



**CITY OF CAHOKIA HEIGHTS  
SANITARY SEWER SYSTEM  
PROPOSED INTERCEPTOR SEWER SYSTEM  
PRELIMINARY DESIGN REPORT**

12-20-24  
revised 4-21-25

# **CAHOKIA HEIGHTS INTERCEPTOR SEWER SYSTEM PRELIMINARY REPORT**

## **INTRODUCTION:**

The City of Cahokia Heights, newly formed from consolidation of the former communities Alorton, Centreville, and Cahokia, plus the Commonfields of Cahokia Public Water District, is located in the southwestern portion of St. Clair County, IL and the region known as the American Bottoms. The Bottoms are a floodplain of the Mississippi River, between the current east riverbank and the line of limestone bluffs more or less parallel to Illinois Route 157 being part of the ancient riverbed, protected from surface water flooding by riverfront levees and interior levees and drainage canals, but subject to frequent surface water inundation from bluff runoff and groundwater flooding from seasonal precipitation and river level surcharges.

This local flooding introduces both infiltration and inflow of surface waters into the sanitary sewer system in both the cities of Cahokia Heights, and its northern neighbor community of East St. Louis. This is especially true in the northern part of Cahokia Heights, where it borders East St. Louis. Neighborhoods in this area known as Ping Pong, Parkside, and Piat Place are subject to frequent flooding from adjacent bluff runoff, and interruption of natural drainage by the high embankment of Interstate 255, which bisects the area into east and west portions. In addition, the main trunk sewer to convey the local sewers serving these neighborhoods runs along this city boundary on the East St. Louis side, and in many areas, lies in a low point for surface water drainage, and/or is heavily wooded/overgrown and difficult to access or maintain. This trunk sewer runs at the toe of a slope of old embankment of an abandoned railroad right-of-way that forms the boundary between the two cities. The local sewers in the aforementioned neighborhoods in Cahokia Heights all drain northward into this East St. Louis trunk sewer.

The new interceptor sewer will cut off, or intercept, these north-flowing local sewer lines with a series of new pump stations and force mains, and redirect these flows to the south into Cahokia Heights system, ultimately discharging into the city's own main trunkline, which is currently being rehabbed (cleaned, televised, and CIPP lined) under a project jointly funded by the city and the US Army Corps of Engineers. As such, the flows from these northern neighborhoods will be conveyed through a large trunkline, rehabilitated to carry the additional flow. In addition, the city is currently in the process of accepting bids for cleaning, televising, and CIPP lining of sewers in the northern residential neighborhoods to address local I/I at its source, thereby reducing flows on the new system by removing stormwater and groundwater.

Interceptors, also known as interceptor sewers, are large-diameter pipes or tunnels that play a crucial role in a city's sewer system. Their primary function is to intercept and transport wastewater from smaller local sewers to a central treatment facility or outfall. The importance of interceptors in a city's sewer system includes several key aspects:

Preventing Combined Sewer Overflows (CSOs): In cities with combined sewer systems, which carry both stormwater and wastewater in the same pipes, interceptors help manage the flow of excess water during heavy rainfall. By directing this flow to treatment facilities or designated outfalls, interceptors reduce the likelihood of combined sewer overflows, which can discharge untreated sewage into local water bodies, posing significant environmental and public health risks. The city of Cahokia Heights does not have any combined sewers in its system, but the city of East St. Louis does have them. Therefore, removing the Cahokia Heights flow from its northern neighborhoods will increase capacity in the East St. Louis system.

Managing High-Volume Flows: Interceptor sewers are designed to handle large volumes of wastewater. They help manage peak flows, especially during storm events, by collecting water from smaller, localized sewers and transporting it efficiently. This helps prevent localized flooding and sewer backups in residential and commercial areas.

Efficient Transportation to Treatment Facilities: Interceptor sewers are typically the main conduits that transport wastewater from various parts of a city to a central wastewater treatment plant. By efficiently conveying wastewater, interceptors help ensure that the sewage reaches the treatment facility in a timely manner, reducing the risk of raw sewage entering natural water bodies. While the city of Cahokia Heights does not own or operate its own wastewater treatment facility, the city's main trunkline does collect all local sewers in the city and then pumps them to a regional wastewater treatment plant, known as the American Bottoms WWTP, located in adjacent Sauget, Illinois.

Protecting the Environment: By preventing untreated sewage from reaching rivers, lakes, and other water bodies, interceptors play a critical role in protecting the environment. They help maintain water quality, protect aquatic ecosystems, and prevent the spread of waterborne diseases.

Supporting Urban Development: Intercepting sewers are essential for supporting urban growth and development. As cities expand, the demand on sewer infrastructure increases. Interceptors can be designed to accommodate future growth, ensuring that new developments have adequate wastewater management services.



Reducing Infrastructure Strain: By diverting large volumes of water away from smaller local sewers, interceptors reduce the strain on these systems. This helps prolong the life of local sewer infrastructure, reduces maintenance needs, and minimizes the risk of damage or failure.

Cost-Effectiveness: Investing in interceptor sewers can be a cost-effective solution for managing large volumes of wastewater. By efficiently transporting water to treatment facilities, interceptors help optimize the use of existing infrastructure and reduce the need for additional treatment facilities or costly upgrades.

The interceptor system's role is crucial in maintaining public health and safety, ensuring regulatory compliance, and preserving water quality.

### **PRELIMINARY DESIGN:**

The Cahokia Heights sanitary sewer system south of Lake Drive flows into a main trunkline which runs south from Illinois Route 15 (Missouri Avenue) to the Metro East Sanitary District (MESD) treatment plant on Levin Drive in the southwestern portion of the city and is then pumped to the American Bottom Regional Wastewater Treatment Plant in Sauget. See the General Alignment Plans attached as Appendix A.

The Cahokia Heights sanitary sewer system north of Lake Drive flows into the City of East St. Louis at eight (8) locations, three (3) locations east of Interstate 255 and five (5) locations west of Interstate 255. The new interceptor system will intercept the sewer flows prior to entering the City of East St. Louis and redirect them to the main trunkline south of Illinois Route 15 at each of these eight locations.

The new interceptor system will be routed along two (2) separate paths, one (1) east of Interstate 255 and one (1) west of Interstate 255. The east interceptor system will run along the northern boundary of Cahokia Heights just south of the East St. Louis boundary, heading east from 73<sup>rd</sup> Street to Illinois Route 157, then south along the western side of Illinois Route 157 to just north of the intersection with Illinois Route 13, then turn west and tie-in to the main trunkline near the intersection of Illinois Route 157 and Old Missouri Avenue.

The west interceptor system will run west along Laura Avenue from 63<sup>rd</sup> Street to 59<sup>th</sup> Street (Illinois Route 111), then continue westward along the northern boundary of Cahokia Heights just south of the East St. Louis boundary to 47<sup>th</sup> Street, then south to Lake Drive, where it continues westward to 43<sup>rd</sup> Street. The west interceptor system then runs south along 43<sup>rd</sup> Street, continuing through the Golden Gardens subdivision, then turns south along Pocket Road and 42<sup>nd</sup> Street to Brady Avenue, then east along Brady Avenue and the Southern Railroad tracks to Mousette Lane (50<sup>th</sup> Street), where it turns south to Market Avenue, tying into the 51<sup>st</sup> & Market Lift Station, where it is then pumped eastward under Interstate 255, to another lift station at 53<sup>rd</sup> Street and Market Ave., and then via existing gravity sewer to the main trunkline at Bond Ave. and Old Missouri Ave.

The east interceptor system will include a minimum of five (5) new lift stations, the rehabilitation of two (2) existing lift stations, and the installation of approximately 20,800 lineal feet (3.9 miles) of new force main. Additional lift stations may be required on approximately 15,800 lineal foot (3.0 mile) force main adjacent to Illinois Route 157, depending on the final calculations and final field survey verification. The work also includes crossings (borings) under Illinois Route 157, Lake Drive, Illinois Route 15 (Missouri Avenue), and the Southern Railroad tracks south of Illinois Route 15.

The majority of the east interceptor system will be located within the public right-of-way, however, it is anticipated to traverse eighteen (18) private properties, including two (2) parcels owned by the Metro East Sanitary District (MESD), one (1) parcel owned by Frank Holten State Park, and one (1) parcel owned by the Southern Railroad. Utility easements will be required for these properties.

The west interceptor system will include a minimum of five (5) new lift stations, the rehabilitation of four (4) existing lift stations, and the installation of approximately 20,400 lineal feet (3.9 miles) of new force main. Additional lift stations may be required on the approximately 11,600 lineal feet (2.2 miles) of force main south of Lake Drive, depending on the final calculations and final field surveys. The work also includes crossings (borings) under S. 59<sup>th</sup> St. (Kingshighway), N. 47<sup>th</sup> St., Pocket Road, Illinois Route 15, the Southern Railroad tracks on Mousette Lane, Bond Avenue, and Mousette Lane.

The majority of the west interceptor system will be located within the public right-of-way, however, it is anticipated to traverse seven (7) private properties, including two (1) parcels owned by Frank Holten State Park, and two (2) parcels owned by Southern Railroad. Utility easements will be required for these properties.

Alternately, the west interceptor system may be routed eastward into the east interceptor system along the north end, to avoid multiple highway and railroad crossings, and reduce the number of new lift stations required to carry the relatively small amount of flow in the neighborhoods west of I-255 and north of Lake Drive that are tributary to the East St. Louis trunkline. This alternate west alignment is shown on the attached plan in Appendix A.

Also see the alignment sketches attached in Appendix B for the layout of these proposed routes in greater detail.

## **PRELIMINARY DESIGN TASKS AND OUTCOMES**

### **1. INITIAL FIELD SURVEYS**

Survey crews and design staff traversed the proposed locations of new pump stations and routes of force mains for obvious signs of conflicts or inconsistencies with available GIS information and mapping. These physical survey efforts did produce a few minor alignment changes, and raised a few issues to be resolved during final design, but no fatal flaws were found during this investigation. Potential alignment issues to be resolved during final design phase include, on the East section: avoiding construction in areas along the abandoned railroad ROW at the city boundary where an existing deep ditch runs parallel to the proposed alignment in some places, and possible alternate route at the crossing of IL Rt 15 to minimize the length of boring beneath the highway. On the West section: alternate alignment to minimize bends in the proposed force main pipe due to jogs in the property lines of the abandoned railroad ROW on the north end near N. 47<sup>th</sup> St.

### **2. REVIEW OF GIS MAPPING**

Designers reviewed the proposed draft alignment against GIS mapping of properties available from St. Clair County to confirm ownership of parcels, easement requirements, public rights-of-way, and other available physical characteristics and descriptions. This review surfaced some minor possible changes to alignments, mentioned above, to maximize the use of public ROWs, and minimize the need for easements from private property owners.

These potential alignment changes will be further reviewed and confirmed during final surveys and design phase. These alignments and ownership information are shown in detail on the sketches included in Appendix B.

### 3. REVIEW OF SITE RESTRICTIONS TO CONSTRUCTION

#### WETLANDS

Designers reviewed available online mapping for potential wetland conflicts at the US Fish and Wildlife website [National Wetlands Inventory](#). Those maps are attached as Appendix C. While there are wetlands and other waterway areas adjacent to the proposed alignment of the new interceptor, the alignment is configured to remain within available public roadways and ROWs in nearly all cases, thereby avoiding jurisdictional wetland conflicts. In the event of any question or concern on several areas where proposed alignment is in close proximity, final design and surveys will determine if any conflicts arise, and alignments will be adjusted to minimize or eliminate these conflicts. At this preliminary point, there appear to be no instances of outright crossing or overlap of construction alignments and wetland areas. Agencies having jurisdiction will be consulted during final design when alignments and ROWs are pinpointed to ensure agreement on no conflicts.

#### ENDANGERED SPECIES

Available data online at the US Fish and Wildlife Service and other sites revealed no critical habitats for threatened or endangered species that are in conflict with the proposed alignment.

As with the wetlands discussion, once final alignments are drafted during final design, the agencies having jurisdiction will be consulted to ensure agreement on no conflicts.

## HISTORIC, ARCHAEOLOGICAL AND CULTURAL SITES

Once final alignments are drafted during final design, the state of Illinois SHPO office will be consulted to ensure agreement on no conflicts.

## ROADWAYS, ROWs, RAILROADS and other UTILITIES

As stated above, the proposed alignment of new construction for the interceptor project will follow, as much as possible, existing street rights-of-way. There will be some easements required of public and private landowners where the public ROW is not usable or accessible. These include a few private landowners, the IDNR (at Frank Holten State Park), the IDOT (along state owned roadways), the MESD (along and across Harding Ditch), and the Southern Railroad, via three borings underneath the railway. There may be other existing utilities, including gas, electric and communications, that may have primacy or priority over tracts of land in the proposed alignment. While not insignificant, it is not anticipated to be a major problem for the completion of the design and construction of the project within the proposed timetable of 4 years (by the end of 2028).

## OTHER PERMITS

The project will require a permit for construction from the IEPA, which is not expected to be an issue.

#### 4. REVIEW OF FLOWS, CAPACITIES, AND OTHER EXISTING CHARACTERISTICS

Designers have conducted a cursory review of the proposed layout and connections to the existing sewer system to determine the operating status, existing conditions, and flow characteristics of lines and pumps. The only concerns identified at this stage are the capacities of existing receiving pump stations at the terminus of both the east and west interceptor sections.

The east section ends at the existing pump station at 6927 Old Missouri Ave., also known as the Lady of the Snows station. This station was replaced in 2023-2024 with new pumps, valves, and control panel/electrical service. This station is equipped with two new Flygt Concertor submersible pumps, each with a 230V, 3-phase, 5.5 HP motor, with a combined total capacity of 400 GPM.

The west section ends at the existing pump station at 51<sup>st</sup> St. and Market Ave. This station was just replaced in fall 2024, with a similar rehab scope. It is equipped with two new Flygt Concertor submersible pumps, each with 230V, 3-phase, 5.5 HP motor, with a combined total capacity of 650 GPM.

While both of these stations have been recently upgraded with replacement equipment, these capacities will be verified and reviewed to ensure their ability to accept the increased flows from the interceptor sewers flowing into them. If necessary, final designs will include upsizing of pumps, valves, and force mains to accommodate the new flows, with the replaced equipment going into spare parts inventory at the city.

Other existing stations in the proposed interceptor will need to be modified for capacity as well, and these are shown on the General Alignment Plans, Flow Chart, and Tributary Map in Appendix A.

## 5. REVIEW OF ALTERNATIVE ALIGNMENTS

A review was conducted of possible alternative alignments to the proposed alignment during preliminary design. Due to the limitations posed by existing Interstate 255 alignment and embankment, other state highway crossings, railroad crossings, major drainage ditch alignments, state park lands, and known wetland areas, the only feasible alternate alignment for the interceptor was determined to be along the MESD ROW for Harding Ditch. In theory, the direction of flow along the north end of the project would be reversed, with east and west sections flowing toward each other and then turning south along and within the MESD ROW for Harding Ditch. At first glance, this alignment offers an improvement in the construction of crossings of state highways and railroads. However, that improvement comes at the heavier cost and difficulty of overall access restrictions for construction equipment and trucks, complications with adjacent water bodies and wetlands, structural concerns with construction adjacent to the important and regulated interior levees that contain Harding Ditch, and the annual easement fees that would be required by the MESD, which are priced by the foot of pipe or easement. After consideration of these factors, this alternate alignment was rejected.

As discussed above, however, an alternate alignment of the west interceptor to flow eastward is being evaluated during final design.



## **CONCLUSION OF PRELIMINARY DESIGN EFFORTS**

After conducting the preliminary tasks described above, and evaluating possible alternative alignments, it is concluded that the proposed alignment and system configuration, while challenging in its implementation and construction, presents the best option for the completion of the interceptor sewer system. Now that the preliminary study has been completed, engineering can proceed to implement the final design activities, which are described below.

## **FINAL DESIGN**

The interceptor system final design will involve proceeding from the preliminary design and feasibility studies to develop the selected alternative into final designs, including the following:

1. Final topographic surveys
2. Negotiations with utilities and agencies having rights-of-way (ROW) over where project elements must be placed
3. Applications for permits and easements from ROW holders
4. Applications for permits and other authorizations concerning location restrictions, such as:
  - a) Wetlands
  - b) Endangered species
  - c) Historical and archaeological artifacts and sites
  - d) Railroads
  - e) Highways
  - f) Gas and electric transmission lines
  - g) IEPA Permits for Construction

U. S. Fish & Wildlife Wetlands maps are provided Appendix C and show the likely route of the proposed interceptor system. The interceptor system is being designed to avoid wetland areas to the greatest extent possible. Surveys performed to date on the alignment indicate that areas along the north and east areas of the interceptor force mains that are in close proximity to mapped wetland areas can be avoided by construction of the new force mains.

5. Production of working drawings and specifications
6. Production of bid documents
7. Inclusion of agency reviews and approvals as needed
8. Advertisement of bids
9. Conducting pre-bid outreach and conferences
10. Answering RFI's and issuing addenda as needed
11. Opening of bids and review
12. Bid Recommendations
13. Issuing Notice of Award
14. Review of submittals and bid documents
15. Issuing Agreement and Notice to Proceed.

Note that final designs will be in accordance with Illinois Title 35, Part 370, Illinois Recommended Standards for Sewage Works. All Cahokia Heights sanitary lift stations are designed in accordance with Illinois Title 35, Part 370, Subpart D, Sewage Pumping Stations, including separate wet well and valve vault structures, guide rails and lift cables to facilitate removal of the pumps & motors without entering the wet well, suitable and safe means of access, duplicate pumps having the same capacity, are capable of passing spheres of up to 3 inches in diameter,

are suitable for operation within a Class I, Division I, Group D environment, are designed to maintain a minimum velocity of 2 feet per second in the force main, etc.

Lift station capacities are calculated based on the number of parcels tributary to each lift station, the average daily water usage, and the peak flow factor, considering static head, friction losses, velocity in the force main, number of cycles per hour, retention time, etc. Flow meters have been installed at specific locations to determine exiting sewage flows in comparison to calculated flows, and to evaluate expected I/I reductions from cleaning and CIPP lining work.

The force main sizes are determined by the lift station calculations, based on the design flows, static head, friction losses, minimum velocity, etc. Based on the number of vacant properties within the City (which per the design standard are counted as contributing flows, but which in reality contribute no flow), and the known and anticipated I/I flow volumes to be reduced by upcoming cleaning, TV, and CIPP work, the actual flow rates are expected to be significantly lower than the calculated values, thus the force mains will be able to accommodate larger flows.

A packaged cellular/cloud based Supervisory Control and Data Acquisition (SCADA) system will be installed within the control panels at every lift station in the city sewer system, including the new stations that will be part of the interceptor system, to collect and transmit data from the lift stations to a central server location to receive, record, and analyze lift station data, alert operating personnel about system alarms and malfunction conditions, and control lift station operations remotely.

All existing and proposed lift stations on the Cahokia Heights sanitary sewer interceptor system are designed as standard duplex submersible lift stations containing 2 pumps of equal capacity set to operate alternately.

Typical submersible duplex lift station construction and rehabilitation details are provided on in Appendix D & E, respectively. The lift stations have been designed to standardize the system components to the greatest extent possible.

Backup power to all lift stations in the city system, including those within the proposed interceptor project, is provided by three portable generators to provide temporary 240V or 480V power to the lift stations as necessary. The control panels have generator receptacles for connection to the portable generators. The length of time between a power failure and commencement of pumping by emergency equipment is anticipated to be 30 minutes or less.

Gravity sewers in the proposed system will be constructed of PVC gravity sewer pipe and fittings shall conform to ASTM D-3034 (minimum SDR26). All pipe shall be manufactured from clear virgin resin cell classification 12454B conforming to ASTM D1784. Pipe shall conform to ASTM D-3034, SDR 26, PSM, with fittings meeting ASTM D-3034, PVC, and joints meeting ASTM F477, elastomeric gaskets. Alternate equivalents of HDPE pipe will be evaluated and considered.

Force main piping installed by trenching methods will be polyvinyl chloride (PVC) pipe (ASTM D2241, SDR21 (200 psi)) with gasketed joints and flexible elastomeric seals (ASTM D3139).

Force main piping at borings / highway & railroad crossings will be polyvinyl chloride (PVC) pipe (ASTM D2241, SDR21 (200 psi)) with restrained joints and flexible elastomeric seals (ASTM D3139). Alternate equivalents of HDPE pipe will be evaluated and considered.

Force main piping within the lift stations will be ductile iron pipe, with fittings conforming to either ANSI/AWWA C110/A21.10, ANSI/AWWA C115/A21.15, or ANSI/AWWA C153/A21.53. Fittings and accessories will be furnished with either push-on, flanged, or mechanical-type joints in accordance with ANSI/AWWA C111/A21.11.

The number of bends in the force mains will be minimized to reduce friction losses within the force main.

All lift stations will be submersible duplex stations designed to accommodate the peak flows with only one pump running, with the second pump available to provide additional capacity as needed. The size of the force main piping is determined during the design process to ensure that it has adequate downstream capacity to manage the anticipated flows. CIPP lining of the main trunkline, which is occurring now, and which will be continued to the end of the trunkline, past the entry point of the interceptor system, will reduce infiltration into the sanitary sewer system, allowing the interceptor system to operate more efficiently. The trunkline sewer, being the oldest, largest and deepest part of the City sewer system, logically incurs the greatest amount of groundwater infiltration. The trunkline CIPP project currently under way will increase the available capacity of the trunkline by a significant amount, to accommodate the additional flows from the interceptor system. Conversations with American Bottoms WWTP operators indicate that flows to its plant from the Cahokia Heights trunkline increase during times of high river levels and corresponding high groundwater levels by as much as 50%.

As discussed above, the east interceptor system is anticipated to flow into the existing Lady of Snows lift station. It currently has (2) 200 gpm pumps and is being evaluated to determine if it can be rehabilitated to manage the increased capacity, or if the flows should bypass the Lady of Snows lift station and tie directly into the main trunkline south of the lift station.

Flow monitoring is being performed in the vicinity of the Lady of Snows lift station to determine existing flow rates and evaluate for infiltration and inflow in the area between Illinois Route 157 and the lift station.

The west interceptor system is currently being evaluated in design to determine the feasibility of it flowing eastward, rather than westward as originally conceived, and into the existing 63<sup>rd</sup> & Laura lift station, and then pumped east to tie into the east interceptor system. This change in design concept could potentially save millions of dollars in construction costs, and avoid several additional crossings/borings of highways and railroads along the former westward route. The 63rd & Laura lift station currently has (2) 125 gpm pumps and is being evaluated to determine if it can be rehabilitated to manage the increased capacity, or if a new lift station is required, should this alternate west interceptor alignment be chosen.

The City will update its CMOM Program and its approved Illinois EPA Operations and Maintenance Program to include the new lift stations and force mains upon completion of the final design, and again upon completion of construction.

## **SCHEDULE**

It is anticipated that the above activities will be completed during 2025, allowing the construction to begin in early 2026. While there is some timeline uncertainty regarding securing all necessary construction funding, permits, and easements, the proposed preliminary project schedule does anticipate a reasonable amount of time for these activities. Key phases in the schedule are below:

Final Design Phase	February 2025 to January 2026
Construction Phase	January 2026 to December 2028

See milestone schedule included in this report as Appendix F for additional milestones and details. Note that upon completion of milestones for 60% design and for the submission of applications/requests and receipt of same for all right-of-way documents (easements, permits) to enable the construction of the project, the City will provide notification to EPA and IEPA.

**CITY OF CAHOKIA HEIGHTS**  
**SANITARY SEWER SYSTEM**  
**PROPOSED INTERCEPTOR SEWER SYSTEM**  
**PRELIMINARY DESIGN REPORT**

**APPENDIX A**

General Alignment Plans



# CAHOKIA HEIGHTS LIFT STATION AND INTERCEPTOR SEWER ALIGNMENT PLAN - 1

VILLAGE OF SAUGET

CITY OF CAHOKIA HEIGHTS

CITY OF EAST ST. LOUIS

CITY OF BELLEVILLE

INTERSTATE 255

INTERSTATE 157

STATE STREET

WEST MAIN STREET

ROUTE 15 (MISSOURI AVE)

BOND AVENUE

POCKET RD

NEW INTERCEPTOR SEWER

SHARED MAIN TRUNKLINE

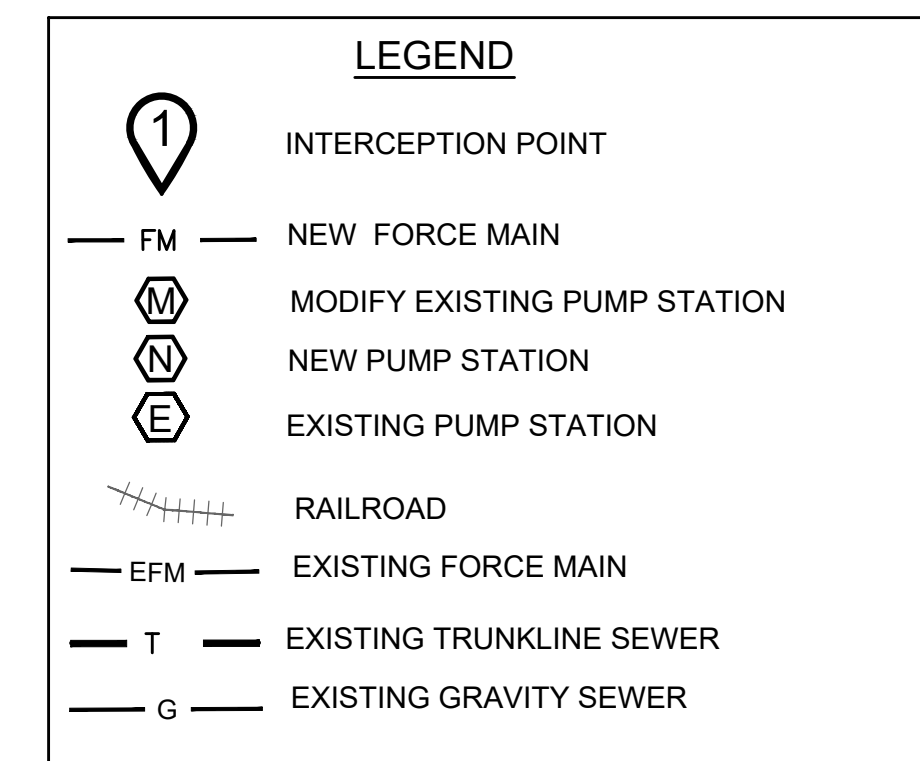
IL ROUTE 3

IL ROUTE 157

LEGEND

- 1 INTERCEPTION POINT
- FM NEW FORCE MAIN
- M MODIFY EXISTING PUMP STATION
- N NEW PUMP STATION

APPROX. SCALE: 1"=2000'



2024 HURST-ROSCHE, INC.



**Hurst-Rosche, Inc.**  
PROFESSIONAL DESIGN NUMBER: 164-000298

5 BANK SQUARE  
EAST ST. LOUIS, IL  
PH: 618.398.0890  
[www.hurst-rosche.com](http://www.hurst-rosche.com)

HILLSBORO, IL  
EAST ST. LOUIS, IL  
SPRINGFIELD, IL  
MARION, IL  
NASHVILLE, TN  
ARNOLD, MO

APPROX. SCALE: 1"=2000'

SIGNATURE

DATE \_\_\_\_\_

**LICENSE EXPIRES**

GENERAL ALIGNMENT PLAN  
CITY OF CAHOKIA HEIGHTS

WK.	DATE	DESCRIPTION
DATE: 10/2024		
PROJECT NO: 860-1214		
DESIGN:	DRAWN:	CHECK:

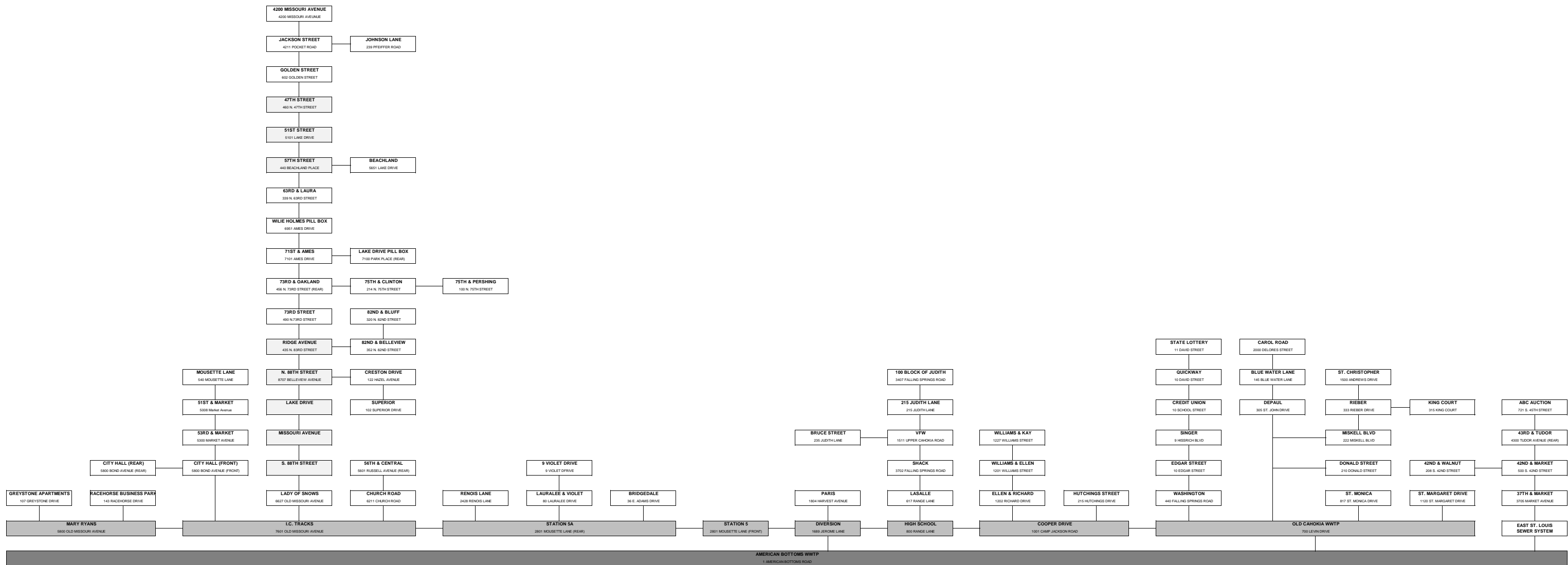
[illegible]

OVERALL LIFT STATION (TRIBUTARY SYSTEM)  
4/16/2025

Lift Station No.	Lift Station Name	Location	Feeds into:
1	Cooper Drive	1001 Camp Jackson Road	To Manhole 17 : To Treatment Plant
2	Station 5	2801 Mousette Lane (Front)	69 - Diversion
3	Blue Water Lane	145 Blue Water Lane	4 - Depaul
4	DePaul	305 St. John Drive	To Manhole 2 : To Treatment Plant
5	Donald Street	210 Donald Street	To Manhole 2 : To Treatment Plant
6	Edgar Street	10 Edgar Street	28 - Washington
7	Ellen & Richard	1202 Richard Drive	1 - Cooper Drive
8	215 Judith Lane	215 Judith Lane	24 - VFW
9	LaSalle	617 Range Lane	68 - High School Station
10	Miskell Blvd.	222 Miskell Blvd.	To Manhole 2 : To Treatment Plant
11	Shack	3702 Falling Springs Road	9 - LaSalle
12	Station 5A	2801 Mousette Lane (Rear)	2 - Station 5
13	Bruce Street	235 Judith Lane	24 - VFW
14	Carol Road	2000 Delores Street	3 - Blue Water Lane
15	Singer	9 Hissrich Blvd.	6 - Edgar Street
16	Hutchings Street	215 Hutchings Drive	1 - Cooper Drive
17	100 Block of Judith	3407 Falling Springs Road	8 - 215 Judith Lane
18	St. Margaret Drive	1120 St. Margaret Drive	To Manhole 50 : To Treatment Plant
19	Credit Union	10 School Street	15 - Singer
20	Quickway	10 David Street	19 - Credit Union
21	State Lottery	11 David Street	20 - Quickway
22	St. Christopher	1500 Andrews Drive	26 - Rieber
23	Williams & Ellen	1201 Williams Street	7 - Ellen & Richard
24	VFW	1511 Upper Cahokia Road	11 - Shack
25	Paris	1804 Harvest Avenue	69 - Diversion
26	Rieber	333 Rieber Drive	10 - Miskell Blvd
27	Williams & Kay	1227 Williams Street	23 - William & Ellen
28	Washington	440 Falling Springs Road	To Manhole 8 : To Treatment Plant
29	King Court	315 King Court	26 - Rieber
30	St. Monica	817 St. Monica Drive	To Manhole 77 : To Treatment Plant
31	9 Violet	9 Violet Drive	51 - Lauralee & Violet
32	51st & Market	5008 Market Avenue	33 - 53rd & Market
33	53rd & Market	5300 Market Avenue	44 - City Hall (Front)
34	63rd & Laura (WI5)	339 N. 63rd Street	55 - Willie Holmes Pill Box
35	71st & Ames	7101 Ames Drive	36 - 73rd & Oakland
36	73rd & Oakland	456 N. 73rd Street (Rear)	37 - 73rd Street (EI6)
37	73rd Street (EI6)	490 N. 73rd Street	71 - Ridge Avenue (EI7)
38	75th & Clinton	214 N. 75th Street	36 - 73rd & Oakland
39	75th & Pershing	100 N. 75th Street	38 - 75th & Clinton
40	82nd & Bellevue	352 N. 82nd Street	71 - Ridge Avenue (EI7)
41	82nd & Bluff	320 N. 82nd Street	40 - 82nd & Bellevue
42	Beachland	5651 Lake Drive	74 - 57th Street (WI4)
43	Bridgedale	36 E. Adams Drive	12 - Station 5A
44	City Hall (Front)	5800 Bond Avenue (Front)	48 - I.C. Tracks
45	City Hall (Rear)	5800 Bond Avenue (Rear)	44 - City Hall (Front)
46	Creston Drive	122 Hazel Avenue	72 - N. 88th Street (EI8)
47	Greystone Apartments	107 Greystone Drive	52 - Mary Ryans
48	I.C. Tracks	7601 Old Missouri Avenue	12 - Station 5A
49	Lady of Snows	6927 Old Missouri Avenue	48 - I.C. Tracks
50	Lake Drive Pill Box	7100 Park Place (Rear)	35 - 71st & Ames
51	Lauralee & Violet	80 Lauralee Drive	12 - Station 5A
52	Mary Ryans	5800 Old Missouri Avenue	48 - I.C. Tracks
53	Mousette Lane	540 Mousette Lane	32 - 51st & Market
54	Superior	102 Superior Drive	46 - Creston Drive
55	Willie Holmes Pill Box	6951 Ames Drive (Near Elm Street)	35 - 71st & Ames
56	42nd & Walnut	208 S. 42nd Street	58 - 42nd & Market
57	4200 Missouri Avenue	4200 Missouri Ave.	61 - Jackson Street
58	42nd & Market	500 S. 42nd Street	59 - 37th & Market
59	37th & Market	3705 Market Avenue	To MH 38 : To East St. Louis
60	43rd & Tudor	4300 Tudor Avenue (Rear)	58 - 42nd & Market
61	Jackson Street	4211 Pocket Road	64 - Golden Street (WI1)
62	Johnson Lane	239 Pfeiffer Road	61 - Jackson Street
63	ABC Auction	721 S. 45th Street	60 - 43rd & Tudor
64	Golden Street (WI1)	602 Golden Street	76 - 47th Street (WI2)
65	Racehorse Business Park	143 Racehorse Drive	52 - Mary Ryans
66	56th & Central	5601 Russell Avenue (Rear)	67 - Church Road
67	Church Road	6211 Church Road	48 - I.C. Tracks
68	High School Station	800 Range Lane	1 - Cooper Drive

69	Diversion	1689 Jerome Lane	68 - High School Station
70	Renois Lane	2428 Renois Lane	12 - Station 5A
71	Ridge Avenue (EI7)	435 N, 83rd Street	72 - N. 88th Street (EI8)
72	N. 88th Street (EI8)	8707 Bellevue Avenue	73 - EI8'A'
73	EI8'A'		49 - Lady of Snows
74	57th Street (WI4)	440 Beachland Place	34 - 63rd & Laura (WI5)
75	51st Street (WI3)	5101 Lake Drive	74 - 57th Street (WI4)
76	47th Street (WI2)	460 N. 47th Street	75 - 51st Street (WI3)

### CAHOKIA HEIGHTS LIFT STATION FLOW CHART

[illegible]

**NEW INTERCEPTOR  
LIFT STATION**

CAHOKIA HEIGHTS  
MAIN TRUNKLINE

AMERICAN BOTTOMS  
WWTP



**CITY OF CAHOKIA HEIGHTS**  
**SANITARY SEWER SYSTEM**  
**PROPOSED INTERCEPTOR SEWER SYSTEM**  
**PRELIMINARY DESIGN REPORT**

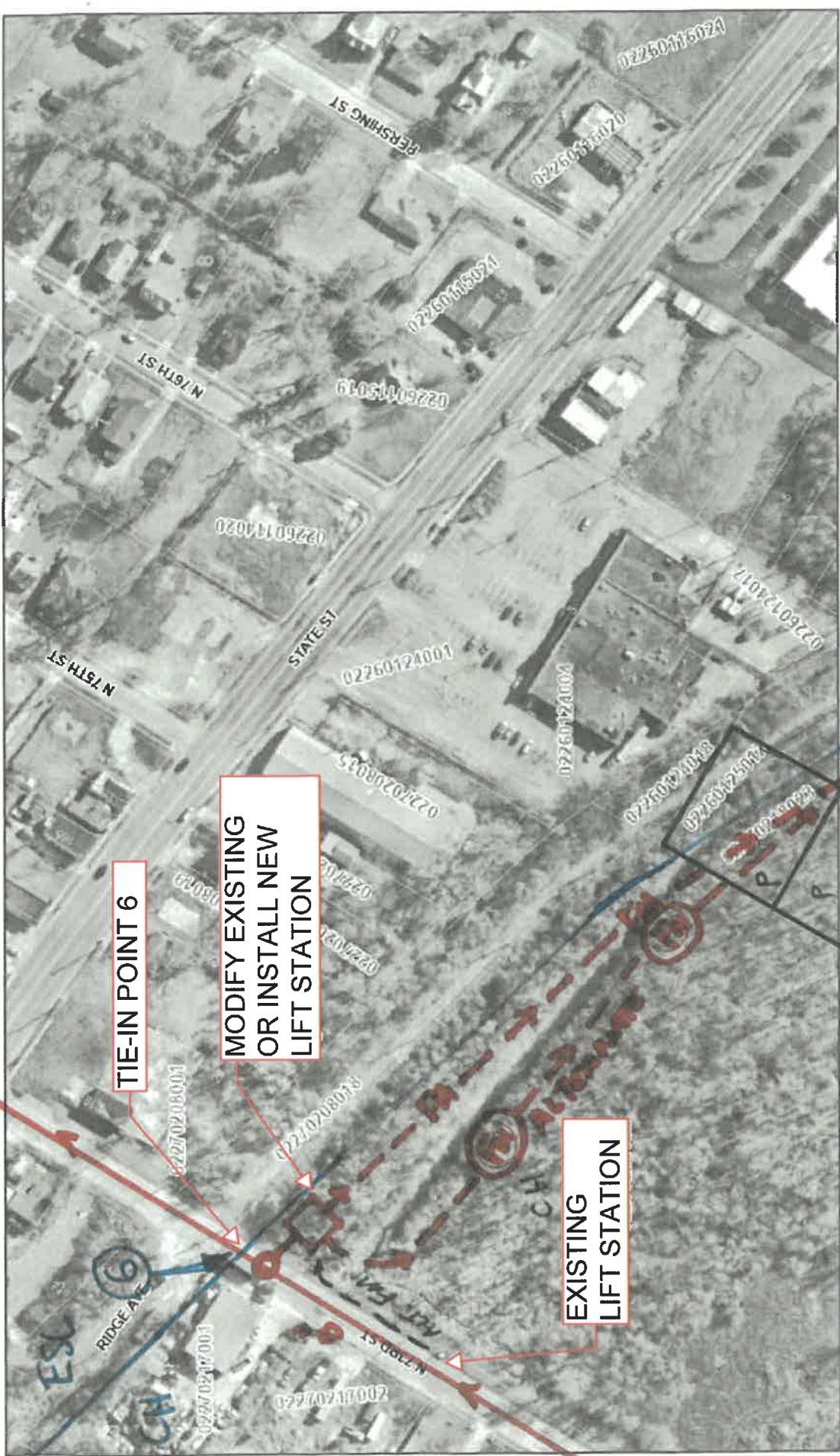
**APPENDIX B**

Route Alignment Sketches

EAST



St Clair County Parcel Map



7/22/2024, 3:03:24 PM

1:2,257  
0.01 0.02 0.03 0.04 0.06 mi  
0 0.02 0.04 0.09 km  
Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

Township Boundary  
Roads  
Parcels

St Clair County GIS  
Esri, HERE, Garmin, USGS, EPA, NPS



St Clair County Parcel Map



7/22/2024, 3:19:13 PM

Township Boundary

Roads

Parcels

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0 0.02 0.04 0.09 km  
Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnology, Inc.,  
USGS, EPA

St Clair County GIS  
Esri, HERE, Garmin, USGS, EPA, NPS |



St. Clair County Parcel Map

7/23/2024, 9:32:56 AM

Township Boundary

Roads

0.01 0.02 0.03 mi

0.01 0.02 0.04 km

Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, EPA

**Township Boundary**

## Parcels

St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

CH/55



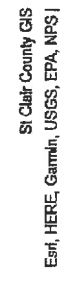
## Roads

Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS I

Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS I

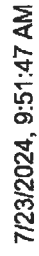


5/24



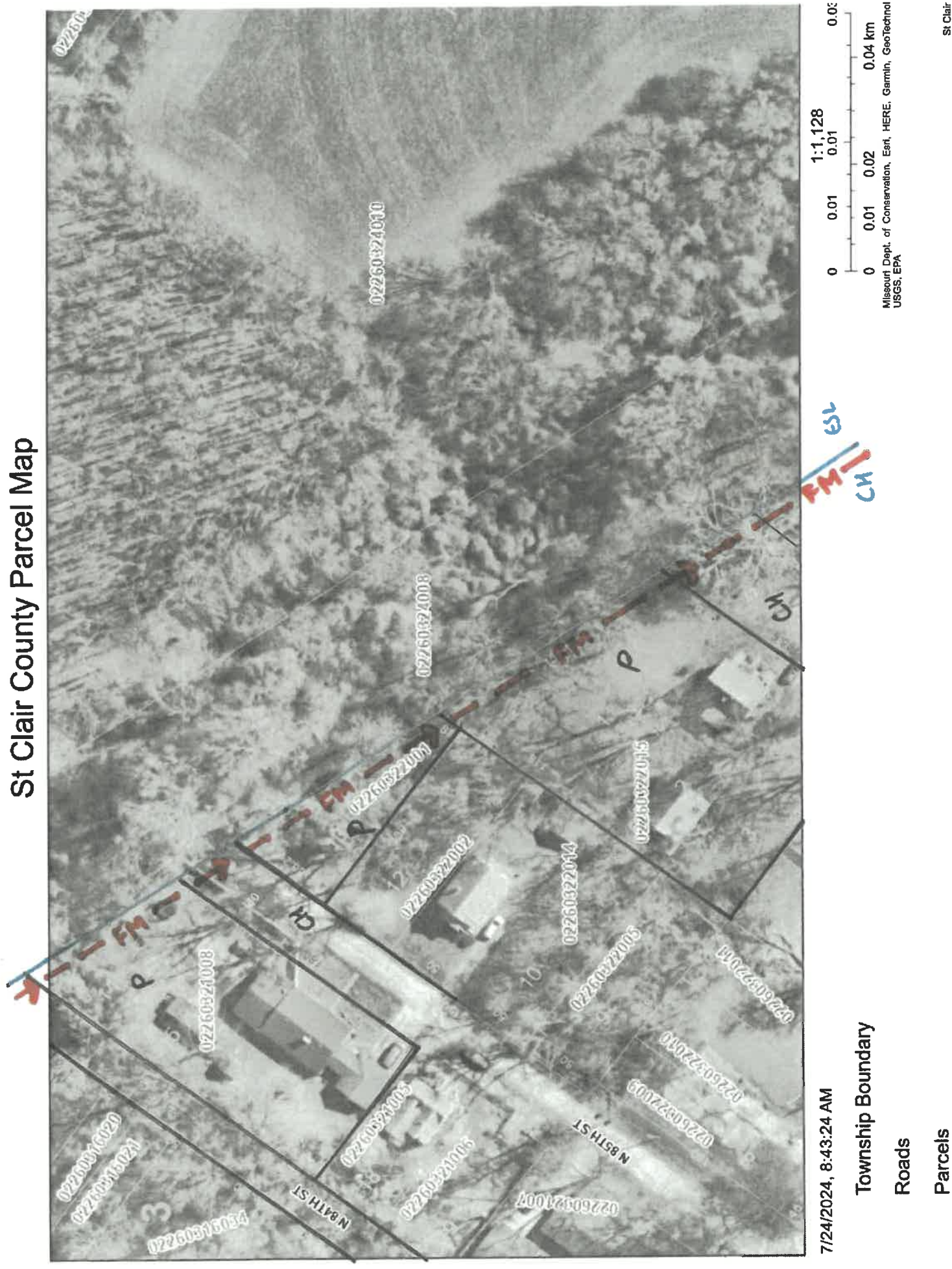


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# St Clair County Parcel Map



St Clair County Parcel Map



7/24/2024, 8:45:59 AM

Township Boundary

Roads

Parcels

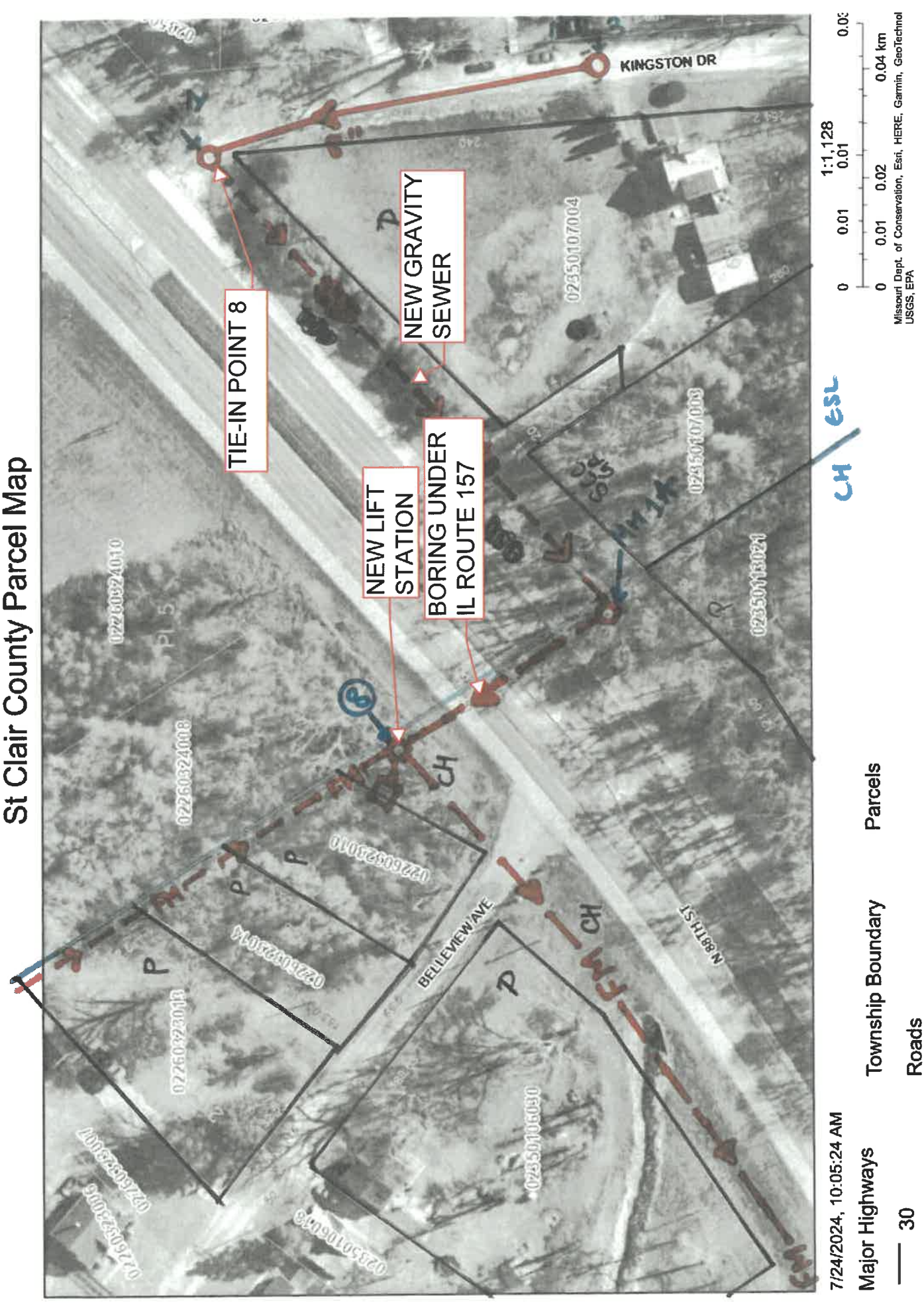
ESL  
CH

1:1,128  
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Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, USGS, EPA

Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA,  
St Clair Coun



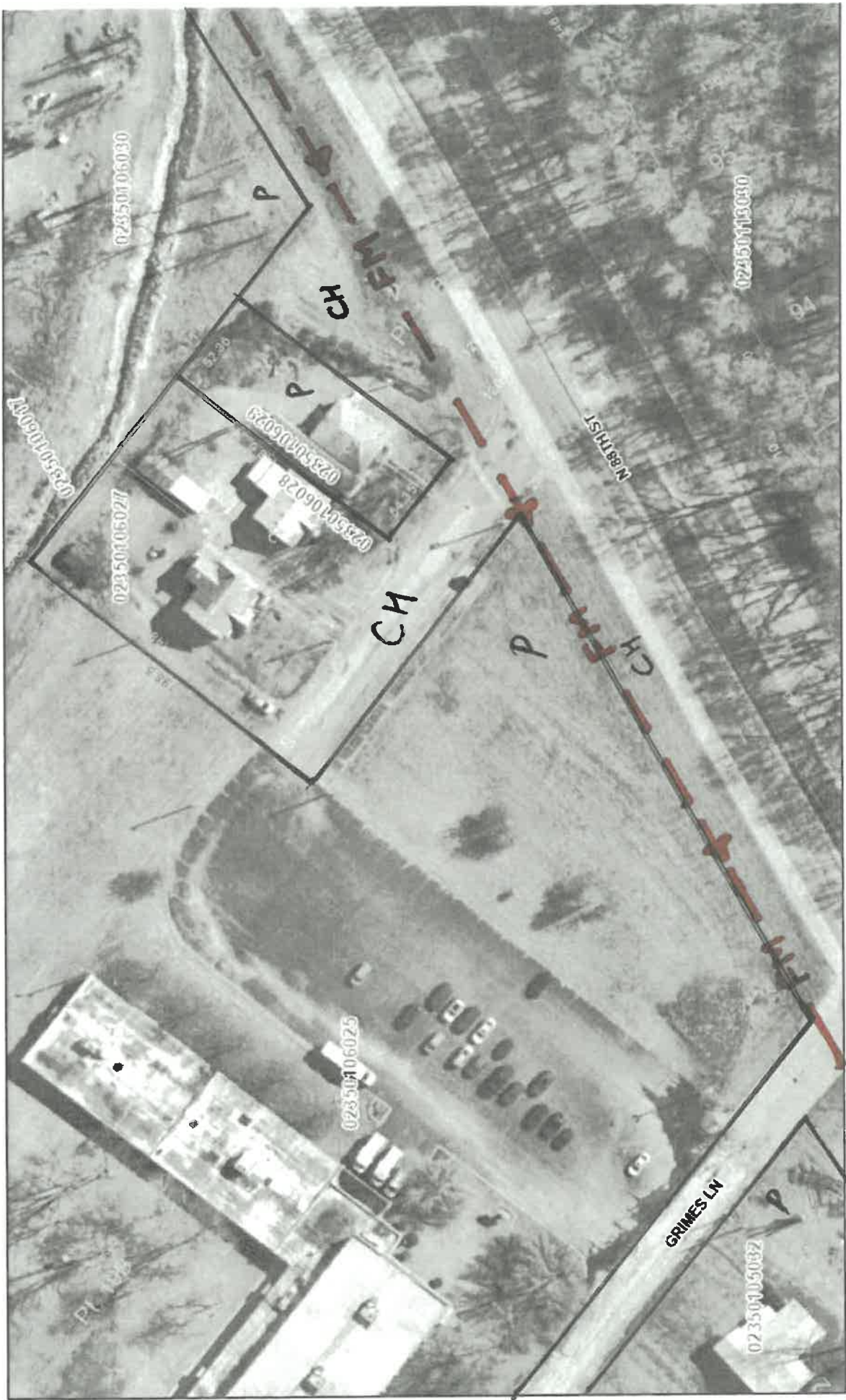
# St Clair County Parcel Map



St Clair



St Clair County Parcel Map



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Major Highways

— 30

Township Boundary

Parcels

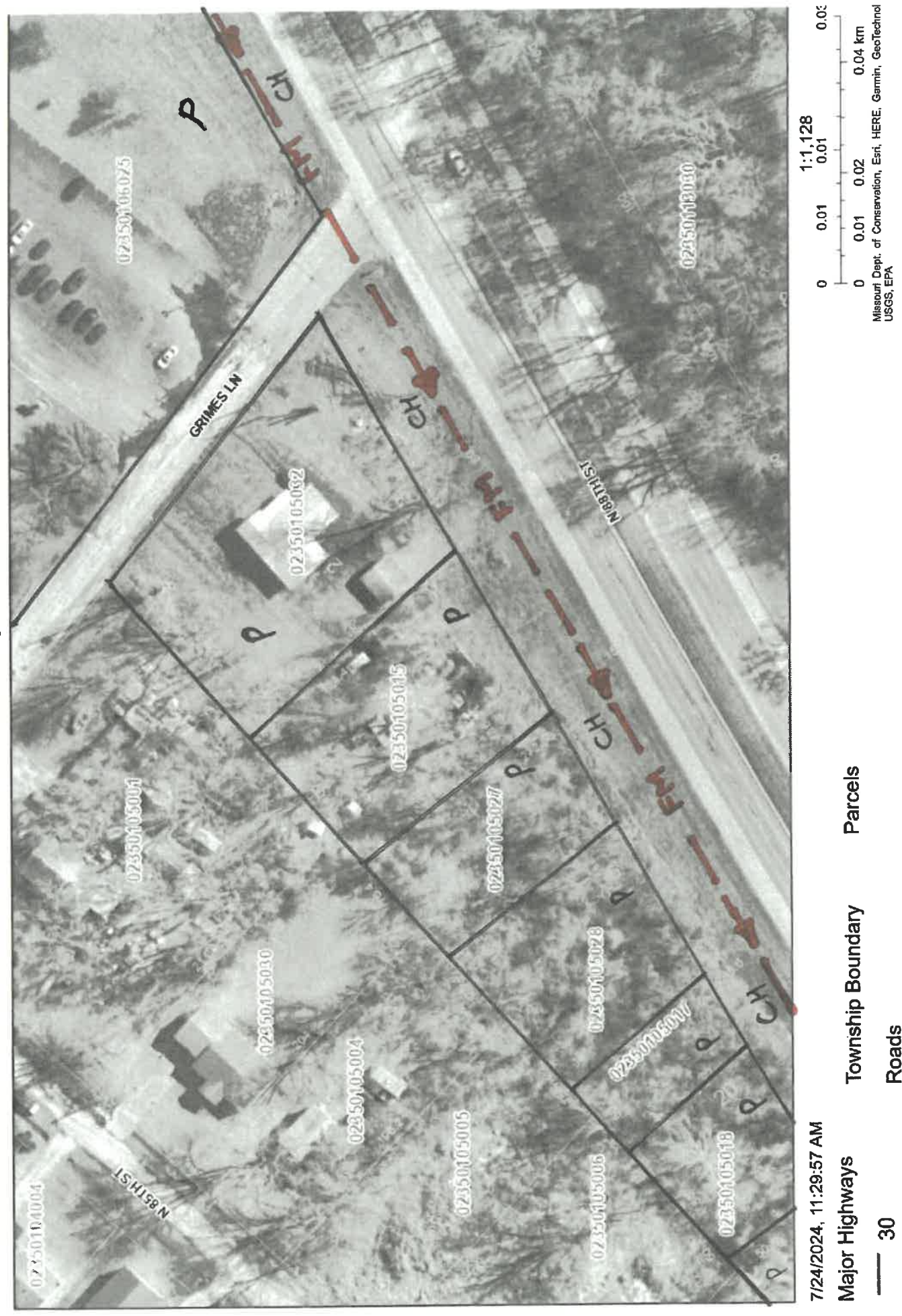
Roads

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Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnol  
USGS, EPA

St Clair



# St Clair County Parcel Map





St Clair County Parcel Map



7/24/2024, 12:02:58 PM

Major Highways

30

Township Boundary

Parcels

Roads

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USGS, EPA

St Clair

St Clair County Parcel Map



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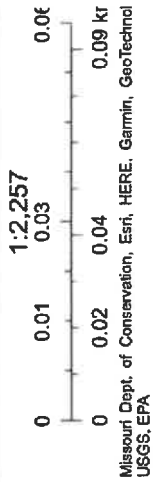
Major Highways

— 30

Township Boundary

Parcels

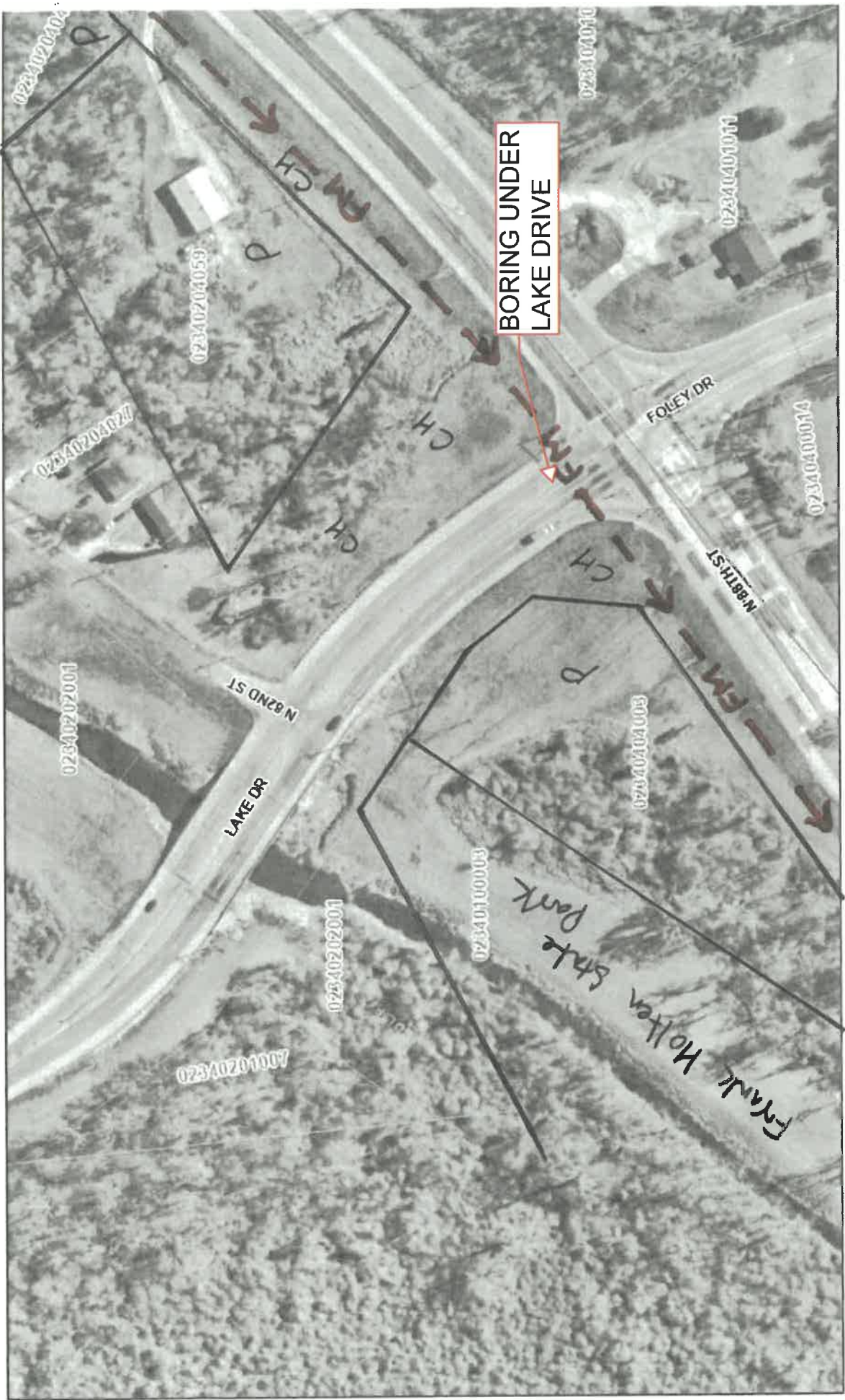
Roads



St Clair



St Clair County Parcel Map



7/24/2024, 12:52:30 PM

Major Highways

30

Township Boundary

Parcels

Roads

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USGS, EPA

St Clair

St Clair County Parcel Map



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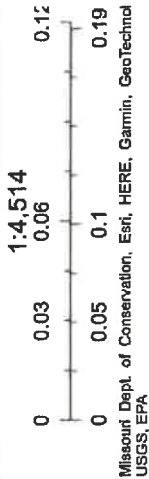
Major Highways

— 30

Township Boundary

Parcels

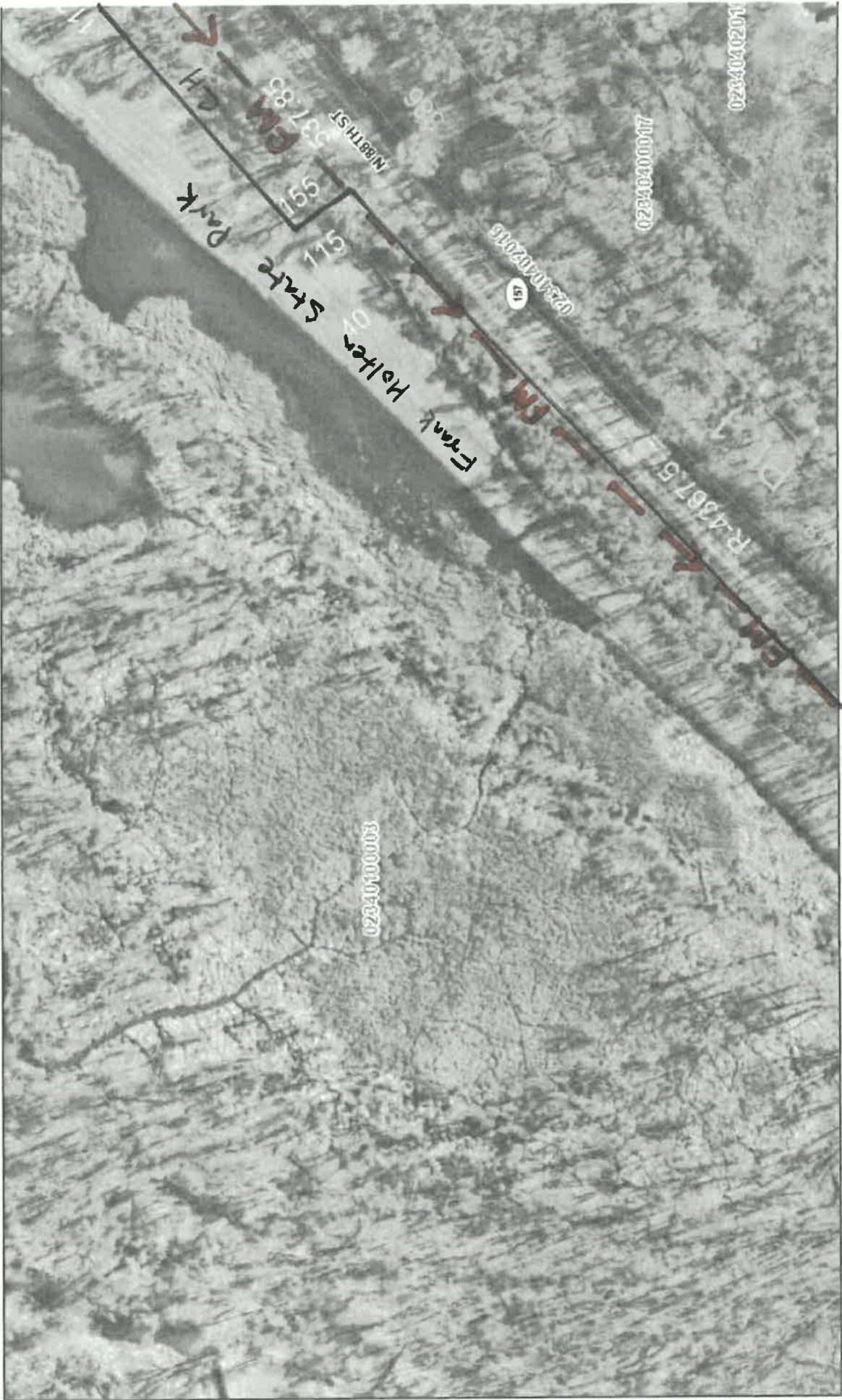
Roads



St Clair



St Clair County Parcel Map



7/24/2024, 1:49:25 PM

Major Highways

— 30

Township Boundary

Parcels

Roads



St Clair



St Clair County Parcel Map



7/24/2024, 1:53:12 PM

Major Highways

— 30

Township Boundary

Parcels

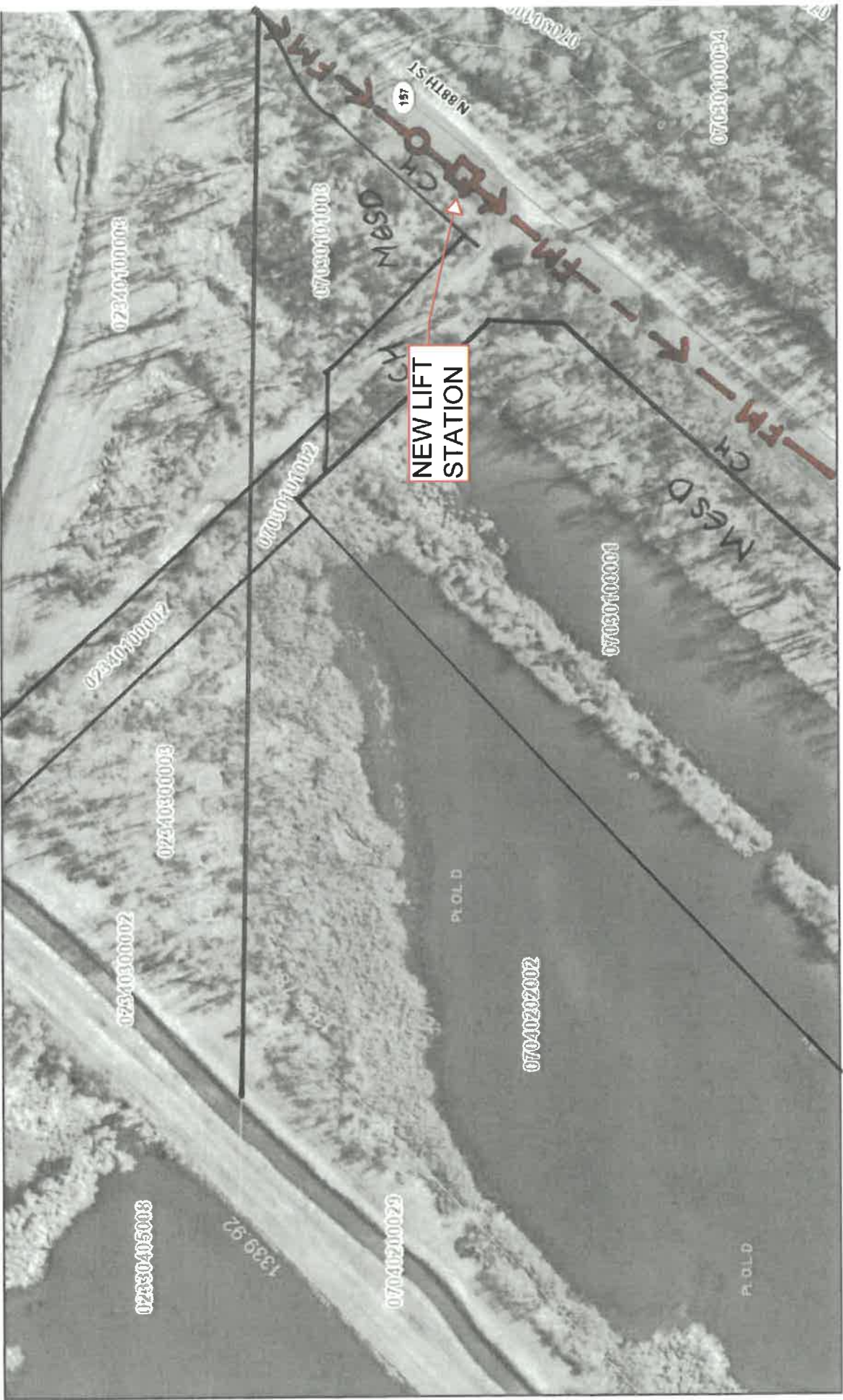
Roads

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Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnol  
USGS, EPA

St Clair



St Clair County Parcel Map



7/25/2024, 8:41:25 AM

Major Highways

30

Township Boundary

Roads

Parcels

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0.02

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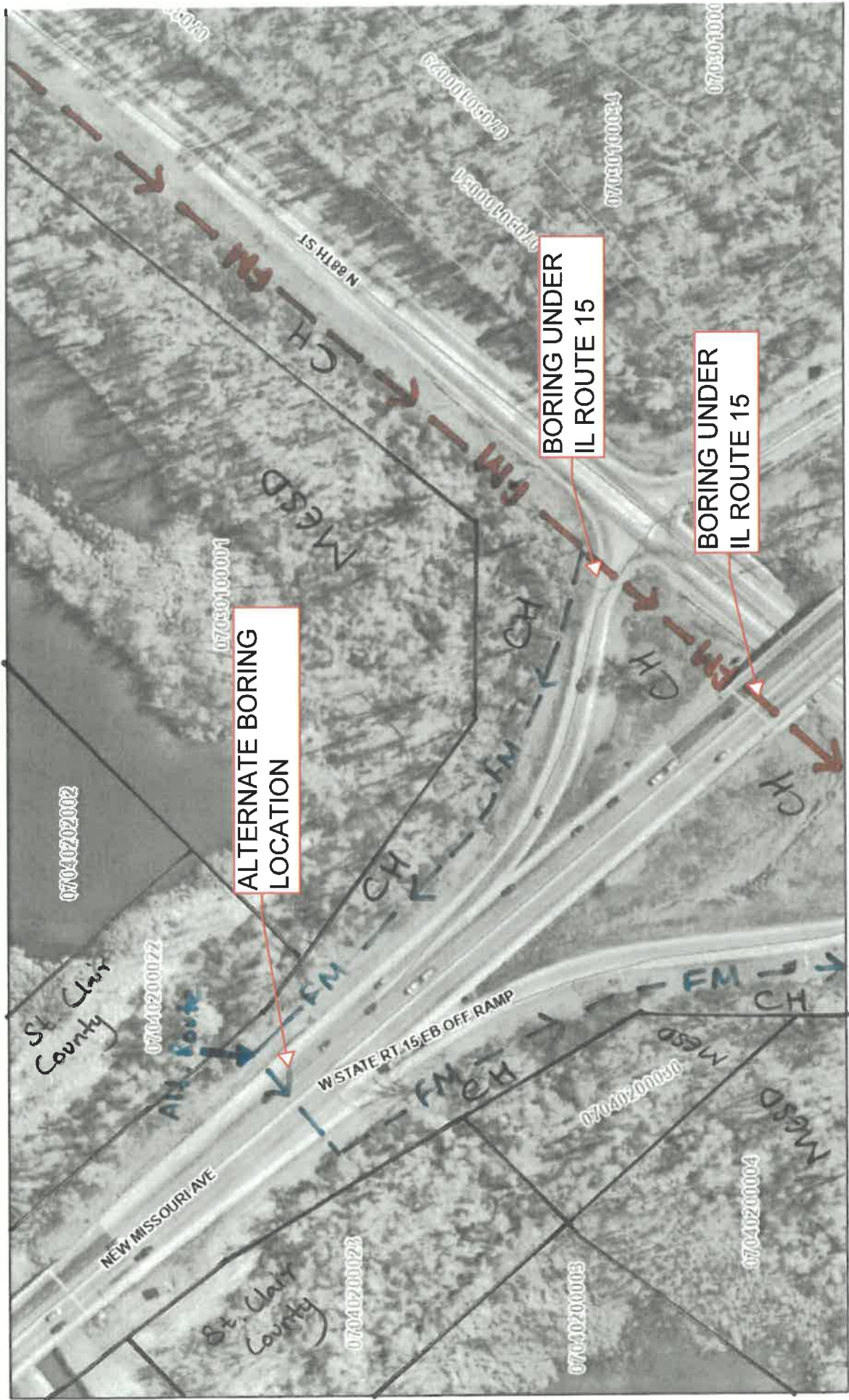
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Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnol

USGS, EPA



St Clair County Parcel Map



7/24/2024, 2:21:20 PM

Major Highways

— 30

Township Boundary

Parcels

Roads

1:2,257

0 0.01 0.03 0.06

0 0.02 0.04 0.09 km  
Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnology, USGS, EPA

St Clair



St Clair County Parcel Map



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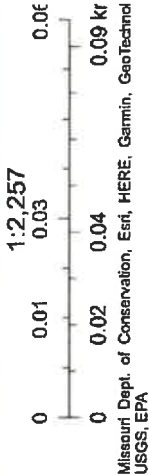
Major Highways

30

Township Boundary

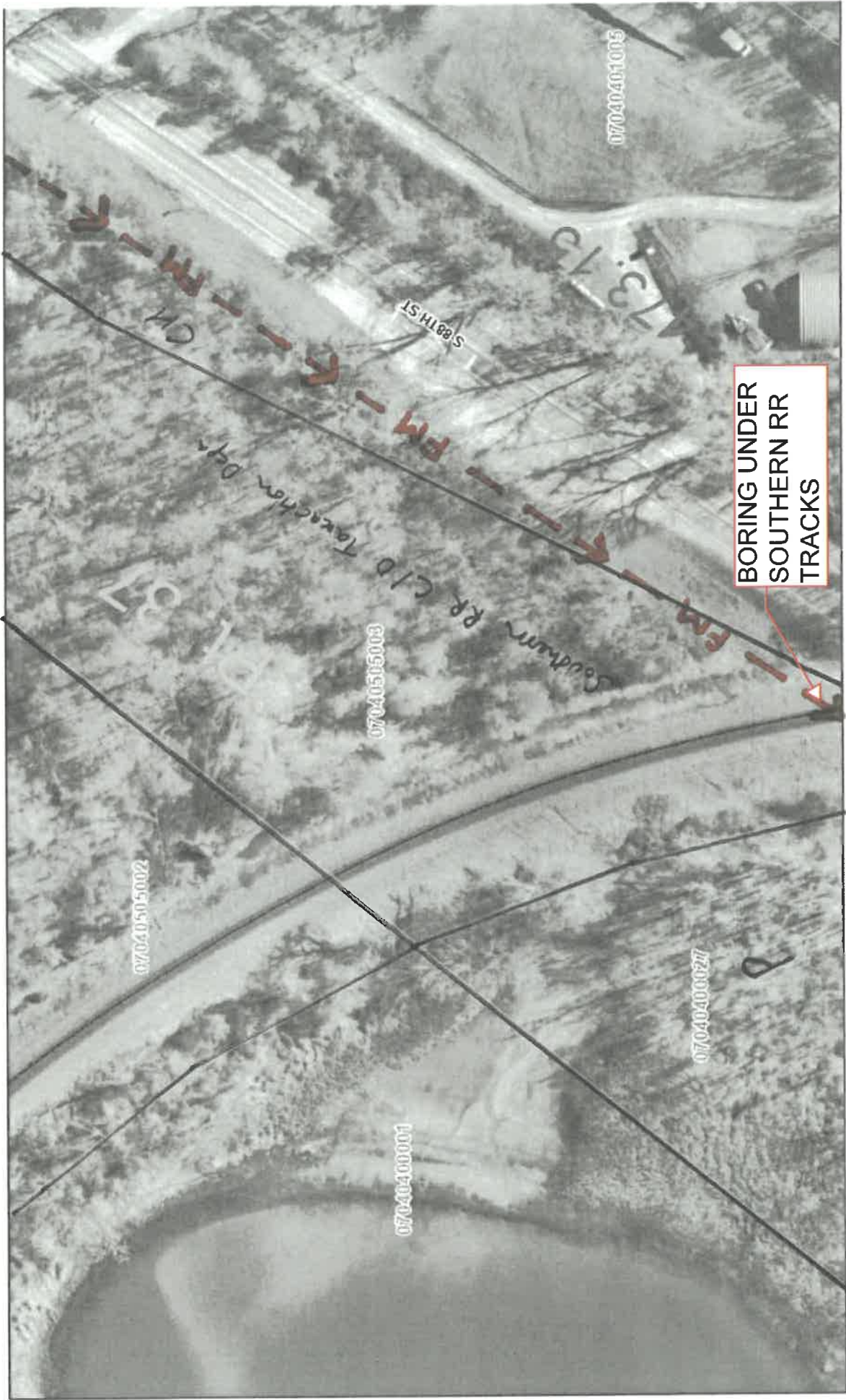
Parcels

Roads



St Clair

St Clair County Parcel Map



7/24/2024, 3:59:30 PM

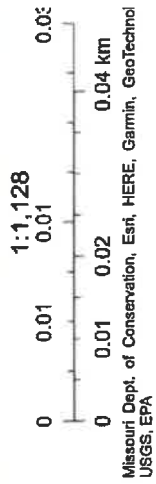
Major Highways    Railroads

30

Roads

Township Boundary

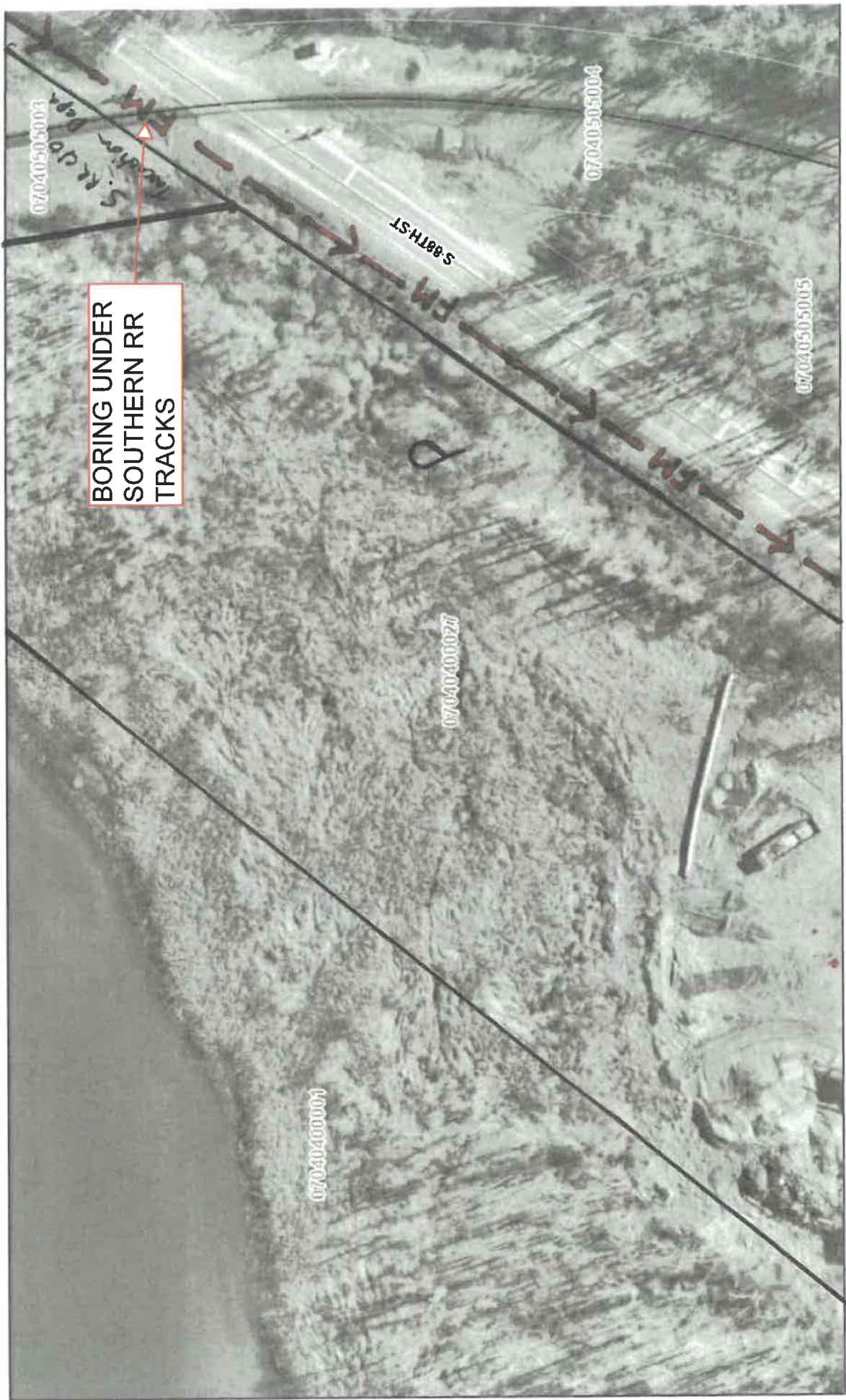
Parcels



St Clair



St Clair County Parcel Map



7/24/2024, 4:00:11 PM

- Major Highways
- 30
- Railroads
- Township Boundary
- Roads
- Parcels



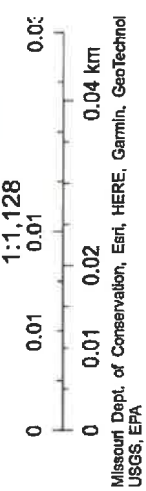


St Clair County Parcel Map



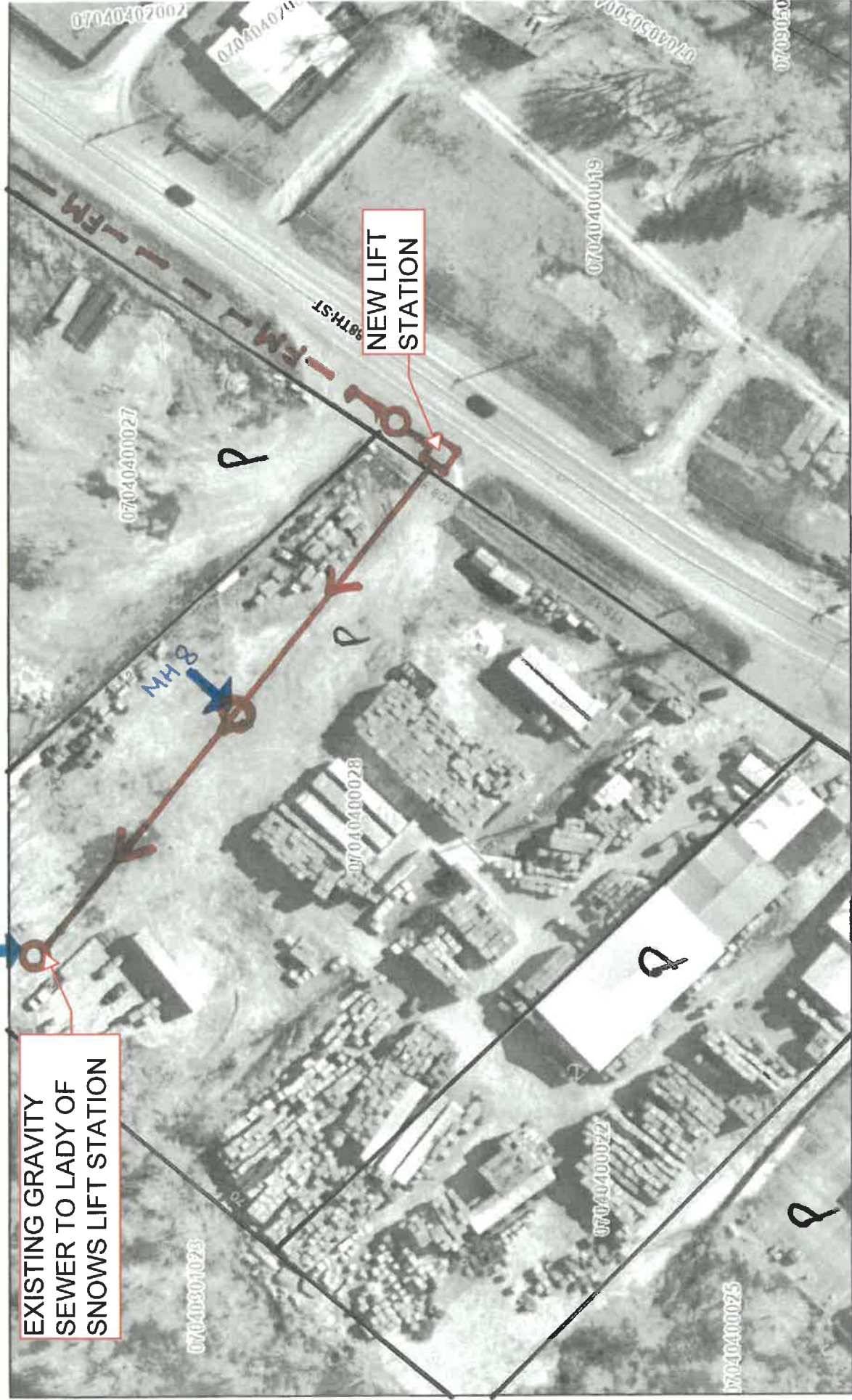
7/24/2024, 4:00:41 PM

- Major Highways
- 30
- Railroads
- Township Boundary
- Roads
- Parcels





MH 3A St Clair County Parcel Map



7/25/2024, 8:27:50 AM

Major Highways — Railroads Roads  
— 30 Township Boundary Parcels

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Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechn  
USGS, EPA

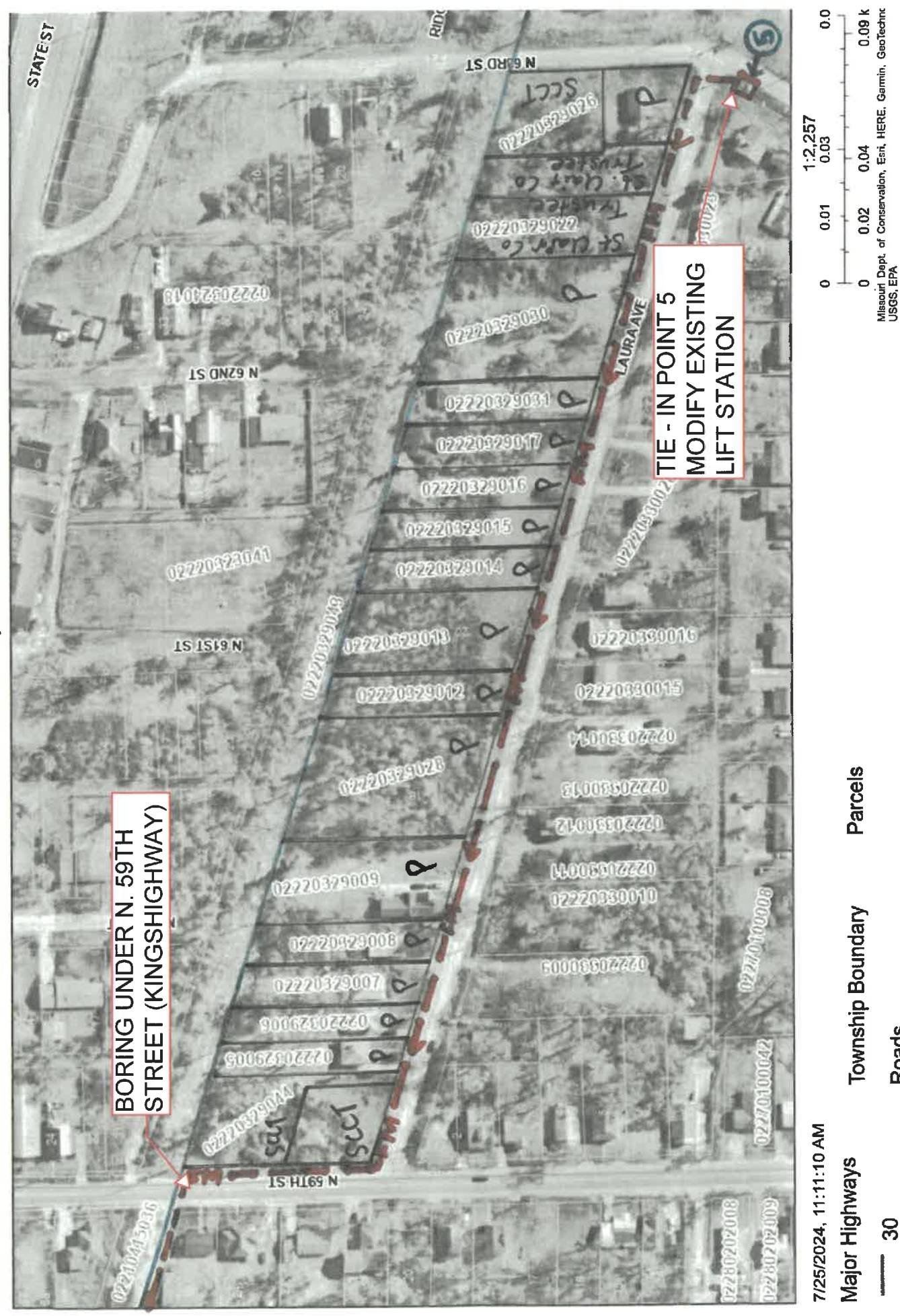
St. Clair

WEST

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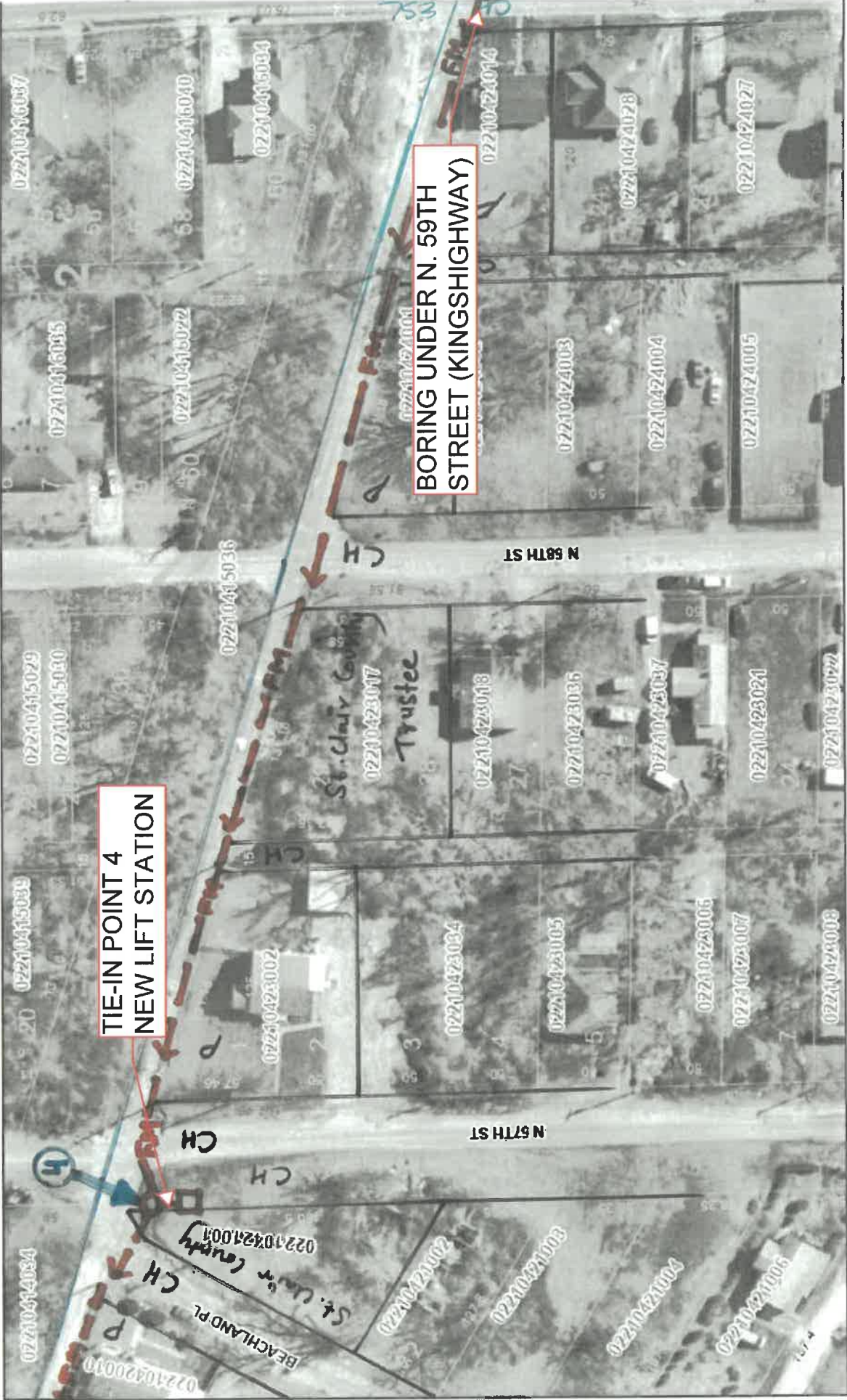
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St Clair



St Clair County Parcel Map



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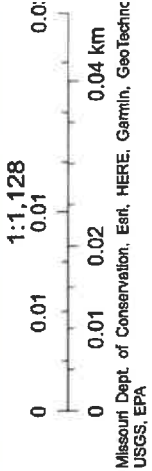
Major Highways

— 30

Township Boundary

Parcels

Roads



St Clair



St Clair County Parcel Map



7/25/2024, 12:46:10 PM

Township Boundary

Roads

Parcels

1:564  
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Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnic  
USGS, EPA

St Clair

St Clair County Parcel Map



7/25/2024, 1:01:19 PM

Township Boundary

Roads

Parcels

1:564  
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USGS, EPA

St Clair



St Clair County Parcel Map



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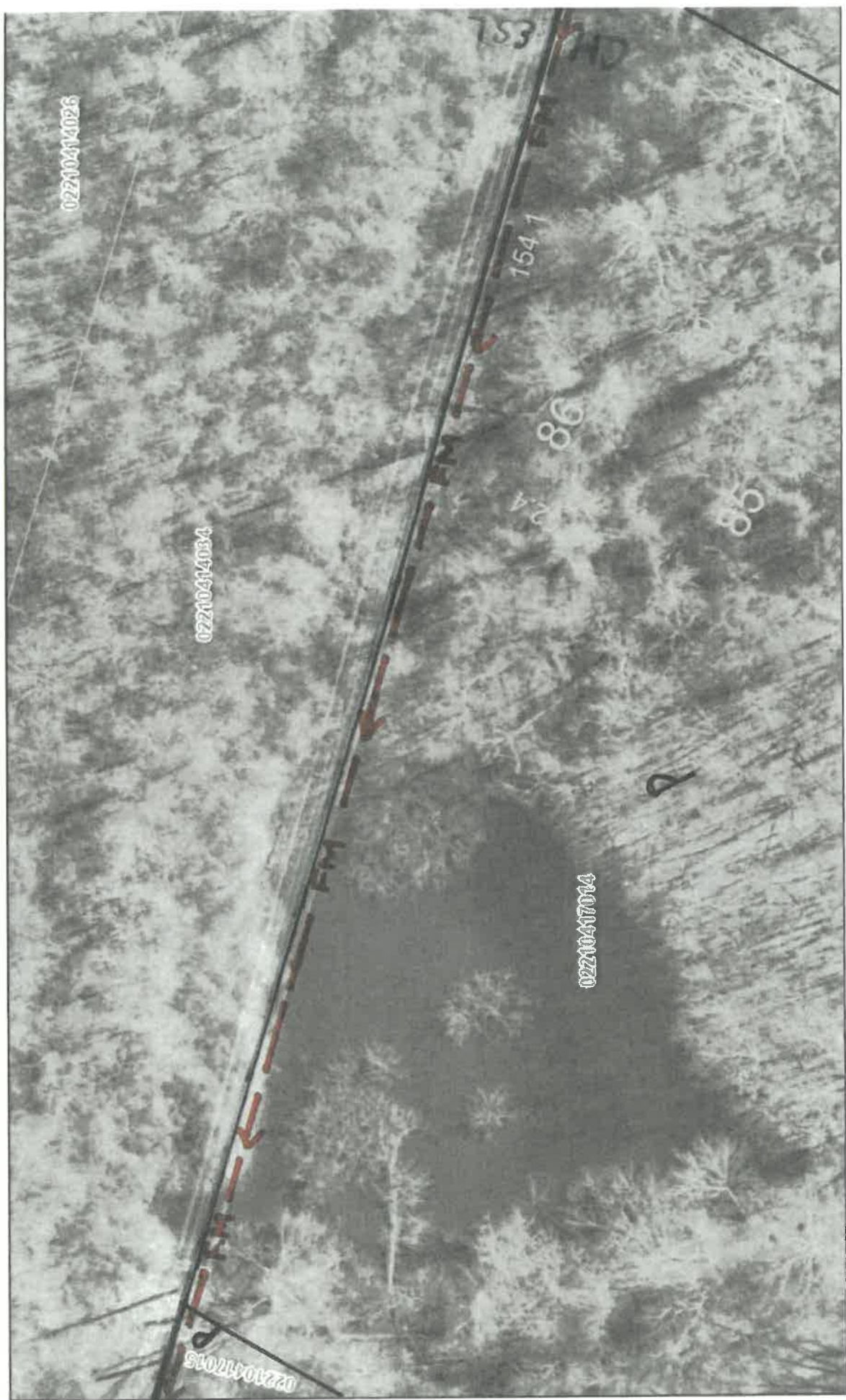
Township Boundary

Roads

Parcels

St Clair

St Clair County Parcel Map

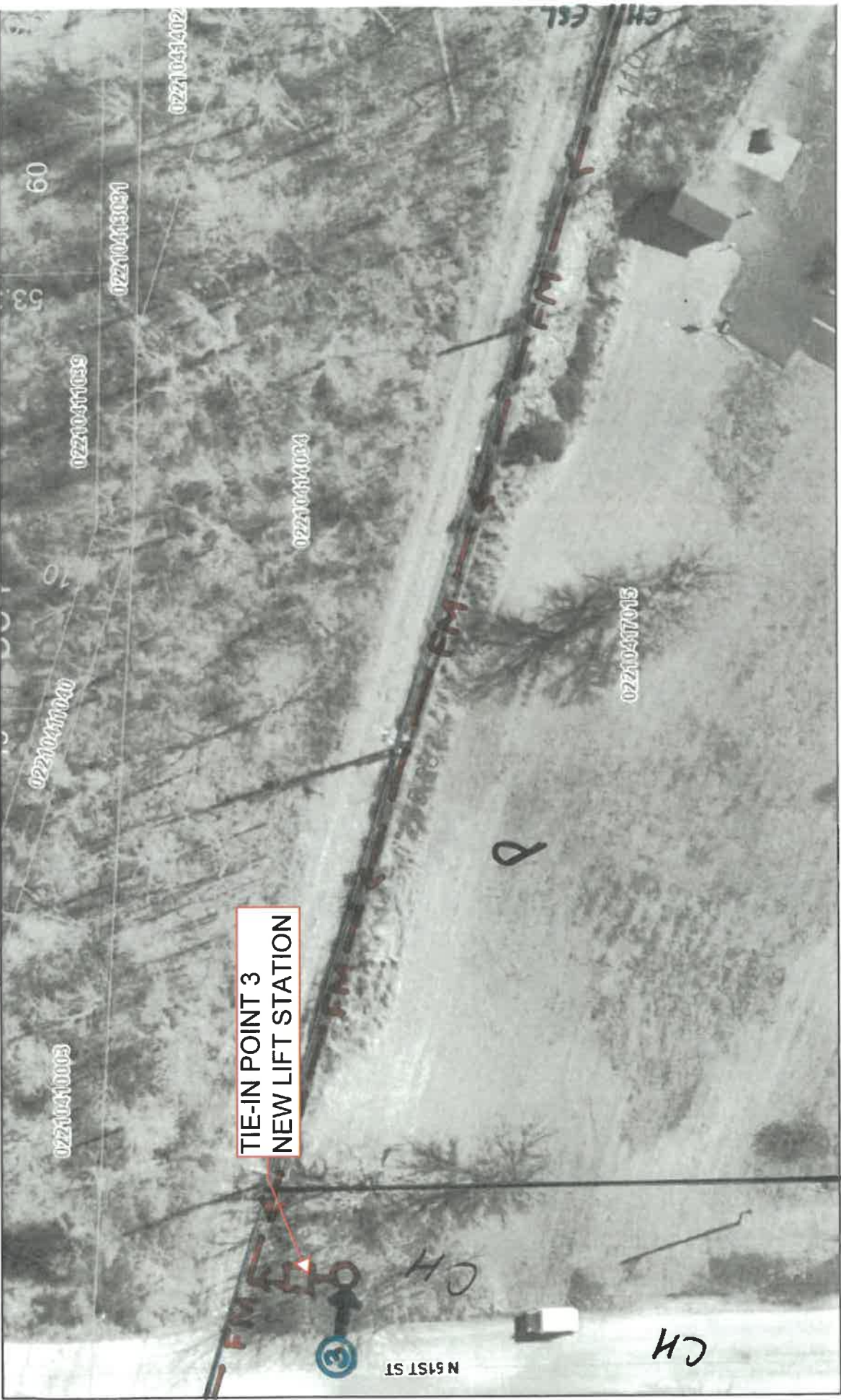


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Township Boundary  
Parcels

St Clair



St Clair County Parcel Map

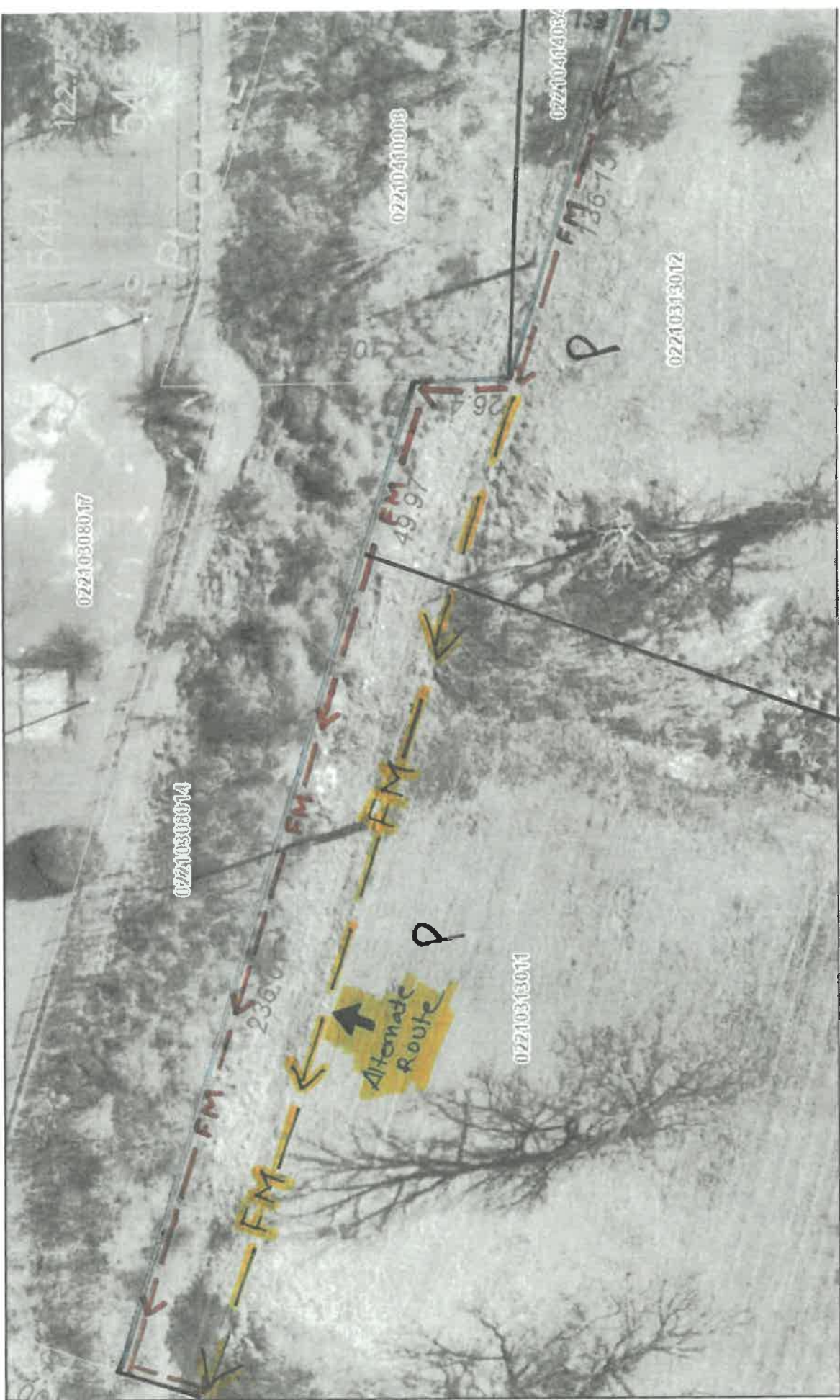


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Township Boundary  
Roads  
Parcels

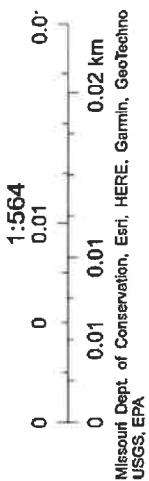
St Clair

St Clair County Parcel Map



7/26/2024, 9:11:24 AM

Township Boundary  
Parcels



St Clair



St Clair County Parcel Map



Township Boundary

Roads

Parcels

# St Clair County Parcel Map



7/26/2024, 10:55:12 AM

## Township Boundary

## Roads

## Parcels

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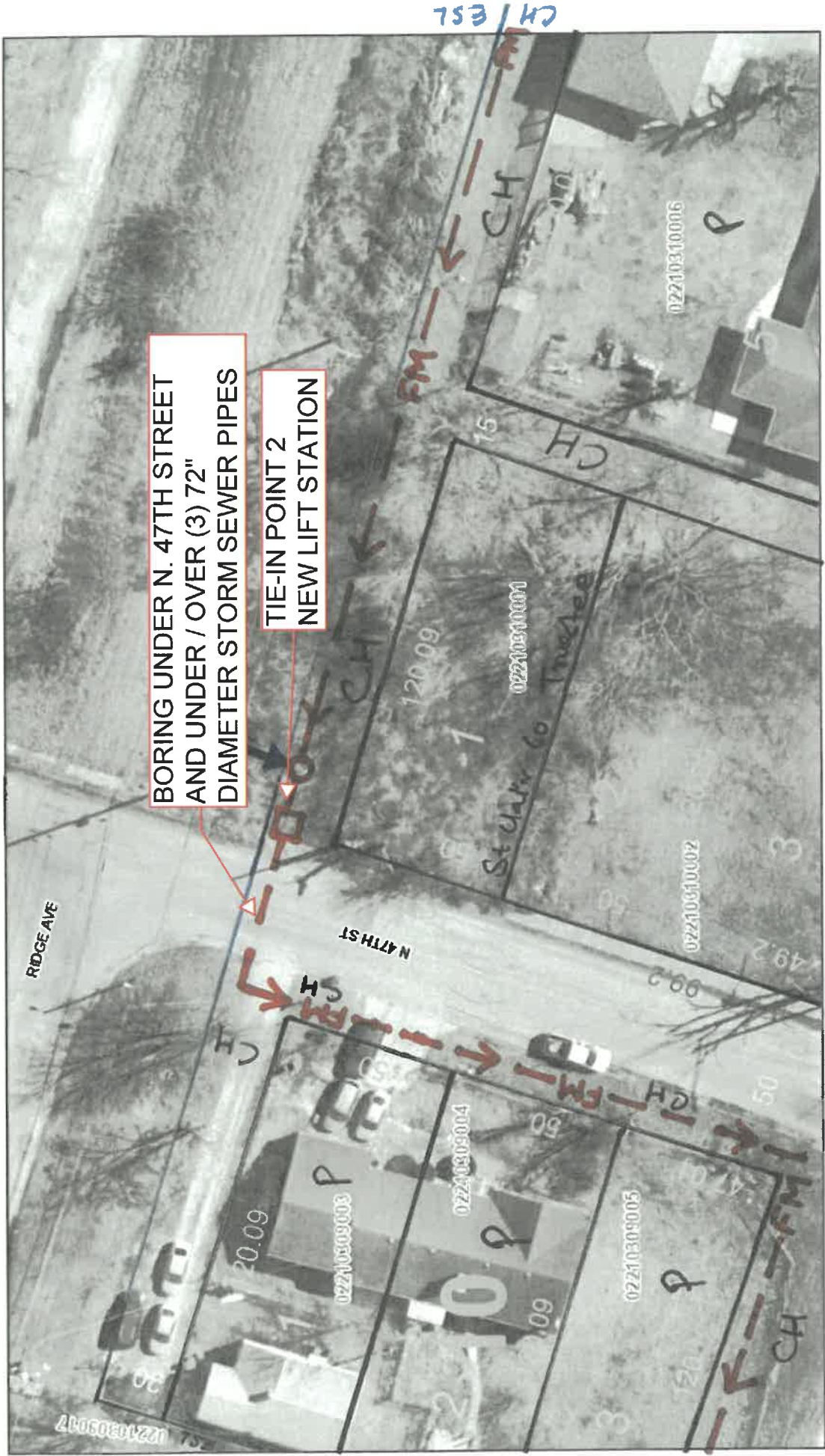
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Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

Missouri Dept of Conservation, Esrl, HERE, Garmin, USGS, EPA, NPS |  
St Clair County GIS

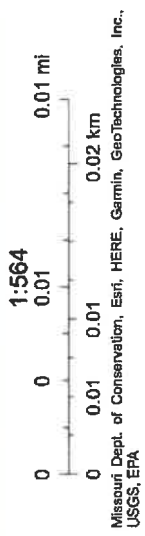


St Clair County Parcel Map



7/26/2024, 11:15:26 AM

- Township Boundary
- Roads
- Parcels



St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

St Clair County Parcel Map



7/29/2024, 1:32:10 PM

Township Boundary

Roads

Parcels

1:1,128

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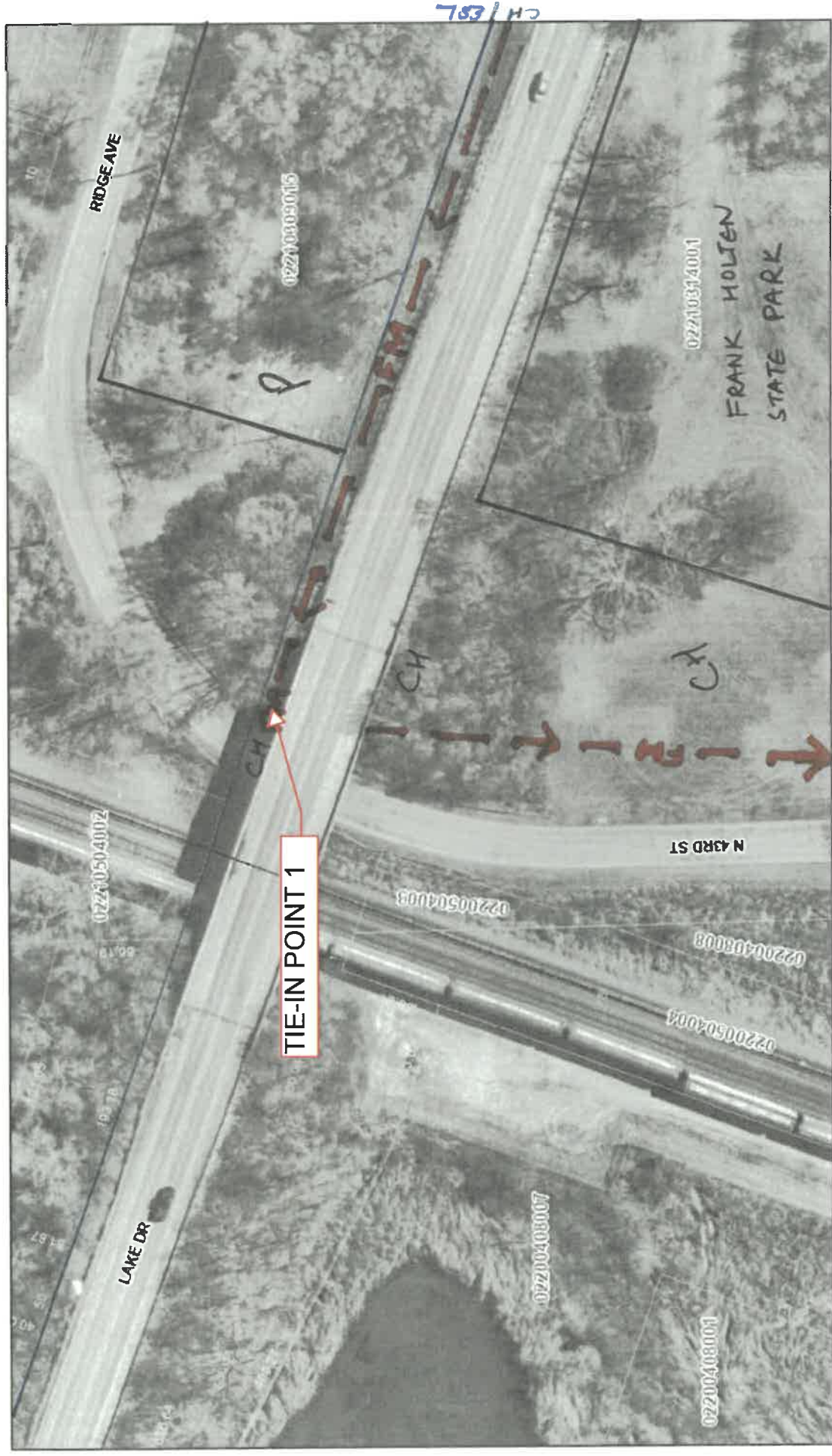
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St. Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |



# St Clair County Parcel Map



7/29/2024, 1:55:02 PM

## — Railroads

## Roads

## Township Boundary

## Parcels

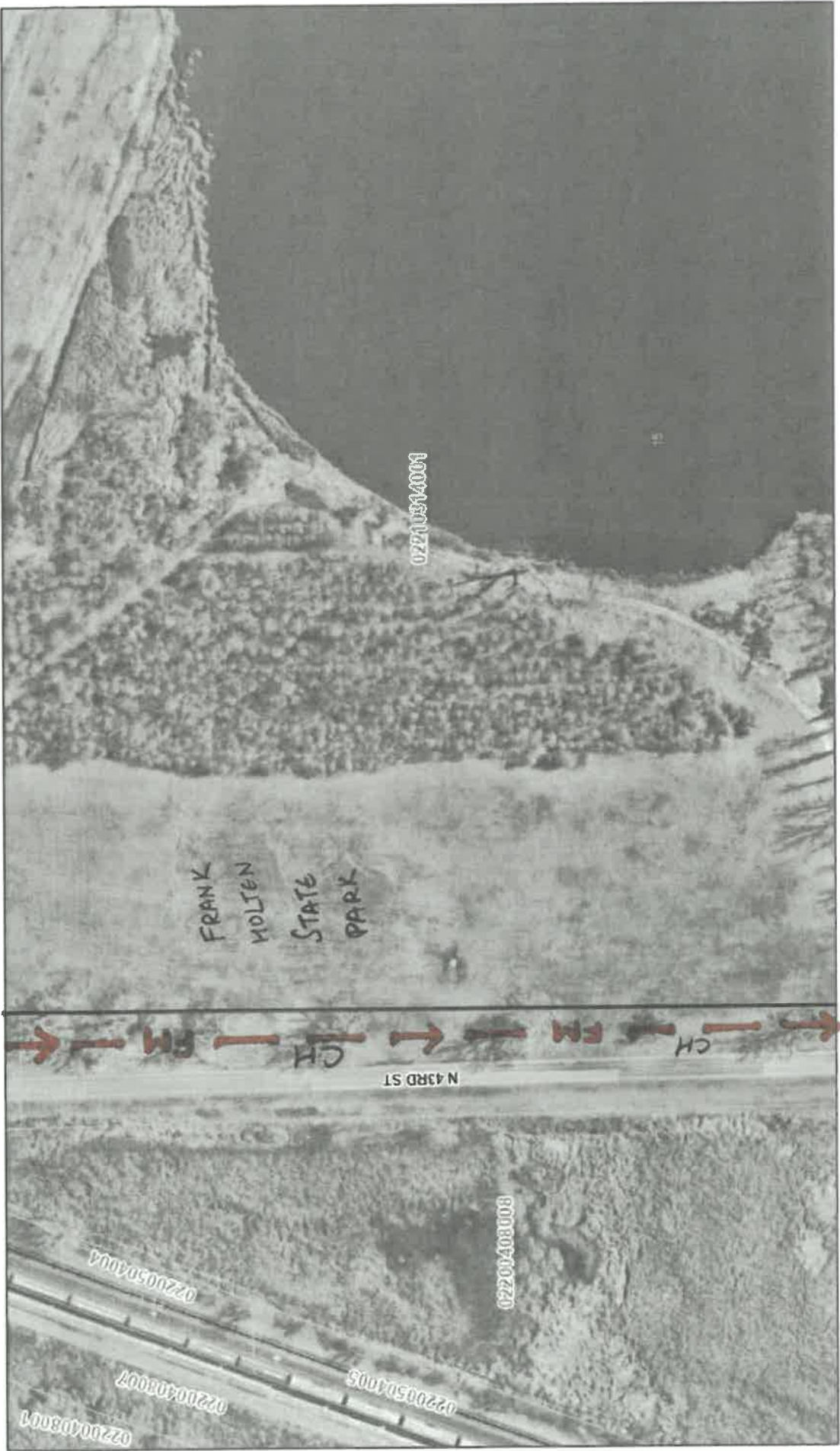
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |  
St Clair County GIS

Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |  
St Clair County GIS

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St Clair County Parcel Map



7/29/2024, 2:16:44 PM

- Railroads
- Roads
- Township Boundary
- Parcels

St Clair County GIS  
Esri, HERE, Garmin, USGS, EPA, NPS |

St Clair County Parcel Map



7/30/2024, 10:38:14 AM

- Railroads
- Roads
- Township Boundary
- Parcels

0 0.01 0.02 0.03 0.04 0.06 mi

0 0.02 0.04 0.09 km  
Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

St Clair County GIS  
Esri, HERE, Garmin, USGS, EPA, NPS |

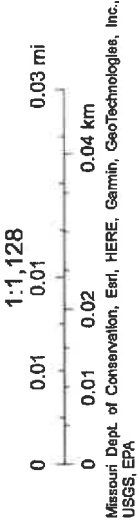


St Clair County Parcel Map



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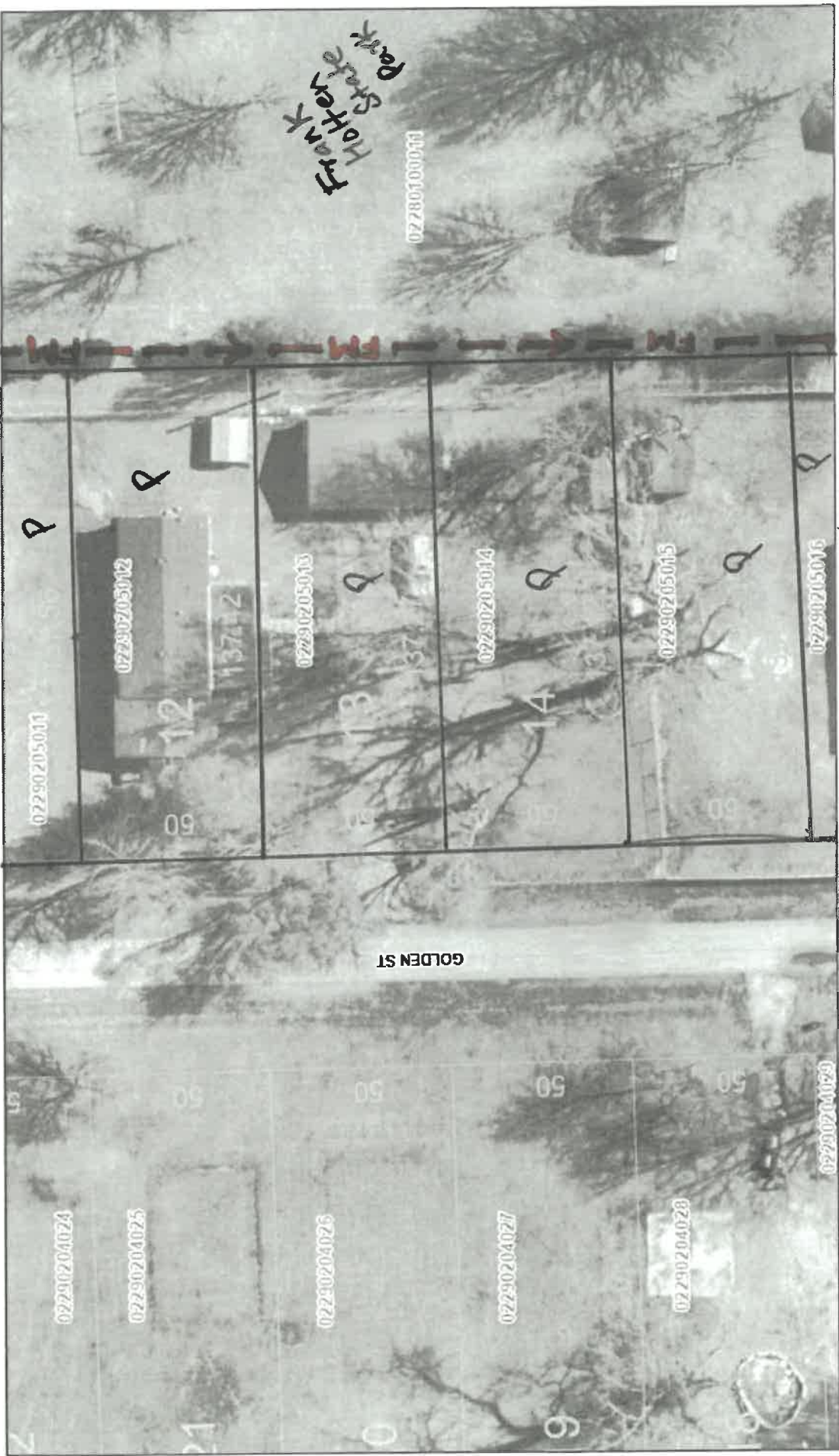
- Township Boundary
- Roads
- Parcels



St. Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

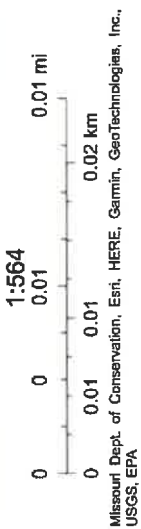


St Clair County Parcel Map



7/30/2024, 10:29:58 AM

- Township Boundary
- Roads
- Parcels



St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

St Clair County Parcel Map



7/30/2024, 10:03:07 AM

Township Boundary

Roads

Parcels

1:564  
0 0.01 0.01 0.01 mi

0 0.01 0.01 0.02 km  
Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |



St Clair County Parcel Map



7/30/2024, 10:04:44 AM

- Township Boundary
- Roads
- Parcels

Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

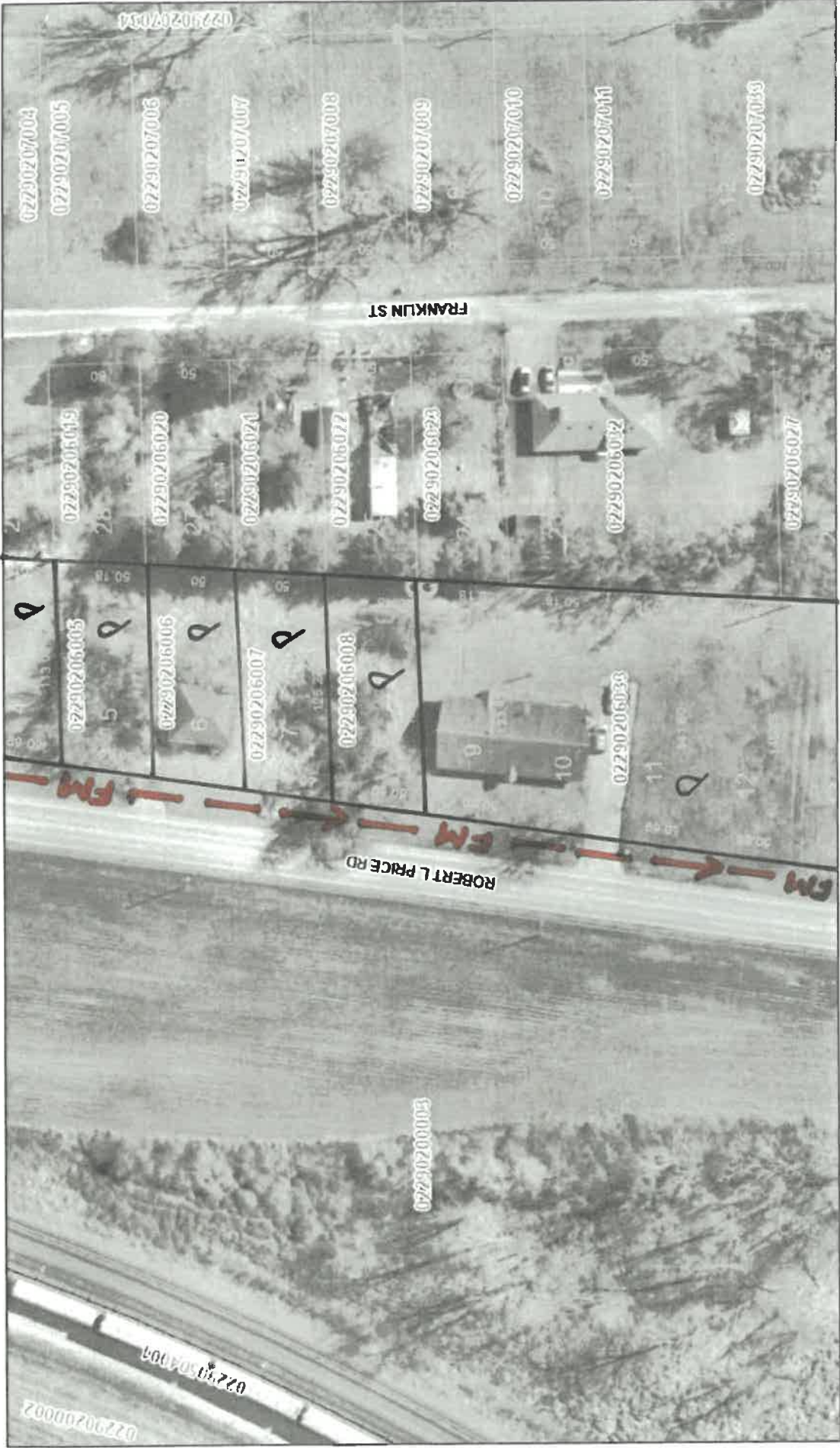
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St Clair County GIS



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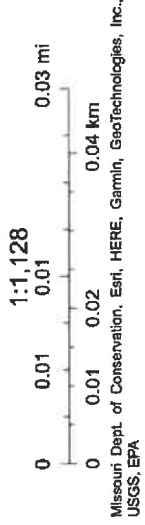
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St Clair County Parcel Map



7/30/2024, 10:08:28 AM

- Railroads
- Roads
- Township Boundary
- Parcels



St. Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

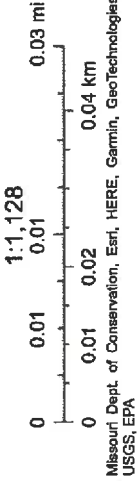


St Clair County Parcel Map



7/30/2024, 8:31:09 AM

- Railroads
- Roads
- Township Boundary
- Parcels



St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS [



Alton & Southern & No Pacific

02290211002

ROBERT L. PRICE RD

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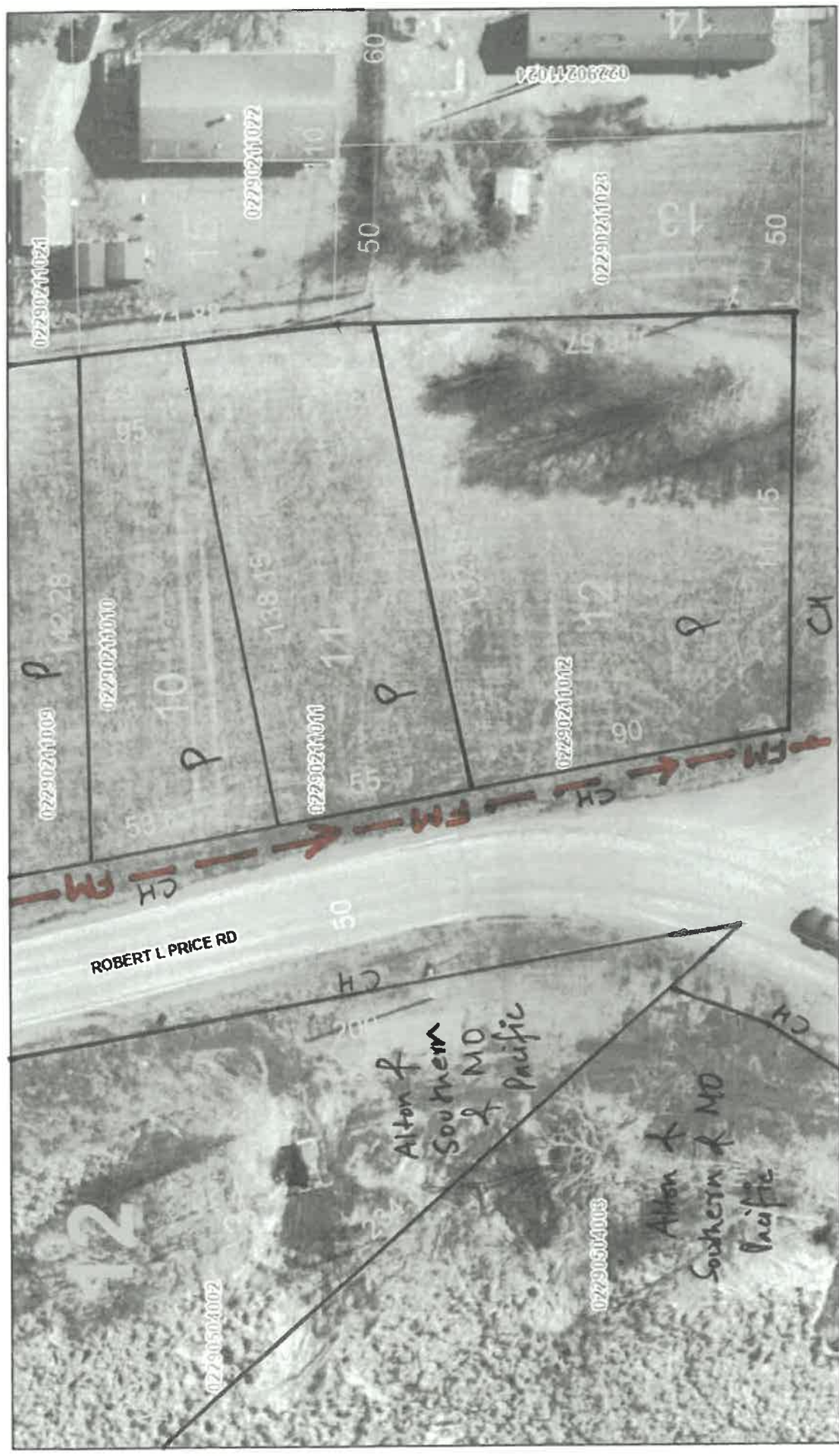
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St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |



# St Clair County Parcel Map



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## Township Boundary

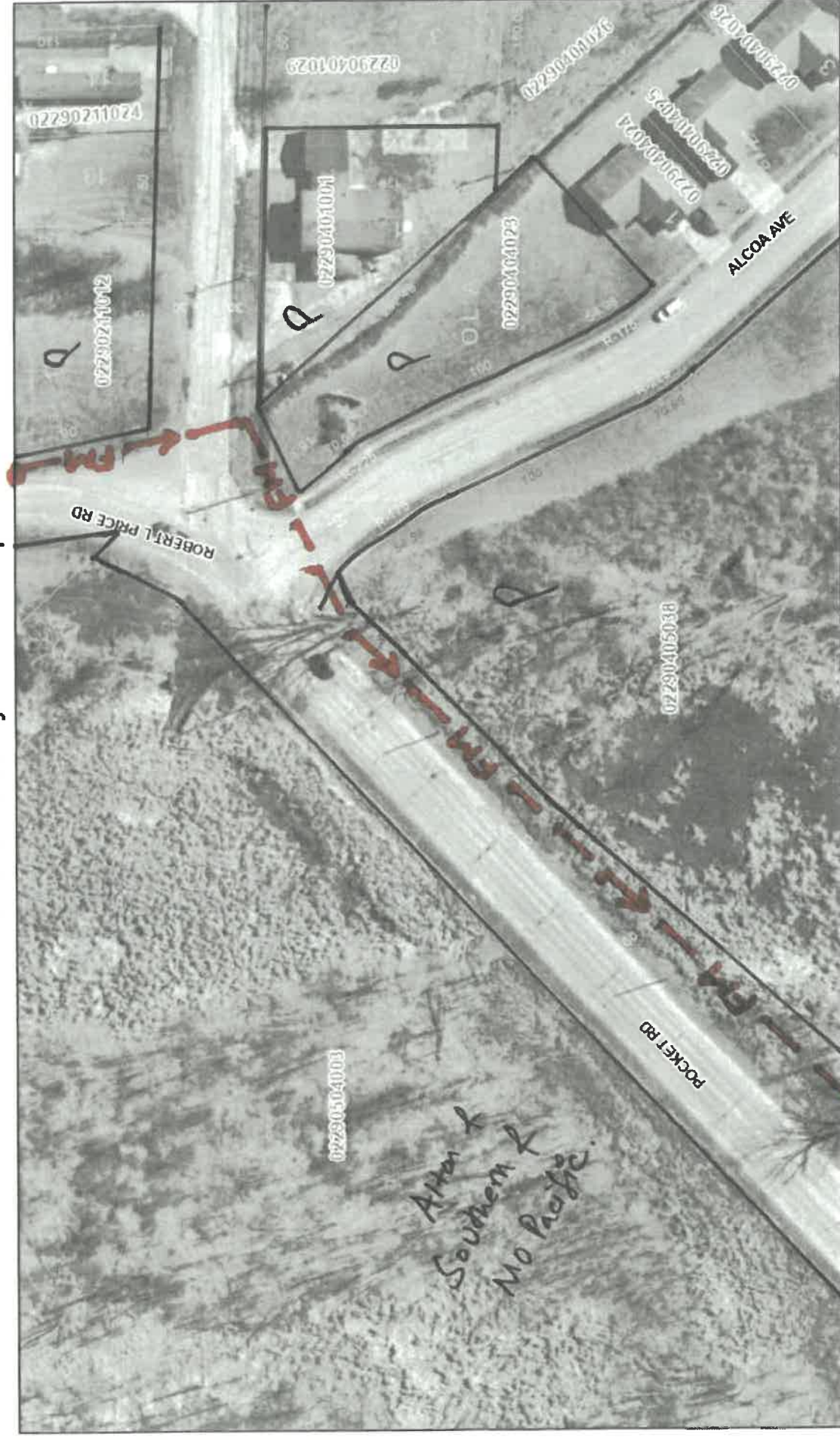
## Roads

## Parcels

St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |



# St Clair County Parcel Map



7/30/2024, 9:24:35 AM

**Township Boundary**

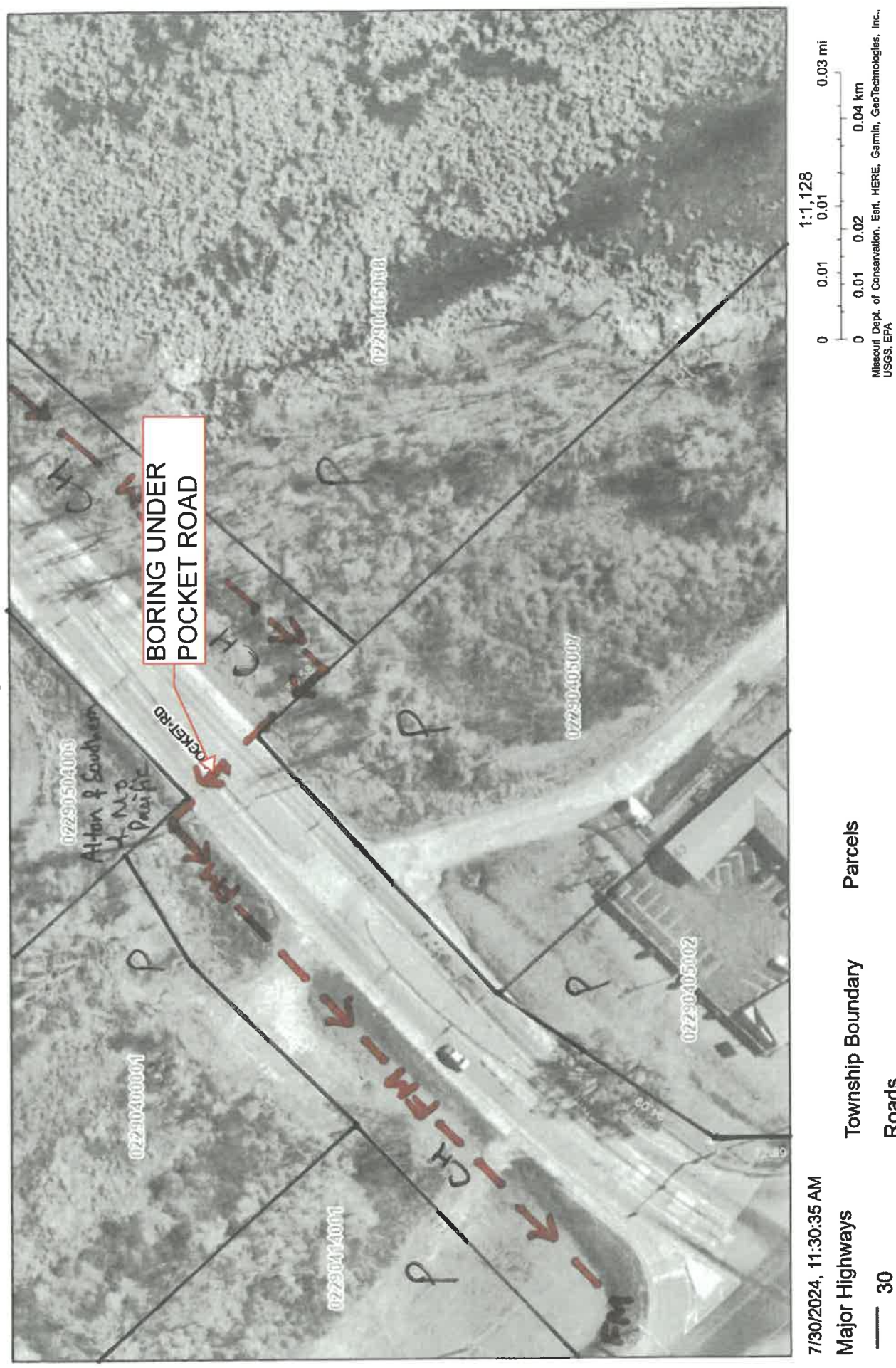
## Roads

## Parcels

Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |  
St Clair County GIS

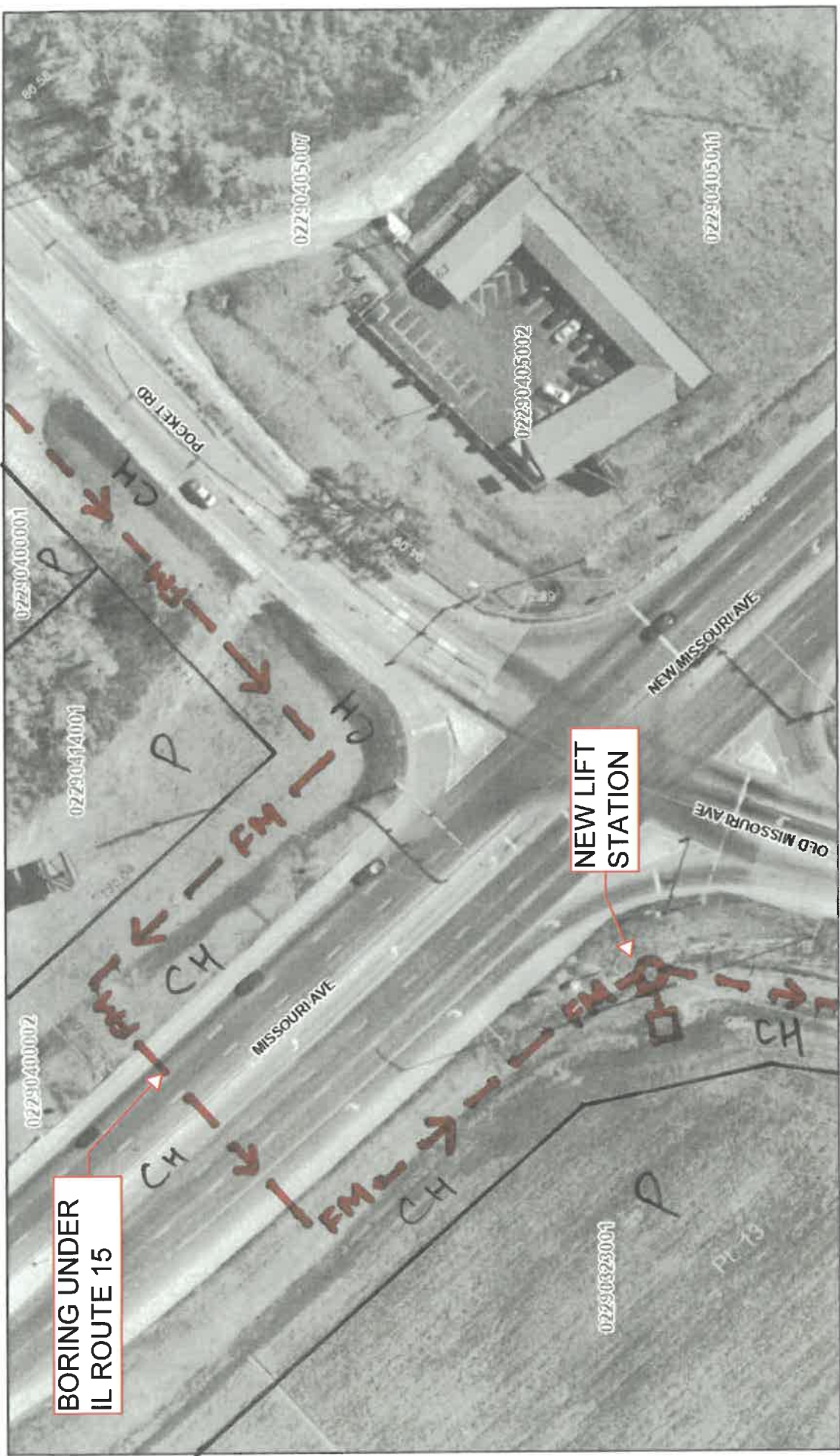


# St Clair County Parcel Map



St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

St Clair County Parcel Map



7/30/2024, 12:53:01 PM

Major Highways

— 30

Township Boundary

Parcels

Roads

1:1,128

0 0.01 0.02 0.03 mi

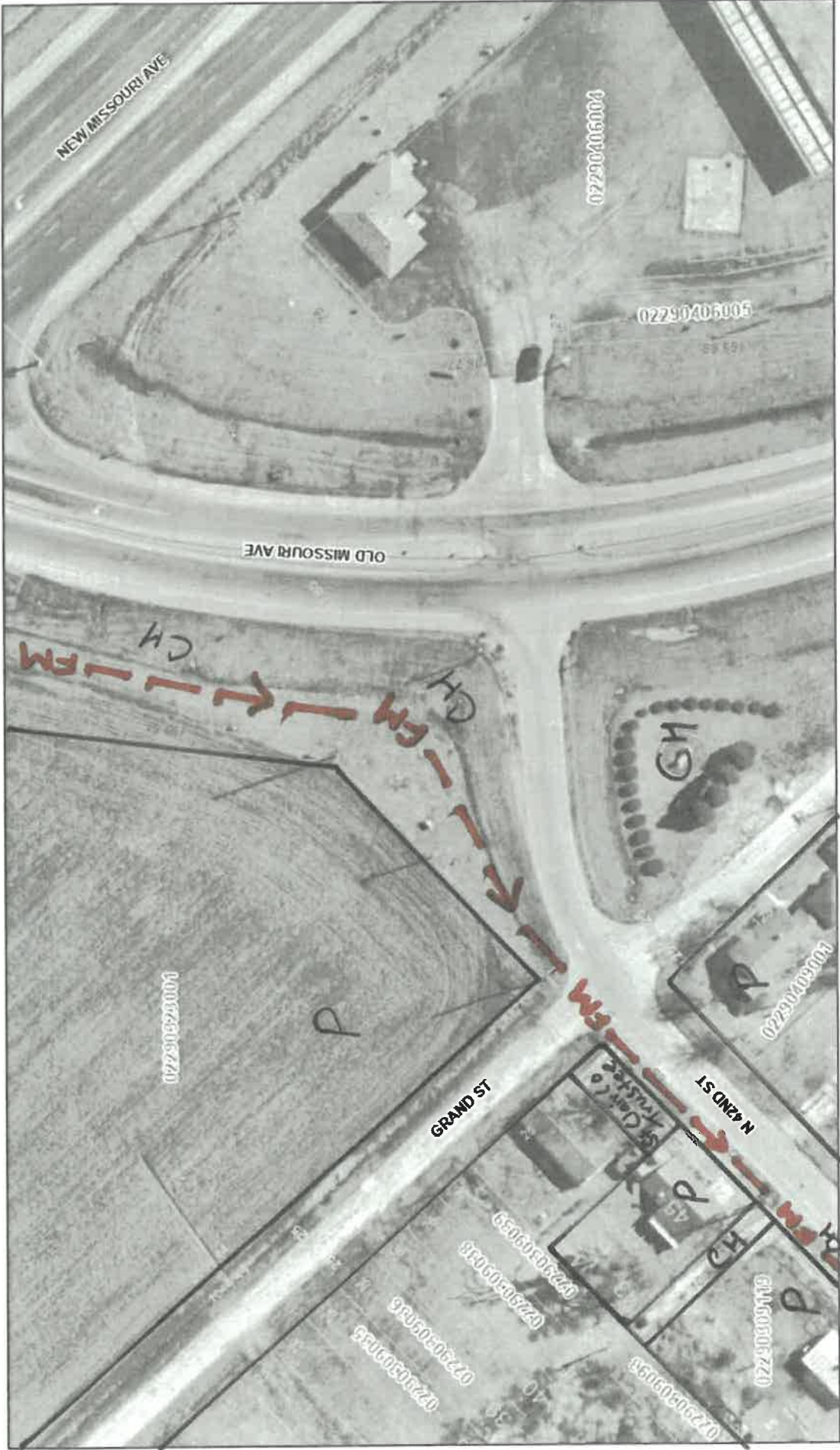
0 0.01 0.02 0.04 km

Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |  
St Clair County GIS



St Clair County Parcel Map



7/30/2024, 12:56:51 PM

Major Highways

— 30

Township Boundary

Parcels

Roads

1:1,128

0 0.01 0.02 0.03 mi

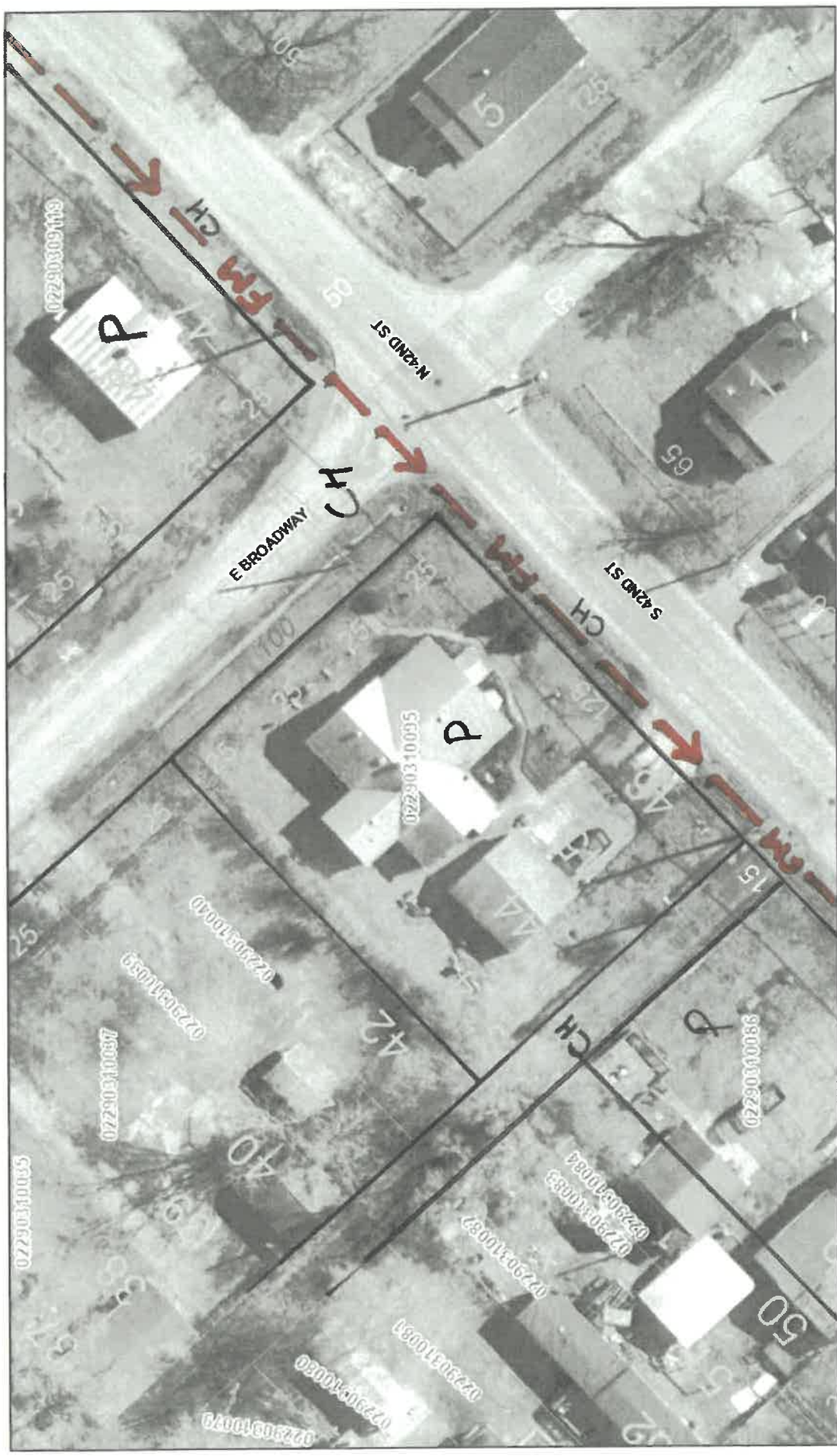
0 0.01 0.02 0.04 km

Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |



# St Clair County Parcel Map



7/30/2024, 1:44:09 PM

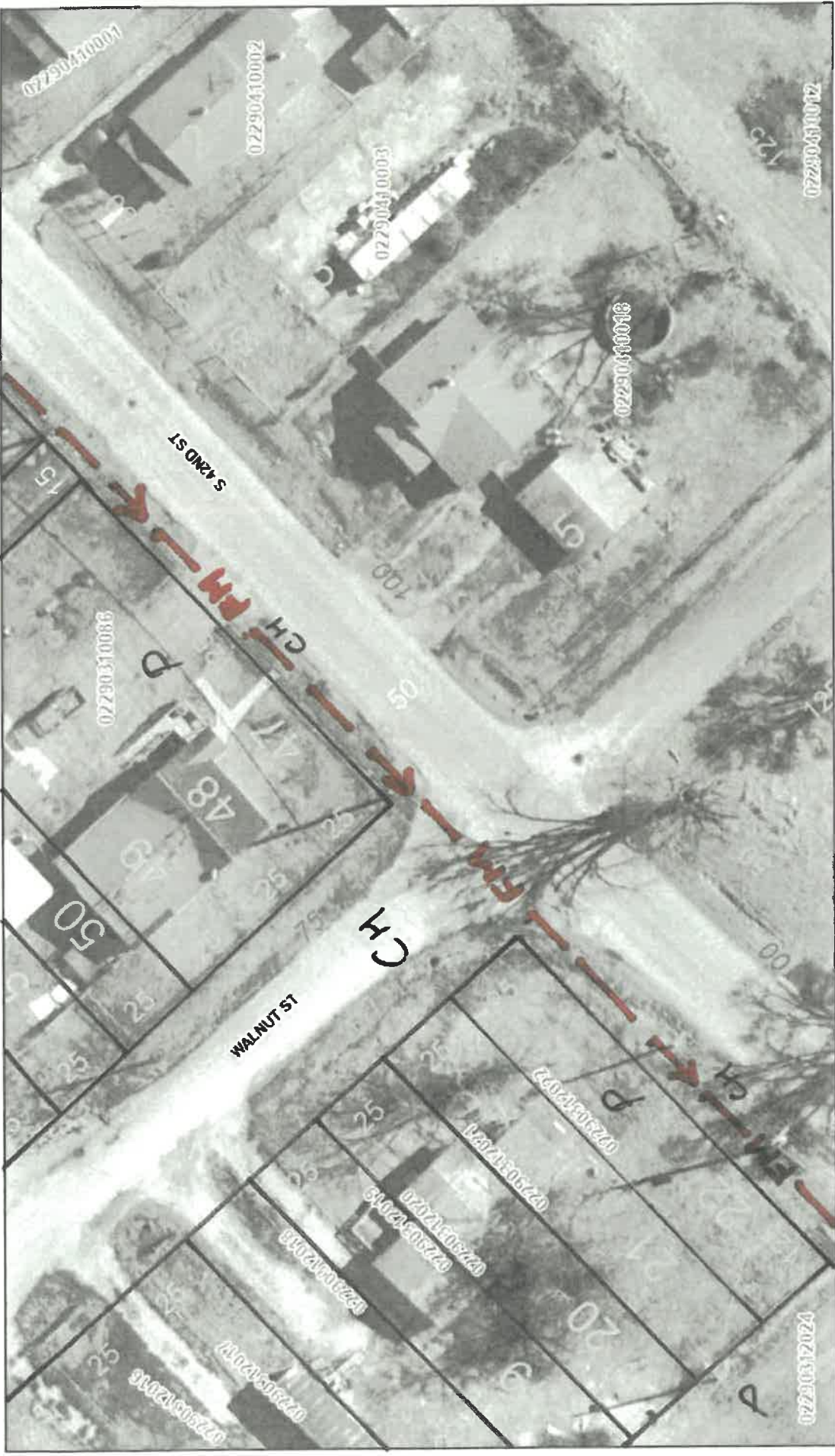
## Township Boundary

## Roads

## Parcels

County of St. Louis, Missouri Dept. of Conservation, Esrl, HERE, Garmin, USGS, EPA, NPS | St Clair County GIS

# St Clair County Parcel Map



7/30/2024, 1:44:54 PM

## Township Boundary

## Roads

## Parcels

St Clair County GIS  
County of St Louis, Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

County of St. Louis, Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |  
St. Clair County GIS

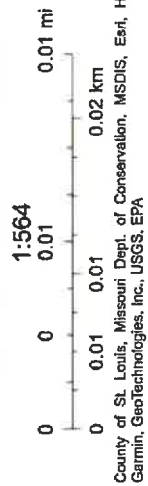


St Clair County Parcel Map



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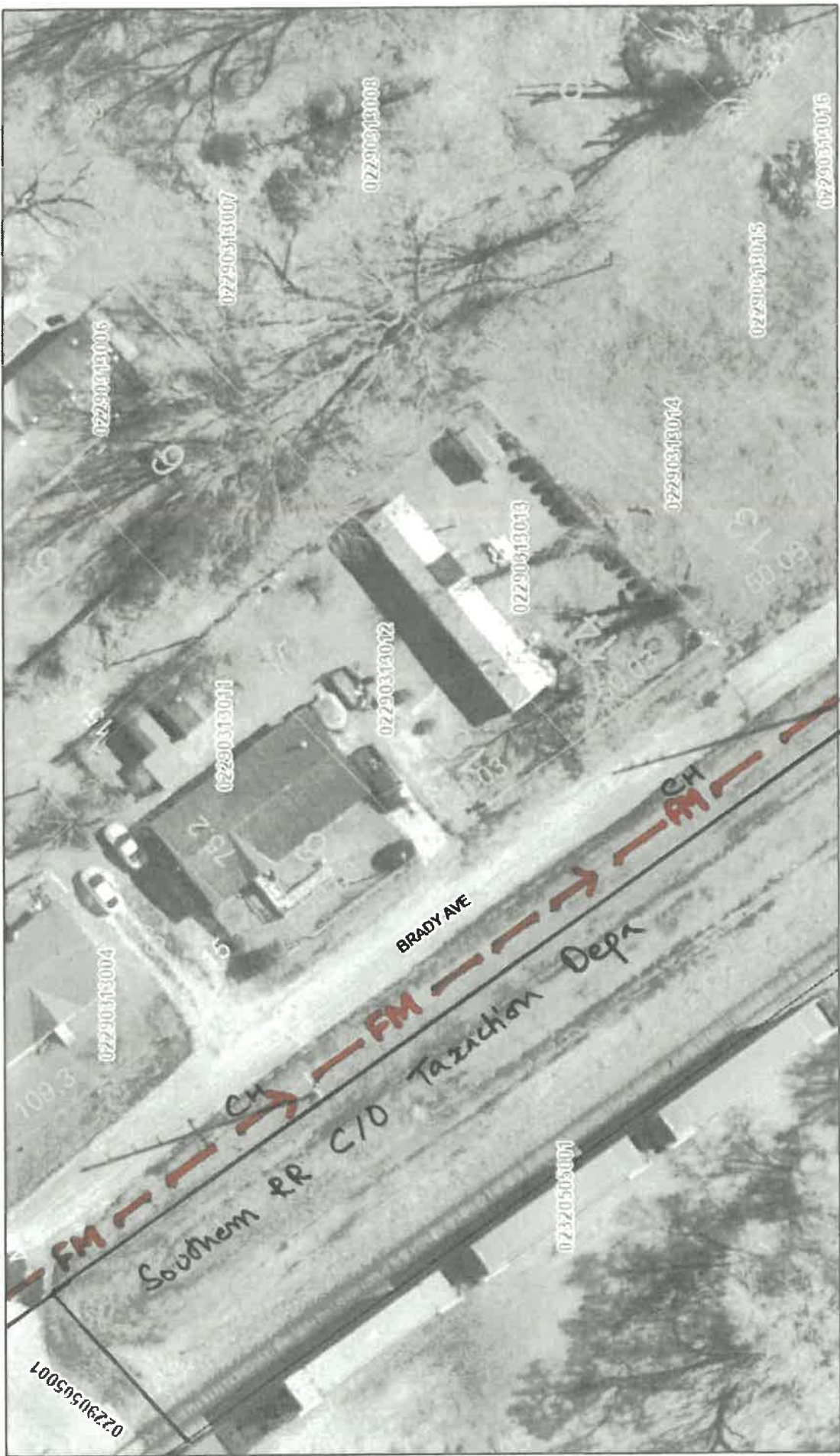
- Railroads
- Roads
- Township Boundary
- Parcels



County of St. Louis, Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |  
County of St. Louis, Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |



St Clair County Parcel Map



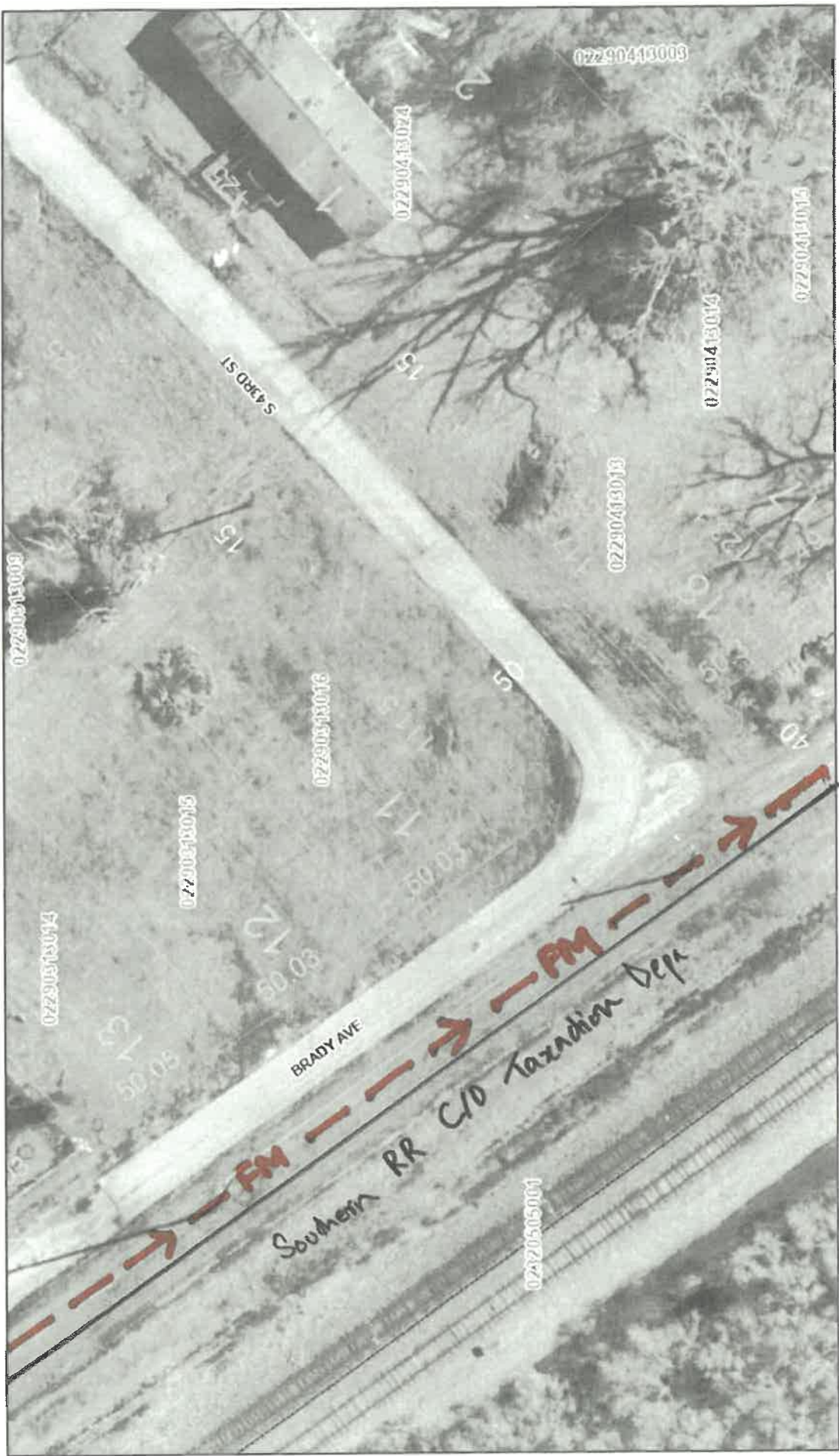
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- Railroads
- Roads
- Township Boundary
- Parcels

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0 0.01 0.01 0.01 mi  
County of St. Louis, Missouri Dept. of Conservation, MSDIS, Esri, HERE,  
Garmin, GeoTechnologies, Inc., USGS, EPA

St Clair County GIS  
County of St. Louis, Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

St Clair County Parcel Map



7/30/2024, 2:02:11 PM

- Railroads
- Roads
- Township Boundary
- Parcels

County of St. Louis, Missouri Dept. of Conservation, MSDIS, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, EPA

St Clair County GIS  
County of St. Louis, Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

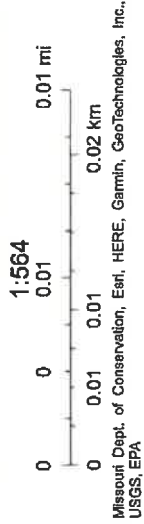


St Clair County Parcel Map



7/30/2024, 2:03:01 PM

- +— Railroads
- +— Roads
- +— Township Boundary
- +— Parcels



Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |



St Clair County Parcel Map



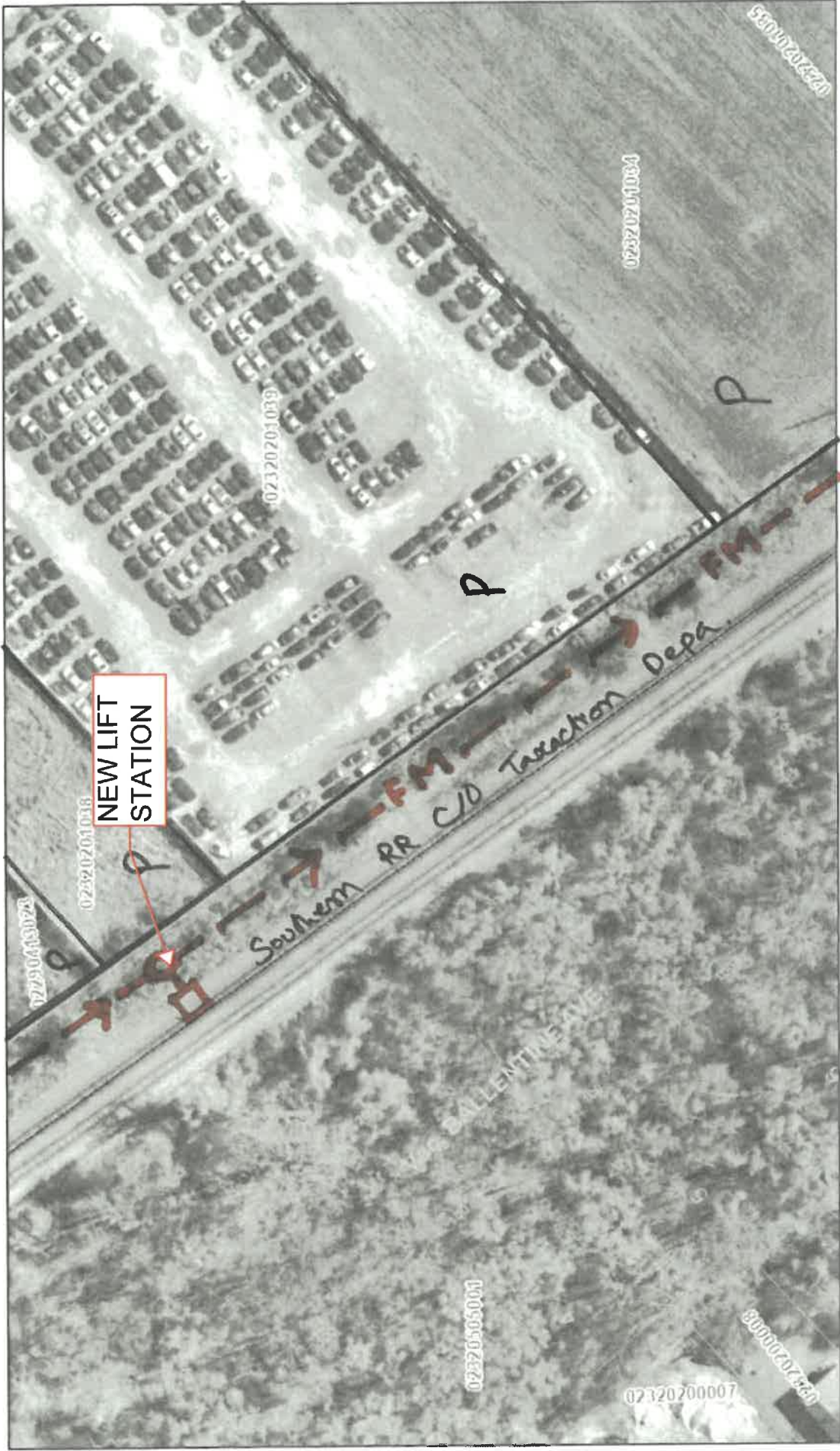
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- Railroads
- Roads
- Township Boundary
- Parcels



St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |  
USGS, EPA

St Clair County Parcel Map



7/30/2024, 2:53:34 PM

— Railroads

Township Boundary

Parcels

1:1,128

0 0.01 0.02 0.03 mi

0 0.01 0.02 0.04 km

Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |  
St Clair County GIS



St Clair County Parcel Map



7/30/2024, 2:54:53 PM

-  Railroads
-  Roads
-  Township Boundary
-  Parcels

Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |  
St Clair County GIS

St Clair County Parcel Map



7/30/2024, 2:55:29 PM

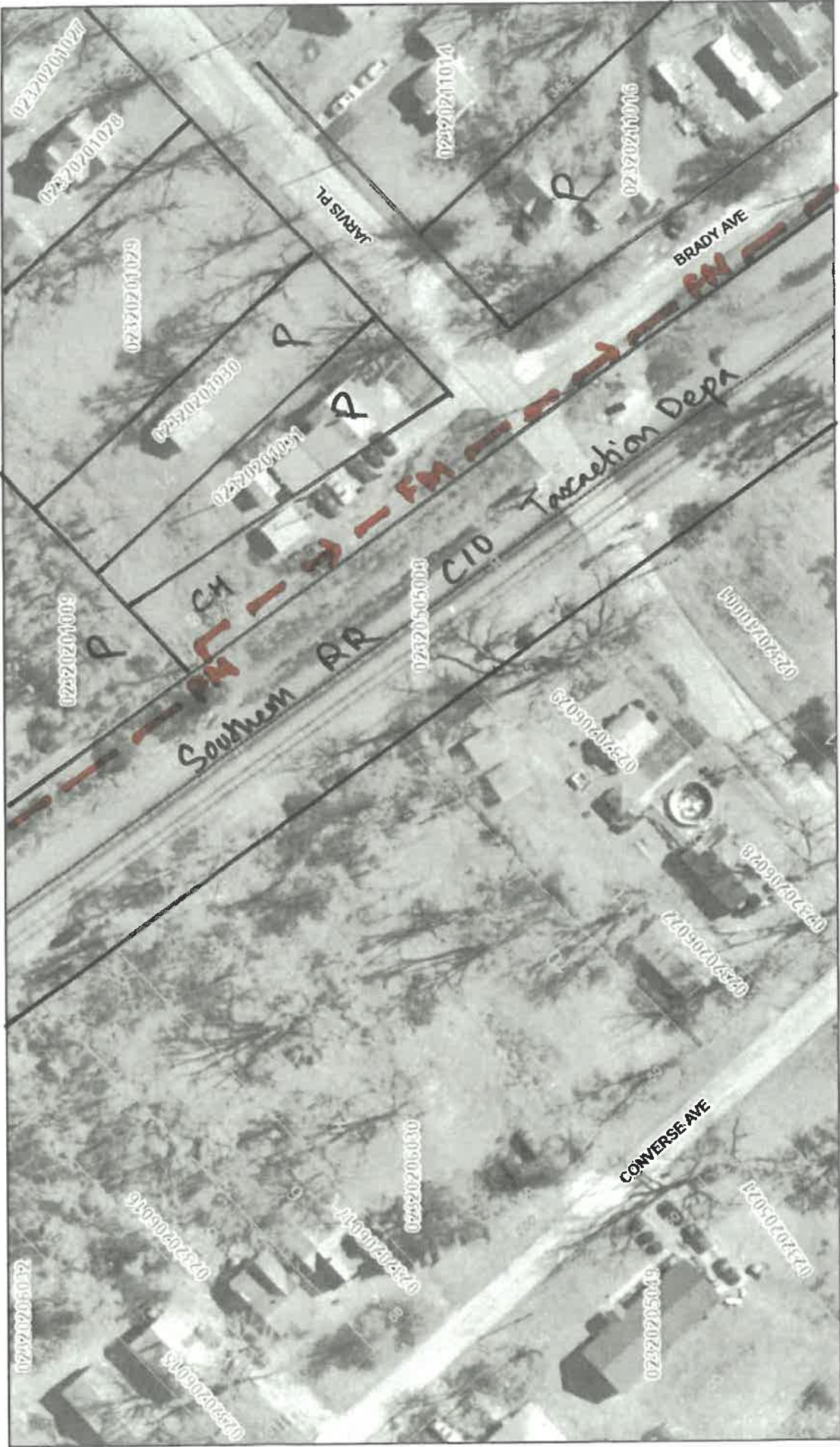
- Railroads
- Roads
- Township Boundary
- Parcels

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Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

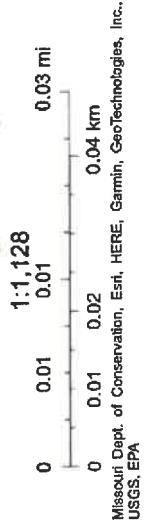
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Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |



St Clair County Parcel Map

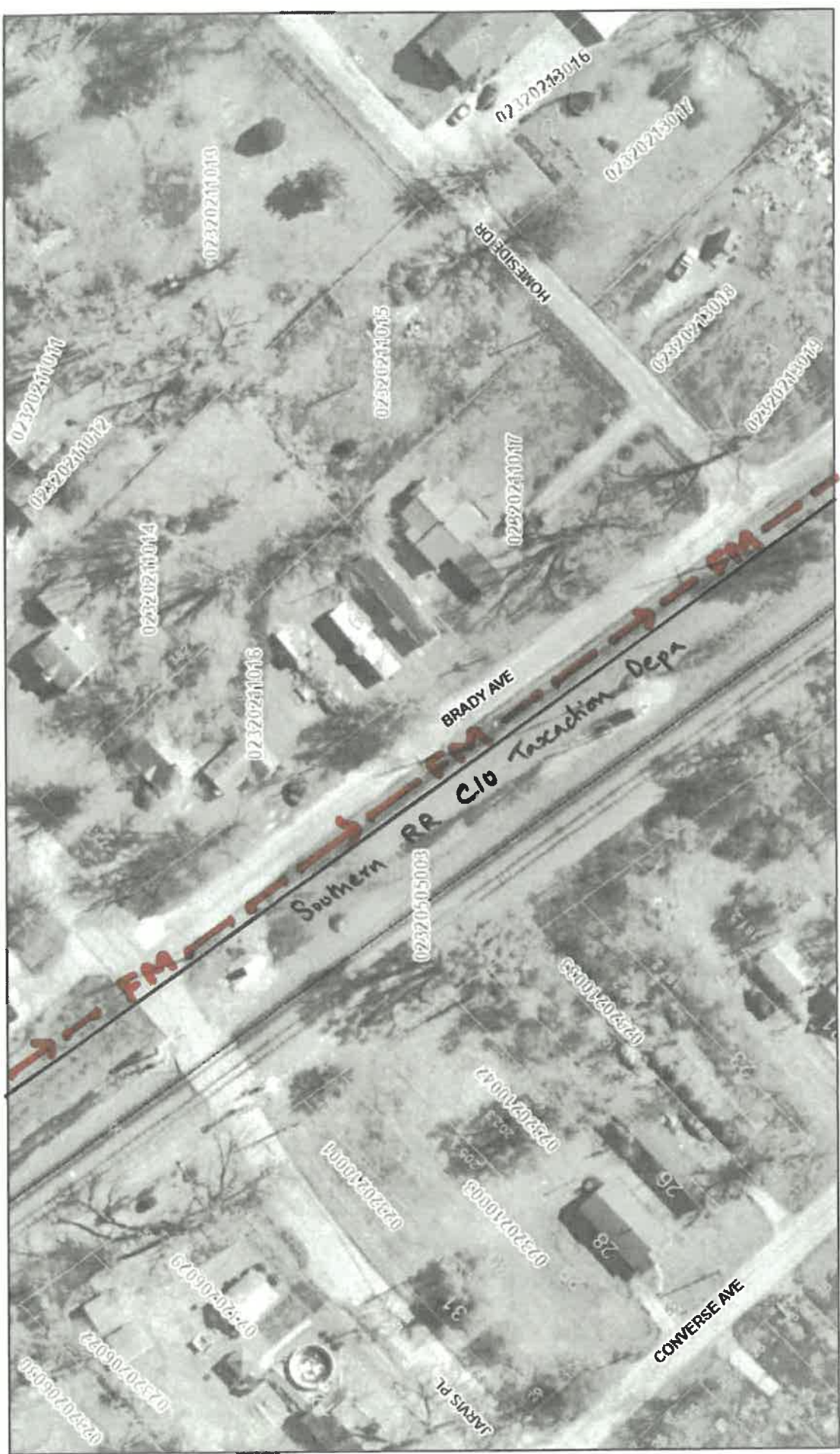


7/30/2024, 2:59:02 PM  
Railroads  
Roads  
Township Boundary  
Parcels



St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

St Clair County Parcel Map



7/31/2024, 8:04:36 AM

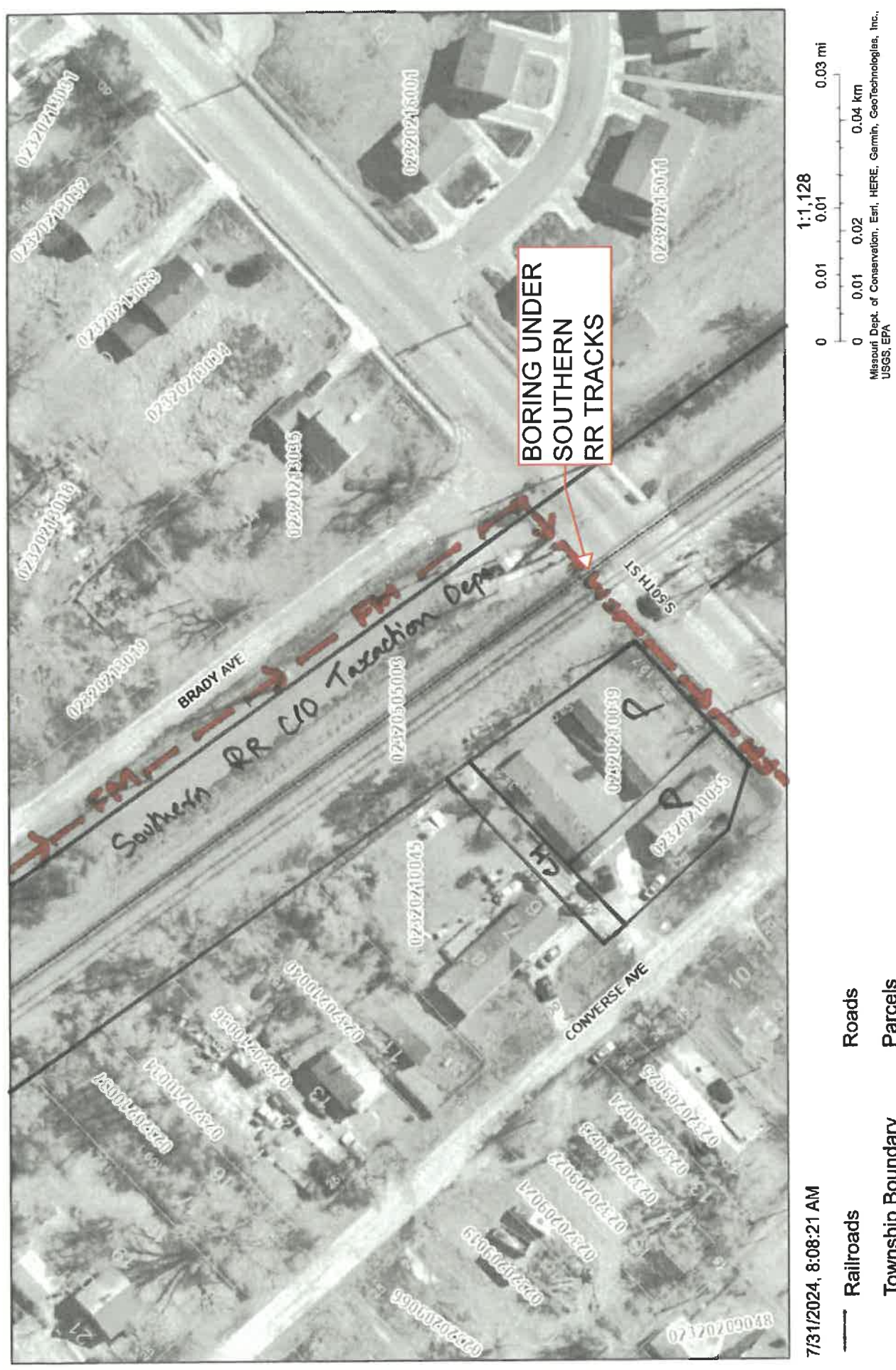
- Railroads
- Roads
- Township Boundary
- Parcels

1:1,128  
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Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

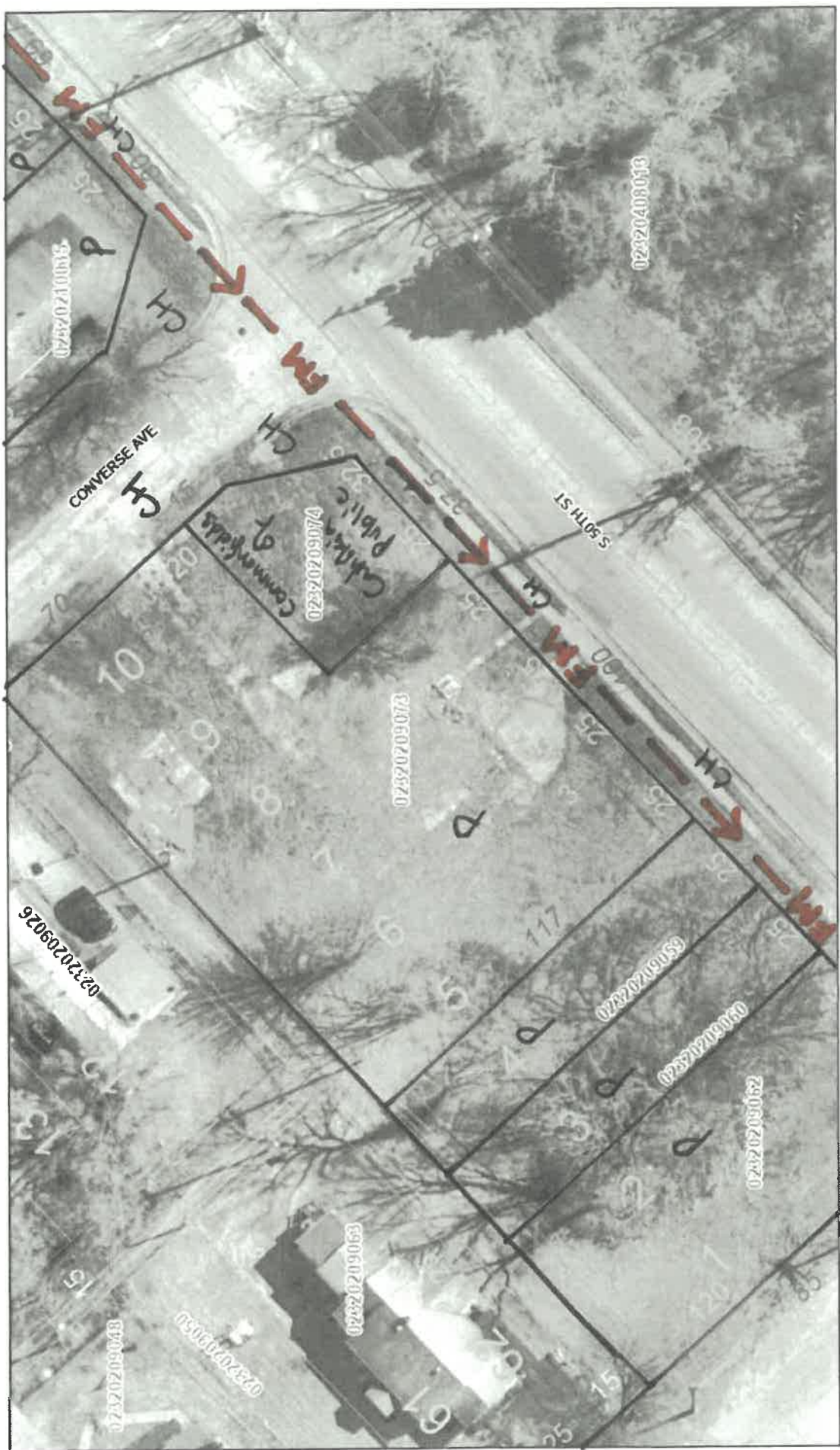


# St Clair County Parcel Map



St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

St Clair County Parcel Map



7/31/2024, 8:10:49 AM

Township Boundary

Roads

Parcels

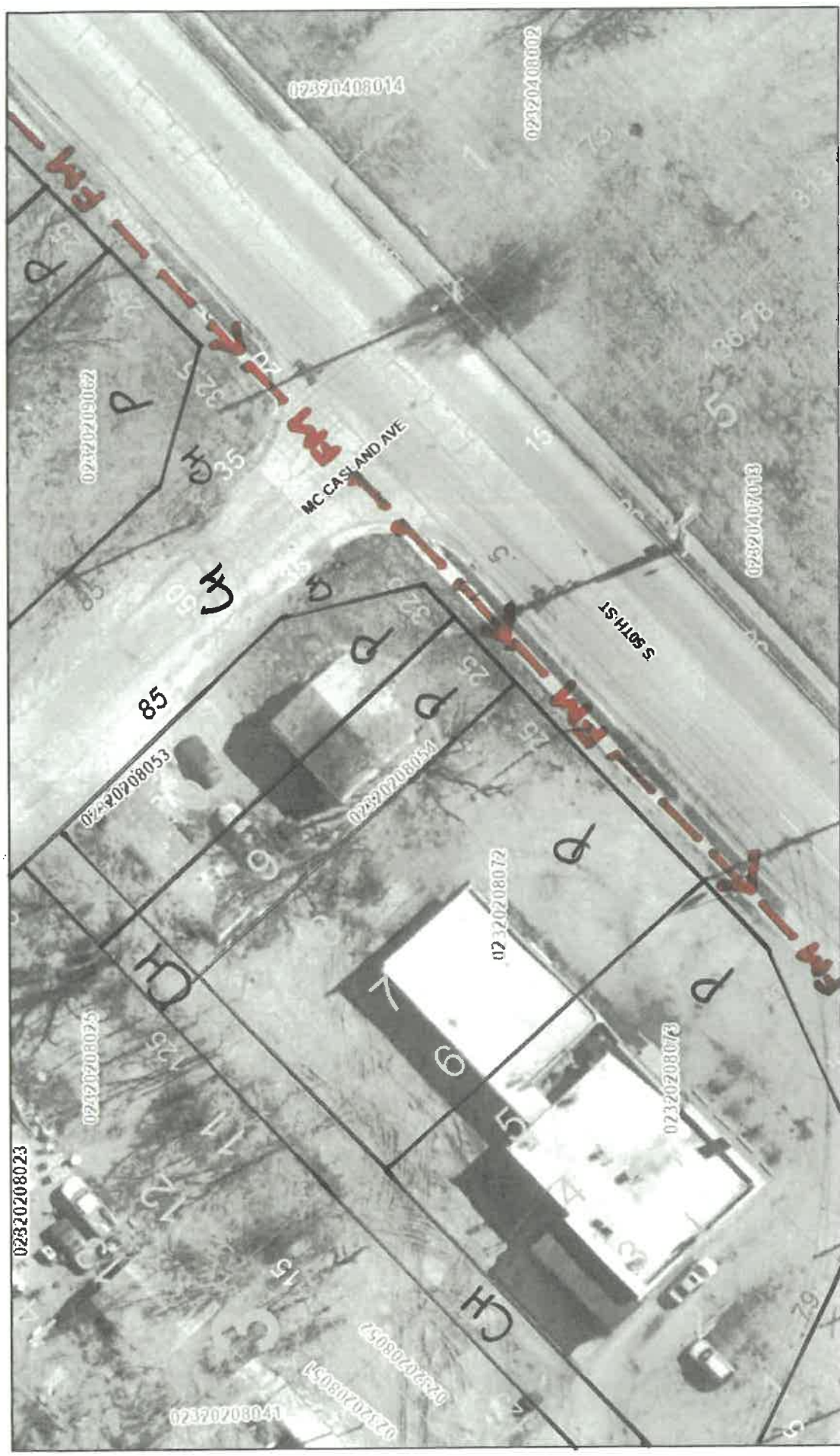
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0 0.01 0.01 0.02 km

Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies, Inc.,  
USGS, EPA

St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS



# St Clair County Parcel Map



7/31/2024, 8:24:56 AM

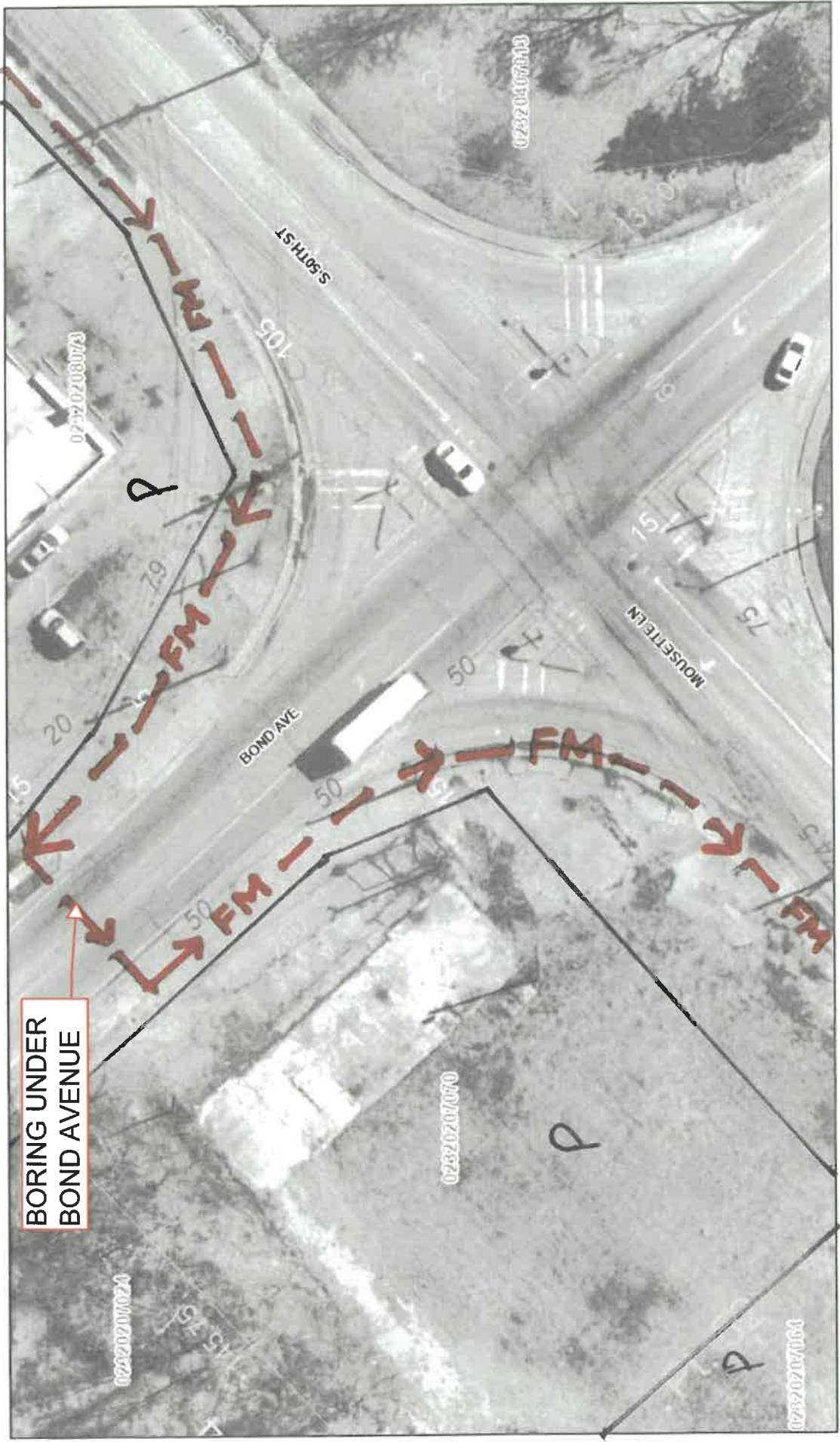
## Township Boundary

## Roads

## Parcels

Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |  
St Clair County GIS

St Clair County Parcel Map



BORING UNDER  
BOND AVENUE

7/31/2024, 8:27:37 AM

- Township Boundary
- Roads
- Parcels

1:564  
0 0.01 0.01 0.01 mi  
0 0.01 0.01 0.02 km  
Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnology, Inc.,  
USGS, EPA

St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |



**BORING UNDER  
MOUSETTE LANE**

**MODIFY EXISTING LIFT STATION**

**EXISTING FORCE MAIN. MAY  
REQUIRE ENLARGING, WITH  
NEW BORING UNDER I-255**

1:1,128  
0.01  
0.03 ml

Missouri Dept. of Conservation, Esrl. HERE, Garmin, GeoTechnology  
USGS, EPA

Missouri Dept. of Conservation, Esri, HERE, Garmin, GeoTechnologies  
USGS, EPA

Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA,

St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

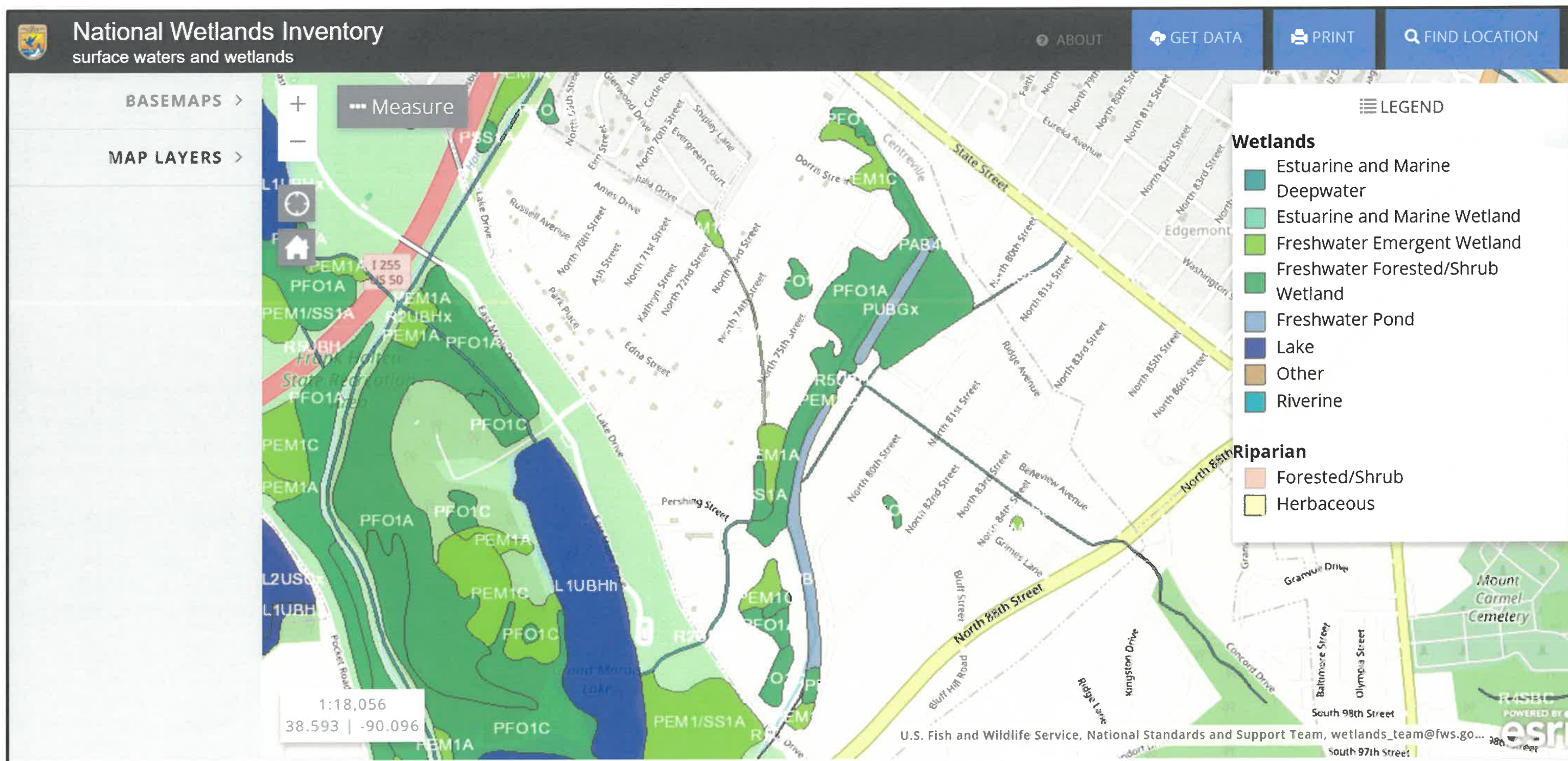
St Clair County GIS  
Missouri Dept. of Conservation, Esri, HERE, Garmin, USGS, EPA, NPS |

**CITY OF CAHOKIA HEIGHTS**  
**SANITARY SEWER SYSTEM**  
**PROPOSED INTERCEPTOR SEWER SYSTEM**  
**PRELIMINARY DESIGN REPORT**

**APPENDIX C**

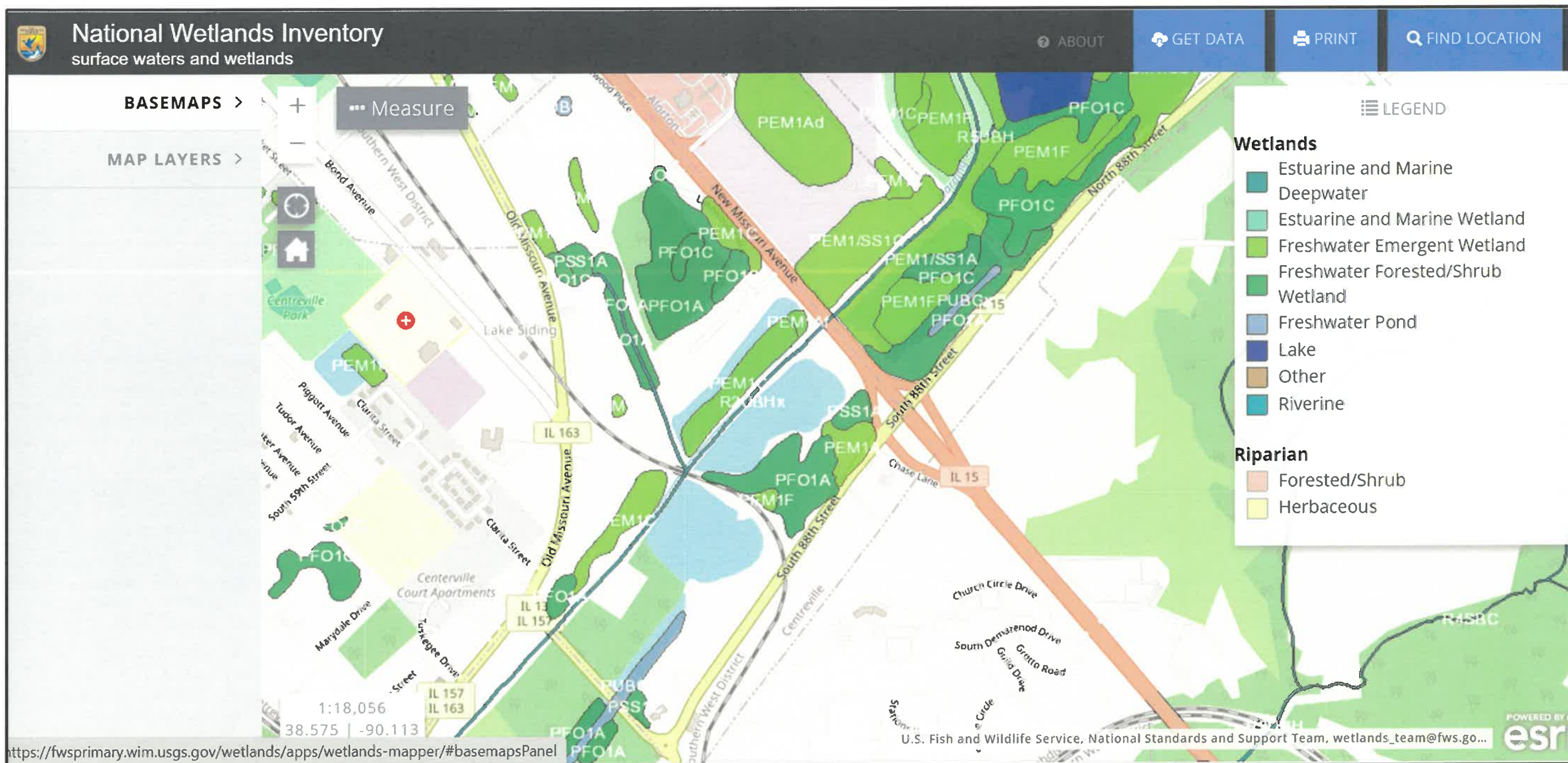
Waterways and Wetlands Maps





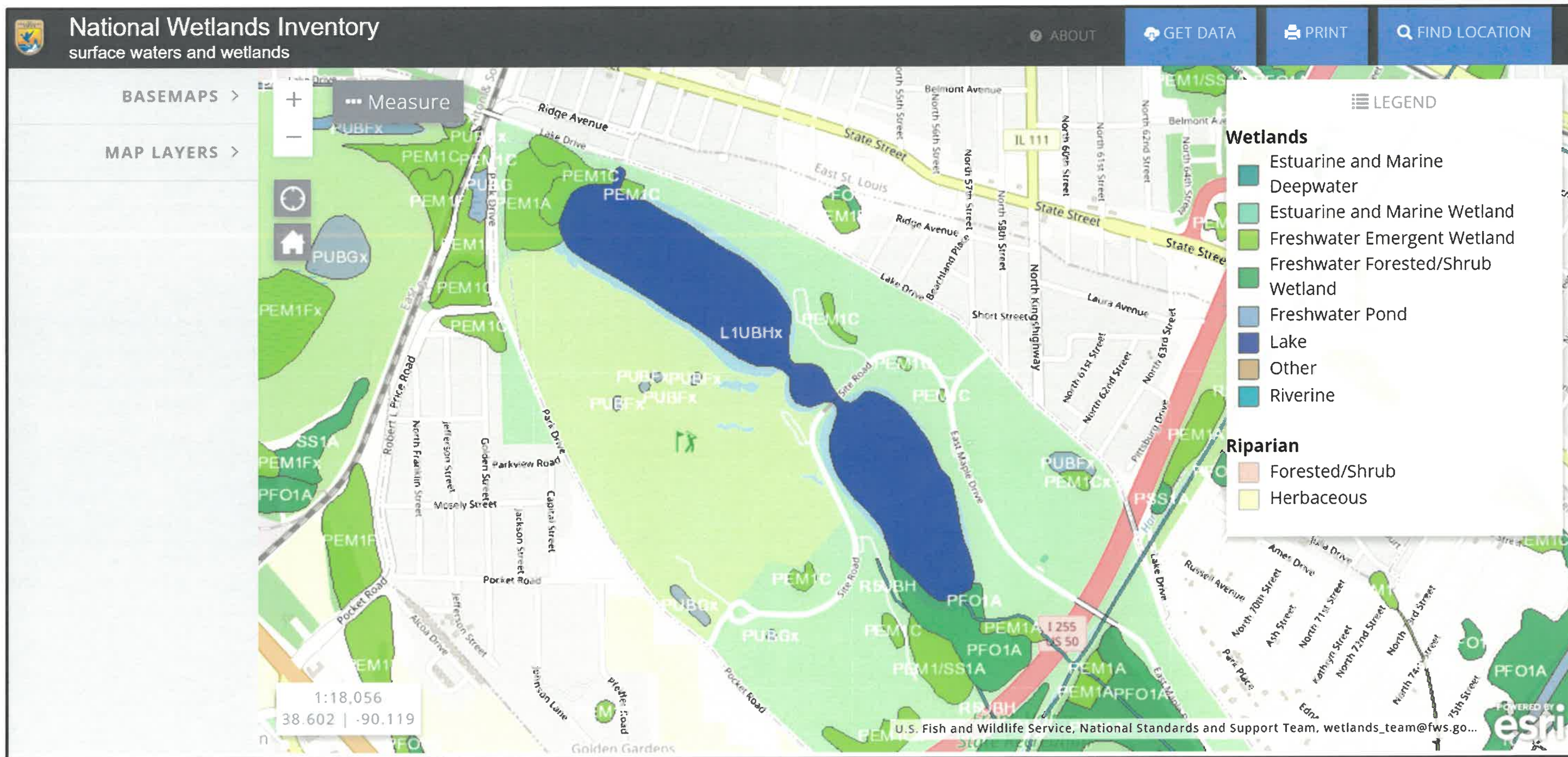
## NORTHEAST SECTION





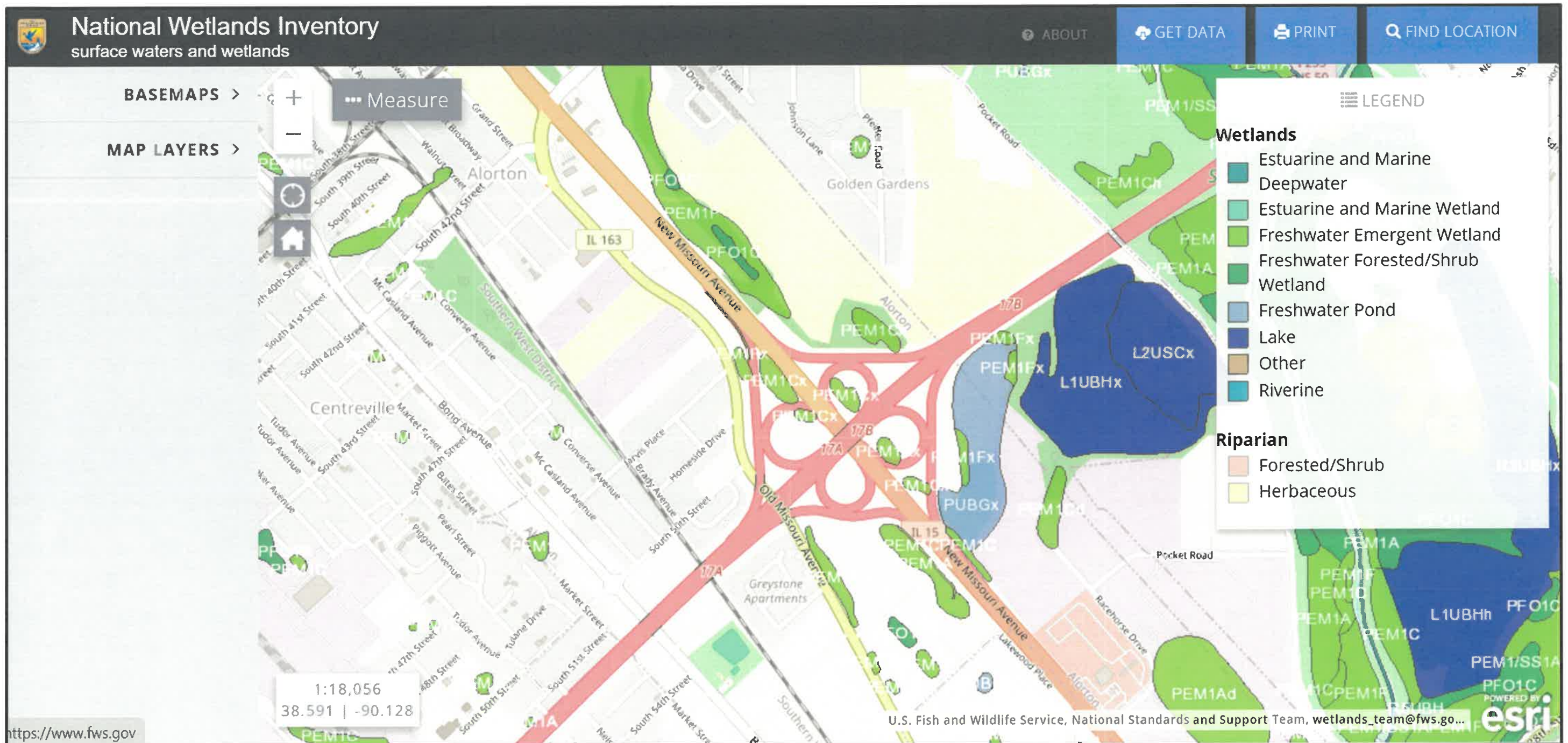
## SOUTHEAST SECTION





## NORTHWEST SECTION





## SOUTHWEST SECTION





March 7, 2025

- Wetlands**
  - Estuarine and Marine Deepwater
  - Estuarine and Marine Wetland

- Freshwater Emergent Wetland
  - Freshwater Forested/Shrub Wetland
  - Freshwater Pond

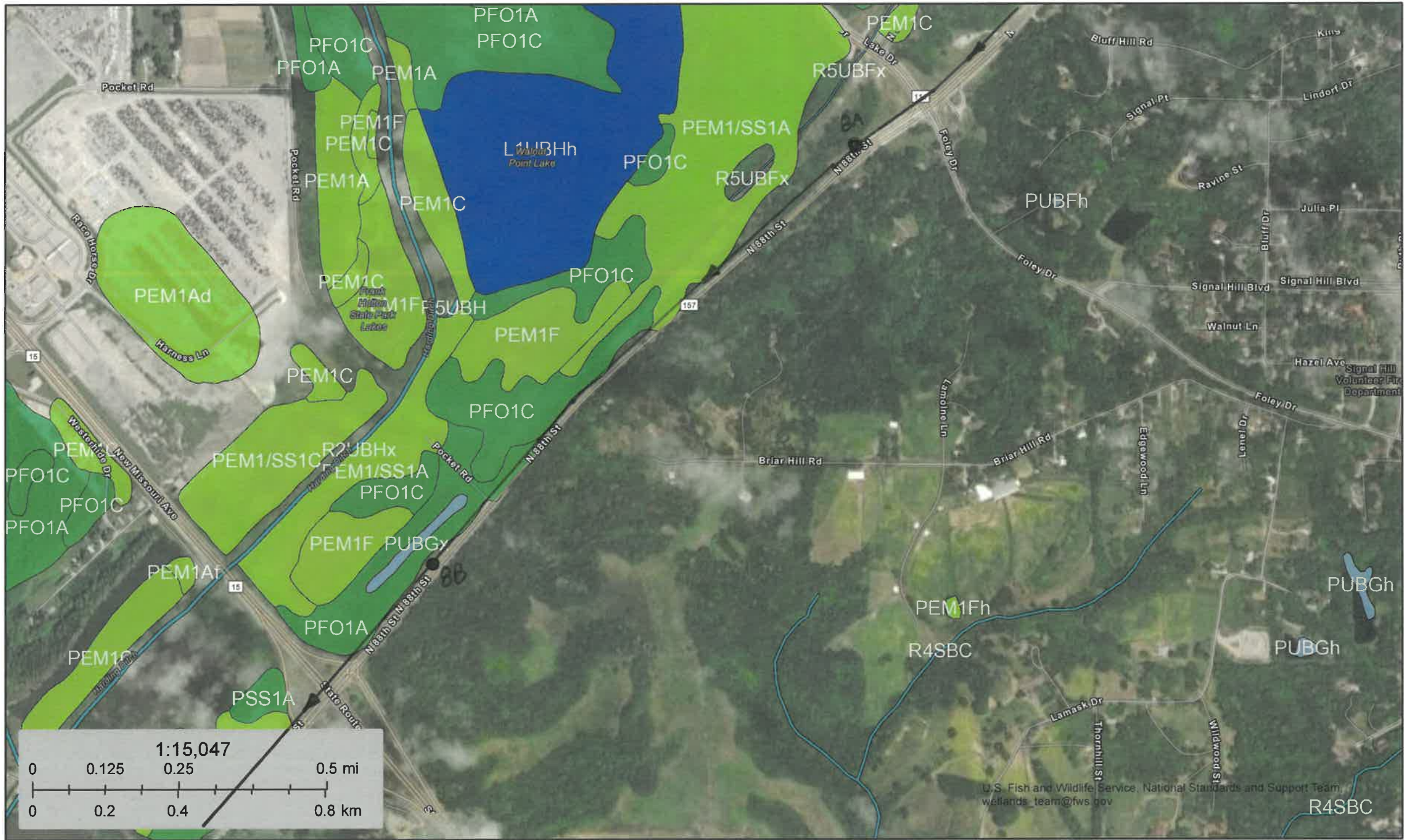
- Lake
  - Other
  - Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.









March 7, 2025

Wetlands

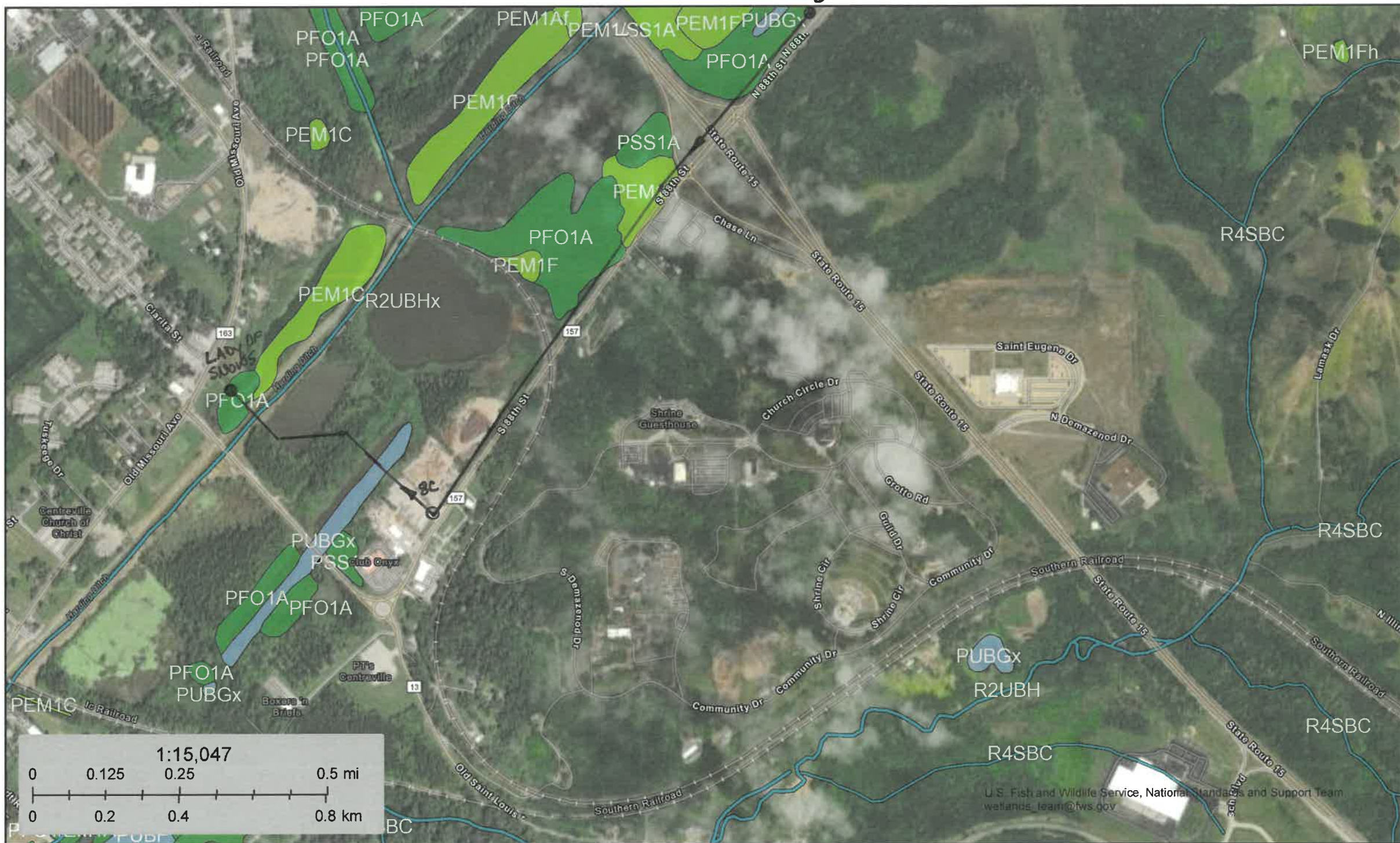
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.





March 7, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.





# Interceptor Wetlands Map WI-1



March 10, 2025

## Wetlands

- Wetlands**
- |   |                                |   |                                   |   |          |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland       |  | Lake     |
|  | Estuarine and Marine Wetland   |  | Freshwater Forested/Shrub Wetland |  | Other    |
|   |                                |  | Freshwater Pond                   |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

**CITY OF CAHOKIA HEIGHTS**  
**SANITARY SEWER SYSTEM**  
**PROPOSED INTERCEPTOR SEWER SYSTEM**  
**PRELIMINARY DESIGN REPORT**

**APPENDIX D**

Lift Station Construction Details





Hurst-Rosche, Inc.  
PROFESSIONAL DESIGN NUMBER: 184-000298

NO. 5 BANK SQUARE  
EAST ST. LOUIS, IL  
PH: 618.398.0890

www.hurst-rosche.com

HILLSBORO, IL  
MARION, IL  
SPRINGFIELD, IL  
ARNOLD, MO  
NASHVILLE, TN

SIGNATURE

DATE

LICENSE EXPIRES

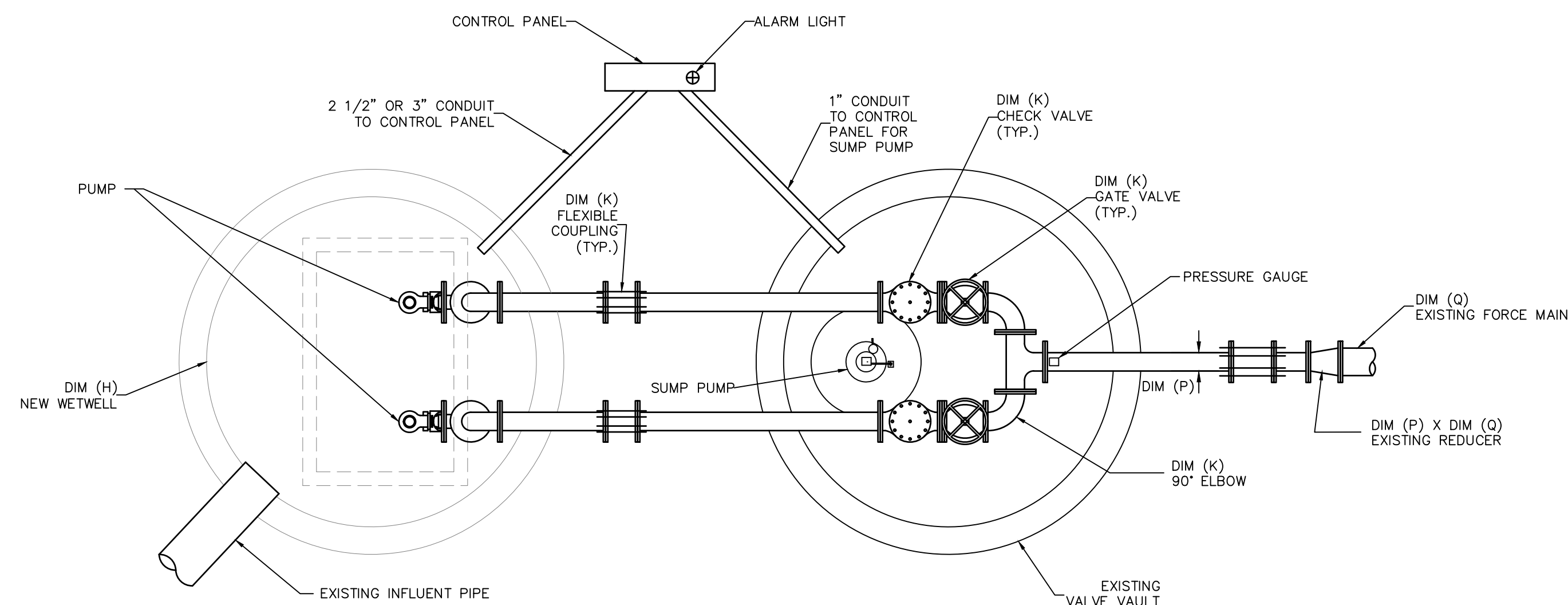
SANITARY SEWER SYSTEM REHABILITATION  
LAURALEE DRIVE & RENOIS DRIVE  
CITY OF CAHOKIA HEIGHTS  
ST. CLAIR COUNTY, ILLINOIS 62206

MK.	DATE	DESCRIPTION
	12/2024	

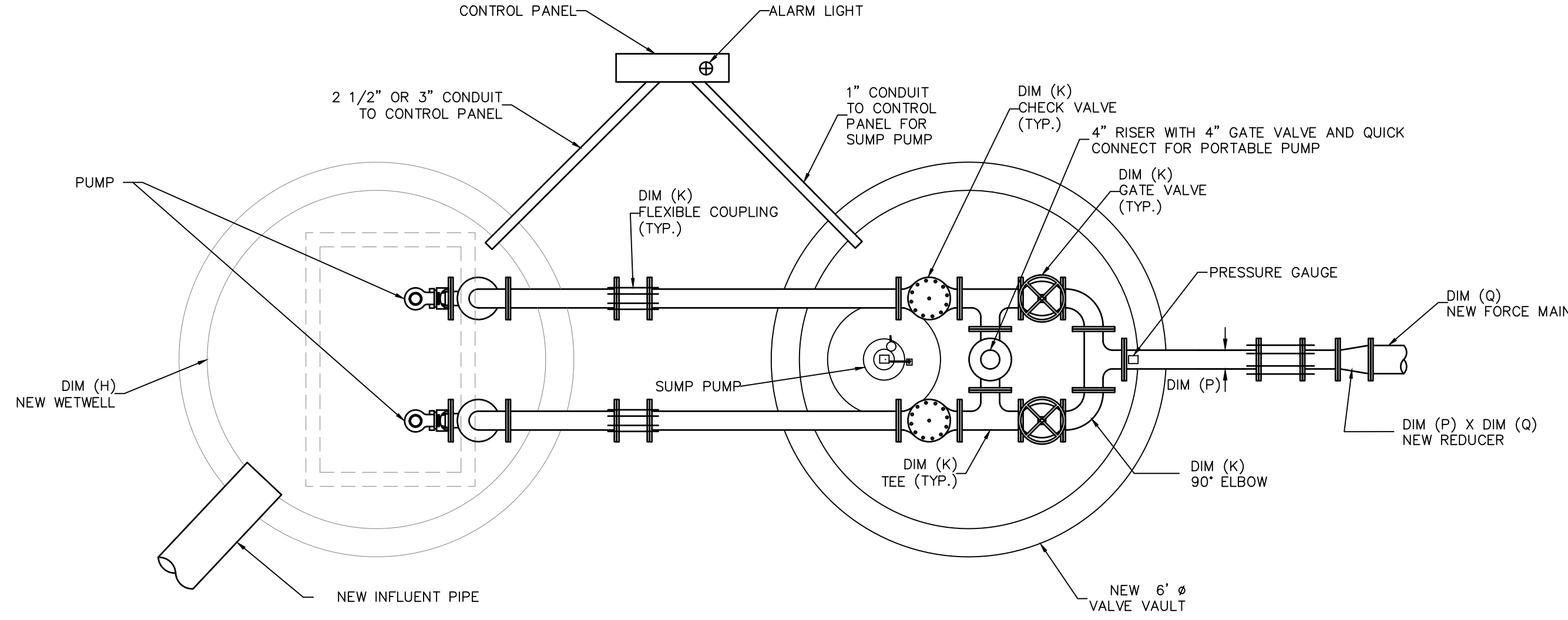
PROJECT NO: 860-1434

DESIGN: TAS  
DRAWN: JJD  
CHECK: LS

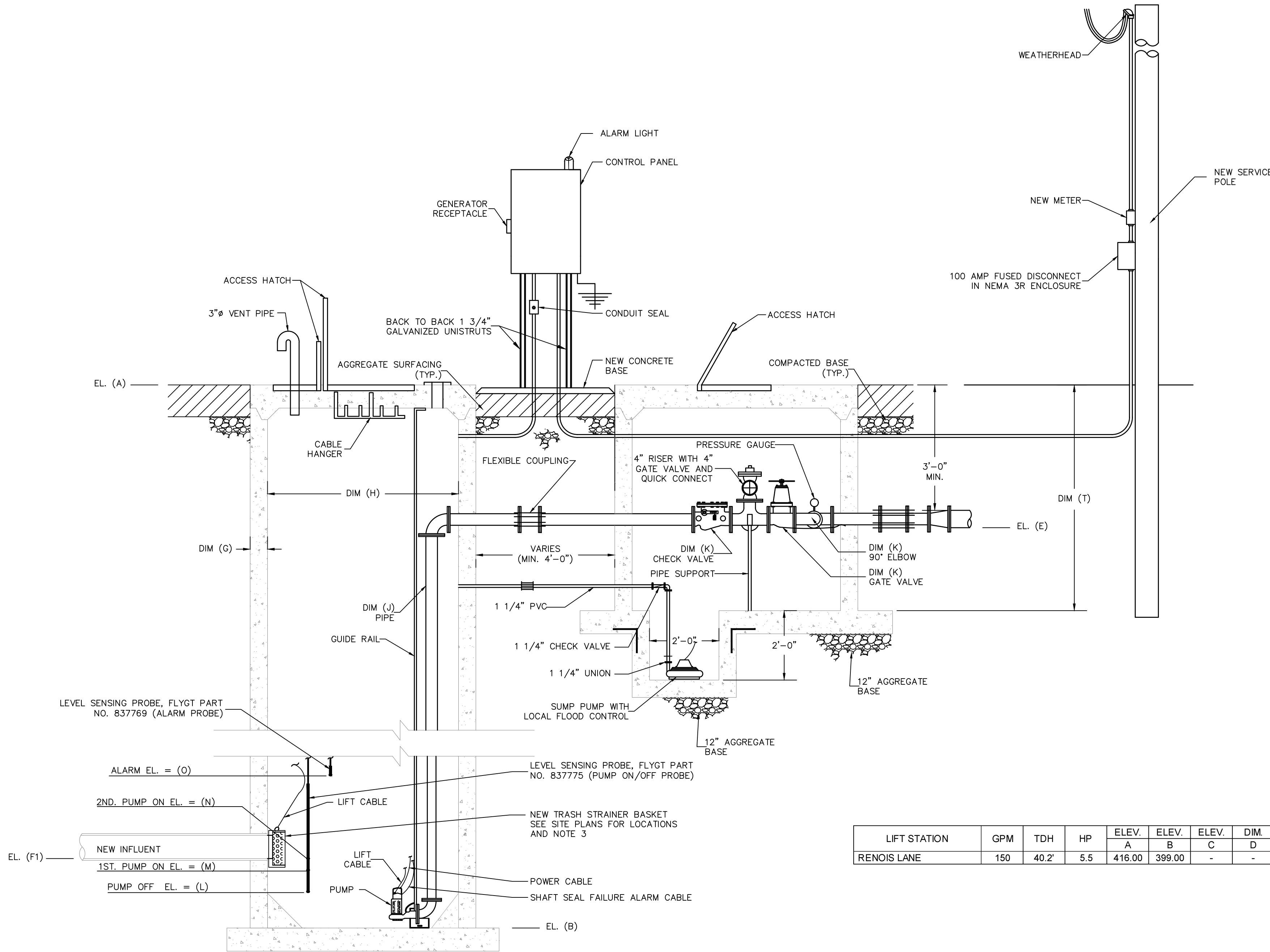
SUBMERSIBLE DUPLEX  
LIFT STATION  
CONSTRUCTION  
DETAILS



EXISTING LIFT STATION PLAN  
1/2\"=1'-0"



PROPOSED LIFT STATION PLAN  
1/2\"=1'-0"



LIFT STATION DETAILS  
1/2\"=1'-0"

NOTES:

1. CONSTRUCT NEW DUPLEX SUBMERSIBLE LIFT STATION, INCLUDING: PUMPS, CONTROL PANEL, VALVES, PRESSURE GAUGE, GUIDE BARS, FLOAT SWITCHES, LIFT CABLES, SERVICE POLE, DISCONNECT SWITCHES, POWER & ALARM CABLES, DISCHARGE PIPE, FORCE MAIN, WETWELL, VALVE VAULT, LIDS, ACCESS HATCHES, AND FENCING.
2. PROVIDE NEW STAINLESS STEEL TRASH STRAINER BASKET WITH STAINLESS STEEL RAILS, HARDWARE AND LIFTING CHAIN SIMILAR TO THOSE MANUFACTURED BY ACCESS MANUFACTURING, INC., MASPETH N.Y. THE BASKET SHALL BE FABRICATED FROM .080 SHEET METAL WITH 1-3/4\"/>
3. THE NEW LEVEL SENSING PROBES WILL REQUIRE ADDITION OF THE FOLLOWING RELAYS AND INTRINSICALLY SAFE BARRIER WITHIN THE CONTROL PANEL:
  - ONE (1) MTR3
  - ONE (1) MTR3
  - ONE (1) MTR3
  - ONE (1) MTIC3
  - ONE (1) MTISB10
4. PUMPS, VALVES, PIPING, ETC. ORIENTED HORIZONTALLY FOR CLARITY. SEE DETAILED PLAN VIEWS FOR ACTUAL ORIENTATION.
5. SEE SHEET 15 AND SITE PLANS FOR CONTROL PANEL/ELECTRICAL DETAILS.

DUPLEX SUBMERSIBLE LIFT STATION CONSTRUCTION SCHEDULE

LIFT STATION	GPM	TDH	HP	ELEV. A	ELEV. B	ELEV. C	DIM. D	ELEV. E	ELEV. F1	ELEV. F2	ELEV. F3	DIM. G	DIM. H	DIM. I	DIM. J	DIM. K	ELEV. L	ELEV. M	ELEV. N	ELEV. O	DIM. P	DIM. Q	DIM. R	DIM. S	DIM. T
RENOIS LANE	150	40.2'	5.5	416.00	399.00	-	-	410.00	401.00	-	-	6"	6'-0"	-	4"	4"	400.00	400.50	401.00	401.50	4"	4"	-	-	6'-0"

**CITY OF CAHOKIA HEIGHTS**  
**SANITARY SEWER SYSTEM**  
**PROPOSED INTERCEPTOR SEWER SYSTEM**  
**PRELIMINARY DESIGN REPORT**

**APPENDIX E**

Lift Station Rehabilitation Details





Hurst-Rosche, Inc.  
PROFESSIONAL DESIGN NUMBER: 184-000298

NO. 5 BANK SQUARE  
EAST ST. LOUIS, IL  
PH: 618.398.0890

HILLSBORO, IL  
MARION, IL  
SPRINGFIELD, IL  
ARNOLD, MO  
NASHVILLE, TN

SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

**LICENSE EXPIRES**

**LIFT STATION REHABILITATION - 16 LOCATIONS**  
**CITY OF CAHOKIA HEIGHTS**  
**ST. CLAIR COUNTY, ILLINOIS 62206**

MK.	DATE	DESCRIPTION
	08/2024	

PROJECT NO: 860-0683

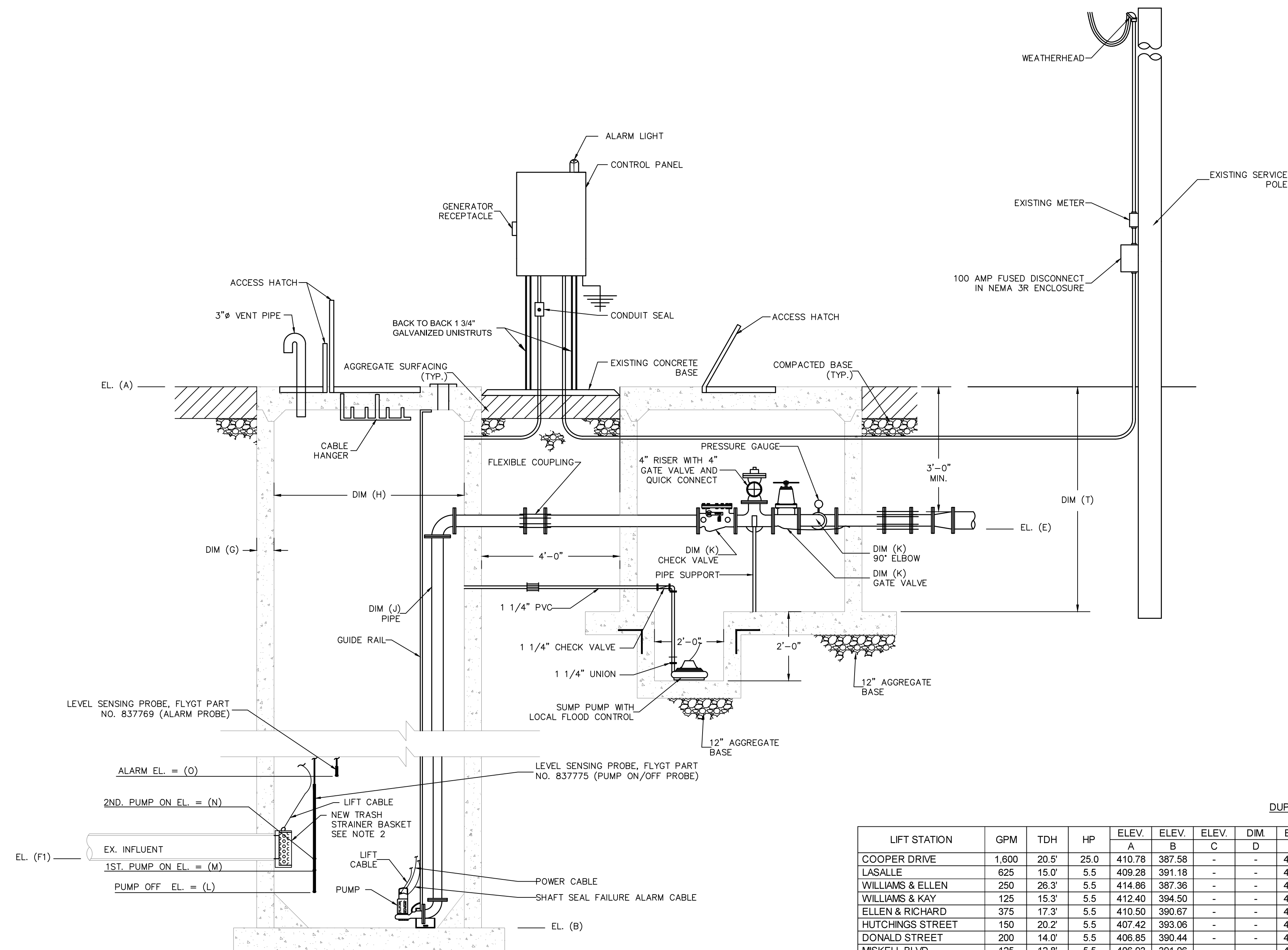
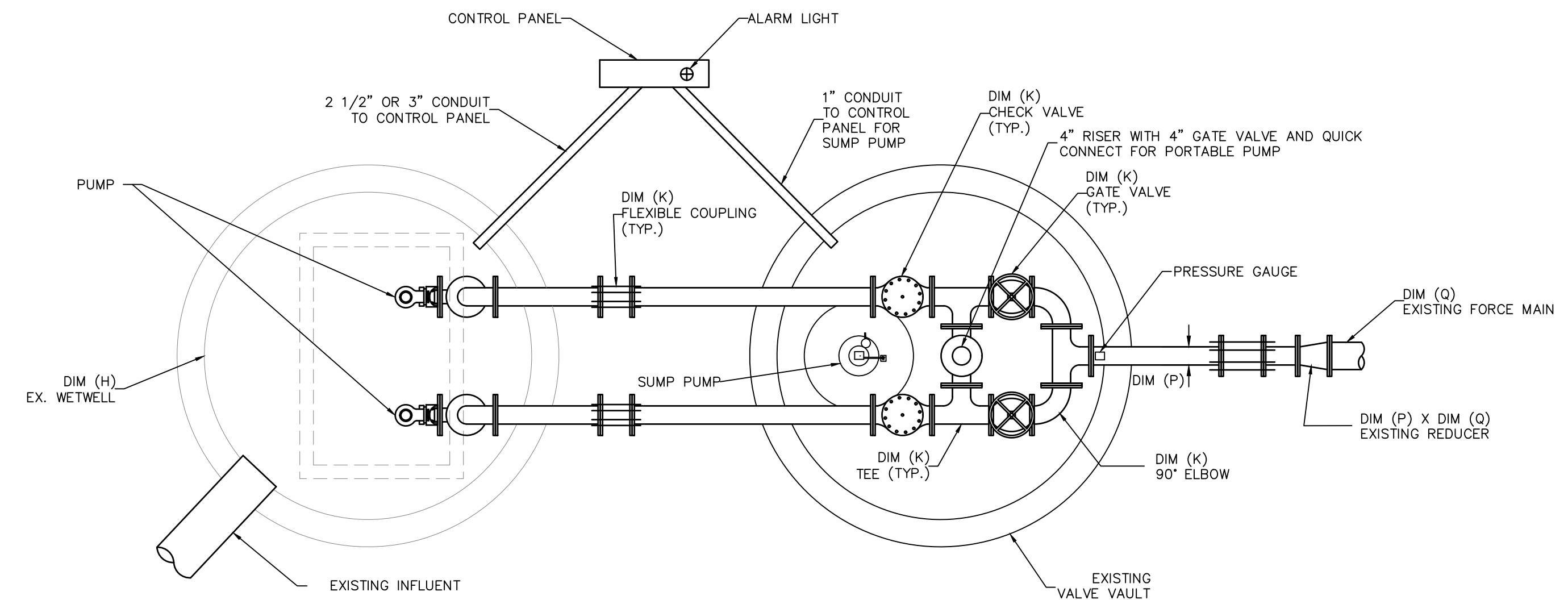
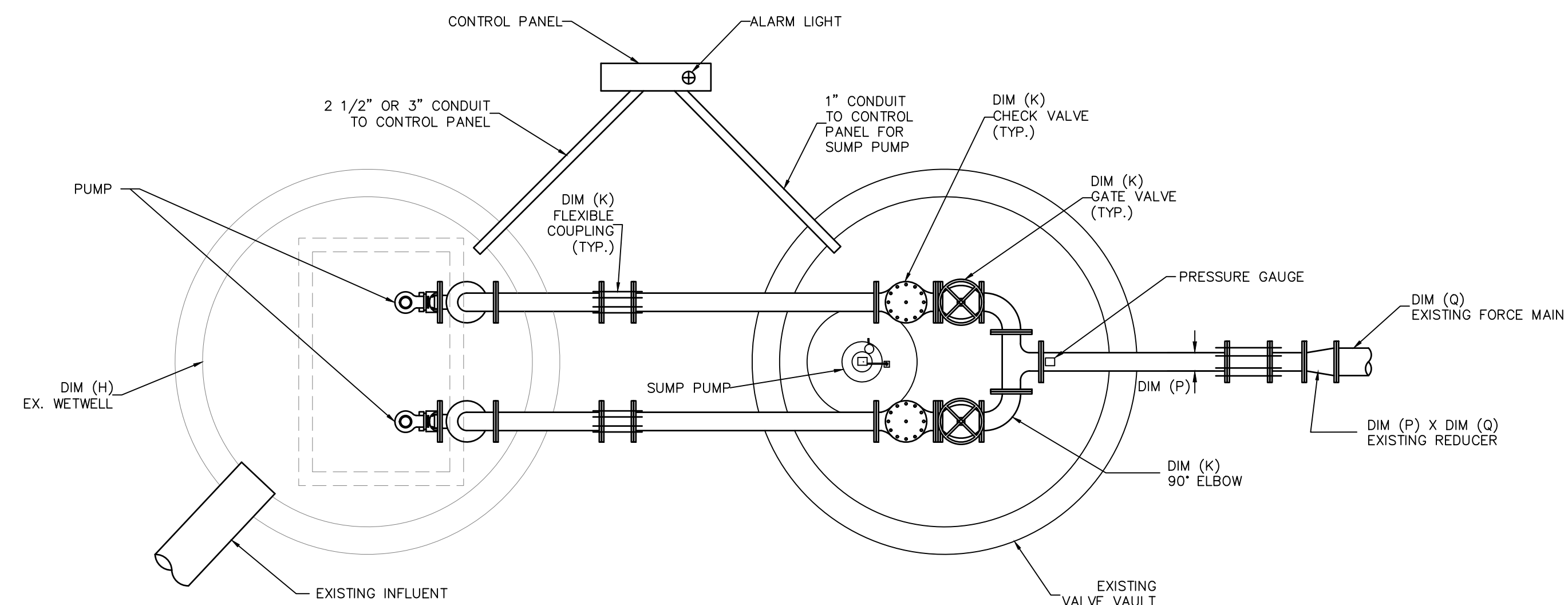
DESIGN: TAS	DRAWN: JJD	CHECK: LS
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## SUBMERSIBLE DUPLEX LIFT STATION REHABILITATION DETAILS

22

SHEET 22 OF 26

© 2024 HURST-ROSCHE, INC.



### DUPLEX SUBMERSIBLE LIFT STATION REHABILITATION SCHEDULE

LIFT STATION	GPM	TDH	HP	ELEV.	ELEV.	ELEV.	DIM.	ELEV.	ELEV.	ELEV.	ELEV.	DIM.	DIM.	DIM.	DIM.	ELEV.	ELEV.	ELEV.	ELEV.	DIM.	DIM.	DIM.	DIM.	DIM.	
				A	B	C		D	F1	F2	F3						G	H	I						J
COOPER DRIVE	1600	20.5'	25.0	410.78	387.58	-	-	405.85	390.44	-	-	10'-0"	10'-0"	-	18"	18"	388.58	386.08	390.44	390.94	12'-0"	12'-0"	-	-	6'-0"
LASALLE	625	15.0'	5.5	409.28	391.18	-	-	405.69	395.88	-	-	6'-0"	6'-0"	-	4"	4"	392.18	393.18	395.88	396.36	4"	10"	-	-	6'-0"
WILLIAMS & ELLEN	250	26.3'	5.5	414.86	387.36	-	-	410.45	394.46	-	-	10'-0"	10'-0"	-	4"	4"	388.36	388.86	394.46	394.96	4"	6"	-	-	6'-0"
WILLIAMS & KAY	125	15.3'	5.5	412.40	394.50	-	-	409.00	398.27	-	-	6'-0"	6'-0"	-	4"	4"	395.50	396.00	398.27	398.77	4"	4"	-	-	5'-6"
ELLEN & RICHARD	375	17.3'	5.5	410.50	390.67	-	-	406.88	401.06	-	-	8"	8'-0"	-	4"	4"	391.67	392.17	401.00	401.50	6"	6"	-	-	6'-0"
HUTCHINGS STREET	150	20.2'	5.5	407.42	393.06	-	-	404.09	395.06	-	-	6"	6'-0"	-	4"	4"	394.06	394.56	395.06	395.56	4"	4"	-	-	6'-0"
DONALD STREET	200	14.0'	5.5	406.85	390.44	-	-	402.66	393.09	393.88	-	6"	6'-0"	-	6"	6"	391.44	391.94	393.09	393.59	6"	6"	-	-	6'-0"
MCKELL BLVD.	125	12.8'	5.5	406.93	391.06	-	-	402.91	394.66	398.31	-	6"	6'-0"	-	4"	4"	392.06	392.56	394.66	395.16	4"	4"	-	-	6'-0"

**CITY OF CAHOKIA HEIGHTS**  
**SANITARY SEWER SYSTEM**  
**PROPOSED INTERCEPTOR SEWER SYSTEM**  
**PRELIMINARY DESIGN REPORT**

**APPENDIX F**

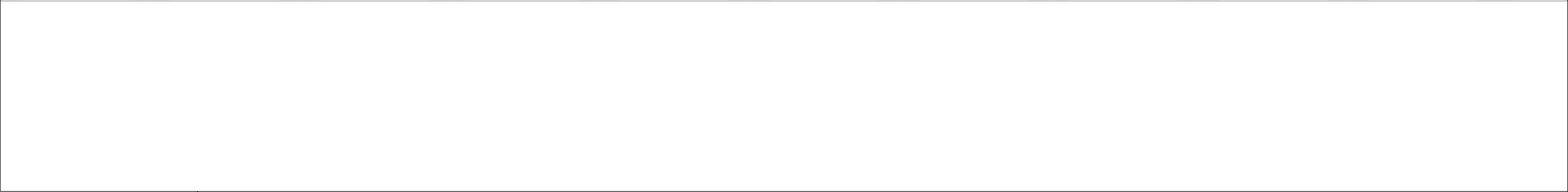
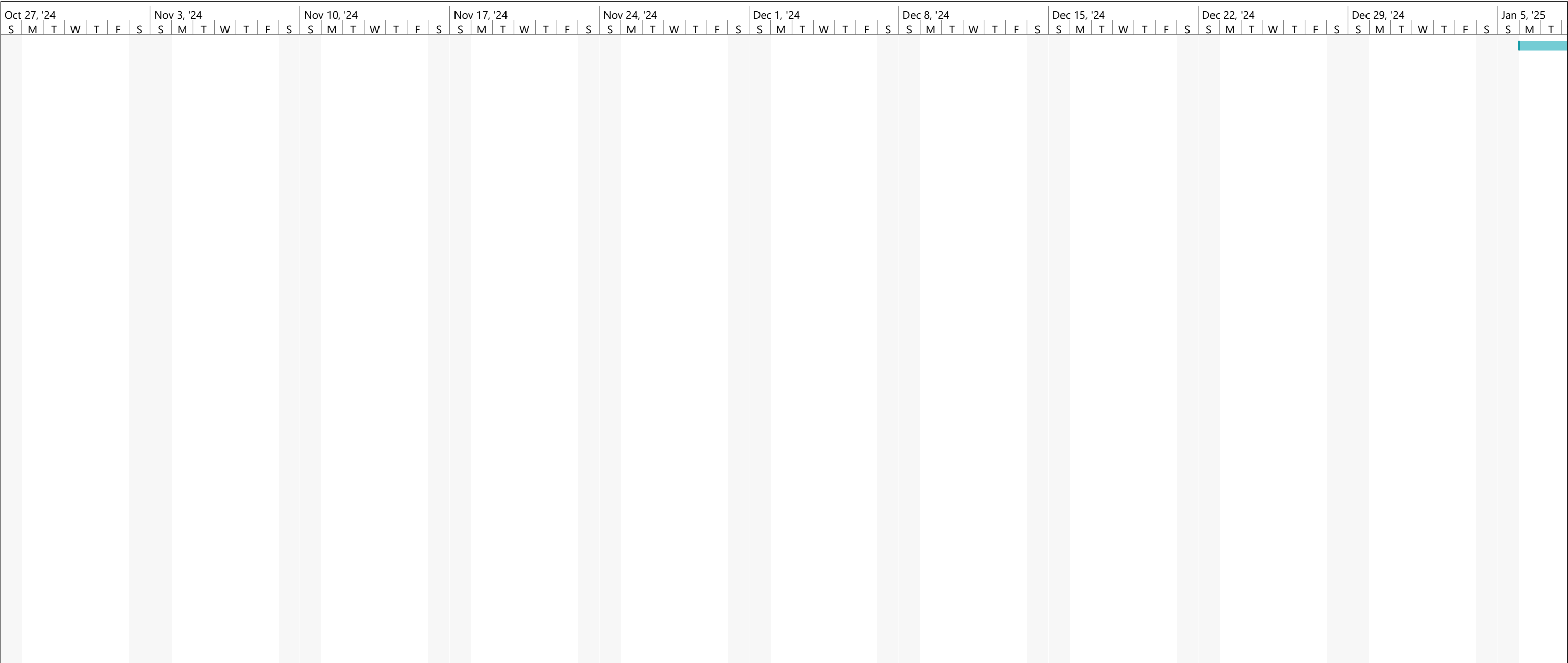
Project Schedule


























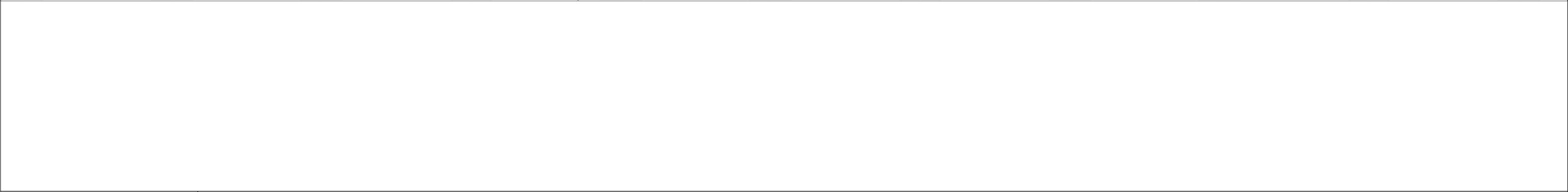




Project: milestone schedule rev Date: Fri 4/18/25	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			





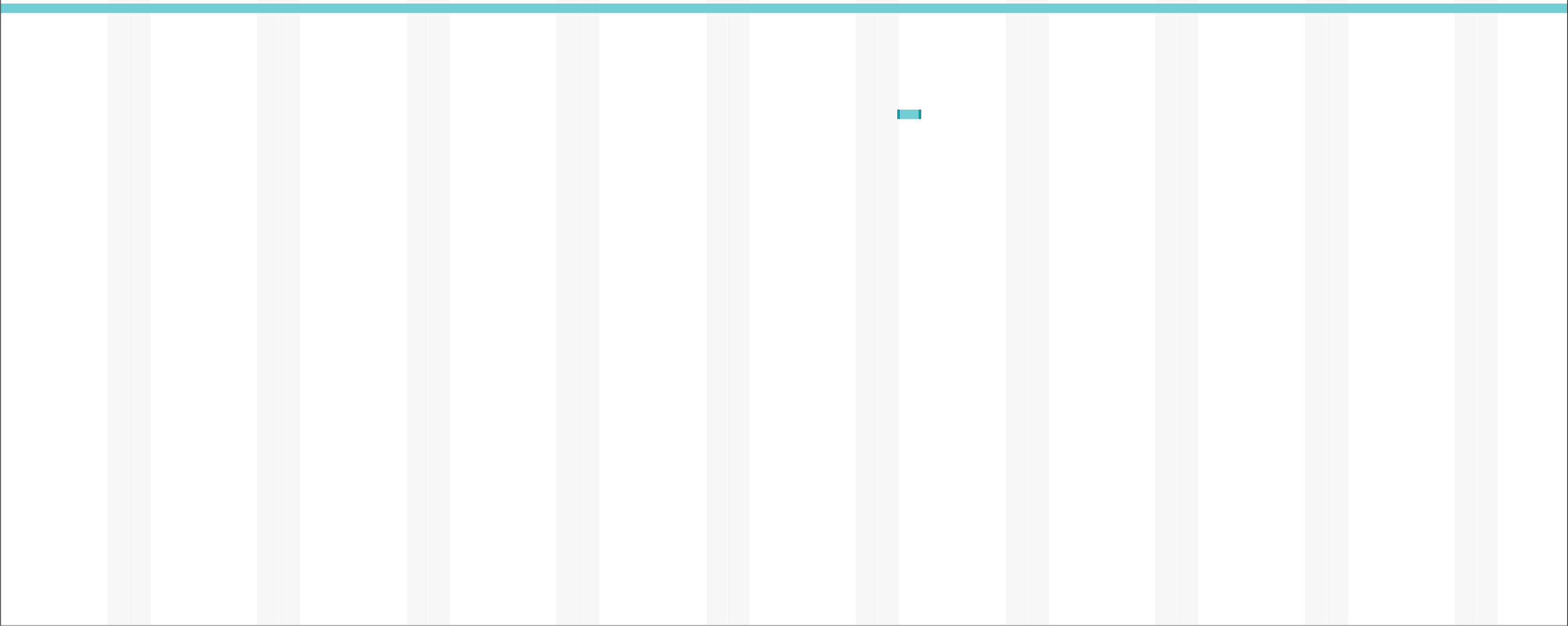


Project: milestone schedule rev Date: Fri 4/18/25	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			



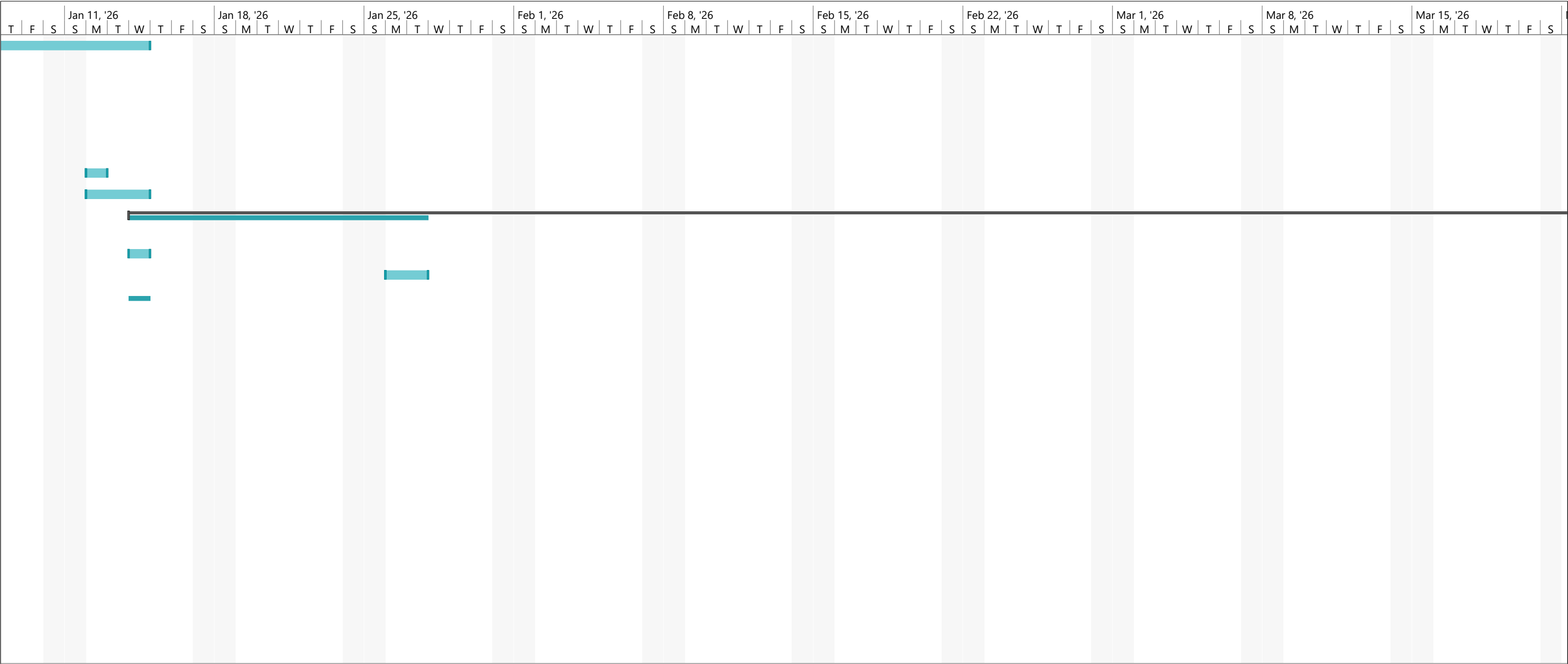

























Project: milestone schedule rev Date: Fri 4/18/25	Task	<div></div>	Project Summary	<div></div>	Manual Task	<div></div>	Start-only	<div></div>	Deadline	<div></div>
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	Milestone	<div></div>	Inactive Milestone	<div></div>	Manual Summary Rollup	<div></div>	External Tasks	<div></div>	Manual Progress	<div></div>
	Summary	<div></div>	Inactive Summary	<div></div>	Manual Summary	<div></div>	External Milestone	<div></div>		





Project: milestone schedule rev Date: Fri 4/18/25	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			

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Nov 1, '26

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Nov 8, '26

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Nov 15, '26

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Nov 22, '26

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Nov 29, '26

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Dec 6, '26

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Dec 13, '26

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Dec 20, '26

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Dec 27, '26

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Jan 3, '27

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Project: milestone schedule rev  
Date: Fri 4/18/25

Task

Split

Milestone

Summary

Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

Deadline

Progress

Manual Progress

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'28  
T W T F S

Mar 26, '28  
S M T W T F S

Apr 2, '28  
S M T W T F S

Apr 9, '28  
S M T W T F S

Apr 16, '28  
S M T W T F S

Apr 23, '28  
S M T W T F S

Apr 30, '28  
S M T W T F S

May 7, '28  
S M T W T F S

May 14, '28  
S M T W T F S

May 21, '28  
S M T W T F S

May 28, '28  
S M T W T

Project: milestone schedule rev  
Date: Fri 4/18/25

Task

Split

Milestone

Summary

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Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

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Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

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Deadline

Progress

Manual Progress

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