Special Committee of the Whole

Monday, July 26, 2021 at 6:30 P.M.

Library at Five Points, Washington, 360 N. Wilmore Road, Washington, IL

Mayor Manier called the special Committee of the Whole meeting of July 26, 2021 to order 7:03 p.m.

Present: Alderpersons Adams, Blundy, Brownfield, Butler, Cobb, Dingledine, Stevens and Yoder
Police Chief McCoy, and Attorney Keith Braskish

Also Present: Finance Director Baxter, P & D Director Oliphant, City Engineer Carr, and Public Works Director Schone, City Treasurer Strubhar and press

MINUTES

1. *Aldermen wishing to be heard:* none provided

2. *Public Comments:* Troy Pudik came forward along with Sam Miller regarding the Phase 2B Trunkline. He shared that he has an affidavit from Gary Deiters who owns property along the proposed line. Mr. Pudik referenced the resolution that was passed on October 21, 2019. He shared that this resolution approved the preliminary engineering study, the route alignment and allowed the City to move forward with permitting. He stated that landowners were not made aware of the project at that time. He stated this is why they weren't at the meetings. He stated that Alderperson Dingledine asked if there were any preliminary discussions with the family. He also stated that previous Public Works Chairman, Ed Andrews stated that discussion had occurred. Mr. Pudik asked to rescind the resolution.

   Tom Gross repeated the previous statements. He stated that he reviewed the minutes from the meeting when the resolution was discussed. He said he can't blame the Council because they were given wrong information and that the resolution should be rescinded. He stated that the wrong information was sent the IEPA to apply for a loan. Mr. Gross also stated that on April 6, 2020, Alderperson Adams made the statement that the landowners were not on board with the project and some members of City Council contacted the landowners to get their own information. He asked for an environmental study on multiple routes. He also stated that this project will cost over $20 million.

   Sam Miller, property owner, repeated the previous statements. He noted that he received a letter dated February 4, 2020 from Caskaskia stating that the purpose was to introduce them to the project and gain access to the property and the homeowners did not know about the project until they received this letter.

   Brian Fischer from Main Street came forward to seek due diligence and process from Council. He shared his local government experience. He stated that after reviewing documents he had three thoughts. He noted the increase in cost, he feels the City only looked at one option which is Route B, wondered why three alternatives weren't explored if they were contracted, and he feels there is a lack of transparency. He asked why the price increased. He stated that the Strand route is based on City priorities. He stated that he would like Council to pause and reevaluate the project.

   Brett Pudik shared that their engineers could not make it tonight but sent questions through him. First, a question regarding the improvements needed at STP2 due to elevation constraints and the costs to do so. He

shared that the Strand report details the impact of the improvements or lack of improvements. He noted that Strand recommended the inflow should be higher than the pumping station but Route B brings the inflow lower than the pumping station and routes north of Farm Creek give greater flexibility of height which will defer the need for replacement. The second question referenced the depth of the proposed Route B that is impacted due to the location of the current sewer line which will require deeper manholes. He stated that a route north of Farm Creek would have an average less than that of Route B and less of an impact on trees and wetlands. He asked why the routes north of Farm Creek were not evaluated with the same detail as Route B.

A resident who didn't share her name asked about crossing Farm Creek with the new line if crossing the creek with the old line was not preferred. She stated that the current line was exposed 30-33 years after it was constructed. She also asked if 93% of the proposed route is covered by forest, why hasn't the City explored more environmentally friendly alternatives.

3. BUSINESS ITEMS

1. *Phase 2B Trunkline Discussion*: City Engineer Dennis Carr introduced Mike Waldren of Strand and Associates to provide project details. Mr. Waldren shared a visual presentation regarding the work that went into evaluating the route that is presented. He shared a map of the sanitary sewer service area that showed it runs from the east to the west along the south side of town. He noted that it crosses Farm Creek around 12-16 times. He explained that when they stated they wanted to lessen the impact of Farm Creek by reducing the number of crossings, not avoiding the creek altogether. He shared another consideration was the location of the treatment plants being on the south side of the railroad tracks. He went on to share that the original purpose of this project is due to the IEPA mandated closer of Treatment Plant #1. The age and location of the current sewer line were also a factor. He shared that creeks are often considered as locations because they are low lying, however, the current line was not deep enough and manholes were too close to it. Mr. Waldren noted that it is difficult to access when it crosses the creek and noted that future development could exceed the current sewer line. He went on to share that they evaluated five primary routes, just like the landowners evaluated several routes, before narrowing it down. He shared that Option A just replaced the existing line which was ruled out due to the costs to bypass the current flow during installation as well as it being intrusive to landowners. He shared that Option B follows the railroad with a few crossings of the creek, however a few more crossings were identified because the oxbow had moved to the north. He shared that Option C had similar issues as Option A with its impact on floodplains. He noted that it is normal to start to rule out routes as problems are discovered. Mr. Waldren shared Option D that runs south and stated that they are trying to stay along property lines. Also, Option E has a similar route that the landowners are proposing. He provided details about the lengths in sewer sections and the depths of the needed manholes. He noted that the depth of concern is approximately 30-feet deep and the alternative route depths go up to 90 feet. He shared that these would cause the cost of direction drilling to be 2-3.5 times more than the cost of traditional trench construction. He also noted on the proposed route that 13 manholes would be at a depth of 40-80 feet and 7 manholes would be 50-100 feet deep and these pose a danger. He stated that Route E that runs along the north side of the creek, contains multiple crossings at the creek, railroad and tributaries as well as concerns with the depth of manholes. He went on to explain the requirement to have manholes every 500-600 feet which would result in at least four manholes at 50-80 feet deep in that route. Mr. Waldren then focused on Route B that is significantly shorter and shallower than the other routes. He also shared that while they are in the area of the existing sewer, they can remove it as they are installing the new line. He noted that this line does cross the creek a few times but less than the previous line and there are fewer trenchless locations which will be a cost savings. Mr. Waldren then reviewed the two options shared by the landowners. He noted that their option D-1 is very similar to the Strand option E as well as Option E-2 that is near Cummings Lane. He shared specifics about depths, tributary crossings, wetlands, two railroad crossings which require extra casing, and extra lengths of trenchless construction. He shared that proposed route E-3 would be easier to consider because it cuts out a hill but it interrupts more tributaries as well as the two railroad crossings and extra depths. Concerning accessibility, Mr. Waldren wants to put trees back and replace impacted wetlands. He also noted that they want to use the access routes that are currently used by Ameren and the property owners and it will be maintained. He also shared that this was purposely proposed along the railroad right of way to avoid

bisecting private properties. He noted that accessing the proposed alternate route would require them to drive down Cummings Lane a across private property to gain access. Mr. Waldren shared information regarding the already existing easement that is on the three properties and the 5-7 properties that would require easements for the proposed alternative route. He went on to share the environmental impacts. He shared that they have to start early to get on the list for IEPA funding. He also shared that the wetland impact studies come after the permit process is started and they use previously obtained wetland studies as a starting point. He shared that they have been working with the Army Corps to avoid wetland areas and feels it is unfair to say that the alternative routes don't affect wetlands. He noted a future need for floodplain studies because not all estimated floodplains flood with a 100-year flooding event. He went on to address the impact on trees, stating that it is a concern of his as well. He also noted archeological affects were previously impacted when the railroad went in. Mr. Waldren shared that areas where the line will cross the creek, will be revised and updated which will include the replanting of eroded banks. He then shared that the opinion of probable costs reveal that the proposed alternatives would be significantly higher due to the amount of trenchless drilling. He noted that the original estimates were close to $6 million with a contingency of 25% for additional discoveries and this is not unusual. He shared that the projected costs for alternative routes were $15-22 million and alternatives D-1 and E-2 were projected at $10 and $11 million. He shared differences in the data provided by the property owners including average depths of manholes, how much wetlands, and how many crossings. He then addressed that mandated replacement of the pumping station is not driven by the depth of the sewer and replacing it at this time allows the City greater flexibility for other improvements. In regards to the stated cost of $3.5 million, he was not sure where that came from because their study estimated $7.8 million, then the pump station would be added on to that to make the estimated cost $10.6 million. They requested $13 million from the IEPA to cover unforeseen costs in design engineering, construction observation, legal and loan fees. He expects that this will be less than $13 million. He noted that he feels that all the goals have been met.

Mr. Carr stated that it is fairly uncommon for the Army Corps of Engineers to request an archeological study but this will be done on any alignment that is looked at.

Alderperson Adams asked who would have been responsible for reaching out to the landowners. Mr. Carr shared that with large scale projects, it is uncommon to bring in all possible affected landowners until routes are ruled out because there will always be a landowner who disapproves of each option. Alderperson Adams clarified that Council was told that landowners were approached and on board but it doesn't appear to have happened. Alderperson Butler stated that in August 2019 a contract with Caskaskia was approved that included a letter that was to go to the landowners but it wasn't sent out in a timely manner. Alderperson Adams shared that he feels they weren't provided all the information and that costs have increased in other projects. Alderperson Stevens stated that after reviewing the August 2019 minutes, it stated that seven parcels were involved, then in September it stated the next step was to decide the final alignment, then there was a presentation by Strand in October that stated there were five parcels, then the next week the resolution was presented. Alderperson Butler stated the unfortunate thing is the preliminary study did not state that alternate routes were considered, we don't have a choice to not do this and the communication could have been better. Alderperson Dingledine noted that construction standards have improved since the previous system was built and that our City has doubled as well. He also shared that Council was led to believe that staff, at that time, was communicating with the landowners but now we need to move forward. Mayor Manier asked that we move forward to make a decision that is best for the residents. Alderperson Adams stated that he would like to evaluate if anyone would vote differently on the resolution knowing today's information. Mayor Manier asked for further discussion at the next Committee of the Whole meeting. All agreed

Adjournment: At 9:21 p.m. Alderman Cobb moved and Alderman Dingledine seconded to adjourn. Motion carried unanimously by voice vote.

Valeri L. Brod, City Clerk

Farm Creek Trunk Sewer Replacement Project
Alternative Route Analysis and Discussion of Route Concerns

July 26, 2021

City of Washington, Illinois

City of Washington Est. 1825

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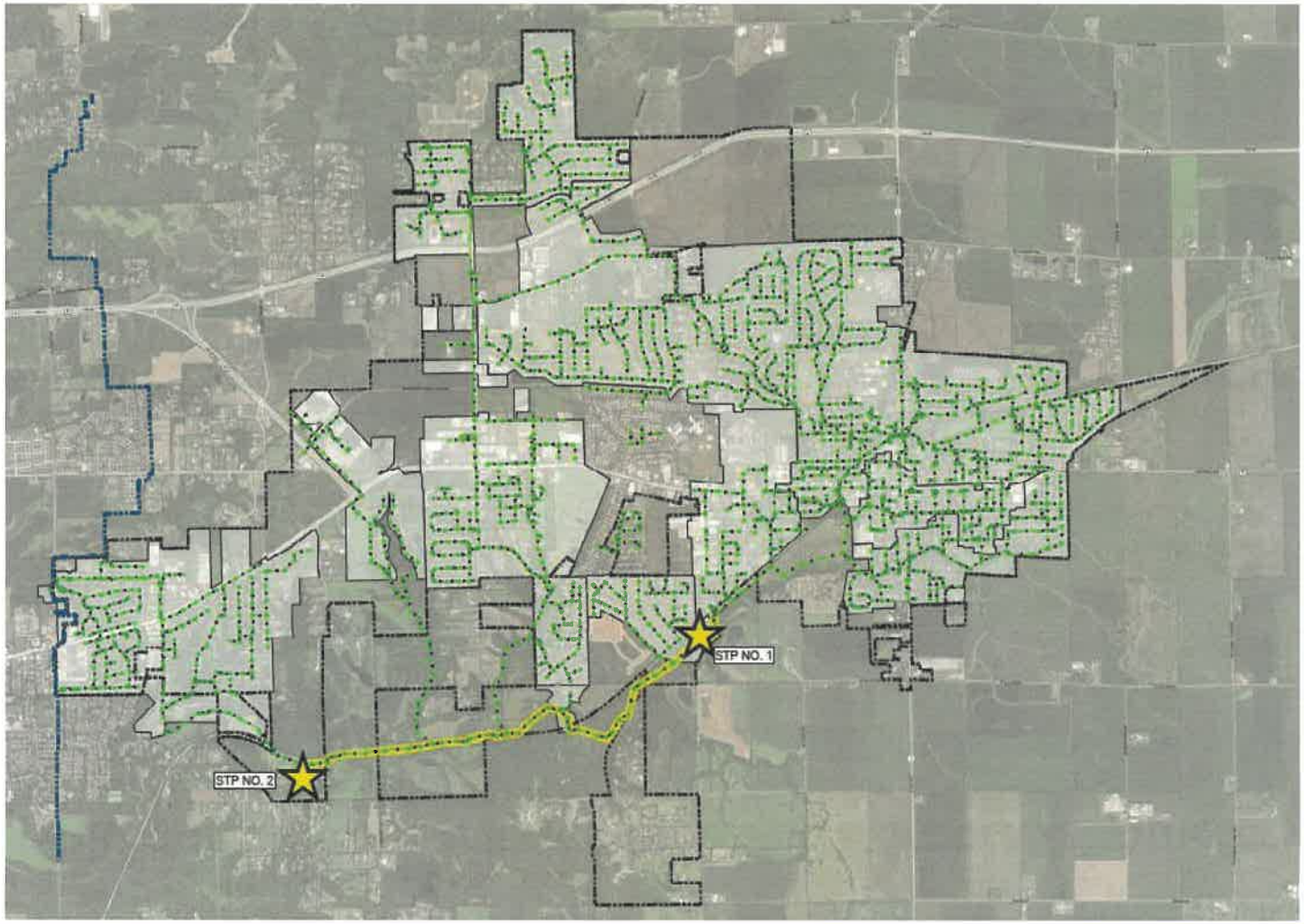
Presentation Overview

- Review of Project Purpose and Objectives
- Review of Alternatives Analyses
- Status of Project and Next Steps

City of Washington's Sewer Service Area and Corporate Boundary



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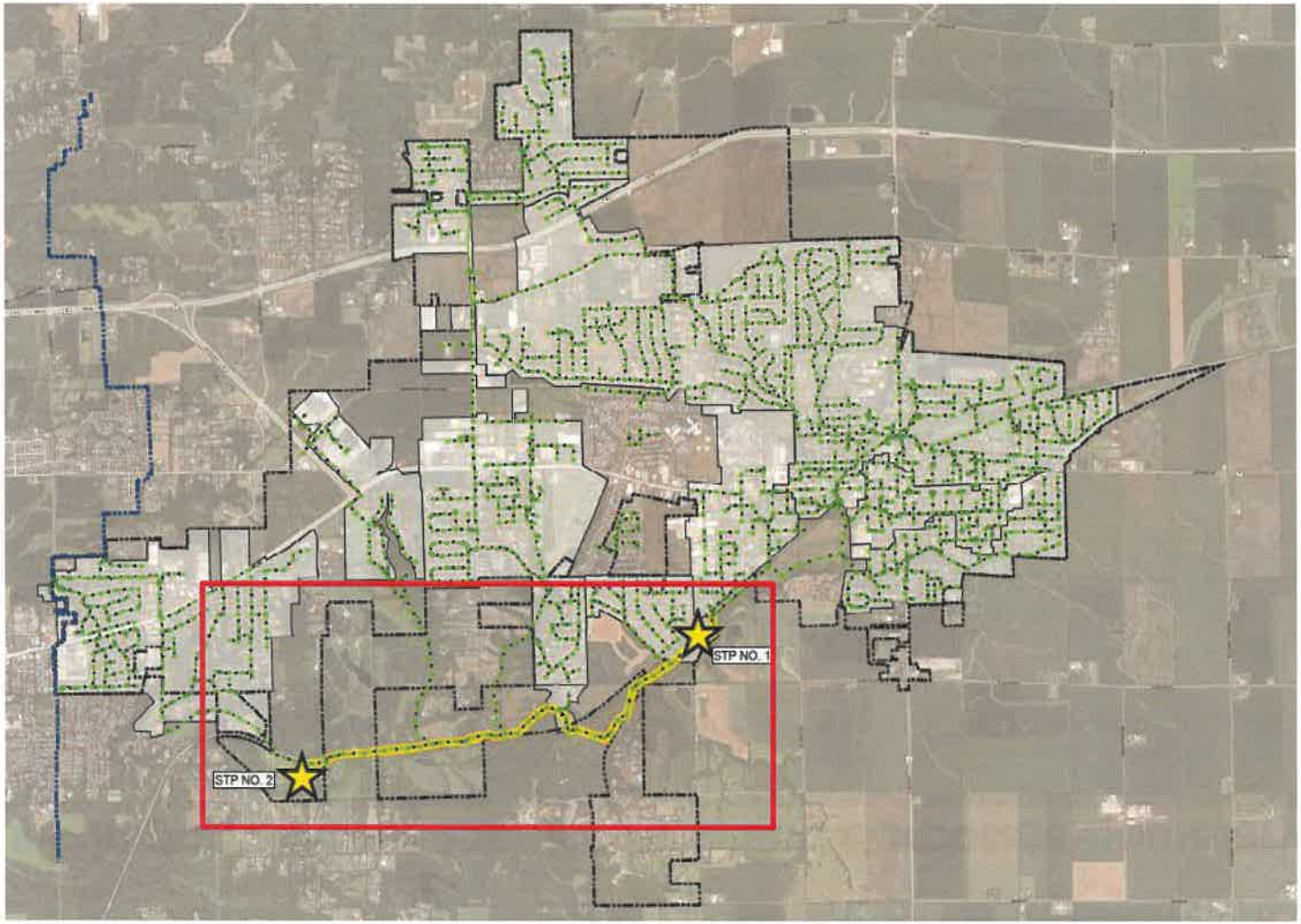
City of Washington's Sewer Service Area and Corporate Boundary



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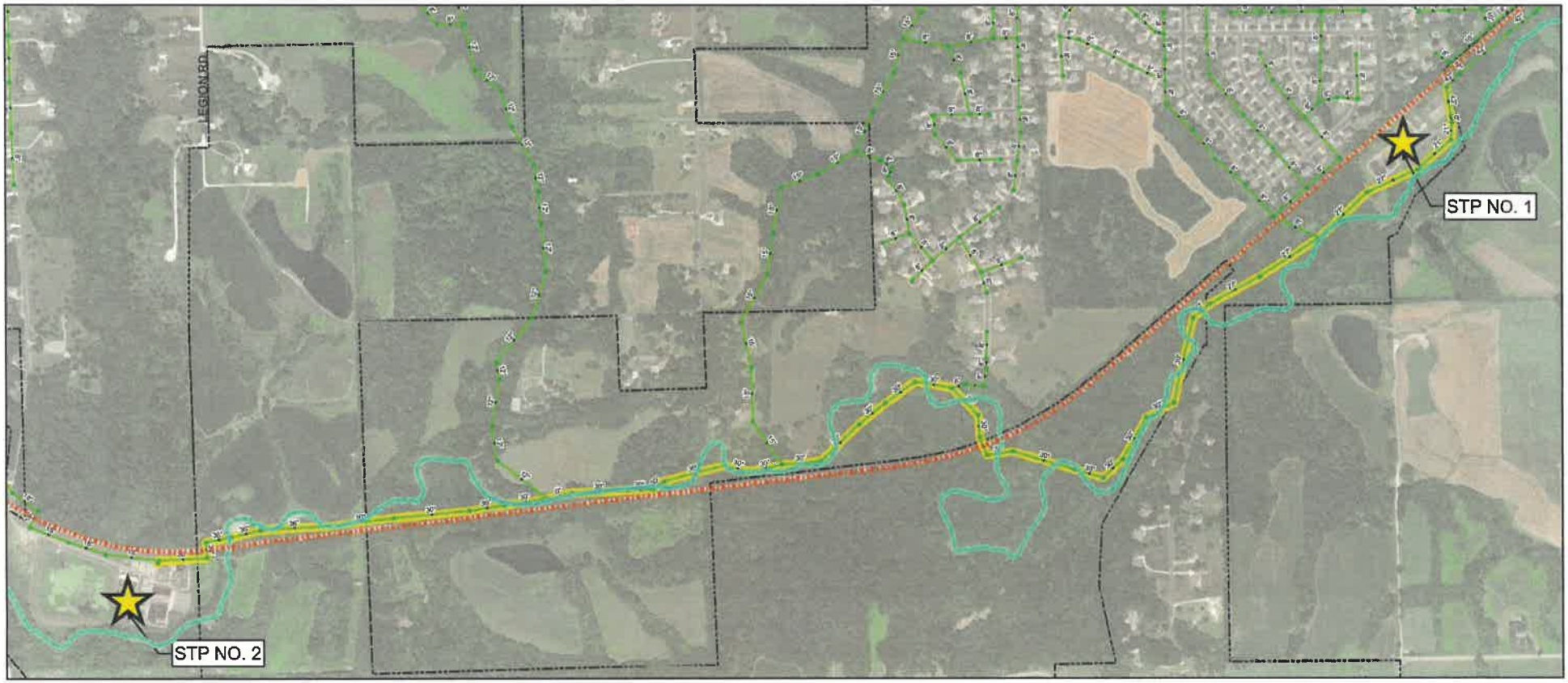
Existing Farm Creek Trunk Sewer (FCTS)



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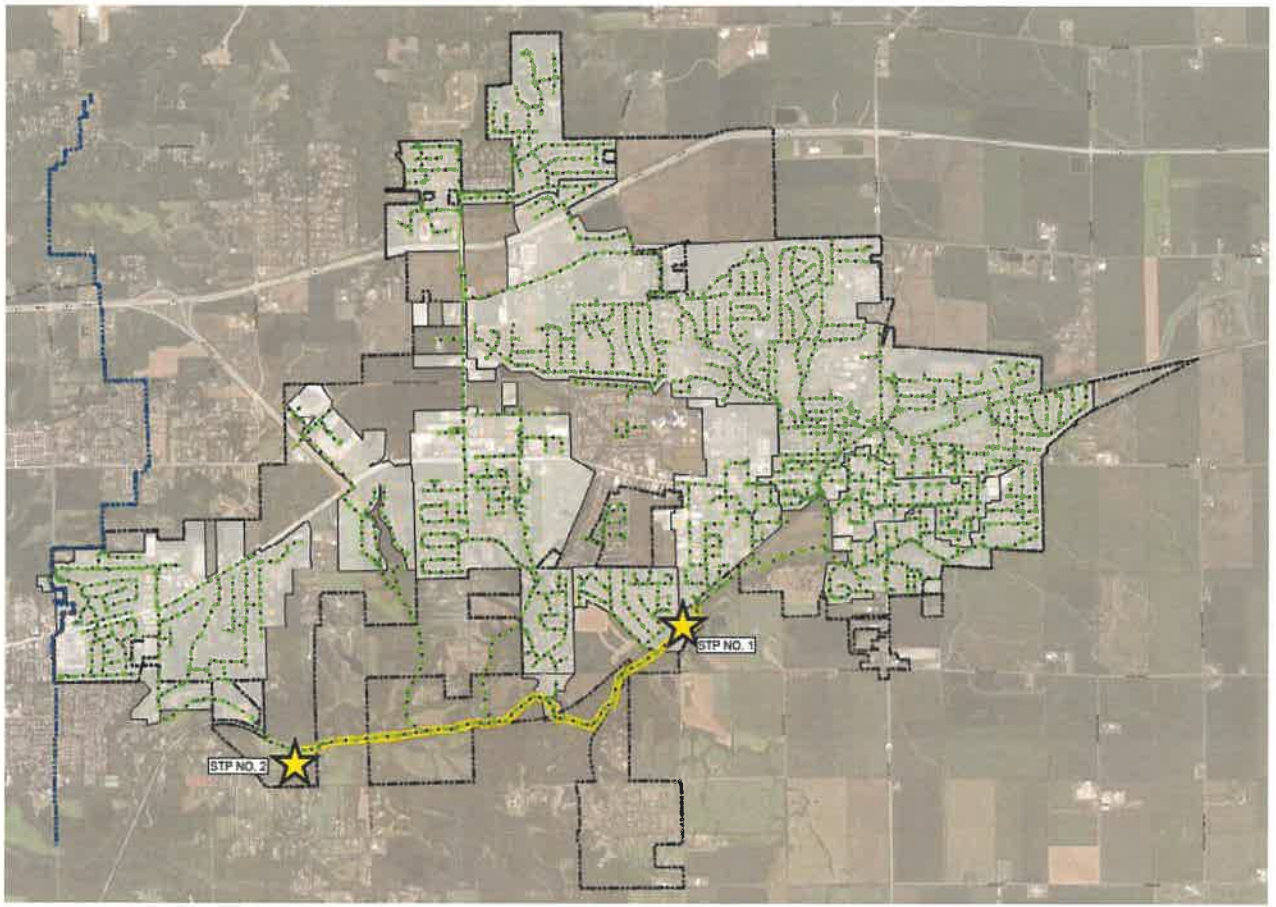
FCTS Replacement Project Purpose

- IEPA mandate to decommission STP No. 1



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FCTS Replacement Project Purpose

- IEPA mandate to decommission STP No. 1
- Age and condition of the existing sewer system
- Excess flow conditions during wet weather (I&I)

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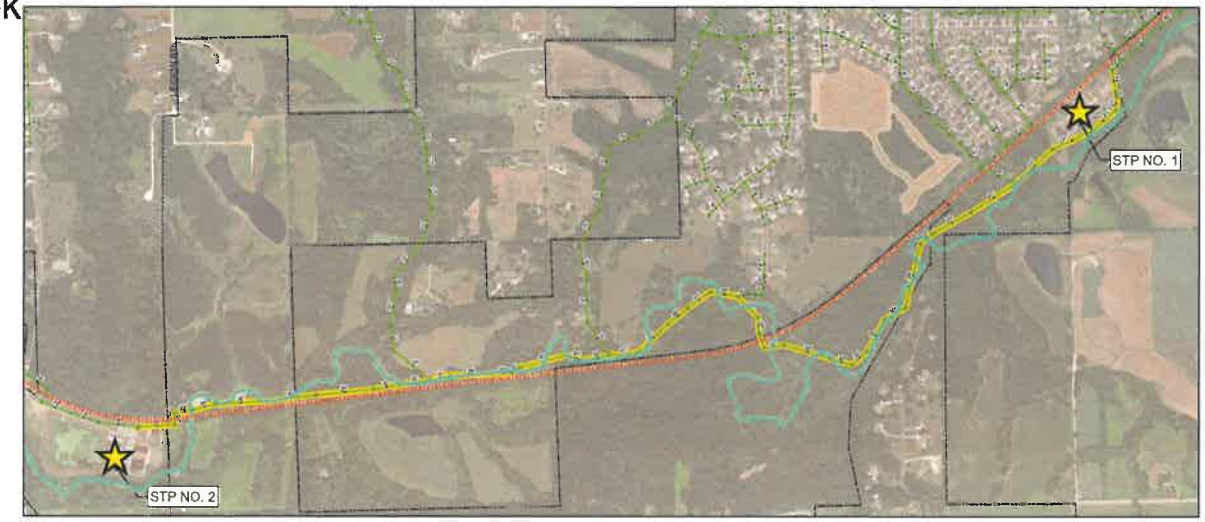
FCTS Replacement Project Purpose

- IEPA mandate to decommission STP No. 1
- Age and condition of the existing sewer system
- Excess flow conditions during wet weather (I&I)
- Access, operation, and maintenance issues along the creek



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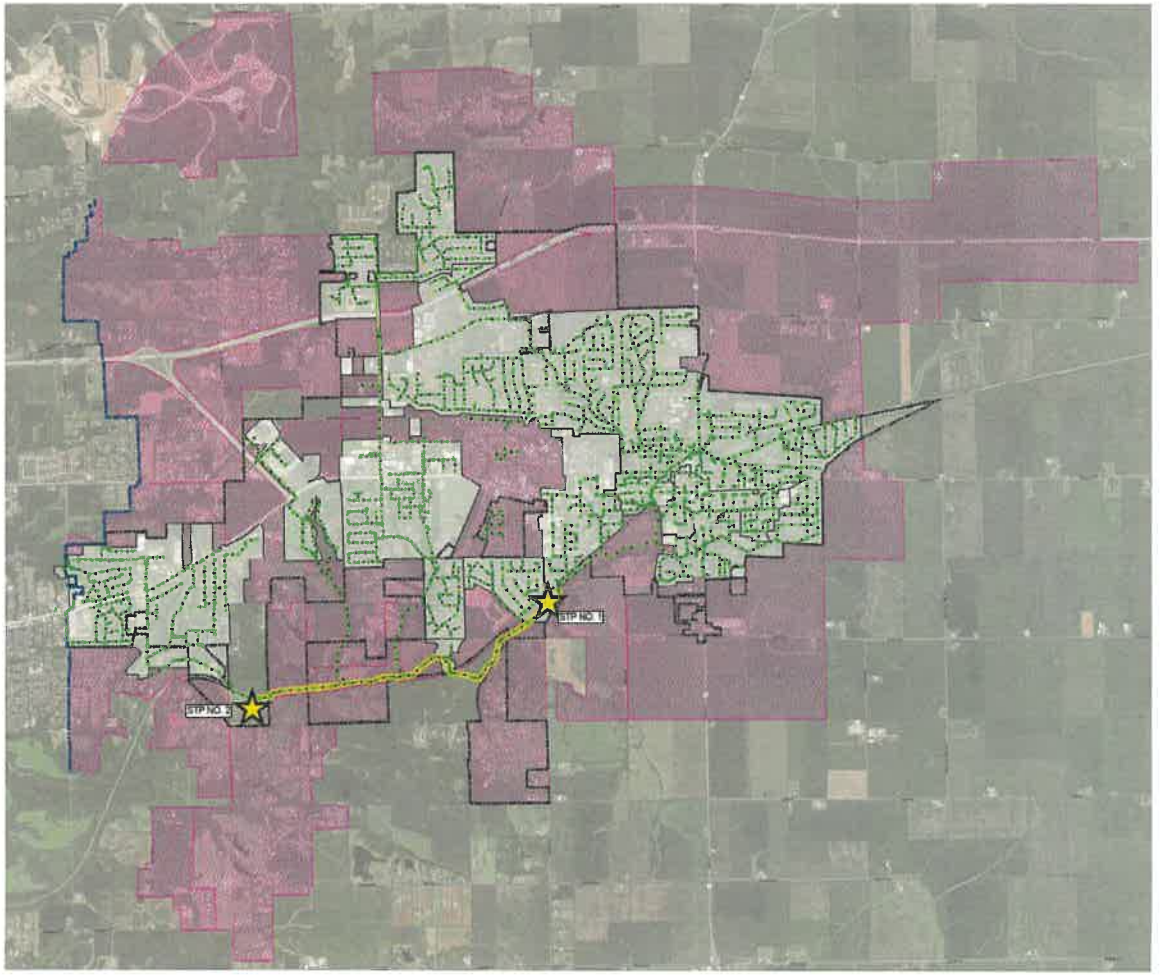
FCTS Replacement Project Purpose

- IEPA mandate to decommission STP No. 1
- Age and condition of the existing sewer system
- Excess flow conditions during wet weather (I&I)
- Operation and maintenance issues along the creek
- Future development exceeding current sewer capacity



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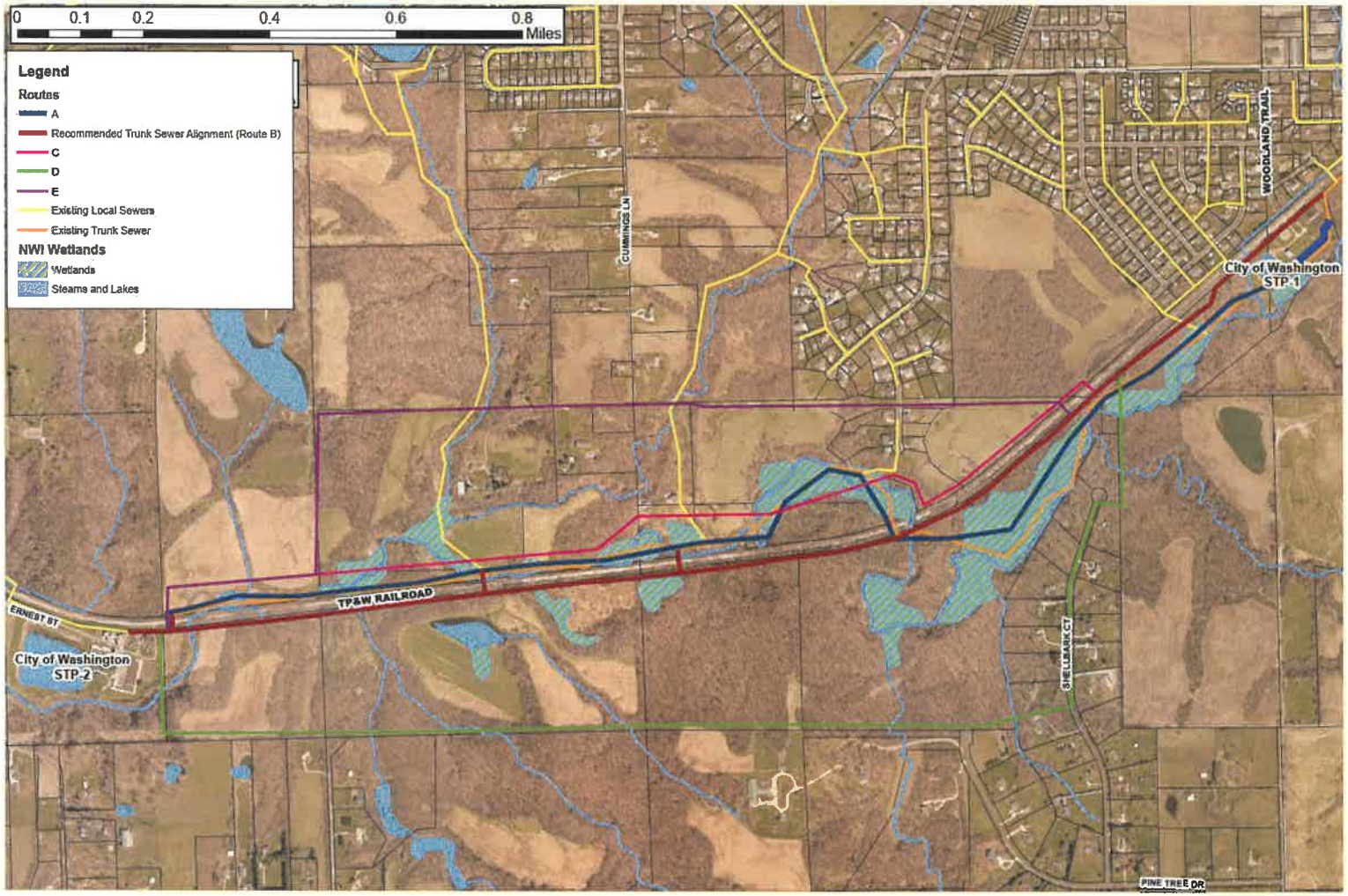
City's Alternative Alignment Study – 5 Primary Alignments



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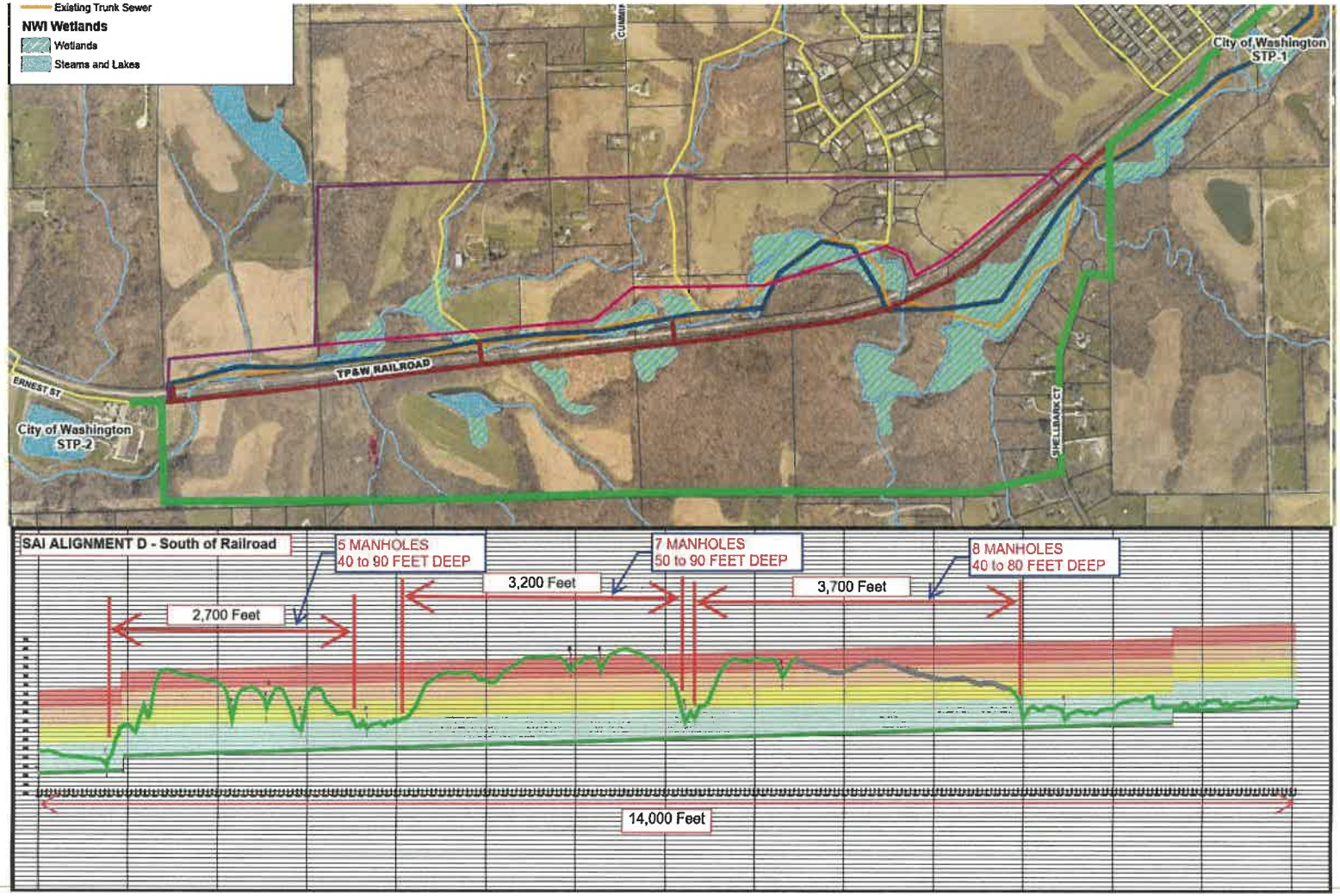
City's Alternative Alignment Study – Alignment D Profile



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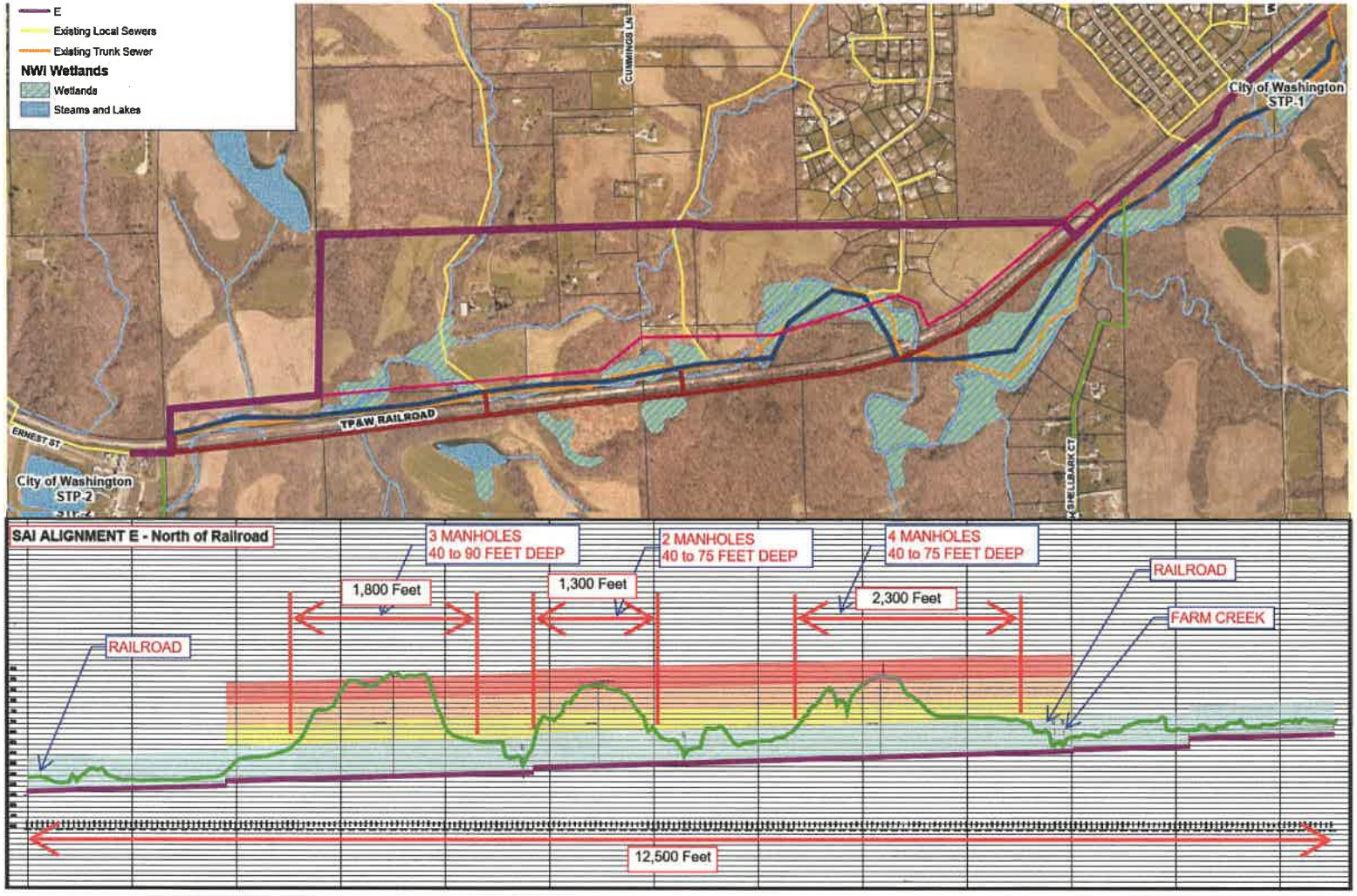
City's Alternative Alignment Study – Alignment E Profile



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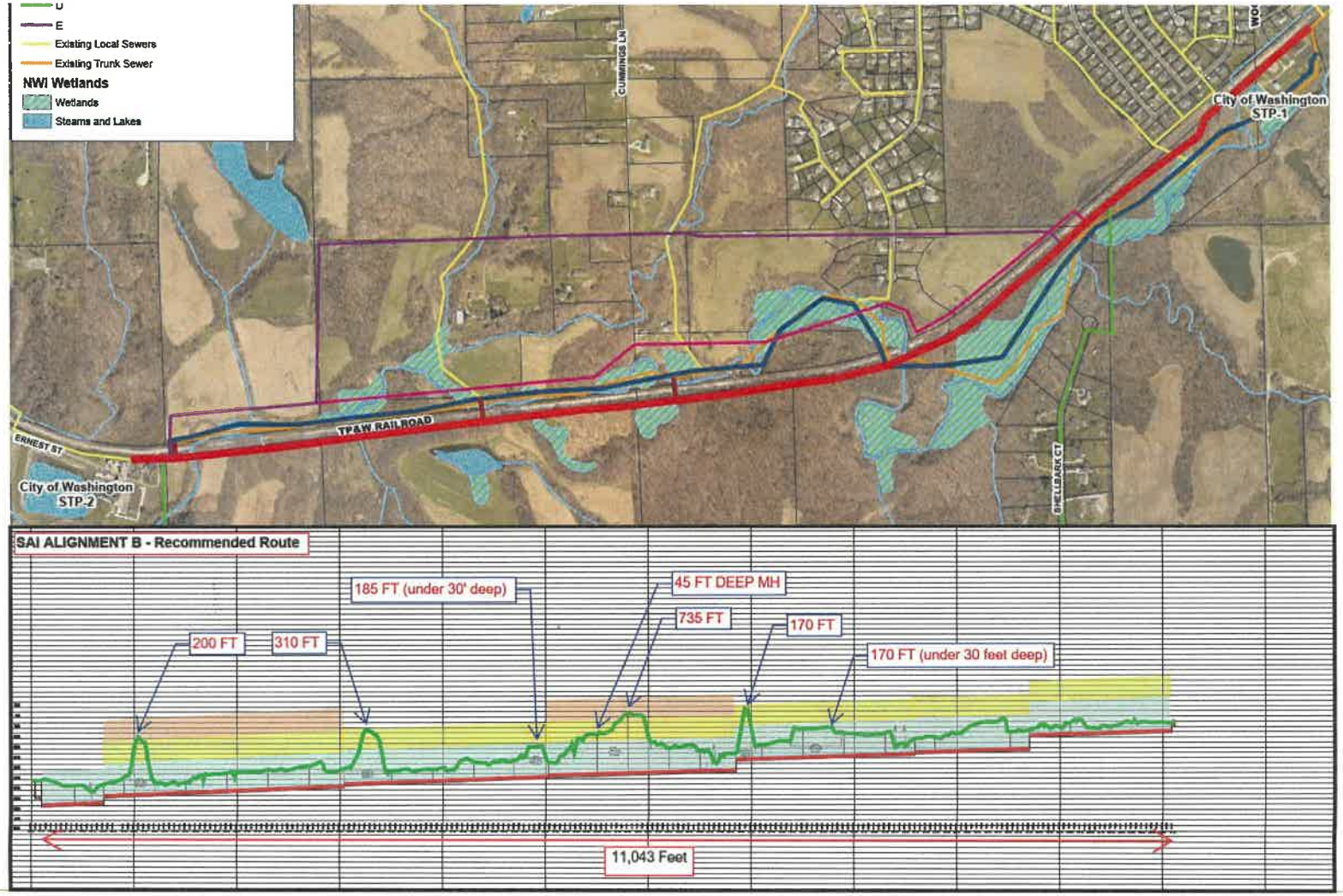
City's Alternative Alignment Study – Alignment B Profile



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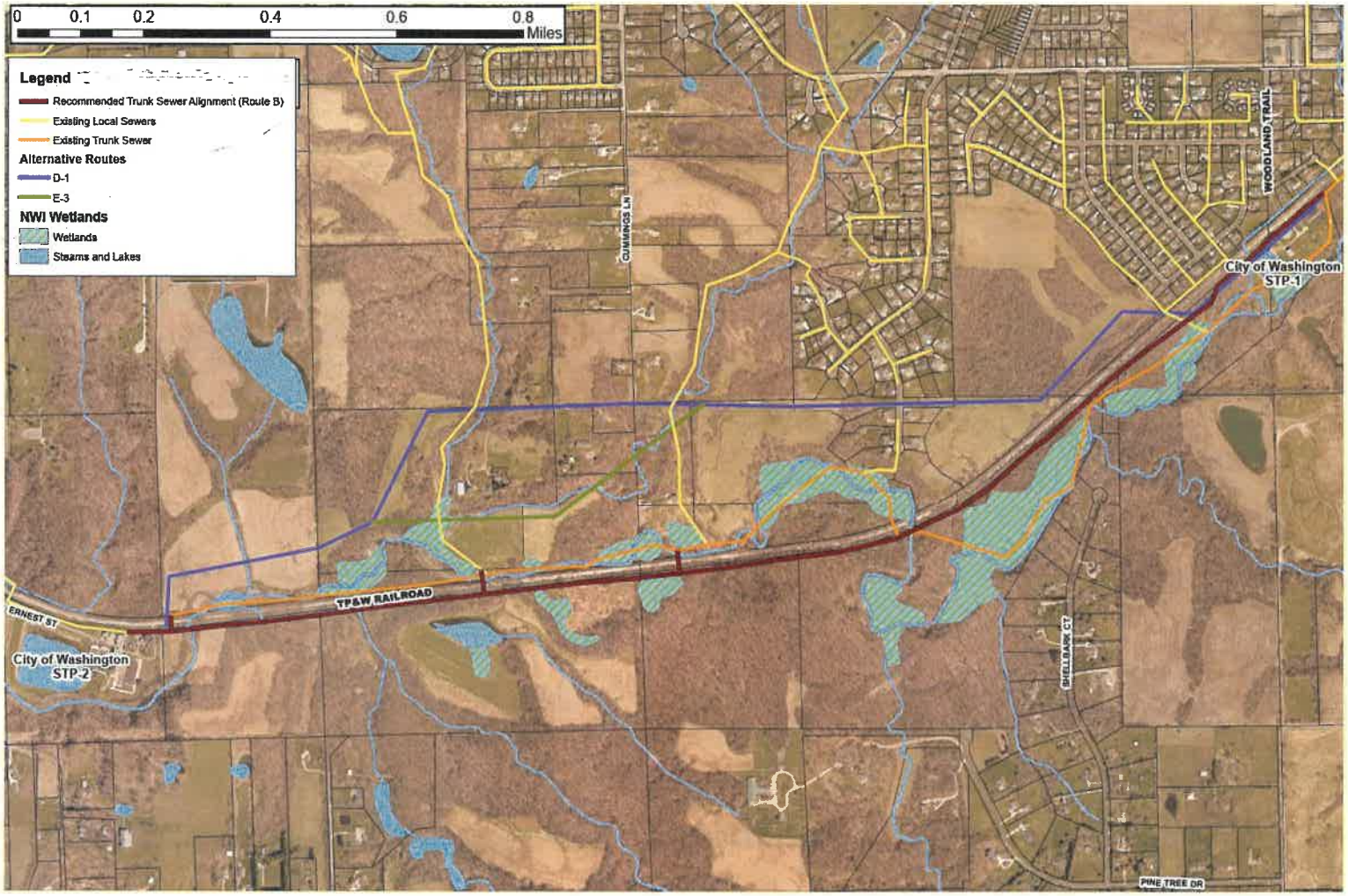
Landowners' Alternative Alignment Study – 2 Primary Alignments



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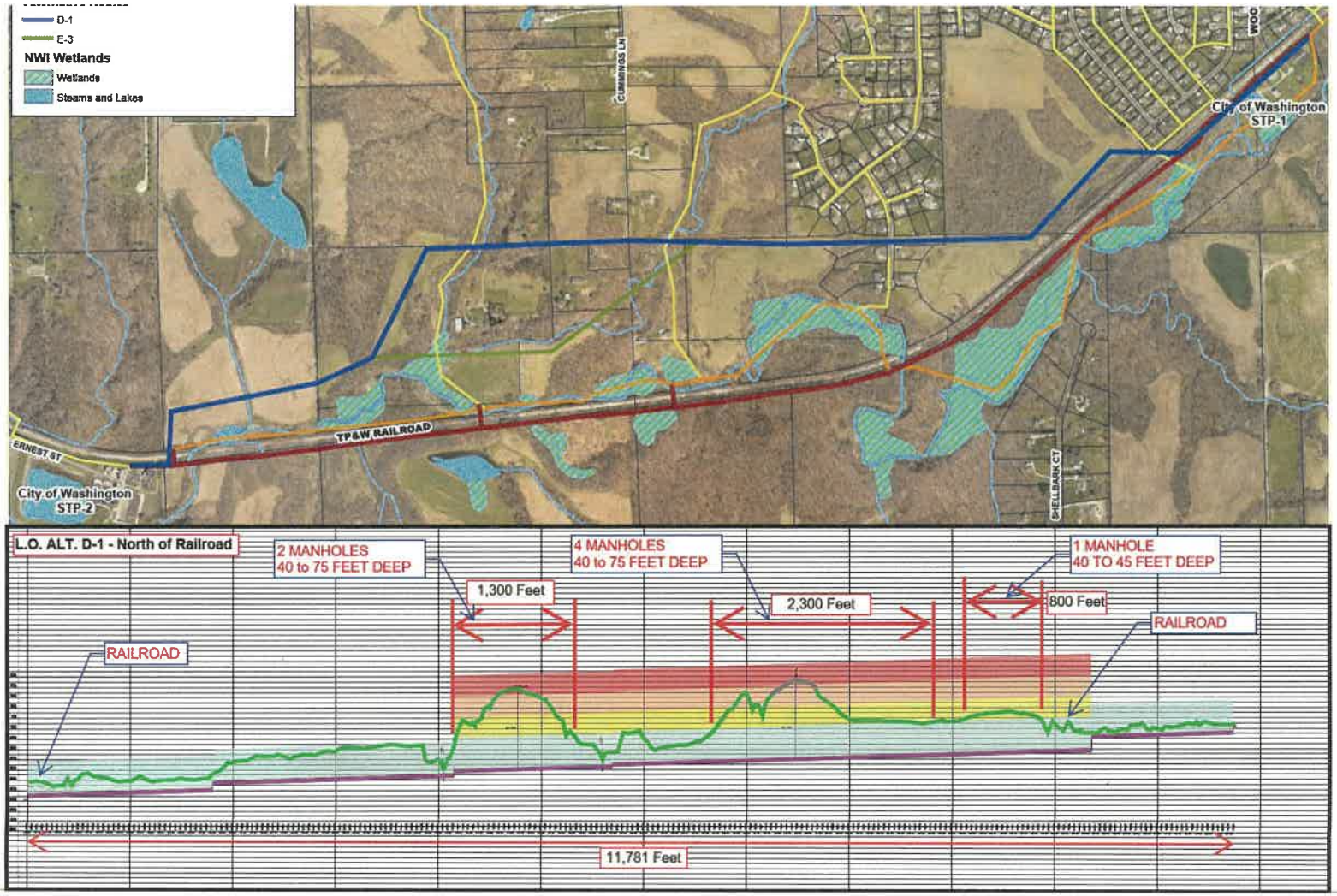
Landowners' Alternative Alignment Study – Alignment D-1 Profile



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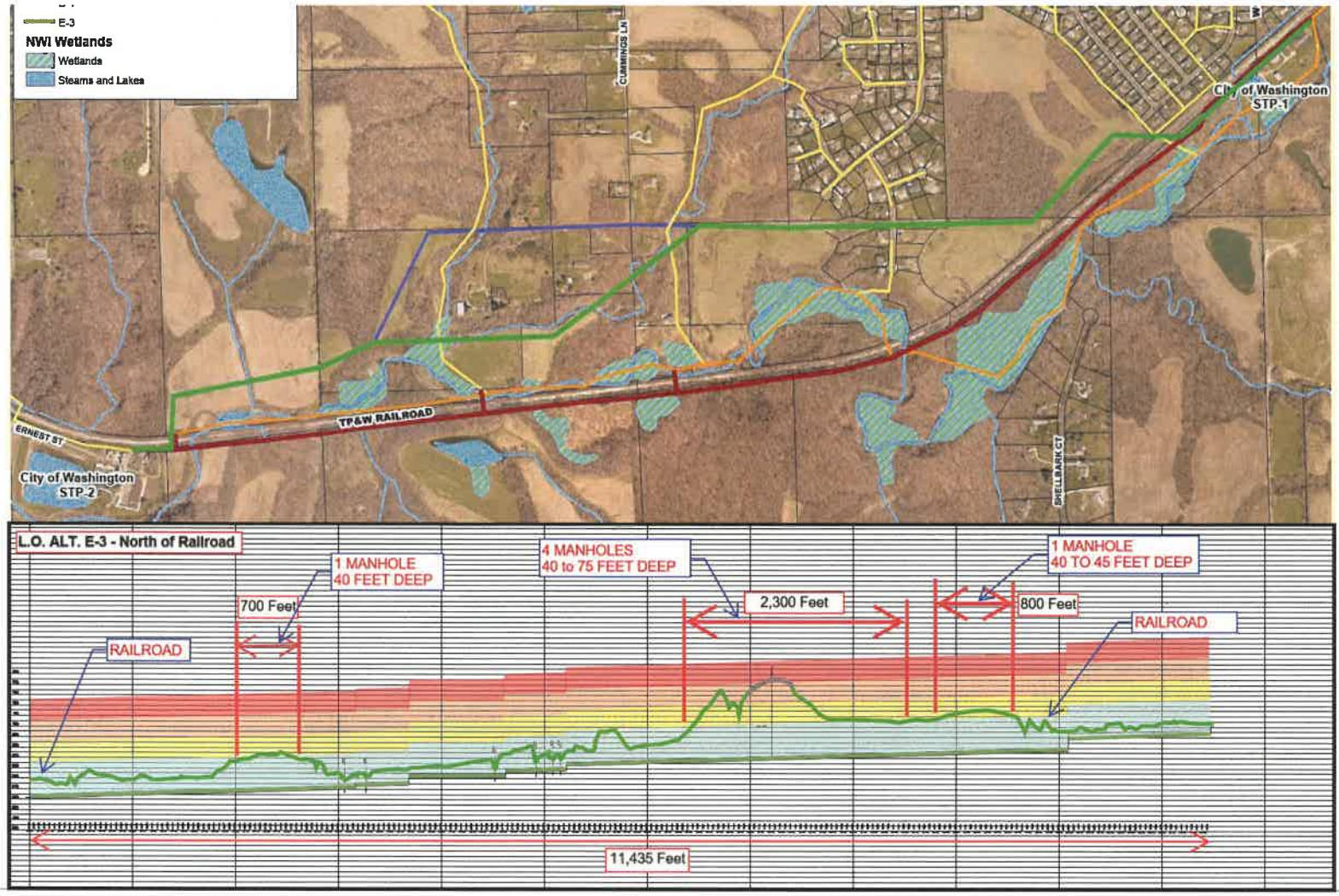
Landowners' Alternative Alignment Study – Alignment E-3 Profile



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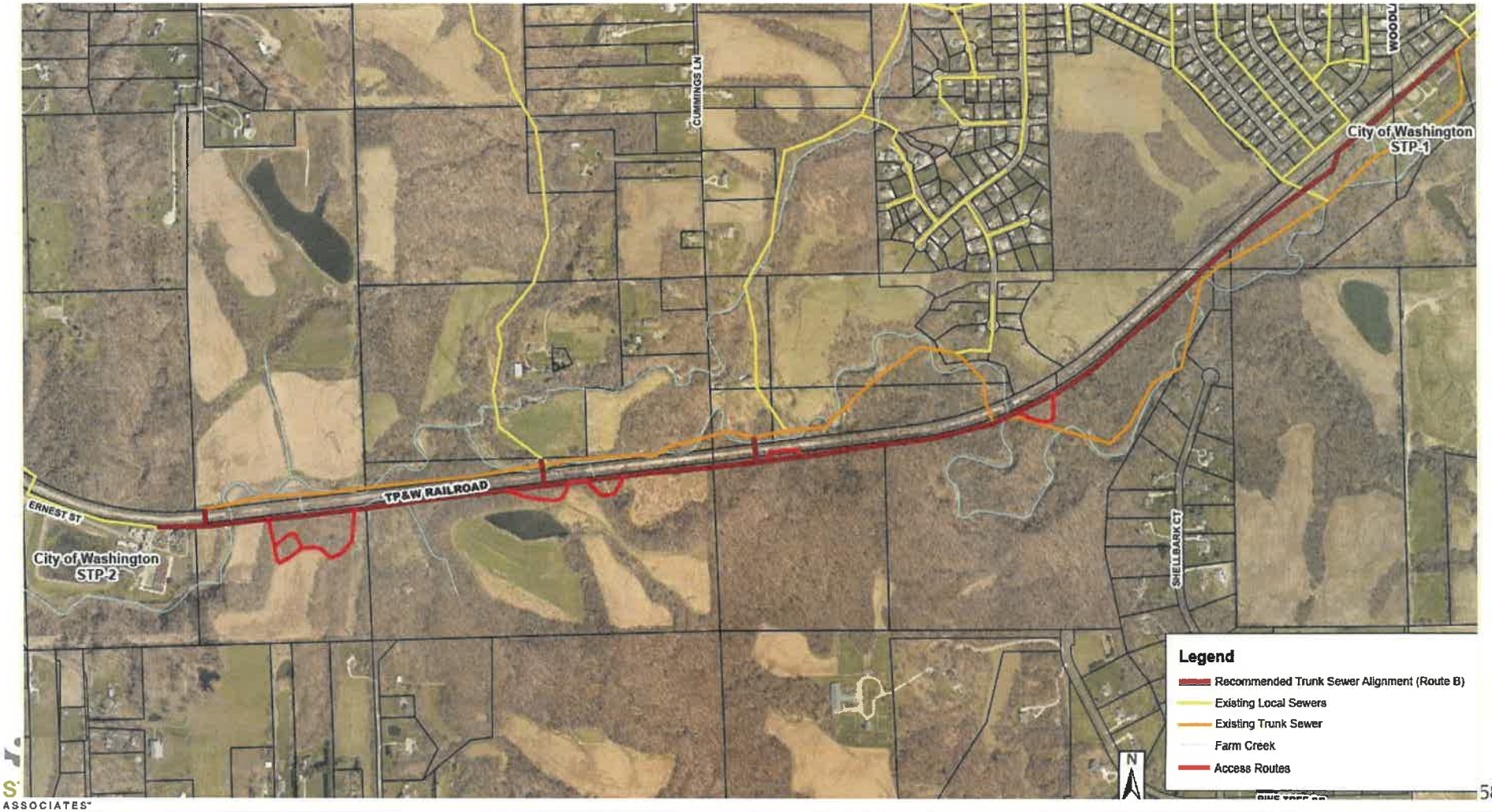
Accessibility – Alignment B (Proposed Route)



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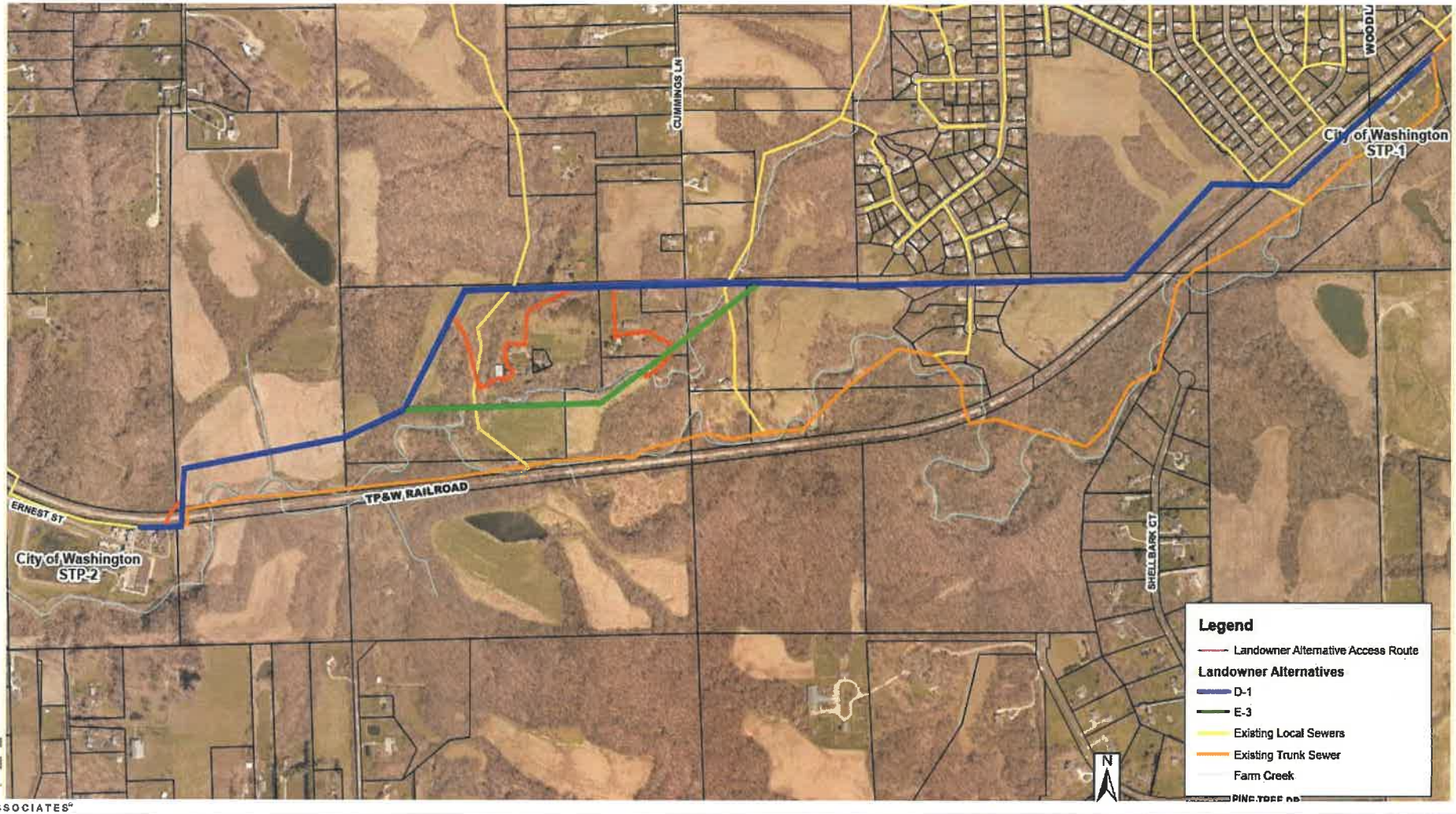
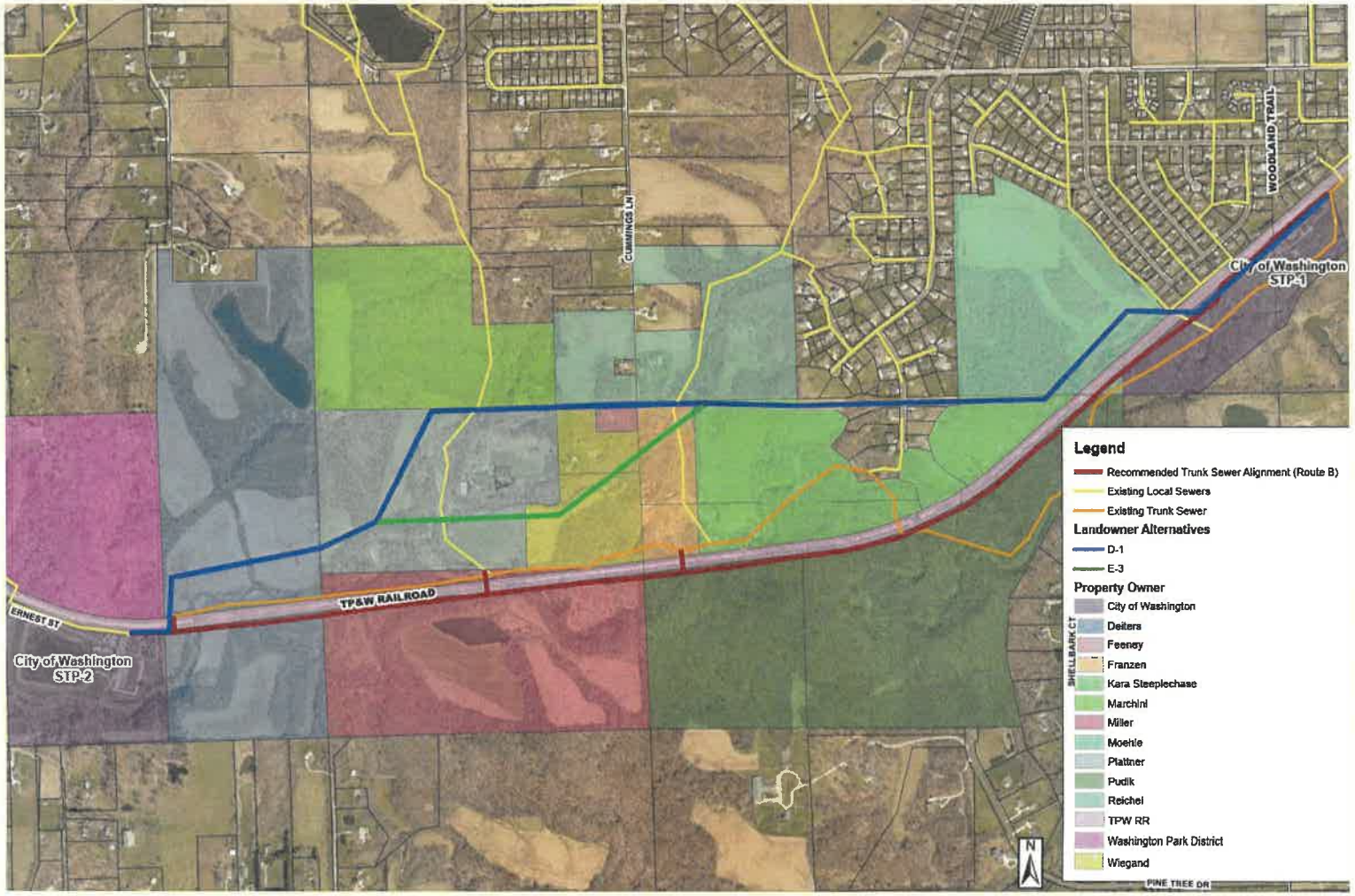


Property Owners and Easements



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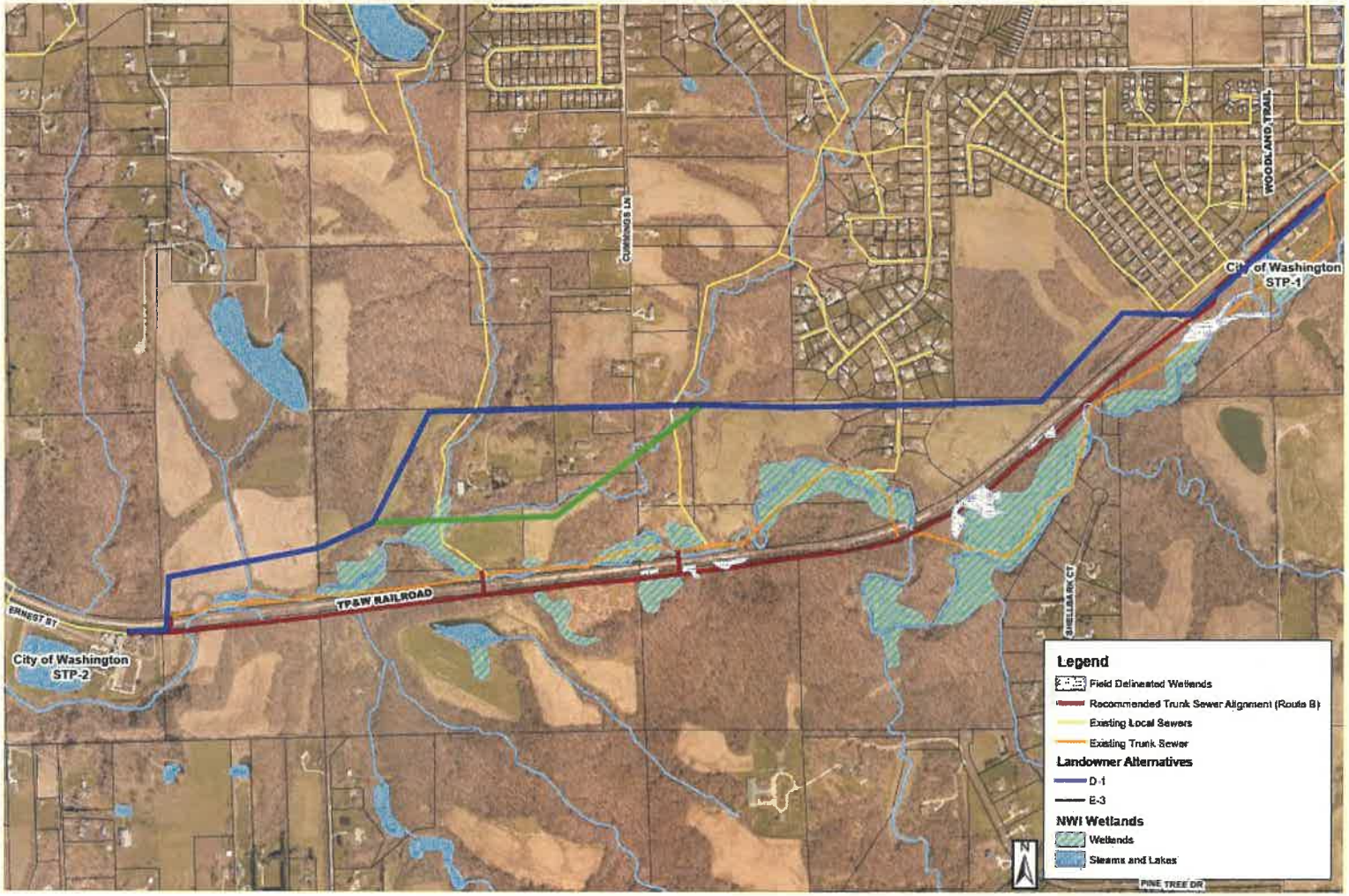
Environmental Impacts – Wetlands (Delineations)



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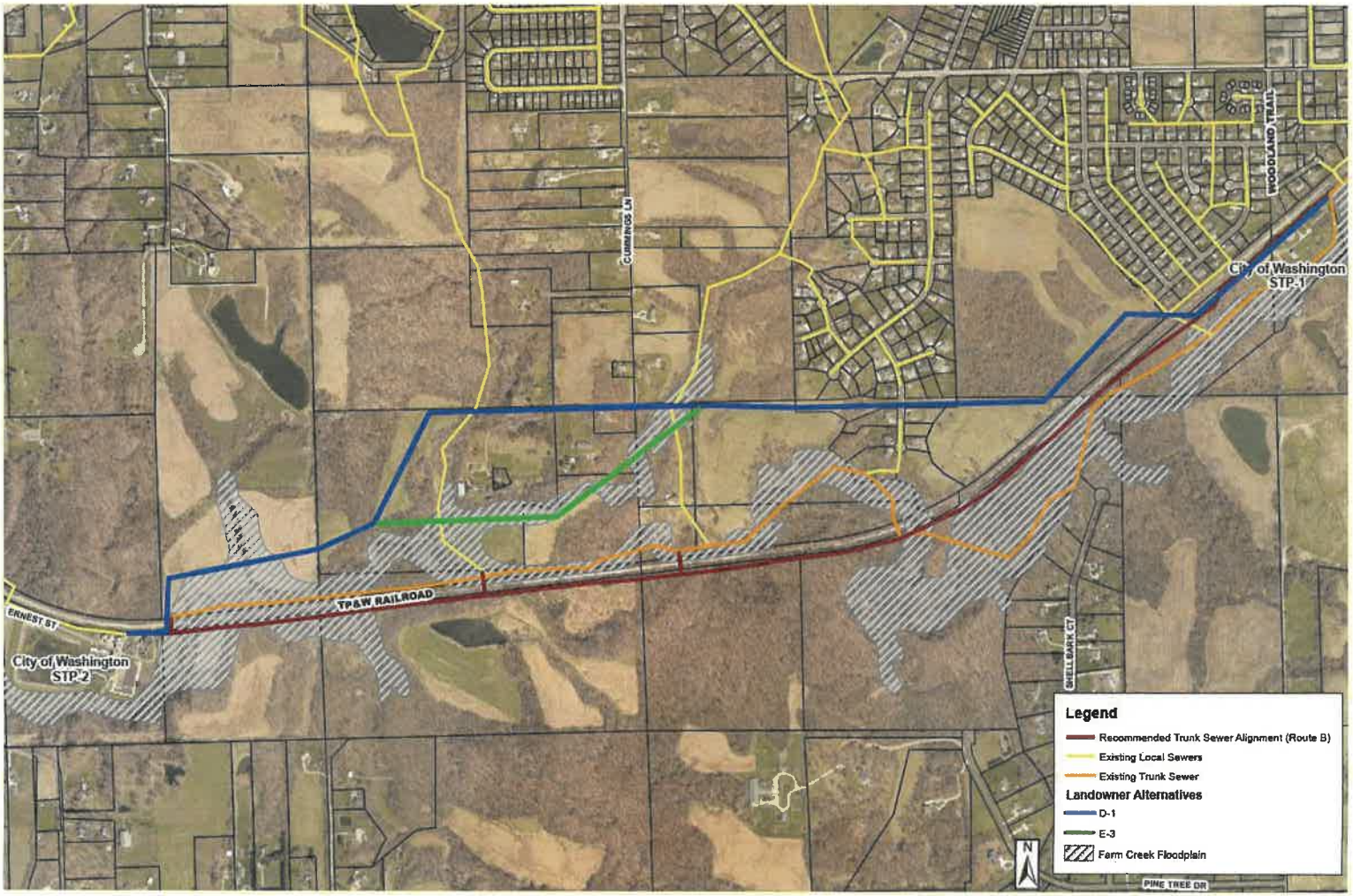
Environmental Impacts – Flood Plain



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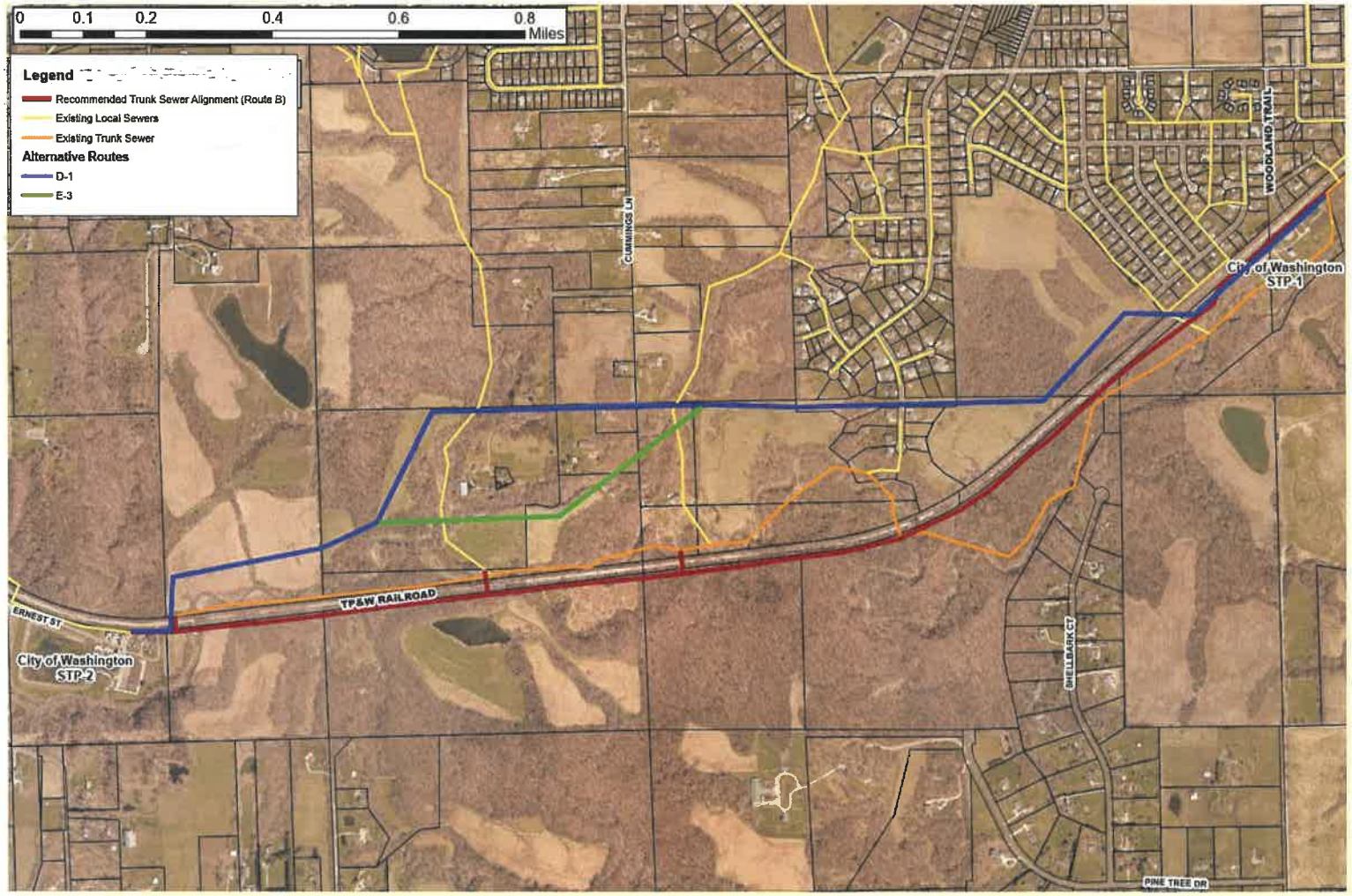
Environmental Impacts - Trees



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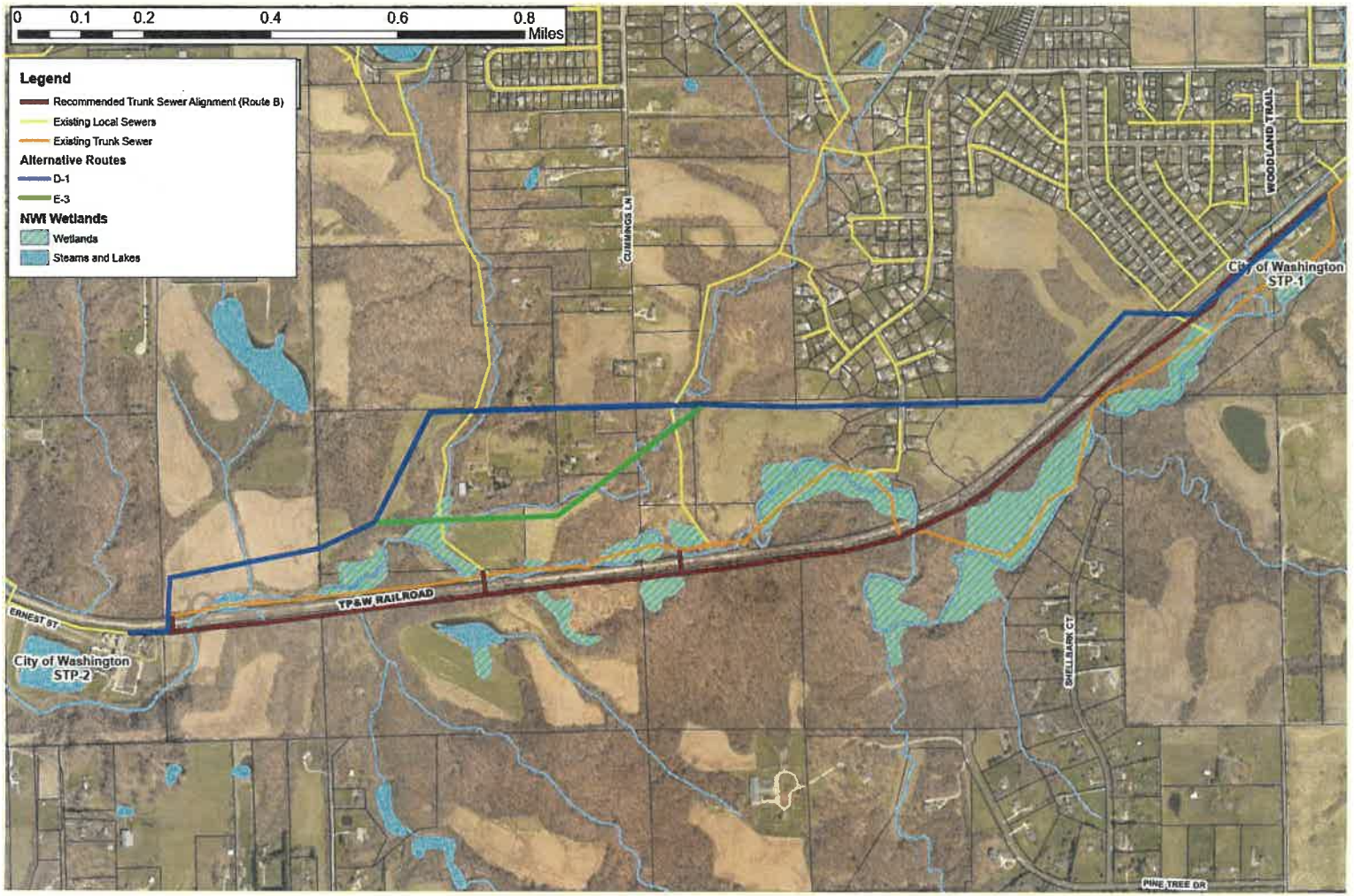
Environmental Impacts – Archeological



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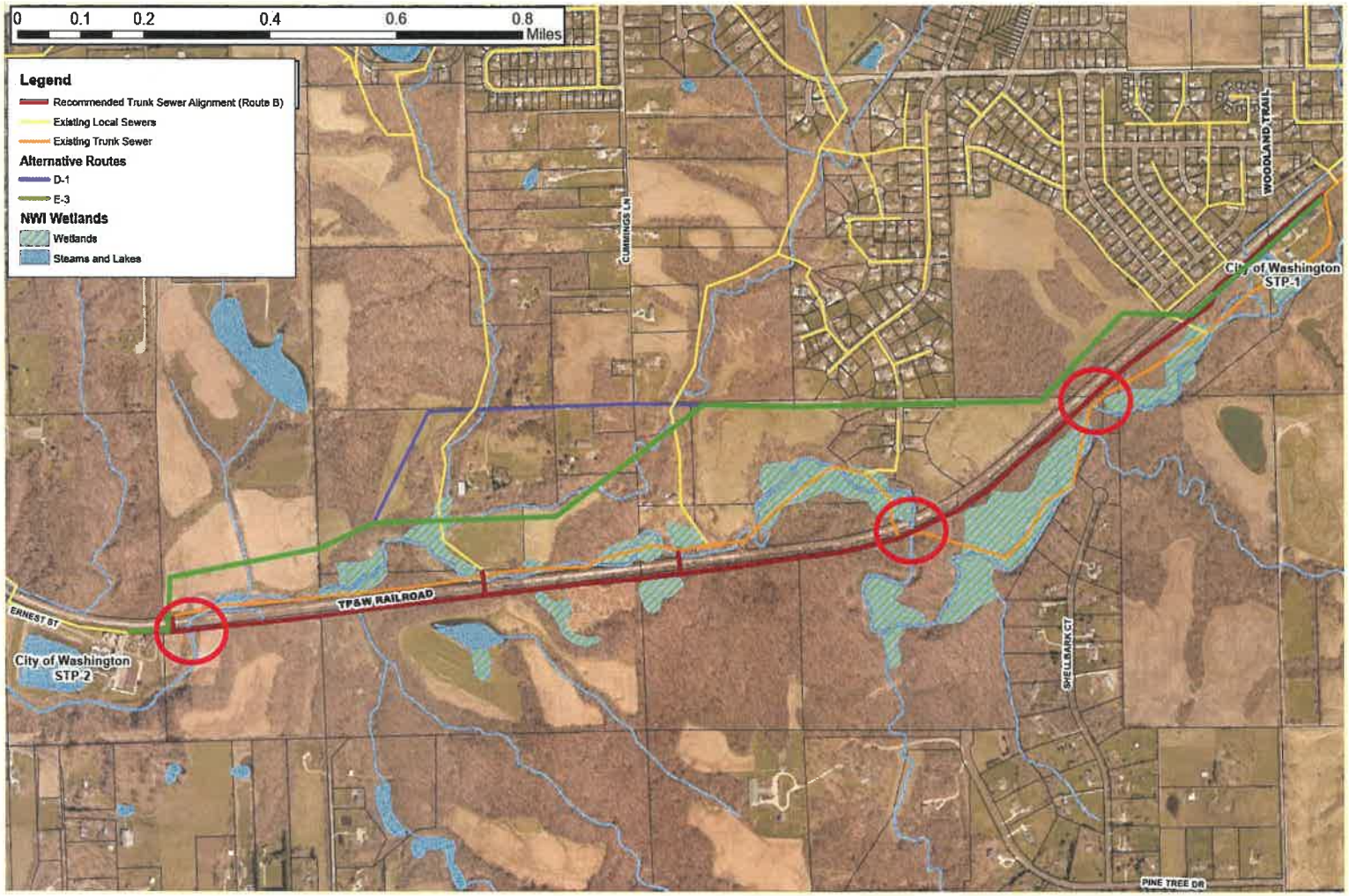
Farm Creek Influence



Farm Creek Influence – At STP-2

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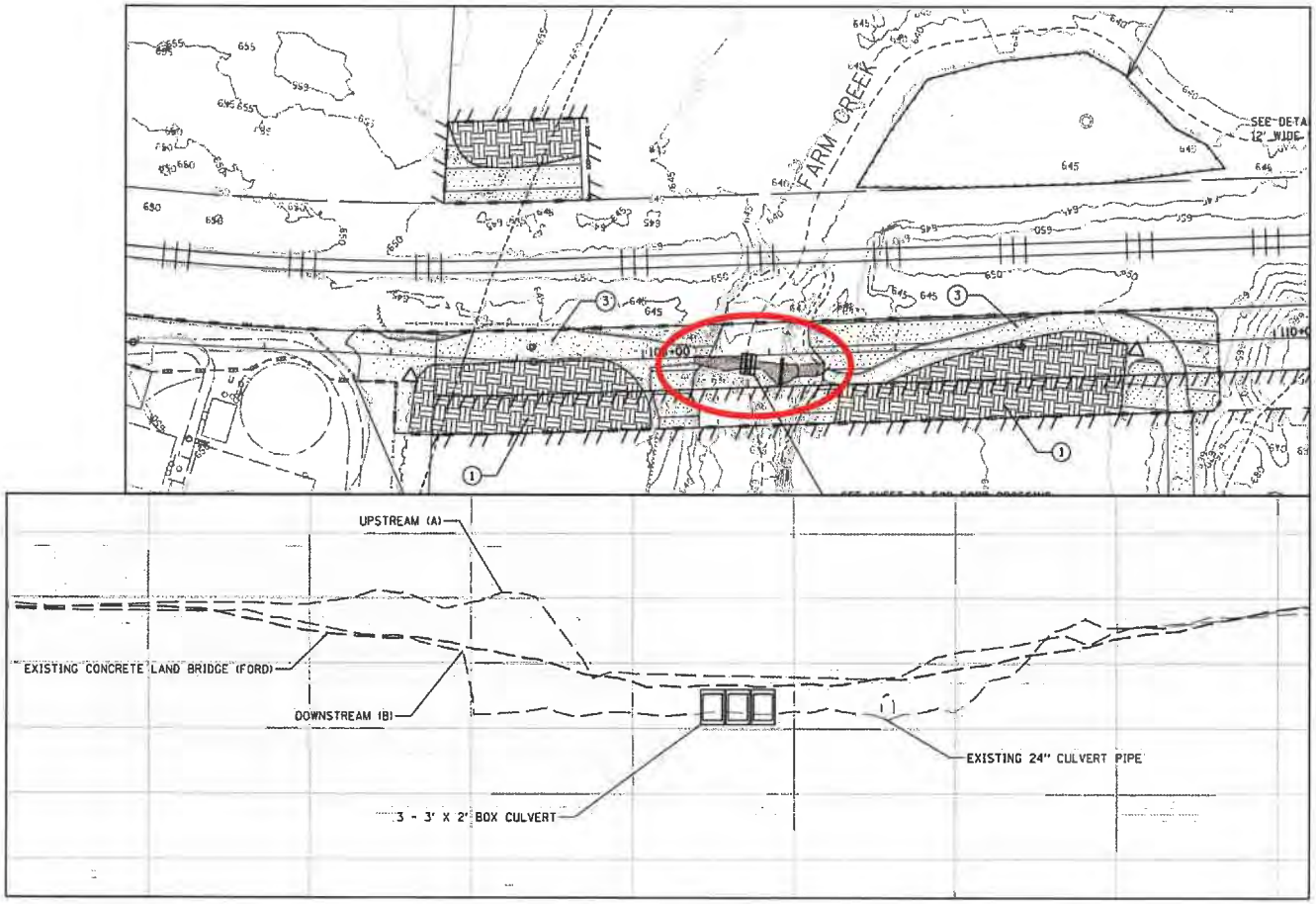
Farm Creek Influence – At STP-2



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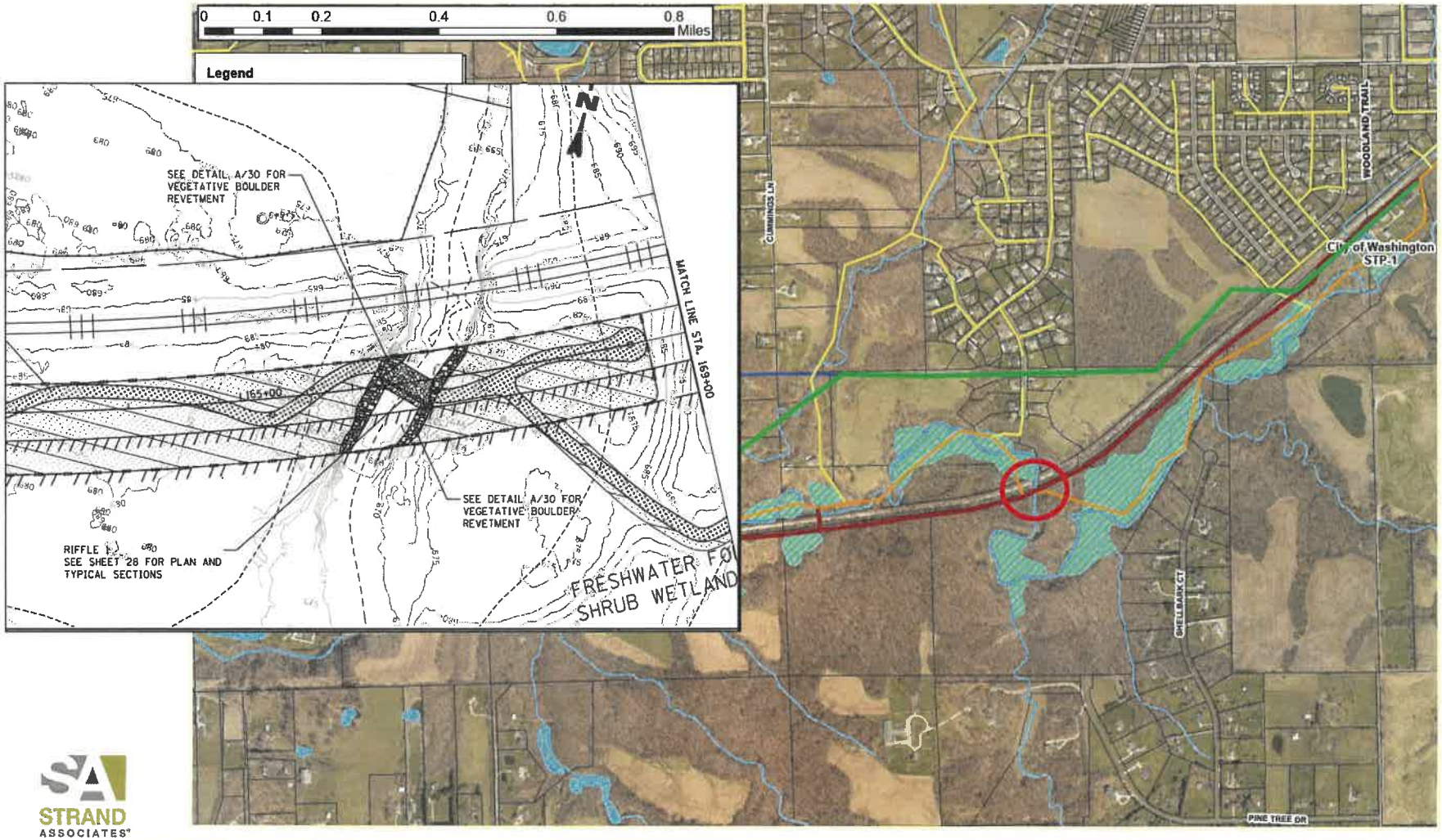
Farm Creek Influence – At Other Creek Crossing



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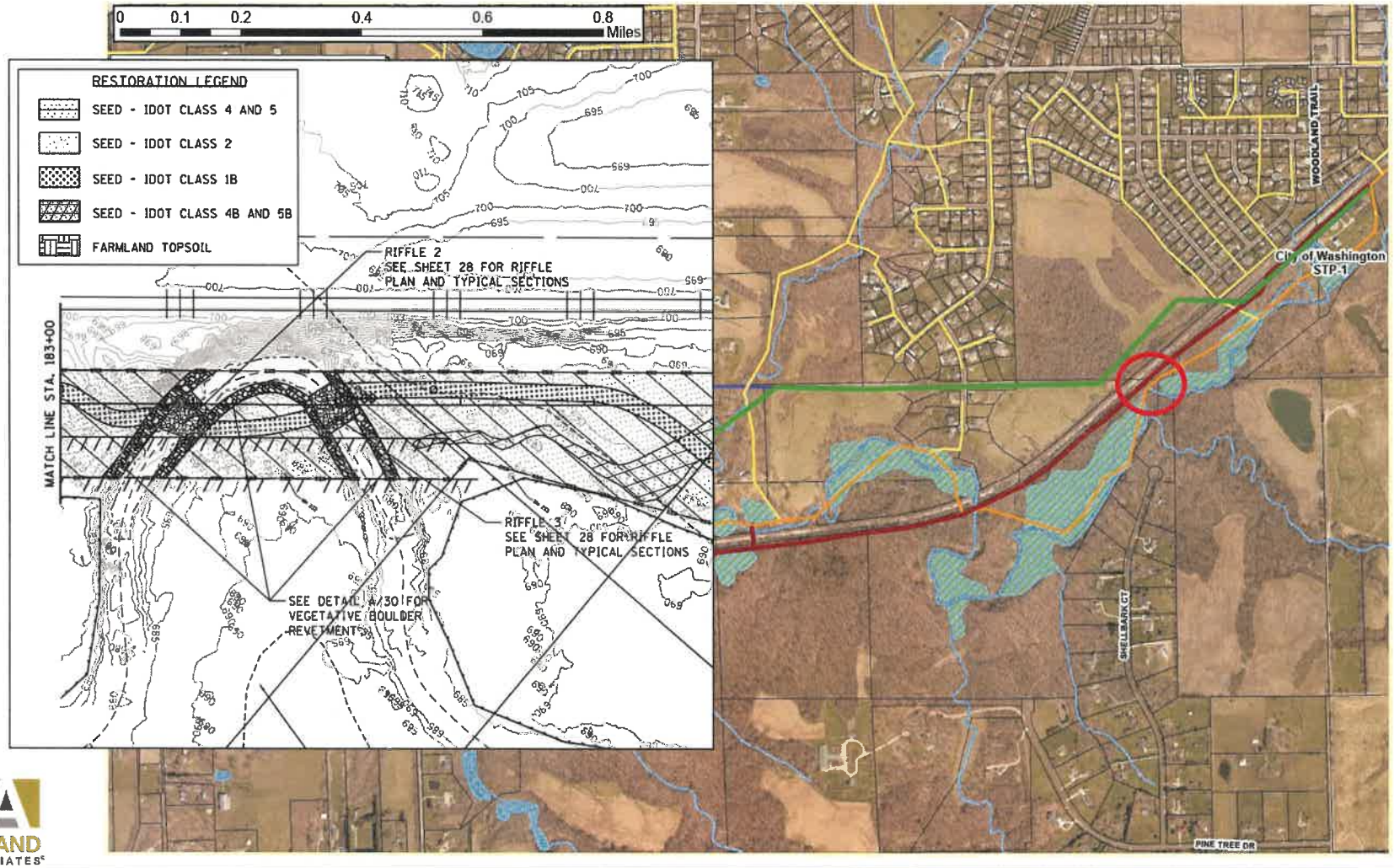

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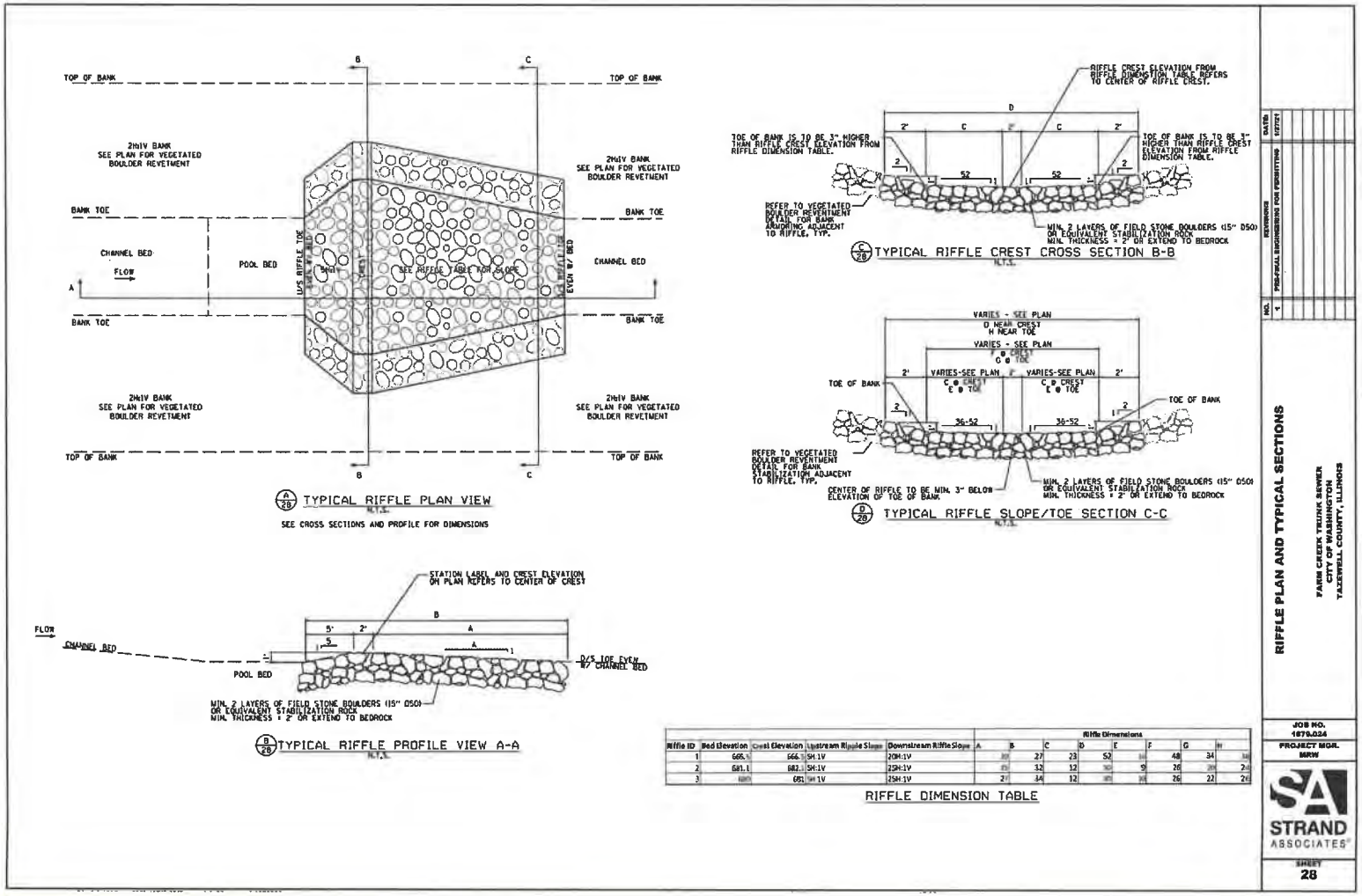
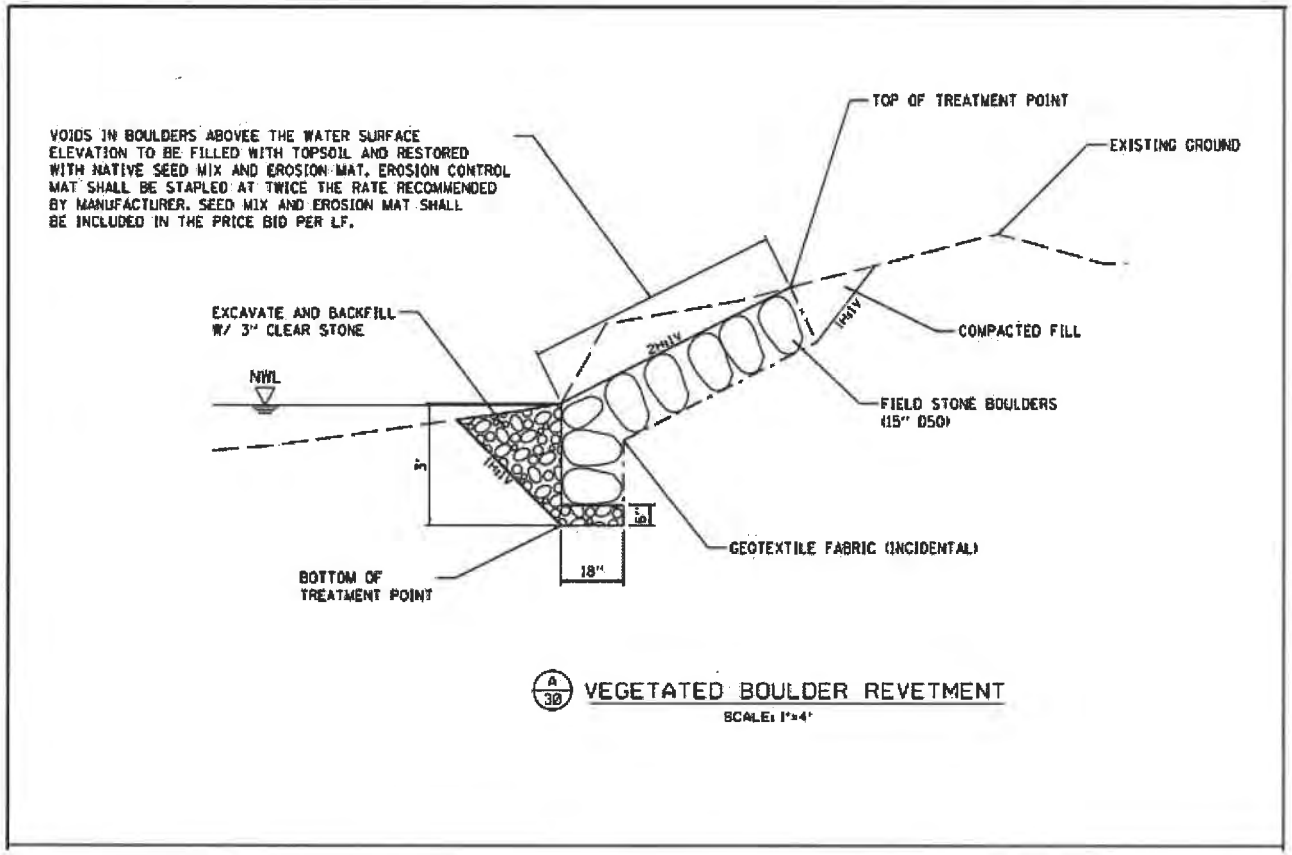


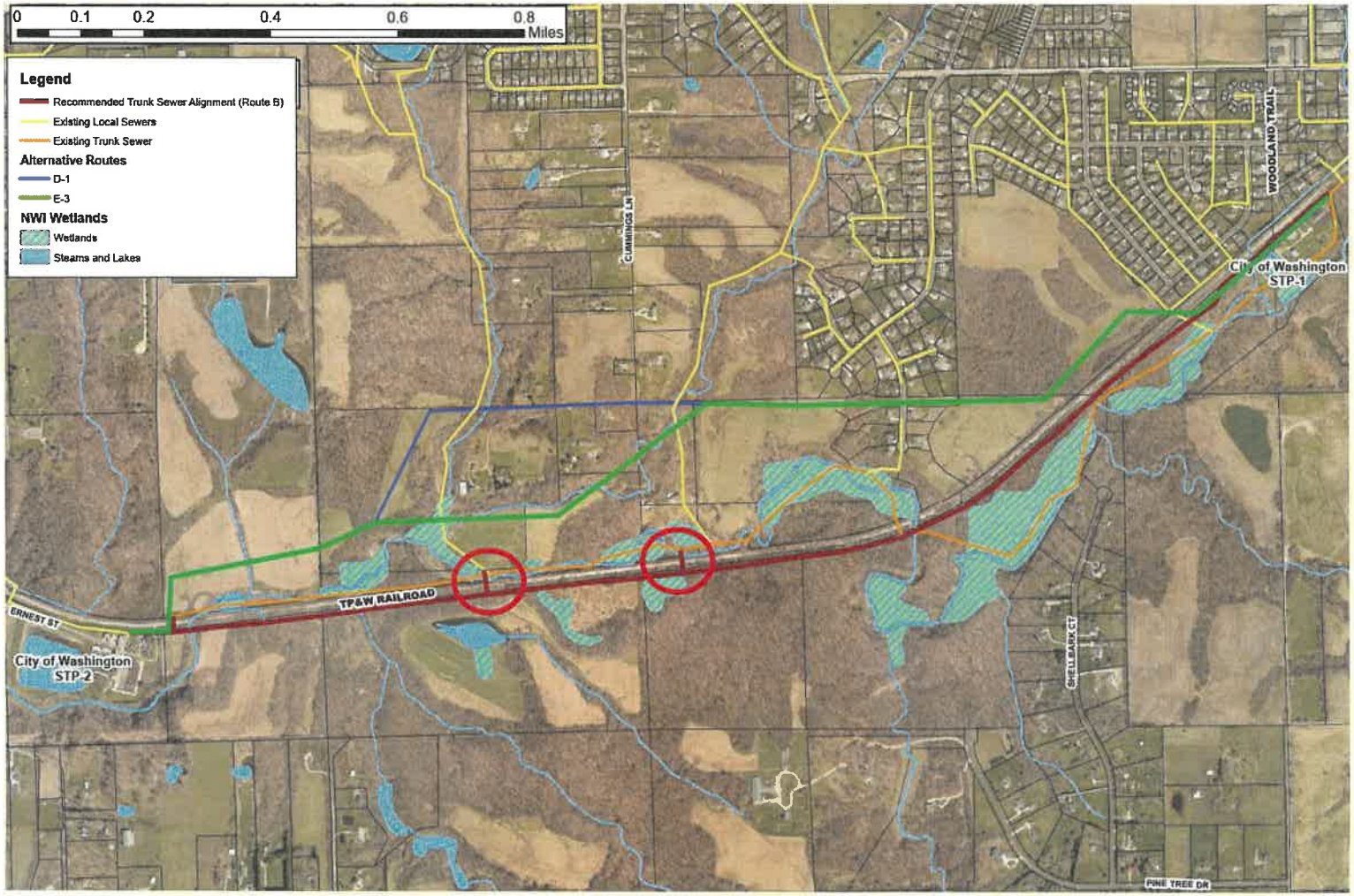
Riffle ID	Bed Elevation	Crest Elevation	Upstream Riffle Slope	Downstream Riffle Slope	Riffle Dimensions A	B	C	D	E	F	G	H
1	665.5	666.5	5H:1V	20H:1V		27	23	52		48	34	
2	681.1	682.1	5H:1V	25H:1V		32	12		9	26		24
3		681	5H:1V	25H:1V	21	34	12			26	22	24

RIFFLE DIMENSION TABLE

Farm Creek Influence – At Other Creek Crossing



Farm Creek Influence – Local Sewer Crossings



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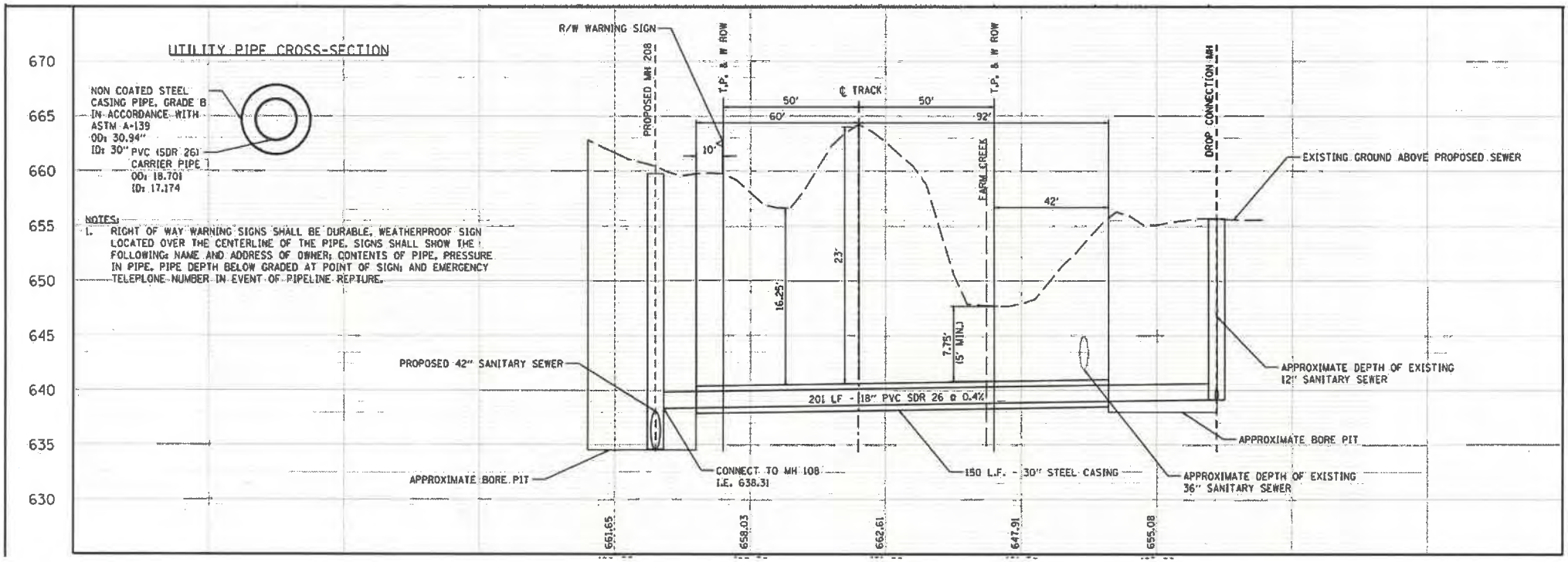
Farm Creek Influence – Local Sewer Crossings



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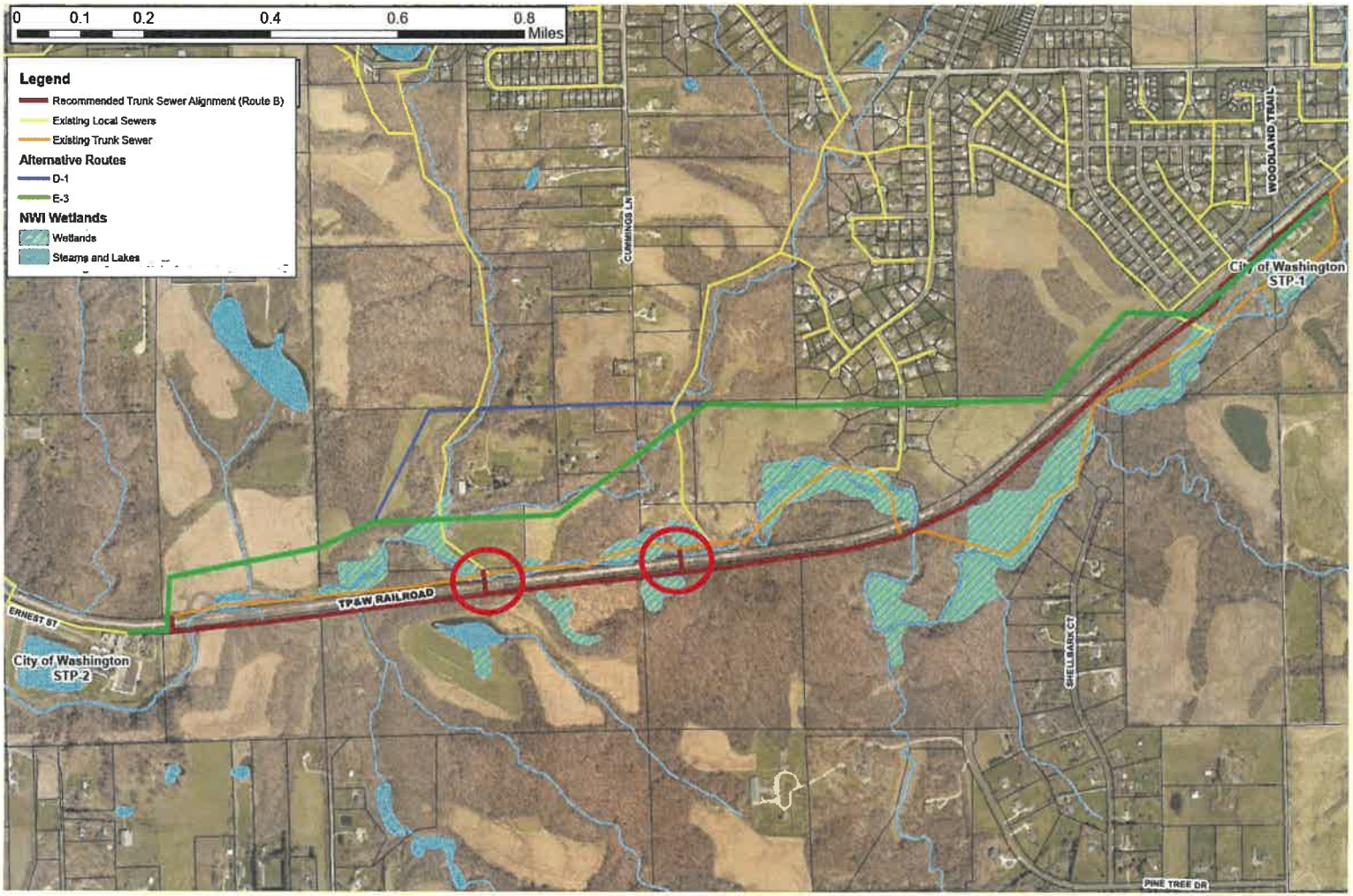
Local Sewer Connections



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Opinion of Probable Cost

Farm Creek Trunk Sewer Replacement
City of Washington Illinois

Description	Units	Estimated Unit Price	ENGINEER'S OPCC (ROUTE B) Preliminary Engineering Report OPCC		ENGINEER'S OPCC (ROUTE D) Preliminary Engineering Report OPCC		ENGINEER'S OPCC (ROUTE E) Preliminary Engineering Report OPCC		ENGINEER'S OPCC (ROUTE D-1) Preliminary Engineering Report OPCC		ENGINEER'S OPCC (ROUTE E-3) Preliminary Engineering Report OPCC	
			Estimated Quantity	Estimated Probable Cost	Estimated Quantity	Estimated Probable Cost	Estimated Quantity	Estimated Probable Cost	Estimated Quantity	Estimated Probable Cost	Estimated Quantity	Estimated Probable Cost
FOUNDATION MATERIAL	CY	$52.00	417.12	$21,690.00	475	$24,700.00	500	$26,000.00	500	$26,000.00	575	$29,900.00
RESTORATION-SEED, class 2 (topsoil,fertilizer,excelsior blanket, mulch incidental)	ACRE	$9,654.55	4.3	$41,707.67	8.6	$82,739.51	7.7	$73,878.57	7.2	$69,609.32	7.5	$72,409.14
RESTORATION-SEED, class 4/5 (topsoil,fertilizer,excelsior blanket, mulch incidental)	ACRE	$9,654.55	4.3	$41,707.67	8.6	$82,739.51	7.7	$73,878.57	7.2	$69,609.32	7.5	$72,409.14
RESTORATION-SEED, class 4B/5B (topsoil,fertilizer,excelsior blanket, mulch incidental)	ACRE	$9,654.55	4.3	$41,707.67	8.6	$82,739.51	7.7	$73,878.57	7.2	$69,609.32	7.5	$72,409.14
PERIMETER EROSION BARRIER	FT	$4.00	7508	$30,032.00	12,000	$48,000.00	10,000	$40,000.00	10,000	$40,000.00	10,000	$40,000.00
TREE REMOVAL (OVER 6 UNITS DIAMETER)	EA	$12.00	7508	$90,096.00	10,000	$120,000.00	10,500	$126,000.00	11,000	$132,000.00	12,000	$144,000.00
STABILIZED CONSTRUCTION ACCESS	EA	$6,000.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00		$0.00
SANITARY SEWER, 42-IN HOBAS - OPEN CUT	LF	$350.00	9385	$3,284,750.00	4,400	$1,540,000.00	7100	$2,485,000.00	7,181	$2,513,350.00	7,235	$2,532,250.00
SANITARY SEWER, 42-IN HOBAS - TRENCHLESS	LF	$896.55	1740	$1,560,000.00	9,600	$8,605,896.55	5400	$4,841,379.31	4,600	$4,124,130.00	4,200	$3,765,510.00
SANITARY SEWER, 12-IN PVC SDR 26 - OPEN CUT	LF	$80.00	520	$41,600.00	550	$44,000.00	575	$46,000.00	550	$44,000.00	600	$48,000.00
SANITARY SEWER, 18-IN PVC SDR 26 - OPEN CUT	LF	$140.00	220	$30,800.00	300	$42,000.00	325	$45,500.00	350	$49,000.00	400	$56,000.00
SANITARY SEWER, 42-IN HOBAS - BORE AND JACK 60" STEEL CASING (RAILROAD CROSSING)	LF			$0.00		$0.00	240	$240,000.00	240	$240,000.00	240	$240,000.00
TRENCHLESS CONSTRUCTION, 8-IN SANITARY SEWER WITH 20-IN STEEL CASING	LF	$400.00	140	$56,000.00	200	$80,000.00	225	$90,000.00	250	$100,000.00	300	$120,000.00
TRENCHLESS CONSTRUCTION, 18-IN SANITARY SEWER WITH 30-IN STEEL CASING	LF	$450.00	280	$126,000.00	360	$162,000.00	400	$180,000.00	450	$202,500.00	500	$225,000.00
NEW 12-IN INSIDE EXISTING 30-IN	LF	$1,250.00	12	$15,000.00		$0.00		$0.00		$0.00		$0.00
PROTECT EXISTING SANITARY SEWER AT CROSSINGS	EA	$4,000.00	3	$12,000.00	3	$12,000.00	3	$12,000.00	3	$12,000.00	3	$12,000.00
ABANDONMENT OF EXISTING SANITARY MANHOLES	EA	$2,000.00	39	$78,000.00	39	$78,000.00	39	$78,000.00	39	$78,000.00	39	$78,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, LESS THAN 20' DEEP	EA	$9,000.00	14	$126,000.00	6	$54,000.00	8	$72,000.00	12	$108,000.00	8	$72,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 20' TO 25' DEEP	EA	$12,000.00	3	$36,000.00	1	$12,000.00	2	$24,000.00	3	$36,000.00	2	$24,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 25' TO 30' DEEP	EA	$15,000.00	1	$15,000.00	2	$30,000.00	2	$30,000.00	1	$15,000.00	2	$30,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 30' TO 35' DEEP	EA	$18,000.00	1	$18,000.00		$0.00	2	$36,000.00	2	$36,000.00	4	$72,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 35' TO 40' DEEP	EA	$21,000.00	1	$21,000.00		$0.00	2	$42,000.00	2	$42,000.00	2	$42,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 40' TO 45' DEEP	EA	$25,000.00		$0.00	4	$100,000.00	2	$50,000.00	2	$50,000.00	2	$50,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 45' TO 50' DEEP	EA	$26,000.00		$0.00		$0.00	2	$52,000.00	2	$52,000.00	2	$52,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 50' TO 55' DEEP	EA	$28,000.00		$0.00	4	$112,000.00	1	$28,000.00	2	$56,000.00	2	$56,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 55' TO 60' DEEP	EA	$30,000.00		$0.00	6	$180,000.00	1	$30,000.00	2	$60,000.00	2	$60,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 60' TO 65' DEEP	EA	$31,000.00		$0.00		$0.00		$0.00	2	$62,000.00	2	$62,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 65' TO 70' DEEP	EA	$32,000.00		$0.00		$0.00	2	$64,000.00	2	$64,000.00	2	$64,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 70' TO 75' DEEP	EA	$33,000.00		$0.00		$0.00		$0.00		$0.00	2	$66,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 75' TO 80' DEEP	EA	$34,000.00		$0.00	4	$136,000.00	1	$34,000.00		$0.00	3	$102,000.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 80' TO 85' DEEP	EA	$35,000.00		$0.00	4	$140,000.00	2	$70,000.00		$0.00		$0.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 85' TO 90' DEEP	EA	$42,000.00		$0.00	4	$168,000.00	1	$42,000.00		$0.00		$0.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 90' TO 95' DEEP	EA	$45,000.00		$0.00		$0.00	2	$90,000.00		$0.00		$0.00
SANITARY MANHOLE, TYPE A, 6-FT DIA, 90' TO 95' DEEP	EA	$50,000.00		$0.00		$0.00	2	$100,000.00		$0.00		$0.00
SANITARY MANHOLE, TYPE A, 6-FT DIA CONSTRUCTED ON EXISTING SEWER PIPE	EA	$12,000.00	3	$36,000.00		$0.00		$0.00		$0.00		$0.00
SANITARY MANHOLE, TYPE A, 8-FT DIA, LESS THAN 20 FT DEEP	EA	$18,000.00	5	$90,000.00		$0.00		$0.00		$0.00		$0.00
SANITARY MANHOLE, TYPE A, 8-FT DIA, 20 -25 FT DEEP	EA	$22,000.00	3	$66,000.00		$0.00		$0.00		$0.00		$0.00
SANITARY MANHOLE, TYPE A, 8-FT DIA JUNCTION MANHOLE	EA	$20,000.00	2	$40,000.00	2	$40,000.00	2	$40,000.00	2	$40,000.00	2	$40,000.00
OUTSIDE DROP MANHOLE CONNECTION, 18"	EA	$8,000.00	1	$8,000.00	1	$8,000.00	1	$8,000.00	1	$8,000.00	1	$8,000.00
SUBTOTAL CONSTRUCTION				**$5,927,091.30**		**$11,985,815.09**		**$9,243,515.01**		**$8,398,807.97**		**$8,307,887.43**
MOBILIZATION (CONTRACTOR PROFIT, BONDS, INSURANCE)	LS		2%	$118,541.82	2.00%	$239,716.30	2%	$184,870.30	2.00%	$167,976.16	2%	$166,157.75
ENGINEERING AND LEGAL	LS		5%	$296,354.55	5.00%	$599,290.75	5%	$462,175.75	5.00%	$419,940.40	5%	$415,394.37
TOTAL BASE PROJECT				$6,341,987.37		$12,824,822.15		$9,890,561.06		$8,986,724.53		$8,889,439.55
Contingencies - Base			25.00%	$1,481,772.75	25.00%	$2,998,453.77	25%	$2,310,878.75	25%	$2,099,701.99	25%	$2,076,971.86
Total - Base Project w/ Contingencies				$7,823,760.12		$15,821,275.92		$12,201,439.81		$11,086,426.52		$10,966,411.41

Landowner Slide 30 Data Comparison

Feauture/Element	SAI Alignment B		L.O. Alignment D-1		L.O. Alignment E-3		SAI Alignment D	SAI Alignment E
	7/12/21 H.O. Presentation	7/26/21 SAI Determination	7/12/21 H.O. Presentation	7/26/21 SAI Determination	7/12/21 H.O. Presentation	7/26/21 SAI Determination	7/26/21 SAI Determination	7/26/21 SAI Determination
Total Linear Feet (Trunk Sewer only)	10,425	11,043	10,455	11,781	10,205	11,435	14,000	12,500
Average Manhole Depth, FT.	22.35	23	24.04		21.20			
Averge Sewer Depth, FT.		21.3		30.9		25.7	35	52.9
Farm Creek Crossings/Tributary Crossings	6	5/1	0	2/3	0	2/7	1/3	2/6
Wetland Crossing, L.FT.	2200	812	0	486	200	766	400	500
Floodplain Crossings, L.FT.	3300	2848	610	1092	1310	2973	1619	975
Trenchless Construction, L.FT.	3095	1775	3100	4600	1610	4200	9600	4200
Jack and Bore Locations	12	2	8	2	5	2	0	2
Open Access Corridors, L.FT. (% of Route)	650 (7%)	2047 (19%)	7405 (74%)	8963 (76%)	7145 (73%)	8339 (73%)	4710 (34%)	7420 (59%)
Forest/Forested Riparian, L.FT. (% of Route)	8,735 (93%)	8996 (81%)	2570 (26%)	2818 (24%)	2,580 (27%)	3096 (27%)	9290 (66%)	5080 (41%)
Alignment in Public ROW, L.FT. (% of Route)	0 (0%)	2873 (26%)	2710 (27%)	3896 (33%)	2,000 (21%)	3219 (28%)	4875 (35%)	5360 (43%)
Construction Cost Estimate		$ 7,823,773.00		$ 11,086,426.00		$ 10,966,411.00	$ 15,821,275.00	$ 11,884,639.00

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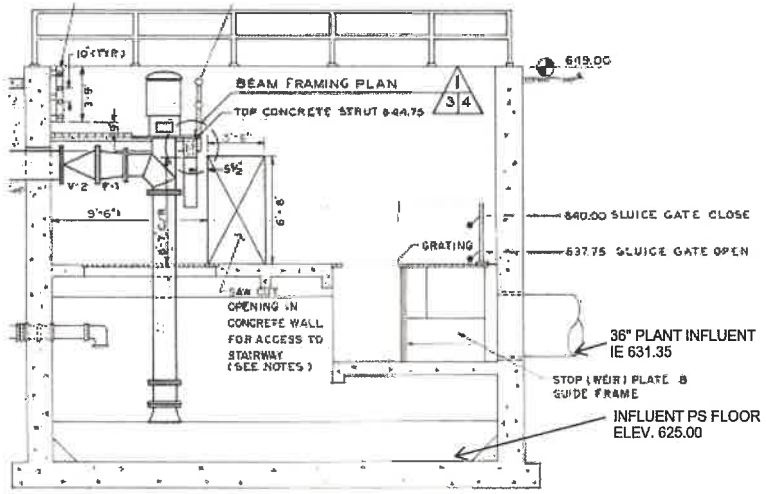
Influent Pumping Station Replacement Purpose

- IEPA mandate to decommission STP No. 1
- Future development capacity needs
- Hydraulic restrictions at existing influent pump station
- Recurring operation and maintenance problems
- NOT driven by depth of new trunk sewer



INFLUENT PUMPING STATION A-A
NOT TO SCALE

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Cost Opinion Update

City of Washington, Illinois
Preliminary Engineering Study for the Farm Creek Trunk Sewer — Section 10 - Opinion of Probable Cost

10.02 TOTAL PROJECT COST

The City has proposed the replacement of the Farm Creek Trunk sewer that runs between STP 1 and STP 2 and replacing the influent pumping station. Construction will consist of approximately 10,125 feet of sanitary sewer pipe ranging from eight-inch to forty-eight-inch and replacing the influent pumping station. Also included in this project will be site restoration, erosion control, cleaning, capping, and abandonment in place of the existing trunk sewer and other necessary appurtenances.

1) Design Engineering (including planning and form preparation):	$ 662,400.00
2) Construction Engineering (including bidding):	$ 700,000.00
3) Other Professional Services (separate legal, loan admin, etc.):	$ 80,000.00
4) Construction (Trunk Sewer and Influent pump station):	$ 10,638,773.47
5) Contingency (at 10% of estimated construction costs):	$ 1,063,877.35
6) Total Estimated Project Costs	$ 13,145,050

Design of the project is currently underway and is being funded through City funds. However, the City intends to finance $13,145,050 of the proposed project with a loan from the IEPA Water Pollutions Control Loan Program.

$7,823,773 Farm Creek Trunk Sewer

$2,815,000 Influent Pump Station

$10,638,000 Total

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Cost Opinion Update

Item No.	Description	Units	EED Jan 2021 ENGINEER'S OPCC 80% COMPLETE - BEGINNING 2021 Estimated Quantity	Estimated Unit Cost	Estimated Probable Cost	CHANGE IN COST FROM PRELIM	EED July 2021 ENGINEER'S OPCC JULY 2021 Estimated Quantity	Estimated Unit Cost	Estimated Probable Cost	CHANGE IN COST FROM 80%
	SUBTOTAL CONSTRUCTION				**$6,275,376.53**	**$330,846.53**			**$6,482,866.00**	**$206,889.47**
1.	CONSTRUCTION LAYOUT AND STAKING	LS	2%		$125,519.53	$125,519.53	2%		$129,657.32	$4,137.79
2.	MOBILIZATION (CONTRACTOR PROFIT, BONDS, INSURANCE)	LS	8%		$502,078.12	$85,919.16	8%		$518,629.28	$16,551.16
3.	TRAFFIC CONTROL	LS	1.00%		$62,759.77	$62,759.77	1.00%		$64,828.66	$2,068.89
4.	ENGINEERING AND LEGAL	LS			$0.00	$0.00			$0.00	$0.00
	TOTAL BASE PROJECT				$6,966,333.95	$605,046.99			$7,195,981.26	$229,647.31
	Contingencies - Base	15%			$1,044,950.09	($441,331.91)			$1,079,397.19	($406,884.81)
	Total - Base Project w/ Contingencies				$8,011,284.04	$163,715.08			$8,275,378.45	$427,809.49

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FCTS Replacement Project Goals

- Be accessible for maintenance
- [Limit] Number, size, and impact of easements required
- Protect the new sewer from instability and erosion of Farm Creek
- Achieve durability and reliability in trunk sewer function and operation
- Be respectful of nature and the environment
- Be responsible to the taxpayer by implementing cost-effective solutions – construction and O&M
- Be responsive to and consistent with long-range plans, initiatives, and missions:
  - City of Washington, Tazewell County, Regional
  - IDNR and IEPA
  - Illinois Forestry and Forest Action Plan
  - USACE and USEPA

Recommended, More Stringent Design Objectives Identified by Landowners Appear to be Available and Achievable:

- **Avoid** Farm Creek crossings
- **Avoid** wetland and floodplain areas
- **Avoid** potential for pollution and contamination of surface water and land
- **Avoid** destruction of trees and endangered species habitat
- **Avoid** archaeologically significant areas
- **Maximize** alignment within open access corridors
  - Ease of access during construction and maintenance
  - Faster land recovery rate post-construction

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Q&A