

I-69 Evansville-Henderson EIS

Design Criteria

Table 1
Design Speeds

DESIGN SPEEDS	Desirable (mph)
Freeway	70 Rural / 55 Urban
Collector/Distributor (C/D)	60
Ramps (Directional)	50
Ramps (Loops)	30
Major Arterial	40 (urban)
Minor Arterial	30 (urban)

Table 2
Typical Sections

Lane Widths & Dimensions	Freeway / Interstate	Collector / Distributor	Ramps (Directional)	Ramps (Loops)	Major Arterial	Minor Arterials
Travel Lane, Kentucky Travel Lane, Indiana	12 ft / lane 12 ft / lane	12 ft / lane Des* 12 ft / lane	15 ft / lane 16 ft / lane	15 ft / lane 16 ft / lane	12 ft / lane	12 ft / lane
Inside Shoulder** KY IN - 2 lanes/direction IN - 3 lanes/direction	12 ft Des* 4 ft (paved) 10 ft (paved)	12 ft Des 4 ft (paved) 10 ft (paved)	6 ft Des 4 ft (paved) 10 ft (paved)	6 ft Des 4 ft (paved) 10 ft (paved)	- 4 ft (paved) 10 ft (paved)	- 4 ft (paved) 10 ft (paved)
Outside Shoulder, Kentucky Outside Shoulder, Indiana	12 ft Des 10 ft paved / 11 ft usable	12 ft Des 10 ft paved / 11 ft usable	8 ft Des	8 ft Des	12 ft Des 10 ft paved / 11 ft usable	8 ft Des 10 ft paved / 11 ft usable
Median (depressed)	80 ft Des (60 ft Urban)	-	-	-	-	-
Median (flush), Kentucky***	26.5 ft Min (26.5 ft Urban)	-	-	-	-	-
Median (flush), Indiana***	30.5 ft					

*Des = Desireable

** Assumes depressed directed median

*** With center concrete median barrier

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Design Criteria

Table 3
Horizontal Alignment

Design Parameter	Freeway / Interstate	Collector / Distributor	Ramps (Directional)	Ramps (Loops)	Major Arterial	Minor Arterials
Max. Degree of Curve Min. Radii	3° 00' 1909.86'	4° 45' 1206.23'	7° 30' 763.94'	16° 30' 347.25'	12° 25' 467.72'	22° 45' 251.85'

Table 4
Vertical Alignment

Grades (%)	Freeway / Interstate	Collector / Distributor	Ramps (Directional)	Ramps (Loops)	Major Arterial	Minor Arterials
Maximum	4	4	6	6	5	6

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Design Criteria

Table 4
Vertical Alignment (cont.)

Stopping Sight Distance	Freeway / Interstate		Collector / Distributor		Ramps (Directional)		Ramps (Loops)		Major Arterial		Minor Arterials	
	Crest	Sag	Crest	Sag	Crest	Sag	Crest	Sag	Crest	Sag	Crest	Sag
Minimum SSD												
Desirable	850	850	700	700	475	475	275	275	475	475	300	300
Minimum	625	625	525	525	400	400	225	225	400	400	250	250

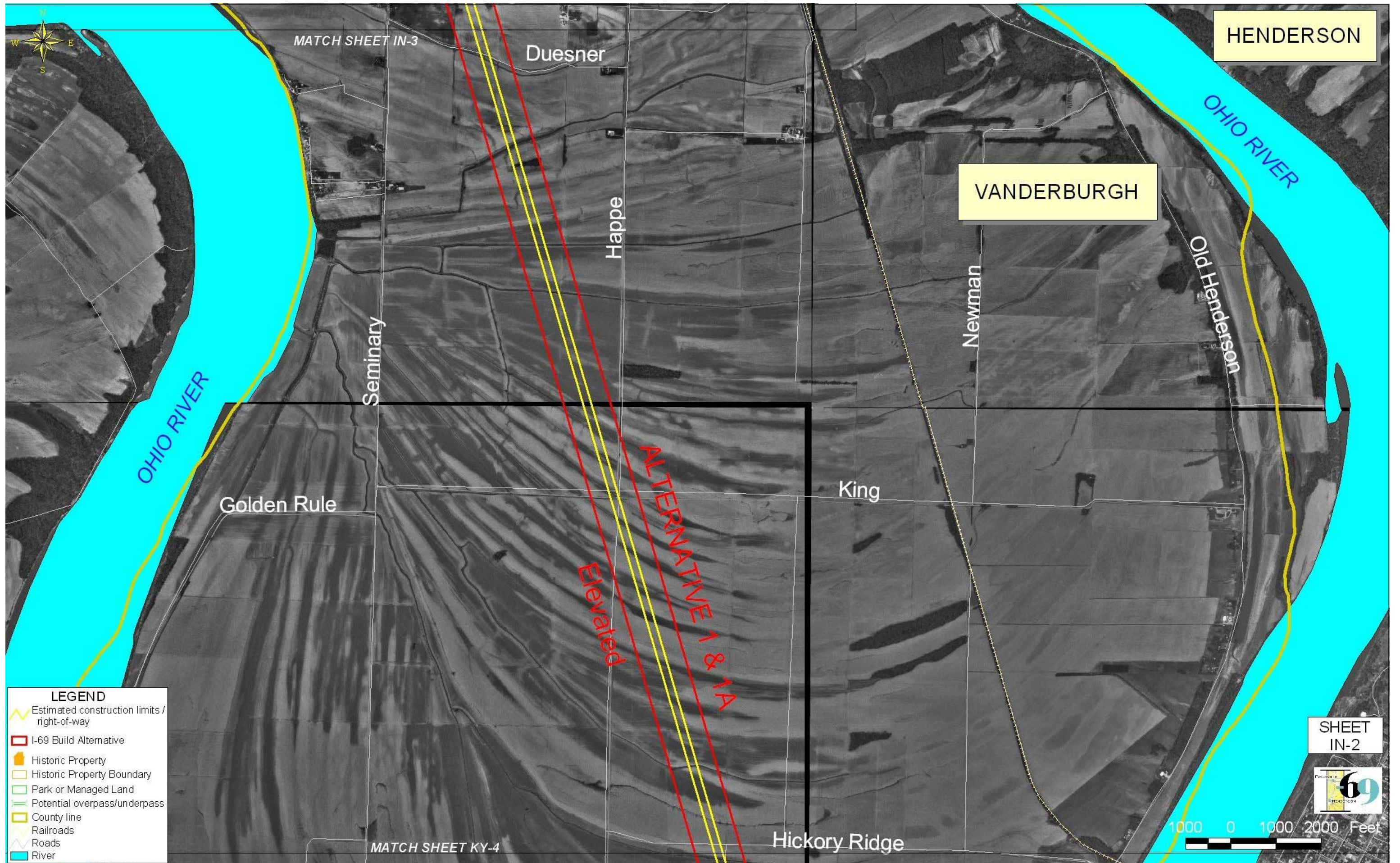
Vertical Clearance
The minimum vertical clearance shall be 16.5 feet for the entire width of usable roadway (including shoulders).

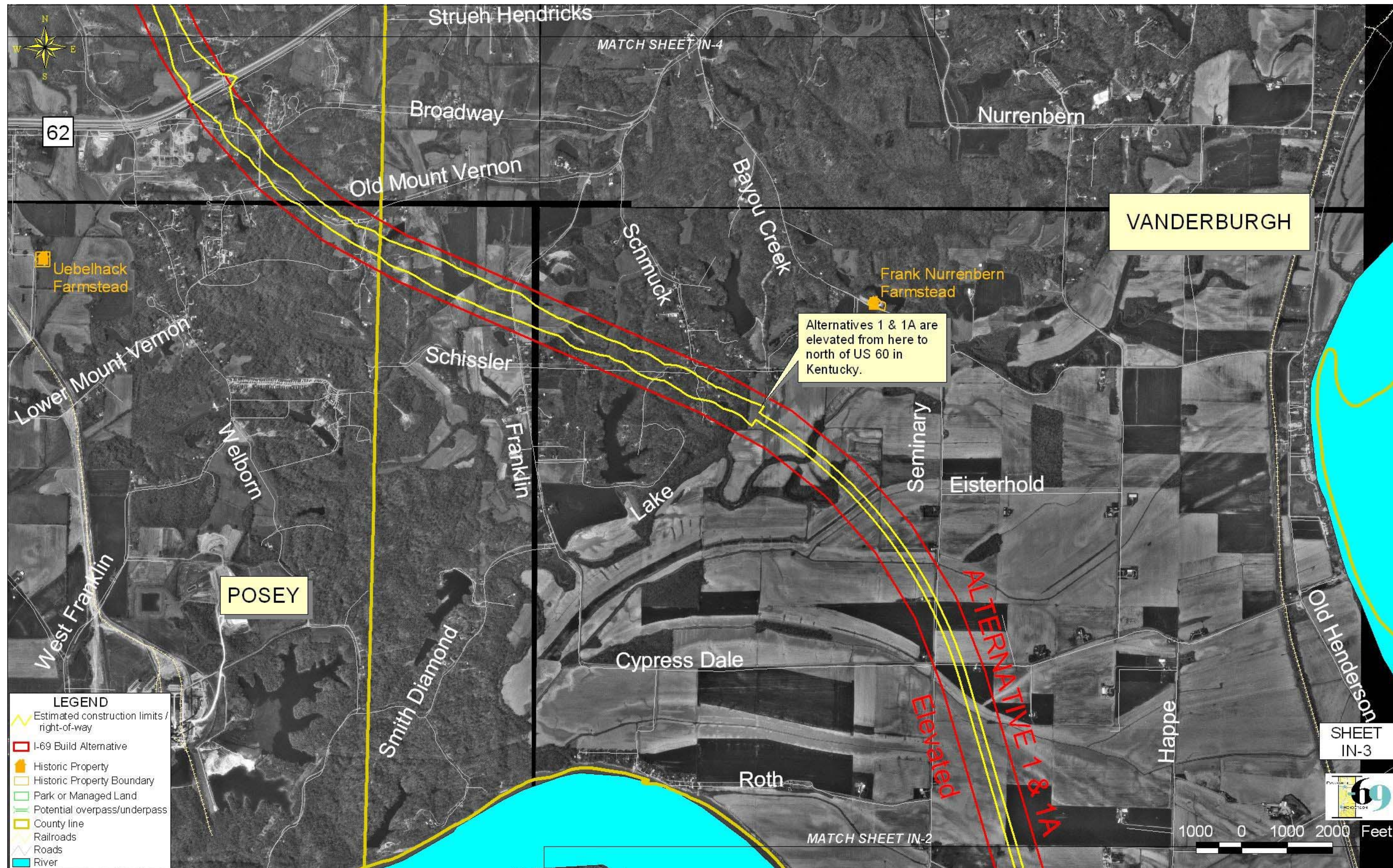
Superelevation
The normal cross slope shall be 2.0% (4.0% for shoulders) for the width of usable roadway.
The maximum superelevation shall be 8.0% for the entire width of usable roadway (including shoulders).

Table 5
Level of Service (los)

DESIGN CLASSES	Minimum LOS	Desirable LOS
Freeway Urban	D	C
Freeway Rural	C	B
C/D Urban	D	C
C/D Rural	C	B
Arterial Urban	D	C
Arterial Rural	C	B







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MATCH SHEET IN-4

VANDERBURGH

POSEY

SHEET IN-3

LEGEND

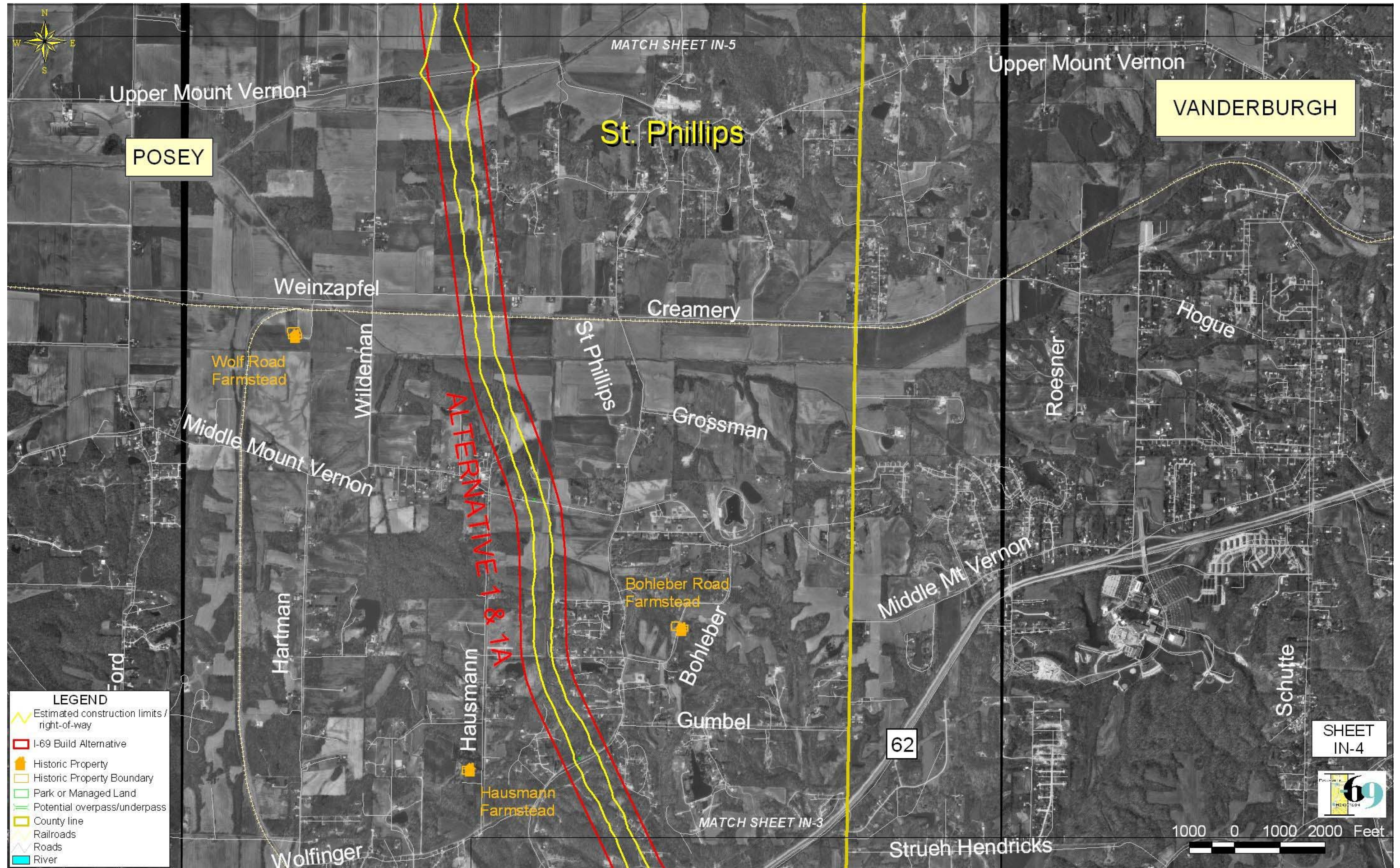
- Estimated construction limits / right-of-way
- I-69 Build Alternative
- Historic Property
- Historic Property Boundary
- Park or Managed Land
- Potential overpass/underpass
- County line
- Railroads
- Roads
- River

Alternatives 1 & 1A are elevated from here to north of US 60 in Kentucky.

Elevated
ALTERNATIVE 1 & 1A

1000 0 1000 2000 Feet





POSEY

VANDERBURGH

ALTERNATIVE 1 & 1A

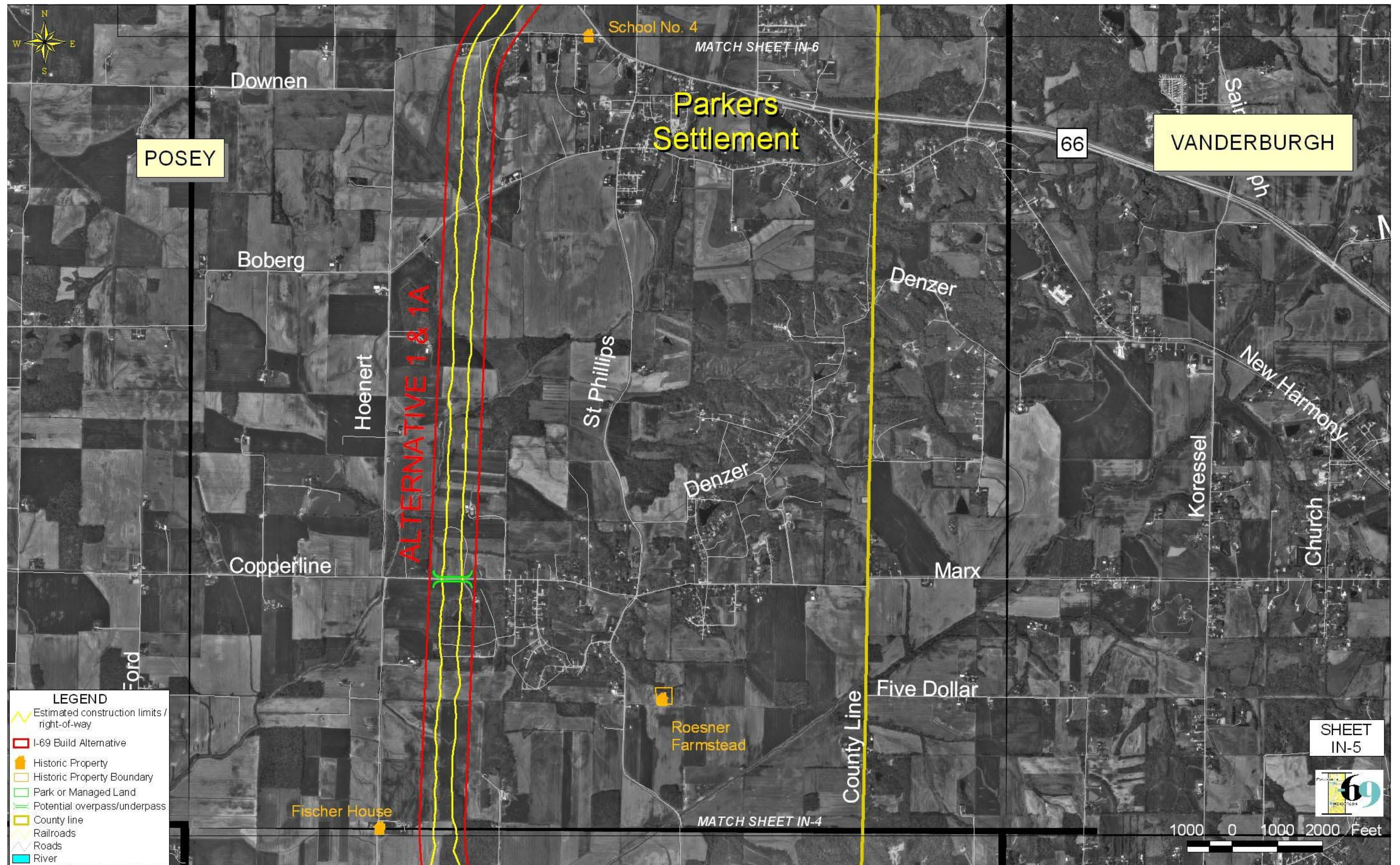
LEGEND

- Estimated construction limits / right-of-way
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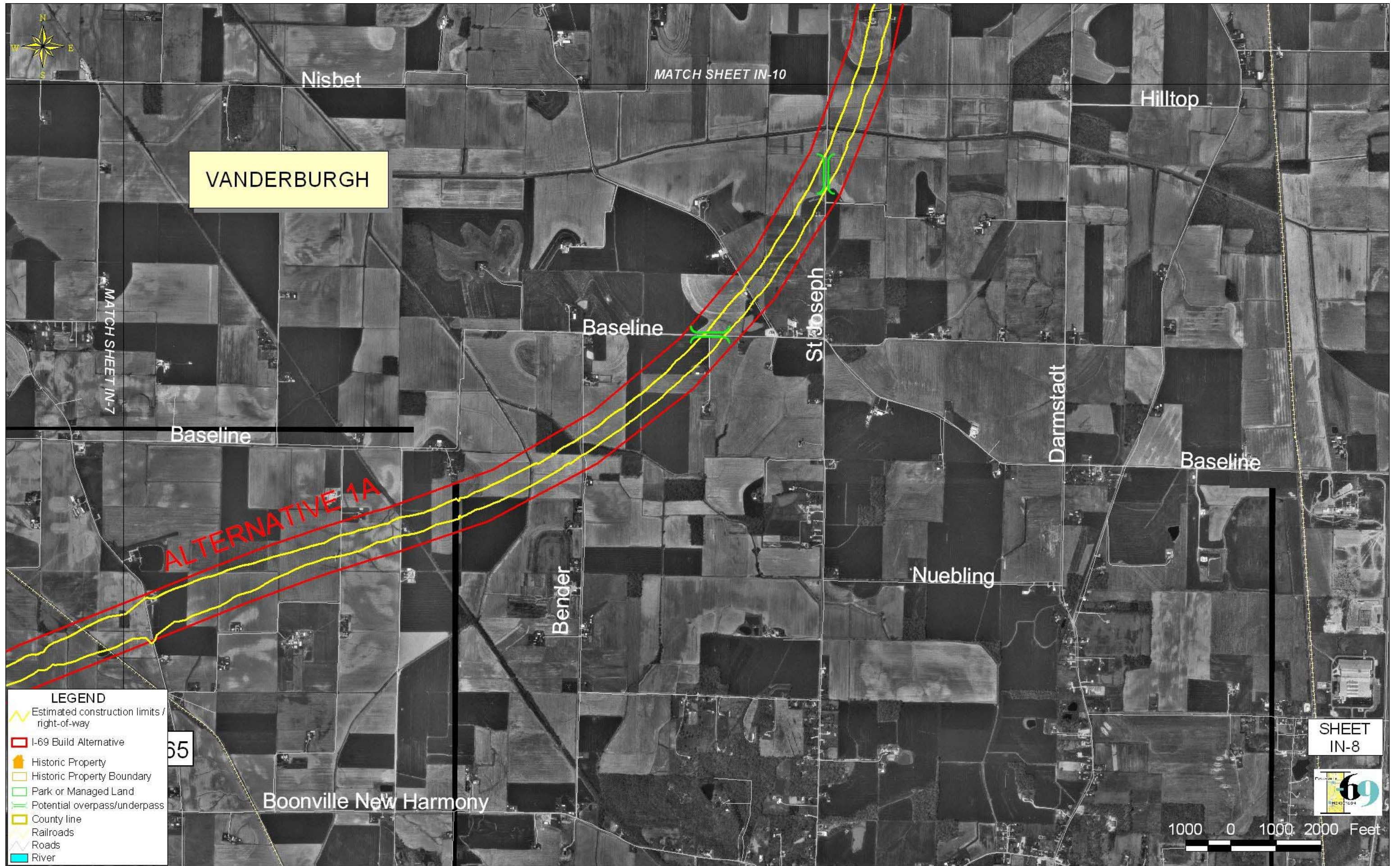
SHEET IN-4



1000 0 1000 2000 Feet









POSEY

GIBSON

County Road 1050

County Road 1000

County Cross

Showers

MATCH SHEET IN-10

68

65



Stein

Water Tank

ALTERNATIVE 1

Pruitt

SHEET IN-9



MATCH SHEET IN-7

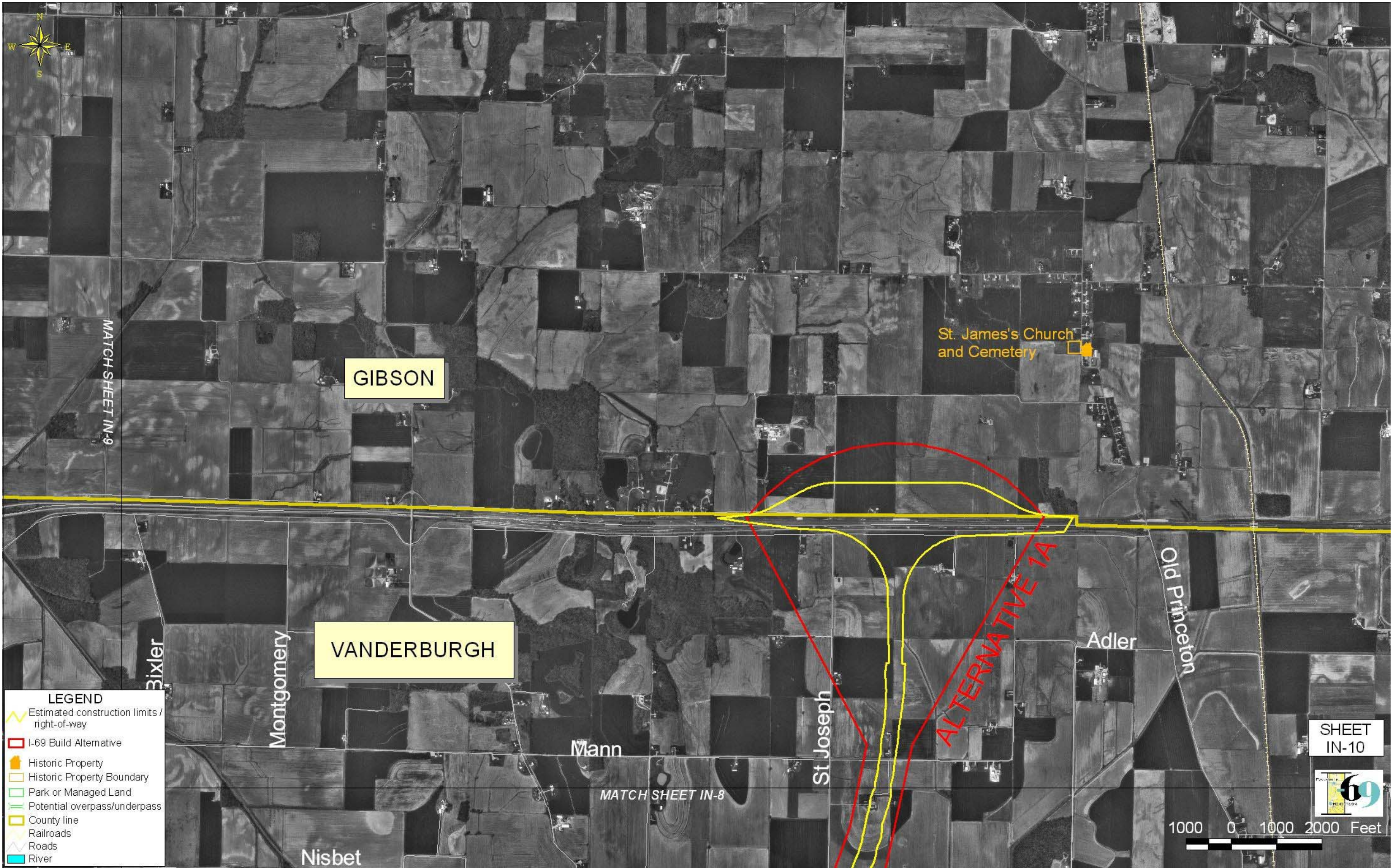
Corbett

Wendel Cynthiana

1000 0 1000 2000 Feet

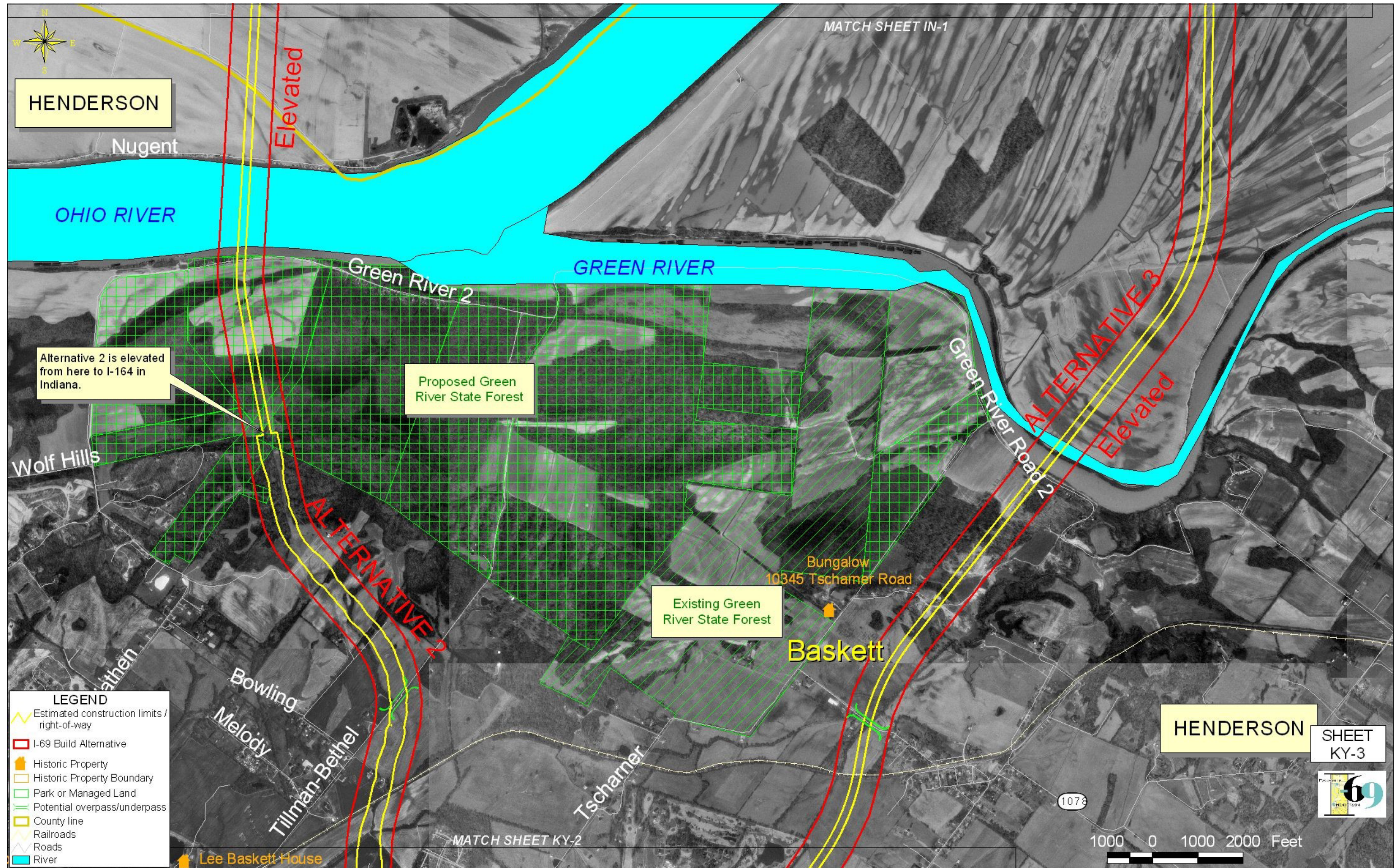
LEGEND

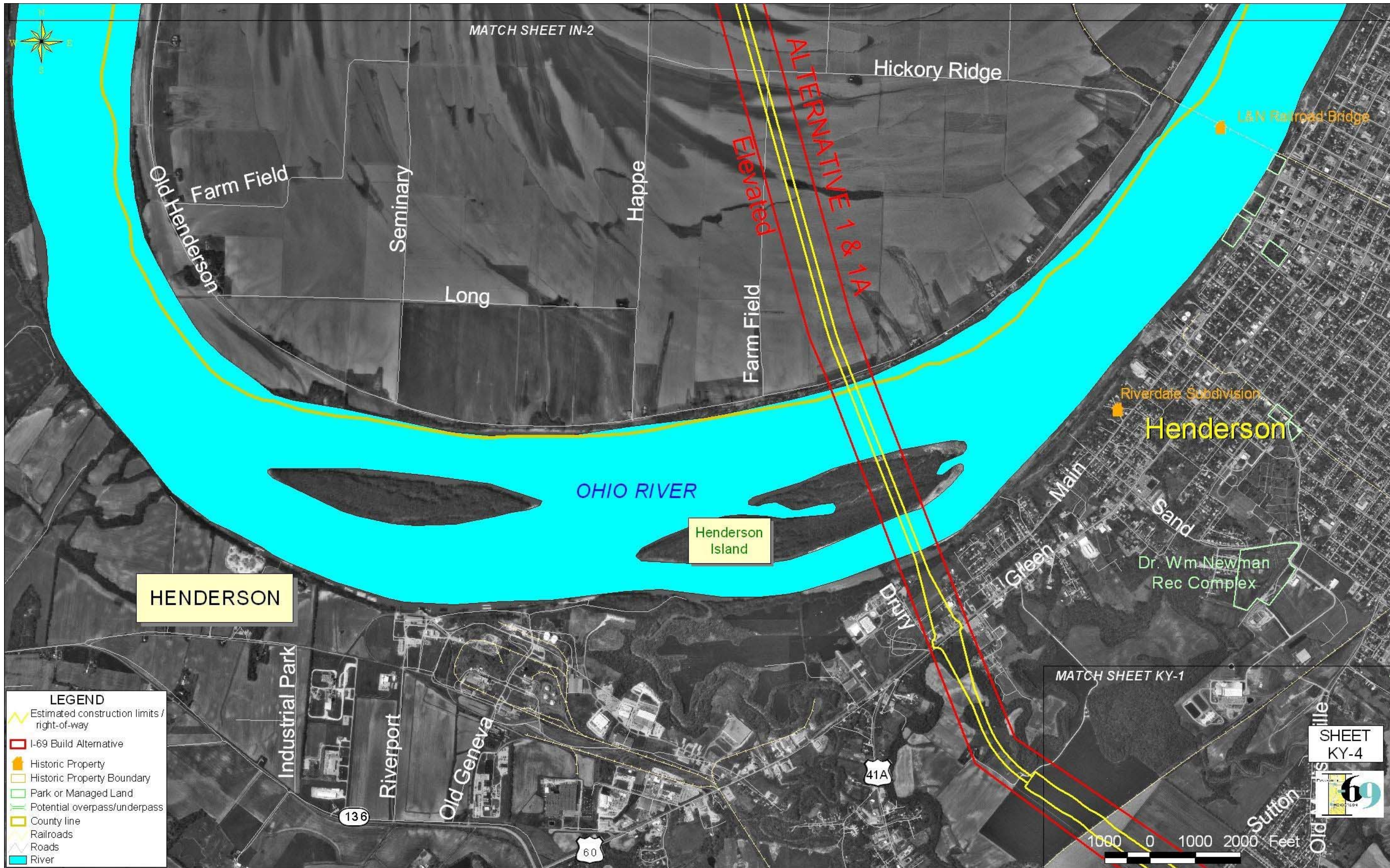
- Estimated construction limits / right-of-way
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I-69 Scoping Study
Level 2 Cost Estimates¹

Alternative	Total Length (miles)	New Roadway Length (miles)	Structure Length ² (miles)	Total Costs	Cost + 25% Contingency
1	31.8	31.8	9.0	\$846,230,000	\$1,057,790,000
1A	35.2	35.2	9.0	\$870,430,000	\$1,088,040,000
2	31.5	13.2	4.0	\$521,860,000	\$652,330,000
3	29.7	14.7	7.0	\$639,120,000	\$798,900,000

1. Cost estimates include Design, Construction, Right of Way, and Utilities, in 2003 dollars.

2. Structure length includes the Ohio River bridge crossing and structures traversing the adjacent floodplain. The determination of bridge requirements across the floodplain will be refined in later phases of project development

Indiana and Kentucky Right-of-Way Requirements and Costs

LAND USE (ACRES)	Cost (per Acre) ³	Alt. 1	Alt. 1A	Alt. 2	Alt. 3
Water ¹	\$0	19.4	20.4	21.9	11.5
Urban/Suburban ¹	\$50,000	38.1	53.5	10.8	61.6
Forest ¹	\$3,000	329.1	314.6	314.6	105.1
Agricultural ¹	\$6,000	1,069.2	1,286.8	573.3	495.4
Wetland ²	\$3,000	20.2	17.9	19.1	3.6
Wetland Mitigation ²	\$3,000	106.4	106.2	124.5	71.1
Total		1,582	1,799	1,064	748
RELOCATIONS ³	Cost (per Unit) ³	Alt. 1	Alt. 1A	Alt. 2	Alt. 3
Homes	\$90,000	61	71	6	74
Apartment Units	\$45,000	0	0	0	0
Businesses	\$500,000	6	6	0	7
Schools	\$1,000,000	0	0	0	0
Total		67	77	6	81
RIGHT OF WAY ESTIMATES		Alt. 1	Alt. 1A	Alt. 2	Alt. 3
Water		\$0	\$0	\$0	\$0
Urban/Suburban		\$1,905,000	\$2,675,000	\$540,000	\$3,080,000
Forest		\$987,300	\$943,800	\$943,800	\$315,300
Agricultural		\$6,415,200	\$7,720,800	\$3,439,800	\$2,972,400
Wetland		\$60,600	\$53,550	\$57,300	\$10,800
Wetland Mitigation		\$319,315	\$318,714	\$373,598	\$213,231
Relocations		\$8,490,000	\$9,390,000	\$540,000	\$10,160,000
Total ROW Cost		\$18,177,415	\$21,101,864	\$5,894,498	\$16,751,731

¹Quantities taken from Table 5-1 in the I-69 DEIS

²Quantities taken from Table 5-25 in the I-69 DEIS

³Engineering estimate

I-69 Henderson to Evansville
Alternative 1

Design	10%	\$75,280,000
Right-of-Way		\$18,180,000
Utilities	2.0%	\$14,540,000
Construction		
Maintenance of Traffic	0.5%	\$3,540,000
Drainage	3.0%	\$21,260,000
Earthwork		
cut (yd^3)	2,958,000	\$11,830,000
fill (yd^3)	8,786,000	\$43,930,000
Roadway		\$100,540,000
Structures		\$444,380,000
Main River Crossing	\$159,870,000	
Floodplain Crossing	\$284,510,000	
Interchanges		
Surface Street (Service)	5	\$38,000,000
Freeway-Freeway (System)	2	\$70,000,000
ITS Components		\$4,750,000
Total		\$846,230,000

I-69 Henderson to Evansville
Alternative 1A

Design	10%	\$77,210,000
Right-of-Way		\$21,100,000
Utilities	2.0%	\$14,960,000
Construction		
Maintenance of Traffic	0.5%	\$3,630,000
Drainage	3.0%	\$21,810,000
Earthwork		
cut (yd^3)	3,448,000	\$13,790,000
fill (yd^3)	9,241,000	\$46,210,000
Roadway		\$114,590,000
Structures		\$444,380,000
Main River Crossing	\$159,870,000	
Floodplain Crossing	\$284,510,000	
Interchanges		
Surface Street (Service)	5	\$38,000,000
Freeway-Freeway (System)	2	\$70,000,000
ITS Components		\$4,750,000
Total		\$870,430,000

I-69 Henderson to Evansville
Alternative 2

Design	10%	\$46,910,000
Right-of-Way		\$5,890,000
Utilities	2.0%	\$8,940,000
Construction		
Maintenance of Traffic	0.5%	\$2,210,000
Drainage	3.0%	\$13,230,000
Earthwork		
cut (yd^3)	487,000	\$1,950,000
fill (yd^3)	3,543,000	\$17,720,000
Roadway		\$37,720,000
Structures		\$263,470,000
Main River Crossing	\$137,500,000	
Floodplain Crossing	\$125,970,000	
Interchanges		
Surface Street (Service)	2	\$15,200,000
Freeway-Freeway (System)	3	\$105,000,000
ITS Components		\$3,620,000
Total		\$521,860,000

I-69 Henderson to Evansville
Alternative 3

Design	10%	\$56,580,000
Right-of-Way		\$16,750,000
Utilities	2.0%	\$10,980,000
Construction		
Maintenance of Traffic	0.5%	\$2,660,000
Drainage	3.0%	\$15,960,000
Earthwork		
cut (yd^3)	684,000	\$2,740,000
fill (yd^3)	2,414,000	\$12,070,000
Roadway		\$31,700,000
Structures		\$365,450,000
Main River Crossing	\$139,380,000	
Floodplain Crossing	\$226,070,000	
Interchanges		
Surface Street (Service)	2	\$15,200,000
Freeway-Freeway (System)	3	\$105,000,000
ITS Components		\$4,030,000
Total		\$639,120,000

Animal and Plant Listings for I-69 Study

Tables for seven taxonomic groups were developed as part of the I-69 study to list species documented from previous studies as well as those identified as part of the I-69 field investigations. These include mammals, birds, reptiles, amphibians, fish, mussels and plants. Wetland, habitat and trophic response guilds were developed for resident and migrant mammal, bird, reptile, amphibian, and fish species of possible occurrence in the I-69 study area based on a literature review and field experience. Rankings were coded so as to emphasize wildlife species and their sensitivity or tolerance to anthropogenic (man-made) disturbances in aquatic and terrestrial habitats. These listings provide valuable information about the habitat, feeding, movement, status and sensitivity for adaptability of each species. Ranking of species in standardized guilds provides a way to compare structural and functional changes in wildlife communities affected by various types of environmental impacts. Categories include:

Wetland Dependency

- Obligate wet – found in wetlands (>99%)
- Facultative wet – generally found in or near wetlands (57-99%)
- Facultative – occurs frequently within wetlands, but wetlands are not essential (34-66%)
- Facultative dry – occasional or no use of wetlands (1-33%)
- Upland – found almost always in uplands, rarely in wetlands (<1%)

Habitat Specificity

- alpha species – stenotypic, specialist (e.g., large tree cavity nester, clear water)
- gamma species – landscape dependent (e.g., undisturbed forest in Indiana, affected by changes in land use, wide-ranging)
- beta species – generalist, edge, disturbance

Trophic Level

- carnivore, specialist (restricted diet)
- carnivore, generalist
- herbivore, specialist (e.g., nuts, nectar)
- herbivore, generalist
- omnivore (eats on either plants or animals)

USFWS Status

- E Endangered
- T Threatened

Indiana Status

- E Endangered
- T Threatened
- S Special Concern
- WL Watch List
- X Extirpated

Kentucky Status

- E Endangered
- T Threatened
- S Special Concern
- H Historic Record

The mussel table includes a collective listing of species previously identified from six previous studies on the Ohio River between RM 770 and 825. It also provides a summary of species identified in 2002 by Ecological Specialists, Inc. at each of the proposed I-69 bridge crossings.

The plant table provided includes a listing of all plant species identified for the I-69 study. In addition to the federal and state status of the species, the table also includes information on the nativity of the species and the community types in which it is most commonly found.

Mammals Inferred and/or Recorded for I-69 Study Area

Species Name Common Name	US	IN	KY	Wetland Depend.	Habitat Spec.	Trophic Level	KFWIS Henderson Co.	I-69
<i>Didelphis virginiana</i> (Kerr) Virginia opossum				facultative	beta	omnivore		✓
<i>Sorex cinereus</i> (Kerr) masked shrew			S	upland fac. dry	beta	carnivore generalist	✓	✓
<i>Sorex fumeus</i> (Miller) smoky shrew		S		facultative	gamma	carnivore generalist		
<i>Sorex hoyi</i> (Baird) pigmy shrew		S		facultative	gamma	carnivore generalist		
<i>Sorex longirostris</i> (Bachman) southeastern shrew				facultative	beta	carnivore generalist		
<i>Blarina brevicauda</i> (Say) short-tailed shrew				facultative	gamma	carnivore generalist		✓
<i>Cryptotis parva</i> (Say) least shrew				facultative	gamma	carnivore generalist		
<i>Scalopus aquaticus</i> (Linnaeus) eastern mole				upland fac. dry	beta	carnivore generalist		✓
<i>Myotis lucifugus</i> (Leconte) little brown bat				facultative	gamma	carnivore specialist		
<i>Myotis grisescens</i> (Howell) gray bat	E	E	E	fac. wet	alpha	carnivore specialist		
<i>Myotis septentrionalis</i> (Trouessart) northern long-eared bat				facultative	alpha	carnivore specialist		✓
<i>Myotis sodalis</i> Miller & Allen Indiana bat	E	E	E	facultative	alpha	carnivore specialist		✓
<i>Lasionycteris noctivagans</i> (Leconte) silver-haired bat				facultative	gamma	carnivore specialist		
<i>Pipistrellus subflavus</i> (Cuvier) eastern pipistrelle				facultative	gamma	carnivore specialist		✓
<i>Eptesicus fuscus</i> (Beauvois) big brown bat				facultative	gamma	carnivore specialist		✓
<i>Lasiurus borealis</i> (Müller) red bat				facultative	gamma	carnivore specialist		✓
<i>Lasiurus cinereus</i> (Beauvois) hoary bat				facultative	gamma	carnivore specialist		
<i>Nycticeius humeralis</i> (Rafinesque) evening bat		E	T	facultative	alpha	carnivore specialist		✓
<i>Corynorhinus rafinesquii</i> (Lesson) Rafinesque's big-eared bat		S	S	upland fac. dry	gamma	carnivore specialist		
<i>Sylvilagus aquaticus</i> (Bachman) swamp rabbit		E		fac. wet	gamma	herbivore generalist	✓	
<i>Sylvilagus floridanus</i> (Allen) eastern cottontail				upland fac. dry	beta	herbivore generalist	✓	✓
<i>Tamias striatus</i> (Linnaeus) eastern chipmunk				upland fac. dry	beta	omnivore		
<i>Marmota monax</i> (Linnaeus) woodchuck				upland fac. dry	gamma	herbivore specialist		probable
<i>Sciurus carolinensis</i> (Gmelin) gray squirrel				upland fac. dry	alpha	herbivore specialist	✓	probable
<i>Sciurus niger</i> (Linnaeus) fox squirrel				upland fac. dry	alpha	herbivore specialist	✓	✓
<i>Tamiasciurus hudsoicus</i> (Erxleben) red squirrel				upland fac. dry	alpha	herbivore specialist		
<i>Glaucomys volans</i> (Linnaeus) southern flying squirrel				upland fac. dry	alpha	herbivore specialist		✓
<i>Castor canadensis</i> (Kuhl) beaver				obligate	alpha	herbivore specialist		✓
<i>Reithrodontomys humulus</i> (Audubon and Bachman) eastern harvest mouse				upland fac. dry	gamma	omnivore	✓	

Species Name Common Name	US	IN	KY	Wetland Depend.	Habitat Spec.	Trophic Level	KFWIS Henderson Co.	I-69
<i>Peromyscus maniculatus</i> (Wagner) deer mouse				upland fac. dry	gamma	omnivore		
<i>Peromyscus leucopus</i> (Rafinesque) white-footed mouse				upland fac. dry	beta	omnivore	✓	✓
<i>Microtus pennsylvanicus</i> (Ord) meadow vole				facultative	gamma	herbivore generalist		
<i>Microtus ochrogaster</i> (Wagner) prairie vole				upland fac. dry	gamma	herbivore generalist		
<i>Microtus pinetorum</i> (Le Conte) pine vole				upland fac. dry	beta	herbivore generalist		
<i>Ondatra zibethicus</i> (Linnaeus) muskrat				obligate	gamma	herbivore generalist	✓	probable
<i>Synaptomys cooperi</i> (Baird) southern bog lemming				upland fac. dry	gamma	herbivore generalist		
<i>Zapus hudsonius</i> (Zimmermann) meadow jumping mouse				facultative	beta	omnivore	✓	
<i>Rattus norvegicus</i> (Berkenhout) norway rat				upland fac. dry	beta	omnivore		
<i>Mus musculus</i> (Linnaeus) house mouse				upland fac. dry	gamma	omnivore		probable
<i>Canis latrans</i> (Say) coyote				upland fac. dry	beta	omnivore		✓
<i>Vulpes vulpes</i> (Linnaeus) red fox				upland fac. dry	beta	omnivore	✓	probable
<i>Urocyon cinereoargenteus</i> (Schreber) gray fox				upland fac. dry	gamma	omnivore		
<i>Procyon lotor</i> (Linnaeus) raccoon				fac. wet	beta	omnivore	✓	✓
<i>Mustela frenata</i> (Lichtenstein) long-tailed weasel				upland fac. dry	beta	carnivore generalist		
<i>Mustela vison</i> (Schreber) mink				obligate	gamma	carnivore generalist		
<i>Taxidea taxus</i> (Schreber) badger		E		upland fac. dry	gamma	carnivore generalist	✓	
<i>Mephitis mephitis</i> (Schreber) striped skunk				upland fac. dry	beta	omnivore		probable
<i>Lutra canadensis</i> (Schreber) river otter		E		obligate	alpha	carnivore specialist		
<i>Lynx rufus</i> (Schreber) bobcat		E		upland fac. dry	gamma	carnivore generalist		
<i>Odocoileus virginianus</i> (Zimmermann) white-tailed deer				upland fac. dry	beta	herbivore generalist	✓	✓

Birds Previously Recorded and Observed for the I-69 Study Area

Species Name Common Name	US	KY	IN	Wetland Depend.	Habitat Spec.	Trophic Level	Habitat Description	KFWIS Henderson County	Kentucky Breeding Bird Atlas (Palmer-Ball, 1996)				1990 Indiana Audubon Summer Counts	Atlas of Breeding Birds of Indiana (Castrale et al., 1998)						I-69 Study
									Evansville South Quad	Newburgh Quad	Henderson Quad	Spottsville Quad		West Franklin Quad	Kasson Quad	Cynthiana Quad	Haubstadt Quad	Evansville South Quad	Newburgh Quad	
Gavia immer Common Loon			X	obligate	alpha	carnivore specialist	Clear, deep-water lakes in northern latitudes. Nests are mounds of vegetation on islands or shorelines of secluded lakes.	✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
Podilymbus podiceps Pied-billed Grebe		E		obligate	beta	carnivore generalist	Marshes and ponds with dense emergent vegetation. Nests on heaps of vegetation, usually floating.	✓	listed for Henderson County in KBBA					not listed for Vanderburgh or eastern Posey County in ABBI						
Phalacrocorax auritus Double-crested Cormorant		H	X	obligate	beta	carnivore specialist	In dead trees, on islands and along the shoreline of lakes and large rivers. Nests are collection of sticks in dead trees or on the ground of small islands.	✓	not listed as breeding species in KBBA				P	not listed as breeding species in ABBI						
Botaurus lentiginosus American Bittern		H	E	obligate	gamma	carnivore generalist	Marshy areas with tall emergent vegetation, sometimes in wet fields. Nests are accumulations of plant material, on hummocks or over water.		not listed as breeding species in KBBA				P	not listed for Vanderburgh or eastern Posey County in ABBI						
Ardea herodias Great Blue Heron		S	S	obligate	alpha	carnivore generalist	Small creeks and farm ponds to the shores of large lakes and rivers. A colonial nester, heronry nests are large platforms high in the tree consisting of sticks and branches lined with finer twigs and green leaves.	✓	not listed for Henderson County in KBBA				PV	not listed for Vanderburgh or Posey County in ABBI						✓
Casmerodius albus Great Egret				obligate	alpha	carnivore generalist	Floodplain wetlands of large rivers. Often nests within other colonial breeders in nests made of sticks in large trees along rivers, swamps or bottomland forests.	✓	not listed for Henderson County in KBBA				W	not listed as breeding species in ABBI						
Bubulcus ibis Cattle Egret		S		obligate	beta	carnivore generalist	Thickets or groves of young deciduous trees in or near standing water. Commonly found in association with Black-crowned Night-heron nests. Nests are sticks and twigs placed in the fork of a tree typically 10-15 feet above water.		not listed for Henderson County in KBBA				W	not listed as breeding species in ABBI						
Butorides virescens Green Heron				obligate	gamma	carnivore generalist	Wooded or shrubby areas near water; marshes. Nests are twig platforms usually low in trees and shrubs; may be far from water.	✓	possible 1 pair				PW		probable	probable				
Nycticorax nycticorax Black-crowned Night-heron		T	E	obligate	alpha	carnivore generalist	Large bodies of water. Nests consists of a platform of sticks in the fork of a tree usually 10 to 20 feet above the water.		not listed for Henderson County in KBBA				W	not listed as breeding species in ABBI						
Nyctanassa violacea Yellow-crowned Night-Heron		T	E	obligate	alpha	carnivore generalist	Closed-in habitts like woodland pools, forested streams and shallow bodies of water in or near forest cover. Nests are solitary or in loose clusters comprised of flimsy platform of sticks in the midstory portion of a mature woods.	✓	listed for Henderson County in KBBA					not listed for Vanderburgh or eastern Posey County in ABBI						
Plegadis falcinellus Glossy Ibis				obligate	alpha	carnivore generalist		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
Cathartes aura Turkey Vulture				upland fac. dry	beta	carnivore generalist	Secluded cliffs, woods and caves. Nests in fallen logs, caves, abandoned buildings and on ledges.	✓			possible 1 pair		PW	not listed for Vanderburgh or Posey County in ABBI						✓
Anser albifrons Great White-fronted Goose				obligate	gamma	herbivore generalist		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
Chen caerulescens Snow Goose				obligate	gamma	herbivore generalist		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
Branta canadensis Canada Goose				obligate	beta	herbivore generalist	Shores of ponds and lakes, islands and artificial structures. Nests are accumulations of plant material lined with down, usually on ground.	✓	listed for Henderson County in KBBA				VW				confirmed			
Cygnus columbianus Tundra Swan				obligate	gamma	herbivore generalist		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
Cygnus olor Mute Swan				obligate	beta	herbivore generalist	Rivers and ponds, canals and marshes, as well as shallow reaches of lakes and reservoirs. Nests are large mounds of vegetation surrounded by water.	✓	not listed as breeding species in KBBA					not listed for Vanderburgh or Posey County in ABBI						

Breeding Status

- possible

probable

confirmed
- species heard or seen in breeding habitat during the breeding season

secondary characteristics of breeding activity observed – agitated behavior or anxiety calls by adults, pairs observed during breeding season, behavior indicating permanent territory observed, courtship or copulation observed, visiting probable nest site, wren and woodpecker nest building

positive indicators of breeding observed – distraction display, nest building, presence of used nest, physiological evidence (e.g., egg in oviduct, brood patches), recently fledged young or downy young, adult bird carrying a fecal sac of young, adult bird carrying food for young, nest with eggs, and nest with young

Abundance

- common

fw

sn

vsn

1 or pair
- one of the commonest species of the survey block for the quadrangle

fairly widespread within survey block for the quadrangle

small numbers observed in scattered localities within the survey block for the quadrangle

very small numbers restricted to a very small area of the survey block for the quadrangle

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<i>Aix sponsa</i> Wood Duck				obligate	alpha	herbivore specialist	Wooded swamps, marshes, streams and ponds. Nests in tree cavities and nest boxes.	✓	confirmed 1 pair	probable vsn			PVW			confirmed				
<i>Anas strepera</i> Gadwall				obligate	gamma	omnivore		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Anas americana</i> American Wigeon				obligate	gamma	omnivore		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Anas rubripes</i> American Black Duck				obligate	gamma	omnivore		✓	not listed as breeding species in KBBA					not listed for Vanderburgh or Posey County in ABBI						
<i>Anas platyrhynchos</i> Mallard				obligate	beta	omnivore	Shores of marshes and pond, occasionally far from water. Nests on ground, a hollow of vegetation lined with down and feathers, hidden by vegetation.	✓	confirmed 1 pair		possible 1 pair		PVW	possible	confirmed		confirmed			
<i>Anas discors</i> Blue-winged Teal		T		obligate	gamma	omnivore	Lakes and ponds. Ground nests consist of dead grasses with down within dense grasses, weeds and herbaceous forbs near water.	✓	not listed for Henderson County in KBBA				W						confirmed	
<i>Anas clypeata</i> Northern Shoveler		E		obligate	beta	omnivore		✓	not listed as breeding species in KBBA				W	not listed for Vanderburgh or Posey County in ABBI						
<i>Anas acuta</i> Northern Pintail				obligate	beta	herbivore generalist		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Anas crecca</i> Green-winged Teal				obligate	gamma	herbivore generalist		✓	not listed as breeding species in KBBA					not listed for Vanderburgh or Posey County in ABBI						
<i>Aythya americana</i> Redhead				obligate	gamma	herbivore generalist			not listed as breeding species in KBBA				W	not listed for Vanderburgh or Posey County in ABBI						
<i>Aythya collaris</i> Ring-necked Duck				obligate	gamma	omnivore		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Aythya marila</i> Lesser Scaup				obligate	gamma	carnivore generalist			not listed as breeding species in KBBA				W	not listed as breeding species in ABBI						
<i>Lophodytes cucullatus</i> Hooded Merganser		T		obligate	alpha	carnivore generalist	Wooded swamps, marshes and ponds. Nests in tree cavities and nest boxes.	✓	listed for Henderson County in KBBA					not listed for Vanderburgh or eastern Posey County in ABBI						
<i>Oxyura jamaicensis</i> Ruddy Duck				obligate	gamma	herbivore generalist		✓	not listed as breeding species in KBBA				W	not listed as breeding species in ABBI						
<i>Haliaeetus leucocephalus</i> Bald Eagle	T	E	E	obligate	alpha	carnivore generalist	Large rivers lakes, reservoirs and sloughs. Nests are large platforms of sticks lined with finer twigs and soft plant material in the upper reaches of large trees near or over water.	✓	listed for Henderson County in KBBA					not listed for Vanderburgh or Posey County in ABBI						
<i>Circus cyaneus</i> Northern Harrier		T	E	fac. wet	gamma	carnivore generalist	Marshes, wet pastures and meadows. Nests are a layer of sticks and reeds on the ground, sheltered by vegetation.	✓	not listed for Henderson County in KBBA				W	not listed for Vanderburgh or Posey County in ABBI						
<i>Accipiter striatus</i> Sharp-shinned Hawk		S	S	upland fac. dry	gamma	carnivore generalist	Extensive wooded habitats, usually where conifers are present. Nest is a platform of twigs, usually near tree trunk.	✓	not listed for Henderson County in KBBA				V	not listed for Vanderburgh or Posey County in ABBI						✓
<i>Buteo lineatus</i> Red-shouldered Hawk			S	facultative	gamma	carnivore generalist	Prefers wetter wooded and open habitats than red-tailed hawks. Nest is a bulky structure in the crotch of a tall tree.	✓	possible 1 pair				PW	not listed for Vanderburgh or eastern Posey County in ABBI						✓
<i>Buteo platypterus</i> Broad-winged Hawk			S	upland fac. dry	gamma	carnivore generalist	Extensive deciduous wooded (usually upland) habitats. Nest is a small platform, usually in a tree crotch. May use abandoned bird or squirrel nest.	✓	not listed for Henderson County in KBBA					not listed for Vanderburgh or Posey County in ABBI						✓

Breeding Status

possible	species heard or seen in breeding habitat during the breeding season
probable	secondary characteristics of breeding activity observed – agitated behavior or anxiety calls by adults, pairs observed during breeding season, behavior indicating permanent territory observed, courtship or copulation observed, visiting probable nest site, wren and woodpecker nest building
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Abundance

common	one of the commonest species of the survey block for the quadrangle
fw	fairly widespread within survey block for the quadrangle
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<i>Buteo jamaicensis</i> Red-tailed Hawk				upland fac. dry	beta	carnivore generalist	An interspersion of mature woods and open areas. Nest is a large, bulky platform in a tall tree, usually at the edge of wooded habitats.	✓	possible 1 pair		possible sn		PW	possible	probable	probable	confirmed		probable	✓
<i>Falco sparverius</i> American Kestrel				upland fac. dry	alpha	carnivore generalist	Open country with scattered trees or woodland edge, city buildings. Nests in tree cavities, nooks and crannies in buildings and nest boxes.	✓	possible 1 pair		possible 1 pair	possible 1 pair	PVW	possible	possible	probable	probable	probable	possible	✓
<i>Phasianus colchicus</i> Ring-necked Pheasant				upland fac. dry	beta	omnivore	Open areas including hayfields, unmowed roadsides, ditches, fencerows and margins of wetlands. Nests are constructed of grasses on the ground.		not listed as breeding species in KBBA				W	not listed for Vanderburgh or Posey County in ABBI						
<i>Meleagris gallopavo</i> Wild Turkey				upland fac. dry	gamma	omnivore	Mature woods, woodland edges and clearings. Nests are sparsely lined hollows on the ground, usually under shrubs or other dense cover.	✓	listed for Henderson County in KBBA					not listed for Vanderburgh or Posey County in ABBI						✓
<i>Colinus virginianus</i> Northern Bobwhite				upland fac. dry	beta	omnivore	Primarily grasslands, fallow fields and woodland edges. Nest is a hollow lined with plant material on the ground, usually near an opening.	✓	possible vsn	possible sn	probable vsn	possible vsn	PVW	confirmed	confirmed	confirmed	confirmed	possible	confirmed	✓
<i>Fulica americana</i> American Coot		H		obligate	beta	omnivore	Dense stands of emergent vegetation interspersed with open water in permanent wetlands. Nests consist of concealed floating platforms comprised of cattails, reeds or grasses anchored to emergent plants.	✓	not listed as breeding species in KBBA				W	not listed for Vanderburgh or Posey County in ABBI						
<i>Grus canadensis</i> Sandhill Crane			T	obligate	gamma	omnivore	Large wet meadows, bogs and open marshes of cattails and sedges; foraging in upland areas and shallow marshes. Nest is a large mound of cattails, sedges, grasses and other marsh vegetation surrounded by shallow water.	✓	not listed as breeding species in KBBA				W	not listed for Vanderburgh or Posey County in ABBI						
<i>Pluvialis squatarola</i> Black-bellied Plover				obligate	gamma	carnivore generalist		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Charadrius vociferus</i> Killdeer				upland fac. dry	beta	carnivore generalist	Short grass fields, bare sandy and gravelly areas, roadbeds, flat rooftops and other disturbed habitats. Nests are shallow scrapes in the open.	✓	possible vsn	possible 1 pair	probable vsn	possible vsn	PVW	confirmed	confirmed	confirmed	confirmed	probable	confirmed	✓
<i>Tringa melanoleuca</i> Greater Yellowlegs				obligate	gamma	carnivore generalist		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Tringa flavipes</i> Lesser Yellowlegs				obligate	gamma	carnivore generalist		✓	not listed as breeding species in KBBA				PW	not listed as breeding species in ABBI						
<i>Tringa solitaria</i> Solitary Sandpiper				obligate	gamma	carnivore generalist			not listed as breeding species in KBBA				P	not listed as breeding species in ABBI						
<i>Actitis macularia</i> Spotted Sandpiper		E		obligate	gamma	carnivore generalist	Habitat associated with sand and gravel bars of large rivers. Nests in shallow depressions in the ground concealed in moderately thick vegetation either at the margin of a water body or in dry fields and pastures.	✓	not listed for Henderson County in KBBA				PW					possible		
<i>Calidris alba</i> Sanderling				obligate	gamma	carnivore generalist		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Calidris minutilla</i> Least Sandpiper				obligate	gamma	carnivore generalist		✓	not listed as breeding species in KBBA				PW	not listed as breeding species in ABBI						
<i>Calidris melanotos</i> Pectoral Sandpiper				obligate	gamma	carnivore generalist		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Calidris alpina</i> Dunlin				obligate	gamma	carnivore generalist		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Limnodromus griseus</i> Short-billed Dowitcher				obligate	gamma	carnivore generalist		✓	not listed as breeding species in KBBA				W	not listed as breeding species in ABBI						

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<i>Gallinago gallinago</i> Common Snipe				obligate	gamma	carnivore generalist		✓	not listed as breeding species in KBBA				W	not listed as breeding species in ABBI						
<i>Chlidonias niger</i> Black Tern			E	obligate	gamma	carnivore generalist	Marshes with abundant emergent vegetation interspersed with open water. Nests are free-floating mats of flattened cattails or other aquatic vegetation in emergent areas; sometimes located on top of former American Coot or Pied-billed Grebe nests.		not listed as breeding species in KBBA				W	not listed for Vanderburgh or Posey County in ABBI						
<i>Scolopax minor</i> American Woodcock				obligate	gamma	carnivore specialist	Breeds in drier upland sites; either shrubby fields or dense cover along woodland edges. Nests are shallow hollows lined with plant material.	✓	listed for Henderson County in KBBA				P						probable	
<i>Columba livia</i> Rock Dove				upland fac. dry	beta	herbivore generalist	Cities, farms, bridges and occasionally cliffs. Nests are scant layers of twigs, on ledges or in crevices.	✓	possible vsn		possible 1 pair	probable vsn	PVW	possible		confirmed	probable	probable	confirmed	
<i>Zenaida macroura</i> Mourning Dove				upland fac. dry	beta	herbivore generalist	Woodland edges, fencerows, and residential plantings. nests are loose twig platforms, 10-25 feet high in tree or shrub, occasionally on ground or ledge.	✓	confirmed fw	possible fw	probable fw	probable fw	PVW	confirmed	confirmed	confirmed	confirmed	confirmed	confirmed	✓
<i>Coccyzus erythrophthalmus</i> Black-billed Cuckoo							Successional habitats including woodland borders and old fields reverting to forest; thickets of young trees usually along moist drainages. Nest is flimsy stick structure lined with dead leaves, cottony plant material and pine needles under cover of outer crown of a tree of shrub.		not listed for Henderson County in KBBA										possible	
<i>Coccyzus americanus</i> Yellow-billed Cuckoo				upland fac. dry	beta	omnivore	Open woodland, edge habitats, fencerows and shrubby fields. nests are large loosely-built twig platforms, usually low in trees or shrubs.	✓	possible vsn	possible vsn	possible vsn	possible vsn	PVW	probable	possible	probable	confirmed	possible	probable	✓
<i>Otus asio</i> Eastern Screech Owl				upland fac. dry	alpha	carnivore generalist	A great variety of woodland and open habitats, old fields, orchards, forested stream corridors, small woodlots, the edge of extensive forests and occasionally urban areas. Nest in tree cavities and nest boxes lined with leaves, wood chips or sticks.	✓				possible 1 pair	PW	possible		possible	confirmed			✓
<i>Bubo virginianus</i> Great Horned Owl				upland fac. dry	beta	carnivore generalist	Upland woods occasionally wooded urban areas and bottomland woods and swamps. Nests in abandoned hawk or crow nests, some in tree cavities and manmade structures.	✓			possible 1 pair		PVW			probable	probable		possible	✓
<i>Strix varia</i> Barred Owl				fac. wet	alpha	carnivore generalist	Semi-open mesic habitats like moist ravines, riparian corridors, bottomland hardowwod forests and floodplain swamps and sloughs. Nests on the debris in natural tree cavities in fairly mature to mature forest areas or along woodland edge.	✓	possible sn	possible sn			PVW	confirmed	confirmed				probable	✓
<i>Asio flammeus</i> Short-eared Owl		E	E	facultative	gamma	carnivore generalist	Reclaimed mine land revegetated with grasses and forbs; marshes, weedy field, meadows and prairies. Nest is shallow depression on the ground lined with grasses and feathers concealed by grasses and other ground vegetation.						W	not listed for Vanderburgh or Posey County in ABBI						
<i>Chordeiles minor</i> Common Nighthawk				upland fac. dry	beta	carnivore generalist	Urban areas, also in woodland clearings. Nests are unlined scrapes in openings; frequently nests on gravel rooftops.	✓	possible 1 pair				PVW			probable	probable	probable	probable	
<i>Caprimulgus carolinensis</i> Chuck-will's-widow				upland fac. dry	gamma	carnivore generalist	Semi-open and open habitats among scattered or fragmented deciduous or mixed forests. No nest is constructed, eggs are laid directly on fallen leaves on the forest floor.						V	not listed for Vanderburgh or Posey County in ABBI						
<i>Caprimulgus vociferus</i> Whip-poor-will				upland fac. dry	gamma	carnivore generalist	Openings of forest and forest edge habitats; semi-open situation like rural farmland, power line/roadway corridors, logged forest tracts old fields and reclaimed mines. No nest is constructed, eggs are laid directly on fallen leaves on the forest floor.	✓				possible 1 pair	P		confirmed	possible	possible		probable	
<i>Chaetura pelagica</i> Chimney Swift				upland fac. dry	beta	carnivore generalist	Primarily urban and suburban areas, a few may nest in open woodlands. Nests are shallow half-cups attached to the insides of chimneys, walls and hollow trees.	✓	possible fw	probable sn	probable fw	probable sn	PVW	confirmed	probable	probable	probable	probable	probable	
<i>Archilochus colubris</i> Ruby-throated Hummingbird				facultative	beta	herbivore specialist	Woodlands, orchards and residential areas. Nests are tiny lichen-covered cups on tree limbs or in shrubs, usually near water.	✓	possible sn	possible vsn	possible 1 pair		PVW	confirmed	probable	probable	probable	possible	probable	
<i>Ceryle alcyon</i> Belted Kingfisher				obligate	alpha	carnivore specialist	Along streams, rivers and lakes. Nests are burrows in dirt banks, often near water.	✓	possible 1 pair		possible 1 pair		PVW		possible	probable			probable	✓

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<i>Melanerpes erythrocephalus</i> Red-headed Woodpecker				facultative	gamma	omnivore	Open woodland, forested riparian corridors, parks; does not inhabit heavily-forested areas. Nests in cavities excavated in trees.	✓	probable vsn	probable vsn	possible vsn	possible 1 pair	PVW	confirmed	confirmed	confirmed	confirmed	possible	confirmed	
<i>Melanerpes carolinus</i> Red-bellied Woodpecker				upland fac. dry	gamma	omnivore	Virtually all wooded habitats; prefers woodlots and edge, does not inhabit heavily-forested areas. Nests in cavities excavated in trees.	✓	confirmed sn	probable sn	possible vsn	possible vsn	PVW	confirmed	confirmed	confirmed	probable		probable	✓
<i>Sphyrapicus varius</i> Yellow-bellied Sapsucker				upland fac. dry	alpha	omnivore		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Picoides pubescens</i> Downy Woodpecker				upland fac. dry	beta	carnivore generalist	Woodlands, edge habitats, parklands with at least some trees. Nests in cavities excavated in trees.	✓	possible sn	probable vsn	possible 1 pair	possible sn	PVW	probable	confirmed	confirmed	probable	probable	probable	✓
<i>Picoides villosus</i> Hairy Woodpecker				upland fac. dry	gamma	carnivore generalist	Mature deciduous woods and woodland edges. Nests in cavities excavated in trees.	✓	possible sn	possible sn			PVW			probable	confirmed		possible	✓
<i>Colaptes auratus</i> Northern Flicker				upland fac. dry	gamma	omnivore	Open woodlands, fields with scattered trees and residential areas. Nests in cavities excavated in trees.	✓	possible vsn	possible vsn	possible 1 pair		PVW	confirmed	confirmed	probable	probable	confirmed	probable	✓
<i>Dryocopus pileatus</i> Pileated Woodpecker				upland fac. dry	alpha	carnivore generalist	Extensive woodland or semi-wooded farmland with large trees. Nests in cavities excavated in trees, usually in main trunk.	✓		possible 1 pair			PVW	confirmed	confirmed	possible	probable		confirmed	
<i>Contopus virens</i> Eastern Wood-Pewee				upland fac. dry	beta	carnivore generalist	Woodlands, parklands with scattered trees. Nests are shallow cups straddling branches or in forks, usually 8-20 feet high.	✓	possible sn	probable sn	possible vsn	possible sn	PVW	probable	possible	probable	probable	probable	probable	
<i>Empidonax virescens</i> Acadian Flycatcher				fac. wet	gamma	carnivore generalist	Mesic or wet woods, floodplain forests. Nests are cups of grass and other plant material suspended in a twig fork, usually over water.	✓	possible sn	probable sn		possible vsn	PVW	possible		probable	probable			
<i>Empidonax traillii</i> Willow Flycatcher				fac. wet	beta	carnivore generalist	Early successional habitats including young trees along streams or marshy areas, old fields and pastures. Nest is a sturdy cup of cottony or silky plant material and grass in the fork of a small tree or shrub branch 3-15 feet above the ground.	✓	listed for Henderson County in KBBA				W					possible		
<i>Empidonax minimus</i> Least Flycatcher		E		upland fac. dry	beta	carnivore generalist	Young deciduous trees of early successional forest and forest edge habitat of mountainous areas. Nest is a tight cup of soft plant materials.	✓	not listed for Henderson County in KBBA					not listed for Vanderburgh or Posey County in ABBI						
<i>Sayornis phoebe</i> Eastern Phoebe				fac. wet	beta	carnivore generalist	Woodlands, riparian habitats and near buildings. Nests are cups of mud pellets and plant fibers, under bridges and building eaves and on cliff ledges.	✓			possible 1 pair		PVW	confirmed	probable		probable			
<i>Myiarchus crinitus</i> Great Crested Flycatcher				upland fac. dry	gamma	carnivore generalist	Mature woodlands, woodland edges and parks. Nests in cavities in trees, occasionally in nest boxes.	✓	probable sn	possible 1 pair		possible vsn	PVW		possible	probable	probable		probable	
<i>Tyrannus tyrannus</i> Eastern Kingbird				upland fac. dry	beta	omnivore	Open farmland with scattered trees and shrubs, open riparian woods, and edges of ponds. Nests are large cps near end of branches, usually over water.	✓	possible vsn	probable vsn	possible 1 pair	confirmed sn	PVW	confirmed	confirmed	confirmed	probable		probable	
<i>Lanius ludovicianus</i> Loggerhead Shrike			E	upland fac. dry	beta	carnivore generalist	Open and semi-open habitats of extensive forests with short, sparse ground cover and in farmland, bare fields, pastures, moved hayfields, yards and roadsides. Nest is composed of sticks lined with fine grass, rootlets, feathers or cottony material in dense tree or shrub cover.	✓				possible 1 pair		not listed for Vanderburgh or eastern Posey County in ABBI						
<i>Vireo griseus</i> White-eyed Vireo				facultative	beta	carnivore generalist	Mesic shrubby fields, thickets and woodland edges. Nests are well-concealed deep cups suspended between horizontal twigs, usually 3-6 feet high.	✓	possible 1 pair	possible vsn	possible 1 pair	possible vsn	PVW	probable	possible	probable	probable		probable	
<i>Vireo bellii</i> Bell’s Vireo		S		upland fac. dry	gamma	carnivore generalist	Large tracts of early successional habitat comprised of deciduous shrubs and small trees. Nest contains various plant material lined with fine grass suspended from a low horizontal branch within the ohter crown of leaves of a small tree or shrub.		not listed for Henderson County in KBBA				W	not listed for Vanderburgh or eastern Posey County in ABBI						
<i>Vireo flavifrons</i> Yellow-throated Vireo				upland fac. dry	gamma	carnivore generalist	Mature deciduous woods. Nests are deep cups suspended between twigs, usually 20+ feet high.	✓	possible 1 pair	possible sn		possible 1 pair	PW	possible					probable	

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<i>Vireo gilvus</i> Warbling Vireo				upland fac. dry	beta	carnivore generalist	Semi-open and open habitats of scattered large trees including riparian zones along large rivers, farmland, parks, cemeteries, lakeshores and other settlement environs. Nest is a compact cup of bark strips, leaves, grasses feathers and plant down suspended 12-35 feet above the ground.	✓	possible vsn	possible 1 pair	possible 1 pair	possible 1 pair	PVW	probable	possible	probable	probable	possible	probable	
<i>Vireo olivaceus</i> Red-eyed Vireo				upland fac. dry	beta	carnivore generalist	Deciduous woods, occasionally in shade trees. Nests are usually suspended 5-10 feet high in a fork of a low tree, some may be higher.	✓	possible sn	possible 1 pair	possible vsn	possible 1 pair	PVW	probable		probable	probable			
<i>Cyanocitta cristata</i> Blue Jay				upland fac. dry	beta	herbivore generalist	Woodlands, parks, fencerows and residential areas. Nests are bulky cups of twigs usually 10-35 feet in crotch of tree or shrub.	✓	confirmed fw	possible sn	probable fw	possible sn	PVW	confirmed	confirmed	probable	probable	probable	probable	✓
<i>Corvus brachyrhynchos</i> American Crow				upland fac. dry	beta	omnivore	Wide variety of open country with a mixture of woodland and open ground. Nests are stick platforms in crotch of a tree.	✓	possible sn	possible vsn	probable common	possible 1 pair	PVW	probable	possible	probable	probable		probable	✓
<i>Corvus ossifragus</i> Fish Crow		S		fac. wet	beta	omnivore	Bars and agricultural fields of large river floodplain corridors and their tributaries, forested floodplains swamps and bottomland forest. Nests of sticks and twigs fined with finer material are placed in the tops of trees 20-80 feet above ground.	✓	possible 1 pair					not listed as breeding species in ABBI						
<i>Eremophila alpestris</i> Horned Lark				upland fac. dry	beta	omnivore	Altered habitats such as tilled agricultural land, overgrazed pasture, airports and reclaimed mine land. Ground nests are formed in a natural depressions usually next to a clump of grass or crop stubble and made of various plant material lined with finer grass.	✓				possible vsn	PVW	confirmed		confirmed	confirmed	possible	confirmed	
<i>Progne subis</i> Purple Martin				upland fac. dry	alpha	carnivore generalist	Occupies open habitats. Nests in colonies, almost exclusively manmade nest boxes.	✓	possible 1 pair		confirmed fw	confirmed vsn	PVW	confirmed	confirmed	confirmed	confirmed	confirmed	confirmed	
<i>Tachycineta bicolor</i> Tree Swallow				facultative	alpha	carnivore generalist	Semi-open and open habitats near lakes, ponds, and marshes. Nests in natural cavities (dead trees of reservoirs) or nest boxes.	✓	confirmed vsn	probable vsn			PVW	not listed for Vanderburgh or eastern Posey County in ABBI						
<i>Stelgidopteryx serripennis</i> Northern Rough-winged Swallow				fac. wet	alpha	carnivore generalist	Pairs or small colonies nest in burrows dug into steep dirt banks, or in crevices in rocky banks; along stream banks as well as highway cuts.	✓		possible 1 pair	probable vsn		PVW		probable					
<i>Riparia riparia</i> Bank Swallow		S		facultative	alpha	carnivore generalist	Breeds in colonies along vertical dirt and sand banks (either natural or artificial), most often near water. Nests are burrows dug into the banks.	✓	possible vsn		probable vsn		P		possible					
<i>Petrochelidon pyrrhonota</i> Cliff Swallow				facultative	beta	carnivore generalist	Breeds in colonies on buildings, dams and bridges; rarely on rock outcrops. Nests are rounded structures composed of mud pellets with tubular entrance.		listed for Henderson County in KBBA				P		possible					
<i>Hirundo rustica</i> Barn Swallow				upland fac. dry	beta	carnivore generalist	Open country near farms and towns; also under roadway brides. Nests are cups of mud pellets and some grass attached to ledges, usually in buildings and under overhangs.	✓	confirmed sn		probable vsn	possible sn	PVW	confirmed	confirmed	confirmed	confirmed	confirmed	confirmed	
<i>Poecile carolinensis</i> Carolina Chickadee				upland fac. dry	beta	omnivore	Woodland, parks, fencerows in cultivated areas and wooded residential areas. Nests in cavities in trees and nest boxes 3-15 feet high.	✓	possible fw	probable fw	possible sn	probable sn	PVW	probable	confirmed	confirmed	confirmed	confirmed	probable	✓
<i>Poecile atricapillus</i> Black-capped Chickadee				upland fac. dry	beta	omnivore	Various wooded habitats including bottomland hardwoods and city parks. Nests in cavities of their own construction or woodpecker holes or nest boxes.	✓	not listed in KBBA					not listed for Vanderburgh or Posey County in ABBI						
<i>Baeolophus bicolor</i> Tufted Titmouse				facultative	gamma	omnivore	Woodlands, parks, fencerows in cultivated areas and wooded residential areas. Nests in cavities in trees and nest boxes 3-15 feet high.	✓	possible sn	confirmed fw		possible fw	PVW	confirmed	possible	probable	probable	probable	probable	✓
<i>Sitta carolinensis</i> White-breasted Nuthatch				upland fac. dry	alpha	omnivore	Woodlands, parks, and wooded residential areas; prefers more mature woodland than preceding two species. Nests in cavities in trees.	✓	possible sn	possible vsn		possible vsn	PVW	probable	possible	probable	probable		possible	
<i>Certhia americana</i> Brown Creeper		E		facultative	alpha	carnivore generalist	Permanently inundated swamp forests of bald cypress and water tupelo, seasonally inundated bottomland forest and open-water slough margins. Nests constructed behind slabs of outer bark separated from the core of large, dead trees.	✓	listed for Henderson County in KBBA					not listed for Vanderburgh or Posey County in ABBI						

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<i>Thryothorus ludovicianus</i> Carolina Wren				upland fac. dry	beta	carnivore generalist	Woodlands with low cover, thickets and near residences. Nests are domed structures placed low in cavities and crevices in rock outcrops, fallen logs and buildings.	✓	possible fw	confirmed sn	probable 1 pair	probable fw	PVW	confirmed	confirmed	confirmed	confirmed	probable	probable	✓
<i>Troglodytes aedon</i> House Wren				upland fac. dry	beta	carnivore generalist	Open woods, shrubby thickets and residential areas. Nests in cavities and crevices in trees and buildings, and nest boxes.	✓	probable sn	possible vsn	probable vsn		PVW	probable	probable	probable	probable	probable	confirmed	
<i>Troglodytes troglodytes</i> Winter Wren				fac. wet	gamma	carnivore generalist		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						✓
<i>Poliopitila caerulea</i> Blue-gray Gnatcatcher				facultative	gamma	carnivore generalist	Mature woodlands, frequently near water. Nests are small, lichen-covered cups in forks or on branches high in a tree.	✓	probable sn	probable sn	probable 1 pair	possible 1 pair	PVW	probable	possible	probable	probable		confirmed	
<i>Sialia sialis</i> Eastern Bluebird				upland fac. dry	alpha	omnivore	All types of open country near farms and buildings. Nests in cavities and nest boxes.	✓	possible vsn	probable 1 pair	probable vsn	confirmed sn	PVW	confirmed	confirmed	probable	probable		confirmed	✓
<i>Hylocichla mustelina</i> Wood Thrush				upland fac. dry	gamma	omnivore	Mesic woodlands. Nests are cups of mud and grasses in a sapling or large shrub.	✓	possible fw	possible sn	possible vsn	possible vsn	PVW	probable	possible	probable	probable		probable	
<i>Turdus migratorius</i> American robin				upland fac. dry	beta	omnivore	Open woodlands and all types of urban habitats. Nests in trees or on building ledges, up to 25 feet above the ground.	✓	confirmed common	possible fw	confirmed common	confirmed fw	PVW	confirmed	confirmed	confirmed	confirmed	confirmed	confirmed	
<i>Dumetella carolinensis</i> Gray Catbird				facultative	beta	omnivore	semi-open habitats, small numbers found in both very open and extensively forested areas	✓	probable sn		possible vsn	possible 1 pair	PVW	confirmed	possible	probable	probable	probable	probable	
<i>Mimus polyglottos</i> Northern Mockingbird				upland fac. dry	beta	omnivore	Trees, shrubs and fencerows in open country, shrubbery near suburban and rural residences. Nests are bulky cups of twigs hidden low in small trees, shrubs and tangles.	✓	possible vsn	possible vsn	confirmed common	possible sn	PVW	probable	confirmed	confirmed	confirmed	confirmed	confirmed	✓
<i>Toxostoma rufum</i> Brown Thrasher				upland fac. dry	beta	omnivore	Similar to gray catbird, but nests closer to the ground.	✓	possible vsn	possible vsn	possible 1 pair	possible vsn	PVW	confirmed	confirmed	probable		possible	probable	
<i>Sturnus vulgaris</i> European Starling				upland fac. dry	gamma	omnivore	Occupies all habitats. Nests in tree cavities, crevices in buildings and nest boxes.	✓	confirmed sn	possible vsn	confirmed fw	confirmed sn	PVW	possible	confirmed	confirmed	confirmed	probable	confirmed	✓
<i>Bombycilla cedrorum</i> Cedar Waxwing				upland fac. dry	beta	herbivore specialist	Open woodlands, riparian woods, orchard and shade trees. Nests are a bulky cup of twigs, usually far out on a horizontal branch; may be colonial.	✓	listed for Henderson County in KBBA				PVW	confirmed	probable	possible			confirmed	
<i>Vermivora ruficapilla</i> Nashville Warbler				facultative	beta	carnivore generalist		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Parula americana</i> Northern Parula				fac. wet	alpha	carnivore generalist	Habitat varies including bottomland floodplain forests and swamps, riparian corridors, mesic slope ravines within mixed mesophytic forest. Nests sometimes placed in lichens, Spanish moss or bromeliads, or hung as pendants from the outer branches 10-40 feet above ground.	✓	possible sn	possible vsn	possible 1 pair		PW	probable	possible	probable	probable			
<i>Dendroica petechia</i> Yellow Warbler				facultative	beta	carnivore generalist	Shrubby growth in swamps and along streams, edge habitats and shrub-dominated fields. Nests are cups in fork of a sapling or shrub, 2-12 feet high.	✓	listed for Henderson County in KBBA				P	not listed for Vanderburgh or eastern Posey County in ABBI						
<i>Dendroica coronata</i> Yellow-rumped Warbler				facultative	gamma	omnivore		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Dendroica dominica</i> Yellow-throated Warbler				facultative	gamma	carnivore generalist	Deciduous woods along streams and lakes (west and central); upland woods with pine or hemlock (east). Nests are built on horizontal branches, usually very high in at tree.	✓	possible fw	confirmed sn		possible 1 pair	PW	listed for Vanderburgh County in ABBI						
<i>Dendroica discolor</i> Prairie Warbler				upland fac. dry	beta	carnivore generalist	Shrubby fields, thickets and woodland clearings. Nests are compact cups placed low in a sapling.		listed for Henderson County in KBBA				PW	probable					probable	

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<i>Dendroica cerulea</i> Cerulean Warbler			S	fac. wet	alpha	carnivore generalist	Mature mesic deciduous woodland. Nests well out on a branch, very high in a tall tree.	✓	not listed as breeding species in KBBA				PW	not listed for Vanderburgh or eastern Posey County in ABBI						
<i>Mniotilta varia</i> Black-and-white Warbler			S	upland fac. dry	gamma	carnivore generalist	Extensive mature or second growth deciduous woodlands. Nest on ground at base o a tree, hidden by roots, rocks or vegetation.	✓	listed for Henderson County in KBBA				P	not listed for Vanderburgh or Posey County in ABBI						
<i>Setophaga ruticilla</i> American Redstart				upland fac. dry	beta	carnivore generalist	Second growth and mature deciduous woods with well-developed understory. Nests are placed in fork of shrub, sapling or tree, 5-35 feet above the ground.	✓	possible vsn	possible 1 pair			PW	not listed for Vanderburgh or eastern Posey County in ABBI						
<i>Protonotaria citrea</i> Prothonotary Warbler				obligate	alpha	carnivore generalist	Riparian corridors along rivers and streams, floodplain sloughs, swamps, and reservoirs, and seasonally flooded bottomland forest. Nests are shallow cup of mosses, rootlets, twigs and leaves in a natural or artificial cavity (tree hole, old woodpecker hole, nest boxes).	✓	possible sn	probable sn		possible 1 pair	PW						confirmed	
<i>Seiurus aurocapillus</i> Ovenbird				upland fac. dry	gamma	carnivore generalist	Mature woods with sparse undergrowth. Nests are domed structures on the ground covered with leaf litter.	✓	listed for Henderson County in KBBA						possible					
<i>Seiurus motacilla</i> Louisiana Waterthrush				obligate	gamma	carnivore generalist	Small to moderate-sized streams in wooded valleys, swamps (west). Nests are cups of mosses and dead leaves placed in a cavity, among tree roots or on the ground.		not listed for Henderson County in KBBA				V		possible					
<i>Oporornis formosus</i> Kentucky Warbler				fac. wet	gamma	carnivore generalist	Mesic deciduous woodland with dense undergrowth. Nest on or just above the ground in a patch of herbs, usually at base of a tree or shrub.	✓	possible vsn	possible vsn	possible vsn	possible 1 pair	PVW	probable						
<i>Geothlypis trichas</i> Common Yellowthroat				fac. wet	beta	carnivore generalist	Wetlands, fallow fields, shrubby fields and dense thickets. Nests on or near ground, well concealed by herbaceous vegetation.	✓	probable sn	probable sn	possible 1 pair	possible sn	PVW	probable	confirmed	confirmed	confirmed	probable	confirmed	
<i>Wilsonia citrina</i> Hooded Warbler			S	fac. wet	gamma	carnivore generalist	Mesic deciduous woodland with dense undergrowth. Nests are dense cups placed up to 2 feet high in a sapling, shrub or tangle.	✓	listed for Henderson County in KBBA					not listed for Vanderburgh or eastern Posey County in ABBI						
<i>Icteria virens</i> Yellow-breasted Chat				facultative	gamma	omnivore	Dense tangled shrubby growth, thickets and woodland edge. Nests in dense shrub or tangle, up to 5 feet above the ground.	✓	possible 1 pair	possible 1 pair	possible 1 pair	possible 1 pair	PVW	probable	possible	probable			probable	
<i>Piranga rubra</i> Summer Tanager				upland fac. dry	gamma	omnivore	Similar to scarlet tanager, but prefers slightly drier and more open woods.	✓	possible vsn	probable 1 pair		possible vsn	PVW	possible	probable	probable	probable			
<i>Piranga olivacea</i> Scarlet Tanager				upland fac. dry	beta	omnivore	Mature deciduous woodlands. Nests are loose, shallow cups placed high in a tree well out on a branch in a twig fork.	✓		possible vsn			VW	not listed for Vanderburgh or Posey County in ABBI						
<i>Pipilo erythrophthalmus</i> Eastern Towhee				upland fac. dry	beta	omnivore	Woodlands with dense undergrowth and shrubby fields. Usually nests on ground under dense shrubs, may nest low in tangles or undergrowth.	✓	possible sn	possible vsn	possible 1 pair	possible sn	PVW	probable	confirmed	probable	probable	probable	probable	✓
<i>Zonotrichia albicoliis</i> White-throated sparrow				upland fac. dry	beta	omnivore			not listed as breeding species in KBBA					not listed as breeding species in ABBI						✓
<i>Spizella passerina</i> Chipping Sparrow				upland fac. dry	beta	omnivore	Woodland edges, parklands and plantings near residences. Nests are compact cups in twig forks of shrub or tree, usually coniferous and 3-2 feet high.	✓	possible vs		possible 1 pair		PVW	probable	confirmed	probable	confirmed		confirmed	
<i>Spizella pusilla</i> Field Sparrow				upland fac. dry	beta	omnivore	Woodland edges, fencerows and abandoned fields with scattered low shrubs. Early nests are placed on or near ground in grass tufts, later nests may be up to a toot high in a shrub.	✓	possible sn	probable vsn		possible sn	PVW	confirmed	probable	probable	confirmed	confirmed	probable	
<i>Chondestes grammacus</i> Lark Sparrow		T		upland fac. dry	alpha	carnivore generalist	Semi-open and open areas with limited cover like cedar glades and prairie openings, well-grazed pastures with exposed ground or rocks. Nests are shallow depressions concealed by clumps of grass or other vegetation or sometimes in a tree or shrub consisting of dead grass.		not listed for Henderson County in KBBA				W	not listed for Vanderburgh or Posey County in ABBI						
<i>Passerculus sandwichensis</i> Savannah Sparrow		S		facultative	beta	omnivore	Hayfields, pastures, reclaimed mine land and other grassy habitats not especially tall or thick. Nests in shallow depression on the ground are primarily of coarse grasses with linings of finer grass, rootlets and hair.		not listed for Henderson County in KBBA				W	not listed for Vanderburgh or Posey County in ABBI						

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<i>Ammodramus savannarum</i> Grasshopper Sparrow				upland fac. dry	beta	omnivore	Grasslands, pastures and hayfields. Nest on ground, at base of grass or weed clump and well concealed.	✓	listed for Henderson County in KBBA				PVW	probable		confirmed	probable			
<i>Ammodramus henslowii</i> Henslow’s Sparrow		S	T	upland fac. dry	gamma	omnivore	Fallow fields, pastures, reclaimed mine lands, hayfields and unmowed thick grassy habitats preferably with a layer of dead plant material at the base. Nests are of dead grasses and lined with finer grass and some hair, concealed by overhanging vegetation.	✓	not listed as breeding species in KBBA					not listed for Vanderburgh or Posey County in ABBI						
<i>Passerella iliaca</i> Fox Sparrow				upland fac. dry	beta	omnivore		✓	not listed as breeding species in KBBA					not listed as breeding species in ABBI						
<i>Melospiza melodia</i> Song Sparrow				facultative	beta	omnivore	Woodland edges and clearings, dense fencerows, shrubby fields and residential plantings, often along streams. Nests on ground under grass tufts early in year, later nests are placed up to 4 feet high in a shrub or small tree.	✓	probable sn	possible vsn	probable sn	possible vsn	PVW	probable	confirmed	probable	probable	probable	probable	✓
<i>Junco hyemalis</i> Dark-eyed Junco		S		upland fac. dry	beta	omnivore	Various semi-open habitats in higher elevations of mountainous areas, natural and artificial forest margins and openings. Nests are on the ground in a recess usually concealed by a fallen branch, exposed roots or vegetation.	✓	not listed for Henderson County in KBBA					not listed as breeding species in ABBI						
<i>Cardinalis cardinalis</i> Northern Cardinal				upland fac. dry	beta	herbivore generalist	Woodland clearings and edges, dense thickets, shrubby fields and residential areas. Nests are cups of twigs placed up to 10- feet high in a shrub or tangle.	✓	confirmed fw	probable fw	probable fw	confirmed fw	PVW	confirmed	confirmed	confirmed	confirmed	confirmed	confirmed	✓
<i>Pheucticus ludovicianus</i> Rose-breasted Grosbeak		S		upland fac. dry	beta	omnivore	Upper and midstory reaches of deciduous forest and forest edge habitat in higher elevations of mountainous terrain. A bulky nest of loose plant material, fine twigs, rootlets, plant fibers and grape tendrils 9-30 feet above ground.	✓	not listed for Henderson County in KBBA					not listed for Vanderburgh or Posey County in ABBI						
<i>Guiraca caerulea</i> Blue Grosbeak				upland fac. dry	beta	omnivore	Shrubby fields, dense thickets and woodland edges. Nests are placed in twig forks up o 15 feet high in dense shrubs or tangles.	✓	listed for Henderson County in KBBA				PVW				probable			
<i>Passerina cyanea</i> Indigo Bunting				facultative	beta	omnivore	Woodland edges and clearings, fencerows, roadside and shrubby fields. Nests are compact cups placed in thick herbaceous growth or twig fork of a shrub, sapling or tangle, usually 5-15 feet high.	✓	confirmed fw	confirmed fw	probable fw	possible fw	PVW	confirmed	confirmed	confirmed	confirmed	confirmed	probable	✓
<i>Spiza americana</i> Dickcissel				upland fac. dry	beta	omnivore	Open habitats of low herbaceous vegetation including artificial grassy fields, fields of clover and alfalfa and small grains. Nests of dead leaves, coarse grasses and weed stems and line with fine grasses and placed on or low to the ground.	✓	possible 1 pair		possible 1 pair	possible 1 pair	PVW	possible	probable	confirmed	probable		possible	
<i>Agelaius phoeniceus</i> Red-winged Blackbird				fac. wet	beta	omnivore	Marshes, pond margins, meadows, hayfields and fallow fields. Nests are large cups suspended between stems, usually under 3 feet above the ground.	✓	confirmed sn	probable sn	probable fw	possible sn	PVW	confirmed	confirmed	confirmed	confirmed	probable	confirmed	✓
<i>Sturnella magna</i> Eastern Meadowlark				upland fac. dry	beta	omnivore	Grasslands, fallow fields, pastures, hayfields. Nests are domed structures on the ground, concealed by overhanging grasses.	✓	possible fw	possible 1 pair	possible 1 pair	possible sn	PVW	probable	probable	probable	probable	probable	probable	
<i>Euphagus cyanocephalus</i> Brewer’s Blackbird			X	upland fac. dry	beta	omnivore			not listed as breeding species in KBBA				P	not listed as breeding species in ABBI						
<i>Quiscalus quiscula</i> Common Grackle				upland fac. dry	beta	omnivore	Open residential and cultivated habitats and shrubby marshes. Nests are bulky loose cups placed in shade trees, on buildings, or in shrubs in marshes. Often breeds in colonies.	✓	confirmed common	probable common	probable vsn	possible sn	PVW	confirmed	possible	confirmed	confirmed	probable	confirmed	
<i>Molothrus ater</i> Brown-headed Cowbird				upland fac. dry	beta	omnivore	A brood parasite that may be found in any habitat. Lays its eggs in nests of other species.	✓	confirmed sn	probable vsn	probable vsn	possible vsn	PVW	possible		confirmed	probable	probable	probable	
<i>Icterus spurius</i> Orchard Oriole				upland fac. dry	beta	carnivore generalist	Successional habitats with scattered trees and fencerows, wooded riparian corridors and shade trees in suburban areas. Nests are hanging cups, normally 20+ feet high in a tree.	✓		possible vsn		possible 1 pair	PW		confirmed	confirmed	probable		confirmed	
<i>Icterus galbula</i> Northern Oriole				upland fac. dry	beta	omnivore	Mature riparian woodland and scattered large shade trees. Nests are pendant, hanging cups, normally 20+ feet high at the tips of branches.	✓	possible sn	possible 1 pair		possible 1 pair	PVW	confirmed	probable	probable	confirmed	probable	confirmed	

Breeding Status

possible	species heard or seen in breeding habitat during the breeding season
probable	secondary characteristics of breeding activity observed – agitated behavior or anxiety calls by adults, pairs observed during breeding season, behavior indicating permanent territory observed, courtship or copulation observed, visiting probable nest site, wren and woodpecker nest building
confirmed	positive indicators of breeding observed – distraction display, nest building, presence of used nest, physiological evidence (e.g., egg in oviduct, brood patches), recently fledged young or downy young, adult bird carrying a fecal sac of young, adult bird carrying food for young, nest with eggs, and nest with young

Abundance

common	one of the commonest species of the survey block for the quadrangle
fw	fairly widespread within survey block for the quadrangle
sn	small numbers observed in scattered localities within the survey block for the quadrangle
vsn	very small numbers restricted to a very small area of the survey block for the quadrangle
1 or pair	only one individual or pair observed in survey block for the quadrangle

Species Name Common Name	US	KY	IN	Wetland Depend.	Habitat Spec.	Trophic Level	Habitat Description	KFWIS Henderson County	Kentucky Breeding Bird Atlas (Palmer-Ball, 1996)				1990 Indiana Audubon Summer Counts	Atlas of Breeding Birds of Indiana (Castrale et al., 1998)						I-69 Study
									Evansville South Quad	Newburgh Quad	Henderson Quad	Spottsville Quad		West Franklin Quad	Kasson Quad	Cynthiana Quad	Haubstadt Quad	Evansville South Quad	Newburgh Quad	
<i>Carpodacus mexicanus</i> House Finch				upland fac. dry	beta	herbivore generalist	Cultivated and suburban areas near buildings. Nests are grass cups placed in trees, shrubs, on ledges and in cavities.	✓			probable 1 pair		PVW	confirmed		probable	confirmed	confirmed		
<i>Carduelis tristis</i> American Goldfinch				upland fac. dry	beta	herbivore generalist	Woodland edges, shrubby fencerows and fallow fields, occasionally shade trees. Nests are compact cups placed in twig forks of sapling, shrubs or larger trees, sometimes in tall weeds, usually lower than 15 feet.	✓	possible 1 pair	possible vsn	probable vsn	possible 1 pair	PVW	confirmed	confirmed	probable	confirmed	possible	confirmed	✓
<i>Passer domesticus</i> House Sparrow				upland fac. dry	beta	omnivore	Breeds near human habitation. Nests are domed structures placed in crevices and cavities in buildings; occasionally in trees and nest boxes.	✓	confirmed common	possible sn	probable fw	possible sn	PVW	confirmed	confirmed	confirmed	confirmed	confirmed	confirmed	

Breeding Status

- possible

probable

confirmed
- species heard or seen in breeding habitat during the breeding season

secondary characteristics of breeding activity observed – agitated behavior or anxiety calls by adults, pairs observed during breeding season, behavior indicating permanent territory observed, courtship or copulation observed, visiting probable nest site, wren and woodpecker nest building

positive indicators of breeding observed – distraction display, nest building, presence of used nest, physiological evidence (e.g., egg in oviduct, brood patches), recently fledged young or downy young, adult bird carrying a fecal sac of young, adult bird carrying food for young, nest with eggs, and nest with young

Abundance

- common

fw

sn

vsn

1 or pair
- one of the commonest species of the survey block for the quadrangle

fairly widespread within survey block for the quadrangle

small numbers observed in scattered localities within the survey block for the quadrangle

very small numbers restricted to a very small area of the survey block for the quadrangle

only one individual or pair observed in survey block for the quadrangle

Reptiles Inferred and/or Recorded for I-69 Study Area

	Species	US	KY	IN	Wetland Depend.	Habitat Spec.	Trophic Level	Minton (1972)	Barbour (1971)	KFWIS Henderson County	I-69 Study
Turtles	<i>Chelydra s. serpentina</i> Eastern snapping Turtle				obligate	beta	omnivore	✓	✓	✓	
	<i>Macrolemys temmincki</i> Alligator Snapping Turtle		T	E	obligate	beta	carnivore generalist	extirpated	✓		
	<i>Sternotherus odoratus</i> Stinkpot				obligate	gamma	carnivore generalist	✓	✓		
	<i>Kinosternon s. subrubrum</i> Eastern Mud Turtle			T	obligate	gamma	omnivore	✓	✓		
	<i>Terrapene c. carolina</i> Eastern Box Turtle				upland/fac. dry	beta	omnivore	✓	✓	✓	✓
	<i>Graptemys geographica</i> Northern Map Turtle				obligate	gamma	omnivore	✓	✓		
	<i>Graptemys p. pseudogeographica</i> False Map Turtle				obligate	gamma	omnivore	✓			
	<i>Graptemys o. ouachitensis</i> Ouachita Map Turtle				obligate	gamma	omnivore		✓		
	<i>Chrysemys picta marginata</i> Midland Painted Turtle				obligate	beta	omnivore	✓	✓	✓	
	<i>Pseudemys concinna hieroglyphica</i> Hieroglyphic River Cooter			E	obligate	gamma	omnivore	✓	✓		
	<i>Trachemys scripta elegans</i> Red-Eared Slider				obligate	gamma	omnivore	✓	✓	✓	
	<i>Apalone m. mutica</i> Midland Smooth Softshell		S		obligate	alpha	carnivore generalist	✓	✓		
	<i>Apalone s. spinifera</i> Eastern Spiny Softshell				obligate	alpha	carnivore generalist	✓	✓		
Lizards	<i>Sceloporus undulatus hyacinthinus</i> Northern Fence Lizard				upland/fac. dry	beta	carnivore generalist	✓	✓		
	<i>Scincella lateralis</i> Little Brown Skink				upland/fac. dry	beta	carnivore generalist	✓	✓		
	<i>Eumeces fasciatus</i> Common Five-lined Skink				upland/fac. dry	beta	carnivore generalist	✓	✓	✓	✓
	<i>Eumeces laticeps</i> Broadhead Skink				upland/fac. dry	beta	carnivore generalist	✓	✓		
	<i>Cnemidophorus s. sexlineatus</i> Six-lined racerunner				upland/fac. dry	beta	carnivore generalist	✓	✓		

Reptiles Inferred and/or Recorded for I-69 Study Area (continued)

	Species	US	KY	IN	Wetland Depend.	Habitat Spec.	Trophic Level	Minton (1972)	Barbour (1971)	KFWIS Henderson County	I-69 Study
Snakes	<i>Carphophis amoenus helenae</i> Midwest Wormsnake				upland/ fac. dry	gamma	carnivore generalist	✓	✓		
	<i>Diadophis punctatus edwardsii</i> Northern Ring-necked Snake				upland/ fac. dry	gamma	carnivore generalist	✓	✓		
	<i>Heterodon platyrhinos</i> Eastern Hog-nosed Snake				upland/ fac. dry	beta	carnivore specialist	✓	✓		
	<i>Opheodrys a. aestivus</i> Rough Greensnake			S	upland/ fac. dry	gamma	carnivore generalist	✓	✓		
	<i>Coluber c. constrictor</i> Northern Black Racer				upland/ fac. dry	beta	carnivore generalist			✓	
	<i>Coluber constrictor priapus</i> Southern Black Racer				upland/ fac. dry	beta	carnivore generalist	✓	✓	✓	✓
	<i>Elaphe o. obsoleta</i> Black Rat Snake				upland/ fac. dry	beta	carnivore generalist	✓	✓	✓	
	<i>Farancia abacura reinwardtii</i> Western Mud Snake		S	X	obligate	?	?			✓	
	<i>Lampropeltis c. calligaster</i> Prairie Kingsnake				upland/ fac. dry	gamma	carnivore generalist	✓	✓		
	<i>Lampropeltis getula nigra</i> Eastern Black Kingsnake				upland/ fac. dry	beta	carnivore generalist	✓	✓	✓	
	<i>Lampropeltis triangulum syspila</i> Red Milksnake				upland/ fac. dry	beta	carnivore generalist	✓	✓		
	<i>Cemophora coccinea copei</i> Northern Scarlet Snake			E	upland/ fac. dry	gamma	carnivore generalist		✓		
	<i>Thamnophis p. proximus</i> Orange-striped Ribbonsnake		T	S	upland/ fac. dry	gamma	carnivore generalist	✓			
	<i>Thamnophis s. sauritus</i> Common Ribbonsnake		S		facultative	gamma	carnivore generalist	✓	✓		
	<i>Thamnophis s. sirtalis</i> Eastern Gartersnake				facultative	beta	carnivore generalist	✓	✓	✓	
	<i>Storeria dekayi wrightorum</i> Midland Brownsnake				upland/ fac. dry	beta	carnivore generalist	✓	✓		
	<i>Storeria o. occipitamaculata</i> Northern Red-bellied Snake				upland/ fac. dry	gamma	carnivore generalist	✓	✓		
	<i>Nerodia fasciata confluens</i> Broad-banded Watersnake		E		obligate	?	?			✓	
	<i>Nerodia sipedon pleuralis</i> Midland Watersnake				obligate	beta	carnivore generalist	✓	✓	✓	
	<i>Nerodia erythrogaster neglecta</i> Copper-bellied Watersnake		S	E	obligate	gamma	carnivore generalist	✓	✓	✓	
	<i>Nerodia r. rhombifera</i> N. Diamond-backed Watersnake				obligate	gamma	carnivore generalist	✓	✓		
	<i>Agkistrodon piscivorous leucostoma</i> Western cottonmouth			E	obligate	alpha	carnivore specialist		✓		
	<i>Agkistrodon contortrix mokasen</i> Northern Copperhead				upland/ fac. dry	gamma	carnivore generalist	✓	✓	✓	

Amphibians Inferred and/or Recorded for I-69 Study Area

	Species	US	KY	IN	Wetland Depend.	Habitat Spec.	Trophic Level	Minton (1972)	Barbour (1971)	KFWIS Henderson County	I-69 Study
Salamanders	<i>Cryptobranchus a. alleganiensis</i> Eastern Hellbender		S	E	obligate	alpha	carnivore generalist	✓			
	<i>Ambystoma maculatum</i> Spotted Salamander				fac. wet	gamma	carnivore generalist	✓			
	<i>Ambystoma opacum</i> Marbled Salamander				fac. wet	gamma	carnivore generalist	✓			
	<i>Ambystoma texanum</i> Small-mouthed Salamander				fac. wet	gamma	carnivore generalist	✓		✓	
	<i>Notophthalmus v. viridescens</i> Red-spotted Newt				obligate	beta	carnivore generalist	✓			
	<i>Plethodon c. cinereus</i> Eastern Red-backed Salamander		S		fac. wet	beta	carnivore generalist	✓			
	<i>Plethodon d. dorsalis</i> Northern Zigzag Salamander				facultative	gamma	carnivore generalist	✓		✓	
	<i>Plethodon g. glutinosus</i> Northern Slimy Salamander				facultative	gamma	carnivore generalist	✓			
	<i>Eurycea cirrigera</i> Southern Two-lined Salamander				fac. wet	gamma	carnivore generalist	✓			
	<i>Siren intermedia nettingi</i> Western Lesser Siren				obligate	alpha	carnivore generalist	✓		✓	
	<i>Necturus maculosus</i> Common Mudpuppy			S	obligate	alpha	carnivore generalist	✓			
Frogs and Toads	<i>Scaphiopus h. holbrookii</i> Eastern Spadefoot			S	facultative	gamma	carnivore generalist	✓	✓		
	<i>Rana a. circulosa</i> Northern Crawfish Frog		S	E	fac. wet	gamma	carnivore generalist	✓	✓	✓	
	<i>Rana catesbeiana</i> American Bullfrog				obligate	gamma	carnivore generalist	✓	✓	✓	✓
	<i>Rana clamitans melanota</i> Northern Green Frog				obligate	gamma	carnivore generalist	✓	✓	✓	
	<i>Rana palustris</i> Pickerel Frog				fac. wet	beta	carnivore generalist	✓	✓		
	<i>Rana pipiens</i> Northern Leopard Frog (1)		S	S	fac. wet	beta	carnivore generalist			✓	
	<i>Rana sphenoccephala utricularia</i> Southern Leopard Frog				fac. wet	beta	carnivore generalist	✓	✓	✓	✓
	<i>Rana sylvatica</i> Wood Frog				fac. wet	beta	carnivore generalist	✓	✓	✓	✓
	<i>Bufo americanus</i> American toad				fac. wet	beta	carnivore generalist		✓	✓	
	<i>Bufo fowleri</i> Fowler's Toad				fac. wet	beta	carnivore generalist	✓	✓	✓	
	<i>Acris crepitans blanchardi</i> Blanchard's cricket frog				fac. wet	beta	carnivore generalist	✓	✓	✓	
	<i>Hyla avivoca</i> Bird-voiced Treefrog		T						✓	✓	
	<i>Hyla chrysoscelis</i> Cope's Gray Treefrog (2,3)				fac. wet	beta	carnivore generalist	✓	✓	✓	
	<i>Hyla cinerea</i> Green Treefrog		S							✓	
	<i>Pseudacris c. crucifer</i> Northern Spring Peeper				fac. wet	beta	carnivore generalist	✓	✓	✓	
	<i>Pseudacris f. ferianrum</i> Upland Chorus Frog				fac. wet	beta	carnivore generalist	✓	✓	✓	

- (1) *R. pipiens* recorded in the KFWIS for Henderson County is believed to be *R. sphenoccephala utricularia* (= *R. pipiens sphenoccephala* in Barbour, 1971)
- (2) Barbour (1971) recognized the Eastern Gray Treefrog (*Hyla versicolor*) as the only Gray Treefrog in the state and ascribed all morphologic occurrences to this species. Subsequent research revealed that a complex of two species, essentially indistinguishable by physical field characteristics, exists in Kentucky. Cope's Gray Treefrog (*Hyla chrysocelis*) is now regarded as the species with the statewide distribution, while *H. versicolor* is limited to an isolated range in the Fort Knox area.
- (3) Minton (1972) indicate that the Eastern Gray Treefrog (*Hyla versicolor versicolor*) is the Gray Treefrog of Indiana, but notes that due to call differences between Gray Treefrogs in northern and southern Indiana, some assign the harsh-voiced southern Indiana frogs to the subspecies (or species) *chrysoscelis*.

Source of Scientific and common names: Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding. Committee on Standard English and Scientific Names, Brian I. Crother, Chair. Society for the Studies of Amphibians and Reptiles. Herpetological Circular No. 29. 2000.

Ichthyofauna of Upper Big Creek Drainage in Eastern Posey and Northwestern Vanderburgh County, Indiana

[illegible]

Ichthyofauna of Bayou Creek Drainage and Minor Ohio River Tributaries in Southwestern Vanderburgh County, Indiana

Family	Species name	Common Name	IN Status	Nativity	Tolerance	Trophic Level	I-69 Study			Cervone et al., 1989																	Grannan and Lodato, 1986							
							Sanders Creek @ Schissler Rd.	Bayou Creek @ SW Franklin Rd.	Bahm Vickery Ditch @ Seminary Rd.	Bayou Creek @ Cypress Dale Rd.	Bayou Creek @ Schmuck Rd.	Bayou Creek @ Bayou Creek Rd.	Bayou Creek @ Pleasant Rd.	Bayou Creek @ Nurrenbern Rd.	Bayou Creek @ Red Bank Rd.	Sanders Creek @ West Franklin Rd.	Sanders Creek @ Schissler Rd.	Sanders Creek @ Lower Mt. Vernon	Sanders Creek @ County Line Rd.	Sanders Creek @ Lower Mt. Vernon	Sanders Creek @ Broadway Rd.	Barnett Ditch @ Roth Rd.	Cypress Dale Ditch @ Cypress Dale Rd.	Edmond Ditch @ Seminary Rd.	Bayou Creek trib. @ Bayou Creek Rd.	Bayou Creek trib. @ Nurrenbern Rd.	Bayou Creek trib. @ Schutte Rd.	Bayou Creek @ Nurrenbern Rd.	Bayou Creek @ Schutte Rd.	Bayou Creek @ Broadway Ave.	Bayou Creek @ Schissler			
Lepisosteidae	<i>Lepisosteus oculatus</i>	spotted gar		native	intermediate	piscivore						1	1																					
Clupeidae	<i>Dorosoma cepedianum</i>	gizzard shad		native	intolerant	omnivore							4	1	1																			
Cyprinidae	<i>Campostoma anomalum</i>	central stoneroller		native	stressed	herbivore	1																											
	<i>Cyprinella spiloptera</i>	spotfin shiner		native	intermediate	insectivore	3			8							2	3				1	18	1										
	<i>Cyprinus carpio</i>	common carp		non-native	tolerant	omnivore				1																								
	<i>Hybognathus nuchalis</i>	Mississippi silvery minnow		native	intermediate	herbivore	30								1									2										
	<i>Notemigonus crysoleucas</i>	golden shiner		native	tolerant	omnivore					1														2									
	<i>Notropis atherinoides</i>	emerald shiner		native	intermediate	insectivore		1		104	35	7	5		174	1		6				1	66	2	7									
	<i>Notropis buccatus</i>	silverjaw minnow		native	stressed	omnivore	31										3								1	39	3	✓	✓					
	<i>Notropis volucellus</i>	mimic shiner		native	intolerant	omnivore				17				1		6	13									1								
	<i>Phoxinus erythrogaster</i>	southern redbelly dace		native	intolerant	omnivore																												
	<i>Pimephales notatus</i>	bluntnose minnow		native	intolerant/stressed	omnivore	102				27	5	1				12	97	1	2	15	57		6			36	11	3	✓	✓	✓	✓	
	<i>Pimephales promelas</i>	fathead minnow		native	tolerant/stressed	omnivore	12																											
	<i>Semotilus atromaculatus</i>	creek chub		native	tolerant/stressed	omnivore	9									1			6	2	12		1			10	25	25	✓	✓	✓	✓		
	Cyprinodontidae	<i>Fundulus notatus</i>	blackstripe topminnow		native	intermediate	insectivore	4	1		7		4	3			3	5			2	23		3				3			✓	✓	✓	✓
	Poeciliidae	<i>Gambusia affinis</i>	western mosquitofish		native	intermediate	insectivore	3	55	118			155										7	13	3									✓
		<i>Erimyzon oblongus</i>	creek chubsucker		native	intermediate/stressed	omnivore									1																		
	<i>Moxostoma erythrurum</i>	golden redhorse		native	intolerant	insectivore	1																											
Ictaluridae	<i>Ameiurus melas</i>	black bullhead		native	intermediate	omnivore					1									4			1	2										
Esocidae	<i>Esox americanus</i>	grass pickerel		native	intermediate	piscivore							1						2															
Aphredoderidae	<i>Aphredoderus sayanus</i>	pirate perch		native	intermediate	insectivore	1	7																							✓			
Centrarchidae	<i>Lepomis cyanellus</i>	green sunfish		native	tolerant/stressed	insectivore		2	1											4			1							✓	✓	✓	✓	
	<i>Lepomis gulosus</i>	warmouth		native	intermediate	invertivore						1	6	2																				
	<i>Lepomis humilis</i>	orangespotted sunfish		native	intermediate	insectivore					1		15	11																				
	<i>Lepomis macrochirus</i>	bluegill		native	intermediate	insectivore	1				1	2	180	39	9		1			2			1									✓		
	<i>Lepomis megalotis</i>	longear sunfish		native	intolerant	insectivore													2															
	<i>Micropterus punctulatus</i>	spotted bass		native	intermediate	carnivore		2																										
	<i>Micropterus salmoides</i>	largemouth bass		native	intermediate	carnivore			1							2																		
		<i>Pomoxis annularis</i>	white crappie		native	intermediate	carnivore						2		2																			
		<i>Pomoxis nigromaculatus</i>	black crappie		native	intermediate	carnivore		1																									
	Percidae	<i>Etheostoma asprigene</i>	mud darter		native	tolerant	insectivore				2	1																						
		<i>Etheostoma gracile</i>	slough darter		native	intermediate	insectivore	1								2																		
		<i>Etheostoma nigrum</i>	johnny darter		native	intermediate/stressed	insectivore		5																									
		<i>Etheostoma squamiceps</i>	spottail darter	E	native	intolerant	invertivore	1													2							1		✓	✓	✓	✓	
	Total Number of Species							14	8	4	8	6	9	8	7	4	6	5	3	3	8	3	3	8	5	5	6	3	7	8	6	6		
	Total Number of Individuals							200	74	121	167	45	366	70	18	178	24	120	10	10	33	92	9	109	9	56	80	31	---	---	---	---	---	
Shannon diversity index							0.69	0.43	0.06	0.53	0.36	0.45	0.62	0.68	0.06	0.58	0.30	0.39	0.41	0.75	0.39	0.30	0.54	0.66	0.45	0.53	0.27	---	---	---	---	---		
Peilou's evenness index							0.60	0.48	0.10	0.58	0.46	0.47	0.69	0.80	0.09	0.75	0.44	0.82	0.86	0.83	0.83	0.62	0.60	0.69	0.65	0.68	0.57	---	---	---	---	---		
Index of Biotic Integrity							---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		

Ichthyofauna of Canoe Creek Drainage, Race Creek, and Lower Green River Drainage in Henderson County, Kentucky

Family	Species Name	Common Name	KY Status	Nativity	Tolerance	Trophic Level	I-69 Study					Harker et al. (1981)			Kentucky Department of Fish and Wildlife Resources							
							Canoe Creek 7/25/02	Sellers Ditch 7/25/02	Elam Ditch trib. 7/25/02	Race Creek 7/25/02	North Fork trib. 7/25/02	Canoe Creek 9/10/80	Cypress Slough 9/9/80	Cypress Slough 7/27/78	Lower Green River Tributaries					Green River Lock #1 8/31/89	Lower Green River	
															Lick Creek 8/16/89	Richland Slough 8/23/89	Richland Slough 8/28/89	Rhodes Creek 8/23/89	Cash Creek 8/16/89			
Lepisosteidae	<i>Lepisosteus oculatus</i>	spotted gar		native	intermediate	piscivore																✓
	<i>Lepisosteus osseus</i>	longnose gar		native	intermediate	piscivore														3		✓
	<i>Lepisosteus platostomus</i>	shortnose gar		native	intermediate	piscivore																✓
Amiidae	<i>Amia calva</i>	bowfin		native	intermediate	piscivore										4						✓
Hiodontidae	<i>Hiodon alosoides</i>	goldeye		native	intolerant	insectivore																✓
	<i>Hiodon tergisus</i>	mooneye		native	intolerant	insectivore														1		✓
Clupeidae	<i>Alosa chrysochloris</i>	skipjack herring		native	intolerant	piscivore														9		✓
	<i>Dorosoma cepedianum</i>	gizzard shad		native	intolerant	omnivore					✓			1	3	37	189			53		✓
	<i>Dorosoma petenense</i>	threadfin shad		native	intolerant	omnivore														7		✓
Cyprinidae	<i>Camposoma anomalum</i>	central stoneroller		native	stressed	herbivore																✓
	<i>Cyprinella spiloptera</i>	spotfin shiner		native	intermediate	insectivore																✓
	<i>Cyprinella whipplei</i>	steelcolor shiner		native	intolerant	insectivore						✓					6					✓
	<i>Cyprinus carpio</i>	common carp		non-native	tolerant	omnivore			2							2	1			3		✓
	<i>Hybognathus nuchalis</i>	Mississippi silvery minnow		native	intermediate	herbivore																✓
	<i>Luxilus chrysocephalus</i>	striped shiner		native	intermediate	omnivore					✓											✓
	<i>Lythrurus ardens</i>	rosefin shiner		native	intolerant	insectivore																✓
	<i>Lythrurus fumeus</i>	ribbon shiner		native	tolerant	insectivore	1		9							1	21					✓
	<i>Lythrurus umbratilis</i>	redfin shiner		native	tolerant	insectivore																✓
	<i>Notemigonus crysoleucas</i>	golden shiner		native	tolerant	omnivore						✓	✓	✓	1							✓
	<i>Notropis atherinoides</i>	emerald shiner		native	intermediate	insectivore						✓										✓
	<i>Notropis boops</i>	bigeye shiner		native	intolerant	insectivore																✓
	<i>Notropis buccatus</i>	silverjaw minnow		native	stressed	omnivore			40													✓
	<i>Notropis volucellus</i>	mimic shiner		native	intolerant	omnivore																✓
	<i>Opsopoeodus emiliae</i>	pugnose minnow		native	intolerant	insectivore						✓										✓
	<i>Phenacobius mirabilis</i>	suckermouth minnow		native	intermediate	insectivore			8	1							1					✓
	<i>Pimephales notatus</i>	bluntnose minnow		native	tolerant/stressed	omnivore	1		16	218	41	✓	✓				7					✓
	<i>Pimephales vigilax</i>	bullhead minnow		native	intermediate	omnivore																✓
	<i>Semotilus atromaculatus</i>	creek chub		native	tolerant/stressed	omnivore			8	5	42	✓										✓
Cyprinodontidae	<i>Fundulus notatus</i>	blackstripe topminnow		native	intermediate	insectivore	2	14	20	103	57	✓	✓	2								✓
	<i>Fundulus olivaceus</i>	blackspotted topminnow		native	intermediate	insectivore																✓
Poeciliidae	<i>Gambusia affinis</i>	western mosquitofish		native	intermediate	insectivore	3	9	367	36	213	✓	✓	9			33	3				✓
Catostomidae	<i>Carpiodes carpio</i>	river carpsucker		native	intermediate	omnivore																✓
	<i>Carpiodes cyprinus</i>	quillback		native	intermediate	omnivore																✓
	<i>Carpiodes velifer</i>	highfin carpsucker		native	intolerant	omnivore																✓
	<i>Catostomus commersoni</i>	white sucker		native	tolerant	insectivore																✓
	<i>Cycleptus elongatus</i>	blue sucker		native	intolerant	insectivore																✓
	<i>Erimyzon oblongus</i>	creek chubsucker		native	intermediate/stressed	omnivore																✓
	<i>Erimyzon sucetta</i>	lake chubsucker	T	native	intermediate/stressed	omnivore							✓									✓
	<i>Ictiobus bubalus</i>	smallmouth buffalo		native	intermediate	omnivore									2	10	1			1		✓
	<i>Ictiobus cyprinellus</i>	bigmouth buffalo		native	intermediate	omnivore			1													✓
	<i>Minytrema melanops</i>	spotted sucker		native	intolerant	insectivore																✓
	<i>Moxostoma anisurum</i>	silver redhorse		native	intolerant	insectivore											1					✓
	<i>Moxostoma carinatum</i>	river redhorse		native	intolerant	insectivore																✓
	<i>Moxostoma duquesnei</i>	black redhorse		native	intolerant	insectivore																✓
	<i>Moxostoma erythrurum</i>	golden redhorse		native	intolerant	insectivore																✓
	<i>Moxostoma macrolepidotum</i>	shorthead redhorse		native	intolerant	insectivore														2		✓
Ictaluridae	<i>Ameiurus melas</i>	black bullhead		native	intermediate	omnivore						✓	✓	✓								✓
	<i>Ameiurus natalis</i>	yellow bullhead		native	tolerant	omnivore	1		4	2	4	✓		5			7					✓
	<i>Ictalurus furcatus</i>	blue catfish		native	intermediate	carnivore																✓
	<i>Ictalurus punctatus</i>	channel catfish		native	intermediate	omnivore											4					✓
	<i>Noturus gyrinus</i>	tadpole madtom		native	intolerant	insectivore																✓
	<i>Noturus miurus</i>	brindled madtom		native	intolerant	insectivore																✓

[illegible]

Mussels of the Ohio and Green Rivers from Previous Studies and the I-69 Bridge Crossing Investigation

Subfamily	Species Name	Common Name	US Status	IN Status	KY Status	Records from Previous Ohio River Studies									Alternate 1 & 1A				Alternate 2				Alternate 3					
						Ohio RM 769.8-771.0	Ohio RM 774.0-775.6	Ohio RM 776.5-777.2	Ohio RM 783.0-783.1	Ohio RM 784.8-786.7	Ohio RM 796.9-799.0	Ohio RM 801.1-802.3	Ohio RM 803.7-805.6	Ohio RM 813.9-814.9	Ohio River North Bank (IN)		Ohio River South Bank (KY)		Ohio River North Bank (IN)		Ohio River South Bank (KY)		Ohio River North Bank (IN)		Ohio River South Bank (KY)		Green River	
															No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Ambleminae	<i>Amblema plicata</i>	three ridge				✓	✓	✓		✓	✓	✓	✓	✓			110	39.0	1	50.0	28	8.5						
	<i>Fusconaia ebena</i>	ebonyshell				✓	✓	✓	✓		✓	✓	✓	✓			52	18.4			267	81.2						
	<i>Fusconaia flava</i>	Wabash pigtoe				✓	✓				✓			✓			1	0.4										
	<i>Megaloniaias verrvosa</i>	washboard				✓				✓	✓	✓	✓	✓			6	2.1			11	3.3						
	<i>Quadrula metanevra</i>	monkeyface				✓	✓	✓	✓		✓			✓			23	8.2			3	0.9						
	<i>Quadrula nodulata</i>	wartyback				✓	✓	✓			✓	✓		✓			4	1.4			1	0.3						
	<i>Quadrula pustulosa</i>	pimpleback				✓	✓	✓		✓	✓	✓	✓	✓			51	18.1			8	2.4						
	<i>Quadrula quadrula</i>	mapleleaf				✓		✓		✓	✓	✓	✓	✓			4	1.4			2	0.6						
	<i>Tritogonia verrucosa</i>	pistolgrip				✓					✓			✓			1	0.4			2	0.6						
Unioninae	<i>Actinonaiaias ligamentina carinata</i>	mucket				✓					✓			✓														
	<i>Arcidens confragosus</i>	red pocketbook												✓														
	<i>Cyclonaias tuberculata</i>	purple wartyback				✓					✓			✓														
	<i>Ellipsaria lineolata</i>	butterfly				✓		✓	✓		✓	✓	✓	✓			7	2.5			WD							
	<i>Elliptio crassidens</i>	elephant-ear				✓					*	✓		✓							WD							
	<i>Lampsilis cardium</i>	plain pocketbook						✓	✓		✓			✓			5	1.8			1	0.3						
	<i>Lampsilis ovata</i>	pocketbook		WL	E						✓			✓														
	<i>Lampsilis teres</i>	yellow sandshell		WL		✓					✓																	
	<i>Lasmigona c. complanata</i>	white heelsplitter															WD											
	<i>Leptodea fragilis</i>	fragile papershell				✓		✓			✓			✓			FD		1	50.0						1	100.0	
	<i>Ligumia recta</i>	black sandshell		WL		✓					✓	✓		✓			8	2.8			3	0.9						
	<i>Obliquaria reflexa</i>	threehorn wartyback				✓	✓	✓	✓	✓	✓		✓	✓			8	2.8			WD					WD		
	<i>Obovaria olivaria</i>	hickortynut				✓	✓				✓	✓	✓	✓							1	0.3						
	<i>Plethobasus cicatricosus</i>	white wartyback	E	E				**	**																			
	<i>Plethobasus cyphus</i>	sheepnose		E	S	✓					✓			FD														
	<i>Pleurobema cordatum</i>	Ohio pigtoe		S		✓					✓		✓	✓							1	0.3						
	<i>Pleurobema sintoxia</i>	round pigtoe									✓																	
	<i>Potamilus alatus</i>	pink heelsplitter				✓		✓	✓	✓	✓	✓		✓			2	0.7			3	0.9						
	<i>Potamilus capax</i>	fat pocketbook	E	E	E						*																	
	<i>Truncilla donaciformis</i>	fawnsfoot						✓	✓		FD																	
	<i>Truncilla truncata</i>	deertoe				✓		✓			✓			✓							WD							
Total														0	282	2	329	0	0	1								
Total live species														0	14	2	12	0	0	1								
Total species														0	16	2	16	0	0	3								

- ✓ live individual(s)
- FD freshly dead
- WD weathered dead
- * museum records list location as Evansville; collections made pre-1957 (Illinois Natural History Survey, 1995)
- ** museum record lists location as Angel Mounds – no date (Illinois Natural History Survey, 1995)

Plant Species Identified within of Near the Proposed Alterntes for the I-69 Study

Family	Species Name	Common Name	Status			Nativity	Illinois Plant Information Network							
			US	KY	IN		Natural Community Types							
							Forest	Savanah	Prairie	Primary	Cultural	Wetland	Stream	Pond/Lake
Acanthaceae	<i>Ruellia strepens</i> L.	limestone wild petunia, smooth ruellia				native	u-fp-t					lb		
Acerceae	<i>Acer negundo</i> L.	box elder				native	fp				a-r			
	<i>Acer rubrum</i> L.	red maple				native	u-fp-fw			b	r	s-b-ss		
	<i>Acer saccharum</i> Marsh.	sugar maple				native	u-s-fp				r	lb		
	<i>Acer saccharinum</i> L.	silver maple				native	fp			g	r			
Alismataceae	<i>Sagittaria latifolia</i> Willd.	broadleaf arrowhead, arrowhead				native	fp-fw					m-s-b-ss-lb	c	p-l
Amaranthaceae	<i>Amaranthus hybridus</i> L.	slim amaranth, green amaranth				native					a-d			
	<i>Amaranthus powellii</i> S. Wats.	Powell's amaranth, smooth pigweed				native					a			
	<i>Amaranthus retroflexus</i> L.	redroot amaranth, rough pigweed				introduced			t	b	a-d			
	<i>Amaranthus rudis</i> Sauer	tall amaranth, tamarisk waterhemp				native					a	lb		
	<i>Amaranthus tuberculatus</i> (Moq.) Sauer	rough-fruit amaranth, tall waterhemp				native					a	lb		
Anacardiaceae	<i>Rhus copallinum</i> L.	flameleaf sumac, dwarf sumac				native	u		s	g	s			
	<i>Rhus glabra</i> L.	smooth sumac				native	u		t	g	a-s-d			
	<i>Toxicodendron radicans</i> (L.) Kuntze	eastern poison ivy, poison ivy				native	u-s-fp-t		g-ls		a-s-d-p	ss		
	<i>Toxicodendron tydbergii</i> (Small ex Rydb.) Greene	western poison ivy				native								
Annonaceae	<i>Asimina triloba</i> (L.) Dunal	pawpaw				native	u-fp				r			
Apiaceae	<i>Chaerophyllum procumbens</i> (L.) Crantz	spreading chervil, wild chervil				native	fp-t			g		lb		
	<i>Cicuta maculata</i> L.	spotted water hemlock, water hemlock				native	u-fp-t		t			m-s-ss-lb		
	<i>Conium maculatum</i> L.	poison hemlock				introduced	t				a-s	lb		
	<i>Daucus carota</i> L.	Queen Anne's lace				introduced	t				a-s-d			
	<i>Erigenia bulbosa</i> (Michx.) Nutt.	harbinger of spring				native	u-fp-t				d			
	<i>Osmorhiza claytonii</i> (Michx.) C.B. Clarke	Clayton's sweetroot, sweet cicley				native	u-t							
	<i>Osmorhiza longistylis</i> (Torr.) DC.	longstyle sweetroot, anise-root				native	u-t							
	<i>Sanicula odorata</i> (Raf.) K.M. Pryer & L.R. Phillippe	clustered snakeroot, common snakeroot				native	u-fp-t				d	ss		
	<i>Torilis arvensis</i> (Huds.) Link	spreading hedgeparsely				introduced								
Apocynaceae	<i>Amsonia tabernaemontana</i> Walt.	eastern bluestar, bluestar				native				g		ss		
	<i>Apocynum cannabinum</i> L.	Indianhemp, dogbane				native	u-t	t	t	g	a-s			
Aquifoliaceae	<i>Ilex decidua</i> Walt.	possumhaw, swamp holly				native	u-fp-t			g-b		s-ss-lb		
Araceae	<i>Acorus calamus</i> L.	calamus, sweet flag				native			t		r	m-s-ss-lb		
	= <i>Acorus americanus</i> (Raf.) Raf.													
	<i>Arisaema triphyllum</i> (L.) Schott	Jack-in-the-pulpit, Indian turnip				native	u-fp-t					ss		
Araliaceae	<i>Aralia spinosa</i> L.	devil's walkingstick, Angelica-tree				native	u-fp			b	r			
Aristolochiaceae	<i>Aristolochia serpentaria</i> L.	Virginia snakeroot, birthwort				native	u-fp-t							
	<i>Asarum canadense</i> L.	Canadian wildginger				native	u-fp			b				
Asclepiadaceae	<i>Asclepias incarnata</i> L.	swamp milkweed				native	fp-t					m-s-b-ss-lb		
	<i>Asclepias perennis</i> Walt.	aquatic milkweed, white milkweed				native	fp					s-lb		
	<i>Asclepias syriaca</i> L.	common milkweed				native	t		t-s	ls	a-s-d			
	<i>Cynanchum laeve</i> (Michx.) Pers.	honeysvine, bluevine				native	fp-t				a	lb		
Aspleniaceae	<i>Asplenium platyneuron</i> L. B.S.P.	ebony spleenwort				native	u			b-g		lb		
	<i>Cystopteris protrusa</i> (Weatherby) Blasdell	lowland bladderfern, fragile fern				native	u-fp					lb		
	<i>Onoclea sensibilis</i> L.	sensitive fern				native	u-fp-t					m-s-b-f-ss-lb		
	<i>Polystichum acrostichoides</i> (Michx.) Schott	Christmas fern				native	u-t			b				
Asteraceae	<i>Achillea millefolium</i> L.	common yarrow, common milfoil				native			t		a-s-d			
	<i>Ambrosia artemisiifolia</i> L.	annual ragweed, bitterweed				native				g	a-s-d	ss		
	<i>Ambrosia trifida</i> L.	great ragweed, buffaloweed				native	u-fp-t			g	a-s-d	lb		
	<i>Ammannia coccinea</i> Rottb.	valley redstem, long-leaved ammania				native					a	lb		
	<i>Symphotrichum cordifolium</i> (L.) Nesom = <i>Aster cordifolius</i> L.	common blue wood aster				native	u-fp			b		lb		
	<i>Symphotrichum dumosum</i> L. Nesom var. <i>dumosum</i> = <i>Aster dumosus</i> L.	rich button aster, bushy aster				native					a-s	s		
	<i>Symphotrichum lateriflorum</i> (L.) A.&D. Love var. <i>lateriflorum</i> = <i>Aster lateriflorus</i> L. Britt	callico aster, side-flowered aster				native	fp-fw		t	b		s-ss-lb		
	<i>Symphotrichum ontarione</i> (Wieg.) Nesom = <i>Aster ontarionis</i> Wieg.	bottomland aster, Ontario aster				native	u-fp			b	a-s	lb		
	<i>Symphotrichum pilosum</i> (Willd.) Nesom var. <i>pilosum</i> = <i>Aster pilosus</i> Willd.	hairy white oldfield aster, hairy aster				native	u	t	t	b-g	a-s-d	lb		
	<i>Symphotrichum praealtum</i> (Poir.) Nesom var. <i>praealtum</i> = <i>Aster praealtus</i> Poir.	willowleaf aster, willow-leaved aster				native	t		t		a-s-d	lb		
	<i>Symphotrichum lanceolatum</i> (Willd.) Nesom ssp. <i>lanceolatum</i> var. <i>lanceolatum</i> = <i>Aster lanceolatus</i> Willd. = <i>Aster simplex</i> Willd.	white panicled aster, panicled aster				native	fp-fw-t		t		a-s-d	ss-lb		
	<i>Bidens cernua</i> L.	nodding beggartick				native					a-s-d	s-b-ss-lb		
	<i>Bidens comosa</i> (Gray) Wieg.	threelobe beggartick, beggartick				native								
	<i>Bidens frondosa</i> L.	devil's beggartick, common beggar-ticks				native	fp-fw-t				a-s-d	m-s-ss-lb		
	<i>Bidens tripartita</i> L.	threelobe beggartick, beggartick				native					s-d	lb		

Family	Species Name	Common Name	Status			Nativity	Illinois Plant Information Network							
			US	KY	IN		Natural Community Types							
							Forest	Savanah	Prairie	Primary	Cultural	Wetland	Stream	Pond/Lake
	<i>Arnoglossum atriplicifolium</i> (L.) H.E. Robins.	pale indian plantain				native	u-t	t	t	b-ls	d	lb		
	<i>Cichorium intybus</i> L.	chicory, blue sailors				introduced					a-s-d			
	<i>Cirsium vulgare</i> (Savi) Ten.	bull thistle				introduced					a-s-d			
	<i>Conyza canadensis</i> (L.) Cronq.	Canadian horseweed, horseweed				native			t	g	a-s-d			
	<i>Eclipta prostrata</i> (L.) L.	false daisy, yerba de tajo				native			t		a-s-d	lb		
	<i>Elephantopus carolinianus</i> Raeusch	Carolina elephantsfoot, elephant's-foot				native	fp-fw-t	t		b		ss-lb		
	<i>Erechtites hieracifolia</i> (L.) Raf. ex DC.	burnweed, fireweed				cultivated	u-t	t			d	b-ss		
	<i>Erigeron annuus</i> (L.) Pers.	eastern daisy fleabane, annual fleabane				native			t		a-s-d			
	<i>Eupatorium coelestinum</i> L. DC.	blue mistflower, blue boneset				native	u-fp-fw			b	d	ss-lb		
	<i>Eupatorium fistulosum</i> Barratt	trumpetweed, hollow joe-pye-weed				native						ss-lb		
	<i>Eupatorium perfoliatum</i> L.	common boneset				native	fp-fw-t		t	b		m-f-b-p-ss-lb		
	<i>Argentina altissima</i> (L.) King &H.E. Robins var. <i>altissima</i> = <i>Eupatorium rugosum</i> Houtt.	white snakeroot				native	u-fp-t			b	a			
	<i>Eupatorium serotinum</i> Michx.	late flowering thoroughwort, late boneset				native			t		a-s-d			
	<i>Helenium autumnale</i> L.	common sneezeweed, annual sneezeweed				native	fp-fw		t		a-s	f-lb		
	<i>Helianthus tuberosus</i> L.	Jerusalem artichoke				native	u-t		t		a-d	lb		
	<i>Iva annua</i> L.	annual marshelder, marsh elder				native			t		a-s-d	lb		
	<i>Lactuca floridana</i> (L.) Gaertn.	woodland lettuce, blue lettuce				native	fp-t				d	ss-s-lb		
	<i>Mikania scandens</i> (L.) Willd.	climbing hempvine				native					a	ss-s-lb		
	<i>Pluchea camphorata</i> (L.) DC.	camphor pluchea, camphor weed				native	fp-fw					s-lb		
	<i>Prenanthes altissima</i> L.	tall rattlesnakeroot, tall white lettuce				native	u			b		s-ss-lb		
	<i>Pyrrhopappus carolinianus</i> (Walt.) DC.	Carolina desert chicory, false dandelion				native	u-t	t	t		a-s-d	lb		
	<i>Packera aureua</i> (L.)A. & D. Love = <i>Senecio aureus</i> L.	golden ragwort				native	fp-fw			g-b	a-s	ss-lb		
	<i>Packera glabella</i> (Poir) C. Jeffrey = <i>Senecio glabellus</i> Poir.	butterweed				native	fp-fw				a-s-d	s-ss-lb		
	<i>Solidago canadensis</i> L. var. <i>scabra</i> Torr. & Gray = <i>Solidago altissima</i> L.	Canada goldenrod				native								
	<i>Solidago gigantea</i> Ait.	giant goldenrod, late goldenrod				native	u-fp-fw-t		t	b		f-lb		
	<i>Solidago rugosa</i> P. Mill.	wrinkleleaf goldenrod, rough goldenrod				native	fp-tw-t		t	b-ls		b-p-ss-lb		
	<i>Taraxacum officinale</i> G.H. Weber ex Wiggers	common dandelion				native					s-d			
	<i>Verbesina alternifolia</i> (L.) Britt. ex Kearney	wingstem				native	fp-t				a-s	ss-lb		
	<i>Vernonia gigantea</i> (Walt.) Trel.	giant ironweed, tall iron weed				native	fp-fw-t		t		a-s	s-ss-lb		
	<i>Xanthium strumarium</i> L.	rough cocklebur, common cocklebur				native				ls	a-s-d	lb		
Balsaminaceae	<i>Impatiens capensis</i> Meerb.	jewelweed				native	u-fp					f-s-ss-lb		
Betulaceae	<i>Betula nigra</i> L.	river birch				native	fp				r	s-ss-lb		
Bignoniaceae	<i>Bignonia capreolata</i> L.	crossvine				native	fp-t				a	s-lb		
	<i>Campsis radicans</i> (L.) Seem. ex Bureau	trumpet creeper				native	u-fp-t				a-s-d	ss-lb		
	<i>Catalpa speciosa</i> (Warder) Warder ex Englem.	northern catalpa, cigar tree			R	native	u-fp				d-r	s-lb		
Brassicaceae	<i>Alliaria petiolata</i> (Bieb.) Carara & Grande	garlic mustard				native	u-fp				d			
	<i>Barbarea vulgaris</i> Ait. f.	garden yellowrocket, winter cress				introduced					a-s-d	lb		
	<i>Cardamine hirsuta</i> L.	hairy bitter cress				introduced					a-d			
	<i>Cardamine pensylvanica</i> Muhl. ex Willd.	Pennsylvanica bittercress, bitter cress				native	fp				s	s-ss-lb		
	<i>Rorippa sessilifora</i> (Nutt.) A.S. Hitchc.	stalkless yellowcress, sessile-flowered yellowcress				native	fp				d	lb		
	<i>Rorippa sinuata</i> (Nutt.) A.S. Hitchc.	spreading yellowcress				native					*	lb		
	<i>Rorippa sylvestris</i> (L.) Bess.	creeping yellowcress				introduced					*	lb		
Caesalpiniaceae	<i>Chamaecrista fasciculata</i> (Michx.) Greene var. <i>fasciculata</i> = <i>Cassia fasciculata</i> Michx.	sleeping plant, partridge pea				native		t	t-s	g	s-d-r			
	<i>Cercis canadensis</i> L.	eastern redbud				native	u-t	t		g	a-r			
	<i>Gymnocladus dioicus</i> (L.) K. Koch	Kentucky coffeetree				native	u-fp				r	lb		
Cactaceae	<i>Optunia humifusa</i> (Raf.) Raf.	devil's-tongue, prickly pear				native	s	s-b	s	g-b-ls	a-d	lb		
Campanulaceae	<i>Campanulastrum americanum</i> L. (Small) = <i>Campanula americana</i> L.	American bellflower				native	u-fp-t							
	<i>Lobelia inflata</i> L.	Indian tobacco				native	u-t	t			s	ss-lb		
	<i>Lobelia siphilitica</i> L.	great blue lobelia, blue cardinal-flower				native	fp		t	b	a-d	s-f-ss-lb		
	<i>Triodanis perfoliata</i> (L.) Nieuwl var. <i>biflora</i> (Ruiz Pavon) Bradley = <i>Triodanis biflora</i> (Ruiz Pavon) Greene	clasping Venus' looking-glass				native			t	g	a-s-d	lb		
Caprifoliaceae	<i>Lonicera japonica</i> Thunb.	Japanese honeysuckle				introduced	fp-t			g	d	ss		
	<i>Lonicera maackii</i> (Rupr.) Maxim.	Amur honeysuckle				introduced					d			
	<i>Lonicera sempevirens</i> L.	trumpet honeysuckle				native					d	lb		
	<i>Sambucus nigra</i> L. ssp. <i>canadensis</i> (L.)R. Bolli = <i>Sambucus canadensis</i> L.	common elderberry, common elder				native	u-fp				s-d	ss-lb		
	<i>Symphoricarpos orbiculatus</i> Moench.	coralberry, buckbrush				native	u-t			g	d-r			
Caryophyllaceae	<i>Stellaria media</i> (L.) Vill.	common chickweed				introduced	fp-t				a-d			

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Celastraceae	<i>Celastrus orbiculatus</i> Thunb.	oriental bittersweet, round-leaved bittersweet				cultivated	t				a-d			
	<i>Celastrus scandens</i> L.	American bittersweet, bittersweet				native	u-s-t			g-ls	a-r	lb		
	<i>Euonymus atropurpurea</i> Jacq. = <i>Euonymus atropurpureus</i> Jacq.	eastern wahoo, burning bush				native	u-fp				d	lb		
	<i>Euonymus fortunei</i> (Turcz.) Hand.-Mazz.	winter creeper, climbing euonymus				introduced					d			
Chenopodiaceae	<i>Chenopodium album</i> L.	lambsquarters, lamb's quarters				native/introduced					a-d			
Clusiaceae	<i>Triadenum tubulosum</i> (Walt.) Gleason	lesser marsh St. John's-wort				native	fp					s-ss		
Commelinaceae	<i>Commelina communis</i> L.	Asiatic dayflower, common dayflower				introduced	fp-t				a-d			
	<i>Commelina virginica</i> L.	Virginia dayflower, day flower				native	fp-t					ss-lb		
	<i>Tradescantia subaspera</i> Ker	spiderwort					u-t			b	d	lb		
Convolvulaceae	<i>Calystegia sepium</i> (L.) R. Br.	hedge false bindweed				native/introduced								
	<i>Ipomoea hederacea</i> (L.) Jacq.	ivyleaf morning-glory				introduced					a-s-d			
	<i>Ipomoea lacunosa</i> L.	whitestar, small white morning-glory				native	t		t		s	lb		
	<i>Ipomoea pandurata</i> (L.) G.F.W. Meyer	man of the earth, wild sweet potato vine				native	u-t				a-s	lb		
	<i>Ipomoea purpurea</i> (L.) Roth.	tall morning-glory, common morning-glory				introduced					a-s-d			
Cornaceae	<i>Cornus florida</i> L.	flowering dogwood				native	u-fp			g	a-s-d-r			
	<i>Cornus racemosa</i> Lam.	panicled dogwood, gray dogwood				native	u-fp-t		t	g	a-s-r	lb		
Cucurbitaceae	<i>Sicyos angulatus</i> L.	oneseed burr cucumber				native	fp-t				a-s-d	lb		
Cupressaceae	<i>Juniperus virginiana</i> L.	eastern red cedar				native	u-fp			g-b-ls	a-s-d-r	s		
Cuscutaceae	<i>Cuscuta glomerata</i> Choisy	rope dodder				native			t			lb		
	<i>Cuscuta gronovii</i> Willd. ex J.A. Schultes	scaldweed, dodder				native	t		t			lb		
Cyperaceae	<i>Carex albursina</i> Sheldon	white bear sedge				native	u							
	<i>Carex blanda</i> Dewey	eastern woodland sedge				native	u-fp-fw-t					lb		
	<i>Carex flaccosperma</i> Dewey	thinfruit sedge				native	fp					s-ss		
	<i>Carex frankii</i> Kunth	Frank's sedge				native	fp-fw		t		a-s	f-sm-ss-lb		
	<i>Carex grayi</i> Carey.	Gray's sedge, bur sedge				native	u-fp-fw					s-ss-lb		
	<i>Carex intumescens</i> Rudge.	great bladder sedge, swollen sedge				native	fp					m		
	<i>Carex jamesii</i> Schwein.	Jame's grass sedge				native	u-fp-fw							
	<i>Carex laxiflora</i> Lam.	broad looseflower sedge				native	u-fp							
	<i>Carex lupulina</i> Muhl. ex Willd.	hop sedge				native	fp-fw		t		s	s-lb		
	<i>Carex muskingumensis</i> Schwein.	Muskingum sedge				native	fp-fw					s-sm		
	<i>Carex normalis</i> Mackenzie	greater straw sedge				native	u-fp-fw		t		d	s-ss-lb		
	<i>Carex pennsylvanica</i> Lam.	Pennsylvania sedge				native	u	t-s-b						
	<i>Carex rosea</i> Schkuhr ex Willd.	rosy sedge				native	u-fw					ss		
	<i>Carex scoparia</i> Schkuhr ex Willd.	broom sedge				native	t		t		d	m-f-ss-lb		
	<i>Carex sparganioides</i> Muhl. ex Willd.	burr reed sedge				native	u		t			ss		
	<i>Carex tribuloides</i> Wahlenb.	blunt broom sedge				native	u-fp-fw		t-s-d			m-s-sm-ss-lb		
	<i>Carex vulpinoidea</i> Michx.	fox sedge				native	u-fp-fw		t			s-f-ss-lb		
	<i>Cyperus erythrorhizos</i> (Gray) Wieg.	redroot flatsedge				native						lb		
	<i>Cyperus esculentus</i> L.	chufa flatsedge, nut grass				native/introduced	u		t		a-s-d	sm-lb		
	<i>Cyperus echinatus</i> (L.) Wood = <i>Cyperus ovularis</i> (Michx.) Torr.	globe flatsedge, hedgehog club rush				native	u-s-fw	t	t	g	a-s-d-r			
	<i>Cyperus pseudovegetus</i> Steud.	marsh flatsedge, green flatsedge			R	native	u		t-s		d	s-sm-lb		
	<i>Cyperus strigosus</i> L.	strawcolored flatsedge				native					a-s-d	sm-ss-lb		
	<i>Rhynchospora corniculata</i> (Lam.) Gray	shortbristle horned beaked rush				native	u-fp-fw				d	ss-lb		
	<i>Scirpus atrovirens</i> Willd.	green bulrush				native	u-fp-fw		t-s-d		d	m-sm-ss-lb		
Dioscoreaceae	<i>Dioscorea villosa</i> L.	wild yam				native	u			b	d			
	<i>Dioscorea quaternata</i> (Walt.) J. F. Gmel.	fourleaf yam				native	u-t					ss		
Ebenaceae	<i>Diospyros virginiana</i> L.	common persimmon				native	u-fp-fw	b	h	g	a-s-d-p-r-m			
Elaeagnaceae	<i>Elaeagnus umbellata</i> Thunb.	autumn olive				introduced	t				s-d			
Euphorbiaceae	<i>Acalypha gracilens</i> Gray	slender threeseed mercury				native	u		g	g	s			
	<i>Acalypha ostryifolia</i> Riddell	pineland threeseed mercury				native	t			b	a-s	lb		
	<i>Acalypha rhomboidea</i> Raf.	Virginia threeseed mercury				native	u-fp-t		t	g-b	a-s-d	ss-lb		
	<i>Chamaesyce humistrata</i> (Engelm.) Small	spreading sandmat, milk spurge				native						lb		
	<i>Chamaesyce maculata</i> (L.) Small	spotted sandmat, nodding spurge				native	t				a-s			
	<i>Chamaesyce serpens</i> (HBK.) Small	matted sandmat, round-leaved spurge				native						ss-lb		
	<i>Euphorbia dentata</i> Michx. var. <i>dentata</i> = <i>Poinsettia dentata</i> (Michx.) Klotzsch & Garcke	toothed spurge, wild poinsettia				native	t		t	g	s			
Fabaceae	<i>Amorpha fruticosa</i> L.	desert false indigo, false indigo				native	fp-t					lb		
	<i>Amphicarpaea bracteata</i> (L.) Fern.	American hogpeanut				native	u-fp-t				a-s	ss		
	<i>Coronilla varia</i> L.	purple crown vetch				native					d			
	<i>Desmodium paniculatum</i> (L.) DC.	panicledleaf ticktrefoil				native	u	t						
	<i>Gleditsia triacanthos</i> L.	honey locust				native	u-fp-t			g	a-d-r			
	<i>Lespedeza thunbergii</i> (DC.) Nakai	Thunberg's lespedeza, tall bush clover				introduced					d			
	<i>Robinia pseudoacacia</i> L.	black locust				native	u-t			g	a-s-d-m			

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	<i>Trifolium pratense</i> L.	red clover				introduced					a-d			
	<i>Trifolium repens</i> L.	white clover				introduced					a-s-d			
Fagaceae	<i>Fagus grandifolia</i> Ehrh.	American beech				native	u				r	s-lb		
	<i>Quercus alba</i> L.	white oak				native	u-s-fp-fw	t-b		g	r			
	<i>Quercus falcata</i> Michx.	southern red oak				native	u-fw	b						
	<i>Quercus imbricaria</i> Michx.	shingle oak				native	u-fp			g-b	a-r	lb		
	<i>Quercus lyrata</i> Walt.	overcup oak				native	fp					s		
	<i>Quercus macrocarpa</i> Michx.	bur oak				native	u-fp	t			r			
	<i>Quercus marilandica</i> Nutt.	blackjack oak				native	u-s-fw	b		g-b				
	<i>Quercus michauxii</i> Nutt.	swamp chestnut, basket oak				native	fp					s-ss-lb		
	<i>Quercus muehlenbergii</i> Engelm.	chinkapin oak				native	u			g-b				
	<i>Quercus pagoda</i> Raf.	cherrybark oak				native	fp							
	<i>Quercus palustris</i> Muenchh.	pin oak				native	fp-fw				r	ss-lb		
	<i>Quercus prinus</i> L.	chestnut oak				native	u							
	<i>Quercus rubra</i> L.	northern red oak				native	u-s			g	r			
	<i>Quercus shumardii</i> Buckl.	Shumard's oak				native	u-fp					lb		
Gentianaceae	<i>Gentiana saponaria</i> L.	harvestbells, soapwort gentian				native	s-t		t					
Hamamelidaceae	<i>Liquidambar styraciflua</i> L.	sweet gum				native	u-fp				d-r	ss		
Hydrophyllaceae	<i>Hydrophyllum appendiculatum</i> Michx.	great waterleaf				native	u-t					ss-lb		
Hypericaceae	<i>Hypericum perforatum</i> L.	common St. John's wort				introduced		b	s		a-s			
Juglandaceae	<i>Carya cordiformus</i> (Wangenh.) K. Koch	bitternut hickory				native	u-fp				r	s-lb		
	<i>Carya illinoensis</i> (Wangenh.) K. Koch	pecan				native	u-fp				p-r			
	<i>Carya laciniosa</i> (Michx. f.) G. Don	shellbark hickory				native	u-fp			g	r	s		
	<i>Carya ovalis</i> (Wangenh.) Sarg.	red hickory, sweet pignut hickory				native	u			g				
	<i>Carya ovata</i> (P. Mill) K. Koch.	shagbark hickory				native	u-fp			g	f			
	<i>Juglans nigra</i> L.	black walnut				native	u-fp			g	r	lb		
Juncaceae	<i>Juncus effusus</i> L.	common rush				native			t		a-s-d	m-ss-lb		
	<i>Juncus interior</i> Wieg.	inland rush				native			t	g	s-d	ss		
Labiatae	<i>Agastache nepetoides</i> (L.) Kuntze	yellow giant hyssop				native	u-t				s			
	<i>Blephilia hirsuta</i> (Pursh) Benth.	hairy pagoda-plant				native	u			g				
Lamiaceae	<i>Lamium purpureum</i> L.	purple deadnettle				introduced					s-d			
	<i>Leonurus cardiaca</i> L.	common motherwort				introduced	u				a-s-d			
	<i>Lycopus americanus</i> Muhl. ex W. Bart.	American water horehound				native	fp-t				a	m-f-lb		
	<i>Lycopus virginicus</i> L.	Virginia water horehound, bugle weed				native	fp			b		m-ss-lb		
	<i>Perilla frutescens</i> (L.) Britt.	beefsteak plant				introduced	u				a-d	ss-lb		
	<i>Prunella vulgaris</i> L.	self-heal				native	fp				a-s-d	ss-lb		
	<i>Scutellaria lateriflora</i> L.	blue skullcap, mad-dog skullcap				native	fp-t			g-b		m-s-b-ss-lb		
	<i>Stachys tenuifolia</i> Willd.	smooth hedge nettle				native	u-fp-t					s-ss-lb		
	<i>Teucrium canadense</i> L.	Canada germander				native	fp-t		t		a	ss-lb		
Lauraceae	<i>Lindera benzoin</i> L. (Blume)	northern spicebush				native	f-fp				r	ss-lb		
	<i>Sassafras albidum</i> (Nutt.) Nees.	sassafras				native	u-t			g	a-s-d			
Liliaceae	<i>Allium canadense</i> L.	meadow garlic, wild onion				native	u-fp-fw-t		t		a-s-d	lb		
	<i>Allium vineale</i> L.	wild garlic, field garlic				introduced	t				a-s-d	lb		
	<i>Hemerocallis fulva</i> (L.) L.	orange day lily				introduced	t				d	lb		
	<i>Muscari corymbosum</i> (L.) Mill.													
	<i>Uvularia grandiflora</i> Sm.	largeflower bellwort, big merry bells				native	u-fp					ss		
	<i>Yucca filamentosa</i> L.	Adam's needle, Spanish bayonet				native	t				d	lb		
Lycopodiaceae	<i>Lycopodium digitatum</i> Dill. ex A. Braun = <i>Diphasiastrum digitatum</i> (Dill. ex A. Braun) Holub.	fan clubmoss, ground pine				native	u			b	s			
Magnoliaceae	<i>Liriodendron tulipifera</i> L.	tuliptree, tulip poplar				native	u				d-r			
Malvaceae	<i>Abutilon theophrasti</i> Medik.	velvetleaf				native					a-s-d			
	<i>Hibiscus laevis</i> All.	halbredleaf rose mallow				native						m-s-lb		
	<i>Hibiscus moscheutos</i> L.	crimsoneyed rosemallow, swamp rose mallow				native						m-lb		
	<i>Sida spinosa</i> L.	prickly fanpetals, prickly sida				native					a-s-d			
Menispermaceae	<i>Menispermum canadense</i> L.	common moonseed				native	u-fp-t				a	lb		
Mimosaceae	<i>Albizia julibrissin</i> Duraz.	silktree, mimosa				introduced					d			
Moraceae	<i>Maclura pomifera</i> (Raf.) Schneid.	osage orange				native					a-s			
	<i>Morus alba</i> L.	white mulberry				introduced	*				a-s-d			
	<i>Morus rubra</i> L.	red mulberry				native	u-fp			g	a-s-d-r			
Nelumbonaceae	<i>Nelumbo lutea</i> (Willd.) Pers.	American lotus				native						m	c	p-l
Nyssaceae	<i>Nyssa sylvatica</i> Marsh.	blackgum, sour gum				native	u-fp-fw				r	s-b-ss		
Oleaceae	<i>Fraxinus americana</i> L.	white ash				native	u-fp			g	r	ss		
	<i>Fraxinus pennsylvanica</i> Marsh.	green ash				native	u-fp							
	<i>Ligustrum vulgare</i> L.	European privet				introduced	t				a-d			

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Onagraceae	<i>Circaea lutetiana</i> L.	broadleaf enchanter's nightshade				native	u-t							
	<i>Ludwigia alternifolia</i> L.	seedbox				native	fp		t-s			s	s-ss-lb	
	<i>Oenothera biennis</i> L.	common evening primrose				native	t		t-s	g-ls	s-d			
Ophioglossaceae	<i>Botrychium dissectum</i> Spreng.	cutleaf grape fern				native	u-t				a-s			
	<i>Botrychium dissectum</i> Spreng. var. <i>obliquum</i> (Muhl.ex Willd.) Clute	bronze fern				native	u-t				a-s	ss		
Orchidaceae	<i>Aplectrum hyemale</i> (Muhl.ex Willd.) Torr.	Adam-and-Eve				native	u-fp					lb		
Oxalidaceae	<i>Oxalis stricta</i> L.	common yellow oxalis, yellow wood sorrel				native	u	t	t	g	a-d			
Passifloraceae	<i>Passiflora incarnata</i> L.	purple passionflower, large passion-flower				native	fp-t				d			
Phytolaccaceae	<i>Phytolacca americana</i> L.	American pokeweed				native	fp-t				a-s-d	m-ss		
Pinaceae	<i>Picea glauca</i> (Moench) Voss	white spruce				native								
	<i>Pinus echinata</i> P. Mill.	shortleaf pine				native	u				d-p			
	<i>Pinus strobus</i> L.	eastern white pine				native	u-s				d	b		
	<i>Pinus virginiana</i> P. Mill.	Virginia pine				native					s-p			
Plantaginaceae	<i>Plantago lanceolata</i> L.	narrowleaf plantain, English plantain				introduced					a-s-d			
	<i>Plantago rugelii</i> Dene.	blackseed plantain, red-stalked plantain				native	f			g	s-d	lb		
Platanaceae	<i>Platanus occidentalis</i> L.	American sycamore				native	u-fp				s-d-r	ss-lb		
Poaceae	<i>Arundinaria gigantea</i> (Walt.) Muhl.	giant cane				native	u-fp-fw-t			g-b		ss		
	<i>Brachyelytrum erectum</i> (Schreb. ex Spreng) Beauv.	bearded shorthusk, long-awned wood grass				native	u							
	<i>Chasmanthium latifolium</i> (Michx.) Yates	Indian woodoats, sea oats				native	u-fp			g-b		lb		
	<i>Cinna arundinacea</i> L.	sweet woodreed, wood reed grass				native	fp-fw-t	t	t		s-m	ss-lb		
	<i>Dactylis glomerata</i> L.	orchard grass				introduced	t				a-s-d-p-r-m			
	<i>Dichanthelium acuminatum</i> (Sw.) Gould & C. A. Clark	tapered rosette grass				native	u-s-fp	t	t	g-b	a-s-d	s-p		
	<i>Dichanthelium clandestinum</i> (L.) Gould	deertongue, broad-leaved panic grass				native	u-s-fp-fw-t	t	s		a-s-d	ss-lb		
	<i>Dichanthelium commutatum</i> (J. A. Schultes) Gould	variable, panicgrass				native	u-s-fp-t			g		lb		
	<i>Dichanthelium depauperatum</i> (Muhl.) Gould	starved panicgrass				native	u-s	t	t-s	g	s-d			
	<i>Dichanthelium microcarpon</i> (Muhl.ex Ell.) Mohlenbrock	cypress panicgrass, small-fruited panic grass				native	s-fp-fw					s-ss-lb		
	<i>Digitaria sanguinalis</i> (L.) Scop.	hairy crabgrass				native			t		a-s-d	ss-lb		
	<i>Echinochloa muricata</i> (Beauv.) Fern.	rough barnyardgrass				native/introduced	fp				a-s-d	lb		
	<i>Eleusine indica</i> (L.) Gaerthn.	Indian goosegrass				introduced					s-d	lb		
	<i>Elymus riparius</i> Wieg.	riverbank wildrye				native	*	t		b		lb		
	<i>Elymus villosus</i> Muhl. ex Willd.	hairy wildrye				native	u-fp-t	t	t		d	lb		
	<i>Elymus virginicus</i> L.	Virginia wildrye				native	fp	t	t	b-g		lb		
	<i>Eragrostis hypnoides</i> (Lam.) B.S.P.	teal lovegrass, pony grass				native	u-s-fp-fw	t	t			lb		
	<i>Glyceria striata</i> (Lam.) A.S. Hitchc.	fowl mannagrass				native	fp		t		r	m-b-f-ss-lb		
	<i>Lolium arundinaceum</i> (Schreb.) S.J. Darbyshire = <i>Festuca arundinacea</i> Schreb.	tall fescue				introduced								
	<i>Lolium pratense</i> (Huds.) S.J. Darbyshire = <i>Festuca pratensis</i> Huds.	meadow ryegrass, meadow fescue				introduced					*			
	<i>Leersia lenticularis</i> Michx.	catchfly grass				native	u-fp-fw					m-s-lb		
	<i>Leersia oryzoides</i> (L.) Sw.	rice cut-grass												
	<i>Leersia virginica</i> Willd.	whitegrass				native	u-fp-fw					m-s-ss-lb		
	<i>Leptochloa panicea</i> (Retz.) Ohwi ssp. <i>brachiata</i> (Steudl.) N. Snow = <i>Leptochloa filiformis</i> (Lam.) Beauv.	mucronate sprangletop, red sprangle top				native	u-s-fp-fw	t	t		a-s	lb		
	<i>Miscanthus sacchariflorus</i> (Maxim.) Franch..	Amur silvergrass, plume grass				introduced					a-s-d-m			
	<i>Muhlenbergia glomerata</i> (Willd.) Trin	spiked muhly				native						m-f		
	<i>Muhlenbergia schreberi</i> J. F. Gmel.	nimblewill				native	u-s-fp-fw-t			g	a-d-p-r			
	<i>Muhlenbergia sobolifera</i> (Muhl.ex Willd.) Trin.	rock muhly				native	u-s-fw							
	<i>Panicum anceps</i> Michx.	beaked panicgrass				native	fp-fw		t-s		a-s-d-r	s-ss		
	<i>Panicum dichotomiflorum</i> Michx.	fall panicgrass				native	f	t	t	g	a-s-d	lb		
	<i>Panicum rigidulum</i> Bosc ex Nees	redtop panicgrass				native	fp-fw		t			lb		
	<i>Panicum virgatum</i> L.	switchgrass, prairie switchgrass				native	u-s	t	t	b-ls	a-s-d-r	m-p-lb		
	<i>Paspalum floridanum</i> Michx.	Florida paspalum, giant beadgrass				native	u		t-s		a-s-d			
	<i>Paspalum pubiflorum</i> Rupr. ex Fourn.	hairyseed paspalum				native	fp-fw	t	t		a-s-d	lb		
	<i>Paspalum setaceum</i> Michx.	thin paspalum				native	*	t	t-s		a-s-d			
	<i>Phalaris arundinacea</i> L.	reed canarygrass				native	fp			ls	s-r	m-s-b-sm-lb	c	p-l
	<i>Schizachyrium scoparium</i> (Michx.) Nash	little bluestem				native	u-s-fw	t-s-b	t-s-g-d-h-sc	g-ls	s-d-r			
	<i>Setaria faberi</i> Herrm.	Japanese bristlegrass, giant foxtail				introduced		t			a-s-d-r-m	lb		
	<i>Pennisetum glaucum</i> (L.) R. Br. = <i>Setaria glauca</i> (L.) Beauv.	pearl millet, yellow foxtail				introduced				g	a-s-d-m	lb		
	<i>Setaria viridis</i> (L.) Beauv.	green bristlegrass, common foxtail				introduced					a-s-d-m			
	<i>Sorghastrum nutans</i> (L.) Nash	Indian grass				native	u-s-fw	t-s-b	t-s-g-d-h-sc	g	a-s-d-r	f		
	<i>Sorghum bicolor</i> (L.) Moench	sorghum				introduced					a-s-d			
	<i>Sorghum halepense</i> (L.) Pers.	Johnson grass				introduced	t				a-s-d-p-r-m			
	<i>Tridens flavus</i> (L.) A. S. Hitchc.	purpletop tridens				native	u-fw	t		g	a-s-d-p-r			
Polemoniaceae	<i>Phlox paniculata</i> L.	fall phlox, garden phlox				native	u-fp-t				d	lb		

Family	Species Name	Common Name	Status			Nativity	Illinois Plant Information Network							
			US	KY	IN		Natural Community Types							
							Forest	Savanah	Prairie	Primary	Cultural	Wetland	Stream	Pond/Lake
Polygonaceae	<i>Polygonum amphibium</i> L.	water knotweed, water smartweed				native			t		a-s-d	m-s-lb		
	<i>Polygonum arenastrum</i> Jord. ex Boreau	oval-leaf knotweed				introduced								
	<i>Polygonum cespitosum</i> Blume	oriental ladysthumb, creeping smartweed				native/introduced					d			
	<i>Polygonum hydropiper</i> L.	marshpepper knotweed, common smartweed				introduced	u-fp				a-s-d	ss-lb		
	<i>Polygonum hydropiperoides</i> Michx.	swamp smartweed, mild water pepper				native						ss		
	<i>Polygonum lapathifolium</i> L.	curlytop knotweed, pale speedwell				native					a-s-d	lb		
	<i>Polygonum pennsylvanicum</i> L.	Pennsylvania smartweed, pinkweed				native	t				a-s	ss-lb		p
	<i>Polygonum persicaria</i> L.	spotted ladysthumb				introduced					a-s-d	lb		
	<i>Polygonum sagittatum</i> L.	arrowleaf tearthumb				native						m-s-b-ss-lb		
	<i>Polygonum scandens</i> L.	climbing false buckwheat				native	u-fp-fw-t			b		lb		
	<i>Polygonum virginianum</i> L.	jumpseed, Virginia knotweed				native	u-fp					ss		
	<i>Rumex altissimus</i> Wood	pale dock				native	fp-fw-t				a-d	lb		
	<i>Rumex crispus</i> L.	curly dock				introduced				g	a-s-d	ss-lb		
	<i>Rumex obtusifolius</i> L.	bitter dock				introduced	fp				a-s-d	ss-lb		
	<i>Rumex orbiculatus</i> Gray	great water dock				native					d	m-s-ss-lb		
	<i>Rumex salicifolius</i> Weinm. var. <i>mexicanus</i> (Meisn.) C.L. Hitchc. = <i>Rumex triangulivalvis</i> (Danser) Rech. f.	Mexican dock, willow-leaved dock				native								
	<i>Rumex verticillatus</i> L.	swamp dock				native	u-fp-fw					m-s-lb		
Primulaceae	<i>Lysimachia nummularia</i> L.	creeping jenny, moneywort				introduced	fp				d	ss-lb		
Ranunculaceae	<i>Aquilegia canadensis</i> L.	red columbine				native	u-s			g-b		b-f		
	<i>Clematis virginiana</i> L.	devil's darning needles, virgin's bower				native	u-t				a	lb		
	<i>Ranunculus abortivus</i> L.	littleleaf buttercup				native	u-fp-t			b	a-s-d	lb		
	<i>Ranunculus hispidus</i> Michx. var. <i>nitidus</i> (Chapman) T. Duncan = <i>Ranunculus septentrionalis</i> Poir.	bristly buttercup, swamp buttercup				native	u-fp					s-ss-lb		
	<i>Thalictrum dioicum</i> L.	early meadow rue				native	u							
Rosaecae	<i>Agrimonia parviflora</i> Ait.	harvestlice, swamp agrimony				native	fp-t				a-d	s-ss-lb		
	<i>Agrimonia pubescens</i> Wallr.	soft agrimony				native	u-fp-t	t				lb		
	<i>Agrimonia rostellata</i> Wallr.	beaked agrimony, woodland agrimony				native	u	t						
	<i>Crataegus pruinosa</i> (Wendl. f.) K. Koch	waxyfruit hawthorn				native	t	t			s			
	<i>Duchesnea indica</i> (Andr.) Focke	Indian strawberry				introduced					d			
	<i>Fragaria virginiana</i> Duchesne	Virginia strawberry, wild strawberry				native	u	t	t	g	d			
	<i>Geum canadense</i> Jacq.	white avens				native	u-fp-t				d	ss		
	<i>Porteranthus stipulatus</i> (Muhl. ex Willd.) Britton	Indian physic				native	u	t		g				
	<i>Potentilla simplex</i> Michx.	common cinquefoil				native	u	t	t		s-d	ss		
	<i>Prunus serotina</i> Ehrh.	black cherry				native	u			g	a-s-d			
	<i>Rosa blanda</i> Ait.	smooth rose, meadow rose				native	t	t			d			
	<i>Rosa carolina</i> L.	Carolina rose, pasture rose				native	u	t	t	g-ls	a-s-d			
	<i>Rosa multiflora</i> Thunb. ex Murr.	multiflora rose				introduced					a-s-d			
	<i>Rosa palustris</i> Marsh.	swamp rose				native	fp-t					s-b-ss		
	<i>Rosa setigera</i> Michx.	climbing rose, prairie rose				native	t	t			a-s-d	ss		
	<i>Rubus pensilvanicus</i> Poir.	Pennsylvania blackberry				native	t	t			a-s-d			
	<i>Rubus bellobatus</i> Bailey	kittatinny blackberry				native								
	<i>Rubus allegheniensis</i> Porter	Allegheny blackberry, common blackberry				native	u-t	t		g	a-s-d			
Rubiaceae	<i>Cephalanthus occidentalis</i> L. var. <i>pubescens</i> Raf.	common buttonbush				native	fp-t					m-s-b-ss-lb		
	<i>Diodia virginiana</i> L.	Virginia buttonweed, large buttonweed				native	fp				s	s-lb		
	<i>Galium obtusum</i> Bigelow	bluntleaf bedstraw, wild madder				native	fp-t		t			s-ss		
	<i>Galium triflorum</i> Michx.	fragrant bedstraw, sweet scented bedstraw				native	u-t			b		b-ss-lb		
	<i>Spermacoce glabra</i> Michx.	smooth false buttonweed				native	fp					s-lb		
Salicaceae	<i>Populus deltoides</i> Bartr. ex Marsh.	eastern cottonwood				native	fp		t	ls	r-m	lb		
	<i>Populus heterophylla</i> L.	swamp cottonwood				native	fp					s		
	<i>Salix interior</i> Rowlee	sandbar willow				native				ls		s-lb		
	<i>Salix nigra</i> Marsh.	black willow				native	fp					s-ss-lb		
Saururaceae	<i>Saururus cernuus</i> L.	lizard's tail				native	fp-fw				d	s-ss-lb		
Scrophulariaceae	<i>Agalinis tenuifolia</i> (Vahl) Raf.	slenderleaf false foxglove				native	t		t	g-b				
	<i>Scrophularia marilandica</i> L.	carpenter's square, late figwort				native	s-t	t			a	ss		
	<i>Mimulus alatus</i> Sol.	sharpwing monkeyflower, winged monkey-flower				native	fp					s-ss-lb		
Sapindaceae	<i>Koelreuteria paniculata</i> Laxm.	goldenrain tree				introduced					d			
Saxifragaceae	<i>Lindernia dubia</i> (L.) Pennell var. <i>anagallidea</i> (Michx.) Cooperrider = <i>Lindernia anagallidea</i> (Michx.) Pennell	yellowseed false pimpernel				native	u-fp					ss-lb		
	<i>Penthorum sedoides</i> L.	ditch stonecrop				native	fp				s	m-s-lb		
	<i>Veronica peregrina</i> L.	neckweed, white speedwell				native	fp				a-s-d			
Simaroubaceae	<i>Ailanthus altissima</i> (P. Mill.) Swingle	tree-of-heaven				introduced					d			
Smilacaceae	<i>Smilax glauca</i> Walt.	cat greenbrier, greenbrier				native	u			g	a-s-d	lb		
	<i>Smilax rotundifolia</i> L.	roundleaf greenbrier, catbrier				native	u-fp-fw-t					s-lb		

Family	Species Name	Common Name	Status			Nativity	Illinois Plant Information Network							
			US	KY	IN		Natural Community Types							
							Forest	Savanah	Prairie	Primary	Cultural	Wetland	Stream	Pond/Lake
	<i>Smilax tamnoides</i> L.	bristly greenbrier				native	u-t					lb		
Solanaceae	<i>Datura stramonium</i> L.	jimsonweed				introduced					a-s-d			
	<i>Physalis virginiana</i> P. Mill.	ground cherry				native	u-s-t	b	hp	g	a-s			
	<i>Solanum carolinense</i> L.	Carolina horsenettle				native			t-s		s-d			
	<i>Solanum ptychanthum</i> Dunal	West Indian nightshade, black nightshade				native	*			b	a-s-d	lb		
Staphyleaceae	<i>Staphylea trifolia</i> L.	American bladdernut				native	u-fp-t				d-r	lb		
Taxodiaceae	<i>Taxodium distichum</i> (L.) L.C. Rich.	bald cypress			T	native	fp				r	s		
Thelypteridae	<i>Thelypteris palustris</i> Schott	eastern marsh fern				native	*		s			m-s-b-f-ss		
Thymelaeaceae	<i>Dirca palustris</i> L.	eastern leatherwood				native	u-fp-t				r	lb		
Tiliaceae	<i>Tilia americana</i> L.	American basswood, American linden				native	u-s-fp			ls	d-r			
Typhaceae	<i>Typha latifolia</i> L.	broadleaf cattail, common cattail				native					r	m-s-ss-lb		
Ulmaceae	<i>Celtis laevigata</i> Willd.	sugarberry				native	u-fp			b-g		lb		
	<i>Celtis occidentalis</i> L.	common hackberry				native	u-fp	b		b	r	ss-lb		
	<i>Ulmus alata</i> Michx.	winged elm				native	u			g				
	<i>Ulmus americana</i> L.	American elm				native	u-fp-fw				d-r	lb		
	<i>Ulmus rubra</i> Muhl.	slippery elm				native	u-fp			b-g		ss-lb		
Urticaceae	<i>Boehmeria cylindrica</i> (L.) Sw.	smallspike false nettle, false nettle				native	fp-fw					m-s-ss-lb		
	<i>Laportea canadensis</i> (L.) Weddell	Canadian wood nettle				native	u-fp					ss		
	<i>Pilea pumila</i> (L.) Gray	Canadian clearweed				native	u-fp				r	ss-lb		
	<i>Urtica dioica</i> L. ssp. <i>gracilis</i> (Ait.) Seland. = <i>Urtica gracilis</i> Ait.	California nettle, stinging nettle				native								
Verbenaceae	<i>Verbena hastata</i> L.	swamp verbena, blue vervain				native	*		t	b	a-d	lb		
	<i>Verbena urticifolia</i> L.	white vervain				native	u-fp-t				a-s-d	ss-lb		
	<i>Phyla lanceolata</i> (Michx.) Greene	lanceleaf fogfruit				native			t			ss-lb		
Violaceae	<i>Viola affinis</i> Le Conte = <i>Viola missouriensis</i> Greene	sand violet, Missouri violet				native	fp-t			b		lb		
	<i>Viola nephrophylla</i> Greene = <i>Viola pratincola</i> Greene	northern bog violet, common blue violet				native	u-fp-t		t		a-s-d	lb		
	<i>Viola sororia</i> Willd.	common blue violet, wooly blue violet				native	u-fp	t	t		d	lb		
Vitaceae	<i>Parthenocissus quinquefolia</i> (L.) Planch.	Virginia creeper				native	u-t			b-g	a-d	ss		
	<i>Vitis aestivalis</i> Michx.	summer grape				native	u-s-t	s	b-g					
	<i>Vitis riparia</i> Michx.	riverbank grape				native	u-s-fp-t					lb		
	<i>Vitis vulpina</i> L.	frost grape				native	fp-t				a	lb		

Natural Community Type Source: Iverson, L.R., D. Ketzner, and J. Karnes. 1999. Illinois Plant Information Network. Database at <http://www.fs.fed.us/ne/delaware/ilpin.html>. Illinois Natural History Survey and USDA Forest Service

Forest	Savanah	Prairie	Primary	Cultural	Wetland	Stream	Pond/Lake
u = upland	t = typical	t = typical	g = glade	a = agricultural field	m = marsh	c = creek	p = pond
s = sand	s = sand	s = sand	b = bluff	s = successional field	s = swamp	r = river	l = lake
fp = floodplain	b = barren	g = gravel	ls = lake shore	d = developed land	b = bog		
fw = flatwoods	* = not designated	d = dolomite		p = plantation	f = fen		
* = not designated		h = hill		r = restoration	sm = sedge meadow		
		sh = shrub		m = mined land	p = panne		
					ss = seep and spring		



United States Department of the Interior

FISH AND WILDLIFE SERVICE

BLOOMINGTON FIELD OFFICE (ES)

620 South Walker Street
Bloomington, IN 47403-2121
(812) 334-4261 FAX (812) 334-4273

April 1, 2002



RECEIVED

APR - 4 2002

BLA

Mr. Tom Cervone
Bernardin Lochmueller & Associates, Inc.
6200 Vogel Road
Evansville, Indiana 47715-4006

Dear Mr. Cervone:

This responds to your request at a March 27, 2002 meeting for endangered species information from the U.S. Fish and Wildlife Service (FWS), concerning the Interstate 69/ Evansville, Indiana to Henderson, Kentucky project. You specifically requested a list of federal endangered and threatened species that should be considered in the environmental evaluation for the I-69 project.

The following information pertains only to the Indiana portion of the study area. Species which should be considered in the environmental evaluation are as follows:

Indiana bat (*Myotis sodalis*) – federally endangered

Survey information for the study area is lacking. There is a current record a few miles west of the area. All forested areas in relatively undisturbed areas provide suitable summer habitat for this species. Large blocks or networks of forest associated with water resources have a higher probability of containing Indiana bats. Attached is a set of protocols for conducting mist net surveys for Indiana bats.

gray bat (*M. grisescens*) - federally endangered

There are no records of this species in or near the study area however there are several records along the Ohio River. Summer colonies inhabit caves and mines, and preferred foraging habitat is wooded stream corridors. The presence of a summer colony near the study area is unlikely, however presence of foraging bats from a distant colony cannot be ruled out.

bald eagle (*Haliaeetus leucocephalus*) – federally threatened

Suitable nesting habitat for bald eagles within the project area includes the Ohio River and large wetland complexes. No nests are known in the study area in Indiana currently, however there is a nest in the Kentucky portion of the study area, and another nest in Indiana within 15 miles of the study area.

fat pocketbook mussel (*Potamilus capax*) – federally endangered

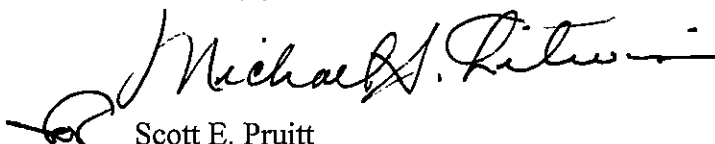
The closest records of this species are in the Ohio River at the west end of Posey County, however its presence cannot be ruled out within the study reach of the Ohio River.

American burying beetle (*Nicrophorus americanus*) – federally endangered

There are old records of this species in Vanderburgh County, and recent survey information is lacking.

For further discussion, please contact Mike Litwin at (812) 334-4261 ext. 205.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Scott E. Pruitt", with a stylized flourish at the end.

Scott E. Pruitt
Field Supervisor

cc: Andrew Pelloso, IDEM, Water Quality Standards Section, Indianapolis, IN
Christie Kiefer, Indiana Division of Fish and Wildlife, Indianapolis, IN
Federal Highway Administration, Indianapolis, IN
Manager, Environmental Assessment, INDOT, Rm 1107, Indianapolis, IN



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue

Room N755

Indianapolis, Indiana 46204-2249

(317) 232-5533

Fax: (317) 232-0238

FRANK O'BANNON, Governor

CRISTINE M. KLIKA, Commissioner

Writer's Direct Line

July 11, 2001

ENCLOSURE

317-232-5653

Ms. Rose Zigenfus, Executive Director
Evansville Urban Transportation Study
316 Civic Center
Evansville, IN 47708

APR 11 2002

RECEIVED

Dear Rose:

Attached you will find the long awaited signed agreement between the Indiana Department of Transportation and the City of Evansville Board of Park Commissioners that permits use of a portion of the I-164 right-of-way for development of the Pigeon Creek Greenway Passage Trail. This is certainly uncharted territory for all of us in Indiana.

Please make a copy for your files and forward the original to the Evansville Parks Department. I want to thank you and Pam Drach for your help in bringing this agreement about. Now the City and local interest groups can move forward on the trail project. For your information, the effective date of this agreement is June 29, 2001.

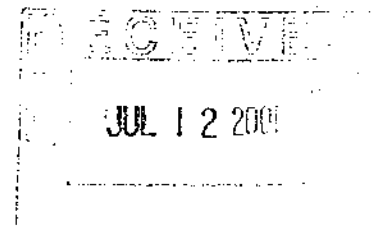
If you have any questions, please feel free to contact me.

Sincerely,

Michael O'Loughlin

Michael O'Loughlin

Bicycle & Pedestrian Program Manager





Evansville Urban Transportation Study

Civic Center Complex, Room 316, 1 N.W. Martin Luther King, Jr. Blvd. Evansville, IN 47708-1833 (812) 436-7833
FAX (812) 436-7834 Hearing Impaired/TDD (812) 436-4925 e-mail: euts@evansville.net

ROSE M. ZIGENFUS, M.P.A.
EXECUTIVE DIRECTOR

TO: The City of Evansville Board of Park Commissioners

FROM:  Rose M. Zigenfus

SUBJECT: Agreement for Bicycle/Pedestrian Trail

DATE: July 16, 2001

Enclosed you will find the Agreement for Bicycle/Pedestrian Trail. If you have any further questions, please contact Pamela Drach or me at (812) 436-7833.

AGREEMENT FOR BICYCLE/PEDESTRIAN TRAIL

THIS AGREEMENT is made and entered into by and between the State of Indiana, acting by and through the Indiana Department of Transportation (hereinafter referred to as "INDOT") and the City of Evansville Board of Park Commissioners, acting by and through its proper officials (hereinafter referred to as "CITY").

WITNESSETH

WHEREAS, the CITY desires to construct a multi-use trail for bicycle and pedestrian usage as part of the Pigeon Creek Greenway Passage System of public use trails in the City of Evansville and Vanderburgh County, Indiana (hereinafter referred to as "Facility"); and

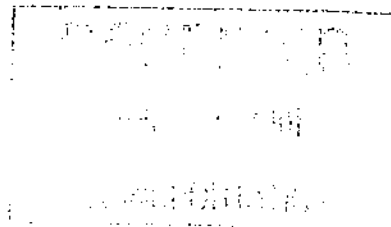
WHEREAS, the CITY has submitted plans, attached hereto as Exhibit "A" and made a part hereof, that represent the entire scope of the Facility; and

WHEREAS, the CITY has submitted an application for Transportation Enhancement money, attached hereto as Exhibit "B" and made a part hereof, to complete the Facility; and

WHEREAS, the CITY and INDOT have determined that no feasible alternative route exists in which the CITY can construct the Facility outside of the Interstate 164 limited access right-of-way (hereinafter referred to as "LA R/W"), between Veterans Memorial Parkway and Pollack Avenue in the City of Evansville and Vanderburgh County; and

WHEREAS, INDOT has, in conjunction with the Federal Highway Administration (hereinafter referred to as "FHWA"), determined that the Facility shall be located within those parts of the Interstate 164 LA R/W, between Veterans Memorial Parkway and Pollack Avenue in the City of Evansville and Vanderburgh County; and

WHEREAS, the construction of the Facility in the City of Evansville and Vanderburgh County shall be referred to as the "Project."



NOW THEREFORE, in consideration of the promises and the mutual agreements and covenants herein contained (the adequacy of which consideration as to each of the parties to this Agreement is hereby mutually acknowledged), and other good and valuable consideration, the receipt of which is hereby acknowledged, and intending to be legally bound, INDOT and the CITY hereby covenant and agree as follows:

ARTICLE I

CITY RESPONSIBILITIES

- 1.01 The CITY shall be responsible for all maintenance required by the Facility within the boundaries as defined by its right-of-way fence and the outer limits of the LA R/W, including, but not limited to, the fence, pavements, vegetative cover, drainage, removal of flood deposits, and repair of vandalism.
- 1.02 The CITY shall post and enforce rules regarding use of the trail and prohibition of trespass beyond the shared right-of-way limits at all trail entry points, and at appropriate locations as warranted should any problems develop.
- 1.03 The CITY shall assume the entire cost of Facility construction and maintenance, including, but not limited to, costs of preliminary and construction engineering, and environmental documentation, less the amount of any federal funds administered by INDOT on behalf of the Project.
- 1.04 Prior to any construction activities within the LA R/W, the CITY shall submit all construction documents for review and approval by INDOT and FHWA, and all necessary permits and approvals secured from any Federal or State agencies having statutory jurisdiction and interest in the Project area. All subsequent changes to those documents or to the Facility, other than those changes associated with routine

maintenance, will be subject to approval by the Evansville Urban Transportation Study, INDOT and FHWA.

- 1.05 The CITY agrees to locate the Facility as close as possible to the existing INDOT right-of-way line.
- 1.06 The CITY agrees to take all applicable measures to ensure that there is no impact to the geometric configuration of the U.S. 41 and I-164 interchange.
- 1.07 The CITY shall, at its own expense, procure and maintain a public liability insurance policy, that shall remain in effect during the duration of this Agreement, in an amount of not less than Three Hundred Thousand Dollars (\$300,000.00), against the claim of one person, and in an amount of not less than Five Million Dollars (\$5,000,000.00), against the claims of two or more persons, resulting from any one accident. Said policy shall be procured from a company or companies approved by the INDOT and provided in order to protect both INDOT and the CITY, and their officers, agents and employees separately and severally as named insured against any liability incident to the use of, or resulting from any cause occurring in or about, the Facility. Said policies shall cover the contingent liabilities, if any, of the INDOT, including its officers, agents and employees, and shall obligate the insurance carrier(s) to notify INDOT in writing not less than fifteen (15) days prior to cancellation thereof, or any other change affecting the coverage of the policies. If said policies contain any exclusion concerning property in the care, custody or control of the insured CITY, an endorsement shall be attached thereto stating that such exclusion shall not apply with regard to any liability of the State of Indiana, its officers, agents, or employees. The CITY shall furnish to INDOT, by the effective date of this Agreement, a Certificate of Insurance for each and every such policy.

- 1.08 If the CITY lets the contract for construction of the facility, a payment and performance bond in an amount sufficient to cover one hundred percent (100%) of the proposed Project costs is required. This performance bond shall be used to guarantee that the CITY fulfills the obligations enumerated in this Agreement. The form and terms of this performance bond shall be in accord with those commonly accepted by INDOT to ensure performance of work or obligations.

ARTICLE II

INDOT RESPONSIBILITIES

- 1.01 INDOT shall retain responsibility for maintenance specific to INDOT's facilities. Should INDOT need to access and repair any portion of the roads or right-of-way under its control that will impact the Facility, INDOT will provide sufficient notification of such operations to the CITY, unless an emergency situation dictates immediate action. All reasonable efforts shall be made by INDOT to minimize any damage to the Facility during maintenance of its facilities.
- 1.02 INDOT shall have the right to access and inspect the Facility once per year to ensure that the City continues to fulfill the obligations enumerated in this Agreement.

ARTICLE III

FACILITY SPECIFICATIONS

- 1.01. No automobile parking facilities, permanent structures or advertising devices in any form or size shall be constructed, placed or permitted to be constructed or placed upon the LA R/W, nor shall any commercial activities be allowed within the LA R/W.
- 1.02. Maintenance and emergency access to the Facility shall be entirely from city or county roads.

- 1.03. The Facility shall be located entirely outside of Interstate and State Highway clear zones, and separated from those clear zones by an INDOT-approved continuous right-of-way fence or other suitable retaining device as approved by INDOT.
- 1.04. The Facility shall not create impediments to INDOT right-of-way maintenance operations and right-of-way entry for such operations will be retained by INDOT.
- 1.05. The Facility shall have no adverse impact on maintenance of traffic on Interstate 164 or U.S. 41 during or after construction. All construction activities for the Facility shall be confined to areas beyond travel lanes, shoulder, and clear zones. Construction access for the Facility shall be confined to city or county roads.
- 1.06. The Facility shall have no adverse impact on existing drainage, cause erosion or otherwise impact the integrity of existing slopes, highway structures, or drainage structures.
- 1.07. Erosion control measures, which meet INDOT standards, shall be employed during construction and shall be maintained until permanent vegetative cover is reestablished during and after construction, and for the life of this Agreement.
- 1.08. All design and construction shall be based on INDOT and AASHTO standards and specifications.
- 1.09. This Agreement shall be for a ten (10) year period, commencing as of the date it is approved by the Attorney General of Indiana, or an authorized representative, as to form and legality, and shall be subject to renewal upon the same terms for four (4) successive ten (10) year periods. This Agreement shall be subject to cancellation and termination by either party upon giving the other party ninety (90) days written notice of such action. Upon cancellation of the Agreement, the CITY shall restore the LA R/W to a condition

acceptable to INDOT within one hundred twenty (120) work days at no cost to INDOT or FHWA. If this Agreement is cancelled or terminated by INDOT, INDOT will cooperate and work with the CITY to find an alternative location for a similar facility.

1.10. This Agreement is non-exclusive and is subject to the rights of others, including but not limited to the Evansville Vanderburgh Levee Authority District (EVLAD), Texas Gas Transmission, or other public utilities which share the LA R/W through covenant, easement, or agreement.

1.11. This Agreement does not grant any interest in land, nor does it establish a permanent park, recreation area or wildlife or waterfowl refuge facility that would become subject to Section 4(f) of the Federal-Aid Highway Act of 1988, nor does it establish a shared use facility which would require replacement pursuant to INDOT use of the property for highway purposes.

1.12. Any use permitted by this Agreement remains secondary to the interest of INDOT to use the LA R/W for other transportation purposes. The CITY shall surrender any part of the shared right-of-way that is required for future expansion, modification, or maintenance of Interstate 164 or its connecting facilities.

ARTICLE IV

GENERAL PROVISIONS

1.01. **Non-Discrimination.** Pursuant to I.C. 22-9-1-10 and the Civil Rights Act of 1964, the Lessee and its subcontractors, including consultants, if any, shall not discriminate against any employee or applicant for employment, to be employed in the performance of work under this Agreement, with respect to hire, tenure, terms, conditions, or privileges of

employment or any matter directly or indirectly related to employment, because of race, color, religion, sex, disability, national origin or ancestry. Breach of this covenant may be regarded as a material breach of this Agreement. Acceptance of this Agreement also signifies compliance with applicable Federal laws, regulations and Executive Orders prohibiting discrimination in the provision of services based on sex, disability or status as a veteran.

1.02. Modification/Entire Agreement. This Agreement may be amended from time to time hereafter only in writing executed by INDOT and the CITY, and submitted to the Attorney General of Indiana for approval as to form and legality. No verbal change, modification, or amendment shall be effective, unless in writing and signed by the parties and approved by the Attorney General. The provisions hereof constitute the entire agreement between the parties and supersede any verbal statements, representations or warranties stated or implied.

1.03. Governing Laws. This Agreement shall be construed in accordance with and governed by the laws of the State of Indiana and suit, if any, must be brought in the State of Indiana.

1.04. Maintaining a Drug-Free Workplace, Exec. Order #90-5.

A. The CITY or its consultant, hereby covenants and agrees to make a good faith effort to provide and maintain during the term of this Agreement a drug-free workplace, and that it will give written notice to the Indiana Department of Transportation and the Indiana Department of Administration within ten (10) days after receiving actual notice that an employee of the CITY, or its consultant, has been convicted of a criminal drug violation occurring at the CITY's workplace.

B. In addition to the provisions of subparagraph (A) above, if the total contract amount set forth in this Agreement is in excess of \$25,000.00, the CITY, or its consultant, hereby further agrees that this Agreement is expressly subject to the terms, conditions and representations contained in the Drug-Free Workplace certification executed by the CITY in conjunction with this Agreement and which is appended as an Attachment hereto.

C. It is further expressly agreed that the failure of the CITY, or its consultant, to in good faith comply with the terms of subparagraph (A) above, or falsifying or otherwise violating the terms of the certification referenced in subparagraph (B) above shall constitute a material breach of this Agreement.

- 1.05. Subsequent Acts.** The parties agree that they will, at any time and from time to time, from and after the execution of this Agreement, upon request, perform or cause to be performed such acts, and execute, acknowledge and deliver or cause to be executed, acknowledged and delivered, such documents as may be reasonably required for the performance by the parties of any of their obligations under this Agreement.
- 1.06. Non-Waiver.** No delay or failure by either party to exercise any right hereunder, and no partial or single exercise of any such right, shall constitute a waiver of that or any other right, unless otherwise expressly provided herein.
- 1.07. Headings.** Headings in this Agreement are for convenience only and shall not be used to interpret or construe its provisions.
- 1.08. Assignment.** This Agreement shall be binding upon and shall inure to the benefits of the parties, their legal representatives, successors and assigns, provided, however, because this Agreement is personal to each of the parties hereto, no party may sell, assign,

delegate, or transfer this Agreement or any portion thereof, including, without limitation, any rights, title, interests, remedies, powers, and/or duties hereunder without the express written consent of the other party.

- 1.09. Severability.** Wherever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.
- 1.10. Attorney General Approval.** This Agreement shall not be effective unless and until approved by the Attorney General of Indiana, or an authorized representative, as to form and legality.
- 1.11. Authorizations.** Any person executing this Agreement in a representative capacity hereby warrants that he/she has been duly authorized by his/her principal to execute this Agreement on such principal's behalf.
- 1.12. Force Majeure, Suspension and Termination.** In the event that either party is unable to perform any of its obligations under this Agreement or to enjoy any of its benefits because of natural disaster, actions or decrees of governmental bodies or communication line failure not the fault of the affected party (hereinafter referred to as a "Force Majeure Event"), the party who has been so affected shall immediately give notice to the other party and shall do everything possible to resume performance. Upon receipt of such notice, all obligations under this Agreement shall be immediately suspended. If the period of nonperformance exceeds thirty (30) days from receipt of notice of the Force

Majeure Event, the party whose ability to perform has not been so affected may be given written notice to terminate this Agreement.

1.13. Substantial Performance. This Agreement shall be deemed to have been substantially performed only when fully performed according to its terms and conditions and any modification thereof.

1.14. Multi-Term Funding Cancellation. When the Director of the State Budget Agency makes a written determination that funds are not appropriated or otherwise available to support continuation of performance of a multi-term contract, the multi-term contract shall be canceled. A determination by the Budget Director that funds are not appropriated or otherwise available to support continuation of performance shall be final and conclusive.

1.15. Indemnification. The CITY, or its contractor agrees to indemnify, defend, exculpate, and hold harmless the State of Indiana, its agencies, officials and employees from any liability, loss, damage, injuries, or other casualties of whatever kind, or by whomsoever caused, due to the performance of any of the obligations under this Agreement, whether due in whole or in part to the negligent acts or omissions of the State of Indiana, its agencies officials, or employees; or the CITY, or its contractor, agents or employees, or other persons engaged in the performance of the work; or the joint or several acts or omissions of any of them; including any claims arising out of the Worker's Compensation Act or any other law, ordinance, order, or decree. The CITY, or its contractor, further agrees to pay all reasonable expenses and attorneys fees incurred by or imposed on the State of Indiana in connection herewith in the event that the CITY, or its contractor, shall default under the provisions of this Section.

- 1.16. The provisions of Indiana Code 34-13-3 et seq. with regard to tort claims against governmental entities applies to any claim(s) arising from the obligations and duties enumerated herein.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN TESTIMONY WHEREOF, the parties hereto have executed this Agreement.

THE CITY OF EVANSVILLE
Board of Park Commissioners

Recommended for Approval

By:



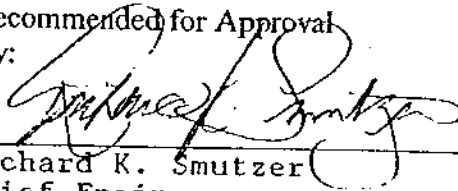
Park Board President

Vice

STATE OF INDIANA
Department of Transportation

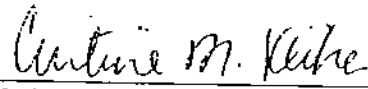
Recommended for Approval

By:



Richard K. Smutzer
Chief Engineer

BY:



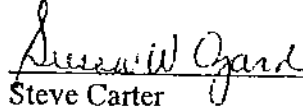
Cristine M. Klika
Commissioner

ATTEST



Secretary of the Board

APPROVED AS TO FORM AND
LEGALITY:



Steve Carter (for)
Attorney General of Indiana

Dated: 6-29-01

ACKNOWLEDGMENT

STATE OF INDIANA)
) SS:
VANDERBURGH COUNTY)

Before me, the undersigned Notary Public in and for said County personally
appeared Jay Ritter
(Name of signers, their official

Vice Park Board President
capacity and agency name)

and each acknowledged the execution of the foregoing Agreement on this 5th
day of April, 2001.

Witness my hand and seal the said last named date.

My Commission Expires

May 17, 2008

Sharon Evans
Notary Public

Vanderburgh
County of Residence

Sharon Evans
Typed or Printed Name

ACKNOWLEDGEMENT

STATE OF INDIANA)
) SS:
MARION COUNTY)

Before me, the undersigned Notary Public in and for said County personally
appeared Cristine M Klika, Commissioner of the
Indiana Department of Transportation, and acknowledged the execution of the foregoing Agreement on this
2nd day of May, 2001.

Witness my hand and seal the said last named date.

My Commission Expires

9-13-2008

JoAnn M Weaver
Notary Public

Marion
County of Residence

JoAnn M Weaver
Typed or Printed Name

ATTACHMENT

to the Agreement for Bicycle/Pedestrian Trail, between the State of Indiana (INDOT) and the City of Evansville Board of Park Commissioners (CITY)

STATE OF INDIANA - DRUG-FREE WORKPLACE CERTIFICATION

Pursuant to Executive Order No. 90-5, April 12, 1990, issued by Governor Evan Bayh, the Indiana Department of Administration requires the inclusion of this certification in all Agreements with and grants from the State of Indiana in excess of \$25,000.00.

No award of an Agreement shall be made or be valid, the total amount of which exceeds \$25,000.00, unless and until this certification has been fully executed by the City of Evansville Department of Parks and Recreation, ("Lessee"), and attached to the Agreement as part of the Agreement documents. False certification or violation of the certification may result in sanctions including, but not limited to, suspension of the Agreement payments, termination of the Agreement and/or debarment of contracting opportunities with the State for up to three (3) years.

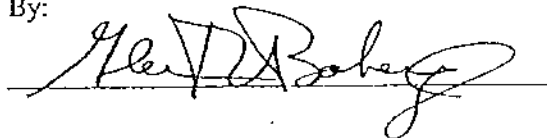
Lessee certifies and agrees that it will provide a drug-free workplace by:

- A. Publishing and providing to all of its employees a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in Lessee's workplace and specifying the actions that will be taken against employees for violations of such prohibition;
- B. Establishing a drug-free awareness program to inform employees about (1) the dangers of drug abuse in the workplace; (2) Lessee's policy of maintaining a drug-free workplace; (3) any available drug counseling, rehabilitation, and employee assistance programs; and (4) the penalties that may be imposed upon an employee for drug abuse violations occurring in the workplace;
- C. Notifying all employees in the statement required by subparagraph (a) above that as a condition of continued employment, the employee will (1) abide by the terms of the statement; and (2) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction;
- D. Notifying in writing the Indiana Department of Transportation and the Indiana Department of Administration within ten (10) days after receiving notice from an employee under subdivision (c) (2) above or otherwise receiving actual notice of such conviction;
- E. Within thirty (30) days after receiving notice under subdivision (c) (2) above of a conviction, imposing the following sanctions or remedial measures on any employee who is convicted of drug abuse violations occurring in the workplace: (1) take appropriate personnel action against the employee, up to and including termination; or (2) require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state or local health, law enforcement, or other appropriate agency; and
- F. Making a good faith effort to maintain a drug-free workplace through the implementation of subparagraphs (a) through (e) above.

The undersigned affirms, under the penalties for perjury, that he or she is authorized to execute this certification on behalf of the designated organization.

City of Evansville, Department of Parks and Recreation

By:



Date 4-5-2001



United States Department of the Interior

FISH AND WILDLIFE SERVICE

1875 Century Boulevard
Atlanta, Georgia 30345

In Reply Refer To:
FWS/R4/R4/RE

FEB 13 2003

LA-Kentucky
Green River NWR
I-69 Highway Project

Memorandum

To: U. S. Department of Transportation
Federal Highway Administration
Division Administrator

From: *acting* Chief, Division of Realty, Southeast Region

Subject: I-69 Evansville to Henderson Project - Section 4(f) Coordination

The proposed Green River National Wildlife Refuge has not received final approval by our Director. Until this occurs, the Fish and Wildlife Service has no authority to acquire any lands in the vicinity of your planned I-69 Evansville to Henderson Project. Should we receive Director's approval in the future, the Service will closely coordinate with your agency concerning any planned acquisition of lands located within or close to the corridors under consideration for I-69. Also, if mitigation (i.e. land acquisition) is required as a result of the I-69 project, there may be opportunities for the Federal Highway Administration to assist in the acquisition of lands for the refuge. Possibilities such as a "mitigation bank" or identification of target tracts for acquisition should be explored, if the refuge is established.

We will keep you informed on the status of Green River NWR and we look forward to working with you in the future.

John W. Binsley

INDIANA DIVISION

FEB 18 03

RECEIVED FWS



U.S. Department
of Transportation
**Federal Highway
Administration**

Indiana Division

575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

January 28, 2003

Mr. Steve Craig, Manager
Burdette Park
5301 Nurrenbern Rd.
Evansville, IN 47712

Re: I-69 Evansville to Henderson Project – Section 4(f) Coordination

Dear Mr. Craig:

I am writing to request your assistance regarding lands within your jurisdiction that may be protected by Section 4(f) of the Department of Transportation Act, 49 U.S.C. § 303(c). This request is being made in connection with the Draft Environmental Impact Statement (DEIS) for the I-69 Evansville to Henderson project. The DEIS is being prepared by the Federal Highway Administration in cooperation with the Indiana Department of Transportation, the Kentucky Transportation Cabinet, and the Evansville Urban Transportation Study.

Section 4(f) protects significant publicly owned parks, recreation areas, and wildlife and waterfowl refuges, and also protects significant historic sites, whether publicly or privately owned. Significant historic sites are those properties that are listed on or determined eligible for the National Register of Historic Places (NRHP). Collectively, the lands protected by Section 4(f) are referred to as "Section 4(f) resources." Section 4(f) resources may not be used for a transportation project unless FHWA finds that (1) there is no prudent and feasible alternative that would avoid the use of such resources, and (2) the selected alternative incorporates all possible planning to minimize harm to those resources.

1. Information Requested

The first step toward achieving compliance with Section 4(f) is to identify each of the Section 4(f) resources that could be used by the alternatives that are being considered in an EIS. With that in mind, we would like to request your assistance in determining whether there are any Section 4(f)-protected lands within your jurisdiction that are located within the study area for this project, including lands located outside the three corridors that are currently under consideration.

We have enclosed a map showing lands within your jurisdiction that we understand may be protected by Section 4(f) and that are located within the study area for this project. With each map, we also have attached a Section 4(f) Applicability Worksheet describing the potential Section 4(f) resource. Please review the enclosed materials and let us know if you have any comments, suggested changes, or corrections. In addition, please also let us know whether you are aware of any other lands within your jurisdiction that are located in the study area and that may be protected under Section 4(f).

In providing your input on these issues, please keep in mind the following guidelines regarding the applicability of Section 4(f). In order for land to be protected under Section 4(f) as a park, recreation area, or refuge, all of the following conditions must be satisfied:

- (1) the land must be formally designated as a park, recreation area, or wildlife or waterfowl refuge, or must have park, recreation, or refuge purposes as one of its "major functions"; *and*
- (2) the land must be publicly owned, or must be subject to a permanent easement that is publicly owned; *and*
- (3) the land must be open to the public; *and*

I-69 Evansville to Henderson EIS
Section 4(f) Coordination for Managed Lands
Formal Section 4(f) Resource Determination Request

Page 2

- (4) the land must possess national, state, or local significance as a park, recreation area, or wildlife or waterfowl refuge.

Please note that these guidelines do not apply to historic resources, which also are protected under Section 4(f). Historic resources are being addressed separately in consultation with the State Historic Preservation Officers for Indiana and Kentucky.

2. Request for Cooperation on Future Actions

In addition to your assistance in identifying existing Section 4(f) resources, we also seek your cooperation with regard to future actions by your agency that could affect the applicability of Section 4(f) to land within the study area for this project. In particular, we request that you coordinate with us prior to taking any of the following actions:

- acquiring any ownership interest, including an easement, in lands located within the study area, particularly if such lands are located within or close to any of the corridors currently under consideration for I-69; or
- formally establishing any new park, recreation area, or refuge within the study area;
- changing the boundaries of any park, recreation area, or refuge within the study area; or
- changing the management designation of any land in a manner that could result in the application of Section 4(f) to that land – e.g., converting land from a non-recreational use to a recreational use.

I should emphasize that we would not necessarily object to any of these actions. We understand that as administrator of these lands, your agency is entitled to engage in any of these actions. However, we would like to ensure that there is an opportunity for coordination before any actions are taken that could result in the creation of additional Section 4(f) resources within any of the corridors under consideration in this study. For example, if additional lands are to be acquired, we could seek to ensure that those lands are “jointly planned” along with the highway project in order to avoid triggering the application of Section 4(f) to those lands.

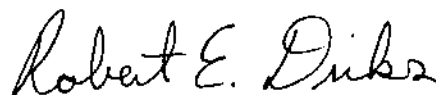
3. Corridor Preservation

We are currently studying three alternatives for completing I-69 between Evansville and Henderson. At this time, none of the alternatives directly uses any Section 4(f)-protected land based on our assessments. As described above, we are requesting your cooperation in preserving each of these corridors for future development of I-69.

Later this year, we expect to identify a single corridor within the study area as the “preferred alternative” for this project. If the preferred alternative includes lands within your jurisdiction, we will be asking for your commitment to reserve the preferred corridor for highway purposes, so that future actions do not inadvertently trigger the application of Section 4(f) late in the NEPA process or after the NEPA process has been completed.

Thank you once again for your assistance in the development of the DEIS for this project. Please provide your response to this letter by February 14, 2003. If you have any questions, please contact Tim Miller, HINTB, Project Manager at 317-917-5356.

Sincerely,
John R. Baxter, P.E.
Division Administrator



By: Robert E. Dirks, P.E.
Environmental Engineer

Enclosures

**I-69 Evansville to Henderson Project
Section 4(f) Applicability Worksheet
for Parks, Recreation Areas, and Refuges**

Background Information

Name of Resource (if any): **Burdette Park**

Location of Resource and its boundaries: **5301 Nurrenbern Rd., Evansville, IN**

Type of Use (e.g., park, recreation, refuge): **County Park (park)**

Agency with Jurisdiction: **Vanderburgh County Parks Board**

Agency Contact Information: **Steve Craig, Manager**

Section 4(f) Criteria

This form is intended only to determine whether a resource is eligible for Section 4(f) protection as a park, recreation area, or refuge; the applicability of Section 4(f) to historic or archaeological sites is being determined and documented separately in the Section 106 process. The following questions must be answered in the affirmative (as applicable) to find that a property is a Section 4(f) resource. In addition to answering "yes" or "no", please provide the requested information and supporting documentation. Where a telephone conference provides relevant information, the content of the call should be documented and attached to this form.

1. Formal Designation or Major Use: Yes or No

At the present time, is the land formally designated as a park, recreation area, or wildlife or waterfowl refuge or does the land have as one of its major functions park, recreation, or refuge purposes? Formal designation refers to the act that creates the park, recreation area, or refuge. This land may include wildlife management areas that perform the same function as a refuge. See FHWA Section 4(f) Policy Paper, Questions ## 2A, 18. Where land is managed for multiple uses, Section 4(f) applies only to the area functioning as or designated for significant park, recreation, or refuge purposes. See 23 C.F.R. § 771.135(d).

If the answer is yes, state the date of designation and describe the method of designation, or if there is no formal designation, describe the major functions of the land. Please attach any supporting documentation, such as the designation document (e.g., EA), the management plan or other planning document indicating major functions or purposes of the resource, and a map of resource boundaries.

Burdette Park was dedicated as a park in September 1934. The major use of the facility continues to be as a local park.

In addition, indicate (and attach any documentation indicating) whether any change in designation or major function is anticipated for the foreseeable future.

2. Public Ownership: Yes or No

At the present time, is land publicly owned or subject to a publicly owned permanent easement? See 4(f) Policy Paper, Questions ## 2A, 2D.

If the answer is yes, state the owner, type of ownership (e.g., fee simple, easement, or lease), and any conditions on such ownership. Include any information about which parcels are publicly owned and which are privately owned. Please attach a map indicating which parcels are publicly owned and any easements that are present and a copy of any easements available on the land.

Burdette Park is owned in fee simple title by Vanderburgh County.

In addition, indicate (and attach any documentation indicating) whether any change in public ownership is anticipated (either expanding or contracting) and the anticipated terms and conditions of that ownership. Please include a map of anticipated boundaries.

3. Public Access and Use: Yes or No or Not Applicable

For park and recreation areas: At the present time, is the land open to the general public? Being open to the general public means that the entire public can access the property at any time. Section 4(f) does not apply when access is permitted to select groups (e.g., residents of a public housing project; military and their dependents; students of a school; and students, faculty, and alumni of a college or university). FHWA encourages the protection of such parks and recreation areas even though 4(f) does not apply. See 4(f) Policy Paper, Question # 2C. Public access is not applicable to refuge areas.

If the answer is yes, explain the public access and use of the land. Please attach any policy or planning document indicating the uses of and any conditions or restrictions on the use of the land.

Burdette Park facilities are open to the general public.

If the answer is no but there is limited access, describe the circumstances under which the land is open to the public (i.e., at certain times of the year or for a select group).

In addition, indicate (and attach any documentation indicating) whether the agency intends to open or restrict the land to the public and if so, the future conditions that will be imposed on public access and usage.

4. **Significance:** Yes or No

At the present time, does the land possess national, state, or local significance? Significance means that the land plays an important role in meeting national, state, or local park, recreation, or refuge objectives. See 4(f) Policy Paper Question # 2B; 23 C.F.R. § 771.135(c).

If the answer is yes, describe how this particular land plays an important role in meeting park, recreation, or refuge objectives of the nation, state, or locality in which the land is located. Please attach any supporting documentation (e.g., agency official statement of significance, documentation of telephone calls).

Burdette Park is of local significance as a park and recreation area.

In addition, indicate (and attach any documentation indicating) whether the significance determination is anticipated to change in the foreseeable future.

Recommendation

Current Section 4(f) Status – check **one** of the following:

- X This resource meets all applicable criteria mentioned above, and none of the exceptions on the Section 4(f) Exceptions Checklist apply. Therefore, Section 4(f) does apply to this resource.
- ☐ This resource meets all applicable criteria mentioned above. However, it qualifies for one or more of the exceptions on the Section 4(f) Exceptions Checklist. Therefore, Section 4(f) does not apply to this resource. (Attach completed copy of Exceptions Checklist).
- ☐ This resource does not meet all applicable criteria mentioned above. Therefore, Section 4(f) does not apply to this resource.

Potential for Future Change in Section 4(f) Status:

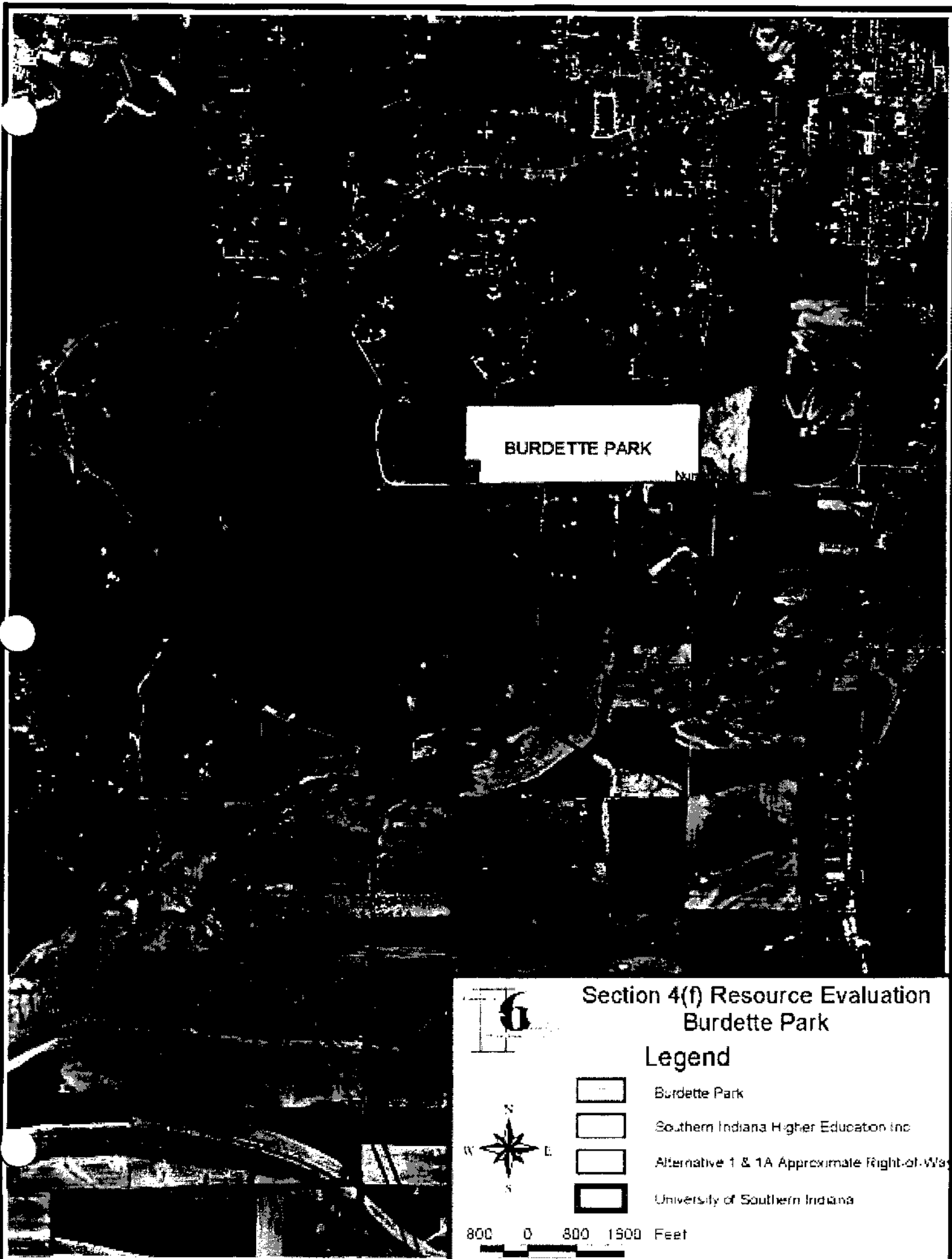
Are there any existing plans that, if implemented, could change the Section 4(f) status of this resource? Examples include plans to acquire public ownership of land, establish a new management designation, or change a boundary. If such plans exist, please describe.

Section 4(f) Resources Exceptions Checklist

Check the exception or exceptions that apply to the land examined in Section 4(f) Applicability Worksheet.

- _____ Late Designation. Land was purchased for transportation purposes prior to designation or change in determination of significance (FHWA Section 4(f) Policy Paper, Question # 7; 23 C.F.R. § 771.135(h)).
- _____ Fairgrounds. Fairgrounds that function primarily for commercial purposes rather than recreational purposes (4(f) Policy Paper, Question # 9).
- _____ School Playgrounds. School playgrounds used only for school activities and functions (4(f) Policy Paper, Question # 10).
- _____ Bikeways. Bikeway that is primarily used for transportation and is an integral part of the local transportation system (4(f) Policy Paper, Question # 13).
- _____ Joint Development. Land is located within a pre-determined right-of-way corridor through the park, recreation area, or refuge where the park, recreation area, or refuge and highway were jointly developed (4(f) Policy Paper, Question # 14).
- _____ Temporary Occupancy. Park or recreational activity occurring as a temporary occupancy of highway right-of-way (4(f) Policy Paper, Question # 16).

Please explain why a checked exception applies to the resource and attach relevant supporting documentation (e.g., land purchase documentation; joint planning documents; authorization for temporary occupancy).



BURDETTE PARK



Section 4(f) Resource Evaluation
Burdette Park

Legend

800 0 800 1600 Feet

Burdette Park

Southern Indiana Higher Education Inc

Alternative 1 & 1A Approximate Right-of-Way

University of Southern Indiana



U.S. Department
of Transportation

**Federal Highway
Administration**

Indiana Division

575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

January 28, 2003

Mr. Tom Follrath, Chief of Realty
U. S. Fish and Wildlife Service
1875 Century Blvd. Suite 420
Atlanta, GA 30345

Re: 1-69 Evansville to Henderson Project – Section 4(f) Coordination

Dear Mr. Follrath:

I am writing to request your assistance regarding lands within your jurisdiction that may be protected by Section 4(f) of the Department of Transportation Act, 49 U.S.C. § 303(c). This request is being made in connection with the Draft Environmental Impact Statement (DEIS) for the 1-69 Evansville to Henderson project. The DEIS is being prepared by the Federal Highway Administration in cooperation with the Indiana Department of Transportation, the Kentucky Transportation Cabinet, and the Evansville Urban Transportation Study.

Section 4(f) protects significant publicly owned parks, recreation areas, and wildlife and waterfowl refuges, and also protects significant historic sites, whether publicly or privately owned. Significant historic sites are those properties that are listed on or determined eligible for the National Register of Historic Places (NRHP). Collectively, the lands protected by Section 4(f) are referred to as "Section 4(f) resources." Section 4(f) resources may not be used for a transportation project unless FHWA finds that (1) there is no prudent and feasible alternative that would avoid the use of such resources, and (2) the selected alternative incorporates all possible planning to minimize harm to those resources.

I. Information Requested

The first step toward achieving compliance with Section 4(f) is to identify each of the Section 4(f) resources that could be used by the alternatives that are being considered in an EIS. With that in mind, we would like to request your assistance in determining whether there are any Section 4(f)-protected lands within your jurisdiction that are located within the study area for this project, including lands located outside the three corridors that are currently under consideration.

We have enclosed a map showing lands within your jurisdiction that we understand may be protected by Section 4(f) and that are located within the study area for this project. With each map, we also have attached a Section 4(f) Applicability Worksheet describing the potential Section 4(f) resource. Please review the enclosed materials and let us know if you have any comments, suggested changes, or corrections. In addition, please also let us know whether you are aware of any other lands within your jurisdiction that are located in the study area and that may be protected under Section 4(f).

In providing your input on these issues, please keep in mind the following guidelines regarding the applicability of Section 4(f). In order for land to be protected under Section 4(f) as a park, recreation area, or refuge, all of the following conditions must be satisfied:

- (1) the land must be formally designated as a park, recreation area, or wildlife or waterfowl refuge, or must have park, recreation, or refuge purposes as one of its "major functions"; *and*
- (2) the land must be publicly owned, or must be subject to a permanent easement that is publicly owned; *and*
- (3) the land must be open to the public; *and*

- (4) the land must possess national, state, or local significance as a park, recreation area, or wildlife or waterfowl refuge.

Please note that these guidelines do not apply to historic resources, which also are protected under Section 4(f). Historic resources are being addressed separately in consultation with the State Historic Preservation Officers for Indiana and Kentucky.

2. Request for Cooperation on Future Actions

In addition to your assistance in identifying existing Section 4(f) resources, we also seek your cooperation with regard to future actions by your agency that could affect the applicability of Section 4(f) to land within the study area for this project. In particular, we request that you coordinate with us prior to taking any of the following actions:

- acquiring any ownership interest, including an easement, in lands located within the study area, particularly if such lands are located within or close to any of the corridors currently under consideration for I-69; or
- formally establishing any new park, recreation area, or refuge within the study area;
- changing the boundaries of any park, recreation area, or refuge within the study area; or
- changing the management designation of any land in a manner that could result in the application of Section 4(f) to that land – e.g., converting land from a non-recreational use to a recreational use.

I should emphasize that we would not necessarily object to any of these actions. We understand that as administrator of these lands, your agency is entitled to engage in any of these actions. However, we would like to ensure that there is an opportunity for coordination before any actions are taken that could result in the creation of additional Section 4(f) resources within any of the corridors under consideration in this study. For example, if additional lands are to be acquired, we could seek to ensure that those lands are “jointly planned” along with the highway project in order to avoid triggering the application of Section 4(f) to those lands.

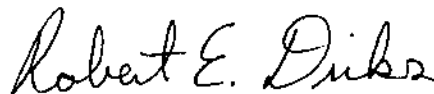
3. Corridor Preservation

We are currently studying three alternatives for completing I-69 between Evansville and Henderson. At this time, none of the alternatives directly uses any Section 4(f)-protected land based on our assessments. As described above, we are requesting your cooperation in preserving each of these corridors for future development of I-69.

Later this year, we expect to identify a single corridor within the study area as the “preferred alternative” for this project. If the preferred alternative includes lands within your jurisdiction, we will be asking for your commitment to reserve the preferred corridor for highway purposes, so that future actions do not inadvertently trigger the application of Section 4(f) late in the NEPA process or after the NEPA process has been completed.

Thank you once again for your assistance in the development of the DEIS for this project. Please provide your response to this letter by February 14, 2003. If you have any questions, please contact Tim Miller, HNTB, Project Manager at 317-917-5356.

Sincerely,
John R. Baxter, P.E.
Division Administrator



By: Robert E. Dirks, P.E.
Environmental Engineer

Enclosures

Copy: Rick Huffines, Clarks River National Wildlife Refuge

**I-69 Evansville to Henderson Project
Section 4(f) Applicability Worksheet
for Parks, Recreation Areas, and Refuges**

Background Information

Name of Resource (if any): **Green River National Wildlife Refuge**

Location of Resource and its boundaries: **Green River Road, Henderson, KY (see map)**

Type of Use (e.g., park, recreation, refuge): **National Wildlife Refuge (refuge)**

Agency with Jurisdiction: **United States Fish and Wildlife Service**

Agency Contact Information: **Richard Huffines, Designated Refuge Manager**

Section 4(f) Criteria

This form is intended only to determine whether a resource is eligible for Section 4(f) protection as a park, recreation area, or refuge; the applicability of Section 4(f) to historic or archaeological sites is being determined and documented separately in the Section 106 process. The following questions must be answered in the affirmative (as applicable) to find that a property is a Section 4(f) resource. In addition to answering "yes" or "no", please provide the requested information and supporting documentation. Where a telephone conference provides relevant information, the content of the call should be documented and attached to this form.

1. Formal Designation or Major Use: Yes or No

At the present time, is the land formally designated as a park, recreation area, or wildlife or waterfowl refuge or does the land have as one of its major functions park, recreation, or refuge purposes? Formal designation refers to the act that creates the park, recreation area, or refuge. This land may include wildlife management areas that perform the same function as a refuge. See FHWA Section 4(f) Policy Paper, Questions ## 2A, 18. Where land is managed for multiple uses, Section 4(f) applies only to the area functioning as or designated for significant park, recreation, or refuge purposes. See 23 C.F.R. § 771.135(d).

If the answer is yes, state the date of designation and describe the method of designation, or if there is no formal designation, describe the major functions of the land. Please attach any supporting documentation, such as the designation document (e.g., EA), the management plan or other planning document indicating major functions or purposes of the resource, and a map of resource boundaries.

Refuge is currently still proposed, it has not formally been created and no land has been acquired for the Refuge. The Final Environmental Assessment has been approved with a Finding of No Significant Impact (see copy attached).

In addition, indicate (and attach any documentation indicating) whether any change in designation or major function is anticipated for the foreseeable future.

2. **Public Ownership:** Yes or No

At the present time, is land publicly owned or subject to a publicly owned permanent easement? See 4(f) Policy Paper, Questions ## 2A, 2D.

If the answer is yes, state the owner, type of ownership (e.g., fee simple, easement, or lease), and any conditions on such ownership. Include any information about which parcels are publicly owned and which are privately owned. Please attach a map indicating which parcels are publicly owned and any easements that are present and a copy of any easements available on the land.

No property has been acquired to date. See the attached map and Final Environmental Assessment for delineation of the proposed acquisition boundary.

In addition, indicate (and attach any documentation indicating) whether any change in public ownership is anticipated (either expanding or contracting) and the anticipated terms and conditions of that ownership. Please include a map of anticipated boundaries.

3. **Public Access and Use:** Yes or No or Not Applicable

For park and recreation areas: At the present time, is the land open to the general public? Being open to the general public means that the entire public can access the property at any time. Section 4(f) does not apply when access is permitted to select groups (e.g., residents of a public housing project; military and their dependents; students of a school; and students, faculty, and alumni of a college or university). FHWA encourages the protection of such parks and recreation areas even though 4(f) does not apply. See 4(f) Policy Paper, Question # 2C. Public access is not applicable to refuge areas.

If the answer is yes, explain the public access and use of the land. Please attach any policy or planning document indicating the uses of and any conditions or restrictions on the use of the land.

If the answer is no but there is limited access, describe the circumstances under which the land is open to the public (i.e., at certain times of the year or for a select group).

In addition, indicate (and attach any documentation indicating) whether the agency intends to open or restrict the land to the public and if so, the future conditions that will be imposed on public access and usage.

4. Significance: Yes or No

At the present time, does the land possess national, state, or local significance? Significance means that the land plays an important role in meeting national, state, or local park, recreation, or refuge objectives. See 4(f) Policy Paper Question # 2B; 23 C.F.R. § 771.135(c).

If the answer is yes, describe how this particular land plays an important role in meeting park, recreation, or refuge objectives of the nation, state, or locality in which the land is located. Please attach any supporting documentation (e.g., agency official statement of significance, documentation of telephone calls).

In addition, indicate (and attach any documentation indicating) whether the significance determination is anticipated to change in the foreseeable future.

Recommendation

Current Section 4(f) Status – check one of the following:

- ☐ This resource meets all applicable criteria mentioned above, and none of the exceptions on the Section 4(f) Exceptions Checklist apply. Therefore, Section 4(f) does apply to this resource.
- ☐ This resource meets all applicable criteria mentioned above. However, it qualifies for one or more of the exceptions on the Section 4(f) Exceptions Checklist. Therefore, Section 4(f) does not apply to this resource. (Attach completed copy of Exceptions Checklist).
- X This resource does not meet all applicable criteria mentioned above. Therefore, Section 4(f) does not apply to this resource.

Potential for Future Change in Section 4(f) Status:

Are there any existing plans that, if implemented, could change the Section 4(f) status of this resource? Examples include plans to acquire public ownership of land, establish a new management designation, or change a boundary. If such plans exist, please describe.

The Final Environmental Assessment has been approved with a Finding of No Significant Impact (see copy attached). Acquisition of property could begin upon formal creation of the Refuge.

Section 4(f) Resources Exceptions Checklist

Check the exception or exceptions that apply to the land examined in Section 4(f) Applicability Worksheet.

- _____ Late Designation. Land was purchased for transportation purposes prior to designation or change in determination of significance (FHWA Section 4(f) Policy Paper, Question # 7; 23 C.F.R. § 771.135(h)).
- _____ Fairgrounds. Fairgrounds that function primarily for commercial purposes rather than recreational purposes (4(f) Policy Paper, Question # 9).
- _____ School Playgrounds. School playgrounds used only for school activities and functions (4(f) Policy Paper, Question # 10).
- _____ Bikeways. Bikeway that is primarily used for transportation and is an integral part of the local transportation system (4(f) Policy Paper, Question # 13).
- _____ Joint Development. Land is located within a pre-determined right-of-way corridor through the park, recreation area, or refuge where the park, recreation area, or refuge and highway were jointly developed (4(f) Policy Paper, Question # 14).
- _____ Temporary Occupancy. Park or recreational activity occurring as a temporary occupancy of highway right-of-way (4(f) Policy Paper, Question # 16).

Please explain why a checked exception applies to the resource and attach relevant supporting documentation (e.g., land purchase documentation; joint planning documents; authorization for temporary occupancy).

FINDING OF NO SIGNIFICANT IMPACT

for the Proposed Establishment of Green River National Wildlife Refuge Henderson County, Kentucky

The U.S. Fish and Wildlife Service proposes to protect and manage certain lands along the confluence of the Green River and Ohio River in Henderson County, Kentucky, through the establishment of Green River National Wildlife Refuge. The Service has analyzed the following alternatives to the proposal in an Environmental Assessment (copy attached):

- Alternative 1: No Action
- Alternative 2: Restoration and Management of up to 23,000 Acres by U.S. Fish and Wildlife Service (Preferred Alternative)
- Alternative 3: Restoration and Management of up to 15,630 Acres by the U.S. Fish and Wildlife Service

The preferred alternative was selected over the other alternatives because it offers full protection, restoration and management of the natural resource values of a valuable complex of wetland habitats. Establishment of the refuge, habitat restoration, and proper management would provide excellent migratory bird habitat and contribute to the habitat conservation goals of the North American Waterfowl Management Plan and the Lower Mississippi River Joint Venture.

Implementation of the agency's decision would be expected to result in the following environmental, social and economic effects:

See Environmental Assessment, pages 26-30.

Because the project does not have any adverse effects, measures to mitigate and/or minimize adverse effects have not been incorporated into the proposal.

The proposal is not expected to have any significant adverse effects on wetlands and floodplains, pursuant to Executive Orders 11990 and 11988 (EA, pages 29-30).

The proposal has been thoroughly coordinated with all interested and/or affected parties. Parties contacted include:

All affected landowners
Congressional representatives
State Clearinghouse
Kentucky Department of Fish
and Wildlife Resources

Local community officials
Governor of Kentucky
Kentucky Historic Preservation Officer
Interested citizens and organizations

Copies of the Environmental Assessment are available by contacting:

Mr. Charles R. Danner
U.S. Fish and Wildlife Service
1875 Century Boulevard, Suite 420
Atlanta, Georgia 30345
1-800-419-9582

Therefore, it is my determination that the proposal does not constitute a major federal action significantly affecting the quality of the human environment under the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). As such, an environmental impact statement is not required. This determination is based on the following factors (40 CFR 1508.27):

1. Both beneficial and adverse effects have been considered and this action will not have a significant effect on the human environment (EA, page 29).
2. The actions will not have a significant effect on public health and safety (EA, page 29).
3. The project will not significantly affect any unique characteristics of the geographic area (EA, page 30).
4. The effects on the quality of the human environment are not likely to be highly controversial (EA, page 30).
5. The actions do not involve highly uncertain, unique, or unknown environmental risks to the human environment (EA, pages 26-30).
6. The actions will not establish a precedent for future actions with significant effects nor does it represent a decision in principle about a future consideration (EA, page 30).
7. There will be no cumulatively significant impacts on the environment (EA, page 30).
8. The actions will not significantly affect any site listed in, or eligible for listing in, the National Register of Historic Places, nor will they cause loss or destruction of significant scientific, cultural, or historic resources (EA, page 30).
9. The actions are not likely to adversely affect endangered or threatened species, or their habitats (Section 7 Consultation).
10. The actions will not lead to a violation of federal, state, or local laws imposed for the protection of the environment (EA, page 30).

References:

Final Environmental Assessment and Land Protection Plan for the Proposed Establishment of Green River National Wildlife Refuge, U.S. Fish and Wildlife Service, Southeast Region, Atlanta, Georgia, June 2001.

Noting

A. Dale Hall
Regional Director

6/12/01
Date





U.S. Department
of Transportation

**Federal Highway
Administration**

Indiana Division

575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

January 28, 2003

Mr. Mike Madriaga, Director
City of Evansville Department of Parks and Recreation
100 E. Walnut St.
Evansville, IN 47713

Re: I-69 Evansville to Henderson Project – Section 4(f) Coordination

Dear Mr. Madriaga:

I am writing to request your assistance regarding lands within your jurisdiction that may be protected by Section 4(f) of the Department of Transportation Act, 49 U.S.C. § 303(c). This request is being made in connection with the Draft Environmental Impact Statement (DEIS) for the I-69 Evansville to Henderson project. The DEIS is being prepared by the Federal Highway Administration in cooperation with the Indiana Department of Transportation, the Kentucky Transportation Cabinet, and the Evansville Urban Transportation Study.

Section 4(f) protects significant publicly owned parks, recreation areas, and wildlife and waterfowl refuges, and also protects significant historic sites, whether publicly or privately owned. Significant historic sites are those properties that are listed on or determined eligible for the National Register of Historic Places (NRHP). Collectively, the lands protected by Section 4(f) are referred to as "Section 4(f) resources." Section 4(f) resources may not be used for a transportation project unless FHWA finds that (1) there is no prudent and feasible alternative that would avoid the use of such resources, and (2) the selected alternative incorporates all possible planning to minimize harm to those resources.

1. Information Requested

The first step toward achieving compliance with Section 4(f) is to identify each of the Section 4(f) resources that could be used by the alternatives that are being considered in an EIS. With that in mind, we would like to request your assistance in determining whether there are any Section 4(f)-protected lands within your jurisdiction that are located within the study area for this project, including lands located outside the three corridors that are currently under consideration.

We have enclosed a map showing lands within your jurisdiction that we understand may be protected by Section 4(f) and that are located within the study area for this project. With each map, we also have attached a Section 4(f) Applicability Worksheet describing the potential Section 4(f) resource. Please review the enclosed materials and let us know if you have any comments, suggested changes, or corrections. In addition, please also let us know whether you are aware of any other lands within your jurisdiction that are located in the study area and that may be protected under Section 4(f).

In providing your input on these issues, please keep in mind the following guidelines regarding the applicability of Section 4(f). In order for land to be protected under Section 4(f) as a park, recreation area, or refuge, all of the following conditions must be satisfied:

- (1) the land must be formally designated as a park, recreation area, or wildlife or waterfowl refuge, or must have park, recreation, or refuge purposes as one of its "major functions"; *and*
- (2) the land must be publicly owned, or must be subject to a permanent easement that is publicly owned; *and*
- (3) the land must be open to the public; *and*

I-69 Evansville to Henderson EIS
Section 4(f) Coordination for Managed Lands
Formal Section 4(f) Resource Determination Request

Page 2

- (4) the land must possess national, state, or local significance as a park, recreation area, or wildlife or waterfowl refuge.

Please note that these guidelines do not apply to historic resources, which also are protected under Section 4(f). Historic resources are being addressed separately in consultation with the State Historic Preservation Officers for Indiana and Kentucky.

2. Request for Cooperation on Future Actions

In addition to your assistance in identifying existing Section 4(f) resources, we also seek your cooperation with regard to future actions by your agency that could affect the applicability of Section 4(f) to land within the study area for this project. In particular, we request that you coordinate with us prior to taking any of the following actions:

- acquiring any ownership interest, including an easement, in lands located within the study area, particularly if such lands are located within or close to any of the corridors currently under consideration for I-69; or
- formally establishing any new park, recreation area, or refuge within the study area;
- changing the boundaries of any park, recreation area, or refuge within the study area; or
- changing the management designation of any land in a manner that could result in the application of Section 4(f) to that land – e.g., converting land from a non-recreational use to a recreational use.

I should emphasize that we would not necessarily object to any of these actions. We understand that as administrator of these lands, your agency is entitled to engage in any of these actions. However, we would like to ensure that there is an opportunity for coordination before any actions are taken that could result in the creation of additional Section 4(f) resources within any of the corridors under consideration in this study. For example, if additional lands are to be acquired, we could seek to ensure that those lands are “jointly planned” along with the highway project in order to avoid triggering the application of Section 4(f) to those lands.

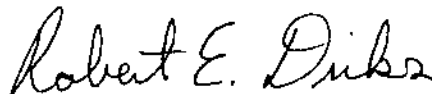
3. Corridor Preservation

We are currently studying three alternatives for completing I-69 between Evansville and Henderson. At this time, none of the alternatives directly uses any Section 4(f)-protected land based on our assessments. As described above, we are requesting your cooperation in preserving each of these corridors for future development of I-69.

Later this year, we expect to identify a single corridor within the study area as the “preferred alternative” for this project. If the preferred alternative includes lands within your jurisdiction, we will be asking for your commitment to reserve the preferred corridor for highway purposes, so that future actions do not inadvertently trigger the application of Section 4(f) late in the NEPA process or after the NEPA process has been completed.

Thank you once again for your assistance in the development of the DEIS for this project. Please provide your response to this letter by February 14, 2003. If you have any questions, please contact Tim Miller, HNTB, Project Manager at 317-917-5356.

Sincerely,
John R. Baxter, P.E.
Division Administrator



By: Robert E. Dirks, P.E.
Environmental Engineer

Enclosures

**I-69 Evansville to Henderson Project
Section 4(f) Applicability Worksheet
for Parks, Recreation Areas, and Refuges**

Background Information

Name of Resource (if any): **Evansville Greenway Passage**

Location of Resource and its boundaries: **I-164, Pollack Ave., Evansville, IN**

Type of Use (e.g., park, recreation, refuge): **Bike/Pedestrian Trail (recreation)**

Agency with Jurisdiction: **Evansville Parks and Recreation Department**

Agency Contact Information: **Mike Madriaga, Manager**

Section 4(f) Criteria

This form is intended only to determine whether a resource is eligible for Section 4(f) protection as a park, recreation area, or refuge; the applicability of Section 4(f) to historic or archaeological sites is being determined and documented separately in the Section 106 process. The following questions must be answered in the affirmative (as applicable) to find that a property is a Section 4(f) resource. In addition to answering "yes" or "no", please provide the requested information and supporting documentation. Where a telephone conference provides relevant information, the content of the call should be documented and attached to this form.

1. Formal Designation or Major Use: Yes or No

At the present time, is the land formally designated as a park, recreation area, or wildlife or waterfowl refuge or does the land have as one of its major functions park, recreation, or refuge purposes? Formal designation refers to the act that creates the park, recreation area, or refuge. This land may include wildlife management areas that perform the same function as a refuge. See FHWA Section 4(f) Policy Paper, Questions ## 2A, 18. Where land is managed for multiple uses, Section 4(f) applies only to the area functioning as or designated for significant park, recreation, or refuge purposes. See 23 C.F.R. § 771.135(d).

If the answer is yes, state the date of designation and describe the method of designation, or if there is no formal designation, describe the major functions of the land. Please attach any supporting documentation, such as the designation document (e.g., EA), the management plan or other planning document indicating major functions or purposes of the resource, and a map of resource boundaries.

There are currently no facilities in place along the I-164 corridor. However, the City's plans indicate that this bike/pedestrian trail is a planned facility on the Greenway Passage

System. This level of planning constitutes a formal designation of the bike/pedestrian path by the City of Evansville.

In addition, indicate (and attach any documentation indicating) whether any change in designation or major function is anticipated for the foreseeable future.

2. **Public Ownership:** Yes or No

At the present time, is land publicly owned or subject to a publicly owned permanent easement? See 4(f) Policy Paper, Questions ## 2A, 2D.

If the answer is yes, state the owner, type of ownership (e.g., fee simple, easement, or lease), and any conditions on such ownership. Include any information about which parcels are publicly owned and which are privately owned. Please attach a map indicating which parcels are publicly owned and any easements that are present and a copy of any easements available on the land.

INDOT owns the right-of-way on which the bike/pedestrian path will be located. Currently a shared use agreement exists between the City of Evansville Board of Park Commissioners and INDOT for utilization of the I-164 right-of-way for the Greenway Passage trail.

In addition, indicate (and attach any documentation indicating) whether any change in public ownership is anticipated (either expanding or contracting) and the anticipated terms and conditions of that ownership. Please include a map of anticipated boundaries.

3. **Public Access and Use:** Yes or No or Not Applicable

For park and recreation areas: At the present time, is the land open to the general public? Being open to the general public means that the entire public can access the property at any time. Section 4(f) does not apply when access is permitted to select groups (e.g., residents of a public housing project; military and their dependents; students of a school; and students, faculty, and alumni of a college or university). FHWA encourages the protection of such parks and recreation areas even though 4(f) does not apply. See 4(f) Policy Paper, Question # 2C. Public access is not applicable to refuge areas.

If the answer is yes, explain the public access and use of the land. Please attach any policy or planning document indicating the uses of and any conditions or restrictions on the use of the land.

No property on the I-164 corridor is open to the general public currently.

If the answer is no but there is limited access, describe the circumstances under which the land is open to the public (i.e., at certain times of the year or for a select group).

In addition, indicate (and attach any documentation indicating) whether the agency intends to open or restrict the land to the public and if so, the future conditions that will be imposed on public access and usage.

The City plans to create a facility within this right-of-way at some point in the foreseeable future, although no studies have been initiated up to this point.

4. Significance: Yes or No

At the present time, does the land possess national, state, or local significance? Significance means that the land plays an important role in meeting national, state, or local park, recreation, or refuge objectives. See 4(f) Policy Paper Question # 2B; 23 C.F.R. § 771.135(c).

If the answer is yes, describe how this particular land plays an important role in meeting park, recreation, or refuge objectives of the nation, state, or locality in which the land is located. Please attach any supporting documentation (e.g., agency official statement of significance, documentation of telephone calls).

The City has not made a finding of significance for the planned bike/pedestrian facility.

In addition, indicate (and attach any documentation indicating) whether the significance determination is anticipated to change in the foreseeable future.

Recommendation

Current Section 4(f) Status – check one of the following:

- ☐ This resource meets all applicable criteria mentioned above, and none of the exceptions on the Section 4(f) Exceptions Checklist apply. Therefore, Section 4(f) does apply to this resource.
- ☐ This resource meets all applicable criteria mentioned above. However, it qualifies for one or more of the exceptions on the Section 4(f) Exceptions Checklist. Therefore, Section 4(f) does not apply to this resource. (Attach completed copy of Exceptions Checklist).
- X This resource does not meet all applicable criteria mentioned above. Therefore, Section 4(f) does not apply to this resource. Moreover, even if the resource becomes operational or a finding of significance is made, Section 4(f) would not apply because the facility would qualify for one of the exceptions on the Section 4(f) Exceptions Checklist. (See next page.)

Potential for Future Change in Section 4(f) Status:

Are there any existing plans that, if implemented, could change the Section 4(f) status of this resource? Examples include plans to acquire public ownership of land, establish a new management designation, or change a boundary. If such plans exist, please describe.

Section 4(f) Resources Exceptions Checklist

Check the exception or exceptions that apply to the land examined in Section 4(f) Applicability Worksheet.

- _____ Late Designation. Land was purchased for transportation purposes prior to designation or change in determination of significance (FHWA Section 4(f) Policy Paper, Question # 7; 23 C.F.R. § 771.135(h)).
- Fairgrounds. Fairgrounds that function primarily for commercial purposes rather than recreational purposes (4(f) Policy Paper, Question # 9).
- _____ School Playgrounds. School playgrounds used only for school activities and functions (4(f) Policy Paper, Question # 10).
- Bikeways. Bikeway that is primarily used for transportation and is an integral part of the local transportation system (4(f) Policy Paper, Question # 13).
- _____ Joint Development. Land is located within a pre-determined right-of-way corridor through the park, recreation area, or refuge where the park, recreation area, or refuge and highway were jointly developed (4(f) Policy Paper, Question # 14).
- X Temporary Occupancy. Park or recreational activity occurring as a temporary occupancy of highway right-of-way (4(f) Policy Paper, Question # 16).

Please explain why a checked exception applies to the resource and attach relevant supporting documentation (e.g., land purchase documentation; joint planning documents; authorization for temporary occupancy).

The section of the proposed Greenway Passage following I-164 from US 41 to Angel Mounds is currently planned to be constructed on I-164 right-of-way. Currently a shared use agreement exists between the City of Evansville Board of Park Commissioners and INDOT for utilization of the I-164 right-of-way for the Greenway Passage trail. This agreement states that this section of the Greenway Passage if constructed would be a temporary occupancy of highway right-of-way and not subject to Section 4(f).

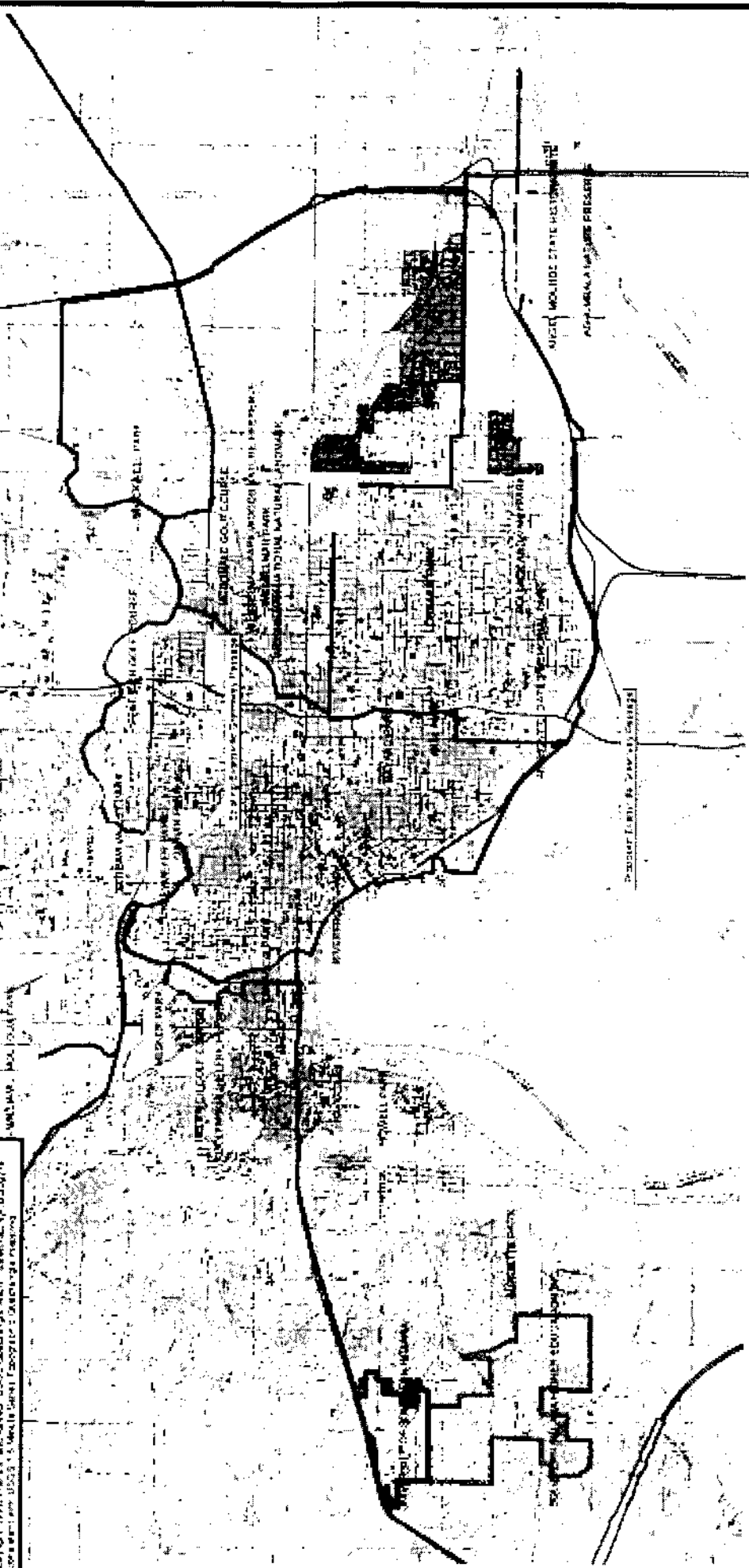
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0.5 0 0.5 miles

1750 1800 1850 1900 1950 2000

10. Do you have any other information that you want to provide to the committee?





Section 4(f) Resource Evaluation
Evansville Greenway Passage

Legend

- Existing
- Proposed
- Proposed Right-of-Way

0 1000 Feet

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Alternative 3
Approximate ROW

Alternative 2
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U.S. Department
of Transportation

**Federal Highway
Administration**

Indiana Division

575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

January 28, 2003

Ms. Rachel Perry, Director of Historic Sites
IDNR State Museum and Historic Sites
650 W. Washington St.
Indianapolis, IN 46204

Re: I-69 Evansville to Henderson Project – Section 4(f) Coordination

Dear Ms. Perry:

I am writing to request your assistance regarding lands within your jurisdiction that may be protected by Section 4(f) of the Department of Transportation Act, 49 U.S.C. § 303(c). This request is being made in connection with the Draft Environmental Impact Statement (DEIS) for the I-69 Evansville to Henderson project. The DEIS is being prepared by the Federal Highway Administration in cooperation with the Indiana Department of Transportation, the Kentucky Transportation Cabinet, and the Evansville Urban Transportation Study.

Section 4(f) protects significant publicly owned parks, recreation areas, and wildlife and waterfowl refuges, and also protects significant historic sites, whether publicly or privately owned. Significant historic sites are those properties that are listed on or determined eligible for the National Register of Historic Places (NRHP). Collectively, the lands protected by Section 4(f) are referred to as "Section 4(f) resources." Section 4(f) resources may not be used for a transportation project unless FHWA finds that (1) there is no prudent and feasible alternative that would avoid the use of such resources, and (2) the selected alternative incorporates all possible planning to minimize harm to those resources.

1. Information Requested

The first step toward achieving compliance with Section 4(f) is to identify each of the Section 4(f) resources that could be used by the alternatives that are being considered in an EIS. With that in mind, we would like to request your assistance in determining whether there are any Section 4(f)-protected lands within your jurisdiction that are located within the study area for this project, including lands located outside the three corridors that are currently under consideration.

We have enclosed a map showing lands within your jurisdiction that we understand may be protected by Section 4(f) and that are located within the study area for this project. With each map, we also have attached a Section 4(f) Applicability Worksheet describing the potential Section 4(f) resource. Please review the enclosed materials and let us know if you have any comments, suggested changes, or corrections. In addition, please also let us know whether you are aware of any other lands within your jurisdiction that are located in the study area and that may be protected under Section 4(f).

In providing your input on these issues, please keep in mind the following guidelines regarding the applicability of Section 4(f). In order for land to be protected under Section 4(f) as a park, recreation area, or refuge, all of the following conditions must be satisfied:

- (1) the land must be formally designated as a park, recreation area, or wildlife or waterfowl refuge, or must have park, recreation, or refuge purposes as one of its "major functions"; *and*
- (2) the land must be publicly owned, or must be subject to a permanent easement that is publicly owned; *and*
- (3) the land must be open to the public; *and*

I-69 Evansville to Henderson EIS
Section 4(f) Coordination for Managed Lands
Formal Section 4(f) Resource Determination Request

Page 2

- (4) the land must possess national, state, or local significance as a park, recreation area, or wildlife or waterfowl refuge.

Please note that these guidelines do not apply to historic resources, which also are protected under Section 4(f). Historic resources are being addressed separately in consultation with the State Historic Preservation Officers for Indiana and Kentucky.

2. Request for Cooperation on Future Actions

In addition to your assistance in identifying existing Section 4(f) resources, we also seek your cooperation with regard to future actions by your agency that could affect the applicability of Section 4(f) to land within the study area for this project. In particular, we request that you coordinate with us prior to taking any of the following actions:

- acquiring any ownership interest, including an easement, in lands located within the study area, particularly if such lands are located within or close to any of the corridors currently under consideration for I-69; or
- formally establishing any new park, recreation area, or refuge within the study area;
- changing the boundaries of any park, recreation area, or refuge within the study area; or
- changing the management designation of any land in a manner that could result in the application of Section 4(f) to that land – e.g., converting land from a non-recreational use to a recreational use.

I should emphasize that we would not necessarily object to any of these actions. We understand that as administrator of these lands, your agency is entitled to engage in any of these actions. However, we would like to ensure that there is an opportunity for coordination before any actions are taken that could result in the creation of additional Section 4(f) resources within any of the corridors under consideration in this study. For example, if additional lands are to be acquired, we could seek to ensure that those lands are “jointly planned” along with the highway project in order to avoid triggering the application of Section 4(f) to those lands.

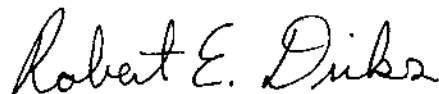
3. Corridor Preservation

We are currently studying three alternatives for completing I-69 between Evansville and Henderson. At this time, none of the alternatives directly uses any Section 4(f)-protected land based on our assessments. As described above, we are requesting your cooperation in preserving each of these corridors for future development of I-69.

Later this year, we expect to identify a single corridor within the study area as the “preferred alternative” for this project. If the preferred alternative includes lands within your jurisdiction, we will be asking for your commitment to reserve the preferred corridor for highway purposes, so that future actions do not inadvertently trigger the application of Section 4(f) late in the NEPA process or after the NEPA process has been completed.

Thank you once again for your assistance in the development of the DEIS for this project. Please provide your response to this letter by February 14, 2003. If you have any questions, please contact Tim Miller, HNTB, Project Manager at 317-917-5356.

Sincerely,
John R. Baxter, P.E.
Division Administrator



By: Robert E. Dirks, P.E.
Environmental Engineer

Enclosures

Copy: Mike Linderman, Manager, Angel Mounds State Historic Site

**I-69 Evansville to Henderson Project
Section 4(f) Applicability Worksheet
for Parks, Recreation Areas, and Refuges**

Background Information

Name of Resource (if any): **Angel Mounds State Historic Site**

Location of Resource and its boundaries: **8215 Pollack Ave., Evansville, IN**

Type of Use (e.g., park, recreation, refuge): **state park and recreation area**

Agency with Jurisdiction: **Indiana Department of Natural Resources (IDNR), State Museum and Historic Sites**

Agency Contact Information: **Mike Linderman, Site Manager**

****The Angel Mounds State Historic Site includes the Angel Mounds National Historic Landmark (NHL) as well as the additional land that has been purchased recently to the west and northeast of the National Register of Historic Places (NRHP) boundary. (See attached map.) The portion within the NRHP boundary is a Section 4(f) resource by virtue of its status as an archaeological site and National Historic Landmark.**

This form focuses on the Section 4(f) status of the Angel Mounds State Historic Site as a park and recreation area. In addition to being a NHL, portions of the Angel Mounds State Historic Site are used as a state park and recreation area.

Section 4(f) Criteria

This form is intended only to determine whether a resource is eligible for Section 4(f) protection as a park, recreation area, or refuge; the applicability of Section 4(f) to historic or archaeological sites is being determined and documented separately in the Section 106 process. The following questions must be answered in the affirmative (as applicable) to find that a property is a Section 4(f) resource. In addition to answering "yes" or "no", please provide the requested information and supporting documentation. Where a telephone conference provides relevant information, the content of the call should be documented and attached to this form.

1. **Formal Designation or Major Use:** **Yes** or No

At the present time, is the land formally designated as a park, recreation area, or wildlife or waterfowl refuge or does the land have as one of its major functions park, recreation, or refuge purposes? Formal designation refers to the act that creates the park, recreation area, or refuge. This land may include wildlife management areas that perform the same function as a refuge. See FHWA Section 4(f) Policy Paper, Questions ## 2A, 18.

Where land is managed for multiple uses, Section 4(f) applies only to the area functioning as or designated for significant park, recreation, or refuge purposes. See 23 C.F.R. § 771.135(d).

If the answer is yes, state the date of designation and describe the method of designation, or if there is no formal designation, describe the major functions of the land. Please attach any supporting documentation, such as the designation document (e.g., EA), the management plan or other planning document indicating major functions or purposes of the resource, and a map of resource boundaries.

The Angel Mounds State Historic Site has been designated as an archaeological site and a NHL. As a whole, this site has not been designated as a park or recreation area, but portions of the property serve recreational purposes—the trails that are located within the NRHP boundary. The parcel located to the northeast of that boundary (north of Pollack Avenue) contains a historic property, but does not have as one of its major functions to be used for park or recreation purposes.

In addition, indicate (and attach any documentation indicating) whether any change in designation or major function is anticipated for the foreseeable future.

IDNR plans to create trails in the future within the portion of the Angel Mounds State Historic Site that is located west of the NRHP boundary. (See map.)

2. Public Ownership: Yes or No

At the present time, is land publicly owned or subject to a publicly owned permanent easement? See 4(f) Policy Paper, Questions ## 2A, 2D.

If the answer is yes, state the owner, type of ownership (e.g., fee simple, easement, or lease), and any conditions on such ownership. Include any information about which parcels are publicly owned and which are privately owned. Please attach a map indicating which parcels are publicly owned and any easements that are present and a copy of any easements available on the land.

The entire Angel Mounds State Historic Site (including the more recently acquired portions) is owned in fee simple by IDNR State Museum and Historic Sites.

In addition, indicate (and attach any documentation indicating) whether any change in public ownership is anticipated (either expanding or contracting) and the anticipated terms and conditions of that ownership. Please include a map of anticipated boundaries.

3. Public Access and Use: Yes or No or Not Applicable

For park and recreation areas: At the present time, is the land open to the general public? Being open to the general public means that the entire public can access the property at any time. Section 4(f) does not apply when access is permitted to select groups (e.g., residents of a public housing project; military and their dependents; students of a school; and students, faculty, and alumni of a college or university). FHWA encourages the

protection of such parks and recreation areas even though 4(f) does not apply. See 4(f) Policy Paper, Question # 2C. Public access is not applicable to refuge areas.

If the answer is yes, explain the public access and use of the land. Please attach any policy or planning document indicating the uses of and any conditions or restrictions on the use of the land.

The portions of the property located south of Pollack Avenue are open to the public. The land located within the NRHP boundary contains an interpretive center and trails for recreation. The recently acquired portion located to the west of the NRHP boundary is open to the public currently for recreation activities.

The parcel located north of Pollack Avenue is closed to the public.

If the answer is no but there is limited access, describe the circumstances under which the land is open to the public (i.e., at certain times of the year or for a select group).

In addition, indicate (and attach any documentation indicating) whether the agency intends to open or restrict the land to the public and if so, the future conditions that will be imposed on public access and usage.

IDNR plans to develop trails within the parcel of land located to the west of the NRHP boundary at some point in the future to provide additional recreation activities for the public.

4. Significance: Yes or No

At the present time, does the land possess national, state, or local significance? Significance means that the land plays an important role in meeting national, state, or local park, recreation, or refuge objectives. See 4(f) Policy Paper Question # 2B; 23 C.F.R. § 771.135(c).

If the answer is yes, describe how this particular land plays an important role in meeting park, recreation, or refuge objectives of the nation, state, or locality in which the land is located. Please attach any supporting documentation (e.g., agency official statement of significance, documentation of telephone calls).

Portions of the Angel Mounds State Historic Site located within the NRHP boundary have local and state significance for recreational purposes; the parcel north of Pollack Avenue does not possess significance as a recreation area.

In addition, indicate (and attach any documentation indicating) whether the significance determination is anticipated to change in the foreseeable future.

The parcel located to the west of the NRHP boundary may become locally significant for recreational purposes upon the development of trails within that parcel.

Recommendation

Current Section 4(f) Status – check **one** of the following:

- X Portions of the Angel Mounds State Historic Site located within the NRHP boundary that serve recreational purposes shall be treated as recreation areas for the purposes of Section 4(f). The parcel located north of Pollack Avenue does not serve recreational purposes and will not be treated as a recreational area for purposes of Section 4(f), although this parcel may be subject to Section 4(f) requirements as it contains a historic resource. Also, within the NRHP boundary, the Angel Mounds State Historic Site is protected under Section 4(f) as a historic and archaeological site.
- ☐ This resource meets all applicable criteria mentioned above. However, it qualifies for one or more of the exceptions on the Section 4(f) Exceptions Checklist. Therefore, Section 4(f) does not apply to this resource. (Attach completed copy of Exceptions Checklist).
- ☐ This resource does not meet all applicable criteria mentioned above. Therefore, Section 4(f) does not apply to this resource.

Potential for Future Change in Section 4(f) Status:

Are there any existing plans that, if implemented, could change the Section 4(f) status of this resource? Examples include plans to acquire public ownership of land, establish a new management designation, or change a boundary. If such plans exist, please describe.

IDNR plans to develop trails within the portion of the Angel Mounds State Historic Site that is located west of the NRHP boundary. This area may then serve recreational purposes and be protected by Section 4(f).

Section 4(f) Resources Exceptions Checklist

Check the exception or exceptions that apply to the land examined in Section 4(f) Applicability Worksheet.

- _____ Late Designation. Land was purchased for transportation purposes prior to designation or change in determination of significance (FHWA Section 4(f) Policy Paper, Question # 7; 23 C.F.R. § 771.135(h)).
- _____ Fairgrounds. Fairgrounds that function primarily for commercial purposes rather than recreational purposes (4(f) Policy Paper, Question # 9).
- _____ School Playgrounds. School playgrounds used only for school activities and functions (4(f) Policy Paper, Question # 10).
- _____ Bikeways. Bikeway that is primarily used for transportation and is an integral part of the local transportation system (4(f) Policy Paper, Question # 13).
- _____ Joint Development. Land is located within a pre-determined right-of-way corridor through the park, recreation area, or refuge where the park, recreation area, or refuge and highway were jointly developed (4(f) Policy Paper, Question # 14).
- _____ Temporary Occupancy. Park or recreational activity occurring as a temporary occupancy of highway right-of-way (4(f) Policy Paper, Question # 16).

Please explain why a checked exception applies to the resource and attach relevant supporting documentation (e.g., land purchase documentation; joint planning documents; authorization for temporary occupancy).

**I-69 Evansville to Henderson Project
Section 4(f) Applicability Worksheet
for Parks, Recreation Areas, and Refuges**

Background Information

Name of Resource (if any): **Ashumbala Nature Preserve**

Location of Resource and its boundaries: **8215 Pollack Ave., Evansville, IN**

Type of Use (e.g., park, recreation, refuge): **Nature Preserve**

Agency with Jurisdiction: **Indiana Department of Natural Resources, State Museum and Historic Sites**

Agency Contact Information: **Mike Linderman, Site Manager**

****The Ashumbala Nature Preserve is included within the National Register of Historic Places (NRHP) boundary of Angel Mounds. The portion within the NRHP boundary is a Section 4(f) resource by virtue of its status as an archaeological site and National Historic Landmark. This form focuses on the Section 4(f) status of the Ashumbala Nature Preserve as a park, recreation area, or refuge.**

Section 4(f) Criteria

This form is intended only to determine whether a resource is eligible for Section 4(f) protection as a park, recreation area, or refuge; the applicability of Section 4(f) to historic or archaeological sites is being determined and documented separately in the Section 106 process. The following questions must be answered in the affirmative (as applicable) to find that a property is a Section 4(f) resource. In addition to answering "yes" or "no", please provide the requested information and supporting documentation. Where a telephone conference provides relevant information, the content of the call should be documented and attached to this form.

1. Formal Designation or Major Use: Yes or No

At the present time, is the land formally designated as a park, recreation area, or wildlife or waterfowl refuge or does the land have as one of its major functions park, recreation, or refuge purposes? Formal designation refers to the act that creates the park, recreation area, or refuge. This land may include wildlife management areas that perform the same function as a refuge. See FHWIA Section 4(f) Policy Paper, Questions ## 2A, 18. Where land is managed for multiple uses, Section 4(f) applies only to the area functioning as or designated for significant park, recreation, or refuge purposes. See 23 C.F.R. § 771.135(d).

If the answer is yes, state the date of designation and describe the method of designation, or if there is no formal designation, describe the major functions of the land. Please attach any

supporting documentation, such as the designation document (e.g., EA), the management plan or other planning document indicating major functions or purposes of the resource, and a map of resource boundaries.

The 63 acres of Ashumbala were designated as a Nature Preserve in 1985, the major use of Ashumbala Nature Preserve is to protect and preserve the floodplain forest and other rare plant species contained within it, particularly a high quality Silver Maple-Cottonwood-Willow forest (see attached Master Plan). The Nature Preserve is not utilized as a park or recreation area. Moreover, the major functions of the Nature Preserve do not include a wildlife or waterfowl refuge because the Preserve was established to preserve plant species rather than wildlife.

In addition, indicate (and attach any documentation indicating) whether any change in designation or major function is anticipated for the foreseeable future.

2. Public Ownership: Yes or No

At the present time, is land publicly owned or subject to a publicly owned permanent easement? See 4(f) Policy Paper, Questions ## 2A, 2D.

If the answer is yes, state the owner, type of ownership (e.g., fee simple, easement, or lease), and any conditions on such ownership. Include any information about which parcels are publicly owned and which are privately owned. Please attach a map indicating which parcels are publicly owned and any easements that are present and a copy of any easements available on the land.

Fee Simple Ownership by IDNR, administered by the State Museum and Historic Sites.

In addition, indicate (and attach any documentation indicating) whether any change in public ownership is anticipated (either expanding or contracting) and the anticipated terms and conditions of that ownership. Please include a map of anticipated boundaries.

3. Public Access and Use: Yes or No or Not Applicable

For park and recreation areas: At the present time, is the land open to the general public? Being open to the general public means that the entire public can access the property at any time. Section 4(f) does not apply when access is permitted to select groups (e.g., residents of a public housing project; military and their dependents; students of a school; and students, faculty, and alumni of a college or university). FHWA encourages the protection of such parks and recreation areas even though 4(f) does not apply. See 4(f) Policy Paper, Question # 2C. Public access is not applicable to refuge areas.

If the answer is yes, explain the public access and use of the land. Please attach any policy or planning document indicating the uses of and any conditions or restrictions on the use of the land.

The Nature Preserve is open by permission only.

If the answer is no but there is limited access, describe the circumstances under which the land is open to the public (i.e., at certain times of the year or for a select group).

In addition, indicate (and attach any documentation indicating) whether the agency intends to open or restrict the land to the public and if so, the future conditions that will be imposed on public access and usage.

4. Significance: Yes or No

At the present time, does the land possess national, state, or local significance? Significance means that the land plays an important role in meeting national, state, or local park, recreation, or refuge objectives. See 4(f) Policy Paper Question # 2B; 23 C.F.R. § 771.135(c).

If the answer is yes, describe how this particular land plays an important role in meeting park, recreation, or refuge objectives of the nation, state, or locality in which the land is located. Please attach any supporting documentation (e.g., agency official statement of significance, documentation of telephone calls).

Although the Nature Preserve is intended to protect a variety of plant species, the property is not significant for local or regional wildlife or waterfowl refuge purposes.

In addition, indicate (and attach any documentation indicating) whether the significance determination is anticipated to change in the foreseeable future.

Recommendation

Current Section 4(f) Status – check one of the following:

- ☐ This resource meets all applicable criteria mentioned above, and none of the exceptions on the Section 4(f) Exceptions Checklist apply. Therefore, Section 4(f) does apply to this resource.
- ☐ This resource meets all applicable criteria mentioned above. However, it qualifies for one or more of the exceptions on the Section 4(f) Exceptions Checklist. Therefore, Section 4(f) does not apply to this resource. (Attach completed copy of Exceptions Checklist).
- X This resource does not meet all applicable criteria mentioned above. Therefore, Section 4(f) does not apply to this resource as a park, recreation area, or wildlife or waterfowl refuge. However, this property is protected under Section 4(f) as a historic and archaeological site because of its location within the NRHP boundary of the Angel Mounds State Historic Site.

Potential for Future Change in Section 4(f) Status:

Are there any existing plans that, if implemented, could change the Section 4(f) status of this resource? Examples include plans to acquire public ownership of land, establish a new management designation, or change a boundary. If such plans exist, please describe.

Section 4(f) Resources Exceptions Checklist

Check the exception or exceptions that apply to the land examined in Section 4(f) Applicability Worksheet.

- ☐ Late Designation. Land was purchased for transportation purposes prior to designation or change in determination of significance (FHWA Section 4(f) Policy Paper, Question # 7; 23 C.F.R. § 771.135(h)).
- ☐ Fairgrounds. Fairgrounds that function primarily for commercial purposes rather than recreational purposes (4(f) Policy Paper, Question # 9).
- ☐ School Playgrounds. School playgrounds used only for school activities and functions (4(f) Policy Paper, Question # 10).
- ☐ Bikeways. Bikeway that is primarily used for transportation and is an integral part of the local transportation system (4(f) Policy Paper, Question # 13).
- ☐ Joint Development. Land is located within a pre-determined right-of-way corridor through the park, recreation area, or refuge where the park, recreation area, or refuge and highway were jointly developed (4(f) Policy Paper, Question # 14).
- ☐ Temporary Occupancy. Park or recreational activity occurring as a temporary occupancy of highway right-of-way (4(f) Policy Paper, Question # 16).

Please explain why a checked exception applies to the resource and attach relevant supporting documentation (e.g., land purchase documentation; joint planning documents; authorization for temporary occupancy).

MASTER PLAN FOR
ASHUMBALA NATURE PRESERVE

The following is hereby adopted as the Master Plan for Ashumbala Nature Preserve, being dedicated as a nature preserve.

1. This Master Plan applies to a Nature Preserve containing a high quality Silver Maple-Cottonwood-Willow floodplain forest and several rare species of plants.
2. This Nature Preserve is owned by the State of Indiana, Department of Natural Resources and is under the administration of the Division of Museums and Memorials. It is located on Angel Mounds State Memorial in Vanderburgh and Warrick Counties.
3. The management, custody and use of the Nature Preserve shall be the joint responsibility of the Division of Museums and Memorials (Administrator) and the Division of Nature Preserves pursuant to the Nature Preserves Act, the Articles of Dedication of the Nature Preserve, and this Master Plan. Maintenance of the Nature Preserve shall be the responsibility of the Division of Museums and Memorials. All provisions of this Master Plan shall be interpreted in the light of the basic intention of this Master Plan that the Nature Preserve shall be managed to maintain its natural ecological conditions in perpetuity. Specifically, the main purpose of this management shall be to protect and preserve the floodplain forest and the rare species contained within the boundaries of the Nature Preserve.
4. Water levels shall not be altered intentionally except when essential for the maintenance of existing natural conditions, or in regard to existing legal ditches or other legal activities that were permitted prior to this dedication.
5. Erosion and soil deposition may be controlled only if such processes are shown to be detrimental to the Nature Preserve or the natural features it is dedicated to protect, in consultation with the Division of Nature Preserves.
6. No action shall be taken to alter natural growth or natural features in the Preserve for the purpose of enhancing the beauty, neatness or amenities of the Preserve or any part thereof.
7. Except as permitted in Sections 8, 9, and 10 of this Master Plan,

there shall be no cutting of grass, brush or other vegetation, thinning of trees, felling of dead trees, opening of scenic vistas or control of plants or animals within the boundaries of this Nature Preserve.

8. Vegetation may be cut to establish or maintain authorized trails and to eliminate safety hazards to persons using said trails.

However, all such cut materials must be left within the Preserve to decompose naturally.

9. Species of plants and animals which are declared noxious, and aggressives exotics which are detrimental to the quality of the Nature Preserve, may be controlled in accordance with State Law, with the joint written approval of the Directors of both Divisions.

10. Control of biotic succession by artificial means may be undertaken only if (a) such action is necessary for the preservation of a particular species and (b) such action is determined by the Division of Nature Preserves to be consistent with the purpose of the preserve. Mowing, cutting of shrubs and trees, use of chemicals, and other means may be employed for such control, but in each case control measures shall be applied conservatively and with caution and only to such parts of the preserve as is necessary. Such action requires the written approval of the Directors of both Divisions.

11. All fires shall be brought under control as quickly as possible. After a fire, there shall be no clean-up, fire hazard reduction, or replanting except for safety purposes.

12. Except as provided in Sections 13, 14, 15, 16, and 17 of this Master Plan, (a) there shall be no intentional introduction of any material product or object into the Nature Preserve and (b) there shall be no removal or use of any natural material, product, or object from the Nature Preserve.

13. Boundary markers and boundary fences may be placed as needed around the perimeter. Foot trails, foot bridges, boardwalks, trail markers and interpretive signs may be constructed and maintained in consultation with the Division of Nature Preserves.

14. Native plants and animals may be introduced into or removed from

- the nature preserve as provided here below. The provisions of this paragraph are not to be interpreted that this preserve may be used as either a source or a refuge for widespread dispersal of plants and animals into and out of the preserve. It is intended for those species whose populations are few and small and thus vulnerable to population declines and possible extirpation from the State. The introduction or removal of plants and animals shall be limited to species which are considered rare, threatened or endangered in Indiana according to the most current listing by the Department of Natural Resources. Provisions of this paragraph shall be implemented only after careful consideration by the Division of Nature Preserves, and with the joint written approval of the Directors of both Divisions.
15. Plants, or any parts thereof, described in Section 9 of this Master Plan may be removed from the Preserve to prevent further infestations of the Preserve by these noxious or alien species.
16. Individual specimens of selected species of plants and animals may be removed from the Nature Preserve by holders of scientific permits issued jointly by both of the concerned Divisions. Specimens shall be collected only in accordance with the regulations contained on said permits, and only if their taking does not jeopardize the species population.
17. At the discretion of the Administrator, nonliving materials which, in origin, have been designed, crafted or manufactured by humans may be removed from the Preserve. Natural materials, dumped by the Ohio River, may be removed if such materials are detrimental to the Preserve (at the discretion of the Division of Nature Preserves).
18. No structure, easement, right-of-way or other intrusion, development, impairment, disturbance or use which is not permitted by this Master Plan shall be established or be allowed to continue, excepting only the continuance of a use or uses of easements which use existed on the date of this dedication.
19. The primary visitor activities in the Preserve shall be walking, observing and nature study. These activities shall be permitted only to the extent that the Preserve can tolerate them without substantial deterioration. Visitors without permits for research or collecting

activities shall generally be permitted only on trails and may otherwise be restricted in movement when deemed advisable.

20. Scientific and educational activities may be permitted only to the extent that the Preserve can tolerate them without substantial deterioration. Collecting and Research Permits will be issued only for scientific purposes, and require the written approval of the Directors of both Divisions.

21. Ingress and egress shall be allowed only at such locations and under such conditions as are established from time to time by the Administrator, in consultation with the Division of Nature Preserves.

22. Except to the extent permitted in this Master Plan, the following activities are prohibited, but their inclusion herein shall not restrict the right of the Administrator to prohibit other activities it considers inconsistent with this Master Plan or the purposes of the Preserve: timbering, grazing by domestic animals, farming, the gathering of firewood or other plant products, mining and quarrying, the harvesting of fruits, nuts, mushrooms, fur bearers or other animals, the dumping, burying or spreading of garbage, trash or other waste material, picnicking, camping, fires, games, sports, the use of vehicles (except for emergency and service uses), horseback riding, hunting, trapping, the removal, disturbance, molestation or defacement of minerals, plants, animals, or natural features and the gathering of specimens except by permit.

IN WITNESS THEREOF, the Department of Natural Resources of the State of Indiana has adopted this Master Plan on the date appearing below.

DATED: July 25 1975 STATE OF INDIANA
NATURAL RESOURCES COMMISSION

ATTEST:

James H. Lahey
James H. Lahey, Chairman

James M. Ridenour
James M. Ridenour, Secretary

This Instrument Prepared by Stephen L. Lucas, Attorney at Law.

Alternative 2
Utilizing Existing I-164

ANGEL MOUNDS STATE HISTORIC SITE

ASHUMBALA NATURE PRESERVE

Approximate Right-of-Way
for Alternative 3

Current Recreational Area Boundary

Proposed Future
Recreational Area Boundary



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Section 4(f) Resource Evaluation Angel Mounds State Historic Site & Ashumbala Nature Preserve

Legend

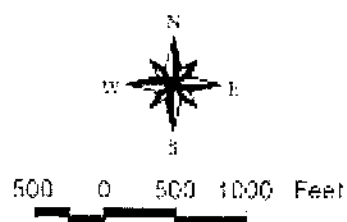
- Angel Mounds State Historic Site & Ashumbala Nature Preserve
- Angel Mounds National Register Boundary
- Alternative 3 Approximate Right-of-Way
- Angel Mounds Recreational Area Boundary
- Future Angel Mounds Recreational Area Boundary

Alternative 2
Utilizing Existing I-164

Approximate Right-of-Way
for Alternative 3

Current Recreational Area Boundary

Proposed Future
Recreational Area Boundary



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Section 4(f) Resource Evaluation Angel Mounds State Historic Site & Ashumbala Nature Preserve

Legend



Angel Mounds State Historic Site
& Ashumbala Nature Preserve



Angel Mounds National Register Boundary



Alternative 3 Approximate Right-of-Way



Angel Mounds Recreational Area Boundary



Future Angel Mounds Recreational Area Boundary



U.S. Department
of Transportation

**Federal Highway
Administration**

Indiana Division

575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

January 28, 2003

Mr. Glen Salmon, Director
IDNR Division of Fish and Wildlife
402 W. Washington St. Rm. 273
Indianapolis, IN 46204

Re: I-69 Evansville to Henderson Project – Section 4(f) Coordination

Dear Mr. Salmon:

I am writing to request your assistance regarding lands within your jurisdiction that may be protected by Section 4(f) of the Department of Transportation Act, 49 U.S.C. § 303(c). This request is being made in connection with the Draft Environmental Impact Statement (DEIS) for the I-69 Evansville to Henderson project. The DEIS is being prepared by the Federal Highway Administration in cooperation with the Indiana Department of Transportation, the Kentucky Transportation Cabinet, and the Evansville Urban Transportation Study.

Section 4(f) protects significant publicly owned parks, recreation areas, and wildlife and waterfowl refuges, and also protects significant historic sites, whether publicly or privately owned. Significant historic sites are those properties that are listed on or determined eligible for the National Register of Historic Places (NRHP). Collectively, the lands protected by Section 4(f) are referred to as "Section 4(f) resources." Section 4(f) resources may not be used for a transportation project unless FHWA finds that (1) there is no prudent and feasible alternative that would avoid the use of such resources, and (2) the selected alternative incorporates all possible planning to minimize harm to those resources.

1. Information Requested

The first step toward achieving compliance with Section 4(f) is to identify each of the Section 4(f) resources that could be used by the alternatives that are being considered in an EIS. With that in mind, we would like to request your assistance in determining whether there are any Section 4(f)-protected lands within your jurisdiction that are located within the study area for this project, including lands located outside the three corridors that are currently under consideration.

We have enclosed a map showing lands within your jurisdiction that we understand may be protected by Section 4(f) and that are located within the study area for this project. With each map, we also have attached a Section 4(f) Applicability Worksheet describing the potential Section 4(f) resource. Please review the enclosed materials and let us know if you have any comments, suggested changes, or corrections. In addition, please also let us know whether you are aware of any other lands within your jurisdiction that are located in the study area and that may be protected under Section 4(f).

In providing your input on these issues, please keep in mind the following guidelines regarding the applicability of Section 4(f). In order for land to be protected under Section 4(f) as a park, recreation area, or refuge, all of the following conditions must be satisfied:

- (1) the land must be formally designated as a park, recreation area, or wildlife or waterfowl refuge, or must have park, recreation, or refuge purposes as one of its "major functions"; *and*
- (2) the land must be publicly owned, or must be subject to a permanent easement that is publicly owned; *and*
- (3) the land must be open to the public; *and*

I-69 Evansville to Henderson EIS
Section 4(f) Coordination for Managed Lands
Formal Section 4(f) Resource Determination Request

Page 2

- (4) the land must possess national, state, or local significance as a park, recreation area, or wildlife or waterfowl refuge.

Please note that these guidelines do not apply to historic resources, which also are protected under Section 4(f). Historic resources are being addressed separately in consultation with the State Historic Preservation Officers for Indiana and Kentucky.

2. Request for Cooperation on Future Actions

In addition to your assistance in identifying existing Section 4(f) resources, we also seek your cooperation with regard to future actions by your agency that could affect the applicability of Section 4(f) to land within the study area for this project. In particular, we request that you coordinate with us prior to taking any of the following actions:

- acquiring any ownership interest, including an easement, in lands located within the study area, particularly if such lands are located within or close to any of the corridors currently under consideration for I-69; or
- formally establishing any new park, recreation area, or refuge within the study area; or
- changing the boundaries of any park, recreation area, or refuge within the study area; or
- changing the management designation of any land in a manner that could result in the application of Section 4(f) to that land – e.g., converting land from a non-recreational use to a recreational use.

I should emphasize that we would not necessarily object to any of these actions. We understand that as administrator of these lands, your agency is entitled to engage in any of these actions. However, we would like to ensure that there is an opportunity for coordination before any actions are taken that could result in the creation of additional Section 4(f) resources within any of the corridors under consideration in this study. For example, if additional lands are to be acquired, we could seek to ensure that those lands are “jointly planned” along with the highway project in order to avoid triggering the application of Section 4(f) to those lands.

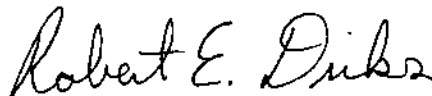
3. Corridor Preservation

We are currently studying three alternatives for completing I-69 between Evansville and Henderson. At this time, none of the alternatives directly uses any Section 4(f)-protected land based on our assessments. As described above, we are requesting your cooperation in preserving each of these corridors for future development of I-69.

Later this year, we expect to identify a single corridor within the study area as the “preferred alternative” for this project. If the preferred alternative includes lands within your jurisdiction, we will be asking for your commitment to reserve the preferred corridor for highway purposes, so that future actions do not inadvertently trigger the application of Section 4(f) late in the NEPA process or after the NEPA process has been completed.

Thank you once again for your assistance in the development of the DEIS for this project. Please provide your response to this letter by February 14, 2003. If you have any questions, please contact Tim Miller, HNTB, Project Manager at 317-917-5356.

Sincerely,
John R. Baxter, P.E.
Division Administrator



By: Robert E. Dirks, P.E.
Environmental Engineer

Enclosures

Copy: Nate Levitte, Manager, Bluegrass Fish and Wildlife Area

**1-69 Evansville to Henderson Project
Section 4(f) Applicability Worksheet
for Parks, Recreation Areas, and Refuges**

Background Information

Name of Resource (if any): **Blue Grass Fish and Wildlife Area**

Location of Resource and its boundaries: **Boonville-New Harmony Rd., Elberfeld, IN**

Type of Use (e.g., park, recreation, refuge): **State Fish and Wildlife Area (recreation)**

Agency with Jurisdiction: **Indiana Department of Natural Resources (IDNR), Division of Fish and Wildlife**

Agency Contact Information: **Nate Levitte, Manager**

Section 4(f) Criteria

This form is intended only to determine whether a resource is eligible for Section 4(f) protection as a park, recreation area, or refuge; the applicability of Section 4(f) to historic or archaeological sites is being determined and documented separately in the Section 106 process. The following questions must be answered in the affirmative (as applicable) to find that a property is a Section 4(f) resource. In addition to answering "yes" or "no", please provide the requested information and supporting documentation. Where a telephone conference provides relevant information, the content of the call should be documented and attached to this form.

1. Formal Designation or Major Use: Yes or No

At the present time, is the land formally designated as a park, recreation area, or wildlife or waterfowl refuge or does the land have as one of its major functions park, recreation, or refuge purposes? Formal designation refers to the act that creates the park, recreation area, or refuge. This land may include wildlife management areas that perform the same function as a refuge. See FHWA Section 4(f) Policy Paper, Questions ## 2A, 18. Where land is managed for multiple uses, Section 4(f) applies only to the area functioning as or designated for significant park, recreation, or refuge purposes. See 23 C.F.R. § 771.135(d).

If the answer is yes, state the date of designation and describe the method of designation, or if there is no formal designation, describe the major functions of the land. Please attach any supporting documentation, such as the designation document (e.g., EA), the management plan or other planning document indicating major functions or purposes of the resource, and a map of resource boundaries.

Major Use of Blue Grass Fish and Wildlife Area is as a recreation area.

In addition, indicate (and attach any documentation indicating) whether any change in designation or major function is anticipated for the foreseeable future.

2. **Public Ownership:** Yes or No

At the present time, is land publicly owned or subject to a publicly owned permanent easement? See 4(f) Policy Paper, Questions ## 2A, 2D.

If the answer is yes, state the owner, type of ownership (e.g., fee simple, easement, or lease), and any conditions on such ownership. Include any information about which parcels are publicly owned and which are privately owned. Please attach a map indicating which parcels are publicly owned and any easements that are present and a copy of any easements available on the land.

Fee Simple Ownership by IDNR, administered by the Division of Fish and Wildlife.

In addition, indicate (and attach any documentation indicating) whether any change in public ownership is anticipated (either expanding or contracting) and the anticipated terms and conditions of that ownership. Please include a map of anticipated boundaries.

3. **Public Access and Use:** Yes or No or Not Applicable

For park and recreation areas: At the present time, is the land open to the general public? Being open to the general public means that the entire public can access the property at any time. Section 4(f) does not apply when access is permitted to select groups (e.g., residents of a public housing project; military and their dependents; students of a school; and students, faculty, and alumni of a college or university). FHWA encourages the protection of such parks and recreation areas even though 4(f) does not apply. See 4(f) Policy Paper, Question # 2C. Public access is not applicable to refuge areas.

If the answer is yes, explain the public access and use of the land. Please attach any policy or planning document indicating the uses of and any conditions or restrictions on the use of the land.

Property is open to the general public.

If the answer is no but there is limited access, describe the circumstances under which the land is open to the public (i.e., at certain times of the year or for a select group).

In addition, indicate (and attach any documentation indicating) whether the agency intends to open or restrict the land to the public and if so, the future conditions that will be imposed on public access and usage.

4. Significance: Yes or No

At the present time, does the land possess national, state, or local significance? Significance means that the land plays an important role in meeting national, state, or local park, recreation, or refuge objectives. See 4(f) Policy Paper Question # 2B; 23 C.F.R. § 771.135(c).

If the answer is yes, describe how this particular land plays an important role in meeting park, recreation, or refuge objectives of the nation, state, or locality in which the land is located. Please attach any supporting documentation (e.g., agency official statement of significance, documentation of telephone calls).

Property is of Local significance as a recreation area.

In addition, indicate (and attach any documentation indicating) whether the significance determination is anticipated to change in the foreseeable future.

Recommendation

Current Section 4(f) Status – check one of the following:

- X This resource meets all applicable criteria mentioned above, and none of the exceptions on the Section 4(f) Exceptions Checklist apply. Therefore, Section 4(f) does apply to this resource.
- ☐ This resource meets all applicable criteria mentioned above. However, it qualifies for one or more of the exceptions on the Section 4(f) Exceptions Checklist. Therefore, Section 4(f) does not apply to this resource. (Attach completed copy of Exceptions Checklist).
- ☐ This resource does not meet all applicable criteria mentioned above. Therefore, Section 4(f) does not apply to this resource.

Potential for Future Change in Section 4(f) Status:

Are there any existing plans that, if implemented, could change the Section 4(f) status of this resource? Examples include plans to acquire public ownership of land, establish a new management designation, or change a boundary. If such plans exist, please describe.

Section 4(f) Resources Exceptions Checklist

Check the exception or exceptions that apply to the land examined in Section 4(f) Applicability Worksheet.

- _____ Late Designation. Land was purchased for transportation purposes prior to designation or change in determination of significance (FHWA Section 4(f) Policy Paper, Question # 7; 23 C.F.R. § 771.135(h)).
- _____ Fairgrounds. Fairgrounds that function primarily for commercial purposes rather than recreational purposes (4(f) Policy Paper, Question # 9).
- _____ School Playgrounds. School playgrounds used only for school activities and functions (4(f) Policy Paper, Question # 10).
- _____ Bikeways. Bikeway that is primarily used for transportation and is an integral part of the local transportation system (4(f) Policy Paper, Question # 13).
- _____ Joint Development. Land is located within a pre-determined right-of-way corridor through the park, recreation area, or refuge where the park, recreation area, or refuge and highway were jointly developed (4(f) Policy Paper, Question # 14).
- _____ Temporary Occupancy. Park or recreational activity occurring as a temporary occupancy of highway right-of-way (4(f) Policy Paper, Question # 16).

Please explain why a checked exception applies to the resource and attach relevant supporting documentation (e.g., land purchase documentation; joint planning documents; authorization for temporary occupancy).

Groundwater Site 3
(PACIFIC NORTHWEST)

Groundwater monitoring area

Blue Grass Fish and Wildlife Area boundary

BLUE GRASS FISH AND WILDLIFE AREA

6

Section 4(f) Resource Evaluation
Blue Grass Fish and Wildlife Area



500 0 500 1000 Feet



U.S. Department
of Transportation
**Federal Highway
Administration**

Indiana Division

575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

January 28, 2003

Mr. Tim Sheehan, State Forest Program Coordinator
Kentucky Division of Forestry
627 Commanche Trail
Frankfort, KY 40601

Re: 1-69 Evansville to Henderson Project – Section 4(f) Coordination

Dear Mr. Sheehan:

I am writing to request your assistance regarding lands within your jurisdiction that may be protected by Section 4(f) of the Department of Transportation Act, 49 U.S.C. § 303(c). This request is being made in connection with the Draft Environmental Impact Statement (DEIS) for the I-69 Evansville to Henderson project. The DEIS is being prepared by the Federal Highway Administration in cooperation with the Indiana Department of Transportation, the Kentucky Transportation Cabinet, and the Evansville Urban Transportation Study.

Section 4(f) protects significant publicly owned parks, recreation areas, and wildlife and waterfowl refuges, and also protects significant historic sites, whether publicly or privately owned. Significant historic sites are those properties that are listed on or determined eligible for the National Register of Historic Places (NRHP). Collectively, the lands protected by Section 4(f) are referred to as "Section 4(f) resources." Section 4(f) resources may not be used for a transportation project unless FHWA finds that (1) there is no prudent and feasible alternative that would avoid the use of such resources, and (2) the selected alternative incorporates all possible planning to minimize harm to those resources.

1. Information Requested

The first step toward achieving compliance with Section 4(f) is to identify each of the Section 4(f) resources that could be used by the alternatives that are being considered in an EIS. With that in mind, we would like to request your assistance in determining whether there are any Section 4(f)-protected lands within your jurisdiction that are located within the study area for this project, including lands located outside the three corridors that are currently under consideration.

We have enclosed a map showing lands within your jurisdiction that we understand may be protected by Section 4(f) and that are located within the study area for this project. With each map, we also have attached a Section 4(f) Applicability Worksheet describing the potential Section 4(f) resource. Please review the enclosed materials and let us know if you have any comments, suggested changes, or corrections. In addition, please also let us know whether you are aware of any other lands within your jurisdiction that are located in the study area and that may be protected under Section 4(f).

In providing your input on these issues, please keep in mind the following guidelines regarding the applicability of Section 4(f). In order for land to be protected under Section 4(f) as a park, recreation area, or refuge, all of the following conditions must be satisfied:

- (1) the land must be formally designated as a park, recreation area, or wildlife or waterfowl refuge, or must have park, recreation, or refuge purposes as one of its "major functions"; *and*
- (2) the land must be publicly owned, or must be subject to a permanent easement that is publicly owned; *and*
- (3) the land must be open to the public; *and*

- (4) the land must possess national, state, or local significance as a park, recreation area, or wildlife or waterfowl refuge.

Please note that these guidelines do not apply to historic resources, which also are protected under Section 4(f). Historic resources are being addressed separately in consultation with the State Historic Preservation Officers for Indiana and Kentucky.

2. Request for Cooperation on Future Actions

In addition to your assistance in identifying existing Section 4(f) resources, we also seek your cooperation with regard to future actions by your agency that could affect the applicability of Section 4(f) to land within the study area for this project. In particular, we request that you coordinate with us prior to taking any of the following actions:

- acquiring any ownership interest, including an easement, in lands located within the study area, particularly if such lands are located within or close to any of the corridors currently under consideration for I-69; or
- formally establishing any new park, recreation area, or refuge within the study area;
- changing the boundaries of any park, recreation area, or refuge within the study area; or
- changing the management designation of any land in a manner that could result in the application of Section 4(f) to that land e.g., converting land from a non-recreational use to a recreational use.

I should emphasize that we would not necessarily object to any of these actions. We understand that as administrator of these lands, your agency is entitled to engage in any of these actions. However, we would like to ensure that there is an opportunity for coordination before any actions are taken that could result in the creation of additional Section 4(f) resources within any of the corridors under consideration in this study. For example, if additional lands are to be acquired, we could seek to ensure that those lands are "jointly planned" along with the highway project in order to avoid triggering the application of Section 4(f) to those lands.

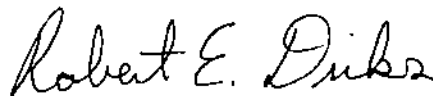
3. Corridor Preservation

We are currently studying three alternatives for completing I-69 between Evansville and Henderson. At this time, none of the alternatives directly uses any Section 4(f)-protected land. As described above, we are requesting your cooperation in preserving each of these corridors for future development of I-69.

Later this year, we expect to identify a single corridor within the study area as the "preferred alternative" for this project. If the preferred alternative includes lands within your jurisdiction, we will be asking for your commitment to reserve the preferred corridor for highway purposes, so that future actions do not inadvertently trigger the application of Section 4(f) late in the NEPA process or after the NEPA process has been completed.

Thank you once again for your assistance in the development of the DEIS for this project. Please provide your response to this letter by February 14, 2003. If you have any questions, please contact Tim Miller, HNTB, Project Manager at 317-917-5356.

Sincerely,
John R. Baxter, P.E.
Division Administrator



By: Robert E. Dirks, P.E.
Environmental Engineer

Enclosures

**I-69 Evansville to Henderson Project
Section 4(f) Applicability Worksheet
for Parks, Recreation Areas, and Refuges**

Background Information

Name of Resource (if any): **Green River State Forest**

Location of Resource and its boundaries: **Green River Road, Henderson, KY (see map)**

Type of Use (e.g., park, recreation, refuge): **State Forest (recreation)**

Agency with Jurisdiction: **Kentucky Division of Forestry**

Agency Contact Information: **Tim Sheehan, State Forest Program Coordinator**

Section 4(f) Criteria

This form is intended only to determine whether a resource is eligible for Section 4(f) protection as a park, recreation area, or refuge; the applicability of Section 4(f) to historic or archaeological sites is being determined and documented separately in the Section 106 process. The following questions must be answered in the affirmative (as applicable) to find that a property is a Section 4(f) resource. In addition to answering "yes" or "no", please provide the requested information and supporting documentation. Where a telephone conference provides relevant information, the content of the call should be documented and attached to this form.

1. Formal Designation or Major Use: Yes or No

At the present time, is the land formally designated as a park, recreation area, or wildlife or waterfowl refuge or does the land have as one of its major functions park, recreation, or refuge purposes? Formal designation refers to the act that creates the park, recreation area, or refuge. This land may include wildlife management areas that perform the same function as a refuge. See FHWA Section 4(f) Policy Paper, Questions ## 2A, 18. Where land is managed for multiple uses, Section 4(f) applies only to the area functioning as or designated for significant park, recreation, or refuge purposes. See 23 C.F.R. § 771.135(d).

If the answer is yes, state the date of designation and describe the method of designation, or if there is no formal designation, describe the major functions of the land. Please attach any supporting documentation, such as the designation document (e.g., EA), the management plan or other planning document indicating major functions or purposes of the resource, and a map of resource boundaries.

Property is managed for multiple uses including most recreational uses such as hiking, hunting and fishing.

In addition, indicate (and attach any documentation indicating) whether any change in designation or major function is anticipated for the foreseeable future.

2. Public Ownership: Yes or No

At the present time, is land publicly owned or subject to a publicly owned permanent easement? See 4(f) Policy Paper, Questions ## 2A, 2D.

If the answer is yes, state the owner, type of ownership (e.g., fee simple, easement, or lease), and any conditions on such ownership. Include any information about which parcels are publicly owned and which are privately owned. Please attach a map indicating which parcels are publicly owned and any easements that are present and a copy of any easements available on the land.

Fee simple ownership of two tracts by Kentucky Division of Forestry. Nine additional tracts are identified for purchase that are still under private ownership and not managed by the Division of Forestry (see attached map).

In addition, indicate (and attach any documentation indicating) whether any change in public ownership is anticipated (either expanding or contracting) and the anticipated terms and conditions of that ownership. Please include a map of anticipated boundaries.

3. Public Access and Use: Yes or No or Not Applicable

For park and recreation areas: At the present time, is the land open to the general public? Being open to the general public means that the entire public can access the property at any time. Section 4(f) does not apply when access is permitted to select groups (e.g., residents of a public housing project; military and their dependents; students of a school; and students, faculty, and alumni of a college or university). FHWA encourages the protection of such parks and recreation areas even though 4(f) does not apply. See 4(f) Policy Paper, Question # 2C. Public access is not applicable to refuge areas.

If the answer is yes, explain the public access and use of the land. Please attach any policy or planning document indicating the uses of and any conditions or restrictions on the use of the land.

Property currently owned by the Division of Forestry is open to the general public for most recreational uses. Other tracts still privately owned have no public access and are not managed.

If the answer is no but there is limited access, describe the circumstances under which the land is open to the public (i.e., at certain times of the year or for a select group).

In addition, indicate (and attach any documentation indicating) whether the agency intends to open or restrict the land to the public and if so, the future conditions that will be imposed on public access and usage.

4. **Significance:** **Yes** or **No**

At the present time, does the land possess national, state, or local significance? Significance means that the land plays an important role in meeting national, state, or local park, recreation, or refuge objectives. See 4(f) Policy Paper Question # 2B; 23 C.F.R. § 771.135(c).

If the answer is yes, describe how this particular land plays an important role in meeting park, recreation, or refuge objectives of the nation, state, or locality in which the land is located. Please attach any supporting documentation (e.g., agency official statement of significance, documentation of telephone calls).

The two tracts owned by the Kentucky Division of Forestry are locally significant as recreation areas.

In addition, indicate (and attach any documentation indicating) whether the significance determination is anticipated to change in the foreseeable future.

Recommendation

Current Section 4(f) Status – check one of the following:

- X The two tracks of this resource owned by the Kentucky Division of Forestry serve recreational purposes, meet all applicable criteria mentioned above, and none of the exceptions on the Section 4(f) Exceptions Checklist apply. Therefore, Section 4(f) does apply to the portions of this resource owned by the Kentucky Division of Forestry and used for recreational purposes.
- ☐ This resource meets all applicable criteria mentioned above. However, it qualifies for one or more of the exceptions on the Section 4(f) Exceptions Checklist. Therefore, Section 4(f) does not apply to this resource. (Attach completed copy of Exceptions Checklist).
- ☐ This resource does not meet all applicable criteria mentioned above. Therefore, Section 4(f) does not apply to this resource.

Potential for Future Change in Section 4(f) Status:

Are there any existing plans that, if implemented, could change the Section 4(f) status of this resource? Examples include plans to acquire public ownership of land, establish a new management designation, or change a boundary. If such plans exist, please describe.

Nine additional tracts are identified for purchase by the Division of Forestry and currently offers have been made on all. However, the first priority for additional acquisition are the two Louisville Gas & Electric (LG&E) tracts. Negotiations are currently ongoing between the Division of Forestry and LG&E.

Section 4(f) Resources Exceptions Checklist

Check the exception or exceptions that apply to the land examined in Section 4(f) Applicability Worksheet.

- _____ Late Designation. Land was purchased for transportation purposes prior to designation or change in determination of significance (FHWA Section 4(f) Policy Paper, Question # 7; 23 C.F.R. § 771.135(h)).
- _____ Fairgrounds. Fairgrounds that function primarily for commercial purposes rather than recreational purposes (4(f) Policy Paper, Question # 9).
- _____ School Playgrounds. School playgrounds used only for school activities and functions (4(f) Policy Paper, Question # 10).
- _____ Bikeways. Bikeway that is primarily used for transportation and is an integral part of the local transportation system (4(f) Policy Paper, Question # 13).
- _____ Joint Development. Land is located within a pre-determined right-of-way corridor through the park, recreation area, or refuge where the park, recreation area, or refuge and highway were jointly developed (4(f) Policy Paper, Question # 14).
- _____ Temporary Occupancy. Park or recreational activity occurring as a temporary occupancy of highway right-of-way (4(f) Policy Paper, Question # 16).

Please explain why a checked exception applies to the resource and attach relevant supporting documentation (e.g., land purchase documentation; joint planning documents; authorization for temporary occupancy).





U.S. Department
of Transportation
**Federal Highway
Administration**

Indiana Division

575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

December 27, 2002

SUBJECT: I-69 Evansville, IN to Henderson, KY – Section 106 Consulting Party Meeting
Formal Invitation to Consulting Parties

Dear Consulting Party:

The Federal Highway Administration (FHWA), in cooperation with the Indiana Department of Transportation, the Kentucky Transportation Cabinet and the Evansville Urban Transportation Study is conducting an *Environmental Impact Statement* for a new Interstate Route 69 between Evansville, IN and Henderson, KY. This study will include compliance with Section 106 of the National Historic Preservation Act.

As a Section 106 consulting party, you are cordially invited to participate in the Section 106 process. Our first consulting party meeting has been scheduled for Friday, January 17th from 11am-1pm CST. The following is the location of the meeting:

John James Audubon State Park
Museum Conference Room
3100 US Highway 41 North
Henderson, KY 42420
(270) 826-2247

The focus of this first consulting party meeting will be on the project's Area of Potential Effect (APE) and potentially eligible properties within the APE. Comments will be accepted until February 17, 2003.

For your convenience, documents containing the APE and preliminary eligible properties are available for viewing during normal business hours at the following locations:

Henderson Public Library
101 South Main Street
Henderson, KY 42420

Evansville Urban Transportation
1 N.W. Martin Luther King Boulevard
Evansville, Indiana 47708

KYTC District 2 Highways
1840 North Main Street
Madisonville, KY 42431

Indiana Department of Transportation
Public Hearings Office, Room N901
100 North Senate Avenue
Indianapolis, Indiana 46204

If you cannot attend this meeting, please feel free to direct any comments to Tim Miller, Project Manager, HNTB Corporation, 111 Monument Circle, Suite 1200, Indianapolis, Indiana 46204 or at tmiller@hntb.com. Again, please submit any Section 106 comments no later than Monday, February 17, 2003.

If you have any questions, please feel free to contact me at (317) 226-7475 or Tim Miller at (317) 636-4682. We hope to see you at the January 17, 2003 meeting.

Sincerely,
John R. Baxter, P.E.
Division Administrator

By: Robert E. Dirks, P.E.
Environmental Engineer

Enclosures



U.S. Department
of Transportation

**Federal Highway
Administration**

Indiana Division

575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

September 3, 2003

SUBJECT: I-69 Evansville, IN to Henderson, KY – Section 106 Consulting Party Meeting
Formal Invitation to Consulting Parties

Dear Consulting Party:

The Federal Highway Administration (FHWA), in cooperation with the Indiana Department of Transportation, the Kentucky Transportation Cabinet and the Evansville Urban Transportation Study is conducting an *Environmental Impact Statement* for a new Interstate Route 69 between Evansville, IN and Henderson, KY. This study will include compliance with Section 106 of the National Historic Preservation Act.

As a Section 106 consulting party, you are cordially invited to continue the participation in the Section 106 process. Our first consulting party took place on January 17, 2003 at the Audubon State Park in Henderson, KY. The Area of Potential Effects (APE) and the potentially eligible properties were the focus of the January 17, 2003 meeting. The focus on this upcoming meeting will be project's effect on those properties that were deemed eligible for or listed in the National Register of Historic Places. The time and location of the meeting is as follows:

Date:	September 23, 2003
Location:	Angel Mounds State Historic Site 8215 Pollack Avenue Evansville, IN 47715 812-853-3956
Time:	6:30pm EST/CDT

For your convenience, documents containing documentation for the preliminary effects findings are available at the same location as the documentation for the project's Area of Potential Effect and eligible properties. The documents can be viewed during normal business hours at the following locations:

Henderson Public Library
101 South Main Street
Henderson, KY 42420

Evansville Urban Transportation Study
1 N.W. Martin Luther King Boulevard
Evansville, IN 47708

KYTC District 2 Highways
1840 North Main Street
Madisonville, KY 42431

Indiana Department of Transportation
Public Hearings Office, Room N901
100 North Senate Avenue
Indianapolis, IN 46204

Potential effects of the project are provided in the attachment. Comments on these proposed effects will be accepted until October 10, 2003. Please submit any comments to Tim Miller, Project Manager, HNTB Corporation, 111 Monument Circle, Suite 1200, Indianapolis, Indiana 46204 or tnmiller@hntb.com.

If you have any questions, please feel free to contact me at (317) 226-7475 or Tim Miller at (317) 636-4682. We hope to see you at the September 23, 2003 meeting.

Sincerely,

Anthony M. DeSimone, P.E.
Environmental Engineer

Attachments



DRAFT
Section 106 Meeting
Documentation

HNTB
HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

SUBJECT: I-69 Evansville, IN and Henderson, KY
Environmental and Engineering Assessment

DATE: January 17, 2003

LOCATION: Section 106 Consulting Party Meeting
Audubon State Park
Henderson, Kentucky

TIME: 11am CDT

Meeting Participants

Robert Dirks
Jim Juricic
Lyle Sadler

John Carr
Rick Jones
Doug Taylor
Rose Zigenfus
Jack Corn
George Warren
Nancy Burns
Rita Stagg
Virginia Berland
John Tapp
Pauline Burgdorf
Jason Dupont
Tom Cervone
Patrick Trader
Tom Beard
Jeff Plunkett
Linda Weintraut
Tom Weintraut
Helen Powell
Karen Mohammadi
Brian Aldridge
Carrie Wolter
Tim Miller

Representing (Firm or Agency)

FHWA
INDOT
INDOT

State Historic Preservation Office-IN
State Historic Preservation Office-IN
KYTC
EUTS
EUTS
Consulting Party
Consulting Party
Consulting Party
Consulting Party
Consulting Party
Consulting Party
BLA
BLA
UK Program for Archaeological Research
Landmark Archaeology
Landmark Archaeology
Weintraut and Associates
Weintraut and Associates
H. Powell and Company
HNTB
HNTB
HNTB
HNTB

The meeting began at 11:10am CST.

cc: 31815 Correspondence

Authored by: Tim Miller



DRAFT

Section 106 Meeting Documentation

HNTB
HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

Discussion Items:

Robert Dirks opened the meeting and welcomed everybody to the first Section 106 Consulting Party meeting on the I-69 project between Evansville, Indiana and Henderson, Kentucky.

Mr. Dirks explained that the term "Section 106" comes from Section 106 of the National Historic Preservation Act of 1966. This Act requires that federal agencies evaluate historic properties on all federally initiated actions. In this particular example, the Federal Highway Administration (FHWA) is initiating an Environmental Impact Statement on a proposed new interstate between Evansville and Henderson.

Mr. Dirks explained that the Consulting Parties are invited to participate in the Section 106 process and provide input to the discussions. In addition to the Consulting Parties, FHWA will work closely with the Indiana Department of Transportation, the Kentucky Transportation Cabinet, the Evansville Urban Transportation Study and the State Historic Preservation Office (SHPO) of both states.

Mr. Dirks stated the purpose of this first consulting party meeting was to discuss the Area of Potential Effect (APE) and the potentially eligible properties within the APE. Additional consulting party meetings will occur to discuss potential effects on properties and mitigation techniques.

The APE was developed using both modeling and field survey data. The boundaries of the APE are simply an estimated boundary where a historical and/or archaeological site may be impacted by the proposed new interstate. Examples of potential impacts included noise and visual elements. Study Team members went out to locations within the APE and verified the visual and noise elements with relation to the proposed location of the new road.

A brochure titled, "*Protecting Historic Properties—A Citizen's Guide to Section 106 Review*" was offered to all attendees. This brochure, published by the Advisory Council on Historic Preservation, explains the Section 106 process and the roles of a Consulting Party.

Mr. Dirks informed the audience that each historic property within the APE will be evaluated to determine if the proposed project will impact the property. The analysis will yield one of three results. These results will determine if the project will have:

- No effect on the property
- No adverse effect on the property
- An adverse effect on the property.



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111 Monument Circle
Indianapolis, Indiana 46204
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If the project has an “adverse effect” on an historic or archeological site, a mitigation plan will be developed. Examples of mitigation include sound walls, visual screens, etc. Mr. Dirks also added that a Memorandum of Agreement (MOA) would be the formal agreement document pertaining to mitigation in the event that mitigation would be required. Questions pertaining to the MOA were raised and it was identified that the MOA would be signed by FHWA, SHPO and the applicant (INDOT and KYTC), but that the Consulting Parties would review the mitigation plans in subsequent meetings prior to the signing of the MOA.

Although it is sometimes very difficult to avoid impacts to all historic properties, the first priority of FHWA is to avoid the historic property. If avoidance is not feasible, FHWA will attempt to minimize the impact. Finally, FHWA will mitigate any adverse impact.

Finally, the Consulting Party invitation letter included a listing of properties that were investigated as being potentially historic within corridors 1-2-3. Several additional properties were investigated as being potentially eligible but were not included because they do not reside in any of the three remaining corridors.

Mr. Dirks then turned the presentation over to Helen Powell and asked that she provide a brief explanation of the criteria used to determine if a property is historic.

Helen Powell – H. Powell and Associates

Ms. Powell explained that a property must meet at least one of the following criteria in order for the property to become historic:

- A. Events- must be the home of a historic event or a series of events.
- B. Person – did a significant person live in the structure?
- C. Architecturally significant – most often used criteria. Looks at the physical design.
- D. Data potential – if the site remains, how much information can we acquire from the site?

In addition to the above criteria, the property must have integrity. Components of the integrity can include:

- Location
- Design (How was the property conceived?)
- Setting
- Materials
- Workmanship
- Feeling
- Association

Ms. Powell then gave a twenty-minute presentation on those properties that she deemed eligible for the National Register. Ms. Powell investigated all potential properties south of Ohio River.



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111 Monument Circle
Indianapolis, Indiana 46204
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fax: (317) 917-5210

Linda Weintraut – Weintraut and Associates

Dr. Weintraut then gave a thirty-minute presentation on those properties she deemed eligible for the National Register north of the Ohio River. In addition to providing an explanation of all the properties she deemed eligible, Dr. Weintraut also provided an explanation on the history of many of the structures. At the conclusion of Dr. Weintraut's presentation, the group adjourned to the large map of the APE.

Pat Trader – University of Kentucky

Mr. Trader described the archaeological characteristics of the area south of the Ohio River. Mr. Trader explained that there is a potential of discovering archaeological sites on any of the three corridors south of the Ohio River. Mr. Trader opened the floor for any archaeological questions.

Mr. Tom Beard – Landmark Archaeology

Mr. Beard also explained that there was a potential of discovering archaeological sites on each of the three corridors north of the Ohio River although sites are more often found in lower lying areas such as the Oxbow area than at higher elevations. Mr. Beard noted that once an alternative is selected, both he and Pat Trader will be walking the alternative and conducting a phase 1A archaeological survey. A Phase 1A survey involves shovel probing, shallow digging, and trenching in areas adjacent to the Ohio River.

Conclusion-

Robert Dirks thanked all consulting parties for attending the meeting. Mr. Dirks requested that any comments be submitted to the Project Manager, Tim Miller, prior to February 17, 2003. (This date is also in the invitation letter.) Comments may address any of the information presented during the meeting or on the APE.

The meeting adjourned at 1:10pm CST.



Section 106 Meeting Documentation

HNTB

HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

SUBJECT: I-69 Evansville, IN and Henderson, KY
Environmental and Engineering Assessment

DATE: September 23, 2003

Section 106 Consulting Party Meeting on
Effects

LOCATION: Angel Mounds State Historic Site
Evansville, IN

TIME: 6:30pm CDT

Meeting Participants

Tony Desimone
Janice Osadczuk
Lyle Sadler
Amie Gregory
Karl Leet
Jay Mitchell
Rebecca Turner
Doug Taylor
Rose Zigenfus
John Carr
Craig Potts
Pauline Burgdorf
Dennis Au
Mike Linderman
Helen Powell
Linda Weintraut
Tom Weintraut
Jeff Plunkett
Tom Beard
Tom Springer
Tom Cervone
Rusty Yeager
Brian Aldridge
Tim Miller

Representing (Firm or Agency)

FHWA
INDOT
INDOT
INDOT
INDOT
INDOT
KYTC
KYTC
EUTS
IDNR SHPO Officer
Kentucky Heritage Council
Consulting Party
Evansville Historic Preservation Office
Angel Mounds State Historic Site
H Powell Company
Weintraut and Associates
Weintraut and Associates
Landmark Archaeology
Landmark Archaeology
QK4
BLA
BLA
HNTB
HNTB

The meeting began at 6:30pm CST.

cc: 31815 Correspondence

Authored by: Tim Miller



Section 106 Meeting Documentation



HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

Discussion Items:

Tony DeSimone of FHWA opened the meeting at 6:30 pm CST with introductions. He explained that this is the second consultant party (CP) meeting. The first CP meeting took place on January 17, 2003 and discussed the Area of Potential Effect (APE) and those properties deemed eligible for the National Register of Historic Places (NRHP).

The purpose of the second CP meeting (September 23, 2003) is to discuss the preliminary findings of effect on each of those properties deemed eligible for the NRHP. FHWA reiterated that all findings information are preliminary at this point. They are not considered final until FHWA has issued a formal effects finding on each of the properties.

Helen Powell of H. Powell & Company, Inc. discussed all properties within Kentucky that have been deemed eligible for inclusion in the NRHP and the preliminary effects that the I-69 project would have on each of these properties. The Kentucky properties and their effects are identified in the attached invitation letter.

Dr. Linda Weintraut of Weintraut and Associates then discussed all properties within Indiana that are eligible for the NRHP and the preliminary effects that the I-69 project would have on each of these properties. The Indiana properties and preliminary effects are identified in the attached invitation letter.

Brian Aldridge of HNTB displayed the potential appearance of a new cable stay bridge on Alternative #3 from the Angel Mounds location. U.S. Coast Guard requirements include the low elevation of a bridge be approximately 90 feet above the normal pool of the river, and 60 feet above the 2% flowline (equaling a 50-year storm/flood event). A cable stay bridge will have towers approximately 400 feet above the surface of the water. Although other bridge types are possible, a cable stay bridge rendering was prepared because it is the most likely bridge type. The last two bridges constructed over the Ohio River have been a cable stay design, including the US 231 Natcher Bridge east of Owensboro.

Rusty Yeager of Bernardin, Lochmueller and Associates provided basic noise principles. Mr. Yeager provided the following facts about noise:

- The standard measurement of noise is dBA (decibels that are A-weighted to account for the range of human hearing).
- Projected noise levels are given in one hour averages (L_{eq}).
- The human ear is not likely to detect a change of 3 dBA or less.
- Common dBAs are:



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111 Monument Circle
Indianapolis, Indiana 46204
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fax: (317) 917-5210

- 40 dBA Quiet Suburban Nighttime
- 60-68 dBA Normal Speech
- 75-80 dBA Shouting at 3 feet
- 110 dBA Rock Concert
- 120 dBA Human ear experiences pain
- Noise increases or decreases are measured on a logarithmic scale. Therefore, a doubling of decibels does not double the sound level. For example, a 10 dBA change represents a 10X change in energy whereas a 20 dBA change is 100X. A 3 dBA increase represents a doubling of the sound level.
- Tom Springer of QK4 provided information on the noise impacts in the study area. Mr. Springer explained that accepted modeling techniques were used to determine both existing and projected noise levels at all properties deemed eligible for the NRHP. It was reiterated that these levels are one hour averages so one time events such as one extremely loud truck does not give false information. It was also noted that all projected noise levels are based on projected noise levels in the year 2025, not the year of construction.
- Although noise impacts to all properties are available, Angel Mounds was utilized as an example because of its National Landmark status. The following noise impacts were reviewed for Angel Mounds:

	Existing Noise Levels	2025 Noise Levels w/Alternative 2	2025 Noise Levels w/Alternative 3	2025 Noise Levels w/No-Build Alternative
Glenn Black House & Library (Site Vanderburgh 20030)	57 dBA	57 dBA	59 dBA	61 dBA
Angel Mounds – Mound G	55 dBA	55 dBA	63 dBA	59 dBA

- Mr. Springer noted that noise actually increases at or near Angel Mounds if the No-Build alternative is pursued because modeling indicates that local traffic would increase on Pollack Avenue. Since Pollack Avenue is a local road within Angel Mounds property, traffic increases on this facility will create an increase in noise at Angel Mounds. These numbers (dBA) represent noise levels in the year 2025 and assume that new I-69 will be constructed from Indianapolis to Texas.
- Brian Aldridge of HNTB addressed the potential for vibration impacts to Angel Mounds. He explained that vibration is the movement of particles and is measured in inches per second



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Indianapolis, Indiana 46204
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(in/sec). He added that the potential for vibration impacts depend on the type of activity involved and the characteristics of the site.

- The soil type (alluvial) in the area is not conducive to the efficient transmission of vibrational energy. The soils consist of silty sands which are not well compacted and contain significant air voids. This lack of compaction, and therefore presence of air molecules, tends to have a dampening effect on the propagation of vibrational energy. Additionally, United States Geological Survey (USGS) information for the area indicates that bedrock is relatively deep (on the order of 75-100 feet deep), thereby minimizing the potential for the reflection of downward-directed vibrational energy back up to the surface.
- Although the FHWA does not have a recognized vibration model, the Federal Transit Authority (FTA) provides guidance some recommended vibration criteria. Due to the age of Angel Mounds and its sensitive surroundings, a vibration study was conducted to determine whether vibration impacts may occur during and after the construction of I-69. The FTA model was utilized to evaluate two locations at Angel Mounds; Mound G, across Pollack Avenue from the main entrance to Angel Mounds, and Mound A, the large mound in the central part of the site. According to the FTA Guidance Manual on Vibration Criteria, vibration levels at "extremely fragile" locations should not exceed .12 in/sec. I-69 vibration levels at Mound G and Mound A are predicted between .0001-0062 in/sec, well within the FTA guidelines. Although vibration - related impacts from both projected 2025 traffic and construction are deemed insignificant at this time, provisions can be made prior to construction to monitor vibration levels.
- Tim Miller of HNTB reiterated that all these findings are preliminary. All consulting parties and interested agencies are asked to submit comments so FHWA can take all comments into consideration prior to making the formal effects findings. Mr. Miller explained that the Draft Environmental Impact Statement (DEIS) is scheduled to be released later this year. Public hearings will then take place on the DEIS in both Evansville and Henderson. A minimum 30 day notice will be provided prior to the public hearing. Mr. Miller then opened the floor to questions. Questions included:
 - Question: Will the DEIS identify one preferred alternative?
 - Response: Since information is still being collected on all three alternatives, it is unknown at this time whether the DEIS will contain a preferred alternative. However, if after evaluating all the information, including the CP comments on effects, a preferred alternative can be identified, a preferred alternative may be identified in the DEIS.
 - Question: Was the entire county mapped when conducting the modeling? Do we know the dBA of combines and/or grain driers?



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Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

- Response: Although the entire county was not mapped, topographic information was taken into consideration when projecting future noise levels. For example, if the terrain was rolling, the noise model would take this into consideration. The potential noise of combines and grain driers is unknown and is not considered because the projected noise levels are one hour averages.
- FHWA concluded the meeting at approximately 8:30 pm, and stated the comment period on effects has been extended to October 23, 2003. Please mail or e-mail any comments to:

HNTB Corporation
Tim Miller, Project Manager
111 Monument Circle, Suite 1200
Indianapolis, IN 46204.
tnmiller@hntb.com

Attachments:
(Pictures of bridges
Noise Table, Scenario 3 only
Invite Letter w/preliminary effects)

cc: 31815 Correspondence

Authored by: Tim Miller



Section 106 Meeting Documentation



HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

cc: 31815 Correspondence

Authored by: Tim Miller



Indiana Department of Natural Resources

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739
Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.state.in.us

Frank O'Bannon, Governor
John Goss, Director



June 3, 2003

John R. Baxter, P.E.
Division Administrator
Federal Highway Administration
Indiana Division
575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

Re: "Draft Historic Property Report," December 2002, for the I-69, Henderson, Kentucky, to
Evansville, Indiana, Project

Dear Mr. Baxter:

Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and 36 C.F.R. Part 800 and pursuant to the National Environmental Policy Act, the staff of Indiana State Historic Preservation Officer has conducted an analysis of the Indiana properties identified in the above-referenced report.

We wish to comment specifically on those properties on which we disagree with the conclusions proposed in the December 2002 "Draft Historic Property Report" regarding eligibility for the National Register of Historic Places and on those properties for which we do not disagree with the conclusion that they are eligible but differ in regard to the area of significance or how the property is characterized.

Page 39, Pratt Through Truss Bridge 189 (Posey 00015); page 41, Pratt Pony Truss Bridge 137 (Posey 00017); and page 72, Warren Pony Truss Bridge 211 (Posey 40016). Pony trusses are still relatively common, and Posey County Bridge #137 and Warren County Bridge #211 are not among the earliest built. We usually do not consider them eligible unless they are among the oldest (e.g., pre-1900) or exceptionally long or unusual in some other way. Warren County Bridge #211 apparently is skewed, but it is otherwise not unusual. Pratt throughs are probably rarer than ponies, but Posey County Bridge #189 is a relatively late Pratt through (ca. 1925), and it seems significance should rest on how a particular bridge served a specific route or opened access to and from an urban area, spurring growth, and such a case has not been made for these three. Based on the information provided and that which is currently available in our files, we do not believe that any of the three is eligible for the National Register.

By contrast, page 329, Pratt Pony Truss (Vanderburgh 15093), although a pony, is a fairly early example of the type (ca. 1895) and is skewed, which bridge historian Dr. James L. Cooper considers to have required something more in the way of engineering design work than the typical, off-the-shelf pony truss. We agree that it is eligible for the National Register. Incidentally, from other sources we consulted, it appears that Kansas Road does not cross Pigeon Creek. We think the stream that this bridge crosses is probably Bluegrass Creek.

Page 44, St. Wendel Catholic Church (Posey 25003). Although this is an attractive building, from the information presented, the ca. 1915 church appears to be a fairly pedestrian example of an early 20th century Colonial Revival (rather than Neo-Classical Revival) church building. From the photographs, it appears as though the windows could be modern replacements. Thus, we do not believe it is eligible for the National Register under Criterion C for architecture. We also do not believe a case has been made for the church and cemetery under Criterion A for settlement. We are not told when the cemetery was established, but the church that stands there today dates from well beyond the settlement period.

John R. Baxter, P.E.

June 3, 2003

Page 2

Page 48, Dr. William Wilhelmus House and Office (Vanderburgh 06006). We would agree that this one is probably eligible, but only under Criterion A for health/medicine. We do not believe a strong enough case has been made for Criterion B significance due to its association with Dr. Wilhelmus, and we do not believe that the house and office collectively are significant enough architecturally for eligibility under Criterion C.

Page 331, Mann House (Vanderburgh 51007). We agree that this house is probably eligible for the National Register under Criterion C for architecture, although we have some reservations about the effect of the large, rear addition on the integrity of the original design, in regard to its massing. As far as its style is concerned, however, it is more nearly an example of Stick Style than of Queen Anne.

Page 338, Joseph Angel House (Vanderburgh 20032). We agree that it is eligible for the National Register under Criteria A and C. The Criterion A significance would be science, for Joseph Angel's efforts to preserve the prehistoric mounds. As for architectural (Criterion C) significance, we think it would be more precise to say it is of the Free Classic style (or variety of Queen Anne), rather than simply the more general Queen Anne style.

Other than those properties mentioned above, we agree with the proposed findings of eligibility or non-eligibility for the other properties identified in the report.

We thank you and the Indiana Department of Transportation for your and their cooperation and patience as we conducted this evaluation. We are especially appreciative of the extensive efforts that Linda Weintraut & Associates Historians have made to identify and evaluate historic properties.

Questions about our comments may be directed to John Carr of my staff at (317) 232-1646.

Very truly yours,



Jon C. Smith
Deputy State Historic Preservation Officer

JCS:JLC:jlc

cc: Janice Osadczuk, Indiana Department of Transportation
Lyle Sadler, Indiana Department of Transportation
Timothy Miller, HNTB
Thomas Cervone, Ph.D., Bernardin, Lochmueller and Associates, Inc.
Linda Weintraut, Ph.D., Weintraut & Associates Historians, Inc.



John Carr
Division of Historic Preservation & Archaeology
402 West Washington Street, W274
Indianapolis, IN 46204-2739

Re: I-69 South: Findings of Effects

Dear Mr. Carr:

Pursuant to Section 106 of the National Historic Preservation Act, I am pleased to convey this draft Findings of Effects Report for the I-69 South Evansville to Henderson Study (Indiana section) for your review.

As you will note, the report includes a) the introduction (or first four pages of the enclosed report) that summarizes the methodology for determining the effects and the conclusions reached in this report; b) the body of the report which is an analysis of the effects of the undertaking on each property. This analysis includes the distance of the boundary of the property from the proposed undertaking, photos of the viewshed from the property, a topographical map of the area of the property and the undertaking, and the results of the noise study, and c) an appendix that includes the findings for both the traffic and the noise modeling which is the underpinning of some of the analysis.

Angel Mounds

Because of the proximity of the I-69 Build Alternates 2 and 3 to Angel Mounds, a National Historic Landmark, potential visual, noise, and vibration effects were examined. Mound A located on the complex grounds, and Mound G located just north of Pollack Ave. near the entrance to the complex (see map) were designated as reference points from which the studies were based. No adverse visual effects were found for alternate 2. However if alternate 3 is selected the new bridge structure would be above the existing tree line visible from Mound A and could be considered as an adverse effect.

Existing noise levels at Mound A were determined by the noise model to be 50 dba. Projected noise levels for Alternate 2 will increase 2 dba to 52 dba, and for Alternate 3 the increase will be 4 dba to 54 dba. Existing noise levels at Mound G were determined to be 55 dba. Projected noise levels for Alternate 2 will remain the same at 55 dba and increase on Alternate 3 to 63 dba. The human ear cannot perceive increases less than 3 dba. Therefore, Alternate 2 will not have any perceptible change in noise levels, whereas Alternate 3 would be a noticeable change and could be considered an adverse effect.

Concerns were expressed about the potential adverse effects of both construction and traffic vibration to the earthworks at the Angel Mounds site if Alternate 3 is selected.

Mound A would be approximately 2,800 feet and Mound G would be about 970 feet from the proposed Alternate 3 right-of-way and construction limits. Although the FHWA has no established vibration criteria, the Federal Transit Administration (FTA) has established a threshold of 0.12 peak particle velocity or PPV for extremely fragile (historical) structures. The vibration study projected a PPV range of 0.0003 to 0.0062 for Mound G and a PPV range of 0.0001 to 0.0021 for Mound A by traffic from I-69. During construction pile driving vibration is projected at 0.0026 to 0.0062 for Mound G, and 0.0005 to 0.0013 PPV for Mound A. Neither construction vibration nor traffic vibration from I-69 Alternate 3 could be considered to be an adverse effect based upon established FTA criteria.

The following tables provide an overview of the properties affected by this undertaking. Because no National Historic Landmarks and no historic properties are listed or eligible for listing in the National Register (NR) are located within the construction limits, it cannot be reasonably foreseen that any property will be demolished or destroyed by the undertaking.

TABLE 1. HISTORIC PROPERTIES LOCATED WITHIN CONSTRUCTION LIMITS

Criteria	Alt. 1	Alt. 1A	Alt. 2	Alt. 3
National Historic Landmark	0	0	0	0
Properties Listed in NR	0	0	0	0
Properties Potentially Eligible to NR	0	0	0	0
Districts Listed in NR	0	0	0	0
Potentially Eligible Districts	0	0	0	0
State Register	0	0	0	0

Table 2 is somewhat deceptive. Although Alternative 2 has three properties within 1,000 feet of the centerline of the undertaking, the alternative uses existing highway I-164 for much of its route. Given modeling numbers for traffic, one must conclude that there are no adverse effects on any property in that alternative—even though it has the greatest potential for having adverse effects on historic properties.

TABLE 2. HISTORIC PROPERTIES WITHIN 1000 FEET OF CONSTRUCTION LIMITS

Criteria	Alt. 1	Alt. 1A	Alt. 2	Alt. 3
NHL	0	0	0	0
Listed in NR	0	0	0	0
Potentially Eligible to NR	1	1	3	2
Listed Districts	0	0	0	0
Potentially Eligible Districts	0	0	0	0
State Register	0	0	0	0

Table 3 illustrates that the greatest collective impact on historic properties occurs in Alternatives 1 and 1A, routes that pass through new terrain in rural Posey and Vanderburgh counties.

TABLE 3. HISTORIC PROPERTIES WITHIN THE APE

Criteria	Alt. 1	Alt. 1A	Alt. 2	Alt. 3
NHL	0	0	1	1
Listed in NR	0	0	0	0
Potentially Eligible to NR	12	13	4	4
Listed Districts	0	0	0	1
Potentially Eligible Districts	1	1	0	0
State Register	0	0	0	0

Table 4. Preliminary Findings of Effects, Alternative 1

County	Survey #	Description	Effect Finding
Posey	25017	Jacob Damm Farmstead	Adverse Effects – Visual
Posey	25020	Doll-Winternheimer Farmstead	Adverse Effects – Noise & Visual
Posey	25023	School No. 4	Adverse Effects – Construction
Posey	25048	Luigs Farm	Adverse Effects – Visual
Posey	25051	Roesner Farmstead	Adverse Effects – Visual
Posey	40017	Wolf Road Farmstead	Adverse Effects – Noise & Visual
Posey	40020	Fischer House	Adverse Effects – Noise & Visual
Posey	40060	Bohleber Road Farmstead	No Adverse Effects
Posey	40070	Uebelhack Farmstead	No Adverse Effects
Posey	40104	Hausmann Farmstead	No Adverse Effects
Vanderburgh	06006	Dr. Wilhelmus House & Office	No Adverse Effects
Vanderburgh	25146	Frank Nurrenbern Farmstead	Adverse Effects – Visual
Posey		St. Philip Historic District	Adverse Effects – Visual

Table 5. Preliminary Finding of Effects, Alternative 1A

County	Survey #	Description	Effect Finding
Gibson	45024	St. James Church	No Adverse Effects
Posey	25017	Jacob Damm Farmstead	Adverse Effects – Visual
Posey	25020	Doll-Winternheimer Farmstead	Adverse Effects – Noise & Visual
Posey	25023	School No. 4	Adverse Effects – Construction
Posey	25048	Luigs Farm	Adverse Effects – Noise & Visual
Posey	25051	Roesner Farmstead	No Adverse Effects
Posey	40017	Wolf Road Farmstead	Adverse Effects – Noise & Visual
Posey	40020	Fischer House	Adverse Effects – Noise & Visual
Posey	40060	Bohleber Road Farmstead	Adverse Effects – Noise
Posey	40070	Uebelhack Farmstead	No Adverse Effects
Posey	40104	Hausmann Farmstead	No Adverse Effects
Vanderburgh	05078	Craig House & Barn	Adverse Effects – Noise
Vanderburgh	25146	Frank Nurrenbern Farmstead	Adverse Effects – Visual
Posey		St. Philip Historic District	Adverse Effects – Visual

Tables 4 and 5 illustrate quite clearly that adverse effects on historic properties occur in Alternatives 1 and 1A, respectively. Topography masks the undertaking somewhat, but

given the high concentration of historic properties and the ambience of the area, clearly these two alternatives have the greatest collective adverse effects on historic properties.

Table 6. Preliminary Finding of Effects, Alternative 2

County	Survey #	Description	Effects Finding
Vanderburgh	15093	Bridge	No Effects
Vanderburgh	51007	Mann House	No Effects
Vanderburgh	20030	Glenn Black House & Library	No Effects
Vanderburgh	20032	Joseph Angel House	No Effects

Table 7. Preliminary Finding of Effects, Alternative 3

County	Survey #	Description	Effects Finding
Vanderburgh	15093	Bridge	No Effects
Vanderburgh	51007	Mann House	Adverse Effects
Vanderburgh	20030	Glenn Black House & Library	Adverse Effects – Visual
Warrick	41044	Short-Tillman House	No Adverse Effects
Warrick		Newburgh Historic District	Adverse Effects – Visual
Vanderburgh		Angel Mounds National Historic Landmark	Adverse Effects – Visual (See Archaeology Section.)

In summary, the preliminary findings of effects are:

- Alternative 1: Historic Properties Affected-Adverse Effects,
- Alternative 1A: Historic Properties Affected- Adverse Effects
- Alternative 2: No Historic Properties Affected
- Alternative 3: Historic Properties Affected-Adverse Effects.

If you have any questions, I stand ready to answer them and will be glad to meet with you at your convenience.

Best regards,

Linda Weintraut, Ph.D.

Weintraut & Associates Historians, Inc.



Tuesday, August 19, 2003

Jon Smith
Division of Historic Preservation & Archaeology
402 West Washington Street, W274
Indianapolis, IN 46204-2739

Re: I-69 South: Findings of Effects

Dear Mr. Smith:

I have three revisions/addendums that need to be made to the Findings of Effects Report.

One is an omission: "Table 6. Preliminary Finding of Effects, Alternative 2" needs to have Angel Mounds, No Effects" added to the list of properties for it to be consistent with Table 3.

Table 6. Preliminary Finding of Effects, Alternative 2

County	Survey #	Description	Effects Finding
Vanderburgh	15093	Bridge	No Effects
Vanderburgh	51007	Mann House	No Effects
Vanderburgh	20030	Glenn Black House & Library	No Effects
Vanderburgh	20032	Joseph Angel House	No Effects
Vanderburgh		Angel Mounds NHL	No Effects

Also, we now have additional information regarding Alternative 3 as it relates to the Mann House. I have enclosed an aerial photo showing the current design of the highway. *Previously*, it had been our understanding that there would be changes in design to I-164 to the west of the highway, especially as it related to the interchange. *Presently*, it is our understanding from HNTB that no changes to the west of the highway will be incurred. (See photo.) The additional lanes are designed east of I-164. Given that fact and the fact that the area is now developed with housing to the west of the Mann House and commercial buildings to the east of the property, we believe that this finding should be changed to "No Effects." Hence, Table 7 should read as follows:

Table 7. Preliminary Finding of Effects, Alternative 3

County	Survey #	Description	Effects Finding
Vanderburgh	15093	Bridge	No Effects
Vanderburgh	51007	Mann House	No Effects
Vanderburgh	20030	Glenn Black House & Library	Adverse Effects – Visual
Warrick	41044	Short-Tillman House	No Adverse Effects
Warrick		Newburgh Historic District	Adverse Effects – Visual
Vanderburgh		Angel Mounds National Historic Landmark	Adverse Effects – Visual (See Archaeology Section.)

I have also enclosed a memo prepared by Tim Miller at HNTB, which further illuminates the situation surrounding School No. 4 and the efforts that will be utilized to minimize impacts to that historic property if Alternative 1 or Alternative 1A becomes the preferred alternative.

If you have any questions, feel free to call.

Best regards,

Linda Weintraut, Ph.D.



Indiana Department of Natural Resources

Division of Historic Preservation & Archaeology 402 W. Washington Street, W274 - Indianapolis, IN 46204-2739
Phone 317-233-1646 • Fax 317-232-0693 • dhpa@dnr.state.in.us

September 18, 2003

Frank O'Bannon, Governor
John Goss, Director



DATE RECEIVED
HNTH INDIANAPOLIS
JOB NO. _____
FILE _____

SEP 22 2003

ROUTE TO: _____

Kathleen H. Quinn
Acting Division Administrator
Federal Highway Administration, Indiana Division
575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

Re: Dr. Linda Weintraut's letter of September 9, 2003, about the I-69 Evansville to Henderson study historic property boundaries

Dear Ms. Quinn:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470f), and implementing regulations at 36 C.F.R. Part 800, and pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. § 4321, *et seq.*), the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the Dr. Linda Weintraut's September 9, 2003, letter and enclosures and pertinent maps in the December 2002 Draft Historic Property Report and in the July 2003 Findings of Effects—Draft for the I-69 Evansville, Indiana, to Henderson, Kentucky, study.

As Dr. Weintraut suggested in her September 9 letter, boundaries of the Luigs Farm (Posey County 25048) and the St. Philip German Community Settlement Historic District are represented in documents already in our possession. The December 2002 Draft Historic Property Report contains site plans of the building locations within those historic properties, and, in the case of the St. Philip District, a schematic boundary line. The July 2003 Findings of Effects—Draft contains excerpts of U.S.G.S. quadrangle maps schematically depicting boundaries of those properties. The draft effects document also explains that the Luigs Farm boundaries encompass the original 80 acres purchased by Anton Luigs at (or perhaps around) the turn of the twentieth century. We concur that the boundaries shown for those two historic properties are sufficiently accurate for the purposes of this Section 106 and NEPA review.

Dr. Weintraut's September 9 letter also noted the boundaries of the Newburgh Historic District and the Angel Mounds National Historic Landmark already have been established by virtue of their listing in the National Register of Historic Places or on the rolls of the National Historic Landmarks program. The boundaries of the Original Newburgh Historic District (the historic name, according to the National Register nomination) as shown in the Draft Historic Property Report and the Findings of Effects—Draft represent that district's boundaries accurately enough for the purposes of this review under Section 106 and NEPA.

However, as my staff has discussed with Dr. Weintraut recently, we believe that, for the purposes of this review, the boundaries of the National Register-eligible Angel Mounds property should be expanded beyond the formal boundaries of the National Historic Landmark property. Those boundaries should include Mound G, which lies across Pollack Avenue to the north of the Angel Mounds State Historic Site, and also should include a strip of land to the west of the NHL that was acquired by the State of Indiana and added to the Angel Mounds State Historic Site in recent years. Mound G appears to be related to the other archaeological sites within the Angel Mounds NHL property. The strip along the west side contains archaeological sites, which have not been fully investigated but which we believe are potentially eligible for the National Register. We hasten to add that the designation of an NHL can only be made by the National Park Service, and we respect that agency's authority. However, we believe that, for the purposes of Section 106 and NEPA, the Federal Highway Administration and our office have the

authority to agree that the boundaries of an *historic property* (i.e., a property that appears to be eligible for inclusion in the National Register) extend beyond the formal boundaries defined in a National Register or NHL nomination form.

With regard to the other 18 historic properties mentioned in Dr. Weintraut's September 9 letter, we concur that the historic property boundaries superimposed on the aerial photographs provided to us, while somewhat schematic, are sufficiently accurate for the purposes of this review.

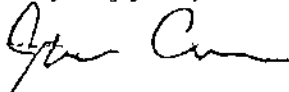
We have noticed that in our June 3, 2003, comments to John Baxter (formerly of your office) on the December 2002 Draft Historic Property Report, the third paragraph included some language about Warren County, which obviously is not within any of the areas of potential effects of this project. We apologize for any confusion caused by that erroneous language in that letter, a copy of which is enclosed. The language of the paragraph could have been clearer in other respects, as well. That paragraph should have read as follows:

Page 39, Pratt Through Truss Bridge 189 (Posey 00015); page 41, Pratt Pony Truss Bridge 137 (Posey 00017); and page 72, Warren Pony Truss Bridge 211 (Posey 40016). Pony trusses are still relatively common, and Bridge 137 and Bridge 211 are not among the earliest built. We usually do not consider pony trusses eligible under Criterion C unless they are among the oldest (especially if pre-1900) or exceptionally long or unusual in some other way. Bridge 211, a Warren pony truss, apparently is skewed, but it is otherwise not unusual. Pratt through trusses are probably rarer than ponies, but Bridge 189 is a relatively late Pratt through truss (ca. 1925), and it seems fairly standard in design. Furthermore, we think that a case for Criterion A eligibility due to transportation significance should rest on how a particular bridge served a specific route or opened access to and from an urban area, spurring growth, and such a case has not been made for these three. Based on the information provided and that which is currently available in our files, we do not believe that any of the three is eligible for the National Register.

We will comment separately on the effect findings proposed in the July 2003 Findings of Effect—Draft and in the attachments to Anthony DeSimone's September 3, 2003, letter regarding the upcoming consulting parties meeting.

Please direct questions about our comments on buildings and structures to John Carr at 317-232-1646. Questions about archaeological issues may be directed to Dr. Rick Jones at the same number.

Very truly yours,



for Jon C. Smith
Deputy State Historic Preservation Officer

JCS:JLC:JRJ:jlc

Enclosure

cc: Linda Weintraut, Ph.D, Weintraut & Associates Historians, Inc.
Timothy Miller, HNTB Corporation
Thomas Cervone, Ph.D., Bernardin, Lochmueller and Associates, Inc.
Lyle Sadler, Indiana Department of Transportation
James Juricic, Indiana Department of Transportation
Janice Osadezuk, Indiana Department of Transportation



Indiana Department of Natural Resources

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739
Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.state.in.us

Frank O'Bannon, Governor
John Goss, Director



October 23, 2003

DATE RECEIVED
HNTB INDIANAPOLIS

JOB NO. _____
FILE _____

OCT 24 2003

ROUTE TO: _____

Kathleen H. Quinn
Acting Division Director
Federal Highway Administration, Indiana Division
575 North Pennsylvania Street, Room 254
Indianapolis, Indiana 46204

Federal agency: Federal Highway Administration

Re: September 3, 2003, "Preliminary Findings of Effects," regarding the I-69 Evansville, Indiana to Henderson, Kentucky Project

Dear Ms. Quinn:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470f), and implementing regulations at 36 C.F.R. Part 800, and the National Environmental Policy Act of 1969 (42 U.S.C. § 4321, *et seq.*), the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the September 3, 2003, "Preliminary Findings of Effects," in light of the September 23, 2003, consulting parties meeting.

In most respects, based on our knowledge of likely effects at this point, we agree with the preliminary effect findings proposed for Indiana properties in the September 3 document. There are several respects in which we differ or are uncertain at this time whether we can fully agree. We will outline those concerns below.

With regard to School No. 4 (Posey 25023), we do not disagree that there *could* be a construction-related adverse effect from either Alternate 1 or Alternate 1A, but we are wondering how the Federal Highway Administration and the Indiana Department of Transportation foresee that the adverse effect would take place. Also, we are not entirely persuaded that there would not be a visual adverse effect on the school from either Alternate 1 or Alternate 1A, particularly if an interchange were to be constructed at SR 66, complete with overpasses, ramps, and perhaps lighting. The rural setting of the school has been altered previously, but it does not appear to have been destroyed.

As for the Luigs Farm (Posey 25048), we do not disagree with the projected adverse noise and visual effects of Alternative 1A or with the projected visual adverse effect from Alternative 1. We can see that Alternative 1 would pass the farm to the west, whereas Alternative 1A would pass the farm on both the west and the north. However, it is not clear to us why only Alternative 1A could have an adverse effect due to noise. We wonder whether the projected noise level at the west end of the farm was considered, or, alternatively, whether only noise levels at the farm house were considered. It strikes us that, since the original 80 acre farm (if we recall the size correctly)—not just the farm house or farmstead—is considered historic, noise impacts on the pastoral quality of the farm fields should also be taken into consideration.

You have projected that Alternative 1A would not have an adverse effect on St. James Church (Gibson 45024). Although the existing I-64 already intrudes upon the rural setting a half-mile or better to the south of the church, it occurs to us that a new interchange linking I-64 to a new I-69 roadway on Alternate 1A would present a higher profile—and more highly visible—structure than now exists in the vicinity. Consequently, we are not ready to rule out the possibility of a visual adverse effect on the church.

An adverse noise effect on the **Bohleber Road Farmstead (Posey 40060)** is projected for Alternative 1A. It is unclear to us how that might occur, considering that the Alternative 1A roadway would pass by at least a half-mile away, with ground of higher elevation apparently standing between the roadway and the farmstead.

A finding of no adverse effect is projected regarding the **Uebelhack Farmstead (Posey 40070)**. It appears to us that if an interchange were to be constructed along either Alternate 1 or Alternate 1A at SR 62, then the interchange might be fairly visible, and possibly intrusive, as one looked across the creek bottom land to the northeast of the farmstead. We are not yet prepared to dismiss the possibility of an adverse effect.

With regard to the **Mann House (Vanderburgh 51007)**, we note that the July 2003 "Findings of Effects—Draft" document, which underlies the September 3 "Preliminary Findings of Effects," says with regard to Alternative 3 that [w]ith an expanded potential interchange nearby, there may be some changes in land use in the area that may adversely affect this property. We would not disagree with that assessment. This sounds to us like an indirect or cumulative effect, which, though not direct, still could have an adverse impact on the Mann House's setting and possibly on its prospects for long-term preservation. Even if the interchange is not expanded under Alternative 2, it seems plausible that there could be growth around that interchange, as a new Alternative 2 bridge would facilitate movement to and from Henderson and beyond.

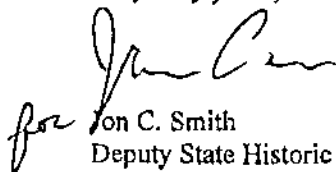
In terms of archaeology, one concern includes the effect of visual and noise impact to **Angel Mounds State Historic Site in southeastern Vanderburgh County and southwestern Warrick County**. At a National Historic Landmark such as this, these effects could detract from a visual and aesthetic experience of the site. Another concern is the potential effect of a bridge (Alternative 3), not only visually and by noise, but any potential river or water erosion it may cause to Three Mile Island (that affords some protection to the Angel Mounds property) or the Angel Mounds State Historic Site itself. There have been problems with damage caused by erosion at the site.

More broadly speaking, effects to archaeological sites of all three of the proposed alternatives (including the 1A variant) are incompletely known since none of these areas has been completely subjected to systematic archaeological field reconnaissance (identification). We expect assurance that identification, evaluation, and mitigation (if necessary) will occur for the chosen alternative.

You may direct questions about our comments on buildings and structures to John Carr at 317-232-1646. Questions about archaeological issues may be directed to Dr. Rick Jones at the same number.

We thank the Federal Highway Administration, the Indiana Department of Transportation, the Kentucky Transportation Cabinet, and both state agencies' consultants for the informative presentations at the September 23 consulting parties meeting at Angel Mounds State Historic Site and for extending the deadline for comment.

Very truly yours,


for John C. Smith
Deputy State Historic Preservation Officer

JCS:JLC:JRJ:jlc

cc: Janice Osadczuk, Indiana Department of Transportation
Lyle Sadler, Indiana Department of Transportation
David Morgan, Kentucky State Historic Preservation Officer
Tim Miller, HNTB Corporation
David Isley, Bernardin, Lochmueller and Associates, Inc.

Kathleen H. Quinn
October 23, 2003
Page 3

Linda Weintraut, Weintraut and Associates, Historians, Inc.
Tom Beard, Landmark Archaeological and Environmental Services, Inc.
Dennis Au, City of Evansville
Stewart Sebree, Southwest Field Office, Historic Landmarks Foundation of Indiana, Inc..



Commonwealth of Kentucky
Transportation Cabinet
 Frankfort, Kentucky 40622

James C. Codell, III
 Secretary of Transportation

Paul E. Patton
 Governor

Clifford C. Linkes, P.E.
 Deputy Secretary

January 13, 2003

Mr. David Morgan
 Preservation Director & SHPO
 Kentucky Heritage Council
 300 Washington Street
 Frankfort, Kentucky 40601

Dear Mr. Morgan:

SUBJECT: A Cultural Resource Survey For I-69 South
 Henderson County, Kentucky
 Item No. 2-69.00

Attached please find the above subject survey for your review and comment. The Principal Investigator documented 151 sites in the Area of Potential Effect. Six sites and one historic district were found to be eligible for the National Register. The sites and the potential effect of each alternate is listed below:

Sites	Alt 1	Alt 2	Alt 3
Site 1 - L&N Railroad Bridge	No Effect	No Effect	No Effect
Sites 20-32 - Riverdale Historic District	No Effect	No Effect	No Effect
Site 108 - White-Goehring District	No Effect	Adverse	Adverse
Site 116 - McCormick House	No Effect	Adverse	Adverse
Site 119 - White-Priest House	No Effect	Adverse	Adverse
Site 128 - McClain House	No Effect	No Effect	No Effect
Site 129 - Lee Baskett House	No Effect	Adverse	No Effect
Site 149 - Henderson-Evansville Bridge (Audubon Bridge)	No Effect	No Effect	No Effect

Your concurrence to this Determination of Eligibility and Effect is requested by February 13, 2003. Please note that site survey forms were not available at this time but will be forthcoming. If you have any questions please contact Rebecca Turner or me at 502-564-7250.

Very truly yours,

David M. Waldner, P.E., Director
 Division of Environmental Analysis

c: K. Sperry, P. Rawlings, T. Vinegar, D-2 (E. Green, D. Taylor), R.H. Turner, HNTB,
 Bernardin and Lochmueller, H. Powell and Company, FHWA



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The State Historic Preservation Office

Paul E. Patton
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Cabinet Secretary

David L. Morgan
Executive Director and
SHPO

February 27, 2003

Mr. David M. Waldner, Director
Division of Environmental Analysis
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, KY 40622

Re: A Cultural Resource Survey for I-69 South in Henderson County, Kentucky
(Item No. 2-69.00)

Dear Mr. Waldner:

On January 16, 2003 you submitted to us a cultural resource assessment report prepared by H. Powell and Company for the I-69 South project in Henderson County. This document was forwarded for our review even though it fails to comply with the Kentucky Heritage Council's *Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports* (Revised June 2001). In particular, there are no site survey forms or KHC site survey numbers referenced in the report. The cover letter transmitting the report indicates that site survey forms will be "forthcoming". However, as of today these have not been received by the Kentucky Heritage Council. We are providing the following review of National Register evaluations and effect determinations in order for the KYTC to proceed with the Section 106 review of this undertaking. These findings are provided on the condition of H. Powell and Company submitting a revised report that conforms to the above referenced *Specifications* within ninety days.

Findings:

We are in agreement with the reports author that Site 2 (130 Dixon Street), Site 3 (E.H. Moore House), Site 4 (405 South Main Street), Site 5 (461 South Main Street), Site 6 (Peavey Henderson Elevator), Site 7 (108 Jackson Street), Site 8 (104 Jackson Street), Site 9 (Harry Smith House), Site 10 (705 South Main Street), Site 13 (821 South Main Street), Site 14 (835 South Main Street), Site 15 (909 South Main Street), Site 16 (917 South Main Street), Site 18 (937 South Main Street), Site 19 (1005 South Main Street), Site 29 (13 Riverdale Court), Site 33 (1041 South Main Street), Site 35 (1121 South Main Street), Site 36 (1223 South Main Street), Site 37 (1225 South Main Street), Site 38 (1227 South Main Street), Site 39 (1229 South Main Street), Site 40 (1303 South Main Street), Site 41 (1307



Mr. David Waldner
February 27, 2003
Page 2

South Main Street), Site 42 (1311 South Main Street), Site 43 (1315 South Main Street), Site 44 (1319 South Main Street), Site 45 (1323 South Main Street), Site 46 (1327 South Main Street), Site 47 (1331 South Main Street), Site 48 (1335 South Main Street), Site 49 (1339 South Main Street), Site 50 (South Main Street, Corner of Horse Shoe Drive), Site 51 (1423 South Main Street), Site 52 (1425 South Main Street), Site 53 (1427 South Main Street), Site 54 (223 Oriole Drive), Site 55 (225 Oriole Drive), Site 56 (227 Oriole Drive), Site 57 (229 Oriole Drive), Site 58 (231 Oriole Drive), Site 59 (230 Oriole Drive), Site 60 (228 Oriole Drive), Site 61 (224 Oriole Drive), Site 62 (222 Oriole Drive), Site 63 (218 Oriole Drive), Site 64 (216 Oriole Drive), Site 65 (210 Oriole Drive), Site 66 (208 Oriole Drive), Site 67 (1326 South Main Street), Site 68 (1324 South Main Street), Site 69 (Arch and Louise Clark House), Site 70 (St. Louis Cemetery), Site 71 (Commercial Building at 1405 South Green Street), Site 72 (1423 South Green Street), Site 74 (1525 South Green Street), Site 75 (1529 South Green Street), Site 76 (1576 South Green Street), Site 77 (Northwest corner of South Green Street and Yeaman), Site 78 (1619 South Green Street), Site 79 (1623 South Green Street), Site 80 (1637-1639 South Green Street), Site 81 (1649 South Green Street), Site 82 (Fairmont Cemetery), Site 83 (Windhaus' South-Y Bar-B-Q), Site 84 (493 US 41), Site 85 (US 41, Henderson), Site 86 (Mount Zion Cemetery), Site 87 (1776 South Green Street), Site 88 (1560 South Green Street), Site 89 (Silver Screen Video), Site 90 (Commercial Building, east side of US 60), Site 92 (1750 South Main Street), Site 93 (1744 South Main Street), Site 94 (1738 South Main Street), Site 95 (1732 South Main Street), Site 96 (1733, 1739, 1743, 1747 South Main Street), Site 97 (Dairy Farm on Rock Road), Site 98 (T-Plan, Rock Road), Site 100 (Bungalow, West Side of KY 285), Site 101 (Bungalow, West Side of US 41), Site 102 (Bungalow, 2030 KY 136), Site 103 (Foursquare, West Side of US 41), Site 104 (Foursquare, East Side of US 41), Site 105 (T-Plan, East Side of US 41), Site 106 (Front-Gabled Bungalow, East Side of US 41), Site 107 (Bungalow, East Side of US 41), Site 109 (Flying H Farm, South Side of KY 812), Site 110 (Flying H Farm, South Side of KY 812), Site 111 (Flying H Farm, South Side of KY 812), Site 112 (Dunn House, 8393 KY 812), Site 113 (T-Plan, North Side of KY 351), Site 114 (Front-Gabled Structure, North Side of KY 351), Site 115 (Cumberland House, 6125 KY 351), Site 117 (Nelson House, North Side of KY 351), Site 118 (Nichols House, 6430 KY 351), Site 120 (Williams House, 7830 Zion Road), Site 121 (Holloway House), Site 122 (7109 Larue Road), Site 123 (Carl Peterson House, 8036 Larue Road), Site 124 (Central Passage House, West Side of Rucker Road #1), Site 125 (Jordon-Crafton Farm), Site 126 (Farley House, 7220 Rucker Road #2), Site 127 (Bungalow, West Side of Rucker Road #2), Site 130 (T-Plan, South Side of US 60 East), Site 131 (1635 Country Club Drive, North of US 60 East), Site 132 (Bungalow, North Side of US 60), Site 134 (7442 Carson Drive, Baskett), Site 135 (Baskett Christian Church), Site 136 (7488 Carson Drive, Baskett), Site 137 (7528 Carson Drive, Baskett), Site 138 (Store, 7536 Carson Drive, Baskett), Site 139 (7503 Railroad Street, Baskett), Site 140 (House, Corner of Railroad and Church Streets, Baskett), Site 141 (T-Plan, Church Street, Baskett), Site 142 (7440 Church Street, Baskett), Site 143 (T-Plan, Church Street, Baskett), Site 144 (7432 Church Street, Baskett), Site 145 (9918 Dr. Hodge Road), Site 146 (T-Plan, West Side of

Mr. David Waldner
February 27, 2003
Page 3

Tscharner Road), Site 147 (T-Plan, North Side of Dr. Hodge Road), Site 150 (Dade Park/Ellis Park, Green River Island), and Site 151 (River Road, South Side of Green River) are not eligible for listing in the National Register of Historic Places individually or within the context of a historic district.

We also agree that Site 1 (Louisville and Nashville Railroad Bridge), Site 20 (1 Riverdale Court), Site 21 (12 Riverdale Court), Site 22 (4 Riverdale Court), Site 23 (2 Riverdale Court), Site 24 (6 Riverdale Court), Site 25 (5 Riverdale Court), Site 26 (7 Riverdale Court), Site 27 (14 Riverdale Court), Site 28 (8 Riverdale Court), Site 29 (13 Riverdale Court), Site 30 (9 Riverdale Court), Site 31 (10 Riverdale Court), Site 32 (11 Riverdale Court), Site 108 (White-Goehring House, 2020 Posey Ball Road), Site 116 (John S. McCormick House, "Forest Grove," 6171 Zion Road), Site 119 (White-Priest House, ~Stage Coach Stop- 7474 Zion Road), Site 128 (Col. Jackson McClain House, 3497 US 60), Site 129 (Lee Baskett (Ellis-Neville) House, 3925 US 60 East), and Site 149 (Henderson-Evansville Bridge/Audubon Memorial Bridge) are eligible for listing on the National Register of Historic Places. Comments regarding National Register boundaries and determinations of effect are as follows:

- Site 1 (Louisville and Nashville Railroad Bridge) – We are in agreement that the National Register boundary should be limited to the bridge superstructure and stone pilings. Furthermore, we agree that constructing Alternates 1, 2, or 3 will have No Effect on this resource.
- Sites 20 - 32 (Riverdale Court Historic District) – We are in agreement that the National Register boundary for this district should follow the boundaries of the subdivision plat from 1939. We are also in agreement that the construction of Alternates 1, 2, or 3 will have No Effect on the district.
- Site 108 (White-Goehring House, 2020 Posey Ball Road) – The proposed National Register boundary illustrated on the project mapping appears to be appropriate. We are in agreement that Alternate 1 will have No Effect on this resource. We are also in agreement that Alternates 2 and 3 will not take land from within the proposed National Register boundary but will likely result in adverse noise and visual impacts. Further discussion regarding these potential impacts is requested should Alternate 2 or 3 be chosen as the preferred.
- Site 116 (John S. McCormick House, "Forest Grove," 6171 Zion Road) – The proposed National Register boundary illustrated on the project mapping appears to be appropriate. We are in agreement that Alternate 1 will have No Effect on this resource. We are also in agreement that Alternates 2 and 3 will not take land from within the proposed National Register boundary but will likely result in adverse noise and visual impacts. Further discussion regarding these potential impacts is requested should Alternate 2 or 3 be chosen as the preferred.

David Waldner
February 28, 2003
Page 4

- Site 119 (White-Priest House, ~Stage Coach Stop~ 7474 Zion Road) – The proposed National Register boundary illustrated on the project mapping appears to be appropriate. We are in agreement that Alternate 1 will have No Effect on this resource. Alternates 2 and 3 will take a triangular piece of land from the southwest corner of the proposed National Register boundary and will, therefore, have an Adverse Effect on this resource. The likelihood of adverse noise and visual impacts from Alignments 1 and 2 are also probable. Further discussion regarding these impacts is requested should one of these alignments be chosen as the preferred.
- Site 128 (Col. Jackson McClain House, 3497 US 60) – The proposed National Register boundary illustrated on the project mapping appears to be appropriate. Based on this boundary, we are in agreement that the construction of Alternates 1, 2, or 3 will have No Effect on this resource.
- Site 129 (Lee Baskett (Elhis-Neville) House, 3925 US 60 East) – The proposed National Register boundary illustrated on the project mapping appears to be appropriate. We are in agreement that Alternates 1 and 3 will have No Effect on this resource. We are also in agreement that Alternate will not take land from within the proposed National Register boundary but will likely result in adverse noise and visual impacts. Further discussion regarding these potential impacts is requested should Alternate 2 be chosen as the preferred.
- Site 149 (Henderson-Evansville Bridge/Audubon Memorial Bridge) – We are in agreement that the National Register boundary should follow the footprint of the bridge. We are also in agreement that the construction of Alternates 1, 2, or 3 will have No Effect on this resource.

We are unable at this time to provide a determination of eligibility on the following properties: Site 11 (707 South Main Street), Site 12 (American Tobacco Building), Site 17 (921 South Main Street), Site 34 (1109 South Main Street), Site 73 (1425 South Green Street), Site 91 (Eckert Packing Company Bldg., 1600 South Green Street), Site 99 (Foursquare, East Side of KY 285), and Site 148 (10345 Tschamer Road). Sites 99 and 148 are the only resources, however, to have eligibility potential and to experience potential adverse impacts. Further discussion regarding these resources is therefore requested should Alternate 1 be chosen as the preferred.

Finally, it was determined through pre-coordination that Site 133 (McCallister / Claycomb/Hartung House, 8955 Tillman Bethel Road) is eligible for listing on the National Register. Because the significance of the property is tied to its architectural merit, a conservative boundary should be proposed to include only the immediate property surrounding the residence. While Alternate 2 does not appear to have any potential for direct takings from this resource, noise and visual impacts are likely. Further discussion regarding these impacts is requested should Alternate 2 be chosen as the preferred. Further discussion

David Waldner
February 28, 2003
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regarding these comments should be directed to Craig Potts of my staff.

In closing, we would like to point out that we have been extremely patient with Ms. Powell, and have continued to accept reports submitted by her that do not follow this offices *Specifications*, even though they have been in effect for nineteen months. I am requesting that you schedule a meeting with Ms. Powell and obtain a commitment from her to follow the reporting *Specifications*. My staff and I are available to go over these with Ms. Powell to ensure that she understands what is required. I am also requesting that your staff perform a technical review of each cultural historic assessment report submitted for our review. Any report not substantially meeting the *Specifications* should not be forwarded to the KHC for review, but should be returned by the KYTC to the author for correction.

If you have any questions regarding this correspondence, our review of cultural resource assessment reports, or our application of the June 1, 2001 *Specifications*, please contact Thomas N. Sanders of my staff at 502-564-7005, ext. 118.

Sincerely,



David L. Morgan
Executive Director and
State Historic Preservation Office



Received

MAY 27 2003

James C. Codell, III
Secretary of Transportation

Commonwealth of Kentucky
Transportation Cabinet
Frankfort, Kentucky 40622

HNTB

Paul E. Patton
Governor

Clifford C. Linkes, P.E.
Deputy Secretary

May 21, 2003

Mr. David Morgan
Preservation Director & SHPO
Kentucky Heritage Council
300 Washington Street
Frankfort, Kentucky 40601

Dear Mr. Morgan:

SUBJECT: Addendum to A Cultural Resource Survey For I-69 South
Henderson County, Kentucky
Item No. 2-69.00

Attached please find the above subject addendum for your review and comment. The addendum has updated information necessary for review by your office on four issues regarding the above project.

1. Revision of Alternates 2 and 3 with an interchange at KY 351 and redesign of ramp off the Audubon Parkway
2. Reconsideration of National Register Eligibility for the McCallister/Claycomb/Hartung House (Site 113), 8955 Tillman-Bethel Rd.
3. Proposed National Register boundary and effects for Foursquare, east side of KY 285 (Site 99)
4. Proposed National Register boundary and effects for 10345 Tscharnier Rd. (Site 148)

Your concurrence to this Determination of Eligibility and/or Effect to this new information is requested by June 21, 2003. Included with this letter are the site survey forms for this project. If you have any questions please contact Rebecca Turner or me at 502-564-7250.

Very truly yours,

David M. Waldner, P.E., Director
Division of Environmental Analysis

c: K. Sperry, P. Rawlings, T. Vinegar, D-2 (E. Green, D. Taylor), R.H. Turner, **HNTB**,
Bernardin and Lochmueller, H. Powell and Company, FHWA



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TRANSPORTATION CABINET
DIVISION OF
ENVIRONMENTAL ANALYSIS

Education, Arts and Humanities Cabinet

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KENTUCKY HERITAGE COUNCIL

The State Historic Preservation Office

Paul E. Patton
Governor
Marlene M. Helm
Cabinet Secretary

David L. Morgan
Executive Director and
SHPO

September 2, 2003

Mr. David M. Waldner, Director
Division of Environmental Analysis
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, KY 40622

Re: Addendum to a Cultural Resource Survey for I-69 South in Henderson County, Kentucky. (Item No. 2-69.00)

Dear Mr. Waldner:

The State Historic Preservation Office has received for review and approval the above referenced addendum compiled by Helen Powell of H. Powell & Co. We are in agreement with the following recommendations for eligibility and/or effect:

- For Alternates 2 and 3, the proposed interchange at KY 351 and revised layout of the Audubon Parkway will have no direct effect on either the White-Priest House (Site 119) or the John S. McCormick Farm (Site 116).
- Due to the recent demolition of the McCallister/Claycomb/Hartung House (Site 113), eligibility for listing in the National Register no longer exists. It is our understanding that the property owner demolished the structure with the intent to influence the roadways design and circumvent the Kentucky Transportation Cabinet's requirement for compliance with federal regulation. It is the finding of this office that any change in the roadways design to capitalize on this unfortunate action will be considered anticipatory demolition.
- The proposed National Register boundary for Site 99 (Foursquare) is appropriate and the closest alignment for I-69, Alternate 1, will have no direct impact on the property. It should be noted that potential secondary effects remain a concern.
- The proposed National Register boundary for Site 148 (10345 Tscharnier Road) is appropriate and the closest alignment for I-69, Alternate 2, will have no direct impact on the property. It should be noted that potential secondary effects remain a concern for this property as well.

We would like to thank the Kentucky Transportation Cabinet for emphasizing the

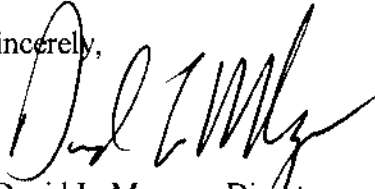
Page 2

Mr. David Waldner

Sept. 2, 2003

avoidance of historic resources throughout this projects development. Should you have any questions regarding these comments, please do not hesitate to call Craig Potts of my staff at 502-564-7005.

Sincerely,

A handwritten signature in black ink, appearing to read "David L. Morgan". The signature is fluid and cursive, with the first name "David" being more prominent.

David L. Morgan, Director
Kentucky Heritage Council and
State Historic Preservation Officer

Cc: Helen Powell



Received

AUG 19 2003

HNTB

James C. Codell, III
Secretary of Transportation

Commonwealth of Kentucky
Transportation Cabinet
Frankfort, Kentucky 40622

Paul E. Patton
Governor

Clifford C. Linkes, P.E.
Deputy Secretary

August 14, 2003

Mr. David Morgan
Preservation Director & SHPO
Kentucky Heritage Council
300 Washington Street
Frankfort, Kentucky 40601

Dear Mr. Morgan:

SUBJECT: Addendum for Indirect Noise Effects for Residential Sites and
Visual Effects for Sites 99 and 129
A Cultural Resource Survey For I-69 South
Henderson County, Kentucky
Item No. 2-69.00

Attached please find the above subject addendum for your review and comment. A comparison of the noise data to the four categories used by the Kentucky Transportation Cabinet reveals that none of the eligible residential historic sites is a Category 1 that requires noise mitigation. Therefore, there will be no indirect effects related to noise.

The two remaining eligible properties with potential for indirect visual effects are the Fourquare on KY 285 (Site 99) and the Lee Basket House (Site 129). Alternate 1 will have an adverse visual effect on Site 99 because the proposed roadway will be visible from the foursquare in the open, relatively flat areas, now farmland, both to the northwest and the southeast of the dwelling. For Site 129, Alternate 3 will be almost twenty feet higher and Alternate 2 that will be forty feet higher than present-day US 60 which is on a ridge.

Your concurrence to this Determination of Effect is requested by September 14, 2003. If you have any questions please contact Rebecca Turner or me at 502-564-7250.

Very truly yours,

David M. Waldner, P.E., Director
Division of Environmental Analysis

c: K. Sperry, P. Rawlings, T. Vinegar, D-2 (E. Green, D. Taylor), R.H. Turner, Bernardin and Lochmueller, H. Powell and Company, FHWA



KENTUCKY TRANSPORTATION CABINET
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KENTUCKY HERITAGE COUNCIL

The State Historic Preservation Office

Paul E. Patton
Governor
Marlene M. Helm
Cabinet Secretary

David L. Morgan
Executive Director and
SHPO

September 8, 2003

Mr. David M. Waldner, Director
Division of Environmental Analysis
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, KY 40622

Re: Addendum for Indirect Noise Effects for Residential Sites and Visual Effects for Sites 99 and 129; A Cultural Resource Survey for I-69 South in Henderson County, Kentucky (Item No. 2-69.00)

Dear Mr. Waldner:

We have completed our review of the above referenced addendum. Based upon the Kentucky Transportation Cabinet's noise and visual analysis study, we are in agreement that there will be no adverse audible impacts to residential sites. Furthermore, we agree that Alternate 1 will have an adverse visual effect on Site 99 and that Alternates 2 and 3 will have adverse visual effects on Site 129. Further discussion regarding the resolution of these potential impacts is requested. Should you have any questions regarding these comments, please do not hesitate to call Craig Potts of my staff at 502-564-7005.

Sincerely,

A handwritten signature in black ink, appearing to read "D. L. Morgan".

David L. Morgan, Director
Kentucky Heritage Council and
State Historic Preservation Officer



Received

AUG 19 2003

HNTB

Paul E. Patton
Governor

James C. Codell, III
Secretary of Transportation

Commonwealth of Kentucky
Transportation Cabinet
Frankfort, Kentucky 40622

Clifford C. Linkes, P.E.
Deputy Secretary

August 14, 2003

Mr. David Morgan
Preservation Director & SHPO
Kentucky Heritage Council
300 Washington Street
Frankfort, Kentucky 40601

Dear Mr. Morgan:

SUBJECT: Addendum for Indirect Visual Effects for
Site 116 (McCormick House) and Site 119 (White Priest House)
A Cultural Resource Survey For I-69 South
Henderson County, Kentucky
Item No. 2-69.00

Attached please find the above subject addendum for your review and comment. This information is submitted to illustrate the relationship of Site 116 (McCormick House) and Site 119 (White Priest House) to the proposed Alternate 2 and 3 and Ground Profile. An interchange is proposed approximately 420-440 feet above sea level to connect with KY 351-Zion Road. Sites 116 and 119 are 430 and 425 feet above sea level, respectively. Therefore, based upon the information prepared by HNTB, Alternates 2 and 3 will have an adverse indirect visual effect on Site 116 and 119.

Your concurrence to this Determination of Effect is requested by September 14, 2003. If you have any questions please contact Rebecca Turner or me at 502-564-7250.

Very truly yours,

David M. Waldner, P.E., Director
Division of Environmental Analysis

c: K. Sperry, P. Rawlings, T. Vinegar, D-2 (E. Green, D. Taylor), R.H. Turner, Bernardin and Lochmueller, H. Powell and Company, FHWA



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Education, Arts and Humanities Cabinet

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Executive Director and
SHPO

October 8, 2003

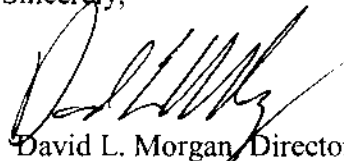
Mr. David M. Waldner, Director
Division of Environmental Analysis
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, KY 40622

Re: Addendum for Indirect Visual Effects for Site 116 (McCormick House) and Site 119 (White Priest House); A Cultural Resource Survey for I-69 South in Henderson County, Kentucky (Item No. 2-69.00)

Dear Mr. Waldner:

We have completed our review of the above referenced addendum. Based upon the information prepared by HNTB, we are in agreement that the construction of either Alternates 2 or Alternate 3 will result in an adverse indirect visual effect to Site 116 and Site 119. Further discussion regarding the resolution of these impacts will be required should one of these two alternates become the preferred. Should you have any questions regarding these comments, please do not hesitate to call Craig Potts of my staff at 502-564-7005.

Sincerely,



David L. Morgan, Director
Kentucky Heritage Council and
State Historic Preservation Officer

Cc: Helen Powell

KENTUCKY

Site Surveyed	Address	County
Abner Cates House	8132 Pruitt Agnew Road (Hwy. 1217)	Henderson
Alzey Store	N/A	Henderson
Barrett-Keach House ("The Elms")	1586 Hwy. 136 West	Henderson
Ben T. Kimsey House	1712 LaRue Road	Henderson
Book-Ditterline House	5618 Hwy. 1299	Henderson
Book-Jenkins House	5442 Hwy. 1299	Henderson
Book-McHatton House	6590 Hwy. 1299	Henderson
C.C. Gabhart House	12199 Hwy. 359 West	Henderson
Cabell-Taylor-Burbank House ("Sugar Tree Grove")	Hwy. 136 (south side)	Henderson
Campbell House	Dixon Road (west side)	Henderson
Campbell-Orsburn House	9097 Dixon Road	Henderson
Carroll Hundley House	Ed Otey Road (north side)	Henderson
Cecil Busby House	Rockhouse Road (south side)	Henderson
Crooks House ("Brandywine Farm")	8160 Pritchett Crooks Road	Henderson
Dixon-House	7452 Wheeler Road	Henderson
E.G. Eakins House	7028 Hwy. 283	Henderson
Ellis-Neville House ("Spence Tea Room")	3925 US 60 East	Henderson
Farley House	7220 Rucker Road #2	Henderson
Frank Carroll House	2517 Wilson Station Road	Henderson
Galloway-Culley House	5729 Hwy. 145	Henderson
Harding-Farley Slave Quarters	7220 Rucker Road #2	Henderson
Haywood Alves House	Hwy. 268 (north side)	Henderson
Henry P. Barret House	2000 US 60 East	Henderson
Henry P. Barret Overseer's House	2000 US 60 East	Henderson
Holloway House	N/A	Henderson
Hust House	9798 Hwy. 416 West	Henderson
J.E. Sublette Jackson House	12500 Hwy. 1078 South	Henderson
Jack Knight House	5189 Pleasant Valley Road	Henderson
John S. McCormick House ("Forest Grove")	6171 Zion Road (Hwy. 351)	Henderson
Jordan-Crafton House	Rucker Road #2 (west side)	Henderson
Joseph Sauer House	8976 Straight Line Road	Henderson
Konsler-Thomas House	4611 Posey Chapel Road	Henderson
Marshall Foreman's House	6454 US 41A South	Henderson
McClain House	3497 US 60 East	Henderson
Overfield House	13356 US 41 South	Henderson
Powell-Clark House	5228 Corydon-Green Lick Road	Henderson
Riverside Downs	N/A	Henderson
Robertson Log House	3030 US 60 East	Henderson
Robertson-Warren House	3030 US 60 East	Henderson
Royster House	Busby-Denton Road (south side)	Henderson
Royster House	7891 Pruitt Agnew Road (Hwy. 1217)	Henderson
Smith-Holloway Cemetery	N/A	Henderson
Soaper Mule Barn	2323 Zion Road (Hwy. 351)	Henderson
Southard House	12848 US 60 West	Henderson
Spencer Homestead	7155 Hwy. 1299	Henderson
Spencer-Hurt House	6635 Hwy. 1299	Henderson
Tapp House	7320 Sulphur Springs Road	Henderson
Tapp-Dixon House	7677 Wheeler Road	Henderson
Tom T. Royster House	8628 Hwy. 416 West	Henderson
US 41 Ohio River Birdge	N/A	Henderson
White-Goehring House	2020 Posey Ball Road	Henderson
White-Priest House (Stagecoach House)	7474 Zion Road (Hwy. 351)	Henderson
William Chapman Briscoe House	15492 Zion Road (Hwy. 351)	Henderson
William Soaper House ("Benvenue")	2323 Zion Road (Hwy. 351)	Henderson

INDIANA

Site Surveyed	Address	County
"Chase Cottage"	100 N	Warrick
"Kuebler's Garden"	700 Jefferson Street	Warrick
5th Avenue Bridge	5th Avenue	Vanderburgh
A. R. Thomas House	1604 Brookside Drive	Vanderburgh
Adam Weikel duplex	21-23 W. Maryland street	Vanderburgh
Ajax Campbell Farm	Anderson Road	Posey
Ajax Filligim House	Lang Road	Posey
Alex Coots Farm	2225 E. Kansas Road	Vanderburgh
Alexander House	490 E	Posey
Alfred E. Bernardin House	508 S. Boeke Road	Vanderburgh
Aloys Ziliak House	110 Main St., Haubstadt	Gibson
Altrusa Club Fish Pond	Mesker Park Zoo	Vanderburgh
Angel Smokehouse and Artifact Storage	8215 Pollack Avenue	Vanderburgh
Anthony Reis House	704 N. First Avenue	Vanderburgh
Anton Kessler House	305 E. Columbia Street	Vanderburgh
Arbor Hill	3605-3609 Stringtown Road	Vanderburgh
Armstrong Township School No. 2	19519 Owensville Road	Vanderburgh
Arthur Grissom Farm	1700 Fray Road	Vanderburgh
Bandstand	10863 Main Street	Posey
Barn	7800 University Boulevard	Vanderburgh
Barn	5800 Smith Diamond Road	Vanderburgh
Bates House	350 W	Warrick
Bear Pit	Mesker Park Zoo	Vanderburgh
Becker-Hartman Bakery Building	1031 Main Street	Vanderburgh
Bernardin-Johnson House	17 Johnson Place	Vanderburgh
Bethel American Methodist Episcopal Church	600 Mill Street	Posey
Bethell Mill/Tobacco Factory	110 Water Street	Warrick
Bethlehem Christian Church	6400 Oak Hill Road	Vanderburgh
Bethsaida Christian Church and Cemetery	1000 N	Posey
Big Four Railroad Underpass	Mohr Road	Vanderburgh
Bitterman Brothers Building	202-204 Main Street	Vanderburgh
Bitterman Building	200 Main Street	Vanderburgh
Black River Bridge	Griffin Road	Posey
Bockelman School	7300 University Boulevard	Vanderburgh
Bockelman-Doggmeier-Parkinson House	6900 Hogure Road	Vanderburgh
Bosecker Farm	7117 W. Mill Road	Vanderburgh
Bosse Field	N. Main Street	Vanderburgh
Bracket Mills House	221 W. Oregon Street	Vanderburgh
Brandt Farm	850 E	Posey
Bridge	Old SR 41	Gibson
Bridge	Old SR 41	Gibson
Bridge	Dogwood Lane	Vanderburgh
Bridge	50 N	Warrick
Bridge	off Bush Road	Warrick
Bridge	River Road	Warrick
Bridge	off 130 W	Posey
Bridge	Upper Evansville-Mt. Vernon Road	Posey
Cabin	Murphy Park	Posey
Cabin #3	Burdette Drive	Vanderburgh
Cabin #6	Burdette Drive	Vanderburgh
Cale Farm	State Road 68	Posey
Cameron House	411 S. Hebron Avenue	Vanderburgh
Camp Reveal	1042 W. Boonville-New Harmony Road	Vanderburgh
Canal Lodge Meeting Hall	Boonville-New Harmony Road, Millersburg	Warrick

Site Surveyed	Address	County
Carnegie Library	E. Locust St., Fort Branch	Gibson
Carpenter's Hall	1035 W. Franklin	Vanderburgh
Caze School	S. Green River Road	Vanderburgh
Cedar Hall School	2100 Fulton Avenue	Vanderburgh
Central High School/Gymnasium	222 Court Street	Vanderburgh
Central Methodist Episcopal Church	300 Mary Street	Vanderburgh
Central Power Plant, Evansville Public Service Company	Mulberry Street	Vanderburgh
Charles H. Tipping House	1503 Lant Circle	Vanderburgh
Charles Lindenschmidt Building	401 Edgar Street	Vanderburgh
Charles Reckefus House	5115 S. Red Bank Road	Vanderburgh
Charles Uhl House	1021 Lincoln Avenue	Vanderburgh
Charles W. Cook House	620 Fulton Avenue	Vanderburgh
Chicago & Eastern Illinois Repair Shops	N/A	Vanderburgh
Christian and John Miller House	410 N. 3rd Avenue	Vanderburgh
Church	Main St.	Gibson
Claremont Apartments, Hotel and Tea Room	133-119 Locust Street	Vanderburgh
Clarence Feldman house	2423 Lincoln Avenue	Vanderburgh
Clarence Riggs house	1619 Brookside Drive	Vanderburgh
Clubhouse	Burdette Drive	Vanderburgh
Coca Cola Bottling Works	927 W. Pennsylvania Street	Vanderburgh
Columbia Apartments	310 N. Rotherwood Street	Vanderburgh
Columbia Apartments	1660-1628 John Street	Vanderburgh
Commercial Block	107-111 S. Main St.	Gibson
Commercial Building	10863 Main Street	Posey
Commercial Building	400 West Second Street	Posey
Commercial Building	422 N. Main Street	Vanderburgh
Commercial Building	413 Main Street	Vanderburgh
Commercial Building	523-525 Main Street	Vanderburgh
Commercial Building	317 Locust Street	Vanderburgh
Commercial Building	700-708 Fulton Avenue	Vanderburgh
Coresell-Sammet Farm	St. Philip Road	Posey
Cottage #4	Burdette Drive	Vanderburgh
County Bridge Cy 3	Ohio street	Vanderburgh
County Bridge No. 76	Heckel Road	Vanderburgh
Crow Farm	960 E. Inglefield Road	Vanderburgh
Cumberland Presbyterian Church	W. Locust St., Fort Branch	Gibson
Cumberland Presbyterian Church & Cemetery	207 Grave St.	Gibson
Cutteridge-Curtis House	318 E. Main Street	Warrick
Dance Gardens	off Lakeside Drive	Vanderburgh
Deig Farm	Lower Mt. Vernon Road	Posey
Demberger House	425 E	Posey
Deneger House	950 N	Warrick
Diederick-Rexing Farm	St. Wendel Road	Vanderburgh
Dieg-Schenck Farm	St. Philip Road, St. Philip	Posey
Doctor Teary House	Second Street	Warrick
Dodd Farm	18801 Barton Road	Vanderburgh
Dr. Carl G. R. Moutoux House	4814 New Harmony Road, Kasson	Vanderburgh
Dr. Charles Yeck House	5709 Spring Lake Drive	Vanderburgh
Dr. Edward k. Denzer House	1509 Southeast Boulevard	Vanderburgh
Dr. Louis Fritsch House	1000 E. Virginia Street	Vanderburgh
Dr. P. C. Rietz House	503 1st Avenue	Vanderburgh
Dr. Simon Laubscher House	6601 Kratzville Road	Vanderburgh
Dr. Springston House	650 E, Tennyson	Warrick
Dr. W.S. Clippenger House	9130 Old Petersburg Road	Vanderburgh
Dress Field	5701 Flightline Drive	Vanderburgh
Dulin House	520 E. Division Street	Warrick

Site Surveyed	Address	County
Duplex	300-302 W. Illinois Street	Vanderburgh
Duplex	304-306 W. Illinois Street	Vanderburgh
Duplex	312-314 Wl. Illinois Street	Vanderburgh
Edgar A. Igleheart House	5500 Lincoln Avenue	Vanderburgh
Edmond Archbold House	State Road 662	Warrick
Eickhoff Farm	Ford Road	Posey
Elliot House	State Road 69	Posey
Elliott Farm	State Road 69	Posey
Elmendorf House	1125 Laubscher Road	Vanderburgh
Emanuel Lutheran Church	308 N. First Avenue	Vanderburgh
Entry/Gatehouse	Nurrenbern Road	Vanderburgh
Erwin General Store	12600 N. Green River Road	Vanderburgh
Esche Farm	Roedel Road	Posey
Evangelical Lutheran School	809 W. Franklin Street	Vanderburgh
Evangelical Lutheran Trinity School	716 W. Illinois Street	Vanderburgh
Evangelische St. Paulus Church and Cemetery	8701 SR 65	Vanderburgh
Evansville Brewery Bottling Works	1301 SR 62	Vanderburgh
Evansville Brewing Association	1301 SR 62	Vanderburgh
Evansville Municipal Market	813 W. Pennsylvania Street	Vanderburgh
Evansville Post Office and Customs House	100 NW 2nd Street	Vanderburgh
Falls House	425E	Posey
Falls House	Main Street	Posey
Farm	100 E.	Gibson
Farm	775 N., Patoka	Gibson
Farm	Fischer Road	Vanderburgh
Farm	4500 Rodenberg Avenue	Vanderburgh
Farm	1000 N	Posey
Farm	State Road 68	Posey
Farm	1000E	Posey
Farm	775 E	Posey
Farm	700 N	Posey
Farm	400 N	Posey
Farm	Springfield Road	Posey
Farm	State Road 66	Posey
Farm	State Road 66	Posey
Farm	Harmony-Springfield Road	Posey
Farm	State Road 69	Posey
Farm	550 E	Posey
Farm	State Road 69	Posey
Farm	Savah Road	Posey
Farm	Upper Mt. Vernon Road	Posey
Farm	6618 Upper Mt. Vernon Road	Posey
Farm	525 S	Posey
Farm	700 E	Posey
Farm	Darnell School Road	Posey
Farm	Bone Bank Road	Posey
Farm	4705 Middle Mt. Vernon Road	Vanderburgh
Farmer's-Koch Dairy Company	317 N. Main Street	Vanderburgh
Faultless Caster Company	1421 N. Garvin Street	Vanderburgh
Ferd Riedy House	819 N. Main Street	Vanderburgh
Fieldhuas House	6520 Upper Mount Vernon Road	Vanderburgh
Fire Alarm Station	118 Baker Street	Vanderburgh
First Baptist Church	320 Cherry Street	Vanderburgh
First Christian Church of Cynthiana	North Street	Posey
First National Bank of Fort Branch	100 S. McCreary St., Fort Branch	Gibson
Fischer House	1000 E	Posey

Site Surveyed	Address	County
Former Booker T. Washington School	Owen Street	Posey
Former Church	Welborn Road	Posey
Former Mt. Vernon High School	614 Canal Street	Posey
Former Posey County Jail and Sheriff's Residence	311 Mill Street	Posey
Frank Gottam Farm	Countyline Road	Gibson
Frank Nurrenbern Farm	4520 Bayou Creek Road	Vanderburgh
Franklin Street Bridge	W. Franklin Street	Vanderburgh
Fred Frank House	116 Posey Street	Warrick
Fred Zeidler House	6651 Kratzville Road	Vanderburgh
Frederick Dewis House	1870 Marshall Avenue	Vanderburgh
Frederick Hagemann Farm	State Road 69	Posey
Frederick Stock House	719 N. Fourth Street	Warrick
Freeman House	3617 New Harmony Way	Vanderburgh
Freewill Baptist Church	905 East Third Street	Posey
Fuhs Farm	5310 New Harmony Road, Kasson	Vanderburgh
Garbers House	1050 N	Warrick
Garvin Park	N. Main Street and Morgan Avenue	Vanderburgh
Gentry House	211 Main Street	Warrick
George Donner Farm	Peters Road	Posey
George L. Krauss House	1601 Lant Circle	Vanderburgh
George M. Goad House	711 N. Third Street	Warrick
George Roth House	401 E. Main Street	Warrick
George Schmidt House	2316 Vann Avenue	Vanderburgh
Germaine Fuchs House	1635 Brookside Drive	Vanderburgh
Germania Maennerchor	916 N. Fulton Avenue	Vanderburgh
Gerrich House	1100 W	Warrick
Gibson Co. Bank	101 Main St.	Gibson
Glen Black House and Library	8215 Pollack Avenue	Vanderburgh
Globe-Bosse-World Furniture Company	801 N. 9th Avenue	Vanderburgh
Globe-Bosse-World Furniture Factory	701 N. 9th Avenue	Vanderburgh
Gottlieb Stahl House	5724 Stringtown Road	Vanderburgh
Gough House	617 Seventh Street	Warrick
Grace Lutheran Church	719 S. Elliott Street	Vanderburgh
Graham Brothers Truck Company/Chrysler company Office	1625 N. Garvin Street	Vanderburgh
Greathouse School	State Road 69	Posey
Greyhound BusTerminal	100 NW 3rd Street	Vanderburgh
Griffin M.E. Church	215 Main Street, Griffin	Posey
Grote House	1138 Washington Avenue	Vanderburgh
Hamby Farm	State Road 68	Warrick
Hancock-Sanders House	820 Irvin Avenue	Vanderburgh
Hannah Jacobs House	609 W. Maryland Street	Vanderburgh
Harold G. Schafer House	1444 Brookside Drive	Vanderburgh
Harper House	SR 64	Gibson
Hazelton Inn	1st St.	Gibson
Hemenway Memorial Presbyterian Church	Sycamore Street	Warrick
Henry E. Cook House	610 Fulton Avenue	Vanderburgh
Henry Graf House	313 Madison Avenue	Vanderburgh
Henry Holzgrafe House	213 W. Virginia Street	Vanderburgh
Henry P. Schrader House	1219 S Linwood Avenue	Vanderburgh
Henry Reis School	1900 Stringtown Road	Vanderburgh
Henry Rietman House	18 Wabash Avenue	Vanderburgh
Henry Wiehe House	700 State Road 662	Warrick
Hercules Buggy Co./Serval Corporation	119 N. Morton Street	Vanderburgh
Herman H. Klammer House	2822 W. Franklin Street	Vanderburgh
Herman Rosenbaum House	1400 Bayard Park Drive	Vanderburgh
Hillenbrand Farm	3609 W. Boonville-New Harmony Road	Vanderburgh

Site Surveyed	Address	County
Hills-Nunn House	4400 Stringtown Road	Vanderburgh
Hilltop Inn	1100 Harmony Way	Vanderburgh
Hines House	Main Street	Posey
Historical Marker	off I-64	Warrick
Hose House No. 10	119 E. Columbia Street	Vanderburgh
Hose House No. 12	1409 First Avenue	Vanderburgh
Hose House No. 3	1065 W. Pennsylvania Street	Vanderburgh
Hose House No. 5	320-314 St. Joseph Avenue	Vanderburgh
Hose House No. 8	931 W. Columbia Street	Vanderburgh
House	200 E., Warrenton	Gibson
House	175 E.	Gibson
House	101 N. Main St., Fort Branch	Gibson
House	200 W. Walnut St., Fort Branch	Gibson
House	350 S., Princeton	Gibson
House	100 N., Princeton	Gibson
House	225 N., Princeton	Gibson
House	200 N., Patoka	Gibson
House	500 N., Patoka	Gibson
House	U.S. 41	Gibson
House	S.R. 56	Gibson
House	100 E., Patoka	Gibson
House	603 Main St.	Gibson
House	402 N. Main St.	Gibson
House	208 Mill St.	Gibson
House	117 N. Main St.	Gibson
House	202 Grave St.	Gibson
House	5117 Hogue Road	Vanderburgh
House	5119 Broadway Avenue	Vanderburgh
House	1100 W	Warrick
House	Main Street	Warrick
House	State Road 61	Warrick
House	Holland Road	Warrick
House	215 W. Main	Warrick
House	606 E. Main Street	Warrick
House	311 E. Locust Street	Warrick
House	431 S. Second Street	Warrick
House	50 N	Warrick
House	150 S	Warrick
House	1000 W	Warrick
House	1050 W	Warrick
House	1000 E	Posey
House	North Street	Posey
House	Locust Street	Posey
House	State Road 66	Posey
House	State Road 66	Posey
House	100 W	Posey
House	400 N	Posey
House	612 East Tavern Street	Posey
House	524 East Steam Mill Street	Posey
House	600 East South Street	Posey
House	601 East South Street	Posey
House	815 North Brewery Street	Posey
House	West South Street	Posey
House	West Church Street	Posey
House	Hidbrader Road	Posey
House	325 N	Posey

Site Surveyed	Address	County
House	7320 Main Street	Posey
House	4700 Main Street, St. Wendel	Posey
House	275 N, Blairsville	Posey
House	State Road 66	Posey
House	1150 E	Posey
House	Hoener Road	Posey
House	Junker Road	Posey
House	Savah Road	Posey
House	Blackburn Road	Posey
House	Tile Factory Road	Posey
House	800 S	Posey
House	State Road 69	Posey
House	800 S	Posey
House	1700 Main Street	Posey
House	1129 Mulberry Street	Posey
House	930 Main Street	Posey
House	217 East Tenth Street	Posey
House	730 Main Street	Posey
House	511 East Fifth Street	Posey
House	431 East Fourth Street	Posey
House	429 East Third Street	Posey
House	602 East Third Street	Posey
House	428 East Fourth Street	Posey
House	742 East Second Street	Posey
House	512 East Second Street	Posey
House	608 East Second Street	Posey
House	419 East Second Street	Posey
House	521 East Water Street	Posey
House	335 West Eighth Street	Posey
House	231 West Eighth Street	Posey
House	729 Main Street	Posey
House	709 Main Street	Posey
House	629 Main Street	Posey
House	519-521 Main Street	Posey
House	518 College Avenue	Posey
House	410 West Fourth Street	Posey
House	601 West Fourth Street	Posey
House	818 West Fourth Street	Posey
House	221 Pearl Street	Posey
House	220 Pearl Street	Posey
House	401 West Second Street	Posey
House	521 West Second Street	Posey
House	Altheide Road	Posey
House	1000 E	Posey
House	325 S	Posey
House	Barter Road	Posey
House	West Franklin	Posey
House	3903 Washington Avenue	Vanderburgh
House	3515 Washington Avenue	Vanderburgh
House	416 S. Roosevelt Drive	Vanderburgh
House	435 S. Roosevelt Drive	Vanderburgh
House	2325 Lincoln Avenu	Vanderburgh
House	605 S. St. James Boulevard	Vanderburgh
House	625 S. St. James Boulevard	Vanderburgh
House	2627 Lincoln Avenue	Vanderburgh
House	2806 Oak Hill Road	Vanderburgh

Site Surveyed	Address	County
House	1915 E. Virginia Street	Vanderburgh
House	3809 Stringtown road	Vanderburgh
House	504 E. Olmstead Avenue	Vanderburgh
House	2008 N. Stringtown Road	Vanderburgh
House	604-606 E. Columbia Street	Vanderburgh
House	628 E. Delaware Street	Vanderburgh
House	802 E. Iowa Street	Vanderburgh
House	517 S. rotherwood Avenue	Vanderburgh
House	509 S. runnymede Avenue	Vanderburgh
House	512 S. Runnymede Avenue	Vanderburgh
House	511 S. Runnymede Avenue	Vanderburgh
House	525 S. Runnymede Avenue	Vanderburgh
House	516 S. Runnymede Avenue	Vanderburgh
House	1918 Lincoln Avenue	Vanderburgh
House	1901 Lincoln Avenue	Vanderburgh
House	637-639 S. Norman Avenue	Vanderburgh
House	817 S. Harlan Avenue	Vanderburgh
House	1901 Bellemeade Avenue	Vanderburgh
House	731 S. Norman Avenue	Vanderburgh
House	1671 S. Rotherwood Avenue	Vanderburgh
House	1616 Brookside Drive	Vanderburgh
House	6609 Kratzville Road	Vanderburgh
House	221 E. Iowa Street	Vanderburgh
House	507 E. Franklin Street	Vanderburgh
House	117 Read Street	Vanderburgh
House	1010 Lincoln Avenue	Vanderburgh
House	762 Lincoln Avenue	Vanderburgh
House	871 Lincoln Avenue	Vanderburgh
House	861 Lincoln Avenue	Vanderburgh
House	1101 S. Grand Avenue	Vanderburgh
House	1217 Judson Street	Vanderburgh
House	1426 Culver Drive	Vanderburgh
House	804 Taylor Avenue	Vanderburgh
House	1003 W. Iowa Street	Vanderburgh
House	819 W. Iowa Street	Vanderburgh
House	402 N. First Avenue	Vanderburgh
House	1008 W. Franklin Street	Vanderburgh
House	1119 W. Indiana Street	Vanderburgh
House	1922 W. Indiana Street	Vanderburgh
House	1412 Mesker Park Drive	Vanderburgh
House	1912 Harmony Way	Vanderburgh
House	106 N. Barker Avenue	Vanderburgh
House	1200 S	Gibson
House	Owensville Road	Gibson
Howard Roosa School	1230 E. Illinois Street	Vanderburgh
Howell Fire Station No. 7	3012 Dearborn Avenue	Vanderburgh
Howell Methodist Episcopal Church	1408 Stinson Avenue	Vanderburgh
I.O.O.F. Lodge	Main St.	Gibson
Igleheart Brothers Office	1600 First Avenue	Vanderburgh
Illinois Central Freight Station	1401 W. Franklin Street	Vanderburgh
Immanuel Lutheran Church and Cemetery	Volkman Road	Vanderburgh
J. L. Kramer House	700 Vine Street	Vanderburgh
J.E. Toops House	100 N. Main, Fort Branch	Gibson
Jacob Brenner House	1000 State Road 261	Warrick
Jacob Kleinknecht Farm	Peerless Road	Vanderburgh
James Lesley House	7 N. Alvord Boulevard	Vanderburgh

Site Surveyed	Address	County
Jarvis House	410 North Street	Warrick
Jason Margedant House	1506 E. Indiana Street	Vanderburgh
Jobe Farm	6524 Broadway Avenue	Vanderburgh
John Barth Farm	4425 Bayou Creek Road	Vanderburgh
John Bessemier House	3001 Harmony Way	Vanderburgh
John C. Stivers House	665 S. Weinbach	Vanderburgh
John Carson House	8601 Old Petersburg Road	Vanderburgh
John Drury House	365 S. Boehne Camp road	Vanderburgh
John H. Heldt House	3815 Stringtown Road	Vanderburgh
John Heldt House	100 E. Franklin Street	Vanderburgh
John Sayler Farm	475 E	Posey
John W. Boehne	420 Oakley Street	Vanderburgh
John W. Boehne House	1119 Lincoln Avenue	Vanderburgh
Jones Schoolhouse	500 N	Posey
Jonn Streithof-F. W. Hulvershorn House	312 Oakley Street	Vanderburgh
Joseph Angel House	7800 Pollack Avenue	Vanderburgh
Joseph Snyder House	State Road 261	Warrick
Judge Phillip Gould House	2510 Lincoln Avenue	Vanderburgh
Juncker Farm	Roehr Road	Posey
Jung Farm	2331 Diffenbach Road	Vanderburgh
Kaiser House	650 S	Warrick
Karch Farm	5507 Pollack Avenue	Vanderburgh
Karch Farm	4005 Hermann Road	Vanderburgh
Karges Furniture Company	1501 W. Maryland Street	Vanderburgh
Karges House	Old Princeton Road	Gibson
Karsch Townhouse	203-215 Oakley Street	Vanderburgh
Kasson School	4701 Old Cynthiana Road	Vanderburgh
Kellogg House	Old State Road	Vanderburgh
Kenyon House	7506 Newburgh Road	Vanderburgh
Kissel Farm	8230 Schaeffer Road	Vanderburgh
Klusmeir Store	313 Main Street	Warrick
Knapp Farm	W. Boonville-New Harmony Road	Vanderburgh
Koch and Sons Factory	107 N. Garvin Street	Vanderburgh
Koch House	3521 Washington Avenue	Vanderburgh
Koester-Patberg House	504 E. Herndon Drive	Vanderburgh
Korff House	400 E. Columbia Street	Vanderburgh
Kruse House	950 N	Warrick
Kuebler House	7300 University Boulevard	Vanderburgh
L.S. French House	Old US 41, Patoka	Gibson
LaGrange House	201 S. West St., Fort Branch	Gibson
Landmark Building	10 NW 4th Street	Vanderburgh
Larence Zilliak House	210 N. Main, Haubstadt	Gibson
Lawrence School	1100 E	Posey
Leonard Ungethum Farm	8323 Upper Mount Vernon Road	Vanderburgh
Levi Hooker-Ensle-Pierce House	6531 Oak Hill Road	Vanderburgh
Liberty Babtist Church	E. Walnut Street	Warrick
Liberty Baptist Church	701 Oak Street	Vanderburgh
Liberty General Baptist Church	1820 Delmar Avenue	Vanderburgh
Liederkrantz Maennerchor	302 Market Street	Vanderburgh
Lincoln Gardens	S. Garvin Street	Vanderburgh
Lincoln School	635 Lincoln Avenue	Vanderburgh
Lion Exhibit/Veld	Mesker Park Zoo	Vanderburgh
Little Hope Baptist Church	663-666 S. Elliott Street	Vanderburgh
Lomasco Bank	226 N. Fulton Avenue	Vanderburgh
Looris G. Julian house	1660 Southeast Boulevard	Vanderburgh
Louis F. Kraft House	33 John Street	Vanderburgh

Site Surveyed	Address	County
Louis Nurrenbern Farm	8401 Broadway Avenue	Vanderburgh
Louis Puster House	418 Edgar Street	Vanderburgh
Louis Schumacher House	412 Monroe Street	Warrick
Louisville and Nashville Railroad Bridge	off Ohio Street	Vanderburgh
Lowell House	725 S. Fifth Street	Warrick
Lowrey House	917 Mill Street	Posey
Lutheran Church & Cemetery	350 N	Warrick
Lynch School	3820 Oak Hill road	Vanderburgh
Mahrenhetz Farm	7824 Middle Mount Vernon Road	Vanderburgh
Maple Grove Farm	Copperline Road	Posey
Maple Hill Cemetery	State Road 66	Posey
Martin Schaefer House	200 N. Main, Haubstadt	Gibson
McCurdy-Sears Building	101 NW 4th Street	Vanderburgh
McFaddin School	McFaddin School Road	Posey
McJohnston House	10512 Browning Road	Vanderburgh
McJohnston Methodist Episcopal Chapel and Cemetery	Kansas Road	Vanderburgh
Mead Johnson River-Rail Truck Terminal	830 W. Ohio Street	Vanderburgh
Mechanic Arts Building	726 Wedeking Avenue	Vanderburgh
Metzger House	150 S	Warrick
Meyers Meats Building	200 E. Columbia Street	Vanderburgh
Michael Helfrich House	700 Helfrich Lane	Vanderburgh
Michael Schaeffer House	118 E. Chandler Avenue	Vanderburgh
Monastery fo St. Clare	509 S. Kentucky Avenue	Vanderburgh
Monastery of St. Clare	510 S. Kentucky Avenue	Vanderburgh
Monkey Boat	Mesker Park Zoo	Vanderburgh
Moorehead House	10141 Old Henderson Road	Vanderburgh
Mount Zion Church	100 W	Warrick
Mt. Pleasant Baptist Church and Cemetery	Bufkin Road	Posey
Mt. Pleasant School/House	8700 Old State Road	Vanderburgh
Murphy Farm	7020 Old Henderson Road	Vanderburgh
Murphy House	State Road 165	Posey
Naab Farm	9300 Upper Mount Vernon Road	Vanderburgh
National Guard Armory	Rotherwood Avenue	Vanderburgh
Never Split Seat	1701 Main Street	Vanderburgh
Newark Shoe Store-Isaac Gant company	221 Main Street	Vanderburgh
Nicholas Elles House	115 Mary Street	Vanderburgh
Niederhaus Farm	Schroeder Road	Vanderburgh
Niemeyer Farm	Carson School Road	Posey
Nisbet Inn	6701 Nisbet Station Road	Vanderburgh
Nobles Chapel	State Road 57	Gibson
Oak Grove Methodist Church	300 S	Warrick
Oak Hill Cemetery	1400 E. Virginia Street	Vanderburgh
Old Beech School	200 N	Posey
Old Horse Fountain	Main Street	Vanderburgh
Old North Church	4201 Stringtown Road	Vanderburgh
Olivett Presbyterian Church	867 Walnut Street	Vanderburgh
Operations Building		Vanderburgh
Orr Summer Cottage	1616 Mt. Auburn Road	Vanderburgh
Parke Memorial Presbyterian Chapel	28 E. Delaware Street	Vanderburgh
Parke Memorial Presbyterian Manse	103 W. Delaware Street	Vanderburgh
Patoka High School	202 S. Main St.	Gibson
Paul Mueller House	103 E. Columbia Street	Vanderburgh
Peter Augustus Maier House	707 6th Street	Vanderburgh
Peter Koch House	413 Middle Street	Warrick
Pfeiffer Farm	Copperline Road	Posey
Picnic Shelter/Concessions	Mesker Park Drive	Vanderburgh

Site Surveyed	Address	County
Pilkington General Store	Boonville-New Harmony Road, Millersburg	Warrick
Public School	S. Main St., Fort Branch	Gibson
Public School No. 6	7835 SR 65	Vanderburgh
Pump House	off Lakeside Drive	Vanderburgh
Railroad Depot	Cherry Street	Warrick
Red & White Cafe	115 S. Main St.	Gibson
Redeemer Lutheran Chapel and School	816 Jefferson Avenue	Vanderburgh
Reitz Convent	Lincoln Avenue	Vanderburgh
Reitz Memorial School	1500 Lincoln Avenue	Vanderburgh
Republic Aviation Corporation	US 41	Vanderburgh
Ridgway Building	313-315 Main Street	Vanderburgh
Robert Acre House	2311 Lincoln Avenue	Vanderburgh
Robert Smith Mortuary	118-120 Walnut Street	Vanderburgh
Roberts Municipal Stadium	26 Division Street	Vanderburgh
Roberts-Aiken House	7300 Newburgh Road	Vanderburgh
Roberts-Morton House	State Road 662	Warrick
Roerig House	121 N. Seventh Streer	Warrick
Rose Hill Cemetery	3772 Stringtown Road	Vanderburgh
Rosecrantz Summer Cottage	1516 Mt. Auburn Road	Vanderburgh
Ross Theater	2509 Washington Avenue	Vanderburgh
Roy Ryan Estate House	State Road 662	Warrick
S. L. Vickery House	1415 S. Linwood Avenue	Vanderburgh
Sacred Hear Catholic Church	2715 W. Franklin Street	Vanderburgh
Sacred Heart Catholic School	2735 W. Franklin Street	Vanderburgh
Salem Christian Church and Cemetery	14143 Princeton Road	Vanderburgh
Samuel Archer House	110 Walnut Street	Vanderburgh
Sanders House	Old Plank Road	Warrick
Schmuck Farm	2700 Koring Road	Vanderburgh
Schnarr House	1150 N	Posey
Schneider Farm	State Road 69	Posey
Schnitzel Banch	5020 New Harmony Road, Kasson	Vanderburgh
School	200 E.	Gibson
School	Oliver Road	Posey
School No. 1	1430 Harmony Way	Vanderburgh
School No. 12 (Darnell School)	900 S	Posey
School No. 2	275 N, Blairsville	Posey
School No. 3	Caborn Road	Posey
School No. 4	Parker Church Road	Posey
School No. 6	Junker Road	Posey
School No. 8 (Jefferson School)	800 S	Posey
School No. 9	9200 Waterman School Road	Posey
School-Engle House	500 Section Street	Warrick
Schultz Mill	235 W. Main Street	Warrick
Sea Lion Exhibit	Mesker Park Zoo	Vanderburgh
Severin's Bridge	off SR 65, Princeton	Gibson
Shelter House #4	Burdette Drive	Vanderburgh
Shelter House #6	Lakeside Drive	Vanderburgh
Shelter House No. 15	Mesker Park Drive	Vanderburgh
SIGECO Company Power Plant	2600 Broadway Avenue	Vanderburgh
Simpson Methodist Episcopal Church	2201 W. Illinois Street	Vanderburgh
Sisters' Home, St. Philip Convent	St. Philip Road, St. Philip	Posey
Site of Indian Fort	1050 N	Warrick
Smith School	State Road 69	Posey
Smith Township School	State Road 68	Posey
Soldiers & Sailors Memorial Coliseum	350 Court Street	Vanderburgh
St. Agnes Catholic School	1620 Glendale Avenue	Vanderburgh

Site Surveyed	Address	County
St. Anthony School	713 N. 2nd Avenue	Vanderburgh
St. Anthony's Catholic Church	N. First Avenue	Vanderburgh
St. Clements Church	Sycamore Street	Warrick
St. James's Church & Cemetary	50 W, St James	Gibson
St. James's Rectory	50 W, St. James	Gibson
St. James's School	50 W, St. James	Gibson
St. John's Catholic Church	625 Bellemeade Avenue	Vanderburgh
St. Johns Church	1100 W	Warrick
St. John's Methodist Church	Caborn Road	Posey
St. Joseph Catholic Church and Cemetery	St. Joseph Road	Vanderburgh
St. Joseph Rectory	St. Joseph Road	Vanderburgh
St. Joseph's Catholic Church	610 E. Virginia Street	Vanderburgh
St. Joseph's Convent	714 E. Virginia Street	Vanderburgh
St. Lucas Evangelical Church	33 W. Virginia Street	Vanderburgh
St. Lucas Halle	430 Baker Avenue	Vanderburgh
St. Mary's Catholic Church	605 Cherry Street	Vanderburgh
St. Mary's Catholic Church Rectory	607 Cherry Street	Vanderburgh
St. Mary's Parish Hall	613 Cherry Street	Vanderburgh
St. Paul United Methodist Church and Cemetery	St. Philip Road	Posey
St. Paul's Evangelical Church	2227 W. Michigan Street	Vanderburgh
St. Paul's Evangelical St. Paulus Church	102 W. Michigan Street	Vanderburgh
St. Philip Cemetery(Annex)	St. Philip Road, St. Philip	Posey
St. Philip Church and Cemetary	St Philip Road, St. Philip	Posey
St. Philip Rectory	St. Philip Road, St. Philip	Posey
St. Philip's School	St. Philip Road, St. Philip	Posey
St. Rupert's Church	650 S	Warrick
St. Wendel Catholic Church and Cemetery	St. Wendel Road, St. Wendel	Posey
Stallings House	Springfield Road	Posey
State Bridge	US 41	Vanderburgh
Steinmetz Farm	1305 Mohr Road	Vanderburgh
Stratman House	900 N	Warrick
Strueh Farm	10120 Strueh-Hendricks Road	Vanderburgh
Sunset Park Pavilion	411 Southeast Riverside Drive	Vanderburgh
Susett Farm	750 N	Warrick
Susett Road Bridge	750 N	Warrick
T.W. Hammond House	722 S. Fourth Street	Warrick
Tekoppel School	111 N. Tekoppel Avenue	Vanderburgh
Temme Farm	8601 Hogue Road	Vanderburgh
The Log Inn	200 E., Warrenton	Gibson
Thene House	North Street	Warrick
Thomas Brown House	205 Brown Street	Posey
Thomas J. Conlin (District No. 6) School	Bone Bank Road	Posey
Thomas Leach House	629 Middle Street	Warrick
Thomas Robb Farm adn Family Cemetery	1170 N	Posey
Thorn House	Tennessee St.	Gibson
Thornton House	State Road 662	Warrick
Tilley Farm	175 E.	Gibson
Tom Rollette House	1601 Rollette Lane	Vanderburgh
Tool House	Dogwood Lane	Vanderburgh
Townshouse	819-817 W. Illinois Street	Vanderburgh
Traction Station	650 W, Chandler	Warrick
Trinity Lutheran Church	1000 W. Illinois Street	Vanderburgh
Trinity methodist Episcopal Church	216 SE 3rd Street	Vanderburgh
Tupman House	1612 N. Red Bank Road	Vanderburgh
U.S. Lock No. 47	State Road 662	Warrick
Union Bethell House	122 W. Main Street	Warrick

Site Surveyed	Address	County
Union Township District No. 1 School (Edmond School)	4700 Old Henderson Road	Vanderburgh
Union Township High School	S. Main St., Fort Branch	Gibson
United Methodist Church	Main St.	Gibson
University of Evansville Administration Hall	1800 Lincoln Avenue	Vanderburgh
University of Evansville President's House	1800 Lincoln Avenue	Vanderburgh
Vanderburgh County Courthouse	201 NW 4th Street	Vanderburgh
Vanderburgh County Jail & Sheriff's Residence	208 NW 4th Street	Vanderburgh
Vulcan Plow Works Livery	112 Clark Street	Vanderburgh
W. R. Weller House	2327 Lincoln Avenue	Vanderburgh
W.C. Polk House	307 W. Locust, Fort Branch	Gibson
Wabash and Erie Canal	off Oak Grove Road	Vanderburgh
Wadesville Primitive Baptist Church	Main Street	Posey
Wagner Farm	1100 E	Posey
Wagoner House	100 N	Warrick
Walkers School House	300 W	Posey
Walnut Street School	216 SE 9th Street	Vanderburgh
Walter Stippler House	5130 Stringtown Road	Vanderburgh
Washington School	1801 Washington Avenue	Vanderburgh
Weir House	Joest Road	Posey
Weiss Farm	1275 S.	Gibson
Weiss Farm	1200 S.	Gibson
Wesley Methodist Episcopal Church	121 E. Maryland Street	Vanderburgh
Wesselman Park	551 N. Boeke Road	Vanderburgh
Westfall Farm	810 N	Posey
Wheaton House	State Road 57	Warrick
Whitehead-McCutchan House	8401 Old Petersburg Road	Vanderburgh
Willard Carpenter House	405 Carpenter Street	Vanderburgh
Willard Library	21 1st Avenue	Vanderburgh
William Abshier House	526 Section Street	Warrick
William Aiken House	State Road 662	Warrick
William Boetticher House	419 1st Avenue	Vanderburgh
William Heilman House	1st Avenue	Vanderburgh
William Kroeger House	150 Third Street	Warrick
William Lang Tavern	2500 Harmony Way, Babytown	Vanderburgh
William Prescott Robb House	425 E	Posey
William Schnackenburg House	811 Madison Avenue	Vanderburgh
William Shaw Farm	Nation Road	Posey
Williams Farm	State Road 68	Posey
Williams-Raab House	422 W. Water Street	Warrick
Willman Farm	250 S	Posey
Winfield Church	345 E	Posey
Winternheimer Farm	Damm Road	Posey
Wolf School	8520 Upper Mount Vernon Road	Vanderburgh
Wright-Meadows House	224 W. Main Street	Warrick
Zion Lippe Evangelical Church and Cemetery	Roedel Road	Posey
Zoar Church and Cemetery	4600 Church Road	Vanderburgh
Zunkel Meat Market	36 W. Delaware Street	Vanderburgh



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

SUBJECT: I-69 Evansville, IN and Henderson, KY
Environmental and Engineering Assessment
USFWS Section 7 Consultation Meeting

LOCATION: Kentucky Division of Forestry
Frankfort, Kentucky

DATE: March 12, 2003

TIME: 2:30pm (EST)

MEETING PARTICIPANT

Doug Taylor
Everett Green
Lee Andrews
Jason Dupont
Rusty Yeager
Tim Miller

AGENCY OR FIRM

Kentucky Transportation Cabinet
Kentucky Transportation Cabinet
US Fish and Wildlife
Bernardin, Lochmueller and Associates (BLA)
Bernardin, Lochmueller and Associates
HNTB Corporation

Discussion Items:

BLA provided USFWS the initial ecological findings and field analysis of Corridors 1-2-3 for informational purposes. Specific testing included a mussel (performed by Heidi Dunn) in the Ohio River. This scuba dive survey yielded no Threatened or Endangered Species (TES) mussels. In addition, mist netting was conducted for bats as well as aquatic and terrestrial sampling. Past records indicate the following TES in the project area:

- 1) Indiana Bat
- 2) Bald Eagle
- 3) Copperbelly Watersnake
- 4) Fat Pocketbook Mussel
- 5) Gray Bat
- 6) American Burying Beetle

Mist netting for the Indiana Bat was performed in the summer of 2002 and yielded one lactating female near the original Corridor 2. The alignment of Alternate 2 was subsequently moved farther west along the Texas Gas easement in a collective effort to minimize bottomland forest impacts and potential impacts to Indiana bat nursery colony habitat.

BLA reported that although a specific mitigation plan would not be provided in the Draft Environmental Impact Statement (DEIS), strategies on the formation of a mitigation plan will be addressed in the



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

document. Mitigation ratios will also be addressed in the DEIS. Additional mitigation plans will be completed once a preferred alternative has been selected.

USFWS reported no additional fieldwork would be required at this time. However, mitigation measures and plans would be required as part of the FEIS if Alternative 2 was selected as the preferred alternative. Mitigation measures may include:

- Additional mussel survey work at the pier locations at least 18 months prior to construction.
- Stream (including low quality ditches) mitigation may include on site, off site, mitigation banks or in lieu fee plans.
- Construction clearing restrictions (no Indiana Bat habitat clearing between October 15 – March 31)
- River bank stabilization plans
- Replace lost forestland, particularly Indiana Bat maternity colony habitat (Swamp chestnut oak, swamp white oak, and shellbark hickory are suitable trees that could be used in this area for a quality mitigation plan)

USFWS is concerned most with the long-term effects of the new interstate highway. This is a standard concern for most transportation projects of this type and location.

USFWS prefers the fewest piers possible. Engineers will have to demonstrate that the pier locations do not promote scour, create sediment buildup and are designed to reduce the level of turbulence.

Formal Consultation is not required at this time. Formal Consultation usually only occurs if a TES is taken as a result of the project. There is no indication that any TES would be taken as a result of this project. If Formal Consultation is deemed necessary later in the project, FHWA will initiate the process with USFWS.

USFWS asked the Study Team to keep them informed of the project or any new findings.

The meeting adjourned at 3pm.

Potential Floodplain Impacts by Alternate

Table 1: Alternate 1 Floodplain Impacts

Stream Name	Transverse length (ft)	Longitudinal length (ft)	Area (acres)	State
Elam Ditch and tributaries	-	12,673	162	KY
Canoe Creek	585	-	5	KY
Canoe Creek	-	452	2	KY
Canoe Creek	-	2,162	11	KY
Ohio River and tributaries	42,360	-	173	KY-IN
Tributary of Bayou Creek	1,786	-	22	IN
Wolf Creek	313	-	2	IN
Little Creek	504	-	9	IN
New Creek	-	1,590	7	IN
Tributary of Big Creek	261	-	2	IN
Big Creek	-	2,868	25	IN
Big Creek	1,918	-	61	IN
Tributary of Big Creek	804	-		IN
Totals	48,531	19,745	481	

Table 2: Alternate 1A Floodplain Impacts

Stream Name	Transverse length (ft)	Longitudinal length (ft)	Area (acres)	State
Elam Ditch and tributaries	-	12,673	162	KY
Canoe Creek	585	-	5	KY
Canoe Creek	-	452	2	KY
Canoe Creek	-	2,162	11	KY
Ohio River and tributaries	42,360	-	173	KY-IN
Tributary of Bayou Creek	1,786	-	22	IN
Wolf Creek	313	-	2	IN
Little Creek	504	-	9	IN
New Creek	-	1,590	7	IN
Tributary of New Creek	233	-	2	IN
Tributary of New Creek	105	-	0	IN
New Creek	337	-	4	IN
Tributary of Barr Creek	708	-	6	IN
Tributary of Barr Creek	-	3,564	27	IN
Barr Creek	-	2,267	17	IN
Tributary of Barr Creek	800	-	10	IN
Wallenmeyer Ditch	1,228	-	16	IN
Buente Creek	1,628	-	14	IN
Maidlow Ditch	1,466	-	11	IN
Pond Flat Ditch	2,170	-	20	IN
Totals	54,223	22,708	521	

Table 3: Alternate 2 Floodplain Impacts

Stream Name	Transverse length (ft)	Longitudinal length (ft)	Area (acres)	State
Tributary of Elam Ditch	265	-	1	KY
Elam Ditch and tributaries	-	14,931	247	KY
Tributary of North Fork Canoe Creek	356	-	3	KY
Tributary of North Fork Canoe Creek	249	-	0	KY
Tributary of North Fork Canoe Creek	876	-	9	KY
Tributary of North Fork Canoe Creek	961	-	8	KY
Ohio River and tributaries	19,458	-	173	KY-IN
Totals	22,165	14,931	440	

Table 4: Alternate 3 Floodplain Impacts

Stream Name	Transverse length (ft)	Longitudinal length (ft)	Area (acres)	State
Tributary of Elam Ditch	265	-	1	KY
Elam Ditch and tributaries	-	14,931	247	KY
Tributary of Race Creek	-	930	4	KY
Tributary of Race Creek	149	-	0	KY
Ohio River and tributaries	24,537	-	99	KY-IN
Willow Pond Ditch	-	766	1	IN
Totals	24,951	16,627	352	

Wetlands Encountered Within Proposed Alternative 1

	Wetland Type	Mapped Soil Unit For Site	Hydric Status	Stationing Location	Estimated size	Surrounding Land Use
Kentucky	PSS1A	Memphis silt loam, 2-6%	non-hydric	56+25 - 57+00	0.10 - 0.25	residential, agriculture
	PEM1A/PSS1A	Dekoven and Wakeland silt loams	hydric	143+00 - 143+50	0.10 - 0.25	roadside, agriculture
	PFO1A	Birds silt loam	hydric	214+00 - 215+00	0.75 - 1.00	agriculture
	PFO1A	Bruno fine sandy loam Huntington fine sandy loam Riverwash	hydric	350+00 - 362+50	3.00 - 3.50	mid channel Ohio River island
Indiana	PFO1A	Lindside silty clay loam	hydric inclusions	426+00 - 427+50	<0.10	agriculture
	PFO1A	Weinbach silt loam	hydric inclusions	608+00 - 608+50	0.10 - 0.25	agriculture
	PFO1A	Newark silty clay loam	hydric inclusions	736+00 - 738+00	0.50 - 0.75	agriculture
	PFO1A	Newark silty clay loam	hydric inclusions	743+00 - 744+00	0.25 - 0.50	agriculture
	PFO1A	Alford silt loam, 12-18%	non-hydric	835+00 - 838+00	0.75 - 1.00	agriculture
	PEM1B	Wellston silt loam, 18-25%	non-hydric	896+00 - 896+50	0.10 - 0.25	upland woods/residential
	PFO1A	Wakeland silt loam	hydric inclusions	1002+00 - 1003+00	0.25 - 0.50	upland woods, residential
	PFO1A	Birds silt loam	hydric	1100+00 - 1111+00	7.00 - 8.00	agriculture
	PEM1A	Alford silt loam, 6-12%	non-hydric	1150+00 - 1151+50	0.10 - 0.25	upland woods, residential, agriculture
	PFO1A	Wakeland silt loam	hydric inclusions	1203+00 - 1204+00	0.10 - 0.25	agriculture
	PFO1A	Alford silt loam, 12-18%	non-hydric	1409+00 - 1410+00	1.00 - 1.25	upland woods, agriculture
	PEM1A	Wellston sit loam, 12-18%	non-hydric	1450+00 - 1450+50	<0.10	agriculture
	PEM1A/PSS1A	Wakeland silt loam	hydric inclusions	1631+00 - 1634+00	1.75 - 2.00	old pasture

Wetlands Encountered Within Proposed Alternative 1A

	Wetland Type	Mapped Soil Unit For Site	Hydric Status	Stationing Location	Estimated Size (acres)	Surrounding Land Use
Kentucky	PSS1A	Memphis silt loam, 2-6% slope	non-hydric	56+25 - 57+00	0.10 - 0.25	residential, agriculture
	PEM1A/PSS1A	Dekoven and Wakeland silt loams	hydric	143+00 - 143+00	0.10 - 0.25	roadside, agriculture
	PFO1A	Birds silt loam	hydric	214+00 - 215+00	0.75 - 1.00	agriculture
	PFO1A	Bruno fine sandy loam Huntington fine sandy loam Riverwash	hydric	350+00 - 362+50	3.00 - 3.50	mid channel Ohio River island
Indiana	PFO1A	Lindside silty clay loam	hydric inclusions	426+00 - 427+50	<0.10	agriculture
	PFO1A	Weinbach silt loam	hydric inclusions	608+00 - 608+50	0.10 - 0.25	agriculture
	PFO1A	Newark silty clay loam	hydric inclusions	736+00 - 738+00	0.50 - 0.75	agriculture
	PFO1A	Newark silty clay loam	hydric inclusions	743+00 - 744+00	0.25 - 0.50	agriculture
	PFO1A	Alford silt loam, 12-18%	non-hydric	835+00 - 838+00	0.75 - 1.00	agriculture
	PEM1B	Wellston silt loam, 18-25%	non-hydric	896+00 - 896+50	0.10 - 0.25	upland woods, residential
	PFO1A	Wakeland silt loam	hydric inclusions	1002+00 - 1003+00	0.25 - 0.50	upland woods, residential
	PFO1A	Birds silt loam	hydric	1100+00 - 1111+00	7.00 - 8.00	agriculture
	PEM1A	Alford silt loam, 12-18%	non-hydric	1150+50 - 1151+50	0.10 - 0.25	upland woods, residential, agriculture
	PFO1A	Wakeland silt loam	hydric inclusions	1203+00 - 1204+00	0.10 - 0.25	agriculture
	PFO1A	Gullied	?	1471+00 - 1472+00	0.75 - 1.00	agriculture

Wetlands Encountered Within Proposed Alternative 2

	Wetland Type	Mapped Soil Unit For Site	Hydric Status	Stationing Location	Estimated size	Surrounding Land Use
Kentucky	PEM1A	Dekoven and Wakeland silt loams	hydric	Breathitt interchange	<0.1	agriculture
	PFO1A	Dekoven silt loam	hydric	342+50 - 345+00	1.50 – 1.75	agriculture
	PEM1A/PSS1A	Dekoven and Wakeland silt loams	hydric	411+00 - 412+50	0.25 – 0.50	agriculture, railroad
	PFO1A	Wakeland silt loam	hydric inclusions	453+00 - 457+00	1.00 – 1.25	agriculture
	PEM1A	Wakeland silt loam	hydric inclusions	464+00 - 465+50	0.50 – 0.75	agriculture
	PFO1A	Melvin silty clay loam	hydric	509+00 - 515+00	2.75 – 3.00	bottomland woods
	PFO1A	Melvin silty clay loam	hydric	527+00 - 528+00	0.25 – 0.50	agriculture
	PFO1A	Melvin silty clay loam	hydric	530+50 - 532+00	0.50 – 0.75	agriculture
Indiana	PFO1A/PSS1A	Lindside silty clay loam Newark silty clay loam	hydric inclusions	I-164 interchange	13.00 – 17.00	interstate
	PFO1A/PSS1A	Lindside silty clay loam Newark silty clay loam	hydric inclusions	I-164 interchange	0.50 – 0.75	sand quarry, agriculture
	PFO1A/PSS1A	Lindside silty clay loam Newark silty clay loam	hydric inclusions	I-164 interchange	1.00 – 1.25	sand quarry, agriculture

Wetlands Encountered Within Proposed Alternative 3

	Wetland Type	Mapped Soil Unit For Site	Hydric Status	Stationing Location	Estimated size	Surrounding Land Use
KY	PEM1A	Dekoven and Wakeland silt loam	hydric	Breathitt interchange	<0.1	agriculture
	PEM1A	Adler silt loam	non-hydric	481+50 - 482+50	0.10 – 0.25	pasture
	PFO1A	Huntington silt loam	hydric inclusions	734+00 - 735+00	0.75 - 1.00	Threemile Island

Inventory of Ponds and Lakes Impacted by Alternative 1

State	Station Begin	Station End	NWI designation	Total Area (acres)	R/W Area (acres)	% of pond in R/W	Use
Kentucky	52+28	55+46	PUBHx	2.00	1.06	53	residential/recreation
	160+00	166+78	not on NWI	4.76	1.36	28	borrow pit
	289+08	291+46	PUBHh	0.81	0.56	69	residential/recreation
	293+95	295+43	PUBHh	3.30	0.36	11	residential/recreation
Indiana	764+74	767+34	not on NWI	0.56	0.56	100	residential/recreation
	772+34	773+37	PUBGh	0.12	0.12	100	woodland pond
	841+63	845+00	not on NWI	1.79	0.81	45	residential/recreation
	847+22	849+00	not on NWI	2.55	0.09	3	residential/recreation
	883+59	885+09	PUBGh	0.31	0.31	100	residential/recreation
	893+91	896+00	PUBGh	5.15	0.51	10	residential/recreation
	1007+88	1009+50	PUBGh	0.90	0.32	35	woodland/recreation
	1150+68	1152+12	PUBGh	0.47	0.14	30	old farm pond
	1158+00	1161+09	PUBGh	1.66	0.66	40	woodland pond
	1433+33	1434+81	PUBGh	0.38	0.38	100	residential/recreation
	1593+85	1594+84	PUBGh	0.17	0.17	100	cattle water supply
	1618+85	1621+10	PUBGh	2.01	0.27	14	old farm pond
	1644+62	1647+80	PUBGh	0.79	0.57	71	residential/recreation
Totals				27.73	8.25		

Inventory of Ponds and Lakes Impacted by Alternative 1A

State	Station Begin	Station End	NWI designation	Total Area (acres)	R/W Area (acres)	% of pond in R/W	Use
Kentucky	52+28	55+46	PUBHx	2.00	1.06	53	residential/recreation
	160+00	166+78	not on NWI	4.76	1.36	28	borrow pit
	289+02	291+46	PUBHh	0.81	0.56	69	residential/recreation
	293+95	295+43	PUBHh	3.30	0.36	11	residential/recreation
Indiana	764+74	767+34	not on NWI	0.56	0.56	100	residential/recreation
	772+34	773+37	PUBGh	0.12	0.12	100	woodland pond
	841+63	845+00	not on NWI	1.79	0.81	45	residential/recreation
	847+22	849+00	not on NWI	2.55	0.09	3	residential/recreation
	883+59	885+09	PUBGh	0.31	0.31	100	residential/recreation
	893+91	896+00	PUBGh	5.15	0.51	10	residential/recreation
	1007+88	1009+50	PUBGh	0.90	0.32	35	woodland/recreation
	1150+68	1152+12	PUBGh	0.47	0.14	30	old farm pond
	1158+00	1161+09	PUBGh	1.66	0.66	40	woodland pond
	1407+75	1409+00	PUBGh	2.75	0.07	3	residential/recreation
	1422+51	1425+60	PUBGh	0.69	0.69	100	woodland/recreation
	1490+42	1493+72	PUBGh	2.19	0.61	28	residential/recreation

	1627+46	1629+66	PUBGh	1.00	0.82	83	residential/recreation
Totals				31.01	9.05		

Inventory of Ponds and Lakes Impacted by Alternative 2

State	Station Begin	Station End	NWI designation	Total Area (acres)	R/W Area (acres)	% of pond in R/W	Use
Kentucky	Breathitt interchange		not on NWI	0.19	0.17	86	unknown
	Breathitt interchange		PUBHx	0.25	0.02	6	old farm pond
	212+31	213+49	PUBHh	0.59	0.46	79	cattle water supply
	478+50	479+50	not on NWI	0.14	0.14	100	wooded pond
Indiana	I-164 interchange		not on NWI	9.08	7.67	84	borrow pit
	I-164 interchange		not on NWI	8.76	0.38	4	borrow pit
Totals				19.01	8.84		

Inventory of Ponds and Lakes Impacted by Alternative 3

State	Station Begin	Station End	NWI designation	Total Area (acres)	R/W Area (acres)	% of pond in R/W	Use
Kentucky	Breathitt interchange		not on NWI	0.19	0.17	86	unknown
	Breathitt interchange		PUBHx	0.25	0.02	6	old farm pond
	212+31	213+49	PUBHh	0.59	0.46	79	cattle water supply
	278+00	281+50	PUBHx	1.45	0.65	45	farm pond
	342+47	344+04	PUBHh	0.49	0.35	73	residential/recreation
	497+34	498+00	not on NWI	0.06	0.06	100	cattle water supply
Totals				3.03	1.71		

Streams, Creeks and Ditches Encountered by Alternative 1

State	Watershed	Name (if given)	Stream Type	Station Begin	Station End	Length Impacted	Average OHW (ft)	Vegetative Cover	Proposed Crossing
KY	Canoe Creek		ephemeral	79+00	79+00	335	4	herbaceous/some scrub	at-grade
			intermittent	96+00	96+00	434	6	herbaceous/some scrub	at-grade
			ephemeral	126+00	127+50	602	4	herbaceous	at-grade
			intermittent	144+00	150+00	578	4	herbaceous/some scrub	at-grade
		Canoe Creek (old channel)	perennial	213+00	214+50	400	40	wooded	at-grade
		Canoe Creek	perennial	300+00	301+00	186	20	wooded	elevated
		Canoe Creek	perennial	303+75	304+25	184	20	wooded	elevated
IN	Ohio River	Canoe Creek	perennial	312+00	312+50	361	7	wooded	elevated
		Frenchmans Slough	intermittent	448+50	449+25	190	6	herbaceous	elevated
		Stround Branch	intermittent	470+25	470+25	179	7	herbaceous	elevated
			ephemeral	531+75	532+00	187	4	herbaceous	elevated
		Rahm Vickery Ditch	intermittent	579+00	579+50	188	8	herbaceous	elevated
		Goose Pond Ditch	intermittent	589+75	590+25	183	4	herbaceous	elevated
		Helfrich and Happe Ditch	intermittent	612+50	613+00	180	5	herbaceous	elevated
IN	Bayou Creek	Camp Ditch	intermittent	631+75	633+50	245	5	herbaceous	elevated
		Cypress Dale Ditch	intermittent	675+00	677+00	260	10	herbaceous	elevated
		Edmond Ditch	perennial	711+00	712+25	215	8	herbaceous	elevated
			intermittent	726+75	726+75	177	4	herbaceous	elevated
		Bayou Creek	perennial	744+50	744+50	182	12	wooded	elevated
			intermittent	755+25	755+25	177	4	herbaceous	elevated
			ephemeral	786+00	787+75	488	2	wooded	at-grade
		Sanders Creek	perennial	822+25	824+00	652	15	narrow wooded	at-grade
			perennial	824+25	826+25	402	10	narrow wooded	at-grade
			ephemeral	836+00	840+50	536	4	wooded	at-grade
IN	Big Creek		ephemeral	911+00	913+50	524	8	wooded	at-grade
			ephemeral	913+25	921+50	840	6	wooded	at-grade
			ephemeral	946+00	958+75	1367	4-8	wooded	at-grade
			ephemeral	948+50	950+00	290	4	wooded	at-grade
			intermittent	958+50	991+75	3422	12-15	wooded	at-grade
			ephemeral	979+25	979+25	354	2.5	very narrow wooded	at-grade
			ephemeral	1027+00	1032+75	598	4	herbaceous/scrub	at-grade
		Wolf Creek	perennial	1033+00	1033+00	348	19	herbaceous	at-grade
			ephemeral	1047+00	1057+00	983	5	herbaceous/wooded	at-grade
			ephemeral	1080+00	1087+50	559	3	herbaceous/scrub/wood ed	at-grade
		Little Creek	perennial	1087+00	1088+00	632	25	herbaceous	at-grade
			ephemeral	1140+25	1140+25	360	2	herbaceous/scrub	at-grade
			intermittent	1160+00	1162+25	356	3	wooded	at-grade
			intermittent	1173+75	1174+00	390	10	narrow wooded	at-grade
			intermittent	1191+25	1191+25	382	6	herbaceous	at-grade
			ephemeral	1201+00	1201+00	350	12	narrow wooded	at-grade
		Neu Creek	perennial	1203+00	1205+00	424	25	herbaceous	at-grade
			intermittent	1219+50	1222+25	482	5	herbaceous/scrub/wood ed	at-grade
			intermittent	1248+00	1252+50	668	8	herbaceous	at-grade
			intermittent	1354+75	1363+25	1056	4	herbaceous/scrub	at-grade
			intermittent	1387+75	1392+00	582	13	herbaceous/some scrub	at-grade
			ephemeral	1409+00	1418+25	1073	6	herbaceous/some scrub	at-grade
			intermittent	1435+75	1438+50	471	4	wooded	at-grade
		Clear Creek	perennial	1485+50	1489+75	568	13	narrow wooded	at-grade
			intermittent	1493+50	1496+50	342	7	herbaceous/some scrub	at-grade
			intermittent	1496+50	1496+50	244	9	herbaceous	at-grade
			intermittent	1520+00	1520+25	357	5	herbaceous	at-grade
			intermittent	1532+50	1537+00	636	4	herbaceous	at-grade
			intermittent	1633+00	1635+00	392	10	herbaceous/scrub	at-grade
		Big Creek	perennial	1665+00	1667+50	432	20	herbaceous/some scrub	at-grade
			intermittent	I-64 interchange		93	5	herbaceous	at-grade
		Big Creek	perennial	I-64 interchange		1029	45	herbaceous/scrub/wood ed	at-grade
			intermittent	I-64 interchange		4141	6	herbaceous/some scrub	at-grade
			intermittent	I-64 interchange		2170	6	herbaceous/wooded	at-grade

Streams, Creeks and Ditches Encountered by Alternative 1A

State	Watershed	Name (if given)	Stream Type	Station Begin	Station End	Length Impacted	Average OHW (ft)	Vegetative Cover	Proposed Crossing
KY	Canoe Creek		ephemeral	79+00	79+00	335	4	herbaceous/some scrub	at-grade
			intermittent	96+00	96+00	434	6	herbaceous/some scrub	at-grade
			ephemeral	126+00	127+50	602	4	herbaceous	at-grade
			intermittent	144+00	150+00	578	4	herbaceous/some scrub	at-grade
		Canoe Creek (old channel)	perennial	213+00	214+50	400	40	wooded	at-grade
		Canoe Creek	perennial	300+00	301+00	186	20	wooded	elevated
		Canoe Creek	perennial	303+75	304+25	184	20	wooded	elevated
IN	Ohio River	Canoe Creek	perennial	312+00	312+50	361	7	wooded	elevated
		Frenchmans Slough	intermittent	448+50	449+25	190	6	herbaceous	elevated
		Stround Branch	intermittent	470+25	470+25	179	7	herbaceous	elevated
			ephemeral	531+75	532+00	187	4	herbaceous	elevated
		Rahm Vickery Ditch	intermittent	579+00	579+50	188	8	herbaceous	elevated
		Goose Pond Ditch	intermittent	589+75	590+25	183	4	herbaceous	elevated
		Helfrich and Happe Ditch	intermittent	612+50	613+00	180	5	herbaceous	elevated
IN	Bayou Creek	Camp Ditch	intermittent	631+75	633+50	245	5	herbaceous	elevated
		Cypress Dale Ditch	intermittent	675+00	677+00	260	10	herbaceous	elevated
		Edmond Ditch	perennial	711+00	712+25	215	8	herbaceous	elevated
			intermittent	726+75	726+75	177	4	herbaceous	elevated
		Bayou Creek	perennial	744+50	744+50	182	12	wooded	elevated
			intermittent	755+25	755+25	177	4	herbaceous	elevated
			ephemeral	786+00	787+75	488	2	wooded	at-grade
		Sanders Creek	perennial	822+25	824+00	652	15	narrow wooded	at-grade
			perennial	824+25	826+25	402	10	narrow wooded	at-grade
			ephemeral	836+00	840+50	536	4	wooded	at-grade
IN	Big Creek		ephemeral	911+00	913+50	524	8	wooded	at-grade
			ephemeral	913+25	921+50	840	6	wooded	at-grade
			ephemeral	946+00	958+75	1367	4-8	wooded	at-grade
			ephemeral	948+50	950+00	290	4	wooded	at-grade
			intermittent	958+50	991+75	3422	12-15	wooded	at-grade
			ephemeral	979+25	979+25	354	2.5	very narrow wooded	at-grade
			ephemeral	1027+00	1032+75	598	4	herbaceous/scrub	at-grade
		Wolf Creek	perennial	1033+00	1033+00	348	19	herbaceous	at-grade
			ephemeral	1047+00	1057+00	983	5	herbaceous/wooded	at-grade
			ephemeral	1080+00	1087+50	559	3	herbaceous/scrub/wooded	at-grade
		Little Creek	perennial	1087+00	1088+00	632	25	herbaceous	at-grade
			ephemeral	1140+25	1140+25	360	2	herbaceous/scrub	at-grade
			intermittent	1160+00	1162+25	356	3	wooded	at-grade
			intermittent	1173+75	1174+00	390	10	narrow wooded	at-grade
			intermittent	1191+25	1191+25	382	6	herbaceous	at-grade
			ephemeral	1201+00	1201+00	350	12	narrow wooded	at-grade
		Neu Creek	perennial	1203+00	1205+00	424	25	herbaceous	at-grade
			intermittent	1219+50	1222+25	482	5	herbaceous/scrub/wooded	at-grade
			intermittent	1248+00	1252+50	668	8	herbaceous	at-grade
			intermittent	1354+75	1363+25	1056	4	herbaceous/scrub	at-grade
			intermittent	1385+00	1388+50	487	13	herbaceous/some scrub	at-grade
			intermittent	1418+00	1418+75	454	10	wooded	at-grade
			intermittent	1435+00	1437+25	428	6	wooded	at-grade
			intermittent	1445+50	1446+25	358	7	narrow wooded	at-grade
			intermittent	1458+00	1458+50	401	9	herbaceous/wooded	at-grade
			intermittent	1479+00	1482+00	531	4	herbaceous/scrub/wooded	at-grade
			intermittent	1504+75	1511+25	796	6	herbaceous/some scrub	at-grade
		Barr Creek	perennial	1521+00	1552+50	3945	9-11	narrow wooded	at-grade
			intermittent	1551+00	1552+50	424	7	narrow wooded	at-grade
			intermittent	1575+50	1578+50	493	7	herbaceous	at-grade
		Barr Creek	perennial	1578+00	1584+00	716	10	herbaceous	at-grade
			intermittent	1613+00	1615+25	572	4	herbaceous	at-grade
		Wallenmeyer Ditch	intermittent	1648+50	1662+50	2120	5	herbaceous	at-grade
		Buente Creek	perennial	1722+50	1724+50	448	12	herbaceous	at-grade
			ephemeral	1735+50	1736+75	282	1	herbaceous	at-grade
		Maidlow Ditch	perennial	1736+00	1739+50	488	21	herbaceous/wooded	at-grade
			ephemeral	1751+00	1754+00	431	2	herbaceous	at-grade
		Pond Flat Ditch	perennial	1828+00	1829+25	404	15	herbaceous	at-grade
			intermittent	I-64 interchange		1283	8	herbaceous	at-grade
			intermittent	I-64 interchange		970	?	herbaceous	at-grade
			intermittent	I-64 interchange		2003	?	herbaceous	at-grade
			intermittent	I-64 interchange		408	8	herbaceous	at-grade

Streams, Creeks and Ditches Encountered by Alternative 2

State	Watershed	Name (if given)	Stream Type	Station Begin	Station End	Length Impacted	Average OHW (ft)	Vegetative Cover	Proposed Crossing
KY	Canoe Creek		intermittent	Breathitt interchange		860	15	herbaceous	at-grade/elevated
			ephemeral	Breathitt interchange		1051	4	herbaceous/narrow wooded	at-grade/elevated
			ephemeral	Breathitt interchange		1180	4	herbaceous/narrow wooded	at-grade/elevated
			intermittent	Breathitt interchange		130	6	narrow wooded	at-grade
		Elam Ditch	intermittent	80+00	80+00	247	16	herbaceous	at-grade
			perennial	111+00	121+75	913	10	herbaceous	at-grade
			intermittent	122+25	124+00	285	4	herbaceous	at-grade
			intermittent	122+25	122+25	144	4	herbaceous	at-grade
			perennial	122+50	127+00	776	13	herbaceous/narrow wooded	at-grade
			ephemeral	143+00	149+00	862	1	herbaceous	at-grade
			intermittent	144+00	152+50	1905	9-10	herbaceous	at-grade
			intermittent	148+00	168+75	1858	8-9	herbaceous	at-grade
			perennial	148+25	165+25	1509	8-10	herbaceous/narrow wooded	at-grade
			intermittent	157+50	169+25	163	8	herbaceous	at-grade
			intermittent	253+50	256+75	468	5.5	herbaceous	at-grade
			ephemeral	301+25	303+75	414	4.5	herbaceous	at-grade
			perennial	320+25	322+75	411	7	herbaceous/narrow wooded	at-grade
			ephemeral	362+75	363+75	306	6	narrow wooded	at-grade
			perennial	363+00	366+00	527	7.5	narrow wooded	at-grade
			perennial	399+00	401+75	545	10	narrow wooded	at-grade
			intermittent	401+00	431+00	3248	9-12	herbaceous/narrow wooded	at-grade
KY	Cypress Slough		intermittent	481+50	497+50	1654	8	herbaceous/wooded	at-grade
IN	Eagle Creek	Eagle Creek	perennial	I-164 interchange		787	14	herbaceous/wooded	at-grade/elevated
		Eagle Creek	perennial	I-164 interchange		901	14	herbaceous	at-grade/elevated
IN	Pigeon Creek		intermittent	MP 6.0	MP 6.0	0	ND	narrow wooded	I-164
		Williams Ditch	intermittent	MP 7.2	MP 7.2	0	ND	herbaceous	I-164
		Nurrenbern Ditch	intermittent	MP 8.0	MP 8.0	0	ND	herbaceous	I-164
		Lockwood Ditch	perennial	MP 8.7	MP 8.7	0	ND	herbaceous	I-164
		Boesche Ditch	intermittent	MP 10.4	MP 10.4	0	ND	herbaceous/scrub	I-164
		Pigeon Creek	perennial	MP 11.3	MP 11.3	0	ND	wooded	I-164
			intermittent	MP 12.4	MP 12.4	0	ND	herbaceous	I-164
		Bluegrass Creek	perennial	MP 13.3	MP 13.3	0	ND	narrow wooded	I-164
			intermittent	MP 13.9	MP 13.9	0	ND	herbaceous	I-164
		Schlensker Ditch	perennial	MP 14.3	MP 14.3	0	ND	narrow wooded	I-164
			intermittent	MP 16.0	MP 16.0	0	ND	herbaceous/scrub	I-164
			intermittent	MP 16.9	MP 16.9	0	ND	herbaceous/scrub	I-164
			perennial	MP 17.3	MP 17.3	0	ND	herbaceous/scrub	I-164
			intermittent	MP 19.0	MP 19.0	0	ND	herbaceous/scrub	I-164
			intermittent	MP 19.9	MP 19.9	0	ND	narrow wooded	I-164
			intermittent	MP 20.1	MP 20.1	0	ND	herbaceous/scrub	I-164
			intermittent	MP 20.9	MP 20.9	0	ND	herbaceous/wooded	I-164

Streams, Creeks and Ditches Encountered by Alternative 3

State	Watershed	Name (if given)	Stream Type	Station Begin	Station End	Length Impacted	Average OHW (ft)	Vegetative Cover	Proposed Crossing
KY	Canoe Creek		ephemeral	Breathitt interchange		1180	4	herbaceous/narrow wooded	at-grade/elevated
			ephemeral	Breathitt interchange		1051	4	herbaceous/narrow wooded	at-grade/elevated
			intermittent	Breathitt interchange		860	15	herbaceous	at-grade/elevated
			intermittent	Breathitt interchange		130	6	narrow wooded	at-grade
		Elam Ditch	intermittent	80+00	80+00	247	16	herbaceous	at-grade
			perennial	111+00	121+75	913	10	herbaceous	at-grade
			intermittent	122+25	124+00	285	4	herbaceous	at-grade
			intermittent	122+25	122+25	144	4	herbaceous	at-grade
			perennial	122+50	127+00	776	13	herbaceous/narrow wooded	at-grade
			ephemeral	143+00	149+00	862	1	herbaceous	at-grade
			intermittent	144+00	152+50	1905	9-10	herbaceous	at-grade
			intermittent	148+00	168+75	1858	8-9	herbaceous	at-grade
			perennial	148+25	165+25	1509	8-10	herbaceous/narrow wooded	at-grade
			intermittent	157+50	169+25	163	8	herbaceous	at-grade
			intermittent	253+00	255+00	402	5.5	herbaceous	at-grade
KY	Race Creek		intermittent	343+25	344+00	247	4	wooded	at-grade
			intermittent	356+50	363+00	778	2	herbaceous/scrub	at-grade
			intermittent	368+25	368+25	411	8	narrow wooded	at-grade
			intermittent	404+50	426+25	2327	3-4	herbaceous	at-grade
			intermittent	433+75	434+25	190	2	herbaceous	at-grade
			perennial	458+00	460+75	325	10	narrow wooded	at-grade
			perennial	461+00	461+25	170	7	herbaceous/scrub	at-grade
IN	Ohio River		intermittent	482+00	484+00	269	2	herbaceous	at-grade
		Willow Pond Ditch	perennial	738+00	738+00	194	13	wooded	elevated
		Willow Pond Ditch	perennial	744+50	752+00	832	13	narrow wooded	elevated
IN	Pigeon Creek		intermittent	MP 6.0	MP 6.0	0	ND	narrow wooded	I-164
		Williams Ditch	intermittent	MP 7.2	MP 7.2	0	ND	herbaceous	I-164
		Nurrenbern Ditch	intermittent	MP 8.0	MP 8.0	0	ND	herbaceous	I-164
		Lockwood Ditch	perennial	MP 8.7	MP 8.7	0	ND	herbaceous	I-164
		Boesche Ditch	intermittent	MP 10.4	MP 10.4	0	ND	herbaceous/scrub	I-164
		Pigeon Creek	perennial	MP 11.3	MP 11.3	0	ND	wooded	I-164
			intermittent	MP 12.4	MP 12.4	0	ND	herbaceous	I-164
		Bluegrass Creek	perennial	MP 13.3	MP 13.3	0	ND	narrow wooded	I-164
			intermittent	MP 13.9	MP 13.9	0	ND	herbaceous	I-164
		Schlensker Ditch	perennial	MP 14.3	MP 14.3	0	ND	narrow wooded	I-164
			intermittent	MP 16.0	MP 16.0	0	ND	herbaceous/scrub	I-164
			intermittent	MP 16.9	MP 16.9	0	ND	herbaceous/scrub	I-164
			perennial	MP 17.3	MP 17.3	0	ND	herbaceous/scrub	I-164
			intermittent	MP 19.0	MP 19.0	0	ND	herbaceous/scrub	I-164
			intermittent	MP 19.9	MP 19.9	0	ND	narrow wooded	I-164
			intermittent	MP 20.1	MP 20.1	0	ND	herbaceous/scrub	I-164
			intermittent	MP 20.9	MP 20.9	0	ND	herbaceous/wooded	I-164

Farmland Conversion Impact Rating

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)

Date Of Land Evaluation Request 11/22/02

Name Of Project I-69: from I-64 (IN) to Pennyrile Parkway (KY)

Federal Agency Involved Federal Highway Administration

Proposed Land Use 4-lane Interstate Highway

County And State Gibson, Posey, Vanderburgh, Warrick Co., Indiana

PART II (To be completed by NRCS) * 4 counties combined

Date Request Received By NRCS

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 ☒No ☐

Acres Irrigated 0

Average Farm Size 247 for 4 counties

Major Crop(s) CORN

Farmable Land In Govt. Jurisdiction

Acres: *788409 % 80

Amount Of Farmland As Defined in FPPA

Acres: *525810 % 53

Name Of Land Evaluation System Used LESA

Name Of Local Site Assessment System

Date Land Evaluation Returned By NRCS

PART III (To be completed by Federal Agency)

A. Total Acres To Be Converted Directly

B. Total Acres To Be Converted Indirectly

C. Total Acres In Site

1	2	3	4
Site A	Site B	Site C	Site D
1,203.0	1,418.0	153.0	104.0
0.0	0.0	0.0	0.0
1,203.0	1,418.0	153.0	104.0

PART IV (To be completed by NRCS) Land Evaluation Information

A. Total Acres Prime And Unique Farmland

B. Total Acres Statewide And Local Important Farmland

C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted

D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value

702.6	960.6	125.8	104.2
0	0	0	0
0.003	0.002	0.002	0.001
75.0	90.0	74.0	85.0

PART V (To be completed by NRCS) Land Evaluation Criterion

Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)

0	63.0	0	65.0	0	66.0	0	73.0
---	------	---	------	---	------	---	------

PART VI (To be completed by Federal Agency)

Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))

Maximum Points

Area In Nonurban Use

2. Perimeter In Nonurban Use

3. Percent Of Site Being Farmed

4. Protection Provided By State And Local Government

5. Distance From Urban Builtup Area

6. Distance To Urban Support Services

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

15	15	15	10	0		
10	10	10	10	0		
20	17	17	16	0		
20	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
10	10	10	10	0		
25	5	5	0	0		
5	5	5	5	5		
20	5	5	0	0		
25	0	0	0	0		
10	3	3	0	0		
160	0	70	0	51	0	5

PART VII (To be completed by Federal Agency)

Relative Value Of Farmland (From Part V)

Total Site Assessment (From Part VI above or a local site assessment)

TOTAL POINTS (Total of above 2 lines)

100	0	63	0	65	0	66	0	73
160	0	70	0	70	0	51	0	5
260	0	133	0	135	0	117	0	78

Site Selected:

Date Of Selection

Was A Local Site Assessment Used?

Yes ☐No ☐

Reason For Selection:

Site A = Alternate 1

Site B = Alternate 1A

Site C = Alternate 2

Site D = Alternate 3

(See Instructions on reverse side)

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Form AD-1006 (10-83)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form.

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Step 3 - NRCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland.

Step 4 - In cases where farmland covered by the FPPA will be converted by the proposed project, NRCS field offices will complete Parts II, IV and V of the form.

Step 5 - NRCS will return copy A and B of the form to the Federal agency involved in the project. (Copy C will be retained for NRCS records).

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

Step 7 - The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

Part I: In completing the "County And State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

Part III: In completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

Part VI: Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in § 658.5 (b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will be weighed zero, however, criterion #8 will be weighed a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned relative adjustments must be made to maintain the maximum total weight points at 160.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points, and alternative Site "A" is rated 180 points:

Total points assigned Site A = $\frac{180}{200} \times 160 = 144$ points for Site "A."

Maximum points possible 200

Project No. INDOT DES No. 9905330 Bridge No. not applicable

Project Description Construction of a 4-lane interstate facility from I-64 (Posey, Vanderburgh or Warrick County) across the Ohio River into Kentucky, around Henderson, terminating at the Pennyrile Parkway

Name of Organization requesting early coordination:

Federal Highway Administration/Indiana Department of Transportation

QUESTIONNAIRE FOR THE NATURAL RESOURCES CONSERVATION SERVICE

- 1) Are the drainage courses within the project area subject to (☒) siltation, (☒) erosion, or () pollution? Identify and describe: Grade changes make silt loam and silty clay loam soils erode and deposit easily
- 2) Are the soils within the project area susceptible to (☒) erosion, (☒) landslides, or (☒) settlement? Describe the degree of each: Silt loam and silty clay loam soils will need special care for proper erosion control and compaction practices
- 3) Is detailed soil survey information available? (☒) If so, where is this information available? Posey County, Vanderburgh County & Warrick County Natural Resources Conservation Service office
- 4) Is there any project in existence or in the planning stage where a conflict of purpose would be created? Where is the problem area? (☒) watershed project, (☒) group drainage system, () other. At what stage is the project? No conflict of purpose

What should be done to make the project compatible or complementary?

- 5) Are major land use changes taking place in the project area (☒)? Describe: Urbanization at a rate of 2 to 5% conversion per year
- 6) Is the general agricultural economy of the area (☒) stable, (☒) declining, or () increasing? Comments: stable to declining slightly

Project No. INDOT DES No. 9905330 Bridge No. not applicable

Project Description Construction of a 4-lane interstate facility from I-64 (Posey, Vanderburgh or Warrick County) across the Ohio River into Kentucky, around Henderson, terminating at the Pennyrile Parkway

Name of Organization requesting early coordination:

Federal Highway Administration/Indiana Department of Transportation

QUESTIONNAIRE FOR THE NATURAL RESOURCES CONSERVATION SERVICE

- 1) Are the drainage courses within the project area subject to (☒) siltation, (☒) erosion, or () pollution? Identify and describe: Gravel changes make silt from and silty clay from soils erode and deposit easily
- 2) Are the soils within the project area susceptible to (☒) erosion, (☒) landslides, or (☒) settlement? Describe the degree of each: Silt from and silty clay from soils will need special care for proper erosion control and construction practices
- 3) Is detailed soil survey information available? (☒) If so, where is this information available? Posey County, Vanderburgh County & Warrick County Natural Resources Conservation Service offices
- 4) Is there any project in existence or in the planning stage where a conflict of purpose would be created? Where is the problem area? (☒) watershed project, (☒) group drainage system, () other. At what stage is the project? No conflict & purpose

What should be done to make the project compatible or complementary?

- 5) Are major land use changes taking place in the project area (☒)? Describe: Urbanization at a rate of 2 to 5% conversion per year
- 6) Is the general agricultural economy of the area (☒) stable, (☒) declining, or () increasing? Comments: Stable to declining slightly

QUESTIONNAIRE FOR THE NATURAL RESOURCES CONSERVATION SERVICE
(continued)

- 7) Please list known positive aspects of the proposed project: _____
- 8) Is this prime farmland? ☒ yes () no. If so, estimate the number of acres that will be affected: 955.1 Ac Prime plus 848.1 Ac of Conditional which is also Prime
- 9) Is this farmland of statewide importance? () yes ☒ no. If so, estimate the number of acres that will be affected: _____

This information was furnished by:

Name: Darrell Rice Title: District Conservationist

Address: 12445 Hwy. 41 North, Evansville, IN 47725

Phone: 812-867-0582 Date: 12-5-02

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 11/19/02			
Name Of Project I-69: from I-64 (IN) to Pennyrite Parkway (KY)		Federal Agency Involved Federal Highway Administration			
Proposed Land Use 4-lane Interstate Highway		County And State Henderson County, Kentucky			
PART II (To be completed by NRCS)		Date Request Received By NRCS 11/19/02			
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 ☒	No ☐	Acres Irrigated NA	Average Farm Size 299
Major Crop(s) corn/soybeans	Farmable Land In Govt. Jurisdiction Acres: 260805 %	Amount Of Farmland As Defined in FPPA Acres: 234346 %		Date Land Evaluation Returned By NRCS 12/5/02	
Name Of Land Evaluation System Used NRCS Henderson Co.		Name Of Local Site Assessment System NA			
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		318.0	594.0	619.0	
B. Total Acres To Be Converted Indirectly		0.0	0.0	0.0	
C. Total Acres In Site		318.0	594.0	619.0	0.0
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		274.8	498.1	541.0	
B. Total Acres Statewide And Local Important Farmland		9.2	38.6	41.0	
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted		0.1	0.2	0.3	
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value		64.0	69.0	70.0	
PART V (To be completed by NRCS) Land Evaluation Criterion					
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)		84	87	85	0
PART VI (To be completed by Federal Agency)					
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))		Maximum Points			
1. Area In Nonurban Use	15	13	15	15	
2. Perimeter In Nonurban Use	10	10	10	10	
3. Percent Of Site Being Farmed	20	18	20	20	
4. Protection Provided By State And Local Government	20	0	0	0	
5. Distance From Urban Builtup Area	0	0	0	0	
6. Distance To Urban Support Services	0	0	0	0	
7. Size Of Present Farm Unit Compared To Average	10	5	6	6	
8. Creation Of Nonfarmable Farmland	25	5	5	5	
9. Availability Of Farm Support Services	5	5	5	5	
10. On-Farm Investments	20	5	5	5	
11. Effects Of Conversion On Farm Support Services	25	0	0	0	
12. Compatibility With Existing Agricultural Use	10	2	3	3	
TOTAL SITE ASSESSMENT POINTS		160	63	69	0
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	84	87	85
Total Site Assessment (From Part VI above or a local site assessment)		160	63	69	0
TOTAL POINTS (Total of above 2 lines)		260	147	156	154

Site Selected:

Date Of Selection

Was A Local Site Assessment Used?

Yes ☐ No ☐

Reason For Selection:

Site A = Alternate 1 & 1A

Site B = Alternate 2

Site C = Alternate 3

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Total points assigned Site A = $180 \times 160 = 144$ points for Site "A."

Maximum points possible 200

Water Quality for I-69 Study Area

[illegible]

NPDES Facilities and Receiving Waterbodies

Facility	NPDES	City	State	Waterbody
Ameriquial Food, Inc.	IN0058556	Evansville	IN	Big Creek
St. Philip Catholic Church	IN0045845	Mt. Vernon	IN	Wolf Creek
Twin Lakes Mobile Home Park	IN0044491	Heusler	IN	Bayou Creek
Mulzer Crushed Stone	ING490067	Evansville	IN	Eagle Creek
Elberfeld Municipal WWTP	IN0020788	Elberfeld	IN	Bluegrass Creek
Concrete Supply, LLC	IN0061336	Evansville	IN	Little Pigeon Creek
St. Joe Parish WWTP	IN0060305	Evansville	IN	Little Pigeon Creek
BP Amoco Pipeline	ING670016	Evansville	IN	Pigeon Creek
Wells Town & Country	IN0041734	Evansville	IN	Pigeon Creek Tributary
Evansville Materials	ING490048	Evansville	IN	Ohio River
Evansville Waterworks Department	IN0043117	Evansville	IN	Ohio River
Marathon Ashland Petrol, LLC	IN0025348	Evansville	IN	Ohio River
Mead Johnson	INP000177	Evansville	IN	Ohio River
Sigeco Ohio River, LT	IN0002241	Evansville	IN	Ohio River
Bigfoot # 95	KY0097691	Henderson	KY	Canoe Creek
Henderson Ready Mix	KYR001141	Henderson	KY	Canoe Creek
KYTC Henderson Co. Main. Garage	KYG500099	Henderson	KY	Canoe Creek
Pittsburgh Tank & Tower Co.	KYR001877	Henderson	KY	Canoe Creek
Polymer Partners	KYR001690	Henderson	KY	Canoe Creek
Southridge Subdivision	KYR101187	Henderson	KY	Canoe Creek
Accuride Corporation	KYR00040	Henderson	KY	North Fork Canoe Creek
Adams Street Development Corp.	KY0102741	Henderson	KY	North Fork Canoe Creek
Bakery Feeds, Inc.	KYR001623	Henderson	KY	North Fork Canoe Creek
Crestline Plastic Pipe	KY0046591	Henderson	KY	North Fork Canoe Creek
Gamco Products Company	KYR200024	Henderson	KY	North Fork Canoe Creek
Hazex Construction Co., Inc.	KYR101169	Henderson	KY	North Fork Canoe Creek
Henderson County Board of Education	KY0101117	Henderson	KY	North Fork Canoe Creek
Home Oil & Gas, Inc.	KYR000060	Henderson	KY	North Fork Canoe Creek
Palmer Oil Co., Inc.	KYR000905	Henderson	KY	North Fork Canoe Creek
Pleasant View Subdivision	KY0086061	Henderson	KY	North Fork Canoe Creek
Rogers Group	KY0089001	Henderson	KY	North Fork Canoe Creek
Snow Enterprises	KYR001759	Henderson	KY	North Fork Canoe Creek
Vincent Industrial Plastics	KYR001800	Henderson	KY	North Fork Canoe Creek
Western Kentucky Trucking	KYR001386	Henderson	KY	North Fork Canoe Creek
Triple S Welding & Marine	KY0100439	Henderson	KY	Green River
Henderson Country Club	KY0084336	Henderson	KY	Green River Tributary
Henderson City Landfill	KY0097675	Henderson	KY	Mound Slough
Ellis Park Race Course	KYG640014	Henderson	KY	Ohio River
Henderson Power & Light	KY0002178	Henderson	KY	Ohio River
Ohio Valley Marine Service, Inc.	KY0099422	Henderson	KY	Ohio River
Sights Denim Systems, Inc.	KYR001821	Henderson	KY	Ohio River
Transmontaigne Terminal, Inc.	KY0095435	Henderson	KY	Ohio River

Appendix
Agricultural Lands
Baseline and Trends
for Cumulative Effects Analysis

INTRODUCTION

The purpose of this baseline information on farmland is to analyze the cumulative effects for the Environmental Impact Statement for the proposed I-69 corridor, Evansville, Indiana to Henderson, Kentucky. The information presented represents efforts to identify farmland land issues and to present and determine past, present, and future information for the project study area.

GEOGRAPHIC AND TIME PERIOD CONTEXT:

Farmland is one of three major resources that is being analyzed for cumulative impacts as a result of I-69. These three resources include farmland, forests, and wetlands. These three resources were selected based upon their importance in the study area as well as input from various resource agencies.

For farmland the geographic scope of the cumulative effects analysis is the 4 county study area. This study area includes Posey, Vanderburgh, and Warrick Counties in Indiana and Henderson County in Kentucky (see Figure 1). The past, present, and future analysis of farmland will look at this 4 county study area.

The time period that will be studied for this cumulative effects analysis includes past years to present day. The analysis will also look into the future to identify future trends. This future analysis will be from present day to the year 2025. The year 2025 allows for reasonably foreseeable future trends for the economic modeling and transportation demand modeling. These models were used in forecasting indirect impacts.

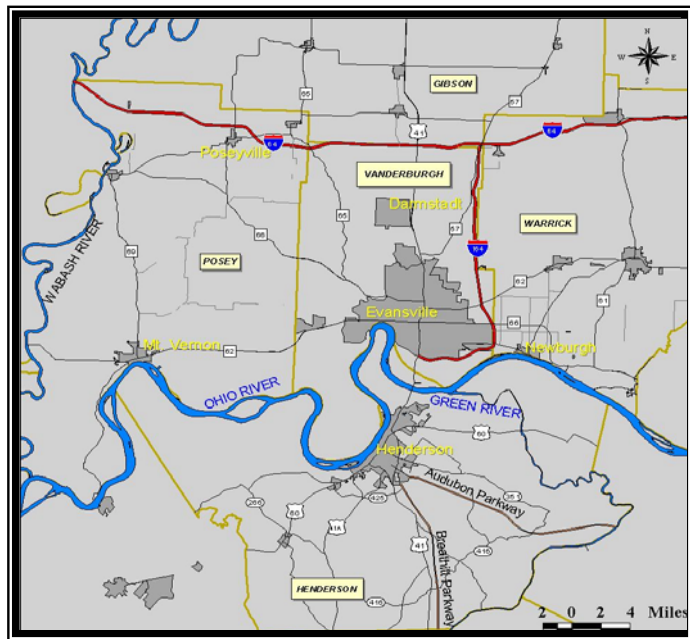


Figure 1 Project Study Area

FARMLAND IN THE STUDY AREA - PAST AND PRESENT:

The study area identified for this project includes Posey, Vanderburgh and Warrick Counties in Indiana and Henderson County in Kentucky. Table 1 shows the farmland acreages for these counties from 1950 to 1997 (Indiana and Kentucky Agricultural Statistics Service, 2002). Since 1950, farmland acreages have declined from 778,822 acres to 562,243 acres.

The reasons for this loss of farmland are a combination of population and employment growth and demographic changes. The U.S. Department of Housing and Urban Development concluded that the urban areas in the U.S. are expanding at about twice the rate that the population is growing. Garth Turner in the Southam New Media states that "the number of people living alone will increase by 70% in the next 20 years. And by 2016, 55% of all families will consist of just two people." The demographic trend to more single person households means more housing units and more land being used for residential purposes. In addition to more housing units and smaller family size, the size of the housing unit is getting bigger. The size of new homes increased by more than 50 percent between 1970 and 2000, from 1,500 square feet to 2,266 square feet (US Census Bureau 2000).

Table 1 Land in Farms (acres)

	1950	1959	1964	1969	1974	1978	1982	1987	1992	1997
Henderson Co., KY	252,628	238,540	241,624	239,306	217,037	230,835	216,973	213,269	197,826	196,277
Posey Co., IN	252,115	230,799	220,659	230,302	222,992	225,348	220,573	217,084	220,959	195,305
Vanderburgh Co, IN	109,059	100,713	99,621	92,454	87,221	89,356	81,779	85,852	80,958	72,112
Warrick Co., IN	165,020	145,104	131,806	131,218	126,851	113,330	108,990	99,944	96,219	98,549
Sum of Study Area	778,822	715,156	693,710	693,280	654,101	658,869	628,315	616,149	595,962	562,243

Source: US Census of Agriculture; Indiana and Kentucky Agricultural Statistics Service

FARMLAND IN THE STUDY AREA- FUTURE TRENDS:

The farmland information collected for the study area since 1950 (see Table 1) is shown in Figure 2. This past data was then projected into the future using regression analysis. These projections extend to the year 2025. Projecting beyond 2025 was considered too uncertain. The figures show the future trends for both Indiana and southwestern Indiana both as a trend line and as a regression equation.

For study area, the future trends in Figure 2 show that by the year 2025, farmland would be approximately 450,000 acres. This would represent a decline of approximately 112,000 acres from 1997. Translating this decline into percentages, this future analysis shows that approximately 20% of the total farmland in the study area in 1997 could be lost by the year 2025. In terms of a loss per year of farmland, this decline is approximately 4,000 acres of farmland lost per year in the 4 county study area.

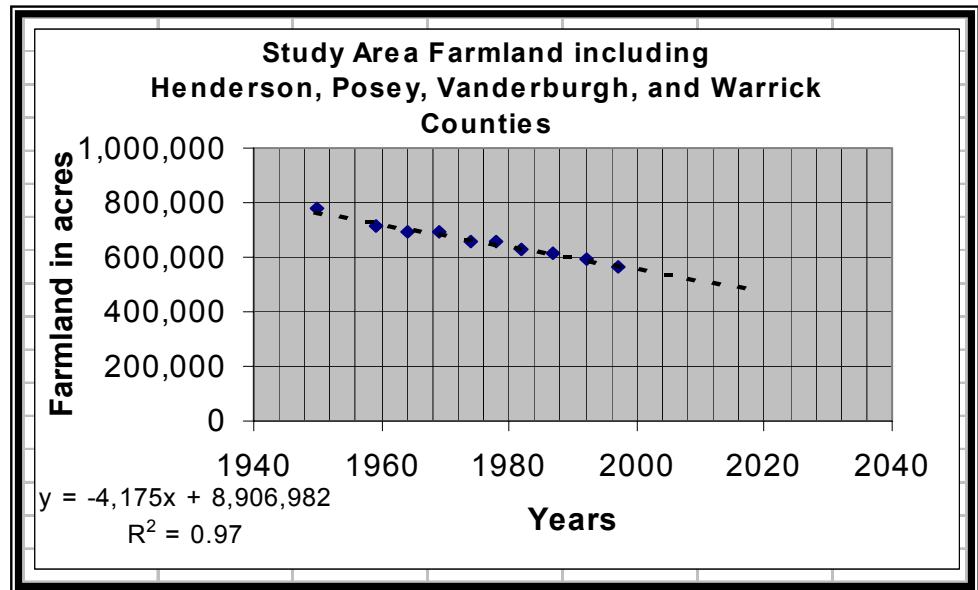


Figure 2

To help determine the reasonableness of this future analysis, the Vanderburgh County District Conservationist of the U.S. Department of Agriculture, Natural Resources Conservation Service was contacted. The District Conservationist stated that if the current trends of low interest rates and a growing economy continue then this forecast of 4,000 acres of farmland lost per year in the 4 county study area is reasonable.

Resources and Publications:

Indiana Agricultural Statistics Service. www.nass.usda.gov/in/historic, May 2002.

Kentucky Agricultural Statistics Service. www.nass.usda.gov/ky/coa, January 2003.

U.S. Department of Housing and Urban Development, "The State of the Cities", 2000

Garth Turner, "Boomer Nightmare Plunging Home Values". Southam New Media. April 1996

Jeff Glassberg, "Exploring Sprawl - Fifth Issue in a Series". Renaissance Development Company, 1998.

U.S. Census Bureau 2000.

Appendix
Forest Lands
Baseline and Trends
for Cumulative Effects Analysis

INTRODUCTION

The purpose of this baseline information on forests is to analyze the cumulative effects for the Environmental Impact Statement for the proposed I-69 corridor, Evansville, Indiana to Henderson, Kentucky. The information presented represents efforts to identify forest issues and to present and determine past, present, and future trends for the project study area.

GEOGRAPHIC AND TIME PERIOD CONTEXT:

Forests are one of three major resources that are being analyzed for cumulative impacts as a result of I-69. These three resources include farmland, forests, and wetlands. These three resources were selected based upon their importance in the study area as well as input from various resource agencies.

For forests the geographic scope of the cumulative effects analysis is the 4 county study area. This study area includes Posey, Vanderburgh, and Warrick Counties in Indiana and Henderson County in Kentucky (see Figure 1). The past, present, and future analysis of forests will look at this 4 county study area.

The time period that will be studied for this cumulative effects analysis includes past years to present day. The analysis will also look into the future to identify future trends. This future analysis will be from the present day to the year 2025. The year 2025 allows for reasonably foreseeable future trends for the economic modeling and the transportation demand modeling. These models were used in forecasting indirect impacts.

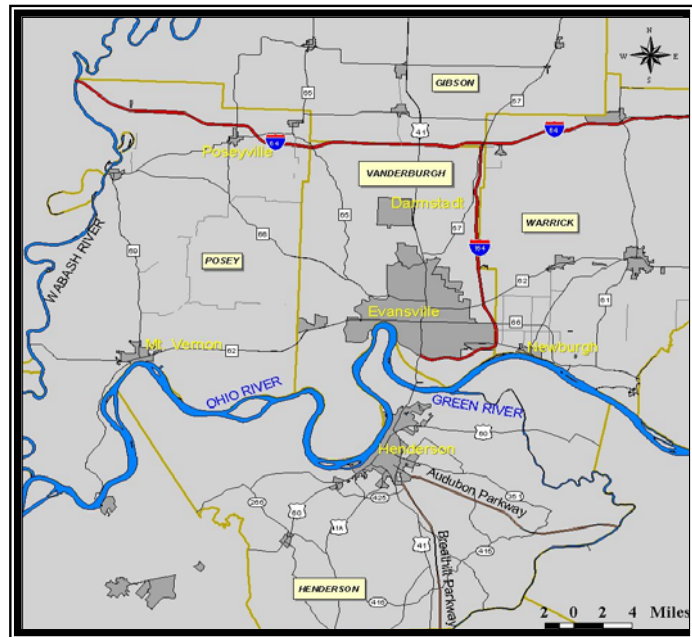


Figure 1 Project Study Area

FORESTS IN THE STUDY AREA - PAST AND PRESENT:

The study area identified for this project includes Posey, Vanderburgh, and Warrick Counties in Indiana and Henderson County in Kentucky. Table 1 and Figure 2 show the acreages for forests from 1950 to 1998 in the four counties in the study area (Hutchison, O. Keith and Winters, Robert, 1953) (Hutchison, O. Keith, 1956) (Gansner, David A., 1968) (Spencer, John S., Jr. 1969) (Smith, W.B. and M. F. Golitz, 1988) (Schmidt, T. L., M. H. Hansen, and J.A. Solomakos, 2000) (Alerich, Carol, 1990). Until 1986, forests had been increasing in the study area by approximately 1,260 acres per year. The period from 1986 to 1998 showed a in total acreage. These statistics on Indiana's forest resources have been periodically published by the USDA Forest Service. Publications from 1953 to 2000 were obtained to determine forest trends for this appendix (Hutchison, O. Keith and Winters, Robert, 1953) (Hutchison, O. Keith, 1956) (Gansner, David A., 1968) (Spencer, John S., Jr. 1969) (Smith, W.B. and M. F. Golitz, 1988) (Schmidt, T. L., M. H. Hansen, and J.A. Solomakos, 2000) (Alerich, Carol, 1990).

FORESTS IN THE STUDY AREA - FUTURE TRENDS:

The recent trend of increases in forest lands changed with a decrease in forest lands reported in the 1998 Forest Service statistics. The question to be answered for future trends is whether this decrease will continue into the future or will the forests experience an increase similar to the 1950's and 1960's.

Trend line analysis for forest acreages for the study area is less accurate as a forecast tool as a result of the recent fluctuations in acreages. Information from the Forest Service indicates that we have achieved a balance between forest interests and users (Schmidt, T. L., M. H. Hansen, and J.A. Solomakos, 2000). With such a balance there maybe little change in the amount of forests in the next few years.

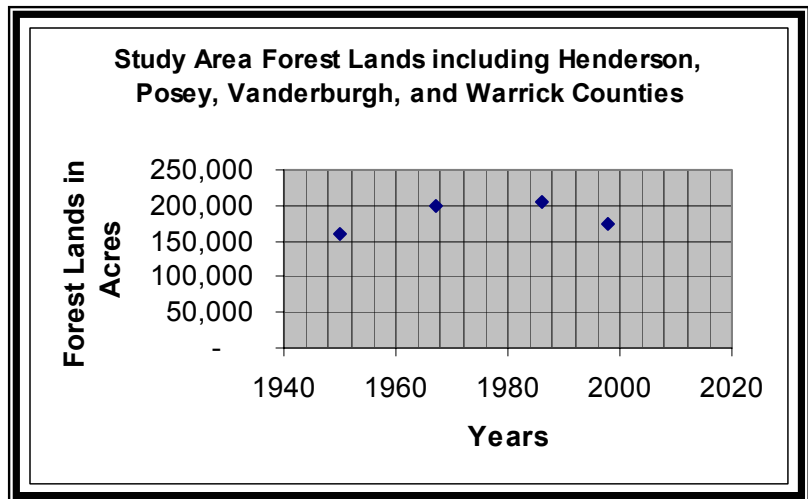


Figure 2

Table 1 Land in Forests (acres)

	195	196	198	199
Henderson County, Kentucky	53,000	61,300	45,818	51,100
Posey County, Indiana	38,000	42,100	49,900	40,600
Vanderburgh County, Indiana	19,000	20,000	25,700	20,900
Warrick County, Indiana	50,000	76,200	84,000	62,500
Sum of Southwestern Indiana	160,000	199,600	205,418	175,100

Source: US Department of Agriculture, Forest Service
For Henderson County, Kentucky – The data was available for years 1949, 1963, 1988, and 1997.

Resources and Publications:

Alerich, Carol. 1990. "Forest Statistics for Kentucky, 1975 and 1988." Resource Bulletin NE-117. North Eastern Forest Experiment Station, USDA Forest Service, Radnor, Pennsylvania.

Bozarth, Rodney. Telephone Conversation on February 25, 2003. USDA Natural Resources Conservation Service.

Gansner, David. 1968. "The Timber Resources of Kentucky". Resource Bulletin NE-9. North Eastern Forest Experiment Station, USDA Forest Service, Upper Darby, Pennsylvania. 97 pp.

Hutchison, O. Keith. 1956. "Indiana's Forest Resources and Industries." Forest Resource Report No. 10. Central States Forest Experiment Station, USDA Forest Service. U.S. Government Printing Office, Washington, D.C. 44 pp.

Hutchison, O. Keith and Robert Winters. 1953. "Kentucky's Forest Resources and Industries." Forest Resource Report No. 7. Central States Forest Experiment Station, USDA Forest Service. U.S. Government Printing Office, Washington, D.C. 55 pp.

Smith, W. B., and M. F. Golitz. 1988. "Indiana Forest Statistics, 1986." Resource Bulletin NC-108.

North Central Forest Experiment Station, USDA Forest Service, St. Paul, Minnesota. 139 pp.

Schmidt, T. L., M. H. Hansen, and J. A. Solomakos. 2000. "Indiana's Forests in 1998." Resource Bulletin NC-196. North Central Research Station, USDA Forest Service, St. Paul Minnesota. 139 p.

Spencer, John S., Jr. 1969. "Indiana's Timber." Resource Bulletin NC-7. North Central Forest Experiment Station, USDA Forest Service, St. Paul, Minnesota. 61 pp.

**Appendix
Wetlands
Baseline and Trends
for Cumulative Effects Analysis**

INTRODUCTION

The purpose of this baseline information on wetlands is to analyze the cumulative effects for the Environmental Impact Statement for the proposed I-69 corridor, Evansville, Indiana to Henderson, Kentucky. The information presented represents efforts to identify wetland issues and to present and determine past, present, and future trends for the project study area. Terms used in the text of this report are defined at the end of this appendix.

GEOGRAPHIC AND TIME PERIOD CONTEXT:

Wetlands are one of three major resources that are being analyzed for cumulative impacts as a result of I-69. These three resources include farmland, forests, and wetlands. These three resources were selected based upon their importance in study area as well as input from various resource agencies. For wetlands the geographic scope of the cumulative effects analysis is the 4 county study area. This study area includes Posey, Vanderburgh, and Warrick Counties in Indiana and Henderson County in Kentucky (see Figure 1). The past, present, and future analysis of wetlands will look at this 4 county study area.

The time period that will be studied for this cumulative effects analysis includes past years to present day. The analysis will also look into the future to identify future trends. This future analysis will be from the present day to the year 2025. The year 2025 allows for reasonably foreseeable future trends for the economic modeling and the transportation demand modeling. These models were used in forecasting indirect impacts.

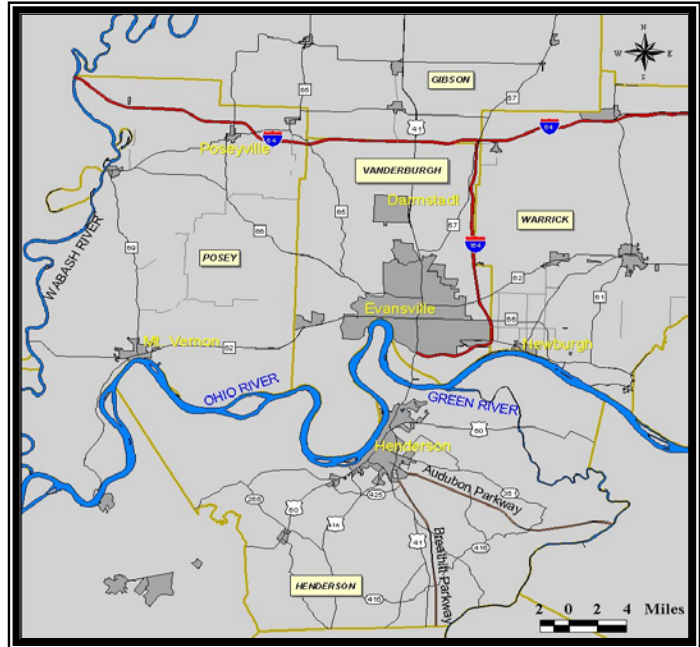


Figure 1 Project Study Area

WETLANDS IN THE STUDY AREA - PAST AND PRESENT

Table 1 shows wetlands in this 4 county area. The total wetland acreage using the National Wetland Inventory from the U.S. Fish and Wildlife Service is 40,808 acres. Posey County and Warrick County in Indiana have the largest amount of wetlands. These wetlands numbers are from the 1992 National Wetland Inventory. This information is the only information regarding wetlands by county in Indiana and Kentucky.

Table 1 Land in Wetlands

	1992 NWI data (acres)
Henderson County, Kentucky	4,529
Posey County, Indiana	18,279
Vanderburgh County, Indiana	3,229
Warrick County, Indiana	14,771
Totals	40,808
Source: National Wetland Inventory 1992	

WETLANDS - FUTURE TRENDS

The most recent policy statements on wetlands came from both the George Bush and Bill Clinton administrations when they adopted policy goals of "no net loss of wetlands". (White House, 1991 and 1993) Preservation of wetlands is a goal for all local, state, and national projects. For every acre of wetland that is taken as a part of a project, several acres will be created as described in the mitigation plan.

Trend line analysis for wetlands for the study area will not work with the limited amount of information. Indiana in the Indiana Wetlands Conservation Plan (Indiana Department of Natural Resources, 1996) stated that their goal is "*to have no overall loss of wetlands.*" On January 28, 1991 the Indiana Department of Transportation signed a memorandum of understanding with the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service regarding wetland mitigation. As a result, wetland losses are being mitigated using ratios that are designed to increase the number of wetland acres in Indiana. For projects that would take wetland acres, these mitigation replacement ratios can vary from replacing one lost wetland acre with one wetland acre to replacing one lost wetland acre with 4 wetland acres and above depending upon quality.

In Kentucky, the 1996 Kentucky Report to Congress on Water Quality (Kentucky Natural Resources and Environmental Protection Cabinet, Division of Water, October 1996) stated that "wetland impacts should be avoided or minimized whenever possible". The "Wetland Compensatory Mitigation and Monitoring Plan Guidelines for Kentucky" are designed to help in the preparation of mitigation plans. From this information, "*no net loss*" provides the best explanation of the future trends in Indiana and Kentucky as well as in the four counties in the study area. Conversations with officials at the Indiana Department of Environmental Management indicate that this statement currently provides the best information as to the future direction of wetlands. This goal is also reflected in the mitigation measures that work towards increasing the number of wetland acres in Indiana.

Resources and Publications

Indiana Department of Natural Resources. 1996. "Indiana's Wetlands Conservation Plan"
Kentucky Natural Resources and Environmental Protection Cabinet, Division of Water. "1996 Kentucky Report to Congress on Water Quality. October 1996.

Shaw, Samuel P. and Fredine, C. Gordon. Wetlands of the United States - their extent and their value to waterfowl and other wildlife. U. S. Department of the Interior, Washington D.C. Circular 39.

U.S. Department of Agriculture. "Wetlands and Agriculture: Private Interests and Public Benefits/ AER-765"

U.S. Fish and Wildlife Service. National Wetlands Inventory 1992.

Definition of Terms

Wetlands. Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For the purposes of this definition, wetlands must have one or more of the following three attributes:

- (1) at least periodically, the land supports predominantly hydrophytes;
- (2) the substrate is predominantly undrained hydric soil; and
- (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

From Cowardin et al. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Fish and Wildlife Service FWS/OBS-79/31. 104 pp.



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
310 W. Liberty Street, Suite 701
Louisville, KY 40202
phone: (502) 581-0985
fax: (502) 581-0987

SUBJECT: I-69 Evansville, IN and Henderson, KY
Environmental and Engineering Assessment

DATE: December 13, 2001

LOCATION: Resource Agency Coordination Meeting
Audubon State Park

TIME: 9:30 AM (CDT)

MEETING PARTICIPANT

Bill Malley
Mike Linderman
Robert Dirks
Frank Nally
Stewart Sebree
Dennis Au
Gary Jordan
Bill Maudlin
John Bittner
Ed Hartke
Wane L. Davis
Mike Morton
Tim Sheehan
Larry Tichenor
Dave Williams
Doug Taylor
Everett T. Green
Mike Hardin
James L. Hixon
Doug Dawson
Tom Beard
Gerry Newall
Doug Shelton
Chris Lee
Cheryl DeHaven
David Orzechowski
Rick Huffines
Mike Litwin

AGENCY OR FIRM

Akin Group
Angel Mounds DNR
FHWA-IN
Henderson County Historical Society
Historic Landmarks Foundation of Indiana (HLFA)
Historic Preservation Society of Evansville
IDNR-Fish & Wildlife
IDNR-Fish & Wildlife
Indiana Farm Bureau
Indiana Geological Survey
KY Department of Fish and Wildlife Resources (KDFWR)
KY Department of Fish and Wildlife Resources (KDFWR)
KY Division of Forestry
KY Division of Waste Management
KY Geological Survey
KYTC D-2
KYTC D-2
KYTC-Environmental
KYTC-Environmental
KYTC-Environmental
Landmark Archaeology
Louisville District COE
Louisville District COE
NRCS
NRCS
US Coast Guard
US Fish and Wildlife Service
US Fish and Wildlife Service

cc: 31815 Correspondence

Authored by: Brian Aldridge



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HNTB Architects Engineers Planners
310 W. Liberty Street, Suite 701
Louisville, KY 40202
phone: (502) 581-0985
fax: (502) 581-0987

Ken Westlake	USEPA
Virginia Laszewski	USEPA
Rose Zigenfus	EUTS
Alan Ball	INDOT
Karl Leet	INDOT
Janice Osadczuk	INDOT
Michael Hazeltine	INDOT
Lyle Sadler	INDOT
Tom Cervone	BLA
Jason Dupont	BLA
David Isley	BLA
Anthony Goodman	BLA
David Ripple	BLA
Rusty Yeager	BLA
Tim Miller	HNTB
Susan Rich	HNTB
Brian Aldridge	HNTB

Tim Miller opened the meeting with introductions and an overview of the meeting agenda.

Mr. Miller began his presentation by giving a project status report. His presentation concentrated on review of the draft purpose and need. He noted that three needs have been identified for this project and he reviewed each need and its objective and performance measure.

Mr. Miller described need #1 (to support the completion of I-69 as a national and international trade corridor) and then opened the floor to discussion.

Q: Virginia Laszewski (EPA)- Is need #1 a primary or underlying need?

A: No. They are not currently weighted.

Comment- Ms. Laszewski- Maybe we need a primary need with secondary needs.

Q: Ms. Laszewski (EPA)- Do we have freight numbers?

A: No. That data is currently being assembled for the National Corridor.

Mr. Miller described need #2 (to provide sufficient cross-river mobility in the Evansville/Henderson area) and then opened the floor to discussion.

cc: 31815 Correspondence

Authored by: Brian Aldridge



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HNTB Architects Engineers Planners
310 W. Liberty Street, Suite 701
Louisville, KY 40202
phone: (502) 581-0985
fax: (502) 581-0987

Q: Ms. Laszewski (EPA)- What is meant by the term redundancy?

A: Robert Dirks (FHWA)- Alternate cross river mobility, etc. Mr. Dirks used the analogy of a bridge member to describe how redundancy applies to the Ohio River crossing. He stated that if one bridge member fails, a bridge is designed so that it will continue to function. Rose Zigenfus (EUTS) added that the need for another crossing was identified 5 years just for local traffic.

Q: Ms. Laszewski (EPA)- What is likelihood of incidents occurring to completely shut down the existing bridge?

Comment: Ken Westlake (EPA)- May want to add forecasted sufficiency ratings to design year.

Q: Ms. Laszewski (EPA)- Questioned the sentence on page 11, paragraph 8:

“To meet performance measures #3...”

She stated that she was under the impression that reconstructing existing bridge is not an option. May want to reword.

Mr. Miller described need #3 (to strengthen the transportation network in the Evansville/Henderson area) and then opened the floor to discussion.

Comment: Dennis Au (Historic Preservation Society of Evansville)- Traffic between Kentucky and Indiana creates a bottleneck at the bridges.

Comment: Dave Ripple (BLA)- US 41 currently serves around 40,000 vehicles per day; the bridges and their approaches currently operate at Level of Service (LOS) F.

Q: Ms. Laszewski (EPA)- What hours are LOS for?

A: Mr. Ripple (BLA)- Peak hours; off-peak hours currently have acceptable LOS.

Q: Ms. Laszewski (EPA)- Has anyone investigated mass transit?

A: Mr. Miller (HNTB)- That is something to be considered.

Comment – Need to address impact of Evansville Airport.

Comment: Mr. Westlake (EPA)- Discuss non-injury accidents.

Brian Aldridge began his presentation on the discussion of preliminary corridor concepts. He noted that the nine preliminary alternatives were developed while attempting to satisfy the draft project needs and avoid/minimize environmental impacts. He added that the word “corridor” is used because the



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HNTB Architects Engineers Planners
310 W. Liberty Street, Suite 701
Louisville, KY 40202
phone: (502) 581-0985
fax: (502) 581-0987

alternatives include a wide band (approximately 2 miles) for study. Mr. Aldridge then went over each of the alternatives briefly and described some of the features of each. He then asked for questions relative to any of the preliminary alternatives.

Q: Ms. Laszewski (EPA)- Why are there no corridors further east?

A: Mr. Aldridge (HNTB)- The intention was to remain close to both Evansville and Henderson on the east, but another corridor could be considered.

A: Ms. Osadczuk (INDOT)- Use of existing I-164 was logical on east side.

A: Mr. Miller (HNTB)- Newburgh (city to east) was a consideration.

A: Ms. Zigenfus (EUTS)- The proximity to the Newburgh Locks and Dam was also a consideration.

Q: Wayne Davis (KDFWR)- Why not consider an alternate through the area adjacent to the Henderson Riverport authority?

A: Would direct traffic through a more urban area.

A: Tim (HNTB)- Design team will look at this concept.

A: Mr. Au (Historic Preservation Society of Evansville)- The area through Union township would be very difficult to build through due to flooding considerations. He pointed out the berm that was constructed for the railroad through the area as an example.

Comment: Ms. Laszewski (EPA)- From the EPA's perspective, stay away from wetlands, minimize environmental impacts.

BREAK

Tom Cervone (BLA) began his presentation discussing areas of concern. Jason Dupont (BLA) reviewed materials included in the handout, which included maps and other information about some of the environmental concerns that would be addressed during the afternoon tour. Mr. Cervone began an interactive discussion of the preliminary corridors and some of the features that would require consideration.

- Eastern corridors

- Blue Grass Creek Fish and Wildlife Area

- Bill Maudlin (IDNR)- The Fish and Wildlife area is approximately ½ mile east of I-264 and outside the proposed corridors.

- Angel Mounds

- Mike Linderman gave overview of the history of the Angel Mounds national historic landmark. Indiana DNR owns approximately 500 acres and has recently acquired additional land to provide a buffer to the west.



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310 W. Liberty Street, Suite 701
Louisville, KY 40202
phone: (502) 581-0985
fax: (502) 581-0987

- Proposed Green River Wildlife Refuge
 - Rick Huffines (US Fish and Wildlife Service)- Approximately 23,000 acres proposed.
 - No land purchased yet for proposed Green River Wildlife Refuge.
 - 90%-95% of the proposed area is currently agricultural land.
- East of US 41- KY's #1 ecological site (everything highlighted in green)
- Green River State Forest
 - Tim Sheehan (KY Division of Forestry)- Discussed purchase/proposed purchase of tracts of land for Green River State Forest purchase area. All land has been appraised.
- Ohio River crossing
 - David Orzechowski (US Coast Guard)- The Coast Guard is responsible for setting horizontal and vertical clearances and determining pier locations. Design minimums include the following:
 - 55' above 2% low level flood plain (vertical clearances)
 - 69' above normal pool plain
 - 845' horizontal clearances

General Comments and questions:

- Doug Shelton (US Army Corps of Engineers)- Interested in overbank and wetlands, as well as permit requirements (404, etc.).
- Mike Hardin (KYTC)- Are farm wetlands on map?
- Mr. Cervone (BLA)- No. The maps contain NWI (National Wetland Inventory) wetlands only.
- Audubon State Park
- Sloughs Wildlife Management Area
 - Mike Morton (KDFWR) gave a brief overview of the Sloughs and included the following points:
 - Waterfowl habitat is a primary focus
 - Most of the wetlands are considered to be "high quality"
 - Hillsides to south and east were original boundaries of Ohio River
 - Bald Eagles are a significant tourism component
 - Wayne Davis (KDFWR)
 - The Ohio River has big river fish not found elsewhere, including River Sturgeon (a species important for caviar production)
 - Fresh water mussels/mollusks extremely important
 - Indiana Bat has excellent habitat (i.e. riparian forests)
 - Goal is to bring back agricultural areas to natural state



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HNTB Architects Engineers Planners
310 W. Liberty Street, Suite 701
Louisville, KY 40202
phone: (502) 581-0985
fax: (502) 581-0987

-Mike Litwin (US Fish and Wildlife Service)

- With respect to mussels, the Ohio River is difficult to survey
- Indiana Bat habitat

-Goose Pond- Managed by Nature Preserves

- 4 to 5 mile long slough with Bald Cypress
- Indiana has 8 natural stands of Bald Cypress with one of those being found at Goose Pond.

Archaeological Issues

-Mann Site- Overview by Tom Beard (Landmark)

- 400+ acres east of Mt. Vernon

-Green River- Mr. Beard (Landmark)

- Lots of shell mounds
- Water does not freeze

-Archaeological sites are practically unavoidable in Kentucky.

-James Hixon (KYTC)- There is a potential for buried sites even along the existing US 41 corridor.

Human Environment

- Dave Isley (BLA): Utilizing I-164, existing bridge, US 41

- More residential- The new Toyota plant in Princeton is rapidly changing the face of Vanderburgh County.
- Large truck stop at I-64 and US 41.
- Considerations of impact by changing 41 to an interstate facility- kids walking to school, churches, etc.
- US 41- Heavy commercial area through Henderson.

- Consideration of another alignment through the Henderson Riverport area and the Ohio River oxbow had great human considerations with both the University of Southern Indiana and the City of Evansville.

Historic Issues

- Sites that are currently on the National Historic Register are represented by red dots on maps. It was pointed out that there are numerous additional sites in and around Evansville that are potentially eligible for the Register.
- Stewart Sebree (HLFA) noted that the town of Newburgh is on the Register.



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- Ms. Osadczyk (INDOT)- Cannot disturb cemeteries- Indiana state law says that a transportation facility must be at least 100 feet from the nearest burial plot. Mr. Hixon (KYTC) noted that the same is not true for Kentucky.

Geological considerations- Dave Williams (KY Geological Survey)

- There are numerous faults throughout the area.
- Entire area is subject to liquefaction.

Farmland

- Potential to impact
- Definite consideration

Hazardous Material- Larry Tichenor (KY Division of Waste Management)

- Transfer station east of Henderson (landfill)

EPA Concerns- Mr. Westlake (EPA)

- All is of interest to EPA
- Air conformity determination
- Water quality, sediment issues

Mr. Dirks (FHWA)

- We will meet again after the screening process is complete.

Legal Aspect- Bill Malley (Akin Group)

- Needs will help guide in the screening process.
- Regulatory requirements are an important component to the project.

I-69 South Agency Coordination Meeting December 13, 2001

Tour of Environmental Issues

11:30am	Departed Audubon State Park on Tour Bus
11:45	Visited Oliver Tract Wetland
12:15	Lunch at Angel Mounds State Historic Site Curator Mike Linderman provided an overview of the historical aspects of the Site and provided a slide presentation.
1:00	Departed Angel Mounds Site
1:45	Toured the Sloughs Wildlife Management Area (WMA). Manager Mike Morton provided a detailed tour of the area. Visited Anderson Pond
2:00	Sloughs WMA Visited Gentle Pond-open water cypress slough Mike Morton provided narration
2:15	Sloughs WMA Visited Pond Creek, marsh area and bald eagle nest Mike Morton provided narration
2:35	Visited Diamond Island
3:35	Arrived at Audubon State Park



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

SUBJECT: I-69 Evansville, IN and Henderson, KY
Environmental and Engineering Assessment
Section 106 Meeting

DATE: April 22, 2002

LOCATION: HNTB Office
Louisville, Kentucky

TIME: 10:30am EDT

Meeting Participants

Lyle Sadler
Mary Murray
John Carr
Rick Jones
David Morgan
Craig Potts
John Mettill
Doug Taylor
David Waldner
Rebecca Turner
Paul Rawlings
Tom Cervone
Jason Dupont
Tim Miller

Representing (Firm or Agency)

INDOT
FHWA
IDNR
IDNR
Kentucky Heritage Council
Kentucky Heritage Council
KYTC
KYTC
KYTC
KYTC
KYTC
BLA
BLA
HNTB

The meeting began at 10:45am EDT.

- Tim Miller opened the meeting by thanking everybody for traveling from Indianapolis, IN, Frankfort, KY and Evansville IN. All attendees made introductions.

FHWA Comments

- FHWA made opening comments. Mary Murray explained that FHWA will be open to flexibility when navigating the Section 106 process. She explained that even though the FHWA Indiana Division and FHWA Kentucky Division has its own set of Section 106 procedures, each Division achieves the same outcome. IN/KY Procedures
- BLA explained the major differences between the state's Section 106 procedures. The major difference between the two states is the Commonwealth of Kentucky requires Baseline reports be prepared and reviewed by the KY Division of Environmental Analysis prior to being included in the

cc: 31815 Correspondence

Authored by: Tim Miller



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HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

draft Environmental Impact Statement (EIS). Baseline reports, such as a Section 106 report, are not required in Indiana. Although Indiana collects much of the same information as KY, Indiana simply inserts the information into the draft EIS rather than produced in a separate report.

- Tom Cervone explained that IN FHWA requires a letter in the draft EIS that describes the Area of Potential Effect (APE), discusses eligible sites and provides a determination of effect for the project. John Mettillle indicated KY had a similar procedure.
- John Mettillle stated that although each state has a different set of procedures, each state provides the same information and results in the draft EIS.
- John Mettillle stated that early and ongoing consultation with the State Historic Preservation Officers (SHPO) was very important.

Section 106

- As part of the I-69 consultant team, Helen Powell is performing the historic review in Kentucky and Dr. Linda Weintraut is performing the historic review in Indiana. Dr. Donald Linebaugh (University of Kentucky) will be conducting archaeology reconnaissance in Kentucky and Tom Beard (Landmark Archaeology) will be conducting archaeology reconnaissance in Indiana.

Consulting Party Coordination

- Approximately 74 Consulting Party invitations have been distributed to date. Native American tribes, associations, agencies and others are among the original invitees. As of April 22, 27 invitees have responded that they want to be a consulting party. (A list of invitees was distributed to the meeting attendees)
- In KY, consulting parties must submit a statement of interest and associated qualifications in order to be considered for a consulting party. KY then reviews their qualifications and then determines whether their qualifications and intent will be valuable to the process. Indiana does not require information and does not have a screening process.
- Request for additional information from the original 27 who requested to be a consulting party will be initiated by BLA. KYTC will send Tim Miller an example of the KYTC standard questionnaire. This questionnaire will be used to gather information from the 27 confirmed consulting parties. The information will be utilized to determine the amount of experience and expertise in the group of confirmed consulting parties.
- Future requests for participation in the Section 106 consulting party process will go through a screening process. KYTC and INDOT will approve all future requests for individual/association/business Section 106 consulting party participation. BLA will forward KY requests to David Waldner and IN requests will be forwarded to Robert Dirks (FHWA). Consideration may take up to 60 days.
- HNTB will revise the Section 106 discussion on the I-69 website. The website will state that interested consultant party requests will be *considered* for inclusion.

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HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

- HNTB will publish a legal advertisement inviting consulting party participation. The legal advertisement will appear in the *Evansville Courier* and the *Henderson Gleaner*. The legal advertisement will advise interested participants to send a consulting party request to BLA for consideration. (Subsequent to the meeting, it was agreed that INDOT and KYTC would publish the legal notice in the area newspapers. HNTB prepared a media-ready version of the legal advertisement)
- KYTC advised that it is important to note that consulting parties do not determine an Area of Potential Effect or eligibility.
- The first Consulting Party meeting should focus on identifying measures on how best to utilize the consulting parties to assess historic resources.
- BLA reported Native American invitees included the Delaware, Miami, Peoria and Cherokee tribes were invited to be consulting parties. As of April 22, 2002, the Delaware tribe is the only tribe who has responded that they want to be a participant.
- Due to Angel Mounds State Historic Site being a National Historic Landmark, BLA will send a consulting party invitation to the National Parks Service.
- HNTB/BLA distributed a list of those who have been invited to be a consulting party. Indiana, Kentucky and Federal Highway Administration will review the list and notify HNTB of any additional requested invitees.
- FHWA will contact the Advisory Council and ask if they would like to be a consulting party. FHWA will notify HNTB of their response.
- BLA has already been in contact with local experts identifying potential archaeology and historic sites. Some of these experts include Dr. Linda Weintraut, Helen Powell, Don Linebaugh, Tom Beard, Dennis Au (Evansville Historic Preservation Commission), Julie Martin (Henderson Downtown) and Frank Nally (Henderson County Historical Society)
- The first consulting party meeting will occur once an Alternative Specific Area of Potential Effect has been determined for each of the final alternatives.

Area of Potential Effect (APE)

- BLA explained that the Study Area of this project includes an area between I-64 to the north, Newburgh to the east, the Pennyriple Parkway to the south and Mount Vernon to the west. This Study Area includes portions of the Indiana counties of Posey, Vanderburgh and Warrick and Henderson County in Kentucky. The study area includes between 500-600 square miles.
- Within the study area, the following has been identified at this time:
National Register Listed sites (170 in IN, 58 in KY), inventoried sites (662 in IN, 94 in KY), National Register Listed Districts (14 in IN, 6 in KY), inventoried districts (7 in IN, 0 in KY)
- KYTC was interested in any preliminary archaeology research for the study area. BLA reported that archival research is being completed in the areas in and around the initial corridors to be used in the Level 1 Analysis.

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HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

- John Mettillle stated that direct and secondary and cumulative effects will have to be addressed in the Section 106 report. Some of the alternatives may have both visual and noise impacts on historic structures/districts.
- The viewshed on some of the alternatives may extend beyond a two-mile band width. For example, since the terrain in the oxbow is extremely flat, one may be able to view an elevated structure for several miles.
- BLA has begun compiling viewshed databases and maps. These maps identify sight distances from the centerline of each alternative.
- FHWA has established noise criteria. Noise levels approaching or exceeding 67 dBA require mitigation for typical residences. However, John Mettillle stated that increases of as little as 5 dBA have been considered an effect on Section 106 sites. The determination of this effect will have to be assessed on a case by case basis.
- The actual study area will be considered a "broad APE".
- An individual APE will be developed for each of the alternatives carried through Level 1 analysis.
- The APE for each corridor will most likely vary in width. Ground elevations, vegetation, manmade obstructions and interchange locations will effect the band width of each APE. A sample APE will be field reviewed by the sponsors and FHWA.
- Literature searches and surveys will be done for the entire study area for historic and archaeology sites. Archaeology site locations will remain confidential.
- The methodology on establishing the APEs will be explained in the Section 106 report.

Archaeology

- KY typically performs "predictive modeling" for archaeology sites not along the preferred alternative in order to estimate the number and quality of sites. However, due to the known number of sites in the Study Area, predictive modeling will not be required. It is assumed that the area has a significant number of archaeology sites.
- Rick Jones, IDNR, stated that the entire study area is rich in archaeology sites.
- Tim Miller reported that the current scope involves Phase 1A archaeology reconnaissance (shovel probing) only on the preferred corridor. KY and IN agreed that Phase 1A reconnaissance on a corridor other than the preferred corridor would only be required if the information would be valuable for the preferred corridor.
- Phase 1C (trenching), could be required for some areas near the Ohio River. Trenching depth could be approximately 15 feet in depth in these areas.
- Proposed pier placements will be critical to the archaeology reconnaissance. It will not be necessary to perform shovel probing in areas where a structure is elevated. However, shovel probing will be required at the proposed pier location.

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HNTB
HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

- Once the preferred corridor has been identified, HNTB will send a letter to the property owners in KY and IN. This letter will state that officials may be in the area doing survey or other related work. KYTC will forward HTNB their standard informational letter.
- A final EIS can be signed prior to phase 1C as long as a Memorandum of Agreement (MOA) exists.

Indiana/Kentucky/FHWA Agreement

- It was determined that an agreement on the Section 106 procedures would be signed by an IN, KY and FHWA representative. All parties agreed that the meeting notes would serve as an agreement.

Tim Miller summarized some of the differences and consensus between the two states.

Item	IN Procedure	KY Procedure	Consensus
Baseline Reports	Not Required	Required	Each state's standard procedure will be followed in regard to Baseline Reports.
Consulting Party Screening	IN Does Not Screen Consulting Party Criteria	KY Screens Consulting Parties	The original 27 confirmed consulting parties will not be screening. Future consulting party request will be screened
Phase 1A Work (shovel probing)	Only performs shovel probing on preferred alternative	Performs shovel probing on all high probability areas	Shovel probing will only occur on preferred corridor since all of the study area has a high probability
Predictive Modeling for Archaeology Sites	Does not Perform	Does not perform	Due to the high probability of sites, predictive modeling will not be performed on alternatives. However, the methodology for predicting high probability areas will be used in the analysis.

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HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
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Legal Notice for Consulting Parties Invitation	Does not require legal notice	Requires legal notice	HTNB will put legal ad in both the Evansville/Henderson newspaper inviting interested consulting parties
Phase 1A Work Under Structures	Not Required	Not Required	Not necessary, however, shovel probing at proposed pier locations is required.

The above minutes serve as the prescribed agreement for the I-69, Henderson, KY to Evansville, IN *Environmental Impact Statement* between the Indiana Department of Transportation and the Kentucky Transportation Cabinet.

Signature_____Date_____
Janice Osadczuk, Division Chief
Indiana Department of Transportation
Environment, Planning and Engineering

Signature_____Date_____
John Mettill Jr.
Kentucky Transportation Cabinet
Chief Environmental Program Administrator

cc: 31815 Correspondence

Authored by: Tim Miller



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HNTB Architects Engineers Planners
310 W. Liberty Street, Suite 701
Louisville, KY 40202
phone: (502) 581-0985
fax: (502) 581-0987

SUBJECT: I-69 Evansville, IN and Henderson, KY
Environmental and Engineering Assessment

DATE: July 30, 2002

LOCATION: Resource Agency Coordination Meeting
Audubon State Park

TIME: 8:30 AM (CDT)

MEETING PARTICIPANT

Mike Linderman
Robert Dirks
Frank Nally
Stewart Sebree
Dennis Au
Gary Jordan
Bill Maudlin
John Bittner
Ed Hartke
Wane L. Davis
Mike Morton
Tim Sheehan
Larry Tichenor
Dave Williams
Doug Taylor
Everett T. Green
Mike Hardin
James L. Hixon
Doug Dawson

AGENCY OR FIRM

Angel Mounds DNR
FHWA-IN
Henderson County Historical Society
Historic Landmarks Foundation of Indiana (HLFA)
Historic Preservation Society of Evansville
IDNR-Fish & Wildlife
IDNR-Fish & Wildlife
Indiana Farm Bureau
Indiana Geological Survey
KY Department of Fish and Wildlife Resources (KDFWR)
KY Department of Fish and Wildlife Resources (KDFWR)
KY Division of Forestry
KY Division of Waste Management
KY Geological Survey
KYTC D-2
KYTC D-2
KYTC-Environmental
KYTC-Environmental
KYTC-Environmental

Chris Lee
Cheryl DeHaven

NRCS
NRCS

Rick Huffines
Mike Litwin

US Fish and Wildlife Service
US Fish and Wildlife Service

cc: 31815 Correspondence

Authored by: Brian Aldridge



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HNTB Architects Engineers Planners
310 W. Liberty Street, Suite 701
Louisville, KY 40202
phone: (502) 581-0985
fax: (502) 581-0987

Rose Zigenfus
Alan Ball
Karl Leet
Janice Osadczuk
Michael Hazeltine
Lyle Sadler
Tom Cervone
Jason Dupont
Rusty Yeager
Tim Miller
Karen Mohammadi
Brian Aldridge

USEPA
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INDOT
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HNTB

Tim Miller welcomed everyone to John James Audubon State Park and Mary Dee Miller for the use of the facilities. Mr. Miller introduced Robert Dirks with the Indiana Division of federal Highway Administration (FHWA). Mr. Dirks welcomed everyone to the meeting and gave a brief overview of the project history. He noted that since the last Resource Agency Meeting, held December 13, 2001, the Study Team has narrowed the alternative corridors for I-69 from ten to three. As a result of the December 12 meeting, an additional corridor through the Oxbow area of the Ohio River west of the Evansville/Henderson area has been added. That corridor, known as Corridor J, is one of the three alternates that is being carried forward to the next phase of the study.

With that, introductions were given. Mr. Miller then went over the agenda for the meeting and the sites that would be visited during the afternoon bus tour. Handouts were provided at that time which included a copy of the agenda and an overview map depicting the three Level 2 Study Corridors and sites to be visited on the tour.

Mr. Miller began a PowerPoint presentation detailing the progress made by the Study Team since the last meeting. The addition of Corridor J, now known as Corridor 1 for the Level 2 analyses, was a result of comments received at that meeting. He discussed other coordination meetings held since that time, including a Section 106 meeting with the State Historic Preservation Officers (SHPO's) from both Kentucky and Indiana, a meeting with the Kentucky Division of Forestry to discuss the Green River State Forest, and two Study Advisory Committee (SAC) meetings. Mr. Miller then discussed the Level 1 Alternatives Analysis Report that details how the alternative corridors were narrowed from ten to three. He noted that the report is available in its entirety on the project website (<http://www.i69in-ky.com>), and that the agencies would be provided a paper or CD version of the report if they request

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Authored by: Brian Aldridge



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HNTB Architects Engineers Planners
310 W. Liberty Street, Suite 701
Louisville, KY 40202
phone: (502) 581-0985
fax: (502) 581-0987

one. Mr. Miller then discussed the screening data discussed in the report and presented the three Level 2 Study Corridors. He then asked for questions.

-Q: What is an “endangered habitat”?

A: (Jason Dupont) Endangered habitat is a site where an endangered species has been located, according to either the Indiana Heritage Council or the Kentucky State Nature Preserves.

-Q: What is the source of the wetlands information (acreages)?

A: (Jason Dupont) The wetlands are as indicated by National Wetland Inventory (NWI) mapping.

(Janice Osadczuk) This study is utilizing the same Geographic Information Systems (GIS) layers as the Indianapolis to Evansville I-69 study. This study will focus on the collection of additional data in the field.

Karen Mohammadi gave a brief summary of the screening process. She noted that all ten corridors were subjected to the same level of analyses, including measures grouped into three distinct, yet interrelated categories. These categories include Purpose and Need, Environmental, and Engineering considerations. Ms. Mohammadi added that traffic-related measures are included in the Purpose and Need screening and thus was not considered a category unto itself. She noted that the results of these analyses provided only indications of which corridors satisfied the screening measures best.

Ms. Mohammadi noted that a SAC meeting was held on May 1, 2002. At that meeting, the SAC members were asked to prioritize criteria derived from the screening measures. Each corridor was then evaluated based on those prioritized screening measures and the results were then compared to the Study Team’s findings. That comparison indicated that the SAC’s priorities are in line with the results of the Level 1 Alternatives Analysis Report.

Mr. Miller discussed the Level 2 Study Corridors in more detail. He noted that a variation of Corridor 1, known as Corridor 1A, has been included in the study in order to determine if the negative aspects of the sole western corridor (namely traffic performance) could be improved through a more-direct connection to the existing US 41 corridor, near the I-64 interchange north of Evansville. Mr. Dirks added that Corridor 1A is an attempt to make Corridor 1 the “best it can be”.

After a short break, Mr. Miller introduced Jason Dupont with Bernardin-Lochmueller and Associates. Mr. Dupont provided a summary of the GIS data sources utilized thus far in the study. He noted that the Study Team will be conducting more in-depth data collections on the three Level 2 Study Corridors (including Corridor 1A) over the coming months.

Mr. Dupont introduced Dr. Don Linebaugh, a professor of archaeology with the University of Kentucky. Dr. Linebaugh stated that there has not been a systematic survey of the corridors thus far and that only



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HNTB Architects Engineers Planners
310 W. Liberty Street, Suite 701
Louisville, KY 40202
phone: (502) 581-0985
fax: (502) 581-0987

known, recorded sites have been included in the study. He noted that the Study Team has access to data from only a limited “universe” from random past explorations. Dr. Linebaugh stated that sites are anticipated in Corridor 3 (13 have been documented). He said that there is one known site in Corridor 2 that is not considered eligible for the National Register of Historic Places. Pre-historic sites are likely to be encountered in Corridor 1. Dr. Linebaugh concluded by stating that archaeological test pits will be investigated along the preferred corridor only.

Mr. Miller introduced Brian Aldridge who gave a brief summary of recent activity with respect to the three remaining corridors. Mr. Aldridge stated that the Study Team has been collecting data on historic properties that may be eligible for the National Register, and has been investigating the potential of shifting the corridors to avoid direct impacts to these properties. He noted that the eligibility of these sites has not yet been determined, but the potential shifts are being investigated to determine if the corridors will remain to be feasible if one or more of the sites is deemed eligible. He discussed the three locations currently under scrutiny, including the St. Phillip area near Corridor 1 in Posey County, a group of sites north of KY 425 south of the Ohio River crossing on Corridor 1 in Henderson County, and three sites west of Zion and adjacent to KY 351 also in Henderson County. A map depicting these locations and the associated corridor modifications under consideration was presented. Mr. Aldridge reiterated that these shifts are contingent upon the determination of eligibility (for listing on the National Register) for the properties in question. Thus, the shifts may not be necessary, or may not be carried forward as shown at that time.

Dr. Tom Cervone detailed the historic data collection process and its impact on the establishment of draft centerlines for alternative alignments. He noted that Study Team engineers and historians have and will continue to work in the field to determine if corridors can be altered (if necessary) to avoid direct impacts to necessary properties. Dr. Cervone added that nothing has been finalized at this point, and much of the future work will focus on determining if the sites in question are eligible for the National Register (and if found eligible, what is the boundary of the eligible property).

Dr. Cervone introduced James Mosely with Envirokinetics. Mr. Mosley discussed the Environmental Justice issues identified thus far in the project. With respect to the remaining three corridors, only Corridor 1 is anticipated to impact a disproportionate percentage of minorities or low income households. Mr. Mosely noted that these impacts concern the Chapelwood Apartment complex along the Ohio River on the western edge of Henderson. That site was to be visited during afternoon bus tour. Dr. Cervone discussed the contents of the Draft Environmental Impact Statement (DEIS) document. There are eight baseline study reports included in the document, including the following:

- Aquatic ecology
- Terrestrial ecology

cc: 31815 Correspondence

Authored by: Brian Aldridge



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HNTB Architects Engineers Planners
310 W. Liberty Street, Suite 701
Louisville, KY 40202
phone: (502) 581-0985
fax: (502) 581-0987

- Socioeconomic
- Air quality
- Noise analysis
- Historic
- Archaeology
- Hazardous materials

Tom Springer with QK4 discussed the computer-based models used in the air and noise analysis. He said that existing conditions are first analyzed through data collection in the field (noise readings, etc.), and then future conditions are approximated using traffic forecasts and design data for each corridor alternate. If adverse impacts are anticipated, then mitigation opportunities are sought and can be committed to in the EIS.

-Q: With respect to the effort taken to avoid direct impacts, why is a “potential” historic site treated differently than a “potential” wildlife refuge (i.e. the Green River National Wildlife Refuge)?

A: (Ms. Osadczuk) Federal regulations require that impacts to sites eligible for the Historic Register be avoided, unless there is no other “reasonable and prudent” alternative. These sites are considered to be 4(f) resources.

(Doug Taylor) The term “potential historic site” refers to a property that has some historic characteristics, but may not necessarily be eligible for the Historic Register. The eligibility for these sites must be determined.

-Q: (On the same subject) Why would the owner of such a property not apply to have it listed on the National Register? Does the property have to be publicly owned to be 4(f)?

A: (David Waldner) One reason is the time and expense related to the paperwork that must be completed to have the property listed.

In the case of historic properties listed on the National Register, the property does not have to be publicly owned to be considered a 4(f) resource.

Endangered species habitats were discussed. Dr. Cervone stated that five federally-listed endangered species are known to exist in the study area. These include the Fat Pocketbook (mussel), Gray Bat, Indiana Bat, American Burrowing Beetle, and Bald Eagle. Gary Jordan said that the Study Team must also ensure that the corridors provide adequate “wobble room” to ensure that impacts to endangered species habitats can be minimized, or avoided if possible.

-Q: The Level 1 Alternatives Analysis Report states that existing roads will be used in some cases. Where is this the case and what will happen to the existing roads (i.e. how will they be signed- I-69 or I-69/I-164)?

cc: 31815 Correspondence

Authored by: Brian Aldridge



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HNTB Architects Engineers Planners
310 W. Liberty Street, Suite 701
Louisville, KY 40202
phone: (502) 581-0985
fax: (502) 581-0987

A: (Mr. Aldridge) With respect to the ten Level 1 Study Corridors, Corridors F, G, H, and I utilized existing transportation corridors. Corridors F and G would require reconstruction of US 41, and Corridors G, H, and I would utilize existing I-164 with no improvements other than new interchanges where a particular alternative departs from the existing alignment. We have not yet discussed the issue of future signage.

(Mr. Miller) The issue of signage will be up to FHWA, but it is possible that roadway would be signed for both I-69 and I-164.

-Q: Is wetland mitigation included in the preliminary cost estimates?

A: (Mr. Aldridge) Yes. We have made an effort to include the cost of purchasing additional properties for use in mitigation.

(Mr. Dupont) Anticipated wetland impacts, based on NWI mapping, were approximated and depending on the type of wetland impacted, replacement ratios of 3:1 and 4:1 were used.

-Q: In the Indianapolis to Evansville I-69 study, mitigation was proposed for non-jurisdictional forests. Will the same be proposed for this study?

A: (Ms. Osadczuk) That is possible, but will require future coordination with KYTC.

(Mr. Taylor) We are not yet to that point in this study.

CONCLUSION

The meeting concluded at about 11:30 AM CDT. All attendees were invited to meet back at Audubon State Park for the bus tour at 12:45 PM.

U.S. Department
of Transportation

United States
Coast Guard



Commander
Eighth Coast Guard District

1222 Spruce Street
St. Louis, MO 63103-2832
Staff Symbol: ob
Phone: (314)539-3900 x2382
FAX: (314)539-3755

16591.1/820.0 OHR
11 July 2002

Mr. Tim N. Miller
Project Manager
HNTB Corporation
310 W. liberty St.
Suite 701
Louisville, KY 40202

Subj: PROPOSED NEW I-69 HIGHWAY BRIDGE BETWEEN EVANSVILLE, IN AND
HENDERSON, KY, MILE 820.0, OHIO RIVER

Dear Mr. Miller:

In reviewing the *Level 1 Draft Analysis Report*, page 5 states the design minimums for horizontal and vertical clearances and pier spacings for new river crossings are: 55 feet above the 2% low-level flood plain (vertical clearance); 69 feet above the normal pool plain; and 845 feet of horizontal clearance between piers. These statements are incorrect.

The correct minimum vertical guide clearance for the proposed subject bridge is: 55 feet above 2% flowline or 69 feet above normal pool (average June flow), whichever is greater. Also, the horizontal clearance in the navigation channel will be a minimum of 1000 feet. After a final crossing location is selected, we will determine pier placement and location and clearance requirements.

We appreciate the opportunity to comment on the project in this early stage. If you have any questions you can contact Mr. David Orzechowski of my office at the above number.

Sincerely,

A handwritten signature in dark ink, appearing to read "R. Wiebusch", written over the printed name.

ROGER K. WIEBUSCH

Bridge Administrator

By direction of the District Commander



Indiana Department of Natural Resources

Frank O'Bannon, Governor
John Goss, Director

Environmental Unit
Division of Water
402 W. Washington Street, Rm. W264
Indianapolis, IN 46204-2641

DATE RECEIVED
HNTB INDIANAPOLIS
JOB NO. _____
FILE _____

28 May 2002

MAY 30 2002

ROUTE TO:

Mr. Tim Miller, Project Manager
HNTB Corporation
111 Monument Circle
Indianapolis, IN 46204-5178

Re: DNR #9343 - Proposed I-69 bridge project - 1996 Habitat Conservation Agreement; Vanderburgh,
Warrick and Posey Counties

Dear Mr. Miller:

This is in response to your May 20, 2002 letter regarding the November 1996 Habitat Conservation Agreement for the Copperbelly Water Snake. You asked that we forward you a copy of the agreement when it is extended.

Though the Indiana Department of Natural Resources is involved in this Agreement, the Kentucky Department of Fish and Wildlife Resources (KDFWR) is the lead agency on the development of the Agreement. For information regarding the Agreement and the possibility of an extension of it, we recommend that you contact Roy Grimes of the KDFWR at (502) 564-7109 ext.474.

Our agency appreciates this opportunity to be of service. Please do not hesitate to contact me at (317) 232-4160 or toll free at 1-877-928-3755 if we can be of further assistance.

Sincerely,

Christie L Kiefer
Environmental Coordinator

Note: Please include the above DNR # on any future correspondence regarding this project.



Indiana Department of Natural Resources

Environmental Unit
Division of Water
402 W. Washington Street, Rm. W264
Indianapolis, IN 46204-2641

Frank O'Bannon, Governor
John Goss, Director

31 October 2002

NOV - 1 2002

Mr. Tim Miller, Project Manager
HNTB Corporation
111 Monument Circle
Indianapolis, IN 46204-5178

ROUTE TO

Re: DNR #9726 (Previous DNR #9343) - I-69 between Evansville, IN and Henderson, KY, HNTB Job# 31815-DS-001-001.1A; Multi-County (Vanderburgh, Warrick, and Posey)

Dear Mr. Miller:

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

This proposal will require the formal approval of our agency for construction in a floodway, pursuant to the Flood Control Act (IC 14-28-1). Please submit a copy of this letter with the permit application.

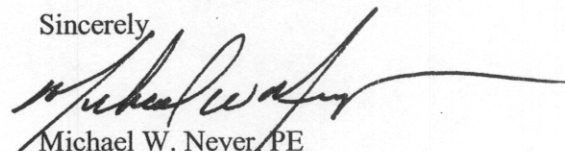
Since the previous review by our Department, substantial changes have occurred to the proposed project. The list of possible corridors has been narrowed to three choices. Of the three remaining potential corridors (J, H, and I), corridor J (the remaining western route) would have the most severe impacts to fish and wildlife habitat. Corridor J has 207.4 acres of forest impact compared to 12.9 and 4.9 acres for H and I, respectively. Almost all of the forest impact is on the Indiana side of the Ohio River. Corridor J has 31.1 acres of wetland impact compared to 2.0 and 10.8 acres for H and I, respectively. Corridor J would also potentially impact a number of Classified Forests on the Indiana side. Although Corridors H and I would bisect a proposed portion of the Green River State Forest and a portion of the proposed Green River National Wildlife Refuge in Kentucky, respectively, Corridor J would impact far more acreage of wildlife habitat.

The majority of the habitat impact in Indiana from Corridor J would be direct losses of forest land and the indirect but serious impacts of further forest fragmentation of numerous wood lots. The effects of forest fragmentation are very detrimental to many forest interior species, especially some species of neotropical migratory birds. The indirect effects of forest fragmentation can often be much more severe than the direct impacts of actual forest acreage lost. For example, predation and nest parasitism rates can be much higher in fragmented forest as compared to larger, unbroken tracts of forest.

Since Corridors H and I utilize the existing I-164 in Indiana, their potential impacts to fish and wildlife resources are negligible on the Indiana side. The only natural resource that would potentially be impacted in Indiana is the Ohio River.

Our agency appreciates this opportunity to be of service and apologizes for not being able to respond sooner in this matter. Please do not hesitate to contact Christie Kiefer, Environmental Coordinator at (317) 232-4160 or toll free at 1-877-928-3755 if we can be of further assistance.

Sincerely,



Michael W. Neyer, PE
Director
Division of Water

Note: Please include the above DNR # on any future correspondence regarding this project.



Indiana Department of Natural Resources

Frank O'Bannon, Governor
John Goss, Director

Environmental Unit
Division of Water
402 W. Washington Street, Rm. W264
Indianapolis, IN 46204-2641

27 March 2002

APR - 1 2002

Mr. Tim Miller, Project Manager
HNTB Corporation
111 Monument Circle
Indianapolis, IN 46204-5178

ROUTE TO:

Re: DNR #9343 - Proposed I-69 bridge project; Multi-County (Vanderburgh, Warrick, Posey)

Dear Mr. Miller:

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

This proposal will require the formal approval of our agency for construction in a floodway, pursuant to the Flood Control Act (IC 14-28-1). Please submit a copy of this letter with the permit application.

The Natural Heritage Program's data have been checked. There are many state listed species and significant natural communities in the project area that should be avoided. For any of these occurrences which occur in proposed corridors, further coordination is necessary to determine potential impacts. If this data would aid your agency in determining if any occurrences are located within any of the proposed corridors, then please contact the Division of Nature Preserves at (317) 232-5052. There are four areas in particular that contain significant natural features of which should be avoided. These are Wesselman Woods Nature Preserve (NP), Angel Mounds State Memorial/Ashumbala NP, DNR Cypress mitigation site, and Goose Pond Cypress Slough NP and Natural Area.

Avoid impacts to forested areas to the extent possible, especially all public and managed forests (including land enrolled in Classified Forest). If a forest is to be impacted, minimize tree and shrub clearing. If a forest is to be cleared, utilize all timber and pulp. Mitigate any forest losses at a ratio of at least 2:1.

The corridor utilizing the existing US 41 route would result in the least impacts to natural resources within the area. The second most favorable option to choose would be the eastern route (east of Evansville). The following is recommended for the bridge location if the eastern route is chosen: from I-64 in the north, utilize the existing I-164 southward to Angel Mounds and then westward to a point just west of Angel Mounds; from this point, travel southwest across mostly open agricultural land and cross the Ohio River at a point west of the mouth of Green River in KY, but east of Audubon State Park in KY. The proposed Green River National Wildlife Refuge in KY is at its narrowest point at this location, and a crossing at this location would impact the narrowest band of wetlands along the Ohio River on the Kentucky side. This route would completely avoid the Green River State Forest in KY, avoid fragmenting a wide section of the proposed NWR, and avoid a crossing of the Green River. This route would almost eliminate wetland impacts in Indiana.

All of the potential western corridors (west of Evansville) would have the greatest impacts to fish, wildlife and botanical resources. All the western corridors would require new terrain roads; building a new road would cause the direct loss of a very large amount of terrestrial habitat. Many forested areas and wood lots would be fragmented, resulting in decreased wildlife habitat value of the

Letter to Mr. Miller
March 27, 2002
Page 2

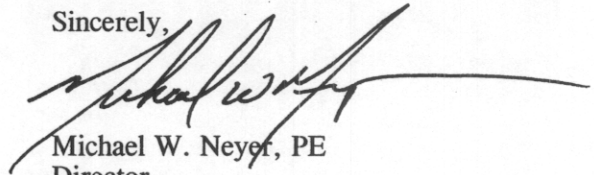
remaining fragments. Forest fragmentation effects can be very deleterious to forest interior species, especially some species of neotropical migratory birds. The indirect impacts of forest fragmentation can often be more serious than the direct loss of forest land. New terrain roads on the west side would also require many stream crossings and possibly a significant amount of wetland impacts.

Goose Pond Cypress Slough NP is located adjacent to one of the potential western corridors; this preserve and the adjacent area is one of the last remaining natural stands of the Indiana state threatened bald cypress. The nature preserve consists of only 60 acres and does not protect all of the bald cypress in the locality. Much of Cypress Slough is unprotected and extends for over three miles. Even if the nature preserve was narrowly avoided, the western-most potential corridor would still impact a portion of this very significant and threatened bald cypress community.

The western corridors would impact a very large amount of wetland and farmed wetland adjacent to units of the Henderson Sloughs Wildlife Management Area (WMA) in Kentucky. Kentucky plans to eventually expand this WMA and connect the two large units within the study area. Due to the extensive high annual flooding of this area, an elevated bridge or roadway would be required for an extended length. Even if none of the existing Henderson Sloughs WMA were directly impacted, the extensive amount of fill and/or earthwork needed to construct such a lengthy bridge or elevated roadway could have very negative impacts on the hydrology of the extensive wetland complexes in the area. Both direct and indirect impacts to wetlands would be excessive for a road to be built in this area. This area harbors the largest known population of the state (IN and KY) endangered copperbelly water snake, a species under a Habitat Conservation Agreement between the States of Indiana, Illinois, Kentucky and the USFWS to protect the species and to prevent it from federal listing as "Threatened". This area is also a very important regional waterfowl wintering site. For these reasons, this area should be completely avoided.

Our agency appreciates this opportunity to be of service and apologizes for not being able to respond sooner in this matter. Please do not hesitate to contact Christie Kiefer, Environmental Coordinator at (317) 232-4160 or toll free at 1-877-928-3755 if we can be of further assistance.

Sincerely,



Michael W. Neyer, PE
Director
Division of Water

Note: Please include the above DNR # on any future correspondence regarding this project.



United States Department of the Interior



FISH AND WILDLIFE SERVICE

BLOOMINGTON FIELD OFFICE (ES)

620 South Walker Street

Bloomington, IN 47403-2121

(812) 334-4261 FAX (812) 334-4273

April 1, 2002

Mr. Tom Cervone
Bernardin Lochmueller & Associates, Inc.
6200 Vogel Road
Evansville, Indiana 47715-4006

Dear Mr. Cervone:

This responds to your request at a March 27, 2002 meeting for endangered species information from the U.S. Fish and Wildlife Service (FWS), concerning the Interstate 69/ Evansville, Indiana to Henderson, Kentucky project. You specifically requested a list of federal endangered and threatened species that should be considered in the environmental evaluation for the I-69 project.

The following information pertains only to the Indiana portion of the study area. Species which should be considered in the environmental evaluation are as follows:

Indiana bat (*Myotis sodalis*) - federally endangered

Survey information for the study area is lacking. There is a current record a few miles west of the area. All forested areas in relatively undisturbed areas provide suitable summer habitat for this species. Large blocks or networks of forest associated with water resources have a higher probability of containing Indiana bats. Attached is a set of protocols for conducting mist net surveys for Indiana bats.

gray bat (*M. grisescens*) - federally endangered

There are no records of this species in or near the study area however there are several records along the Ohio River. Summer colonies inhabit caves and mines, and preferred foraging habitat is wooded stream corridors. The presence of a summer colony near the study area is unlikely, however presence of foraging bats from a distant colony cannot be ruled out.

2.

bald eagle (*Haliaeetus leucocephalus*) – federally threatened

Suitable nesting habitat for bald eagles within the project area includes the Ohio River and large wetland complexes. No nests are known in the study area in Indiana currently, however there is a nest in the Kentucky portion of the study area, and another nest in Indiana within 15 miles of the study area.

fat pocketbook mussel (*Potamilus capax*) – federally endangered

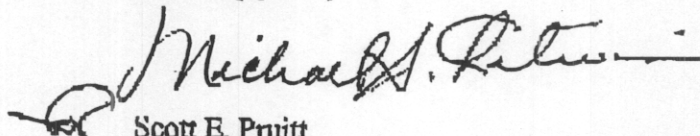
The closest records of this species are in the Ohio River at the west end of Posey County, however its presence cannot be ruled out within the study reach of the Ohio River.

American burying beetle (*Nicrophorus americanus*) – federally endangered

There are old records of this species in Vanderburgh County, and recent survey information is lacking.

For further discussion, please contact Mike Litwin at (812) 334-4261 ext. 205.

Sincerely yours,


Scott E. Pruitt
Field Supervisor

cc: Andrew Pellosn, IDEM, Water Quality Standards Section, Indianapolis, IN
Christie Kiefer, Indiana Division of Fish and Wildlife, Indianapolis, IN
Federal Highway Administration, Indianapolis, IN
Manager, Environmental Assessment, INDOT, Rm 1107, Indianapolis, IN



United States Department of the Interior

FISH AND WILDLIFE SERVICE

BLOOMINGTON FIELD OFFICE (ES)

620 South Walker Street

Bloomington, IN 47403-2121

(812) 334-4261 FAX (812) 334-4273

September 5, 2002



Mr. Tim Miller
HNTB Corporation
111 Monument Circle
Indianapolis, Indiana 46204-5178

DATE RECEIVED
FBI INDIANAPOLIS
JOB NO.
FILE

SEP 11 2002

ROUTE TO:

Dear Mr. Miller:

The U.S. Fish and Wildlife Service's Bloomington, Indiana Field Office (FWS) has reviewed the Level 1 Alternatives Analysis Report for the I-69 Evansville to Henderson project in southern Indiana and Northern Kentucky. We also attended the agency meeting at Audubon State Park on July 30, 2002. The alternatives carried forward include portions of Vanderburgh, Warrick and Posey Counties, Indiana and Henderson County, Kentucky. The site-specific comments in the following comments refer only to natural resources in the Indiana portion of the study area. Comments for the Kentucky portion will come from our Cookeville, Tennessee Field Office. For future comments the FWS will designate a lead office for administrative contact and submission of comments.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

Specific Comments

We have no comments on Sections 1 and 2 of the document. We will provide comments on the sections that pertain to fish and wildlife issues in sequential order.

Section 3

The environmental measures list under 3.2 lists wildlife habitats but not endangered/threatened species. Both of these topics should be addressed.

Section 4

Section 4

The list of environmental measures in Table 4.2.1 includes endangered wildlife habitats and wetlands but not other wildlife habitats. Upland habitat loss and fragmentation should be included in the evaluation due to potential adverse affects on migratory birds and declining species.

4.2.3 (and Table 4.2.1). This section should be revised to address the following items:

1. The document refers to the number of species that reside within the two mile study area. Some of the endangered species references pertain to old records or to species whose ranges are statewide and which may not actually be present in the study area at the current time. We recommend that the wording be changed to refer to species that could potentially be present in the study area.
2. Although the category is called 'endangered wildlife habitat', the rating is based on the number of species within a mile of the centerline of each corridor. This is misleading because some of the species records may be obsolete, with the species and their habitat no longer present, and because presence within a mile does not necessarily imply adverse impacts. Alternatives rankings for this measure could change considerably if they were habitat based. For example, Alternative F which is almost entirely through a developed urban area, ranked only slightly better than Alternatives A-E, which may have extensive impacts on suitable habitat for Indiana bats and other listed species.

We recognize that for cost purposes the level of habitat evaluation must be limited for the 10 preliminary alternatives, however there should be some habitat component to the endangered species ranking measure. For alternatives carried forward we recommend a habitat-based approach, along with a more accurate assessment of the species actually present. The latter concern is already being addressed through surveys for bats, mussels and other listed species.

Subsection 4.2.13 (and Table 4.2.1). Stream impacts are rated based on the number of proposed stream crossings. A better measure of impacts would be the linear extent of impacts to streams and their riparian areas, coupled with the quality of streams being affected. A single crossing that requires an extensive channel relocation of a high-quality stream could have greater total impacts than minimal crossings of several agricultural ditches. This is somewhat addressed in the table in Appendix C, which estimates linear impacts for 'longitudinal stream encroachments' only (which is a small subset of total crossings).

Again we recognize that level of analysis will be limited for preliminary alternatives, however the analysis could include a factor for general quality of streams being affected and for the quality of the riparian vegetation in the affected area. These impacts should be fully quantified for the alternatives carried forward.

Section 6

The narrative analysis of the preliminary alternatives refers to both state-listed species and federally endangered species. Federal species impacts are mentioned only for Alternatives F, G, H, and I. This is inaccurate because all alternatives which will cause forest loss in non-urban areas could affect the habitat of the Indiana bat, which is the federal species of greatest concern in the study area.

The narrative for Alternative F states that it "impacts 1 federally endangered species". This is not accurate based on our existing records, however it may be based on bat surveys that were conducted for the I-69 project analysis. In general, Alternative F is the least likely of all alternatives to adversely affect an endangered species.

The narrative for Alternatives G, H and I state that they may impact up to 4 or 5 federally endangered species. For clarification, there are only two federal species which are considered likely to be extant in the study area: the Indiana bat and the bald eagle. As mentioned in our previous review letter of April 1, 2002, there are old historical records of two mussel species, and also of a terrestrial invertebrate (the American burying beetle) in the study area. The presence of these three species cannot be ruled out due to the difficulty of thoroughly surveying for them, however at this time we consider the possibility of their presence in the study area to be unlikely.

Appendix C

We could not determine the exact meaning of the 'Longitudinal Stream Encroachment' category under Aquatic Systems in the table. It addresses only a small proportion of the total number of proposed stream crossings for each alternative. There should be a narrative or a footnote to explain this category.

Under Terrestrial Ecosystems, there should be a definition of the 'Unique Habitats' category. All alternatives received an identical rating of low impacts for this category; however the far western alternatives would have affected significant wetlands, copperbelly water snake habitat, and other sensitive areas.

For listed species (both state and federal) there should be an explanation of what the numbers in the table refer to; e.g. whether they are historic records, current records, or only within the known range of the species.

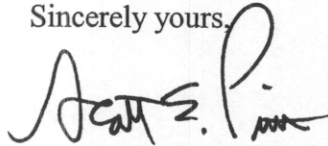
General Comments

The FWS concurs with the conclusion that Alternatives G, H and I would have considerably fewer impacts on fish and wildlife resources than would the western

alternatives, and that Alternative J would have fewer impacts than the other western alternatives. The selection of Alternatives H, I, and J eliminates the alternatives with the greatest impacts on wildlife resources. Alternative F was ranked ninth of the ten preliminary alternatives for environmental measures, based chiefly on impacts to residential areas, however it was one of the top ranking alternatives for natural resource impacts. Its ranking would have been higher in that regard if all habitat impacts had been evaluated quantitatively and if the endangered species impact ranking had been based on habitat rather than number of species records within a mile of the centerline.

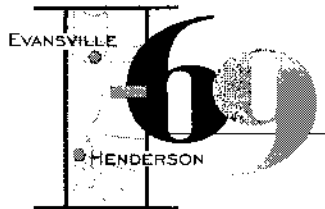
For further discussion, please contact Mike Litwin at (812) 334-4261 ext. 205.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Scott E. Pruitt". The signature is fluid and cursive, with a large initial "S" and a distinct "P".

Scott E. Pruitt
Field Supervisor

cc: Andrew Pelloso, IDEM, Water Quality Standards Section, Indianapolis, IN
Christie Keifer, Indiana Division of Fish and Wildlife, Indianapolis, IN
Federal Highway Administration, Indianapolis, IN
Manager, Environmental Assessment, INDOT, Rm 1107, Indianapolis, IN
Virginia Laszewski, US EPA, B-19J, Chicago, IL
USFWS, Cookeville, TN



MEETING DOCUMENTATION

HNTB

HNTB Architects Engineers Planners
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

SUBJECT: I-69 Evansville, IN and Henderson, KY
Environmental and Engineering Assessment
KY Division of Forestry Meeting

LOCATION: Kentucky Division of Forestry
Frankfort, Kentucky

DATE: March 12, 2003

TIME: 2:30pm (EST)

MEETING PARTICIPANT

Doug Taylor
Everett Green
Lee Andrews
Jason Dupont
Rusty Yeager
Tim Miller

AGENCY OR FIRM

Kentucky Transportation Cabinet
Kentucky Transportation Cabinet
US Fish and Wildlife
Bernardin, Lochmueller and Associates (BLA)
Bernardin, Lochmueller and Associates
HNTB Corporation

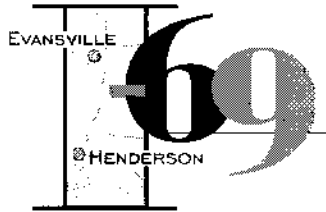
Discussion Items:

BLA provided USFWS the initial ecological findings and field analysis of Corridors 1-2-3 for informational purposes. Specific testing included a mussel (performed by Heidi Dunn) in the Ohio River. This scuba dive survey yielded no Threatened or Endangered Species (TES) mussels. In addition, mist netting was conducted for bats as well as aquatic and terrestrial sampling. Past records indicate the following TES in the project area:

- 1) Indiana Bat
- 2) Bald Eagle
- 3) Copperbelly Watersnake
- 4) Fat Pocketbook Mussel
- 5) Gray Bat
- 6) American Burying Beetle

Mist netting for the Indiana Bat was performed in the summer of 2002 and yielded one lactating female near the original Corridor 2. The alignment of Alternate 2 was subsequently moved farther west along the Texas Gas easement in a collective effort to minimize bottomland forest impacts and potential impacts to Indiana bat nursery colony habitat.

BLA reported that although a specific mitigation plan would not be provided in the Draft Environmental Impact Statement (DEIS), strategies on the formation of a mitigation plan will be addressed in the



MEETING DOCUMENTATION

HNTB

HNTB Architects Engineers Planners
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

document. Mitigation ratios will also be addressed in the DEIS. Additional mitigation plans will be completed once a preferred alternative has been selected.

USFWS reported no additional fieldwork would be required at this time. However, mitigation measures and plans would be required as part of the DEIS if Alternative 2 was selected as the preferred alternative. Mitigation measures may include:

- Additional mussel survey work at the pier locations at least 18 months prior to construction.
- Stream (including low quality ditches) mitigation may include on site, off site, mitigation banks or in lieu fee plans.
- Construction clearing restrictions (no Indiana Bat habitat clearing between October 15 – March 31)
- River bank stabilization plans
- Replace lost forestland, particularly Indiana Bat maternity colony habitat (Swamp chestnut oak, swamp white oak, and shellbark hickory are suitable trees that could be used in this area for a quality mitigation plan)

USFWS is concerned most with the long-term effects of the new interstate highway. This is a standard concern for most transportation projects of this type and location.

USFWS prefers the fewest piers possible. Engineers will have to demonstrate that the pier locations do not promote scour, create sediment buildup and are designed to reduce the level of turbulence.

Formal Consultation is not required at this time. Formal Consultation usually only occurs if a TES is taken as a result of the project. There is no indication that any TES would be taken as a result of this project. If Formal Consultation is deemed necessary later in the project, FHWA will initiate the process with USFWS.

USFWS asked the Study Team to keep them informed of the project or any new findings.

The meeting adjourned at 3pm.



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

SUBJECT: I-69 Evansville, IN and Henderson, KY
Environmental and Engineering Assessment
KY Division of Forestry Meeting

LOCATION: Kentucky Division of Forestry
Frankfort, Kentucky

DATE: May 23, 2002

TIME: 1:30 PM (EDT)

MEETING PARTICIPANT

Hugh Archer
Mary Hardin
David Waldner
Doug Taylor
Everett Green
Robert Buskirk
Hugh Archer
Doug Dawson
Jim Funx
Tim Sheehan
Jose M. Sepulveda
Mary Murray
Jason Dupont
Andrew S. Layson
Brian Aldridge
Tim Miller

AGENCY OR FIRM

Kentucky Department of Natural Resources
Kentucky Transportation Cabinet
Kentucky Transportation Cabinet
Kentucky Transportation Cabinet
Kentucky Transportation Cabinet
Indiana Department of Transportation
Kentucky Department of Natural Resources
Kentucky Transportation Cabinet
Kentucky Division of Forestry
Kentucky Division of Forestry
Federal Highway Administration
Federal Highway Administration
Bernardin, Lochmueller and Associates
Bernardin, Lochmueller and Associates
HNTB Corporation
HNTB Corporation

Discussion

Tim Miller opened the meeting with introductions and an overview of the meeting agenda. Mr. Miller stated the intent of the meeting was to:

- 1) Explain the project scheduling timetable to the KY Division of Forestry
- 2) Allow the Division of Forestry to explain their current acquisition plans/schedule
- 3) Allow the Division of Forestry to explain the proposed usage of the acquisition
- 4) Allow the Division of Forestry to voice any concerns about the current schedule and proposed project
- 5) Allow all parties to voice expectations

cc: 31815 Correspondence

Authored by: Tim Miller



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

Project Status

Mr. Miller gave an overview of the status of the project. In this discussion, it was noted that nine build alternatives were presented at the December 13, 2001 Agency Resource Meeting. Since that date, two additional build alternatives (Corridor J and Corridor a new western alternative) are being considered. Corridor J is a western alternative that travels through the oxbow region of Evansville. The second additional western corridor begins at US41 and travels in a southwesterly directly to met with corridors C and D.

HNTB is currently reviewing the eleven build alternatives and will be narrowing the number of corridors for further study in June 2002. Approximately 3-4 corridors will be recommended for further study. Once the recommendations are adopted by the project sponsors, a public information meeting will be held to inform the public on the recommended corridors. A public information meeting is tentatively scheduled for June 26-27 in Evansville, IN and Henderson, KY, respectively.

A second resource agency meeting will likely take place in July 2002.

Corridor H

Corridor H is an eastern alternative that potentially impacts the Green River State Forest. As currently proposed, Corridor H travels through the State Forest.

Brian Aldridge stated that if constructed, the road would probably be on an elevated structure through the boundaries of the State Forest. This type of design would probably be necessary because of the floodplain surrounding the Ohio River.

Mr. Aldridge stated the elevated interstate corridor would be approximately 125 feet in width. Although the current proposal would construct a 4 lane interstate facility (2 lanes in each direction), the structures would be designed to allow six lanes in the future, if needed. Construction techniques may be implemented that would not require much additional right of way beyond temporary construction easements.

Green River State Forest

Tim Sheehan provided an update on the Division of Forestry's acquisition plan. Mr. Sheehan has 12 parcels identified for acquisition. Offers have been made to eleven out of the twelve property owners. The Division of Forestry is in conversation with the remaining parcel (owned by Louisville Gas and Electric).



MEETING DOCUMENTATION



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111 Monument Circle, Suite 1200
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The KY Division of Forestry recently received an \$800,000 matching grant to acquire property. This money is being used to fund the offers.

If all acquisitions are successfully secured, the Green River State Forest will be approximately 1,900 acres, of which 200 acres will be agricultural land (by lease). In comparison, the proposed National Wildlife Refuge is approximately 25,000 acres.

Mr. Sheehan noted the following concerns about Corridor H:

- 1) Noise impacts to the State Forest
- 2) Contaminated water runoff from the interstate highway on Green River State Forest property
- 3) Additional right of way required for construction and access purposes
- 4) Bisecting the State Forest is not a desirable situation
- 5) Would prefer the corridor to travel along the western boundary of the State Forest

Although these concerns were raised, Mr. Sheehan informed the attendees that the Division of Forestry was open to discussion and mitigation techniques should Corridor H become the preferred corridor.

Mr. Sheehan noted that the Cooper Tract had low quality trees because of the means of past tree harvesting. However, the Division of Forestry has a restoration plan if the parcel is secured.

Mr. Sheehan noted that the Green River State Forest would have public use. However, it would only allow low impact recreation (hunting, hiking, etc). Not all parts of the Forest would be open to public

FHWA

Jose M. Sepulveda explained that FHWA will take the approach of mitigating any potential impacts on both sides of the Ohio River. FHWA has the goal of minimizing impacts while maximizing mitigation plans.

KYTC has approached the Division of Forestry about purchasing land in the forest for use as a wetland bank. Mr. Sepulveda explained that this occurred prior to the I-69 Study. The I-69 Study may expedite investigating this possibility.

Mr. Sepulveda explained that Gene Cleckley, FHWA, is the FHWA contact for the National I-69 project. Mr. Cleckley takes a broad approach when evaluating corridors. It is FHWA policy to determine how we link both the human and environmental factors when developing the I-69 corridor.



MEETING DOCUMENTATION



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Mr. Sepulveda reiterated that FHWA will play an active role in participating in mitigation plans on both sides of the Ohio River. FHWA wants to make a mitigation plan a win-win for both parties regardless of the ultimate findings or recommendations from this study.

Environmental

Tim Sheehan reported that the Forest's acquisition plan was granted a Categorical Exclusion. Mr. David Waldner suggested the Audubon State Park be contacted in order to discuss the size of a potential buffer between the interstate and the Audubon State Park boundaries.

Conclusion

Mr. Miller stated that the group would convene next at the second Resource Agency Meeting. This meeting is proposed in July 2002.

END



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

SUBJECT: I-69 Evansville, IN and Henderson, KY
Environmental and Engineering Assessment
KY Division of Forestry Meeting

LOCATION: Kentucky Division of Forestry
Frankfort, Kentucky

DATE: March 12, 2003

TIME: 1PM (EST)

MEETING PARTICIPANT

Hugh Archer
Tim Sheehan
Robert Buskirk
Mike Hardin
David Waldner
Doug Taylor
Everett Green
Tony Vinegar
Doug Dawson
Jim Funk
Tim Sheehan
Wayne Davis
Lee Andrews
Stephen Coleman
Mary Murray
Robert Dirks (via phone)
Jason Dupont
Rusty Yeager
Tom Cervone (via phone)
Brian Aldridge
Tim Miller

AGENCY OR FIRM

Kentucky Department for Natural Resources
Kentucky Division of Forestry
Indiana Department of Transportation
Kentucky Transportation Cabinet (KYTC)
Kentucky Transportation Cabinet
Kentucky Transportation Cabinet
Kentucky Transportation Cabinet
Kentucky Transportation Cabinet
Kentucky Transportation Cabinet
Kentucky Division of Forestry (KYDOF)
Kentucky Division of Forestry
Kentucky Division of Fish and Wildlife
US Fish and Wildlife
Kentucky Division of Conservation
Federal Highway Administration, Kentucky Division
Federal Highway Administration, Indiana Division
Bernardin, Lochmueller and Associates (BLA)
Bernardin, Lochmueller and Associates
Bernardin, Lochmueller and Associates
HNTB Corporation
HNTB Corporation

Discussion Items:

Introductions

KYTC welcomed all attendees to the meeting. This is the second meeting with the KY Division of Forestry (KYDOF). A previous meeting took place on May 23, 2002.

Project History

cc: 31815 Correspondence

Authored by: Tim Miller



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

HNTB provided the history of the project. The following is a synopsis of the project history:

- Initial 2-mile study bands were developed in fall of 2001. There were nine study bands, including 5 west of the Evansville/Henderson area, two to the east, one utilizing the existing US 41 corridor, and one utilizing I-164 and US 41.
- Ten 2,000 foot corridors were presented to the KY Division of Forestry in May 2002. These corridors were developed from the original nine study bands, with the addition of Corridor J that traverses the Ohio River oxbow west of Henderson.
- Two State and Federal Resource Agency Meetings have been conducted since May 2002.
- Preliminary data and analysis was performed on the ten corridors in 2002 and three corridors were advanced for further study in June 2002. These include Corridors J, H, and I. These alternatives were renamed Corridors 1, 2, and 3, respectively. An alternative connection for Corridor 1 to I-64 was also added and named Corridor 1A.
- The three 2,000 foot corridors were refined to 1,000 feet in the summer of 2002.
- HNTB and BLA traveled to the Wheeler National Wildlife Refuge in Alabama in August 2002 to view the I-65 bridge through the Refuge. This meeting was suggested and attended with Mr. Rick Huffines, US Fish and Wildlife. The refuge was established in 1938, contains 34,500 acres and attracts approximately 650,000 visitors annually. Pictures of the refuge and I-65 were presented to the meeting attendees. I-65 travels through the refuge on a bridged section. This has similar characteristics to the I-69 project.
- Corridor 2 is currently proposed to travel through the KY Division of Forestry purchase area. The Corridor 2 bridge is estimated to be 3.4 miles in length. The bridge will be approximately 126 feet wide and will be approximately 100 feet above the Ohio River (at its highest point). The bridge is anticipated to require two lanes of traffic in each direction (total of 4 lanes), but given the impossibility for future expansion, will be designed to accommodate up to six lanes. With respect to Corridor 2, approximately 24,000 vehicles per day are anticipated to use the bridge in the year 2025.
- Corridor 2 will require right of way from three tracts currently being pursued by the KYDOF (Harrison Tract, Western LG&E Tract, and the Cosmos Broadcasting Tract).
- Corridor 2 was shifted approximately 2,000 feet to the west since the May 2002 KYDOF consultation meeting. This shift came as a result of the Division's desire to have the corridor as far west as possible. The corridor now parallels an existing utility easement. Interchange locations, design criteria, and other impacts prevent the corridor from being shifted further west.

Coordination Letters/Agency Worksheets

BLA briefed the attendees that coordination letters and worksheets were provided to agencies that owned property in the three corridors under further consideration. The purpose of these letters/worksheets was to validate information obtained by the Study Team. The KYDOF provided a quick response and concurred with the information provided the Study Team.

cc: 31815 Correspondence

Authored by: Tim Miller



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

Forest Expansion Update

The KYDOF updated the attendees on the status of their acquisition plans. Their acquisition plans are as follows:

- KYDOF is currently pursuing eleven tracts of land. Once acquired, these parcels will be used to expand the limits of the State Forest.
- The Division of Forestry is aggressively pursuing the two tracts owned by Louisville Gas and Electric (LG&E). Acquisition of the western LG&E tract could take place in the next few months, but that timeframe is optimistic.
- The Eastern LG&E tract is being pursued as a mitigation bank for KYTC projects.

Project Team/Division of Forestry Coordination

The KYDOF recognizes the advantages of placing the corridor in its current location as compared to its original location. The existing utility easement “cut” through the wooded area already fragments the proposed forest expansion. Since Corridor 2 follows this easement, a new fragment through the forest will be prevented.

The KYDOF will contact KYTC prior to purchasing any parcels identified in Corridor 2. On parcels contained within the limits of Corridor 2, language will be inserted in the purchase agreements, management plan, or titlework specifying a transportation corridor within the acquired parcel. KYTC and the KYDOF recognize that they must work together in order to achieve both of their goals and objectives, and both agencies stated their commitments to keeping each other informed of their respective projects. KYTC will update the Division of Forestry on the progress of the I-69 project on a regular basis or when significant progress is identified.

Both the IN and KY FHWA offices emphasized the importance of the coordination efforts between KYTC and the KYDOF. They recognize that quality coordination has taken place thus far and do not want either of their plans negatively impacted due to the lack of future coordination.

Project Schedule

HNTB gave an approximate schedule for the Environmental Impact Statement (EIS). A draft EIS (DEIS) is anticipated to be published this spring. If sufficient data is available, a preferred alignment(s) may be identified in the DEIS. Once the DEIS is published, public hearings will take place in both Evansville and Henderson. The DEIS will also be provided to federal and state resource agencies and comments will be solicited. Although a specific mitigation plan will not be available in the draft, general mitigation techniques will be addressed and discussed.

cc: 31815 Correspondence

Authored by: Tim Miller



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

A final EIS is anticipated to be published in early 2004.

Conclusion

The meeting adjourned at approximately 2:30 EST. All attendees agreed to continue the cooperation and inform each other prior to making final decisions on topics that could impact the project of the other agency.

cc: 31815 Correspondence

Authored by: Tim Miller

MEMO OF UNDERSTANDING

This memorandum of understanding is made and entered into this 28th day of January, 1991 between the Indiana Department of Transportation (INDOT), the Indiana Department of Natural Resources (IDNR), and the U. S. Fish and Wildlife Service (USFWS) for the purpose of improving the regulatory programs process.

Whereas, INDOT, IDNR and USFWS wish to cooperate with each other to facilitate state and federal permitting requirements in the determination of the type and level of wetland mitigation required and,

Whereas, the INDOT will accomplish wetland mitigation through sequencing, i.e. avoiding impacts, minimizing impacts, rectifying impacts, reducing impacts over time and compensating impacts,

Therefore, in consideration of the terms and conditions set forth herein the INDOT, IDNR and USFWS agree as follows:

1. INDOT in cooperation with the IDNR and USFWS shall determine the quality and quantity of wetland habitat to be impacted by INDOT projects. INDOT will utilize the Federal Manual for Identifying and Delineating Jurisdictional Wetlands. The IDNR and USFWS will be requested to review and comment on INDOT's findings at the early coordination phase of project development.

2. INDOT, using the input from IDNR and USFWS, will formulate appropriate and practicable measures to offset unavoidable impacts to wetlands.
3. INDOT will send a summary or copy of the approved environmental document containing the measures to offset unavoidable impacts to wetlands to IDNR's Division of Fish and Wildlife and the USFWS.
4. If IDNR or the USFWS feel other appropriate and practicable measures are required for regulatory purposes they will notify INDOT in writing so INDOT can arrange a field review. The field review, which will include representatives from INDOT, IDNR and USFWS, will identify additional unavoidable impacts to wetlands and final compensation to the extent appropriate and practicable will be noted.
5. As a result of the field review, if all agencies agree, a mitigation agreement will be prepared. This agreement will be signed by the Department Director of IDNR, the Commissioner of INDOT and the supervisor of the USFWS Bloomington Indiana Field Office. The mitigation agreement will accompany all permit requests so the permitting agency has written documentation that agreement on wetland mitigation has been reached, by the three agencies.
6. Mitigation ratios acceptable to INDOT, IDNR and USFWS will be:

<u>Wetland Type</u>	<u>Ratio</u>
A) farmed	1 to 1
B) scrub-shrub and palustrine/ lacustrine emergent	2-3 to 1 depending upon quality
C) bottomland hardwood forest	3-4 to 1 depending upon quality
D) exceptional, unique, critical (i.e. cypress swamp)	4 and above to 1 depending upon quality

Acceptable mitigation shall be restoration or creation.

The mitigation ratios take into consideration the initial loss plus a time factor to achieve in kind or greater value wetland habitat. The goal is to achieve no net loss of the wetland resource. Wetland mitigation ratios for violations or unpermitted activities shall be determined on a case by case basis.

7. The INDOT, IDNR and USFWS agree that due to conditions at certain project sites, wetland mitigation such as restoration or creation may not be available or may otherwise be impracticable. All parties further realize that in some cases agreement on appropriate and practicable wetland mitigation will not be attained by the three agencies. In those cases, the INDOT agrees to monetary compensation at the rate of \$1500/acre, to be dedicated to a designated wetland restoration or wetland creation project(s) at the aforementioned specified mitigation ratios.

8. Reimbursement to IDNR and/or USFWS for personnel costs will be made by INDOT for formally requested work associated with wetland design, construction or monitoring for compliance and/or achievement of the intended purpose(s).
9. All parties agree that INDOT, not being a resource agency, will transfer title of lands acquired for wetland mitigation to an agreed upon recipient in lieu of INDOT holding such lands in perpetuity.
10. This document will be reviewed annually or more frequently at the request of any of the foregoing agencies.

Signatures



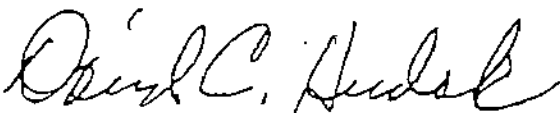
Indiana Department of Transportation

Commissioner



Indiana Department of Natural Resources

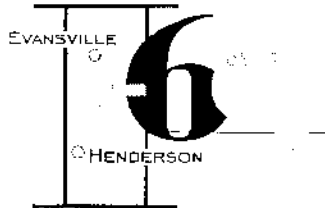
Director



U. S. Fish and Wildlife Service
Bloomington, Indiana Field Office

January 28, 1991

Supervisor



Wheeler National Wildlife Refuge Field Visit

SUBJECT:	Field Visit	DATE:	August 13, 2002
LOCATION:	Wheeler National Wildlife Refuge Decatur, AL	TIME:	8am – 5pm

Attendees	Representing
Rick Huffines	U.S. Fish and Wildlife
Dwight Cooley	U.S. Fish and Wildlife, Director of Wheeler National Wildlife Refuge
Jason Dupont	Bernardin, Lochmueller and Associates (BLA)
Tim Miller	HNTB

On August 13, 2002, Rick Huffines (US Fish and Wildlife), Jason Dupont (BLA) and Tim Miller (HNTB) drove to Decatur, AL to meet Dwight Cooley, Director of the Wheeler National Wildlife Refuge in Decatur, AL. The meeting with Mr. Cooley began at approximately 9:30am CDT and ended at approximately 2:30pm. The meeting began with Mr. Cooley providing a short history of the Refuge and the I-65 bridge. Mr. Cooley referred to an aerial map that showed the entire boundaries of the refuge and its physical relationships of the Tennessee River. The meeting then focused on the bridge's impacts on the Refuge and wildlife. Mr. Cooley provided a two-hour tour of the refuge and its surrounding areas. Following the Refuge tour, the group reviewed the proposed locations of the Green River National Wildlife Refuge and its relationship to the the I-69 Level 2 corridors.

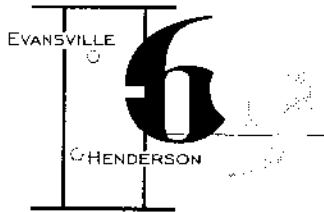
Discussion Items:

Wheeler National Refuge:

- The Refuge was established in 1938 and currently consists of approximately 35,000 acres.
- The Refuge is situated in the Tennessee River Valley between Decatur and Huntsville, AL on property originally purchased by the Tennessee Valley Authority (TVA) for the Wheeler Dam Project.
- A primary focus of the Refuge management is for migratory waterfowl habitat.
- The Refuge allows approximately 3500 acres to be farmed for commercial purposes. However, 20% of the crop remains "unharvested" and acts as cover and a food source for wildlife.

cc: 31815 Correspondence

Authored by: Tim Miller



Wheeler National Wildlife Refuge Field Visit

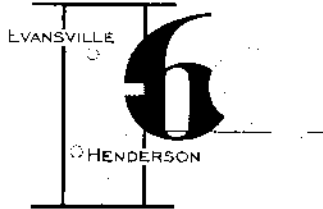
- The majority of the area under and adjacent to the bridge is maintained as moist soil units and is seasonally flooded for habitat management. The remainder of the area is open water habitat.
- An access road constructed under the bridge is used by the Refuge as a water control structure for the flooding of some areas.

Bridge History

- Construction began on the 2-mile I-65 bridge through the Wheeler National Wildlife Refuge in the late 1960s and was completed in 1973.
- The development of the project in the late 1960s consisted of little mitigation. However, some mitigation included limiting bridge construction from November 1 through the middle of February.
- According to US Fish and Wildlife, the construction of the bridge created the following immediate impacts: loss of forested wetland habitat, increased noise and litter, and a decrease in aesthetics.
- Neither the Refuge nor the Alabama Department of Transportation (ALDOT) has a hazmat recovery plan in place.
- There is/was no mitigation for habitat loss for the Wheeler bridge.
- The right of way width for the bridge is 100 feet.
- An underground pipeline was recently constructed under the bridge and through the refuge on an easement adjacent to the existing bridge.
- The bridge contains drainports along the sides of the structures. However, these drainports allow untreated runoff directly on the refuge property.
- Trumpetkeeper (plant-vine) is abundant on the piers. This is good habitat for hummingbirds.
- The ALDOT is responsible for maintaining the right of way under the bridge structure.
- The bridge crossing the floodplain area consists of approximately 20 foot spans.
- The right-of-way under the bridge through the Refuge is not fenced to further reduce restrictions to wildlife.

Other Notes:

- US Fish and Wildlife identified that the bridge does not act as a barrier to wildlife movement. However, they did indicate that the majority of waterfowl does not utilize the area directly adjacent to the bridge.
- The waterfowl appear to maintain a buffer distance from the bridge of approximately 200-300 ft.
- US Fish and Wildlife indicated a spill recovery system may be necessary on future bridges through refuges.
- US Fish and Wildlife also indicated that some type of runoff treatment would be preferable prior to discharge onto the Refuge



Wheeler National Wildlife Refuge Field Visit

- ALDOT does not salt their roadway system. Since IN and KY use road salt to treat ice and snow, a low salt strategy, as well as means for safe disposal for the proposed new bridge crossing, may have to be investigated.
- Wheeler National Wildlife Refuge has a significant littering problem under the bridge. The source of the litter is vehicular traffic.
- The Wheeler Refuge currently has an easement policy that restricts any new easements crossing the property to be located adjacent to existing crossings. The purpose of this policy is to limit the fragmentation of habitat in the Refuge. This methodology was used in the adjustment of Alternative 2 crossing the proposed Refuge/Forest area where it was moved adjacent to an existing pipeline easement.
- US Fish and Wildlife indicated that not having a bridge through the proposed Refuge would be preferable, however, if designed and constructed properly, a new bridge could be built that would have minimal impacts on the proposed Refuge.

END

Summary of Coordination Meetings

DATE	DESCRIPTION
February 14, 2001	Study Advisory Committee Meeting
April 25, 2001	Study Advisory Committee Meeting
May 10, 2001	Evansville Advanced Traffic Management System Meeting
July 20, 2001	Study Advisory Committee Meeting
November 14, 2001	Study Advisory Committee Meeting
November 14, 2001	Indiana Public Meeting
November 15, 2001	Kentucky Public Meeting
December 13, 2001	Resource Agency Meeting
February 7, 2002	Section 106 Meeting
February 12, 2002	Study Advisory Committee Meeting
April 22, 2002	Section 106 Meeting
May 20, 2002	IN SHPO Meeting
May 1, 2002	Study Advisory Committee Meeting
May 23, 2002	KY Division of Forestry Meeting
June 5, 2002	USFWS, USACE, KY Division of Water
June 19, 2002	Study Advisory Committee Meeting
June 19, 2002	I-69 Study Team Press Conference
June 26, 2002	Indiana Public Information Meeting
June 27, 2002	Kentucky Public Information Meeting
July 30, 2002	Resource Agency Meeting
July 31, 2002	KY Division of Forestry Meeting
August 9, 2002	IN SHPO Meeting APE Coordination
August 12, 2002	IN Division of Historic Preservation & Archaeology
August 13, 2002	USFWS Meeting
August 15, 2002	KY SHPO/Division of Environmental Analysis Field Review
August 16, 2002	KY SHPO Meeting
August 20, 2002	IN SHPO Meeting
August 27, 2002	Section 106 Meeting Field Review APE w/IN SHPO
August 29, 2002	IN Division of Historic Preservation & Archaeology
September 12, 2002	IN Department of Natural Resources (and others) Meeting
September 20, 2002	Property Owner Meeting
September 23, 2002	KYTC Division of Environmental Analysis
September 24, 2002	Henderson CO. NRCS Meeting
September 26, 2002	Indiana Public Meeting
September 27, 2002	Kentucky Public Meeting
October 1, 2002	Woodland Lake Meeting
October 16, 2002	Evansville Lake Meeting
October 21, 2002	CSX Railroad Meeting
October 24, 2002	IN SHPO Meeting
November 7, 2002	IN Department of Natural Resources Meeting
November 7, 2002	IN Geological Survey Meeting
November 12, 2002	IN SHPO Meeting
November 19, 2002	KY Natural Resources Conservation Service
November 22, 2002	IN Natural Resources Conservation Service
November 25, 2002	IN Division of Historic Preservation & Archaeology
November 27, 2002	IN Natural Resources Conservation Service
December 16, 2002	Property Owner Meeting
January 17, 2003	Consulting Party Meeting
March 12, 2003	KY Division of Forestry Meeting
March 12, 2003	USFW Meeting
September 23, 2003	Consulting Party Meeting



MEETING DOCUMENTATION

HNTB
HNTB Architects Engineers Planners
310 West Liberty Street, Suite 701
Louisville, Kentucky 40202
phone: (502) 581-0985
fax: (502) 581-0987

SUBJECT: I-69 Evansville, Indiana and Henderson,
Kentucky Engineering Assessment and EIS

DATE: February 14, 2001

Study Advisory Committee Meeting

LOCATION: EUTS offices in Evansville, Indiana

TIME: 1:30 PM (CST)

Meeting Participants

Robert Dirks
Janice Osadczuk
Lyle Sadler
Alan Ball
Karl Leet
Barbara Gasper Hines
Rose Zigenfus
Everett Green
Charles Schaub
David Isley
Larry Chaney
Karen Mohammadi
Doug Sheffer
H.C. Farmer
John Schwartz
David Matthews
Mike Feltz
Steve Bennett
George H. Warren
Russell Lloyd, Jr.

Representing (Firm or Agency)

FHWA
INDOT
INDOT
INDOT
INDOT
INDOT
EUTS
KYTC, District 2
KYTC, Central Office
Bernardin, Lochmueller and Associates (BLA)
HNTB
HNTB
HNTB
Indiana Port Authority
The Voices for I-69
David Matthews Associates
Clark Dietz
Old National Bank
Evansville Courier
Mayor, Evansville

Discussion:

The purpose of the meeting was to introduce the I-69 Environmental and Engineering Assessment project and the project team to the Study Advisory Committee (SAC), and to discuss the role and responsibilities of the SAC.

Introduction

- ♦ The meeting began with the introductions of the project team and the SAC.
- ♦ Larry Chaney presented the SAC with the history of the I-69 corridor study, from Port Huron, Michigan to Brownsville, Texas. He explained how the entire corridor was broken into

separate sections of independent utility (SIU) throughout the corridor, and he discussed the limits of the Evansville section. Larry also stated that the I-69 section around Evansville would need to be able to connect into the entire I-69 corridor as well as act as a section of independent utility.

GIS and Environmental

- ♦ A demonstration of the GIS information that has been gathered was shown to the SAC. This included parklands, wetland areas, floodplains, churches and cemeteries, EPA designated areas, coal and gas mines and current population density.
- ♦ It was asked if this information could be made available to the public. It was agreed that it could be possibly displayed either in ArcView format or each individual layer in Adobe format on the I-69 website.

Study Advisory Committee

- ♦ Mr. Chaney explained that a questionnaire would be distributed to each member of the SAC in an attempt to gather information about current problems in the Evansville area, and to determine what issues may be encountered. The answers will then be tabulated and used for future information gathering.
- ♦ He stated that members of the SAC could make recommendations for other local groups to be included in the SAC. These recommendations should be submitted to HNTB, and will be evaluated by the project team. Ms. Osadczuk stated that we needed to keep the number of members manageable.

Public Involvement

- ♦ A website will be developed by HNTB, and will be a direct link from INDOT's website. The website will contain the notice of intent, any press releases, a list of committee members, very broad timetables, the purpose and need, and preliminary alignments when they are ready. Frequently asked questions (FAQ) should be posted on the web site.
- ♦ A news release will be prepared prior to the next SAC meeting and put on the website.

General Discussion/Concerns

- ♦ A question was asked about the predicted traffic for the entire I-69 corridor and the effect of potential truck traffic on the Evansville area. HNTB will look into the question and bring information concerning the entire I-69 corridor to the next meeting.
- ♦ A statement from the Metropolitan Evansville Chamber of Commerce was read and submitted to the project team.
- ♦ David Isley explained that a five-county model is being developed for traffic forecasting, and will be completed once census data is received by BLA. The expected delivery of this data is late March or April. The traffic model should provide critical information for the purpose and need statement in terms of congestion across the bridge, as well as truck traffic volumes.

MEETING DOCUMENTATION

- ♦ The proposed Fish and Wildlife Refuge (about 18,000 acres) on the Kentucky side of the Ohio River was then explained to the SAC.
- ♦ The issue of barge traffic and the impact it would have on the project was discussed. Mr. Chaney stated that that issue would be one of many issues that will be evaluated and included in the final environmental report.

Next Meetings

- ♦ The next meeting will be Wednesday, April 25, 2001 at 1:00 CST/2:00 EST. The results of the questionnaire, as well as the outline for the purpose and need statement, will be brought to the next SAC meeting.

Action Items

	<u>Responsibility</u>	<u>Due Date</u>
1. Begin development of website.	HNTB	4-25-01
2. Prepare questionnaire for SAC members.	HNTB	4-25-01
3. SAC to recommend new members for the committee	SAC	3-31-01
4. Review I-69 corridor traffic and prepare presentation for SAC	HNTB	4-25-01



MEETING DOCUMENTATION

HNTB
HNTB Architects Engineers Planners
310 West Liberty Street, Suite 701
Louisville, Kentucky 40202
phone: (502) 581-0985
fax: (502) 581-0987

SUBJECT: I-69 Evansville, IN and Henderson, KY
Environmental and Engineering Assessment

DATE: April 25, 2001

Study Advisory Committee Meeting

LOCATION: EUTS Offices in Evansville, Indiana
Room 301

TIME: 1:00 PM (CDT)

Meeting Participants

Janice Osadcuk
Lyle Sadler
Alan Ball
Karl Leet
Frank Baukert
Rickie Clark
Everett Green
Rose Zigenfus
Robert Dirks
Jeff Broughton
Jack Pike
Stephen Melcher
H.C. Farmer
Marco DeLucio
Nancy L. Burns
John Schwartz
Mike Feltz
Steve Bennett
David Matthews
Melvin Levin
Bill Longtine

Representing (Firm or Agency)

INDOT
INDOT
INDOT
INDOT
INDOT
INDOT
KYTC, District 2
EUTS
FHWA
City of Henderson
Warrick County Commissioner
Evansville City Council
Indiana Port Authority
Evansville Chamber of Commerce
North Vernon Chamber of Commerce
The Voices for I-69
Clark Dietz
Old National Bank
David Matthews Associates
Highway Advocates

Discussion:

The meeting was intended to further solidify the membership of the Study Advisory Committee (SAC), to discuss 2000 Census data and the Five-County traffic model, and to explain the status of the proposed Green River Wildlife Refuge.

Introduction

- ♦ The meeting began with the introductions of the project team and the SAC.

MEETING DOCUMENTATION

- ♦ Larry Chaney discussed the SAC membership, and urged the committee to recommend membership to other community leaders who may have interest in the project.
- ♦ Janice Osadczuk explained the concept of Purpose and Need, and told the Committee that they would have an opportunity to review this document later in the project. She explained that the Purpose and Need asks the questions "Why, why where, and why now?" She also explained that public meetings and a public hearing would be conducted as a part of this study.
- ♦ Ms. Osadczuk also addressed how this project, as a section of independent utility (SIU), was connected to the National I-69 Corridor.

2000 Census Data and Traffic Model Availability

- ♦ Census data will be received in various segments, with household level data expected by late Summer 2001.
- ♦ The traffic model is ultimately dependent upon the Census data, but regional deficiencies could be identified by late August or early September 2001.

Green River Wildlife Refuge

- ♦ Mr. Chaney explained the status of the proposed wildlife refuge, and stated that the Kentucky Division of Forestry had purchased land in the area that would become a part of the refuge. Various other agencies, including the Kentucky Transportation Cabinet, have had discussions relating to additional purchases in the future.

Questionnaire

- ♦ A questionnaire was distributed to the committee members. This will assist the project team in the identification of community issues and concerns

General Discussion/Concerns

- ♦ The question was asked about public meetings and their location. It was stated that the meetings would be held both in Indiana and Kentucky
- ♦ It was suggested that a newsletter be developed to keep the public informed of the status of the project. The project team will consider this addition to the public involvement process.
- ♦ Several suggestions for potential SAC members were offered by committee members:
 - Farm Bureau
 - USI
 - Neighborhood associations
 - Southern Roundtable for Mayors (Indiana)

Next Meetings



MEETING DOCUMENTATION

HNTB
HNTB Architects Engineers Planners
310 West Liberty Street, Suite 701
Louisville, Kentucky 40202
phone: (502) 581-0985
fax: (502) 581-0987

- ♦ The next meeting will be June 27, 2001 at 1:00 CDT/2:00 EDT.

Action Items

1. Website completed and discussed with SAC
2. Results of questionnaire related to SAC members
3. Potential additional SAC members to be contacted

Responsibility

HNTB

HNTB

HNTB

Due Date

6-27-01

6-27-01

5-15-01



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
310 W. Liberty St., Suite 701
Louisville, KY 40202
phone: (502)581-0985
fax: (502)581-0987

SUBJECT: I-69 Evansville, IN and Henderson, KY
SAC Meeting

DATE: May 1, 2002

LOCATION: University of Southern Indiana (USI)
8600 University Boulevard
Evansville, IN

TIME: 1:00 PM CDT

Meeting Participants

Bryan Nicol
Janice Osadczuk
Lyle Sadler
Everett Green
Doug Taylor
Rose Zigenfus
Pamela Drach
Robert Dirks
Mary Murray
Judy Weatherholt
Joanne Alexandrovich
Marjorie M. Jones
Niles Rosenquist
Tom McCarthy
Scott Moyer
Bill Gillenwater
George H. Warren
Jack Corn
David Matthews
James Hagen
Chris Gwaltney
Fred Reeves
John Schwartz
Hugh Haydon
Melvin J. Levin
Mike Walsh
Phil Wilzbacher
Randy Krun
Sally R. Lambert

Representing (Firm or Agency)

INDOT Commissioner
INDOT
INDOT
KYTC
KYTC
EUTS
EUTS
FHWA-Indiana
FHWA-Kentucky
Southwestern IN Regional Dev. Commission
Vanderburgh County Health Department
USI
Hoosier Environmental Council

Posey County Council President
B & M Plastics

ASCE
Owensboro Chamber of Commerce
Voices for I-69

Metro Evansville Chamber of Commerce

cc: 31815 Correspondence

Authored by: Brian Aldridge



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
310 W. Liberty St., Suite 701
Louisville, KY 40202
phone: (502)581-0985
fax: (502)581-0987

Michael Feltz
Phil Fisher
Matt Meadows
John Tapp
Joe Kiefer
Russell Lloyd
Catherine Fanello
Amanda Akin
David A. Smith
Tim Miller
Karen Mohammadi
Brian Aldridge

USI
Metro Evansville Chamber of Commerce
Henderson Water Utility
Evansville City Council
Mayor, City of Evansville
Vanderburgh County Commissioner

HNTB
HNTB
HNTB

Items Discussed

Purpose of Meeting

The purpose of the meeting was to discuss project status and schedule and for the SAC to assist in weighing the screening criteria.

Introduction and General Discussion

Tim Miller welcomed everyone to USI and introduced the Study Team members in attendance. He noted that one additional item had been included on the agenda. With that, Mr. Miller introduced J. Bryan Nicol, the Commissioner of the Indiana Department of Transportation (INDOT). Commissioner Nicol thanked the SAC for its continuing involvement and input in the project. He noted that this is an immense project, requiring coordination between numerous agencies between the states of Kentucky and Indiana. Mr. Nicol discussed the relationship between the transportation system and the economy and then opened the floor to questions.

-Q: What percentage of the funding for the construction of this segment of I-69 will come from the Federal government?

A: (Commissioner Nicol) The existing transportation authorization legislation (TEA-21) expires next September and is due for reauthorization in October, 2003. Until that time, INDOT does not know what Federal funds will be available for the construction of I-69. Indiana currently gets back 90.5% of its Federal gas tax dollars and is seeking to raise that level to 95%. The INDOT long-range plan identifies significant needs throughout the state.

-Q: How does the current state budget situation affect I-69?

cc: 31815 Correspondence

Authored by: Brian Aldridge



MEETING DOCUMENTATION

HNTB
HNTB Architects Engineers Planners
310 W. Liberty St., Suite 701
Louisville, KY 40202
phone: (502)581-0985
fax: (502)581-0987

A: (Commissioner Nicol) General fund revenues do not directly affect INDOT projects, with the exception of programs such as aviation. The gas tax (\$.15 State and \$.18 Federal per gallon) is dedicated only for transportation enhancement projects. The Crossroads 2000 bonding program, which ends in July 2003, could impact INDOT funding.

Mr. Miller then discussed the latest corridor map (see attached). The corridors have been refined to 2000' wide having been approximately 2 miles wide at the public meetings held last November. Mr. Miller said that two changes have been made to the corridors since that time. These include the addition of an "Oxbow" corridor (shown as Corridor J) which was discussed at the February SAC meeting, and a potential US 41 connector that is being considered to connect one or more of the western alternatives to near the existing US 41 interchange with I-64. Mr. Miller then asked if the SAC had any questions related to the corridors being considered for the Level 1 Analysis.

-Q: Is a loop around the Evansville/Henderson area being considered?

A: (Mr. Miller) We are not currently investigating a loop.

(Commissioner Nicol) This project serves to complete a portion of what is known as Corridor 18, or the national I-69, through a single corridor connecting I-64 in Indiana to the Pennyriple Parkway in Kentucky. This section is referred to as Segment of Independent Utility #4, and has been identified as a segment that can be constructed independently of the possible segments to the north or south and provide benefits to the communities which it serves. A loop is not currently in the Evansville Urban Transportation Study (EUTS) long-range plan. If it were to be added, then a loop could be studied at that time, but that would be a completely separate study. This study, however, will consider the prospect that a loop could be developed in the future. For example, the study's recommendations will not preclude the construction of a loop by terminating at a point on the Pennyriple Parkway where a 4(f) property would prevent a connection on the opposite side.

-Q: (On same topic) In the Purpose and Need Statement there are three needs listed. Need #1 (*To Support the Completion of I-69 as a National and International Trade Corridor*) is met by a single corridor, but the remaining needs (*To Provide Sufficient Cross-River Mobility in Evansville, Indiana /Henderson, Kentucky Area; and, To Strengthen the Transportation Network in Evansville, Indiana /Henderson, Kentucky Area*) could likely be better satisfied by the construction of a loop, and this committee has expressed great interest in seeing a loop built. What is the purpose of the SAC if our input and opinions are not to be considered?

A: (Commissioner Nicol) All the alternatives are to be evaluated based upon the Purpose and Need, but a loop is not part of this study. The SAC has and will continue to provide meaningful input.

-Q: What is the timeline for this Study?

A: (Mr. Miller) The Level 1 analyses are underway and will be finished this spring. Once that screening process is completed, there will be another round of public meetings sometime in the summer and then more-detailed analyses of the remaining 3-4 corridors will begin. We anticipate a Draft Environmental



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
310 W. Liberty St., Suite 701
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fax: (502)581-0987

Impact Statement (DEIS) will be submitted to the sponsors by the end of 2002, and will be submitted to the Federal Highway Administration for review early in 2003. Once approved, public hearings can be held, and after that the final evaluation of a single corridor can begin. The Final Environmental Impact Statement (FEIS) should be finalized by the end of 2003.

(Janice Osadczuk) With respect to the screening process, it is important to note that the regulatory issues must be considered first, followed by the remaining criteria.

-Q: When might we see construction of this segment of I-69 and will it be prior to or after the northern segment (Indianapolis to Evansville) is constructed?

A: (Commissioner Nicol) That has yet to be determined because both are multi-year projects and will require segmented construction. The northern section is approximately 140-155 miles in length and the Evansville to Henderson section requires the construction of a new bridge crossing the Ohio River. Hence, both are complex projects.

(Ms. Osadczuk) The Indianapolis to Evansville Study of I-69 is a Tier-1 study and will require individual Tier-2 studies for each individual segment. There are likely to be 4-5 (or more) segments that will be studied in greater detail.

(Mr. Miller) This study also requires a tremendous amount of coordination since it involves two states and numerous agencies representing each state. For example, there are two divisions of FHWA, and two divisions of the Environmental Protection Agency involved in the study.

Screening Exercise

Mr. Miller then introduced Cynthia Bowen with HNTB's Indianapolis office. Ms. Bowen discussed the screening criteria evaluation exercise. Each SAC member was provided a handout (see attached) and nine stickers- three each of green, yellow, and red. There were two large boards at the front of the room that were identical to the handouts. Ms. Bowen asked that each SAC member evaluate the seventeen criteria, and use the stickers to indicate how strongly they felt about how an I-69 corridor should be evaluated based upon each. Each sticker indicates how important each criteria is to each individual with green indicating very important, yellow indicating medium importance, and red indicating little importance. She noted that red does not mean a criterion is not important, but that it is less important than green or yellow. If an individual feels that a criterion is not important at all, then they should not place a sticker next to that criterion. Similarly, if one criterion is very important, then more than one sticker (or all of one color, or even all stickers) can be placed by that criterion. Mr. Miller then briefly discussed each of the criteria and asked the SAC if there were any questions about the exercise.

-Q: The criterion of reducing freight travel time is listed, but what about "people" travel time?

A: (Mr. Miller) Criterion #12 (Improve Service of Neighborhoods and the Proximity to Neighborhoods) essentially addresses that issue.



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310 W. Liberty St., Suite 701
Louisville, KY 40202
phone: (502)581-0985
fax: (502)581-0987

After some discussion, it was decided that an additional criterion would be added as follows:

18. Strengthen the Existing Transportation Network in Area

-Q: How will the results of this exercise be used?

A: (Ms. Bowen) We will be developing a "weight" for each criterion based on the responses received today and from those mailed to SAC members who are not here today. The importance placed on each criterion will then be provided to the Study Team in order to assist them in the decision making process.

(Ms. Osadczuk) A similar exercise was used on the Hoosier Heartlands project with great success.

-Q: What is the difference between a "critical habitat" (criterion #5) and a "wetland" habitat (criterion #1)?

A: (Ms. Osadczuk) A critical habitat includes habitat for threatened and endangered species. A wetland does not necessarily provide habitat for threatened and endangered species.

-Q: What is the definition of a 4(f) property (criterion #6)?

A: (Mr. Miller) A 4(f) property is publicly owned land (or water) used for recreational purposes and is protected.

-Q: What about bias in this exercise with respect to this group and each individual's perspective?

A: (Ms. Bowen) Some bias is inherent to a survey, but we assume that each SAC member represents his or her own group of constituents.

-Q: Please clarify what the dots (stickers) mean. Does a red dot indicate low interest but not zero interest or no importance?

A: (Ms. Bowen) Correct. If you feel as though a criterion is not at all important, then leave the box beside it blank. Red means that it is important, just not as important as one you would classify as green or yellow.

-Q: What about economic benefits or the maximization of economic benefits?

A: (Ms. Osadczuk) That can be added to the list for evaluation.

After some discussion with respect to wording, the following criterion was added:

19. Maximize economic benefits.

With that, the SAC conducted the exercise. Ms. Bowen provided a brief summary by showing the completed boards to the group and discussing the results. (The results are not included in these minutes so that the remaining surveys to be mailed to absent members are not skewed).



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310 W. Liberty St., Suite 701
Louisville, KY 40202
phone: (502)581-0985
fax: (502)581-0987

Conclusion

Mr. Miller concluded the meeting stating that the consulting team will be screening the eleven build alternatives down to only three or four for further study. A question arose about why there would be three or four and not two or three in hopes of expediting the study. Mr. Miller replied that there may be only two or three remaining after the initial screening, but that the sponsors would like to see no more than four alternatives. Mr. Miller then asked the SAC if the meeting times were agreeable and if there were any suggestions for future locations. The SAC agreed that around 12:00 was good for travel and that the next meeting should be held in Henderson. Doug Taylor stated that this meeting would have been at John James Audubon State Park in Henderson, but the facility was already reserved. Mr. Miller added that HNTB would try to schedule the next meeting at that location, and around 12:00.

cc: 31815 Correspondence

Authored by: Brian Aldridge



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HNTB Architects Engineers Planners
310 W. Liberty St., Suite 701
Louisville, KY 40202
phone: (502)581-0985
fax: (502)581-0987

SUBJECT: I-69 Evansville, IN and Henderson, KY
SAC Meeting

DATE: June 19, 2002

LOCATION: Henderson Community College
Henderson, KY

TIME: 12:00 PM CDT

Meeting Participants

Janice Osadczuk
Lyle Sadler
Everett Green
Doug Taylor
Rose Zigenfus
Pamela Drach
Jack Corn
Robert Dirks
Michael Riney
Fred Reeves
Stan Billman
Joanne Alexandrovich
Larry Williams
Judy Weatherholt
John Perkovsek
Amanda Akin
David Griffith
George H. Warren
Marcia Dowell
Chris Gwaltney
Jim Hagen
Larry Ordner
Robert Krieg
David A. Smith
Matt Meadors
John Schwartz
Steve Schaefer
Kim Derk
David Thomason

Representing (Firm or Agency)

INDOT
INDOT
KYTC
KYTC
EUTS
EUTS
EUTS
FHWA-Indiana
Daviess County Fiscal Court
Owensboro Chamber of Commerce
Southwind Maritime
Vanderburgh County Health Department
Mt. Vernon Area Chamber of Commerce
Southwestern IN Regional Dev. Commission
Evansville Chamber of Commerce
AAA Oil Company

Henderson Chamber of Commerce
University of Evansville
ASCE
Valley Watch
Senator Dick Lugar
Congressman John Hostettler
Owensboro Chamber Govt. Affairs Committee
Evansville Chamber of Commerce
Voices for I-69
Congressman John Hostettler
GE Plastics

cc: 31815 Correspondence

Authored by: Brian Aldridge



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HNTB Architects Engineers Planners
310 W. Liberty St., Suite 701
Louisville, KY 40202
phone: (502)581-0985
fax: (502)581-0987

John Tapp
Bill Newman
Marjorie M. Jones
Niles Rosenquist
Tim Miller
Karen Mohammadi
Brian Aldridge

Henderson Water Utility
Mt. Vernon Chamber of Commerce
USI
Hoosier Environmental Council
HNTB
HNTB
HNTB

Items Discussed

Purpose of Meeting

The purpose of the meeting was to discuss project status, including the three corridors to be carried forward to the next phase of the study.

Introduction and General Discussion

Tim Miller welcomed everyone to Henderson Community College and introduced the Study Team members in attendance. After SAC introductions, Mr. Miller unveiled the three corridors that will be carried forward into Level 2 analysis. These include Corridor J, Corridor H, and Corridor I. Additionally, the US 41 connector that was discussed at the previous SAC meeting (now known as Corridor J1) will also be carried forward. Mr. Miller noted that KYTC Secretary James Codell and INDOT Commissioner Bryan Nicol would be holding a press conference at 2:00 CDT to disclose the Study Team's findings, but that this was the first public announcement of the three corridors. It was noted that the corridors will be renamed from this point forward, with Corridor J renamed as Corridor 1, J1 as 1A, H as 2, and I as 3.

Mr. Miller briefly discussed how the Study Team chose the three corridors for further study. He stated that each of the 10 corridors was evaluated relative to one another with respect to issues stated in the *Draft Purpose and Need Statement*, Environmental impacts and concerns, and Engineering issues. He added that the *Level 1 Alternatives Analysis* Report, available after the press conference online at www.i69in-ky.com, details the evaluation process and results.

-Q: What are the approximate costs for each corridor?

A: (Mr. Miller) Corridor 1 is approximately \$959M, Corridor 2 is approximately \$581M, and Corridor 3 is approximately \$686M. These costs include design, right-of-way, utilities, and construction, and also include a 25% contingency factor for unknown issues. It is important to note that the costs were only compared relative to one another and that cost was only one criterion evaluated.

-Q: In Indiana, is Corridor J in Vanderburgh or Posey County?

cc: 31815 Correspondence

Authored by: Brian Aldridge



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310 W. Liberty St., Suite 701
Louisville, KY 40202
phone: (502)581-0985
fax: (502)581-0987

A: (Mr. Miller) Corridor J, now known as Corridor 1, runs north-south in Posey County, just west of the Posey-Vanderburgh County line.

-Q: What will Corridor 1A cost?

A: (Mr. Miller) We are currently looking into the cost of Corridor 1A. It is about 6 miles longer than Corridor 1.

-Q: If Corridor 2 or Corridor 3 is selected, will the new roadway be named I-164/I-69?

A: (Mr. Miller) That will be up to INDOT and FHWA.

-Q: Where will interchanges be located along each of the corridors?

A: (Brian Aldridge) Potential new interchange locations for Corridor 1 include I-64, SR 66, Evansville-Upper Mt. Vernon Road, and SR 62 in Indiana, and US 60, KY 285, and the Breathitt Parkway in Kentucky. Corridor 2 includes a relocated Green River Road interchange (to avoid the cemetery located in the southwest quadrant of the existing interchange) in Indiana, and US 60, KY 351, Audubon Parkway, and the Breathitt Parkway in Kentucky. Potential interchange locations for Corridor 3 include a new interchange between the Lloyd Expressway and Covert Avenue in Indiana, and US 60, KY 351, Audubon Parkway, and the Breathitt Parkway in Kentucky. These are identified as "potential" interchange locations because at this point in the study we have not identified roadway alignments. With respect to Corridors 2 and 3, it may not be possible to construct interchanges at both KY 351 and the Audubon Parkway given the distance between the two roadways.

-Q: Do each of the potential (Ohio River) bridges have any special considerations?

A: (Mr. Miller) At this point, each of the three proposed Ohio River crossing locations is considered feasible, but we will be studying each in further detail over the coming months.

(Janice Osadcuk) Any bridge crossing the Ohio River will be designed through coordination with the Army Corps of Engineers and the US Coast Guard. The *Level 1 Alternatives Analysis* Report details the general Coast Guard requirements that must be satisfied for pier spacing, clearances, etc.

(Robert Dirks) The discovery of archaeological sites is possible anywhere adjacent to the Ohio River. We will be investigating each of the potential crossing locations for such sites.

-Q: Can you show the floodplains for the three corridors?

A: (Mr. Aldridge) The approximate 100-year floodplain limits were pointed out on the *Level 2 Study Corridors* exhibit.

-Q: Can Corridor 1 be moved so that it passes east of the University of Southern Indiana?

A: (Mr. Miller) We can look into that possibility. However, as we approach the Evansville urbanized area, there will be more impacts to residential areas and the built environment. The corridors, as shown, were developed while attempting to minimize impacts to both the natural and human environment.



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310 W. Liberty St., Suite 701
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phone: (502)581-0985
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-Q: Is it possible to build a “continuous” interchange serving KY 351 and the Audubon Parkway for Corridor 2 or 3?

A: (Mr. Miller) We do not know at this point.

(Mr. Aldridge) It depends on the traffic demand and where the corridor intersect each of the roadways. We may be able to build two separate interchanges if there is enough separation between the two.

-Q: What is the format for the Public Meetings?

A: (Mr. Miller) The June 26th meeting will be at Reitz High School. It will include a formal presentation and recorded public comment period, just like the meeting last November (2001). The June 27th meeting will be held at Henderson County High School and will be informal with a recorded presentation running continuously. Each meeting will run from 4:00-8:00 p.m. CDT. We will have handouts and exhibits available.

Conclusion

Mr. Miller concluded the meeting stating that the consulting team will begin the more-detailed analyses of the three study corridors near the end of the public comment period. That period will extend about two weeks after the Public Information Meetings (June 26 and 27). He also reiterated that the *Level 1 Alternatives Analysis* report would be available on the project website (www.i69in-ky.com) immediately after the 2:00 p.m. press conference.



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HNTB
HNTB Architects Engineers Planners
310 West Liberty Street, Suite 701
Louisville, Kentucky 40202
phone: (502) 581-0985
fax: (502) 581-0987

SUBJECT: I-69 Evansville, IN and Henderson, KY
Environmental and Engineering Assessment

DATE: July 20, 2001

Study Advisory Committee Meeting

LOCATION: Evansville Chamber of Commerce
2nd Floor Conference Room

TIME: 1:00 PM (CDT)

Meeting Participants

Janice Osadczuk
Lyle Sadler
Karl Leet
Frank Baukert
Rickie Clark
Everett Green
Rose Zigenfus
Robert Dirks
Steven Uhde
Alice Weber
Joanne Alexandrovich
Valerie West
Niles Rosenquist
Davis Thomason
John Tapp
Catherine Fanello
David Coker
Steve Miller
Jack Cover
Steve Brooks
Scott Schrock
Pamela Drach
Russell Lloyd
Steve Grantz
Kelly Elder
Amanda Akin
Tom Doyle
Chris Gwaltney
George Warren

Representing (Firm or Agency)

INDOT
INDOT
INDOT
INDOT
INDOT
KYTC, District 2
EUTS
FHWA
IN. Junior Chamber
Evansville Junior Chamber
Vanderburgh County (UCHD-Air)
SOLE
Hoosier Environmental Council
Citizen
Henderson Water Utility
County Commissioner
Save Our Land & Environment
Chamber of Commerce
City Council EUTS
McDonald Douglas Investments
University of Evansville
EUTS
Mayor, City of Evansville
Evansville/Marine Su. Inc. & Chamber Tr. Com.
Elder Environmental & Safety Services
AAA Oil Inc, and Baukley Inc
Hoosier Accountant
American Society of Civil Engineers
Henderson College

Stephen Melcher
H.C. Farmer
John Schwartz
Mike Feltz
David Matthews
Melvin Levin
Bill Longtine
Al Andrews
Karen Mohammadi

Evansville City Council
Indiana Port Authority
The Voices for I-69
MEVCC/Clark Dietz
David Matthews Associates
Highway Advocates
Self (Retired)
HNTB
HNTB

Discussion:

The meeting was to update the Study Advisory Committee (SAC) on the status of the project and to better inform them of the NEPA process.

Introduction

- ♦ The SAC was briefed on the status of the Purpose and Need document and the schedule for the release of that document, as well as the study alternates. This should occur in late September, with public meetings to follow in October. Resources Agency meetings and tours will occur coincidental with the public meetings. A public meeting will be held on each side of the river.

Web Page

- ♦ The SAC was shown the draft web page and notified of proposed changes to the layout, including a new logo and e-mail address. A Public Involvement page will be added to include the Committees page and Meetings page, as well as a methodology to request speakers. An "Items of Special Interest" page may also be added.
- ♦ The site will be updated frequently, and will have links to EUTS, INDOT and KYTC pages as well as other I-69 pages (as they come online).
- ♦ It was requested that a FAQ page be added and that all comments be published. The committee was told that a decision as to whether to include all public comments would have to be made at a later date, when the study team knows more about the number and nature of comments that may be received.
- ♦ Concerns were expressed over focusing the main public involvement efforts on the web page, and the committee was informed that this would be only one source of information dissemination.

Web Address

- ♦ A list of 7 possible web page address names was given to the SAC for discussion. SAC members added several more names to the list, and a vote was held on the preferred name. The new address will be 169in-ky.com.

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E-mail Address

- ♦ The e-mail address for the project is I69IN-KY@hntb.com.

Project Logo

- ♦ Potential logos were shown to the committee, and changes proposed during the Management Team meeting were explained. The SAC was in concurrence with the changes, including changing the photo to reflect the area.
- ♦ Use of the I-69 shield was discussed, and it was explained that a new logo was developed for this project to give it a unique identity.

Questionnaire

- ♦ A questionnaire was distributed to the committee members to assist the project team in the identification of community issues and concerns. The same questionnaire was given out at the last meeting, but after the presentation on the NEPA process it was felt that some members might wish to resubmit a second response.

NEPA Presentation

- ♦ Robert Dirks and Janice Osadczuk gave a presentation on the NEPA process, with a strong focus on the development of project purpose and need.

Next Meetings

- ♦ The next meeting will be In October 2001.

Action Items

	<u>Responsibility</u>	<u>Due Date</u>
1. Provide recommended changes to web site.	All	7-27-01
2. Update web site and logo, change domain name and create e-mail address.	HNTB	8-3-01
3. Finalize Draft Purpose and Need document.	HNTB	8-31-01
4. Finalize Draft Alternates.	HNTB	9-14-01



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

SUBJECT: I-69 Evansville, IN and Henderson, KY
Environmental and Engineering Assessment

DATE: November 14, 2001

LOCATION: Study Advisory Committee (SAC) Meeting
Civic Center Complex
City Council Chambers, Room 301

TIME: 1:00 PM (CDT)

Meeting Participants

Janice Osadcuk
Lyle Sadler
Rickie Clark
Jay Mitchell
Rose Zigenfus
Robert Dirks
Tim Miller
Mark Nouri
Susan Rich
Brian Aldridge
James Hagen
Melvin Levin
Stephen Melcher
Jennifer Simpson
Brian Howard
Doug Lane
H.C. "Bud" Farmer
John Swartz
Russell Lloyd
Bill Longtine
Chris Gwaltney
Niles Rosenquist
John Tapp
Patty White
Ray Hoops
Greg Server
Jack Corn
Mike Feltz
David Matthews
Marco Delucio
Jeff Broughton
Pamela Drach

Representing (Firm or Agency)

INDOT
INDOT
INDOT
INDOT
EUTS
FHWA
HNTB Corporation
HNTB Corporation
HNTB Corporation
HNTB Corporation

EUTS
EUTS
EUTS
Port Commission & Evansville Air Board
The Voices for I-69
City of Evansville

Hoosier Environmental Council
Henderson Water Utility
Vanderburgh County
USI

EUTS

cc: 31815 Correspondence

Authored by: Brian Aldridge



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HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

The meeting began at 1:15 CDT. Lyle Sadler opened the meeting and introduced Tim Miller as the new project manager for the HNTB/BLA Consultant Team. The Study Team members in attendance were then introduced and Mr. Miller asked that each member of the Study Advisory Committee (SAC) introduce themselves.

The agenda had four main discussion items. These items included:

1. Discussion of Purpose and Need
2. Presentation and Discussion of Preliminary Corridor Concepts
3. Discussion of Public Meeting Format and Expectations
4. Update on Project Website

Mr. Miller briefly discussed the public meetings and the agenda for this meeting. The PowerPoint presentation that was to be shown at the public meetings with recorded audio was shown to the Committee. Mr. Miller then unveiled the "Preliminary Corridor Concepts" exhibits to the Committee and asked for questions from the group. The following questions/discussion items arose:

-Q: Is the Pennyrile Parkway a definite terminus for the project?

-A: Mr. Miller: Yes. The Segment of Independent Utility (SIU) #4 requires connecting I-64 to the north with the Pennyrile Parkway to the south.

-Q: How will the SAC be involved in the future?

-A: Mr. Miller: The Committee will remain an active part of the project as alternative corridors are narrowed.

Mr. Sadler: There will be continued SAC meetings where members will be able to provide input to the Study Team.

Rose Zigenfus: The SAC Committee has provided some valuable comments.

-Q: (About the general study timeline shown in the presentation.) The project timeline seems rather long- can it be unrealistic?

-A: Mr. Miller: The timeline presented was rather generic and as such, does not represent every single project.

-Q: (Discussion item.) Evansville needs a loop similar to Fort Wayne or Indianapolis.

-A: Mr. Miller: This Study may result in the recommendation of one or more recommended alternatives. Therefore, a loop is not beyond possibility

-Q: Will there be a benefit-to-cost (B/C) analysis performed on each of the alternatives?



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111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

-A: Robert Dirks: The Federal Highway Administration (FHWA) does not require that a B/C analysis be performed for an Environmental Impact Statement (EIS).

Ms. Osadczuk: The B/C analysis cannot be used as a focus for selecting an alternative or alternatives. The Study Team will be performing some type of B/C analysis, but it likely will not play a major role in the selection process.

Mr. Dirks: There is some concern that if the focus is placed on the B/C analysis results, environmental or other pertinent issues may not receive their due attention.

-Q: Who makes the final decision on a route?

-A: Mr. Miller: HNTB will make final recommendations to the Study Team. Each state will then be responsible for proceeding with the recommendations.

-Q: How is truck traffic, freight and air quality impacted?

-A: Mr. Miller: The Study Team is currently compiling information on these items. The public meetings will solicit comments from concerned citizens on these issues.

Ms. Osadczuk: It is important to remember that this is a transportation project and not an air quality improvement project.

-Q: (Comment) Economic development needs to be considered.

-A: Ms. Osadczuk: This is not an economic development project. This is a transportation project. Economic development will certainly have an impact on the decision-making process, but it will not be the focus of the study.

-Q: Has anyone looked into seismic studies, bedrock issues, etc.?

-A: Mr. Miller: Such issues will be taken into consideration. Bernardin, Lochmueller and Associates (BLA) is conducting the environmental analyses and will be investigating a wide variety of issues.

Ms. Osadczuk: All alternatives would meet current seismic design codes.

Brian Aldridge presented a brief synopsis of the SAC survey results. He stated that 24 surveys had been returned and that congestion and travel time were the primary issues discussed. Mr. Aldridge mentioned that the survey is available on the Study website and that the Study Team will continue to accept responses from the SAC.

Mr. Miller reviewed the draft Purpose and Need Statement with the group. He questioned the SAC about the need for river-crossing redundancy. The overall response was that redundancy was an important issue, and the following reasons were discussed:

- Need for separation between bridges
- Nearest crossing (to US 41) is approximately 30 miles upstream in Owensboro
- Public safety and disasters (barge collisions, chemical spills, etc.)

cc: 31815 Correspondence

Authored by: Brian Aldridge



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HNTB
HNTB Architects Engineers Planners
111 Monument Circle
Indianapolis, Indiana 46204
phone: (317) 636-4682
fax: (317) 917-5210

- Travel time issues and bridge closings

Mr. Miller indicated that the next step in the Study would be for the SAC members to carefully review the draft Purpose and Need Statement and provide feedback as to whether the project issues/needs are adequately addressed. He added that the document can be changed at any time and is an evolving work-in-progress. Mr. Miller also stated that the Study Team hopes to have the Purpose and Need finalized early in 2002 and that BLA is working on the data requirements for the completion of the draft EIS which should be ready for submission in late Spring or early Summer of next year.

Ricky Clark, INDOT Hearings Examiner, will request all comments on the Purpose and Need be submitted by Wednesday, December 5, 2001. This date will be stated at the public meeting. However, the Purpose and Need is a *working* document so comments will be accepted at any time.

A question arose about the date for the next SAC meeting. Mr. Miller indicated that the next meeting will likely be after the beginning of 2002, but that no dates have been discussed at this point. He stated that the screening of alternatives will probably begin in early January and that another round of public involvement meetings will be held after the alternatives have been narrowed.

Mr. Miller briefly discussed the format and agenda for the public meetings. After that discussion, he opened the floor to comments. The following two items were discussed:

1. The next SAC meeting could be held at a different location with a round table-type discussion instead of presenters and an audience.
2. The nine individual corridors should be attached to the minutes for distribution to the SAC. (Mr. Miller replied to that comment by stating that the corridors are available on the website.)



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
310 W. Liberty St., Suite 701
Louisville, KY 40202
phone: (502)581-0985
fax: (502)581-0987

SUBJECT: I-69 Evansville, IN and Henderson, KY
SAC Meeting and Environmental Tour

DATE: February 12, 2002

LOCATION: Angel Mounds State Historic Site
Pollack Avenue
Evansville, IN

TIME: 8:00 am CST

Meeting Participants

Janice Osadczuk
Lyle Sadler
Doug Taylor

Mary Murray
Mike Linderman
David Smith
David Isley
Tom Cervone
Tim Miller
Brian Aldridge

Representing (Firm or Agency)

INDOT
INDOT
KYTC
EUTS
FHWA, Kentucky Division
IDNR
QK4
BLA
BLA
HNTB
HNTB

Items Discussed

Purpose of Meeting

The purpose of the meeting was to familiarize the SAC with the study area and some of the environmental issues that are currently under consideration by the Study Team.

Introduction

- Tim Miller welcomed everyone to the Angel Mounds State Historic Site and thanked Mr. Mike Linderman for the use of the facility.
- At around 8:30 am CST, the group boarded a chartered bus and began a tour of the Evansville/Henderson metropolitan area. The agenda for the tour is attached, and the main points of interest were as follows:

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Authored by: Brian Aldridge



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HNTB Architects Engineers Planners
310 W. Liberty St., Suite 701
Louisville, KY 40202
phone: (502)581-0985
fax: (502)581-0987

- Angel Mounds
 - US 41
 - Southwind Maritime Center
 - University of Southern Indiana campus
 - Oliver Tract wetland (north of Audubon State Park in Henderson)
 - Henderson Riverport Authority
 - Henderson City-County Airport
 - Henderson Sloughs Wildlife Management Area
 - Diamond Island
- During the tour, Mr. Miller pointed out items of interest to the group. At Southwind Maritime Center, Mr. Bill Farmer briefly discussed the operations at the facility. During a brief drive through the University of Southern Indiana campus, President Raymond Hoops detailed its recent growth in terms of both enrollment as well as physical campus expansion.
 - Mr. Miller explained to the SAC that the Study Team is currently investigating a possible corridor through the Ohio River oxbow, southeast of the City of Henderson and in the vicinity of the Henderson Riverport Authority.
 - The tour ended around 11:45 and the group had lunch at Angel Mounds. A video describing the site was shown and discussions were held after lunch.

General Discussion Items:

- Marjorie , a professor of anthropology at USI, discussed the potential for archaeological impacts with each of the western alternatives. She stated that the locations of many sites are documented, but those locations are confidential for preservation. Ms. **XX** was asked if the oxbow area contained known archaeological sites. Her response was that there are sites throughout the area along the river.
- Doug Taylor noted that the Section 106 work which has been recently incorporated into the pre-Draft Environmental Impact Statement (DEIS) of the Study, would be gathering information on archaeological/historical sites. He also said that this work is vital to the Study because federal money cannot be used for a roadway project that would cause significant damages to such sites.
- A question came from a SAC member about the schedule of the project and refinement of the current 2-mile wide study bands. Mr. Miller discussed the fact that HNTB, BLA and their subconsultants would be refining the study bands to 2000-foot corridors in the next month and that the detailed Level 1 analysis would begin sometime in March. He went on to say that the next

cc: 31815 Correspondence

Authored by: Brian Aldridge



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HNTB Architects Engineers Planners
310 W. Liberty St., Suite 701
Louisville, KY 40202
phone: (502)581-0985
fax: (502)581-0987

round of public meetings would be held sometime in the early summer (likely June), with a DEIS submitted in late 2002 or early 2003.

- Another question arose about why the project has been delayed from the original schedule. Mr. Miller noted that the Section 106 work has been added, partially due to recently revised federal regulations, early in the Study process rather than at the end as was originally the case. He said that the five to six month delay early in the process is aimed at avoiding potential delays later that could extend the project by years. Lyle Sadler noted that the Study Sponsors and not the consulting team requested the additional work be completed prior to the writing of the DEIS. Tom Cervone added that this work would extend the schedule because of the large number of significant historic properties throughout the region (1,200 currently identified in Posey County alone).
- Mr. Miller briefly discussed the wetlands issues with the areas east of Audubon State Park and the Henderson Sloughs. A map showing the Sloughs properties was displayed.
- Doug Taylor discussed the Green River State Forest and its recently acquired properties, as well as the lands that are proposed for future purchase. He also discussed the proposed Green River National Wildlife Refuge. Tom Cervone noted that US Fish and Wildlife Service has placed priorities on the purchasing of the three tracts that would constitute the refuge area. These include, in order of priority, the Scuffletown Unit, the Horseshoe Bend Unit, and the Green River Unit (a map showing the approximate boundaries of each unit was provided in the meeting packet). He added that the Blue Heron rookery and Oliver tract are included in the Scuffletown Unit.
- A SAC member asked if there would be reports available prior to the complete DEIS. Mr. Miller replied that a technical report would be prepared and submitted to INDOT, KYTC, EUTS and FHWA at the conclusion of the Level 1 screening process. The results of that report would be discussed at the next round of public meetings.
- The topic of the SAC's role through the remainder of the Study was discussed. Mr. Miller said that the SAC has and would continue to provide invaluable information. He added that the tour was a first attempt to get the SAC more involved in the process by providing each member with the same general knowledge of the study areas that the Study Team currently has. He asked the group if anyone had ideas on how to get the SAC more involved. The frequency of meetings was mentioned; one member stated that monthly meetings could prove beneficial, provided that the Study Team had new information to provide at each meeting.
- Someone asked if the traffic modeling would consider the construction of a loop around Evansville, including the development of two Ohio River crossings. Mr. Miller answered the question by stating that it was not in the scope of work for the project. Janice Osadczuk concurred and said that HNTB/BLA was doing exactly what was in their scope.
- Another question was asked about the impact of air quality on the area, particularly with the addition of significantly more truck traffic. Janice Osadczuk replied that the corridor had been modeled as a single link (one corridor) connecting the Pennyryle Parkway and I-64 and that the results indicated an improvement in air quality.

cc: 31815 Correspondence

Authored by: Brian Aldridge



MEETING DOCUMENTATION



HNTB Architects Engineers Planners
310 W. Liberty St., Suite 701
Louisville, KY 40202
phone: (502)581-0985
fax: (502)581-0987

General Comments and Requests

The Study Team should:

- Provide an exhibit depicting the floodplain throughout the area, but especially for the proposed oxbow corridor.
- Provide information on both residential and commercial property densities for each alternative.

cc: 31815 Correspondence

Authored by: Brian Aldridge



Environmental Impacts and Engineering Assessment
Henderson, Kentucky to Evansville, Indiana

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Who Are We?

- *Indiana Department of Transportation*
- *Kentucky Transportation Cabinet*
- *Evansville Urban Transportation Study*
- *Vanderburgh County*
- *Federal Highway Administration*
- *HNTB Team - Study Consultants*

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Why are We Here?

- *To let the community know about the project*
- *To identify and address community concerns and issues*
- *To identify sensitive areas that should be avoided*
- *To create a project that benefits the community*

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How Can You Be Part of the Project?

- 1) *Watch this video presentation*
- 2) *Review the exhibits*
- 3) *Ask questions*
- 4) *Provide oral testimony and/or written feedback*

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Who Are Involved in the Decisions?

• <i>The Public</i>	• <i>KYTC</i>
• <i>Study Advisory Committee</i>	• <i>EUTS</i>
• <i>Local Elected Officials</i>	• <i>Vanderburgh County</i>
• <i>INDOT</i>	• <i>FHWA</i>

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Study Advisory Committee Members

Evansville, City of	Indiana Port Commission
Evansville Metropolitan Chamber of Commerce	Louisville District US Army Corps of Engineers
Health Department – Environmental Division	Mt. Vernon Chamber of Commerce
Henderson Chamber Of Commerce	Newburgh, Town of
Henderson, City of	Vanderburgh County
Henderson County	Voices For I-69
Henderson Water Utility	Warrick County
Hoosier Environmental Council	University of Southern Indiana

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Format for the Meeting

- **Present:**
 - National I-69
 - Purpose and Need
 - Preliminary Corridors
 - Project Timeline
- View exhibits and discuss them one-on-one with members of the Project Team
- Complete survey form

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- ISTEA
- National Highway Designation Act

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Original Corridor 18

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Current I-69 Corridor

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Previous Studies

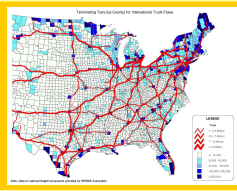
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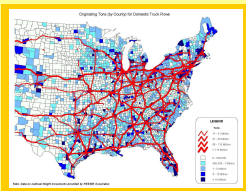
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Freight Traffic



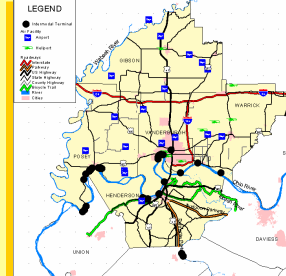
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Study Area (Section of Independent Utility 4)

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Draft Project Needs of SIU #4

- Need #1: To Support the Completion of I-69 as a National and International Trade Corridor;
- Need #2: To Provide Sufficient Cross-River Mobility in the Henderson, Kentucky/Evansville, Indiana Area;
- Need #3: To Strengthen the Transportation Network in the Henderson, Kentucky/Evansville, Indiana Area.

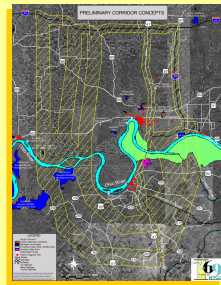
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Preliminary Corridors

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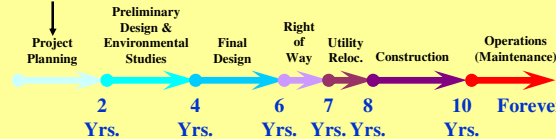
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When Will We See an Improvement?

We Are Here



NOTE: This timeline represents an average time for completion of the various road building steps. Some projects may be completed a little faster, and some may take a little longer depending on the particular circumstances associated with each project.

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What Have We Discussed?

- Why We Are Here
- National I-69 Corridor
- Project Purpose and Need
- Preliminary Corridors

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What's Next?

- **Collect Public Input**
 - Oral comments at tonight's meeting
 - Submitted comment sheets
 - Email (I69IN-KY@hntb.com)
 - Summarize Public Input
 - Your comments are important to our decision making!
- **Refine Corridors and Prepare Draft EIS**

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Thanks For Attending!

*Please be sure to complete your comment sheet and
place it in the box in the back of the room,
or you may mail it in.*

*Please stop by the exhibits and
ask questions of our
representatives.*

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Environmental Impacts and Engineering Assessment

Henderson, Kentucky to Evansville, Indiana

Comment Survey

On behalf of the Indiana Department of Transportation, the Kentucky Transportation Cabinet and the Evansville Urban Transportation Study, we request that you provide comments on this form concerning the purpose and need and the proposed corridors for this study. All comments will be given consideration during the development of potential study options and alternatives for I-69 from I-64 to the Pennyrile Parkway. Please return this form to one of our representatives prior to leaving this meeting, or place it in an envelope and mail it back by November 29, 2001.

All comments are welcome! We appreciate your participation!

Name: _____ Date: _____
Representing: _____
Phone (optional): _____
Address: _____

1. Do you feel that any changes are needed to the Purpose and Needs? ☐ Yes ☐ No
Please explain any changes.

2. Do you feel that any changes are needed to the Proposed Corridors? ☐ Yes ☐ No
Please explain any changes.

Additional Comments: _____

You may send your written comments to:

Mr. Tim Miller
HNTB Corporation
111 Monument Circle
Indianapolis, IN 46204



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Who Are We?

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- Evansville Urban Transportation Study
- Vanderburgh County
- Federal Highway Administration
- HNTB Team - Study Consultants

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Public Information Meeting Objectives

- To update the community on the progress of the I-69 Evansville to Henderson Environmental Impact Statement
- To identify and address community concerns and issues
- To explain the screening process used to determine the preferred corridors
- Provide information on the corridors under further study

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Draft Project Purpose and Needs

- Need #1: To Support the Completion of I-69 as a National and International Trade Corridor;
- Need #2: To Provide Sufficient Cross-River Mobility in Evansville, Indiana /Henderson, Kentucky Area;
- Need #3: To Strengthen the Transportation Network in Evansville, Indiana /Henderson, Kentucky Area.

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No-Build Alternative

- No Build includes the existing plus currently planned/committed projects
- I-164 provides sufficient capacity for 2025 traffic projections
- Portions of US 41 currently operating at LOS F south of I-164

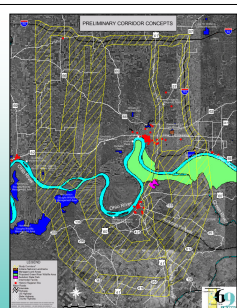
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Original Draft Corridors

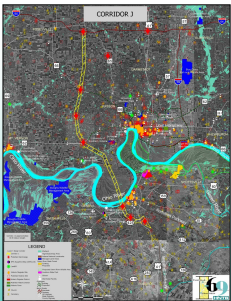
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Addition of New Corridor

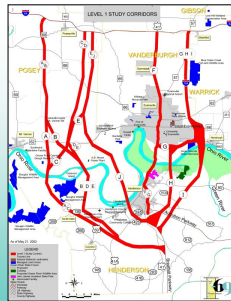


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10 Study Corridors Corridors A Through J



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Estimates of Probable Costs

Corridor	Length ¹ (miles)	New Roadway Length ² (miles)	Structure Length ³ (miles)	Total Cost
A	42.5	42.5	6.2	\$982,868,000
B	42.0	42.0	6.1	\$989,939,000
C	41.7	41.7	6.2	\$979,790,000
D	38.8	38.8	6.1	\$874,918,000
E	39.4	39.4	6.1	\$864,115,000
F	26.1	26.1	4.6	\$1,281,146,000
G ⁴	31.4	10.3	4.6	\$778,394,000
H ⁵	30.2	11.6	3.4	\$580,771,000
I ⁵	31.9	14.7	5.6	\$685,678,000
J	30.9	30.9	8.0	\$958,933,000

1. Cost estimates include Design, Construction, Right of Way, and Utilities.
2. All lengths are approximate.
3. New roadway length is total length minus existing freeway (I-164).
4. Structure length includes the Ohio River bridge crossing and structures traversing the adjacent floodplain.
5. Cost does not include widening of I-164 as it is not anticipated to be necessary.



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Environmental Considerations

- Wetlands & Streams
- Wildlife Habitats & Refuges
- Schools, Churches, & Cemeteries
- Parks & Other Publicly Owned Lands
- Historical & Archaeological Sites
- Low Income and/or Minority Neighborhoods
- Hazardous Material Sites
- Utility Impacts
- Land Use Issues

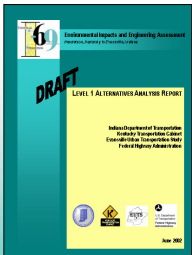
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Henderson, Kentucky to Evansville, Indiana

Level 1 Report Format

1. Introduction
2. Development of Corridor Alternatives
3. Screening Measures
4. Evaluation of Corridors
5. SAC Input
6. Summary of Corridor Evaluation
7. Final Recommendations

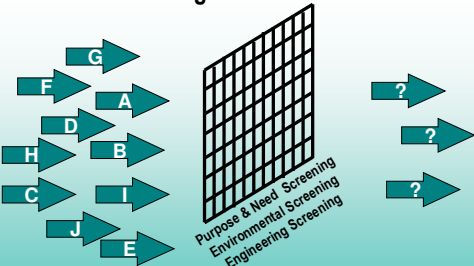


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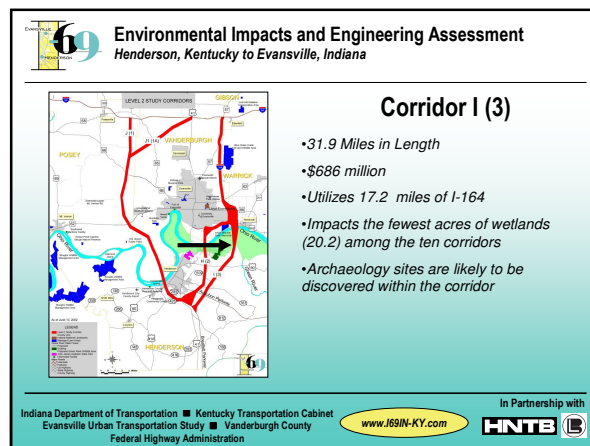
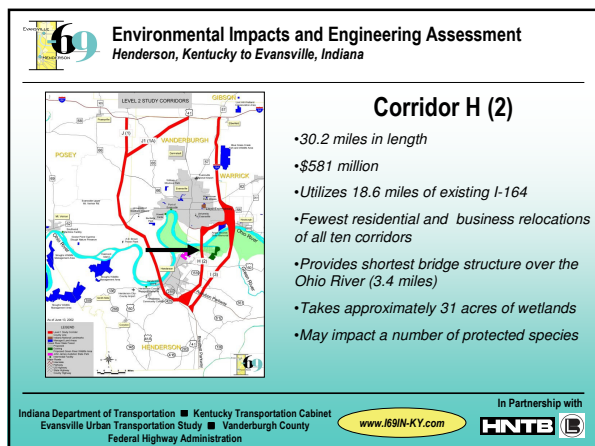
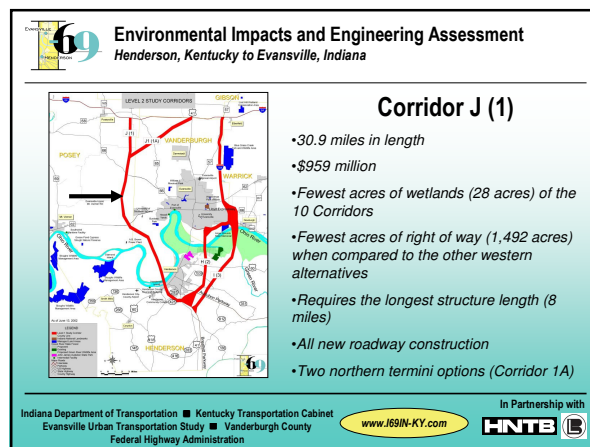
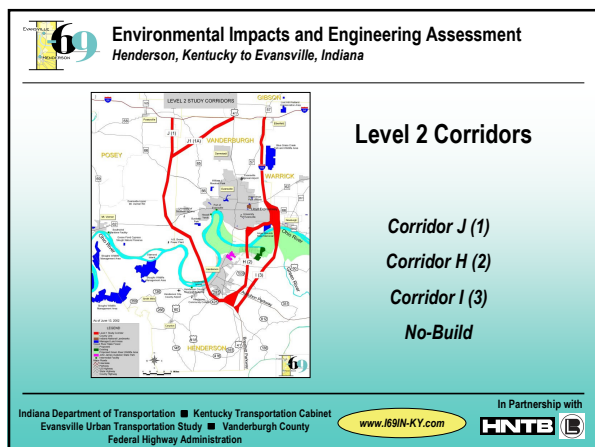
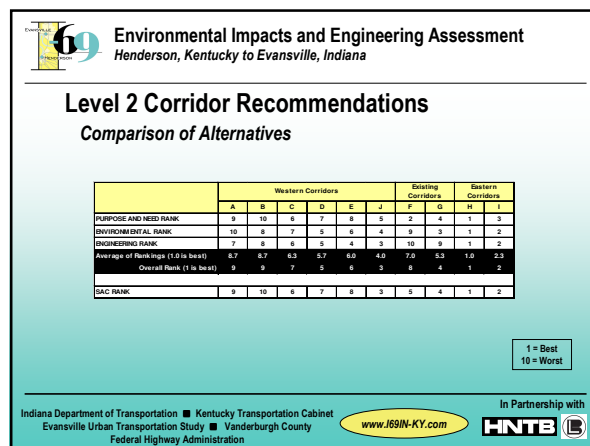
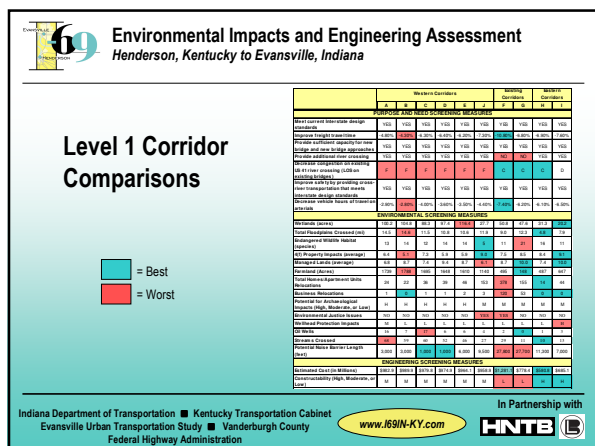
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Level 1 Screening Process



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Environmental Impacts and Engineering Assessment Henderson, Kentucky to Evansville, Indiana

Project Schedule

July-December 2002

- *Collect and Review Public Comments*
- *Gather Additional Environmental Information*
- *Develop Additional Engineering Information*
- *Begin Developing Draft EIS in late-2002*
- *Publish Draft EIS in early 2003*

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*Please stop by the exhibits and
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Henderson, Kentucky to Evansville, Indiana

Comment Survey

On behalf of the Indiana Department of Transportation, the Kentucky Transportation Cabinet and the Evansville Urban Transportation Study, we request that you provide comments on this form concerning the three corridors being proposed for further study. All comments will be given consideration during the development of alternatives for I-69 from I-64 to the Pennyryle Parkway. Please return this form to one of our representatives prior to leaving this meeting, or place it in an envelope and mail it back by July 17, 2002.

All comments are welcome! We appreciate your participation!

Name: _____ Date: _____

Representing: _____

Phone (optional): _____

Address: _____

1. Do you feel that any of the three preferred corridors should be dismissed from further consideration by the Study Team? ☐ Yes ☐ No Which one(s)? ☐ J(1) ☐ J1 (1A) ☐ H (2) ☐ I (3) Why?

2. Do you feel that any of the three preferred corridors should be adjusted? ☐ Yes ☐ No Which one(s)? ☐ J(1) ☐ J1 (1A) ☐ H (2) ☐ I (3) Why?

Additional Comments: _____

You may send your written comments to:

Mr. Tim Miller
HNTB Corporation
111 Monument Circle
Indianapolis, IN 46204

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Public Information Meeting Objectives

- To update the community on the progress of the I-69 Evansville to Henderson Environmental Impact Statement
 - We will briefly review the Level One Alternative Report
 - We will present alignment shifts since the June XX,-XX public meetings
 - We will review the project schedule
 - We ask that attendees present ideas, concerns or field data to the numerous representatives

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Draft Project Purpose and Needs

- Need #1: To Support the Completion of I-69 as a National and International Trade Corridor;**
- Need #2: To Provide Sufficient Cross-River Mobility in Evansville, Indiana /Henderson, Kentucky Area;**
- Need #3: To Strengthen the Transportation Network in Evansville, Indiana /Henderson, Kentucky Area.**

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Previous Public Information Meetings

Public Information Meeting #1
November 14-15, 2001

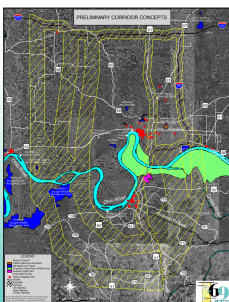
Public Information Meeting #2
June 26-27, 2002

Public Information Meeting #3
September 25-26, 2002

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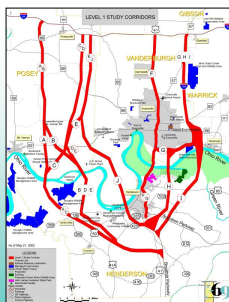


January 2002 Original Draft Corridors in

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January 2002 -June 2002 10 Study Corridors Corridors A Through J

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Henderson, Kentucky to Evansville, Indiana

No-Build Alternative

- *No Build includes the existing plus currently planned/committed projects*
- *I-164 provides sufficient capacity for 2025 traffic projections*
- *Portions of US 41 currently operating at LOS F south of I-164*

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Level 1 Report Format - June 2002

1. Introduction
2. Development of Corridor Alternatives
3. Screening Measures
4. Evaluation of Corridors
5. SAC Input
6. Summary of Corridor Evaluation
7. Final Recommendations

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Level 1 Screening Criteria

- **Purpose and Need**
 - Traffic Data
- **Environmental**
 - Wetlands & Streams
 - Parks & Other Publicly Owned Lands
 - Historical & Archaeology
- **Engineering**
 - Length of bridge structures
 - Cost information

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Henderson, Kentucky to Evansville, Indiana

Archaeology

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Potential Floodplains

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Public Lands

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Estimates of Probable Costs

Corridor	Length ¹ (miles)	New Roadway Length ² (miles)	Structure Length ³ (miles)	Total Cost
A	42.5	42.5	6.2	\$982,868,000
B	42.0	42.0	6.1	\$969,939,000
C	41.7	41.7	6.2	\$979,790,000
D	38.8	38.8	6.1	\$974,918,000
E	39.4	39.4	6.1	\$964,115,000
F	26.1	26.1	4.6	\$1,281,148,000
G ⁴	31.4	10.3	4.6	\$778,394,000
H ⁵	30.2	11.6	3.4	\$580,771,000
I ⁵	31.9	14.7	5.6	\$685,078,000
J	30.9	30.9	8.0	\$958,933,000

1. Cost estimates include Design, Construction, Right of Way, and Utilities.
2. All lengths are approximate.
3. New roadway length is total length minus existing freeway (I-164).
4. Structure length includes the Ohio River bridge crossing and structures traversing the adjacent floodplain.
5. Cost does not include widening of I-164 as it is not anticipated to be necessary.

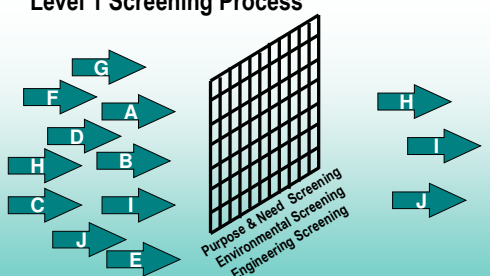


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Environmental Impacts and Engineering Assessment
Henderson, Kentucky to Evansville, Indiana

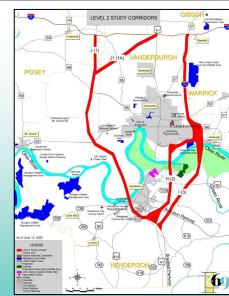
Level 1 Screening Process



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Level 2 Corridors June 2002

Corridor 1
Corridor 2
Corridor 3
No-Build

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Henderson, Kentucky to Evansville, Indiana

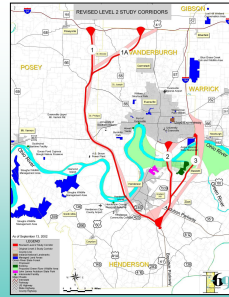
Progress Since June 2002 Information Meetings

- Documentation of Historical Resources
- Further evaluation of engineering viability
- Continued field surveys for environmental considerations
- Federal and state agency coordination
 - US Fish and Wildlife
 - Department of Natural Resources (IN & KY)
 - Traffic Evaluation

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Henderson, Kentucky to Evansville, Indiana



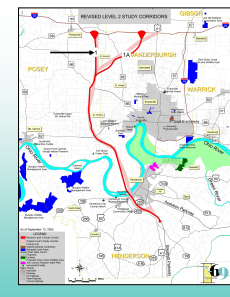
Revised Level 2 Corridors

Corridor 1
Corridor 1A
Corridor 2
Corridor 3
No-Build

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Henderson, Kentucky to Evansville, Indiana



Corridor 1

- Slight shift to west
- 30.9 miles in length
- \$959 million
- Fewest acres of wetlands (28 acres) of the 10 Corridors
- Fewest acres of right of way (1,492 acres) when compared to the other western alternatives
- Requires the longest structure length (8 miles)
- All new roadway construction

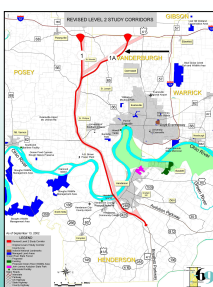
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Evansville Urban Transportation Study ■ Vanderburgh County
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Environmental Impacts and Engineering Assessment

Henderson, Kentucky to Evansville, Indiana



Corridor 1A

- Slight shift to the north and west
- 36.9 miles in length
- \$959 million
- Second fewest acres of wetlands
- Second fewest acres of right of way when compared to the other western alternatives
- Requires the longest structure length (8 miles)
- All new roadway construction

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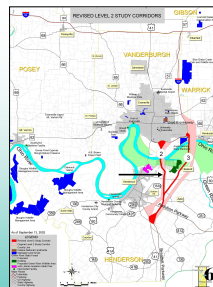
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Environmental Impacts and Engineering Assessment

Henderson, Kentucky to Evansville, Indiana



Corridor 2

- 30.2 miles in length
- \$581 million
- Utilizes 18.6 miles of existing I-164
- Fewest residential and business relocations of all ten corridors
- Provides shortest bridge structure over the Ohio River (3.4 miles)
- May require approximately 31 acres of wetlands
- May impact a number of protected species

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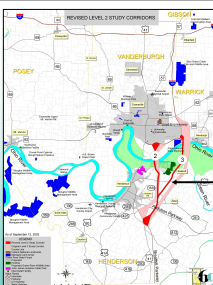
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Environmental Impacts and Engineering Assessment

Henderson, Kentucky to Evansville, Indiana



Corridor 3

- Slight shifts to the west
- 31.9 Miles in Length
- \$686 million
- Utilizes 17.2 miles of I-164
- Impacts the fewest acres of wetlands (20.2) among the ten corridors
- Archaeology sites are likely to be discovered within the corridor

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Federal Highway Administration

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Environmental Impacts and Engineering Assessment

Henderson, Kentucky to Evansville, Indiana

Project Schedule

July 2002 - Spring 2003

- Evaluate comments from 3 public information meetings
- Gather Additional Environmental Information
- Develop Additional Engineering Information
- Document Historic Resources
- Coordinate with federal and state agencies
- Publish Draft EIS in early 2003

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Federal Highway Administration

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Henderson, Kentucky to Evansville, Indiana

Thanks For Attending!

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Federal Highway Administration

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Environmental Impacts and Engineering Assessment Henderson, Kentucky to Evansville, Indiana

Comment Survey

On behalf of the Indiana Department of Transportation, the Kentucky Transportation Cabinet and the Evansville Urban Transportation Study, we request that you provide comments on this form concerning the three corridors being proposed for further study. All comments will be given consideration during the development of alternatives for I-69 from I-64 to the Breathitt Parkway (formerly known as the Pennyrile Parkway). Please return this form to one of our representatives prior to leaving this meeting, or place it in an envelope and mail it back by October 14, 2002.

All comments are welcome! We appreciate your participation!

Name: _____ Date: _____
Representing: _____
Phone (optional): _____
Address: _____

Do you feel that any of the three preferred corridors should be further adjusted? ☐ Yes ☐ No
Which one(s)? ☐ J(1) ☐ J1 (1A) ☐ H (2) ☐ I (3) Why?

Additional Comments: _____

You may send your written comments to:

Mr. Tim Miller
HNTB Corporation
111 Monument Circle
Indianapolis, IN 46204

NOV 6 2002

NOV - 6 2002

ROUTE TO:

November 4, 2002

Mr. Tim Miller, Project Mgr
HNTB Corp
111 Monument Circle, Suite 1200
Indianapolis, IN 46204

Dear Mr. Miller:

I am a 10 year old boy who is very much against the new I69 being built along the "J" route.

My fellow classmates are also against this route coming through our communities as can be seen by the approximately 155 names on the enclosed petition.

We do not want this route because it will forever change our community culture. Other routes through Evansville would not have such an impact on the people in that those routes would be where there are already busy roads and larger city activities.

We like our country life and don't want it broken up by a large interstate that would prevent us from riding our bikes to our friends who might be on the other side of the future interstate.

Please don't put this interstate through the communities on the west side of Evansville. Choose a better route—please !!

Sincerely,

Joey Priest

Joey Priest

10701 Greenleaf Dr
Evansville, IN 47712

West Kids Concern Against the Proposed J Route of I 69

We are kids on the west side of Evansville. We do not want I 69 on the west side ruining our communities and the special life we have. The interstate on the proposed "J" route would divide us from friends and families, bring in new safety concerns, and disrupt many homes and families.

It would not carry as much traffic as the other routes yet it is the most expensive.

Save money and our communities – Don't build on the West side of Evansville!

(The signatures below support the above statements in opposition to the J route for I 69.)

Ferrad Lizette
DJ Hall
Chris Andrecht
Cory Little
Andrew Reich
Cin Zwart
Krystle Berry
Alex Mitchell
Jaclyn Hostettler
Kyle Kelley
Jack D.
Nikki Ruffer
Gregory
Thomas Alvey
Jacob Dapp
Mason Lingafelter
Caleb Vossel
Nolan C. Zwick
Adam Buddell
Lucas Bullington

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J
e
y

Brent Allberry
Lauren Party
Austen McBain
Brittany McDowell
Breanna Johnson
Madison Wright
Katie Snyder
Mrs. Sweeney
Dervin Cuellar
Julie Baaden
Ashley Everley
Korben Sellers
Jessica K.
Megan Gaurdan
Haley Butler
Alexandra Kereisen
Brian K.
Alex K.
Brandon W. Hatfield
Nolan C. Zwick

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It would not carry as much traffic as the other routes yet it is the most expensive.

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(The signatures below support the above statements in opposition to the J route for I 69.)

Orew Murray
Seth Sadley
Adam Lynn
Deron Crane
Max Simpson
Holly Heerclink
Logan Turner
Eric Merbley
Meg Pourwood
Adam Hebles
Chris Jarvis
Jacob Wright
Frank Hammond
Cody Johnson
Lee Mcgrary
Shane Smith
Melanie Morrow
Kristen Durbin
Carlye Elpers
Kirbi
Abby Mayer

Orew Pearson
Casey McDaniel
Josh Hughes
Kelsey Teel
Jonathan Boettchen
Joe Bretz
Joe Hoover
Bry Lingafelter
Dustin Smith
Brett Cheaney
Kraig Schmidt
Mike Bretz
William Stock (Owen)
Jessica Pate
Meagan O'Brien
Jordan Redman
Jordan Elpers
Frank Rykiewicz
Madissa Pate
Derek Radglen
Jack Poney

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It would not carry as much traffic as the other routes yet it is the most expensive.

Save money and our communities – Don't build on the West side of Evansville!

(The signatures below support the above statements in opposition to the J route for I 69.)

Rhyan.B

Trovis Gartin

Justin Adams

Caiten Sashley

Jessica Mason

Luke Morrow

Kris Landrum

Tristen Henein

Jessica Norrick

Jessica Sherman

Brandon L. Coxell

Courtney Wolf

Lynn Koehler

Autumn Johnson

Kaylyn Wallace

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Save money and our communities – Don't build on the West side of Evansville!

(The signatures below support the above statements in opposition to the J route for I 69.)

Katie

Anthony Leigh

Haunten
Cole

Joey Priest

Kaylee

Jessica

Misty

Conner

Katelyn

Jess

Nikki

Kyle

Bryan

Jackie

Shelley

D. Folke

Griffin

Joey

Joey Grapp

Lody Crawford

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Save money and our communities – Don't build on the West side of Evansville!

(The signatures below support the above statements in opposition to the J route for I 69.)

~~Kelsey Foltz~~
Christy Muhl

Madison Wright

Jacob Wright

Travis Reese

~~Marissa Pate~~ Marissa Pate

Ally Elpers

Megan Jourdan

Bro Johnson

Jordan Elpers

Sara Smith

Jamie Deckerling

Jared Melliff

Megan Redman

Loren Tomey

Kelsey

Kendall Beidford

Morgan Stierler

Wylor

Gabrielle

~~Sierra King~~

Sierra King

Tracy Reese

Cecilia

Logan Koettger

Lindsey Droege

Tarah Rowe

Andrew Jordan

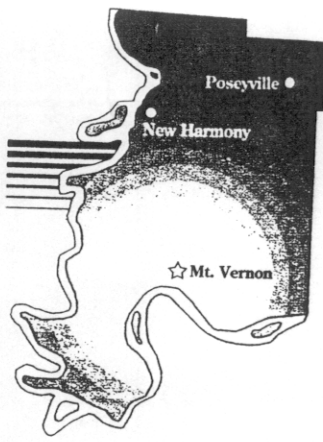
Levin Culler

Gabe Mork

Jacob Melliff

Kelanie Schmitt

Amy



Mt. Vernon Area Chamber of Commerce

"Serving All of Posey County"

June 26, 2002

Mr. Tim Miller, Project Manager
HNTB Corporation
310 West Liberty Street, Suite 701
Louisville, KY 40202

Dear Mr. Miller:

When considering the route of I-69 through the Evansville area, it is important to remember that even though corridor one (1) would be the most expensive, it clearly puts western Vanderburgh County and Posey County at a definite disadvantage for potential future growth and development. We understand there is still considerable work that must be completed, but we do question traffic numbers that are projected to be carried daily on the bridge.

Posey County has two (2) options when traveling to Kentucky: we can drive through Evansville heading south on U.S. 41; or go west to Shawneetown, Illinois.

Other factors to be considered include:

- The University of Southern Indiana is the fastest growing university in the State of Indiana, and possibly the country. Enrollment is at over 9,400 students. Access to the university is currently through Evansville on State Road 62. Improved access to educational institutions in both Indiana and Kentucky would improve economic development capabilities.
- The State of Indiana has significant investments and economic development, including recreational and cultural assets in southwestern Indiana. Siting the Interstate crossing west of Evansville would enhance the future potential of Southwind Maritime Centre, Harmonie State Park, Hovey Lake Wildlife Refuge, and Historic New Harmony.
- The recent bridge collapse in Oklahoma clarifies the need for another alternative for travel south. An alternate bridge crossing the Ohio River on the west side would provide excellent risk management and open markets to the south.
- A west side route will be a major step toward completing a belt-loop around the Evansville urban area. Currently Evansville is the only major urban area in Indiana without such a belt-loop. Bridge locations west and east of Evansville would help manage air quality more effectively by decreasing vehicular congestion and emission

Mr. Tim Miller

June 20, 2002

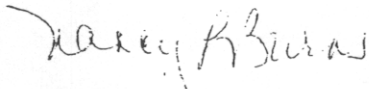
Page 2.

related problems, lessen drive time and improve safety. Access to Evansville hospitals would be dramatically improved by reducing the downtown truck traffic.

- The west side corridor will enhance the overall economic development of southwest Indiana by better linking the free trade zones located at Southwind Maritime Centre and the Evansville Regional Airport.

The Mt. Vernon Area Chamber of Commerce encourages the State of Indiana to make the right decision for southwest Indiana for all the right reasons.

Sincerely,



Nancy L. Burns
Executive Vice President

CC: Governor Frank O'Bannon
Mr. J. Bryan Nicol, Commissioner
Senator Larry E. Lutz
Representative Jonathan Weinzapfel



NOV 13 2001

November 9, 2001

Mr. Larry Chaney
Project Manager, I-69 Corridor Study
HNTB Corporation
310 W. Liberty Street, Suite 701
Louisville, KY 40202

Dear Mr. Chaney:

On October 26, 2001, I sent you a copy of the University of Southern Indiana's statement of support for a belt loop connector road with I-164 and I-69 in the greater Evansville area. Since then, we have made refinements to the original document and enclosed you will find the revised version, dated November 8, 2001. Please discard the original document and use the enclosed revision in any presentations or mailings.

We look forward to participating in the public hearing in Evansville on November 14.

Thank you.

Sincerely,

A handwritten signature in black ink, reading "H. Ray Hoops". The signature is written in a cursive, flowing style.

H. Ray Hoops
President

Office of the President

8600 University Boulevard • Evansville, Indiana 47712-3596 • 812/464-1756 • FAX 812/464-1956

November 8, 2001

UNIVERSITY OF SOUTHERN INDIANA POSITION STATEMENT ON I-69 AND A LOOP ROAD TO SERVE VANDERBURGH, POSEY, AND HENDERSON COUNTIES

About the University of Southern Indiana

The University of Southern Indiana was founded in 1965 as a regional campus of Indiana State University. In 1985, by an act of the Indiana General Assembly, it became a separate state university with its own Board of Trustees. With a steady growth in enrollment annually, the University has become one of the fastest growing colleges in the Midwest. As a result of its growth, the University is poised for a major transformation in the coming decade. The climate exists for future progress that could surpass that of the recent past.

Enrollment for the fall semester 2001 was 9,362, with students coming from 91 Indiana counties, 32 states, and 31 nations. Newly revised projections are that the University will continue to grow at about three percent a year. Annual credit enrollment is expected to exceed 11,000 in the next few years. The University serves an additional 10,000 persons annually through comprehensive noncredit programs, developed in response to the public and employer needs. It is estimated that an additional 150,000 people annually participate in programs other than classes on campus. Presently, there is housing for just over 2,700 students; the remainder commute to class each day.

With southern Indiana in the midst of major economic expansion with the location of Toyota and related manufacturing interests, education is playing an even larger role in regional development. The need for expanded opportunities is more evident than ever with the increased importance of education and the re-education of the workforce to achieve economic competitiveness. Improving the educational attainment level and skills of the citizens of Indiana is critical to the future of the State. The University is committed to providing service to the southern Indiana region by expanding educational opportunities and working in partnership with the community to fulfill both the service and applied research needs of the area.

The University needs better transportation corridors

The volume of commuting students added to the regular course of business on a campus of nearly 10,000 is taxing the main artery -- Highway 62/Lloyd Expressway -- and the Eickhoff Road overpass to the campus. The University supports the concept of a west side loop road which would connect with I-164 on Evansville's east side and I-69. The loop road would eliminate congestion, reduce emissions, and improve safety. It also would provide a new bridge across the Ohio River which could serve Evansville and Mt. Vernon, Indiana, (where

several major industries and the Southwind Maritime Center are located) and Henderson, Kentucky. A new Ohio River bridge constructed in conjunction with a west side loop road would be affordable in view of the gains it would provide for safety, improved air quality, and service to the business sector. The present Highway 41 bridge over the Ohio is the only corridor for 40 miles to the east and about 60 miles to the west.

Adding to the Indiana 62/Lloyd congestion is the increasing volume of trucks carrying coal between Warrick County and the Vectren Energy generating station just a few miles west of the University. Other heavy truck traffic includes those serving industries such as Bristol Myers and GE Plastics in Mt. Vernon, and semi-trailers bringing grain from Southern Indiana and Southern Illinois farms to the Evansville terminal just five miles east of campus. A new Ohio River bridge west of Evansville would facilitate movement of this traffic and would also provide opportunities for grain producers in Western Kentucky to get their product to the Southwind Maritime Center in Mt. Vernon.

Improved transportation corridors will enhance workforce development
New corridors will improve the transportation flow in and around the University and will enhance workforce opportunities because of improved access between Vanderburgh and contiguous counties, including Henderson County in Kentucky. Educational partnerships already exist with the Community College of Indiana-Evansville campus and Kentucky community colleges in Henderson and Owensboro, allowing students to take classes at in-state rates at all these institutions and to move credits easily between them. Improved transportation would further enhance students' ability to take advantage of classes closest to their workplace or their homes. The completion of I-69 will open new opportunities with Vincennes University-Jasper campus and with Indiana University in Bloomington.

The University works closely with communities throughout southern Indiana and is keenly aware of economic development needs in the region. We know the economic development implications of I-69. It will mean new and higher paying jobs for graduates and those continuing their education after employment, benefiting students who work while attending college and those who take permanent employment after graduation. This will keep larger numbers of well-educated citizens in the state.

I-69 and a loop will improve regional air quality

Traffic, especially heavy vehicular traffic, contributes to the ozone problems experienced in this part of the Ohio River valley. The construction of I-69 and a loop road west of Evansville will help manage regional air quality more effectively. Louisville, Kentucky, erred in concentrating major expressway arteries within a narrow corridor, which intensified emission pollution and restricted economic development until better air quality could be established. Concentrating I-164 and I-69 traffic into the same corridor would have a similar

effect for Vanderburgh County. Traffic from north and northeast of Evansville flowing to the University of Southern Indiana, Southwind Maritime Center and Posey County manufacturers, and to the south would bypass Evansville and decrease vehicular congestion and emission-related problems.

Interstate access will enhance regional tourism

The State of Indiana has significant investments in southern Indiana, including recreational and cultural assets. The future potential of Harmonie State Park, Historic New Harmony, and Angel Mounds state historical site can be maximized with improved transportation corridors and interstate access. Historic Southern Indiana is an outreach program of the University which unites an array of natural, historic, and tourist sites in southern Indiana. The development of I-69 and a loop road will enhance the University's work here. A projection from the I-69 study says that nearly a half million visitors can be expected to spend \$120 million. The construction of I-64 across southern Indiana 25 years ago has not ruined southern Indiana; it has enhanced the development of business and promoted tourism, itself an important component of economic development.

A loop road will be economical

Drs. Munir Quddus and Mohammed Khayum of the USI Department of Economics recently performed an analysis of alternative routes for I-69 traffic through Evansville. It quantified some of the benefits of a west side loop. Taking into account benefits such as time saved in driving, safety, convenience, and fuel saved in driving distance, as well as costs such as right of passage costs, environmental impacts, construction, and maintenance costs, a west side loop was found to be economically feasible with a benefit-cost ratio exceeding 2. This result is comparable with alternatives such as extending I-164 on the east side of Evansville to Kentucky with a new bridge on the Ohio east of the present bridge.

A west side loop was projected to yield fuel savings of 169.3 million gallons over 20 years compared to 163 million gallons for an east side bypass. Similarly, the carbon monoxide emission reduction over 20 years was projected to be 37.3 million kg. for a west side loop compared to 36.2 million kg. for an east side bypass. The creation of a west side loop will also serve to divert as much as 43 percent of the traffic from existing routes such as U.S. 41 and I-164 by the year 2010, which serves to increase user benefits in terms of reduced congestion and time spent driving.

An added economic benefit of a west side loop is that it will serve to promote the economic development of the west side of Evansville, thereby reducing the uneven and unbalanced development that exists between the east and west side of Evansville.

Summary

In summary, the construction of I-69 with a western loop road connector to I-164 will reduce traffic within the Evansville city limits, expedite the movement of traffic

across the Ohio River, provide a safety net in the event the bridge south of Evansville is damaged, improve air quality, improve regional workforce opportunities, reduce travel time, and enhance economic development. It will contribute to the University of Southern Indiana's growth by easing the commute to USI from western Kentucky communities and for student from communities along the I-69 corridor in Indiana. It also, by generally enhancing workforce development, will allow the University to keep larger numbers of students and graduates in the region, attracted by higher salaries and a better quality of life.

NOV 10 2001

HNTB

Posey County Commission**126 East Third Street****Mt. Vernon, IN 47620****John Sherretz, President
Robert Daig
Martin R. Rodman****November 6, 2001****Mr. Larry Chaney, Project Manager
HNTB Corporation
310 West Liberty Street, Suite 701
Louisville, KY 40202****Dear Mr. Chaney:**

The decision on placement of an Interstate 69 route in Vanderburgh County should be based on economic, health and safety perspectives only. The Mt. Vernon Area Chamber of Commerce supports a belt-loop with two new sets of bridges that would provide an opportunity to multiply significantly the economic, environmental and risk management benefits of the Interstate 69 project.

- ❑ The University of Southern Indiana is the fastest growing university in the State of Indiana. Enrollment is at over 9,400 students. Access to the university is currently through Evansville on State Road 62. Improved access to educational institutions in both Indiana and Kentucky would improve economic development capabilities.
- ❑ The recent closing of one lane of the Henderson Bridge had disastrous effects on traffic flow. How many times in recent years has the bridge been closed due to barge collisions? An alternate bridge crossing the Ohio River would provide excellent risk management and open markets to the south. There is no bridge west of Henderson until you get to Shawneetown, Illinois.
- ❑ The State of Indiana has significant investments and economic development, including recreational and cultural assets in southwestern Indiana. Siting the Interstate crossing west of Evansville would enhance the future potential of Southwind Maritime Centre, Harmonie State Park, Hovey Lake Wildlife Refuge, and Historic New Harmony.

Mr. J. Bryan Nicol, Commissioner

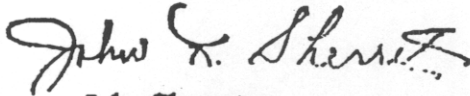
November 6, 2001

Page 2.

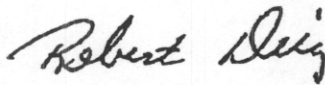
- A west side route will be a major step toward completing a belt-loop around the Evansville urban area. Currently Evansville is the only major urban area in Indiana without such a belt-loop. Bridge locations west and east of Evansville would help manage air quality more effectively by decreasing vehicular congestion and emission related problems.

We encourage the State of Indiana to make the right decision for southwest Indiana for all the right reasons.

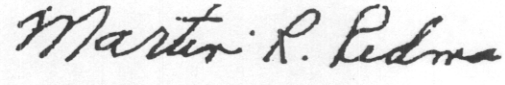
Sincerely,



John Sherretz
President



Robert Deig



Martin R. Redman

CC: J. Bryan Nicol, Commissioner
Senator Larry E. Lutz
Representative Jonathan Weinzapfel



INDIANA PORT COMMISSION

I.S.T.A. Center • 150 West Market Street • Ste 100
Indianapolis, Indiana 46204 • USA
(317) 232-9200 • Fax (317) 232-0137

Nov. 14, 2001

Mr. Timothy N. Miller
Director of Program Management
HNTB Corporation
111 Monument Circle, Suite 1200
Indianapolis, IN 46204-5178

Dear Mr. Miller,

The Indiana Port Commission has a very clear position on development of a future I-69 route around the Evansville area. The Port Commission strongly supports a western corridor around the Evansville Metropolitan Area because of its proximity to the state's public port in Mount Vernon – Southwind Maritime Centre.

The port offers a connection for businesses to link the use of truck, rail and water-borne transportation in the movement of cargo. The ports emphasize water transportation, which can reduce traffic on U.S. roadways and is more environmentally friendly:

- A 15-barge tow can haul the same amount of cargo as 900 large semis.
- Barge-tows travel 514 miles on one gallon of fuel (semis travel 60 miles).

The key to a port's success lies in its transportation costs. Southwind Maritime Centre has excellent access to the Inland Waterway System, which links imports and exports through New Orleans and the Gulf of Mexico. It also has an outstanding rail connection with CSX, but the truck connections at the Mount Vernon port are marginal to say the least. Current routes are time-consuming and the highway system in and out of the port area is very poor.

Currently, about 80,000 trucks go through Southwind's facilities each year. The port moves 2 to 4 million tons of cargo annually over its docks.

The Indiana Port Commission operates two Ohio River ports that have experienced significantly different rates of growth because of interstate access.

- Southwind Maritime Centre opened in 1976. Today, the port has eight commercial tenants located within its boundaries.
- Clark Maritime Centre at Jeffersonville opened in 1985. In 1993, the port had six tenants but a year later I-265 opened connecting Clark directly to I-65. In 2001, the port welcomed its 22nd commercial tenant.

Clark Maritime Centre
5100 Port Road
Jeffersonville, Indiana 47130
FTZ #170
(812) 283-9662

Indiana's International Port
/Burns Harbor at Portage
6625 S. Boundary Drive
Portage, Indiana 46368
FTZ #152
(219) 787-8636

Southwind Maritime Centre
1700 Bluff Road
Mount Vernon, Indiana 47620
FTZ #177
(812) 838-4382

Even though Clark is a younger port, it is more developed than Southwind in many areas because of its excellent interstate connections. Tenants at Clark can leave the port and enter our nation's interstate highway system without encountering one stop sign or traffic light. Port tenants can distribute goods by truck to more than two-thirds of the U.S. market within a day's drive. Clark also benefits from a great deal of steel business because of its location in the center of our nation's automotive- and appliance-manufacturing sector.

Currently, Southwind has the same potential for growth, but lacks the interstate access necessary to benefit from it. Additional effects of interstate access at the river ports are evident in an economic impact study recently performed by Indiana University. The study showed that in 1993 (before I-265), Clark supplied 420 direct jobs. By 1999, that number had more than tripled to 1,344 jobs. Over the same time, Southwind actually lost 19 jobs within the port, reporting 333 in 1999.

Economic contributions by these two ports are very different because of interstate access:

Annual property tax contributions to the local communities:

- Clark: \$478,000
- Southwind: \$123,000

Return on investment:

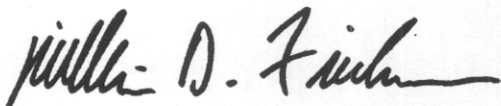
- By 1995, Clark had \$84 million in private investment and \$24 million in state funds. By 1999, the private investment had reached \$255 million compared to the state's \$30 million.
- By 1995, Southwind had received \$72 million in private investment to \$25 million in state funds. Through 1999, private investment was \$96 million while the state's contributions were \$26 million

Overall economic impact:

- In 16 years, Clark's impact has grown to \$354 million per year.
- In 25 years, Southwind's impact has reached \$236 million per year.

We hope these numbers show how important a western corridor of I-69 around Evansville would be to Southwind Maritime Centre, the local community and the State of Indiana. We request that our Indiana officials do everything they can to make this route a reality because of the tremendous benefits for our state. Thank you for your time. Please contact us if you have any questions.

Sincerely,



William D. Friedman, Executive Director
Indiana Port Commission

Henderson

**Economic
Development Council**

1951 Barrett Ct. • P.O. Box 674 • Henderson, KY 42419-0674

Phone: 270.826.7505 • Fax: 270.827.2969

Toll Free: 1-877-434-3766

email: results@hendersonedc.com • www.hendersonedc.com

RESOLUTION OF SUPPORT FOR INTERSTATE 69 CORRIDOR

WHEREAS, The Henderson Economic Development Council acknowledges and realizes the significant economic impact that Interstate 69 will play in the retention and expansion of new and existing industries in the tri-state region.

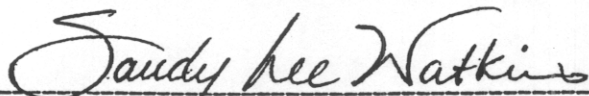
WHEREAS, The completion of Interstate 69 will greatly enhance the long-term economic competitiveness of the tri-state region by preventing the erosion of the current manufacturing base.

WHEREAS, The eastern route around Evansville, Indiana will connect with the existing I-164, cross the Ohio River on the eastern side of Henderson, Kentucky and connect with the Kentucky Parkways system.

WHEREAS, This eastern route will utilize existing infrastructure thereby reducing the overall cost of the project for the most efficient use of funds.

NOW,
THEREFORE, The Henderson Economic Development Council and its Board of Directors do hereby support and recommend Interstate 69 Project using the eastern route from Evansville, Indiana into Henderson, Kentucky. Such route will assist in maintaining the vitality of the economic base, thereby encouraging economic growth in the entire tri-state region.

Resolved this 12th day of November, 2001



Signed:

Sandy L. Watkins, President of the Board of Directors



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The John James Audubon
Museum showcases one of the
most extensive collections of
Audubon's work in the world.

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42419-0376

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Fax: (270) 827-4461

Email:
info@hendersonchamber.org

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www.hendersonky.com

Bridging Roads To Success!
**Henderson Henderson County
Chamber of Commerce**

Resolution in
Support of Favored Route for Bridge Crossing
For Interstate 69

Whereas, the Henderson-Henderson County Chamber of Commerce recognizes the importance of access to interstate roads to our continued growth and economic prosperity; and,

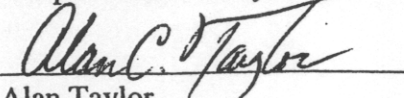
Whereas, we recognize the need to work with the area of southern Indiana and western Kentucky in which the proposed I-69 road will travel; and,

Whereas, we all must consider the cost of the construction of I-69 and the placing of the roadway in the most appropriate location that provides for the most efficient use of funds and still improves the economic opportunities to the region; and,

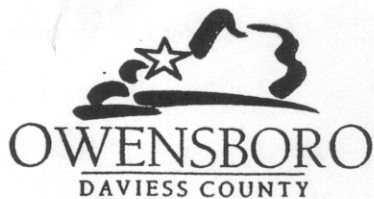
Now, therefore, be it resolved that the Henderson-Henderson County Chamber of Commerce and its Board of Directors, with the credible and professional data presented to the Transportation Committee of the Henderson-Henderson County Chamber of Commerce, supports and recommends the I-69 Corridor using the Eastern route from I-164 across the Ohio River into Kentucky. Such a route directly benefits Vanderburgh and Warrick counties in Indiana and Henderson, Daviess and McLean counties in Kentucky. This route will also benefit Posey County in Indiana and Union County in Kentucky by bringing an interstate much closer. Therefore, this route will provide access and benefit the largest population segment in the region; and,

Furthermore, the committee recognizes the need and benefits of the completion of a loop around Henderson and Vanderburgh counties that would continue from Henderson in a westward direction to a point between Evansville and Mr. Vernon and continue North to the existing I-64. We therefore support the additional funding after the construction of the favored eastern route.

Adopted this 31st day of October, 2001.


Alan Taylor,
Chairman of the Board

Attest: 
George H. Warren, President



The Chamber of Commerce and Industry, Inc.

November 28, 2001

Mr. Tim Miller
HNTB Corporation
111 Monument Circle
Indianapolis, IN 46204

DATE RECEIVED
HNTB INDIANAPOLIS
JOB NO. _____
FILE _____

NOV 30 2001

ROUTE TO:

RE: SIU No. 4/ I-69 Route Henderson, KY- Evansville, IN Connector

Dear Mr. Miller,

These comments and suggestions come to you as a result of the information disseminated at public meetings held on November 14 in Evansville, IN and on November 15 in Henderson, KY concerning the new connection between these two cities proposed as part of the development of I-69.

For purposes of clarity my remarks will be organized around the comment survey made available at the meetings and will focus on the proposed Purpose and Need Statement as well as the benefits of selecting the eastern most point for the crossing.

As drafted, the Purpose and Need Statement defines three separate areas of emphasis.

Need #1 is drafted to read: "To support the completion of I-69 as a national and international trade corridor." Two separate objectives are defined under this need. The first of these deals with facilitating movement through the corridor and it appears to me that any of the proposed route alternatives would meet this need. The second objective deals with connection to existing routes, destinations and freight sources.

A crossing point east of Henderson would clearly provide the most benefit in meeting this objective. An eastern route would provide much better connectivity to existing interstate and limited access parkways systems in Kentucky and Indiana. By crossing east of Henderson, the route would take advantage of I-164 in Evansville, the Audubon and Pennerile Parkways in Kentucky and would even provide direct, limited access connections to I-65 in Kentucky. This route would also offer much more efficient links for the industrial and population concentration in the region by placing the connection more proximate to not only Evansville and Henderson but also to the significant business centers of Owensboro and Hancock County Kentucky.

These business centers and operations include major sources of freight including the aluminum industries of Hancock County, AK Steel, and the Owensboro Riverport facility. The Owensboro port is one of the busiest public ports on the Ohio River and is used as a freight shipping and receiving point for businesses throughout the tri-state region.

In reviewing all of the proposed needs and objectives, no mention was noted of any concern over completing the project in the timeliest and cost efficient manner possible and my suggestion would be that such a statement be added as Objective #3 under need #1. This addition would also appear to support selection of an eastern crossing by allowing use of existing corridors, avoiding protected lands and minimizing necessary construction activities.

Proposed need #2 is "to provide sufficient cross-river mobility in Evansville, IN/ Henderson, KY area." Only one objective is described under this need but several different performance measures are offered. Again, properly designed it would appear that any of the proposed routes would meet this need, objective and performance measures.

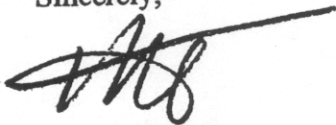
As a suggestion, I would propose that a second objective be added under need #2 dealing with a desire to provide a facility that would not only meet existing and forecasted traffic requirements but would also offer the greatest access to the largest number of businesses and residents of the region. As a large business and population center it is important that access to the new facility from the Owensboro area be maximized.

Need #3 is defined as "strengthen the transportation network in Evansville, IN/ Henderson, KY area" and includes only one objective and two performance measures. The second of these measures states a desire to minimize the number of travel hours on arterial roadways. Again, because of the population center it would appear that a route providing the nearest access point to Owensboro would best meet this requirement by allowing a larger number of vehicles to travel a shorter distance to reach the access point.

The maps provided at the public meetings provided a good general overview of the proposed routes but left open the possibility of a fairly wide path for each option. As noted earlier, it appears clear to me that the proposed corridors that result in a crossing on the east side of Henderson and Evansville would better serve the region and project needs as proposed and defined. Of these possibilities, Corridor I seems to hold the most promise.

Your consideration of these comments and suggestions is most appreciated. I look forward to working with you as this project develops and would ask that you keep me advised of significant developments.

Sincerely,



Hugh A. Haydon
President/CEO

CC: John Carr, Kentucky Transportation Cabinet
Ted Merryman, Kentucky Transportation Cabinet

INDIANA PORT COMMISSION

ISTA Center – 150 W. Market St. – Ste. 100
Indianapolis, IN 46204 – USA
(317) 232-9200 – Fax (317) 232-0137

Nov. 14, 2001

Mr. J. Bryan Nicol, Commissioner
Indiana Department of Transportation
100 N. Senate Ave., Room N755
Indianapolis, IN 46204

Dear Mr. Nicol,

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The port offers a connection for businesses to link the use of truck, rail and water-borne transportation in the movement of cargo. The ports emphasize water transportation, which can reduce traffic on U.S. roadways and is more environmentally friendly:

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5100 Port Road
Jeffersonville, IN 47130
(812) 283-9662
Fax (812) 282-7505

**Indiana's International Port/
Burns Harbor at Portage**
6625 S. Boundary Drive
Portage, IN 46368
(219) 787-8636
Fax (219) 787-8636

Southwind Maritime Centre
2751 Bluff Road
Mount Vernon, IN 47620
(812) 838-4382
Fax (812) 838-4377

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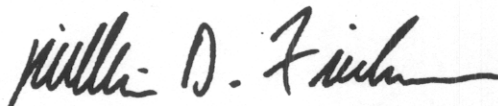
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We hope these numbers show how important a western corridor of I-69 around Evansville would be to Southwind Maritime Centre, the local community and the State of Indiana. Thank your for your time. Please contact us if you have any questions.

Sincerely,



William D. Friedman, Executive Director
Indiana Port Commission



CITY OF EVANSVILLE

ONE N.W. MARTIN LUTHER KING, JR. BLVD. • ROOM 302

EVANSVILLE, INDIANA 47708-1833

(812) 436-4962

FAX (812) 436-4966

**Interstate 69 Evansville-Indianapolis Corridor
Public Information Meeting
Reitz High School
September 25, 2002, 5:00 pm**

OFFICE OF THE MAYOR
RUSSELL G. LLOYD JR.

Thank you for allowing Evansville and Southwest Indiana residents to voice their opinion on the proposed national Interstate 69 (I-69) corridor passing through Evansville to Henderson, Kentucky. Many of our citizens have spent years working to bring this project to this stage – we appreciate your efforts. We are anxious to see the I-69 project completed in a timely and expeditious manner, especially the link from Indianapolis to Evansville and the new Ohio River Bridge that it will bring. We appreciate INDOT's commitment to the I-69 project.

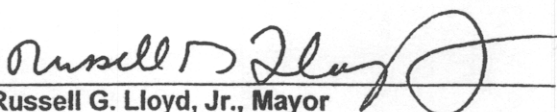
J-1

I strongly urge you to give favorable consideration to Corridor 1, the western-most route. It is the City of Evansville's goal to have a freeway loop around our city like so many other growing cities and cities our size already have. Our West Side has literally exploded with development in the last several years, especially with the University of Southern Indiana's enrollment growth and expansion, as well as and the commercial and residential development in this area. *I don't feel route J-1A is cost justified.*

Nationally, I-69 will be an indispensable asset in continuing the international trade route from Canada to the Gulf of Mexico, and the leg passing through Evansville will be a crucial component. Southwind Maritime Centre and General Electric Plastics in Mount Vernon create a substantial amount of over-the-road traffic for our West Side that must travel through the middle of Evansville on U. S. Highway 41 to go south. Rerouting this truck traffic is very important for the safety of our citizens and the efficient movement and flow of traffic. I-69 would be of great service to our friends in Posey County and would greatly enhance development in Southwest Indiana. Finally, the Corridor 1 route would give the City of Evansville a second set of bridges west, allowing for optimum traffic flow around our city.

I know the west loop offers challenges just as any new highway does, but we believe that it is the best route for continued growth of our community and the safety of the motoring public.

As Mayor of Evansville I have a responsibility to plan for the growth of our City. The West I-69 route best allows for orderly growth and development not only for Evansville but the entire Southwestern Indiana area.


Russell G. Lloyd, Jr., Mayor

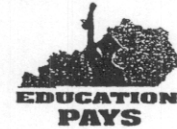


City of Owensboro Kentucky

P.O. BOX 10003
OWENSBORO, KENTUCKY 42302-9003
PHONE: 270-687-8550
Fax: 270-687-8585

Mayor
WAYMOND MORRIS
Mayor Pro Tem
CHARLES CASTLEN
Commissioners
JAMES R. WOOD
OLIVE BURROUGHS
BILL VAN WINKLE

Explore www.owensboro.org



I-69 BRIDGE CROSSING – PUBLIC COMMENT MEETING Thursday, June 27, 2002, 4:00 – 8:00 p.m. Henderson County High School

As a member of a group from Southern Indiana and Western Kentucky who have been working together for years to improve transportation in our region, I strongly support the routes east of Evansville linking I-64 to the Breathitt Parkway south of Henderson.

From information reported in a June 20, 2002, article in the Owensboro Messenger-Inquirer, the following comparison chart was produced:

Corridor No.	Route Description	Miles In Route	Estimated Cost	No. of Vehicles on Route Daily
1	West of Evansville linking I-64 about 4 miles east of Poseyville in Posey County to the U.S. 425 interchange with Breathitt (formerly Pennyrile) Parkway south of Henderson	31	\$959 Million	7,900
2	East of Evansville linking I-164 just east of the River Road interchange to the Breathitt Parkway just south of Henderson. The route would run west of Angel Mounds State Memorial.	19	\$581 Million	27,000
3	East of Evansville linking I-164 just north of the Covert Avenue interchange to the Breathitt Parkway south of Henderson. The route would run east of Angel Mounds.	32	\$685 Million	20,000

I strongly support the completion of I-69 as a national and international trade corridor, and I believe a connection between Indiana and Kentucky east of Evansville would best serve the entire region surrounding Evansville, Indiana, and Henderson, Kentucky. A route east of Evansville would provide sufficient cross-river mobility and be the most beneficial for the Evansville, Indiana / Henderson, Kentucky, areas for the following reasons:

- It would provide direct access to the most populated and industrialized portion of the region, including the industrial and business center of Daviess and Hancock Counties in Kentucky. The City of Owensboro, located in Daviess County and the third largest city in Kentucky, has one of the busiest ports on the Ohio River.

Further, the Owensboro Riverport is growing and expanding, which will only increase the industrial flow of this region.

- It would promote cost efficiency and timeliness, because existing roadways could be used to keep costs down and to move the corridor along on a fast track. And, using roadways already in place would minimize the amount of protected lands that may be needed for this section of I-69, while decreasing construction time and costs.
- It would provide the largest number of people and industries the most direct access to I-69. It would also decrease the vehicle hours of travel on arterial roadways. When the Natcher Bridge opens sometime this August, the flow of traffic in this region will increase even more.

I am strongly opposed to Corridor 1, which is the route proposed to go west of Evansville. Not only this proposed route serve the least number of vehicles daily (around 7,900) but its estimated cost of \$959 million also far exceeds the two eastern routes. This west route also would have the effect of building a bypass around Evansville, and I do not believe this should be done with federal dollars appropriated for the purpose of enhancing trade from Canada to Mexico.

The proposed eastern routes are not only supported by the cities of Southern Indiana and Western Kentucky, but these routes are also supported by the Secretary of the Kentucky Transportation Cabinet, James C. Codell, III.

There is no doubt that an eastern path for I-69, connected with a four-lane U.S. 231 in Southern Indiana and the opening of the William H. Natcher Bridge would definitely have a significant economic impact on this region. Highway 231, which connects the Great Lakes to the Gulf of Mexico, is already one of the hottest industrial corridors in Indiana, providing linkage for the automotive industry (A K Steel, Toyota, Subaru, Saturn, Dana Corporation, and Jasper Engineers. It also services the wood and plastics manufacturers in Kimball International and Spencer Plastics, besides serving Crane Naval Depot – the 2nd largest employer south of Indianapolis.

Respectfully,

Waymond Morris
Waymond Morris
Mayor of Owensboro

Kevin B. Hulse
Executive Director
Owensboro-Daviess County Tourist Com.
Mervyn H. Hulse + A



CITY OF EVANSVILLE

OFFICE OF THE MAYOR
RUSSELL G. LLOYD JR.

ONE N.W. MARTIN LUTHER KING, JR. BLVD. • ROOM 302
EVANSVILLE, INDIANA 47708-1833
(812) 436-4962
FAX (812) 436-4966

Interstate 69 Evansville-Indianapolis Corridor
Public Information Meeting
Reitz High School
June 26, 2002, 4:00 pm

and Southwest Indiana

Thank you for allowing Evansville residents to voice their opinion on the proposed national Interstate 69 (I-69) corridor going through Evansville to Henderson, Kentucky. Many of our citizens have spent years working to bring this project to this stage – we appreciate your efforts. We are anxious to see the I-69 project completed in a timely and expeditious manner, especially the link from Indianapolis through Evansville and the new Ohio River bridge that it will bring.

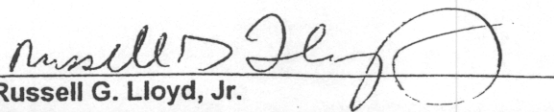
Appreciate INDOT's commitment to I-69 project.

I strongly urge you to give favorable consideration to Corridor 1, the western-most route. It is the city's goal to have a freeway loop around our city like as so many other growing cities and cities our size have. Our West Side has literally exploded with development in the last several years, especially with the University of Southern Indiana's enrollment growth and expansion and the commercial and residential development in this area.

Nationally, I-69 is important to continue the NAFTA international trade route from Canada to the Gulf of Mexico, and this leg is a crucial component. Southwind Maritime Centre in Mount Vernon creates a substantial amount of over-the-road traffic for our West Side that must travel through the middle of Evansville on U. S. Highway 41. Rerouting this truck traffic is very important for the safety of our citizens and the efficient movement of traffic. This would be of great service to our friends in Posey County and enhance development in Southwest Indiana. Finally, the Corridor 1 route would give the City of Evansville a second set of bridges west, allowing for optimum traffic flow around our city.

I know the west loop offers challenges just as any new highway does, but we believe that it is the best route for continued growth of our community and the safety of the motoring public.

As Mayor of Evansville I have a responsibility to plan for the growth of our City. The West I-69 route best allows for growth for Evansville and Southwest Indiana.


Russell G. Lloyd, Jr.
Mayor



Daviess County Fiscal Court

COUNTY JUDGE/EXECUTIVE
Reid Haire

COUNTY ATTORNEY
Robert M. Kirtley

Daviess County Courthouse
P. O. Box 1716
Owensboro, Kentucky 42302-1716
Telephone: (270) 685-8424
Fax: (270) 685-8469
www.daviessky.org

COUNTY COMMISSIONERS
Bruce Kunze - Central Division
Jim Lambert - East Division
Mike Riney - West Division

November 29, 2001

Mr. Tim Miller
HNTB Corporation
111 Monument Circle
Indianapolis, IN 46204

Dear Mr. Miller:

We are writing regarding the Sections of Independent Utility (SIU) No. 4, in particular the connection of I-69 between the cities of Evansville, IN and Henderson, KY. In the material distributed at the November 14th meeting in Henderson, it is stated that three needs are to be met during the completion of the Evansville, Indiana/Henderson, Kentucky section of I-69.

Need #1: To Support the Completion of I-69 as a National and International Trade Corridor.

A connection between Indiana and Kentucky east of Henderson would be the most beneficial in meeting this first need. An eastern route would be able to take advantage of the roadways that are already in place in and around Evansville and Henderson. The eastern route would provide direct access to the most populated and industrialized portion of the region including the industrial and business centers of Daviess and Hancock Counties Kentucky. The city of Owensboro, located in Daviess County and the third largest city in Kentucky after Louisville and Lexington, has one of the busiest ports on the Ohio River in the Owensboro Riverport. Furthermore, the Riverport is discussing an expansion that will only increase the industrial flow of this region.



Daviess County Fiscal Court

COUNTY JUDGE/EXECUTIVE
Reid Haire

COUNTY ATTORNEY
Robert M. Kirtley

Daviess County Courthouse
P. O. Box 1716
Owensboro, Kentucky 42302-1716
Telephone: (270) 685-8424
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www.daviessky.org

COUNTY COMMISSIONER
Bruce Kunze - Central Division
Jim Lambert - East Division
Mike Riney - West Division

Need #2: To Provide Sufficient Cross-River Mobility in Evansville, Indiana/Henderson, Kentucky Area.

It appears that any of the proposed corridors (A - I) would meet this need. However, cost efficiency and timeliness of the project would point to the need of an eastern route. As mentioned earlier, existing roadways could be used to keep costs down and to continue moving SIU No. 4 along on a fast track. The eastern route would also decrease the necessary construction work and minimize the amount of protected lands that will be used during this section of I-69.

Need #3: To Strengthen the Transportation Network in Evansville, Indiana/Henderson, Kentucky Area.

For this third need to be met, Corridor I would seem to be the most logical choice. Corridor I would provide the largest number of people and industries the most direct access to I-69. That route would also meet the desired goal of reducing the proposed vehicle hours of travel on arterial roadways.

To best serve the entire region surrounding Evansville, Indiana and Henderson, Kentucky, a crossing on the eastern side of Henderson would be most ideal. The eastern route would clearly be the ideal option to meet all the needs and objectives that have been set forth. As the Natcher Bridge opens next summer in Daviess County, the flow of traffic will increase even more in this region. This further increases the need for an eastern/Corridor I-type route.

We thank you for your time and consideration of these comments. Please keep us informed as this project progresses and we look forward to working with you in the future.

Sincerely,

Reid Haire
Judge Executive

Waymond Morris
Mayor, City of Owensboro

CC: Ted Merryman, Kentucky Transportation Cabinet; John Carr, Kentucky Transportation Cabinet; Sheryl Beasley, Governor Paul Patton's Office

CITY OF MT. VERNON
MAYOR'S OFFICE

JACKSON L. HIGGINS

City Hall Annex
520 Main Street
Mt. Vernon, Indiana 47620-1846
(812) 838-5576
Fax (812) 838-8704

November 14, 2001

Indiana Department of Transportation
Bryan Nicol, Commissioner

I am a life-long resident of Mount Vernon and for thirty-seven years, I have represented Mount Vernon as Mayor and City Councilman.

I strongly support the belt-loop concept with a bridge on the west side of Evansville.

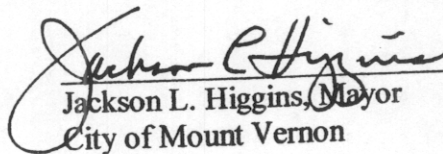
According to a recent truck survey, over 1,400 trucks per week leave Mount Vernon for points south. With over 20-plus stoplights from Mount Vernon to the Henderson bridge.....that's a lot of stopping and starting.

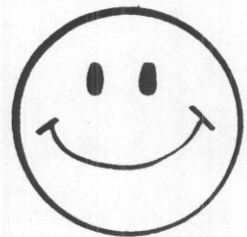
For the industries located in the Mount Vernon area, a western loop would be faster and safer....plus reduce vehicular congestion and help air quality.

A west side route would be a major step towards completing a belt-loop around the Evansville urban area. Evansville is the only major urban area in Indiana without such a belt-loop.

The State of Indiana has three facilities in our county.....Southwind Maritime Centre, Hovey Lake and Harmony State Park. The State would benefit financially from the increased use of these state-own facilities.

Thank you for your consideration.


Jackson L. Higgins, Mayor
City of Mount Vernon



MT. VERNON
SMILE CITY