sensitive areas, and the utilization of retaining walls to avoid extensive disturbance along the bluff side of IL 29 have, to a great extent, reduced adverse effects of this alternative. Refer to Table 2 for a listing of impacts and Table 3 for a comparison of impacts between alternatives.

Alignment Impacts

Section 4(f) impact of the On IL 29 alternative is limited to the removal of a potentially historic bridge located on an access road adjacent to the existing IL 29 roadway. Localized avoidance options, such as moving the roadway to the east, are being investigated at this site. No Section 4(f) impacts would be associated with the Bluff Alignment.

Design measures have reduced the impact on Natural Areas to 0.4 acres at the Hopewell Hill Prairie and 0.7 acre at the Marshall County Hill Prairie. Impacts at both of these locations are restricted to areas located within the existing right-of-way which are buffer areas adjacent to

the existing facility. No impacts are anticipated in the vicinity of the protected hill prairies. No impacts to Natural Areas would be anticipated with the Bluff Alignment.

South of Sparland, design measures have reduced the impact to IDNR lands to 0.12 acre. The Sparland interchange would impact another 7.8 acres of IDNR property. No impacts to IDNR lands would be anticipated with the Bluff Alignment.

Table 2
Central Section from Benedict Rd. to 1 ½ mile north of Camp Grove Rd.

Factor	On IL 29	Bluff Alignment
Existing Right-of-Way Used (ac)	211	77
New Right-of-Way Needed (ac)	249	638
Total Right-of-Way Needed (ac)	470	715
Landlocked (ac)	698	0
Cost (\$ Millions)	220 - 230	180 - 190
Farmland Impacts (ac)	218	626
Residential Displacements	26	11
Commercial Displacements	1 - 2	1
Wetland Impacts (ac)	20	13
Forested Areas (ac)	70	112
Natural Area Impacts (ac)	1.1	0
IDNR Land Impacts	8	0
Floodplain Impacts (ac)		
Illinois River	61	0.2
Senachwine Creek, South	27	21
Crow Creek	15	17
Other	18	0

Comparison Table 3
Central Section from Benedict Rd. to 1 ½ mile north of Camp Grove Rd.

Factor	On IL 29	Bluff Alignment
Existing Right-of-Way Used (ac)	+134	
New Right-of-Way Needed (ac)		+389
Total Right-of-Way Needed (ac)		+245
Landlocked (ac)	+698	
Cost (\$ Millions)	+40	
Farmland Impacts (ac)		+408
Residential Displacements	+15	
Commercial Displacements	0	0
Wetland Impacts (ac)	+6	
Forested Areas (ac)		+42
Natural Area Impacts (ac)	+1.1	
IDNR Land Impacts	+8	0
Floodplain Impacts (ac)		
Illinois River	+61	
Senachwine Creek, South	+6	
Crow Creek		+2

No wetland impacts are anticipated south of Sparland with either alternative. The Sparland interchange proposed with the On IL 29 alignment would impact 7.9 acres of wetland with an FQI of 17 or less. The On IL 29 alignment and the Bluff Alignment would impact 8.2 acres and 9.4 acres of wetlands, respectively in the vicinity of Crow Creek. Each alternative would impact 3.8 acres of wetland with a FQI of 21 within the Crow Creek wetland complex.

The On IL 29 alignment would impact 70 acres of woodland while the Bluff Alignment would impact 112 acres. The majority of woodland impacts resulting from the On IL 29 alignment are associated with fringe areas adjacent to the existing facility; however, impacts to forested areas by the Bluff Alignment would result in fragmentation of large tracks of woodlands.

In regards to right-of-way needed to construct each alternative; 470 acres, of which 211 acres are existing right-of-way, would be needed for the On IL 29 alignment and 715 acres, of which 77 are existing right-of-way, would be needed for the Bluff Alignment.

Approximately 218 acres and 626 acres of farmland would be impacted by the On IL 29 and Bluff Alignment respectively. Of the farmland required for the Bluff Alignment approximately 95.2 acres are zoned as Protected Agricultural Land.

Other notable impact differences between the two alternates are: The On IL 29 alignment would result in 15 additional residential displacements than the Bluff Alignment. Also the On IL 29 alignment would impact 61 acres of Illinois River floodplain

Landlocked Parcels

With the On IL 29 alignment approximately 698 acres of property would be landlocked. Approximately 607 acres of landlocked parcels are located south of Sparland and east of IL 29. These landlocked areas involve 6 parcels belonging to 4 separate landowners. Reasonable access can not be provided to these properties due to conflicts with the railroad. There are no landlocked parcels associated with the Bluff Alignment.

Within the Sparland interchange area another 87 acres of land would be landlocked. Access can not be provided to these properties due to conflicts with ramps and access control limits associated with the interchange.

Vegetative cover types associated with the landlocked parcels are:

Cropland - 52.9 acres

Forested Wetland - 326.6 acres

Upland Forest - 45.7 acres

Water - 269.4 acres

The remaining landlocked parcels are located along IL 17 in Sparland and in the vicinity of Barville Creek.

Adverse Impacts

Adverse impacts resulting from the landlocked parcels include the removal of approximately 53 acres of cropland and the removal of land from the tax base.

Based on 2003 tax records the tax loss would include:

Marshall County - \$351.85

Steuben Township - \$155.33

Midland Community School District - \$1,570.81

Village of Sparland - \$149.12

Beneficial Impacts

Beneficial Impacts associated with the landlocked parcels in the Central Section include:

- 326.6 acres of forested wetlands would be protected,
- 45.7 acres of upland forest would be protected,

- 42 acres of cropland could be converted to wetland, thereby providing on site mitigation for wetland impacts (the remaining cropland could not be converted because it contains an American Indian village archaeological site),
- increased safety by reducing the number of railroad crossings,
- increased safety by reducing the number of entrances onto IL 29, and
- protection of the Federally Threatened Decurrent False Aster (*Boltonia decurrens*).

Conclusion

Early in the IL 29 Study, the project team recognized the need to develop/evaluate an alternative that would avoid the potential impacts associated with widening existing IL 29. From the time the Bluff Alignment was developed there has been a question about whether it was a feasible and prudent alternative or if it should be eliminated from consideration.

The major reason to eliminate the Bluff Alignment from further consideration is that it doesn't meet the project's purpose and need to enhance transportation continuity between the freeway connections at IL 6 and I-180 by improving IL 29 to be a safe and efficient highway that will serve existing and future travel demand while minimizing disturbance to the natural and built environment.

The traffic analysis projected to 2032 found that between 2,850 and 3,800 vehicles per day would use the Bluff Alignment. If IL 29 were to be widened the analysis found that between 8,600 and 15,600 vehicles per day would utilize the facility. This indicates the location of the existing facility better addresses the needs of the traveling public in the region.

If the Bluff Alignment were constructed the route of choice for the majority of travelers would still be existing IL 29. The failure of the Bluff Alignment to attract travelers and alleviate future congestion on existing IL 29 means that it would not fulfill the purpose statement of providing a safe and efficient highway that would serve existing and future travel demands.

Also, when comparing the alternatives it is obviously less prudent to spend money on the Bluff Alignment which would serve 2,850 to 3,800 vehicles daily than to spend money on the On IL 29 alignment which would serve 3 to 4 times as many vehicles

The Central Section design work and traffic forecasting completed over the past several months have clarified the impacts of the Bluff Alignment and the nature of impacts along existing IL 29. The many design refinements along the existing IL 29 alignment have made great strides in eliminating or minimizing impacts. As can be seen from the preceding tables and discussion, the impacts anticipated to result from an On IL 29 alignment have not developed. The Bluff Alignment, therefore, does not offer a significant reduction of impacts when compared to the On IL 29 alternative.

Recommendation

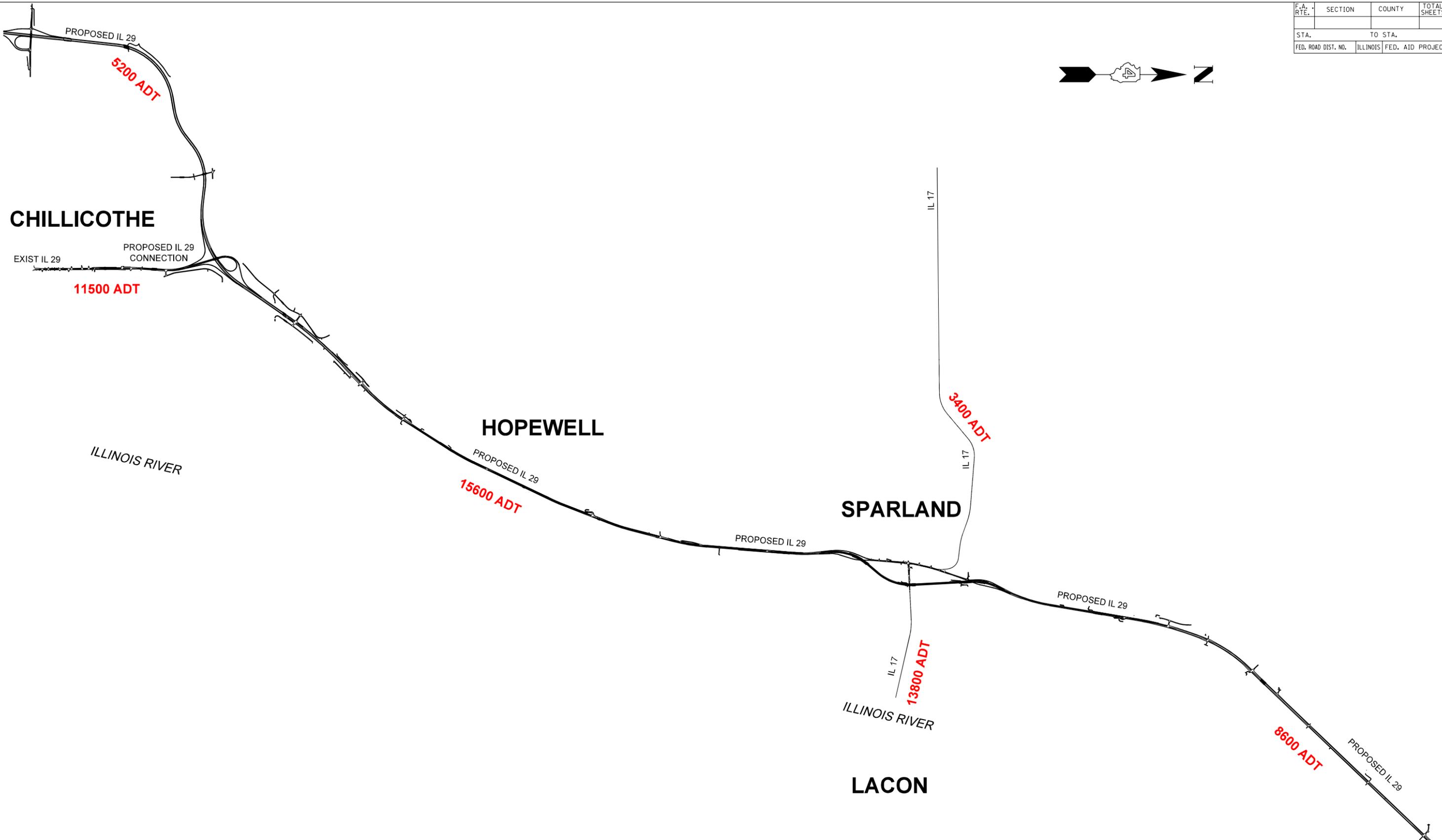
Based on the facts presented in this memorandum it is recommended that for the Central Section of the IL 29 Study the only alternatives to be carried forward should be the No Build Alternative and the On IL 29 Alternative.

It is also recommended the EIS contain a discussion of the Bluff Alignment and reasons it was eliminated from further consideration in the Alternatives Section of the document.

Action

Concurrence on the recommended alternatives to carry forward is requested.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



ANTICIPATED 2032 AVERAGE DAILY TRAFFIC WITH THE ON IL 29 ALIGNMENT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILLINOIS 29
 PHASE I ENGINEERING SERVICES
 IL 6 TO I-180
**CENTRAL SECTION
 ON IL 29 ALIGNMENT**

SCALE: NTS
 DATE 3/16/2005

DRAWN BY CH2M HILL
 CHECKED BY

Plotted by: gsb/vey
 C:\projects\188912 - Illinois 29 - Phase I Engineering Services\exhibit_Cen_Exist_traffic.dgn
 3/16/2005

MEETING SUMMARY

CH2MHILL

IL 29 Corridor Study Second NEPA/404 Coordination Meeting

ATTENDEES: See Sign-in Sheet
 FROM: CH2M HILL
 DATE: March 29, 2005

Introduction

Dan Dupies (CH2M Hill) opened the meeting by reviewing the meeting purpose and project agenda. The purpose of the meeting was to provide an update on the project alternatives since the June 2004 Technical Advisory Committee meeting and to obtain agency concurrence on the range of alternatives to be evaluated in detail in the project's Draft EIS.

South Section Update

Dan and Kim Kolody (CH2M HILL) then began the alternatives update starting in the South Section. Kim stated that IL 29 is proposed to be a freeway from the IL 6 interchange to the proposed north Chillicothe interchange. Access would be provided at the following interchanges, IL 6, Cedar Hills Drive, Rome West Road, McGrath Street and Truitt Avenue. Dan noted that impacts in the South Section were primarily to agricultural land (580 acres), and that the state-protected viburnum molle would be affected north of the BNSF railroad. The impact was unavoidable because of other constraints in the Truitt Avenue interchange area.

Central Section Update

On IL 29 Alignment

In the Central Section, Kim noted that there were no changes to the typical section between the Benedict Road bridge and the proposed north Chillicothe interchange. A trumpet interchange had been selected because it was the most efficient at accommodating traffic traveling between Chillicothe and Sparland. Kim pointed out that while there were no changes to the alignment from north of Chillicothe to south of Sparland, the typical section changed. Rather than keeping the northbound and southbound lanes at the same elevation, a split profile is recommended. The split profile, which would have the southbound lanes at a different elevation than the northbound lanes, was recommended because it minimized the cut required into the west bluff and impacts on natural areas and IDNR properties. Heidi Woeber (U.S. FWS) asked whether the split profile compromises safety. Kim responded that because the split profile maintains two lanes in each direction separated by a barrier median, this typical section does not pose a safety issue.

In Sparland, Kim stated that the interchange options had been narrowed to two alternatives 3 and 3a. While the right of way requirements for each were very similar, alternative 3a was selected because it avoided the flood buyout properties in Sparland. FHWA and FEMA

recommended avoiding the flood buyout properties rather than entering a lengthy (and probably unsuccessful) coordination process to be able to place fill on those properties.

Kim noted that a number of properties would be landlocked in the Central Section. Some of the "landlocking" was caused by the proximity of the properties to the proposed Sparland interchange. The majority of the landlocked acreage was the result of the decision to obtain a number of properties east of the Lincoln & Southern Railroad rather than provide access. The approximate cost of providing access generally was as much or more than the estimated cost to purchase the property. North of Sparland to the Crow Creek area there were no changes to the alignment, but a split-profile section was added from north of Thenius Drive to south of Camp Grove Road. Also, IDOT decided to use a guardrail with 2:1 sideslopes on the west side of IL 29 adjacent to Crow Creek to minimize impacts to floodplain and wetlands. Although the guardrail option does not reduce floodplain and wetland impacts to same extent as the retaining wall option, the guardrail option would be \$10 million less to construct.

Bluff Alignment

Dan opened the discussion of the Bluff Alignment by informing the group that the issue was whether the Bluff Alignment should be evaluated in detail in the Draft EIS. Dan began the discussion by reviewing the Bluff Alignment-On IL 29 Alignment impact comparison. He noted the Bluff Alignment's primary impact was to agricultural land. While the total right of way needed to construct the On IL 29 Alignment was less than needed for the Bluff Alignment, the On IL 29 Alignment landlocked much more property. The On IL 29 Alignment had more floodplain and wetland impacts, but the Bluff Alignment had more forest impacts.

Following the impact summary review, Dan described the results of the traffic study, which showed that the Bluff Alignment would have 2,700 to 3,800 average daily traffic (ADT) in 2032, leaving 5,700 to 12,600 ADT on existing IL 29. Because the Bluff Alignment would attract so little traffic, it would not increase travel efficiency in the project area and, therefore, does not meet the project's purpose and need.

John Betker (U.S. COE) asked why traffic would not use the Bluff Alignment. Dan responded that there is a traffic break in the project area at IL 17 in Sparland with a substantial traffic volume crossing the river (eastbound and westbound). Because a large number of the trips are traveling between Lacon and Chillicothe (and points south), it would be inefficient to use the Bluff for that type of trip. John asked whether there are any portions of the Bluff Alignment (subalternates) that would satisfy purpose and need. Dan and Eric Therkildsen said no. John asked if there were any other convenient way to get to Lacon from Peoria. Eric replied that there was not a convenient way. John asked whether the Bluff Alignment would be more attractive to southbound traffic if IL 17 were improved to eliminate the "jog" in Sparland where IL 17 is concurrent with IL 29. It was pointed out that this alternative had been considered but eliminated because of the impacts to floodplain and IDNR's property in Sparland.

Newton Ellens (U.S. EPA) asked Steve Hamer (IDNR) whether the 8 acres affected by the On IL 29 alignment was significant. Steve said yes taking particular note of the severed

property in Sparland. He noted, however, that IDNR would request mitigation for the potential impact.

John said that he was not convinced that the Bluff Alignment should be dropped at this time. J.D. Stevenson (FHWA) noted that the project team would need a full explanation in the Draft EIS why the Bluff Alignment should be eliminated from further consideration. Newton asked whether the project's purpose and need is addressing long- or short-distance trips. Dan responded that the purpose and need addresses all trips between IL 6 and I-180. Ken Westlake (U.S. EPA) and John stated that our decision to drop the Bluff Alignment seems to be predicated on traffic moving east and west of the river between the Lacon area and Chillicothe (and points south). Eric noted that not all IL 29 traffic is bound for IL 17 so IDOT is not immediately concerned about the IL 17 bridge being able to accommodate future traffic volumes. Because it is a two-lane bridge, it is possible that it would have to be expanded if traffic volumes increase to a level where IDOT considers two-lane to four-lane expansion.

Newton asked whether the Bluff is part of the Peoria Wilds. Paula Green (IDOT) indicated that part of the Bluff was in the Peoria Wilds, including the portion where the greatest impact to forested land is located.

When the agencies were asked whether they could agree today to drop the Bluff Alignment, they indicated that they needed more traffic information before they might drop it. Paul Niedernhofer (IDOT) suggested that it should be shown when existing IL 29 would have to be expanded if the Bluff Alignment were constructed. Heidi Woeber asked DNR's opinion about the Bluff Alignment. Steve responded that the DNR still supports the Bluff Alignment but could agree to improving existing IL 29 with the appropriate mitigation. J.D. said that the project team should provide FHWA with the additional detail requested before it is sent to the agencies. After the agencies review the additional information, it will be decided how to proceed and whether another meeting is needed or whether it can be handled through e-mail.

North Section Update

Kim stated that there were no changes to the alignment or the typical section in the North Section. A 0.1 acre seep north of Brewmaster's Restaurant would be filled by the proposed improvements. An eagle's nest was located west of IL 29 at the south edge of the Miller-Anderson Woods Nature Preserve. A groundwater study conducted by ISGS in Miller-Anderson Woods during summer 2004 concluded that the proposed project would not adversely affect groundwater. In reviewing the North Section impacts, Paula pointed out that most of the 7.6-acre impact to the Miller-Anderson Woods Natural Area (east of IL 29) was within IL 29 and railroad right of way.

Other Issues

Kim pointed out that wildlife crossings are planned throughout the project. Currently, the project team is proposing to widen 12 bridges to accommodate large mammals, construct 9 culverts to accommodate large mammals and construct 8 culverts to accommodate small animals.

Coordination will continue with the railroads to work through the safety issues at railroad crossings.

INHS will be forwarding to the project team some information from their 2004 field studies. The archaeology work continues but it has been determined that the project will not affect any burial mounds. Some village sites will be affected. A Memorandum of Agreement will be developed to cover those impacts. More work will be done on the village sites during the Phase II work.

Coordination with IDNR will continue on the appropriate level of mitigation.

Barb Traeger (IDOT) noted that the Detailed Action Report is in progress.

Paula indicated that the next meeting with the Technical Advisory Committee would likely be this summer/fall prior to the public hearing.

Dan reviewed the Draft EIS target dates and the planned date of the public hearing.

J.D. Stevenson said the third concurrence point meeting for the preferred alternative would likely occur between the public hearing and the signing of the Final EIS.

Actions taken subsequent to the March 29, 2005 NEPA/404 meeting

On April 26, 2005, J.D. Stevenson provided additional information requested at the March 1, 2005 NEPA/404 Merger meeting in Schaumburg regarding dropping the Bluff Alignment from further consideration. The Agencies were asked to respond by e-mail with their concurrence in taking this action. The IDNR provided FHWA with their concurrence via e-mail on April 28, 2005. In addition, the USEPA provided written concurrence to FHWA in their letter dated May 10, 2005.

During a May 16 phone conversation, John Betker indicated that both the USACE and the USFWS had concerns with dropping the Bluff Alignment from further study based solely on the fact that it did not meet the Purpose and Need. John indicated that the USACE and the USFWS could not concur in dropping the Bluff alignment based only on the fact that it did not meet the originally concurred in Purpose and Need. It read, "The purpose of the proposed action is to enhance transportation continuity between the freeway connections at IL 6 and I-180 by improving IL 29 to be a safe and efficient highway that will serve existing and future travel demand while minimizing disturbance to the natural and built environment." This statement appears to focus primarily on improving travel safety and efficiency between IL 6 to I-180, i.e. only serving regional travel needs. With this focus, it would be hard to justify that the Bluff Alignment does not meet Purpose and Need.

It was never the intent of IDOT, nor the understanding of FHWA, that the Purpose and Need would focus on regional travel only. This is evident in reading the paragraph under the Proposed Action section of the Purpose and Need Chapter where it states that travel safety and efficiency will be improved "in the IL 29 corridor", including both regional and local travel. Also, the second sentence in the

original "Purpose and Need" paragraph explains the intent to "improve transportation continuity, facilitate modal interrelationships, improve travel efficiency and enhance economic stability." However, IDOT and FHWA believed that the intent could be easily clarified in the Purpose and Need statement with the following: "The purpose of the proposed action is to improve transportation continuity, facilitate modal interrelationships, improve travel efficiency and enhance economic stability within the Illinois Route 29 (IL 29) corridor from Illinois 6 (IL 6) in Peoria County to Interstate 180 (I 180) in Bureau County. The proposed highway facility will provide a safe and efficient highway that will serve existing and future travel demand for both regional and local travelers while minimizing disturbance to the natural and built environment." FHWA does not believe that this clarification in the Purpose and Need requires revisiting the Purpose and Need concurrence point with the Resource Agencies.

Subsequent to issuing this clarification in the Purpose and Need, FHWA received e-mail concurrence from both the USACE and USFWS on May 25, 2005. In addition, FHWA received e-mail concurrence from the IDOA on June 1, 2005. Based on receiving concurrence from all Resource Agencies, the Bluff Alignment will be dropped from further consideration.

-----Original Message-----

From: Stevenson, Jerry [mailto:Jerry.Stevenson@fhwa.dot.gov]
 Sent: Tuesday, April 26, 2005 1:01 PM
 To: ellens.newton@epa.gov; heidi_woeber@fws.gov;
 John.G.Betker@mvr02.usace.army.mil; westlake.kenneth@epa.gov;
 Tsavko@agr.state.il.us; Shamer@dnrmail.state.il.us
 Cc: Piland, Janis; Strang, Randy; Cowin, Jason; Green, Paula A; Lewis, Mike
 Subject: IL-29 EIS - Bluff Alignment Technical Memorandum

Folks,

At the March 1, 2005 NEPA/404 Merger meeting in Schaumburg, we asked the consultant and IDOT District 4 to provide additional information and justification for dropping the Bluff Alignment from consideration. Subsequently, you will find the subject memo along with traffic maps for the Bluff Alignment attached to this e-mail. At this point we are asking you to review this additional information and we are seeking your concurrence in dropping the Bluff Alignment. We ask for your response by May 13, 2005. Your concurrence may be provided to me via e-mail if you feel comfortable in responding in this way. If not, please provide your preference (conference call, meeting, ...) in providing concurrence as soon as possible so that any needed preparations can be made. As Always, if you have any questions or need any additional information, please contact me.

Thanks for your help!!

J.D. Stevenson
 Environmental Programs Engineer
 Illinois Division
 Federal Highway Administration
 3250 Executive Park Drive
 Springfield, IL 62703
 Phone - (217) 492-4638
 Fax - (217) 492-4238
 jerry.stevenson@fhwa.dot.gov

<<03-10-05 bluff alt TECHNICAL MEMORANDUM.doc>>
 <<exhibit_Cen_Bulff_traffic.pdf>> <<exhibit_Cen_Exist_traffic.pdf>>

-----Original Message-----

From: Piland, Janis [mailto:Janis.Piland@fhwa.dot.gov]

Sent: Tuesday, May 31, 2005 4:02 PM

To: ellens.newton@epa.gov; heidi_woeber@fws.gov; John.G.Betker@mvr02.usace.army.mil;
westlake.kenneth@epa.gov; Tsavko@agr.state.il.us; Shamer@dnrmail.state.il.us

Cc: Green, Paula A; Stevens, Barbara H; Strang, Randy; Cowin, Jason; Lewis, Mike; Stevenson, Jerry
Subject: IL 29 Purpose and Need and dropping Bluff Alignment

Folks,

Attached you will find a copy of the IL-29 Purpose and Need Chapter of the EIS. This is a copy of the original P&N that was concurred in by all the Resource Agencies. However, you will notice that the paragraph under the subtitle "Purpose and Need" reflects clarifications that have been implemented in response to concerns expressed by the Rock Island COE and FWS offices. Their concern was with dropping the Bluff Alignment from further study based solely on the fact that it did not meet P&N the way it was originally written, and as shown in the "Analysis of the Bluff Section Alignment" memorandum. It read, "The purpose of the proposed action is to enhance transportation continuity between the freeway connections at IL 6 and I-180 by improving IL 29 to be a safe and efficient highway that will serve existing and future travel demand while minimizing disturbance to the natural and built environment." This statement appears to focus primarily on improving travel safety and efficiency between IL 6 to I-180, i.e. on serving regional travel needs. With this focus, it would be hard to justify that the Bluff Alignment does not meet P&N.

It was never the intent of IDOT, nor the understanding of FHWA, that the P&N would focus on regional travel only. This is evident in reading the paragraph under the Proposed Action section of the P&N Chapter where it states that travel safety and efficiency will be improved "in the IL 29 corridor", including both regional and local travel. Also, the second sentence in the original "Purpose and Need" paragraph explains the intent to "improve transportation continuity, facilitate modal interrelationships, improve travel efficiency and enhance economic stability." However, we felt that the intent could be easily clarified in the P&N statement and have provided the attached. We do not feel that we have changed the P&N, only clarified it, and thus we do not need to revisit the P&N concurrence point with the Resource Agencies.

With this clarification, the Rock Island COE and FWS concur with dropping the Bluff Alignment from further study, provided there is full documentation explaining the reasons behind this decision. We now have

concurrence from all the Resource Agencies. IDOT will proceed with the preparation of the DEIS and fully justify dropping the Bluff Alignment in the Alternatives chapter (Chapter 3).

Jan

<<IL 29 P&N May 05 clarification.doc>>

Janis P. Piland
Environmental Engineer
FHWA Illinois Division
Springfield, IL 62703
Phone: (217)492-4989
Fax: (217)492-4621
Buckle up - Every Trip - Every Time

Table of Contents

Introduction	3
Alternative Screening Process	4
Resolution of Comments	13
Minimization and Mitigation Measures	16
Public Hearing Summary	29

Introduction

The Federal Highway Administration in cooperation with the Illinois Department of Transportation signed and released the Illinois Route 29 Draft Environmental Statement (DEIS) for review and comment in April of 2006. The DEIS documented the proposed highway improvement in the Illinois Route 29 corridor between Illinois Route 6 in Peoria County and Interstate Route 180 in Bureau County. Two public hearings were held in June of 2006 to inform the public and provide an opportunity for stakeholder involvement.

Prior to the release of the DEIS and the public hearings the following meetings were held with the members of the NEPA/404 Merger participants.

April 19, 2002 – Interagency Meeting
September 11, 2002 – Technical Advisory Committee Meeting
November 13, 2002 – Technical Advisory Committee Meeting
May 19, 2003 – Technical Advisory Committee Meeting
January 20, 2004 – Technical Advisory Committee Meeting
June 9, 2004 – Technical Advisory Committee Meeting
June 1, 2006 – Technical Advisory Committee Meeting

In addition the following NEPA/404 Merger meetings have been held on the IL 29 project.

April 28, 2003 – Concurrence was granted for the project's Purpose and Need and for alternates recommended for further study.

March 1, 2005 – Concurrence was granted on alternatives to be carried forward.

The Illinois Department of Transportation and the Federal Highway Administration are currently preparing the Final Environmental Impact Statement for the Illinois Route 29 study. One build alternative and the No Build alternative were both addressed in the DEIS. Based on the following material and detailed environmental documentation in the DEIS, we are requesting concurrence on the build alternative as the Preferred Alternative.

Your participation in this project has been greatly appreciated. By working together as a multi-disciplinary team the proposed project has been able to meet the transportation needs of the public while protecting sensitive environmental resources in the study area. Your input and participation in meetings have been an important factor in the project's development.

Alternative Screening Process

The sole remaining Build Alternative described under Selection of a Preferred Alternative in the DEIS evolved from alignment studies conducted between 2002 and 2005. The objective of the studies was to evaluate a wide range of alternatives to address the project's Purpose and Need. To facilitate the development and comparison of alignments in the 35-mile-long study corridor, the project was divided into three sections:

- **South:** IL 6 interchange to a point east of the Benedict Street bridge, north of Chillicothe (Exhibit 2-4)
- **Central:** A point east of Benedict Street (north of Chillicothe) to a point north of Camp Grove Road (to Crow Creek) (Exhibit 2-5)
- **North:** North of Camp Grove Road to I-180 (Exhibit 2-6)

The sections were subdivided for further refinement. Because of the length of the project area and the numerous possible alignments within each section, the project team focused on developing and screening alignments within sections and subsections instead of on single alternatives that extended from IL 6 to I-180.

The screening process involved input from the project's Technical Advisory Committee and the public. A wide range of environmental and socioeconomic resources and engineering issues were considered during the screening process. The goal of the screening process was to develop alternatives that would minimize impacts while addressing the transportation deficiencies

Preferred Alternative

South Section

The general location of the proposed project in the South Section is shown on page 10. The proposed project begins at the IL 6 interchange with the focus of the work there being ramp related. The geometry of the westbound to southbound ramp will be improved, and the northbound exit and entrance ramps and southbound to eastbound ramp will be completed. The new IL 29 mainline will begin north of the existing IL 6 terminus. The 4-lane divided freeway section will extend within the existing right of way to Cedar Hills Drive. Dickison Lane and Boy Scout Road would be closed east of the proposed alignment. Access to properties west of the alignment would be gained from a 2-lane frontage road extending from Mossville Road to Cedar Hills Drive. The proposed bridge over Dickison Run would be designed to accommodate a wildlife crossing for large mammals.

At Cedar Hills Drive an interchange would be constructed with a loop ramp in the southwest quadrant. The interchange would be located mainly south of Cedar Hills Drive within existing IDOT right of way. IL 29 would pass under Cedar Hills Drive. Cedar Hills Drive would be expanded to a 4-lane roadway between the west side of the interchange and Old Galena Road to match the typical section on Cedar Hills Drive east of Old Galena Road.

North of Cedar Hills Drive the proposed project would be on new alignment west of Caterpillar's Tech Center. North of the Tech Center, IL 29 would curve northeast and pass over Old Galena Road immediately south of the undeveloped Audubon Wildlife Area.

North of Old Galena Road, IL 29 would continue northeast and cross Wayne Road south of the existing intersection with Rome West Road. A diamond interchange is proposed at Rome West Road. Rome West Road would pass over IL 29 and a new frontage road connecting Wayne Road (at Rome West Road) to Krause Road east of the interchange is proposed. East of this interchange, near the Rome West Road/North 7th Street intersection, Rome West Road would tie into the proposed Knox Street extension. The extension would be on new alignment north of the residential properties on North 6th Street and tie into the existing Knox Street/IL 29 intersection.

Continuing northeast, interchanges would be provided at McGrath Street and Truitt Road. The proposed project would cross over Old Galena, Wayne, and Krause roads and beneath Cloverdale Road and Sycamore and Benedict streets. All crossings would be bridges except Wayne Road, which would be on fill with realignment of Wayne Road to connect to Rome West Road at Krause Road.

North of Truitt Road, IL 29 would cross over the BNSF railroad and continue north and east, crossing Senachwine Creek (South). The Senachwine Creek bridge would be lengthened to provide a wildlife crossing. North of the creek crossing, IL 29 would bend east, aligned parallel to and over part of Ratliff Road. Two additional culverts east of Senachwine Creek would accommodate wildlife crossings. Continuing east, the proposed project in the South Section would end east of the relocated Benedict Street bridge.

Central Section

The general location of the proposed alignment for the Central Section is shown on page 11. In the Central Section, the proposed project would begin east of the relocated Benedict Street bridge from which the freeway facility would continue a short distance before entering the proposed north Chillicothe interchange area. A trumpet interchange is planned for the area between Hart Lane and IL 29. The interchange would allow free-flow movement for travel between Chillicothe and Sparland, which constitutes most of the traffic in the area. Southbound traffic leaving Sparland, would enter Chillicothe using the interchange's loop ramp. Northbound traffic from the bypass would enter Chillicothe from an exit ramp.

Improvements to existing IL 29 within Chillicothe are planned between Truitt Road and the north Chillicothe interchange. South of Truitt Road, IL 29 has 2 lanes in each direction plus a center 2-way left-turn lane and sidewalks on either side. North of the Truitt Road intersection to Wilmot Street, IL 29 has 2 lanes in each direction with a 5-foot flush median. The 5-foot median would be widened to 12 feet to accommodate left turning vehicles, and sidewalks would be provided on both sides of the road. North of Wilmot Street, where the cross section narrows to 2 lanes (under the existing viaduct), IL 29 would be widened to the west and have 2 lanes in each direction with an 18-foot raised median to the north Chillicothe interchange. The east leg of Moffit Street would be moved to the north to align with the west leg of Moffit Street along the IL 29 connector into Chillicothe. A strip of new right of way would be acquired from residences in Chillicothe between Truitt Road and the viaduct. Five residences (and two garages) west of IL 29 would be displaced. The strip of new right of way would create a continuous sidewalk between Truitt Road and just north of the railroad viaduct (for access to the Chillicothe Recreational Area). The outside lane of the 4-lane section of IL 29 from Truitt Road to a point south of the viaduct would be widened to 14 feet to provide a shared use lane on both sides of the roadway. The proposed sidewalk under the viaduct would accommodate both pedestrians and bicycles on the west side of IL 29 (10 feet wide) and bicycles only on the east side (8 feet wide). North of the Chillicothe Recreational Area and along proposed IL 29, bicycles would be accommodated on the 10-foot-wide outside paved shoulder on both sides of the roadway.

The south railroad viaduct would be reconstructed to accommodate two lanes of traffic in each direction with a center bridge pier (within an 18-foot raised median). A guardrail would be installed adjacent to the outside travel lanes (under the viaduct) separating the traffic from the sidewalks on the east and west side of IL 29. Continuing north, the north viaduct would be demolished requiring realignment of the BNSF yard track and maintenance road over the reconstructed south viaduct. The realignment would allow all

existing through tracks to use the reconstructed south viaduct.

North of the reconstructed south viaduct, IL 29 would be expanded to a 4-lane divided facility with an 18-foot raised median as it approaches the trumpet interchange. North of the interchange, Hart Lane would be extended on new alignment west of IL 29 and tied into realigned Boehle Road. Realigned Boehle Road would partially follow existing IL 29, then continue north along existing alignment to Hardscrabble Road. This design would create a new connection from Hart Lane to Hardscrabble Road. A new intersection connecting Hart Lane and Boehle and Hardscrabble roads to IL 29 is proposed 1,500 feet north of the Yankee Lane/Hart Lane intersection with IL 29. On the east side of proposed IL 29, Yankee Lane would be realigned to tie into a frontage road serving the Chillicothe Driving Range property. Yankee Lane and frontage road traffic would access IL 29 at the intersection serving Hart Lane and Boehle and Hardscrabble roads.

Several wildlife crossings would be included in the design of box culverts and bridges from Benedict Street to Crow Creek on the north end of the Central Section.

The proposed project would widen IL 29 to the east across the Chillicothe Sportsman property, the Chillicothe Driving Range and IDOT's rest area. North of the rest area, the IL 29 median would transition from a 50-foot grass median to a 22-foot concrete barrier median and widen to the west to minimize impacts to natural areas and IDNR property on both sides of IL 29 south of Sparland. The IDOT rest area would be improved to allow for a weigh scale and truck maneuvering. The rest area intersection would have a service drives north and south of the rest area to provide access to one property to the north and three properties to the south, including IDNR. On the west side of IL 29 opposite the IDOT rest area, a small section of Crew Lane would be reconstructed and the south and north intersections of Crew Lane and IL 29 closed. A new intersection would be constructed at the north driveway of IDOT's rest area as would a new connection to Crew Lane. The proposed project would displace four residences located between IL 29 and Crew Lane.

A split profile typical section (southbound lanes at a higher elevation than the northbound lanes) would begin just north of the existing intersection with Crew Lane and continue north 0.5 mile to reduce impacts to County Line Hill Prairie Natural Area. The split profile typical section would have a 2- to 3-foot retaining wall in the median and a retaining wall that would vary from up to 7 feet along the west side of IL 29. There would also be a split profile typical section from 1,100 feet south of the Hopewell Estates Hill Prairies Natural Area to 800 feet south of the Hopewell entrance. The typical split profile would have a 3- to 10-foot retaining wall in the median and a retaining wall on the west side of IL 29 that would be up to 14 feet high. The entrance drive to the Village of Hopewell would be realigned to improve stopping sight distance along IL 29. A median opening would be constructed at the entrance to Hopewell to provide access for northbound and southbound travel.

A split profile and retaining wall would be proposed between 1,300 feet north of the Barrville Drive entrance and the north limits of the Marshall County State Hill Prairie Natural Area. The split profile section would be 3,400 feet long with a 3- to 10-foot retaining wall in the median and a retaining wall varying up to 11 feet along the west side of IL 29. The widening to the west would displace the historic Barrville bridge and one residence near the IL 29/Barrville Drive intersection. North of Barrville Drive, widening would continue on the west side. The existing entrance to the Marshall State Fish and Wildlife Area west of IL 29 would be widened and extended for 900 feet south of the existing entrance. The driveway for the wildlife area east of IL 29 would be relocated to the south to improve safety at the railroad crossing in that area. The railroad tracks would be relocated east to provide a 90-degree crossing from IL 29 to the east side of the railroad. Because the Marshall County State Hill Prairie Natural Area extends into the IL 29 right of way on the west side, a minor impact (less than 1 acre) would occur at the property.

North of the Marshall County State Hill Prairie Natural Area, the split profile typical section ends as the proposed project enters the proposed Sparland interchange. A split diamond interchange separating the northbound exit and southbound entrance ramps from northbound entrance and southbound exit ramps is proposed. The proposed project would bend west of existing IL 29 starting about 2,500 feet south of the Sparland corporate limits. It would then move to the east and cross over existing IL 29 and the Lincoln & Southern Railroad tracks on a bridge. East of the railroad tracks, the proposed project would cross the agricultural field on the south side of Sparland on roughly 25 to 35 feet of fill. The proposed project would cross over Gimlet Creek and IL 17 east of the Whiffle Tree House and continue east passing roughly 100 feet west of Sparland's treatment ponds. The proposed project would cross over Thenius Creek and the Lincoln & Southern Railroad for the second time. The northbound entrance ramp and the southbound exit ramp would be located north of Thenius Drive, providing access to Sparland. The ramp at the north end of the interchange would require a 26-foot-high wall between the mainline and the ramp and a 29-foot-high wall between the ramp and the bluff on the west. The mainline through the interchange will have a 65 mph design speed instead of the 70 mph design speed used elsewhere. This is necessary because in certain areas, the median barrier walls will restrict the line of site of a driver traveling 70 mph. In order for a design speed of 70 mph to be achieved, the shoulders would need to be widened excessively. Widening the shoulder to increase the sight distance might lead the driver to think the shoulder is an additional lane. Therefore in the interest of safety, on the mainline through the interchange, a design speed of 65 mph will be used. Within the Sparland Interchange bikes will be diverted to existing IL 29.

In Sparland, IL 17 and existing IL 29 would be reconstructed at their existing elevations. Access to businesses and residences along IL 17 would not change. Along IL 29 north of the south leg of IL 17 access would remain the same, but would be modified south of the existing intersection. Oak and Maple Streets would be closed and Willow Street would remain open. Existing IL 29 on the south side of Sparland would be terminated south of Willow Street to provide for the entrance and exit ramps to and from proposed IL 29. The alley between Willow Road and Maple Street and Maple Street to Oak Street would be improved to provide internal circulation. A signal would be installed at the existing IL 29/IL 17 intersection (south leg). For safety reasons, left turns would be prohibited at Center Street east of the railroad tracks so that vehicle queues do not extend over the railroad tracks. Left turns would be permitted at Lacon Street, which would be improved. Vine Street would also be improved to provide connection back to Center Street. North of Sparland, five residences along the ramp west of IL 29 would be displaced by the proposed project.

North of the Sparland interchange, to minimize cuts into the bluff, a split profile commences and continues to the existing intersection of 1100E. The retaining wall on the west side of IL 29 would be up to 15 feet high while the median wall would be up to 18 feet high. Also north of Sparland, widening resumes on the west side of existing IL 29 and the 22-foot concrete median barrier would be used. The south intersection of Road 1100E with IL 29 would be closed. A new intersection would be constructed 3,100 feet north of the intersection to be closed. One residence north of the closed intersection and three residences along the west side of IL 29 north of the proposed intersection would be displaced. Access to properties north and south of the proposed 1100E will be along the connector rather than IL 29. The proposed intersection would also provide access to properties east of IL 29. Roughly 2,500 feet south of the intersection, the median would transition from 22 feet wide with a concrete median to 50 feet with a grass median. The proposed project would continue widening to the west through the Camp Grove Road intersection displacing a residence and two commercial storage buildings.

A new bridge would be constructed at the Crow Creek crossing. The bridge would be lengthened to provide for a wildlife crossing.

North Section

The general location of the proposed alignment for the North Section is on page 12. North Section begins just north of the proposed Crow Creek bridge.

North of the new Crow Creek bridge, three residences west of IL 29 would be displaced. To limit wetland and floodplain impacts west of IL 29 a guardrail and steeper side slopes would be used in the Crow Creek area. The elevation of IL 29 would be increased roughly 10 feet to raise the travel lanes above the 50-year design water elevation. A new culvert would be constructed at the north end of the Crow Creek slough to replace the culvert under IL 29. The culvert would continue to drain to another culvert under the railroad tracks. A small animal wildlife crossing would be provided at the north crossing of Crow Creek.

North of the proposed culvert and the Crow Creek slough, widening continues on the west side of IL 29 through the IL 29/Old IL 29 (1150 N) intersection displacing a residence south of the intersection. That intersection would be realigned to the south to improve sight distance at the intersection. The realignment would change the access to the lumber warehouse located in the northwest quadrant of the intersection with the proposed project.

North of the old IL 29 intersection, widening would continue to the west, and the proposed project would realign the IL 29/1300E intersection to the north to improve sight distance. The west and east connections would be realigned to connect to the new intersection. The west widening would cross the AgView FS Coop property, displacing the warehouse, office and storage tanks. To the north, the proposed project would displace a farm residence before leaving the IL 29 alignment and veering northward across farm land (at the south end of the Henry bypass). At this point bikes will be directed off the mainline and on to existing IL 29 through Henry. This will provide a shorter route for cyclist to goods and services in Henry. The proposed project would proceed north on new alignment through farm fields toward Western Avenue (County Highway 6). A diamond interchange is planned at Western Avenue, about 0.5 mile west of Henry. On the south side of Western Avenue, the proposed interchange would displace two residences and landlock a property in the southwestern quadrant. One residence would be displaced on the north side of Western Avenue, and a frontage road would be developed in the northwestern quadrant to provide access to a commercial property.

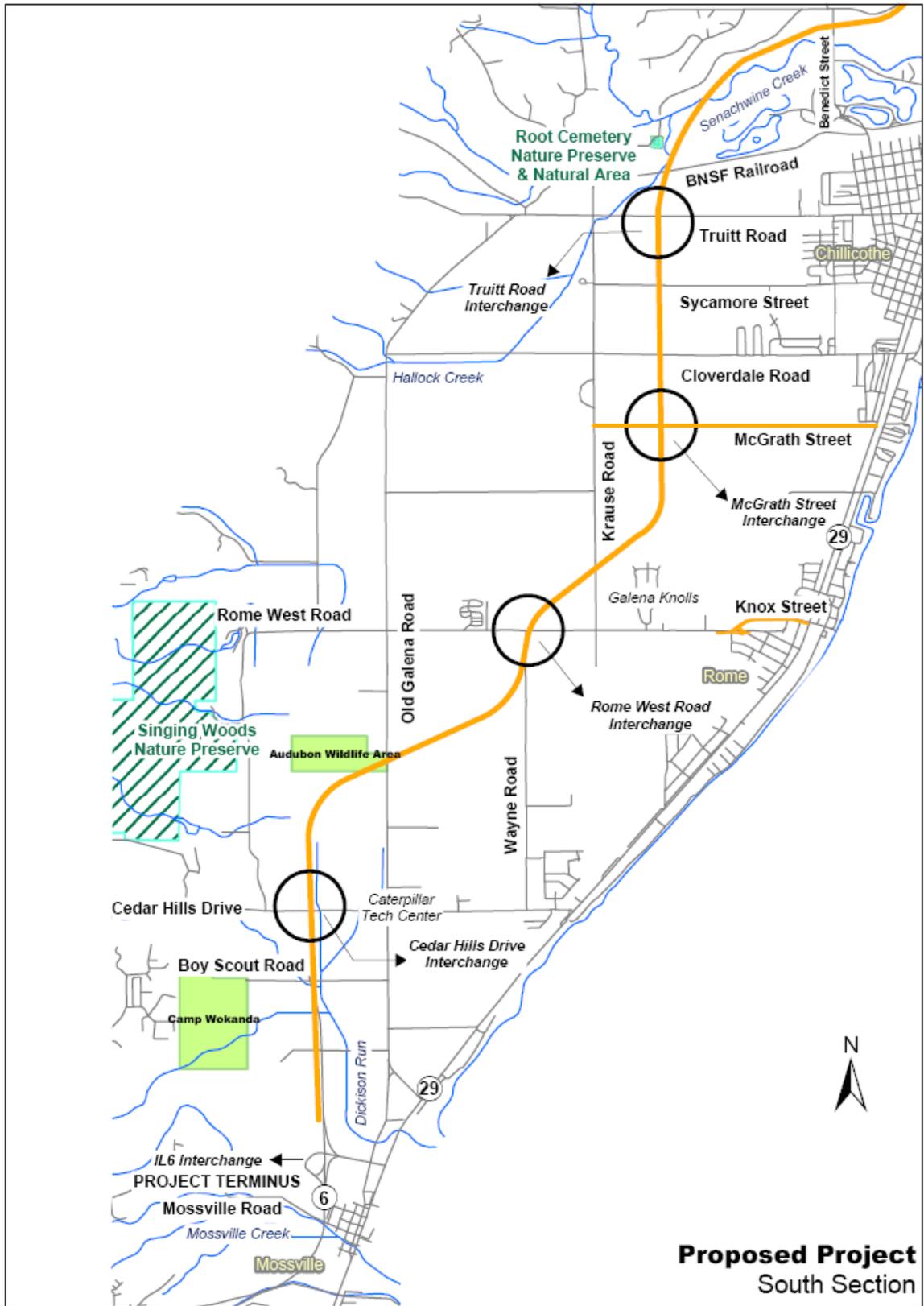
North of the proposed Western Avenue interchange, the proposed project would remain on new alignment crossing through farm fields. Two large outbuildings would be displaced. The proposed project would cross under Old Indian Road and intersect Whitefield Road at grade. North of the Whitefield Road intersection, the proposed project would remain on new alignment before crossing the Marshall/Putnam county line and rejoining existing IL 29 about 1,600 feet north of Dry Hollow Creek. Bikes would be guided from existing IL 29 to the outside paved shoulder of the proposed project. The proposed bridge at Dry Hollow Creek would be lengthened to provide a wildlife crossing.

After rejoining the IL 29 alignment, widening would continue on the west side of the highway as it approaches Putnam. A new connection between IL 29 and Center Street is proposed south of Bradford Road. Within Putnam, the 50-foot median would generally be maintained, and widening to the west would displace five residences and one business. Based on coordination with Senachwine Township, the median at IL 29 and Bradford Road would be increased to 64 feet because of the large number of trucks. The IL 29/Bradford Road intersection would be realigned slightly to the south. Bradford Road would be extended east of IL 29 and aligned east of the grain elevator and residential area and tie into Senachwine Lake Road (County Highway 13). Senachwine Lake Road would be reconstructed between the Bradford Road intersection and Condit Street. Senachwine Lake Road between IL 29 and Condit Street would remain open but would have to be maintained by others. The Bradford Road extension would provide access to the east side of the Putnam grain elevator and direct access to IL 29 at Senachwine Lake Road would not be permitted. The Douglas, Courtland, and Main Street intersections with IL 29 would be closed, leaving access to Putnam at Bradford Road and High Street, which would be realigned slightly to the south to improve sight distance at the intersection.

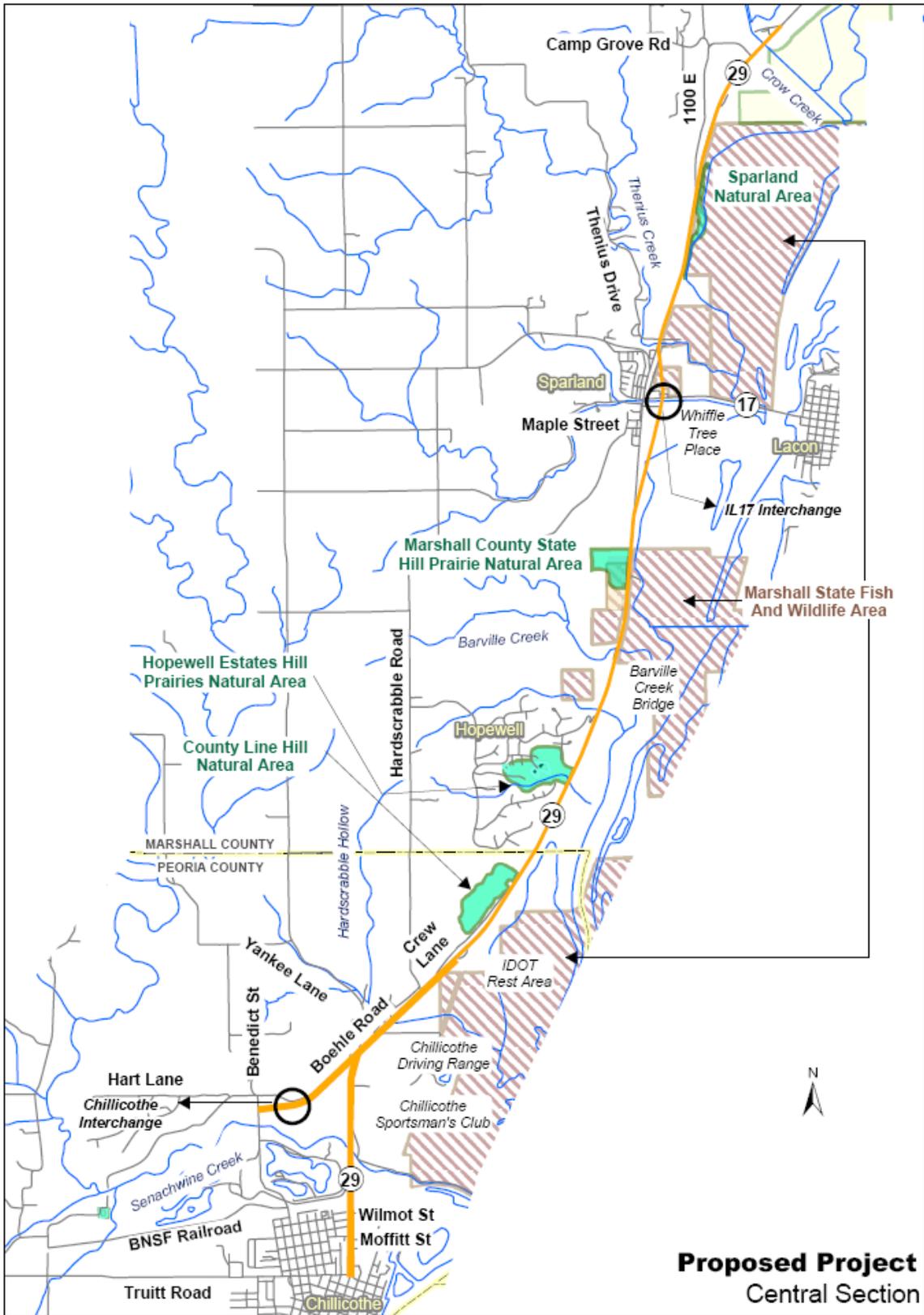
North of Putnam, widening would continue west of existing IL 29 through the Senachwine Valley Road intersection, which would be realigned slightly to the north. Widening would continue on the west through the Cabin Hill Road intersection to a restaurant and residences north of Cabin Hill Road. There the median would change from a 50-foot open, grass median to a 22-foot concrete barrier median to minimize impacts in the Miller-Anderson Woods Nature Preserve. A frontage road is proposed to provide access to the restaurant and adjacent residential properties.

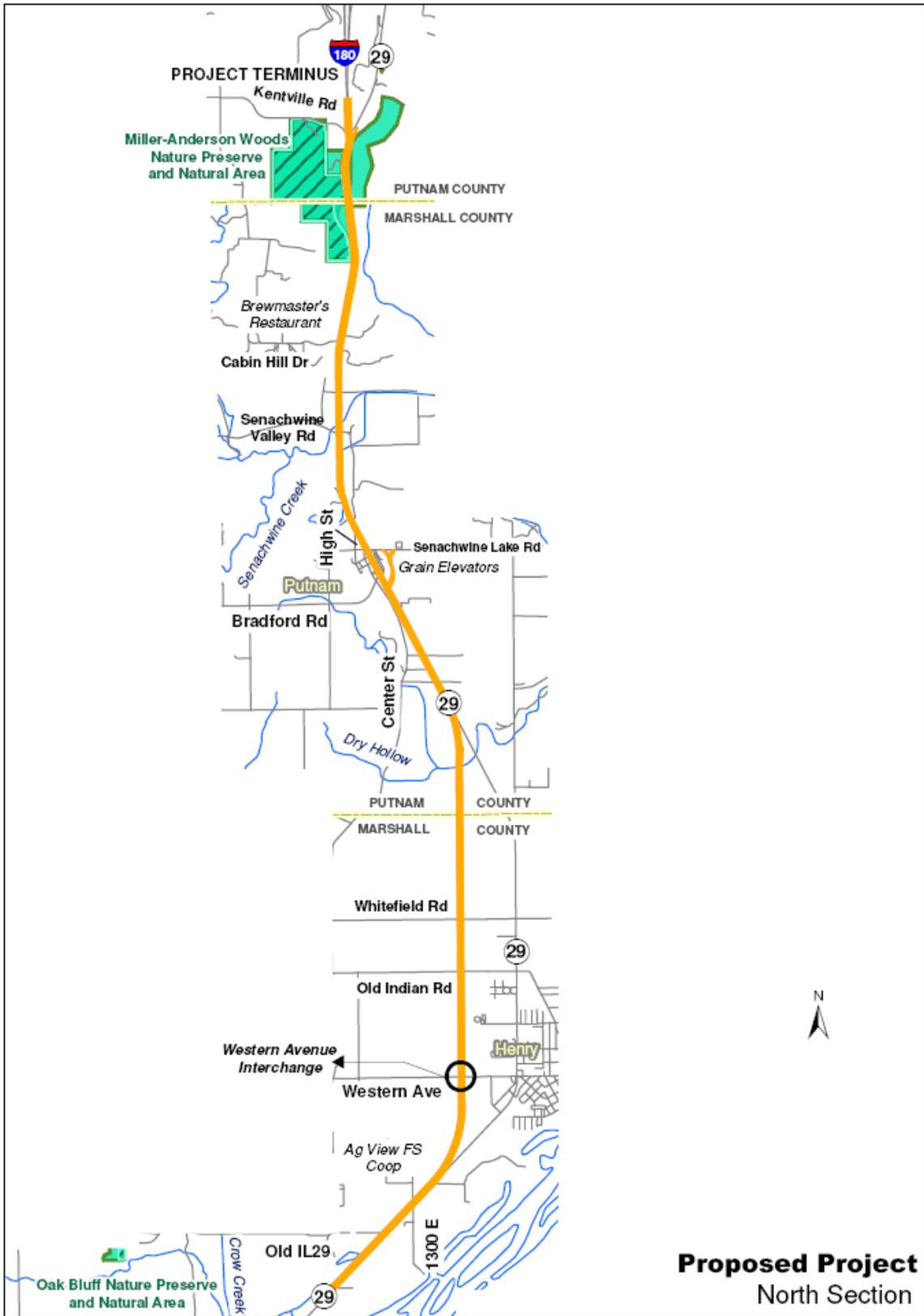
North of the restaurant, the proposed project would shift to the east side of IL 29 close to the CSX Railroad to avoid the nature preserve. To avoid changes to the slope and ditch along the west side of IL 29 adjacent to the preserve, a guardrail would be located on the west side of the road. A 5- to 18-foot retaining wall will be constructed on the east to limit the amount of right of way needed from the railroad. Up to 28 feet of railroad right of way will be used to accommodate the shift to the east.

The mainline profile begins to rise, from a point 1,300 feet south of Kentville Road to I-180, to improve the intersection sight distance and the existing profile grade. The intersection of Kentville Road would be 15 feet higher than the existing intersection, and the intersection angle with IL 29 would be improved to increase the stopping sight distance and safety of turning movements. The raise in profile would require some earthwork that affects bluffs north of the existing intersection. Retaining walls would be added to minimize impact to the bluff north of the proposed intersection where existing benching would remain in place.



Proposed Project
South Section





Resolution of Comments Received on the IL Route 29 Draft Environmental Impact Study

U.S. Environmental Protection Agency

Comment: We are concerned whether the wetland impact minimization strategies for the Build Alternative are sufficient to comply with the Section 404 Guidelines.

In particular, wetland W-16, wetland W-26, wetland W-52 at Crow Creek, and wetland C-2

Resolution: Wetland W-16 parallels the eastside of IL 29 south of Sparland. The wetland has a FQI of 23.8 and is 144.7 acres in size.

Impact from the preferred alternative equals 0.2 acre. The impact results from relocation of the railroad to provide access to Illinois Department of Natural Resources Spring Branch Unit of the Marshall State Fish & Wildlife Area. Of the 1,642 acres within the Spring Branch Unit this is the only location that provides access to the public for picnicking, fishing and to a boat launch. Maintaining this public access point is vital to the function of the facility and the only way access can be maintained is by relocation of the railroad.

Impact to W-16 has been greatly minimized by avoiding any impact to the 2 mile stretch of W-16 south of the IDNR property. Providing access to 6 parcels along this portion of IL 29 would have required a two (2) mile relocation of the railroad. The entire railroad relocation would have been within the limits of W-16. Instead, IDOT proposes to purchase these parcels (387 ac.) for environmental mitigation. Eventually this land will be transferred to the Illinois Department of Natural Resources for protection and maintenance.

Wetland W-26 is located east of IL 29 and south of IL 17 at Sparland. The wetland has a FQI of 21.7 and is 46.2 acres in size.

Impact for the preferred alternative equals 1.4 acres. The proposed IL 29 is located on new alignment in this area and the northeast corner of W-26 is impacted by the alignment. Five (5) interchange alternates were investigated at Sparland. All but Alternate 5 had greater wetland impacts than the alternate chosen (Alternate 3). Although Alternate 5 had less wetland impact it was not carried forward due to the impact on the Village of Sparland residential community and tax base. Alternate 5 would result in 35 residential displacements opposed to 11 for Alternate 3, 2 commercial displacements as opposed to 1 for Alternate 3 and 46 outbuildings as opposed to 14 for Alternate 3. In addition Alternate 5's design included tight loop ramps and an unsatisfactory low design speed.

Alternate 3 was revised later in the study to Alternate 3A which resulted in the impact to W-26. The revision was necessary in order to avoid flood buyout properties purchased with Federal Emergency Management Agency funding. The deed restrictions for these properties stipulate that the land can only be use for purposes compatible with open space, recreational, or wetlands management practices. Placing a highway facility on these parcels would be in violation of the FEMA deed restrictions.

Impact to W-26 has been greatly minimized by not providing roadway access to the Barnes/Barnes & Kidder property south of the IL 29/IL 17 interchange. Providing access to this parcel would require relocation of the railroad. The entire railroad relocation would have been within the limits of W-26. Instead, IDOT proposes to purchase this parcel (221.0 ac.) for environmental mitigation. Eventually this land will be transferred to the Illinois Department of Natural Resources for protection and maintenance.

Wetland W-52 is located west of IL 29 along Crow Creek. The wetland has a FQI of 20.8 and is 97.2 acres in size.

Using a roadway section with 2:1 side slopes and guardrail reduced the wetland impacts along Crow Creek to 9.7 acres. This is the impact shown in the DEIS on page 3-111. The 11 acre impact shown at the June 2006 Technical Advisory Meeting had not been properly updated. This has been further reduced to 8.6 acres by elimination of the drainage ditch at the bottom of the 2:1 slope. The final anticipated wetland impacts in the Crow Creek area are 4.6 acres to wetland W-52, 2.0 acres to wetland W-49, and 2.0 acres to wetland W-53. The impact to wetland W-52 could be further reduced to approximately 2.6 acres by construction of a retaining wall. However this option would add approximately \$12 million to the cost of the facility. The additional expenditure was not considered a prudent use of Federal and State monies. Instead, funding is proposed to purchase 240 acres of wetlands with FQI's of greater than 20 for environmental mitigation.

Wetland W-C2 is located west of IL 29 and south of Miller Anderson Woods Nature Preserve. The wetland has a FQI of 20.4 and is 0.1 acre in size.

Impact from the preferred alternate equals 0.1 acre. Extension of the retaining wall located south of W-C2 will be investigated to minimize impacts to this wetland. **Note:** *This has been investigated and a retaining wall will be included in the plans to minimize impacts to W-C2. The wall will cost approximately \$160,000 and will reduce the wetland impact from 0.1 acre (4,356 sq. ft.) to 0.03 acre (1,330 sq. ft.).*

Comment: We are concerned about the adequacy of the proposed project's tree mitigation plan and its affect on neotropical migratory birds. We urge the project proponents to protect additional nesting neotropical migrants by expanding the tree clearing to all 142 acres of trees planned for cutting.

Response: The tree clearing restriction which prohibits tree clearing from April 15 to August 15 will be applied to the entire project.

Comment: We are concerned about the adequacy of the proposed project's tree mitigation plan, and we question how the plan complies with the September 6, 2002 Illinois Department of Transportation Policy for Preservation and Replacement of Trees.

Response: The proposed mitigation plan does comply with the IDOT Departmental Policy D&E – 18, Preservation and Replacement of Trees. Design measures including utilizing a 22 foot median, split profile and retaining walls have greatly reduced impacts to trees, in addition approximately 30 acres of high quality upland forest on landlocked parcels and 59 acres of high quality upland forest currently owned by IDOT are proposed be transferred to IDNR for preservation and maintenance thereby, complying with Section 3d of the policy (Preservation of Trees).

Since the Draft EIS was circulated, tree mitigation measures shown on page 3-133 of the DEIS have been modified. At the 1st mitigation area on this page the prairie planting have been removed and 12 additional areas of trees have been added to the plan. This mitigation combined with the second mitigation scenario shown on page 3-133 of the DEIS would provide 54 acres of trees along Dickison Run Creek. The replacement of trees at these locations will add woody riparian habitat to a stream that currently is poorly developed in this regard. Some of these plantings are within the 100 year floodplain. This will provide an additional benefit to water quality and fish habitat. The establishment of a woody riparian corridor which is compatible with the proposed wildlife crossing at this point will better afford wildlife movement between the bluffs and the Illinois River. These plantings would also add habitat that will be used by neotropical migrants.

The last mitigation area show on page 3-133 has been changed from 7.7 acres of trees to 7.7 acres of prairie. It was felt that a large planting of prairie would have greater habitat value than an isolated stand of trees.

The 4 acres of tree mitigation shown at the top of page 3-134 occurs within a 15.2 acre wooded parcel that occurs along Hallock Creek and buffers the Root Cemetery Nature Preserve. The tree plantings at this location are intended to close openings that currently occur within this woodland. Closing these openings will benefit wildlife using the Senachwine Creek corridor and neotropical migrants. This mitigation area also provides relocation areas for *Viburnum molle* (a state listed plant species, small tree) that is impacted by the project.

The 8 acres of trees along Senachwine Creek, the second mitigation plan on page 3-134 of the DEIS, will be in the floodplain and therefore benefit water quality and wildlife habitat.

In conclusion, the intent of Section 3e(Replacement of Trees), is to provide replacement plantings that are comparable in function. The majority of trees to be removed (62%) are located in a linear corridor along State right-of-way. These are volunteer growth species of low value. The replacement plan, while not matching the acreage of trees to be removed, will provide higher quality of trees and function. The planting of 66 acres of trees along the riparian corridors of Dickison and Senachwine Creek and mixture of large stands of trees and prairie will provide a more diverse habitat for neotropical migrants and all wildlife in general.

The exact species of trees to be utilized for replacement will depend on the replacement site (wetland, floodplain or upland) and will be selected during the design phase of the project. All plantings will be species native to Illinois. The tree replacement proposal has been coordinated with all agencies via circulation of the DEIS.

U.S. Army Corps of Engineers, Regulatory Functions Branch

Comment: Wetland mitigation at sites W-B1 and W-B2 would not appear to provide much benefit to aquatic resources and water quality. If it is only a small of the mitigation plan I would not recommend a change.

Response: The quality of this wetland mitigation site, located on a seven (7) acre landlocked parcel, will be enhanced by planting of trees and grasses, the creation of additional wetlands, and the connection of the two existing wetlands. Wetland mitigation plans will be limited to no more than two and one half (2.5) acres.

U.S. Army Corps of Engineers, Economic and Environmental Analysis Branch

Comment: The DEIS states in several locations that the Illinois River is degraded. No mention is made of the environmental improvements in recent years to the river. This position minimizes the identified impacts of increased sedimentation and polluted runoff by this project.

Response: We believe that we have given a balanced treatment for the Illinois River. The document focuses on the tributaries of the Illinois River, which are directly impacted by the proposed project. The Illinois River is not directly affected by the project and is briefly discussed in the Surface Water Resources and Quality Chapter of the document under indirect impacts. In the indirect impact section we note that the river is an important economic and recreational resource. This reach of the Illinois River is listed as impaired by the Illinois EPA.

Through coordination with the US EPA and the COE the boundary for the discussion of the projects cumulative impacts was identified as the Illinois River on the east from south of Hennepin downstream to Mossville. A brief discussion of the studies, projects, and programs affecting this reach of the Illinois River was presented in the cumulative impact section of the Wildlife Resources and Surface Water Resources and Quality Chapters of the draft EIS. The studies included the Crow Creek West and Senachwine Creek South Watersheds, the Rock Island COE's Illinois River feasibility study, and the Mossville Bluffs Watershed Plan. The Senachwine Creek Phase I and II and the Hennepin & Hoppers Lakes Restoration projects were presented. On going programs, such as the Conservation Reserve

Program, Conservation Reserve Enhancement Program, Wetland Reserve Program, and the Environmental Quality Incentives Program were presented in the cumulative impact section. We are aware of the many wetland restoration efforts both above and below the project area, but these areas fall outside the boundary of the cumulative impacts discussion.

Comment: The alignment of the road in the lower portion of the Senachwine Creek (south) remains in the floodplain for a considerable distance, rather than crossing perpendicularly. This increases floodplain impacts.

Response: The Senachwine Creek floodplain has been an area of concern and intense alignment studies since the beginning of the project in 2002. Between 2002 and 2003 five (5) alignments which were studied were eliminated in part due to the impact on this floodplain. These alignments are shown in blue on Exhibit 2-4 of the Draft Environmental Impact Statement (Illinois).

In order to minimize impacts of the project, the existing Illinois 29 right-of-way was utilized to the greatest extent practical. However, to minimize impacts to Chillicothe, the proposed Illinois 29 is on new alignment west of the city. In order to tie this new alignment portion to the existing IL 29 corridor it was necessary to curve proposed Illinois 29 to the east. Since the main part of Chillicothe is located south of the Burlington Northern Railroad, the first opportunity to do this is north of the railroad where Senachwine Creek and its associated floodplains are located. Other restrictions in this area are Root Cemetery Nature Preserve and Natural Area, the Galena Road Gravel pits, and the Illinois River Bluff. The proposed alignment in this area was selected because it avoided impacts to Chillicothe's residential areas, Root Cemetery Nature Preserve and Natural Area, the deep lakes located on Galena Road Gravel property and provided a perpendicular crossing of the stream below the junction of Hallock and Senachwine Creeks. The currently proposed location of the alignment sits at the base of the Illinois River bluff. At this location an elevation difference of 100 feet exists from the bottom of the bluff and the top of the bluff, thereby restricting the proposed alignment location.

Positioning the roadway in the floodplain was unavoidable but the impact was minimized by pushing the alignment as far north as possible, thereby placing it at the edge of the floodplain. The best place to view the association between Chillicothe's northwest residential area, Galena Road Gravel pits, Burlington Northern Railroad and Senachwine Creek is on Exhibit 2-4; also refer to Aerial Exhibit Sheets 6 and 7.

Comment: Much of the proposed floodplain mitigation is proposed for landlocked parcels. This does nothing to mitigate floodplain function impacts.

Response: Per our conversation with Randy Kraciun and Karen Hagerty of your office, it appears this comment was mainly a result of misunderstanding of the term "landlocked parcel". The transportation definition of a landlocked parcel means that there is no connection between a piece of land and the local road network.

The 15.2-acre parcel owned by Galena Road Gravel, Inc. and the 21.1 acre parcel owned by Jerry L. Welch within the Senachwine Creek Floodplain would be not be accessible from proposed IL 29 or the local roadway network(See Aerial Exhibit Sheet 6). Currently, the only access for the entire Galena Road Gravel property (including the landlocked portion) is from Benedict Street. Because the proposed IL 29 would sever the 15.2-acre parcel from the remainder of the property to the east, the 15.2-acre parcel would lose its access to Benedict Street. Existing access to the Welch property is via Ratliff Road. The proposed IL 29 alignment lies between Ratliff Road and Senachwine Creek thereby, making the 21.1 acres between the proposed alignment and Senachwine Creek inaccessible. The Final Environmental Impact Statement will add an explanation of the term "landlocked".

While these parcels will be landlocked from the roadway system they are still directly connected to Senachwine Creek. These landlocked parcels will not only function as floodplain but they will be

protected from future development and the land within these parcels currently farmed will be planted either in trees or prairie. This added vegetation cover within the floodplain will also reduce sedimentation into the stream.

Comment: Runoff from the roadway will adversely impact plants with a high C value, reducing the FQI of wetlands adjacent to the road.

Response: Twelve of the wetlands in the project area have FQI's greater than 20 (see Table 3-39, page 3-99 in the DEIS). Of the approximately 242 plant species identified in the project areas wetlands, 15 of these species have a high C value (7-10; conservative species). These high C value species (with C value in parentheses) include swamp aster (7); marsh marigold (7), lurida sedge (7), blue-leaf willow (7), swamp white oak (7), hollow joe-pye weed (7), white turtlehead (7), blue-joint grass (7), hairy bedstraw (7), greater waterdock (7), skunk cabbage (8), rough-leaved goldenrod (9), cinnamon fern (9), bulblet water hemlock (9), and queen-of-the-prairie (10). Most of these high C value species occur within the seep (sites C2, W-67, W-75, and W-80) and marsh (sites W-79 and W-83) communities.

The following table shows the distribution of the plants with high C value.

Wetland	# of C value plant (7 – 10 Conservative Species)
WC-2	3
W-16	0
W-26	2
W-32	1
W-52	1
W-58	0
W-67	6
W-70	0
W-75	2
W-79	3
W-80	3
W-83	4

High C value species represent a small percentage (0-10%) of the species that occur in these wetlands and in general, do not significantly contribute to the overall FQI of the wetland. The exception to this occurs if the wetland is small in size and contains few species. This condition is met in the seep and marsh communities (sites WC2, W-67, W-75, W-80, W-83). The FQI values of over 20 are attributable to the number of species with C values of 4-6 (dominant/matrix species), which represent 20-45% of the species. The majority of species in the project area wetlands have C values between 0-3 (ruderal-competitive species), which represent 50-70% of the wetland species.

Wetland sites W-75, W-79, W-80 and W-83 are located at the northern end of the project along a portion of IL 29 which is not affected by the project. This portion of IL 29 is not proposed to be widened nor will any other construction activity occur in this area. Therefore, the proposed project will have no affect, direct or indirect, on these wetlands.

Wetland sites (number of high C value species in parentheses) directly affected by the proposed project include WC2 (three), W-16 (none), W-26 (two), and W-52 (one). Drainage in these areas will be along new vegetated ditches which will filter highway run off and drain into existing drainage ways, except for site WC2, which is 0.1 acre in size and will be totally displaced by construction.

Wetland sites W-32, W-58, and W-70 occur east of the railroad and are not directly affected by the project. In these areas, existing drainage patterns will channel roadway runoff into vegetated ditches located between the roadway and the railroad. These ditches will filter highway runoff which will drain into existing waterways or through existing culverts under the railroad into these wetlands as it currently does. Wetland W-67 is small in size but occurs west of the road and drain toward the road and will not be affected by drainage changes.

We conclude that roadway runoff will not adversely impact plants with a high C value or reduce the FQI of these sites.

Comment: Increased fragmentation is not adequately addressed.

Response: While some habitat fragmentation occurs in the Senachwine Creek (south) area, the remainder of the project is located either through agricultural fields or within the existing IL 29 corridor. To minimize the affect of habitat fragmentation and impact to wildlife movement in the Senachwine Creek (south) area four (4) large wildlife crossings are proposed. Two of these are located in the riparian corridor of the creek (See Aerial Exhibit Sheet 6).

Expanding IL 29 adjacent to the existing facility from north of Chillicothe to Camp Grove Road and from north of Henry to the end of the project will prevent bottomlands and uplands adjacent to the highway from being bisected or fragmented. The use of a narrowed typical section for roughly 11 miles along the proposed project also will help to minimize wildlife habitat impacts, although it is acknowledged that the short sections of split profile narrowed typical section may pose barriers for wildlife crossing the proposed project.

Including the wildlife crossings in the Senachwine Creek floodplain animal-vehicle collisions and the effects of retaining walls and median barriers on wildlife movement will be minimized by construction of 30 wildlife passages (spaced at approximately half mile intervals) which have been incorporated into the design of the project (Table 3-54, page 3-146 of the DEIS). The wildlife crossings are located to coincide with the high mammal and herptile roadkill areas (Exhibit 3-25). Wildlife passages consist of bridges and culverts. At all 12 proposed bridges, the bridge length/opening will be extended another 10 to 25 feet to provide a sufficiently wide dry crossing area adjacent to the stream for large animals (Exhibits 3-26 and 3-27 in the DEIS). Fencing will be installed for a distance from the bridge abutments parallel to the highway to direct deer and other wildlife to the mouth of the wildlife passage. Large and small culverts also will be used as wildlife passages. The large culverts, which are meant to accommodate deer and smaller wildlife, would be at least 10 feet high and sufficiently wide to attract and accommodate deer.

DEIS Exhibit 3-28 depicts a culvert designed to accommodate small and medium animals and Exhibit 3-29 one for large mammals. Provisions would be made for allowing daylight into the culverts that would pass under the median as a means of attracting deer. The culverts for smaller mammals (raccoon, muskrat, fox) and herptiles would be about 5 feet high. Because the culverts will also be used for drainage, there will be occasions when the water level in the culvert may be a deterrent to use by some species. However, the culverts are designed to provide a 2-foot-wide ledge to allow dry crossings for up to a 2-year storm. As at bridge wildlife crossing locations, fencing would be added to the wingwalls of culverts to guide wildlife to the openings.

As a further measure to minimize the effect of median barriers on wildlife movement, medians that do not trap wildlife are being considered at several locations throughout the project area. Openings in the barrier about 2 feet wide would allow smaller species to move along the barrier to these locations and then cross through the barrier.

U.S. Department of the Interior

Comment: The provisions of the programmatic Section 4(f) agreement have been satisfied.

Comment: The DEIS adequately addresses the potential impacts of the proposed project on US Fish & Wildlife and wildlife resources, including federally-listed, threatened and endangered species.
Response: No response was required.
Illinois Department of Agriculture
Comment: The proposed project is consistent with the IDOT's Agricultural Land Preservation Policy and in compliance with Illinois' Farmland Preservation Act.
Response: No response was required.
U.S. Department of Commerce, National Oceanic and Atmospheric Administration
Comment: The National Ocean Service must be notified not less than 90 days in advance of any activities which will disturb any horizontal and vertical geodetic control monuments.
Response: No response was required.
U.S. Department of Health & Human Services
Comment: If mitigation measures discussed are followed, there should be very minimal threats to the health and safety from the project.
Response: No response was required.
Comment: The DEIS does not make it clear whether the buildings to be removed have been surveyed to determine if they contain asbestos and lead materials. The FEIS should clarify this point.
Response: No response was required.
Illinois Environmental Protection Agency
Comment: The Agency has no objections to the project: however, a construction site activity stormwater NPDES permit will be required.
Response: No response was required.
Illinois Department of Natural Resources
Comment on the Detailed Action Report: The IDNR recommends that the <i>Viburnum molle</i> plants impacted be moved, to the greatest extent possible, to an area of suitable habitat with long term protections. Based on this recommendation being implemented, the Illinois Department of Natural Resources would concur that this project will not have an adverse impact on any State-listed species, Natural Areas or Nature Preserves.

Minimization and Mitigation Measures

Agriculture

- The alignments were designed to parallel property lines, where feasible, to keep farm severances, severance management zones, and uneconomical remnants to a minimum.
- Where practical, field access roads will be constructed to maintain access to farm fields.
- Existing surface and subsurface drainage will be maintained.
- Subsurface field tiles draining to, or intersected by, the proposed highway's right of way will be located by trenching in order to ensure that proper field drainage is maintained during construction.
- Agricultural impacts will be lessened by using landlocked parcels for mitigation purposes.

Cultural

- Under the stipulations of a Programmatic Agreement for Historic Bridges ratified by IHPA and FHWA in 2004, a Memorandum of Agreement was formulated and signed by IHPA, FHWA, and IDOT in November of 2005 which specifies mitigation measures for the adverse effects of the removal of SN 062-0011 (Appendix A, Other Agency Coordination).
- All the archaeological sites that have moderate or high research potential located within the construction limits of the proposed project will be subjected to subsurface evaluations (test excavations).

Geology, Soils, and Surface Water Resources

- High cut and fill slopes will be benched, where necessary, to minimize soil erosion and long-term maintenance including sloughing.
- The use of split profiles for certain segments of the project will reduce the disturbance to erodible soils, the risk of landslides and the risk of encountering abandoned mines.
- Principles and standards from IDOT's *Joint Design/Construction Procedure Memorandum on Erosion and Sediment Control* and other erosion control best management practices will be used to minimize soil erosion. An erosion control plan will be developed as part of this study that will reflect IDOT's erosion control practices. The preliminary plan includes the following concepts:
 - **Temporary Ditch Checks**
 - Ditch check material will vary according to velocity of flow in ditch.
 - Spacing of ditch checks will be adjusted according to ditch slope.
 - **Ditch Linings**
 - Temporary linings (excelsior blankets) will be installed according to ditch velocity during construction activities (prior to revegetation).
 - Permanent linings (paved ditches, riprap) will be installed according to ditch velocity after construction activities (after revegetation).

- **Culverts** – Downstream channels will be protected as required using riprap, energy dissipater basins, and so on, according to culvert outlet velocities.
- **Perimeter Erosion Barrier** will be installed in areas where sediments run off the construction area in sheet flow.
- **Inlet and Pipe Protection** will be installed immediately after inlets and pipes are constructed until surrounding area is paved or revegetated.
- **Stormwater Detention Ponds** will be installed at several locations in the project area to allow sediments to settle out of highway runoff. Five detention facilities are proposed along the proposed project: on the east side of Old Galena Road opposite the Audubon Wildlife Area, on the east side of Krause Road northeast of the proposed Rome West Road interchange, in the southwest quadrant of the proposed McGrath Road interchange, on the south side of Senachwine Valley Road near Senachwine Creek (North), and south of Putnam near Center Street.
- Basic erosion control principles and best management practices that will be used on the project include the following:
 - The size of disturbed area exposed at any one time and the duration of exposure will be minimized. Construction contracts could include limits on the amount of soil that can be exposed at any one time, measures to prevent erosion during spring thaw if construction is not completed before winter, and specifications to complete grading as soon as possible and revegetate with temporary and permanent cover.
 - Control methods will be used to prevent erosion and sedimentation in sensitive areas. Such methods include proper design of drainage channels with respect to width, depth, gradient, side slopes, and energy dissipation; protective ground cover such as vegetation, mulch, erosion mat, or riprap; dikes and intercepting embankments to divert sheet flow away from disturbed areas; and sediment control devices such as ditch checks, erosion bales, and silt fences, and retention or detention basins.

If a stream enhancement was impacted during construction it would be replaced in-kind.

Wetlands, Floodplains, and Designated Lands

- Alignments with notable wetland and floodplain impacts, such as Alignment N-4 east of IL 29 from Putnam to the north terminus, were eliminated from consideration (Section 2).
- The proposed project incorporates alignment shifts where practicable to minimize wetland impacts.
- To minimize impacts on wetlands, floodplains, and designated lands, a 22-foot median will be used in specific areas.
- Guard rail with steepened sideslopes will be used in the Crow Creek area to minimize wetland and floodplain impacts.
- Impact to W-16 has been minimized by avoiding any impact to the 2 mile stretch of W-16 south of the IDNR property. Providing access to 6 parcels along this portion of IL 29 would have required a two (2) mile relocation of the railroad. The entire railroad relocation would have

been within the limits of W-16. Instead, IDOT proposes to purchase these parcels (387 ac.) for environmental mitigation. Eventually this land will be transferred to the Illinois Department of Natural Resources for protection and maintenance

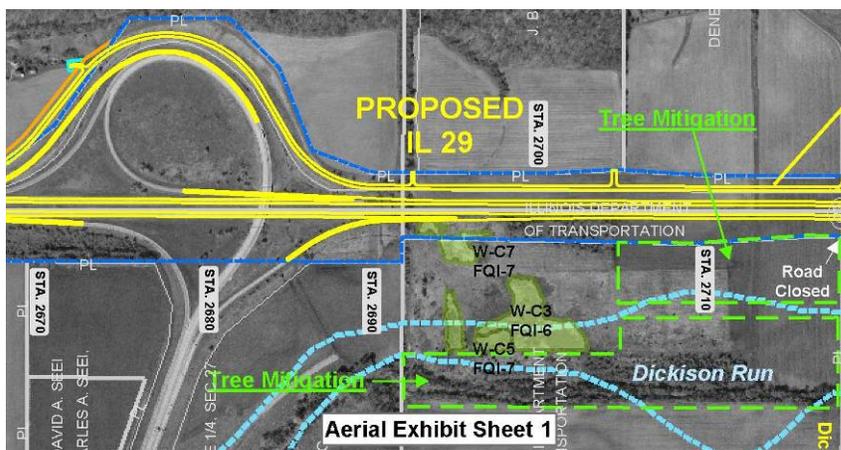
- Impact to W-26 has been minimized by not providing roadway access to the Barnes/Barnes & Kidder property south of the IL 29/IL 17 interchange. Providing access to this parcel would require relocation of the railroad. The entire railroad relocation would have been within the limits of W-26. Instead, IDOT proposes to purchase this parcel (221.0 ac.) for environmental mitigation. Eventually this land will be transferred to the Illinois Department of Natural Resources for protection and maintenance.
- Impact to W-52 has been minimized by using a roadway section with a 2:1 side slope, guardrails, and elimination of the drainage ditch at the bottom of the 2:1 slope.
- To minimize the impact at W-C2 a retaining wall was used which reduced the impact from 0.1-acres to 0.03 acres.
- Several structures, such as the proposed IL 29 bridge (north of Chillicothe) and the Crow Creek bridge, are designed to have fewer bridge piers in the water than the existing structures.
- In the Illinois River floodplain, 657.2 acres located east of IL 29, from just south of the Peoria/Marshal County Line to just north of Sparland, will be purchased by IDOT to mitigate the project's environmental impacts. The property east of IL 29, which will be transferred to IDNR, includes 293.9 acres of forested floodplain wetlands, which have a high native character and are an environmental asset (FQI greater than 20) and 25.6 acres of forested floodplain wetlands with FQIs of 16 to 19. This land will be transferred to IDNR in order to protect the high quality floodplain wetlands. Three farm fields within the floodplain east of IL 29 will be converted to wetlands.
- Wetlands W-C3, W-C5 and W-C6 located northeast of the existing IL 6 interchange near Mossville will be expanded to create new wetlands.
- The following design measures will be implemented to minimize impacts to the County Line Hill Prairie Natural Area, Hopewell Estates Hill Prairie Natural Area, Marshall County State Hill Prairie, Marshall County State Land and Water Reserve, Marshall State Fish and Wildlife Area Spring Branch, Marshall State Fish and Wildlife Area – Sparland Unit, and Miller-Anderson Woods Nature Preserve:
 - **Split Profile** – Long stretches of the proposed project from the IDOT rest area north of Chillicothe to the IL 29/Camp Grove Road intersection will be designed so that proposed southbound lanes are higher in elevation than northbound lanes. This strategy reduces the expansion into the bluff and the impact on designated lands west of IL 29. (Split profile design would not benefit Miller-Anderson Woods Nature Preserve and so is not proposed in that area.)
 - **Narrowed Median** – A 22-foot median will be used adjacent to every designated land north of Chillicothe to reduce impacts and near the Miller-Anderson Woods Nature Preserve. The standard median width in other areas of the corridor is 50 feet.

- **Retaining Walls, Barrier, and Guardrail**—Several retaining wall, barrier, and guardrail designs will be incorporated into the proposed project to minimize the amount of new right of way required from designated lands and other uses.
- **Alignment Shift**—During the alignment studies, the proposed widening of IL 29 was shifted to the east to minimize impacts to the natural areas and nature preserves west of existing IL 29.
- The following measures will be implemented to minimize and mitigate impacts to land owned by IDNR:
 - Four landlocked parcels immediately west of IL 29 and north of IL 17 will be transferred to IDNR. The parcels total 31.2 acres. The exact size of the land will be determined after the design phase of the project is completed. Jurisdictional transfer of 59.8 acres of IDOT property adjacent to these landlocked parcels to IDNR is also proposed. This would place a total of 91 acres containing oak upland forests with an FQI of 33.4 under the protection of IDNR. Refer to Aerial Exhibit sheets 10 and 11.
 - Several parcels located east of IL 29, between the railroad and the Illinois River, will be purchased by IDOT and used to mitigate the project's environmental impacts. The parcels, which total 657.2 acres, consists of 56.7 acres of cropland, 319.5 acres of forested wetlands, and 267.1 acres of backwater of the Illinois River. Of the 319.5 acres of forested wetlands, 293.9 acres located south of Sparland are of exceptional quality with FQI ratings of 22 and 24. The 22.2 acres of forested wetlands north of Sparland also are of high quality with an FQI of 19.
 - Ownership of these parcels will be transferred to IDNR. These lands, combined with two parcels owned by IDNR, will provide a continuous strip of IDNR land from roughly 0.75 mile south of IL 17 in Sparland to Senachwine Creek north of Chillicothe.
 - Transfer of these lands will increase IDNR land holdings in the unique environmental setting by about 734 acres.
 - The landlocked parcel located north of the BNSF Railroad (and the proposed Truitt Road interchange) will be transferred to IDNR. The parcel, which is 15.2 acres in size, is located east of IDNR's Root Cemetery Nature Preserve and Natural Area. Several populations of arrowwood (*Viburnum molle*), an Illinois threatened plant, are located on the parcel, and IDNR could expand the boundaries of the Root Cemetery Nature Preserve and Natural Area to encompass the land.
 - IDOT, will provide funding for IDNR, to enhance the hill prairies at the Hopewell Hill Prairie and the Marshall County Hill Prairie Land and Water Reserve
 - IDOT, in conjunction with IDNR, will restore a 15-acre old field community within the boundaries of Miller-Anderson Woods Nature Preserve.
 - IDOT, in conjunction with IDNR, will implement weed control measures at Miller-Anderson Woods Nature Preserve.
 - IDOT will construct a 40- by 60-foot gravel parking lot located off the existing entrance road to Miller-Anderson Woods Nature Preserve.

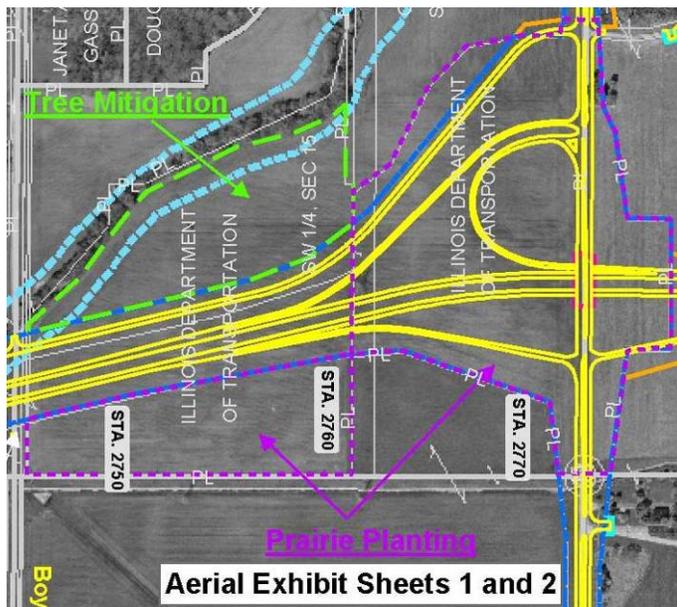
- Excess right of way at the south end of Miller-Anderson Woods Nature Preserve will be transferred to IDNR.
- As a precautionary measure, a commitment would be placed in the official project file stating that if culvert invert elevations are lowered or capacities increased through Miller-Anderson Woods Nature Preserve, the effects on groundwater conditions would be reevaluated.
- All potential borrow sites, waste areas, and other contractor generated use areas will require biological, wetland, and cultural resource clearances from IDOT.

Plant Communities and Wildlife Resources

IDOT has preliminarily identified the following mitigation measures for upland plant communities and wildlife habitat.



38 acres of trees will be planted on land currently owned by IDOT northeast of the existing IL 6 interchange near Mossville.



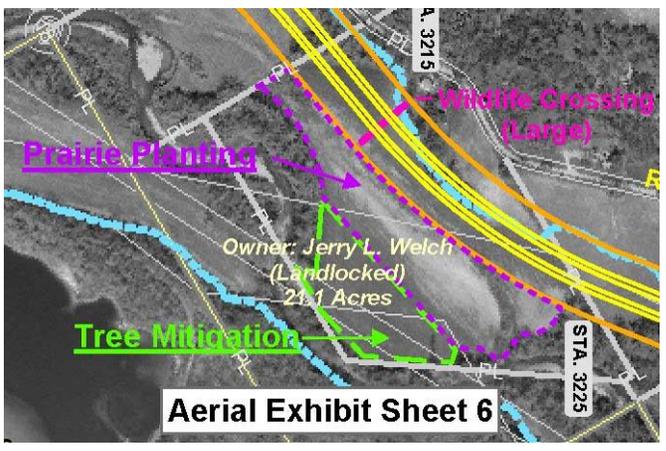
16 acres of trees and 43 acres of prairie will be planted on land currently owned by IDOT at the proposed Cedar Hills Drive interchange.



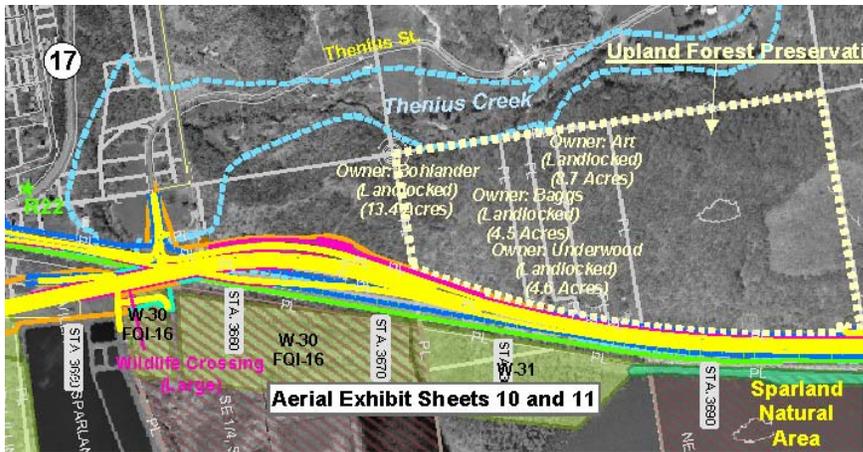
7.7 acres of prairie grass will be planted on a landlocked parcel between Stations 2876 and 2888.



4 acres of trees will be planted on a landlocked parcel north of the BNSF Railroad.



8 acres of trees and 4 acres of prairie will be planted on a landlocked parcel located along Senachwine Creek between Stations 3210 and 3224.



Roughly 28.9 acres of high quality upland forest on landlocked parcels north of IL 17 and 59.7 acres on land currently owned by IDOT will be protected from development by transferring the land to IDNR.

- In accordance with BD&E Procedure Memo #14-00, the backslopes of the proposed roadway will be seeded with Class 4 and Class 5 seed mixture where appropriate. These are prairie seed mixes. This will result in roughly 200 acres of prairie.
- Several parcels east of IL 29, between the railroad and the IL River, will be purchased by IDOT and used to mitigate the project's environmental impacts. The parcels east of IL 29, which total 657.2 acres, consist of 56.7 acres of cropland, 319.5 acres of forested wetlands and 267.1 acres of backwater of the Illinois River. The transfer of land, along with two parcels owned by IDNR, will protect a continuous strip of wildlife habitat land from 0.75 mile south of IL 17 in Sparland to Senachwine Creek north of Chillicothe
- Expanding IL 29 adjacent to the existing facility from north of Chillicothe to Camp Grove Road and in the Miller-Anderson Woods Nature Preserve will limit impacts to the project area's prime wildlife habitat to edge impacts, thus minimizing loss of wildlife habitat.
- The use of a narrowed typical section for about 11 miles along the proposed project will help to minimize wildlife habitat impacts, although the split profile narrowed typical section may pose barriers for wildlife crossing the proposed project.
- To minimize the animal-vehicle collisions and the effects of retaining walls/median barriers on wildlife movement, roughly 30 wildlife passages (spaced at 0.5-mile intervals) have been incorporated into the design of the proposed project. Wildlife passages consist of bridges and culverts. At all 12 proposed bridges, the bridge length/opening will be extended an additional 10 to 25 feet to provide a sufficiently wide dry crossing area adjacent to the stream for large animals. Large and small culverts also will be used as wildlife passages. The large culverts, meant to accommodate deer and smaller wildlife, would be at least 10 feet high and sufficiently wide to attract and accommodate deer. Provisions would be made for allowing daylight into culverts that would pass beneath the median as a means of attracting deer. The culverts for smaller mammals (raccoon, muskrat, fox) and amphibians/reptiles would be about 5 feet high. Because the culverts also will be used for drainage, there will be occasions when the water level in the culvert may be a deterrent to use by some species. However, the culverts have been designed to provide a 2-foot-wide ledge to allow dry crossings for up to a 2-year storm.
- To minimize the effect of median barriers on wildlife movement, medians that do not trap wildlife are being considered at several locations throughout the project area. Openings in the

barrier about 2 feet wide would allow smaller species to move along the barrier to those locations and then cross through the barrier. Tree removal will not be allowed between April 15 and August 15 of any given year.

- Tree removal will not be allowed between April 15 and August 15 of any given year.

Threatened and Endangered Species

- Several arrowwood plants, an Illinois threatened species, are in jeopardy of being disrupted by mining operations. The proposed improvement would landlock 15.2 acres of Galena Road Gravel property thereby protecting the plants. The landlocked part of the property would be transferred to IDNR for future protection and management.
- The decurrent false aster, a federal and state threatened species, will be relocated to an agricultural field (field 2) in the environmental mitigation area east of IL 29 (Exhibit 3-21). Unlike the other fields in the mitigation area, field 2 will not be used for wetland mitigation. All the environmental mitigation parcels will be transferred to IDNR for management and protection. Through an agreement with IDOT, IDNR will maintain the fields of decurrent false asters. The *Decurrent False Aster Recovery Plan* published by the U.S. Department of Interior, U.S. Fish and Wildlife Service in 1990, lists three criteria for recovery of the species. Criterion 2 states "Twelve geographically distinct self-sustaining natural or established populations of the species must be protected through purchase in fee, easement of by cooperative management agreements." This mitigation measure would meet Criterion 2 of the Recovery Plan. Criterion 3 of the plan states "Populations must be monitored for a period of five years to determine if they are self-sustaining." To meet this criterion, INHS will monitor the decurrent false aster fields for 5 years.

Visual Resources

Although the visual scale of the highway will increase, landscaping features within and adjacent to the highway right of way would minimize adverse effects. A landscaping plan that will be developed during a future engineering phase could include the following provisions:

- Preserve the existing vegetation as much as possible.
- Perform landscape planting, including trees and prairie plant species, and natural revegetation of cut and fill slopes.
- Landscape along the right of way in Putnam and Sparland.
- Replace vegetation cleared from the existing or proposed rights of way with grasses (except at habitat loss mitigation areas).

Section 4(f)

- Under the stipulations of a Programmatic Agreement for Historic Bridges ratified by IHPA and FHWA in 2004, a Memorandum of Agreement was formulated and signed by IHPA, FHWA, and IDOT in November 2005 that specifies mitigation measures for the adverse effects of the removal of AN 062-001 (Appendix A, Other Agency Coordination).

- IDOT also will ensure that a bridge in Illinois analogous to the Barrville Creek Bridge will be sought and, if found, substituted for the adversely affected bridge on the Illinois Historic Bridge Survey. No bridges similar to structure SN 062-0011 were located within Marshall County.

Public Hearing Summary

The project's open-house public hearings were held on June 14th and 15th, 2006 from 4:00 p.m. to 7:00 p.m. The June 14th meeting was held at Three Sisters Park in Chillicothe and was attended by approximately 346 people. Approximately 180 attended the meeting on June 15th in Henry at Henry-Senachwine High School. The purpose of the public hearings was to present the preferred alternative to project-area residents and offer a forum for people to ask questions and provide their comments.

At Three Sisters Park, 65 people left comments. Twenty-two comments were in overall support of the proposed project, 39 were in opposition and 4 comments did not indicate a preference. Concerns most frequently voiced were that other transportation projects should be completed, existing roads should be improved or that taxes should focus on other government programs. Other frequent comments were concerns about an increase in noise and the proposed project's effect on other environmental resources. People were also concerned that the proposed project would not support local economic sustainability while others believe that it would. Concerns about the proposed project's impact to rural lifestyle were also voiced.

- Fifty-six people left comments at Henry-Senachwine High School. Twenty-four comments were in overall support of the proposed project, 27 were in opposition and 5 comments did not indicate a preference. Many of those commenting believe the project would improve local economies along the corridor including Henry's. People were also concerned about the proposed project's impact on the environment and rural lifestyle. Other common concerns were that traffic numbers and population growth are not high enough to warrant the proposed improvements. Other frequently heard comments were in support of the project's reuse of existing right-of-way to the greatest extent possible and for the project to be built as soon as possible.
- An additional 52 people sent in comments via mail. Seventeen comments were in overall support of the proposed project, 32 were in opposition and 3 comments did not indicate a preference. The most common comments were that taxes should be focused on other transportation projects in the area. Other commonly heard comments were concerns about the construction cost and schedule and the proposed project's impact to environmental resources. People commented frequently that they believed the proposed project would improve safety. Also, multiple people were concerned about the proposed project's impact to the scenic nature of IL 29 and to their rural lifestyle.

Preferred Alternative Concurrence Point Package Email.txt

From: Fuller, Matt [mailto:Matt.Fuller@fhwa.dot.gov]
Sent: Tuesday, October 03, 2006 4:21 PM
To: shamer@dnrmail.state.il.us; Tsavko@agr.state.il.us; Allison, James;
westlake.kenneth@epa.gov; ellens.newton@epa.gov; heidi_woeber@fws.gov;
john.g.betker@usace.army.mil
Cc: Stevenson, Jerry; Piland, Janis; Kohler, Jon-Paul; Strang, Randy; Perino,
Charles H; Stevens, Barbara H; Larson, Greg V; Green, Paula A
Subject: IL 29 EIS -- Preferred Alternative Concurrence Point Package

Hello again...I forgot to mention we would request that each of you respond to our concurrence request within 30-days. Thanks!
Matt

All--

Attached is the Preferred Alternative Concurrence Package for the Illinois Route 29 project from IL 6 to I-180. The EIS was signed by FHWA on April 24, 2006 and the public comment period expired on June 23, 2006. The Illinois DOT District 4 staff coordinated with the resource agencies previously and agreement was reached to request concurrence on the preferred alternative via e-mail. With the submittal of this concurrence package, FHWA and IDOT hereby request your concurrence with the preferred alternative identified in the attached document. Please e-mail or call me if you have any questions concerning this request.

Sincerely,

Matt Fuller

Environmental Programs Engineer

FHWA-IL Division Office

217-492-4625

<<2006-09-28 IL 29 EIS -- Concurrence Point 3 Packet.doc>>

-----Original Message-----

From: EIlens, Newton@epamail.epa.gov
[mailto:EIlens, Newton@epamail.epa.gov]
Sent: Friday, January 19, 2007 9:06 AM

To: Fuller, Matt

Cc: heidi_woeber@fws.gov; james.allison@epa.state.il.us; Piland, Janis; Stevenson, Jerry; john.g.betker@usace.army.mil; Kohler, Jon-Paul; Green, Paula A; Strang, Randy; shamer@dnrmail.state.il.us; Tsavko@agr.state.il.us
Subject: Re: FW: IL 29 EIS -- Preferred Alternative Concurrence Point Package

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), Section 309 of the Clean Air Act, and the concurrent NEPA/Clean Water Act, Section 404 review process, we have reviewed the additional mitigation strategies proposed for the IL 29 preferred alternative in the Crow Creek floodplain. We find the mitigation strategies to be acceptable; therefore, we concur with the preferred alternative.

Thanks for your work on this project. Please call if you have any questions.

Newton EIlens
Environmental Protection Specialist
U.S. Environmental Protection Agency (B-19J)
77 West Jackson Boulevard
Chicago, Illinois 60604
(312) 353-5562

"Fuller, Matt"
<Matt.Fuller@fhwa.dot.gov>

01/18/2007 10:18 AM

Newton EIlens/R5/USEPA/US@EPA,
heidi_woeber@fws.gov,
john.g.betker@usace.army.mil

james.allison@epa.state.il.us,
"Paula Green (E-mail)"
<Paula.Green@illinois.gov>,
shamer@dnrmail.state.il.us,
Tsavko@agr.state.il.us,
"Stevenson, Jerry"
<Jerry.Stevenson@fhwa.dot.gov>,
"Piland, Janis"
<Janis.Piland@fhwa.dot.gov>,
"Kohler, Jon-Paul"
<Jon-Paul.Kohler@fhwa.dot.gov>,
"Strang, Randy"
<Randy.Strang@fhwa.dot.gov>

To

cc

Subject

FW: IL 29 EIS -- Preferred
Alternative Concurrence Point
Package

Page 1

In response to USEPA's comments on concurrence package #3, the Illinois Department of Transportation has made design revisions in the Crow Creek area to minimize impacts to wetlands W-52 (FQI of 21) and W-53 (FQI 16). The revised design is shown on the attached aerial. When the aerial is enlarged to 100% a dashed orange line is visible that indicates the right-of-way required with the retaining wall design. The solid orange line indicates the right-of-way required with the 2:1 slope design.

The table below shows that the retaining wall design will reduce impacts to wetland W-52 by 2.3 acres and wetland W-53 by 0.7 acres.

Retaining Wall	2:1 impacts	Wall impacts	Reduction	Cost-2:1	Added Cost of Wall
A	W52 = 2.2 W53 = 1.9	W52 = 0.9 W53 = 1.2	W52 = 1.3 W53 = 0.7	3.3 mil	3.5 mil
Total	4.1	2.1	2.0		
B	W52 = 2.6	W52 = 1.6	W52 = 1.0	1.6 mil	2.0 mil
Total	W52 = 4.8 W53 = 1.9	W52 = 2.5 W53 = 1.2	W52 = 2.3 W53 = 0.7	4.9 mil	5.5 mil

IDOT and FHWA's preferred alternative is considered to be the preferred alternative contained in the concurrence point #3 package, with the above design changes incorporated into the alternative. FHWA hereby requests concurrence from USFWS, USEPA, and USACE on the preferred alternative for the IL-29 project.

Thanks and if you have any questions, please feel free to call me.

Matt Fuller
 Environmental Programs Engineer
 217-492-4625

-----Original Message-----

From: EIlens, Newton@epamail.epa.gov

[mailto:EIens.Newton@epamail.epa.gov]

Sent: Tuesday, October 31, 2006 9:16 AM

To: Fuller, Matt

Cc: heidi_woeber@fws.gov; Allison, James; john.g.betker@usace.army.mil; Green, Paula A; shamer@dnrmail.state.il.us; Tsavko@agr.state.il.us

Subject: Re: IL 29 EIS -- Preferred Alternative Concurrence Point Package

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), Section 309 of the Clean Air Act, and the concurrent NEPA/Clean Water Act, Section 404 review process, we have reviewed the September 2006 NEPA/404 Merger Packet: Preferred Alternative Concurrence Point (NEPA/404 Merger Packet) for the Illinois Route 29 Study (IL-6 to I-180, Illinois). The Federal Highway Administration and the Illinois Department of Transportation (the project proponents) are preparing a Final Environmental Impact Statement for the proposed project. The project proponents requested our concurrence with the Preferred Alternative.

We are concerned about whether the strategies to minimize wetland impacts for the Preferred Alternative are sufficient to comply with the Clean Water Act, Section 404 (Section 404) Guidelines. At a June 1, 2006 Technical Advisory Committee Meeting, the project proponents stated that wetland impacts totaled 11 acres within the Crow Creek Floodplain, under the preferred alternative. An August 2, 2006 Illinois Department of Transportation letter and the NEPA/404 Merger Packet state that wetland impacts were further reduced to 8.6 acres by three mitigation strategies:

1. Steeper side slopes (2:1),
2. Guardrail, and
3. Elimination of the drainage ditch at the bottom of the 2:1 slope.

Despite these efforts to reduce wetland impacts, we still think that the Preferred Alternative impacts a significant amount of wetlands in the Crow Creek Floodplain. Section 404 Guidelines require the project proponents to minimize such impacts to the extent practicable. The project proponents previously considered an alternate roadway cross-section utilizing a retaining wall; this cross-section only impacted 5 acres of wetlands in the Crow Creek Floodplain. The alternate cross-section was dropped from consideration because of its cost. We request the project proponents to either: (1) reconsider implementing the alternate roadway cross-section, or (2) adopt wetland impact minimization strategies which are as effective as the alternate roadway cross-section. We are withholding concurrence with the Preferred Alternative until this issue is resolved.

Thank you for the opportunity to review the NEPA/404 Merger Packet. If you have any questions, please contact Newton EIlens, at (312) 353-5562, for NEPA-related issues, or Sue Elston, at (312) 886-6115, for Section 404-related issues.

-----Original Message-----

From: Betker, John G MVR [mailto:John.G.Betker@mvr02.usace.army.mil]
Sent: Friday, January 19, 2007 9:40 AM
To: Fuller, Matt; Ellens.Newton@epamail.epa.gov; Heidi_woeber@fws.gov
Cc: james.allison@epa.state.il.us; Green, Paula A; shamer@dnrmail.state.il.us;
Tsavko@agr.state.il.us; Stevenson, Jerry; Piland, Janis; Kohler, Jon-Paul; Strang,
Randy
Subject: RE: IL 29 EIS -- Preferred Alternative Concurrence Point Package
(UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Matt, we also concur with the design changes and the reduction in wetland impacts that will occur as a result. As always, we appreciate yours and the IDOT's cooperation in seeking to reduce wetland impacts to the maximum extent without compromising your goals for safe and improved transportation projects. Newton, thanks to you for the speedy review!! John Betker

-----Original Message-----

From: Fuller, Matt [mailto:Matt.Fuller@fhwa.dot.gov]
Sent: Thursday, January 18, 2007 10:19 AM
To: Ellens.Newton@epamail.epa.gov; Heidi_woeber@fws.gov; Betker, John G MVR
Cc: james.allison@epa.state.il.us; Paula Green (E-mail); shamer@dnrmail.state.il.us;
Tsavko@agr.state.il.us; Stevenson, Jerry; Piland, Janis; Kohler, Jon-Paul; Strang,
Randy
Subject: FW: IL 29 EIS -- Preferred Alternative Concurrence Point Package

In response to USEPA's comments on concurrence package #3, the Illinois Department of Transportation has made design revisions in the Crow Creek area to minimize impacts to wetlands W-52 (FQI of 21) and W-53 (FQI 16). The revised design is shown on the attached aerial. When the aerial is enlarged to 100% a dashed orange line is visible that indicates the right-of-way required with the retaining wall design. The solid orange line indicates the right-of-way required with the 2:1 slope design.

The table below shows that the retaining wall design will reduce impacts to wetland W-52 by 2.3 acres and wetland W-53 by 0.7 acres.

Retaining Wall

2:1 impacts

Wall impacts

Reduction

Cost-2:1

Added Cost of Wall

A

W52 = 2.2

USCOE Concurrence.txt

W53 = 1.9

W52 = 0.9

W53 = 1.2

W52 = 1.3

W53 = 0.7

3.3 mi l

3.5 mi l

Total

4.1

2.1

2.0

B

W52 = 2.6

W52 = 1.6

W52 = 1.0

1.6 mi l

2.0 mi l

Total

W52 = 4.8

W53 = 1.9

W52 = 2.5

W53 = 1.2

W52 = 2.3

W53 = 0.7

4.9 mi l

5.5 mi l

IDOT and FHWA's preferred alternative is considered to be the preferred alternative contained in the concurrence point #3 package, with the above design changes incorporated into the alternative. FHWA hereby requests concurrence from USFWS, USEPA, and USACE on the preferred alternative for the IL-29 project.

Thanks and if you have any questions, please feel free to call me.

Matt Fuller
Environmental Programs Engineer
217-492-4625

-----Original Message-----

From: Eilens.Newton@epamail.epa.gov
[mailto:Eilens.Newton@epamail.epa.gov]
Sent: Tuesday, October 31, 2006 9:16 AM
To: Fuller, Matt
Cc: heidi_woeber@fws.gov; Allison, James; john.g.betker@usace.army.mil; Green, Paula
A; shamer@dnrmail.state.il.us; Tsavko@agr.state.il.us
Subject: Re: IL 29 EIS -- Preferred Alternative Concurrence Point Package

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), Section 309 of the Clean Air Act, and the concurrent NEPA/Clean Water Act, Section 404 review process, we have reviewed the September 2006 NEPA/404 Merger Packet: Preferred Alternative Concurrence Point (NEPA/404 Merger Packet) for the Illinois Route 29 Study (IL-6 to I-180, Illinois). The Federal Highway Administration and the Illinois Department of Transportation (the project proponents) are preparing a Final Environmental Impact Statement for the proposed project. The project proponents requested our concurrence with the Preferred Alternative.

We are concerned about whether the strategies to minimize wetland impacts for the Preferred Alternative are sufficient to comply with the Clean Water Act, Section 404 (Section 404) Guidelines. At a June 1, 2006 Technical Advisory Committee Meeting, the project proponents stated that wetland impacts totaled 11 acres within the Crow Creek Floodplain, under the preferred alternative. An August 2, 2006 Illinois Department

of Transportation letter and the NEPA/404 Merger Packet state that wetland impacts were further reduced to 8.6 acres by three mitigation strategies:

1. Steeper side slopes (2:1),
2. Guardrail, and
3. Elimination of the drainage ditch at the bottom of the 2:1 slope.

Despite these efforts to reduce wetland impacts, we still think that the Preferred Alternative impacts a significant amount of wetlands in the Crow Creek Floodplain. Section 404 Guidelines require the project proponents to minimize such impacts to the extent practicable. The project proponents previously considered an alternate roadway cross-section utilizing a retaining wall; this cross-section only impacted 5 acres of wetlands in the Crow Creek Floodplain. The alternate cross-section was dropped from consideration because of its cost. We request the project proponents to either: (1) reconsider implementing the alternate roadway cross-section, or (2) adopt wetland impact minimization strategies which are as effective as the alternate roadway cross-section. We are withholding concurrence with the Preferred Alternative until this issue is resolved.

Thank you for the opportunity to review the NEPA/404 Merger Packet. If you have any questions, please contact Newton Ellens, at (312) 353-5562, for NEPA-related issues, or Sue Elston, at (312) 886-6115, for Section 404-related issues.

Classification: UNCLASSIFIED
Caveats: NONE

USFWS Concurrence.txt

-----Original Message-----

From: Fuller, Matt [mailto:Matt.Fuller@fhwa.dot.gov]
Sent: Monday, January 22, 2007 9:03 AM
To: Heidi_Woeber@fws.gov; john.g.betker@usace.army.mil;
Ellens.Newton@epamail.epa.gov
Cc: james.allison@epa.state.il.us; Piland, Janis; Stevenson, Jerry; Kohler,
Jon-Paul; Green, Paula A; Strang, Randy; shamer@dnrmail.state.il.us;
Tsavko@agr.state.il.us
Subject: RE: FW: IL 29 EIS -- Preferred Alternative Concurrence Point Package

Thanks to everyone for providing quick review and response to the third concurrence point for IL 29. Concurrence point #3 for the IL 29 project is now concluded with all signatory agencies to the NEPA/404 merger agreement concurring with IDOT & FHWA's preferred alternative. Thanks again!

Matt

-----Original Message-----

From: Heidi_Woeber@fws.gov [mailto:Heidi_Woeber@fws.gov]
Sent: Monday, January 22, 2007 8:43 AM
To: Fuller, Matt
Cc: Ellens.Newton@epamail.epa.gov; james.allison@epa.state.il.us; Piland, Janis;
Stevenson, Jerry; john.g.betker@usace.army.mil; Kohler, Jon-Paul; Paula Green
(E-mail); Strang, Randy; shamer@dnrmail.state.il.us; Tsavko@agr.state.il.us
Subject: Re: FW: IL 29 EIS -- Preferred Alternative Concurrence Point Package

Matt:

The U.S. Fish and Wildlife Service provides concurrence on ILDOT's revised design to minimize impacts to wetlands W-52 and W-53 in the Crow Creek Area in regard to IL 29 EIS - Preferred Alternative Concurrence Point Package.

Thanks for the opportunity to review the revised plans.

Heidi Woeber
Fish and Wildlife Biologist
Ecological Services, Rock Island Field Office
4469 48th Avenue Court
Rock Island, Illinois 61201
309/793-5800 Ext. 209
309/793-5804 Fax
heidi_woeber@fws.gov

"Our life is frittered away by detail.
Simplify, simplify."
-Henry David Thoreau

"Fuller, Matt"

<Matt.Fuller@fhwa
.dot.gov>

To

<Ellens.Newton@epamail.epa.gov>,

01/18/2007 10:18

<heidi_woeber@fws.gov>,

AM

<john.g.betker@usace.army.mil>

Page 1

USFWS Concurrence.txt

cc

<james.allison@epa.state.il.us>,
"Paul a Green \ (E-mail \)"
<Paul a.Green@illinois.gov>,
<shamer@dnrmail.state.il.us>,
<Tsavko@agr.state.il.us>,
"Stevenson, Jerry"
<Jerry.Stevenson@fhwa.dot.gov>,
"Pi land, Jani s"
<Jani s.Pi land@fhwa.dot.gov>,
"Kohl er, Jon-Paul "
<Jon-Paul.Kohl er@fhwa.dot.gov>,
"Strang, Randy"
<Randy.Strang@fhwa.dot.gov>

Subject

FW: IL 29 EIS -- Preferred
Alternative Concurrence Point
Package

In response to USEPA's comments on concurrence package #3, the Illinois Department of Transportation has made design revisions in the Crow Creek area to minimize impacts to wetlands W-52 (FQI of 21) and W-53 (FQI 16). The revised design is shown on the attached aerial. When the aerial is enlarged to 100% a dashed orange line is visible that indicates the right-of-way required with the retaining wall design. The solid orange line indicates the right-of-way required with the 2:1 slope design.

The table below shows that the retaining wall design will reduce impacts to wetland W-52 by 2.3 acres and wetland W-53 by 0.7 acres.

Page 2

USFWS Concurrence.txt

Retaining Wall	2:1 impacts	Wall impacts	Reduction	Cost-2:1	Added Cost
Wall		impacts			of Wall
A	W52 = 2.2 W53 = 1.9	W52 = 0.9 W53 = 1.2	W52 = 1.3 W53 = 0.7	3.3 mil	3.5 mil
Total	4.1	2.1	2.0		
B	W52 = 2.6	W52 = 1.6	W52 = 1.0	1.6 mil	2.0 mil
Total	W52 = 4.8 W53 = 1.9	W52 = 2.5 W53 = 1.2	W52 = 2.3 W53 = 0.7	4.9 mil	5.5 mil

IDOT and FHWA's preferred alternative is considered to be the preferred alternative contained in the concurrence point #3 package, with the above design changes incorporated into the alternative. FHWA hereby requests concurrence from USFWS, USEPA, and USACE on the preferred alternative for the IL-29 project.

Thanks and if you have any questions, please feel free to call me.

Matt Fuller
Environmental Programs Engineer
217-492-4625

-----Original Message-----

From: Eilens.Newton@epamail.epa.gov
[mailto:Eilens.Newton@epamail.epa.gov]
Sent: Tuesday, October 31, 2006 9:16 AM
To: Fuller, Matt
Cc: heidi_woeber@fws.gov; Allison, James; john.g.betker@usace.army.mil; Green, Paula A; shamer@dnrmail.state.il.us; Tsavko@agr.state.il.us
Subject: Re: IL 29 EIS -- Preferred Alternative Concurrence Point Package

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), Section 309 of the Clean Air Act, and the concurrent NEPA/Clean Water Act, Section 404 review process, we have reviewed the September 2006 NEPA/404 Merger Packet: Preferred Alternative Concurrence Point (NEPA/404 Merger Packet) for the Illinois Route 29 Study (IL-6 to I-180, Illinois). The Federal Highway Administration and the Illinois Department of Transportation (the project proponents) are preparing a Final Environmental Impact Statement for the proposed

project. The project proponents requested our concurrence with the Preferred Alternative.

We are concerned about whether the strategies to minimize wetland impacts for the Preferred Alternative are sufficient to comply with the Clean Water Act, Section 404 (Section 404) Guidelines. At a June 1, 2006 Technical Advisory Committee Meeting, the project proponents stated that wetland impacts totaled 11 acres within the Crow Creek Floodplain, under the preferred alternative. An August 2, 2006 Illinois Department of Transportation letter and the NEPA/404 Merger Packet state that wetland impacts were further reduced to 8.6 acres by three mitigation strategies:

1. Steeper side slopes (2:1),
2. Guardrail, and
3. Elimination of the drainage ditch at the bottom of the 2:1 slope.

Despite these efforts to reduce wetland impacts, we still think that the Preferred Alternative impacts a significant amount of wetlands in the Crow Creek Floodplain. Section 404 Guidelines require the project proponents to minimize such impacts to the extent practicable. The project proponents previously considered an alternate roadway cross-section utilizing a retaining wall; this cross-section only impacted 5 acres of wetlands in the Crow Creek Floodplain. The alternate cross-section was dropped from consideration because of its cost. We request the project proponents to either: (1) reconsider implementing the alternate roadway cross-section, or (2) adopt wetland impact minimization strategies which are as effective as the alternate roadway cross-section. We are withholding concurrence with the Preferred Alternative until this issue is resolved.

Thank you for the opportunity to review the NEPA/404 Merger Packet. If you have any questions, please contact Newton Ellens, at (312) 353-5562, for NEPA-related issues, or Sue Elston, at (312) 886-6115, for Section 404-related issues.
(See attached file: Crow_Creek_RetainingWall122006.pdf)

Resource Agency Technical Committee

Illinois Route 29 Phase I Engineering Study Resource Agency Technical Committee First Meeting -- September 11th, 2002

ATTENDEES: See Attached Roster
FROM: CH2M HILL
DATE: September 13, 2002

The meeting was held at the Holiday Inn City Center in Peoria. John Anderson introduced the IDOT and consultant staff. Other attendees introduced themselves and described their affiliation.

Dick Stafford presented the study process and described the present status of the project. Questions were raised as to the cost of the Phase I study and whether the project is funded. It was explained that the only funding available now is for the Phase I study. No funds are currently available for the development of construction plans, land acquisition, or for construction itself.

Maureen Addis stressed the complexity of issues in the study area and that the group gathered for this meeting is diverse. By meeting together, everyone can hear the full range of issues. The department wants to be able to address as many of the concerns as possible. The more that is known about the non-engineering elements that affect the project, the better able the department is to minimize the negative effects and enhance the positive effects.

Mike Lewis presented the history of the project and described some of the engineering issues. Questions were raised concerning access to the facility. The difference in access policy between a freeway and expressway were discussed. It was explained that access to the expressway would be provided for agricultural field entrances and residences, but not for commercial uses. Need for the project was questioned. There was a brief discussion of some of the reasons for the project. There was also a discussion of the role of mitigation in the project. Charles Perino noted that IDOT is required by law to consider mitigation for wetlands and other types of impacts. He noted that the mitigation considerations bring closure to the impact discussion in the EIS. It was noted that wetland mitigation generally requires the conversion of agricultural land. Jim Hartwig indicated that he wants to be involved in wetland mitigation issues to insure that agricultural interests are part of the decision process.

Paula Green presented a summary of the environmental aspects of the project including natural areas and nature preserves in the study corridor. It was pointed out that Miller Anderson Woods, at the north end of the project, is both a natural area and nature preserve. She also described the known threatened and endangered species in the study area as well as the animal pathway investigations. Since the railroad serves as a levee, wetlands and

floodplains will not be affected as much as expected as long as the alignment is west of the railroad.

It was suggested that bridges over streams could also be used in connection with animal pathways.

Once the first round of environmental studies has been completed, there is still the potential for additional studies if warranted by specific concerns.

IDOT's policy is to first try to avoid impacts, then to minimize, and finally if necessary to mitigate. All options for dealing with impacts fall within these three categories. Mitigation is a wide range of actions.

Paula Green described how Section 4(f) of the U.S. Department of Transportation Act of 1966, a federal law, affects the alternatives to be studied. The law offers special protection to publicly owned parks, recreation areas, wildlife and waterfowl refuges, and historic sites. These are commonly called Section 4(f) land. The major involvement with Section 4(f) land on this project is where IDNR land borders IL 29.

In order to meet the requirements of this law, it is necessary to investigate alternatives which would totally avoid IDNR property. Although this is a study to widen IL 29, an alignment which would run on top of the bluff, west of Sparland, will need to be studied as an avoidance alternative to the use of land from the Marshall County State Conservation Area. This avoidance alternative would involve greater impacts to agricultural resources.

Biological surveys are three-quarters complete. For the four-season studies, only the fall surveys have not been made. This final round will be completed by the end of 2002. Chris Phillips gave a brief presentation of the findings. The surveys include everything the regulatory people need to make their decision.

David Nolan reported on archaeological investigations conducted to date in the study corridor. The main focus so far has been from Chillicothe to the northern terminus. To date, 125 prehistoric sites have been found ranging from single items to villages and burial mounds.

Detailed discussions of the animal pathway study and boundaries of natural areas, nature preserves, etc. were deferred to a future date.

An explanation was presented of the Spring Bird Count. This count, generally done the first week of May, documents resident and migratory birds passing through the survey area. Because the Illinois River is an important migratory flyway, the study area is an important survey area. The survey is done on a county basis and normally records are kept of species within publicly owned open spaces such as Miller Anderson. Another source of data for the project's EIS would be the Breeding Bird Atlas being published by DNR. The atlas contains data from a 5-year survey done between June and September. The focus of the survey was to document a wide range of information regarding bird breeding activity. This study may also have information specific to publicly owned land in the study corridor.

Dick Stafford presented progress to date in developing preliminary alignments from just south of Henry to I-180. All of the alternatives are planned to provide a 65-mph highway. Questions were raised regarding the spacing of access points to the new highway. The new roadway would also be accessible for farm equipment if it is an expressway. When alternative alignments have been refined and are presented at the next meeting, there will be more detail on access points.

Todd Bittner pointed out that the section just south of I-180 poses a particular problem because of the nature preserve/natural area (Miller Anderson Woods) located west of IL 29 and a bald eagle's nest east of IL 29. Eagles are better able to adapt to traffic than they are to intrusion by people. Moving IL 29 somewhat closer to the nest may not affect the eagles as long as access by humans was not increased. Todd Bittner mentioned that the two alignments shown that would result in the removal of the nesting tree would be least acceptable.

Dick Stafford explained that all of the alternatives shown stayed within the western right-of-way of IL 29 and would not require any land from that portion of Miller Anderson Woods that borders IL 29. State right-of-way in this area extends approximately 60 feet to the west from the centerline of the road. Todd stated that the southern pond may reach into the existing right-of-way.

The next meeting will be held in about six to eight weeks. A request was made that copies of typical sections of the preliminary alignments be available for the attendees at that time.

IL Route 29 Study - Technical Committee Meeting Sign-in Sheet - September 11, 2002

Name	Agency/Organization	Phone	Email	Signature
1. Maureen Addis	IDOT - District 4, Peoria	309-671-3454	addismm@nt dot state il us	
2. John Anderson	IDOT - District 4, Peoria	309-671-3433	andersonji@nt dot state il us	
3. John Belker	US Army Corps of Engineers	309-749-5380	john.g.belker@usace.army.mil	
4. Todd Bittner	IL Dept. of Natural Resources (Miller-Anderson Wood Nature Preserve) Heritage Resource	815-224-8219	tbittner@damail.state.il.us	
5. Dan Dupies	CH2M Hill	414-272-1052	ddupies@ch2m.com	
6. Newton Eilens	US Environmental Protection Agency	312-553-5512	eilensn@epa.gov eilens.newton@epa.gov	
7. Paula Green	IDOT - District 4, Peoria	309-671-3478	greenpa@nt dot state il us	
8. Steve Hamner	IL Dept. of Natural Resources - Springfield	217-785-5500	shamner@dnrmail.state.il.us	
9. Jim Hartwig	IL Dept. of Agriculture - Springfield	217-785- 6997 4470	jhartwig@dot.state.il.us	
10. Joyce Hofmann	IL Natural History Survey	217-244-2366	hofmann@mail INHS.uiuc.edu	
11. Patrick Kirshofer	Peoria Co. Farm Bureau	309-686-7070	pkirshofn@bwsys.net	
12. Arlene Kocher	Federal Highway Administration	217-492-4628	arlene.kocher@FHWA.dot.gov	
13. Greg Larson	IDOT - District 4, Peoria	309-671-3479	larsongv@nt dot state il us	
14. Mike Lewis	IDOT - District 4, Peoria	309-671-3474	lewisml@nt dot state il us	
15. Tiffany Moodie	Marshall-Putnam Co. Farm Bureau	309-364-2501	mpfb@oslink.com	
16. Paul Niedemhofer	IDOT - Springfield	217-524-1651	niedemhofer@nt dot state il us	

\\D:\NTS\RD\GEN\WIN\WORD\STDP\PLNS\EN\VI\RON\IL_29 Study\Resource Tech Committee\sign-in sheet 1sep.doc

IL Route 29 Study - Technical Committee Members

Name	Agency/Organization	Phone	E-mail
1. Maureen Addis	IDOT - District 4, Peoria	309-671-3454	addismm@nt.dot.state.il.us
2. John Anderson	IDOT - District 4, Peoria	309-671-3433	andersonj@nt.dot.state.il.us
3. John Betker	US Army Corps of Engineers	309-749-5380	john.g.betker@mvro2.usace.army.mil
4. Todd Blittner	IL Dept. of Natural Resources - Miller-Anderson Wood Nature Preserve	815-224-8219	tblittner@dnrmail.state.il.us
5. Dan Dupies	CH2M Hill	414-272-1052	ddupies@ch2m.com
6. Newton Ellens	US Environmental Protection Agency	312-353-5512	ellens.newton@epamail.epa.gov
7. Paula Green	IDOT - District 4, Peoria	309-671-3478	greenpa@nt.dot.state.il.us
8. Steve Hamer	IL Dept. of Natural Resources - Springfield	217-785-5500	shamer@dnrmail.state.il.us
9. Jim Hartwig	IL Dept. of Agriculture - Springfield	217-785-6297	jhartwig@nt.dot.state.il.us
10. Joyce Hofmann	IL Natural History Survey	217-244-2366	ihofmann@mail.INHS.uiuc.edu
11. Patrick Kirshofer	Peoria Co. Farm Bureau	309-686-7070	peoriafcbm@bwsys.net
12. Arlene Kocher	Federal Highway Administration	217-492-4628	arlene.kocher@FHWA.dot.gov
13. Greg Larson	IDOT - District 4, Peoria	309-671-3479	larsongv@nt.dot.state.il.us
14. Mike Lewis	IDOT - District 4, Peoria	309-671-3474	lewism1@nt.dot.state.il.us
15. Tiffany Moodie	Marshall-Putnam Co. Farm Bureau	309-364-2501	mpfb@ocslink.com
16. Paul Niedernhofer	IDOT - Springfield	217-524-1651	niedernhofer@nt.dot.state.il.us
17. Charles Perino	IDOT - Springfield	217-785-2130	perinch@nt.dot.state.il.us
18. Larry Rice	IL Dept. of Natural Resources - Marshall Co. State Fish & Wildlife Area	309-246-8351	lrice@dnrmail.state.il.us
19. Jim Saag	CH2M Hill	773-693-3800	jsaag@ch2m.com
20. Michelle Siome	IL Dept. of Natural Resources, Heritage Biologist	309-347-5119	msiome@dnrmail.state.il.us
21. Dick Stafford	CH2M Hill	773-693-3800	rstaffor@ch2m.com
22. Barbara Stevens	IDOT - Springfield	217-785-4245	stevensbs@nt.dot.state.il.us
23. J. D. Stevenson	Federal Highway Administration	217-492-4638	jerry.stevenson@FHWA.dot.gov
24. Barb Traeger	IDOT - Springfield	217-785-4245	traegerbj@nt.dot.state.il.us
25. Heidi Woerber	U.S. Dept. of Interior	309-793-5800	heidi_woerber@fws.gov

David Nolan User of IT

17. Charles Perino	IDOT - Springfield	217-785-2130	perinch@nt.dot.state.il.us	Charles H. Perino
18. Larry Rice	IL Dept. of Natural Resources - Marshall Co. State Fish & Wildlife Area	309-246-8351	lrice@dnrmail.state.il.us	Larry Rice
19. Jim Saag	CH2M Hill	773-693-3800 x 208	jsaag@ch2m.com	Jim Saag
20. Michelle Siome	IL Dept. of Natural Resources, Heritage Biologist	309-347-5119	msiome@dnrmail.state.il.us msiome	Michelle Siome
21. Dick Stafford	CH2M Hill	773-693-3800 x 214	rstaffor@ch2m.com	Dick Stafford
22. Barbara Stevens	IDOT - Springfield	217-785-4245	stevensbs@nt.dot.state.il.us	Barbara Stevens
23. J. D. Stevenson	Federal Highway Administration	217-492-4638	jerry.stevenson@FHWA.dot.gov	J. D. Stevenson
24. Barb Traeger	IDOT - Springfield	217-785-4245	traegerbj@nt.dot.state.il.us	Barb Traeger
25. Heidi Woerber	U.S. Dept. of Interior	309-793-5800	heidi_woerber@fws.gov	Heidi Woerber
26. David Nolan	U.S. Dept. of Interior	309-793-5800	dnolan@uiuc.edu	David Nolan
27. Paul Jaeger	IDOT - BDE	217-785-0202	jaegerp@nt.dot.state.il.us	Paul Jaeger
28. Paul Jaeger	IDOT - BDE	217-785-0202	jaegerp@nt.dot.state.il.us	Paul Jaeger
29. Pam Savits	IL Dept of Agr	217-785-4459	tsavits@agr.state.il.us	Pam Savits
30. Jan Pileand	FHWA	(217) 492-4985	jan.pileand@fhwa.dot.gov	Jan Pileand
31. Chris Phillips	IL Dept. Nat. Res. - INHS	317 244 671	chrisph@ns.uiuc.edu	Chris Phillips
32. Tom Colvin	IL Dept. Nat. Res. - INHS	309 246 8392	colvin@dnrmail.state.il.us	Tom Colvin
33. Tom Colvin	IL Dept. Nat. Res. - INHS	309 246 8392	colvin@dnrmail.state.il.us	Tom Colvin

Illinois Route 29 Phase I Engineering Study Resource Agency Technical Committee Second Meeting -- November 13, 2002

ATTENDEES: See Attached Roster

FROM: CH2M HILL

DATE: November 18, 2002

Agenda Items 1 and 2 - Introductions/Meeting Minutes

The second resource agency meeting was held in the Training Room at the District 4 offices in Peoria. Mike Lewis began the meeting by welcoming technical committee members and covering a few house-keeping issues. He then asked the group whether there were any questions/comments on the minutes from the first technical committee meeting. There were no comments.

Agenda Item 3 - How Alignments are Developed and Refined

Dick Stafford described the process the study team is using to develop and refine project alternatives. He explained that we are in the data gathering phase, collecting environmental, socio-economic, and engineering data. The environmental and socio-economic information that has been collected has been included in the GIS database and added to the project aeriels. As preliminary alignments are placed on the aerial, the project team attempts to avoid impacts to the resources. Dick noted that there is very little design information associated with the preliminary alignments, generally only its width. As such it is not possible to answer detailed questions about the alignment yet. The strategy at this early stage of the study is to eliminate alternatives that have obvious environmental and engineering flaws until a "reasonable range" of alternatives remains. These alternatives, which will be evaluated in detail in the Draft EIS, will have a greater level of engineering work conducted on them to better assess their impacts.

Dick presented exhibits that gave a conceptual explanation of permissible access along a freeway and expressway, the two types of facilities being considered under the Build Alternative.

Agenda Item 4 - Typical Sections - Constrained Areas

Dick presented two "graphic-oriented" typical sections of the Miller Anderson Woods area showing how an improved IL 29 would fit between Miller Anderson and the existing railroad. The first typical section was the narrowest and included a median barrier between opposing lanes of travel. It also included retaining walls on the west (to avoid Miller Anderson) and on the east (to avoid the railroad). Closed drainage would have to be used with this option. The high construction costs associated with walls, and the lack of recovery room in the median are some of the notable features of this typical section.

The second typical section included an open median between opposing lanes of travel such as would be found in other parts of the study area. Because of the increased width of this typical section and the need to avoid Miller Anderson, this alternative proposes to relocate the railroad tracks east by about 50 feet for a distance of five to seven miles to obtain the necessary new right-of-way. The cost of relocating the railroad (estimated at \$5 to \$7 million), the greater wetland and floodplain impacts (as compared to the compressed section), and the closer proximity of the new highway and railroad to the bald eagle nest were noted.

Dick noted that both typical considerations would remain under consideration during the alternatives development phase.

Agenda Item 5 - Project Need Considerations

Dan Dupies summarized the information under the major headers of the Purpose and Need Statement. He noted that it is a work in progress subject to change as the data gathering phase progresses. The project purpose is to enhance transportation continuity between IL 6 and I-180 by improving IL 29 to be a safe and efficient high-type highway that will serve existing and future travel demand while minimizing disturbance to the natural and built environment. The project need includes 1) System Linkage and Continuity, 2) Modal Interrelationships, 3) Travel Efficiency, and 4) Enhanced Economic Stability. A hard copy of the slides Dan used during the Purpose and Need presentation are attached to the minutes.

Agenda Item 6 - Natural Areas

Paula Green asked Patti Reilly from DNR to discuss nature preserves, natural areas, and other designations found on DNR property along the IL 29 corridor. Patti explained that in the early 1960's, in an effort to save the "best of the best" remaining natural areas in Illinois, the Nature Preserve Commission requested the development of a list of all parcels in the state whose highest and best use was preservation as a natural area. The list of parcels became the Illinois Natural Areas Inventory, and from that list the Commission selects properties to designate as nature preserves. Nature preserves, which can be publicly or privately owned, open or closed to the public, are established with the most restrictive use agreements of all DNR property. In general, nothing can be done to a preserve that would change the environmental landscape (natural conditions). All nature preserves are also considered natural areas because they were part of the Natural Areas Inventory. Any potential impacts to a nature preserve would require consultation with/approval from the Nature Preserves Commission.

Natural areas, which are also listed on the Illinois Natural Areas Inventory, have no protection in and of themselves. Impacts to natural areas would require consultation with DNR if threatened and endangered species would be affected. If wetlands within natural areas would be affected, it would require coordination under the Interagency Wetland Policy Act.

Natural areas include an area large enough to encompass the natural resource feature and a buffer to protect/manage it. The natural area's boundaries are biology based, they are not based on property lines. A change to or confirmation of the natural area boundaries requires the assistance of DNR's biologists and approval by the Natural Area Commission. It was noted that the project team would need DNR's assistance in identifying exactly where the

east boundaries are located for three natural areas south of Sparland. In a discussion following the meeting, Michelle Simone stated that she would contact Paula Green following DNR's burn season to establish a date(s) to review the three natural areas. The review may not occur until January. Michelle requested that CH2M HILL develop aerial maps of the three areas with contour information to help delineate the boundaries.

Todd Bittner noted that the bald eagle nest east of IL 29 and an area within a 0.25-mile radius of the nest has been added to the Miller Anderson natural area inventory site.

Patti noted that there are other designations on DNR owned property. She noted that there are state natural areas, state fish and wildlife areas, recreation areas, and state conservation areas. There is a portion of Miller Anderson that is designated as state natural area.

Agenda Item 7 - Preliminary Alignments

Dick began the discussion by reminding the group that the study corridor has been divided into three segments for alternatives development purposes, a north segment that extends from I-180 to south of Henry, a central segment that extends from south of Henry to north of Chillicothe, and the south segment that extends from north of Chillicothe to the Illinois Route 6 highway stub. He noted that during the first meeting we reviewed the full range of alternatives in the north segment. Since that meeting the project team developed interchange footprints that were needed to better understand and avoid impacts. Dick then reviewed the alternatives within the three sections in the north segment.

The alternatives recommended for elimination in the north segment were alternatives through Henry because of the high number of displacements at the proposed Illinois Route 29 and Illinois Route 18 interchange, and the difficulties that alternative created for providing safe access to the high school and county fairgrounds. The alternatives that remain under consideration in the Henry area (section 1) are those that are located 0.5 mile to 1 mile west of Illinois Route 29. Those alignments have interchanges with Illinois Route 18. Mike Lewis reminded the group that although alternatives are recommended for elimination now, it does not preclude them from being re-evaluated later in the study. If for example, the City of Henry would express interest in a through town alignment, we would re-evaluate it.

In section 2 of the north segment (Putnam area), there are 5 alternatives being evaluated. The "one-way pair alternative" through Putnam in this section was deemed unreasonable and dropped. The alternative that crossed through the ridge where Chief Senachwine is buried was also eliminated. Dick noted that there are no interchanges in this area because of the lower traffic volumes. Three alternatives in this section are being carried forward. The width of the alternatives in this section ranges between 150 to 300 feet.

In section 3 (Miller Anderson Woods area), the one-way pair alternative with the railroad in the middle was eliminated. The cross section of the alternatives has been compressed (approximately 150 feet wide) to avoid Miller Anderson requiring the use of retaining walls. A compressed diamond interchange is being considered at the intersection of Illinois Route 29 and Kentville Road, with some realignment of Kentville Road. An alternative relocating the railroad tracks is also being considered to avoid Miller Anderson.

Name	Agency/Organization	Phone	E-mail	Signature
1. Maureen Addis	IDOT - District 4, Peoria	309-671-3454	addismm@nt.dot.state.il.us	Mo Addis
2. John Anderson	IDOT - District 4, Peoria	309-671-3433	andersonj@nt.dot.state.il.us	John Anderson
3. John Belker	US Army Corps of Engineers	309-749-5380	john.g.belker@usace.army.mil	John A. Belker
4. Todd Bittner	IL Dept. of Natural Resources - (Miller-Anderson Wood Nature Preserve)	815-224-8219	tbittner@dnrmail.state.il.us	Todd Bittner
5. Tony Colvin	IL Dept. of Natural Resources- Marshall Co. State Fish & Wildlife Area	309-246-8351	tcovlin@dnrmail.state.il.us	Tony Colvin
6. Dan Dupies	CH2M HILL	414-272-1052	ddupes@ch2m.com	Dan Dupies
7. Newton Eliens	US Environmental Protection Agency	312-353-5512	eliens.newton@epa.gov	Newton E. Eliens
8. Ron Fisher	US Dept. of Interior	309-535-2290	ron_fisher@fws.gov	
9. Paula Green	IDOT - District 4, Peoria	309-671-3478	greempa@nt.dot.state.il.us	Paula Green
10. Steve Hamer	IL Dept. of Natural Resources - Springfield	217-785-5500	shamer@dnrmail.state.il.us	Steve Hamer
11. Jim Hartwig	IL Dept. of Agriculture - Springfield	217-785-4470	jhartwig@agr.state.il.us	
12. Joyce Hofmann	IL Natural History Survey	217-244-2366	jhofmann@mail.INH.S.uiuc.edu	Joyce Hofmann
13. Patrick Kirchhofer	Peoria Co. Farm Bureau	309-686-7070	pkirchhof@bwsys.net	Patrick Kirchhofer

N:\RSTA\FOR\Illinois 29\Technical Committee\Sign-in Sheet (keep.doc

Todd said he is concerned about the impacts along the proposed realignment of Kentville Road and the proposed interchange there. He noted impacts to the high-quality woods east of the intersection as an example of the type of impact he would like to avoid. To eliminate those impacts, Todd suggested developing an alternative that would leave the Kentville Road/IL 29 intersection in its current location and move the proposed interchange with IL 29 north and east to I-180. It was noted that wetland impacts could increase notably with an interchange along I-180. There would also be potential operation issues with an interchange in that location.

Patti Reilly asked whether any alternatives were evaluated off-alignment west of Miller Anderson. It was noted that IDOT have been charged with using as much of IL 29 as possible. In addition, the agricultural impacts associated with a west bypass of Miller Anderson were one of the reasons why that alternative was strongly opposed during the earlier Heart of Illinois Study.

Some one asked whether IDOT could consider a 4-lane undivided facility along the north portion of the study area to reduce impacts. Dick noted that research and analyses of existing 4-lane undivided highways have shown that those types of roads are much less safe than a divided facility. Moreover, undivided highway have a greater potential for increased accidents including head-on collisions. It was also pointed out that FHWA, for safety reasons, would not fund that type of highway.

Dick also reviewed the full range of preliminary alternatives in the central project segment (south of Henry to north of Chillicothe). This segment has also been divided into three sections for analysis purposes. There is one alternative in this segment along the length of IL 29. In Sparland, Dick noted that consideration is being given to relocating a portion of the railroad to minimize impacts in the community. Dick said the project team is considering alternatives in the bluffs to avoid potential impacts to Marshall County State Fish and Wildlife land that is located on both sides of IL 29. Section 4(f) regulations require analysis of an avoidance alternative. The bluff alternatives, which are aligned to follow property lines and existing roads such as Hardscrabble Road, would affect more woodlands and cropland than the improvements along IL 29. It was noted that agricultural interests would not support alternatives west of IL 29 because of their impacts to cropland.

Agenda Item 8 - Next Technical Meeting

No specific date was set, but Paula noted the next meeting would be in mid- to late January. IDOT will send out an e-mail with the exact date.

14. Ariene Kocher	FHWA	217-492-4628	ariene.kocher@FHWA.dot.gov	<i>Ariene Kocher</i>
15. Greg Larson	IDOT - District 4, Peoria	309-671-3479	larsonvg@mt.dot.state.il.us	<i>Greg Larson</i>
16. Mike Lewis	IDOT - District 4, Peoria	309-671-3474	lewisml@mt.dot.state.il.us	<i>Mike Lewis</i>
17. Tiffany Moodie	Marshall-Putnam Co. Farm Bureau	309-364-2501	tmfby@ocslink.com	<i>Tiffany Moodie</i>
18. Paul Niedernhofer	IDOT - Springfield	217-524-1651	niedernhofer@mt.dot.state.il.us	<i>Paul Niedernhofer</i>
19. David Nolan	University of Illinois-ITARP	309-837-3097	dnolan@uiuc.edu	<i>David Nolan</i>
20. Charles Perrino	IDOT - Springfield	217-785-2130	perrinocl@mt.dot.state.il.us	<i>Charles Perrino</i>
21. Chris Phillips	IL Dept. of Natural Resources	217-244-7077	chrispn@dnhr.uiuc.edu	
22. Jan Pland	FHWA	217-492-4989	janis.pland@hwa.dot.gov	
23. Larry Rice	IL Dept of Natural Resources - Marshall Co. State Fish & Wildlife Area	309-246-8351	lrice@dnrmail.state.il.us	
24. Jim Saag	CH2M HILL	773-693-3800	jsaag@ch2m.com	
25. Terry Savko	IL Dept of Agriculture	217-785-4458	tsavko@agr.state.il.us	<i>Terry Savko</i>
26. Michèle Simone	IL Dept of Natural Resources, Heritage Biologist	309-347-5119	msimone@dnrmail.state.il.us	<i>Michèle Simone</i>
27. Dick Stafford	CH2M HILL	773-693-3800	rstaffor@ch2m.com	<i>Dick Stafford</i>

Illinois Route 29 Phase I Study Resource Agency Technical Meeting May 19, 2003

ATTENDEES: See Attached Roster
FROM: CH2M HILL
DATE: May 19, 2003

Paula Green began the meeting at 10:10 a.m. with a presentation of the project Purpose and Need statement.

Pat Kirchhofer raised a question regarding the comparison of crash rates on IL 29 with statewide averages. There are two sections of IL 29 (out of six total sections) where the current crash rate is greater than the average for similar highways throughout the state.

Paula Green and Dick Stafford then presented the alignments that were considered for improvement of IL 29. The alignments were presented in three study sections - south, central and north. Preliminary estimates of impacts were also presented for each of the alignments to be carried forward.

In the Central Section, Paula Green explained that both the bluff alignment and the alignments along existing IL 29 would be taken to the public meetings to obtain a good representation of public opinion as to the options. It was asked whether the railroad has been contacted yet. Dick Stafford replied that they had.

Paula Green and Dick Stafford explained the difficulties in providing an improved facility on the present alignment of IL 29 through Henry. They also described the range of alternatives that were considered north of Henry, through Putnam. Pat Kirchhofer asked about the width of the proposed right-of-way and the acreage of farmland to be taken by alternative bypass alignments.

Dick Stafford indicated that river otters were included in the threatened and endangered species impacts. Paula Green suggested that the river otters be removed from the impact summaries because it is not expected that the highway would affect their habitat. Dick also explained how the area of various impact categories was measured. On new alignments off of existing IL 29, a 300-foot right-of-way width was assumed. IDOT right-of-way was subtracted from the total right-of-way when the alignment used existing IDOT right-of-way.

Paula Green explained that, at this time, we expect to carry alternative alignments through the environmental impact statement.

Steve Hamer asked if matrices of impacts for the various alignments would be provided. Dick Stafford responded that they would.

28. Barbara Stevens	IDOT - Springfield	217-785-4245	stevensbh@mt.dol.state.il.us	Barbara Stevens
29. J. D. Stevenson	FHWA	217-492-4638	jerdy.stevenson@FHWA.dol.gov	
30. Barb Traeger	IDOT - Springfield	217-785-0202	traegerbh@mt.dol.state.il.us	Barb Traeger
31. Heidi Woebler	U.S. Dept. of Interior	309-793-5800	heidi_woebler@ius.gov	Heidi Woebler
32. Wayne Herndon	IDNR - DRC	309-347-5119	WHerndon.DNR.State.IL.us	Wayne Herndon
33. Faye Kelly	IDNR - DRC		pkelly@dnr.state.il.us	Faye Kelly
34.				
35.				
36.				
37.				
38.				
39.				

Pat Kirchhofer asked if there has been any economic study of the loss of farmland due to highway construction. He pointed out that the loss of farmland would have the effect of reducing traffic by trucks carrying the farm products. Terry Savko indicated that IDOA has procedures to estimate the crop loss resulting from taking farmland out of production.

Paula Green concluded the meeting at 11:10 a.m. with an announcement that public information meetings will be held on June 11th and June 12th. A newsletter announcing the meetings will be sent out soon.

MEETING SUMMARY

CH2MHILL

Illinois Route 29 Study Technical Advisory Committee Meeting

January 20, 2004

ATTENDEES: Attendance Roster attached.
 FROM: CH2M HILL
 DATE: February 5, 2004

The Illinois Route 29 (IL 29) Technical Advisory Committee meeting was held on January 20, 2004 at the Department's District 4 office. Mike Lewis/IDOT began by having the attendees introduced themselves. He then gave an overview of the project as well as the meeting purpose, which is to maintain an open forum with opportunity for agencies to provide their input.

Mike turned the presentation over to Dan Dupies who noted that the meeting allowed the project team to update the group on progress since the last meeting in additional alternatives screening and the start of alternatives design. Dan then reviewed the meeting agenda before summarizing progress on the project. A brief description of the information presented by the project team follows.

First Public Information Meetings

Dan reviewed the general themes heard at the Henry and Chillicothe meetings which included concerns about impacts to agricultural land as well as businesses. He also reviewed the project-related resolutions local communities passed supporting some level of improvement in the study area and letters received from organizations opposed to the proposed improvements.

First NEPA Meeting

Dan said the purpose of the meeting was to obtain agency input/concurrence on the Purpose and Need Statement and the range of alternatives to carry forward. He noted major agency were minimizing impacts to agricultural lands, protected species and natural areas as the project moved into the design phase.

Field Studies

Dan summarized the project's three main field studies, the Illinois Natural History Survey (INHS) field report, the Illinois State Geologic Survey (ISGS) Preliminary Environmental Site Assessment (PESA), and the cultural resources survey.

Dan emphasized the importance of the INHS field report, which characterizes a wide range of environmental resources in the project area, in helping the project team avoid/minimize impacts to these resources as design proceeds. The INHS report findings will be used in the

"Affected Environment" portion of the EIS as well as to help the team to assess impacts to resources that cannot be avoided by the reasonable range of alternatives.

In reviewing the PESA reports, Dan noted that ISGS developed construction stipulations for 14 contaminated sites that could be affected by the proposed improvements.

Dan reviewed the ongoing process of identifying structures potentially eligible for the National Register of Historic Places within the project corridor. He also mentioned that one potentially eligible farmstead may be impacted by the proposed improvements in the north section. Dan also noted that the archaeological research that has been done to date has identified burial mounds within the project corridor.

Alternatives Screening/Design Summary

Dan introduced Kim Kolody who reviewed the additional alternatives screening in the south and central sections since the last TAC meeting. He also noted that Paula Green would discuss screening and design progress in the project's north section.

South Segment Alternatives Screening

Kim began the south section discussion stating that a new alternative, S-6, had been added to the west side of the Catepillar property. Kim indicated that Alternative S-6 had been suggested at the first public information meeting and would be carried forward for further study. The project team is recommending that Alternative S-4 be dropped from further consideration because it would not serve transportation needs in the area as well as S-6.

At Chillicothe, Alternative S-5 was dropped and Alternative S-4 retained because S-4 complies with Chillicothe's Comprehensive Plan better and has less impact to the gravel pit than S-5. Northwest of Chillicothe where the alignment would cross the Senachwine Creek floodplain, S-5b was eliminated and S-4b was modified to decrease the longitudinal floodplain impact.

Dan reviewed the South Section alternatives' impacts. He noted that the south section is dominated by farmland and that most impacts were, therefore, to farmland. Dan reviewed the different land uses included in "Total Farmland" and "Cropland" impacts. He also indicated that the impact to Rutherford Sports Park by Alternative S-6 will likely be avoided with further design modifications. A question was asked about the park's ownership and existing/future land use. Dan stated that the park is currently cropland. Paula Green said that Peoria Park District (the property owner) would be contacted to determine whether future land use if it would indeed be impacted would be affected if Alternative S-6 were further developed.

Central Segment Alternatives Screening

Kim then reviewed alternative refinements in the central section. She noted that Alternatives C-2 and C-3 were going to be carried forward and that C-2 was the "avoidance alternative." At the south end of the central section, Alternative C-2a has been retained and C-2 was dropped because C-2a provided the best opportunity for a connection to Chillicothe. Rather than staying on alignment through Sparland (Alternative C-3), which would have impacted approximately 30 residences, the project team selected Alternative C-3a which is located east of IL 29. A question was asked about the reason for keeping

Alternative C-2 (bluff alignment). Dan responded that because IDNR property along IL 29 south of Sparland could be affected by the proposed improvements, the project team was required to evaluate an alternative that would avoid the impact. Alternative C-2 serves as that avoidance alternative.

Dan continued with a discussion of the impacts in the central section. He stated that there are different floodplain impacts between the two alignment alternatives. Dan emphasized that minimal engineering design has occurred in the south and central sections and that the numbers associated with the impacts are rudimentary at best and that as the design gets more detailed, the numbers will begin to more accurately reflect the project's potential impacts. As an example, he noted that the ground is very rough up on the bluff and as the design for C-2 progresses the impacts to forested and agricultural lands would almost certainly increase.

Also emphasized was the fact that designated lands along IL 29 would potentially be impacted by Alternative C-3 but not C-2. The point was made (subsequent to a question by Steve Hamer/IDNR) that these numbers reflect IDNR's survey to more accurately identify the property lines of some designated lands along the existing alignment.

Dan discussed residential and commercial impacts noting that the number of residential impacts for Alternatives C-2 and C-3a are comparable. Alternative C-3a has a greater number of commercial impacts because it is located in Sparland's small commercial area. In response to a question about impacts in Sparland, Dan noted that the project team selected impacts to the commercial area of Sparland east of IL 29 to avoid a much greater number of residential impacts by staying on existing IL 29.

Dan reviewed where the impacts to farmland were located. Steve Hamer/IDNR asked whether the central section alternatives had been refined. Dan replied that they still reflect the bands shown on the map. Pat Kirchhofer/Farm Bureau asked how many additional traveling miles would be introduced with Alternative C-2 vs. C-3. The project team was unsure of the exact amount and offered to provide that number at a later date. After the meeting, that number was identified as 1.5 miles.

North Section Alternatives Refinement and Design

Dan introduced Paula Green/IDOT who then reviewed the progress that has occurred in the north section.

Paula Green emphasized that more detailed design has occurred for the north section alternatives than the central and south and therefore, the impacts identified for north section alternatives are more accurate than those for the central and south.

Paula began with the Henry bypass alternatives noting that Alternative H-3 had been dropped and H-4 has been carried forward because it is closer to town. Henry has expressed a preference for an alternative that is within 0.5 mile of town. Alternative H-4 also has fewer impacts on farmland. Paula explained the typical section for the proposed bypass noting that it was similar to a typical section for an interstate facility but at-grade access would be provided. She compared impacts associated with H-3 and H-4 noting that while there is less acreage required for H-4 than H-3, there are higher impacts to most resources except for total farmland required. Paula restated that Alternative H-4 was being carried forward

because Henry supports it and it has slightly fewer impacts to farmland than Alternative H-3.

Paula then outlined the major issues involved with the Henry Bypass including agricultural, floodplain and wetland impacts. She noted that farm severances are higher than anticipated with an alignment that follows a section line because in the Henry area the property lines do not uniformly follow section or half-section lines. Shifting the alignment further east would not reduce the number of severances. Access points are in the development stage, but current interchanges will remain at Western Avenue and some other points. Access to certain farms has presented a challenge which has yet to be worked out. Attempts will be made to minimize irrigation disruption on those farms that have pivot irrigation systems.

Regarding Crow Creek floodplain impact, the amount and type of impact was reviewed. Concern was raised that the Crow Creek floodplain impact may be longitudinal (not yet officially determined) and that there is a potential for impact to a high quality wetland. Because the wetland is high quality, that raises the mitigation ratio to 5 times the amount of impact. The impact to a high quality wetland and floodplain longitudinally presents reason to further refine the alignment at this location.

Paula reviewed the alternatives in the Putnam area shown at the last TAC meeting and the refinements since then. She explained that N-4, the Putnam Bypass, was dropped from further consideration because it presented the most impacts compared to the other options and no real support was shown for it at the first public information meetings. It was then explained that the two other options from last meeting, N-2 which maintains IL 29 on existing alignment, and N-2a, which relocates the railroad to the east, were developed into 5 variations, N-2A through N-2E. Paula further explained that all of the alignments are the same from the north end of the Henry bypass to approximately 0.5 mile south of Miller Anderson Woods. In the Miller Anderson Woods vicinity, no right-of-way would be taken from the Nature Preserve and no permanent work would be pursued west of the western drainage ditch. Todd Bittner/IDNR asked for further explanation of what it meant to not have permanent changes to the western slope. Paula responded by saying temporary easements may be required to temporarily access that area during construction of retaining walls or fix the slope at that location.

Paula presented the typical section through Putnam and noted that it is similar to that of the Henry bypass. She also discussed the three access options for Putnam. A main consideration in the design options was maintaining safe access to the grain elevator east of IL 20. Paula requested that meeting attendees provide the project team with input on the Putnam access options after they had reviewed the exhibits.

Paula identified the major issues between north of Putnam and 0.5 mile south of Miller Anderson Woods, including the farmland impacts, the existence of Senachwine Creek floodplain and a potentially historic farm.

The differences between the alternatives in the vicinity of the Miller Anderson Woods were reviewed including railroad relocation vs. no railroad relocation; median width; and retaining wall or no retaining wall. The typical sections for each of the alternatives were reviewed. Paula indicated that Alternative N-2A (which has a 100-foot railroad relocation to the east) was the best engineering design, but had the highest environmental impacts.

Alternative N-2D did not relocate the railroad, however, it would encroach on railroad right-of-way. Additionally, two retaining walls would be necessary and the drainage system will be closed because no room exists for a ditch between the retaining wall and the railroad tracks. The question was raised about whether the proposed drainage systems would be longitudinal or not. Jim Jodie reviewed the two (closed) drainage options for N-2D which include only a pipe running parallel to the existing roadway with an outlet north or south of the segment or in addition to the longitudinal pipe, providing a pipe perpendicular to the roadway and underneath the railroad with the outlet to the east of the railroad. Todd Bittner/IDNR asked if there would be closed drainage for N-2E. The response was no, Alternative N-2E has room available for a drainage ditch. Tom Lerczak/INPC asked what the main issue associated with having a center barrier median would be. Mr. Jodie responded that safety is the main issue; a center barrier median coupled with a smaller cross section tend to give motorists a closed-in feeling. Terry Savko/IDOA asked if buses would be able to turn with a barrier median. The answer was that access is limited to right-turns and no opportunity for crossing over or executing U-turns exists for N-2E. Heidi Woeber/USFWS asked if there were any similar examples where a barrier median was used. US 24 in Bartonville was given as the example. Newton Ellen/USEPA asked if there would be any treatment for roadway runoff before it exited the closed drainage system and entered into the streams. Jim noted that the project team had not conducted enough design work to address that issue. Options include sediment basins or erosion control devices. Steve Hamer/IDNR asked if the impact to natural areas in the Miller Woods area was attributed to the portion of the natural area within the existing right-of-way. Paula responded that the INAI site is shown to cross the roadway and approximately 10 acres crosses the existing right-of-way.

Paula outlined the general impacts associated with the five Miller Anderson area alternatives. She identified Alternative N-2A again as having the highest amount of impacts and N-2E having the lowest amount of impacts with those in between gradually diminishing in impact. Wetland and floodplains were highlighted. Cost figures were reviewed; N-2C was identified as having the highest cost. Jason Cowin/FHWA asked whether the cost figures took into account the cost of relocating the railroad. Jim indicated the costs did include railroad relocation. He expanded on the discussion by reviewing what was shown at the last meeting which was the two extreme examples (compressed cross-section vs. railroad relocation and the widest possible cross-section the cost of both including the purchase of wetlands, natural area, etc.).

Paula then reviewed natural area and threatened and endangered species impacts. Todd Bittner asked why there was no difference in the distance between the railroad and the eagles nest between N-2D and N-2E. The response was that it is the same as the existing distance and the railroad was not being relocated by either alternative so the number would not change. John Betker/Corps asked if the project team has a preferred alternative yet. Paula replied that no preferred alternative has been identified, and that input from the meeting would be used in making that decision.

Paula finished the alternatives overview by reviewing the wetland impacts for the various alternatives. Patrick Kirchofer/Farm Bureau asked if the wetland mitigation ratio was 5.5:1 within natural areas. Paula answered yes, the 5.5:1 ratio applies for wetlands with FQIs greater than or equal to 20, located within natural areas, have a Coefficient of Conservatism

greater than 4 or has a threatened or endangered species present. Mr. Kirchhofer also asked if it was required to buy a wetland within the same location as the one taken out. The response was that it did not, but the decision about where mitigation wetlands would located had not been made yet.

Steve Hamer/IDNR indicated that Todd Bittner had obtained new species data since the publication of the INHS report including the identification of a Blandings turtle at Goose Lake. Todd indicated the new data should be in the INHS database. Charles Perino/IDOT said that INHS has been instructed to review the project corridor in 2004 for Blandings turtles as well as the four-toed salamander. Todd also noted the likelihood that a cirulean warbler found in the corridor may be listed on the endangered species list, but that no further action would be taken until it is listed. Charles also indicated that the endangered species list would be reviewed within the next year or so for any new listings.

Todd requested that a detailed hydrologic study be conducted to better understand the proposed improvements' potential impact on groundwater flow and species that rely on groundwater. He noted that retaining walls have the potential to block the natural flow of groundwater or lower groundwater levels by breaking through the clay layer that may exist. Eric Therkildsen/IDOT noted that the retaining wall may not extend deeper underground than the roadway. However, oftentimes, walls that extend below the surface have pilings that allow for water to migrate around them as opposed to just being a solid wall under ground. Tom Lerczak reiterated a concern that any construction east of the highway could break a clay layer thereby impacting the hydrology of Miller Anderson Woods, specifically creating a situation where area wetlands would not retain the water they currently hold. He further suggested that relocating the railroad may impact drinking water resources. Eric asked if there was a precedent for the hydrologic study requested by DNR. Charles noted that this had been done in Black Partridge Nature Preserve. Tom Brooks/IDOT said that in that case, however, the seeps were below the highway whereas in this case, the seeps are above the highway. He also suggested that the ISGS be included to review the hydrology in the area and confer with IDNR to address this issue. Charles indicated that DNR's concerns were justifiable because in still another situation in McHenry County, excavation broke through the clay layer and drained a nearby lake within a park. Paula suggested that IDOT, IDNR, ISGS all get together to address this.

Paula requested input from the attendees on the options still under consideration in an effort to narrow down the number of alternatives to carry forward beginning in Putnam with the 3 access options. Patrick Kirchhofer suggested that as much existing right-of-way be used as possible. Paula said that this was part of the plan. New right-of-way would be acquired to the west, which would result in a row of buildings being displaced. Terry Savko asked what the proposed speed would be through Putnam and expressed concern over trucks entering and exiting the roadway. Paula noted that it would be 65 mph, the same as the rest of the roadway. John Anderson/IDOT noted the similarity with the US 24 in Kingston Mines. Paula informed the attendees that long turn lanes will be provided for trucks accessing the property.

The discussion turned to the alternatives near the Miller Anderson property. A few attendees expressed interest in having as narrow a cross-section as possible. Steve Hamer/IDNR indicated their preference for N-2D and N-2E. John Betker/Corps and Heidi Woeber/USFWS agreed. Heidi also reiterated the interest in tree-planting for mitigation for

the loss of forested area around the bald eagle's nest. Newton Ellens/USEPA said that safety was the primary interest and if a barrier median did not meet safety standards, mitigation for wetland or natural area taken would be required.

Paula ended the presentation by previewing the next steps in the project. More detailed work on north section alternatives would continue and central section alternatives would be designed further. Design work on the south section would begin in the fall. The next TAC meeting would occur in the spring at which time more detailed design on central section alternatives would be presented. Steve Hamer asked if the north section would be revisited at the next TAC meeting. Paula noted that this information could be presented. Also proposed in the spring is the next set of Public Information Meetings (after the TAC meeting). The Draft Environmental Impact Statement is proposed to be complete by spring of 2005. The question was raised about whether or not the south section would be shown at the PIMs; the answer was no, it is not slated to be developed by then. John Betker asked when the next NEPA/404 meeting would be held. Paula said that the next NEPA/404 merger meeting would occur after the south section was completed. She indicated that an alternative was to have the next NEPA/404 merger meeting after the Public Hearing, which would occur after the DEIS is submitted next spring.

A discussion ensued over whether or not the Corps representative needed to be present at the TAC meetings, because the NEPA/404 merger meetings were set up to keep the agencies informed and involved throughout the process. No real divisive issues (from the Corps's perspective) would require agency representative's presence at the TAC meetings.

The meeting was adjourned by Paula.



ATTENDANCE ROSTER

SUBJECT IL 29 TAC Meeting

MEETING DATE January 20, 2004

NAME	REPRESENTING	ADDRESS, PHONE & E-MAIL
Jason Cowley	FHWA	3250 Executive Park Drive Springfield, IL 62703 217-492-4622
Patrick Kralter	Farm Bureau	1716 N. University, Peoria, IL 61604
Barb Jaeger	IDOT-BDE	Central Office
Barbara Stevers	IDOT-BDE	Central Office
Charles Perino	IDOT-BDE	Central Office
Tom Brooks	IDOT-BDE	"
Paul Niedzwiedz	"	"
Nichelle Simon	IDNR	215 N 5th St Peoria IL 61554 309-347-5719
John Anderson	IDOT	671-3493
Terry Sawko	IDOA	Statefair grounds Springfield 62794-9281 tsawko@agr.state.il.us
Paul Throckmorton	DOT	Peoria
Glen Kruse	IDNR	Spfld 217-785-8891
Tom Lerczak	INPC	11500 E. COUNTY ROAD 1950 N 309-593- P.O. BOX 590 HAVANA, IL 62644 2744
John Becker	CORPS	Rock Island
Heidi Woeber	FAWS	Rock Is.
Paula Green	IDOT-DIST 4	
Greg Larson	IDOT-OH	Peoria 671-3479
Todd Bither	IDNR	Oglesby 815/224-8219
Steve Hamer	IDNR	Spfld 217-785-5500
Dan Dupies	CH2M HILL	414-272-2426
Jim Jodie	CH2M HILL	773-893-3800 x214
Kim Kolacz	CH	773-621-3800 x295

Dan noted that an interim report had been prepared documenting the archaeological findings. Nearly 300 acres have already been surveyed in 2004 with four new sites located. Of the 12 burial mounds located during the survey, none would be affected by the proposed IL 29 improvements. Dan said that the planned groundwater survey in the Miller-Anderson Woods area will not start until eagle hatchlings nearby have fledged.

Agenda Item 2 - North Section Update

Kim Kolody described the revisions to the North Section (Henry Bypass and north of bypass to I-180) since the last Technical Advisory Meeting. Kim noted that additional design work along the Henry Bypass included drainage work and refinements to the right of way. North of the Henry Bypass, access to the Brewmaster Restaurant was changed to avoid a wetland seep. It was pointed out that the seep was not delineated during the 2003 delineation work. It will be delineated during this year's field work. Kim also indicated that wildlife crossings are being considered in the Miller-Anderson Woods area.

Todd Bittner asked how the IL 29 would drain in the Miller Anderson Woods area. Kim responded that the road (2 lanes in each direction) would drain east and west away from the barrier median. Todd reinforced his concern about losing the trees on the east side of IL 29 within the railroad right of way. He noted that the trees provide a screen for the eagle nest to the east. He reminded the group that the FWS guidance on protecting eagle nests prohibits tree cutting within 0.25 mile of the nest. The tree clearing along the east side of IL 29 would be within the 0.25-mile boundary. Todd also noted that he has located another eagle nest west of IL 29 in Miller Anderson Woods (half way up the bluff). If the nest is occupied for two years, Todd noted that the natural area designation west of IL 29 would be extended to include the area required by the FWS' three concentric rings around an eagle's nest.

Todd asked what would happen along the west side of IL 29 adjacent to Miller Anderson. Jim Jodie responded that guardrail would be installed along the west side and that no work would be needed west of the existing west shoulder. Jim noted that to reconstruct the culverts beneath IL 29, a backhoe would have to work downslope of the west shoulder. The effects of the culvert work would be minor and temporary. Todd said he has seen the impacts of culvert work on other projects and wants to minimize those impacts on Miller Anderson.

Agenda Item 3 - Central Section Update

Kim described the progress in the Central Section along existing IL 29, including the interchange concepts north of Chillicothe and in Sparland. Kim noted the areas where the compressed typical section and retaining walls are proposed to minimize impacts to IDNR property.

Todd asked where the proposed retaining wall would be at County Line Hill Prairie Natural Area. Kim stated that the retaining wall would be largely within existing right of way with small strips beyond the existing right of way to allow for a maintenance area (approximately 15-foot-wide) behind (west) of the retaining wall.

Tom Lerczak (INPC) indicated that the potential impacts to IDNR's Land and Water Reserve property west of IL 29 (south of Sparland) would have to be presented to/approved by the

Nature Preserve Board. For the Board to grant IDOT approval to impact the Land and Water Reserve, Tom noted that IDOT would have to demonstrate that there is no prudent and feasible avoidance option. Todd stated the key will be whether the project/proposed impact meets the "imminent public necessity" test in the Nature Preserves law. The Nature Preserve Board is comprised of nine individuals approved by the Governor. The Board registers property and meets four times a year. Tom felt it would be better to present the project's impacts to the Board sooner rather than later. Charles Perino stated it would be beneficial if IDNR were at the hearing with IDOT to tell the Board that the potential 0.3-acre impact to the Land and Water Reserve would not be a loss to the property. It has been Charles' experience that, without IDNR at the Board presentations, IDOT's requests are not well received. The next Nature Preserve Board meeting will be in August in Champaign.

Larry Rice was concerned that IDOT will do whatever they want at the Sparland interchanges regardless of IDNR's concerns about impacts to their property there. Steve Hamer requested a copy of the Sparland interchange exhibits to allow the field staff to better understand the potential impacts. Todd asked if there is any Sparland interchange concept that does not affect IDNR's property in the northeast quadrant of the IL 29/17 interchange. It was noted that every concept affects the northeast quadrant although the extent of the impact varies among alternatives. The question was asked whether it is possible to improve the existing alignment through Sparland using the compressed typical section. It was noted that because IDOT was trying to develop a 65 mph facility, improving the existing alignment through Sparland would not be possible. Pat Kirchhofer (Farm Bureau) said that Sparland interchange concept 2 had the fewest agricultural impacts although it has notable residential impacts, essentially the first row of houses on the west side of IL 29.

Jim Jodie then described the latest work on the Bluff Alignment. He described the cuts and fills associated with the Bluff Alignment on the south and north ends of the alignment. Jim noted that on the north end there could be up to 50-foot cuts and fills before rejoining IL 29 near Crow Creek. When asked about the width of the roadway in the cut and fill sections, Jim responded that the highway could be 150-foot-wide on either side of the centerline.

Dan then reviewed the impact summary table for the Central Section. He noted that, in general, the Bluff Alignment affects agricultural land and the improvements along existing IL 29, while it affects agricultural land, has greater impacts on wetlands, floodplains, and IDNR properties. Pat noted the amount of agricultural acreage affected with the Bluff Alignment and asked whether IDOT had considered using a 22-foot-wide median to reduce the impacts. He also asked whether there were any studies comparing the safety benefits of a 22-foot-wide median compared to a 50-foot-wide median. John Anderson responded that he was not aware of such a study, but noted that a 50-foot-wide median is preferred when possible because its wider median provides safer storage for farm vehicles and other large vehicles. Tony Colvin (Farm Bureau) asked what designation IL 29 has in Chillicothe. John responded that it is a 4-lane facility, but not capable of accommodating 65 mph traffic. He went on to note that the more access allowed along a road, the greater the potential for crashes.

Todd asked whether any viburnum was located along the Bluff Alignment. Charles responded that none were located, but that studies were continuing this field season.

Randy Timmons (IDNR) asked when cost estimates for the Central Section (project) could be expected. Paula Green stated that it would be several months before cost estimates would be generated.

Agenda Item 4 - Senachwine Creek and Crow Creek Floodplains

Kim reviewed the work the team is conducting to better define the project's potential floodplain impacts at Senachwine Creek (south) and Crow Creek. She gave a brief description of the work involved in developing a more accurate 100-year floodplain elevation for Senachwine Creek. Kim noted that the proposed IL 29 improvements would result in longitudinal encroachments on the Senachwine Creek and Crow Creek floodplains. The project team is evaluating alternatives to minimize floodplain impacts, including considering locations to compensate for lost floodplain storage.

Agenda Item 5 - Wildlife Crossings

Kim noted that wildlife crossings have been located in the North Section and include expanded bridges that would accommodate deer and other wildlife adjacent to the bridge embankment and box culvert passages. Planning for wildlife passages is not as advanced in the Central or South Sections. The locations of the crossings will be largely driven by the high roadkill areas as identified during DOT's survey. The wildlife crossings will continue to be refined as design proceeds in each section.

Larry Rice asked about the trapping effect of the median barrier that is proposed in portions of the Central and North sections. Paula noted that a barrier design is used in California that allows wildlife to move through the median. This possibility will be investigated on this project.

Agenda Item 6 - South Section Update

Kim explained that the project team developed a refinement to Alternative S-6 in an attempt to reduce the number of farm severances in the South Section. The revised alternative is known as S-6c and it is being compared to Alternative S-6b which generally follows the original alignment in the South Section. Alternative S-6c had a more east-west orientation than S-6b east of Old Galena Road. It was aligned east of Galena Knolls Subdivision before rejoining Alternative S-6b near the proposed McGrath Road interchange. The downside of Alternative S-6c may be its proximity to Galena Knolls Subdivision and its potential noise impacts.

In reviewing the South Section impacts, Dan noted that the impacts are almost exclusively to agricultural land. Pat Kirchhofer (Farm Bureau) reinforced his desire to use existing IL 29 rather than the west Chillicothe bypass as a means of reducing agricultural impacts. John Anderson explained that it was not possible to improve IL 29 through Chillicothe to a 65 mph facility without substantial impacts to the community. Patrick stated that because of the proximity of existing IL 29 and the proposed bypass a number of Chillicothe businesses would leave the community and locate along the bypass.

Agenda Item 7 - What's Next

Dan encouraged TAC members to attend the planned second public information meeting. He also noted that it would be helpful to have their input on whether another TAC meeting later in the year would be helpful. Todd thought it would be appropriate to meet in the fall to work through issues such as the project's impacts to IDNR properties. Terry Savko and Patrick agreed.

Todd asked when TAC members would be able to review the DEIS. Paula responded that the preliminary DEIS would be delivered to DOT in late spring 2005. Three to six months after that it should be available for public and agency review.

Terry (IL Dept. of Agriculture) asked whether a separate agricultural technical report would be prepared as part of the project. Paula said that all agricultural analysis would be included in the DEIS.

Tony asked whether the comments received at the upcoming public information meeting are taken into consideration in making future alternatives decisions. J.D. Stevenson said that the public comments are considered by DOT, but that the process is not one where the most "votes" sets the course DOT must follow.

Larry Rice indicated that DNR would begin considering mitigation possibilities. He asked whether the project's wetland mitigation could be done locally rather than offsite. Paula indicated that is possible, but noted the potential difficulty of finding a suitable mitigation site in an area that has as many wetlands as the project area does. Tom Lerczak asked if it would be possible for DOT to mitigate by providing funds to upgrade existing properties rather than purchasing "new land." Paula indicated that approach would be possible.

Todd did not agree with the assessment that there are no wetland mitigation opportunities in the project corridor. He noted agricultural land in the Miller-Anderson Woods area that could be restored to wetlands. Charles pointed out that wetlands that are being farmed do not qualify as wetland mitigation sites for DOT. Todd asked if the wetland bank near Spunky Bottoms is the project's only mitigation site. Charles indicated that the bank is only used if onsite mitigation is not successful. Todd said DNR would examine areas in and around Sparland and the general project area in an effort to keep wetland mitigation local.

Charles said that DOT can use conservation easements in perpetuity as a mitigation option and receive full credit. Patrick asked if there is a time limit on the conservation easements. Charles responded that the easements must be in perpetuity for DOT mitigation purposes. Todd asked if DOT land can be used for mitigation. Paula said it could be. Paula also noted that capital improvement projects such as boat landings can also qualify as mitigation. Steve Hamer stated that if DOT would buy forested land and turn it over to DNR, the land could not be used as tree replacement mitigation because under that scenario there would still be a net loss of trees.

Randy Timmons asked whether land purchased by DOT for DNR would come with any restrictions. Paula responded that she did not know of any restrictions.

Newton Ellens (U.S. EPA) asked whether summaries from the upcoming public information meeting would be available at the next TAC meeting. Paula said a summary would be available.

Larry Rice asked if there are funds to construct this project. John Anderson said there were not any construction funds, only funds to complete the EIS phase. Larry asked what happens to property owners who are unable to sell their houses (properties) because they will eventually be acquired by the project. John said that DOT's hardship policy could allow the early acquisition of properties.

A question was asked about how long the EIS is in force after it is completed. Charles replied that it really does not have a "shelf life." It can be re-evaluated to account for changing conditions in the study area.



ATTENDANCE ROSTER

SUBJECT TECHNICAL AGENCY COMMITTEE MEETING

MEETING DATE JUNE 9, 2004

NAME	REPRESENTING	ADDRESS, PHONE & E-MAIL
Mike Lewis	IDOT - District 4	401 MAIN, PEORIA, IL 61602
Barbara Stevens	IDOT - BDE	IDOT Springfield 2177854245
Barb Traeger	IDOT - BDE	IDOT, Spfld. 217/785-0202
Charles Perino	IDOT - BDE	IDOT, Spfld 217/785-2130
JD STEVENSON	FHW A	SPRINGFIELD 217-492-4638
Steve Hamer	IDNR	SPRINGFIELD 217-785-4862
Paul Niedernhofer	IDOT - BDE	Springfield 217-524-1651
Tom LERUZAK	INPL	11500 E. OR 1950W P.O. BOX 590 HAVANA, IL 62644 309-543-2744
Terry Savko	IL Dept of Agr.	Springfield, IL 217-785-4458
Todd Bittner	IDNR	Oglesby IL 815/224-8219
John Anderson	IDOT	309-671-3493
Patrick Kirchhofer	Farm Bureau	1716 N. University, Peoria
Tony Colvin	IDNR	236 St. Rt 26, Lacon (309) 246-8351
Larry Rice	"	"
Paula Green	IDOT	401 Main Peoria, IL 309-671-3478
ERIC THERKILSEN	IDOT	" 309-671-3491
DAW DUBLES	CH	
KIM KOLORY	CH	
JIM SOOLE	CH	
MADDY TIMMONS	IDNR - FORESTRY	IVCC 618511 - 815 N. ORLANDO Smith Ave Oglesby, IL 61348-9692 TIMMONS@IDNR.MH.STATE.ILL
Newton Ellens	U.S. EPA	77 W. Jackson Blvd. (B-19J) Chgo, IL 60604 - 312/353-5562 - ELLENS.NEWTON@EPA.GOV
Maureen Adda	IDOT/D4	

FW IL 29-Cumulative Impact Study Boundaries.txt

-----Original Message-----

From: Green, Paula A [mailto:GreenPA@dot.il.gov]
Sent: June 18, 2004 10:36 AM
To: John Betker-USCOE; Heidi Woeber-FWS
Cc: Dupies, Dan/MKE; Stevens, Barbara H; STEVE HAMER; Stevenson, Jerry; Newton
Ellens - USEPA; Savko, Terry
Subject: IL 29-Cumulative Impact Study Boundaries

The attached information was given to the NEPA/404 members who were at the June 9th Tech. Advisory Committee meeting.

The material concerns the limits being set for the cumulative impact analysis portions of the EIS.

Please review the material and let me know by July 15th if you are in agreement with the boundaries set.

Paula Green
Illinois Department of Transportation
401 Main, Peoria, IL, 61602
Phone: 309-671-3478 - Fax: 309-671-3498
email: greenpa@dot.il.gov

-----Original Message-----

From: Green, Paula A [mailto:GreenPA@dot.il.gov]
Sent: July 01, 2004 11:14 AM
To: Ellens.Newton@epamail.epa.gov
Cc: Dupies, Dan/MKE
Subject: RE: Map of Analysis Area for Indirect and Cumulative Impacts from the IL 29 Project

Our response is attached

Paula Green
Illinois Department of Transportation
401 Main, Peoria, IL, 61602
Phone: 309-671-3478 - Fax: 309-671-3498
email: greenpa@dot.il.gov

-----Original Message-----

From: Ellens.Newton@epamail.epa.gov [mailto:Ellens.Newton@epamail.epa.gov]
Sent: Monday, June 28, 2004 12:41 PM
To: Green, Paula A
Cc: John Betker-USCOE; Heidi Woeber-FWS
Subject: Map of Analysis Area for Indirect and Cumulative Impacts from the IL 29 Project

This message is in response to your request for feedback on the map of the analysis area for indirect and cumulative impacts from the IL 29 project. It is difficult to tell if the proposed analysis area provided covers the "universe" of possible indirect and cumulative impacts. The final map should include information describing how the analysis area was developed. I have a few questions that are intended to assist you in developing and justifying your boundary for the analysis area:

For Cumulative Impacts:

Does the analysis area include resources which have been impacted in the past? Where and what are the sources of impact?
Does the analysis area include resources which are being impacted now? Where and what are the impact sources?
Does the analysis area include resources which may undergo reasonably foreseeable impacts? Where and what are the impact sources? What is the justification (e.g. land use plans) for the anticipated future activities?
What is the time frame used to evaluate cumulative impacts?
What threshold is used to determine a significant impact? (e.g., sedimentation amount, reduced wetland quality, etc.)

Page 1

Page 1

For Indirect Impacts:

What and where are indirect impacts expected? (e.g., range of salt spray, areas of polluted run-off, noise receptors, areas for possible residential/commercial/industrial development)
Where and what resources may be affected by indirect impacts? (e.g., Illinois River and its tributaries, ground wells, natural areas, forest land, residential and commercial property, farmland)

If you have any questions, please call.

Newton Ellens
Environmental Protection Specialist
U.S. Environmental Protection Agency (B-19J)
77 West Jackson Boulevard
Chicago, Illinois 60604
(312) 353-5562

IL 29, Cumulative and Indirect Impacts

Newton Ellens
USEPA

Cumulative Impacts:

1. Does the analysis area include resources which have been impacted in the past? Where and what are the sources of the impact?

Answer: Yes, there has been a loss of wetlands, prairies, forests, and wildlife in the past. The area streams have been modified by channelization and/or land clearing activities. The Illinois River has been greatly impacted by the addition of sewage from Chicago, the establishment of the lock and dam system, maintenance dredging, and the siltation of the adjacent lakes. These impacts have occurred throughout the project area as depicted on the analysis map. The sources of impact have been conversion to agricultural land, conurbation, and transportation (roads, railroads, and barges).

2. Does the analysis area include resources which are being impacted now? Where and what are the impact sources?

Answer: This question is harder to answer. We specifically do not know if any of these resources are currently being impacted. The study area appears to have been relatively stable over the last 40 years. The area can be characterized as losing population and is economically stagnant. There are some potential projects involving sand and gravel mining. Various agencies (IEPA, IDNR, NRCS) have restoration projects ongoing in or adjacent to the study area. These include stream bank stabilization (Crow and such Creeks) and wetland restoration guides. The current state administration has a plan to develop infrastructure and commerce along the Illinois River, upgrade the lock and dam system, promote ethanol production, protect the Illinois River for future generations, and develop and promote attractions along the Illinois River. The City of Henry would like to become an international port. Harder to gauge is the management practices of the wildlife refuges and other properties in the project area and the effects they have on wildlife and wetlands.

3. Does the analysis area include resources which may undergo reasonably foreseeable impacts? Where and what are the impact sources?

Answer: Yes. If any of the economic activities mentioned above come to fruition it could cause losses to wetlands, forested areas and wildlife.

4. What is the justification (e.g. land use plans) for the anticipated future activities?

Answer: The project area does not have any land use plans, either at the municipal or county level. We are in the process of constructing cover type maps of the area for the period of 1939/1940, 1969/1970, and 2002. From these maps we will analyze the changes in cover types over the last 60 years. We will use the last map (2002) to predict the 2020 cover types.

5. What is the time frame used to evaluate cumulative impacts?

Answer: The analysis will range from 1820's to 2020.

6. What threshold is used to determine a significant impact? (e.g., sedimentation amount reduced wetland quality, etc.)

Answer: Thresholds have not been set, but with regards to wetlands, prairie, and forest it most likely will be acreage. Thresholds for wildlife will likely be based on relative abundance.

7. What and where are indirect impacts expected? (e.g., range of salt spray, areas of polluted run-off, noise receptors, areas for possible residential/commercial/industrial development).

Answer: Expected indirect impacts include salt spray, roadway runoff, and land use changes. Studies have shown that salt spray can travel up to 1,000 feet from the highway pavement.

8. Where and what resources may be affected by indirect impacts? (e.g., Illinois River and its tributaries, ground wells, natural areas, forest land, residential and commercial property, farmland)

Answer: All of the above.

-----Original Message-----

From: Green, Paula A [mailto:GreenPA@dot.il.gov]
Sent: July 02, 2004 10:33 AM
To: Duples, Dan/MKE; Kolody, Kim/CHI; Stevens, Barbara H
Cc: Lewis, Mike; Larson, Greg V
Subject: FW: IL 29-Cumulative Impact Study Boundaries

FYI

Paula Green
 Illinois Department of Transportation
 401 Main, Peoria, IL, 61602
 Phone: 309-671-3478 - Fax: 309-671-3498
 email: greenpa@dot.il.gov

-----Original Message-----

From: Betker, John G MVR [mailto:John.G.Betker@mvr02.usace.army.mil]
Sent: Friday, July 02, 2004 9:46 AM
To: Green, Paula A
Subject: RE: IL 29-Cumulative Impact Study Boundaries

Paula, I have reviewed the information you sent on cumulative impacts and the limits of analysis. We have previously discussed the general limits of this project and we concur with the limits you have set. Please keep us informed of further developments in this project. Thanks John Betker

-----Original Message-----

From: Green, Paula A [mailto:GreenPA@dot.il.gov]
Sent: Friday, June 18, 2004 10:36 AM
To: John Betker-USCOE; Heidi Woeber-FWS
Cc: Dan.Dupies@CH2M.com; Stevens, Barbara H; STEVE HAMER; Stevenson, Jerry; Newton Ellens - USEPA; Savko, Terry
Subject: IL 29-Cumulative Impact Study Boundaries

The attached information was given to the NEPA/404 members who were at the June 9th Tech. Advisory Committee meeting.

The material concerns the limits being set for the cumulative impact analysis portions of the EIS.

Please review the material and let me know by July 15th if you are in agreement with the boundaries set.

Paula Green
 Illinois Department of Transportation
 401 Main, Peoria, IL, 61602

file://C:\IL\2029\Section\205-Agency\20Coord\New\20Materials\FW\20IL\2029-... 02/15/2005

Introduction

The purpose of this handout is provide background information on the indirect and cumulative impact analysis that will be included in the IL 29 EIS. The handout provides general background information on the topic, defines indirect and cumulative impacts and lists the resources for which indirect (or secondary) and cumulative impacts will be analyzed. This handout also includes an exhibit with the geographic area within which indirect and cumulative impacts will be analyzed.

Because there is more published information on cumulative impacts than indirect impacts most of the information in this handout focuses on cumulative impacts. The Council on Environmental Quality's publication, *Considering Cumulative Effects* is the source for information in this handout.

Background Information

Secondary impacts associated with highway improvements are those that affect the natural or built environment beyond the immediate "footprint" of the highway improvements. Secondary or indirect effects are those that are "...caused by an action and are later in time or further removed in distance but are still reasonably foreseeable" (Title 40, *Code of Federal Regulations*, 1508.8). Such impacts include the reasonably foreseeable economic and land use changes that may occur later in time as an indirect result of implementing the reasonable range of IL 29 improvements. Secondary impacts may be positive or negative. Negative impacts have the potential to be offset through highway design features and a range of mitigation measures.

Cumulative impacts are those "...which result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions" (Title 40, *Code of Federal Regulations*, 1508.7).

These impacts are less defined than secondary effects. The cumulative effects of an action may be undetectable when viewed in the individual context of direct and even secondary impacts, but nonetheless can add to other disturbances and eventually lead to a measurable environmental change. For example, degradation of a stream's water quality by several developments which taken individually would have minimal effects, but collectively would cause a measurable negative impact is considered a cumulative effect.

According to *Considering Cumulative Effects*, a project's cumulative effects analysis should focus on resources of national, regional, or local significance. The authors of the environmental document should "count what counts, not produce superficial analyses of a laundry list of issues that have little relevance to the effects of the proposed action or the eventual decisions."

In general, the cumulative effects analysis process is comprised of the four steps below:

- Step 1 - Identify the significant cumulative effects issues associated with the proposed action and define the assessment goals;
- Step 2 - Establish the geographic scope for the analysis;
- Step 3 - Establish the time frame for the analysis; and
- Step 4 - Identify other actions affecting the resources, ecosystems, and human communities of concern.

As noted, the geographic area within which indirect and cumulative impacts will be analyzed is attached. The IL 29 team will use 2030, the project's design year, as the "out year" to analyze indirect and cumulative impacts. The Illinois Natural History Survey will be gathering historic impacts to wetlands and other applicable natural resources to assist in the evaluation.

Indirect and cumulative impacts will be analyzed for the resources listed below.

- Agriculture
- Surface Water Resources/Quality
- Wetlands
- Plant Communities
- Wildlife Resources
- Threatened and Endangered Species
- Designated Lands

If you have any questions or comments about the indirect and cumulative analysis process for this study please contact Paula Green.

MEETING SUMMARY

CH2MHILL

Technical Agency Committee Meeting

ATTENDEES: Mike Lewis / IDOT
 Barbara Stevens / IDOT BDE
 Barb Traeger / IDOT BDE
 Charles Perino / IDOT BDE
 Jan Piland / FHWA
 J.D. Stevenson / FHWA
 Randy Strang / FHWA
 Matt Fuller / FHWA
 Greg Larson / IDOT
 Paul Niederhauer / IDOT BDE
 Janel Verle / IDOT BDE
 Tom Lerczak / INPC
 Terry Savko / IL Dept of Agric.
 Todd Bittner / IDNR
 Matt Sprenger / USFWS
 Patrick Kirchhofer / Farm Bureau
 Kevin Rund / Farm Bureau

Steve Hamer / IDNR
 Tony Colvin / IDNR
 Paula Green / IDOT
 Felecia Hurley / IDOT-BDE
 Dan Dupies / CH2MHILL
 Kim Kolody / CH2MHILL
 Jim Jodie / CH2M HILL
 Jill Kramer / CH2M HILL
 Randy Timmons / IDNR – Forestry
 Tony Holtschlag / IDNR
 Randy Edwards / USDA
 Josh Joseph / Peoria SWMD
 Newton Ellens / U.S. EPA
 Maureen Addis / IDOT
 Steve Hamer / IDNR

FROM: CH2M HILL

DATE: June 1, 2006

Introduction

A technical advisory committee meeting was held in the Training Room at the District 4 offices in Peoria on June 1, 2006. Mike Lewis/IDOT began the meeting by welcoming technical committee members and informing members that Public Hearings will be held on June 14th in Chillicothe and June 15th in Henry.

Jim Jodie/CH2M HILL reviewed the purpose and agenda for today's meeting; provide an update on changes to the alternatives since the last TAC meeting in June 2004, summarize the project's mitigation concepts, provide an update on local government and agency coordination activities, and the status of the DEIS and upcoming Public Hearing.

A summary of the PowerPoint presentation that was used during the meeting is found below.

South Section

Jim Jodie provided an overview of the proposed alternatives under consideration in the south section in June 2004, as well as the recommended alignment in the DEIS. In summary there was no change to the typical section, Alternative S-6B was carried forward, and Alternative S-6C was eliminated from further consideration. He provided an overview of

the proposed interchanges at IL 6, Cedar Hills Drive, Rome West Road, McGrath Street, and Truitt Road.

Central Section

Dan Dupies/CH2M HILL provided an overview of the proposed alternatives under consideration in the central section in June 2004. Dan explained that the bluff alignment under consideration in June 2004 was eliminated from further consideration because it did not meet the project's Purpose and Need, the "on IL 29 alignment" would attract 3 to 4 times more vehicles per day than the bluff alignment, and it would not alleviate future congestion on IL 29. Dan noted that the resource agencies who participated in the second NEPA/404 meeting in March 2005 concurred with eliminating the bluff alignment.

Kim Kolody/CH2M HILL provided an overview of the proposed improvements generally following the existing IL 29 alignment from Benedict Street to Crow Creek north of Sparland including the Chillicothe area from Truitt to the North Chillicothe interchange. Kim reviewed the three interchange alternatives that were under consideration in June 2004, and the reasons why the trumpet interchange was identified as the most efficient; the proposed typical sections along the central section, including the use of a split profile between the IDOT rest area to south of Sparland; and the Sparland interchange options and why Alternative 3A was selected.

Tony Colvin/IDNR Marshall State Fish and Wildlife Area asked how people would access the hunter parking lot just north of Senachwine Creek, east of IL 29 and south of the proposed trumpet interchange.

Kim explained that access would be provided from IL 29 to the existing service road via a proposed frontage road.

Steve Hamer/IDNR asked if bikes would be allowed on the section between the IDOT rest area to south of Sparland (area of the proposed split profile).

Kim explained that a 10' shoulder would be provided through this section to accommodate bicycles.

Steve Hamer stated that regarding the FEMA floodplain buyout area, IDNR would like to see the proposed improvements use the buyout properties rather than split the IDNR-Sparland Unit of the Marshall State Fish and Wildlife Area. He asked if anyone at the DOT has contacted a local congressman about making an exception to using the floodplain buyout properties.

Paula Green commented that there have been several coordination meetings with the appropriate personnel regarding the use of the floodplain buyout properties. We have learned that this would be an extremely difficult process to go through with no guarantees that a structure would be allowed on the properties.

Charles Perino noted that in a recent case in Missouri the decision was supported that no structures would be allowed on floodplain buyout properties. FEMA Washington hasn't budged from its initial position that no structures are allowed on floodplain buyout properties.

North Section

Kim Kolody provided an overview of the proposed alignment from north of Crow Creek through the northern project terminus north of Kentville Road. She reviewed the selected typical section through the Crow Creek area; the proposed Henry Bypass alignment; the proposed improvements through Putnam; the proposed improvements through Miller-Anderson Woods; and the proposed Kentville Road intersection.

Tony Colvin asked how high IL 29 would be elevated at Kentville Road. Todd Bittner asked why the intersection is being moved further to the north.

Kim indicated that IL 29 was raised for safety reasons and to reduce the grade from I-180. Maureen Addis/IDOT added that the proposed improvement would shift the intersection to the north to improve intersection angles as well.

Tony Colvin asked if the proposed improvements addressed the IDNR parking facility in Sparland.

Kim indicated that Center Street has been extended to provide access to the property north of the pond, under the proposed IL 29 bridge. Additionally, south of IL 17 the proposed improvements include redoing the existing parking lot.

Randy Edwards asked where the Whiffle Tree House is located.

Kim indicated that it is adjacent to the proposed improvements south of IL 17 and west of proposed IL 29.

Dan Dupies summarized the potential impacts of the proposed project, including right-of-way needs, impacts to farmland, forest, wetland, floodplains, T&E species, INDR properties, Natural Areas, and residential and commercial displacements.

Todd Bittner added that an eagle's nest in the Miller Anderson Woods Natural Area was destroyed and that a new nest has been built. However, in order for a bald eagle to get a natural area designation it needs 2 years of fledgling activity. The nest has had 1 successful year, and it is anticipated that a natural area designation will be adopted in the future. The bald eagle nest is approximately 900' from IL 29 and not anticipated to be affected by the proposed project.

Todd Bittner asked if there were any restrictions for tree cutting in the DEIS relative to the Indiana Bat.

Matt Sprenger/USFWS indicated that the USFWS will no longer accept tree cutting restrictions as a mitigation measure for impacts to the Indiana Bat.

Paula Green/IDOT commented that tree removal will not be permitted between April 15 and August 15 for the protection of bald eagle nests.

Steve Hamer asked if there would be no tree cutting for migratory birds.

Charles Perino commented that some birds require interior foliage, but not migratory birds.

Matt Sprenger commented that it is illegal to take a migratory bird without a permit.

Josh Joseph/Peoria SMWD asked if a displacement meant that the improvements would be taking the building or just access to the building.

Dan Dupies commented that both situations are considered a displacement.

Dan Dupies continued the presentation providing an overview of the mitigation and enhancement measures that will be implemented by the project.

Tony Colvin asked if the DOT would do the wetland restoration.

Paula Green responded that the DOT will do the restoration, as well as 5 years of monitoring.

Steve Hamer asked if there was a mitigation site near Galena Road Gravel.

Dan Dupies commented that there is a 15.2 acre mitigation parcel that will be turned over to the IDNR near the Galena Road Gravel site.

Newton Ellens/USEPA asked if the wetland impacts in the Crow Creek floodplain stand-up to the LEDA test (least environmentally damaging alternative).

Paula Green indicated yes. She noted that there is no avoidance option at this location. She indicated that the alignment is as close to the railroad road as it can be, minimizes impacts by using as much of the existing facility as possible, and it represents the best compromise.

Kevin Round/Farm Bureau asked about the 1,165 acres of farmland impact shown in the impact summary table and asked why this is higher than the slide which illustrated a 600 vs. 200 acre farmland impact.

Mike Lewis indicated that the 600 vs. 200 acre farmland impact was just for the Central Section.

Dan Dupies concluded the meeting by indicating the DEIS was signed by FHWA on April 24, 2006, and that comments are due on June 23rd or 10 days after the last public hearing on June 15th. The FEIS and ROD are expected to be published later this year.

Other Agency Coordination



Illinois Department of Transportation
Memorandum



To: J. E. Crowe Attn: Prog. Development
From: Michael L. Hine By: Larry L. Piche
Subject: PESA Review
Date: May 17, 2002 *Larry L. Piche*

Refer to: IL 29 (FAP 318)
Job No. P-94-009-01
From Chillicothe to I-180; Rome, Chillicothe, Lacon, Henry, Putnam
Florida, and Princeton-South Quadrangles
Peoria, Marshall, Putnam and Bureau Counties
ISGS # 1331 Sequence # 9816

Attached is a copy of the Preliminary Environmental Site Assessment conducted by the Illinois State Geological Survey (ISGS) for the subject project as described in your Special Waste Survey Request.

Volatile organic and metals testing was done for this project and the attached (ISGS) report indicates possible detection of contamination at five sites. *In addition, one site from ISGS # 801, dated April 22, 1996, has been re-evaluated since depth restrictions have been modified since the issuance of that report. The stipulations stated in this memorandum supercede those previously set.* The report has assessed a high risk for this project and recommends that further soil boring and sample analysis needs to be performed to determine the precise nature and extent of the contamination if excavation or additional right-of-way is required at these locations.

It is the opinion of this office, in consultation with the Chief Counsel's Office, that if right-of-way acquisition includes a parcel with an underground storage tank(s) and Land Acquisition Procedures are followed and if construction excavation and utility relocation do not exceed the maximum testing depth at each site and does not exceed

1.8 meters (6 feet) within 15 meters (50 feet) of soil boring 1331-13A and 0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1331-13B at Residence, located on the NE quadrant of University Ave. and Chestnut St. in the 500 block of University Ave., Henry;

no grading or excavation within 15 meters (50 feet) of soil boring 1331-14A and 1.8 meters (6 feet) within 15 meters (50 feet) of soil boring 1331-14B at McClain Ford Used Cars, located on the east side of University Avenue in the 500 block of University Ave., Henry;

no grading or excavation at Ag View FS (Site 1331-17), located on the west side of IL 29 at 1195 IL 29, Henry;

1.8 meters (6 feet) within 15 meters (50 feet) of soil boring 1331-19A and 0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1331-19B at Vacant lot, located on the west side of Railroad St. one parcel north of North St. in the 300 block of Railroad St., Spaulding;

no grading or excavation at Battery Vault (Site 1331-21), located on the SE quadrant of IL 29 and County Line Rd., Sparland;

and from ISGS # 801:

0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 801-6B at Abandoned Amoco Pipeline (Site 1331-G), location crosses IL 29 approximately 61 meters (200 feet) south of Senachwine Creek, Chillicothe,

then no additional preliminary testing for the project is necessary. If the above stipulations can be met, then the project will be in compliance with Departmental Hazardous Waste Policy LEN-13. If the stipulations cannot be met, then the statewide consultant should be requested to perform additional investigations. Please notify this office of any actions you may decide to take concerning these sites (i.e., avoidance, further investigation, etc.). The PESA Response form can be found on the PMA.

Other findings and recommendations of the report should be carefully considered. If you have any questions regarding this report or the tasking of the statewide consultant, please contact John Washburn at 217/782-7074 or Steven Gobelman at 217/785-4246.

Attachment

cc: Randy Schick
Central Bureau of Land Acquisition
District Bureau of Land Acquisition
District Utility Coordinator
Scott Stitt

S:\GEN\WPDOCS\MEHRA\PHASE\DISTRA\1331.doc



Illinois Department of Transportation

Division of Highways / District 4
401 Main Street / Peoria, Illinois / 61602-1111
Telephone 309/671-3333

June 24, 2002

BUREAU OF PROGRAM DEVELOPMENT
Studies & Plans – Phase I
Illinois Route 29 Study
Peoria, Marshall, Putnam & Bureau Counties
Job No. P-94-009-01
Catalog No. 032469-00

Mr. Dan Dupies
CH2M Hill
135 South 84th Street
Suite 325
Milwaukee, WI 53214

Dear Mr. Dupies:

The enclosed May 21, 2002 memo from IDNR refers to the IDNR Action report mailed to you on October 2, 2001 and to questions from Paula Green concerning that material. A copy of the September 28, 2002 e-mail questions is also enclosed.

The maps mentioned in the memo under items 1, 2 and 3 were e-mailed to you on October 1, 2002.

Please contact Paula Green of this office if you have any questions concerning this matter.

Very truly yours,

Joseph E. Crowe, PE
District Engineer

A handwritten signature in black ink, appearing to read "Eric S. Therkildsen".

By: Eric S. Therkildsen, PE
Program Development Engineer

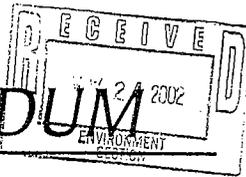
PAG:jl/s:\mgr2\winword\std&plns\env\ir\letters\pag0039.doc

cc: Dick Stafford – CH2M Hill, Chicago Office
M. Lewis (no attach.)
P. Green



ILLINOIS
DEPARTMENT OF
NATURAL
RESOURCES

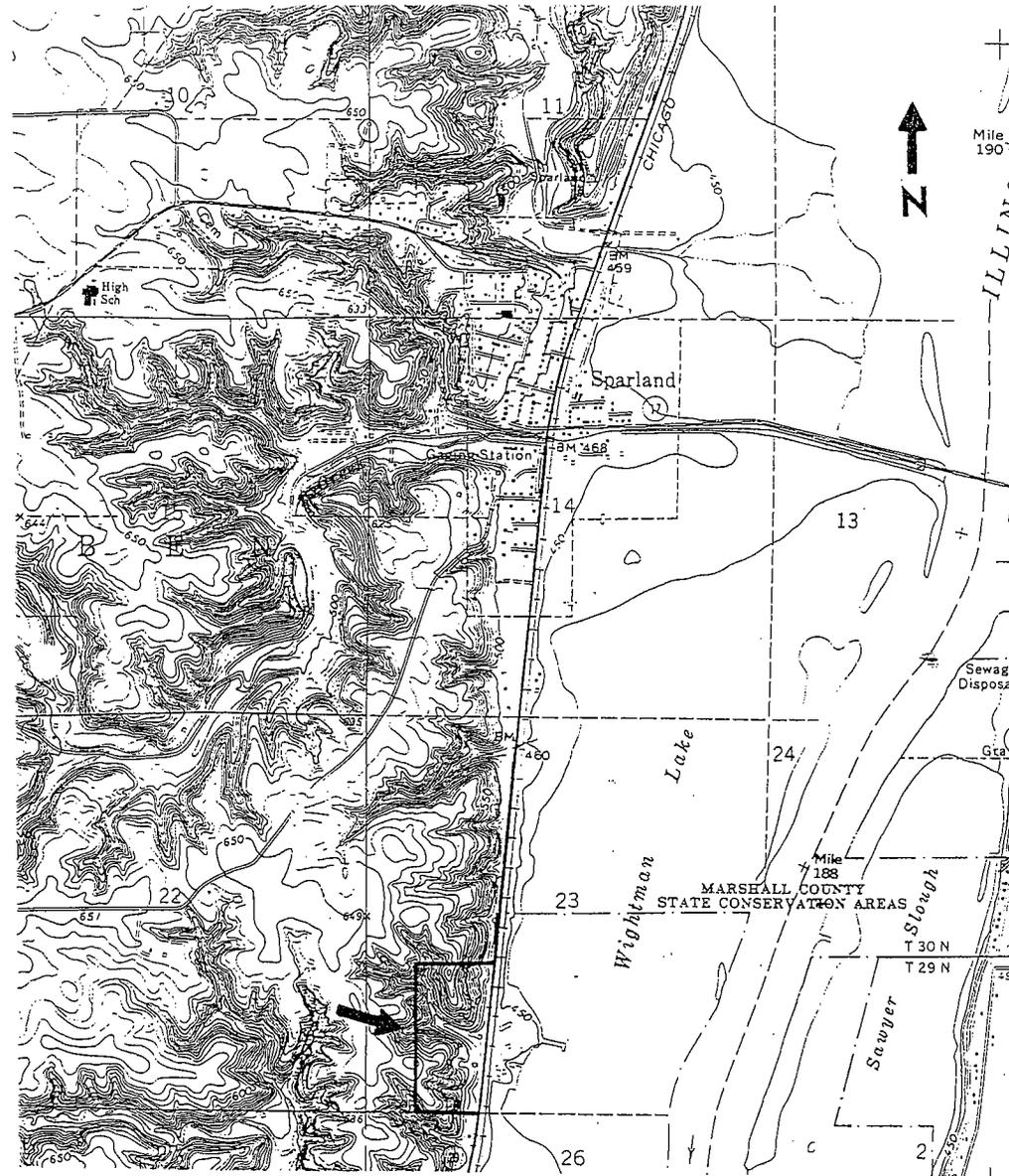
MEMORANDUM



to: Barb Traeger
from: 5-21-02
date: Michelle Simone
subject: IL Route 29 Questions

Below are answers to the questions that Paula Green had sent you for clarification on material from the IDNR on the Route 29 study area. If you need further information please feel free to contact me (309-347-5119).

- 1 - Spring Branch Conservation Area is a part of Marshall State Fish and Wildlife Area which is indicated by blue lines on the enclosed map. If you have any specific questions about the boundaries of Marshall SFWA, you can call the site staff directly at 309-246-8351.
- 2 - The blue square located in Section 27 is part of Marshall SFWA.
- 3 - On the enclosed map, in Section 23, the Marshall Co Conservation Area Hill Prairies INAI is indicated in orange. Not all of this is owned by the state and therefore the entire Natural Area doesn't fall within the Land and Water Reserve boundaries. The Marshall Co Hill Prairies Land and Water Reserve is outlined in green. I have enclosed two additional maps, one of just the INAI boundaries and one of just the Land and Water Reserve boundaries.
- 4 - River otter sighting #225. This was a roadkill of a juvenile river otter found on August 19, 1997. If you need any other information about this record, call Bob Gottfried at 217-785-8774.
- 5 - Names of watersheds in river otter occurrence record - These watersheds don't have names to correspond to the numbers. These watershed numbers are USEPA HCU (hydrological category units) 08 designations. To get more information on these watershed designations, contact the USEPA (not IL EPA, apparently they have a different numbering system).



11.3 Marshall County Hill Prairies Land and Water Reserve Registry boundaries - USGS 7.5' topographic map

	County <u>MARSHALL</u> No. <u>15</u>
	Name of Area <u>MARSHALL CO. CONSERVATION AREA HILL PRAIRIES</u>
	Quadrangle <u>LACON 7.5'</u>
	Location <u>Sec 23, T12N, R9E</u>

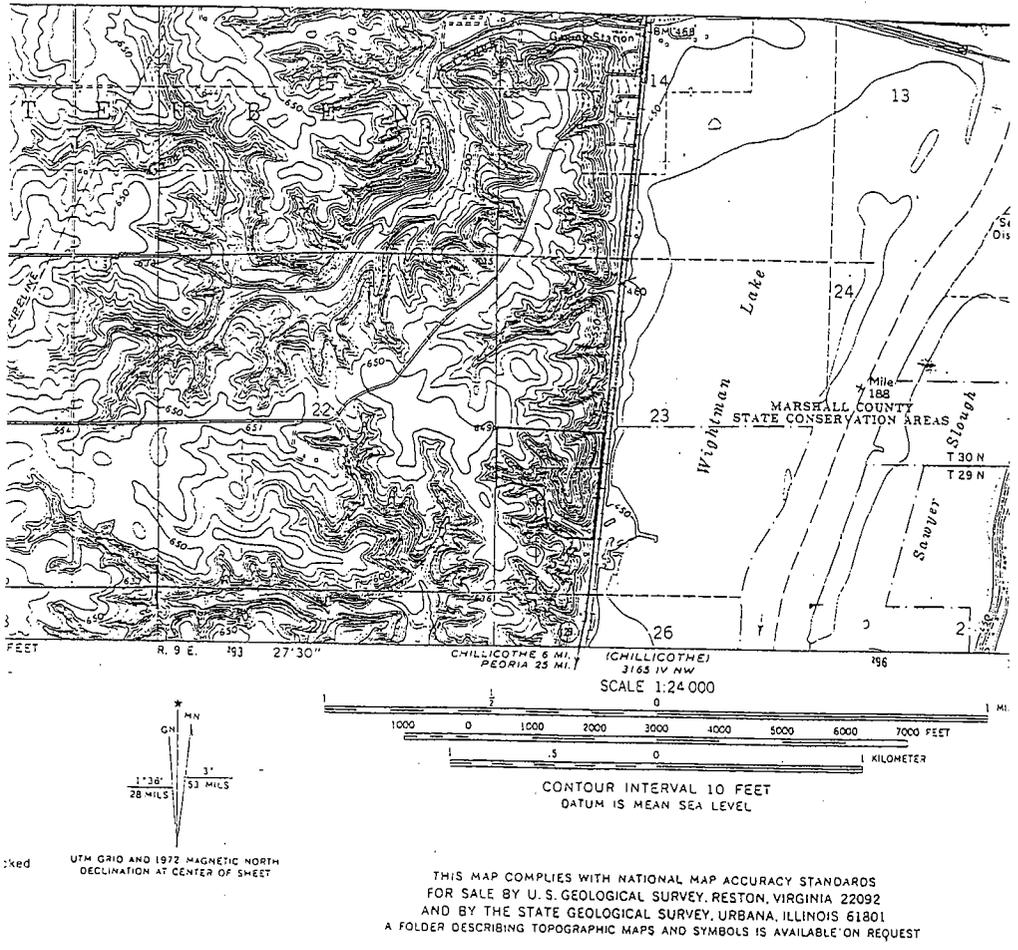
ILLINOIS NATURAL AREAS INVENTORY

Green, Paula A
 From: Green, Paula A
 Sent: Friday, September 28, 2001 4:25 PM
 To: Traeger, Barb J.
 Subject: IL 29 - IDNR Material

Thanks for the material from IDNR for the IL 29 study area. After reviewing the material I have the following questions:
 Is a print out available for the Spring Branch State Conservation Area?
 On the map showing the Marshall County Conservation Area Hill Prairie there is a blue square located of the east boundary of Sec. 27. Is this part of the Marshall County State Conservation Area or is it a separate entity?
 The boundaries of the Marshall County Conservation Area Hill Prairie Land and Water Reserve are difficult to distinguish. Can IDNR provide better mapping?
 River sighting #225 is not listed on Element Occurrence Record AMAJF 1001*008*IL. Is there any information on this sighting?
 The 2nd page of the same occurrence record list 6 watersheds by number. Can we have the names of the watersheds.

If this is the only information IDNR has available concerning plants and animals within the natural areas I think we need to have our surveyors inventory the areas? Please discuss this again with Charles.

Paula Green
 Environmental Studies Unit
 Illinois Department of Transportation
 401 Main Street
 Peoria, IL 61603
 (309) 671-3478
greenpa@nt.dot.state.il.us





Illinois Department of Transportation

Memorandum

To: J. E. Crowe Attn: Prog. Development Engineer
From: Michael L. Hine By: Larry L. Piche
Subject: PESA Review
Date: November 6, 2002



Refer to: IL 29 (FAP 318)
Job No. P-94-009-01
IL 6 to Truitt Ave. in Chillicothe; Survey for Chillicothe Bypass
Peoria, Marshall, Putnam & Bureau Counties
ISGS # 1331A Sequence # 9816A

Attached is a copy of the Preliminary Environmental Site Assessment conducted by the Illinois State Geological Survey (ISGS) for the subject project as described in your Special Waste Survey Request.

Volatile organic and metals testing was done for this project and the attached (ISGS) report indicates possible detection of contamination at eight sites. The report has assessed a high risk for this project and recommends that further soil boring and sample analysis needs to be performed to determine the precise nature and extent of the contamination if excavation or additional right-of-way is required at these locations.

It is the opinion of this office, in consultation with the Chief Counsel's Office, that if right-of-way acquisition includes a parcel with an underground storage tank(s) and Land Acquisition Procedures are followed and if construction excavation and utility relocation do not exceed the maximum testing depth at each site and does not exceed

0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1331A-3A at Vacant building, 1235 North Fourth St.;

no grading or excavation at Riverside Chevy (Site 1331A-17), 200 Plaza Drive Rd.;

no grading or excavation at battery vault (Site 1331A-18), located on the SE quadrant of IL 29 and Swain Road;

no grading or excavation at battery vault (Site 1331A-20), located on the SE quadrant of IL 29 and Knox St.;

1-2 meters (4 feet) within 15 meters (50 feet) of soil boring 1331A-21A and 0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1331-21B at Shell/Freedom station, 15530 IL 29;

no grading or excavation at Burlington Northern Rail Yard (Site 1331A-25), located on the north side of Chillicothe from Benedict St. west to Krause Rd.;

0.6 meters (2 feet) within 15 meters (50 feet) of soil boring 1331A-26A and 1.8 meters (6 feet) within 15 meters (50 feet) of soil boring 1331A-26B at Casey's, 1206 Truit Ave.;

no grading or excavation at Caterpillar Technical Center (Site 1331A-34A), 909 Cedar Hills Dr.,

then no additional preliminary testing for the project is necessary. *Please note that the following archived CERCLIS sites intersect the project route: Caterpillar Technical Center (Site 1331A-34) and Caterpillar Mossville (Site 1331A-D).*

If the above stipulations can be met, then the project will be in compliance with Departmental Hazardous Waste Policy LEN-13. If the stipulations cannot be met, then the statewide consultant should be requested to perform additional investigations. Please notify this office of any actions you may decide to take concerning these sites (i.e., avoidance, further investigation, etc.). The PESA Response form can be found on the PMA.

Other findings and recommendations of the report should be carefully considered. If you have any questions regarding this report or the tasking of the statewide consultant, please contact John Washburn at 217/782-7074 or Steven Gobelman at 217/785-4246.

Attachment

cc: Randy Schick
Central Bureau of Land Acquisition
District Bureau of Land Acquisition
District Utility Coordinator
Scott Silit
Todd Hummert

S:\GENWPD\DCS\MEHRA\PHASE\ID\STR4\1331A.doc



ILLINOIS STATE GEOLOGICAL SURVEY

Natural Resources Building
615 East Peabody Drive
Champaign, IL 61820-8964
217.333-4747
FAX 217/244-7004



November 8, 2002

Mike Lewis
Illinois Department of Transportation
District 4
401 Main St.
Peoria, IL 61602-1111



Dear Mike:

Enclosed please find numerous paper-copies (2 each) of ISGS deliverables for the IL 29 project. Most of these products have been in the hands of John Washburn since this past summer. He requested that we send you 2 copies of those same products. Please provide one of the copies to CH2M Hill. In addition are new products from Bob Bauer.

We are in the final stages of tweaking the 3-regional volume model and the data that supports this. We want to make sure that this model is as good as it is going to get before we pass it off to you and your consultants. It should be coming very soon. In the meantime, if you need any help with any of the enclosed products, you need additional copies, or would like preliminary digital files of products, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard C. Berg".

Richard C. Berg
Senior Geologist and Director
Geological Mapping Program

RCB:dms

Enclosures



Illinois Department of Transportation

Division of Highways / District 4
401 Main Street / Peoria, Illinois / 61602-1111
Telephone 309/671-3333

April 16, 2003

Mr. Dan Dupies
CH2M Hill
135 South 84th Street
Suite 325
Milwaukee, WI 53214

Dear Mr. Dupies:

Enclosed for your use is one copy of the Assessment of the Biological Resources Report for the Illinois 29 project.

If you have any questions concerning this matter, please contact Ms. Paula Green of this office at (309) 671-3478.

Very truly yours,

Joseph E. Crowe, P.E.
District Engineer

By: Eric S. Therkildsen, P.E.
Program Development Engineer

PAG:kmales:\mgr2\winword\std&plns\environment\letters\pag0001.doc

Enclosure

cc: CH2Hill, Chicago Office (Attn: Dick Stafford) – No Attach.
M. Lewis – No attach.
Project File - P. Green



Marshall-Putnam Soil and Water Conservation District

M. Lewis

July 21, 2003

Eric Therkildsen
Illinois Department of Transportation
401 Main Street
Peoria, Illinois 61602



RE: Opposition to Illinois Route 29 Expansion

Mr. Therkildsen,

The Marshall-Putnam Soil and Water Conservation District Board of Directors, at the July 9, 2003 meeting, voted unanimously to **OPPOSE** the creation of the Route 29 Expansion connecting Peoria to Interstate 80 as proposed by the Illinois Department of Transportation and the engineering firm CH2MHill. Opposition is based on minimal community development with high impact on natural resources and existing farm operations including but not limited to the sensitive bluff areas, wetland areas and Miller-Anderson Nature Preserve.

At the forefront of discussion was the permanent loss of prime farmland. Prime Farmland is defined as land (soils) best suited for farming. Prime Farmland is flat or gently rolling, consistently produces the most food, feed, fiber, forage and oilseed crops with the least amount of fuel, fertilizer, and labor. The soil quality, growing season, and moisture supply assures continuous high productivity without degrading the environment. The presence of all these factors together in central Illinois is unsurpassed by any other area in the world!

The proposed location for the Route 29 Expansion intersects Ag Areas in Marshall and Putnam Counties. The Agricultural Areas Conservation and Protection Act (P.A. 81-1173) provides a means by which agricultural land may be protected and enhanced as a viable segment of the states economy and as an economic and environmental resource of major importance. Ag Areas must consist of 350 contiguous acres or more of land. These areas are organized among local landowners and county government then registered as an Agricultural Protection Area with the Illinois Department of Agriculture for the purpose of designating blocks of land parcels that are committed to production of agricultural commodities.

Additionally, the proposed expansion adversely affects irrigated farming operations, federal and state enrolled protected lands such as those in the Conservation Reserve Program and the Conservation Reserve Enhancement Program and the Miller-Anderson Nature Preserve located on the current Route 29 on the Bureau-Putnam Border.

Agriculture plays a vital role in Central Illinois. It provides employment, protects and enhances our natural resources, contributes heavily to the local economy, and provides a wholesome quality of life to residents.

The Marshall -Putnam Soil and Water Conservation District is a locally organized unit of government promoting the protection, maintenance, improvement, and wise use of the soil, water and related resources in Marshall and Putnam counties, the state of Illinois, and the nation.

For more information, please contact the Marshall-Putnam Soil and Water Conservation District at 309-364-3913 x3.


Jill Ketter
Resource Conservationist



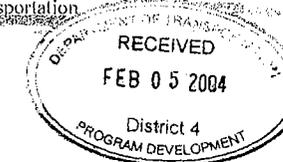
Illinois Department of
Natural Resources

One Natural Resources Way • Springfield, Illinois 62702-1271
http://dnr.state.il.us

Rod R. Blagojevich, Governor
Joel Brunsvold, Director

February 2, 2004

Mr. Joseph E. Crowe, P.E.
District Engineer, Div. Of Highways/District 4
Illinois Department of Transportation
401 Main Street
Peoria, Illinois 61602-1111



RE: Illinois Rt. 29 Study
IL. 6 to I-180 Interchange
Hydrologic Survey Request
and Additional Surveys

ATTN: Paula Green

Dear Mr. Crowe:

The Illinois Department of Natural Resources (IDNR) recently attended the Technical Advisory Committee Meeting or the Illinois 29 Corridor Study. It was during that meeting that IDNR referred to a previous request for a hydrology study along portions of the Miller-Anderson Woods Nature Preserve. This study had not been initiated at that time. It is the intent of this letter by a formal request that this study be completed along with the other resource surveys. Specifics for the study would be determined after a preliminary meeting with the District 4 Hydrology Engineers and the State Geological Survey.

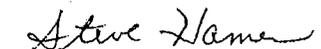
It was also requested that additional surveys be completed for the Blandings Turtle as this is a recent addition to the database that was not included in the original Agency Action Report for this project. See attached map.

The IDNR supports the recommendation of the Natural History Survey to do additional surveys for the Four-toed Salamander due to the presence of habitat found during the initial survey.

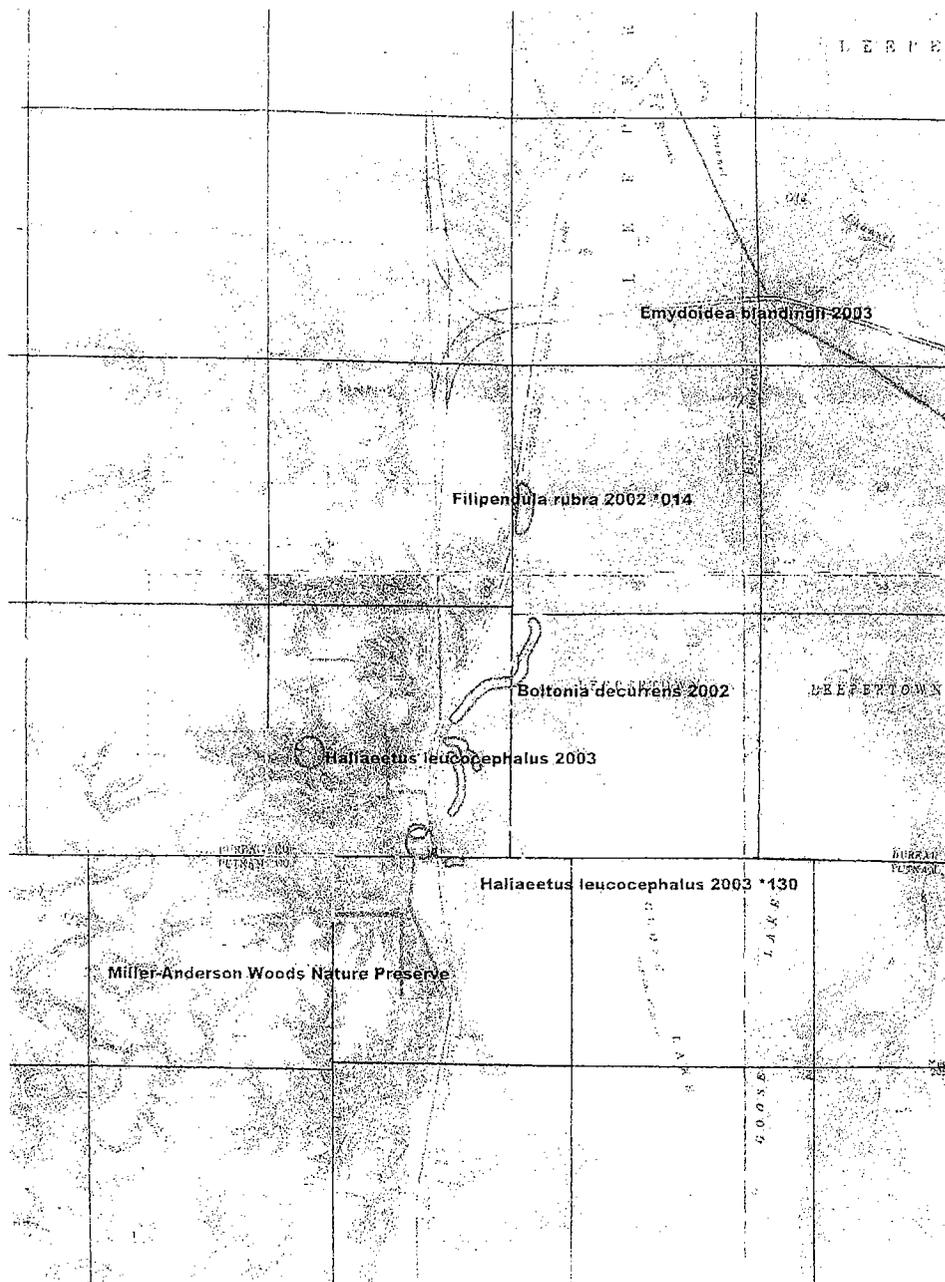
The Cerulean Warbler was recently sited within the Miller-Anderson Woods Nature Preserve and could appear on the listed species database in the near future. For this reason it would be beneficial to survey for this species also.

If you have any questions on the above, please contact me at 217-785-5500.

Sincerely,


Steve Hamer
Transportation Review Program
Division of Natural Resource Review

cc: Tom Brooks /IDOT Central Office



MEETING SUMMARY

CH2MHILL

IL Route 29 Study – IL 6 to I-80 Groundwater Meeting

ATTENDEES: Jim Jodie/CH2MHILL
 Kim Kolody/CH2MHILL
 Roger Huddleston/CH2MHILL
 Neil Von Bebbler/IDOT
 Hydraulics
 Bob Dawe/IDOT Hydraulics
 Jim Hamilton/Hutchison
 Engineering, Inc.
 Fred Lin/Lin Engineering
 James Miner/ISGS

Mike Lewis/IDOT Dist. 4
 Greg Larson/IDOT Dist. 4
 Eric Therkildsen/IDOT Dist. 4
 Paula Green/IDOT Dist. 4
 Tom Brooks/IDOT Springfield
 Todd Bittner/IDNR
 Pat Malone/IDNR
 Steve Hame/IDNR
 Tom Lerczak/INPL

FROM: Jim Jodie
 DATE: March 15, 2004

Introduction and Meeting Purpose

At the January 20th, 2004 TAC meeting IDNR requested a meeting with the IDOT to discuss groundwater equilibrium concerns that could potentially be caused by widening IL 29 from a two-lane to a four-lane facility in the area of Miller-Anderson Woods.

On March 12th, 2004, IDOT, IDNR, INPL, ISGS, CH2M HILL, Lin Engineering, and Hutchison Engineering met at IDOT District 4 offices to address groundwater issues.

During a brief presentation CH2M HILL discussed the following:

1. The roadway geometrics, including design of the compressed typical section in the Miller Anderson Woods area which had guardrail on the west side of the roadway and retaining walls on the east.
2. Different types of retaining walls that could be installed to minimize subsoil disturbances.
3. Details about the existing soil conditions and strata, existing groundwater flow, and the anticipated effects of the proposed widened roadway to groundwater flow.

Recommendations

At the meeting, it was agreed to do the following for collecting baseline groundwater data:

1. ISGS will develop a proposed scope and well locations to complete one transect of wells along the existing bluff/slope, extending from a point along Old IL 29 to the west side of existing IL 29. This will be a collaborative effort between ISGS and CH2M HILL hydrogeologists.

2. IDNR will assist in coordinating access and permitting for drilling in the nature preserve.
3. The wells will be monitored to determine the baseline for existing conditions. ISGS, IDOT and IDNR will decide the duration.

If no red flags (such as a dramatic change of several feet in the subsurface water elevations, or the presence of a confining layer that creates artesian groundwater conditions beneath IL 29) are identified as a result of the baseline data, IDOT will consider it a closed issue. Additional studies will not be needed unless an important variation or issue is raised.

IDOT will re-assess the situation pre- and post construction.

Meeting Presentation Minutes

Participants were introduced.

Jim Jodie provided background information regarding the meeting purpose, generally described the current design in the area of Miller-Anderson Woods, and introduced the speakers and topics that would be covered in the meeting.

Kim Kolody outlined the study area of interest for the meeting, described concerns with the previous design, and described modifications made as a result of concerns that were raised during the January meeting. Key factors she highlighted in the current design were:

- Current design alternatives will focus on alignments that do not relocate the railroad east of the existing IL 29 alignment.
- The existing pavement will be used for the southbound lanes and widening will be to the east.
- The profile is essentially at the same elevation as the existing roadway.
- The northbound lanes are on fill so there is no cut or excavation there.
- Based on concerns raised previously, the proposed centerline is shifted 8 feet east of the existing IL 29 centerline. The shift allows for elimination of the previously proposed retaining wall on the west. Instead, a guardrail will be used on the west while the east will require a retaining wall. Access to a couple of east properties may be eliminated.
- As a result, there will be approximately 40 feet between the proposed east roadway retaining wall and the center of the railroad tracks. This is a reduction of 10 feet from the previous proposal (existing railroad right of way is 50 from centerline of tracks). Even with the reduction, the current design will not require large longitudinal drain pipes since a typical ditch can be accommodated.
- The pavement surface was modified from the initial design so that there is not a normal crown. Instead the southbound pavement will drain to the west and the northbound

pavement will drain to the east. The proposed design will minimize cost and maintenance of median drainage.

- The existing drainage pattern will continue by using drainage structures to convey water from the west side ditch to the east side ditch.

Jim Hamilton provided handouts and discussion regarding the likely retaining wall design. Key factors he highlighted were:

- The most likely type of wall that will be constructed on the east side in the fill area is an MSE (Mechanically Stabilized Earth) wall. The length of wall required is approximately 6,000 feet and the height would vary up to a maximum of 20 feet (12 feet being typical). There are three key aspects to the wall: (1) The precast base panels, (2) the granular back fill and (3) reinforcing strips that attach to the base panel and extend into the granular back fill. There is plenty of room to construct this type of wall.
- Handouts illustrating drainage alternatives were reviewed. Drainage can be accomplished through gaps in the wall, vertical drains, or pipe openings designed to match the water table and eliminate pressure build-up behind the wall.

Concrete cantilever walls also were described and shown in the typical drawings, however they may be eliminated. A cantilevered concrete wall is unlikely to be constructed due primarily to the loose granular nature of the fill soils, which would not have suitable strength to support a concrete wall.

Roger Huddleston summarized available geologic and hydrogeologic information that was reviewed, and presented interpretations and conclusions based on these data. Key factors he highlighted were:

- Multiple borings and wells ranging from 5 feet to 100 feet in depth have been installed across the study area, along the roadway to the tops of the bluffs.
- The ISGS has developed a three dimensional model of the geologic subsurface.
- The primary geological formations are the Cahokia formation, which is a stream-type deposit that is a mixture of sand, silt, clay and gravel, typically present in lenses or layers; and the Henry Formation, a predominantly fine-sandy unit. The Cahokia formation, which is the top layer, varies from 5 to 50 feet in thickness and the Henry formation ranges from 10 to 80 feet in thickness. Typically the depth of bedrock is 110 to 120 feet below ground surface in the vicinity of Miller-Anderson Woods.
- The pond elevation in Miller-Anderson Woods is about 460 feet and Goose Lake, down the slope and to the east, is 440 feet. The road within this area is at approximate elevation of 470 feet and most of that is either currently built up or planned to be built up on fill. There is room for the shallow footing for the retaining wall and there are ditches on either of the side of the road.
- The ground water is expected to follow the topography and be present very close to the ground surface at the toe of the bluff. This was determined using several known factors. These include the groundwater elevations from wells (previously installed at the top of

the bluff), the existence of the pond on the west side of IL 29, the overall surface topography and the interpretation of the overall hydrologic system. There was no site-specific groundwater elevation data along the road.

- Water is expected to be 2 to 5 feet below the natural ground surface. It may be up to 10 to 15 feet below ground surface beneath the roadway where approximately 10 feet of fill appear to be present. From the toe of the bluff where IL 29 exists down to Goose Lake, groundwater will likely exist at a shallow depth (expected to be within 2 to 5 feet of ground surface) reflecting the surface topography. The 20-foot difference in hydraulic head (between the pond in Miller-Anderson Woods and Goose Lake) is a fairly dramatic head difference for a relatively short horizontal distance. As a result, groundwater gradients are likely to be both eastward and downward in the vicinity of the roadway.
- The proposed retaining wall footings are likely to penetrate 2 to 4 feet below the existing ground surface. Ground water levels are likely close to the surface, estimated in the range of 2 to 5 feet below ground surface along the east and west sides of the roadway. As a result, it is expected that the depth of the base of the retaining wall be at or near the water table.

In summary, the geologic materials are predominantly coarse-grained and permeable. The retaining wall will have only a shallow penetration into the subsurface, and the retaining wall can be designed with drains to maintain a hydraulic connection. The overall interpretation and conclusions are that there is likely to be a very minimal, in fact, probably not even a measurable impact to the ambient ground water condition with the current designs proposed for the roadway and retaining wall.

Meeting Discussion Minutes

At this time, the meeting was opened up for discussion. IDNR and INPL presented questions. Clarifications to the hydrogeologic interpretation were provided primarily by Jim Miner of the ISGS, with input from Roger Huddleston, Fred Lin, Jim Hamilton, Kim Kolody, and Jim Jodie regarding other geologic and design parameters, as appropriate. The following key points were raised or clarified during the discussion:

The proposed culverts shall be placed at existing culvert locations and the sizes will be maintained. Wildlife crossings will also be proposed within this area, however, they shall be placed at least above the 2-year high water elevation. This should avoid any existing groundwater impacts. No ditches will be proposed on the west side of the road. On the east side, proposed ditches will be graded between approximately 1 to 2 feet within the existing pond area.

The proposed road sub-base and MSE wall will be constructed of a sandy, granular material.

IDNR clarified that the key environmental concerns are associated with the high quality natural areas associated with the seeps at the base of the bluff, and not the pond directly except to the extent that the pond and seep communities are hydraulically connected. The concern is that either groundwater or surface water elevations could be raised or lowered, and that there are no baseline data on what these elevations are to assess whether the system might be changed as a result of the new road construction. The IDNR is requesting

this baseline data so that in the future, if the system is hydraulically changed it can be documented and remedied. Additionally, more detailed information on how the wetland system works was requested in order to design or make recommendations so that the design minimizes potential impacts. Given that construction will occur at or near the top of the water table and realizing that the water table is not a static elevation, there is a need for more information.

IDOT acknowledged that the existing water table elevation could be monitored to establish a current baseline. During construction, it may be necessary to reestablish the baseline.

ISGS clarified that as long as ditches are not excavated to depths below the water table and there are no confining units that are encountered in the vicinity, the chances of any impacts are relatively low.

Additionally, except in flooding months, the Illinois River probably does not affect the groundwater situation in the Miller-Anderson Woods and proposed roadway area at all.

There was some discussion regarding the effect of the beaver dams, and whether the INDR was interested in maintaining water elevations resulting from the presence of the beaver dams or not. The IDNR commented that a dramatic (3-foot) change in the pond level over a short period of time would not be desirable, as it would likely result in the growth of non-native invasive species which would reduce the quality of the environment.

IDNR suggested developing a groundwater-surface water model.

ISGS commented that that level of assessment was beyond the scope of a baseline study.

IDOT clarified that their obligation is to maintain the current condition.

ISGS and IDOT suggested installing a series of wells along a transect, including at least one in the Nature Preserve to characterize baseline groundwater conditions. It was agreed that wells could be installed along the Old IL 29 alignment that cuts through the nature preserve.

IDNR re-iterated the concern that the primary environmental issue is associated with the seep communities, up the slope from the pond, but that the hydrologic connections are not understood. Specifically, the hydrologic connections not understood result from effects of water leaving the pond from any of three different ways:

1. An outlet in the middle of the pond discharging through a partially dammed culvert under IL 29, at approximate proposed Station 6248+10.
2. An outlet on the south end of the pond at a beaver dam, at approximate proposed Station 6225+30.
3. Through the subsurface soils.

Any changes could negatively affect any of these seep wetland communities. Although there may be a very little chance of there being an effect, the nature preserve is protected by law; there is a need to know if there is a change from the construction. The best way to do that is to get monitoring wells to obtain baseline data.

There was some discussion regarding installing wells in one or two transects across the slope to establish baseline conditions, with the primary issue focusing on the number of



Illinois Department of Transportation

Division of Highways / District 4
401 Main Street / Peoria, Illinois / 61602-1111
Telephone 309/671-3333

May 3, 2004

BUREAU OF PROGRAM DEVELOPMENT
STUDIES & PLANS – PHASE I
Illinois Route 29 Study
Peoria, Marshall, Putnam & Bureau Counties
Job No. P-94-009-01
Catalog No. 032469-00

«Title» «FirstName» «LastName»
«Company»
«Address»
«CityStateZip»

Dear «Title» «LastName»:

The Illinois Department of Transportation (IDOT) is in the process of evaluating agricultural impacts for the Illinois Route 29 Study. The Illinois Route 29 Study extends from Illinois Route 6 south of Chillicothe to Interstate 180 south of Hennepin, Illinois. The Department is requesting permission for the Illinois Route 29 consultant, CH2M Hill, to secure names and addresses of owners/operators and their associated farms in the study area counties.

The Federal Highway Administration (FHWA) under the provisions of the Freedom of Information Act (FOIA), United States Code (U.S.C.) 552 as amended, has sent a request in writing to William Graff, Farm Service State Executive Director, requesting on behalf of the FHWA, that IDOT's consultant be given access to this information.

Also, access was requested for a large aerial photography showing Conservation Reserve Program acreage, tract numbers and wetland acreage for the study area. The consultant will need to borrow and duplicate the aerial photography and return it the same day.

In the near future Amiee King, from CH2M Hill, will contact your office for an appointment to view this data.

This information will be helpful in describing agricultural operations in the project area and assessing potential impacts resulting from the proposed project.

«Title» «FirstName» «LastName»
 «Company»
 Re: Illinois Route 29 Study
 May 3, 2004
 Page 2

If you have any concerns regarding this matter, please contact Paula Green of the Illinois Department of Transportation, Peoria District Office at (309) 671-3478.

Thank you for your cooperation in this matter.

Very truly yours,


 Joseph E. Crowe, P.E.
 District Engineer

PAG:tdp\sts:\mgr2\winword\std&plns\green\letters\pag0020.doc

cc: Environment (P. Green)
 CH2M Hill (Attn: Mr. Dan Dupies)

Title	FirstName	LastName	Company	Address	CityStateZip
Mr.	Brad	Powelson	Bureau County Farm Service	312 East Backbone Road, Suite A	Princeton, IL 61356
Mr.	Kent	Mason	Maisshall & Pulnam County Farm Service	1511 University Court	Henry, IL 61537
Mr.	Tom	Austin	Peoria County Farm Service	Edwards, IL 61528	

PAG:tdp\sts:\mgr2\winword\std&plns\green\letters\pag0020.doc



Illinois Department of Transportation

Memorandum

DEPARTMENT RECEIVED
AUG 27 2004
DISTRICT 4
PEORIA ILLINOIS

DEPARTMENT RE
AUG 27 2004

To: J. E. Crowe
From: Michael L. Hine
Subject: PESA Review
Date: August 26, 2004
Attn: Eric Therkildsen
Michael L. Hine

Refer to IL 29 (FAP 318)
Job No. P-94-009-01
New Alignments at Cedar Hills Dr. near CAT Complex in Chillicothe
Peoria County
ISGS # 1331B
Sequence # 9816C

Attached is a copy of the Preliminary Environmental Site Assessment conducted by the Illinois State Geological Survey (ISGS) for the subject project as described in your Special Waste Survey Request.

Volatile organic testing was done for this project and the attached (ISGS) report indicates no detection of contamination at the sites tested. The report has assessed a moderate risk for this project. This is the lowest possible rating if anticipated construction intersects an underground storage tank (UST).

The following two archived CERCLIS sites are located adjacent to the project area: Caterpillar Mossville Engine Center (Site 1331B-A [1331A-D]) and Caterpillar Technical Center (Site 1331B-1 [1331A-34]).

It is the opinion of this office, in consultation with the Chief Counsel's Office, that if right-of-way acquisition includes a parcel with an underground storage tank(s) and Land Acquisition Procedures are followed and if construction excavation and utility relocation do not exceed the maximum testing depth at each site, then no additional preliminary testing for the project is necessary.

If these stipulations can be met, then the project will be in compliance with Departmental Hazardous Waste Policy LEN-13. If the stipulations cannot be met, then the statewide consultant should be requested to perform additional investigations. Please notify this office of any actions you may decide to take concerning these sites (i.e., avoidance, further investigation, etc.). The PESA Response form can be found on PMA.

Other findings and recommendations of the report should be carefully considered. If you have any questions regarding this report or the tasking of the statewide consultant, please contact Debbra Mehra at 217/785-8068 or Steven Gobelman at 217/785-4246.

Attachment

cc: Office of Chief Counsel - Rm. 311
District Bureau of Land Acquisition
Scott Stitt
Central Bureau of Land Acquisition
District Utility Coordinator
Todd Hummert

S:\genlwpdocs\mehra\phase1\district4\1331B.doc

MEETING SUMMARY

CH2MHILL

Floodplain Impacts and Compensation Workshop Illinois Route 29 Phase I Engineering Services Job No. P-94-009-01, P-94-019-02 (PTB 118/56)

ATTENDEES:

Maureen Addis/IDOT-D4	Tom Lerczak/INPC
John Anderson/IDOT-D4	Mike Lewis/IDOT-D4
Ron Davis/IEMA	Fred Lin/Lin Engineering
Mike Diedrickson/IDNR-OWR	Charles Perino/IDOT-BDE
Dan Dupies/CH2M HILL	Barbara Stevens/IDOT-BDE
Paula Green/IDOT-D4	J.D. Stevens/FHWA
Steve Hamer/IDNR	Cheng Soong/CH2M HILL
Alan Justice/IEMA	Eric Therkildsen/IDOT-D4
Kim Kolody/CH2M HILL	Barb Traeger/IDOT-BDE
Greg Larson/IDOT-D4	

FROM: CH2M HILL

DATE: October 4, 2004

The meeting was convened at 10:00 a.m. on Tuesday, September 14, 2004 in the 6th Floor conference room of the IDOT District 4 headquarters. The overall purpose of the meeting was to discuss the process and procedures for determining floodplain impacts and compensation along the IL 29 corridor. Alternatives for dealing with the floodplain buyout properties in Sparland were also discussed.

Kim Kolody began the meeting by reiterating the meeting objective and reviewing the meeting agenda. Project background and status was also provided, including examples of work that has been completed to minimize impacts to the floodplain, evaluate the impact and compensate for them. Cheng Soong followed with more detail on the procedure and solicited feedback and input from agencies.

Concept of Floodplain Encroachment and Compensation

Principles and Discussion of Floodplain Encroachment

Area versus Volume: The EIS reports floodplain encroachment as an area and volume measurement. Volume is a more accurate assessment and will be used to determine actual impacts, as the design is more complete.

Hydraulic analysis: Hardcopy FEMA Flood Insurance Rate Maps provide 100-year high water elevation data for the Illinois River and Thinius Creek along the corridor. The insurance rate maps did not have data for other creeks and rivers in the corridor, including

Senachwine Creek South, Crow Creek, and Senachwine Creek North. For these locations a hydraulic analysis under normal conditions was developed to obtain the necessary information. Mike Diedricksen confirmed that the natural (unobstructed) 100-year flood should be used as the basis for the calculation.

Electronic FEMA Flood Insurance Rate Maps cannot be used to determine 100-year water elevations. It cannot be used to supplement data because it is not accurate enough for detailed project purposes.

Longitudinal versus Transverse Impact: As defined by an adjoining state department of transportation, transverse and longitudinal encroachments are defined as:

Longitudinal encroachment - 30 degree or less crossing of floodplain by the proposed highway. Example: lengths of roadway running along or beside streams, rivers, lakes, etc. This may apply to areas of Senachwine Creek South, the Illinois River, and areas of Crow Creek.

Transverse encroachment - 30 to 90 degree crossing of floodplain by the proposed highway. Example: perpendicular bridge crossing of river or stream. This may apply to areas of Senachwine Creek South crossing at Benedict Road, Senachwine Creek South Crossing at existing IL 29, and Senachwine Creek North.

Mike Diedricksen outlined the acceptable increase in 100-year water levels:

Longitudinal encroachment (urban) = 0.1 feet
Longitudinal encroachment (rural) = 0.5 feet
Transverse encroachment (urban) = 0.5 feet
Transverse encroachment (rural) = 1.0 feet

Modifying the proposed structure design allows the designer to minimize changes in 100-year water levels within the limits shown above. A hydraulic analysis of each proposed bridge structure will be completed as part of the Phase I services. IDNR Water Resources is not concerned with the impacts of transverse "floodway crossings". They are concerned about longitudinal impacts to the "floodway".

Floodway versus Floodplain Encroachment: IDNR Water Resources is interested in the hydraulics and impact to the "floodway", while IDOT and FHWA focus on the significance of the impact to the floodplain and the effect on the value of the resources i.e. wetlands, cultural resources, historical sites, vegetation.

On September 22, 2004, subsequent to the floodplain meeting, Mike Diedricksen forwarded a document which provided instruction for determining the floodway limits. Fred Lin has tested two cross-sections in Senachwine Creek South, which will be verified by IDNR. If the location of proposed IL 29 is in the floodway, mitigating measures such as will be investigated. Procedures will be assessed with input from IDNR.

A subsequent meeting will be set up with FEMA to solicit their input on the hydraulic analysis process, the longitudinal and transverse impacts and the floodway versus floodplain concerns.

Significant versus Insignificant Encroachment: As defined by an adjoining state department of transportation, a significant encroachment is any encroachment into the floodplain, which results in:

- (1) a significant potential for interruption or termination of a transportation facility which is needed for emergency vehicles or provides a community's only evacuation route;
- (2) a significant risk, or;
- (3) a significant adverse impact on natural and beneficial flood-plain values.

FEMA may be able to provide processes for determining which encroachments are significant and should be compensated. This information will be provided by FEMA at a subsequent meeting. On inspection of the corridor, impacts to the Illinois River may be insignificant since there is a relatively small encroachment, which would have very little effect on the entire Illinois River.

Principles and Discussion of Floodplain Compensation

Cheng Soong described the process that was used on the IL 29 project for calculating preliminary compensation volumes (1:1 basis) and procedures used to identify compensation sites. Proposed roadway cross-sections need to be evaluated to determine the encroachment volume that is below the 100-year high water elevation (under natural conditions). Floodplain compensation areas were then identified and compensation volumes are calculated; the low elevation of each compensation site needs to be above the flow line of the receiving stream. In some locations, ditches can be widened to create greater capacity to provide floodplain compensation. The ditches need to be above the receiving waters normal flow elevation. Wetlands and low areas were not suitable for compensation sites. The compensation site needs to be located based on its ability to provide the needed volume and that the low point of the compensation site will be above the receiving stream normal flow elevation (for drainage of the site after flood waters recede).

Landlocked properties may be suitable sites for compensation. Floodplain compensation sites may have a secondary value such as providing areas for wetland mitigation and to act as borrow site locations. A complete hydraulic analysis is required to determine the exact encroachment and compensation volumes.

Project Floodplain Locations

Approximate encroachment and compensation volumes were determined for various locations along the IL 29 corridor. Tentative compensation locations were provided for discussion purposes. The need to pursue compensation for these or other locations will be determined after coordinating with FEMA. Only longitudinal crossings by IL 29 will require floodway analysis. The following highlights the discussion at each review floodplain location.

Senachwine Creek South: FEMA design year high water elevations are not available for the Senachwine Creek South area. Lin Engineering calculated the 100-year natural high water elevation for study purposes. Areas of Senachwine Creek South may have longitudinal impacts to the floodway and the floodplain. The crossing at Benedict Road and existing IL 29 are transverse crossings and do not need to be compensated for floodway impacts.

However, according to IDNR, an analysis will need to be completed by Lin Engineering to determine if there are longitudinal impacts to the floodway and if mitigation is needed or if proposed IL 29 needs to be relocated out of the floodway.

The proposed improvements will only effect the Senachwine Creek South floodway, not the Illinois River floodway.

Crow Creek: At Crow Creek, FEMA design year high water elevations were not available Lin Engineering calculated the 100-year natural high water elevation for study purposes. The main crossing of Crow Creek would be a transverse crossing and will therefore not require compensation according to IDNR.

There is a longitudinal encroachment to the Crow Creek floodplain north of the main crossing. Limits of the floodway will need to be computed by Lin Engineering to determine if there is a longitudinal encroachment to the floodway.

Senachwine Creek North: Lin Engineering determined the 100-year high water elevation at Senachwine Creek North because FEMA design year high data was not available. This is a transverse crossing, which will not require compensation of the floodway.

Illinois River Floodplain at Miller-Anderson Woods: FEMA design year data was available for the Illinois River and were used for the analysis. This is a longitudinal encroachment of the Illinois floodplain, but may not encroach the floodway. The impact to the floodplain may also have an insignificant effect on the Illinois River floodplain and the floodway limits will need to be determined by Lin Engineering.

Illinois River/Gimlet Creek/Themius Creek at Sparland: FEMA design year data was available for the Illinois River and were used for the analysis. This is a longitudinal encroachment to the Illinois River floodplain that does not have a significant impact to the river floodplain. Research is being conducted by Lin Engineering to determine the floodway limits of the Illinois River.

Floodplain and Floodway Action Items

Floodway limits will be determined at Senachwine Creek South, the Illinois River, and Crow Creek. If there is impact to the floodway, CH2M HILL will assess design options to reduce the encroachment.

A meeting will be scheduled with FEMA and IEMA to evaluate the above-described processes for assessing and addressing longitudinal encroachments to the floodplains in the project corridor. The meeting objective will also be to reach consensus on the floodplain encroachment and compensation methods proposed for IL 29 and to determine the reporting methods for the EIS.

Sparland Floodplain Buyout Properties and Alternate 3/3A

There are 17 properties within the Sparland corporate limits that were purchased as floodplain buyouts, 12 are currently owned by IEMA and 5 are currently owned by INDR. Some of the floodplain buyouts are affected by the split diamond interchange, which may be carried forward in the design process. However, due to deed restrictions on the floodplain buyout properties the interchange was modified to avoid them. The modified interchange has greater impacts to environmental resources and has a higher cost. FEMA will provide feedback to determine which alternative will be carried forward in the study. This

information and selection of an interchange at Sparland is needed before proceeding with the 90% Central Section plans.



ATTENDANCE ROSTER

SUBJECT FLOOD PLANS MTS
 MEETING DATE SEPTEMBER 14, 2004

NAME	REPRESENTING	ADDRESS, PHONE & E-MAIL
Steve Hamer	IDNR	417-785-4862 Shamer@dnrmail.state.il.us
Mike Lewis	IDOT - DIST 4	309-671-3474
ALAN JUSTICE	IDNR	217-782-2457 <i>justice@dnrmail.state.il.us</i>
Ron Davis	IEMA	1035 Outer Park Springfield 62704 217-524-1003
John Anderson	IDOT - DIST 4	
MIKE DIRDRONSON	IDNR-DWR	217-782-4406 ONE N. NATURAL RESOURCES DR, SPFLD
Fred Lin	LIN 616161666	630-323-5168; flin@lineng.com
Barb Traeger	BDE	217-785-0202
Barbara Stevens	BDE	217 785 4245
J.D. STEVENSON	FHWA	217-492-4638
Charles Perino	IDOT - BDE	217-785-2130
Maureen Addis	IDOT/D4	309 671 3454
Paula Green	IDOT - D4	309 671 3478
Greg Larson	IDOT - D4	309 671 3479
ERIC THORNTON	IDOT - D4	309-671-3491
DAN DUPES	CH2M	414-272-2426
TOM LERECZAK	INPC	309-543-2744 <i>lereczak@dnrmail.state.il.us</i>
CHENG SWONG	CH2M	773-693-3800 x 226
Kim Kolody	CH2M	773-693-3800 x 245

MEETING SUMMARY

CH2MHILL

IDNR Meeting to Discuss Impacts/Mitigation of IDNR Property and Natural Areas & Miscellaneous IL 29 Items
 Illinois Route 29 Phase I Engineering Services
 Job No. P-94-009-01, P-94-019-02 (PTB 118/56)

ATTENDEES:

IDOT
 Maureen Addis
 John Anderson
 Paula Green
 Greg Larson
 Mike Lewis
 Charles Perino
 Barbara Stevens
 Barb Traeger

IDNR
 Todd Bitner
 Steve Hamer
 Michelle Simone
 Michael Weber
 INPC
 Tom Lereczak
 CH2M HILL
 Dan Dupes
 Jim Jodie
 Kim Kolody
 Dan Nowak

FROM: CH2M HILL

DATE: October 12, 2004

A meeting was held on Monday, October 4, 2004 at District 4 to:

- ◆ To provide an update of IL 29 project progress to IDNR and INPC.
- ◆ To describe geometric design modifications that had been evaluated to minimize impacts to IDNR property and natural areas along the project corridor.
- ◆ To obtain feedback from IDNR and INPC on the revised designs.
- ◆ To discuss miscellaneous IL 29 items.

In June 2004, a meeting was held with IDNR to present the IL 29 design, to discuss impacts to IDNR land and to receive feedback on potential mitigation. At that time, IDNR requested that additional designs be studied to further minimize impacts to IDNR and natural areas. Particular attention and design emphasis was placed on the Land and Water Reserve because of the high protection guidelines for this property.

Subsequent to the June meeting, CH2M HILL refined the design at each IDNR property and natural area and developed a comparison table to review with IDNR. In the table, the previous design is referred to as the "Original Design"; the revised design is referred to as the "Current Design".

Kim Kolody provided an overview of the design approach to minimize impacts. Dan Nowak provided more detailed design and impact information at each environmentally sensitive location.

Design Approach to Minimize Impacts

Two methods were used on IL 29 to minimize impacts to IDNR land and to natural areas, guardrail and a split profile.

Guardrail

At some locations, impacts could be minimized by modifying the standard 6:1/4:1 foreslope to a 2:1 foreslope and adding guardrail.

Same Profile versus Split Profile

Same Profile - The original design assumed the same profile for northbound and southbound lanes. The northbound lanes would be built on the existing lanes and the southbound lanes would widen to the west into the bluff. In bluff areas, this results in high retaining walls cut into the bluff. The walls may require tiebacks because of slope instability. IDOT would require permanent easements behind the wall to maintain the tied-back. In some locations, the tie back easements could be 50 to 75 feet into the bluff, an impact IDNR would like to avoid.

Split Profile - A split profile design (with northbound lanes placed at the existing IL 29 location and elevation and southbound lanes raised to the bluff elevation on the west side) was developed at critical locations to minimize cuts into the bluff and to also reduce impacts.

In summary, the split profile design, or the Current Design, results in reduced effects to IDNR and Natural Areas. This Design was recommended for each IDNR property and natural area. Steve Hamer will send a letter to IDOT indicating their comments for each design.

Details presented and discussed at each IDNR and natural area are shown below. Exhibits were provided for each site, including an impact table. In the table, the typical section with the same profile for northbound and southbound is labeled "Original Design". The split profile and the 2:1 foreslope design is labeled "Current Design".

Design at Specific IDNR and Natural Area Locations

Marshall State Fish & Wildlife Area Spring Branch Unit

The Original Design required right-of-way from the Spring Branch Unit to accommodate full slopes and ditches. It also required a temporary easement to construct their driveway to the IDOT rest area.

For the Current Design at Spring Branch, the proposed IL 29 east foreslope will be steepened to 2:1 and a guardrail installed at this location. The existing east ditch will remain as-is; this does not create any impacts to the IDNR property. The existing driveway from IL 29 will be relocated to the existing rest area. Access to the IDNR property from the rest area will require right of way acquisition from the Lee & Wilda Miller property. Construction of the driveway from the rest area into IDNR land will require some tree removal. A full intersection is proposed on IL 29 at the north entrance to the rest area, allowing for U-turns. The Current Design was recommended.

County Line Hill Natural Area

The Current Design reduces the cut into the bluff (split profile) compared to the Original Design. It requires the same amount of right-of-way as the Original Design; the cost is slightly higher due to the retaining wall for the split profile. The Current Design was recommended.

Hopewell Hill Prairie Natural Area

The Current Design does not require any permanent easements to build the tiebacks for the retaining wall as required with the Original Design. A temporary easement is needed to reconstruct an existing driveway (into the bluff). To reestablish the driveway, trees may be removed. The Current Design was recommended.

Marshall County Hill Prairie Natural Area

The Original Design required tiebacks into the bluff.

The Current Design does not require any permanent easements and there is less permanent impact within the existing right-of-way to build and maintain the tiebacks for the retaining wall. However there is more temporary impact within the existing right-of-way due to grading.

The cost is less than the Original design because the retaining walls are shorter in cut sections so that a cantilever wall can be used. At some locations, an MSE wall on fill is being considered. This reduces the cut into the existing bluff and the right-of-way impact. The Current Design was recommended.

Marshall County Hill Prairie Land & Water Reserve

As with the Marshall County Hill Prairie Natural Area, the Current Design at the Land & Water Reserve eliminates the permanent easement by eliminating the tie-backs and reduces the temporary easement for reconstruction of the driveway located at Station 3544+60. Construction of the driveway will require a temporary easement on Land & Water Reserve property. The left and right fill slopes on the driveway will take some additional land and possibly remove some of the trees that have grown onto the driveway. Per IDNR, the Nature Preserve Commission will support the "driveway/parking lot" to remain the same size as existing, although the use of this driveway is limited because of the bluff on the west side. The "pad" for the driveway will be a little smaller than existing because the split profile places the roadway in fill and the driveway in fill. The surface should not be paved. INPC noted that Nature Preserve Commission should have well defined physical limits for the existing driveway. IDNR will evaluate the need to replace this driveway since the existing driveway to the south will remain and be improved. They will contact IDOT with the decision.

A retaining wall is proposed on the west side of IL 29. A gutter is proposed on the uphill side of the wall to collect and convey stormwater to drop inlets. Maintenance of the wall and gutter will take place within the existing right-of-way. If a greater width is needed for maintenance in the future, each occurrence will need Nature Preserve Commission

approval. IDNR requested that the construction limits needed by the contractor be "taped" in the field for easy identification so that it will not be disturbed. A specification currently exists (or can be developed) to "armor" trees at risk to minimize tree kills.

The Current Design was recommended.

Marshall State Fish & Wildlife Area, Sparland Unit, Alternate 3 and 3A

Alternate 3 and 3A were described; these are the final alternates being considered for Sparland. Alternative 3 is similar to the original split diamond interchange design but with more detailed improvements along existing IL 29 and IL 17. Alternative 3A is also a split diamond interchange, but it is shifted further to the east to avoid the floodplain buyout properties. Alternative 3A has greater impacts to IDNR property, but it may be necessary if FEMA deed restrictions determine that the floodplain buyout properties cannot be impacted. A meeting is planned for mid-November to discuss the interchanges with FEMA and reach consensus regarding the recommended alternate.

The right-of-way shown for Alternate 3 and 3A indicates the land that is needed for roadway improvements. As more detailed design takes place during Phase II the IDNR right-of-way required may change slightly.

A handout was provided showing the landlocked properties for both alternates. Paula noted that the last 2 landlocked properties in the handout may actually have an access that would remove them from the list (Charles Fosbender Estate and Antonio Turk), but the landowners need to be contacted to verify access.

CILCO property is landlocked and no future utilities are planned. IDNR indicated that Ducks Unlimited is considering purchasing the Bunge Corporation property.

IDNR (Steve Hamer) and Marshall State Fish & Wildlife (Larry Rice) will be sent the exhibits and tables showing landlocked properties at Sparland and at Senachwine Creek south.

Miller Anderson Woods

The proposed typical section is a 22' median with guardrail on the west side. The highway foreslope adjacent to MAW will not be disturbed. The only west side disturbed areas is for installation of culverts; erosion control measures will be part of the construction contract. The proposed profile of IL 29 is the same as existing; it is not necessary to reconstruct this driveway. The temporary easement shown on the plans for this driveway is not needed. The beavers have moved from this area and the pond is shrinking as a result. The dam continues to hold water without the beaver's maintenance, but the water level has dropped partially because of dry years.

ISGS groundwater monitoring well installation was delayed because of eagle nesting. Five wells were installed in late July and ISGS is still doing the three-month monitoring. Results will be provided when information is available.

IDNR previously requested that IDOT look at a closed drainage system to collect surface water and prevent it from entering the MAW (from the southbound lanes and median).

This will require disturbing the foreslope. IDNR does not want any unneeded disturbance to this area. A closed system concentrates the pollution and pushes it further downstream.

The IDNR noted that there is a concrete paved ditch on the west side of IL 29, south of MAW. The concrete has blocked springs in the cut slope resulting in the creation of a wetland. This ditch is proposed to be modified during design and the IDOT usually replaces these areas with something that can grow vegetation. This can be coordinated with IDNR during final design.

Meeting Conclusion

IDNR will provide a letter to IDOT indicating their comments (commitments) to each of the designs for IL 29. IDNR was asked to continue thinking about mitigation issues on their properties.

Nature Preserve

Coordination with the Nature Preserve Commission will be as follows:

IDOT will coordinate with Steve Hamer and Steve will talk to the Nature Preserve Committee. Steve will contact IDOT with results.

Bio-Surveys

IDOT will provide IDNR an update of the bio surveys.

Items to be Provided

Barb Traeger needs purpose and need and project description, location map (3 sheets at 11"x17" of the corridor), indicating the project right-of-way and roadway improvements for the bluff and existing alignments over an aerial background. The environmental resources should not be shown.

Miscellaneous Items (Post IDNR Meeting)

Please see the Post Meeting Items Agenda for discussion items.

PIM Comments - for PIM #2 also summarize the comments using the more detailed approach that was used for PIM #1. Show tickmark for each comment made from all the letters.

Bike Paths - at the viaduct on the north side of Chillicothe, show bike paths on both sides. Use minimum of 8' clear width on both sides. To accommodate combined use by bikes and pedestrians (going to the Chillicothe Recreation Center), the width may need to be widened. Use of this bike path will probably be two-way. At Sparland, the bike path will be located on the ramps with appropriate signing. In Sparland, provide minimum 5' width for bikes.

Orthophotos - Add to the list provided as follows:

At Kentville Road, include Miller Anderson Woods in a photo looking south.

At Putnam, take a photo looking northeast; make sure to include the relocation of Bradford and the road closures in the City.

Henry Bypass - include a photo looking northeast to the City.

Sparland - take a lot of photos to decide which one to use.

Illinois River narrows near Land and Water Reserve - take a couple of photos; one should be looking southwest and another looking northwest.

North side of Chillicothe - take a photo looking north towards the viaduct and looking west toward trumpet interchange. Take a lot of pictures here.

Rome West Interchange - take some photos looking northeast.

Cedar Hills Interchange - take a photo looking southwest toward interchange, including the Caterpillar plant and the bluff west of the proposed interchange.

IL 6 interchange - no photo's needed here.

BN&SF RR at Truitt/Galena Road Gravel quarry Meeting - over versus under alternate sketches were provided (prepared by Hutchison). For now, assume the IL 29 design is over the BN&SF RR. Corridor protection is important to minimize quarry mining.

IDS Submittal Schedule - CH2M HILL will e-mail the schedule to IDOT. Do not submit IDS's all at once. Review comments will be provided at bi-monthly meetings.

Bluff Memo - IDOT provided comments to the memo that was submitted August 27, 2004.

Include dropped alternates at Sparland. Include the improvements to the east leg of IL 17. If the bluff is dropped, this shows there is localized avoidance on the east leg of IL 17. For the table on Page 4, drop the 1st and 3rd row.

At Whiffle Tree house, provide distance from proposed right of way to the house.

For Barrville avoidance, remove comments about economic issues.

Impact Summary Table - use latest impacts. Cost can be represented as % comparison. Check for accuracy.

For the IDNR and natural lands, include letter from Steve Hamer of IDNR; indicate T & E's are not 4f. Crow Creek Watershed Committee - IDOT will e-mail them to set up a meeting.

Project Meeting - plan for last part of November 2004 to discuss project status, tasks not needed for the project and extra work.

Iowa Interstate RR/Lincoln Southern RR - meeting is scheduled for November 10, 2004. CH2M HILL will provide list of exhibits.

FEMA/FHWA Floodway Meeting - IDOT to schedule this meeting towards the end of October.

Summary of IL 29 Decisions

South Section -

Include interchanges at Rome West and McGrath. For Phase I submittal, the proposed right of way needs to be determined. The extent of design for the Rome West and McGrath interchange will be confirmed by IDOT. At this time, the work plans is as follows:

Rome West - extend interchange design west to Krause. Widen Krause/Rome West intersection to provide for turning vehicles. Do not do Rome West design to the east of the interchange, but determine right of way needs for the Knox Street connection to existing IL 29. The DTM coverage from Martinez does not extend to existing IL 29. DTM and topo surveys cost estimates will be provided by CH2M HILL. This is considered extra work.

McGrath - do not do detailed design (no profile is needed) because McGrath is a local road to be designed by others. Indicate this on plans and show as dashed lines. To determine right of way (estimated), use typical section for a local two-lane road with ditches and determine estimated distance to proposed right of way. This is considered extra work.

The meeting adjourned at 4 PM.



CH2MHILL

ATTENDANCE ROSTER

SUBJECT IL 29
MEETING DATE October 4, 2004

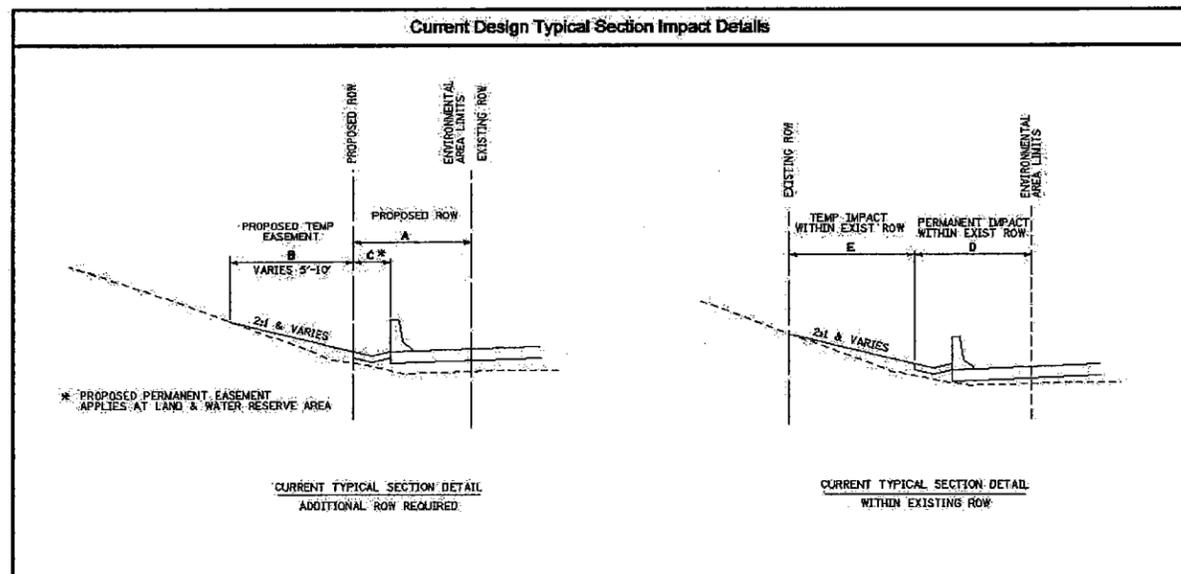
NAME	REPRESENTING	ADDRESS, PHONE & E-MAIL
Paula Greer	IDOT DIST 4	
Tom Bittner	IDNR	
Mike Lewis	IDOT - DISTRICT 4	309-671-3474
John Anderson	IDOT-D4	671-3493
Michael Weber	IDNR	
Michelle Simone	IDNR	
Barbara Stevens	IDOT-BDE	217 785 4245
Barb Traeger	IDOT-BDE	217-785-0202
Charles Perino	IDOT-BDE	217-785-2130
Greg Langan	IDOT-04	309-671-3479
Steve Hamer	IDNR	212-785-4862
Dan Dupies	CH2M	414-272-2426
Margaret Adams	IDOT/D4	309 671-3454
Kim Kolodj	CH2M HILL	773 693 3809
Linn Newell		
Jim Jodie		
Tom Vercaak	INOC	309-543-2744

Impact Comparison for Alternative Designs at Natural Areas and IDNR Property Along the Widening IL 29 Alignment

29-Sep-04

AREAS OF IMPACT MINIMIZATION	Design	IMPACT TYPE (see graphic below)						Cost ¹⁰
		Proposed New Right-of-Way Acres (SQ FT)	Proposed Temporary Easement Acres (SQ FT)	Proposed Permanent Easement Acres (SQ FT)	Permanent Impact Within Existing ROW Acres (SQ FT)	Temporary Impact Within Existing ROW Acres (SQ FT)	Isolated IDNR Property Acres (SQ FT)	
		A	B	C	D	E	F	
Marshall State Fish & Wildlife Area Spring Branch Unit	Original Design ¹	0.29 (12600)	0.20 (8600)					
	Current Design ²	0	0.20 (8600)	0	0	0	0	NA
County Line Hill Natural Area (private)	Original Design ¹	0	0.02 (1000)	0	0	0	0	\$3.0 M
	Current Design ³	0	0.02 (1000)	0	0	0	0	\$3.3 M
Hopewell Hill Prairie Natural Area (private)	Original Design ¹	0.15 (6600)	0.18 (7800)**	0.29 (12700)	0.38 (16400)	0	0	\$5.1 M
	Current Design ⁴	0.15 (6600)	0.19 (8400)**	0	0.36 (15800)	0.005 (200)	0	\$5.2 M
Marshall County Hill Prairie Natural Area (private)	Original Design ¹	0	0.17 (7400)	0.69 (30100)	1.35 (58700)	0.05 (2000)	0	\$8.0 M
	Current Design ⁴	0	0.02 (700)	0	0.73 (31800)	0.19 (8100)	0	\$6.6 M
Marshall County Hill Prairie Land and Water Reserve	Original Design ¹	0	0.24 (10600)	0.44 (19100)	0	0	0	\$8.0 M
	Current Design ⁵	0	0.09 (4000)	0	0	0	0	\$6.6 M
Miller-Anderson Woods Natural Area ⁷	Current Design ⁶	0	0.24 (10600)	2.03 (88300)	5.50 (239600)	0	0	NA
IDNR Property in Sparland Alternative 3	Current Design ⁸	7.25 (315600)	0	0	0	0	1.38 (60200)	NA
IDNR Property in Sparland Alternative 3A	Current Design ⁹	7.83 (341000)	0	0	0	0	4.08 (177800)	NA

1. The Original Design was shown in the 50% plan set of April 2004. There was one profile for northbound and southbound IL 29 and standard right-of-way widths.
 2. The Current Design at the MSFWA Spring Branch Unit eliminates permanent impact to IDNR property. At this location design modification included use of guard rail with a 2:1 foreslope on the east side of the road.
 3. The Current Design at County Line Hill Natural Area involves splitting the NB and SB profiles, with the NB lanes remaining at the existing grade while the SB lanes are raised to eliminate any cut into the adjacent bluff. This will minimize slope instability from the bluff.
 4. The Current Design at Hopewell Hill Prairie and Marshall County Hill Prairie Natural Areas have been modified to reduce impact using a different approach than at the Spring Branch Unit. At these locations, the NB lanes remain at the existing grade while the SB lanes are raised to eliminate the tied-back retaining wall on the west side. At most locations a barrier is used on the west side to reduce impact. At some locations an MSE wall on fill is necessary. This reduces both the cut into existing ground and right-of-way impact.
 5. The Current Design at the MSFWA Land and Water Reserve includes the NB lanes at the existing grade and the SB lanes raised to eliminate the tied-back retaining wall on the west side. At most locations a barrier is used on the west side to reduce impact. At some locations an MSE wall on fill is necessary. This reduces both the cut into existing ground and right-of-way impact.
 6. The Current Design was shown in the 90% plan set of April 2004. At this location the typical section includes use of guard rail with a 2:1 foreslope on the west side, 22-foot median and retaining wall on the east side of the road.
 7. The Nature Preserve in Miller-Anderson Woods is not impacted by the project.
 8. The Current Design is a split diamond interchange, located east of the Railroad tracks and impacts the floodplain buyout properties in Sparland.
 9. The Current Design is a split diamond interchange, located east of the Railroad tracks. It avoids impact to the floodplain buyout properties by shifting to the east.
 10. Cost is estimated in 2004 dollars
- ** Includes Hopewell Driveway Temporary Easement





IN REPLY REFER
TO:

FWS/RIFO

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Rock Island Field Office
4469 48th Avenue Court
Rock Island, Illinois 61201
Phone: (309) 793-5800 Fax: (309) 793-5804



October 5, 2004

Mr. Dan Dupies
CH2M HILL
135 South 84th Street, Suite 325
Milwaukee, Wisconsin 53214

Dear Mr. Dupies:

This responds to your September 27, 2004, request for technical assistance regarding the Illinois 29 Project Corridor in Peoria, Marshall, Putnam, and Bureau Counties, Illinois. We have the following comments.

With respect to any species, listed or proposed to be listed, which may be present in the area of a proposed action, we are furnishing you the following list of species which may be present in the concerned area:

<u>Classification</u>	<u>Common Name</u>	<u>(Scientific Name)</u>	<u>Habitat</u>
Threatened	Bald eagle	<i>Haliaeetus leucocephalus</i>	Breeding, wintering
Endangered	Indiana bat	<i>Myotis sodalis</i>	Caves, mines; small stream corridors with well developed riparian woods; upland forests
Threatened	Decurrent false aster	<i>Boltonia decurrens</i>	Disturbed alluvial soils

The threatened bald eagle (*Haliaeetus leucocephalus*) is listed as breeding in Marshall County, Illinois and wintering along large rivers, lakes, and reservoirs in Peoria, Bureau, Putnam, and Marshall Counties, Illinois. During the winter, this species feeds on fish in the open water areas created by dam tailwaters, the warm water effluents of power plants and municipal and industrial

discharges, or in power plant cooling ponds. The more severe the winter, the greater the ice coverage and the more concentrated the eagles become. They roost at night in groups in large trees adjacent to the river in areas that are protected from the harsh winter elements. They perch in large shoreline trees to rest or feed on fish. There is no critical habitat designated for this species. The eagle may not be harassed, harmed, or disturbed when present nor may nest trees be cleared.

The endangered Indiana bat (*Myotis sodalis*) may potentially occur in Peoria County. **Potential habitat for this species occurs statewide, therefore, this species is considered to potentially occur in any area with forested habitat.**

Indiana bats migrate seasonally between winter hibernacula and summer roosting habitats. Winter hibernacula include caves and abandoned mines. Females form nursery colonies under the loose bark of trees (dead or alive) and/or cavities, where each female gives birth to a single young in June or early July. A single colony may utilize a number of roost trees during the summer, typically a primary roost tree and several alternates. The species or size of tree does not appear to influence whether Indiana bats utilize a tree for roosting provided the appropriate bark structure is present.

During the summer, the Indiana bat frequents the corridors of small streams with riparian woods as well as mature upland forests. It forages for insects along stream corridors, within the canopy of floodplain and upland forests, over clearings with early successional vegetation (old fields), along the borders of croplands, along wooded fencerows, over farm ponds, and in pastures.

Suitable summer habitat in Illinois is considered to have the following characteristics within a ½ mile radius of a project site:

- 1) forest cover of 15% or greater;
- 2) permanent water;
- 3) one or more of the following tree species: shagbark and shellbark hickory that may be dead or alive, and dead bitternut hickory, American elm, slippery elm, eastern cottonwood, silver maple, white oak, red oak, post oak, and shingle oak with slabs or plates of loose bark;
- 4) potential roost trees with 10% or more peeling or loose bark

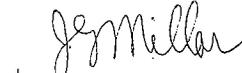
If the project site contains any habitat that fits the above description, it may be necessary to conduct a survey to determine whether the bat is present. In addition, a search for this species should be made prior to any cave-impacting activities. If habitat is present or Indiana bats are known to be present, they must not be harassed, harmed, or disturbed when present, and this field office should be contacted for further assistance.

The decurrent false aster (*Boltonia decurrens*) is listed as threatened and known to occur in Bureau, Peoria, Putnam and Marshall Counties, Illinois (Illinois River floodplain). It is also considered to potentially occur in any county bordering the Illinois River and the counties bordering the Mississippi River between the mouths of the Missouri River and the Ohio River. It occupies disturbed alluvial soils in the floodplains of these rivers. There is no critical habitat listed for this species in Illinois.

There may be wetlands within and adjacent to the project area. The Corps of Engineers is the Federal agency responsible for wetland determinations, and we recommend that you contact them for assistance in delineating the wetland types and acreage within the project boundary. Priority consideration should be given to avoid impacts to these wetland areas. Any future activities in the study area that would alter these wetlands may require a Section 404 permit. Unavoidable impacts will require a mitigation plan to compensate for any losses of wetland functions and values. The U.S. Army Corps of Engineers, Clock Tower Building, P.O. Box 2004, Rock Island, Illinois, 61201, should be contacted for information about the permit process.

These comments provide technical assistance only and do not constitute the report of the Secretary of the Interior on the project within the meaning of Section 2(b) of the Fish and Wildlife Coordination Act, do not fulfill the requirements under Section 7 of the Endangered Species Act, nor do they represent the review comments of the U.S. Department of the Interior on any forthcoming environmental statement. If you have questions, please contact Heidi Woeber of my staff.

Sincerely,



Richard C. Nelson
Field Supervisor

cc: ILDNR (Schanzle)

S:\Office Users\Heidi\1129\lande.doc

IL 29 Meeting Section 4(f) Applicability Review November 9, 2004

PREPARED FOR: John Anderson, IDOT - District 4
Paula Green, IDOT - District 4
Greg Larson, IDOT - District 4
Mike Lewis, IDOT - District 4

Charles Perino, IDOT -BDE
Barbara Stevens, IDOT -BDE
J.D. Stevenson, FHWA
Paul Tufts, FHWA
Jan Piland, FHWA
Justin Luther, FHWA

PREPARED BY: Jill Kramer, CH2M HILL

COPIES: Kim Kolody, CH2M HILL
Jim Jodie, CH2M HILL
Dan Dupies, CH2M HILL

DATE: November 9, 2004

On November 9, 2004, a meeting was held with staff from the Federal Highway Administration (FHWA), IDOT District 4, and consultant staff to discuss the potential applicability of Section 4(f) to resources in the IL 29 project area. The meeting, held in a conference room at District 4, began at 10 a.m. See the attached attendance sheet and agenda.

Introduction and Project Overview

Paula Green/IDOT began the meeting by welcoming participants to the meeting and providing an overview of the meeting's agenda and purpose. Jim Jodie/CH2M HILL provided an overview of the project, the alternatives development and refinement process, and the reasonable alternatives that are being carried forward.

SECTION 4(f) APPLICABILITY

1. Parks, Recreation, and Wildlife Refuges

Dan Dupies/CH2M HILL explained that he and Kim Kolody/CH2M HILL would discuss parks, recreational and wildlife areas in the project area proceeding from south to north. A memorandum was e-mailed to participants prior to the meeting to provide them with background information on the resources in the project area. Dan encouraged IDOT staff to add information as he introduced each park and wildlife area and encouraged everyone to ask questions as each property was discussed.

a. Peoria Park District Properties

Following the second public information meeting, IDOT received a letter from the Peoria Park District (PPD) stating that the proposed improvements in the project's south section would have detrimental effects on three properties they administer: Camp Wokanda, Singing Woods Nature Preserve, and Audubon Wildlife Area.

Camp Wokanda

Dan provided an overview of the property, facilities at the site, planned improvements and objectives PPD is trying to achieve at the camp. Groups that visit the camp learn about habitats at Singing Woods. This relationship would remain unaltered in the proposed plan. See attached memo. The PPD is concerned about the following project effects at Camp Wokanda:

- Access to their site during construction,
- Sound impacts, and
- The IL 29 extension would impact the park district's ability to conduct prescribed burns due to smoke from the burns obscuring the vision of highway users.

Access

Dan explained, using an aerial exhibit, that currently traffic from any direction bound for the Camp must use Old Galena Road as a connection to Boy Scout Road. As construction approaches the Old Galena Road/Boy Scout Road intersection, the proposed service road west of IL 29 would be constructed to intersect Boy Scout Road. Access to Boy Scout Road would then be possible from either Cedar Hills Drive or Mossville Road via the service road. At no time during the proposed extension of IL 29 would Boy Scout Road (or the Camp) be cut off from the local road network.

Noise

To assess the PPD concerns about sound impacts, a field measurement was taken at the camp near the activities field to understand existing conditions. The existing noise level at that location was 40 dBA. To understand the potential impacts, future noise levels at the camp were modeled using 2032 forecasted traffic volumes on IL 29. The modeling showed that noise levels in 2032 were anticipated to be 43 dBA on the east side of the camp near the activities field. The predicted noise level is below the acceptable threshold of 67 dBA and does not represent an increase of 14 dBA over existing levels. The human ear would barely perceive the 3 dBA increase.

Prescribed Burns

There are two areas within Camp Wokanda that PPD staff has been burning for the past eight years with the intent of restoring/maintaining oak savanna habitat. Prescribed burns are conducted on the two units (each 60 to 75 acres) in spring and fall to burn the accumulated "litter" from the past year. These tend to be low level, slow, creeping burns. The PPD is currently constrained on when it can burn by residential development to the west. PPD is concerned that smoke from the burns will impede safety on the highway, and IDOT will preclude them from doing these burns.

The entrance to Camp Wokanda is slightly over 2,000 feet from the IL 29 extension. The burn units at Camp Wokanda would be about 3,000 feet from IL 29. Dan indicated that the PPD is also concerned about similar constraints for its prescribed burns at Singing Woods Nature Preserve, which are needed to restore habitat. PPD indicated that approximately 700 acres would be included in its fire regime. The closest prescribed burn at Singing Woods Nature Preserve to the proposed highway would be about 3,500 feet.

Although there are no absolutes, Dan indicated that with the distances separating the PPD properties and the IL 29 extension, it is not reasonable to accept the claim that the potential for smoke from PPD prescribed burns will cause a safety issue for IL 29 users thereby ending the practice of prescribed burns. Dan indicated that it is prudent for the PPD to be concerned about the issue and to coordinate with IDOT on this issue in the future, but the likelihood of the prescribed burning being stopped by IDOT is not compelling enough now to assume that the use of the PPD facilities will be adversely affected by extending IL 29.

FHWA comments:

FHWA representatives concurred with the project team's recommendation that Section 4(f) would not be applicable at Camp Wokanda because the proximity of proposed project would not substantial impair the Section 4(f) property (i.e. no constructive use.)

Signing Woods Nature Preserve

Dan provided an overview of the property and objectives PPD is trying to achieve at the preserve. The PPD is concerned about the following project effects at Singing Woods:

- Sound impacts, and
- Development of a large highway to the east of their property would impact the park district's ability to conduct prescribed burns due to smoke travel.

Noise

To assess the potential effect of noise at Singing Woods noise measurements were taken at the edge of Singing Woods Road adjacent to the preserve. At its closest point, the nature preserve will be approximately 3,500 feet from the proposed alignment. Existing noise levels were found to be 53 dBA at the south edge of the property.

Similar to Camp Wokanda, future noise levels were modeled using 2032 traffic volumes on IL 29. The modeling showed that 2032 noise levels are anticipated to remain constant at 53 dBA. The future noise levels are below the acceptable threshold of 67 dBA and would not be anticipated to increase should the proposed roadway be constructed.

Prescribed Burns

See previous Camp Wokanda discussion.

FHWA comments:

FHWA concurred with the project team's recommendation that Section 4(f) would not be applicable because the proximity of proposed project would not substantial impair the Section 4(f) property (i.e. no constructive use.)

Audubon Wildlife Area

Using an aerial exhibit, Dan illustrated the Audubon Wildlife Area (approximately 98-acre parcel) located north of Caterpillar and west of Old Galena Road. This parcel consists of a 78-acre agricultural field and a 20-acre wetland complex located at the west edge of the parcel. The wetland at the west edge of the property is part of a 40-acre wetland complex that extends east on Caterpillar's property. The PPD does not have a master plan for the site, nor does it have a clear vision for the facility in the future. The wetland complex at the property is currently being evaluated by the Peoria Audubon Society for its potential to provide shorebird habitat. However there is no binding agreement between the Audubon Society and the PPD if it were determined that the wetland complex could support this type of habitat.

The PPD is concerned that a large highway development close to the proposed preserve will severely impact the use of any developed refuge by shorebirds. Dan explained that the project team undertook a limited literature review to determine if the project would affect shorebird habitat. One of the recommendations from the literature search (predominantly of shorebird habitat on the east coast) was to establish a 50-meter (approx. 160+ feet) buffer above the high tide line to separate shorebird habitat from beach users (walkers and vehicles. IL 29 would be 1900 feet from the west end of the Audubon Wildlife Area, the area that contains the critical potential shorebird habitat. A shorebird viewing area is being considered by PPD that would be closer to the habitat than the road. In addition, impacts from headlights from passing cars on the property would be minimal (i.e., diminished at that distance.) Therefore, the project team indicated that there was no proximity effect from the project.

Charles Perino/IDOT-D4 indicated that the proposed improvements need to be assessed from a biological standpoint, and that this parcel was not a Section 4(f) consideration. Charles indicated that this project is in a shorebird "flyway." He indicated that for the biological assessment we need to look at an U.S. Fish and Wildlife Agency publication on shorebird habitat conservation.

FHWA comments:

FHWA indicated that this site would not be considered under the regulations of Section 4(f).

b. Illinois Department of Natural Resources Properties

Spring Branch Unit Marshall State Fish and Wildlife Area

Kim Kolody began the discussion of Illinois Department of Natural Resources (IDNR) properties at the Spring Branch Unit of the Marshall State Fish and Wildlife Area. Kim indicated that approximately 0.2 acres of temporary easement is necessary at the site to "tie in" or provide access to the site.

FHWA comment:

This is not considered a Section 4(f) impact.

County Line Hill Prairie

Kim indicated that the original design adjacent to the County Line Hill Prairie called for the improvements to "cut into" the bluff. However, there are concerns about the slope stability and soil in this area, and thus the current design calls for a split profile in this segment. With the current split-profile design the project would need approximately 0.02 acres of

temporary easement. This property is privately owned so it is not considered under the Section 4(f) regulations.

Hopewell Hill Prairie Natural Area

The original design called for a section of the retaining wall with tie-backs into the bluff. With the current design there would be a split profile and the tie-backs would not be necessary. Approximately 0.15 acres of proposed right-of-way would be needed for roadway purposes. This property is privately owned so it is not considered under the Section 4(f) regulations.

Spring Branch Unit Marshall State Fish and Wildlife Area

IDNR owns a 0.3-acre rectangular parcel between IL 29 and old Route 29, just south of the Land and Water Reserve. This property is not contiguous with other portions of the Spring Branch Unit. The project team has been considering possible options to avoid impacts to the property.

Paul Tuft asked, "What is the Marshall State Fish and Wildlife Area?"

Charles Perino responded that hunting and fishing occur at this site.

Paul indicated that for a site to be considered a wildlife refuge it must be set up for the protection of a specific animal. He indicated that not all publicly owned land is a recreation area nor is it a wildlife refuge as defined by Section 4(f) regulations. FHWA does not consider hunting, bird watching, fishing or trails that are occasionally used as "recreation" under the Section 4(f) regulations, as these are occasional use activities.

Charles indicated that the Marshall State Fish and Wildlife Area is managed for encouraging animal habitat.

Paul indicated that the project team needs to know if there are specific areas at the Marshall State Fish and Wildlife Area that are managed for the protection of a specific animal, or specific recreation areas, or planned recreation areas.

Charles will get a copy of the Marshall State Fish and Wildlife Areas management plan. If IDNR can demonstrate that portions or the entire site are being managed to protect a specific animal, that would help FHWA make a decision.

A question was asked about whom makes the final determination of the applicability of Section 4(f) regulations. FHWA will make the final determination if a parcel is considered under the Section 4(f) regulations (i.e., significant, public use, constructive use, etc.)

Jan Piland mentioned that the FHWA publication *Section 4(f) Questions and Answers* is currently being revised. Questions #6 and #18 are relevant to the questions surrounding this IDNR parcel.

FHWA comment:

Per the FHWA policy, Paul indicated that this parcel is not considered under the Section 4(f) regulations.

Land and Water Reserve

The purpose of this site is to protect hill prairies (i.e., plant reserve.) It is not a wildlife or waterfowl refuge, but a plant reserve.

FHWA comment:

This parcel is not considered under the Section 4(f) regulations (see summary of Section 4(f) policy above.) Paul will check with Washington to see if there are any potential changes to the policy on the horizon.

Sparland Unit of the Marshall State Fish and Wildlife Area

Kim indicated that there are two remaining alternatives to bypass the community of Sparland (Alternative 3 and Alternative 3A). These alternatives differ based on potential impacts to properties that have been purchased through a Federal Emergency Management Agency (FEMA) buyout program (potential "no touch" properties). Kim indicated that to this point the project team had anticipated that the impacts, from both options, to the Sparland Unit would be considered under the Section 4(f) regulations. The IDNR prefers Alternative 3 because it has a smaller impact to their property.

FHWA comment:

This parcel is not considered under the Section 4(f) regulations.

Paul also noted that his experience with other projects where "buyout" property was being considered for use by a project, FEMA has not been agreeable to using the property; even when it would present an improved condition from the existing condition for the property.

Miller Anderson Woods Nature Preserve

Dan led the discussion of the Miller Anderson Woods Nature Preserve at the north end of the project area. The boundary of this preserve includes a small portion of existing DOT right-of-way. The proposed improvements have been shifted to the east away from the Section 4(f) property to avoid any direct impacts. Dan explained that in an effort to be proactive concerning potential constructive use impacts to the property the project team assessed the effect of:

- Noise
- Visual Resources
- Water Quality
- Salt Spray
- Alien Flora

Noise

To understand the project's potential noise impacts on Miller-Anderson Woods Nature Preserve, the existing traffic on IL 29 adjacent to the site was used to develop existing noise levels at two locations, one toward the south end of the property and the other north of that location near Old IL 29. Dan indicated that no noise modeling was conducted for the portion of the property on the bluff. The existing noise level at the south end of the property is 48 dBA and the reading near Old IL 29 is 46dBA. The noise threshold for a setting like Miller-Anderson Nature Preserve is 67 dBA (exterior).

Future noise levels at the Preserve were modeled using the Federal Highway Administration's Traffic Noise Model (TNM). Noise levels for two future scenarios were modeled, the 2032 No Build Alternative and the 2032 Build Alternative. The modeling showed that noise levels in 2032 were anticipated to be 50 dBA (south end) and 47 dBA (near Old IL 29) with the No Build Alternative. With the Build Alternative the future volumes would be 52 dBA (south end) and 52 dBA (near Old IL 29).

Dan noted that there are no permanent human receptors in Miller-Anderson. All existing and future noise levels are below the acceptable threshold of 67dBA. Given these results, future noise levels would not be considered an impact at Miller-Anderson.

Paul commented that a 3 dBA increase is barely perceptible to the human ear.

Visual Resources

Dan explained that visual resources were considered from two perspectives: from the highway users viewshed; and from a user of Miller-Anderson to the proposed improvements. No change in profile is planned along Miller-Anderson except at the IL 29/Kentville Road intersection at the north end of the project. He indicated that there would be no change to the west. However, a swath of trees roughly 70 feet wide and 5700 feet long to the east would be cut down. Removing the trees in this area would increase the visibility of the railroad tracks from some locations in Miller-Anderson Woods. Considering the views of Miller-Anderson from the road, IDOT has committed to not remove any vegetation west of the existing highway's shoulder and generally maintain the same profile as the existing highway. IDOT has also committed to maintaining the plugged culvert so as not to drain the "beaver pond." Therefore, the view of Miller-Anderson from the road (northbound or southbound) will look the same as it does today except at the far north end of the property where the IL 29/Kentville Road intersection will be raised.

Next Dan explained the view from Miller-Anderson of the road. The proposed improvements would expand east and increase the paved portion of the highway by approximately 66 feet. The additional pavement would be constructed at the same profile as the existing highway and may not be visible from some portions of Miller-Anderson such as the beaver pond and adjoining areas that are lower than IL 29. The proposed improvements would also not be visible from the portion of Miller-Anderson on top of the bluff. The loss of trees currently growing in the IL 29 east right of way will increase the visibility of the railroad east of the highway. However, he explained that it would be difficult to imagine how the loss of a 70-foot-wide swath of trees 5700 feet long in DOT's right of way could so alter the view of the road from Miller-Anderson that it would raise to the level of a significant visual impact.

Paul indicated that this is still a transportation corridor; that the line of trees shouldn't affect the whole Nature Preserve.

Water Quality

Dan stated that the forecast 2032 traffic volume on IL 29 is 6,800 ADT. He indicated that FHWA research on the effects of runoff from highways with less than 30,000 ADT show that the project would not result in notable water quality impacts, such as impacts on human and aquatic health or present a threat to surface or groundwater. Based on water quality

research, the proposed IL 29 improvements would have no additional impacts on water quality or to the two ponds and wetlands.

Salt Spray

Salt is applied by IDOT to IL 29 during winter snow-events. After salt is applied to the road, it then leaves the road surface by itself (by gravity), while some salt leaves the road as aerosol spray as traffic travels the road. Dan briefly summarized the results of published salt spray research, which indicates that most of salt applied to low volume roads is contained within the general road right of way area. Dan stated that based on this research it seems reasonable to conclude that impacts from salt spray would have, at best, a minor impact on the Miller-Anderson Woods property, similar to existing IL 29 salt influences.

Alien Flora

Dan indicated that the east side of IL 29 has a greater likelihood of alien flora introduction with the improvements being made to the east, however he indicated that it would be very unlikely that these species would be dominant enough to affect the established areas on the west side of IL 29. The opportunity for alien flora introduction occurs during construction and as a result of salt spray, which softens up the adjacent area. However, he indicated that there is "limited-to-no potential" for exotics to establish themselves within the area that will ultimately be paved as part of the improvements. The existing base course that will be exposed when the existing lanes are removed and new base course that will be put in place will be exposed for such a short period of time that it is unlikely exotics would be able to establish themselves and go to seed quickly enough to move from that area to Miller-Anderson.

He indicated that the new highway's proposed east ditch provides the best potential habitat to support exotics that could migrate to the west. However, IDOT's erosion control measures would militate against the east ditch being overtaken by exotics. The seed mix IDOT would recommend for the east ditch and the cover that would be used to protect the seed mix (straw, erosion matting, and even the nurse crop) will limit the potential for exotics to take root. The more important factor working to limit the influence of exotics in Miller-Anderson is that IDOT has committed to not disturb any vegetation in Miller-Anderson.

Exotics are much more likely to gain a foothold in Miller-Anderson if soil is exposed there. By avoiding soil disturbing impacts in Miller-Anderson, IDOT has severely minimized the potential for exotics to be an impact issue there.

FHWA comment:

FHWA indicated that this site would not be considered under the Section 4(f) regulations.

c. Other

Putnam Pavillion

Dan explained that on this publicly owned parcel is a 4-post shelter with 1 picnic table. This is the site of the former township hall, and the pavilion was erected in remembrance of its location here. The pavilion is maintained and insured by the township. There are no markers or signs indicating this at the site. The proposed improvements would require approximately 1800 square feet of right-of-way from the parcel. Kim indicated that the project could put in a barrier to separate it from the parcel or it could impact the 1800 feet

and provide grading, landscaping or other mitigation. Putnam does not have a park's department, nor does the community have a master plan for its parks.

FHWA Comment:

Paul suggested that the project team inquire with the township if this parcel is a "significant" part of their park system. The response of "significant" or "not significant" should be noted in writing to IDOT. If the site is not considered a significant part of its park system, then it would not be considered under Section 4(f) regulations, and the project team would have more flexibility in working with the township to identify appropriate and agreeable mitigation measures. If it is significant, inquire about the location of the recreational part of the property. Jan also suggested that the project team could ask the township if they think the new highway would deter people from using the facility.

It was also acknowledged that this parcel has a joint use, being adjacent to the Fire Department.

Township Baseball Field (Putnam)

Dan indicated that the current township hall is located in a former grade school. Adjacent to the building is the former grade school's baseball field. Dan asked FHWA if they would advise asking the township to comment on the baseball field as well.

FHWA Comment:

Paul indicated that the project team needs to look at the recreational component of this multi-use property and define the boundary of the ball field. Perhaps the proposed improvements do not hit the ball field. The project team should inquire if there are organized or unorganized activities occurring at the site and how important the site is to the township.

2. Historic Properties

Barville Creek Bridge

Kim introduced the Barville Creek Bridge, which is located south of the Land and Water Reserve and Sparland. She explained that when existing IL 29 was constructed the bridge structure was left in place but that it is no longer available for use. Barricades have been placed in front of the bridge to prevent people from using the bridge, however the barricades have been moved in the past. The bridge is on the Illinois Historic Bridge List.

The project team is considering a potential shift to the east to avoid an impact to the historic bridge, however this option would require removal of one of the Marshall State Fish and Wildlife Area's access points.

FHWA comments:

Paul asked what IDOT wants to do with the bridge? He also inquired if the project team has coordinated with the SHPO on this issue? There may be some value in going through the Section 4(f)/Section 106 process given that the avoidance alternative could possibly remove an access point to the Marshall State Fish and Wildlife Area. Further, by going through the Section 4(f)/Section 106 process the structure would be documented for future reference, in

contrast with the present situation where the structure is not maintained and becoming dilapidated.

Whiffle Tree House (Sparland)

Paula indicated that this structure and its property may potentially be eligible for inclusion on the National Register of Historic Places (NRHP) because of its former use as a hunting club and its association with 19th century recreation industry. But this is not certain; John Wathall/IDOT will be reviewing the structure and its property for eligibility. Paula also noted that the SHPO may rule that it doesn't fit any of the criteria to be considered eligible for inclusion on the NRHP.

FHWA comments:

Paul recommended that the project team coordinate with John Wathall on the architectural value of the structure. If he thinks the structure is potentially eligible, then request that he draw a boundary on the property, to define its historic setting. The project team should also coordinate with the SHPO regarding their recommendations. Paul indicated that the SHPO makes a recommendation, and the FHWA makes a final determination.

If we are not touching the property, but SHPO indicates that the project is affecting the structure adversely, it is not necessarily considered under the Section 4(f) regulations. The project would need to substantially impair the qualities for which the structure was put on the NRHP to be considered under Section 4(f).

BLUFF ALIGNMENT

Dan introduced the Bluff Alignment, which was developed early in the alternatives development process as an avoidance option to the potential wetlands, floodplains and other designated land resources in the central section of the project area, and asked whether this alternative should continue to be included in the project's reasonable range of alternatives. It was noted that during the course of the study the project team has developed a number of more localized options to avoid impacts to wetlands, floodplains and other designated lands.

A detailed traffic flow analysis of the bluff alignment indicates that the proposed bluff alignment would not draw enough traffic from existing IL 29 to forgo the need for a future improvement to existing IL 29; that is, the bluff alignment does not solve the future traffic capacity problems on existing IL 29. Thus, existing IL 29 would still need to be improved. The project team believes that the bluff alignment is not prudent because it does not meet the Purpose and Need of the project.

Further given that existing IL 29 would have to be reconstructed with the construction of the Bluff alignment, the impacts of the bluff alignment need to be combined with the impacts to widen IL 29.

FHWA comments:

Paul and J.D. Stevenson concurred that the bluff alignment does not meet the Purpose and Need of the project. The bluff alignment is an avoidance option for Sparland involvement, but it is not prudent.

Paula asked, given this new information, if the project team should schedule a NEPA/404 merger meeting. Dan commented that we had previously presented the range of alternatives at a NEPA/404 meeting, however, the alternatives currently under consideration are different and it may be prudent to obtain the agencies' re-concurrence.

IDOT-BDE noted that there may be a NEPA/404 meeting scheduled in January; this project could be added to the agenda.

John Anderson/IDOT asked if we could tell the public that we are looking into dropping the bluff alignment. At the last two informational meetings in July, the project team received numerous comments in opposition to the bluff alignment. Paul commented that the project team is in a tough position, but that we can indicate that there have been numerous design changes since the public meeting and that improvements to existing IL 29 seem to provide the best solution to transportation issues in the project area.

Parks, Recreational, and
Wildlife Refuges

Peoria Park District Properties

The Peoria Park District (PPD) stated that the proposed improvements would have detrimental effects on three properties they administer: Camp Wokanda, Singing Woods Nature Preserve, and Audubon Wildlife Area. A letter from PPD contained four concerns

- The construction of the highway will impact access to Camp Wokanda. Park.
- The Peoria Park District and the Peoria Audubon Society are currently involved in a feasibility study to determine the possibility of wetland restoration and development of a wetland refuge for shorebirds at the Audubon Wildlife Area. Large highway development so close to the proposed preserve will severely impact the use of any developed refuge by shorebirds.
- Sound impacts at Camp Wokanda, Singing Woods Nature Preserve and Audubon Wildlife Area will be heavy.
- Development of a large highway to the east of our preserves will impact the park district's ability to conduct prescribed burns due to smoke travel.

Camp Wokanda

Background Information

Camp Wokanda is located on Boy Scout Road west of Mossville (see Figure 1, *Peoria Park District Properties in South Section*). It is a 273-acre special use park available to groups such as a school group, scout group, or civic group. The Camp's primary mission is as a resident outdoor education center for area schools and other clients. The property includes a lake, trails, dining hall, cabins, program buildings and tent camping (see Figure 2, *Camp Wokanda Site Map*). The Camp offers a variety of naturalist tours, environmental education and rental options for retreats, family reunions, weddings or special group camp outings.

Woodlands at the camp are oak savanna, and there are two locations that are approximately 75-acre units north and south of the lake that are burned annually to restore/maintain the oak savanna habitat. According to the Peoria Wilds website, the camp maintains a diverse array of plants and animals. Surveys have turned up 359 plant species and more are continuously being added.

The Camp entrance, which is the closest portion of the property to the IL 29 extension, is slightly more than 2,000 feet (approximately 0.4 mile) west of the proposed IL 29 alignment (see Figure 1). The dining hall, cabins, program buildings and tent camping are located south of the entrance along the east side of the camp.

Impact Evaluation

Access Concern

Currently, traffic from any direction bound for the Camp must use Old Galena Road as a connection to Boy Scout Road. As construction approaches the Old Galena Road/Boy Scout Road intersection, the proposed service road west of IL 29 would be constructed to intersect Boy Scout Road. Access to Boy Scout Road would then be possible from either Cedar Hills Drive or Mossville Road via the service road. At no time during the proposed extension of IL 29 would Boy Scout Road (or the Camp) be cut off from the local road network.

Noise Concerns

A field measurement was taken at the camp near the activities field. The existing noise level at that location was 40 dBA. Future noise levels at the camp were modeled. The model used 2032 forecasted traffic volumes on IL 29. The modeling showed that noise levels in 2032 were anticipated to be 43 dBA on the east side of the camp near the activities field. The predicted noise level is below the acceptable threshold of 67dBA and does not represent an increase of 14 dBA over existing levels.

Prescribed Burn Concerns

There are two areas within Camp Wokanda that PPD staff has been burning for the past eight years with the intent of restoring/maintaining oak savanna habitat. Prescribed burns are conducted on the two units (each 60 to 75 acres) in spring and fall to burn the accumulated "litter" from the past year.

The entrance to Camp Wokanda is slightly over 2,000 feet from the IL 29 extension. The burn units at Camp Wokanda would be about 3,000 feet from IL 29. With the distances separating the PPD properties and the IL 29 extension, it is not reasonable to accept the claim that the potential for smoke from PPD prescribed burns will cause a safety issue for IL 29 users thereby ending the practice of prescribed burns.

Conclusions: Section 4(f) would not be applicable because the proximity of proposed project would not substantial impair the Section 4(f) property.

Singing Woods Nature Preserve

Background Information

Singing Woods Nature Preserve is an approximately 900-acre property located on the bluffs north of Cedar Hills Drive and west of Ivy Lake Lane (see Figure 1). There are no signs identifying the preserve and currently no developed access. The nature preserve designation applies to approximately 700 acres of the 900-acre parcel. At its closest point, the nature preserve is almost 3,500 feet (approximately 0.7 mile) from the proposed IL 29.

Impact Evaluation

Noise Concerns

Noise measurements were taken at the edge of Singing Woods Road adjacent to the preserve. At its closest point, the nature preserve will be approximately 3,500 feet from the

proposed alignment. Existing noise levels were found to be 53 dBA at the south edge of the property.

Like at Camp Wokanda, future noise levels were modeled using 2032 traffic volumes on IL 29. The modeling showed that 2032 noise levels are anticipated to remain constant at 53 dBA. The future noise levels are would not be anticipated to increase should the proposed roadway be constructed.

Prescribed Burn Concerns

Fire management will be one of the key activities in restoring habitat there. Approximately 700 acres will ultimately be included in a fire regime. The closest prescribed unit to the proposed highway would be about 3,500 feet from IL 29. Other burn units would be approximately one mile from IL 29.

It is prudent for the PPD to be concerned about the issue and to coordinate with IDOT on this issue in the future, but the likelihood of the prescribed burning being stopped by IDOT is not compelling enough now to assume that the use of the PPD facilities will be adversely affected by extending IL 29.

Conclusions: Section 4(f) would not be applicable because the proximity of proposed project would not substantial impair the Section 4(f) property.

Audubon Wildlife Area

Background Information

Audubon Wildlife Area is an approximately 98-acre parcel located north of Caterpillar and west of Old Galena Road (see Figure 1). The parcel consists of a 78-acre agricultural field and a 20-acre wetland complex located at the west edge of the parcel. The wetland at the west edge of the property is part of a 40-acre wetland complex that extends east on Caterpillar's property. The Peoria Audubon Society (PAS) is evaluating the potential for the wetland (and some portion of the cropped land) to be restored as shorebird habitat. The habitat that would be developed to attract shorebirds would consist of mudflats, short grass, and shallow water wetlands. There currently is no formal agreement between the Audubon Society and the PPD to conduct the restoration work.

If the site were to be restored, PPD anticipates that there would be viewing blinds east of the existing wetlands and a parking area in what is currently the agricultural field. Dave Wheeler (PPD) indicated that the public could exert pressure to develop the site as a neighborhood park. There is currently no master plan developed for the site.

Alternative S-6 runs from the southwest to northeast from 1900 feet south of the southwest corner of the Audubon Wildlife Area to the southeast corner of the property immediately adjacent to the property at Old Galena Road. Because Alternative S-6 is grade separated over Old Galena Road, the roadway would be elevated above the property by 22 feet beginning at 1100 feet south of Old Galena Road to 1300 feet north of Old Galena Road.

Impact Evaluation

Proximity Impacts to the Potential Shorebird Habitat

The PPD indicated that a large highway development close to the proposed preserve will severely impact the use of any developed refuge by shorebirds. In a flyer produced by either the PPD or the Peoria Audubon Society, they expressed concerns about water flow at the property, of noise, highway lights, accessibility of the property, highway storm runoff on water quantity/quality, and the quality of the experience for visitors.

It is important to begin the discussion of potential Section 4(f) issues at the Audubon Wildlife Area by discussing the implications of the lack of a master plan for the property. Absence of a site master plan leaves open several possible uses for the Audubon Wildlife Area and makes it difficult to analyze the potential impact on the use of a Section 4(f) property. Because the potential use of the site as a shorebird refuge is supported by the PPD, only the project's potential impacts on that use have been addressed. Furthermore the project's potential impacts to the wildlife area (and its ability to function as a shorebird refuge) are limited to the property owned by the PPD.

In assessing the potential impacts to the concept of a shorebird refuge at the Audubon Wildlife Area, several sources of information were consulted, most notably the Natural Resources Conservation Service's publication *Shorebirds, Fish and Wildlife Habitat Management Leaflet, Number 17, July 2000*. The text below uses information from that publication without reference.

Most shorebirds winter in the temperate regions of South America and sub-tropical areas of the U.S. and Mexico, and return to northern breeding grounds in the spring. Peak migrations occur from March through May (spring) and from July through September (fall).

It would be during the migration periods that most shorebirds would be present in the IL 29 project area. A conversation with a Fish and Wildlife official indicated that the project area is not a notable shorebird breeding area. Transcontinental (inland) shorebird migrants, such as would be found in the study area, typically travel in small numbers and may hop between stopover sites to reach wintering grounds. This strategy involves flying short distances between stops to replenish fat reserves. Wetland degradation and land use conversion (i.e. from wetlands to agricultural land) have modified many interior stopover sites, reducing the potential of frequent stops.

Concerning human disturbances and effects on shorebirds, the publication noted that human disturbance (e.g. walking, dog walking, sunbathing, bird watching, fishing, and driving on the beach) negatively impacts populations of nesting, migrating, and foraging shorebirds. Also noted as issues were industrial and agricultural land use, agricultural runoff, and chemical pollution. As a means of improving migration habitats, the establishment of driving and walking buffer zones that limit human use at high tide was recommended. Prohibiting human activity above the average high tide line helps keep shorebirds separated from human activities. A tidal walking/driving buffer zone of 50 meters was recommended.

At its closest point, Alternative S-6 is 1,900 feet from the south edge of the wetland on the Audubon Wildlife Area property. Assuming the wetland at the west edge of the property would be the focus of the shorebird restoration area, it seems unlikely (based on information presented in the NRCS publication) that the proximity of IL 29 would adversely affect the use of the Audubon Wildlife Refuge by shorebirds. In response to PPD's more specific concerns listed at the beginning of this discussion the following are offered:

- The impact on water flow at the property - Extended IL 29 would not interfere with any visible stream that feeds the Audubon Wildlife Area wetland or sheet flow that feeds the site.
- The impact of highway lights to birds - It was not clear from the brief literature search whether lights disturb shorebirds. One would expect that 1600 feet (or more) of separation between IL 29 and the west end wetland would minimize or eliminate the effects of headlight glare.
- The impact to the accessibility of the property - With or without the project, the assumption would be that site access would be provided from Old Galena Road.
- The impact of highway storm runoff on water quantity/quality - The proposed improvements will be designed with rural ditches that will capture the highway runoff. It is highly unlikely that any connection could be drawn between the highway runoff conveyed by ditches and water quality at a site approximately 1600 feet away. A more pressing concern for the success of the site may be agricultural runoff from fields that surround the wetland.
- The impact on the quality of the experience for visitors - Again, future noise levels at the site do not exceed FHWA standards. It is difficult if not impossible to provide any meaningful comparison about how a person's experience at the site would differ with the No Build Alternative's noise level and the Build Alternative's noise level. One would assume that the most important predictor of a quality experience would be the variety and number of shorebirds at the site rather than noise levels, particularly given the modeled future noise levels.

Further evidence of the ability of shorebirds and highways to coexist can be seen in the proximity of highways to U.S. Fish and Wildlife Service refuges. Two examples among potentially many include:

- Necedah Wildlife Refuge in west central Wisconsin which has STH 173 cutting through the west half of the property and STH 80 running along its east edge, and
- Montezuma Wildlife Refuge in upstate New York which has State Highway 20 that runs through the refuge and the New York State Thruway to its north.

While it is acknowledged that these refuges are much larger than that being considered at the Audubon Wildlife Center, it is inaccurate to simply state that shorebirds cannot exist proximate to highways.

Noise Concerns

The existing traffic on Old Galena Road adjacent to the Audubon Wildlife Area was used to develop existing noise levels at the site. Based on field measurements taken at the site, noise

levels at the east end of the property adjacent to Old Galena Rd were found to be 65 dBA. The noise threshold for the property is 67 dBA (exterior). Another field measurement was taken at the west side of the property near the wetland complex. Noise levels at that location were found to be 52 dBA.

Noise Levels for two future scenarios were modeled, the 2032 No Build Alternative and the 2032 Build Alternative. The modeling showed that noise levels in 2032 under the No Build Alternative are anticipated to be 66 dBA adjacent to Old Galena Rd and 52 dBA near the wetland complex. With the Build Alternative the future noise levels would be 68 dBA adjacent to Old Galena Rd and 53 near the wetland complex.

Conclusions: Section 4(f) would not be applicable because the proximity of proposed project would not substantially impair the Section 4(f) property. In addition Section 4(f) would not be applicable because this is not a "planned facility". (The term "planned facility" refers to a facility with documented plans for further recreational development.)

Illinois Department of Natural Resource (IDNR)

Spring Branch Unit

Impacts to this area have been reduced to only 0.2 acres of temporary easement. The easement is required to construct an entrance to a new access road for the Unit.

IDNR has concurred that the easement will:

- a) be of short duration and less than the time needed for construction of the project,
- b) not change the ownership or result in retention of long-term or indefinite interests in the land for transportation purposes,
- c) not result in any temporary or permanent adverse change to the activities, features, or attributes which are important to the purposes of functions that qualify the resource for protection under Section 4(f), and
- d) include only a minor amount of land.

Conclusions: Section 4(f) would not be applicable

Marshall County Hill Prairie Land and Water Reserve

Impacts to this area have been reduced to only 0.1 acres of temporary easement. The easement is required to reshape their entrance.

IDNR has concurred that the easement will:

- e) be of short duration and less than the time needed for construction of the project,
- f) not change the ownership or result in retention of long-term or indefinite interests in the land for transportation purposes,

- g) not result in any temporary or permanent adverse change to the activities, features, or attributes which are important to the purposes of functions that qualify the resource for protection under Section 4(f), and
- h) include only a minor amount of land.

Conclusions: Section 4(f) would not be applicable

Marshall County Hill Prairie (IDNR property outside of the Land & Water Reserve)

Approximately 0.3 acres of right-of-way would be required from this parcel if the On IL 29 Alternative were selected. Currently studies to reduce or eliminate the right-of-way are underway.

Conclusions: If the need for right-of-way can not be eliminated, Section 4(f) would be applicable.

Sparland Unit

At this location two design options are still under consideration. Depending on the option selected potentially either 7.3 or 7.8 acres of this site could be impacted.

Conclusions: Section 4(f) would be applicable and if the selected alternate impacts this property a Section 4(f) evaluation will be processed.

Miller-Anderson Woods Nature Preserve

IDNR has not raised the issue of the project's potential impacts affecting the use of Miller-Anderson Nature Preserve. This question is being examined to determine whether potential impacts to the Preserve need to be part of the Section 4(f) evaluation in the Draft EIS. Only the project's potential impacts on the Nature Preserve (west of IL 29) will be examined. The property east of IL 29 (Miller-Anderson Woods Natural Area) is privately owned and is not a 4(f) resource. No distinctions will be drawn between the natural area and nature preserve boundaries on IDNR's property west of IL 29. The entire property is a 4(f) resource and impacts will be discussed in that vein.

The following potential project impacts on the Nature Preserve will be examined: noise, visual and water quality impacts, and impacts caused by salt spray and alien flora. A discussion of each is found below.

Impact Evaluation

Noise

The existing traffic on IL 29 adjacent to Miller-Anderson was used to develop existing noise levels at two locations, one toward the south end of the property and the other north of that location near Old IL 29. The existing noise level at the south end of the property is 48 dBA and the reading near Old IL 29 is 46dBA.

Noise levels for two future scenarios were modeled, the 2032 No Build Alternative and the 2032 Build Alternative. The modeling showed that noise levels in 2032 were anticipated to be 50 dBA (south end) and 47 dBA (near Old IL 29) with the No Build Alternative. With the Build Alternative the future volumes would be 54 dBA (south end) and 52 dBA (near Old IL 29).

An increase of 4 to 5 dBA (future No Build vs. Build) would not be considered significant nor would it result in a substantial impairment to the Nature Preserve.

Visual

Existing IL 29 in the Miller-Anderson Woods area consists of two 12-foot lanes, 3-foot gravel shoulders and ditches and a total right of way width of approximately 125 feet. The Miller-Anderson Woods property has approximately 5700 feet of frontage along IL 29, and is 340 acres in size (including the buffer areas). Approximately 130 acres of the property is located "on top of the bluff" and cannot be seen from IL 29.

There is a relatively narrow area immediately adjacent to the highway in Miller-Anderson that includes old field habitat, the "beaver pond" and wetlands. West of this level area, the landscape rises steeply to the top of the bluff. The bluffs are heavily wooded with stands of oak-hickory and rise up 180 feet above IL 29. With the exception of an outbuilding near the small pond south of Kentville Road, there are no structures in Miller-Anderson.

IL 29 would be expanded to the east (away from IDNR's property). The expanded IL 29 would have two 12-foot-wide lanes in each direction separated by a 22-foot-wide median (with a concrete barrier), and 10-foot-wide paved shoulders. No improvements would be made west of the existing west shoulder although a guardrail would be added to that shoulder. No change in profile is planned along Miller-Anderson, except at the IL 29/Kentville Road intersection at the north end of the project. As a result of the proposed widening to the east, trees that have grown in the highway right of way east of IL 29 would be removed. A swath of trees roughly 70 feet wide and 5700 feet long would be cut down. Removing the trees would increase the visibility of the railroad tracks from some locations in Miller-Anderson Woods.

Considering the views of Miller-Anderson from the road, IDOT has committed to not remove any vegetation west of the existing highway's shoulder and generally maintaining the same profile as the existing highway. IDOT has also committed to maintaining the plugged culvert so as not to drain the "beaver pond." Therefore, the view of Miller-Anderson from the road (northbound or southbound) will look the same as it does today except at the far north end of the property where the IL 29/Kentville Road intersection will be raised.

Concerning the view from Miller-Anderson of the road, the proposed improvements would expand east and increase the paved portion of the highway by approximately 66 feet. The additional pavement would be constructed at the same profile as the existing highway and may not be visible from some portions of Miller-Anderson such as the beaver pond and adjoining areas that are lower than IL 29. The proposed improvements would also not be visible from the portion of Miller-Anderson on top of the bluff. The loss of trees currently growing in the IL 29, east right of way will increase the visibility of the railroad east of the highway. However, it would be difficult to imagine how the loss of an 80-foot-wide swath

of trees 5700 feet long in DOT's right of way could so alter the view of the road from Miller-Anderson that it would raise to the level of a significant visual impact.

Water Quality

There are two surface water features and associated wetlands in the Miller-Anderson Woods property adjacent to IL 29, the "beaver pond" toward the south end of the property and a small pond south of the IL 29/Kentville Road intersection. This water quality discussion focuses on potential impacts to those two surface water features and nearby wetlands. The 12-acre beaver pond, which was formed by a dam blocking a drainage culvert, extends approximately 1200 feet along the highway foreslope. The small pond is separated from the southbound travel lane by approximately 30 feet.

With the current design, the northbound lane drains east and the southbound lanes drains west to ditches on both sides of the highway. The ditch on the west side of IL 29 carries highway runoff to culverts which drain east toward the Illinois River.

In total, the proposed IL 29 improvements would add 66 feet of additional impervious surface to the existing highway adjacent to Miller-Anderson Woods. None of the changes to the highway's typical section will be located any closer to the two surface water features than the edge of the existing gravel shoulder on the west side of IL 29. With the proposed improvements, the northbound lanes (including half the median and the paved shoulder) will continue to drain to the east and the southbound lanes (including half the median and the paved shoulder) will drain to the west to grassed ditches.

The research on the effects of runoff from highways with less than 30,000 ADT on human and aquatic health makes it quite clear that the proposed IL 29 improvements would not result in notable water quality impacts to the two ponds and wetlands. The primary highway runoff components include suspended sediments (pavement wear and dirt), lead (gasoline, tire filler), zinc (tire filler, motor oil stabilizers), copper (metal platings, brake linings), and petroleum (gasoline, antifreeze, hydraulic fluids).

Throughout the mid-1980s, the FHWA conducted extensive nationwide studies to determine highway runoff constituents, amounts relative to roadway types and traffic conditions, and the potential impacts to surface water resources (*Pollutant Loadings and Impacts from Highway Stormwater Runoff, Volume I*, Federal Highway Administration, April 1990).

FHWA's research concluded that pollutants in highway runoff are not present in amounts sufficient to threaten surface or groundwater where Average Daily Traffic (ADT) volumes are below 30,000. These findings are also cited by the U.S. EPA in their Report: *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*, EPA Publication 840-B-92-002, January 1993. It should be noted that the forecast 2032 traffic volume on IL 29 is 6,800 ADT.

Salt Spray

The salt transport process begins when salt is applied to the road. The salt then leaves the road surface by itself (by gravity) or by the action from traffic. By runoff, the salt will reach

the roadside/drainage system. By being forced into the air by traffic or by plowing, the salt leaves the road as splash, spray or dry crystals to be deposited on the road surface or roadside. By leaving the drainage system or percolating from the soil surface through the soil the salt solution may reach the groundwater.

Although a limited amount of information concerning the effects of salt spray was reviewed, that research concludes that the bulk of salt applied to low volume roads is contained within the general road right of way area. Based on this conclusion it seems reasonable to conclude that impacts from salt spray would have, at best, a minor impact on the Miller-Anderson Woods property, similar to existing IL 29 salt influences. Beyond that, it is also reasonable to conclude that there would be no discernable differences at Miller-Anderson between the effects of salt spray under the No Build Alternative in 2032 (from existing IL 29) and the 2032 Build Alternative (improved IL 29).

The low traffic volumes on IL 29 with the No Build and Build Alternatives reduce the amount of salt that is forced into the air and transported off the road surface. In addition, it is likely that prevailing winter winds in the project area would not carry the majority of air-borne salt into Miller-Anderson Woods. If salt spray were a problem at Miller-Anderson, it would be reasonable to expect the problem(s) to be evident after years of salting existing IL 29 and deposition of salt/salt spray in and beyond the highway right of way. Instead, what may be happening is that salt tolerant (i.e. White Oaks and Red Oaks) and moderately salt tolerant (White Ash, Cottonwood and Black Cherry) species have come to dominate the area adjacent to the highway and salt intolerant species (i.e. maples and Shagbark Hickory) have self-selected to areas beyond that zone.

Alien Flora

When soil adjacent to Miller-Anderson is stripped of vegetation it creates an opportunity for exotics in that soil's "seed bank" or volunteering into the area (by wind, animal droppings, etc.) to establish themselves and expand their range. This process could result in an increased risk of exotics or alien flora penetrating Miller-Anderson Woods.

The reconstruction of IL 29 adjacent to Miller-Anderson would remove the existing travel lanes and require construction east of the existing west shoulder to a point 66 feet east. Within this relatively narrow disturbed zone, an impervious surface (concrete) will cover the bulk of it. There is "limited-to-no potential" for exotics to establish themselves within the area that will ultimately be paved.

The new highway's proposed east ditch provides the best potential habitat to support exotics that could migrate to the west. IDOT's erosion control measures would, however, mitigate against the east ditch being overtaken by exotics. The seed mix IDOT would recommend for the east ditch and the cover that would be used to protect the seed mix (straw, erosion matting, even the nurse crop) will limit the potential for exotics to take root. The more important factor working to limit the influence of exotics in Miller-Anderson is that IDOT has committed to not disturb any vegetation in Miller-Anderson. Exotics are much more likely to gain a foothold in Miller-Anderson if soil is exposed there. By avoiding soil disturbing impacts in Miller-Anderson, IDOT has severely minimized the potential for exotics to be an impact issue there.

Conclusions: Section 4(f) would not be applicable because the proximity of proposed project would not substantial impair the Section 4(f) property.

Putnam Township

Pavilion

The parcel on which the "pavilion" is located is the site of the original town hall. When the hall was torn down in the late 1970's or early 1980's a picnic shelter was erected on the site of the hall as a memorial. Today this area is used as a picnic area for the community and is maintained and insured by Senachwine Township.

Conclusions: Section 4(f) would be applicable.

Historical Properties

Historic Bridge at Barville Creek

This bridge is on the Illinois Historic Bridge List. If the On IL 29 alternate is selected this bridge would be removed.

Conclusions: Section 4(f) would be applicable.

Whiffle Tree House

This structure, located south of IL 17 in Sparland, is potentially eligible for inclusion in the National Register of Historic Places. Two IL 29/IL 17 interchange alternatives are in the vicinity of the structure.

Alternative 3

The proposed IL 29 right-of-way ranges from 75 feet to zero feet (at the north edge) from the west Whiffle Tree House property line (David Smith). At the closest point the proposed right-of-way is 100 feet from the building.

The elevation of the proposed IL 29 adjacent to the Whiffle Tree House is approximately 25 feet above existing ground with a retaining wall.

The elevation of IL 17 will be raised approximately 5 feet in the vicinity of the Whiffle Tree House.

Alternative 3A

The proposed IL 29 right-of-way impacts the east side of the Whiffle Tree House property (David Smith). The closest distance from the Whiffle Tree House to the proposed IL 29 right-of-way is approximately 84 feet.

The elevation of the proposed IL 29 adjacent to the Whiffle Tree House is approximately 28 feet above existing ground with a retaining wall.

The elevation of IL 17 will be raised approximately 3 feet in the vicinity of the Whiffle Tree House.

Conclusions: Coordination with Illinois Historic Preservation Agency will be necessary to determine if the proposed project would have an adverse effect on the property. If either Alternate 3 or 3A is selected and IHPA determines there is an adverse effect then a Section 106 evaluation would be required.

Since Alternate 3 does not require right-of-way from the property Section 4(f) would be applicable only if the proposal would result in substantial impairment to the resource. Although the raised alignment would alter the visual environment of the site it would not affect the historic value of the structure.

Alternate 3A does require right-of-way from the property on which the house sits. Whether or not Section 4(f) would apply to this taking would depend on the delineation of NRHP boundaries. If IHPA defines the structure itself as the boundaries then Section 4(f) would not apply. However, if the structure and the property on which it sits are defined as the NRHP boundary then Section 4(f) would apply.

Archaeological Sites

Numerous archaeological sites have been identified along the proposed alignments however no burial mounds would be impacted. At this time there are none of the archaeological sites which may be eligible for inclusion in the National Register warrant preservation in place and are important chiefly because of what can be learned by data recovery.

Conclusions: If IHPA concurs with this assesment, Section 4(f) would not apply.

11-23-04 Floodplain Meeting

ATTENDEES: Paula Green/IDOT
 Mike Lewis/IDOT
 John Anderson/IDOT
 Greg Larson/IDOT
 Charles Perino/IDOT
 Barbara Stevens/IDOT
 Dan Ghere/FHWA
 J.D. Stevenson /FHWA
 George Jones/FHWA
 Jan Piland/FHWA
 Justin Luther/FHWA
 Brian Smith/FHWA
 Dan Dupies/CH2M HILL
 Kim Kolody/CH2M HILL
 Jim Jodie/CH2M HILL
 Fred Lin/Lin Engineering

COPIES: Mike Lewis/IDOT
 Paula Green/IDOT

FROM: Dan Dupies

DATE: December 20, 2004

Introduction

On September 14, 2004, a meeting was held with IDOT, FHWA and the Department of Natural Resources' (DNR's) Office of Water Resources to discuss the potential floodplain impacts associated with the proposed IL 29 improvements. During that meeting, the DNR indicated that their interest in floodplains was limited to whether the project would place fill in a stream's floodway and whether the fill would increase the floodway's backwater elevation beyond permissible limits. DNR noted that they had no jurisdiction over filling in the flood fringe (the portion of the floodplain outside the floodway).

To develop a deeper understanding of the potential ramifications of filling in the flood fringe, particularly the question of whether there is a requirement to compensate for filling in the flood fringe, IDOT requested a meeting with Dan Ghere (FHWA) and other FHWA and IDOT representatives. Dan Ghere, is a former IDOT hydraulics engineer Now working for FHWA. The text below summarizes the floodplain meeting held at IDOT's District 4 offices on November 23, 2004. The summary follows the order of the attached meeting agenda.

Meeting Summary

Jim Jodie began the meeting by reviewing the meeting purpose and providing a general project overview. Kim Kolody then reviewed the floodplain information that the project team has gathered to date, including the work (at Senachwine Creek) to refine the 100-year floodplain elevations provided by FEMA. Kim also reviewed the information the DNR's Office of Water Resources staff provided during our meeting with them on September 14, 2004. Dan Dupies noted that, in conversations with the floodplain administrators for Peoria

and Marshall Counties, there were no county requirements to compensate for filling in the flood fringe.

Dan Ghere asked whether DNR was concerned about replacing lost flood storage at the same elevation as the lost storage. In response to a question about which agency has floodplain jurisdiction, Dan responded that FHWA does not "control" either the floodway or the flood fringe. Rather, FHWA's role is to ensure that other agencies' floodplain rules are followed. Brian Smith pointed out that FHWA is charged (by Executive Order 11988, Floodplain Management) with preserving the natural and beneficial floodplain values. The Executive Order does not draw distinctions between the floodway portion of the floodplain and the flood fringe. Dan Ghere reminded the group that the project's DEIS would have to address the hydraulic implications of floodplain filling and the environmental implications. We will have to demonstrate why the proposed IL 29 improvements could not be located outside the floodplain. Paula noted that the team has a good grasp of the environmental issues associated with floodplain filling and, therefore, wanted this meeting to focus on the hydraulic issues.

J. D. Stevenson said the question is whether we have to compensate for impacts in the flood fringe. Paula added that if compensation is necessary, what is the rate?

Dan Ghere said that the team has to plan on the property owner(s) on the south side of the creek filling an amount equal to the project's proposed fill for the longitudinal impact at Senachwine Creek (south). He went to acknowledge that the HEC/RAS model used to analyze floodway impacts does not consider filling in the flood fringe. Stated differently, filling in the flood fringe does not affect the floodway and no compensation would be necessary unless required by local ordinance. As noted, neither Peoria nor Marshall County require floodplain compensation. As noted during the September 14th meeting with the Office of Water Resources, the key issue for FEMA and DNR will be impacts that affect floodway conveyance. Paula said that it did not appear that compensation would be required in the flood fringe. Dan Ghere agreed with Paula's assessment.

Dan Dupies asked Dan Ghere about the appropriate level of investigation in a Phase I study to determine the project's potential impact on flood conveyance. Dan responded that the analysis should go far enough to know whether the project has an alternative that works. Dan Dupies asked which agency would decide whether the project team had done enough work to determine whether we have a workable alternative in floodplain areas. Dan Ghere responded that DNR Office of Water Resources would be responsible for deciding when we have conducted the appropriate level of work to determine whether the project would affect floodway conveyance. He stated that the Office of Water Resources' regulations are more conservative than FEMA's, so if we satisfy the Office of Water Resources we will also satisfy FEMA.

Charles noted that when FEMA criticizes the floodplain write-ups in EISs, it is usually because the document does not show evidence of addressing their "8 points." Paula asked Fred Lin about the likelihood of being in the Senachwine Creek (south) floodway. Fred noted that his preliminary work indicates that we are quite close at one cross section. Kim Kolody stated that we may even be in the floodway, but are evaluating options to shift away from it.

Brian stated that he would not recommend compromising the design of IL 29 to avoid the floodway. A waiver should be pursued if necessary.

The focus of the meeting then shifted from the potential floodplain impacts at Senachwine Creek (south) to potential impacts at Crow Creek, Senachwine Creek (north) and the Illinois River floodplains.

At Crow Creek, Dan Ghere stated that he would consider the south bridge crossing as a transverse floodplain crossing. He noted that the project's floodplain impact along the west side of IL 29 would be an impact to the flood fringe. While the impact to this portion of Crow Creek is technically a longitudinal encroachment, that encroachment is to the flood fringe. As a result, Fred's modeling work is not intended to determine the limits of the Crow Creek floodway, rather it is focused on determining whether we have properly sized the bridge opening at the south end of the creek. Currently during 50-year and 100-year storms, water in the Crow Creek "slough" overtops IL 29. The proposal to raise IL 29 would prevent the overtopping thus requiring the bridge opening at the south end to accommodate the volume of water from the 50- and 100-year storms that currently passes through it plus the volume of water that currently overtops IL 29.

At the crossing of Senachwine Creek (north), Dan Ghere said that although it appears to be a longitudinal crossing, he considers the longitudinal area close enough to the transverse crossing point that we should consider this entire crossing transverse.

Fred Lin noted that in the Miller-Anderson Woods area, the Illinois River floodplain is located on both sides of IL 29. He pointed out that the floodway in this area is well east of Goose Lake, and therefore we have a longitudinal encroachment of the flood fringe (not floodway) in that area. Because it is flood fringe, no compensation would be required.

In Sparland, Fred stated that the floodway boundary is located well east of the proposed interchange area. Dan Ghere noted that the proposed improvements would have transverse crossings of the Gimlet Creek and Thenius Creek floodplains and a longitudinal encroachment of the Illinois River flood fringe (no compensation required for any of the Sparland crossings).

Concerning the issue of whether the flood buyout properties in Sparland should be/must be avoided by the interchange alternatives, Dan Ghere said he would discuss the issue with FHWA headquarters to determine if there might be negotiations with FEMA in deciding which interchange alternative to select. Dan requested that the project team not contact FEMA about a meeting until he has contacted FHWA headquarters.

Dan Ghere recommended that Fred talk to Mike Diedrichsen (Office of Water Resources) to confirm the appropriate method to evaluate floodway impacts. Dan noted that the discussion had focused on the project's potential to change the elevation of the floodway, but there is also the issue of whether the project could affect the velocity of the flow in the floodway. He stated that the Office of Water Resources might also be interested in that issue.

Charles requested that the term flood fringe not be used in the DEIS.

MEETING SUMMARY

CH2MHILL

12-15-04 NRCS Meeting (Henry)

ATTENDEES: Dan Dupies/CH2M HILL
Randy Edwards/NRCS

COPIES: Mike Lewis/IDOT
Paula Green/IDOT

FROM: Dan Dupies

DATE: December 16, 2004

This memorandum summarizes the meeting with Randy Edwards to discuss the project's potential impacts on NRCS improvements along Crow Creek and, generally, in the Crow Creek Watershed. Listed below are the key pieces of information that were discussed during the meeting.

- NRCS was involved with the design and construction of the Senachwine Creek (south) streambank protection measures. One of the projects was in the area of the Benedict Street bridge where gabion baskets were placed on the south bank of the creek and willow posts and stone toe protection were placed on the north bank. The other streambank protection project was near the transmission tower near the IL 29 bridge. In that location, NRCS constructed rock vanes and stone toe protection on the south bank of the creek. **CH2M HILL will review the aeriels between the Benedict Street bridge and the IL 29 bridge to locate those improvements and determine whether the proposed IL 29 improvements impact NRCS' streambank protection measures.**
- Randy noted that the proposed IL 29 improvements would not effect any NRCS projects adjacent to Crow Creek. He did point out that the Villagers have stabilized the slope along the bank of Crow Creek east of IL 29 at the north crossing. They have also constructed dry dams along the edge of the tree line adjacent to Crow Creek in the same area. Because the proposed improvements are located west of IL 29 in this area, there will be no impacts on the work conducted by the Villagers. Randy pointed out the old Catholic cemetery in the middle of the Villagers field east of IL 29 and the access road used to reach the cemetery. Our current design maintains the access point leading to the access road.
- Randy noted that when water levels in the Crow Creek slough are high enough to overtop IL 29, a "rooster tail" as high as 12 feet can be seen on the east side of IL 29 at the railroad bridge. Our team has been assuming that there is no connection between the Crow Creek slough west of IL 29 (at the north crossing) and the portion of the creek east of IL 29 and the railroad.
- Randy said that the structure in the southeast quadrant of the IL 29/Goodrich Road intersection is owned by Tyson Foods and was used as a local buying station for hogs.

Area farmers would bring their hogs there and after the sale, the hogs were shipped out. The facility, which is for sale, has been closed for two years. There is a restriction on the property preventing it from being used as a hog buying station.

- Several properties that are included in our project aerial were identified as part of the proposed 640-acre Ozinga sand quarry. The properties include the Knuckey property in the northeast quadrant of the IL 29/Goodrich Road intersection and the two properties immediately north of it. The quarry would also include some land in the industrial park including a parcel adjacent to the river that would serve as the harbor for the quarry.
- Randy pointed out a former sand quarry west of IL 29 on the property owned by Patricia Accardi. There is a former clay pit west of IL 29 (south of Putnam) on the property owned by Bert and Rose Weir.
- Dry Hollow was an outlet for Crow Creek many years ago. After a dam was constructed somewhere west of IL 29 it has remained completely dry.
- NRCS installed rock vanes to protect the Senachwine Creek (north) streambank. The work is located well west of the proposed IL 29 improvements. Senachwine Creek (north) on the east side of IL 29 was placed in a ditch with levees on both sides of the ditch to its outlet in Goose Lake.
- Randy asked whether we had the wetlands identified in the Winships' (Shady Bluff Farm) field west of IL 29. No wetlands were identified on the mapping. **CH2M HILL will review the aeriels and the NHS wetland information to resolve this issue.**
- When asked about logging in the project area, Randy noted that it is not uncommon for landowners to harvest cottonwoods and swamp maple from floodplain forests. The wood is purchased by furniture makers and is sometimes used for making pallets. Randy said that it may be 15 years between logging events.



Illinois Department of Natural Resources

One Natural Resources Way • Springfield, Illinois 62762-1271
<http://dnr.state.il.us>

Rod A. Blagojevich, Governor

Joel Brunsvoild, Director

January 26, 2005

SUBJECT: Illinois Route 29 Project
Longitudinal Encroachments



Mr. Fred M. Lin, P.E.
Lin Engineering, Ltd.
608 Citadel Drive
Westmont, Illinois 60559

Dear Mr. Lin:

Reference is made to your December 7, 2004 inquiry concerning four potential longitudinal encroachments associated with the subject project and the applicability of our Part 3700 floodway construction rules.

Senachwine Creek @ Chillicothe

Your analysis of the longitudinal encroachment along Senachwine Creek on the northern edge of Chillicothe appears to reasonably estimate the project's impact on the creek's 100-year flood profile. It indicates that the project, singularly, would result in an increase of 0.3'. As you have indicated, the rules allow (assuming there are no existing buildings or other uses in the 100-year floodplain that would be damaged by increased flood heights) an increase of up to 0.1' in urban areas and 0.5' in rural areas. However, these allowable increases are based on a worst-case analysis (see the definition in Section 3700.20) which includes the impacts of other existing development and reasonably anticipated future development. Therefore, you will need to show that the project, in combination with other existing development and an equal encroachment on the opposite side of the floodplain, would comply with our urban or rural area criteria - whichever is appropriate. Alternatively, the project would be permissible if designed to create no increase in existing conditions water surface profile, or if the water surface profile increases would be contained on IDOT property or within flood easements.

For bridge and culvert crossings, the rules allow (assuming there are no existing damagable buildings or other floodplain uses) water surface profile increases of up to 0.5' (urban) or 1.0' (rural) upstream of the crossing provided the increase is reduced to 0.1' (urban) or 0.5' (rural) 1000' upstream as determined by the horizontal projection of the maximum increase and the slope of the hydraulic grade line. This criteria, would apply in the reaches of the creek within 1000' upstream of Benedict Road and the proposed Illinois Route 29 bridge crossing.

Printed on recycled and recyclable paper

Mr. Fred M. Lin, P.E.
Page 2
January 26, 2005

Therefore, in these reaches, the project may be designed so that the maximum overall water surface profile increase, considering the crossings in combination with the proposed longitudinal encroachment and assumed equal opposite encroachment, would comply with the bridge criteria.

Additional information on the potential for residential, commercial or industrial development in the area will need to be submitted to enable us to determine whether the Senachwine Creek portion of the project will need to comply with our urban or rural requirements.

Crow Creek South of Henry

We will not require the proposed road work along Crow Creek's northern overflow channel to be analyzed as a longitudinal encroachment of that channel. However, since that channel apparently serves to bypass some of the discharge that would otherwise go through the main channel bridge, any raising of the road or modification of the culvert in that northern channel area could impact Crow Creek's water surface profiles and should be considered in the analysis of the roadway's transverse crossing of Crow Creek. Unless the silting of the overflow channel culvert is due to the general sedimentation of the channel, and not just a lack of maintenance of the highway or railroad waterway openings, those openings should be considered to be open and functional in the existing conditions model of the transverse crossing.

Illinois River @ Sparland

Although I do not concur with your estimate of the Illinois River floodway at Sparland, I concur that the roadway alignment indicated on the submitted map is not located within the floodway. Enclosed for your information are copies of two "one-section" HEC-2 models used to estimate a 0.1' floodway and a map indicating the western floodway line. Corps of Engineers' cross section data was used for our analysis.

Illinois River @ Miller Anderson Woods

Although your estimate of the floodway width at the Miller Anderson Woods appears to be too narrow, I have determined that the proposed road work at that site is located outside of the floodway. Our determination is based on the relatively small portion of floodplain area between the roadway and the western edge of the floodplain.

Mr. Fred M. Lin, P.E.
Page 3
January 26, 2005

Please feel free to contact me at 217/782-4426 if you have any questions or comments concerning this matter.

Sincerely,

Michael L. Diedrichsen, Acting Section Manager
Downstate Regulatory Programs

MLD:crw
Enclosures
cc: IDOT-Dist. 4 (Paula Green)

-----Original Message-----
From: Fred Lin [mailto:flin@lineng.com]
Sent: March 03, 2005 10:45 AM
To: Jodie, Jim/MKE
Cc: Dupies, Dan/MKE; Kolody, Kim/CHI
Subject: Fw: Senachwine South - Rural Designation

Hi Jim,

Mike Diedrichsen concurs that the Senachwine South area is rural, based on the land use plan provided.

Thanks,
Fred

----- Original Message -----
From: "MIKE DIEDRICHSEN" <MDIEDRICHSEN@dnrmail.state.il.us>
To: <flin@lineng.com>
Sent: Thursday, March 03, 2005 8:45 AM
Subject: Re: Senachwine South - Rural Designation

> Fred,
>
> Based on Chillicothe's land use plan that was attached to your e-mail,
> I concur that the area in the vicinity of Route 29 bypass crossing
> and longitudinal encroachment along Senachwine Creek is rural.
> Therefore our rural area criteria will apply to that project.
>
> Mike Diedrichsen, P.E.
> Senior Water Resources Engineer
> Illinois Department of Natural Resources
> Office of Water Resources
> One Natural Resources Way
> Springfield, Illinois 62702-1271
>
>
>



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

March 7, 2005

Putnam, Marshall, & Peoria Counties
 FAP 318, IL 29
 I-180 to Peoria
 Project: P-94-009-01

IDOT Sequence # 9816

FEDERAL 106 PROJECT

Ms. Anne Haaker
 Deputy State Historic Preservation Officer
 Illinois Historic Preservation Agency
 Springfield, Illinois 62701

Dear Ms. Haaker:

Enclosed is the additional information requested in your letter of December 23, 2004 concerning historic and architectural properties located along the route of proposed FAP 318 in Putnam, Marshall, and Peoria Counties. Five structures were evaluated in terms of the criteria for eligibility for the National Register of Historic Places. Four of these properties, a school building, 2 houses, and a farmstead, do not meet the criteria for listing on the National Register.

The fifth property, the Whiffle Tree Place, retains architectural integrity and is considered eligible under Criterion C. The boundary of this property is the main building foundation since it is the structure's architectural merit that makes it eligible. This house will not be impacted by the proposed construction of FAP 318 and will remain in private ownership. We ask your concurrence in our finding that the Whiffle Tree Place is the only historic property found along this right-of-way and that it is significant under Criterion C.

Very truly yours,

John A. Walthall
 John A. Walthall, PhD
 Cultural Resources Unit

CONCUR
 By: *Anne E. Haaker*
 Deputy State Historic Preservation Officer
 Date: 3/9/05



Illinois Department of Transportation

Memorandum

To: Michael L. Hine, Engineer of Design & Environment
 From: Joseph E. Crowe
 Subject: Hazardous Waste Waiver Request
 Date: August 19, 2005

RECEIVED
 AUG 24 2005

ENVIRONMENT SECTION

BUREAU OF PROGRAM DEVELOPMENT
 STUDIES & PLANS
 FAP Route 318 (IL 29)
 Location: IL Route 6 to Interstate 180
 Peoria, Marshall, Putnam & Bureau Counties
 Job Nos. P-94-009-01 & P-94-019-02

2/3

The district is requesting approval to waive waiting for the results of further hazardous waste investigations prior to design approval per BDE Manual, Chapter 27, Section 2.06, Paragraph 4.

The locations where the district will have involvement with the sites specified within the three PESA's (ISGS 1331, 1331A, and 1331B) that were completed are either on existing alignment or within the single alternative that is proposed, which in various locations is off the existing alignment. The following is a list of those sites and the corresponding involvement for each site. The district will not acquire any of the property associated with these sites prior to the completion of the PSI and any other subsequent studies that may be required.

ISGS Number	Type of Site	Comment
ISGS Site #1331-A25	Railroad site (battery vault)	PESA stated no concern as long as no grading or excavation occurs at the site. This stipulation cannot be met. Excavation would be required for new bridge piers.
ISGS Site #1331-21	Railroad site (battery vault)	PESA stated no concern as long as no grading or excavation occurs at the site. This stipulation cannot be met. Excavation would be required to reconstruct the intersection of IL Route 29 and Ferry Street.

A question was asked about the location of the borrow for the proposed IL 29 improvements. Paula Green (IDOT) responded that locating suitable borrow sites was the contractor's responsibility, but that IDOT would have to approve the sites. Paula noted that IDOT requires the contractor to develop erosion control plans designed to prevent siltation into Crow Creek and other wetlands/waterways.

Terry Bogner stated that the committee's vision for Crow Creek would be to construct the necessary streambank armoring projects similar to what has been done at the Senachwine Creek (south) crossing of IL 29.

A question was asked about the likelihood of IL 29 being improved. Mike Lewis said it was hard to predict. He noted that this project would be competing nationally for funding and as a result, construction could be 10 years out or beyond 20 years out.

Someone asked whether it was possible that the proposed improvements would stay completely on the bluffs. Mike said he did not see that as likely. One of participants pointed out the apparent inconsistency of IDOT worry about acquiring farmland along the bluff when farmers are receiving tax money, in programs like CRP, not to farm. This person also noted that farmland is being purchased for use as mitigation sites.

A question was asked about the size of the proposed Crow Creek replacement bridge. Fred Lin (Lin Engineering) noted that the existing structure is about 245 feet wide and that the proposed crossing would be about 270 feet wide.

Legal Notice Requesting Comments on the Removal of the Barville Creek Bridge
Published in the Peoria Journal Star on March 15, 2005

Legal Notice

NOTICE

In accordance with the National Historic Preservation Act, the views of the public and interested persons are being sought regarding the effect of the project that proposes to replace the bridge that carries Old IL 29 over Barville Creek located west of IL 29 and just north of Hopewell. The bridge is included on the primary list of historic bridges in the State of Illinois and is eligible for listing on the National Register of Historic Places (NRHP). Comments should be submitted by April 15, 2005 to Joseph E. Crowe, Deputy Director of Highways, Region Three Engineer, Illinois Department of Transportation, 401 Main Street, Peoria, IL 61602-1111, Attn: Environment Unit.



Illinois Department of Transportation

Division of Highways / Region 3 / District 4
401 Main Street / Peoria, Illinois / 61602-1111
Telephone 309/671-3333

December 12, 2005

BUREAU OF PROGRAM DEVELOPMENT
STUDIES & PLANS – PHASE I
Illinois Route 29 Study
Peoria, Marshall, Putnam & Bureau Counties
Job No. P-94-009-01
Catalog No. 032469-00

Mr. James Johnson
US Department of Agriculture
Natural Resource Conservation Service
2118 West Park Court
Champaign, IL 61821

Dear Mr. Johnson

The Illinois Department of Transportation is studying for a proposed highway improvement in the Illinois Route 29 corridor between Illinois Route 6 in Peoria County and Interstate 180 in Bureau County. An Environmental Impact Statement is currently being developed for the project.

U.S. Department of Agriculture

5

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request	
Name Of Project IL Route 29 Study		Federal Agency Involved FBWA	
Proposed Land Use Highway		County And State Peoria, Marshall, Putnam & Bureau - Illinois	
PART II (To be completed by SCS)		Date Request Received By SCS 12-28-05 Revised	
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply. -- do not complete additional parts of this form).		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Acres Irrigated — Average Farm Size 372
Major Crop(s) Corn, soybeans, wheat - Hay	Farmable Land In Govt. Jurisdiction Acres: 29,633,500 % 97	Amount Of Farmland As Defined In FPPA Acres: 27,625,900 % 91	
Name Of Land Evaluation System Used ILLINOIS	Name Of Local Site Assessment System Statewide	Date Land Evaluation Returned By SCS 12-29-05	
PART III (To be completed by Federal Agency)		Alternative Site Rating	
		Site A	Site B
A. Total Acres To Be Converted Directly		1056	
B. Total Acres To Be Converted Indirectly		110	
C. Total Acres In Site		1166	
PART IV (To be completed by SCS) Land Evaluation Information			
A. Total Acres Prime And Unique Farmland		969	
B. Total Acres Statewide And Local Important Farmland		86	
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted		0.0042	
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value		50.7	
PART V (To be completed by SCS) Land Evaluation Criterion			
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)		150	75 112.5
PART VI (To be completed by Federal Agency)		Maximum Points	
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))			
1. Area In Nonurban Use			
2. Perimeter In Nonurban Use			
3. Percent Of Site Being Farmed			
4. Protection Provided By State And Local Government		See attached	
5. Distance From Urban Builtup Area		ILLINOIS Corridor	
6. Distance To Urban Support Services		Factors	
7. Size Of Present Farm Unit Compared To Average			
8. Creation Of Nonfarmable Farmland			
9. Availability Of Farm Support Services			
10. On-Farm Investments			
11. Effects Of Conversion On Farm Support Services			
12. Compatibility With Existing Agricultural Use			
TOTAL SITE ASSESSMENT POINTS		100	150
PART VII (To be completed by Federal Agency)			
Relative Value Of Farmland (From Part V)	150*	100	113
Total Site Assessment (From Part VI above or a local site assessment)	150*	100	106
TOTAL POINTS (Total of above 2 lines)	300*	200	219
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Statewide Corridor	

* When utilizing the state site Assessment Corridor Factors, 150 points are assigned to the Land Evaluation portion, and 150 points are assigned to the site Assessment portion, for a maximum score of 300 points

**Illinois Route 29 Study
P-94-009-01
Bureau, Marshall, Peoria and Putnam Counties, Illinois
Federal Highway Administration Funds**

PART VI-B Illinois Site Assessment <i>CORRIDOR</i> Factors	Maximum Points	Site A
1. Amount of Agricultural Land Required	30	30
2. Location of the Proposed Alignment	30	19
3. Acres of Off-Site Agricultural Land Required for Borrow Materials	15	15
4. Acres of Prime and Important Farmland Required for Mitigation	15	15
5. Creation of Severed Farm Parcels	10	5
6. Creation of Uneconomical Remnants	10	5
7. Creation of Landlocked Parcels	10	5
8. Creation of Adverse Travel	10	5
9. Relocations of Rural Residences and Farm Buildings	10	5
10. Utilization of Minimum Design Standards	10	2
TOTAL SITE ASSESSMENT <i>CORRIDOR</i> POINTS	150	106
 PART VII		
Relative Value of Farmland	150	113
Total Site Assessment <i>CORRIDOR</i> Factors	150	106
TOTAL ILLINOIS LESA POINTS	300	219

Illinois Site Assessment Corridor Factor Score Sheet

Factor	Maximum Points	South Section	Central Section	North Section
1. Amount of Agricultural Land Required (acres)	30	567	198	291
2. Location of the Proposed Alignment	30	—	—	—
a. Percent of route utilizing existing pavement		33	47	40
b. Percent of route adjacent to existing alignment (but not utilizing existing pavement)	0		63	38
3. Acres of Offsite Agricultural Land Required for Borrow Mitigation		15 Unkn		own
4. Acres of Prime and Important Farmland Required for Mitigation		15 Unkn		own
5. Creation of Severed Farm Parcels (acres)	10	2,127.0	255.4	1,515.1
6. Creation of Uneconomical Remnant (acres)	10	11.9	2.9	2.1
7. Creation of Landlocked Parcels (acres)	10	44	689	12
8. Creation of Adverse Travel (miles)	10	15.4	0	3.6
9. Relocations of Rural Residences (RR) and Farm Buildings (FB) (Number)	10	3 RR; 19 FB	5 RR; 7 FB	4 RR; 22 FB
10. Utilization of Minimum Design Standards	10		See below	
Total Site Assessment Corridor Points	150			

10. Utilization of Minimum Design Standards: Throughout the IL 29 Phase I design process, specific designs have been employed to minimize impacts to farmland. During the alternatives screening process, alignments with greater agricultural impacts were eliminated. Specifically N-4, which was east of existing IL 29 in the north section (near Putnam), and C-2, the bluff alignment, were both eliminated. The bluff alignment affected 626 acres of agricultural land, 428 acres more than the proposed project in the Central Section. The proposed project would maximize the use of existing right-of-way and minimize new right-of-way required by widening the existing alignment where it is practical and feasible. Bypasses were only recommended when they were the only feasible option. Bypasses were recommended west of Chillicothe and west of Henry because building a 65-mph facility through those communities would have displaced many businesses and residences and created a barrier in the heart of the communities. The use of existing right-of-way was also maximized between IL 6 and Cedar Hills Drive (South Section) by locating the proposed alignment within IDOT's existing right-of-way and selecting the diamond with a loop interchange at Cedar Hills Drive. Selecting this interchange type minimized the impact to privately owned agricultural land north of Cedar Hills Drive. It should be noted that the agricultural impacts of the proposed McGrath interchange are included in the impacts reported on this form, but IDOT has indicated that the interchange would only be built when development in that area is dense enough to warrant an interchange. In other words, the agricultural impacts in the area surrounding the proposed McGrath interchange will precede the construction of the interchange rather than be caused by the interchange.

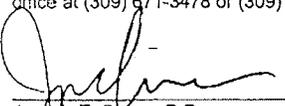
SOILS IMPACTED
For AD-1006 Form

MUSYM	Prime, Important or Other	Acres Impacted	MUSYM	Prime, Important or Other	Acres Impacted
25G	Other	7	379A	Prime	73
28	Prime	74	379B	Prime	74
37B	Prime	50	398A	Prime	23
54B	Important	37	398B	Prime	15
54D	Important	8	399A	Prime	8
77	Prime	25	399B	Prime	27
87B	Prime	148 406		Prime	1
88C2	Important	12	439B	Prime	97
93E	Other	1	536	Other	2
104	Prime	24	549G	Other	1
107	Prime	5	570A	Prime	8
132	Prime	15	570C	Important	10
145B2	Prime	1	618E	Other	1
148B	Prime	4	857G	Other	3
149	Prime	1	865	Other	5
150A	Prime	8	883F	Other	2
150C	Important	4	2802B	Other	4
152A	Prime	6	3070	Other	1
198	Prime	12	3360L	Other	1
199A	Prime	1	3480	Prime	10
199B	Prime	10	3480L	Other	21
224D3	Important	7	7070	Prime	12
224E	Other	5	7081	Other	9
233C2	Important	8	8077	Prime	8
282F	Other	4	8107	Prime	2
290A	Prime	60	8107A	Other	25
290B2	Other	1	8368A	Prime	41
304B	Prime	134	W	Other	9
344B	Prime	1			

MEMO – Michael L. Hine, Engineer of Design & Environment
 RE – Hazardous Waste Waiver Request (IL 29)
 August 19, 2005
 Page 2

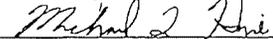
ISGS Number	Type of Site	Comment
ISGS Site #1331-G	Pipeline site	PESA stated no concern as long as construction excavation and utility relocation do not exceed the maximum testing depth at each site and do not exceed 3' (0.9m) within 50' (15m) of soil boring 801-6B. This stipulation cannot be met. The pipeline would need to be replaced as part of the railroad viaduct reconstruction.
Above-ground fuel tanks	Unknown	Two above-ground fuel tanks are located on the north side of Camp Grove Road adjacent to a roofing company's storage buildings. The buildings and the tanks will be acquired by the proposed project. The fuel tanks were not discussed in the PESA.
ISGS Site #1331-17	Commercial site	PESA stated no concern as long as no grading or excavation occurs at the site. This stipulation cannot be met. Excavation and grading would be required for new roadway paving and ditches.

If you have any questions, please contact Paula Green or Greg Larson of this office at (309) 671-3478 or (309) 671-3479.


 Joseph E. Clowe, P.E.
 Deputy Director of Highways,
 Region Three Engineer

GVL:tdpls:\mng\2\win\word\std&pln\environment\memos\gvl\0001_hazardous waste waiver request.doc
 Attachments

cc: Environment (G. Larson)
 Environment Engineer (P. Green)

Concur: 
 Chief, Geologic & Waste Assessment Unit

Date: 8/25/05 Discuss: Yes No



Illinois Department of Transportation
Memorandum

To: File
 By: Greg Larson
 Subject: PESA Re-evaluation
 Date: December 16, 2005

STUDIES & PLANS
 FAP Route 318 (IL 29)
 IL Route 6 to Interstate 180
 Peoria, Marshall, Putnam & Bureau Counties
 Job Nos. P-94-009-01 & P-94-019-02

The Illinois State Geological Survey conducted three PESAs for the subject project on May 17, 2002 (ISGS #1331), November 6, 2002 (ISGS #1331A), and August 20, 2004 (ISGS # 1331B). Standards issued by the American Society for Testing and Materials (ASTM) indicate that property audits for special waste/regulated substance contamination should only be considered valid for a period of six months. Per BDE Manual, Chapter 27, Section 2.07, the district has re-evaluated the project area.

It has been determined that it is not necessary to complete a supplement PESA for the project. This determination was based upon a review of the existing land use throughout the proposed corridor. In addition, the EPA Cerclis Hazardous Waste Site database and the IEPA Lust Site database were reviewed to determine the presence of any new sites within the project corridor. These searches did not uncover any new sites or significant land use changes within the project corridor; therefore, the PESAs dated May 17, 2002, November 6, 2002 and August 20, 2004 are revalidated affective December 16, 2005.

Programmatic Section 4(f) Evaluation

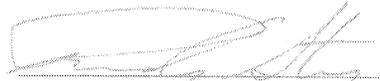
Barrville Creek Bridge
IL 29 Frontage Road
Marshall County
SN 062-0011

SECTION 4(f) APPROVAL

U.S. Department of Transportation
Federal Highway Administration

The Federal Highway Administration (FHWA) has determined that this project meets all requirements for processing under the nationwide programmatic Section 4(f) evaluation for historic bridges approved on July 5, 1983. This determination is based on the attached documentation which has been independently evaluated by FHWA and determined to adequately and accurately discuss the Section 4(f) considerations of this project. Accordingly, FHWA gives Section 4(f) approval under the nationwide Section 4(f) Evaluation for the replacement of the structure carrying the IL 29 Frontage Road over Barrville Creek (SN 062-0011), which will use a bridge deemed eligible for listing on the National Register of Historic Places.

12/29/05
Date


For Federal Highway Administration

MEMORANDUM OF AGREEMENT
STRUCTURE # 062-0011
BARRVILLE CREEK BRIDGE
IL 29 FRONTAGE ROAD
MARSHALL COUNTY,
ILLINOIS

WHEREAS, the Federal Highway Administration (FHWA), U.S. Department of Transportation, has determined that assisting the Illinois Department of Transportation (IDOT) in the replacement of Structure # 062-0011 (BRIDGE) carrying the IL 29 frontage road over Barrville Creek in Marshall County, Illinois, will have an adverse effect upon the BRIDGE, a property eligible for inclusion in the National Register of Historic Places (NRHP), and has consulted with the Illinois State Historic Preservation Officer (SHPO), pursuant to the regulations (36 CFR Part 800) Implementing Section 106 of the National Historic Preservation Act (17 U. S. C. 470f) and in accordance with the Programmatic Agreement (PA) for the Rehabilitation and Replacement of Historic Bridges ratified by the FHWA and the Illinois SHPO in April, 2004, and

WHEREAS, IDOT participated in consultation and has been invited to concur in this Memorandum of Agreement;

NOW, THEREFORE, IDOT, FHWA, and the Illinois SHPO agree that the undertaking shall be implemented in accordance with the following stipulations to take into account the effect of the undertaking on historic properties.

STIPULATIONS

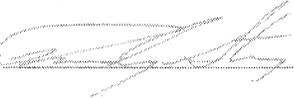
FHWA, in coordination with IDOT, shall ensure that the following measures are carried out:

1. The BRIDGE will be replaced with a new structure as developed in the plans prepared by IDOT.
2. As outlined in the stipulations of the 2004 PA, bridge types that have three or more examples recorded to HAER standards are exempt from further formal documentation. Since Structure 062-0011 is a type that has met these requirements (Type 124 - Concrete Thru Girder) it is exempt from HAER recordation
3. If appropriate, IDOT shall market the BRIDGE in accordance with the provisions of Section 123 (f)(4) of the Surface Transportation and Uniform Relocation Assistance Act of 1987.
4. Should the marketing not succeed in relocating the BRIDGE to a venue acceptable to the SHPO, IDOT shall seek an analogous bridge in Illinois as a substitute for the BRIDGE on the Illinois Historic Bridge Survey (HBS) and, should one be found, submit documentation concerning the proposed substitute for acceptance by the SHPO.

6. IDOT shall list the substitute bridge accepted by the Illinois SHPO in the HBS

Execution of this Memorandum of Agreement by FHWA and the Illinois SHPO, and the implementation of its terms, demonstrates that FHWA has taken into account the effects of the undertaking on historic properties.

FEDERAL HIGHWAY ADMINISTRATION

By:  Date: 12/29/05

ILLINOIS STATE HISTORIC PRESERVATION OFFICER

By:  Date: 11-21-05

CONCUR:

ILLINOIS DEPARTMENT OF TRANSPORTATION

By:  Date: 11/18/05

W. M. Stone



US Department of Transportation
Federal Highway Administration

Illinois Division

3250 Executive Park Drive
Springfield, Illinois 62703



January 3, 2006

HB-IL

Mr. Don L. Klima, Director
Office of Federal Agency Programs
Advisory Council on Historic Preservation
The Old Post Office Building
1100 Pennsylvania Avenue, N.W., Suite 809
Washington, D.C. 20004

Dear Mr. Klima:

Subject: Notification of Adverse Effect
IL 29 Frontage Road
Barrville Creek Bridge
Structure # 062-0011
Marshall County, Illinois

This letter is to notify you that the subject project is expected to have an adverse effect on the subject bridge, which is listed on the Illinois Historic Bridge Survey and has been determined eligible for listing in the National Register of Historic Places. We are enclosing a copy of the signed Memorandum of Agreement (MOA) for the subject bridge, along with the documentation specified in 36 CFR 800.11(f), for your information. This documentation was developed in consultation with the Illinois Historic Preservation Officer (SHPO) and other parties in fulfilling the requirements under Section 106 of the National Historic Preservation Act.

On October 28, 2005, the Advisory Council on Historic Preservation (ACHP) granted approval for the Federal Highway Administration (FHWA) and the Illinois Department of Transportation (IDOT) to operate under the Programmatic Agreement for the Rehabilitation and Replacement for Historic Bridges in Illinois, ratified by the FHWA and SHPO, with IDOT concurrence, in April 2004. Per this agreement, consultations with IDOT and SHPO led towards the development of the MOA stipulating measures to be taken to mitigate the negative impacts to the subject bridge.

The IDOT and the SHPO agreed on how adverse impacts to the subject bridge will be handled and we have concurred with this determination. In accordance with the 2004 Historic Bridge Agreement,

we will proceed with the planned mitigation on the subject bridge without further comment from the ACHP.

If you have any questions, please call me at (217) 492-4618.

Sincerely yours,

/s/ Randy E. Strang

Randy E. Strang, P.E.
Transportation Engineer

For: Norman R. Stoner, P.E.
Division Administrator

Enclosure

cc: Mr. Michael Hinc, Chief, IDOT Bureau of Design and Environment





Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

January 11, 2006

Marshall County
FAP 318, IL 29
Western Avenue Exchange
Henry
Project: P-94-009-01
IDOT Seq.# 9816

Richard Bazyn House

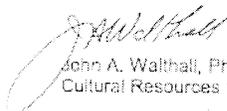
Ms. Anne Haaker
Deputy State Historic Preservation Officer
Illinois Historic Preservation Agency
Springfield, Illinois 62701

Dear Ms. Haaker:

Attached is a plan sheet and photographs of the Richard and Eigeene Bazyn house and property. The house is a nineteenth century brick, two-story Federal style structure which sits well back from Western Avenue on the western edge of Henry. In order to construct the Western Avenue interchange for proposed IL29 the entrance to the current driveway leading to the house will be moved to the west side of the lot. The new entrance will join the existing drive way well away from the house. The $\frac{1}{4}$ length of the existing drive way location nearest to the house will not be altered. No new right-of-way will be required as part of this entrance relocation. The Department will acquire a temporary easement from the property owner to complete the required work.

In accordance with the established procedure for coordination of proposed Illinois Department of Transportation projects, we request the concurrence of the State Historic Preservation Officer in our determination that no historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended, will be adversely affected by the proposed construction activities outlined in this letter.

Very truly yours,

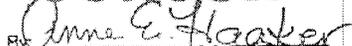

John A. Walthall, PhD
Cultural Resources Unit

RECEIVED
JAN 18 2006
ENVIRONMENT
SECTION

IHPA REVIEW
H/A _____
AC _____
AR _____
File _____

RECEIVED
JAN 12 2006
001611206
preservation Services

CONCUR

By: 
Deputy State Historic Preservation Officer
Date: 1/13/06

TOTAL P. 02



Illinois Department of Transportation

Memorandum

To: File
By: Greg Larson
Subject: PESA Re-evaluation
Date: July 31, 2006

STUDIES & PLANS
FAP Route 318 (II 29)
IL Route 6 to Interstate 180
Peoria, Marshall, Putnam & Bureau Counties
Job Nos. P-94-009-01 & P-94-019-02

The Illinois State Geological Survey conducted three PESAs for the subject project on May 17, 2002 (ISGS #1331), November 6, 2002 (ISGS #1331A), and August 20, 2004 (ISGS # 1331B). Standards issued by the American Society for Testing and Materials (ASTM) indicate that property audits for special waste/regulated substance contamination should only be considered valid for a period of six months. Per BDE Manual, Chapter 27, Section 2.07, the district has re-evaluated the project area.

It has been determined that it is not necessary to complete a supplement PESA for the project. This determination was based upon a review of the existing land use throughout the proposed corridor. In addition, the EPA Cerclis Hazardous Waste Site database and the IEPA Lust Site database were reviewed to determine the presence of any new sites within the project corridor. These searches did not uncover any new sites or significant land use changes within the project corridor; therefore, the PESAs dated May 17, 2002, November 6, 2002 and August 20, 2004 are revalidated affective July 31, 2006.



Illinois Department of Transportation

Division of Highways / Region 3 / District 4
401 Main Street / Peoria, Illinois / 61602-1111
Telephone 309/671-3333

August 24, 2006

BUREAU OF PROGRAM DEVELOPMENT
STUDIES & PLANS – PHASE I
Illinois Route 29 Study
Peoria, Marshall, Putnam & Bureau Counties

Mr. Steve Hamer
Illinois Department of Natural Resources
Transportation Review Program
One Natural Resources Way
Springfield, IL 62702

Dear Mr. Hamer:

Enclosed is a copy of the Illinois Department of Natural Resources/Illinois Department of Transportation Memorandum of Agreement (MOA) for the Illinois Route 29 project in Peoria, Marshall, Putnam and Bureau counties. The copy has been signed by the Secretary of the Illinois Department of Transportation.

If you have any questions or comments on the MOA, please contact Paula Green of our office at (309) 671-3478 or email Paula.Green@illinois.gov.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Joe Crowe', with a long, sweeping underline.

Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

PAG:tdp

Enclosure

cc: Project File (M. Lewis)
Environment (P. Green)
CH2M Hill, Milwaukee Office (Attn. Mr. Dan Dupies)

s:\mgr2\winword\std&pins\green\letters\pag0012_il 29_steve hamer_idnr.doc



MEMORANDUM OF AGREEMENT

MITIGATION/ENHANCEMENT FOR THE EXPANSION OF ILLINOIS ROUTE 29

This Agreement is being entered into between the Illinois Department of Natural Resources (IDNR) and the Illinois Department of Transportation (IDOT) to describe the various commitments IDOT will need to make to IDNR so that real property rights can be exchanged between the two agencies. The Agreement will also describe public use enhancements, prairie restorations, and wetland and endangered plant mitigation to be performed or funded by IDOT.

A. Changes in access.

Spring Branch Unit-Marshall State Fish & Wildlife Area

1. Hunter Access Area (IDNR Zone 4 North – IDOT Station 3351+00 Rt.). The existing access point on the east side of Route 29 will be closed and the property associated with the access drive transferred from IDNR to IDOT. The transfer will occur after IDOT replaces the existing access with an improved access drive at the location shown on Sheet 2 as IP 1 in Exhibit A. IDOT will retain maintenance responsibility for the new access drive.
2. Hunter Access Area. (IDOT Stations 3534 +90 Lt. and 3544+80 Lt.) The existing access drive at the location shown on Sheet as IP 2 in Exhibit A on the west side of Route 29 will be extended approximately 450 feet to the south and widened from 14 feet to 24 feet. After the improvements, access from Route 29 will be limited to right in/right out and maintenance responsibility will remain with IDNR.
3. Day Use Area (IDOT Station 3548+00 Rt.). The access drive located on Sheet 3 as IP 3 in Exhibit A will be closed and replaced with an improved access road that will require the relocation of railroad tracks.

Sparland Unit-Marshall State Fish & Wildlife Area

4. Access to the currently landlocked portion of IDNR land located north of the holding ponds in Sparland and located on Sheet 4 as IP 5 in Exhibit A will be provided by extending Center Street and constructing an access road. After construction, maintenance responsibility for the portion of the access road located on IDNR property will remain with IDNR.
5. The existing access to the Sparland Natural Area shown as IP 6 on Sheet 5 in Exhibit A will be relocated and improved.

B. Funding for Restoration

6. IDOT will provide funding, not to exceed \$28,000 plus inflation, to assist in restoration of the prairies at the Hopewell Hill Prairie and Marshall County Hill Prairie Land and Water Reserve and 15 acres of old field community in Miller Anderson Woods Nature Preserve/Natural Area. These parcels are shown as

RP 1 and RP 2 on Sheet 3 and RP 3 on Sheet 6 in Exhibit A. The location and supervision of the restorations will be the responsibility of IDNR.

C. Transfer of Land

7. The landlocked 15.2 acre parcel located north of the BNSF Railroad and east of the Root Cemetery Nature Preserve & Natural Area referred to as MP 1 on Sheet 1 in Exhibit A will be transferred from IDOT to IDNR.
8. Several parcels east of existing Route 29 between the railroad and the Illinois River consisting of approximately 643 acres referred to as MP 2 through MP 13 on Sheets 2 through 4 in Exhibit A will be acquired by IDOT for environmental mitigation of impacts on wetlands and *Boltonia decurrens*
9. IDOT will transfer 59.8 acres of property referred to as MP 18 and 19 on Sheets 4 and 5 of Exhibit A and located in Section 11, Steuben Township in Marshall County to IDNR along with four parcels consisting of approximately 31.2 acres located immediately south of the 59.8 acre parcel and referred to as MP 14 through MP 17 on Sheet 4 on Exhibit A which will be landlocked.
10. A portion of excess right of way located at the south end of Miller Anderson Woods Nature Preserve referred to as MP 20 on Sheet 6 of Exhibit A will be transferred from IDOT to IDNR with right in/right out access to improved Route 29. The exact size of this land will be determined after the design phase of the project is completed.

D. Wetland and *Boltonia decurrens* mitigation

11. Assuming concurrence from the U.S. Fish & Wildlife Service and the U.S. Army Corps of Engineers, the following mitigation items are anticipated to be performed by IDOT on the land described in Paragraph 8, above:
 - a) conversion of 33.3 acres of cropland on parcels MP6 through MP 9 on Sheets 3 and 4 in Exhibit A to forested wetlands,
 - b) Retaining the field on parcel MP4 on Sheet 3 in Exhibit A as an area for *Boltonia decurrens* and transplanting the remaining *Boltonia decurrens*.
 - c) Maintaining responsibility for wetland conversion and 5 year monitoring or until the regulatory criteria are met, whichever occurs first, for both wetlands and *Boltonia decurrens*,
12. IDNR will grant IDOT 0.25 acres of wetland preservation credit for each of floodplain forest transferred to IDNR that has a floristic quality index of 20 or higher

E. Enhancement Measures

13. IDOT will provide funding to IDNR, not to exceed \$350,000 plus inflation, for construction of a hiking/maintenance trail, to provide access for monitoring and maintenance of the wetlands and *Boltonia decurrens* fields listed in 11a and 11b above.

14. In the area described in Paragraph 1, above, a gravel parking area will be provided.
15. In the area described in Paragraph 3, above, an overlay of the existing parking facility will be provided.
16. IDOT and a designated IDNR representative will conduct an annual review for the control of exotic plants on IDOT right of way near Miller Anderson Woods Nature Preserve.
17. IDOT will remove an abandoned barn located on IDNR property referred to as IP7 on Sheet 6 in Exhibit A as part of the north end of the highway construction project
18. IDOT will construct a 40 foot by 60 foot gravel parking lot referred to as IP7 on Sheet 6 in Exhibit A adjacent to the Miller Anderson Woods Nature Preserve entrance road.

F. General

19. All of the measures listed in this Memorandum of Agreement will be timed to coincide with the construction contract relating to the area in question.
20. Whenever IDOT needs to perform work on IDNR land, IDNR will grant the necessary right of entry or other appropriate document.
21. Whenever a land transfer under this Agreement affects access by the railroad to its structures, IDNR will cooperate with the railroad in granting the necessary rights so that the railroad can do the necessary maintenance.
22. All acreages in this Agreement shall be approximate until detailed design is available for the highway project and plats and surveys are available for land acquisition.

ACCEPTED:


Secretary
Ill. Dept. of Transportation

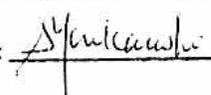
ACCEPTED:

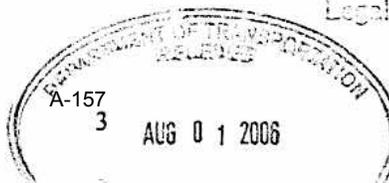

Director
Ill. Dept. of Natural Resources

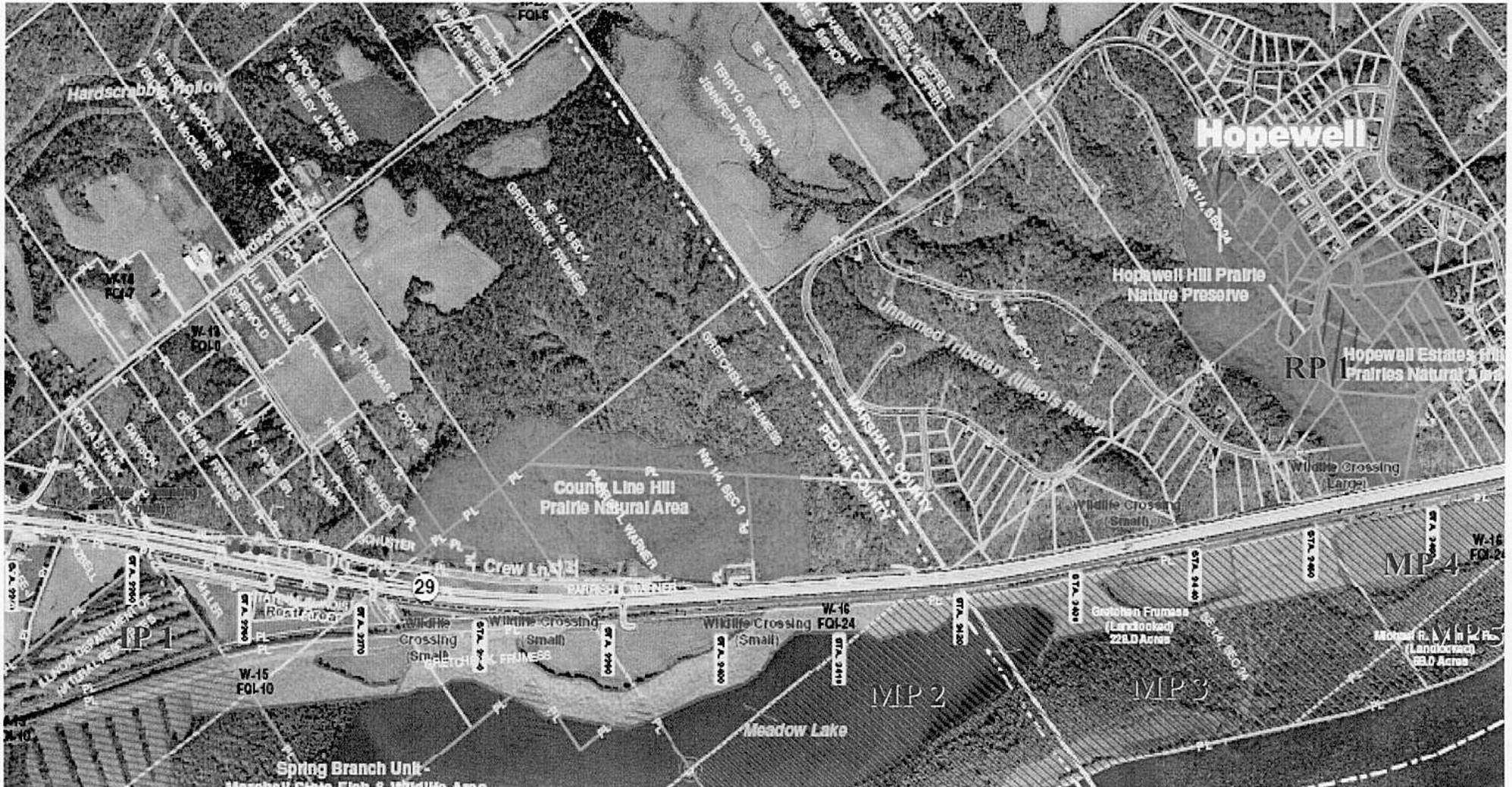
Dated this 15 day of August, 2006

APPROVED FOR EXECUTION

Date: 7-21-06

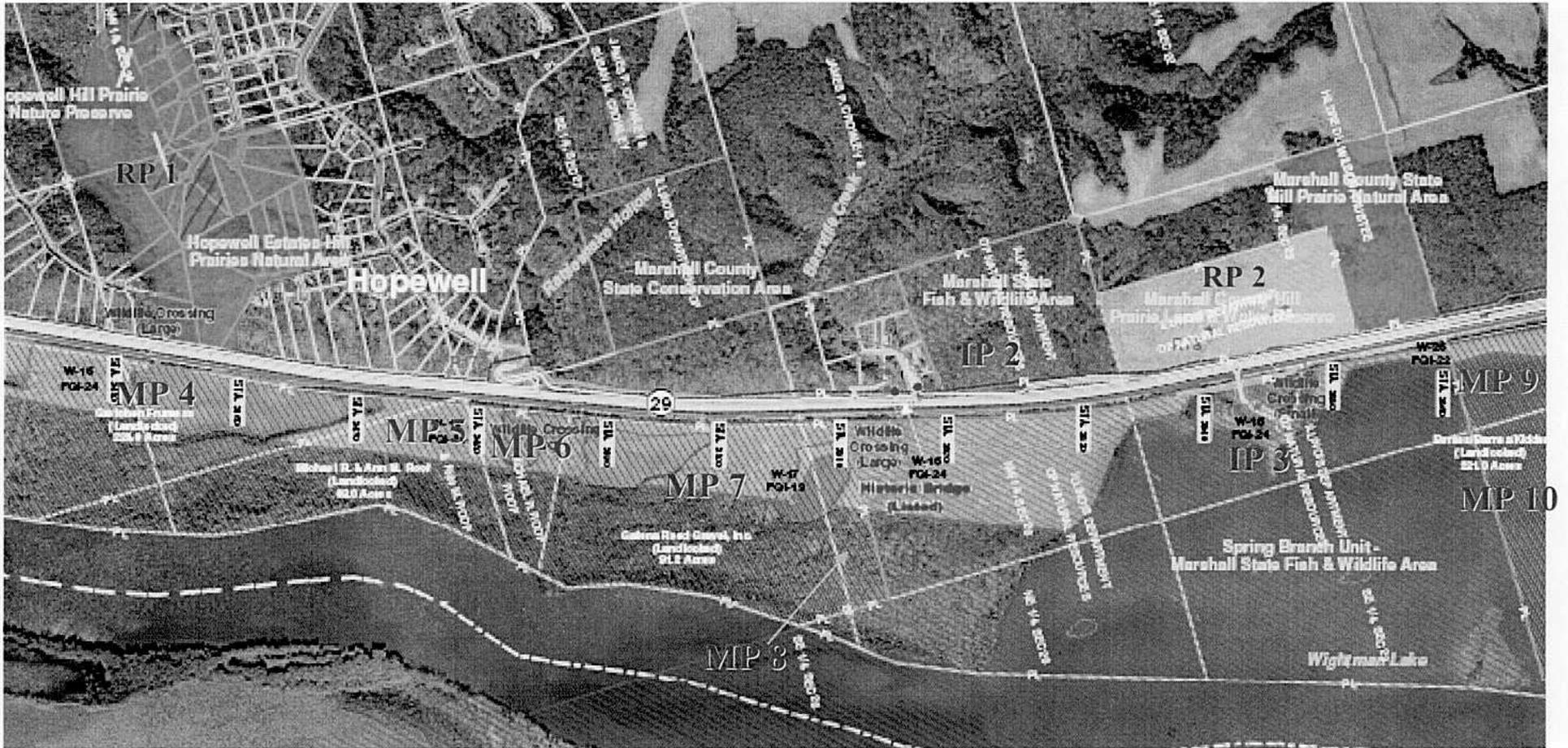
Legal Counsel: 





IP – INDR Parcel
 MP – Mitigation Parcel
 RP – Restoration Parcel

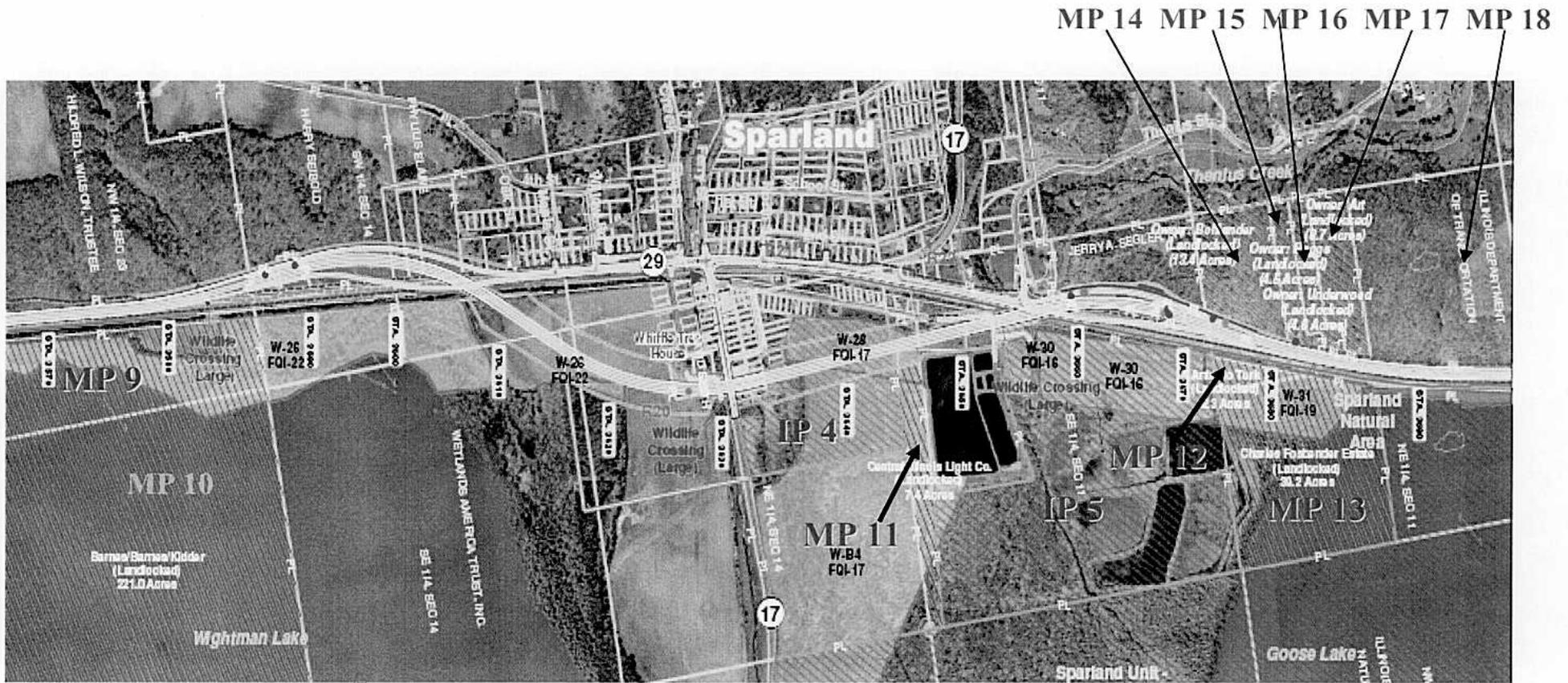
EXHIBIT A
 Sheet 2 of 6



IP – INDR Parcel
 MP – Mitigation Parcel
 RP – Restoration Parcel

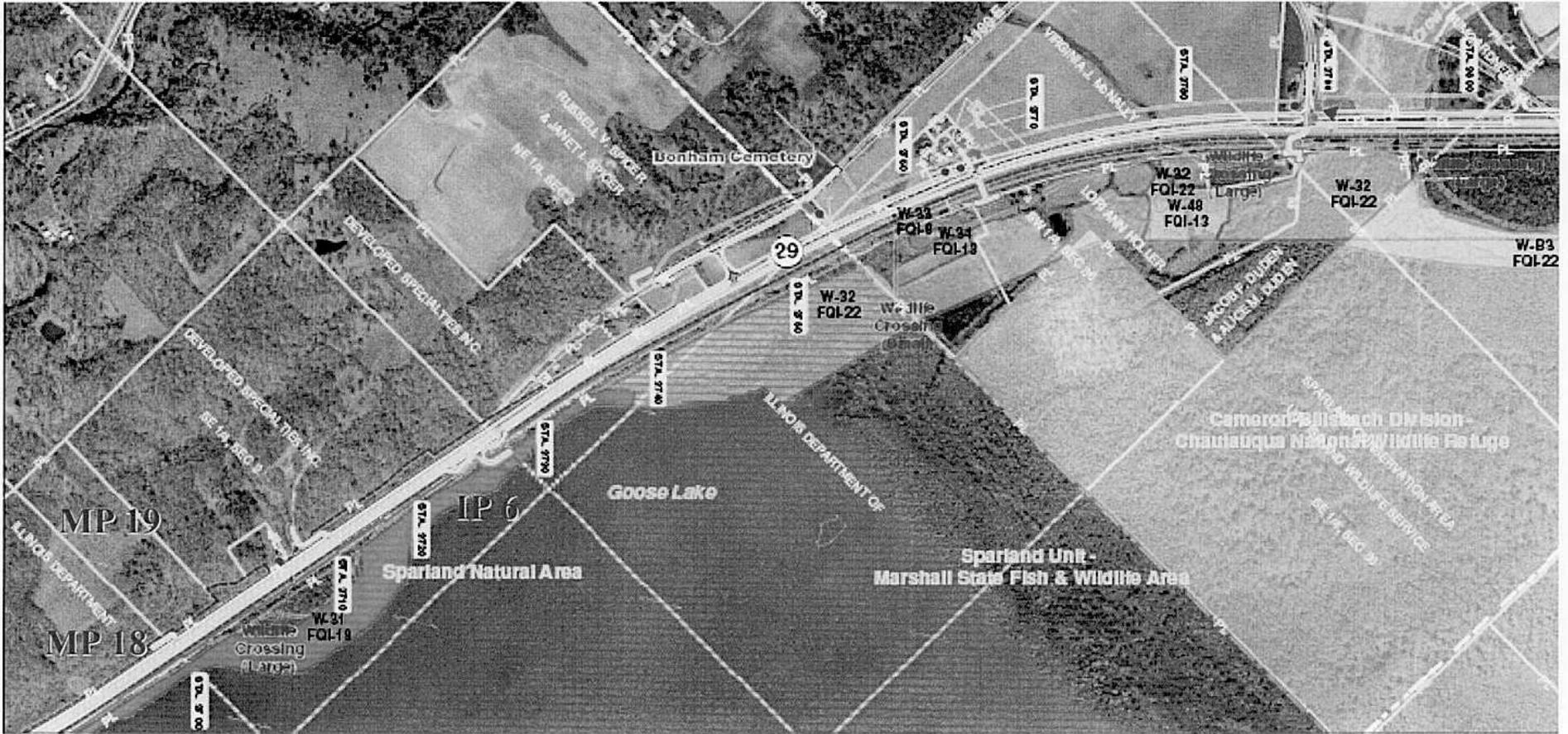
A-160

EXHIBIT A
 Sheet 3 of 6



IP – INDR Parcel
 MP – Mitigation Parcel
 RP – Restoration Parcel

EXHIBIT A
 Sheet 4 of 6

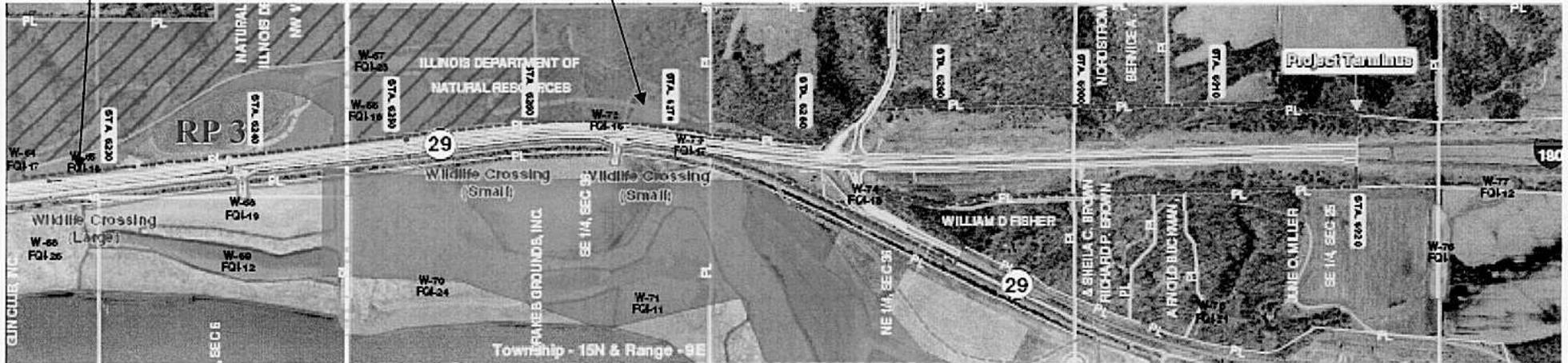


IP – INDR Parcel
 MP – Mitigation Parcel
 RP – Restoration Parcel

EXHIBIT A
 Sheet 5 of 6

MP 20

IP 7



IP – INDR Parcel
MP – Mitigation Parcel
RP – Restoration Parcel

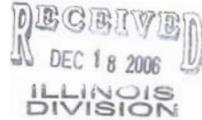
EXHIBIT A
Sheet 6 of 6



PEORIA TRIBE OF INDIANS OF OKLAHOMA

118 S. Eight Tribes Trail (918) 540-2535 FAX (918) 540-2538
P.O. Box 1527
MIAMI, OKLAHOMA 74355

CHIEF
John P. Froman
SECOND CHIEF
Jason Dollardide



December 13, 2006

US Department of Transportation
Federal HWY Admin
3250 Executive Park Drive
Springfield, Illinois 62703

RE: Illinois Route 29, IL-6 to I-180 Peoria, Marshall, Putnam and Bureau Counties

Thank you for notice of the referenced project. The Peoria Tribe of Indians of Oklahoma is currently unaware of any documentation directly linking Indian Religious Sites to the proposed construction. In the event any items falling under the Native American Graves protection and Repatriation Act (NAGPRA) are discovered during construction, the Peoria Tribe request notification and further consultation.

The Peoria Tribe has no objection to the proposed construction. However, if human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction should stop immediately, and the appropriate persons, including state and tribal NAGPRA representatives contacted.

John P. Froman
Chief

xc: Bud Ellis, Repatriation/NAGPRA Committee Chairman



**Illinois Department of
Natural Resources**

One Natural Resources Way Springfield, Illinois 62702-1271
<http://dnr.state.il.us>

Pat Quinn, Governor
Marc Miller, Acting Director

March 23, 2009

Barb Traeger
Illinois Department of Transportation - CO
2300 S. Dirksen Pkwy, Room 330
Springfield, IL 62764

Re: #9816 - IL 29
Project Number(s): 0907290 [0404989 and 0300472]
County: Marshall, Peoria, Woodford

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Steve Hamer
Division of Ecosystems and Environment
217-785-5500

Printed on recycled and recyclable paper

TREASURER
John Sharp

SECRETARY
Hank Downum

FIRST COUNCILMAN
Carolyn Garren

SECOND COUNCILMAN
Jenny Rampey

THIRD COUNCILMAN
Alan Goforth

Appendix A-2

Federal and State Agency Coordination – Approvals

Signature Sheets for DEIS, FEIS, and ROD

	Date
Draft Environmental Impact Statement	April 24, 2006
Final Environmental Impact Statement	April 23, 2009
Record of Decision	January 19, 2010

Bridge Condition Report Approvals

	Date
IL 29 Connector over Senachwine Creek (SN 072-0014)	May 12, 2006
IL 29 over Coon Creek (SN 072-0013)	May 12, 2006
IL 29 over Illinois River Tributary (SN 062-0010)	May 12, 2006
IL 29 over Rattlesnake Hollow (SN 062-0009)	May 12, 2006
IL 29 over Barrville Creek (SN 062-0008)	May 12, 2006
IL 29 over Gimlet Creek (SN 062-0057)	May 12, 2006
IL 29 over Thenius Creek (SN 062 0056)	May 12, 2006
IL 29 over Crow Creek ((SN 062-0004)	May 12, 2006
IL 29 over Dry Hollow Creek (SN 078-0005)	May 12, 2006
IL 29 over Senachwine Creek Overflow(SN 078-0004)	May 12, 2006
IL 29 over Senachwine Creek (SN 078-0003)	May 12, 2006

Hydraulic Report Approvals

(Arranged in Order of Location Along IL 29)

IL 29 and Frontage Road over Dickison Run Tributary	July 20, 2006
IL 29 and Frontage Road over Dickison Run Senachwine Creek South (near BN&SF RR) Station 3176 + 47	May 7, 2009
Benedict Street over Senachwine Creek	September 8, 2006
IL 29 Connector over Senachwine Creek	September 8, 2006
IL29 over Coon Creek	September 15, 2008
IL 29 over Illinois River Tributary	August 10, 2009
IL 29 over Rattlesnake Hollow	June 1, 2009
IL 29 over Barrville Creek	June 5, 2009
IL 29 over Gimlet Creek	March 4, 2009
IL 29 over Thenius Creek, Ramp D	July 6, 2009
IL 29 over Thenius Creek, Existing IL 29	(To Be Completed in Phase II)
IL 29 over Thenius Creek, Proposed IL 29	December 1, 2009
Access Road over Thenius Creek	(To Be Completed in Phase II)
IL 29 over Crow Creek	(To Be Completed in Phase II)
IL 20 over Dry Hollow Creek	June 30, 2009
IL 29 over Senachwine Creek & Overflow	June 24, 2009
	June 19, 2009

Structure Sketches

IL 29 Connector over Senachwine Creek
IL 29 over Coon Creek
Relocated Boehle Road over Coon Creek
Service Road over Coon creek
IL 29 over Illinois River Tributary
IL 29 over Rattlesnake Hollow
IL 29 over Barrville Creek
IL 29 over Gimlet Creek
IL 29 over Thenius Creek
IL 29 over Crow Creek
IL 29 over Dry Hollow Creek
IL 29 over Senachwine Creek Overflow
IL 29 over Senachwine Creek

Signature Sheets for DEIS, FEIS, and ROD

**FEDERAL AID PRIMARY ROUTE 318
ILLINOIS ROUTE 29 FROM ILLINOIS 6 TO I-180
PEORIA, MARSHALL, PUTNAM AND BUREAU COUNTIES
DRAFT ENVIRONMENTAL IMPACT STATEMENT
AND SECTION 4(F) EVALUATION**

Submitted Pursuant to 42 USC 4332(2)(c)
and 49 USC 303 by the

U.S. Department of Transportation, Federal Highway Administration
and the
Illinois Department of Transportation

Cooperating Agencies

U.S. Environmental Protection Agency
Illinois Department of Agriculture
Illinois Department of Natural Resources

U.S. Fish and Wildlife Service
U.S. Army Corps of Engineers

April 20, 2006
Date of Approval

APRIL 24, 2006
Date of Approval

Michael L. Fine
For IDOT

[Signature]
For FHWA

The following persons may be contacted for additional information concerning this document:

Mr. Norman Stoner, P.E.
Division Administrator
Federal Highway Administration
3250 Executive Park Drive
Springfield, Illinois 62703
Phone: 217-492-4600

Mr. Joseph E. Crowe, P.E.
Deputy Director, Region 3 Engineer
Illinois Department of Transportation
401 Main Street
Peoria, Illinois 61602-1111
Phone: 309-671-3333

Abstract: The Illinois Department of Transportation (IDOT), in consultation with the Federal Highway Administration (FHWA), is studying alternatives to enhance continuity and to improve the safety and travel efficiency in the Illinois Route 29 (IL 29) corridor from IL 6 near Mossville in Peoria County to the Interstate 180 (I-180) interchange north of Kentville Road in Bureau County. The project is located in Peoria, Marshall, Putnam and Bureau counties. Alternatives under consideration include: (1) the No-Build Alternative, (2) improvements to the existing highway, and (3) possible bypasses at Chillicothe, Sparland and Henry. The proposed project would improve north-south highway access west of the Illinois River between IL 6 and I-180, improve travel efficiency, and enhance economic stability and development in the region. The proposed project would affect 23.4 acres of wetlands, 142 acres of forested land, and 996.5 acres of cropland. It would also displace 40 residences and 4 businesses.

Comments on this Draft EIS are due by June 23, 2006, following review and should be sent to Joseph E. Crowe, P.E. at the address listed above.

FEDERAL AID PRIMARY ROUTE 318
ILLINOIS ROUTE 29 FROM ILLINOIS 6 TO I-180
PEORIA, MARSHALL, PUTNAM AND BUREAU COUNTIES
FINAL ENVIRONMENTAL IMPACT STATEMENT
AND SECTION 4(F) EVALUATION

Submitted Pursuant to 42 USC 4332(2)(c)
and 49 USC 303 by the

U.S. Department of Transportation, Federal Highway Administration
and the

Illinois Department of Transportation

Cooperating Agencies

U.S. Environmental Protection Agency
Illinois Department of Agriculture
Illinois Department of Natural Resources

U.S. Fish and Wildlife Service
U.S. Army Corps of Engineers

4-21-09

Date of Approval

April 23, 2009

Date of Approval

Charles J. Russell

For IDOT

Max Tull

For FHWA

The following persons may be contacted for additional information concerning this document:

Norman Stoner, P.E.
Division Administrator
Federal Highway Administration
3250 Executive Park Drive
Springfield, Illinois 62703
Phone: 217-492-4600

Joseph E. Crowe, P.E.
Deputy Director, Region 3 Engineer
Illinois Department of Transportation
401 Main Street
Peoria, Illinois 61602-1111
Phone: 309-671-3333

Abstract: The Illinois Department of Transportation (IDOT), in consultation with the Federal Highway Administration (FHWA), studied alternatives to enhance continuity and to improve the safety and travel efficiency in the Illinois Route 29 (IL 29) corridor from IL 6 near Mossville in Peoria County to the Interstate 180 (I-180) interchange north of Kentville Road in Bureau County. The project is located in Peoria, Marshall, Putnam and Bureau counties. Alternatives considered in the Draft EIS include the No-Build Alternative and the Build Alternative. IDOT and FHWA have identified the Build Alternative as the Preferred Alternative based on review of impacts presented in the Draft EIS and comments received as a result of the public hearing and availability of the Draft EIS for agency and public review. The Build Alternative will improve north-south highway access west of the Illinois River between IL 6 and I-180, improve travel efficiency, and enhance economic stability and development in the region. It will affect 20 acres of wetlands, 122 acres of forested land, and 1,027 acres of cropland, and will displace 44 residences and 4 businesses.

Signature Sheet for Record of Decision



U.S. Department
of Transportation
**Federal Highway
Administration**

Illinois Division

January 19, 2010

3250 Executive Park Dr.
Springfield, IL 62703
(217) 492-4640
www.fhwa.dot.gov/ildiv

In Reply Refer To:
HPER-IL

Christine Reed, P.E.
Director of Highways
Chief Engineer
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, IL 62764

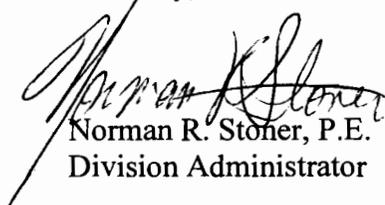
Subject: Record of Decision
Illinois Route 29 Improvements, Illinois 6 to Interstate 180
Peoria, Marshall, Putnam and Bureau Counties

Dear Ms. Reed:

Enclosed is a copy of the Federal Highway Administration's (FHWA) Record of Decision for the Illinois Route 29 project from Illinois Route 6 to Interstate 180 in Peoria, Marshall, Putnam and Bureau Counties, Illinois. With the signing of the Record of Decision, FHWA's responsibilities under the National Environmental Policy Act of 1969 have been satisfied.

If you have any questions please contact Heidi Liske at (217) 492-4637.

Sincerely,



Norman R. Stoner, P.E.
Division Administrator

Enclosure

ecc: Mr. Charles Ingersoll, Bureau of Design & Environment, IDOT, w/enclosure
Mr. Joseph Crowe, Bureau of Design & Environment, IDOT, w/enclosure
Ms. Barbara Stevens, Bureau of Design & Environment, IDOT, w/enclosure



which was approved by FHWA, identifies noise levels equal to or greater than 66 decibels would be considered an impact. The key issue to understand in evaluating noise impacts at the schools is that the dominant noise source will be traffic on Old Galena Road rather than proposed IL 29. Although proposed IL 29 would carry more traffic in 2032 than Old Galena Road, the schools are only 200 feet from Old Galena Road, whereas they are 1,300 feet from proposed IL 29. No substantial increase in traffic is expected on Old Galena Road at the schools. As a result, no noise study is to be conducted for Mossville Elementary and Middle Schools.

8. Approval

Based on the analysis and evaluation contained in the FEIS, after careful consideration of all the identified social, economic, and environmental factors and input received from other agencies, organizations, and the public; and the factors and mitigation measures outlined in this document, it is the decision of FHWA to approve the Build Alternative as the Selected Alternative.

January 19, 2010
Date

Norman R. Stoner
Norman R. Stoner, P.E.
Division Administrator

Bridge Condition Report Approvals



Illinois Department of Transportation

Memorandum

To: Joseph E. Crowe/District 4 Attn: E. Therkildsen/J. Miller
From: Ralph E. Anderson By: Todd E. Ahrens
Subject: BRIDGES AND STRUCTURES *Todd E. Ahrens*
Date: May 12, 2006

FAP Route 318
Marshall, Peoria, & Putnam Counties

P-94-009-01

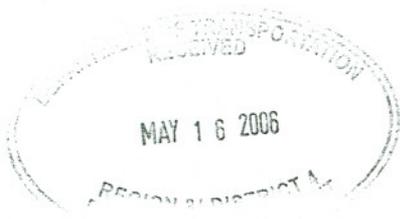
IL 29 over Crow Creek (SN 062-0004)
IL 29 over Barrville Creek (SN 062-0008)
IL 29 over Rattlesnake Hollow (SN 062-0009)
IL 29 over Illinois River Tributary (SN 062-0010)
IL 29 Connector over Senachwine Creek (SN 072-0014)
IL 29 over Senachwine Creek (SN 078-0003)
IL 29 over Senachwine Creek Overflow (SN 078-0004)

We have received the Bridge Condition Report for the above-mentioned structures, sent with your memorandum dated March 27, 2006. The reports recommend removing and replacing the existing structures

We concur with the proposed scope of work based on the new roadway geometry. The bridge cross-sections are subject to approval from the Bureau of Design and Environment.

The Bridge Condition Reports are approved. Please call Alex Siudyla at (217) 785-2919 if you have any questions.

AS/ac1245





Illinois Department of Transportation

Memorandum

To: Joseph E. Crowe/District 4 Attn: E. Therkildsen/J. Miller
From: Ralph E. Anderson By: Todd E. Ahrens
Subject: BRIDGES AND STRUCTURES *Todd E. Ahrens*
Date: May 12, 2006

FAP Route 318
Marshall, Peoria, & Putnam Counties

P-94-009-01

IL 29 over Thenius Creek (SN 062-0056)
IL 29 over Gimlet Creek (SN 062-0057)
IL 29 over Coon Creek (SN 072-0013)
IL 29 over Dry Hollow Creek (SN 078-0005)

We have received the Bridge Condition Report for the above-mentioned structures, sent with your memorandum dated March 27, 2006. The reports recommend leaving the existing structures in-place for local traffic.

Based on the good condition of the existing structures, we concur with your recommendation to allow the existing structures to remain in-place to carry local traffic after IL 29 is reconstructed on a separate alignment. Since the structure over Thenius Creek (SN 062-0056) will have to be widened a TSL Plan, Hydraulic Report and Structure Geotechnical Report will be required. Please coordinate with your District Geotechnical Engineer as to whether or not additional soil borings will be required at this location.

The Bridge Condition Reports are approved. Please call Alex Siudyla at (217) 785-2919 if you have any questions.

AS/ac1244



Hydraulic Report Approvals



Illinois Department of Transportation

Memorandum

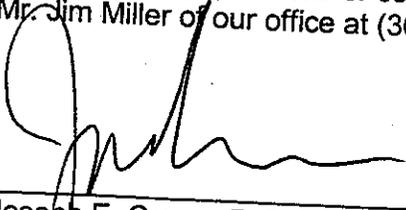
To: Ralph E. Anderson, Engineer of Bridges & Structures
From: Joseph E. Crowe
Subject: **Approved Waterway Information Table***
Date: July 20, 2006

BUREAU OF PROGRAM DEVELOPMENT
*STUDIES & PLANS - PHASE I
FAP Route 318 (IL 29)
Section: 6,8,9,10
Location: Proposed IL 29 & Frontage Road over
Tributary to Dickinson Run in Peoria County
Peoria County
Existing S.N. N/A
Proposed S.N. N/A
Job No. P-94-019-02
Catalog No. 032469-02P

We have completed our review of the revised Hydraulic Report for the above-mentioned structures, and have attached a copy of the approved report.

The approved structures are double 12' by 8' box culverts at a skew. Some revisions were made to the original report to obtain the approved Waterway Information Tables. Details of the changes are outlined on the attached sheets.

If you have any questions or comments concerning this matter, please contact Mr. Jim Miller of our office at (309) 671-3451.


Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:tdp

Attachments

cc: Project File (M. Lewis)
Hydraulics File (J. Miller)

s:\mgr2\winword\std&plns\miller\memos\jpm0029_il 29_dickinson run.doc

FAP Route 318
Section 6,8,9,10
Peoria County
S.N. N/A
Date: 7/18/06

Prop. IL 29 & Frontage Rd. over Trib. To Dickinson Run

BY: JPM

Both culverts are proposed double 12'x8' boxes. The downstream face of the Frontage Road culvert is approximately 80' upstream of the mainline culvert. Because of that, the flow is not fully expanded prior to entering the culvert under the proposed 4 lane IL 29.

Due to this configuration, the consultant was showing the culverts to essentially have no created head. After speaking to Neil Vanbebber of the Bureau of Bridges & Structures Hydraulics Unit, it was decided to analyze the mainline culvert without the upstream culvert under the Frontage Road. This would give a better idea of the effects of the IL 29 culvert.

After that, the original model could be used to analyze the Frontage Road culvert. The results of that run would give the net effect of both culverts.

As indicated by the Drainage Manual, the headwater elevation reading was taken at a distance upstream of the culverts where flow was fully expanded. In both cases, this was taken at a point one structure length upstream of the face of the culvert.

No other changes were made to the hydraulic report. Approved waterway information tables are attached reflecting the above changes.

Waterway Information Table

Route: Frontage Road for
FAP 318 (IL29)
Section: 6, 8, 9, 10
County: Peoria

Exist. S.N.: N/A
Prop. S.N.: N/A
Waterway: Tributary to Dickinson Run

Computed: JPM
Checked:

Date: 7/14/2006
Date:

Drainage Area =		1.15	sq. mi.		Existing Low Grade Elevation =		N/A ft. @ Sta.		N/A
					Proposed Low Grade Elevation =		500.95 ft. @ Sta.		76+70
Flood	Frequency Year	Q (cfs)	Waterway Opening (sq. ft.)		Natural H.W.E.	Head (ft.)		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
	10	754	X	103	495.98	X	0.25	X	496.23
Design	50	1223	X	122	497.44	X	0.00	X	497.44
Base	100	1428	X	134	498.05	X	0.09	X	498.14
Max. Calc.	500	1931	X	179	499.48	X	1.48	X	500.96

10 Year Velocity through Ex. Bridge = N/A fps 10 Year Velocity through Pr. Bridge = 6.0 fps

All-Time H.W.E. & Date: N/A
Scope of Work: Culvert Under New Frontage Road

Existing Structure

Type: N/A
Length: N/A
Spans: N/A
Low Beam: N/A
Skew: N/A

Proposed Structure

Type: Double 12'x8' Box Culvert
Length: 64.5'
Barrels: 2
US Invert: 489.77
Skew: 11° LHF

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Route: FAP 318 (IL29)
 Section: 6, 8, 9, 10
 County: Peoria

Exist. S.N.: N/A
 Prop. S.N.: N/A
 Waterway: Dickinson Run

Computed: BAN
 Checked: JPM

Date: 8/5/2008
 Date: 2/25/2009

Drainage Area =		4.14	sq. mi.	Existing Low Grade Elevation =		N/A ft. @ Sta.		N/A	
				Proposed Low Grade Elevation =		506.41 ft. @ Sta.		2759+56	
Flood	Frequency Year	Q (cfs)	Waterway Opening (sq. ft.)		Natural H.W.E.	Head (ft.)		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
	10	1704	X	345	497.5	X	0.0	X	497.5
Design	50	2890	X	534	499.7	X	0.0	X	499.7
Base	100	3456	X	621	500.6	X	0.0	X	500.6
Max. Calc.	500	4867	X	778	502.2	X	0.1	X	502.3

10 Year Velocity through Ex. Bridge = N/A fps

10 Year Velocity through Pr. Bridge = 4.9 fps

Datum: NAVD 88

All-Time H.W.E. & Date: N/A

Scope of Work: Dual Bridges For New 4 Lane Highway

Proposed Structure

Type: 36" PPC I-Beam
Length: 152'
Spans: 3
Low Beam: 505.3
Skew: 35° LHF

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Route: Frontage Road for
FAP 318 (IL29)
Section: 6, 8, 9, 10
County: Peoria

Exist. S.N.: N/A
Prop. S.N.: N/A
Waterway: Dickinson Run

Computed: BAN
Checked: JPM

Date: 8/5/2008
Date: 2/25/2009

Drainage Area =		4.14	sq. mi.	Existing Low Grade Elevation =		N/A ft. @ Sta.		N/A	
				Proposed Low Grade Elevation =		507.91 ft. @ Sta.		96+00	
Flood	Frequency Year	Q (cfs)	Waterway Opening (sq. ft.)		Natural H.W.E.	Head (ft.)		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
	10	1704	X	308	498.3	X	0.1	X	498.4
Design	50	2890	X	475	500.6	X	0.1	X	500.7
Base	100	3456	X	553	501.5	X	0.2	X	501.6
Max. Calc.*	500	4867	X	666	503.2	X	0.8	X	504.0

10 Year Velocity through Ex. Bridge = N/A fps

10 Year Velocity through Pr. Bridge = 5.5 fps

Datum: NAVD 88

All-Time H.W.E. & Date: N/A

Scope of Work: New Bridge For Frontage Road

Proposed Structure

Type: 48" Plate Girder
Length: 97'
Spans: 1
Low Beam: 502.6
Skew: 40° LHF

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.



Illinois Department of Transportation

Memorandum

To: Ralph E. Anderson, Engineer of Bridges & Structures
From: Joseph E. Crowe
Subject: **Approved Waterway Information Table***
Date: September 8, 2006

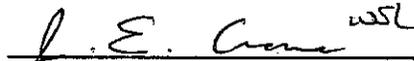
BUREAU OF PROGRAM DEVELOPMENT
STUDIES & PLANS – PHASE I
FAP Route 318 (IL 29)
Section: 6, 8, 9, 10
Location: Proposed IL 29 over Senachwine
Creek at Station 3176+47
Peoria County
Existing S.N.: N/A
Proposed S.N.: Not Assigned
Job No. P-94-019-02
Catalog No. 032469-02P

We have completed our review of the revised Hydraulic Report for the above-mentioned structure, and have attached a copy of the approved report.

The proposed structures are dual three-span bridges with 42" plate girders at a skew.

Some revisions were made to the original report to obtain the revised Waterway Information Tables. Details of the changes are outlined in the attached sheets.

If you have any questions or comments concerning this matter, please contact Mr. Jim Miller at (309) 671-3451.



Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:tdp

Attachments

cc: Project File (M. Lewis)
Hydraulics File (J. Miller)

s:\mgr2\winword\std&plans\miller\memos\jpm0035_il 29_senachwine creek.doc

FAP Route 318 (IL 29)
Section 6, 8, 9, 10
Peoria County
Prop S.N. Not Assigned
Date: 9/6/06

Proposed IL 29 over Senachwine Creek Sta. 3176+47

BY: JPM

The Consultant has proposed dual three span bridges for the Northbound and Southbound lanes of IL 29. The bridges are 293.5' long with 42" plate girders.

The discharges used in the WWIT were updated to the 2004 Soong equations. The consultant had calculated them, but used the 1987 equations in the table.

The roughness coefficients were also modified in the model. Originally, the consultant assigned a 0.07 number to the channel and 0.04 to the overbank. While calculations were done to support this, it didn't appear that the number used for the overbank represented the general conditions present. The model was changed to show the n values for the over bank as 0.05.

Changes made from the original WWIT in the report are different natural high water elevations at the point matching the upstream face of the proposed structure and reading the proposed head at RS 1525, the location of fully expanded flow upstream of the bridge.

When the revisions are made, the IL 29 structures create 0.65' of head, which is low enough to qualify for an IDNR/OWR Statewide Permit # 2 in a rural area.

No other changes were made to the hydraulic report. Revised waterway information tables are attached.

Waterway Information Table

Route: FAP 318 (IL29)
 Section: 6, 8, 9, 10
 County: Peoria

Exist. S.N.: N/A
 Prop. S.N.: N/A
 Waterway: Senachwine Creek Sta. 3176+47

Computed: JPM
 Checked:

Date: 9/7/2006
 Date:

Drainage Area =		88 sq. mi.	Existing Low Grade Elevation =		N/A ft. @ Sta.	N/A	Proposed Low Grade Elevation =		489.57 ft. @ Sta.	3191+25
Flood	Frequency Year	Q (cfs)	Waterway Opening (sq. ft.)		Natural H.W.E.	Head (ft.)		Headwater Elevation		
			Existing	Proposed		Existing	Proposed	Existing	Proposed	
	10	8017	X	1965	484.25	X	0.28	X	484.53	
Design	50	12213	X	2024	485.21	X	0.65	X	485.86	
Base	100	13993	X	2088	485.54	X	0.84	X	486.38	
Max. Calc.	500	18230	X	2218	486.22	X	1.39	X	487.61	

10 Year Velocity through Ex. Bridge = N/A fps 10 Year Velocity through Pr. Bridge = 4.0 fps

Datum: NAVD 88

All-Time H.W.E. & Date: N/A

Scope of Work: Dual Bridges For New 4 Lane Highway

Proposed Structure

Type: 42" Plate Girder
 Length: 293.5'
 Spans: 3
 Low Beam: 495.38
 Skew: 29° RHF

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.



Illinois Department of Transportation

Memorandum

To: Ralph E. Anderson, Engineer of Bridges & Structures
From: Joseph E. Crowe
Subject: **Approved Waterway Information Table***
Date: September 8, 2006

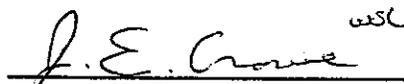
BUREAU OF PROGRAM DEVELOPMENT
STUDIES & PLANS - PHASE I
FAP Route 318 (IL 29)
Section: 6, 8, 9, 10
Location: Proposed Benedict Street over
Senachwine Creek
Existing S.N.: 072-4002
Proposed S.: Not Assigned
Peoria County
Job No. P-94-019-02
Catalog No. 032469-02P

We have completed our review of the revised Hydraulic Report for the above-mentioned structure, and have attached a copy of the approved report.

The proposed structure is a three-span bridge with 54" PPC I-beams.

Some revisions were made to the original report to obtain the revised Waterway Information Tables. Details of the changes are outlined in the attached sheets.

If you have any questions or comments concerning this matter, please contact Mr. Jim Miller of our office at (309) 671-3451.



Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:tdp
Attachments

cc: Project File (M. Lewis)
Hydraulics File (J. Miller)

s:\mgr2\winword\std&plns\miller\memos\jpm0036_il 29_senachwine creek.doc

FAP Route 318 (IL 29)
Section 6, 8, 9, 10
Peoria County
Prop S.N. Not Assigned
Date: 9/7/06

Proposed Benedict St. over Senachwine Creek

BY: JPM

The Consultant has proposed a three span bridge to replace the existing structure over Benedict Street. The bridge will be 231' long with 54" PPC I-beams.

The discharges used in the WWIT were updated to the 2004 Soong equations. The consultant had calculated them, but used the 1987 equations in the table.

The created head was read at a point upstream of the bridges where the flow was fully expanded.

When the revisions are made, the IL 29 structures create 0.10' of head, which is low enough to qualify for an IDNR/OWR Statewide Permit # 2 in a rural area.

No other changes were made to the hydraulic report. Revised waterway information tables are attached.

Waterway Information Table

Route: Benedict St.
 Section: 6, 8, 9, 10
 County: Peoria

Exist. S.N.: 072-4002
 Prop. S.N.: N/A
 Waterway: Senachwine Creek Sta. 3176+47

Computed: JPM
 Checked:

Date: 9/7/2006
 Date:

Drainage Area =		90	sq. mi.	Existing Low Grade Elevation =		477.28 ft. @ Sta. 42+00			
				Proposed Low Grade Elevation =		487.02 ft. @ Sta. 41+00			
Flood	Frequency Year	Q (cfs)	Waterway Opening (sq. ft.)		Natural H.W.E.	Head (ft.)		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
	10	7852	2102	2275	473.25	0.05	0.02	473.30	473.27
Design	50	11933	2450	2685	475.28	0.14	0.10	475.42	475.38
Base	100	13660	2516	2770	473.70	0.27	0.20	473.97	473.90
Max. Calc.	500	17767	2629	2933	476.50	0.65	0.47	477.15	476.97

10 Year Velocity through Ex. Bridge = N/A fps

10 Year Velocity through Pr. Bridge = 3.5 fps

Datum: NAVD 88

All-Time H.W.E. & Date: N/A

Scope of Work: Structure Replacement

Existing Structure

Type: Wide Flange Beam
 Length: 184'
 Spans: 3
 Low Beam: 475.1
 Skew: 0°

Proposed Structure

Type: 54" PPC I-Beam
 Length: 231'
 Spans: 3
 Low Beam: 480.98
 Skew: 0°

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.



Illinois Department of Transportation

Memorandum

To: Ralph E. Anderson, Engineer of Design & Environment
From: Joseph E. Crowe
Subject: **Approved Waterway Information Table***
Date: September 15, 2008

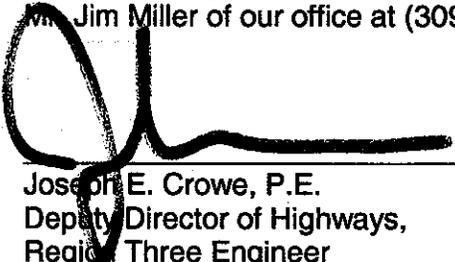
BUREAU OF PROGRAM DEVELOPMENT
*STUDIES & PLANS – PHASE I
FAP Route 318 (IL 29)
Section: 6, 8, 9, 10
Location: Proposed IL Route 29 Connector over
Senachwine Creek
Peoria County
Job No. P-94-019-02
Catalog No. 032469-02P

We have completed our review of the revised Hydraulic Report for the above-mentioned structure, and have attached a copy of the approved report.

The proposed structure is a three-span bridge at a 25° skew.

Some revisions were made to the original report to obtain the revised Waterway Information Tables. Details of the changes are outlined in the attached sheets.

If you have any questions or comments concerning this matter, please contact Mr. Jim Miller of our office at (309) 671-3451.



Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:tdp

Attachments

cc: Project File (M. Lewis)
Project Engineer (J. Miller)

s:\mgr2\winword\std&plns\miller\memos\fap 318_il 29_p-94-019-02_senachwine creek_approved wwit_mi.doc

**FAP Route 318 (IL 29)
Section 6, 8, 9, 10
Peoria County
Exist. S.N. 072-0014
Date: 9/12/08**

Proposed IL 29 Connector over Senachwine Creek BY: JPM

The Consultant has proposed a three span bridge for the Northbound and Southbound lanes of the IL 29 Connector. The bridge is 250' long and 85'-2" wide.

The discharges used in the WWIT were calculated with the 1987 equations. After checking the flows generated in StreamStats, they were about 15% lower than those generated by the 1987 equations.

With the lower flow rates entered in the model, the Natural HWE went down about 1' at all flow rates. This change caused the 500 year event not to inundate the beams in the proposed model.

The WIT underwent many changes due to the different flow rates and the changes that made in the elevations.

No other changes were made to the hydraulic report. Revised waterway information tables are attached.

Waterway Information Table

Route: FAP 318 (IL 29)
 Section: 6, 8, 9, 10
 County: Peoria

Exist. S.N.: 072-0014
 Prop. S.N.: N/A
 Waterway: Senachwine Creek

Computed: Lin
 Checked: JPM

Date: 8/28/2008
 Date: 9/12/2008

Drainage Area =		89	sq. mi.		Existing Low Grade Elevation =		471.37 ft. @ Sta. 72+62			
					Proposed Low Grade Elevation =		474.20 ft. @ Sta. 73+60			
Flood	Frequency Year	Q (cfs)	Waterway Opening (sq. ft.)		Natural H.W. E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	7490	X	1965	464.22	464.24	0.48	0.53	464.70	464.77
Design	50	11700	X	2024	466.25	466.29	0.60	0.53	466.85	466.82
Base	100	13600	X	2088	467.02	467.06	1.41	0.53	468.43	467.59
Max. Calc.	500	18300	X	2218	468.70	468.75	1.33	0.57	470.03	469.32

10 Year Velocity through Ex. Bridge = N/A fps

10 Year Velocity through Pr. Bridge = 4.0 fps

Datum: NAVD 88

All-Time H.W.E. & Date: N/A

Scope of Work: Dual Bridges For New 4 Lane Highway

Existing Structure

Type: Multi-Girder
 Width: 43'-2" O-to-O
 Length: 220'-4" Bk.-to-Bk.
 Spans: 3
 Low Beam: 467.64
 Skew: 45° LHF

Proposed Structure

Type: Multi-Girder
 Width: 85'-2" O-to-O
 Length: 250' Bk.-to-Bk.
 Spans: 3
 Low Beam: 470.2
 Skew: 25° LHF

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.



Illinois Department of Transportation

Memorandum

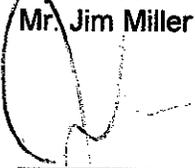
To: Ralph E. Anderson, Engineer of Bridges & Structures
From: Joseph E. Crowe
Subject: **Approved Waterway Information Table***
Date: August 10, 2009

BUREAU OF PROGRAM DEVELOPMENT
*STUDIES & PLANS – PHASE I
FAP Route 318 (IL 29)
Section: (4B)I-1
Peoria County
Existing Structure No. 072-0013
Proposed Structure Nos.: 072-0222, 0223, 0224 & 0225
Proposed IL 29 four-lane over Coon Creek
Job No. P-94-009-01
Catalog No. 032469-01P
PTB/Item No. 118/056

Please find enclosed a copy of the approved Waterway Information Tables and the Hydraulic Reports for the proposed bridges over Coon Creek. SN 072-0222 is for relocated Boehle Road, 072-0223 & 072-0224 are for the proposed four-lane expansion of IL 29 and 072-0225 is for Service Road South. The bridges will be located about two miles north of Chillicothe. The report was prepared by Lin Engineering of Chatham.

Some revisions were made to the report to obtain the approved Waterway Information Tables. Details of the changes are outlined in the attached sheets.

If you have any questions or comments concerning this matter, please contact Mr. Jim Miller of our office at (309) 671-3451.


Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:kme

s:\mgr2\winword\std&plns\hydraulics\j_miller\memos\il 29_coon creek_sn 072-0013_approved wit.docx

Attachments

cc: Project File (M. Lewis)
Hydraulics File (J. Miller)

Proposed IL 29 over Coon Creek

BY: JPM

The Consultant has proposed dual three span bridges for the northbound and southbound lanes of IL 29, located about 480' downstream of the existing bridge. They have also proposed a Service Road bridge another 330' downstream of the proposed IL 29 bridges. A fourth bridge will be built in the location of the existing bridge to carry relocated Boehle Road.

The discharges used in the WIT were calculated with the 2004 equations. The flows were not updated in accordance with the June 5, 2008 memo adopting the use of the internet based StreamStats flows. After checking the flows generated in StreamStats, the flows were higher than calculated.

The tables for use in the design of the proposed bridges were generated with all bridges in place, since it gives the highest amount of created head. All four proposed bridges will require permits from the Corps of Engineers, and the EPA. No permit from the IDNR/OWR is necessary due to the drainage area being less than 10 square miles in a rural area.

Scour calculations from the report are slightly large, due to the lower velocities in the model. When checked in HEC-RAS, the proposed scour was similar to the calculated values for contraction scour, but smaller than the pier scour values. Calculated abutment scour depths are much larger than expected. This is typical of these equations, which tend to be very conservative. The existing bridge has armored slopes, and the proposed bridges should be armored with riprap across the channel.

No other changes were made to the hydraulic report. Revised waterway information tables are attached.

Waterway Information Table

Existing IL 29 vs. Proposed Relocated Boehle Road

Route: Ex. IL 29/Prop. Boehle Road
 Section: (3B)BR
 County: Peoria

Exist. S.N.: 072-0013
 Prop. S.N.: 072-0222
 Waterway: Coon Creek

Computed: Lin
 Checked: JPM

Date: 2/9/2009
 Date: 8/7/2009

Exist. Drainage Area =		2.99	Sq. Mi.	Existing Low Grade Elevation =		493.49	ft. @ Sta.	325+00		
				Proposed Low Grade Elevation =		494.30	ft. @ Sta.	325+00		
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	1390	227	350	481.5	481.5	1.0	0.7	482.5	482.2
Design	50	2360	317	468	483.1	483.1	1.1	0.7	484.2	483.8
Base	100	2820	355	515	483.7	483.7	1.1	0.7	484.8	484.4
Max. Calc.	500	3970	440	628	485.1	485.1	1.4	0.8	486.5	485.9

10 Yr. Velocity through Ex. Bridge = 5.9 fps

10 Yr. Velocity through Pr. Bridge = 5.7 fps

All-Time H.W.E. & Date: 467.8, 1996

Scope of Work: Widen existing bridge for local traffic

Existing Structure

Type: Open Abutment with PPC Beams
 Width: 43'-2" Out to Out
 Length: 121'-4" Bk. to Bk.
 Spans: 3
 Low Beam: 489.41
 Skew: 45° RA

Proposed Structure

Type: Open Abutment with Deck Bms
 Width: 31'-2" Out to Out
 Length: 150'-0" Bk. to Bk.
 Spans: 3
 Low Beam: 491.00
 Skew: 45° RA

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural Highwater with DS RR Bridge Included, Exist. & Prop. With DS RR Bridge

Route: Service Road South
 Section: (3B)BR
 County: Peoria

Exist. S.N.: N/A
 Prop. S.N.: 072-0225
 Waterway: Coon Creek

Computed: Lin
 Checked: JPM

Date: 2/9/2009
 Date: 8/7/2009

Exist. Drainage Area =		3.03	Sq. Mi.		Proposed Low Grade Elevation =		485.63	ft. @ Sta.		406+25
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	1390	-	396	-	475.0	-	2.7	-	477.7
Design	50	2360	-	400	-	475.6	-	2.9	-	478.5
Base	100	2820	-	400	-	475.9	-	3.3	-	479.1
Overtop	500	3970	-	400	-	476.4	-	3.9	-	480.3

10 Yr. Velocity through Pr. Bridge = 4.5 fps

All-Time H.W.E. & Date: N/A

Scope of Work: New Bridge for Service Road

Proposed Structure

Type: Open Abutment with Multiple Beams
Width: 24'-0" Out to Out
Length: 125'-0" Bk. to Bk.
Spans: 3
Low Beam: 481.63
Skew: 45° RA

Waterway Information Table

Proposed IL 29 Four Lane Bridges Over Coon Creek

Route: FAP 318 (IL 29)
 Section: (3B)BR
 County: Peoria

Exist. S.N.: N/A
 Prop. S.N.: 072-0223 (NB) & 0224 (SB)
 Waterway: Coon Creek

Computed: Lin
 Checked: JPM

Date: 2/9/2009
 Date: 8/7/2009

Prop. Drainage Area =		3.03	Sq. Mi.		Proposed Low Grade Elevation =		490.3	ft. @ Sta.		3322+00
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	1390	-	233	-	476.7	-	1.9	-	478.6
Design	50	2360	-	275	-	477.3	-	2.8	-	480.1
Base	100	2820	-	290	-	477.5	-	3.0	-	480.5
Max. Calc.	500	3970	-	331	-	478.1	-	3.9	-	482.0

10 Yr. Velocity through Pr. Bridge = 3.2 fps

All-Time H.W.E. & Date: N/A

Scope of Work: New Bridges for IL 29 4 Lane

Proposed Structures

Type: Dual Bridges with Open Abutment with Multiple Beams
Length: 150'-0" Bk. to Bk.
Spans: 3
Low Beam: 486.88
Skew: 45° RA

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.



Illinois Department of Transportation

Memorandum

To: Ralph E. Anderson, Engineer of Bridges & Structures
From: Joseph E. Crowe
Subject: **Approved Waterway Information Table ***
Date: June 1, 2009

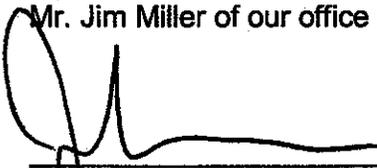
BUREAU OF PROGRAM DEVELOPMENT
*STUDIES & PLANS – PHASE I
FAP Route 318 (IL 29)
Section: 4B
Location: Proposed IL 29 four-lane over the
Illinois River Tributary
Marshall County
Existing Structure No. 062-0010
Proposed Structure No.: Not Assigned
Job No. P-94-009-01
Catalog No. 032469-01P

Please find attached a copy of the approved Waterway Information Tables and the Hydraulic Reports for the proposed bridge replacement located on the proposed four-lane IL Route 29 near the Peoria County line. The report was prepared by Lin Engineering of Chatham.

The proposed structure is a three-span, 90' long R.C. slab bridge.

Some revisions were made to the report to obtain the approved Waterway Information Tables. Details of the changes are outlined in the attached sheets.

If you have any questions or comments concerning this matter, please contact Mr. Jim Miller of our office at (309) 671-3451.



Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:tdp
Attachments
cc: Project File (M. Lewis)
Hydraulics File (J. Miller)

s:\mgr2\winword\std&plns\hydraulics\j_miller\memos\il 29_il 29_il river trib_sn 062-0010_approved wit_lewis.docx

Proposed IL 29 over Illinois River Tributary

BY: JPM

The Consultant has proposed a three span RC slab bridge for the Northbound and Southbound lanes of IL 29. The bridge is 90' long and 93'-2" wide.

The discharges used in the WIT were calculated with the 2004 equations. The flows were not updated in accordance with the June 5, 2008 memo adopting the use of the internet based StreamStats flows. After checking the flows generated in StreamStats, the flows changed slightly.

The effective waterway opening should be calculated at the upstream face of the structure based on the Natural Highwater Elevation for a given frequency. The values in the WIT were calculated using the headwater elevation.

The consultant read the created head at a location with fully expanded flow, but it was located well past the first river station with fully expanded flow. While additional cross sections were interpolated into the model, they were not used to find the expanded flow cone. After looking at the model, the location where the highest amount of created head was generated is at RS 1110 for existing and RS 1127 for proposed, which should be considered the approach section in the model. Because of this, the headwater on the WIT was read at those sections.

The table for use in the design of the proposed bridge will be the one generated by the natural conditions including the downstream railroad bridge, since it gives the highest Natural High Water Elevation. The bridge will require permits from the Corps of Engineers and the EPA, but will not need an IDNR/OWR permit, due to the small drainage area.

Scour calculations made in HEC-RAS are included as well. Because of the lower flow rates from StreamStats, the calculated scour was lower than expected. The total scour depths calculated in the report were combined in the summary, which gave a larger magnitude answer than should be expected.

No other changes were made to the hydraulic report. Revised waterway information tables are attached.

Waterway Information Table

Natural Highwater with No DS Bridges Included

Route: FAP 318 (IL29)
 Section: 4B
 County: Peoria

Exist. S.N.: 062-0010
 Prop. S.N.: N/A
 Waterway: Illinois River Tributary

Computed: Lin
 Checked: JPM

Date: 2/12/2009
 Date: 5/28/2009

Drainage Area =		0.68	sq. mi.		Existing Low Grade Elevation =		474.70	ft. @ Sta.		3452+90
					Proposed Low Grade Elevation =		477.24	ft. @ Sta.		3453+09
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	583	81	143	466.9	467.3	1.3	0.9	468.2	468.2
Design	50	998	108	206	468.1	468.5	2.0	1.1	470.1	469.6
Base	100	1200	120	234	468.6	469.0	2.5	1.1	471.1	470.1
Max. Calc.	500	1700	142	294	469.6	470.0	3.6	1.3	473.2	471.3

10 Yr. Velocity through Ex. Bridge = 6.2 fps

10 Yr. Velocity through Pr. Bridge = 3.5 fps

All-Time H.W.E. & Date: None Available

Scope of Work: Structure Removal & Replacement

Existing Structure

Type: Closed Abutment RC Slab
Length: 26'
Spans: 1
Low Beam: 473.34
Skew: 30° LT Ahead

Proposed Structure

Type: Open Abutment RC Slab
Length: 90'
Spans: 3
Low Beam: 472.83
Skew: 30° LT Ahead

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural Highwater with DS RR Bridge Included

Route: FAP 318 (IL29)
 Section: 4B
 County: Peoria

Exist. S.N.: 062-0010
 Prop. S.N.: N/A
 Waterway: Illinois River Tributary

Computed: Lin
 Checked: JPM

Date: 2/12/2009
 Date: 5/28/2009

Drainage Area = 0.68 sq. mi.		Existing Low Grade Elevation = 474.70 ft. @ Sta. 3452+90								
		Proposed Low Grade Elevation = 477.24 ft. @ Sta. 3453+09								
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	583	81	143	466.9	467.3	1.3	0.9	468.2	468.2
Design	50	998	110	211	468.2	468.6	1.9	1.0	470.1	469.6
Base	100	1200	122	240	468.7	469.1	2.3	1.0	471.0	470.1
Max. Calc.	500	1700	147	300	469.8	470.1	3.5	1.2	473.3	471.3

10 Yr. Velocity through Ex. Bridge = 6.2 fps

10 Yr. Velocity through Pr. Bridge = 3.5 fps

All-Time H.W.E. & Date: None Available

Scope of Work: Structure Removal & Replacement

Existing Structure

Type: Closed Abutment RC Slab
Length: 26'
Spans: 1
Low Beam: 473.34
Skew: 30° LT Ahead

Proposed Structure

Type: Open Abutment RC Slab
Length: 90'
Spans: 3
Low Beam: 472.83
Skew: 30° LT Ahead

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.



Illinois Department of Transportation

Memorandum

To: Ralph E. Anderson, Engineer of Bridges & Structures
From: Joseph E. Crowe
Subject: **Approved Waterway Information Table***
Date: June 5, 2009

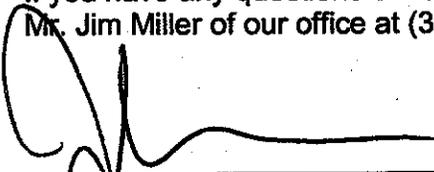
BUREAU OF PROGRAM DEVELOPMENT
*STUDIES & PLANS – PHASE I
FAP Route 318 (IL 29)
Section: 4B-1
Location: IL 29 four-lane over Rattlesnake Hollow
Existing Structure No. 062-0009
Proposed Structure No.: Not Assigned
Marshall County
Job No. P-94-009-01
Catalog No. 032469-01P

Please find attached a copy of the approved Waterway Information Tables and the Hydraulic Reports for the proposed bridge replacement located on the proposed four-lane IL Route 29 near the Peoria County line. The report was prepared by Lin Engineering of Chatham.

The proposed structure is a single-span, 110' long bridge.

Some revisions were made to the report to obtain the approved Waterway Information Tables. Details of the changes are outlined in the attached sheets.

If you have any questions or comments concerning this matter, please contact Mr. Jim Miller of our office at (309) 671-3451.



Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:tdp
Attachments
cc: Project File (M. Lewis)
Hydraulics File (J. Miller)

s:\mgr2\winword\std&plans\hydraulics\j_miller\memos\il_29_rattlesnake hollow_sn 062-0009_approved wit_lewis.docx

Proposed IL 29 over Rattlesnake Hollow

BY: JPM

The Consultant has proposed a three span RC slab bridge for the Northbound and Southbound lanes of IL 29. The bridge is 90' long and 93'-2" wide.

The discharges used in the WIT were calculated with the 2004 equations. The flows were not updated in accordance with the June 5, 2008 memo adopting the use of the internet based StreamStats flows. After checking the flows generated in StreamStats, the flows changed slightly.

The effective waterway opening should be calculated at the upstream face of the structure based on the Natural Highwater Elevation for a given frequency. The values in the WIT were calculated using the headwater elevation.

The Existing structure model used created sections for the bounding cross sections of the existing bridge, RS 1039 & RS 972. These created sections resembled the bridge opening, but when compared to the surveyed sections in the Natural run, they were not alike at all. To produce a more accurate model, the sections from the natural run were copied into the existing model as bounding cross sections.

The proposed structure did not match the existing opening size. The existing opening gives 26' of streambed for the channel, but the proposed only gave 12'. This made the bridge more restrictive at lower flows. The opening was revised to give more channel area at low flows.

The consultant read the created head at a location with fully expanded flow, but it was located well past the first river station with fully expanded flow. The created heads were read by the consultant at RS 1358 for existing and RS 1376 for proposed, however, the contraction cone they modeled only extended to RS 1110 in both models. After looking at the model, the location where the highest amount of created head was generated is at RS 1086 for existing and RS 1110 for proposed. Because of this, the headwater on the WIT was read at those sections.

The table for use in the design of the proposed bridge will be the one generated by the natural conditions including the downstream railroad bridge, since it gives the highest Natural High Water Elevation. The bridge will require permits from the Corps of Engineers and the EPA, but will not need an IDNR/OWR permit, due to the small drainage area.

Scour calculations made in HEC-RAS are included as well. Because of the lower flow rates from StreamStats, the calculated scour was lower than expected. The total scour depths calculated in the report were combined in the summary, which gave a larger magnitude answer than should be expected.

No other changes were made to the hydraulic report. Revised waterway information tables are attached.

Waterway Information Table

Natural Highwater with DS RR Bridge Included

Route: FAP 318 (IL29)
 Section: 4B-1
 County: Peoria

Exist. S.N.: 062-0009
 Prop. S.N.: N/A
 Waterway: Rattlesnake Hollow

Computed: Lin
 Checked: JPM

Date: 2/11/2009
 Date: 6/3/2009

Drainage Area = 1.2 sq. mi.			Existing Low Grade Elevation = 481.41 ft. @ Sta. 3491+00		Proposed Low Grade Elevation = 481.20 ft. @ Sta. 3490+00					
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	725	122	175	461.7	461.9	0.4	0.1	462.1	462.1
Design	50	1220	159	253	463.1	463.3	0.8	0.2	464.0	463.5
Base	100	1460	175	284	463.7	463.8	1.1	0.3	464.8	464.1
Max. Calc.	500	2050	206	361	464.9	465.0	1.7	0.4	466.6	465.4

10 Yr. Velocity through Ex. Bridge = 6.1 fps

10 Yr. Velocity through Pr. Bridge = 4.0 fps

All-Time H.W.E. & Date: None Available

Scope of Work: Structure Removal & Replacement

Existing Structure

Type: Closed Abutment RC Slab
Length: 31'-9"
Spans: 1
Low Beam: 468.57
Skew: 25° RT Ahead

Proposed Structure

Type: Open Abutment 72" Bulb Tee
Length: 110'
Spans: 1
Low Beam: 473.57
Skew: 25° RT Ahead

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural Highwater with No DS Bridges Included

Route: FAP 318 (IL 29)
 Section: 4B-1
 County: Peoria

Exist. S.N.: 062-0009
 Prop. S.N.: N/A
 Waterway: Rattlesnake Hollow

Computed: Lin
 Checked: JPM

Date: 2/11/2009
 Date: 6/3/2009

Drainage Area = 1.2 sq. mi.			Existing Low Grade Elevation = 481.41 ft. @ Sta. 3491+00		Proposed Low Grade Elevation = 481.20 ft. @ Sta. 3490+00					
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	725	111	169	461.3	461.6	0.6	0.1	461.9	461.8
Design	50	1220	132	214	462.1	462.5	1.6	0.8	463.7	463.2
Base	100	1460	138	224	462.3	462.8	2.2	1.0	464.5	463.8
Max. Calc.	500	2050	151	260	462.8	463.4	3.5	1.7	466.3	465.0

10 Yr. Velocity through Ex. Bridge = 6.3 fps

10 Yr. Velocity through Pr. Bridge = 4.4 fps

All-Time H.W.E. & Date: None Available

Scope of Work: Structure Removal & Replacement

Existing Structure

Type: Closed Abutment RC Slab
Length: 31'-9"
Spans: 1
Low Beam: 468.57
Skew: 25° RT Ahead

Proposed Structure

Type: Open Abutment 72" Bulb Tee
Length: 110'
Spans: 1
Low Beam: 473.57
Skew: 25° RT Ahead

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.



Illinois Department of Transportation

Memorandum

To: Ralph E. Anderson
From: Joseph E. Crowe
Subject: Approved Waterway Information Table*
Date: March 4, 2009

*STUDIES AND PLANS – Phase I
FAP Route 318 (IL 29)
Section: 3
Marshall County
Exist. S.N. 062-0008
Prop. S.N. 062-0074
Proposed IL 29 4 Lane over Barrville Creek
Job No. P-94-009-01
Catalog No. 032469-01P

We have completed our review of the revised Hydraulic Report for the above-mentioned structure, and have attached a copy of the approved report.

The proposed structure is a three span, 105' long R.C. slab bridge on tangent.

Some revisions were made to the report to obtain the approved Waterway Information Tables. Details of the changes are outlined in the attached sheets.

If you have any questions or comments concerning this matter, please contact Mr. Jim Miller at (309) 671-3451.

A handwritten signature in black ink, appearing to read 'Joseph E. Crowe', written over a horizontal line.

Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:kme

s:\mgr2\winword\std&plans\hydraulics\j_miller\memos\il 29_barrville creek_p-94-009-01_wit.docx

Attach.

cc: Project File (M. Lewis)
Hydraulics File (J. Miller)

**FAP Route 318 (IL 29)
Section 3
Marshall County
Exist. S.N. 062-0008
Prop. S.N. 062-0074
Date: 03/04/09**

Proposed IL 29 over Barrville Creek

BY: JPM

The Consultant has proposed a three span RC slab bridge for the Northbound and Southbound lanes of IL 29. The bridge is 105' long and 93'-2" wide.

The discharges used in the WIT were calculated with the 2004 equations. After checking the flows generated in StreamStats, the flows changed slightly.

The consultant read the created head at a location with fully expanded flow, but it was located past the first river station with fully expanded flow. After looking at the model, the location where the highest amount of created head was generated is at RS 1125, which is labeled as the approach section in the model. Because of this, the headwater on the WIT was read at RS 1125.

The table for use in the design of the proposed bridge will be WIT # 3, since it gives the highest Natural High Water Elevation. The bridge will require permits from the Corps of Engineers and the EPA, but will not need an IDNR/OWR permit, due to the small drainage area.

No other changes were made to the hydraulic report. Revised waterway information tables are attached.

Waterway Information Table

Table 1: Natural Water Surface Elevations computed without RR Bridge, Existing & Proposed with IL 29 structures only

Route: FAP 318 (IL 29)
 Section: 68 BR-1
 County: Marshall

Exist. S.N.: 062-0008
 Prop. S.N.: 062-0074
 Waterway: Barrville Creek

Computed: Lin
 Checked: JPM

Date: 2/4/2009
 Date: 3/3/2009

Drainage Area =		1.86	sq. mi.	Existing Low Grade Elevation =		467.31 ft. @ Sta. 3514+80		Proposed Low Grade Elevation =		473.98 ft. @ Sta. 3515+20	
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E. (ft.)		Head (ft.)		Headwater Elevation		
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	
	10	1223	153	216	462.0	462.5	1.5	1.0	463.5	463.4	
Design	50	1799	180	265	462.7	463.2	2.3	1.5	465.0	464.8	
Base	100	2036	188	288	462.9	463.5	3.4	1.9	466.3	465.4	
Max. Calc.	500	2589	203	325	463.3	464.0	4.4	2.9	467.6	466.8	

10 Year Velocity through Ex. Bridge =

5.2 fps

10 Year Velocity through Pr. Bridge =

4.1 fps

All-Time H.W.E. & Date: N/A

Scope of Work: Bridge Removal & Replacement

Existing Structure

Type: Closed Abut. R.C. Tee Beam
Length: 40'-11 1/2" back to back abutments
Spans: 1
Low Beam: 463.26
Skew: 10° Left Ahead

Proposed Structure

Type: Open Abutment R.C. Slab
Length: 105' back to back abutments
Spans: 3
Low Beam: 471.54
Skew: 0

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Table 2: Natural Water Surface Elevations computed without RR Bridge, Existing & Proposed with RR structure only

Route: FAP 318 (IL 29)
 Section: 68 BR-1
 County: Marshall

Exist. S.N.: 062-0008
 Prop. S.N.: 062-0074
 Waterway: Barrville Creek

Computed: Lin
 Checked: JPM

Date: 2/4/2009
 Date: 3/3/2009

Drainage Area =		1.86	sq. mi.	Existing Low Grade Elevation =		467.31 ft. @ Sta. 3514+80		Proposed Low Grade Elevation =		473.98 ft. @ Sta. 3515+20	
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E. (ft.)		Head (ft.)		Headwater Elevation		
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	
	10	1223	85	x	461.2	x	0.8	x	462.0	x	
Design	50	1799	85	x	461.8	x	1.4	x	463.2	x	
Base	100	2036	85	x	462.0	x	1.7	x	463.7	x	
Max. Calc.	500	2589	85	x	462.4	x	2.3	x	464.7	x	
10 Year Velocity through Ex. Bridge =			6.6	fps	10 Year Velocity through Pr. Bridge =			N/A	fps		

All-Time H.W.E. & Date: N/A
 Scope of Work: Bridge Removal & Replacement

Existing Structure

Type: Timber RR Bridge
 Length: 91'-7" back to back abutments
 Spans: 5
 Low Beam: 459.6
 Skew: 0

Proposed Structure

Type: N/A
 Length: N/A
 Spans: N/A
 Low Beam: N/A
 Skew: N/A

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Table 3: Natural Water Surface Elevations computed with RR Bridge, Existing & Proposed with IL 29 & RR bridges

Route: FAP 318 (IL 29)
 Section: 68 BR-1
 County: Marshall

Exist. S.N.: 062-0008
 Prop. S.N.: 062-0074
 Waterway: Barrville Creek

Computed: Lin
 Checked: JPM

Date: 2/4/2009
 Date: 3/3/2009

Drainage Area =		1.86	sq. mi.	Existing Low Grade Elevation =		467.31 ft. @ Sta. 3514+80		Proposed Low Grade Elevation =		473.98 ft. @ Sta. 3515+20	
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E. (ft.)		Head (ft.)		Headwater Elevation		
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	
	10	1223	193	266	463.0	463.2	2.6	0.6	465.6	463.8	
Design	50	1799	203	371	464.6	464.6	3.4	0.8	468.0	465.4	
Base	100	2036	-	411	-	465.1	-	0.8	-	465.9	
Ex. Overtop.	30	1511	203	-	464.2	-	3.1	-	467.3	-	
Max. Calc.	500	2589	-	494	-	466.1	-	1.0	-	467.1	

10 Year Velocity through Ex. Bridge = 5.2 fps

10 Year Velocity through Pr. Bridge = 4.0 fps

All-Time H.W.E. & Date: N/A
 Scope of Work: Bridge Removal & Replacement

Existing Structure

Type: Closed Abut. R.C. Tee Beam
Length: 40'-11 1/2" back to back abutments
Spans: 1
Low Beam: 463.26
Skew: 10° Left Ahead

Proposed Structure

Type: Open Abutment R.C. Slab
Length: 105' back to back abutments
Spans: 3
Low Beam: 471.54
Skew: 0

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Table 4: Natural Water Surface Elevations computed without RR Bridge, Existing & Proposed with IL 29 & RR bridges

Route: FAP 318 (IL 29)
 Section: 68 BR-1
 County: Marshall

Exist. S.N.: 062-0008
 Prop. S.N.: 062-0074
 Waterway: Barrville Creek

Computed: Lin
 Checked: JPM

Date: 2/4/2009
 Date: 3/3/2009

Drainage Area =		1.86	sq. mi.	Existing Low Grade Elevation =		467.31 ft. @ Sta.		3514+80		
				Proposed Low Grade Elevation =		473.98 ft. @ Sta.		3515+20		
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E. (ft.)		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	1223	153	266	462.0	462.5	3.1	1.0	465.1	463.5
Design	50	1799	180	371	462.7	463.2	4.4	1.8	467.1	465.0
Base	100	2036	-	411	-	463.5	-	2.1	-	465.6
Ex. Overtop.	60	1847	203	-	462.8	-	4.6	-	467.4	-
Max. Calc.	500	2589	-	494	463.3	464.0	-	3.0	-	467.0

10 Year Velocity through Ex. Bridge = 5.2 fps

10 Year Velocity through Pr. Bridge = 4.1 fps

All-Time H.W.E. & Date: N/A
 Scope of Work: Bridge Removal & Replacement

Existing Structure

Type: Closed Abut. R.C. Tee Beam
Length: 40'-11 1/2" back to back abutments
Spans: 1
Low Beam: 463.26
Skew: 10° Left Ahead

Proposed Structure

Type: Open Abutment R.C. Slab
Length: 105' back to back abutments
Spans: 3
Low Beam: 471.54
Skew: 0

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.



Illinois Department of Transportation

Memorandum

To: Ralph E. Anderson, Engineer of Bridges & Structures
From: Joseph E. Crowe
Subject: **Approved Waterway Information Table***
Date: July 6, 2009

BUREAU OF PROGRAM DEVELOPMENT
*STUDIES & PLANS – PHASE I
FAP Route 318 (IL 29)
Section: (3B)BR
Location: Proposed IL 29 four-lane over
Gimlet Creek
Existing Structure No. 062-0057
Proposed Structure No.: Not Assigned
Marshall County
Job No. P-94-009-01
Catalog No. 032469-01P
PTB/Item No. 118/056

Please find attached a copy of the approved Waterway Information Tables and the Hydraulic Reports for the proposed widening of the existing bridge as a frontage road and a new bridge over Gimlet Creek on the proposed four-lane expansion of IL 29 in Sparland. The report was prepared by Lin Engineering of Chatham.

The proposed new structure is a three-span, 345' long bridge.

Some revisions were made to the reports to obtain the approved Waterway Information Tables. Details of the changes are outlined in the attached sheets.

If you have any questions or comments concerning this matter, please contact Mr. Jim Miller of our office at (309) 671-3451.



Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:tdp

Attachments

cc: Project File (M. Lewis)
Hydraulics File (J. Miller)

s:\mgr2\winword\std&plns\hydraulics\j_miller\memos\il 29_gimlet creek_sn 062-0057_approved wit_lewis.docx

**FAP Route 318 (IL 29)
Section (3B)BR
Marshall County
Exist. S.N. 062-0057
Date: 07/06/09**

Proposed IL 29 over Gimlet Creek

BY: JPM

The Consultant has proposed widening the existing bridge carrying IL 29 over Gimlet Creek for use as a local route. They have also proposed a single three span bridge for the Northbound and Southbound lanes of IL 29, located about 900' downstream of the existing bridge.

The discharges used in the WIT were calculated with the 2004 equations. The flows were not updated in accordance with the June 5, 2008 memo adopting the use of the internet based StreamStats flows. After checking the flows generated in StreamStats, the flows were lower than calculated.

The table for use in the design of the widened existing bridge will be the one generated by the natural conditions including the downstream railroad bridge, since it gives the highest Natural High Water Elevation. Both bridges will require permits from the Corps of Engineers, the EPA and the IDNR/OWR due to the urban area of Sparland.

Scour calculations from the report are slightly large, due to the smaller flows from StreamStats. When checked in HEC-RAS, the proposed scour was similar to the calculated values, except for abutment scour depths. Calculated abutment scour depths are much larger than expected. This is typical of these equations, which tend to be very conservative. The existing bridge has already been armored, and the widened section should be armored in a similar fashion.

No other changes were made to the hydraulic report. Revised waterway information tables are attached.

Waterway Information Table

Natural, Existing & Proposed with No DS Bridges Included

Route: FAP 318 (IL 29)
 Section: (3B)BR
 County: Marshall

Exist. S.N.: 062-0057
 Prop. S.N.: N/A
 Waterway: Gimlet Creek

Computed: Lin
 Checked: JPM

Date: 4/17/2009
 Date: 7/1/2009

Exist. Drainage Area = 5.60			Existing Low Grade Elevation = 467.59 ft. @ Sta. 47+50								
			Proposed Low Grade Elevation = 467.59 ft. @ Sta. 47+50								
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation		
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	
	10	1800	314	322	462.7	462.8	1.3	1.1	464.0	463.9	
Design	50	2990	400	400	464.4	464.5	2.3	2.1	466.7	466.6	
Base	100	3550	400	400	465.1	465.2	3.1	3.0	468.2	468.2	
Overtop	100	3550	400	400	465.1	465.2	3.1	3.0	468.2	468.2	
10 Yr. Velocity through Ex. Bridge =			4.5	fps	10 Yr. Velocity through Pr. Bridge =			4.5	fps		

All-Time H.W.E. & Date: 467.8, 1996

Scope of Work: Widen existing bridge for local traffic

Existing Structure

Type: Closed Abutment with Steel Bms
 Width: 63' Out to Out
 Length: 78' Bk. to Bk.
 Spans: 1
 Low Beam: 463.76
 Skew: 0°

Proposed Structure

Type: Closed Abutment with Steel Bms
 Width: 79' Out to Out
 Length: 78' Bk. to Bk.
 Spans: 1
 Low Beam: 463.76
 Skew: 0°

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural Highwater with DS RR Bridge Included, Exist. & Prop. With DS RR Bridge

Route: FAP 318 (IL 29)
 Section: (3B)BR
 County: Marshall

Exist. S.N.: 062-0057
 Prop. S.N.: N/A
 Waterway: Gimlet Creek

Computed: Lin
 Checked: JPM

Date: 4/17/2009
 Date: 7/1/2009

Exist. Drainage Area =		5.60			Existing Low Grade Elevation =		467.59	ft. @ Sta.	47+50	
					Proposed Low Grade Elevation =		467.59	ft. @ Sta.	47+50	
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	1800	391	396	463.7	463.7	0.4	0.3	464.1	464.0
Design	50	2990	400	400	465.7	465.8	1.0	0.9	466.7	466.7
Base	100	3550	400	400	467.1	467.1	1.2	1.2	468.3	468.3
Overtop	100	3550	400	400	467.1	467.1	1.2	1.2	468.3	468.3

10 Yr. Velocity through Ex. Bridge = 4.5 fps

10 Yr. Velocity through Pr. Bridge = 4.5 fps

All-Time H.W.E. & Date: 467.8, 1996

Scope of Work: Widen existing bridge for local traffic

Existing Structure

Type: Closed Abutment with Steel Bms
 Width: 63' Out to Out
 Length: 78' Bk. to Bk.
 Spans: 1
 Low Beam: 463.76
 Skew: 0°

Proposed Structure

Type: Closed Abutment with Steel Bms
 Width: 79' Out to Out
 Length: 78' Bk. to Bk.
 Spans: 1
 Low Beam: 463.76
 Skew: 0°

Waterway Information Table

Proposed IL 29 Four Lane Bridge In Sparland

Route: FAP 318 (IL 29)
 Section: (3B)BR
 County: Marshall

Exist. S.N.: 062-0057
 Prop. S.N.: N/A
 Waterway: Gimlet Creek

Computed: Lin
 Checked: JPM

Date: 4/17/2009
 Date: 7/1/2009

Exist. Drainage Area =		5.6	Existing Low Grade Elevation =		502.83	ft. @ Sta.		134+15		
Prop. Drainage Area =		6.06	Proposed Low Grade Elevation =		507.98	ft. @ Sta.		5728+00		
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	1704	-	733	-	497.8	-	0.2	-	498.0
Design	50	2831	-	1180	-	499.3	-	0.0	-	499.3
Base	100	3365	-	1432	-	500.0	-	0.1	-	500.1
Max. Calc.	500	4940	-	1665	-	501.9	-	0.1	-	502.0

10 Yr. Velocity through Ex. Bridge =

8.6 fps

10 Yr. Velocity through Pr. Bridge =

2.9 fps

All-Time H.W.E. & Date: None Available

Scope of Work: New Bridges for IL 29 4 Lane, Existing Bridge Remains in Place

Proposed Structure

Type: Open Abutment with Multiple Beams

Length: 345'-0" Bk. to Bk.

Spans: 4

Low Beam: 481.22

Skew: 0°

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.



Illinois Department of Transportation

Memorandum

To: Ralph E. Anderson
From: Joseph E. Crowe
Subject: Approved Waterway Information Table*
Date: December 1, 2009

*STUDIES & PLANS -- PHASE I
FAP Route 318 (IL 29)
Section: (3B)BR
Marshall County
Existing S.N. 062-0056
Proposed S.N. Not Assigned
Proposed IL 29 4 Lane over Thenius Creek
Job No. P-94-009-01
Catalog No. 032469-01P
PTB No. 118/056

Please find enclosed a copy of the approved Waterway Information Tables and the Hydraulic Reports for the proposed widening of the existing bridge to remain in place as a frontage road. There are three (3) new bridges proposed over Thenius Creek for the proposed four lane expansion of IL 29 in Sparland. They are for a ramp, IL 29 mainline and an access road. The report was prepared by Lin Engineering of Chatham.

Some revisions were made to the report to obtain the approved Waterway Information Tables. Details of the changes are outlined in the attached sheets.

If you have any questions or comments concerning this matter, please contact Jim Miller at (309) 671-3451.

Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:kme

s:\mgr2\winword\std&pins\hydraulics\j_miller\memos\il_29_thenius_creek_062-0056_approved_wit.docx

Attach.

cc: Project File (M. Lewis)
Hydraulics File (J. Miller)

FAP Route 318 (IL 29)
Section (3B)BR
Marshall County
Exist. S.N. 062-0056
Date: 11/23/09

Proposed IL 29 over Thenius Creek

BY: JPM

The Consultant has proposed widening the existing bridge carrying IL 29 over Thenius Creek for use as a local route. They have also proposed a new bridge for Ramp D upstream of SN 062-0056, a new mainline IL 29 bridge that will span over the existing bridge, and a new access road bridge downstream of the existing bridge.

At this time, the other proposed bridges are not being approved. The information necessary for their approval has not been generated with this report. The Phase I portion of the project is coming to a close, and the prospects for these bridges being built in the near future is very slim, since funding is not available for this portion of the project. Because of that, the extra time and expense involved in approving those structures was deemed enough to delay the approval until Phase II.

The discharges used in the WIT were calculated with the 2004 equations. The flows were not updated in accordance with the June 5, 2008 memo adopting the use of the internet based StreamStats flows. After checking the flows generated in StreamStats, the flows were lower than the calculated.

The table for use in the design of the widened existing bridge will be the one generated by the natural conditions including the downstream railroad bridge, since it gives the highest Natural High Water Elevation. Both bridges will require permits from the Corps of Engineers, the EPA and the IDNR/OWR due to the urban area of Sparland.

Scour calculations from the report are slightly large, due to the smaller flows from StreamStats. When checked in HEC-RAS, the proposed scour was similar to the calculated values, except for abutment scour depths. Calculated abutment scour depths are much larger than expected. This is typical of these equations, which tend to be very conservative. The existing bridge has already been armored, and the widened section should be armored in a similar fashion.

No other changes were made to the hydraulic report. Revised waterway information tables are attached.

Waterway Information Table

Natural, Existing & Proposed with No DS Bridges Included

Route: FAP 318 (IL 29)
 Section: (3B)BR
 County: Marshall

Exist. S.N.: 062-0056
 Prop. S.N.: N/A
 Waterway: Thenius Creek

Computed: Lin
 Checked: JPM

Date: 4/17/2009
 Date: 7/8/2009

Exist. Drainage Area =		5.60	Existing Low Grade Elevation =		471.68	ft. @ Sta.	360+00		
			Proposed Low Grade Elevation =		472.69	ft. @ Sta.	76+05		
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.	Head (ft.)		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
	10	2520	703	703	461.4	3.3	2.7	464.7	464.1
Design	50	4160	889	889	463.0	4.1	3.5	467.1	466.5
Base	100	4930	977	977	463.7	4.4	3.7	468.1	467.4
Max. Calc.	500	6820	1136	1136	465.0	4.8	4.1	469.8	469.1

10 Yr. Velocity through Ex. Bridge = 3.0 fps

10 Yr. Velocity through Pr. Bridge = 2.8 fps

All-Time H.W.E. & Date: Unknown

Scope of Work: Widen existing bridge for local traffic

Existing Structure

Type: Open Abutment with Steel Bms
Width: 43'-2" Out to Out
Length: 137'-0" Bk. to Bk.
Spans: 3
Low Beam: 468.37
Skew: 0°

Proposed Structure

Type: Open Abutment with Steel Bms
Width: 65'-2" Out to Out
Length: 137'-0" Bk. to Bk.
Spans: 3
Low Beam: 468.26
Skew: 0°

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural, Existing & Proposed with No DS Bridges Included

Route: FAP 318 (IL 29)
 Section: (3B)BR
 County: Marshall

Exist. S.N.: 062-0056
 Prop. S.N.: N/A
 Waterway: Thenius Creek

Computed: Lin
 Checked: JPM

Date: 4/17/2009
 Date: 7/8/2009

Exist. Drainage Area =		5.60	Existing Low Grade Elevation =		471.68	ft. @ Sta.	360+00		
			Proposed Low Grade Elevation =		472.69	ft. @ Sta.	76+05		
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.	Head (ft.)		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
	10	2520	944	944	463.4	1.5	0.8	464.9	464.2
Design	50	4160	1215	1215	465.5	1.8	1.1	467.3	466.6
Base	100	4930	1330	1330	466.5	1.7	1.1	468.2	467.6
Max. Calc.	500	6820	1538	1538	468.4	1.5	0.8	469.9	469.2
10 Yr. Velocity through Ex. Bridge =			3.0	fps	10 Yr. Velocity through Pr. Bridge =			2.8	fps

All-Time H.W.E. & Date: Unknown

Scope of Work: Widen existing bridge for local traffic

Existing Structure

Type: Open Abutment with Steel Bms
Width: 43'-2" Out to Out
Length: 137'-0" Bk. to Bk.
Spans: 3
Low Beam: 468.37
Skew: 0°

Proposed Structure

Type: Open Abutment with Steel Bms
Width: 65'-2" Out to Out
Length: 137'-0" Bk. to Bk.
Spans: 3
Low Beam: 468.26
Skew: 0°



Illinois Department of Transportation

Memorandum

To: Ralph E. Anderson, Engineer of Bridges & Structures
From: Joseph E. Crowe
Subject: **Approved Waterway Information Table***
Date: June 30, 2009

BUREAU OF PROGRAM DEVELOPMENT
*STUDIES & PLANS – PHASE I
FAP Route 318 (IL 29)
Section: (2B)BY
Location: IL 29 four-lane over Crow Creek
Existing Structure No. 062-0004
Proposed Structure No.: Not Assigned
Marshall County
Job No. P-94-009-01
Catalog No. 032469-01P
PTB/Item No. 118/056

Please find attached a copy of the approved Waterway Information Tables and the Hydraulic Reports for the proposed bridge replacement located on the proposed four-lane IL Route 29 north of Sparland. The report was prepared by Lin Engineering of Chatham.

The proposed structures are dual three-span 280' long bridges.

Some revisions were made to the report to obtain the approved Waterway Information Tables. Details of the changes are outlined in the attached sheets.

If you have any questions or comments concerning this matter, please contact Mr. Jim Miller of our office at (309) 671-3451.

A handwritten signature in black ink, appearing to read 'Joe Crowe', written over a horizontal line.

Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:tdp

Attachments

cc: Project File (M. Lewis)
Hydraulics File (J. Miller)

s:\mgr2\winword\std&p\ins\hydraulics\j_miller\memos\il 29_crow creek_sn 062-0004_approved wit_lewis.docx

**FAP Route 318 (IL 29)
Section (2B)BY
Marshall County
Exist. S.N. 062-0004
Date: 06/29/09**

Proposed IL 29 over Crow Creek

BY: JPM

The Consultant has proposed dual three span bridges for the Northbound and Southbound lanes of IL 29. The bridges are 280' long and 43'-4" wide.

The discharges used in the WIT were calculated with the 2004 equations. The flows were not updated in accordance with the June 5, 2008 memo adopting the use of the internet based StreamStats flows. After checking the flows generated in StreamStats, the flows were lower than calculated.

The table for use in the design of the proposed bridge will be the one generated by the natural conditions including the downstream railroad bridge, since it gives the highest Natural High Water Elevation. The bridge will require permits from the Corps of Engineers, the EPA and the IDNR/OWR due to the large drainage area.

Scour calculations from the report are slightly large, due to the smaller flows from StreamStats. When checked in HEC-RAS, the proposed scour was similar to the calculated values, except for abutment scour depths. Calculated abutment scour depths are much larger than expected. It appears that the component representing average depth of flow on the floodplain was entered as the average depth of flow in the channel. This caused the number to be about 25' of scour versus what should be 4' to 5'.

No other changes were made to the hydraulic report. Revised waterway information tables are attached.

Waterway Information Table

Natural Highwater with No DS Bridges Included

Route: FAP 318 (IL29)
 Section: (2B)BY
 County: Peoria

Exist. S.N.: 062-0004
 Prop. S.N.: N/A
 Waterway: Crow Creek

Computed: Lin
 Checked: JPM

Date: 2/16/2009
 Date: 6/29/2009

Drainage Area = 82.1 sq. mi.		Existing Low Grade Elevation = 462.50 ft. @ Sta. 219+27		Proposed Low Grade Elevation = 475.42 ft. @ Sta. 3795+50						
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	6,540	1480	2360	463.1	464.1	1.7	1.1	464.8	465.2
Design	50	10,100	1480	2605	464.4	465.1	2.4	1.6	466.8	466.7
Base	100	11,800	1480	2845	465.0	466.1	2.7	1.8	467.7	467.9
Overtop.	10	6,540	1480	-	463.1	-	1.7	-	464.8	-
Max. Calc.	500	15,700	-	3145	-	467.3	-	2.2	-	469.5

10 Yr. Velocity through Ex. Bridge = 4.4 fps

10 Yr. Velocity through Pr. Bridge = 2.5 fps

All-Time H.W.E. & Date: Water 18" Deep on Roadway, June 6, 2001

Scope of Work: Structure Removal & Replacement

Existing Structure

Type: Open Abutment WF Beams
Length: 239'-6"
Spans: 3
Low Beam: 462.00
Skew: 0°

Proposed Structure

Type: Dual Open Abutment Plate Girder
Length: 280'
Spans: 3
Low Beam: 470.17
Skew: 0°

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural Highwater with DS RR Bridge Included

Route: FAP 318 (IL29)
 Section: (2B)BY
 County: Peoria

Exist. S.N.: 062-0004
 Prop. S.N.: N/A
 Waterway: Crow Creek

Computed: Lin
 Checked: JPM

Date: 2/16/2009
 Date: 6/29/2009

Drainage Area = 82.1 sq. mi.			Existing Low Grade Elevation = 462.50 ft. @ Sta. 219+27		Proposed Low Grade Elevation = 475.42 ft. @ Sta. 3795+50					
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	6,540	1480	2360	464.7	465.0	0.8	0.3	465.5	465.3
Design	50	10,100	1480	2605	466.4	466.7	1.2	0.4	467.6	467.1
Base	100	11,800	1480	2845	467.1	467.4	1.2	0.4	468.3	467.8
Overtop.	10	6,540	1480	-	464.7	-	0.8	-	465.5	-
Max. Calc.	500	15,700	-	3145	-	468.9	-	0.4	-	469.3

10 Yr. Velocity through Ex. Bridge = 4.4 fps

10 Yr. Velocity through Pr. Bridge = 2.5 fps

All-Time H.W.E. & Date: Water 18" Deep on Roadway, June 6, 2001
 Scope of Work: Structure Removal & Replacement

Existing Structure

Type: Open Abutment WF Beams
Length: 239'-6"
Spans: 3
Low Beam: 462.00
Skew: 0°

Proposed Structure

Type: Dual Open Abutment Plate Girder
Length: 280'
Spans: 3
Low Beam: 470.17
Skew: 0°

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.



Illinois Department of Transportation

Memorandum

To: Ralph E. Anderson, Engineer of Bridges & Structures
From: Joseph E. Crowe
Subject: **Approved Waterway Information Table ***
Date: June 24, 2009

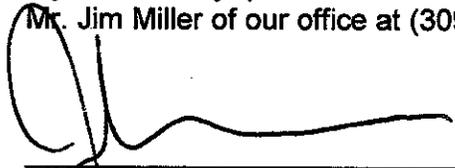
BUREAU OF PROGRAM DEVELOPMENT
*STUDIES & PLANS – PHASE I
FAP Route 318 (IL 29)
Section: 20BR
Location: Proposed IL 29 four-lane over
Dry Hollow Creek
Putnam County
Existing Structure No. 078-0005
Proposed Structure No.: Not Assigned
Job No. P-94-009-01
Catalog No. 032469-01P
PTB/Item No. 118/056

Please find attached a copy of the approved Waterway Information Tables and the Hydraulic Reports for the proposed bridge replacements located on the proposed four-lane IL Route 29 over Dry Hollow Creek north of Henry in Putnam County. The report was prepared by Lin Engineering of Chatham.

The proposed structure is a dual three-span bridge.

Some revisions were made to the report to obtain the Waterway Information Tables. Details of the changes are outlined in the attached sheets.

If you have any questions or comments concerning this matter, please contact Mr. Jim Miller of our office at (309) 671-3451.



Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:tdp
Attachments
cc: Project File (M. Lewis)
Hydraulics Engineer (J. Miller)

s:\mgr2\winword\std&pin\shydraulics\j_miller\memos\il 29_dry hollow creek_ptb 118-056_p-94-009-01_approved wit_lewis.docx

Proposed IL 29 over Dry Hollow Creek

BY: JPM

The Consultant has proposed replacing SN 078-0005 with a dual three span bridges for the Northbound and Southbound lanes of IL 29. Both bridges are 130'-0" long and 43'-2" wide. The proposed bridges will be 1100' upstream of the existing bridge, which will remain in place.

The discharges used in the WIT were calculated with the 2004 Soong equations. The flows were not updated in accordance with the June 5, 2008 memo adopting the use of the internet based StreamStats flows. After checking the flows generated in StreamStats, the flows were lower than the calculated values.

The consultant read the created head at a location with fully expanded flow, but it was located well past the first river station with fully expanded flow. Also, the chosen river stations were not the location with the highest created head in the model. To give a more accurate picture of the bridge, the headwater on the WIT was read at those sections where the created head was highest because of the downstream railroad bridge and the overlapping of the expansion and contraction cones from the bridges.

The table for use in the design of the proposed bridge will be the one generated using the natural conditions including the downstream railroad bridge, since it gives the highest Natural High Water Elevation and Headwater Elevation. The bridge will require permits from the Corps of Engineers, the EPA, and the IDNR/OWR.

The contraction scour and pier scour numbers in the report appear to be reasonable, but the abutment scour numbers are very high. Part of the reason the numbers are so high is that the scour was calculated for both structures using the full flow for each event. When revised to use a flow distribution between the 2 structures, they become more reasonable. The slopes and channel of the proposed structures should be lined with at least grade A4 riprap for protection.

No other changes were made to the hydraulic report. Revised waterway information tables are attached.

Waterway Information Table

Natural, Existing & Proposed with No DS Bridges Included

Route: FAP 318 (IL 29)
 Section: 20 BR
 County: Putnam

Exist. S.N.: 078-0005
 Prop. S.N.: N/A
 Waterway: Dry Hollow Creek

Computed: Lin
 Checked: JPM

Date: 2/17/2009
 Date: 6/19/2009

Exist. Drainage Area =		5.86	sq. mi.	Existing Low Grade Elevation =		502.83	ft. @ Sta.	134+15			
Prop. Drainage Area =		6.06	sq. mi.	Proposed Low Grade Elevation =		507.98	ft. @ Sta.	5728+00			
Flood	Frequency Year	Head (ft.)		Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
		Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	1704	1750	180	482	495.9	497.7	2.4	0.0	498.3	497.7
Design	50	2831	2910	225	610	497.4	499.2	4.1	0.0	501.5	499.2
Base	100	3365	3460	245	664	498.1	499.8	6.2	0.0	504.3	499.8
Overtop	50	3098	3401	235	-	497.8	-	5.2	-	503.0	-
Max. Calc.	500	-	4800	-	783	-	501.1	-	0.0	-	501.1

10 Yr. Velocity through Ex. Bridge = 8.2 fps

10 Yr. Velocity through Pr. Bridge = 3.2 fps

All-Time H.W.E. & Date: None Available

Scope of Work: New Bridges for IL 29 4 Lane, Existing Bridge Remains in Place

Existing Structure

Type: Closed Abutment with Deck Bms
Length: 30'-2 1/2" Bk. to Bk.
Spans: 1
Low Beam: 501.21
Skew: 22° RT Ahead

Proposed Structure

Type: Open Abutment with Multiple Beams
Length: 130'-0" Bk. to Bk.
Spans: 3
Low Beam: 504.52
Skew: 8° RT Ahead

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural Highwater with No DS Bridges Included, Exist. & Prop. With DS Bridges

Route: FAP 318 (IL 29)
 Section: 20 BR
 County: Putnam

Exist. S.N.: 078-0005
 Prop. S.N.: N/A
 Waterway: Dry Hollow Creek

Computed: Lin
 Checked: JPM

Date: 2/17/2009
 Date: 6/19/2009

Exist. Drainage Area =		5.86 sq. mi.		Existing Low Grade Elevation =		502.83 ft. @ Sta.		134+15			
Prop. Drainage Area =		6.06 sq. mi.		Proposed Low Grade Elevation =		507.98 ft. @ Sta.		5728+00			
Flood	Frequency Year	Head (ft.)		Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
		Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	1704	1750	180	482	495.9	497.7	2.3	1.2	498.2	498.9
Design	50	2831	2910	225	610	497.4	499.2	3.9	2.5	501.3	501.7
Base	100	3365	3460	245	664	498.1	499.8	6.2	4.7	504.3	504.5
Overtop	75	3098	3401	235	-	497.8	-	5.1	-	502.9	-
Max. Calc.	500	-	4800	-	783	-	501.1	-	6.2	-	507.3

10 Yr. Velocity through Ex. Bridge = 8.2 fps

10 Yr. Velocity through Pr. Bridge = 3.5 fps

All-Time H.W.E. & Date: None Available

Scope of Work: New Bridges for IL 29 4 Lane, Existing Bridge Remains in Place

Existing Structure

Type: Closed Abutment with Deck Bms
Length: 30'-2 1/2" Bk. to Bk.
Spans: 1
Low Beam: 501.21
Skew: 22° RT Ahead

Proposed Structure

Type: Open Abutment with Multiple Beams
Length: 130'-0" Bk. to Bk.
Spans: 3
Low Beam: 504.52
Skew: 8° RT Ahead

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural, Existing & Proposed with Downstream Bridges Included

Route: FAP 318 (IL 29)
 Section: 20 BR
 County: Putnam

Exist. S.N.: 078-0005
 Prop. S.N.: N/A
 Waterway: Dry Hollow Creek

Computed: Lin
 Checked: JPM

Date: 2/17/2009
 Date: 6/19/2009

Exist. Drainage Area =		5.86 sq. mi.		Existing Low Grade Elevation =		502.83 ft. @ Sta.		134+15			
Prop. Drainage Area =		6.06 sq. mi.		Proposed Low Grade Elevation =		507.98 ft. @ Sta.		5728+00			
Flood	Frequency Year	Head (ft.)		Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
		Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	1704	1750	187	487	496.2	497.8	2.0	1.1	498.2	498.9
Design	50	2831	2910	236	621	497.8	499.3	3.5	2.4	501.2	501.7
Base	100	3365	3460	257	678	498.5	500.0	5.8	4.7	504.3	504.7
Overtop	75	3098	3401	247	-	498.1	-	4.7	-	502.8	-
Max. Calc.	500	-	4800	-	862	-	501.9	-	5.4	-	507.2

10 Yr. Velocity through Ex. Bridge = 8.6 fps

10 Yr. Velocity through Pr. Bridge = 2.9 fps

All-Time H.W.E. & Date: None Available

Scope of Work: New Bridges for IL 29 4 Lane, Existing Bridge Remains in Place

Existing Structure

Type: Closed Abutment with Deck Bms
Length: 30'-2 1/2" Bk. to Bk.
Spans: 1
Low Beam: 501.21
Skew: 22° RT Ahead

Proposed Structure

Type: Open Abutment with Multiple Beams
Length: 130'-0" Bk. to Bk.
Spans: 3
Low Beam: 504.52
Skew: 8° RT Ahead

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.



Illinois Department of Transportation

Memorandum

To: Ralph E. Anderson, Engineer of Bridges & Structures
From: Joseph E. Crowe
Subject: **Approved Waterway Information Tables***
Date: June 19, 2009

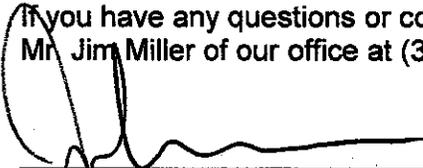
BUREAU OF PROGRAM DEVELOPMENT
*STUDIES & PLANS – PHASE I
FAP Route 318 (IL 29)
Section: 21B, 21(B-1)I
Location: Proposed IL 29, four-lanes over
Senachwine Creek & Overflow
Existing Structure Nos. 078-0003 & 078-0004
Putnam County
Job No. P-94-009-01
Catalog No. 032469-01P
PTB/Item No. 118/056

Please find attached a copy of the approved Waterway Information Table and the Hydraulic Reports for the proposed bridge replacements located on the proposed four-lane IL Route 29 over the Senachwine Creek and Senachwine Creek Overflow in Putnam County. The reports were prepared by Lin Engineering of Chatham.

The proposed structures are both three-span bridges.

Some revisions were made to the report to obtain the approved Waterway Information Tables. Details of the changes are outlined in the attached sheets.

If you have any questions or comments concerning this matter, please contact Mr. Jim Miller of our office at (309) 671-3451.


Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

JPM:tdp

Attachments

cc: Project File (M. Lewis)
Hydraulics File (J. Miller)

s:\mgr2\winword\std&plns\hydraulics\j_miller\memos\il 29_senachwine creek_sn 078-0003-0004_ptb 118-056_wit.docx

Proposed IL 29 over Senachwine Creek & Senachwine Creek Overflow BY: JPM

The Consultant has proposed replacing SN 078-0003 with a single three span bridge for the Northbound and Southbound lanes of IL 29. The bridge is 175'-0" long and 131'-2" wide.

The Consultant also proposed replacing SN 078-0004 with dual three span bridges for the Northbound and Southbound lanes of IL 29. The bridges are both 100'-0" long and 43'-2" wide.

The discharges used in the WIT were calculated with the 2004 Soong equations. The flows were not updated in accordance with the June 5, 2008 memo adopting the use of the internet based StreamStats flows. After checking the flows generated in StreamStats, the flows changed slightly.

The proposed structure did not match the existing opening size. The existing opening gives 26' of streambed for the channel, but the proposed only gave 12'. This made the bridge more restrictive at lower flows. The opening was revised to give more channel area at low flows.

The consultant read the created head at a location with fully expanded flow, but it was located well past the first river station with fully expanded flow. The created heads were read by the consultant at RS 1320 for existing and RS 1450 for proposed. However, these river stations were not the location with the highest created head in the model. To give a more accurate picture of the bridge, the headwater on the WIT was read at those sections where the created head was highest because of the downstream railroad bridge and the overlapping of the expansion and contraction cones from the bridges.

The table for use in the design of the proposed bridge will be the one generated by the natural conditions including the downstream railroad bridge, since it gives the highest Natural High Water Elevation and Headwater Elevation. The bridge will require permits from the Corps of Engineers, the EPA, and the IDNR/OWR.

Scour calculations could not be made in HEC-RAS, since the two structures are considered multiple openings. This prevents the hydraulic design module from getting individual information about each structure. The contraction scour and pier scour numbers in the report appear to be reasonable, but the abutment scour numbers are too high. Part of the reason the numbers are so high is that the scour was calculated for both structures using the full flow for each event. When revised to use a flow distribution between the 2 structures, they become more reasonable. The slopes and channel of the proposed structures should be lined with at least grade A4 riprap for protection.

No other changes were made to the hydraulic report. Revised waterway information tables are attached.

Waterway Information Table

Natural, Existing & Proposed with DS RR Bridge Included

Route: FAP 318 (IL 29)
 Section: (21B)
 County: Peoria

Exist. S.N.: 078-0003
 Prop. S.N.: N/A
 Waterway: Senachwine Creek

Computed: Lin
 Checked: JPM

Date: 3/4/2009
 Date: 6/18/2009

Drainage Area = 36.821 sq. mi.		Existing Low Grade Elevation = 470.37 ft. @ Sta. 1130+00		Proposed Low Grade Elevation = 476.43 ft. @ Sta. 6131+00										
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation					
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed				
	10	4510	855	1105	468.0	468.1	1.1	0.9	469.1	468.9				
Design	50	7200	949	1193	470.2	470.2	1.3	0.3	471.5	470.6				
Base	100	8440	949	1280	470.7	470.8	1.7	0.5	472.4	471.3				
Overtop	25	6030	949	-	469.3	-	1.1	-	470.4	-				
Max. Calc.	500	11500	-	1323	-	473.0	-	0.6	-	473.6				
10 Yr. Velocity through Ex. Bridge =			4.4		fps			10 Yr. Velocity through Pr. Bridge =			3.2		fps	

All-Time H.W.E. & Date: None Available
 Scope of Work: Structure Removal & Replacement

Existing Structure

Type: Open Abutment RC Slab
Length: 118'-8 3/4" Bk. to Bk.
Spans: 3
Low Beam: 468.90
Skew: 35° RT Ahead

Proposed Structure

Type: Open Abutment with Multiple Beams
Length: 175'-0"
Spans: 3
Low Beam: 472.51
Skew: 35° RT Ahead

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural Highwater with No DS Bridges Included, Exist. & Prop. With DS Bridges

Route: FAP 318 (IL 29)
Section: (21B)
County: Peoria

Exist. S.N.: 078-0003
Prop. S.N.: N/A
Waterway: Senachwine Creek

Computed: Lin
Checked: JPM

Date: 3/4/2009
Date: 6/18/2009

Drainage Area = 36.821 sq. mi.			Existing Low Grade Elevation = 470.37 ft. @ Sta. 1130+00		Proposed Low Grade Elevation = 476.43 ft. @ Sta. 6131+00					
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	4510	787	1105	467.2	467.2	2.1	1.8	469.3	469.0
Design	50	7200	849	1193	467.9	467.9	3.7	2.6	471.6	470.5
Base	100	8440	910	1280	468.7	468.7	3.9	2.7	472.6	471.4
Overtop	25	6030	949	-	467.5	-	2.9	-	470.4	-
Max. Calc.	500	11500	-	1323	-	469.4	-	4.3	-	473.7
10 Yr. Velocity through Ex. Bridge = 5.5 fps			10 Yr. Velocity through Pr. Bridge = 3.5 fps							

All-Time H.W.E. & Date: None Available
Scope of Work: Structure Removal & Replacement

Existing Structure

Type: Open Abutment RC Slab
Length: 118'-8 3/4" Bk. to Bk.
Spans: 3
Low Beam: 468.90
Skew: 35° RT Ahead

Proposed Structure

Type: Open Abutment with Multiple Beams
Length: 175'-0"
Spans: 3
Low Beam: 472.51
Skew: 35° RT Ahead

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural, Existing & Proposed with No DS Bridges Included

Route: FAP 318 (IL 29)
 Section: (21B)I
 County: Peoria

Exist. S.N.: 078-0003
 Prop. S.N.: N/A
 Waterway: Senachwine Creek

Computed: Lin
 Checked: JPM

Date: 3/4/2009
 Date: 6/18/2009

Drainage Area =		36.821	sq. mi.		Existing Low Grade Elevation =		470.37	ft. @ Sta.		1130+00	
					Proposed Low Grade Elevation =		476.43	ft. @ Sta.		6131+00	
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation		
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	
	10	4510	787	1105	467.2	467.2	1.6	1.1	468.8	468.3	
Design	50	7200	849	1193	467.9	467.9	2.1	1.2	470.0	469.1	
Base	100	8440	910	1280	468.7	468.7	2.2	1.1	470.9	469.8	
Overtop	75	7820	880	-	468.3	-	2.2	-	470.5	-	
Max. Calc.	500	11500	-	1323	-	469.4	-	2.1	-	471.5	
10 Yr. Velocity through Ex. Bridge =			5.6		fps		10 Yr. Velocity through Pr. Bridge =			3.4	fps

All-Time H.W.E. & Date: None Available
 Scope of Work: Structure Removal & Replacement

Existing Structure

Type: Open Abutment RC Slab
Length: 118'-8 3/4" Bk. to Bk.
Spans: 3
Low Beam: 468.90
Skew: 35° RT Ahead

Proposed Structure

Type: Open Abutment with Multiple Beams
Length: 175'-0"
Spans: 3
Low Beam: 472.51
Skew: 35° RT Ahead

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural, Existing & Proposed with DS RR Bridge Included

Route: FAP 318 (IL 29)
 Section: 21B
 County: Peoria

Exist. S.N.: 078-0004
 Prop. S.N.: N/A
 Waterway: Senachwine Creek Overflow

Computed: Lin
 Checked: JPM

Date: 3/4/2009
 Date: 6/18/2009

Drainage Area = 36.821 sq. mi.		Existing Low Grade Elevation = 471.56 ft. @ Sta. 1112+00								
		Proposed Low Grade Elevation = 476.75 ft. @ Sta. 6119+00								
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	4510	194	306	468.0	468.1	1.1	0.9	469.1	468.9
Design	50	7200	232	473	470.2	470.2	1.3	0.3	471.5	470.6
Base	100	8440	232	520	470.8	470.8	1.7	0.5	472.4	471.3
Overtop	75	7820	232	-	470.5	-	1.5	-	472.0	-
Max. Calc.	500	11500	-	707	-	473.0	-	0.6	-	473.6

10 Yr. Velocity through Ex. Bridge = 4.4 fps

10 Yr. Velocity through Pr. Bridge = 1.2 fps

All-Time H.W.E. & Date: None Available

Scope of Work: Structure Removal & Replacement

Existing Structure

Type: Closed Abutment with Channel Bms
Length: 37'-6" Bk. to Bk.
Spans: 3
Low Beam: 469.03
Skew: 0

Proposed Structure

Type: Open Abutment with Multiple Beams
Length: 100'-0" Bk. to Bk.
Spans: 3
Low Beam: 473.29
Skew: 0

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural Highwater with No DS Bridges Included, Exist. & Prop. With DS Bridges

Route: FAP 318 (IL 29)
 Section: 21B
 County: Peoria

Exist. S.N.: 078-0004
 Prop. S.N.: N/A
 Waterway: Senachwine Creek Overflow

Computed: Lin
 Checked: JPM

Date: 3/4/2009
 Date: 6/18/2009

Drainage Area = 36.821 sq. mi.		Existing Low Grade Elevation = 471.56 ft. @ Sta. 1112+00								
		Proposed Low Grade Elevation = 476.75 ft. @ Sta. 6119+00								
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	4510	164	251	467.2	467.2	2.1	1.8	469.3	469.0
Design	50	7200	191	302	467.9	467.9	3.7	2.6	471.6	470.5
Base	100	8440	218	353	468.7	468.7	3.9	2.7	472.6	471.4
Overtop	50	7200	191	-	467.9	-	3.7	-	471.6	-
Max. Calc.	500	11500	-	408	-	469.4	-	4.3	-	473.7

10 Yr. Velocity through Ex. Bridge = 2.0 fps

10 Yr. Velocity through Pr. Bridge = 1.2 fps

All-Time H.W.E. & Date: None Available

Scope of Work: Structure Removal & Replacement

Existing Structure

Type: Closed Abutment with Channel Bms
Length: 37'-6" Bk. to Bk.
Spans: 3
Low Beam: 469.03
Skew: 0

Proposed Structure

Type: Open Abutment with Multiple Beams
Length: 100'-0" Bk. to Bk.
Spans: 3
Low Beam: 473.29
Skew: 0

Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Waterway Information Table

Natural, Existing & Proposed with No DS Bridges Included

Route: FAP 318 (IL 29)
 Section: 21B
 County: Peoria

Exist. S.N.: 078-0004
 Prop. S.N.: N/A
 Waterway: Senachwine Creek Overflow

Computed: Lin
 Checked: JPM

Date: 3/4/2009
 Date: 6/18/2009

Drainage Area = 36.821 sq. mi.			Existing Low Grade Elevation = 471.56 ft. @ Sta. 1112+00		Proposed Low Grade Elevation = 476.75 ft. @ Sta. 6119+00					
Flood	Frequency Year	Q (cfs)	Waterway Opening (s.f.)		Natural H.W.E.		Head (ft.)		Headwater Elevation	
			Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
	10	4510	164	251	467.2	467.2	1.6	1.1	468.8	468.3
Design	50	7200	191	302	467.9	467.9	2.1	1.2	470.0	469.1
Base	100	8440	218	353	468.7	468.7	2.2	1.1	470.9	469.8
Overtop	300	9970	232	-	469.0	-	3.3	-	472.3	-
Max. Calc.	500	11500	-	408	-	469.4	-	2.1	-	471.5

10 Yr. Velocity through Ex. Bridge = 2.0 fps

10 Yr. Velocity through Pr. Bridge = 1.2 fps

All-Time H.W.E. & Date: None Available

Scope of Work: Structure Removal & Replacement

Existing Structure

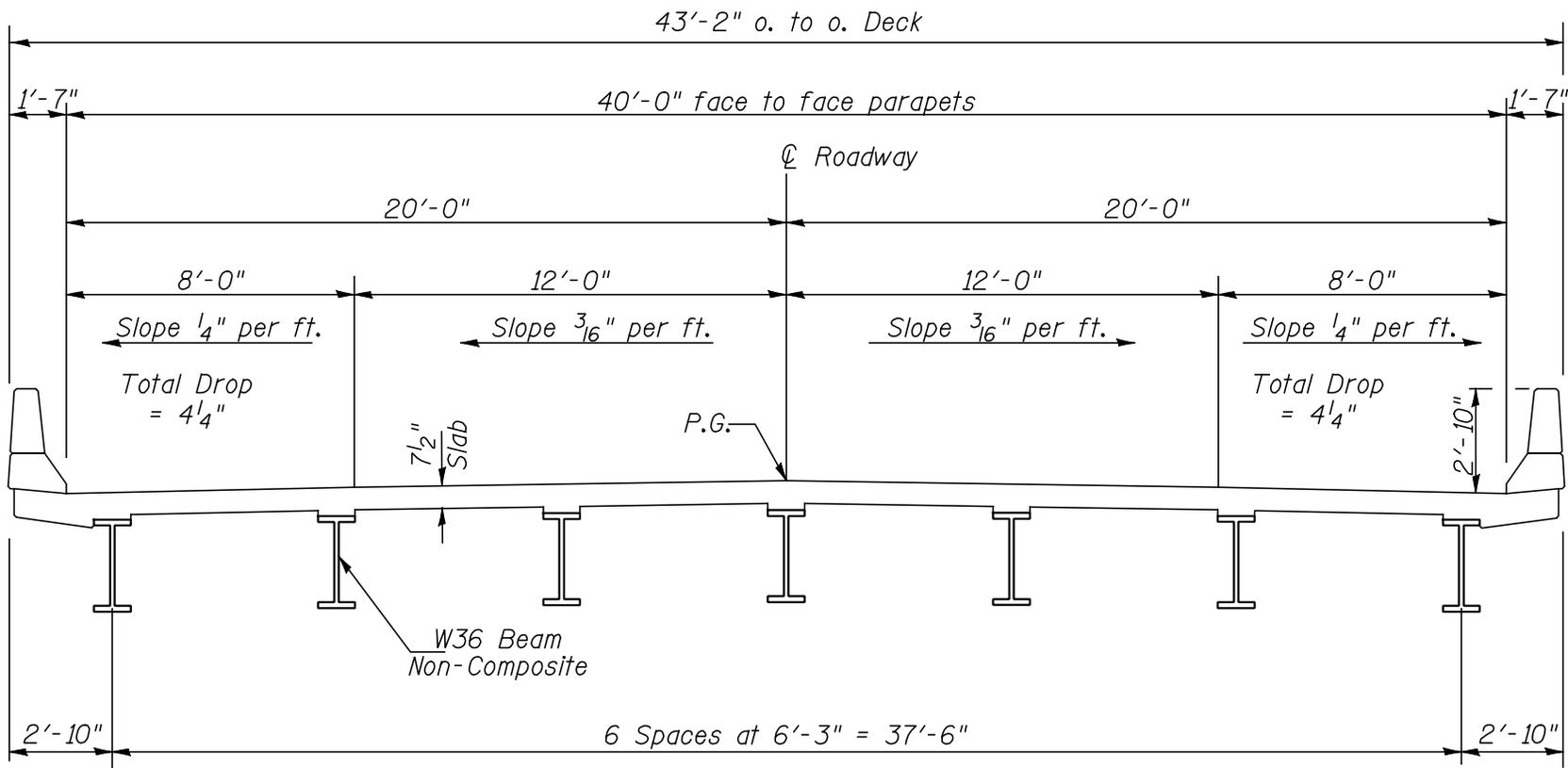
Type: Closed Abutment with Channel Bms
Length: 37'-6" Bk. to Bk.
Spans: 3
Low Beam: 469.03
Skew: 0

Proposed Structure

Type: Open Abutment with Multiple Beams
Length: 100'-0" Bk. to Bk.
Spans: 3
Low Beam: 473.29
Skew: 0

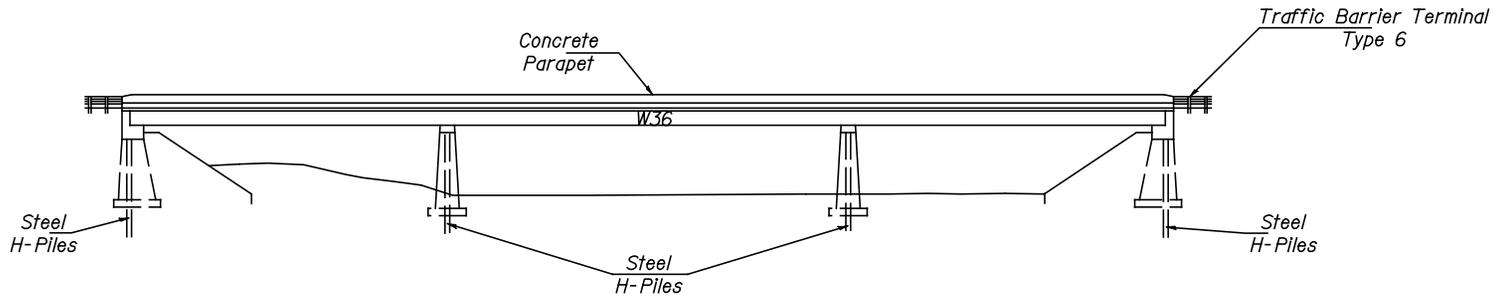
Note: Proposed structure details are preliminary; subject to refinement in TSL stage.

Structure Sketches

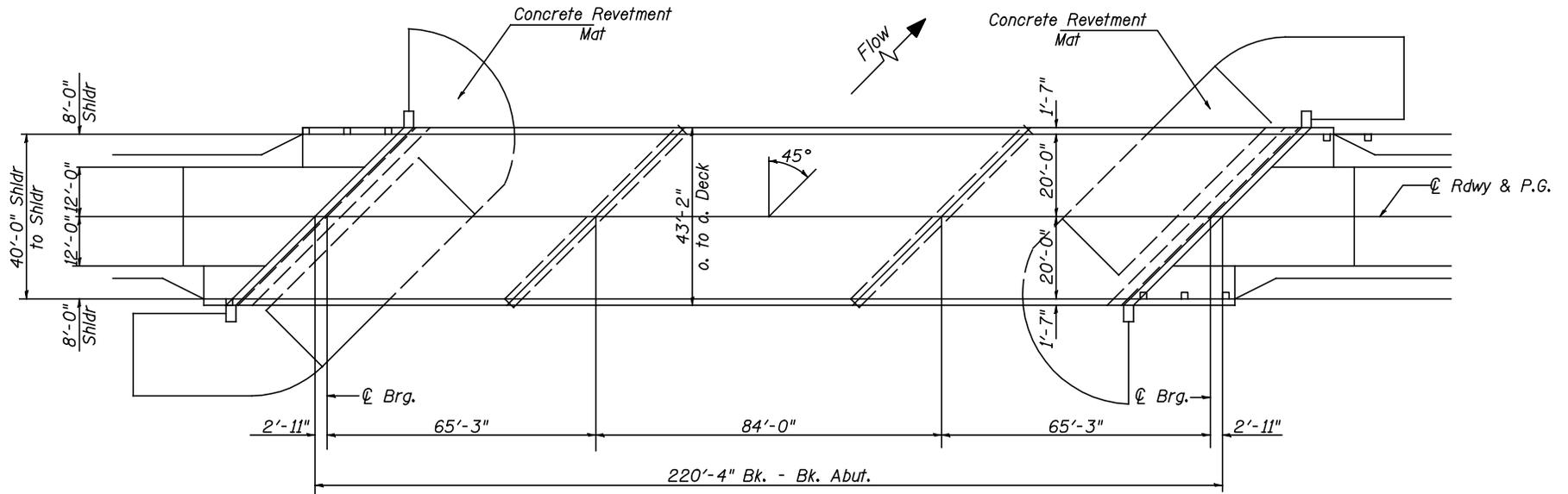
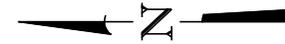


CROSS SECTION

**EXISTING CROSS SECTION
 IL. RTE 29 OVER SENACHWINE CREEK
 S.N. 072-0014
 PEORIA COUNTY**

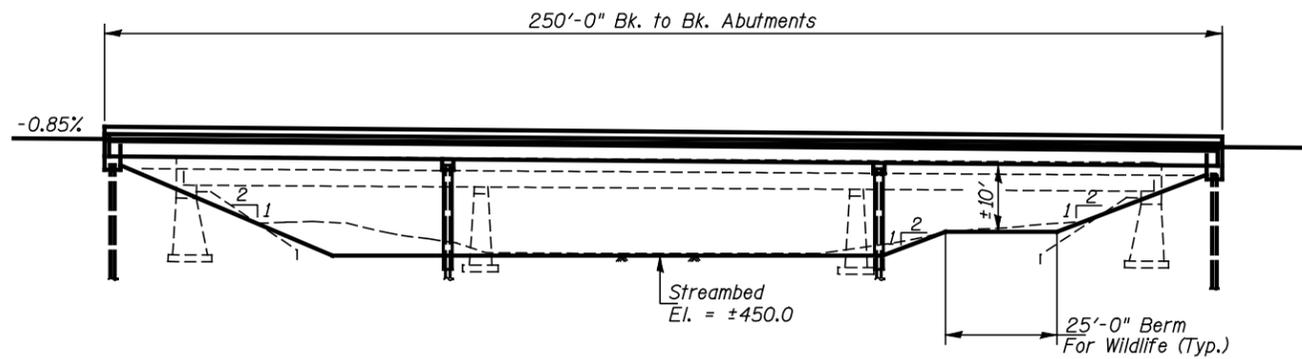


ELEVATION

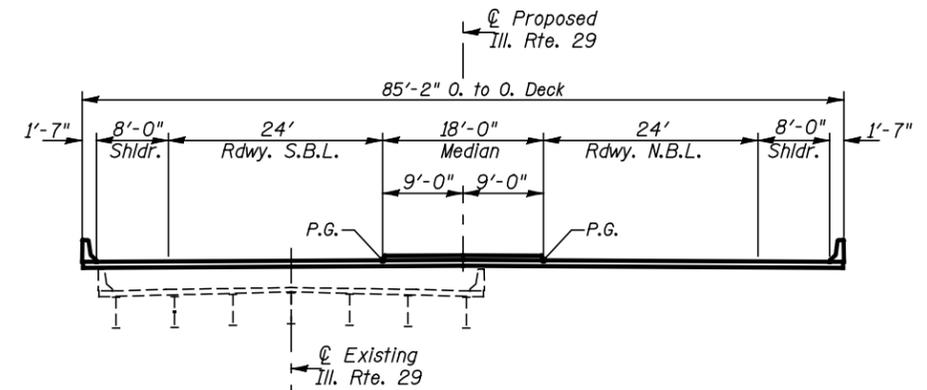


PLAN

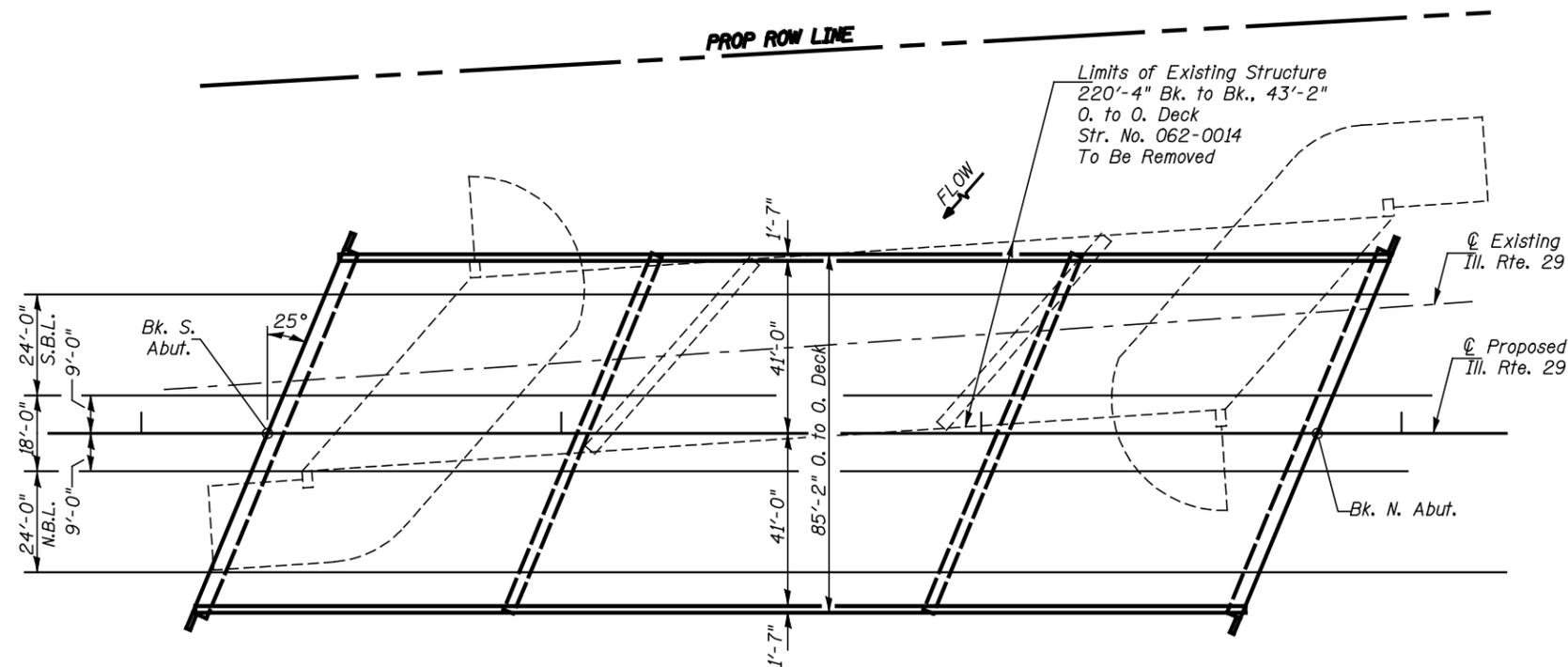
**EXISTING STRUCTURE
 IL. RTE 29 OVER SENACHWINE CREEK
 S.N. 072-0014
 PEORIA COUNTY**



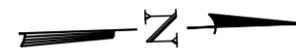
ELEVATION



CROSS SECTION (PROPOSED WIDTH)
(Looking North)



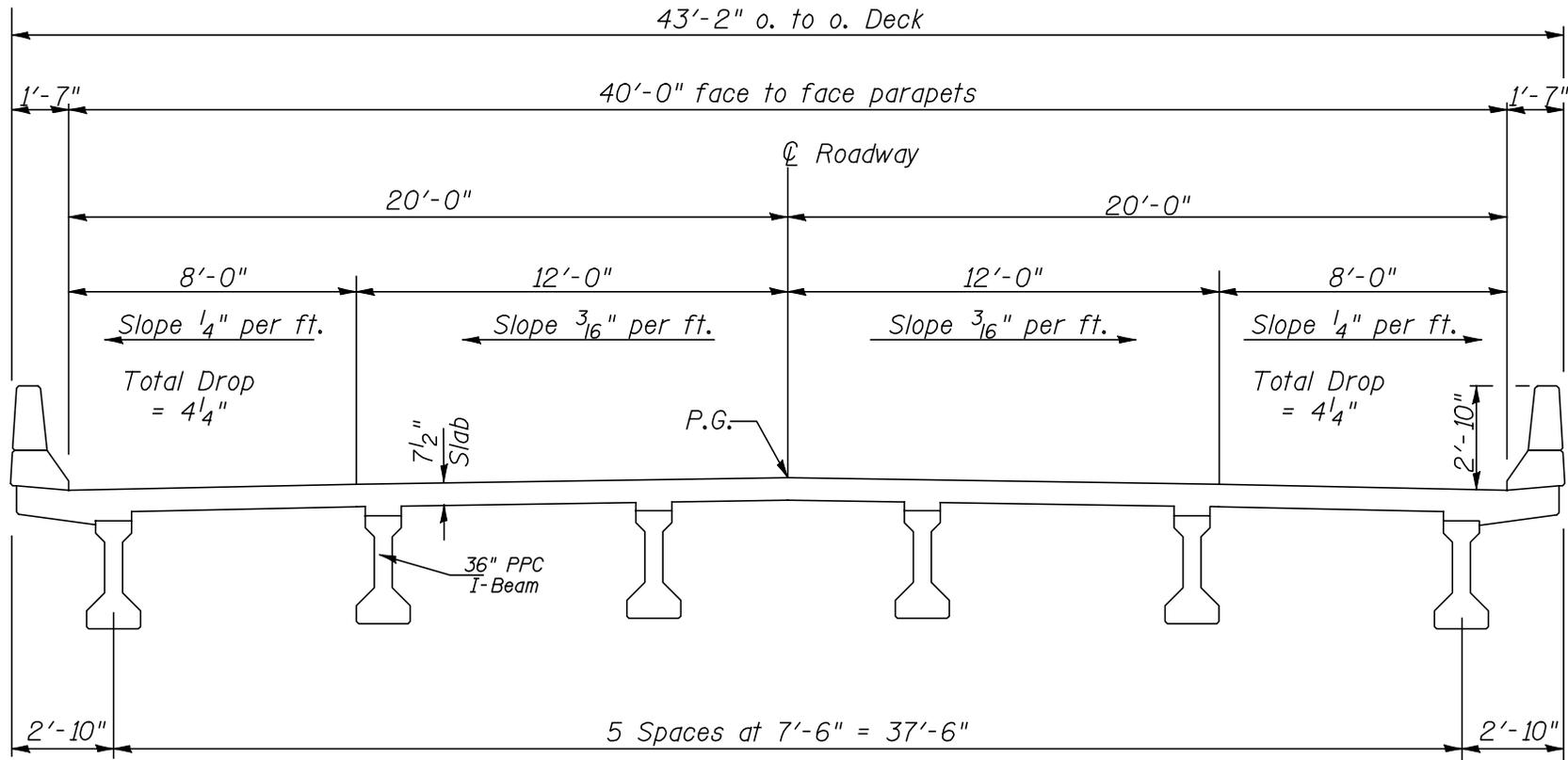
PLAN



The proposed profile grade line, pier locations and the bridge length are subject to refinement in detailed planning and design stage.

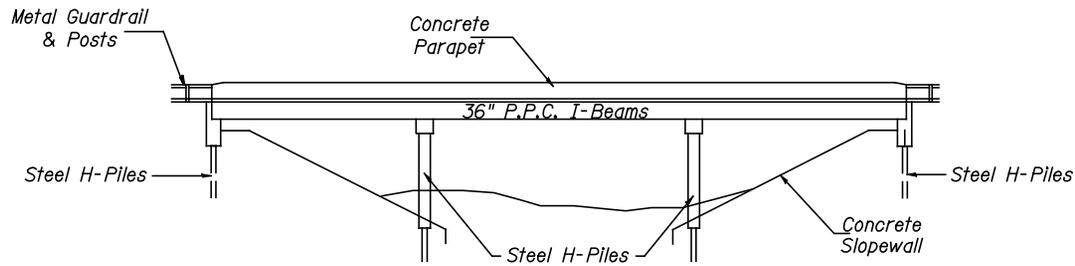
Traffic shall be maintained during construction using Stage Construction. Details of staging and lane widths will be determined during TS&L preparation.

PROPOSED STRUCTURE
FAP 318 (ILL RTE 29)
SENACHWINE CREEK
PEORIA COUNTY
SN 072-0014

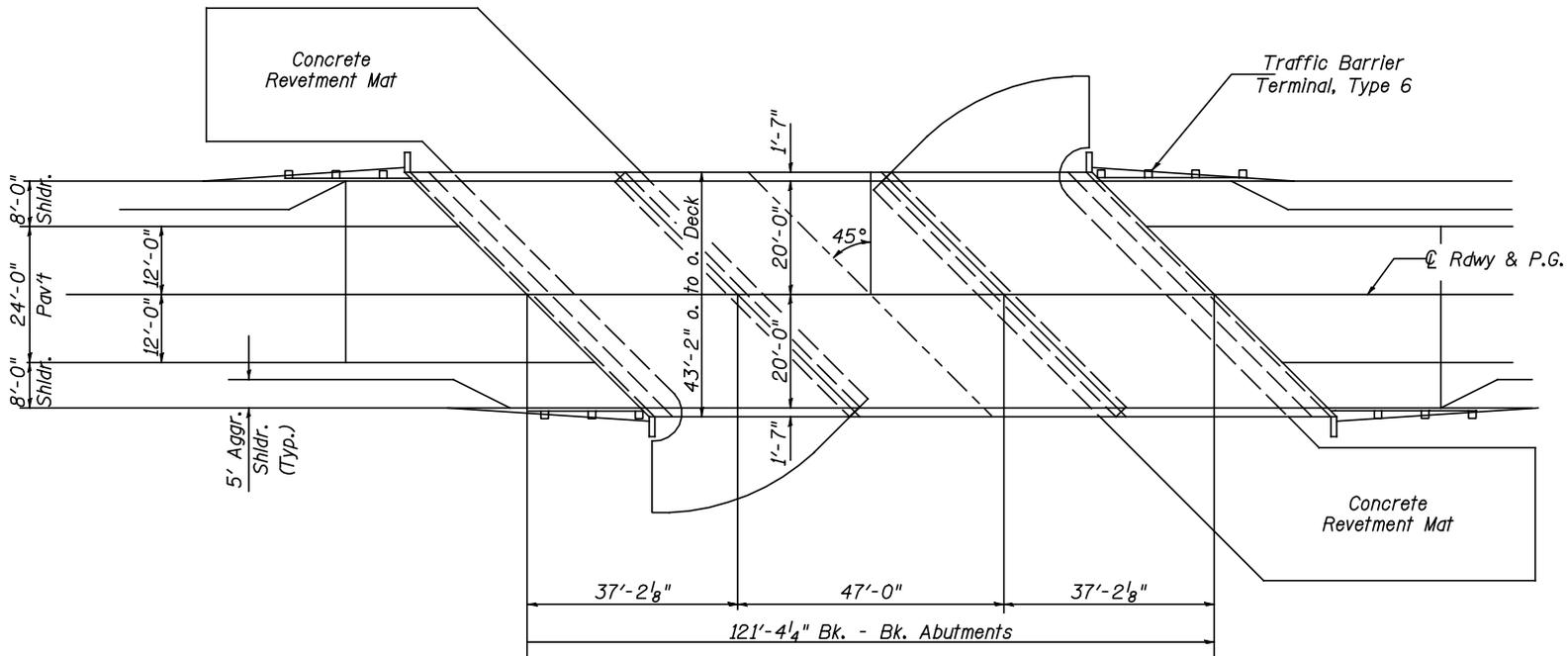
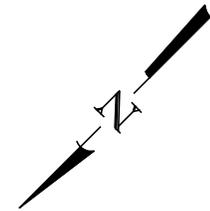


CROSS SECTION

**EXISTING CROSS SECTION
 IL. RTE 29 OVER COON CREEK
 S.N. 072-0013
 PEORIA COUNTY**

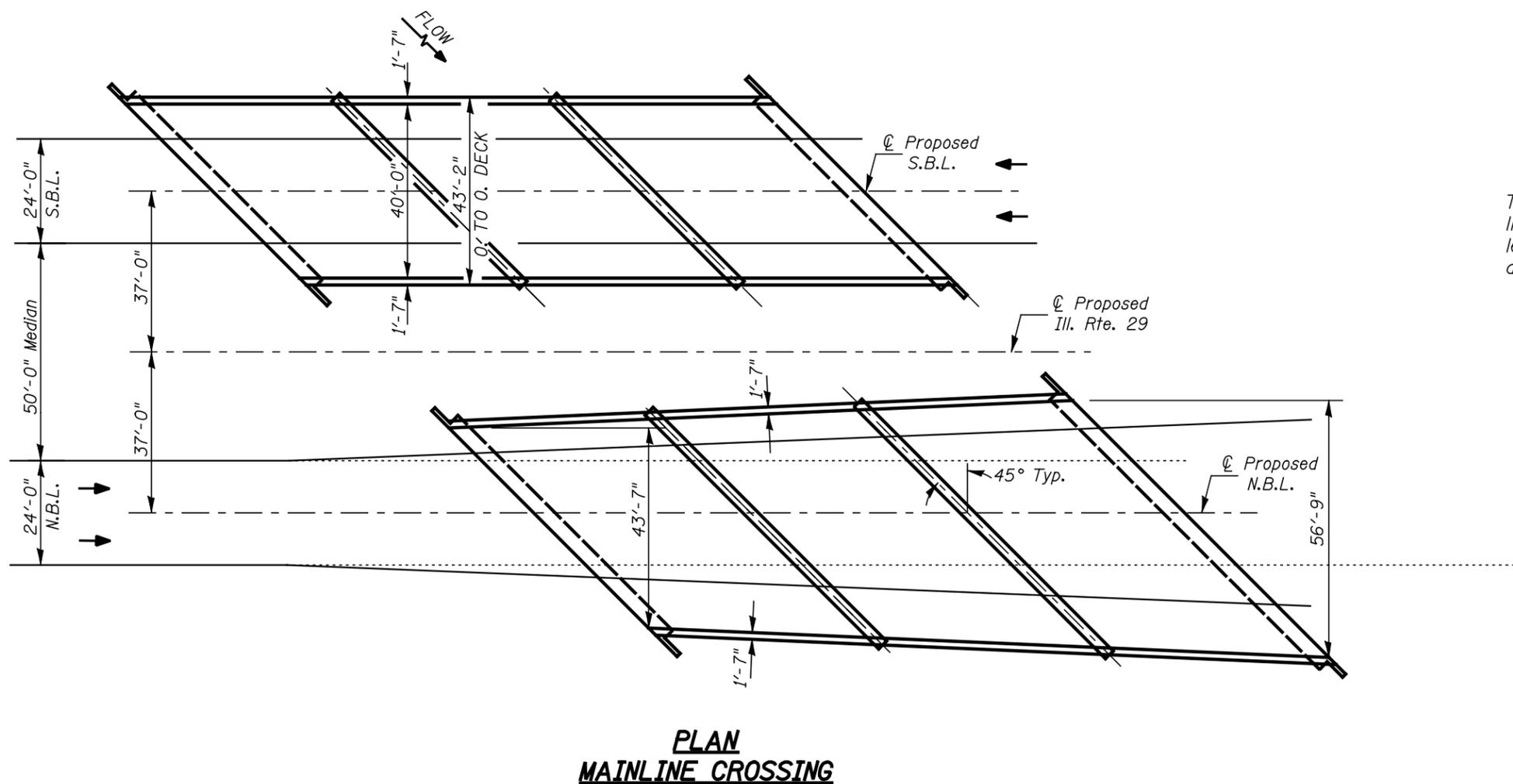
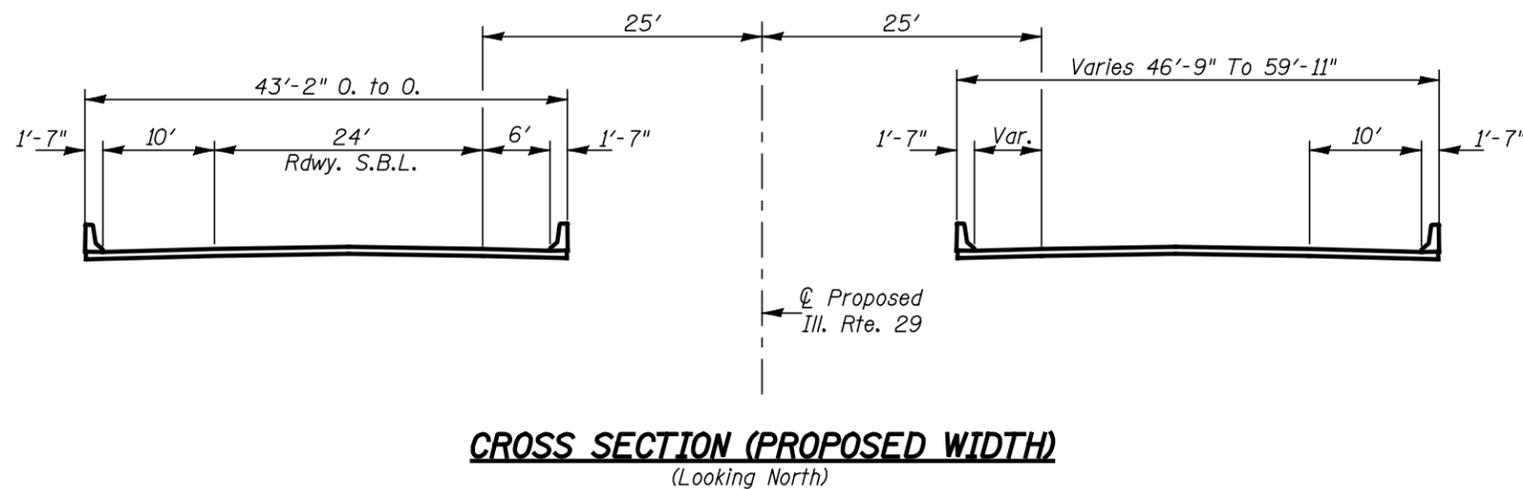
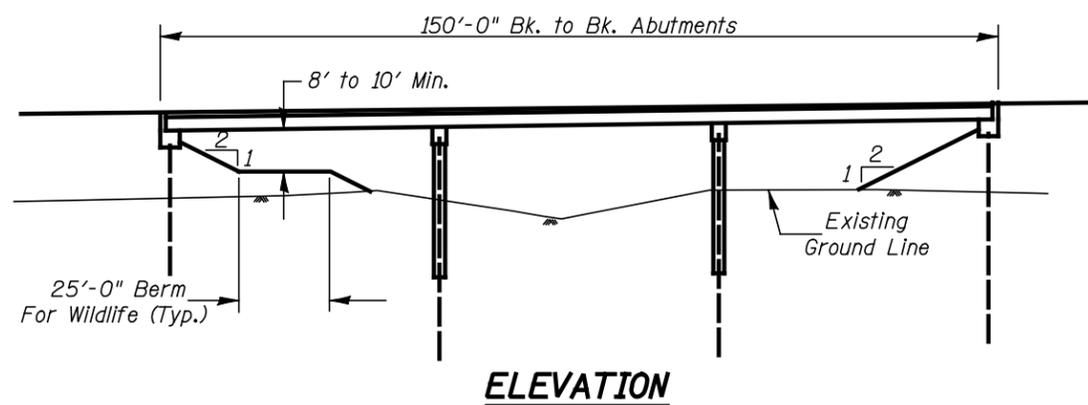


ELEVATION

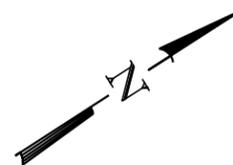


PLAN

**EXISTING STRUCTURE
 IL. RTE 29 OVER COON CREEK
 S.N. 072-0013
 PEORIA COUNTY**

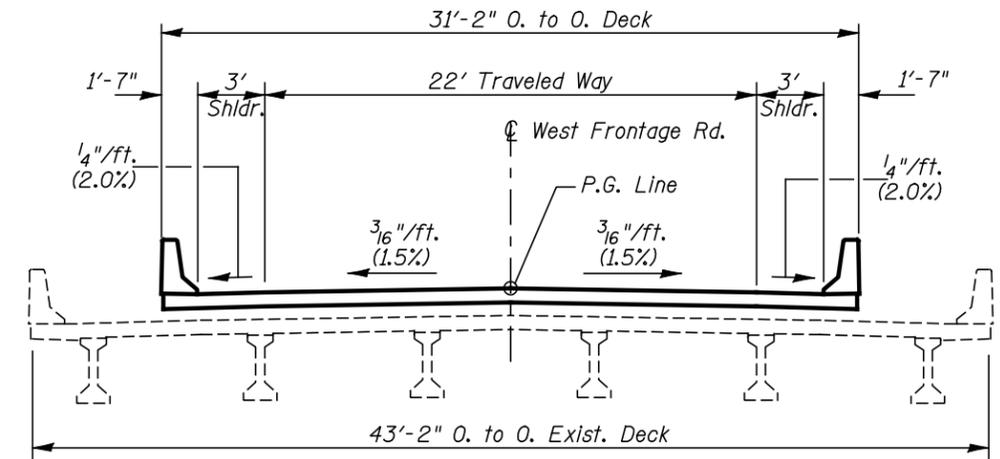
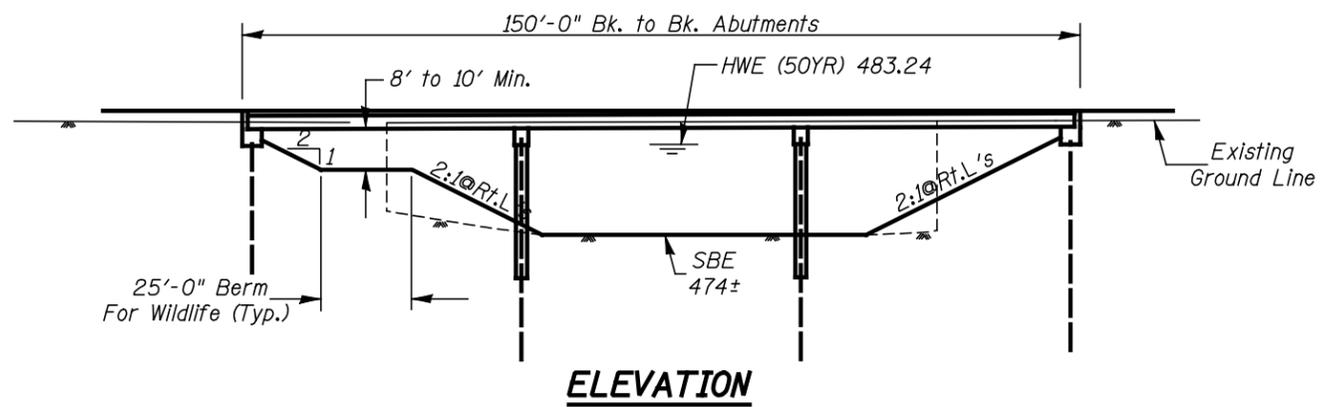


The proposed pier locations, profile grade line, lane tapers and proposed bridge length are subject to refinement during detailed planning and design phase.



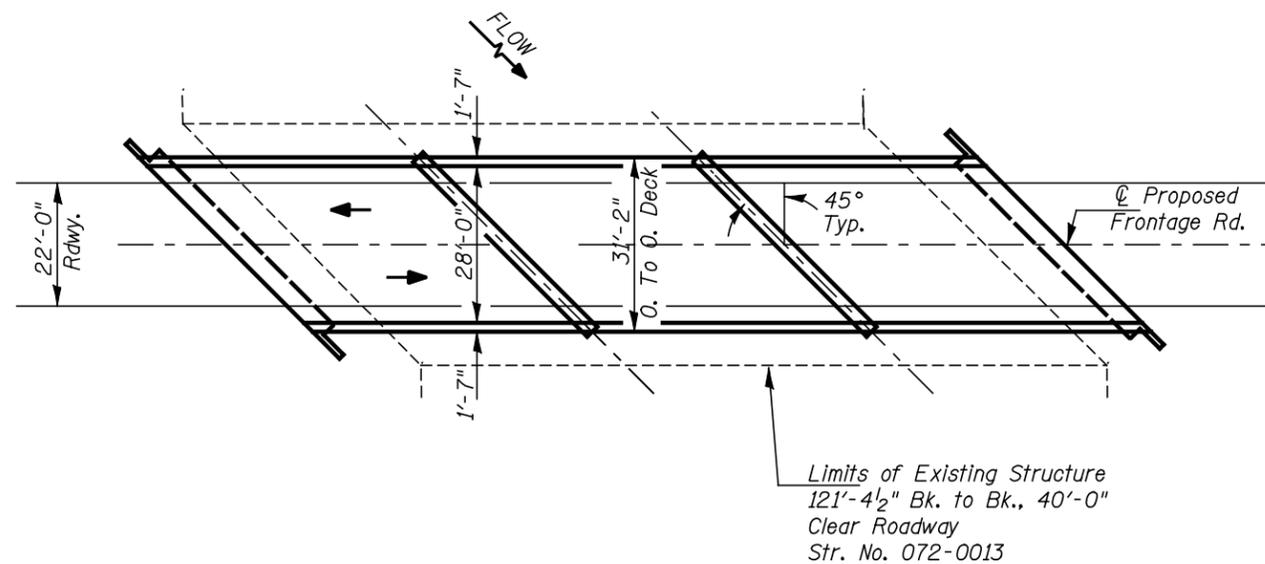
MAINLINE CROSSING

PROPOSED BRIDGE DRAWING
FAP 318 (IL RTE. 29)
PEORIA COUNTY
OVER COON CREEK
SN 072-****

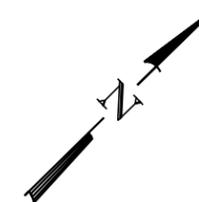


RELOCATED BOEHLE ROAD
 (Looking East)
 (See Fig. 44-2H, BDE Manual)

The proposed pier locations, profile grade line and proposed bridge length are subject to refinement during detailed planning and design phase.

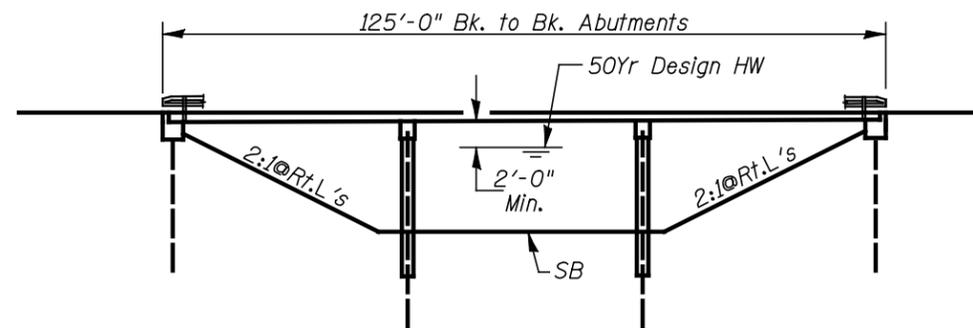


RELOCATED BOEHLE ROAD

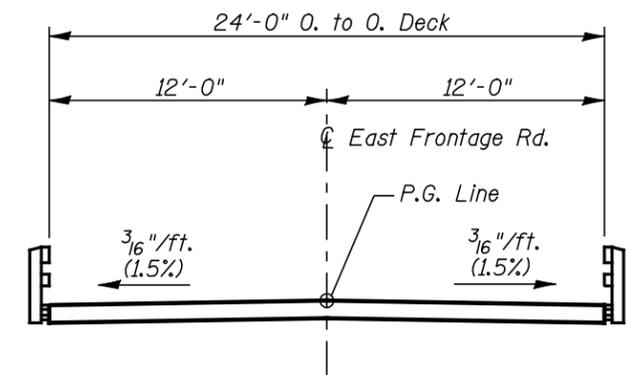


RELOCATED BOEHLE ROAD

PROPOSED BRIDGE DRAWING
FAP 318 (IL RTE. 29)
PEORIA COUNTY
OVER COON CREEK

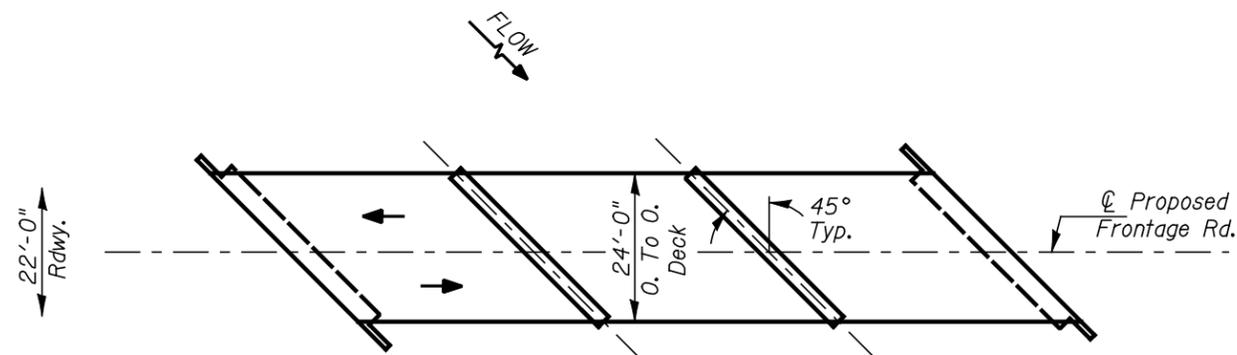


ELEVATION

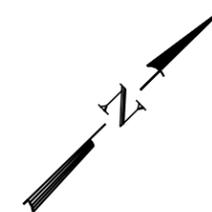


CROSS SECTION
PROPOSED SERVICE ROAD, SOUTH
(Looking East)

The proposed pier locations, profile grade line and proposed bridge length are subject to refinement during detailed planning and design phase.

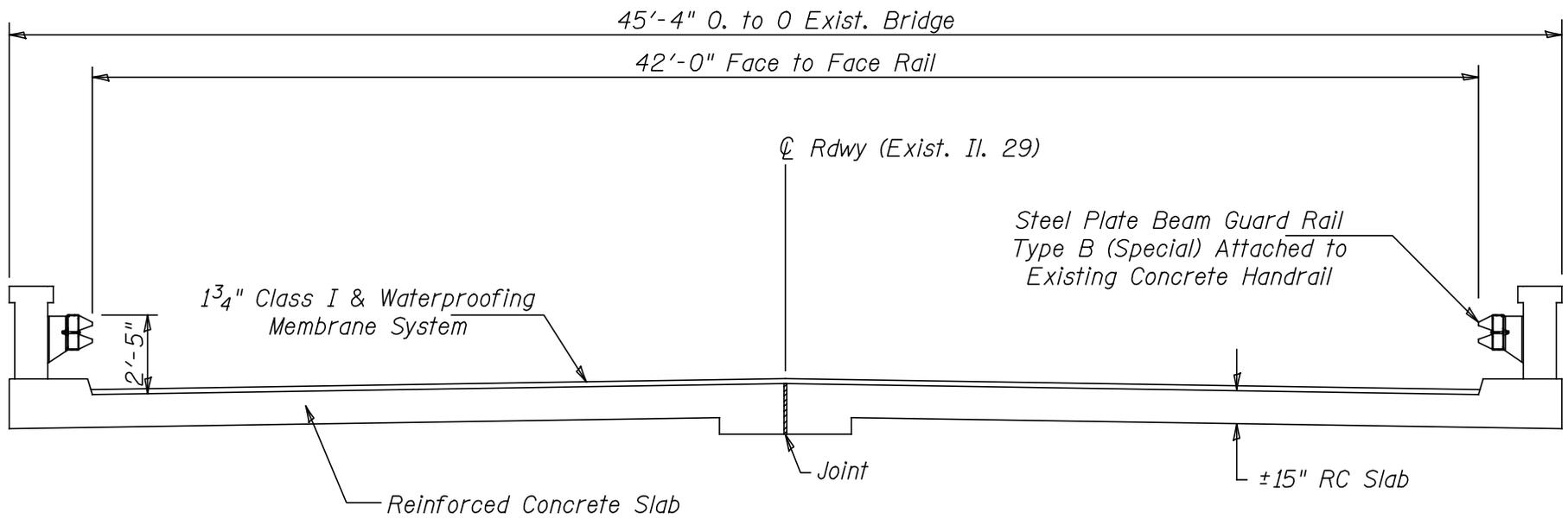


PLAN
PROPOSED SERVICE ROAD, SOUTH

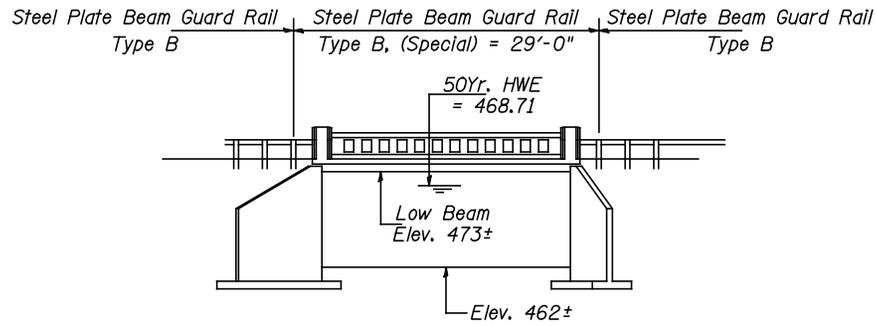


PROPOSED SERVICE ROAD, SOUTH

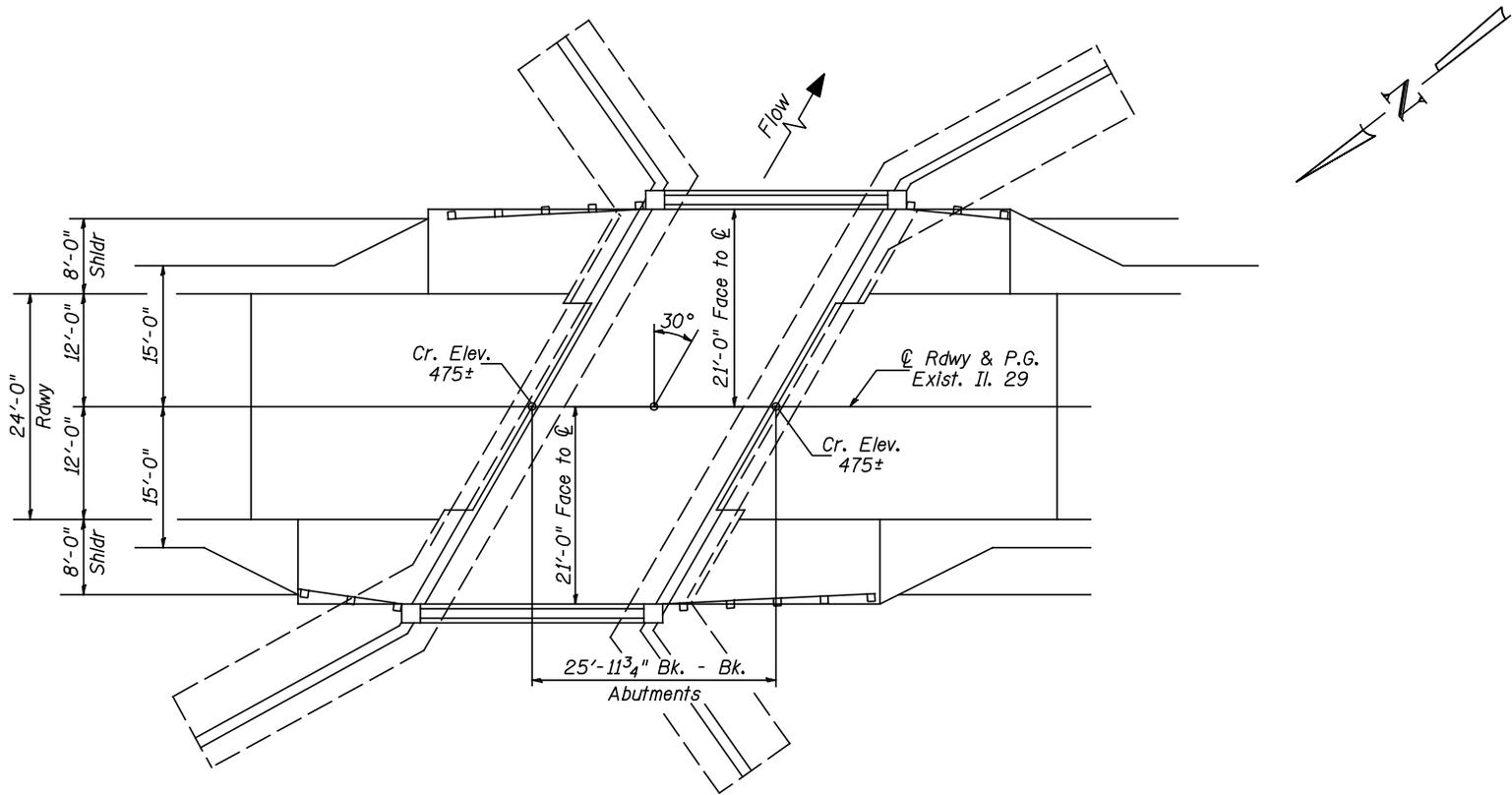
PROPOSED BRIDGE DRAWING
FAP 318 (IL RTE. 29)
PEORIA COUNTY
OVER COON CREEK



**EXISTING CROSS SECTION
 IL. RTE 29 OVER TRIB. TO ILLINOIS RIVER
 S.N. 062-0010
 MARSHALL COUNTY**

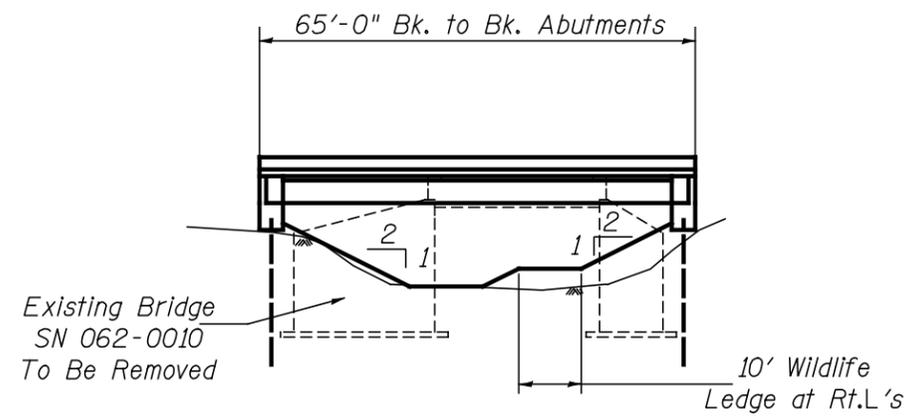


ELEVATION

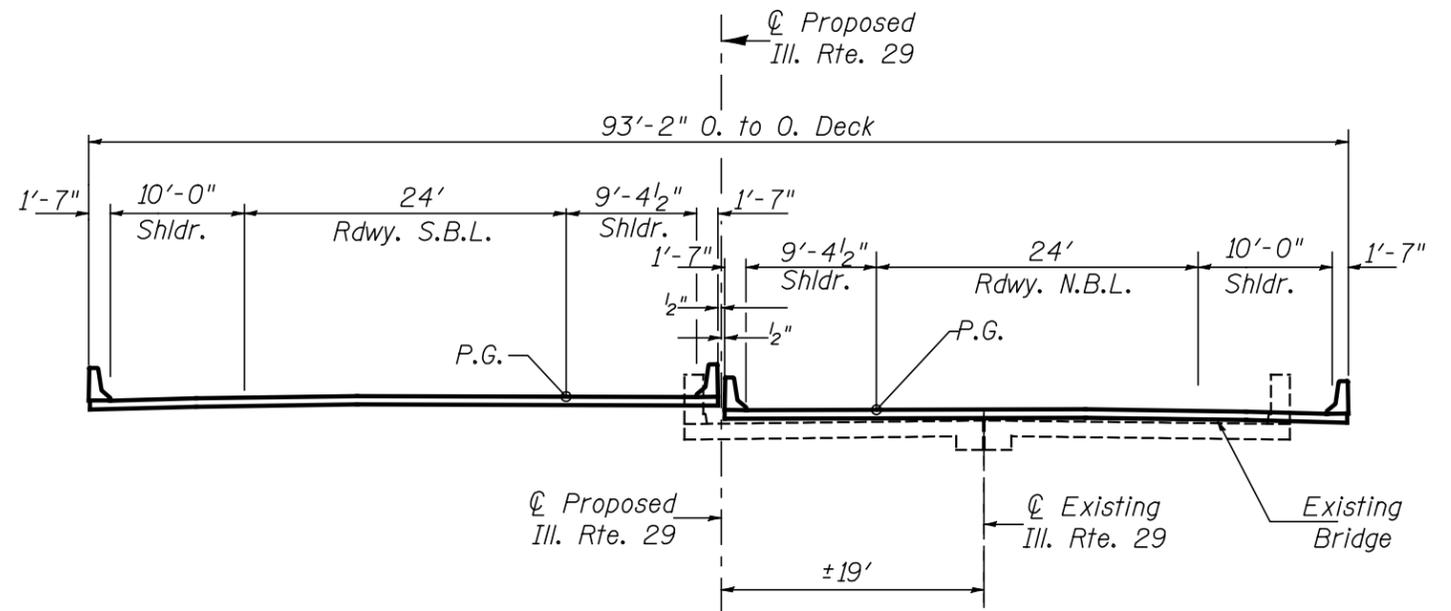


PLAN

**EXISTING BRIDGE
 IL. RTE 29 OVER TRIB. TO ILLINOIS RIVER
 S.N. 062-0010
 MARSHALL COUNTY**



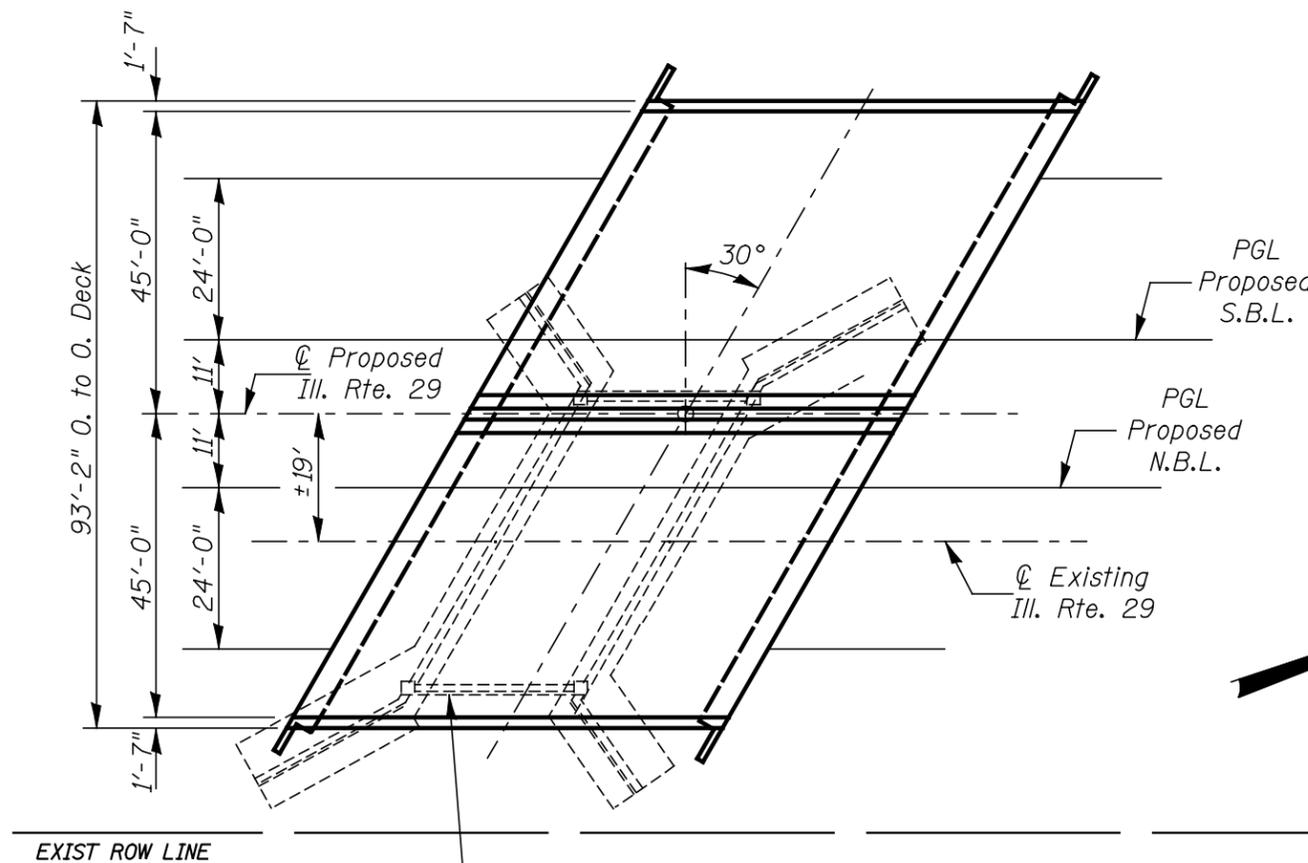
ELEVATION



CROSS SECTION (PROPOSED WIDTH)
(Looking North)

The profile grade line, and the bridge length are subject to refinement in detailed design.

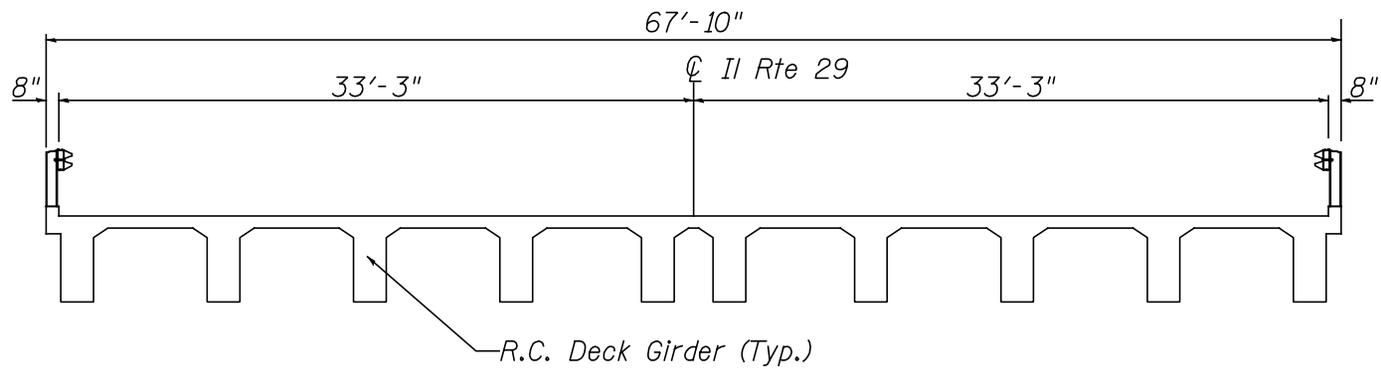
PROP ROW LINE



Limits of Existing Structure
25'-11³/₄" Bk. to Bk., 45'-4" O. to O.
Str. No. 062-0010

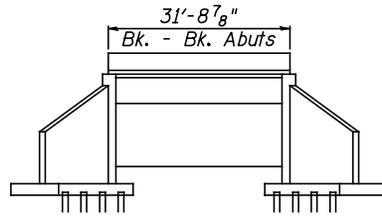
PLAN

PROPOSED STRUCTURE
FAP 318 (IL. RTE. 29)
OVER ILL. RIVER TRIBUTARY
MARSHALL COUNTY
SN 062-0010 (EXIST.)

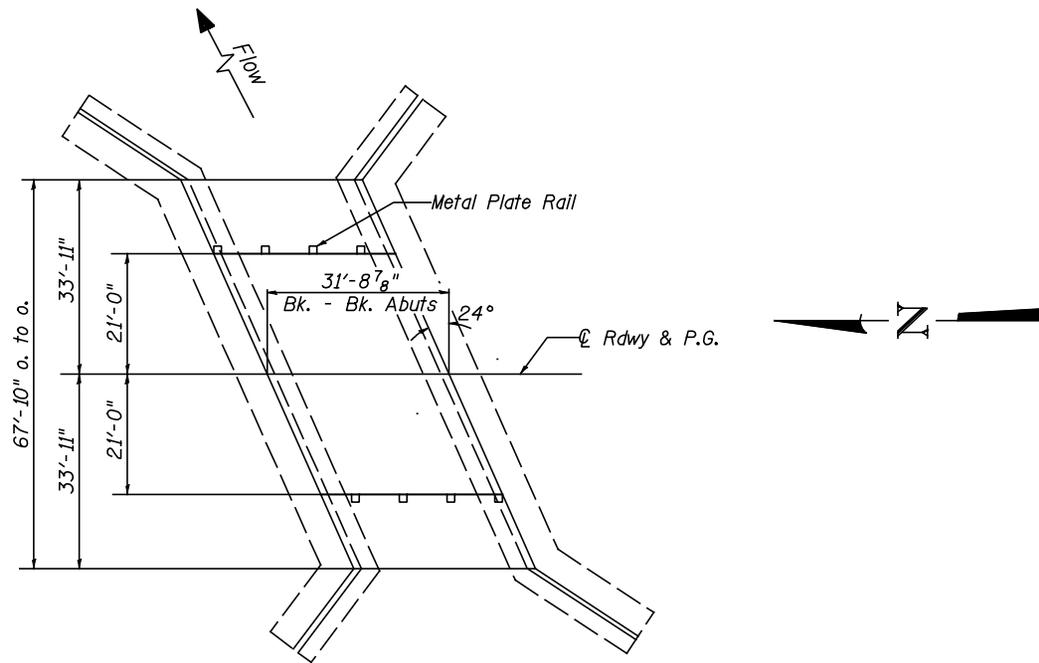


CROSS SECTION

**EXISTING CROSS SECTION
IL. RTE 29 OVER RATTLESNAKE HALLOW
S.N. 0692-0009
MARSHALL COUNTY**

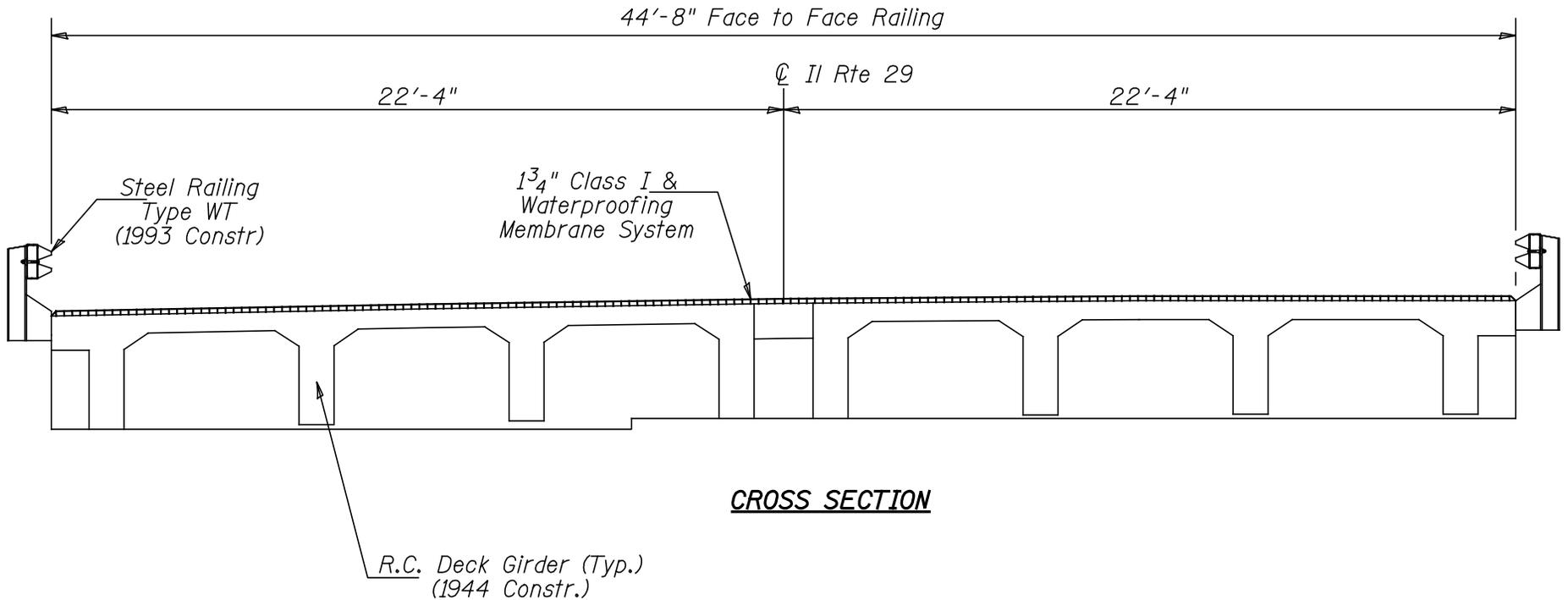


ELEVATION

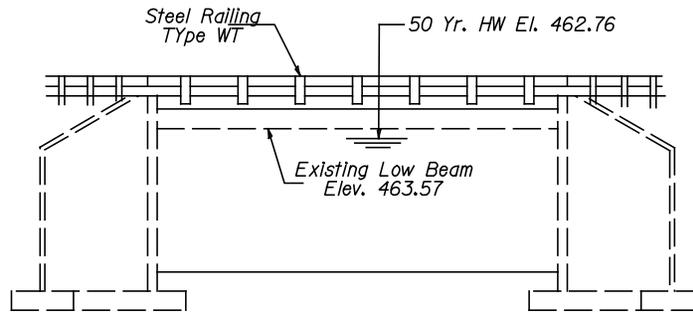


PLAN

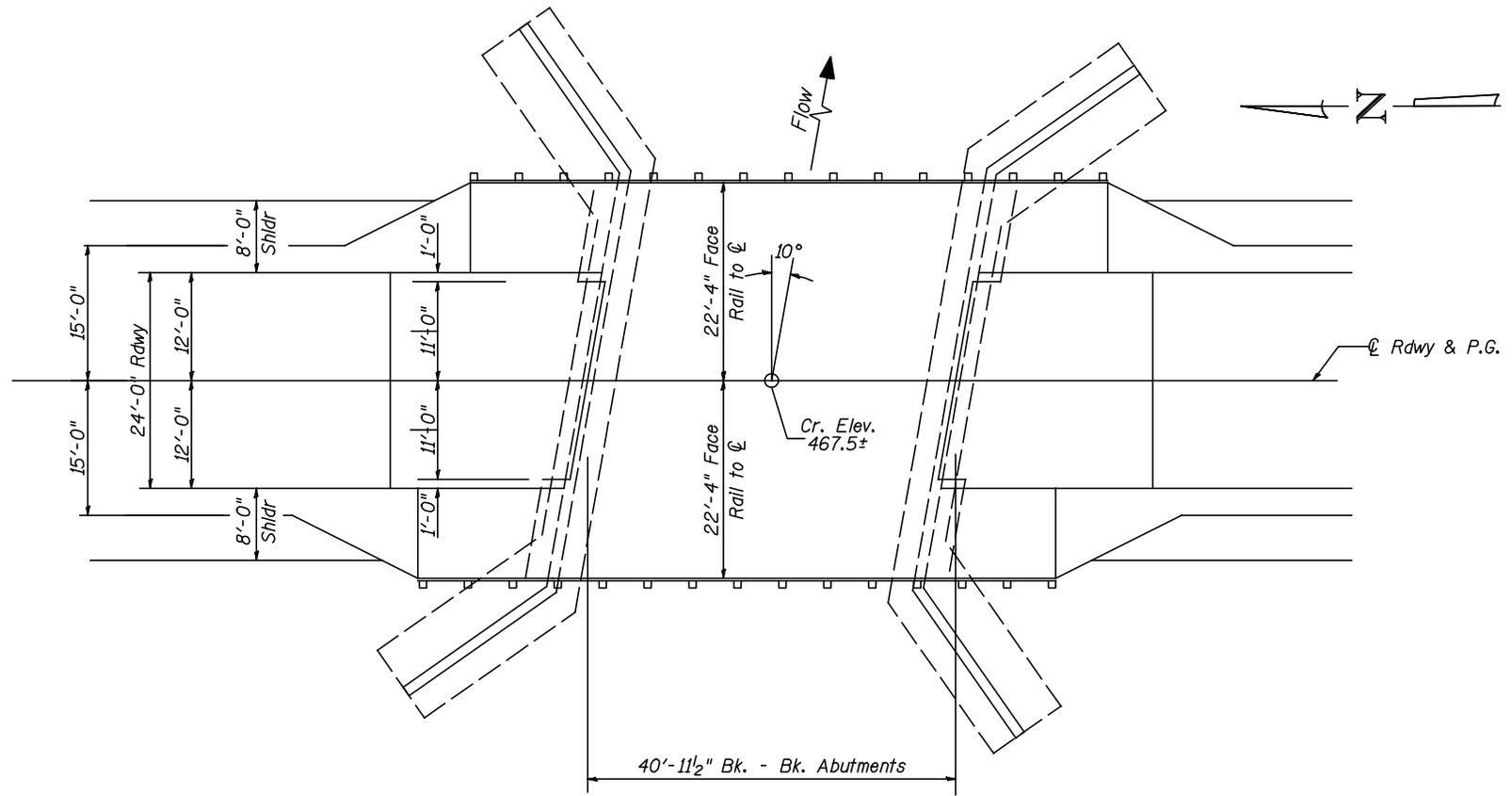
**EXISTING STRUCTURE
 IL. RTE 29 OVER RATTLESNAKE HOLLOW
 S.N. 062-0009
 MARSHALL COUNTY**



**EXISTING CROSS SECTION
 IL. RTE 29 OVER BARRVILLE CREEK
 S.N. 062-0008
 MARSHALL COUNTY**

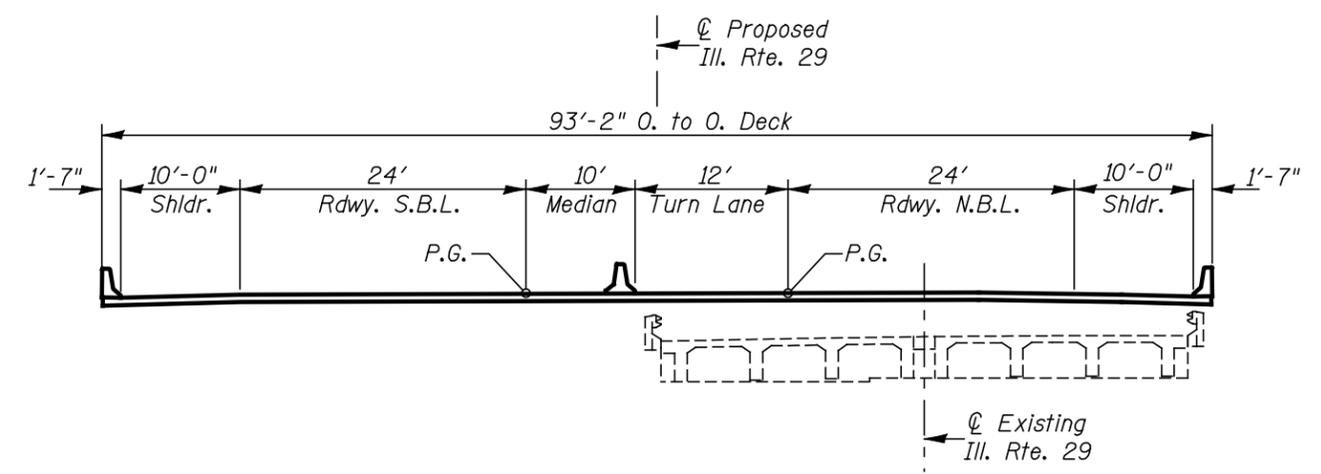
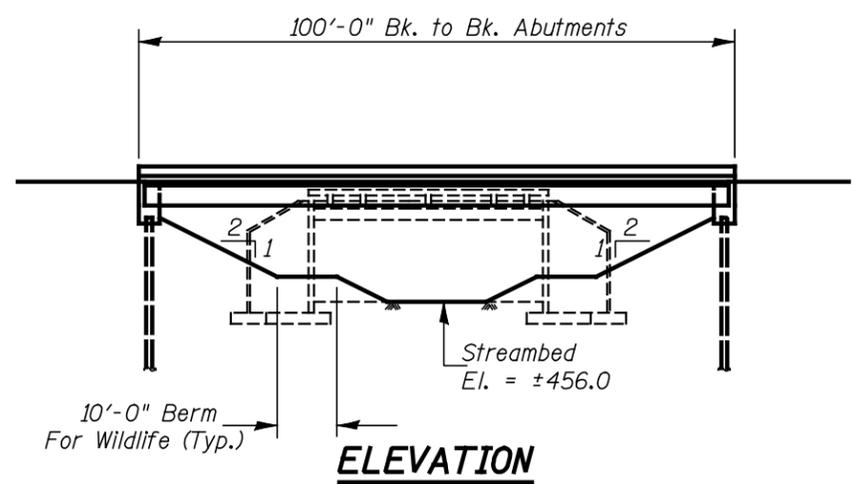


ELEVATION



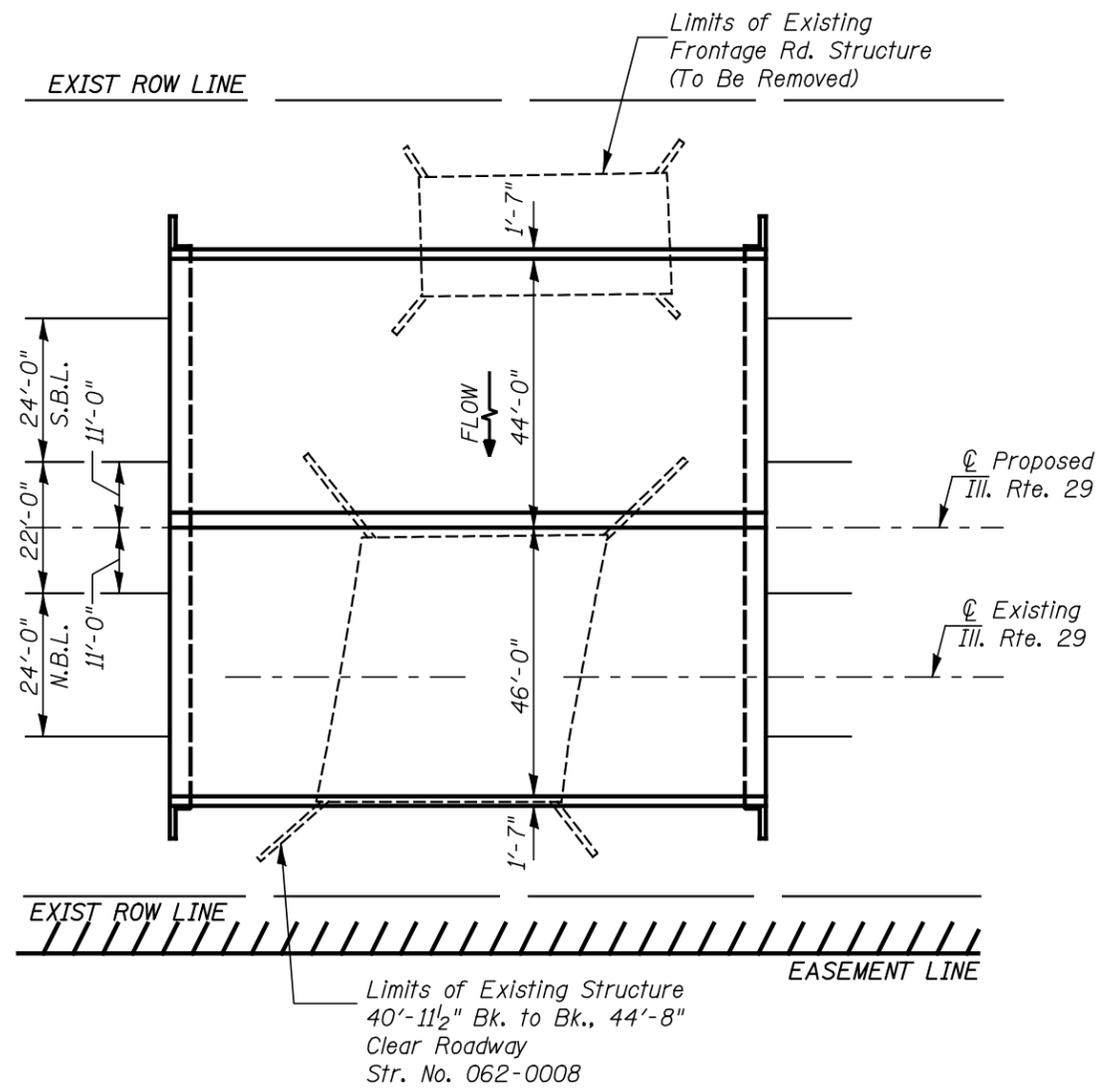
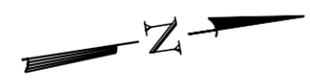
PLAN

**EXISTING STRUCTURE
IL. RTE 29 OVER BARRVILLE CREEK
S.N. 062-0008
MARSHALL COUNTY**



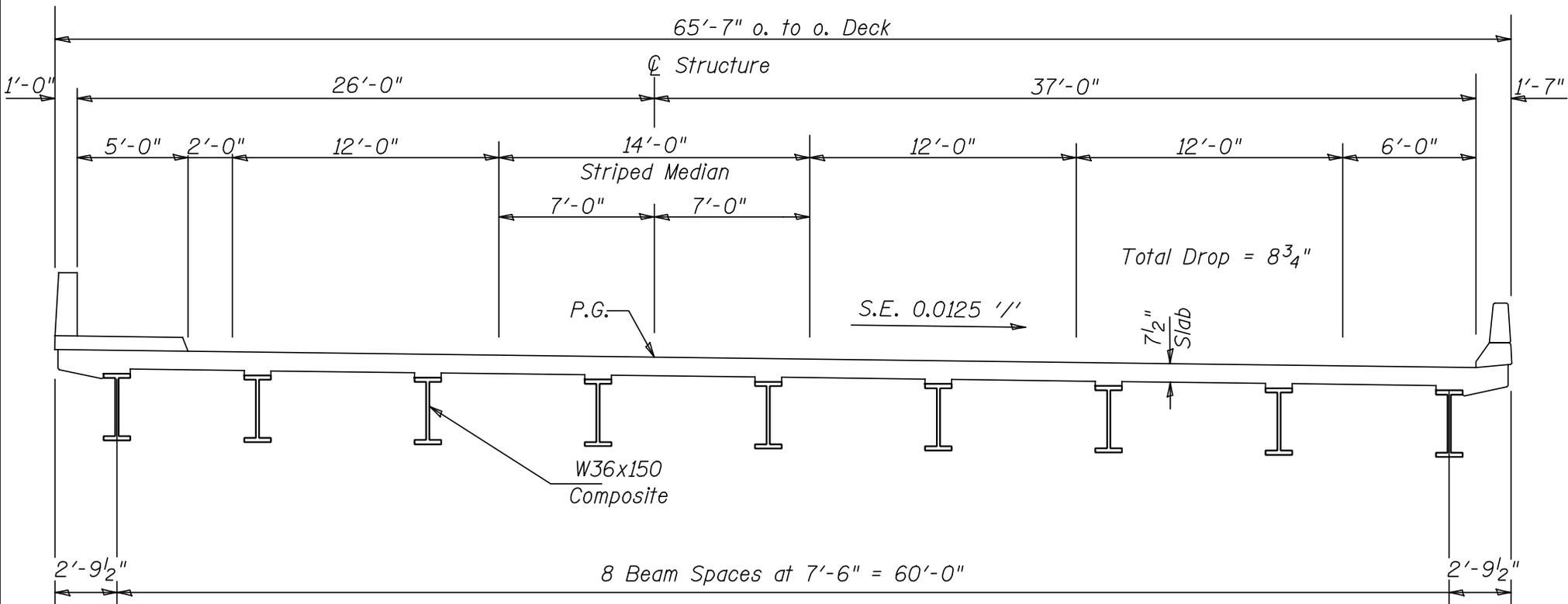
CROSS SECTION (PROPOSED WIDTH)
(Looking North)

The proposed profile grade line, and the bridge length are subject to refinement in detailed planning and design stage.



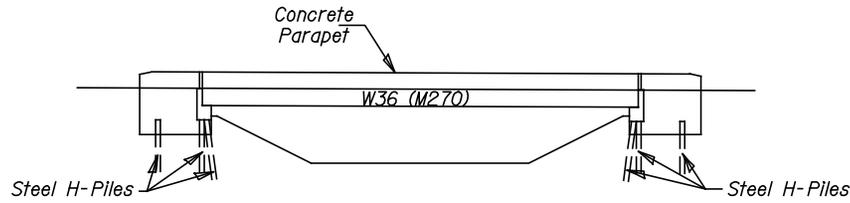
PLAN

**PROPOSED STRUCTURE
FAP 318 (ILL RTE 29)
BARRVILLE CREEK OVERFLOW
MARSHALL COUNTY
SN 062-0008**

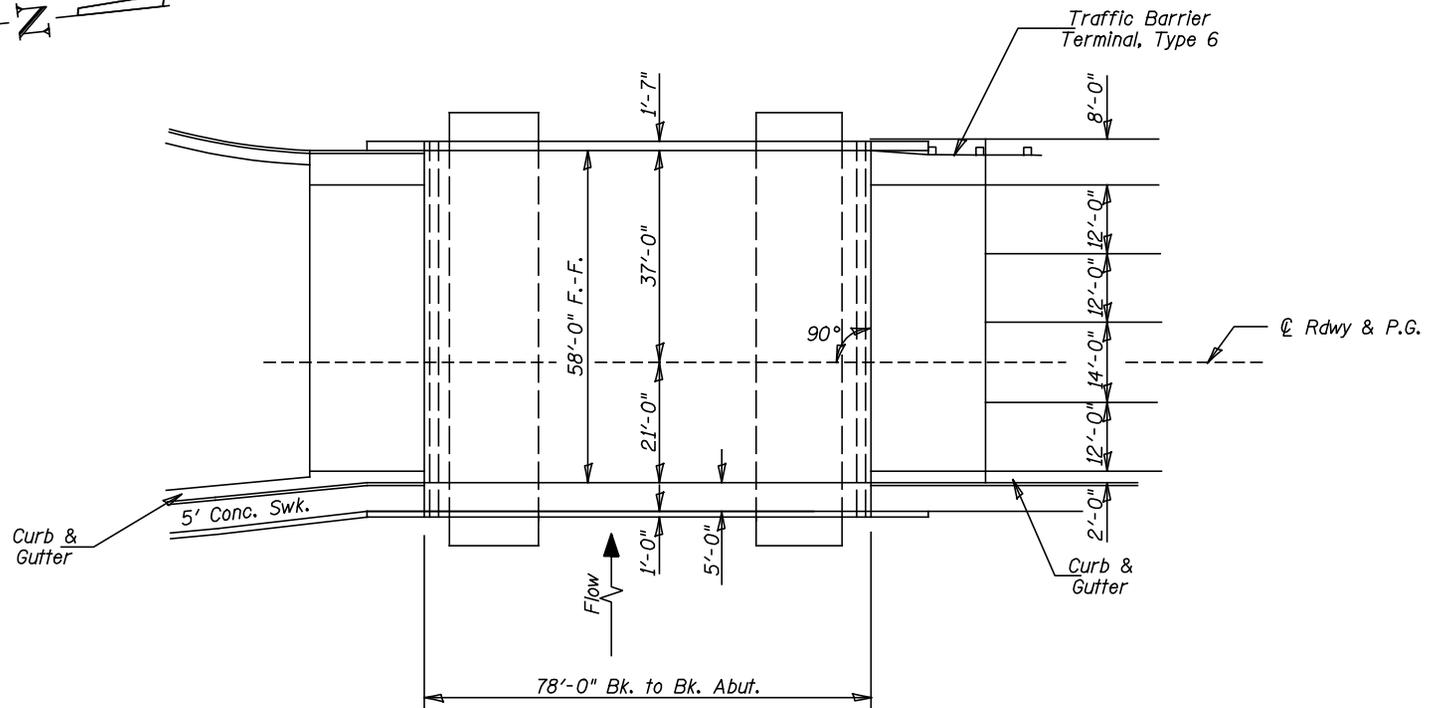


CROSS SECTION

**EXISTING CROSS SECTION
 IL. RTE 29 OVER GIMLET CREEK
 S.N. 062-0057
 MARSHALL COUNTY**

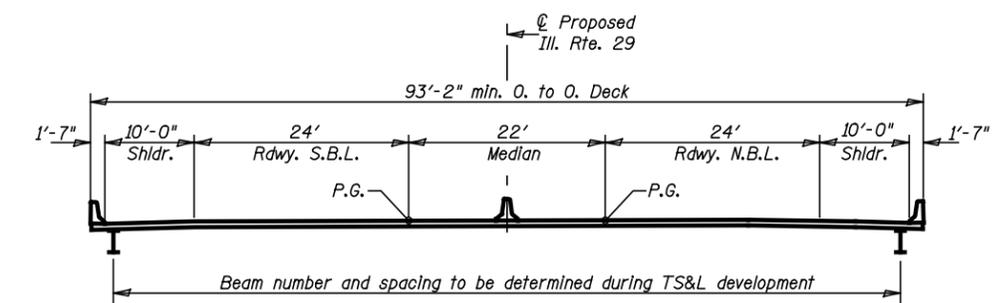
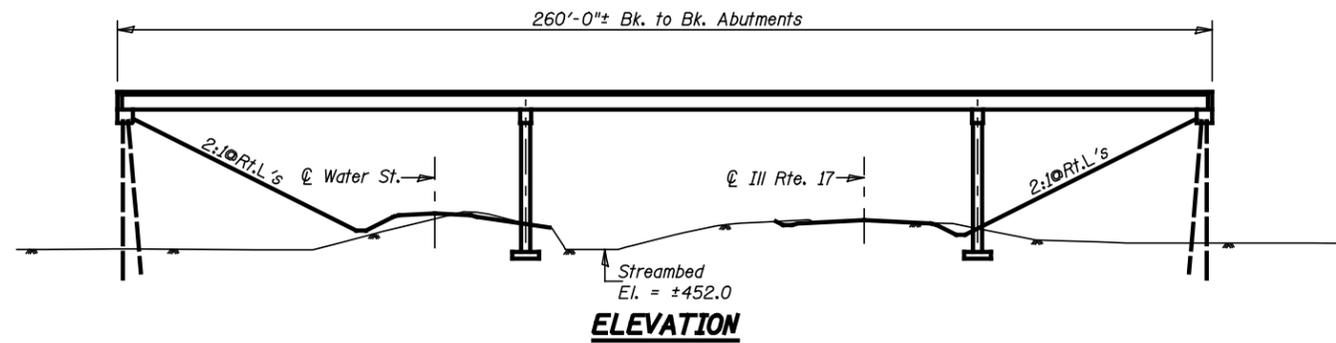


ELEVATION



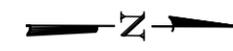
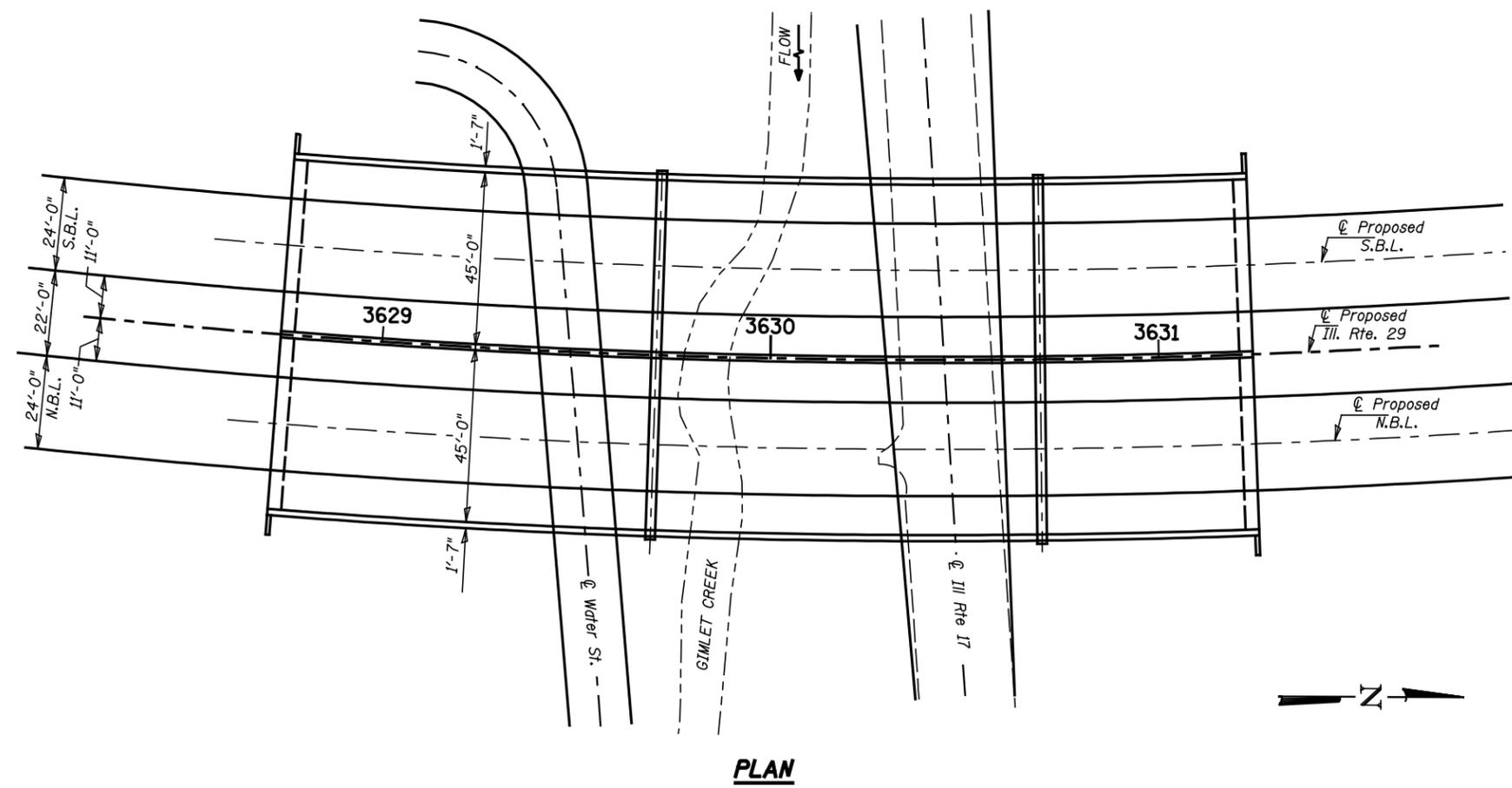
PLAN

**EXISTING STRUCTURE
 IL. RTE 29 OVER GIMLET CREEK
 S.N. 062-0057
 MARSHALL COUNTY**

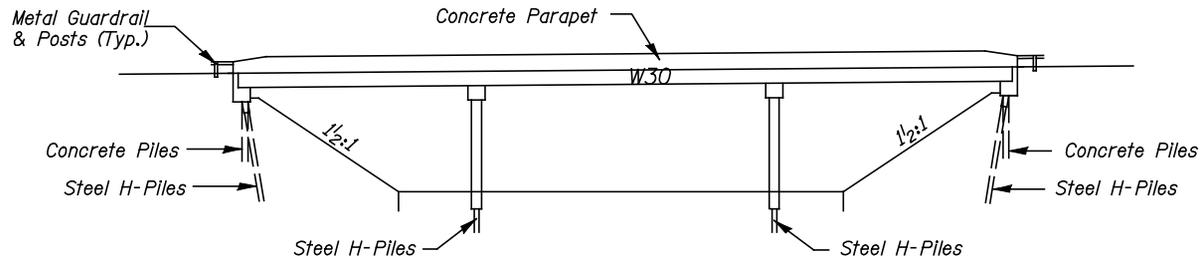


CROSS SECTION (PROPOSED WIDTH)
(Looking North)

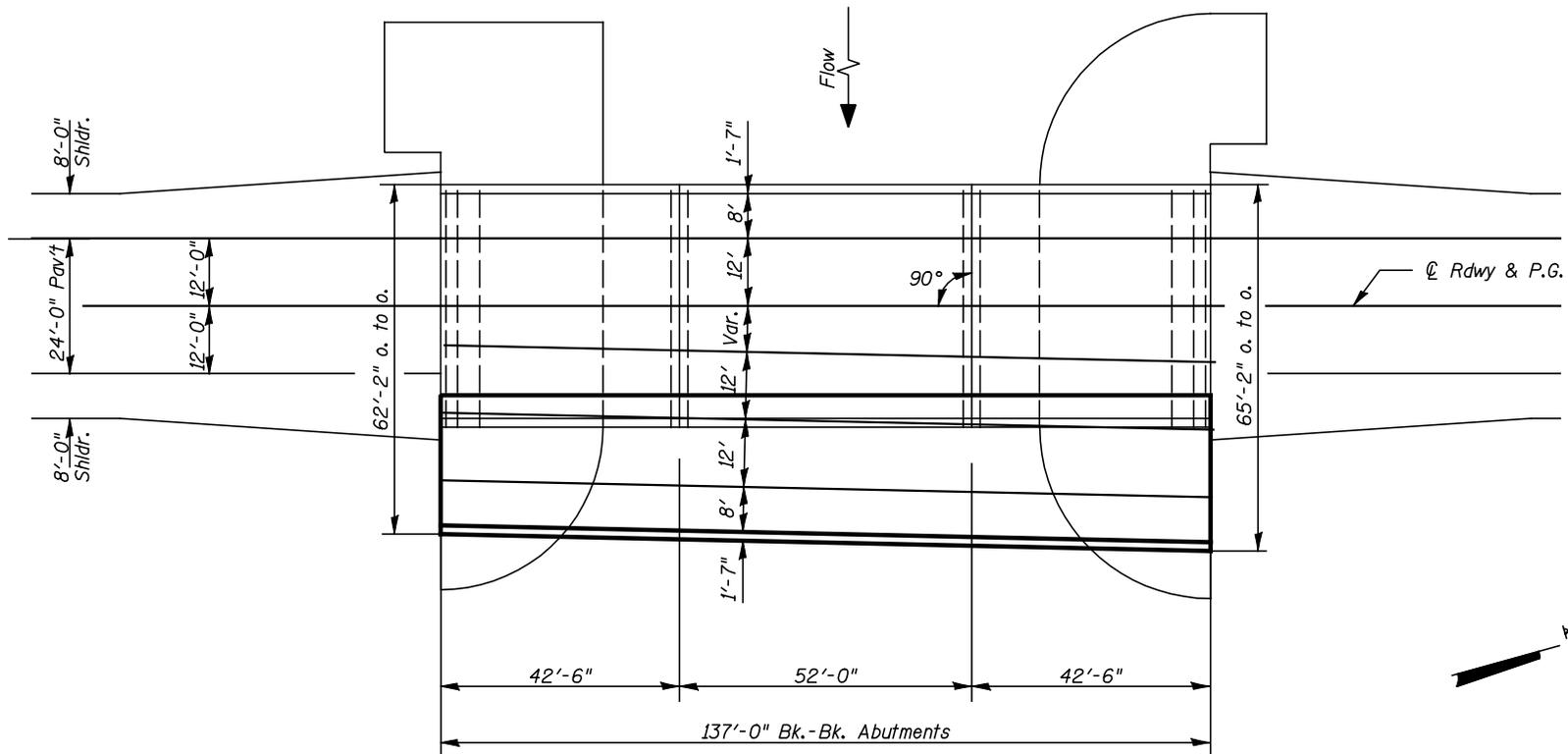
The number and location of piers outside the stream channel, the profile grade line, and the bridge length are subject to refinement during development of Type Size and Location plan.



PROPOSED STRUCTURE
ILLINOIS ROUTE 29 OVER GIMLET CREEK
MARSHALL COUNTY

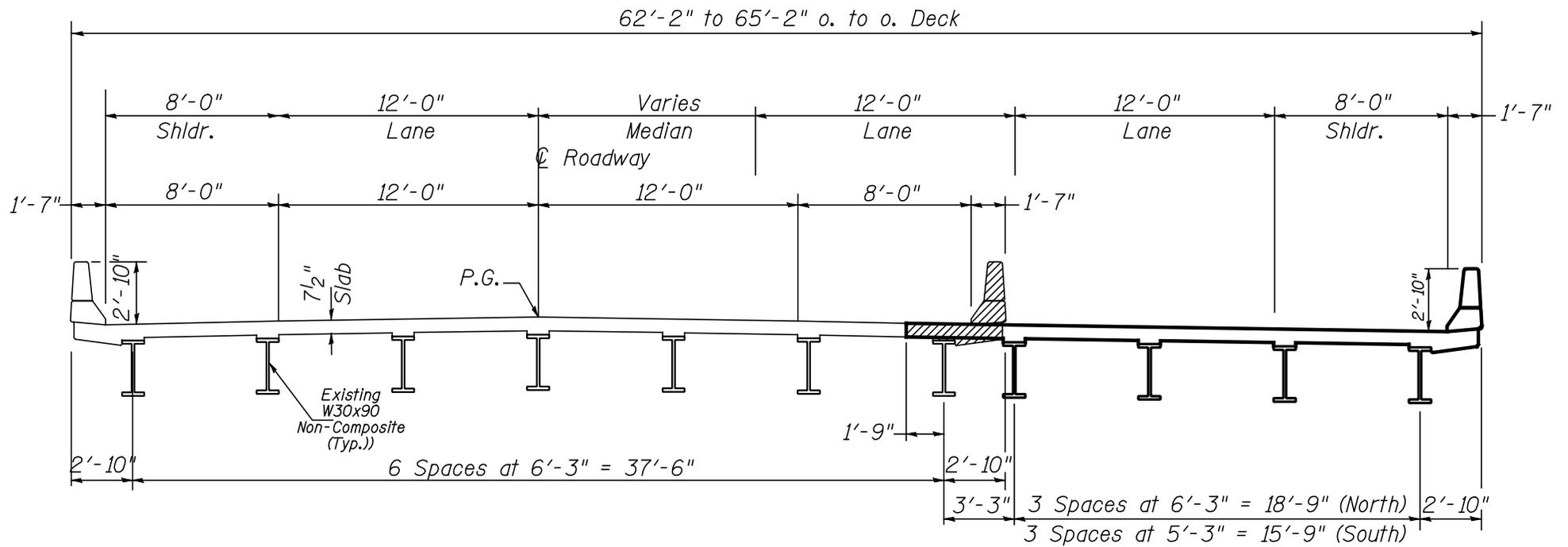


ELEVATION



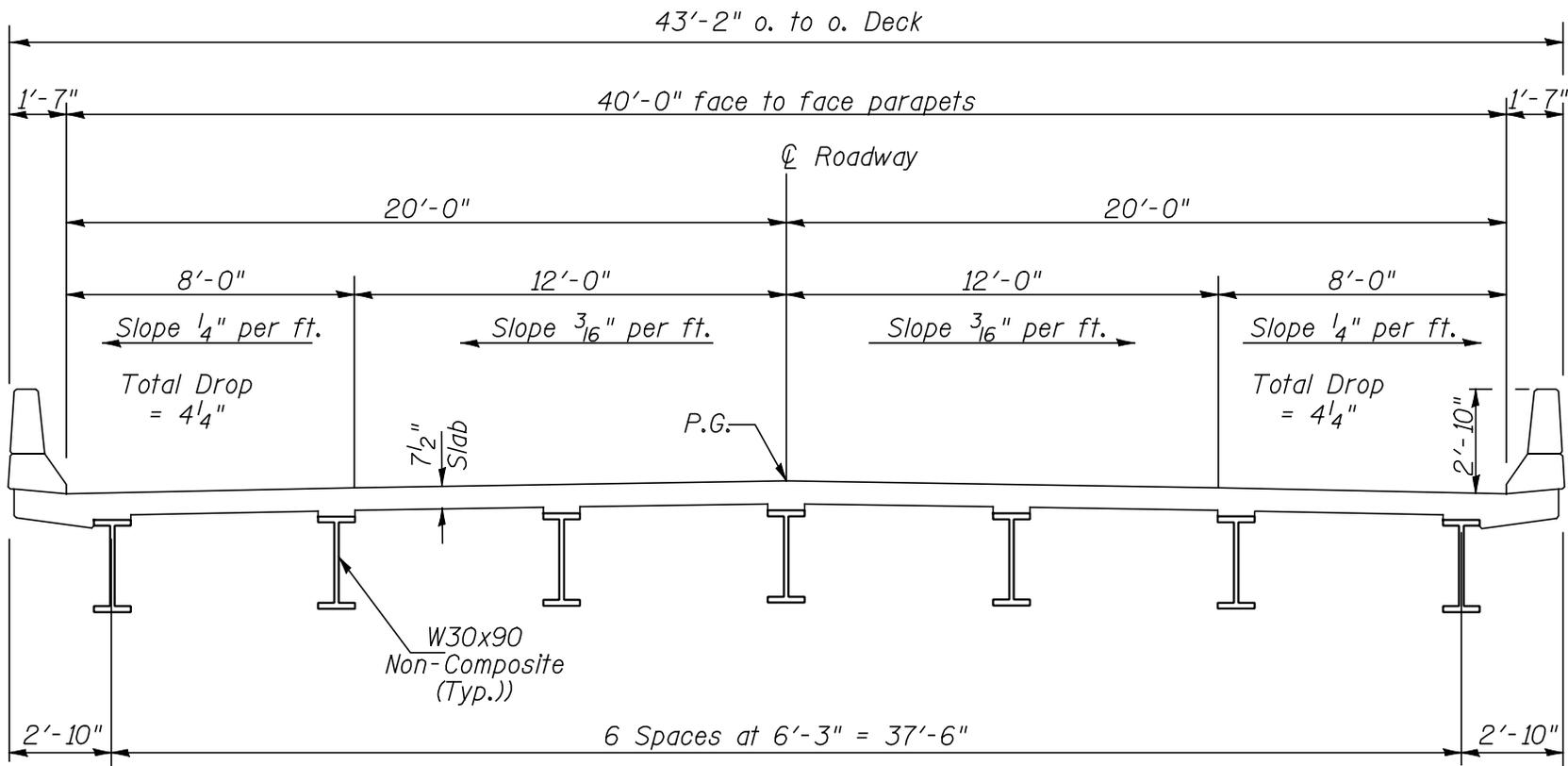
PLAN

**PROPOSED STRUCTURE
EXISTING IL. RTE 29 OVER THENIUS CREEK
S.N. 062-0056
MARSHALL COUNTY**



CROSS SECTION
(Looking North)

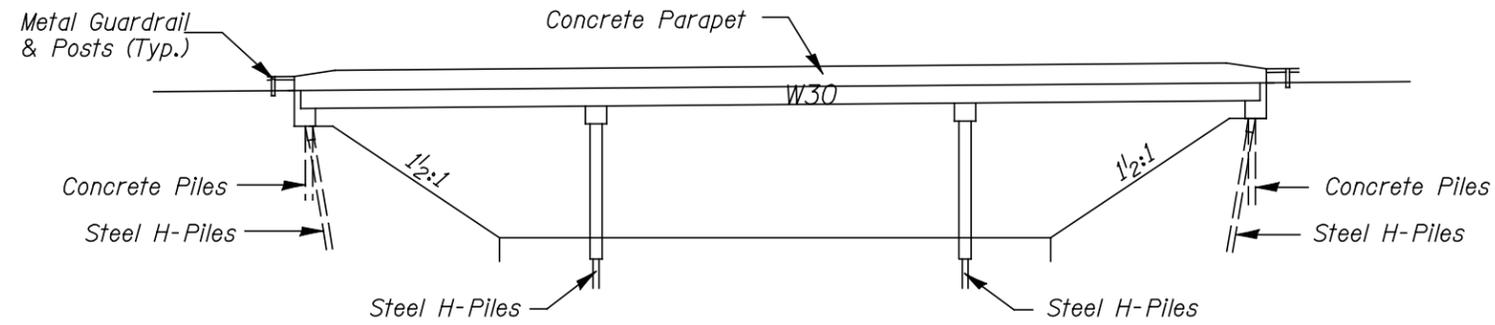
**PROPOSED CROSS SECTION
IL. RTE 29 OVER THENIUS CREEK
S.N. 062-0056
MARSHALL COUNTY**



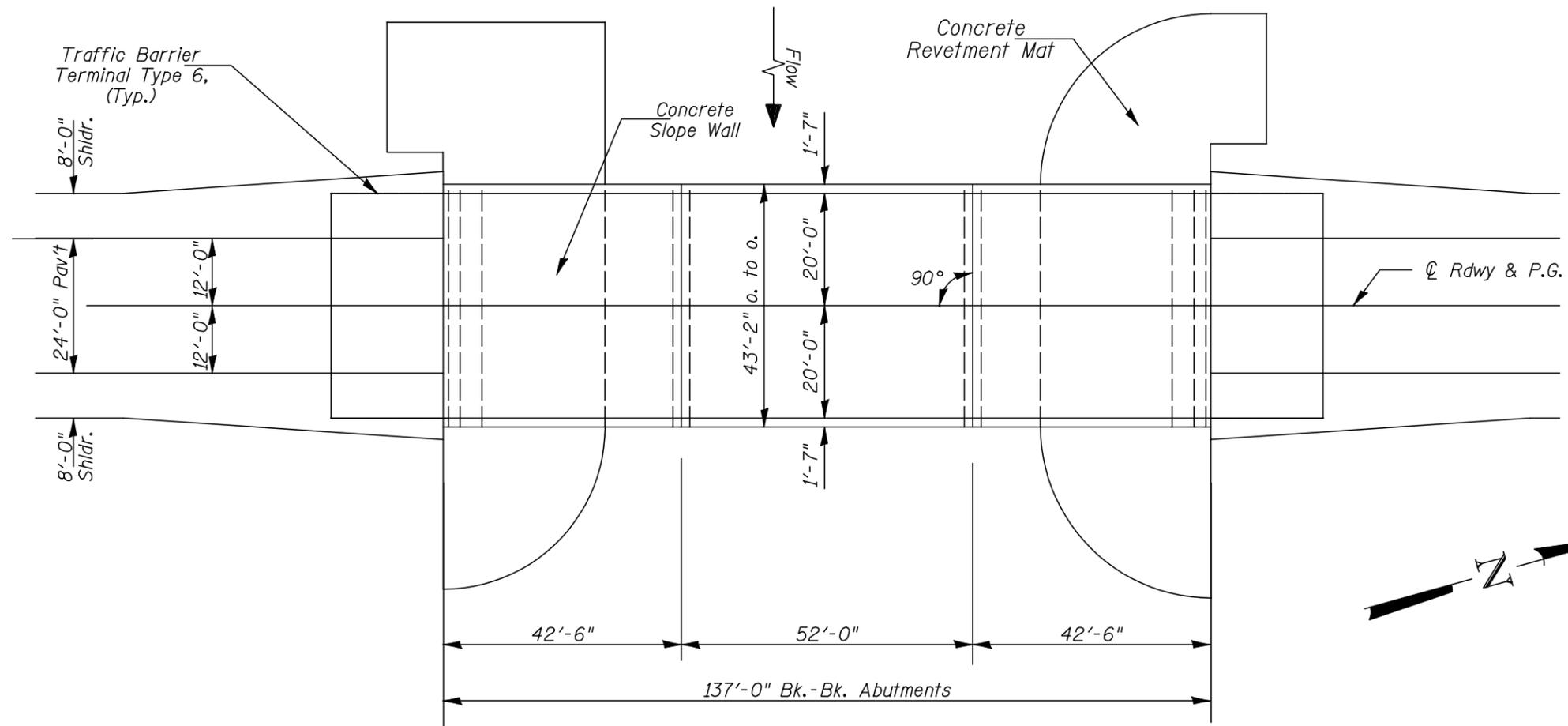
CROSS SECTION

Note: Bridge rebuilt in 1993 with new superstructure, new abut. caps and backwall, new pier caps, piling and pile encasement.

**EXISTING CROSS SECTION
 IL. RTE 29 OVER THENIUS CREEK
 S.N. 062-0056
 MARSHALL COUNTY**

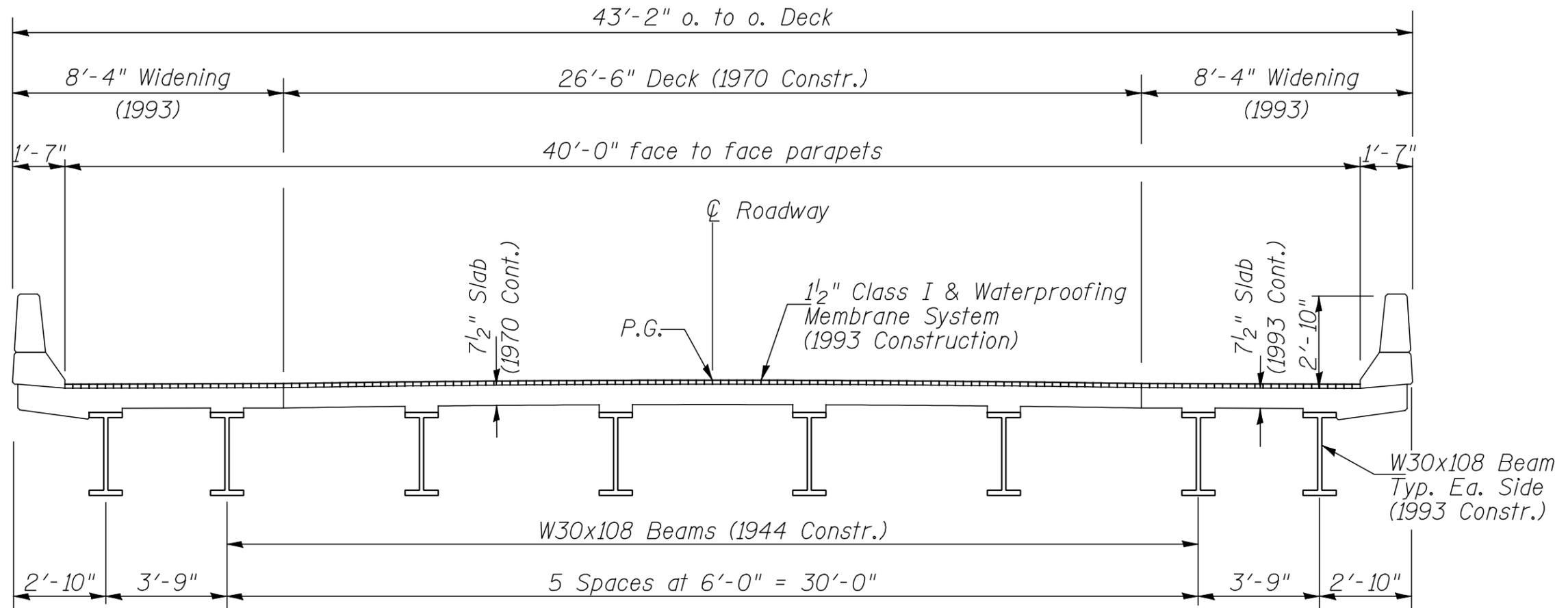


ELEVATION



PLAN

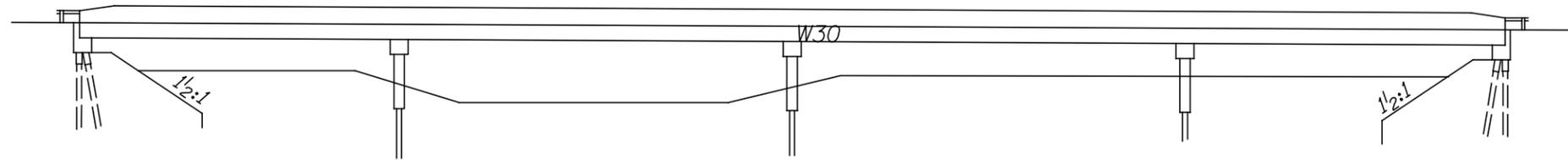
**EXISTING STRUCTURE
 IL. RTE 29 OVER THENIUS CREEK
 S.N. 062-0056
 MARSHALL COUNTY**



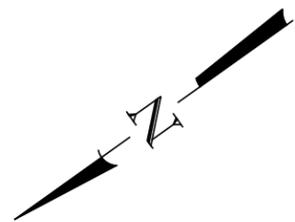
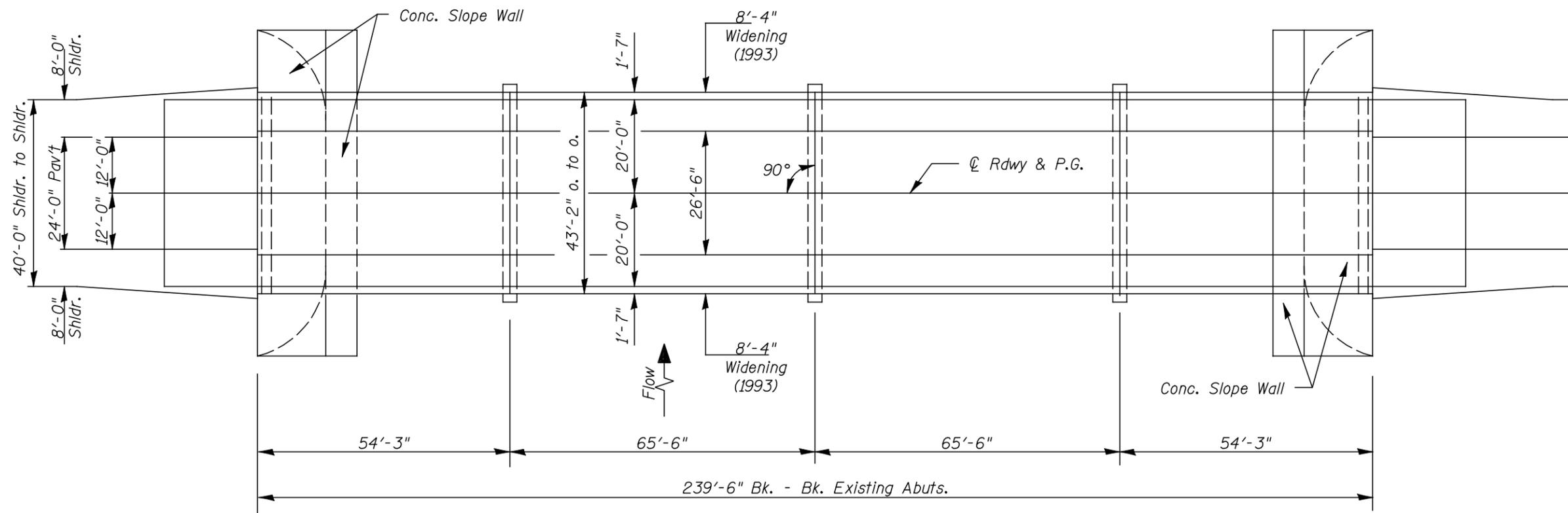
CROSS SECTION

Note: Composite constr. in positive moment regions of spans.

**EXISTING CROSS SECTION
IL. RTE 29 OVER CROW CREEK
S.N. 062-0004
MARSHALL COUNTY**

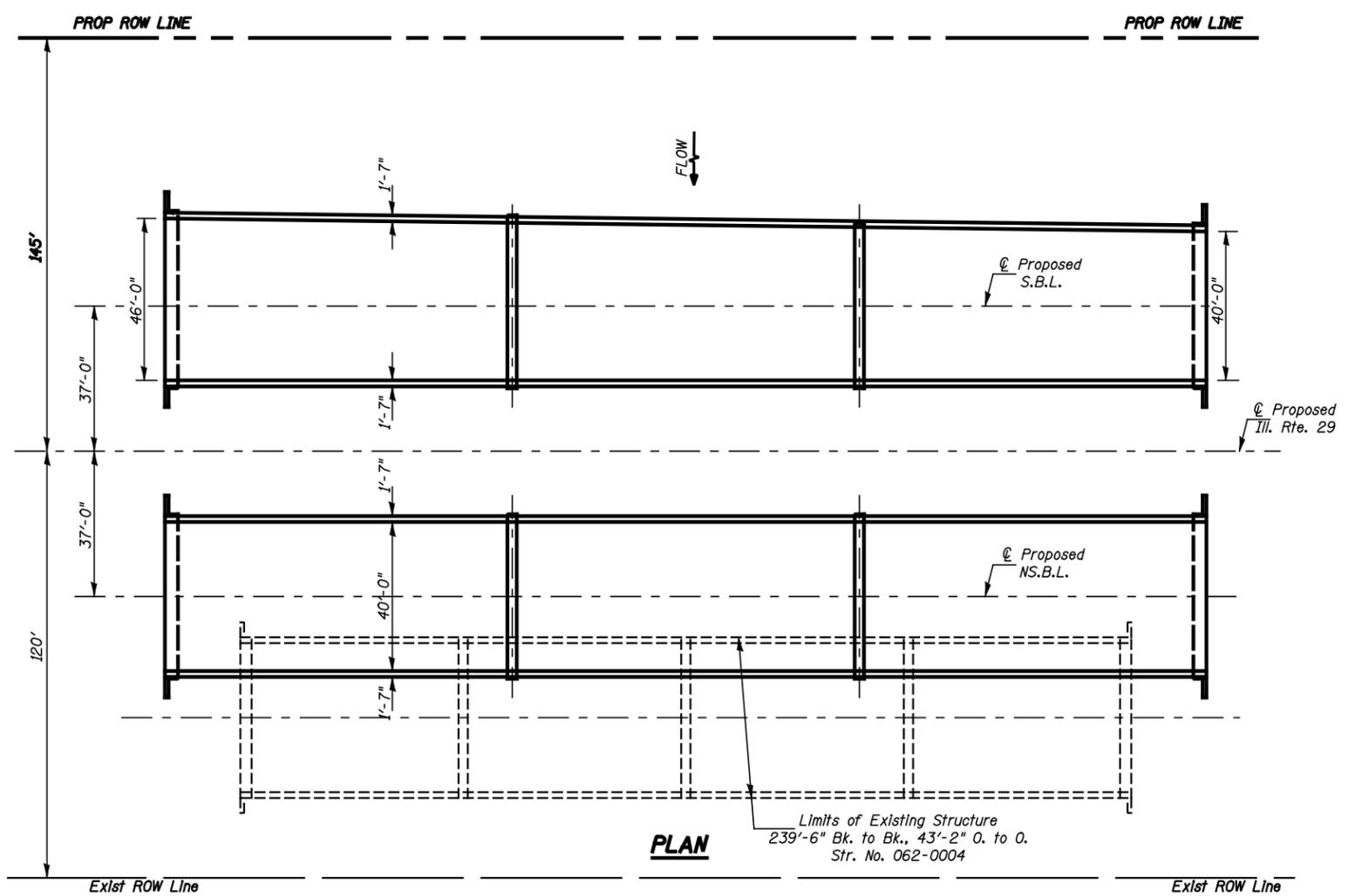
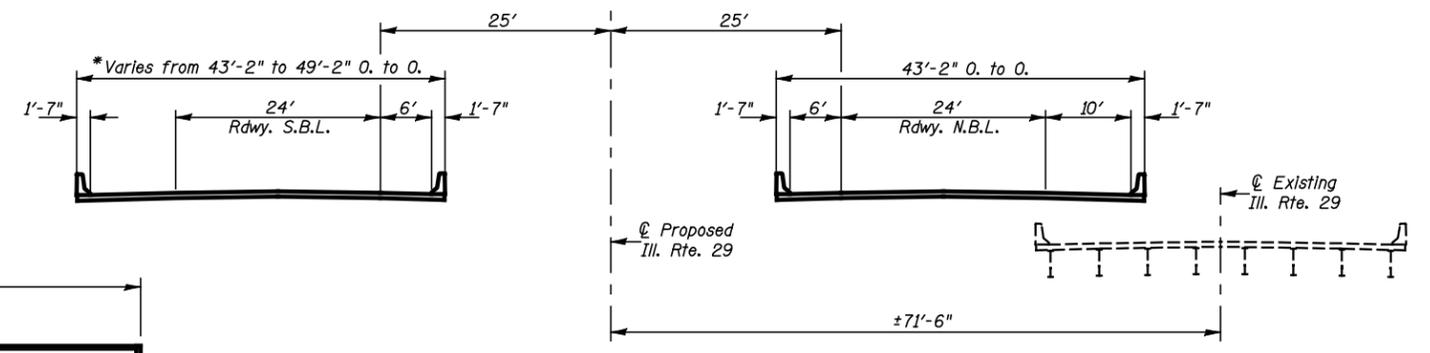
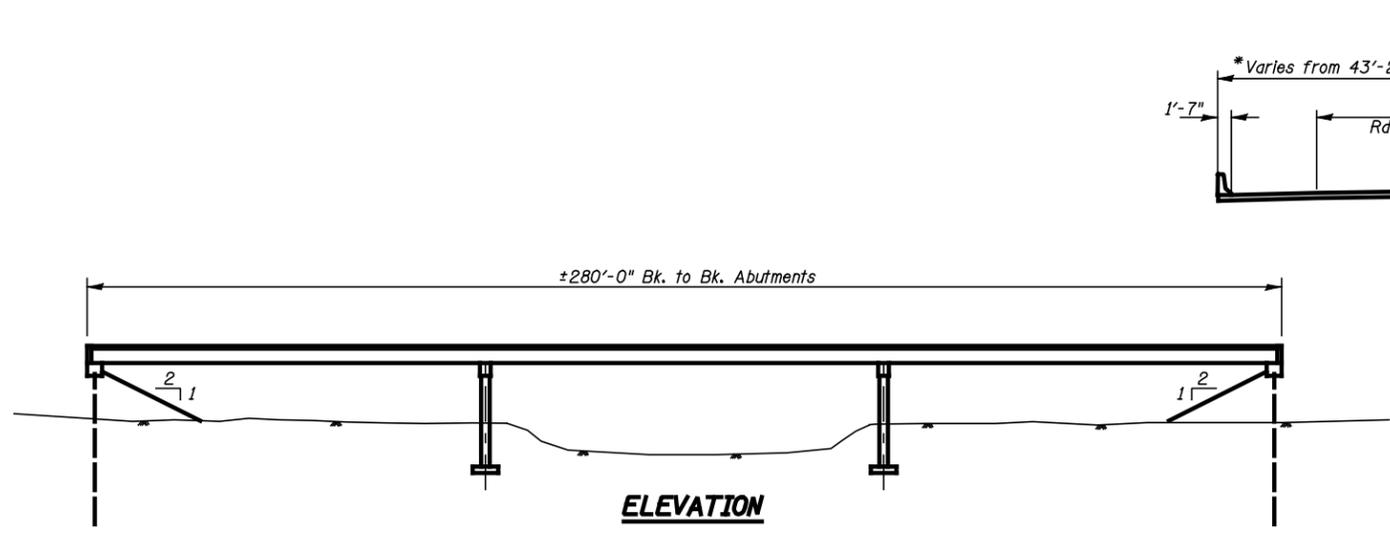


ELEVATION

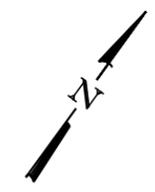


PLAN

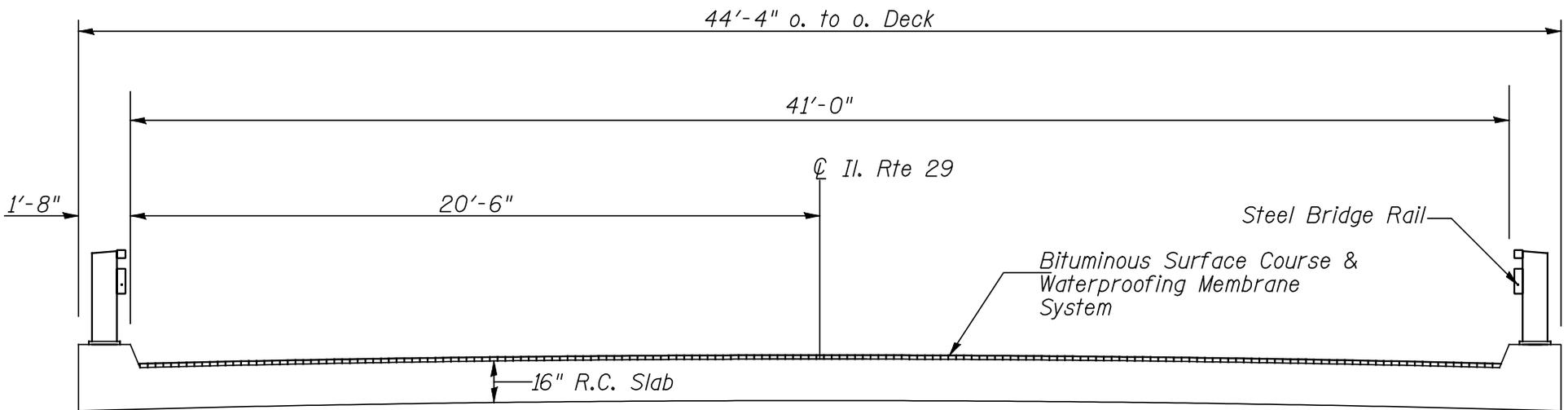
**EXISTING STRUCTURE
IL. RTE 29 OVER CROW CREEK
S.N. 062-0004
MARSHALL COUNTY**



The number and location of piers outside the stream channel, the profile grade line, and the bridge length are subject to refinement in detailed design.

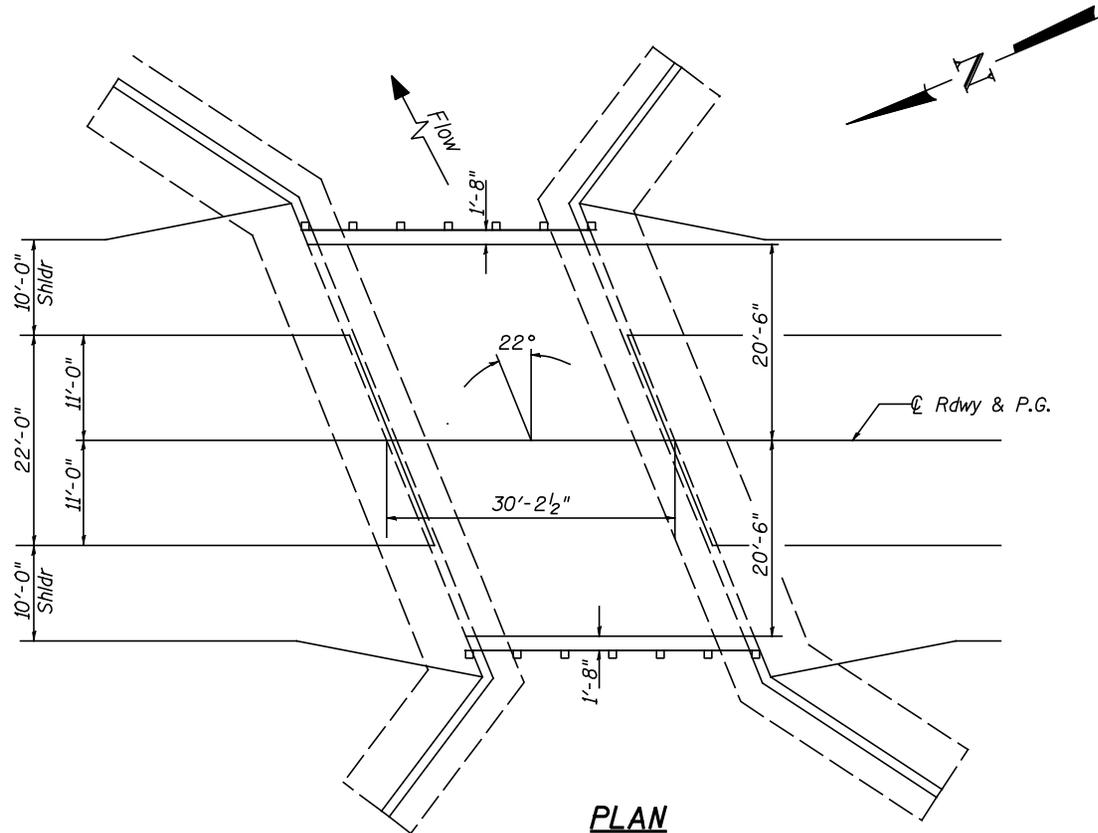
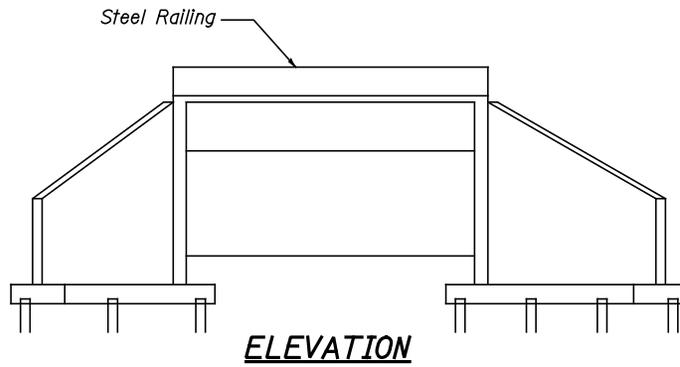


**PROPOSED STRUCTURE
ILLINOIS ROUTE 29 OVER CROW CREEK
SECTION 2B-
MARSHALL COUNTY**

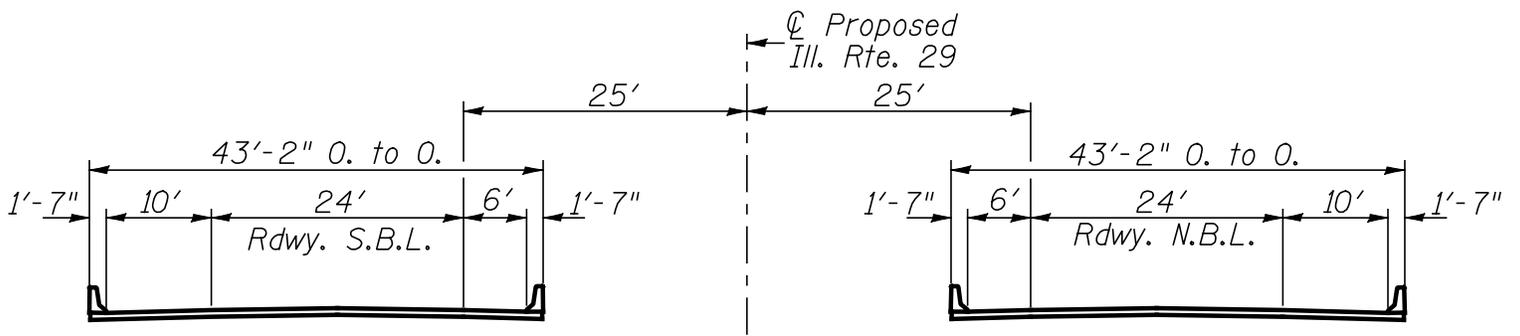


CROSS SECTION

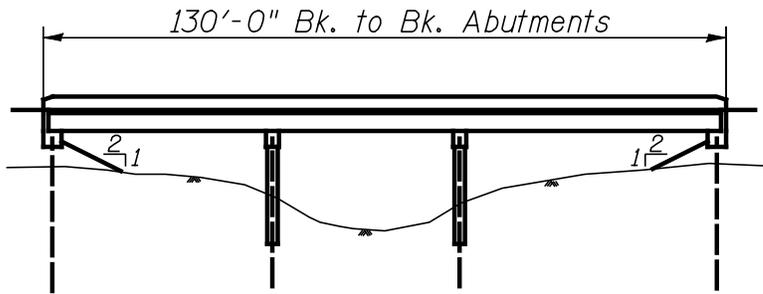
**EXISTING CROSS SECTION
 IL. RTE 29 OVER DRY HOLLOW CREEK
 S.N. 078-0005
 PUTNAM COUNTY**



**EXISTING STRUCTURE
 IL. RTE 29 OVER DRY HOLLOW CREEK
 S.N. 078-0005
 PUTNAM COUNTY**

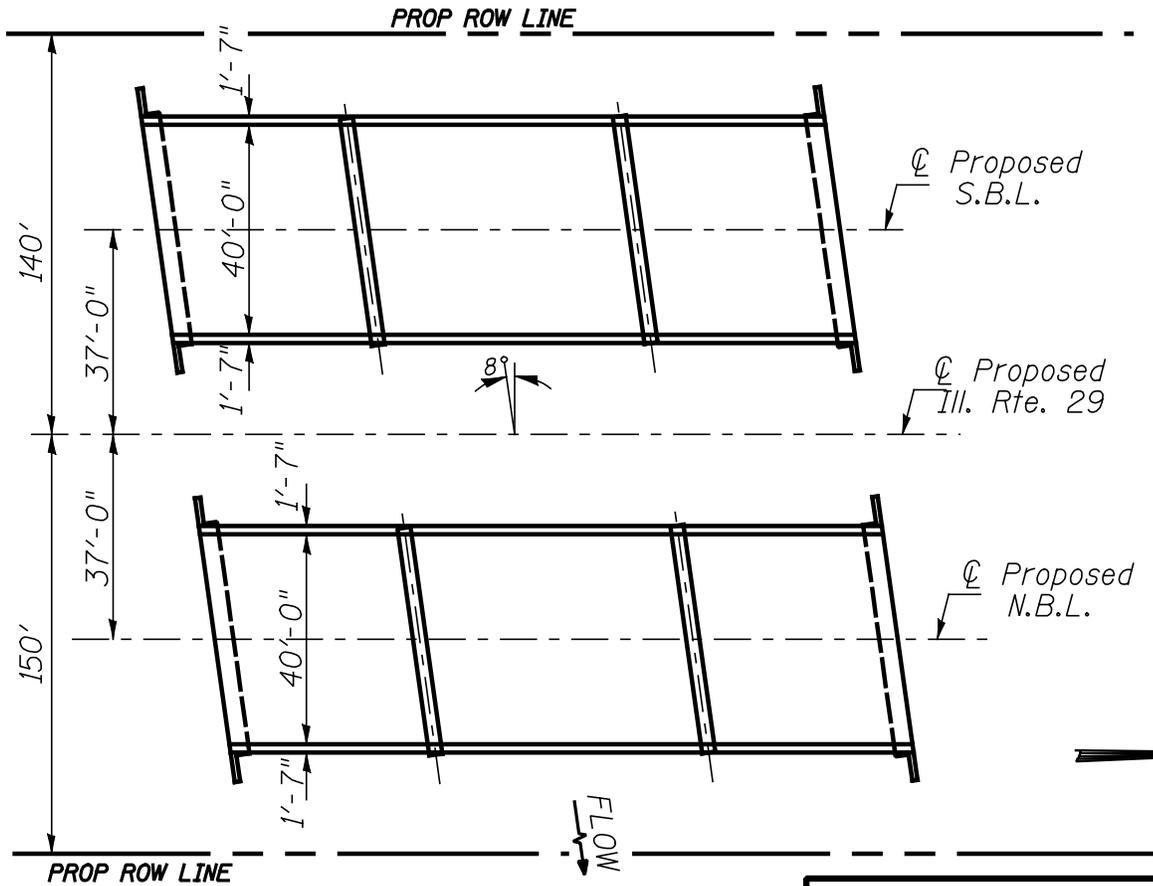


CROSS SECTION (PROPOSED WIDTH)
(Looking North)



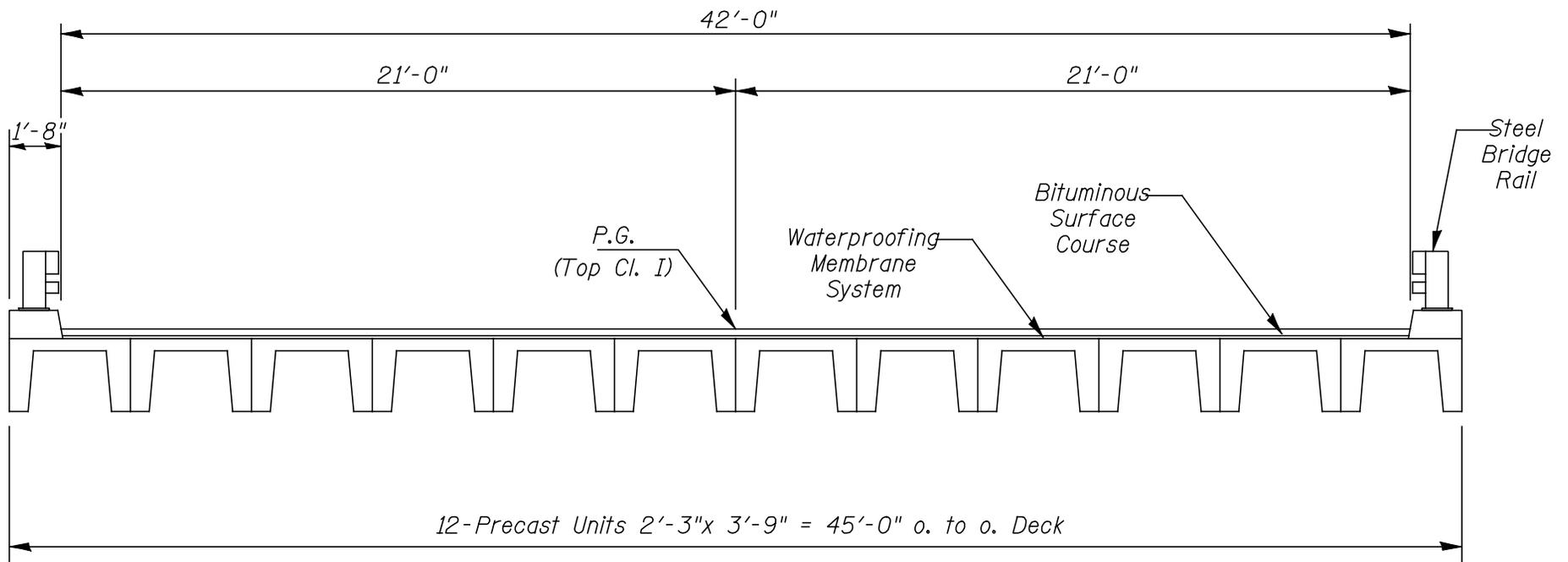
ELEVATION

The number and location of piers outside the stream channel, the profile grade line, and the bridge length are subject to refinement in detailed design.

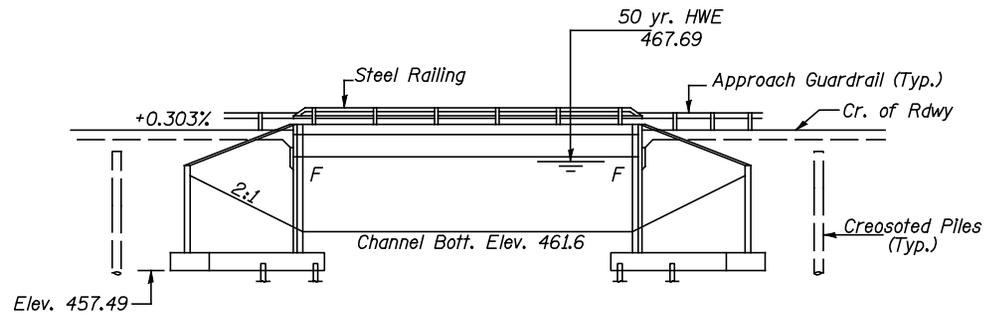


PLAN

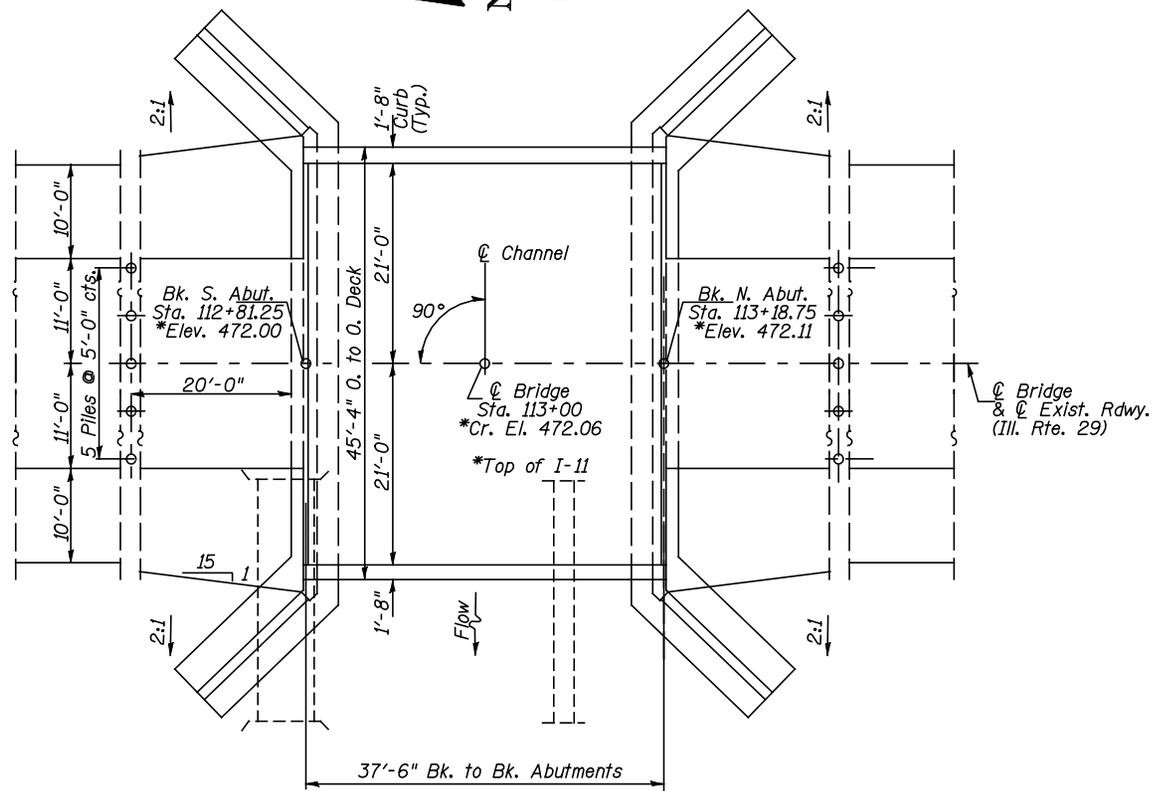
**PROPOSED STRUCTURE
ILLINOIS ROUTE 29 OVER
DRY HOLLOW CREEK
SECTION 20BR
PUTNAM COUNTY**



**EXISTING CROSS SECTION
 IL RTE 29 OVER SENACHWINE CREEK OVERFLOW
 S.N. 078-0004
 PUTNAM COUNTY**

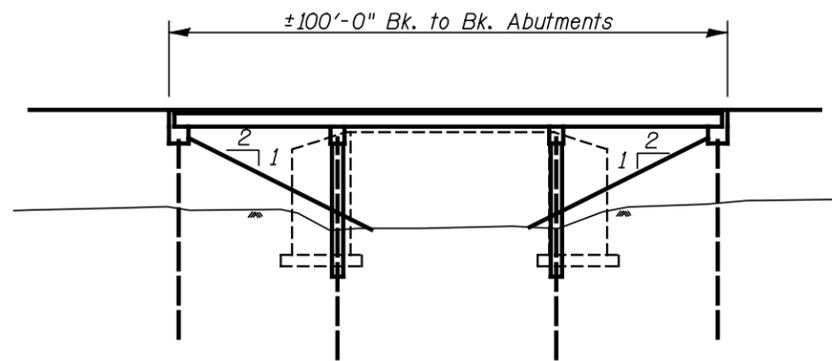


ELEVATION



PLAN

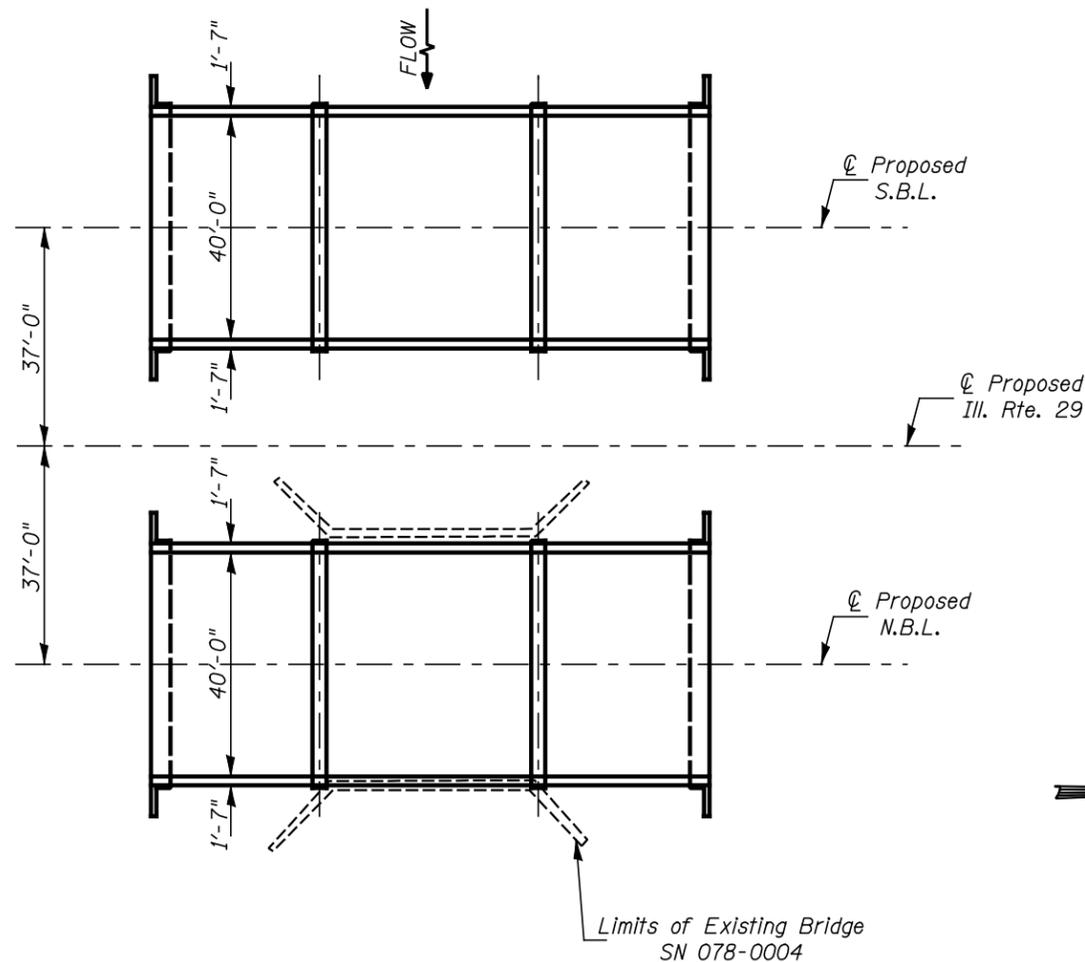
**EXISTING STRUCTURE
SENACHWINE CREEK OVERFLOW
S.N. 078-0004
PUTNAM COUNTY**



ELEVATION

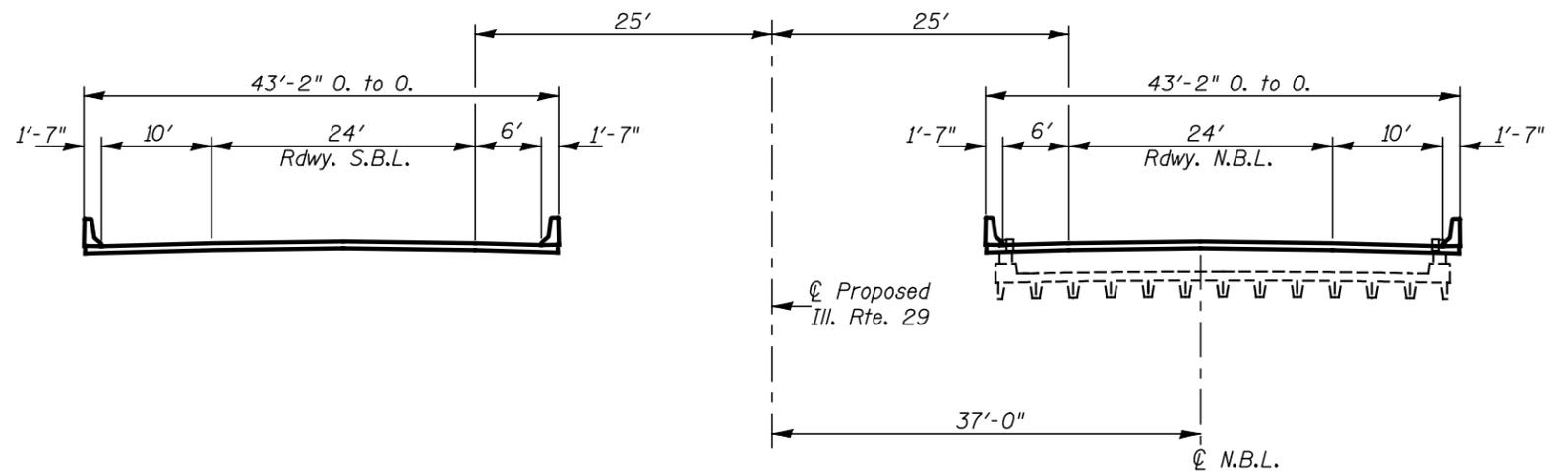
The proposed pier locations, profile grade line and proposed bridge length are subject to refinement during detailed planning and design phase.

PROP ROW LINE



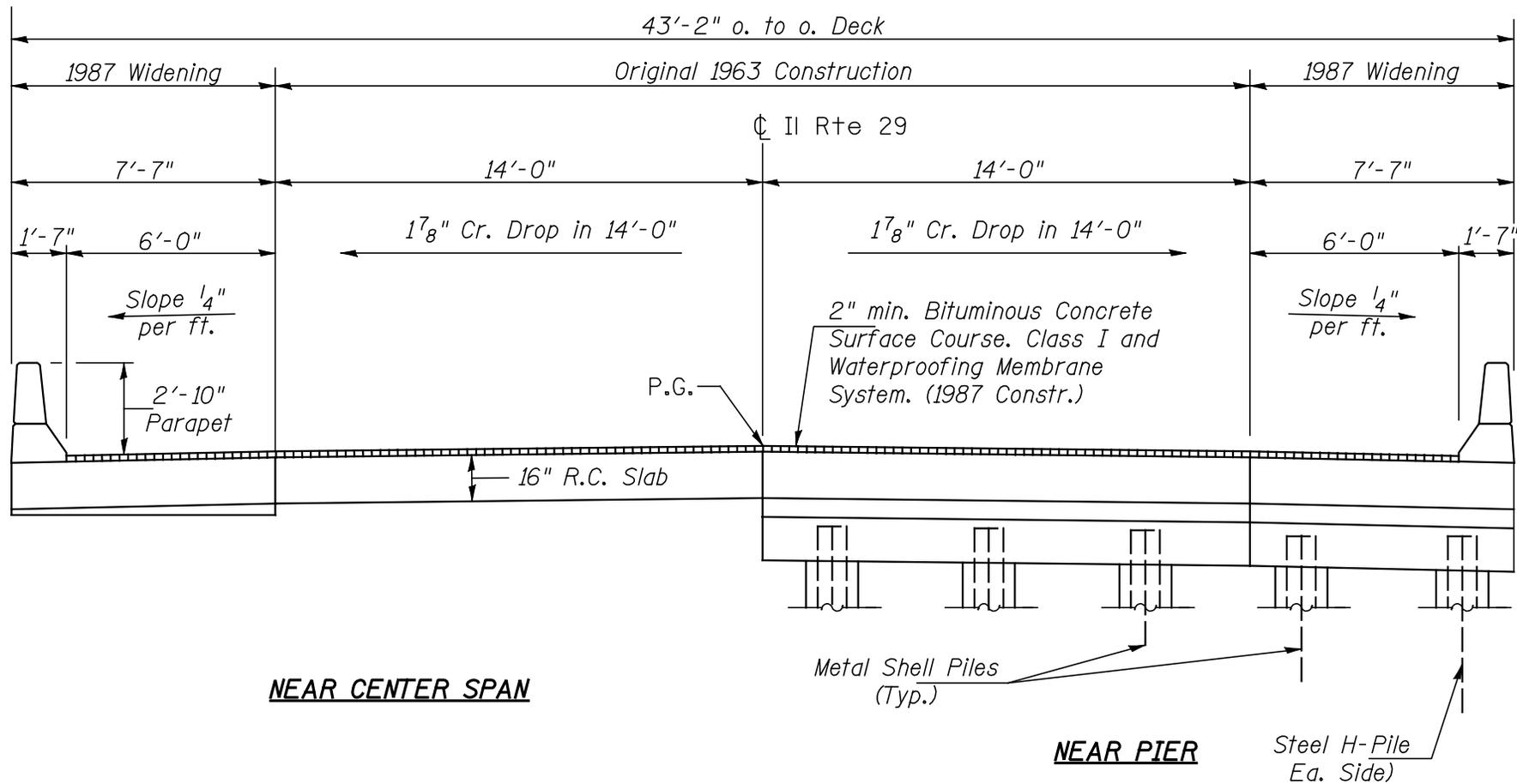
EXIST ROW LINE

PLAN



CROSS SECTION (PROPOSED WIDTH)
(Looking North)

PROPOSED BRIDGE DRAWING
FAP 318 (IL RTE. 29)
PUTNAM COUNTY
SENACHWINE CREEK OVERFLOW
SN 078-0004 (EXIST)

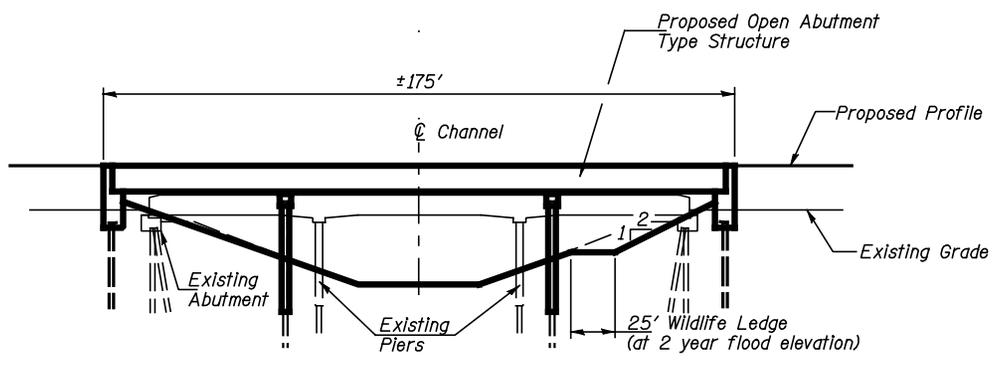


NEAR CENTER SPAN

NEAR PIER

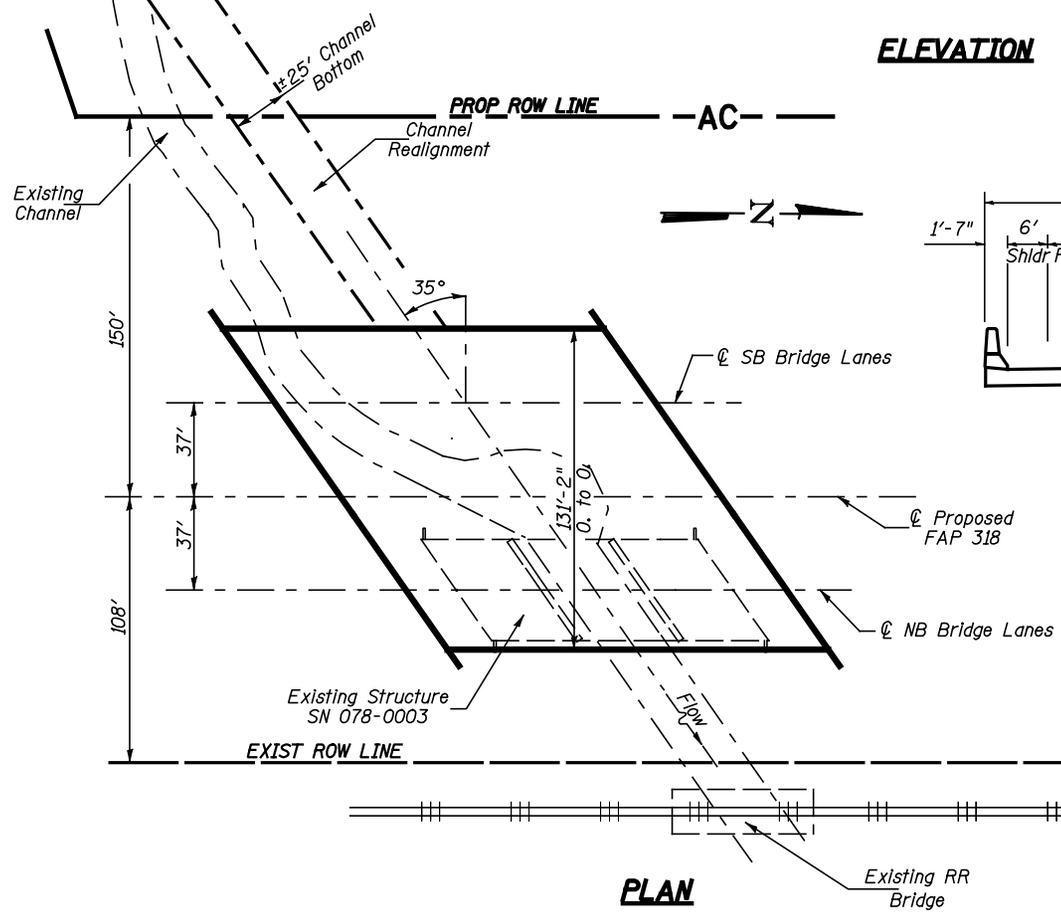
Steel H-Pile
Ea. Side

**EXISTING CROSS SECTION
IL. RTE 29 OVER SENACHWINE CREEK
S.N. 078-0003
PUTNAM COUNTY**

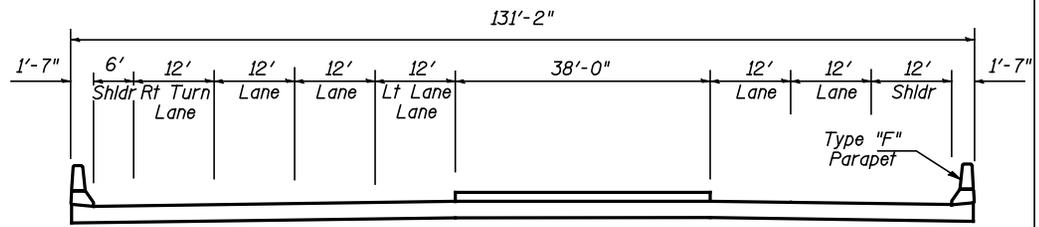


ELEVATION

The proposed pier locations, profile grade and proposed bridge length are subject to refinement during detailed planning and design phase.

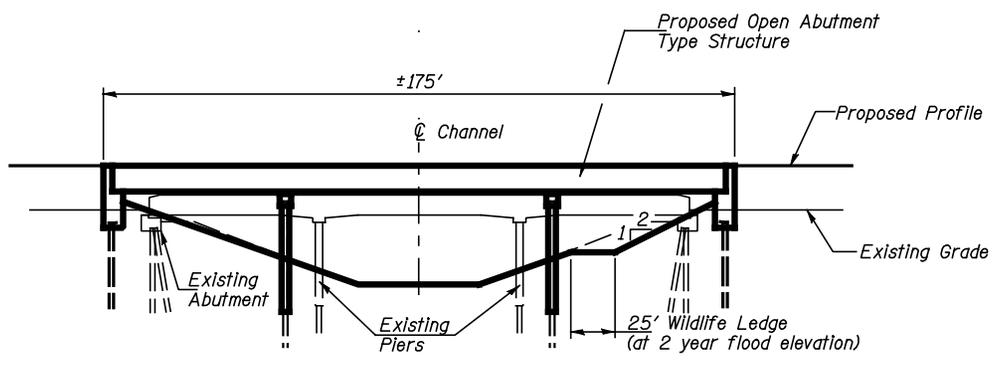


PLAN



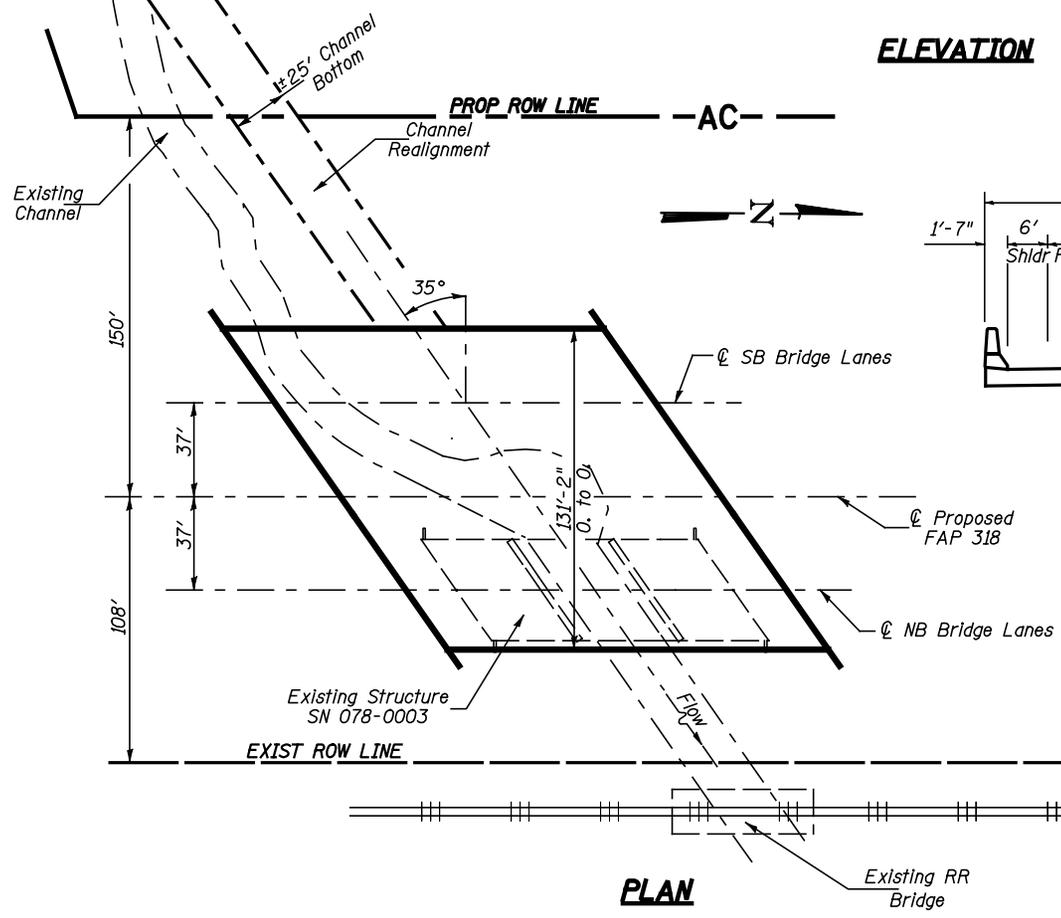
CROSS SECTION
(Looking North)

**PROPOSED BRIDGE DRAWING
FAP 318 (IL. RTE 29)
PUTNAM COUNTY
SENACHWINE CREEK
S.N. 078-0003 (EXIST.)**

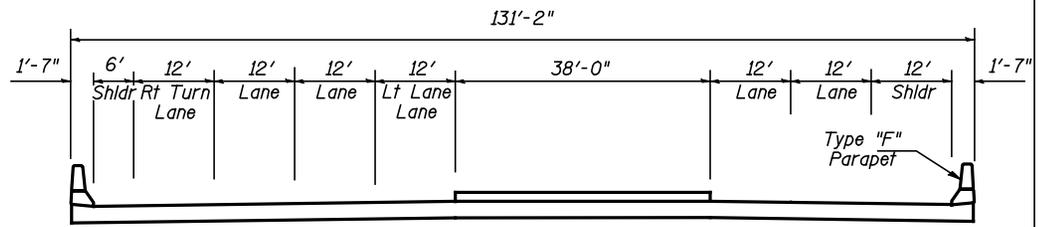


ELEVATION

The proposed pier locations, profile grade and proposed bridge length are subject to refinement during detailed planning and design phase.



PLAN



CROSS SECTION
(Looking North)

**PROPOSED BRIDGE DRAWING
FAP 318 (IL. RTE 29)
PUTNAM COUNTY
SENACHWINE CREEK
S.N. 078-0003 (EXIST.)**

Appendix B

Public Coordination

Meeting and/or Correspondence	Date
Letter to Local Officials	October 2, 2002
Letter from Meta Tec Limited	October 2, 2002
Letter from Hardin Industries, Inc.	October 2, 2002
Letter from Marshall County Airport	October 3, 2002
Letter from Marshall County Airport Board	October 4, 2002
Letter from City of Lacon	October 8, 2002
Letter from County Board of Marshall County, Illinois	October 8, 2002
Letter to Poly One Corporation	March 11, 2003
City of Henry Resolution	May 12, 2003
Telephone Coordination Poly One Corporation	May 13, 2003
City of Princeton Resolution	June 2, 2003
Marshall County Resolution	June 5, 2003
Bureau County Resolution	June 10, 2003
Meeting Minutes -- Mayor of Chillicothe	July 3, 2003
Letter from Lincoln & Southern Railroad Company	July 23, 2003
Henry Senachwine Community School Dist. 5 Resolution	August 20, 2003
City of Chillicothe Resolution	September 8, 2003
Letter from Caterpillar Inc.	January 5, 2004
Meeting Minutes -- Henry Fire Protection District	April 23, 2004
Meeting Minutes - Senachwine Creek Watershed Committee	May 6, 2004
Review of Materials to be Presented for PIM #2 (minutes not included)	July 7, 2004
Letter from Bureau county Highway Department	July 14, 2004
Letter from Sparland	July 19, 2004
Henry Township Resolution	August 10, 2004
Letter to Peoria Park District	August 27, 2004
Letter from Henry Township	August 31, 2004
Meeting Minutes - Peoria Park District	September 9, 2004
Meeting Minutes - Chillicothe	September 16, 2004

Meeting Minutes - Railroad Coordination	November 10, 2004
Meeting Minutes -Putman Pavilion/Henry Secondary Impacts	November 18, 2004
Meeting Minutes - Railroad Meeting	December 6, 2004
Meeting Minutes -Sparland	January 27, 2005
Meeting Minutes - Railroad meeting	January 27, 2005
Meeting Minutes - Crow creek Watershed Committee	February 23, 2005
Letter from Senachwine Township	December 22, 2005
Senachwine Township Meeting	January 12, 2006
Meeting Minutes - Sparland Board meeting	June 1, 2006
Meeting Minutes - Senachwine Township	June 8, 2006
Meeting Minutes - Railroad Meeting with BNSF	January 30, 2007
Correspondence - BN&SF correspondence regarding railroad signal relocation north of Truitt Road interchange, preparation of BN&SF railroad overpass, and provisions for two railroad tracks at the underpass in Chillicothe and at the overpass north of Truitt Road interchange	July 2, 2007
Memorandum - Sparland Village Board	January 3, 2008
Letters requesting comments from BN&SF on TS&L (included) for proposed railroad viaduct at north edge of Chillicothe	May 12, 2008 and January 7, 2009

168912.B0.EN.01

October 2, 2002

168912.B0.EN.01

Mayor Daryl Fountain
City of Henry
Henry, IL 61537

Subject: Illinois Route 29 Study
IL 6 to I-180
Peoria, Marshall, Putnam, and Bureau Counties
October 8, 2002 Meeting

Dear Mayor Fountain:

Thank you for agreeing to meet with us on October 8 to discuss your views on the need for the IL 29 project. As we discussed, the meeting will begin at 4:30 p.m. and will be held in the Marshall County Courthouse Boardroom.

As I mentioned during our conversation, a critical chapter of the Environmental Impact Statement we will be preparing for this study is the first chapter which describes the need for improvements along IL 29. To develop a compelling "need statement" for IL 29 improvements, we would like to include input from people such as you that use the highway on a daily basis. Your knowledge of commuting patterns and the importance of the highway for existing and prospective businesses and to accommodate planned development will complement data we are collecting on existing and future traffic information, crash data, and engineering deficiencies along IL 29.

I look forward to meeting you. If you have any questions about the October 8 meeting or the project in general, please ring me at 414-272-2426.

168912.B0.EN.01

Sincerely,

CH2M HILL

Dan Dupies
Project Planner

MKE\Document2

c: Dick Stafford/CH2M HILL
Eric Therkildsen, P.E./IDOT
Paula Green/IDOT

168912.B0.EN.01

October 2, 2002

168912.B0.EN.01

Mayor Don White
908 N. 2nd Street
Chillicothe, IL 61523

Subject: Illinois Route 29 Study
IL 6 to I-180
Peoria, Marshall, Putnam, and Bureau Counties
October 8, 2002 Meeting

Dear Mayor White:

Thank you for agreeing to meet with us on October 8 to discuss your views on the need for the IL 29 project. As we discussed, the meeting will begin at 1:00 p.m. and will be held at City Hall.

As I mentioned during our conversation, a critical chapter of the Environmental Impact Statement we will be preparing for this study is the first chapter which describes the need for improvements along IL 29. To develop a compelling "need statement" for IL 29 improvements, we would like to include input from people such as you that use the highway on a daily basis. Your knowledge of commuting patterns and the importance of the highway for existing and prospective businesses and to accommodate planned development will complement data we are collecting on existing and future traffic information, crash data, and engineering deficiencies along IL 29.

I look forward to meeting you. If you have any questions about the October 8 meeting or the project in general, please ring me at 414-272-2426.

168912.B0.EN.01

Sincerely,

CH2M HILL

Dan Dupies
Project Planner

MKE\Document2

c: Dick Stafford/CH2M HILL
Eric Therkildsen, P.E./IDOT
Paula Green/IDOT

168912.B0.EN.01

October 2, 2002

168912.B0.EN.01

Mayor Philip Murphy
Sparland Village Hall
Sparland, IL 61565

Subject: Illinois Route 29 Study
IL 6 to I-180
Peoria, Marshall, Putnam, and Bureau Counties
October 8, 2002 Meeting

Dear Mayor Murphy:

Thank you for agreeing to meet with us on October 8 to discuss your views on the need for the IL 29 project. As we discussed, the meeting will begin at 4:30 p.m. and will be held in the Marshall County Courthouse Boardroom.

As I mentioned during our conversation, a critical chapter of the Environmental Impact Statement we will be preparing for this study is the first chapter which describes the need for improvements along IL 29. To develop a compelling "need statement" for IL 29 improvements, we would like to include input from people such as you that use the highway on a daily basis. Your knowledge of commuting patterns and the importance of the highway for existing and prospective businesses and to accommodate planned development will complement data we are collecting on existing and future traffic information, crash data, and engineering deficiencies along IL 29.

I look forward to meeting you. If you have any questions about the October 8 meeting or the project in general, please ring me at 414-272-2426.

168912.B0.EN.01

Sincerely,

CH2M HILL

Dan Dupies
Project Planner

MKE\Document2

c: Dick Stafford/CH2M HILL
Eric Therkildsen, P.E./IDOT
Paula Green/IDOT

168912.B0.EN.01

October 2, 2002

168912.B0.EN.01

Mr. Tom Wenk
P.O. Box 308
Lacon, IL 61540

Subject: Illinois Route 29 Study
IL 6 to I-180
Peoria, Marshall, Putnam, and Bureau Counties
October 8, 2002 Meeting

Dear Mr. Wenk:

Thank you for agreeing to meet with us on October 8 to discuss your views on the need for the IL 29 project. As we discussed, the meeting will begin at 4:30 p.m. and will be held in the Marshall County Courthouse Boardroom.

As I mentioned during our conversation, a critical chapter of the Environmental Impact Statement we will be preparing for this study is the first chapter which describes the need for improvements along IL 29. To develop a compelling "need statement" for IL 29 improvements, we would like to include input from people such as you that use the highway on a daily basis. Your knowledge of commuting patterns and the importance of the highway for existing and prospective businesses and to accommodate planned development will complement data we are collecting on existing and future traffic information, crash data, and engineering deficiencies along IL 29.

I look forward to meeting you. If you have any questions about the October 8 meeting or the project in general, please ring me at 414-272-2426.



RR#1 Box 143-B
Lacon, IL 61540
309-246-2960
FAX 309-246-3061

168912.B0.EN.01

Sincerely,

CH2M HILL

Dan Dupies
Project Planner

MKE\Document2

c: Dick Stafford/CH2M HILL
Eric Therkildsen, P.E./IDOT
Paula Green/IDOT

Tom Wenk
Chairman Marshall County Board

October 02, 2002

Re: Highway Transportation Improvements

Dear Tom:

I was delighted to hear that we may be able to see an improved four (4)-lane highway coming past Lacon. I will personally lend my support towards any improvements being considered on our present highway access.

Meta Tec was recently awarded "Tier 1" status as a supplier to Caterpillar Tractor in their Global Purchasing strategy. There are only a very few outsource suppliers that have achieved this recognition. "Tier 1" marks us as a company that Caterpillar plans to grow with in the coming years. Widening route 29 to (4)-lane will enhance Meta Tec's ability to deliver our product "Just-In-Time" to the recipient Caterpillar facilities.

Over the last three years manufacturing in this country has seen a serious downturn. Caterpillar like many of the large corporate giants is seeking vendors that can provide their products in a timely and cost effective manner. Sadly, this has meant that jobs here in Illinois have migrated to other states and countries. As an Illinois manufacturer I certainly applaud your efforts to help enable Meta Tec to keep those jobs and work here at home. It is thru efforts by people like yourself working with I.D.O.T. to enhance our ability to compete in the world market place, that Meta Tec will continue to be a manufacturer with a future.

We will be receiving many new opportunities in the next fifteen months because of our "Tier 1" status. The nature of the products we support being large and of heavy steel plate make transportation a very important issue. I would like to extend an invitation to you, your committee members, representatives of I.D.O.T., and representatives of our legislature to come and see what is happening at Meta Tec. Simple observation of our current products for our customers is indicative of the type of products we have yet to start, and why it is so important that improvements in our highways be made.

Thank you
David S. Suffern - President

A handwritten signature in black ink, appearing to read "David S. Suffern", written over a faint, larger version of the same signature.

Hardin Industries, Inc.

400 Commercial Street
Lacon, Illinois 61540

Phone (309) 246-8456
Fax (309) 246-3117

Tom Wenk
County Board Chairman
619 Park St.
Lacon, IL 61540

October 2, 2002

Re: Widening of IL Route 29

Tom,

It is my opinion that the widening of IL Route 29 to four lanes between Peoria and Route 180 would be advantageous to my company, as well as to other commercial concerns in the Lacon area.

We ship all of our products by semi truck/trailer; therefore a four-lane road closer to us would be more cost effective for getting to the interstate highways.

Dale J. Hardin,
Hardin Industries, Inc.



MARSHALL COUNTY AIRPORT

October 2, 2002
LACON, ILLINOIS 61540

Tom Wenk
Chairman, Marshall County Board

Regarding the impact of improvement to surface access north from Peoria on the Marshall County Airport:

The staff and Airport Board feel it would be very positive. Currently many flight students and some hangar tenants either reside in or work in Peoria. Improved access will increase those numbers and should encourage people to take up residence nearer the airport. Many already shop in and frequent restaurants in the county. We feel many current owners in Peoria may choose to relocate here as other forms of security and development restrict light plane aviation growth near Peoria.

Neil Pobanz, Manager

AIRPORT BOARD
Charles L. Allen, President
Robert Jesse, Secretary-Treasurer
Roy Seibold
Art Blase
Bill McNight

AIRPORT MANAGER
Lacon Aero Service, Inc.
Phone 309/246-2870

FIXED BASE OPERATOR
Lacon Aero Service, Inc.
Chad Pobanz
Bill Doyle
Neil Pobanz
Phone 309/246-3700

Airport Manager
Lacon Aero Service, Inc.
Neil Pobanz
Phone 309/246-2870

Fixed Base Operator
Lacon Aero Service, Inc.
Phone 309/246-3700



AIRPORT BOARD
Charles L. Allen, Pres.
Robert Jesse, Sec.-Treas.
Roy Seibold
Art Blase
Bill McKnight

MARSHALL COUNTY AIRPORT BOARD

P.O. BOX 248
LACON, ILLINOIS 61540

October 4, 2002

Mr. Thomas V. Wenk, Chairman
Marshall County Board
Marshall County Court House
122 N. Prairie Street
Lacon, Illinois 61540

Dear Tom:

The Marshall County Airport Board unanimously supports the expansion and improvement of State highway Route 29.

The Marshall County Airport Board has recently entered into an Agreement for Consultant Services and is beginning an extensive study for the expansion of facilities at Marshall County Airport. This study will include a new, longer runway to accommodate more corporate and general aviation aircraft. Planning is already in place for construction of more corporate and general aviation hangars.

Improved and widened highway access both from the Peoria area and to Interstate 80 to the North are essential components for the growth of Marshall County Airport. As security restrictions and other developments restrict corporate and light plane activities in the Peoria area, more and more pilots are using the facilities at Marshall County Airport.

Sincerely,

MARSHALL COUNTY AIRPORT BOARD

Charles L. Allen
President

This certificate is issued under and subject to the provisions of the Illinois Aeronautics Department for the Administration thereof.



STATE OF ILLINOIS
RICHARD B. OGILVIE, GOVERNOR
DEPARTMENT OF AERONAUTICS
Springfield

Certificate

THIS CERTIFICATE, issued pursuant to an order of the Department of Aeronautics, dated January 29, 1970, certifies that the airport described below has been approved as a Restricted Landing Area pursuant to the Laws of the State of Illinois and the Rules and Regulations of the Department of Aeronautics.

Located near Sparland, in the Northeast 1/4 of Section 4, Township 12 North, Range 9 East of the Fourth Principal Meridian, Marshall County, Illinois.

Issued to Donald O. Hughes this 14th day of July, 19 70

/s/ J. E. Wenzel
Director of Aeronautics

DISPLAY PROMINENTLY AT ALL TIMES



CITY OF LACON

CITY HALL - LACON, ILLINOIS 61540
Phone (309) 246-6111

October 8, 2002

Dan Dupies
Project Planner
CH2M HILL
135 South 84th Street
Suite 325
Milwaukee, WI 53214-1456

Dear Dan:

As Mayor of Lacon and a concerned citizen of Marshall County, I want to express my support for widening Rt. 29 in its present location. Relocating the highway would isolate our community and other small towns in rural Marshall County, resulting in erosion of our businesses and population.

At present, we have two manufacturing facilities that rely on truck transportation and would greatly benefit from having a multi-lane highway accessible to their distribution point. Our commercial district has room for growth and the proposed expansion of the highway would make the Lacon commercial district more desirable for new business to locate.

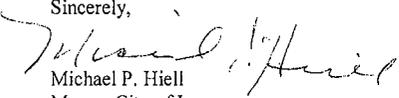
A large portion of our population works and/or shops in the Peoria area, utilizing the current Rt. 29 would greatly improve the safety and reduce the time for that trip.

The Peoria area is growing from the South to the North along the Rt. 29 corridor. I feel that having modern highways will enhance that growth into our community making Lacon a comfortable place to purchase homes and raise families.

Lacon is located on the Illinois River with an active marina. Our restaurants, antique shops and unique retail stores attract a moderate level of tourism. Improving the access to our community would enable us to increase tourism and interest in this region.

Again, I urge you to choose the solution that widens Rt. 29 in its current location. Rural communities are the backbone of Central Illinois and this is the only solution that allows the communities in Marshall County to thrive.

Sincerely,


Michael P. Hiell
Mayor, City of Lacon

October 2, 2002

168912.B0.EN.01

Mayor Mike Hiell
406 5th Street
Lacon, IL 61540

Subject: Illinois Route 29 Study
IL 6 to I-180
Peoria, Marshall, Putnam, and Bureau Counties
October 8, 2002 Meeting

Dear Mayor Hiell:

Thank you for agreeing to meet with us on October 8 to discuss your views on the need for the IL 29 project. As we discussed, the meeting will begin at 4:30 p.m. and will be held in the Marshall County Courthouse Boardroom.

As I mentioned during our conversation, a critical chapter of the Environmental Impact Statement we will be preparing for this study is the first chapter which describes the need for improvements along IL 29. To develop a compelling "need statement" for IL 29 improvements, we would like to include input from people such as you that use the highway on a daily basis. Your knowledge of commuting patterns and the importance of the highway for existing and prospective businesses and to accommodate planned development will complement data we are collecting on existing and future traffic information, crash data, and engineering deficiencies along IL 29.

I look forward to meeting you. If you have any questions about the October 8 meeting or the project in general, please ring me at 414-272-2426.

Sincerely,

CH2M HILL

Dan Dupies
Project Planner



County Board of Marshall County, Illinois

COUNTY COURTHOUSE • LACON, ILLINOIS 61540 • PHONE (309) 246-6325

10/08/2002

Dan Dupies
Project Planner
CH2M HILL
Suite 325
135 South 84th Street
Milwaukee, WI 53214-1456

Dear Mr. Dupies:

I want to thank you for coming to Marshall County, and it is my hope that when you leave, it will be with a positive understanding of why the widening of current Rt. 29 in its present location, is so important.

As you mentioned in your letter of the 2nd of October, you have all of the facts and figures relating to traffic counts, crash data, etcetera. What I hope to impart with our meeting, is information that is not readily available in a facts and figure format.

A large portion of our residents work, shop and play in the Peoria metro area, an area that is moving northward. The personal traffic pattern for most residents of this side of Marshall County is Rt 29.

Marshall County is home to industries and has its own airport. All of which would be greatly enhanced by the improvement to Rt 29.

At our meeting you will have a chance to meet with the Mayors along the Rt 29 corridor and I am sure that they will also have positive input for you. I have also attached letters of support from our Airport and our major industries.

Again thanks for seeking local input, and I hope to see this project come to fruition in the not too distant future.

Sincerely,

Thomas V Wenk
Chairman, Marshall County Board

Attachments



Illinois Department of Transportation

Division of Highways / District 4
401 Main Street / Peoria, Illinois / 61602-1111
Telephone 309/671-3333

March 11, 2003

Mr. Dennis W. Bailey, Manager
Distribution Operations
Poly One Corporation - 440-930-1000
33587 Walker Road
Avon Lake, OH 44012

Dear Mr. Bailey:

In a letter dated March 11, 2002, you responded to the Department's inquiry about activities with respect to the possible sale of the Lincoln and Southern Railroad. The letter indicated a willingness to engage in discussions about using the L&S right-of-way to expand IL 29 as long as the safety or viability of operations along the line was not disturbed.

The study of the expansion of IL 29 to four lanes is underway. The Department has hired the engineering firm CHM2HILL to perform the study. The project extends from IL 6 near Peoria to I-180 near Hennepin. The proposed expansion poses many engineering challenges since it lies in an environmentally sensitive area that is often constrained by the river, bluff, and railroad. The L&S Railroad and IL 29 parallel one another over much of the project length north of Chillicothe. Several design alternatives are being evaluated; some of the alternates require that the Department consider relocating a portion of the railroad.

In the near future, Department representatives will be contacting you for assistance to help evaluate alternates that may affect the railroad. Please provide the name of the individual(s) you would like to participate in the evaluation. The Department fully understands the importance of maintaining both modes of transportation within the study area and looks forward to working with you. Please contact Mr. John Anderson at (309) 671-3493 or Maureen Addis at (309) 671-3454 if you have any questions.

Very truly yours,

Joseph E. Crowe, P.E.
District Engineer

By: Eric S. Therkildsen, P.E.
Program Development

MMA:tdp\slmgr2\winword\std&plns\addis\letters\mma0021.doc

cc: Project File (M. Lewis)
CH2M Hill
John Schwalbach (Bureau of Railroads)

RESOLUTION NO. 03-01

A RESOLUTION OF THE CITY OF HENRY, MARSHALL COUNTY, ILLINOIS SUPPORTING IMPROVEMENT OF ROUTE 29 AS A PART OF THE FOUR LANE HIGHWAY SYSTEM FROM PEORIA TO CHICAGO.

WHEREAS, a four lane highway to link Peoria and Chicago has been proposed; and

WHEREAS, THE City of Henry wishes to express its support for a highway linking Peoria and Chicago; and

WHEREAS, on the 14th day of August, 2000, the City of Henry adopted Resolution No. 00-6 expressing its support for the construction of a highway as an extension of the Interstate 474/Illinois Route 6 Bypass to the North of Peoria to the southerly end of Interstate 180 located North of Putnam, Illinois; and

WHEREAS, presently, a two lane highway known as Illinois Route 29 connects the Interstate 474/Route 6 Bypass to Interstate 180; and

WHEREAS, the improvement of Route 29 to a four lane highway or incorporation of Route 29 into a four lane highway, in addition to keeping prime farmland available for production, will have the beneficial effect of facilitating the use of existing supporting services such as service stations, restaurants, lodging and emergency facilities by travelers on the highway.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF HENRY, MARSHALL COUNTY, ILLINOIS, as follows:

Section 1: That the City of Henry hereby expresses its support for the construction of a four lane highway system from Peoria to Chicago by incorporating or improving, as part of the four lane highway, Route 29 from at or near its intersection with the Interstate 474/Illinois Route 6 Bypass at Peoria to Interstate 180.

PASSED BY THE COUNCIL OF THE CITY OF HENRY, MARSHALL COUNTY, ILLINOIS, IN REGULAR AND PUBLIC SESSION, THIS 12th DAY OF May, 2003.

CH2MHILL TELEPHONE CONVERSATION RECORD

Call To: Dennis W. Bailey, Manager
Poly One Corporation

Phone No.: 440-930-1000

Date: May 13, 2003

Call From: Dick Stafford

Time: 02:54 PM

Message

Taken By: Richard W. Stafford, P.E.

Subject: Illinois 29--Railroad Relocation

Pursuant to IDOT's request I contacted Poly One Corporation, owners of the railroad parallel to Illinois Route 29. I begin the conversation by reminding Mr. Bailey of a letter IDOT sent to his attention on March 11th, 2003. Mr. Bailey remembered the letter and the issues regarding their railroad.

Mr. Bailey stated that they have had an internal meeting discussing the potential of the relocation of their railroad tracks in conjunction with improvements and expansion of Illinois Route 29. Mr. Bailey stated that at their internal meeting they concurred/agreed that it was acceptable to Poly One for their tracks to be relocated with IDOT paying for the relocation. He also stated that it was necessary for their tracks to remain operational while the track relocation is being constructed.

Mr. Bailey asked where we are at in the project. I told him that we are still in the planning mode/alternatives development stages. I also informed him that IDOT would be holding a Public Information Meeting in the second week of June. Mr. Bailey requested to be informed of the time and day when these information meetings will be held. He expressed the desire for his organization to attend. I told Mr. Bailey I would let him know as soon as the date has been set.

Mr. Bailey also left me the phone number and the contact at the Iowa Interstate. The contact is Pat Sheldon/Iowa City, Iowa. Phone number is 319-339-9504

RESOLUTION NO. R-17-03-6-2

WHEREAS, a four lane highway to link Peoria and Chicago has been proposed; and

WHEREAS, the City of Princeton wishes to express its support for a highway linking Peoria to Chicago; and

WHEREAS, on the 21st day of August 2000, the City of Princeton adopted Resolution No. R-10-00-8-21 expressing its support for the construction of a highway as an extension of the Interstate 474/Illinois Route 6 Bypass to the North of Peoria to the southerly end of Interstate 180 located North of Putnam, Illinois; and

WHEREAS, presently, a two lane highway known as Illinois Route 29 connects the Interstate 474/Route 6 Bypass to Interstate 180; and,

WHEREAS, the improvement of Route 29 to a four lane highway or incorporation of Route 29 into four lane highway, in addition to keeping prime farmland available for production, will have the beneficial effect of facilitating the use of existing supporting services such as service stations, restaurants, lodging and emergency facilities by travelers on the highway.

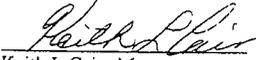
NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND THE CITY COUNCIL OF THE CITY OF PRINCETON, BUREAU COUNTY, ILLINOIS, as follows:

Section 1: That the City of Princeton hereby expresses its support for the construction of a four lane highway system from Peoria to Chicago by incorporating or improving, as part of the four lane highway, Route 29, from at or near its intersection with the Interstate 474/Illinois Route 6 Bypass at Peoria to Interstate 180.

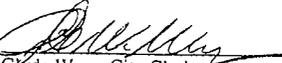
Passed and adopted this 2nd day of June, 2003.

	<u>AYE</u>	<u>NAY</u>	<u>ABSENT</u>	<u>ABSTAIN</u>
Mayor Keith L Cain	x			
Councilmen:				
Robert L Warren	x			
Al Taylor	x			
Ray Swanson	✓			
James R Myers	x			

APPROVED:


Keith L Cain, Mayor

ATTEST:


Clyde Wray, City Clerk

A RESOLUTION OF THE COUNTY OF MARSHALL, ILLINOIS SUPPORTING IMPROVEMENT OF ROUTE 29 AS A PART OF THE FOUR LANE HIGHWAY SYSTEM FROM ROUTE 6 IN PEORIA COUNTY TO ROUTE 80 IN BUREAU COUNTY ILLINOIS.

WHEREAS, a four lane highway to link Route 6 to Route 80 has been proposed; and

WHEREAS, The County of Marshall wishes to express its support for a highway linking Route 6 and Route 80.

WHEREAS, we have previously gone on record expressing its support for the construction of a highway as an extension of the Interstate 474/ Illinois Route 6 Bypass to the North of Peoria to the southerly end of Interstate 180 located North of Putnam, Illinois; and

WHEREAS, presently, a two lane highway known as Illinois Route 29 connects the Interstate 474/ Route 6 Bypass to Interstate 180; and

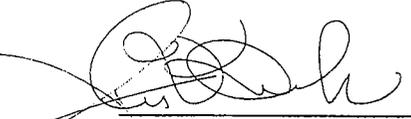
WHEREAS, the improvement of Route 29 to a four lane highway or incorporation of Route 29 into a four lane highway, in addition to keeping prime farmland available for production, will have the beneficial effect of facilitating the use of existing supporting services such as service stations, restaurants, lodging and emergency facilities by travelers on this highway.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNTY BOARD OF MARSHALL COUNTY, ILLINOIS, as follows:

Section 1: That the County Board of Marshall County hereby expresses its support for the construction of a four lane highway system from Route 6 to Route 80 by incorporating or improving, as part of the four lane highway, Route 29 from at or near its intersection with the Interstate 474/ Illinois Route 6 Bypass at Peoria to Interstate 180.

PASSED BY THE COUNTY BOARD OF MARSHALL COUNTY, ILLINOIS, IN REGULAR AND PUBLIC SESSION, THIS 5th DAY OF June, 2003.


Andrea J. Mahoney
Marshall County Clerk


Thomas V. Wenk, Chairman
Marshall County Board

RESOLUTION OF BUREAU COUNTY
SUPPORTING IMPROVEMENT OF ROUTE 29 AS A PART OF THE
FOUR LANE HIGHWAY SYSTEM FROM PEORIA TO INTERSTATE 180

WHEREAS, presently, a two lane highway known as Illinois Route 29 connects the Interstate 474/Route 6 Bypass to Interstate 180; and,

WHEREAS, a four lane highway to link Peoria and Chicago has been proposed; and Bureau County wishes to express its support for a highway linking Peoria and I-180; and

WHEREAS, the improvement of Route 29 to a four lane highway or incorporation of Route 29 into a four lane highway, will have the beneficial effect of encouraging economic development and improving the use of existing supporting services such as service stations, restaurants, lodging and emergency facilities by travelers on the highway.

WHEREAS, the transportation committee reviewed the Route 29 improvement project at the meeting on May 27, 2003 and recommends support of the project to the full county board

NOW, THEREFORE, BE IT RESOLVED BY THE COUNTY OF BUREAU

That the County of Bureau hereby expresses its support for the construction of a four lane highway system from Peoria to I-180 by incorporating or improving, as part of the four lane highway, Route 29 from at or near its intersection with the Interstate 474/Illinois Route 6 Bypass in Peoria to Interstate 180 in Bureau County.

Ron Happach
Ron Happach, Chairman
Bureau County Board

STATE OF ILLINOIS)
)SS
COUNTY OF BUREAU)

I, Kamala Hieronymus, County Clerk in and for the County and State aforementioned and keeper of the records and files of said county office hereby certify that the foregoing is a true, correct statement and copy of a resolution passed by the county board at their meeting on this ¹⁰~~12~~^{June} day of ~~May~~, 2003.

WITNESS, my hand and official seal of the County Clerk of said county in Princeton, Illinois this ¹⁰~~13~~^{June} day of ~~May~~, 2003.

(SEAL)

Kamala S. Hieronymus
Kamala Hieronymus,
County Clerk

APPROVED:

Daryl Fauntleroy
Mayor

ATTEST: Jane Gildner
City Clerk

EXAMINED AND APPROVED:

[Signature]
Corporation Counsel

Illinois Route 29—Field Review and Meeting with Mayor of Chillicothe

ATTENDEES: Don White/Mayor
Syd/Public Works Director
Dick Stafford/CHI
Kim Kolody/CHI

FROM: CH2M HILL

DATE: July 7, 2003

On Wednesday, July 3rd, 2003 CH2M HILL were involved in a field review to investigate various conditions as they relate to alternative alignments developed for the Illinois Route 29 Phase I Study. In addition to the field review, a meeting was also held with Mayor Don White of Chillicothe and the Chillicothe Public Works Director.

Gravel Pit Issues

The existing gravel pit area was investigated. CH2M HILL met with operators of the Galena Road Gravel Inc. to get a reasonable understanding of activities, future plans, etc. The following information was uncovered:

- The gravel pit has a depth of approximately 70 to 75 feet.
- The gravel pit will be excavating areas further to the west than was seen in the field review. It was stated that they will excavate an area up to their property line. Their property line extends west through the S-5 (furthest east) alignment. Currently there is some operation in the area near the S-5 alignment, however, the depth of the excavation is relatively small compared to other areas of the gravel pit.
- The right-of-way line for the S-4 mainline alignment (west of S-5) has its eastern right-of-way line located where the gravel pit's property line is located. All of the S-4 mainline right-of-way would not encroach upon the gravel pit. This alignment would have less of an impact on the gravel pit than would S-5. Note that an interchange at Truit would still have some encroachment upon the gravel pit. At this time this does not appear to be a problem.

North of Gravel Pit and Railroad Tracks

This area is the area north of the gravel pit and north of the railroad tracks, where the Illinois Route 29 bypass of Chillicothe travels further to the east to tie into existing Illinois Route 29. The following are some field observations and information received from the Gravel Pit owner.

- Galena Road Gravel Inc. owns property north of the railroad tracks, and is planning on excavating that area in the future.

- Alternative alignments north of the railroad tracks travels through some of the Galena Road Gravel Inc. property. Specifically, alternative alignment S-4b and S-5b encroach upon the site.
- Field investigations identified potential concerns over the alignments S-4b and S-5b. These alignments travel parallel to the Senachwine Creek, and travels between the Senachwine Creek and the major ponds/waterways associated with the Galena Road Gravel Inc's property. Major soil stability, impacts to the future excavation of the Galena Road Gravel Inc's property, and other potential environmental issues could arise.
- Alignments S-4a and S-5a would have limited, if not any impact, to the Galena Road Gravel Inc's property north of the railroad tracks.
- The terrain of this area was also investigated in the field review. It appeared that the alignments S-4/5a would be able to "fit better" within the existing terrain then would alignments S-4/5b.

Meeting with Mayor Don White

A meeting was also held on July 2nd, 2003 with Don White Mayor of Chillicothe, and the Chillicothe's Public Works Director. The objective of this meeting was to:

- Understand the city's overall comprehensive plan.
- The city's concerns, preference, and/or impacts regarding the potential Illinois Route 29 bypass alignments to be carried forward.

The following documents key points that were brought up during the discussion:

- S-5 alignment is less politically desirable for some of the city's council members.
- S-5 alignment may impact the gravel pit. It was pointed out to the Mayor that this would may be very costly if a long spanned bridge would be necessary to travel over Truitt, over the railroad, and then span over the gravel pit.
- Mayor White stated that alignment S-5 is approximately ¼ mile west of the city limits, and that this alignment would enable more development to the west without hitting the S-5 alignment. The mayor went on to state that in the future growth would expand even further then ¼ mile, and that the S-5 alignment may develop into a boundary/barrier for future expansion. The mayor then stated that the S-4 alignments would enable more area for future development then would S-5. The Mayor stated that this would be a desirable factor.

The Mayor's overall vision for the Chillicothe network would be to:

- Extend McGrath Street to the west to S-4. McGrath Street is just north of Three Sisters Park and runs parallel, south of Cloverdale Rd.
- Consider interchanges at McGrath Street and Truitt Road.
- Grade separate Cloverdale Road and Sycamore Street at the Illinois Route 29 Bypass to maintain roadway continuity, and to ensure that access is not cut off.

- An at-grade crossing or grade separation at Benedict to provide access to newly developing high-end housing as well as a possible golf course.
- An interchange at either Cedar Hills Drive or Old Galena Road for access to Caterpillar would be beneficial.

The Chillicothe Public Works Director made some comments regarding utility issues.

- There is a lift station located along the south side of Sycamore Street, east of S-5. The lift is used for sewer and could be maintained if either alignment were selected.
- Caissons, existing and future, would be a concern if there were at-grade intersections at Cloverdale or Sycamore with either of the two bypass alignments. The Public Works Director stated if Cloverdale and Sycamore were to become at-grade intersection with the bypass alignments that the current and future function of the lift station would be difficult to maintain or expand. It was pointed out to the Director that these roadways are currently under study, and that they would probably be grade separated. The Director stated that this would avoid any problems.

The Mayor expressed that they will meet with the city council in order to pass a resolution in support of S-4. He seemed confident that they could get a majority of the votes, but it is unlikely to be unanimous.

The Mayor would like to set up a meeting with IDOT and the project team to present to the city council the issues associated with the two remaining alignments. The Mayor would like to have this meeting before the council resolution meeting.



One Geon Center • Avon Lake, Ohio 44012 • 440-930-3084
246-930-1000

251 Chancellor's Park Court
Simpsonville, S.C. 29681
July 23, 2003

Mr. Eric Therkildsen, P.E.
Program Development Engineer
Illinois Department of Transportation
401 Main Street
Peoria, Illinois 61602

SUBJECT: Illinois Route 29 Study

Dear Mr. Therkildsen:

I enjoyed meeting you at the Public Information Meeting, held on June 11, 2003 at Henry Senachwine High School on Highway 29. I realize that this was a preliminary overview as to the various alignments for route 29 that the Department has under consideration. It was good to meet some of the persons; both from IDOT and CH2M HILL that are currently involved in this major project of expansion of Illinois 29 to four lanes.

Lincoln and Southern Railroad as a property owner, has an ongoing interest in the outcome of this project. Our operator, the Iowa Interstate Railroad, has a very strong interest as well.

We are extremely concerned that the drainage conditions along the right of way do not deteriorate as a consequence of any work done on Rte. 29, particularly that could effect the railroad right of way. To assist us in assessing the drainage issues, as well as the project in general, we appreciate receiving copies of your hydraulic engineering survey when it is completed.

Depending on the final footprint for the highway IDOT may require easements. We would appreciate the opportunity to discuss the impact of those easements on railroad operations. In addition, if Route 17 at Sparland is realigned we would appreciate IDOT consulting with us on (minimum required) clearance issues.

Naturally, the Lincoln & Southern would have a deep interest in assisting IDOT in the identification and selection of reputable contractors for any track revision/relocation work.

If you have any question, please contact me.

Yours very truly,



Donald M. Murray, President
Lincoln & Southern Railroad

✓ Cc Richard W. Stafford, PE
CH2M Hill

Patrick H. Sheldon, AVP
Iowa Interstate Railroad

Woodrow Ban
PolyOne Corporation

Dennis Bailey,
PolyOne Corporation

CORRIDOR "A" RESOLUTION

A RESOLUTION OF THE HENRY SENACHWINE COMMUNITY UNIT SCHOOL DISTRICT 5, MARSHALL COUNTY, ILLINOIS SUPPORTING IMPROVEMENT OF ROUTE 29 AS A PART OF THE FOUR LANE HIGHWAY SYSTEM FROM PEORIA TO CHICAGO.

WHEREAS, a four-lane highway to link Peoria and Chicago has been proposed; and

WHEREAS, the Henry Senachwine Community Unit School District 5 wishes to express its support for a highway linking Peoria and Chicago; and

WHEREAS, presently, a two-lane highway known as Illinois Route 29 connects the Interstate 474/Route 6 Bypass to Interstate 180; and

WHEREAS, the State of Illinois Department of Transportation has proposed a route which does not take advantage of or incorporate significant portions of Illinois Route 29; and

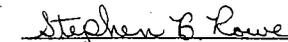
WHEREAS, the construction of a highway at the location recently proposed by IDOT (Corridor A) will take prime farmland out of production, increase transportation expenses and will isolate communities presently located on Route 29; and

WHEREAS, the improvement of Route 29 to a four-lane highway or incorporation of Route 29 into a four-lane highway, in addition to keeping prime farmland available for production will have the beneficial effect of facilitating the use of existing supporting services such as service stations, restaurants, lodging and emergency facilities by travelers on the highway.

NOW, THEREFORE, BE IT RESOLVED THAT THE HENRY SENACHWINE COMMUNITY UNIT SCHOOL DISTRICT 5 BOARD OF EDUCATION, MARSHALL COUNTY, ILLINOIS, that the Board of Education hereby amends its support for the construction of a four-lane highway system from Route 29 to Interstate 180. The District 5 School Board encourages the Illinois Department of Transportation to perform a study providing a 65 mph, four-lane highway improvement extending from Illinois Route 6 near Mossville, Illinois to I-180 near Hennepin, Illinois with such highway to come within ½ mile of the Henry city limits.

PASSED BY THE BOARD OF EDUCATION OF THE HENRY SENACHWINE COMMUNITY UNIT SCHOOL DISTRICT 5, MARSHALL COUNTY, ILLINOIS IN REGULAR SESSION, THIS 20TH DAY OF AUGUST, 2003.

APPROVED:


Stephen B. Rowe

ATTEST:


Joyce Wood, Board Secretary

RESOLUTION NO. 03-09-10

**A RESOLUTION OF THE CITY OF CHILlicoTHE, PEORIA COUNTY, ILLINOIS
SUPPORTING IMPROVEMENTS OF ROUTE 29 CONNECTING ILLINOIS ROUTE 6
TO INTERSTATE I-180.**

WHEREAS, a high-speed, four-lane, limited access highway linking Illinois Route 6 to Interstate I-180 has been proposed; and

WHEREAS, a two-lane highway, known as Illinois Route 29, presently connects Illinois Route 6 to Interstate I-180; and

WHEREAS, the improvement of Illinois Route 29 to a high-speed, four-lane, limited access highway, in addition to keeping prime farmland in production, will have a beneficial effect, if planned well, on the communities along the Route, including Chillicothe; and

WHEREAS, Chillicothe's current Comprehensive Plan points out that our community's future growth will be to the West; and

WHEREAS, the proposed highway Corridors under consideration bypass Chillicothe to the West; and

WHEREAS, the City of Chillicothe wishes to express its support for the proposed highway, and have input to the design of the highway as it bypasses Chillicothe.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CHILlicoTHE, PEORIA COUNTY, ILLINOIS, as follows:

The City of Chillicothe hereby expresses its support for the construction of a high-speed, four-lane, limited access highway linking Illinois Route 6 to Interstate I-180, and bypassing the City of Chillicothe along proposed Corridor Alignment S-4, approximately one-half mile west of Chillicothe's current Corporate Limits; as long as the Illinois Department of Transportation allows City input, and provides full consideration of:

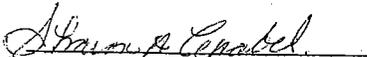
- A) a frontage road along the highway
- B) exits from the highway at Trutt Avenue and McGrath Street (extended),
- C) an underpass/overpass at Cloverdale Road, Benedict Road and Sycamore Street;

thereby allowing farm access, future development along the highway, future housing growth to the West, and police and fire access to the West.

PASSED BY THE COUNCIL OF THE CITY OF CHILlicothe, PEORIA COUNTY, ILLINOIS, THIS 8th DAY OF September, 2003.


Donald Z. White, Mayor

ATTEST:


Sharon A. Crabel, City Clerk



Chillicothe Area Chamber of Commerce
1028 North Second Street * Chillicothe, IL 61523-0106
309 274-4556 Fax 309 274-3303
www.chillicothechamber.com E-Mail info@chillicothechamber.com

Illinois Route 29 Chillicothe Bypass Resolution Survey

The Chillicothe Chamber of Commerce conducted a survey of its membership regarding their views of a resolution presented to the Chillicothe City Council by Mayor Donald White. The resolution would, if passed by the Council, express support for the Illinois Department of Transportation (IDOT) proposal to construct a high-speed highway that would bypass the City of Chillicothe along the west side of City.

Mayor White's proposed resolution iterates the general concept of the IDOT plan to build the new roadway. The resolution says that the City of Chillicothe supports the proposed highway bypass, as long as IDOT would allow the City of Chillicothe to provide input on the project and to assure that IDOT would consider three conditions.

The three conditions called for by the City of Chillicothe were 1.) Construction of a frontage road along the highway, 2.) Build highway exits at McGrath Street on the South, and at Truitt Ave. on the North. (McGrath Street would require extension from its current end at Parkhill St.) 3.) IDOT would construct an underpass or overpass at Cloverdale Road, Benedict Street and Sycamore Street.

The survey was mailed to members of the Chillicothe Chamber of Commerce. The survey included a copy of the proposed resolution and indicated that the empirical research studies submitted by First Ward Alderman Chris Cassidy were available for review at the City Clerk's office and at the Chamber of Commerce office. The survey contained four questions and a provision for additional comments.

Survey Questions

- In the conduct of your business, do you believe the bypass will benefit your business?
- Do you believe that the current road structure is adequate for the future growth and development of this city?
- Given the opportunity, would you vote in favor or against the current bypass resolution?
- Do you believe a new road, as proposed in the resolution, will increase the city's residential growth?

Survey Results

Nr. of Surveys Mailed	Nr. of Surveys Returned	Response Percentage
94	21	22%

Survey question responses

1. In the conduct of your business, do you believe the bypass will benefit your business?

Yes: 13 (62%)	No: 7 (33%)	N/A 1 (5%)
---------------	-------------	------------

2. Do you believe that the current road structure is adequate for the future growth and development of this city?

Yes: 11 (52%)	No: 8 (38%)	N/A or Unsure 2 (10%)
---------------	-------------	-----------------------

3. Given the opportunity, would you vote in favor or against the current bypass resolution?

Yes: 15 (71%)	No: 6 (29%)	
---------------	-------------	--

4. Do you believe a new road, as proposed in the resolution, will increase the city's residential growth?

Yes: 14 (67%)	No: 6 (29%)	Perhaps: 1 (4%)
---------------	-------------	-----------------

Note: Percentages were rounded to nearest full number to equal 100%.

Additional Comments

1. The new road to the west will provide Chillicothe with an opportunity to grow, if our city leaders are willing to take advantage of it. 3 Sisters(Park) when fully developed, will have better access for those traveling distances.
2. Should the new road bypass Chili by being constructed on the east side of the river, it could have a negative effect on Chillicothe. The current road structure would remain status-quo, at best.
3. I do not believe there is a need for another road going north from Peoria.

4. What a waste of taxpayer money! The town will be a place to sleep, but no money will be spent here. 4th Street & 2nd Street will be empty – may as well put apartments or (illegible) there.
5. With a bypass going west of town people from Lacon and Sparland will no longer come here for groceries when the bypass will be a straight-shot to Super WalMart, Cub Foods or Kroger on Rte 40. Fast food won't stay on 4th Street. They will move out near the bypass as will gas station. Business does generate tax and I hope it isn't forgotten.
6. The bypass will kill 2nd and 4th street business. When people get on the bypass they will go to Peoria more than they do now and the local businesses do not get good patronization now.
7. Suggest adding a second resolution favoring the construction of a bridge at Mossyville.
8. This road may be built regardless of local desires. To alienate the planners & designers would be a mistake.
9. Years ago Second Street was Route 29.... Take a good look at Second Street, think back 20 years ago when we had a dime store, 2 jewelry stores, 3 hardware stores, 2 drug stores, 2 banks, a dress shop, a gift shop, a menswear store, a book/card shop, a photo shop, a fabric store, a craft store, a furniture store, a shoe store, a JC Penny store, a feed store and more in those two blocks. With the traffic flow went the business to Fourth Street. Take a good look at Fourth Street, 20 years from now....
10. The specifics in the resolution with regards to bypass location, exits, and under/over passes is a very good compromise - I am in full support.
11. This road isn't being proposed because Chillicothe needs it. It is being considered because the Greater Peoria Area needs it. Central Illinois needs it. It just happens to run near Chillicothe. I believe it would be a valuable asset to our City in the long term. In the short term, it would probably hurt some local merchants. However, because of what it would mean for the future growth of Chillicothe, I would have to be for it.
12. It would be easy for this resolution to pass, because we leave this decision in the hands of the mayor and council. Past voting records indicate that 10 to 25% of our community vote at general elections. People become complacent and disgusted with the system. The public doesn't generally voice their opinions. This however, has not been the case about the Chillicothe bypass. There has been a large grassroots effort to stop any type of bypass for Chillicothe. Are our elected officials now listening to the voters? Not one city official has asked for my opinion. Other business people I spoke with have not been contacted.
13. The Chillicothe Area Chamber of Commerce should be commended in their efforts for soliciting input from area business people. If this were put to vote, what would be the results? Bypass or No bypass? Do the elected officials know?
14. Our mayor and council should be making a concentrated effort to woo new business to Chillicothe. Chillicothe shouldn't have to settle on being a bedroom community. Isn't our motto, "Where the River Meets the Rails"? We have natural resources here that we should be promoting. Why settle? Other communities get aggressive in their efforts to promote growth. Why not / Chillicothe?
15. A road runs two ways. If we believe it will make it easy to come to Chillicothe, why won't it make it easier for people to leave Chillicothe – to shop Peoria?
16. What is not currently adequate is the north side of Chillicothe, where our four-lane road narrows to two-lane, making it inadequate for people to connect to Interstate 180.
17. Communities grow into great cities when business growth takes place.
18. What makes us believe residential growth is the answer for Chillicothe? Business growth is needed and residential growth will follow with little effort.
19. I would definitely not vote for the bypass. It will be a severe blow to Chillicothe.
20. (A) bridge would be better; going across river at Truitt.
21. What a great chance to manage the growth to the west. We probably have 10 years or so, to get the city services out to the road site. Good planning would allow the addition of both housing and commercial development along the road. I can see light industry and warehousing along the north end to take advantage of the road and rail access.
22. Let's support the road. Then get busy and see what the road can do for Chillicothe.
23. We will grow or Peoria will grow up to our borders. We need to manage the growth area and this is a great opportunity to manage this. If we don't do it, Peoria will manage it for us and guess what they will do for Chillicothe.
24. The City should plan to get sewer, water, etc. to the other side of the proposed road as soon as possible. Annex the area now and rebate city taxes to the current owners until it is not used for agriculture.



Caterpillar Inc.

100 NE Adams Street
Peoria, Illinois 61625

January 5, 2004

Mr. Eric S. Therkildsen
Program Development Engineer
District 4
401 Main Street
Peoria, IL 61602

Dear Eric:

This letter will confirm the phone conversation we had on December 23, 2003 regarding Route 6 Extension.

After review by appropriate administrative, facility and real estate officers, Caterpillar's preference for Illinois Route 29 - Illinois Route 6 to North of Caterpillar property is Alternative 1 - Exhibit 1.

Thank you for the opportunity to participate in this decision phase of this important transportation improvement program for the greater Peoria area.

Best wishes for a successful 2004.

Sincerely,

Henry Holling
Manager
Social Responsibility Initiatives
Global Public Affairs

Henry Holling
Telephone: (309) 675-4418



Message

Page 1 of 2

-----Original Message-----

From: Lewis, Mike [mailto:LewisML@dot.il.gov]

Sent: April 23, 2004 1:04 PM

To: Therkildsen, Eric S; Anderson, John J DOT; Addis, Maureen M; Green, Paula A; Larson, Greg V

Cc: Jodle, Jim/MKE; Kolody, Kim/CHI; Duples, Dan/MKE

Subject: Henry Fire Protection District Meeting

IL 29 Team --

Here are a few notes from the meeting Maureen and I had last night with the Henry Fire Protection District.

- General consensus seemed to be that the proposed improvements wouldn't help or hurt their operations; it would just be different. They would need to find different ways to get around.
- Their current buildings in Putnam would not be impacted by the improvements shown at this time. (Through the town of Putnam, not bypassing, was shown to the group. It was explained, however, that if there is a great deal of opposition to going through town, this could change. From the first set of public meetings, however, there didn't seem to be that opposition). Also, the property they are considering moving to would not be affected greatly either. They are considering moving to the northwest corner of Bradford Road and Center Street.
- They didn't seem to think their operations in the Henry area would be adversely affected a great deal. They asked a few questions about crossing the median for accidents on the new expressway. IDOT explained it there would be intersections to turn around and occasional median crossings available as well. The locations of the median crossings haven't been decided yet.
- They did not note any existing problems that would be corrected by the proposed improvements. Nor did they see any major complications caused by the improvements.
- One of the Fire Protection District trustees asked if using existing IL 29 to go north may be faster than using the new Henry bypass. It was pointed out, however, that by using the bypass, vehicles on the highway would have more room to get out of a fire truck's way, and it would be safer to travel faster on the bypass than it would be in town.
- The possibility of a cul-de-sac south of Henry on existing IL 29 was discussed. The Fire Protection District did not express a major concern over that design. It was noted, however, that all the information shown to them could be subject to further revision, based upon new information IDOT receives from field investigations and from public comment.
- The District trustees said they are 100% volunteer. They have 3 locations (Henry, Putnam, and 10 miles west of Henry) where they keep their equipment, so that they are able to be within 10 miles of any location in their district. Depending on where the call comes from, they have different people assigned to go to the different locations. (That is, people who live close to Putnam, for instance, are the ones who would be called out if the emergency was close to Putnam.)
- Their district runs from the base of the I-180 hill (at Kentville Road) to Camp Grove Road. They are going to work on a map showing their full district boundaries. They will send it to IDOT or, if CH2M HILL calls first, send it to them.
- It was explained that there is at least two years left in this planning study, there is currently no funding for design plans, and there is no funding for construction itself at this time.
- The Fire Protection District asked if they could receive a base map of Putnam without the proposed improvements shown. This map would have aerial background with topo shown (not contours, however; just edge of streets, street names, houses, sheds, grain elevators, existing R.O.W., etc.). Property owner names and property lines would be fine to show as well. The scale should be 1" = 50'.
- We let them know CH2M HILL will probably be contacting them in the next few months to follow up with

A-147

some more specific questions. Their contact is Mr. Allan L. Waldschmidt / 428 Western Road / Henry, IL 61537 / 309-364-3561 (Home). IDOT also encouraged them to call with any questions they may have in the future.

Please let me know if you have any questions. Thanks!

Mike L.

TECHNICAL MEMORANDUM

CH2MHILL

**IL 29 Meeting- Central Section
Senachwine Creek Watershed Committee
May 6, 2004**

PREPARED FOR:

Paula Green, IDOT
Greg Larson, IDOT
Mike Lewis, IDOT
Greg Larson, IDOT

PREPARED BY:

Jim Jodie, Project Manager

COPIES:

Kim Kolody, CH2M HILL
Cheng Soong, CH2M HILL
Dan Dupies, CH2M HILL
Fred Lin, Lin Engineering

DATE:

May 25, 2004

On Thursday, May 6, 2004, a meeting was held with the Senachwine Creek Watershed Committee at the District #4 office. The attendance sheet is attached. The purpose of the meeting was to discuss the proposed alignment of IL 29 at Senachwine Creek and the proposed encroachment onto the 100-year floodplain.

Items Discussed

1. The Committee identified an old paper mill as a potential historic site. The site is located just west of the Benedict Street bridge and north of Senachwine Creek. Subsequent to this meeting, Walthall was notified; he will notify John Vogel about this site.
2. The Senachwine Watershed group has received funds to install holding basins, detention ponds, willows, terraces, etc to minimize the impacts of hard rains and flooding situations (all incorporated in the Senachwine Creek Watershed Agreement #3190014 - Feb 2003). Remediation has been more successful on the bluff (on farmland).
3. The Committee did not have concerns regarding the proposed IL 29 design and impacts to the Creek. They would like to work closely with us through the mitigation process.
4. Over the last 10 years, Mr. Shepard had only one crop loss due to flooding. He said it is worse upstream.
5. The Committee has added grasses along the bank; this has been effective and should be included in the mitigation plan.

-
6. The velocity of Senachwine Creek really picks up where the 3 branches flow together (Hallock, Henry, and Senachwine), north of the BN&SF Railroad.
 7. There has been some flooding along the Creek at Old 29, near the Lincoln & Southern Railroad (east of existing IL 29).
 8. The name of Krause Road at Truitt Ave needs to be verified. It is labeled Krause Road to the south and North Hampton Road to the north. Subsequent to this meeting, the property records and map quest were searched; N. Blue Ridge Road is the name to the north. North Hampton Road connects with Blue Ridge Rd north of the BN &SF Railroad. Our plans will show N. Blue Ridge Road on the north side of Truitt Avenue.

ACTION

1. Fred Lin requested aerial photos from Josh Joseph from the 1950's to 1970's to determine changes in the channel. Josh agreed to send this information.
2. Josh Joseph will continue to be the prime contact. Paula mentioned that Dan Dupies would contact him to get more detail on the projects the Committee has been conducting.
3. CH 2M HILL will scan the color copy of the Senachwine Creek Watershed Agreement #3190014 - Feb 2003 and send it to the DOT.
4. Josh Joseph requested the digitized soils for Peoria County. CH 2M HILL will send them to Josh.

In the afternoon, we discussed other subjects:

ACTION

1. Paula requested that we take off the special waste on all constraint maps. Overall, DOT provided us with guidance on scales of exhibits for the next meetings and gave us some input on line types, weights, styles, etc. (We are in the process of working on the exhibits)
2. CH 2M HILL received a copy of the 50% central and 90% north plan sets with desired animal crossing locations and culvert sizes. Indicated on the plans are small/medium crossings = 5'x5' or large crossings = 10'x10'. Generally DOT tried to space large crossings every 3000 ft and small/medium crossings between the large crossings. CH2M HILL will check the locations and access.
3. Fencing should be shown near the back of the retaining walls and in other areas to guide the animals to the crossing locations. This should be shown on the plans. The Macomb EIS has an example of a conceptual animal crossing typical that CH 2M HILL can use.
4. The acres of landlocked properties that are impacted should be totaled and broken out by landowner.
5. CH 2M HILL needs to investigate the total floodplain impact along the corridor for the TAC meeting. Volumes should be calculated.
6. At Cedar Hills Drive, a standard diamond and 1 loop interchange (with diamond) should be evaluated. There is no need for the Parclo AB or compressed diamond. The mainline should cross over Cedar Hills Drive.
7. Ramps should be modified at IL 6.

-
8. Scott Stit can evaluate the Sparland interchanges or others without traffic data to let us know if he identifies any problems.

BUREAU COUNTY HIGHWAY DEPARTMENT
 595 Elm Place, Princeton Illinois 61356
 Phone: (815) 875-4477 Fax: (815) 875-4470
 Jeff Peacock, P.E., County Engineer



July 14, 2004

Eric Therkildsen, P.E.
 Program Development Engineer
 IDOT District 4
 401 Main Street
 Peoria, IL 61602

Re: Illinois Route 29 Design Study

Dear Mr. Therkildsen:

Please be advised that the Bureau County Board passed a Resolution at their regularly scheduled meeting on Tuesday, July 13, 2004, in support of the Route 29 project, and strongly encourage completion of the project in a timely manner. It is also my personal comment that construction commences at the north end.

Please feel free to call with any questions.

Sincerely,
 Bureau County Highway Department

Jeff Peacock
 Jeff Peacock, P.E.
 County Engineer

JEP/mkl

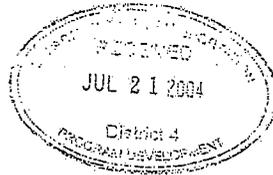
ATTENDANCE SHEET
IL 29/Sencachwine Creek Watershed Meeting
May 6, 2004

NAME	REPRESENTING	PHONE #	ADDRESS
1. [Handwritten]	ISVN CROOS	309 446 9184	501 W. College St - Princeton, IL 61356
2. [Handwritten]	Peoria, IL	671 7000 x 105	675 N. Main St - Peoria, IL 61602
3. [Handwritten]	Peoria, IL	319 849 3154	110 W. College St - Peoria, IL 61602
4. [Handwritten]	Peoria, IL	309-274-4002	521 E. 2nd St - Peoria, IL 61602
5. [Handwritten]	WIN BUREAU COUNTY	317-283-2188	210 W. Commercial - Peoria, IL 61602
6. [Handwritten]	ISVN		
7. [Handwritten]	ISVN	671-3474	
8. [Handwritten]	ISVN		
9. [Handwritten]	ISVN		
10. [Handwritten]	CHICK HILL		
11. [Handwritten]	" "		
12. [Handwritten]			
13. [Handwritten]			
14. [Handwritten]			

VILLAGE OF SPARLAND

P.O. BOX 278 • SPARLAND, ILLINOIS 61565

July 19, 2004



Dear Mr. Therkindsen,

I am writing on behalf of the Village of Sparland, concerning the state routes that you propose to build through our community.

The opinion of our Village is that we do not need a road to connect Peoria to Chicago, we already have several routes than can be taken to get there, it seems that the only reason the state wants one is to save about 20 minutes travel time and evidently the state has more highway money than they need and is just looking for a way to spend it, we believe it could be put to better use by fixing our already existing roads, Illinois is known for just putting up a sign for BUMP AHEAD instead of fixing them.

If you are determined to build a new highway, we would prefer to have it built west of Sparland, we know that you think you will be disturbing prime farmland, but if you would go out and test it, you would find that most of it is clay and gravel, another route that you are considering is a highway straight through Sparland buying out approximately 20 homes, due to the flood water buyout by the government we have already lost about 13 homes and 12 vacant lots, in the past five years, because of the flood buyout we have already had a severe economic hardship, we have lost water and sewer monies, plus real estate tax revenue, now you are asking a community of approximately 500 people to double their payments for water and sewer because of another buyout, actually it would end up being less people than 500. Another option and the one that would be more practical for the Sparland residents would be for you to take the eastern route that goes closer to the river, you would disturb fewer homes.

Let me also point out to you that North, South, and East of Sparland are also federal wildlife areas, do you think you have a right to disturb them, you need to look west of Sparland or do not even build the highway.

This letter is written with the approval of the Village Board of Sparland and the President of the Board.

Sincerely,

Ralph McCasky (President of the Board)



INF. ENG.	
PLN.	
ADMN.	
IMPLEMENTATION	
LOG. MGR.	
OPERATIONS	
PROGRAM DEVELOPMENT	<input checked="" type="checkbox"/>
REPLY	
PREPARE REPLY MAIL D.E. 2004	
INVESTIGATE & REPORT	
RETURN	

RESOLUTION 04-01

A RESOLUTION OF HENRY TOWNSHIP, MARSHALL COUNTY, ILLINOIS NOT SUPPORTING IMPROVEMENT OF ROUTE 29 AS A PART OF THE FOUR LANE HIGHWAY SYSTEM FROM PEORIA TO CHICAGO

WHEREAS, a four lane highway to link Peoria and Chicago has been proposed; and

WHEREAS, Henry Township wishes not to support the highway linking from Peoria and Chicago; and

WHEREAS, on the 10th day of August, 2004, Henry Township wishes not to support the construction of a highway as an extension of the Interstate 474/Illinois Route 6 Bypass to the North of Peoria to the southerly end of Interstate 180 located North of Putnam, Illinois; and

WHEREAS, presently, a two lane highway known as Illinois Route 29 connects the Interstate 474/Route 6 Bypass to Interstate 180; and

WHEREAS, the improvement of route 29 to a four lane highway or incorporation of Route 29 into a four lane highway, in addition to keeping prime farmland available for production, will have the beneficial effect of facilitating the use of existing supporting services such as service stations, restaurants, lodging and emergency facilities by travelers on the highway.

NOW, THEREFOR, BE IT RESOLVED BY THE SUPERVISOR AND TOWNSHIP BOARD OF HENRY, MARSHALL COUNTY, ILLINOIS, as follows:

Section 1: That Henry Township hereby will not support the construction of a four lane highway system from Peoria to Chicago by incorporating or improving, as part of the four lane highway, Route 29 from at or near its intersection with the Interstate 474/Illinois Route 6 Bypass at Peoria to Interstate 180.

PASSED BY THE TOWNSHIP BAORD OF HENRY, MARSHALL COUNTY, ILLINOIS, IN REGULAR AND PUBLIC SESSION, THIS 10TH DAY OF AUGUST, 2004.

APPROVED:

Supervisor

ATTEST:

CLERK



Illinois Department of Transportation

Division of Highways / District 4
401 Main Street / Peoria, Illinois / 61602-1111
Telephone 309/671-3333

HENRY TOWNSHIP
HENRY, ILLINOIS

August 27, 2004

BUREAU OF PROGRAM DEVELOPMENT
STUDIES & PLANS - PHASE I
Illinois Route 29 Study
Peoria, Marshall, Putnam & Bureau Counties
Job No. P-94-009-01
Catalog No. 032469-00

Mr. David Wheeler
Peoria Park District
Glen Oak Park Administrative Offices
2218 North Prospect Road
Peoria, IL 61603

Dear Mr. Wheeler:

Thank you for your July 23, 2004 letter expressing the Park District's concerns regarding the proposed Illinois Route 29 project. In order for us to adequately address your concerns, the following information concerning Camp Wokanda, Audubon Wildlife Area and Singing Woods Nature Preserve is needed:

1. Size;
2. Function of and/or available activities;
3. Description and location of all existing and planned facilities;
4. Approximate number of users or visitors per year;
5. Relationship to other similarly used lands in the vicinity;
6. Any clauses affecting the ownership, such as lease, easement covenants, or restrictions, including whether or not Land and Water Conservation Funds were used for development;
7. Unusual characteristics that enhance the value of all or part of the property; and
8. A map of the park, including roads, trails, camping grounds and other facilities available.

Since the Audubon Wildlife Area is currently not developed, any information you can provide regarding its future development, anticipated use and timetable for development would be beneficial.

August 31, 2004

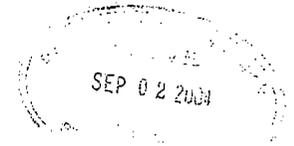
Illinois Department of Transportation
Division of Highways/District 4
Eric S. Therildsen
401 Main Street
Peoria, IL 61602-1111

Dear Eric Therildsen

The Henry Township Board held their regular township meeting, Tuesday, August 10, 2004. Attending the township meeting were some concern citizen land owners which were voicing their opinion on the four lane highway from Peoria to Chicago. The concern citizen group was asking for the township support in opposing the interstate highway proposed to Chicago. Attached you will find Resolution #04-01 Henry Township not supporting the improvement of Route 29 as a part of the four lane highway system from Peoria to Chicago.

Sincerely

Henry Township
Concern Citizen Land Owners



9-9-04 Peoria Park District Meeting

ATTENDEES: Paula Green/IDOT
Mike Lewis/IDOT
Greg Larson/IDOT
Dan Dupies/CH2M HILL

Dave Wheeler/PPD
John Muller/PPD
Mike Miller/PPD

COPIES: Mike Lewis/IDOT
Paula Green/IDOT

FROM: Dan Dupies

DATE: December 8, 2004

Introduction

Following the second public information meeting for the IL 29 Corridor Study, IDOT received a letter from the Peoria Park District (PPD) stating that the proposed improvements in the project's South Section would have detrimental effects on three properties they administer, Camp Wokanda, Singing Woods Nature Preserve, and Audubon Wildlife Area. The Park District representatives were concerned that the proposed extension of IL 29 would result in noise impacts at its facilities, prevent prescribed burning at Camp Wokanda and Singing Woods Nature Preserve and interfere with the possible restoration of shorebird habitat on a portion of the Audubon Wildlife Refuge.

A meeting was held on September 9, 2004, with Park District representatives to discuss their concerns. The highlights of the meeting are summarized below by park property.

Camp Wokanda

Camp Wokanda is located on Boy Scout Road west of Mossville. In 1994, PPD purchased Camp Wokanda from the Boy Scouts. It is a 273-acre special use park available to groups such as a school group, scout group, civic group. The Camp's primary mission is as a resident outdoor education center for area schools and other clients. The property includes a lake, trails, dining hall, cabins, program buildings and tent camping (see layout exhibit). The Camp offers a variety of naturalist tours, environmental education and rental options for retreats, family reunions, weddings or special group camp outings. The camp serves as the trailhead for the nine-mile Illinois River Bluff Trail. The first phase of the hiking trail construction that will extend from the camp to Mossville Road has started. The second phase of construction will be between Mossville Road and Detweiler Park. Eventually, the PPD would like to construct connections to Singing Woods Nature Preserve and Audubon Wildlife Area. PPD staff indicated that 200,000 visitor hours are logged at the camp annually and they expect that level to double over the next five years.

Woodlands at the camp are oak savannas, and there are two approximately 75-acre units north and south of the lake that are burned annually to restore/maintain the oak savanna habitat.

The PPD representatives were concerned that construction of the highway would impact access to Camp Wokanda. They noted that park users, emergency and maintenance vehicles would need to be accommodated during the construction phase. They were also concerned that sound impacts at the Camp would be heavy. They stated that the highway noise would be particularly bothersome for its overnight campers.

Singing Woods Nature Preserve

Singing Woods Nature Preserve is an approximately 900-acre property located on the bluffs north of Cedar Hills Drive and west of Ivy Lake Lane (see aerial exhibit). There are no signs identifying the preserve and currently no developed access. The nature preserve designation applies to approximately 700 acres of the 900-acre parcel. At its closest point, the nature preserve is almost 3,500 feet (approximately 0.7 mile) from the proposed IL 29.

Singing Woods is the largest contiguous tract of oak-hickory forest in the state north of the Shawnee National Forest. It supports over 250 different wild flowers (including the state threatened *Viburnum molle*), 60 species of trees and shrubs, 10 different ferns, 18 different mammals, 14 reptiles and amphibians, and numerous grasses and sedges have been identified. The preserve provides important migratory and breeding habitat for forest interior birds. Singing Woods Stream, which cuts through the center of the preserve, is being monitored annually for water quality by the state.

The Park District representatives were concerned that sound impacts at the Preserve would be heavy. They were also concerned that development of a large highway east of their properties would impact their ability to conduct prescribed burns due to smoke travel. The proposed highway is in the smoke management area of over 1,000 acres of PPD burn units.

Audubon Wildlife Area

Audubon Wildlife Area is an approximately 98-acre parcel located north of Caterpillar and west of Old Galena Road. The parcel consists of a 78-acre agricultural field and a 20-acre wetland complex at the west edge of the parcel. The wetland at the west edge of the property is part of a 40-acre wetland complex that extends east on Caterpillar's property. The Peoria Audubon Society is evaluating the potential for the wetland (and some portion of the cropped land) to be restored as shorebird habitat. The habitat that would be developed to attract shorebirds would consist of mudflats, short grass, and shallow water wetlands. It was noted that past shorebird counts in nearby fields indicate that shorebirds will use flooded agricultural fields which are less than optimal habitat. There currently is no formal agreement between the Audubon Society and the PPD to conduct the restoration work.

If the site were to be restored, PPD anticipates that there would be viewing blinds east of the existing wetlands and a parking area in what is currently the agricultural field. Dave Wheeler (PPD) noted that the public could exert pressure to develop the site as a neighborhood park. There is currently no master plan developed for the site.

The Park District representatives were concerned that sound impacts at Audubon would be heavy. They were also concerned that the IL 29 extension so close to the potential shorebird restoration area would severely impact the use of any developed refuge by shorebirds.

IL 29 Peoria Park District Meeting
Sept 9, 2004

John G. Miller	IDOT
Mike Miller	Peoria Park District
John Mullen	PEORIA PARK DISTRICT
Dan Dupies	CH2M HILL
Greg Lawson	IDOT
Mike Lewis	IDOT
Don White	PEORIA PARK DISTRICT

MEETING SUMMARY

CH2MHILL

9-16-04 Chillicothe Secondary Impacts Meeting

ATTENDEES: Dan Dupies/CH2M HILL
Mayor Don White

COPIES: Mike Lewis/IDOT
Paula Green/IDOT

FROM: Dan Dupies

DATE: December 8, 2004

This memorandum summarizes the meeting with Mayor Don White to discuss growth issues in Chillicothe and the IL 29 project's potential to cause secondary development.

Mayor White noted that Peoria's continued expansion north will at some point absorb Chillicothe just as it has Peoria Heights. Unlike West Peoria and Durlap that will lose (have lost) their identity when absorbed by Peoria because they do not have a vibrant downtown like Chillicothe. Mayor White noted that over the last 10 years, Chillicothe has been growing by about 10 percent. The growth has primarily been to the west.

In cooperation with the Tri County Regional Planning Commission, Chillicothe developed a 2020 land use plans with (Scenario B) and without (Scenario A) the Chillicothe bypass. In Scenario B, the development east of the Chillicothe bypass would occur by 2020. The development west of the bypass would occur after 2020. As expected the Scenario B land use plan has an area of commercial and residential development not found on the land use plan without the bypass.

Dan obtained copies of the plans from the Mayor. The plans will be used to identify the amount of secondary development caused by the IL 29 improvements and the type of land use affected by the secondary growth.

After developing the two land use scenarios, Chillicothe held meetings with property owners that are currently outside city limits, but within the planned city limits. Chillicothe offered to reduce the property owners' taxes in exchange for an agreement to be annexed to the city. Prior to annexation, Chillicothe also offered to provide those property owners with police and fire protection, and, when available, water and sewer service.

In describing existing development along IL 29 and in the downtown, Mayor White noted that the downtown is now dominated by specialty shops. The zoning ordinance does not allow services to locate in the downtown without a special use permit. Most of the city's services and "big box" uses are located along IL 29.

The Mayor noted that the McDonalds, Hardees, and Subway may be adversely affected by the proposed bypass. He thought the Chinese restaurant, Monocles (restaurant) and the Grecian Garden would not be affected because they are less dependent on through traffic.

The Dairy Queen is a summer-only operation and will likely not be affected. Other uses along IL 29 are destinations and would not be affected by the bypass.

TECHNICAL MEMORANDUM

CH2MHILL

IL 29

Railroad Meeting November 10, 2004

PREPARED FOR: John Anderson, IDOT - District 4
 Paula Green, IDOT - District 4
 Maureen Addis - District 4
 Mike Lewis, IDOT - District 4
 Eric Therkildsen - District 4
 Butch Hunter, IDOT - Bureau of Railroads
 Sue Eckhoff, IDOT - RR
 Randy Hopper, IDOT - RR

Donald Murray, Lincoln & Southern RR
 Woody Ban, Lincoln & Southern RR/Polyone Corp.
 Dennis Bailey, Polyone Corp.
 Pat Sheldon, Iowa Interstate RR
 Richard Schroeder, URS/CSXT

PREPARED BY: Jim Jodie, CH2M HILL

COPIES: Kim Kolody, CH2M HILL

DATE: November 10, 2004

On November 10, 2004, a meeting was held with representatives from the various railroads that abut the IL 29 project from Chillicothe to the north project limits at I-180. Staff from IDOT Railroads section and the IDOT district were also present. The purpose of the meeting was to:

1. Provide an overview of the proposed IL 29 Phase I preliminary engineering study.
2. Determine the ownership and contacts from the railroad(s).
3. Discuss the proximity of proposed IL 29 construction to the railroad right of way and tracks.
4. Discuss the needed permanent and temporary easements for IL 29 construction.
5. Discuss drainage issues and flooding problems.
6. Determine the procedure for and cost to IDOT for railroads to attend meetings, review plans, etc.

Jim Jodie provided the introduction and project overview.

Ownership - see updated Railroad Contacts and Ownership memo)

1. From Peoria (PPU) to Henry (Lincoln Street), the primary contact is:

Patrick Sheldon
 Assistant Vice President-Engineering/Mechanical
 Iowa Interstate Railroad
 800 Webster Street
 Iowa City, IA 52240
 e-mail: phsheldon@IAISRR.com

Telephone:
 Office: 319-298-5428
 Fax: 319-298-5427
 Cell: 319-330-9568

2. From Henry, IL (Lincoln Street) to Bureau Junction, IL, the primary contact is:

Larry Shaw
 URS Corporation
 47 South Meridian Street
 Suite 312
 Indianapolis, IN 46204

Telephone:
 Office: 317-635-0064, x203
 Fax: 317-635-0066
 Cell: 317-294-1979
 e-mail: larry_shaw@urscorp.com

IL 29 Plan Review at RR crossings:

The proposed and existing IL 29 railroad crossings were reviewed from Chillicothe to the north project limits at I-180.

Primary concerns stated by the railroads are:

1. Sight distance at proposed "Y type" railroad crossings – the railroad companies expressed a concern about the lack of sight distance for vehicles using the proposed "Y type" access or the "½ Y type" access (ButtonHook) crossings. The railroads feel these create safety problems; drivers of vehicles approach the crossing at an angle and they are not able to see a train approaching the crossing. Signals are not proposed at the private crossings. The Y type driveways were designed to provide a crossing at locations where the profile from IL 29 to the tracks is steep (greater than 10 %). The railroad representatives expressed their concern for entrances running parallel to the railroad tracks then turning across the railroad. Per Richard Schroeder, Pat Sheldon and Woody

Ban, the sight distance created by this situation is a safety issue that the railroad may not approve. Currently, trucks haul crops from the fields across the tracks. CH2M HILL will study the Y type or ½ Y type railroad crossings to determine if the crossing design can be changed or if it can be moved. Otherwise, if the Y type is not installed, the land east of the tracks will be landlocked.

2. Drainage between the Railroad and IL 29 – the lack of maintenance of the shared ditch between the railroad and IL 29 has resulted in maintenance problems and flooding. Pat Sheldon stated that IDOT roadway stormwater outlets to the shared ditch. Due to the close proximity of the road to the railroad, water rises in the ditch to the ties and the ties need to be replaced prematurely due to moisture.
3. The purpose of the existing permanent, longitudinal easements on railroad right of way is unknown, although these may be for drainage. Don Murray will verify the reason for the easements. Pat Sheldon said that there are several ditch locations that need cleaning. He has contacted the IDOT several times, but he had to clean them instead. Mike Lewis will check if there is an agreement for maintenance of the shared ditch.
4. Per Don Murray and Pat Sheldon, IDOT has made several changes to culverts and they have also changed the bridge at the south Crow Creek crossing. Per Pat Sheldon, this has resulted in water getting through and under the IDOT structures, but now there is debris on the downstream railroad structures. The railroad does not have plans to replace the south Crow Creek bridge to force debris further downstream.
5. Future Track Addition – the railroads want the IDOT to keep space available on the side of the tracks for future sidings, new lines and clear zone. The location of the added track will need to be provided by the railroad. See further discussion on Item #4 below.

Other concerns are as follows:

1. The BN&SF (AT&SF) RR viaduct over IL 29 at Chillicothe is proposed to be replaced. Currently, there is an L & S spur connection to the BN&SF east of IL 29 (via a box culvert). Al Benesch is designing the viaduct replacement structure and the staging plans; the plans include "filling-in" of the box culvert. Don Murray and Pat Sheldon asked that the box culvert and the spur be kept viable/usable. Subsequent to the meeting, Benesch indicated that if the box culvert remains, it would need to be extended north to accommodate the proposed viaduct at a cost of \$300,000 to \$400,000.
2. Is it possible to eliminate some private crossings? Per Mike Lewis, eliminating crossings would landlock property and IDOT would have to pay damages. This is not usually feasible or wanted by the property owner unless there are no viable solutions. A service road east of the tracks (to accommodate multiple railroad crossings) would impact the farming operations and would be difficult to construct because the Illinois River is close to the tracks.

3. For public road, at-grade crossings, there is concern about vehicles parking on the tracks as they wait to get onto the new 4-lane highway. The typical crossing detail in the plan set shows there is adequate room between the tracks and the edge of proposed IL 29 for a WB 65 design vehicle (long semi-truck). If more than one WB-65 is queued, these trucks will need to stop in advance of the tracks. The public crossings will require gates (per Butch Hunter) and this should help prevent this occurrence.
4. Sparland split diamond type interchange 3 and 3A - the proposed railroad crossings on the north and south end of the interchange can either be crossed via a bridge or a tunnel. The railroad tracks will not be changed. Whichever design is used, the railroad companies want to have adequate width to expand the single track to a double track in the future. A tunnel will need to have 15' each side of the centerline of the railroad for a 44' total span. The parallel tracks need to be 14' or 15' from center to center. The method of maintenance of tunnels changes because they need a width in the tunnel that allows the railroad ties to be replaced.
5. Method of Ditch Drainage in the Miller Anderson Woods area - the proposed shared ditch between the railroad and new IL 29 will be designed for a 50-year capacity. All pavement drainage on the east side of IL 29 will discharge into the shared ditch by way of a closed drainage system.
6. Overtopping of the Railroad - per Don Murray/Pat Sheldon, the north Crow Creek crossing has never experienced water overtopping the railroad. There has been some railroad overtopping of the south Crow Creek crossing and south of Chillicothe. Pat Sheldon will provide Mike Lewis and Fred Lin with the location of flooding and drainage problems. Richard Schroeder and Fred Lin will coordinate efforts to identify overtopping locations in the North and Central Sections.
7. Crow Creek Drainage - Several years ago, Crow Creek south drained into the Illinois River per Woody Ban. Now, it is just a delta and there is no connection to the river. Mike Lewis will send Don Murray the 1991 Crow Creek roadway widening and bridge plans.
8. Existing Bridge Profile for the Central Section - the existing IL 29 profile will be maintained for the northbound roadway of proposed IL 29.
9. Silted Railroad Culverts - Fred Lin will provide Woody Ban culvert locations that have silted-in. Downstream cleaning of drainageways would be too costly for the railroad to complete and at Crow Creek, the IDNR will not let the railroad re-establish the stream. Proposed new drainage structures on IL 29 will use the existing downstream silted elevation for sizing of the structures.
10. Bradford Crossing at Putnam - the proposed east connection of Bradford contains a median opening that allows grain elevator trucks to turn left from the south exit of the grain elevator resulting in an angle crossing of the railroad tracks. The exit design will be revised to allow right turns only (to IL29).

11. Retaining Walls and Permanent Easement at Miller Anderson Woods - in the north part of the project (south of Kentville Rd.), proposed IL 29 will be shifted east to avoid disturbing the west foreslope along this nature preserve. The typical section has a 22' median and retaining walls on the east side along the railroad. The retaining walls will encroach on the railroad right of way approximately 8' for a distance of approximately 6700'. A permanent easement will be needed from the railroads for the retaining walls and the shared ditch. Richard Schroeder will discuss this with the CSXT Railroad and contact the IDOT with the results.
12. At the proposed treatment plant road in Sparland, the current design constrains the railroad and reduces opportunities for expansion or addition of a sidetrack. IDOT said the design would be revisited to see if more room could be made available.

General Information provided by the Railroads

1. Railroad design speed is 40 mph.
2. There are no future plans by railroads to update their facilities except to provide maintenance.
3. One round trip train operates 6 days per week between Bureau Junction and Peoria. The trips start at 8 AM and last for 10 hours. There are also two coal trains per week; their schedule is not consistent.
4. Butch Hunter stated that the ICC requires review and approval of all changed or new public road crossings of the railroad tracks. All new public crossings must be active crossings. This takes from 120 days to 6 months. Private crossings do not need to go to ICC. Butch will provide Mike Lewis a sample ICC submittal.
5. Crossing maintenance - for private crossings, the farmer with fields east of the railroad tracks does the maintenance by agreement or by non-objection from the railroad.

At the end of the meeting with Rhonda, IDOT decided to include the pavilion property and the ballfield as Section 4(f) resources in the DEIS. There were two general reasons for taking this approach. First, the properties represent the only publicly owned land in the township available for use by Putnam residents whether or not they are actually used for "recreation." Second, given Rhonda's lack of familiarity with Section 4(f) provisions it did not seem reasonable to expect the township to write a letter stating the properties were "insignificant" public resources without excessive coaching and/or explanation of the Section 4(f) regulations. In the end, it seemed easier to simply include the properties in the DEIS' Section 4(f) evaluation.

Following the meeting, CH2M HILL investigated the dimensions of a grade school ballfield. Placing those dimensions on the former ballfield, it was found that the proposed IL 29 improvements would affect the ballfield. Even when the orientation of the ballfield was changed with the outfield adjacent to High Street, a retaining wall would be required to prevent the proposed IL 29 improvements from affecting the field.

Henry Secondary Impacts Meeting

Dan Dupies (CH2M HILL), Mike Lewis and Paula Green (IDOT), Ed Mathis (Henry Zoning Board), Andy Stash (Henry Zoning Board Chairman), Daryl Fountain (Henry Mayor), Jay McCracken (former Henry Mayor) attended the Henry meeting.

The purpose of the meeting was to learn more about land use planning in Henry and discuss the potential for secondary development in Henry as a result of the proposed IL 29 improvements. At the start of the meeting Dan Dupies explained the focus of the development discussion would be a comparison of reasonably foreseeable development in Henry with and without the IL 29 improvements.

The Henry officials explained that Henry's 1989 Comprehensive Plan contains the land use plan. The corporate limits of Henry were identified, and it was noted that all areas within the corporate limits will be served by sewer and water. Henry officials see city services on both sides of the proposed Henry bypass. They do not see the Henry bypass as a logical growth boundary. It was noted that new development in Henry tends to move west. Development to the south is limited by the large Material Gravel holdings and development to the north is limited by the industrial park.

Concerning general development trends caused by the proposed Henry bypass, Jay noted that some local businesses may locate away from existing IL 29 toward the bypass to set themselves up for the future roadway. Andy noted that he does not see any new development south of Western Avenue as a result of the bypass.

Dan asked about the likelihood of some of the larger development proposals that are possible in Henry. The Henry officials noted that an ethanol plant might locate south of Henry on the Material Gravel property or in the industrial park north of Goodrich Drive. There was also mention of the possible development of a 120-acre harbor in the industrial park to serve the possible gravel quarry north of Goodrich Drive. It was difficult for the Henry officials to comment on the timeframe for either the gravel quarry (and the associated harbor) and/or the ethanol plant being developed. However, there was no indication that the decision to proceed with those major developments was related to the proposed improvements to IL 29.

Beyond the possible gravel quarry, harbor, and ethanol plant, the Henry representatives indicated that, because of Peoria's expansion to the north, they foresee the development of a subdivision in Henry. They estimated the subdivision could be 40 acres and would likely be located west of IL 29 although there are two "infill" locations east of IL 29. There is also a possibility that new residential development (no amount specified) may develop along the Illinois River on empty lots and redevelopment of existing residential properties. Again, there was no indication that the timing of these potential developments were related to the proposed IL 29 improvements.

It was also mentioned that the development of the ethanol plant or a subdivision would increase the chances of developing a new hotel in Henry. When asked about the development that might locate at the proposed Western Avenue interchange, the Henry representatives were unable to identify any reasonably foreseeable development, but thought it would be reasonable to assume that all four quadrants of the interchange would develop.

As noted, the Henry officials stated that they would not view the Henry bypass as a growth boundary. If growth pressures required expanding west of the bypass, the Henry representatives indicated they would amend the land use plan to allow such growth.

In summary, it was difficult for the Henry representatives to identify development that may happen in the near future without the proposed IL 29 improvements. Clearly, part of the difficulty in identifying near-term development is the sensitive nature of some of the large development proposals that are possible in Henry. Development like the gravel quarry north of Henry or the ethanol plant would be large-scale developments that have the ability to influence development in the community. As noted, the proposed improvements to IL 29 seem to have no influence on whether the gravel quarry or ethanol plant locate in Henry.

The Henry representatives were unable to identify any reasonably foreseeable development that would be considered secondary development caused by IL 29. Potential development at the proposed Western Avenue interchange seems the most likely secondary development even though the Henry representatives were not able to provide specific information on the type of development.

Mike Garcia will look at some of the existing driveway crossings and some of Dan Nowaks re-designs. Dan will send Mike Lewis/Mike Garcia the electronic files for the proposed design between Chillicothe and Sparland.

Mike Garcia suggested that we develop some driveway/railroad crossing solutions and then meet with Pat Sheldon to determine if he agrees with the revised designs.

Maintenance of the access roads at the crossings is an issue for the railroads because of liability, snow removal, repair of railroad ties at the crossings, etc and as a result, the railroads prefer to keep the crossings minimal.

Viaduct Replacement at BN&SF Railroad in Chillicothe

The proposed viaduct replacement at the crossing of IL 29 and the BN&SF Railroad in Chillicothe was discussed. At the November 10 meeting, L&S requested that we maintain this spur line. If the spur line is maintained, the existing box culvert carrying this line under the BN&SF Railroad will need to be extended at a cost of \$300,000 to \$400,000 (per Al Benesch Company). Mike Garcia feels this spur line is very important for L&S and this may be a means to achieve some negotiating power. Mike Garcia would like to be involved in the negotiations with L&S at the spur to BN&SF.

A design speed of 50 MPH should be adequate for the shoefly during construction. The requested 70-MPH design speed by BN&SF is negotiable.

General Discussion Items:

1. Does the design speed of the railroad ever increase? It would take a lot of work to increase the design speed to passenger service, but it is possible.
2. Cleaning Culverts under the railroad - if IDOT does some railroad culvert cleaning, it will help with negotiations. At the November 10 meeting, the railroad companies indicated their concerns about maintenance of culverts and the lack of maintenance funds.
3. Consideration of a second rail along the existing should not be considered.
4. Railroad Review of the Proposed IL 29 Plans - need to think about how this will be funded by IDOT, because this could delay project development/progress. Many railroads have consultants do the reviews for them.

The Illinois Commerce Commission (ICC) sets the general order/rules regarding the railroad, but anything above ICC requirements is negotiable; even some ICC requirements are negotiable if there is a good reason.

Dan Nowak described the "Y" type driveways that were presented at the November 10 meeting. These were referred to as the "Y" and the "parallel Y". Both create an angular crossing of the railroad, but the "Y" improves the sight distance (less angular crossing). Dan has re-designed many of the crossings using a "Y" type but the grade of the driveways is between 10% and 12%. Maximum BDE allowable grade is 12%. The largest design vehicle for many of the driveways is WB-40; this matches the existing vehicle types but the median opening for the divided highway needs to be on the north side of the "Y" type driveway to accommodate this vehicle type.

Dan also presented an additional "reverse curve Y type crossing". This design pulls the driveway away from the railroad and results in the crossing being close to a 90-degree railroad crossing.

The cost of each driveway type varies considerably.

1. The "Y" average cost is approximately \$25,000.
2. The "Parallel Y" costs \$250,000.
3. The "reverse curve Y type crossing" costs is \$450,000.

The higher costs are due mainly to the need for retaining walls both adjacent to the highway and adjacent to the railroad. Comparing the cost of the driveway with the cost of eliminating the driveway and landlocking the property was discussed. Depending on the size of the landlocked property, the cost to purchase the land is high. This is based on a unit price of \$ 1500/acre for forested land and \$5000/acre for farmland.

Private signal crossings could be installed at a cost of up to \$150,000, but this would set precedence for other crossings.

For the Lincoln & Southern Railroad, the operating speed is 25 MPH and changes in horizontal or vertical alignment of the track is not a big issue. Due to the concern about the angle crossing created by the "Y" type driveways, suggested solutions to the steep grade and angular crossings are to provide 90-degree crossings as follows:

1. Raise the elevation of the railroad to reduce the driveway grade. The cost to raise the railroad is \$70/foot.
2. Shift the railroad to the east to provide additional horizontal distance and to reduce the driveway crossing grade (local relocation or "kink" the railroad). The cost to shift the railroad is \$150/foot but this may be greater if we are in a high fill location.

CH2M HILL will re-design some of the driveway/railroad crossings to achieve an 8% to 10% grade by either raising the track elevation or by moving the tracks east. Moving to the east will impact wetland and floodplain areas. If the railroad tracks are raised, the drainage capacity of the ditch between proposed IL 29 and the railroad will be reduced; it will be necessary to move the tracks east if the tracks are raised or longitudinal sewers may be required.

1-27-05 Sparland Progress Update and Secondary Impacts Meeting

ATTENDEES: See attached sign-in sheet

COPIES: Mike Lewis/IDOT
Paula Green/IDOT

FROM: Dan Dupies

DATE: January 28, 2005

Introduction

On January 27, 2005, the project team met with the Sparland Village Council to update them on the current status of the proposed improvements in the Sparland area and to discuss the project's potential to cause secondary development in Sparland. The meeting was held at 7 p.m. at the Village Hall. John Anderson, Mike Lewis, Paula Green, and Dan Dupies attended the meeting.

Meeting Summary

John Anderson began the meeting by introducing the project team members and explaining the meeting purpose. He noted that the IL 29 study began in 2002 with the goal of developing a 4-lane divided, 65 mph facility along IL 29. John noted that from the start of the project, the team knew that it would be challenging to improve IL 29 without affecting natural areas and IDNR-owned property along the highway. As a result, the project team developed the Bluff Alignment as an avoidance alternative.

John stated that funding is only available for this study phase which will end in 2006. There are no funds currently available to complete the design of IL 29 or to construct it. John went on to note that even if construction funding were made available tomorrow, it would take about 5 years before work would begin. The logical starting point for construction would be the south end of the study area. Nobody has any idea, however, when design or construction funding would be available.

John stated that letters of project support from Chillicothe, Henry and Marshall County. Lacon's resolution of project support did not pass. He said that Sparland sent a project letter to DOT in summer 2004 against the project.

Mike Lewis then reviewed the interchange alternatives that have been considered in Sparland. He discussed the advantages and disadvantages of Alternatives 2 (continuous route along IL 17, but displaces structures on the west side of IL 29), Alternative 3 (avoids impacts to most structures in Sparland, but uses an atypical single-point diamond

railroad will need to be raised and relocated to provide a 10% crossing profile and the railroad bridge will be replaced. This will increase the cost of this crossing.

8. Crossing Location @ Station 3507+50 (New Crossing) - this crossing provides access to the IDNR property, but is located on Galena Road Gravel property. To avoid considering this crossing a service drive, the land surrounding this driveway will be purchased from Galena Road Gravel and added to the IDNR land. The IDOT will need to consider damages to the Galena Road Gravel property during acquisition (for Galena to access their farm field). If the railroad crossing were moved further north onto IDNR property, the railroad would be raised and relocated on property with a high FQI value. Also, an existing railroad bridge would need to be replaced and the cost to construct would be higher.
9. Crossing Location @ Station 3514+30 - this crossing was eliminated because the railroad would need to be raised and relocated at the location of an existing railroad bridge resulting in a high cost to maintain this crossing. Also, the relocated railroad would be located on property with a high FQI.
10. Crossing Location @ Station 3543+00 (New Crossing) - This crossing provides access to the IDNR parking and boat launch area. It replaces an existing crossing located at Station 3548+30 because the needed railroad relocation for this location would occur in the Illinois River. This is a private crossing, but due to the higher volumes of crossing traffic to the parking/boat launch, crossing protection needs to be determined.
11. Crossing Location @ Station 3548+30 - this crossing was eliminated for the reasons stated above at Station 3543+00.
12. Crossing Location @ Station 3580+80 - this crossing provides access to the Robert Barnes, Jr., Richard Barnes and Floride Kidder property. This crossing was eliminated because it is located within 1500' of the northbound exit ramp at the Sparland interchange. Other crossing locations were considered south of the existing at Station 3563+00, but this would require raising and relocating the railroad in an area with a high FQI and damages would need to be paid to the property owner(s) to access their farm field located at Station 3578+00. The cost to purchase this landlocked property is less than the cost of the railroad crossing and the damages to correct. Therefore, the crossing was eliminated.
13. Crossing Location @ Station 3724+80 - only a "Y" type driveway with a reverse curve crossing is possible at this location for access to the IDNR boat launch. Assuming the railroad will not agree to an angular crossing at this location, a meeting is needed with the IDNR to determine if they need this boat launch or if an alternate crossing (and boat launch location) is acceptable. Two alternate crossing locations at approximate Station 3746 and Station 3754 were considered. Station 3746 aligns with a median opening, but it would require raising the railroad. To access the boat launch from this crossing, a driveway parallel to the railroad tracks is required and the driveway needs to be within the railroad right of way. At Station 3754, no changes are needed to the railroad profile. The same driveway would be needed for access to the boat launch. A meeting with IDNR is needed before resolution of the crossing location. Subsequently, a meeting is needed with the railroad to 1). Determine if they would agree to a "Y" type reverse

Described below is the disposition of each crossing discussed at the January 27, 2005 meeting, including recommendations for revisions (raising the railroad profile or raising and relocating the railroad), if needed.

The railroad relocation criteria used for raising the railroad consists of a 0.5% maximum vertical grade and a horizontal curve consisting of a tangent and two reverse curves, designed for 25 mph. After a short discussion, it was concluded that the horizontal curves will need to be revisited to assure adequate length of horizontal curve and the vertical curves will need to provide approximately a 100' "flat area" on either side of the crossing.

For each crossing, alternate designs were presented by Dan Nowak, including a table showing cost comparisons between relocating the tracks and land locking the property. All railroad crossings from north of Chillicothe to I-180 are described. Unless noted below, the proposed railroad crossings shown are at existing railroad crossing locations. Appropriate crossing protection will be required. Generally crossings are either private unless otherwise noted as public (County or State or municipality owned).

1. Crossing Location @ Station 3391+92 - this crossing provides access to the Gretchen Frumess farm field. It will be maintained and the railroad tracks will not be raised or relocated east to provide a maximum 10% grade on the crossing.
2. Crossing Location @ Station 3415+71 - This crossing accesses the Gretchen Frumess woodlands. There may not be an actual lease or agreement for this crossing. IDOT needs to work with the railroad to truth this crossing. At this time, this crossing was eliminated because it provides access to a narrow strip of land abutting the river (on the east) that has a Floristic Quality Index (FQI) of 24. If this crossing is a legal entrance, IDOT will need to consider damages to the property; this may involve acquisition of this narrow strip of land at an estimated cost of \$1500 per acre.
3. Crossing Location @ Station 3434+75 (New Crossing) - this crossing provides access to the Gretchen Frumess farm field and replaces the existing crossing at Station 3440+60. There is approximately 1000' of railroad relocation. This access will be maintained.
4. Crossing Location @ Station 3440+60 - this crossing was eliminated because raising and relocating the railroad would occur on property with an FQI of 24 and the distance between the railroad and the proposed driveway (east of the railroad) is greater at this access point than at Station 3434+75 (this will affect a greater amount of the FQI property).
5. Crossing Location @ Station 3453+30 - this crossing was eliminated because the railroad would need to be raised and relocated at the location of an existing railroad bridge resulting in a high cost to maintain this crossing.
6. Crossing Location @ Station 3467+70 (New Crossing) - this crossing provides access to the Gretchen Frumess farm field and will replace the crossing at Station 3453+30. The railroad will need to be raised and relocated to provide a 10% crossing profile.
7. Crossing Location @ Station 3491+07 - this crossing provides access to the Michael and Ann Roof farm field and to the Galena Road Gravel farm field. This access is considered a driveway/private crossing (and not a service road) because the construction will be located in an existing permanent easement at the property line. The

26. Crossing Location @ Station 5060+90 (New Crossing) - this crossing replaces the crossing at Station 5055+50 and provide access to Material Service Corp. It aligns with the median opening at 1300E. **This is a public crossing along 1300E.**
27. Existing crossings that will be replaced are located at Station 5072+90, 5311+00, 5331+90, and 6032+30. These are private crossings.
28. Crossing Location @ Station 6050+53 (New Crossing) -due to the realignment and extension of Bradford Road to Senachwine Lake Road, this crossing replaces the internal grain elevator crossing located at Station 6051+80. **This is a public crossing along Bradford Road extended.**
29. Crossing Location @ Station 6051+80 -this crossing was eliminated because it only services the grain elevator operations and the new crossing aligns with Bradford Road.
30. Crossing Location @ Station 6064+30 (New Crossing) - this crossing provides for internal circulation of the grain elevator operations and crosses the railroad at approximately 90 degrees. This crossing replaces the existing crossing located at Station 6064+50. This is a private crossing for the grain elevator. Due to the high volume of grain elevator truck traffic, crossing protection needs to be determined.
31. Crossing Location @ Station 6064+50 - this crossing was eliminated because it is replaced by the crossing located at Station 6064+30.
32. Overpass Located @ Station 6082+80 - this existing wooden trestle overpass of the railroad will remain in-place.
33. Existing crossings that will be replaced are located at Station 6128+65 and 6148+50. The crossing at 6128+65 is for Senachwine Valley Road extended east. **This is a public crossing along Senachwine Valley Road.**
34. Crossing Location @ Station 6169+80 - this crossing was eliminated and replaced with the crossing located at Station 6174+60.
35. Crossing Location @ Station 6174+60 (New Crossing) - this crossing provides access to Edward Rogan/Richard Schroeder property . It aligns with the median opening and with the west connection of Cabin Hill Road to IL 29.
36. Crossing Location @ Station 6178+83 - this crossing was eliminated because it crosses the railroad at an angle. It was replace with the crossing at Statin 6179+64.
37. Crossing Location @ Station 6179+64 (New Crossing) - this crossing provides access to the Francis Read property.
38. Crossing Location @ Station 6207+30 - this existing crossing provides access to the Julie Enzenberger property that has a boat launch.
39. Crossing Location @ Station 6238+15 -this crossing was replaced at the same location, but the railroad will need to be raised to provide a maximum 10% crossing profile. Raising the railroad will increase the width of footprint on the surrounding wetlands. If this design is selected, the area of this new footprint will be included as an impact in the EIS. Otherwise a "Y" type driveway will be provided.

- curve crossing and 2). To discuss the other two crossing options if the IDNR agrees to a different access location to the boat launch. This is a private crossing, but due to higher volumes of crossing traffic, the crossing protection needs to be determined.
14. Crossing Location to Whiffletree House - this crossing will be maintained.
15. Crossing Location to IL 17 in Sparland - this crossing will be maintained, but IL 17 will be widened to 50' to provide for two travel lanes and a left-turn lane at the IL 17/Existing IL 29 intersection. **This is a public crossing on IL 17.**
16. Crossing Location north of Thenius Creek - this crossing was eliminated because it is within the Sparland interchange and access cannot be provided off existing IL 29. Access to this property (IDNR) will be provided off Center Street extended.
17. Crossing Location @ Station 3765+10 - a 90-degree crossing is provided at this location without raising or relocating the railroad. This crossing provides access to two properties east of the tracks (Aron & Tanya Shofner and Gordon & Lori Holler) and aligns with a driveway on the west side and the median opening. This crossing provides access to two properties and it is considered a service road/private crossing.
18. Crossing Location @ Station 3788+40 - this crossing was eliminated because the railroad tracks would need to be raised and relocated to provide a 10% grade. The relocated driveway at Station 3789+50 replaces this driveway without raising or relocating the tracks.
19. Crossing Location @ Station 3789+50 (New Crossing)- this crossing provides access to three properties (George & Carol Deffenbaugh, Gordon & Lori Holler, Jacob & Alice Duden) and does not require changes to the railroad tracks. It is curved to align with Camp Grove Road. This crossing is considered a service road/private crossing.
20. Crossing Location @ Station 3823+10 -this crossing provides access to the Daniel & Angela Hosler farm field.
21. Crossing Location @ Station 3836+60 - this crossing provides access to the Daniel & Angela Hosler farm field and to the US Fish & Wildlife Service property. Because access is provided to two properties, this driveway is considered a service road/private crossing.
22. Crossing Location @ Station 4999+20 - this existing crossing provides access to the Villager Farms.
23. Crossing Location @ Station 5029+80 - this crossing was eliminated because it does not align with the median opening at Old IL 29 (1150N). The replacement driveway is located at Station 5033+80.
24. Crossing Location @ Station 5033+80 (New Crossing) - this crossing replaces the crossing at Station 5029+80 and provides access to the Villager farms. It aligns with the median opening at Old IL 29.
25. Crossing Location @ Station 5055+50 - this crossing was eliminated because it does not align with the median opening at Station 5060+90 and County Road 1300E.

-
40. Crossing Location A Station 6247+20 – this crossing was eliminated because the crossing profile is too steep and it is the second access into Drake Grounds property. The land on the Drake Grounds at this location consists of forested wetlands.
41. Crossing Location @ Station 6266+55 – this crossing was replaced at the same location, but the railroad will be raised to provide a maximum 10% crossing profile. Raising the railroad will increase the width of the railroad footprint on the surrounding farm field. If the raised railroad profile is not selected, a “Y” type driveway will be provided.

ACTION: At crossings providing access to IDNR lands, a meeting will be scheduled with IDNR to obtain access concurrence. Subsequently, a meeting will be held with the railroads (Iowa Interstate Railroad for the track from Chillicothe to Henry and CSX for the section from Henry to the north project limits) to obtain concurrence with the recommended railroad crossings. Pat Sheldon (Iowa Interstate Railroad) and Rick Schroeder (URS representing CSX) have been alerted of upcoming meetings with them.

The railroad crossing comparison table calculations provided at the January 31, 2005 meeting (acres of land, unit costs, etc) will be sent to IDOT.

Due to the difficulty of some crossings, the IDOT legal council may need to be contacted.

Subsequent to this meeting on January 27, 2005, the IDOT will meet and recommend whether to provide access to properties east of the railroad or to remove access and purchase the landlocked property.

2-23-2005 Crow Creek Watershed Committee Meeting

ATTENDEES: See attached sign-in sheet

COPIES: Mike Lewis/IDOT
Paula Green/IDOT

FROM: Dan Dupies

DATE: March 30, 2005

The purpose of the Crow Creek Watershed Committee meeting was to update that organization on the proposed improvements to IL 29 adjacent to Crow Creek (Camp Grove to Old IL 29) and to confirm that the project would not affect projects funded by the committee in the watershed. The meeting was sponsored by the NRCS and held in their Henry office.

Terry Bogner, the committee chairperson, opened the meeting with a brief welcome. After self-introductions, Mike Lewis (IDOT) reviewed the alternatives for the entire corridor under consideration. Kim Kolody (CH2M HILL) then described the proposed improvements adjacent to Crow Creek.

Two committee members noted the area along IL 29 that is overtopped by the creek. They noted that the overtopping is unrelated to high water conditions in the Illinois River.

The question was asked whether, as part of the project, IDOT would "clean out" Crow Creek. It was noted that if the creek is not cleaned out then IDOT should build the new road 50 feet higher than the existing because the dams formed by debris in the creek are only going to make existing problems more severe in the future.

Ron Fisher (U.S. FWS) noted that in the past, Crow Creek had been opened up and the result was an enormous glut of sediment emptying into Goose Lake. Ron noted that Fish and Wildlife would not be inclined to do anything to the portion of Crow Creek that flows through the Cameron Billsbach National Wildlife Refuge until the amount of sediment entering Crow Creek upstream of the refuge is substantially reduced. Randy Edwards (NRCS) noted that the bed load from Crow Creek itself is a more pressing problem now than sediment loading from adjacent agricultural land.

A meeting participant noted that some of what is currently considered wetland adjacent to Crow Creek was farmed as recently as 10 years ago. The logjam that begins just west of the Crow Creek bridge and extends to the location of the first blowout has forced some of the creek flow to the north. The blowout was caused by water backing up behind the logjam. The second blowout (west of the first) is evidence that problem has worsened over the years.

A question was asked about the location of the borrow for the proposed IL 29 improvements. Paula Green (IDOT) responded that locating suitable borrow sites was the contractor's responsibility, but that IDOT would have to approve the sites. Paula noted that IDOT requires the contractor to develop erosion control plans designed to prevent siltation into Crow Creek and other wetlands/waterways.

Terry Bogner stated that the committee's vision for Crow Creek would be to construct the necessary streambank armoring projects similar to what has been done at the Senachwine Creek (south) crossing of IL 29.

A question was asked about the likelihood of IL 29 being improved. Mike Lewis said it was hard to predict. He noted that this project would be competing nationally for funding and as a result, construction could be 10 years out or beyond 20 years out.

Someone asked whether it was possible that the proposed improvements would stay completely on the bluffs. Mike said he did not see that as likely. One of participants pointed out the apparent inconsistency of IDOT worry about acquiring farmland along the bluff when farmers are receiving tax money, in programs like CRP, not to farm. This person also noted that farmland is being purchased for use as mitigation sites.

A question was asked about the size of the proposed Crow Creek replacement bridge. Fred Lin (Lin Engineering) noted that the existing structure is about 245 feet wide and that the proposed crossing would be about 270 feet wide.



Illinois Department of Transportation

Division of Highways / Region 3 / District 4
401 Main Street / Peoria, Illinois / 61602-1111
Telephone 309/671-3333

December 22, 2005

BUREAU OF PROGRAM DEVELOPMENT
High Street/IL 29 Intersection Realignment
Senachwine Township – Section 4(f)

Ms. Rhonda Downey
Senachwine Township Clerk
Senachwine Township Hall
1881 Bradford Blacktop Road
Putnam, IL 61560-5045

Dear Ms. Downey:

As you are aware, the Illinois Department of Transportation (District Four in Peoria) is currently developing plans to widen Illinois Route 29 to a four-lane divided highway from Illinois Route 6 to Interstate 180. The proposed widening of Illinois Route 29 through Putnam and the realignment of the High Street/IL Route 29 intersection would acquire 1.9 acres from the township's property. A portion of this impact would be to the former baseball field adjacent to the township hall (See enclosed exhibit).

Alternative alignments to avoid impacts to the baseball field and township property were considered, but were eliminated due to safety concerns, impacts to the Putnam grain elevator, and engineering constraints. With the proposed Illinois Route 29 improvements shown on the enclosed exhibit, the baseball field could still be used. If an outfield fence were placed immediately adjacent to the proposed Illinois Route 29 right-of-way in center field, it would be approximately 140 feet from the home plate. The proposed Illinois Route 29 improvements would not preclude the baseball field from being used, but it would preclude the use of the field by any league requiring a regulation Little League field (which requires a minimum distance of 165 feet from home plate). During our meeting on November 28, 2004, you indicated that there are no organized recreational activities on the property, nor is it regularly used by Putnam community.

As discussed previously with you, there is a regulation known as Section 4(f) that protects publicly owned parks and open space that are used for recreational purposes. However, the regulations only apply to properties that are considered "significant" recreational resources by the property owners (Senachwine Township). A recreational property is generally determined to be "significant" when it is designated as a park and included in a community's park system, and when the community that owns the property determines that the major purpose for the land is public recreation. Incidental, secondary, occasional or dispersed recreational activities on the property would not make it a "significant" recreational use.

Ms. Rhonda Downey
Senachwine Township
December 22, 2005
Page 2

The Illinois Department of Transportation is asking Senachwine Township to determine the significance of the land on which the existing baseball field is located. If you and the Senachwine Township Board agree that because the baseball field is not used for any organized recreational activities, and because the baseball field is rarely used by the community, the baseball field is not a significant recreational facility, please sign below and return this letter to us in the self-addressed, stamped envelope.

Please retain the enclosed copy of this letter for your files. After receiving the below determination, the Department may proceed with the environmental documentation for the Illinois Route 29 project.


Senachwine Township Signature


Date

If you have any questions or require additional information, please contact Mr. Mike Lewis at (309) 671-3474.

Very truly yours,


Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

PAG:\tdp\PAG0001_IL 29_Rhonda Downey_Senachwine Township.doc

Enclosure

cc: Project File (M. Lewis)
Environmental (P. Green)
Land Acquisition (R. Searle)

01-12-06 Senachwine Township Meeting

ATTENDEES: Rhonda Downey/Sen. Twp. George Wheeler/Sen. Twp.
 Lloyd Jeppson/Sen. Twp. David Workman/Sen. Twp.
 Gary Fountain/Sen. Twp. Mike Lewis/IDOT
 Wally Sprague/Sen. Twp. Paula Green/IDOT
 Cindy Miller/Sen. Twp. Kim Kolody/CH2M HILL
 Michael Miller/Sen. Twp.

FROM: CH2M HILL

MEETING DATE: January 12, 2006, 7:00 PM to 9:00 PM

MEETING LOCATION: Old School in Putnam, IL

This summarizes the meeting that was held with Senachwine Township on January 12, 2006, to discuss updates to the project design and 4(f) issues.

Updates to the Design

Mike Lewis provided a description of the design in the Putnam area. During the discussion a couple of concerns were raised.

Concerns about Large Trucks

There was a concern about the safety of trucks crossing IL 29 at Bradford Road. Since IL 29 will be a 65 mph corridor there was interest in providing enough room in the median to store a truck so that vehicles would only have to cross two lanes of traffic at a time. The current design includes a 50 foot median. Due to safety concerns by the Committee, IDOT will study alternate designs for this area due large number of trucks that travel to and from the grain elevator.

There was concern about eastbound trucks crossing through the intersection and having to stop for a train. There is over 100 feet between the railroad tracks and the proposed edge of pavement which allows for storage of one truck.

Long acceleration and deceleration lanes were added to accommodate the large truck volume in the area.

There was discussion of alternate routes for the trucks i.e. improving Center Street to the north or south to accommodate turning vehicles at the connection to Center Street or High Street. The options were eliminated due to out of direction travel and trucks driving through a residential area.

A question was raised about providing a median cross-over at Douglas Street. This was not a desirable design due to closely spaced median openings. BDE indicates the average spacing between median openings is 2640 feet. The proposed design has 2400 feet between Bradford Road and High Street.

There was discussion of placing warning signs along IL 29 to indicate the presence of trucks so that vehicles may be alerted and slow down if necessary.

Maintenance Garage Access

A concern was raised regarding the amount of right-of-way remaining near the maintenance garage located between Main and High Streets along Center Street. Currently maneuvering road graders into the garage requires area up to the proposed edge of pavement. Options discussed were shifting the opening of the garage and providing access off of IL 29 or High Street. IDOT will review other options for accessing the garage.

4(f) of the Baseball Diamond

The committee indicated kids play pick-up games at the ball field from time to time, but there is not an organized league, nor is one expected in the future. Also, there is not a managed park plan for the area. The county signed a letter from IDOT that stated that the ballfield property is not 4(f) and this will be documented in the DEIS.

IL 29**Sparland Board Meeting****June 1, 2006**

PREPARED FOR: Maureen Addis, IDOT - District 4
 Paula Green, IDOT - District 4
 Mike Lewis, IDOT - District 4

PREPARED BY: Jim Jodie, CH2M HILL

COPIES: Kim Kolody, CH2M HILL
 Dan Dupies, CH2M HILL

DATE: June 6, 2006

On Thursday, June 1, 2006, a meeting was held with the Sparland Village Board beginning at 7 PM at the Sparland Village Hall. Twenty four people attended that included 7 board members, 13 residents and 4 IL 29 IDOT/CH2M HILL staff. Exhibits displayed were:

1. A 1:2275' scale project overview.
2. A 1:150' scale plan view of Sparland.
3. Sparland interchange alternatives.
4. A visualization of the Sparland interchange,
5. Four conceptual drawings in Sparland.
 - The community park.
 - IL 17 east of proposed IL 29, looking west.
 - Railroad Street at existing IL 29, looking east.
 - Ramp D looking south.
 - Proposed IL 29 looking west from High Street.

Mike Lewis provided the introduction, Jim Jodie provided an overview of the project and Kim Kolody explained the reasons the bluff alignment was dropped, the three interchanges previously considered for Sparland and the current Sparland interchange design that is proposed.

Reasons the bluff was dismissed is that traffic from Lacon to Chillicothe will continue to use existing IL 29, resulting in the need to build both a new 4-lane bluff roadway and widen existing IL 29; and there are greater impacts to farmland and less existing right-of-way is used.

The three alternates considered for Sparland were #2, a diamond interchange along existing IL 29 without railroad relocation; #4, a diamond located east of existing IL 29 and the railroad tracks, and #3, a split diamond that avoids the flood buyout properties. Alternative 2 was eliminated because it had the greatest number of potential residential and commercial displacements, maintenance during construction was difficult and it had the highest cost. Alternative 4 was eliminated due to the greatest impact to IDNR property, wetland, and floodplain impact. It also impacted the Whiffle Tree House. As a result the split diamond was selected and modified to eliminate impacts to floodplain buyout properties. Kim

described the operation of the split diamond for traffic entering and exiting Sparland from Chillicothe and Lacon.

Questions from the audience:

1. Access to the treatment ponds will be via Center Street extended (under proposed IL 29).
2. Center Street will operate as a two-way street, but access from IL 17 will be via Lacon Street and Vine Street. Due to safety concerns (eastbound traffic stopping on the L & S railroad tracks), eastbound IL 17 traffic will be prohibited from making a left-turn to Center Street.
3. No residential properties will be removed in Sparland resulting in no impact to the Sparland tax base. Outside of the Village Corporate Limits, two residences will be displaced south of Sparland and 7 residences north of Sparland. There was a comment that some of them buy water from the Village and therefore contribute to the tax base.
4. Property purchased in Sparland for proposed IL 29 will be at fair market value.
5. To provide an area for left-turn lanes, widening of existing IL 29/Railroad Street will be to the east. Some areas will require a retaining wall between the road and the railroad. The existing west properties will not be changed.

The meeting concluded at 8 PM.

ATTENDANCE SHEET
 Sparland Village Board Meeting
 Sparland Village Hall
 7:00 pm Thursday, June 1, 2006

NAME	REPRESENTING	PHONE #
1. TERRY MURPHY	SPARLAND	309-360-4993
2. Tolene Smith	Sparland	309-469-2317
3. DAVE SMITH	SPARLAND	309-369-3499
4. NANCY SEAUER	SPARLAND	309-469-3691
5. ROBERT PLACHER	SPARLAND	309-469-3691
6. Ligda Meberis	Sparland	309-469-2191
7. Luella Dawson	Sparland	309-469-2711
8. Ed Austans	Waste Rec. - Sparland	(309) 683-5571
9. Chester Russell	Sparland	309-469-2872
10. Dean Peter	Sparland	309-369-6831
11. Todd Zungen	SPARLAND	309-471-4052
12. Arthur Peters	Sparland	309-369-6835
13. Ronald Smother	Sparland	309-469-3191
14. Joe Bernard	Sparland	309-469-2091
15. Doug Wilkman	Sparland	309-469-9271
16. Harold Dewaet	Sparland	309-469-4051
17. Rose Dewaet	Sparland	309-469-4051
18. Ida Dalrymple	Henry	309-364-9971
19. Mary Bornard		
20. Lew Lewis	Sparland, Ill ⁶¹⁵⁶⁵	309-469-5651
21. Mike Lewis	IDOT	
22. Jim Jodie	CH2M HILL	
23. Kim Kolody	CH2M HILL	
24. Paula Green	IDOT	
25.		

MEETING SUMMARY

CH2MHILL

06-08-06 Senachwine Township Meeting

ATTENDEES: Rhonda Downey/Sen. Twp. George Wheeler/Sen. Twp.
 Lloyd Jeppson/Sen. Twp. Tim Snowden/Putnam resident
 Gary Fountain/Sen. Twp. Mike Lewis/IDOT
 Wally Sprague/Sen. Twp. Paula Green/IDOT
 Michael Miller/Sen. Twp. Kim Kolody/CH2M HILL

FROM: CH2M HILL

MEETING DATE: June 8, 2006, 7:00 PM to 9:00 PM

MEETING LOCATION: Old School in Putnam, IL

This summarizes the meeting that was held with Senachwine Township on June 8, 2006, to discuss updates to the project design.

Introduction

Mike Lewis began the meeting by inviting the committee to the public hearing to be held on June 14th in Chillicothe at Three Sisters Park and on June 15th in Henry at the Henry-Senachwine School. Mr. Lewis reviewed the agenda for the meeting noting that this is follow-up to the concerns raised at the previous meeting held on January 12, 2006.

Updates to the Design

Kim Kolody provided a description of the updates to the design in the Putnam area based on comments received at the previous meeting.

Concerns about Large Trucks

A concern about the safety of trucks crossing IL 29 at Bradford Road was raised at the previous meeting. Several design modifications were suggested and evaluated.

1 – Grade separation at Bradford Road and IL 29

IL 29 over Bradford Road, Bradford Road over IL 29, and an interchange were all reviewed and evaluated. Due to cost, complexity, additional right-of-way impacts, and adverse travel each of the alternatives were dismissed.

2 – Rerouting trucks to the north to cross at High Street or routing trucks south to the connection to Center Street.

Routing trucks north to turn at High Street or south to turn at the connection to Center Street required upgrading Center Street to accommodate truck traffic, combined residential and commercial traffic in one area, and increased out of direction travel. As a result these alternatives were dismissed.

3 – Widen the median along IL 29 at Bradford Road

Meeting Minutes

Project No.: 3730
Current Date: April 19, 2007
Date of Meeting: January 30, 2007
Time of Meeting: 1:00 p.m.
Meeting Location: IDOT District 4 Office - Peoria, Illinois

Regarding: IL 29 BNSF Meeting

Participants: See Attendance Roster

General

Mr. Mike Lewis of IDOT presented the project overview.

- The project consists of the construction of a 4-lane highway facility from IL 6 in Peoria to I-180 in Bureau County, Illinois.
- The mainline pavement will bypass Chillicothe.
- The route will follow along existing IL 29 thru Sparland and Henry, IL.
- Construction of the project is not presently funded in IDOT's 5-year program
- Some funds have been identified for additional engineering but it has not been determined how the money will be used.
- The railroad bridge reconstruction will be a part of the project to improve IL 29 from Truitt Avenue in Chillicothe to the trumpet interchange north of Chillicothe.
- The project is nearing end of environmental process. Once the EIS is approved, the project can go into Phase II design. IDOT anticipates that it will take three to five year to complete Phase II once funding is identified.
- IDOT anticipates that the earliest that construction can occur is 7 to 10 years, but the construction could occur as far away as 25 to 30 years.

Proposed Railroad Bridge on IL 29 Connector

Mr. Dan Nowak presented the existing and proposed roadway conditions:

- IL 29 is currently a 2-lane roadway.
- A 4-lane roadway with a center median is proposed under the BNSF Viaduct.
- Retaining walls are proposed to reduce the impacts to adjacent properties.
- The existing clearance under the railroad is about 14 to 16 feet.
- The proposed clearance is 16'-9".

Benesch presented the railroad bridge concept. When complete, the new bridge will accommodate two main tracks, a yard track, and an access road.

Existing Condition

- BNSF has two bridges that are included in the project at this location. There are two (2) main tracks on the south bridge, and one (1) yard track and an access road on the north bridge.
- The proposed railroad staging is summarized below:

Stage 1

- Build north half of new bridge, adjacent to and north of existing south bridge.

Stage 2

- Move main line railroad traffic to the new bridge with the main tracks on temporary alignments.
- The design speed for the temporary alignments will be 77 mph.
- Demolish the existing south bridge.

Stage 3

- Build south half of new bridge.
- There is a slight raise in grade for the mainline tracks (approximately 6").

Stage 4

- Restore main tracks to original alignment.
- Build yard track and access road across new bridge.

Stage 5

- Demolish north bridge.
- Railroad construction will be completed prior to construction of the IL 29 Connector roadway.

Lincoln & Southern Interchange Crossing to the East of IL 29

The required offset between the existing main track and the proposed temporary alignment causes the temporary alignment to be off of the bridge over the Lincoln & Southern RR interchange track. The proposed vertical geometry for the yard track will not allow a connection

from the new yard track to the interchange track; therefore the design team will consider taking the bridge out and filling the existing structure.

Bridge Structure

- The yard lead track will be set at a thirty (30) foot offset from the No. 1 main track (WBM).
- There will be a twelve and one-half (12-1/2) foot offset from the centerline of the new yard track to the south edge of the ten (10) foot wide access road.
- BNSF stated a preference for a 2-span structure in the feasibility report developed in the mid 1990's. The current bridge concept includes:
 - Fifty (50) foot rolled beam spans with center pier.
 - Approximately six (6) foot structure depth.
 - Eighty-five (85) foot deck width.
 - CIP concrete deck.
 - Full depth solid pier and full depth abutments.
 - 16'-9" proposed vertical clearance over new roadway.
 - Temporary main tracks will be located on the alignment of the yard lead and fifteen (15) feet north of the future yard lead track.

BNSF Comments

- Current BNSF policy requires a 10% factor of safety with design speed. The temporary track must be designed for authorized speed plus 10% (In this case, 77 M.P.H.).
- BNSF will provide alignment design criteria to Benesch.
- Main track No. 1 is the northerly track (westbound main track). Main track No. 2 is the southerly track (eastbound main track).
- Current traffic is 80 trains per day, with potential growth to 100 trains per day in the future, making track outages crucial and difficult to obtain. Any time a track must be taken out of service for more than 2 hours, it must be authorized by BNSF General Manager.
- If the work area is at or beyond twenty-five (25) feet from the centerline of the nearest main track, the contractor can avoid delays from train operations.
- Yard track alignment with 3-degree curves may not be acceptable. Curves of 2-degrees or less would be more acceptable.
- BNSF agrees that the connection to the Lincoln & Southern interchange track will not work.
- The design team anticipates operations on the temporary alignments for nine months to one year.

- BNSF will supply and construct all trackwork from top of subballast, including ballast, ties, rail and other track material.
- The contractor for IDOT will install all embankment, subballast, and the new bridge.
- The BNSF track construction season is from April 1 to November 1.
- Temporary tracks may be cut-over on summer holidays, such as Memorial Day for mainline track No. 1 and July 4 for mainline track No. 2.
- It may take a full construction season to install the temporary track work, and a full construction season to remove the temporary trackwork.
- The design should not preclude the possibility of a future third main track.
- By the end of 2008, BNSF will be double-tracked from Chicago to Los Angeles.
- After 2008 there could be extensive stretches of three (3) tracks in the corridor.
- IDOT stated that if BNSF installs a third main track before the new bridge is constructed, the EIS should not be affected.
- The design team does not anticipate changes near Benedict Street crossing.
- Benesch provided BNSF with staging and preliminary structure plans.
- BNSF is open to considering the use of track materials from the temporary track alignment for the permanent yard lead.
- The group did not know who owns the interchange track right-of-way. Benesch will review the BNSF property maps to verify ownership. Current and proposed ownership of the overpasses is under review.

Utilities

- BNSF will locate known utilities on BNSF property if IDOT furnishes base drawings for mark-up.
- BNSF stated that there could be fiber-optics lines, and possibly gas lines within the project limits.

IL 29 Overpass (North of Truitt Road)

- BNSF stated the desire for 25'-0" horizontal clearance from their mainline tracks to any proposed pier. Piers with offsets less than 25' would require crashwalls. The minimum allowable offset to a pier is fifteen (15) feet. BNSF standard for track centers on new construction is 25 feet. Where property is constrained, reduced centers, not less than 15 feet may be considered.

- There are two mainline tracks (Main #1 and Main #2) approximately 15'-0" on centers. There are two yard or storage tracks located north of the main tracks. The southerly yard track is about 70' from the northerly main track. The northerly yard track is approximately 28' to 30' north of the southerly yard track. The track locations are shown in the drawings provided by CH2M Hill at the meeting.
- The railroad wants provision for a third mainline track located 25'-0" north of the existing main track, south of the existing yard track. Clearance requirements to piers should be based on the future track location.
- Some adjustment in the pier locations could be made to accommodate the railroad clearance requirements.
- A four span bridge has been proposed in order to minimize the construction depth and maintain proposed IL 29 profile.
- Elimination of the pier between the mainline tracks and yard tracks could require a span approximately 150' long, increased construction depth and higher cost.
- Phase I Plans will be adjusted as necessary to comply with railroad request at this crossing.
- Another item of interest discussed regarding the crossing of the BNSF had to do with the future excavation of the gravel pit sites adjacent to railroad property. CH2MHill stated that the adjacent gravel pit has been excavated about 80' deep. There was some discussion about stability and/or slope requirements for the excavation. BNSF stated that they would investigate the matter and see if there are any controls affecting the gravel excavation including distance from railroad right of way and slope.
- The design team believes that it will not take long to set beams, probably 45 minutes or less.

Signal Visibility

BNSF will perform a study to determine if signals at West Chillicothe Interlocking will be visible to westbound trains when the new mainline IL 29 overpass is in place. If they are not, BNSF will have to install signals on the east side of the overpass at a cost to the project.

- Visibility now is at least 2 miles
- It will be expensive to move signal bridge
- BNSF will provide conceptual estimate on cost to move signal bridge.
- BNSF will require proposed layout information from to verify the visibility of the signal bridge with the proposed conditions. (CH2MH has provided this information to the BNSF)

Meeting Minutes
January 30, 2007
Page 6

The above constitutes our understanding of the discussions that took place. Any corrections should be directed to the author within five (5) working days.

Sincerely,

A handwritten signature in black ink that reads "Richard D. Conrath". The signature is written in a cursive style with a large, stylized initial "R".

Richard D. Conrath, P.E.
Senior Project Manager

RDC:lag

Attachments

Agenda for
IL 29 BN&SF Railroad Meeting
January 30, 2007

- **Introductions**
- **Describe Project and Project Schedule**
- **Describe IL 29 Design at BN&SF Railroad Overpass North of Truitt Rd.**
 1. Proposed IL 29 Plan and Profile at Overpass
 2. Ortho-Photo of Truitt Interchange
 3. Stage Construction
 4. Stability Concerns at Galena Road Gravel
- **Describe IL 29 Connector Design at Viaduct in Chillicothe**
 1. Aerial Plan View of IL 29 Connector
 2. Proposed IL 29 Connector Plan and profile at Viaduct
 3. Proposed IL 29 Connector Typical Sections at Viaduct
 4. Proposed BNSF Railroad Typical Sections
 5. Discuss Christian Roge Report for RR Design
 6. Describe RR Stage Construction
- **Future Plans**
 1. Future Expansion of the Railroad Tracks
 2. Financial Participation

STATE OF ILLINOIS

PUBLIC UTILITIES COMMISSION

PEORIA COUNTY by Walter E. Emery, :
County Superintendent of Highways, :
v. :
THE ATCHISON, TOPEKA AND SANTA FE : 9477
RAILWAY COMPANY, CHILLICOTHE TOWN- :
SHIP, VILLAGE OF NORTH CHILLICOTHE. :

PETITION FOR SEPARATION OF GRADES

Funk, Commissioner:

It appearing to the Commission that public safety requires that the grade of the highway known as Fourth Street, running north and south along the easterly boundary line of the Village of North Chillicothe in the Township of Chillicothe, Peoria County, should be separated from the grade of the railroad tracks of the Atchison, Topeka and Santa Fe Railway Company, at the point where the same intersect, by depressing the grade of said highway so that it shall pass under said railroad tracks through a subway, and it further appearing to the Commission that said highway is a portion of a state and federal aid road extending northwardly from Peoria in said County and that the County of Peoria and the Township of Chillicothe have appropriated and agreed to pay upon the order of the Department of Public Works and Buildings the sum of Eight Thousand Dollars (\$8,000) to a party to be designated by said department, it being understood that the above mentioned sum is to be applied on the cost of the work to be done by said Department of Public Works and Buildings as stipulated in this order, in connection with separation of said grades under and in accordance with an agreement which has been made by the parties hereto, subject to the approval of this Commission, which agreement is substantially as follows:

The parties have agreed that said highway shall be depressed and said subway constructed in accordance with plans shown on the

print hereto attached and made a part hereof, which plans provide for the present construction of a subway under the eight (8) existing railroad tracks only, with a clear opening at least twenty-four (24) feet wide between subway walls and clear headroom of at least fourteen (14) feet, measured between the surface of said highway when paved and the clearance line of the superstructure, and for the subsequent extension of said subway walls and the bridge thereover for the purpose of carrying over said highway such additional tracks as the Railway Company may from time to time find it convenient or necessary to construct and operate thereover.

Said plans further provide that the grade of the surface of said highway from the present northerly right of way line of said Railway Company through said subway and to the southerly line of said right of way shall be at such elevation as will permit of the extension of said subway walls and bridge to said northerly and southerly right of way lines so that the vertical clearance between the surface of the pavement of said highway and the lowest projection of the bridge when extended shall at all points be not less than fourteen (14) feet.

Said plans further provide that the grades of the approaches outside the present right of way lines of said Railway Company shall be not to exceed four (4) feet in each one hundred (100) feet, and that from the southerly right of way line of the Railway Company to the northerly right of way line said roadway shall be constructed on a grade of not less than two-tenths (.2) of one foot in each one hundred (100) feet.

The parties have further agreed:

1. That the Railway Company shall, within a reasonable time after the entry of this order, construct or cause to be constructed and put in place such false work as shall be necessary to support the present tracks during the construction of the subway; and that the Department of Public Works and Buildings shall thereupon, within

a reasonable time, excavate an opening completely across the present right of way of the Railway Company down to the subgrade of the pavement and extending laterally at the bottom to the outside faces of the abutments, and also do all necessary excavating and grading for the approaches and acquire and furnish any additional land necessary for highway purposes outside the present right of way of the Railway Company.

2. Within a reasonable time after the completion by said Department of Public Works and Buildings of the excavation through and across the right of way of the Railway Company, the Railway Company shall construct the masonry and bridge or superstructure of said subway in accordance with said plans and shall also construct and install the necessary sewers or drains to properly drain the subway and approaches thereto, and thereafter maintain said masonry work and bridge or superstructure and drainage system.

3. That within a reasonable time after the completion of said masonry work, superstructure and drain said Department of Public Works and Buildings will pave the roadway through said subway and upon the approaches with concrete or other suitable permanent material, which shall thereafter be maintained by said Department of Public Works and Buildings or other public authorities having jurisdiction over said highway.

4. That the above work shall be prosecuted diligently and, if practicable, all things considered, shall be completed within one year from the date of this order.

5. That the Railway Company may, from time to time, after the construction of the subway under its present tracks, extend said subway walls and bridge on each or either side for the purpose of carrying over said highway additional tracks so that ultimately said subway walls and bridge may be extended completely across the present right of way of the Railway Company, and that said Railway Company may,

from time to time, construct and operate over said highway upon said bridge when extended such additional tracks as it may find necessary or convenient.

And, it appearing to the Commission that the construction and extension of said subway and additional tracks in accordance with said plans and under said agreement are proper and that public safety requires the separation of grades as therein provided for:

IT IS THEREFORE ORDERED that the grades of the crossing where the tracks of the Atchison, Topeka and Santa Fe Railway Company cross the highway known as Fourth Street running north and south along the easterly boundary of the Village of North Chillicothe in the Township of Chillicothe, Peoria County, Illinois, shall be separated by depressing the grade of said highway so that it shall pass under said railroad tracks through a subway.

IT IS FURTHER ORDERED that the said grades shall be separated and a subway shall be constructed in the manner and in accordance with the terms set forth in a certain agreement filed herein and signed by the Department of Public Works and Buildings of the State of Illinois, The Atchison, Topeka and Santa Fe Railway Company, the County of Peoria, The Highway Commissioner of Chillicothe Township and the Village of North Chillicothe.

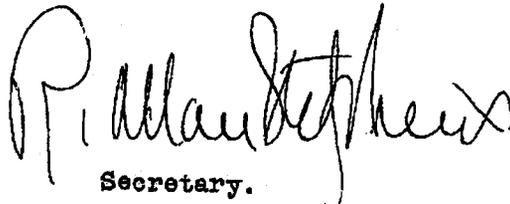
The County of Peoria and the Township of Chillicothe shall upon the order of the Department of Public Works and Buildings pay as their portion of the costs of the improvement herein provided for, the sum of Eight Thousand Dollars (\$8,000). The Department of Public Works and Buildings shall do the work and bear the cost of such work as is set forth in said agreement to be done by said Department. The Atchison Topeka & Santa Fe Railway Company shall do such work and bear such costs as are set forth in the said agreement.

IT IS FURTHER ORDERED that all the work of the improvement herein provided for shall be completed and ready for public use not later than one year from the date of this order.

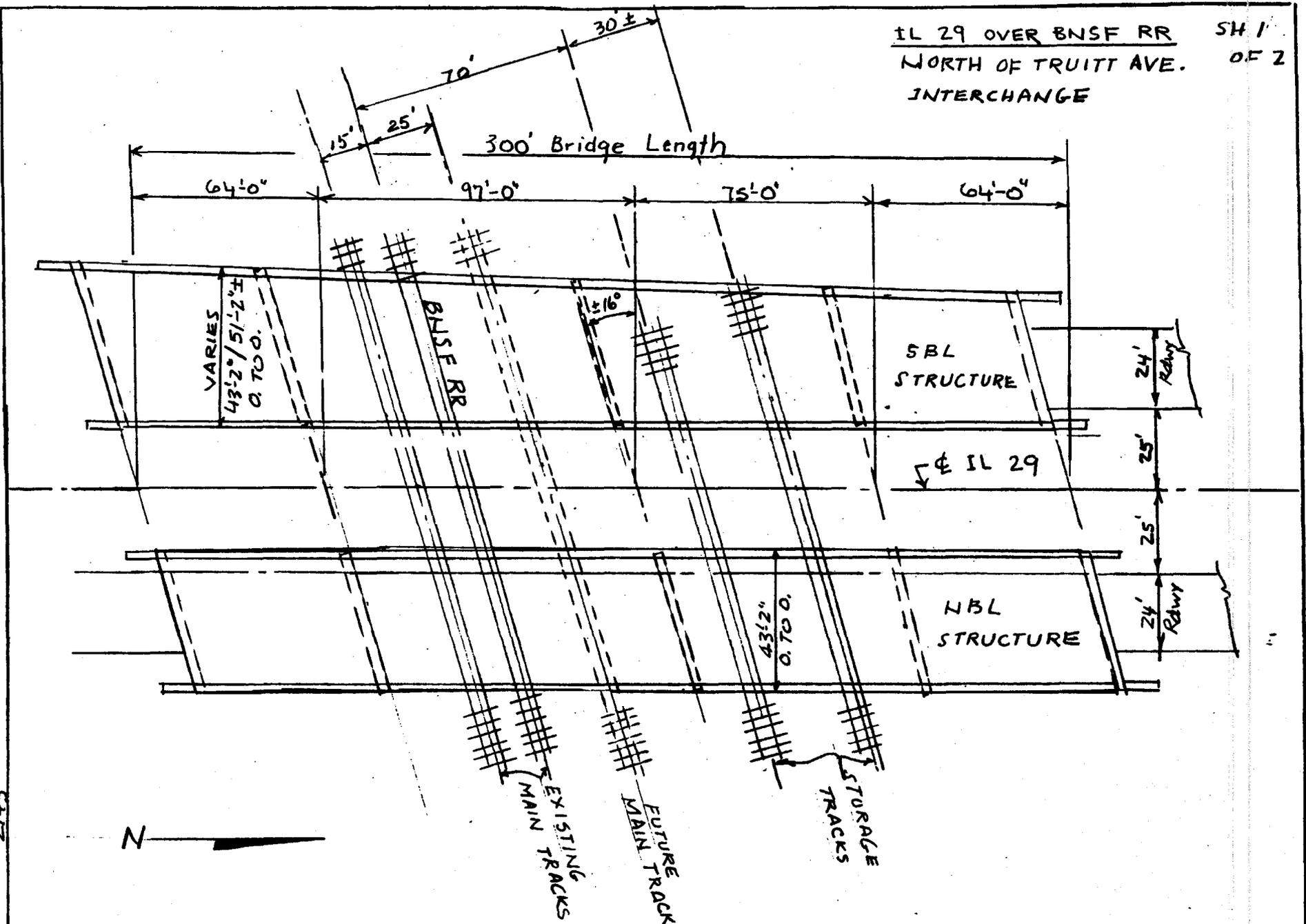
The Commission retains jurisdiction of the matter herein and

the parties hereto to make any further orders as at any time it may deem necessary.

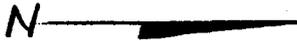
By order of the Commission this 28th day of April, 1920.


Secretary.

IL 29 OVER BNSF RR SH 1
 NORTH OF TRUITT AVE. OF 2
 INTERCHANGE



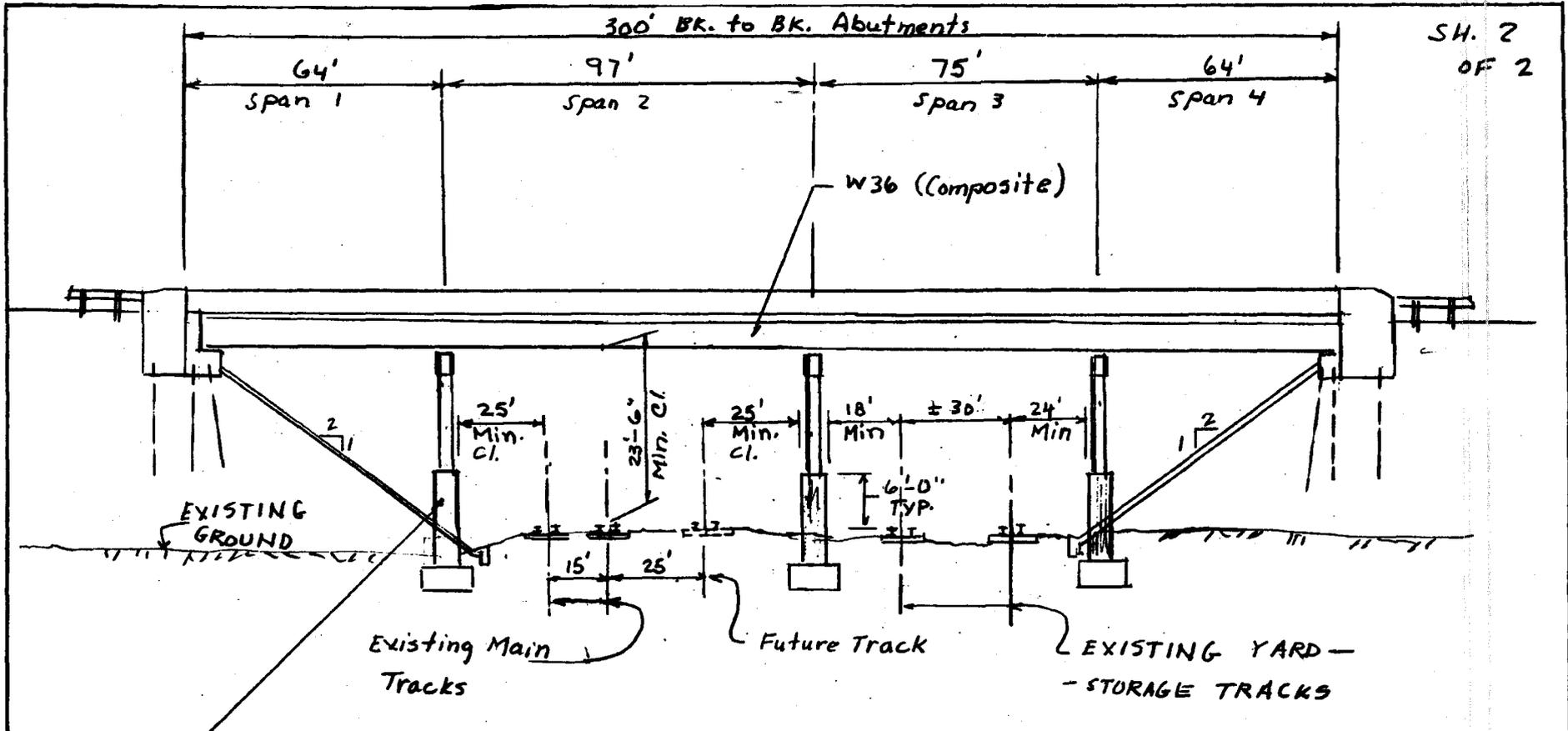
5717



PLAN

IL 29
 PHASE I STUDY

JOH
 2-1-2007



SH. 2
OF 2

ELEVATION

(Horizontal Dimensions are at L'S
unless noted)
(LOOKING WEST)

Description: Four span continuous W-Beam with 8" concrete deck, pile bent abutments, and reinf. concrete multi-column piers with crashwall. Dual bridges 43'-2" o. to o. (NBL) 43'-2" / 51'-2" o. to o. (SBL). ± 16° skew

**IL 29 OVER BNSF RR
NORTH OF TRUITT AVE.
INTERCHANGE**

JOH
2-1-2007

2145



alfred benesch & company

Record of Conversation

Subject: IL Rte 29 **Project No.:** 3730
Date: July 2, 2007 **Time:** 10:00 AM
Revised March 25, 2010 (responses to questions are shown in italic font)
Contact: Craig Rasmussen- BNSF
 Jim Jodie-CH2M Hill

Follow-Up Required: Yes No
Follow-Up Completed: Yes No
Instructions or data obtained or transmitted:

A conference call was held with the BNSF, CH2MH and Benesch concerning the Phase I Engineering for IL Rte 29, to discuss the following issues:

- Line of sight for the existing signal bridge located west of the proposed Truitt Interchange overpass structure.
- Vehicular access to BNSF property from proposed IL 29 Connector.
- Review of Benesch’s preliminary TS&L layout for the proposed viaduct and staging concepts.
- Track design criteria

1. CH2MH stated that they are currently preparing a cost estimate to raise the roadway profile for the Truitt Interchange overpass to mitigate the line of site issue. The proposed overpass as currently located obstructs the view of oncoming trains to see the signals. Ch2MH requested that the BNSF furnish the data used to calculate the height required to elevate the low chord of the overpass for the line of site determination. CH2MH also requested that the BNSF provide an estimate of cost to relocate the existing signal to the east of the proposed overpass location. ***IDOT asked if raising the bridge is in lieu of the signal bridge. CH2M HILL and Al Benesch responded: Relocation of the signal bridge is in lieu of raising the IL 29 profile.*** There was some discussion regarding the future value of the cost of the signal relocation. It was decided that the cost estimate for the signal relocation be prepared in 2007 dollars, and it will be necessary to adjust this figure when the project goes to construction in the future.

Record of Conversation

Date of Conversation: July 2, 2007

Page 2

2. The BNSF expressed their desire that vehicular access be provided to their property from the new IL 29 Connector. Access is required in order for BNSF personnel to be able to drive to the signal facilities, propane tanks and switches located to the east side of the new IL 29 Connector. Existing access to the BNSF R.O.W. is currently provided at the recreation area located west of the present IL 29 and north of the northerly existing BNSF structure. This access point is basically unaffected by the proposed construction. ***IDOT asked if this will suffice for access east of IL 29? CH2M HILL and Al Benesch responded: Yes, it will.***

The existing northerly BNSF Bridge will remain in place until the new structure that includes a service road is constructed. Access to BNSF property can also be handled from Benedict Street. ***IDOT asked if this satisfies BNSF's needs? CH2M HILL and Al Benesch responded: Yes, it does.***

3. BNSF stated that the structural review of the proposed viaduct and staging concepts is being done by the Structures Department in Kansas City, Kansas. The BNSF will check on the status of the review.

4. Regarding the track design criteria, BNSF stated that the AREMA standards are to be used. The temporary track alignment is to be designed for a speed of 77 MPH.

Concerning an additional issue, the BNSF stated that while at this time there is only one existing yard track on the northerly structure, this could change over the coming years due to possible railroad expansion. The addition of future trackage should be factored into the current design. CH2MH/Benesch will inform IDOT of this and ask for IDOT direction. ***IDOT commented that this is a new issue that came up during our conversation with BNSF on July 2, 2007. Additional yard trackage had not been previously discussed. What was discussed at the January 30, 2007 meeting in Peoria was a third through track over the IL 29 Viaduct. CH2M HILL and Al Benesch responded: Current conceptual plans for the viaduct are based on providing two main tracks, one yard track and a service road (this is what BNSF currently has in place).***

At the Truitt interchange overpass, CH2MH will look at the possibility of accommodating a fourth track for future rail expansion. ***Per review by Hutchison Engineering, a fourth thru track north of the Truitt interchange can be accommodated. The overpass cost will increase approximately \$170,000 over the previous bridge cost of \$20 million .***

CH2MH asked the question if the BNSF had concerns regarding the proximity of the proposed overpass structure to the existing quarry. The BNSF stated that this does not seem to be a problem at this point. ***This pertains to both the existing railroad line and the proposed overpass structure. The amount of quarry excavation will determine the amount of fill required when IL 29 is constructed. If the railroad has stability concerns, they then may request that the excavation stop. Per Craig Rasmussen, BNSF looked at the soils in the location of the existing BNSF Railroad at the quarry and they did not find anything to be concerned about regarding the stability of their tracks in the area of the quarry excavation.***

Record of Conversation

Date of Conversation: July 2, 2007

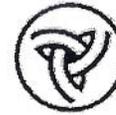
Page 3

If there are any comments or corrections to the above, please contact the undersigned via e-mail at lbellisario@benesch.com.

CC: File 3730

By: Larry R. Bellisario

ATTENDANCE SHEET
 Sparland Village Board Meeting
 Sparland Village Hall
 7:00 pm Thursday, January 3, 2008



Illinois Department of Transportation

Memorandum

To: File
 From: Mike Lewis, Studies & Plans – Squad 2
 Subject: IL Route 29 Study – Meeting with Sparland Village Board
 Date: January 11, 2008

Attendance: See attached attendance sheet.

Department representatives met with the Sparland Village Board on January 3, 2008 at 7:00 p.m. at the regular monthly board meeting in Sparland. The goal of the meeting was to present an update of the project status and to describe design changes in the Sparland area, including adjustments at the Thenius Road/IL 29 intersection, at the IL 29/Hilltop Drive (IL 17) intersection, and at the IL 29/Ferry Street/IL 17 intersection.

Tom Lacy, Studies & Plans Engineer, opened the presentation and introduced the IDOT personnel. On hand were Sean Coyle, Geometrics Engineer; Mike Lewis, Team Leader; and Paula Green, Environmental Coordinator.

Mike Lewis noted the current status of the project. This planning study should be completed in the spring. There is no money for construction and no timeline for construction. There is a little bit of money for some design work in the south section near Chillicothe, but, still, no construction money exists there either. The changes to be discussed at this meeting are relatively small, but large enough that the Department wanted to update Sparland and get their feedback.

Mr. Lewis then provided a review of the designs shown at the 2006 public hearings and an overview of the proposed design changes in the Sparland area. The 2006 design had an at-grade intersection with Thenius Road and Ramp D, the off-ramp for proposed IL 29 southbound traffic. The intersection was at the bottom of a fairly steep ramp and questions had been raised as to whether a better design could be developed which would improve this situation. The new design presented to the Board showed a flyover design at Thenius Road. This concept would eliminate the intersection of the steep off-ramp and Thenius Road. In conjunction with the flyover design, a roundabout was also proposed at the IL Route 29/Hilltop Drive/IL Route 17 intersection. This roundabout would facilitate the movement of traffic from southbound IL 29 to Thenius Road. In addition to the already described changes, Mr. Lewis explained that changes are proposed for the left-turn lane from westbound IL 17 to southbound IL 29/Railroad Street. Because of the volume of traffic expected to make this movement, double left-turn lanes are now proposed. The most significant effect of this change is that the house at the corner of Ferry Street and IL 29/Railroad Street would be displaced.

NAME	REPRESENTING	PHONE #
1. Mike Lewis	IDOT - Peoria	309-671-3333
2. Ed Andrews	MACTEC	309-692-4422
3. Roger Wilkinson	Sparland	309-469-9271
4. William [unclear]	Sparland	309-469-3041
5. Dave Smith	RESIDENT SPARLAND	309 688 6993
6. Bill Okerberg	TRUSTEE VILL BOARD	309 469-3141
7. Linda Madaric	Trustee Village of Sparland	309-460-2191
8. Richard Alden	Trustee Village of Sparland	309-219-3174
9. Todd Kragen	Village Maintenance	309-471-4052
10. Tom Lacy	IDOT	
11. Sean Coyle	IDOT	
12. Paula Green	IDOT	
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25.		

MEMO – File
RE – IL Route 29 Study – Meeting with Sparland Village Board
January 11, 2008
Page Two

After the review and overview, a short video was shown to the Sparland Village Board showing the operations of a typical roundabout. Sean Coyle then described in more detail the layout and operations of the newly proposed designs in Sparland. The flyover at Thenius Road would eliminate concerns for vehicles approaching an at-grade intersection on a downhill grade. The roundabout then would allow for an easy and smooth movement back to Thenius Road for vehicles going that direction. The roundabout would be designed for large trucks to use, including a WB-65 vehicle. Mr. Coyle noted a truck apron around the center of the roundabout that is mountable by the truck trailers to assist in their movement through the roundabout. He explained that trucks like to use roundabouts because if there is no one coming, they can continue into the roundabout without coming to a complete stop and then avoid having to run through their gears again when restarting. Roundabouts are more efficient than signalized intersections which may require vehicles to stop even though no other vehicles are coming from other directions. They also save on gas consumption and are better on air pollution because vehicles do not sit and idle if no other vehicles are entering the intersection. Mr. Coyle explained that roundabouts usually have some low-growing foliage in the center to help motorists identify the intersection and that this, coupled with the island configuration, causes drivers to slow down. This would help keep speeds along Railroad Street down. It was noted no large, solid structures are allowed in the center of the roundabout for safety reasons.

Mr. Coyle also described the operations at the IL 29/Ferry Street/IL Route 17 intersection. Due to the high volume of left turns made by traffic going from westbound IL Route 17 to southbound IL Route 29, double left-turn lanes are proposed to make the intersection work more efficiently. This change would allow the left turning vehicles to clear out more quickly and allow other turning movements ample time to get through the intersection. The widening necessary to provide room for the double left-turn lanes, however, requires the displacement of the house on the corner of Ferry and Railroad Streets.

Ed Andrews of MACTEC, Sparland's village engineer, asked if there are parts of the improvement through Sparland that could be done independently from the rest of the project. IDOT responded that, yes, the double left-turn design could certainly be done as a stand-alone project, if traffic volumes warranted the improvement. The roundabout could also be done separately if the improvement were determined to have enough merit to be built as a stand-alone project. One of the village board members asked if roundabouts are like those in London, England. Mr. Coyle responded that these are used a lot in England and Europe. Village President Roger Wilkinson said he had gone through many of these in Wisconsin, and they were easy to drive through.

MEMO – File
RE – IL Route 29 Study – Meeting with Sparland Village Board
January 11, 2008
Page Three

A question was posed by one of the Sparland residents about how many tax-paying properties were being taken by this improvement. IDOT responded that no displacements were due to the flyover or the roundabout additions. The only displacement came from the addition of the double left-turn lanes. IDOT noted the design from 2006 created only about \$43 in taxes lost annually by Sparland. With the inclusion of the property at the corner of Ferry and Railroad Streets, however, that number would be increased by the amount that property contributes to Sparland's tax base, in the neighborhood of \$300. These numbers, it was explained, were based on properties within the village limits. Other properties are shown as displacements, but they are shown as outside the village limits. If those properties contribute to Sparland's tax base, for water service for instance, that contribution would need to be added to the lost income for Sparland.

Mr. Andrews asked if the flood buyout properties were taken into consideration when developing the proposed IL Route 29 alignment. Mr. Lewis responded that, yes, a great deal of work went into developing an alternative that avoided the flood buyout properties.

Mr. Andrews also asked if Ducks Unlimited had been consulted regarding their recently purchased property south of IL Route 17 and east of existing IL Route 29. Mr. Lewis said, yes. Ducks Unlimited coordinated very early with IDOT concerning their plans and adjustments were made to accommodate both their plans and the proposed alignment.

A Sparland resident asked if existing IL Route 29 would be upgraded with the overall IL Route 29 improvement. IDOT responded that the existing road would be overlaid and curbs and gutters replaced, but the roadway would not be upgraded with additional lanes, such as to a five-lane section.

Some concern was raised by the board about traffic flow at the post office. All residents come to the post office to get their mail, and if there is a median on IL Route 17 at Center Street, then all the traffic would have to go around the block to get to the post office. Mr. Coyle explained the purpose of the median is to restrict left turns from Center Street to IL Route 17 because crossing so many lanes could cause a conflict with vehicles coming from IL Route 29. In addition, left turns from eastbound IL Route 17 to Center Street are not allowed by the median because this movement could back up traffic to the railroad tracks. A resident asked if the village streets (Lacon Street and Vine Street) would be upgraded to handle the different traffic pattern. IDOT responded that those streets could be improved to handle the additional traffic as a part of this project, if the changed traffic pattern proved to be the case.

Another concern was raised at Elm Street and IL Route 29 (Railroad Street). Several residents live west of IL Route 29 on Elm Street, and they may not like having access to Elm Street closed at IL Route 29. Also, fire trucks need to be able to make the U-turn from southbound IL Route 29 to northbound Elm Street. The current footprint of the location looks like it might be a little small for that movement. IDOT said that the accommodation for that turning movement will be investigated.

MEMO -- File
RE -- IL Route 29 Study -- Meeting with Sparland Village Board
January 11, 2008
Page Four

Village President Wilkinson and Mr. Andrews said the village had worked on a letter to send to IDOT some time ago, but it was never sent. They said the village will look at updating it and sending it now. They said they'll probably wait until after IDOT meets with the residents in order to get their input before they send the letter.

Tom Lacy suggested an open house format for IDOT to meet with the residents rather than at the next board meeting. The village board felt this was a good idea and suggested a meeting during the evening, such as between 5:00 p.m. and 7:00 p.m. or between 4:00 p.m. and 6:00 p.m.

In summary, the village board saw no problems with the use of a roundabout. The flyover design seemed fine as well. They expressed concerns for adverse travel and traffic flow at the post office, including additional wear on village streets due to traffic pattern changes. The village board also expressed concerns for access to Elm Street, including the connection to Railroad Street and fire truck access.

IDOT thanked the board again for their time and input. The timeline for the project was again reiterated: no money for construction, a little money for design work near Chillicothe, and this planning portion of the project should be completed in the spring. Paula Green said newsletters will be sent out to those on the mailing list when the project documents are finalized. If anyone would like to be added to the mailing list, it was noted they could still be added.

s:\gen\winword\std&plns\squad02\l\29 - four lanel\sparland village board meeting 1-3-08.doc

benesch

alfred benesch & company

Engineers • Surveyors • Planners

205 North Michigan Avenue • Suite 2400 • Chicago, IL 60601-5927
312-565-0450 • Fax: 312-565-2497 • www.benesch.com

May 12, 2008

Mr. Riley M. Kadota
Director Bridge Engineering
BNSF Railway Company
GOB
4515 Kansas Avenue
Kansas City, KS 66106-1199

Subject: BNSF Brs. 129.6 and 129.4
Over Illinois Route 29
Chillicothe, Illinois
Benesch Project No. 3730

Dear Mr. Kadota:

Alfred Benesch & Company and CH2M Hill, under the direction of the Illinois Department of Transportation (IDOT), have been working on a Phase I engineering study to widen Illinois Route 29, north of Chillicothe, Illinois. The existing two lane roadway will be widened to four traffic lanes and a median, and the roadway widening will impact two BNSF bridges over the roadway and the bridge over the abandoned interchange track east of Route 29.

Enclosed for your review and comments is the IDOT approved TS&L for the subject project. IDOT is requesting an expedited review of this submittal.

If you have any questions regarding this request or require additional information concerning this project, please contact the undersigned at (312) 565-0450. Your assistance with this matter is greatly appreciated.

Sincerely,



Larry R. Bellisario, P.E., S.E.
Project Manager

LRB:qmf
Enclosures

cc: C. Rasmussen – BNSF (w/encl.)
M. Lewis – IDOT
J. Jodie – CH2M Hill

benesch

alfred benesch & company

Engineers • Surveyors • Planners

205 North Michigan Avenue • Suite 2400 • Chicago, IL 60601-5927
312-565-0450 • Fax: 312-565-2497 • www.benesch.com

January 7, 2009

Mr. Riley M. Kadota
Director Bridge Engineering
BNSF Railway Company
GOB
4515 Kansas Avenue
Kansas City, KS 66106-1199



Subject: BNSF Brs. 129.6 and 129.4
Over Illinois Route 29
Chillicothe, Illinois
Benesch Project No. 3730

Dear Mr. Kadota:

Enclosed please find a copy of our letter sent to you on May 12, 2008 regarding the TS&L submittal for the subject project.

Your review and comments for the TS&L are required for the finalization of the Phase I engineering study, and your assistance in furnishing this information would be greatly appreciated.

If required we can provide an additional set of the TS&L submittal for your use. If you have any questions or concerns please contact the undersigned. Thank you for your cooperation.

Sincerely,

Larry R. Bellisario, P.E., S.E.
Project Manager

LRB:qmf
Enclosures

cc: C. Rasmussen – BNSF
M. Lewis - IDOT
J. Jodie – CH2M HILL



IL Rte 29 TS&L Package

Project 3730

November 12, 2007

1. TS& L Plans
2. Typical Sections
3. Civil Plan and Profile Sheets
4. Staging Plans
5. Cross Sections
6. Bridge Condition Report
7. Structure Report
8. Prelim. Bridge Design and Hydraulic Report
9. Railroad Drainage Report
10. Copy of Geotech Report
11. Cost Estimate

Bridge Condition Report

Prepared for:
Illinois Department of Transportation

Route: BNSF Railroad Viaduct at IL Rte 29
County: Peoria
S.N.: 6 VB
Location: BNSF Railroad over IL Rte 29

Prepared by:
Alfred Benesch & Company
November, 2007

TABLE OF CONTENTS

Item

Description of Structure and Site

Deficiencies and Recommendations

Exhibits:

Location Map

Photo of Existing Bridges

Proposed Structure Sketch (see TS&L plans)

Description of Structure and Site

South Bridge – Structure No. 072-9902

The existing structure carries the two mainline tracks of the BNSF Railway Company (formerly the A.T. & S.F. Railway Co.) over Illinois Route 29. The current structure was built in 1930. The structure consists of one 29'-9 1/2", ballasted deck, steel rolled beam span, with closed concrete gravity abutments on spread footings. There is a 4 inch thick concrete slab with deck waterproofing. The bridge provides 23'-10" of horizontal clearance from face to face of abutments at the elevation of the top of abutment footing. The total width of the bridge is 42'-6" out to out measured perpendicular to the tracks. The bridge crosses over one lane in each direction of Illinois Route 29, and is skewed with respect to the roadway. The minimum vertical clearance is approximately 16-6 1/2". There is no state inspection report.

North Bridge – Structure No. 072-9901

The existing structure carries a yard track and access road of the BNSF Railway Company over Illinois Route 29. The bridge was originally designed to carry 10 tracks. The current structure was built in 1920. The structure consists of one 29'-9", ballasted deck, steel rolled beam span, with closed concrete gravity abutments on spread footings. There is a concrete slab with deck waterproofing. The bridge provides 23'-10" of horizontal clearance from face to face of abutment at the elevation of the top of abutment footing. It crosses over one lane in each direction of Illinois Route 29, and is skewed with respect to the roadway. The posted minimum vertical clearance is 14'-2". There is no state inspection report.

Deficiencies and Recommendations

The project involves a major widening of Illinois Route 29 to two lanes in each direction with a center median, for a face to face of new abutment distance of approximately 97 feet. This proposed widening renders the current structure functionally obsolete without any possibility of salvage. The recommendation is total replacement of the south structure. The north structure will remain in service and carry the existing yard lead and access road throughout the construction phase. The north structure will be demolished after completion of the new bridge which will carry the two mainline tracks, yard lead and access road. The construction of the new IL Rte 29 Connector will not start until the completion of the new structure and the removal of both of the existing bridges.



**BNSF North Bridge
Over IL Rte. 29
Looking North
Structure No. 072-9901**



**BNSF South Bridge
Over IL Rte. 29
Looking South
Structure No. 072-9902**



Marked Route/Name of Road: Burlington Northern Santa Fe Railroad Over: IL Route 29

Funding Route: FAP 318 Existing Structure No.: 072-9902(S)

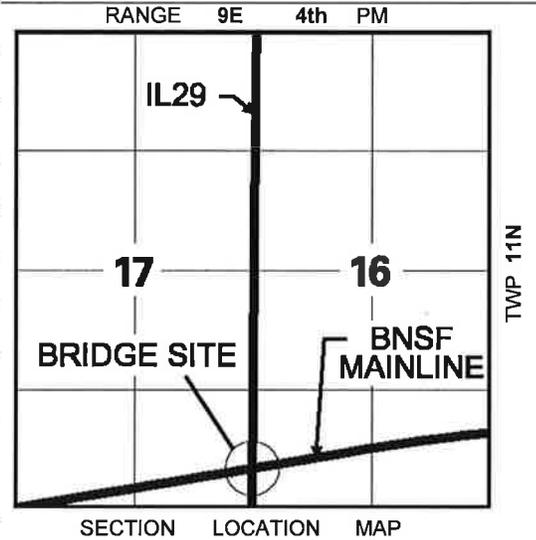
Section: 6 VB New Structure Number: 072-9922

County: Peoria [] D# or [x] P# P-94-009-01

Station: 6845+24.03 Proposed Letting Date: NA

Proposed Improvement:: Replace existing 24 ft. single clear span RR bridge with 2 span structure with 50 ft. and 48 ft. spans.

Bench Mark: Chiseled square in backwall, southwest corner of the west abutment of the north BNSF RR Bridge over IL Rte 29, Elev. 509.45.



RECOMMENDED STRUCTURE

Skew: 9.48 Spans: 2 Approx. Bridge Length: 107'-1"

BRIDGE APPROACH ROADWAY - Route: NA

Functional Class: Design Speed: Posted Speed:

ADT: () ADT: () ADTT: () [] One way or [] Two Way

Directional Distribution: DHV: (One Way)

GRADE SEPARATION - Roadway Under, Route: IL 29

Functional Class: Other Principal Arterial Design Speed: 45 Posted Speed: 45

ADT: 8700 (2001) ADT: 12,100 (2032) ADTT: 1140 (2032) [] One Way or [x] Two Way

Directional Distribution: DHV: (One Way) Skew:

VIADUCT/SUBWAY - Railroad: Viaduct

No. of Tracks: 2 Nearest Mile Post Location: M.P. 129 Skew: 9.48

STREAM CROSSING - Hydraulic Report Approving Agency - [] District [] Central Office Streambed Elevation: NA

GEOTECHNICAL INFORMATION:

Substructure Exploration / Soil Borings Required? Yes Information Provided by: SCI Engineering

Structure Geotechnical Report Required? Yes Information Provided by: CH2MH

ATTACHMENTS:

- [] Bridge Approach Roadway Template [x] Plan and Profile Sheet and Cross Section for Underpassing Feature
[x] Plan and Profile Sheet for Route over Feature [] Approved waterway Information Table and Hydraulic Data
[x] Structure Geotechnical Report [] Retaining Walls: Applicable Plan and Profile Sheets and Cross Sections

SPECIAL REQUIREMENTS - Describe and attach appropriate details.

General (Configuration preferences, Slope protection, Deck drainage, Type of bridge lighting, Light pole type, Light pole height, Salvage items, etc.)

Deck drainage

Utility Attachments: None

Stage Construction/Temporary Bridge: North portion of new bridge will be built on an offset alignment while rail traffic is maintained on the existing south structure. Mainline RR tracks will be temporarily relocated to the newly constructed north portion of

bridge. Remove existing south bridge and construct southerly portion of new bridge. Mainline tracks are relocated to the newly constructed south portion of the bridge and are back on original track alignment. The new yard lead track and service road are installed on the north portion of new bridge.

BBS 153 (Rev. 9/06)

Municipality Chillicothe
 County Peoria
 Road District _____
 Other Agency IDOT
 Project IL Route 29
 Section 6 VB



**Illinois Department
of Transportation**

**Preliminary Bridge Design
and Hydraulic Report**

Route BNSF over IL Rte 29
 Stream NA
 Ex. St. No. 072-9902
 Pr. St. No. 072-9922
 Prepared by JRB
 Agency/Firm Alfred Benesch & Company
 Date 08/22/2007

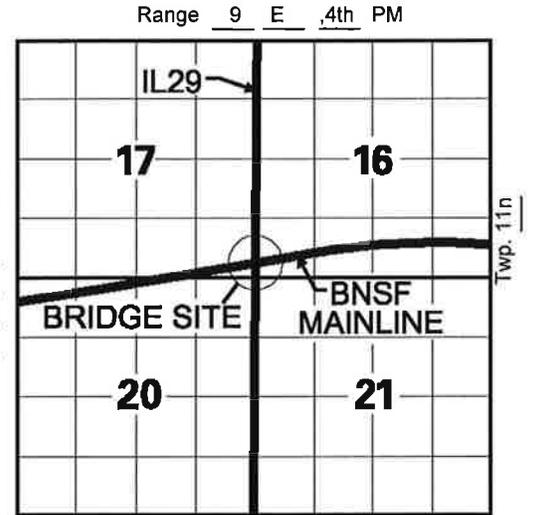
Funding Type: HBP STU STR Enhancement
 TBP MFT Non-MFT Other (Unknown)
 Sufficiency Rating NA Existing clear span length 24 ft.
 Functionally Obsolete Yes No
 Structurally Deficient Yes No

Construction Information Proposed Letting Date NA

Shop Plan Review by Local Agency Consultant State
 Fabrication Inspection by Local Agency Consultant State

Approach Roadway Information

Surface Type: Existing Railroad Proposed Railroad
 Surface Width: Existing NA Proposed NA
 Shldr to Shldr Width: Existing NA Proposed NA
 Elevation of Low Point: Existing NA Proposed NA
 Proposed Side Slopes 2H:1V
 Roadway Functional Classification Railroad
 DHV NA Current ADT NA Design Year ADT NA
 % Trucks NA Design Speed 79 MPH
 3R Design Guidelines Used Yes No



Locate bridge accurately above

Proposed Structure Information

Type of Structure Proposed Bridge Culvert "Standard Plans" Bridge Pedestrian/Bicycle
 Vehicle Design Loading Cooper E80 Train Load Pedestrian/Bicycle Design Loading NA
 Superstructure Type 2-Span Rolled Beam w/C.I.P. Concrete Deck
 Structure Length Back to Back Abutments 105'-9" Span Length 49.5' and 47.5'
 Clear Roadway Width NA Rail Type NA Crash Tested Rail Required Yes No
 Wearing Surface Type NA Wearing Surface Thickness NA
 Deicing Agents Used Yes No
 Embankment Slope Under Bridge NA Proposed Skew Angle 9 34' Forward on. Rt. Lt.
 Pier Type C.I.P. Concrete Solid Shaft Abutment Type C.I.P. Concrete Closed Abutment
 Proposed Pile Type Steel HP 14x89
 Borings By SCI Engineering Expected Submittal Date for Borings Attached

Hydraulic Data

Exist. Br. Cr. El. NA @ Sta. NA Prop. Br. Cr. El. NA @ Sta. NA
 Exist. Low Beam Elev. _____ Proposed Low Beam Elev. _____
 Exist. Freeboard _____ Proposed Freeboard _____ Streambed Elev. _____
 Drainage Area _____ Crossing Location Rural Urban
 Crossing Located within a Mapped National Flood Insurance Program Area Yes No (Map No. _____)
 Crossing Located within a Northeast Region (District #1) FEMA Mapped Floodway Yes No
 Crossing Located over designated "Public Bodies of Water" Yes No
 Design Flood Data
 Design Flood Frequency _____ Design Discharge _____ Design High Water Elev. _____
 Exist. Br. Opening _____ Exist. Over-the-Road _____
 Prop. Br. Opening _____ Prop. Over-the-Road _____
 100 Year Flood Data
 100 Year Discharge _____ 100 Year High Water Elev. _____
 Exist. Br. Opening _____ Exist. Over-the-Road _____ Exist. Created Head _____
 Prop. Br. Opening _____ Prop. Over-the-Road _____ Prop. Created Head _____

If proposed structure and over-the-road area will not carry entire flow, state kind and area of additional waterway

Type of Streambed soil _____ Will drift or ice permit pier in channel? Yes No
Has scour occurred at or near existing structure? Yes No; If yes, reason for scour _____

Comments on hydraulic adequacy of existing structure _____

Has the existing structure been the cause of demonstrable flood damage to adjacent property? Yes No
If yes, describe damage _____

Comments on the hydraulic adequacy of upstream and downstream structures and their comparable relationship to the proposed structure _____

Will houses, places of business or valuable property be affected by backwater from the proposed bridge? Yes No
If yes, describe property and effect of backwater _____

Is any channel excavation beyond that required to construct the substructure required in the channel? Yes No
If yes, describe extent of channel excavation _____

Will a channel realignment be required? Yes No (If yes, attach Channel Change Sketch)
Are stream flow data (gaging station or flood study) available for the stream at or near the proposed site? Yes No
(If yes, attach an analysis of the stream flow data)
Provide information regarding high water from other streams, reservoirs, flood control projects, proposed channel changes, strip mine areas or other controls affecting the hydraulic or hydrologic properties of the crossing site _____

Scour Analysis

Was a HEC-18 scour analysis performed? Yes No
Were all substructure units being utilized evaluated to consider the effect of anticipated scour? Yes No
Will scour protection or corrective actions be required? Yes No
If yes, describe protection or corrective actions. _____

Attachments (Check those items below that are included.)

- Reproduction of applicable portion of USGS quadrangle showing locations of proposed bridge and properties affected by backwater caused by the proposed structure
- Cross sections as required by WSPRO including floodplain above high water elevation
- Streambed profile
- Profile of existing and proposed roadway across floodplain
- Hydraulic calculations
- Joint Application Form for construction permit submittals (Joint Form NCR-426)
- Waterway sketch
- Channel change sketch
- Applicable certification(s)
- Boring data
- Scour analysis/evaluation
- Other Proposed Bridge Sketch

Railroad Drainage Report

Prepared for:
Illinois Department of Transportation

Route: BNSF Railroad Viaduct at IL Rte 29
County: Peoria
S.N.: 6 VB
Location: BNSF Railroad over IL Rte 29

Prepared by:
Alfred Benesch & Company
November, 2007

Drainage Report

BNSF RR Viaduct

In order to drain the bridge deck of the new BNSF Viaduct, the deck has a longitudinal slope of 0.20% descending to the east. The run-off from the bridge deck will be channeled to the back of the east abutment by means of deck drains located in the bridge ballast. The deck drains will connect to downspouts that run down the embankment side of the east abutment and intersect the perforated pipe underdrain located just above the top of the abutment footing. The run-off is exited through a pipe that is cast in the abutment stem and drains to a catch basin located in the bike path adjacent to the northbound traffic lanes. The outlet from the catch basin is tied to the proposed roadway drainage structures. See the attached sketch.

Behind the new west abutment, the water that filters through the porous granular backfill will be handled similar to the east abutment without the use of the vertical downspouts.

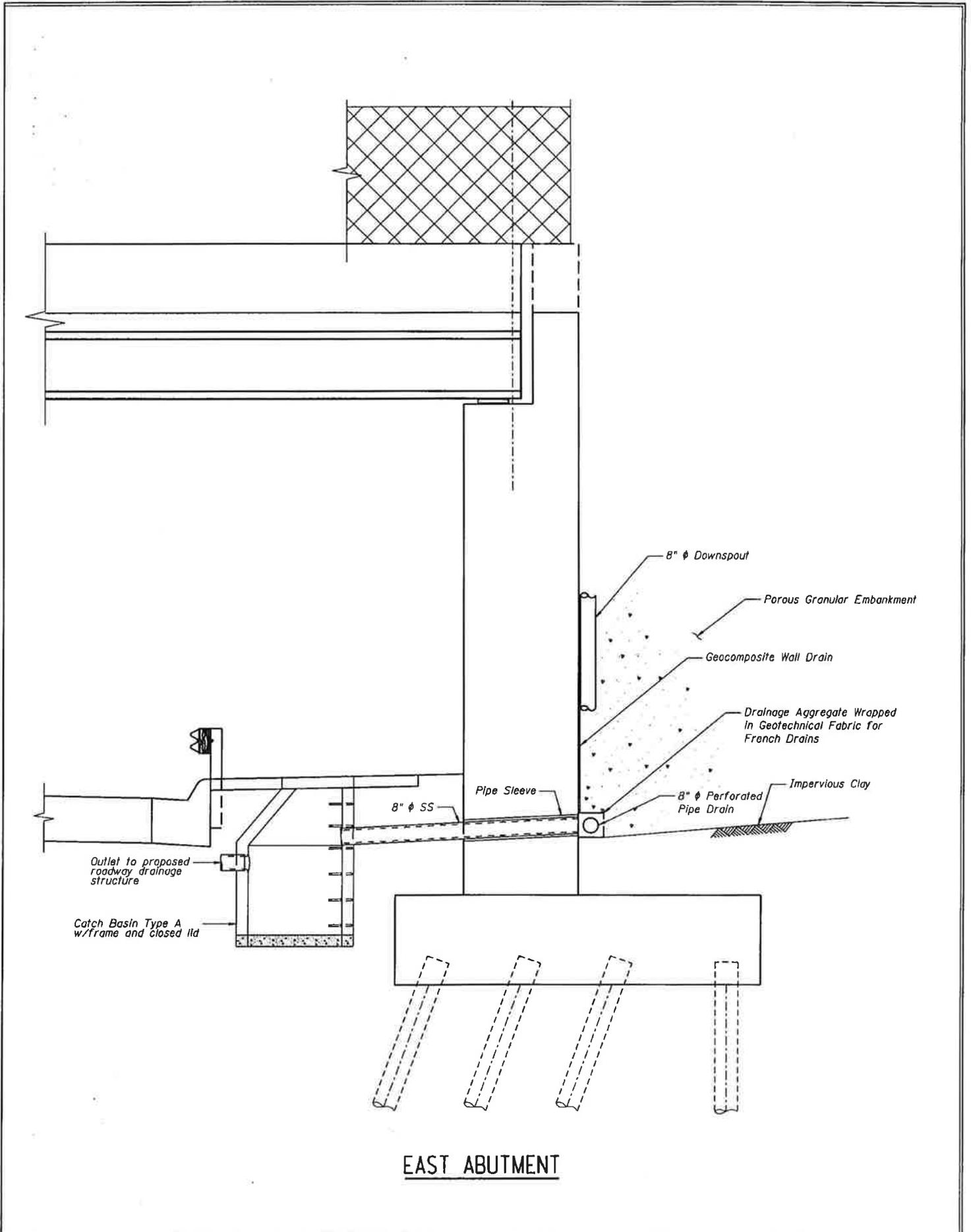
An alternative to the above would be to tie the viaduct drainage to the retaining wall drainage system. The exact number and location of the catch basins will be determined in the Phase II design.

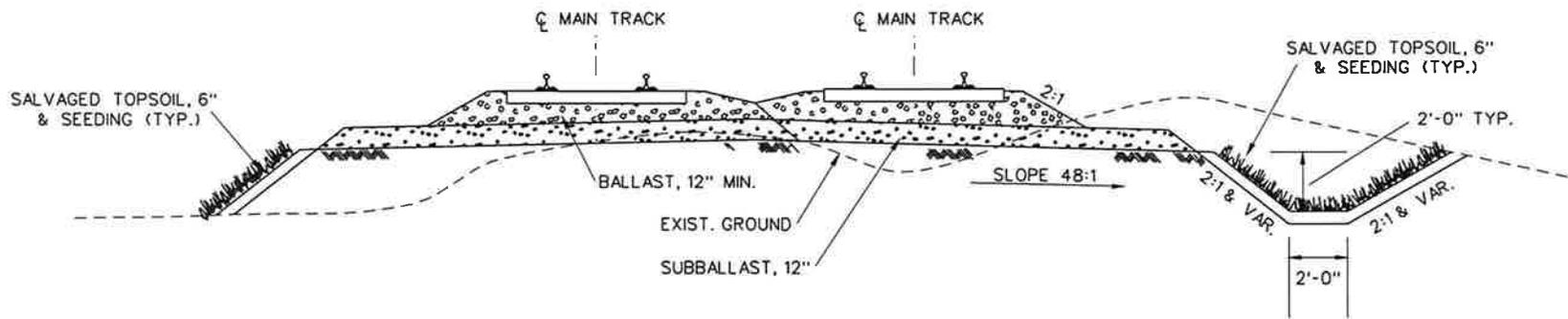
BNSF RR Embankment

To facilitate construction of the new BNSF Viaduct, a temporary shoofly of the existing mainline tracks of approximately 30 feet is required to keep train operations in service. To accommodate the shoofly, the existing track embankment must be widened. The embankment widening will vary in width with the maximum widening being 30 feet. The widening will consist of the removal of topsoil and vegetation from the existing embankment, placement and compaction of engineering fill adjacent to the existing embankment until the final subgrade elevation is reached.

Currently trackside ditches running parallel to the railroad track on both sides of the existing embankment are used to convey water. Typically these ditches are 2 foot wide with a 2 foot ditch bottom (See track typical section). Culverts running underneath the railroad track convey water from one side of the embankment to the other.

Under the proposed conditions, it is anticipated that the drainage patterns will remain unchanged. Natural drainage ditches will be used in conjunction with pipe culverts to convey water.





TYPICAL RAILROAD SECTION

Structure Geotechnical Report

Illinois Route 29
BN&SF Viaduct Reconstruction
Peoria County, Illinois

Contract Number: P-94-009-01

PTB Item Number: 890, Item 138

Structure Number: 072-9902

Prepared for
Alfred Benesch & Company

June 2007

CH2MHILL

8501 W. Higgins Road, Suite 300
Chicago, IL 60631

Contents

Project Description	1
Available and Existing Information	1
Site Investigations, Subsurface Exploration, and General Subsurface Conditions	1
Geotechnical Evaluations.....	2
Settlement	3
Slope Stability.....	3
Seismic Considerations	3
Scour	4
Mining Activity.....	4
Foundation Evaluations and Design Recommendations.....	4
Spread Footings	4
Pile Foundations	4
Construction Recommendations	6
Limitations.....	6
References	7

Tables

1	Summary of Recommended Soil Parameters	2
2	Summary of Seismic Data (AREMA, 2001).....	3
3	Estimated Pile Tip Elevations	5

Figures

1	Site Location Map
2	Approximate Borehole Locations
3	Typical Section - BN&SF Viaduct

Appendix

A	Field Exploration Report (SCI Engineering, Inc. 2006)
---	---

CH2M HILL prepared this Structure Geotechnical Report (SGR) for Alfred Benesch & Company for the above referenced location along IL Route 29 in Chillicothe, Illinois. This SGR was prepared in accordance with the Illinois Department of Transportation (IDOT) Geotechnical Manual and the September 26, 2005, addendum to Chapter 5 of the manual (Structure Geotechnical Reports).

Project Description

The existing BN&SF railroad bridge crosses IL Route 29 near the northeast side of Chillicothe. IL Route 29 is a two-lane pavement road aligned roughly north-south at the project area. Improvements will include widening IL Route 29 to four lanes, by converting the existing pavement to northbound lanes and adding two new southbound lanes west of the existing pavement. This segment of IL Route 29 is referred to as the proposed IL Route 29 connector. The railroad bridge will be replaced and extended to span the new IL Route 29. An existing railroad bridge located north of the replaced bridge will be removed.

Alfred Benesch & Company is preparing the type, size, and location (TS&L) plan for the replacement railroad bridge over IL Route 29. This TS&L is confined to the bridge superstructure, abutments, and piers. Retaining walls north and south of the bridge along IL Route 29 are not included in this TS&L. Therefore, this SGR presents analyses and recommendations for abutment and pier foundations. Stability of retaining structures adjacent to the bridge is not addressed in this report.

Available and Existing Information

The recommendations in this SGR are based on the contents of a field exploration report dated November 13, 2006, prepared by SCI Engineering, Inc. (SCI Engineering, Inc. 2006; included as Appendix A). The SCI report contains the boring logs for the four boreholes advanced for the project. Figure 1 shows the site location, and Figure 2 shows the approximate borehole locations as indicated in Appendix A. Figure 3 shows a typical section through Illinois Route 29 at the BN&SF Railroad Viaduct.

As-built information for the railroad bridge over the IL Route 29 was unavailable at the time this report was prepared. Any information that becomes available shall be submitted under a separate cover or will be included in an amended SGR. Adjacent land uses consist of the existing railroad yards and railroad structure north of the proposed railroad bridge. Land use in the southwest quadrant is residential and storage rental areas are present in the southeast quadrant. Existing buried utilities consist of storm and sanitary sewers, CILCO gas lines and underground fiber optic lines that will be replaced or relocated during widening of the IL Route 29 Connector.

Site Investigations, Subsurface Exploration, and General Subsurface Conditions

Ownership of the existing ROW for the viaduct is unknown at this time, but it will be provided at a later date by the IDOT. At this time, it is presumed that the railroad owns the

land over existing IL Route 29. Additional ROW and easements will be required for widening of the IL Route 29 Connector. Existing buried utilities located within the roadway will need to be removed or replaced as needed due to widening of the IL Route 29 Connector.

SCI advanced four boreholes at the project site in September 2006. IDOT selected the borehole locations before drilling. Borehole logs are presented in Appendix A. Boreholes B-1 through B-4 were advanced using a CME 1050 rig near the southwest, southeast, northwest, and northeast corners of the bridge, respectively. Ground elevations at the four boreholes range from 507.0 to 508.2 feet above mean sea level.

Standard penetration test (SPT) blowcounts were recorded at 2.5-foot depth intervals in the upper 30 feet below ground surface, and at 5-foot depth intervals below 30 feet below ground using an automatic hammer. Each borehole was advanced using a hollow-stem auger until auger refusal occurred, typically at the top of shale bedrock. Final borehole depths ranged from 93 to 95 feet below ground, corresponding to bottom elevations of 412 to 414 feet above mean sea level.

Between 2.5 and 4.5 feet of silty clay fill was encountered near the ground surface at each borehole. Pocket penetrometer readings varying from 2.5 to 4.5 tsf were recorded in this layer. Below the fill, soils consist predominantly of sand and gravelly sand (AASHTO designation A-1 to A-3). Isolated intervals of gravelly clay (A-4) and gravel (A-1) were encountered at a few locations. SPT blowcounts in the sandy overburden soils ranged from 11 to 74, generally increasing with depth. Shale bedrock was encountered at the bottom of each borehole, resulting in SPT blowcount refusal.

Groundwater was encountered at two of the four boreholes during drilling (encountered at elevation 445.7 feet at B-2 and 446.1 feet at B-3). Groundwater elevations were listed as "N/A" on the logs for B-1 and B-4. Twenty-four-hour groundwater readings were not recorded. Groundwater was assumed to be at an elevation of 445 ft for analyses.

Geotechnical Evaluations

Table 1 summarizes of the soil parameters used in the analyses to prepare the SGR and to provide recommendations. Current design information available indicates that the bottom of the proposed abutment and pier footings will be at an elevation of 480 feet. Accordingly, the summary of soil parameters presented in Table 1 are for soil layers encountered below the footing elevation of 480 feet. The recommended parameters were developed from published correlations with the SPT data and engineering judgement. Geotechnical evaluations and considerations regarding settlement, slope stability, seismic considerations, scour, and mining activity are described in the following sections.

TABLE 1
Summary of Recommended Soil Parameters
Structure Geotechnical Report – Illinois Route 29 – BN&SF Viaduct Reconstruction

Soil Type	Layer Thickness (ft)	Unit Weight (pcf)	Undrained Shear Strength (psf)	Undrained Friction Angle (deg)
Sand	23	115	—	37

TABLE 1
 Summary of Recommended Soil Parameters
Structure Geotechnical Report – Illinois Route 29 – BN&SF Viaduct Reconstruction

Soil Type	Layer Thickness (ft)	Unit Weight (pcf)	Undrained Shear Strength (psf)	Undrained Friction Angle (deg)
Gravelly sand	20	118	—	38
Dense gravelly sand	20	120	—	38
Shale	> 5	130	1,500	—

Settlement

Construction of the new southbound lanes will require roadway cut west of the existing IL-29 centerline. Minor fills (a few feet) over native ground will be required to realign additional tracks to the bridge directly north of and adjacent to the existing bridge crossing. The subsurface materials consist of medium dense to dense sands at the project site, and so significant settlement is not expected to occur at the bridge location. It is expected that the settlement of structure foundations over granular soils, if any, will occur during initial loading, and hence no downdrag is expected to act on the foundations.

Slope Stability

The TS&L does not include retaining walls north or south of the railroad bridge abutments. Therefore, retaining wall stability analyses have not been performed as part of this SGR. It is recommended that slope stability analyses and retaining wall analyses be performed as part of a RGR for the roadway and retaining walls.

Seismic Considerations

The project site is located in Peoria County, Illinois. Table 2 presents the various seismic parameters for the site per *American Railway Engineering and Maintenance-of-Way Association Manual* (AREMA 2001.) The project site is located in a low seismic activity area, and design impacts due to seismic considerations are considered to be minimal.

TABLE 2
 Summary of Seismic Data (AREMA, 2001)
Structure Geotechnical Report – Illinois Route 29 – BN&SF Viaduct Reconstruction

Coefficient of Horizontal Acceleration (A), Based on 475 Year Return Period ^a	Soil Type ^b	Site Coefficient (S) ^c	Damping Adjustment Factor (D) ^c	Seismic Response Coefficient (C _m) ^d
0.04	1	1.0	1.0	<0.1

Sources (citations below refer to AREMA 2001):

^a Figure 9-1-4: site located within area where 475-year return acceleration is shown <4 percent of acceleration of gravity (g)

^b Table 9-1-6: based on stiff soils less than 200 feet thick over rock.

^c Default value, per paragraph 1.4.4.2

^d Bounding value per paragraph 1.4.4.3, based on $2.5 \times A \times D$

Scour

The proposed bridge will cross over IL Route 29. Review of the area indicates that there are no water bodies in the area that would affect the structure due to scour, and so scour impacts are not anticipated.

Mining Activity

A review of the coal mine map for the Peoria County from the ILDNR Web site indicates no record of coal mining activity at the project site.

Foundation Evaluations and Design Recommendations

At the time this SGR was prepared, loads acting on the abutment and pier locations had not been finalized. The Alfred Benesch structural engineer has informed CH2M HILL that driven piles may be the preferred foundation type for the proposed bridge, but spread footings should also be considered. The following sections present engineering considerations for spread footings and for driven pile foundations.

Spread Footings

The preliminary design information indicates that the bearing elevations for spread footings is at an elevation of roughly 480 feet. The borings indicate that a spread footing may be possible for the large abutments and pier. Each boring encountered medium dense to dense sand and gravel below the proposed footing depth, with groundwater levels more than 35 feet below the bottom of the footing. These soil conditions are capable of providing a net allowable bearing stress in the range of at least 5.0 to 6.0 kips per square foot (ksf), assuming a 16-foot-wide footing. The actual size of the footing will likely need to be larger to accommodate the significant lateral forces likely to act on the foundations. A larger footing width would act to increase the allowable bearing stress.

Sliding resistance along the base of the footings should provide a minimum safety factor of 1.5. For preliminary design purposes, it is recommended that an ultimate friction factor ($\tan \phi$) of 0.6 be used for the interface between the mass concrete foundation (rough surface) and the underlying sand/gravel foundation soil. It is recommended that passive resistance in front of the abutment wall be ignored when determining the factor of safety against sliding using the above values.

Pile Foundations

Steel H-piles are commonly driven as friction piles and are considered appropriate for the granular subsurface conditions at the project site. If a different pile type is selected during preparation of the structure design, the recommendations in this report must be revised for the corresponding pile type.

Section 3.10.1.3 of the ILDOT Bridge Manual 2006 specifies that a factor of safety of 3.0 be used to determine the nominal bearing resistance, which precludes the need to over-drive the piles to 1.5 times the allowable load. Table 3.10.1.2.1-1 of the manual specifies the maximum nominal required bearing loads for HP 14 × 89 piles to be 705 kips. This represents approximately 117 tons in allowable capacity per pile.

Static pile analyses were performed using Driven v1.2 software, using the subsurface information available at each of the four boreholes B-1 through B-4. HP 14 × 89 pile lengths were calculated based on a factor of safety of 3.0 for the driven capacity. Additional assumptions incorporated in the pile capacity analysis include the following:

- The embankments at the bridge abutment locations will incorporate a retaining structure. Structure details are not specified at this time.
- For the purpose of determining tip elevations of the pile foundations, it is assumed that there will be no downdrag on the pile foundations due to settlement.
- The bottom of the abutment and pier footing is expected to be at elevation of 480 feet. The proposed IL Route 29 connector low ground elevation at this location is at an approximate elevation of 486 feet. The analysis was performed to estimate the pile length below the footing elevation.

The results of the analyses are presented in Table 3 below. The estimated pile tip elevations in Table 3 are provided for contract estimates and to support TS&L development. The actual pile tip elevations and lengths should be determined during installation based on the drivability of the piles through the dense to very dense gravelly sand layers that are the predominant soil type at this bridge location. It is recommended that at least one test pile be driven at each abutment and pier before ordering piles for production driving.

TABLE 3
Estimated Pile Tip Elevations
Structure Geotechnical Report – Illinois Route 29 – BN&SF Viaduct Reconstruction

Boring and Location	Existing Ground Elevation (ft above mean sea level)	Tip Elevation of Hp 14 × 89 Pile for 117 Ton Capacity ^a (ft above mean sea level)
B-1 (west abutment)	508.2	425
B-2 (east abutment)	507.0	420
B-3 (west abutment)	508.1	425
B-4 (east abutment)	507.1	425

^a Tip elevation is based on pile length below footing elevation of 480 feet. Actual pile tip elevations and lengths are preliminary and will be reevaluated when the bridge TS&L plans are available.

A preliminary wave equation analysis was performed using GRL WEAP. The preliminary analysis indicates that the H-piles can be safely and efficiently driven to the estimated tip elevations using commonly available driving equipment. Once the contractor has selected the driving equipment, the contractor should perform a more detailed wave equation analysis for the selected equipment to confirm that the pile stresses and driving resistance (blowcounts) will be acceptable. This will ultimately be confirmed during the driving of test piles.

Preliminary lateral capacity analyses were performed for a vertical pile using FB-Multiplier software. The following assumptions were considered in the analyses:

- The spacing between the piles is assumed to be roughly three times the pile section depth. Therefore, the corresponding lateral capacity of the pile was calculated assuming a p-multiplier of 0.7.

- Piles were assumed to be fixed in the pile cap.
- No vertical loading was included in the analyses.

The estimated lateral capacity of each pile is approximately 25 kips corresponding to 0.5-inch deflection and 45 kips corresponding to 1.0-inch deflection.

The lateral capacities and the pile lengths presented above are for piles driven vertically with the stated assumptions. Generally, the lateral and vertical load carrying capacities of the pile group depend significantly on group geometry. Use of batter piles will significantly increase the lateral stiffness of the pile group. It is recommended that a detailed pile group capacity analysis be performed during final design once the loads acting on the pile foundations, and the planned pile configurations, are finalized.

Construction Recommendations

All recommendations presented in this SGR are preliminary and are presented to aid the structural engineer in preparing the TS&L. The recommendations should be reviewed and assessed for applicability during final design once the TS&L and loading information is available.

In general, the medium to dense granular soils are suitable for either spread foundations or driven pile foundations. Selection of the foundation system for this bridge will depend upon the actual axial and lateral loads acting on the abutment and pier foundations. Because of the high lateral loads typically associated with railroad structures, driven pile foundations (with batter piles) may be preferred over spread footings. However, it is recommended that both spread footings and driven piles be analyzed for suitability with respect to design, cost and risk after the preliminary TS&L and foundations loads are available.

Limitations

This report has been prepared in accordance with generally accepted geotechnical engineering practice. No other warranty, express or implied, is made.

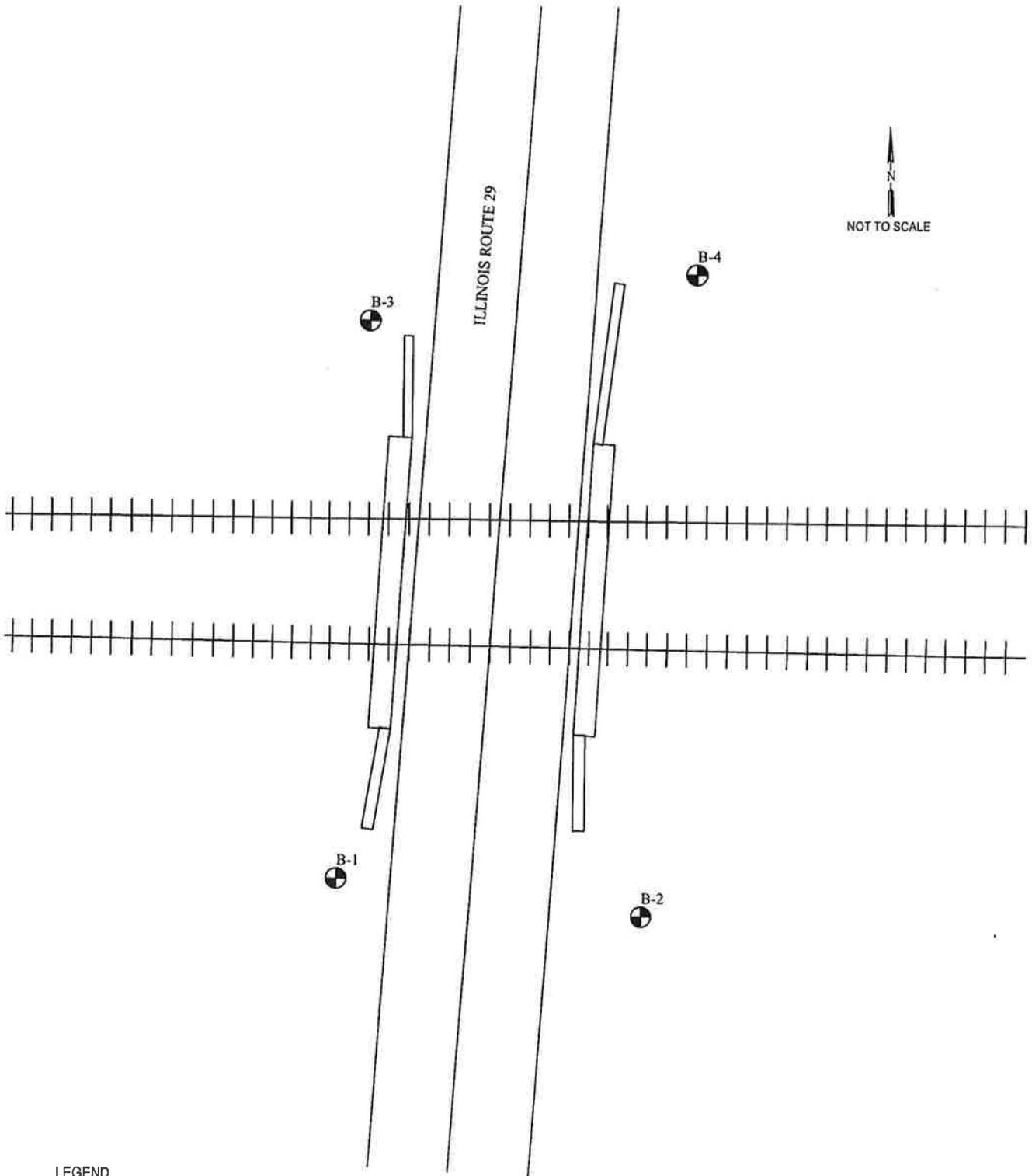
The analyses and recommendations contained in this report are based on the data summarized in Attachment A (SCI Engineering, Inc. 2006), which indicate subsurface conditions only at specific locations and times and only to the depths penetrated. They do not necessarily reflect strata variations that may exist between such locations. If variations in subsurface conditions from those described are noted during construction, the recommendations in this report must be reevaluated.

In the event that any changes in the nature, design, or location of the facilities are planned, the conclusions and recommendations contained in this report should not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing by CH2M HILL. CH2M HILL is not responsible for any claims, damages, or liability associated with interpretation of subsurface data or reuse of the subsurface data or engineering analyses without the express written authorization of CH2M HILL.

References

American Railway Engineering and Maintenance-of-Way Association (AREMA). 2001. *AREMA Manual for Railway Engineering*. Chapter 9, Part 1 – Seismic Design of Railway Structures.

SCI Engineering, Inc. November 16, 2006. Letter Report Re: Geotechnical Services – Revised BNSF Railroad Bridge over Illinois Route 29, Chillicothe, Illinois, Work Order No. 2, PTB 130, Item 8.



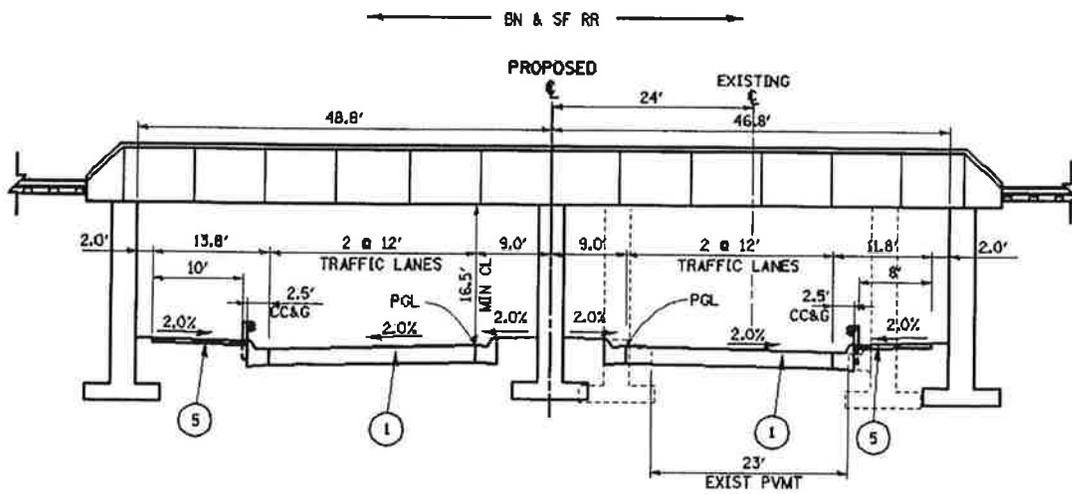
LEGEND

⊕ Indicates Approximate Soil Boring Locations

NOTE: Locations are approximate
See Note on Site Plan in Appendix A

Source: SCI Engineering, Inc. (2006)
T 168912.A0.PI Fig 2_MatC 06-26-07 lg

Figure 2
Approximate Borehole Locations
Structure Geotechnical Report
Illinois Route 29 - BN&SF Viaduct Reconstruction
CH2MHILL



PROPOSED IL 29 CONNECTOR
 EXISTING IL 29 AT VIADUCT IN CHILLICOTHE
 (SOUTH STRUCTURE)
 STA 50+42.22 TO STA 51+35.48

Figure 3
 Typical Section-BN&SF Viaduct
 Structure Geotechnical Report
 Illinois Route 29 - BN&SF Viaduct Reconstruction
CH2MHILL

Appendix A
Field Exploration Report



SCI ENGINEERING, INC.

650 PIERCE BOULEVARD
O'FALLON, ILLINOIS 62269
618-624-6969 FAX 618-624-7099
www.sciengineering.com

November 13, 2006

**CONSULTANTS IN DEVELOPMENT,
DESIGN, AND CONSTRUCTION**

GEOTECHNICAL
ENVIRONMENTAL
CULTURAL RESOURCES
NATURAL RESOURCES
CONSTRUCTION SERVICES

Mr. Joseph E. Crowe, Jr.
Deputy Director of Highways
Illinois Department of Transportation
Region 3/District 4
401 Main Street
Peoria, Illinois 61602-1111

RE: Geotechnical Services - Revised
BNSF Railroad Bridge over Illinois Route 29
Chillicothe, Illinois
Work Order No. 2
PTB 130, Item 8
Various Routes
Various Sections
Various Counties
Job No. D-94-017-04
SCI No. 2003-3332.51

Dear Mr. Crowe:

Based on the comments from District 4, we have revised the boring logs for the above project as enclosed herein. This transmittal should replace our previous letter, dated November 6, 2006.

SCI Engineering, Inc. (SCI) recently performed a subsurface exploration for the reference project. The purpose of our exploration was to provide boring logs for the construction of a new railroad bridge carrying the Burlington Northern Santa Fe Railroad over Illinois Route 29 just north of Chillicothe, Illinois. The location of the project site is shown on the *Vicinity and Topographic Map*.

The field exploration phase of the project consisted of drilling four test borings, designated B-1 through B-4, as shown on the *Site Plan*. The borings were located in the field by Illinois Department of Transportation (IDOT). Stations, offsets, and elevations at the boring locations were estimated based on information provided by IDOT. Detailed information regarding the nature and thickness of the soils encountered, and the results of the field sampling and laboratory testing are shown on the enclosed Boring Logs.

ST. CHARLES, MISSOURI
O'FALLON, ILLINOIS
ST. LOUIS, MISSOURI
UNION, MISSOURI
SPRINGFIELD, MISSOURI

Mr. Joseph E. Crowe, Jr.
Illinois Department of Transportation

2

November 13, 2006
SCI No. 2003-3332.51

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the information contained in this transmittal, please call.

Respectfully,

SCI ENGINEERING, INC.



Yong Wu, Ph.D., P.E.
Staff Engineer



Mark A. Harms, P.E.
President

YW/MAH/tlw

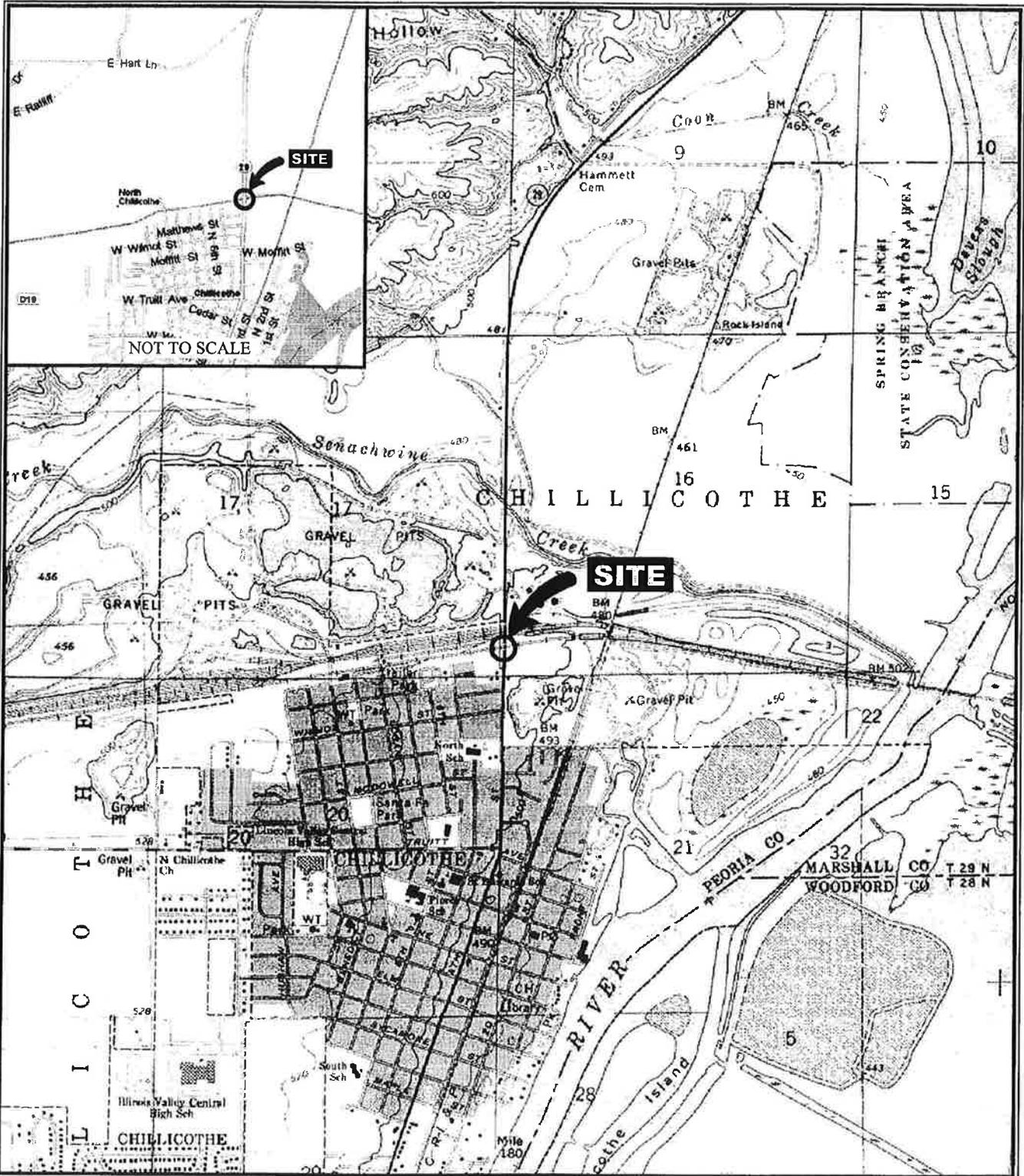
Enclosure

Vicinity and Topographic Map
Site Plan
Boring Logs

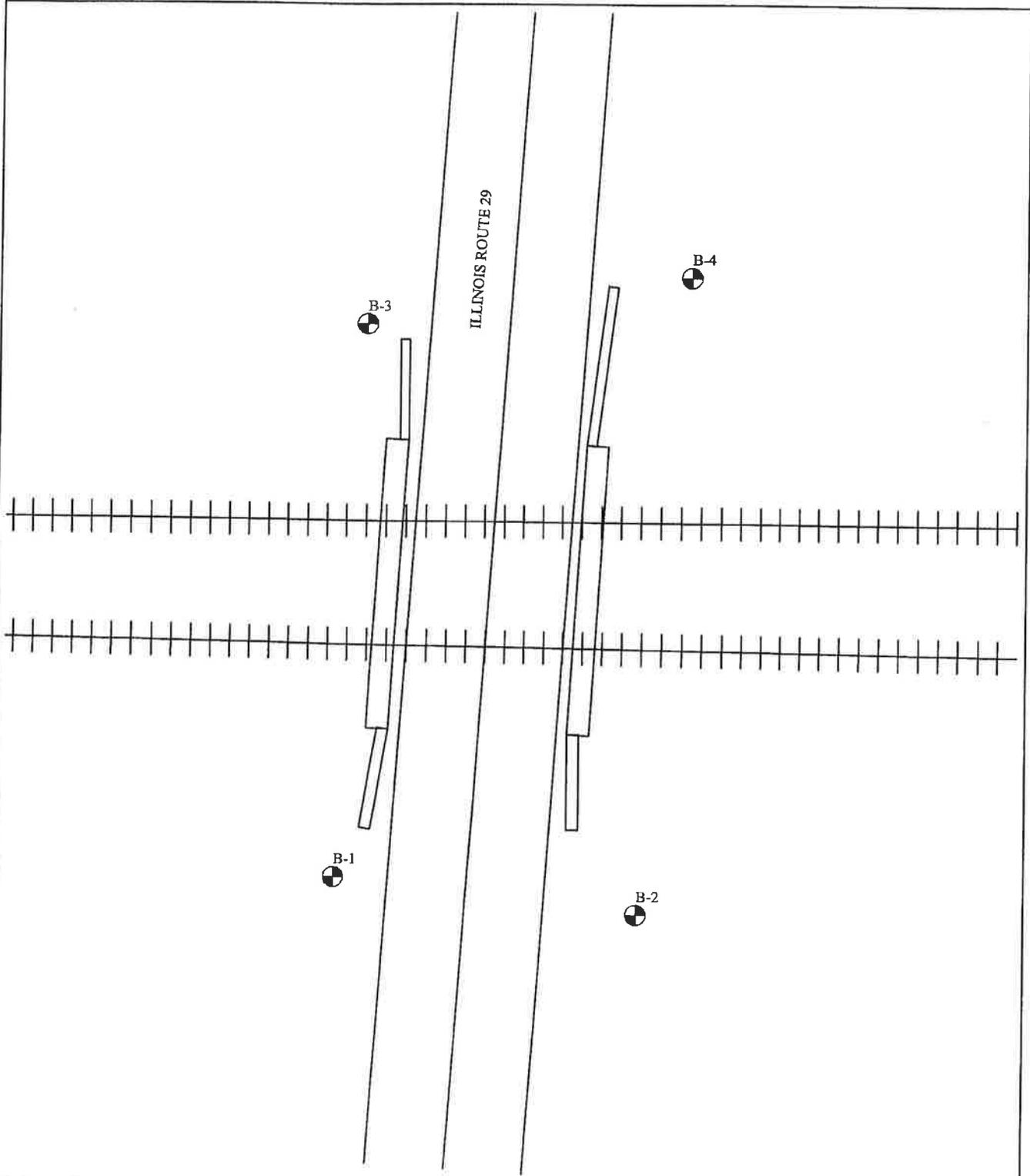
Two additional copies submitted.

C: Mr. Raymond Seneca, Illinois Department of Transportation
Mr. Darren Reents, Illinois Department of Transportation

\\FALLON\SHARE\DEM\TAPPS\PROJECT FILES\2003 PROJECTS\2003-3332 VARIOUS-VARIOUS DISTRICT 4 PTB 130 ITEM 8 PRIME\TS.51\REVISED GEO LETTER.DOC



	<p>PROJECT NAME BNSF RAILROAD BRIDGE OVER ILLINOIS ROUTE 29 CHILICOTHE, ILLINOIS</p>			<p>General Notes/Legend USGS TOPOGRAPHIC MAP CHILICOTHE, ILLINOIS QUADRANGLE DATED 1972 PHOTO REVISED 1990 20' CONTOURS ROME, ILLINOIS QUADRANGLE DATED 1982 PHOTO REVISED 1990 20' CONTOURS</p>			
	<p>VICINITY AND TOPOGRAPHIC MAP</p>						
DRAWN BY	EES	DATE	JOB NUMBER	MICROSOFT STREETS AND TRIPS 2005		SCALE	1" = 2000'
CHECKED BY	YW	11/2006	2003-3332.51			FIGURE	1



PROJECT NAME
 BNSF RAILROAD BRIDGE
 OVER ILLINOIS ROUTE 29
 CHILLICOTHE, ILLINOIS

SITE PLAN

DRAWN BY	EES	DATE	JOB NUMBER
CHECKED BY	YW	11/2006	2003-3332.51

General Notes/Legend

● INDICATES APPROXIMATE SOIL BORING LOCATIONS
 BASED ON UNDATED PLAN PROVIDED BY THE ILLINOIS DEPARTMENT OF
 TRANSPORTATION. DIMENSIONS AND LOCATIONS ARE APPROXIMATE;
 ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE
 CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.



SCALE	NTS
FIGURE	2



SOIL BORING LOG

ROUTE _____ DESCRIPTION Structure Boring LOGGED BY SCI - BCR
 SECTION 16 SW, 17 SE LOCATION Chillicothe, Illinois, SEC., TWP. 11N, RNG. 9E
 COUNTY Peoria DRILLING METHOD CME 1050 w/HSA HAMMER TYPE Automatic

STRUCT. NO. Station	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Surface Water Elev. _____ ft	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
					Stream Bed Elev. _____ ft				
BORING NO. <u>B-1</u> Station <u>50+16</u> Offset <u>58 ft L</u> Ground Surface Elev. <u>508.2</u> ft					Groundwater Elev.: First Encounter _____ N/A ft Upon Completion _____ N/A ft After _____ Hrs. _____ N/A ft				
SAND: Brown, fine to medium, trace gravel (A-3) (continued)					SAND: Brown, fine to coarse, some gravel, trace clay, trace silt (A-1) (continued)				
----- 466.2									
SAND: Brown, fine to coarse, trace clay, trace silt, trace gravel (A-1)									
		10		4			11		
		18					16		
	-45	22				-65	17		
----- 461.2									
SAND: Brown, fine to medium, trace gravel (A-3)					SAND: Brown, fine to medium, trace gravel (A-3)				
		6		5			14		
		13					25		
	-50	18				-70	34		
----- 456.2									
SAND: Brown, fine to coarse, some gravel, trace clay, trace silt (A-1)									
		10		6			8		
		21					11		
	-55	19				-75	17		
Driller added bentonite-grout water mixture at 60 feet and changed from 4.25-inch center plug to 3.25-inch center plug.				2			8		
		12					18		
	-60	23				-80	21		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

beneschalfred benesch & company
CONSULTING ENGINEERSComputed by: RDC 5/03/06/rev 11/01/2007
Checked by: LRB 5/03/06/rev chkd.11/01/2007
Project: IL Rte 29
Element: BNSF Bridge over Reconstructed
IL Rte 29 in ChillicotheSheet 1 of 3
Job No. 3730

PRELIMINARY ESTIMATE OF RAILROAD CONSTRUCTION COST

DESCRIPTION	UNIT	QTY	UNIT PRICE	EXT.
Track Construction *	LF	7,628	\$200	\$1,525,600
Track Realignment *	LF	2,551	\$100	\$255,100
Ex. Track Removal *	LF	1,510	\$50	\$75,500
Temporary Track Removal *	LF	6,093	\$50	\$304,650
Demolition of North Bridge	LS	1	\$500,000	\$500,000
Demolition of South Bridge	LS	1	\$200,000	\$200,000
Filling-in RR Bridge over L&S Interchange Track (East of IL Rte 29)	LS	1	\$400,000	\$400,000
Embankment Construction	C.Y.	10,429	\$15	\$156,435
Bridge Construction	LS	1	\$5,545,025	\$5,545,025
Salvage Ex. Main Tracks *	LF	0	(35)	0
Salvage Yard Track *	LF	1,510	(25)	(37,750)
Salvage Temporary Main Tracks *	LF	6,093	(60)	(365,580)
Sub Total				\$8,558,980
Contingency (20%)				\$1,711,796
Total				\$10,270,776

* Trackwork by BNSFRR - Costs subject to review and comment by BNSFRR

Estimate is in 2007 dollars

Earthwork estimated from contour data, not cross sections

Estimate does not include retaining walls along IL 29

Estimate does not include Railroad Signal Costs or Railroad Force Account Work

STATE OF ILLINOIS
DIVISION OF TRANSPORTATION

DATE	REVISION	BY	CHKD	POST

SHEET NO. OF 3 SHEETS(S)

Benchmarks
Chiseled square in backwall, southwest corner of the west abutment on the North BNSF Railroad Bridge over IL Rte 29, Elevation 509.45.

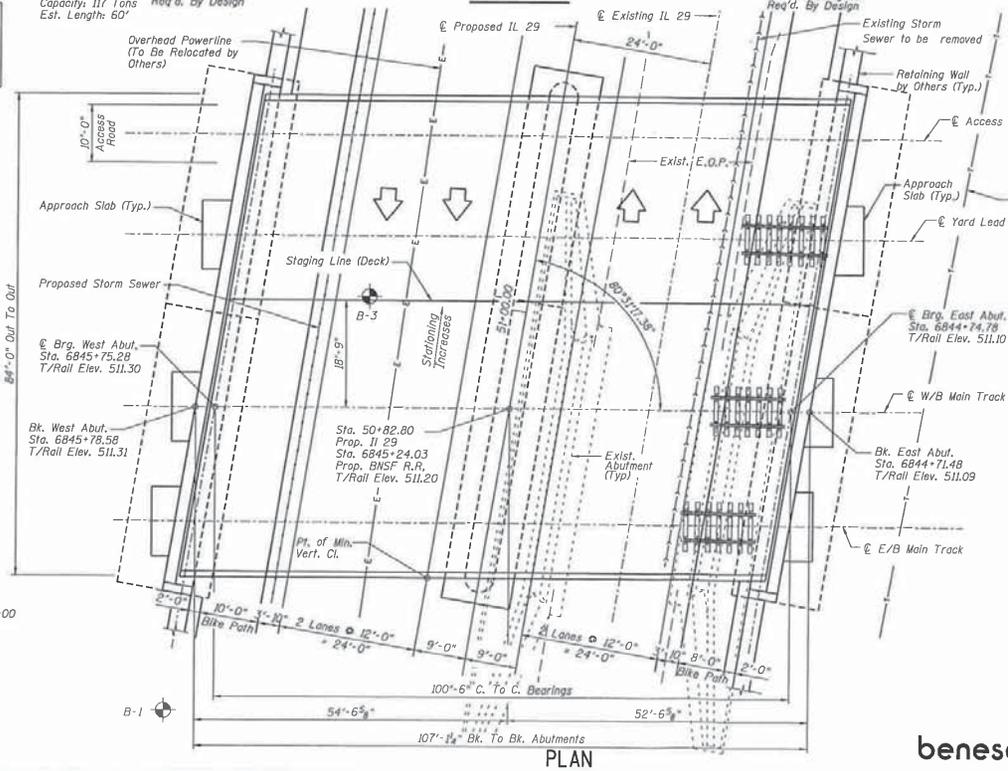
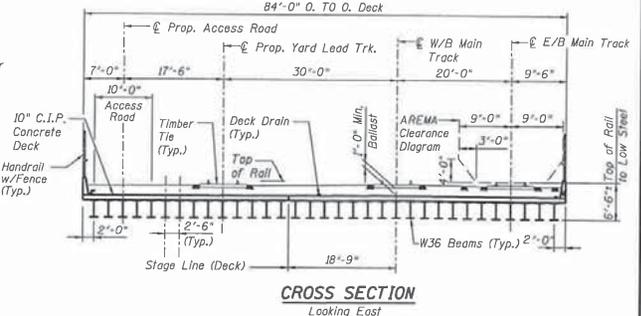
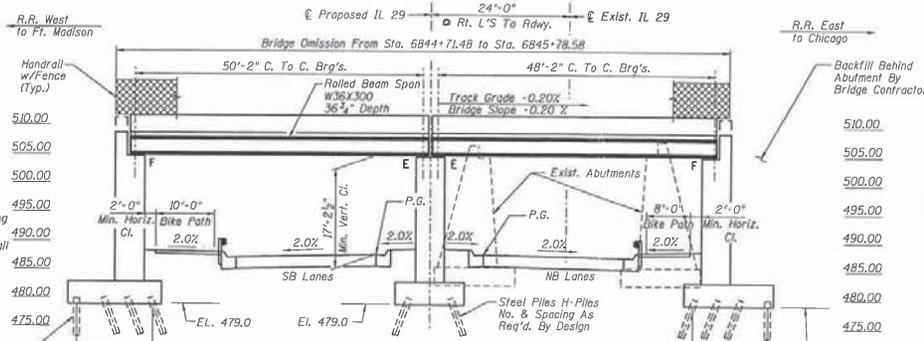
Existing Structure: Structure No. 072-9902(S)

Single-span ballasted deck steel beam span with concrete deck, 30 ft. long and 42.5 ft. wide, with 21-27CBx85# steel beams, supported on full depth, closed, concrete abutments. Built as A.T. & S. F. Ry. over Illinois Rte 29 in 1930 under State of Illinois Dept. of Public Works Contract No. 67396.

The contractor will construct the northerly portion of the new bridge on an offset alignment to the north of the existing structure with rail traffic operating in its current location. The south portion of the new bridge will be constructed in the location of the existing structure with rail traffic operating temporarily on the newly constructed north portion of the bridge. BNSF rail traffic must be maintained at all times during construction and IL Rte 29 will be reduced to one lane of traffic during construction of the rail bridge foundations. Night time closures of IL Rte 29 will be required to set the new bridge superstructure.

No contractor salvage.

Railroad utilities may exist within BNSF right-of-way. Prior to the start of any construction or excavation, utility relocations will have to be coordinated with the BNSF.



LEGEND

Boring Location

B-4

HIGHWAY CLASSIFICATION

Illinois Route 29
Functional Class: Other Principal Arterial
ADT: 8,700 (2001); 12,100 (2032)
DHW: 600
Design Speed: 45 mph
Posted Speed: 45 mph

LOADING COOPER E-80

IMPACT: Diesel Impact
Allow Imposed Dead Load of 30' of Ballast

DESIGN SPECIFICATIONS

2007 AREMA Specifications
Live Load Deflections: L/840
Composite Design for Deflection Requirements
Design Speed: 79 m.p.h.

DESIGN STRESSES

FIELD UNITS
f_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)
f_y = 50,000 psi (Structural Steel)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0
Range 9E - 4th PM

PROFILE GRADE IL RTE. 29 CONNECTOR

PIC Sta. 6844+40.00 Elev. 495.13
PVI Sta. 50+90.00 Elev. 483.44
PVI Sta. 6844+40.00 Elev. 495.13
PVI Sta. 6844+50.00 Elev. 501.05

-1.68% +0.47%

0.20%

LOCATION SKETCH

Proposed Structure

17 15 21

11th St. 29

BNSF MAINLINE

11th St. 29

M.P. 130 + Sta. 6864+00

DESIGNED	=	LRB
CHECKED	=	APW
DRAWN	=	AYR
CHECKED	=	LRB

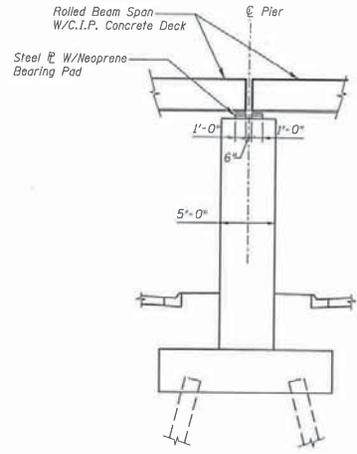
GENERAL PLAN
B.N.S.F. OVER
ILLINOIS ROUTE 29 CONNECTOR
SECTION 6VB
PEORIA COUNTY
STATION 6845+24.03
STRUCTURE NO. 072-9922

benesch
alfred benesch & company
Engineers - Surveyors - Planners
200 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312.585-0800
Project No. 0729

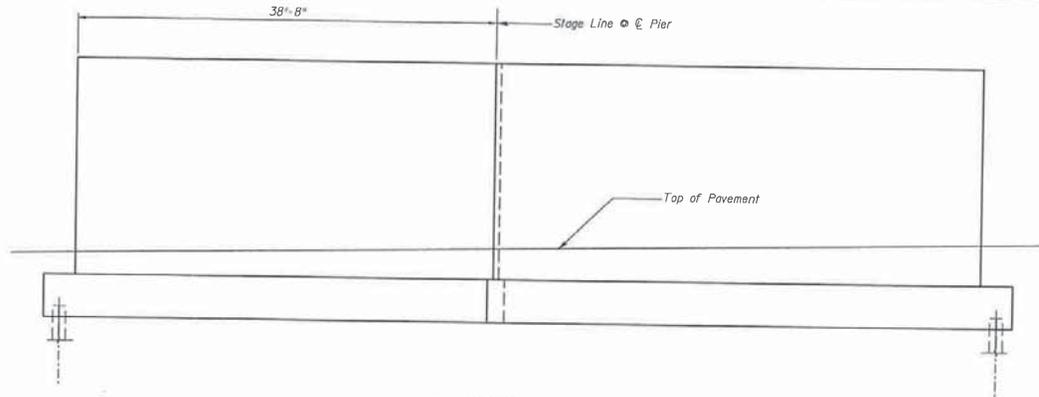
STATE OF ILLINOIS
DIVISION OF TRANSPORTATION

ROUTE NO.	SECTION	DATE	BY	CHECKED
DESIGNED BY: LRB		CHECKED BY: APW		
DRAWN BY: AYR		CHECKED BY: LRB		

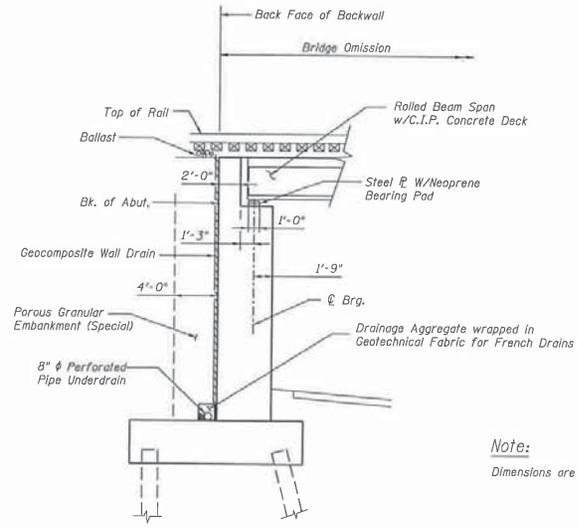
SHEET NO. 2
OF 3 SHEETS



SECTION THROUGH PIER

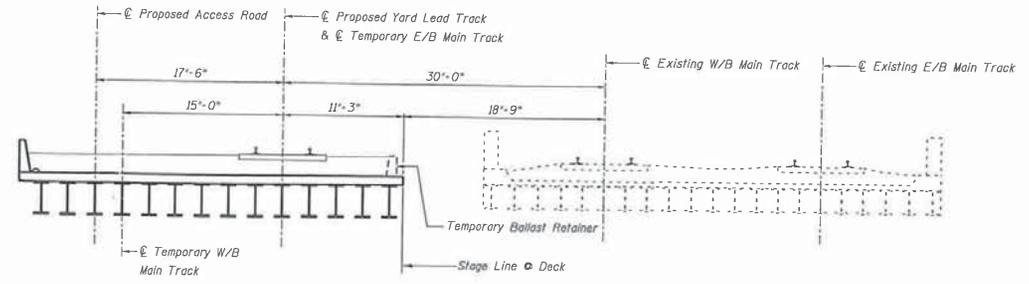


ELEVATION AT PIER
(Looking R.R. East)



SECTION THROUGH CLOSED ABUTMENT

Note:
Dimensions are at right angles.



PROPOSED BRIDGE

EXISTING BRIDGE

STAGE I CROSS-SECTION
(Looking R.R. East)

DESIGNED	-	LRB
CHECKED	-	APW
DRAWN	-	AYR
CHECKED	-	LRB

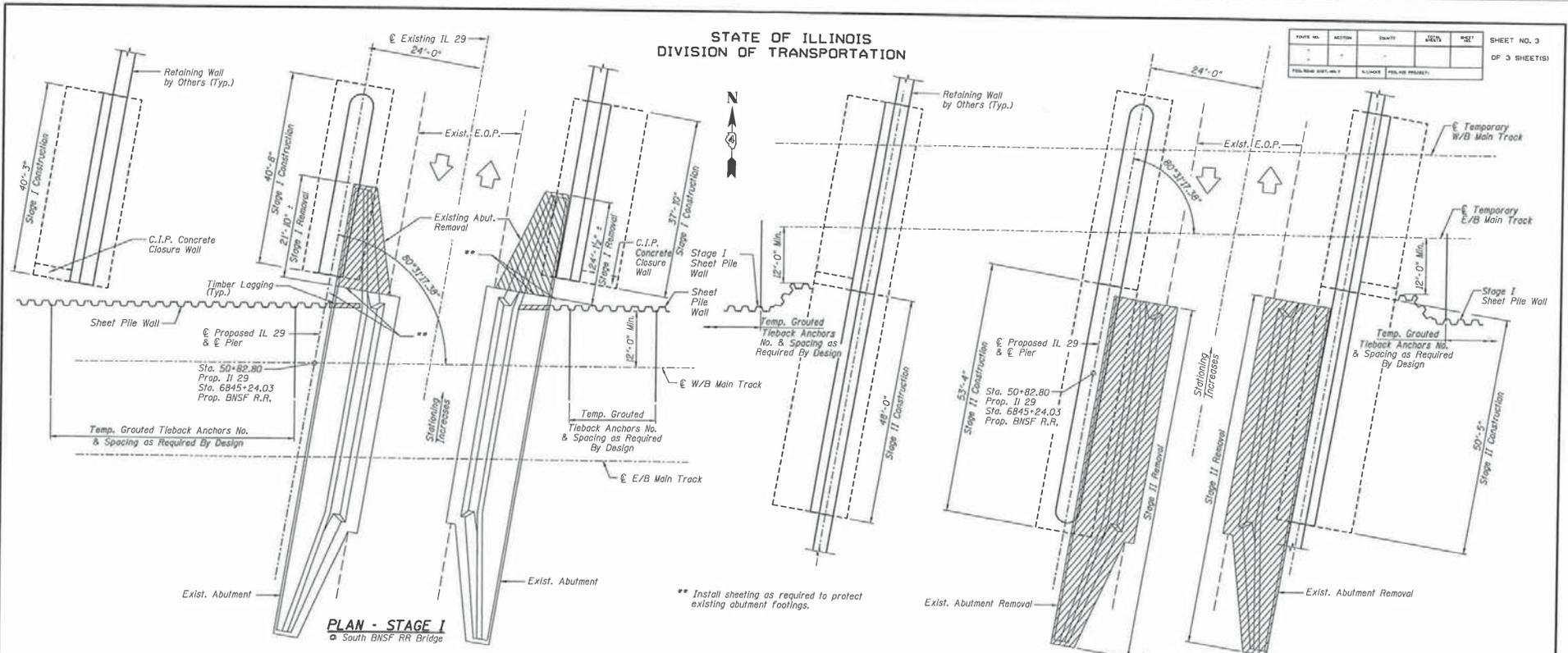
benesch
alfred benesch & company
Engineers - Architects - Planners
200 North Michigan Avenue, Suite 5400
Chicago, Illinois 60601
312.965.6400
Project No. 1230

GENERAL PLAN
B.N.S.F. OVER
ILLINOIS ROUTE 29 CONNECTOR
SECTION 6VB
PEORIA COUNTY
STATION 6845+24.03
STRUCTURE NO. 072-9922

STATE OF ILLINOIS
DIVISION OF TRANSPORTATION

DATE	BY	CHKD	APP'D
DESIGNED		CHECKED	
DRAWN			

SHEET NO. 3
OF 3 SHEETS



PLAN - STAGE I
South BNSF RR Bridge

PLAN - STAGE II
South BNSF RR Bridge

CONSTRUCTION SEQUENCE

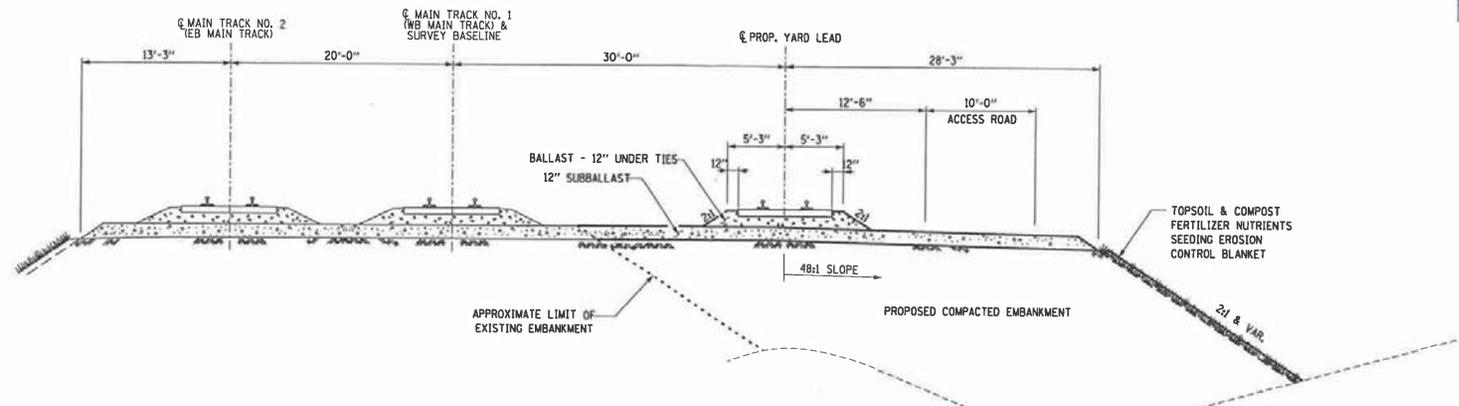
- Stage IA - Maintain 2 existing BNSF mainline tracks on south bridge. Maintain existing yard lead track on north BNSF bridge. Maintain existing access road on north BNSF bridge. Maintain existing vehicular traffic patterns on IL Rte 29.
1. Drive sheet piling parallel to existing WBM Track behind both existing abutments.
 2. Excavate and install temporary grouted tieback anchors.
- Stage IB - Same as Stage IA except maintain vehicular traffic on one lane (NB) of IL Rte 29.
1. Remove existing wingwall and wingwall footing at the west abutment.
 2. Construct north portion of new center pier and new west abutment.
 3. After completion of new center pier, restore two lanes of traffic on IL Rte 29.
- Stage IC - Same as Stage IA except maintain vehicular traffic on one lane (SB) of Rte IL 29.
1. Remove existing wingwall and wingwall footing at the east abutment.
 2. Construct north portion of new east abutment.
 3. After completion of east abutment, restore two lanes of traffic on IL Rte 29.
- Stage ID - Same as Stage IA
1. Using evening or week end road closures erect new spans.
 2. Pour new CIP concrete deck with 2 lanes of IL Rte 29 fully operational.
 3. Install track and ballast on newly constructed bridge.
 4. Modify Stage IA sheet piling behind new abutments.
 5. During a track outage cut-over mainline tracks to the temporary alignment on the newly constructed north portion of the new bridge.
- Stage IIA - Maintain 2 existing mainline tracks on temporary alignment on north portion of new bridge. Maintain existing yard lead track on north BNSF bridge. Maintain existing access road on north BNSF bridge.
1. Using evening or week end road closures remove existing superstructure over IL Rte 29.
- Stage IIB - Same as Stage IIA except maintain vehicular traffic on one lane (NB) of IL Rte 29.
1. Remove remaining existing abutment stem, wingwall and footings at the west abutment.
 2. Construct south portion of new center pier, restore two lanes of traffic on IL Rte 29.
 3. After completion of new center pier, restore two lanes of traffic on IL Rte 29.
- Stage IIC - Same as Stage IIA except maintain vehicular traffic on one lane (SB) of IL Rte 29.
1. Remove remaining existing abutment stem, wingwall and footings at the east abutment.
 2. Construct south portion of new east abutment.
 3. After completion of new east abutment, restore two lanes of traffic on IL Rte 29.
- Stage IID - Same as Stage IIA
1. Using evening or week end road closures erect new spans.
 2. Pour new CIP concrete deck with 2 lanes of IL Rte 29 fully operational.
 3. Install track and ballast on newly constructed bridge.
 4. During a track outage cut-over mainline tracks to the permanent alignment on the newly constructed south portion of the new bridge.
- Stage IIE - 2 mainline tracks on permanent alignment on south portion of new bridge. Maintain existing yard lead track on north BNSF bridge. Maintain existing access road on north BNSF bridge.
1. Install new yard lead track and access road on the north portion of the new bridge.
- Stage III - 2 mainline tracks on permanent alignment on south portion of new bridge. Yard lead track in final location on north portion of new bridge. Access road in final location on north portion of new bridge.
1. Remove superstructure on existing north BNSF bridge using evening or week end road closures.
 2. Demolish existing substructure of the north bridge, (alternating lane closures on IL Rte 29)
 3. Construct new SB lanes of IL Rte 29 connector. (Traffic on existing IL Rte 29)
 4. Construct new NB lanes of IL Rte 29 connector. (Traffic on newly constructed SB lanes)

DESIGNED	-	LRB
CHECKED	-	APW
DRAWN	-	AYR
CHECKED	-	LRB

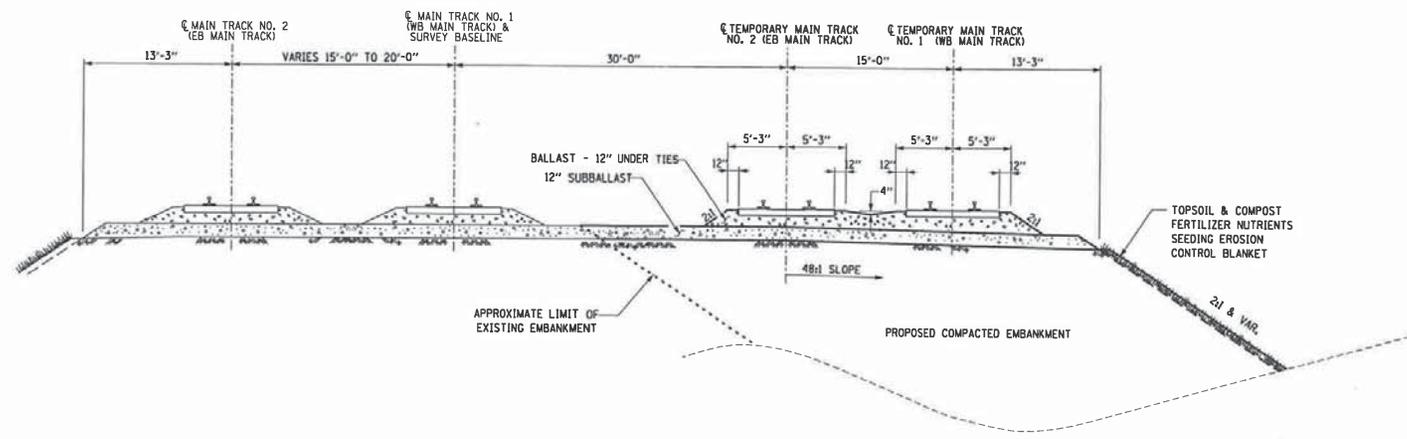
benesch
alfred benesch & company
Engineers - Surveyors - Planners
200 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312.261.0400
Project No. 3700

GENERAL PLAN
B.N.S.F. OVER
ILLINOIS ROUTE 29 CONNECTOR
SECTION 6VB
PEORIA COUNTY
STATION 6845+24.03
STRUCTURE NO. 072-9922

A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
ILL. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	



TYPICAL SECTION - FINISHED BNSF RAILROAD TRACK
LOOKING WEST



TYPICAL SECTION - TEMPORARY BNSF MAINLINE DOUBLE TRACK
LOOKING WEST

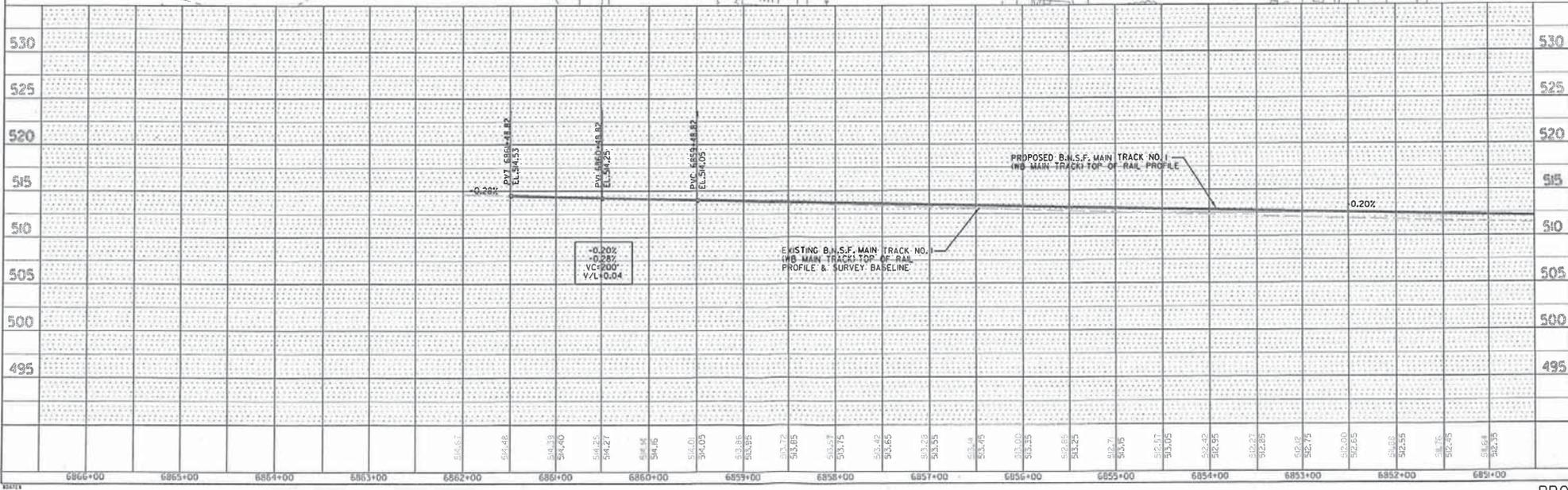
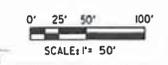
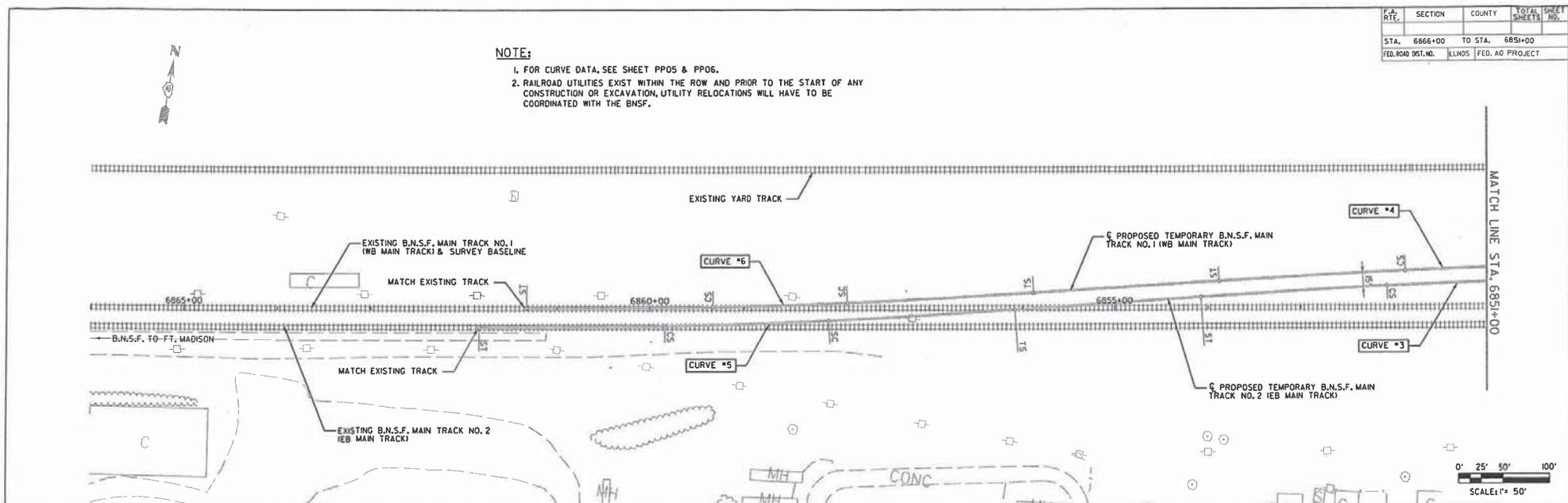
REVISIONS	
NAME	DATE
UPDATED FOR T&A	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS 23
PHASE I ENGINEERING SERVICES
IL 6 TO I-180
TYPICAL SECTIONS
THROUGH BNSF RR
SCALE: 3/8" = 1'-0"
DATE 05/03/2006
DRAWN BY AB & CO.
CHECKED BY ROC

M:\p\031130\BNSF\10\product\33307\cook typ.dgn
 9:26:07 AM
 11/17/2007

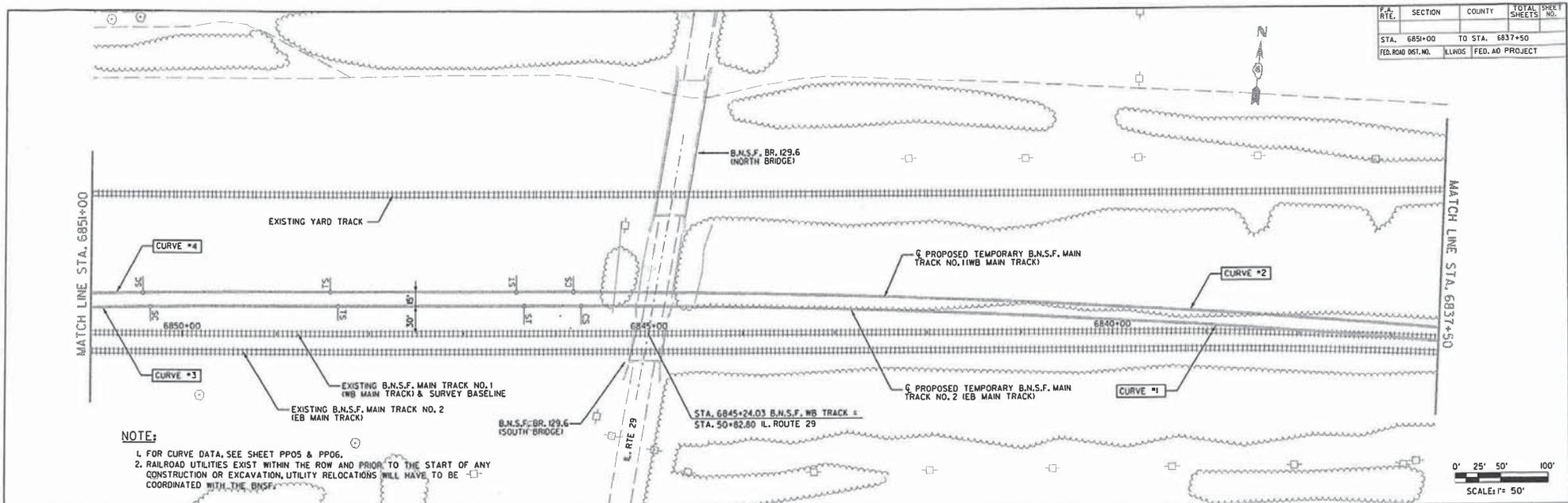
P.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6866+00			
	TO STA.	6851+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTE:
 1. FOR CURVE DATA, SEE SHEET PPO5 & PPO6.
 2. RAILROAD UTILITIES EXIST WITHIN THE ROW AND PRIOR TO THE START OF ANY CONSTRUCTION OR EXCAVATION, UTILITY RELOCATIONS WILL HAVE TO BE COORDINATED WITH THE BNSF.

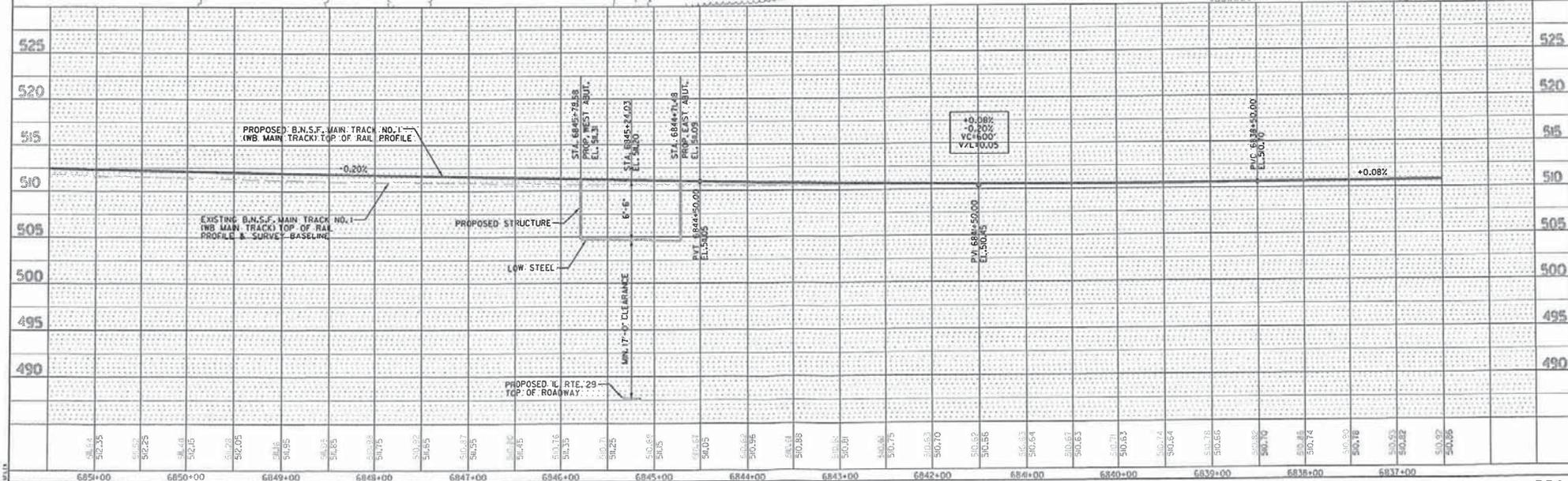


PPO

P.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA. 6851+00	TO STA. 6837+50			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

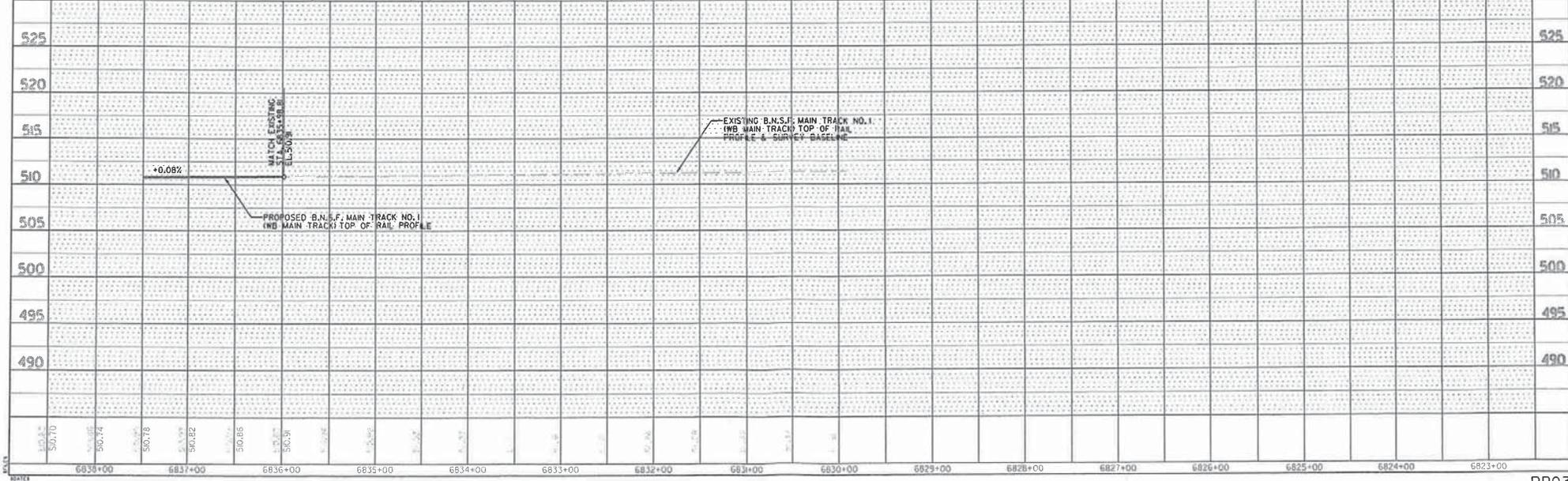
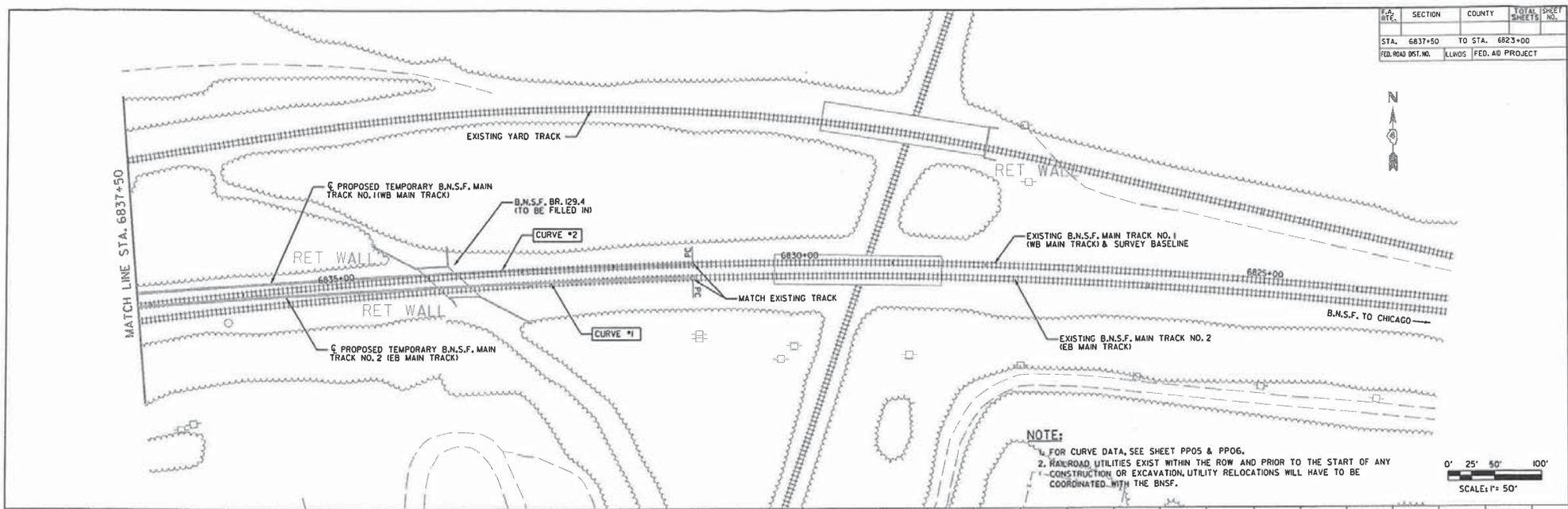


NOTE:
 1. FOR CURVE DATA, SEE SHEET PPOS & PPOS.
 2. RAILROAD UTILITIES EXIST WITHIN THE ROW AND PRIOR TO THE START OF ANY CONSTRUCTION OR EXCAVATION, UTILITY RELOCATIONS WILL HAVE TO BE COORDINATED WITH THE BNSF.

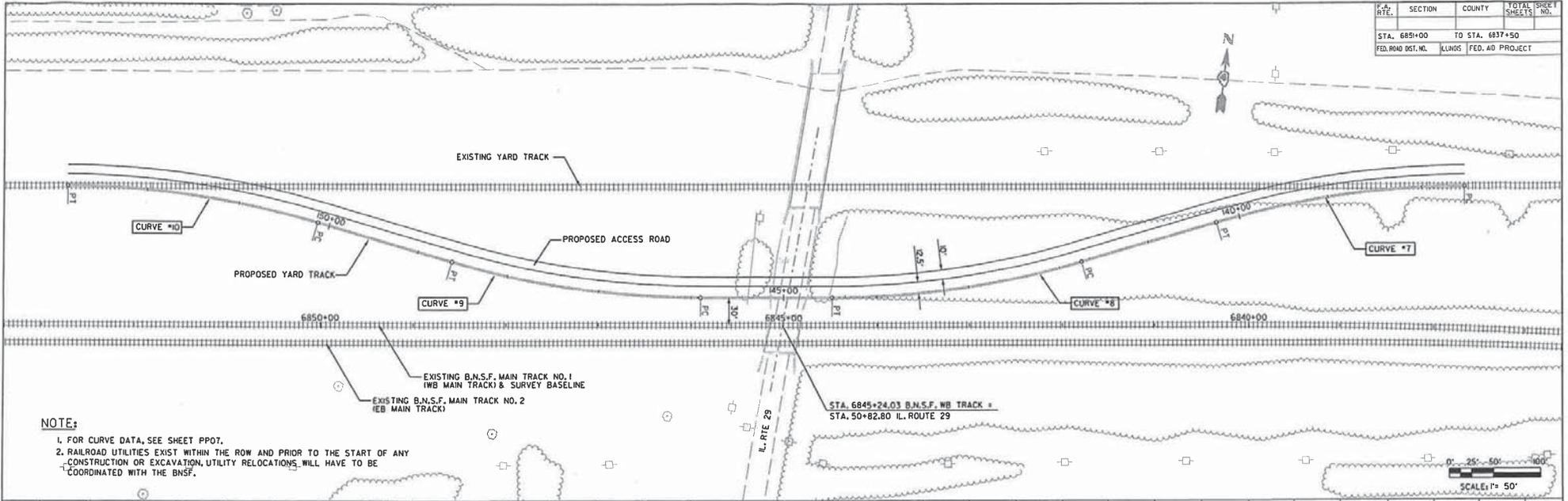


6851+00	6850+00	6849+00	6848+00	6847+00	6846+00	6845+00	6844+00	6843+00	6842+00	6841+00	6840+00	6839+00	6838+00	6837+00
---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------

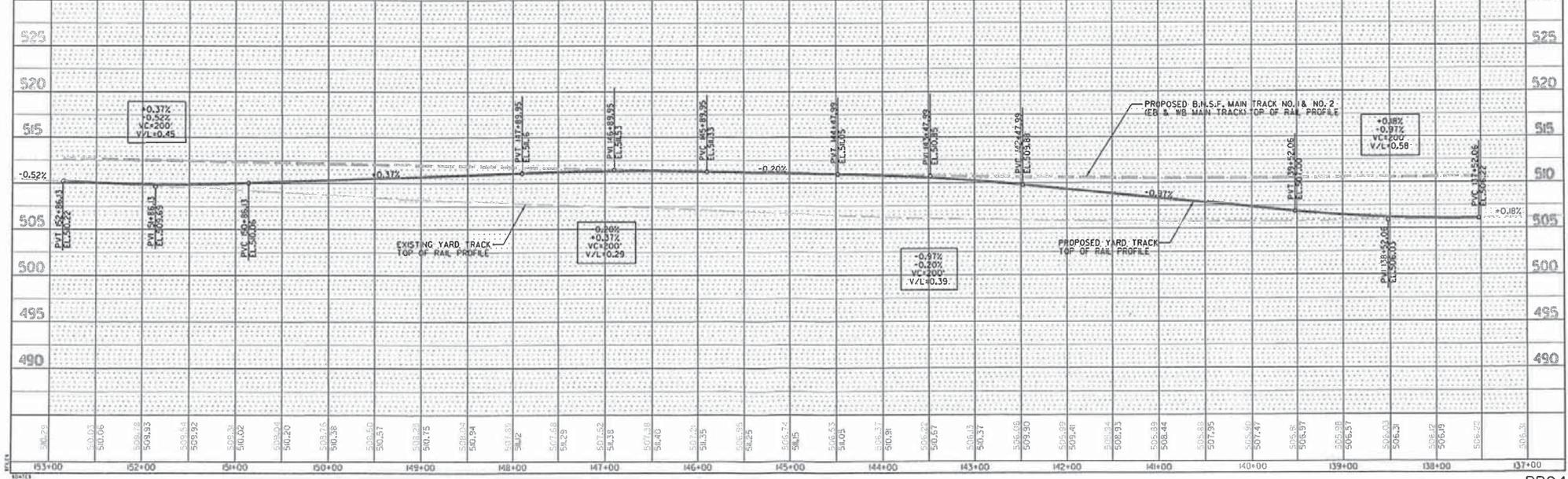
TA. WTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA. 6837+50	TO STA. 6823+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



P.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA. 685+00	TO STA. 6837+50			
FED. ROAD DIST. NO.	KLINGS	FED. AID PROJECT		



NOTE:
 1. FOR CURVE DATA, SEE SHEET PP07.
 2. RAILROAD UTILITIES EXIST WITHIN THE ROW AND PRIOR TO THE START OF ANY CONSTRUCTION OR EXCAVATION, UTILITY RELOCATIONS WILL HAVE TO BE COORDINATED WITH THE BNSF.



TEMPORARY EASTBOUND MAINLINE

F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CURVE #1

CURVE

DESIGN SPEED: 77 MPH
 SE: 7/4
 PC () 10+00.00 155392.76 2485999.93
 PI () 17+29.98 1553893.75 2485270.20
 CC () 24+57.63 1543360.98 2486274.93
 CS () 10555.37 1553774.46 2484550.03
 RADIUS: 10555.37
 DELTA: 7°54'43.93" LEFT
 DEGREE OF CURVATURE (CHORD): 0°32'34.13"
 LENGTH: 1457.63
 TANGENT: 729.98
 CHORD: 1456.47
 MIDDLE ORDINATE: 25.15
 EXTERNAL: 25.21
 TANGENT DIRECTION: S 88°30'25.52" W
 RADIAL DIRECTION: N 1°29'34.48" W
 CHORD DIRECTION: S 84°33'03.56" W
 RADIAL DIRECTION: N 9°24'18.41" W
 TANGENT DIRECTION: S 80°35'41.59" W

SPIRAL OUT

CS () 24+57.63 1553774.46 2484550.03
 SPI () 1553774.08 2484529.64
 ST () 1553764.21 2484488.89
 ENTRANCE RADIUS: 10555.37
 EXIT RADIUS: 0.00
 LENGTH: 62.00
 ANGLE: 0°10'05.78" LEFT
 CONSTANT: 808.97
 LONG TANGENT: 41.33
 SHORT TANGENT: 20.67
 LONG CHORD: 62.00
 Xs: 62.00
 Ys: 0.06
 P: 0.02
 K: 31.00
 TANGENT DIRECTION: S 80°35'41.59" W
 RADIAL DIRECTION: N 9°24'18.41" W
 CHORD DIRECTION: S 80°28'57.74" W
 RADIAL DIRECTION: N 9°34'24.19" W
 TANGENT DIRECTION: S 80°25'35.81" W

CURVE #3

SPIRAL IN

CS () 27+19.37 1553730.99 2484291.93
 SPI () 1553708.81 2484160.45
 ST () 1553696.58 2484094.92
 ENTRANCE RADIUS: 0.00
 EXIT RADIUS: 5729.65
 LENGTH: 200.00
 ANGLE: 0°59'59.95" LEFT
 CONSTANT: 1070.48
 LONG TANGENT: 133.34
 SHORT TANGENT: 66.67
 LONG CHORD: 200.00
 Xs: 199.99
 Ys: 116
 P: 0.29
 K: 100.00
 TANGENT DIRECTION: S 80°25'35.81" W
 RADIAL DIRECTION: N 9°34'24.19" W
 CHORD DIRECTION: S 80°05'35.83" W
 RADIAL DIRECTION: N 10°34'24.14" W
 TANGENT DIRECTION: S 79°25'35.86" W

CURVE

DESIGN SPEED: 77 MPH
 SE: 2/2
 PC () 29+19.37 1553696.58 2484094.92
 PI () 30+05.93 1553680.70 2484009.82
 CC () 30+92.48 1548064.21 248546.27
 CS () 5729.65 1553662.25 2483925.25
 RADIUS: 5729.65
 DELTA: 1°43'51.93" LEFT
 DEGREE OF CURVATURE (CHORD): 1°00'00.00"
 LENGTH: 173.11
 TANGENT: 86.56
 CHORD: 173.10
 Xs: 0.65
 EXTERNAL: 0.65
 TANGENT DIRECTION: S 79°25'35.86" W
 RADIAL DIRECTION: N 10°34'24.14" W
 CHORD DIRECTION: S 78°33'39.89" W
 RADIAL DIRECTION: N 12°18'16.07" W
 TANGENT DIRECTION: S 77°41'43.93" W

SPIRAL OUT

CS () 30+92.48 1553662.25 2483925.25
 SPI () 1553648.04 2483860.11
 ST () 1553617.36 2483730.36
 ENTRANCE RADIUS: 5729.65
 EXIT RADIUS: 0.00
 LENGTH: 200.00
 ANGLE: 0°59'59.95" LEFT
 CONSTANT: 1070.48
 LONG TANGENT: 133.34
 SHORT TANGENT: 66.67
 LONG CHORD: 200.00
 Xs: 199.99
 Ys: 116
 P: 0.29
 K: 100.00
 TANGENT DIRECTION: S 77°41'43.93" W
 RADIAL DIRECTION: N 12°18'16.07" W
 CHORD DIRECTION: S 77°01'43.96" W
 RADIAL DIRECTION: N 13°18'16.02" W
 TANGENT DIRECTION: S 76°41'43.98" W

CURVE #5

SPIRAL IN

CS () 34+93.29 1553571.15 2483534.93
 SPI () 1553540.46 2483405.18
 ST () 1553526.25 2483340.04
 ENTRANCE RADIUS: 0.00
 EXIT RADIUS: 5729.65
 LENGTH: 200.00
 ANGLE: 0°59'59.95" RIGHT
 CONSTANT: 1070.48
 LONG TANGENT: 133.34
 SHORT TANGENT: 66.67
 LONG CHORD: 200.00
 Xs: 199.99
 Ys: 116
 P: 0.29
 K: 100.00
 TANGENT DIRECTION: S 76°41'43.98" W
 RADIAL DIRECTION: N 13°18'16.02" W
 CHORD DIRECTION: S 77°01'43.96" W
 RADIAL DIRECTION: N 12°18'16.07" W
 TANGENT DIRECTION: S 77°41'43.93" W

CURVE

DESIGN SPEED: 77 MPH
 SE: 2/2
 PC () 36+93.29 1553526.25 2483340.04
 PI () 37+81.81 1553507.39 2483253.56
 CC () 38+70.31 1553492.29 248219.01
 CS () 5729.65 1553491.21 2483166.53
 RADIUS: 5729.65
 DELTA: 1°46'12.63" RIGHT
 DEGREE OF CURVATURE (CHORD): 1°00'00.00"
 LENGTH: 177.02
 TANGENT: 88.52
 CHORD: 177.01
 Xs: 0.68
 EXTERNAL: 0.68
 TANGENT DIRECTION: S 77°41'43.93" W
 RADIAL DIRECTION: N 12°18'16.07" W
 CHORD DIRECTION: S 78°34'50.25" W
 RADIAL DIRECTION: N 10°32'03.43" W
 TANGENT DIRECTION: S 79°27'56.57" W

SPIRAL OUT

CS () 38+70.31 1553491.21 2483166.53
 SPI () 1553479.02 2483100.99
 ST () 1553456.93 2482969.49
 ENTRANCE RADIUS: 5729.65
 EXIT RADIUS: 0.00
 LENGTH: 200.00
 ANGLE: 0°59'59.95" RIGHT
 CONSTANT: 1070.48
 LONG TANGENT: 133.34
 SHORT TANGENT: 66.67
 LONG CHORD: 200.00
 Xs: 199.99
 Ys: 116
 P: 0.29
 K: 100.00
 TANGENT DIRECTION: S 79°27'56.57" W
 RADIAL DIRECTION: N 10°32'03.43" W
 CHORD DIRECTION: S 80°07'56.54" W
 RADIAL DIRECTION: N 9°32'03.48" W
 TANGENT DIRECTION: S 80°27'56.52" W

REVISIONS	DATE
NEW	10-24-07
UPDATED FOR ISBL	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY TRACK
 CURVE DATA

SCALE: N.T.S.
 DATE 1/23/2007

DRAWN BY DJK
 CHECKED BY MJK

TEMPORARY WESTBOUND MAINLINE

STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL				
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CURVE

CURVE #2

DESIGN SPEED:	77 MPH		
SE:	1/4"		
PC ()	110+00.00	1553927.16	2485999.56
PI ()	117+35.26	1553908.00	2485264.54
CC ()		1543300.50	2486276.51
CS ()	124+68.19	1553787.84	2484539.16
RADIUS:	10630.27		
DELTA:	7°54'48.20"	LEFT	
DEGREE OF CURVATURE (CHORD):	0°32'20.36"		
LENGTH:	1468.20		
TANGENT:	735.27		
CHORD:	1467.03		
MIDDLE ORDINATE:	25.34		
EXTERNAL:	25.40		
TANGENT DIRECTION:	S 88°30'25.52" W		
RADIAL DIRECTION:	N 1°29'34.48" W		
CHORD DIRECTION:	S 84°33'01.42" W		
RADIAL DIRECTION:	N 9°24'22.68" W		
TANGENT DIRECTION:	S 80°35'37.32" W		

SPIRAL OUT

CS ()	124+68.19	1553787.84	2484539.16
SPI ()		1553784.46	2484518.77
ST ()	125+30.19	1553777.58	2484478.01
ENTRANCE RADIUS:	10630.27		
EXIT RADIUS:	0.00		
LENGTH:	62.00	LEFT	
ANGLE:	0°10'01.5"		
CONSTANT:	81.84		
LONG TANGENT:	41.33		
SHORT TANGENT:	20.67		
LONG CHORD:	62.00		
Xst	0.06		
Yst	0.02		
Pt	31.00		
Kt			
TANGENT DIRECTION:	S 80°35'37.32" W		
RADIAL DIRECTION:	N 9°24'22.68" W		
CHORD DIRECTION:	S 80°28'56.32" W		
RADIAL DIRECTION:	N 9°34'24.19" W		
TANGENT DIRECTION:	S 80°25'35.81" W		

SPIRAL IN

CURVE #4

CS ()	127+29.95	1553744.36	2484281.04
SPI ()		1553722.19	2484149.56
ST ()	129+29.95	1553709.95	2484084.02
ENTRANCE RADIUS:	0.00		
EXIT RADIUS:	5729.65		
LENGTH:	200.00	LEFT	
ANGLE:	0°59'59.95"		
CONSTANT:	1070.48		
LONG TANGENT:	133.34		
SHORT TANGENT:	66.67		
LONG CHORD:	200.00		
Xst	199.99		
Yst	1.16		
Pt	0.29		
Kt	100.00		
TANGENT DIRECTION:	S 80°25'35.81" W		
RADIAL DIRECTION:	N 9°34'24.19" W		
CHORD DIRECTION:	S 80°05'35.83" W		
RADIAL DIRECTION:	N 10°34'24.14" W		
TANGENT DIRECTION:	S 79°25'35.86" W		

CURVE

DESIGN SPEED:	77 MPH		
SE:	2 1/2"		
PC ()	129+29.95	1553709.95	2484084.02
PI ()	1353696.61	1553696.61	2484012.54
CC ()		1548077.59	2485135.38
CS ()	130+75.37	1553681.46	2483941.42
RADIUS:	5729.65		
DELTA:	1°27'15.35"	LEFT	
DEGREE OF CURVATURE (CHORD):	1°00'00.00"		
LENGTH:	145.43		
TANGENT:	72.72		
CHORD:	145.42		
MIDDLE ORDINATE:	0.46		
EXTERNAL:	0.46		
TANGENT DIRECTION:	S 79°25'35.86" W		
RADIAL DIRECTION:	N 10°34'24.14" W		
CHORD DIRECTION:	S 78°41'58.18" W		
RADIAL DIRECTION:	N 12°01'39.49" W		
TANGENT DIRECTION:	S 77°58'20.51" W		

SPIRAL OUT

CS ()	130+75.37	1553681.46	2483941.42
SPI ()		1553667.56	2483876.21
ST ()	132+75.37	1553637.51	2483746.31
ENTRANCE RADIUS:	5729.65		
EXIT RADIUS:	0.00		
LENGTH:	200.00	LEFT	
ANGLE:	0°59'59.95"		
CONSTANT:	1070.48		
LONG TANGENT:	133.34		
SHORT TANGENT:	66.67		
LONG CHORD:	200.00		
Xst	199.99		
Yst	1.16		
Pt	0.29		
Kt	100.00		
TANGENT DIRECTION:	S 77°58'20.51" W		
RADIAL DIRECTION:	N 12°01'39.49" W		
CHORD DIRECTION:	S 77°18'20.53" W		
RADIAL DIRECTION:	N 13°01'39.45" W		
TANGENT DIRECTION:	S 76°58'20.55" W		

SPIRAL IN

CURVE #6

CS ()	134+75.29	1553592.44	2483551.54
SPI ()		1553562.39	2483421.63
ST ()	136+75.29	1553548.49	2483356.43
ENTRANCE RADIUS:	0.00		
EXIT RADIUS:	5729.65		
LENGTH:	200.00	RIGHT	
ANGLE:	0°59'59.95"		
CONSTANT:	1070.48		
LONG TANGENT:	133.34		
SHORT TANGENT:	66.67		
LONG CHORD:	200.00		
Xst	199.99		
Yst	1.16		
Pt	0.29		
Kt	100.00		
TANGENT DIRECTION:	S 76°58'20.55" W		
RADIAL DIRECTION:	N 13°01'39.45" W		
CHORD DIRECTION:	S 77°18'20.53" W		
RADIAL DIRECTION:	N 12°01'39.49" W		
TANGENT DIRECTION:	S 77°58'20.51" W		

CURVE

DESIGN SPEED:	77 MPH		
SE:	2 1/2"		
PC ()	136+75.29	1553548.49	2483356.43
PI ()	137+48.21	1553533.30	2483285.11
CC ()		1559152.36	2482162.46
CS ()	138+21.13	1553519.92	2483213.42
RADIUS:	5729.65		
DELTA:	1°27'30.03"	RIGHT	
DEGREE OF CURVATURE (CHORD):	1°00'00.00"		
LENGTH:	145.84		
TANGENT:	72.92		
CHORD:	145.83		
MIDDLE ORDINATE:	0.46		
EXTERNAL:	0.46		
TANGENT DIRECTION:	S 77°58'20.51" W		
RADIAL DIRECTION:	N 12°01'39.49" W		
CHORD DIRECTION:	S 78°42'05.52" W		
RADIAL DIRECTION:	N 10°34'09.46" W		
TANGENT DIRECTION:	S 79°25'50.54" W		

SPIRAL OUT

CS ()	138+21.13	1553519.92	2483213.42
SPI ()		1553507.69	2483147.89
ST ()	140+21.13	1553485.53	2483016.41
ENTRANCE RADIUS:	5729.65		
EXIT RADIUS:	0.00		
LENGTH:	200.00	RIGHT	
ANGLE:	0°59'59.95"		
CONSTANT:	1070.48		
LONG TANGENT:	133.34		
SHORT TANGENT:	66.67		
LONG CHORD:	200.00		
Xst	199.99		
Yst	1.16		
Pt	0.29		
Kt	100.00		
TANGENT DIRECTION:	S 79°25'50.54" W		
RADIAL DIRECTION:	N 10°34'09.46" W		
CHORD DIRECTION:	S 80°05'50.51" W		
RADIAL DIRECTION:	N 9°34'09.51" W		
TANGENT DIRECTION:	S 80°25'50.49" W		

REVISIONS	
NAME	DATE
UPDATED FOR T&E	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY TRACK
CURVE DATA

SCALE: N.T.S.
DATE 1/23/2007

DRAWN BY DJK
CHECKED BY M.JK

PROPOSED YARD TRACK

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

CURVE #7

CURVE			
PC ()	137+52.06	1554026.84	2485326.33
PI ()	138+89.11	1554004.01	2485191.20
CC ()		1553084.83	2485485.50
PT ()	140+24.30	1553944.11	2485067.93
RADIUS:	955.37		
DELTA:	16°19'37.05"	LEFT	
DEGREE OF CURVATURE (CHORD):	6°00'00.00"		
LENGTH:	272.24		
TANGENT:	137.05		
CHORD:	271.32		
MIDDLE ORDINATE:	9.68		
EXTERNAL:	9.78		
TANGENT DIRECTION:	S 80°24'34.83" W		
RADIAL DIRECTION:	N 9°35'25.17" W		
CHORD DIRECTION:	S 72°14'46.30" W		
RADIAL DIRECTION:	N 25°55'02.22" W		
TANGENT DIRECTION:	S 64°04'57.78" W		

CURVE #10

CURVE			
PC ()	150+12.73	1553782.81	2484112.58
PI ()	151+50.37	1553799.07	2483975.90
CC ()		1552834.13	2483999.71
PT ()	152+86.13	1553776.09	2483840.19
RADIUS:	955.37		
DELTA:	16°23'47.53"	LEFT	
DEGREE OF CURVATURE (CHORD):	6°00'00.00"		
LENGTH:	273.40		
TANGENT:	137.64		
CHORD:	272.47		
MIDDLE ORDINATE:	9.76		
EXTERNAL:	9.86		
TANGENT DIRECTION:	N 83°12'54.32" W		
RADIAL DIRECTION:	N 6°47'05.68" E		
CHORD DIRECTION:	S 88°35'11.91" W		
RADIAL DIRECTION:	N 9°36'41.86" W		
TANGENT DIRECTION:	S 80°23'18.14" W		

CURVE #8

CURVE			
PC ()	141+75.40	1553878.07	2484932.03
PI ()	143+12.62	1553818.09	2484808.61
CC ()		1554737.35	2484514.47
PT ()	144+47.99	1553795.28	2484673.29
RADIUS:	955.37		
DELTA:	16°20'52.74"	RIGHT	
DEGREE OF CURVATURE (CHORD):	6°00'00.00"		
LENGTH:	272.59		
TANGENT:	137.23		
CHORD:	271.67		
MIDDLE ORDINATE:	9.71		
EXTERNAL:	9.81		
TANGENT DIRECTION:	S 64°04'57.78" W		
RADIAL DIRECTION:	N 25°55'02.22" W		
CHORD DIRECTION:	S 72°15'24.15" W		
RADIAL DIRECTION:	N 9°34'09.48" W		
TANGENT DIRECTION:	S 80°25'50.52" W		

CURVE #9

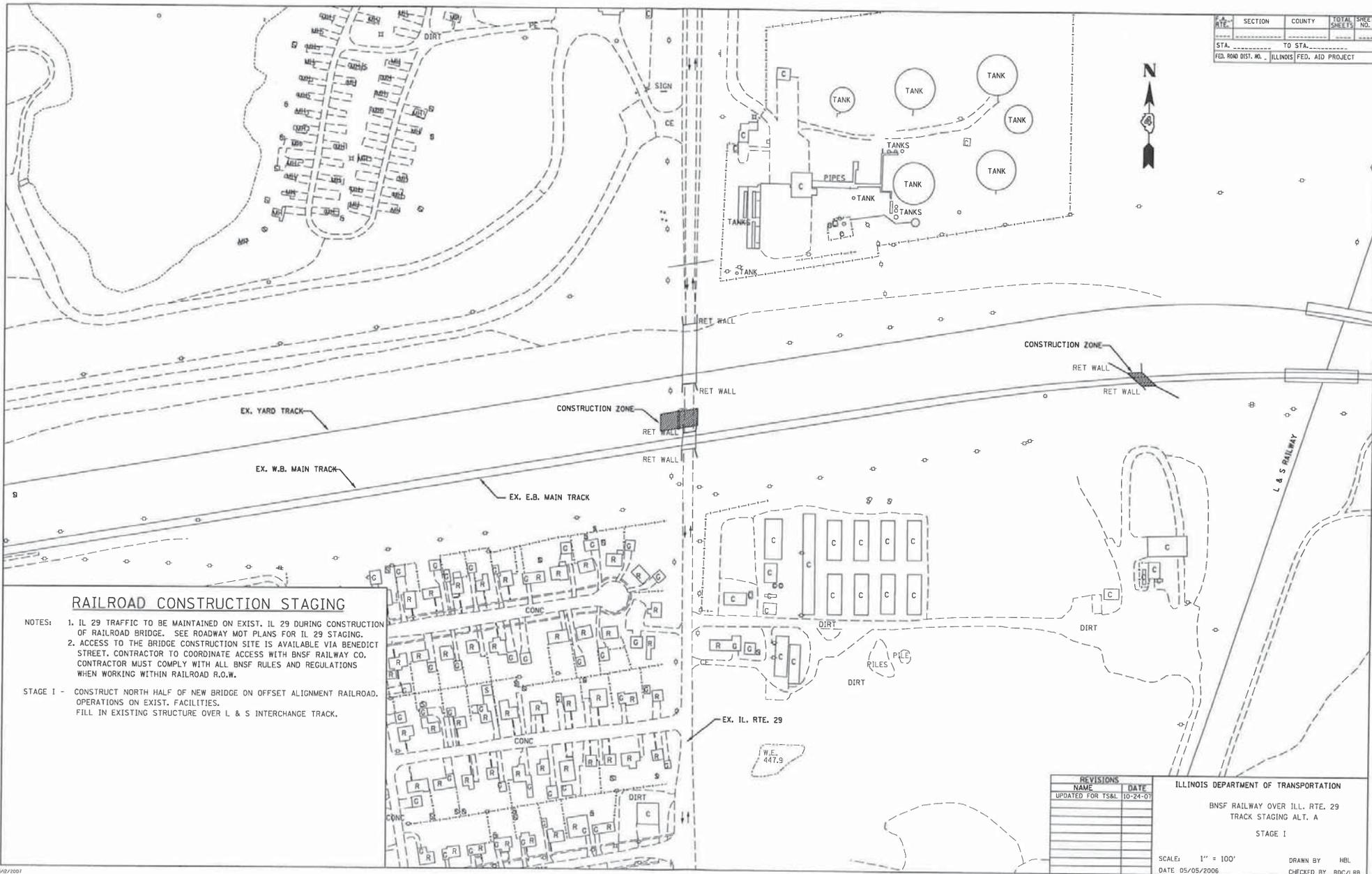
CURVE			
PC ()	145+89.95	1553771.68	2484533.30
PI ()	147+27.23	1553748.86	2484397.93
CC ()		1554713.75	2484374.48
PT ()	148+62.65	1553765.08	2484261.61
RADIUS:	955.37		
DELTA:	16°21'15.16"	RIGHT	
DEGREE OF CURVATURE (CHORD):	6°00'00.00"		
LENGTH:	272.69		
TANGENT:	137.28		
CHORD:	271.77		
MIDDLE ORDINATE:	9.71		
EXTERNAL:	9.81		
TANGENT DIRECTION:	S 80°25'50.52" W		
RADIAL DIRECTION:	N 9°34'09.48" W		
CHORD DIRECTION:	S 88°36'28.10" W		
RADIAL DIRECTION:	N 6°47'05.68" E		
TANGENT DIRECTION:	N 83°12'54.32" W		

REVISIONS	
NAME	DATE
UPDATED FOR TS&L 10-24-07	

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY TRACK
CURVE DATA

SCALE: N.T.S. DRAWN BY: DJK
DATE: 1/23/2007 CHECKED BY: MJK



SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA. _____ TO STA. _____			
FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT			

RAILROAD CONSTRUCTION STAGING

- NOTES:
1. IL 29 TRAFFIC TO BE MAINTAINED ON EXIST. IL 29 DURING CONSTRUCTION OF RAILROAD BRIDGE. SEE ROADWAY MOT PLANS FOR IL 29 STAGING.
 2. ACCESS TO THE BRIDGE CONSTRUCTION SITE IS AVAILABLE VIA BENEDICT STREET. CONTRACTOR TO COORDINATE ACCESS WITH BNSF RAILWAY CO. CONTRACTOR MUST COMPLY WITH ALL BNSF RULES AND REGULATIONS WHEN WORKING WITHIN RAILROAD R.O.W.
- STAGE I - CONSTRUCT NORTH HALF OF NEW BRIDGE ON OFFSET ALIGNMENT RAILROAD. OPERATIONS ON EXIST. FACILITIES. FILL IN EXISTING STRUCTURE OVER L & S INTERCHANGE TRACK.

REVISIONS	
NAME	DATE
UPDATED FOR TS&L	10-24-07

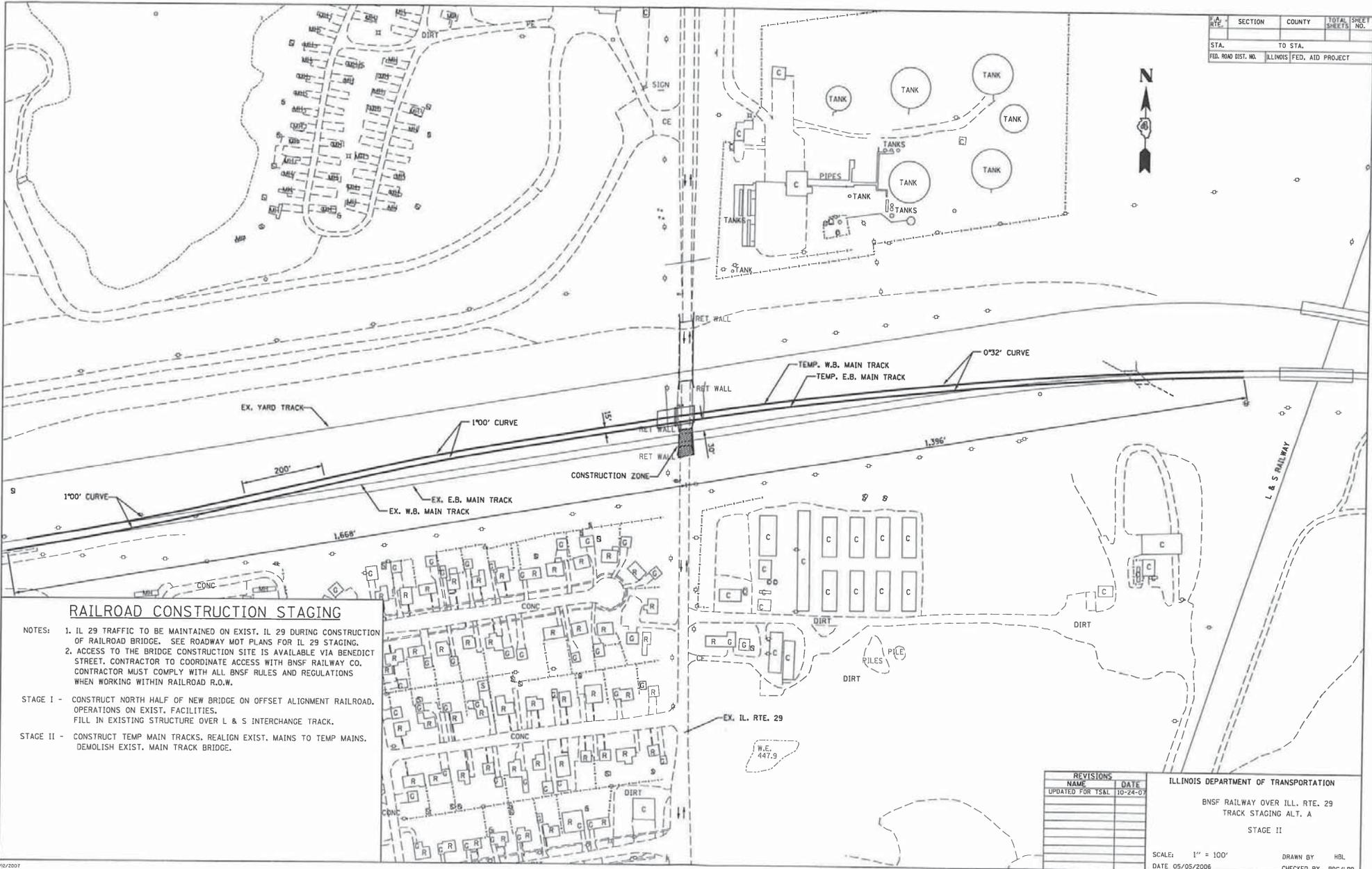
ILLINOIS DEPARTMENT OF TRANSPORTATION

BNSF RAILWAY OVER ILL. RTE. 29
TRACK STAGING ALT. A
STAGE I

SCALE: 1" = 100'
DATE: 05/05/2006

DRAWN BY: HBL
CHECKED BY: RDC/LRB

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

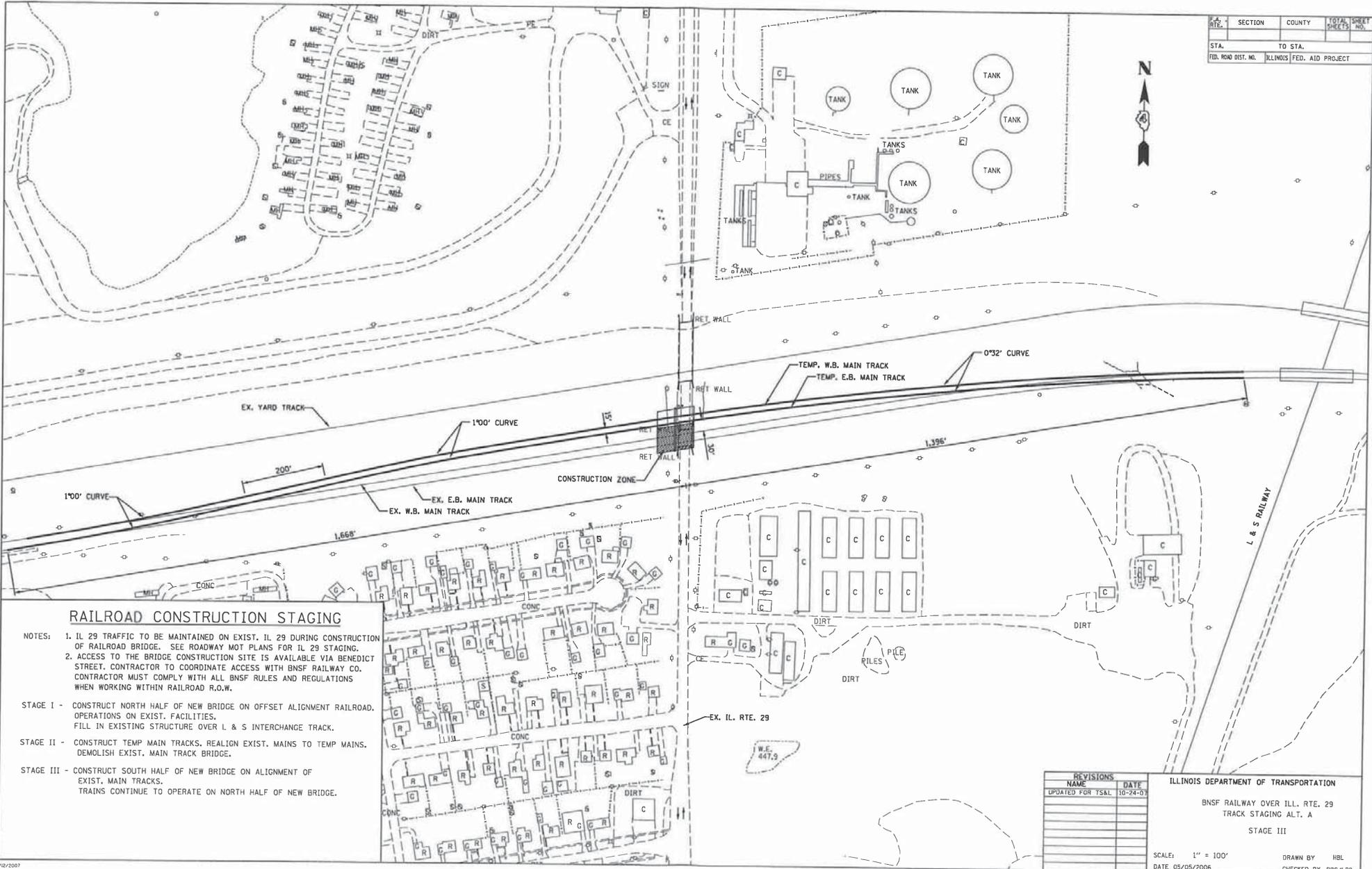


RAILROAD CONSTRUCTION STAGING

- NOTES:
1. IL 29 TRAFFIC TO BE MAINTAINED ON EXIST. IL 29 DURING CONSTRUCTION OF RAILROAD BRIDGE. SEE ROADWAY MOT PLANS FOR IL 29 STAGING.
 2. ACCESS TO THE BRIDGE CONSTRUCTION SITE IS AVAILABLE VIA BENEDICT STREET. CONTRACTOR TO COORDINATE ACCESS WITH BNSF RAILWAY CO. CONTRACTOR MUST COMPLY WITH ALL BNSF RULES AND REGULATIONS WHEN WORKING WITHIN RAILROAD R.O.W.
- STAGE I - CONSTRUCT NORTH HALF OF NEW BRIDGE ON OFFSET ALIGNMENT RAILROAD. OPERATIONS ON EXIST. FACILITIES. FILL IN EXISTING STRUCTURE OVER L & S INTERCHANGE TRACK.
- STAGE II - CONSTRUCT TEMP MAIN TRACKS. REALIGN EXIST. MAINS TO TEMP MAINS. DEMOLISH EXIST. MAIN TRACK BRIDGE.

REVISIONS	
NAME	DATE
UPDATED FOR TSKL	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BNSF RAILWAY OVER ILL. RTE. 29
 TRACK STAGING ALT. A
 STAGE II
 SCALE: 1" = 100'
 DATE 05/05/2006
 DRAWN BY HBL
 CHECKED BY RDC/LRB



SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	



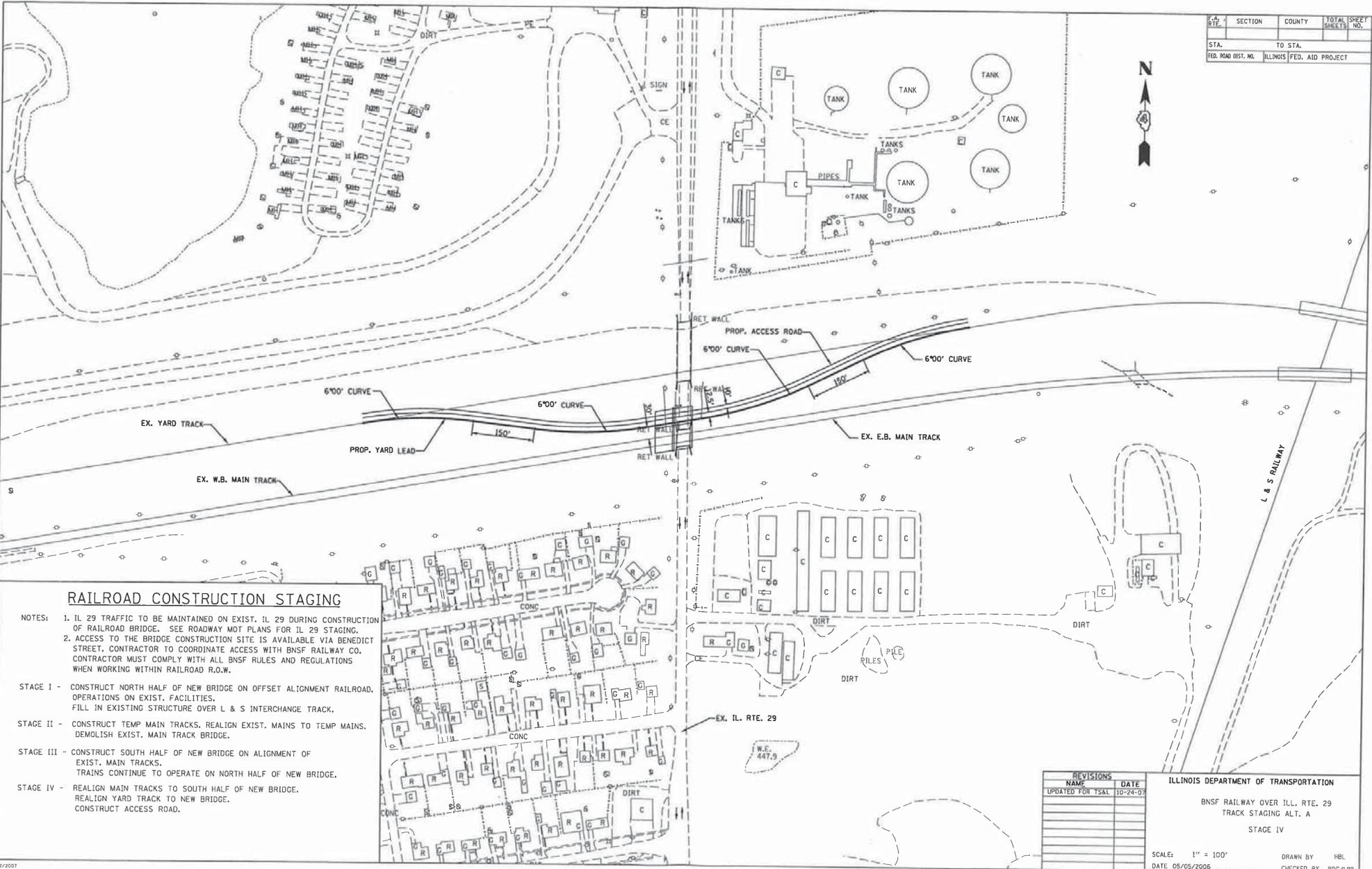
RAILROAD CONSTRUCTION STAGING

- NOTES:
1. IL 29 TRAFFIC TO BE MAINTAINED ON EXIST. IL 29 DURING CONSTRUCTION OF RAILROAD BRIDGE. SEE ROADWAY MOT PLANS FOR IL 29 STAGING.
 2. ACCESS TO THE BRIDGE CONSTRUCTION SITE IS AVAILABLE VIA BENEDICT STREET. CONTRACTOR TO COORDINATE ACCESS WITH BNSF RAILWAY CO. CONTRACTOR MUST COMPLY WITH ALL BNSF RULES AND REGULATIONS WHEN WORKING WITHIN RAILROAD R.O.W.
- STAGE I - CONSTRUCT NORTH HALF OF NEW BRIDGE ON OFFSET ALIGNMENT RAILROAD. OPERATIONS ON EXIST. FACILITIES. FILL IN EXISTING STRUCTURE OVER L & S INTERCHANGE TRACK.
- STAGE II - CONSTRUCT TEMP MAIN TRACKS, REALIGN EXIST. MAINS TO TEMP MAINS. DEMOLISH EXIST. MAIN TRACK BRIDGE.
- STAGE III - CONSTRUCT SOUTH HALF OF NEW BRIDGE ON ALIGNMENT OF EXIST. MAIN TRACKS. TRAINS CONTINUE TO OPERATE ON NORTH HALF OF NEW BRIDGE.

REVISIONS	
NAME	DATE
UPDATED FOR TSAL	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BNSF RAILWAY OVER ILL. RTE. 29
 TRACK STAGING ALT. A
 STAGE III
 SCALE: 1" = 100'
 DATE: 05/05/2006
 DRAWN BY: HBL
 CHECKED BY: RDC/LRS

STATE	SECTION	COUNTY	TOTAL SHEETS
NO.			NO.
STA. TO STA.		ILLINOIS FED. AID PROJECT	
FED. ROAD DIST. NO.			



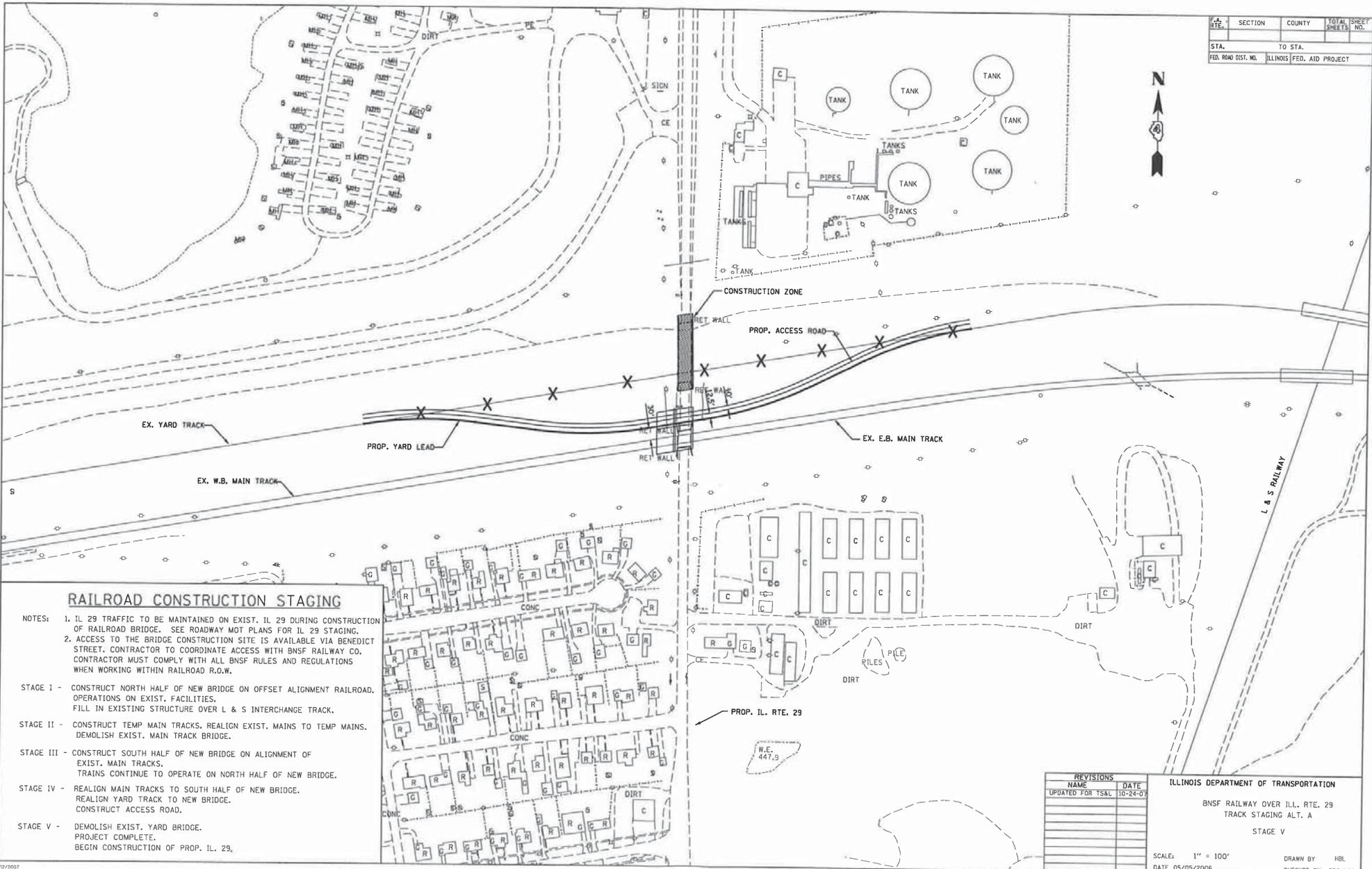
RAILROAD CONSTRUCTION STAGING

- NOTES:
1. IL 29 TRAFFIC TO BE MAINTAINED ON EXIST. IL 29 DURING CONSTRUCTION OF RAILROAD BRIDGE. SEE ROADWAY MOT PLANS FOR IL 29 STAGING.
 2. ACCESS TO THE BRIDGE CONSTRUCTION SITE IS AVAILABLE VIA BENEDICT STREET. CONTRACTOR TO COORDINATE ACCESS WITH BNSF RAILWAY CO. CONTRACTOR MUST COMPLY WITH ALL BNSF RULES AND REGULATIONS WHEN WORKING WITHIN RAILROAD R.O.W.
- STAGE I - CONSTRUCT NORTH HALF OF NEW BRIDGE ON OFFSET ALIGNMENT RAILROAD. OPERATIONS ON EXIST. FACILITIES. FILL IN EXISTING STRUCTURE OVER L & S INTERCHANGE TRACK.
- STAGE II - CONSTRUCT TEMP MAIN TRACKS, REALIGN EXIST. MAINS TO TEMP MAINS. DEMOLISH EXIST. MAIN TRACK BRIDGE.
- STAGE III - CONSTRUCT SOUTH HALF OF NEW BRIDGE ON ALIGNMENT OF EXIST. MAIN TRACKS. TRAINS CONTINUE TO OPERATE ON NORTH HALF OF NEW BRIDGE.
- STAGE IV - REALIGN MAIN TRACKS TO SOUTH HALF OF NEW BRIDGE. REALIGN YARD TRACK TO NEW BRIDGE. CONSTRUCT ACCESS ROAD.

REVISIONS	
NAME	DATE
UPDATED FOR T&S	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BNSF RAILWAY OVER ILL. RTE. 29
 TRACK STAGING ALT. A
 STAGE IV
 SCALE: 1" = 100'
 DATE: 05/05/2006
 DRAWN BY: HBL
 CHECKED BY: ROC/LRB

STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILLINOIS				
STA. TO STA.				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



RAILROAD CONSTRUCTION STAGING

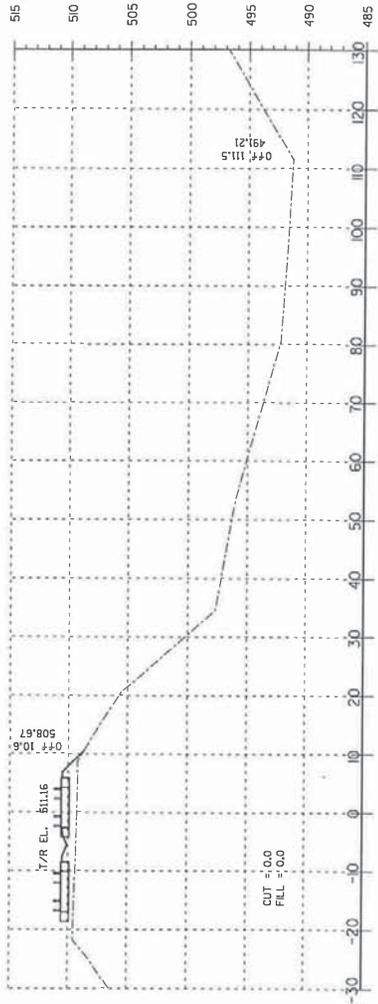
- NOTES:
1. IL 29 TRAFFIC TO BE MAINTAINED ON EXIST. IL 29 DURING CONSTRUCTION OF RAILROAD BRIDGE. SEE ROADWAY MOT PLANS FOR IL 29 STAGING.
 2. ACCESS TO THE BRIDGE CONSTRUCTION SITE IS AVAILABLE VIA BENEDICT STREET. CONTRACTOR TO COORDINATE ACCESS WITH BNSF RAILWAY CO. CONTRACTOR MUST COMPLY WITH ALL BNSF RULES AND REGULATIONS WHEN WORKING WITHIN RAILROAD R.O.W.
- STAGE I - CONSTRUCT NORTH HALF OF NEW BRIDGE ON OFFSET ALIGNMENT RAILROAD. OPERATIONS ON EXIST. FACILITIES. FILL IN EXISTING STRUCTURE OVER L & S INTERCHANGE TRACK.
- STAGE II - CONSTRUCT TEMP MAIN TRACKS. REALIGN EXIST. MAINS TO TEMP MAINS. DEMOLISH EXIST. MAIN TRACK BRIDGE.
- STAGE III - CONSTRUCT SOUTH HALF OF NEW BRIDGE ON ALIGNMENT OF EXIST. MAIN TRACKS. TRAINS CONTINUE TO OPERATE ON NORTH HALF OF NEW BRIDGE.
- STAGE IV - REALIGN MAIN TRACKS TO SOUTH HALF OF NEW BRIDGE. REALIGN YARD TRACK TO NEW BRIDGE. CONSTRUCT ACCESS ROAD.
- STAGE V - DEMOLISH EXIST. YARD BRIDGE. PROJECT COMPLETE. BEGIN CONSTRUCTION OF PROP. IL. 29.

REVISIONS	NAME	DATE
1	UPDATED FOR T&S	10-24-07

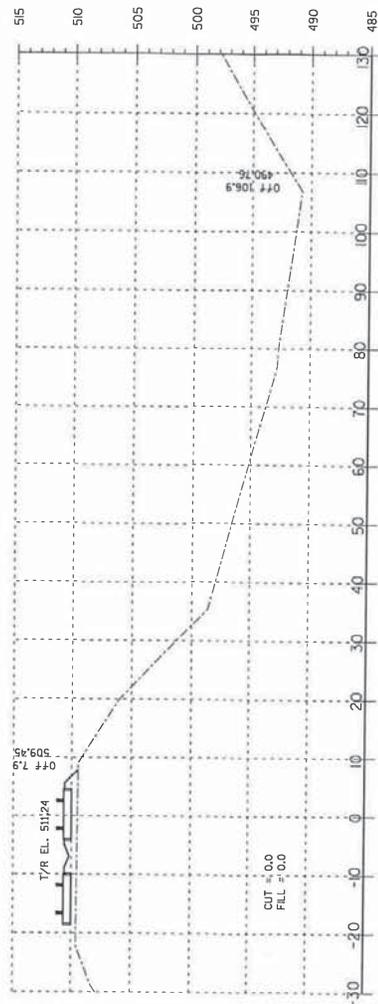
ILLINOIS DEPARTMENT OF TRANSPORTATION
 BNSF RAILWAY OVER ILL. RTE. 29
 TRACK STAGING ALT. A
 STAGE V
 SCALE: 1" = 100'
 DATE: 05/05/2006
 DRAWN BY: HBL
 CHECKED BY: RDC/LRB

A:\work\121201\BNSF_PROD\121201\BNSF1010.dwg

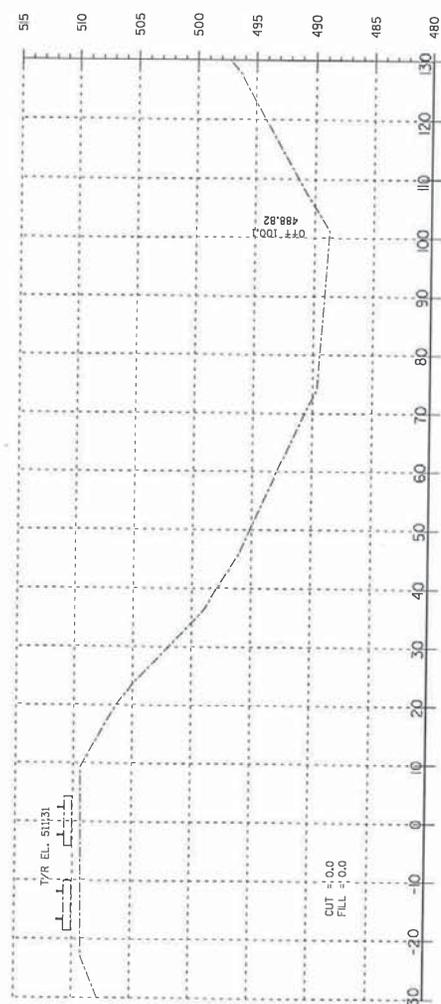
4/15/2007



6833+00



6832+00



6831+16

FILE	SECTION	COUNTY	TOTAL SHEETS
STA. 6831+16		TO STA. 6861+64	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

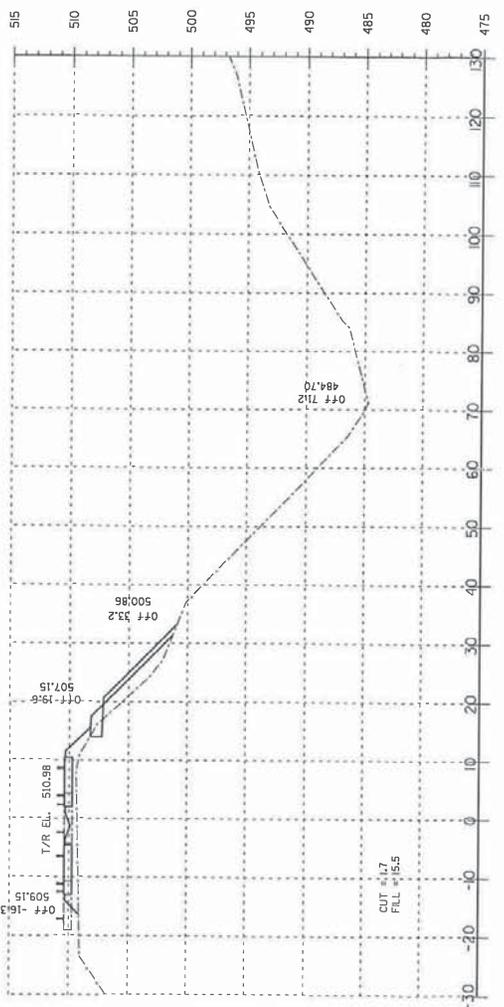
REVISIONS	
NAME	DATE
UPDATED FOR TS&L	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

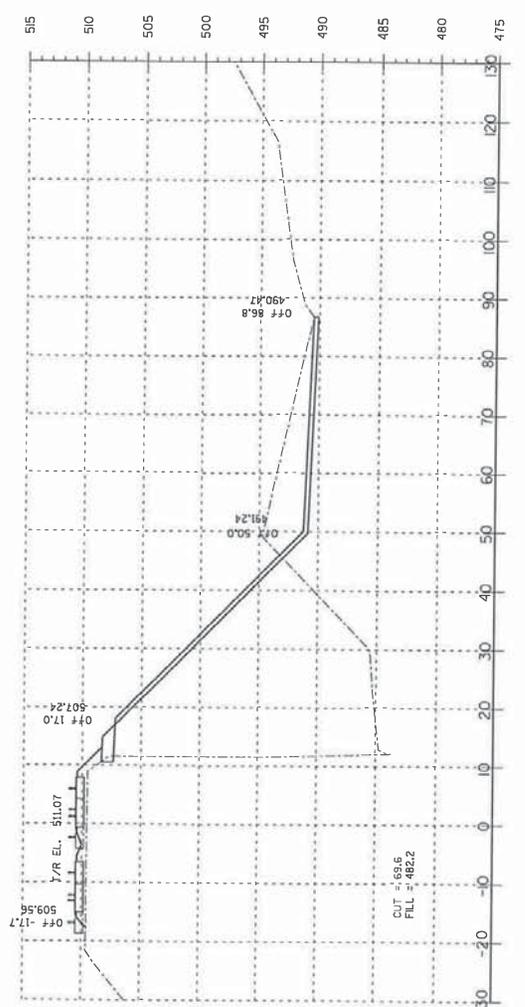
TEMPORARY BNSF MAINLINE
RAILROAD CROSS SECTIONS

SCALE: 1" = 10' H
1" = 50' V
DATE: 05/05/2006

DRAWN BY: AB & CO.
CHECKED BY: MJK



6835+00

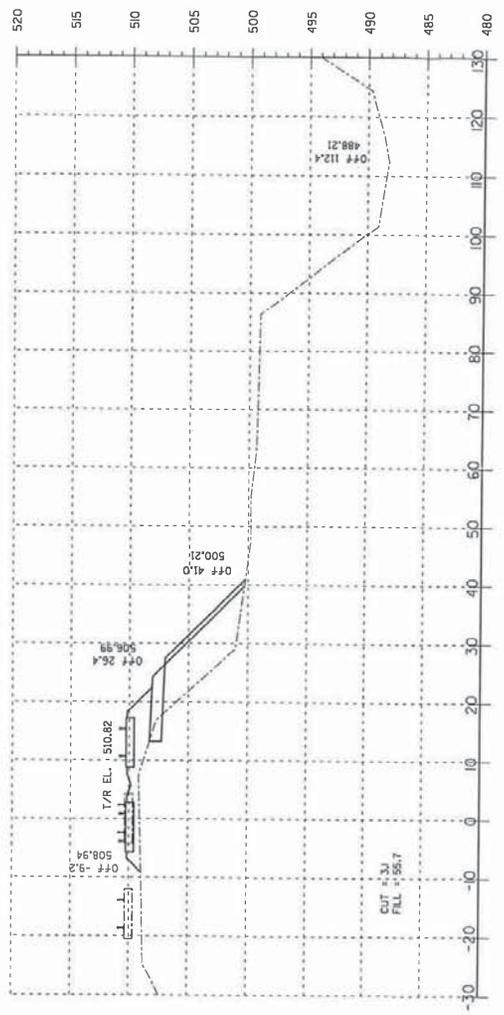


6834+00

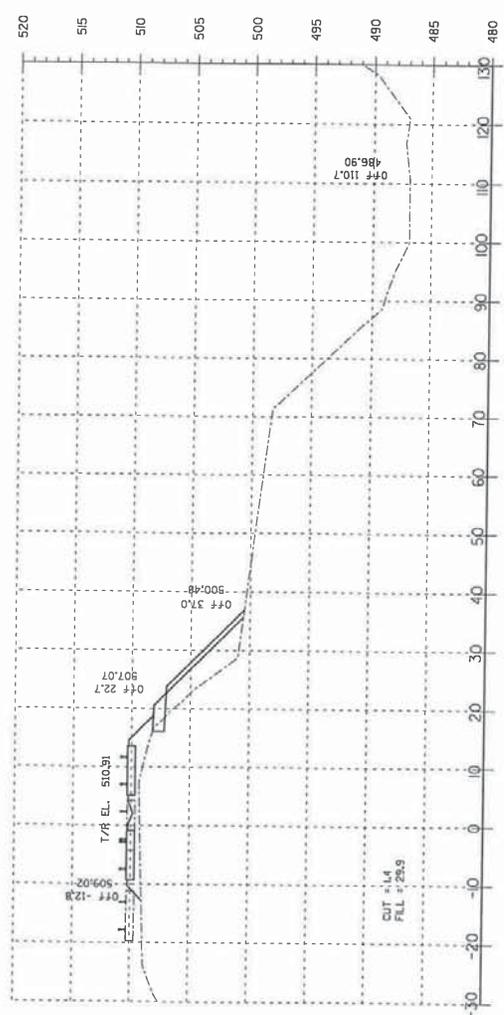
DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	STA. 6831+16	TO STA. 6861+84		
	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		

REVISIONS	
NAME	DATE
UPDATED FOR TS&L	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TEMPORARY HNSP MAINLINE
 RAILROAD CROSS SECTIONS
 SCALE: 1" = 10' H
 1" = 50' V
 DATE 05/05/2006
 DRAWN BY AB & CO.
 CHECKED BY MJK



6837+00



6836+00

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA. 6831+16	TO STA. 6861+64		
ILLINOIS FED. AID PROJECT			

REVISIONS	
NAME	DATE
UPDATED FOR TS&L	10-24-07

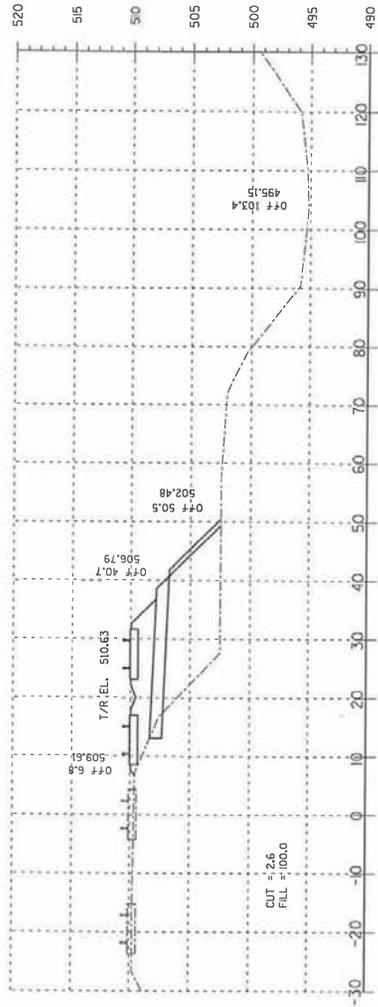
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TEMPORARY BNSF MAINLINE
 RAILROAD CROSS SECTIONS

SCALE: 1" = 10' H
 1" = 50' V
 DATE: 05/09/2006

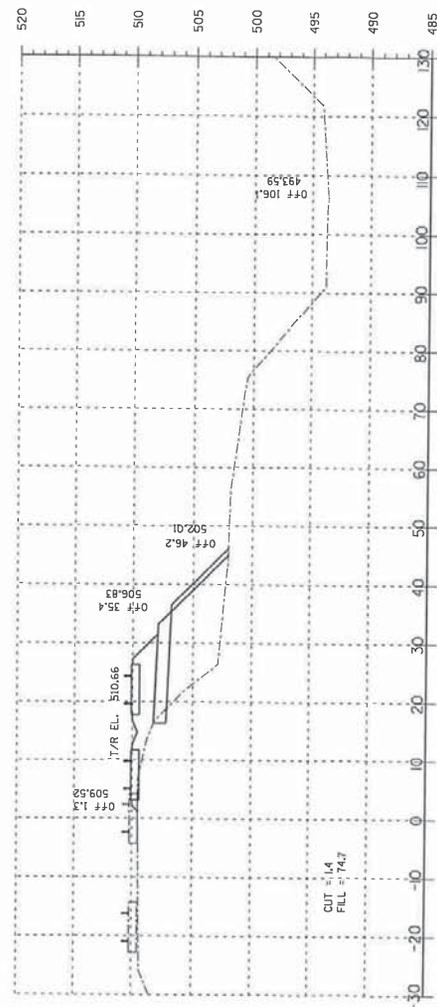
DRAWN BY: AS & CO.
 CHECKED BY: MJK

6/12/2007

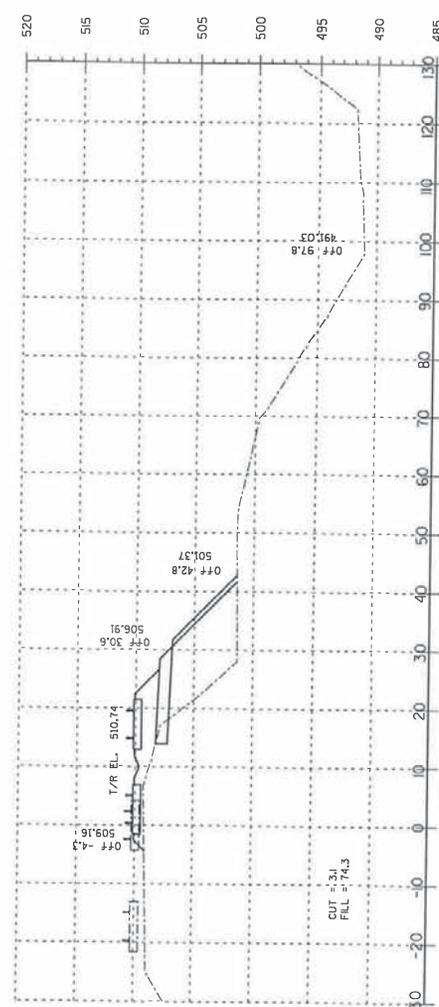
M:\Projects\21250\WSP_Productions\21250\sec01.dwg
1/8/2007



6840+00



6839+00



6838+00

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA. 6831+16	TO STA. 6861+84			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

REVISIONS	
NAME	DATE
UPDATED FOR TS&L	10-24-07

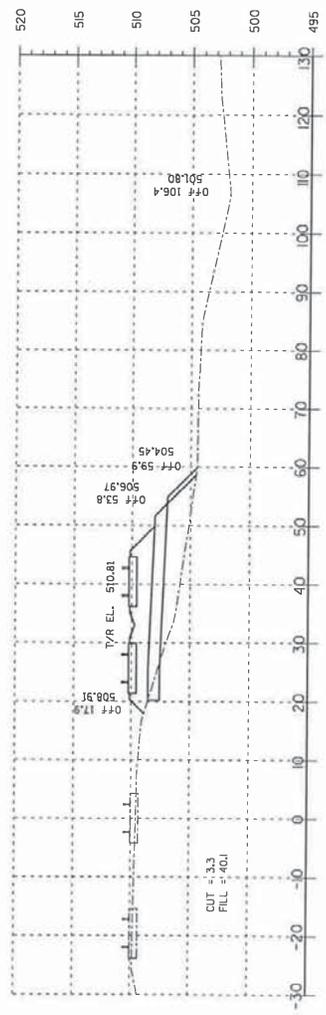
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TEMPORARY BNSF MAINLINE
 RAILROAD CROSS SECTIONS

SCALE: 1" = 10' H
 1" = 5' V
 DATE 05/05/2006

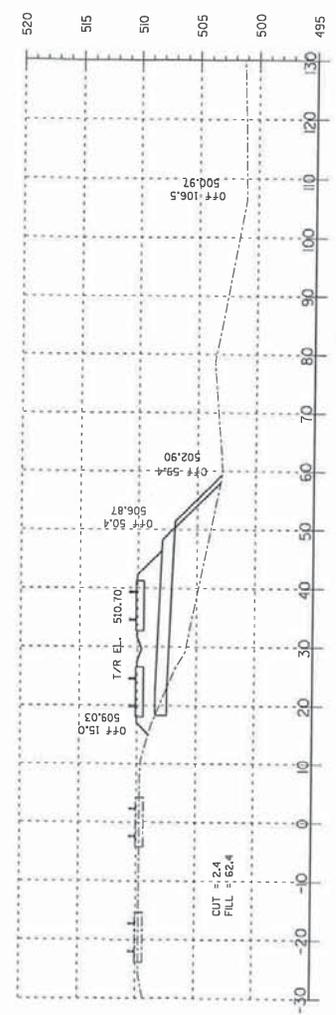
DRAWN BY AB & CO.
 CHECKED BY MJK

M:\Projects\2010\2010-0001 - PULASKI\10276.dwg (10/24/07)

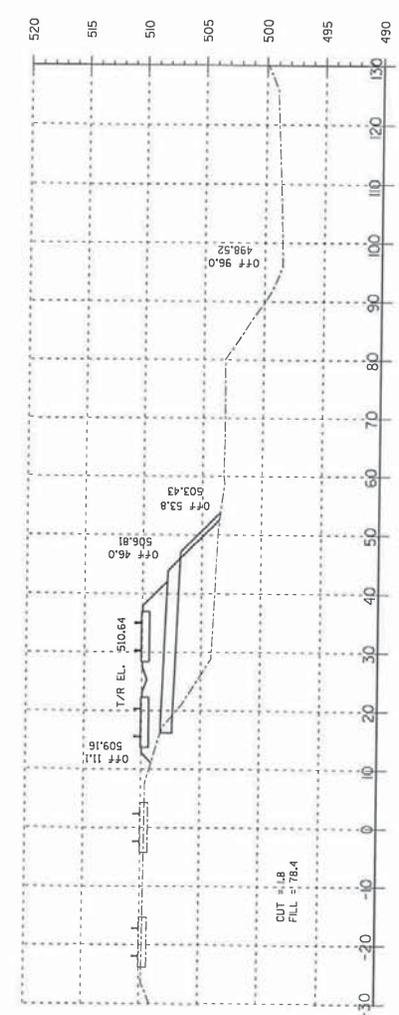
1/12/2007



6843+00



6842+00



6841+00

STA.	SECTION	COUNTY	TOTAL SHEETS
6831+16		TO STA. 6861+84	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

REVISIONS	
NAME	DATE
UPDATED FOR TSAL	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY BNSF MAINLINE
RAILROAD CROSS SECTIONS

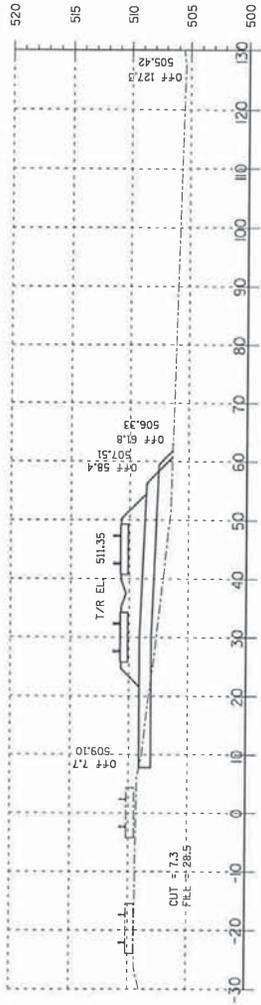
SCALE: 1" = 10' H
1" = 50' V

DATE 05/05/2006

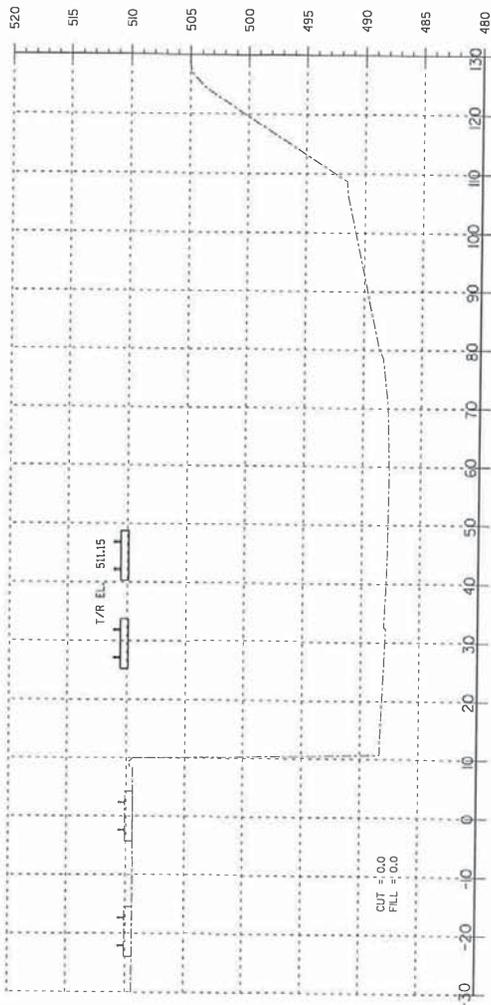
DRAWN BY AB & CO.
CHECKED BY MJK

M:\proj\21720\BNSF_1806\act\1128\crosssection.dgn

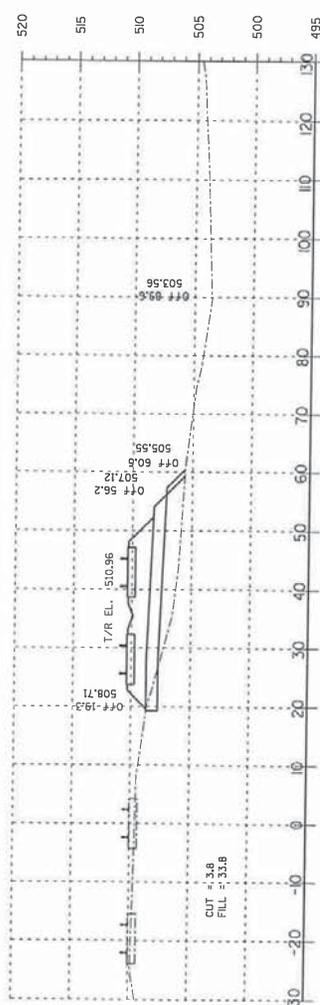
4/12/2007



6846+00



6845+00
(SEE BRIDGE PLANS)



6844+00

P.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	STA. 6831+16	TO STA. 6861+64		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

REVISIONS	
NAME	DATE
UPDATED FOR TSAL	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

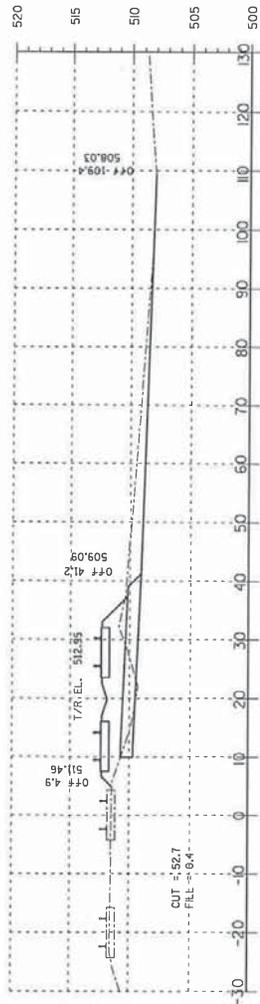
TEMPORARY BNSF MAINLINE
RAILROAD CROSS SECTIONS

SCALE: 1" = 10' H
1" = 5' V
DATE 05/05/2006

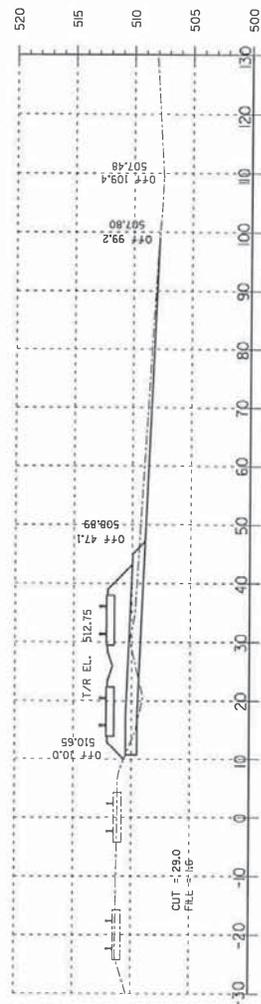
DRAWN BY AB & CO.
CHECKED BY MJK

\\mch\proj\37729\36607 - Project\112\Drawings\Drawings.dwg

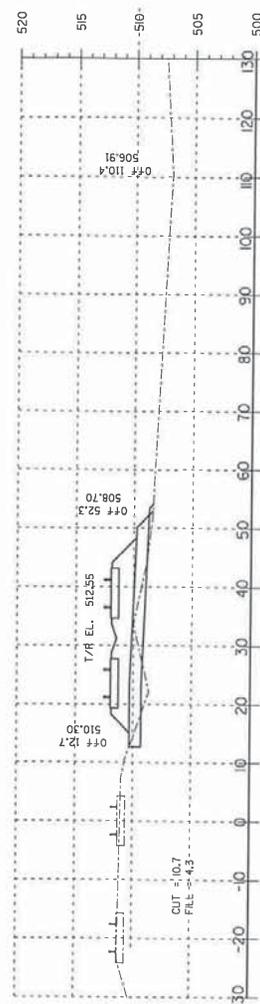
1/12/2007



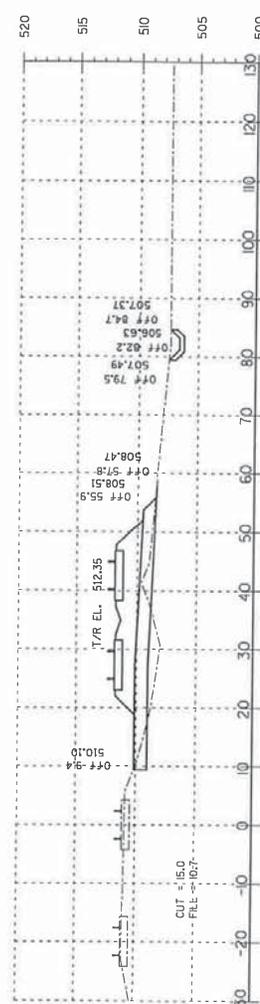
6854+00



6853+00



6852+00



6851+00

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA. 6831+16	TO STA. 6861+84			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

REVISIONS	
NAME	DATE
UPDATED FOR TS&L	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

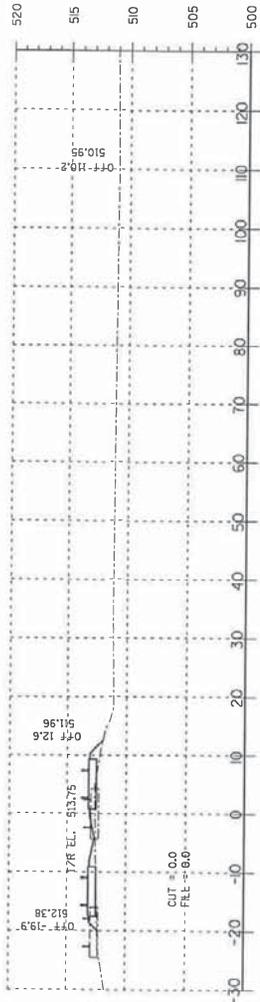
TEMPORARY BNSF MAINLINE
RAILROAD CROSS SECTIONS

SCALE: 1" = 10' H
1" = 5' V
DATE 05/05/2006

DRAWN BY AB & CO.
CHECKED BY MJK

M:\0\12720\12720.DWG 10/24/03 11:29:43 AM

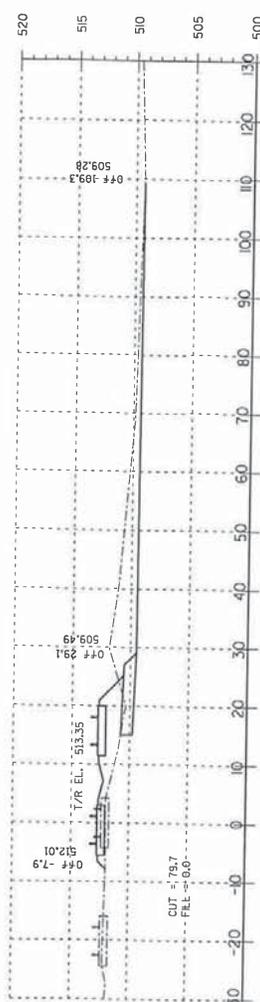
4/12/2001



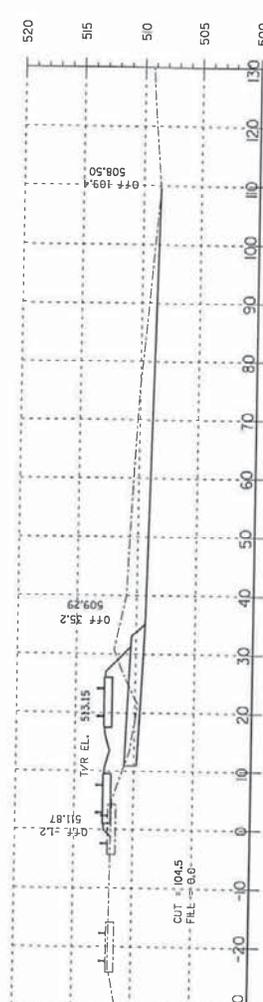
6858+00



6857+00



6856+00



6855+00

P.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6831+16			
	TO STA. 6861+84			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

REVISIONS	
NAME	DATE
UPDATED FOR TS&L	10-24-03

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TEMPORARY BNSF MAINLINE
 RAILROAD CROSS SECTIONS

SCALE: 1" = 10' H
 1" = 5' V
 DATE 05/05/2006

DRAWN BY AB & CO.
 CHECKED BY MJK

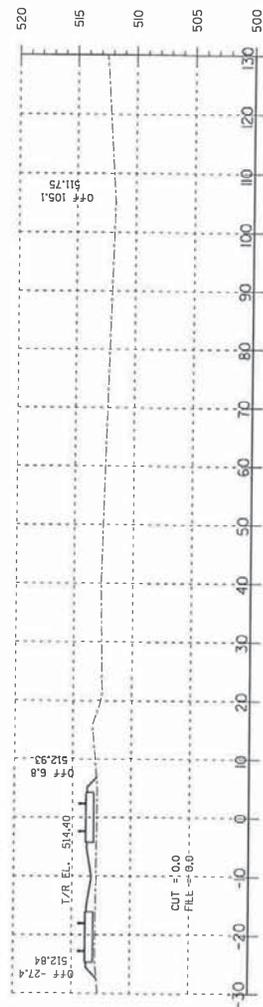
M:\work\1220\1220.dwg Product\1220\mainline.dwg

6/22/2007

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA. 6831+16	TO STA. 6861+84			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



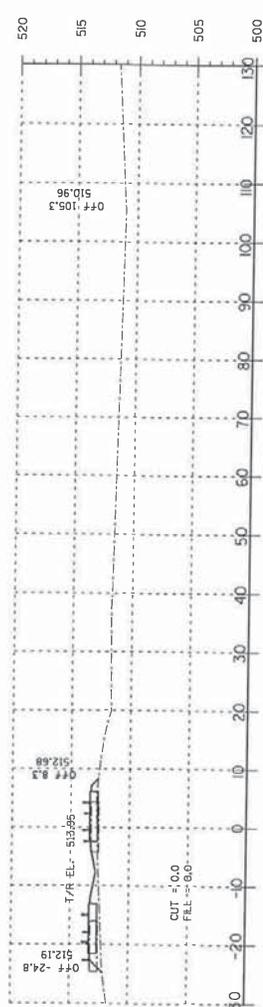
6861+84



6861+00



6860+00



6859+00

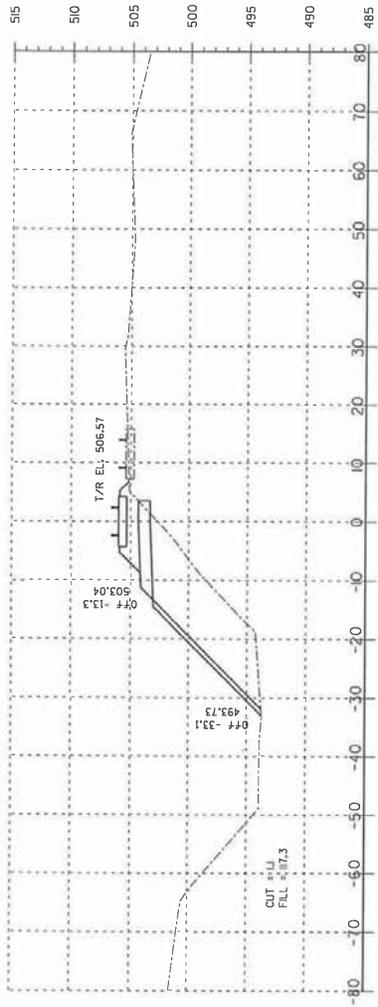
REVISIONS	
NAME	DATE
UPDATED FOR TSAL	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TEMPORARY BNSF MAINLINE
 RAILROAD CROSS SECTIONS

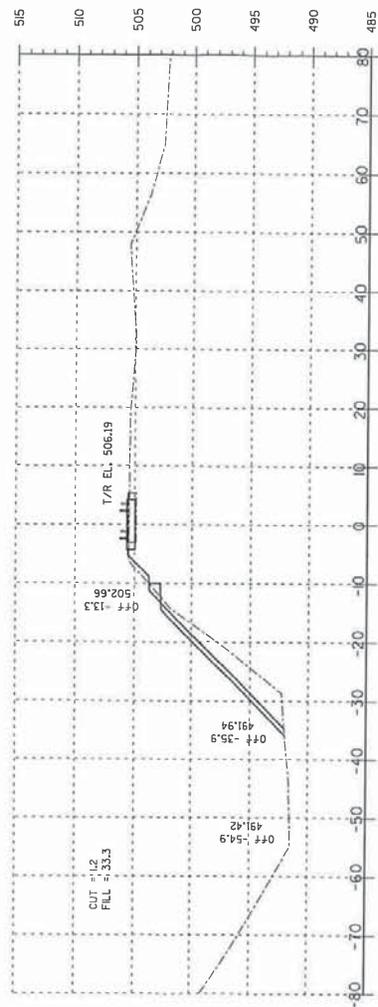
SCALE: 1" = 10' H
 1" = 5' V
 DATE: 08/05/2005

DRAWN BY AB & CO.
 CHECKED BY MJK

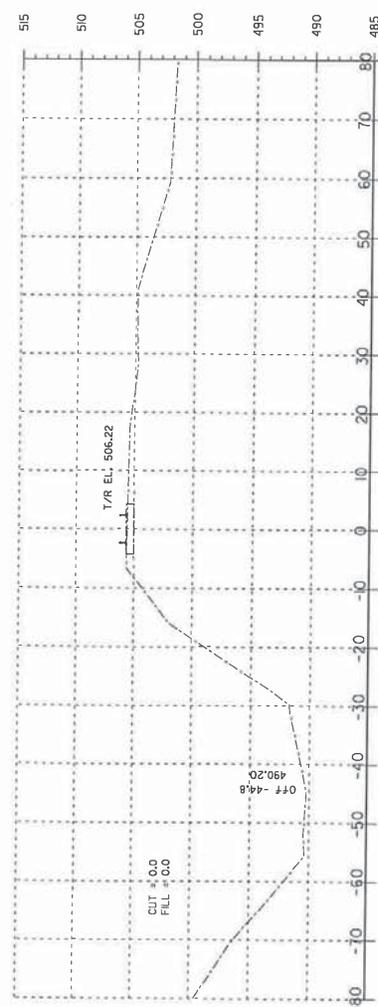
M:\proj\137\137\137\137.dwg 1/25/2006 10:28:00 AM



139+00



138+00



137+52

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

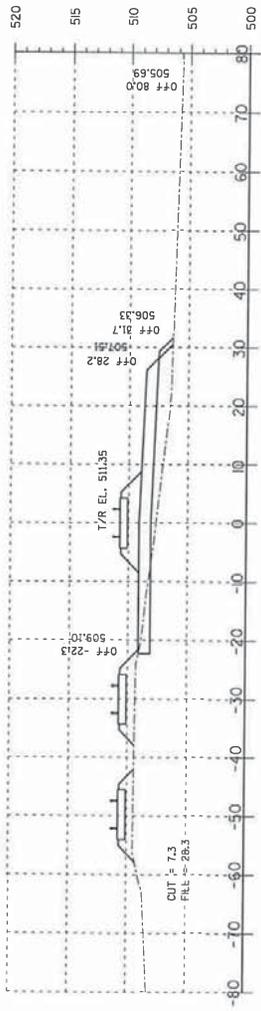
REVISIONS	
NAME	DATE
UPDATED FOR T&L	10-24-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PROPOSED YARD TRACK
 RAILROAD CROSS SECTIONS

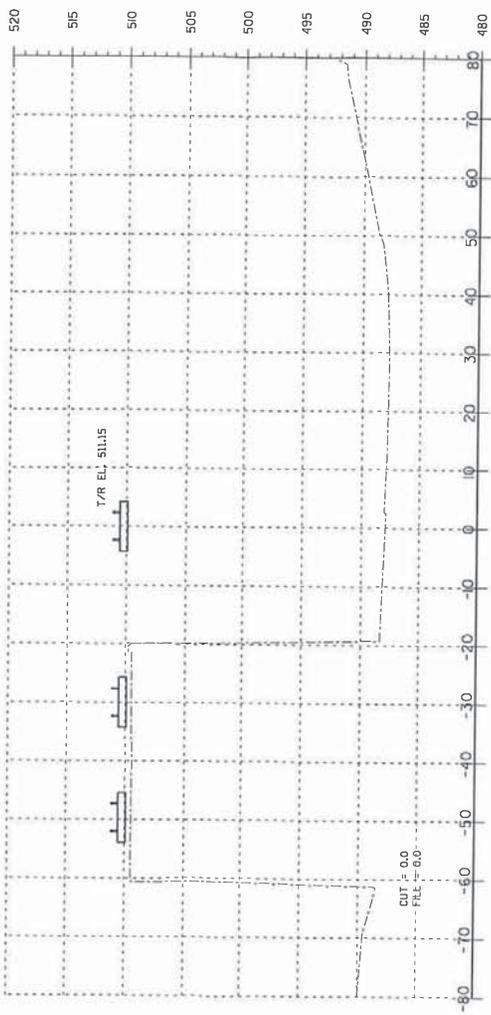
SCALE: 1" = 10' H
 1" = 50' V
 DATE 05/05/2006

DRAWN BY AB & CO.
 CHECKED BY MJK

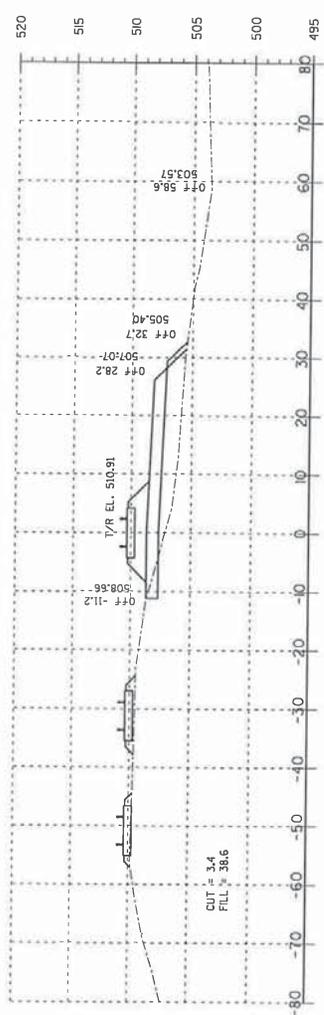
M:\proj\21250_06\F - 10/20/05\1025sheetplan.dwg 1/27/2007



146+00



145+00
(SEE BRIDGE PLANS)



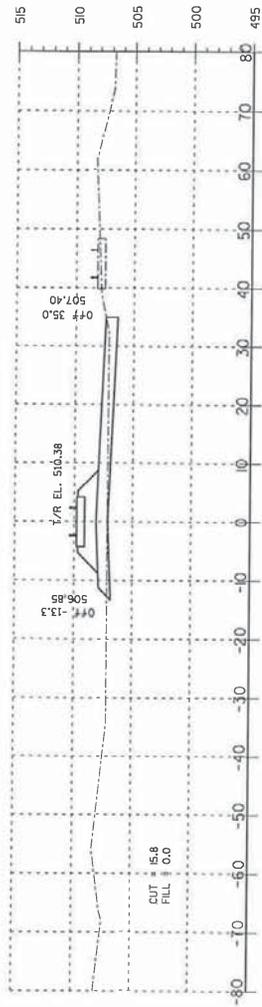
144+00

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
ILLINOIS FED. AID PROJECT				

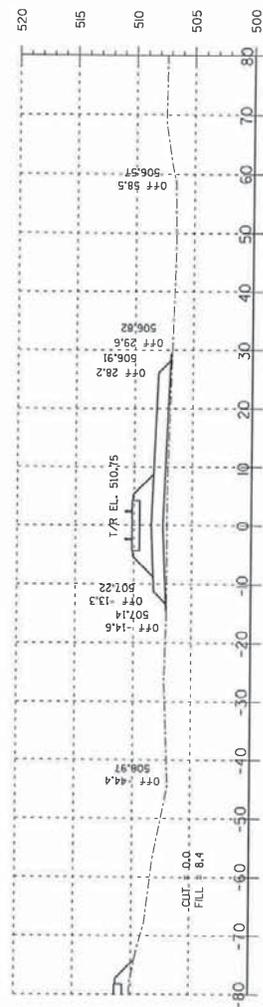
REVISIONS	
NAME	DATE
UPDATED FOR T&A	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
**PROPOSED YARD TRACK
 RAILROAD CROSS SECTIONS**
 SCALE: 1" = 10' H
 1" = 5' V
 DATE 05/05/2006
 DRAWN BY AB & CO.
 CHECKED BY MJK

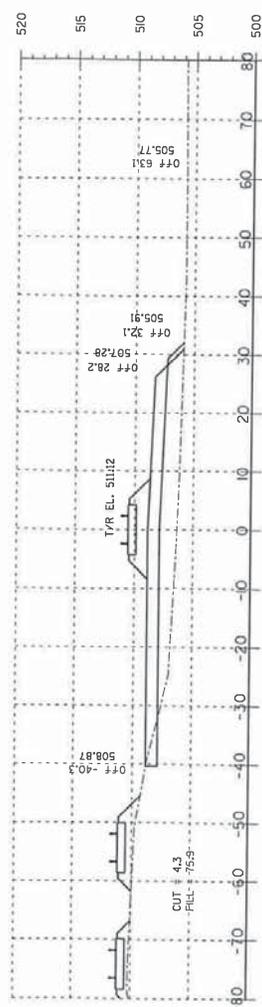
1/27/2007



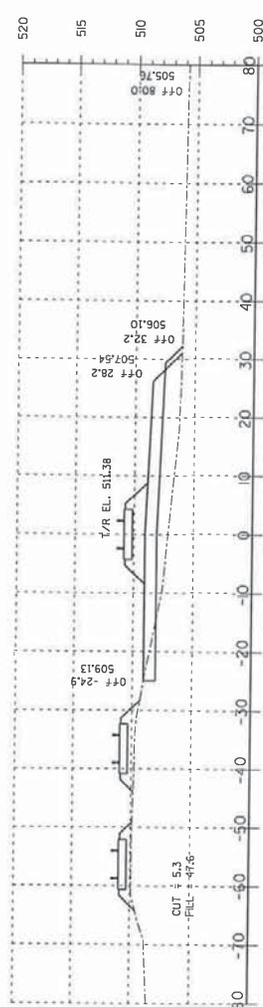
150+00



149+00



148+00



147+00

P.A. SITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

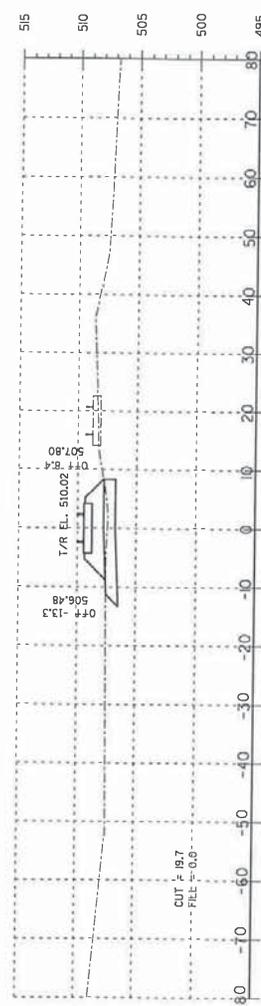
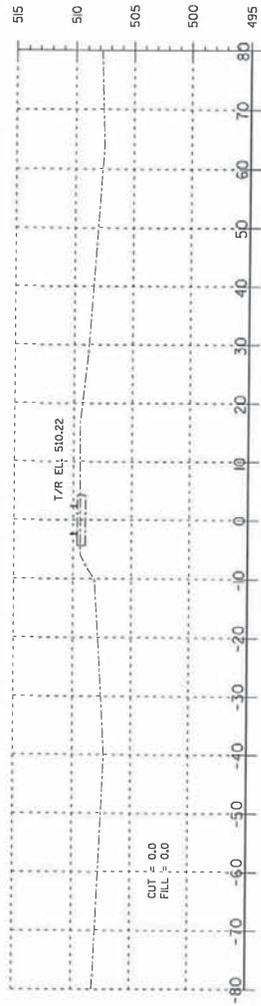
REVISIONS	
NAME	DATE
UPDATED FOR T&A	10-24-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED YARD TRACK
RAILROAD CROSS SECTIONS

SCALE: 1" = 10' H
1" = 20' V
DATE: 05/05/2006

DRAWN BY: AB & CO.
CHECKED BY: MJK



P.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

REVISIONS	
NAME	DATE
UPDATED FOR T&E	10-24-97

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED YARD TRACK
RAILROAD CROSS SECTIONS

SCALE: 1" = 10' H
1" = 50' V

DATE 05/05/2006

DRAWN BY AB & CO.
CHECKED BY MJK

Appendix C

Public Involvement

Meeting Summary -- Public Information Meeting #1	June, 2003
Meeting Summary - Public Information Meeting #2	July, 2004
Minutes of Alternatives Screening Workshop - Post PIM #2	August 11, 2004
Meeting Summary - Public Hearing	June 14/15, 2006
Meeting Summary - Sparland Public Meeting	January 23, 2008

IL Route 29 Study
Illinois Department of Transportation – District 4
Summary of Comments Received
June 2003 Public Information Meetings

The project's first open-house public information meetings were held on June 11th and 12th, 2003 from 4:00 p.m. to 7:00 p.m. The June 11th meeting was held in Henry at Henry-Senachwine High School and was attended by approximately 326 people. Approximately 427 attended the meeting on June 12th at Three Sisters Park in Chillicothe. The purpose of the public information meetings was to provide project-area residents with the general status of the project, obtain public input on the preliminary and reasonable range of alternatives, and offer a forum for people to ask questions.

The same information was presented at both meetings, including alignments proposed to be carried forward for additional study, as well as those proposed for elimination, possible typical sections for the different sections of the corridor, a project newsletter and meeting handout. A table and comment box were available for those who wanted to leave project comments at the meeting. Project staff from IDOT and CH2M HILL were available to answer questions and discuss the project alternatives.

A summary of the written comments received at the June 11th and 12th meetings and after the meetings is found on the following pages. Separate summaries are provided for the comments received at the June 11th and 12th meetings and the comments mailed to IDOT after the meetings. The comments were placed in categories developed by the project team to assist in understanding the public's reaction to the project. Most comments at both meetings concerned either a specific alternative or the project in general. The "Miscellaneous" category was added to accommodate comments that did not fit well in other categories. It should be noted that a number of comments referred to the project as the "Peoria-to-Chicago Highway" and commented from that perspective. Table 1 summarizes written comments received at the June 11th meeting, Table 2 summarizes written comments received at the June 12th meeting, and Table 3 documents comments received by mail after the two public information meetings.

Table 1
IL Route 29 Study
Illinois Department of Transportation - District 4
Summary of Written Comments (Received at Meeting)
June 11th 2003 Public Information Meeting
Henry-Senachwine High School - Henry, Illinois

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
SUPPORTS IL 29 PROJECT IN GENERAL	Need better road between I-180 and Peoria	1
	Would present work opportunities	1
	North of Chillicothe, road is dangerous because of high traffic numbers, speeders, and bad drivers	1
	Need an efficient, safe connection between Route 6 and I-180	1
SUPPORTS ON IL 29 ALTERNATIVE	Existing road needs updating, but unsure of whether the state can afford it	1
	Stated that improving existing IL 29 was Rep. LaHood's vision for this project	1
	If project must be done, support improving existing alignment (would adversely affect local economies if IL 29 were relocated)	1
	Project would provide a boost to the Princeton economy	Princeton Chamber of Commerce
	Would improve economic vitality in project area	3
	Need to improve existing roads rather than building on new alignment	2
	Would save land	1
	Would minimize impact to farmland	3
	Would be less costly than building a new road	4
SUPPORTS BLUFF ALTERNATIVE AT HOPEWELL AND SPARLAND (C-2)	Would be less expensive	2
	Would impact fewer houses than C-3	1
	Would minimize impact to residences	1
	Would minimize impacts to the Illinois River	1
	Would minimize impacts to fragile plant and animal life	1
	The cross-section would be much safer than the compressed 4-lane proposed with C-3	1
	Would result in two roadways, existing and new alignments	1
	Would minimize impact to bluffs	1
Would be easier to maintain	1	
SUPPORTS HENRY BYPASS		
H-3 (NORTHERMOST BYPASS ALIGNMENT)		

Table 1 (continued)
IL Route 29 Study
Summary of Written Comments

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
H-4 (NORTHERN BYPASS ALIGNMENT)	If H-5 is not an option	Henry City Council; City of Henry Mapping Marketing Committee
	Would provide best option for economic stimulation for Henry	Henry Chamber of Commerce
	Would be best for residents of Henry	1
SUPPORTS THROUGH PUTNAM (N-2)	Would be best for residents in Putnam	1
OPPOSES IL 29 PROJECT IN GENERAL	Would favor traveling to Peoria for shopping rather than shopping locally	1
	Would be too costly	1
	Would impact homeowners	1
	Would impact farmers	1
	Would impact wildlife	1
	Do not want to focus tax dollars on this project	1
	If project must be done, choose original plans	1
	As traffic increases, travel becomes more dangerous	1
	Does not believe state has sufficient funds to build project	1
Not convinced a traffic need exists	3	
OPPOSES ON IL 29 ALTERNATIVE	Fears increase in crime	1
	Would cause adverse travel between Lacon and Chillicothe	1
	Would ruin tranquility for those living near existing IL 29	1
	Do not want to experience construction impacts	1
OPPOSES CHILLICOTHE BYPASS		
S-4 (NORTHERNMOST BYPASS ALIGNMENT)	Safety concerns for winter travel (drifting snow, lack of prompt plowing)	1
S-5 (NORTHERN BYPASS ALIGNMENT)		
OPPOSES BLUFF ALIGNMENT AT HOPEWELL AND SPARLAND (C-2)	Safety concerns for winter travel (drifting snow, lack of prompt plowing)	1
	Would impact sensitive bluff areas	1
OPPOSES HENRY BYPASS		
H-3 (NORTHERMOST BYPASS ALIGNMENT)	Safety concerns for winter travel (drifting snow, lack of prompt plowing)	1
	Would impact farm with specialty crop contract (Villiger)	1
	Would impact too many houses	1
	Would cut through multiple irrigation systems	1
	Could impact Illinois Department of Aviation air strip on Villager farm	1

Table 1 (continued)
IL Route 29 Study
Summary of Written Comments

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
H-4 (NORTHERN BYPASS ALIGNMENT)	Would sever multiple farms	1
	Would impact too many houses	2
	Would impact irrigation systems	2
	Would impact farm with specialty crop contract (Villiger)	1
	Would be too close to Henry	1
	May impact fairgrounds	1
	Would increase noise in Henry	1
SUPPORT IMPROVEMENTS ON NEW ALIGNMENT	Off-alignment improvements will serve traffic needs further in the future than improvements on existing 29	1
	Off-alignment alternatives in Henry area will not affect prime farmland. Rather it will affect sandy soils that have to be irrigated	1
OPPOSE IMPROVEMENTS ON NEW ALIGNMENT	Would adversely impact economy in smaller towns along existing IL 29	7
	Unnecessary to impact farmland for another north-south route	1
	Would increase time and distance traveled and gas consumption	1
	Would create adverse travel	1
SUPPORT 4 LANE FREEWAY	Would be enough of an improvement	2
	Would not require 65 mph speed limit	1
OPPOSE LIMITED ACCESS INTERSTATE	Would be too dangerous to have an increase in traffic and speed with how curvy the road is	1
IDENTIFY PROJECT AS "PEORIA-TO-CHICAGO HIGHWAY"	Unnecessary to save time traveling from Peoria to Chicago	1
	Not worth impacting smaller towns along IL 29	Henry Mapping Steering Committee
	Would not be direct enough to be worthwhile	1
	Suggest connecting IL 6 with I-39	2 Marshall-Putnam SWCD; Henry City Council
MISCELLANEOUS	What is the project's purpose and need?	1
	Unclear about land acquisition and restitution process and how it applies to individual land owners	1
	When will improvements be completed?	1
	Where will access points be if limited-access highway is chosen?	1
	Suggest upgrading Western Avenue in Henry to IL 18 status so IL 18 extends to IL 40	3 City of Henry
	Requested access points/interchanges: Senachwine Road, Kentville Road, Western Avenue and Goodrich/Whitefield Road	2
	What will increase in distance traveled and fuel consumption be if new alignment is chosen?	1

Table 1 (continued)
IL Route 29 Study
Summary of Written Comments

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
MISCELLANEOUS (continued)	Confusion over why some alignments were “dropped” and if they could be resurrected or not	1
	Suggests adhering to property lines better	2
	Suggests moving H-3 0.25 mile to the west	1
	Concern about the impact to the bluff areas, wetlands, Miller/ Anderson nature preserve, reduction of prime farmland in Marshall-Putnam County	Marshall-Putnam SWCD
	Suggests providing improved access for semi-trucks to industrial areas north of Henry and upgrading Goodrich/Whitefield Rd. to serve PolyOne Noveon and the new ethanol plant	City of Henry Mapping Marketing Committee
	Suggests providing proper signage to Rt. 18, Marshall-Putnam Fairgrounds and Illinois River	City of Henry Mapping Marketing Committee
	Railroad representatives were not opposed to proposed railroad relocation.	1
	A landowner adjacent to Miller-Anderson Woods said the boundary between his property and Miller-Anderson Woods is incorrect and that this he is currently contesting this with DNR.	1
	Suggests widening IL 29 from I-180 to Kentville Road	1
	More information should have been provided at the meetings	Henry Chamber of Commerce

Table 2
IL Route 29 Study
Illinois Department of Transportation - District 4
Summary of Written Comments (Received at Meeting)
June 12th 2003 Public Information Meeting
Three Sisters Park - Chillicothe, Illinois

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
SUPPORTS IL 29 PROJECT IN GENERAL	Would boost local economies and open up central Illinois to the Chicago market	4
	Need a new highway	1
	Need improvements for economic diversity in central Illinois	1
SUPPORTS ON IL 29 ALTERNATIVE	Would minimize impact to farmland	2 Chillicothe Chamber of Commerce
	Would improve economic vitality of towns on existing IL 29	2 Chillicothe Chamber of Commerce
	Would minimize impact to environment	Chillicothe Chamber of Commerce
	Would minimize impact to residents	2
	Would increase safety of motorists	Chillicothe Chamber of Commerce
	If project must go forward it should be on IL 29	2
	Need to improve existing roads rather than building roads on new alignment	4
	SUPPORTS CHILLICOTHE BYPASS	
S-4 (NORTHERNMOST BYPASS ALIGNMENT)	Would fit Chillicothe's land use plan	1
	Would minimize environmental impacts (Illinois River, wetlands, plant and animals)	1
	Would be less expensive	1
S-5 (NORTHERN BYPASS ALIGNMENT)	Would use open farmland rather than impacting homes	1

Table 2 (continued)
IL Route 29 Study
Summary of Written Comments

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
SUPPORTS BLUFF ALTERNATIVE AT HOPEWELL AND SPARLAND (C-2)	Would be less expensive	1
	Increase in typical-section width would create safer road	1
	Would alleviate rush hour traffic getting out of Hopewell Village	1
	Would be safer for school buses than widening existing IL 29	1
	Would minimize environmental impacts (Illinois River, wetlands, plant and animals)	4
	Would avoid erosion of the hill	1
	Would provide more space and stable ground on which to build	1
	Would not impact the tranquility of Hopewell	1
	Would be safer than C-3	1
	Would be easier to maintain than C-3	1
SUPPORTS HENRY BYPASS		
H-3 (NORTHERNMOST BYPASS ALIGNMENT)	Would minimize environmental impacts (Illinois River, wetlands, plant and animals)	1
	Would be less expensive	1
H-4 (NORTHERN BYPASS ALIGNMENT)		
SUPPORTS THROUGH PUTNAM (N-2)	Would minimize environmental impacts (Illinois River, wetlands, plant and animals)	1
OPPOSES IL 29 PROJECT IN GENERAL	Unnecessary because there are fewer jobs in Peoria, and fewer people traveling there	1
	Would increase noise	7
	Unnecessary	2
	Would increase traffic	2
	Would increase roadkill	1
	Would increase air pollution	2
	IL 29 currently is a very scenic drive; expansion would impair the beauty of the drive	1
	Would impact homes	2
	Would impact farmland	2
	Would have negative environmental impacts	6
	Would impact wildlife	1
	Would be too costly	5
	Funds could better serve schools, etc.	4
	Not convinced there is a traffic need	2
	Is not worth saving a few minutes to travel between south and north	3
	Not convinced of the economic benefits project is intended to spur	3
	Would cause light pollution	1
	Believe it will cause property values to decrease	2
	Not convinced this is the best way to increase safety on the roads	1

Table 2 (continued)
IL Route 29 Study
Summary of Written Comments

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
OPPOSES CHILLICOTHE BYPASS		
S-4 (NORTHERNMOST BYPASS ALIGNMENT)		
S-5 (NORTHERN BYPASS ALIGNMENT)	Would impact city's lift station	1
OPPOSES BLUFF ALIGNMENT AT HOPEWELL AND SPARLAND (C-2)	Would impact farm with CRP land	2
	Would not help local communities	1
	Would impact a large amount of farmland	2
	Would have higher environmental impacts	1
OPPOSES THROUGH SPARLAND (C-3)	Would have higher environmental impacts	1
OPPOSE IMPROVEMENTS ON NEW ALIGNMENT	Would not benefit local economies	3
	Would increase the amount of concrete covering the ground	2
	Would impact farmland	3
SUPPORT IMPROVEMENTS ON NEW ALIGNMENT	Would impact fewer residences	1
	If project must proceed; would impact farmland rather than more fragile environment	1
IDENTIFY PROJECT AS "PEORIA-TO-CHICAGO HIGHWAY"	Would not be cost effective	4
	Would not be the most convenient route for residents along existing IL 29, east Peoria or residents to the east of the river	7
	Suggest building ring road	20
SUPPORT C-1a	Would minimize environmental impacts (Illinois River, wetlands, plant and animals)	1
	Would be less expensive	1
MISCELLANEOUS	Requests the project maps be available online and in library	2
	What assistance is there for Sparland so it doesn't lose revenue to tear down homes and shift the location of the railroad?	Village of Sparland Trustee
	How will alternatives going through Sparland impact floodplain buyout the state required?	Village of Sparland Trustee
	Is there any information on how this type of improvement affects property value?	1
	How does a project like this affect water supplies and the environment?	1

Table 2 (continued)
IL Route 29 Study
Summary of Written Comments

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
MISCELLANEOUS (Continued)	Where will funding come from if the state is in such dire straits?	1 Village of Sparland Trustee
	When will improvements be completed?	Village of Sparland Trustee
	Suggest existing IL 29 could become a scenic route	1
	Suggest upgrading Western Avenue in Henry to IL 18 status so IL 18 extends to IL 40	2
	Confusion over why some alignments were “dropped” and if they could be resurrected or not	1
	Requested access points/interchanges: Truitt Avenue, Krause Road, Old Galena/Cedar Hills Drive; overpass at Cloverdale Road; Marshall County Conservation Area	4 Volunteer steward, Root Cemetery Nature Preserve; Chillicothe Chamber of Commerce; Hallock Township Trustee
	What will alternative alignment be during construction if new alignment is chosen?	1
	Why not locate the project limit on the north side of Chillicothe where IL 29 changes from two-lanes to four-lanes?	2
	Suggestion for Sparland: on existing IL 29, split freeway around IL 29 so that northbound traffic goes on existing IL 29 and southbound traffic travels to the west of Sparland	1
	Suggest restricting access around Rome Road to minimize traffic	1
	Suggest widening and repairing railroad bridge in north Chillicothe	1
	Citizens west of Chillicothe wonder what will happen to Wayne Road (currently serves as convenient access to Chillicothe and for firefighters to get from Rome to Galena Knolls)	2
	Unclear about land acquisition and restitution process and how it applies to individual land owners	1
	Suggest that the ring road also be built	1 Chillicothe Chamber of Commerce
	Rather than a build alternative, put up signs that say something like “Slow traffic to the right” to decrease the number of rear-end crashes	1
Suggest using original Rt. 6 alignment	1	
Galena Knolls residents would experience increased noise	2	

Table 2 (continued)
IL Route 29 Study
Summary of Written Comments

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
MISCELLANEOUS (Continued)	Suggest flattening southernmost section of the alignment from Cedar Hills/Galena intersection to Wayne Road/Rome Road intersection	1
	Suggest either moving alignment further away from Galena Knolls or putting up noise barrier	1
	Will project substantially lower real estate values for Galena Knolls residents?	1
	Concern about the impact to the environment and fish and wildlife areas	1
	Old Galena Road and Cedar Hills intersection is ridiculous	1
	Suggest project should improve Crow Creek which has experienced serious sedimentation and slippage	1
	Would the intersection of Thenius Road and IL 29 remain open?	1
	All recent floodplain buyouts in Sparland left the community rather than relocating in the area. Concerned that displacements caused by C-3 would have the same result. Identified C-3A as a better alternative because it would not result in residential displacements as C-3.	2
	Has any study been done on environmental effects and what should be done to minimize/mitigate impact?	1
	Would citizens be able to vote on the project recommendations?	1

Table 3
IL Route 29 Study
Illinois Department of Transportation - District 4
Summary of Comments Received after the June 11th and 12th Meetings

Citizens were offered a period of 10 days after the public information meetings to send in their comments to the Illinois Department of Transportation.

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
SUPPORTS IL 29 PROJECT IN GENERAL	Would spur growth in Chillicothe	1
	Would benefit local economies between Rt. 6 and I-180	2
	Provide easier access to Peoria and Chicago	1
	Traffic and accidents have increased dramatically	1
	Long overdue	2
	Would be consistent with Chillicothe's Comprehensive Plan	1
SUPPORTS ON IL 29 ALTERNATIVE	Under the impression that this project replaces alignments proposed in HOI study with improvements to existing IL 29	2
	Would be quicker than alternative route	Bureau Co. Board
	Would require trucks to use less fuel than on alternative route	1
	Would be less expensive than alternative route	2
	Believes that is what LaHood pledged to do by proposing this project	Marshall Co. Board
	Should just increase lanes to 4 where they currently are not	1
	Would provide safest alternative	2
	Would improve truck access from IL 17 to I-39	1
	Would improve local economies	4
	Would comply with Illinois Farm Bureau policy of improving existing roadways	Peoria Co. Farm Bureau
	Would impact less homes	2
	Would impact less farmland than alternative route	8
If the project proceeds, supports improving existing IL 29	3	
SUPPORTS CHILLICOTHE BYPASS	Railroad viaduct would be avoided	1
S-4 (NORTHERNMOST BYPASS ALIGNMENT)	Would allow residential growth to get close to the new roadway	1
	Would devalue fewer properties	1
	Would be easier, faster and safer to construct and therefore more economical	1
S-5 (NORTHERN BYPASS ALIGNMENT)		

Table 3 (continued)
IL Route 29 Study
Summary of Comments Received after the June 11th and 12th Meetings

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
SUPPORTS BLUFF ALTERNATIVE AT HOPEWELL AND SPARLAND (C-2)	Would avoid engineering issues associated with expanding through the narrow existing corridor	1
	Hopewell would not experience an increase in noise levels	1
	Would be easier, faster and safer to construct and therefore more economical	1
	Would alleviate rush hour traffic getting out of Hopewell Village	1
	Would minimize environmental impact (Illinois River, wetlands, plant and animals)	1
	Would avoid erosion of the hill	1
	Would cost less than railroad relocation	1
	Would be safer than on existing alignment through Sparland	1
	Would devalue fewer properties	1
	Would not require relocation of railroad causing impact to post office and other local businesses	1
SUPPORTS THROUGH SPARLAND	Would improve an existing road	1
	Would avoid farmland	Marshall Co. Board
	Would not require the burning of excess fuel to get on top of the bluff	1
	Would not create a need for a truck passing lane	1
	Would improve Rt. 17	Marshall Co. Board
	Would have positive economic effect on Sparland and Lacon	Marshall Co. Board
C-3	Would have positive effect on area	3
	Would alleviate the need of trucks slowing down from Chillicothe to Sparland and Lacon	Director, Peoria Co. Farm Bureau
	Marshall Co. Road & Bridge Committee passed resolution in support of C-3 because it would preserve prime farmland and would be the best chance for economic development in Henry	Marshall Co. Highway
C-3A (RR RELOCATION AT SPARLAND)	Would improve safety by eliminating stop sign and truck hazards	1
	Would have least damage to town (no commercial district of value)	1
SUPPORT HENRY BYPASS		
H-3 (NORTHERNMOST BYPASS ALIGNMENT)	Would be located close enough to Henry to attract businesses	City of Henry Deputy Clerk
	Would be easier, faster and safer to construct and therefore more economical	1
	Would devalue fewer properties	1

Table 3 (continued)
IL Route 29 Study
Summary of Comments Received after the June 11th and 12th Meetings

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
H-4 (NORTHERN BYPASS ALIGNMENT)	Would be closer to Henry	1 Marshall Co. President
	If alignment cannot stay on existing IL 29 through Henry, supports H-4	1
	Marshall Co. Road & Bridge Committee passed resolution in support of H-4 because it would preserve prime farmland and would be the best chance for economic development in Henry	Marshall County Highway
OPPOSES IL 29 PROJECT IN GENERAL	Would impact wetlands	3 Marshall- Putnam Soil and Water Conservation District
	Would impact timber areas	2
	Unnecessary	7 Director, Peoria Co. Farm Bureau
	Would impact wildlife areas	4
	Would impact Miller-Anderson Woods State Nature Preserve, Senachwine Wetlands, Marshall County Fish and Wildlife Area, Peoria Park District's Audubon Preserve, Singing Woods Preserve, and Camp Wakonda	1 Marshall- Putnam Soil and Water Conservation District
	Would cause erosion	1
	Would increase traffic and safety issues	1
	Would impact farmland	7 Marshall- Putnam Soil and Water Conservation District
	Would increase noise experienced by residents	1
	Residents would be inconvenienced during construction	1
	Would cause deterioration in peacefulness of corridor and create urban sprawl	4
	Not convinced there is a traffic need	4 Director, Peoria Co. Farm Bureau
	Would be too costly for little or no benefit	10
	Money could be better spent elsewhere	2
Suggest building the ring road instead	10	

Table 3 (continued)
IL Route 29 Study
Summary of Comments Received after the June 11th and 12th Meetings

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
OPPOSES IL 29 PROJECT IN GENERAL (Continued)	Would increase taxes	1
	Would impact landowners	2
	Suggest creating periodic passing zones	1
	Would impact sensitive bluff area, Prime Farmland, Agricultural Protection Areas, Conservation Reserve Program, and Conservation Reserve Enhancement Program	Marshall-Putnam Soil and Water Conservation District
	For a scenic route, people can drive Rt. 26 on east side of Illinois River	1
	Not convinced of economic benefits	7
OPPOSES ON IL 29 ALTERNATIVE	Would not provide the room for necessary improvements that would make project worthwhile (would like new roadway to be an interstate)	1
	Would impact Illinois River Valley	1
OPPOSES CHILLICOTHE BYPASS	Would impact farmland	1
	Already have four-lanes on existing IL 29	2
	Would increase noise	3
	Would not give Chillicothe an economic boost	2
	Would impact homes in Wayne-Hidden Valley Neighborhood	1
	Would impact newly built residences	1
OPPOSES THROUGH CHILLICOTHE ALTERNATIVE	Would reduce property value	2
	Would sever community and would make it much more difficult for residents to get from one side of the road to the other	Midland Community Unit School District #7 (in two different submitted letters)
	Would impact businesses and residences	1

Table 3 (continued)
IL Route 29 Study
Summary of Comments Received after the June 11th and 12th Meetings

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
OPPOSES BLUFF ALIGNMENT AT HOPEWELL AND SPARLAND (C-2)	Would run through Midland School District and would diminish tax revenue base	1
	Would adversely affect economies of Sparland and Lacon	4 Marshall Co. President
	Would increase the time it would take for Sparland and Lacon residents to get to Peoria	1
	Would cause sight and sound pollution	1
	Would cause adverse travel for emergency vehicles	1
	Would impact the environment	3
	Would impact farmland	11 Marshall Co. President
	Would close secondary roadways and increase traffic on Rt. 17	1
	Would decrease property value	2
	Would impact Steuben Township tax revenue	1
	Would not be utilized by those living in Lacon	1
Would require upkeep of an additional roadway (existing IL 29 and the new one)	3	
OPPOSES THROUGH SPARLAND (C-3)	Does not want higher speed traffic going through town	1
OPPOSES HENRY BYPASS	Would adversely impact Henry's economy	2
H-3 (NORTHERNMOST BYPASS ALIGNMENT)	Would impact Villiger family farm which has irrigation wells and 2 center pivot irrigation systems, grows specialty crops	2
H-4 (NORTHERN BYPASS ALIGNMENT)	Would impact Villiger family farm which has irrigation wells and 2 center pivot irrigation systems, grows specialty crops	2
OPPOSES PUTNAM BYPASS (N-4)	No need to cross railroad twice; there would not be much disruption to Putnam if IL 29 stays on existing alignment	1
OPPOSES RR RELOCATION AT MILLER-ANDERSON	Would require fill and is too costly	1

Table 3 (continued)
IL Route 29 Study
Summary of Comments Received after the June 11th and 12th Meetings

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
OPPOSE IMPROVEMENTS ON NEW ALIGNMENT	Would be too costly	1
	Would impact farmland	2
	Would increase noise	1
	Would introduce drainage problems	1
	Not convinced of the economic benefits of a new highway	1
	Would have environmental impacts	1
	Would impact homes	1
	Believes there must be some redeeming quality to existing IL 29 if it was turned into a state route and a railroad was elected to be built adjacent to it	1
	Would not conserve fuel	1
	Would adversely impact local economies	1
IDENTIFY PROJECT AS "PEORIA-TO-CHICAGO HIGHWAY"	Believe a ring road over the river near Mossville would benefit the surrounding communities more.	13
	Unnecessary	3
	Money would be better served elsewhere	1
	Would impact homeowners	3
	Would be too costly	3
	Would increase noise	1
	Would impact wildlife habitat	3
	Would increase air pollution	1
	Would probably impact archaeological sites	1
	Would introduce erosion problems	1
	Would decrease beauty of the drive	1
	Not convinced of the economic benefits of a new highway	1
	Would not decrease travel time	7
Would impact farmland	6	
MISCELLANEOUS	If Cloverdale Road is closed between Old Galena Rd. and Chillicothe, people in Woodland Heights, Hallock Hallow, Mangold Rd. area would experience adverse travel	1
	Prefers a freeway over a thoroughfare because it would minimize access points thereby making it safer to travel on and across IL 29	Illinois Valley Central School District Superintendent
	Interested in drainage plans for IL 29	1
	How can state pay for this if it is having financial difficulties?	1
	Supports improving Rt. 17	2 Marshall Co. Highway

Table 3 (continued)
IL Route 29 Study
Summary of Comments Received after the June 11th and 12th Meetings

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
MISCELLANEOUS (Continued)	Suggest upgrading Western Avenue in Henry to IL 18 status so IL 18 extends to IL 40	4 Marshall Co. Board & President; Marshall Co. Highway
	How much volume is required to justify an overpass?	1
	Request intersection at Cloverdale Road	1
	What is considered an acceptable increase in emergency vehicle response time caused by road closure?	1
	What provisions will be made to accommodate school bus routes?	1
	Concerned about reliability of snow removal	1
	What is projected cost of new highway?	1
	What will the increase in taxes be for this new highway?	1
	What is projected annual cost to upkeep new highway?	1
	Unclear about land acquisition and restitution process and how it applies to individual land owners	1
	Requests clarification of the use of the word "dropped" when referring to alignment alternatives	Wayne-Hidden Valley Neighbors
	Requests hydraulic surveys and other drainage items for when/if railroad would need to be track reconstruction	Iowa Interstate Railroad & Lincoln & Southern Railroad Company
	Interested in noise abatement possibilities	1
In northern half, suggests going west of all proposed alternatives from I-180 to Camp Grove Rd. - would be least costly to construct	Senachwine Club	

Table 4
IL Route 29 Study
Illinois Department of Transportation - District 4
Summary of All Comments Received

The following table summarizes all of the comments submitted at the public information meetings and sent to the Illinois Department of Transportation.

PREFERENCE	HENRY MEETING	CHILlicoTHE MEETING	COMMENTS MAILED IN AFTER MEETINGS	GRAND TOTAL
SUPPORTS IL 29 PROJECT IN GENERAL	4	6	7	17
SUPPORTS ON IL 29 ALTERNATIVE	17 (Princeton Chamber of Commerce)	13 (Chillicothe Chamber of Commerce)	27 (Bureau County Board; Marshall County Board; Peoria County Board)	57 (Bureau County Board; Marshall County Board; Peoria County Board, Chillicothe Chamber of Commerce, Princeton Chamber of Commerce)
SUPPORTS CHILlicoTHE BYPASS	No comment	No comment	1	1
S-4 (NORTHERNMOST BYPASS ALIGNMENT)	No comment	3	3	6
S-5 (NORTHERN BYPASS ALIGNMENT)	No comment	1	No comment	1
SUPPORTS BLUFF ALTERNATIVE AT HOPEWELL AND SPARLAND (C-2)	10	13	10	33
SUPPORTS THROUGH SPARLAND	No comment	No comment	4 (Marshall County Board)	4 (Marshall County Board)
C-3	No comment	No comment	5 (Director, Peoria County Farm Bureau; Marshall County Highway)	5 (Director, Peoria County Farm Bureau; Marshall County Highway)
C-3A (RR RELOCATION AT SPARLAND)	No comment	No comment	2	2
SUPPORTS HENRY BYPASS	No comment	No comment	No comment	0
H-3 (NORTHERNMOST BYPASS ALIGNMENT)	No comment	2	3 (Henry Deputy Clerk)	5 (Henry Deputy Clerk)

Table 4 (continued)
IL Route 29 Study
Summary of All Comments Received

PREFERENCE	HENRY MEETING	CHILLICOTHE MEETING	COMMENTS MAILED IN AFTER MEETINGS	GRAND TOTAL
H-4 (NORTHERN BYPASS ALIGNMENT)	4 (Henry City Council; Henry Mapping Steering Committee; Henry Chamber of Commerce)	No comment	4 (Marshall County President; Marshall County Highway)	8 (Henry City Council; Henry Mapping Steering Committee; Henry Chamber of Commerce; Marshall County President; Marshall County Highway)
SUPPORTS THROUGH PUTNAM (N-2)	1	1	No comment	2
OPPOSES IL 29 PROJECT IN GENERAL	12	48	67 (Directory, Peoria County Farm Bureau)	127 (Directory, Peoria County Farm Bureau)
OPPOSES ON IL 29 ALTERNATIVE	4	No comment	1	5
OPPOSES CHILLICOTHE BYPASS	No comment	No comment	10	10
S-4 (NORTHERNMOST BYPASS ALIGNMENT)	1	No comment	No comment	1
S-5 (NORTHERN BYPASS ALIGNMENT)	No comment	1	No comment	1
OPPOSES THROUGH CHILLICOTHE ALTERNATIVE	No comment	No comment	2	2
OPPOSES BLUFF ALIGNMENT AT HOPEWELL AND SPARLAND (C-2)	2	6	31 (Marshall County President)	39 (Marshall County President)
OPPOSES THROUGH SPARLAND (C-3)	No comment	1	1	2
OPPOSES HENRY BYPASS	No comment	No comment	2	2
H-3 (NORTHERNMOST BYPASS ALIGNMENT)	5	No comment	2	7
H-4 (NORTHERN BYPASS ALIGNMENT)	9	No comment	2	11
OPPOSES PUTNAM BYPASS (N-4)	No comment	No comment	1	1
OPPOSES RR RELOCATION AT MILLER-ANDERSON	No comment	No comment	1	1
SUPPORT IMPROVEMENTS ON NEW ALIGNMENT	2	2	No comment	4

Table 4 (continued)
IL Route 29 Study
Summary of All Comments Received

PREFERENCE	HENRY MEETING	CHILLICOTHE MEETING	COMMENTS MAILED IN AFTER MEETINGS	GRAND TOTAL
OPPOSE IMPROVEMENTS ON NEW ALIGNMENT	10	8	11	29
SUPPORT 4-LANE FREEWAY	3	No comment	No comment	3
OPPOSE LIMITED ACCESS INTERSTATE	1	No comment	No comment	1
IDENTIFY PROJECT AS "PEORIA-TO-CHICAGO HIGHWAY"	7 (Henry Mapping Steering Committee; Marshall-Putnam SWCD; Henry City Council)	31	33	71 (Henry Mapping Steering Committee; Marshall-Putnam SWCD; Henry City Council)
SUPPORTS C-1a	No comment	2	No comment	2
MISCELLANEOUS	21 City of Henry; Marshall-Putnam SWCD; Henry Mapping Steering Committee; Henry Chamber of Commerce)	42 (Village of Sparland Trustee; Volunteer steward, Root Cemetery Nature Preserve; Chillicothe Chamber of Commerce; Hallock Township Trustee)	23 (Illinois Valley Central School District Superintendent; Marshall County Highway; Marshall County Board & President; Senachwine Club)	86 City of Henry; Marshall-Putnam SWCD; Henry Mapping Steering Committee; Henry Chamber of Commerce, Village of Sparland Trustee; Volunteer steward, Root Cemetery Nature Preserve; Chillicothe Chamber of Commerce; Hallock Township Trustee, Illinois Valley Central School District Superintendent; Marshall County Highway; Marshall County Board & President; Senachwine Club)

IL Route 29 Study
Illinois Department of Transportation - District 4
Summary of Comments Received
July 2004 Public Information Meetings

The project's second open-house public information meetings were held on July 14th and 15th, 2004 from 4:00 p.m. to 7:00 p.m. The July 14th meeting was held in Henry at Henry-Senachwine High School and was attended by approximately 176 people. Approximately 408 attended the meeting on July 15th at Three Sisters Park in Chillicothe. The purpose of the public information meetings was to provide project-area residents with the general status of the project, obtain public input on the range of alternatives currently under consideration as well as those removed from further consideration, and offer a forum for people to ask questions.

The same information was presented at both meetings, including alignments proposed to be carried forward for additional study, as well as those proposed for elimination since the first public information meeting, possible typical sections for the different sections of the corridor, a project newsletter and meeting handout. A table and comment box were available for those who wanted to leave project comments at the meeting. Project staff from IDOT and CH2M HILL were available to answer questions and discuss the project alternatives.

A summary of the written comments received during and after the July 14th and 15th meetings is found on the following pages. The comments were placed in categories developed by the project team to assist in understanding the public's reaction to the project. Most comments at both meetings concerned either a specific alternative or the project in general. The "Miscellaneous" category was added to accommodate comments that did not fit well in other categories. Fewer comments misidentified the project's purpose as creating a more efficient route between Peoria and Chicago.

IL Route 29 Study
Illinois Department of Transportation - District 4
Summary of Written Comments
July 14th and 15th, 2004 Public Information Meeting

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
SUPPORTS IL 29 PROJECT IN GENERAL	Generally supports project	9 (Bureau County Highway Dept.)
	Need an efficient, safe connection between Route 6 and I-180	3
	Would boost local economies (including Chillicothe) and open up central Illinois to the Chicago market/ increase economic diversity/serve Peoria better	7
	Long overdue	7
	Cost not enough of a deterrent	2
	Need 4-lane, 65 mph, limited access facility	3 (Peoria Area Chamber)
SUPPORTS ON IL 29 ALTERNATIVE	Would improve economic vitality in project area, incl. Princeton	1
	Would save land	2
	Would minimize impact to farmland	1
	If the project proceeds, supports improving existing IL 29	9
	Generally supports improvements on IL 29	4
SUPPORTS CHILLICOTHE BYPASS	Generally supports Chillicothe Bypass	2
	Would spur growth in Chillicothe	1
SUPPORTS S-6B	Generally supports S-6B	7
	More logical, less ROW/farmland needed/ fewer displacements	3
	If project must occur.	6
	Farther from residences on Wayne Road.	1
SUPPORTS S-6B/ROME WEST ROAD INTERCHANGE	Generally supports S-6B/Rome West Road Interchange	2
	Provide adequate access to Chillicothe	1
	Most practical, fewer displacements	1
SUPPORTS S-6B/MCGRATH INTERCHANGE	Farther from developed areas	1
	If project must occur.	1
SUPPORTS S-6C	Generally supports S-6C	1
	Would cause least disruption to agriculture, enhance commerce	1
	Most viable for Chillicothe	1
	Would be farther from bluff	1
	If project must occur.	2
	Would displace more homes.	1
SUPPORTS S-6C/ROME WEST RD INTERCHANGE	Generally supports S-6B/Rome West Road Interchange	1
SUPPORTS ROME WEST ROAD INTERCHANGE	Generally supports Rome West Road Interchange	1
	Would impact fewer homes, would help with traffic, is more centrally located, and would impact less farmland	1
SUPPORTS MCGRATH INTERCHANGE	Supports either alignment with McGrath Interchange	1
SUPPORTS CHILLICOTHE INTERCHANGE 2	Generally supports Chillicothe Interchange 2	1
	Would eliminate dangerous turning movement onto IL29 from NB IL29	1

Table 1 (continued)
IL Route 29 Study
Summary of Written Comments

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
SUPPORTS BLUFF ALTERNATIVE AT HOPEWELL AND SPARLAND (C-2)	Would be less expensive	3
	Would impact fewer houses than C-3/ Would minimize impact to residences, including those with wells	3
	Would minimize impacts to the Illinois River	1
	Would minimize environmental impacts (Illinois River, wetlands, plant and animals)	2
	Would avoid erosion of the hill and provide more space and stable ground on which to build	1
	More could be accomplished and future improvements could more easily be made	1
	Would improve traffic	1
	Existing IL29 makes a nice scenic drive with the recreational areas	1
	Generally supports C-2	7
	Would impact fewer commercial properties	1
	Would enable existing IL29 to be used just for local traffic	1
SUPPORTS THROUGH SPARLAND	Would improve Rt. 17	1
SUPPORTS SPARLAND INTERCHANGE 2	Generally supports Sparland Interchange #2	1
SUPPORTS SPARLAND INTERCHANGE 4	Generally supports Sparland Interchange #4	2
OPPOSES IL 29 PROJECT IN GENERAL	Would impact homeowners/landowners	4
	Would impact wildlife/wildlife areas/sensitive bluff areas	5
	Do not want to focus tax dollars on this project/does not believe state has funds to build project/not cost effective/too costly	22
	Increase in traffic would cause decrease in safety	1
	Not convinced a traffic need exists	13
	Unnecessary	15
	Would impact Miller-Anderson Woods State Nature Preserve, Senachwine Wetlands, Marshall County Fish and Wildlife Area, Peoria Park District's Audubon Preserve, Singing Woods Preserve, and Camp Wakonda	2 (Marshall-Putnam SWCD)
	Would cause erosion	2
	Would increase traffic and safety issues	3
	Would impact farmland, including properties with Prime Farmland, Agricultural Protection Areas, Conservation Reserve Program, and Conservation Reserve Enhancement Program	10
	Would cause deterioration in peacefulness of corridor/increase noise and create urban sprawl	10
	Suggest building the ring road instead	24
	Would increase air pollution	2
	IL 29 currently is a very scenic drive; expansion would impair the beauty of the drive	1
	Not worth saving a few minutes to travel between south and north	2
Not convinced of the economic benefits project is intended to spur	5	

Table 1 (continued)
IL Route 29 Study
Summary of Written Comments

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
OPPOSES IL 29 PROJECT IN GENERAL (continued)	Not convinced this is the best way to increase safety on the roads	1
	Should revisit Peoria to Chicago highway; proposed project does not provide a connection between the two cities	1 (City of East Peoria mayor)
	Generally opposes project	1
	Would introduce drainage problems	1
	Suggests considering road up on bluff where bike trail was put in	1
	Should focus on a high-speed rail system	1
	Not worth the impacts	1
	Would impact Peoria Lakes project	1
	Would impact local economies/businesses	8
	Does not go through towns as originally promised	1
	Would impact endangered species	2
	Should focus on upgrading existing roads	4
	Would not be used by citizens outside project corridor	2
OPPOSES CHILLICOTHE BYPASS	Would increase noise	1
	Would not give Chillicothe an economic boost	1
	Would reduce property value	1
	Generally opposes Chillicothe Bypass	1
	Would impact access to/noise at Camp Wokanda; would impact the use of the Audubon Wildlife Area for wetland refuge for shorebirds; would increase noise at Singing Woods Nature Preserve and Audubon Wildlife Area	1 (Peoria Park District)
	Would increase air pollution and impact wildlife habitat	1
	Does not believe state has funds to spend on it	1
OPPOSES S-6C	Generally opposes S-6C	1
OPPOSES BLUFF ALIGNMENT AT HOPEWELL AND SPARLAND (C-2)	Would impact sensitive bluff areas	1
	Would not help local communities/adversely impact economies of Sparland and Lacon	1
	Would have higher environmental impacts	1
	Would run through Midland School District and would diminish tax revenue base	1
	Would cause adverse travel for emergency vehicles, school buses and farm equipment	2
	Would impact farmland, including CRP land/remove farmland from tax base	8
	Would impact Steuben Township tax revenue	1 (Steuben Township Bd.)
	Would not be utilized by those living in Lacon	1
	Would require more maintenance by IDOT including upkeep of an additional roadway and maintenance of two bridges	4
	Would cause deterioration in peacefulness of corridor	1
	Generally opposes bluff alignment	2
	Unnecessary	1
	Would impact an agricultural preservation district	1
	Would impact forested lands	1
Would require more fuel to burn to get up bluff	1	

Table 1 (continued)
IL Route 29 Study
Summary of Written Comments

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
OPPOSES ON IL 29 ALTERNATIVE	Would not provide the room for necessary improvements to make project worthwhile (would like new roadway to be an interstate)	1
OPPOSES THROUGH SPARLAND (C-3)	Would displace too many homes	1
OPPOSES SPARLAND INTERCHANGE 2	Would displace too many homes	2
OPPOSES HENRY BYPASS	Would adversely impact Henry's economy	1
	Would impact horse farm	2
	Not convinced of economic benefit to Henry	2
OPPOSE IMPROVEMENTS ON NEW ALIGNMENT	Would adversely impact economy in smaller towns on IL 29	2
	Would create adverse travel	1
	Would not benefit local economies	1
	Would impact farmland	4
	Would be too costly	2
	Would increase noise	1
	Would introduce drainage problems	1
	Would impact homes	1
	Not enough of a traffic need	1
Would increase number of roads to take care of	3	
IDENTIFY PROJECT AS "PEORIA-TO-CHICAGO HIGHWAY"	Unnecessary to save time traveling from Peoria to Chicago	6
	Not worth impacting smaller towns along IL 29	2
	Would not be direct enough to be worthwhile	9
	Would not be cost effective	3 (HOI Sierra Club)
	Suggest building ring road/ Believe a ring road over the river near Mossville would benefit the surrounding communities more.	7
	Unnecessary	5
	Money would be better served elsewhere	9
	Would impact homeowners	1
	Would be too costly	2
	Would impact wildlife habitat	6 (HOI Sierra Club)
	Would introduce erosion problems	1 (HOI Sierra Club)
	Not convinced of the economic benefits of a new highway	6
	Would impact farmland	5
	Minimize access points; consider emergency vehicle routes	1
	Suggests widening Chillicothe viaduct to 4 lanes	1
	Suggests considering a route between Peoria and Galesburg	1
	Would increase noise at Root Cemetery	1
	Would impact tranquility of country life and increase urban sprawl	3 (HOI Sierra Club)
	Does not go through towns as originally promised	2
	Would impact Senachwine Creek Watershed	1
Would increase bus route distances	1	
Would impact wetlands	2	

Table 1 (continued)
IL Route 29 Study
Summary of Written Comments

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
IDENTIFY PROJECT AS "PEORIA-TO-CHICAGO HIGHWAY" (continued)	Would impact wildlife areas	1
	Would cause runoff and sedimentation into the Illinois River	1
	Would impact Illinois River bluff	1
	Not enough access points to east side of the river	1
	Believes money should be spent on upgrading existing roads	2
	Does not believe state has sufficient funds to build project	2
	Feel voters in Marshall & Putnam Counties are not being counted	1
	Would promote urban sprawl	3
	Not convinced a traffic need exists	2
	Too close to homes	1
	Would impact wetlands and forest preserves	1
	Would make Chillicothe a ghost town	2
MISCELLANEOUS	Unsure of project's purpose and need	2
	Unclear about land acquisition and restitution process and how it applies to individual land owners	3
	Suggest upgrading Western Avenue in Henry to IL 18 status so IL 18 extends to IL 40	2
	Suggests widening IL 29 from I-180 to Kentville Road/improving intersection to better accommodate truck traffic	1
	Suggest either moving alignment further away from Galena Knolls or putting up noise barrier	1
	Interested in noise abatement possibilities	2
	Requests information on how emergency vehicles would access Lake Thunderbird after improvements are completed	1 (Lake Thunderbird Association)
	Has a split profile through central section on existing IL 29 been studied to avoid building into the bluff	1
	Questions whether the ring road has been studied	1
	Requests meeting with Sparland (in addition to the mayor)	1
	Concerned about traffic coming off of McGrath connection to Chillicothe and into the subdivision	1
	Views Knox Avenue improvements as safer	1
	Suggests repairing existing IL 29	1
	Requests two copies of the 1/2-mile stretch north of Putnam that shows the Winship property	1
	Suggests just providing an overpass at Cloverdale & leaving it as is or cul-de-sacing Cloverdale on either side of the proposed IL29	1
	Emphasizes need for connection between Henry bypass and existing IL 29 if it is cul-de-saced	1
	Notes that making Hart Lane a cul-de-sac would give fire/ambulance only one route to reach houses in the area	1
	Suggests not improving IL29 north of Sparland but going across the river on IL17 and improving IL39	2
	Requests maps showing 2 alternatives that cross Rome West Rd.	1
	Suggests overcompensating those people who would be displaced	1

Table 1 (continued)
IL Route 29 Study
Summary of Written Comments

PREFERENCE	ADDITIONAL COMMENTS	NUMBER of COMMENTS
MISCELLANEOUS (continued)	Requests relocating improvements that impact township garage	1 (Senachwine Township Bd.)
	Requests copy of the map showing S-6C at Cedar Hills Drive	1
	Suggests moving the Cloverdale overpass to the north to avoid disrupting front yards of the homes where the wells are located	2
	Requests copies of maps showing Chillicothe Interchange alternatives and bluff alternative	1
	Suggests making existing IL29 through Henry a business route as opposed to making it a cul-de-sac	1
	Requests staying within IDOT right-of-way as much as possible	1
	Requests design at Henry be reconsidered	1
	Suggests moving Whiffle Tree up to the bluff or somewhere with a better setting	1
	Suggests moving Thenius Creek intersection to the north	1
	Does not feel that proposed improvements would have detrimental effect on MAW	1
	Skeptical about wildlife crossing allowances	1
	Comment period noted on the newsletter is misleading	2
	Requests looking into animal detection devices to minimize deer accidents	1
	During construction, access by park users, maintenance and emergency vehicles needs to be provided; would impact ability to conduct smoke burns since proposed alignment is within the smoke management area; original interchange bisecting CAT complex would have least impact on PPD lands	1 (Peoria Park District)
	Widen railroad viaduct to 4-lanes	2
	Requests that light abatement alternatives be researched especially along Chillicothe bypass	1
	Requests information on how wetland on property would be replaced	1
	Requests meeting with IDOT regarding restitution for displacement of farmstead	1
	Requests construction begin at north terminus	2 (Bureau County Highway Dept.)
	Requests construction begin at south terminus	1
Is median wide enough to accommodate a semi waiting to cross IL29 to get to grain elevator?	1	
Need to consider gas lines at Rome West, American Water on Rome West, a new road at Old Wayne Road, 6900 Line	1	
Skeptical about LaHood taking ownership of some property within proposed project	3	
Supports earlier intersection bisecting CAT complex	1	

Alternative S-6B or S-6C

Impact Comparison

- S-6C is slightly longer and less direct, therefore has more right-of-way impact.
- S-6C also has more farmland impact and more displacements.

Public Input

- 20 support S-6B and 9 support S-6C

Other information needed

- Findings from transmission line survey

Recommendation

S-6B

Interchange at Spillman/McGrath or at Rome West

Impact Comparison

- Interchange spacing is better with the Rome West option
- The interchange at Rome West has less right-of-way impact, less farmland impact, and costs less.

Public Input

- 3 people support the Spillman/McGrath interchange location while 9 support the Rome West option.
- The community of Chillicothe supports the Spillman/McGrath interchange location.

Other information needed

- May require Rome West traffic projections

Recommendation

- **CH2M Hill will develop an option with S-6B and interchanges at both Rome West Road and McGrath Road. In this scenario, McGrath will be developed as a direct connection the west and will not connect to Spillman Road to the south. This will allow for appropriate rural interchange spacing of 1.5 miles.**
- **After the interchange is developed, IDOT will meet with the mayor of Chillicothe to discuss the options and feedback from the public information meeting.**

Truitt Avenue Interchange - standard diamond vs. diamond with a loop in the SE quadrant

Impact Comparison

- The diamond with the loop in the SE quadrant minimizes impacts to the gravel pit, has less right-of-way impact, and lower cost.

Public Input

- Only the diamond with the loop was shown at the PIM therefore there were no comments received.

Other information needed

- Survey of the gravel pit shows that the existing limits of excavation extend further north than the aerial indicates. This does not effect the design.

Recommendation

- **Diamond interchange with a loop in the SE quadrant**

CENTRAL SECTION - BLUFF ALIGNMENT

Widen east of Hardscrabble or west of Hardscrabble

Impact Comparison

- There are 52 outbuilding displacements on the west shift and 17 outbuilding displacements with the east shift.

Public Input

- No comments received on this topic.

Recommendation

- **IDOT will continue to think about this.**

CENTRAL SECTION - EXISTING ALIGNMENT

North of Chillicothe Interchange – trumpet vs. diamond with Hart Lane vs. diamond with Yankee Lane

Impact Comparison

- Impacts are similar for each interchange type, but the trumpet favors the predominant movements between Sparland and Chillicothe

Public Input

- 0 people support the trumpet interchange, 2 people support the diamond with Hart Lane, and 1 person supports the diamond with Yankee Lane

Recommendation

- **Trumpet interchange**

Sparland Interchange

Impact Comparison

Public Input

- 2 people support the diamond interchange located west of existing IL 29, 3 people support the split diamond interchange, and 5 people support the diamond interchange east of existing IL 29

Recommendation

Crow Creek Typical Section

Impact Comparison

Public Input

Other information needed

- input from planned Crow Creek Watershed Committee meeting

Recommendation

NORTH SECTION

No screening decisions

OTHER ISSUES/DECISIONS

Henry Bypass (Is Henry firmly behind H4 in spite of some public support for H3?).

Bluff Alignment - IDSs, Drainage Location Report, Maintenance of Traffic, Erosion Control, Access Control, culvert design needed

IDNR/Natural Area minimization

FUTURE MEETINGS

Floodplain Meeting with DNR, FHWA, IEMA, others

Crow Creek Watershed Committee meeting.

CSX/Iowa Interstate RR meeting for IL 29 encroachment across from MAW.

Viaduct meeting to discuss stage construction on BN & SF RR with Al Benesch & Company.

BN & SF RR meeting to discuss stage construction.

IL Route 29 Study
Illinois Department of Transportation – District 4
Summary of Comments Received
June 2006 Public Hearings

The project's open-house public hearings were held on June 14th and 15th, 2006 from 4:00 p.m. to 7:00 p.m. The June 14th meeting was held at Three Sisters Park in Chillicothe and was attended by approximately 346 people. Approximately 180 attended the meeting on June 15th in Henry at Henry-Senachwine High School. The purpose of the public hearings was to present the preferred alternative to project-area residents and offer a forum for people to ask questions and provide their comments.

The same information was presented at both meetings, including the preferred alternative, alignments eliminated from consideration, typical sections, a project newsletter and meeting handout. Copies of the DEIS were available for review and comment. Comment forms were provided for those who wanted to leave comments at the meeting. A court reporter was also available to take oral comments. Project staff from IDOT and CH2M HILL were present to answer questions and discuss the preferred alternative.

The comments received during and after the June 14th and 15th meetings are summarized in the following paragraphs and tables. In the first three tables, each person's comments are itemized according to where they were received (i.e., Three Sisters Park, Henry Senachwine High School or via mail). In the last four tables, the comments were tallied to provide the project team with an understanding of which comments were most frequently made. The comments are first combined to provide a tally of all comments received and then are broken down in each table according to where they were received.

At Three Sisters Park, 65 people left comments. Twenty-two comments were in overall support of the proposed project, 39 were in opposition and 4 comments did not indicate a preference. Concerns most frequently voiced were that other transportation projects should be completed, existing roads should be improved or that taxes should focus on other government programs. Other frequent comments were concerns about an increase in noise and the proposed project's effect on other environmental resources. People were also concerned that the proposed project would not support local economic sustainability while others believe that it would. Concerns about the proposed project's impact to rural lifestyle were also voiced.

Fifty-six people left comments at Henry-Senachwine High School. Twenty-four comments were in overall support of the proposed project, 27 were in opposition and 5 comments did not indicate a preference. Many of those commenting believe the project would improve local economies along the corridor including Henry's. People were also concerned about the proposed project's impact on the environment and rural lifestyle. Other common concerns were that traffic numbers and population growth are not high enough to warrant the proposed improvements. Other frequently heard comments were in support of the project's reuse of existing right-of-way to the greatest extent possible and for the project to be built as soon as possible.

An additional 52 people sent in comments via mail. Seventeen comments were in overall support of the proposed project, 32 were in opposition and 3 comments did not indicate a

preference. The most common comments were that taxes should be focused on other transportation projects in the area. Other commonly heard comments were concerns about the construction cost and schedule and the proposed project's impact to environmental resources. People commented frequently that they believed the proposed project would improve safety. Also, multiple people were concerned about the proposed project's impact to the scenic nature of IL 29 and to their rural lifestyle.

Table 1
IL Route 29 Study
Illinois Department of Transportation - District 4
Summary of Written and Oral Comments
June 14th, 2006 Public Hearing - Three Sisters Park

SUMMARY OF COMMENTS
June 14th, 2006 Public Hearing - Three Sisters Park

Name	Address	Comments	Support	Oppose
Betsy Anderson	72 Pinewood Mobile Home Park Chillicothe, IL 61523	<ul style="list-style-type: none"> • Asks if he (a renter) would be compensated if the property owner sold the property because it was too close to the improvements • Asks if during construction artifacts are found would they be handled in a special way • Asks if a road to Chicago through Eureka and El Paso has been considered as a quicker alternative • Advocates a bike/hiking trail to be included in the design • Figures showing before and after renewed faith in Illinois government 		X
Craig and Carol Berger	16123 Grant Ct. Chillicothe, IL 61523	<ul style="list-style-type: none"> • Supports effort to provide natural noise abatement measures 	(2) X	
Lisa Bessler	651 County Rd. 650N Sparland, IL 61565	<ul style="list-style-type: none"> • Concerned that new road will introduce drug dealers and murderers to the area quicker • Concerned about loss of farmland and forest • Concerned that existing roads need to be maintained before introducing new ones • Believes there are shorter routes [presumably to Chicago] 		X
Carmen A. Biddison	722 W. Wanut Street Chillicothe, IL 91523	<ul style="list-style-type: none"> • Does not feel there is a need for a freeway • Believes that altering existing IL29, a scenic drive, would detract tourists not encourage them. Construction could destroy any Native American artifacts that would be a tourist attraction • Believes that Chillicothe bypass would have a negative impact on businesses along existing IL 29 • Would prefer improving IL24 or 		X

SUMMARY OF COMMENTS

June 14th, 2006 Public Hearing - Three Sisters Park

Name	Address	Comments	Support	Oppose
		IL40		
Joyce Blumenshine (Chairperson for Heart of Illinois Sierra Club)	2419 East Reservoir Peoria, IL	<ul style="list-style-type: none"> • Does not believe taxes should be spent on proposed project • Concerned about impacts to bluff lands, impacts on wildlife, erosion into the Illinois River • Requests a complete cost-benefit analysis 		X
Joyce Blumenshine (2 nd Comment) Chair of Heart of Illinois Sierra Club	2419 E. Reservoir Peoria, IL 61614- 8029	<ul style="list-style-type: none"> • Does not believe taxes should be spent on proposed project • Existing IL 29 is a scenic road and should be protected • Concerned about impact on rural lifestyle • Concerned about impacts to wetlands • Concerned about increase in runoff, air pollution from increased gas consumption, and increased development resulting from the project • Concerned about impact to wildlife. Asks if deer and larger mammals will use the crossings. Believes increase in noise will adversely impact wildlife • Erosion from construction will contribute to sedimentation • Does not believe that population growth and traffic numbers indicate need for improvements 		
Donna Bogner	1128 N. Nancy St. East Peoria, IL 61611	<ul style="list-style-type: none"> • Believes that improvements will benefit Chillicothe and Sparland businesses • Believes that project will provide a safer route to get from Peoria to northern towns • Would prefer money be spent on maintaining existing roads and examining a high speed train to run between the towns with depots in Chillicothe and Henry 		X
Steve and Becky Bogner	860 County Rd. 800E Sparland, IL 61565	<ul style="list-style-type: none"> • Support project's substantial reuse of existing right-of-way • Skeptical that monetary cost, residential displacements and impacted natural habitat outweigh 		(2) X

SUMMARY OF COMMENTS

June 14th, 2006 Public Hearing - Three Sisters Park

Name	Address	Comments	Support	Oppose
		<ul style="list-style-type: none"> saving time to get to Chicago 		
Jeffrey J. Brenner	707 Taylor Rd. Chillicothe, IL 91523	<ul style="list-style-type: none"> Believes money could be better spent helping the elderly or on schools or maintaining existing roads. Believes that the Whitefield Rd. entrance would be used by a large number of heavy trucks coming from Henry's industrial area. Wonders if a wider crossover has been considered to make it safer for trucks to cross while existing or entering. Believes multiple serious accidents have occurred at existing IL 29/Whitefield Rd. intersection. Wonders if any lighting, signage or other traffic control devices could be implemented to improve safety there. 		
James E. Christopher Medina Township Planning Commission	618 W. Singing Woods Rd. Edelstein, IL 61526	<ul style="list-style-type: none"> Believes most important part of project is the expansion of IL29 under viaduct on north side of Chillicothe Believes improvements north of Chillicothe would be nice to have, but are unnecessary Believes building a bridge at Mossville should be completed first. The ring road would be more valuable to Peoria area residents. If those fail, put the money towards the 336 project. 		X
Keith Crotz	1107 N. Truitt Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes farmland lost could have otherwise been used for the production of ethanol or other agri-based fuels. Does not agree with using this land to save travel time. Believes money used on this project would be better spent on researching fossil fuels. 		X
Diane Denekas	117 White Clover Dr. Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes Chillicothe bypass should follow Old Galena Road Concerned about impact to rural lifestyle 		X
Kim Engquist	2103 E. Rove Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes project could introduce more crime to Chillicothe Concerned about increase in air 		X

SUMMARY OF COMMENTS

June 14th, 2006 Public Hearing - Three Sisters Park

Name	Address	Comments	Support	Oppose
		<ul style="list-style-type: none"> pollution 		
Donald Ernst	2319 E. Truitt Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> Concerned about loss of farmland and impact to rural lifestyle Thinks improvements at IL6 were halted because the discovery of Native American artifacts Believes cost per person to increase access to Peoria is too high 		X
Stephanie Farris	1304 N. First St. Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes improvements will bring economic stimulation to the area 	X	
Paul Foster	18703 N. Krause Road Chillicothe, IL	<ul style="list-style-type: none"> Bisects personal farms and disrupts irrigation measures Prefers building bridge between IL6 and IL24 to I-39 or ring road option 		X
Rick Fox	15215 N. Ivy Lake Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> Does not feel project can justifiably increase economic opportunities Believes study does not adequately address water quality impacts from construction and additional runoff 		X
Ann Frye	1023 W. Truitt Ave Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes the improvements will introduce alien species to Root Cemetery Suggests planting only plants native to the area on shoulders between Truitt and the county line 		X
Garry Fyke Chillicothe Mayor	908 N. Second St. Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes more people are supportive of the project thanks to the visualizations and sketches and the alignment being further designed seemingly based on public comments 	X	
Frank Gerke	16215 N. Lincoln St. Chillicothe, IL 61523	<ul style="list-style-type: none"> Does not believe traffic statistics are justified Concerned about loss of farmland, natural habitat, residences, and additional noise 		X
Paula K. Gerke	16215 N. Lincoln Ct. Chillicothe, IL 61523	<ul style="list-style-type: none"> Does not believe taxes should be spent on the proposed project Concerned about impact to wildlife and rural lifestyle Concerned about impact to farmland and farming families Suggests building ring road to 		X

SUMMARY OF COMMENTS

June 14th, 2006 Public Hearing - Three Sisters Park

Name	Address	Comments	Support	Oppose
Jennifer Giberson	705 N. Santa Fe Ave. Chillicothe, IL 61523	<ul style="list-style-type: none"> impact fewer families • Notes that existing IL 29 is already 4 lanes • Money should not be spent on this road especially considering Illinois's budget • Believes that existing roads should be maintained • Does not believe the project is in the best interest of the central Illinois communities • Concerned about impact on farmland, woodlands and wetlands, especially since central Illinois is some of the most scenic land in Illinois 		X
Rosemary and Don Griswold	22810 N. Hardscrabble Road Sparland, IL	<ul style="list-style-type: none"> • Support the project for improving safety (no turn lane so people pass on right-hand shoulder or even grass) • Support project for decreasing travel time • Would prefer bluff alignment because it would be a straighter and therefore quicker facility; also should be less expensive • Unsure that existing IL 29 would experience more traffic than the bluff alternative 	X (2)	
Andrew Heebink	20714 N. Deer Bluffs Chillicothe, IL 61523	<ul style="list-style-type: none"> • Concerned about increase in noise • Asks if there is compensation for residences who will lose natural surroundings • Requests information on economic impact to bypassed towns like Chillicothe • Requests information on impact to watershed north of Chillicothe and ultimately community well for Fawn Hills residents • Does not believe that existing 4-lane IL 29 between Mossville and Chillicothe can be beyond capacity 		X
Barbara N. Hofer Peoria Chamber	14021 N. River Beach Dr.		X	

SUMMARY OF COMMENTS

June 14th, 2006 Public Hearing - Three Sisters Park

Name	Address	Comments	Support	Oppose
Transportation Committee	Chillicothe, IL 61523			
Thomas Horning	2033 White Clover Dr. Chillicothe, IL 61523	<ul style="list-style-type: none"> Appreciates the opportunity to review project Asks when construction can begin, how long it will take, how much it will cost and how it will affect taxes Asks if there will be a contingency plan for the farmland that will be contested 	X	
Kate Kach	16425 N. Krause Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> Does not believe that future traffic could be as high as it is projected to be based on historical population growth 		X
Paul Kinsinger, MD	113 Windridge Washington, IL 61571	<ul style="list-style-type: none"> Believes other corridors (eastern ring road, IL24 to I-55) should be built instead of this one Does not believe project will increase economic opportunities in Peoria area Does not believe project provides a route to Chicago Costs more than corridors B and C (except for the Tazewell Woodford corridor) 		X
Ronald L. Masonholder	110 Sioux Dr. Hopewell, IL 61565-9412	<ul style="list-style-type: none"> Supports current design which minimizes impact to hillsides and nature preserves Recognizes why traffic has influenced the route 	X	
Gary A. McIntyre	316 S. Hollybrook Chillicothe, IL 61523	<ul style="list-style-type: none"> Does not agree with having so many interchanges along the Chillicothe bypass Believes existing roads should be maintained before introducing more Does not believe that roadway will bring people to Chillicothe to stay 		X
Tracy Meints	15215 N. Ivy Lake Rd. Chillicothe, IL 61523-9133	<ul style="list-style-type: none"> Skeptical about economic benefit Does not believe that increase in traffic is large enough to warrant additional lanes north of Chillicothe Employment opportunities are constrained to construction of the road. No new long-term jobs will 		X

SUMMARY OF COMMENTS

June 14th, 2006 Public Hearing - Three Sisters Park

Name	Address	Comments	Support	Oppose
Tracy Meints (2 nd Comment)	15215 N. Ivy Lake Rd. Chillicothe, IL 61523-9133	<p>be created and no increase in population for roadway to serve.</p> <ul style="list-style-type: none"> • Concerned about causing sedimentation in the Illinois River • Concerned about negating CRP and other Illinois River restoration initiatives • Disagrees with the ability to include Chillicothe's future recreation buffer as a mitigation measure for tree loss • Believes impact to T&E plant species is underestimated because of high potential of exotic species to overrun habitat. • Contests the tree removal prohibition starting date. Believes that bald eagles actually can nest as early as February. • Believes the towns along IL29 will prosper without the road. • Believes money could be spent better elsewhere. • Believes the EIS does not adequately demonstrate economic benefit of the project • Believes project provides minor intermodal improvements for few businesses, limited increases in traffic efficiency, no safety improvements, and jobs only resulting from road construction as opposed to sustained job opportunities • Concerned about impact to wetlands, buffs, a nature preserve. Believes that impact is longer term, not temporary. • Does not believe using Chillicothe's recreation buffer as a mitigation measure is reliable – the buffer does not carry any legal weight. • Believes IDNR does not have the funds to maintain mitigation parcels. • Believes the T&E plant species mitigation measures are 		

SUMMARY OF COMMENTS

June 14th, 2006 Public Hearing - Three Sisters Park

Name	Address	Comments	Support	Oppose
		inadequate.		
Herbert Meyer	9103 N. Trigger Rd. Edwards, IL 61528	<ul style="list-style-type: none"> Believes including 10-foot tall fences would be only way to keep deer off the road 	X	
Steve K. Morris	5611 Hart Ln. Chillicothe, IL 61523	<ul style="list-style-type: none"> Home is approximately 800' feet from proposed improvements and is concerned about noise abatement measures and impact noise will have on his property's value. 		
Jon and Christy Oliphant	2510 E. Silver Leaf St. Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes the improvements will bring economic benefit Hopes IDOT provides as much noise abatement as possible and prevents as many vehicle/wildlife interaction as it can. Believes the onus is on the communities to properly prevent adverse impact to businesses 	(2) X	
Virginia Orendorf	20513 N. Deer Bluff Dr. Chillicothe, IL 61523	<ul style="list-style-type: none"> Requests the purchase of her home in Fawn Hills as the proposed road is too close Believes that the Peoria County Zoning Board entertained the request to change the zoning for a piece of agricultural land to a campground. 		X
Roberta Parks	401 SW Water #802 Peoria, IL 61602	<ul style="list-style-type: none"> Believes project is not the highest priority for area projects. Believes that the Cedar Hills and Chillicothe viaduct improvements are the most important parts of the project 	X	
Virginia Passe	3509 Westbrook Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes improvements are important for economic growth and survival. 	X	
Jonathan A. Perrault	515 St. Rt. 29 Sparland, IL 61565	<ul style="list-style-type: none"> Requests proposed sketches of Barrville subdivision 		
Sandra J. Perry	15013 N. Ivy Lake Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> Does not believe the project will provide a quicker route to Chicago. Does not believe the project will improve Chillicothe business. Building a road between IL6 and I-39 will provide a quicker route to Chicago. 		X
Kathy Peters	101 Willow	<ul style="list-style-type: none"> Would like to know how much of their property will be taken. 		

SUMMARY OF COMMENTS

June 14th, 2006 Public Hearing - Three Sisters Park

Name	Address	Comments	Support	Oppose
	Sparland, IL 61565	Concerned about impact to property on the alley side where access to their house is		
Delores Petty	815 W. Cedar Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes impacts from the proposed project are too high and that the project is unneeded and unnecessary 		X
Dave Price	4423 E. Deer Hunt Lane	<ul style="list-style-type: none"> Concerned that change in access to Fawn Hills, Benedict Street north of Hart Lane, and Yankee Lane will minimize emergency service access to those places. 		X
David Quigg	13723 N. Ivy Lake Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> Is pleased the proposed improvements avoid the bluff Concerned that if the frontage road to Ivy Lake Road isn't for the camp then it would become used as a shortcut or used by commercial traffic. Is skeptical about economic benefit. Believes that Henry and Lacon might benefit, but existing IL 29 businesses may be adversely affected 		X
Rick Rosetto	105 Hazel St. Chillicothe, IL 61523	<ul style="list-style-type: none"> Concerned about loss of rural lifestyle 		X
Craig Ross	15908 N. Krause Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> Right-of-way for Krause Rd. is too close to his home (a Christmas tree farm and home) 		X
Jim Rumbold	16221 N. Old Galena Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> Current proposal is best to-date 	X	
Kenneth Rumbold	Sparland, IL 61565	<ul style="list-style-type: none"> Believes improvements between Hart Lane and Henry make the most sense. Supports current design measures including retaining walls and flatter grade to decrease fuel burn Supports Sparland bypass Believes project saves high quality farmland 	X	
Marjorie Schaufelberger	4122 E. Cloverdale Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> Asks what kind of compensation is available if profile of the property is raised to meet roadway profile. Suggests building the highway 		X

SUMMARY OF COMMENTS

June 14th, 2006 Public Hearing - Three Sisters Park

Name	Address	Comments	Support	Oppose
		across the river from IL 6.		
Rick Schmalzried	15824 N. Brougham Dr. Chillicothe, IL 61523	<ul style="list-style-type: none"> Concerned about scarcity of farmland in the future. Believes it would be more beneficial to build a bridge across the river to connect to I-39 Appreciates noise minimization and mitigation measures 		X
Jerry Segler	775 State Route 29 Sparland, IL	<ul style="list-style-type: none"> Supports constructing this project as soon as possible 	X	
Greg and Marie Seppelt	21901 N. Boehle Ln. Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes that the road will introduce more noise and suggests natural noise minimization measures (trees or shrubs). 		(2) X
		<ul style="list-style-type: none"> Displacement. 		
Jeanette Simmons	1012 W. Evergreen Dr. Chillicothe, IL 61523	<ul style="list-style-type: none"> Suggests putting improvements across the river so both sides can have access to Chicago. A bridge would increase economic opportunities Believes Chillicothe businesses will be adversely affected 		X
Lisa Slane	1515 NE Glen Oak Peoria, IL 61603	<ul style="list-style-type: none"> Believes money could better be spent on a high speed rail between Peoria and Chicago. 		X
Julia Spadin	3628 Westbrook Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> Chillicothe bypass is too close to her home. Skeptical that roadway is needed to alleviate traffic and safety and to better access Peoria. Believes that building a bridge at IL 6 and building the ring road would provide better access to Chicago. Concerned that rural lifestyle will be jeopardized by increased noise pollution. 		X
Bill G. Starks	232 W. Lindy Ln. Peoria, IL 61614	<ul style="list-style-type: none"> Suggests including a partial cloverleaf (southwest quadrant of IL29/Cedar Hills Drive interchange) to avoid users intersecting with CAT workers at peak hours. 	X	
Mel Tanks	22214 Hardscrabble Road	<ul style="list-style-type: none"> Need road to address wildlife, traffic congestion and existing 	X	

SUMMARY OF COMMENTS

June 14th, 2006 Public Hearing - Three Sisters Park

Name	Address	Comments	Support	Oppose
	Sparland, IL	access roads.		
Marcia Trent	14017 Riverbeach Chillicothe, IL 61523	<ul style="list-style-type: none"> Support finishing project soon Supports building it as soon as possible. 	X	
Donald Z. White	302 N. Second St. Chillicothe, IL 61523	<ul style="list-style-type: none"> Appreciates public input being considered. Improved road will increase economic success of Chillicothe Overpasses at Cloverdale and Sycamore are critical to Chillicothe's westward growth 	X	
Not provided	Not provided	<ul style="list-style-type: none"> Supports building a bridge across river at Mossville 		X
Not provided	Not provided	<ul style="list-style-type: none"> Believes plans are great and project is much needed 	X	
Not provided	Sparland	<ul style="list-style-type: none"> Believes only need 3 lanes between Chillicothe and Sparland (2 SB and 1 NB). Going NB, experiences other drivers passing when people are turning left and tailgating. 		X

Table 2
IL Route 29 Study
Illinois Department of Transportation - District 4
Summary of Written and Oral Comments
June 15th, 2006 Public Hearing - Henry-Senachwine High School

SUMMARY OF COMMENTS
June 15th, 2006 Public Hearing - Henry-Senachwine High School

Name	Address	Comments	Support	Oppose
Jim Annen	29 Barbados Dr. Putnam, IL 61560	<ul style="list-style-type: none"> Does not believe the road is necessary or that taxes should be used for the project 		X
Jeff Bergfeld	911 Edward St Henry, IL	<ul style="list-style-type: none"> Concerned that Henry bypass will have an adverse effect on Henry's economic viability Believes that maintaining 2 lanes through Henry would be sufficient 		X
Gary and Susan Blake and Gary Blake II	109 Douglas St. Putnam, IL 61560	<ul style="list-style-type: none"> Believes his property, which will affront the highway, will decrease in value Concerned about losing rural lifestyle Believes project will eliminate any chance for businesses in Putnam 		(3) X
Roberta Bogner	910 School Street Henry, IL	<ul style="list-style-type: none"> Believes money would be better spent designing a road ½ mile to the west of the current Henry bypass. 		X
Terry Bogner	741 County Road 1150 North Henry, IL	<ul style="list-style-type: none"> Supports project's large reuse of existing right-of-way and minimization of farmland impact Believes project is addressing wetland impacts 	X	
Katherine Catton	1205 County Road 1000 East Henry, IL	<ul style="list-style-type: none"> Does not believe traffic numbers justify the improvements Concerned about loss of rural lifestyle Supports moving the Henry bypass farther west where there are no houses or farm buildings Doesn't believe there is a need for any interchange along bypass, but rather people can get off highway when bypass parts from IL 29 and get return to highway when they rejoin. Does not believe it warrants taxpayer money 		X

SUMMARY OF COMMENTS

June 15th, 2006 Public Hearing - Henry-Senachwine High School

Name	Address	Comments	Support	Oppose
Julann and Ken Condit			(2) X	
Condit's Ranch				
Tom Cooper	107 Oak Lane Henry, IL	<ul style="list-style-type: none"> Believes money could be better spent maintaining existing roads 		X
Ralph Daniels	3311 E. Senachwine Valley Rd. Putnam, IL 61560	<ul style="list-style-type: none"> Suggests shifting west to the cellular tower and then south to avoid conservation area, swamp, bull springs and plain narrow alleys. [I think this must be a vote for a Putnam bypass]. Concerned about the disruption of Native American artifacts 		X
Jonathan Downey	1881 Bradford Blacktop Rd. Putnam, IL 61560	<ul style="list-style-type: none"> Suggests a cloverleaf or similar type intersection in Putnam to address the large amount of truck traffic Concerned about the safety of Putnam being the first major intersection off of I-180 	X	
James Feurer	1389 Rt. Lacon, IL 61540	<ul style="list-style-type: none"> Concerned about the environmental impact Concerned with development of rural landscape 		X
Dr. David Forbes (City of Henry Transportation Committee)	12 Sawmill Lake Rd.	<ul style="list-style-type: none"> Believes the project will have a positive impact on Henry and the residents 	X	
Deborah Forbes	12 Sawmill Lake Rd. Henry, IL 61537	<ul style="list-style-type: none"> Believes Henry and the area needs the project economically 	X	
Peter A. Forbes	Not provided	<ul style="list-style-type: none"> Believes Henry and the area needs the project economically 	X	
Regina Forman	404 South Street Lacon, IL 61540	<ul style="list-style-type: none"> Believes project will only benefit construction companies Believes state does not have the money to pay for this Asks cost of reinforcing the bluff between Chillicothe and north of Sparland Believes state needs to maintain existing roads before adding new ones Does not believe Chillicothe bypass will increase economic 		X

SUMMARY OF COMMENTS

June 15th, 2006 Public Hearing - Henry-Senachwine High School

Name	Address	Comments	Support	Oppose
		viability of Chillicothe		
Daryl Fountain	1115 Edward St. Henry, IL	<ul style="list-style-type: none"> Believes project will improve traffic safety and economic viability 	X	
Bob Frazee	1105 Malibu Dr. Henry, IL 61537	<ul style="list-style-type: none"> Believes project team have incorporated public comments into the design Believes project has minimized impact to farmland Believes project sufficiently reuses as much existing IL29 as possible Would like project to be completed as soon as possible 	X	
Kevin Greer	1357 County Road 1350 North Henry, IL	<ul style="list-style-type: none"> Supports moving Henry bypass ½ mile to the west to avoid impacting farms Is concerned that the bypass at its current location will open up the possibility for properties to be annexed Bypass at its current location will impact his farm and rural lifestyle Is discouraged that the project does not consider impact to family farms like his. 		X
Eldon and Laura Hageman	1273 County Rd. 1150N Henry, IL 61537	<ul style="list-style-type: none"> Displaced and asks if they would be responsible for decommissioning the well and septic Has seen posts around their property and asks what is being surveyed currently. Notes that they requested from Maureen actual footage of property being taken beginning at the pavement 		
Mary Lou and Kenneth Hakenjos	15 Hunter Court Putnam, IL	<ul style="list-style-type: none"> Plans look reasonable 	(2) X	
Kirsten Holzhauer	56 Catalina Dr. Putnam, IL	<ul style="list-style-type: none"> Does not believe project will improve Marshall and Putnam Counties, but will benefit Caterpillar by providing a truck bypass from IL6 and I-180 Does not believe traffic numbers justify improvements As IL29 is a scenic byway, money should go towards promoting 		X

SUMMARY OF COMMENTS

June 15th, 2006 Public Hearing - Henry-Senachwine High School

Name	Address	Comments	Support	Oppose
		tourism rather than a truck route.		
J. Thomas Howes	RR #1 Box 47 Bradford, IL	<ul style="list-style-type: none"> • Would like to see Western Avenue and Bradford-Putnam blacktop improved • Believes there will be an increase in truck traffic from the alcohol plants and livestock production 		
Michael Kingery	515 University Ave. Henry, IL 61537	<ul style="list-style-type: none"> • Supports Henry Bypass • Requests a plan view of the affected property including distance to centerline of existing IL 29 and existing vs. proposed elevations • Believes proposed project will improve communities including Henry and Putnam • Supports building the road as soon as possible 	X	
Norbert Kuchenmeister	713 Market Street Henry, IL	<ul style="list-style-type: none"> • Believes project will provide better access to jobs outside of Henry making it easier to live in Henry and work elsewhere 	X	
Tim Kunkel	None given	<ul style="list-style-type: none"> • Believes Henry and the area needs the project economically 	X	
Mark Marquis	602 Poplet Hollow Road Peoria, IL		X	
Harold and Theresa Maubach	646 Western Road Henry, IL 61537	<ul style="list-style-type: none"> • Request updates as frequent as possible since they have investments in the area 		
William Maupin	1318 County Road 1450 North Henry, IL	<ul style="list-style-type: none"> • Irrigated farm parcel will be halved by project. Believes state should buy whole property so he can move investment elsewhere 		X
William Maupin (2 nd Statement)	1318 County Road 1450 North Henry, IL	<ul style="list-style-type: none"> • Suggest having property assessments on hand at public meetings so that impacted property owners can find out exactly what they'll be compensated so they can form an opinion on the project. • Opposes project until he receives information on compensation 		
Thomas D. McKenna	167 Lake Thunderbird Dr. Putnam, IL 61560	<ul style="list-style-type: none"> • Believes improvements will increase safety, improve travel times and provide extra lanes when roadway is under repair 	X	

SUMMARY OF COMMENTS

June 15th, 2006 Public Hearing - Henry-Senachwine High School

Name	Address	Comments	Support	Oppose
George Meister Marshall and Putnam County Engineer	P.O. Box 242 Lacon, IL	<ul style="list-style-type: none"> Supports high amount of existing right-of-way reused and minimized impact to farmland Believes it will provide economic opportunities to the area Believes project has support of mayors of Hopewell, Sparland and Lacon and the Marshall County board chairman 	X	
B. Miller	50 Barbados Dr. Putnam, IL 61560	<ul style="list-style-type: none"> Costs too much for a state that cannot afford it 		X
Reverend Thomas Mizeur	401 South St. Henry, IL 61537	<ul style="list-style-type: none"> Appreciates project's utilization of as much existing right-of-way as possible Advocate better access to Peoria 	X	
Marcia Moore	12841-2345 E St. Princeton, IL	<ul style="list-style-type: none"> Existing IL29 is dangerous because of heavy truck traffic and wildlife crossings Believes proposed project addresses these two issues 	X	
Nicky Nauman	8948 St. Hwy 18 Magnolia, IL 61336	<ul style="list-style-type: none"> Concerned about environmental impact especially tree removal between IL29 and the railroad tracks in Miller-Anderson Woods Concerned about additional air pollution caused by projected ADT in Miller-Anderson Woods 		X
Pete Nelson	1110 S. Main St. Princeton, IL 61356	<ul style="list-style-type: none"> Believes project has been designed to improve economic development 	X	
Ned Ransom	1012 Main Henry, IL 61537	<ul style="list-style-type: none"> Would like project built as soon as possible 	X	
Sharon and Bill Read	Not given	<ul style="list-style-type: none"> Believes there are fewer trucks traveling through Putnam than projected Would prefer that the project crosses the Illinois River at Chillicothe or Sparland 		(2) X
Tammy Read	1356 Western Rd. Henry, IL 61537	<ul style="list-style-type: none"> Believes project is not needed 		X
Ken Rickey	Henry, IL	<ul style="list-style-type: none"> Would like the project completed as soon as possible 	X	
Michael Schaab	3262 Senachwine Valley Rd. Putnam, IL	<ul style="list-style-type: none"> Would prefer that the road bypass Putnam rather than stay in town and go through sensitive areas 		X

SUMMARY OF COMMENTS

June 15th, 2006 Public Hearing - Henry-Senachwine High School

Name	Address	Comments	Support	Oppose
Jerry Segler (2 nd Comment)	775 State Route 29 Sparland, IL	<ul style="list-style-type: none"> Believes an access road to northern property will provide him the ability to move his house elsewhere on the property 		
Robert E. Sloan	1321 Sun Rd. Washburn, IL 61570	<ul style="list-style-type: none"> Believes project will be a burden on communities it goes through Does not believe it would be a better way for people from Peoria to get to Chicago Believes a more beneficial roadway improvement would be connecting Rt. 116 to Rt. 6 Believes existing roads need improvement 		X
Karl Villiger	1215 State Rt. 29 Henry, IL 61537	<ul style="list-style-type: none"> Does not believe traffic numbers justify the expansion to 4 lanes Project would have major impact on the farm: remove irrigation, bisect the farm, cause residential displacement Believes money would be better spent building a bridge at Mossville to connect IL6 to I-39, which would also provide better traffic flow 		X
Marvin Waldschmidt	1062 Camp Grove Rd. Sparland, IL	<ul style="list-style-type: none"> Does not believe the road is necessary Prefers improvements between Mossville and I-39 and building the ring road 		X
Elizabeth Wiedman	Box 222 Henry, IL 61537	<ul style="list-style-type: none"> Believes the existing IL 29 should have room enough for any improvements Concerned about emergency service to Henry Concerned about having trucks and cars with trailers crossing the roadway at Putnam 		X
Pat Williams	1361 Western Road Henry, IL	<ul style="list-style-type: none"> Believes there would be less impact if bypass was moved farther west (only to less than desirable farmland) Does not believe the road is worth displacements Believes roadway could remain on existing IL29 		X

SUMMARY OF COMMENTS

June 15th, 2006 Public Hearing - Henry-Senachwine High School

Name	Address	Comments	Support	Oppose
Marshall C. Winn	30 Poplar Dr. Putnam, IL 61560	<ul style="list-style-type: none"> Believes improving existing IL29 is best way to go because infrastructure already exists 		X
Randy Witko	RR1 Putnam, IL 61560	<ul style="list-style-type: none"> Believes project is an opportunity for DOT and DNR to build wetland habitat along the new roadway. Erosion control devices should be put in place to minimize sedimentation in the Illinois River 	X	
Katie Zemann	821 Western Ave. Henry, IL 61537	<ul style="list-style-type: none"> Believes Henry and the area needs the project economically 	X	
Not provided	Not provided	<ul style="list-style-type: none"> Believes IL29 will become like Rt. 66 		X

Table 3
IL Route 29 Study
Illinois Department of Transportation - District 4
Summary of Written Comments
2006 Public Hearings - Sent in via Mail

SUMMARY OF COMMENTS
June 2006 Public Hearings - Sent in via mail

Name	Address	Comments	Support	Oppose
David Baldwin	15922 McCabe Dr. Chillicothe, IL	<ul style="list-style-type: none"> Believes the Chillicothe bypass should continue north north of the Tech Center and join IL29 north of Chillicothe at Hart Lane because it would be less disruptive to residents in terms of noise and displacements and would limit westward expansion of Chillicothe 	X	
Susan Banter	11 Sawmill Lake Rd. Henry, IL 61537	<ul style="list-style-type: none"> Believes proposed project has least impact to environment and would improve Sparland and perhaps the slough south of Henry 	X	
Sam Bogner	846 County Rd., 800E Sparland, IL 61565	<ul style="list-style-type: none"> Believes proposed project will save farmland, minimize impact to environment and wildlife, and provide the best facility for motorists 	X	
Lorris Bowers	12201 W. US Hwy 150 Brimfield, IL 61517	<ul style="list-style-type: none"> Preferred bluff alignment unless proposed project can be upgraded to interstate standards in the future 		X
Michael J. Burrell, Sr.	5005 N. Sherwood Ave. Peoria, IL 61614	<ul style="list-style-type: none"> Would like the project to be completed as soon as possible Believes project would improve access from Peoria to Chicago 	X	
Ron & Eileen Butte	474 Yankee Lane Chillicothe, IL 61523	<ul style="list-style-type: none"> Prefers proposed project over any previous alternatives Believes project minimizes impact to farmland and cost of maintenance Notes that project would not impact transportation costs, township road maintenance, and emergency services in Marshall County or tax base of Midland School District Believe a road on the east side of the river to I-39 would alleviate traffic on Peoria area bridges 	(2) X	
Katherine Catton Marjorie Mattern	1205 County Rd. 1000E Henry, IL 61537	<ul style="list-style-type: none"> Does not believe the traffic numbers are as high as they are projected to be Highlights that IL29 is a National 		(2) X

SUMMARY OF COMMENTS
June 2006 Public Hearings - Sent in via mail

Name	Address	Comments	Support	Oppose
Kenneth Villiger		Scenic Byway		
Gerald Villiger		<ul style="list-style-type: none"> Concerned about implications of existing IL29 being built on unstable ground 		
Arnold Villiger		<ul style="list-style-type: none"> Concerned about the safeness of commuting farming equipment across the highway Believes money would be better spent on a ring road and bridge at Mossville Believes proposed project would not be a faster route to Chicago Believes landowners should have been informed between 2004 and 2006 of updates. Believes bypass would have a negative impact on businesses along existing IL29 in Henry Believes seniors and rural drivers would have a hard time navigating a 4-lane road Concerned about compensation for bisecting a farm with central pivot irrigation system Concerned about floodplain impact to Crow Creek 		
Michael F. Edwards Henry Chamber of Commerce – Vice President	IL29 South/PO Box 197 Henry, IL 61537	<ul style="list-style-type: none"> Believes there should be an exit on the north side of Henry bypass for industrial truck traffic servicing industrial facilities (PolyONE, Noveon, Fertilizer plant, anhydrous plant and future development). Objects to the taking of family farms for the project. Believes there should be additional compensation for such long-standing farms. 		X
James Feurer (2 nd Comment)	1389 Rt. 17 Lacon, IL	<ul style="list-style-type: none"> Concerned about impact to rural lifestyle Does not believe an interchange at Sparland is necessary 		
Gary Hanna Princeton Fire Chief	2 South Main St. Princeton, IL 61356	<ul style="list-style-type: none"> Believes proposed action will improve emergency service between Princeton and Peoria 	X	
Mr. and Mrs. John Hayes	14917 N. Ivy Lake Rd. Chillicothe, IL	<ul style="list-style-type: none"> Believes widening IL29 is all that needs to occur 		(2) X

SUMMARY OF COMMENTS
June 2006 Public Hearings - Sent in via mail

Name	Address	Comments	Support	Oppose
Patti Hedden	61523 1404 W. Elm Chillicothe, IL 61523	<ul style="list-style-type: none"> • Concerned about wildlife accidents • Believes Chillicothe bypass would adversely affect businesses • Prefers money be spent on a bridge at Mossville and the ring road • Does not believe the roadway is necessary • Concerned about impact to rural lifestyle • Believes a better route to Chicago would be to build a bridge and connect to Rt. 39 • Concerned that the proposed project would introduce drug dealers and garbage to the area • Concerned about how costly the study is 		X
Callin J. Herndon	5602 E. Fleet St. Chillicothe, IL 61523	<ul style="list-style-type: none"> • Considered the Public Hearing informative and IDOT professional and helpful • Concerned about the monetary cost of the project • Does not believe the traffic numbers justify the proposed action • Believes the proposed project is the best one presented to date • Believes the proposed project would economically benefit all the towns along the roadway • Believes the project's purpose to be a quicker route to Chicago and believes improving the road east to I-39 or I-55 would present a better route to Chicago 	X	
Kirsten Holzhauser (2 nd Comment)	56 Catalina Dr. Putnam, IL	<ul style="list-style-type: none"> • Concerned that project will negate reasons IL29 was designated a National Scenic Byway, especially if truck traffic increases as a result of the improvements 		
Mary Howard	201 E. Lake Shore Dr. Edelstein, IL 61526	<ul style="list-style-type: none"> • Believes money should not be spent on the project • Concerned about the environmental impact • Believes money should be spent 		X

SUMMARY OF COMMENTS
June 2006 Public Hearings - Sent in via mail

Name	Address	Comments	Support	Oppose
William Hunt	LS52 Trustee	<ul style="list-style-type: none"> on building a bridge at Mossville Would like safety to be the most important factor going into the design 	X	
Jim King	76 Blackhawk Ct. Sparland, IL 61565	<ul style="list-style-type: none"> Requests a bike trail on the new IL29 to provide an opportunity for bikers and hikers to enjoy the beauty of the area 		
Steven and Gwyndlyn Krause	15903 North Regency Park Place Chillicothe, IL 61523-9475	<ul style="list-style-type: none"> Concerned that Chillicothe bypass comes too close to the subdivisions (e.g., Galena Knolls Subdivision) Believes following Old Galena Road north of Truitt would minimize impact to residents along existing IL29 Concerned about the cost effectiveness of widening the existing roadway Prefers widening existing IL29 through Chillicothe including the railroad viaduct and incrementally improving the bridge over the creek to four lanes Does not believe traffic numbers warrant improving IL29 north of Chillicothe Believes the location needing improvement is the access to the Caterpillar Mossville plant 		(2) X
Doug and Rhonda Kunkel	325 Black Hawk Dr. Hopewell, IL 61565-9422	<ul style="list-style-type: none"> Does not believe taxes should go to this project Believes that proposed alignment does not minimize impact to residences and wildlife Concerned about increase in noise Concerned about impact on rural lifestyle 		(2) X
W. G. Lippert Medina Township Assessor	13815 N. Dover Lane Chillicothe, IL 61523	<ul style="list-style-type: none"> Prefers building a bridge between IL6 and Rt. 39 		X
Orland and Vicki Lockhart	871 State Rt. 29 Sparland, IL 61565	<ul style="list-style-type: none"> Believes they are landlocked by the proposed project Suggests scheduling one meeting in the morning for those who work second shift such as the Lockharts and one in the evening for those 		

SUMMARY OF COMMENTS
June 2006 Public Hearings - Sent in via mail

Name	Address	Comments	Support	Oppose
		who work first shift		
Karen M. Maberly	613 N. Second St. Chillicothe, IL 61523	<ul style="list-style-type: none"> • Does not believe the roadway is necessary • Believes money should be spent on building a bridge at Rt. 6 • Believes Chillicothe bypass will adversely affect businesses in Chillicothe • Concerned with impact to farmland and residences along the bypass • Does not believe project is a better route to Chicago 		X
William and Karen Maupin	1318 County Road 1450 N Henry, IL 61537	<ul style="list-style-type: none"> • Concerned about increase in noise pollution on their property • Concerned about impact to irrigation system on their farm • Wished they had received correspondence between 2004 and 2006 public involvement events 		(2) X
Jim Neuhalfen	1150 County Rd. 1330 E Henry, IL 61537	<ul style="list-style-type: none"> • Concerned about the monetary cost • Concerned about loss of irrigated land • Prefers building a bridge at Mossville and connecting it to Rt. 39 		X
Tonya Putnam	772 Thenius Road Sparland, IL	<ul style="list-style-type: none"> • Believes truck traffic and through traffic will use bluff alignment and local traffic would use existing IL 29 • Believes the bluff alternative is preferable to going through Sparland to avoid impacting the town and the waterfowl refuge. Also believes bluff would have to be less expensive because of all the retaining walls on existing IL 29 alternative. • Believes bluff alternative complies with law protecting IDNR land • Does not believe the deer would use the wildlife crossings • Believes a bridge connecting IL6 and Rt. 39 would improve access to Caterpillar for commuters. 		X

SUMMARY OF COMMENTS
June 2006 Public Hearings - Sent in via mail

Name	Address	Comments	Support	Oppose
Ned Ransom	1012 Main St. Henry, IL 61537	<ul style="list-style-type: none"> Concerned that traffic would increase on IL17 bridge causing additional wear and tear Concerned about increasing flooding in Sparland Believes it is endangering to motorists to cut into the hillside Concerned about the safety of the proposed Thenius Road intersection 	X	
Craig Ross	15908 N. Krause Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> Would prefer the ring road be built because does not believe that IL29 would be traveled by people trying to get northeast Asks what measures are being taken to minimize noise 		X
Albert Rostello	2 Oakdale Ave. Spring Valley, IL 61362	<ul style="list-style-type: none"> Believes environmental and socio-economic costs outweigh the amount of time that will be saved traveling the roadway Believes existing roadway should be widened and the speed limit raised Believes money should be spent on resurfacing existing roadways 		X
Jerry and Janet Segler	775 State Rt. 29 Sparland, IL 61565-9805	<ul style="list-style-type: none"> Believes that enough traffic would use the bluff alignment. Believes that most of the traffic coming into Sparland go east to I-39 to travel between Peoria and Chicago and would be willing to use the bluff for a quicker path. Believes that bluff must cost less because it would be less expensive to buy farmland than buy residences, build retaining walls and elevate roads. Concerned about compensation for not only residence, but moving expenses, etc. Believes that displaced residences should have been notified in advance of the rest of the community members. Would like to have consideration given to an access road so they 		X

SUMMARY OF COMMENTS
June 2006 Public Hearings - Sent in via mail

Name	Address	Comments	Support	Oppose
		can access their other property and potentially rebuild or relocate their house onto it.		
Roy F. Seibold	994 Willow Rd. Sparland, IL 61565		X	
Dave Smith Sparland Board Member	PO Box 193 Sparland, IL 61565	<ul style="list-style-type: none"> Believes project will negatively impact Sparland by removing taxable land from its tax base 		X
Michael and Amy Soldat	1605 Sandstone Ct. Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes Chillicothe bypass will improve safety 	(2) X	
Virgil Swanson	4110 E. Cloverdale Rd. Chillicothe, IL 61523-9585	<ul style="list-style-type: none"> Believes adjustments to Cloverdale Road (moving plans to the north and providing a short access road) are improvements Believes project minimizes impact to her property 	X	
Frances C. Timmermann	5603 E. Crews Ave. Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes the proposed project would improve the safety conditions along the roadway Believes with higher traffic numbers in the future the roadway should be a 4-lane freeway in the central section Concerned about the current safety of school buses 	X	
Frank Timmermann	5603 E. Crews Ave. Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes the proposed project would improve the safety conditions along the roadway Believes with higher traffic numbers in the future the roadway should be a 4-lane freeway in the central section Believes the proposed project would improve the economic conditions along the roadway 	X	
Gerald Villiger	1127 West Sycamore St. Chillicothe, IL 61523	<ul style="list-style-type: none"> Believes posted speed limit is too fast for motorists hauling farming machinery Believes that the bisecting of his farm and impact to central pivot system would not be fairly compensated Believes that raising the road to 50-year high water level would increase flooding on both sides of IL29 at Crow Creek 		X

SUMMARY OF COMMENTS
June 2006 Public Hearings - Sent in via mail

Name	Address	Comments	Support	Oppose
Kenneth Villiger	207 Conrad St. Henry, IL 61537	<ul style="list-style-type: none"> • Disagrees with closing existing IL 29 on south side of Henry. Believes it would negatively impact Henry's businesses and would eliminate ability for slower moving traffic to use alternative roadways. • Believes traffic numbers are too low south of Henry to I-180 • Believes monetary cost is too high • Costs do not outweigh the benefits • Believes bypass would adversely impact Henry businesses • The project would impact family farm – eliminate central pivot system and wells, bisect farm and leave land without measures to irrigate • Concerned about Crow Creek flooding second property farther south on IL29 • Concerned about affecting emergency service routes • Concerned about effect new roadway would have on IL29's status as a scenic byway • Does not believe that I-180 would experience more traffic with new roadway • While proposed roadway is better than IL17 to I-39, it isn't preferred by motorists so it wouldn't be well traveled • Believes that Henry Township sent IDOT a letter opposing the roadway 		X
Susan Vonk	18530 N. Old Galena Rd. Chillicothe, IL	<ul style="list-style-type: none"> • Does not believe traffic numbers justify roadway • Believes project is too costly 		X
John C. Wagner	4210 Cloverdale Rd. Chillicothe, IL 61523	<ul style="list-style-type: none"> • Believes proposed IL29 should overpass Cloverdale Rd. to eliminate impacting the residences on the south side of Cloverdale Road and landlocking the farmland behind them. Believes this would be less expensive than having Cloverdale Rd. overpass IL 29 		X
Robert Ward	432 County Rd. 850	<ul style="list-style-type: none"> • Believes the presentation was 		X

SUMMARY OF COMMENTS
June 2006 Public Hearings - Sent in via mail

Name	Address	Comments	Support	Oppose
	East Sparland, IL 61565	helpful, clear and comprehensible		
Terry Ward	432 County Rd. – 850 East Sparland, IL 61565	<ul style="list-style-type: none"> Believes improving the existing roadway would be less expensive Does not believe that project will effectively enhance economic position of towns in the project area Concerned about project's cost Does not believe that project will improve local economies it bypasses 		X
Debra A. Welch	116 E. Lake Shore Dr. Edelstein, IL 61526	<ul style="list-style-type: none"> Believes project is too costly Concerned about displacements and loss of farmland Does not believe a faster way to Chicago is a priority of Chillicothe residents Concerned about the inconvenience of construction 		X
Berna Winship Winship Shady Bluff Farm	6975 IL Hwy 29 Putnam, IL 61560	<ul style="list-style-type: none"> Concerned about personal farmland being reduced (for the third time because of improvements to IL29) Believes IL29 solely needs resurfacing 		X
Cheryle A. Wood No Way Corridor A Committee	1018 Yankee Lane Sparland, IL 61565	<ul style="list-style-type: none"> Supports keeping the project on existing IL29 as much as possible Believes the proposed project will support towns along the roadway Believes dropping the bluff minimizes impact to farmland and wildlife Is grateful for ability to have input on the proposed project 	X	
John Wosik	12409 N. Blackhawk Ct. Dunlap, IL 61525- 9552	<ul style="list-style-type: none"> Does not believe taxes should be spent on the proposed project Supports rebuilding bridge viaduct on north side of Chillicothe Does not believe traffic numbers support project Does not believe motorists traveling between Peoria and Chicago would use the proposed route Believes proposed project would 		X

SUMMARY OF COMMENTS
 June 2006 Public Hearings - Sent in via mail

Name	Address	Comments	Support	Oppose
Not provided	Not provided	<p>encourage sprawl</p> <ul style="list-style-type: none"> • Believes project would increase travel times/distances to Peoria and waste energy • Does not believe project would encourage high quality economic development, but rather fast food restaurants, gas stations, etc. • Preferred route proposed at PIM2 but eliminated afterwards [Likely the bluff alignment] 		X

Table 4
IL Route 29 Study
Illinois Department of Transportation - District 4
Tally of Submitted Comments
June 2006 Public Hearings - Total of All Comments

TALLY OF SUBMITTED COMMENTS
June 2006 - Total of All Comments

Comment	Number of Comments
Comments from the point of view that the proposed project's intention is to provide an improved route between Peoria and Chicago	24
Believes taxes would be better spent on other transportation projects such as a bridge at Mossville, the "ring road", IL24 to I-55, IL24 to I-39, IL6 to I-39, IL40, IL 6 to Rt. 116, 336 or high speed rail	24
Concerned about impact to environment (farmland, CRP and other Illinois River restoration efforts, forest, bluff, sedimentation in the Illinois River, wildlife, wetlands, runoff, air pollution by increased gas consumption, noise pollution, Miller-Anderson Woods)	22
Does not believe taxes should be spent on the proposed project	13
Does not believe proposed project would economically benefit towns in project area	12
Believes proposed project would economically benefit towns in the project corridor	11
Believes existing roadways need to be improved before creating new ones	10
Concerned about construction schedule and cost	9
Concerned about impact to rural lifestyle	8
Does not believe that population growth and traffic numbers indicate need for improvements	8
Believes proposed project will improve safety	7
Believes traffic numbers justify need for proposed project	7
Supports completing the proposed project as soon as possible	7
Does not believe there is a need for the proposed project	6
Believes existing IL29 route is scenic and should be preserved	6
Believes proposed project minimizes impact to high quality farmland	6
Believes proposed project reuses existing right-of-way to the greatest extent possible	5
Proposed alternative is best to-date	5
Believes proposed project will improve Henry	5
Believes existing IL 29 could be improved enough to address issues	5
Believes Chillicothe bypass would adversely affect businesses in town	4
Concerned about property being too close to the proposed project, but not actually directly impacted. Some would like more information on compensation for property being close to proposed alignment (e.g., purchase) or is impacted aesthetically by the proposed project	4
Believes most important part of proposed project is the expansion of IL29 under viaduct on	4

**TALLY OF SUBMITTED COMMENTS
June 2006 - Total of All Comments**

Comment	Number of Comments
north side of Chillicothe	
Concerned about residential impacts resulting from proposed project	4
Prefers a more western bypass around Henry	4
Concerned about impact on Native American artifacts and how artifacts would be handled if found during construction	3
Concerned that proposed project would introduce drug dealers and criminals to the area	3
Supports efforts to provide natural noise abatement measures	3
Does not believe improvements north of Chillicothe are necessary (because of lack of traffic)	3
Believes Chillicothe bypass should follow Old Galena Road	3
Believes bluff alignment would be quicker and less expensive	3
Believes proposed project will provide economic opportunities limited in quality and time	3
Believes proposed project will improve wildlife crossing situations	3
Appreciates consideration given to public input	3
Believes Henry bypass will have adverse affect on Henry's economy	3
As a property owner affected by the proposed project, would like more frequent updates	3
Believes that existing IL29 through Henry is sufficient	2
Believes enough traffic would use the bluff alignment to warrant its construction	2
Advocates a bike/hiking trail to be included in the design	2
Concerned about sprawl resulting from proposed project	2
Believes proposed project minimizes impact to bluffs and nature preserves	2
Does not believe proposed project will increase safety	2
Suggests bypassing Putnam	2
Asks cost of reinforcing the bluff between Chillicothe and north of Sparland	2
Does not believe Chillicothe bypass will improve Chillicothe's economy	2
Concerned about impact to family farms	2
Concerned about emergency access to Henry	2
Concerned about the displacements	2
Believes proposed project minimizes impact to the environment, including the slough south of Henry	2
Prefers bluff alignment	2
Concerned about safeness of transporting farming machinery on/across new roadway	2
Concerned about compensation for bisecting a farm with central pivot irrigation system	2
Believes with higher traffic numbers in the future the roadway should be a 4-lane freeway in the	2

TALLY OF SUBMITTED COMMENTS
June 2006 - Total of All Comments

Comment	Number of Comments
central section	
Believes that raising the road to 50-year high water level would increase flooding on both sides of IL29 at Crow Creek	2
Requests a complete cost-benefit analysis	1
Suggests studying a high-speed rail system between the towns	1
Suggests widening Whitefield Road to accommodate truck traffic accessing Henry's industrial area	1
Suggests improving existing IL 29/Whitefield Road intersection because it is dangerous	1
Thought IL6 was halted because Native American artifacts were found there	1
Believes cost per person to increase access to Peoria is too high	1
Does not believe proposed project adequately addresses runoff and water quality impacts from construction	1
Believes proposed project would introduce alien species to Root Cemetery and suggests planting only native species between Truitt and the county line	1
Believes proposed project will decrease travel time	1
Requests information on economic impact of bypassing towns (like Chillicothe)	1
Requests information on impact to watershed north of Chillicothe and ultimately community well for Fawn Hills residents	1
Asks if there will be a contingency plan for the farmland that will be contested	1
Does not believe all interchanges along Chillicothe bypass are necessary	1
Does not believe recreational buffer area in Chillicothe's future land use plan is an adequate mitigation measure	1
Believes the tree removal prohibition time begins too late (April) – believes eagles nest as early as February	1
Does not believe the intermodal improvements will benefit more than a few businesses	1
Believe proposed project will have limited improvements in travel efficiency	1
Concerned that IDNR does not have the funds to properly oversee mitigation properties	1
Believes wildlife crossing measures need to include 10-foot fences to keep deer off the road	1
Hopes project minimizes noise and prevents animal collisions as much as possible	1
Believes it is the communities' responsibility to keep the economy vibrant under the proposed project	1
Believes Cedar Hills Drive improvement is one of the most important features of the proposed project	1
Does not believe proposed project is the highest priority for the project area	1
Believes the Chillicothe bypass is one of the most important improvements	1
Concerned about emergency service to Fawn Hills, Benedict Street north of Hart Lane, and	1

TALLY OF SUBMITTED COMMENTS
June 2006 - Total of All Comments

Comment	Number of Comments
Yankee Lane	
Concerned that if the frontage road to Ivy Lake Road isn't for the camp then it would become used as a shortcut or used by commercial traffic	1
Supports alignment on existing IL 29 in Central Section	1
Supports current design measures including retaining walls and flatter grade to decrease fuel burn	1
Supports Sparland bypass	1
Asks what kind of compensation is available if profile of the property is raised to meet roadway profile (at Cloverdale Rd.).	1
Believes proposed project minimizes noise impacts	1
Does not believe proposed project will provide better access to Peoria	1
Suggests including a partial cloverleaf (southwest quadrant of IL29/Cedar Hills Drive interchange) to avoid users intersecting with CAT workers at peak hours.	1
Believes proposed project will improve access roads	1
Believes proposed project will improve Chillicothe's economy	1
Overpasses at Cloverdale and Sycamore are critical to Chillicothe's westward growth	1
Believes project is necessary	1
Believes only need 3 lanes between Chillicothe and Sparland (2 SB and 1 NB).	1
Believes proposed project will adversely impact Putnam	1
Believes wetland impacts are minimized by proposed project	1
Does not believe interchange is necessary along Henry bypass	1
Supports Henry Bypass	1
Suggests a cloverleaf or similar type intersection in Putnam to address the large amount of truck traffic	1
Concerned about the safety of Putnam being the first major intersection off of I-180	1
Concerned that proposed Henry bypass presents the possibility of property annexation	1
Believes proposed project will benefit Caterpillar rather than Marshall and Putnam Counties	1
Would like to see Western Avenue and Bradford-Putnam blacktop improved	1
Believes there will be an increase in truck traffic from the alcohol plants and livestock production	1
Believes project will provide better access to jobs outside of Henry making it easier to live in Henry and work elsewhere	1
Believes proposed project will provide better access to Peoria	1
Irrigated farm parcel will be halved by project. Believes state should buy whole property so he can move investment elsewhere	1

TALLY OF SUBMITTED COMMENTS
June 2006 - Total of All Comments

Comment	Number of Comments
Suggest having property assessments on hand at public meetings so that impacted property owners can find out exactly what they'll be compensated so they can form an opinion on the project.	1
Does not believe that so many trucks travel through Putnam	1
Believes proposed project would be a burden on the towns it goes through	1
Concerned about trucks and cars with trailers crossing the road at Putnam	1
Believes proposed project provides an opportunity to build wetlands along roadway	1
Believes implementing erosion control devices would minimize sedimentation in the Illinois River	1
Believes IL 29 will become like Rt. 66	1
Believes existing IL 29 through Chillicothe is sufficient	1
Believes the T&E plant species mitigation measures are inadequate.	1
Believes proposed project minimizes cost of maintenance	1
Concerned about proposed project being built on unstable ground	1
Believes seniors and rural drivers would have a hard time navigating a 4-lane road	1
Concerned about floodplain impact to Crow Creek	1
Believes there should be an exit on the north side of Henry bypass for industrial truck traffic servicing industrial facilities (PolyONE, Noveon, Fertilizer plant, anhydrous plant and future development)	1
Believes there should be additional compensation for such long-standing farms.	1
Does not believe an interchange at Sparland is necessary	1
Believes proposed action will improve emergency service between Princeton and Peoria	1
Concerned about wildlife accidents	1
Concerned that Chillicothe bypass comes too close to subdivisions (e.g., Galena Knolls)	1
Believes access to Mossville Caterpillar Plant is highest priority	1
Suggests scheduling one meeting in the morning for those who work second shift such as the Lockharts and one in the evening for those who work first shift	1
Believes truck traffic would use bluff and cars would use existing IL 29	1
Believes bluff alignment would minimize impact to waterfowl refuge near Sparland and would comply with IDNR laws	1
Does not believe deer will use wildlife crossings	1
Concerned about additional traffic using IL17 causing wear and tear	1
Concerned about increase in flooding in Sparland	1
Concerned about the safety of cutting into the hillside	1
Concerned about safety of proposed Thenius Road intersection	1

TALLY OF SUBMITTED COMMENTS
 June 2006 - Total of All Comments

Comment	Number of Comments
Concerned about not only compensation for displacement, but for moving expenses, etc.	1
Believes displaced residences should have found out before the public hearing	1
Believes alignment through Sparland will negatively affect tax base	1
Believes adjustments to Cloverdale Road (moving plans to the north and providing a short access road) are improvements	1
Concerned about the current safety of school buses	1
Disagrees with closing existing IL 29 on south side of Henry. Believes it would negatively impact Henry's businesses and would eliminate ability for slower moving traffic to use alternative roadways.	1
Does not believe that I-180 would experience more traffic with new roadway	1
Believes proposed IL29 should overpass Cloverdale Rd. to eliminate impacting the residences on the south side of Cloverdale Road and landlocking the farmland behind them. Believes this would be less expensive than having Cloverdale Rd. overpass IL 29	1
Believes proposed project is less expensive than bluff alignment	1
Concerned about inconvenience of construction	1

Table 5
IL Route 29 Study
Illinois Department of Transportation - District 4
Tally of Submitted Comments
June 14th, 2006 Public Hearings - Three Sisters Park

TALLY OF SUBMITTED COMMENTS
June 14th, 2006 Public Hearing - Three Sisters Park

Comment	Number of Comments
Believes taxes would be better spent on other transportation projects such as a bridge at Mossville, the "ring road", IL24 to I-55, IL24 to I-39, IL6 to I-39, IL40, IL 6 to Rt. 116, 336 or high speed rail	12
Concerned about impact to environment (farmland, CRP and other Illinois River restoration efforts, forest, bluff, sedimentation in the Illinois River, wildlife, wetlands, runoff, air pollution by increased gas consumption, noise pollution, Miller-Anderson Woods)	11
Comments from the point of view that the proposed project's intention is to provide an improved route between Peoria and Chicago	8
Does not believe proposed project would economically benefit towns in project area	7
Does not believe taxes should be spent on the proposed project	7
Concerned about impact to rural lifestyle	6
Believes existing roadways need to be improved before creating new ones	5
Does not believe that population growth and traffic numbers indicate need for improvements	4
Believes proposed project would economically benefit towns in the project corridor	4
Concerned about property being too close to the proposed project, but not actually directly impacted. Some would like more information on compensation for property being close to proposed alignment (e.g., purchase) or is impacted aesthetically by the proposed project	3
Supports efforts to provide natural noise abatement measures	3
Supports completing the proposed project as soon as possible	3
Concerned about impact on Native American artifacts and how artifacts would be handled if found during construction	2
Concerned that proposed project would introduce drug dealers and criminals to the area	2
Believes existing IL29 route is scenic and should be preserved	2
Does not believe there is a need for the proposed project	2
Believes Chillicothe bypass would adversely affect businesses in town	2
Believes proposed project will improve safety	2
Believes most important part of proposed project is the expansion of IL29 under viaduct on north side of Chillicothe	2
Concerned about residential impacts resulting from proposed project	2
Believes proposed project minimizes impact to bluffs and nature preserves	2
Believes traffic numbers justify need for proposed project	2

TALLY OF SUBMITTED COMMENTS
June 14TH, 2006 Public Hearing - Three Sisters Park

Comment	Number of Comments
Does not believe proposed project will increase safety	2
Believes proposed project will provide economic opportunities limited in quality and time	2
Does not believe Chillicothe bypass will improve Chillicothe's economy	2
Advocates a bike/hiking trail to be included in the design	1
Requests a complete cost-benefit analysis	1
Concerned about sprawl resulting from proposed project	1
Suggests studying a high-speed rail system between the towns	1
Believes proposed project reuses existing right-of-way to the greatest extent possible	1
Suggests widening Whitefield Road to accommodate truck traffic accessing Henry's industrial area	1
Suggests improving existing IL 29/Whitefield Road intersection because it is dangerous	1
Does not believe improvements north of Chillicothe are necessary (because of lack of traffic)	1
Believes Chillicothe bypass should follow Old Galena Road	1
Thought IL6 was halted because Native American artifacts were found there	1
Believes cost per person to increase access to Peoria is too high	1
Does not believe proposed project adequately addresses runoff and water quality impacts from construction	1
Believes proposed project would introduce alien species to Root Cemetery and suggests planting only native species between Truitt and the county line	1
Believes proposed project will decrease travel time	1
Believes bluff alignment would be quicker and less expensive	1
Believes enough traffic would use the bluff alignment to warrant its construction	1
Requests information on economic impact of bypassing towns (like Chillicothe)	1
Requests information on impact to watershed north of Chillicothe and ultimately community well for Fawn Hills residents	1
Concerned about construction schedule and cost	1
Asks if there will be a contingency plan for the farmland that will be contested	1
Does not believe all interchanges along Chillicothe bypass are necessary	1
Does not believe recreational buffer area in Chillicothe's future land use plan is an adequate mitigation measure	1
Believes the tree removal prohibition time begins too late (April) – believes eagles nest as early as February	1
Does not believe the intermodal improvements will benefit more than a few businesses	1
Believe proposed project will have limited improvements in travel efficiency	1

TALLY OF SUBMITTED COMMENTS
June 14TH, 2006 Public Hearing - Three Sisters Park

Comment	Number of Comments
Concerned that IDNR does not have the funds to properly oversee mitigation properties	1
Believes wildlife crossing measures need to include 10-foot fences to keep deer off the road	1
Hopes project minimizes noise and prevents animal collisions as much as possible	1
Believes it is the communities' responsibility to keep the economy vibrant under the proposed project	1
Believes Cedar Hills Drive improvement is one of the most important features of the proposed project	1
Does not believe proposed project is the highest priority for the project area	1
Concerned about emergency service to Fawn Hills, Benedict Street north of Hart Lane, and Yankee Lane	1
Concerned that if the frontage road to Ivy Lake Road isn't for the camp then it would become used as a shortcut or used by commercial traffic	1
Proposed alternative is best to-date	1
Supports alignment on existing IL 29 in Central Section	1
Supports current design measures including retaining walls and flatter grade to decrease fuel burn	1
Supports Sparland bypass	1
Believes proposed project minimizes impact to high quality farmland	1
Asks what kind of compensation is available if profile of the property is raised to meet roadway profile (at Cloverdale Rd.).	1
Believes proposed project minimizes noise impacts	1
Does not believe proposed project will provide better access to Peoria	1
Suggests including a partial cloverleaf (southwest quadrant of IL29/Cedar Hills Drive interchange) to avoid users intersecting with CAT workers at peak hours.	1
Believes proposed project will improve wildlife crossing situations	1
Believes proposed project will improve access roads	1
Appreciates consideration given to public input	1
Believes proposed project will improve Chillicothe's economy	1
Overpasses at Cloverdale and Sycamore are critical to Chillicothe's westward growth	1
Believes project is necessary	1
Believes only need 3 lanes between Chillicothe and Sparland (2 SB and 1 NB).	1
Concerned about impact to family farms	1
Believes existing IL 29 through Chillicothe is sufficient	1
Believes the T&E plant species mitigation measures are inadequate.	1

Table 6
IL Route 29 Study
Illinois Department of Transportation - District 4
Tally of Submitted Comments
June 15th, 2006 Public Hearings - Henry-Senachwine High School

TALLY OF SUBMITTED COMMENTS
June 15TH, 2006 - Henry-Senachwine High School

Comment	Number of Comments
Concerned about impact to environment (farmland, CRP and other Illinois River restoration efforts, forest, bluff, sedimentation in the Illinois River, wildlife, wetlands, runoff, air pollution by increased gas consumption, noise pollution, Miller-Anderson Woods)	5
Believes proposed project would economically benefit towns in the project corridor	5
Believes proposed project will improve Henry	5
Concerned about impact to rural lifestyle	4
Does not believe that population growth and traffic numbers indicate need for improvements	4
Believes proposed project reuses existing right-of-way to the greatest extent possible	4
Supports completing the proposed project as soon as possible	4
Prefers a more western bypass around Henry	4
Believes existing roadways need to be improved before creating new ones	3
Does not believe taxes should be spent on the proposed project	3
Does not believe proposed project would economically benefit towns in project area	3
Believes traffic numbers justify need for proposed project	3
Does not believe there is a need for the proposed project	2
Believes proposed project minimizes impact to high quality farmland	2
Suggests bypassing Putnam	2
Believes existing IL 29 could be improved enough to address issues	2
Concerned about property being too close to the proposed project, but not actually directly impacted. Some would like more information on compensation for property being close to proposed alignment (e.g., purchase) or is impacted aesthetically by the proposed project	1
Concerned about impact on Native American artifacts and how artifacts would be handled if found during construction	1
Believes existing IL29 route is scenic and should be preserved	1
Believes proposed project will improve safety	1
Does not believe improvements north of Chillicothe are necessary (because of lack of traffic)	1
Believes taxes would be better spent on other transportation projects such as a bridge at Mossville, the "ring road", IL24 to I-55, IL24 to I-39, IL6 to I-39, IL40, IL 6 to Rt. 116, 336 or high speed rail	1
Concerned about construction schedule and cost	1

TALLY OF SUBMITTED COMMENTS
June 15TH, 2006 - Henry-Senachwine High School

Comment	Number of Comments
Believes the Chillicothe bypass is one of the most important improvements	1
Believes proposed project will improve wildlife crossing situations	1
Appreciates consideration given to public input	1
Believes Henry bypass will have adverse affect on Henry's economy	1
Believes that existing IL29 through Henry is sufficient	1
Believes proposed project will adversely impact Putnam	1
Believes wetland impacts are minimized by proposed project	1
Does not believe interchange is necessary along Henry bypass	1
Supports Henry Bypass	1
Suggests a cloverleaf or similar type intersection in Putnam to address the large amount of truck traffic	1
Concerned about the safety of Putnam being the first major intersection off of I-180	1
Asks cost of reinforcing the bluff between Chillicothe and north of Sparland	1
Concerned that proposed Henry bypass presents the possibility of property annexation	1
Concerned about impact to family farms	1
Believes proposed project will benefit Caterpillar rather than Marshall and Putnam Counties	1
Would like to see Western Avenue and Bradford-Putnam blacktop improved	1
Believes there will be an increase in truck traffic from the alcohol plants and livestock production	1
Believes project will provide better access to jobs outside of Henry making it easier to live in Henry and work elsewhere	1
As a property owner affected by the proposed project, would like more frequent updates	1
Believes proposed project will provide better access to Peoria	1
Irrigated farm parcel will be halved by project. Believes state should buy whole property so he can move investment elsewhere	1
Suggest having property assessments on hand at public meetings so that impacted property owners can find out exactly what they'll be compensated so they can form an opinion on the project.	1
Does not believe that so many trucks travel through Putnam	1
Believes proposed project would be a burden on the towns it goes through	1
Concerned about emergency access to Henry	1
Concerned about trucks and cars with trailers crossing the road at Putnam	1
Concerned about the displacements	1
Believes proposed project provides an opportunity to build wetlands along roadway	1

TALLY OF SUBMITTED COMMENTS
June 15TH, 2006 - Henry-Senachwine High School

Comment	Number of Comments
Believes implementing erosion control devices would minimize sedimentation in the Illinois River	1
Believes IL 29 will become like Rt. 66	1

Table 7
IL Route 29 Study
Illinois Department of Transportation - District 4
Tally of Submitted Comments
June 2006 Public Hearings - Comments Sent in via Mail

TALLY OF SUBMITTED COMMENTS
June 2006 Public Hearings - Comments sent in via Mail

Comment	Number of Comments
Believes taxes would be better spent on other transportation projects such as a bridge at Mossville, the "ring road", IL24 to I-55, IL24 to I-39, IL6 to I-39, IL40, IL 6 to Rt. 116, 336 or high speed rail	11
Concerned about construction schedule and cost	7
Comments from the point of view that the proposed project's intention is to provide an improved route between Peoria and Chicago	6
Concerned about impact to environment (farmland, CRP and other Illinois River restoration efforts, forest, bluff, sedimentation in the Illinois River, wildlife, wetlands, runoff, air pollution by increased gas consumption, noise pollution, Miller-Anderson Woods)	6
Does not believe that population growth and traffic numbers indicate need for improvements	5
Believes proposed project will improve safety	4
Does not believe taxes should be spent on the proposed project	3
Believes existing IL29 route is scenic and should be preserved	3
Concerned about impact to rural lifestyle	3
Believes proposed project would economically benefit towns in the project corridor	3
Proposed alternative is best to-date	3
Believes proposed project minimizes impact to high quality farmland	3
Believes existing IL 29 could be improved enough to address issues	3
Believes proposed project minimizes impact to the environment, including the slough south of Henry	2
Prefers bluff alignment	2
Believes existing roadways need to be improved before creating new ones	2
Does not believe there is a need for the proposed project	2
Believes Chillicothe bypass would adversely affect businesses in town	2
Believes most important part of proposed project is the expansion of IL29 under viaduct on north side of Chillicothe	2
Believes Chillicothe bypass should follow Old Galena Road	2
Does not believe proposed project would economically benefit towns in project area	2
Concerned about residential impacts resulting from proposed project	2
Believes bluff alignment would be quicker and less expensive	2

TALLY OF SUBMITTED COMMENTS
June 2006 Public Hearings - Comments sent in via Mail

Comment	Number of Comments
Believes traffic numbers justify need for proposed project	2
Believes Henry bypass will have adverse affect on Henry's economy	2
As a property owner affected by the proposed project, would like more frequent updates	2
Concerned about safeness of transporting farming machinery on/across new roadway	2
Concerned about compensation for bisecting a farm with central pivot irrigation system	2
Believes with higher traffic numbers in the future the roadway should be a 4-lane freeway in the central section	2
Believes that raising the road to 50-year high water level would increase flooding on both sides of IL29 at Crow Creek	2
Advocates a bike/hiking trail to be included in the design	1
Concerned that proposed project would introduce drug dealers and criminals to the area	1
Concerned about sprawl resulting from proposed project	1
Does not believe improvements north of Chillicothe are necessary (because of lack of traffic)	1
Believes enough traffic would use the bluff alignment to warrant its construction	1
Believes proposed project will provide economic opportunities limited in quality and time	1
Supports completing the proposed project as soon as possible	1
Believes proposed project will improve wildlife crossing situations	1
Appreciates consideration given to public input	1
Asks cost of reinforcing the bluff between Chillicothe and north of Sparland	1
Concerned about emergency access to Henry	1
Concerned about the displacements	1
Believes proposed project minimizes cost of maintenance	1
Concerned about proposed project being built on unstable ground	1
Believes seniors and rural drivers would have a hard time navigating a 4-lane road	1
Concerned about floodplain impact to Crow Creek	1
Believes there should be an exit on the north side of Henry bypass for industrial truck traffic servicing industrial facilities (PolyONE, Noveon, Fertilizer plant, anhydrous plant and future development)	1
Believes there should be additional compensation for such long-standing farms.	1
Does not believe an interchange at Sparland is necessary	1
Believes proposed action will improve emergency service between Princeton and Peoria	1
Concerned about wildlife accidents	1
Concerned that Chillicothe bypass comes too close to subdivisions (e.g., Galena Knolls)	1

TALLY OF SUBMITTED COMMENTS

June 2006 Public Hearings - Comments sent in via Mail

Comment	Number of Comments
Believes access to Mossville Caterpillar Plant is highest priority	1
Suggests scheduling one meeting in the morning for those who work second shift such as the Lockharts and one in the evening for those who work first shift	1
Believes truck traffic would use bluff and cars would use existing IL 29	1
Believes bluff alignment would minimize impact to waterfowl refuge near Sparland and would comply with IDNR laws	1
Does not believe deer will use wildlife crossings	1
Concerned about additional traffic using IL17 causing wear and tear	1
Concerned about increase in flooding in Sparland	1
Concerned about the safety of cutting into the hillside	1
Concerned about safety of proposed Thenius Road intersection	1
Concerned about not only compensation for displacement, but for moving expenses, etc.	1
Believes displaced residences should have found out before the public hearing	1
Believes alignment through Sparland will negatively affect tax base	1
Believes adjustments to Cloverdale Road (moving plans to the north and providing a short access road) are improvements	1
Concerned about the current safety of school buses	1
Disagrees with closing existing IL 29 on south side of Henry. Believes it would negatively impact Henry's businesses and would eliminate ability for slower moving traffic to use alternative roadways.	1
Does not believe that I-180 would experience more traffic with new roadway	1
Believes proposed IL29 should overpass Cloverdale Rd. to eliminate impacting the residences on the south side of Cloverdale Road and landlocking the farmland behind them. Believes this would be less expensive that having Cloverdale Rd. overpass IL 29	1
Believes proposed project is less expensive than bluff alignment	1
Concerned about inconvenience of construction	1



Illinois Department of Transportation

Memorandum

To: File
From: Mike Lewis, Studies & Plans – Squad 2
Subject: **IL Route 29 Study – Public Meeting #4 – Sparland**
Date: January 31, 2008

On January 23, 2008, Illinois Department of Transportation representatives held an open house public meeting at the Sparland Village Hall to present updates to local residents regarding proposed design changes in the Sparland area. The meeting was held from 4:30pm to 7:00pm. In attendance from the design team were Tom Lacy, Studies & Plans Engineer; Maureen Addis, Project Engineer; Mike Lewis, Team Leader; and Jim Jodie, Project Manager (CH2M HILL). A sign in sheet is attached with names of attendees from the public.

Comments were received by the design team and explanations were given concerning the design changes, as well as concerning the project in general. Changes since the 2006 public hearing included: a flyover structure for Ramp D at Thenius Road, a roundabout at IL 29/IL 17/Hilltop Drive, and a double left turn at IL 17/IL 29/Ferry Street. The changes were shown with orthophoto renderings, plan view drawings, and a video on roundabouts.

A summary of various discussions with the public follows:

In general the design changes were well received and the residents in attendance did not see many negative aspects to the changes. Concerns were raised, however, about whether the benefits of the improvements would justify the cost. Also, some of the residents were unsure if a roundabout would work well at that location. Comments were received doubting if the roundabout would be able to handle the expected volume of traffic.

One individual suggested the previous design at Thenius Road would be better than, and a cost savings over, the new design. He also suggested the use of a ramp to split off of Ramp D to go to westbound on Thenius Road. He felt the roundabout would be too congested and wouldn't work. He also strongly suggested signage be placed on existing IL 29 to alert motorists of the Thenius Road intersection. He said it is a dangerous location that has had accidents and near misses.

Sparland Village President Roger Wilkinson and Tadd Kingen requested a copy of the existing Sparland orthophoto for their village. Mike Lewis said that could be arranged.

President Wilkinson expressed some confusion over the traffic flow utilizing the flyover structure and the roundabout. He understood the roundabout would be raised a few feet at IL 17 to improve the profile match with IL 17, but operations of the flyover and roundabout may not be completely understood. Department representatives will supply him with more information to help the understanding of the design.

Mr. Ron Gehrig, Steuben Township Clerk, requested a meeting with the department on behalf of the township. He would like the township to receive more information regarding the roundabout and the design at Thenius Road. He would like the department to include an example of a roundabout and any literature that could be handed out. About one-half dozen handouts should be enough for their board. They meet on the 2nd Tuesday of the month.

Mr. Gehrig also had comments about the proposed design. He stated it would be more difficult for trucks to go up the hill at IL 17 if the roundabout were in place. Maureen Addis explained how trucks would not have to stop when going from IL 29 to westbound IL 17 once they have a gap in the traffic flow. This would allow trucks to develop some momentum before going up the hill. Mr. Gehrig agreed that the roundabout design may not be as bad as he first thought.

Mr. Todd Pendleton, who lives on Thenius Road just west of existing IL 29, said he was okay with the proposed design for Thenius Road. Jim Jodie explained that his driveway would need to be moved further west to improve the sight distance from the Ramp D overpass. He was okay with that proposal. The indirect route from Ramp D to his house on Thenius Road was his concern.

A property owner located 4 to 5 houses north/west of existing IL 29 on Thenius Road has a trailer on the east side of Thenius Road. His concern is the indirect route from Ramp D to his house. He had some safety issues with the existing IL 29/Thenius Road intersection. On a couple of occasions, he was almost hit when he was northbound on IL 29 and turned left onto Thenius Road. Drivers will pass him on the left when he is turning left. Drivers may think they are beyond the village of Sparland and can drive 55 MPH. It was explained that with the proposed design, this traffic movement/safety issue would be eliminated and no longer a problem.

