STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

IN THE MATTER OF THE PETITION OF THE TOWN OF DEMOTTE, INDIANA, FOR APPROVAL OF A REGULATORY ORDINANCE ESTABLISHING A WATER REGULATED TERRITORY AND A SEWER REGULATED TERRITORY.	**CAUSE NO. 45444**

PETITIONER'S DIRECT TESTIMONY AND EXHIBITS

Direct Testimony and Exhibits of Daryl Knip	Petitioner's Exhibit 5
Curriculum Vitae	Petitioner's Exhibit 6
PER for DeMotte Westside Sewer Expansion	Petitioner's Exhibit 7
PER for NORWEJ Westside Water Expansion	Petitioner's Exhibit 8
PER for NORWEJ Eastside Water Expansion	Petitioner's Exhibit 9

Respectfully submitted,

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PETITIONER'S EXHIBIT 5

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

IN THE MATTER OF THE PETITION OF THE TOWN OF DEMOTTE, INDIANA, FOR APPROVAL OF A REGULATORY ORDINANCE ESTABLISHING A WATER REGULATED TERRITORY AND A SEWER REGULATED TERRITORY	**CAUSE NO. 45444**

DIRECT TESTIMONY

OF

DARYL KNIP

ON BEHALF OF PETITIONER,

THE TOWN OF DEMOTTE, INDIANA

I.
Introduction

1. Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Daryl Knip, and my business address is 17 North Washington Street, Valparaiso, Indiana, 46383.

2. Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am currently employed by Abonmarche Consultants, Inc. ("Abonmarche"), and I currently serve as the Chief Executive Officer ("CEO").

3. Q. PLEASE SUMMARIZE YOUR PROFESSIONAL AND EDUCATIONAL QUALIFICATIONS.

A. I am a registered Professional Engineer in Indiana, and I hold a Bachelor's Degree in Civil Engineering from Purdue University. I have attached a copy of my Curriculum Vitae ("CV") to my testimony as Petitioner's Exhibit 6.

4. Q. PLEASE SUMMARIZE YOUR PROFESSIONAL EXPERIENCE.

A. I have been employed by Abonmarche since 1996. At Abonmarche, I am primarily responsible for managing the operations of our company and I act as a project manager and consulting engineer on primarily sewer, water, and road projects. Prior to holding the CEO position, I was Vice President in charge of Indiana operations and have previously been a Project Manager, Project Engineer, and staff engineer at Abonmarche.

5. Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE INDIANA UTILTY REGULATORY COMMISSION ("COMMISSION")?

A. No, I have not.

6. Q. PLEASE DESCRIBE ABONMARCHE.

A. Abonmarche was founded in 1979 and is a professional consulting firm providing surveying, civil engineering, and marina development services to a variety of private- and public-sector clients. In 1984, Abonmarche expanded to also provide architecture, planning, and landscape architecture services. The bulk of our work is in northern Indiana and southwestern and western Michigan. In Indiana, we have offices in Fort Wayne, Goshen, Hobart, Lafayette, South Bend, and Valparaiso. In Michigan, we have offices in Benton Harbor, South Haven, and Portage.

7. Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of the Town of DeMotte, Indiana ("DeMotte") and the Northwest Jasper Regional District ("NORWEJ").

8. Q. PLEASE DESCRIBE YOUR EXPERIENCE WITH DEMOTTE AND NORWEJ.

A. As an initial matter, I grew up and went to grade school through high school in DeMotte. Needless to say, I am intimately familiar with the community. Shortly after I graduated from Purdue University, I started working on private engineering projects in the Town. Our firm has provided engineering consulting services to DeMotte since 1999 and to NORWEJ since its inception in 2003. I began acting as the Town's engineer in 2004. Over the years, we have assisted the Town and NORWEJ on a variety of projects, including the following: an expansion to the wastewater treatment plant; extension of a sanitary sewer to the Kankakee Valley Middle School and to Kankakee Valley High School; construction of a new well

field and water treatment plant; installation of over twenty-three miles of water main; design and construction of a 500,000 gallon elevated storage tank; widening of Division Street East; construction of a sidewalk that connects both elementary schools, the library, and adjacent neighborhoods, construction of a walking path linking the Town to the little league and soccer fields; relocation of, and repair to, a pedestrian bridge; expansion of the Town Hall and the Police Station; construction of a band shell and pavilions; completion of road improvements; and review of numerous site plans and subdivisions. Specific to this case, Abonmarche was asked to prepare preliminary engineering reports ("PER") for DeMotte and NORWEJ related to the expansion of their respective sewer and water utility systems in the proposed sewer and water service territories ("Sewer and Water Regulated Territories") described in the Verified Petition initiating this case. For the Commission's reference, I have attached a copy of DeMotte's PER for the west-side sewer expansion to my testimony as Petitioner's Exhibit 7; a copy of NORWEJ's west-side water expansion PER as Petitioner's Exhibit 8; and a copy of NORWEJ's east-side water expansion PER as Petitioner's Exhibit 9.

9. Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to support the sewer and water regulatory ordinance, Ordinance No. 10052020-2 ("Regulatory Ordinance") that was adopted by DeMotte on October 5, 2020. My testimony will specifically address the following issues: (i) a general overview of the respective sewer and water utility

systems for DeMotte and NORWEJ and the planned upgrades to each system; (ii) the ability of DeMotte and NORWEJ to provide sewer and water utility service, respectively, in the Sewer and Water Regulated Territories; (iii) the ability of another utility to provide sewer or water utility service in the Sewer and Water Regulated Territories; and (iv) the potential impact of the Regulatory Ordinance on present and future economic development in the area.

10. Q. DO YOU HAVE ANY ATTACHMENTS TO YOUR TESTIMONY?

A. Yes. My testimony includes the following attachments:

- Petitioner's Exhibit 6 – a copy of my CV.
- Petitioner's Exhibit 7 – The DeMotte west-side sewer expansion PER.
- Petitioner's Exhibit 8 – The NORWEJ west-side water expansion PER.
- Petitioner's Exhibit 9 – The NORWEJ east-side water expansion PER.

II.
Existing Sewer and Water Systems

11. Q. PLEASE DESCRIBE DEMOTTE'S CURRENT SEWER UTILITY SYSTEM.

A. DeMotte's existing wastewater treatment plant was designed and constructed in 1975 and is located at 13390 North 900 West in DeMotte. The plant was upgraded and expanded in 2000. The system has not experienced any major damage or repair. DeMotte's treatment plant has an average design flow of 0.495 million gallons per day ("MGD") with a peaking factor of 3.05 and a peak design flow of 1.515 MGD. The collection system comprises 23.5 miles of primarily 8" diameter gravity

sanitary pipe within DeMotte's corporate boundaries and extending eastward along State Road ("SR") 10 to the Kankakee Valley Intermediate, Middle, and High Schools.

12. Q. PLEASE DESCRIBE NORWEJ'S CURRENT WATER UTILITY SYSTEM.

A. NORWEJ's existing water utility system was designed and constructed in 2012. NORWEJ currently has one operating well field ("North Well Field"), which was originally constructed with three wells. The current system has a design capacity of 650 gallons per minute ("gpm"). The system's current average water usage is approximately 99 gpm with a recorded peak maximum water usage of 314 gpm. Well 1 was never put into service because of bacterial issues, and Well 3, which supplies 250 gallons per minute (gpm), is used only occasionally since October of 2018 because of high ammonia levels. Well 2 currently supplies all of NORWEJ's capacity, and with a production capacity of 400 gpm has sufficient capacity to meet the current system's average and peak demands. However, with Well 3 offline, there is no pumping redundancy within the system. While Well 3 could be put back online in an emergency situation, maintaining adequate chlorine residuals would be a significant challenge. With Well 3 offline, NORWEJ is able to maintain a sufficient chlorine residual.

NORWEJ's existing distribution system, which was also constructed in 2012, is comprised of 23 miles of PVC C900 and PVC SDR 21 water main with pipe diameters ranging from six-inches to 10 inches. The anticipated useful life of the

water main system is 80 years. The system is routed and sized to provide 1,000 gpm at 50 to 60 psi. No operational problems have been reported. According to the Indiana Department of Environmental Management's ("IDEM") Monthly Reports of Operations, daily flows range from 69 gpm to 314 gpm.

13. Q. PLEASE DESCRIBE NORWEJ'S EXISTING TREATMENT AND STORAGE FACILITIES.

A. NORWEJ currently has one water treatment plant ("WTP") located at the North Well Field. Raw water entering the WTP passes through an aerator and is stored in a detention tank with two 6,500-gallon compartments and a 7,750-gallon pump chamber, for a total of 20,750 gallons of storage. The raw water is pumped by two alternating high service pumps from the detention tanks through four pressure filters collectively capable of treating 650 gpm at a rate of 3.2 gpm/sft for iron and manganese. The filtered water is then treated with chlorine and orthophosphates and enters the distribution system. The WTP is adequately sized for NORWEJ's current system and there are no known operational problems with the WTP.

In addition to the WTP, NORWEJ has a 500,000-gallon elevated storage tank located in DeMotte that was constructed in 2012 and has a useful life of 80 years. There are no known operational issues with the existing water tower.

14. Q. PLEASE DESCRIBE THE PLANNED UPGRADES TO NORWEJ'S WATER UTILITY SYSTEM LOCATED EAST OF DEMOTTE.

A. To mitigate the issues with the North Well Field, a second well field will soon be under construction as part of the NORWEJ Water Supply and Treatment Plant No. 2 project, which will be located at 5931 Commercial Drive and 5853 Commercial Drive in DeMotte. The new well field contains three wells with planned production of 450 gpm with a total possible capacity of 750 gpm. The new well field will be connected to the existing system through a new WTP and water main extension. The water main extension includes approximately 9,150 lineal feet of C900 PVC water main east of and parallel with SR 10 from the east end of DeMotte near Orchid Street to the new well field as shown in Exhibit A-5 of Petitioner's Exhibit 9 (i.e. the Eastside PER).

The new WTP will be similar to NORWEJ's existing WTP. Raw water will enter the building, pass through an aerator, and be stored in a detention tank with two 9,000-gallon compartments and a 4,700-gallon pump chamber. The raw water will then be pumped by two high service pumps, which will run one at a time, through three pressure filters, which will filter the water for iron and manganese. Finally, the filtered water will be treated with chlorine and orthophosphates and enter the distribution system. The pressure filters will be backwashed periodically, and the backwash water will be stored in a tank until periodically released into DeMotte's sanitary sewer system. Unlike the WTP at the North Well Field, backwash water at the new WTP will not be recycled through the plant.

III.
Ability of DeMotte and NORWEJ to Provide Utility Service In the Sewer and Water Regulated Territories

15. Q. ARE YOU FAMILIAR WITH DEMOTTE'S PLAN TO PROVIDE SEWER UTILITY SERVICE IN THE SEWER REGULATED TERRITORY?

A. Yes, I am. Abonmarche was engaged by DeMotte to develop a PER for the expansion of its sewer system to serve new customers in the area of the intersection of Interstate 65 ("I-65") and SR 10 ("Interlocal Service Area"). A copy of that PER is attached to my testimony as Petitioner's Exhibit 7.

16. Q. IS DEMOTTE CURRENTLY CAPABLE OF PROVIDING SEWER UTLITY SERVICE TO CUSTOMERS IN THE INTERLOCAL SERVICE AREA?

A. DeMotte's wastewater treatment plant has sufficient capacity to serve the Interlocal Service Area. As stated above, the treatment plant has an average design flow of 0.495 MGD and a peak design flow of 1.515 MGD. In 2018, the annual average flow on the system was 0.248 (50% capacity); in 2019, annual average flow was 0.281 (57% capacity); and in 2020, annual average flow was 0.298 (60%). Although I do not have specific details of the proposed development in the Interlocal Service Area, the existing plant has sufficient capacity to serve the expected additional load without the need to expand the plant or modify its effluent limits. However, in order to provide sewer utility service to the Interlocal Service Area and the other areas in the Sewer Regulated Territory where DeMotte is not currently serving, DeMotte would need to extend sewer mains to the area.

17. Q. HOW WILL DEMOTTE EXTEND ITS SEWER UTILITY SYSTEM TO PROVIDE SERVICE IN THE INTERLOCAL SERVICE AREA?

A. DeMotte will extend approximately 15,600 lineal feet of sanitary sewer from the southern town limits parallel with SR 10 to the intersection of SR 10 and SR 110. DeMotte will then install two lift stations and extend approximately 16,600 lineal feet of force main and gravity sanitary sewer west from the intersection of SR 10 and SR 110 parallel with SR 10 to the I-65 and SR 10 interchange. The detailed plan for extending service to this area is outlined in the PER, Petitioner's Exhibit 7.

18. Q. DOES YOUR PER PETITIONER'S EXHIBIT 7 CONTEMPLATE EXTENDING SEWER SERVICE TO THE WESTSIDE OF I-65?

A. Yes, it does. In addition, the west side water PER, Petitioner's Exhibit 8, details the facilities necessary to provide water service on the west side of I-65. As explained by witness Boer in his testimony, DeMotte and NORWEJ were able to reach an agreement in principle after completion of the PERs with the private utility on the westside of I-65, Community Utilities of Indiana, Inc. ("CUII"), whereby CUII would provide sewer and water service to this area for the next twelve (12) years. Thereafter, DeMotte and NORWEJ can extend service to this area and be the direct provider of service.

19. Q. IF CUII IS UNWILLING TO SERVE THIS AREA, CAN DEMOTTE SERVE IN A TIMELY MANNER?

A. Yes, it can. DeMotte and NORWEJ can both extend their facilities across the interstate and serve the area in a timely manner. The facilities proposed to be constructed in the PERs will have sufficient capacity to provide service to this area.

20. Q. ARE YOU FAMILIAR WITH NORWEJ'S PLAN TO PROVIDE WATER UTILITY SERVICE IN THE WATER REGULATED TERRITORY?

A. Yes, I am. Abonmarche was engaged by NORWEJ to develop a PER for the expansion of its water system to serve new customers in the Interlocal Service Area. A copy of that PER is attached to my testimony as Petitioner's Exhibit 8. Abonmarche was also engaged by NORWEJ to develop a PER for the expansion of its water system to serve new customers located in the Water Regulated Territory east of DeMotte. A copy of the eastside PER is attached to my testimony as Petitioner's Exhibit 9.

21. Q. IS NORWEJ CURRENTLY CAPABLE OF PROVIDING WATER UTLITY SERVICE TO CUSTOMERS IN THE WATER REGULATED TERRITORY?

A. Technically, NORWEJ's existing water supply and treatment plant may have sufficient capacity to provide service to the Water Regulated Territory. The existing system has an average design flow of 370,080 gpd and a peak design flow of 936,000 gpd. The average daily demand on the system is approximately 142,882 gpd, which is less than half of the average design flow. However, as discussed above, because NORWEJ's system currently uses a single well for its supply source, it does not currently have any supply redundancy unless Well 3 in the North

Well Field is put into service, which would cause NORWEJ to have difficulty maintaining sufficient chlorine residuals. In addition, NORWEJ would need to extend water mains to serve the Water Regulated Territory.

22. Q. WILL THE PLANNED CONSTRUCTION OF THE SECOND WELL FIELD AND WTP IMPROVE NORWEJ'S ABILITY TO PROVIDE WATER UTILITY SERVICE TO CUSTOMERS IN THE WATER REGULATED TERRITORY?

A. Yes. The addition of three new wells and the new WTP will add approximately 648,000 gpd in average design flow and 1.08 million gpd in peak design flow for a total average design flow of 1.018 million gpd and a total peak design flow of 2.016 million gpd. The estimated 20-year average flow is 322,026 gpd and the estimated 20-year peak flow is 817,450 gpd, which are both well within the capacity of the upgraded system.

23. Q. HOW WILL NORWEJ EXTEND ITS WATER UTILITY SYSTEM TO PROVIDE SERVICE IN THE INTERLOCAL SERVICE AREA?

A. NORWEJ will extend approximately 16,000 lineal feet of C900 PVC water main south from DeMotte parallel to SR 10 to the intersection of SR 10 and SR 110. NORWEJ will then extend approximately 22,500 lineal feet of C900 PVC water main west from the intersection of SR 10 and SR 110 parallel to SR 10 to the I-65 and SR 10 interchange. NORWEJ will also extend approximately 13,200 lineal feet of C900 PVC water main north from the intersection of SR 10 and County Road 1100 West parallel to County Road 1100 West to the Indiana Department of

Transportation's ("INDOT") Kankakee Rest Area. Finally, NORWEJ will construct a new 150,000-gallon elevated storage tank and chemical feed station in the area of the I-65 and SR 10 interchange.

24. Q. HOW WILL NORWEJ EXTEND ITS WATER UTILITY SYSTEM TO PROVIDE SERVICE IN THE WATER REGULATED TERRITORY EAST OF DEMOTTE?

A. NORWEJ will extend approximately 9,150 lineal feet of C900 PVC water main east and north from DeMotte parallel to SR 10 to the new well field and WTP. NORWEJ will then extend approximately 11,400 lineal feet of C900 PVC water main east from the new well field parallel to SR 10 to Kankakee Valley High School.

25. Q. IN YOUR OPINION, WITH THE PLANNED UPGRADES AND MAIN EXTENSIONS, WILL DEMOTTE AND NORWEJ HAVE THE ABILITY TO PROVIDE SEWER AND WATER UTILITY SERVICE IN THE SEWER AND WATER REGULATED TERRITORIES?

A. Yes. The sewer and water main extensions and the upgrades to NORWEJ's water supply and treatment facilities that are discussed above will allow DeMotte and NORWEJ to provide safe, efficient, and affordable sewer and water utility service in the Sewer and Water Regulated Territories, both west of DeMotte in the Interlocal Service Area and east of DeMotte.

IV.
Ability of Another Utility to Provide Utility Service in the Sewer and Water Regulated Territories

26. Q. ARE YOU AWARE OF ANY OTHER UTILITY THAT IS CAPABLE OF PROVIDING WATER OR SEWER UTILITY SERVICE IN THE SEWER REGULATED TERRITORY?

A. The only other utility providing sewer utility service in the region that I am aware of is CUII. My understanding is that CUII currently provides water and sewer utility service west of I-65 in the unincorporated area near Roselawn, Indiana. Theoretically, CUII could extend its water and sewer utility systems eastward toward I-65 to serve a portion of the Interlocal Service Area; however, I have no personal knowledge of CUII's water and sewer utility systems, and I cannot speculate on the extent to which CUII has available capacity to provide service to additional customers.

I am not aware of any other utilities that are capable of providing sewer or water utility service in the Sewer and Water Regulated Territories west of DeMotte. And I do not believe there are any utilities, other than DeMotte and NORWEJ, that are capable of providing sewer or water utility service in the Sewer and Water Regulated Territories east of DeMotte.

V.
Impact on Present and Future Economic Development

27. Q. WILL APPROVAL OF THE REGULATORY ORDINANCE HAVE A POSITIVE IMPACT ON PRESENT AND FUTURE ECONOMIC DEVELOPMENT IN THE SEWER AND WATER REGULATED TERRITORIES?

A. Yes. First of all, approval of the Regulatory Ordinance and the extension of DeMotte's and NORWEJ's sewer and water utility systems in the Sewer and Water Regulated Territories promotes the regionalization of utility service by ensuring that existing and new customers will have access to safe, efficient, and affordable sewer and water utility service. Second, as explained by DeMotte's financial advisor, John Seever, DeMotte and NORWEJ will have access to financing through the Indiana State Revolving Fund Loan Program ("SRF Program"), which should allow them to issue bonds to fund the system extensions and upgrades at very competitive interest rates. In addition, it is my understanding that under the Interlocal Agreement, TIF revenues will be made available to DeMotte and NORWEJ to assist with the repayment of the SRF bonds. These two facts should assist DeMotte and NORWEJ in providing sewer and water utility service in the Sewer and Water Regulated Territories at competitive rates and charges.

28. Q. MR. KNIP, WHAT IS THE STATUS OF THE FINANCING FOR AND CONSTRUCTION OF ANY OF THE PROPOSED SEWER AND WATER FACILITIES?

A. The eastside and westside facilities are on two (2) difference construction tracks. With respect to the eastside facilities, NORWEJ issued a bond anticipation note in April of 2020 that provided funding for the design and construction of the contemplated eastside facilities. On November 20, 2020, NORWEJ received bids for the first phase of the eastside facilities, the well field and treatment plant. NORWEJ anticipates awarding the bid to the lowest responsive and responsible bidder and issuing a notice to proceed within the next few weeks. NORWEJ further anticipates receiving bids for the main to connect the new treatment plant to the remaining portions of its system in early February of 2021, and bids for the extension to the Kankakee Valley High School by May 1, 2021. At this point, NORWEJ is planning on closing its permanent financing with the SRF Program on or before June 30, 2021. I anticipate that all eastside improvements will be constructed and in service by December 31, 2021.

For the westside facilities, DeMotte and NORWEJ have advertised for bids for the first phase of construction. The remaining phases will be advertised for bids in early spring, 2021. NORWEJ anticipates issuing bond anticipation notes in January, 2021, to fund construction of the sewer and water facilities necessary to serve the Interlocal Service Area. Both DeMotte and NORWEJ anticipate completing construction of the westside facilities by December 31, 2021, and closing on permanent financing with the SRF Program in 2022.

29. Q. HAVE ANY ENTITIES REQUESTED THAT DEMOTTE AND NORWEJ EXTEND THEIR SEWER AND WATER SYSTEMS TO PROVIDE SERVICE?

A. Yes. Several existing and developing entities located in the Interlocal Service Area have requested service from DeMotte and/or NORWEJ, including Love's Travel Stop, TA Travel Stop, and INDOT. NORWEJ has also been approached by the existing Kankakee Valley High School, commercial customers, residential developments, and an industrial park about extending water utility service east of DeMotte.

30. Q. WILL APPROVAL OF THE REGULATORY ORDIANANCE IMPACT THE PROVISION OF SEWER AND WATER UTILTIY SERVICE TO EXISTING RESIDENTIAL CUSTOMERS LOCATED IN DEMOTTE AND IN THE SEWER AND WATER REGULATED TERRITORIES?

A. Yes. NORWEJ currently provides water utility service to approximately 40% of DeMotte's population. Based on my analysis, there are 1,023 potential water service connections inside of DeMotte's corporate boundaries, which could be served using the additional capacity generated from the new well field and WTP. Further, the proposed sewer and water main extensions will enable residential connections along SR 10, along County Road 1100 West, and within the Renwald Manor and Devries Manor subdivisions. Many of the residences in the DeMotte area are currently served by private shallow sand wells, which will soon expire. As those wells fail, the residential customers are expected to connect to the NORWEJ

water system. Similarly, those same customers currently have private septic systems, and they can be expected to connect to the DeMotte sewer system as those septic systems fail.

31. Q. HOW WILL THESE ADDITIONAL POTENTIAL CONNECTIONS AFFECT PRESENT AND FUTURE ECONOMIC DEVELOPMENT IN THE AREA?

A. As more customers connect to the sewer and water utility systems, the operating and maintenance expenses and debt service costs are spread over a larger customer base. This allows DeMotte and NORWEJ to maintain rates and charges as low as possible, which encourages commercial and industrial business stability and growth and supports residential real estate values.

VI.
Conclusion

32. Q. DO YOU BELIEVE THAT APPROVAL OF THE REGULATORY ORDINANCE IS IN THE PUBLIC INTEREST?

A. Yes. Approval of the Regulatory Ordinance supports the regionalization of sewer and water utility service in the DeMotte/Jasper County area. Because DeMotte and NORWEJ have access to SFR funding and TIF revenue support, they can extend their sewer and water utility systems in an affordable manner, which allows them to provide sewer and water utility service to customers in the Sewer and Water Regulated Territories at very competitive rates and charges. This will support

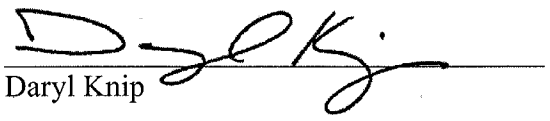
existing and encourage new economic development and residential home-ownership in the area.

33. Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

VERIFICATION

I affirm under the penalties of perjury that the foregoing testimony is true to the best of my knowledge, information, and belief as of the date here filed.



Daryl Knip

CERTIFICATE OF SERVICE

I certify that on December 4, 2020, this document was electronically filed with the Indiana Utility Regulatory Commission and was served electronically on the parties below:

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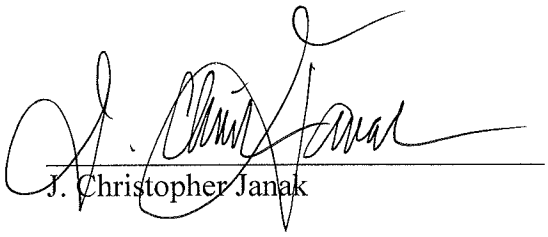

J. Christopher Janak

3959350_3

Petitioner's Exhibit 6

DARYL S. KNIP, PE

CHIEF EXECUTIVE OFFICER

Daryl has over 26 years of experience in design and management of civil engineering projects including roadways, sanitary sewer, lift stations, storm sewer, water main, detention and retention analysis, and site design associated with public works projects, federally funded projects and private developments. Daryl understands his client's vision and is able to conceptualize it, so that it's their vision guiding each project. He understands the area's market and is able to think beyond our client's needs to their client's needs, creating a design that's attractive to our client's clients.

Daryl is also responsible for managing Abonmarche operations that include nine offices in Indiana and Michigan.

EDUCATION
Purdue University
Bachelor of Science,
Civil Engineering

REGISTRATION
Professional Engineer
Licensed:
Indiana, Michigan

CERTIFICATIONS
Project Engineer / Supervisor
Certificate (INDOT)

PROFESSIONAL AFFILIATIONS
Past-President of the American Society of Civil Engineers, Indiana North Central Branch

AREAS OF EXPERTISE:

MUNICIPAL

Daryl has served as Project Manager and Engineer for public works projects in several communities in Northern Indiana. These projects include sanitary sewer extensions, lift station, water main, well fields, elevated storage tanks, treatment facilities, storm sewer, road widening and reconstruction, signal improvements, fiber optic interconnects, streetscape, lighting and place making.

These projects have included survey, design, environmental assessments, utility coordination, road and drainage design, water modeling, utility master planning, right-of-way acquisition, bidding and construction engineering.

Many of these projects included federal or state funding through Local Public Agency (LPA) projects administered by INDOT , Community Crossing Matching Grant (CCMG) projects funded by the State and administered through local communities, SRF funded sewer and water projects and USDA Rural Development water projects.

A sample of Daryl's municipal experience includes the following.

- NORWEJ Water Treatment Plant & Well Field
- NORWEJ Water Main Project (23 miles of main)
- NORWE 500,000 Gallon Elevated Storage Tank
- South Bend Ameritech Drive Lift Station
- South Bend Western Ave Road Reconstruction and Water Main Replacement
- South Bend St. Louis Boulevard Road Reconstruction and Multi-Use Path
- La Porte New Porte Landing Brownfield Redevelopment, Road & Utility Design
- South Bend Ignition Park Brownfield Redevelopment, Road & Utility Design
- Mishawaka Trinity Place Road and Utility Extension
- DeMotte Division Street Widening and Reconstruction
- DeMotte Division Street Widening and Reconstruction
- Portage Iron Horse Trail Design and Construction Engineering
- DeMotte Community Crossing Projects
- Mishawaka Trinity Place Road and Utility Extension
- Mishawaka Cleveland Road Water Main Extesion
- Elkhart Greenleaf & Leininger Water Main Extensions
- Middlebury Water Main Extensions

Petitioner's Exhibit 7

TOWN OF DEMOTTE
I-65 UTILITY EXTENSIONS PROJECT: SANITARY SEWER
DeMotte, IN

Preliminary Engineering Report
IFA: State Revolving Fund Loan Program

Town of DeMotte – Town Council:

Jeffery Cambe – Town Council President
Mark Boer – Police Commissioner
Dale Eeningenburg – Street Commissioner
Terry Schultz – Sewer Commissioner
Alana Bauman – Park Commissioner

October 2020

Prepared By:

Abonmarche Consultants, Inc.
17 N. Washington Street
Valparaiso, IN 46383

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Chapter 1 – Project Location

The project is located within the United States Geological Survey (USGS) DeMotte and Shelby Quadrangles. USGS Topographic Maps showing the proposed project area, the existing service area, and the future 20-year service area are provided in Appendix A.

The Quadrangle Map, Section, Township, and Range for each project element are provided in Table 1:

Table 1: Project Location

Project Element	Quadrangle Map	Section	Township	Range	Civil Township
I-65 Utilities Extension: Sanitary Sewer	DeMotte Quad	34	32N	7W	Keener
I-65 Utilities Extension: Sanitary Sewer	DeMotte Quad	35	32N	7W	Keener
I-65 Utilities Extension: Sanitary Sewer	DeMotte Quad	2	31N	7W	Keener
I-65 Utilities Extension: Sanitary Sewer	DeMotte Quad	3	31N	7W	Keener
I-65 Utilities Extension: Sanitary Sewer	DeMotte Quad	10	31N	7W	Keener
I-65 Utilities Extension: Sanitary Sewer	DeMotte Quad	11	31N	7W	Keener
I-65 Utilities Extension: Sanitary Sewer	DeMotte Quad	15	31N	7W	Keener
I-65 Utilities Extension: Sanitary Sewer	DeMotte Quad	9	31N	7W	Keener
I-65 Utilities Extension: Sanitary Sewer	DeMotte Quad	16	31N	7W	Keener
I-65 Utilities Extension: Sanitary Sewer	Shelby Quad	8	31N	7W	Keener
I-65 Utilities Extension: Sanitary Sewer	Shelby Quad	17	31N	7W	Keener

I-65 Utilities Extension: Sanitary Sewer	Shelby Quad	7	31N	7W	Keener
I-65 Utilities Extension: Sanitary Sewer	Shelby Quad	18	31N	7W	Keener
I-65 Utilities Extension: Sanitary Sewer	Shelby Quad	12	31N	8W	Keener
I-65 Utilities Extension: Sanitary Sewer	Shelby Quad	13	31N	8W	Keener

The Sanitary sewer extension of the I-65 Utilities Extension project will be located within the right of way of State Road 10 and within easements parallel with SR 10 and CR 1100 W. Easements are being negotiated with the Indiana Department of Transportation (INDOT) and property owners. The Sanitary sewer extension project will run from the southern Town limits on SR-110 thence south to the intersection of SR-10 and SR-110 thence west along SR-10 across the I-65/SR-10 Interchange to County Line Road.

Chapter 2 – Current Situation

Existing System

Wastewater Treatment Plant

The existing waste water treatment plant was designed in 1975 and is located at 13390 N 900 W. There have been no upgrade to the system since 1975. [Conditions at the treatment plant]. There have been no major damages or repairs made to any system at the wastewater treatment plant.

Table 2: Current Pollutant Loadings

	Influent (ppm)	Influent (lbs)	Effluent (ppm)	Effluent (lbs)
$CBOD_5$	244	558	2.8	6.4
SS	292	669	5.7	13
Phosphorus	0	0	0	0
Ammonia	41.1	94.7	0.08	0.17
DO	-	-	8.1	-

Table 3: Current Flows

Flow Type	Value
Average Design Flow	0.496 MGD
Peaking Factor	3.05
Peak Design Flow	1.515 MGD
Peak Sustained Infiltration	0 gal
Wet Weather Infiltration	43,000 gal

[DIRECT AND INDIRECT EVIDENCE OF OPERATING PROBLEMS AND FAILURES & LETTER FROM COUNTY SANITARIAN]

Collection System

The current collection system consists of approximately 23.5 miles of gravity sanitary pipe within the Town of DeMotte and eastward along SR-10 to the Kankakee Valley Intermediate, Middle, and High Schools. A majority of the sanitary pipe used is 8" in diameter. Original design of the collection system occurred in 1975

Chronic operational problems, rehab/replacement, documentation, Indiana CSO strategies.

Documents

There are currently no chronic operational problems. There are currently no plans to expand or replace any section of the current wastewater treatment plant. There are no current Notice of Violations (NOV), Warnings of Non-Compliance (WONC), Agreed Orders (AO), new NPDES requirements, or sewer ban notifications.

Significant Contributors

The significant contributors of wastewater within the Town of DeMotte are primarily residential. Commercial and industrial waste producers are the next largest contributors.

Table 4: Significant Contributors

Contributor Type	Average Monthly Volume (gal)
Residential	2,343,269
Commercial	601,106
Industrial	82,815
Government	15,045
Multi-Family	542,149
Public Fire	6,493
Private Fire	0
Educational	79,870
Religious	57,471

Table 5: Top 20 Contributors

Name	Address	Waste Contribution 5/2019 – 12/2019	Waste Contribution: 1/2020 – 9/2020
Oak Grove Christian Retirement	221 Division St. W.	2,222,979	1,649,411
Stamac Management, LLC	410 15th St. SE	1,741,888	Not a Top 20 User
Family Express	109 15th St SE,	1,185,209	1,106,108
Spencer Park Pool	112 Carnation St SE	637,564	Not a Top 20 User
McDonald's Corporation	338 Halleck St. N	561,539	606,844
CMS Management		499,557	331,857
Pizza Hut	425 N Halleck St	451,584	282,119
DeMotte Trails MHP	112 Carnation St SE	Not a Top 20 User	417,889
Schultz, Diane	1805 Kapok St SW	230,490	121,864
DeMotte Christian School	611 15th St. SW	223,249	110,178
Woolley, Dodi R. DDS	534 N Halleck St	211969	Not a Top 20 User
Porter Physicians, G	520 8th Ave NE	205,789	118,766
DQ Grill and Chill	341 N Halleck St	194,646	130,415
Advanced Auto	400 N Halleck St	193,776	Not a Top 20 User
Demotte Little League	750 15th St SW	188,294	Not a Top 20 User
DeMotte State Bank	210, 228, 305 Halleck St. S	Not a Top 20 User	163,430
Kallenbach, Richard	628 3rd Ave. NW	162,083	99,068
Walgreens Drug Store	226 Halleck St. N	Not a Top 20 User	157,925
Lacefield, Joshua		132,641	Not a Top 20 User
Covenant Christian High School	611 15th St SW	130,906	Not a Top 20 User

Chapter 3 – Future Needs

20-year Population Projection

According to the U.S. Census information from the Indiana Business Research Center, the population of DeMotte was 3,814 people in the 2010 census and was projected to increase to 4,082 people in 2018, showing a growth rate of 6.5% and placing DeMotte as the 64th fastest growing city or town in the state for this period.

The project will extend the NORWEJ system beyond the Town of DeMotte's borders; consequently, Jasper County projections were also researched for this report. According to the Indiana Business Research Center, the population of Jasper County is projected to be 33,879 people in 2020 and 37,906 people in 2040. According to these projections, the population of Jasper County is projected to grow by approximately 11.9% within the next 20-years.

Population projections are documented in Appendix D.

20-year Design Flow

The existing system services the entire Town of DeMotte and small portions of unincorporated Jasper County. Currently, the system is anticipated to expand in the next 20-years to include existing commercial businesses at the I-65/SR-10 interchange.

A table of design flows including domestic, commercial/institutional, industrial, peak sustained infiltration, average design flow, the peaking factor, the peak hourly inflow/wet weather infiltration, and peak design flow will be included when it is constructed.

A table of expected wasteloads in concentration units of PPM (mg/L) and pounds will be included when it is constructed.

With the expansion of the sanitary sewer it is expected that there will be increased wasteloads and flows at the existing wastewater treatment plant. Flows at the existing wastewater treatment plant are expected to change by an amount yet to be determined. The existing plant has enough capacity that it is anticipated that effluent limits will not change.

Receiving Stream

The current receiving stream that the existing wastewater treatment plant discharges into is the Evers Ditch. Stream Reach ID (NHD) 07120001000922.

Chapter 4 – Evaluation of Alternatives

Several alternatives were considered in addressing the problem of extending sanitary sewer to the existing businesses at the Exit 230 interchange at I-65. Alternatives concentrating on addressing routing include 1) No Action; 2) N 1100 W Route; 3) Northern Approach Route; and 4) SR 10 Route. The SR 10 Route is the selected alternate.

1. *No Action*

The No Action alternative does not address the project needs for extending sanitary sewer services to existing businesses at the Exit 230 interchange. Furthermore, it does not fit within the Town of DeMotte's plan to expand sanitary services to the rest of the residential properties within and around the Town.

2. *N 1100 W Route*

This alternative proposes to connect to sanitary sewer from the Field of Dreams park, located at 750 15th Street SW, DeMotte IN 46310 west parallel with CR W 1200 N to the intersection of CR N 1000 W and CR W 1200 N. Then, the sanitary sewer would continue south, parallel with CR N 1000 W to the intersection of CR N 1000 W and State Road 10.

This alternate was rejected because it did not meet the needs of extending sanitary service to INDOT's Kankakee Rest Stop.

3. *Northern Approach Route*

This alternative proposes to route the sanitary sewer west from the Field of Dreams park, located at 750 15th Street SW, DeMotte IN 46310 west parallel with CR W 1200 N to the intersection of CR W 1200 N and CR N 1000 W. From there, sanitary sewer would be installed south parallel with CR N 1000 W to the intersection of CR N 1000 W and CR W 1100 N. Then, sanitary sewer will be installed parallel with CR W 1100 N parallel with CR W 1100 N to the intersection of CR W 1100 N and Potomac Drive. Sanitary sewer will then be routed parallel with Potomac Drive through the Devries Manor and Renwald Manor subdivisions to the intersection of Potomac Drive and Georgetown Drive. From this intersection, sanitary sewer will be routed parallel with Georgetown Drive to INDOT's Kankakee Rest Stop.

Furthermore, in the Northern Approach Route, sanitary sewer will be routed south, parallel with Potomac Drive to the southern edge of the Devries Manor subdivision. Then it will be routed through the wooded area of the Devries Manor subdivision down to the existing businesses at the I-65 Exit 230 Interchange.

4. *SR 10 Route – Selected*

This alternative routes the sanitary sewer in easements parallel with SR 10 south from the Town limits to the intersection of SR-10/SR-110, thence west along SR-10 to the I-65/SR-10 interchange and existing businesses.

This is the selected option and is expect to cost $6,895,000 including contingency and engineering costs.

A list of other alternatives are: optimum operation/integration of existing facilities, collection system rehabilitation/replacement, existing wastewater treatment plant upgrades/expansions, new wastewater treatment plant, sludge handling & disposal alternative, and phasing. These alternatives do not address the project needs for extending sanitary sewer services to existing businesses at the Exit 230 interchange. Furthermore, it does not fit within the Town of DeMotte's plan to expand sanitary services to the rest of the residential properties within and around the Town.

The selected alternative was chosen due to its cost compared to other alternatives as well as its direct route along SR-10 south and west. This would provide a more straight forward construction and have minimal impact on local environments and ecosystems due to the proximity to existing infrastructure.

Chapter 5 – Evaluation of Environmental Impacts

Disturbed and Undisturbed Land

This project will be constructed within easements on INDOT right of way for SR-10 and should no impact farmlands. If farmlands are to be disturbed, the top soil will be stripped away and replaced, providing minimum impact to organic nutrient content of the topsoil. Borrow soil, if necessary, will come from directional drilling pits excavated for the project.

In Division A and B the proposed sanitary sewer will be located within easements parallel to and within the INDOT right of way of SR-10 as such it will be considered disturbed land.

See Appendix A for an exhibit showing the proposed improvements with an aerial photograph.

Historical and Architectural Resources

According to the Indiana Department of Natural Resources (IDNR) Buildings, Bridges, and Cemeteries Maps, the project is located near a few historic buildings or bridges. There is one notable and one contributing historic properties. The Cornelius Evers farm is rated as notable and the house at 9941 North State Road 10 is rated as contributing.

See Appendix A for maps showing the project location on the Indiana Department of Natural Resources (IDNR) Buildings, Bridges, and Cemeteries Maps.

Wetlands

There are no wetlands on or adjacent to any part of the proposed sanitary sewer project.

See Appendix A for a map showing wetland locations.

Hydrology

Surface Waters

The proposed route for Division A, Division B, and Division C will require crossing several perennial streams. These streams are unnamed ditches which are classified drainage flow lines. These ditches will be crossed by directional drilling.

This project will not affect waters of high quality listed in 327 IAC 2-1-2(3), exceptional use streams listed in 327 IAC 2-1-11(b), Natural, Scenic, and Recreational Rivers and Streams listed in 327 IAC 7-(2), Salmonid Streams listed in 327 IAC 2-1.5-5(a)(3) or waters on the Outstanding Rivers List (National Resources Commission Non-rule Policy Document).

See Appendix A for a map showing stream locations.

Groundwater

The project will required dewatering during construction. Dewatering flows will be settled in a settling basin prior to discharge. The project will not more than temporarily affect groundwater levels in the project area.

100-Year Floodplains and Floodways

No part of the project is located within the 100-year floodplain. The project was mapped on Federal Emergency Management Agency (FEMA) Panel 18073C0087C, and FIRMette panels 18073C0087C, 18073C0090C, and 18073C0070C.

FEMA maps showing the proposed project area are included in Appendix A.

Plants and Animals

The project will be implemented to minimize impact to non-endangered species and their habitat. Mitigation measures cited in comment letters from the Indiana Department of Natural Resources (IDNR) and the U.S. Fish and Wildlife Service (USFWS) will be implemented. No negative effects to plants and animals or wooded or scrub/shrub habitats are anticipated to result from this project.

Prime Farmland and Geology

The National Resource Conservation Service (NRCS) in Jasper County has been sent a copy of Form AD-1006, a soils map, and an exhibit showing the proposed improvements.

The State Conservationist's response on whether or not this project will cause a conversion of prime farmland, when received, will be included in Appendix F.

A copy of the form and soil maps are provided in Appendix F.

Air Quality

Jasper County is currently in compliance with National Ambient Air Quality (NAAQ) standards. No part of this project is expected to contribute regulated pollutants to the environment; consequently, this project is not expected to affect the compliance of Jasper County. Construction vehicles will be required to adhere to state emission regulations. While dust will be present during construction, it will be temporary and cease when construction is complete. Dust inhibitors and watering will be used during construction.

During construction, construction vehicles and machinery will create some noise pollution, and residents may be adversely affected by the noise. Special provisions for reducing construction noise, such as restricting work hours and maintaining equipment mufflers, will be implemented to reduce noise.

Open Space and Recreational Opportunities

The proposed project's construction and operation will neither create nor destroy open space and recreational opportunities.

Lake Michigan Coastal Program

The proposed project will not affect the Lake Michigan Coastal Zone.

National Natural Landmarks

The construction and operation of the proposed project will not affect National Natural Landmarks.

Mitigation Measures

Since more than 1-acre of land will be disturbed, a Stormwater Pollution Prevention Plan (SWPPP/SWP3) will be made and Indiana Rule 5 will be adhered to. Best Management Practices (BMPs) will be installed to reduce surface runoff.

Chapter 6 – Selected Plan

Project Components

The Town of DeMotte I-65 Utilities Improvements project consists of the following two phases:

> Division A: Sanitary Sewer extension from the Town of Demotte thence south to the intersection of SR 110 and SR 10 (approx. 3-miles)
>
> Division B: Sanitary Sewer extension from the intersection of SR 10 and SR 110 thence west across I-65/SR 10 interchange to County Line Road

Division A

The Division A sanitary sewer extension will consist of approximately 15,600 lineal feet of sanitary sewer and all appropriate fittings. This project will install new sanitary sewer in the existing right of way of SR-10.

The project will begin at the southern town limits of the Town of DeMotte and continue south for approximately 15,600 lineal feet parallel to and within the INDOT right of way of SR-10 to the intersection of SR-10 and SR-110.

The proposed sanitary sewer will allow the needs of the project to be met by extending the sewer south out of the Town of DeMotte to connect the existing businesses at the I-65/SR-10 Interchange. The sanitary sewer will be installed via trench cut or through directional drill where needed.

An exhibit showing the proposed improvements and cost estimates for this project is provided in Appendix E.

Division B

The Division B sanitary sewer extension will consist of approximately 15,600 lineal feet of sanitary sewer and all appropriate fittings. This project will install new sanitary sewer in the existing right of way of SR-10.

The project will begin at the intersection of SR-10 and SR-110 and continue west for approximately 16,800 lineal feet parallel to and within the INDOT right of way of SR-10 across the I-65/SR-10 Interchange to the county line.

The proposed sanitary sewer will allow the needs of the project to be met by extending the sewer west from the intersection of SR-10/SR-110 to connect the existing businesses at the I-65/SR-10 Interchange. The sanitary sewer will be installed via trench cut or through directional drill where needed.

An exhibit showing the proposed improvements and cost estimates for this project is provided in Appendix E.

Preliminary Design Summary

The Preliminary Design Summary, Attachment 4, is provided in Appendix F.

Project Layout

A layout of the proposed project is provided in Appendix E.

Project Component Costs

The following tables outline the costs of each component of the proposed project.

Table 6: Construction Costs

Type	Construction Project Cost	Contingencies	Total Costs
Division A	-	-	-
Division B	-	-	-
TOTAL CONSTRUCTION	$3,623,930	$362,390	$3,986,320

Table 7: Total Project Costs

Type	Project Cost
Administrative and Legal	-
Land and Right of Way Acquisition	-
Relocation	-
Engineering Fees	$344,270
Construction	$3,986,320

Project Inspection	$181,200
Total Project Cost	**$4,511,790**

Itemized preliminary construction cost opinions are included in Appendix E.

Project Schedule

The system improvements have been divided into two phases.

Anticipated schedules for the projects are below:

Table 8: Division A

Milestone	Completion Date
Plans and Specifications	March 1, 2021
Land and Easement Acquisition	N/A
Bid Advertisement	March 19, 2021
Loan Closing	March 19, 2021
Contract Award	April 1, 2021
Initiation of Construction	April 15, 2021
Substantial Completion of Construction	October 1, 2021
Initiation of Operation	**November 1, 2021**

Table 9: Division B

Milestone	Completion Date
Plans and Specifications	June 15, 2021
Land and Easement Acquisition	June 15, 2021
Bid Advertisement	June 28. 2021
Loan Closing	March 19, 2021
Contract Award	July 28, 2021
Initiation of Construction	September 8, 2021
Substantial Completion of Construction	March 2, 2022
Initiation of Operation	**April 7, 2021**

Phasing:

The I-65 Utilities Extension project will be constructed in two phases: Division A and Division B. Each phase will be constructed according to the schedules above. Phases are expected to be constructed concurrently.

Green Project Reserve (GPR) Sustainability Incentive:

The Green Project Reserve (GPR) Sustainability Incentive will not be pursued for this project.

Chapter 7 – Legal, Financial, and Managerial Capabilities

SRF Forms

See Appendix F for the Signatory Authorization and PER Acceptance Resolution.

See Appendix F for the SRF Financial Information Form.

Letters of intent from land and easement owners, when available, will be provided in Appendix A.

A copy of the signed agreements, when available, will be provided in Appendix A.

Chapter 8 – Public Participation

A public hearing will be held regarding this project. The notice will be published in the Northwest Indiana Times 10-days prior to the hearing and the notice will be included in Appendix G.

The PER will be available for public review at the Town of DeMotte Town Hall 10 days prior to the public hearing. Written comments will be accepted at the hearing and for five days after the hearing; written comments will be sent to the DeMotte Town Hall, 112 Carnation Street SE, DeMotte, IN 46310.

A copy of the Public Hearing notice is available in Appendix G.

A sign in sheet, copy of the minutes, written comments, and self-sticking mailing labels to attendees, interested parties, and local media outlets will be provided after the hearing is held.

Appendix A
Exhibits

EXHIBIT A-1: USGS Topographic Maps - DeMotte Quad

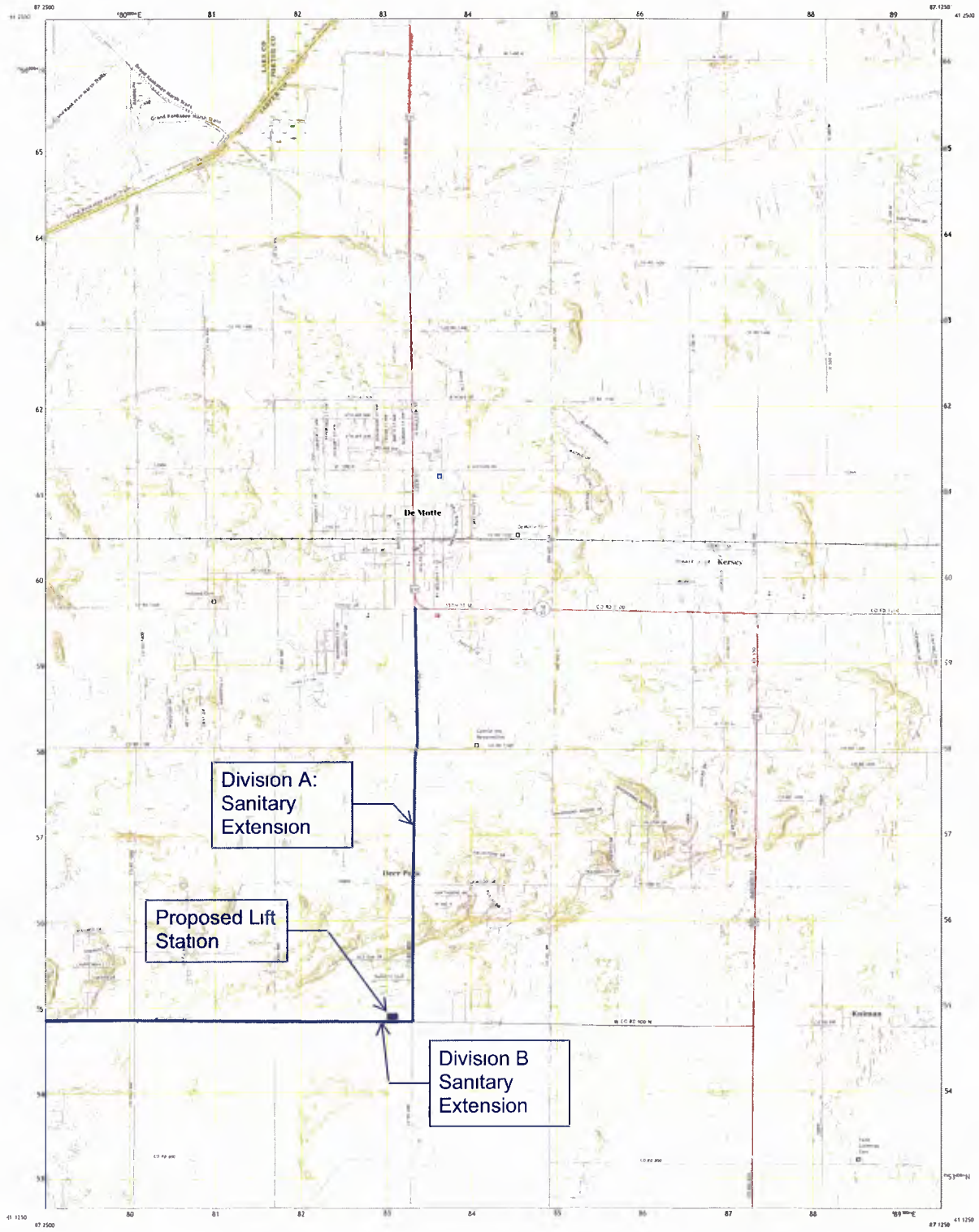


EXHIBIT A-1: USGS Topographic Maps - Shelby Quad

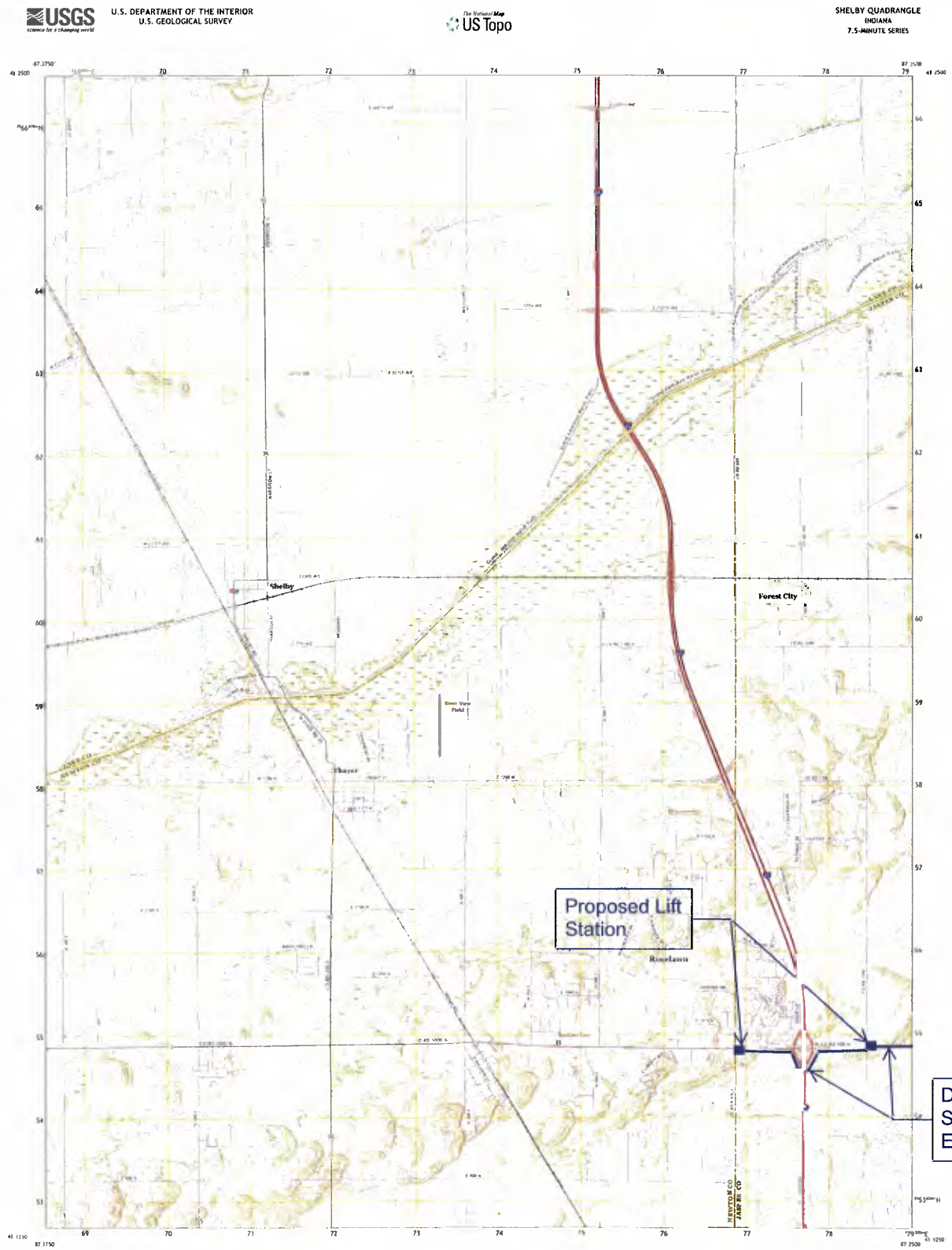
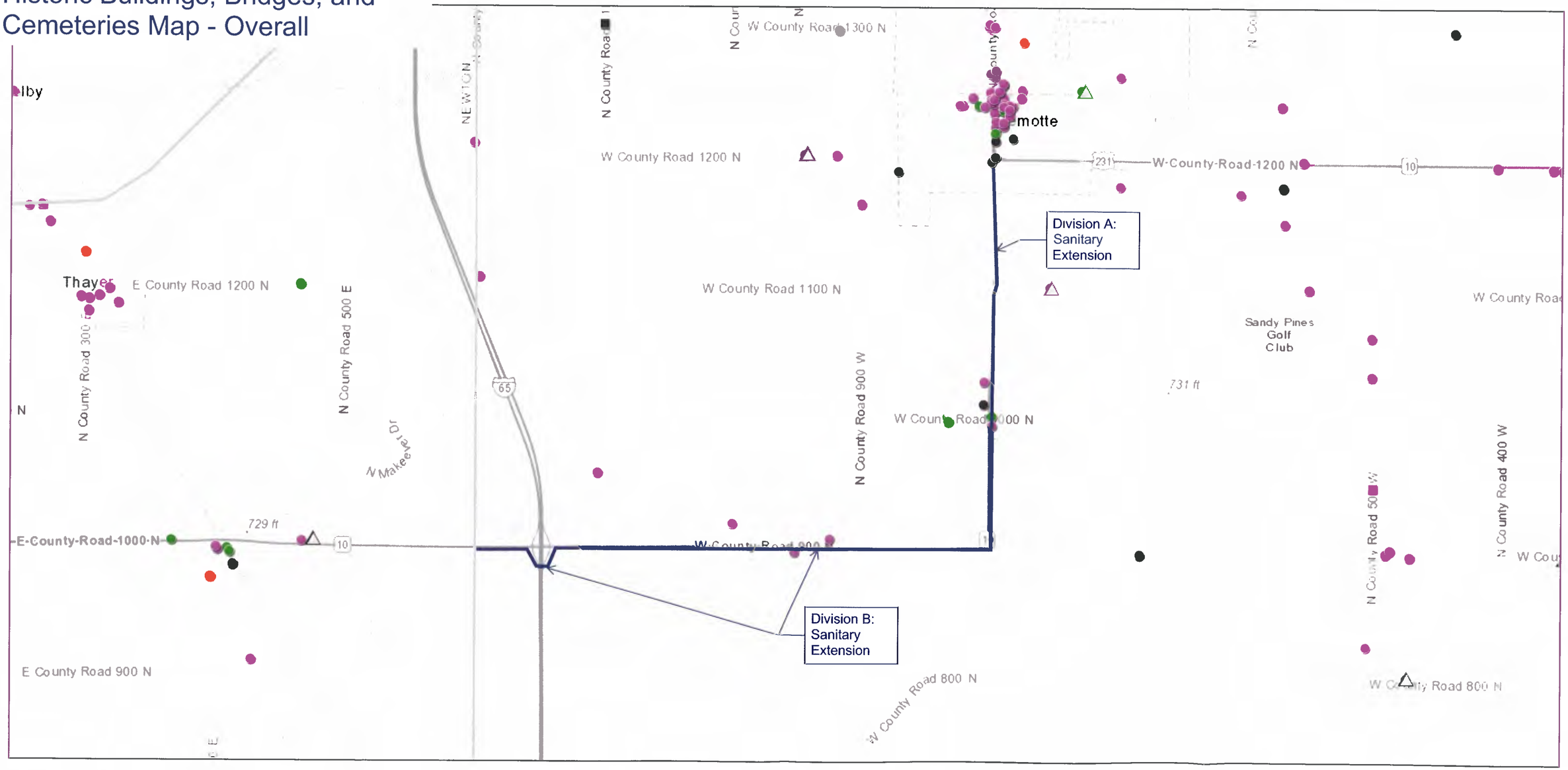


EXHIBIT A-2:
Historic Buildings, Bridges, and Cemeteries Map - Overall

Historic Buildings, Bridges, and Cemeteries Map



10/4/2020, 11:03:07 AM

- Cemeteries
- **Historic Bridges**
  - Contributing
  - Demolished
- **County Survey Sites**
  - Outstanding
  - Notable
  - Contributing
  - Demolished

1:63,360

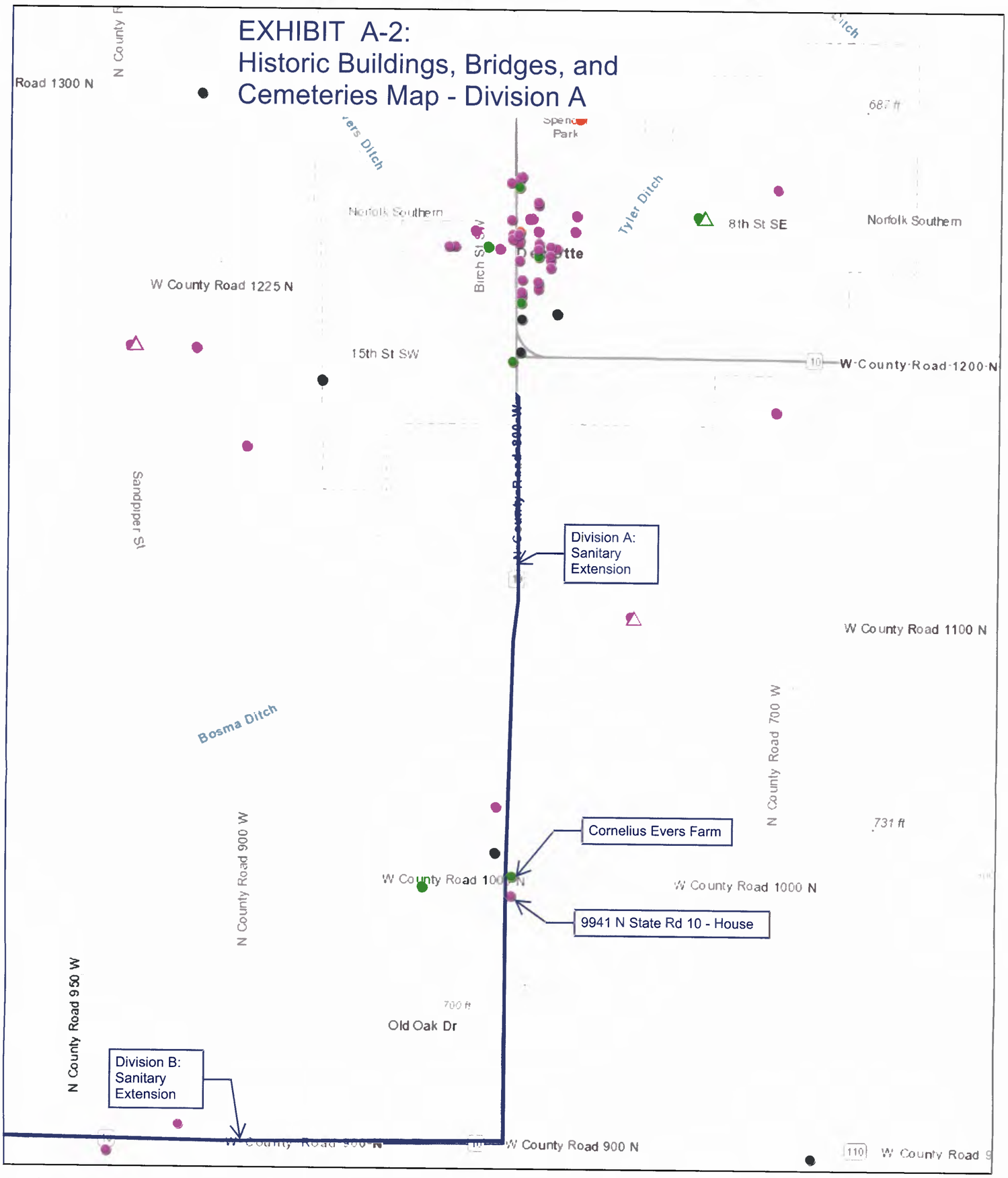
0 0.75 1.5 3 mi

0 1.25 2.5 5 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Indiana DNR DHPA

Historic Buildings, Bridges, and Cemeteries Map



10/4/2020, 11:11:24 AM

- Cemeteries

County Survey Sites

- Outstanding
- Notable
- Contributing
- Demolished

1:31,680

0 0.35 0.7 1.4 mi

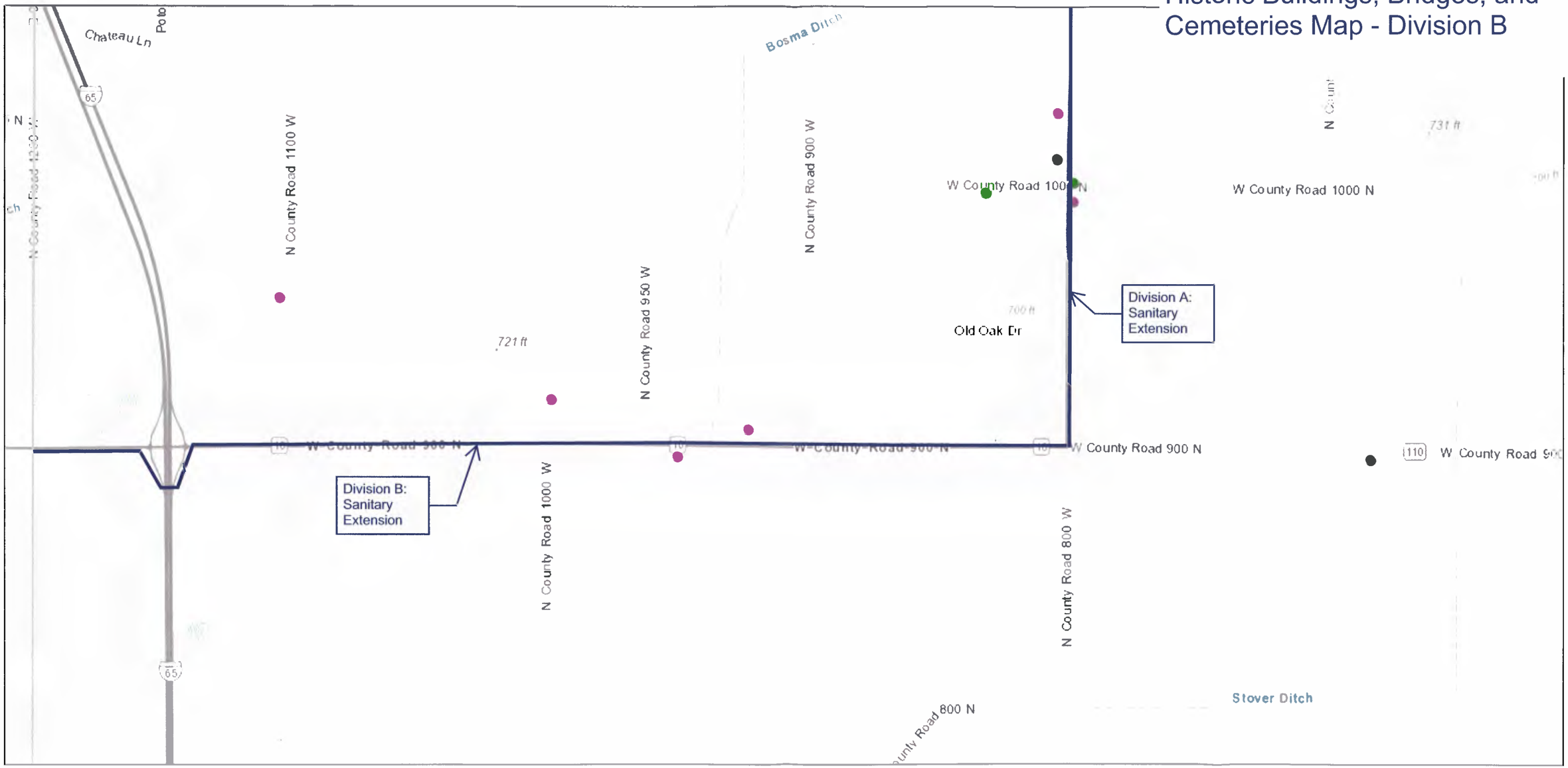
0 0.5 1 2 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Indiana DNR DHPA

Historic Buildings, Bridges, and Cemeteries Map

EXHIBIT A-2:
Historic Buildings, Bridges, and Cemeteries Map - Division B



10/4/2020, 11:30:15 AM

County Survey Sites

- Notable
- Contributing
- Demolished

1:31,680

0 0.375 0.75 1.5 mi

0 0.5 1 2 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Indiana DNR DHPA

IN.gov SHAARD

EXHIBIT A-2:
Historic Buildings, Bridges, and Cemeteries Map

IHSSI (County Survey)

Survey Number: 073-161-10025
Rating: Notable
Historic Name: Cornelius Evers Farm
Year Dataset Compiled: 2001
National Register File Number: -

Survey County

County	Legal Township(s)	Quad Name(s)
Jasper	Keener	DeMotte

Address: State Road 10
City: -
Location Notes: Southeast corner at County Road 1000 North

Coordinates

Easting	Northing
483339	4556417

EXHIBIT A-2:
Historic Buildings, Bridges, and Cemeteries Map

Common Name: Cornelius Evers Farm
Category: Building
Visible?: ☐
Historic District?: ☐
Historic District Name: -
Ownership: private

Use: Present

Residence: ☑ Commercial: ☐ Vacant: ☐
Other: ☐
Other: ☐

Use: Past

Residence: ☑ Commercial: ☐ Vacant: ☐
Other: ☐
Other: ☐

Surveys/Legal Protections

National Register: ☐ State Register: ☐ Hoosier Homestead: ☐
National Historic Landmark: ☐ Local Designation: ☐ Protective Covenants: ☐
Other: ☐

Areas of Significance: AGRICULTURE, ARCHITECTURE, VERNACULAR/CONSTRUCTION
Other Significance: -
Endangered: No
Explanation: -

Number of Contributing Resources: 4
Number of Non-contributing Resources: 1

Environment: Rural/Highway frontage
Bibliography: Owner-resident

Structure Type

Bridge: ☐
Cemetery: ☐
Other: ☑

Time Period(s): c. 1885
Condition: Excellent
Year Demolished: -
Integrity: Slightly Altered
Date Moved: -
Alterations: -

Style: -

Type/Vernacular: Gable front

Architect/Builder	Architectural Firm	Affiliation
-	-	

EXHIBIT A-2:
Historic Buildings, Bridges, and Cemeteries Map

Replacement

Windows: ☐ Roof: ☐

Other: ☑ Description: Lower level windows

Additions

Siding: ☐ Wings: ☐

Other: ☐

Removals: -

Stories

1: ☐ 1 1/2: ☑ 2: ☐ 2 1/2: ☐

Other: ☐

Plan

Rectangular: ☑ Polygonal: ☐

L: ☐ T: ☐ X: ☐ U: ☐

Irregular: ☐ Other: ☐

Depth

Single-Pile: ☐ Double-Pile: ☐

Irregular/Massed: ☑ Other: ☐

Number of Bays: -

Foundation: OTHER

Foundation Description: Rock face block

Walls Description: Clapboard, corner boards, wide frieze under verges and eaves

Other Walls: -

Roof

Side-Gable: ☐ Front-Gable: ☑ Cross-Gable: ☐

Hip: ☐ Pyramidal: ☐ Mansard: ☐

Other: ☐

Material: ASPHALT

Features: T pattern shingles, steep pitches, medium extension all around, modest fascia, boxed cornice/molding, sloped soffit on eaves, 2 ridge pole, chimney piles

Porches

Front: ☐ Side: ☐ Back: ☐

Notes: Concrete stoop only

Openings: Left-center entry; upper level gable windows original- 1/1 wood sash, flat surrounds, plain trim, molded entablature over windows and entry on facade, rear center entry, rear upper level window features, 4/4 sash

EXHIBIT A-2: Historic Buildings, Bridges, and Cemeteries Map

Interior: -

Outbuildings: Garage,
Livestock barn,
Milk house

Notes: Garage: gable front, tin sheet roof, 1 bay, swinging doors, vertical wood siding, extension shed at front; barn: gable side, south shed extension, concrete foundation, horizontal drop siding, asphalt shingle roof, wall dormer (hay barn) on west *

Statement of Significance: -

Architectural Description: Very well preserved example, continuous family ownership. Some people has speculated that it was a schoolhouse. Although the form might suggest it, this is not the case. Family moved from Roseland and reproduced the home that was owned there. Certainly the oldest, best expressed resource in the locale.

*side, features square 4 light windows; milk house: gable front, drop wood siding, corner boards, asphalt shingle roof (T-Shape)

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EXHIBIT A-2:
Historic Buildings, Bridges, and Cemeteries Map

IHSSI (County Survey)

Survey Number: 073-161-10026
Rating: Contributing
Historic Name: House
Year Dataset Compiled: 2001
National Register File Number: -

Survey County

County	Legal Township(s)	Quad Name(s)
Jasper	Keener	DeMotte

Address: 9941 North State Road 10
City: -
Location Notes: Located on east side, south of 1000 North, south of Deer Park Addition

Coordinates

Easting	Northing
483346	4556320

EXHIBIT A-2:
Historic Buildings, Bridges, and Cemeteries Map

Common Name: Luzadder House
Category: Building
Visible?: ☐
Historic District?: ☐
Historic District Name: -
Ownership: private

Use: Present

Residence: ☑ Commercial: ☐ Vacant: ☐
Other: ☐
Other: ☐

Use: Past

Residence: ☑ Commercial: ☐ Vacant: ☐
Other: ☐
Other: ☐

Surveys/Legal Protections

National Register: ☐ State Register: ☐ Hoosier Homestead: ☐
National Historic Landmark: ☐ Local Designation: ☐ Protective Covenants: ☐
Other: ☐

Areas of Significance: ARCHITECTURE, VERNACULAR/CONSTRUCTION
Other Significance: -
Endangered: No
Explanation: -

Number of Contributing Resources: 1
Number of Non-contributing Resources: 0

Environment: -
Bibliography: Current owner/resident

Structure Type

Bridge: ☐
Cemetery: ☐
Other: ☑

Time Period(s): c. 1918
Condition: Fair
Year Demolished: -
Integrity: Severely Altered
Date Moved: c. 1948
Alterations: -
Style: -

Type/Vernacular: Gable front

Architect/Builder	Architectural Firm	Affiliation
-	-	

EXHIBIT A-2:
Historic Buildings, Bridges, and Cemeteries Map

Replacement

Windows: ☑ Roof: ☐
Other: ☐

Additions

Siding: ☑ Wings: ☐
Other: ☐
Removals: -

Stories

1: ☐ 1 1/2: ☐ 2: ☑ 2 1/2: ☐
Other: ☐

Plan

Rectangular: ☑ Polygonal: ☐
L: ☐ T: ☐ X: ☐ U: ☐
Irregular: ☐ Other: ☐

Depth

Single-Pile: ☐ Double-Pile: ☐
Irregular/Massed: ☑ Other: ☐

Number of Bays: -
Foundation: CONCRETE
Foundation Description: Finished block, basement
Walls Description: Wide vinyl, high, vertical profile to form
Other Walls: -

Roof

Side-Gable: ☐ Front-Gable: ☑ Cross-Gable: ☐
Hip: ☐ Pyramidal: ☐ Mansard: ☐
Other: ☐
Material: ASPHALT
Features: Shingle, medium pitch, minimal extension all around, plain fascia, boxed sloped soffit

Porches

Front: ☐ Side: ☐ Back: ☑
Notes: Shed type lean to plywood

Openings: Symmetrical, center facade entry, modern door, arrangement and sizing appears original, material is modern

Interior: -

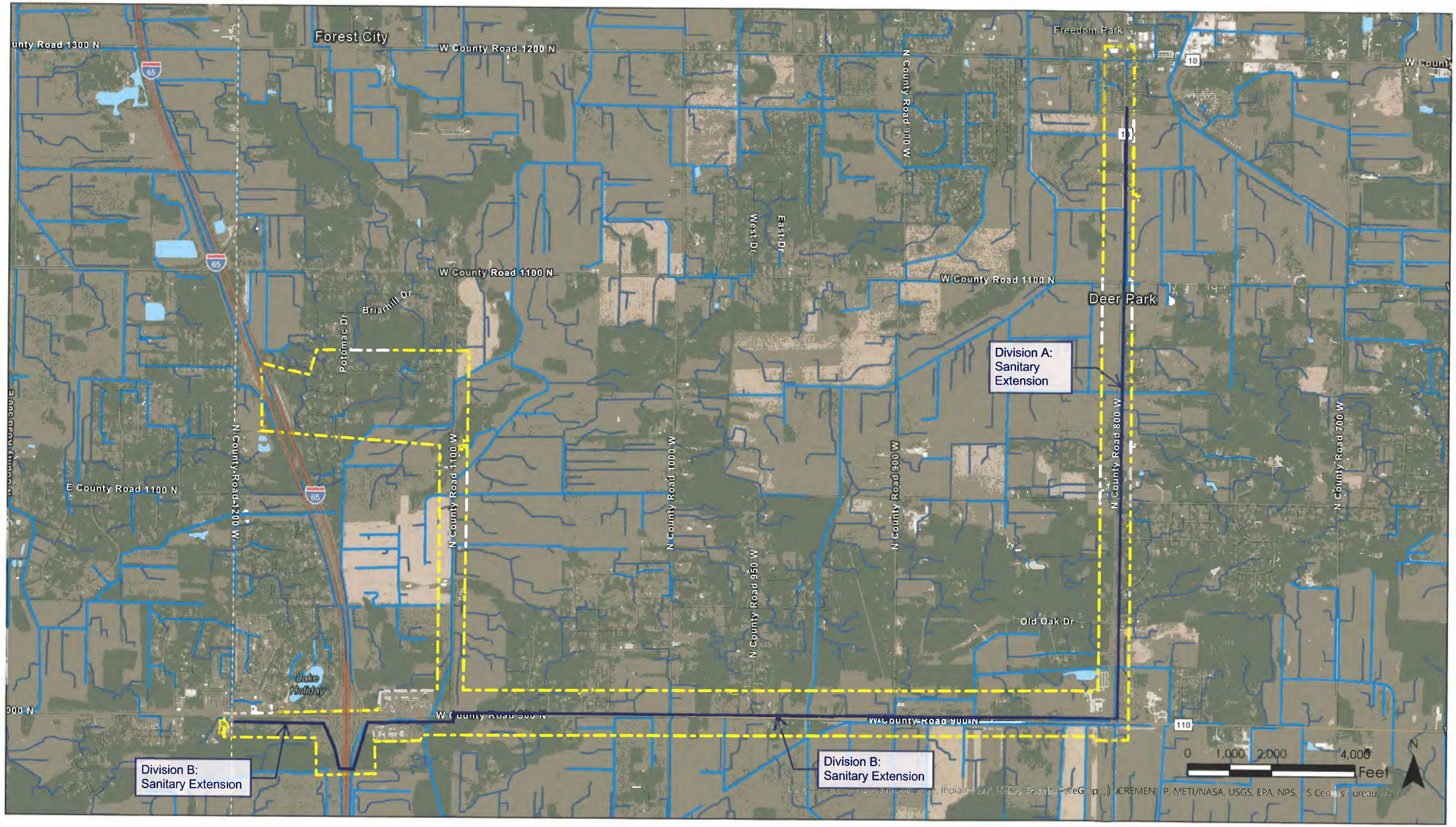
Outbuildings: -

Notes: -

EXHIBIT A-2:
Historic Buildings, Bridges, and Cemeteries Map

Statement of Significance: -

Architectural Description: Purity of the form and its distinctiveness of the profile encourages its inclusion. Resident was able to cite its approximate age, which is consistent with the observation. Approximate date of move to present location is fixed by their citation and material form of the basement foundation.

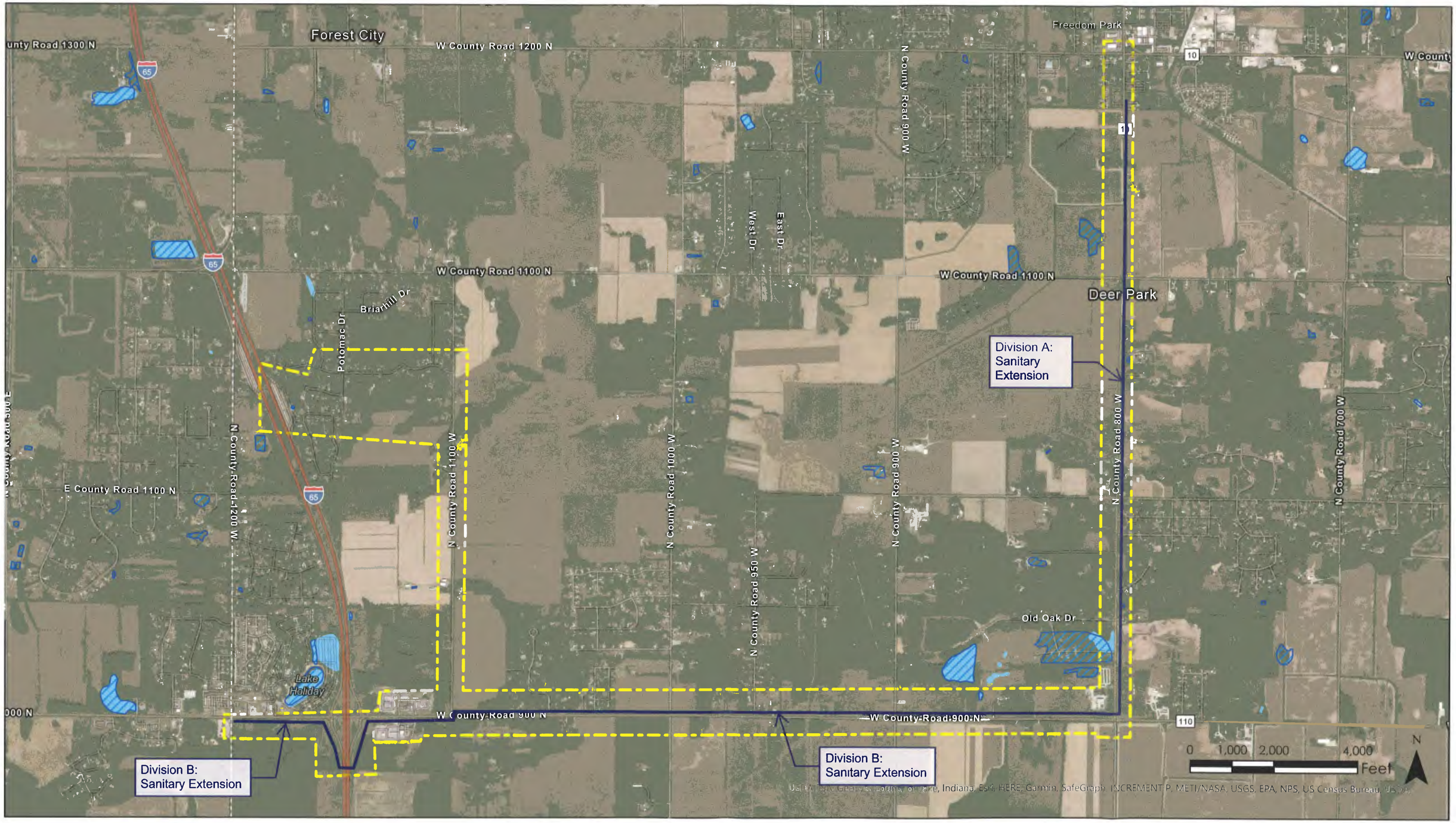


HYDROLOGY

- Classified Drainage Flowlines
- Unclassified Drainage Flowlines
- Waterbodies
- Project Area

I-65 UTILITIES EXTENSION IMPROVEMENT PROJECT

ABONMARCHE



WETLANDS

- Project Area
- NWI 2014
- NWI 1992

I-65 UTILITIES EXTENSION IMPROVEMENT PROJECT

ABONMARCHE

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the **FIRM** for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Indiana State Plane West Zone (FIPS zone 1302). The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood **elevations** on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location **information for bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey **at (301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from the 2013 Indiana Orthophotography (IndianaMap Framework Data www.indianamap.org) This information was photogrammetrically compiled at a **scale** of 1:2400 from **aerial** photography dated spring 2013.

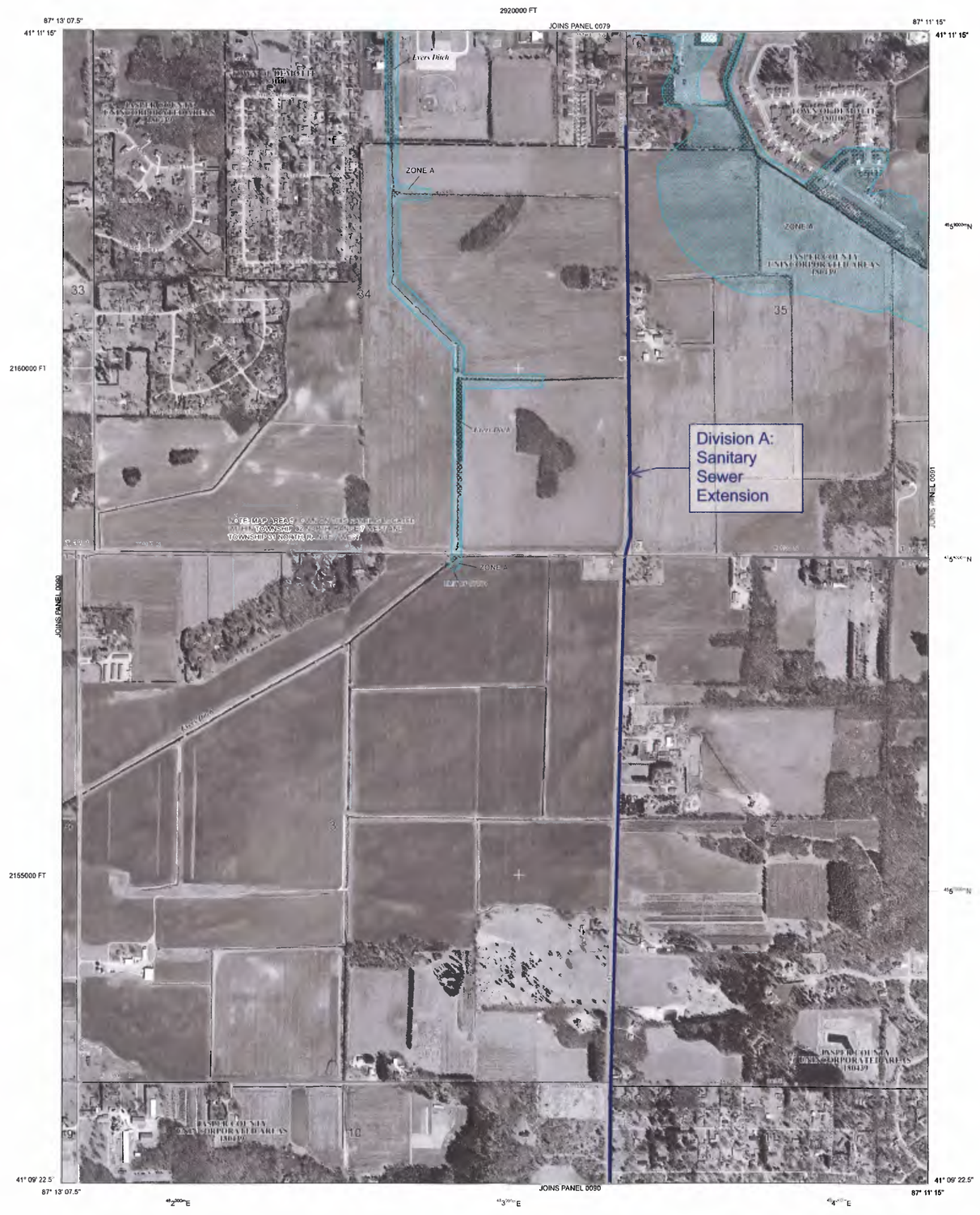
The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the **separately** printed **Map** Index for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order **products,** or the National Flood Insurance Program in **general,** please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equalled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined
ZONE AE	Base Flood Elevations determined
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a federal flood protection system under construction; no Base Flood Elevations determined
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% Annual Chance Floodplain Boundary

0.2% Annual Chance Floodplain Boundary

Floodway boundary

Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.

513 — Base Flood Elevation line and value; elevation in feet*

(EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

A — A — Cross section line

23 — 23 — Transect line

Culvert

Bridge

45° 02' 08", 93° 02' 12" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere

3100000 FT — 5000-foot ticks: Indiana State Plane West Zone (FIPS Zone 1302), Transverse Mercator projection

[illegible]"N — 1000-meter Universal Transverse Mercator grid values, zone 16

DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)

M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
December 21, 2018

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For **community map** revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 METERS

PANEL 0087C

FIRM

FLOOD INSURANCE RATE MAP

JASPER COUNTY, INDIANA AND INCORPORATED AREAS

PANEL 87 OF 525

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DEMOTTE, TOWN OF	180100	0087	C
JASPER COUNTY	180439	0087	C

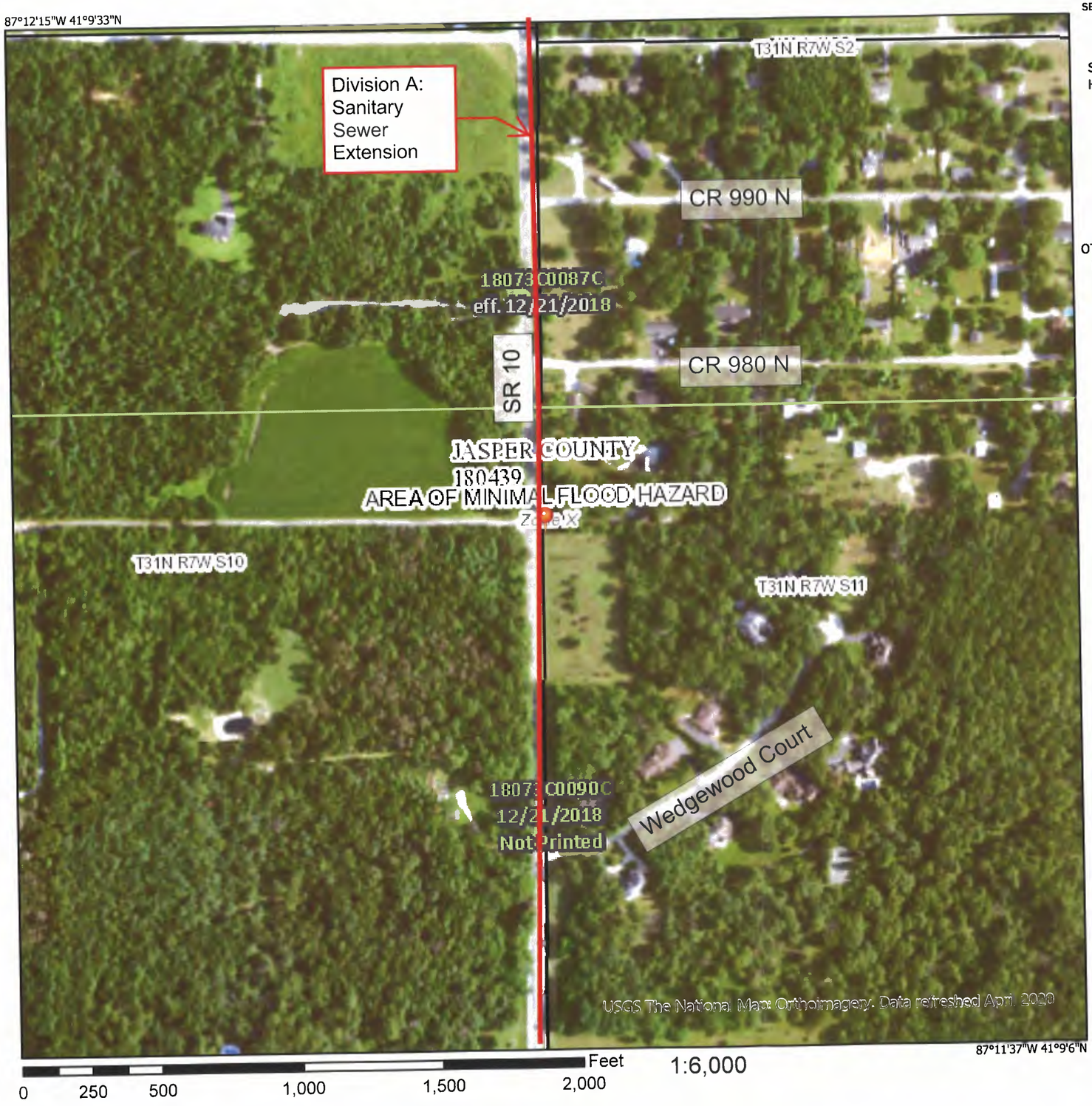
Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
18073C0087C
EFFECTIVE DATE
DECEMBER 21, 2018

Federal Emergency Management Agency

National Flood Hazard Layer FIRMette

FEMA



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 — Cross Sections with 1% Annual Chance
- 17.5 — Water Surface Elevation
- Coastal Transect
- 513 — Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

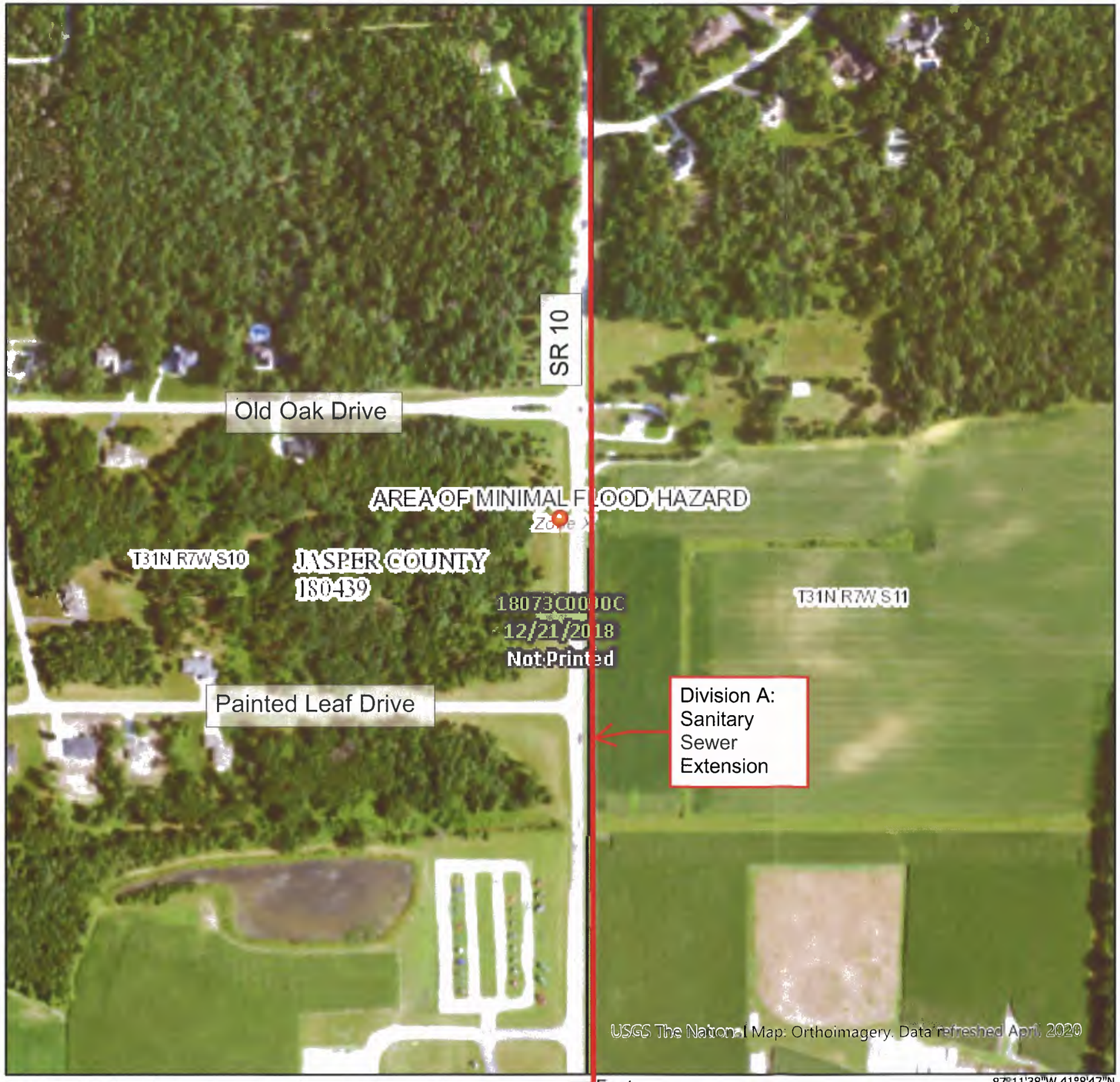
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 3:39 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°12'16"W 41°9'14"N



87°11'38"W 41°8'47"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

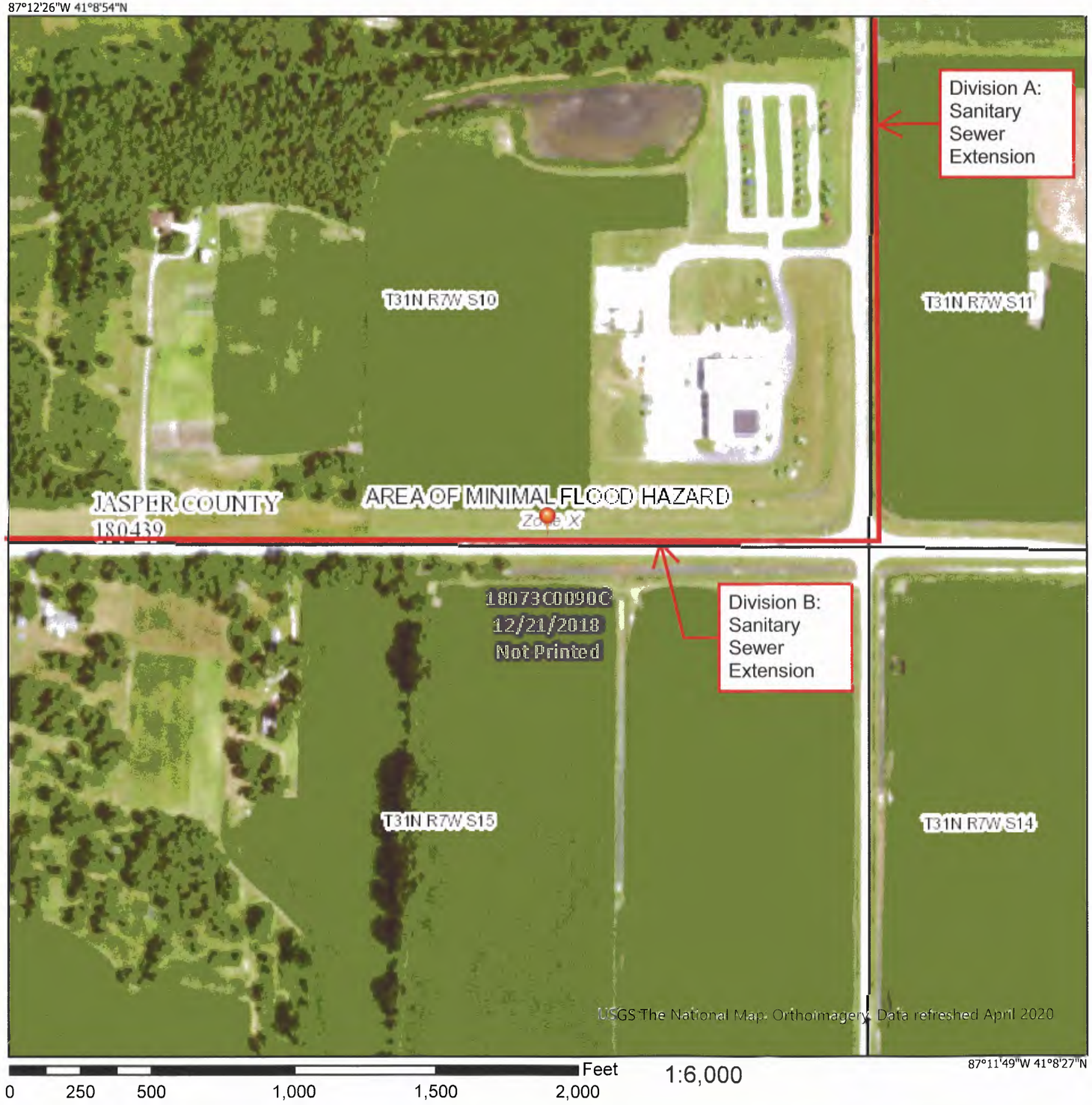
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 3:41 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°12'26"W 41°8'54"N



87°11'49"W 41°8'27"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

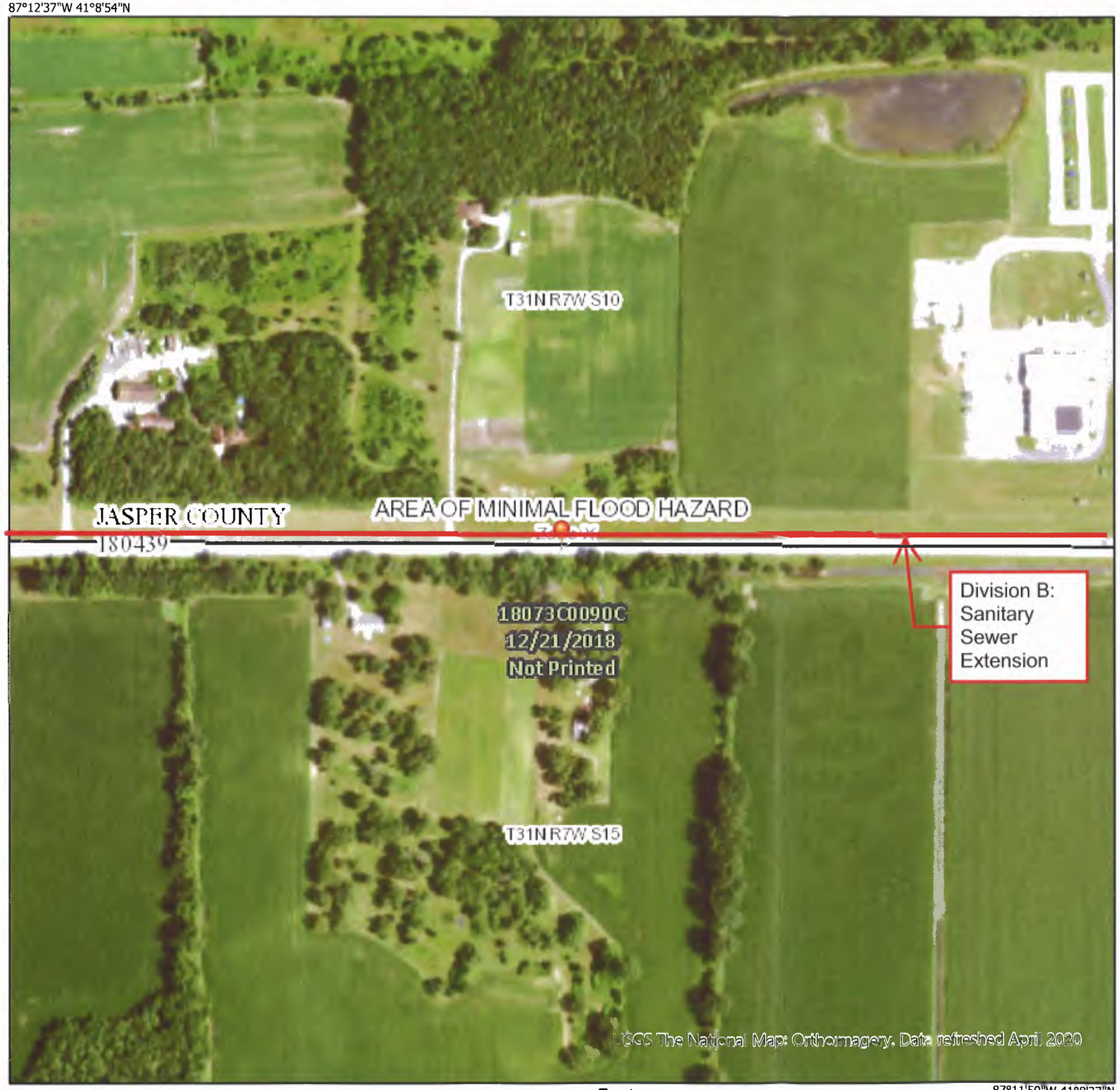
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 3:43 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°12'37"W 41°8'54"N



87°11'59"W 41°8'27"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

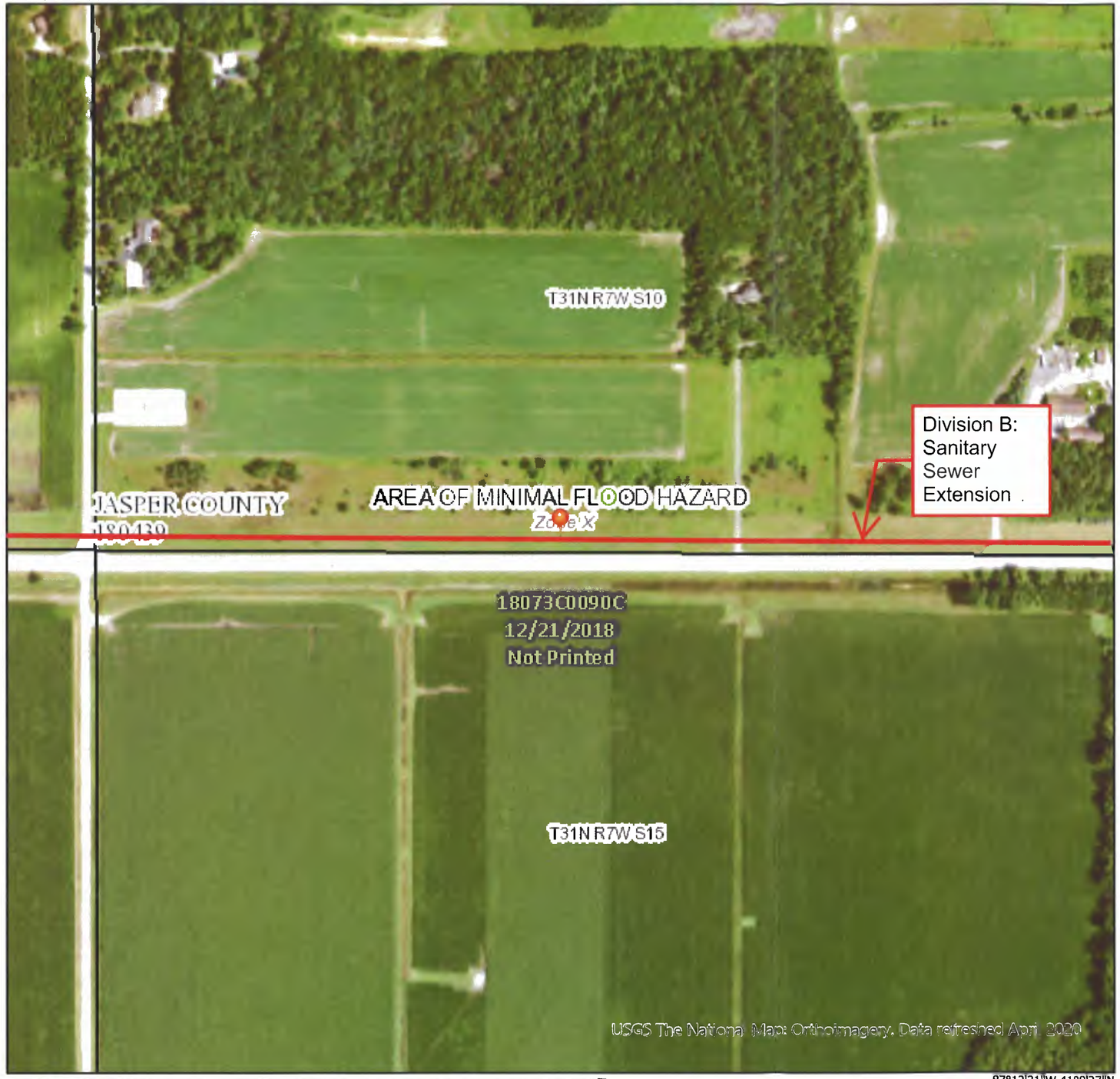
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 3:44 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°13'8"W 41°8'54"N



87°12'31"W 41°8'27"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 3:52 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°13'36"W 41°8'56"N

87°12'59"W 41°8'29"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 3:53 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°13'55"W 41°8'54"N

87°13'18"W 41°8'27"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

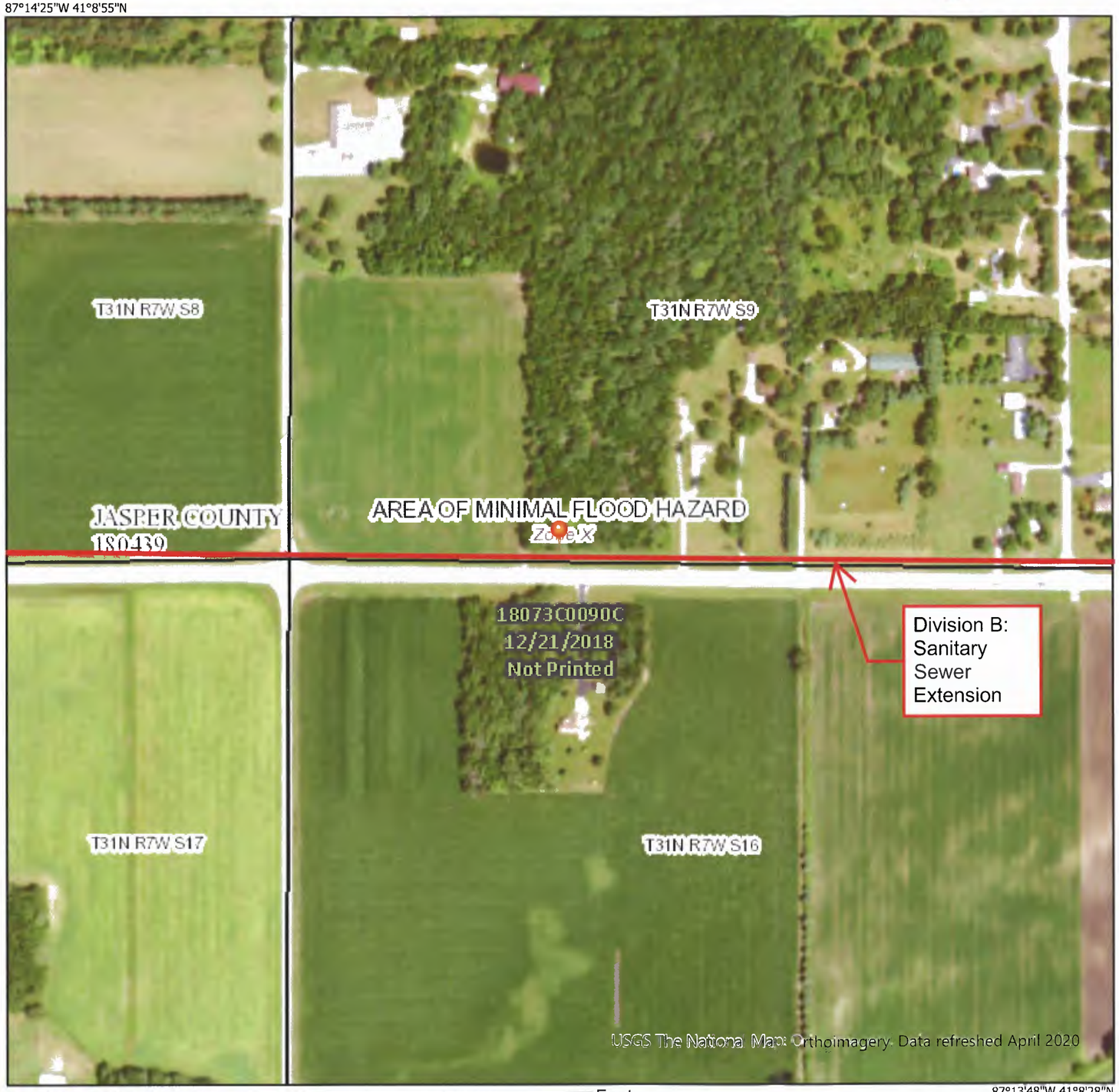
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 3:57 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°14'25"W 41°8'55"N



87°13'48"W 41°8'28"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

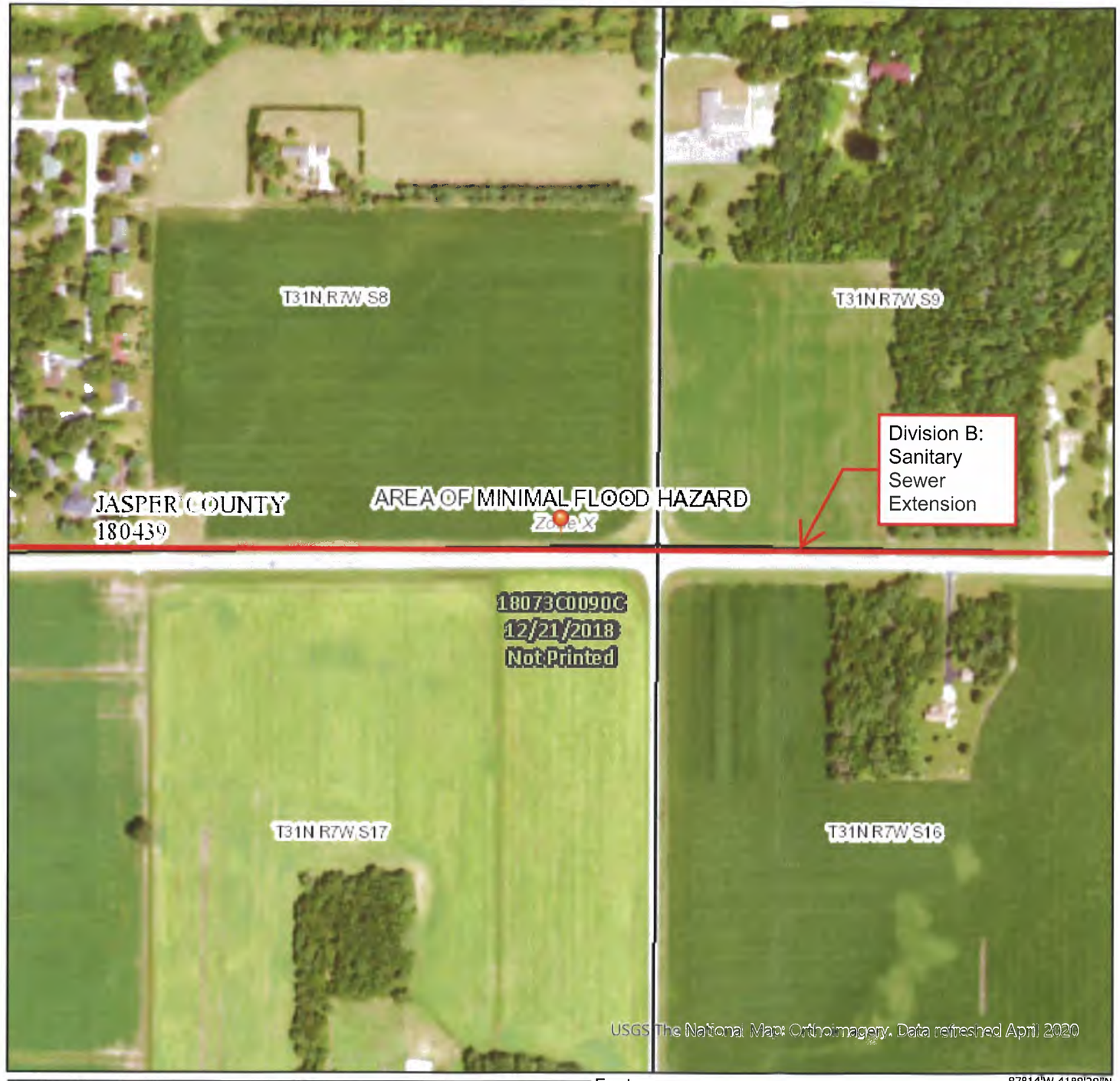
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 3:58 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°14'38"W 41°8'55"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

87°14'W 41°8'28"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 3:59 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°14'55"W 41°8'54"N

87°14'17"W 41°8'27"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 — Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

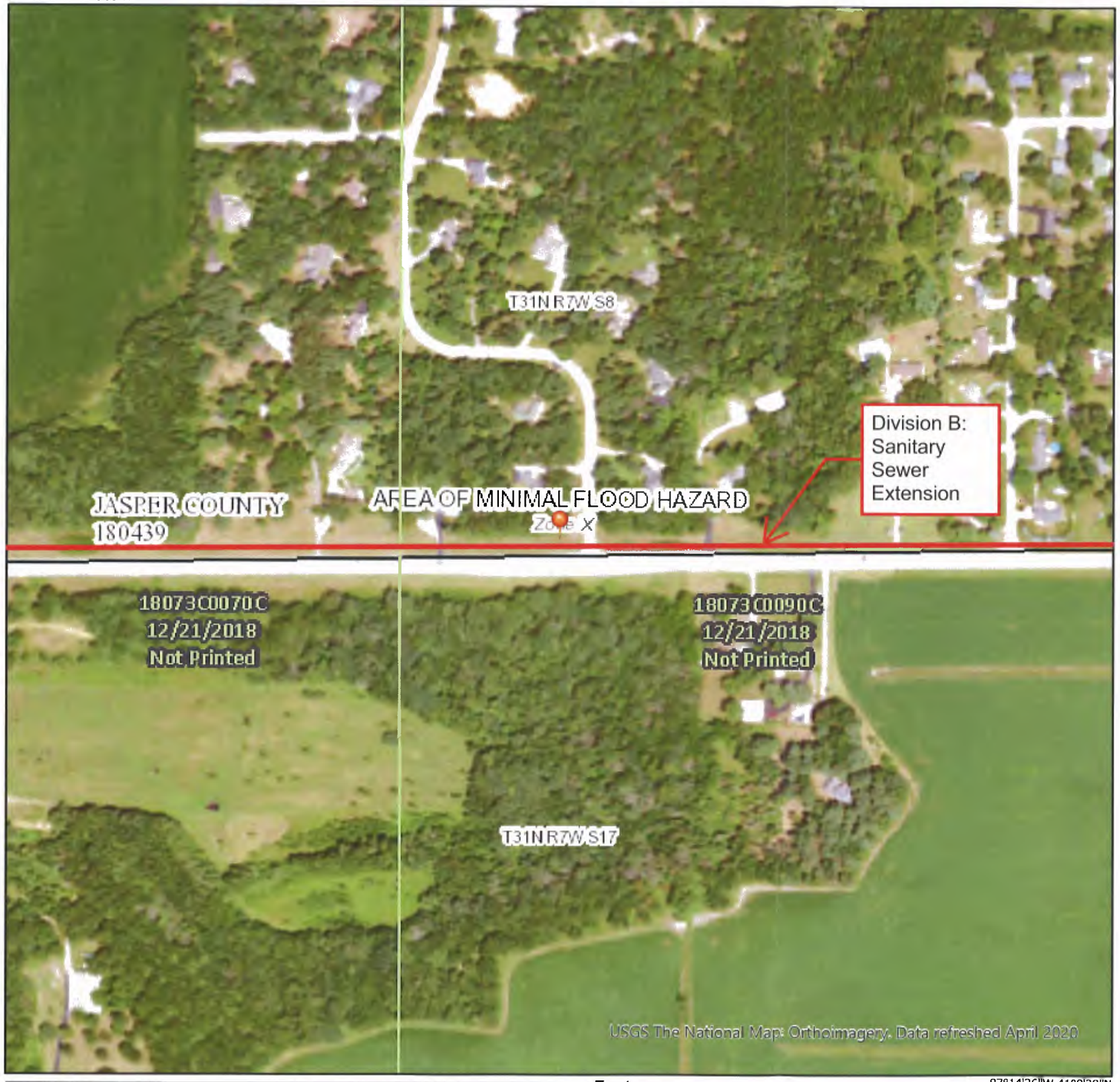
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 4:00 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°15'13"W 41°8'55"N



87°14'36"W 41°8'28"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 — Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 4:01 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°15'38"W 41°8'54"N

87°15'1"W 41°8'27"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

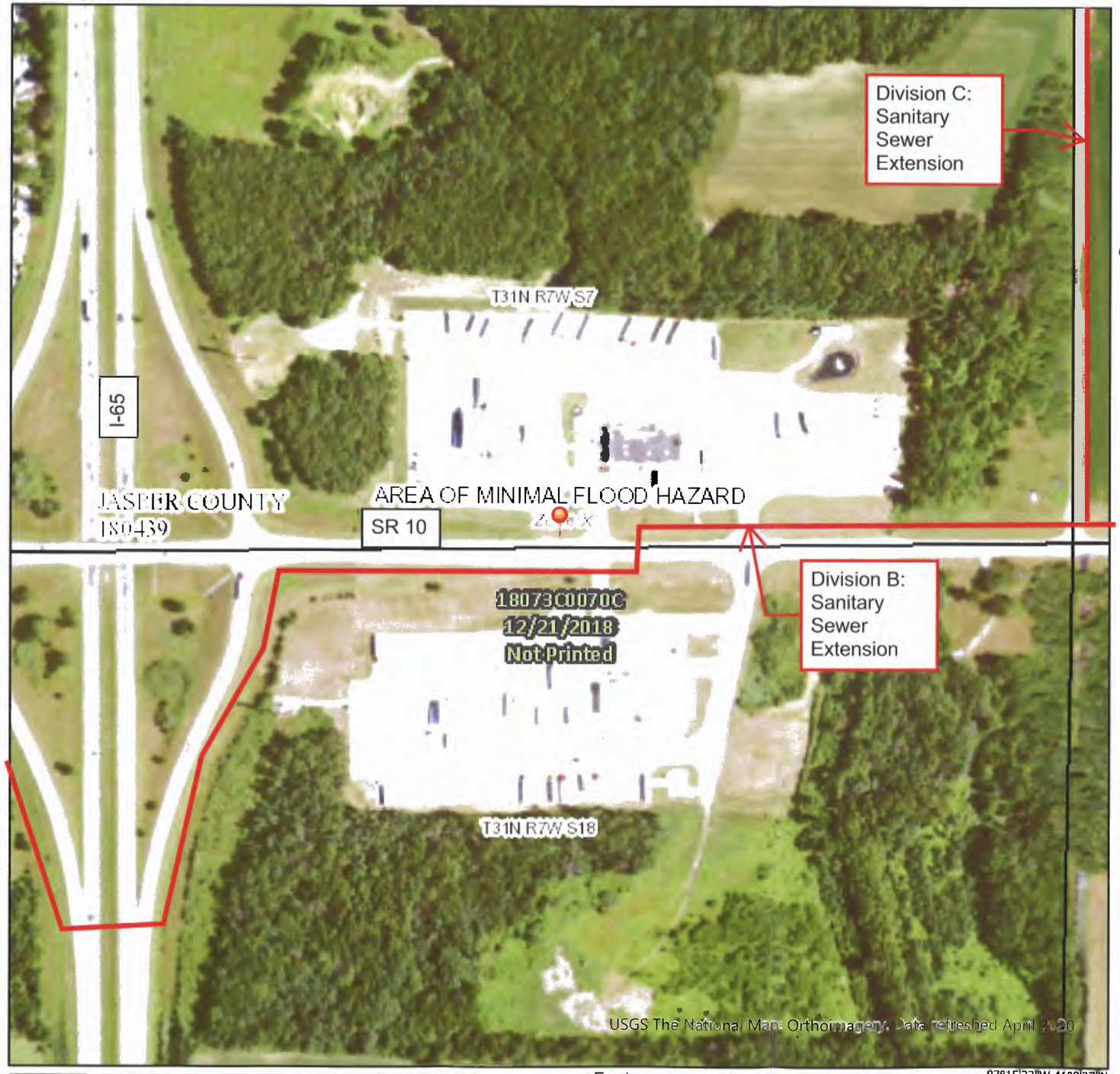
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 4:02 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°16'W 41°8'54"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

87°15'23"W 41°8'27"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

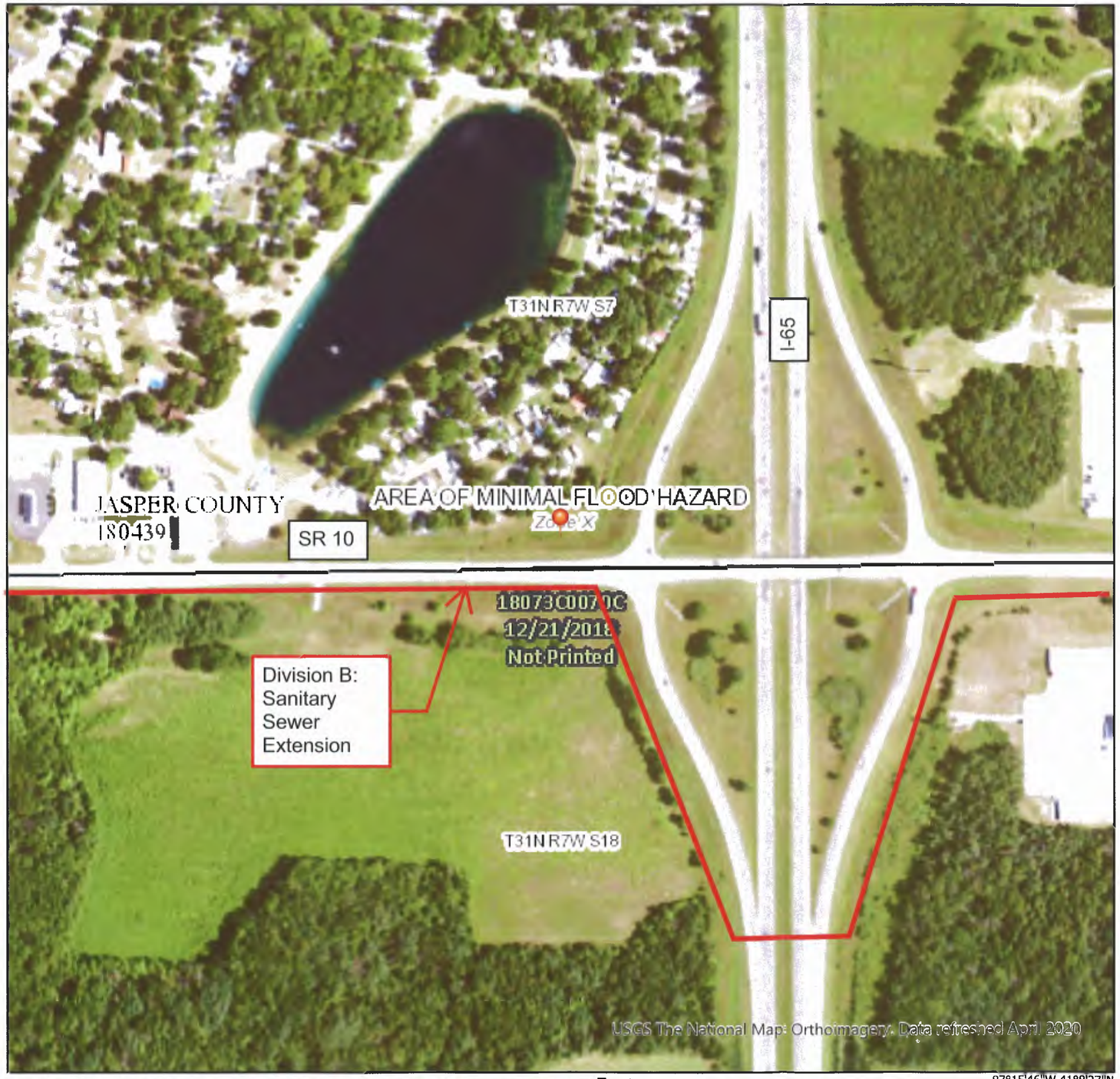
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 4:02 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°16'23"W 41°8'54"N



87°15'46"W 41°8'27"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 4:05 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

87°16'44"W 41°8'54"N

87°16'6"W 41°8'27"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2020 at 4:06 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

EXHIBIT A-10: Photographs

PHOTOGRAPH LOCATIONS
DIVISION A

GRAPHIC SCALE
600 0 300 600 1200
(IN FEET)
1 inch = 600 ft.

ABONMARCHE

17 N. Washington St
Valparaiso, IN 46383
T 219 850 4624
F 219 850 4625
abonmarche.com

Battle Creek, Benton Harbor, Manistee, South Haven, Goshen, Hobart, Lafayette, South Bend, Valparaiso

Engineering · Architecture · Land Surveying

PROJECT: TOWN OF DEMOTTE I-65 UTILITIES EXTENSION IMPROVEMENT PROJECT PER

SHEET TITLE: PROPOSED IMPROVEMENTS PHOTO LOCATION EXHIBIT DIVISION A

DRAWN BY:	MTE
DESIGNED BY:	N/A
PM REVIEW:	N/A
QA/QC REVIEW:	N/A
DATE:	OCTOBER 2020
SEAL:	
SIGNATURE:	
DATE:	

HARD COPY IS INTENDED TO BE 24" X 36" WHEN PLOTTED. SCALE(S) INDICATED AND GRAPHIC QUALITY MAY NOT BE ACCURATE FOR ANY OTHER SIZES

SCALE: HORZ: 1" = 600' VERT: N/A

ACI JOB #: 20-1421

SHEET NO.: 1 of 16

NO.	REVISION DESCRIPTION	BY	DATE

EXHIBIT A-10· Photographs

1-1

2-1

3-1

4-1

5-1

6-1

DIVISION A - PHOTOGRAPHS
SETS 1-6

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T 219.850.4624
F 219.850.4625
abonmarche.com
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Engineering Architecture Land Surveying

PROJECT: TOWN OF DEMOTTE
I-65 UTILITIES EXTENSION
IMPROVEMENT PROJECT

SHEET TITLE: DIVISION A
PHOTO LOG
SHEET 1

DRAWN BY: MTE
DESIGNED BY: N/A
PM REVIEW: N/A
QA/QC REVIEW: N/A
DATE: OCTOBER 2020
SEAL:

SIGNATURE:
DATE:
SCALE:
HORZ: N/A
VERT: N/A
ACI JOB #: 20-1421

RNUM | RDESC | RBY | RDATE

EXHIBIT A-10: Photographs

7-1

8-1

9-1

10-1

11-1

12-1

DIVISION A - PHOTOGRAPHS

SETS 7-12

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Engineering Architecture Land Surveying

PROJECT: TOWN OF DEMOTTE I-65 UTILITIES EXTENSION IMPROVEMENT PROJECT

SHEET TITLE: DIVISION A PHOTO LOG SHEET 2

DRAWN BY: MTE
DESIGNED BY: N/A
PM REVIEW: N/A
QA/QC REVIEW: N/A
DATE: OCTOBER 2020
SCALE:

SIGNATURE:
DATE:
SCALE: HORZ: N/A VERT: N/A
ACI JOB #: 20-1421
SHEET NO. 3 of 16

RNUM	RDESC	RBY	RDATE

EXHIBIT A-10: Photographs

13-1

14-1

15-1

16-1

17-1

DIVISION A - PHOTOGRAPHS
SETS 13-18

ABONMARCHE

TOWN OF DEMOTTE
I-65 UTILITIES EXTENSION
IMPROVEMENT PROJECT

DIVISION A
PHOTO LOG
SHEET 3

DRAWN BY: MTE
DESIGNED BY: N/A
PM REVIEW: N/A
QA/QC REVIEW: N/A
DATE: OCTOBER 2020

SCALE:
HORZ: N/A
VERT: N/A
ACI JOB #: 20-1421
SHEET NO.: 4 of 16

EXHIBIT A-10: Photographs

PHOTOGRAPH LOCATIONS
DIVISION B & D

GRAPHIC SCALE
(IN FEET)
1 inch = 600 ft.

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Valparaiso, IN 46383
T 219.850.4624
F 219.850.4625
abonmarche.com

Battle Creek, Benton Harbor, Manistee, South Haven, Goshen, Hobart, Lafayette, South Bend, Valparaiso
Engineering · Architecture · Land Surveying

PROJECT: TOWN OF DEMOTTE I-65 UTILITIES EXTENSION IMPROVEMENT PROJECT PER

SHEET TITLE: PROPOSED IMPROVEMENTS PHOTO LOCATION EXHIBIT DIVISIONS B & D

DRAWN BY:	MTE
DESIGNED BY:	N/A
PM REVIEW:	N/A
QA/QC REVIEW:	N/A
DATE:	
SEAL:	
SIGNATURE:	
DATE:	

HARD COPY IS INTENDED TO BE 24" X 36" WHEN PLOTTED. SCALE(S) INDICATED AND GRAPHIC QUALITY MAY NOT BE ACCURATE FOR ANY OTHER SIZES

SCALE: HORZ: 1" = 600' VERT: OCTOBER 2020

ACI JOB #: 20-1421

SHEET NO.: 5 of 16

NO.	REVISION DESCRIPTION	BY	DATE

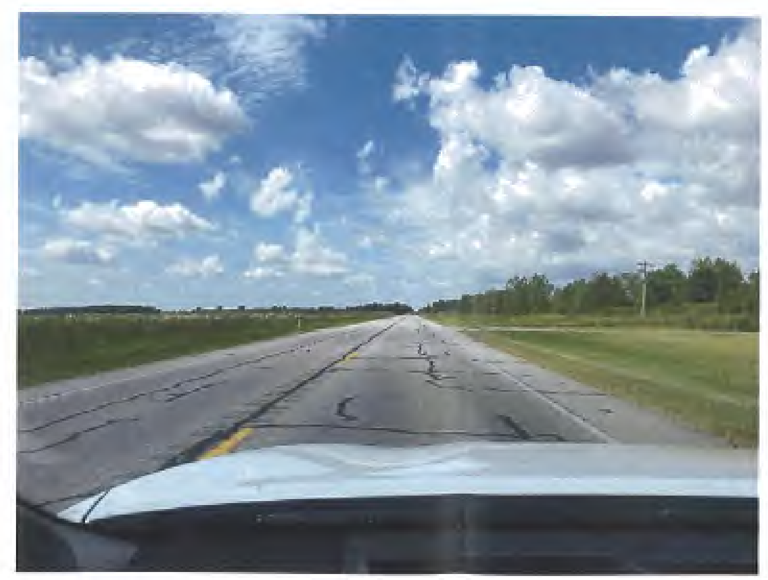
EXHIBIT A-10: Photographs

18-1

19-1

20-1

21-1



22-1

23-1

DIVISION B & D - PHOTOGRAPHS

SETS 18-23

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PROJECT: TOWN OF DEMOTTE I-65 UTILITIES EXTENSION IMPROVEMENT PROJECT

SHEET TITLE: DIVISION B & D PHOTO LOG SHEET 1

DRAWN BY:	MTE
DESIGNED BY:	N/A
PM REVIEW:	N/A
QA/QC REVIEW:	N/A
DATE:	OCTOBER 2020
SEAL:	
SIGNATURE:	
DATE:	
SCALE: HORZ:	N/A
VERT:	N/A
ACI JOB #	20-1421
SHEET NO.	6 of 16

EXHIBIT A-10: Photographs

24-1

25-1

26-1

27-1

28-1

29-1

DIVISION B & D - PHOTOGRAPHS

SETS 24-29

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PROJECT: TOWN OF DEMOTTE
I-65 UTILITIES EXTENSION
IMPROVEMENT PROJECT

SHEET TITLE: DIVISION B & D
PHOTO LOG
SHEET 2

DRAWN BY:	MTE
DESIGNED BY:	N/A
PM REVIEW:	N/A
QA/QC REVIEW:	N/A
DATE:	OCTOBER 2020
SEAL:	
SIGNATURE:	
DATE:	
SCALE:	HORZ: N/A VERT: N/A
ACI JOB #	20-1421
SHEET NO.	7 of 16

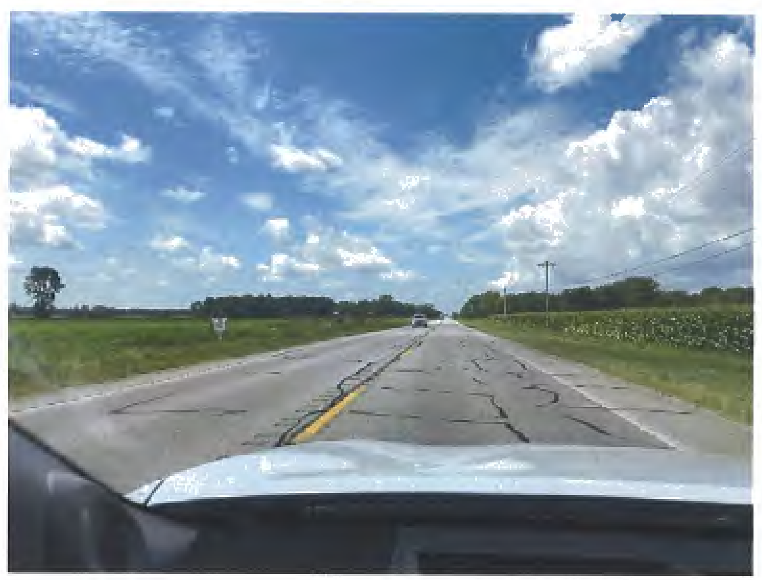
RNUM	RDESC	REV	RDATE

EXHIBIT A-10: Photographs

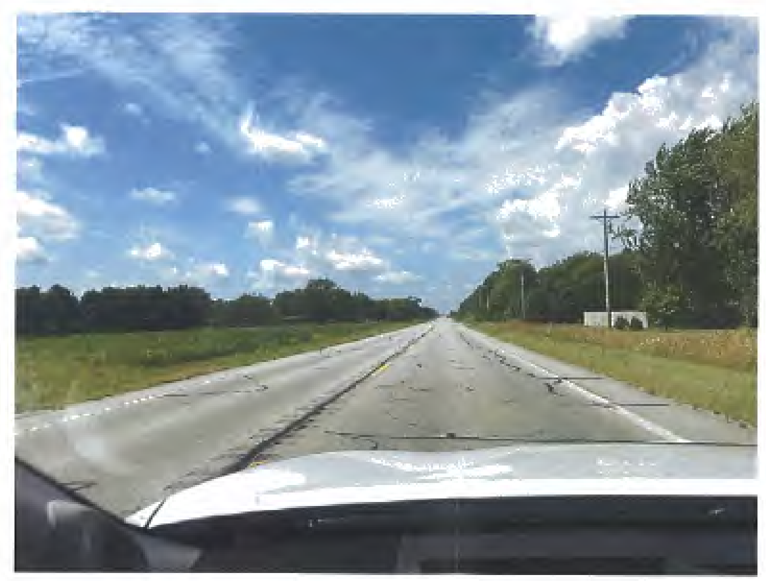
30-1

31-1

32-1



33-1



34-1

35-1

DIVISION B & D - PHOTOGRAPHS

SETS 30-35

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PROJECT: TOWN OF DEMOTTE I-65 UTILITIES EXTENSION IMPROVEMENT PROJECT

SHEET TITLE: DIVISION B & D PHOTO LOG SHEET 3

DRAWN BY: MTE
DESIGNED BY: N/A
PM REVIEW: N/A
QA/QC REVIEW: N/A
DATE: OCTOBER 2020
SEAL:
SIGNATURE:
DATE:
SCALE: HORZ: N/A VERT: N/A
ACI JOB # 20-1421

EXHIBIT A-10: Photographs

36-1

37-1

38-1

39-1

40-1

41-1

DIVISION B & D - PHOTOGRAPHS

SETS 36-41

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Mishawaka
Lafayette
South Bend
Valparaiso
Schererville
Engineering Architecture Land Surveying

PROJECT
TOWN OF DEMOTTE
I-65 UTILITIES EXTENSION
IMPROVEMENT PROJECT

SHEET TITLE
DIVISION B & D
PHOTO LOG
SHEET 4

DRAWN BY: MTE
DESIGNED BY: N/A
PM REVIEW: N/A
QA/QC REVIEW: N/A
DATE: OCTOBER 2020
SEAL:

SIGNATURE:
DATE:
SCALE:
HORZ: N/A
VERT: N/A
ACI JOB #
20-1421
SHEET NO.
9 of 16

RNUM	RDESC	RBY	RDATE

EXHIBIT A-10: Photographs

42-1

43-1

DIVISION B & D - PHOTOGRAPHS

SETS 42-43

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Benton Harbor
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South Haven
Goshen
Mishawaka
South Bend
Valparaiso
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PROJECT
TOWN OF DEMOTTE
I-65 UTILITIES EXTENSION
IMPROVEMENT PROJECT

SHEET TITLE
DIVISION B & D
PHOTO LOG
SHEET 5

DRAWN BY: MTE
DESIGNED BY: N/A
PM REVIEW: N/A
QA/QC REVIEW: N/A
DATE: OCTOBER 2020
SEAL:

SIGNATURE:
DATE:

SCALE:
HORZ: N/A
VERT: N/A

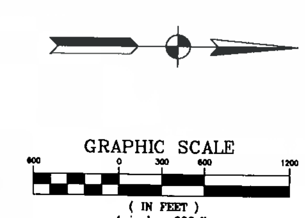
ACI JOB #
20-1421

SHEET NO.
10 of 16

R-NUM | RDESC | REV | RDATE

EXHIBIT A-10: Photographs

PHOTOGRAPH LOCATIONS
DIVISION C



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Engineering · Architecture · Land Surveying

PROJECT: TOWN OF DEMOTTE I-65 UTILITIES EXTENSION IMPROVEMENT PROJECT PER

SHEET TITLE: PROPOSED IMPROVEMENTS PHOTO LOCATION EXHIBIT DIVISION C

DRAWN BY:	MTE
DESIGNED BY:	N/A
PM REVIEW:	N/A
QA/QC REVIEW:	N/A
DATE:	OCTOBER 2020
SEAL:	
SIGNATURE:	
DATE:	

HARD COPY IS INTENDED TO BE 24" X 36" WHEN PLOTTED. SCALE(S) INDICATED AND GRAPHIC QUALITY MAY NOT BE ACCURATE FOR ANY OTHER SIZES

SCALE: HORZ: 1" = 600' VERT: N/A

ACI JOB #: 20-1421

NO.	REVISION DESCRIPTION	BY	DATE

EXHIBIT A-10: Photographs

48-1

49-1

50-1

51-1

52-1

53-1

DIVISION C - PHOTOGRAPHS

SETS 48-53

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Fort Wayne
Lafayette
South Haven
Goshen
Holland
South Bend
Valparaiso
Engineering Architecture Land Surveying

PROJECT
TOWN OF DEMOTTE
I-65 UTILITIES EXTENSION
IMPROVEMENT PROJECT

SHEET TITLE
DIVISION C
PHOTO LOG
SHEET 1

DRAWN BY: MTE
DESIGNED BY: N/A
PM REVIEW: N/A
QA/QC REVIEW: N/A
DATE: OCTOBER 2020
SEAL:

SIGNATURE:
DATE:

SCALE:
HORZ: N/A
VERT: N/A

ACI JOB #
20-1421

SHEET NO.
12 of 16

RNUM | RDESC | RBY | RDATE

EXHIBIT A-10: Photographs

54-1

55-1

56-1

57-1

58-1

59-1

DIVISION C - PHOTOGRAPHS

SETS 54-59

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PROJECT: TOWN OF DEMOTTE I-65 UTILITIES EXTENSION IMPROVEMENT PROJECT

SHEET TITLE: DIVISION C PHOTO LOG SHEET 2

DRAWN BY: MTE
DESIGNED BY: N/A
PM REVIEW: N/A
QA/QC REVIEW: N/A
DATE: OCTOBER 2020
SEAL:
SIGNATURE:
DATE:
SCALE: HORZ: N/A VERT: N/A
ACI JOB #: 20-1421

RNUM | RDESC | REV | RDATE

EXHIBIT A-10: Photographs

60-1

61-1

69-1

70-1

71-1

72-1

DIVISION C - PHOTOGRAPHS

SETS 60-61 & 69-72

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Lafayette
South Haven
Goshen
Wabash
South Bend
Valparaiso
Engineering Architecture Land Surveying

PROJECT
TOWN OF DEMOTTE
I-65 UTILITIES EXTENSION
IMPROVEMENT PROJECT

SHEET TITLE
DIVISION C
PHOTO LOG
SHEET 3

DRAWN BY: MTE
DESIGNED BY: N/A
PM REVIEW: N/A
QA/QC REVIEW: N/A
DATE: OCTOBER 2020
SEAL:

SIGNATURE:
DATE:
SCALE:
HORZ: N/A
VERT: N/A
ACI JOB #
20-1421
SHEET NO.
14 of 16

RNUM	RDESC	RBY	RDATE

EXHIBIT A-10: Photographs

73-1

74-1

75-1

76-1

77-1

78-1

DIVISION C - PHOTOGRAPHS

SETS 73-78

ABONMARCHE

PROJECT: TOWN OF DEMOTTE I-65 UTILITIES EXTENSION IMPROVEMENT PROJECT

SHEET TITLE: DIVISION C PHOTO LOG SHEET 4

DRAWN BY: MTE

DESIGNED BY: N/A

PM REVIEW: N/A

QA/QC REVIEW: N/A

DATE: OCTOBER 2020

SEAL:

SIGNATURE:

DATE:

SCALE: HORZ: N/A VERT: N/A

ACI JOB # 20-1421

SHEET NO. 15 of 16

RNUM	RDESC	RBY	RDATE

EXHIBIT A-10: Photographs

79-1

80-1

81-1

82-1

82-2

DIVISION C - PHOTOGRAPHS

SETS 79-82

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Goshen
Mishawaka
South Bend
Valparaiso
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PROJECT
TOWN OF DEMOTTE
I-65 UTILITIES EXTENSION
IMPROVEMENT PROJECT

SHEET TITLE
DIVISION C
PHOTO LOG
SHEET 5

DRAWN BY: MTE
DESIGNED BY: N/A
PM REVIEW: N/A
QA/QC REVIEW: N/A
DATE: OCTOBER 2020
SEAL:

SIGNATURE:
DATE:

SCALE:
HORZ: N/A
VERT: N/A

ACI JOB #
20-1421

SHEET NO.
16 of 16

RHUM	RDESC	RBY	RDATE

Appendix B
NRCS Coordination

USDA
United States Department of Agriculture

Natural Resources Conservation Service
Indiana State Office
6013 Lakeside Boulevard
Indianapolis, IN 46278
317-290-3200

October 5, 2020

Allison Atkinson
Abonmarche
300 South Meridian Street
Indianapolis, Indiana 46225

Dear Ms. Atkinson:

The proposed project to proceed with water main extensions, sanitary sewer extensions and water tower construction in the Town of DeMotte, Jasper County, Indiana as referred to in your letter received September 23, 2020, will not cause a conversion of prime farmland.

If you need additional information, please contact John Allen at 317-295-5859.

Sincerely,

RICK NEILSON
State Soil Scientist

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 9/23/020
Name of Project I-65 Utilities Extensions Project	Federal Agency Involved EPA/Indiana DWSRF & WWSRF
Proposed Land Use Water Main & Sanitary Sewer	County and State Jasper County, IN
PART II *(To be completed by NRCS)*	Date Request Received By NRCS / Person Completing Form:

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☐ NO ☐	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %	
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS	

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	33.5			
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site	33.5			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide Important or Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)				

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)				
2. Perimeter In Non-urban Use	(10)				
3. Percent Of Site Being Farmed	(20)				
4. Protection Provided By State and Local Government	(20)				
5. Distance From Urban Built-up Area	(15)				
6. Distance To Urban Support Services	(15)				
7. Size Of Present Farm Unit Compared To Average	(10)				
8. Creation Of Non-farmable Farmland	(10)				
9. Availability Of Farm Support Services	(5)				
10. On-Farm Investments	(20)				
11. Effects Of Conversion On Farm Support Services	(10)				
12. Compatibility With Existing Agricultural Use	(10)				
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100	0	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	0	0	0	0
TOTAL POINTS ***(Total of above 2 lines)***	260	0	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☐
Reason For Selection:		
Name of Federal agency representative completing this form:		Date:

(See Instructions on reverse side) **Form AD-1006 (03-02)**

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, http://fppa.nrcs.usda.gov/lesa/.

Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s)of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)

Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.

Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.

Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.

Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.

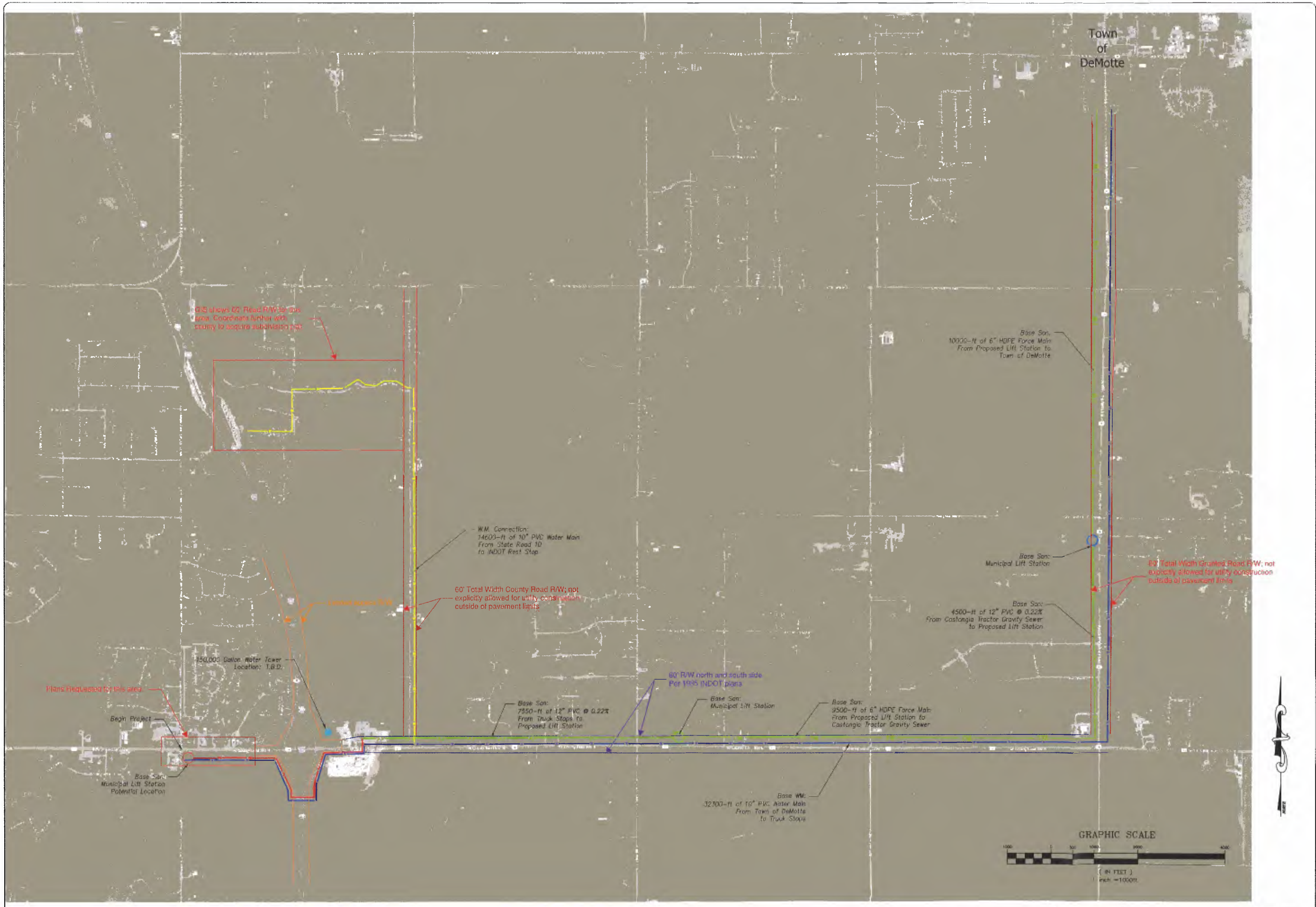
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.
Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.



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South Bend
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PROJECT

TOWN OF DEMOTTE

I-65 UTILITIES EXTENSION
IMPROVEMENT PROJECT

SHEET TITLE

DRAWN BY: MRR
DESIGNED BY:
PM REVIEW:
QA/QC REVIEW:
DATE: 9/11/2020
SEAL:

SIGNATURE:
DATE:

SCALE:
HORZ: 1"=1000'
VERT:

ACI JOB #
20-1421

SHEET NO.
1

RNUM | RDESC | PBY | PDATE

Map Scale: 1:9,470 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 100 200 400 600

Feet
0 450 900 1800 2700

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jasper County, Indiana
Survey Area Data: Version 21, Jun 4, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 16, 2011—Oct 2, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Mu	Morocco loamy sand, 0 to 2 percent slopes	A/D	0.5	2.5%
OaB	Oakville fine sand, 2 to 6 percent slopes	A	1.0	4.9%
Wm	Watseka-Maumee loamy sands	A/D	13.6	64.6%
Za	Zadog-Maumee loamy sands	B/D	5.9	28.0%
Totals for Area of Interest			**21.1**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher


87° 12' 57" W
87° 10' 53" W
481900
482300
482700
483100
483500
483900
484300
484700
41° 10' 34" N
41° 8' 30" N
4558200
4557800
4557400
4557000
4556600
4556200
4555800
4555400
4555000
4554600
W 1100 N
W 1000 N
Za
Mu
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OaB
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OaB
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OaC
Mu
BeB
Wm
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Wm
N Rustic Dr
10
900
Map Scale: 1:18,700 if printed on A portrait (8.5" x 11") sheet.
Meters
0
250
500
1000
1500
Feet
0
500
1000
2000
3000
N
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
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Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jasper County, Indiana
Survey Area Data: Version 21, Jun 4, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 16, 2011—Oct 2, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BeB	Brems loamy sand, 1 to 3 percent slopes	A	9.1	17.0%
Mu	Morocco loamy sand, 0 to 2 percent slopes	A/D	9.7	18.1%
OaB	Oakville fine sand, 2 to 6 percent slopes	A	6.3	11.8%
OaC	Oakville fine sand, 6 to 15 percent slopes	A	4.2	7.9%
Wm	Watseka-Maumee loamy sands	A/D	7.7	14.4%
Za	Zadog-Maumee loamy sands	B/D	16.5	30.8%
Totals for Area of Interest			**53.5**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

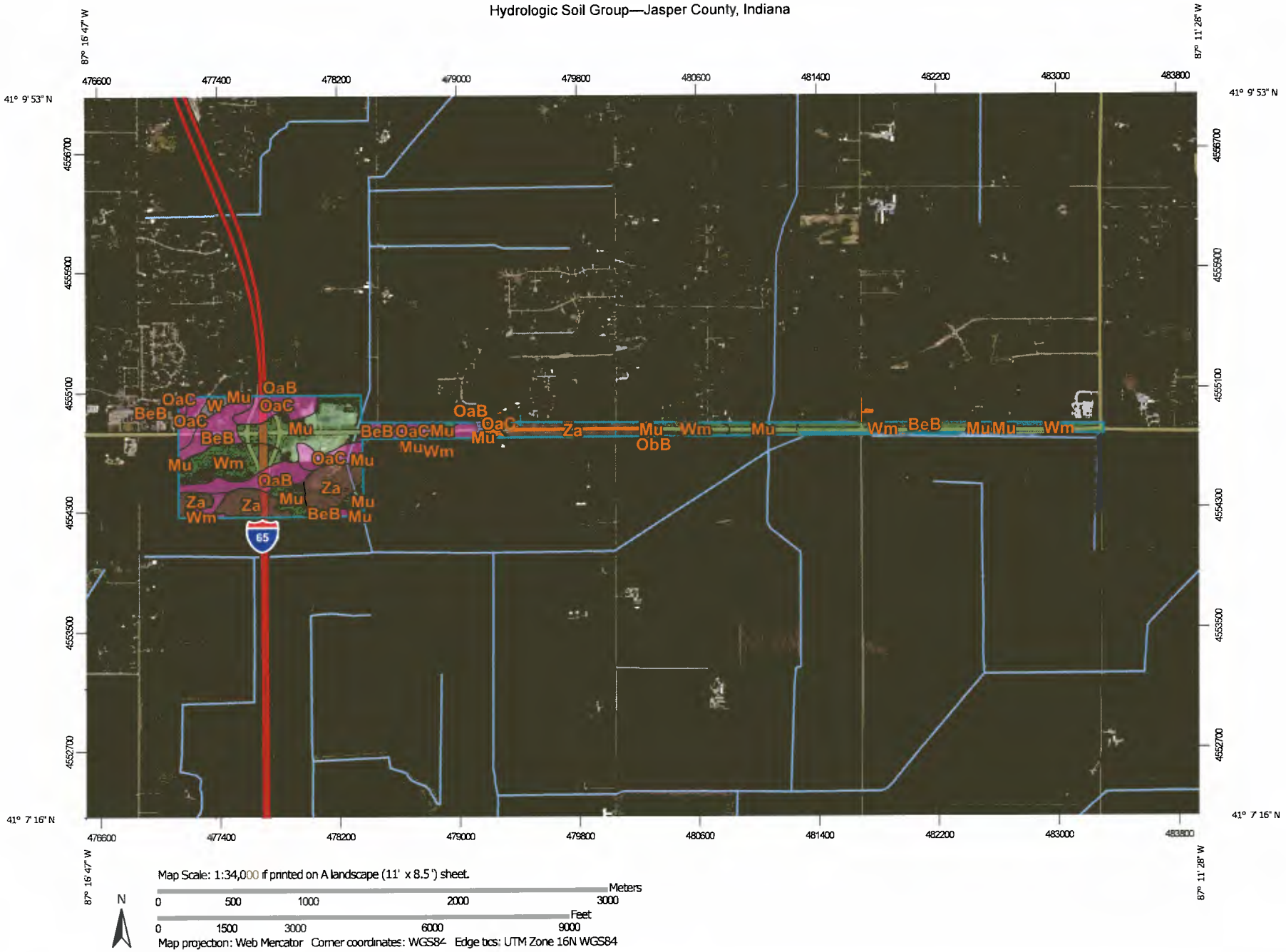
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Hydrologic Soil Group—Jasper County, Indiana



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jasper County, Indiana
Survey Area Data: Version 21, Jun 4, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 16, 2011—Oct 2, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BeB	Brems loamy sand, 1 to 3 percent slopes	A	30.5	8.6%
Mu	Morocco loamy sand, 0 to 2 percent slopes	A/D	82.3	23.2%
OaB	Oakville fine sand, 2 to 6 percent slopes	A	29.5	8.3%
OaC	Oakville fine sand, 6 to 15 percent slopes	A	47.9	13.5%
ObB	Oakville sand, moderately wet, 1 to 3 percent slopes	A	5.3	1.5%
W	Water		4.7	1.3%
Wm	Watseka-Maumee loamy sands	A/D	80.7	22.8%
Za	Zadog-Maumee loamy sands	B/D	73.7	20.8%
Totals for Area of Interest			**354.7**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher


87° 16' 41" W
87° 15' 0" W
41° 10' 12" N
41° 8' 32" N
476800
477100
477400
477700
478000
478300
478600
478900
4557600
4557300
4557000
4556700
4556400
4556100
4555800
4555500
4555200
4554900
4554600
N 600 E
Pewter Ln
Bahama Dr
W State Road 10
10
65
Mu
BeB
OaB
OaC
Za
Map Scale: 1:15,100 if printed on A portrait (8.5" x 11") sheet.
Meters
0
200
400
800
1200
N
Feet
0
500
1000
2000
3000
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jasper County, Indiana
Survey Area Data: Version 21, Jun 4, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 16, 2011—Oct 2, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BeB	Brems loamy sand, 1 to 3 percent slopes	A	14.7	14.5%
Mu	Morocco loamy sand, 0 to 2 percent slopes	A/D	10.5	10.3%
OaB	Oakville fine sand, 2 to 6 percent slopes	A	37.2	36.7%
OaC	Oakville fine sand, 6 to 15 percent slopes	A	7.7	7.5%
Za	Zadog-Maumee loamy sands	B/D	31.4	30.9%
Totals for Area of Interest			**101.5**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

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If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix C
MRO Data and Calculations

TABLE I

MODEL FOR EXISTING WASTEWATER FLOWS (in gallons per day) OF SEWERED AND UNSEWERED COMMUNITIES

Existing Treatment Facilities Design Flows (for Sewered Communities only)

Average Design Flow (gpd) 0.496 Peak Design Flow (gpd) 1.515

Domestic[1] (D)	215,700	Peak DCI (Total DCI X Peaking Factor)[4]	
Commercial/ Institutional[1] (C)	52,080	Peak Hourly Inflow &/or Wet Weather Infiltration[5]	Infiltration 43,000
Industrial[1] (I)	0		
Total DCI	267,780	**Peak Hourly Flow**	
Peak Sustained Infiltration[2]			

TOTAL EXISTING FLOW[3]

1. DCI flows must be based upon actual water use records where possible. Flows may be estimated by one of the following methods:
   a) Billing records for the most recent 24 months (less 10-20 % consumption) are to be used whenever available;
   b) When billing records are unavailable, pumped water volumes (less 20-40 % consumption and losses) for the most recent 12 months are to be used;
   c) In communities (or portions thereof) without a water supply system, use 310 gpd/connection or 100 gpcpd.
2. Based on I/I analysis reviewing the most recent MRO's (24 months) during a high groundwater non-rainfall day period (preferably 7-14 consecutive days) and taking the average followed by subtracting the average DCI (sewered communities only). For unsewered communities, infiltration could be based on 200 gpidm (Conventional Gravity Sewers).
3. Total DCI + Peak Sustained Infiltration
4. System Peaking Factor (check which applies)
   a) Measured from hourly flow data ____ (the preferred method for existing conventional gravity sewers)
   b) i. Estimated from 10-States Standards ____ (Conventional Gravity Only)
      ii. Estimated from other source (list) _____
5. Sewered Communities only.

Yes or NA	
Yes	1. Flow meter calibrated
Yes	2. Flows appear accurate
No	3. Based on subtracting the dry weather peak flows from the influent peak flow including all bypassed flows. If this information is not available verify if the peak hourly flow can be determined based on flow data obtained from the influent pumping station(s).

Only Final Effluent Flow

TABLE II

MODEL FOR CURRENT TREATMENT PLANT OPERATION

	Concentration mg/l	Daily Load lbs
INFLUENT		
CBOD5	244	558
TSS	292	669
NH3-N	41.1	94.7
P	N/A	N/A
Other		
EFFLUENT		
CBOD5	2.8	6.4
TSS	5.7	13.0
NH3-N	.08	0.17
P	N/A	N/A
Total Residual Cl	N/A	N/A
DO	8.1	
Other		

page # or NA

✓ Above values are derived from the 24 most recent consecutive MROs &/or DMRs

dates of MROs: 2018 to 2020

dates of DMRs: 2018 to 2020

Appendix D
Census Data

STATS INDIANA
Indiana's Public Data Utility

EXHIBIT D-1
DeMotte Population Estimate

Population Estimates for Indiana's Incorporated Places, 2010-2018

View analysis of these estimates from the IBRC »

Interactive Graphics: *Explore Indiana City/Town Population Change* | **Map:** 20 Fastest-Growing Cities and Towns

Download these data with FIPS codes

Geographic Area	Population Estimates (as of July 1)									April 1, 2010 Estimates Base	April 1, 2010 Census	Change July 1, 2010 to July 1, 2018		Rank: Pop Change July 1, 2010 to July 1, 2018	
	2018	2017	2016	2015	2014	2013	2012	2011	2010			Number	Percent	Number	Percent
Advance town	514	512	506	508	509	514	514	513	481	477	477	33	6.9%	122	49
Akron town	1,110	1,107	1,112	1,125	1,136	1,132	1,145	1,148	1,155	1,157	1,167	-45	-3.9%	441	450
Alamo town	66	65	65	65	65	65	65	65	65	65	66	1	1.5%	198	150
Albany town	2,151	2,166	2,178	2,191	2,204	2,221	2,231	2,249	2,252	2,252	2,165	-101	-4.5%	493	485
Albion town	2,338	2,318	2,318	2,324	2,304	2,306	2,328	2,290	2,350	2,351	2,349	-12	-0.5%	311	235
Alexandria city	4,997	5,010	5,017	5,027	5,055	5,070	5,068	5,103	5,135	5,137	5,145	-138	-2.7%	512	371
Alfordsville town	105	105	105	104	104	103	102	102	101	101	101	4	4.0%	175	109
Alton town	54	54	54	54	55	54	55	55	55	55	55	-1	-1.8%	214	312
Altona town	197	195	195	195	194	194	195	195	195	195	197	2	1.0%	190	170
Ambia town	222	219	220	221	222	225	227	227	228	227	239	-6	-2.6%	270	366
Amboy town	369	372	375	374	374	375	378	382	383	384	384	-14	-3.7%	329	430
Amo town	420	422	418	414	414	412	409	409	401	401	401	19	4.7%	144	91
Anderson city	55,037	55,033	55,082	55,121	55,358	55,561	55,532	55,883	56,151	56,169	56,129	-1,114	-2.0%	557	326
Andrews town	1,128	1,127	1,128	1,136	1,136	1,144	1,148	1,155	1,155	1,155	1,149	-27	-2.3%	385	346
Angola city	8,702	8,642	8,604	8,634	8,645	8,626	8,589	8,586	8,599	8,607	8,612	103	1.2%	84	160
Arcadia town	1,664	1,663	1,660	1,671	1,692	1,714	1,698	1,689	1,670	1,666	1,666	-6	-0.4%	271	227
Argos town	1,625	1,636	1,641	1,648	1,654	1,664	1,669	1,678	1,687	1,690	1,691	-62	-3.7%	466	433
Ashley town	980	977	976	975	976	976	971	973	973	973	983	7	0.7%	165	182
Atlanta town	745	747	742	739	746	755	743	733	727	725	725	18	2.5%	145	134
Attica city	3,183	3,127	3,075	3,092	3,126	3,164	3,211	3,221	3,247	3,242	3,245	-64	-2.0%	469	325
Auburn city	13,391	13,161	13,012	12,937	12,897	12,858	12,844	12,892	12,820	12,794	12,731	571	4.5%	41	99
Aurora city	3,687	3,693	3,682	3,689	3,686	3,712	3,713	3,735	3,746	3,743	3,750	-59	-1.6%	460	298
Austin city	4,114	4,130	4,112	4,123	4,128	4,163	4,169	4,214	4,276	4,281	4,295	-162	-3.8%	523	444
Avilla town	2,451	2,419	2,396	2,404	2,401	2,392	2,389	2,390	2,395	2,398	2,401	56	2.3%	109	137
Avon town	18,343	17,567	17,134	16,599	16,137	14,999	14,627	14,268	13,855	13,749	12,446	4,488	32.4%	11	7
Bainbridge town	748	744	735	733	737	735	742	743	745	746	746	3	0.4%	182	196

EXHIBIT D-1
DeMotte Population Estimate

Delphi city	2,891	2,882	2,870	2,858	2,868	2,891	2,891	2,882	2,903	2,897	2,893	-12	-0.4%	313	231
De Motte town	4,082	4,054	4,020	4,005	3,979	3,942	3,904	3,862	3,833	3,818	3,814	249	6.5%	64	52
Denver town	465	468	473	472	473	475	479								
Dillsboro town	1,401	1,399	1,396	1,398	1,396	1,405	1,404								
Dublin town	747	753	760	767	775	781	786								
Dugger town	884	889	888	895	900	905	911								
Dune Acres town	182	181	182	184	185	184	183								
Dunkirk city	2,289	2,309	2,326	2,339	2,342	2,358	2,368	2,369	2,353	2,362	2,362	-64	-2.7%	470	375
Dunreith town	171	171	171	172	173	173	174	176	177	177	177	-6	-3.4%	273	409
Dupont town	325	324	326	324	325	327	325	324	326	327	339	-1	-0.3%	218	223
Dyer town	15,987	15,918	15,933	16,016	16,155	16,235	16,330	16,375	16,378	16,369	16,390	-391	-2.4%	543	351
Earl Park town	337	336	336	340	340	341	345	349	349	348	348	-12	-3.4%	314	413
East Chicago city	27,930	28,168	28,429	28,690	29,019	29,225	29,451	29,522	29,694	29,698	29,698	-1,764	-5.9%	563	543
East Germantown town	350	352	356	358	361	363	365	367	372	372	410	-22	-5.9%	363	540
Eaton town	1,734	1,739	1,752	1,756	1,770	1,783	1,791	1,803	1,807	1,807	1,805	-73	-4.0%	482	454
Economy town	175	176	178	179	181	181	182	183	185	185	187	-10	-5.4%	303	523
Edgewood town	1,857	1,858	1,863	1,865	1,876	1,885	1,885	1,897	1,910	1,910	1,913	-53	-2.8%	455	378
Edinburgh town	4,577	4,585	4,569	4,533	4,523	4,527	4,502	4,483	4,477	4,476	4,480	100	2.2%	86	139
Edwardsport town	297	298	298	300	301	301	301	304	304	304	303	-7	-2.3%	279	344
Elberfeld town	652	649	641	637	629	627	621	620	614	613	625	38	6.2%	118	57
Elizabeth town	207	204	204	202	201	201	202	201	203	203	162	4	2.0%	176	144
Elizabethtown town	527	528	531	528	525	522	521	516	512	512	504	15	2.9%	150	125
Elkhart city	52,367	52,415	52,487	52,532	52,315	52,182	52,004	51,929	51,865	51,932	50,949	502	1.0%	44	175
Ellettsville town	6,676	6,667	6,616	6,539	6,498	6,430	6,400	6,335	6,251	6,221	6,378	425	6.8%	47	50
Elnora town	661	661	659	657	653	645	644	643	639	638	640	22	3.4%	137	118
Elwood city	8,403	8,424	8,422	8,432	8,472	8,507	8,509	8,547	8,596	8,601	8,614	-193	-2.2%	527	340
English town	627	627	631	629	637	637	640	637	645	645	645	-18	-2.8%	350	380
Etna Green town	591	590	587	589	589	586	585	583	585	586	586	6	1.0%	170	171
Evansville city	117,963	118,288	118,915	119,442	120,154	120,296	120,263	120,207	120,095	120,075	117,429	-2,132	-1.8%	565	309
Fairland town	579	579	578	581	582	582	582	583	584	585	315	-5	-0.9%	258	252
Fairmount town	2,775	2,788	2,805	2,841	2,877	2,897	2,910	2,929	2,947	2,954	2,954	-172	-5.8%	526	538
Fairview Park town	1,309	1,310	1,318	1,318	1,324	1,352	1,358	1,371	1,372	1,380	1,386	-63	-4.6%	467	488
Farmersburg town	1,079	1,083	1,086	1,095	1,099	1,108	1,112	1,112	1,120	1,123	1,118	-41	-3.7%	433	431
Farmland town	1,257	1,263	1,271	1,272	1,283	1,297	1,309	1,318	1,328	1,327	1,333	-71	-5.3%	478	521

EXHIBIT D-2
Jasper County
Population Estimate

STATS INDIANA Indiana Population Projections

Select General Area	Select Year	Projections	Help Custom Region
Indiana Counties ▼	2020 ▼	Total, Functional Groups ▼	☐ Group Counties
Select Geography Jasper ▼		☐ Show % of Total Get Data Print	

Indiana Population Projections - Jasper County, Total: 2020

Total	Preschool 0-4	School Age 5-19	College Age 20-24	Young Adult 25-44	Older Adult 45-64	Seniors 65+
33,879	1,998	6,778	2,193	7,834	8,913	6,163

Notes: 2010 data are census counts from the U.S. Census Bureau. 2015 data are U.S. Census Bureau population estimates (Vintage 2016).
Metro areas that show (pt) include only projections for the Indiana counties in that area.

Source: STATS Indiana, using data from the Indiana Business Research Center, IU Kelley School of Business
Produced on 1/8/2020 8:11:13 AM

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Information

EXHIBIT D-2
Jasper County
Population Estimate

STATS INDIANA Indiana Population Projections

Select General Area	Select Year	Projections	Help Custom Region
Indiana Counties ▼	2040 ▼	Total, Functional Groups ▼	☐ Group Counties
Select Geography Jasper ▼		☐ Show % of Total Get Data Print	

Indiana Population Projections - Jasper County, Total: 2040

Total	Preschool 0-4	School Age 5-19	College Age 20-24	Young Adult 25-44	Older Adult 45-64	Seniors 65+
37,906	2,287	7,915	2,019	8,101	8,573	9,011

Notes: 2010 data are census counts from the U.S. Census Bureau. 2015 data are U.S. Census Bureau population estimates (Vintage 2016).
Metro areas that show (pt) include only projections for the Indiana counties in that area.

Source: STATS Indiana, using data from the Indiana Business Research Center, IU Kelley School of Business
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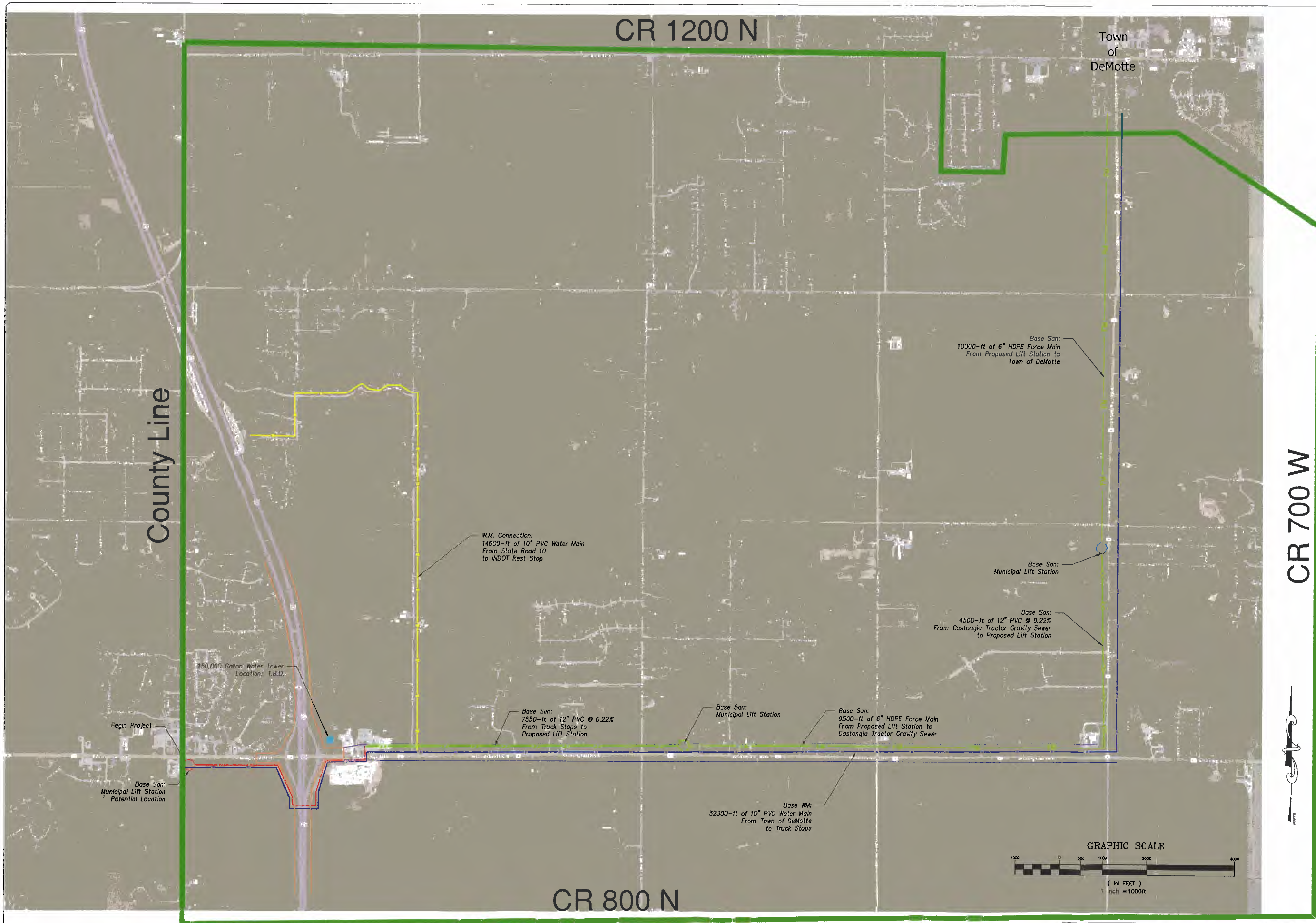
Information

Appendix E
Proposed Project Exhibits and Estimates



ABONMARCHE

Battle Creek, Benton Harbor, Lafayette, South Haven, Goshen, Hobart, South Bend, Valparaiso

Engineering Architecture Land Surveying

PROJECT: **TOWN OF DEMOTTE**

SHEET TITLE: **I-65 UTILITIES EXTENSION IMPROVEMENT PROJECT**

DRAWN BY: MRR

DESIGNED BY:

PM REVIEW:

QA/QC REVIEW:

DATE: 9/11/2020

SEAL:

SIGNATURE:

DATE:

SCALE: HORZ: 1"=1000' VERT:

ACI JOB #: 20-1421

SHEET NO: 1

ABONMARCHE

Engineering • Architecture • Land Surveying

Town of DeMotte
System Expansion Project Cost Analysis
Preliminary I-65 Sanitary Sewer Extension Opinion of Cost
10/01/2020

			Sanitary Sewer Improvements		
	Description	*Unit*	*Quantity*	*Unit Price*	*Cost*
1	Construction Engineering	LS	1	1.5%	$51,040
2	Mobilization/Demobilization	LS	1	5.0%	$170,140
3	Maintenance of Traffic	LS	1	$20,000.00	$20,000
4	Erosion Control	LS	1	$17,500.00	$17,500
5	Duplex Lift Station (municipal)	EA	4	$200,000.00	$800,000
6	Sanitary Sewer, 12-inch, SDR 35	LF	12,050	$65.00	$783,250
7	Restoration	LS	1	$125,000.00	$125,000
8	Clearing and Grubbing	LS	1	$100,000.00	$100,000
9	Manhole Sanitary	EA	34	$4,000.00	$136,000
10	Sanitary Tie in	LS	1	$6,000.00	$6,000
11	Force main, 6" HDPE directional drill	LF	25,150	$40.00	$1,006,000
12	12" Steel Casing	LF	400	$300.00	$120,000
13	Dewatering	LF	12,050	$20.00	$241,000
14	Air/Vacuum Release Structure	EA	6	$8,000.00	$48,000
	Subtotal:				***$3,623,930***
	Contingency			*10%*	*$362,390*
	Engineering			*9.5%*	*$344,270*
	Construction Adminstration			*5.0%*	*$181,200*
	TOTAL:				**$4,511,790**

Appendix F
SRF Attachments

SRF Loan Program
PER Acceptance Resolution

Whereas, the Town of DeMotte of DeMotte, Indiana, has caused a Preliminary Engineering Report ("PER"), dated October, 2020, to be prepared by the consulting firm of Abonmarche Consultants, Inc.; and

Whereas, said PER has been presented to the public at a public hearing held on October 26, 2020, at the DeMotte Town Hall for public comment; and

Whereas, the DeMotte Town Council finds that there was not sufficient evidence presented in objection to the recommended project in the PER.

Now, therefore be it resolved that:

1. The PER dated October, 2020 be approved and adopted by the Town of DeMotte Town Council; and

2. Said PER be submitted to the State Revolving Fund Loan Program for review and approval.

Adopted and Passed by the Council / Board of Trustees of the Utility / Political Subdivision of DeMotte, Indiana, this _____ day of _____, of 20____ .

Council / Board of Trustees

_____
Jeffery Cambe, President

Attest: _____
[insert name], Secretary / Clerk Treasurer

Approved and signed by the Mayor of _____ [insert location], Indiana this _____ [insert day] day of _____ [insert month], of 20____ [insert year].

_____
[insert name], Mayor

Attest: _____
[insert name], Secretary / Clerk Treasurer

State Revolving Fund Loan Program
Asset Management Program Certification Form
Inclusive of
Fiscal Sustainability Plan Certification

(To be submitted either at the time of loan closing or no later than the final disbursement of a Participant's loan proceeds)

Participant Name		
Street Address	P. O. Box Number	
City	State	Zip Code

Indiana Code 5-1.2-10-16 requires a Participant that receives a loan or other financial assistance from the State Revolving Fund Loan Program (SRF) to certify that the Participant has documentation demonstrating it has the financial, managerial, technical and legal capability to operate and maintain its water or wastewater collection and treatment system. A Participant must demonstrate that it has developed an asset management program as defined in the Indiana Finance Authority's (Authority) Asset Management Program Guidelines.

Section 603(d)(1)(E) of the Federal Water Pollution Control Act (FWPCA) requires a recipient of a loan for a project that involves the repair, replacement or expansion of a publically owned treatment works to develop and implement a Fiscal Sustainability Plan (FSP). The requirement pertains to those portions of the treatment works paid for with Clean Water SRF Loan Funds.

The Asset Management Program (AMP) shall be inclusive of the requirements of the FSP for Wastewater and Drinking Water projects and shall include at a minimum the following: (1) A system map (2) An inventory and assessment of system assets (3) development of an infrastructure inspection, repair, and maintenance plan, including a plan for funding such activities (4) an evaluation and implementation of water and energy conservation efforts (5) An analysis of the customer rates necessary to support the AMP (6) Audit performed at least every two years (7) Demonstration of the technical, managerial, legal and financial capability to operate and maintain the system, per the guidelines established by the Authority.

I hereby certify that I am an authorized representative for the above listed Participant and pursuant to IC 5-1.2-10-16 and Section 603(d)(1)(E), the Participant has developed and is implementing an AMP (inclusive of the requirements of an FSP) that meets the requirements established by the Authority. Upon the request of the Environmental Protection Agency (EPA) or the Indiana SRF, the Participant agrees to make the AMP (which includes the FSP requirements) available for inspection and/or review.

Signature of Authorized Representative	Date
Printed Name	Phone Number/Email Address

TABLE I

MODEL FOR EXISTING WASTEWATER FLOWS (in gallons per day) OF SEWERED AND UNSEWERED COMMUNITIES

Existing Treatment Facilities Design Flows (for Sewered Communities only)

Average Design Flow (gpd) 0.496 Peak Design Flow (gpd) 1.515

Domestic[1] (D)	215,700	Peak DCI (Total DCI X Peaking Factor)[4]	
Commercial/ Institutional[1] (C)	52,080	Peak Hourly Inflow &/or Wet Weather Infiltration[5]	Infiltration 43,000
Industrial[1] (I)	0		
Total DCI	267,780	**Peak Hourly Flow**	
Peak Sustained Infiltration[2]			

TOTAL EXISTING FLOW[3]

1. DCI flows must be based upon actual water use records where possible. Flows may be estimated by one of the following methods:
   a) Billing records for the most recent 24 months (less 10-20 % consumption) are to be used whenever available;
   b) When billing records are unavailable, pumped water volumes (less 20-40 % consumption and losses) for the most recent 12 months are to be used;
   c) In communities (or portions thereof) without a water supply system, use 310 gpd/connection or 100 gpcpd.
2. Based on I/I analysis reviewing the most recent MRO's (24 months) during a high groundwater non-rainfall day period (preferably 7-14 consecutive days) and taking the average followed by subtracting the average DCI (sewered communities only). For unsewered communities, infiltration could be based on 200 gpidm (Conventional Gravity Sewers).
3. Total DCI + Peak Sustained Infiltration
4. System Peaking Factor (check which applies)
   a) Measured from hourly flow data ____ (the preferred method for existing conventional gravity sewers)
   b) i. Estimated from 10-States Standards ____ (Conventional Gravity Only)
      ii. Estimated from other source (list) _____
5. Sewered Communities only.

Yes or NA	
Yes	1. Flow meter calibrated
Yes	2. Flows appear accurate
NO	3. Based on subtracting the dry weather peak flows from the influent peak flow including all bypassed flows. If this information is not available verify if the peak hourly flow can be determined based on flow data obtained from the influent pumping station(s).

Only Final Effluent Flow

TABLE II

MODEL FOR CURRENT TREATMENT PLANT OPERATION

	Concentration mg/l	Daily Load lbs
INFLUENT		
CBOD5	244	558
TSS	292	669
NH3-N	41.1	94.7
P	N/A	N/A
Other		
EFFLUENT		
CBOD5	2.8	6.4
TSS	5.7	13.0
NH3-N	.08	0.17
P	N/A	N/A
Total Residual Cl	N/A	N/A
DO	8.1	
Other		

page # or NA

✓ Above values are derived from the 24 most recent consecutive MROs &/or DMRs

dates of MROs: 2018 to 2020

dates of DMRs: 2018 to 2020

TABLE III

MODEL FOR ESTIMATED INFLUENT STRENGTH & LOADINGS

UNSEWERED COMMUNITIES

Conventional Gravity, Pressure, Vacuum Sewers

	Concentration (mg/l)			Daily Load (lb)		
	D	C	I	D	C	I
$CBOD_5$						
TSS						
NH_3-N						
P	N/A			N/A		

Source(s) of Data:

Domestic (**D**) _____

Commercial/Institutional (**C**) _____

Industrial (**I**) _____

DeMotte Waste Water Plant

Annual Summation of Monthly Reports of Operation
2018

Plant Design Flow	0.496
Annual Average Flow	0.248
Capacity Used	50%

PERCENT REMOVAL SUMMARY

	BOD5	S.S.	Ammonia	Phosphorus
Primary Treatment				
Secondary Treatment				
Tertiary Treatment				
Overall Treatment	#VALUE!	#VALUE!	#VALUE!	

	Man-Hours at Plant (Plants less than 1 MGD only)	Precipitation - Inches	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED: Chlorine - Lbs	CHEMICALS USED: Lbs/Day or Gal./Day	CHEMICALS USED: Lbs/Day or Gal./Day	RAW SEWAGE: Influent Flow Rate (if metered) MGD	RAW SEWAGE: pH	RAW SEWAGE: CBOD5 - mg/l	RAW SEWAGE: CBOD5 - lbs	RAW SEWAGE: Susp. Solids - mg/l	RAW SEWAGE: Susp. Solids - lbs	RAW SEWAGE: Phosphorus - mg/l	RAW SEWAGE: Ammonia - mg/l	RAW SEWAGE:	PRIMARY EFFLUENT: CBOD5 - mg/l	PRIMARY EFFLUENT: Susp. Solids - mg/l	AERATION: MIXED LIQUOR: Settleable Solids % in 30 minutes	AERATION: MIXED LIQUOR: Susp. Solids - mg/l	AERATION: MIXED LIQUOR: Sludge Vol. Index - ml/gm	AERATION: MIXED LIQUOR: Dissolved Oxygen - mg/l	AERATION: RETURN SLUDGE: Volume - MG	AERATION: RETURN SLUDGE: Susp. Solids - mg/l	SECONDARY EFFLUENT: CBOD5 - mg/l	SECONDARY EFFLUENT: Susp. Solids - mg/l
Average	19.42									268	560.065	289	604.072		42.2				614	3604	168	2.8				
Maximum		0			0	0	0	0	76.0	455	1245.1	560	1621.96	0	76.8	0	0	0	890	5116	277	7.8	0	0	0	0
Minimum					0	0	0	0	7.0	152	313.793	128	279.724	0	11.2	0	0	0	200	1936	76	0.8	0	0	0	0
Totals	7088	0			0	0	0	0			80649.3		86986.3										0			
No. of Data		0			0	0	0	0	261	157	144	157	144	0	157	0	0	0	144	144	144	144	0	0	0	0
Estimated Annual Totals (Average X 365)											204,424		220,486													

	Residual Chlorine - Contact Tank	FINAL EFFLUENT: Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l	Flow: Effluent Flow Rate (MGD)	Flow: Effluent Flow Weekly Average	BOD: CBOD5 - mg/l	BOD: CBOD5 - mg/l Weekly Average	BOD: CBOD5 - lbs	BOD: CBOD5 - lbs/day Weekly Average	Total Suspended Solids: Susp. Solids - mg/l	Total Suspended Solids: Susp. Solids - mg/l Weekly Average	Total Suspended Solids: Susp. Solids - lbs	Total Suspended Solids: Susp. Solids - lbs/day Weekly Average	Ammonia: Ammonia - mg/l	Ammonia: Ammonia - mg/l Weekly Average	Ammonia: Ammonia - lbs	Ammonia: Ammonia - lbs/day Weekly Average	Other: Oil & Grease (mg/l)		SLUDGE TO DIGESTER: Primary Sludge Gal. x 1000	SLUDGE TO DIGESTER: Waste Act. Sludge Gal. x 1000		
Average			5		8.2		0.248		3.2		6.78568		5.7		11.66		0.09		0.181					10.19		
Maximum	0	0	980	7.9	10.1	0	0.835	0.518	9.7	8.5	20.8033	19.05	13.2	9.267	27.97	20.71	0.641	0.284	1.343	0.618	0	0	0	12	0	0
Minimum	0	0	1	6.8	6.9	0	0.163	0.201	0.8	1.3	1.58221	2.705	1.2	2	2.777	5.92	0.002	0.01	0.006	0.025	0	0	0	0	0	0
Totals							82.95				977.139				1679				26.09		0	0	0	3403	0	0
No. of Data	0	0	54	239	239	0	334		144		144		144		144		144		144		0	0	0	334	0	0
Estimated Annual Totals (Average X 365)							91				2,477				4,256				66							

	DIGESTER OPERATION: Anaerobic Only: pH	Gas Production Cubic Ft. x 1000	Temperature - F	Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000
Average										
Maximum	0	0	0	0	0	0	0	0	0	0
Minimum	0	0	0	0	0	0	0	0	0	0
Totals		0		0						0
No. of Data	0	0	0	0	0	0	0	0	0	0

DeMotte Waste Water Plant

Annual Summation of Monthly Reports of Operation
2019

Plant Design Flow	0.496
Annual Average Flow	0.281
Capacity Used	57%

PERCENT REMOVAL SUMMARY

	BOD5	S.S.	Ammonia	Phosphorus
Primary Treatment				
Secondary Treatment				
Tertiary Treatment				
Overall Treatment	99	98	100	

	Man-Hours at Plant (Plants less than 1 MGD only)	Precipitation - Inches	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED: Chlorine - Lbs	CHEMICALS USED: Lbs/Day or Gal./Day	CHEMICALS USED: Lbs/Day or Gal./Day	RAW SEWAGE: Influent Flow Rate (if metered) MGD	RAW SEWAGE: pH	RAW SEWAGE: CBOD5 - mg/l	RAW SEWAGE: CBOD5 - lbs	RAW SEWAGE: Susp. Solids - mg/l	RAW SEWAGE: Susp. Solids - lbs	RAW SEWAGE: Phosphorus - mg/l	RAW SEWAGE: Ammonia - mg/l	RAW SEWAGE:	PRIMARY EFFLUENT: CBOD5 - mg/l	PRIMARY EFFLUENT: Susp. Solids - mg/l	AERATION: MIXED LIQUOR: Settleable Solids % in 30 minutes	AERATION: MIXED LIQUOR: Susp. Solids - mg/l	AERATION: MIXED LIQUOR: Sludge Vol. Index - ml/gm	AERATION: MIXED LIQUOR: Dissolved Oxygen - mg/l	AERATION: RETURN SLUDGE: Volume - MG	AERATION: RETURN SLUDGE: Susp. Solids - mg/l	SECONDARY EFFLUENT: CBOD5 - mg/l	SECONDARY EFFLUENT: Susp. Solids - mg/l
Average	18.37									243	570.209	291	685.69		41.9				697	3779	184	2.1				
Maximum		0			0	0	0	0	8.6	423	1133.21	572	1437.55	0	59.9	0	0	0	920	5248	330	4.5	0	0	0	0
Minimum					0	0	0	0	7.2	126	295.862	104	233.32	0	19.2	0	0	0	270	1976	92	0.9	0	0	0	0
Totals	6704	0			0	0	0	0			88952.7		106968										0			
No. of Data		0			0	0	0	0	260	156	156	156	156	0	156	0	0	0	156	156	156	156	0	0	0	0
Estimated Annual Totals (Average X 365)											208,126		250,277													

	Residual Chlorine - Contact Tank	FINAL EFFLUENT: Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l	Flow: Effluent Flow Rate (MGD)	Flow: Effluent Flow Weekly Average	BOD: CBOD5 - mg/l	BOD: CBOD5 - mg/l Weekly Average	BOD: CBOD5 - lbs	BOD: CBOD5 - lbs/day Weekly Average	Total Suspended Solids: Susp. Solids - mg/l	Total Suspended Solids: Susp. Solids - mg/l Weekly Average	Total Suspended Solids: Susp. Solids - lbs	Total Suspended Solids: Susp. Solids - lbs/day Weekly Average	Ammonia: Ammonia - mg/l	Ammonia: Ammonia - mg/l Weekly Average	Ammonia: Ammonia - lbs	Ammonia: Ammonia - lbs/day Weekly Average	Other: Oil & Grease (mg/l)	Other:	SLUDGE TO DIGESTER: Primary Sludge Gal. x 1000	SLUDGE TO DIGESTER: Waste Act. Sludge Gal. x 1000		
Average			3		8.2		0.281		2.7		6.27921		5.2		12.12		0.06		0.148					10.2		
Maximum	0	0	96	8.3	9.5	0	0.494	0.384	5.9	4.5	14.1815	10.38	11.6	7.733	28.41	19.59	0.34	0.175	0.701	0.385	0	0	0	39	0	0
Minimum	0	0	1	7	7.4	0	0.172	0.247	1	1.633	2.64537	3.677	1.2	3	2.794	8.558	0.014	0.02	0.03	0.046	0	0	0	7	0	0
Totals							102.4				979.556				1891				23.06		0	0	0	3723	0	0
No. of Data	0	0	59	261	261	0	365		156		156		156		156		156		156		0	0	0	365	0	0
Estimated Annual Totals (Average X 365)							102				2,292				4,423				54							

	DIGESTER OPERATION: Anaerobic Only: pH	Gas Production Cubic Ft. x 1000	Temperature - F	Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000
Average										
Maximum	0	0	0	0	0	0	0	0	0	0
Minimum	0	0	0	0	0	0	0	0	0	0
Totals		0		0						0
No. of Data	0	0	0	0	0	0	0	0	0	0

DeMotte WWTP

Annual Summation of Monthly Reports of Operation
2020

Plant Design Flow	0.496
Annual Average Flow	0.298
Capacity Used	60%

PERCENT REMOVAL SUMMARY	BOD5	S.S.	Ammonia	Phosphorus
Primary Treatment				
Secondary Treatment				
Tertiary Treatment				
Overall Treatment	99	98	100	

					CHEMICALS USED			RAW SEWAGE									PRIMARY EFFLUENT		AERATION – MIXED LIQUOR				AERATION – RETURN SLUDGE		SECONDARY EFFLUENT	
	Man-Hours at Plant (Plants less than 1 MGD only)	Precipitation - Inches	Bypass At Plant Site ("x" If Occurred)	Sanitary Sewer Overflow ("x" If Occurred)	Chlorine - Lbs/day	Lbs/Day or Gal./Day	Lbs/Day or Gal./Day	Influent Flow Rate (if metered) MGD	pH	CBOD5 - mg/l	CBOD5 - lbs/day	Susp. Solids - mg/l	Susp. Solids - lbs/day	Phosphorus - mg/l	Ammonia - mg/l		CBOD5 - mg/l	Susp. Solids - mg/l	Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Volume - MG	Susp. Solids - mg/l	CBOD5 - mg/l	Susp. Solids - mg/l
Average	15.67									249	616.959	326	800.591		39.1				428	3297	130	2.2				
Maximum		0			0	0	0	0	8.2	388	1249.86	568	1369.03	0	53	0	0	0	620	4072	209	3.9	0	0	0	0
Minimum					0	0	0	0	7.4	142	377.527	160	324.159	0	20.3	0	0	0	180	2052	60	0.8	0	0	0	0
Totals	1928	0			0	0	0	0			35166.7		45633.7										0			
No. of Data		0			0	0	0	0	87	57	57	57	57	0	57	0	0	0	59	59	59	59	0	0	0	0
Estimated Annual Totals (Average X 365)											225,190		292,216													

	FINAL EFFLUENT						Flow		BOD				Total Suspended Solids				Ammonia				Phosphorus		SLUDGE TO DIGESTER			
	Residual Chlorine - Final	Residual Chlorine - Contact Tank	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Oil & Grease (mg/l)	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs/day	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs/day	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs/day	Ammonia - lbs/day Weekly Average	Phosphorus - mg/l	Phosphorus - lbs/day	Primary Sludge Gal. x 1000	Waste Act. Sludge Gal. x 1000	0	
Average			8		8.0		0.298		2.4		6.08957		6.2		15.31		0.08		0.19					10.21		
Maximum	0	0	490	7.9	8.6	0	0.553	0.472	5.1	4.333	12.7679	12.52	13.6	10.47	40.61	23.5	0.8	0.315	1.616	0.65	0	0	0	12	0	0
Minimum	0	0	1	7.3	7.5	0	0.196	0.252	1.1	1.633	2.65288	3.638	2.8	3.667	6.623	10.37	0.017	0.036	0.044	0.114	0	0	0	8	0	0
Totals							39.94				334.927				842.1				10.26		0	0	0	1307	0	0
No. of Data	0	0	43	87	87	0	134		55		55		55		55		54		54		0	0	0	128	0	0
Estimated Annual Totals (Average X 365)							109				2,223				5,588				69							

	DIGESTER OPERATION – Anaerobic Only			DIGESTER OPERATION																																			
	pH	Gas Production Cubic Ft. x 1000	Temperature - F	Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000														0															
Average																																							
Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals		0		0						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No. of Data	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix G
Public Participation

CLASSIFIEDS

Post News
827 Halleck St. PO Box 110
DeMotte, IN
219.987.5111
Deadline: Noon Friday

Action Plus
827 Halleck St. PO Box 110
DeMotte, IN
219.987.5111
Deadline: Noon Tuesday

3,744 Weekly Print Readers

35,532 Weekly Print Readers

Readership numbers are in accordance with the National Newspaper Association Statistics

MISCELLANEOUS

GRAIN STORAGE AVAILABLE- 165,000 bushels of bin storage available in Pulaski County with dryer and scale. 574-806-4575

HELP WANTED

Full Time and Part Time Maintenance Technicians :

Perfect for new retirees that want to get out of the house! Clean/repair refrigeration/ice making equipment on the road in the chicagoland/NW Indiana region.
NO EXPERIENCE NECESSARY,
however former HVAC or Refrigeration/ Commercial ice machine /electrical circuit diagnosis experience is ideal but will train the right individual. Benefit package available for FT positions.

Email resume to:
tb.987@hotmail.com or mail resume to:
PO Box 166 DeMotte IN 46310

Help Wanted Assistant
Elderly lady in need of hiring an assistant,
hours and salary open.
219-988-2075
ask for Patsy

HELP WANTED

Multicell Packaging is located in Remington IN. We are an industrial packaging manufacturing company, with locations in Pennsylvania and Georgia. We are currently accepting resumes to fill a 2nd shift opening. 3PM - 11PM
Production/Machine Operator will be responsible for the safe and efficient operation of production equipment. Although no prior experience is required, one must have willingness to learn and work with others in a team work environment. A Driver's License is needed. Clean, Not a very loud workplace.
Full time job with overtime when needed.
Full Benefits (Health, Dental, Vision, Life) after 90 days. 401k after a year.
Pay Starts at $12.50 will increase after 90 days.
Five Vacation days after 6 months
Drop of Resumes or fill out an application at.
Multicell Packaging.
600 North Harrington Street
Remington IN
1-800-772-9193

USED TRUCKS & VANS

FOR SALE: 1999 Ford F450 crew cab service truck & 1994 Ford F350. 574-806-4575

GARAGE SALES: INDIANA

Estate Sale Friday Oct 9-10, 10am-4pm. 12218 E. Stalbaum Ln. Wheatfield. (Sculley SQ) Antique dressers, tables, chairs, refrigerator, etc. Two Flexsteel sofas and chair. Patio set, books, shoes. Women's clothes (M-3X) all $1 ea. Dishes and household items. Cash and check only.

GARAGE SALES: INDIANA

11804 Old Colony Rd
Demotte, In. 46310
Yard Sale
Rockville is closed this year, however we are open at 9-4 Friday, Oct. 9 and Saturday, Oct. 10.
Retiring after 30 years.
Multi family with elephant collectibles, tools, books and many waiting to have new owners.
Clothing many sizes adult men and women size L-plus sizes and kids, mostly boys.

INDIANA LEGALS

20-067KV 10/8
Notice of Public Hearing
Town of DeMotte
Wastewater Preliminary Engineering report (PER)

The Town of DeMotte will hold a public hearing at 6:00 pm on October 26th, 2020 during their regularly schedule Town Council meeting, at the Town of DeMotte Town Hall, 112 Carnation Street SE, DeMotte, IN 46310. The Town of DeMotte's engineering consultant, Abonmarche, will present the recommended project, which will include an extension of their sanitary sewer network. The project will be funded through a Wastewater State Revolving Fund (WWSRF) loan. Copies of the required Preliminary Engineer Report (PER) are available for public viewing starting October 12th through November 2nd at the Town of DeMotte Town Hall, 112 Carnation Street SE, DeMotte, IN 46310.
There will be opportunity for questions and comments from the public at this meeting. Written comments from the public will be accepted through November 2nd. Your participation is welcomed and encouraged. If you will require special assistance at the meeting, please contact Heather Tokarz, (219) 987?3831.
Written comments regarding the project should be sent to Daryl Knip, 315 W Jefferson Blvd, South Bend, IN 46601 or dknip@abonmarche.com prior to November 2nd.
HSPAXLP

INDIANA LEGALS

20-073KV 10/8
Notice of Public Hearing
DeMotte Board of Zoning Appeals
To the residents of the Town of Demotte, Indiana, and those persons residing within the two mile buffer zone with its jurisdiction: notice is hereby given that the DeMotte Board of Zoning Appeals will hold a public hearing on the 10th day of November, 2020, at the DeMotte Town hall in DeMotte Indiana, at 7:00 o'clock p.m. Central Standard time to consider the request of Karen Eck, as petitioner for a developmental variance, as provided by the zoning ordinance to permit certain property to be used for a residential dwelling to be built according to submitted plans. The variance requested is that this dwelling to be constructed on 2.5 acres, varying from DeMotte Zoning Code 11.3.1 requiring minimum lot size of 5 acres, following all specified FEMA guideline in regard to elevation. Land is currently vacant and designated as farmland. Legal description of land is: PT NW NW SE 16 32 7, 2.5 acres (165 ft. x 660 ft.) County parcel # 007-03649-00. State parcel # 37-15-16-000-013.000-024
Persons may make written or oral comment either in favor of or in opposition to such request in person at the public hearing, or in writing by delivery, prior to the hearing at the office of the Planning Commission at the DeMotte Town Hall.
hspaxlp

20-075KV 10/8 10/15
NOTICE TO PUBLIC AND BIDDERS
The Town of DeMotte, Indiana, will receive bids until 11:00 AM, local time, on Monday, October 26, 2020 at the Office of the Town Manager, Town Hall, 112 Carnation Street SE, DeMotte, Indiana 46310, at which time bids will be publicly opened and read aloud in Town Hall for the following project:
Industrial Park Sanitary Extension Project
The project is located in the unincorporated area of Kersey just East of the Town of DeMotte.

INDIANA LEGALS

Work to be performed shall include the installation of approximately 1,225 lineal feet of 2-in HDPE by directional drill, and approximately 4825 lineal feet of 4-in HDPE force main by directional drill, and other appurtenant work along the roads of Industry Drive, Work Street, and Commercial Drive. This project shall be substantially complete within one hundred twenty (120) calendar days from the issuance of the Notice to Proceed. The Contract Documents and Plans are available for examination at the Office of the Town Manager, Town Hall, DeMotte and the offices of the Engineer, Abonmarche Consultants, Inc., 17 North Washington St, Valparaiso, IN 46303 or 315 W. Jefferson Blvd, South Bend, IN 46601. Electronic contract documents can be obtained online from the Abonmarche website, found at http://www.abonmarche.com/bids. There is no fee for registration on the plan holder's list and download of electronic bidding documents The Contract Documents and Plans are also available for purchase during regular business hours at the Office of the Town Manager and the Office of Abonmarche Consultants for a non-refundable cost of $30.00 for each set of documents for all bidders.
Bids shall be properly and completely executed on bid proposal form provided, accompanied by a Non-Collusion Affidavit and a Certified Check or Bid Bond payable to the Owner in the amount of not less than five percent (5) of the bid. Each bid shall include Indiana State Form 96 and all other required forms as described in the bidding documents. Bidder shall be certified to do work in the State of Indiana. Additional Bidding requirements are in the Instructions to bidders included in the Project Documents.
The bidder awarded the contract will be required to furnish a separate Performance Bond and Payment Bond, each in the amount of one hundred percent (100%) of the contract price before commencing work. The Performance Bond and Payment Bond shall remain in effect throughout the entire construction period. In addition a Warranty Bond in the amount of ten (10%) percent will be required for a period of three (3) years prior to final acceptance by the Owner.
The Town of DeMotte reserves the right to reject any and all bids or to waive any irregularities in bidding, to accept a full or partial award of the Bid or Bids which, in its judgement, will be in the best interest of The Town of DeMotte.
No bid or bid security may be withdrawn after the scheduled closing time for receipt of bids for at least sixty (60) days.
Town of DeMotte
/s/ Heather Tokarz
Town Manager
hspaxlp

20-253RR 10/3 10/10
NOTICE TO TAXPAYERS OF PROPOSED ADDITIONAL APPROPRIATIONS
2020-10
Notice is hereby given to the taxpayers of Jasper County Government, Jasper County Indiana, the proper and legal officers of the Jasper County Council will meet at 7:00 P.M., C.S.T., at 910 S Sparling Avenue, Rensselaer, Indiana, on the 20th of October, to consider the following additional appropriations in excess of the budget for the current year of 2020.
General:
Superior
Law Books
(1000.20043.000.0201) $5,005.00
TOTAL GENERAL $5,005.00
Taxpayers appearing at this meeting shall have a right to be heard. The additional appropriations as finally made will be referred to the Indiana Department of Local Government Finance (DLGF). The DLGF will make a written determination as to the sufficiency of funds to support the appropriations made within fifteen (15) days of receipt of a certified copy of action taken. Kimberly K. Grow, Auditor of Jasper County
hspaxlp

PROOF OF PUBLICATION

STATE OF INDIANA)
COUNTY OF JASPER)

NOTICE OF HEARING

Legal #20-076KV
ABONMARCHE

Publisher's Fee: $63.84

(ATTACH COPY OF AD)

The undersigned, Marlene Taden, Legal Advertising Clerk of THE KV POST NEWS, a weekly newspaper of general circulation, printed in the English language and published in Kentland, Indiana in said county; does hereby certify that the advertisement attached hereto is a true copy, which was duly published in said paper for 1 week(s), successively, the first of which publication was on the 8TH day of OCTOBER, 2020.
In addition, this Newspaper has a website and this public notice was posted on the same day as it was published in the newspaper.

Dated this 19th OCTOBER, 2020.

/s/Marlene Taden, Legal Advertising Manager

WWSRF Loan Program
Public Notice

Notice of Public Hearing
Town of DeMotte
Wastewater Preliminary Engineering report (PER)

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Appendix H
Environmental Coordination