

ILLINOIS ROUTE 13 (FAP 331)
FROM EAST OF DIVISION STREET IN CARTERVILLE TO
WEST OF HALFWAY ROAD IN MARION
WILLIAMSON COUNTY, ILLINOIS



ENVIRONMENTAL ASSESSMENT

Submitted Pursuant to 42 USC 4332 (2)(c)
by the

U.S. Department of Transportation
Federal Highway Administration

And

Illinois Department of Transportation

6/30/08

Date of Approval

7/2/08

Date of Approval

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The proposed action is to reconstruct the roadway to provide a six-lane roadway section (three lanes in each direction) separated by an open, grass median from Division Street in Carterville, Illinois to Halfway Road in Marion, Illinois. Intersection improvements and signal modernizations are also proposed throughout. A railroad overpass is proposed for the Burlington Northern/Santa Fe railroad crossing just east of Skyline Drive in Marion. A frontage road is also proposed on the south side of IL 13 from Walton Way to Skyline Drive as well as a frontage road system (comprised of existing and proposed pavement) on both the north and south sides of IL 13 from IL 148 near Herrin to Division Street in Carterville. In addition, an interchange is proposed near Wolf Creek Road near Crainville to provide access to IL 13 and the frontage road system. Issues with the project include: access restrictions, displacements, noise and wetland impacts.

Access will be limited or restricted at the intersections located between Division Street in Carterville to IL 148 near Herrin. A new interchange is proposed near the center of this portion of roadway to provide access to IL Route 13 from the proposed frontage road network. The proposed project results in five residential displacements and one commercial displacement at the intersection of IL 13 with Division Street in Carterville. One additional displacement occurs at the Main Street intersection in Crainville. Noise abatement measures were evaluated for nine receptors in the corridor and the study determined abatement measures to be feasible and reasonable for the receptor located at Samuel Road near Herrin. Wetland impacts total 1.85 acres from seven wetland sites. Compensation for these wetland impacts will be provided from IDOT's Sugar Camp Creek Wetland Mitigation Bank located in Franklin County. The U.S. Army Corps of Engineers Section 404 permit and IL Environmental Protection Agency 401 permit will be required for wetland impacts and stream crossings.

**ENVIRONMENTAL ASSESSMENT
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SECTION 1.0

PURPOSE AND NEED FOR ACTION

Section 1.0

PURPOSE AND NEED FOR ACTION

1.1 Description and Location of the Proposed Project

The proposed project provides for a transportation improvement of Illinois Route 13 from the intersection with Division Street in Carterville to the intersection with Halfway Road in Marion in Williamson County. (See Figure 1.1). Recent economic growth, stemming primarily from population growth and the recent commercial and industrial development from Carterville to Marion, has resulted in increased traffic volumes on this principal arterial with very few east-west alternate routes adequate for immediate traffic relief. Improvements to Illinois Route 13 are necessary to provide an adequate transportation system to support the traffic volumes associated with the existing and future economic growth in the corridor. In addition, an adequate transportation system would enhance the economic potential for the area by providing a safe and efficient means to transfer goods and services.

The estimated length of the project is about 6.7 miles. With existing frontage roads already in place and heavily utilized by locals, traffic and congestion levels decrease to the west of the intersection with Division Street, making this the logical location for the western endpoint of the study. Interstate 57 is a significant traffic generator and destination point for this IL 13 corridor, making it a logical choice for the eastern endpoint of the study. Therefore, the reasonable endpoints for this project to be studied or “logical termini” extend from the intersection of IL 13 with Division Street at Carterville (western terminus) to the intersection of IL 13 with I-57 in Marion (eastern terminus). (See Figure 1.2).

1.2 Project History

Illinois 13 is a crucial link in the transportation infrastructure of southern Illinois. This roadway is functionally classified as a rural principal arterial.

The original old IL Route 13 pavement between Carbondale and Marion was built between 1923 and 1925. In 1939, construction began on the new IL Route 13 in order to reroute a 2 lane section around the soon to be constructed Crab Orchard Lake. In 1948, IDOT constructed the two-lane, IL Route 13 from Carbondale to the Jackson / Williamson County line. In 1950, the traffic on new IL Route 13 was 4,300 vehicles per day.

In 1958, IDOT built a 2 lane section of new IL Route 13 from Carterville to IL 148, and in 1959, a four lane section from IL 148 to Marion. In 1959, the traffic was 5,700 vehicles per day.

In 1966-1970 the remainder of IL Route 13 was converted to a four lane facility. The average daily traffic in 1970 was 13,500 vehicles per day. Today, traffic on IL Route 13 between Carbondale and Marion is between 25,200 and 35,900 vehicles per day. With the recent increase in commercial and industrial development between Marion and Carterville, traffic volumes are quickly approaching the maximum capacity level of 37,000 vehicles per day for an acceptable level of service for the four lane facility. (Further discussion of level of service is provided in section 1.4.3).

In addition, there is currently a feasibility study for the Illinois Route 13 Corridor extending from Illinois Route 166 just east of Marion to Illinois Route 149 in Murphysboro. Improvements to overall traffic flow in this corridor are being considered. These improvements may include additional lanes and increased access control.

1.3 Purpose of the Project

The purpose of this proposed project is to provide for a transportation improvement of Illinois Route 13 from Division Street in Carterville to Halfway Road in Marion, Williamson County. Specific needs addressed by the project include Economic Development, Safety, and Traffic Mobility and Efficiency.

1.4 Need for the Project

1.4.1. Economic Development

Illinois 13 is a four lane expressway providing the primary east-west transportation corridor in Southern Illinois that connects the cities of Murphysboro, Carbondale, Carterville, Herrin, Marion and Harrisburg. Illinois 13 is the vital transportation link to Interstate 57 for these and other communities. A comparison of the U.S. Census figures from 1990 and 2000 indicates that Carterville's population grew by 22.4%, while Marion's population increased by 9.6% during the same period. Growth between 2000 and the 2006 U.S. Census estimate is 9.8% for Carterville and 6.8% for Marion. This is comparatively much higher than the growth rate of 6% for all of Williamson County for the period from 1990 to 2000. Concurrently, commercial and industrial development along Illinois 13 between Marion and Carterville has also accelerated in recent years providing numerous new jobs for area residents. (See Table 1.1).

TABLE 1.1 RECENT CORRIDOR DEVELOPMENTS

<u>Company</u>	<u>Type of Business</u>	<u>Employees</u>	<u>Est.</u>
Aisin Mfg. Illinois	Automobile Components	710	2001
Aisin Light Metals	Automobile Components	110	2003
Aisin Electronics	Automobile Components	100	2004
Blue Cross/Blue Shield	Medicare Claims Processing	300	1984
Circuit City	Distribution Center	300	1999
Crisp Container Corp.	Plastic Beverage Bottles	100	1997
Excel Mining Systems	Mine Roof Bolt Systems	100	1985
Menards	Home & Garden Center	400	2006
So.IL. Miners Baseball	Minor League Stadium	250	2007
WalMart SuperCenter	Department Store	500	2006
Wisconsin Physicians Serv.	Medicare Claims Processing	350	2000

These employers are all located within or adjacent to the Illinois 13 project corridor. The Williamson County Regional Economic Development Corporation, the Airport Business Park, and the Butler Industrial Park are all located adjacent to the Illinois 13 corridor. Also located in the regional area are the Herrin Industrial Park and another Williamson County Industrial Area. The employees of these facilities utilize the Illinois 13 corridor daily and anticipated expansion of the Aisin facilities may increase this usage. Also relying on the Illinois 13 corridor are regional distribution centers for United Parcel and Federal Express which are located in Marion. Other developments along Illinois 13 include Heartland Regional Medical Center, Illinois Center Mall, and numerous other retail establishments, particularly those located on 'The Hill', the newest area of development in Marion. (See Figure 1.3 for Business Locations).

In conjunction with the regional development and population growth, increased traffic volumes have negatively affected the potential for further economic expansion by creating congestion and delays. A need exists to provide an adequate transportation facility to provide for the effective transfer of goods and services and enhance the potential for continued economic growth.

1.4.2 Safety

Traffic crash data was compiled for the years 2002 through 2006. There were 994 traffic crashes resulting in 378 injuries and three fatalities during the period studied. Of the 378 injuries, 91 (or 12%) were Type A injuries. A Type A injury is defined as any injury, other than a fatal injury, which prevents the injured person from walking, driving, or normally continuing the activities he/she was capable of performing before the injury occurred. This includes severe lacerations, broken/distorted limbs, skull injuries, chest injuries and abdominal injuries. The predominant type of crash that occurred was rear-end collisions (536 crashes or 54 %.) Of those rear-end crashes, 455 occurred during dry, clear, daylight (or lighted) conditions and accounted for 187 injuries (49% of injury total) and one fatality. These rear-end crashes resulted in 21 Type A injuries, or 23% of the Type A injury total. The second leading type of crash was turning movement (18%) and accounted for 97 injuries (26% of injury total) and one fatality. The turning movement crashes resulted in 41 Type A injuries, or 45% of the Type A injury total. Angled collisions accounted for only 7% of the total crashes, but resulted in 65 injuries (17% of the injury total). Angled collisions resulted in 18 Type A injuries, or 20% of the Type A injury total. Animal-vehicle collisions accounted for 12% of the crash total. Sideswipes, fixed object, overturned vehicle and other types of crashes accounted for the remainder of the injuries. The third fatality was caused by a head-on collision.

Based on the results of the crash report (Table 1.2) and the Type A Injury/Fatality Location Map (Figure 1.4), it can be deduced that the rear-end and turning movement crashes in the Illinois Route 13 corridor from Carterville to Marion were the direct result of the high traffic volumes and the large number of turning vehicles with high approach speeds. High numbers of crashes occurred at intersections while the remaining crashes occurred at random highway segments throughout the corridor. (See Table 1.3). Based on this data and projections for constant increases in traffic volumes created by regional and economic growth, a need is identified to provide roadway and intersection improvements that will address the safety issues along Illinois Route 13 between Carterville and Marion.

TABLE 1.2 CRASH REPORT ANALYSIS

YEAR OF ANALYSIS	TYPE A INJURY	FATALITY	TOTAL CRASHES
2002	12	0	196
2003	9	2	198
2004	8	0	254
2005	10	1	180
2006	10	0	185
TOTALS	49	3	1013

Table 1.3 Intersection Crash Analysis

Intersection	2002 Crashes	2003 Crashes	2004 Crashes	2005 Crashes	2006 Crashes	*Total Crashes	Type A Injuries	Fatalities
Division St.	14	12	13	11	9	59	4	0
Main St.	6	1	6	10	6	29	5	0
Wolf Creek Rd.	0	1	0	2	4	7	0	0
Samuel Rd.	4	7	12	4	7	34	2	1
Briggs Rd.	7	0	1	3	1	12	0	0
IL 148	28	22	26	20	24	120	5	0
Terminal Dr.	8	5	2	5	3	23	1	0
Pentecost Rd.	5	4	2	9	6	26	5	0
Bainbridge Rd.	2	3	7	8	11	31	2	0
Skyline Dr.	18	29	39	23	12	121	6	0
Marathon Dr.	11	15	15	7	2	50	2	1
Sinclair Ave.	4	10	10	12	10	46	1	0
Walton Way	28	26	39	20	26	139	4	1
Halfway Rd.	29	35	46	24	31	165	4	0
Totals	164	170	218	158	152	862	41	3

* To accurately analyze crash data based on intersection movements, animal crashes have been excluded.

1.4.3 Traffic Mobility and Efficiency

Regional growth in the Illinois Route 13 corridor between Carterville and Marion has resulted in increased traffic volumes that have been detrimental to traffic mobility and efficiency. This stretch of roadway is functionally classified as a principal arterial and serves a large region of southern Illinois with very few suitable routes available for alternate use. The existing average daily traffic (ADT) varies for this 6.7 mile stretch of roadway between 25,200 vpd and 35,900 vpd with an average of 7% trucks. (See Table 1.4). This traffic rate is projected to climb to a range of 34,000 to 50,000 by the year 2016. There are thirteen existing intersections within the project limits. Eight of these are signalized intersections, five of which are located in a 1-mile stretch in Marion from Skyline Drive to Halfway Road. This close intersection spacing has resulted in traffic delays and congestion, especially during peak hours. Crash data has revealed that numerous crashes resulting in serious injury and death were directly linked to this condition.

TABLE 1.4 AVERAGE DAILY TRAFFIC

ROADWAY SEGMENT	2006 (vpd)	2016 (vpd)	2026 (vpd)	2036 (vpd)
W. Plaza Dr. to Division St.	26,700	33,200	40,470	49,330
Division Street to IL 148	27,300	33,940	41,380	50,440
IL 148 to Pentecost Drive	25,200	34,880	46,880	63,000
Pentecost Dr. to Bainbridge Rd.	26,100	36,130	48,550	62,250
Bainbridge Rd. to Skyline Dr.	26,000	35,990	48,370	65,000
Skyline Dr. to Sinclair Dr.	28,100	38,900	52,270	70,250
Sinclair Dr. to Walton Way	28,200	39,040	52,460	70,500
Walton Way to Halfway Rd.	28,100	38,900	52,270	70,250
Halfway Rd. to I-57	35,900	46,690	66,780	89,750

The existing facility is partially access controlled. The existing typical cross sections vary throughout and are generally described as two sets of lanes, each with two twelve-foot wide lanes, four-foot to six-foot wide inside shoulders and eight-foot to ten-foot wide outside shoulders. These lanes are typically separated by an open, grass median throughout the project limits with the exception of intersection locations.

Existing traffic capacity of the existing roadway within the project limits ranges from 23,900 to 29,200 vpd. Recent traffic counts reveal that the existing traffic volumes are nearing or already exceeding the roadway's current capacity. Traffic projections indicate that the existing 4-lane roadway's capacity threshold will be exceeded within the 20 year design period. (See Table 1.3).

Level of Service (LOS) is a grading system that defines the flow of traffic operations on a street system, with LOS A representing free flow of traffic, and LOS F representing stopped conditions. A 2004 traffic study analysis based on 2002 figures (shown in Figure 1.5) placed the section of IL 13 from Division Street in Carterville to IL 148 at a LOS C. But the intersection of IL 13 with Division Street in Carterville itself was rated a LOS D, or below average. This congestion represents traffic waiting to get onto IL 13 and traffic waiting to access the localized development in the area. The problem is compounded by the very close proximity of the access points on the legs of the intersection. The section of roadway from IL 148 to Walton Way was rated a LOS C. But the intersection of IL 13 with Walton Way itself was rated a LOS F and the remaining section of roadway was rated a LOS D to just west of Halfway Rd. This congestion is a direct result of the closely spaced intersections and multiple access points located in an area of heavy traffic volume and high economic development. A need exists to provide a transportation facility capable of safely and effectively moving projected traffic volumes through the Illinois 13 corridor between Marion and Carterville.

LOCATION MAP

FAP 331 (IL 13)

Williamson County

Division St. in Carterville to Interstate 57 (I-57) in Marion

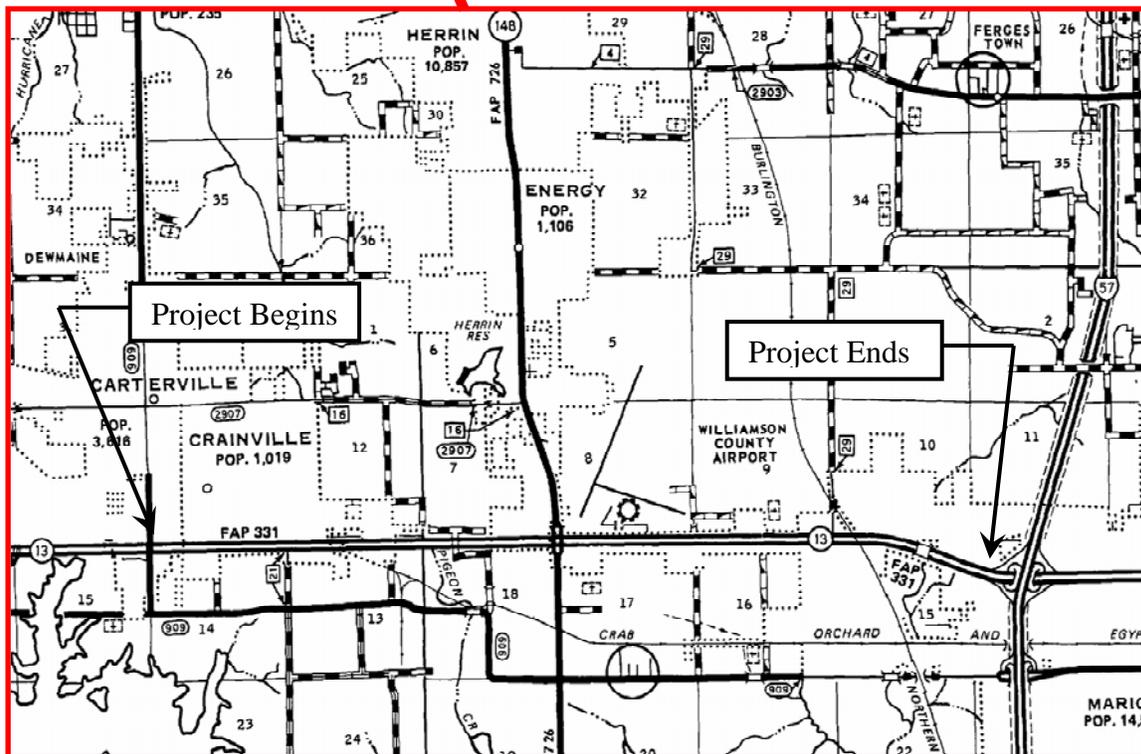
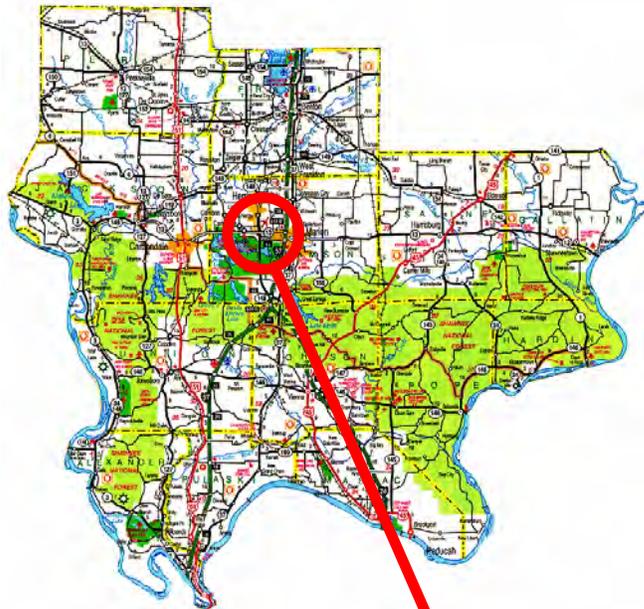


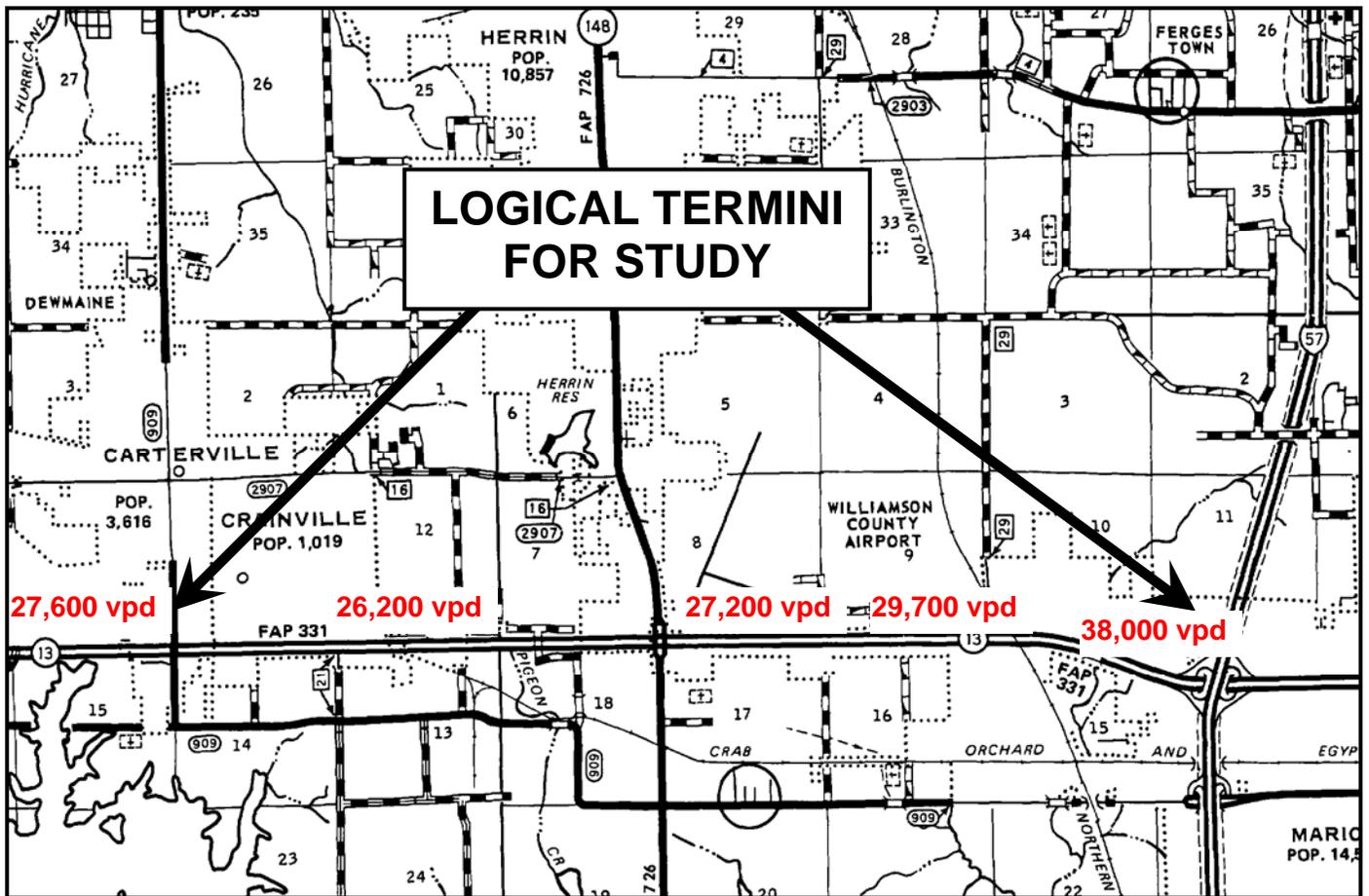
FIGURE 1.1

LOGICAL TERMINI

FAP 331 (IL 13)

Williamson County

Division St. in Carterville to Interstate 57 (I-57) in Marion



Traffic data shown in vehicles per day (vpd) for the year 2007.

FIGURE 1.2

ILLINOIS ROUTE 13 ECONOMIC DEVELOPMENT

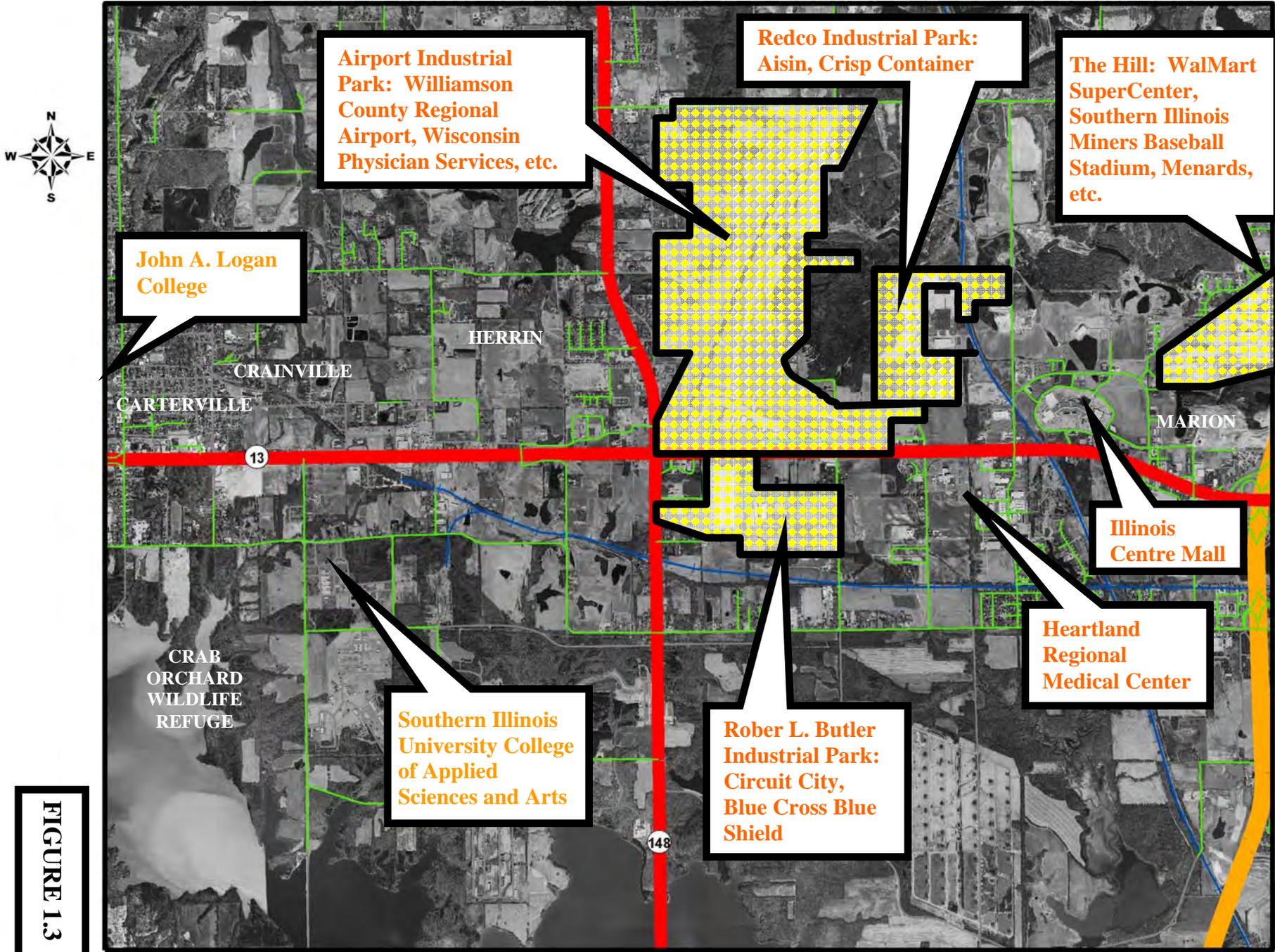
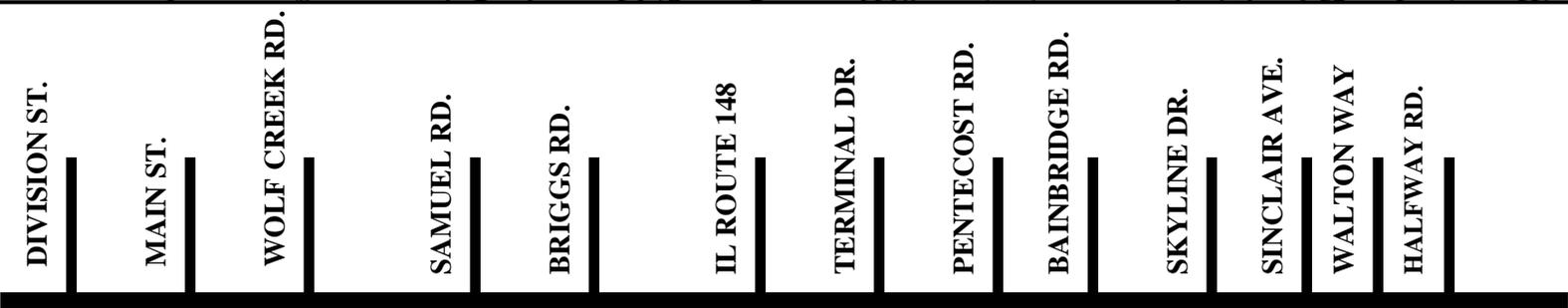
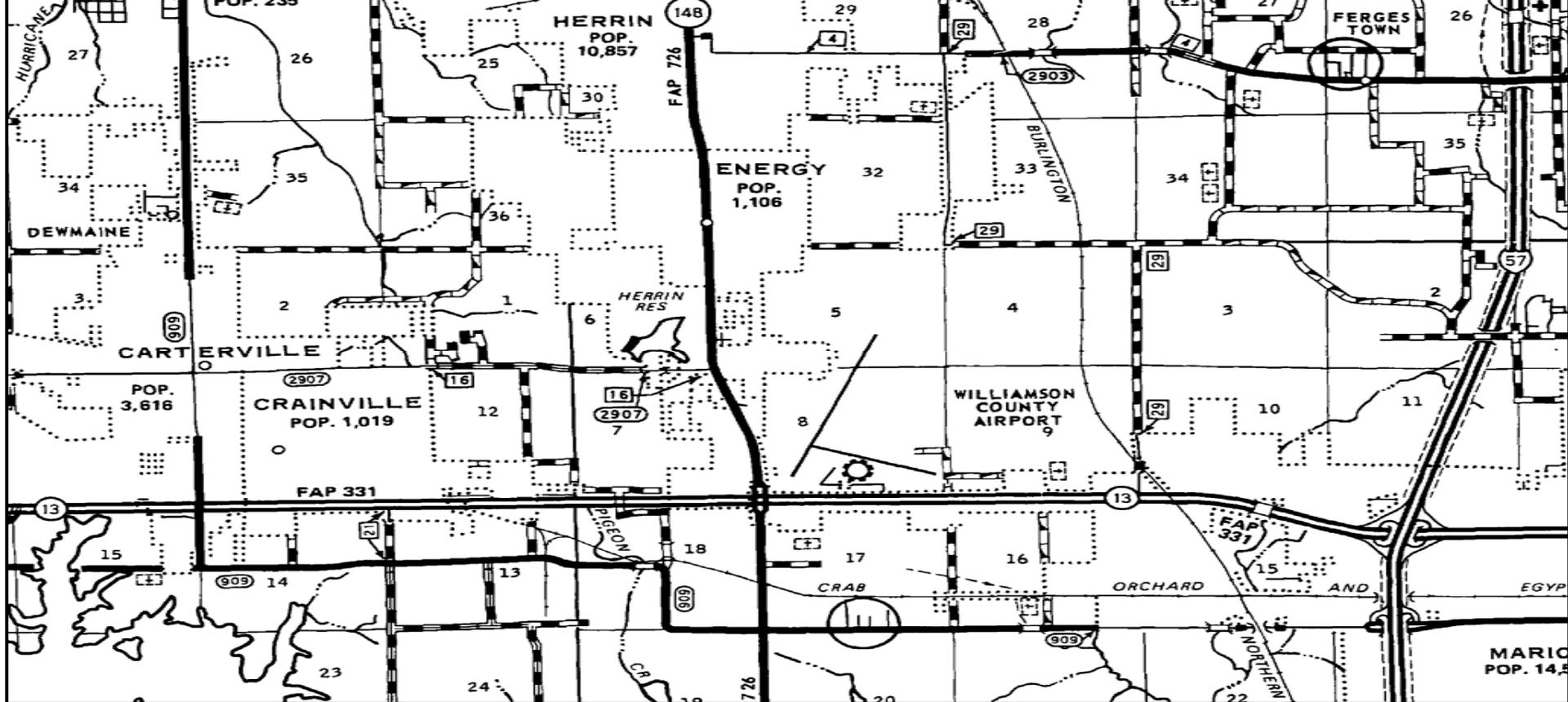


FIGURE 1.3



Year	Division St.	Main St.	Wolf Creek Rd.	Samuel Rd.	Briggs Rd.	IL Route 148	Terminal Dr.	Pentecost Rd.	Bainbridge Rd.	Skyline Dr.	Sinclair Ave.	Walton Way	Halfway Rd.
2005	D		C			C	A	C	C	B	B	F	D
2025	E		D			F	C	F	F	F	F	F	F

FIGURE 1.5

EXISTING AND PROJECTED LEVEL OF SERVICE FOR NO BUILD ALTERNATIVE

SECTION 2.0

AFFECTED ENVIRONMENT

Section 2.0

AFFECTED ENVIRONMENT

The initial environmental survey request (ESR) was submitted for the project on November 13, 2003 and multiple addendums for additional surveys followed. (See Appendix, p. A-1 to A-9.) The project area was inventoried for environmental resources. Those cultural, biological, and socio-economic resources found in the project area along with the identified special waste sites are identified in this section and on the *Environmental Inventory Map* (See Figure 2.2).

2.1 Socioeconomic

Illinois 13 is a four lane principal arterial providing the primary east-west transportation corridor in Southern Illinois that connects the cities of Murphysboro, Carbondale, Carterville, Herrin, Marion and Harrisburg. Illinois 13 is the vital transportation link to Interstate 57 for these and other communities. In addition, Illinois 13 intersects Illinois 148, a four lane principal arterial. A number of north-south collector roads also exist within the study limits, which provide local access to and from Illinois Route 13. The study area focuses on the corridor from Division Street in Carterville to I-57 in Marion, all in Williamson County.

2.1.3 Demographics

As shown in Table 2.1, the Cities of Carterville, Herrin and Marion have experienced population increases. Table 2.2 shows the population data by race.

Table 2.1 Population Data*

Demographic Boundary	1990	2000	% Growth
Carterville	3630	4616	27 %
Herrin	10857	11298	4 %
Marion	14545	17011**	17%
Williamson County	57733	61296	6%

* Data from United States Census Bureau.

** New count taken in 2006.

Table 2.2 Population Data by Race*

Geography	White Alone	Black or African American Alone	American Indian and Alaska Native Alone	Asian Alone	Native Hawaiian and Other Pacific Islander Alone	Some Other Race Alone	Two or More Races	Totals:
Carterville	4,441	52	7	43	1	27	45	4,616
Herrin	10,927	104	39	76	3	35	114	11,298
Marion	14,895	696	39	133	8	70	194	16,035
Totals:	30,263	852	85	252	12	132	353	31,949

* Data from United States Census Bureau.
Household income ranges throughout the corridor are as follows:

Table 2.3 Household Incomes

Geography	Under \$15,000	\$15,000 to \$24,999	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$149,999	\$150,000 to \$199,999	\$200,000 or more
Carterville	416	252	595	521	106	18	23
Herrin	1,223	914	1,495	955	176	21	22
Marion	1,538	1,418	2,018	1,486	288	74	133
Totals	3,177	2,584	4,108	2,962	570	113	178

* Data from United States Census Bureau.

2.1.2 Land Use

A small number of single-family homes are located close to the existing right-of-way lines. One residential apartment complex is located at the intersection of Illinois Route 13 with Samuel Road. Institutional land uses in the identified corridor include a remote John A. Logan College building, church facilities, the Heartland Regional Medical Center, and other health-care related facilities. Businesses that exist in the corridor include individual businesses catering to residents in the area, a regional-scale shopping mall, the REDCO Industrial Park, corporate business centers and office complexes. (See Figure 2.1 for Land Use in Corridor.)

2.1.3 Public Services and Facilities

The Williamson County Regional Airport, located adjacent to Illinois 13 in the northeast quadrant of the intersection with Illinois Route 148, falls within the project corridor. This airport consists of two runways 6,500-ft. and 5,000-ft. in length respectively and offers its facilities for both private and commercial flights. Another transportation facility within the corridor is the Saluki Express transit service currently enters the study limits at Division Street at Carterville. This service transports students to and from the Southern Illinois University College of Applied Science and Arts facility located along Old Illinois 13. Other public transportation services in the area include Williamson County Transit, First Transit, Inc. and Archie Affordable Cab

all in Herrin, Downstate Transportation in Carterville, and Red Top Cab, Marion Cab and Greyhound Bus Lines all in Marion.

Healthcare facilities in the corridor include Heartland Regional Medical Center, Addus Healthcare, Marion Diagnostic Center, and Memorial Hospital Cancer Center all in Marion, Herrin Hospital and Logan Medical Park in Herrin. Ambulance services include Lifeline Ambulance in Marion and Williamson County Ambulance Service serving the entire corridor.

Schools in the Carterville area include Carterville Community Unit School District No. 5, John A. Logan College, and the Southern Illinois University College of Applied Science and Arts. Schools in the Herrin area include Herrin Community Unit School District No. 4 and Our Lady of Mt. Carmel Catholic Elementary School. Marion area schools include Marion Community School District No. 2, Williamson County Early Childhood Cooperative, School for the Hearing Impaired and Williamson County Special Education.

No sidewalk facilities or crosswalks exist within the project limits of this proposed improvement to Illinois Route 13. There are no existing on-road bicycle lanes or off-road bicycle paths that are on or cross the proposed project.

2.2 Agriculture

A portion of the study area is suitable for agricultural use or is in active agricultural production. The bedrock surface of all of Williamson County is a part of the Pennsylvania system. Soils of the Hosmer-Stoy Association and the Ava-Bluford Association underlie the study area. These soil associations involve upland physiography with very poor to moderately well natural soil drainage. The predominant soil types within the study corridor include Hosmer silt loam, Stoy silt loam, Bluford silt loam and some Hoyelton silt loam. Most of the Bluford silt loam and Ava silt loam is designated as prime or important farmland, particularly where drained.

2.3 Geology

The uppermost bedrock in the project area consists of the Pennsylvanian-age Carbondale Formation, which is dominated by gray shales but also contains several sandstone and limestone members, and the principal coals of economic importance in Illinois: the Herrin (No. 6), the Springfield-Harrisburg (No. 5), the Colchester (No. 2), and the Danville (No. 7) Coal Members. The coal and limestone members together amount to as much as 10% of the formation's entire thickness. Claystones and shaly mudstones comprise about 65% of the unit's complete thickness and sandstones about 25%.

The total thickness of surficial deposits ranges from 6 to 15 m (20 to 49 ft) in the project area. The uppermost deposits consist of Wisconsinan Peoria Silt (formerly Peoria Loess) and Roxana Silt from 1.5 to 2.1 m (5 to 7 ft) in the project area. These deposits overlie loamy and sandy glacial deposits of the Glasford Formation.

2.4 Air Quality

The National Ambient Air Quality Standards (NAAQS), established by the U.S. Environmental Protection Agency set maximum allowable concentration limits for six criteria air pollutants. Areas in which air pollution levels persistently exceed the NAAQS may be designated as "non-attainment." States in which a non-attainment area is located must develop and implement a State Implementation Plan (SIP) containing policies and regulations that will bring about attainment of the NAAQS.

No portion of this project is located within a designated non-attainment area or maintenance area.

2.5 Noise

The existing noise in the study corridor is generated primarily by motor vehicles operating on IL 13, IL 148 and local city streets throughout the municipalities and rural areas. Noise levels vary throughout the day according to the activity of the source and proximity of the receptor. Surrounding land use is primarily commercial and industrial with pockets of residential establishment and large areas of undeveloped land, some of which is in agricultural production. Twenty-four (24) receptors were identified as representative of the study area. Existing (2007) noise levels predicted by the FHWA approved Traffic Noise Model (TNM) range from 51 dBA to 70 dBA. More details of the traffic noise study are provided in Section 4.5.

2.6 Natural Resources

The project area was inventoried for natural environmental resources. Those natural resources found to be present in the project area are identified on the *Environmental Inventory Map* (Figure 2.2).

No golf courses, parks, or conservancy lands exist along either side of the highway. Because of its distance to the west and south of the project limits, there will be no impacts to the Crab Orchard National Wildlife Refuge associated with this project. In addition, no known Section 6(f) LAWCON or OSLAD lands exist within the study limits.

There are no designated Natural Areas or Nature Preserves in the project area. The U.S. Fish and Wildlife Service lists the Indiana bat, eastern prairie fringed orchid, and prairie bush clover as occurring in Williamson County. The eastern prairie fringed orchid and prairie bush clover occur in wet to dry prairies. There are no prairies within the project area. The Indiana bat hibernates in caves and mines during the winter. There are no known hibernacula in Williamson County. In the summer, the bat forms maternity colonies behind the peeling bark from dead and live trees. There are records of reproductive Indiana bats from counties adjacent to Williamson County (Jackson, Union, Johnson, and Saline). Mist netting surveys have been done in Williamson County during the late 1980's and early 1990's at two sites, Crab Orchard National Wildlife Refuge and Sugar Creek. No Indiana bats were captured at these locations.

The Illinois Endangered Species Protection Board lists a number of species as occurring in Williamson County. The Illinois Natural Heritage Database indicated the Bewick's Wren and the Upland Sandpiper in the vicinity of the project corridor. (See Appendix, p. A-10 to

A-13.) The Bewick's wren occurred north of Marion and just east of Interstate 57. The Upland Sandpiper occurred within the grassland areas of the Williamson County Regional Airport. The IDNR Agency Action Report dated December 11, 2003 (see Appendix, p. A-14) and the IDNR EcoCAT submittal and response dated April 3, 2007 (see Appendix, p. A-15 to A-18) concluded that adverse effects are unlikely. Surveys also located state endangered *Rhexia mariana* in the vicinity of the project. The project will not affect these three species. (See Biological Resources Review in the Appendix, p. A-19.)

A wetland survey was completed for the Illinois 13 corridor on June 7, 2007 by the Illinois Natural History Survey (INHS) through IDOT's integrated ESR process. This survey identified thirty-five sites that met the criteria for jurisdictional wetlands. These wetland sites are listed in Table 2.4 and shown on Figure 2.2. The sites were evaluated for floristic integrity and assigned a Floristic Quality Index (FQI). Seven sites (1, 9, 22, 24, 28, 34, and 45; Table 2.4) were evaluated to have good natural quality. The project is being processed as a Standard Action under the IDOT Wetlands Action Plan as approved by IDNR.

Table 2.4 Wetland Determinations

Site	Type	Dominant Vegetation	Size (acres)	FQI
1A	Wet Meadow	Reed grass, English bluegrass, sedge	0.04	11.2
1	Floodplain Forest	Red maple, pin oak, green ash, American elm, multiflora rose	1.29	25.1
3	Floodplain Forest	Bald cypress, American elm, poison ivy, panicled aster	0.16	18.1
8	Wet Meadow	Spikerush, giant smartweed	0.11	11.1
9	Floodplain forest	Green ash, American elm, Virginia wild rye, jewelweed, panicled aster	15.13	25.3
10	Wet meadow	Rush, giant smartweed, reed grass	0.58	13.7
11	Pond	Primrose willow	0.19	11.6
12	Floodplain forest	Red maple, American elm, stout wood reed, Japanese honeysuckle	0.13	19.5
18	Pond	American lotus, rice cutgrass, duckweed, dark green bulrush	0.13	16.3
20	Floodplain forest	American elm, red maple, trumpet creeper, fowl manna grass	0.049	12
22	Marsh	Rush, cattail, primrose willow, dark green bulrush	0.33	21.9
24	Floodplain forest	Silver maple, jewelweed, fowl manna grass, rice cutgrass	0.28	24.9
25	Floodplain forest	Silver maple, false nettle, Japanese honeysuckle	0.026	12
26	Pond	Pin oak, red maple, false nettle, dotted smartweed	0.094	14.9
28	Floodplain forest	Pin oak, American elm, fowl manna grass, Japanese honeysuckle	0.39	20.1
29	Floodplain forest	Red maple, American elm, path rush	0.088	17.1
33	Wet meadow	Sedge, dark green bulrush, English bluegrass	0.16	14.2

Site	Type	Dominant Vegetation	Size (acres)	FQI
34	Sedge meadow	Dark green bulrush, sedge, inland rush, poison ivy	0.39	20.2
35	Wet meadow	Rush, inland rush	0.051	15.4
36	Wet meadow	Dark green bulrush, sedge, reed grass	0.60	19.0
37	Wet shrubland	Black willow, reed grass	0.76	12.6
39	Wet meadow	Reed grass, rice cutgrass	0.073	13.3
40	Wet shrubland	Black willow, rice cutgrass, dark green bulrush	0.15	16.5
41	Marsh	Dark green bulrush, cocklebur, chufa, marsh seedbox, sedge	0.32	11.6
43	Pond	Spatterdock, duckweed	0.5	17.1
44	Wet meadow	Sedge, rush, marsh seedbox	0.18	17.6
45	Floodplain forest	American elm, red maple, arrow wood, poison ivy, spike grass, fowl manna grass	0.099	20.5
49	Wet meadow	Swamp marigold, rice cutgrass, white avens	0.074	15.1
50	Floodplain forest	Black willow, reed grass, English bluegrass	0.81	16.9
51	Wet meadow	Slender mountain mint, Canada goldenrod, Missouri ironweed, sedge	0.31	18.9
52	Marsh, detention basin	Reed grass	0.38	14.8
53	Wet meadow, detention basin	Reed grass, giant ragweed, rice cutgrass, giant smartweed	0.045	11.9

The project area occurs within the Southern Till Plain Natural Division of Illinois. The dominant cover type within the project area is commercial/residential/ industrial. Other types include cropland, pasture, woodland, wetlands, barren land, and pond. Barren land includes a number of large parcels adjacent to IL Route 13 on the south that had been recently cleared and graded during the 2007 wetland survey. The woodland and wetland cover types are important wildlife habitats. Five woodland stands currently occur within the project area and range from 4 to 30 acres in size. These stands have an open canopy and have been disturbed. In 2007 two woodland stands (11 and 7 acres in size) were cleared for development. The existing sites are depicted on Figure 2.2A (includes wetland site 1, west of Wolf Creek Road south of IL 13, east of Wolf Creek Road north of IL 13) and Figure 2.2B (east of BNSF Railroad, and wetland site 9). Stand descriptions are available for two of these sites: stand west of Wolf Creek Road and wetland site 9. The first stand is dominated by pin oak, black cherry, and American elm. The stand has been disturbed, as indicated by the high number (59 percent) of weedy/competitive plant species. The site also contains the invasive species climbing euonymus, autumn olive, Japanese honeysuckle, and multiflora rose. Wetland site 9, a forested wetland, is dominated by green ash and American elm and is identified under wetlands.

2.7 Cultural Resources

No archaeological, architectural or historic sites were identified within the proposed corridor through IDOT's integrated Environmental Survey Request (ESR) process. (Refer to correspondence with the Illinois State Historic Preservation Officer in this document's Appendix, p. A-20 to A-21.)

2.8 Water Quality/Resources

All surface drainage is located within the Big Muddy River Watershed (Hydrologic Unit Code 07140106.) Pigeon Creek and Westenaire Creek are located in the project area as well as an unnamed stream near Walton Way in Marion. (See Figure 2.2.) All streams have intermittent flow in the project area. Pigeon Creek drains into Crab Orchard Lake. Westenaire Creek and the unnamed stream drain into a large impoundment on the Crab Orchard National Wildlife Refuge, which in turn flow into the Big Muddy River.

Pigeon Creek, Westenaire Creek, and the Unnamed Creek are not identified within the IEPA 2008 (Draft) Illinois Integrated Water Quality Report and Section 303(d) List. Pigeon Creek drains into Crab Orchard Lake, an impaired water body. The lake is in nonsupport of its fish consumption and aesthetic quality designated uses. The causes of these impairments are from mercury, PCB's, phosphorus (total), and aquatic algae. The sources of these impairments are from atmospheric deposition (toxic), contaminated sediments, RCRA hazardous waste sites, shore area modifications, crop production, and other unknown sources. Currently, the IEPA is preparing a total maximum daily load (TMDL) report for Crab Orchard Creek, which includes Crab Orchard Lake. The purpose of the TMDL Report is to determine the greatest amount of a given pollutant that a waterbody can receive without violating water quality standards or designated uses.

No sole source aquifers, as defined in Section 1424(e) of the Safe Drinking Water Act, exist in Illinois. This project will not create any new potential "routes" for groundwater pollution or any new potential sources of groundwater pollution as defined in the Illinois Environmental Protection Act (415 ILCS 5/3, et seq.) Accordingly, the project is not subject to compliance with the minimum setback requirements for community water supply wells or other potable water supply wells, as set forth in 415 ILCS 5/14, et seq.

2.9 Floodplains

Flood Insurance Rate Maps (FIRM) for Williamson County, Illinois developed by the Federal Emergency Management Agency (FEMA), were reviewed. No portion of the project is within a regulatory floodway. However, the 100-year floodplain of Westenaire Creek is traversed within the project area. (See Figure 2.2)

2.10 Special Waste

The U.S. Environmental Protection Agency (USEPA) listing of potential, suspected, and known hazardous waste or hazardous substance sites in Illinois (i.e., the Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) list, was reviewed on January 22, 2008 to ascertain whether the proposed project will involve any listed sites. As a result of this review, it has been determined that no site included in the CERCLIS listing is located within the project limits.

A Preliminary Environmental Site Assessment (PESA) for sites potentially impacted with regulated substances was completed by the Illinois State Geological Survey in February, 2004 and August, 2007. The assessment concluded that the build alternative will involve special waste sites. Sites contaminated with potentially hazardous wastes are involved. Further investigations will be conducted to determine the risks and liabilities of the involvement. (See Special Waste Waiver in Appendix, p. A-22.)

CARTERVILLE

LAND USE IN CORRIDOR – DIVISION ST. TO IL 148

LEGEND

- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- AGRICULTURAL
- WOODLAND
- CEMETERY

HERRIN

CRAINVILLE

HERRIN

MAR

DIVISION ST.

MAIN ST.

SAMUEL RD.

IL 13

BRIGGS RD.

WOLF CREEK RD.

IL 148

Residential Subdivision Est. 2007

Enterprise Zone

Wolf Cr. Landscaping

River Radio WSIL-TV 3

Heartland Pump Radio Activity

Mobile Home Sales

Apartment Complex

Logan Medical Park

Airport Industrial Park

Hurricane Creek / River-to-River Corp.

Tom's Bargain Barn

AAA SELF STORAGE

Heartland Kubota Tractor Sales

Roland Machinery

FIGURE 2.1A

LAND USE IN CORRIDOR – IL 148 to I-57 IN MARION

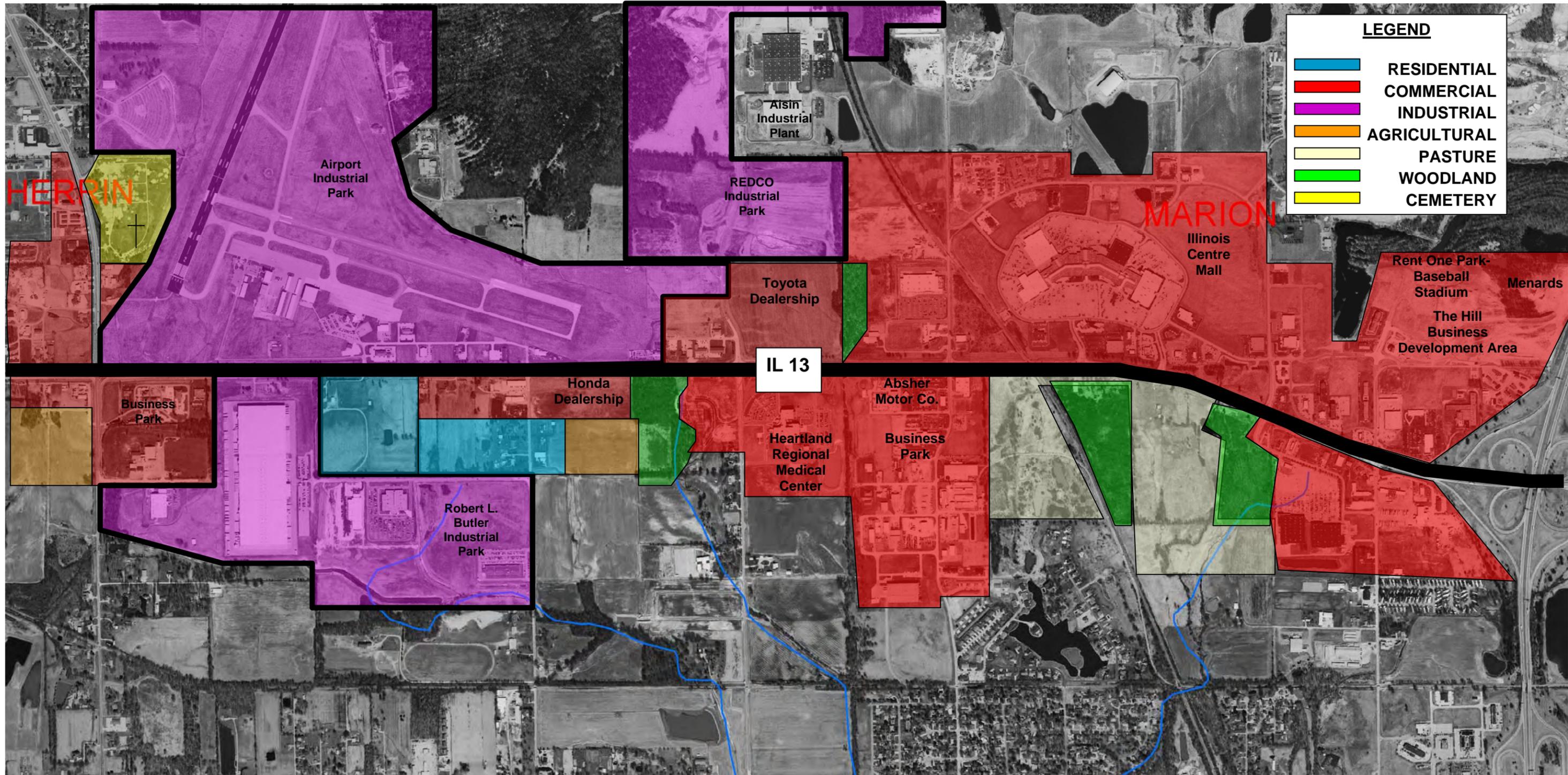


FIGURE 2.1B

ENVIRONMENTAL INVENTORY MAP – DIVISION STREET TO IL 148

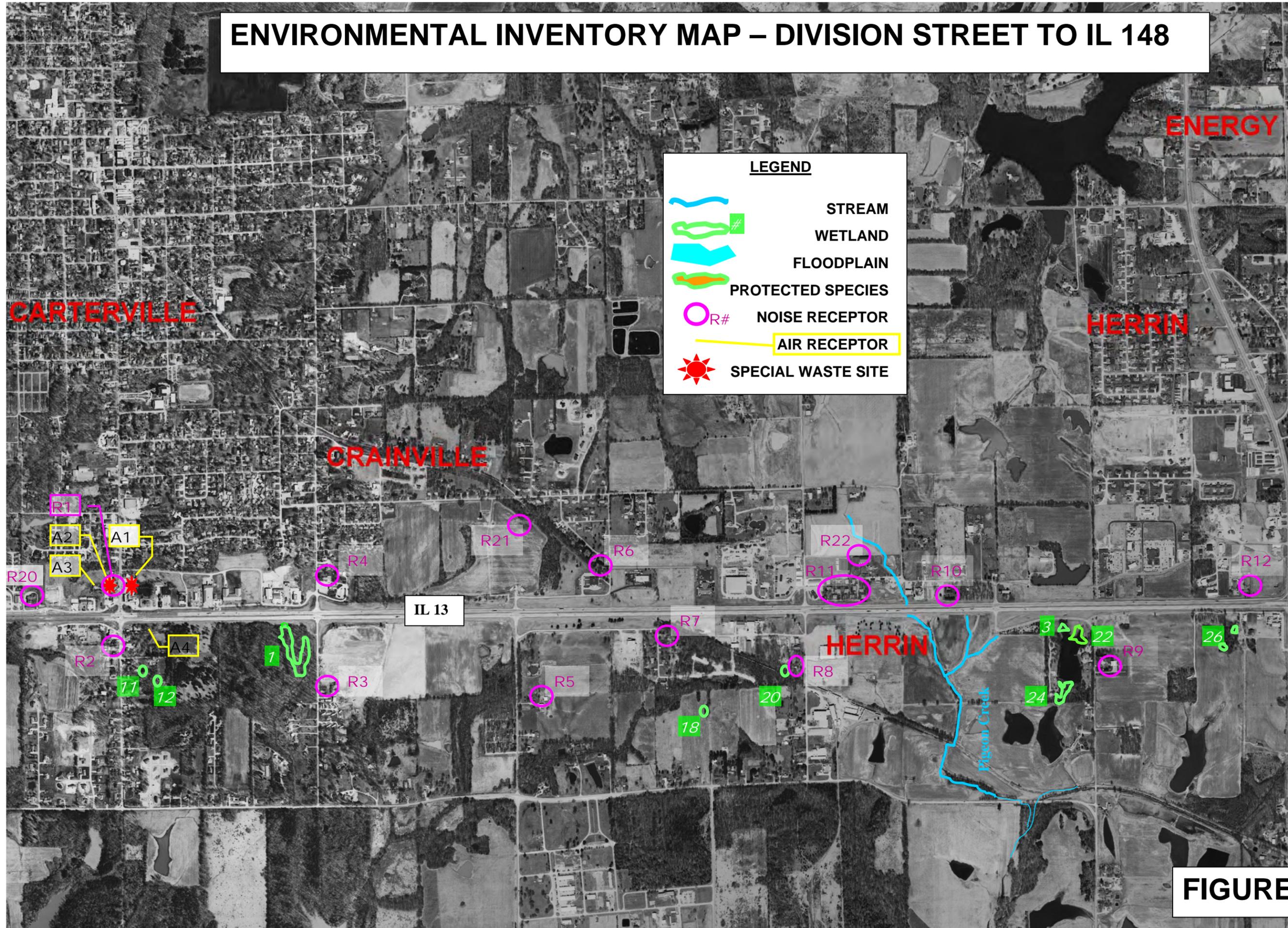


FIGURE 2.2A

ENVIRONMENTAL INVENTORY MAP – IL 148 TO HALFWAY ROAD

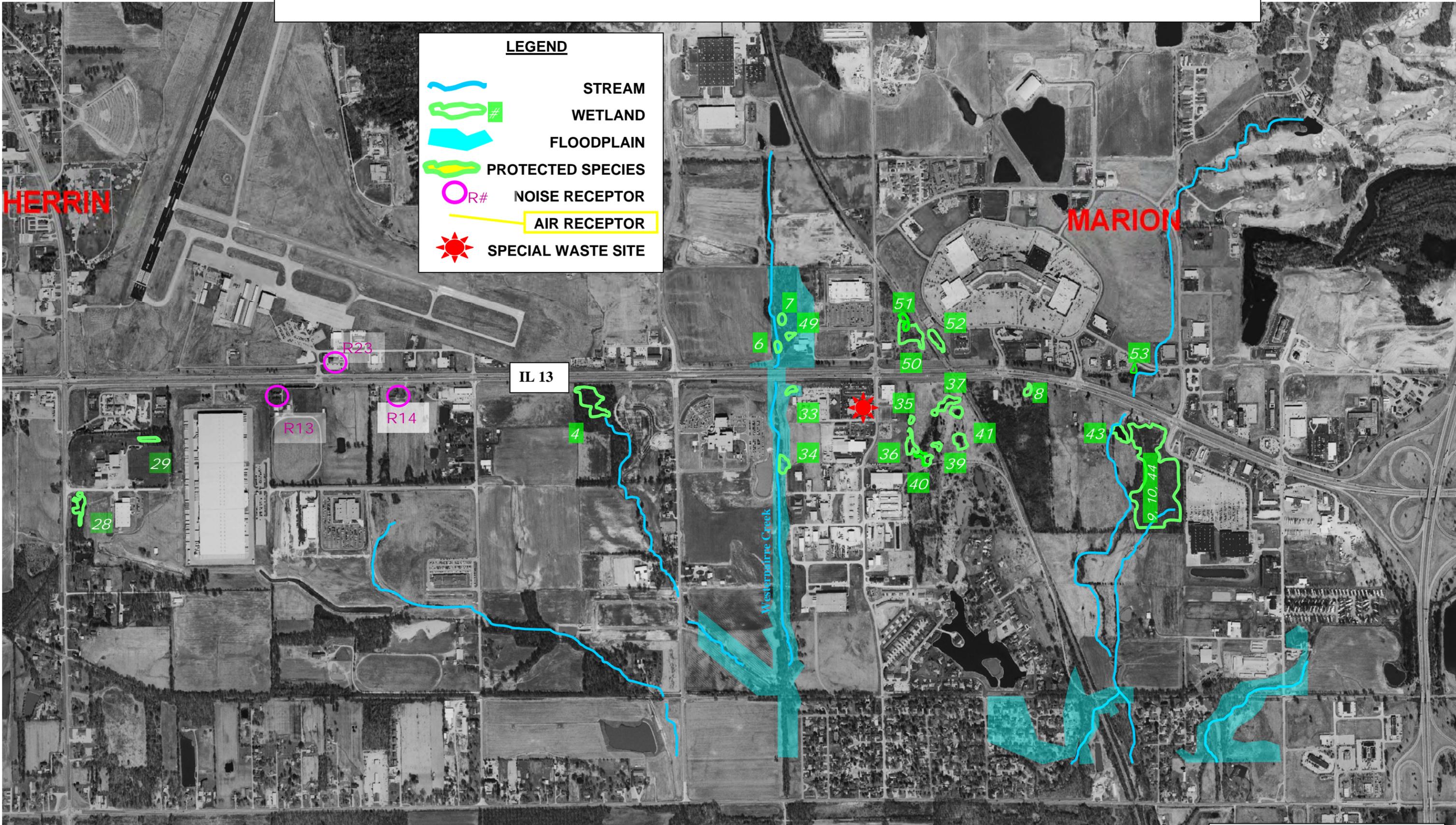


FIGURE 2.2B

SECTION 3.0

ALTERNATIVES

Section 3.0

ALTERNATIVES

3.1 Introduction

The alternatives considered to meet the transportation needs identified for the project include a No-Action Alternative and the Build Alternatives. The No-Action Alternative and the Build Alternatives are discussed as follows.

3.2 No-Action Alternative

Under the No-Action Alternative, Illinois Route 13 and cross streets would remain the same as the existing configuration and would be subject to only routine maintenance improvements such as resurfacing, pavement patching, and improvements addressing identified safety issues. The existing roadway and intersections with the current capacity limitations and traffic concerns would remain. (See Figure 3.1). This would cause increased traffic congestion levels and thereby reduce access and mobility along this route. In addition, the existing at-grade railroad crossing over the Burlington Northern/Santa Fe Railroad would remain. This existing condition causes significant traffic back-ups, particularly during peak hours.

Advantages of the No-Action Alternative are that travel delays to residents and temporary loss of business opportunities due to construction activities would be avoided. The No-Action Alternative would not require right-of-way acquisition or displacements. However, as shown in Table 3.1 on page 3-8, construction costs would still be incurred to provide necessary maintenance improvements to the roadway.

With the recent increase in commercial and industrial development between Marion and Carterville, traffic volumes are quickly approaching the maximum capacity level for the roadway facility. The No-Action Alternative would fail to meet the purpose and need for the project. Seven of the eight intersections within the project limits would operate at an unacceptable level of service (LOS E or LOS F) and five of the seven roadway sections within the project limits would operate at an unacceptable level of service (LOS F). The roadway capacity would not be expanded and the roadway network would not be upgraded to serve identified traffic demands, therefore exacerbating the existing safety problems. Without a safe and functionally adequate roadway, issues with traffic mobility and efficiency and the potential for economic development within the corridor will not be addressed.

3.3 Build Alternatives

Under the Build Alternatives, options to expand traffic capacity and improve traffic flow were analyzed by their ability to meet the Purpose and Need. Alternatives to expand the existing IL 13 facility to a six-lane roadway were studied as well as utilizing existing

frontage roads and constructing new frontage roads. Four build alternatives are described below.

3.3.1 Build Alternative #1: Add Lanes with Open Median

The Add Lanes with Open Median Alternative proposes to construct additional lanes throughout the project length on the outside of the existing lanes and continue to provide an open, grass median to separate the eastbound and westbound traffic. This configuration would provide an additional 12-ft. lane in each direction with a four to six foot inside shoulder and ten foot outside shoulder. The outside ditch design would provide a 6:1 foreslope and 4:1 backslope. Proposed intersection expansions involving configuration, channelization and signalization are also included throughout the corridor to better accommodate existing and projected traffic volumes. (See Figure 3.2).

In addition, a railroad overpass would be constructed to carry traffic over the Burlington Northern/Santa Fe Railroad which is currently an at-grade crossing that causes significant traffic back-ups, particularly during peak hours. The railroad overpass would be located between Skyline Drive and Sinclair Avenue, one of the entrances to the Illinois Centre Mall. However, this structure would require the closure of Marathon Drive, another entrance to the mall.

A study of the impacts shows that environmental impacts are greater with this build alternative than the No Build Alternative. (See Table 3.1 on page 3-8.) The total estimated cost for construction, land acquisition and utility adjustments would equal \$90 million. Due to the roadway and intersection expansions, wetland impacts would equal 0.75 acres and 9 noise receptors would be impacted. (A complete discussion of the existing and projected traffic noise levels is included in Section 4, Environmental Consequences.) Minor land use conversions would occur adjacent to the roadway and six displacements would occur in the area of the Division Street intersection in Carterville. Furthermore, a traffic analysis for a six lane facility with traffic levels projected for the year 2025 reveals that the Level of Service (LOS) for all segments is below average at LOS D. Three of the eight intersections within the project limits would still operate at an unacceptable level of service (LOS E or LOS F) and two intersections would still operate at a below average level of service (LOS D). (See Figure 3.3). An analysis of the crash data given in Section 2, Table 2.2 and Figure 2.3, revealed that those intersections projected to have a below average or unacceptable level of service with Build Alternative #1 accounted for nearly two thirds of the total crashes throughout the corridor (626, or 62%) and 23 of the 49 total Type A injury crashes (47%). With reference to this build alternative, the persistent traffic congestion and close intersection spacing will not address traffic mobility or improve safety. Therefore, this alternative does not meet the Purpose and Need and has been dropped from further discussion.

3.3.2 Build Alternative #2: Modified Add Lanes with Open Median

In order to more thoroughly study Alternative #1, a special design was considered. This modified alternative proposes to construct the additional lanes on the outside of the existing lanes, to provide an open median to separate the eastbound and westbound traffic, and to improve intersections. This alternative keeps the same typical section as shown in Figure 3.2. However, to minimize the environmental impacts and overall land acquisition needs for this project, variable ditch configurations with foreslopes less than 6:1 and backslopes less than 4:1 were used. These ditch configurations have been researched by the American Association of State Highway and Transportation Officials (AASHTO). A foreslope of 4:1 and greater is considered to be recoverable, meaning the driver can maintain control and reenter the roadway if the path is clear and free of obstacles. The railroad overpass is proposed with this alternative as well.

The total estimated cost of this Build Alternative #2 is \$86.8 million. Due to the modified roadway and intersection expansions, wetland impacts would be 0.55 acres and 9 noise receptors would be impacted. (A complete discussion of the existing and projected traffic noise levels is included in Section 4, Environmental consequences.) Minor land use conversions would occur adjacent to the roadway and six displacements would occur in the area of the Division Street intersection in Carterville. (See Table 3.1 on page 3-8.) Although the impacts associated with Build Alternative #2 are slightly less than those listed with Alternative #1, the traffic analysis still poses a dilemma. The Level of Service (LOS) for all segments is below average at LOS D. Three of the eight intersections within the project limits would still operate at an unacceptable level of service (LOS E or LOS F) and two intersections would still operate at a below average level of service (LOS D). (See Figure 3.3.) An analysis of the crash data given in Section 2, Table 2.2 and Figure 2.3, revealed that those intersections projected to have a below average or unacceptable level of service with Build Alternative #2 accounted for nearly two thirds of the total crashes throughout the corridor (626, or 62%) and 23 of the 49 total Type A injury crashes (47%). With reference to this build alternative, the persistent traffic congestion and close intersection spacing will not address traffic mobility or improve safety. Therefore, this alternative does not meet the Purpose and Need and has been dropped from further discussion.

3.3.3 Build Alternative #3: Add Lanes with Barrier Median

The Add Lanes with Barrier Median Alternative proposes to construct the additional lanes within the existing area of open, grass median and to separate the eastbound and westbound traffic with a concrete barrier throughout the project length. This configuration would provide an additional 12-ft. lane in each direction with a six to eight foot inside shoulder and ten foot outside shoulder. The outside ditch design would provide a 6:1 foreslope and 4:1 backslope. (See Figure 3.4).

As with Build Alternative #1, a railroad overpass would be constructed to carry traffic over the Burlington Northern/Santa Fe Railroad which is currently an at-grade crossing that causes significant traffic back-ups, particularly during peak hours. The railroad overpass would be located between Skyline Drive and Sinclair Avenue, one of the entrances to the Illinois Centre Mall. However, this structure would require the closure of Marathon Drive, another entrance to the mall.

As depicted in Table 3.1 on page 3-8, this design would reduce the environmental impacts and need for additional right-of-way throughout the project limits. The total cost is estimated to be \$85.7 million. (This cost includes the placement of a concrete median barrier.) Wetland impacts would equal 0.32 acres and 9 noise receptors would be impacted. (A complete discussion of the existing and projected traffic noise levels is included in Section 4, Environmental consequences.) Minor land use conversions would occur adjacent to the roadway and six displacements would occur in the area of the Division Street intersection in Carterville. Although the impacts associated with Build Alternative #3 are considerably less than those listed with Alternatives #1 and #2, the traffic analysis still poses a dilemma. The Level of Service (LOS) for all segments is below average at LOS D. Three of the eight intersections within the project limits would still operate at an unacceptable level of service (LOS E or LOS F) and two intersections would still operate at a below average level of service (LOS D). (See Figure 3.3.) An analysis of the crash data given in Section 2, Table 2.2 and Figure 2.3, revealed that those intersections projected to have a below average or unacceptable level of service with Build Alternative #2 accounted for nearly two thirds of the total crashes throughout the corridor (626, or 62%) and 23 of the 49 total Type A injury crashes (47%). With reference to this build alternative, the persistent traffic congestion and close intersection spacing will not address traffic mobility or improve safety. Therefore, this alternative does not meet the Purpose and Need and has been dropped from further discussion.

3.3.4 Build Alternative #4: Modified Add Lanes with Open Median and Frontage Road System (Preferred Alternative)

In order to best address the Purpose and Need, the build alternative was re-evaluated for potential improvements and modifications. Because of the severity of crashes located at existing intersection locations and the potential for additional future intersections due to the high rate of economic development directly along the corridor, a supplemental frontage road system was included with additional lanes in this alternative. The frontage road system would address the need for local trips between the businesses and allow the through traffic to flow more freely.

The section of IL 13 from IL Route 148 to the eastern project terminus at Interstate 57 in Marion is already concentrated with commercial and industrial development and signalized intersections that are warranted by high traffic levels. A frontage road is proposed to run along the southern side of IL 13 from Walton Way to Skyline Drive. Marathon Drive, an entrance to the Illinois Center Mall, is proposed to be extended under a proposed railroad overpass of the Burlington Northern/Santa Fe Railroad and tie into this frontage road. (See Figure 3.5). This will allow both entrances to the mall to remain open. In addition, this alternative provides an option for local traffic to travel from Halfway Road in Marion to the Illinois Centre Mall without having to utilize IL Route 13. As determined with the traffic study cited in the previous build alternatives, a below average level of service (LOS D) would still be experienced with a proposal considering additional lanes only. All five of the intersections identified as having below average or unacceptable levels of service with additional lanes only, are located in this section from IL 148 to the eastern project terminus. (See Figure 3.3). The addition of the frontage road from Walton Way to Skyline Drive would offer relief to traffic congestion and crashes on this section of IL 13. In addition, new areas for economic development would be provided along the frontage road that wouldn't require direct access onto IL 13.

The Section of IL 13 from IL Route 148 to the western project terminus at Division Street in Carterville has relatively lower traffic levels than the previous section. Open acreage that is located directly along the IL 13 corridor is readily available to potential developers. Many new business and residential developments have recently located in this section. (See Figure 3.6). However, this open acreage also provides the opportunity to connect existing frontage roads and construct new frontage roads throughout the section to create a nearly complete roadway network for local traffic. This design would allow for thorough access restriction throughout the section, with the exception of Division Street and IL Route 148, which are proposed to remain signalized. To facilitate travel from the south side of IL 13 to the north side and to allow for access to IL 13, an interchange is proposed at a point near the center of this corridor section. (See Figure 3.7). As determined with the traffic study cited in the previous build alternatives, a below average level of service (LOS D) would still be experienced

with a proposal considering additional lanes only. (See Figure 3.3). A proposal offering additional lanes and a complete frontage road network would restrict access to IL 13, relieve traffic congestion and decreased delays. The frontage road network would also provide new areas for economic development that wouldn't require direct access onto IL 13. With this improved traffic mobility and efficiency, economic development is anticipated to continue to thrive throughout the corridor.

Table 3.1 shows that the total estimated cost of Build Alternative #4 would be \$93.4 million. Due to the new and expanded frontage road system, wetland impacts would equal 1.85 acres. (Wetland Impacts are discussed in Section 4, Environmental Consequences. See Figure 4.8 and Table 4.2 for Preferred Alternative Wetland Impacts.) Nine noise receptors would be impacted. (A complete discussion of the existing and projected traffic noise levels is included in Section 4, Environmental Consequences. See Figure 4.9 and Table 4.3 for Summary of Noise Analysis.) The total number of displacements would only increase from six to seven relocations with this alternative. (See Figure 3.8) But the total land conversion is higher. Cropland conversion increases to 4.2 acres, pasture conversion increases to 7.6 acres, woodland conversion increases to 2.8 acres, and residential/commercial conversion increases to 32.67 acres. (These conversions can be compared to the other proposed alternatives in Table 3.1 on page 3-8.) This is exclusively due the frontage road system traversing through rural and currently undeveloped areas. However, Build Alternative #4 provides increased capacity for IL 13 motorists, greater access restrictions, and frontage road networks for local traffic. It is projected that the relief provided to the traffic congestion will improve the average level of service to LOS B. Safety and traffic mobility and efficiency would be improved and opportunities for expanded economic development would be provided. Although the impacts are higher, this alternative meets the established Purpose and Need for the project. Therefore, this build alternative is the Preferred Alternative.

This Preferred Alternative would reconstruct the roadway to provide a six-lane roadway section, (three lanes in each direction) separated by an open, grass median from Division Street in Carterville to Halfway Road in Marion. Intersection improvements and signal modernizations are also proposed throughout. A railroad overpass is proposed for the Burlington Northern/Santa Fe railroad crossing just east of Skyline Drive in Marion. A frontage road will be constructed on the south side of IL 13 from Walton Way to Skyline Drive with Marathon Drive connecting to it. This proposed frontage road will also include a 10-ft. bicycle/pedestrian path separated from the roadway, along its northern side. Marathon Drive, along with an adjacent bicycle/pedestrian path, will run under the railroad overpass, providing another open access point to the Illinois Centre Mall. A proposed frontage road system (utilizing some areas of existing frontage roads) on both the north and south sides of IL 13 from IL 148 to Division Street in Carterville is also included. A 10-ft. bicycle/pedestrian path extending from Briggs Road near the Logan Medical Park to Division Street in Carterville is also

proposed along the frontage road proposed for the north side of IL 13. This bicycle/pedestrian path is proposed to be separated from the frontage roadway as well. Access between the intersections at IL 148 and Division Street in Carterville will be restricted as shown in Figure 3.7. An interchange will be provided for frontage road users entering and exiting IL 13 and will be located near the existing intersection of IL 13 and Wolf Creek Road.

The potential for regional economic development and traffic mobility and efficiency is achieved with this Preferred Alternative. The design would improve both capacity and safety by providing an acceptable level of service throughout the project corridor.

The achievement of the Purpose and Need for the project is optimal with this Build Alternative #4 in that it

- improves the economic potential for the area by addressing the traffic volumes generated by the existing and future economic development in the corridor,
- enhances traffic mobility and efficiency by providing an adequate transportation facility to move the volumes of traffic through the population centers, commercial and industrial areas, and major crossroads within the corridor,
- provides the necessary capacity for the existing and projected traffic volumes by expanding the existing four-lane roadway to six lanes, improving the intersections with widening, channelization and signalization, and providing a frontage road system for local traffic,
- addresses existing safety concerns within the corridor by efficiently moving the traffic through a corridor with higher access control and traffic capacity and improved intersections.

Table 3.1

* Cost and Impacts Comparison

Alternatives	Project Costs			Total Cost (\$ million)	Land-Use Conversions				Potential Displacements		Noise Impacted Receptors *** (number)	Wetland Impacts (acres)	Threatened & Endangered Species Involvement (Y / N)	Potential Special Waste Sites (number)	Cultural Resource Involvement (Y/N)
	Construction (\$ million)	Land Acquisition (\$ million)	Utilities (\$ million)		Cropland (acres)	Pasture (acres)	Woodland (acres)	Residential and Commercial (acres)	Residential	Commercial					
No-Action Alternative	** 8.0	0	0	8	0	0	0	0	0	0	0	0	N	0	N
Build Alternative #1 Add Lanes with Open Median	75.1	9.9	3.4	90	0.25	3	1.5	1	5	1	9	0.75	N	4	N
Build Alternative #2 Modified Add Lanes with Open Median	73.7	9.8	3.3	86.8	0.13	2.5	1.1	1	5	1	9	0.55	N	4	N
Build Alternative #3 Add Lanes with Median Barrier	76.7	6.9	2.1	85.7	0	1.1	0	1	5	1	9	0.32	N	4	N
Build Alternative #4 (Preferred Alternative) Modified Add Lanes with Frontage Roads	79.5	10.4	3.5	93.4	4.2	7.6	6.6	32.67	6	1	9	1.85	N	4	N

* Estimated using 2007 data

** Cost of routine maintenance and resurfacing

*** A "receptor" refers to a residence, school, church, commercial building or other structure where humans could be affected by noise.

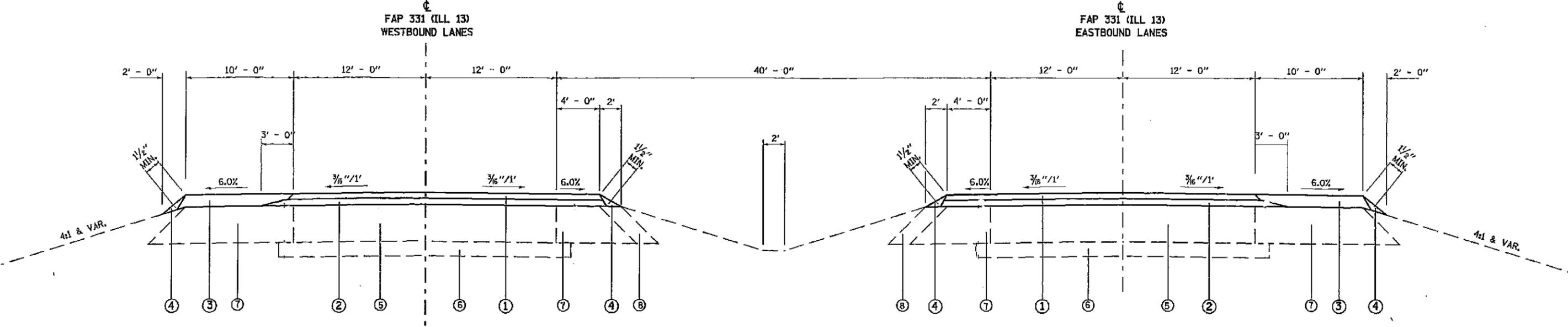
A negatively impacted receptor is (a) any structure where predicted noise levels approach or exceed the noise abatement criterion threshold of 67 dBA Leq

(a) a measurement of noise in decibels over a period of time) or (b) any commercial structure where predicted noise levels approach or exceed the noise

abatement criterion threshold of 72 dBA Leq, or (c) when the predicted noise levels are substantially higher (i.e. are more than 14 decibels greater) than the existing noise levels.

= Preferred Alternative

No-Action Alternative Typical Sections

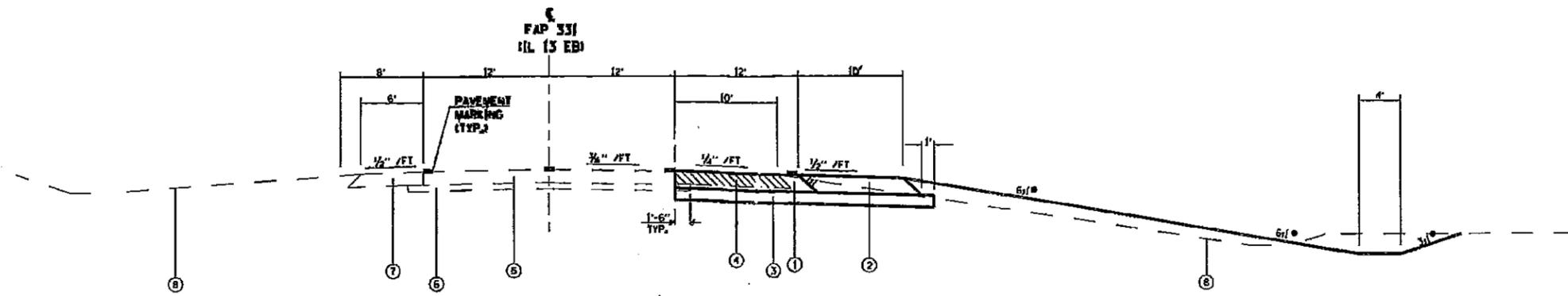


LEGEND

- 1 POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE E, N105, 1/2"
- 2 POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N105, 1 3/4"
- 3 BITUMINOUS SHOULDERS
- 4 AGGREGATE SHOULDERS TYPE B
- 5 PCC PAVEMENT, 10"
- 6 SUB-BASE GRANULAR MATERIAL
- 7 BITUMINOUS SHOULDERS, 10"
- 8 AGGREGATE SHOULDERS

Figure 3.1

Build Alternative #1 Typical Sections



- ① BITUMINOUS CONCRETE PAVEMENT (FULL-DEPTH, SUPERPAVE, 10 1/2")
- ② BITUMINOUS SHOULDERS SUPERPAVE 10 1/2"
- ③ SUB-BASE GRANULAR MATERIAL, TYPE A 8"
- ④ PAVED SHOULDER REMOVAL
- ⑤ EXISTING DRC PAVEMENT 6"
- ⑥ EXISTING BAW SUBBASE 4"
- ⑦ EXISTING BITUMINOUS SHOULDER
- ⑧ EXISTING GROUND LINE

DATE: 10/10/00
 DRAWN BY: J. J. J.
 CHECKED BY: J. J. J.
 APPROVED BY: J. J. J.

Figure 3.2

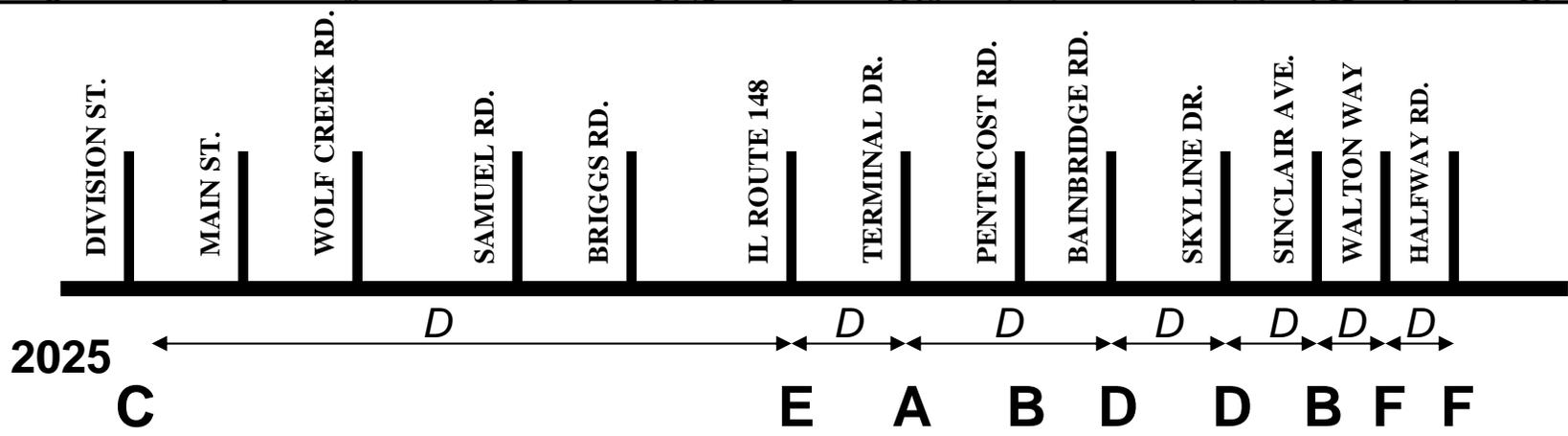
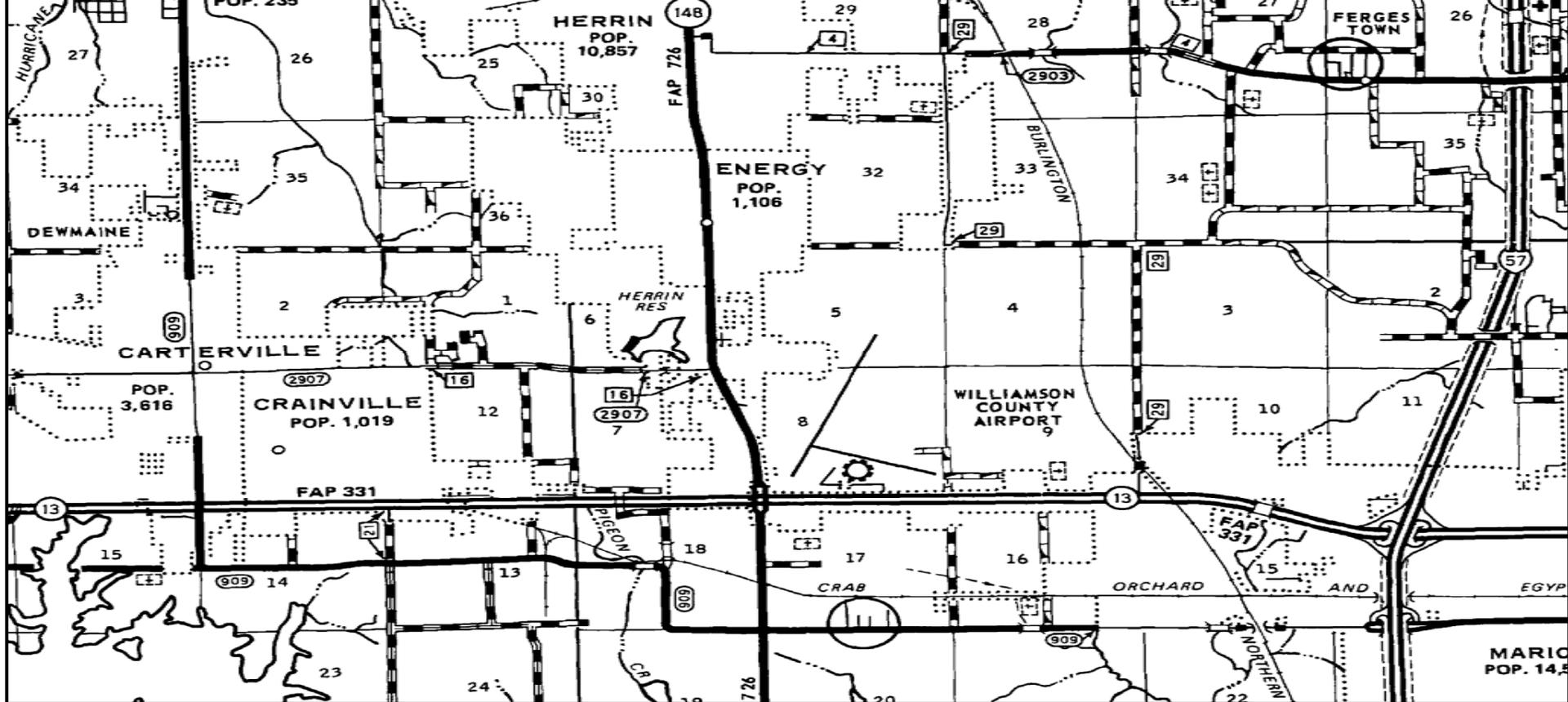


FIGURE 3.3

PROJECTED LEVEL OF SERVICE FOR BUILD ALTERNATIVES 1 THROUGH 3

CONTRACT NO.			
F.A. RTE.	SECTION	COUNTY	TOT. SHEET
STA.		TO STA.	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJ.	

Build Alternative #3 Typical Section

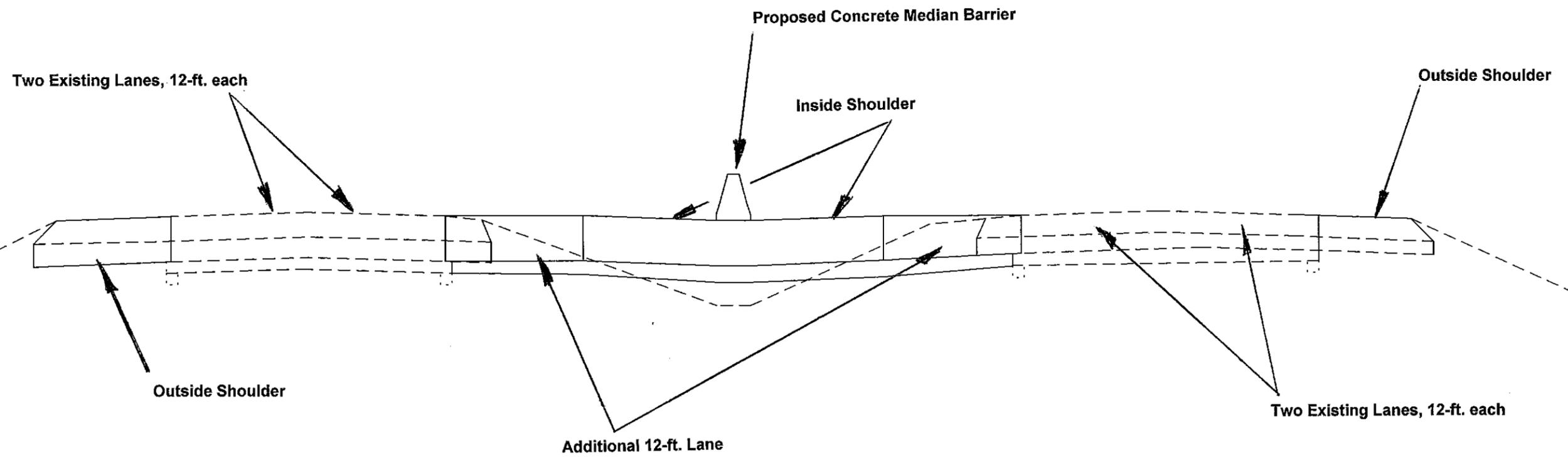


Figure 3.4

REVISIONS	
NAME	DATE

PREFERRED ALTERNATIVE PLAN DETAILS

N

WILLIAMSON COUNTY REGIONAL AIRPORT
& AIRPORT INDUSTRIAL PARK

ILL 148

TERMINAL DRIVE

EXPRESS ROAD

IL 13

ROBERT L. BUTLER INDUSTRIAL PARK

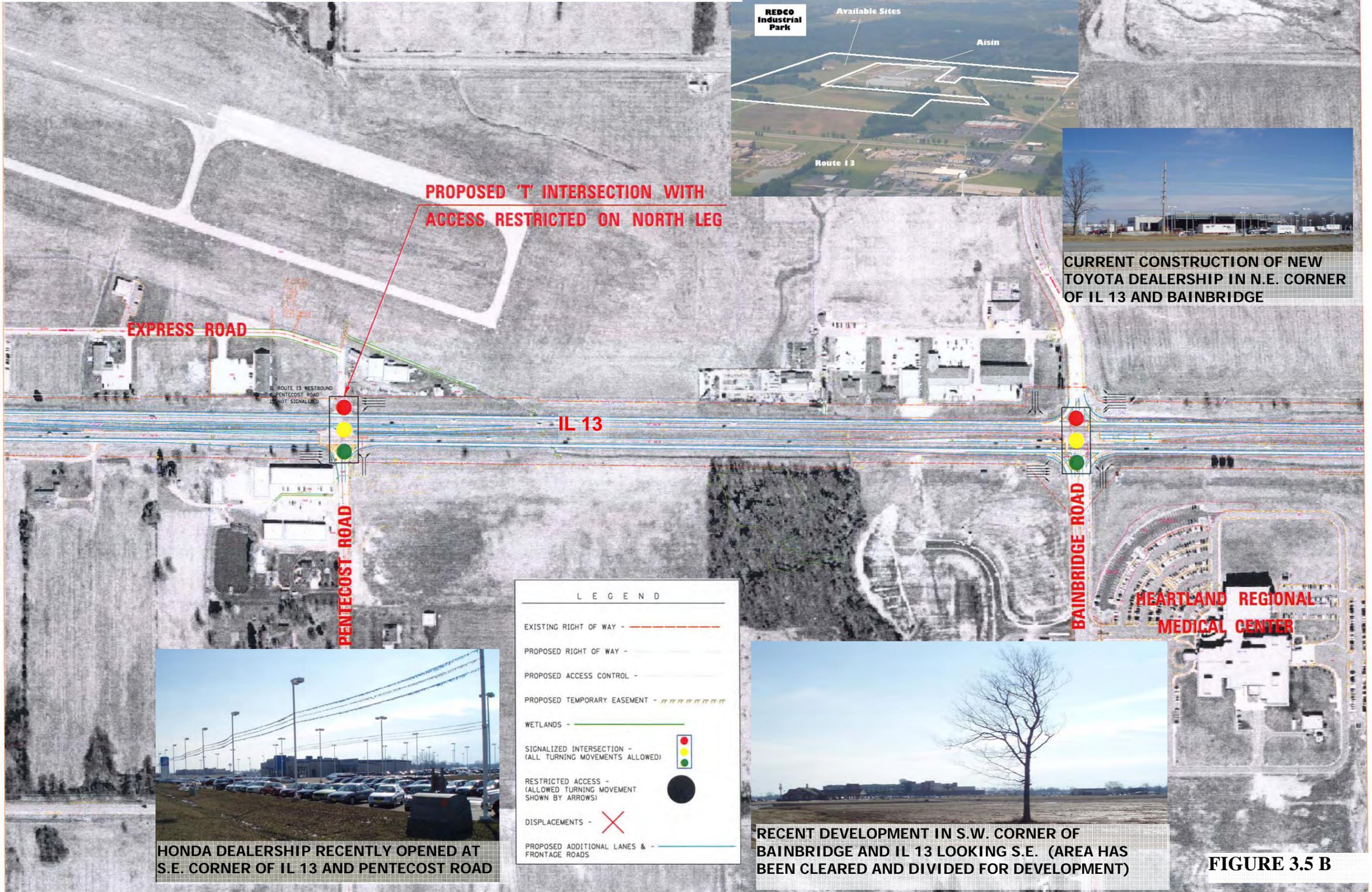
PROPOSED FRONTAGE ROADS TYING
INTO EXISTING FRONTAGE ROAD SYSTEM

LEGEND	
EXISTING RIGHT OF WAY -	---
PROPOSED RIGHT OF WAY -	---
PROPOSED ACCESS CONTROL -	---
PROPOSED TEMPORARY EASEMENT -	-----
WETLANDS -	---
SIGNALIZED INTERSECTION - (ALL TURNING MOVEMENTS ALLOWED)	
RESTRICTED ACCESS - (ALLOWED TURNING MOVEMENT SHOWN BY ARROWS)	
DISPLACEMENTS -	
PROPOSED ADDITIONAL LANES & - FRONTAGE ROADS	---

ROUTE 13 EASTBOUND
AT TERMINAL DRIVE
IS NOT SIGNALIZED

FIGURE 3.5 A

PREFERRED ALTERNATIVE PLAN DETAILS



PREFERRED ALTERNATIVE PLAN DETAILS

MARION

LOOKING N.E. TOWARD SKYLINE DRIVE FROM N.E. CORNER OF BAINBRIDGE AND IL 13. (HOME DEPOT IN BACKGROUND) NEW FRONTAGE RD. IS SHOWN AND DEPICTED IN YELLOW ON AERIAL PHOTO

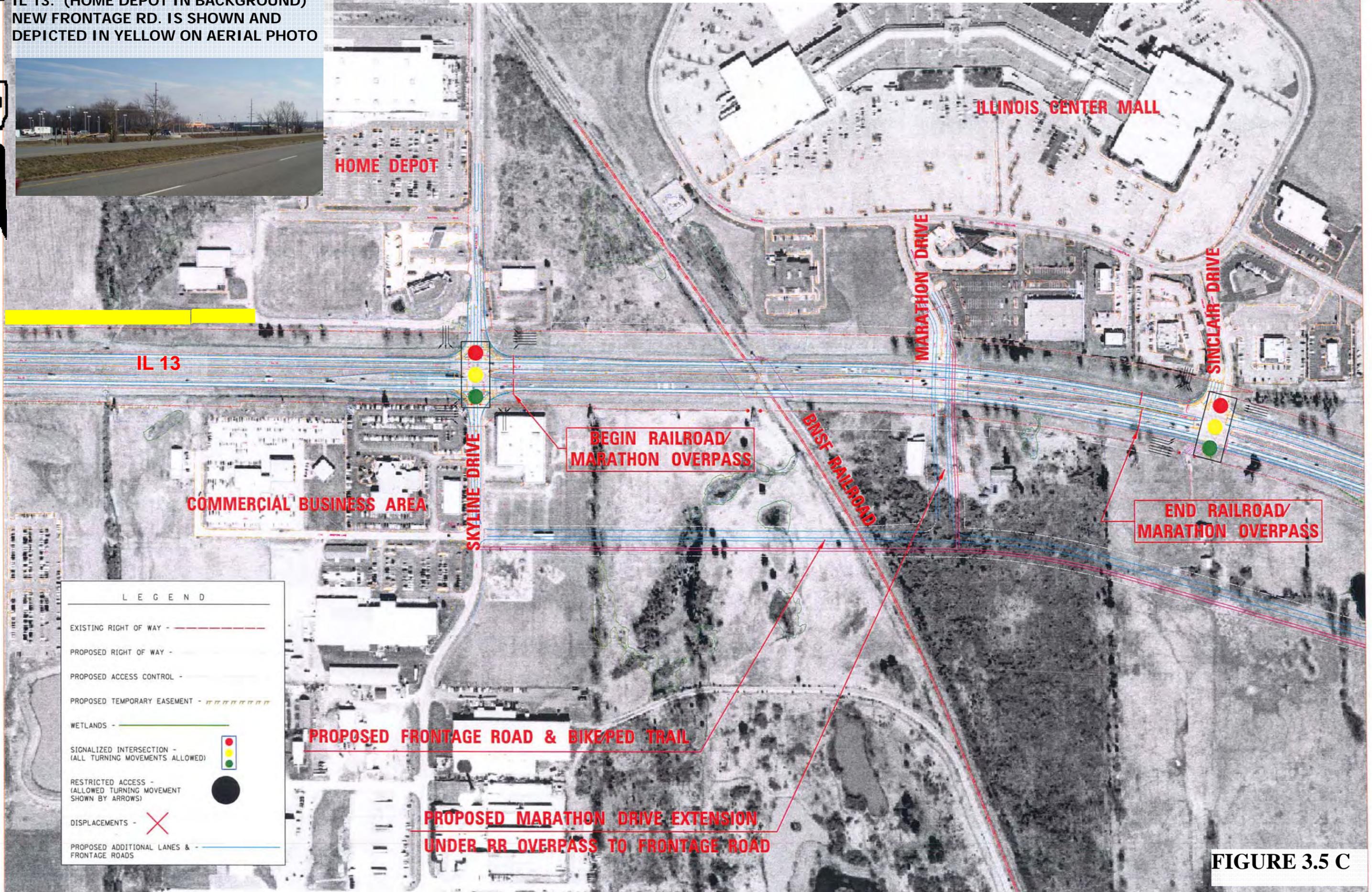


FIGURE 3.5 C



LEGEND

- EXISTING RIGHT OF WAY -
- PROPOSED RIGHT OF WAY -
- PROPOSED ACCESS CONTROL -
- PROPOSED TEMPORARY EASEMENT -
- WETLANDS -
- SIGNALIZED INTERSECTION - (ALL TURNING MOVEMENTS ALLOWED)
- RESTRICTED ACCESS - (ALLOWED TURNING MOVEMENT SHOWN BY ARROWS)
- DISPLACEMENTS -
- PROPOSED ADDITIONAL LANES & FRONTAGE ROADS -

PREFERRED ALTERNATIVE PLAN DETAILS

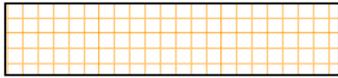


TO ILLINOIS CENTRE MALL

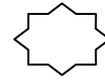
TO MARATHON DR. AND SKYLINE DR.

PROPOSED FRONTAGE ROAD & BIKE/PED TRAIL TYING INTO WALTON WAY

FIGURE 3.5 D



Areas of Commercial Establishment



Recent Establishments



RECENT CORRIDOR DEVELOPMENT

Figure 3.6



CARTERVILLE

CRAINVILLE

PROPOSED FRONTAGE ROAD & BIKE/PEDESTAL TRAIL

WESTERN PROJECT TERMINUS

DIVISION ST

MAIN ST

IL 13

PLAZA DR.

**ENTERPRISE ZONE:
LAND CURRENTLY
FOR SALE**

**PROPOSED FRONTAGE ROADS TYING
INTO EXISTING FRONTAGE ROAD SYSTEM**

RIGHT IN/RIGHT
OUT ONLY LEFT
TURN NOT ALLOWED



LEGEND	
EXISTING RIGHT OF WAY -	
PROPOSED RIGHT OF WAY -	
PROPOSED ACCESS CONTROL -	
PROPOSED TEMPORARY EASEMENT -	
WETLANDS -	
SIGNALIZED INTERSECTION - (ALL TURNING MOVEMENTS ALLOWED)	
RESTRICTED ACCESS - (ALLOWED TURNING MOVEMENT SHOWN BY ARROWS)	
DISPLACEMENTS -	
PROPOSED ADDITIONAL LANES & - FRONTAGE ROADS	



**RECENT DEVELOPMENTS ALONG PLAZA
DRIVE LOOKING S.E. TOWARD DIVISION ST.**



**LAND CURRENTLY CLEARED AND
DIVIDED FOR COMMERCIAL AND
INDUSTRIAL DEVELOPMENT (LOOKING
S.W. TOWARD MAIN ST.)**

FIGURE 3.7A

PREFERRED ALTERNATIVE PLAN DETAILS



CRAINVILLE



RECENT COMMERCIAL AND RESIDENTIAL DEVELOPMENT LOOKING NORTH AT WOLF CREEK RD.

PROPOSED FRONTAGE ROAD & BIKEPED TRAIL

EXISTING FRONTAGE ROAD WITH PROPOSED BIKEPED TRAIL

ENTERPRISE ZONE: LAND CURRENTLY CLEARED AND FOR SALE

IL 13

EXISTING FRONTAGE ROADS

PROPOSED DIAMOND INTERCHANGE WITH WOLF CREEK ROAD OVERPASS

EXISTING FRONTAGE ROADS

WOLF CREEK ROAD

PROPOSED FRONTAGE ROAD

LEGEND	
EXISTING RIGHT OF WAY -	---
PROPOSED RIGHT OF WAY -	---
PROPOSED ACCESS CONTROL -	---
PROPOSED TEMPORARY EASEMENT -	-----
WETLANDS -	---
SIGNALIZED INTERSECTION - (ALL TURNING MOVEMENTS ALLOWED)	●●●
RESTRICTED ACCESS - (ALLOWED TURNING MOVEMENT SHOWN BY ARROWS)	●
DISPLACEMENTS -	✕
PROPOSED ADDITIONAL LANES & FRONTAGE ROADS	---



RECENT COMMERCIAL DEVELOPMENT LOOKING S.W. FROM WOLF CREEK TOWARD MAIN ST. (ENTIRE AREA CLEARED, DIVIDED AND FOR SALE)

FIGURE 3.7 B

PREFERRED ALTERNATIVE PLAN DETAILS

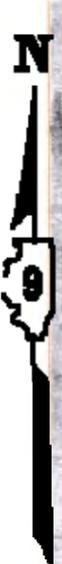


LEGEND

- EXISTING RIGHT OF WAY - - - - -
- PROPOSED RIGHT OF WAY - - - - -
- PROPOSED ACCESS CONTROL - - - - -
- PROPOSED TEMPORARY EASEMENT - - - - -
- WETLANDS - - - - -
- SIGNALIZED INTERSECTION - (ALL TURNING MOVEMENTS ALLOWED)
- RESTRICTED ACCESS - (ALLOWED TURNING MOVEMENT SHOWN BY ARROWS)
- DISPLACEMENTS -
- PROPOSED ADDITIONAL LANES & FRONTAGE ROADS - - - - -

FIGURE 3.7 C

PREFERRED ALTERNATIVE PLAN DETAILS



EXISTING FRONTAGE ROADS

HERRIN

HERRIN MEDICAL

IL 13

ILL 148

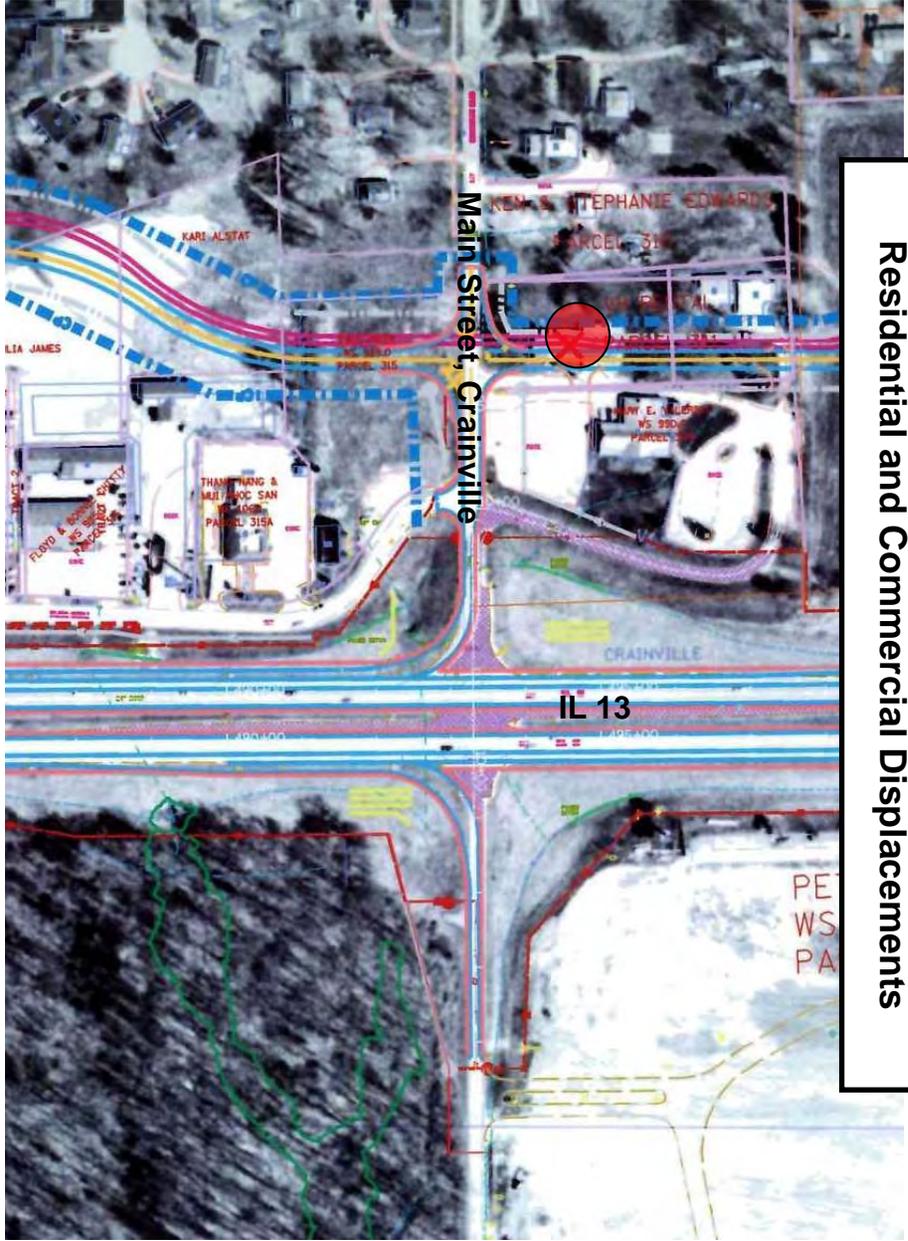
PROPOSED FRONTAGE ROADS TYING INTO EXISTING FRONTAGE ROAD SYSTEM

EXISTING FRONTAGE ROADS

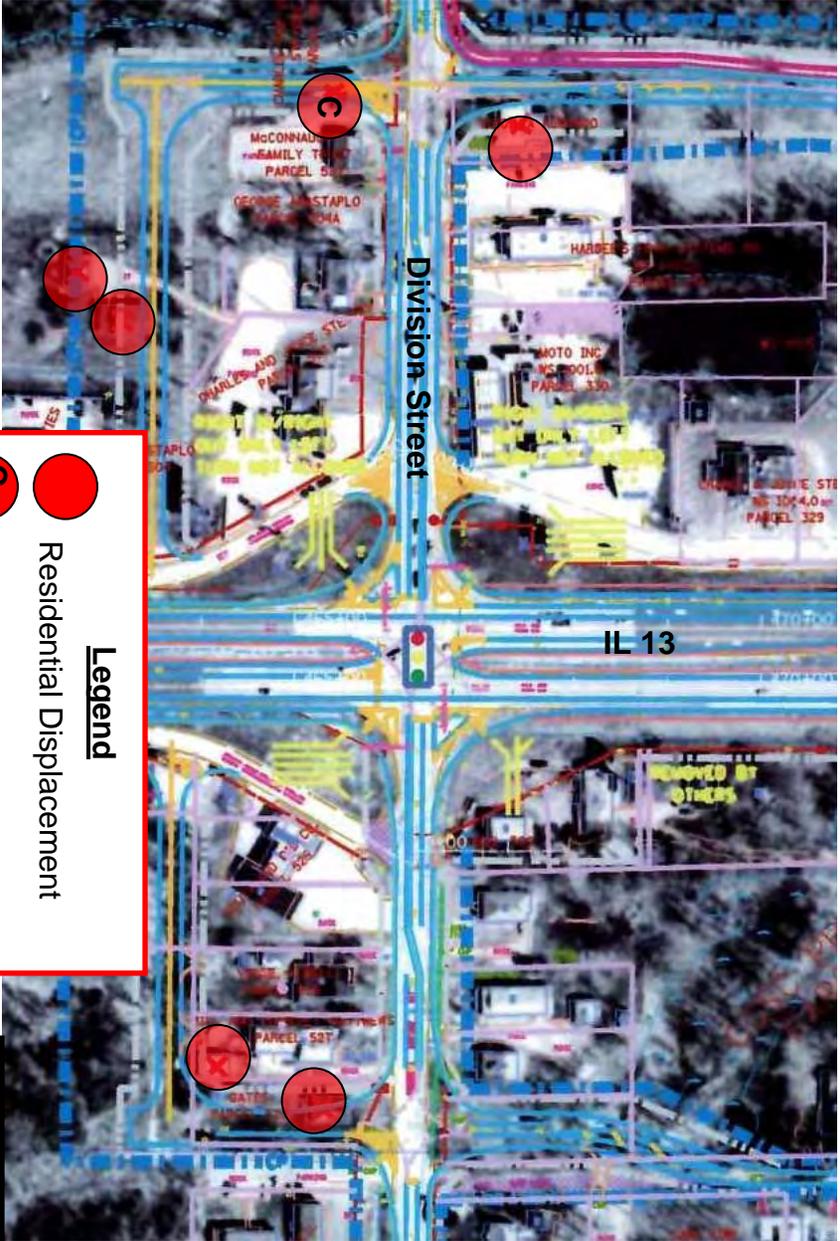
PROPOSED FRONTAGE ROAD

LEGEND	
EXISTING RIGHT OF WAY -	---
PROPOSED RIGHT OF WAY -	---
PROPOSED ACCESS CONTROL -	---
PROPOSED TEMPORARY EASEMENT -	-----
WETLANDS -	---
SIGNALIZED INTERSECTION - (ALL TURNING MOVEMENTS ALLOWED)	
RESTRICTED ACCESS - (ALLOWED TURNING MOVEMENT SHOWN BY ARROWS)	
DISPLACEMENTS -	
PROPOSED ADDITIONAL LANES & FRONTAGE ROADS	---

FIGURE 3.7 D



Residential and Commercial Displacements



Legend
 ● Residential Displacement
 ● C Commercial Displacement

Figure 3.8

SECTION 4.0

ENVIRONMENTAL CONSEQUENCES OF THE PREFERRED ALTERNATIVE

Section 4.0

ENVIRONMENTAL CONSEQUENCES OF THE PREFERRED ALTERNATIVE

The environmental inventory map (see Figure 2.2) identifies all sensitive cultural, natural, physical, and socioeconomic resources, and special waste sites in the study area. Resources potentially impacted by the proposed action or that require discussion pursuant to applicable laws and regulations are addressed in this section. Build Alternative #4, the preferred alternative (Modified Add Lanes with Open Median and Frontage Road System), was retained for further impact analysis and is discussed below. Table 4.1 summarizes the impacts of the preferred alternative. These impacts are also shown on Figure 4.1A through 4.1H, *Environmental Impacts*.

Table 4.1 Impact Summary of the Preferred Alternative

Impact Category	Impacts of Preferred Alternative (Build Alternative #4)
Right-of-Way acquisition (acres)	51
Displacements	
Residential	6
Commercial	1
Agricultural Impacts	
Prime Farmland Conversion (acres)	3.6
Important Farmland Conversion (acres)	0.6
Cultural Resources	No Adverse Impact
Air Quality	No Adverse Impact
Noise	9 Receptors Impacted
Natural Resources	
Designated Natural Areas	None identified within limits
Nature Preserves	None identified within limits
Threatened or Endangered Species	No Adverse Impact
Water Resources	3 Stream Crossings
Floodplains	No Adverse Impact
Wetlands	
Forested (acres)	1.4
Marsh / Wet Meadow (acres)	0.43
Pond (acres)	0.5
Special Waste	4 sites in Carterville
Special Lands	No Impact

4.1 Socioeconomic

4.1.1 Community Characteristics and Cohesion

The study area is primarily in commercial and residential use on either side of IL Route 13 with a minor amount of widely scattered agricultural use. The communities of Carterville, Crainville, Herrin and Marion have developed along both sides of the roadway. The proposed highway expansion and roadway network system will not adversely affect or alter the community cohesion.

4.1.2 Title VI

Groups of ethnic, racial or religious minorities or elderly or handicapped people are not present within the project area. No groups or individuals have been or will be excluded from participation in public involvement activities, denied the benefit of the project or subjected to discrimination in any way on the basis of race, color, age, sex, national origin, disability or religion.

4.1.3 Environmental Justice

Using U.S. Census Bureau data for 2000, the potential for disproportionate impacts to low-income or minority populations was evaluated in accordance with Executive Order 12898 “Federal Actions to Address Environmental Justice in Minority Populations.” The Median Family Income (MFI) and Median Household Income (MHI) for each community are shown in Table 4.2. The 2000 Census Poverty Level for a family of four is \$17,029. The Executive Order defines low-income as a person whose median household income is at or below the Department of Health and Human Services (HHS) poverty guideline. The 2008 HHS Poverty Guideline for a family of four is \$21,200.

Table 4.2 Economic Characteristics

Community	MFI (2000 Census)	MHI (2000 Census)	% of Families Below Poverty Level
Carterville, Illinois	\$44,722	\$36,969	9.9%
Herrin, Illinois	\$39,108	\$28,532	13.6%
Marion, Illinois	\$39,275	\$30,364	11.2%

The population characteristics for each community within the project limits are shown in Table 4.3. The project footprint, including areas of proposed frontage roads, does not impact any low-income or minority populations.

Table 4.3 Population Characteristics

Community	Population (2000 Census)	Black or African American	American Indian/Alaska Native	Asian	Hispanic or Latino	Other
Carterville	4,616	52 (1.1%)	7 (0.2%)	43 (0.9%)	52 (1.1%)	27 (0.6%)
Herrin	11,298	104 (0.9%)	39 (0.3%)	76 (0.7%)	107 (0.9%)	35 (0.3%)
Marion	16,035	696 (4.3%)	39 (0.2%)	133 (0.8%)	257 (1.6%)	70 (0.4%)

4.1.4 Public Facilities and Services

The preferred alternative will provide expanded traffic capacity to IL Route 13 as well as additional frontage road networks to improve community access. Improved Bicycle and pedestrian access will also be provided with the frontage road networks. Access to all schools, churches, health facilities and other public facilities and services is provided off of adjacent side roads and streets that intersect IL Route 13. There will be no adverse impact to public facilities and services due to the proposed project. Those public facilities and services, including emergency services will benefit from the improved traffic flow on IL Route 13 and the alternative access provided by the frontage roads.

4.1.5 Change in Travel Patterns

With the addition of frontage road networks, the preferred alternative would provide alternative routes of access to the local residences, commercial businesses and industrial establishments throughout the area. With direct access to IL Route 13 restricted or limited in some areas, these alternative routes may involve greater trip distances for some local traffic. Bicycle/pedestrian paths will also be provided in areas of Carterville, Crainville and Marion, offering an alternative mode of transportation and another travel pattern for use.

4.1.6 Relocations

The preferred alternative will result in the relocation of six residences and one business. Five of these residential relocations occur in the area of the proposed intersection improvement at Division Street and IL Route 13 at Carterville. The business relocation, a chiropractic clinic, occurs in the northwest quadrant of the same intersection and will impact the doctor and his staff of three employees. The remaining residential relocation occurs in the Northeast quadrant of the intersection of the proposed frontage road and Main Street in Crainville. These displacements are all shown on Figure 3.8 and also included in Figure 4.1, *Environmental Impacts*. Comparable housing is currently available in the Carterville and Crainville area. The provisions of the “Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970” as amended and the IDOT Land Acquisition Procedures Manual will be followed. Efforts will be made to provide housing of last resort, if necessary, and housing resources will be made available to all relocates without discrimination.

4.1.7 Land Use and Economic Impacts

The study area includes intensive commercial development along IL Route 13 from Division Street in Carterville to the intersection of IL Route 148 in Herrin. Active and aggressive industrial and commercial development is occurring from IL Route 148 in Herrin to Halfway Road in Marion. Sporadic residential areas occur along IL Route 13 in the areas of Carterville and Crainville. The remainder of the study area involves idle and active agricultural use. (See Figure 2.1.) The preferred alternative is compatible with this current land use throughout the corridor.

The increased traffic capacity of IL Route 13 and the addition of a frontage road system in the areas of Crainville and Marion will offer improved traffic mobility and efficiency. The preferred alternative would offer a transportation system that would enhance the economic potential for the area by providing a safe and efficient means to transfer goods and services.

4.1.8 Pedestrian and Bicycle Facilities

The project is located in a corridor where several bicycle and pedestrian generators exist. In the area of Carterville and Crainville, there are numerous commercial establishments interspersed with residential areas. A bicycle/pedestrian trail is planned along the proposed frontage road system to serve this area. (See Figure 3.7.) In the Marion area, many bicycle/pedestrian generators exist. The Illinois Centre Mall is located in an area just north of IL Route 13 that includes many restaurants, other businesses, medical facilities, a golf course, a baseball stadium, and residential areas. A bicycle/pedestrian trail is planned along the frontage road that is proposed to the south of IL Route 13. (See Figure 3.5.) This proposed frontage road will include a side road that will run under the proposed railroad overpass and tie into Marathon Drive, an entrance to the Illinois Centre Mall. Marathon Drive then joins an existing city street network that serves all the aforementioned businesses and residences.

4.2 Agriculture

Approximately 4.2 acres of prime and important farmland would be impacted as a result of the preferred alternative. (See Figure 4.1.) The proposed project will not create any diagonal severances or uneconomical remnants of agricultural parcels. Although the impact is less than three acres per project length, additional right of way for the proposed frontage roads is required that is not contiguous to the existing highway right of way. Therefore, a form AD-1006 was submitted to the U.S. Department of Agriculture's Natural Resources Conservation Service and the Illinois Department of Agriculture. (See Appendix, p. A-23 to A-24.)

4.3 Cultural Resources

According to the Illinois Historic Preservation Agency Historic Architectural/Archaeological Resources Geographic Information System (HAARGIS, 2007), no sites listed on the National Register of Historic Places or determined eligible for the National Register are located within the study corridor.

An Archaeological Report and Phase I survey was completed by personnel from the Illinois Transportation Archaeological Research Program (ITARP) concerning historical and archaeological properties. No archaeological, architectural, or historic sites were identified within the proposed study corridor.

The Illinois State Historic Preservation Officer (SHPO) concurred with IDOT's determination that no historic properties subject to protection under Section 106 of the National Historic Preservation Act of 1966, as amended, would be affected by the preferred alternative. (See Appendix p. A-20 and A-21.)

4.4 Air Quality

No portion of this project is within a designated non-attainment area or maintenance area for any of the air pollutants for which the USEPA has established standards. Accordingly, a conformity determination under 40 CFR Part 93 (“Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Funded or Approved under Title 23 USC or the Federal Transit Act”) is not required.

The air quality effects of the proposed project were analyzed using the Illinois Carbon Monoxide Screen for Intersection Modeling (COSIM). This analysis was performed on all receptors defined as “buildings or locations where the general public may be expected to remain for the duration of the period specified by the National Ambient Air Quality Standard (NAAQS, IDOT 1982).” These receptors include residences and hotels. (See Figure 2.2 for receptor locations.) Where the pre-screen analysis indicated traffic volumes on the busiest intersection leg below the Pre-Screen Cutoff ADT for the closest receptor distance, further analysis was not required. The “worst case” analysis provided by the COSIM model indicated that the proposed undertaking does not have the potential for contributing to a violation of the NAAQS for Carbon Monoxide (CO). CO concentrations for the worst case receptor were as follows: Existing (2008) – 6.5 ppm; Build - Time of Completion (TOC) (2010) – 7.0 ppm, TOC + 10 years (2020) – 7.1 ppm, and Design Year (2030)- 7.6 ppm; No Action – 6.3 ppm in 2010, 6.4 ppm in 2020, and 7.0 ppm in 2030. (See Table 4.4.)

**Table 4.4 Air Quality Effects Analyzed with COSIM
(Carbon Monoxide concentrations in ppm)**

INTERSECTION	RECEPTORS	EXIST. YEAR	TOC BUILD	TOC NO BUILD	TOC+10 BUILD	TOC+10 NO BUILD	DESIGN YEAR BUILD	DESIGN YEAR NO BUILD
Division St.	A1: Residence in NE Quad	5.1	5.2	4.9	5.2	5.1	5.4	5.4
	A2: Residence in NW Quad	5.2	5.0	4.8	5.0	5.0	5.3	5.4
	A3: Residence in NW Quad	4.4	4.5	4.3	4.6	4.3	4.8	4.5
	A4: Residence in SE Quad	6.5	7.0	6.3	7.1	6.4	7.6	7.0

4.4.1 Construction-Related Particulate Matter

The Department of Transportation’s Standard Specifications for Road and Bridge Construction include provisions on dust control. Under these provisions, dust and airborne dirt generated by construction activities will be controlled through dust control procedures or a specific dust control plan, when warranted. The contractor and the Department will meet to review the nature and extent of dust-generating activities and will cooperatively develop specific types of control techniques appropriate to the specific situation. Techniques that may warrant consideration include measures such as minimizing track-out of soil onto nearby publicly-traveled roads, reducing speed on unpaved roads, covering haul vehicles, and applying chemical dust suppressants or water to exposed surfaces, particularly those on which construction vehicles travel. With the application of appropriate measures to limit dust emissions during construction, this project will not cause any significant, short-term particulate matter air quality impacts.

4.4.2 Mobile Source Air Toxics

In addition to the criteria air pollutants for which there are National Ambient Air Quality Standards (NAAQS), EPA also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners) and stationary sources (e.g., factories or refineries).

Mobile Source Air Toxics (MSATs) are a subset of the 188 air toxics defined by the Clean Air Act. The MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

The EPA is the lead Federal Agency for administering the Clean Air Act and has certain responsibilities regarding the health effects of MSATs. The EPA issued a Final Rule on Controlling Emissions of Hazardous Air Pollutants from Mobile Sources. 66 FR 17229 (March 29, 2001). This rule was issued under the authority in Section 202 of the Clean Air Act. In its rule, EPA examined the impacts of existing and newly promulgated mobile source control programs, including its reformulated gasoline (RFG) program, its national low emission vehicle (NLEV) standards, its Tier 2 motor vehicle emissions standards and gasoline sulfur control requirements, and its proposed heavy duty engine and vehicle standards and on-highway diesel fuel sulfur control requirements. Between 2000 and 2020, FHWA projects that even with a 64 percent increase in vehicle miles traveled (VMT), these programs will reduce on-highway emissions of benzene, formaldehyde, 1,3-butadiene, and acetaldehyde by 57 percent to 65 percent, and will reduce on-highway diesel PM emissions by 87 percent.

As a result, EPA concluded that no further motor vehicle emissions standards or fuel standards were necessary to further control MSATs. The agency is preparing another rule under authority of CAA Section 202(I) that will address these issues and could make adjustments to the full 21 and the primary six MSATs.

This Environmental Assessment (EA) includes a basic analysis of the likely MSAT emission impacts of the project. However, available technical tools do not enable us to predict the project-specific health impacts of the emission changes associated with the alternatives carried forward in this EA. Due to these limitations, the following discussion is included in accordance with CEQ regulations (40 CFR 1502.22(b)) regarding incomplete or unavailable information:

Evaluating the environmental and health impacts from MSATs on a proposed highway project would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling in order to estimate human exposure to the estimated concentrations, and then final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the MSAT health impacts of this project.

1. Emissions. The EPA tools to estimate MSAT emissions from motor vehicles are not sensitive to key variables determining emissions of MSATs in the context of highway projects. While MOBILE 6.2 is used to predict emissions at a regional level, it has limited applicability at the project level. MOBILE 6.2 is a trip-based model—emission factors are projected based on a typical trip of 7.5 miles, and on average speeds for this typical trip. This means that MOBILE 6.2 does not have the ability to predict emission factors for a specific vehicle operating condition at a specific location at a specific time. Because of this limitation, MOBILE 6.2 can only approximate the operating speeds and levels of congestion likely to be present on the largest-scale projects, and cannot adequately capture emissions effects of smaller projects. For particulate matter, the model results are not sensitive to average trip speed, although the other MSAT emission rates do change with changes in trip speed. Also, the emissions rates use in MOBILE 6.2 for both particulate matter and MSATs are based on a limited number of tests of mostly older-technology vehicles. Lastly, in its discussions of PM under the conformity rule, EPA has identified problems with MOBILE 6.2 as an obstacle to quantitative analysis.

These deficiencies compromise the capability of MOBILE 6.2 to estimate MSAT emissions. MOBILE 6.2 is an adequate tool for projecting emissions trends, and performing relative analyses between alternatives for very large projects, but it is not sensitive enough to capture the effects of travel changes tied to smaller projects or to predict emissions near specific roadside locations.

2. Dispersion. The tools to predict how MSATs disperse are also limited. The EPA's current regulatory models, CALINE3 and CAL3QHC, were developed and validated more than a decade ago for the purpose of predicting episodic concentrations of carbon monoxide to determine compliance with the NAAQS. The performance of dispersion models is more accurate for predicting maximum concentrations that occur at some time at some location within a geographic area. This limitation makes it difficult to predict accurate exposure patterns at specific times at specific highway project locations across an urban area to assess potential health risk. The NCHRP is conducting research on best practices in applying models and other technical methods in the analysis of MSATs. This work will also focus on identifying appropriate methods of documenting and communicating MSAT impacts in the NEPA process and to the general public. Along with these general limitations of dispersion models, FHWA is also faced with a lack of monitoring data in most areas for use in establishing project-specific MSAT background concentrations.
3. Exposure Levels and Health Effects. Finally, even if emission levels and concentrations of MSATs could be accurately predicted, shortcomings in current techniques for exposure assessment and risk analysis preclude us from reaching meaningful conclusions about project-specific health impacts. Exposure assessments are difficult because it is difficult to accurately calculate annual concentrations of MSATs near roadways, and to determine the portion of a year that people are actually exposed to those concentrations at a specific location. These difficulties are magnified for 70-year cancer assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over a 70-year period. There are also considerable uncertainties associated with the existing estimates of toxicity of the various MSATs,

because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population. Because of these shortcomings, any calculated difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with calculating the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against other project impacts that are better suited for quantitative analysis.

Research into the health impacts of MSATs is ongoing. For different emission types, there are a variety of studies that show that some either are statistically associated with adverse health outcomes through epidemiological studies (frequently based on emissions levels found in occupational settings) or that animals demonstrate adverse health outcomes when exposed to large doses.

Exposure to toxics has been a focus of a number of EPA efforts. Most notably, the Agency conducted the National Air Toxics Assessment (NATA) in 1996 to evaluate modeled estimates of human exposure applicable to the county level. While not intended for use as a measure of or benchmark for local exposure, the modeled estimates in the NATA database best illustrate the levels of various toxics when aggregated to a national or State level.

The EPA is in the process of assessing the risks of various kinds of exposures to these pollutants. The EPA Integrated Risk Information System (IRIS) is a database of human health effects that may result from exposure to various substances found in the environment. The IRIS database is located at <http://www.epa.gov/iris>. The following toxicity information for the six prioritized MSATs was taken from the IRIS database Weight of Evidence Characterization summaries. This information is taken verbatim from EPA's IRIS database and represents the Agency's most current evaluations of the potential hazards and toxicology of these chemicals or mixtures.

- Benzene is characterized as a known human carcinogen.
- The potential carcinogenicity of acrolein cannot be determined because the existing data are inadequate for an assessment of human carcinogenic potential for either the oral or inhalation route of exposure.
- Formaldehyde is a probable human carcinogen, based on limited evidence in humans, and sufficient evidence in animals. 1,3-butadiene is characterized as carcinogenic to humans by inhalation.
- Acetaldehyde is a probable human carcinogen based on increased incidence of nasal tumors in male and female rats and laryngeal tumors in male and female hamsters after inhalation exposure.
- Diesel exhaust (DE) is likely to be carcinogenic to humans by inhalation from environmental exposures. Diesel exhaust as reviewed in this document is the combination of diesel particulate matter and diesel exhaust organic gases.
- Diesel exhaust also represents chronic respiratory effects, possibly the primary noncancer hazard from MSATs. Prolonged exposures may impair pulmonary function and could produce symptoms, such as cough, phlegm, and chronic bronchitis. Exposure relationships have not been developed from these studies.

There have been other studies that address MSAT health impacts in proximity to roadways. The Health Effects Institute, a non-profit organization funded by EPA, FHWA, and industry, has undertaken a major series of studies to research near-roadway MSAT hot spots, the health implications of the entire mix of mobile source pollutants, and other topics. The final summary of the series is not expected for several years.

Some recent studies have reported that proximity to roadways is related to adverse health outcomes – particularly respiratory problems¹. Much of this research is not specific to MSATs, instead surveying the full spectrum of both criteria and other pollutants. The FHWA cannot evaluate the validity of these studies, but more importantly, they do not provide information that would be useful to alleviate the uncertainties listed above and enable us to perform a more comprehensive evaluation of the health impacts specific to this project.

Because of the uncertainties outlined above, a quantitative assessment of the effects of air toxic emission impacts on human health cannot be made at the project level. While available tools do allow us to reasonably predict relative emissions changes between alternatives for larger projects, the amount of MSAT emissions from each of the project alternatives cannot be predicted with enough accuracy to be useful in estimating health impacts. (As noted above, the current emissions model is not capable of serving as a meaningful emissions analysis tool for smaller projects.) Therefore, the relevance of the unavailable or incomplete information is that it is not possible to make a determination of whether any of the alternatives carried forward would have “significant adverse impacts on the human environment.”

In this document, FHWA has provided a qualitative analysis of MSAT emissions relative to the various alternatives carried forward, and has acknowledged that the project alternatives may result in increased exposure to MSAT emissions in certain locations, although the concentrations and duration of exposures are uncertain, and because of this uncertainty, the health effects from these emissions cannot be estimated.

As discussed above, technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable estimates of MSAT emissions and effects of this project. However, even though reliable methods do not exist to accurately estimate the health impacts of MSATs at the project level, it is possible to qualitatively assess the levels of future MSAT emissions under the project. Although a qualitative analysis cannot identify and measure health impacts from MSATs, it can give a basis for identifying and comparing the potential differences among MSAT emissions – if any – from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by the FHWA entitled A Methodology for Evaluating Mobile Source Air Toxic Emission Among Transportation Project Alternatives, found at: www.fhwa.dot.gov/environment/airtoxic/msatcompare/msatemiissions.htm

¹ South Coast Air Quality Management District, Multiple Air Toxic Exposure Study-II (2000); Highway Health Hazards, The Sierra Club (2004) summarizing 24 Studies on the relationship between health and air quality; NEPA’s Uncertainty in the Federal Legal Scheme Controlling Air Pollution from Motor Vehicles, Environmental Law Institute, 35 ELR 10273 (2005) with health studies cited therein.

For each build alternative carried forward in the Environmental Assessment (EA), the amount of MSATs emitted would be proportional to the VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for each of the Build Alternatives carried forward is slightly higher than that for the No Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. This increase in VMT would lead to higher MSAT emissions for the action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to the EPA's MOBILE 6 emissions model, emissions of all the priority MSATs except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emission decreases will offset VMT-related emission increases cannot be reliably projected due to the inherent deficiencies of technical models.

Because the estimated VMT under each of the Build Alternatives carried forward are nearly the same, varying by less than six percent (6%), it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce MSAT emissions by 57 to 87 percent between 2000 and 2020. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated as part of the project alternatives will have the effect of moving some traffic closer to nearby homes, schools and businesses; therefore, under each Build Alternative carried forward there may be localized areas where ambient concentrations of MSATs could be higher under certain Build Alternatives than the No Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the expanded roadway section that would be built between IL 148 and Halfway Road in Marion under all Alternatives. However, as discussed above, the magnitude and the duration of these potential increases compared to the No Build Alternative cannot be accurately quantified due to the inherent deficiencies of current models.

In summary, when a highway is widened and, as a result, moves closer to receptors, the localized level of MSAT emissions for the Build Alternative carried forward could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSATs will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

4.5 Noise

The purpose of the noise study was to determine existing (2007) noise levels along IL Route 13 and to predict future noise levels (2036) for the preferred Build and No-Build alternatives. A traffic noise impact occurs when the future design year traffic noise levels approach (defined by IDOT as within 1 dBA) or exceed the Noise Abatement Criteria (NAC) or “substantially exceed” existing noise levels, defined by IDOT noise policy as greater than 14 dBA. The NAC for the receptors along IL Route 13 (residences, hospital, day care, churches and hotels) is 67 dBA. The modeled noise levels for the future design year were compared to the modeled noise levels for the existing conditions to determine whether traffic noise impacts will occur. Existing and predicted noise levels (Leq(h)) (the hourly steady-state sound level) were calculated for each of the receptor locations. Descriptions of existing receptors are shown in Table 4.5. The results of the noise receptor analysis are listed in Table 4.6. See Figure 2.2 for receptor locations.

Table 4.5 Existing Noise Receptors

Receptor	Description	Location	Distance to IL 13 Centerline	Number of Residences Represented
R01	Residence	North Division St.	375	2
R02	Residence	South Division St.	315	4
R03	Residence	South Main St.	575	1
R04	Residence	North Main St.	615	3
R05	Residence	South Wolf Creek Rd	1,150	1
R06	Residence	North Wolf Creek Rd	507	3
R07	Residence	South Sara Lane	313	2
R08	Residence	South Samuel Rd.	785	1
R09	Residence	South Briggs Road	635	3
R10	Residence	North Fleming Rd.	191	1
R11	Residence	North Samuel Rd.	147	60
R12	Day Care	North IL Rte 148	167	1
R13	Residence	South Terminal Dr.	168	1
R14	Residence	South Pentecost Rd.	128	3
R15	Residence	South Pentecost Rd.	486	3
R16	Residence	South Old Bainbridge Rd.	1,016	1
R17	Hospital	South Old Bainbridge Rd.	532	1
R18	Day Care	North Redco Drive	416	1
R19	Residence	South Marathon Dr.	279	1
R20	Church	North Division St.	200	2
R21	Residence	North Wolf Creek Rd	991	1
R22	Church	North Samuel Rd.	625	1
R23	Hotel	North Terminal Dr.	186	1
R24	Hotel	North Halfway Rd.	325	2

Table 4.6 Existing and Predicted Noise Levels, dBA

Receptor	Existing	No-Build	Build	Increase
R01	66	69	69	3
R02	62	65	65	3
R03	57	60	61	4
R04	56	59	60	4
R05	51	53	54	3
R06	58	61	62	4
R07	61	64	67	6
R08	58	59	60	2
R09	56	58	59	3
R10	66	69	71	5
R11	68	71	73	5
R12	70	73	74	4
R13	65	68	70	5
R14	69	73	73	4
R15	61	64	65	4
R16	58	60	61	3
R17	58	61	62	4
R18	61	63	64	3
R19	60	64	65	5
R20	63	66	67	4
R21	55	57	57	2
R22	54	57	61	7
R23	66	69	71	5
R24	57	61	62	5

Boldface indicates the noise levels approach or exceed the NAC.

4.5.1 Noise Abatement

Since predicted noise levels approached or exceeded the NAC (67 dBA) for receptors R01, R07, R10, R11, R12, R13, R14, R20 and R23, noise abatement measures were evaluated. A preliminary evaluation of possible noise abatement measures has been conducted along the alignment where there are noise impacts. Four types of noise abatement measures were evaluated to determine if they would be feasible and reasonable. Traffic noise abatement measures include traffic control measures, alteration of vertical or horizontal alignment, acquisition of buffering land, and the construction of traffic noise barriers. IDOT considers a feasible noise abatement measure as structurally and acoustically capable of attenuating traffic noise at a specific receiver by at least 8 dBA Leq(h) during the noisiest hour conditions. If such a measure is deemed feasible, then it is analyzed for its level of reasonableness. A reasonable noise abatement measure meets the following criteria: 1) the cost of the noise abatement measure does not exceed \$24,000 per benefited residence (A benefited residence is considered one that experiences a reduction of at least 5 dBA as a result of the abatement); 2) it shall have the support of the affected public; 3) development around the existing roadway is not impeded; 4) potential impacts such as social, economic and environmental effects, reduced safety, and/or restriction of access for emergency vehicles are outweighed by the benefits of the noise reductions.

4.5.2 Traffic Control Measures

Altering or lowering the noise source may be accomplished by lower speed limits, or the prohibition of louder vehicles such as heavy trucks. Lowering speed limits or prohibiting trucks would not be reasonable since this section of highway experiences high traffic flows and is projected to maintain traffic increases over time. Either option would impede the movement of traffic through this major thoroughfare.

4.5.3 Alteration of Alignment

Altering the vertical or horizontal alignment would shift or reduce the noise contours from their present positions. Due to the existing development and natural resources adjacent to the existing alignment, the environmental impacts and engineering constraints make realignment not reasonable.

4.5.4 Acquisition of Land

The acquisition and conversion of adjacent private land to vacant IDOT Right-of-Way would increase the distance between the traffic and noise receptors, therefore eliminating noise impacts. Costs associated with the relocations would not compensate for the benefits achieved. Nine receptors within the project corridor were identified as impacted by the proposed preferred alternative. Relocation expenses involved with these acquisitions would greatly exceed those associated with erecting noise barrier. This alternative is considered not reasonable due to additional cost and social impacts.

4.5.5 Physical Barriers

The noise abatement evaluation for Illinois Route 13 was conducted for those receptors experiencing a noise impact. (See Figure 4.1 for locations of impacted noise receptors.) Noise walls evaluated for six of the nine receptor locations were considered to be feasible. Noise walls in the remaining three locations could not achieve a substantial traffic noise reduction due to distance from the noise wall or openings in the noise wall needed to maintain access to Illinois Route 13. Further evaluation of the costs of noise abatement indicates that one of the six noise walls was economically reasonable. Noise wall B-R11 abates traffic noise at an apartment complex (R11) where 36 units would achieve at least a 5-dBA traffic noise reduction. The remaining noise walls would not be considered economically reasonable as they only benefited one or two receptors at a cost that exceeded \$24,000 per benefited receptor. Table 4.7 summarizes the noise wall evaluation.

Table 4.7 Summary of Noise Abatement Analysis

Receptor	Barrier Height (ft.)	Barrier Length (ft.)	8 dBA Reduction	Construction Cost	Benefited Residences	Cost per Residence	Economically Reasonable
R1	> 35	1020	No				
R7	> 35	1900	No				
R10	11	900	Yes	\$247,500	1	\$247,500	No
R11	11	1,200	Yes	\$330,000	36	\$9,200	Yes
R12	11	925	Yes	\$254,400	1	\$254,400	No
R13	12	950	Yes	\$285,000	1	\$285,000	No
R14	11	1,350	Yes	\$371,250	2	\$185,625	No
R20	18	800	Yes	\$360,000	2	\$180,000	No
R23	> 35	750	No				

Noise abatement measures are likely at Receptor #11 (apartment complex). A final decision on the installation of abatement measures will be made upon completion of project design and the public involvement process.

4.5.6 Construction Noise

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

4.6 Natural Resources

The project will impact a total of 6.6 acres of woodland from four sites. The impacted areas are depicted on Figure 4.1B (east and west of Wolf Creek Road), Figure 4.1G (east of BNS Railroad), and Figure 4.1H (Wetland site 9). The impacts are due to the placement of frontage roads and a bike/pedestrian trail. Wildlife, mostly birds, using these areas is species (blue jays, American robin, and starlings) commonly found in disturbed habitats. The project will cause the loss of 6.6 acres of wildlife habitat.

There are no designated Natural Areas or Nature Preserves in the project area. The U.S. Fish and Wildlife Service North Central Region "Redbook" lists the Indiana bat as occurring in Williamson County. Some of the tree removal associated with the project may be suitable Indiana Bat habitat. As a precaution, any tree felling occurring in those areas will be restricted to the dates between September 30 and April 1 of any year, when the bats are not breeding (i.e., not occupying nursery trees).

4.7 Water Quality Resources

Instream work involves that which is necessary to extend or replace bridges and culverts throughout the project limits. (See Figure 4.1 for instream work locations). Because of construction activity in and around Pigeon Creek (near Briggs Rd. in Herrin), Westernaire Creek (near Bainbridge Road in Marion) and an unnamed stream (near Walton Way in Marion), short-term sedimentation will occur. An erosion and sediment plan will be designed to incorporate measures to minimize sedimentation effects. With the implementation of the plan and the use of the Standard Specifications for erosion and sediment control, no long-term adverse impacts to the water quality and biological components of the stream are anticipated to occur. This work will be coordinated through the Illinois Environmental Protection Agency and the U.S. Army Corps of Engineers in accordance with sections 401 and 404 of the Federal Clean Water Act.

All surface drainage is located within the Big Muddy River Watershed (Hydrologic Unit Code 07140106.) Pigeon Creek and Westernaire Creek are located in the project area, as well as an unnamed stream near Walton Way in Marion. (See Figure 2.3.) All streams have intermittent flow in the project area. Pigeon Creek drains into Crab Orchard Lake, which drains into Crab Orchard Creek. Westernaire Creek and the unnamed stream drain into Crab Orchard Creek which in turn flow into the Big Muddy River. With the preferred project alternative, runoff from the IL Route 13 project area will continue to be collected in adjacent drainage ditches and flow to the existing streams.

Highway runoff pollution, including solids, heavy metals, deicing salts, oil and grease, and nutrients, may affect water quality of receiving waters. Deicing salt usage is seasonal and varies from year to year depending on the number of storm events and their intensity. Federal Highway Administration research indicates impacts from highway runoff pollution for highways with traffic over 30,000 vehicles per day. Vegetated medians, slopes and ditches, and areas of surrounding woodland will promote deposition and infiltration of potential runoff contaminants before entering the receiving streams. Therefore, no adverse impacts to surface water quality as a result of the preferred alternative are anticipated.

This project will result in the disturbance of more than one acre of total land area. Accordingly, it is subject to the requirement for a National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges from the construction sites. Permit coverage for the project will be obtained either under the Illinois Environmental Protection Agency General Permit for Stormwater Discharges from Construction Site Activities (NPDES Permit No. ILR10) or under an individual NPDES permit. Requirement applicable to such a permit will be followed, including the preparation of a Stormwater Pollution Prevention Plan. Such a plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges from the construction site and shall describe and ensure the implementation of practices to be used to reduce pollutant discharges associated with construction site activity and to assure compliance with the terms of the permit.

The project will not create any new potential “routes” for groundwater pollution or any new potential “sources” of groundwater pollution as defined in the Illinois Environmental Protection Act. Accordingly, the project is not subject to compliance with the minimum setback requirements for community water supply wells or other potable water supply wells, as set forth in 415 ILCS 5/14, et seq.

4.8 Floodplains

Flood Insurance Rate Maps for Williamson County, Illinois developed by the Federal Emergency Management Agency, were reviewed. No portion of the project is within a regulatory floodway. However, the preferred alternative will require fill to be placed in the floodplain for the construction of the additional lanes, expanding the transverse crossing of the Westernairre Creek floodplain. (See Figure 2.2.) Accordingly, coordination with the IDNR Office of Water Resource Management was initiated. The drainage area for this stream is less than one square mile. Based on these initial site review criteria, a floodplain permit was not required and the consultation with the IDNR Office of Water Resource Management was terminated on May 20, 2004.

4.9 Wetlands

A wetland survey was completed for the Illinois 13 corridor on June 7, 2007 by the Illinois Natural History Survey (INHS) through IDOT's integrated ESR process. This survey identified thirty-five sites that met the criteria for jurisdictional wetlands. These wetland sites are delineated in Figure 2.2 and described in Table 2.4. Of these, seven sites were evaluated to have good natural quality and fourteen sites were either artificial ponds or sites cleared and filled for development, decreasing their quality to low status. As identified in Table 4.8 and Figure 4.1, the preferred alternative would impact seven of the thirty-five identified sites, for a total of 1.85 acres. The project is being processed as a Standard Action under the IDOT Wetlands Action Plan as approved by IDNR.

TABLE 4.8 WETLAND IMPACT CHART

Wetland ID #	Wetland Description	Wetland Quality	Impact to Wetland in Acres	Required Off-site Mitigation Ratio	Required Mitigation in acres
1A	Wet Meadow	Fair (FQI 11.2)	0.025	2.0:1	0.05
28	Floodplain Forest	Good (FQI 20.1)	0.10	5.5:1	0.55
37	Wet Shrubland	Fair (FQI 12.6)	0.02	2.0:1	0.04
8	Wet Meadow	Fair (FQI 11.1)	0.05	2.0:1	0.10
9	Floodplain Forest	Good (FQI 25.3)	1.3	5.5:1	7.15
10	Wet Meadow	Fair (FQI 13.7)	0.29	2.0:1	0.58
44	Wet Meadow	Fair (FQI 17.6)	0.04	2.0:1	0.08
TOTAL			1.85		8.55

The seven wetland areas to be impacted by the proposed project consist of floodplain forest and wet meadow / shrubland. This impact will be a result of clearing and adding fill material to construct the additional lanes to IL Route 13 or the new pavement for the proposed frontage roads. This impacted wetland habitat is adjacent to the heavily traveled IL Route 13.

Adverse impacts to the wetlands cannot be avoided. As detailed in the alternative analysis in Section 3, the preferred alternative best meets the Purpose and Need for the project. It is anticipated that mitigation will occur off-site at the existing Sugar Camp Creek Wetland Mitigation Bank located along Sugar Camp Creek in the Big Muddy watershed basin in Franklin County. This bank is a 105-acre parcel that is currently going through the U.S. Army Corps of Engineers (St. Louis District) approval process. Based on the off-site

compensation ratios established in the Approved IDOT Wetlands Action Plan, 1998, mitigation will total 8.55 acres of compensation. It is anticipated that this mitigation will be in-kind, involving 7.7 acres of floodplain forest and 0.85 acres of wet meadow. (See Table 4.7 and Appendix p. A-25 to A-26.)

Executive Order 11990 (Protection of Wetlands) requires federal agencies to avoid, to the extent practicable, the long and short-term adverse impacts associated with the destruction or modification of wetlands. The order directs federal agencies to avoid new construction in wetlands unless there is no practicable alternative and where wetlands cannot be avoided, the proposed action must include all practicable measures to minimize harm to wetlands. The Illinois Interagency Wetland Policy Act of 1989 has similar wording.

4.10 Special Waste

4.10.1 Hazardous Waste

No Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) site will be involved nor impacted by the project.

4.10.2 Non-Hazardous Waste

Two Preliminary Environmental Site Assessments for special waste were conducted by the Illinois State Geological Survey. The assessments concluded that the Preferred Alternative could involve sites potentially impacted with regulated substances. Further, it has been determined that not all of the sites can be avoided. Two such sites, Caldwell Banker Realty and Carterville Moto Mart, are shown on Figure 4.1A. The Carterville Moto Mart site involves petroleum contamination from a leaking underground storage tank registered with the Illinois Environmental Protection Agency. Contamination at the Caldwell Banker Realty site involves volatile organic compounds (VOC) associated with petroleum contamination. The Office of the State Fire Marshall reports that three underground storage tanks (UST) were removed from this site in 1990. The nature and extent of the involvement at both sites are known and the areas of contamination will be managed and disposed of in accordance with applicable Federal and State laws and regulations and in a manner that will protect human health and the environment. The quantities to be disposed are not expected to have a significant effect on landfill capacity. A copy of the Special Waste Waiver is located in this document's Appendix on p. A1-22.

4.11 Special Lands

The preferred alternative will not involve use or constructive use of land from a publicly owned park, recreation area, wildlife or waterfowl refuge, or historic site of national, state or local significance. There will be no impacts to lands protected by Section 4(f). The project will not involve the use of lands that had LAWCON or OSLAD funds involved in their purchase or development.

4.12 Indirect and Cumulative Impacts

Indirect impacts are defined as “those environmental impacts that will result from reasonably foreseeable non-highway actions which will accompany or occur after completion of a highway project and which are assumed to be induced by the highway project.” Cumulative impacts are defined as “the total impacts on specific environmental resources anticipated to result from the proposed highway project and other highway and non-highway development in the project area.” Indirect and cumulative impacts can be both difficult to identify and evaluate. Potential indirect and cumulative impacts as a result of construction of the preferred alternative were identified.

Land use plans and zoning maps indicate a future progression of land development along IL Route 13 throughout the corridor. As discussed in Section 2 of this document, this development is currently taking place and will continue unabated regardless of the construction of this preferred alternative. The additional traffic capacity provided by the addition of a third lane in each direction and the relief provided by the utilization of a frontage road network will enhance the potential for regional economic development and traffic mobility and efficiency as well as improve capacity and safety by providing an acceptable level of service throughout the project corridor. Development would be expected to intensify following the construction of the preferred alternative.

The foreseeable indirect impacts from development are land use changes and farmland conversion. Located within the corridor are tracts of farmland, some of which is in current production. One farmland tract, located south of the Illinois Center Mall in Marion, is idle and used primarily as pasture. The area of farmland currently in production is located along Briggs Road on the south side of IL Route 13. Land use changes are certain to follow implementation of the preferred alternative. Throughout these areas of farmland, frontage roads are proposed. It is reasonable to anticipate land use changes and farmland conversion in these areas due to continued expansion of development.

Foreseeable cumulative impacts associated with the preferred alternative in association with future roadway improvement and land developments are socioeconomic, floodplain, and water quality impacts. The cumulative socioeconomic impacts are anticipated to be generally positive for this region of Williamson County. Urban development resulting from improved highway capacity and local frontage roads will typically stimulate the local economy, provide additional employment and increase the tax base.

Wetlands and woodlands located within the study corridor will be potentially impacted indirectly and cumulatively from future commercial development. It is likely that these future impacts will occur with or without the proposed roadway project as evidenced from the current land use and recent growth of this general area.

Approximately 26 acres of wetlands and 35 acres of woodlands were identified within the study corridor (see Section 2). The potential decrease in wetlands and woodlands would reduce available habitat for wildlife in the areas adjacent to IL Route 13.

Indirect and cumulative impacts are likely to occur to water resources. Urban development will increase the amount of impervious surface area. Increased impervious surface area results in a more rapid and high discharge runoff pattern indirectly increasing flooding of Crab Orchard Lake and the impoundment following storm events. Increase vehicular traffic

and runoff from parking lots and streets will also increase the composition and concentration of runoff pollutants. As evidenced by current and rapid economic development in the corridor, it is anticipated that these impacts to water resources will occur regardless of the construction of the preferred alternative. Implementation and/or enforcement of local stormwater ordinances, compensatory storage requirements imposed upon property developers, and/or best management practices such as vegetative buffers could offset these impacts to water resources.

4.13 Permits

The impact to wetlands and the instream work proposed at the roadway's drainage structures will require an Individual Section 404 permit from the U.S. Army Corps of Engineers and a Section 401 Water Quality Certification from the Illinois EPA. A public notice will be issued for public review and comment during the permit application process. The Purpose and Need, the Alternatives Analysis, and the Preferred Alternative were presented to the resource agencies (USEPA, USFWS, USACE, IDNR, and IDOA) for concurrence under the 404/NEPA Merger Memorandum of Agreement. (See Appendix p. A-27 to A-39.)

It is anticipated that this project will result in the disturbance of more than one acre of total land area. Accordingly, it is subject to the requirement for a National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges from the construction sites. Permit coverage for the project will be obtained either under the Illinois EPA General Permit for Stormwater Discharges from Construction Site Activities (NPDES Permit No. ILR10) or under an Individual NPDES permit. Requirements applicable to such a permit will be followed, including the preparation of a Stormwater Pollution Prevention Plan. Such a plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the construction site and shall describe and ensure the implementation of practices that will be used to reduce the pollutants in discharges associated with construction site activity and to assure compliance with the terms of the permit.

4.14 Environmental Commitments

- The IDOT Bureau of Construction will notify the local governments within the project area (Williamson County, Carterville, Crainville, Herrin and Marion) prior to construction so that they may inform emergency service providers to ensure that service will not be interrupted during the construction phase.
- Public notification will be made prior to any lane restrictions to make motorists aware of detours and other impediments during the construction phase.
- Trees which are required to be removed will be replaced according to IDOT's Departmental Policy D&E-18. It is estimated that 6.6 acres of trees will be impacted on this project. Some of the tree removal associated with the project may be suitable Indiana Bat habitat. As a precaution, any tree felling occurring in those areas will be restricted to the dates between September 30 and April 1 of any year, when the bats are not breeding (i.e., not occupying nursery trees). Final tree removal quantities will be calculated and mitigation sites identified in the Phase II design plans.

- Coordination with U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Illinois Environmental Protection Agency and the Illinois Department of Natural Resources will occur again prior to any wetland impacts and mitigation efforts.
- The IDOT Joint Design/Construction Procedure Memorandum on Erosion and Sediment Control will be implemented to minimize impacts on wetlands. Several erosion control measures will be utilized to minimize impacts to wetlands. Perimeter barrier fencing will be erected at each wetland location. The only runoff that will be allowed to leave the construction zone in these areas will be through sedimentation/stilling basins. In addition, all disturbed areas will be seeded or sodded as soon as practical after construction activities in that area have been concluded.
- There are still outstanding special waste issues to be addressed. A Special Waste Waiver has been approved which allows design approval to be granted prior to completion of special waste studies. Right of way required from any contaminated parcel will not be acquired until the Preliminary Site Investigation, or subsequent studies, are completed.
- Noise abatement measures are likely. Further coordination will occur with the local municipalities and residents concerning the level of noise abatement measures at Noise Receptor #R11 near Samuel Road. This final decision will be made prior to completion of project design.
- IDOT will secure an individual Section 404 permit and an individual Section 401 Water Quality Certification prior to project construction. The project would also require a National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges since one or more acres of total land area will be disturbed during construction.
- The IDOT Joint Design/Construction Procedure Memorandum on Erosion and Sediment Control would be implemented to minimize impacts to surface water resources. All disturbed areas will be seeded or sodded as soon as practical after construction activities in the area have concluded.

ENVIRONMENTAL IMPACT MAP – DIVISION STREET TO MAIN STREET

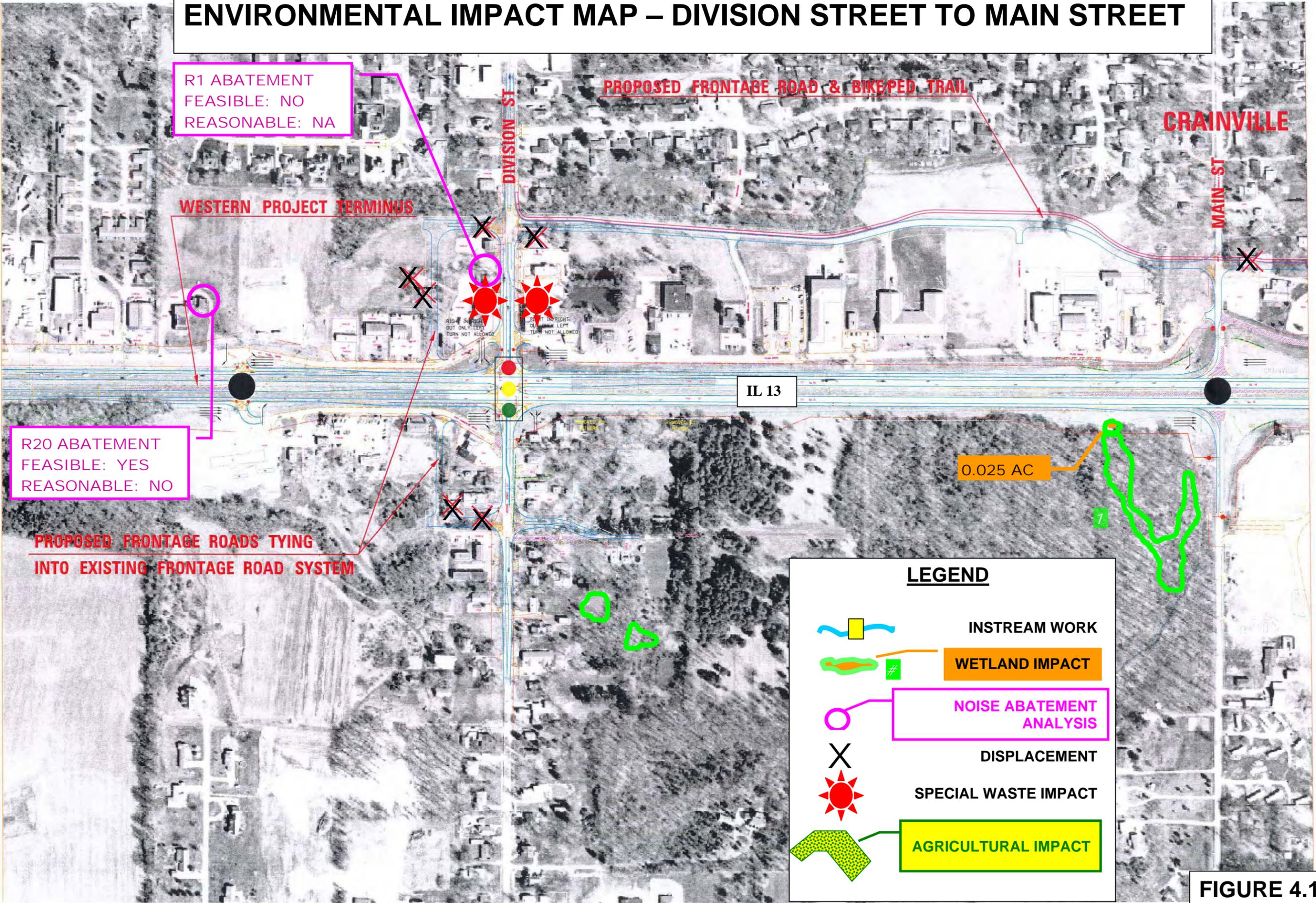


FIGURE 4.1A

ENVIRONMENTAL IMPACT MAP – MAIN STREET TO EAST OF WOLF CREEK ROAD

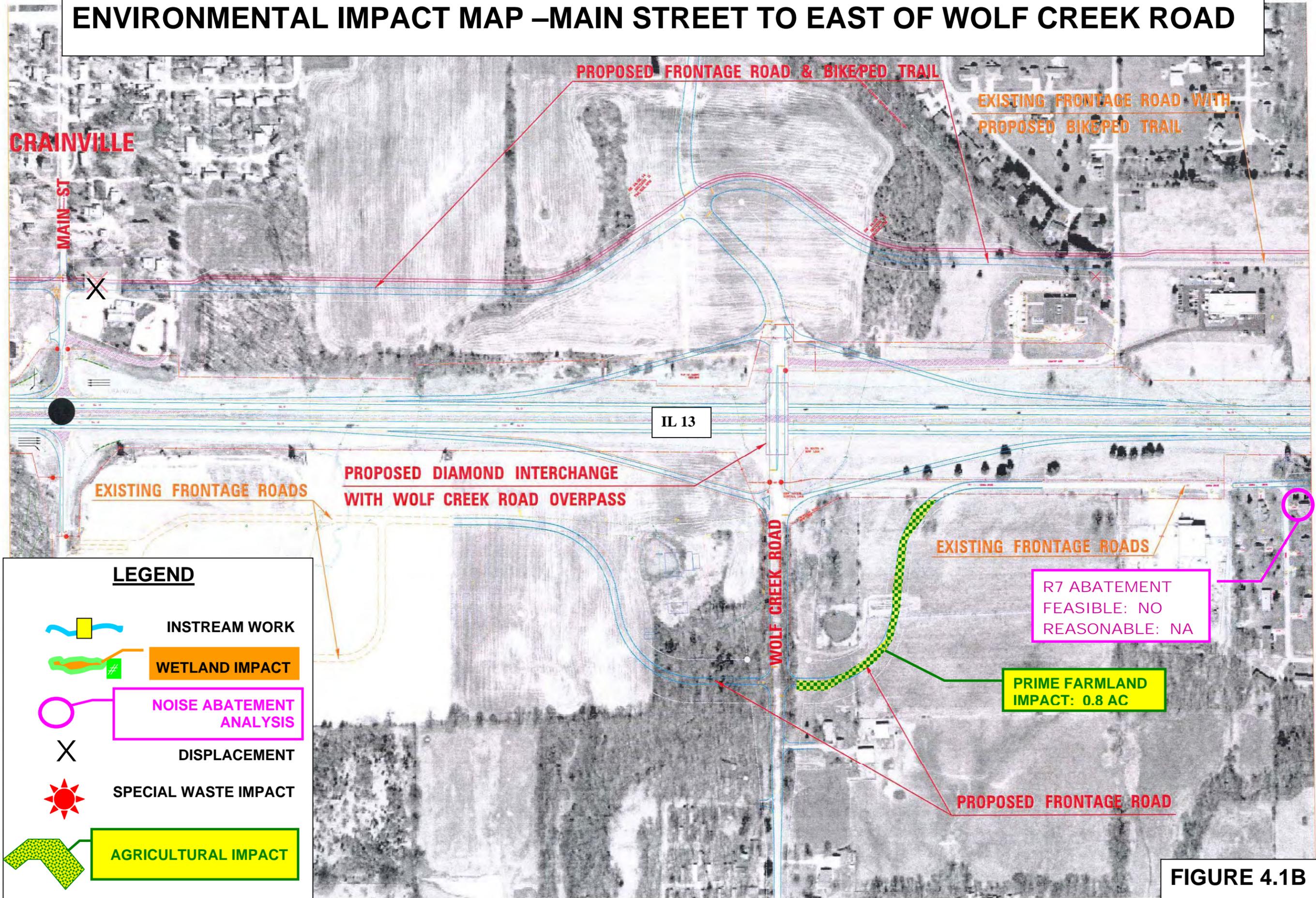


FIGURE 4.1B

ENVIRONMENTAL IMPACT MAP – EAST OF WOLF CREEK ROAD TO BRIGGS ROAD

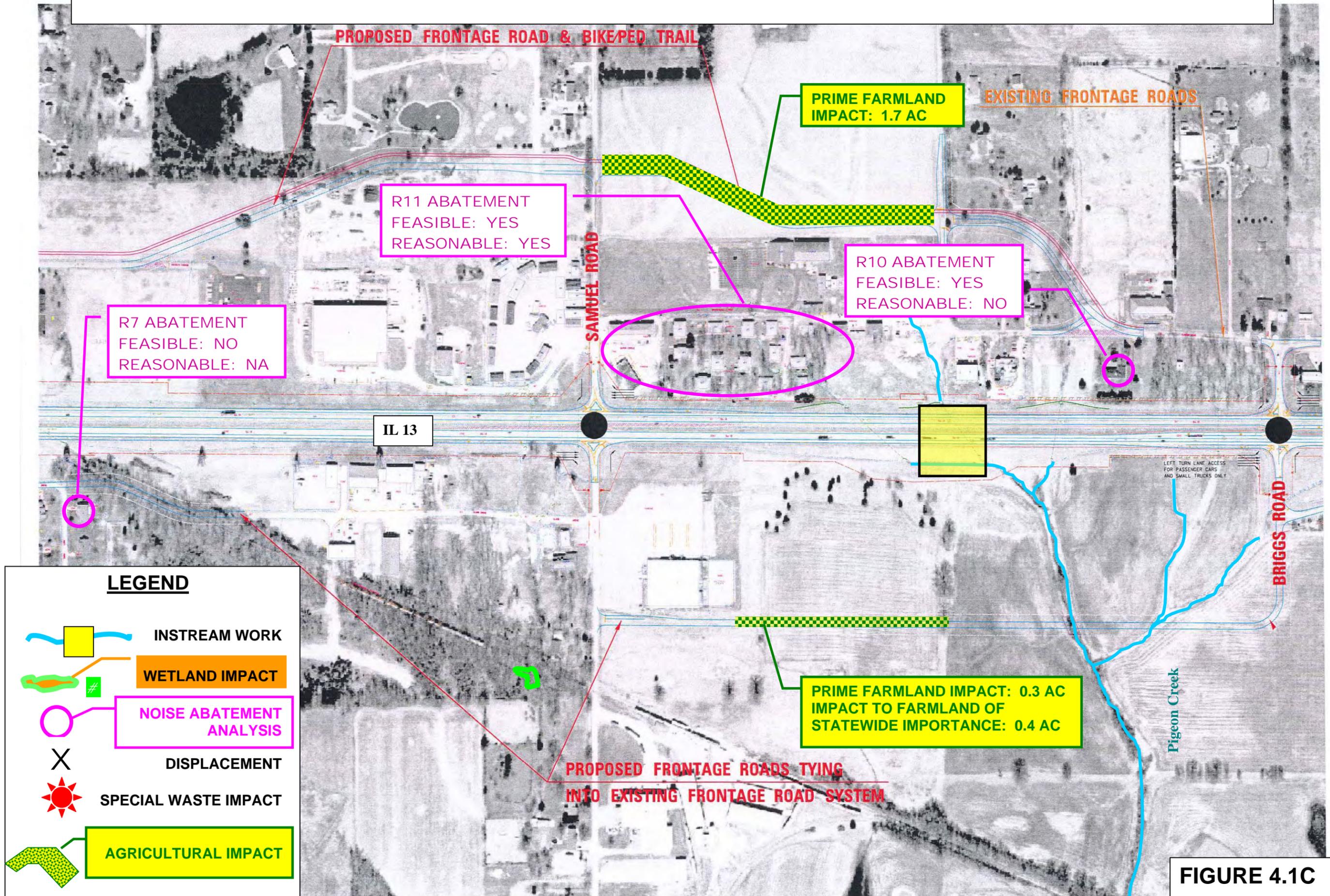


FIGURE 4.1C

ENVIRONMENTAL IMPACT MAP – BRIGGS ROAD TO IL ROUTE 148

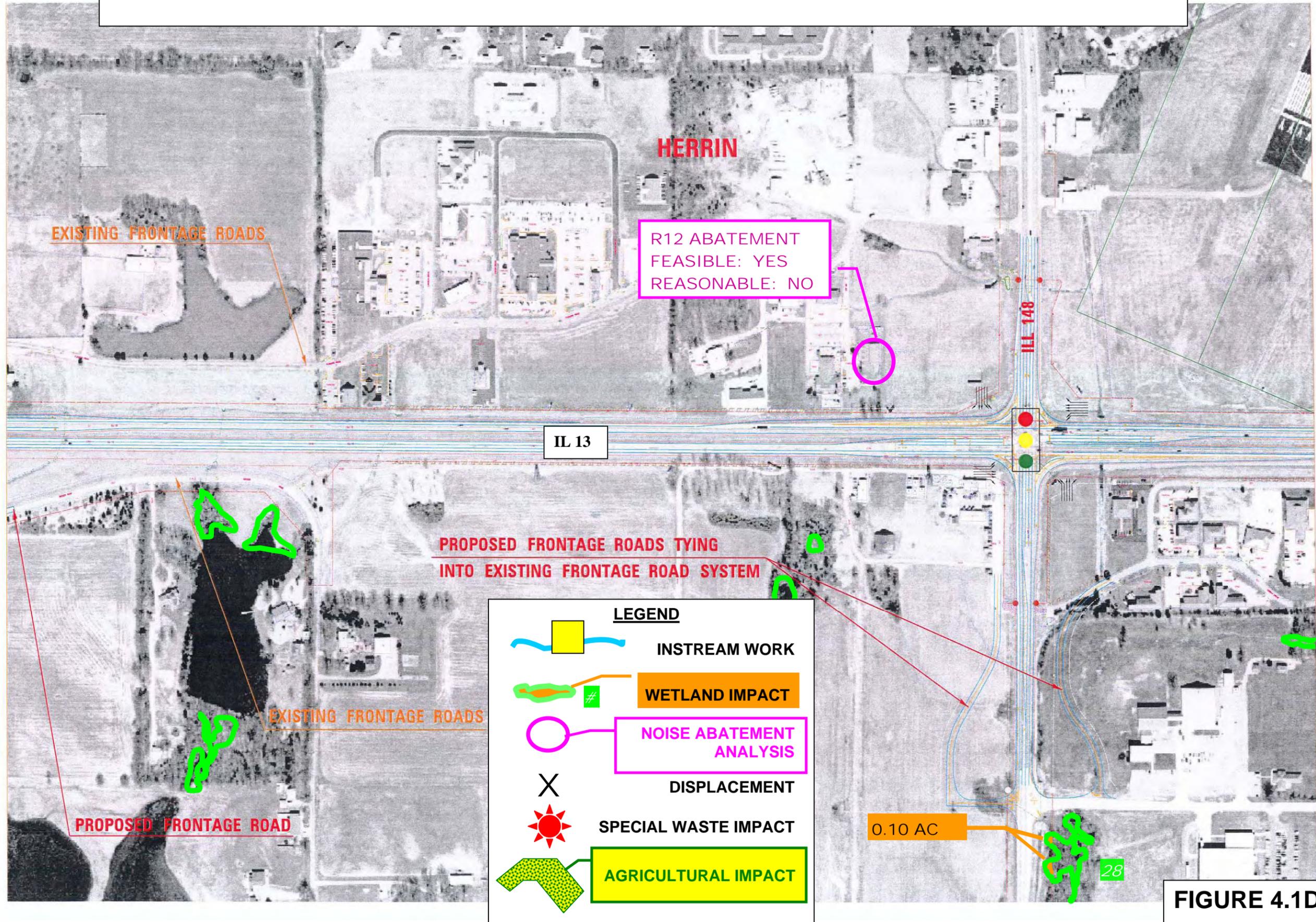


FIGURE 4.1D

ENVIRONMENTAL IMPACT MAP – IL ROUTE 148 TO TERMINAL DRIVE

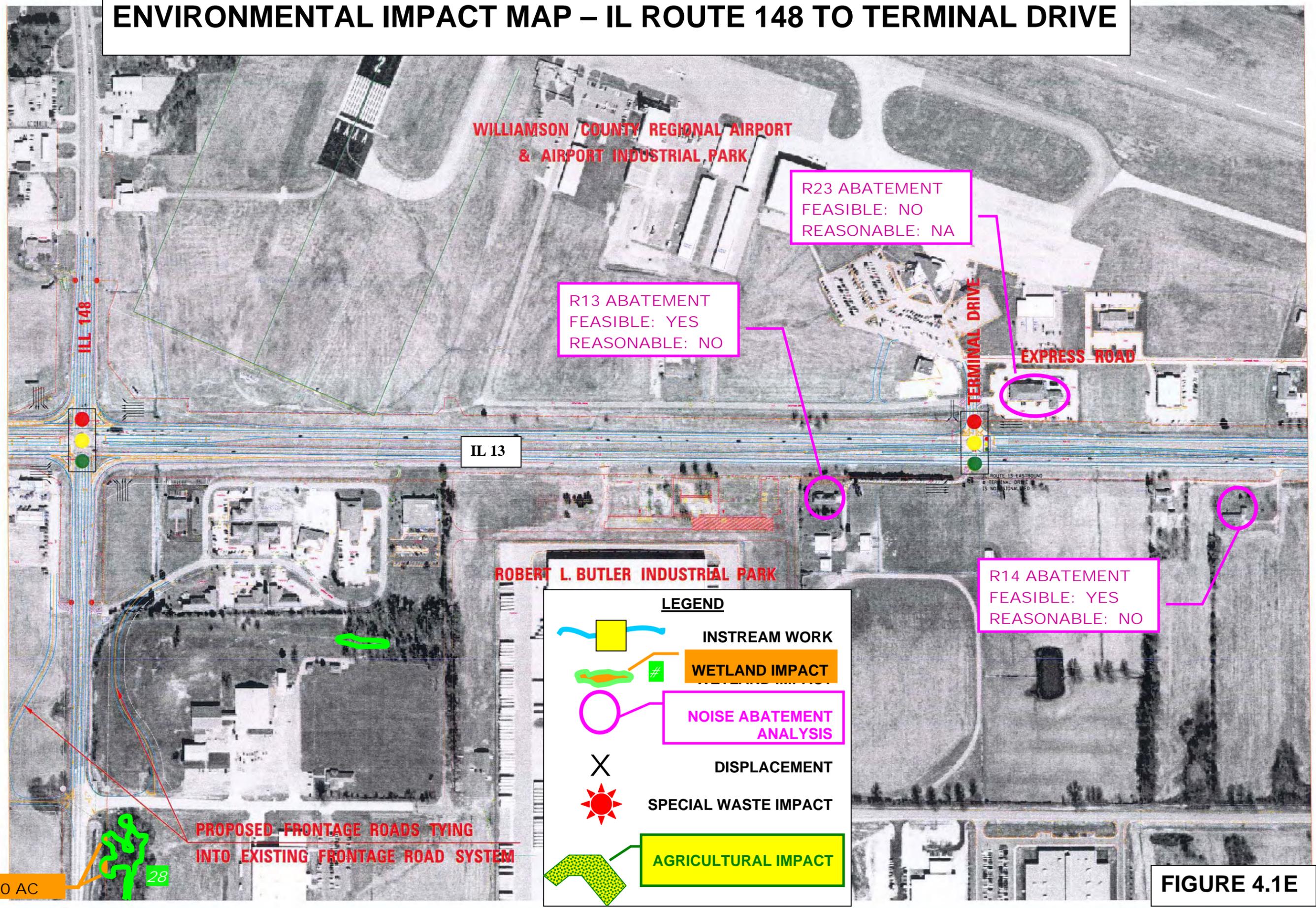


FIGURE 4.1E

ENVIRONMENTAL IMPACT MAP – TERMINAL DRIVE TO BAINBRIDGE ROAD

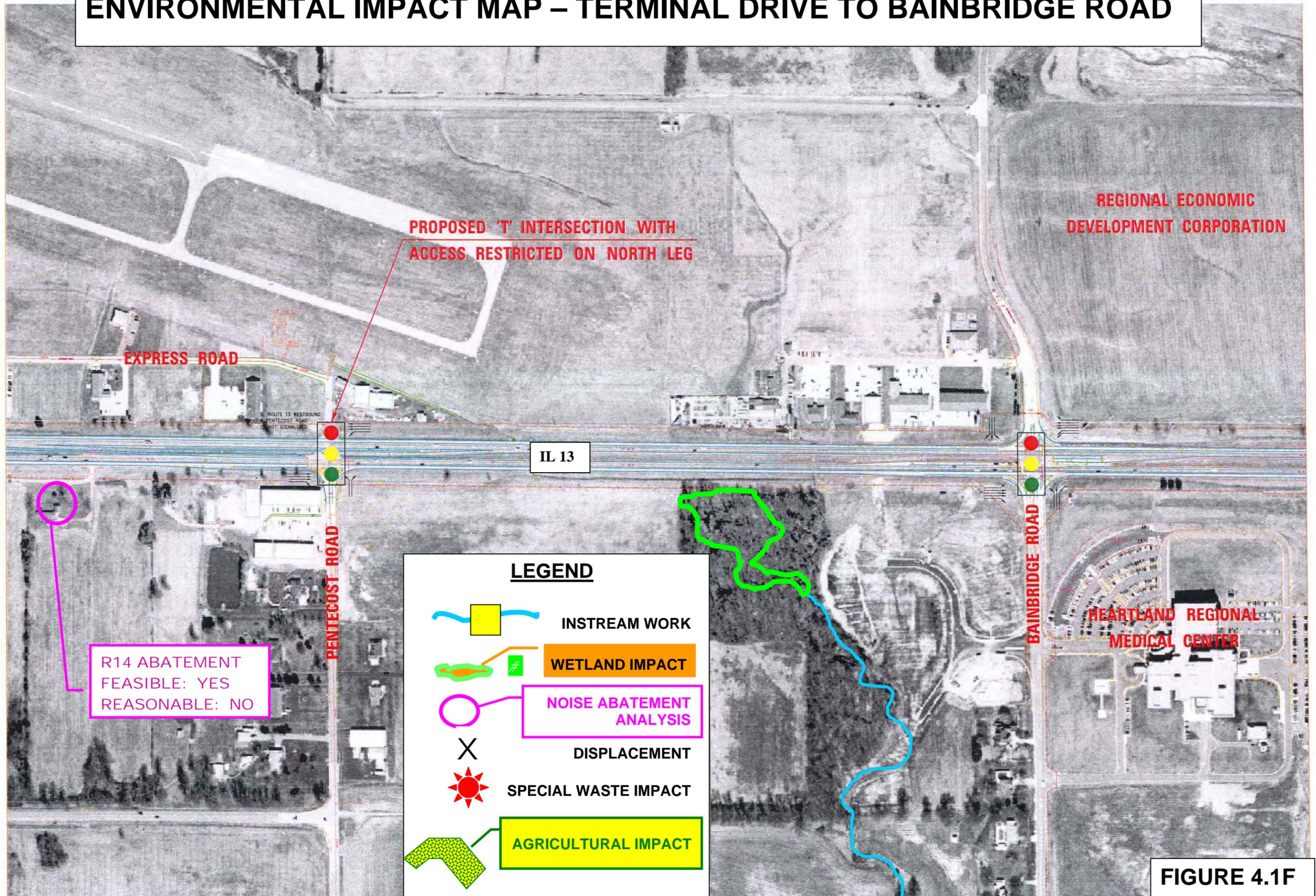


FIGURE 4.1F

ENVIRONMENTAL IMPACT MAP – BAINBRIDGE ROAD TO SINCLAIR DRIVE

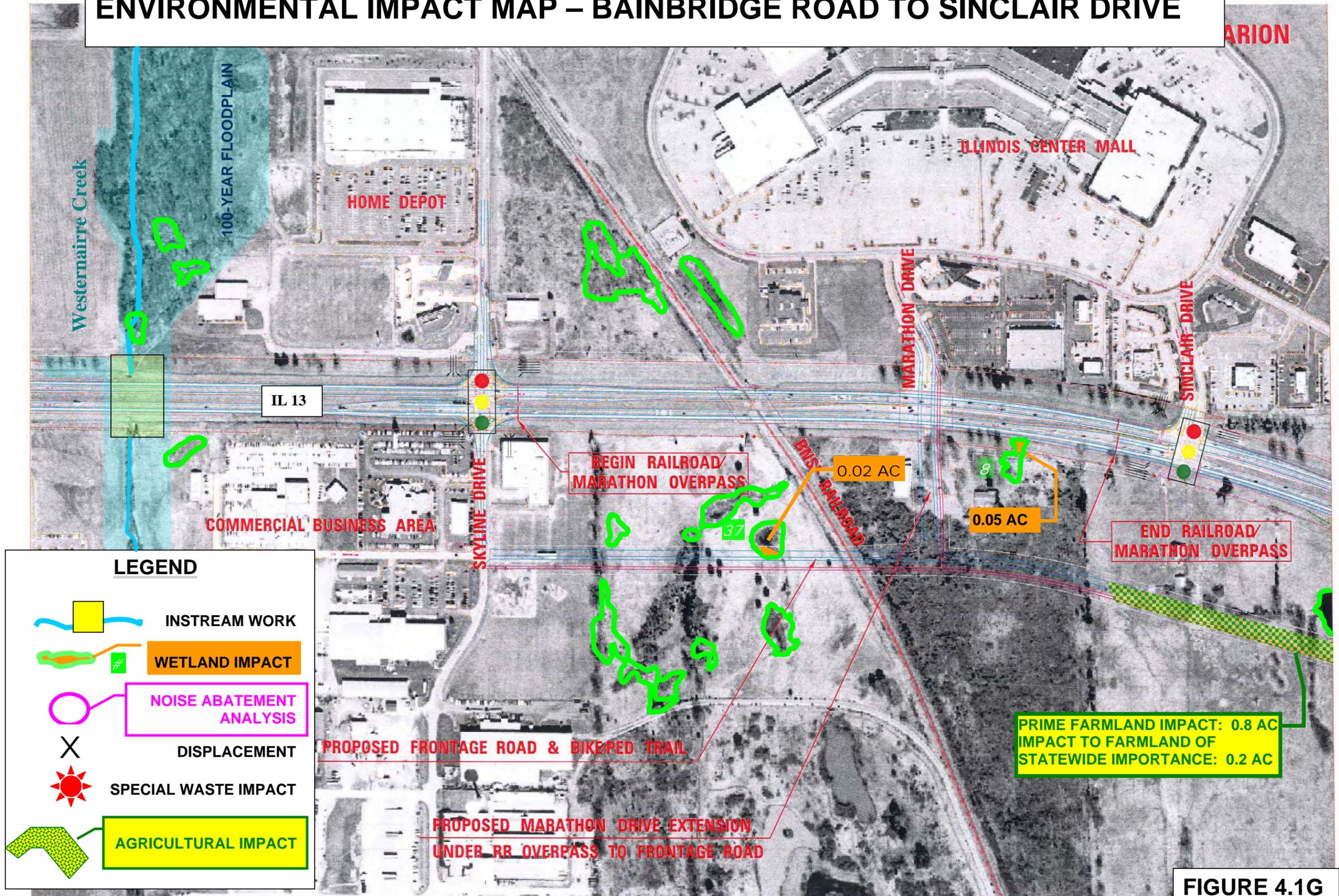


FIGURE 4.1G

ENVIRONMENTAL IMPACT MAP – SINCLAIR DRIVE TO WALTON WAY

LEGEND

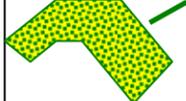
-  **INSTREAM WORK**
-  **WETLAND IMPACT**
-  **NOISE ABATEMENT ANALYSIS**
-  **DISPLACEMENT**
-  **SPECIAL WASTE IMPACT**
-  **AGRICULTURAL IMPACT**



FIGURE 4.1H

SECTION 5.0

PUBLIC INVOLVEMENT

Section 5.0

PUBLIC INVOLVEMENT

Public involvement for this project has included early coordination, two public informational meetings and the creation of a website for the project. In addition, IDOT has met individually with affected property owners and municipalities upon request. Early in project development, the build alternatives focused only on the addition of roadway lanes. Public comment, additional corridor studies and analysis of the traffic and crash data resulted in the addition of the frontage road system to the preferred alternative.

A Public Information Meeting was held on February 11, 2004 at John A. Logan College in Carterville, Illinois to discuss the project. The meeting was conducted in an open-house format with exhibits available for viewing from 3:00 p.m. to 8:00 p.m. Representatives of the Illinois Department of Commerce and Economic Opportunity, the Illinois Department of Transportation, and CH2MHill Consultants were available to answer questions concerning the Opportunity Returns project and the long-range planning study currently underway. 412 persons attended the meeting. Those attending the meeting were greeted at the sign-in table and received handouts describing the information available for viewing on the two separate projects. They also received comment forms for each project and were encouraged to submit their comments in the available collection boxes at the meeting or by sending them to IDOT as pre-addressed on the back of the comment forms. A February 25, 2004 deadline was set for receipt of all comments to be included as part of the public record. A total of 1297 comments were received by the pre-established deadline.

Form letters from residents of Carterville and the surrounding area stating opposition to the project “in its present form” were received en masse prior to the presentation of the project at the public meeting. This form letter focused on IDOT’s proposal to expand the Division Street intersection design and move the frontage road access points along Division Street farther back from IL Route 13. A total of 1039 letters of this type were received before the deadline. The design recommendations presented at the public informational meeting were based on the intersection’s current and projected traffic volumes and current designation as a high crash location. This particular intersection had been a high crash location since 1994. Similarly, crash data shows that segments associated with this intersection had frequently been identified as high crash locations for over 17 years. Consequently, on March 2, 2004 a workshop was held at John A. Logan College with the city of Carterville. Proposals for improving existing traffic flow and safety at the intersection of IL 13 at Division Street were studied. The results of that meeting were carried on for further project consideration.

Results of a long-range planning study that included this corridor revealed the potential for improved traffic and crash relief as well as an opportunity to provide for continued economic development. This alternative involved a proposed frontage road system in addition to the additional lanes on IL Route 13. To further improve traffic flow and access to the frontage road system, an interchange was proposed near Crainville at Wolf Creek Road and access to IL Route 13 at the open, unsignalized intersections was restricted to prevent left-out turning movements. Corridor protection was also included with this proposal in order to protect the right-of-way for future improvements. In an effort to accurately discuss the proposal with the

affected municipalities and gain input, town meetings were held to describe the proposed alternative and how it best met the project's Purpose and Need. These meetings were held in Carterville, Crainville, Herrin and Marion.

This proposed alternative was then presented at a second public informational meeting on October 25, 2007 at the Williamson County Pavilion in Marion, Illinois. Approximately 170 people attended the meeting and 226 comments were gathered. The results of comments were as follows:

- A total of 115 commenters supported the project as presented.
- A total of 38 commenters supported the project in general but had suggestions for revisions to the design. These suggestions included adding a frontage road on the south side of IL Route 13 from Division St. in Carterville to Main St. in Crainville, adding more lanes to Division Street, and deleting the proposed interchange near Crainville.
- A total of 63 commenters opposed the project. This opposition included comments that the project will negatively impact surrounding businesses, the frontage roads will have excessive negative impacts on the area, and the project costs too much.
- 10 commenters were neutral.

In response to the comments received, IDOT reviewed the preferred alternative and considered revisions with respect to the project's Purpose and Need. Reductions to the design, such as deleting frontage roads and the interchange, would decrease capacity and compromise safety by reducing the level of service throughout the project corridor, therefore not meeting the Purpose and Need for the project. Additions to the design, such as adding lanes to Division Street in Carterville and adding a frontage road south of IL 13 from Division Street to Main Street in Crainville, were compatible with the project's Purpose and Need in that they added capacity and increased safety by improving the corridor's level of service. After the city of Carterville reviewed and approved of an intersection design at IL 13 and Division Street providing additional lanes for Division Street, IDOT included that plan revision to the Preferred Alternative. However, the additional frontage road on the south side of IL 13 from Division Street to Main Street was not considered feasible or practicable at this time due to factors including environmental impacts and alternative access. Due to the high public response to this project and many specific requests, a website for the project has been created and can be found at the following link: <http://www.dot.il.gov/IL13/index.html>.

SECTION 6.0

APPENDIX

AGENCY COORDINATION

Environmental Survey Request

A. Project Information

Bio Cultural Wetlands Special Waste

Submittal Date: 11/13/2003 Sequence No: 11592
District: 9 Requesting Agency: DOH Project No:
Contract #: 98849, 98857, 98858, 9 Job No.: D-99-005-04
Counties: Williamson
Route: FAP 331 Marked: IL 13
Street: Section:
Municipality(ies): Marion, Cartersville Project Length: 10.14 km 6.3 miles
From To (At): Halfway Road intersection in Marion to Division St. intersection in Cartersville
Quadrangle: Mrion, Crab Orchard Lake Township-Range-Section: T. 9 S. / R. 2 E., R. 1 E. /
Secs. 10, 11, 12, 7, 8; 9, 10
Anticipated Design Approval: 05/15/2004

B. Reason for Submittal: (Check all that apply)

Acquisition of additional ROW or easement 3.318417 ha/ 8.2 acres
 In-Stream Work Stream Name: unnamed stream 0.8 mi. w of I-57 in Marion
 Other:

C. Project Description: Upgrade of IL 13 from a four-lane facility to a six lane facility from Halfway Rd in Marion to Division Street in Cartersville including a railroad overpass near the Illinois Center Mall in Marion.

Proposed Work: Highway Bridge Bike Trail Other

D. Tree Removal?: Yes Number?: 5 ha/ acres

Existing Bridge(s) Structure Number: 100-2007 On Historic Bridge List: No

Historic District Involved? No Historic Buildings Involved? No

Section 4(f) Lands Involved? No Section 6(f) Lands Involved? No

Wetland delineation performed by: End. Species Consultation performed by:

E. Funding: Federal State TBP MFT Local Non-MFT

404 Permit Required Anticipated Processing: CE

F. Contact Person: Larry Anderson Local Contact Person:
Telephone #: (618) 351-5218 ext. Telephone #:
Env. Contact: Julie Klamm E-Mail:
Telephone #: 6183515284 Title/Company:

Field Sign Off (Bio & Cultural Only) Received in CO 11/14/2003 SW Received

Sequence No: 11592

Memo Date: 02/24/2004 Memo By: Julie Klamm

Memo: This project has been broken out into two separate projects: The first piece extends from west of Division Street in Carterville to just west of Skyline Drive in Marion. The second piece extends from just west of Skyline Drive to just west of Halfway Road in Marion. This separation will allow the railroad overpass (just east of Skyline Drive) and the box culvert structure to be designed and constructed in a separate contract. The second section can be found under PMA #

Memo Date: 11/13/2003 Memo By: Julie Klamm

Memo: As stated in the ESR transmittal memo, the project will be constructed primarily on existing IDOT R.O.W. Only spot sections of new R.O.W. are needed. Photos of these areas will be submitted to the Bio section for review. Only one structure, a double box culvert (100-2007), is located within the project limits and will require in-stream work, therefore requiring a 404 permit. A search of the HAARGIS database revealed NO historic properties along this stretch of roadway. A railroad overpass will be constructed on the existing alignment just west of the Illinois Center Mall in Marion. This structure will be constructed using run-around detours for each set of lanes.

Environmental Survey Request Addendum

A. Project Information

Bio Cultural Wetlands Special Waste

Submittal Date: 01/13/2004 Sequence No: 11592 A
District: 9 Requesting Agency: DOH Project No:
Contract #: 98849 Job No.: D- 99-005-04
Counties: Williamson
Route: FAP 331 Marked: IL 13
Street: Section:
Municipality(ies): Marion, Cartersville Project Length: 10.139 km 6.3 miles
FromTo (At): Division St intersection at Cartersville and Terminal Dr intersection at Williamson Co Airport
Quadrangle: Mrion, Crab Orchard Lake Township-Range-Section: T. 9 S. / R. 2 E., R. 1 E. / Secs.
10, 11, 12, 7, 8; 9, 10
Anticipated Design Approval: 05/15/2004

B. Reason for Submittal: (Check all that apply)

Acquisition of additional ROW or easement Addendum: 2.5 acres Total Project: 10.700 acres
 In-Stream Work Stream Name:
 Other:
 Field Sign Off (Bio & Cultural Only)

C. Addendum Description: Additional ROW needed at Division St and Terminal Dr intersections. Division: frontage road changes. Terminal: new south leg extension.

D. Tree Removal?: Number?: ha/ acres

Wetland delineation performed by: End. Species Consultation performed by:

E. Contact Person: Larry Anderson Local Contact Person:
Telephone #: (618) 351-5218 ext. Telephone #:
Env.Contact: Julie Klamm E-Mail:
Telephone #: 6183515284 Title/Company:

F. Update Entire Project
 Addendum Only

Field Sign Off (Bio & Cultural Only) Received in CO 01/20/2004

Memo Date: 01/15/2004 **Memo By:** Julie Klamm

Memo: It should be noted that special waste testing already incorporates these addendum areas. Broader limits were discussed with ISGS and agreed to prior to testing. Therefore, additional special waste testing is not required with this addendum.

Memo Date: 01/15/2004 **Memo By:** Julie Klamm

Memo: This addendum is being submitted to provide bio and cultural testing in the vicinity of the Division Street intersection and Terminal Drive intersection. It is anticipated that additional ROW will be required at the Division Street intersection to relocate frontage roads in order to provide adequate geometrics. Terminal Drive, at the entrance to the Williamson County Regional Airport, will be reconfigured (in cooperation with the City of Marion and Williamson County) to provide a south leg connecting the intersection with Meadowland Parkway.

Environmental Survey Request Addendum

A. Project Information

Bio Cultural Wetlands Special Waste

Submittal Date: 03/09/2004 Sequence No: 11592 B
District: 9 Requesting Agency: DOH Project No:
Contract #: 98849 Job No.: P- 99-007-08
Counties: Williamson
Route: FAP 331 Marked: IL 13
Street: Section:
Municipality(ies): Marion, Cartersville Project Length: 10.139 km 6.3 miles
FromTo (At): Division St intersection at Cartersville and Terminal Dr intersection at Williamson Co Airport
Quadrangle: Mrion, Crab Orchard Lake Township-Range-Section: T. 9 S. / R. 2 E., R. 1 E. / Secs.
10, 11, 12, 7, 8; 9, 10
Anticipated Design Approval: 05/15/2004

B. Reason for Submittal: (Check all that apply)

Acquisition of additional ROW or easement Addendum: acres Total Project: 10.700 acres
 In-Stream Work Stream Name:
 Other:
 Field Sign Off (Bio & Cultural Only)

C. Addendum Description:

Relocation of frontage road requiring additional right of way. This area for surveys runs 400' east of and parallel to Division St and is 300' in width, 1200' north of CL of 13WB and 1200' south of CL of 13WB. The pond in NE quad will not be impacted.

D. Tree Removal?: Number?: ha/ acres

Wetland delineation performed by: End. Species Consultation performed by:

E. Contact Person: Carrie Nelsen Telephone #: (618) 351-5214 ext.
Env.Contact: Julie Klamm Telephone #:
Telephone #: 6183515284 Local Contact Person:
E-Mail:
Title/Company:

F. Update Entire Project

Addendum Only

Field Sign Off (Bio & Cultural Only) Received in CO 03/11/2004

Special Waste

Sequence No: 11592 B

Special Waste Submittal Date: 03/08/2004

Cleared for Design: Cleared for Letting: Date of Preliminary Report:

Screening Criteria

Acquisition of additional ROW or easement

No Railroad ROW (except single rail rural, with no maintenance facilities, evidence or open dumping or record of spills in the project area)

No Building Demolition/Modification

No SubSurface Utility Relocation or Linear Excavation

If all responses are No, sign and place in appropriate report. If any response is Yes or Don't Know, continue screening or survey project as necessary.

No Any known hazardous or non-hazardous waste sites in vicinity (CERCLIS [1.0 mile], LUST [1000'], UST and RCRA facilities [property itself])

Description:

Land Use History and Development Setting

Entirely Agricultural/Residential or with some recently developed commercially benign uses(see list of potentially non benign commercial uses)

State Highest Level of Development

Current Land Uses	
Previous Land Uses	
Adjacent Land Uses	

Records Review:

In-House

Old Plat Books Soil Survey Old Aerial Photos Old Survey Books Other Dist. Files Photos

Other Sources

City Directories County Assessor Fire Dept. Sanborn Maps Other

Take Photos of sites or attach sketch. If land use is and was always entirely Agriculture/Residential or has some recently developed commercially benign uses, continue screen; otherwise submit for survey.

Visual Inspection

Inspection Date:

Step 1

Underground Tanks

Building or building materials containing regulated substances other than asbestos:

Buildings	Batteries	Solvents	Foundry Sands	Transformers or Other Oil-filled Electrical Equipment	Paint	Lead

Step 2

Surface Tanks	Sumps	Ponds	Drums	Basins	Landfills
Transformers (except pole mounted with no discernable evidence of soil staining)					
RR Signal Boxes (except those with no discernable soil staining)					
Other (storage structures/pipelines [except water and natural gas])					

Step 3

Surface Staining	Oil Sheen	Odors	Vegetation Damage	Other (spills, leaks, illegal dumping, etc.)

If entirely Agriculture/Residential or has some recently developed commercial benign uses, and if all responses to Step 1, Step 2, Step 3 are No, sign form and place in appropriate report, otherwise send for Preliminary Environmental Site Assessment (PESA).

District Sign Off of Special Waste Screen 03/08/2004 Validation in Progress Revised Sign Off Date

Conducted By: Julie Klamm Position: Environmental Coord Telephone: (618) 351-5284

Sequence No: 11592 B

Memo Date:	04/22/2008	Memo By:	Walt Z.
Memo:	A new project number was assigned today by Julie Klamm: P-99-007-08 (replacing old #: D-99-005-04).		



Illinois Department of Transportation

Memorandum

To: Eric Harm Attn: Barbara Stevens
From: Mary C. Lamie By: Carrie Nelsen
Subject: * Environmental Survey Request Addendum C
Date: March 20, 2007

* FAP 331 (IL 13)
Williamson County
Contract # 98849
Job No. D-99-005-04
Halfway Rd. in Marion to Division St. in Carterville

Enclosed is the Environmental Survey Request Addendum C and related attachments for the above listed project. This project involves the upgrade of IL 13 to provide greater traffic capacity in a high economic development corridor. The section of IL 13 from Division Street in Carterville to IL 148 will be improved by providing a newly constructed frontage road system with one new interchange for main access. Access to IL 13 from other existing intersections will be changed to limit the movements to configurations such as right-in / right-out only. Signalized intersection access will remain at Division Street in Carterville and IL 148.

The section of IL 13 from IL 148 to Halfway Rd. in Marion will be expanded from a 4-lane facility to a 6-lane facility. Access at the existing intersections will remain with some modifications. A new railroad overpass is proposed over the Burlington Northern / Santa Fe line near the Illinois Center Mall in Marion. A frontage road system is also proposed from Skyline Dr. to Halfway Rd. to ease congestion of local traffic in this area.

New R.O.W. is required. In-stream work is proposed at the stream crossing just west of Walton Way in Marion. It is anticipated that this project will be constructed in multiple contracts, utilizing both stage construction and road closures.

The District is currently projecting the first contract to be on the June, 2008 Letting. Design Approval is therefore requested by October 1, 2007. If there are any questions, please contact Julie Klamm at (618) 351-5286 or Julie.Klamm@illinois.gov

JAK:jk

Environmental Survey Request Addendum

A. Project Information

Bio Cultural Wetlands Special Waste

Submittal Date: 03/20/2007 Sequence No: 11592 C
District: 9 Requesting Agency: DOH Project No:
Contract #: 98849 Job No.: D- 99-005-04
Counties: Williamson
Route: FAP 331 Marked: IL 13
Street: Section:
Municipality(ies): Marion, Cartersville Project Length: 10.139 km 6.3 miles
FromTo (At): Division St intersection at Cartersville and Terminal Dr intersection at Williamson Co Airport
Quadrangle: Marion, Crab Orchard Lake Township-Range-Section: T. 9 S. / R. 2 E., R. 1 E. / Secs.
10, 11, 12, 7, 8; 9, 10
Anticipated Design Approval: 10/01/2007

B. Reason for Submittal: (Check all that apply)

Acquisition of additional ROW or easement Addendum: 200 acres Total Project: 210.70 acres
 In-Stream Work Stream Name:
 Other:
 Field Sign Off (Bio & Cultural Only)

C. Addendum Description: ESR limits have been greatly broadened to encompass larger scope that includes a new frontage road system with new access points, addtl lanes from 148 to Halfway Rd in Marion, and a RR overpass at Skyline in Marion.

D. Tree Removal?: Yes Number?: ha/ acres

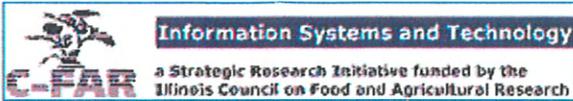
Wetland delineation performed by: End. Species Consultation performed by:

E. Contact Person: Carrie Nelsen **Local Contact Person:**
Telephone #: (618) 351-5280 ext. Telephone #:
Env.Contact: Julie Klamm E-Mail:
Telephone #: 6183515286 Title/Company:

F. Update Entire Project

Addendum Only

Field Sign Off (Bio & Cultural Only) Received in CO



Wetland Impact Review Tool Report: Report of Possible Resource Conflicts.

Parcel ID: IL 13 - Seq. #11592C

Resource in Vicinity of Project Polygon

- Threatened and Endangered Species
- National Wetlands Inventory (NWI)

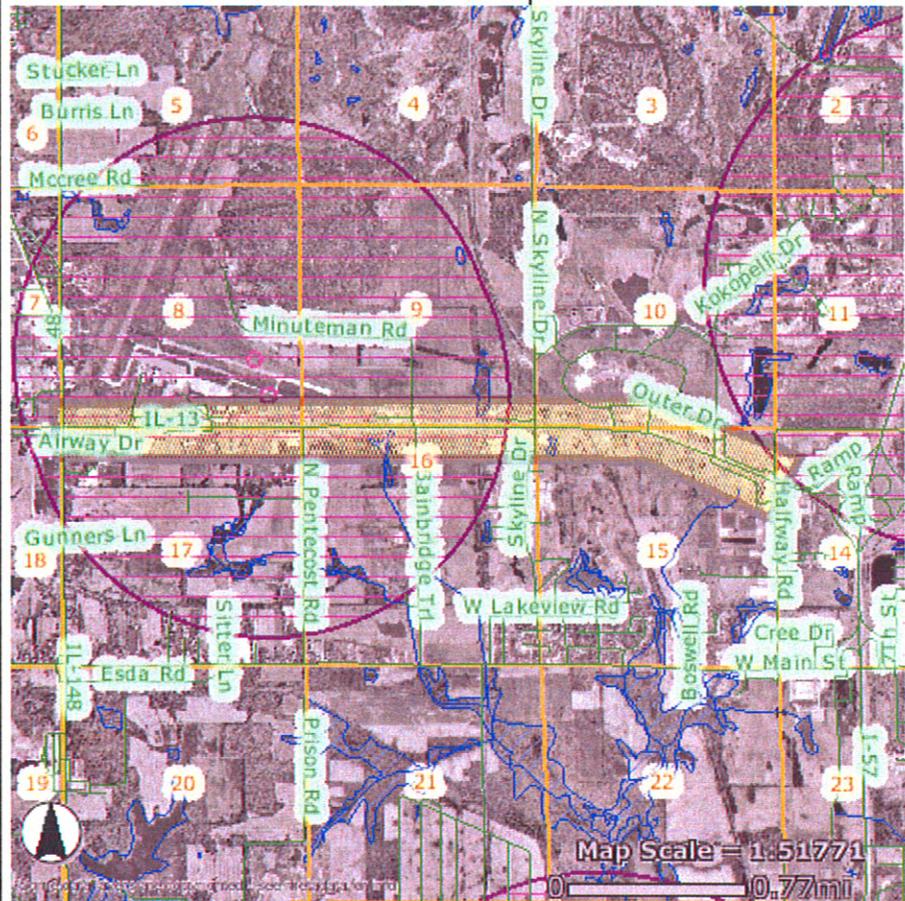
Resource within Buffer

No Resource Found

- Natural Area Inventory
- Nature Preserve/LWR

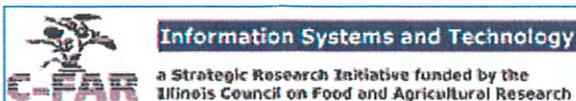
County: WILLIAMSON.
Section (PLSS): 3 9S
2E16.

**Area: 0.803 square miles
= 517.406 acres**



Report generated by: Barb Traeger

Tue Mar 27 14:24:47 CDT 2007



Wetland Impact Review Tool Report: Report of Possible Resource Conflicts.

Parcel ID: IL 13 - Seq. #11593C (2)

Resource in Vicinity of Project Polygon

- Threatened and Endangered Species
- National Wetlands Inventory (NWI)

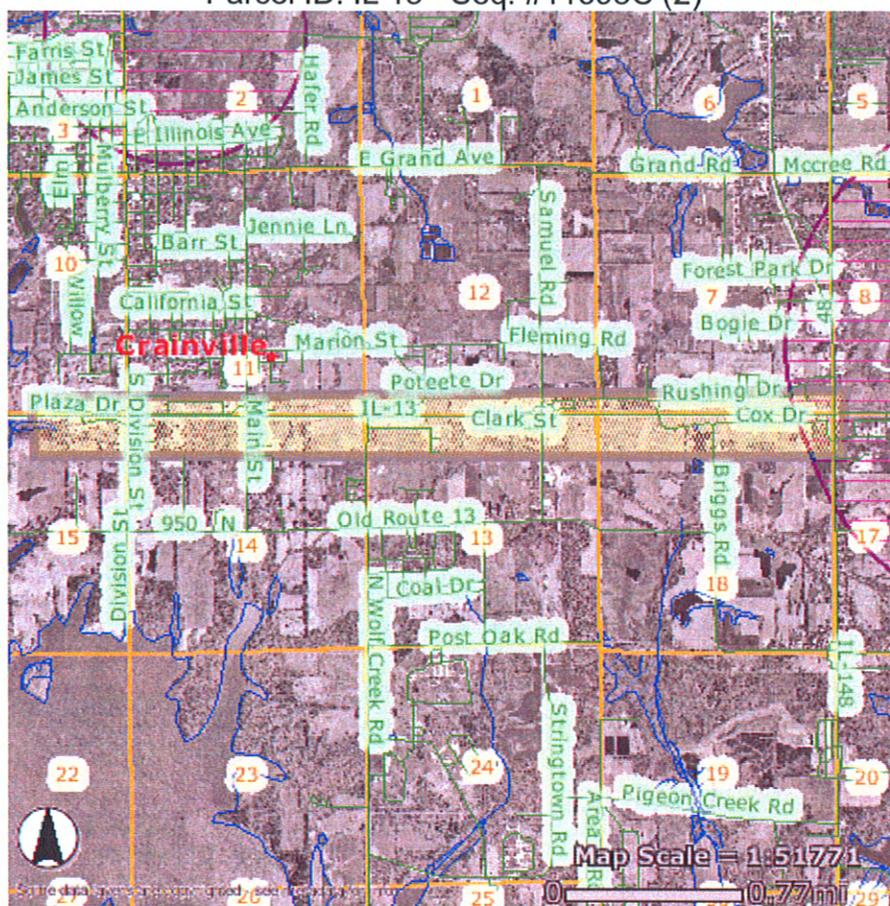
Resource within Buffer

No Resource Found

- Natural Area Inventory
- Nature Preserve/LWR

County: WILLIAMSON.
Section (PLSS): 3 9S
1E13.

**Area: 0.926 square miles
= 596.37 acres**



Report generated by: Barb Traeger

Tue Mar 27 14:34:04 CDT 2007

ET Species

Rec	SCIENTIFIC	COMMON_NAM	LAST_OBS_D	NAME_CATEG	S_PROTECTI	SURVEY_DAT	ELCODE_BCD	EO_NUM	MAPPEDDATE	M
1	Thryomanes bewickii	Bewick's Wren	1987-06-24	Vertebrate Animal	LE	2004-07-08	ABPBG07010	6	Thu, 1 Oct 1987 00:00:00	2016

Sections(PLSS)

Rec	TRS	MERIDIAN	TOWNSHIP	RANGE	SECTION	COUNTY_NUM	TWP	OBJECTID
1	3 9S 2E11	3	9S	2E	11	199	3 9S 2E	54956

Counties

Rec	NAME_CNTY	AREA_SQMI	POP_1990	POP_2000	FIPS
1	WILLIAMSON	444.02	57733	61296	17199

ET Buffers

Rec	Common Name	Scientific Name	BCD Code	EO Number	OBJECTID
1	Bewick's Wren	Thryomanes bewickii	ABPBG07010	6	2309

DOQ Date

Rec	MAPNAME	QUARTER	USGS	IMAGE_DATE	OBJECTID
1	JOHNSTON CITY	SW	37088.G8	Monday 6 April 1998	3917

ET Species

Rec	SCIENTIFIC	COMMON_NAM	LAST_OBS_D	NAME_CATEG	S_PROTECTI	SURVEY_DAT	ELCODE_BCD	EO_NUM	MAPPEDDATE	M
1	Bartramia longicauda	Upland Sandpiper	1987	Vertebrate Animal	LE	2004-07-08	ABNNF06010	33	Thu, 1 Oct 1987 00:00:00	2016

Sections(PLSS)

Rec	TRS	MERIDIAN	TOWNSHIP	RANGE	SECTION	COUNTY_NUM	TWP	OBJECTID
1	3 9S 2E 8	3	9S	2E	8	199	3 9S 2E	54951

Counties

Rec	NAME_CNTY	AREA_SQMI	POP_1990	POP_2000	FIPS
1	WILLIAMSON	444.02	57733	61296	17199

ET Buffers

Rec	Common Name	Scientific Name	BCD Code	EO Number	OBJECTID
1	Upland Sandpiper	Bartramia longicauda	ABNNF06010	33	2085

DOQ Date

Rec	MAPNAME	QUARTER	USGS	IMAGE_DATE	OBJECTID
1	CRAB ORCHARD LAKE	NE	37089.F1	Monday 6 April 1998	3950



Illinois
Department of
Natural Resources

One Natural Resources Way • Springfield, Illinois 62702-1271

Dept. of Natural Resources

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NOV 24 2003

OREP

<http://dnr.state.il.us>

Resource Review & Coordination Blagojevich, Governor

CONSULTATION AGENCY ACTION REPORT

(Illinois Administrative Code Title 17 Part 1075)

Division of Resource Review and Coordination

Stephen K. Davis, P.G., Chief

Date Submitted: November 20, 2003
If this is a re-submittal, include previous IDNR response if available.

FOR DEPARTMENT USE ONLY
PROJCODE: 0402487 DUE DATE: 1/8/04

Applicant: Illinois Department of Transportation Phone: (217) 782-4073
Contact Person: Scott Marlow Fax: (217) 524-9356
Applicant Address: Bureau of Design and Environment, Room 330 Email: marlows@nt.dot.state.il.us
2300 S. Dirksen Parkway, Springfield, IL 62764

LOCATION OF PROPOSED ACTION

A MAP SHOWING LOCATION OF PROPOSED ACTION IS REQUIRED

Project Name: FAP 331 County: Williamson
Project Address (if available): IL 13 BDE Seq. No. 11592
City, State, Zip: _____
Township/Range/Section (e.g. T45N, R9E, S2): T 9S/R 2E/Sec. 7, 8, 9, 10 & T 9S/R 1E/Sec. 11, 12
Brief Description of Proposed Action: Upgrade IL 13 from 4-lanes to 6-lanes from Halfway road in Marion to Division Street in Carterville.
New ROW required: 8.2 acres.
Projected Start Date and End Date of Proposed Action: Unknown

Will state funds or technical assistance support this action? [Yes | No] If Yes, the Interagency Wetland Policy Act may apply. Contact funding agency or this Division for details.

Local/State Agency with Project Jurisdiction: District 9
Contact: Julie Klamm Phone: 618-351-5284
Address: _____ Fax: _____

FOR DEPARTMENT USE ONLY

Are endangered/threatened species or Natural Areas present in the vicinity of the action? [Yes | No]
Could the proposed action adversely affect the endangered/threatened species or Natural Area? [Yes | No]
Is consultation terminated? [Yes | No]
Comments: _____

Evaluated by: Steve Wamer
Division of Resource Review & Coordination (217) 785-5500

Date 12-11-03

RECEIVED

DEC 18 2003

EcoCAT Results Report

IDNR Project Number: 0712533
 Date: 3/27/2007

Applicant Name: Illinois Department of Transportation - CO
 Contact Name: Barb Traeger
 Applicant Address: 2300 S. Dirksen Pkwy, Room 330
 Springfield, IL 62764

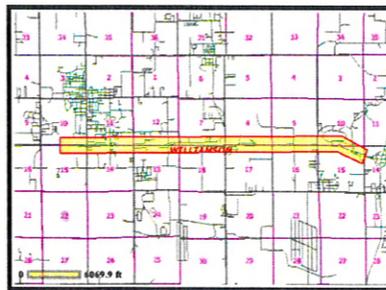
Project Information

Project Name: Seq. #11592C - IL 13 (Halfway Road to Division Street)
 Jurisdiction: Illinois Department of Transportation
 IDNR Project Number: 0712533

County: Williamson

Township, Range, Section:

- 9S, 1E, 10
- 9S, 1E, 11
- 9S, 1E, 12
- 9S, 1E, 13
- 9S, 1E, 14
- 9S, 1E, 15
- 9S, 2E, 7
- 9S, 2E, 8
- 9S, 2E, 9
- 9S, 2E, 10
- 9S, 2E, 14
- 9S, 2E, 15
- 9S, 2E, 16
- 9S, 2E, 17
- 9S, 2E, 18



Location Accuracy

The project location is assumed to be accurate for the purpose of this environmental review based on what is submitted by the applicant. The applicant who submits the information is solely responsible for the location submitted and thus the accuracy of this report content.

Review Results

Consultation Review Process (Part 1075)

The Illinois Natural Heritage Database indicates the presence of protected resources in the vicinity of the project location submitted.

Protected Resources in Project Vicinity:

- Bewick'S Wren (*Thryomanes bewickii*)
- Upland Sandpiper (*Bartramia longicauda*)

Wetland Review Process (Part 1090)

The National Wetlands Inventory (NWI) data indicates the presence of wetlands within 250 feet of the project location submitted. In accordance with 17 IL Administrative Code Part 1090, if state funds will be used the project "shall not be commenced until completion of the wetland review process and a wetland compensation plan has been approved for any unavoidable impacts."

Next Step

IDNR will evaluate this report and notify you within 30 days whether additional information about the project will be needed.

Disclaimer

The Illinois Natural Heritage Database at the Illinois Department of Natural Resources (IDNR) cannot provide a conclusive statement on the presence, absence, or condition of significant natural features in any part of Illinois. This report summarizes only the information existing in the Illinois Natural Heritage Database regarding natural features or locations in question known to IDNR at the time of this inquiry. This report should not be regarded as a final statement on the site being considered, nor should it be a substitute for field surveys required for environmental assessments. This response cannot replace detailed site surveys. Furthermore, should a protected resource be encountered during the project's implementation, compliance with applicable statutes and regulation is required regardless of the results of this review.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed and intended for the purpose of screening projects for potential adverse impacts to protected resources under the Endangered Species Consultation Process (*Illinois Administrative Code* Title 17 Part 1075) and for responding to general requests for information. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.
2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.
3. IDNR reserves the right at any time without notice to enhance, modify, alter, or suspend the website and to terminate or restrict your access to the website.
4. This review is based only on the project polygon that was submitted. The review must be repeated if the project boundary changes. If additional information on protected resources becomes available, this review may be reconsidered by IDNR.

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The IDNR EcoCAT application operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law. Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

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The EcoCAT website maintains a record of each search result and all information submitted for each search. This information is recorded for internal tracking purposes. The information collected in this application will not be shared outside of the EcoCAT system and the Illinois Department of Natural Resources; however, this information does become public record and is therefore subject to the Freedom of Information Act (FOIA).

EcoCAT Results Report

IDNR Project Number: 0712533

Date Submitted: 3/27/2007

Contact Information

If you have questions regarding this project review, please contact:

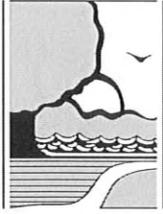
Steve Hamer

217-785-5500

Illinois Department of Natural Resources

Division of Ecosystems and Environment

cc: Illinois Department of Transportation



Illinois Department of Natural Resources

One Natural Resources Way • Springfield, Illinois 62702-1271
<http://dnr.state.il.us>

Rod R. Blagojevich, Governor

Sam Flood, Acting Director

April 03, 2007

Barb Traeger
Illinois Department of Transportation - CO
2300 S. Dirksen Pkwy, Room 330
Springfield, IL 62764

Re: Seq. #11592C - IL 13 (Halfway Road to Division Street)

Project Number: 0712533

County: Williamson

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Steve Hamer
Division of Ecosystems and Environment
217-785-5500



Illinois Department of Transportation

Memorandum

To: Mary C. Lamie Attn: Carrie Nelsen
From: Eric E. Harm By: Thomas C. Brooks
Subject: Biological Resources Review
Date: August 6, 2007

Thomas C. Brooks

IL 13 (FAP 331)
I-57 in Marion to Division St. in Carterville
Job No. D-99-005-04 (Seq. #11592C)
Contract No. 98849)
Williamson County

The Natural Resources Unit has reviewed this project. The project, as described on the Environmental Survey Request Form, does not require biological surveys. The IDNR Natural Heritage Database has records of listed species (Bewick's Wren and Upland Sandpiper) within the project corridor. The IDNR concluded that adverse impacts to the species are unlikely (IDNR EcoCAT response letter dated April 3, 2007).

The National Wetland Inventory Map (Crab Orchard Lake and Marion Quadrangle) depicts wetlands in the project area. The project was sent for field survey. Attached is a copy of the Wetland Report and aerial photograph. The results of the survey indicate the presence of 35 jurisdictional wetlands within the project area (Sites 1A, 1, 3, 4, 6, 7, 8, 9, 10, 11, 12, 18, 20, 22, 24, 25, 26, 28, 29, 33, 34, 35, 36, 37, 39, 40, 41, 43, 44, 45, 49, 50, 51, 52, 53).

In accordance with Section V of the IDOT Wetlands Action Plan, wetland impacts are to be avoided, minimized and then mitigated.

For unavoidable impacts, please fill out the Wetland Impact Evaluation Form (WIE Tab in the Wetland Form of the Project Monitoring Database) and submit the form to this office.

By agreement, no coordination with the Illinois Department of Natural Resources and the U.S. Fish and Wildlife Service is required at this time.

Attachments

BT



Illinois Department of Transportation

Memorandum

To: Mary Lamie Attn: Carrie Nelson
 From: Eric Harm By: J. A. Walthall
 Subject: Cultural Resource Concurrence
 Date: May 21, 2007

Williamson County
FAP 331, IL 13, Addendum C
Job No. D-99-005-04
Division St. Intersection at Carterville and Terminal Dr. intersection at
Williamson Co. Airport

Attached is a letter of concurrence from the State Historic Preservation Officer indicating that the proposed project referenced above will have no effect on significant cultural resources.

This completes the necessary coordination relative to evaluating the impact of this project on significant cultural resources.

Attachment

JAW:km





Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

May 11, 2007

Williamson County
FAP 331, IL 13
Marion
Project: D-99-005-04

IDOT Seq.# 11592C
ITARP# 07037

FEDERAL 106 PROJECT

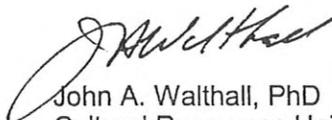
Ms. Anne Haaker
Deputy State Historic Preservation Officer
Illinois Historic Preservation Agency
Springfield, Illinois 62701

Dear Ms. Haaker:

Attached is a report from the Illinois Transportation Archaeological Research Program concerning the results of survey of the 200 acre project area referenced above. No archaeological, architectural, or historic sites were identified within the proposed project rights-of way.

In accordance with the established procedure for coordination of proposed Illinois Department of Transportation projects, we request the concurrence of the State Historic Preservation Officer in our determination that no historic properties, subject to protection under Section 106 of the National Historic Preservation Act of 1966 as amended, will be affected by the proposed construction activities.

Very truly yours,


John A. Walthall, PhD
Cultural Resources Unit

CONCUR
By: 
Deputy State Historic Preservation Officer
Date: SSH 5/16/07



Illinois Department of Transportation

Memorandum

To: Eric Harm Attn: Steven Gobelman
 From: Mary C. Lamie By: Carrie Nelsen
 Subject: * Special Waste Waiver Request
 Date: March 11, 2008

* FAP 331 (IL 13)
 Williamson County
 Halfway Rd. in Marion to Plaza Dr. in Carterville
 ISGS #1504A PMA #11592C

In accordance with BDE 27-2.06, the District requests a waiver so that design approval may be obtained prior to performing the phase II testing for the above listed project. The basis for this request is that the project has not yet been funded and programmed for construction. As a commitment, a special waste re-evaluation will be performed upon notification of funding and program status. If necessary, the District will request that the Illinois State Geological Survey perform updated surveys at that time. As outlined in the BDE Manual, this design approval request is based on the following information:

- The project involves adding lanes to the existing alignment, but also involves some areas of new frontage roads. These locations involve only a single alignment which has been identified in the preferred alignment for this project.
- Design approval is requested subject to the condition that acquisition of any contaminated parcel will not proceed until the PSI and subsequent studies, if needed to determine the cost of addressing the contamination, are completed.
- The District will reflect in the commitment file for the project the requirement for completing the PSI and other related studies, if needed, prior to commencing acquisition of any contaminated parcel and will ensure follow-through on the commitment once the project is programmed.

This task will be posted in the project's **commitment file**. If further information is required, please call (618) 351-5286.

Concur Barbara Stevens
 Barbara Stevens
 Environment Section Chief
 Bureau of Design and Environment
 Date 3/11/08
 Discuss _____

U.S. Department of Agriculture

11

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request		5-12-08	
Name Of Project IL 13 (FAP 33) Carterville to Marion		Federal Agency Involved		FHWA	
Proposed Land Use Highway - Frontage Road		County And State		Williamson, IL	
PART II (To be completed by SCS)		Date Request Received By SCS		5-13-08	
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Acres Irrigated	—
Major Crops/ Corn, Soybeans, Wheat, Hay		Farmable Land In Govt. Jurisdiction Acres: 29,633,500 % 97		Average Farm Size 372	
Name Of Land Evaluation System Used Illinois		Name Of Local Site Assessment System Statewide		Amount Of Farmland As Defined In FPPA Acres: 27,695,900 % 91	
				Date Land Evaluation Returned By SCS 5-20-08	
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		4.2			
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site		4.2			
PART IV (To be completed by SCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		3.6			
B. Total Acres Statewide And Local Important Farmland		0.6			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted		0.000015			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value		50.7			
PART V (To be completed by SCS) Land Evaluation Criterion					
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)		*150	25	113	
PART VI (To be completed by Federal Agency)		Maximum Points			
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))					
1. Area In Nonurban Use					
2. Perimeter In Nonurban Use					
3. Percent Of Site Being Farmed					
4. Protection Provided By State And Local Government		See attached			
5. Distance From Urban Builtup Area		ILLINOIS LESEA			
6. Distance To Urban Support Services		CORRIDOR FACTORS			
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Nonfarmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments					
11. Effects Of Conversion On Farm Support Services					
12. Compatibility With Existing Agricultural Use					
TOTAL SITE ASSESSMENT POINTS		*150	100		
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		*150	100	113	
Total Site Assessment (From Part VI above or a local site assessment)		*150	100	5	
TOTAL POINTS (Total of above 2 lines)		*300	200	118	
Site Selected:		Date Of Selection		Was A Local Site Assessment Used?	
				Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Reason For Selection:		Statewide Corridor			

* When using the state of Illinois site Assessment Corridor Factors 150 points are assigned to the site Assessment (SA) and 150 points are assigned to the Land Evaluation (LE) portion for a maximum score of 300 points.

**FAP 331 (Illinois Route 13)
 Carterville to Marion
 Frontage Road
 Williamson County, Illinois
 Federal Highway Administration Funds**

PART VI-B Illinois Site Assessment <i>CORRIDOR</i> Factors	Maximum Points	Site A
1. Amount of agricultural land required	30	1
2. Location of the proposed alignment	30	3
3. Acres of off-site agricultural land required for borrow materials	15	0
4. Acres of Prime and Important farmland required for mitigation	15	0
5. Creation of severed farm parcels	10	0
6. Creation of uneconomical remnants	10	0
7. Creation of landlocked parcels	10	0
8. Creation of adverse travel	10	0
9. Relocations of rural residences and farm buildings	10	0
10. Utilization of minimum design standards	10	1
TOTAL SITE ASSESSMENT <i>CORRIDOR</i> POINTS	150	5
PART VII		
Relative Value of Farmland	150	113
Total Site Assessment <i>CORRIDOR</i> Factors	150	5
TOTAL ILLINOIS LESA POINTS	300	118



Illinois Department of Transportation

Memorandum

To: Mary C. Lamie Attn: Carrie L. Nelsen
From: Eric E. Harm By: Thomas C. Brooks
Subject: Wetland Resources Review
Date: March 26, 2008

Thomas C. Brooks

IL 13 (FAP 331)
Halfway Road in Marion to Division Street in Carterville
Job No. D-99-005-04 (Seq. #11592)
Williamson County

This memorandum is in response to the revised Wetland Impact Evaluation form dated March 17, 2008.

Since new frontage roads will be constructed on new alignment, this project is being processed as a Standard Review Action in accordance with the IDOT Wetlands Action Plan.

Mitigation for the 1.825 acres of impact has been proposed to occur at the Sugar Camp Creek Wetland Mitigation Bank. We concur with that form of mitigation. The project is in the same basin as the bank, therefore a 2.0 to 1 ratio has been applied to Sites 1A, 8, 10, 37 and 44. Since the FQI of site 9 is 25.3 and site 28 is 20.1, a 5.5 to 1 ratio has been applied for the 1.3 acres of impact to site 9 and 0.1 acre impact to site 28. A total of 8.55 acres of credit will be required from the bank.

By copy of this memorandum, IDNR is being notified of this project. In accordance with the IDOT Wetlands Action Plan, we are requesting IDNR's written concurrence of the impacts and the proposed mitigation. Their response will be forwarded to your office.

Attachments

cc: Steve Hamer (IDNR)

BT



Illinois Department of Natural Resources

One Natural Resources Way • Springfield, Illinois 62702-1271
<http://dnr.state.il.us>

Rod R. Blagojevich, Governor

Sam Flood, Acting Director

April 03, 2007

Barb Traeger
Illinois Department of Transportation - CO
2300 S. Dirksen Pkwy, Room 330
Springfield, IL 62764

Re: Seq. #11592C - IL 13 (Halfway Road to Division Street)

Project Number: 0712533

County: Williamson

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Steve Hamer
Division of Ecosystems and Environment
217-785-5500



Illinois Department of Transportation

Memorandum

To: Matt Fuller
From: Julie Klamm
Subject: * NEPA 404 Merger Meeting Minutes
Date: June 21, 2007

* FAP 331 (IL 13)
Williamson County
Division St. in Carterville to W. of Halfway Rd. in Marion

A NEPA 404 Merger Meeting was held on May 29, 2007 at the FHWA Illinois Field Office in Springfield, Illinois.

The Purpose and Need (Concurrence Point #1) was presented for the above listed project by Julie Klamm, Environmental Studies Coordinator for IDOT District 9. The purpose of the proposed project is to provide for a transportation improvement that would address the need for improved safety and improved traffic mobility and efficiency that are driven by the recent economic growth in the corridor. The average daily traffic reaches 35,900 vpd and is projected to reach 50,000 vpd by the year 2016. Traffic accident data revealed a total of 1013 crashes in a five year period with nearly 5% of those resulting in Type A injuries. Three fatalities were also recorded. Continued economic growth is expected resulting in increased traffic volumes, congestion and traffic crashes.

The following comments and concurrences were obtained:

IEPA - Was this project driven by Marion or Carterville?

IDOT D-9, Klamm - Actually driven by recent growth and economic development that has created unsafe traffic conditions.

IDOA - Can we close some of the access points along the route in this corridor?

IDOT D-9, Klamm - Yes, but only from Division Street to IL 148. A frontage road system is actually being considered for this section.

IDOA - Any funding for this project yet?

IDOT D-9, Klamm - Nothing definite at this time.

The Purpose and Need was then proposed by Matt Fuller for concurrence. The results were:

IDOA - Concur

IDNR - Concur

USACE, St. Louis Regulatory Dist. - Concur

IEPA - Concur

USEPA - Concur

With concurrences obtained and no further questions or comments, the presentation of the Purpose and Need for this project was concluded.

Klamm, Julie A

From: Joyce_Collins@fws.gov
Sent: Wednesday, June 06, 2007 8:36 AM
To: Klamm, Julie A
Cc: Matt.Fuller@fhwa.dot.gov; Stevenson, Jerry; Stevens, Barbara H; Zyznieuski, Walter G; Perino, Charles H; HAMER, STEVE; Keith.A.McMullen@mvs02.usace.army.mil; ellens.newton@epa.gov
Subject: District 9 Projects - Concurrence Points

Julie,

I finally had a chance to review the information for the two projects and offer the following:

1. IL 13 (Marion to Carterville) - I concur with the purpose and need for the project.

As you move into analyzing the effects of this project, the indirect and cumulative effects of upgrading IL 13 on Crab Orchard NWR need to be evaluated. We, the Service, think that all the development and growth occurring along the IL 13 corridor is having a very detrimental impact on the Refuge. This is mostly due to increased stormwater resulting in higher lake levels, which is in turn impacting forest resources. We are also concerned about chemicals that are most likely being transferred into the lake as well. Some amount of friction exists with local landowners as they think the Refuge is causing increased flooding to occur on their properties. We contend that it's all the development causing more runoff that's creating the problem. As stated in the Purpose and Need discussion, traffic congestion is now somewhat controlling (e.g., limiting) the amount of future development that may occur. With improved traffic flow, more development will come and more stormwater with it. All this should be evaluated and mitigative actions developed and implemented as appropriate.

2. IL 13/127 (Murphysboro to Pinkneyville) - I concur with the alternatives carried forward and preferred alternative.

The table that lists the Costs and Impacts for all the Alternates identifies that no known federally-listed threatened or endangered species occur in the project area. A non-reproductive female Indiana bat was collected south west of Pyramid State Park along Gallum Creek in late August 1988. According to the table, approximately 90 acres of woodland will be impacted by the project. With this amount of forest impacts and a prior record in the county, the impacts should consider the potential presence of Indiana bats in the area.

I apologize for not getting a response sooner. Let me know if you have any questions regarding any of the above.

Thanks,
Joyce

Joyce A. Collins
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Marion Illinois Sub-Office
8588 Route 148
Marion, Illinois 62959
phone: 618/997-3344, ext. 340
fax: 618/997-8961
email: joyce_collins@fws.gov

"Klamm, Julie A"
<Julie.Klamm@illinois.gov>

05/31/2007 03:54
PM

<Joyce_Collins@fws.gov>

To

cc

Subject
RE: Upcoming NEPA/404 Merger meeting

Hi Joyce, Just an update on the 404 Merger meeting held this past Tuesday.

IL 13/127 Murphysboro to Pinckneyville Received concurrence
on
Alternatives and Preferred Alternative for the project. USEPA concurred on the condition that the EA would provide discussion on why the Preferred Alternative changed. This language is now in the updated EA.
(Which is due to go out to everyone soon.) IEPA concurred. US Army Corps of Engineers concurred on the condition that the document state that an individual 404 Permit would be required. That language is now in the updated EA. IDNR concurred. IDOA concurred.

IL 13 Carterville to Marion Received concurrence on
Purpose
and Need with no conditions stated.

Just checking to see if you had any further questions or comments?
Concurrence? Just let us know when you get a chance. Thanks Joyce,

Julie Klamm, Environmental Studies Coordinator IDOT, Division of Highways, Region 5, District 9
9 PO Box 100
2801 W. Murphysboro Rd.
Carbondale, IL 62903
Phone: (618) 351-5286
Fax: (618) 457-8622
E-mail: Julie.Klamm@illinois.gov

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

From: Joyce_Collins@fws.gov [mailto:Joyce_Collins@fws.gov]
Sent: Friday, May 04, 2007 10:41 AM
To: Klamm, Julie A
Cc: Matt.Fuller@fhwa.dot.gov; Stevenson, Jerry; Stevens, Barbara H; Perino, Charles H
Subject: Upcoming NEPA/404 Merger meeting

Julie,

I won't be attending the upcoming NEPA/404 Merger meeting in Springfield as I will be out of town that week. I'll plan to review the materials provided for the two District 9 projects and provide feedback via email.
If for some reason we need to meet, I'm hoping we could do that locally.

Let me know if this causes any problems.
Thanks,
Joyce

Joyce A. Collins
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Marion Illinois Sub-Office
8588 Route 148
Marion, Illinois 62959
phone: 618/997-3344, ext. 340
fax: 618/997-8961
email: joyce_collins@fws.gov

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

From: Fuller, Matt

Sent: Mon 2/4/2008 7:24 PM

To: Fraley, Chris; Helmerichs, Robin; 'Barbara Stevens (Barbara.Stevens@illinois.gov)'; 'Zyznieuski, Walter G'

Cc: Kohler, Jon-Paul; Piland, Janis; Stevenson, Jerry

Subject: D9-D8 Concurrence Info and D7 comments on US 51

FYI...please pass along to the appropriate IDOT District personnel. Thanks.

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

From: Heidi_Woeber@fws.gov [mailto:Heidi_Woeber@fws.gov]

Sent: Monday, February 04, 2008 9:20 AM

To: Fuller, Matt

Subject: February 7 meeting

Matt:

I have reviewed the IL Route 13 (FAP 331), Williamson County Concurrence Points 2 & 3 Alternatives Analysis and Preferred Alternative Selection and can provide concurrence.

I have also reviewed the I-255 Interchange near Davis Street Ferry Road, Village of Dupo, St. Clair County Alternatives to be Carried Forward and Preferred Alternative (Concurrence Points #2 and #3) and can provide concurrence.

Thanks for the additional US 51 EIS Introduction information. I would like to attach some information regarding the eastern massasauga rattlesnake for forwarding to the US 51 Partners and project manager Jerry Payonk. I'm not sure in looking over some of the species listed that this "candidate" species was included. This species should also be addressed along with others in the EIS. Thanks!

(See attached file: Massasauga.doc)

Heidi Woeber

Fish and Wildlife Biologist

Ecological Services, Rock Island Field Office

1511 47th Avenue

Moline, Illinois 61265

309/757-5800 Ext. 209

309/757-5806 Fax

heidi_woeber@fws.gov



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
77 West Jackson Boulevard
Chicago, IL 60604**

Office of Enforcement & Compliance Assurance
NEPA Implementation
Mail Code: E-19 J
Fax Number: (312) 353-5374

To: Matthew Fuller
Federal Highway Administration
3250 Executive Park Drive
Springfield, Illinois 62703

Phone: 217 - 492 - 4625 Fax: **217 - 492 - 4324**

From: Norm West

Phone: **312 - 353 - 5692** Fax: above

Date: 3 / 17 / 2008 Number of pages,
including this cover sheet: **2**

Comments: A snail mail hard copy for your files to follow.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAR 17 2008

REPLY TO THE ATTENTION OF

E-19J

Matthew Fuller
Federal Highway Administration
3250 Executive Park Drive
Springfield, Illinois 62703

Re: **Concurrence for the IL-13 Improvements Project**

Dear Mr. Fuller:

Our comment letter is provided pursuant to the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act. This project is being developed using a merged process of NEPA and Section 404 of the Clean Water Act. The purpose and need statement for this Federal Highway Administration (FHWA) project identified three concerns to be addressed: 1) economic development, 2) safety, and 3) traffic mobility and efficiency. We previously concurred with the project purpose and need during the February 7, 2008 agency meeting conference call. We appreciate the materials clarifying the project proposal. We now concur with the alternatives considered and the preferred alternative. We recommend that environmental assessment's presentation of impacts for this project include related economic developments, as they increase impermeable surface area with related consequences, cause land use changes, and induce additional future infrastructure needs.

Thank you for the opportunity to comment on the alternatives for this project. Should you have any questions regarding our comments, please feel free to contact my staff member, Norm West, at 312-353-5692 or west.norman@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth A. Westlake".

Kenneth A. Westlake, Supervisor
NEPA Implementation
Office of Enforcement and Compliance Assurance