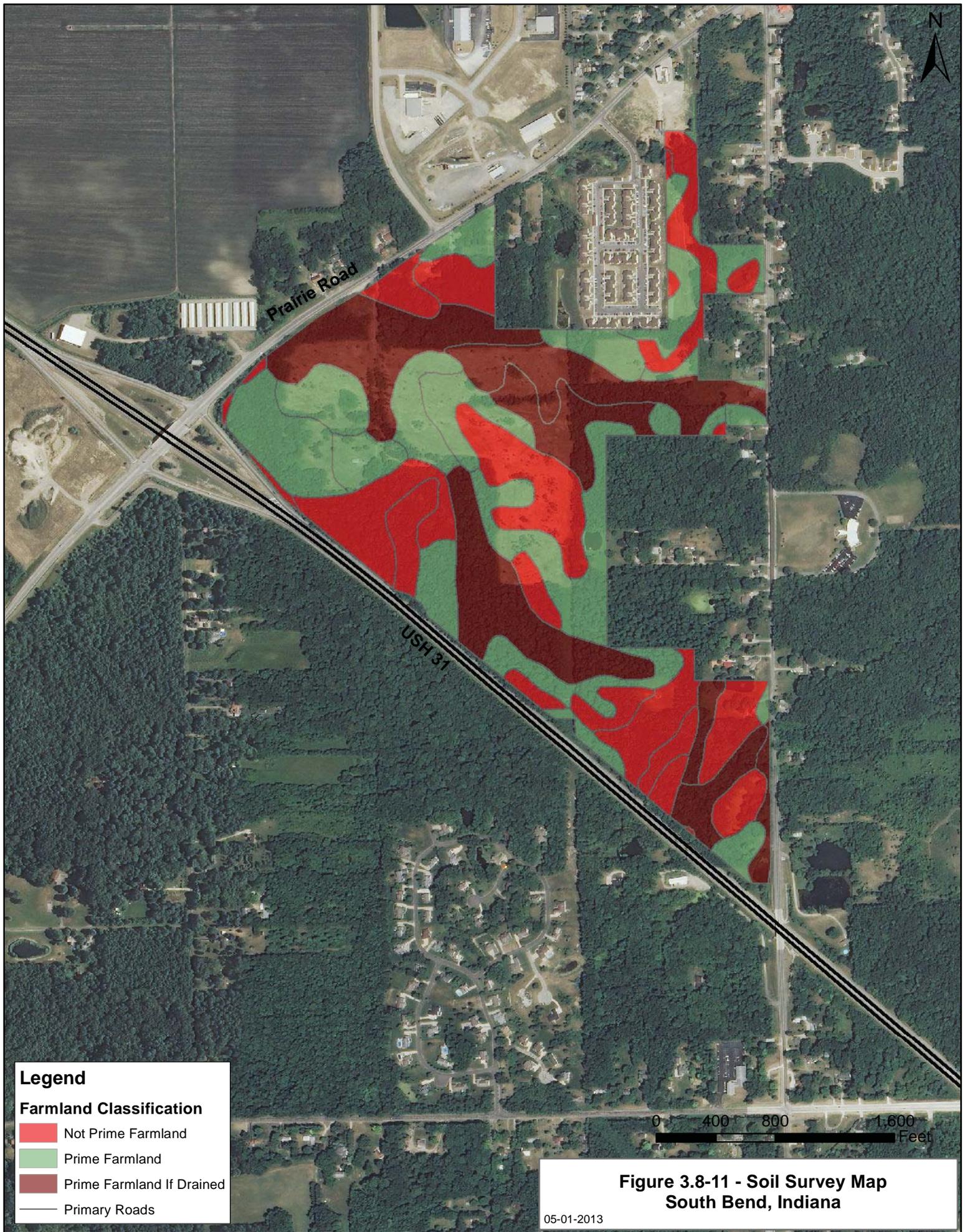


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**Figure 3.8-11 - Soil Survey Map
South Bend, Indiana**

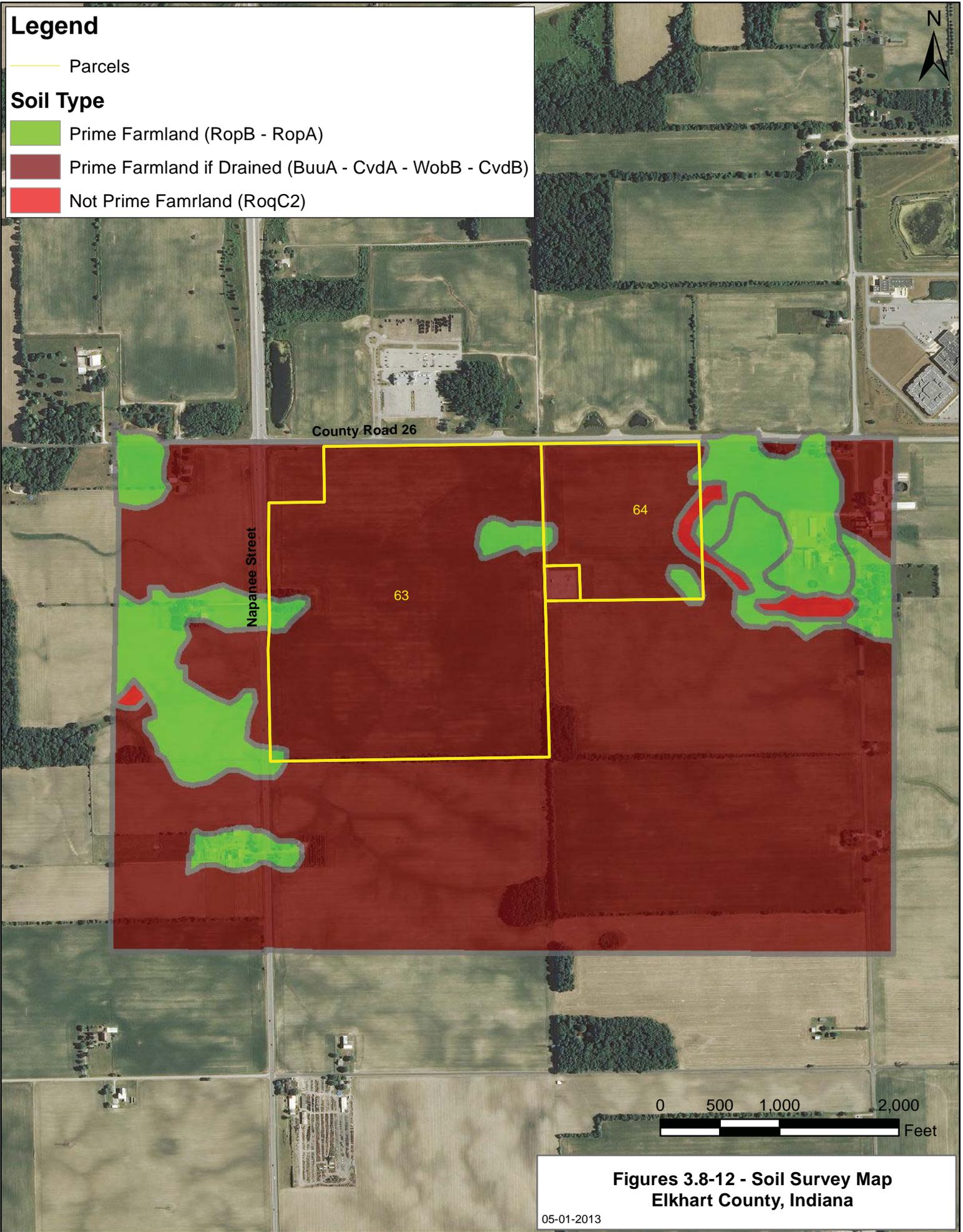
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Legend

— Parcels

Soil Type

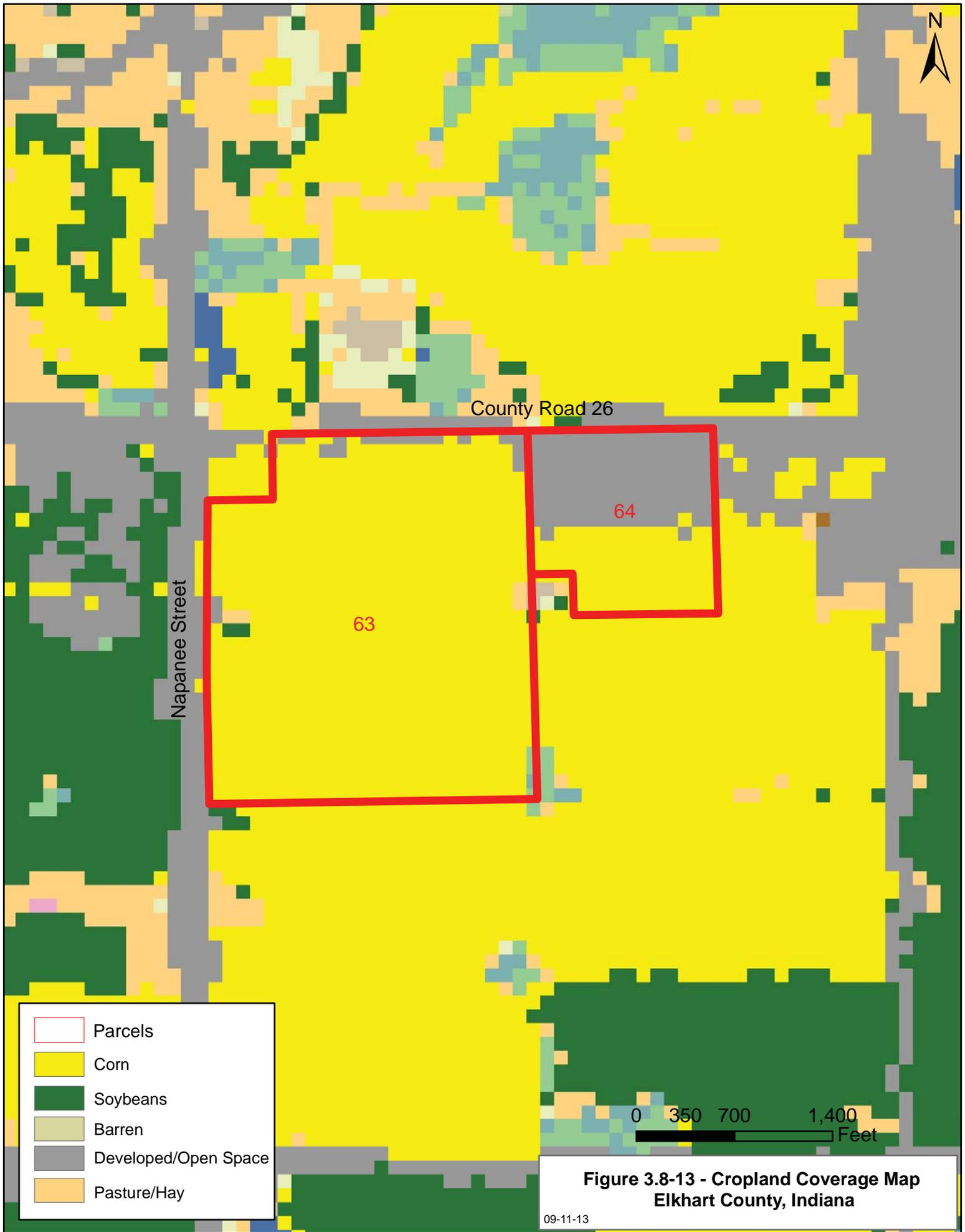
- Prime Farmland (RopB - RopA)
- Prime Farmland if Drained (BuuA - CvdA - WobB - CvdB)
- Not Prime Farmland (RoqC2)



**Figures 3.8-12 - Soil Survey Map
Elkhart County, Indiana**

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**Figure 3.8-13 - Cropland Coverage Map
Elkhart County, Indiana**

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Act (FPPA) and it is administered by the Natural Resource Conservation Service. The FPPA is designed to minimize impacts of federal programs on unnecessary and irreversible conversion of farmland to nonagricultural land uses. See **Section 4.8.3.3** for details of NRCS consultation.

To define the quality of the agricultural lands, the NRCS categorizes soils into three groups including: Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. For soils to be classified in these three groups, the land does not need to be actively farmed. Prime Farmland is considered to have the best possible features to sustain long-term productivity. Farmland of Statewide Importance includes farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Unique farmland is characterized by low quality soils needing intervention to be successful for crop production. This land generally needs irrigation depending on climate.

The NRCS Web Soil Surveys (NRCS 2013) show soils with “Prime Farmland” designation at the South Bend site (**Figure 3.8-11**) and soils primarily classified as “Prime Farmlands if drained” at the Elkhart site (**Figure 3.8-12**). Currently, only the Elkhart site is actively being farmed. The datasets from the NRCS Web Soil Surveys and specific soil farmland ratings are located in **Appendix F**. The 2011 statewide Cropland Data Layer on the Elkhart Cropland Coverage Map shows the parcels containing the Elkhart Site are primarily farmed for corn (**Figure 3.8-13**) (USDA NRCS 2013).

3.8.4 Other Resource Uses

The South Bend site proposed for the fee-to-trust transfer and the alternative Elkhart site are currently not used for activities such as hunting, fishing, gathering, timber harvesting, mining, or recreational activities.

3.9 PUBLIC SERVICES

Water supply to the South Bend Site and the Elkhart site are provided and regulated by South Bend Water Works and the City of Elkhart, respectively. Water supply quality is regulated by both the EPA and IDEM. South Bend wastewater is regulated and managed by the City of South Bend public works division. Similarly, Elkhart wastewater is regulated by the City of Elkhart public works.

IDEM’s Office of Land Quality regulates solid waste facilities and waste types in Indiana (IDEM 2013).

3.9.1 Water Supply

3.9.1.1 South Bend Site

The South Bend Water Works utilizes groundwater from the Hilltop and the St. Joseph River aquifers as its drinking water source. In 2011, 30 wells, five filtration plants, four pumping facilities,

and six booster stations were used to supply drinking water to customers. The 30 wells range from 73 to 237 feet below the ground surface. A wellhead protection program has been implemented by the South Bend Water Works to ensure the quality of the drinking water source. Wellhead protection focuses on groundwater protection and pollution prevention.

South Bend Water Works distributes an average of 16.1 MGD of high quality water that meets federal and state requirements (John Wiltrott, Director of Water Treatment, pers. comm.). The present capacity of this water supply system is 60 MGD. The IDEM and the EPA require the South Bend Water Works to continually analyze their water and submit the results to ensure its safety. The South Bend Water Works has always exceeded all water quality requirements and performs thousands of tests every year on the water to maintain these conditions (Budget Water USA 2013).

Currently, the project site is located at a divide between a normal pressure district and a high pressure district (**Figure 3.9-1**). Locust Road, which runs along the east side of the project site, is serviced with a 12-inch main and is in the high pressure district. The booster station and end of the high pressure district is at the north end of Locust Road just before the intersection of Prairie Avenue. At that location, a 10-inch main exists running southwest down Prairie Avenue for about 2,000 feet.

3.9.1.2 Elkhart Site

All of the City of Elkhart's drinking water is supplied from ground water. This ground water comes from several hundred feet below ground. Currently, three well fields, the North Main Street Wellfield, the South Wellfield and the Northwest Wellfield provide the water supply for the City of Elkhart. In 2011, 2.8 billion gallons of safe drinking water was supplied to Elkhart customers through 346 miles of water mains (City of Elkhart 2011). The City also maintains a Wellhead Protection Plan in accordance with Indiana state regulations. The program forms a local team which would assist with the protection of public supply wells in the area and identifies and manages existing and potential sources of contamination. The plan also includes a contingency plan to prepare for an emergency well closing and plans for future water supply needs.

The City of Elkhart distributes an average of 15 MGD of high quality water that meets federal and state requirements. The current peak capacity of this water supply system is about 25 MGD (Mike Machlan, City Engineer, pers. comm.). The IDEM and the EPA require the city to continually analyze their water and submit the results to ensure its safety. The City of Elkhart has always exceeded all water quality requirements and performs thousands of tests every year on the water to maintain these conditions (City of Elkhart 2011).

Currently, the project site is located in an elevated pressure zone of the City of Elkhart's water system because it is at a higher elevation than other areas of the system (**Figure 3.9-2**). An existing water main is situated just north of the project site approximately 900 feet east of the intersection of Nappanee Street (State Road 19) and County Road 26.

3.9.2 Wastewater service

3.9.2.1 South Bend Site

The project site is within the wastewater treatment service district of the City of South Bend (**Figure 3.9-3**). The treatment facility is classified as Class IV activated sludge treatment and is designed to produce an average 48.0 MGD of treated, reclaimed water with a peak design flow of 77.0 MGD. Currently, the treatment plant is running at an average of 31.77 MGD (Kim Thompson, Manager of Environmental Compliance, pers. comm.). The service area for South Bend wastewater treatment has over 590 miles of sanitary and combined sewer with over 40 pumping stations at various locations throughout the district. Pumping stations and combined sewer overflow points are monitored continuously to ensure proper operation. Alarms are triggered at the wastewater treatment plant, and crews are dispatched to respond to any problems that may be detected. Following treatment, the plant currently discharges into the St. Joseph River and also has 36 combined overflow locations for discharge during flooding.

There is a Long Term Control Plan (LTCP) in place for the City of South Bend over the next twenty years to reduce their combined sewer overflows. The main objectives of this plan are to reduce the current 36 overflow locations to nine, reduce the number of overflows to no more than four per year per location, and to upgrade the treatment plant to “match the capacity of 100 MGD of the existing interceptor as it enters the plant” (United States District Court 2013). Treatment systems, mainly disinfection and solids removal, will also be established at the remaining nine CSO’s. The City is required to submit monthly and semi-annual discharge monitoring reports to IDEM to ensure that they are on course with this Long Term Control Plan.

Currently, the project site is located near three accessible main sewer lines. The first line is an 8-inch gravity sanitary line which runs north starting at the intersection of Locust Road and Assumption Drive. This joins with another gravity sanitary line that runs northeast along Prairie Avenue for about 1,200 feet at the intersection of Locust Road and Prairie Avenue. Finally, there is a 15-inch gravity line which runs north and begins at the intersection of Prairie Avenue and New Energy Drive (see **Figure 3.9-3**).

3.9.2.2 Elkhart Site

The project site is within the wastewater treatment service district of the City of Elkhart. The Elkhart Wastewater Treatment Plant is located at 1201 South Nappanee Street. The facility utilizes the conventional activated sludge process and is designed to treat an average daily flow of 20 MGD with a peak flow capacity of 40 MGD (City of Elkhart 2013). Currently, the treatment plant is running at 10-15 MGD in dry conditions and 30-35 MGD in wet conditions (Mike Machlan, City Engineer, pers. comm.). The sewer system for Elkhart includes both separate sanitary sewer and combined sewer with pumping stations at various locations throughout the district. Pumping

stations and combined sewer overflow points are monitored continuously to ensure proper operation.

Preliminary treatment components include automatic bar screens, cyclone grit removal and eight rectangular clarifiers. Secondary treatment components include five aeration tanks utilizing a biological nutrient removal process for Ammonia and Phosphorus. Effluent from the facility is disinfected with Chlorine and later removed using Sulfur Dioxide. Following treatment, the plant discharges effluent to the St. Joseph River under the authority of IDEM. The average annual sewer overflow volume from the City of Elkhart's sewer system into the St. Joseph River Watershed is approximately 179.4 million gallons (Elkhart CSO LTCP). There is a Long Term Control Plan in place for the City of Elkhart over the next twenty years to reduce their combined sewer overflows to a volume of 44.9 million gallons/year. The main objectives of this plan are to partially or completely remove the number of overflow locations (currently 33), reduce the number of overflows to no more than nine per year per location, and to upgrade the treatment plant to a peak capacity of 60 MGD (City of Elkhart 2011). Overflow monitoring equipment is going to be installed at the remaining CSO's and a new water quality plan has been developed. The City is required to submit monthly and semi-annual discharge monitoring reports to IDEM to ensure that they are on course with this Long Term Control Plan.

Currently, the project site is located near three main sewer lines. There are two 8-inch gravity sanitary lines with one running north starting at County Road 26 at the west and east sides of the driveway for American Countryside Market. The other 8-inch gravity line starts at the intersection of County Road 26 and County Road 7. These lines run north and join with a 15-inch gravity sanitary line that runs west and heads towards the nearest lift station (**Figure 3.9-4**).

3.9.3 Solid Waste Service

There are two general categories of non-hazardous solid waste facilities in Indiana: land disposal facilities and processing facilities. Those facilities can accommodate different categories of waste, including municipal waste, solid waste, construction–demolition waste, special waste, or other wastes. IDEM's Office of Land Quality regulates these solid waste facilities and waste types in Indiana.

IDEM's Office of Pollution Prevention and Technical Assistance and Office of Land Quality collaborate to reduce solid waste levels and achieve waste disposal reduction goals. IDEM also assists solid waste management districts in Indiana with their local level efforts to increase reuse and recycling by providing funding in the form of grants and loans. IDEM's Office of Pollution Prevention and Technical Assistance supports and advocates the financial "Pay-As-You-Throw" program that is typically a part of the solid waste management districts' local management plans. The Pay-As-You-Throw program is based on the principle that the more you throw away, the more you pay. This is similar to the billing systems used by other utilities. This program has been shown to increase recycling efforts while reducing waste disposal volumes.

The Indiana state mandates, the House Enrolled Act (HEA 1240) and the Senate Enrolled Act 25, were signed into state laws by 1990, and are designed to address solid waste concerns in Indiana. To comply with these acts, a 20-year plan for Indiana was designed to reduce the amount of solid waste incinerated and disposed of in landfills by 35% before 1996 and 50% before 2001. There have been no recent state mandates for solid waste initiatives.

3.9.3.1 South Bend Site

For City of South Bend residential customers, the city manages wastes and recycling by hiring private contractors for the job. Commercial and industrial customers must contract directly with private waste management contractors for trash removal and recycling needs. It is anticipated that the Pokagon Band would contract with a private firm for its trash and recycling disposal needs.

Local Solid Waste Collection and Disposal

The company Waste Management currently provides solid waste collection services for the project area through weekly residential trash pick-ups (Andrae Price, City of South Bend Solid Waste Manager, per. comm.). The St. Joseph County Solid Waste Management District handles biweekly residential curb side recycling pickup. St. Joseph County also has a permanent Household Hazardous Waste collection facility located at 1105 E. Fifth Street which accepts various residential materials on a free drop-off basis (Solid Waste Management District of St. Joseph County 2013).

There are multiple landfills and/or recycling centers in and around St. Joseph County that are utilized by private waste management companies to handle residential and commercial wastes, including: Southeast Berrien County Landfill, Prairie View Landfill, Earthmovers Landfill and Green Tech Transfer Station. Prairie View and Earthmovers Landfills are owned by Waste Management, and Green Tech Transfer Station is owned by Reliable.

3.9.3.2 Elkhart Site

The Elkhart County Solid Waste Management District, created to comply with the HEA 1240 Act, manages local solid waste. The primary objectives of the District are to protect the environment and encourage development of environmentally sound business, industry and recycling practices.

Local Solid Waste Collection and Disposal

For Elkhart County residential, commercial and industrial customers, trash and recycling pick-up is handled privately through a number of small and large waste management companies. Some municipalities within the county, such as the City of Elkhart, handle waste and recycling pick-up for its residential customers. The Elkhart site's mailing address is the City of Elkhart but it is outside the city limits; therefore, wastes for this location would be handled privately.

Elkhart County residential customers can drop off recyclables at one of 14 drop off sites within Elkhart County. The Elkhart site is located between the Cities of Elkhart, Wakarusa and Goshen within the County. There are three recycling locations within the City of Elkhart and six recycling locations within the City of Goshen. Wakarusa's recycling site is located in the Industrial Park off County Road 103 just south of the project site.

There are several landfills within the region that local and national solid waste management companies utilize, including: Elkhart County Landfill, EarthMovers Landfill, Countyline Landfill in Argos, IN, and Green Tech Transfer Station. The Green Tech transfer station, owned by Reliable, and EarthMovers, managed by Waste Management, are both privately owned.

Since the Elkhart project site is within the Elkhart County boundaries, it is anticipated that the Pokagon Band would contract with a private firm for its trash and recycling disposal needs.

3.9.4 Electricity, Natural Gas, and Telecommunications

3.9.4.1 Electrical and Gas Services

Electricity is supplied to the South Bend and Elkhart property regions by the Indiana and Michigan Power Company (I&M). I&M serves the South Bend site through one circuit via 12 kilovolt power line. The nearest substation, the Kankakee Substation, is located northeast of the intersection of Prairie Avenue and Cotter Street. The Elkhart site would be serviced by the Countryside Substation located at Hwy 19 and CR 26.

Natural Gas services are supplied to the South Bend and Elkhart property regions through Northern Indiana Public Service Company.

3.9.4.2 Telecommunications

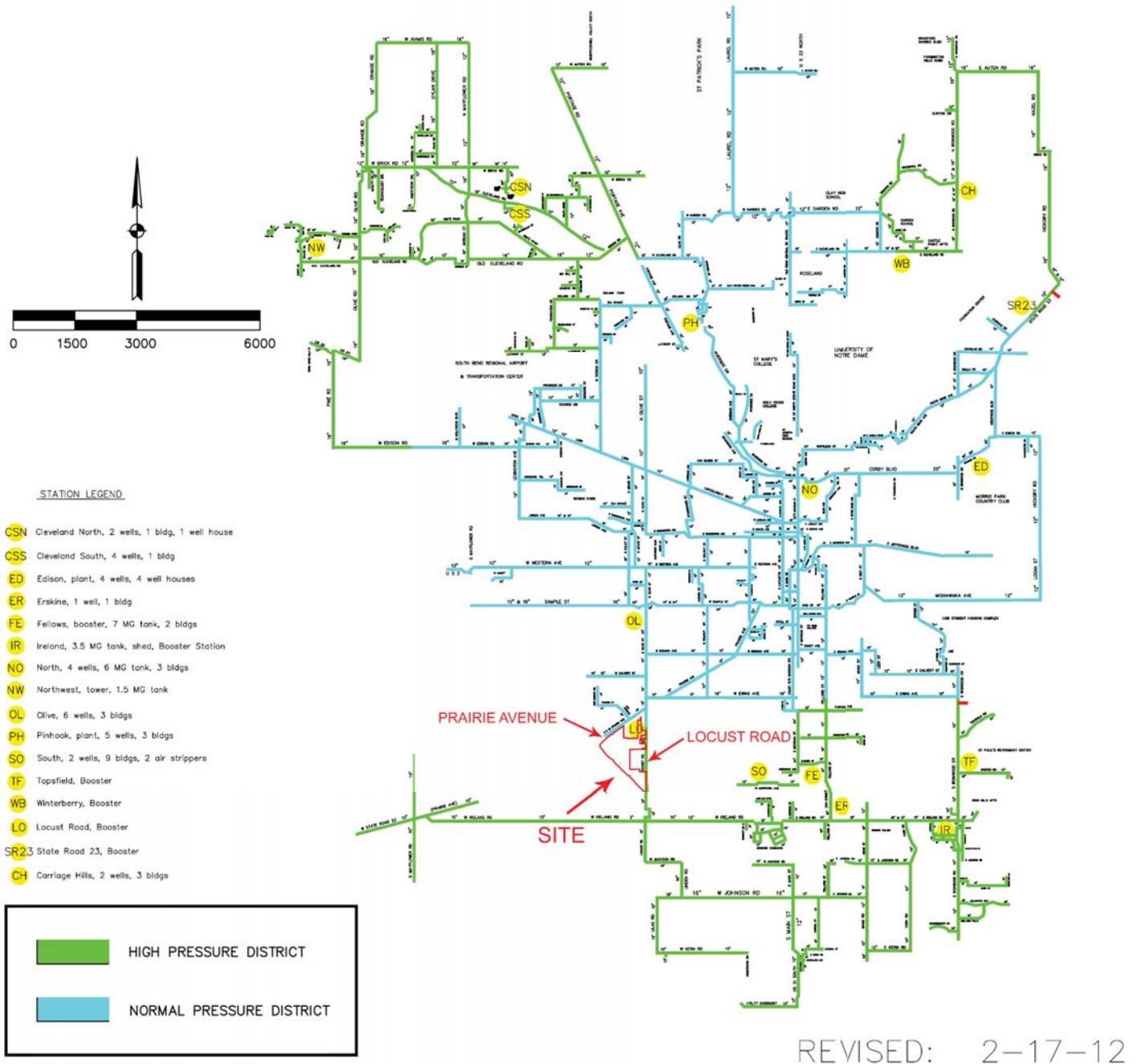
South Bend Site

AT&T, formerly SBC, provides basic telecommunication services, including cellular communications, to the project area. AT&T currently has above ground phone lines along Prairie Avenue from Maple Street to Locust Street. AT&T can provide local and long distance service. AT&T can also provide cable and internet services to the project area (AT&T, pers. comm.).

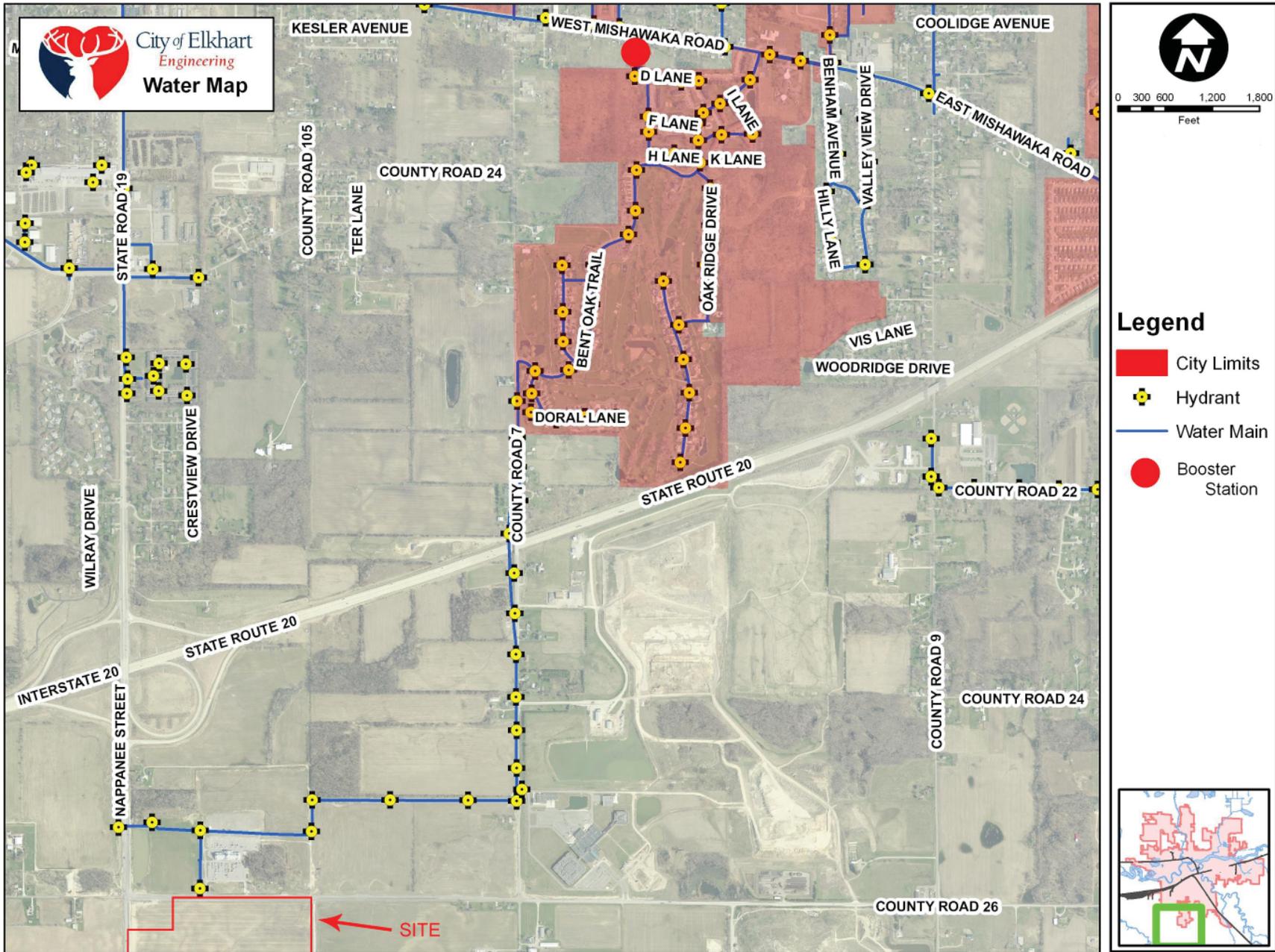
Elkhart Site

Frontier Communications provides all basic telecommunication services, including cellular communications, to the project area. Frontier currently has above ground phone lines along County Road 26 which provides service to the surrounding areas near the site. Frontier can provide local toll calls, long distance service, a 12 MB internet service, and Cable TV to the project area. If more than a 12 MB internet service is required, additional telecommunications infrastructure would be needed (Frontier, pers. comm.).

SOUTH BEND WATER SYSTEM (10" AND LARGER MAINS ONLY)



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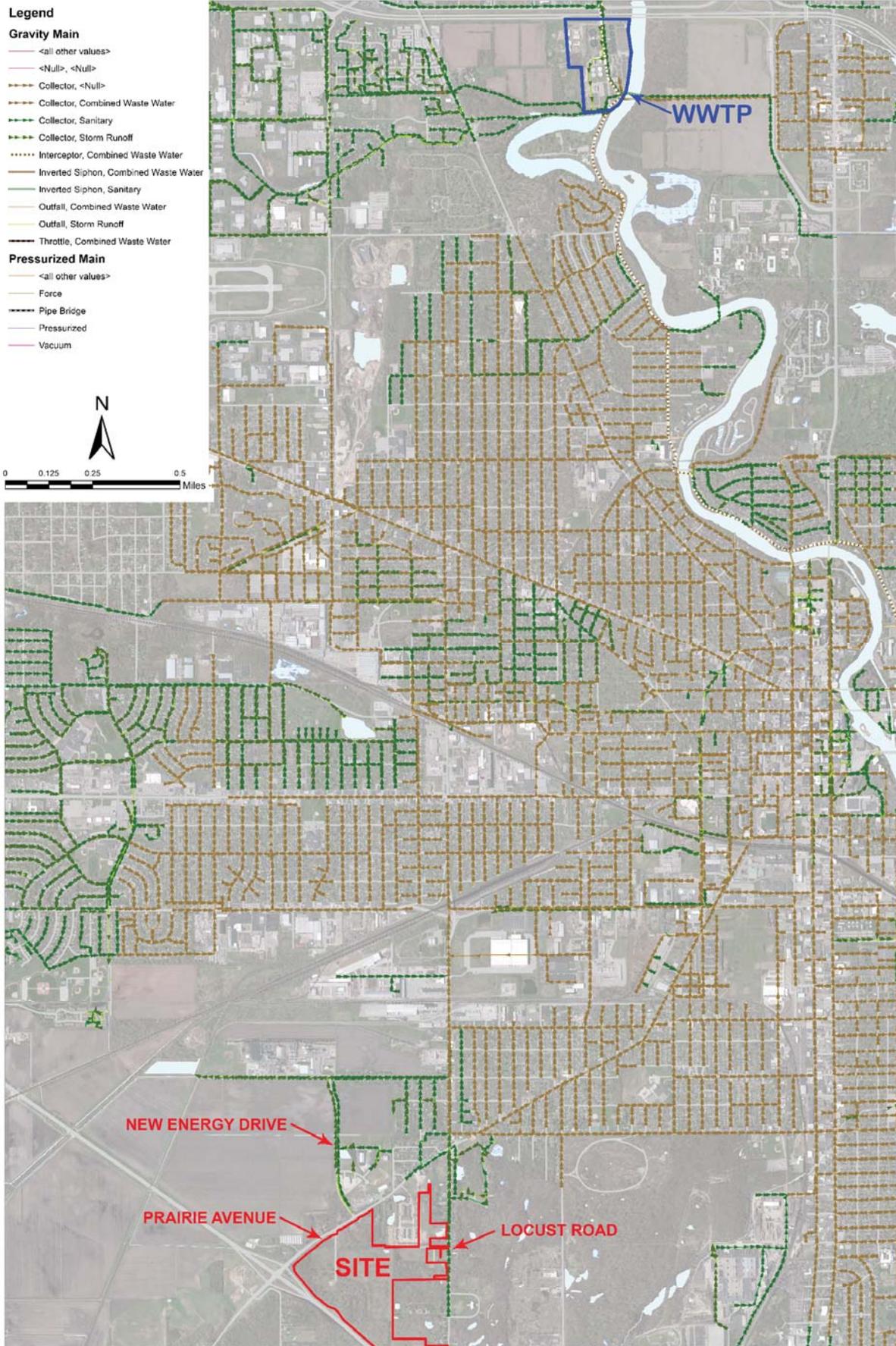


Source: City of Elkhart Public Works and Utilities Department

Pokagon South Bend EIS /January 2013

Figure 3.9-2
City of Elkhart Water Map

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Source: City of South Bend Department of Public Works

Pokagon South Bend EIS / January 2013

Figure 3.9-3
City of South Bend Sewer System

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3.9.5 Public Health and Safety

The City of South Bend and the County of Elkhart and each of their respective public safety departments have civil jurisdiction to provide public health and safety services within City boundaries. The fee-to-trust acquisition would transfer jurisdiction of the designated parcels to the Pokagon Band, but the Band could voluntarily enter into agreements with the City and/or County to continue to provide public safety services after the jurisdictional shift occurs.

3.9.5.1 Law Enforcement

The State of Indiana and local law enforcement jurisdictions would be partially relieved of the burden of providing law enforcement services, as the Pokagon Band has a fully-equipped police department. Primary law enforcement services would be provided by the Pokagon Band Police Department. It is anticipated that the Band would eventually enter into one or more cross-deputization agreements with Indiana police agencies, which would allow these jurisdictions to share law enforcement authority, enforcement personnel, and resources. The Indiana State Police-District 24 Bremen, could enter into a cross-deputization agreement for providing law enforcement services to both the South Bend and Elkhart project sites. The cross-deputization agreement would be subject to any limitations in applicable law regarding the legal capacity of the Indiana State Police and other Indiana law enforcement agencies to confer law enforcement authority on the Pokagon Band Tribal Police. Located at 1425 Miami Trail Bremen, IN 46506, District 24 provides law enforcement services to St. Joseph, Elkhart, Marshall, and Kosciusko counties (Indiana State Police 2013), with the headquarters located approximately 14 miles southeast of the South Bend site and 15 miles southwest of the Elkhart site. In November of 2014, in preparation for jurisdictional changes that would result from the proposed transfer of land owned by the Pokagon Band in South Bend to federal trust status, the St. Joseph County Board of Commissioners unanimously adopted Resolution R-12-C-2014 which approved the local governmental cross deputization agreement for law enforcement with the Pokagon Band of Potawatomi Indians (see **Appendix A**). The agreement will allow both Tribal Police deputies and Sheriff's deputies to have reciprocal law enforcement jurisdiction and authority throughout St. Joseph County.. This includes land that would be held in trust for the Pokagon Band as detailed within this resolution. The Elkhart County Sheriff's Department could also do so for local law enforcement services at the Elkhart site.

South Bend Site

The St. Joseph County Sherriff's Department consists of seven divisions: Patrol, Detective Bureau, Court Security, Civil, Jail, Warrants, and Records. Police headquarters and the county jail are located at 401 West Sample Street in South Bend, approximately 2.6 miles northeast of the South Bend site. The Patrol Division, which is responsible for responding to citizen calls and investigating crime and traffic incidents, is located at 4817 Lincoln Way West in South Bend, approximately 3.8 miles northwest of the South Bend Site. The Patrol Division provides law enforcement services to a 467-square mile area, and in 2007 was dispatched to respond to 43,074 calls. This division has three

shifts per day in order to provide law enforcement services to St. Joseph County, and each shift has approximately 18 officers on duty (St. Joseph County Sherriff's Department 2013). According to the Federal Bureau of Investigation (FBI) Uniform Crime Reporting Statistics (UCR), the most frequent crimes reported to the St. Joseph County Sherriff's Department in 2010 were property crimes (2107 offenses reported) and larceny-theft (1440 offenses reported) (FBI UCR 2010a).

The South Bend Police Department is located at 701 West Sample Street in South Bend, approximately 2.4 miles northeast of the South Bend site. Approximately 260 sworn officers and 110 civilian employees provide law enforcement services to over 107,000 citizens in South Bend. The South Bend Police Department is comprised of four divisions: Uniform, Investigative, Services and Community Relations. The Uniform Division is responsible for patrolling the South Bend area and is the largest division, employing over 150 officers in motor patrol, K9 units, SWAT, and bike patrol, among others. The City of South Bend is separated into 20 patrol areas or 'beats' in order to cover 520 miles of streets and 499 miles of alleys; the proposed South Bend site is located in Beat #29 (**Figure 3.9-5**) (SBPD 2009). According to the 2006 annual report, 110,000 calls for police services were received by the South Bend Police Department (SBPD 2006). The FBI UCR indicate that the most frequent crimes reported to the South Bend Police Department in 2010 included property crimes (5929 offenses reported) and larceny-theft (3411 offenses reported) (FBI UCR 2010b).

Elkhart Site

The Elkhart County Sheriff's Department is located at 26861 County Road 26 in Elkhart, approximately 1.0 mile northeast of the Elkhart site. Approximately 71 merit/police officers, 94 correction officers, and 36 support staff are divided among four divisions: Administrative Services, Patrol, Investigations, and Corrections (Jim Bradberry, Elkhart County Sheriff's Department Captain, pers. comm.). According to the annual report for 2011, the Elkhart County Sherriff's Department responded to 78,412 calls for service, with most crimes related to residential burglary and larceny-theft (ECSD 2011). The FBI UCR identify similar offenses, with the most frequent crimes reported to the Elkhart County Sherriff's Department in 2010 listed as property crimes (1646 offenses reported) and larceny-theft (987 offenses reported) (FBI UCR 2010c).

3.9.5.2 Fire Protection

South Bend Site

The South Bend Fire Department (SBFD) employs 248 full time firefighters in four different divisions (Fire, Emergency Medical Services [EMS], Special Operations and Fire Prevention and Inspection). Station 5 is the closest of eleven stations to the proposed South Bend project site, located at 2221 Prairie Avenue, approximately 0.9 mile northeast of the South Bend Site. The South Bend Fire Department serves a population of 107,700 residents and responds to calls regarding emergency medical incidents, fires and complex rescue situations. The Special Operations division

includes a Hazardous Materials Response Team, Swiftwater Response Team, Tactical Rescue Response Team and the Administration of the Indiana River Rescue School. The Fire Prevention and Inspection division provides public safety education and is responsible for enforcing all City and State fire codes, including plan review and inspection services (SBFD 2013a).

Elkhart Site

The Elkhart Fire Department (EFD) employs 124 sworn firefighters to respond to calls for fire and medical emergencies. Station 3 is the closest of seven stations to the proposed Elkhart project site, located at 1612 West Mishawaka Road, approximately 2.5 miles north of the Elkhart site. Among the seven fire stations located throughout the City of Elkhart, the Elkhart Fire Department uses an active fleet of six engines, two trucks, and three reserve engines to provide services to 51,800 residents. The Department also has the ability to conduct fire investigations and inspections; a staff of three fire inspectors each inspects approximately 500 buildings per year. The fire stations consist of exclusively paid staff, not volunteers, which on average, deliver 12,000 responses per year (combination of fire and EMS [80 percent EMS-related]) (EFD 2013a).

3.9.5.3 Emergency Medical Services

South Bend Site

The South Bend Fire Department EMS division employs 61 Paramedics, 24 Intermediates, 27 Advanced Emergency Medical Technicians (EMT's), 99 Basic EMT's and 20 First Responders in order to respond to emergency medical incidents, fires, and complex rescue situations. Station 5 is the closest of eleven stations to the proposed South Bend project site, located at 2221 Prairie Avenue, approximately 0.9 miles northeast of the South Bend Site. The EMS division of the South Bend Fire Department provides Advanced Life Support to residents County wide; four transport units are dedicated to serving the City of South Bend, and three transport units and one non-transport unit are dedicated to the remainder of St. Joseph County. The EMS division is also comprised of the NeoNatal Transport Unit with Memorial Hospital and Critical Care Transport Unit with St. Joseph Hospital. The EMS Division participates in all Fire Service, Hazardous Materials, Confined Space, Swift Water, Divers, Boat Operators and Terrorist Preparedness activities (SBFD 2013b).

The nearest hospitals to the proposed South Bend project site that could provide emergency medical services include Memorial Hospital of South Bend (approximately 3.6 miles northeast) and St. Joseph Regional Medical Center (approximately 7.4 miles northeast). Emergency air transportation would be provided by Memorial MedFlight.

Elkhart Site

The Elkhart Fire Department employs 35 state-certified paramedics and approximately 90 Emergency Medical Technicians to respond to calls for fire and medical emergencies. All firefighters

in the department are also certified EMT's. Station 3 is the closest of seven stations to the proposed Elkhart project site, located at 1612 West Mishawaka Road, approximately 2.5 miles north of the Elkhart site. Among the seven stations located throughout the City of Elkhart, the Elkhart Fire Department uses four paramedic ambulances and two reserve ambulances to provide services to approximately 51,800 residents. Each medical professional is certified in advanced cardiac life support, Pediatric Advanced Life Support, Advanced Medical Life Support and Intermediate Trauma Life Support. The Department delivers on average 12,000 responses per year (combination of fire and EMS [80 percent EMS-related]) (EFD 2013b).

The nearest hospitals to the proposed Elkhart project site that could provide emergency medical services include Elkhart General Hospital (approximately 4.1 miles north) and Indiana University Health Goshen Hospital (approximately 9.5 miles southeast). Emergency air transportation would be provided by Indiana University Health LifeLine.

3.10 OTHER VALUES

3.10.1 Noise

Noise criteria used in this study include the Federal Highway Administration (FHWA) Noise Abatement Criteria (NAC) for the assessment of noise impacts related to roadway traffic. In addition, for noise sources other than roadway traffic, environmental impacts are also evaluated relative to the change in the ambient (existing) conditions at sensitive noise receptors within the project area as a result of the proposed project.

3.10.1.1 Acoustical Background Information

Noise is generally defined as unwanted or annoying sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB). Most sounds heard in the environment do not consist of a single frequency, but rather a broad band of frequencies. The intensities of each frequency add together to generate sound. Because the human ear does not respond to all frequencies equally, the method commonly used to quantify environmental noise consists of evaluating all of the frequencies of a sound according to a weighting system. It has been found that the A-weighted (dBA) filter on a sound level meter, which includes circuits to differentially measure selected audible frequencies, best approximates the frequency response of the human ear.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from various sources, including relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of noise, a statistical noise descriptor called the equivalent sound level (L_{eq}) is commonly used. L_{eq} describes a

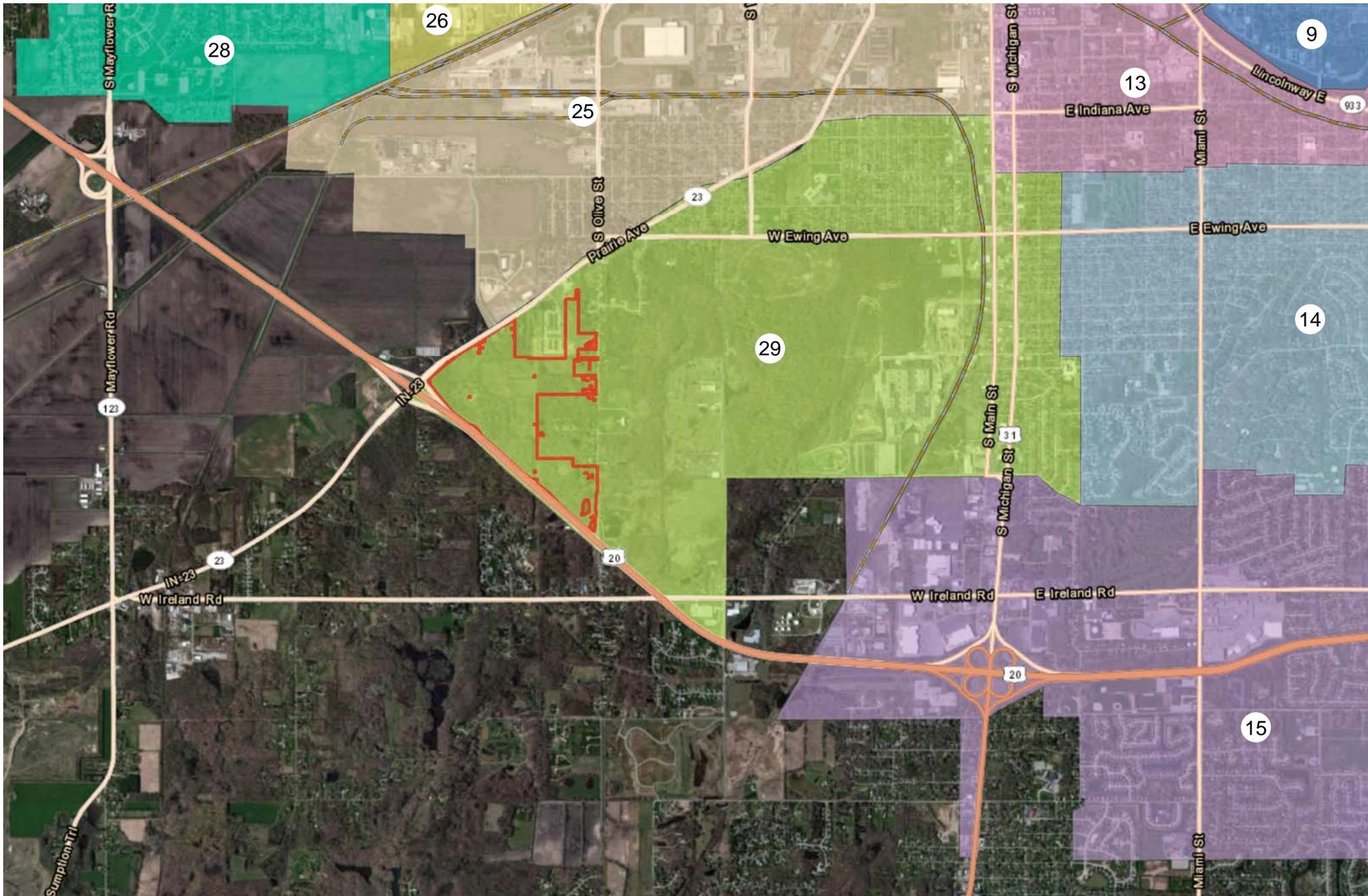


FIGURE 3.9-5. SOUTH BEND PROJECT VICINITY POLICE BEATS



PROPOSED PROJECT BOUNDARY

0 2,000 4,000 6,000 Feet

SOURCE: NAIP 2012, ESRI 2013, SBPD 2009

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noise sensitive receptor’s cumulative exposure from all noise-producing events over a one-hour period and provides an “average” noise level for a measured time period. The decibel scale is logarithmic and expresses the ratio of the sound pressure unit being measured to a standard reference level. Because decibels are logarithmic units, sound levels cannot be added by ordinary arithmetic means. The following general relationships provide a basic understanding of sound generation and propagation:

- An increase or decrease of 10 dBA will be perceived by a receptor to be a doubling or halving, of the sound level.
- Doubling the distance between a “line source” such as a highway and a receptor will typically produce a 3 dBA sound level decrease, while doubling the distance between a point source such as a generator and a receptor will typically produce a 6 dBA sound level decrease.
- A 3 dBA sound level change is barely detectable by the human ear.

Figures 3.10-1 and 3.10-2 provide several examples of typical noise sources with corresponding sound levels that are helpful in understanding and comparing various sound levels.

3.10.1.2 Regulatory Guidelines

FHWA regulations for roadway traffic noise are contained in 23 CFR 772, *Procedures for Abatement of Highway Traffic Noise and Construction*, dated July 13, 2010. These regulations established the Noise Abatement Criteria for determining noise impacts for a variety of land uses. Land uses are categorized on the basis of their sensitivity to noise. FHWA land use Activity Categories along with the criteria are presented in Table 3.10-1. The NAC sound levels are only to be used to determine a roadway noise impact. A traffic noise impact occurs when either of two conditions is met:

- The predicted traffic noise level approaches or exceeds the NAC for an activity category. “Approaching” the NAC is defined as being within one dB of the NAC levels listed in **Table 3.10-1**.
- The predicted future noise level substantially exceeds the existing noise level (defined as an increase of 10 dBA or more).

Table 3.10-1
 FHWA Noise Abatement Criteria

Activity Category	Activity Criteria L_{eq}	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Residential
C	67 (Exterior)	Active sport areas, amphitheatres, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of

Activity Category	Activity Criteria L_{eq}	Description of Activity Category
		worship, playgrounds, public meeting rooms, public or not profit institutional structures, radio studios, recording studios, recreation areas, Section (4F) sites, schools, television studios, trails and trail crossings
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public and not profit institutional structures, radio studios, recording studios, schools, and television studios
E	72 (Exterior)-	Hotels, motels, offices, restaurant/bars and other developed lands, properties, or activities not included in A-D or F
F	-	Agriculture, airports, bus yards, emergency services, industrial logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing
G	-	Undeveloped lands that are not permitted

Source: FHWA Highway Noise Control Standards and Procedures, 23 CFR Part 772

3.10.1.3 Affected Environment

Noise-sensitive receptors are locations that may be subject to interference from noise. They include, but are not limited to, picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.

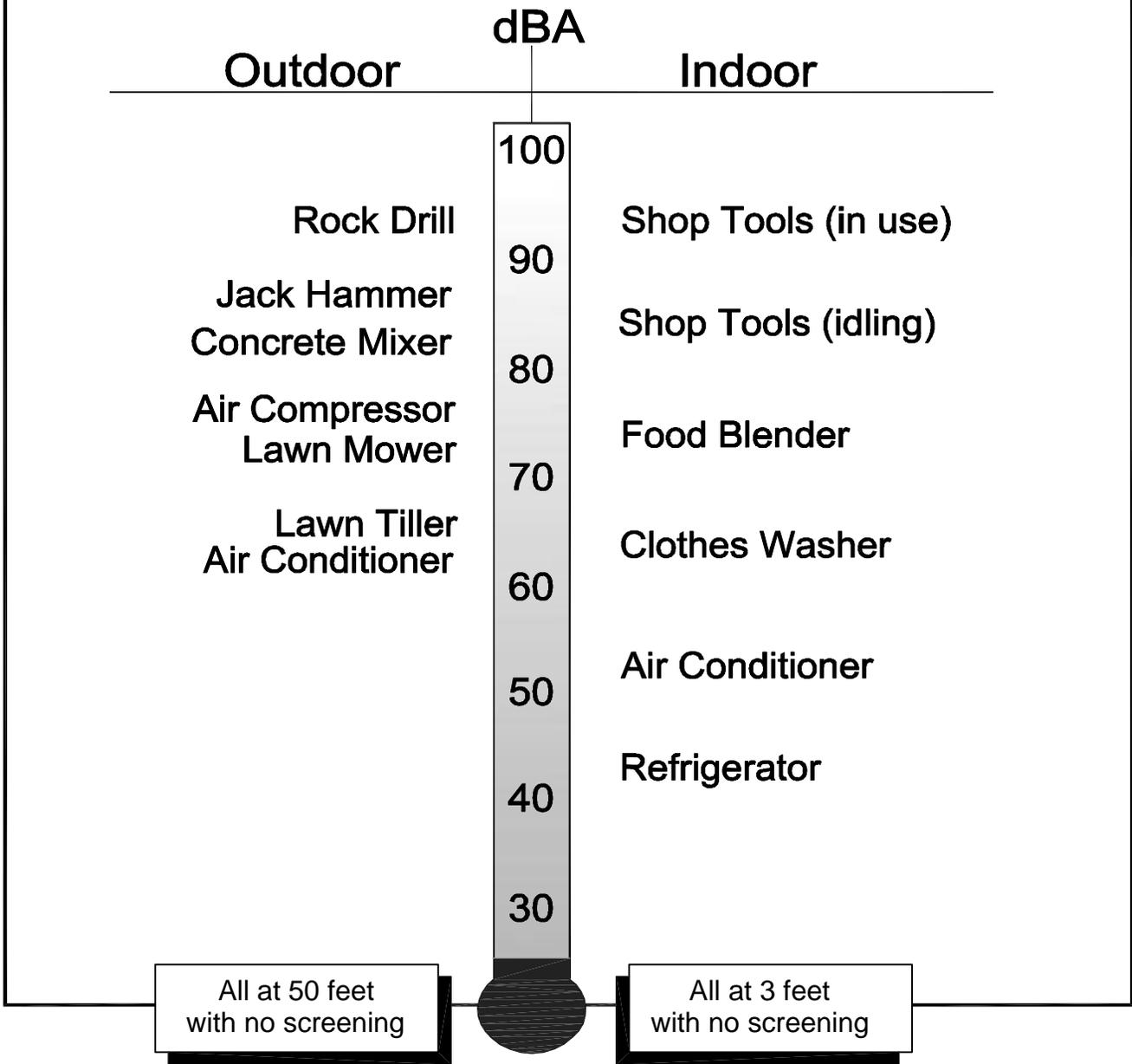
South Bend Site

Existing noise-sensitive receptors in the immediate project area mainly consist of scattered single-family homes to the north, east, and west of the project site. An evaluation of existing traffic volumes and the proximity of the receptors to local roadways was performed so as to establish groupings of receptors, referred to as Noise-Receptor Groups (NRG). The NRGs are shown on **Figures 3.10-3** and **3.10-5**, while **Table 3.10-2** provides a description of each NRG.

In order to define existing noise levels at the NRGs, ambient noise measurements were taken within the project area. Representative ambient noise measurements within the project area provide a general assessment of the overall noise levels in the project area. The collection of ambient noise measurements was conducted on March 26 and 28, 2013 using a Quest Soundpro DL noise dosimeter. A total of four existing noise level measurements were collected at representative receptor locations throughout the project area during the A.M. and P.M. peak hour traffic periods (project area noise is predominantly generated by traffic on the adjacent roadways). Fifteen minute recording durations were used. The noise measurement locations are shown on **Figures 3.10-3** and **3.10-5**, while the noise measurement results are provided in **Table 3.10-2**. Copies of the Ambient Noise Measurement Logs are included in **Appendix F**.

FIGURE 3.10-1

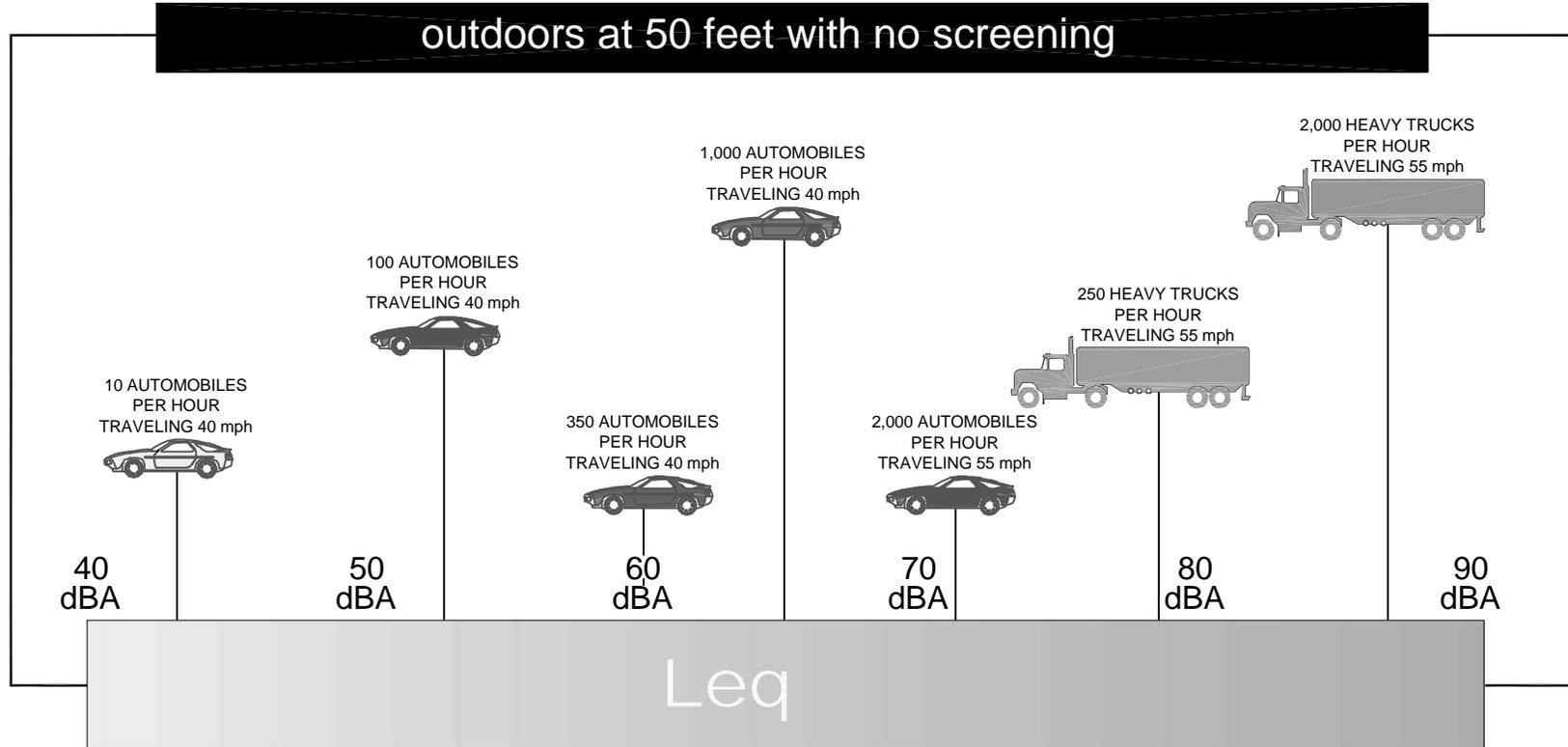
TYPICAL A-WEIGHTED SOUND LEVELS



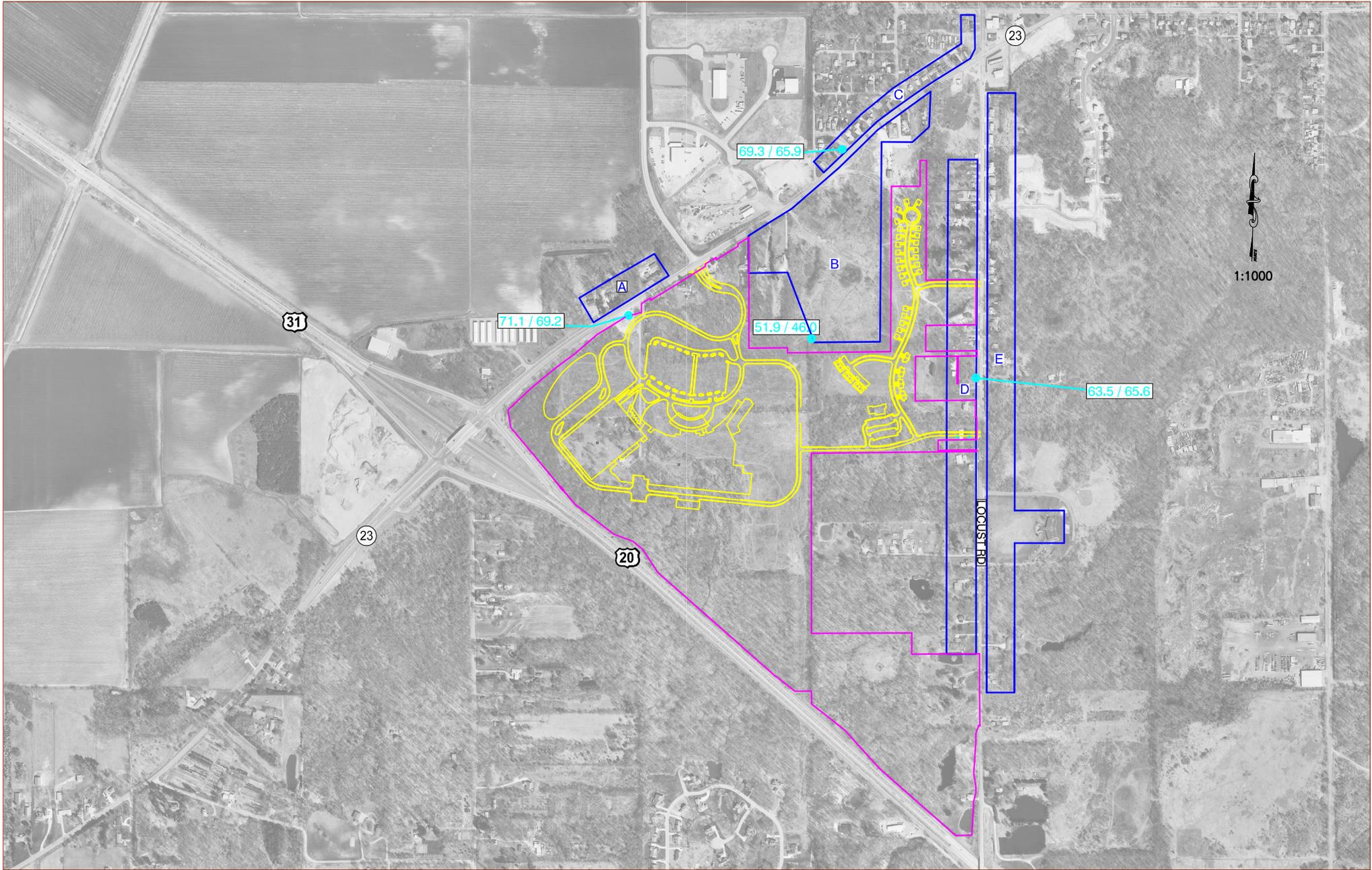
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Figure 3.10-2 TYPICAL HOURLY LEQS

outdoors at 50 feet with no screening



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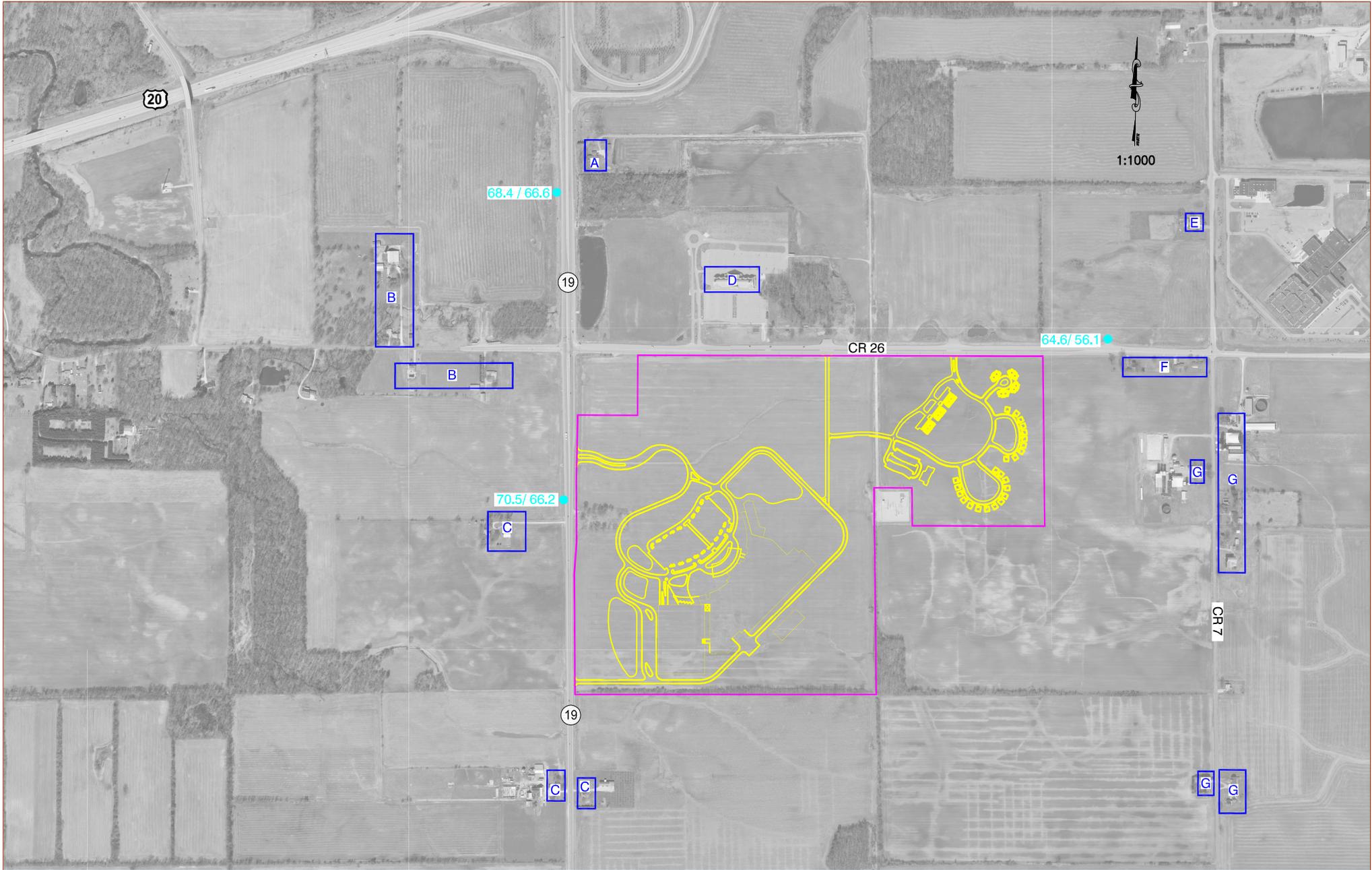


LEGEND

<ul style="list-style-type: none"> NOISE RECEPTOR GROUPS ● AM / PM (dBA) FIELD MEASUREMENT LOCATIONS AND NOISE LEVELS 	<ul style="list-style-type: none"> PROPOSED SITE PROPERTY BOUNDARY ALTERNATIVE A IMPROVEMENTS
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Figure 3.10-3
NOISE MEASUREMENT AND RECEPTOR LOCATIONS
ALTERNATIVE A

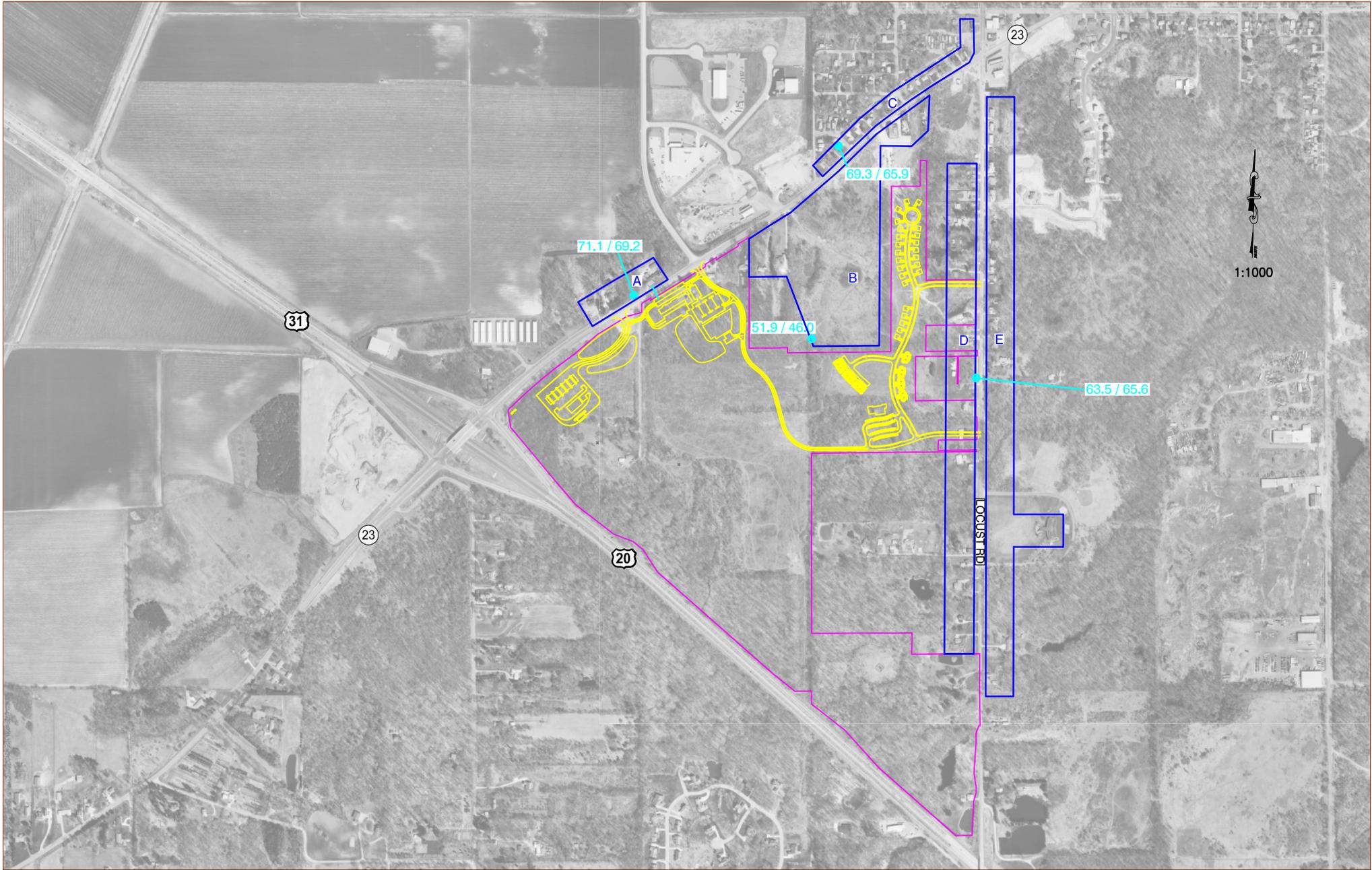
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LEGEND			
	NOISE RECEPTOR GROUPS		PROPOSED SITE PROPERTY BOUNDARY
●	AM / PM (dBA) FIELD MEASUREMENT LOCATIONS AND NOISE LEVELS		ALTERNATIVE A IMPROVEMENTS

Figure 3.10-4
NOISE MEASUREMENT AND RECEPTOR LOCATIONS
ALTERNATIVE B

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LEGEND			
	NOISE RECEPTOR GROUPS		PROPOSED SITE PROPERTY BOUNDARY
●	AM / PM (dBA) FIELD MEASUREMENT LOCATIONS AND NOISE LEVELS		ALTERNATIVE A IMPROVEMENTS

Figure 3.10-5
NOISE MEASUREMENT AND RECEIVER LOCATIONS
ALTERNATIVE C

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As indicated in Table 3.10-2, ambient noise levels in the project area ranged from 63.5 to 71.1 dBA at the various NRGs. Though part of this range is above FHWA thresholds found in 23 CFR 772, *Procedures for Abatement of Highway Traffic Noise and Construction*, they are consistent with levels expected for a semi-rural area affected by traffic noise. The highest readings were measured nearest to US-20/31 while readings at the NRGs located further from the major roadways were below FHWA regulations.

Elkhart Site

Existing noise-sensitive receptors in the immediate project area mainly consist of scattered single-family homes to the north, east, and west of the project site. An evaluation of existing traffic volumes and the proximity of the receptors to local roadways was performed to establish the NRGs. The NRGs are shown on **Figure 3.10-4**, while Table 3.10-2 provides a description of each NRG.

In order to define existing noise levels at the NRGs, ambient noise measurements were taken within the project area. The collection of ambient noise measurements was conducted on March 27 and April 3, 2013. A total of three existing noise level measurements were collected at representative receptor locations throughout the project area during the A.M. and P.M. peak hour traffic periods (project area noise is predominantly generated by traffic on the adjacent roadways). Fifteen minute recording durations were used. The noise measurement locations are shown on **Figure 3.10-4**, while the noise measurement results are provided in Table 3.10-2. Copies of the Ambient Noise Measurement Logs are included in **Appendix F**.

As indicated in **Table 3.10-2**, ambient noise levels in the project area ranged from 58.1 to 70.5 dBA at the various NRGs. Though part of this range is above FHWA thresholds found in 23 CFR 772, *Procedures for Abatement of Highway Traffic Noise and Construction*, they are consistent with levels expected for semi-rural area affected by local traffic noise.

Table 3.10-2
 Existing Noise Levels

Noise Receptor Group*	Noise Receptor Group Description	Measured DBA**	
		AM	PM
South Bend Site			
A	2 single-family homes	71.1	69.2
B	6 single-family homes, 1 restaurant, 1 apartment complex	69.3	65.9
C	15 single-family homes	69.3	65.9
D	17 single-family homes	63.5	65.6
E	22 single-family homes, 1 church	63.5	65.6
Elkhart County Site			
A	1 single-family home	68.4	68.6

Noise Receptor Group*	Noise Receptor Group Description	Measured DBA**	
		AM	PM
B	4 single-family homes	68.4	68.6
C	3 single-family homes	70.5	66.2
D	1 church	64.6	56.1
E	1 single-family home	64.6	56.1
F	3 single-family homes	64.6	56.1
G	8 single-family homes	64.6	56.1

*See Figures 3.10 -3, 3.10-4, 3.10-5 for receptor locations

**All noise measurements are Hourly Leq

3.10.2 Hazardous Materials

Hazardous materials are subject to numerous laws and regulations at all levels of government. In relation to tribal lands, presidential memorandums outline Federal Indian Policy, and provide direction and guidance for federal agencies regarding the administration of their responsibilities on Indian reservations and tribal lands. However, these agencies recognize that tribal governments are sovereign entities and thus these agencies are to work directly with these tribal governments in their capacity as independent entities, and not as political subdivisions of other governments. This is broadly described as a “government-to-government” relationship.

At the federal level, human exposure to chemical agents, and in some cases the environment and wildlife, is regulated primarily by four regulatory agencies: The U.S. Environmental Protection Agency, the Occupational Safety and Health Administration (OSHA), the Food and Drug Administration (FDA) and the Consumer Product Safety Commission. The Consumer Product Safety Commission plays a limited role (primarily the labeling of consumer products) in regulating hazardous substances as they pertain to the proposed project. The FDA primarily regulates food additives and contaminants, human drugs, medical devices, and cosmetics. Similarly, the FDA plays a limited role in regulating hazardous substances as they pertain to the proposed project. In addition to these regulatory agencies, the U.S. Department of Transportation regulates the interstate transport of hazardous materials.

An inventory of known and potential hazardous substances and hazardous waste generators was conducted for the South Bend and Elkhart Sites. A comprehensive search of federal, state, and local agencies’ databases was conducted for the project alternatives according to guidance established by the American Society of Testing and Materials (ASTM). These databases contain information on hazardous waste generators, handlers, disposal sites, and incidents. Environmental Data Resources, Inc. (EDR) was utilized to perform this database search of the South Bend and Elkhart Sites (**Appendix G**).

Phase I Environmental Site Assessments (Phase I ESAs) were conducted by Wightman Environmental, Inc., for the South Bend and Elkhart Sites in May 2009. The investigations were conducted

in accordance with the ASTM Standard E 1527-97, Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. These assessments included review of federal and state regulatory agency records and databases, interviews with pertinent individuals and property owners, site inspections, and aerial photography reviews. Such assessments are a requirement of the Department of the Interior (DOI) to avoid financial liability for cleanup of contaminants under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 42 U.S.C. Section 9601. Compliance with DOI Policy 602 DM2 requires that a Phase I Assessment be no more than 12 months old at the time of the trust acquisition and is required to ensure that no changes have occurred regarding the presence of hazardous material since the Phase I ESA documenting the original conditions on the site. Therefore, an additional Phase I ESA for the South Bend Site was conducted in April 2016 (**Appendix G**) to update/supplement the original Phase I ESAs.

The scope of the regulatory information queried for both the South Bend and Elkhart Sites included but was not limited to the following databases:

- The National Priority List. Identifies abandoned or uncontrolled hazardous waste sites identified by the EPA for priority remedial action under the Federal Superfund Program
- Comprehensive Environmental Response, Compensation, and Liability Information System Database (CERCLIS). Identifies sites the EPA is currently investigating for the release or threatened release of hazardous substances pursuant to the CERCLA of 1980
- CERCLIS No Further Remedial Action Planned (NFRAP). Identifies former CERCLIS sites that have been de-listed because a lack of significant contamination was found
- Resource Conservation and Recovery Act (RCRA) Notifiers. Identifies registered hazardous waste generators, transporters, treatment, storage, and disposal facilities in the vicinity of the study area. The databases maintained under this Act include: Generators and Violators List; RCRA Corrective Actions List (CORRACT); and RCRA Treatment, Storage, or Disposal List
- Emergency Response Notification System database. Identifies EPA documented releases of oil and hazardous substances. This database was reviewed to determine whether past spill events have occurred in the study area
- State Hazardous Waste Site (SHWS). The Indiana Department of Environmental Management maintains a list of statewide priority hazardous waste sites that are equivalent to CERCLIS sites
- Underground Storage Tank Facility List. The underground Storage Tank (UST) facilities database is maintained by IDEM to track permitted petroleum storage tank sites
- Leaking Underground Storage Tank Sites (LUST). This list is maintained by IDEM of facilities where a known UST release has occurred
- Solid Waste Facilities Database. This database is a listing of solid waste disposal facilities registered and tracked by the state. The facilities tracked include solid waste disposal sites as well as transfer and processing stations

- BULK List. This list is comprised of registered dry or liquid bulk fertilizer and pesticide storage facilities
- Inactive Solid Waste Facilities. This database contains historical information of the location of abandoned landfills and solid waste disposal sites
- Brownfields. These lists (U.S., state, and local) contain industrial or commercial properties that have been abandoned, are inactive, or underutilized, on which expansion or redevelopment is complicated due to actual or perceived environmental contamination

No listed hazardous waste sites, such as federal or state Superfund sites and hazardous waste treatment, storage or disposal facilities, landfills, or facilities with known toxic releases were identified or recorded at the South Bend or Elkhart Sites. Based on the condition and history of the South Bend Site, there is no reason to suspect the site could qualify as a Superfund or similar waste site requiring corrective action. In addition, no Superfund sites are located within 6000 feet of the South Bend Site (the closest Superfund site is Whiteford Sales and Service Inc./Nationalease approximately 1.18 miles north-northeast of the South Bend Site at 2020 West Sample Street, South Bend IN 46619). Also, as mandated under CERCLA, the EPA recently updated the Superfund's National Priorities List (NPL) and added the Beck's Lake site to the list on December 12, 2013; this site is located at the intersection of Washington and Falcon Streets, approximately 2.3 miles north of the proposed South Bend project site. This area located immediately west of LaSalle Park was once used as a dump and a landfill, and potential waste materials included but were not limited to asbestos, plating wastes, solvents, paint wastes, oils and sludges, and foundry sand. Dumping ended in the mid-1950s, but elevated levels of arsenic, lead, and cadmium have been detected in surface soils. The main concern for the Beck's Lake site is exposure to arsenic in the residential and park soils (EPA 2013c). The record review did not reveal, and there is no known evidence that the South Bend Site, which has historically been utilized for agricultural operations and residential development, contains underground storage tanks. In addition, there are no identified hazardous material spills or other major issues identified on the South Bend Site, and the records review revealed no indication that regulated quantities of agricultural chemicals were stored on the site, that the site was ever used as a farm waste or other waste disposal facility or of soil or groundwater contamination.

No Superfund sites are located within 14,000 feet of the Elkhart Site (the closest Superfund site is the Conrail Elkhart Rail Yard approximately 2.8 miles north-northwest of the Elkhart Site at 2600 West Lusher Avenue, Elkhart, IN 46517). The Elkhart Site has historically been utilized for large-scale agricultural operations, which commonly contain an on-site fuel source, such as an underground storage tank. During site inspections, there were no visual indicators of current or former UST systems, although it is possible that the Elkhart Site has historically contained some type of fuel storage system.

3.10.2.1 South Bend Site

According to the regulatory agency database search conducted in April 2016, seven (7) facilities registered with state and/or federal agencies were identified within the relative distances prescribed by the ASTM (see EDR report in **Appendix G**). One of the facilities is listed in multiple databases (* designates this facility), therefore only 6 facilities are listed below. The following facilities were reported in the regulatory agency database search:

1. Tibor Folding Site located at 2408 Prairie Avenue South Bend, IN 46614, about 0.197 miles northeast of the South Bend Site, is a State LUST site. The entire facility has been given a medium corrective action priority and the North American Industry Classification System (NAICS) code for the facility is listed as hazardous waste collection.
2. Ideal Interiors located at 2442 Jaclyn CT. South Bend, IN 46613, about 0.198 mile north of the South Bend Site, is a RCRA NonGen/NLR site. The site is not listed as a federal facility and is not contained on the National Priority List. This site has been given a no further remedial action planned status. This site is also listed as a state Voluntary Cleanup Program site. The status of the site is listed as Non-Generator, Non-Generators do not presently generate hazardous waste.
3. *Charles Phillips 66 located at 2334 Prairie Avenue South Bend, IN 46613, about 0.241 mile northeast of the South Bend Site, is a State LUST site containing one NFA-Unconditional Closure and one Active. These sites have been given a low and medium priority respectively. This site is also listed as a State UST site. Located at 2334 Prairie Avenue South Bend, IN 46613, about 0.241 mile northeast of the South Bend Site, containing (2) gasoline USTs and (1) kerosene UST, listed as permanently out of service. The site is also listed as containing (4) gasoline USTs, (1) diesel UST, and (1) kerosene UST, all listed as currently in use.
4. Ashland Chemical Company located at 1817 W. Indiana Avenue South Bend, IN 46613, about 0.843 miles north-northeast of the South Bend Site, is a Federal RCRA CORRACTS site. This site is not listed as a federal facility and is not contained on the National Priority List, and the North American Industry Classification System (NAICS) code for the facility is listed as hazardous waste collection.
5. COZ Terminaling, SOU located at 20630 West Ireland Road South Bend, IN 46680, about 0.938 mile southeast of the South Bend Site, is a SHWS (State and Tribal equivalent to CERCLIS). Media affected at this site is listed as soil and groundwater and the contaminant is listed as petroleum.
6. Steel Warehouse Company Incorporation located at 2722 W. Tucker Drive South Bend, IN 46619, about 0.981 miles north of the South Bend Site, is a Federal RCRA CORRACTS site. This site is not listed as a federal facility and is not contained on the National Priority List.

The initial 2009 Phase I ESAs revealed that three parcels within the South Bend Site (Parcels 4, 6, and 9) possessed recognized environmental conditions (RECs) such as abandoned automobiles and snowmobiles, aboveground storage tanks (AST), empty drums, unknown pipes, and miscellaneous debris. In response to these findings, Wightman Environmental Inc. conducted a limited Phase II Assessment (Phase II ESAs) at each parcel in order to further investigate these potential concerns.

At Parcel 4, three (3) RECs were identified:

1. Numerous abandoned automobiles, snowmobiles, machinery, and automobile parts were observed across the subject property.
2. A fuel oil AST was identified on the south side of the residence on the subject property.
3. Two unknown pipes were identified exiting the ground near the southernmost out building on the subject property.

To investigate the contamination potential of the RECs, eleven (11) hand-augered soil pits were bored 5-feet below ground surface near these RECs. Frequent samples from the borings were analyzed for visual and/or olfactory indicators of contamination, and a photoionization detector (PID) was used to field scan the soil samples for organic contamination. Analyses revealed no visual or olfactory indicators of impacted soils, and PID readings did not exceed 2.1 ppm, indicating that the samples did not contain elevated concentrations of organic compounds. Interviews with the current landowner revealed that the unknown pipes are part of a former clothesline. Therefore, it was determined that the RECs on Parcel 4 were adequately addressed with the limited Phase II ESA and that no further environmental investigation is warranted at this time. It is recommended that the abandoned automobiles, machinery, fuel oil AST, and miscellaneous debris be removed from the property and properly disposed of or recycled. The 2016 Phase I ESA reported that in the time that elapsed since the original 2009 Phase I ESA was completed, these RECs were remediated and are no longer present on this parcel (see **Appendix G**).

At Parcel 6, one (1) REC was identified:

1. An aboveground storage tank was identified near a small out building behind the garage on the subject property.

To investigate the contamination potential of this REC, hand-augered soil bores near the AST were installed at a depth of 4 ft. below ground surface. Soils were continuously sampled from the auger and analyzed for visual and olfactory indicators of contamination. Samples were also field scanned with a PID for organic contamination. Analyses revealed that a thin layer of soil at the surface (top 6 inches) was affected by the AST. This was determined based on elevated PID readings, visual soil staining, and heating oil odor. Since soils located deeper than 6 inches did not appear to be adversely affected, the impacted surface soils beneath the AST represent *de minimis* conditions. It is suggested that the AST be removed from the premises and that the top 6 inches of soil near the AST be removed and properly disposed. Based on the results of the limited Phase II ESA, no further environmental investigation is warranted at this time. As described in the 2016 Phase I ESA (see **Appendix G**), conditions on this parcel have not changed since the original 2009 Phase I ESA.

At Parcel 9, three (3) RECs were identified:

1. The subject property contains numerous abandoned automobiles.
2. The subject property contains an aboveground storage tank; former contents are unknown.
3. The subject property contains empty drums, machinery, tires and miscellaneous debris.

To investigate the contamination potential of the RECs, fifteen (15) hand-augered soil pits were bored 5-feet below ground surface near these RECs. Frequent samples from the borings were analyzed for visual and olfactory indicators of contamination, and a PID was used to field scan the soil samples for organic contamination. Analyses revealed no visual or olfactory indicators of impacted soils, and PID readings did not exceed background levels, indicating that the samples did not contain elevated concentrations of organic compounds. It was determined that the limited Phase II ESA addressed any potential concerns related to the RECs and that no further environmental investigation is warranted at this time. It is recommended that the automobiles, AST, drums, and debris be cleared from the site and properly disposed of or recycled. As described in the 2016 Phase I ESA (see **Appendix G**), conditions on this parcel have not changed since the original 2009 Phase I ESA.

In summary, according to the April 2016 Phase I ESA which contains supplementary information to the original May 2009 Phase I ESAs, during the site investigation and historical research, no new RECs) associated with the subject property were identified.

3.10.2.2 Elkhart Site

According to the regulatory agency database search conducted in May 2009 by EDR, four (4) sites registered with state and/or federal agencies were identified within the prescribed distances by the ASTM (see EDR report in **Appendix G**). Three of these sites are the Elkhart County Landfill, which is located approximately 0.5 mile east of the Elkhart Site in the northeast quadrant of the intersection of County Road 26 and County Road 7. The following sites were reported in the regulatory agency database search:

1. Elkhart County Landfill, located at 59308 CR 7S Elkhart IN, 46517 about 0.372 mile east-northeast of the Elkhart Site, is a CERCLIS NFRAP site. It is not listed as a federal facility and the site description has not been reported.
2. Elkhart County Landfill, located at 59530 CR 7S Elkhart, IN 46517 about 0.372 mi east-northeast of the Elkhart Site, is a State Solid Waste Facilities Database site. It is not listed as a federal facility, and is categorized as a Municipal Solid Waste Landfill that is active and open to the public.
3. Elkhart County Solid Waste Disposal, located at 59308 CR 7S Elkhart, IN 46517 about 0.372 mi east northeast of the Elkhart Site, is a State UST site. According to the report, the site formerly contained one (1) diesel UST and one (1) gasoline UST, the quantities of which are not listed. The USTs are listed as permanently out of service.
4. A 22-gallon diesel spill reported near the intersection of Nappanee Street and U.S. Highway 20 is listed on the IDEM Indiana SPILLS list. The site is located at St. RD 19 E/RT 20 Bypass Elkhart IN 46515, approximately 1900 feet north of the Elkhart Site. The diesel spill was reported from the site due to a transportation truck release, where 22 gallons of material were spilled, and 22 gallons of material are listed as recovered. Groundwater is not listed as affected and the approximate area affected is listed as 320 square feet.

3.10.3 Visual Resources

Visual resource data was obtained from the previously discussed habitat, vegetation and land use data. The central core of the project development area of the site has been either in tillage agriculture or intense pasture use which resulted in the removal and alteration of the majority of native vegetation, likely over 100 years ago. This area is transitioning to old field meadows consisting primarily of non-native weedy herbaceous and woody species. Drainage ditches along the perimeters of these agricultural and grazing lands have established as fence row plant species typically comprised of low quality native and non-native woody material and with little diversity. The wooded district north of US 20, along the south side of Prairie Avenue, is currently wooded, but since it has been intensely tilled or pasture, the woods are not of remnant quality. On the north and east perimeter of the site and in smaller portions the vegetation is typically residential-type landscapes.

Both emergent and forested wetlands on site are of low to moderate quality due in part from past land management practices and becoming degraded by storm water runoff.

Though, the three wood areas, one north of the project site, another west of the transmission lines and the other in the southeast corner, east of the transmission lines and north of US 31/20 are considered intact remnant landscape. If it had been continually managed through natural and past cultural fire practices, it would represent the surrounding historic landscape prior to timbering and agricultural disturbance.

These ambient landscapes will be cleaned up, restored and programmed appropriately; would be visible from throughout the site.

3.10.3.1 South Bend Site

Currently, there are no exterior overhead lighting fixtures within the property boundaries. Most exterior lighting sources will be from adjacent parcels which include seven (7) overhead light fixtures along the drive into Prairie Apartments to the north and approximately seventeen (17) overhead cobra style street lights along Locust Drive between US 23 and Prairie Drive. Along Prairie Avenue from US 23 interchange to New Energy Drive there are no overhead street lights

3.10.3.2 Elkhart Site

Currently, there are no exterior overhead light fixtures within the property boundaries. There are no overhead street light fixtures on either Co. Road 26 or Indiana 19. There are approximately forty-eight (48) overhead light fixtures to the north in the American Countryside Market parking lot and entry drive.

3.11 ENVIRONMENTAL JUSTICE

Title VI of the Civil Rights act of 1964 as amended in 1968, and *Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, as amended, directs federal agencies to develop an Environmental Justice (EJ) Strategy that identifies and addresses disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations. The Council on Environmental Quality has oversight responsibility of the Federal Government's compliance with Executive Order 12898 and the National Environmental Policy Act. The CEQ, in consultation with the Environmental Protection Agency and other agencies has developed guidance to assist federal agencies with their NEPA procedures so that EJ concerns are effectively identified and addressed. According to the CEQ's Environmental Justice Guidance Under NEPA (1997), agencies should consider the composition of the affected area, to determine whether minority populations or low-income populations are present in the area affected by the proposed action, and if so, whether there may be disproportionately high and adverse environmental effects to these populations from implementation of the proposed action.

3.11.1 Environmental Justice (EJ) Methodology

The data used in this study to determine the potential for disproportionate impacts to low-income and/or minority populations include ethnicity, income, and employment data at the state, county, township, and census tract level, obtained from the 2010 United States Census Bureau. 2010 ethnicity data for block groups were also evaluated. See **Figure 3.11-1** for project area communities utilized in the EJ analysis of populations at the South Bend and Elkhart sites.

If ethnic minorities or persons of poverty do not exist, then documentation of these findings completes the EJ process and public involvement and mitigation measures would not be required. If these groups do exist within the affected area, then public involvement and outreach programs would need to be developed, and all project stakeholders (particularly minority and low-income groups that may be affected) would be invited to participate and provide input to the proposed project development process. Documentation of each stakeholders' interests, issues, and concern would be expressed in the public involvement and outreach program and in public comments on the Draft EIS.

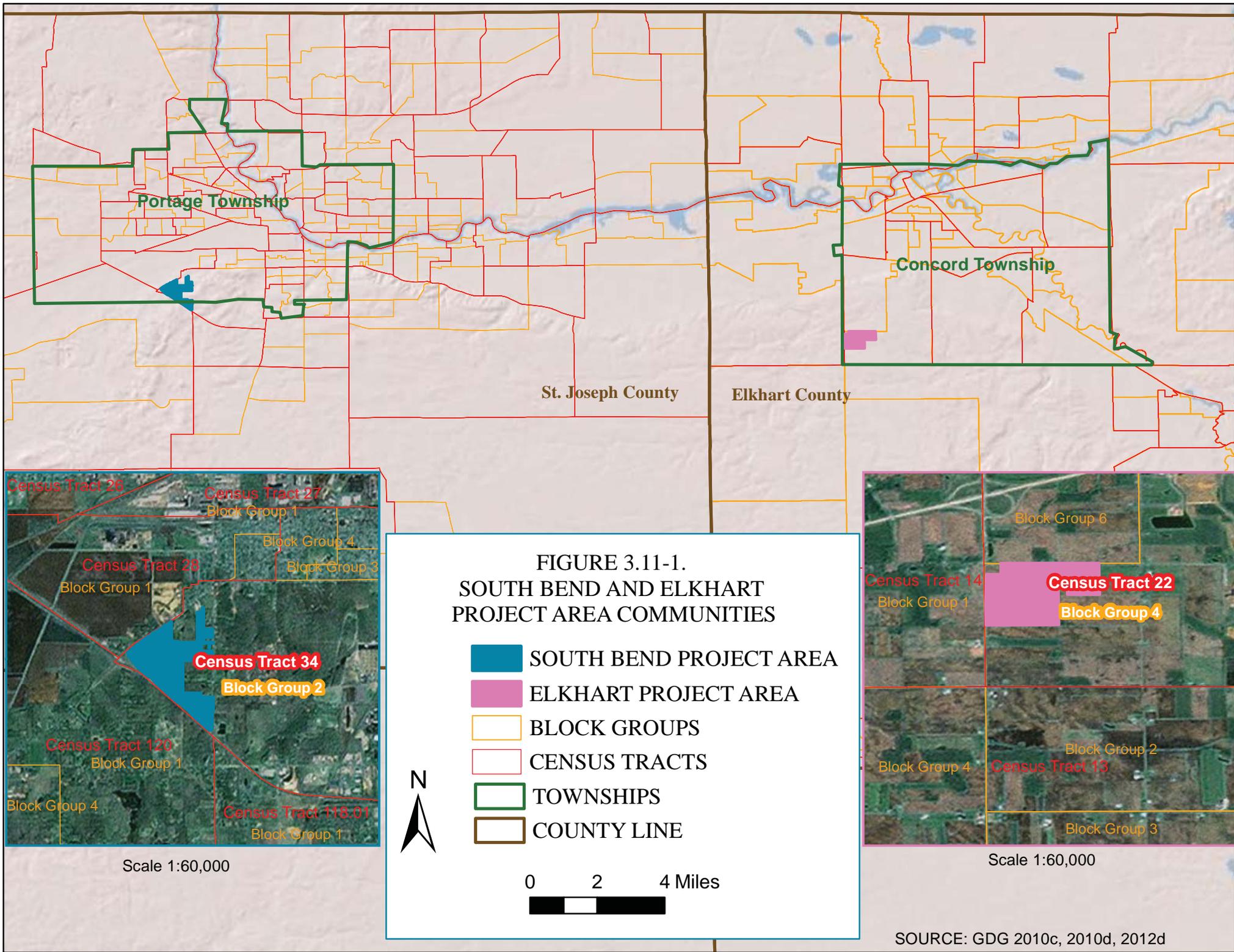
The EJ disproportionate effects determination should take into account committed mitigation and enhancement measures and potential offsetting benefits to the affected minority and low-income populations. The EJ mitigation measures should reduce or offset adverse community impacts. Mitigation measures are developed through public involvement with affected minority and low-income community leaders and citizen groups. This process involves public participation and is used (in part) to minimize adverse community impacts. Community comments received during the September 27, 2012 scoping meeting were used in the evaluation of EJ effects. An additional public meeting was held on April 14, 2015 after release of the Draft EIS.

In terms of analyzing ethnicity characteristics, data from Census Tracts were used, since these small, relatively permanent statistical county subdivisions are generally characterized by much smaller percentages of ethnic populations; therefore providing a more accurate representation of the ethnic groups within each community. The results of the Census Tract Analysis were used to determine whether there is potential within the Project Area Communities for disproportionate effects to ethnic minorities or poverty status persons. The percentage of ethnic minorities and persons of poverty status for the County were used as thresholds for comparison. Block group data were also be used in EJ determinations, as this data describes even a smaller geographic area than Census Tracts and can provide an acutely accurate representation of the population; however, data is only available at this level for ethnicity characteristics, and could not be used to analyze low-income populations or employment statistics in the Project Area.

CEQ's Environmental Justice Guidance under NEPA defines minority as individual(s) who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. According to the same CEQ guidelines, minority populations are considered EJ populations if "(a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage in the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis...a minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds" (CEQ 1997).

In addition to identifying the proportion of the population of individual Census Tracts that are composed of minority individuals, analysts should attempt to identify whether highly concentrated pockets of minority populations are present in specific geographic areas. The guidance also advises agencies to consider both groups of individuals living in geographic proximity to one another, and geographically dispersed/transient sets of individuals, where either type of group "experiences common conditions" of environmental exposure or effect within the guidance provided for minority population. This can result from cultural practices, educational backgrounds, or the median age of community residents (e.g., disproportionate numbers of elderly residents, children, or women of child-bearing age may be more susceptible to environmental risks).

Data used in this analysis to determine the potential for disproportionate effects to low-income and/or minority populations are presented in Table 3.11-1, 2010 Population and Ethnicity Characteristics for Project Block Groups, Census Tracts and Project Area Communities, and Table 3.11-2, 2006-2010 5-year estimate of Income, Poverty Status, and Unemployment for Project Census Tracts and Project Area Communities. Using this 2010 socioeconomic data and the CEQ's analysis criteria described above, the population at the South Bend site would be considered an EJ population because the aggregate minority group percentage of the population at the Census Tract level (and Block Group level) exceeds that of the County. Study area census data indicate that minority groups comprise 31.4 percent of the Census Tract 34 population (and 42 percent of the

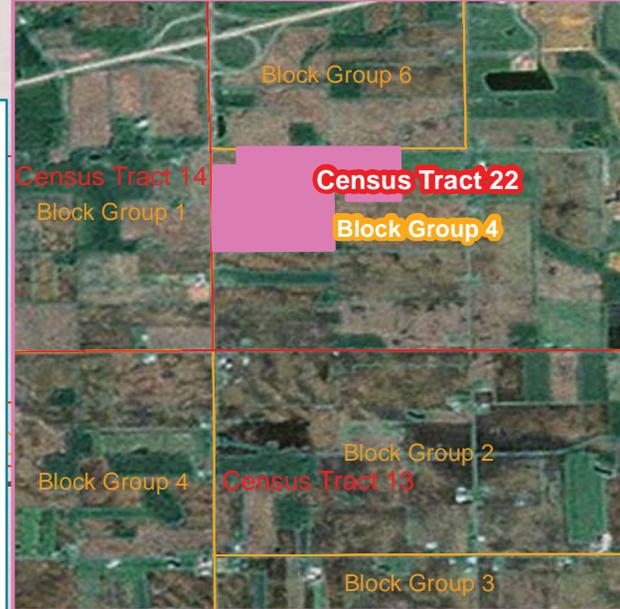
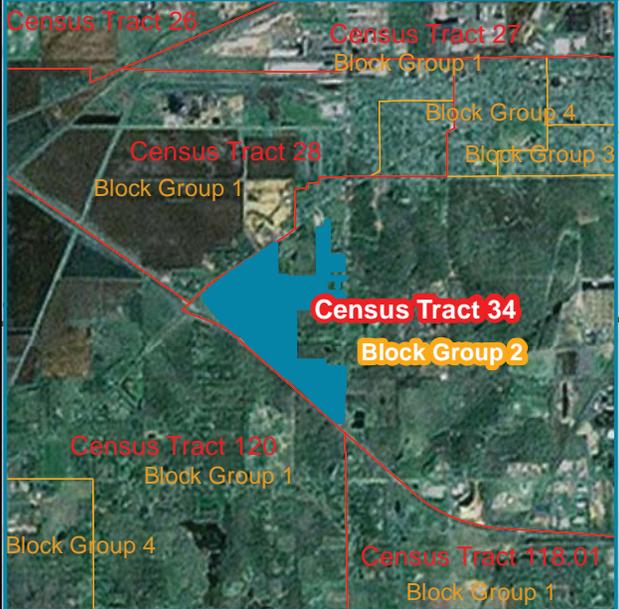


Portage Township

Concord Township

St. Joseph County

Elkhart County



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Block Group 2 population), and account for 15.5 percent of the St. Joseph County population. Additionally, the median household income for Census Tract 34, \$34,636, is lower than that of St. Joseph County, \$44,644. Also, the percentage of individuals living below the poverty level and the percentage of unemployed labor force are both higher in the Census Tract 34 population than in St. Joseph County.

Similarly, the population at the Elkhart site would also be considered an EJ population because the aggregate minority group percentage of the population at the Census Tract level (and Block Group level) exceeds that of the County. Minority groups account for 20.4 percent of the Census Tract 22 population (and 10.9 percent of the Block Group 4 population), while only 7.3 percent of the Elkhart County population is comprised of the same minority groups. Additionally, the median household income is lower than that of Elkhart County, \$47,697. Also, the percentage of individuals living below the poverty level and the percentage of unemployed labor force are both higher in the Census Tract 22 population than in Elkhart County.

3.11.2 Race

3.11.2.1 South Bend

According to the 2010 Census, approximately 95 percent of the population within Census Tract 34, where the proposed South Bend Site is located, can be classified as people of “one race.” Of these residents, 54.3 percent are white, 29.5 percent are black or African American, 1.1 percent are American Indian/Alaska Native, 0.8 percent are Asian (including Asian Indian, Chinese, Japanese, Filipino, Korean, Vietnamese or other), 0.02 percent are Native Hawaiian/Other Pacific Islander, and 14.3 percent are classified as other. Similar ethnic proportions characterize the populations of one-race residents of Block Group 2, Portage Township, City of South Bend, St. Joseph County, and the State of Indiana (Table 3.11-1).

3.11.2.2 Elkhart

According to the 2010 Census, approximately 96 percent of the population within Census Tract 22, where the Elkhart Site is located, can be classified as people of “one race.” Of these residents, 59.1 percent are white, 18.5 percent are black or African American, 0.7 percent are American Indian/Alaska Native, 1.1 percent are Asian (including Asian Indian, Chinese, Japanese, Filipino, Korean, Vietnamese or other), 0.09 percent are Native Hawaiian/Other Pacific Islander, and 20.5 percent are classified as other. Similar ethnic proportions characterize the populations of one-race residents of Block Group 4, Concord Township, City of Elkhart, and Elkhart County (Table 3.11-1).

3.11.3 Income and Employment

3.11.3.1 South Bend

According to the United States Census Bureau 2006-2010 American Community Survey, the median

household income in Census Tract 34 is \$34,636, and approximately 34.3 percent of all people in this Census Tract are living below the poverty level. The median household income is similar in Census Tract 34, Portage Township, and the City of South Bend (approximately \$34,000), and increases by approximately \$10,000 at the county level (Table 3.11-2). In general, as the population of the South Bend Project Area community increases (see population estimates in Table 3.11-1), the percentage of persons below the poverty line decreases (Table 3.11-2). Additionally, the percent of the labor force that is unemployed is the highest in Census Tract 34 (23 percent) of all geographic areas analyzed. The unemployment percentage decreases as the Project Area Community population size increases.

3.11.3.2 Elkhart

According to the United States Census Bureau 2006-2010 American Community Survey, the median household income in Census Tract 22 is \$41,270, and approximately 19.3 percent of all people in this census tract are living below the poverty level. Of the Project Area Communities evaluated, the City of Elkhart has the lowest median household income (\$35,654) and the highest percentage of persons living below the poverty level (22.7 percent). Additionally, the percent of the labor force that is unemployed is higher in Census Tract 22 than in Elkhart County or the State of Indiana, but the City of Elkhart has the highest percentage of unemployment (14.1 percent) of all project area communities evaluated (Table 3.11-2).

3.11.4 State of Indiana

According to the 2010 Census, approximately 86 percent of one-race individuals living in the State of Indiana are white (Table 3.11-1). Of all the project area communities evaluated, the State of Indiana has the highest median household income (\$47,697), lowest percentage of persons living below the poverty level (13.5 percent), and lowest level of unemployment (8.4 percent of the labor force) (Table 3.11-2).

Additionally, according to the 2012 Pokagon Band Fee-to-Trust Application (BIA 2012), 507 individuals are currently enrolled in the Pokagon Band of the Potawatomi Indians in the State of Indiana. Of the enrolled persons, 90 of 132 individuals available for work were employed. Of these employed tribal members, 17 (19 percent) were below poverty guidelines (BIA 2005).

3.11.5 Additional EJ Parameters

During the scoping meeting held on September 27, 2012, attendees expressed concerns regarding increased alcoholism as a result of Project implementation. It is assumed that citizen concerns stemmed from known co-morbidities between problem gambling and alcohol addiction (Petry et al. 2005). Based on data collected by the Substance Abuse Mental Health Services Administration (SAMHSA), alcohol dependence and abuse in the North Central region of Indiana (which includes both St. Joseph and Elkhart counties) was reported in 7.4 percent of persons aged 12 or older,

which is higher than State levels (7.13 percent) and lower than the national figure (7.5 percent) (2010).

Table 3.11-1
 2010 Total Population and Ethnicity Characteristics for Project Block Groups,
 Census Tracts and Project Area Communities

	Project Area Community	Total Population	Total Population "one race"	White	Black	AI/AN*	Asian	NH/OPI**	Other
	Block Group 2	788	743	371	299	8	5	0	60
	Census Tract 34	3,709	3,524	1,914	1,040	38	28	1	503
SOUTH BEND SITE	Portage Township	93,063	89,002	55,924	24,362	478	1,220	54	6,964
	City of South Bend	101,168	96,944	61,199	26,906	478	1,318	64	6,979
	St. Joseph County	266,931	259,221	209,972	33,958	1,030	5,036	194	9,031
	Block Group 4	1,591	1,523	979	143	4	18	1	378
	Census Tract 22	8,363	8,012	4,736	1,486	52	88	7	1,643
ELKHART SITE	Concord Township	54,167	52,163	37,160	7,595	298	496	25	6,589
	City of Elkhart	50,949	48,884	33,672	7,862	290	452	33	6,575
	Elkhart County	197,559	192,634	163,792	11,307	747	1,915	81	14,792
State of Indiana	6,483,802	6,355,901	5,467,906	591,397	18,462	102,474	2,348	173,314	

Source: U.S. Census Bureau, 2010 Census (USCB 2011).

*AI/AN-American Indian/Alaska Native

**NH/OPI-Native Hawaiian/Other Pacific Islander

Table 3.11-2
 2006–2010 5-year Estimate of Income, Poverty Status and Unemployment for Project Census Tracts and Project Area Communities

	Project Area Community ¹	Median Household Income	Percent (%) of Persons Below Poverty Level	Percent (%) of Labor Force that is Unemployed
SOUTH BEND SITE	Census Tract 34	\$34,636	34.3	23.0
	Portage Township	\$34,159	25.6	14.4

	Project Area Community¹	Median Household Income	Percent (%) of Persons Below Poverty Level	Percent (%) of Labor Force that is Unemployed
	City of South Bend	\$34,761	24.3	13.5
	St. Joseph County	\$44,644	14.6	9.5
	Census Tract 22	\$41,270	19.3	11.0
	Concord Township	\$39,178	21.0	12.4
ELKHART SITE	City of Elkhart	\$35,654	22.7	14.1
	Elkhart County	\$47,258	13.7	9.9
	State of Indiana	\$47,697	13.5	8.4

Source: U.S. Census Bureau, 2006-2010 American Community Survey (USCB 2011),

¹ Income, poverty status, and unemployment data were not available for Block Groups

The data indicate that neighborhood poverty exposures appear to be associated with increased odds of alcoholic bingeing and an increased rate of weekly alcohol consumption (Cerdá et al. 2010). Individuals whom are frequently targeted for addiction treatment services in the public mental health system in Indiana typically have incomes at or below 200 percent of federal poverty level, based on the assumption that poverty and addiction disorders are highly correlated. Alcohol dependence for this group is estimated to be more than 1.5 times higher than the prevalence in the general population. In St. Joseph County, it was estimated that in 2008, there were approximately 37,870 individuals living below the federal poverty line (USCB 2009). Of these individuals, it is estimated that roughly 5800 (or 15.3 percent) were also living with a chronic drug or alcohol addiction (St. Joseph County Epidemiological Profile 2011). In addition, alcoholism has also been associated with long-term unemployment, where individuals are said to abuse alcohol as a means for coping with financial stress caused by job loss (Forcier 1988).

Data also indicate that alcohol is the most frequently used drug in the state of Indiana by all racial and ethnic groups, but that the prevalence of heavy alcohol use (defined as adult men having more than two drinks per day and adult women having more than one drink per day) does not appear to differ between racial/ethnic groups (State Epidemiology and Outcome Workshop [SEOW] 2007), and that the prevalence of binge drinking (defined as males having five or more drinks on one occasion and females having four or more drinks on occasion) is not significantly different between racial/ethnic groups (SEOW 2010). Multiracial individuals in the state of Indiana report the highest rate of heavy alcohol consumption (7.6 percent), followed by whites (5.1 percent), blacks (4.9 percent), and Hispanics (4.8%) (SEOW 2007), while Hispanic ethnic groups in the state of Indiana report the highest rate of binge drinking (16 percent), followed by whites (13.6 percent), and blacks (12.8 percent) (SEOW 2010). More locally, St. Joseph County residents ages 18 and older, 54.4 percent of whites, 26.2 percent of blacks, and 48.1 percent of other races consumed alcohol

monthly in 2008 (St. Joseph County Epidemiological Profile 2011). This data suggests that heavy alcohol consumption in Indiana does not appear to differ among racial/ethnic groups, that white individuals in St. Joseph County consume alcohol on a monthly basis more than other races, and that low-income populations may be more susceptible to developing an alcohol addiction. Alcoholism data for minority, low income, and unemployed populations in Elkhart County were unable to be obtained, but based on similar socioeconomic conditions and minority group percentages, alcohol dependence statistics are assumed to be similar to those for St. Joseph County.

Citizens at the scoping meeting also expressed concerns regarding problem gambling and related issues such as bankruptcy, divorce, domestic violence, suicide and crime as potential consequences of the casino development proposed in Alternative A at South Bend, and Alternative B at Elkhart (see Section 4.9 for information regarding the relationship between casinos and crime). A comprehensive review conducted by Williams et al. (2011) indicated that one of the main negative impacts of casino introduction is in fact an increase in problem gambling, and its related issues such as bankruptcy, divorce, domestic violence, suicide, and crime. However, most of the increase in problem gambling occurs after the initial introduction of gaming, with progressively fewer impacts occurring over the life of the casino (Williams et al. 2011). Another study indicated that casino introduction does systematically increase problem gambling among a portion of its patrons thus increasing bankruptcy rates, but patterns tend to be cyclical in nature with increases and decreases over time, and effects tend to be offset by the positive economic impacts generated from the casino operation (Goss and Morse 2005). Additionally, Williams and others (2011) found that lower income people consistently contribute a higher proportion of their income to gambling than do middle and high income groups, but that the average annual expenditure on gambling still tends to increase as a function of income class; therefore EJ populations may or may not be more likely to experience increased debt from gambling.

Based on the literature discussed above and the higher aggregate minority percentages, lower median income, higher percentage of persons living below the poverty level, and higher unemployment rates in the populations within both the South Bend and Elkhart project areas compared to St. Joseph County and Elkhart County, respectively, EJ populations in both locations may or may not be at a higher risk for alcohol dependence, problem gambling, and associated indices such as bankruptcy, divorce, domestic violence, suicide, and crime as a result of casino construction/operation.

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