THE HIGH CLIFF STATE TRAIL CORRIDOR FEASIBILITY STUDY

WISDOT ID #4479-05-00

STH 114 STUDY SEGMENTS


STH 114 East


STH 114 East


STH 114 West

Village of HARRISON
WHERE OPPORTUNITY LIVES

VILLAGE OF SHERWOOD

Menasha

January 17, 2025

KL Engineering
[A] Better Experience

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LIST OF EXHIBITS AND APPENDICIES

ACKNOWLEDGMENTS

The development of the Feasibility Report is a joint effort and would not be possible without data sharing, input, and general cooperation from a multitude of stakeholders. We thank the following organizations for their assistance with this project.

- City of Menasha Staff
- Village of Harrison Staff
- Village of Sherwood Staff
- WisDOT Staff
- East Central Wisconsin Regional Planning Commission (ECWRPC) Staff
- Community Foundation for the Fox Valley Region
- Trail Strategies, LLC

Thank you,
KL Engineering, Inc.

EXECUTIVE SUMMARY

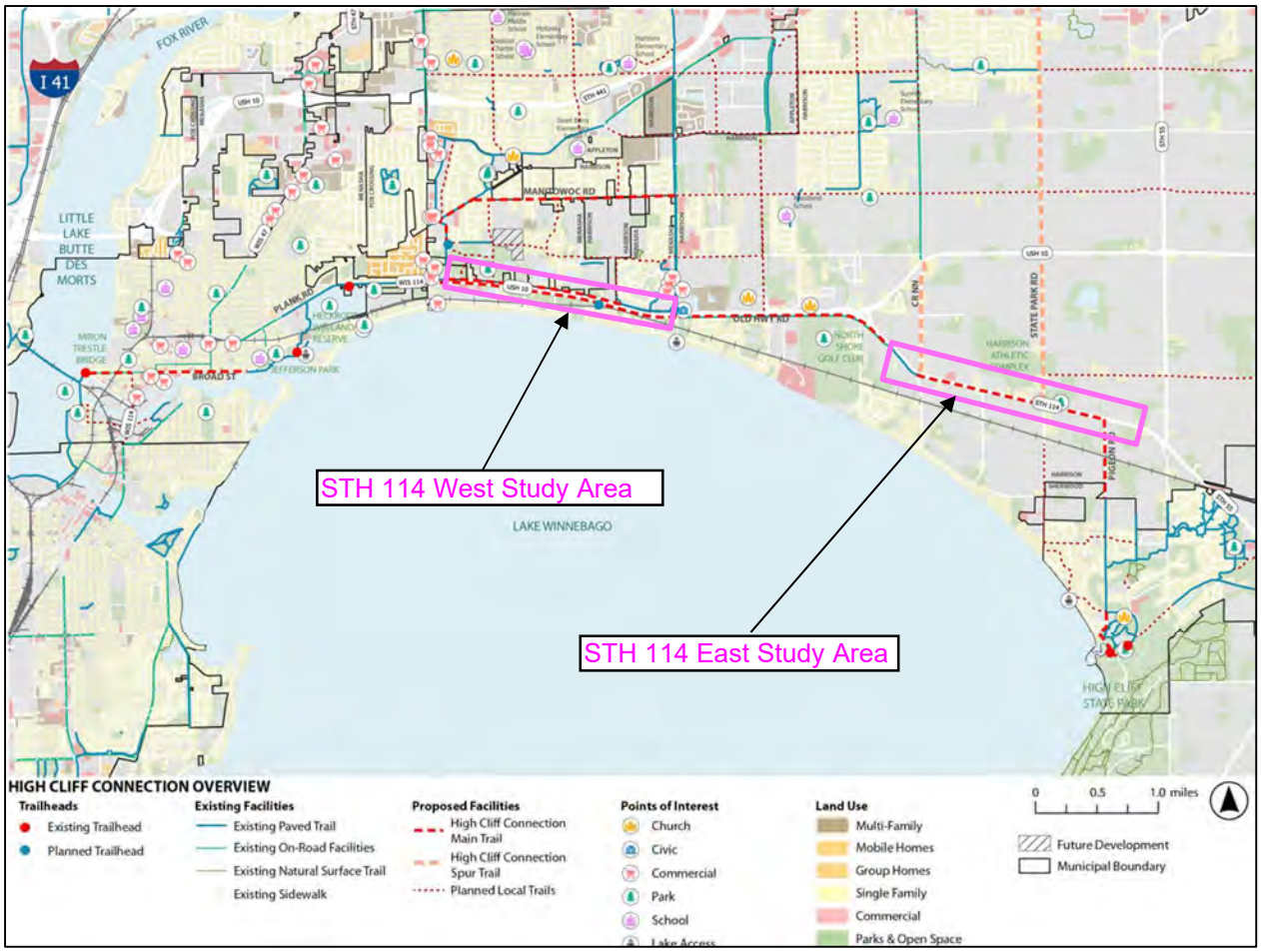


Exhibit 1: STH 114 Connection Overview

STUDY BACKGROUND

The City of Menasha led this feasibility study to add bicycle and pedestrian facilities along STH 114 in the City of Menasha and a WisDOT planning grant (see Exhibit 1).

Past community planning efforts identified the importance of establishing a new pedestrian/bicycle route along the northern edge of Lake Winnebago that would link the surrounding communities to the High Cliff State Park. A 2022 planning study led by the East Central Wisconsin Planning Commission (ECWRPC) produced the High Cliff Connection Master Plan. Several possible routes were identified for further study.

The routes included within this study effort are:

- **STH 114 West - STH 114 – Oneida St to Lake Park Rd (2.06 miles)**
  - **West Path– Woodlands West (Lake Park to Kernan)**
  - **West Path– Conservancy East (Conservancy to Kernan)**
  - **West Path – Conservancy West (Oneida to Conservancy)**
- **STH 114 East - STH 114 – Fire Lane 12 to Pigeon Rd (1.56 miles)**
  - **East Path – 114 Segment (Fire Lane 12 to Pigeon Rd)**

PROJECT TIMELINE

- **January 23, 2024** - Project Kickoff
- **February 29, 2024** - Existing Conditions Review Meeting
- **March 21, 2024** - Public Involvement Meeting 1 - Old Highway Road and Pigeon Road
- **May 14, 2024** - Public Involvement Meeting 2 - Manitowoc Road with STH 114 segments studied under other ongoing feasibility study
- **April 22 and 25, 2024 –** WisDOT Coordination Meeting 1 & 2
- **June 1, 2024** - Preliminary Alternatives Submitted for Review
- **July 25, 2024** – WisDOT coordination Meeting 2
- **July 26, 2024** - Draft Feasibility Report Submitted for Review
- **August 2, 2024** - Updated Design Alternative Displays Per Core Team Review Comments
- **September 12, 2024 -** Potential Acquisition Displays submitted to Core Team
- **December 2024** - Final Feasibility Report Submitted

PUBLIC OUTREACH

The meeting for the STH 114 study segments was held on May 14, 2024. This meeting also included displays for Manitowoc Road, a segment of study for the concurrent feasibility study for local road segments. Displays showing existing conditions (topography, utilities, right-of-way, drainage patterns, etc.) along the study corridors were provided without design alternatives to encourage discussion and gather ideas for potential trail locations. Feedback from the meetings assisted in the development of preliminary alternatives.

ALTERNATIVE DEVELOPMENT

Alternatives for the segments were developed based on preliminary data gathering and public feedback.

The alternatives were developed with the following goals for the routes:

- Minimize the impact on the natural environment.
- Connect to already-established trails and destinations along the corridor.
- Minimize private property purchases.
- Minimize construction costs to the greatest extent possible.

A concurrent feasibility study for routes along Old Highway Road, Pigeon Road, and Manitowoc Road study segments is ongoing. The same core team is working on both feasibility projects.

STUDY RECOMMENDATIONS

The recommendations for each route vary.

- **For STH 114 West,** an off-road bicycle and pedestrian trail is recommended on the north side of the roadway, sometimes within and sometimes outside of the existing right-of-way. Phased construction is recommended with logical phase termination points at roadways/trail connections.
- **For STH 114 East,** an off-road bicycle and pedestrian trail is recommended on the south side of the roadway, sometimes within and sometimes outside of the existing right-of-way.

The next steps to move the STH 114 West and East projects forward include design and construction grant requests, discussions with potential project partners, inclusion in long-range planning documents, inclusion of design and construction funding in future budgets, and property acquisition following the federal funding process.

STH 114 West – Near Oneida Street

Segment Name	Conservancy West (Oneida to Conservancy)	Conservancy East (Conservancy to Kernan)	Woodlands West (Lake Park to Kernan)	TOTAL (STH 114 WEST)
Length (Miles)	0.38	0.51	0.53	1.42
Municipality	City of Menasha - 0.29 Mi Villiage of Harrison - 0.09 Mi	City of Menasha - 0.27 Mi Villiage of Harrison - 0.24 Mi	City of Menasha - 0.10 Mi Villiage of Harrison - 0.43 Mi	City of Menasha - 0.66 Mi Villiage of Harrison - 0.76 Mi
Timeline	2030 (Real Estate Complete) 2032-2033 (Design) 2034 (Construction)	2028 (Real Estate Complete) 2029-2030 (Design) 2031 (Construction)	2025-2026 (Design) 2029 (Construction)	2028-2030 (Real Estate Complete) 2028-2032 (Design) 2030-2034 (Construction)
Real Estate Acres	0.74	0.49	0.00	1.23
Design Cost *	$158,000.00	$201,000.00	$197,000.00	$556,000.00
Construction Cost*	$1,192,000.00	$1,564,000.00	$1,483,000.00	$4,239,000.00
Real Estate Cost*	$43,000.00	$28,000.00	$0.00	$71,000.00
Project Cost	$1,393,000.00	$1,793,000.00	$1,680,000.00	$4,866,000.00

Segment Name	STH 114 EAST
Length (Miles)	1.55
Municipality	Villiage of Harrison
Timeline	2032 (Real Estate Complete) 2033-2034 (Design) 2034-2035 (Construction)
Real Estate Acres	3.13
Design Cost *	$401,000.00
Construction Cost*	$1,208,000.00
Real Estate Cost*	$181,000.00
Project Cost	$1,790,000.00

Project costs in tables provided account for 3% inflation rate from 2024 cost estimates in the year that design, acquisition, or construction is expected. **Estimated timeline is based on assumptions of availability of government funding. Actual timeline will be dependent on funding and real estate acquisition.**

PROJECT NEED

Connecting the Fox Valley communities to High Cliff State Park with a bicycle and pedestrian trail has been on planners' and local residents' wish lists for some time. This idea was at the forefront of the Fox Cities Trail Summit, hosted by the Community Foundation for the Fox Valley Region in 2020.

Building off the direction and momentum from that summit, the East Central Wisconsin Regional Planning Commission (ECWRPC) completed the High Cliff Connection Master Plan through a study effort from August 2021 to October 2022. The purpose of this study was to gather regional demographic and bike/pedestrian use data and engage the public to assist in route planning.

The public outreach included interactive websites, social media, online surveys, in-person meetings, and pop-up tables at community events to garner as much feedback from as many local stakeholders as possible.

The result of the High Cliff Connection Master Plan was a specific potential route to connect area communities to the High Cliff State Park and a sequence of action plans for project implementation. A primary step of the action plan was to complete a preliminary engineering study of the identified routes.

This feasibility study completes this primary step for the following routes:

- **STH 114 West - Oneida St to Lake Park Rd (2.06 miles)**
- **STH 114 East - Fire Lane 12 to Pigeon Rd (1.56 miles)**

PROJECT GOALS

The goal of the study was to develop multiple alternatives for the trail that would provide a safe, off-road transportation option for bicyclists and pedestrians along the study segments. The alternatives were developed with the following goals:

- Provide a direct route along the corridor for bicyclists and pedestrians to encourage multi-modal transportation.
- Minimize the impact on the natural environment.
- Connect to already-established trails and destinations along the corridor.
- Incorporate a sustainable and maintenance friendly design.
- Provide a facility that is accessible to all.
- Minimize private real estate purchases and partner with other government entities using their land, if necessary.
- Plan, design, and construct with adjacent roadway projects where possible.
- Minimize construction costs to the greatest extent possible.
- Respect adjacent land uses.

STH 114 West – Near Kernan Ave

STUDY BACKGROUND

THE PROCESS

Using a WisDOT Transportation Alternatives Program (TAP) planning grant, the City of Menasha, in cooperation with the Village of Harrison and the Village of Sherwood, was able to complete this feasibility study to explore adding bicycle and pedestrian facilities to connect surrounding communities to High Cliff State Park. This feasibility study reviews the previously mentioned routes to determine the challenges and opportunities associated with building bicycle and pedestrian facilities along these corridor segments. The study reviewed the potential trail impacts relative to the following:

- Topography & Soils
- Water Resources & Endangered Resources
- Utilities
- Adjacent Land Use & Right-of-Way
- Traffic Data
- Bike/Pedestrian Counts
- Public Outreach

Following the initial data gathering, site visits were conducted to validate the data and provide a more complete understanding of the trail corridors.

Displays showing existing conditions (topography, utilities, right-of-way, drainage patterns, etc.) along the study corridors, without design alternatives, were presented at a public meeting. This was done to:

- Encourage discussion and gather ideas for potential trail locations.
- Learn more about the day-to-day conditions in the trail corridors (traffic conditions, stormwater trouble areas, existing multi-modal use, area needs, etc.).
- Garner feedback in support of or in opposition to potential trail projects and locations.

After the public input process, preliminary design alternatives for the corridors were developed and presented to the core team, made up of representatives from the City of Menasha, Village of Harrison, Village of Sherwood, ECWRPC, and the Community Foundation for the Fox Valley Region. Based on feedback, refinements were made to the designs, and construction costs were prepared for the final recommended alternatives.

A meeting was held with WisDOT Staff to discuss our initial findings and inquire about any further information they may be able to share regarding the corridors. Through this meeting we learned that no highway expansion or reconstruction projects for either of the study segments are currently scheduled. There is a pavement rehabilitation project scheduled for part of the West study corridor to be constructed in 2027.

The refined alternatives were presented to WisDOT staff for their feedback regarding the preliminary alternatives. Their feedback regarding the alternatives was accounted for when choosing the preferred alternatives.

These recommended alternatives can help secure design and construction funding through budget planning and grant writing.

ENGINEERING STANDARDS

The following standards were used to develop the alternatives for the bicycle and pedestrian facilities:

- Wisconsin Bicycle Facility Design Handbook 2004
- AASHTO Guide for the Development of Bicycle Facilities 2012
- Wisconsin Facilities Design Manual 2024
- Public Right-of-Way Accessibility Guidelines July 3, 2024

Trail Design

- Typical Trail Pavement Section
- Top: 10-foot-wide asphalt at 4 inch-depth depth
- Base: 12-foot-wide crushed aggregate at 8 inch depth

*Assumed pavement structure based on other similar trails. Geotechnical investigation in final design will be needed to confirm pavement structure.

Key standards include:

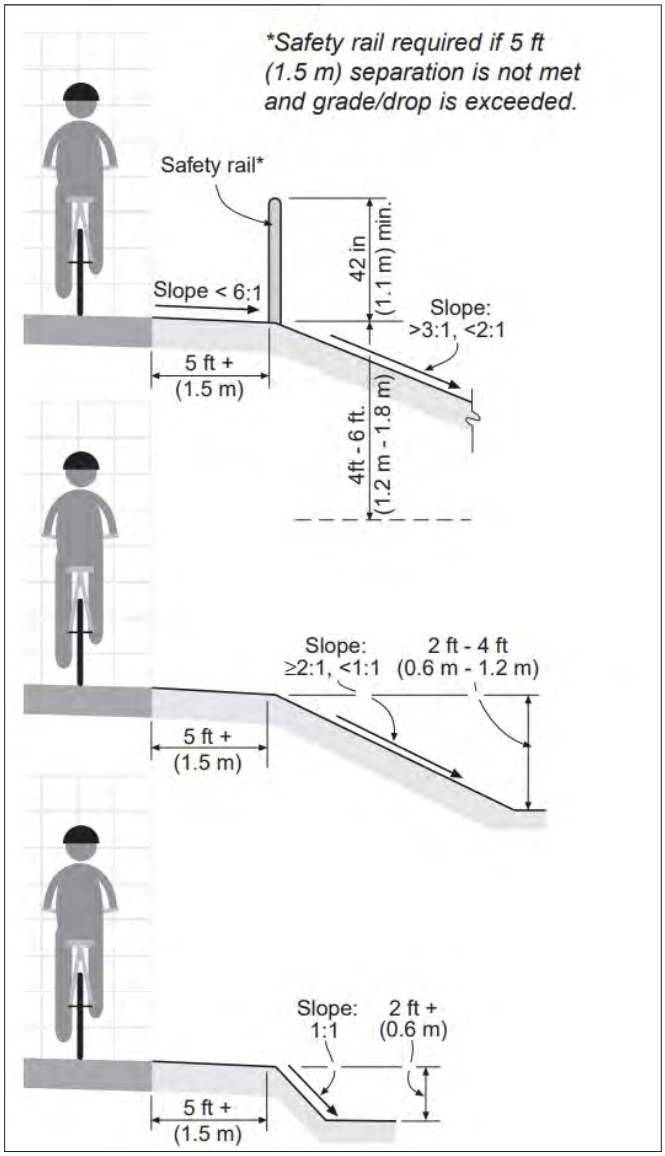
- 10-foot trail width
- 2-foot shoulders at 6:1 maximum slope
- Curve radii (minimum of 60-foot, 100-foot preferred)
- Side slopes flatter than 3:1 and requirements for buffer or railing in areas steeper than 3:1 (See figure on following page from Wisconsin Bicycle Facility Design Handbook.)

ENGINEERING STANDARDS

(CONTINUED)

Trail Design (Continued)

- Clear zone from edge of trail (3-foot typical, 1-foot allowed with continuous obstacle - railing).
- Boardwalk railing required when greater than 12-inches from ground level.
- Structure clear width a minimum of 12-foot.
- Curb ramps with detectable warning fields at all roadway crossings.
- 1.5% cross slope on trail.
- Running grades less than 5%.



ASSUMPTIONS

This is a feasibility study and, therefore, utilized publicly available planning level data. More detailed data is required for final design. Description of the planning level data used, limitations and assumptions, and the detailed data needed for final design are described below:

- **Right-of-way:** Existing right-of-way linework was obtained through GIS sources that are not perfectly accurate and may not include all easements. Further investigation of right-of-way through title work and field survey will be required. Formal plat work will be necessary for the final design process should real estate be needed to construct the project. Possible trail alternatives were designed to minimize the need for property acquisition. Condemnation for trail construction is not allowed per state law statute 32.015. Where preferred alternatives involve the acquisition of property, the federal acquisition processes will need to be followed. Any proposed acquisition areas based on 2' offset of slope intercepts or boardwalk and maintaining consistent acquisition width through the parcel.

- **Wetlands:** Limits of wetlands were based on data from the DNR water surface viewer. A complete wetland delineation will be required for the project, which may necessitate preferred alternative changes, require the use of boardwalk instead of asphalt, or require special treatments for erosion control and landscaping, etc.

- **Topography:** Alignment and grading calculations were based on LIDAR data provided by a variety of sources. Field surveys will be required in order to complete a more detailed design which may modify various elements.

- **Soils:** The USDA Natural Resources Conservation Service (NCRS) soils data was utilized for design assumptions for this report. Soil borings will be required for the project, which can impact pavement design, required excavation, and structure design.

- **Work Limits** were determined based on slope intercepts and required space to complete grading and construction and are utilized for real estate acquisition.

ASSUMPTIONS (CONTINUED)

- **Waterways:** Per the mapping, no floodplain impacts are anticipated, but a more detailed analysis will be required. Additional field surveys will be required to pick up more local drainage patterns and geotechnical reports will include groundwater investigation. These investigations could require modification of earthwork, drainage structures, and pavement structures currently planned.
- **Endangered Resources:** As part of the evaluation of endangered resources in each of the study corridors, a preliminary assessment was completed through the Natural Heritage Inventory (NHI) public portal on the DNR website. Additionally, an Information for Planning and Consultation (IPaC) was completed through the U.S. Fish and Wildlife Service (USFWS). Due to the sensitive nature of endangered resources, specific details are not included in this report and were provided separately to the core team.
- **Utilities:** Typically, when utilities are located within the road right-of-way and need to be relocated as part of a public roadway redesign, the cost for the relocation is the responsibility of the utility company. However, at times, there are separate agreements within large corridors that may pre-empt this. 23 CFR 645 subpart B and Wis. Stat. ss 84.01(31) and 182.017 reference such considerations. When trails are involved, sometimes this protocol is not honored.

  System maps were requested as part of this study, but limited responses were received. As part of the final design process, the utilities will be coordinated with during the design and, if necessary, will develop work plans to address any necessary relocations. The intent will be to avoid relocations.

DATA SOURCES

This study included gathering data from a number of sources, including, but not limited to, the following:

- **Calumet & Winnebago Counties**: GIS Data, Lidar, Aerial Photography
- **WisDOT:** Traffic Counts, LIDAR, Aerial Photography
- **East Central Wisconsin Regional Planning Commission (ECWRPC):** GIS Data, Crash Data, Bike/Pedestrian Counts, High Cliff Connection Master Plan
- **WDNR:** Water Surface Viewer
- **USDA Natural Resources Conservation Service** (NRCS)
- **DNR National Heritage Inventory (NHI):** Endangered Species
- **USFWS IPaC:** Endangered Species
- **Utilities**: System Maps from Utility Owners
- **Public Comment:** Existing Conditions

This initial data was supplemented with field visits, additional meetings with the core team, and various other online resources. This study did not include the following:

- Topographic Field Survey
- Geotechnical Investigations
- Wetland & Waterway Field Analysis
- Cultural & Historical Resources Reviews

Assumptions based on the level of data available are noted within the report.

STH 114 West

Exhibit 2: STH 114 West Study Overview Map

DATA ANALYSIS

The area of study for a path along STH 114 spans from Oneida St on the west to Lake Park Rd on the east for a total length of 2.06 miles.

The roadway right of way is owned by WisDOT and is entirely located within the Village of Harrison Municipal boundary. Adjacent properties along the corridor are located within the City of Menasha or Village of Harrison municipal boundaries.

Road Geometry

- Rural cross section with four 11-foot driving lanes, 5-foot paved with 3-foot stone shoulders and ditches.
- 30’ roadway clear zone.
- Fairly flat with a longitudinal running grade of 0.5% to 1% increasing from west to east with some flatter areas.
- Three side road intersections along the north side of the roadway.
- Arnold Drive and Kernan Avenue allow for four-way turning movements. The remaining two are right-in, right-out only.
- Six side road intersections on the south side of the roadway which are Fire Roads.
- All intersections allow for four-way turning movements.
- Fourteen driveways on the north side of the roadway.
- Seven driveways on the south side of the roadway.
- The posted speed is 45 mph west of Firelane 2 and 55 mph east of Firelane 2.
- The Average Annual Daily Traffic (AADT) from 2023 is 12,200.

Soils

The majority of the soils are silty loams with a hydrologic soil group rating of A/D, (see Appendix A-1 & A-2). These soils generally have slow to very slow infiltration rates, which can lead to high runoff rates. Additionally, these soils are mostly classified as “somewhat poorly drained,” which would indicate that wet soil conditions are likely to be encountered throughout the construction season.

Waterways

One unnamed stream crosses the trail along the corridor through culverts, 300 feet west of Firelane 5. No FEMA-mapped floodplains are shown within the study area.

Roadside Ditches

The corridor has relatively undefined roadway ditches throughout, which are covered with lawn turf or other vegetation.

Existing ditch capacity is calculated to be 50 CFS on average throughout the corridor. CFS is short for cubic feet per second, which is a measurement of the rate of water flow through the ditch. Given the slow infiltration rates of the soils, larger ditches and/or storm sewer will be required for stormwater conveyance.

DATA ANALYSIS (CONTINUED)

Wetlands
There are no mapped wetlands within the study area. Wetland indicator soils (see Appendix A-1 & A-2) are present as well as common wetland vegetation, such as cattails, observed throughout the ditch, indicating that wetlands are likely present throughout the study corridor.

Endangered Resources
Several possible species may be present in the corridor, but there are no required actions to confirm their presence, avoid impacts, or mitigate impacts.

Utilities
The corridor has underground gas, electric, water, sanitary, and communications lines, as well as overhead utility lines and poles on the north side of the roadway. Laterals connecting utilities to individual properties along the corridor are also present.

Adjacent Land Use
The project corridor outside the roadway right-of-way is largely residential consisting mostly of single-family use structures with some sections of multi-family use structures. There are also several commercial properties.

Right-of-Way/Real Estate Needs
The width of the right-of-way varies throughout the corridor, between 55 and 115 feet from the centerline of STH 114.

Bike & Pedestrian Counts
Due to the nature of the 4-lane highway with no bicycle or pedestrian facilities, no bike and pedestrian counts are available for this study segment.

Although demand modeling was not included in the scope of the feasibility study, it is reasonable to expect that there is demand for a bike and pedestrian facility along this study segment. There are existing segments of trail on the west end of the segment near Oneida Street and on the east end of the segment near Lake Park Road. Between the ends of the study there is existing and expanding residential housing and, if a facility was provided in this corridor, this would promote further use by bikes and pedestrians.

According to ScienceDirect, Transportation Research Part D: Transport and Environment, April 2019, “Presence of bicycle facilities (e.g., bicycle lanes, off-street trails) was positively associated with higher levels of bicycle traffic.”

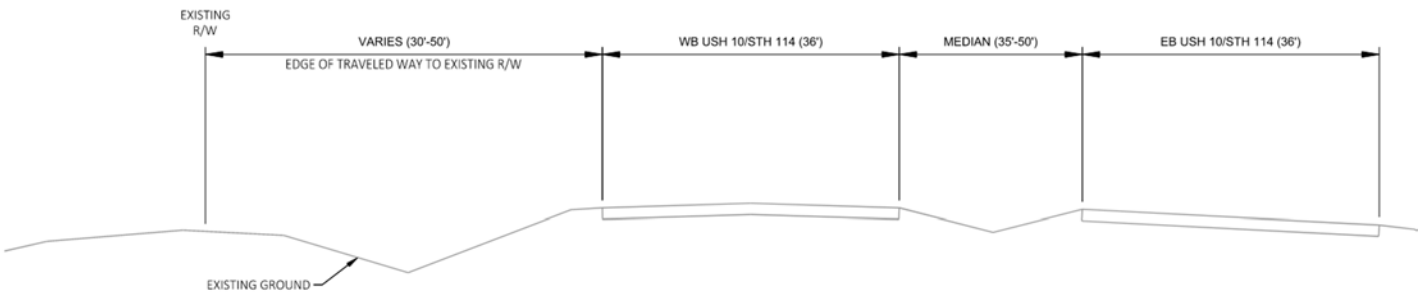


Exhibit 3: STH 114 Typical Existing Section

Roadway Crash Analysis

The ECWRPC data mapping provided information regarding crashes along the corridor between 2019 and 2023, which is summarized below.

2019 – 4 Total Crashes
- 2 motor vehicle in transport crashes
- 1 crash with non-fixed object
- 1 deer crash
- 1 leaving roadway crash

2020 – 3 Total Crashes
- 3 motor vehicle in transport crashes

2021 – 5 Total Crashes
- 4 motor vehicle in transport crashes
- 1 deer crash

2022 – 6 Total Crashes
- 1 leaving roadway crash
- 4 motor vehicle in transport crash
- 1 deer crash

2023 – 10 Total Crashes
- 7 motor vehicle in transport crashes
- 1 other
- 1 deer crash
- 1 struck by object crash

2019-2023 Crashes - 28 total crashes
- 1 leaving roadway crash (3.6%)
- 20 motor vehicle in transport crashes (71.4%)
- 4 deer crashes (14.3%)
- 1 other crash (3.5%)
- 1 struck by object crash (3.6%)
- 1 non-fixed object crash (3.6%)

Given the frequency of crashes on STH 114, properly locating the trail with respect to the adjacent roadway will be important for user safety and comfort.

PUBLIC OUTREACH

A Public Involvement Meeting (PIM) for the STH 114 West study segment was held on May 14, 2024, at the Menasha City Hall. This meeting was held in conjunction with the STH 114 East and Manitowoc Road study segments. Displays for all of the segments were presented to the public.

STH 114 West (CONTINUED)

The public was informed about the public involvement meeting using:
- Mailings to property owners along the study corridor.
- Posting on municipality websites.
- Social media posts.

The PIM was opened with a brief presentation by staff from KL Engineering, the High Cliff Connection Core team, and ECWRPC to explain the history of the project, the current project goals, and the next steps. Following the presentation, there was an open house-style meeting with displays of the existing conditions of the study areas in large roll plot formats. Attendees were asked to provide additional information regarding the existing conditions along the corridor by marking up the provided roll plots and discussing with the project team members, asking questions about the project, and providing any general comments and concerns. Following the conclusion of the meeting, materials were available for public viewing on municipality websites and project websites.

The recorded attendance of the meeting was 42, not including project staff. Four written comments were received in addition to verbal comments from meeting attendees. The feedback from attendees and how it will be considered are as follows:
- Desire to avoid tree/shrub removal to the greatest extent possible.
- Emphasis on keeping the proposed trail as far from the property line as possible.
- Keep the corridor's rural feel (no lighting, no curb and gutter, etc.).
- Concerns with the increased potential for litter and trespassing due to trail users.

Overall, the public's response to the potential trail was encouraging. They expressed their support, provided that the trail is a safe distance from STH 114 driving lanes for safety, and aligns with the proposed section as presented in Alternative 1.

Exhibit 4: STH 114 Existing Conditions Map

ALTERNATIVE DEVELOPMENT

Alternatives Discussion

The alternative developed for the STH 114 West study segment will construct 2.06 miles of shared-use trail beginning at the intersection of Oneida St and running to the east to the intersection of Lake Park Road along STH 114. Alternative 1 is on the north side of STH 114, whereas Alternative 2 runs along the south side of STH 114.

At the western edge of the project, the trail will connect to the existing Province Terrace Trail, and at the eastern end, it will connect to the Friendship Trail that continues east on the south side of STH 114.

Preliminary alternative plans are provided in Appendix: D.

Design Elements (Applicable to both Alternatives)

Typical cross section for the trail

- 4-inch of asphalt at a 10-foot width over 8-inch of 1.25-inch crushed aggregate at a 12-foot width outside of the clear zone.
- 2-foot turf shoulder.
- Accounted for possible poor soil conditions with an assumed 20% of the trail length requiring additional subgrade improvements, including 12-inch of select crushed and geotextile fabric.
- The right-of-way location will need to be confirmed with topographic survey and title searches in the design phase.

Railing

- Required at specific locations along the trail to protect users from proposed steeper than 3:1 side slopes.
- These steep side slopes may be necessary to avoid environmental impacts, property acquisition, and maintain existing drainage along the corridor.

Boardwalk

- 12-foot clear width
- Railing required if drop greater than 1-foot
- Minimizes wetland impact
- Helical pile supports

Utilities

- Based on system mapping provided by utilities, the only expected conflict currently shown is between an existing water line and fire hydrants.
- There are a couple of instances of communication line and gas line crossings of the proposed trail, but conflicts requiring a utility relocation for these utilities would not be expected.
- Overhead power is present on both sides of STH 114.
- Further coordination in the design phase of the project will be required.

Wetlands & Endangered Resources

- A wetland delineation will be required.
- Some changes in side slopes and railing limits may be required to avoid extensive wetland impacts.
- Some clearing and grubbing will likely be required.
- Based on preliminary USFWS coordination, it is possible that there will be restrictions on when this work can occur.
- Based on possible species in the corridor, it is likely that construction time restrictions and native/pollinator seeding would be required.

Intersections

- Curb ramps with detectable warning fields will be required.
- Signing along the trail and along the roadway will be required.
- Crosswalk markings will be required.

Existing drainage patterns

- Intent is to maintain existing ditch capacity and drainage patterns.
- Minor grading in the ditch is necessary. No impact on ditch capacity, existing drainage patterns, or adjacent property is expected.
- Storm sewer or culvert work is anticipated to be minimized with the trail project.

Alternative 1 – North Side of STH 114

This Alternative begins with its western terminus at the Province Terrace Trail that was previously established section of the STH 114 trail, creating a network for outdoor enthusiasts and neighborhood connectivity. As the trail progresses eastward it is outside the clear zone of westbound STH 114, allowing residents from the nearby neighborhoods on the northern side to easily access this new route. The trail terminates at the existing Lake Park Road trail. The pathway features a mix of boardwalks and asphalt surfaces, facilitating smooth passage while addressing challenges such as cut and fill, tree removal, and minimizing wetland disturbances.

Exhibit 5: STH 114 West Alternative 1- North Side Design Map

Alternative 2 – South Side of STH 114

The western endpoint of Alternative 2 is at the STH 114 and Oneida Street intersection. The trail stretches eastward, featuring sections of boardwalk—designed to handle cut and fill requirements, tree clearing, and to mitigate impacts on wetlands—along with asphalt trail. This route remains outside the clear zone for eastbound STH 114 and crosses several fire roads, ensuring a safe passage while steering clear of residential developments, allowing for a more natural experience along the trail. The western trail termination ends at an existing curb ramp at the Old Highway Trail, providing convenient access for trail users.

WisDOT Feedback

Design Displays for Alternative 1 and 2 were provided to WisDOT Staff for review and comments prior to a review meeting. The main takeaways from this meeting included:

- Desire to keep the trail outside of clear zone for as much of the corridor as possible. Willing to entertain trail within clear zone with traversable slopes but is the least desirable alternative.
- Concern regarding proposed boardwalk in same area as ditch, if ditch needs to be maintained who will do that and how will that boardwalk be removed and replaced?

PROS AND CONS

Alternative 1 - North	Alternative 2 - South
•Pros •Connection to adjacent neighborhoods •Less boardwalk •Better connection to existing trails •Less environmental impact (trees, wetlands) •Cons •Connection to Old Highway Road Segment requires STH 114 crossing **but** already exists at Lake Park.	•Pros •Less significant roadway crossings and trail connections allowing for less interruptions and stopping •Avoids crossing STH 114 to tie into Old Highway Road Segment •Cons •Little connection to nearby trails/ neighborhoods •More storm sewer and ditch impacts •Closer to STH 114 roadway •More railing required

Exhibit 6: STH 114 West Alternative 2 - South Side - Design Map

Things to consider when viewing the Pros & Cons list on the previous page:

Property Acquisition
- Expected to be expensive - estimated $50,000/acre for this area.
- Based on Wisconsin State Law, condemnation for trail projects is not allowed. If one property owner is not a willing seller it can put the project in jeopardy.

Drainage Structures
- Installation of storm sewer system can decrease necessary ditch size.
- Storm sewer is expensive to install.

Boardwalk
- Boardwalk is expensive to install and maintain.
- Boardwalk can be used to avoid wetland impact, decrease need for fill, and also be used in poor soil areas instead of more extensive excavation, thicker gravel subgrade and geosynthetic subgrade improvement.
- Should be evaluated in lieu of real estate acquisition.

A comparison is presented below for the impacts for each alternative:

Impacts	Alternative 1	Alternative 2
Drainage		Ditch and storm sewer impacts are more impactful as the trail would significantly impact the capacity of the existing roadway ditch Therefore, a storm sewer system would need to be installed to maintain drainage along the corridor
Utilities	Existing utility poles may conflict with proposed trail construction all along the cooridor	Existing utility poles may conflict with proposed trail construction all along the cooridor
Wetlands		More wetland impact likely based on desktop research performed
Intersections	50% less crossings • 3 side road intersections along the north side of the roadway • Arnold Drive and Keman Avenue allow for four way turning movements The remaining two are right-in, right-out only.	• 6 side road intersections on the south side of the roadway which are Fire Roads • Oneida Street Inersection is more impactful.
Real Estate	1.23 Acres required	0.34 Acres required
Cost (2024)	$4.0M	$5.2M

Preferred Alternative

Based on connection to existing trails, minimizing impacts to the current ditch and drainage patterns and the associated costs, as well as minimizing use of railing and maintenance costs, **it is recommended that Alternative 1 be the preferred alternative.**

Challenges that will need to be addressed moving forward include:

- Real Estate Acquisition
- Potential Wetland Areas
- Balancing the cost of real estate acquisition, storm sewer, boardwalk and subgrade corrections to provide cost effective and efficient trail system.

Preliminary Preferred Alternative Plans for the STH 114 West segment can be found on the following page.

Phases are recommended to provide flexibility for budgeting, sequencing of construction and roadway impacts. Three phases are recommended as follows:

a. Woodlands West (Lake Park Trail to Kernan)
b. Conservancy East (Conservancy to Kernan)
c. Conservancy West (Oneida to Conservancy)

Items that require further investigation in future design phases include the following:

- Confirmation of existing right-of-way location (can be confirmed by requesting title reports).
- Possible wetland areas along the corridor may require more railing installation to minimize wetland impacts.

Length and total project costs are summarized in the following table for each phase:

Segment Name	Conservancy West (Oneida to Conservancy)	Conservancy East (Conservancy to Kernan)	Woodlands West (Lake Park to Kernan)	TOTAL (STH 114 WEST)
Length (Miles)	0.38	0.51	0.53	1.42
Municipality	City of Menasha - 0.29 Mi Villiage of Harrison - 0.09 Mi	City of Menasha - 0.27 Mi Villiage of Harrison - 0.24 Mi	City of Menasha - 0.10 Mi Villiage of Harrison - 0.43 Mi	City of Menasha - 0.66 Mi Villiage of Harrison - 0.76 Mi
Timeline	2030 (Real Estate Complete) 2032-2033 (Design) 2034 (Construction)	2028 (Real Estate Complete) 2029-2030 (Design) 2031 (Construction)	2025-2026 (Design) 2029 (Construction)	2028-2030 (Real Estate Complete) 2028-2032 (Design) 2030-2034 (Construction)
Real Estate Acres	0.74	0.49	0.00	1.23
Design Cost *	$158,000.00	$201,000.00	$197,000.00	$556,000.00
Construction Cost*	$1,192,000.00	$1,564,000.00	$1,483,000.00	$4,239,000.00
Real Estate Cost*	$43,000.00	$28,000.00	$0.00	$71,000.00
Project Cost	$1,393,000.00	$1,793,000.00	$1,680,000.00	$4,866,000.00

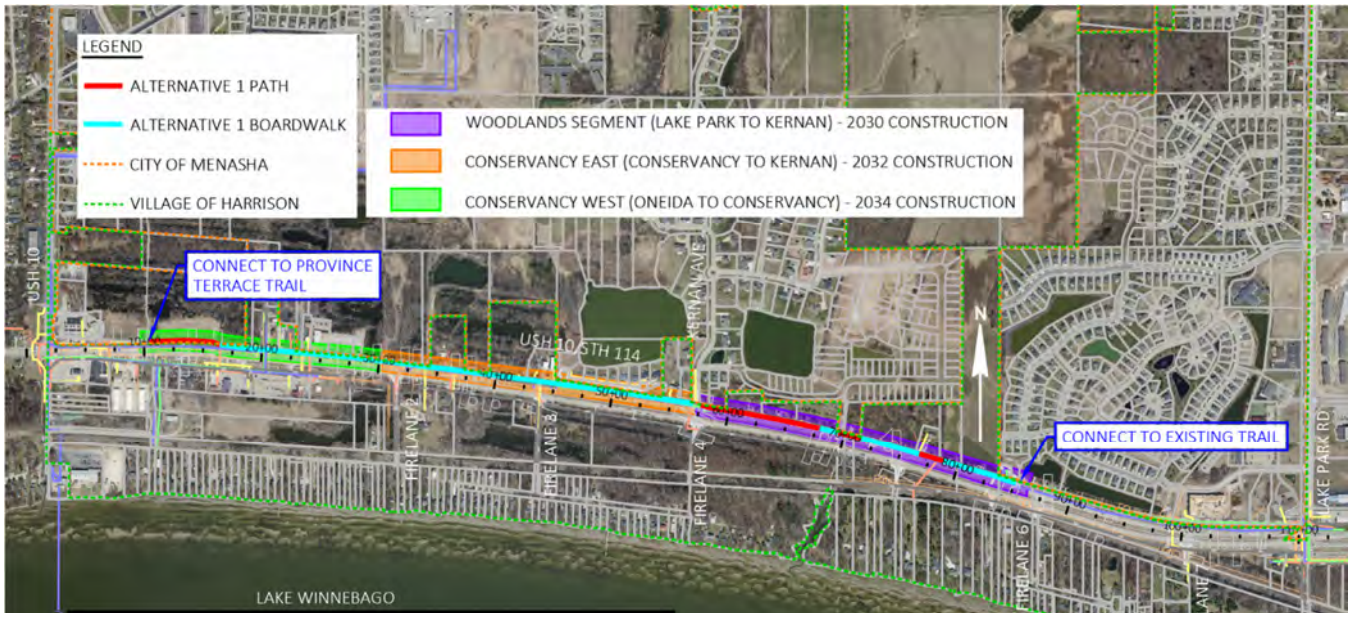


Exhibit 7: STH 114 West Preferred Alternative Design Map With Phases

Project Schedule

The project schedule presented below is based on trail connections which will occur for adjacent projects and establishes construction scope which is achievable in one year. These phases may be modified based on funding as well as other local projects.

Secure Funding

2025-2028

West Segment Woodlands West (Lake Park to Kernan)

2025-2026 Design	2029 Construction

West Segment Conservancy East (Conservancy to Kernan)

2028 Real Estate Acquisition	2029-2030 Design	2033 Construction

West Segment Conservancy West (Oneida to Conservancy)

2030 Real Estate Acquisition	2032-2033 Design	2034 Construction

2

2

PROVINCE TERRACE TRAIL

CONVENIENCE STORE INVESTMENTS

10' SHARED USE PATH

2'NP'+00

4'NP'+00

6'NP'+00

EXISTING R/W (TYP.)

MATCH LINE 6+50

USH 10/STH 114

N

LEGEND

WOODLANDS WEST SEGMENT
(LAKE PARK TO KERNAN) - 2030 CONSTRUCTION

CONSERVANCY EAST
(CONSERVANCY TO KERNAN) - 2032 CONSTRUCTION

CONSERVANCY WEST
(ONEIDA TO CONSERVANCY) - 2034 CONSTRUCTION

POTENTIAL
R/W ACQUISITION

12' BOARDWALK

SLOPE INTERCEPTS

MATCH LINE 6+50

CONVENIENCE STORE INVESTMENTS

KT REAL ESTATE HOLDINGS LLC

SYNTHIA LAMBERT

ARNOLD DR

JAN STACHOWICZ - N8808 HWY 10

BONNIE R DAY - W7170 HWY 114

TFT PROPERTIES, LLC - W714

EXISTING R/W (TYP.)

8'NP'+00

10'NP'+00

12'NP'+00

USH 10/STH 114

MATCH LINE 13+00

N

PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 WEST	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSOTHER\050201-PN_USH10 NORTH-POTENTIALREALESTATEACQUISITION.DWG
LAYOUT NAME - PN N 01

PLOT DATE : 1/15/2025 9:17 AM PLOT BY : NATHAN RULLMAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

2

MATCH LINE 13+00

MATCH LINE 19+50

MATCH LINE 19+50

MATCH LINE 26+00

PROPERTIES, LLC - W7158 HWY 114

HWY 114

CMAC HOLDINGS, LLC - W7150 HWY 114

CMAC HOLDINGS, LLC

CMAC HOLDINGS, LLC - W7124 HWY 114

EXISTING R/W (TYP.)

14'NP'+00

16'NP'+00

18'NP'+00

USH 10/STH 114

CITY OF MENASHA

EXISTING R/W (TYP.)

20'NP'+00

22'NP'+00

24'NP'+00

MICHAEL J. GAMBSKY

CHAD M

TIN - W7068 HWY 114

USH 10/STH 114

N

N

LEGEND

WOODLANDS WEST SEGMENT
(LAKE PARK TO KERNAN) - 2030 CONSTRUCTION

CONSERVANCY EAST
(CONSERVANCY TO KERNAN) - 2032 CONSTRUCTION

CONSERVANCY WEST
(ONEIDA TO CONSERVANCY) - 2034 CONSTRUCTION

POTENTIAL
R/W ACQUISITION

12' BOARDWALK

SLOPE INTERCEPTS

PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 WEST	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSOTHER\050201-PN_USH10 NORTH-POTENTIALREALESTATEACQUISITION.DWG
LAYOUT NAME - PN N 02

PLOT DATE : 1/15/2025 9:17 AM PLOT BY : NATHAN RULLMAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

2

MATCH LINE 26+00

MATCH LINE 32+50

MATCH LINE 32+50

MATCH LINE 39+00

CHAD M MARTIN - W7068 HWY 114

MICHAEL J. GAMBSKY

EXISTING R/W (TYP.)

TIMOTHY J SMITH - W7010 HWY 114

26'NP'+00

28'NP'+00

30'NP'+00

32'NP'+00

USH 10/STH 114

N

LEGEND

WOODLANDS WEST SEGMENT
(LAKE PARK TO KERNAN) - 2030 CONSTRUCTION

CONSERVANCY EAST
(CONSERVANCY TO KERNAN) - 2032 CONSTRUCTION

CONSERVANCY WEST
(ONEIDA TO CONSERVANCY) - 2034 CONSTRUCTION

POTENTIAL
R/W ACQUISITION

12' BOARDWALK

SLOPE INTERCEPTS

TIMOTHY J SMITH - W6998 HWY 114

34'NP'+00

36'NP'+00

38'NP'+00

EXISTING R/W (TYP.)

LAKE COTTAGE CT

10' SHARED USE PATH

USH 10/STH 114

N

PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 WEST	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSOTHER\050201-PN_USH10 NORTH-POTENTIALREALESTATEACQUISITION.DWG
LAYOUT NAME - PN N 03

PLOT DATE : 1/15/2025 9:17 AM PLOT BY : NATHAN RULLMAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

2

MATCH LINE 39+00

LAKE COTTAGE CT

JACOB MALZAHN

EXISTING 20' TRAIL EASEMENT

EXISTING R/W (TYP.)

WEBORG CRAIG L IRREVOCABLE TRUST

40'NP'+00

42'NP'+00

44'NP'+00

10' SHARED USE PATH

USH 10/STH 114

MATCH LINE 45+50

N

LEGEND

WOODLANDS WEST SEGMENT
(LAKE PARK TO KERNAN) - 2030 CONSTRUCTION

CONSERVANCY EAST
(CONSERVANCY TO KERNAN) - 2032 CONSTRUCTION

CONSERVANCY WEST
(ONEIDA TO CONSERVANCY) - 2034 CONSTRUCTION

POTENTIAL
R/W ACQUISITION

12' BOARDWALK

SLOPE INTERCEPTS

MATCH LINE 45+50

KERNAN AVE

TINA SCHMOLD, TRUSTEE OF THE ILDRED FAMI - 2455 KELLY

WEBORG CRAIG L IRREVOCABLE TRUST

46'NP'+00

48'NP'+00

50'NP'+00

10' SHARED USE PATH

PAMELA A. CRAMER

EXISTING R/W (TYP.)

DANIEL H GRAY - W6864 HWY 114

EXTENDED MEDIAN AND POTENTIAL SIGNING TO WARN AND SLOW DOWN STH 114 TURNING TRAFFIC TO BE EVALUATED DURING FINAL DESIGN PHASE

USH 10/STH 114

MATCH LINE 52+00

N

PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 WEST	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSOTHER\050201-PN_USH10 NORTH-POTENTIALREALESTATEACQUISITION.DWG
LAYOUT NAME - PN N 04

PLOT DATE : 1/15/2025 9:18 AM PLOT BY : NATHAN RULLMAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

2

MATCH LINE 52+00

MARY D MORALES - W6846 HWY 114

10' SHARED USE PATH

EXISTING R/W (TYP.)

STUMPF FAMILY ENTERPRISES LLC

54'NP'+00

56'NP'+00

58'NP'+00

USH 10/STH 114

MATCH LINE 58+50

N

LEGEND

WOODLANDS WEST SEGMENT
(LAKE PARK TO KERNAN) - 2030 CONSTRUCTION

CONSERVANCY EAST
(CONSERVANCY TO KERNAN) - 2032 CONSTRUCTION

CONSERVANCY WEST
(ONEIDA TO CONSERVANCY) - 2034 CONSTRUCTION

POTENTIAL
R/W ACQUISITION

12' BOARDWALK

SLOPE INTERCEPTS

MATCH LINE 58+50

LINDA J. BARTELT - W6794 HWY 114

DOUGLAS P BODWAY - W6762 HWY 114

10' SHARED USE PATH

EXISTING R/W (TYP.)

60'NP'+00

62'NP'+00

64'NP'+00

USH 10/STH 114

CALUMET COUNTY HWY 10/114 ROW

MATCH LINE 65+00

N

PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 WEST	SHEET E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSOTHER\050201-PN_USH10 NORTH-POTENTIALREALESTATEACQUISITION.DWG
LAYOUT NAME - PN N 05

PLOT DATE : 1/15/2025 9:18 AM PLOT BY : NATHAN RULLMAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

2

MATCH LINE 65+00

DOUGLAS P BODWAY - W6762 HWY 114

BECKY WEBER - W6748 HWY 114

10' SHARED USE PATH

JAMES L BODWAY - W6730 HWY 114

EXISTING R/W (TYP.)

JAMES L BODWAY

66'NP'+00

68'NP'+00

70'NP'+00

USH 10/STH 114

MATCH LINE 71+50

N

LEGEND

WOODLANDS WEST SEGMENT
(LAKE PARK TO KERNAN) - 2030 CONSTRUCTION

CONSERVANCY EAST
(CONSERVANCY TO KERNAN) - 2032 CONSTRUCTION

CONSERVANCY WEST
(ONEIDA TO CONSERVANCY) - 2034 CONSTRUCTION

POTENTIAL
R/W ACQUISITION

12' BOARDWALK

SLOPE INTERCEPTS

MATCH LINE 71+50

JAMES L BODWAY

EXISTING R/W (TYP.)

72'NP'+00

WAVERLY SANITARY DISTRICT

74'NP'+00

10' SHARED USE PATH

CITY OF MENASHA

CITY OF MENASHA

EXISTING TRAIL

USH 10/STH 114

N

PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 WEST	SHEET E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSOTHER\050201-PN_USH10 NORTH-POTENTIALREALESTATEACQUISITION.DWG
LAYOUT NAME - PN N 06

PLOT DATE : 1/17/2025 3:44 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

STH 114 East

Exhibit 8: STH 114 East Study Overview Map

DATA ANALYSIS

The area of study for a path along STH 114 spans from Firelane 12 on the west end to Pigeon Road on the east end for a total length of 1.55 miles.

Over this length, the Village of Harrison has jurisdiction.

Road Geometry

- Rural cross-section consisting of two, 12-foot lanes with 3-foot paved shoulders and 5-foot gravel shoulder.
- Fairly flat with a longitudinal running grade of 0.4% to 2% increasing from east to west with some flatter areas.
- Twi side road intersections along the corridor including Firelane 13 and State Park Road are present on the south side of the road.
- Six driveways exist on the south side of the roadway.
- The posted speed is 55 mph.
- The Average Annual Daily Traffic (AADT) from 2023 is 10,600 and clear zone of 44-feet.

Soils

The majority of the soils are silty loams with a hydrologic soil group rating of C and D (see Appendix A-3 & A-4). These soils generally have slow to very slow infiltration rates, which can lead to high runoff rates. Additionally, these soils are classified as “somewhat poorly drained,” which would indicate that wet soil conditions are likely to be encountered throughout the construction season.

Waterways

One unnamed stream crosses west of Pigeon Road through culverts. No FEMA- mapped floodplains are shown within the study area.

Roadside Ditches

The corridor has deep roadway ditches throughout. The ditches are mainly covered with lawn turf or wild vegetation. Standing water was observed in some ditch areas during the site visit and aerial photography. Ditch capacity is estimated at 144 CFS.

Given the soil conditions we would expect to need larger ditches and/or storm sewer for water conveyance and subgrade improvements for pavement stability.

DATA ANALYSIS (CONTINUED)

Adjacent Land Use

The project corridor outside the roadway right- of-way is largely agricultural consisting mainly of farm fields. Additionally, there is residential land with single-family homes and large lots. There are several parcel zoned for industrial and commercial use.

Right-of-Way

The width of the right-of-way is varies throughout the corridor between 66 and 82-foot. The roadway is located within the center of the right-of-way throughout the corridor.

Bike & Pedestrian Counts

Due to the nature of the 2-lane highway with no bicycle or pedestrian facilities no bike and pedestrian counts are available for this study segment. It is reasonable to expect that there is demand for a bike and pedestrian facility along this study segment. based on the use of the Friendship Trail - an off-road shared-use pathway that exists at the western terminus of this area being studied. Additionally, increased users would be expected if regional trail connections are made and the ultimate goal to connect off-road trails to High Cliff State Park is achieved.

Roadway Crash Analysis

Information regarding crashes along the corridor between 2019 and 2023 was obtained from the ECWRPC data mapping and is summarized below.

2019 – 4 Total Crashes
- 3 motor vehicle in transport crashes
- 1 leaving roadway crash

2020 – 9 Total Crashes
- 3 deer crashes
- 6 vehicle in transport crashes.

2021 – 7 Total Crashes
- 3 Motor vehicle in transport crashes
- 2 leaving roadway crashes
- 2 deer

2022 – 9 Total Crash
- 1 rollover crash
- 6 motor vehicle in transport crashes
- 2 deer crashes

2023 – 4 Total Crashes
- 2 motor vehicle in transport crashes
- 2 deer crashes

2019-2023 Crashes - 33 total crashes
- 3 leaving roadway crashes (9.1%)
- 20 motor vehicle in transport crashes (60.6%)
- 9 deer crashes (27.3%)
- 1 rollover crash (3%)

Given the speed and number of crashes within this segment of STH 114, design must consider proper intersection design and ensure that sufficient space is provided between the roadway and trail.

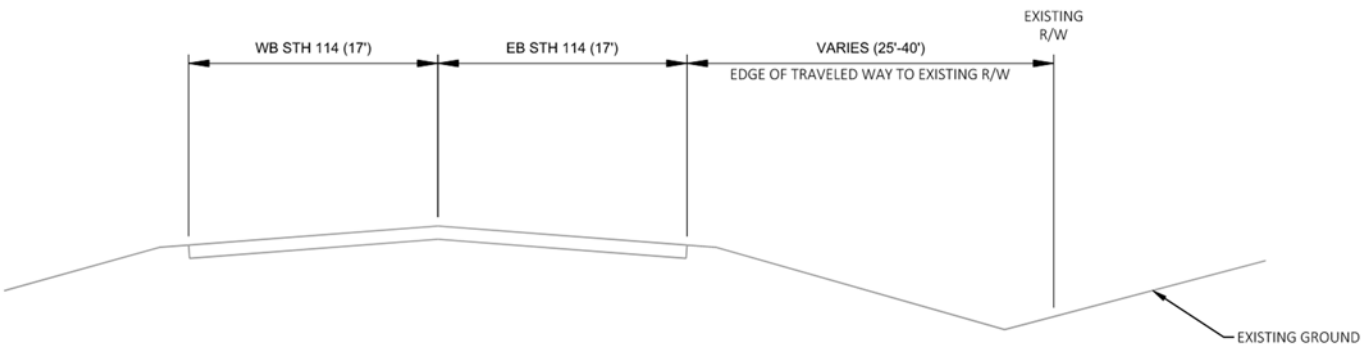


Exhibit 9: STH 114 East Typical Existing Section

PUBLIC OUTREACH

The Public Information Meeting (PIM) was opened with a brief presentation by staff from KL Engineering, the High Cliff Connection Core team, and ECWRPC to explain the history of the project, the current project goals, and the next steps.

Following the presentation, there was an open house-style meeting with displays of the existing conditions of the study areas in large roll plot formats. Attendees were asked to provide additional information regarding the existing conditions along the corridor by marking up the provided roll plots and discussing with the project team members, asking questions about the project, and providing any general comments and concerns. Following the conclusion of the meeting, materials were available for public viewing on municipality websites and project websites.

Attendees were asked to provide additional information regarding the existing conditions along the corridor by marking up the provided roll plots and discussing with the project team members, asking questions regarding the project, and providing any general comments and concerns.

The recorded attendance of the meeting was 42, not including project staff. Nine written comments were received and incorporated into this study.

Feedback about the project and how it will be considered is as follows:

- The STH 114 corridor experiences many accidents and vehicles travel at a high rate of speed. Use of this corridor should consider the speeds and safety.

Overall feedback regarding a potential trail along STH 114 was positive with safety of vehicles and trail uses as a priority.

Exhibit 10: STH 114 East Existing Conditions Map

ALTERNATIVE DEVELOPMENT

Based on the overall vision of the High Cliff Connection Core team, the southside of STH 114 is the only side being evaluated. Friendship trail has an off-road path south of STH 114 (west of study area) and the State Park is south STH 114 lending the team to follow the south side of STH 114. The project would tie into Firelane 12 on the west and Pigeon Road on the east. Both alternatives consist of asphaltic pavement (boardwalk is not envisioned to be needed).

Design Elements (Applicable to both Alternatives)

Typical cross section for the trail

- 4-inch of asphalt at a 10-foot width over 8-inch of1.25-inch crushed aggregate at a 12-foot width outside of the clear zone.
- 2-foot turf shoulder.
- Accounted for possible poor soil conditions with an assumed 20% of the trail length requiring additional subgrade improvements, including 12-inch of select crushed and geotextile fabric.
- The right-of-way location will need to be confirmed with topographic survey and title searches in the design phase.

Utilities

- Based on system mapping provided by utilities, the only expected conflict currently shown is between an existing water line and fire hydrants.
- Further coordination in the design phase of the project will be required.

Intersections

- Curb ramps with detectable warning fields will be required.
- Signing along the trail and along the roadway will be required.
- Crosswalk markings will be required.

Existing drainage patterns

- Intent is to maintain existing ditch capacity and drainage patterns.
- Minor grading in the ditch is necessary. No impact on ditch capacity, existing drainage patterns, or adjacent property is expected.

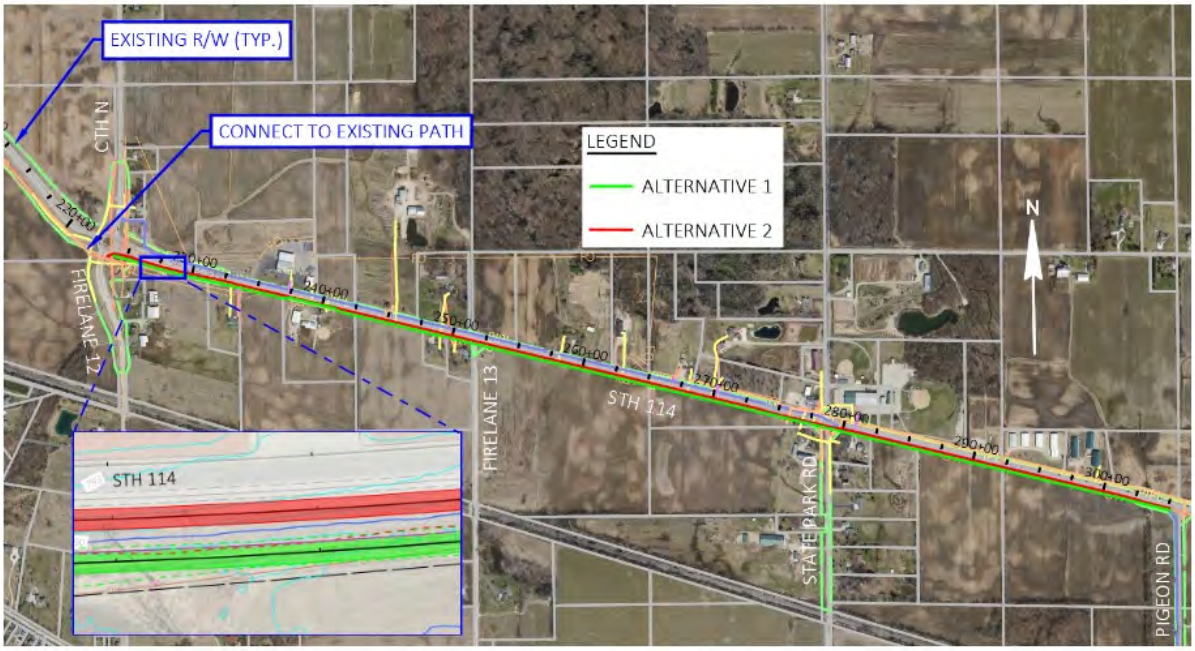


Exhibit 11: STH 114 Alternative Map

Alternative 1 – Within Clear Zone of STH 114.

This alternative runs parallel to the travel lane with approximately 10-foot from the edge of travel to edge of trail. Given the proximity to the roadway, limited right-of-way acquisition is required. Safety is a concern which would need to be addressed to maintain user safety and ensure the roadway clear zones based on the closeness of the trail and edge of roadway.

Alternative 2 – Outside Clear Zone of STH 114.

Alternative 2 is situated outside of the clear zone which improves safety and offers a more enjoyable experience. Much of the trail will require acquisition of right-of-way.

PROS AND CONS

Alternative 1	Alternative 2
•Pros •Less ROW acquisition •Less impact to properties along path. •Cons •Proximity of trail to roadway would require additional measures to ensure safety	•Pros •Improved safty resulting from distance from roadway •Straight alignment •Cons •ROW acquisition •Potential utility relocation

A comparison is presented below for the impacts for each alternative

Impacts	Alternative 1	Alternative 2
Drainage	Existing large ditches required for stormwater capacity limit design- if intent to stay within existing R/W. Therefore, extensive piped stormwater system would be required.	Maintains existing drainage patterns, builds trail outside of existing ditch and maintains ditch capacity.
Utilities	Similar Impacts to OH Power	
Wetlands	Similar Impacts	
Intersections	Better distance from trail to STH 114. Longer crossing distance compared to alternative 2 but may more noticeable to STH 114 traffic based on proximity to intersection	Alternative 2 provides a smaller crossing distance of side roads compared to Alternative 1.
Real Estate	0 Acres	3.16 Acres
Cost (2024)	$3.8M	$1.3M

Things to consider when viewing the Pros & Cons list:

Property Acquisition

- Expected to be expensive – estimated $50,000/acre for this area.
- Based on Wisconsin State Law, condemnation for trail projects is not allowed. If 1 property owner is not a willing seller it can put the project in jeopardy.

Railing

- Expensive to initially install and maintain.
- Can decrease impacts to environmentally sensitive areas and utilities.
- Can decrease amount of fill required for trail installation.

Drainage Structures

- Installation of storm sewer system can decrease necessary ditch size.
- Storm sewer is expensive to install.
- Large pipe culverts are expensive to install, and railing is often necessary to protect users from drop off and steep slopes near installation areas.

WisDOT Feedback

Design Displays for Alternative 1 and 2 were provided to WisDOT Staff for review and comments prior to a review meeting. The main takeaways from this meeting included:

- Desire to keep the trail outside of clear zone.
- Maintenance concerns if trail is 5 feet off of the paved shoulder edge where will the snow be stored?
- Should extending pipes owned and maintained by WisDOT be required, recommend using a storm sewer connection via manhole or inlet in order to clearly show future WisDOT and Village/City staff which entity is responsible for maintenance of the drainage structures.

Preferred Alternative

Based on safety and minimizing costs for stormwater conveyance, **it is recommended that Alternative 2 be the preferred alternative.**

Challenges that will need to be addressed moving forward include:

- Real Estate Acquisition
- Potential Unforeseen Wetland Areas

Preliminary Preferred Alternative Plans for the STH 114 East segment can be found on the following pages.

Schedule

STH 114 East construction is currently anticipated to be constructed between 2032 and 2036. Design will begin two years prior to construction to allow for permitting and WisDOT approvals

Potential Costs

The construction costs assume that the project is being constructed as a standalone project:

Segment Name	STH 114 EAST
Length (Miles)	1.55
Municipality	Villiage of Harrison
Timeline	2032 (Real Estate Complete) 2033-2034 (Design) 2034-2035 (Construction)
Real Estate Acres	3.13
Design Cost *	$401,000.00
Construction Cost*	$1,208,000.00
Real Estate Cost*	$181,000.00
Project Cost	$1,790,000.00

*Project costs provided account for 3% inflation rate from 2024 cost estimates in the year that design, acquisition, or construction is expected

The detailed cost estimate is included in the Appendix B-1.

Exhibit 12: STH 114 East Preferred Alternative Map

2

2

FIRELANE 12

225+00

STH 114

230+00

N

225'CZ'+00

230'CZ'+00

EXISTING R/W (TYP.)

10' SHARED USE PATH

RELOCATE POWER POLE WITHIN DOT R/W

ADA COMPLIANT CURB RAMPS AT INTERSECTION TO BE DESIGNED DURING FINAL DESIGN PHASE

EDWIN R DAVIDSON - N8464 FIRELANE 12 RD

EDWIN R DAVIDSON - N8464 FIRELA

MATCH LINE 230+50

MATCH LINE 230+50

235+00

STH 114

RELOCATE POWER POLE WITHIN DOT R/W

235'CZ'+00

EXISTING R/W (TYP.)

10' SHARED USE PATH

ANE 12 RD

DEANNA R FISCHER - W5635 HWY 114

JOSE VARGAS MUNIZ

JOSE VARGAS MUNIZ

MATCH LINE 237+00

LEGEND

PATH PAVEMENT

POTENTIAL R/W ACQUISITION

SLOPE INTERCEPTS

PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 EAST	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050202-PN_STH 114 EAST SEGMENT.DWG
LAYOUT NAME - PN 01

PLOT DATE : 12/6/2024 6:23 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

MATCH LINE 237+00

240+00

240'CZ'+00

STH 114

RELOCATE POWER POLE WITHIN DOT R/W

RELOCATE POWER POLE WITHIN DOT R/W

RELOCATE POWER POLE WITHIN DOT R/W

EXISTING R/W (TYP.)

10' SHARED USE PATH

JOSE VARGAS MUNIZ - W5595 HWY 114

FENCE

MATCH LINE 243+50

MATCH LINE 243+50

245+00

245'CZ'+00

STH 114

RELOCATE POWER POLE WITHIN DOT R/W

RELOCATE POWER POLE WITHIN DOT R/W

10' SHARED USE PATH

EXISTING R/W (TYP.)

STEVEN J REUTER

STEVEN J REUTER - W5519 HWY 114

STEVEN J REUTER

MATCH LINE 250+00

LEGEND

PATH PAVEMENT

POTENTIAL R/W ACQUISITION

SLOPE INTERCEPTS

PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 EAST	SHEET E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050202-PN_STH 114 EAST SEGMENT.DWG
LAYOUT NAME - PN 02

PLOT DATE : 12/6/2024 6:24 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

2

MATCH LINE 250+00

0+00

255+00

STH 114

802

3'

4'

2'+00

255'CZ'+00

9'

DAVID O ROBBINS - WI5503 HWY 114

DAVID O ROBBINS

801

ADA COMPLIANT CURB RAMPS AT INTERSECTION TO BE DESIGNED DURING FINAL DESIGN PHASE

STUMPF FAMILY ENTERPRISES LLC

10' SHARED USE PATH

EXISTING R/W (TYP.)

N

MATCH LINE 256+50

MATCH LINE 256+50

260+00

STH 114

RELOCATE POWER POLE WITHIN DOT R/W

RELOCATE POWER POLE WITHIN DOT R/W

260'CZ'+00

4'

9'

800

EXISTING R/W (TYP.)

10' SHARED USE PATH

STUMPF FAMIL

MATCH LINE 263+00

LEGEND

PATH PAVEMENT

POTENTIAL R/W ACQUISITION

SLOPE INTERCEPTS

PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 EAST	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050202-PN_STH 114 EAST SEGMENT.DWG
LAYOUT NAME - PN 03

PLOT DATE : 12/6/2024 6:24 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

MATCH LINE 263+00

265+00

RELOCATE POWER POLE WITHIN DOT R/W

STH 114

RELOCATE POWER POLE WITHIN DOT R/W

265'CZ'+00

EXISTING R/W (TYP.)

ANDREW STUMPF - W5397 HWY 114

10' SHARED USE PATH

Y ENTERPRISES LLC

MATCH LINE 269+50

MATCH LINE 269+50

270+00

RELOCATE POWER POLE WITHIN DOT R/W

STH 114

275+00

RELOCATE POWER POLE WITHIN DOT R/W

270'CZ'+00

275'CZ'+00

10' SHARED USE PATH

EXISTING R/W (TYP.)

ANDREW STUMPF - W5397 HWY 114

ANDREW STUMPF

MATCH LINE 276+00

LEGEND

PATH PAVEMENT

POTENTIAL R/W ACQUISITION

SLOPE INTERCEPTS

PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 EAST	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050202-PN_STH 114 EAST SEGMENT.DWG
LAYOUT NAME - PN 04

PLOT DATE : 12/6/2024 6:24 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

MATCH LINE 276+00

RELOCATE POWER POLE WITHIN DOT R/W

ANDREW D STUMPF - N8389 STATE PARK RD

280+00

STH 114

280'C2'+00

10' SHARED USE PATH

ADA COMPLIANT CURB RAMPS AT INTERSECTION TO BE DESIGNED DURING FINAL DESIGN PHASE

EXISTING R/W (TYP.)

TODD L WITTMANN - W5297 HWY 114

TODD L WITTMANN

TODD L WITTMANN

MATCH LINE 282+50

2

MATCH LINE 282+50

285+00

STH 114

285'C2'+00

RELOCATE POWER POLE WITHIN DOT R/W

PAMELA A WITTMANN

10' SHARED USE PATH

EXISTING R/W (TYP.)

AMERI-DON LLC

MATCH LINE 289+00

LEGEND

PATH PAVEMENT

POTENTIAL R/W ACQUISITION

SLOPE INTERCEPTS

PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 EAST	SHEET E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050202-PN_STH 114 EAST SEGMENT.DWG
LAYOUT NAME - PN 05

PLOT DATE : 12/6/2024 6:24 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

MATCH LINE 289+00

290+00

STH 114

290'EZ'+00

RELOCATE POWER POLE WITHIN DOT R/W

10' SHARED USE PATH

RELOCATE POWER POLE WITHIN DOT R/W

EXISTING R/W (TYP.)

295+00

295'CZ'+00

RELOCATE POWER POLE WITHIN DOT R/W

AMERI-DON LLC

BARBARA J JACK

MATCH LINE 295+50

MATCH LINE 295+50

300+00

STH 114

300'CZ'+00

RELOCATE POWER POLE WITHIN DOT R/W

10' SHARED USE PATH

EXISTING R/W (TYP.)

RELOCATE POWER POLE WITHIN DOT R/W

BARBARA J JACK

MATCH LINE 302+00

LEGEND

PATH PAVEMENT

POTENTIAL R/W ACQUISITION

SLOPE INTERCEPTS

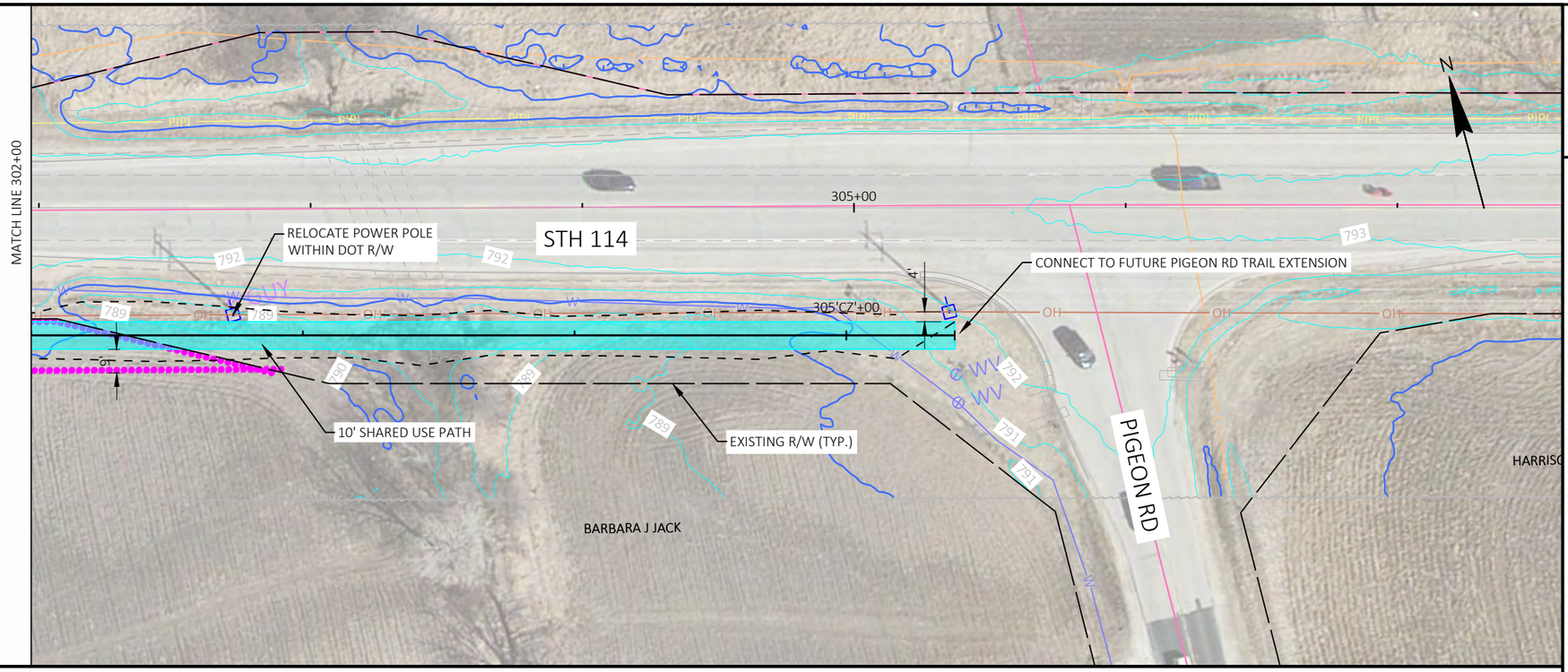
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 EAST	SHEET E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050202-PN_STH 114 EAST SEGMENT.DWG
LAYOUT NAME - PN 06

PLOT DATE : 12/6/2024 6:25 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2



2

LEGEND

- PATH PAVEMENT
- POTENTIAL R/W ACQUISITION
- SLOPE INTERCEPTS

PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	HIGH CLIFF STATE TRAIL - C MENASHA CORRIDOR - STH 114 EAST	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050202-PN_STH 114 EAST SEGMENT.DWG
LAYOUT NAME - PN 07

PLOT DATE : 12/6/2024 6:25 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

NEXT STEPS

PLAN COMMITMENT

For this study to be successful, it will need to be adopted by the Village of Harrison, Village of Sherwood, and City of Menasha and incorporated by reference into the following:

- Comprehensive Bike/Ped Plans
- Future 5-year Prioritized Capital Project Plan
- Annual Budgets
- Future Land Use Plan
- Future Comprehensive Outdoor Recreation Plan
- Long-Range Transportation Plan

In addition to the local municipalities, inclusion/adoption of the recommendations from this report in County and regional open space and transportation-related reports will all be helpful.

FUNDING POSSIBILITIES

WisDOT Grants

When receiving a WisDOT grant, the design would need to go through the WisDOT Local Program process. The time from grant application to award can vary greatly. Once a grant is awarded and typically around six months from grant award, a State Municipal Agreement would need to be signed by WisDOT and the project applicant (sponsor). The design process, beginning from selecting a design consultant through awarding the contract for construction, typically takes two years, and most trail construction projects can be constructed in one construction season.

Grant Name: Transportation Alternatives Program (TAP)

Supporting Agency: WisDOT

Description: The main WisDOT Grant that provides trail funding to local communities is the Transportation Alternatives Program (TAP) grant. TAP Grants are commonly provided as 80% federal funds with a 20% match from the local municipality (sponsor) required. Design and construction costs are eligible.

High Scoring Criteria: In addition to project cost, there are several items that would give a project an advantage in the TAP grant application process, including:

- Logical termini
  - Begin and end of the trail, make connections to existing trails, points of interest, schools, parks, neighborhoods, commercial areas, etc.
  - The project named in the planning documents mentioned in the Plan Commitment section above.
- Partnerships
  - Work with adjacent municipalities, county, advocacy groups, businesses, and private foundations to build support for the project and use support letters as attachments to the application.
- Completion of the feasibility study
  - Providing proof that the proposed project corridor has been studied to a level that provides some confidence that there are not any glaring barriers to project completion is helpful with an application submittal.

Typical Grant Awards: Grant award amounts can vary greatly in the TAP program. A good rule of thumb to use when strategizing for a TAP Grant application is a construction cost of $1.2 million or less.

Timing of the Grant Applications & Awards: TAP projects are typically solicited every two years on even years, but that schedule is highly dependent on the federal budget and can vary.

Typical Time From Award to Construction: Typically two years between award and construction with design completed during this timeframe.

Overview of Pros

- 80% of funding is higher than many available grants.
- Total project cost is higher than many available grants.

Overview of Cons

- Adherence to more rigorous documentation and approval process.

All segments of project are applicable.

Grant Name: DNR Trail Grants
Supporting Agency: DNR

Description: DNR grants are also available that could assist in the funding for this project. There are a number of state and federal grants that fall under the DNR Stewardship umbrella.

Recreational Trails Program (RTP) federal funds can only be used on trails that have been identified in or which further a specific goal of a local, county, or state trail plan included or referenced in a statewide comprehensive outdoor recreation plan required by the Federal LWCF Program.

Stewardship funds may be used on projects including land acquisition for parks and trails and construction of hiking trails and bike paths as well as parks and water recreation facilities.

High Scoring Criteria:
- Provide public access to outdoor recreation
- Relationship to the Statewide Comprehensive Outdoor Recreation Plan
- Regional (Stewardship) or statewide (RTP) in nature
- Serves the greatest populations
- Involves intergovernmental cooperation or donations
- Supports multiple uses
- Nature-based
- Related or near water facilities
- Improvements to allow for universal accessibility

Typical Grant Awards:
- Stewardship: Up to $250,000 typical (range from $50,000 to $1,000,000)
- RTP: $250,000 every three years, $100,000 other years within cycle
- Design and construction costs are eligible.

Timing of the Grant Applications & Awards: Applications are due in spring of each year, with notification of award occurring in early fall. Typical time from award to construction: One year from authorization is typical.

Overview of Pros
- 50% federal/state match / 50% local (Stewardship)
- 80% federal/state match / 20% local (RTP)
- Design must meet ADA and DNR standards, but no additional reporting other than standard local permits, etc.

Overview of Cons
- Intensive grant application process
- Slower reimbursement timeframe (3 months to 1 year)
- Strong statewide competition for grants (typically get three times the amount of applicants than awards)

All segments of the project are applicable.

To be eligible, the applicant must have a current Comprehensive Outdoor Recreation Plan (CORP) in place.

Further information on DNR grants is available here: 2024_Grant_Program_Guidance_Booklet.pdf

NEXT STEPS (CONTINUED)

PARTNERSHIPS & LOCAL ORGANIZATIONS

The local municipalities have done a great job building partnerships with each other, as well as with other organizations. It would be important to continue fostering these relationships and coordinate efforts to schedule and fund the proposed projects. Example partnerships include:

- Community Foundation for the Fox Valley Region (CFFVR) has already financially supported the efforts in the High Cliff Connection project by committing to a 3:1 match with a local match of $2,000,000 in 2022.
- Chamber of Commerce/Convention Visitors Bureau grants can be applied for tourist attractions
- Community Development Business Grants (CDBG)
- East Central Wisconsin Regional Planning Commission (ECWRPC)
- Fox Cities Greenways
- Local service groups (Rotary, Kiwanis), etc.

STH 114 and Pigeon Road

STH 114 West Soils

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Gb	Granby fine sandy loam	298.6	67.5%
KnB2	Kewaunee loam, 2 to 6 percent slopes, eroded	5.5	1.2%
KnD2	Kewaunee loam, 12 to 20 percent slopes, eroded	13.6	3.1%
MbA	Manawa silt loam, 0 to 3 percent slopes	35.9	8.1%
Po	Poygan silty clay loam, 0 to 2 percent slopes, occasionally ponded, drained	5.0	1.1%
TeA	Tedrow loamy fine sand, 0 to 3 percent slopes	12.1	2.7%
W	Water	59.6	13.5%
Subtotals for Soil Survey Area		**430.2**	**97.3%**
Totals for Area of Interest		**442.3**	**100.0%**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ks	Kingsville mucky loamy fine sand	8.2	1.9%
UoA	Udorthents, 0 to 3 percent slopes	1.4	0.3%
W	Water greater than 40 acres	2.4	0.5%
Subtotals for Soil Survey Area		**12.0**	**2.7%**
Totals for Area of Interest		**442.3**	**100.0%**

APPENDIX A-2

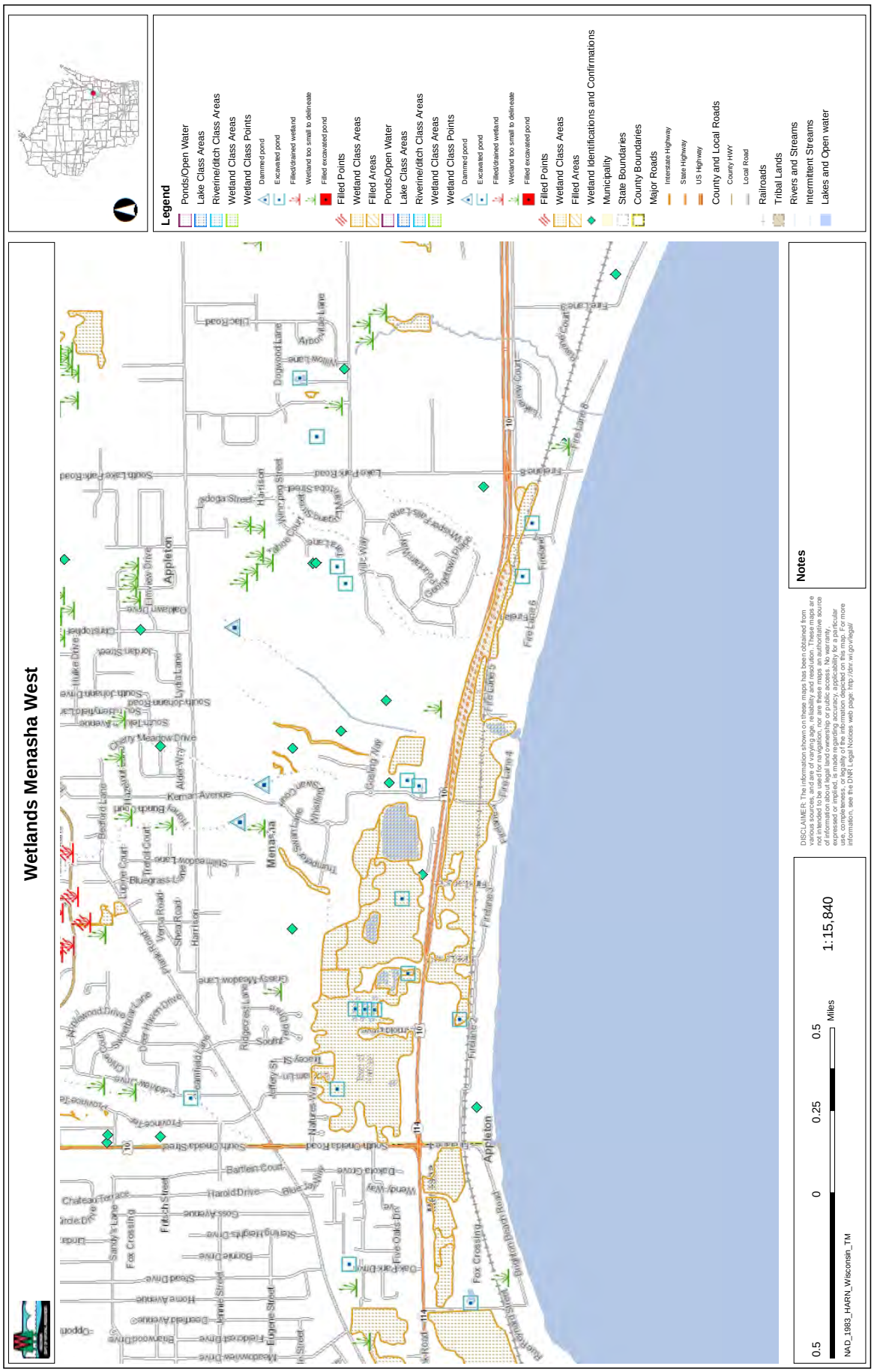
STH 114 West Soils

Hydrologic Soil Group

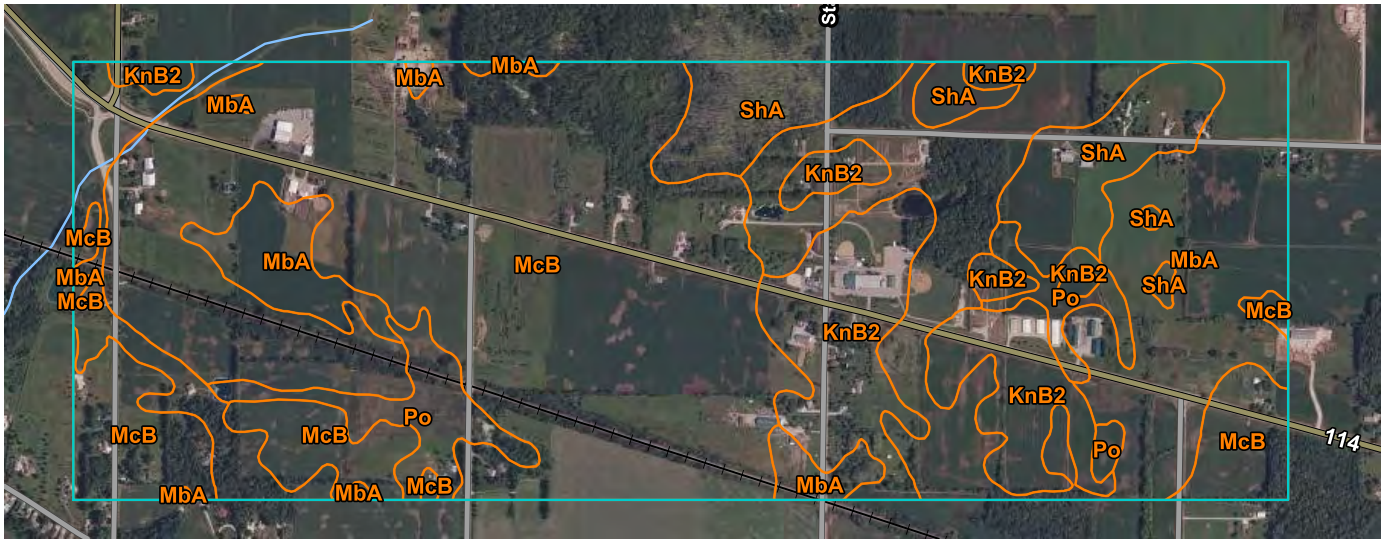
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Gb	Granby fine sandy loam	A/D	298.6	67.5%
KnB2	Kewaunee loam, 2 to 6 percent slopes, eroded	D	5.5	1.2%
KnD2	Kewaunee loam, 12 to 20 percent slopes, eroded	D	13.6	3.1%
MbA	Manawa silt loam, 0 to 3 percent slopes	D	35.9	8.1%
Po	Poygan silty clay loam, 0 to 2 percent slopes, occasionally ponded, drained	C/D	5.0	1.1%
TeA	Tedrow loamy fine sand, 0 to 3 percent slopes	A/D	12.1	2.7%
W	Water		59.6	13.5%
Subtotals for Soil Survey Area			**430.2**	**97.3%**
Totals for Area of Interest			**442.3**	**100.0%**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ks	Kingsville mucky loamy fine sand	A/D	8.2	1.9%
UoA	Udorthents, 0 to 3 percent slopes	C	1.4	0.3%
W	Water greater than 40 acres		2.4	0.5%
Subtotals for Soil Survey Area			**12.0**	**2.7%**
Totals for Area of Interest			**442.3**	**100.0%**

STH 114 West Wetlands



STH 114 East Soils

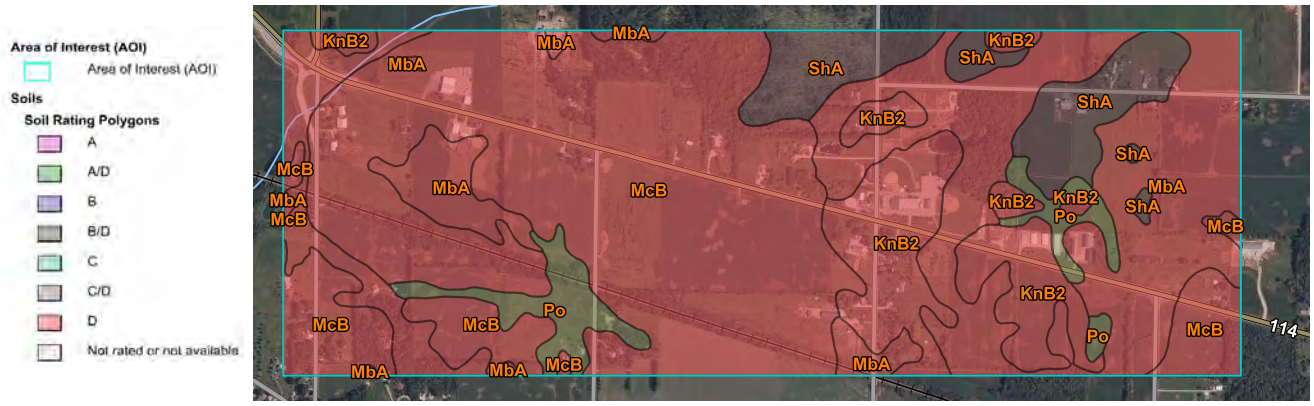


Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KnB2	Kewaunee loam, 2 to 6 percent slopes, eroded	76.2	11.4%
MbA	Manawa silt loam, 0 to 3 percent slopes	193.0	28.9%
McB	Manawa-Kewaunee-Poygan complex, 0 to 4 percent slopes	314.0	47.1%
Po	Poygan silty clay loam, 0 to 2 percent slopes, occasionally ponded, drained	29.2	4.4%
ShA	Shiocton very fine sandy loam, 0 to 3 percent slopes	54.4	8.2%
Totals for Area of Interest		**666.9**	**100.0%**

APPENDIX A-5

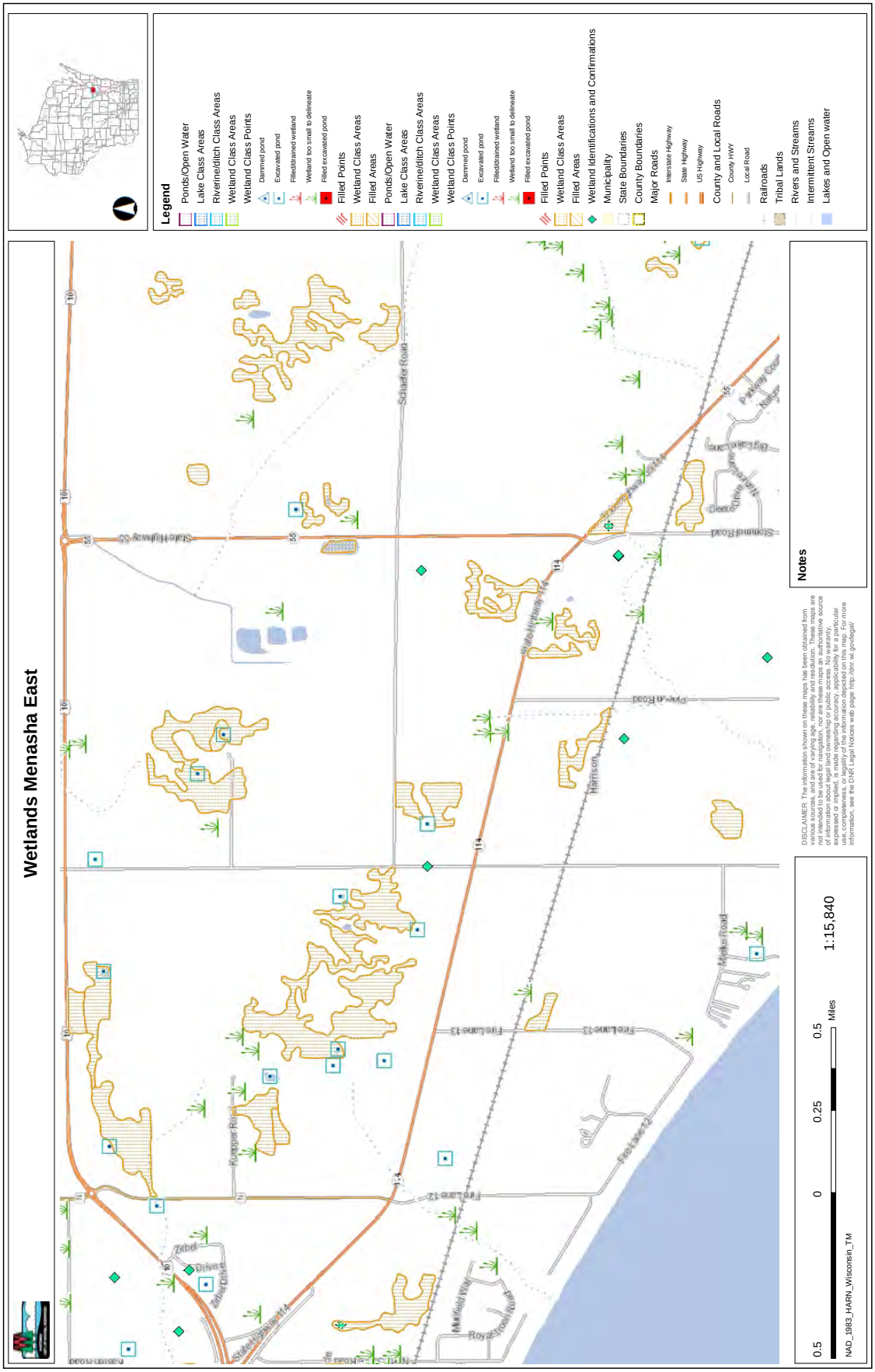
STH 114 Soils



Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
KnB2	Kewaunee loam, 2 to 6 percent slopes, eroded	D	76.2	11.4%
MbA	Manawa silt loam, 0 to 3 percent slopes	D	193.0	28.9%
McB	Manawa-Kewaunee-Poygan complex, 0 to 4 percent slopes	D	314.0	47.1%
Po	Poygan silty clay loam, 0 to 2 percent slopes, occasionally ponded, drained	C/D	29.2	4.4%
ShA	Shiocton very fine sandy loam, 0 to 3 percent slopes	B/D	54.4	8.2%
Totals for Area of Interest			**666.9**	**100.0%**

STH 114 East Wetlands



APPENDIX B-1

STH 114 West Cost Estimate

STH 114 West - Feasibility Study					
July 2024					
Item Number	Bid Item	Unit	# of Units	Unit Price	Total Price
	MISCELLANEOUS				
642.5001	Field Office Type B	EACH	1	$ 10,000.00	$ 10,000.00
SPV.0060.02	Construction Staking	EACH	1	$ 25,000.00	$ 25,000.00
	Culvert Extensions	LS	1	$ 30,000.00	$ 30,000.00
	Property Acquisition	ACRE	1.5	$ 50,000.00	$ 75,000.00
	TRAIL				
205.0100	Excavation Common	CY	1,004	$ 25.00	$ 25,100.00
201.0105	Clearing	STA	10	$ 350.00	$ 3,500.00
201.0205	Grubbing	STA	10	$ 200.00	$ 2,000.00
208.1100	Select Borrow	CY	806	$ 30.00	$ 24,180.00
305.0120	Base Aggregate Dense 1 1/4-inch	TON	1,218	$ 24.00	$ 29,232.00
465.0105	Asphaltic Surface	TON	506	$ 120.00	$ 60,720.00
602.0410	Concrete Sidewalk 5-Inch	SF	600	$ 10.00	$ 6,000.00
602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	120	$ 49.00	$ 5,880.00
SPV.0090.01	Special (01. Boardwalk)	LF	4,874	$ 500.00	$ 2,437,000.00
	TRAFFIC CONTROL				
SPV.0060.01	Special (01. Traffic Control)	EACH	1	$ 40,000.00	$ 40,000.00

Subtotal Total		$ 2,773,612.00	$3,618,934.56
Design Contingency - 20%		$ 554,722.40	$723,786.91
Construction Total		**$ 3,328,334.40**	**$4,342,721.47**
Construction Oversight - 7%		$ 232,983.41	$303,990.50
Consultant Design Cost		$ 215,000.00	$280,526.23
WisDOT Design Oversight		$ 20,000.00	$26,095.46
Total Project Delivery		**$ 3,796,317.81**	**$4,953,333.67**
		2024 Dollars	2033 Dollars

3% Year over Year Inflation

STH 114 East - Alternative 1 Cost Estimate

STH 114 East Alternative 1 - Feasibility Study

July 2024

Item Number	Bid Item	Unit	# of Units	Unit Price	Total Price	
	MISCELLANEOUS					
642.5001	Field Office Type B	EACH	1	$ 10,000.00	$ 10,000.00	
SPV.0060.02	Construction Staking	EACH	1	$ 20,000.00	$ 20,000.00	
	Property Acquisition	ACRE	0.15	$ 50,000.00	$ 7,500.00	
	TRAIL					
201.0105	Clearing	STA	4	$ 350.00	$ 1,400.00	
201.0205	Grubbing	STA	4	$ 350.00	$ 1,400.00	
205.0100	Excavation Common	CY	3,310	$ 25.00	$ 82,750.00	
208.1100	Select Borrow	CY	830	$ 30.00	$ 24,900.00	
305.0120	Base Aggregate Dense 1 1/4-inch	TON	4867	$ 24.00	$ 116,808.00	
312.0110	Select Crushed Material	TON	2548	$ 23.00	$ 58,604.00	
465.0105	Asphaltic Surface	TON	2038	$ 120.00	$ 244,560.00	
602.0410	Concrete Sidewalk 5-Inch	SF	500	$ 10.00	$ 5,000.00	
602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	100	$ 49.00	$ 4,900.00	
645.0135	Geotextile Type SR	SY	3822	$ 3.00	$ 11,466.00	
	STORM SEWER					
608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	390	$ 105.00	$ 40,950.00	
608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	2025	$ 140.00	$ 283,500.00	
608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	2025	$ 150.00	$ 303,750.00	
608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	2025	$ 211.00	$ 427,275.00	
608.0348	Storm Sewer Pipe Reinforced Concrete Class III 48-Inch	LF	2025	$ 320.00	$ 648,000.00	
611.0530	Manhole Covers Type J	EACH	39	$ 783.00	$ 30,537.00	
611.0642	Inlet Covers Type MS	EACH	39	$ 716.00	$ 27,924.00	
611.2004	Manholes 4-FT Diameter	EACH	13	$ 4,000.00	$ 52,000.00	
611.2005	Manholes 5-FT Diameter	EACH	13	$ 5,400.00	$ 70,200.00	
611.2007	Manholes 7-FT Diameter	EACH	13	$ 11,400.00	$ 148,200.00	
611.3901	Inlets Median 1 Grate	EACH	39	$ 3,400.00	$ 132,600.00	
	TRAFFIC CONTROL					
SPV.0060.01	Special (01. Traffic Control)	EACH	1	$ 25,000.00	$ 25,000.00	

Subtotal Total		$ 2,779,224.00	$3,418,094.96
Design Contingency - 20%		$ 555,844.80	$683,618.99
Construction Total		**$ 3,335,068.80**	**$4,101,713.96**
Construction Oversight -7%		$ 233,454.82	$287,119.98
Consultant Design Cost		$ 210,000.00	$258,273.51
WisDOT Design Oversight		$ 20,000.00	$24,597.48
Total Project Delivery		**$ 3,798,523.62**	**$4,671,704.92**
		2024 Dollars	2031 Dollars

STH 114 East - Alternative 2 Cost Estimate

STH 114 East Alternative 2 - Feasibility Study

July 2024

Item Number	Bid Item	Unit	# of Units	Unit Price	Total Price	
	MISCELLANEOUS					
642.5001	Field Office Type B	EACH	1	$ 10,000.00	$ 10,000.00	
SPV.0060.02	Construction Staking	EACH	1	$ 20,000.00	$ 20,000.00	
	Storm Sewer	LS	1	$ 25,000.00	$ 25,000.00	
	Property Acquisition	ACRE	3	$ 50,000.00	$ 150,000.00	
	TRAIL					
201.0105	Clearing	STA	4	$ 350.00	$ 1,400.00	
201.0205	Grubbing	STA	4	$ 350.00	$ 1,400.00	
205.0100	Excavation Common	CY	1,929	$ 25.00	$ 48,225.00	
208.1100	Select Borrow	CY	1,222	$ 30.00	$ 36,660.00	
305.0120	Base Aggregate Dense 1 1/4-inch	TON	4842	$ 24.00	$ 116,208.00	
312.0110	Select Crushed Material	TON	1449	$ 23.00	$ 33,327.00	
465.0105	Asphaltic Surface	TON	2028	$ 120.00	$ 243,360.00	
602.0410	Concrete Sidewalk 5-Inch	SF	500	$ 10.00	$ 5,000.00	
602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	100	$ 49.00	$ 4,900.00	
645.0135	Geotextile Type SR	SY	2173	$ 3.00	$ 6,519.00	
	TRAFFIC CONTROL					
SPV.0060.01	Special (01. Traffic Control)	EACH	1	$ 25,000.00	$ 25,000.00	

Subtotal Total		$ 726,999.00	$894,117.07
Design Contingency - 20%		$ 145,399.80	$178,823.41
Construction Total		**$ 872,398.80**	**$1,072,940.48**
Construction Oversight - 10%		$ 87,239.88	$107,294.05
Consultant Design Cost		$ 200,000.00	$245,974.77
WisDOT Design Oversight		$ 20,000.00	$24,597.48
Total Project Delivery		**$ 1,179,638.68**	**$1,450,806.78**
		2024 Dollars	2031 Dollars

STH 114 Combined Summary

	LENGTH (MILES)	CONSTRUCTION COST (2024)*	Design Cost**	CONSTRUCTION COST (2024)	COST (2033)
STH 114 WEST	1.42	$ 3,328,000	$ 468,000	$ 3,796,000	$ 4,953,000
PHASE 1 Woodlands Segment (Lake Park to Kernan)	0.53	$ 1,242,000	$ 175,000	$ 1,417,000	$ 1,849,000
PHASE 2 Conservancy East (Conservancy to Kernan)	0.51	$ 1,199,000	$ 168,000	$ 1,367,000	$ 1,783,000
PHASE 3 Conservancy West (Oneida to Conservancy)	0.38	$ 887,000	$ 125,000	$ 1,012,000	$ 1,321,000
STH 114 EAST	1.55	$ 873,000	$ 307,000	$ 1,180,000	$ 1,451,000

TOTAL	2.97			$ 4,976,000	$ 6,404,000

APPENDIX C-1

Public Information Meeting Invitation

5400 King James Way
Suite 200
Madison, WI 53719
608.663.1218
www.klengineering.com

April 30, 2024

RE: Trail Feasibility Study: Project Introduction & Public Involvement Meeting
WisDOT ID 4479-04-00 & 4479-05-00
High Cliff State Trail Corridor Feasibility Study
Manitowoc Rd and STH 114 Study Areas
Calumet County

Dear Property Owner,

The City of Menasha (4479-05-00) and the Village of Harrison (4479-04-00) are working with KL Engineering, the Village of Sherwood, and the Wisconsin Department of Transportation to study the feasibility of constructing a multi-use bike/pedestrian trail along STH 114 from Oneida Street to Lake Park Road and, separately, from CTH N to Pigeon Road. An additional area of study includes Manitowoc Road from Plank Road to Lake Park Road. These areas are being evaluated as part of an effort to expand trail access within the local neighborhoods and communities while additionally providing an off-road connection to the High Cliff State Park.

This feasibility study will develop several alternatives that are evaluated based on safety, environmental impacts, utility, longevity, maintenance, property impacts, as well as cost. Feedback from the public and partner agencies will be integral to this process.

You are invited to attend the Public Involvement Meeting (PIM) at which the above referenced projects will be discussed. The meeting will be held in the first-floor conference rooms **at Menasha City Hall on Tuesday, May 14, 2024, from 5:00-6:30pm located at 100 Main Street, Menasha, WI 54952.**

The meeting will include a brief presentation at 5:15 pm followed by open-house format to review project displays and discuss the project with the project team. Project representatives from the City of Menasha, Village of Harrison, Village of Sherwood, and KL Engineering will be available to discuss the proposed project and address any questions or concerns you may have.

Please submit any comment forms by Friday, May 31, 2024. These can be emailed or mailed direct to the following project personnel:

Josh Mercier, Project Manager
(mail) KL Engineering
5400 King James Way
Suite 200
Madison, WI 53719
(e-mail) josh.mercier@klengineering.com
(phone) 608.663.1218

Public Information Meeting Invitation

Megan Sackett, Director of Parks, Recreation and Forestry - Menasha
(mail) 100 Main Street, Suite 200
Menasha, WI 54952
(e-mail) msackett@menashawi.gov
(phone) 920-967-3640

Chad Pelishek, Assistant Village Manager - Harrison
(mail) W5298 State Road 114
Harrison, WI 54952
(e-mail) cpelishek@harrison-wi.org
(phone) 920-989-1062, ext 8

Wheelchair accessibility is available at the meeting site. Citizens who require a sign language interpreter may request one by contacting project staff through the Wisconsin Telecommunications Relay System at 711 or 1-800-947-3529 at least three working days prior to the meeting. If you need an interpreter, translator, materials in alternate formats, or other accommodations to access this program, please call the phone number below immediately.

If you have any questions or information that may assist in the development of this project we encourage you to attend the meeting. If you would like additional information, please contact me at (608) 663-1218 or by email at josh.mercier@klengineering.com.

Sincerely,

Josh Mercier, PE KL Engineering, Inc.

Cc: Megan Sackett, Menasha – Director of Parks, Recreation, and Forestry
Chad Pelishek, Harrison - Assistant Village Manager

Encl. Project Location Map, Comment Form

Public Information Meeting FAQs

Frequently Asked Questions

High Cliff Connection Corridor Feasibility Study

Public Information Meeting: STH 114 and Manitowoc Road Areas

1. **What is the scope of the project?**
   The City of Menasha, Village of Harrison, Village of Sherwood, and the Wisconsin Department of Transportation (WisDOT) are studying the feasibility of constructing a multi-use bike/pedestrian trail along STH 114 as part of an effort to expand trail access and ultimately provide an off-road connection to the High Cliff State Park. An additional area of study includes Manitowoc Road from Plank Road to Lake Park Road. The Manitowoc Road area is being evaluated as part of an effort to expand bike and pedestrian access within the local neighborhoods and communities while additionally providing an off-road connection to the High Cliff State Park.

2. **What are the study areas?** *(purple and green outlined areas in map below)*
   - STH 114 (2 separate areas)
     - from Oneida Street to Lake Park Road
     - from CTH N to Pigeon Road
   - Manitowoc Road (from Plank Road to Lake Park Road)

Public Information Meeting FAQs

3. **Are there any related on-going projects?**
   Pigeon Road from STH 114 to Blue Heron Court and Old Highway Road from Lake Park Rd to STH 114 are also being studied. A Public Information Meeting on those sections was held earlier this Spring. The studies are working in tandem with each other.

4. **Why were these study areas chosen?**
   These study areas were chosen as a result of the High Cliff Connection Master Plan completed by East Central Wisconsin Planning Commission (ECWRPC). The Master Plan focused on identifying broad-scale routes for further study. The areas in the current feasibility studies include some of the sections of the overall Master Plan.

5. **What is the difference between a Feasibility Study in comparison to design of a project?**
   A feasibility study evaluates potential routes based on a number of factors (see below) to determine if a concept works to move forward with detailed design by identifying pros and cons of different routes and the extent of challenges with each. A feasibility study also identifies funding options, potential project timelines, etc. If a project is determined feasible and the public support and funding is in place, then detailed design and engineering would occur next.

6. **What is the criteria for evaluating the feasibility of the trails?**
   Trail and roadway user safety, trail utility and connectivity, project cost, environmental impacts, utility impacts, adjacent property impacts, drainage patterns, and existing and planned surrounding land use will all be factors evaluated in determining the feasibility of the segments of study.

7. **What is the timeline for the project?**
   The final feasibility reports will be submitted in Summer & Fall 2024.

8. **What is the next step after the feasibility study is completed?**
   If trail sections are feasible, then the next step would be more detailed evaluation for funding and potential inclusion within municipal plans for future design and construction. It should be noted that funding, design, and construction of regional trail projects stretches over many years and is segmented into manageable sections

9. **Are these displays going to be available online?**
   Yes, these displays will be posted to the City of Menasha website and a link to that website will be posted on the High Cliff Connection website: **www.highcliffconnection.org**

10. **If I have specific questions on the project that are unanswered at the meeting or in the FAQs, who do I contact?**

Chad Pelishek
cpelishek@harrison-wi.org
(920) 989-1062, ext 8

Megan Sackett
msackett@menashawi.gov
920-967-3640

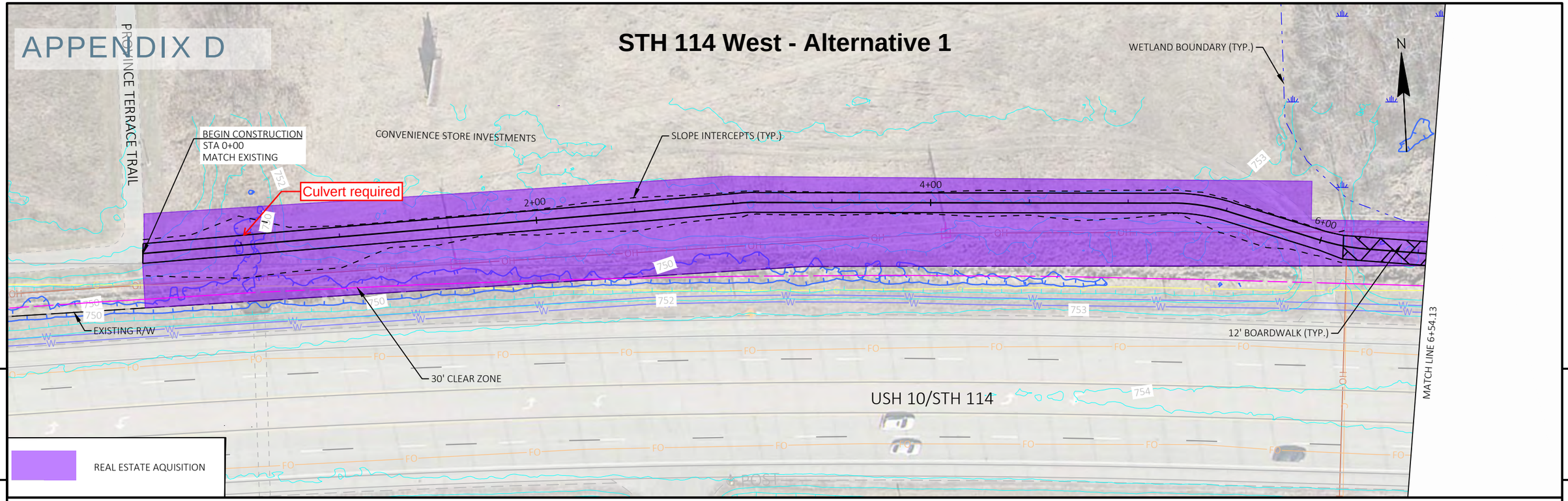
Josh Mercier
josh.mercier@klengineering.com
(608) 663-1218

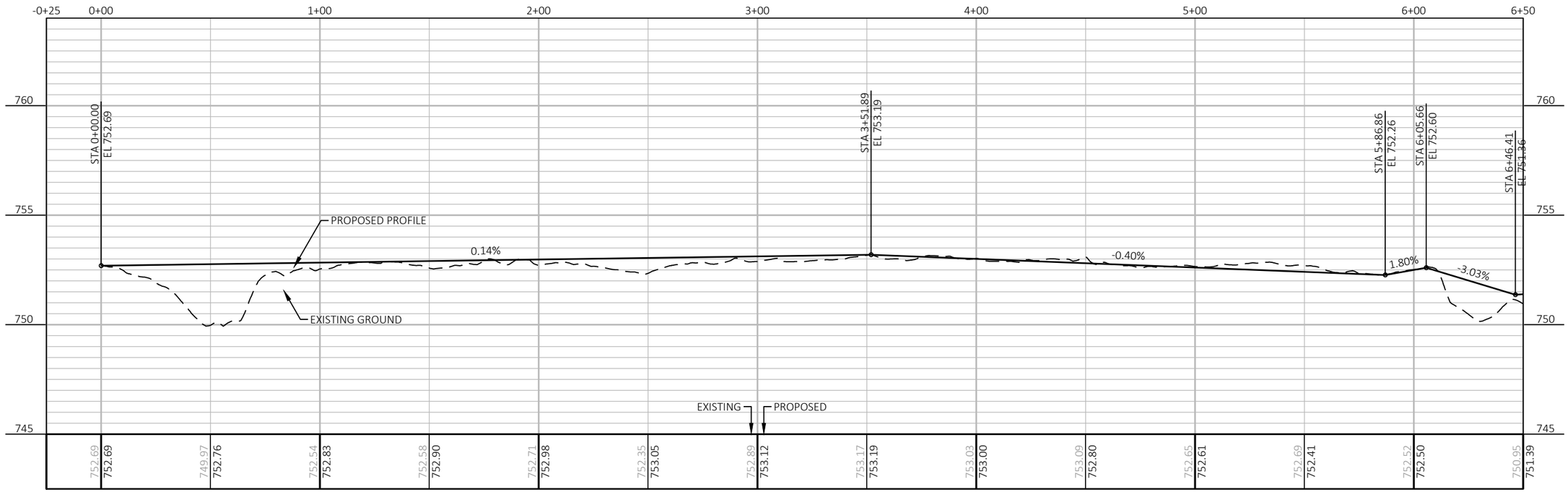
For more information about the larger project visit Highcliffconnnection.org

Public Information Meeting Map
STH 114 West

Public Information Meeting Map
STH 114 East

STH 114 West - Alternative 1





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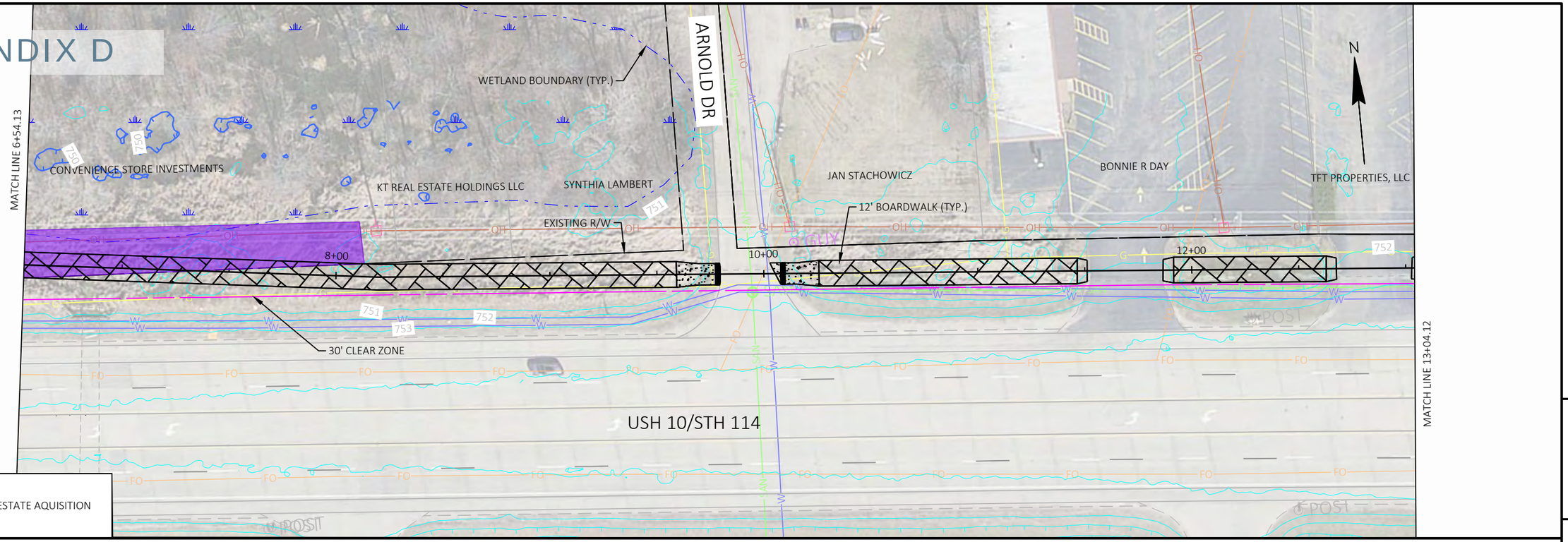

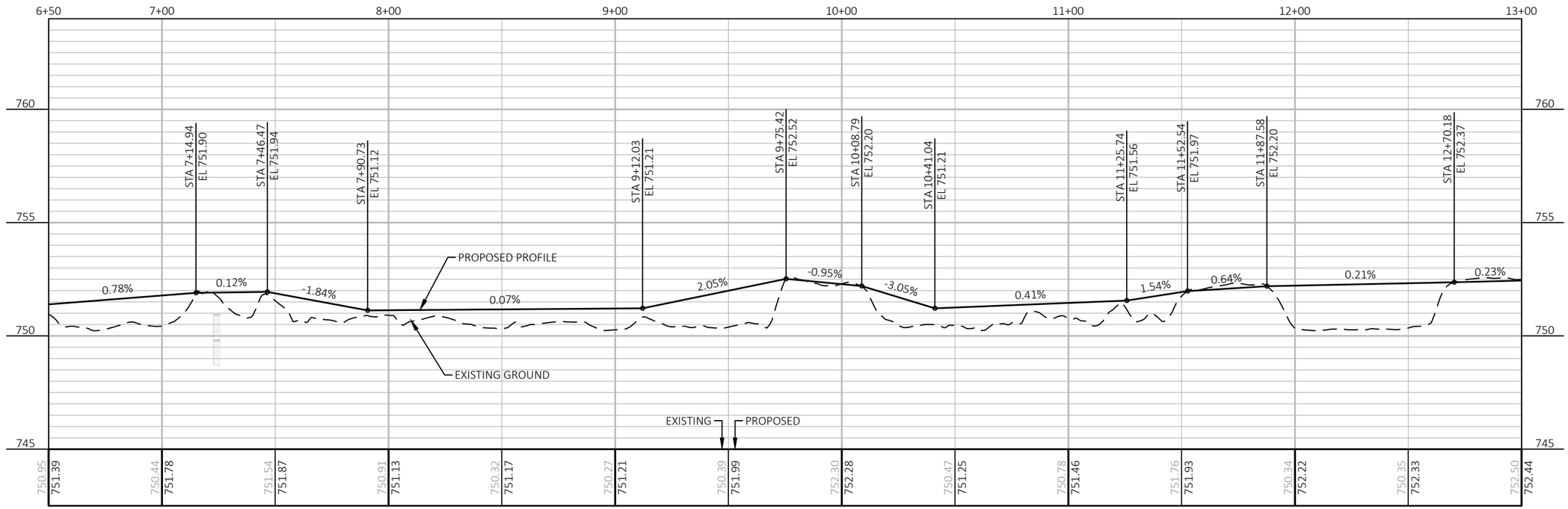

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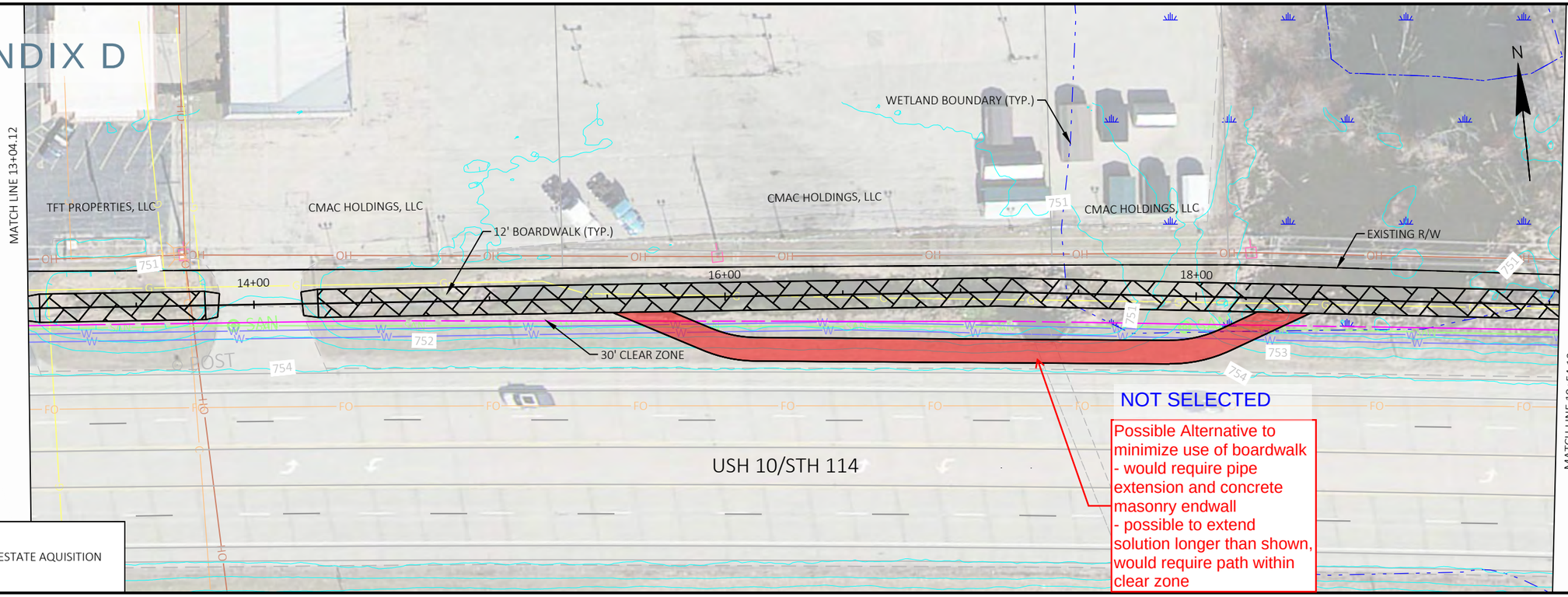

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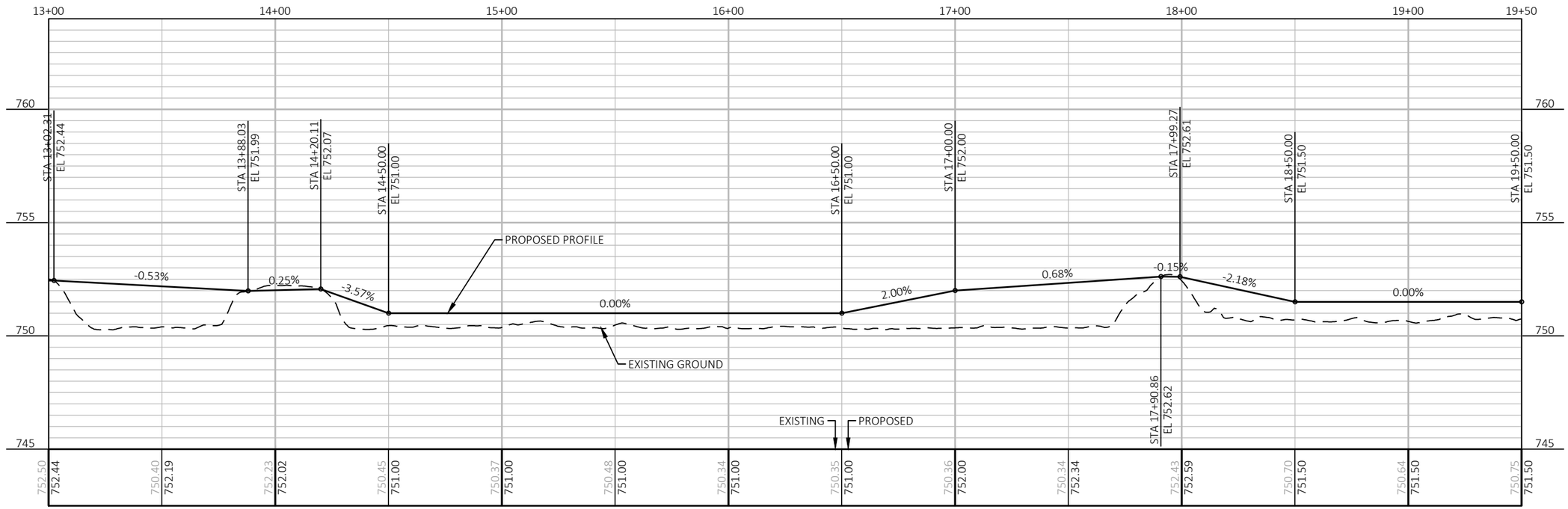

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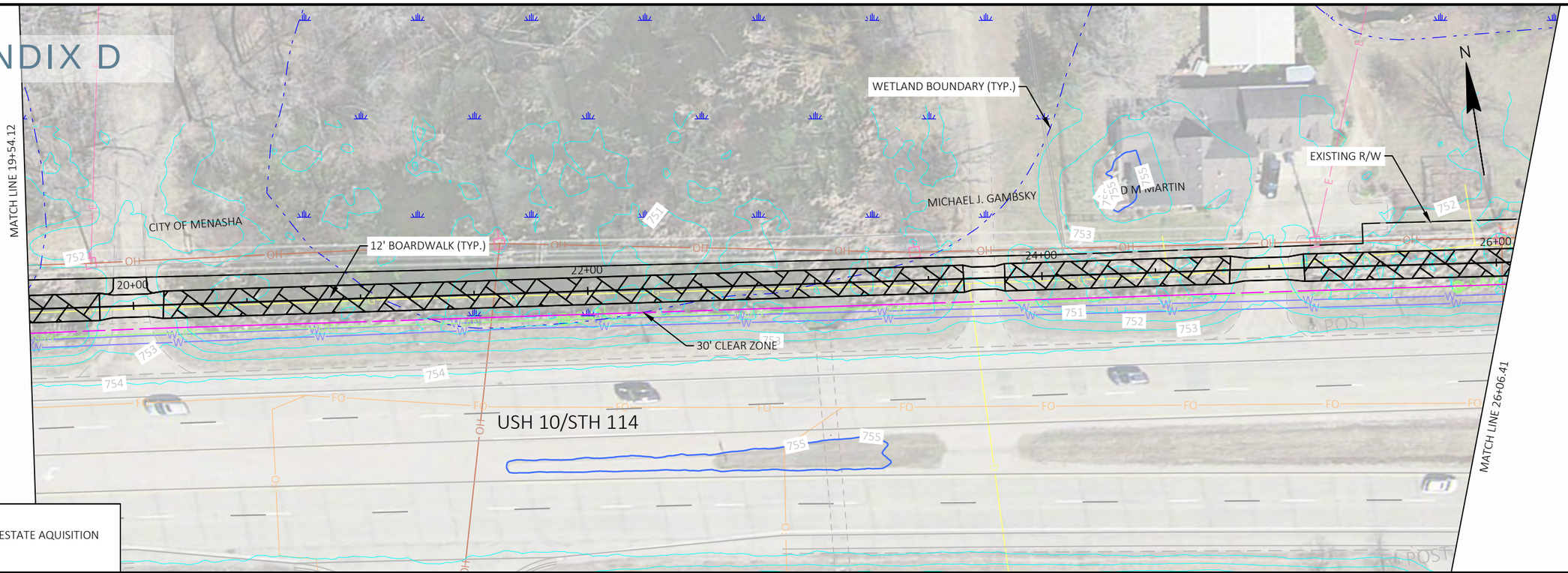

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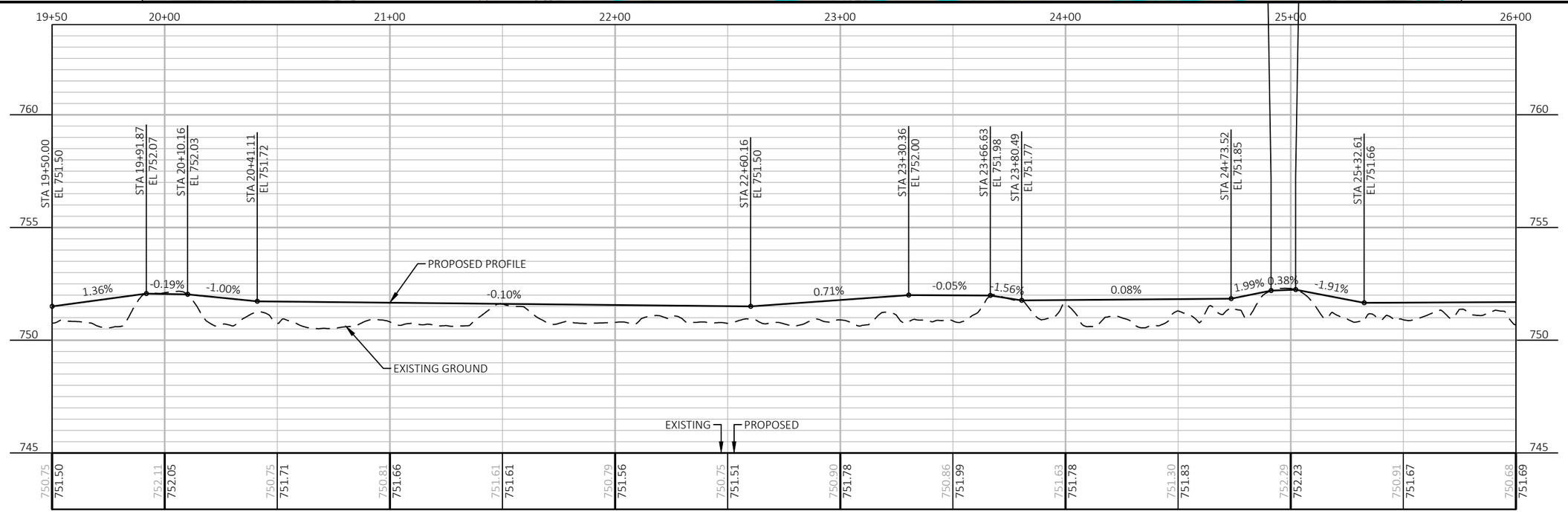

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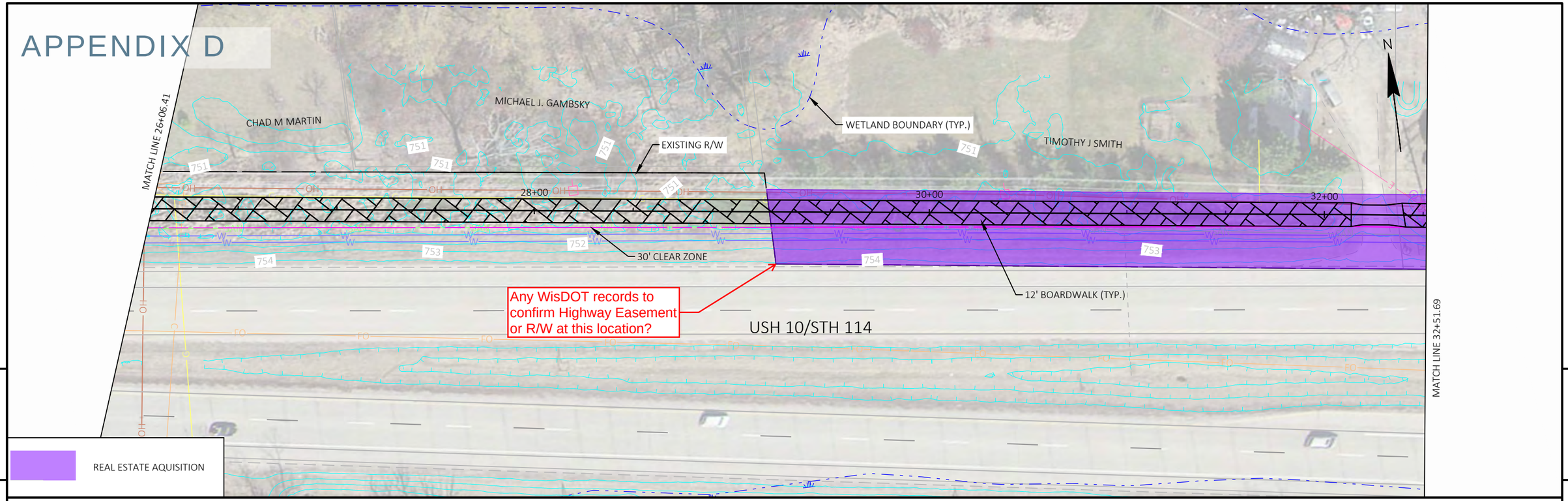

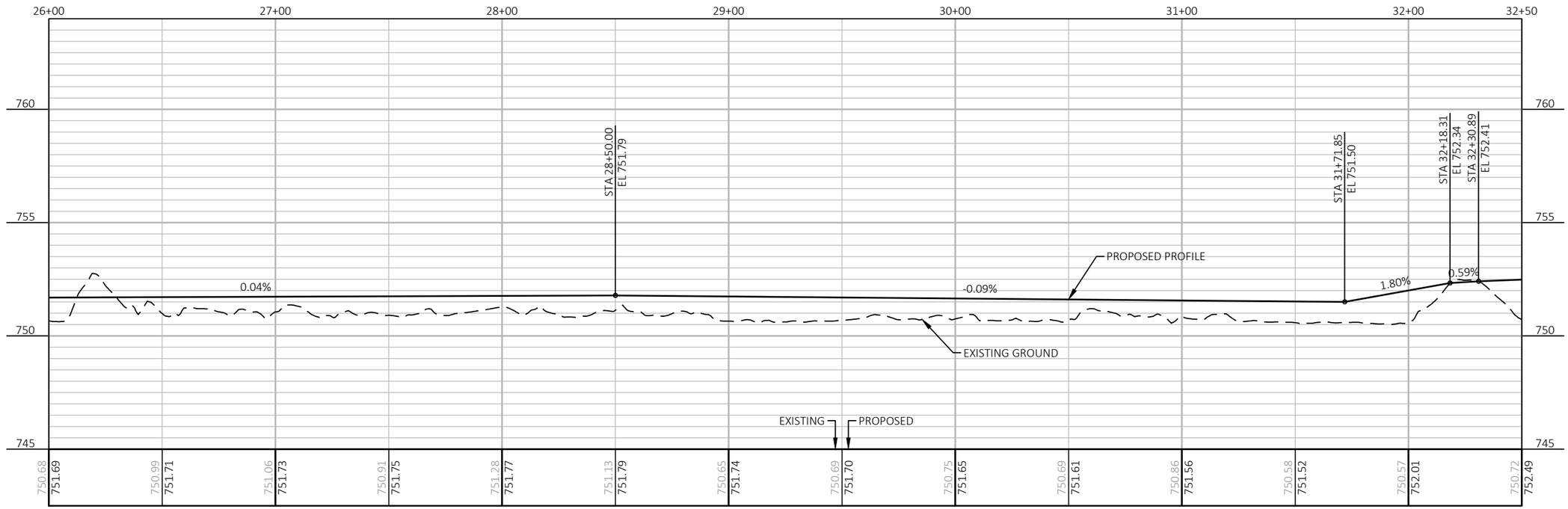

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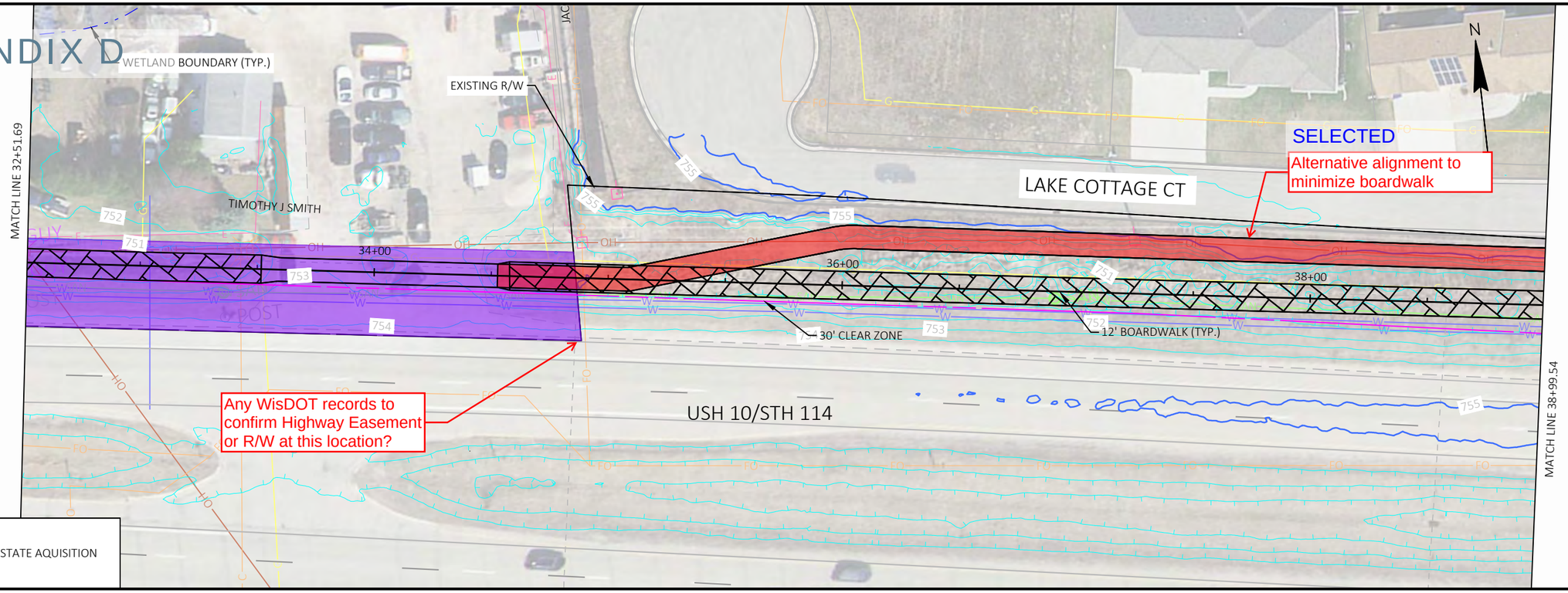

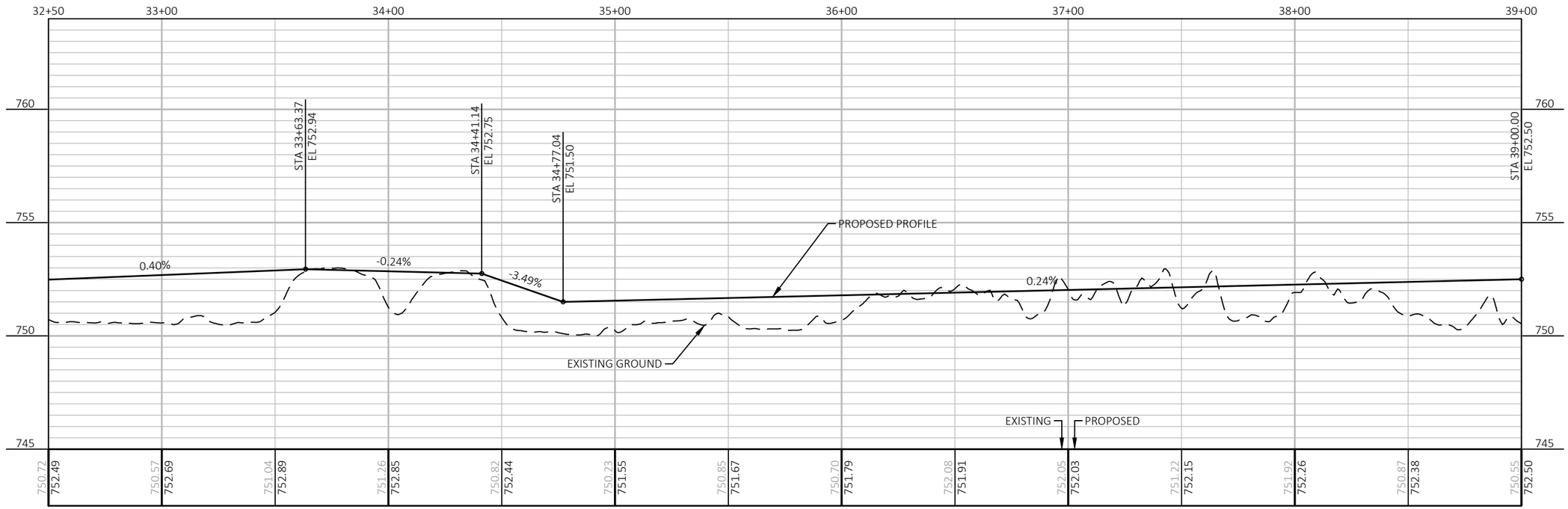

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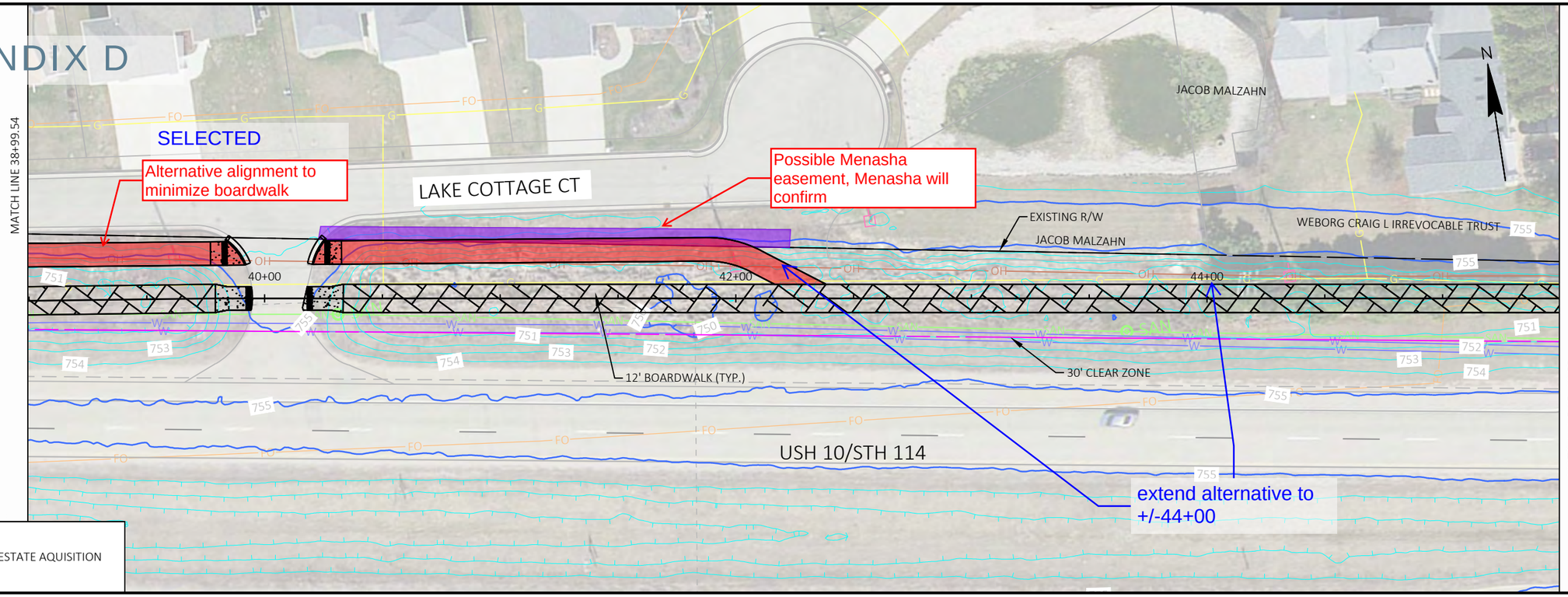

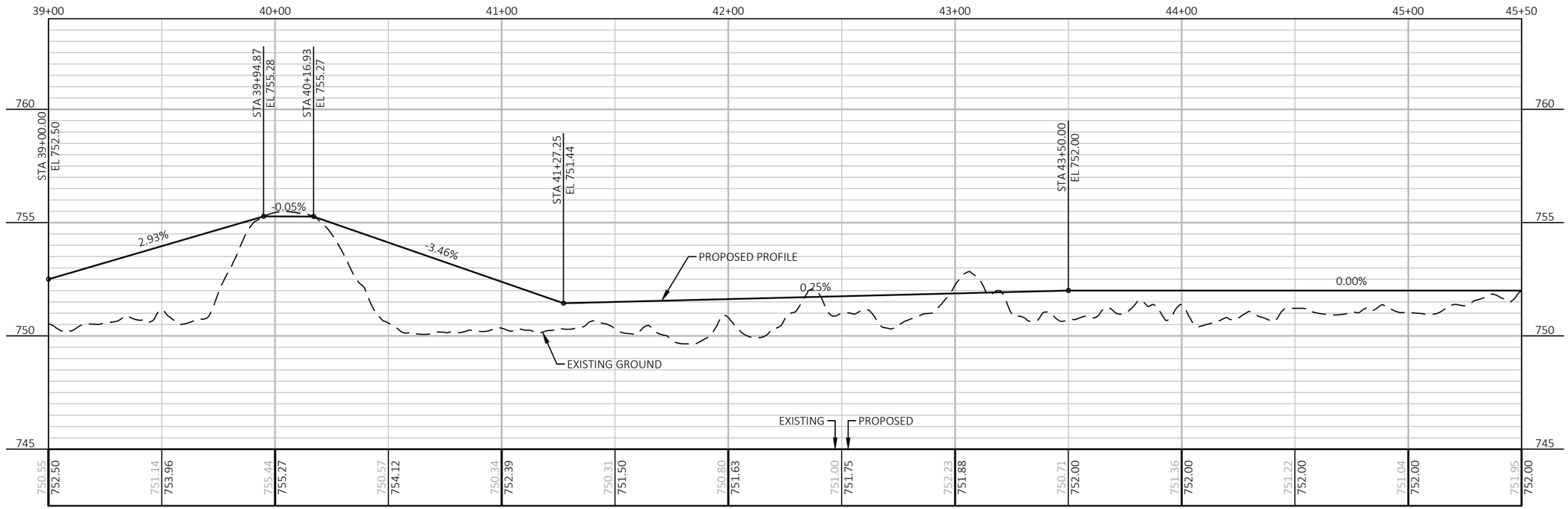

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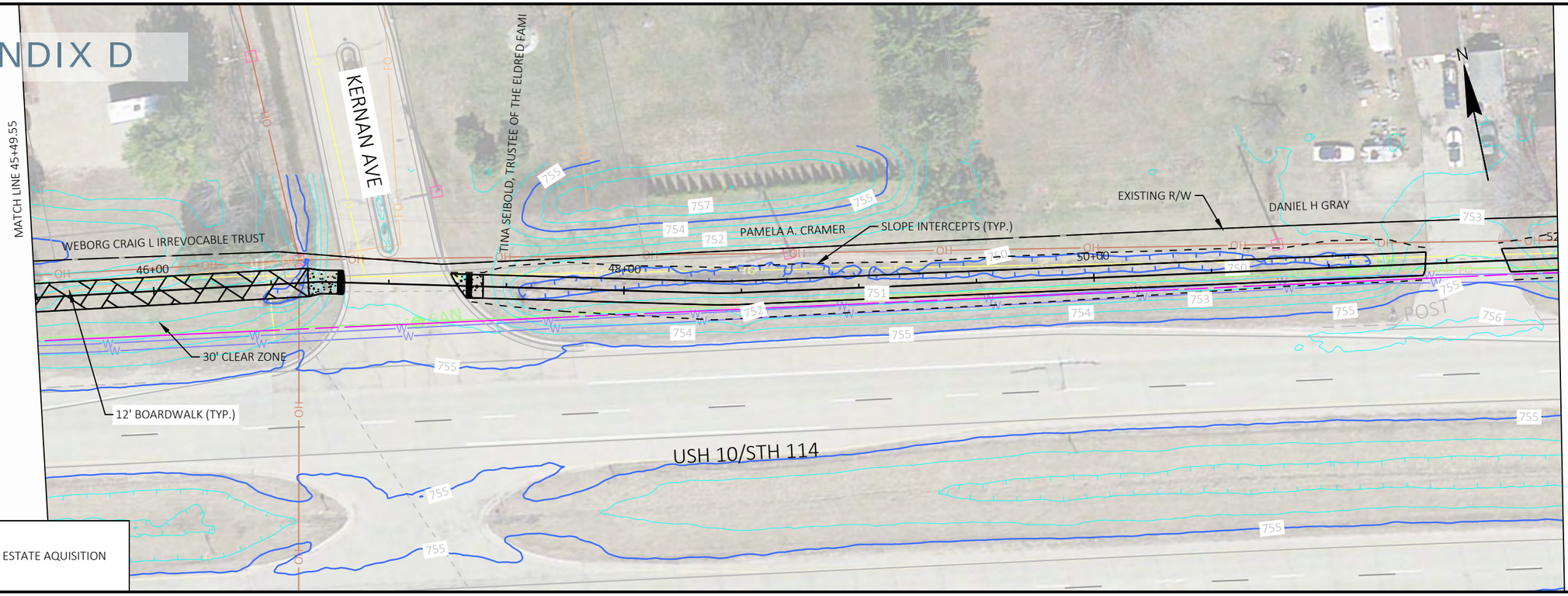

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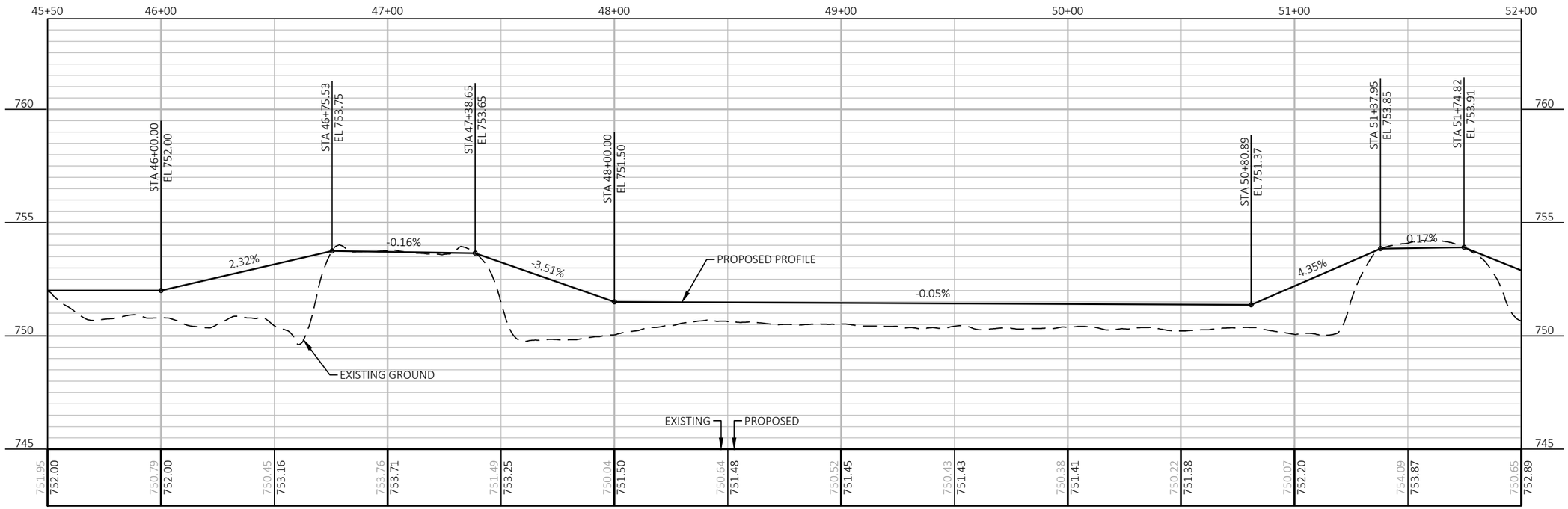

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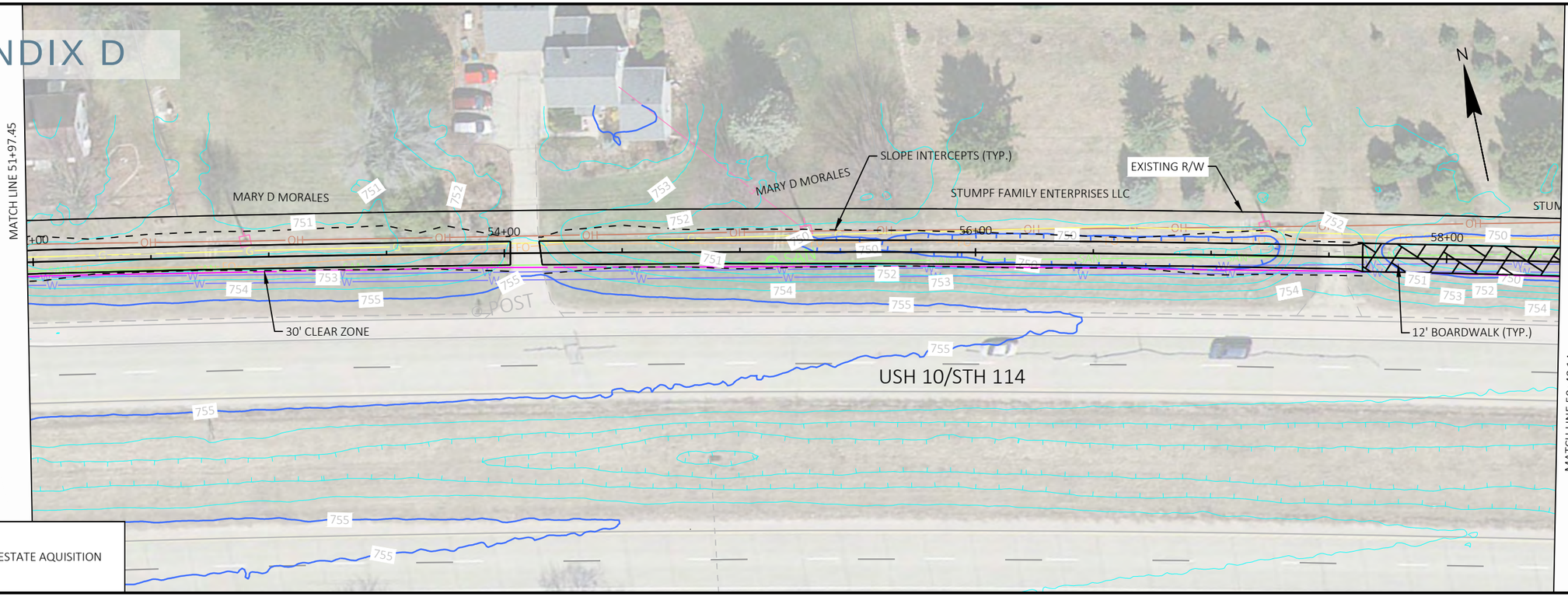

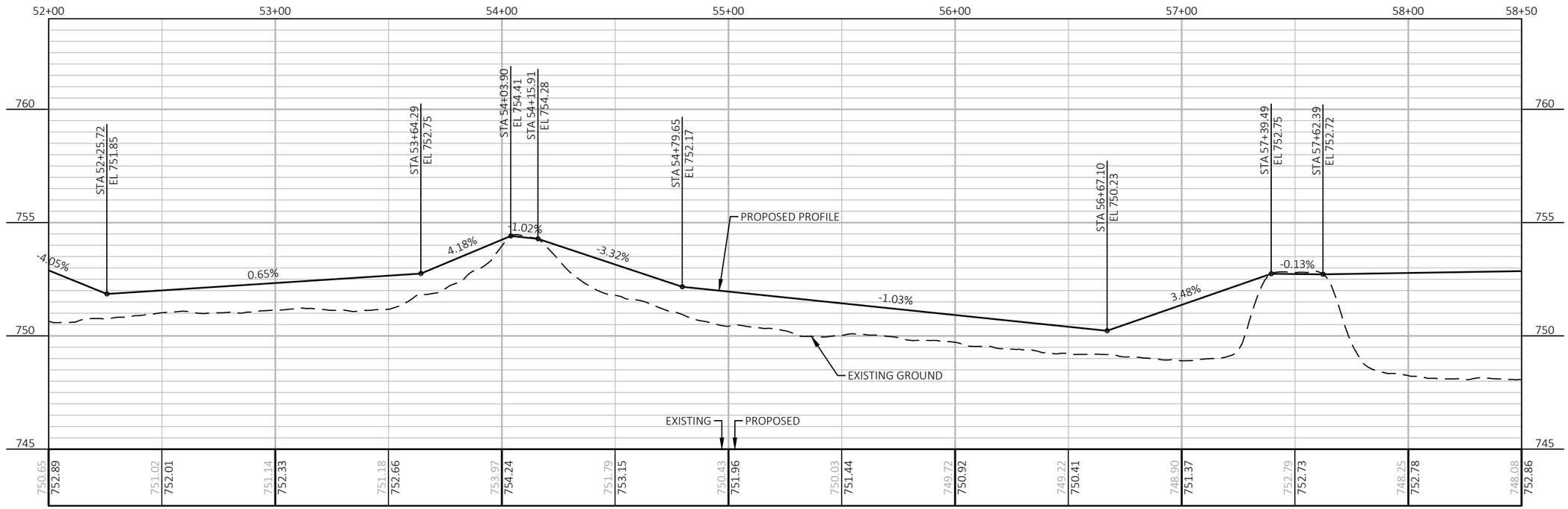

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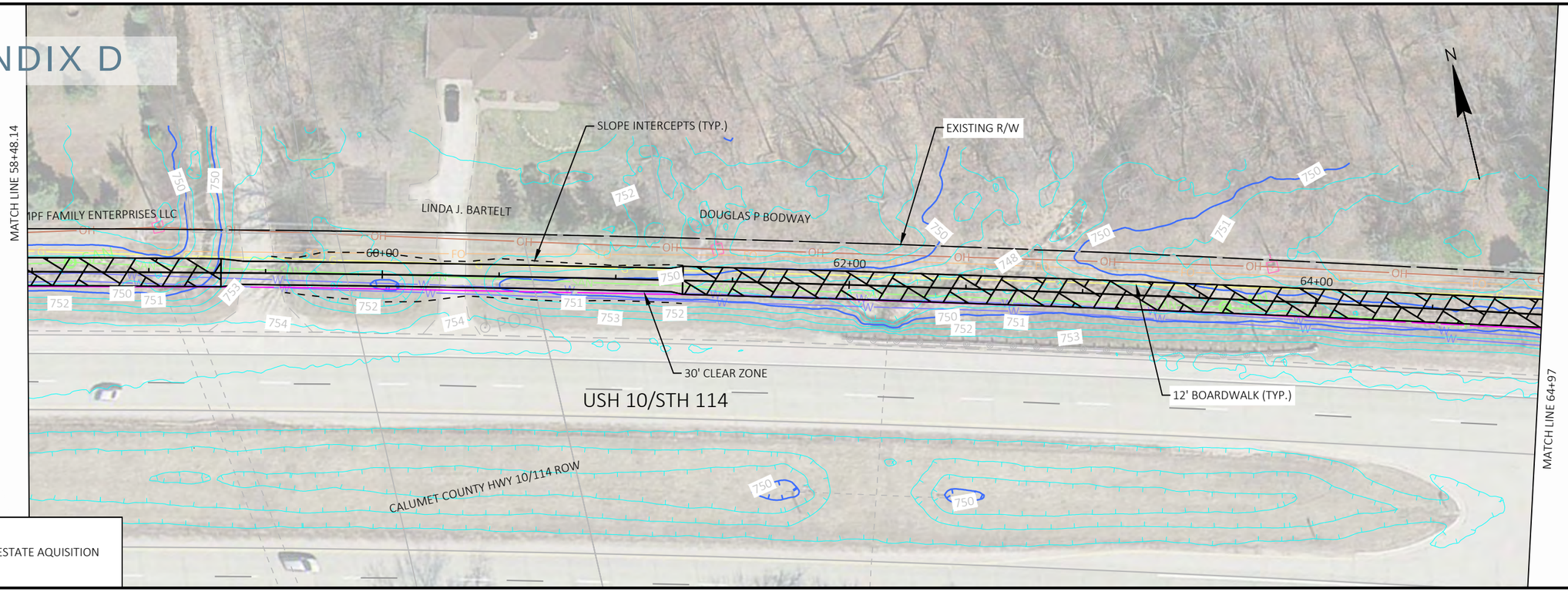

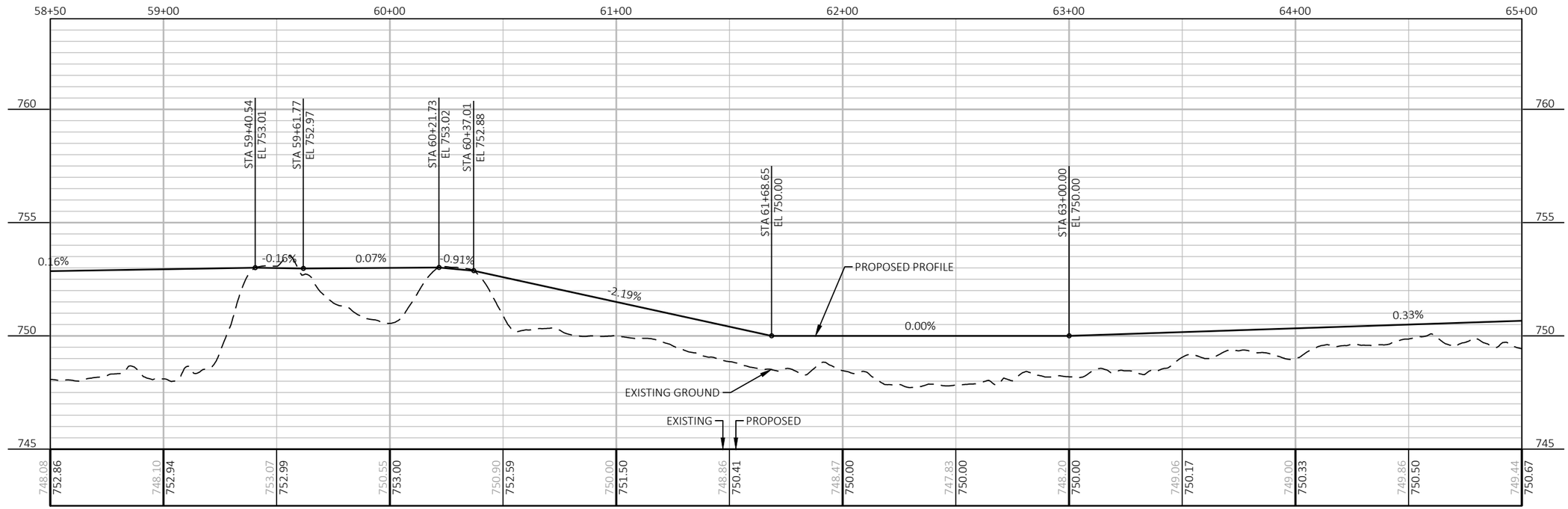

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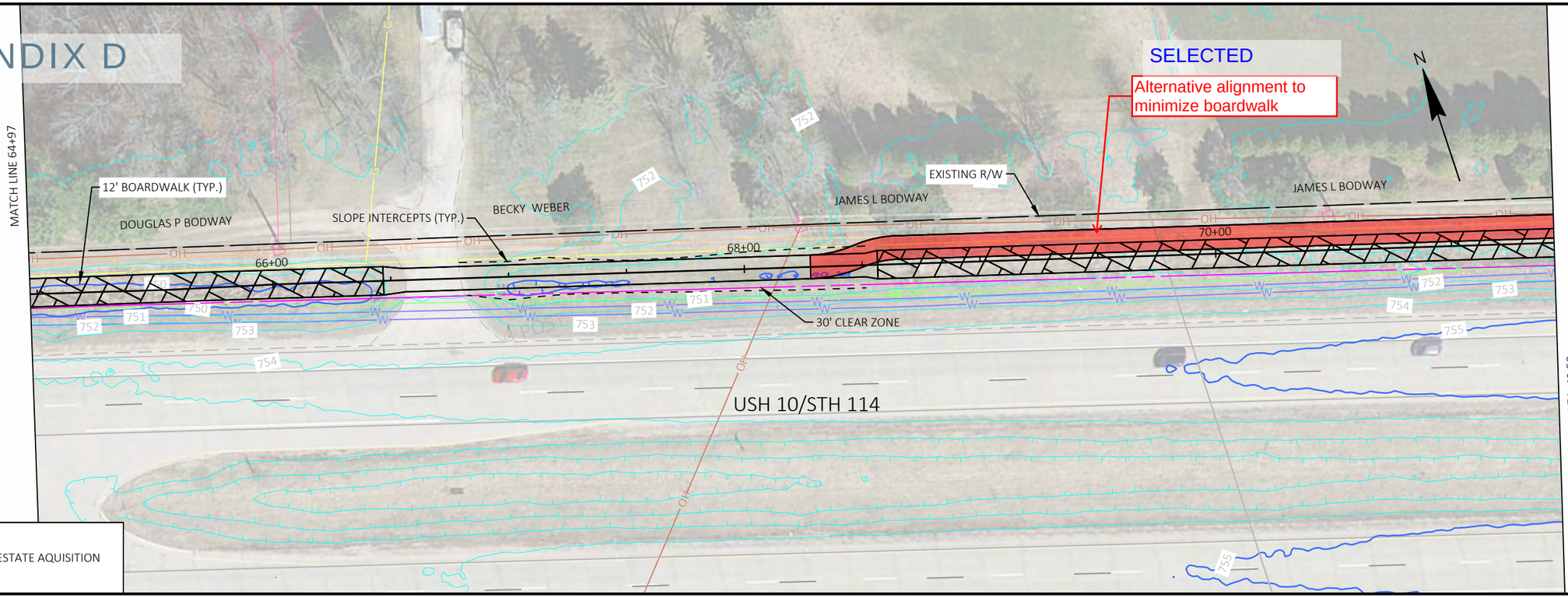

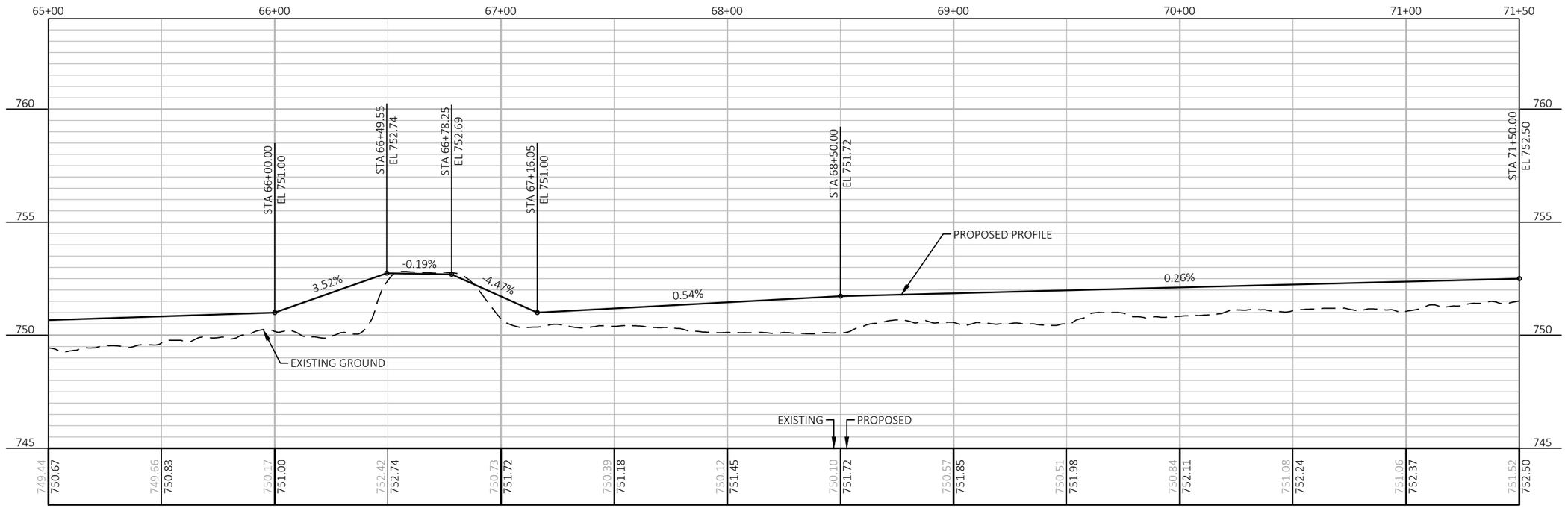

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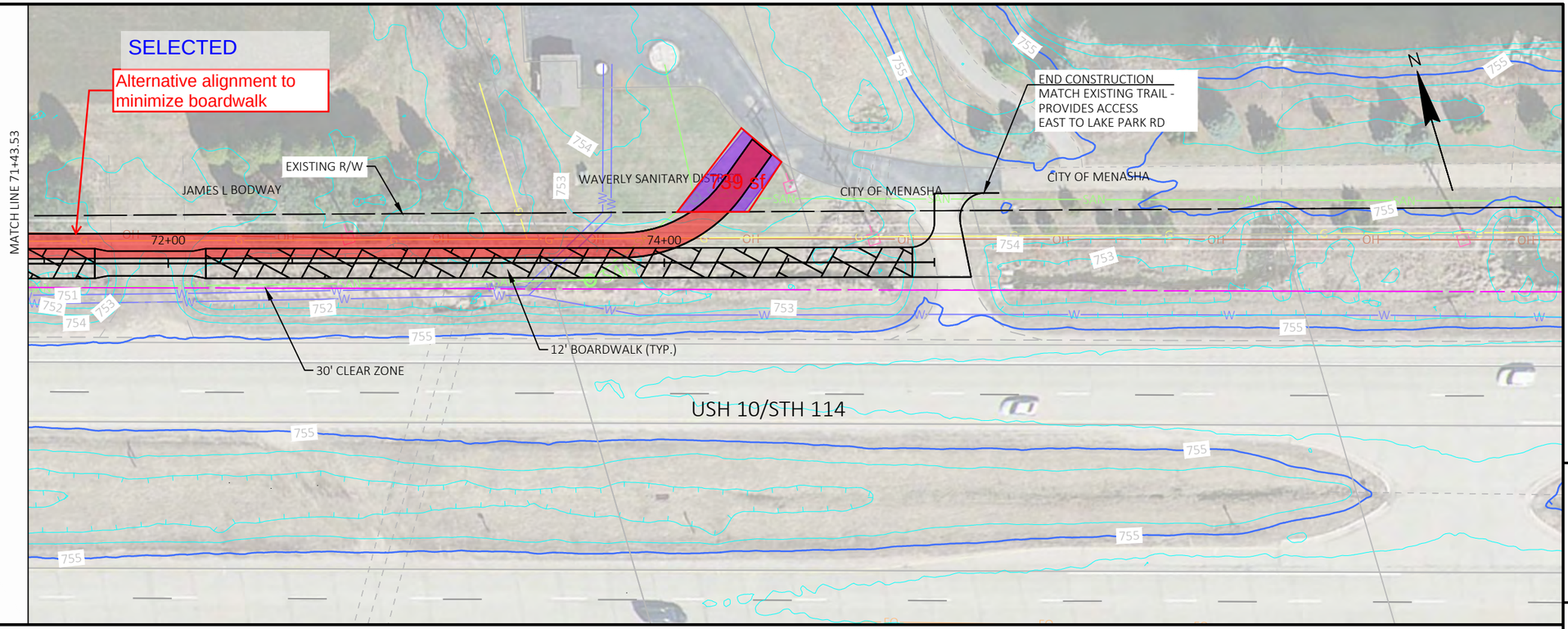

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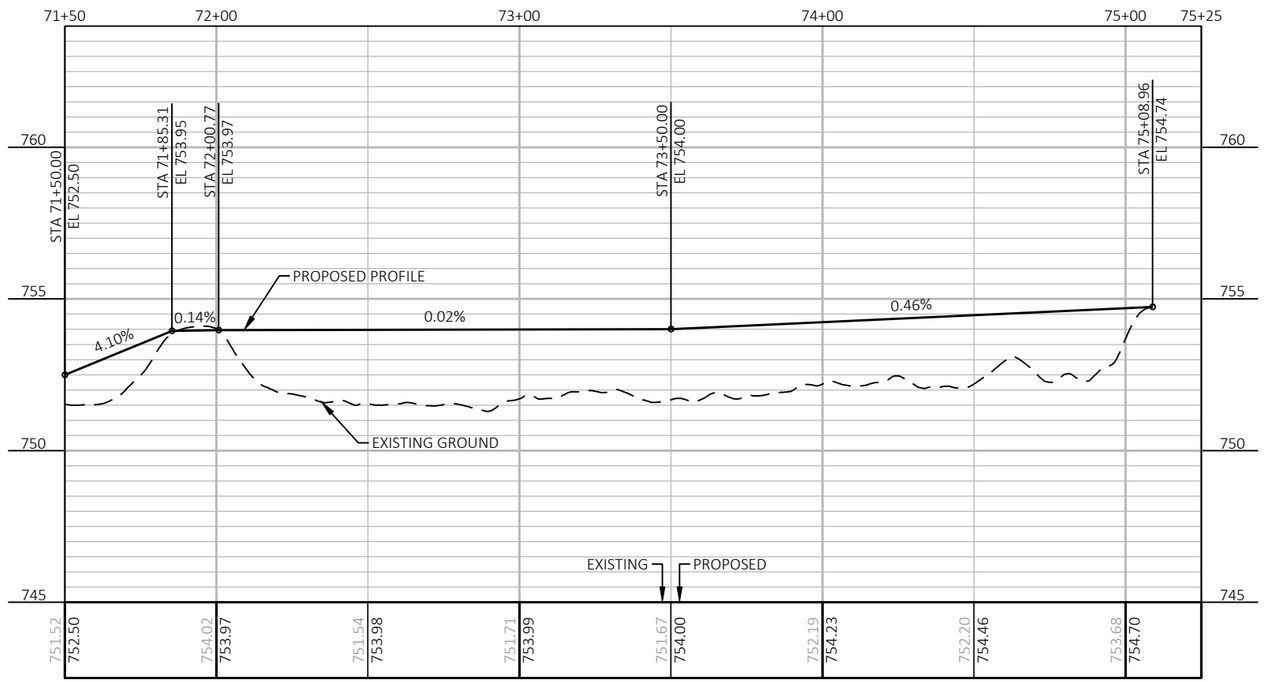

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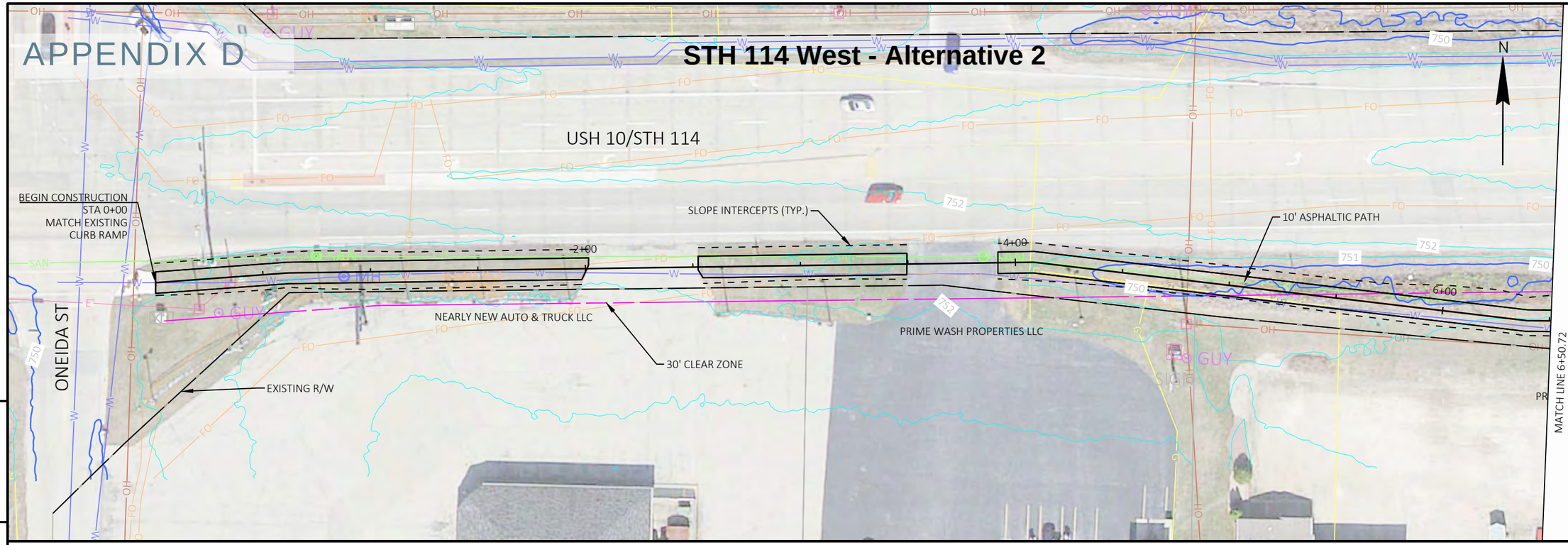

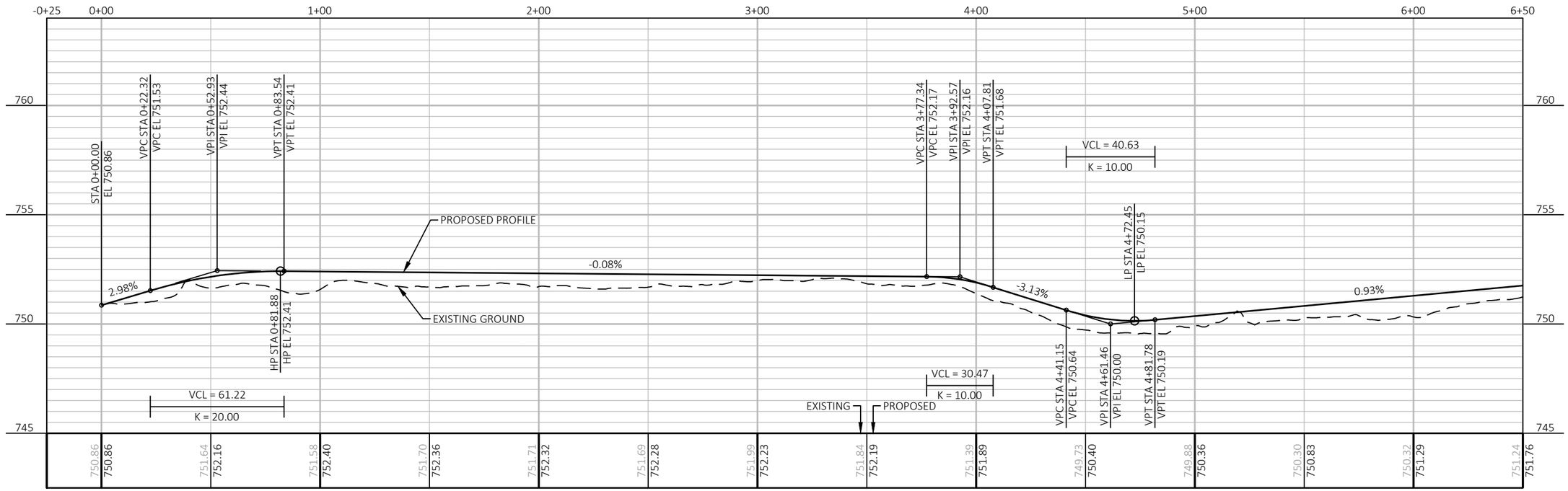

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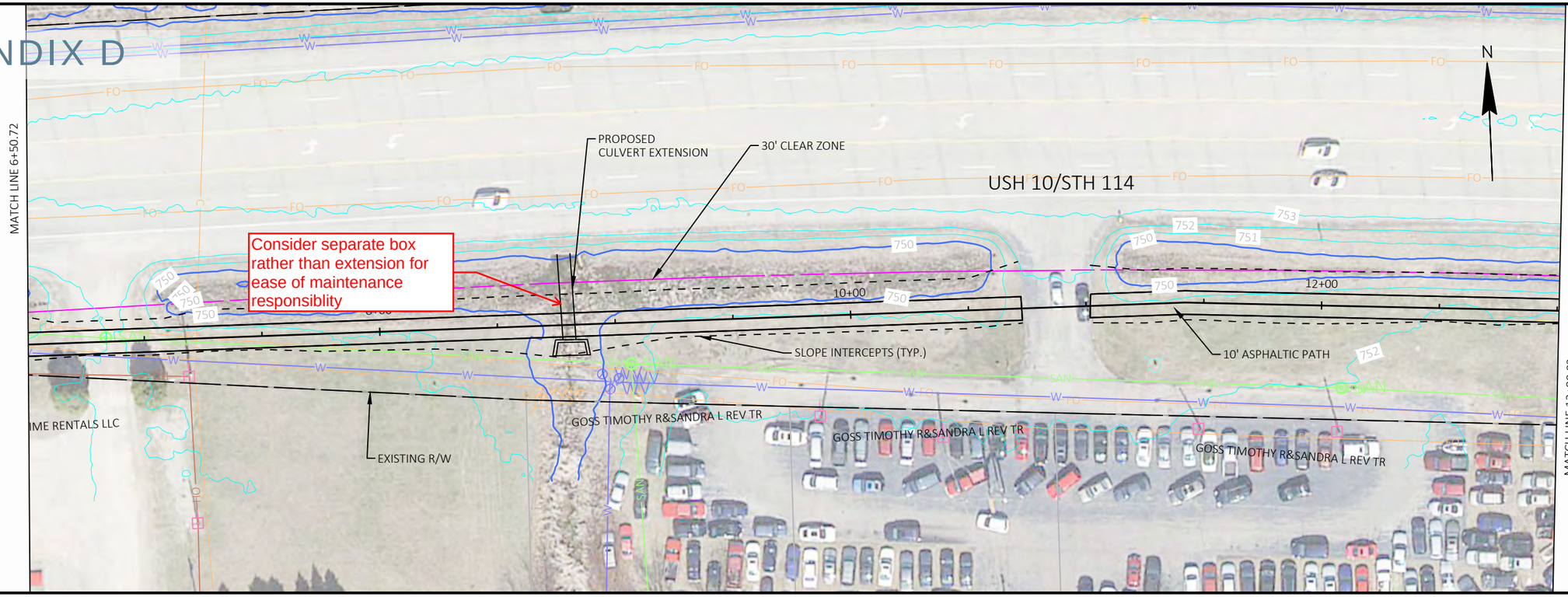

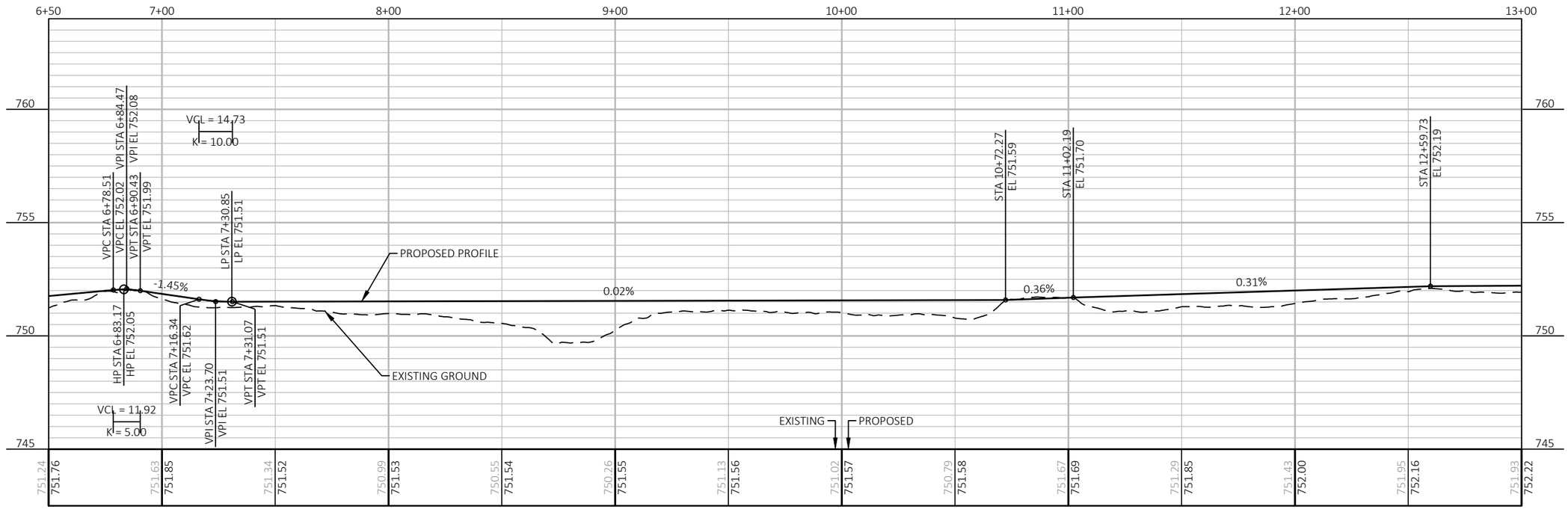

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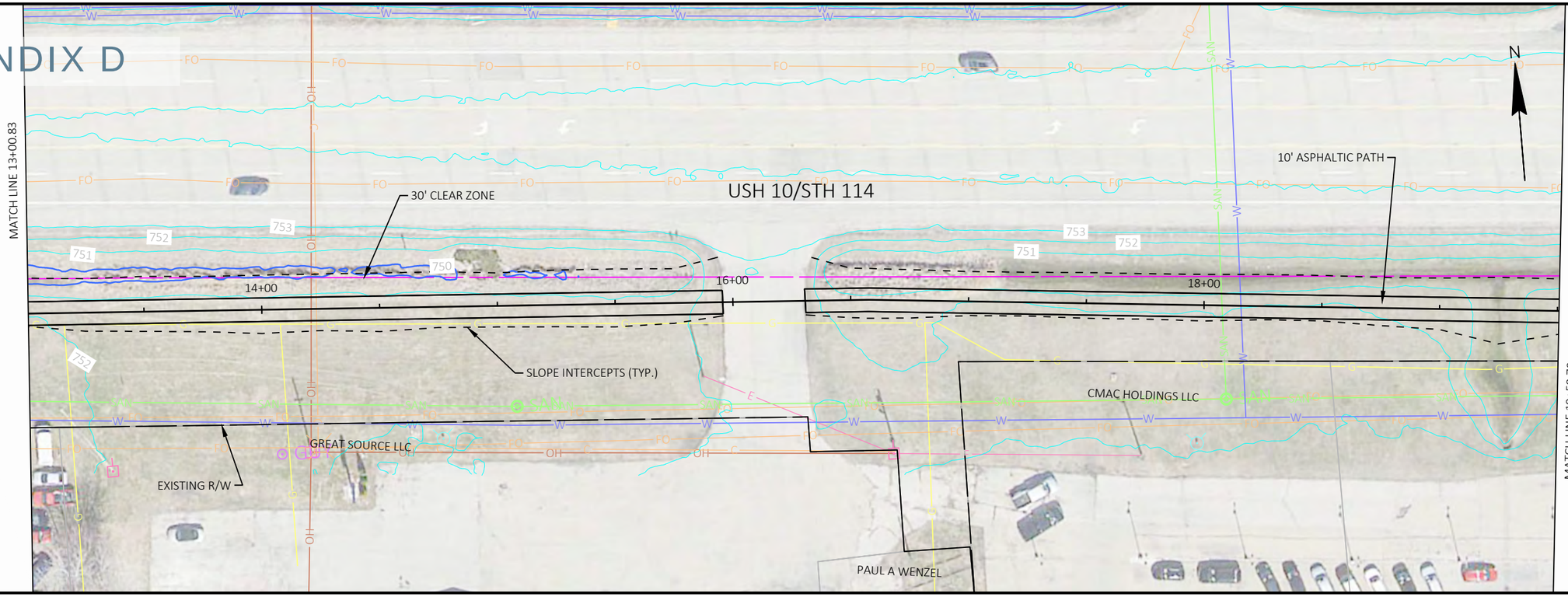

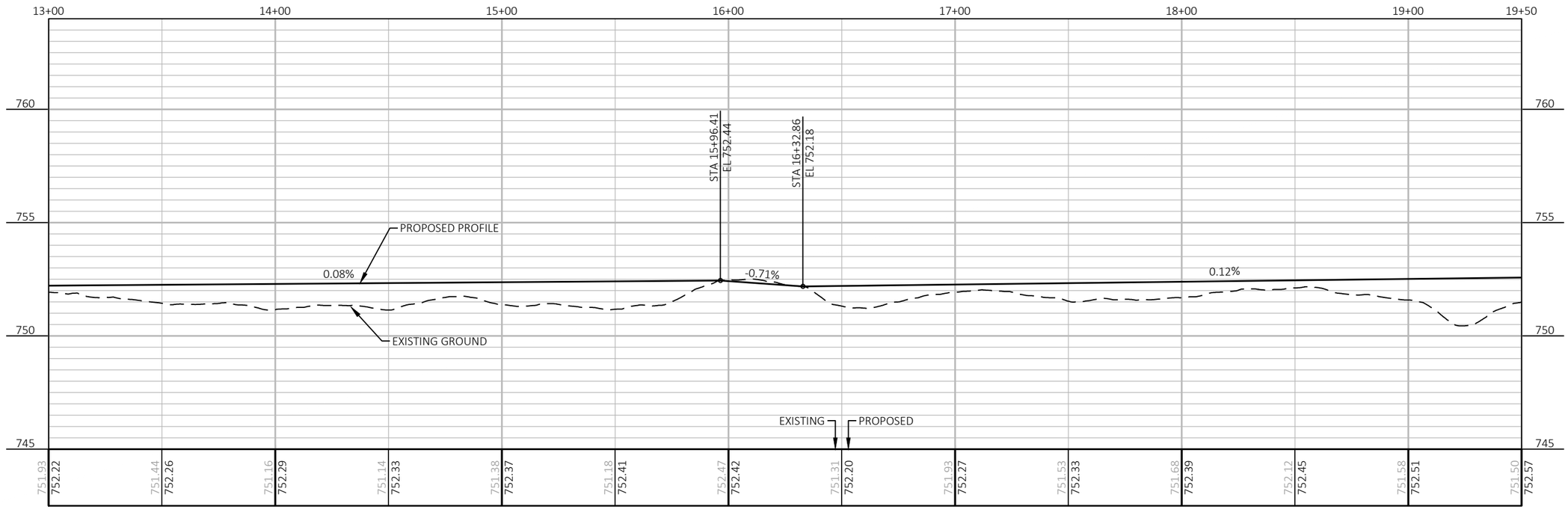

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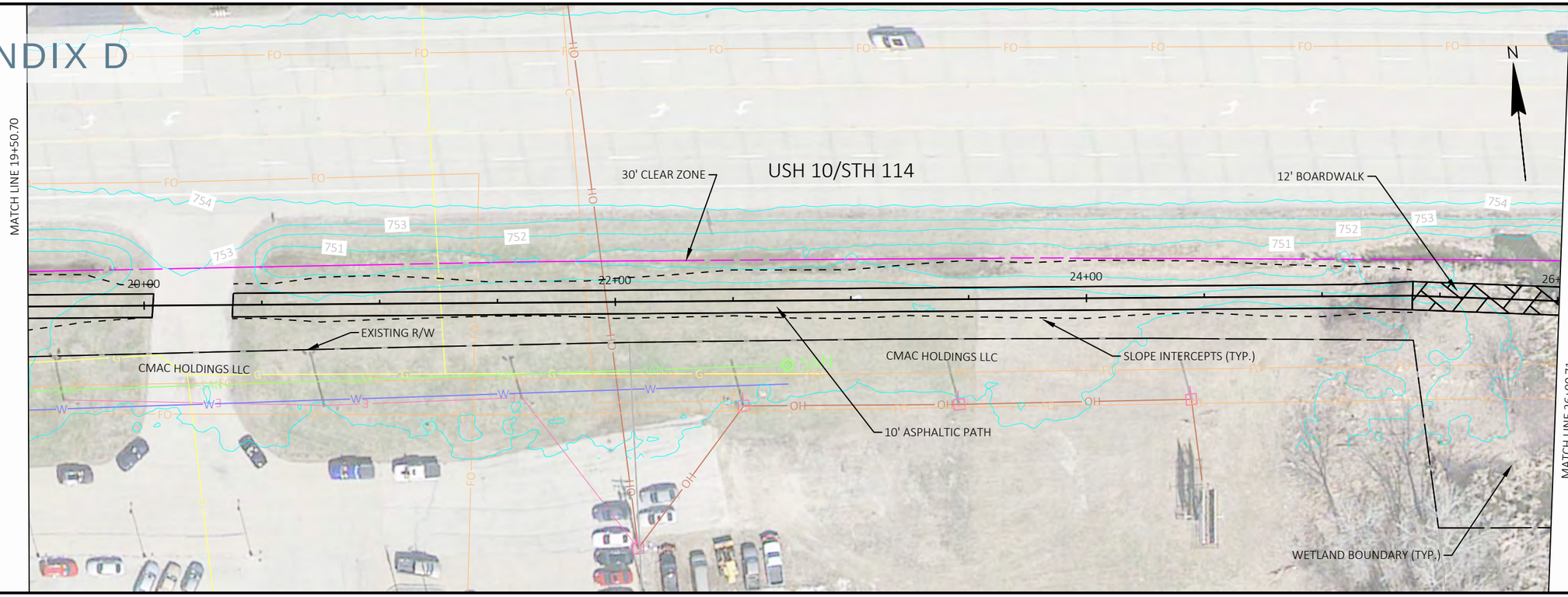
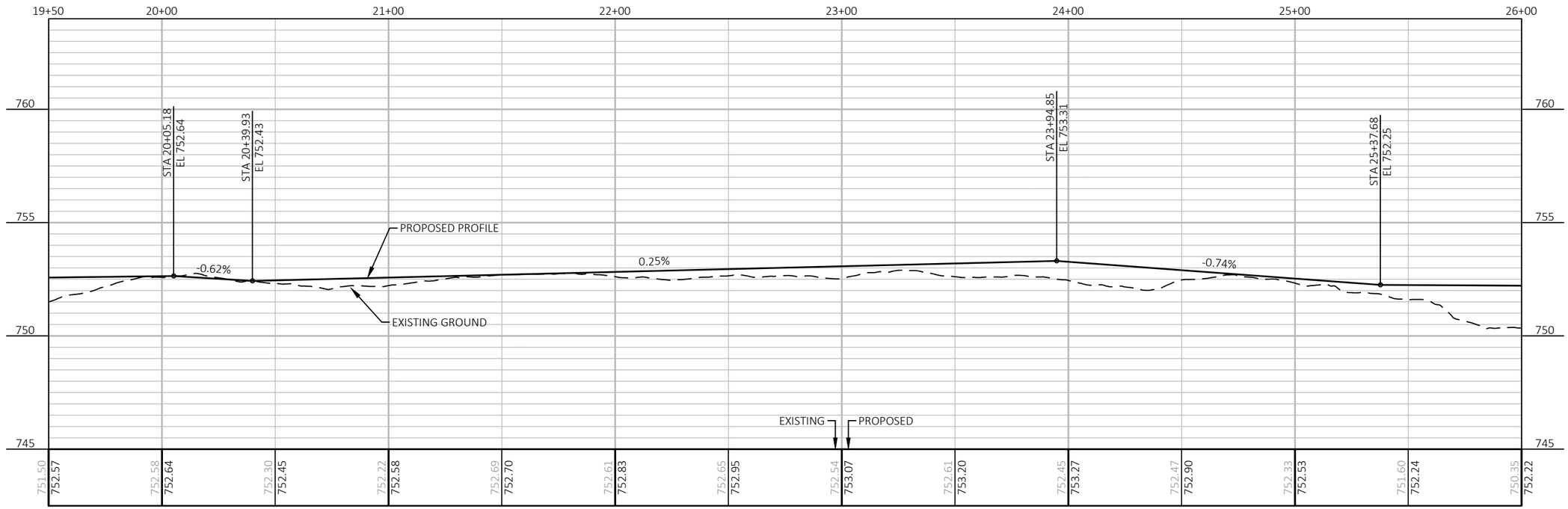
PLOT DATE : 7/23/2024 11:05 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



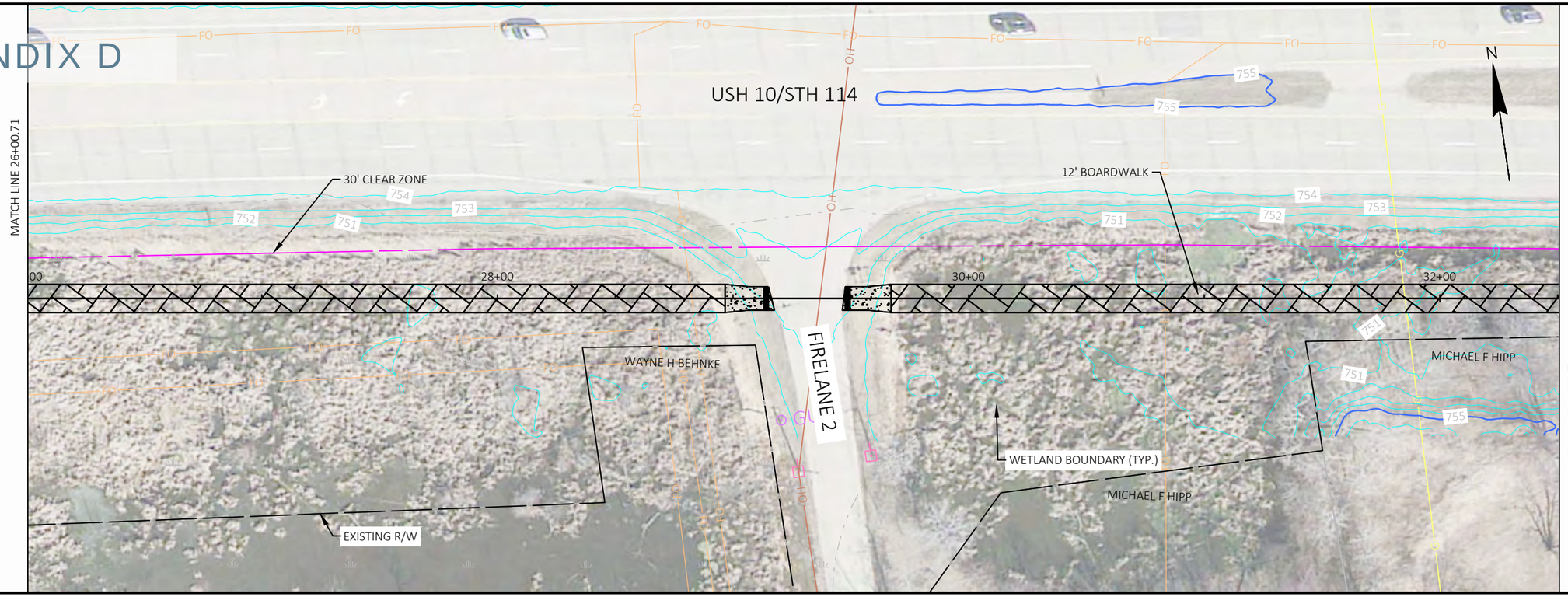


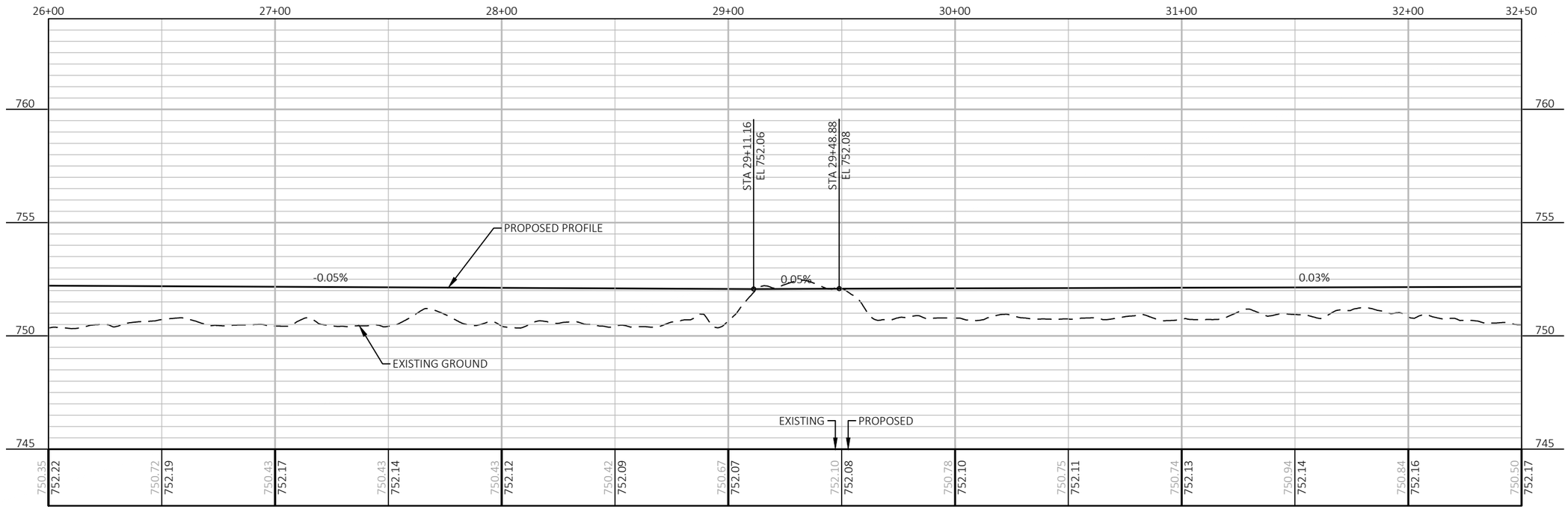
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 04

PLOT DATE : 7/23/2024 11:06 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



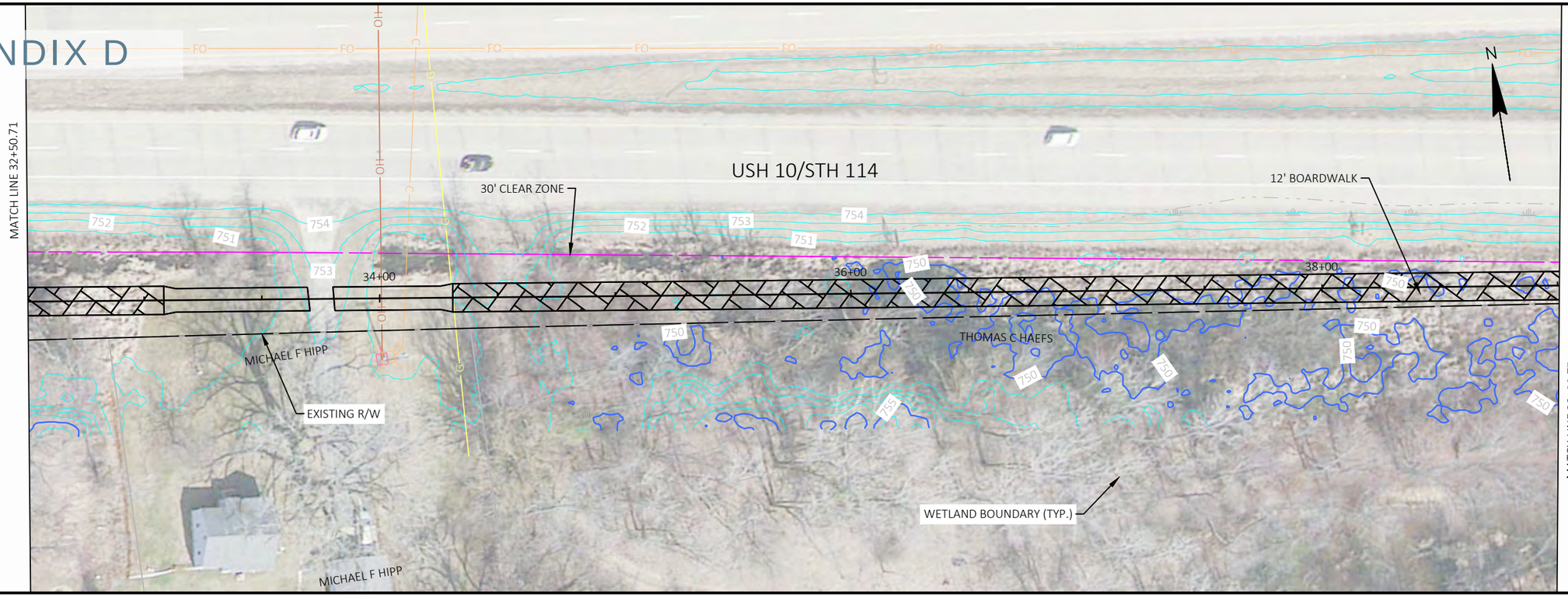


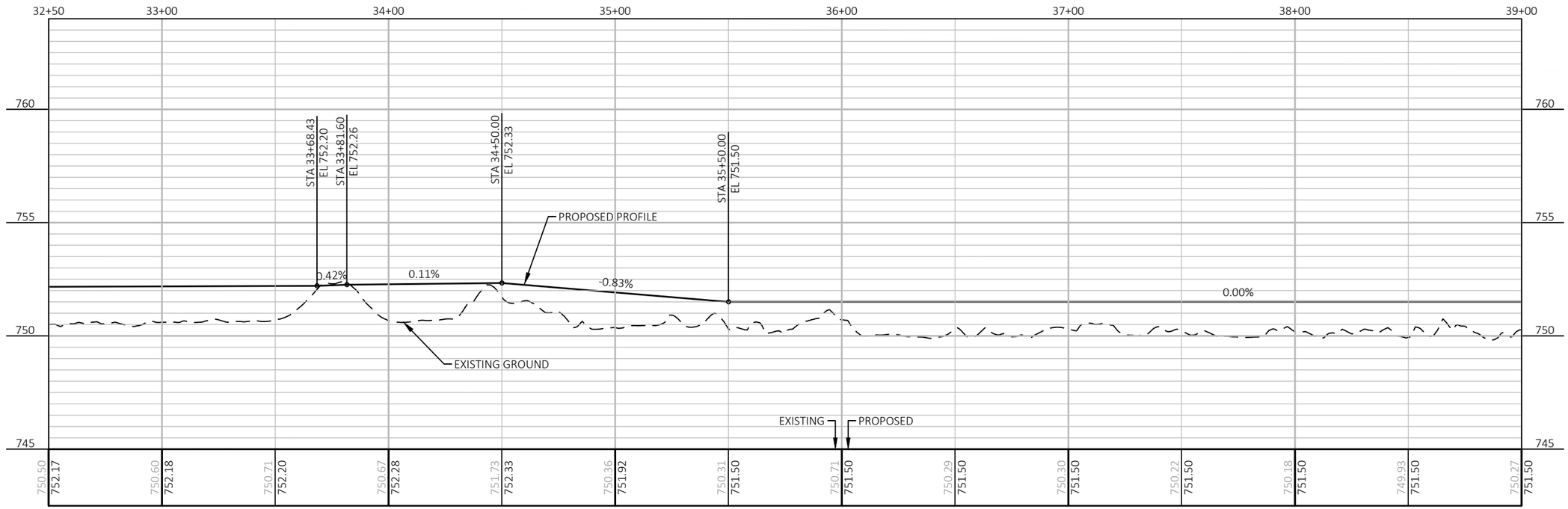
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 05

PLOT DATE : 7/23/2024 11:07 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

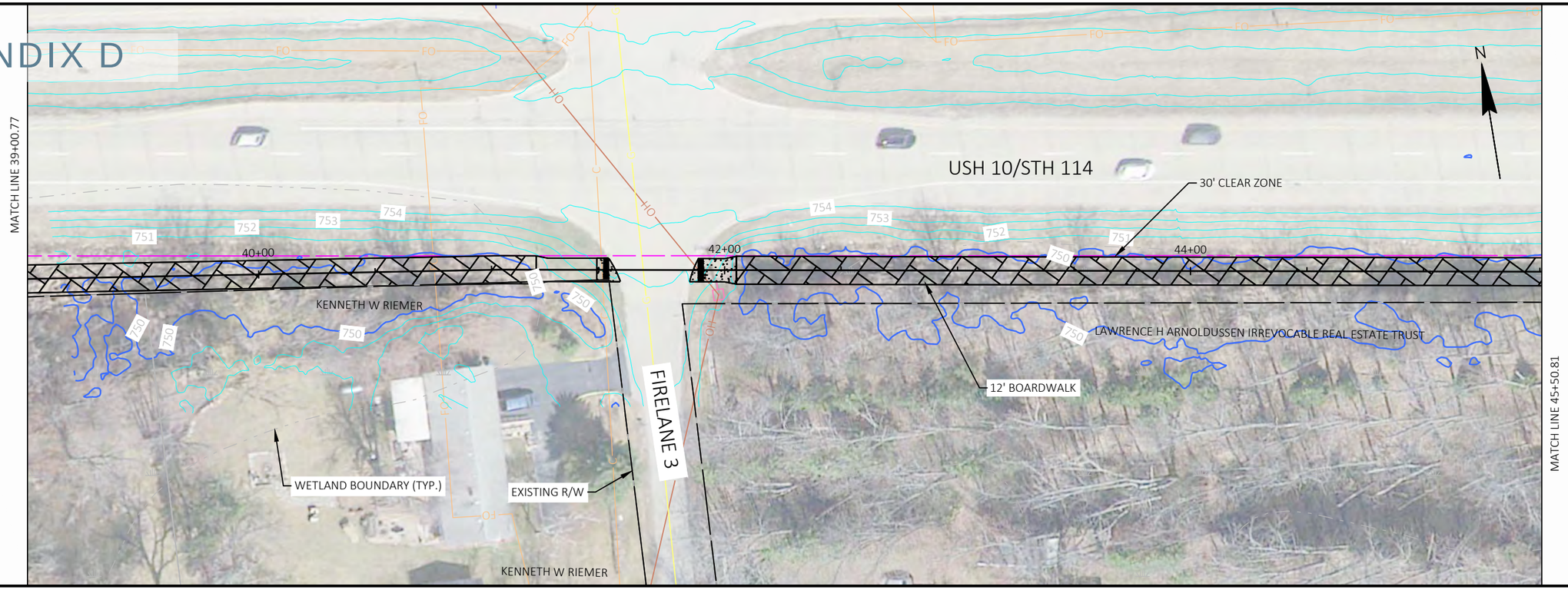
WISDOT/CADDS SHEET 44

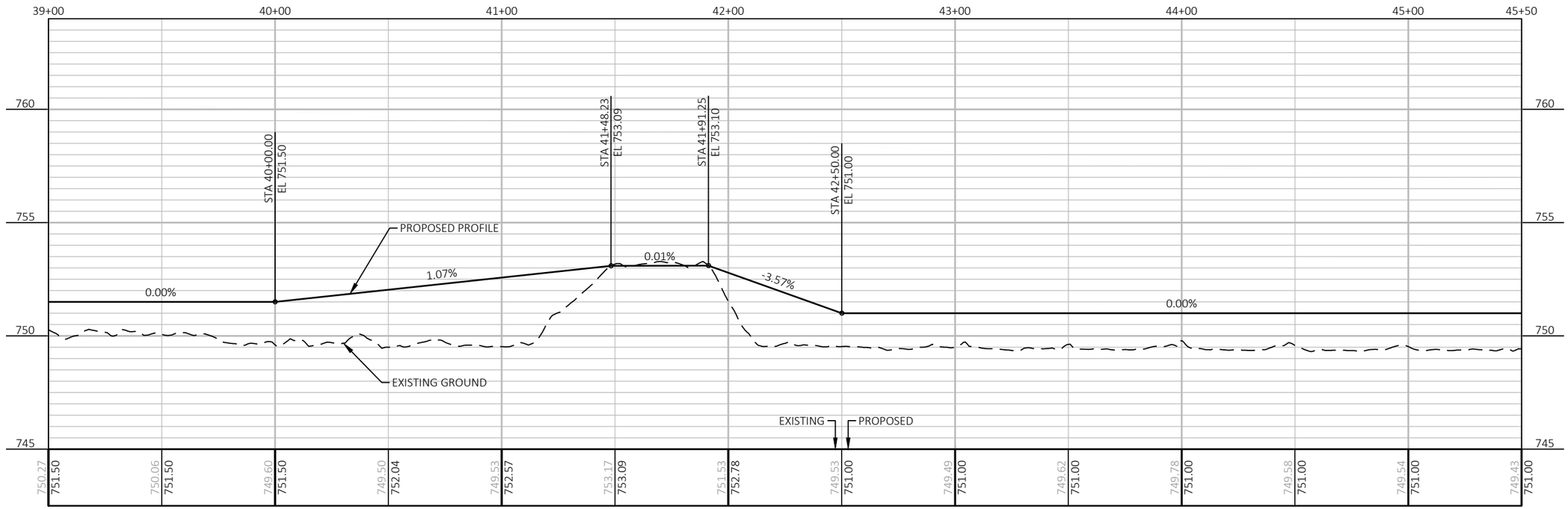




PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 06
PLOT DATE : 7/23/2024 11:09 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44



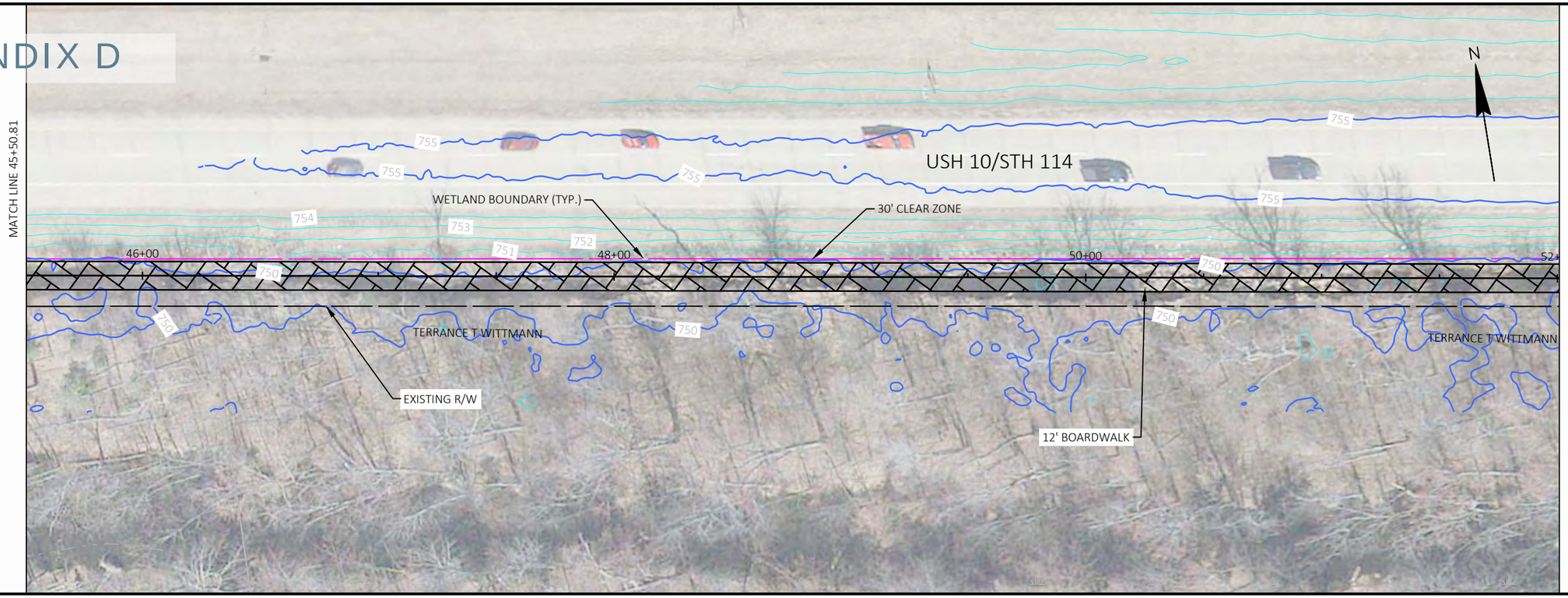


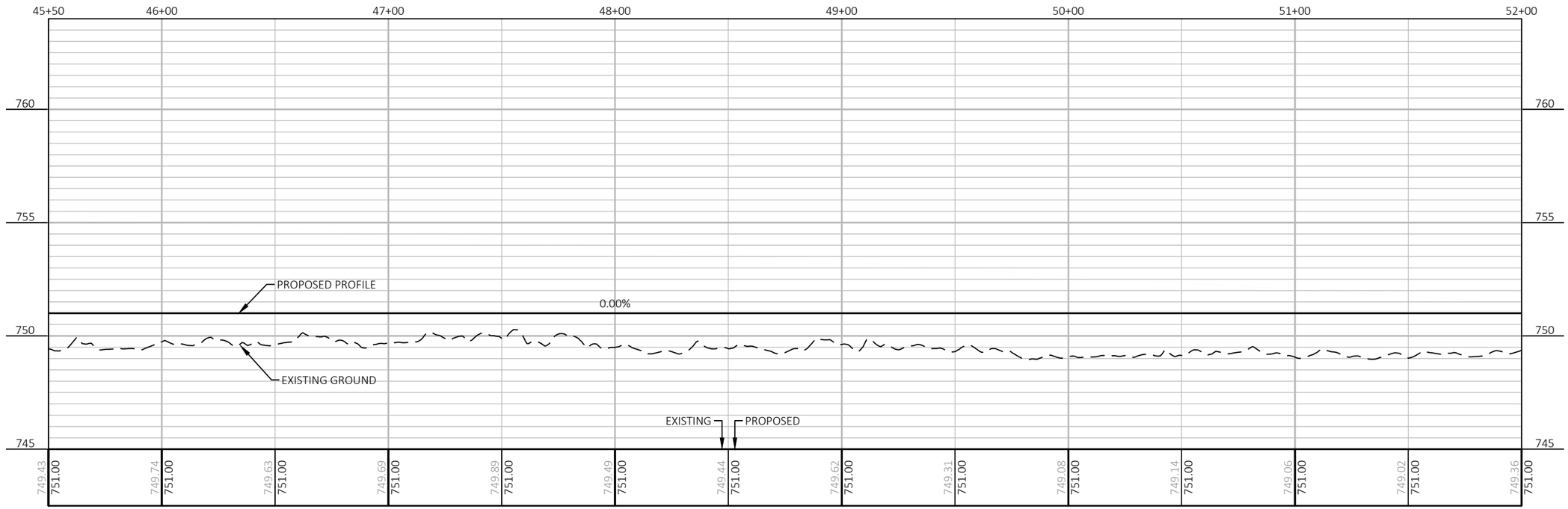
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 07

PLOT DATE : 7/23/2024 11:33 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



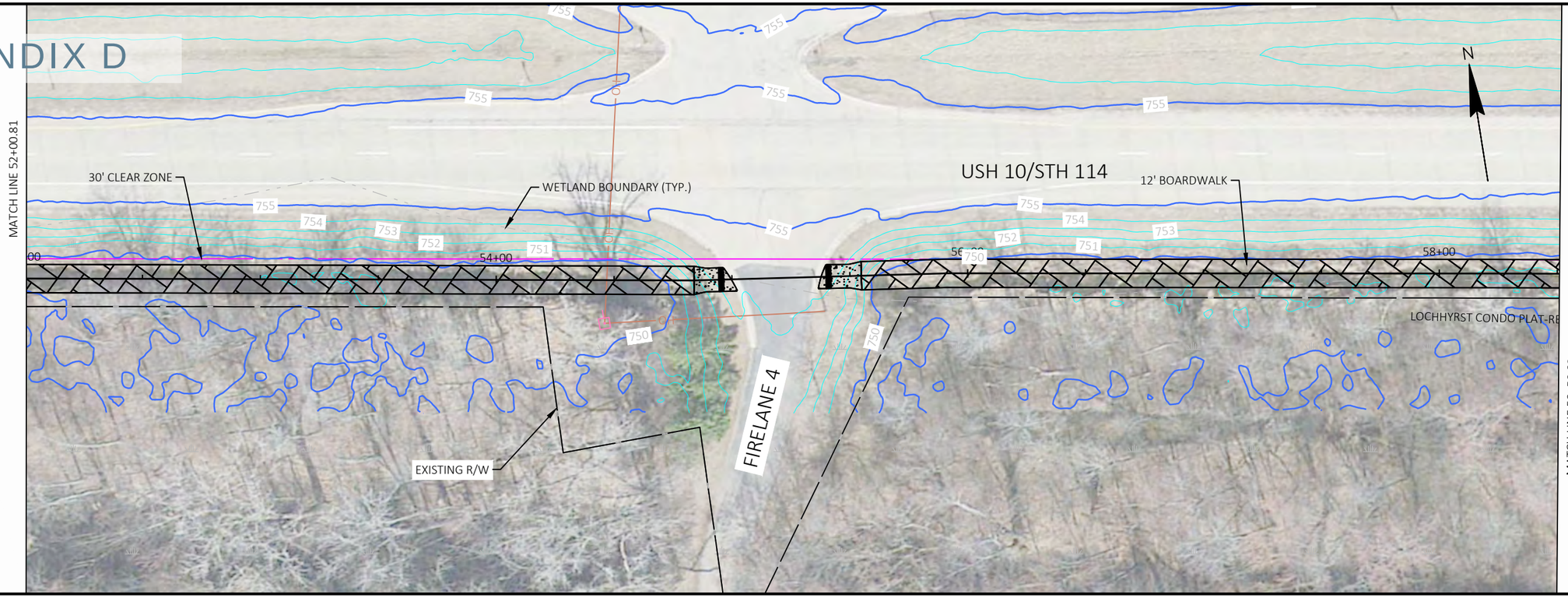


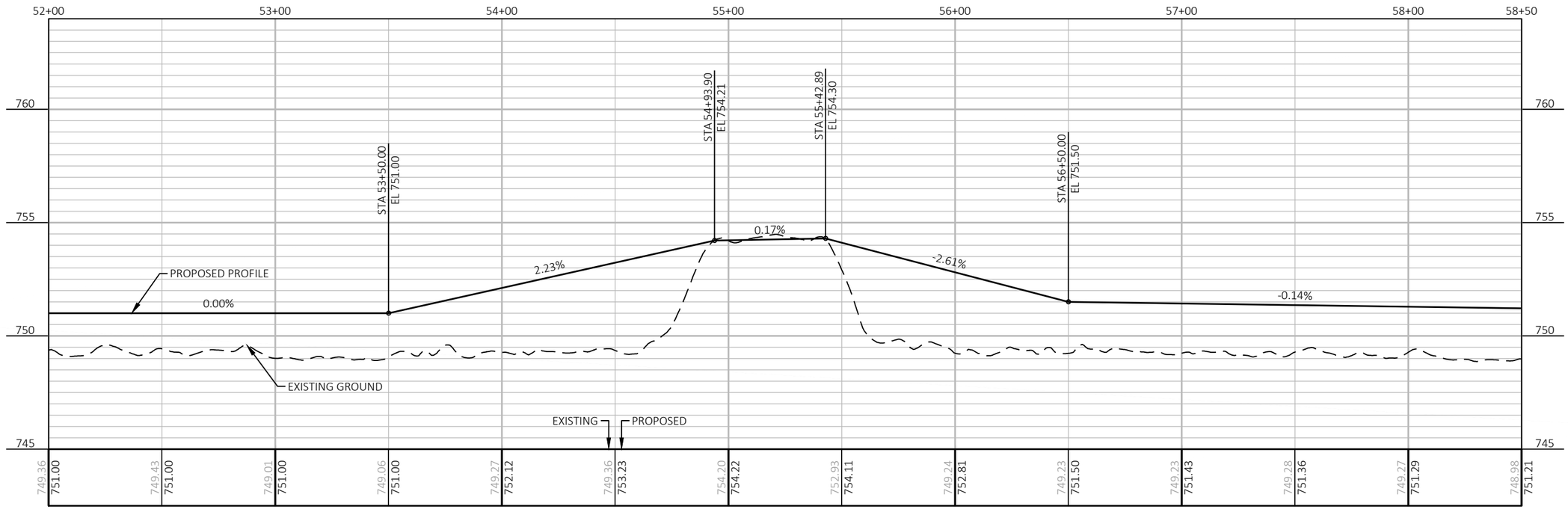
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 08

PLOT DATE : 7/23/2024 11:35 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



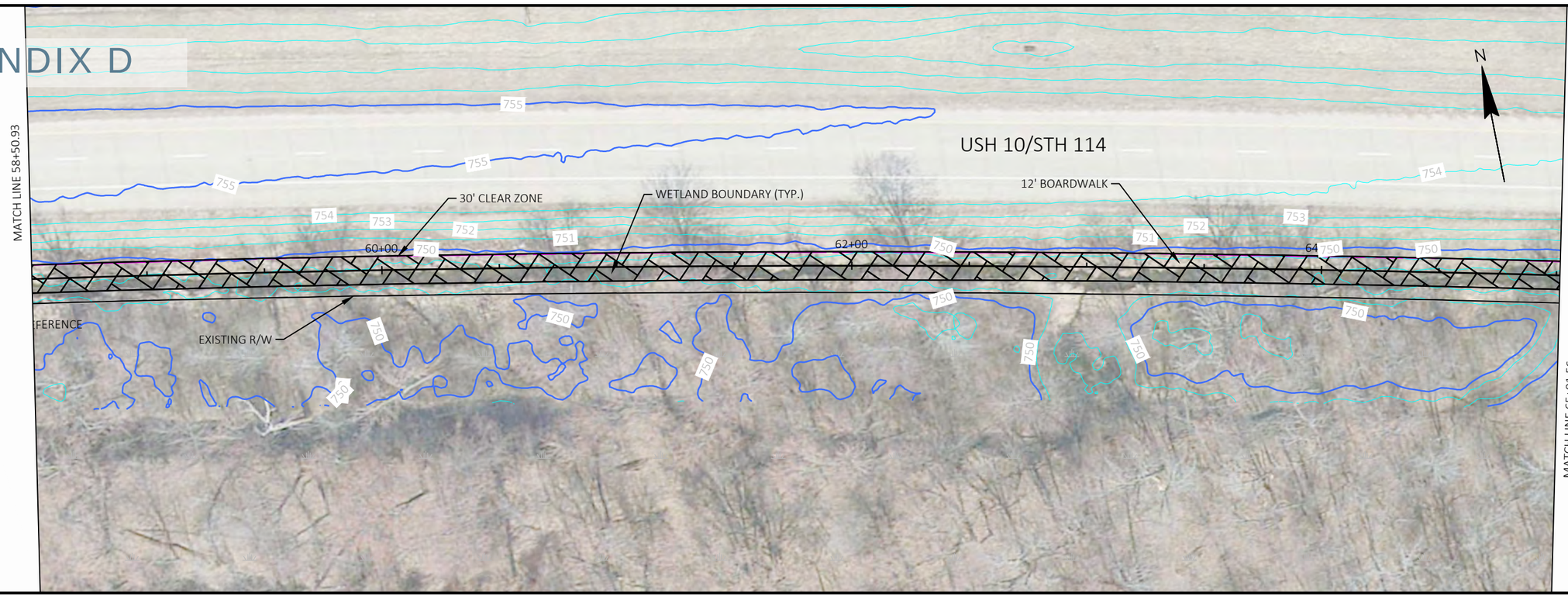


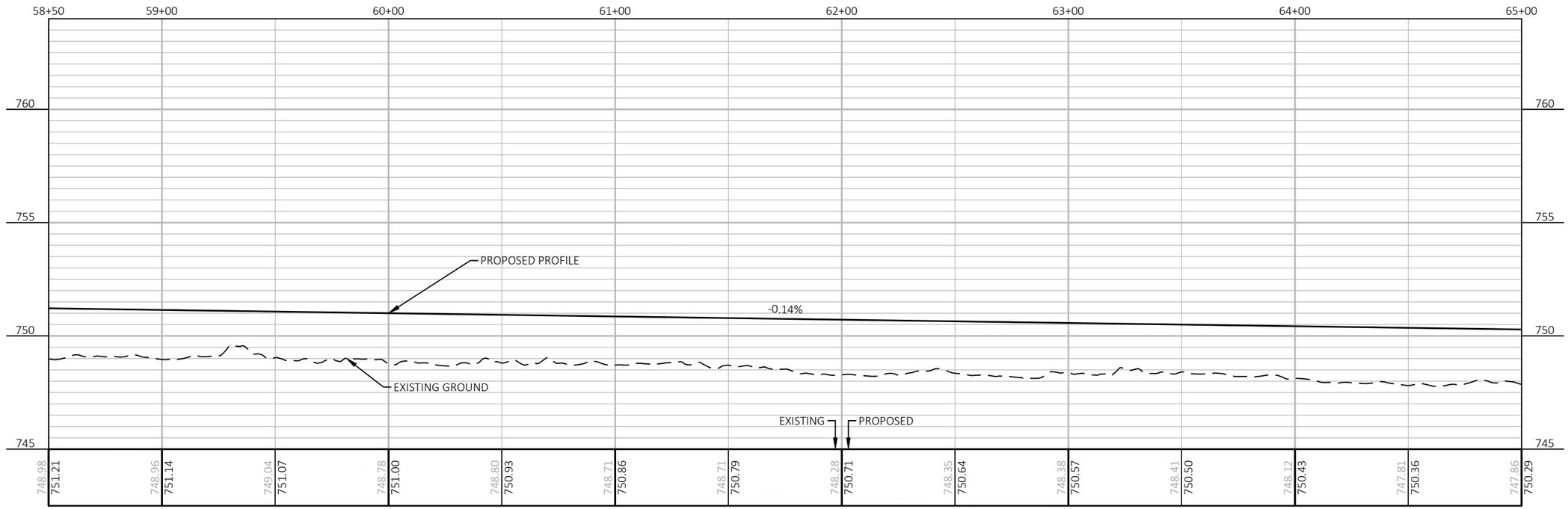
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 09

PLOT DATE : 7/23/2024 11:38 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



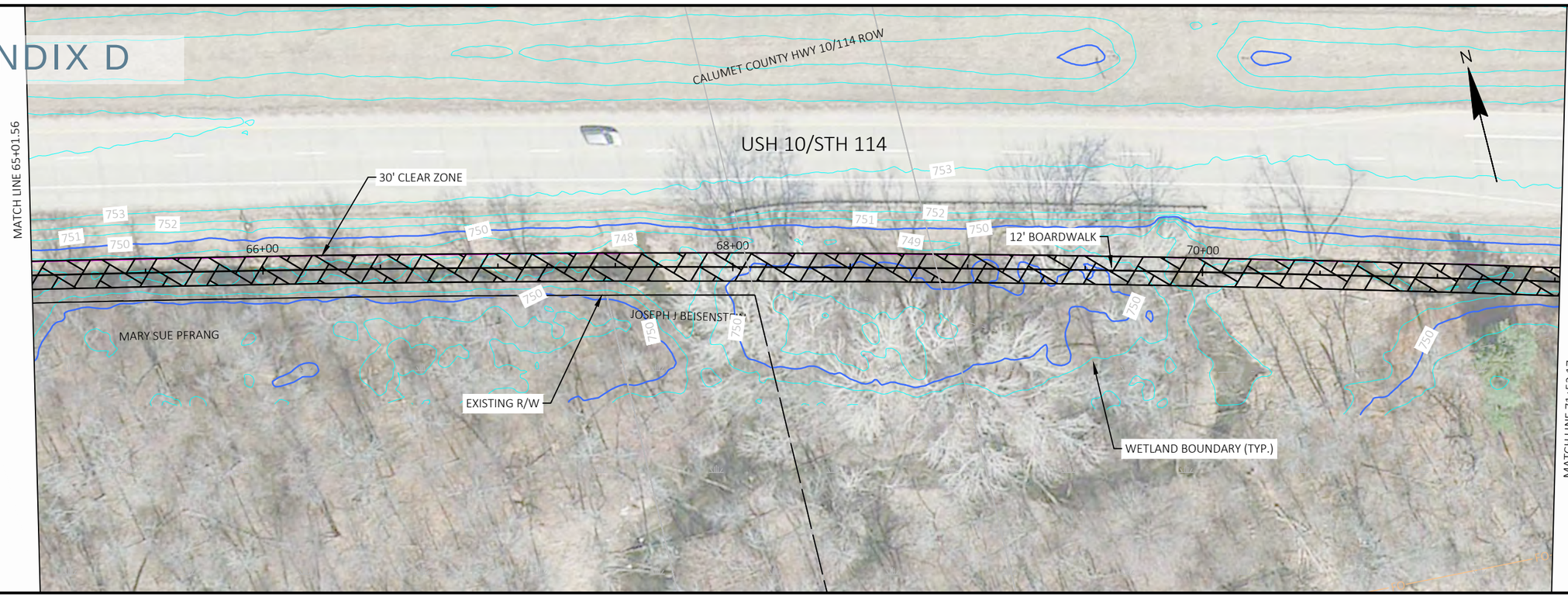


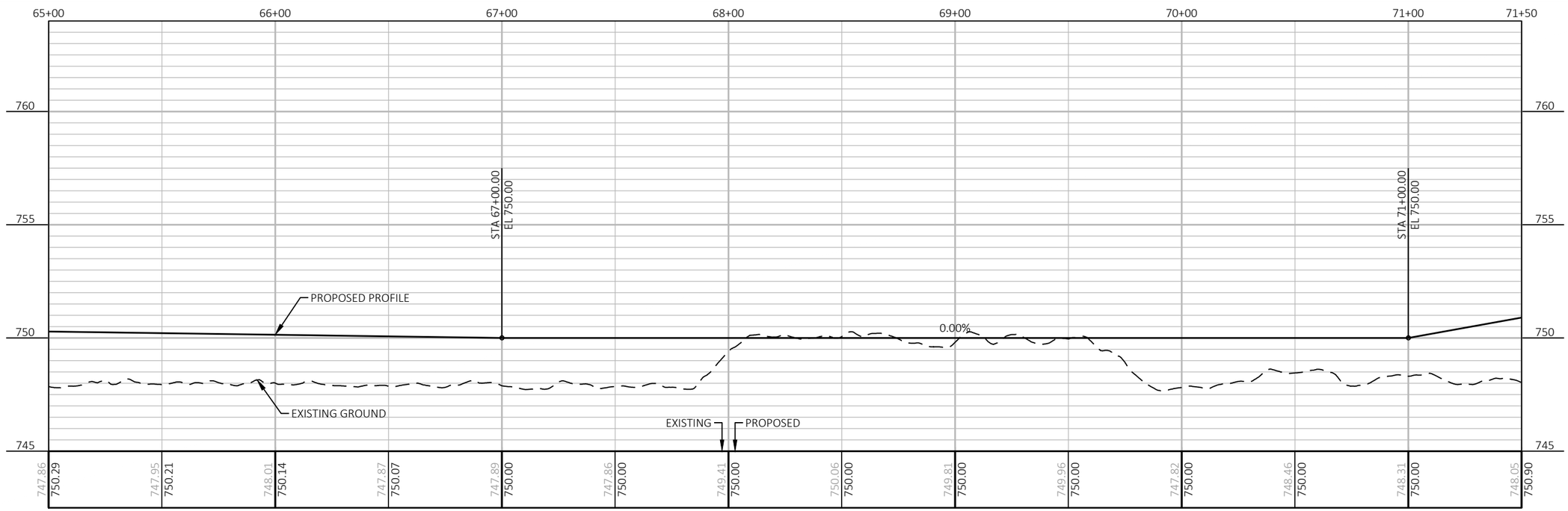
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 10

PLOT DATE : 7/23/2024 11:41 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



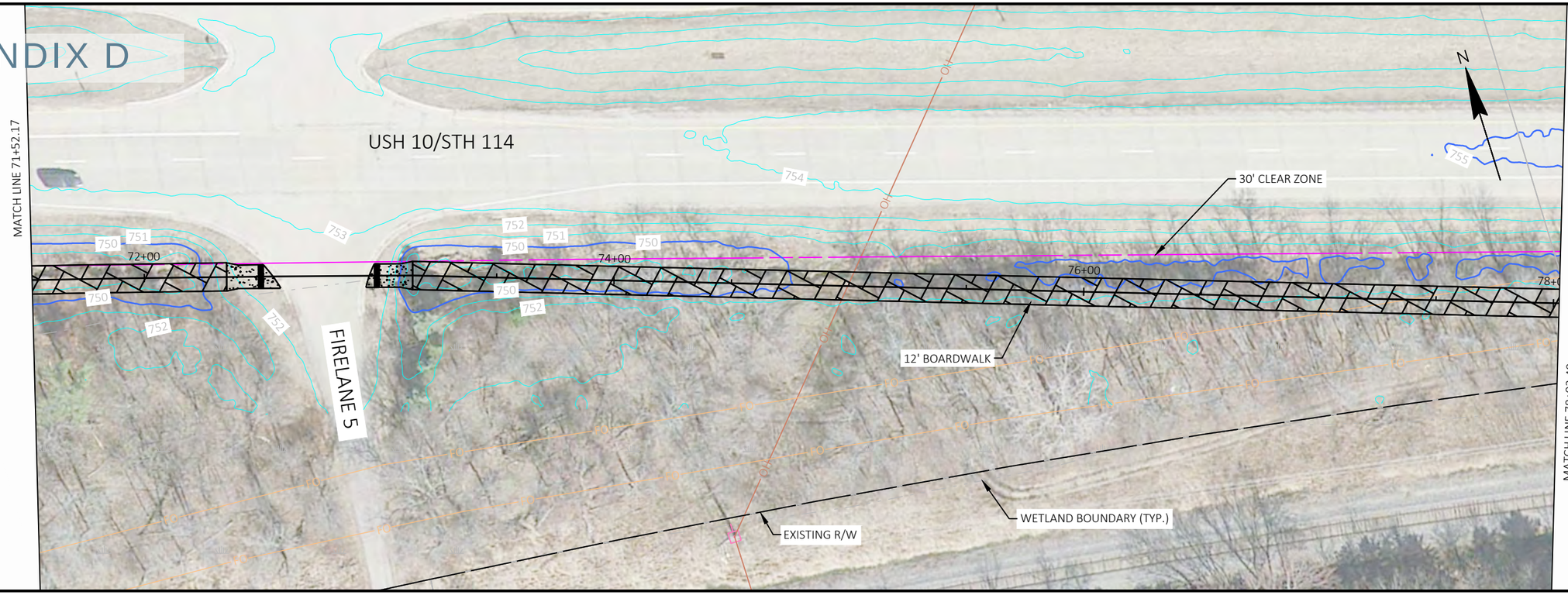


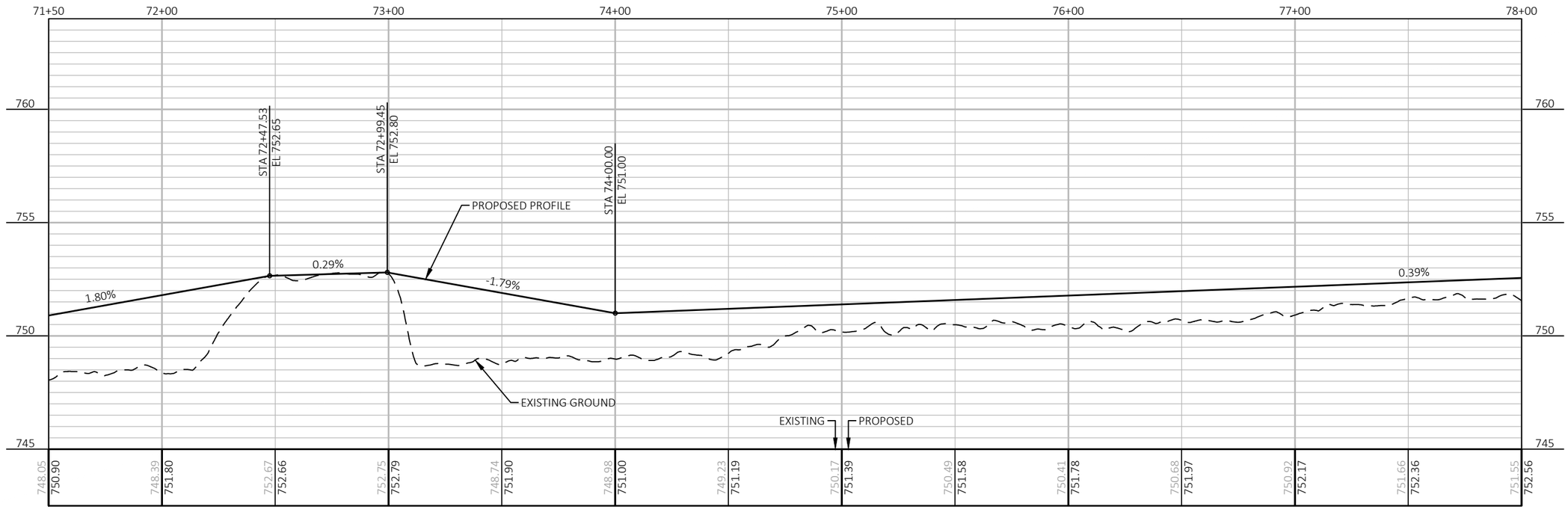
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 11

PLOT DATE : 7/23/2024 11:45 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



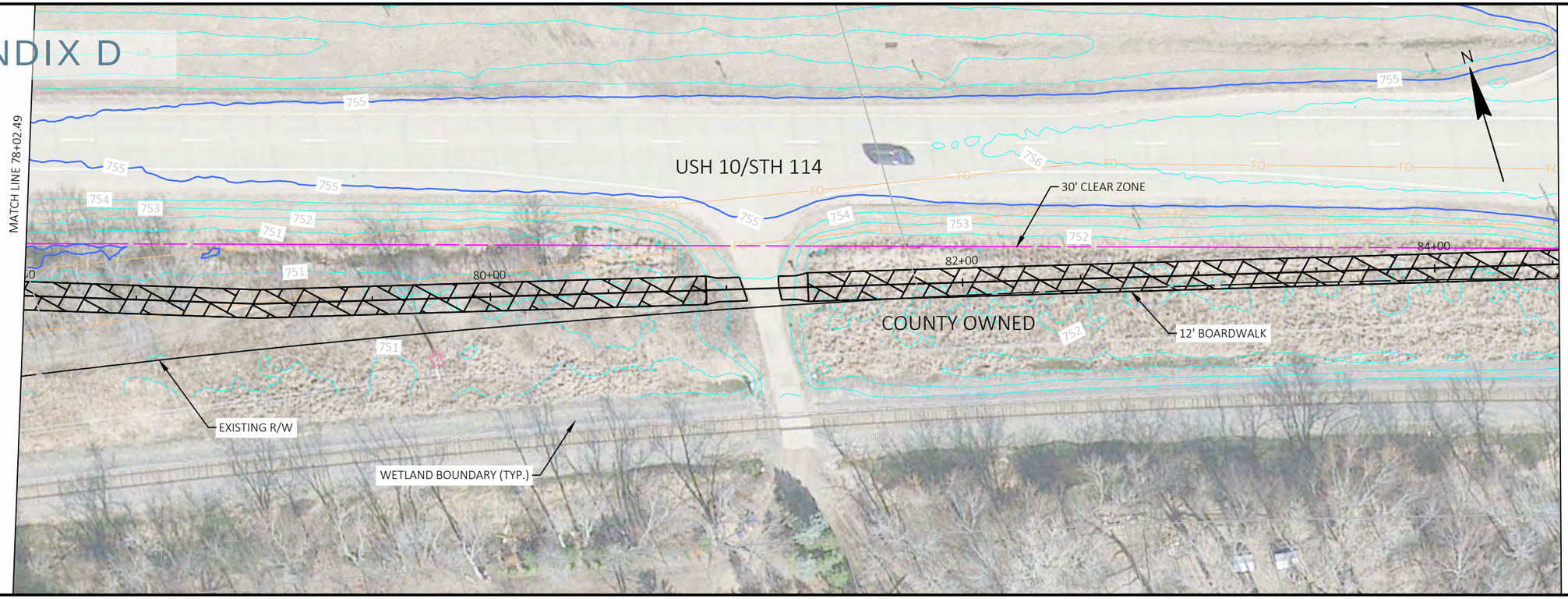


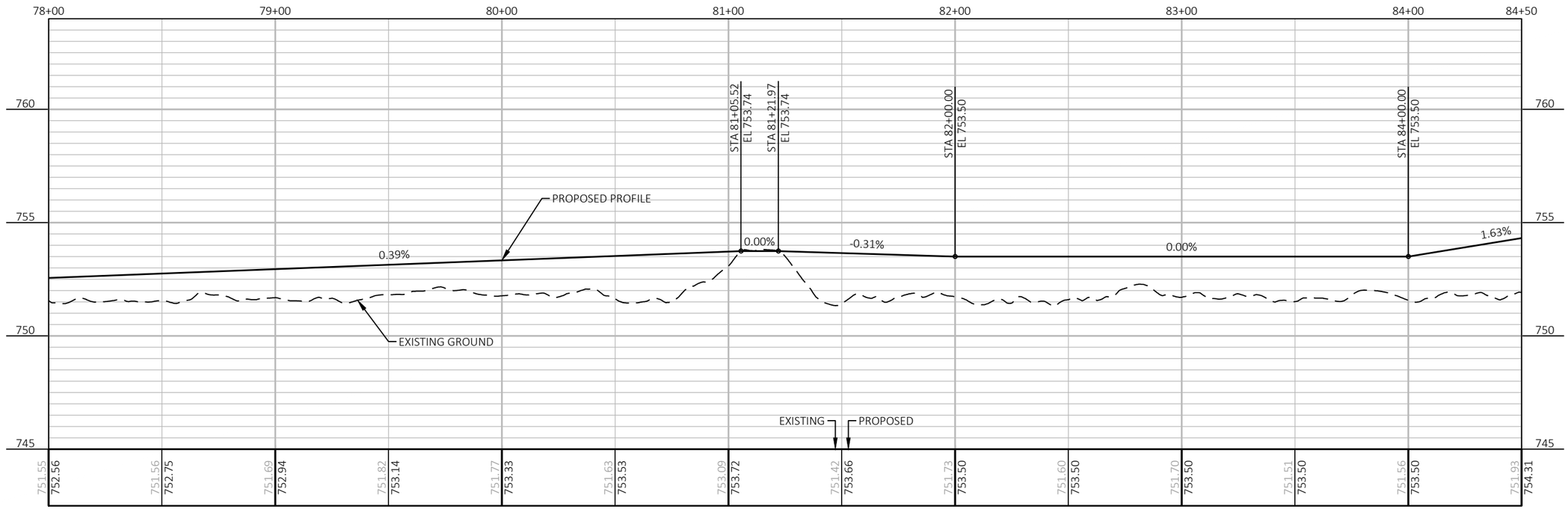
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 12

PLOT DATE : 7/23/2024 11:47 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

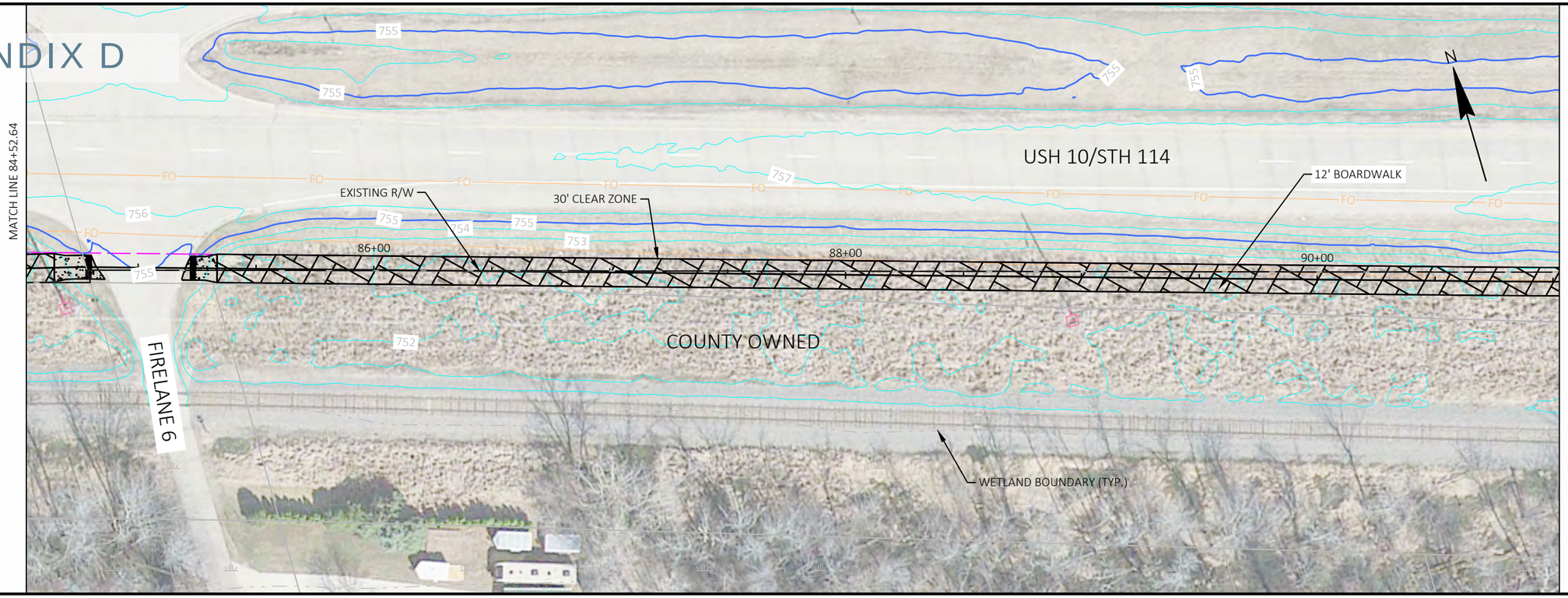
WISDOT/CADDS SHEET 44

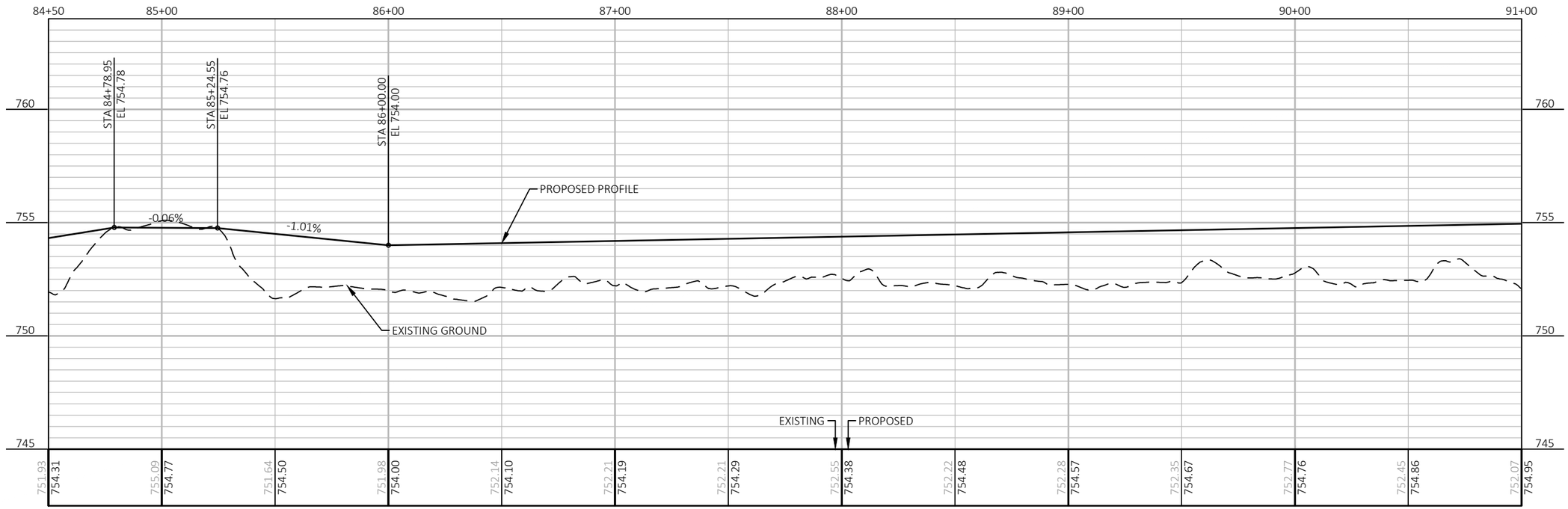




PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 13
PLOT DATE : 7/23/2024 11:54 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44



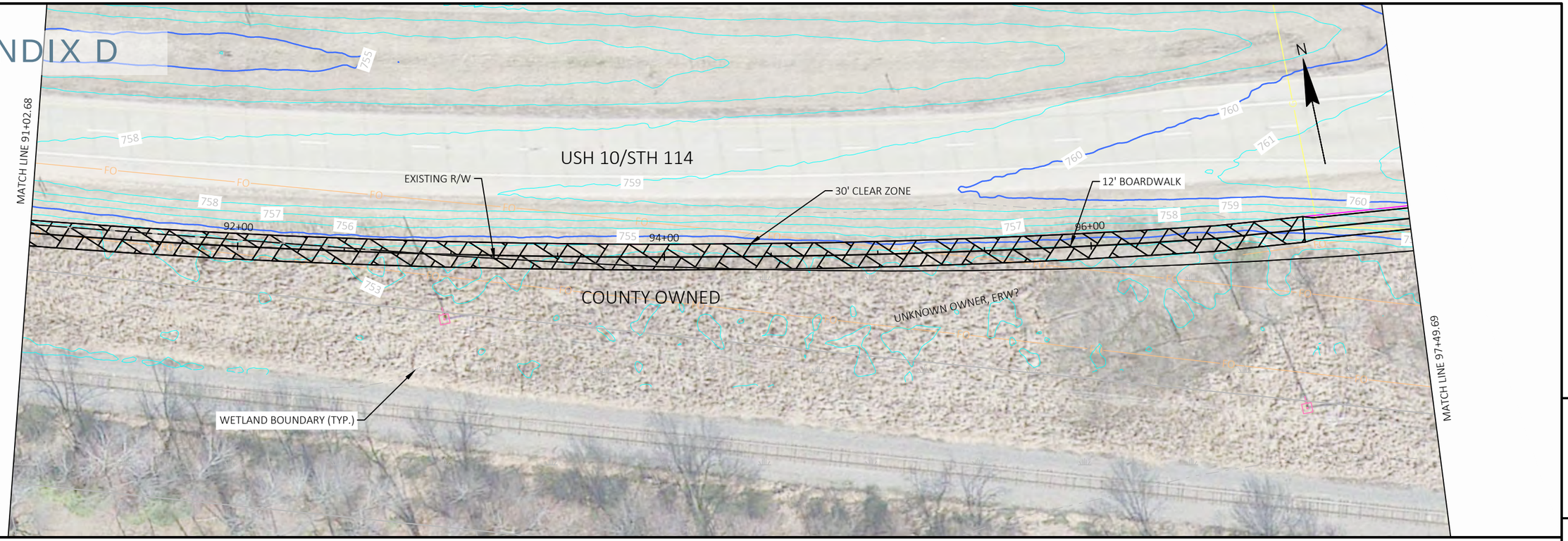


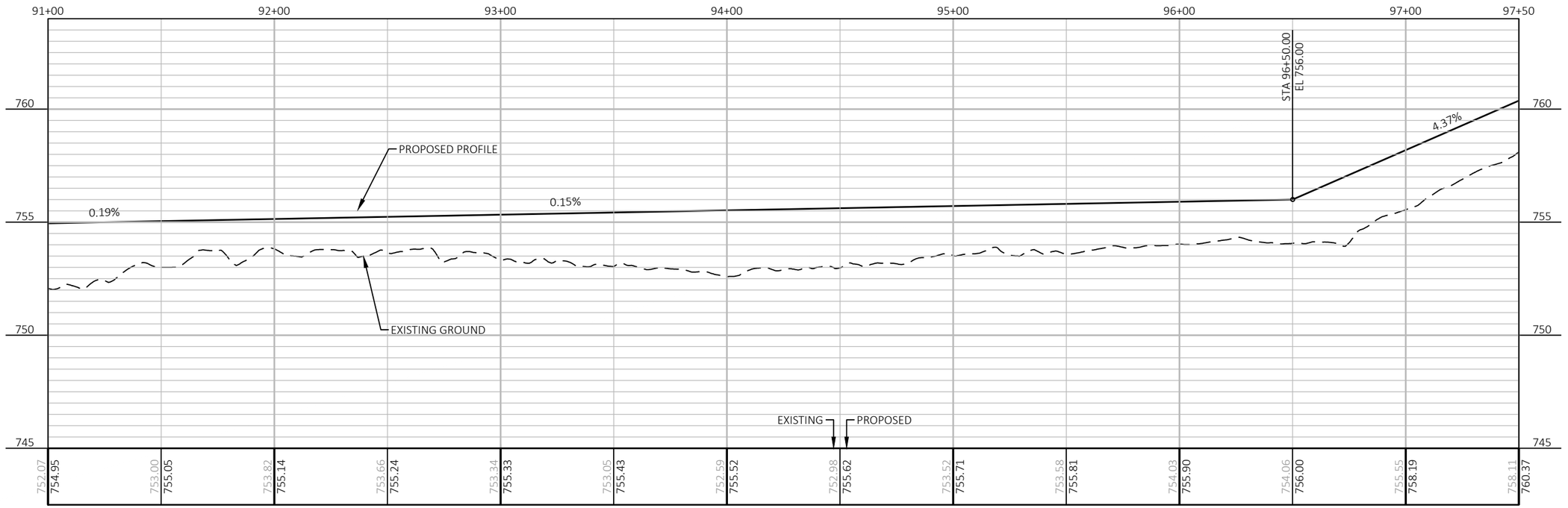
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 14

PLOT DATE : 7/23/2024 11:58 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



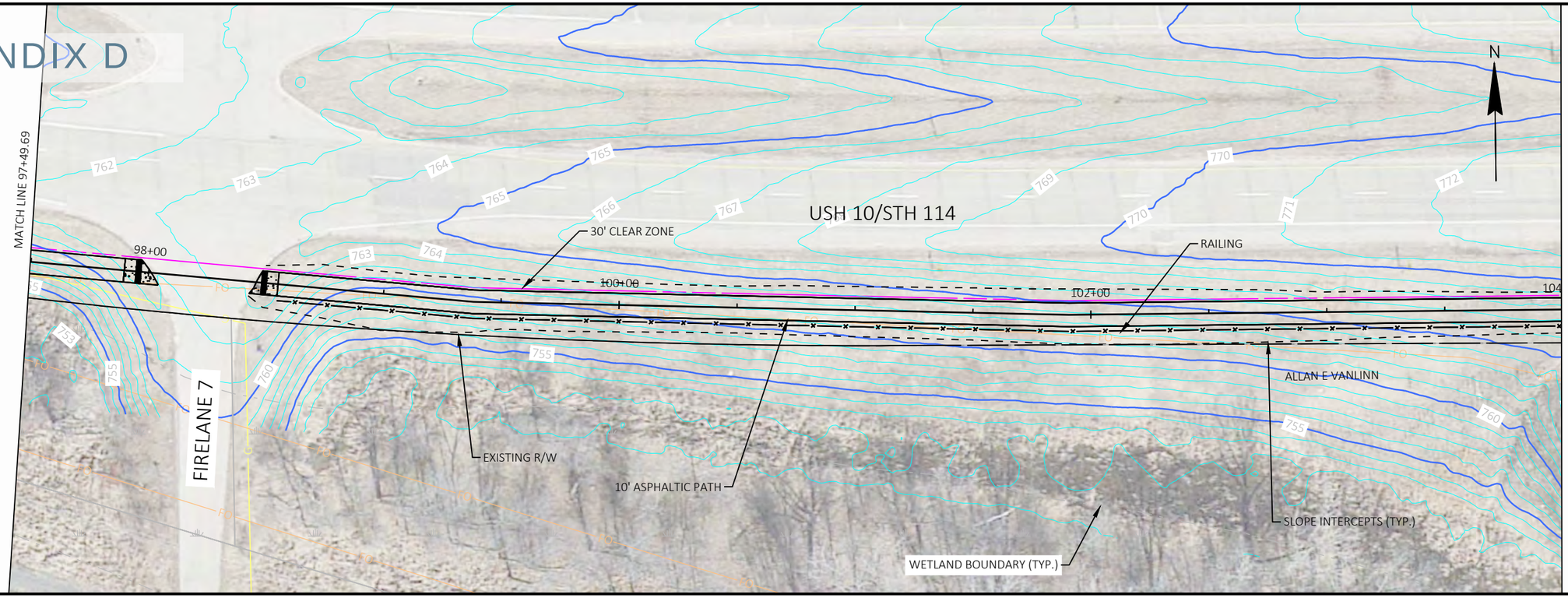


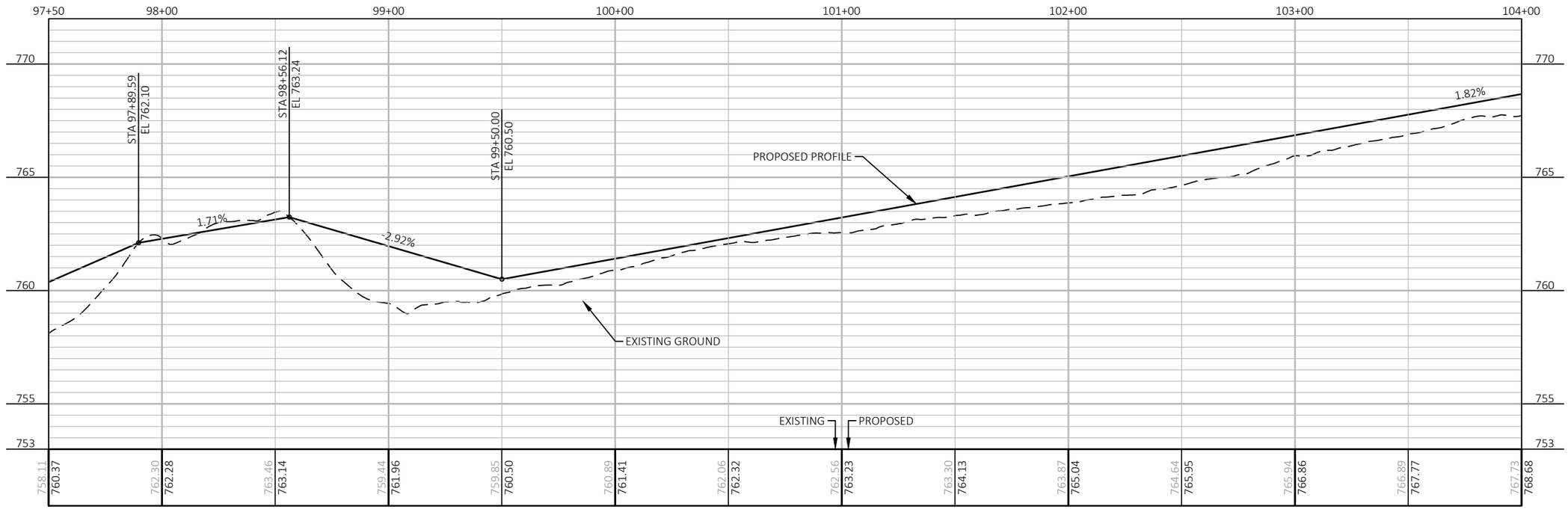
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 15

PLOT DATE : 7/23/2024 11:18 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



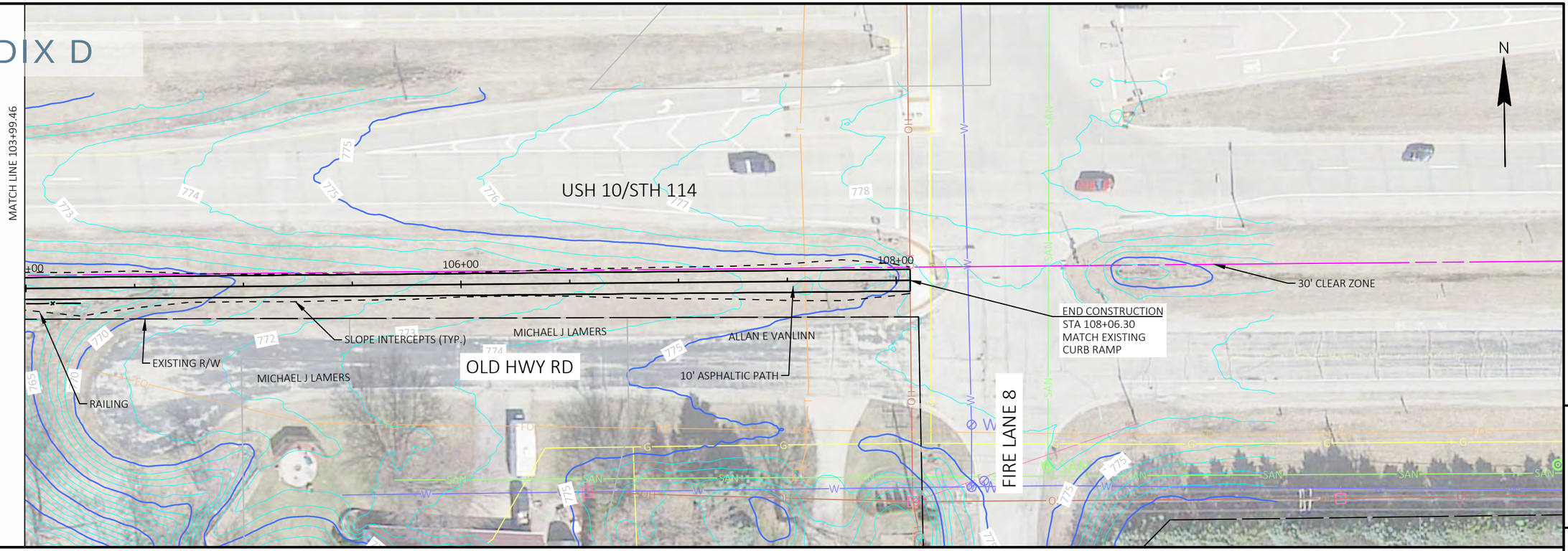


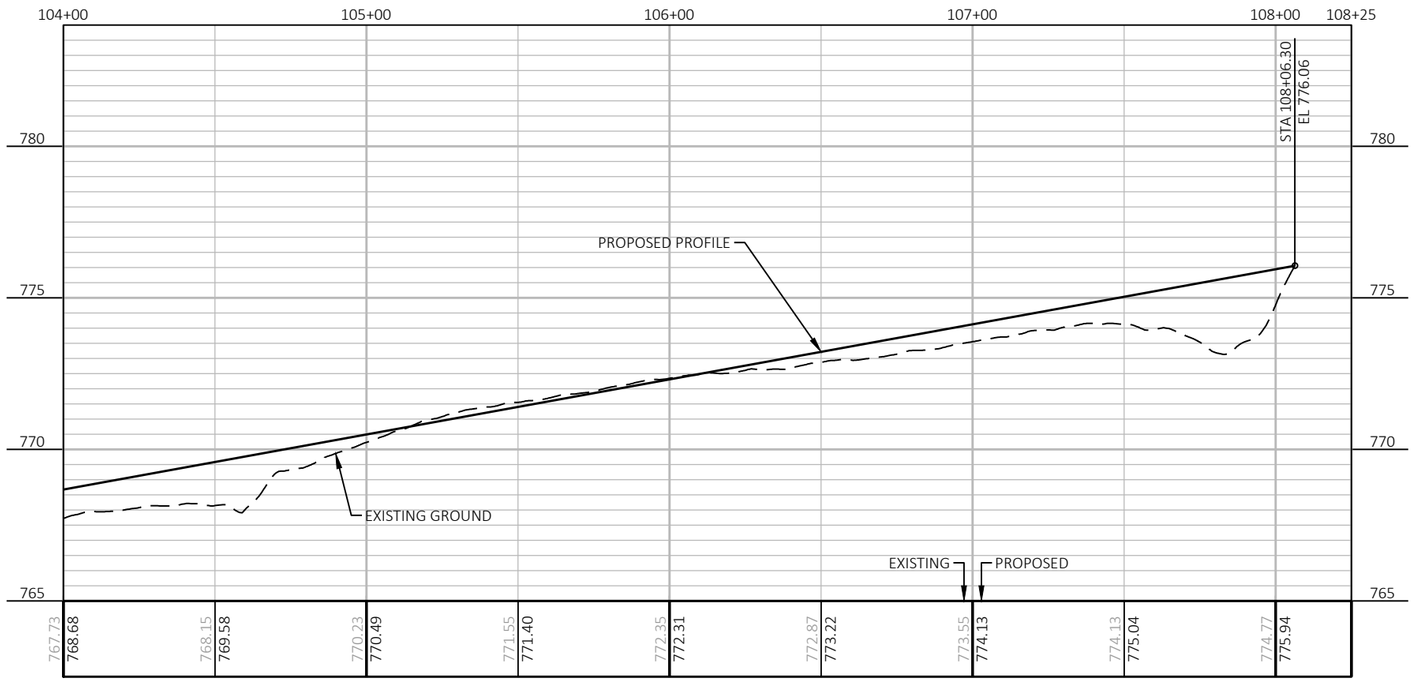
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 16

PLOT DATE : 7/23/2024 11:19 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

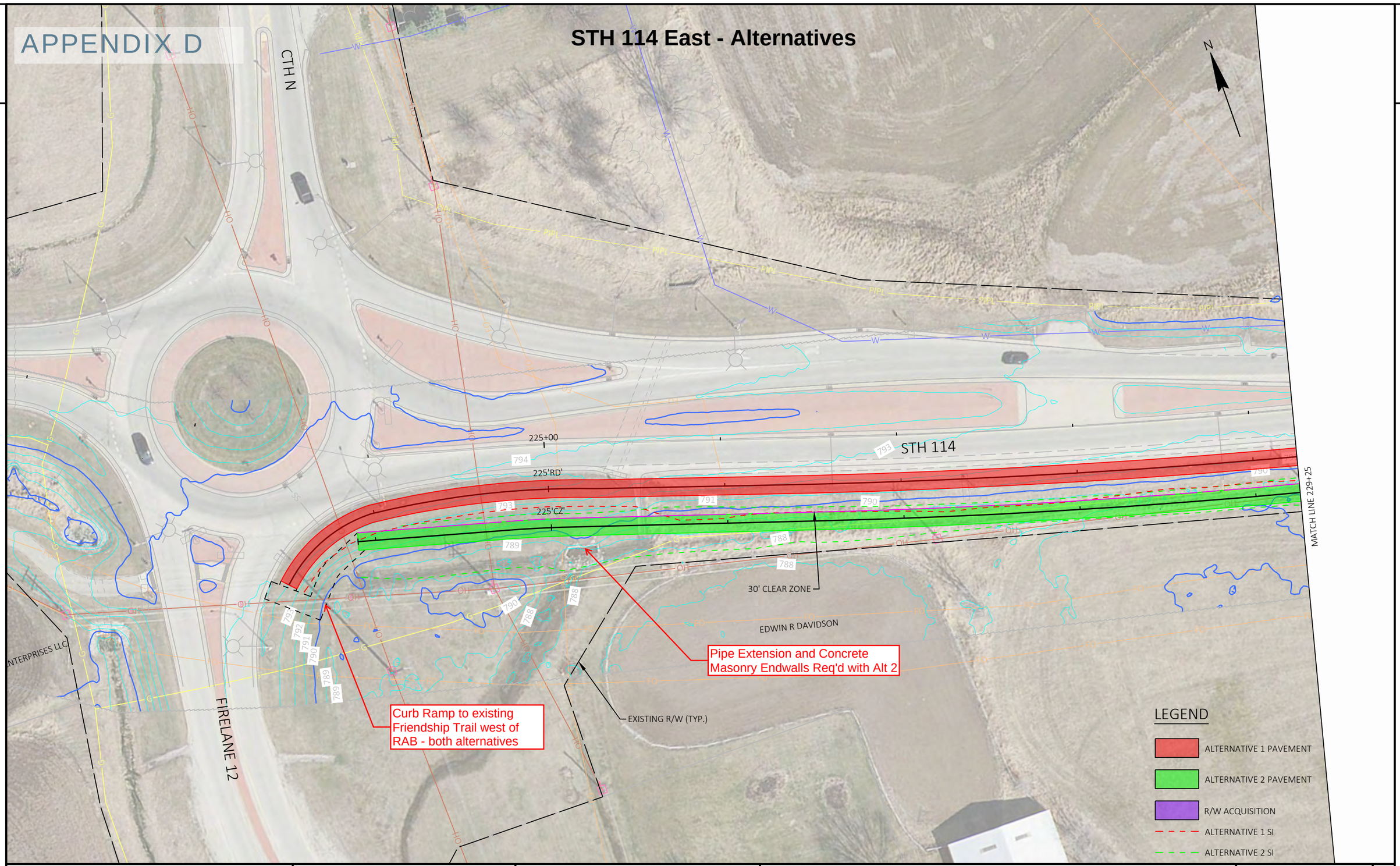




PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	PLAN AND PROFILE: SOUTH PATH	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050101-PP_SOUTH.DWG
LAYOUT NAME - PP S 17
PLOT DATE : 7/24/2024 12:04 AM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

STH 114 East - Alternatives

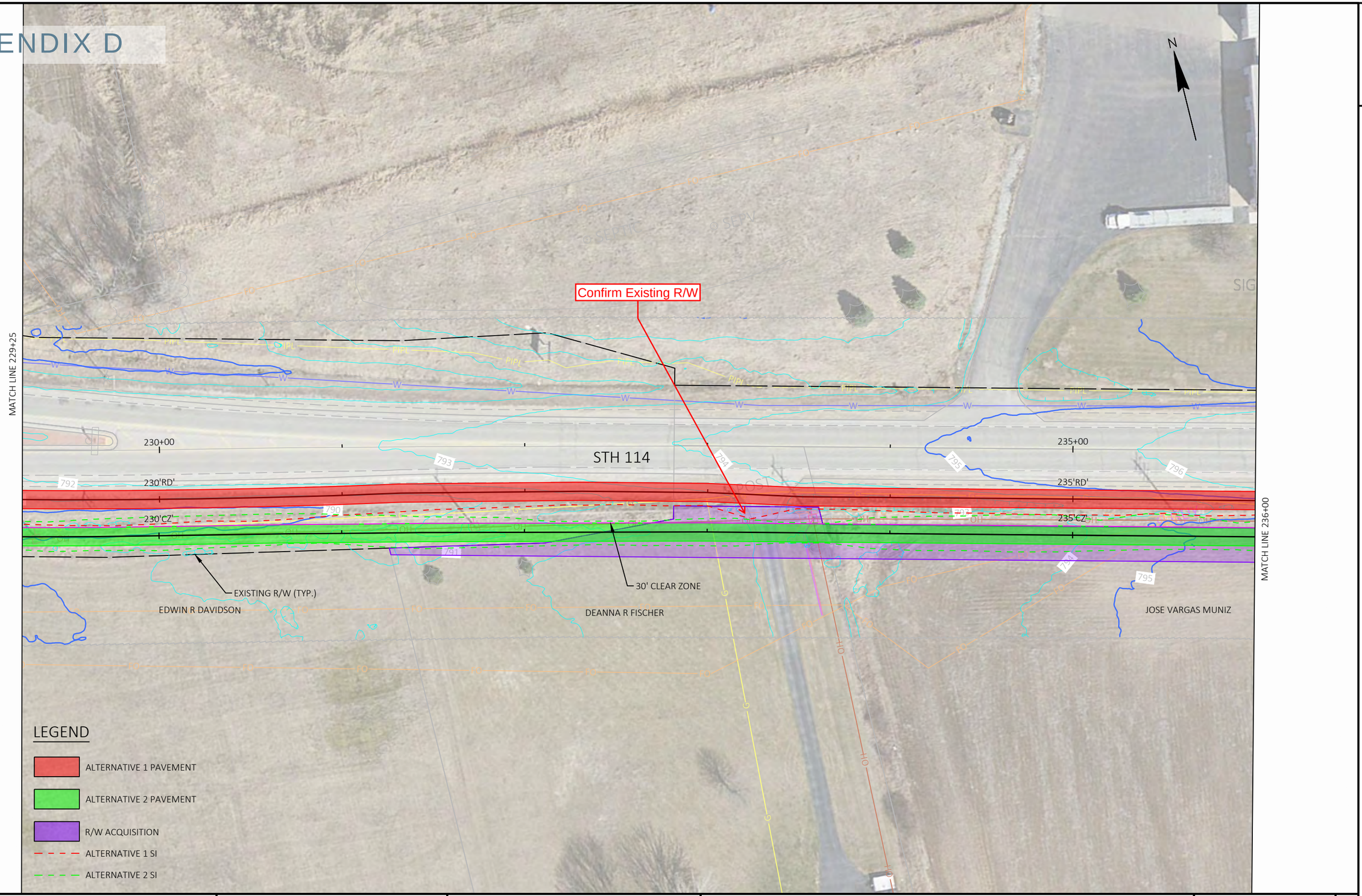


PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050203-PN_STH114-WEST.DWG
LAYOUT NAME - PN 01
PLOT DATE : 7/23/2024 3:05 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

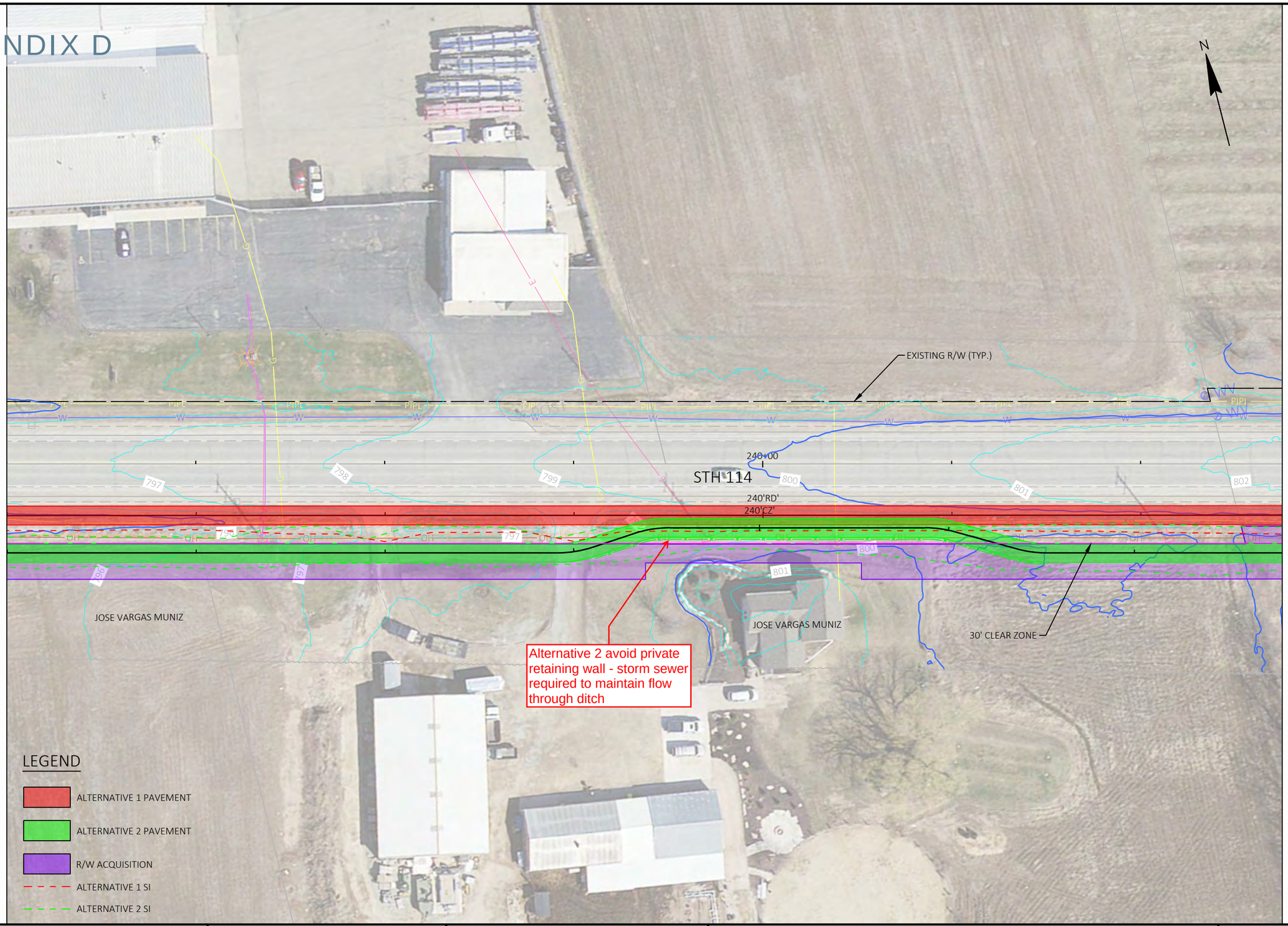


PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050203-PN_STH114-WEST.DWG
LAYOUT NAME - PN 02

PLOT DATE : 7/23/2024 3:06 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

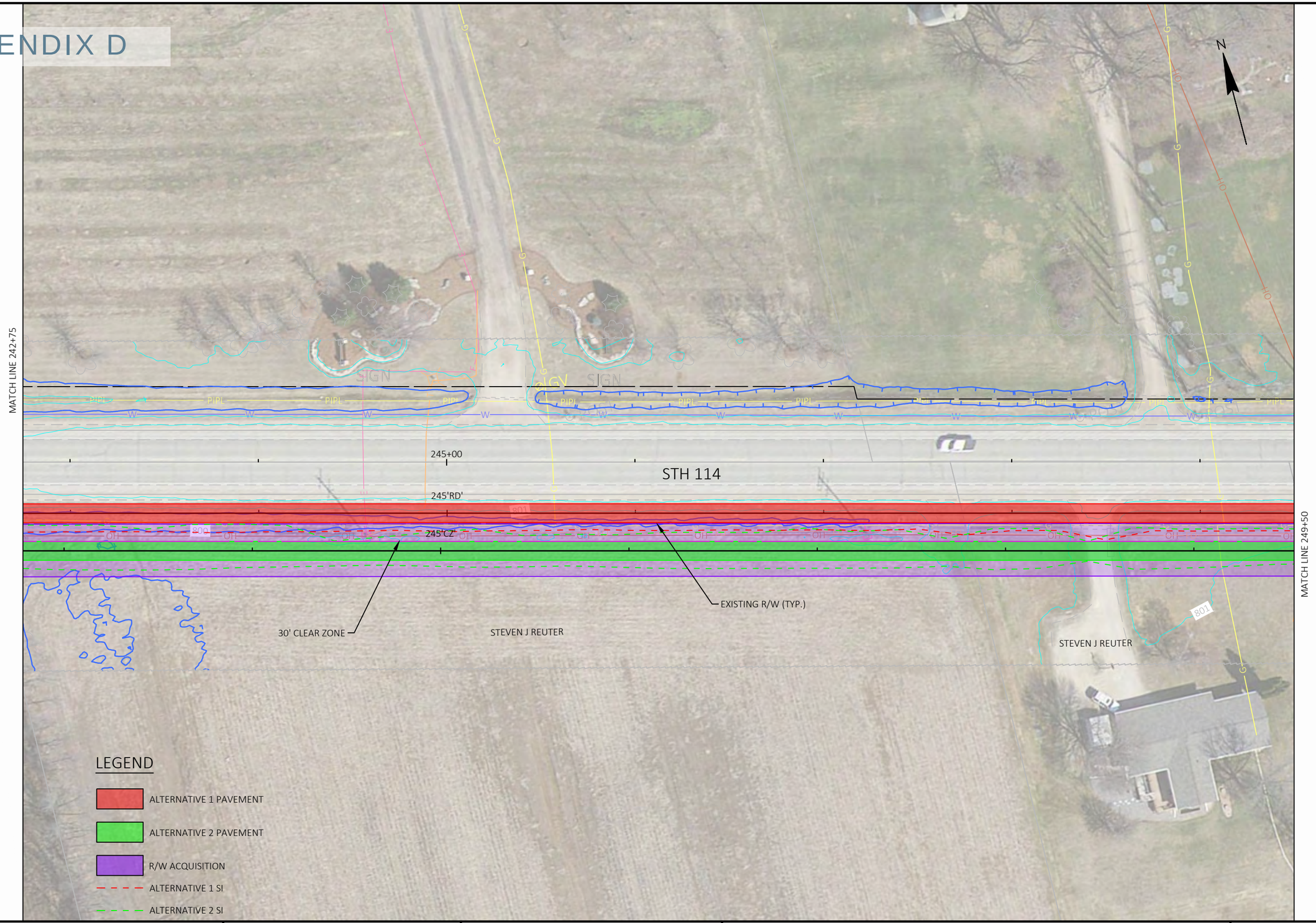


PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050203-PN_STH114-WEST.DWG
LAYOUT NAME - PN 03
PLOT DATE : 7/23/2024 3:06 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

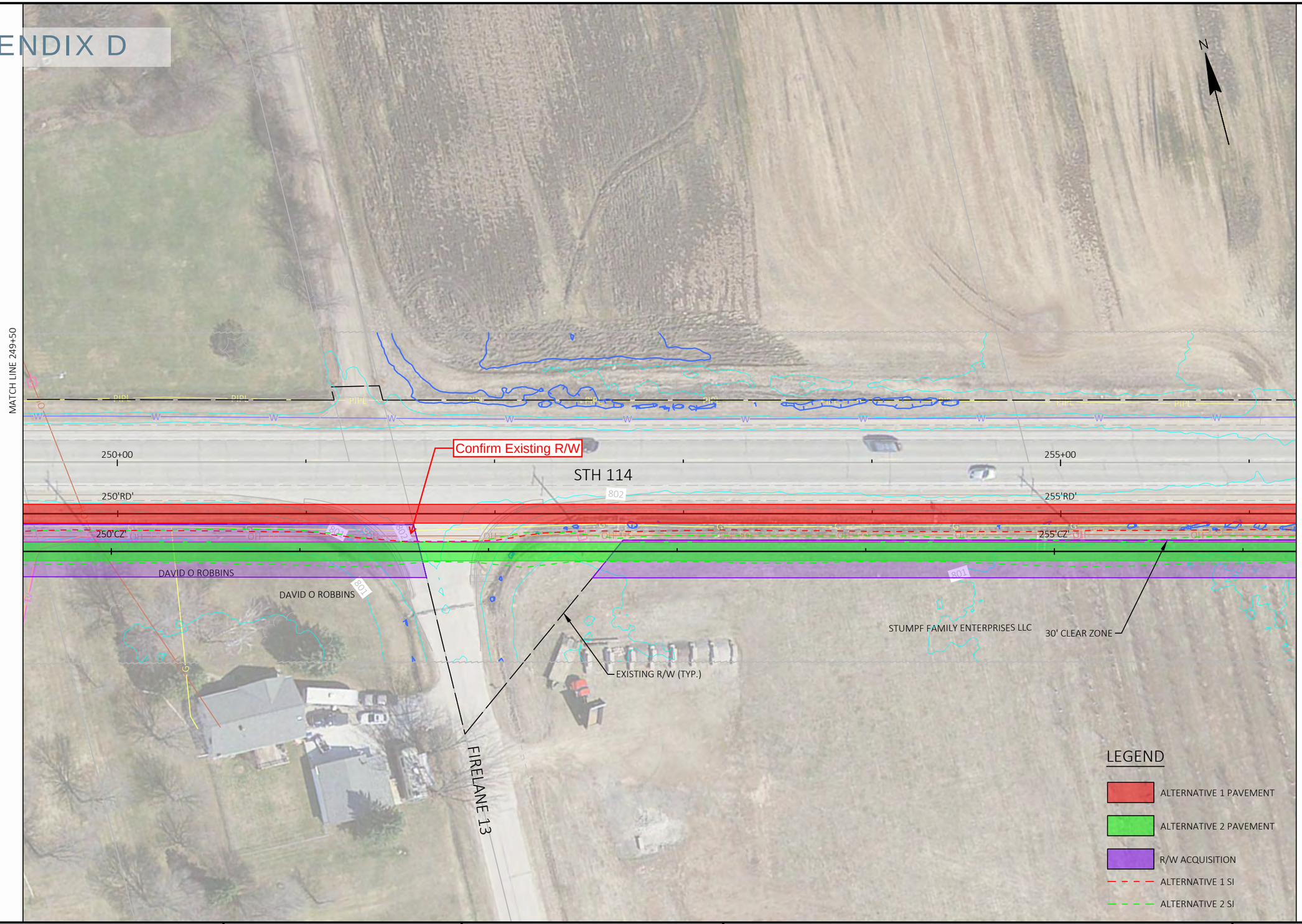
2

2



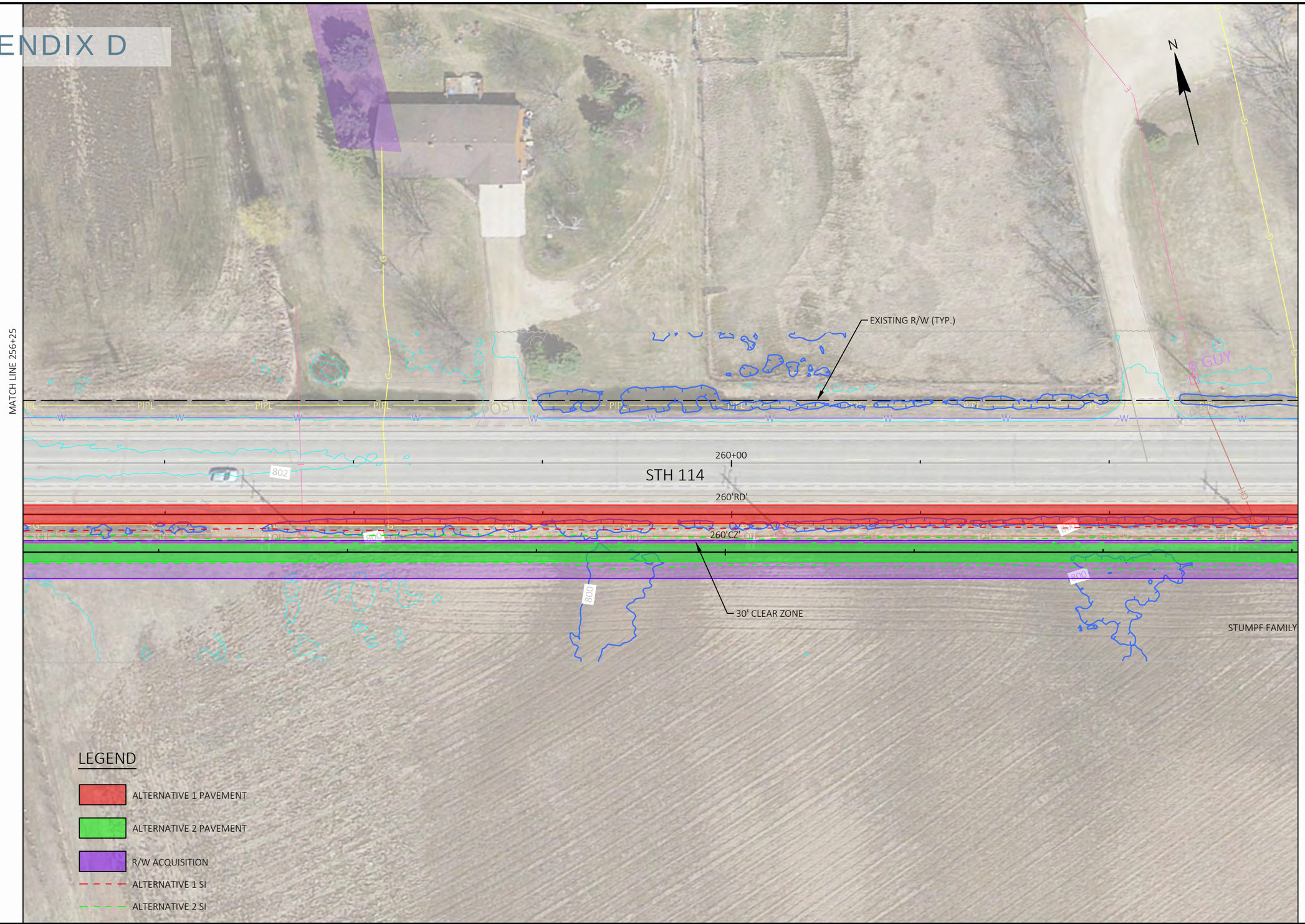
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050203-PN_STH114-WEST.DWG
LAYOUT NAME - PN 04
PLOT DATE : 7/23/2024 3:06 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42



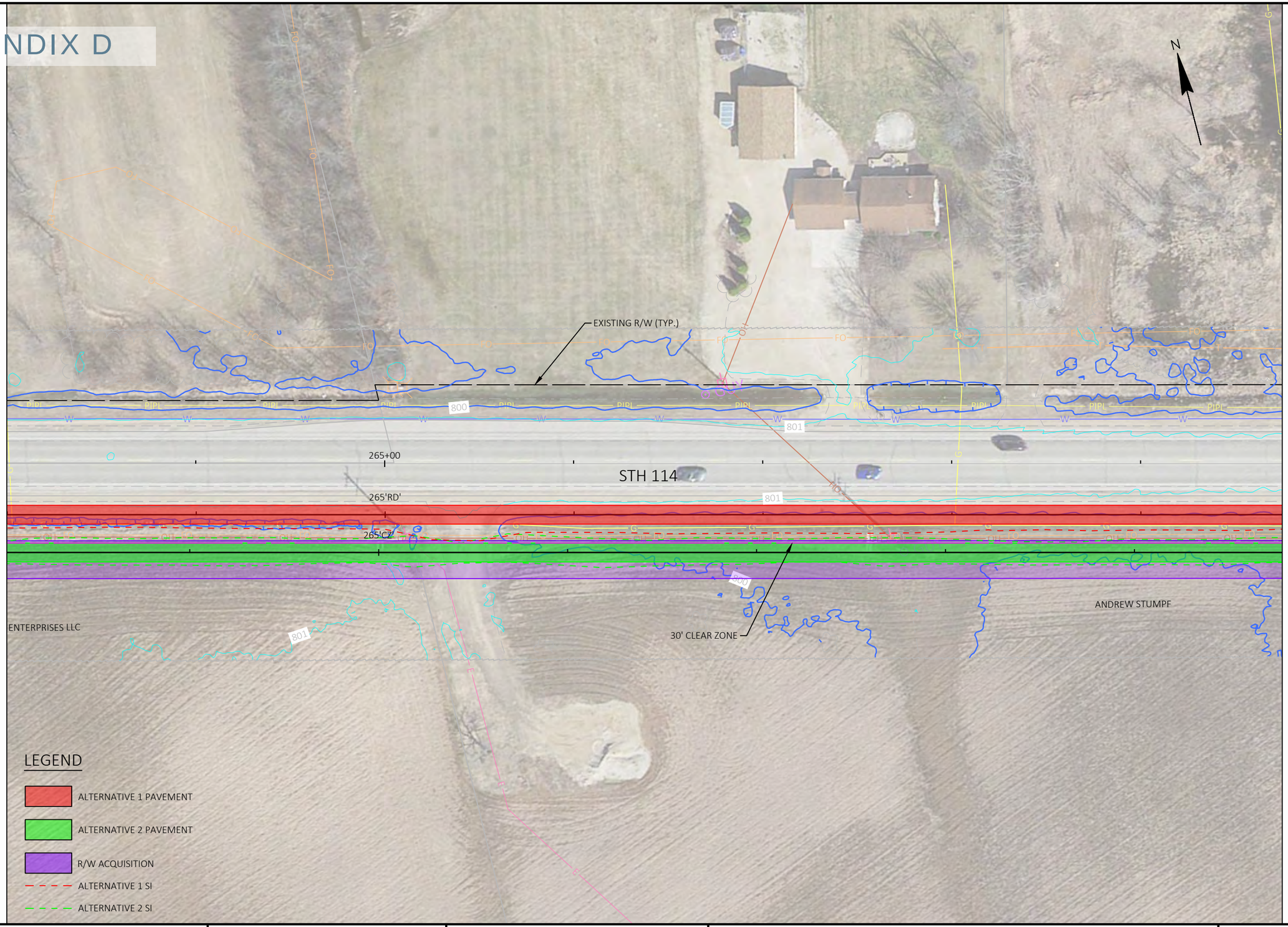
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050203-PN_STH114-WEST.DWG
LAYOUT NAME - PN 05
PLOT DATE : 7/23/2024 3:06 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42



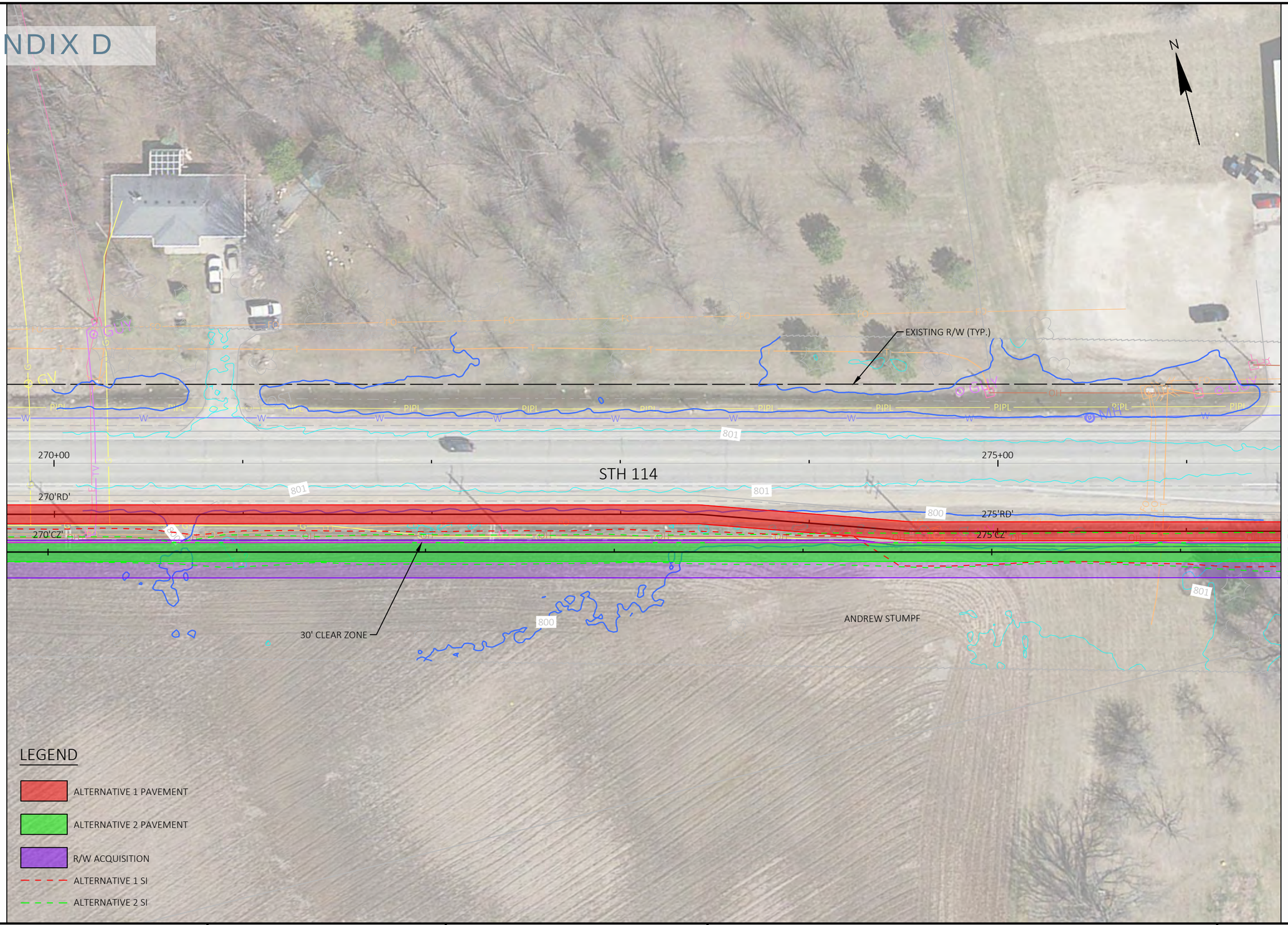
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050203-PN_STH114-WEST.DWG
LAYOUT NAME - PN 06
PLOT DATE : 7/23/2024 3:06 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42



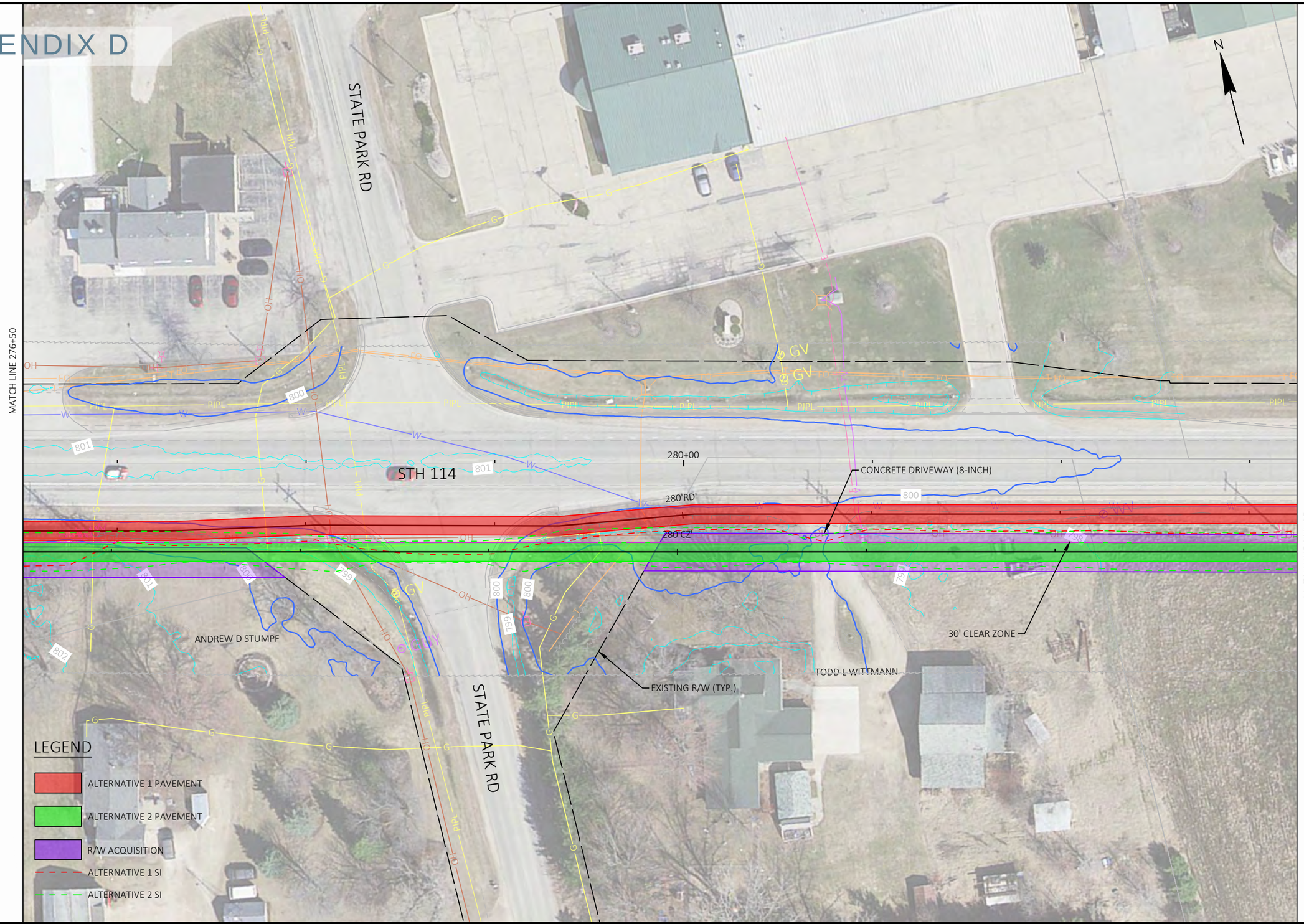
PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050203-PN_STH114-WEST.DWG
LAYOUT NAME - PN 07
PLOT DATE : 7/23/2024 3:06 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050203-PN_STH114-WEST.DWG
LAYOUT NAME - PN 08
PLOT DATE : 7/23/2024 3:06 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET	E

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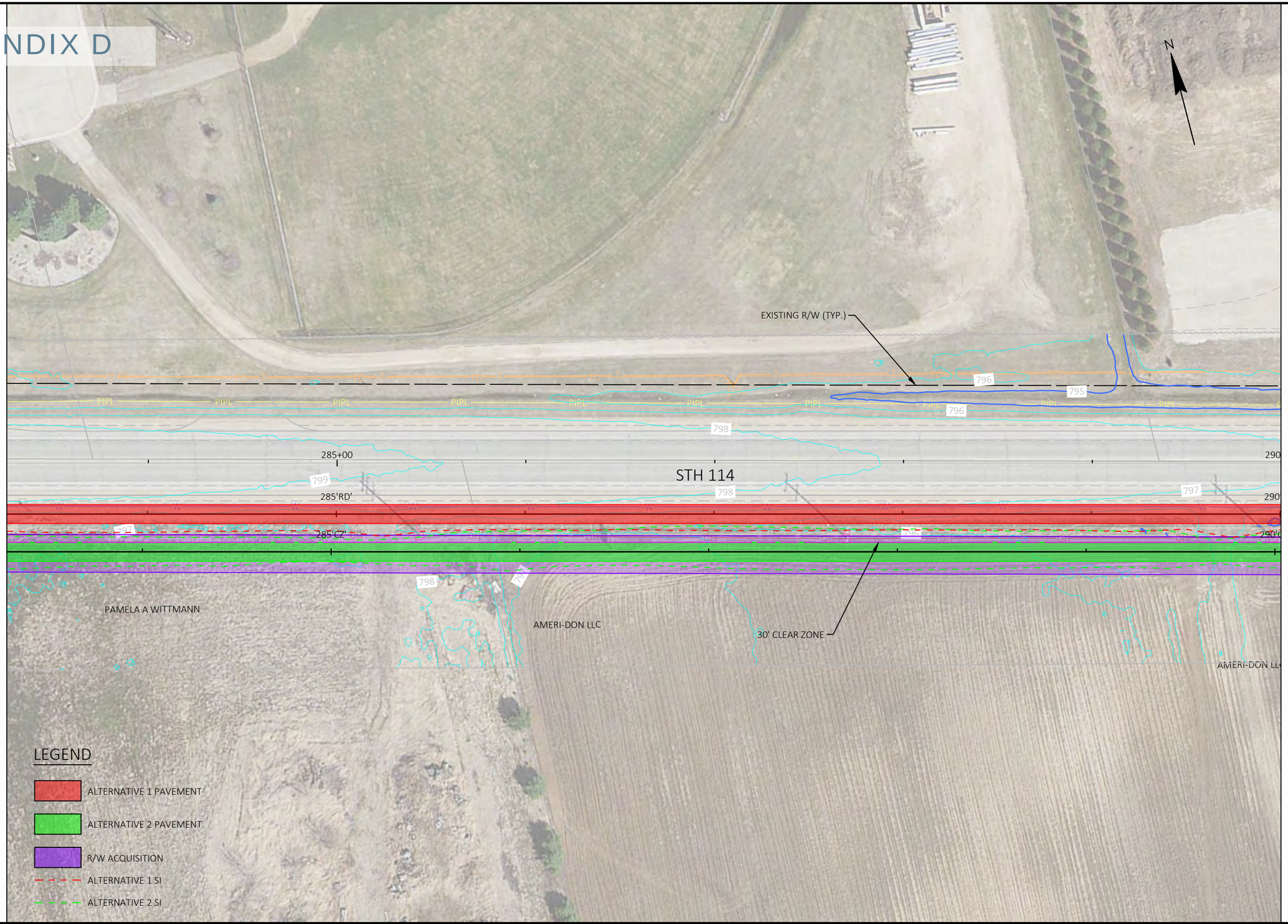
LAYOUT NAME - PN 09

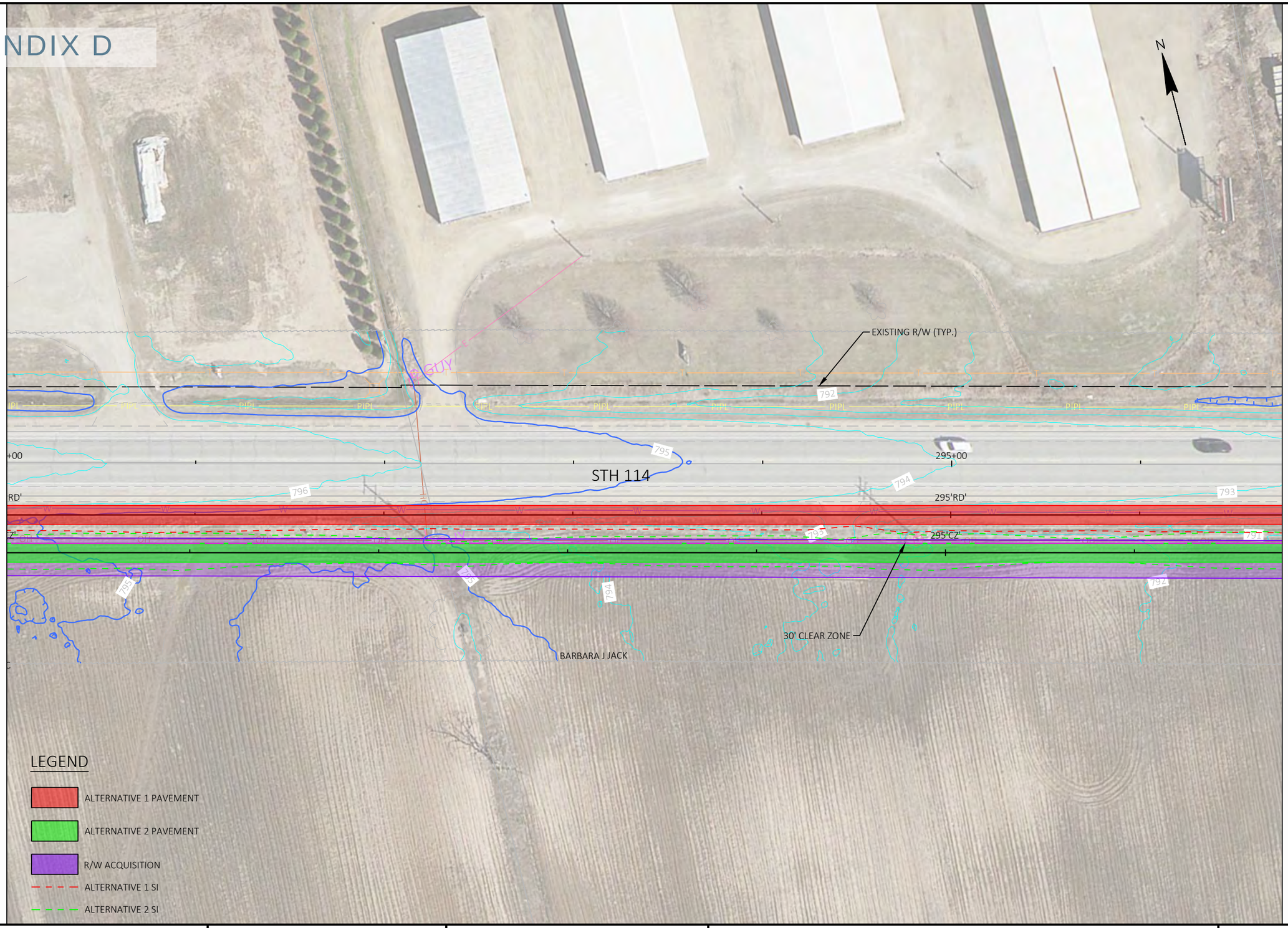
PLOT DATE : 7/23/2024 3:06 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050203-PN_STH114-WEST.DWG
LAYOUT NAME - PN 10
PLOT DATE : 7/23/2024 3:06 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

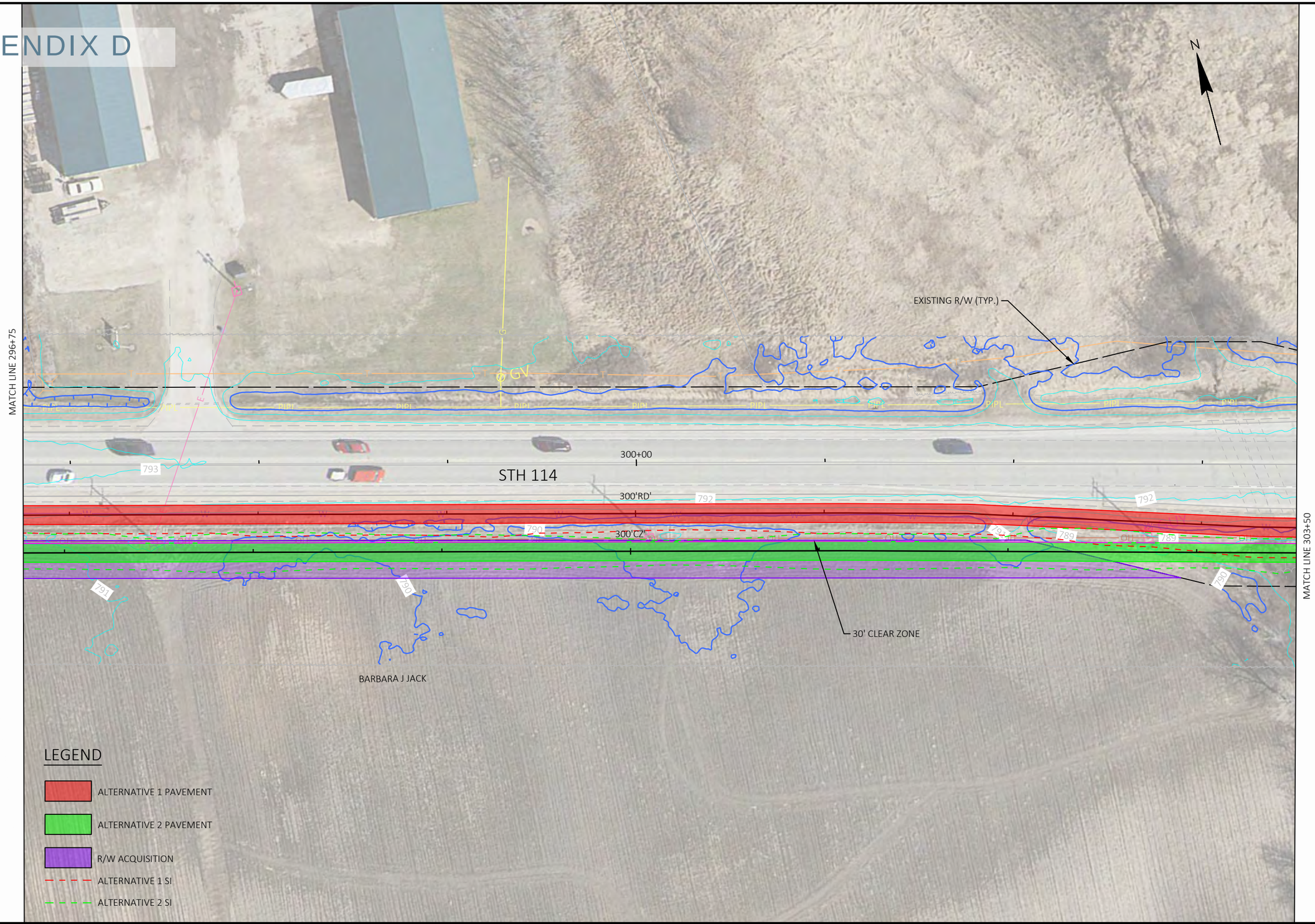


PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050203-PN_STH114-WEST.DWG
LAYOUT NAME - PN 11

PLOT DATE : 7/23/2024 3:07 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

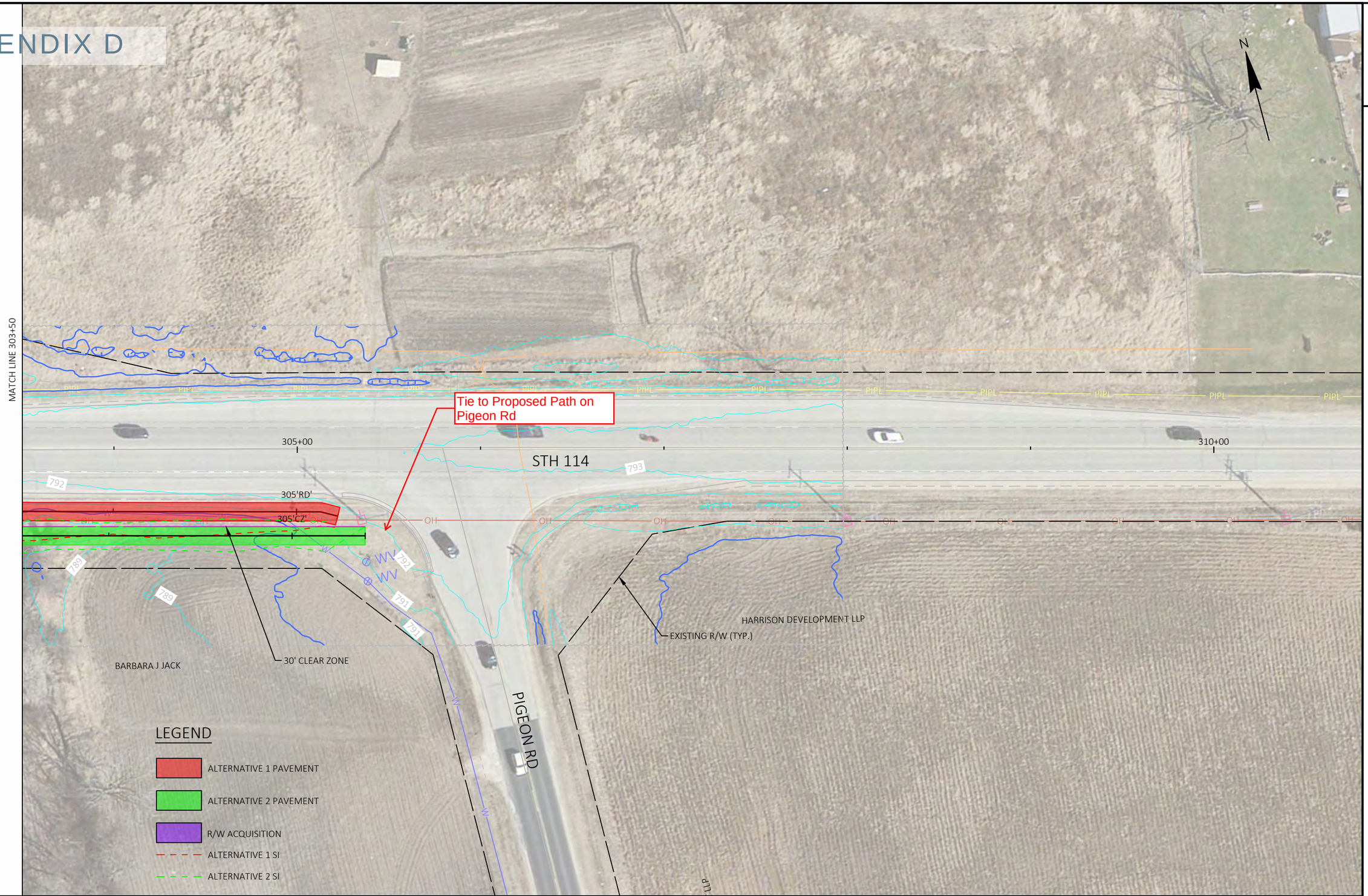


PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050203-PN_STH114-WEST.DWG
LAYOUT NAME - PN 12
PLOT DATE : 7/23/2024 3:07 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2



PROJECT NO: 4479-05-00	HWY: NON-HWY	COUNTY: CALUMET	STH 114 ALTERNATIVES	SHEET	E

FILE NAME : G:\WDOT LP\MENASHA\24002-000_HIGH CLIFF FEASIBILITY STUDY - MENASHA\CIVIL 3D\SHEETSPLAN\050203-PN_STH114-WEST.DWG
LAYOUT NAME - PN 13
PLOT DATE : 7/23/2024 3:07 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42