

CATEGORICAL EXCLUSION LEVEL 1 FORM

GENERAL PROJECT INFORMATION

Road No./County:

Michigan Avenue (Ave.) and Dickey Road (Rd.) / Lake County

Designation Number(s):

2101118 & 2300726

Project**Description/Termini:**

Roadway Reconstruction on Michigan Ave. and Dickey Rd. The project limits along Michigan Ave. extend from Sheridan Place (Pl.) to approximately 100 feet northeast of Block Ave. The project limits along Dickey Rd. extend from Michigan Ave. to Watling Street (St.).

**CE Level 1 documentation for
exempted projects****Additional Information
to CE Level 1****Approval:**_____
INDOT DE/ESD Signature and Date

ADWP

June 14, 2024

Release for Public Involvement:_____
INDOT DE/ESD Initials and Date**Certification of Public involvement:**_____
INDOT Consultant Services Signature and Date**INDOT DE/ESD Reviewer:**_____
Signature and Date**CE Preparer:**_____
Aaron Lawson, RQAW

Name and Organization

Indiana Department of Transportation

County Lake Route Michigan Ave. & Dickey Rd. Des. No. 2101118 & 2300726

GENERAL PROJECT INFORMATION, DESCRIPTION, AND DESIGN INFORMATION	
Purpose and Need:	<p><u>Need</u></p> <p>The need of the project is due to poor pavement condition, deteriorating and inoperable sewer and water utility lines, poor sidewalk condition, and many of the curb ramps do not meet Americans with Disabilities Act (ADA) requirements.</p> <p>According to the Abbreviated Engineer's Assessment completed by First Group Engineering, dated July 19, 2023, the existing pavement of Michigan Ave. and Dickey Rd. is deteriorating and in very poor condition. The majority of the pavement is exhibiting pavement failures, such as alligator cracking, depressions, potholes, rutting, longitudinal and transverse joint cracking and failures. Most of the existing sidewalks are also in poor condition with gaps in some areas, and many of the existing curb ramps do not meet current Americans with Disabilities (ADA) requirements. The existing sanitary sewer lines, water lines, valves, and meters are deteriorating and outdated along the project area. There are several locations where the water valves are inoperable and there have also been water line breaks. Sanitary sewer failures have also been an issue in the area. Please refer to Appendix I, pages I2 to I4 for the Abbreviated Engineer's Assessment.</p> <p><u>Purpose</u></p> <p>The purpose of the project is to restore the pavement condition, improve inoperable and outdated sewer and water utility lines, and improve accessibility for pedestrians by meeting ADA requirements along Michigan Ave. from Sheridan Pl. to approximately 100 feet northeast of Block Ave. and along Dickey Rd. from Michigan Ave. to Watling St.</p>
Project Description (Preferred Alternative):	<p>The City of East Chicago and the Federal Highway Administration (FHWA) intend to proceed with a road reconstruction project on Michigan Ave. and Dickey Rd. in East Chicago, Lake County, Indiana.</p> <p><u>Location</u></p> <p>The project is located on Michigan Ave. and Dickey Rd. in Lake County, Indiana. The project limits along Michigan Ave. extend from Sheridan Pl. to approximately 100 feet northeast of Block Ave., and the project limits along Dickey Rd. extend from Michigan Ave. to Watling St. Specifically, the project is located in North Civil Township, Sections 21 and 22 of Township 37 North, Range 9 West of the Whiting U.S. Geological Survey (USGS) Quadrangle. Please refer to Appendix B, pages B1 to B3 for project location maps.</p> <p><u>Existing Conditions</u></p> <p>Within the project area, Michigan Ave. consists of four 11-foot-wide travel lanes (two in each direction) with 4-foot to 11-foot-wide concrete sidewalks along each side of the roadway. Dickey Rd. consists of two 18-foot-wide travel lanes (one in each direction) with 5-foot-wide concrete sidewalks along each side of the roadway. The existing pavement of Michigan Ave. and Dickey Rd. is deteriorating and in very poor condition. The majority of the pavement is exhibiting pavement failures, such as alligator cracking, depressions, potholes, rutting, longitudinal and transverse joint cracking and failures. Most of the</p>

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existing sidewalks are also in poor condition with gaps in some areas, and many of the existing curb ramps do not meet current ADA requirements. The existing sanitary sewer lines, water lines, valves, and meters are deteriorating and outdated along the project area. There are several locations where the water valves are inoperable and there have also been water line breaks. Sanitary sewer failures have also been an issue in the area. The surrounding land use is heavily urbanized with a mix of residential, commercial, and industrial properties. The existing right-of-way (ROW) width along Michigan Ave. and Dickey Rd. is 40 feet in each direction from each of the roadway centerlines (80 feet wide total). Refer to attached project area photos in Appendix B, pages B4 to B31.

Proposed Conditions

Design and construction will occur in two phases. Phase 1 (Des. No. 2101118) will be approximately 0.65 mile long and extend from Broadway St. to 100 feet north of Block Ave. Phase 2 (Des. No. 2300726) would be approximately 0.24 mile long and extend from Sheridan Pl. to Broadway St. Refer to Appendix B, page B3 for a project area map showing the limits of each phase. Please note that Phase 2 (Des. No. 2300726) was previously programmed under Des. No. 2700594, which was a temporary/placeholder Des. No. until the phase was officially programmed. The proposed project will involve the following:

- Reconstruct the existing roadway pavement and curb and gutter of Michigan Ave. along the entire project area.
- Reconstruct the existing sidewalk along the east side of Michigan Ave. to provide a new 5- to 8-foot-wide ADA compliant sidewalk, except from Grand Blvd. to Guthrie St. where the existing sidewalk is in good condition.
- Replace the existing sidewalk along the west side of Michigan Ave. from Sheridan Pl. to Guthrie St. with a new 8- to 10-foot-wide paved asphalt multi-use path. The multi-use path will connect to an existing path/sidewalk along the north side of Guthrie St. The existing sidewalk along the west side of Michigan Ave. from Guthrie St. to Block Ave. will be replaced with a new 5- to 8-foot-wide sidewalk.
- Replace all existing curb ramps with ADA compliant curb ramps.
- Replace the existing sanitary sewer lines, water lines, valves, and meters throughout the project area.
- Reduce the travel lane configuration of Michigan Ave. from Sheridan Pl. to Dickey Rd. to include two 12-foot-wide travel lanes (one in each direction) with a 14-foot-wide center two-way left-turn lane (TWLTL).
- Reconfigure the cross-section of Michigan Ave. from Dickey Rd. to Guthrie St. to include three 11.5-foot-wide travel lanes (two eastbound and one westbound), a westbound 12 foot wide right-turn lane, and an 11-foot-wide center left-turn lane.
- Reconstruct the cross-section of Michigan Ave. from Guthrie St. to Block Ave. (end of the project) to include four 11.5-foot-wide travel lanes (two in each direction) and an 11-foot-wide center left-turn lane.
- Reconstruct the existing roadway pavement and curb and gutter of Dickey Rd. from Michigan Ave. to Watling St.

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	<ul style="list-style-type: none">• Replace the existing sidewalk along both sides of Dickey Rd. with a new 5-foot-wide ADA compliant sidewalk from Michigan Ave. to Watling St.• Reconstruct all drive entrances within the project area.• Upgrade or replace existing traffic signals to include pedestrian signals and pushbutton assemblies.• Replace all existing crosswalk pavement markings.• Replace all existing street lighting with decorative street lighting.• Provide storm water management, such as bioswales and infiltration trenches within grassy spaces along Michigan Ave. between East 136th St. and Carey St. and between East 138th St. and Parish Ave.• Please refer to the project design plans in Appendix B, pages B32 to B85. <p>The maintenance of traffic (MOT) plan will be completed in four phases. Please refer to the <i>MOT During Construction</i> section of this document for more details.</p> <p>The preferred alternative is expected to satisfy the purpose and need of the project by restoring the pavement condition, improving the inoperable and outdated sewer and water utility lines, and improving accessibility for pedestrians.</p> <p><u>Impact Summary</u></p> <p>There will be no impacts to water resources (i.e. streams and wetlands) as a result of this project. This project will not require the acquisition of any new permanent or temporary ROW as all work will occur within existing City of East Chicago ROW. There will be up to 0.1 acre of tree removal/trimming and up to 0.25 acre of terrestrial habitat disturbance associated with this project. There will be impacts to the East Chicago Department of Water Works water lines. The existing water lines will remain in service while the new water lines are installed; however, there will be temporary disruptions to service when switching over to the newly installed water lines. Please refer to the <i>Drinking Water Resources</i> section of this CE document for more details concerning impacts to this public water system.</p> <p><u>Logical Termini and Independent Utility</u></p> <p>The project limits along Michigan Ave. extend from Sheridan Pl. to approximately 100 feet northeast of Block Ave., and the project limits along Dickey Rd. extend from Michigan Ave. to Watling St. The termini for the project are logical because the footprint is limited to the portion of the roadway that has the transportation deficiencies that this project seeks to correct. The project also has independent utility because it is not dependent on any other projects to meet its purpose and need.</p>
Other Alternatives Considered:	<p><u>Do Nothing Alternative</u></p> <p>This alternative would not involve any improvements to the existing pavement, sewer and water lines, or sidewalks and curbs ramps. This alternative would not involve any cost and would not result in any impacts to the surrounding environment. If no improvements are made to the existing pavement, sewer and water lines, and sidewalks and curb ramps they would continue to deteriorate resulting in decreased structural integrity or failure and increased</p>

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	costs for future repairs or replacement. As such, this alternative was dismissed from further consideration because it would not address the purpose and need of the project.		
Funding Source(s):	<input checked="" type="checkbox"/> Federal	<input type="checkbox"/> State	<input checked="" type="checkbox"/> Local <input type="checkbox"/> Other
Project Sponsor:	City of East Chicago		
Estimated Cost:	\$8,169,254	Project Length:	0.89 mile / 4,692 feet
Public Involvement:	No:		Yes: <input checked="" type="checkbox"/>
<u>Public Involvement Plan</u> The Public Involvement Plan was sent to the Project Manager on August 28, 2023 (Appendix G, pages G1 and G2).			
<u>Notice of Entry</u> Notice of Entry letters were mailed to potentially affected property owners near the project area on August 4, 2022, notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of Entry letter is included in Appendix G, page G3.			
<u>Opportunity to Submit Comments and/or Request a Public Hearing</u> The project meets the minimum requirements described in the current <i>Indiana Department of Transportation (INDOT) Project Development Public Involvement Procedures Manual</i> which requires the project sponsor to offer the public an opportunity to submit comments and / or request a public hearing. Therefore, a legal notice will appear in a local publication contingent upon the release of this document for public involvement. This document will be revised after the public involvement requirements are fulfilled.			
Right-of-Way:	No: <input checked="" type="checkbox"/>		Yes:
The existing right-of-way width along Michigan Ave. and Dickey Rd. is approximately 40 feet in each direction from each of the roadway center lines (80 feet wide total). Land use within the existing ROW consists of paved roadway, sidewalks, maintained lawn, commercial, industrial, and residential properties. This project will take place within existing City of East Chicago right-of-way. No permanent or temporary right-of-way will be required (Appendix B, pages B32 to B85).			
If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately.			
Maintenance of Traffic (MOT) During Construction:	No:		Yes: <input checked="" type="checkbox"/>
The MOT plan will be completed in four phases. Phases 1-3 will include construction on Michigan Ave. from Dickey Rd. to Block Ave, and on Dickey Rd. to Watling St. A combination of single lane closures and lane shifts during construction will occur. During phases 1-3, one lane in each direction will be maintained at all times. Phase 4 of the MOT will include construction on Michigan Ave. from Sheridan Pl. to Dickey Rd. and will require the use of a local detour. However, exact detour routes have not been determined at this time. It is important to note that this proposed portion of roadway to be constructed under Phase 4 will be constructed one block at a time to limit impacts. Access to all properties will be maintained at all times during construction (Appendix B, pages B37 and B38).			

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Bridge(s) and/or Small Structure(s) (include structure number(s)):	No: ✓	Yes:
No bridges or small structures are located within the project limits.		

IDENTIFICATION AND EVALUATION OF IMPACTS

Early Coordination:

Early coordination letters were sent on August 17, 2023 (Appendix C, pages C1 to C3). Refer to the table below.

Agency	Date Sent	Date Response Received	Appendix C Pages
Indiana Department of Transportation LaPorte District	August 17, 2023	August 18, 2023	C13 to C15
FHWA	August 17, 2023	--	--
Natural Resources Conservation Service (NRCS)	August 17, 2023	August 17, 2023	C17
Indiana Department of Natural Resources (IDNR) Division of Fish and Wildlife	August 17, 2023	September 15, 2023	C21 to C22
U.S. Department of Housing and Urban Development (USHUD) Chicago Regional Office	August 17, 2023	--	--
U.S. Army Corps of Engineers (USACE), Chicago District	August 17, 2023	--	--
National Park Service (NPS), Midwest Regional Office	August 17, 2023	--	--
Northwestern Indiana Regional Planning Commission (NIRPC)	August 17, 2023	September 7, 2023, September 13, 2023	C18 to C20
Lake County Council	August 17, 2023	--	--
Lake County Highway Department	August 17, 2023	August 18, 2023	C9 to C11
Indiana Department of Environmental Management (IDEM) Groundwater Section	August 17, 2023	August 29, 2023	C7 to C8
Lake County Board of Commissioners	August 17, 2023	--	--
Lake County Stormwater Quality / Municipal Separate Storm Sewer Systems (MS4) Coordinator	August 17, 2023	--	--
Lake County Surveyor's Office	August 17, 2023	--	--
East Chicago Parks and Recreation Department	August 17, 2023	--	--
East Chicago Mayor's Office	August 17, 2023	--	--
INDOT Aviation	August 17, 2023	August 17, 2023	C12
Lake County Board of Commissioners 3rd District	August 17, 2023	--	--
Indiana Geological and Water Survey (IGWS)	August 17, 2023	August 17, 2023	C4 to C6

This is page 6 of 19 Project name: Michigan Avenue Road Reconstruction Date: May 17, 2024

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East Chicago Utility Operations	August 17, 2023	--	--
East Chicago Police Department	August 17, 2023	--	--
East Chicago Fire Department	August 17, 2023	--	--
Grace Missionary Baptist Church	August 17, 2023	--	--
Lafarge Corporation and Phoenix Services LLC	August 17, 2023	--	--
East Chicago Department of Water Works	August 30, 2023	--	--
Hammond Water Works	August 30, 2023	--	--
Indiana American Water	August 29, 2023	August 29, 2023	C16

Coordination occurred with INDOT Aviation as the Gary/Chicago International Airport is located 1.9 miles southeast of the project area. INDOT Aviation responded on August 17, 2023, that a tall structure permit is not required for this project as long as no equipment over 100 feet in height is used (Appendix C, page C12). All applicable recommendations are included in the *Environmental Commitments* section of this CE document.

Streams, Rivers, and Other Jurisdictional Features Impacted:	No: ✓	Yes:
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Based on the desktop review, the aerial map of the project area (Appendix B, page B3), and the RFI report (Appendix E, pages E3 and E13) there are three streams, rivers, watercourses, or other jurisdictional features within the 0.5-mile search radius. There are no streams, rivers, watercourses, or other jurisdictional features within or adjacent to the project area, which was confirmed by the site visits on October 11, 2022, and on July 27, 2023, by RQAW. Therefore, no impacts are expected.

Please note that a *Waters of the U.S. Determination / Wetland Delineation Report* was not prepared for this project. This project takes place in a heavily urbanized area and no water resources were observed during the October 11, 2022, and on July 27, 2023, site visits by RQAW. Please refer to the project area maps and photos in Appendix B, pages B1 to B31.

Open Water Feature(s):	No: ✓	Yes:
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Based on the desktop review, the aerial map of the project area (Appendix B, page B3) and the RFI report (Appendix E, pages E3 and E13) there are four open water features within the 0.5-mile search radius. There are no open water features within or adjacent to the project area, which was confirmed by the site visits on October 11, 2022, and on July 27, 2023, by RQAW. Therefore, no impacts are expected.

Wetlands:	No: ✓	Yes:
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Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E, pages E3 and E13) there are two wetlands within the 0.5-mile search radius. There are no wetlands within or adjacent to the project area, which was confirmed by the site visits on October 11, 2022, and on July 27, 2023, by RQAW. Therefore, no impacts are expected.

Terrestrial Habitat:	No:	Yes: ✓
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Based on a desktop review, a site visit on October 11, 2022, and on July 27, 2023, by RQAW, the aerial map of the project area (Appendix B, page B3), there is maintained roadside grass and residential trees present and adjacent to the project area. Dominant tree species include silver maple (*Acer saccharinum*), white oak (*Quercus alba*), eastern cottonwood (*Populus deltoides*), and American elm (*Ulmus americana*). The dominant herbaceous species is Kentucky blue grass (*Poa pratensis*).

There will be up to 0.1 acre of tree removal/trimming and up to 0.25 acre of disturbance to maintained roadside grass that will occur as a result of this project. The tree removal/trimming is only anticipated to

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impact one tree in the southwest corner of Euclid Street. This tree was identified as an eastern cottonwood (*Populus deltoides*). Impacts to roadside grass habitat has been minimized to the greatest extent possible to allow for the installation of the bioswales and infiltration trenches which are functional infrastructure elements that will help to improve stormwater quality in the area.

Early Coordination

In their early coordination response, the IDNR Division of Fish and Wildlife provided recommendations for revegetating disturbed areas, minimizing and containing tree and brush clearing, restrictions for tree clearing, and implementing erosion and sediment control measures (Appendix C, pages C21 to C22). All applicable recommendations are included in the *Environmental Commitments* section of this CE document.

Protected Species:	No:	Yes: ✓
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Based on a desktop review and the RFI report (Appendix E, page E7 to E8), completed by RQAW on August 28, 2023, the IDNR Lake County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated September 15, 2023 (Appendix C, pages C21 and C22), the Natural Heritage Program's Database has been checked. The State endangered Barn Owl (*Tyto alba*) has been identified within 0.5 mile of the project area. The proposed project does not support suitable habitat for Barn Owls. Thus, no significant negative effects are expected to the species. An INDOT 0.5-mile bat review occurred on January 25, 2023, by INDOT LaPorte District. The review of the USFWS database did not indicate the presence of threatened or endangered bat species within 0.5 mile of the project area.

Indiana Bat and Northern Long-eared Bat

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C, pages C23 to C33). The project is within range of the federally endangered Indiana bat (*Myotis sodalis*). Other species were generated in the IPaC species list along with the Indiana bat and northern long-eared bat. Refer to paragraph below.

The official species list generated from IPaC indicated two other species present within the project area: the federal proposed endangered Tricolored Bat (*Perimyotis subflavus*) and the federal candidate monarch butterfly (*Danaus plexippus*). As proposed and candidate species, the tricolored bat and monarch butterfly are not given any statutory protection under the Endangered Species Act. Therefore, no further coordination is needed with the USFWS.

The project qualifies for the *Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. An effect determination key was completed on August 30, 2023, and based on the responses provided, the project was found to *May Affect, Not Likely to Adversely Affect* the Indiana bat and/or the NLEB (Appendix C, pages C34 to C47). INDOT reviewed and verified the effect finding on August 30, 2023, and requested USFWS's review of the finding. No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. Avoidance and Minimization Measures (AMMs) and/or commitments are included as firm commitments in the *Environmental Commitments* section of this document. AMMs pertain to lighting restrictions tree cutting restrictions, and workers' awareness of AMMs.

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act, as amended. If new information on endangered species at the site becomes available, or if project plans are changed, USFWS will be contacted for consultation.

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Geological and Mineral Resources:	No: ✓	Yes:
<p>Based on a desktop review and the Indiana Karst Region map, the project is located outside the designated Indiana Karst Region as outlined in the most current <i>Protection of Karst Features during Project Development and Construction</i>. According to the topo map of the project area (Appendix B, page B2), the RFI report (Appendix E, pages E3 and E13), there are no karst features identified within or adjacent to the project area. In the early coordination response, dated August 17, 2023, the IGWS did not indicate that karst features exist in the project area (Appendix C, pages C4 to C6). The IGWS stated that the project is located within an area with a high liquefaction potential, floodway, high potential for bedrock resource, low potential for sand and gravel resource, and active industrial mineral site.</p> <p>The response from IGWS has been communicated to the designer on September 26, 2023. No impacts are expected.</p>		
Drinking Water Resources:	No:	Yes: ✓
<p><u>Sole Source Aquifer (SSA)</u> The project is located in Lake County, which is not located within the area of the St. Joseph Sole Source Aquifer, the only legally designated sole source aquifer in the state of Indiana. Therefore, the FHWA/Environmental Protection Agency (EPA)/INDOT Sole Source Aquifer Memorandum of Understanding (MOU) is not applicable to this project, a detailed groundwater assessment is not needed, and no impacts are expected.</p> <p><u>Wellhead Protection Area (WHPA) or Source Water Area (SWA)</u> The Indiana Department of Environmental Management's Wellhead Proximity Determinator website (http://www.in.gov/idem/cleanwater/pages/wellhead/) was accessed on August 17, 2023 by RQAW. This project is not located within a Wellhead Protection Area, but it is located within a Source Water Area. An early coordination letter was sent to IDEM, Groundwater Section on August 17, 2023. In a response letter dated August 29, 2023, the IDEM Groundwater Section stated that the project is located within three separate Source Water Assessment Areas (East Chicago Water Works, Hammond Water Works Department, and Indiana American Water – Northwest). Early coordination letters were sent by email on August 29, 2023, to Indiana American Water, and on August 30, 2023, to East Chicago Water Works and Hammond Water Works. Indiana American Water responded by email on August 29, 2023, stating that Indiana American Water anticipates that this project will not impact their facilities or operations. East Chicago Water Works and Hammond Water Works did not respond to the early coordination letter. These features are not likely to be impacted as all work will be conducted in accordance with the IDEM Construction Stormwater General Permit.</p> <p><u>Water Wells</u> The Indiana Department of Natural Resources Water Well Record Database website (https://www.in.gov/dnr/water/3595.htm) was accessed on September 26, 2023, by RQAW. No wells are located near this project. Therefore, no impacts are expected.</p> <p><u>Urban Area Boundary (UAB)</u> Based on a desktop review of the INDOT MS4 website (IDEM: Water Quality In Indiana: MS4s Boundaries Map for Indiana) on September 26, 2023 by RQAW, the project is located within a UAB. An early coordination letter was sent to the Lake County MS4 Coordinator on August 17, 2023. The Lake County MS4 Coordinator did not respond to the early coordination letter. Impacts are not expected.</p> <p><u>Public Water System</u> Based on a desktop review, site visits on October 11, 2022, and on July 27, 2023 by RQAW, the aerial map of the project area (Appendix B, page B3), and review of IDEM's public water supply system website</p>		

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([Drinking Water Branch](#)) accessed September 26, 2023, by RQAW, this project is located where there is a public water system. The East Chicago Department of Water has water mains that exist within the project area. The project includes replacing existing sanitary sewer lines, water lines, valves, and meters throughout the project area. The existing water lines will remain in service until the new water lines are placed. There will be switchover when the old lines are abandoned by shifting service block to block, thus disruption of water service is expected to be minimal. Disruption of water service should be approximately 4 hours for main lines and approximately 6 hours for service lines. Sanitary sewer lines will be constructed block to block with bypass pumping utilized to allow constant operation. An Early Coordination letter was sent on August 30, 2023, to the East Chicago Department of Water Works. East Chicago Department of Water did not respond within the 30-day time frame. The designers have met with the City of East Chicago, and utility coordination will be ongoing as this project advances.

Floodplains:	No: ✓	Yes:
<p>The Indiana Department of Natural Resources Indiana Floodway Information Portal website (https://www.in.gov/dnr/water/surface-water/indiana-floodplain-mapping/indiana-floodplain-information-portal/) was accessed on September 26, 2023 by RQAW. This project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F, page F1). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.</p>		

Farmland:	No: ✓	Yes:
<p>Based on a desktop review, site visits on October 11, 2022, and on July 27, 2023, by RQAW, and the aerial map of the project area (Appendix B, page B3), there is no land that meets the definition of farmland under the Farmland Protection Policy Act (FPPA) within or adjacent to the project area. The requirements of the FPPA do not apply to this project; therefore, no impacts are expected. An early coordination letter was sent on August 17, 2023, to NRCS.</p>		

Early Coordination

In their early coordination response, dated August 17, 2023, the NRCS stated the project will not cause a conversion of prime farmland (Appendix C, page C17). No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.

Cultural Resources:	No:	Yes: ✓
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Minor Project Programmatic Agreement

On November 2, 2023, the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category A, Type 5, and Category B, Types 1, 2 and 8 under the Minor Projects Programmatic Agreement (Appendix D, pages D1 to D9).

Category A, Type 5 projects include repair, in-kind replacement or upgrade of existing lighting, signals, signage, and other traffic control devices in previously disturbed soils.

Category B, Type 1 projects include replacement, repair, or installation of curbs, curb ramps, or sidewalks, including when such projects are associated with roadway work such as surface replacement, reconstruction, rehabilitation, or resurfacing projects, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking.

Category B, Type 2 projects include installation of new lighting, signals, signage and other traffic control devices.

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Category B, Type 8 projects include construction of pedestrian facilities including trails, multi-use paths, greenways, and associated minor activities.

Above Ground Historic Resources: Commercial Building, 3531 Michigan Avenue

One previously unsurveyed early twentieth century (c. 1928) brick commercial building at 3531 Michigan Avenue was identified adjacent to the project area (Appendix B, page B5). The building features ornate detailing and banding in the upper half of the building with pilasters demarcating the five bays of the building. These features appear to be stone or terracotta tiling. The bases of the pilasters show prior damage and deterioration. The lower portion of the building appears to have been highly altered by brick infill, modern windows and doors, and a modern garage door. Despite these integrity issues, INDOT CRO determined that the building does appear to be potentially eligible for the National Register. However, work adjacent to this building is limited to sidewalk replacement. The sidewalk in front of the building is modern concrete, but it comes up to the face of the building. The building will not be modified or impacted as part of this project. A firm commitment to avoid damaging the deteriorated material at the base of the pilasters on the front of the building at 3531 Michigan Avenue will be made in order for Condition B-ii.b-1 to apply to this project. If the commitment cannot be maintained, then the project will need to be reassessed by INDOT CRO (Appendix D, page D8). This firm commitment has been added to the *Environmental Commitments* section of this CE document.

No other buildings adjacent to the project possess the cultural significance and/or material integrity necessary to be considered potentially eligible for the National Register. Therefore, the project falls under Category B, Types 1, 2, and 8, as described above. Please refer to Appendix D, pages D4 to D6 to see how the above listed Category B items meet both Condition A, which pertains to archaeological resources, and Condition B which pertains to above ground resources.

An archaeological survey is not needed since the project will take place within disturbed soils (Appendix D, page D8). No further consultation is required. This completes the Section 106 process and the responsibilities of the FHWA under Section 106 have been fulfilled.

Section 4(f) and Section 6(f) Resources:

No: ☒

Yes:

Section 4(f) Resources

Section 4(f) of the U.S. Department of Transportation Act of 1966 prohibits the use of certain public and historic lands for federally funded transportation facilities unless there is no feasible and prudent alternative. The law applies to significant publicly owned parks, recreation areas, wildlife / waterfowl refuges, and National Register of Historic Places (NRHP) eligible or listed historic properties regardless of ownership. Lands subject to this law are considered Section 4(f) resources.

Based on a desktop review, the aerial map of the project area (Appendix B, page B3), the RFI report (Appendix E, pages E2 and E12), and the Section 106 MPPA Determination Assessment (Appendix D, page D8), there are 15 potential Section 4(f) resources located within the 0.5-mile search radius. According to additional research, including a review of Lake County Indiana Appraisal District Records, and by the site visits on October 11, 2022, and on July 27, 2023, by RQAW, there is one recreational Section 4(f) resource (Linear Park Trail, also identified as Pennsylvania Recreation Park) and one potentially eligible National Register historic resource (commercial building at 3531 Michigan Avenue) adjacent to the project area.

Linear Park Trail (also identified as Pennsylvania Recreation Park)

The Linear Park Trail is located adjacent to the project area on the east side of Michigan Avenue between Guthrie Street and Pennsylvania Avenue (Appendix B, page B5). The trail is publicly owned and maintained by the City of East Chicago Parks and Recreation Department and is open to the public.

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Therefore, the Linear Park Trail is considered a Section 4(f) resource. The trail will not be modified or impacted by the project. The project will not use this resource by taking permanent right-of-way and will not indirectly use the resource in such a way that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Therefore, no 4(f) use is expected.

Above Ground Historic Resources: Commercial Building, 3531 Michigan Avenue

One previously unsurveyed early twentieth century (c. 1928) brick commercial building at 3531 Michigan Avenue was identified adjacent to the project area (Appendix B, page B5). INDOT CRO determined that the building does appear to be potentially eligible for the National Register. However, this resource was not further evaluated for listing in the National Register as this project qualifies under the Minor Projects Programmatic Agreement. If the building were to be listed in the National Register, then it would also be considered a Section 4(f) historic resource. However, since the building is not listed in the National Register, the building is not considered a Section 4(f) historic resource. Work adjacent to this building is limited to sidewalk replacement. The sidewalk in front of the building is modern concrete, but it comes up to the face of the building (Appendix D, page D8). The building will not be modified or impacted as part of this project. The project will not use this resource by taking permanent right-of-way and will not indirectly use the resource in such a way that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Therefore, no 4(f) use is expected. A firm commitment to avoid damaging the deteriorated material at the base of the pilasters on the front of the building at 3531 Michigan Avenue will be made in order for Condition B-ii.b-1 to apply to this project. If the commitment cannot be maintained, then the project will need to be reassessed by INDOT CRO. This firm commitment has been added to the *Environmental Commitments* section of this CE document.

Section 6(f) Resources

The U.S. Land and Water Conservation Fund Act of 1965 established the Land and Water Conservation Fund (LWCF), which was created to preserve, develop, and assure accessibility to outdoor recreation resources. Section 6(f) of this Act prohibits conversion of lands purchased with LWCF monies to a non-recreation use.

A review of Section 6(f) properties on the INDOT ESD website revealed a total of 57 properties in Lake County (Appendix I, page I1). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to Section 6(f) resources.

Air Quality:

No: ✓

Yes:

Statewide Transportation Improvement Program (STIP) and Transportation Improvement Program (TIP)

Des. No. 2101118 is included in the Fiscal Year (FY) 2022-2026 Northwestern Indiana Regional Planning Commission (NIRPC) TIP (Appendix H6) and FY 2024-2028 Statewide Transportation Improvement Program (STIP) (Appendix H, pages H1 to H4). Please note that Des. No. 2300726 is currently listed in the draft FY 2024-2028 NIRPC TIP (Appendix H5) and will require to be amended into the FY 2022-2026 NIRPC TIP prior to NEPA approval. This NEPA document will be revised post public involvement procedures.

Attainment Status

This project is located in Lake County, which is currently a nonattainment area for Ozone, under the 2015 Ozone 8-hour standard according to the Environmental Protection Agency (EPA) greenbook at: [Nonattainment Areas for Criteria Pollutants \(Green Book\) | US EPA](#). This project has been identified as being exempt from air quality analysis in accordance with 40 CFR Part 93.126 and this project is not a project of air quality concern (40 CFR Part 93.123). Therefore, the project will have no significant impact on air quality.

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Mobile Source Air Toxics (MSAT)

This project is of a type qualifying as a categorical exclusion (Group 1) under 23 CFR 771.117(c) or exempt under the Clean Air Act conformity rule under 40 CFR 93.126, and as such, a MSAT analysis is not required.

Community Impacts:

No: ✓

Yes:

No EJ analysis required

Under FHWA Order 6640.23A, FHWA and the project sponsor, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. This project will have no relocations and will require less than 0.5 acre of additional permanent right-of-way (no permanent right-of-way required); therefore, an EJ analysis is not required per the current INDOT Categorical Exclusion Manual.

The project is not anticipated to result in substantial impacts to the community because it will not change access to properties within the area, divide existing communities, or cause negative economic impacts to the surrounding area. There are several commercial, industrial and residential properties adjacent to the project area; however, access to all properties will be maintained during construction. According to the Fairs and Festivals website ([Find Art Shows, Craft Shows, and Festivals near you \(fairsandfestivals.net\)](https://fairsandfestivals.net)), accessed on September 27, 2023, by RQAW, there is one community event scheduled within a 10-mile radius of zip code 47396 (project area). This community event is located in Griffith, Indiana and will not be impacted by the project. Any future community events that may be planned, are unlikely to be impacted by the project because the MOT plan will be implemented during construction that will ensure access is maintained.

Public Facilities and Services (e.g. schools, emergency services):

No:

Yes: ✓

Based on a desktop review, the aerial map of the project area (Appendix B, page B3), and the RFI report (Appendix E, pages E2 and E12), there is one school, one fire station, 25 religious facilities, 10 recreational facilities, 16 pipelines, one trail segment, and three managed lands located within the 0.5 mile of the project. During the site visits on October 11, 2022, and on July 27, 2023, by RQAW, one fire station (East Chicago Fire Department Station 2), one trail segment (Linear Park Trail), and one religious facility (Grace Missionary Baptist Church) were observed adjacent to the project area. Several public utilities were also observed within and adjacent to the project area, such as overhead electric, sanitary sewer, storm sewer, and water lines. Utility coordination will be ongoing as the project advances to determine if any relocations are needed. A segment of the Norfolk Southern railroad is located adjacent to the southwest end of the project. While construction for the project will not encroach upon the railroad right-of-way, the MOT plan will cross through the railroad right-of-way. Coordination between the project designer and Norfolk Southern is currently on-going regarding the MOT plan. The project will occur within existing ROW and access will be maintained at all times during construction; therefore, no impacts are anticipated to occur to East Chicago Fire Department Station 2, Linear Park Trail, or to Grace Missionary Baptist Church. Access to all properties will be maintained during construction.

Early Coordination

Early coordination letters were sent to East Chicago Fire Department, Grace Missionary Baptist Church, NIRPC, and Lake County Highway Department on August 17, 2023 (Appendix C, pages C1 to C3). The East Chicago Fire Department and Grace Missionary Baptist Church did not respond to the early coordination letter; therefore, it was assumed they did not have any objections or concerns with the project.

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Lake County Highway Department responded on August 18, 2023, asking if the project will impact any bridge structures, specifically whether it will impact Bridge No. 365 Dickey Road over Indiana Harbor Canal. RQAW responded to the Lake County Highway Department on August 18, 2023, stating that the project will not impact any bridge structures and that the work on Dickey Road will only extend from Michigan Avenue to Watling Street. Lake County Highway Department responded on the same day stating they have no comments (Appendix C, pages C9 to C11).

NIRPC responded on September 7, 2023, stating they are pleased that swales and infiltration trenches will be incorporated and requested a set of preliminary plans. They also asked to consider projected increases in precipitation and peak flows when designing and sizing stormwater management, ensuring that long-term maintenance plans are detailed for stormwater practices, and to consider planting native trees where appropriate to provide shade to roads and sidewalks, stormwater benefits, air quality buffering, and aesthetic benefits (Appendix C, page C19 to C20). RQAW responded to NIRPC on September 12, 2023, and provided a set of plans showing the locations of the swales and infiltration trenches. RQAW also stated there is no projected increase in peak flows and there is no need to add any additional drainage basins when compared to the existing drainage basins because the project is proposing to reduce the roadway width and there will be reduction in peak flow of stormwater throughout the project area. It was also explained that the addition of the infiltration trenches will carry much of the surface water into infiltration pipes and will disperse into highly pervious sandy soils. Regarding NIRPC's comment regarding planting native trees, RQAW explained that there are not enough plantable areas along the project area due to conflicts with underground utilities, the need to stay within existing right-of-way, and that some of the adjacent properties were purchased by the Redevelopment Commission meaning that nothing can be placed that would restrict development (Appendix C, pages C18 to C19). In their response dated September 13, 2023, NIRPC thanked RQAW but did not provide any additional comments (Appendix C, page C18).

It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access.

Hazardous Materials and Regulated Substances:	No:	Yes: ✓
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Based on a review of GIS and available public records, the RFI was completed on August 28, 2023, and INDOT SAM provided their concurrence on the same day (Appendix E, pages E1 to E15). There are seven (7) Resource Conservation Recovery Act (RCRA) Generator/Treatment, Storage, Disposal (TSD) sites, one (1) State Cleanup site, eleven (11) Underground Storage Tank (UST) sites, one (1) Voluntary Remediation Program site, one (1) Infectious/Medical Waste site, nine (9) Leaking Underground Storage Tank (LUST) sites, fifteen (15) Brownfield sites, eleven (11) Institutional Controls sites, seventeen (17) National Pollutant Discharge Elimination System (NPDES) facilities, and thirteen (13) NPDES Pipe locations located within 0.5 mile of the project area. One (1) RCRA Generator/TSD site, one (1) LUST site, four (4) Brownfield sites, one (1) Institutional Controls site, and one (1) NPDES facility could impact the project.

The RFI recommended the following:

RCRA Generator/Treatment, Storage, Disposal: Arcelormittal USA Incorporated was identified as Cleveland-Cliffs Indiana Harbor East in the Virtual File Cabinet (VFC) files, AI ID # 11557, and is located adjacent to the west-northwest of the project area. The site is currently undergoing corrective action and groundwater monitoring activities for contamination from coke by-product contaminants of concern (COCs). While most groundwater flow appears to be away from the project area, one (1) groundwater flow path appears to be flowing toward the northwestern corner of the project area. A Phase II Environmental Site Assessment is recommended to occur before Ready for Contracts (RFC). Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review

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and approval. Coordination will occur with Gregory Rudloff (Rudloff.gregory@epa.gov), US EPA, before RFC.

LUST Sites: Calumet Services, 3475 Michigan Avenue, AI ID # 20764, is located adjacent to the project area near the northeast corner of the intersection of Michigan Avenue and Hemlock Street. An Initial Site Characterization (ISC) report, dated April 30, 2015, concluded that petroleum related contaminants of concern (COCs) are present in both soil and groundwater. On July 22, 2015, IDEM requested that a Further Site Investigation (FSI) be prepared to fully delineate the nature and extent of contamination to include volatile organic compounds (VOCs), polyaromatic hydrocarbons (PAHs), and metals in soil and groundwater. No files were available for review in the VFC documenting actions at this site past 2015. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Brownfields: Bills K M Service, 1316 Broadway Street, AI ID # 18979, is located adjacent to the project area on the northeast corner of the intersection of Michigan Avenue and Broadway Street. The property was developed prior to the 1930s and has historically been utilized as a fueling station and auto repair facility with minor utilization as a restaurant and a retail shop. The property is currently vacant, and all site structures have been demolished. A Phase II site investigation was performed in December 2021/January 2022. The laboratory analytical report indicated the presence of benzo(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene, and lead in the soil above IDEM's 2022 Remediation Closure Guide (RCG) screening levels. Dissolved 2-methylnaphthalene, naphthalene, vinyl chloride, and lead were detected in the groundwater above the screening levels. No additional investigation has been completed on the site. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Michigan Company Infra-Metals, 3600 Michigan Avenue, AI ID # 22753, is located adjacent to the project area near the intersection of Michigan Avenue and 136th Street. The only file available for review in the VFC is from 2005 and discusses IDEM's procedures for site characterization for prospective buyers. No information was found about possible contamination on site. Infra Metals provided structural steel services. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Commercial Lot, 3487-3489 Michigan Avenue, AI ID # 105737, is located adjacent to the project area southwest of the intersection of Michigan Avenue and Hemlock Street. A Phase I (September 12, 2012) and Phase II (November 8, 2012) were completed for this site. The Phase I ESA indicated that the lots at 3483 and 3485 Michigan Avenue were historical UST site. In addition, the site to the north was a historical dry cleaner. The Phase II indicated that lead was present in the groundwater to the northeast and northwest. It also stated that not enough information was provided to determine potential contamination present on-site and off-site. No further information was found in the VFC concerning this site, but based on aerial imagery the building appears to have been demolished between March of 2013 and April of 2014. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Michigan Avenue Property, 3402 Michigan Avenue, AI ID # 24273, is located adjacent to the project area near the intersection of Michigan Avenue and Guthrie Street. No files are available for review in the VFC. The Phase I for 3487-3489 Michigan Avenue indicated that this location was previously the Interurban Tavern; however, this property appeared to be a possible candidate for the Brownfields Program. A

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Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Institutional Controls: North Harbor Properties; 3521-25, 3443, 3423, 3407-21 Fir Street; 3411, 3415, and 3428 Guthrie Street; AI ID # 127979, is located 0.03 mile southeast of the project area. An April 24, 2020, Phase I indicated that from 1915 to 1972 the Michigan Avenue property was used as a theater, commercial stores, and an automobile garage. A Phase II dated June 23, 2020, indicated that subsurface soil sampling was not completed near the Michigan Avenue property nor at depths greater than ten (10) feet. One (1) surface sample was collected for lead and arsenic on the Michigan Avenue property and laboratory results were less than RCG Screening Levels. An Environmental Restrictive Covenant (ERC) was recorded on the property on July 22, 2022. The ERC strictly prohibits the use and/or extraction of groundwater from the site. If excavation occurs in this area, it is possible that contamination may be encountered. Before proper removal and disposal of soil and/or groundwater, analysis for lead will be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination.

NPDES Facilities: Indiana Radiator, 3531 Michigan Avenue, Permit # INP000514, is located adjacent to the project area south of the intersection of Michigan Avenue and Parrish Avenue. The permit for this facility is pending. Coordination with Indiana Radiator will occur prior to RFC.

Firm commitments regarding the RFI recommendations have been added to the *Environmental Commitments* section of this CE document.

Permits:	No:	Yes: ✓
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The total area of land disturbance is approximately 8.5 acres. Because the project will result in more than one acre of land disturbance, an IDEM Construction Stormwater General Permit (CSGP) will likely be required.

Applicable recommendations provided by resource agencies are included in the *Environmental Commitments* section of this document. If permits are found to be necessary, the conditions of the permit will be requirements of the project and will supersede these recommendations.

It is the responsibility of the project sponsor to identify and obtain all required permits.

ENVIRONMENTAL COMMITMENTS:

Firm:

- 1) If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT LaPorte District)
- 2) It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access. (INDOT ESD)
- 3) GENERAL AMM 1 - Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs. (USFWS)
- 4) TREE REMOVAL AMM 1 - Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)

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- 5) TREE REMOVAL AMM 2 - Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/ rail surface and outside of documented roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed. (USFWS, IDNR Division of Fish and Wildlife)
- 6) TREE REMOVAL AMM 3 - Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits). (USFWS)
- 7) TREE REMOVAL AMM 4 - Do not remove documented Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or documented foraging habitat any time of year. (USFWS)
- 8) LIGHTING AMM 1 - Direct temporary lighting away from suitable habitat during the active season. (USFWS)
- 9) LIGHTING AMM 2 - When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable. (USFWS)
- 10) Avoid damaging the deteriorated material at the base of the pilasters on the front of the building at 3531 Michigan Avenue in order for Condition B-ii.b-1 of the Section 106 Minor Projects Programmatic Agreement to apply to this project. If this commitment cannot be maintained, then the project will need to be reassessed by INDOT CRO. (INDOT CRO)
- 11) Arcelormittal USA Incorporated was identified as Cleveland-Cliffs Indiana Harbor East in the VFC files, AI ID # 11557, and is located adjacent to the west-northwest of the project area. The site is currently undergoing corrective action and groundwater monitoring activities for contamination from coke by-product COCs. While most groundwater flow appears to be away from the project area, one (1) groundwater flow path appears to be flowing toward the northwestern corner of the project area. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval. Coordination will occur with Gregory Rudloff (Rudloff.gregory@epa.gov), US EPA, before RFC. (INDOT SAM)
- 12) Calumet Services, 3475 Michigan Avenue, AI ID # 20764, is located adjacent to the project area near the northeast corner of the intersection of Michigan Avenue and Hemlock Street. An ISC report, dated April 30, 2015, concluded that petroleum related contaminants of concern (COCs) are present in both soil and groundwater. On July 22, 2015, IDEM requested that a Further Site Investigation (FSI) be prepared to fully delineate the nature and extent of contamination to include volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and metals in soil and groundwater. No files were available for review in the VFC documenting actions at this site past 2015. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval. (INDOT SAM)
- 13) Bills K M Service, 1316 Broadway Street, AI ID # 18979, is located adjacent to the project area on the northeast corner of the intersection of Michigan Avenue and Broadway Street. The property was developed prior to the 1930s and has historically been utilized as a fueling station and auto repair facility with minor utilization as a restaurant and a retail shop. The property is currently vacant, and all site structures have been demolished. A Phase II site investigation was performed in December 2021/January 2022. The laboratory analytical report indicated the presence of benzo(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene, and lead in the soil above IDEM's 2022 Remediation Closure Guide (RCG) screening levels. Dissolved 2-

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methylnaphthalene, naphthalene, vinyl chloride, and lead were detected in the groundwater above the screening levels. No additional investigation has been completed on the site. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval. (INDOT SAM)

- 14) Michigan Company Infra-Metals, 3600 Michigan Avenue, AI ID # 22753, is located adjacent to the project area near the intersection of Michigan Avenue and 136th Street. The only file available for review in the VFC is from 2005 and discusses IDEM's procedures for site characterization for prospective buyers. No information was found about possible contamination on site. Infra Metals provided structural steel services. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval. (INDOT SAM)
- 15) Commercial Lot, 3487-3489 Michigan Avenue, AI ID # 105737, is located adjacent to the project area southwest of the intersection of Michigan Avenue and Hemlock Street. A Phase I (September 12, 2012) and Phase II (November 8, 2012) were completed for this site. The Phase I ESA indicated that the lots at 3483 and 3485 Michigan Avenue were historical UST site. In addition, the site to the north was a historical dry cleaner. The Phase II indicated that lead was present in the groundwater to the northeast and northwest. It also stated that not enough information was provided to determine potential contamination present on-site and off-site. No further information was found in the VFC concerning this site, but based on aerial imagery the building appears to have been demolished between March of 2013 and April of 2014. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval. (INDOT SAM)
- 16) Michigan Avenue Property, 3402 Michigan Avenue, AI ID # 24273, is located adjacent to the project area near the intersection of Michigan Avenue and Guthrie Street. No files are available for review in the VFC. The Phase I for 3487-3489 Michigan Avenue indicated that this location was previously the Interurban Tavern; however, this property appeared to be a possible candidate for the Brownfields Program. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval. (INDOT SAM)
- 17) North Harbor Properties; 3521-25, 3443, 3423, 3407-21 Fir Street; 3411, 3415, and 3428 Guthrie Street; AI ID # 127979, is located 0.03 mile southeast of the project area. An April 24, 2020, Phase I indicated that from 1915 to 1972 the Michigan Avenue property was used as a theater, commercial stores, and an automobile garage. A Phase II dated June 23, 2020, indicated that subsurface soil sampling was not completed near the Michigan Avenue property nor at depths greater than ten (10) feet. One (1) surface sample was collected for lead and arsenic on the Michigan Avenue property and laboratory results were less than RCG Screening Levels. An Environmental Restrictive Covenant (ERC) was recorded on the property on July 22, 2022. The ERC strictly prohibits the use and/or extraction of groundwater from the site. If excavation occurs in this area, it is possible that contamination may be encountered. Before proper removal and disposal of soil and/or groundwater, analysis for lead will be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination. (INDOT SAM)
- 18) Indiana Radiator, 3531 Michigan Avenue, Permit # INP000514, is located adjacent to the project area south of the intersection of Michigan Avenue and Parrish Avenue. The permit for this facility is pending. Coordination with Indiana Radiator will occur prior to RFC. (INDOT SAM)

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For Consideration:

- 1) Best management practices should be implemented to limit the migration of polycyclic aromatic hydrocarbons (PAHs) into local waterways. The use of sealants that are free of petroleum and coal tar-based products is encouraged whenever possible. Where possible, road runoff should be directed to riprap turnouts and sediment filtration prior to entering a stream to reduce impacts to aquatic species. IDNR recommends the use of pollutant trapping technology such as storm drain inserts to reduce the runoff of roadside pollutants. (IDNR Division of Fish and Wildlife)
- 2) A more sustainable approach to stormwater management should aim to rebuild the natural water cycle by using storage techniques (retention basins, constructed wetlands, rain gardens, etc.). (IDNR Division of Fish and Wildlife)
- 3) Revegetate all bare and disturbed areas within the project area using a mixture of grasses (excluding all varieties of tall fescue), sedges, wildflowers, shrubs, and trees native to Northern Indiana as soon as possible upon completion. Turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas only. (IDNR Division of Fish and Wildlife)
- 4) Minimize and contain within the project limits all tree and brush clearing. (IDNR Division of Fish and Wildlife)
- 5) All excavated material must be properly spread or completely removed from the project site such that erosion and off-site sedimentation of the material is prevented. (IDNR Division of Fish and Wildlife)
- 6) Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized. (IDNR Division of Fish and Wildlife)
- 7) If erosion control blankets are used, they shall be heavy-duty, biodegradable, and net free or use loose-woven/Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas. (IDNR Division of Fish and Wildlife)

Designation (Des.) Number 2101118 & 2300726

Michigan Avenue: Roadway Reconstruction Project – Lake County, Indiana

Appendix A: INDOT Supporting Documentation

Categorical Exclusion Level Thresholds	A1
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Appendix B: Graphics

General Location Map	B1
Topographic Map	B2
Aerial Map	B3
Photo Location Maps and Photographs	B4
Design Plans (Phase I).....	B32
Design Plans (Preliminary Phase II)	B77

Appendix C: Early Coordination

Example Early Coordination Letter (<i>graphics omitted</i>)	C1
Indiana Geological and Water Survey (IGWS)	
Electronic Response	C4
IDEM, Groundwater Section	
Response Email	C7
Lake County Highway Department	
Response Letter	C9
INDOT, Aviation	
Response Email	C12
INDOT, Laporte District Environmental Manager	
Response Email	C13
Indiana American Water Northwest	
Response Email	C16
U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS)	
Response Email	C17
Northwest Indiana Regional Planning Commission	
Response Email	C18
Indiana Department of Natural Resources, Division of Fish and Wildlife (IDNR-DFW)	
Response Letter	C21
U.S. Fish and Wildlife Service (USFWS) Coordination	
USFWS IPaC Official Species List	C23
IPaC Concurrence Verification Letter	C34

Appendix D: Section 106 of the National Historic Preservation Act (NHPA)

Minor Projects Programmatic Agreement (MPPA) Documentation	D1
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Appendix E: Red Flag Investigation and Hazardous Materials

Red Flag Investigation	E1
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Appendix F: Water Resources

IDNR Indiana Floodplain Information Portal (INFIP) Map	F1
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Appendix G: Public Involvement

Public Involvement Plan	G1
Example Notice of Survey Letter	G3

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Michigan Avenue: Roadway Reconstruction Project – Lake County, Indiana

Appendix H: Air Quality

2024-2028 Statewide Transportation Improvement Program (STIP) Approval Pages	H1
2024-2028 NIRPC Transportation Improvement Program (TIP) (<i>relevant pages only</i>)	H5
2022-2026 NIRPC TIP (<i>relevant pages only</i>)	H6

Appendix I: Additional Studies

Land and Water Conservation Fund (LWCF) List	I1
Abbreviated Engineer's Report	I2

Categorical Exclusion

Appendix A

INDOT Supporting Documentation

Categorical Exclusion Level Thresholds

	PCE	Level 1	Level 2	Level 3	Level 4 ¹
Section 106	Falls within guidelines of Minor Projects PA	"No Historic Properties Affected"	"No Adverse Effect"	-	"Adverse Effect" Or Historic Bridge involvement ²
Stream Impacts³	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts	-	USACE Individual 404 Permit ⁴
Wetland Impacts³	No adverse impacts to wetlands	< 0.1 acre	-	< 1.0 acre	≥ 1.0 acre
Right-of-way⁵	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	-	-
Relocations⁶	None	-	-	< 5	≥ 5
Threatened/Endangered Species (Species Specific Programmatic for Indiana bat & northern long eared bat) *	"No Effect", "Not likely to Adversely Affect" (With select AMMs ⁷)	"Not likely to Adversely Affect" (With any AMMs or commitments)	-	"Likely to Adversely Affect"	Project does not fall under Species Specific Programmatic ⁸
Threatened/Endangered Species (Any other species) *	Falls within guidelines of USFWS 2013 Interim Policy or "No Effect"	"Not likely to Adversely Affect"	-	-	"Likely to Adversely Affect"
Environmental Justice	No disproportionately high and adverse impacts	-	-	-	Potential ⁹
Sole Source Aquifer	No Detailed Groundwater Assessment	-	-	-	Detailed Groundwater Assessment
Floodplain	No Substantial Impacts	-	-	-	Substantial Impacts
Section 4(f) Impacts	None	-	-	-	Any ¹⁰
Section 6(f) Impacts	None	-	-	-	Any
Permanent Traffic Alteration	None	-	-	-	Any
Noise Analysis Required	No	-	-	-	Yes
Air Quality Analysis Required	No	-	-	-	Yes ¹¹
Approval Level <ul style="list-style-type: none"> • District Env. (DE) • Env. Serv. Div. (ESD) • FHWA 	Concurrence by DE or ESD	DE or ESD	DE or ESD	DE and/or ESD	DE and/or ESD; and FHWA

¹ Coordinate with INDOT Environmental Services Division. INDOT will then coordinate with the appropriate FHWA Environmental Specialist.

² Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement.

³ Total permanent impacts to streams (linear feet) and wetlands (acres).

⁴ US Army Corps of Engineers Individual 404 Permit

⁵ Total permanent and temporary right-of-way. This does not include reacquisition of existing apparent right-of-way.

⁶ If any relocations are within an area with a known or suspected Environmental Justice (EJ) or disadvantaged population, or has greater than 5 relocations, a conversation with FHWA, through INDOT ESD, is needed to confirm NEPA classification and outreach plan for the project.

⁷ Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs.

⁸ Projects that do not fall under a Species Specific Programmatic and results in a "Likely to Adversely Affect". Other findings can be processed as a lower level CE.

⁹ Potential for causing a disproportionately high and adverse impact.

¹⁰ Section 4(f) use resulting in an Individual, Programmatic, or *de minimis* evaluation. The only exception is a *de minimis* evaluation for historic properties (Effective January 2, 2020). If a historic property *de minimis* and no other use, mark the *None* column.

¹¹ Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

* Includes the threatened/endangered species critical habitat

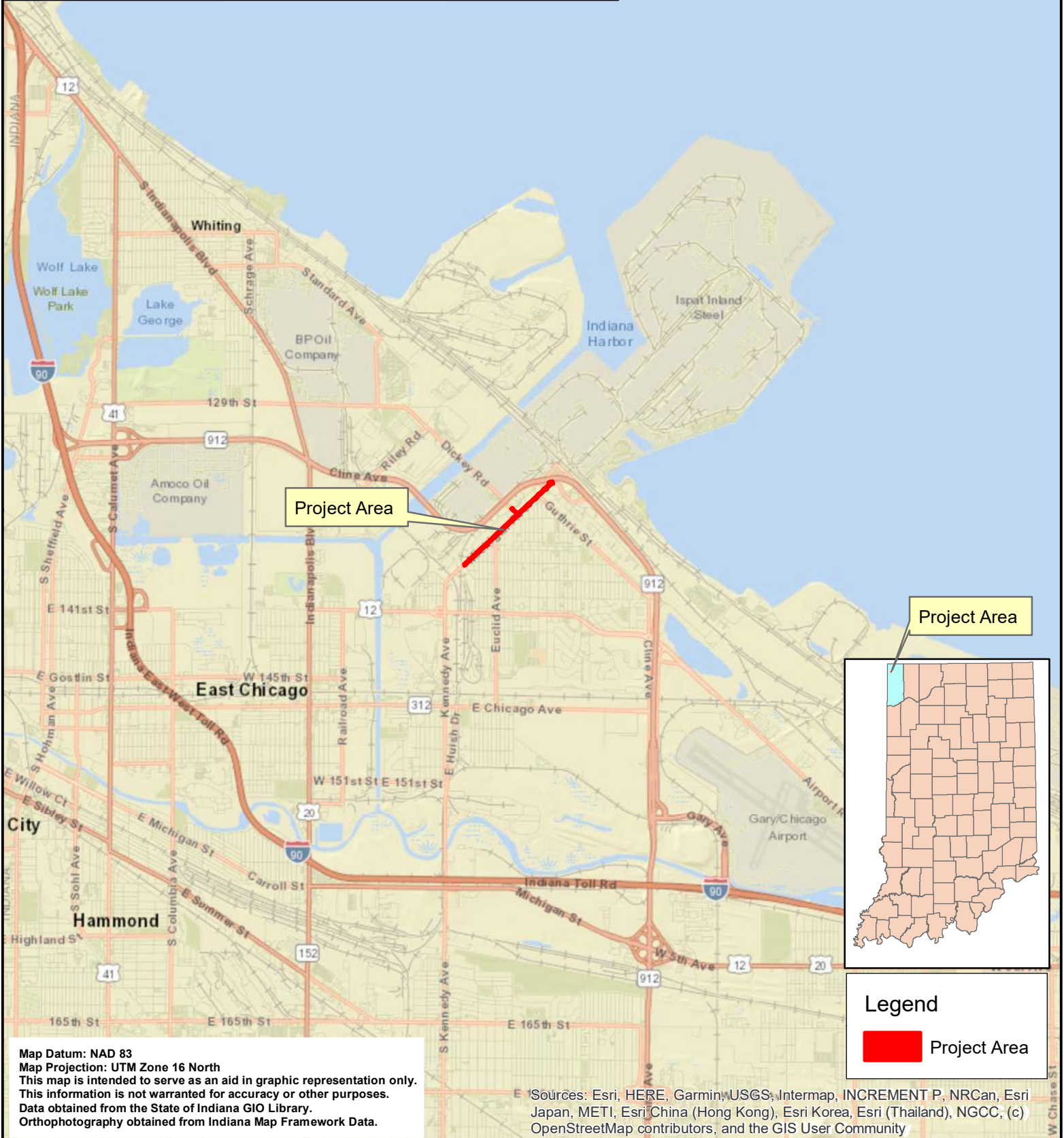
Note: Substantial public or agency controversy may require a higher-level NEPA document.

Categorical Exclusion

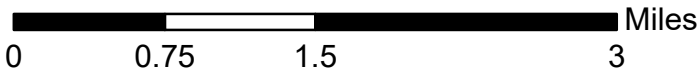
Appendix B

Graphics

General Location
Michigan Avenue, from Sheridan Place to 0.02 Mile North of Block Avenue
Road Reconstruction Project
Lake County, Indiana
Des. No. 2101118 & 2300726

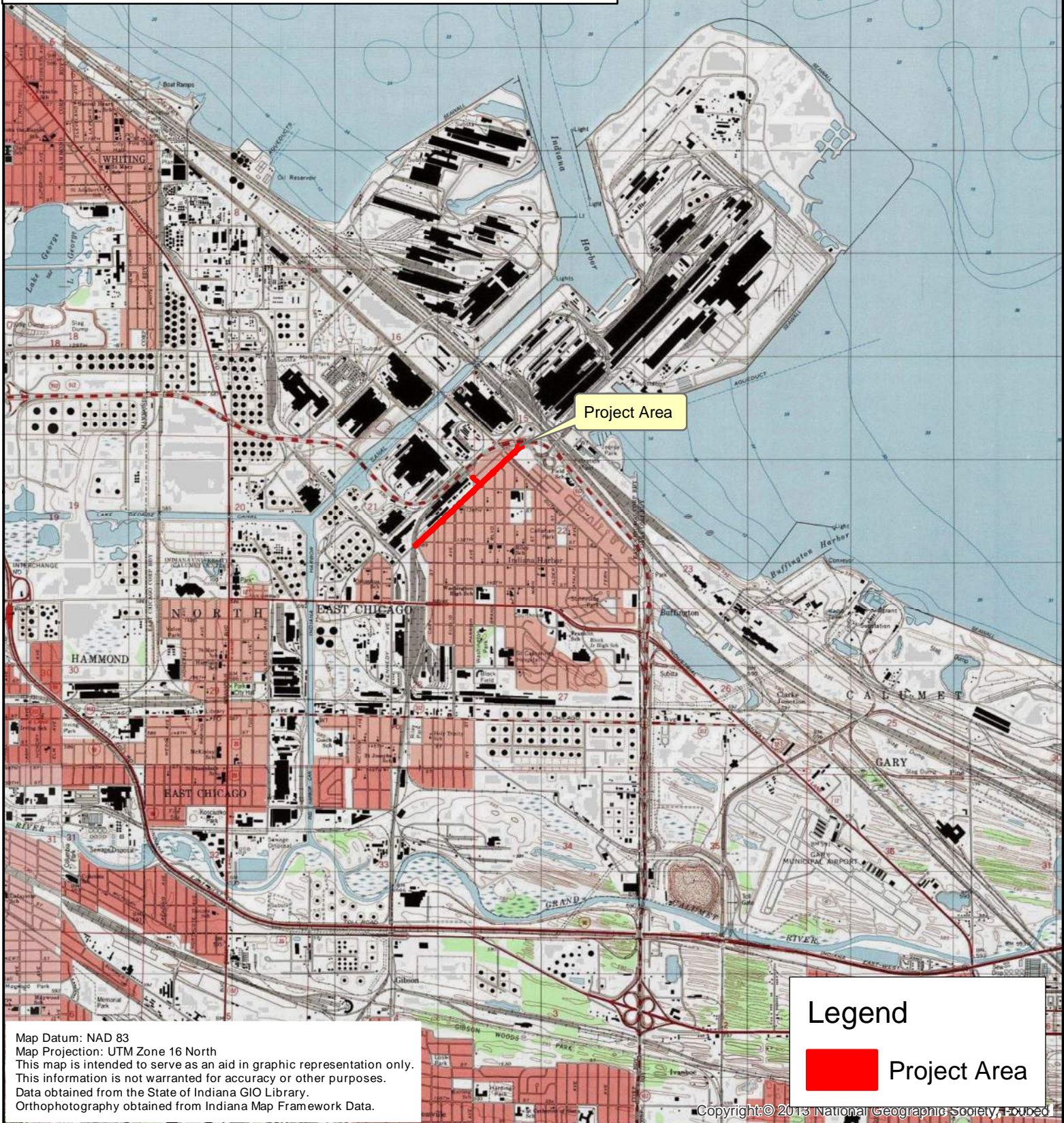


General Location



Location: Michigan Ave.
Township: North
County: Lake

U.S. Geological Survey (USGS) (1:24,000) Map
 Whiting USGS Quadrangle
 Michigan Avenue, from Sheridan Place to 0.02 Mile North of Block Avenue
 Road Reconstruction Project
 Lake County, Indiana
 Des. No. 2101118 & 2300726



Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.

Legend



Project Area

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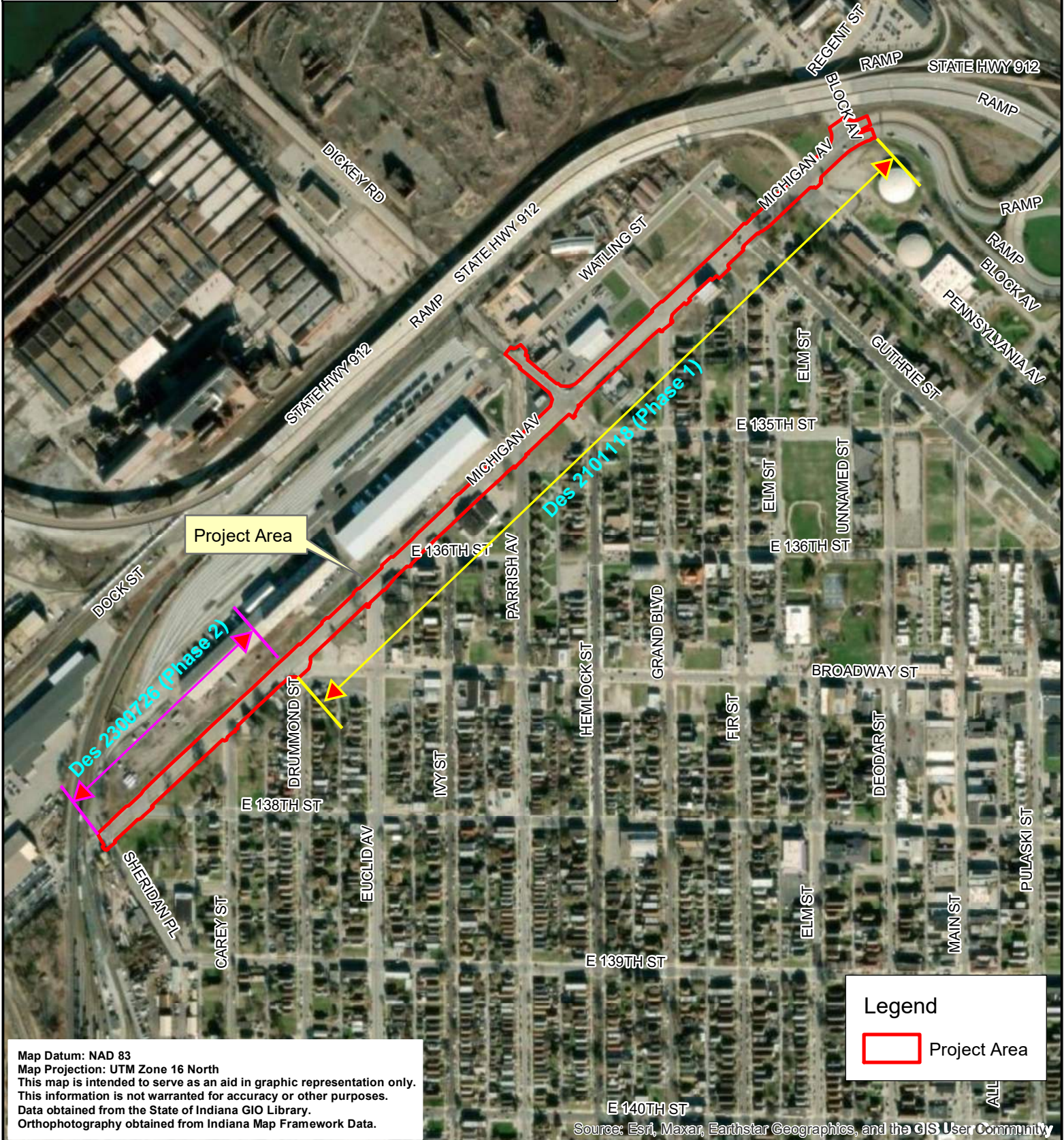


USGS Topographic Map

0 2,125 4,250 8,500 Feet

Location: Michigan Ave.
 Township: North
 County: Lake

Aerial Photograph - Project Area Map
 Michigan Avenue, from Sheridan Place to 0.02 Mile North of Block Avenue
 Road Reconstruction Project
 Lake County, Indiana
 Des. No. 2101118 & 2300726



Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.

Legend

Project Area

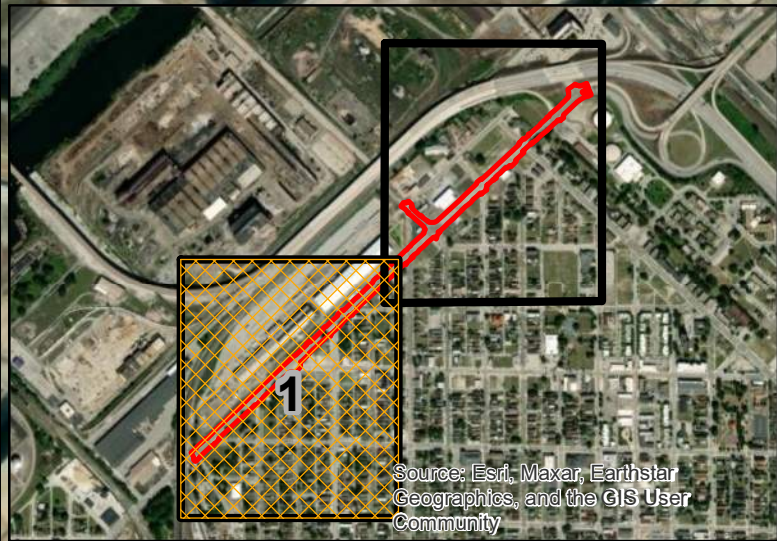


Project Area Map

0 0.075 0.15 0.3 Miles

Location: Michigan Ave.
 Township: North
 County: Lake

Photo Location Map
Michigan Avenue (Sheridan Place to 0.02 Mile North of Block Avenue)
Road Reconstruction Project
Lake County, Indiana
Des. Nos. 2101118 & 2300726



Legend

- Photo Locations
- Active Extent
- Map Extent
- Project Area

Map Datum: NAD 83
Map Projection: UTM Zone 16 North
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes. Data obtained from the State of Indiana GIO Library. Orthophotography obtained from Indiana Map Framework Data.

Photo Location Map
Michigan Avenue (Sheridan Place to 0.02 Mile North of Block Avenue)
Road Reconstruction Project
Lake County, Indiana
Des. Nos. 2101118 & 2300726





1. Looking southwest at Michigan Ave. from the southwest end of the project.



2. Looking southeast at Sheridan Pl. from Michigan Ave.



3. Looking northeast at Michigan Ave. near the intersection of Sheridan Pl.



4. Looking west at Michigan Ave. from 138th St.



5. Looking northeast at Michigan Ave. near the intersection of 138th St.



6. Looking southwest at Michigan Ave. near the intersection of 138th St.



7. Looking south at Carey St. from Michigan Ave.



8. Looking northeast at Michigan Ave. near the intersection of Carey St.



9. Looking southwest at Michigan Ave. between Carey St. and Drummond St.



10. Looking southwest at Michigan Ave. near the intersection of Broadway St.



11. Looking northeast along the west side of Michigan Ave. near the intersection of Broadway St.



12. Looking northeast at Michigan Ave. near the intersection of Broadway St.



13. Looking northeast at Michigan Ave. from the intersection of Broadway St.



14. Looking southwest along the west side of Michigan Ave. between Broadway St. and Euclid Ave.



15. Looking northeast at Michigan Ave. near the intersection of Euclid Ave.



16. Looking southwest at the intersection of Euclid Ave. (left) and Michigan Ave. (right).



17. Looking northeast at the intersection of Michigan Ave (left) and 136th St. (right).



18. Looking southwest at the intersection of Michigan Ave. (right) and 136th St. (left).



19. Looking northeast at Michigan Ave. between 136th St. and Parrish Ave.



20. Looking southwest at Michigan Ave. between 136th St. and Parrish Ave.



21. Looking northeast along the west side of Michigan Ave. between 136th St. and Parrish Ave.



22. Looking southwest along Michigan Ave. from Parrish Ave.



23. Looking northeast at the intersection of Michigan Ave. (left) and Parrish Ave. (right)



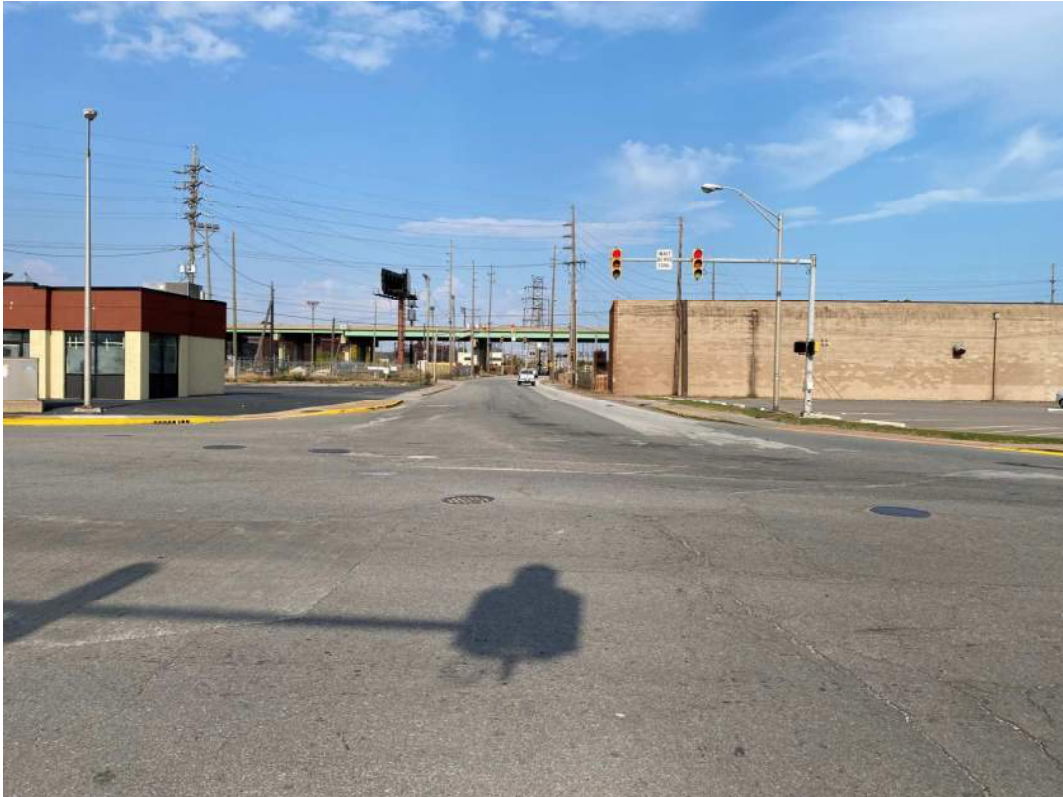
24. Looking southwest along Michigan Ave. between Parrish Ave. and Dickey Rd.



25. Looking southwest along Michigan Ave. from Hemlock St.



26. Looking northeast along Michigan Ave. from Hemlock St.



27. Looking northwest at Dickey Rd. from Michigan Ave.



28. Looking northwest at Dickey Rd.



29. Looking southeast at Dickey Rd. from Watling St.



30. Looking northeast at Watling St. from Dickey Rd.



31. Looking southwest along Michigan Ave. towards the intersection with Dickey Rd.



32. Looking southwest from the intersection of Michigan Ave. (right) and Grand Blvd. (left)



33. Looking northeast along Michigan Ave. from Grand Blvd.



34. Looking southwest along west side of Michigan Ave. between Grand Blvd. and Fir St.



35. Looking southwest along Michigan Ave. from the intersection with Fir St.



36. Looking northeast along the west side of Michigan Ave., opposite Fir St.



37. Looking northeast along Michigan Ave. from Fir St.



38. Looking southwest along Michigan Ave. from Guthrie St.



39. Looking northwest at the intersection of Michigan Ave. and Guthrie St.



40. Looking northeast along Michigan Ave. from Guthrie St.



41. Looking southwest at Pennsylvania Recreation Park.
Note: Pennsylvania Recreation Park is also identified as Linear Park Trail.



42. Looking southeast at Pennsylvania Recreation Park.
Note: Pennsylvania Recreation Park is also identified as Linear Park Trail.



43. Looking northeast at the intersection of Michigan Ave. (left) and Pennsylvania Ave. (right).



44. Looking northeast along Michigan Ave. from Pennsylvania Ave.



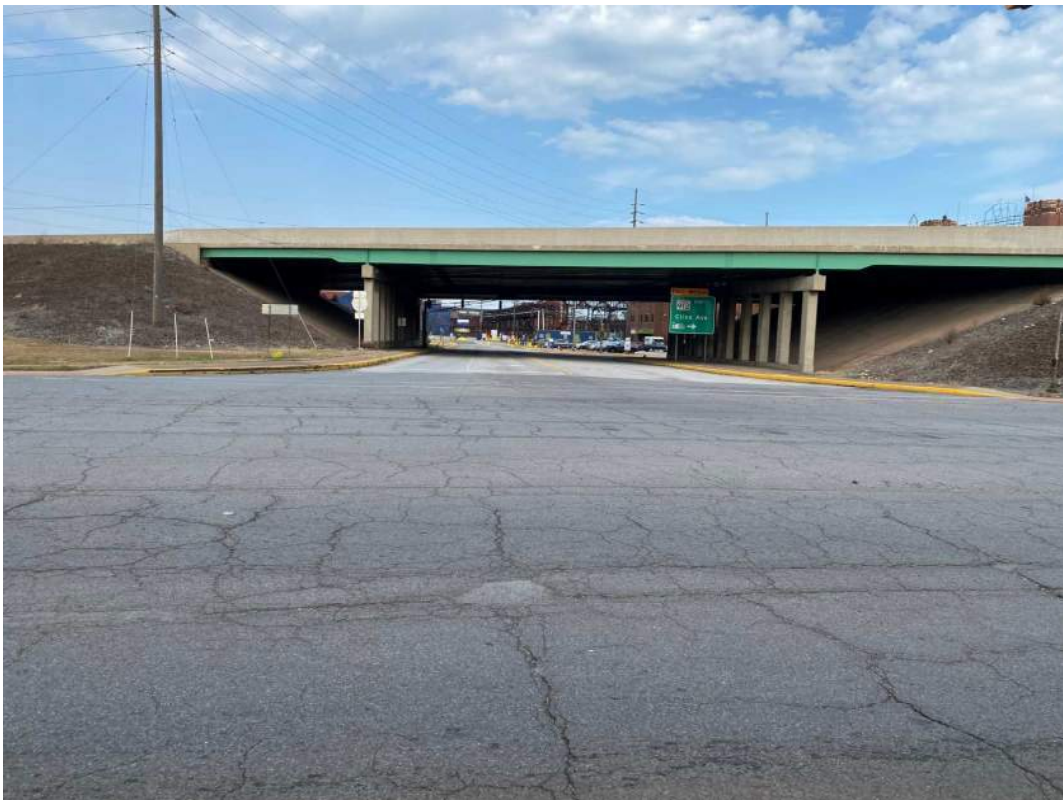
45. Looking southwest at Michigan Ave. (left) and Pennsylvania Ave. (right).



46. Looking northwest along Block Ave.



47. Looking southwest along Michigan Ave. near the Block Ave. and SR 912 exit ramp.



48. Looking northwest towards Block Ave. from Michigan Ave.



49. Looking northeast along the Block Ave. and SR 912 exit ramp.



50. Looking northeast at the Block Ave. and SR 912 exit ramp.



51. Looking southwest along Michigan Ave. from Block Ave.

UTILITIES

<u>Gas & Electric</u> Electric X X X Attn: Arthur Rosales ARosales@nisource.com	<u>Cable</u> Comcast 16 W. 84th Dr. Merrillville, In. 46410 (574) 320-8203 Attn: Larry Smith Larry_Smith3@comcast.com
Gas 1313 167th Street Hammond, In. 46324 (219) 895-4630 Attn: George Rodgers georgerodgers@nisource.com	<u>Pipelines</u> Linde/Praxair Inc. 4450 Kennedy Ave. East Chicago, In. 46312 (219) 391-5183 Attn: Kenny Diego kenny_diego@praxair.com
<u>Telephone / Fiber Optic</u> AT&T 13630 Lorain Ave. Cleveland, Oh. 44111 (216) 543-0256 Attn: Matt Spindler ms4822@att.com	<u>Water</u> East Chicago Water Dept. 400 East Chicago Ave. East Chicago, In. 46312 (219) 391-8469 Attn: Edward Santen Esanten@eastchicago.com
Job 8/Zayo 800 Woodlands Parkway, Suite 118 Ridgeland, Ms. 39157 (601) 956-0861 Attn: John Bruce john.bruce@zayo.com	<u>Sewer</u> East Chicago Sewer 5201 Indianapolis Blvd. East Chicago, In. 46312 (219) 391-8773 Attn: Obed Marrero Omarrero@eastchicago.com
Wide Open West 1674 Frontenac Rd. Naperville, Il. 60563 (630) 536-3153 Attn: Tom Jebens tjebens@wideopenwest.com	
Verizon/MCI 6835 Hillside Ct. Indianapolis, In. 46250 (317) 498-1242 Attn: Rolland Craig dennis.craig@verizon.com	
Northwestern Indiana Telephone P.O. Box 67 Hebron, In. 46341 (219) 996-0216 Attn: Don Schoenbeck dons@nitco.com	

GENERAL NOTES	
**	All Earth shoulders, median areas, and cut and fill slopes shall be plain or mulched seeded except where sodding is specified. Erosion control methods including sodding are to be placed as soon as possible after finished grade is established to minimize erosion.
**	No two drive entrances to the same property shall be closed at the same time.
**	The utilities as shown on the plans are for reference only. It is Contractor's responsibility to contact all utility companies at least 2 weeks prior to any construction and to determine the exact locations of all utilities. Dimensions for all existing utilities are shown in Inches (in.)
**	This set of plans shall not be construed to be a property retracement survey. Where apparent property lines, corners, subdivisions, or section corners information is shown, it is based upon physical evidence or testimony
**	If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division and the INDOT District Environmental Section will be contacted immediately

** REPRESENTS GENERAL NOTES REQUIRED

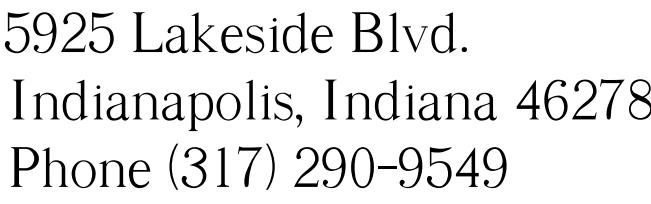
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LINE	COMMON EXCAVATION (CYS)		FILL + 25% (CYS)	
	COMMON	BENCHING	FILL	BENCHING
Line "A"	5145	-	600	-
Line "D"	639	-	0	-
TOTALS	5784		600	

EXCAVATION, COMMON = 5784 CYS

PAVEMENT REMOVAL = 12,315 SYS

BORROW = 100 CYS

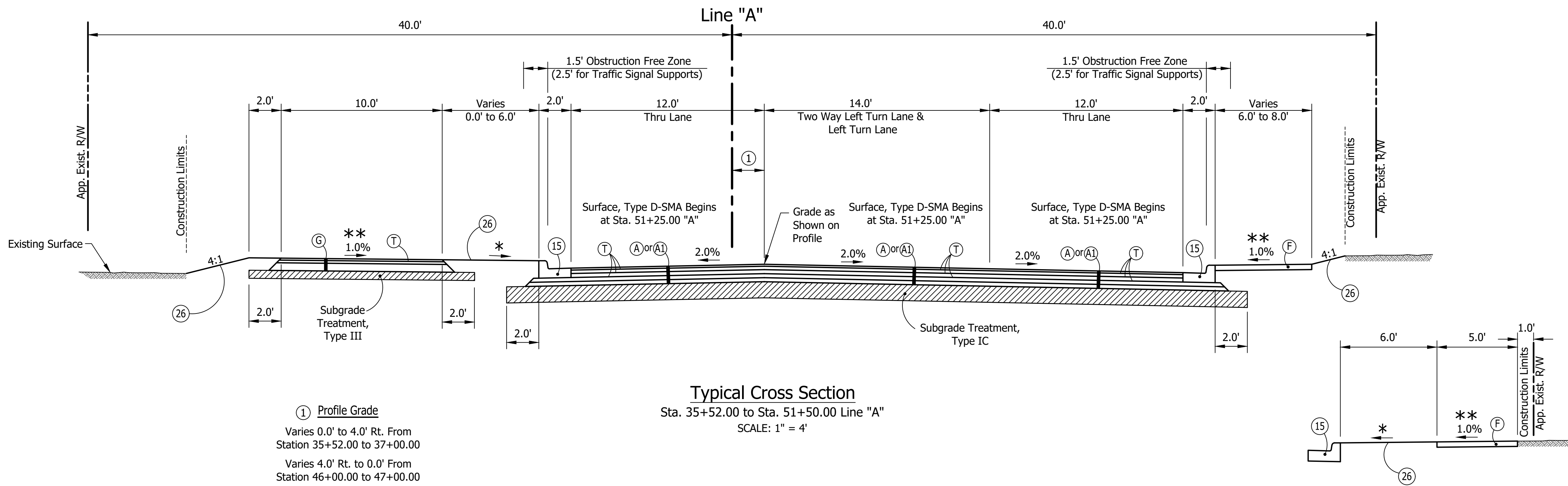
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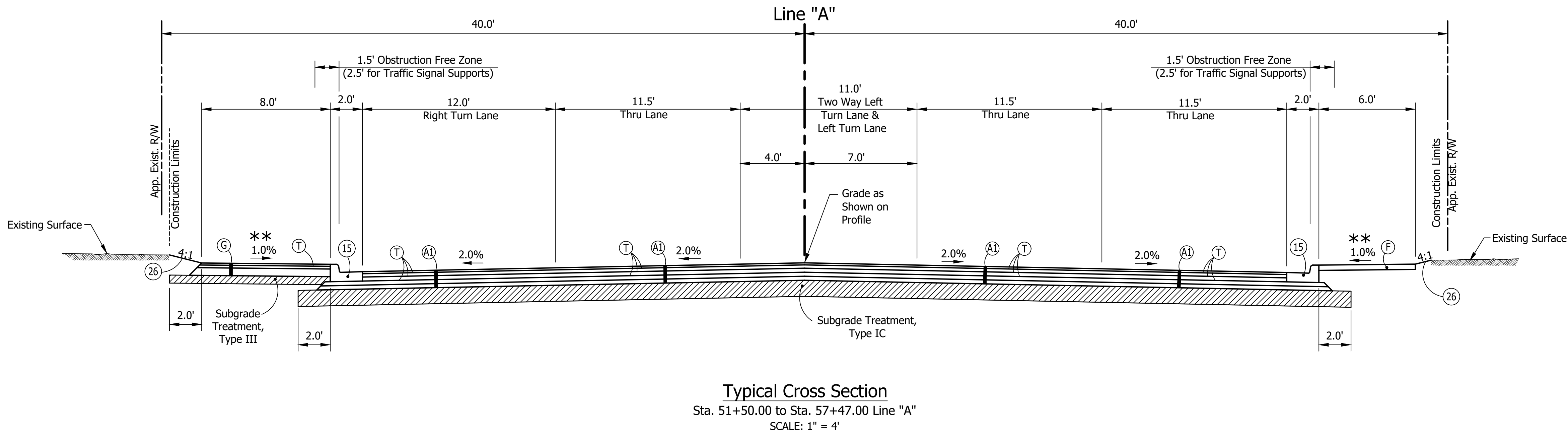
DESIGNED: <u>B.M.S./C.E.S.</u>	DRAWN: <u>B.M.S.</u>
CHECKED: <u>B.M.S./C.E.S.</u>	CHECKED: <u>S.H.S.</u>

MICHIGAN AVE.
INDEX AND INFORMATION SHEET

HORIZONTAL SCALE	BRIDGE FILE		
N/A	N/A		
VERTICAL SCALE	DESIGNATION		
N/A	2101118		
SURVEY BOOK	SHEETS		
N/A	2	of	XX
CONTRACT	PROJECT		
R-44001	2101118		

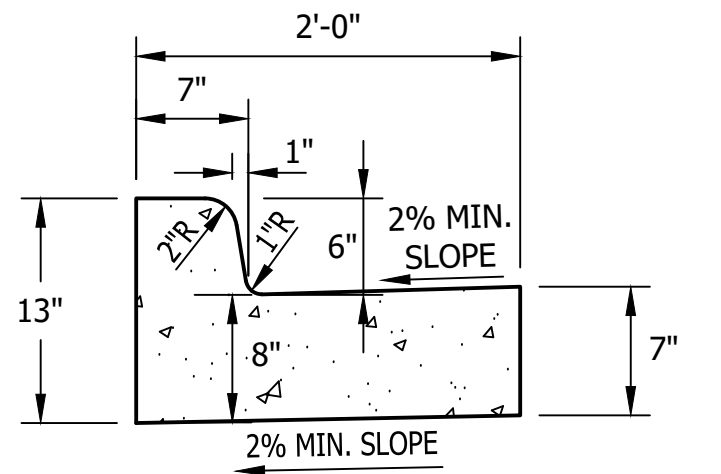


Alternate Sidewalk Section
Sta. 47+00.00 to Sta. 51+50.00 Rt. Line "A"
SCALE: 1/4" = 1'-0"

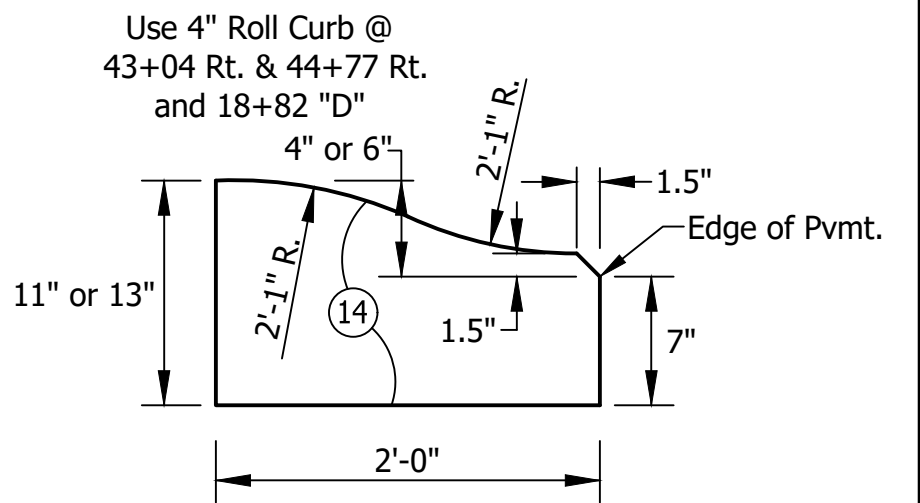


* Slope Varies, 6:1 Max.

** Slope Varies, Slope 1.0% Unless Shown
Otherwise on Cross Sections (2.0% Max.)



Combined Concrete Curb & Gutter
SCALE: 1" = 1'



Roll Curb, Concrete Detail
SCALE: 1" = 1'

Legend

- (A) 165 #/syd. Hma Surface Type D, 9.5 mm On 275 #/syd. Hma Intermediate Type D, 19.0mm On 660 #/syd. Hma Base Type D, 25.0mm (2-Lifts) On 3" Compacted Aggregate No. 53, On Subgrade Treatment Type IC
- (A1) 165 #/syd. Hma Surface Type D-SMA, 9.5 mm On 275 #/syd. Hma Intermediate Type D, 19.0mm On 660 #/syd. Hma Base Type D, 25.0mm (2-Lifts) On 3" Compacted Aggregate No. 53, On Subgrade Treatment Type IC
- (C1) PCCP for Approaches 6" on Dense Graded Subbase, on Subgrade Treatment Type II
- (C2) PCCP for Approaches 9" on Dense Graded Subbase, on Geogrid Type 18, on Subgrade Treatment Type II
- (CR) Curb Ramp, Concrete
- (F) Sidewalk, Concrete
- (FT) Sidewalk Elevation Transition
- (G) HMA Sidewalks:
140 #/syd. Hma Surface Type B On 220 #/syd. Hma Intermediate Type B On 6" Compacted Aggregate No. 53 Subgrade Treatment Type III
- (GT) HMA Elevation Transition
- (R) Milling, Asphalt 1 1/2" with 165 #/syd. Hma Surface Type D-SMA, 9.5 mm
- (T) Asphalt Material For Tack Coat
- (14) Concrete Roll Curb
- (15) Combined Concrete Curb And Gutter
- (26) Sodding (Nursery) W/topsoil (4" As Required Under Sodding)
- (27) Seed Mixture, U

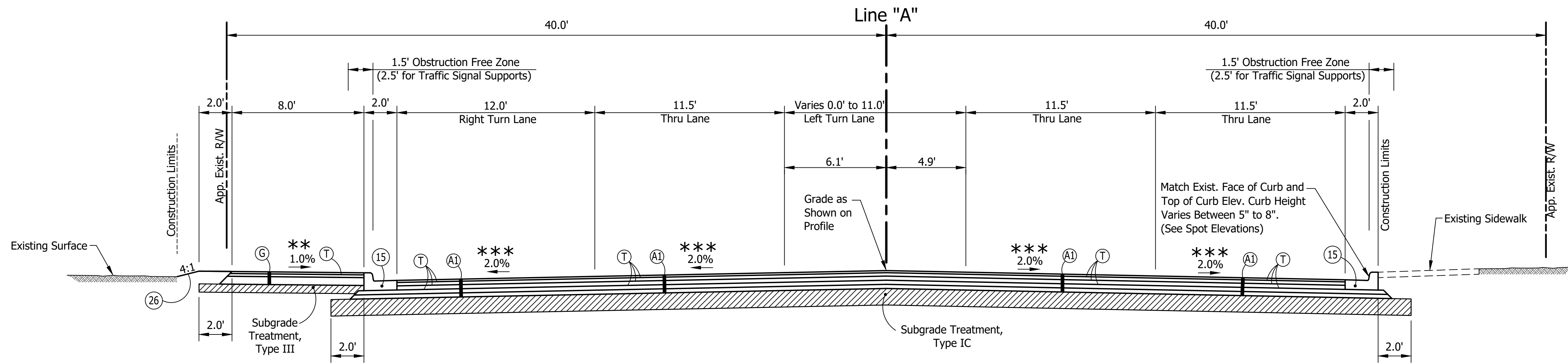
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FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

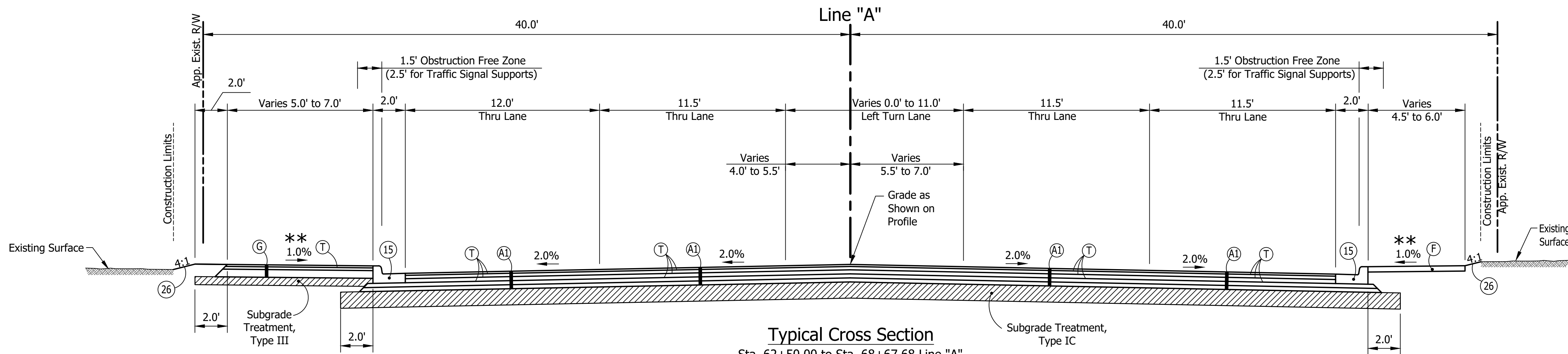
MICHIGAN AVENUE
TYPICAL CROSS SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1" = 4'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	3 of XX
CONTRACT	PROJECT
R-44001	2101118



Typical Cross Section
Sta. 57+47.00 to Sta. 62+50.00 Line "A"
SCALE: 1" = 4'

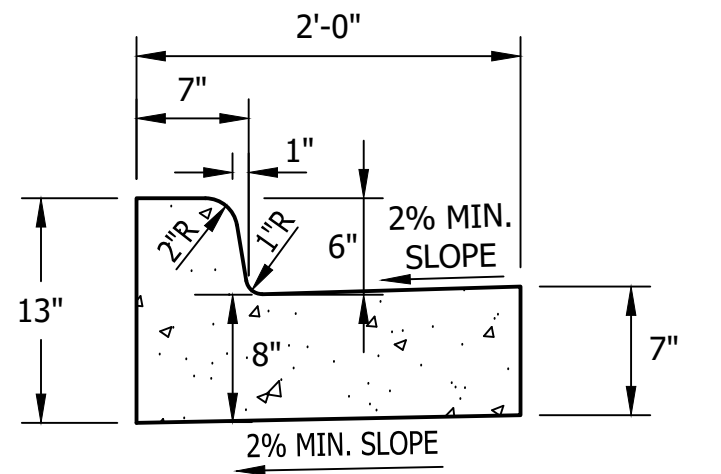
*** Match Exist. Cross Slope and Profile Grade,
Between Sta. 62+03.50 to 62+24.40
(No Typical Section Shown).



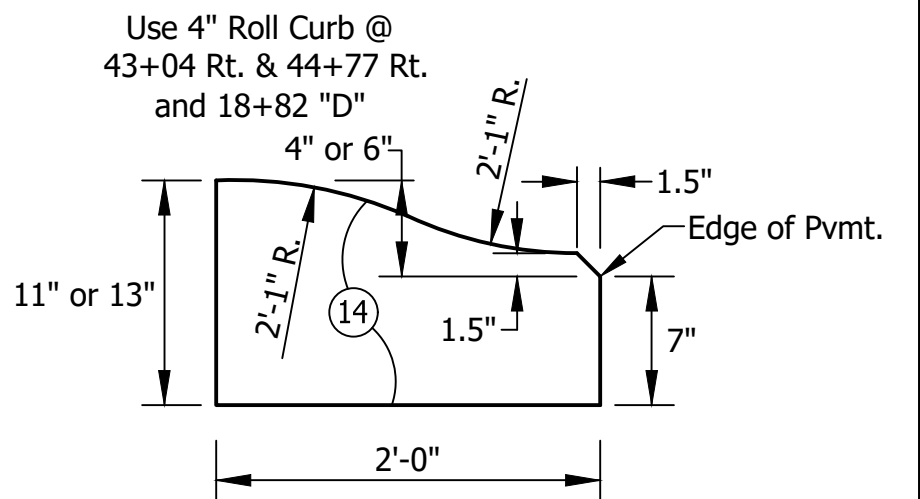
Typical Cross Section
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SCALE: 1" = 4'

* Slope Varies, 6:1 Max.

** Slope Varies, Slope 1.0% Unless Shown
Otherwise on Cross Sections (2.0% Max.)



Combined Concrete Curb & Gutter
SCALE: 1" = 1'



Roll Curb, Concrete Detail
SCALE: 1" = 1'

Legend

- (A) 165 #/syd. Hma Surface Type D, 9.5 mm On 275 #/syd. Hma Intermediate Type D, 19.0mm On 660 #/syd. Hma Base Type D, 25.0mm (2-Lifts) On 3" Compacted Aggregate No. 53, On Subgrade Treatment Type IC
- (A1) 165 #/syd. Hma Surface Type D-SMA, 9.5 mm On 275 #/syd. Hma Intermediate Type D, 19.0mm On 660 #/syd. Hma Base Type D, 25.0mm (2-Lifts) On 3" Compacted Aggregate No. 53, On Subgrade Treatment Type IC
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- (C2) PCCP for Approaches 9" on Dense Graded Subbase, on Geogrid Type 18, on Subgrade Treatment Type II
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- (FT) Sidewalk Elevation Transition
- (G) HMA Sidewalks: 140 #/syd. Hma Surface Type B On 220 #/syd. Hma Intermediate Type B On 6" Compacted Aggregate No. 53 Subgrade Treatment Type III
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- (14) Concrete Roll Curb
- (15) Combined Concrete Curb And Gutter
- (26) Sodding (Nursery) W/topsoil (4" As Required Under Sodding)
- (27) Seed Mixture, U

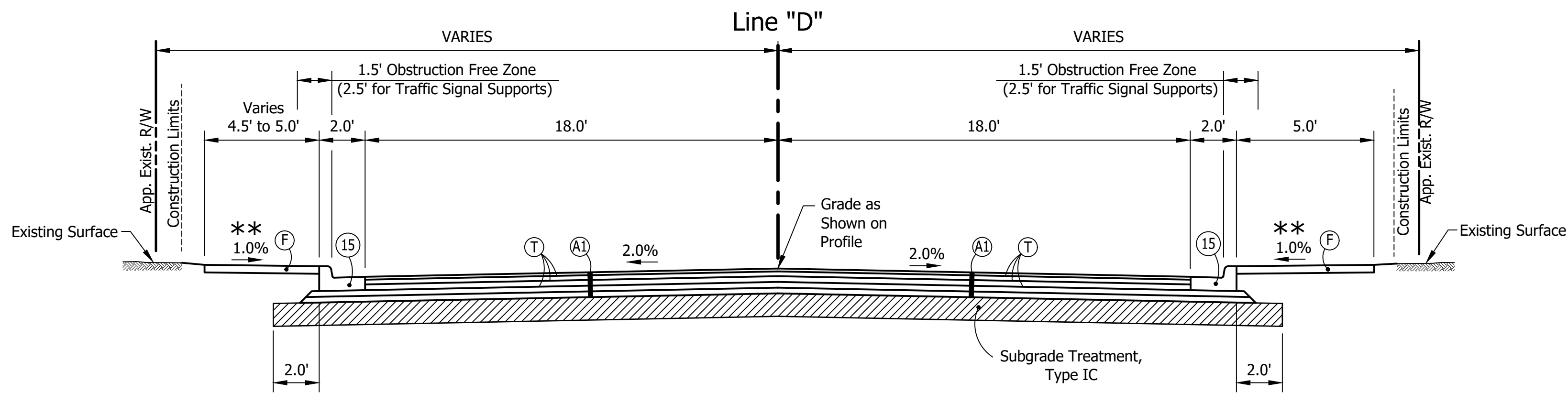
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FOR APPROVAL
DESIGN ENGINEER DATE

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CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

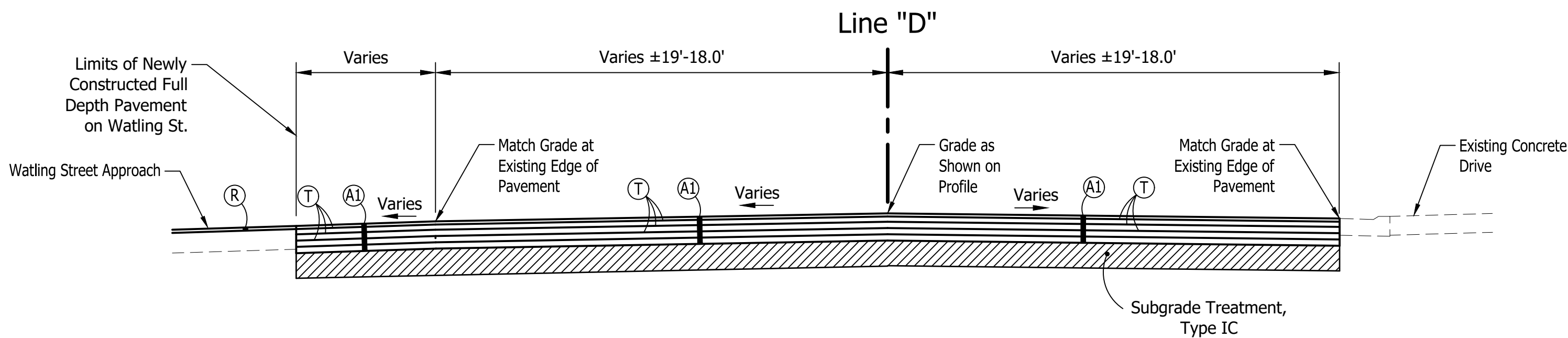
INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE
TYPICAL CROSS SECTIONS

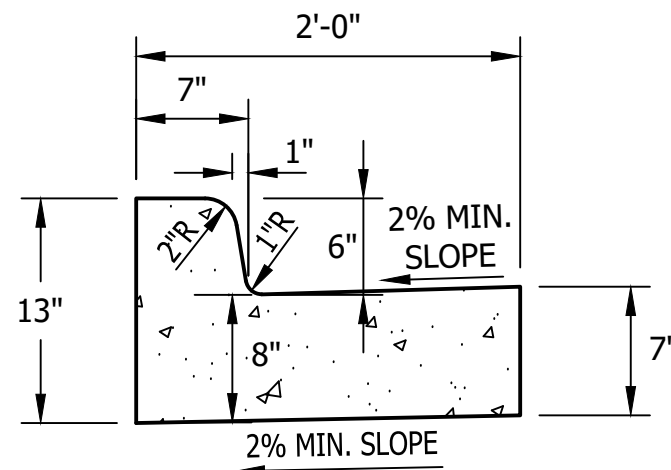
HORIZONTAL SCALE	BRIDGE FILE
1" = 4'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	4 of XX
CONTRACT	PROJECT
R-44001	2101118



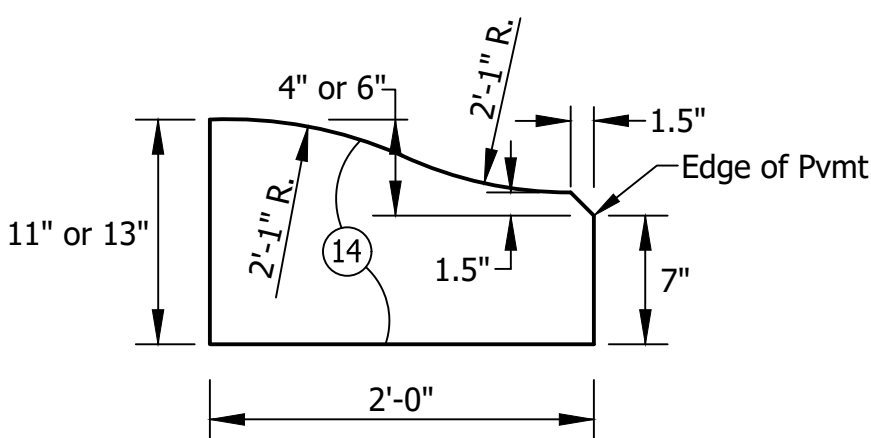
Typical Cross Section
Dickey Road
Sta. 17+45.00 to Sta. 18+99.78 Line "D"
SCALE: 1" = 4'



Typical Cross Section
Dickey Road
Sta. 16+45.00 to Sta. 17+35.00 Line "D"
SCALE: 1" = 4'



Combined Concrete Curb & Gutter
SCALE: 1" = 1'



Roll Curb, Concrete Detail
SCALE: 1" = 1'

Legend

- (A) 165 #/syd. Hma Surface Type D, 9.5 mm On 275 #/syd. Hma Intermediate Type D, 19.0mm On 660 #/syd. Hma Base Type D, 25.0mm (2-Lifts) On 3" Compacted Aggregate No. 53, On Subgrade Treatment Type IC
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- (26) Sodding (Nursery) W/topsoil (4" As Required Under Sodding)
- (27) Seed Mixture, U

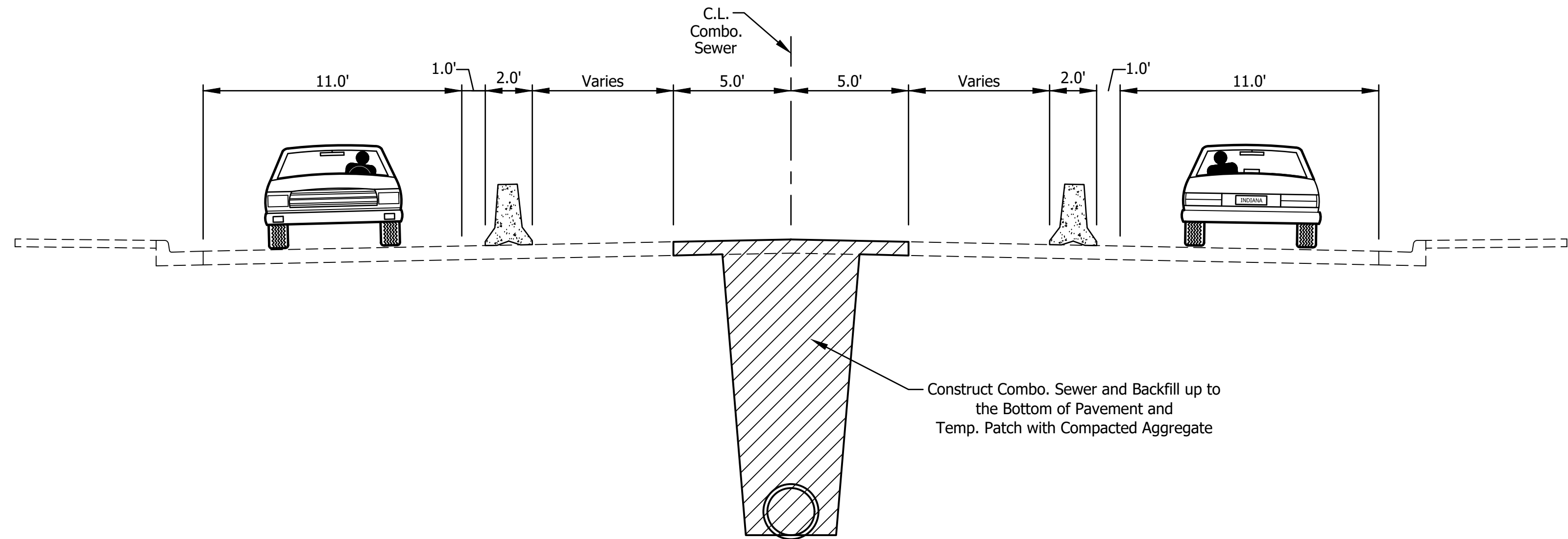
RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

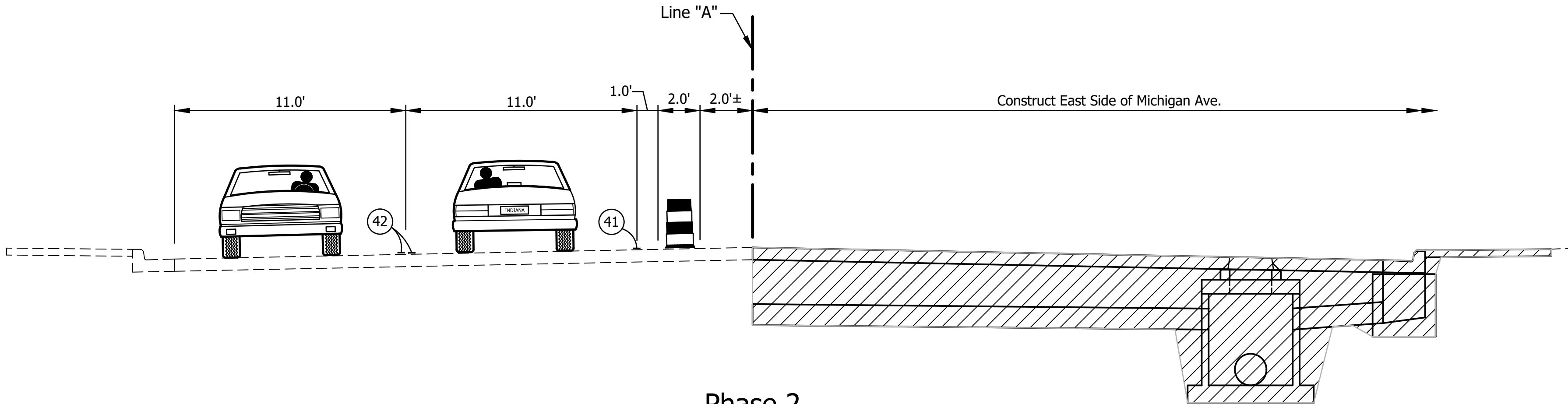
MICHIGAN AVENUE & DICKEY ROAD
TYPICAL CROSS SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1" = 4'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	5 of XX
CONTRACT	PROJECT
R-44001	2101118



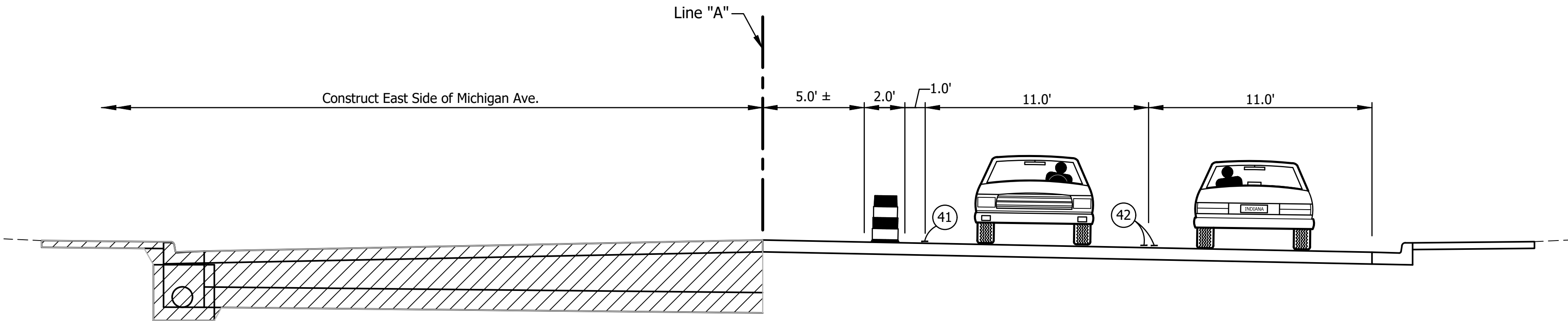
Phase 1

Scale 1" = 4'
From Dickey Rd. to Block Ave.
(See Detours for Broadway St. to Dickey Rd.)



Phase 2

Scale 1" = 4'
From Dickey Rd. to Block Ave.
(See Detours for Broadway St. to Dickey Rd.)



Phase 3

Scale 1" = 4'
From Dickey Rd. to Block Ave.
(See Detours for Broadway St. to Dickey Rd.)

Legend

- Standard Drum
- Standard Drum
- Barricade, Type III-B
- Traffic Flow Arrow
- Construction Signs, Type A or B w/Type "A" Construction Warning Light
- Temporary Traffic Barrier, Type 2
- Flashing Arrow Sign
- Area To Be Constructed During This Phase
- Temp. Pavement Marking, Solid, White, 4"
- Temp. Pavement Marking, Solid, Yellow, 4"

RECOMMENDED
FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE
MAINTENANCE OF TRAFFIC

HORIZONTAL SCALE	BRIDGE FILE
1" = 4'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	5 of XX
CONTRACT	PROJECT
R-44001	2101118

Summary Of Maintenance Of Traffic Quantities						
Item						
	Phase 1	Phase 2				TOTALS
Line, Remove						X Lft.
** Temporary Pavement Marking, Solid, White, 4"						X Lft.
Temporary Pavement Marking, 4" (Removable)						X Lft.
Line, Thermoplastic, Solid, White, 4 In. (To Replace Permanent Markings Removed)						X Lft.
Line, Thermoplastic, Solid, Yellow, 4 In. (To Replace Permanent Markings Removed)						X Lft.
Temp. Pavement Message Markings, Thermoplastic, Lane Indication Arrow						* X Each
Construction Signs, Type "A" w/Type "A" Construction Warning Light						* X Each
Construction Signs, Type "B" w/Type "A" Construction Warning Light						* X Each
Barricade, Type III-B						* X Lft.
Flashing Arrow Sign (Days) (at 10 Days Each)						X Days
**** Compacted Aggregate No. 53, Temporary						X Tons
*** Temporary Traffic Barrier, Type 2						* X Lft.
*** Energy-Absorbing Terminal, CZ, TL-2						* X Ea.

* Maximum required during any single phase

** Not a pay item

*** Total includes undistributed quantity for locations deemed necessary by the engineer for sewer or other construction.

**** Estimated quantity for maintaining access to drives. (As required)

NOTES:

Existing pavement markings that conflict with each maintenance of traffic scheme shall be removed prior to construction.

No two adjacent street approaches shall be closed at the same time.

Whenever possible private driveways shall be constructed in portions to allow access to properties at all times. Whenever private driveways are too narrow to accommodate continuous access the contractor shall contact the property owner and work out a time schedule for driveway construction that will cause the least inconvenience to the property owner.

Dimensions for sign locations are approximate only. Actual locations to be determined by the Contractor and approved by the engineer.











CONSTRUCTION ZONE DESIGN SPEED (mph)	SPACING (ft)	
	TAPERED SECTION	TANGENT SECTION
45 or less	25	50
50 or greater	50	100

SUGGESTED MAXIMUM SPACING OF CHANNELIZATION DEVICES











Sequence Of Construction

- Phase 1 - Construct Combo. Sewer and Backfill up to the Bottom of Pavement and Temp. Patch with Compacted Aggregate
- Phase 2 - Shift Traffic to the West. Construct East Side of Michigan Ave. From Dicky Rd. To Block Ave.
- Phase 3 - Shift Traffic to the East. Construct West Side of Michigan Ave. From Dicky Rd. To Block Ave.
- Phase 4 - Construct from Broadway St. to Dicky One Block at a Time Using a Standard Urban Detour.

Legend

-  Standard Drum
-  Standard Drum
-  Barricade, Type III-B
-  Traffic Flow Arrow
-  Construction Signs, Type A or B w/Type "A" Construction Warning Light
-  Temproary Traffic Barrier, Type 2
-  Flashing Arrow Sign
-  Area To Be Constructed During This Phase
-  Temp. Pavement Marking, Solid, White, 4"
-  Temp. Pavement Marking, Solid, Yellow, 4"

Sign Legend

-  XG20-7 - Worksite Added Penalty Sign
-  XW20-1 - Road Construction Ahead
-  XG20-2 - End Construction
-  R3-7(R) - Right Lane Must Turn Right
-  XW9-2A(R) - Lane Ends Merge Right
-  XW4-2-A(R) - Merge Right (Sym.)
-  R3-2a - No Left Turn
-  R9-9 - Sidewalk Closed
-  R11-3a - Road Closed / Local Traffic Only
-  R11-2 - Road Closed

RECOMMENDED FOR APPROVAL	
DESIGN	ENGINEER
DATE	
DESIGNED: B.M.S./C.E.S.	DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S.	CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE
MAINTENANCE OF TRAFFIC

HORIZONTAL SCALE		BRIDGE FILE	
1" = 4'		N/A	
VERTICAL SCALE		DESIGNATION	
N/A		2101118	
SURVEY BOOK		SHEETS	
N/A		5	of XX
CONTRACT		PROJECT	
R-44001		2101118	

32

32+12.7, 20.8' Tele. M.H.

32+33.3, 35' Pwp. (71-902)

33

33+33.8, 36.7' H.H. (Traffic)

34

33+77.1, 16.4' W.V.
33+82.6, 34.6' Pwp.
(71-901)

SEC. 21, T37N, R9W
NORTH TOWNSHIP
LAKE COUNTY

35

34+85.2, 25.1' W.V.
34+85.4, 31.1' F.Hyd.

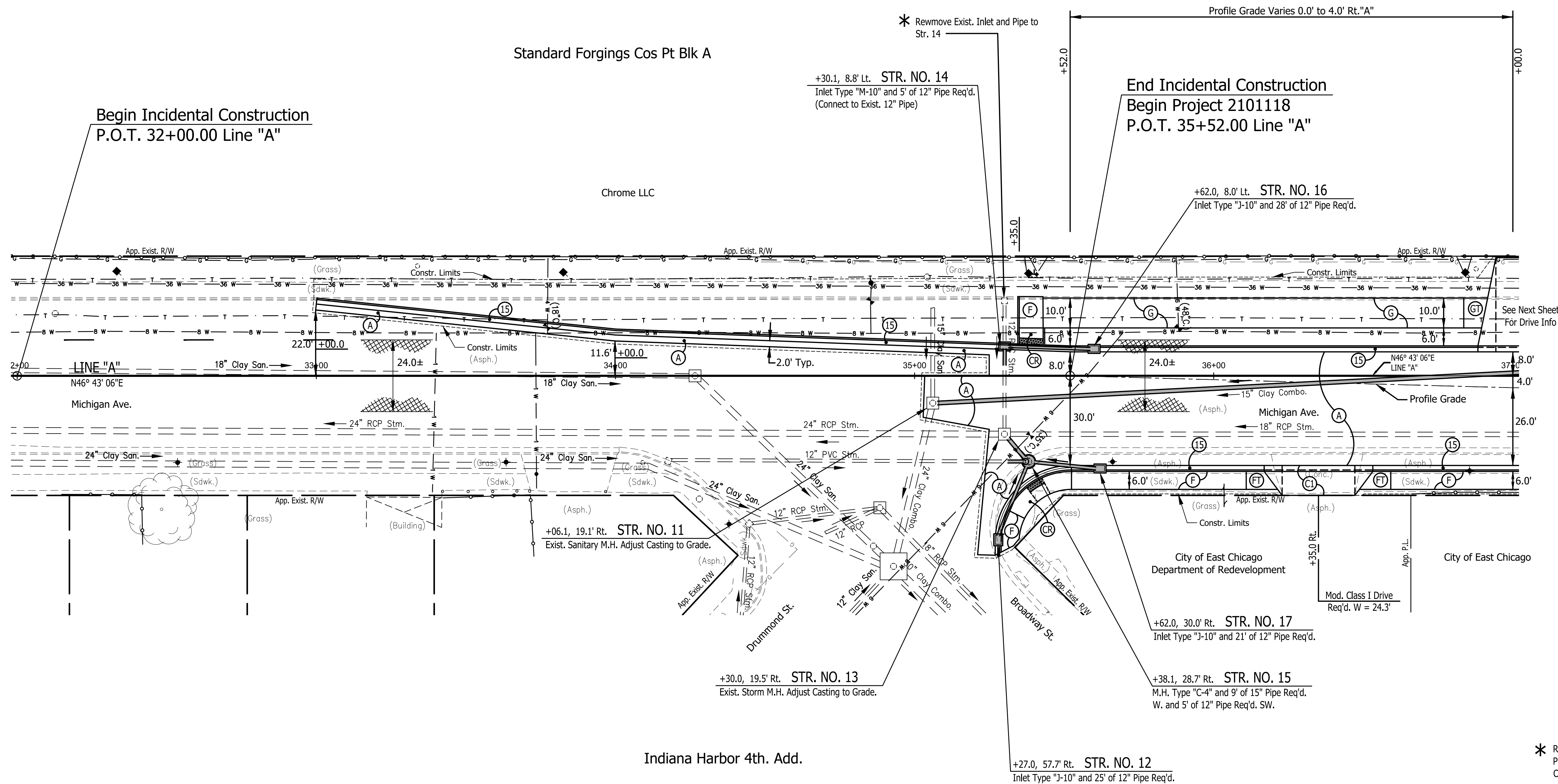
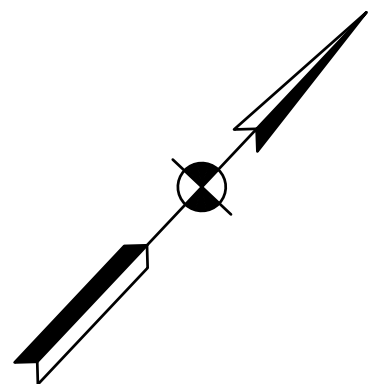
35+04.2, 33'
Telephone M.H.

36

35+86.2, 16' W.V.

37

36+84.1, 34.6' Pwp.
(79-970)
36+87.7, 35.7' H.H.
(Lighting)



* Remove Existing Structures and Pipes that Conflict with the New Construction. (Typical)

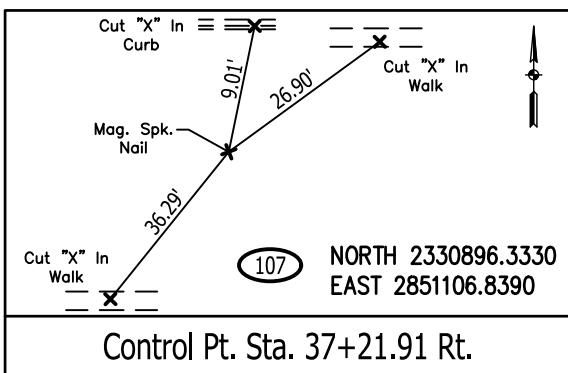
Indicates Pavement Removal

32+14.9, 39.6' End Fence
32+41.6, 39.8' Fence Cor.
32+42.56, 4' End Fence
32+48.3, 44.7' Maple 30 IN
32+53.6, 29' LtP. (No No.)

33+42.2, 38.6' Slt. Post
33+42.3, 40.8' End Fence
33+50.7, 38.7' Slt. Post
33+59.38, 7' Slt. Post
33+63.4, 28.9' LLP. (No No.)
33+67.1, 38.6' Slt. Post
33+71.3, 38.6' Slt. Post
33+71.6, 39.8' Fence Cor.
33+72.8, 60.4' End Fence
33+73.6, 32.8' W.M.
33+96.7, 38.7' Slt. Post
34+09.1, 29.1' H.H. (Comm.)
34+17.7, 28.5' Inlet
34+26.0' Sanitary M.H.
34+28.0, 41.2' Trti. Sig. M.H.
34+38.0, 49.6' LLP. (No No.)
34+41.9, 83.4' Inlet
34+44.8, 49.5' Inlet

34+71.9, 107.9' Sign
(Broadway/Drummond St.)
34+86.2, 56.9' C.B.
34+88.4, 44.1' Storm M.H.
34+93.6, 3.7' Sanitary M.H.
35+06.1, 9.1' Sanitary M.H.
35+10.5, 115.5' Inlet
35+30.1, 9.5' Storm M.H.
35+33.8, 90.6' Storm M.H.
35+38.1, 28.7' C.B. (B-15)
35+38.6, 19.9' W.V.
35+44.5, 80.4' Inlet
36+66.2, 28.7' Lt. P.

36+66.4, 39.5' End Fence
36+85.3, 31.8' LLP. (No No.)



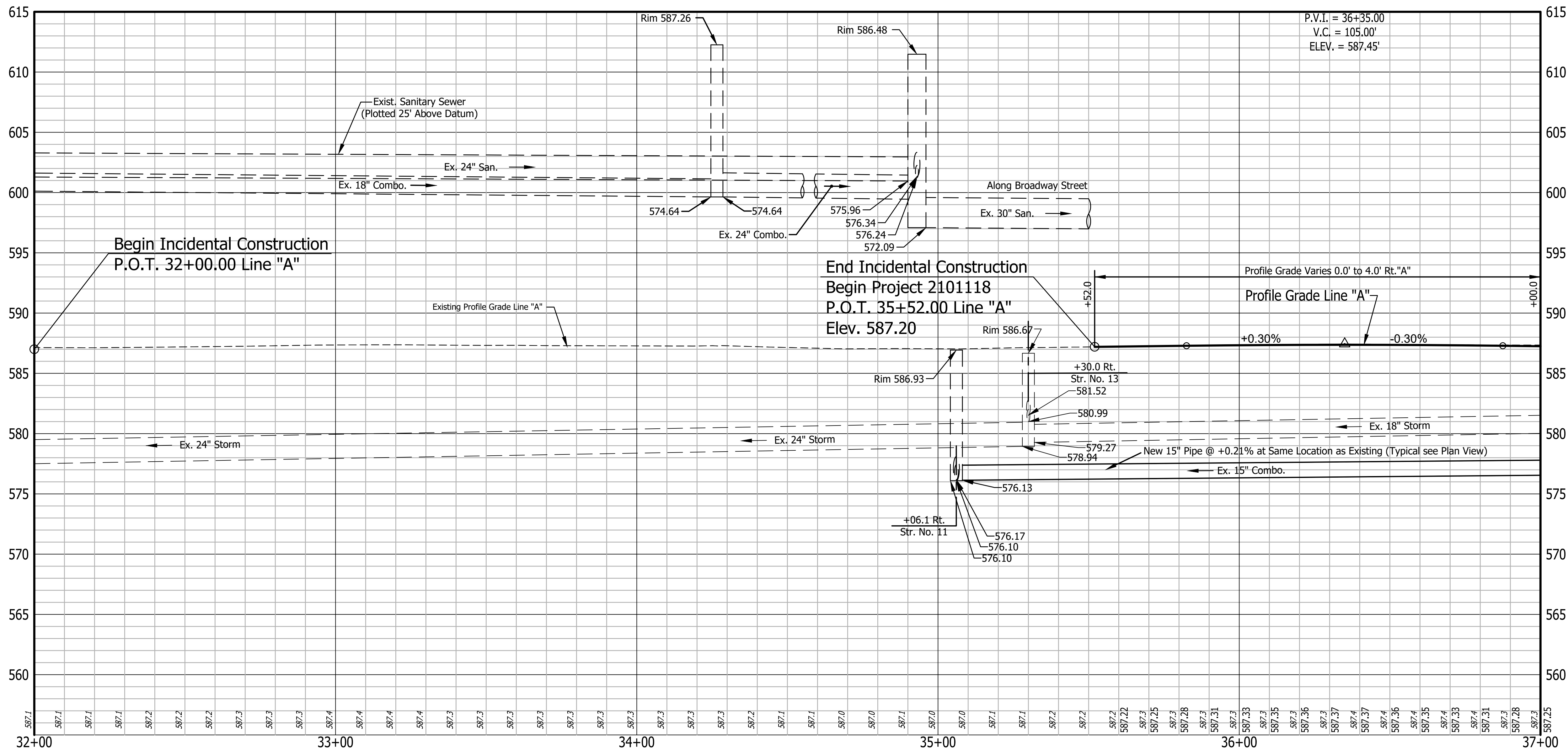
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: B.M.S./C.E.S.	DRAWN: B.M.S.	
CHECKED: B.M.S./C.E.S.	CHECKED: S.H.S.	

INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE - LINE "A"
PLAN SHEET

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	2101118
SURVEY BOOK	SHEETS
N/A	8 of XX
CONTRACT	PROJECT
R-44001	2101118

B.M. NO. 8 Cut Square in Ltp. Fdn.
29+99.11 "A", 29.78 Rt., Elev. 587.21



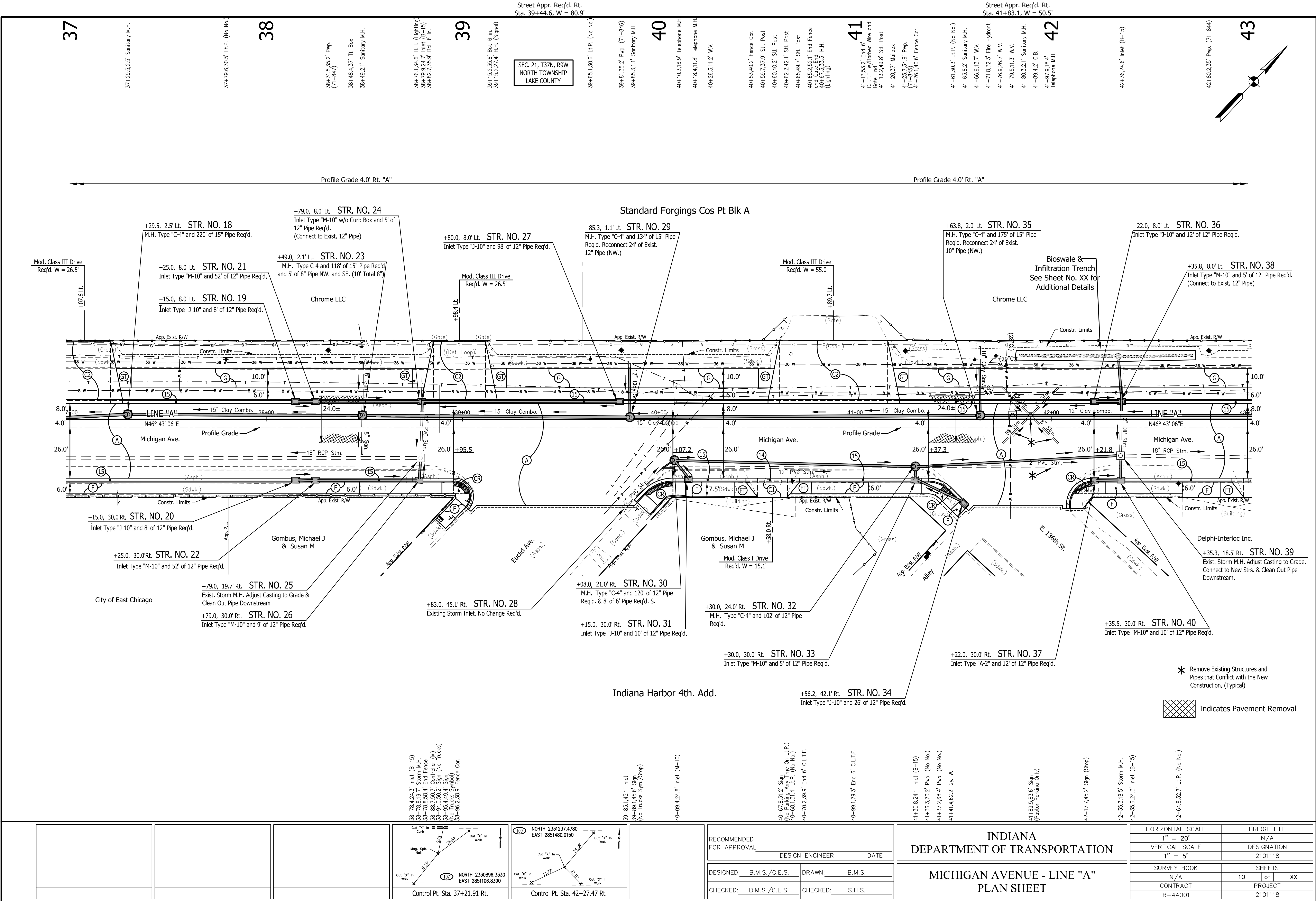
RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

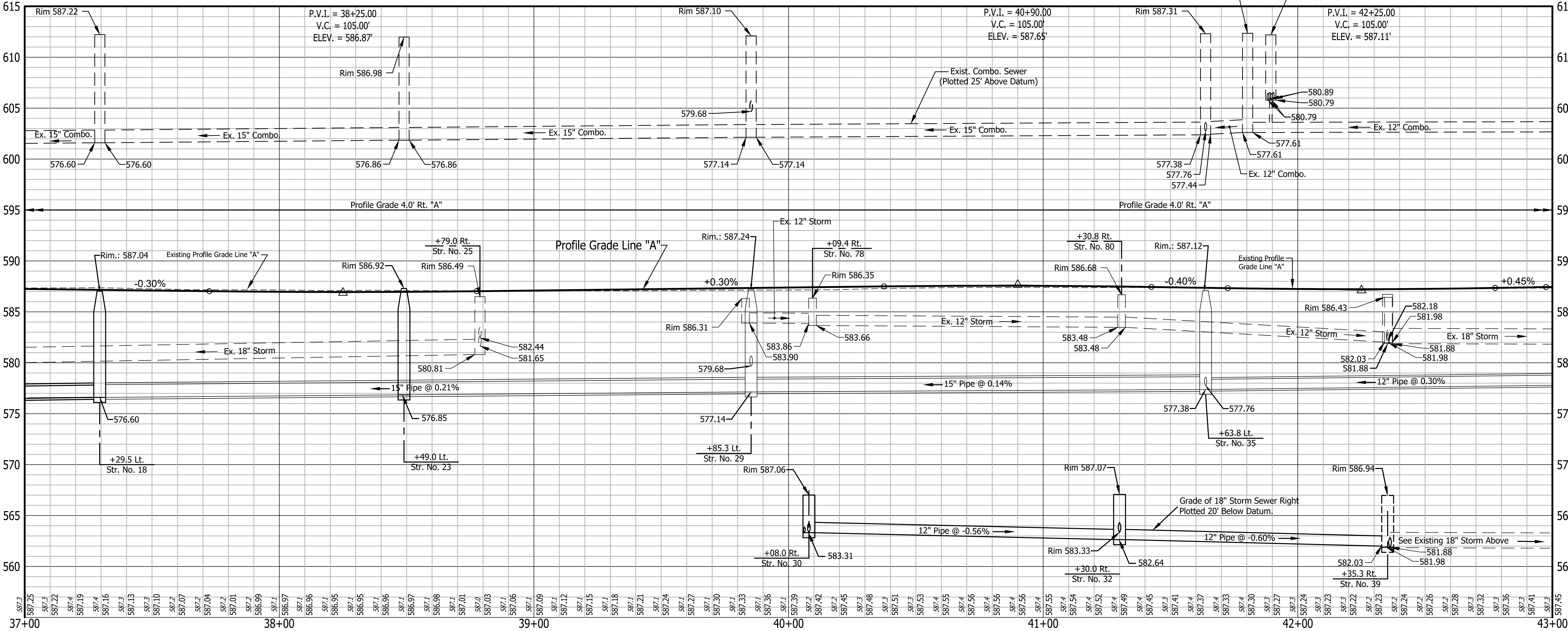
INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE - LINE "A"
PROFILE SHEET

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	2101118
SURVEY BOOK	SHEETS
N/A	9 of XX
CONTRACT	PROJECT
R-44001	2101118



B.M. NO. 12 Cut Square in Ltp. Fdn.
49+07.56 "A", 34.70 Rt., Elev. 586.98



RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____	DATE _____
DESIGNED: _____ B.M.S./C.E.S.		DRAWN: _____ B.M.S.	
CHECKED: _____ B.M.S./C.E.S.		CHECKED: _____ B.M.S.	

INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE - LINE "A" PROFILE SHEET

HORIZONTAL SCALE	BRIDGE FILE		
1" = 20'	N/A		
VERTICAL SCALE	DESIGNATION		
1" = 5'	2101118		
SURVEY BOOK		SHEETS	
N/A	11	of	XX
CONTRACT	PROJECT		
	2100553		

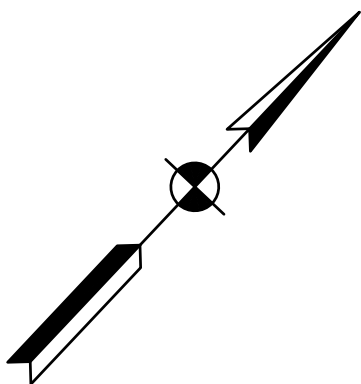
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44

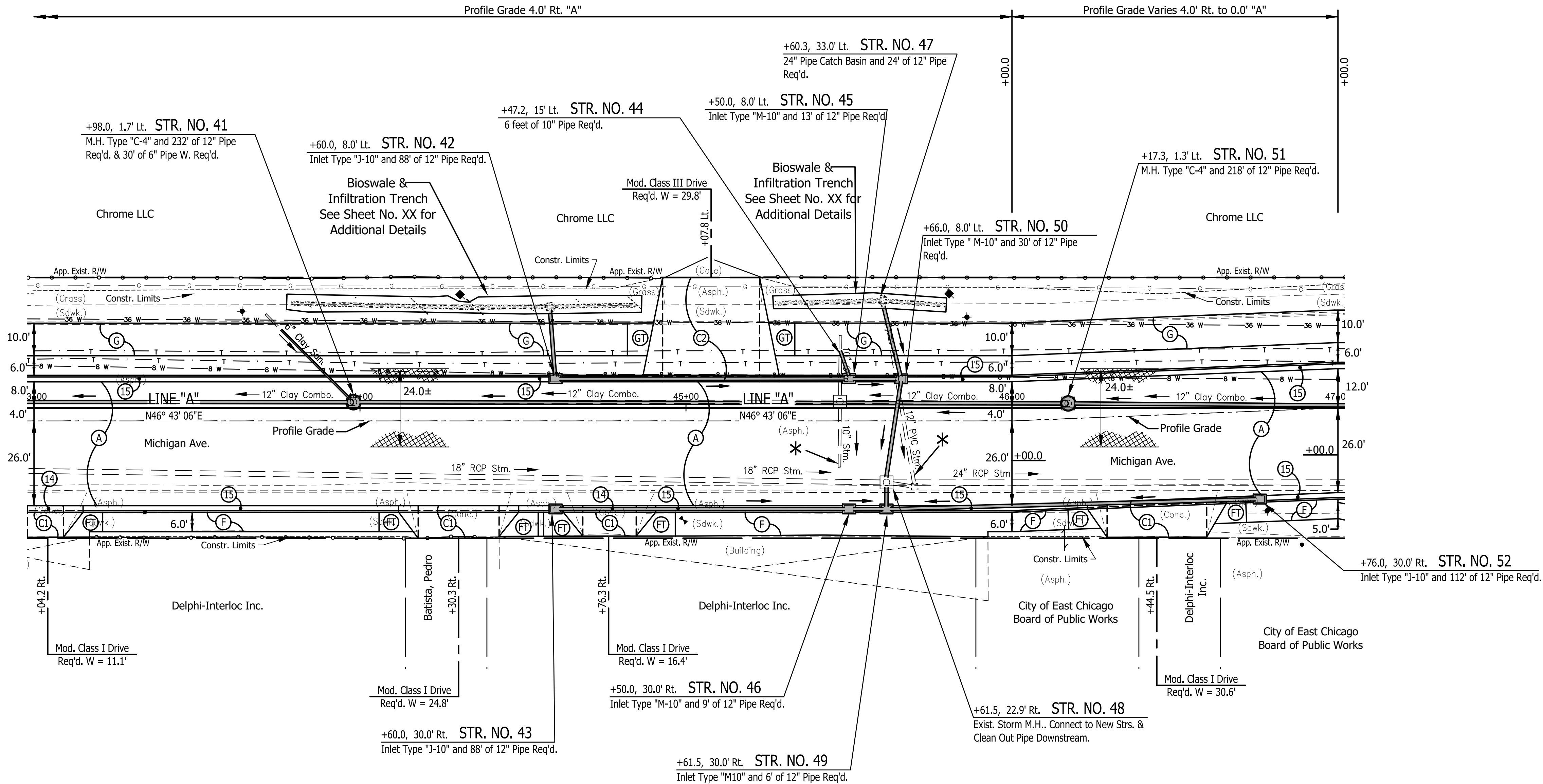
45

46

47



Standard Forgings Cos Pt Blk A



* Remove Existing Structures and Pipes that Conflict with the New Construction. (Typical)

Indicates Pavement Removal

Norlins Add.

43+17.4, 39.6' End Fence

43+34.32' W.M.

44+41.9, 39.9' End Fence

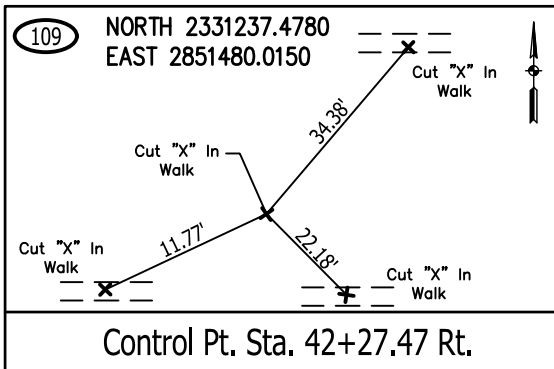
44+99.2, 34.4' W.V.

45+41.5, 22.9' Storm M.H.

46+70.2, 24.2' Inlet

46+78.3, 31.6' L.L.P. (No No.)

46+88.9, 42' W.M.



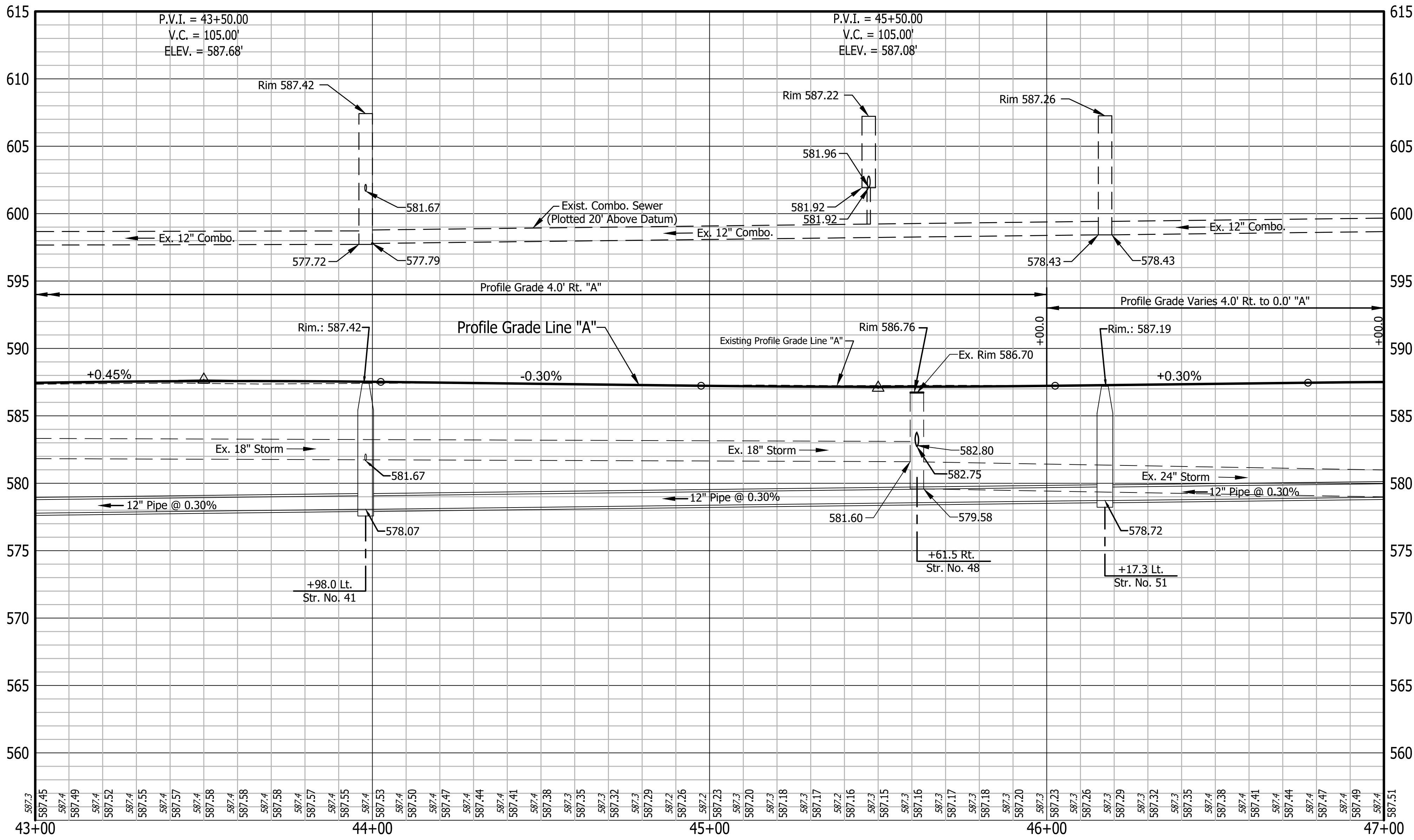
RECOMMENDED FOR APPROVAL _____	
DESIGN ENGINEER _____	DATE _____
DESIGNED: B.M.S./C.E.S.	DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S.	CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE - LINE "A"
PLAN SHEET

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
VERTICAL SCALE 1" = 5'	DESIGNATION 2101118
SURVEY BOOK N/A	SHEETS 12 of XX
CONTRACT R-44001	PROJECT 2101118

B.M. NO. 12 Cut Square in Ltp. Fdn.
49+07.56 "A", 34.70 Rt., Elev. 586.98



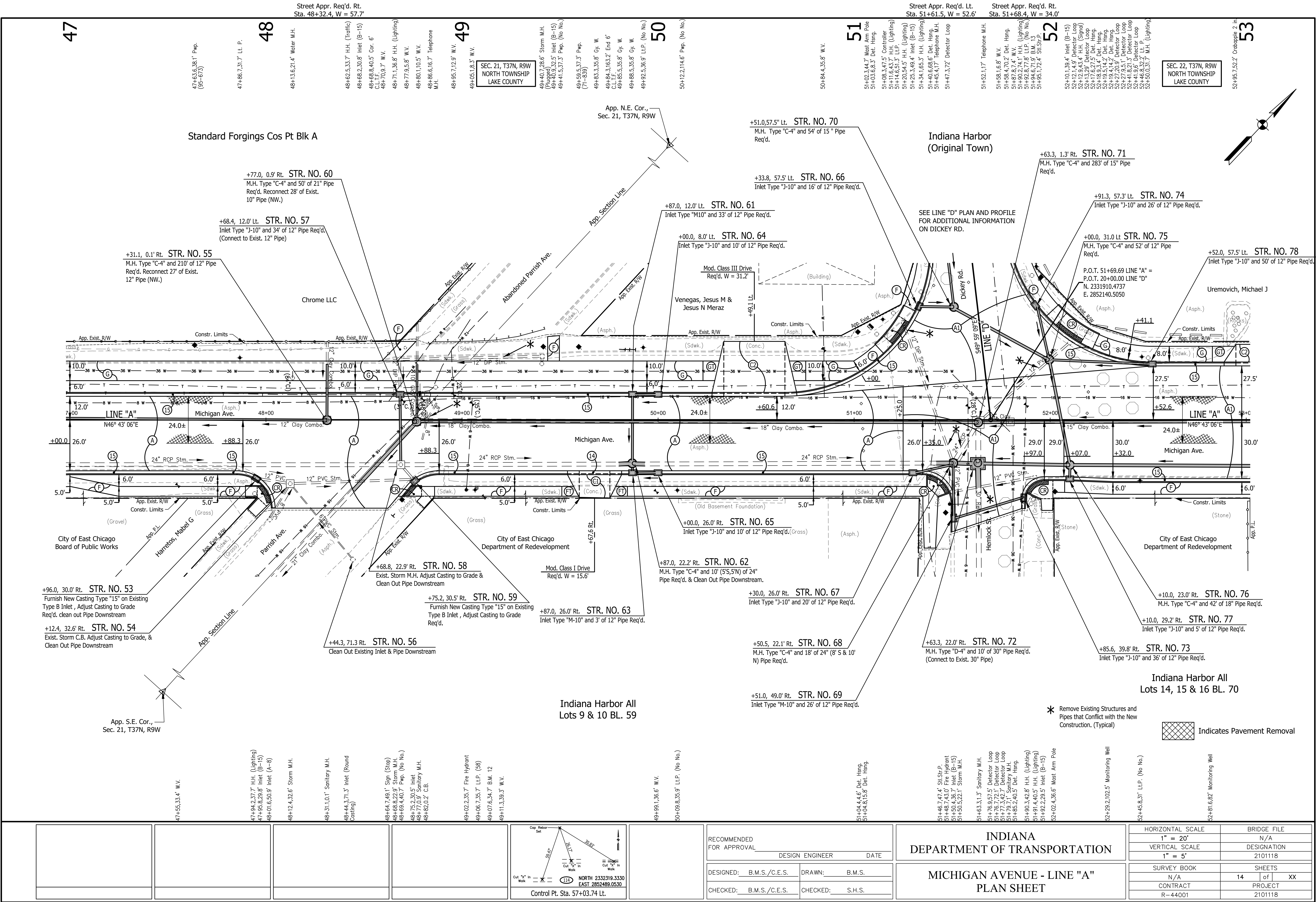
RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

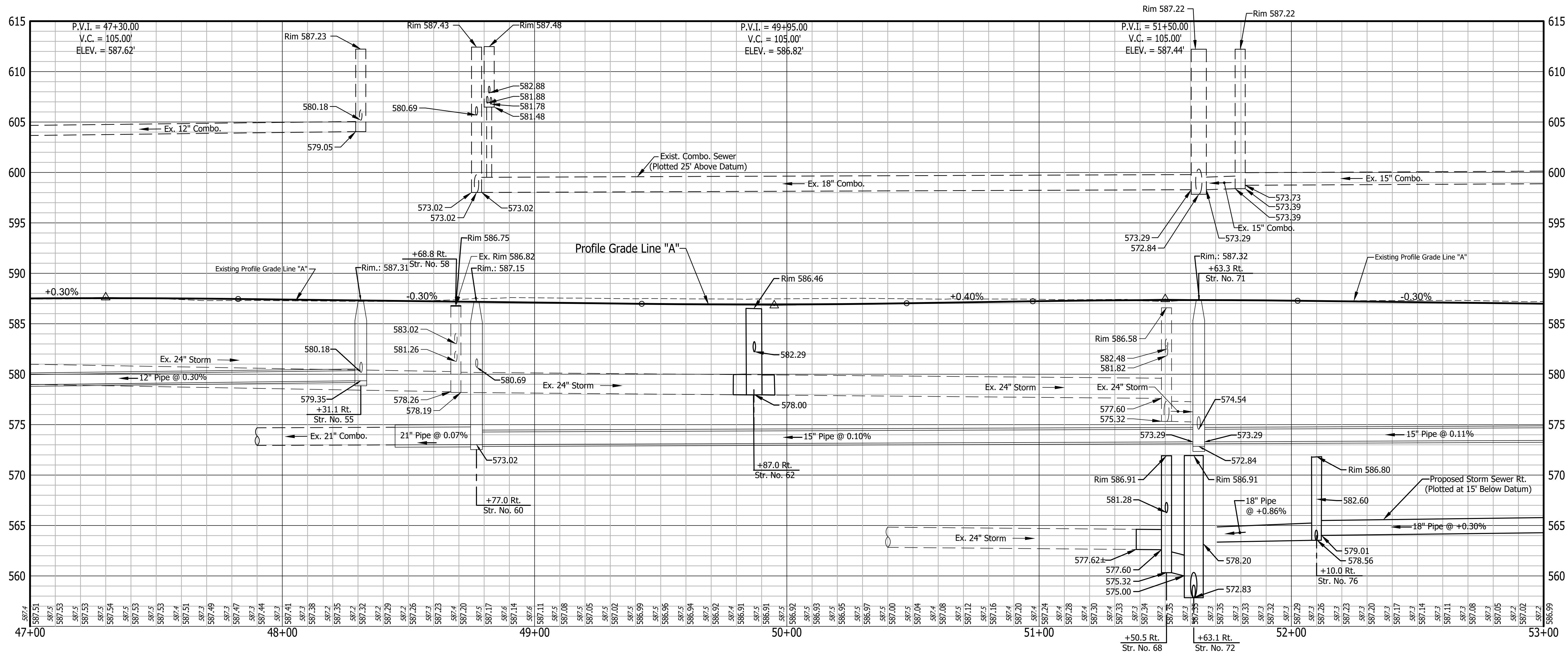
MICHIGAN AVENUE - LINE "A"
PROFILE SHEET

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	2101118
SURVEY BOOK	SHEETS
N/A	13 of XX
CONTRACT	PROJECT
R-44001	2101118



B.M. NO. 12 Cut Square in Ltp. Fdn.
49+07.56 "A", 34.70 Rt., Elev. 586.98

B.M. NO. 13 Cut Square Steel Strain Pole Fdn.
51+94.56 "A", 71.85 Lt., Elev. 587.00



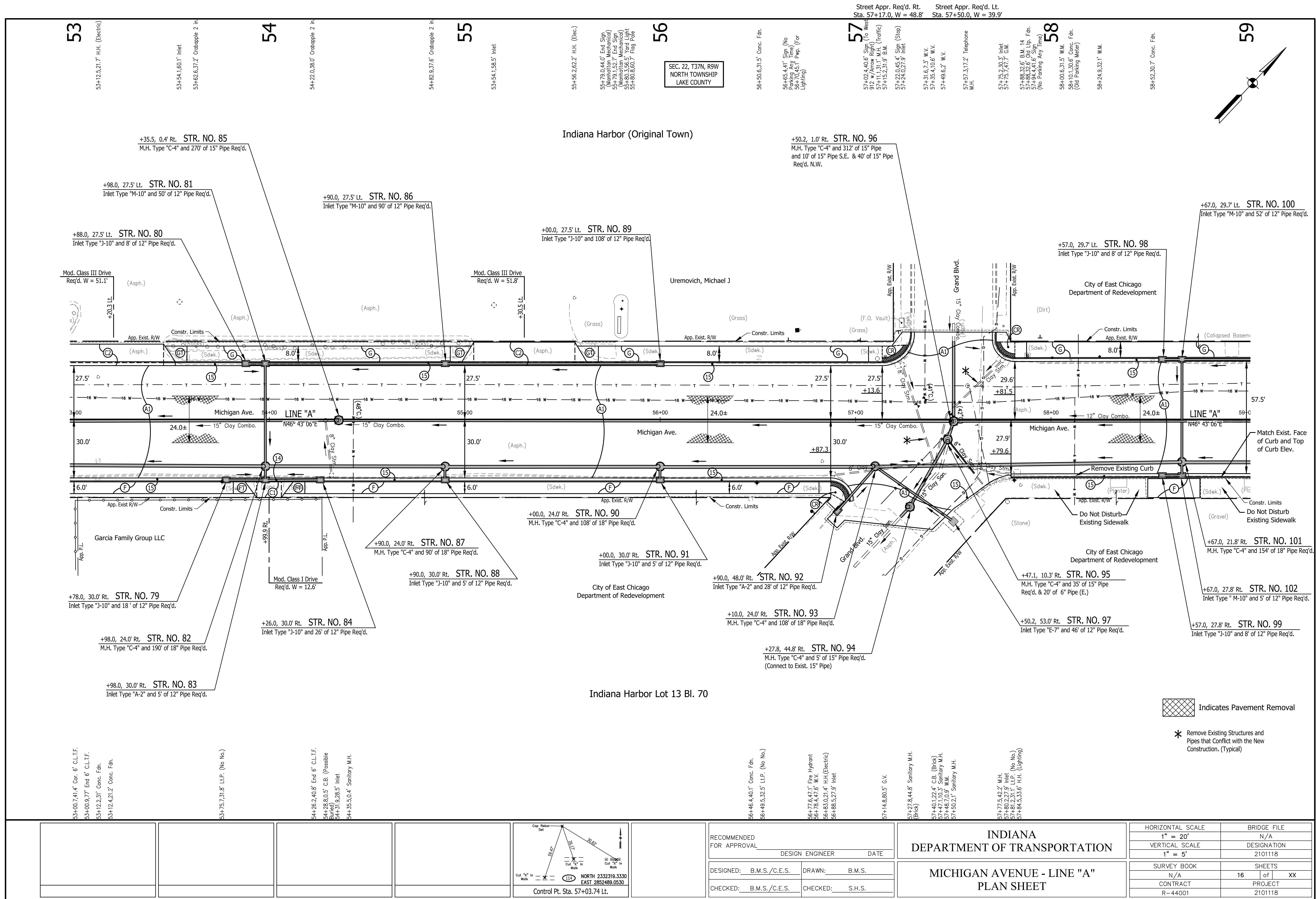
RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

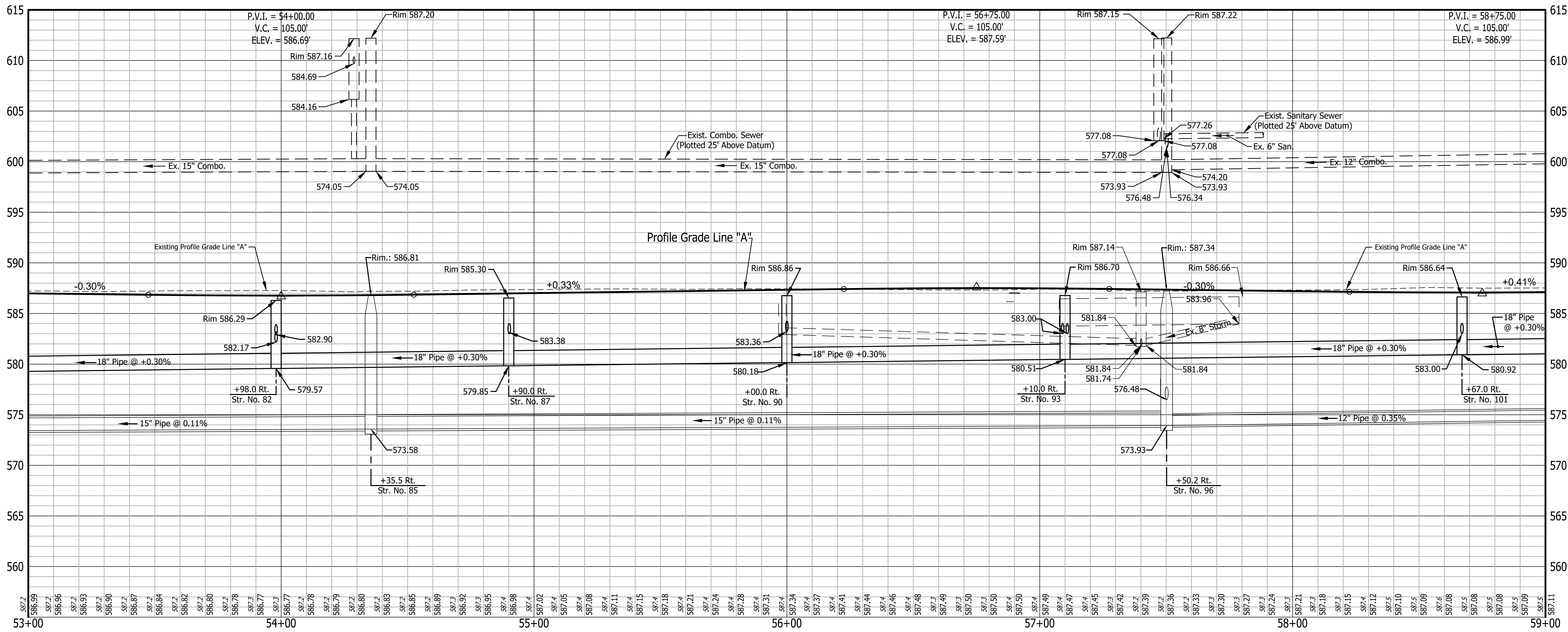
MICHIGAN AVENUE - LINE "A"
PROFILE SHEET

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	2101118
SURVEY BOOK	SHEETS
N/A	15 of XX
CONTRACT	PROJECT
R-44001	2101118



B.M. NO. Cut Square in Old Signal Fdn.
57+15.21 "A", 31.93 Lt., Elev. 586.72

B.M. NO. 14 Cut Square in Old Signal Fdn.
57+87.99 "A", 32.60 Lt., Elev. 587.10



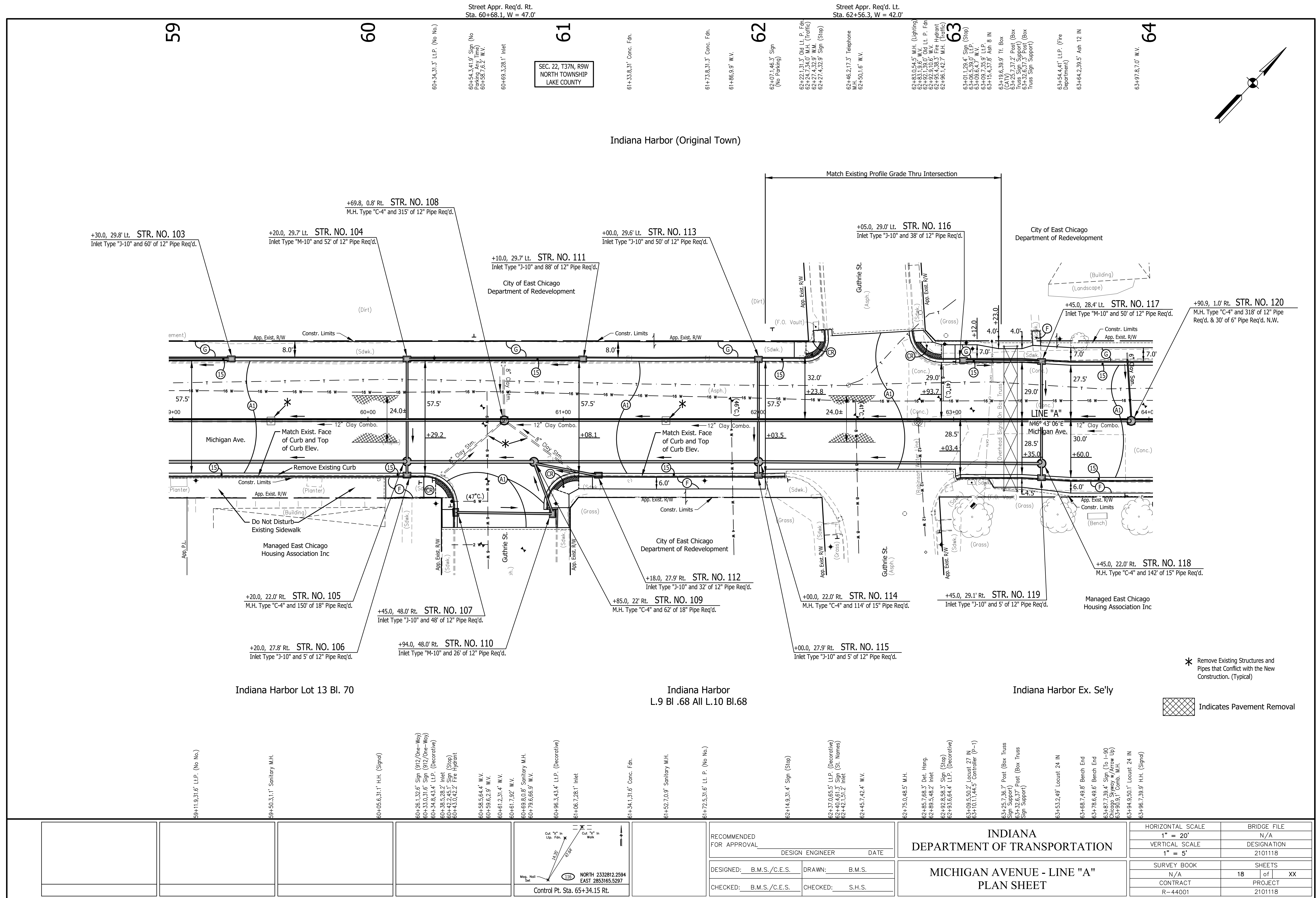
RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

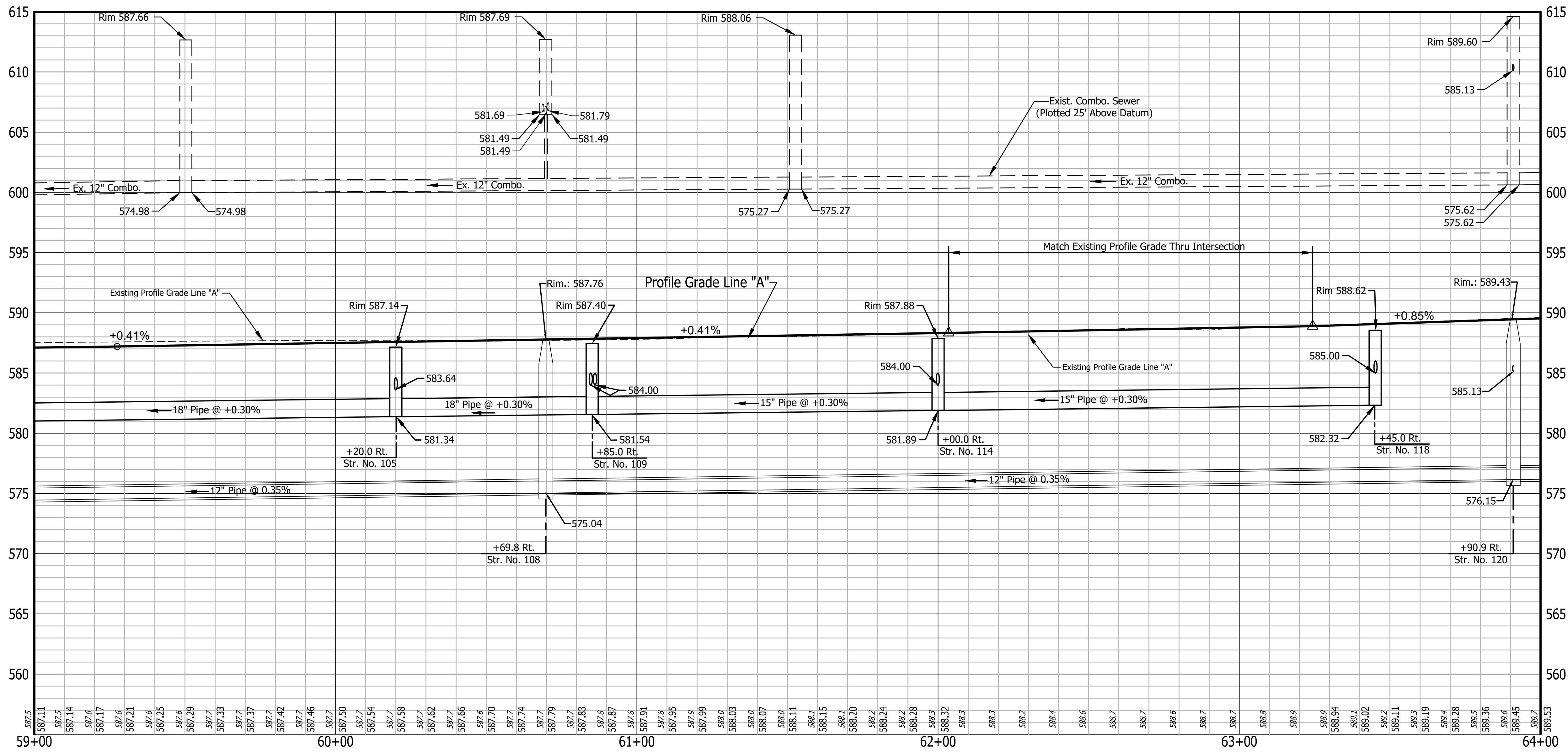
INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE - LINE "A"
PROFILE SHEET

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
VERTICAL SCALE 1" = 5'	DESIGNATION 2101118
SURVEY BOOK N/A	SHEETS 17 of XX
CONTRACT R-44001	PROJECT 2101118



B.M. NO. 15 Top S.W. Anchor Bolt Steel Strain Pole
62+90.54 "A", 37.19 Lt., Elev. 589.12



RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE - LINE "A"
PROFILE SHEET

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	2101118
SURVEY BOOK	SHEETS
N/A	19 of XX
CONTRACT	PROJECT
R-44001	2101118



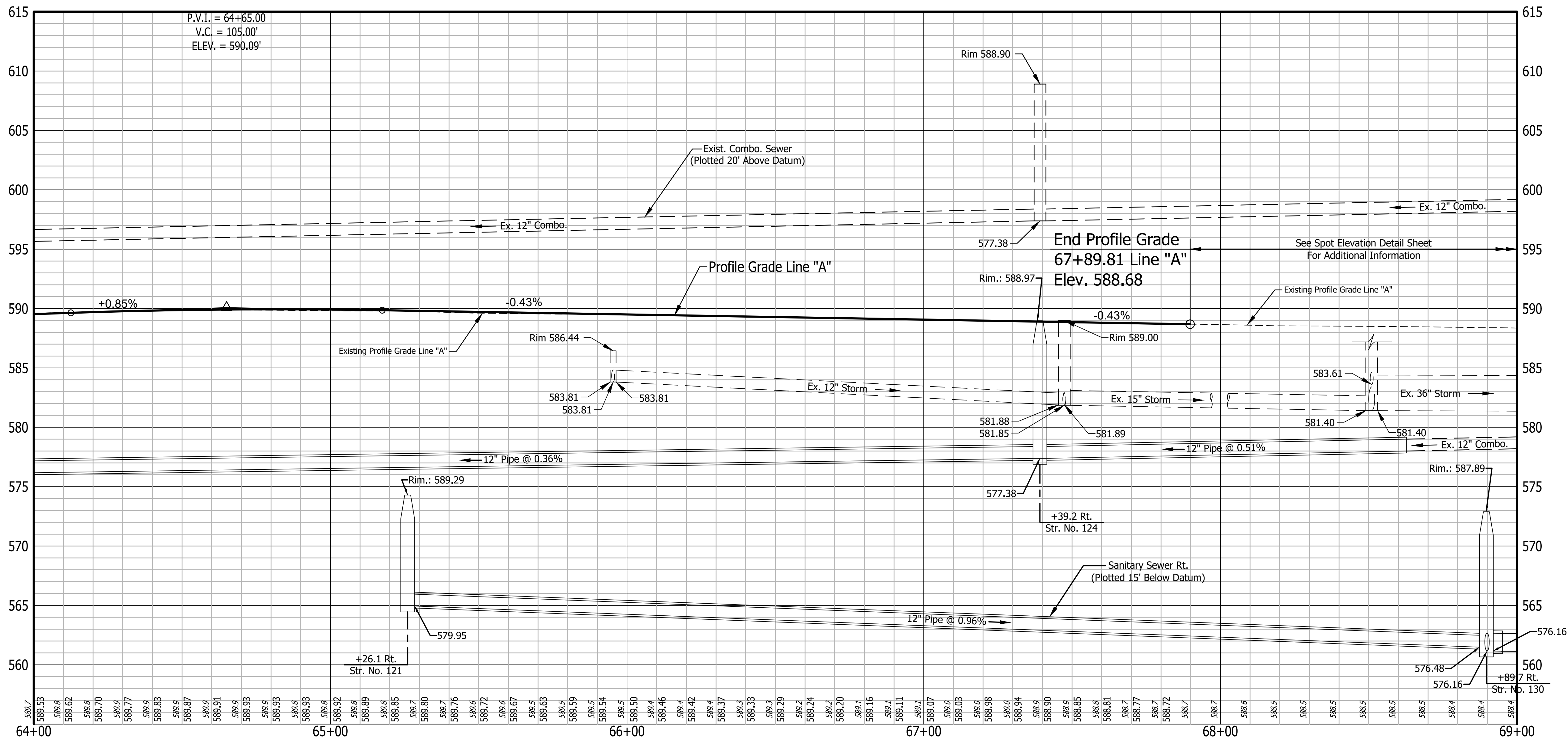
RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____	DATE _____
DESIGNED: _____ B.M.S./C.E.S.		DRAWN: _____ B.M.S.	
CHECKED: _____ B.M.S./C.E.S.		CHECKED: _____ S.H.S.	

MICHIGAN AVENUE - LINE "A"
PLAN SHEET

HORIZONTAL SCALE		BRIDGE FILE	
1" = 20'		N/A	
VERTICAL SCALE		DESIGNATION	
1" = 5'		2101118	
SURVEY BOOK		SHEETS	
N/A		20	of XX
CONTRACT		PROJECT	
R-44001		2101118	

B.M. NO. 10 Cut Square in Ltp. Fdn.
65+45.60 "A", 38.70 Rt., Elev. 589.70

B.M. NO. 11 Cut Square Mast Arm Pole Fdn.
68+19.02 "A", 43.86 Lt., Elev. 589.17



RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER _____ DATE _____

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE - LINE "A"
PROFILE SHEET

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	2101118
SURVEY BOOK	SHEETS
N/A	21 of XX
CONTRACT	PROJECT
R-44001	2101118

69

70

71

72

SEC. 22, T37N, R9W
NORTH TOWNSHIP
LAKE COUNTY

Resub. L. 8 TO 19, Bl. 33
Indiana Harbor

End Incidental Construction
P.O.C. 70+00.00 Line "A"

Begin Incidental Construction
End Project 2101118
P.O.C. 69+31.00 Line "A"

+66.0, 50.0' Rt. STR. NO. 131
Inlet Type "J-10" and 20' (5' N & 15' SE) of
12" Pipe Req'd.

+72.0, 67.2' Rt. STR. NO. 132
Existing Storm M.H.

Curve Data
P.I. 70+33.30 "A"
 $\Delta = 59^{\circ}11'30"$
L = 258.27'
R = 250.00'
T = 142.00'
E = 37.51'
S.E. = Match Exist.

Indiana Harbor Blk. 47
Lots 1 to 24

Indicates Pavement Removal

69+42.3, 58.2' M.H. (Traffic)
69+46.7, 5.1' Sign (Do Not Enter)
69+72.0, 67.2' M.H. Storm
69+72.0, 67.2' Sign (S.L. 25)
69+72.0, 67.2' Sign (S.L. 25)
69+72.0, 67.2' Inlet or CB

70+25.6, 8.1' Inlet
70+26.0, 4.2' Inlet

70+55.0, 91.6' Post (Box Truss Sign Support)
70+66.4, 91.1' Post (Box Truss Sign Support)

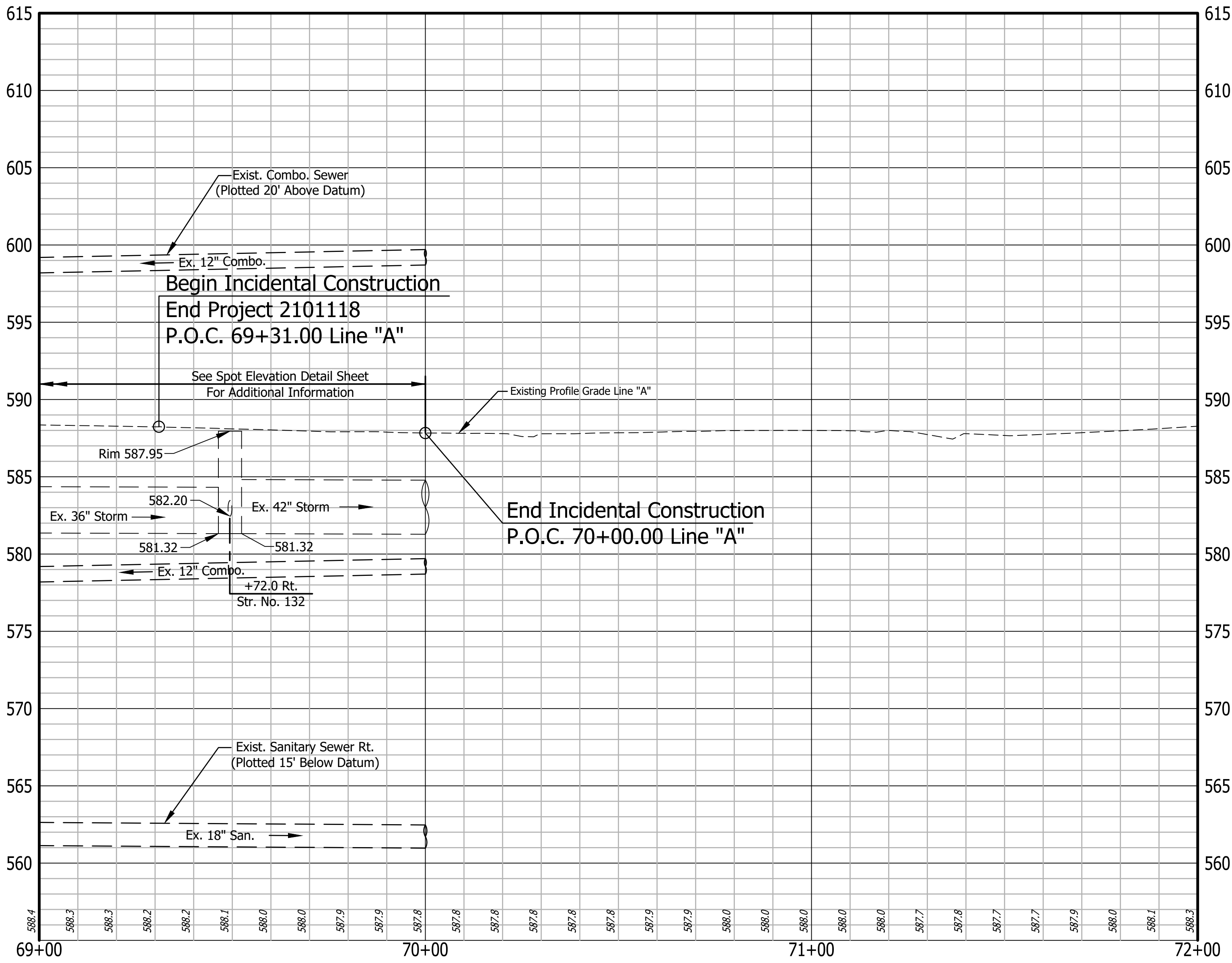
71+36.6, 0.2' Inlet
71+36.7, 4.1' Inlet
71+40.3, 77.0' M.H. Storm
71+51.7, 96.7' Inlet

RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER _____ DATE _____
DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION
MICHIGAN AVENUE - LINE "A"
PLAN SHEET

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	2101118
SURVEY BOOK	SHEETS
N/A	22 of XX
CONTRACT	PROJECT
R-44001	2101118

B.M. NO. 11 Cut Square Mast Arm Pole Fdn.
68+19.02 "A", 43.86 Lt., Elev. 589.17



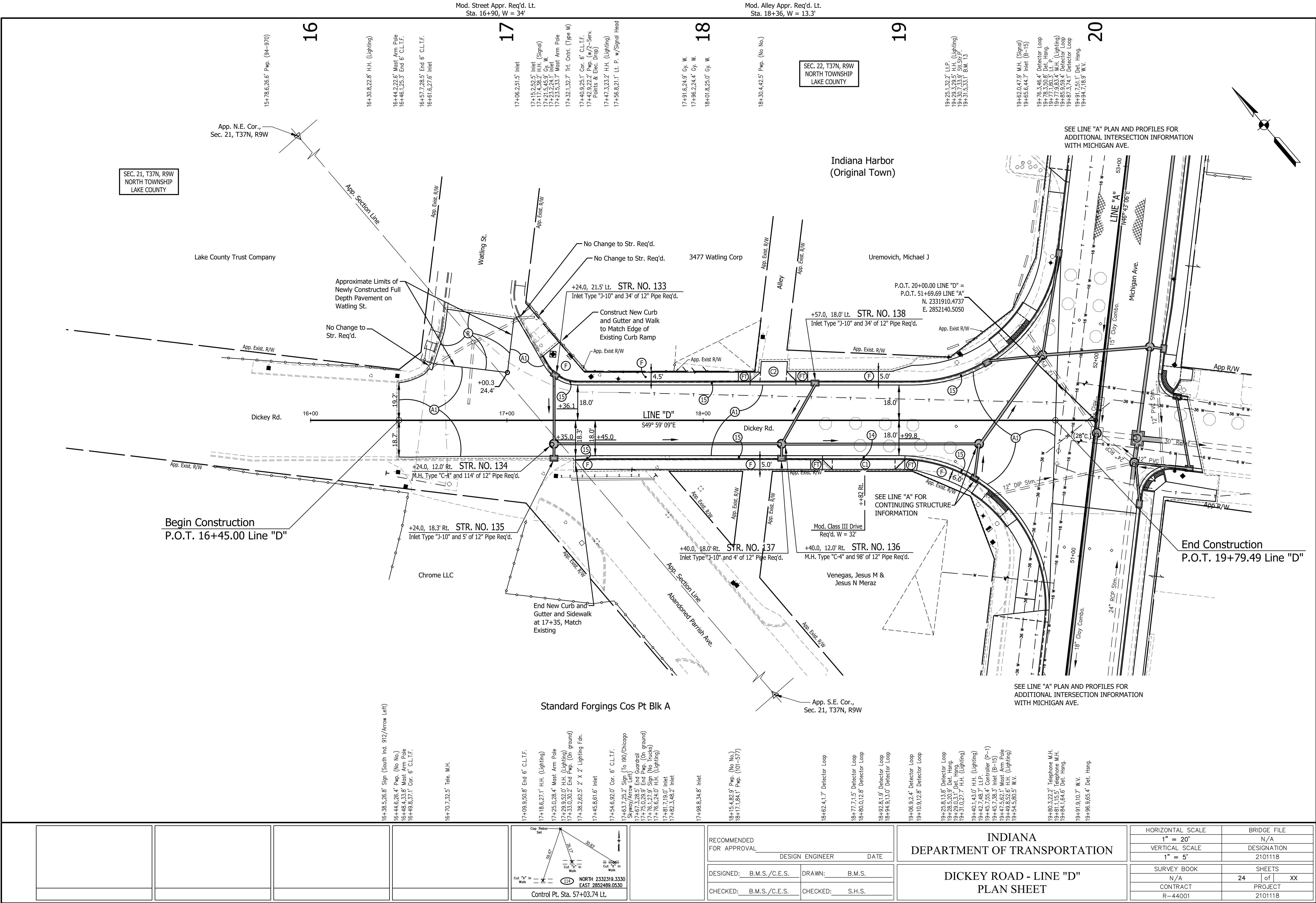
RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

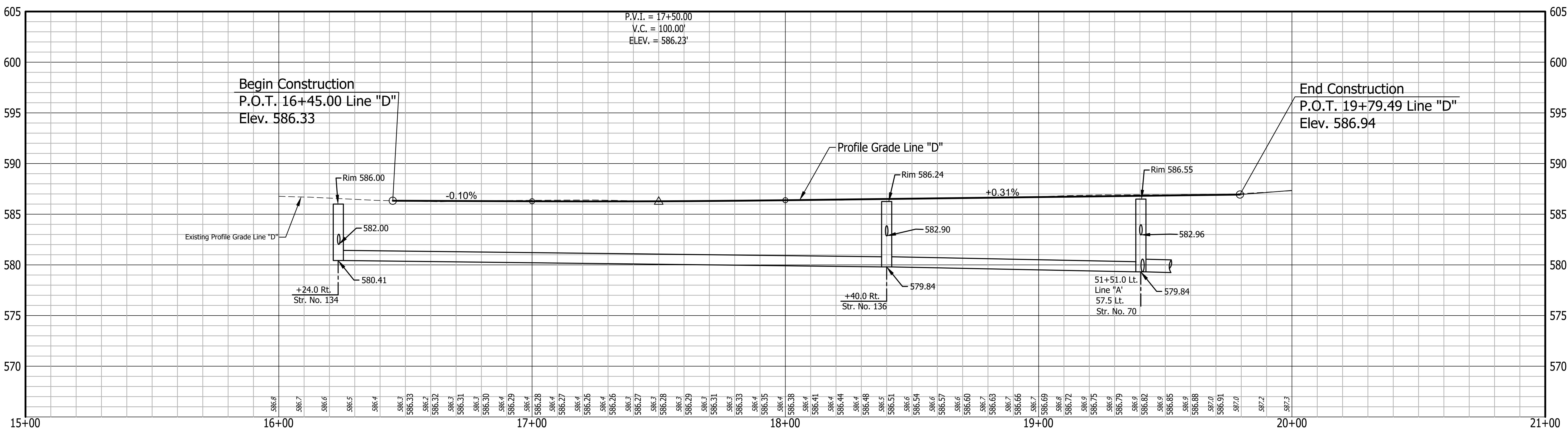
MICHIGAN AVENUE - LINE "A"
PROFILE SHEET

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	2101118
SURVEY BOOK	SHEETS
N/A	23 of XX
CONTRACT	PROJECT
R-44001	2101118

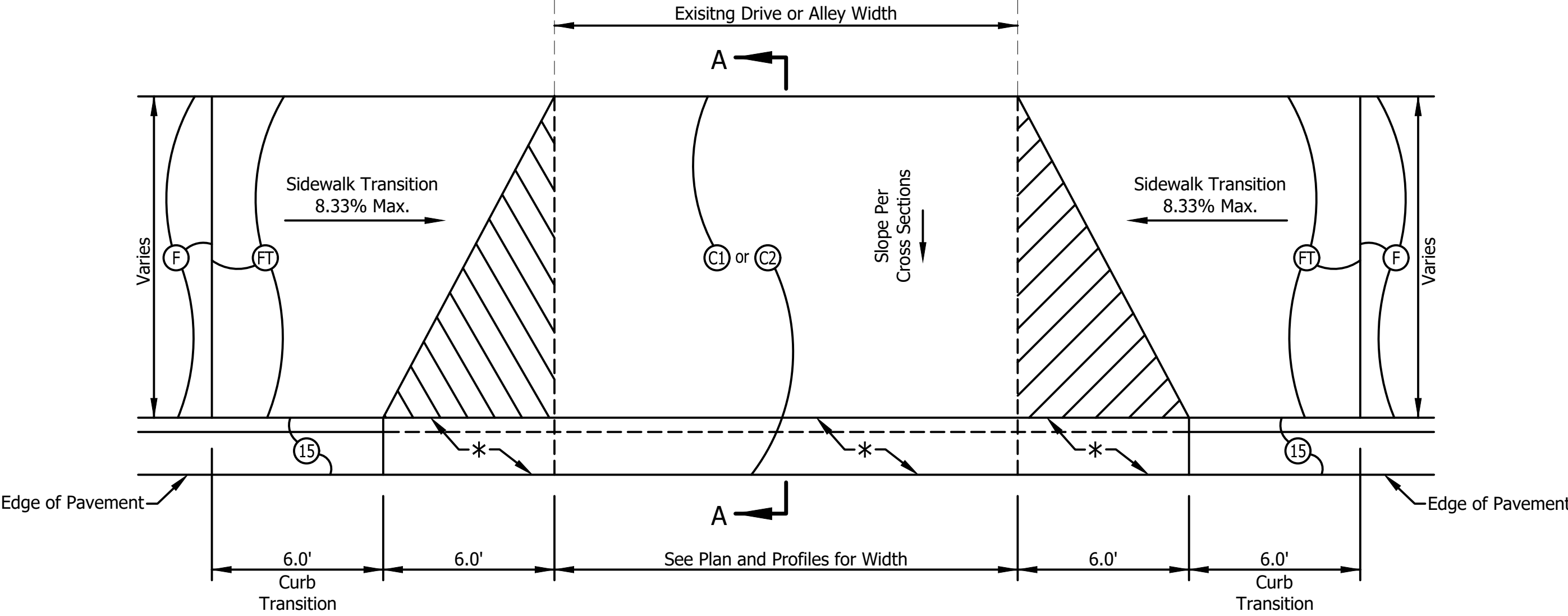


B.M. NO. 12 Cut Square in Ltp. Fdn.
49+07.56 "A", 34.70 Rt., Elev. 586.98

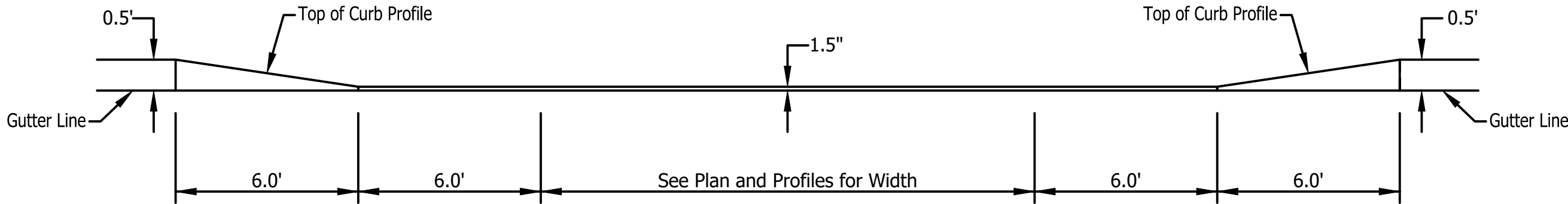
B.M. NO. 13 Cut Square Steel Strain Pole Fdn.
51+94.56 "A", 71.85 Lt., Elev. 587.00



- Legend**
- (A) 165 #/syd. Hma Surface Type D, 9.5 mm On
275 #/syd. Hma Intermediate Type D, 19.0mm On
660 #/syd. Hma Base Type D, 25.0mm (2-Lifts) On
3" Compacted Aggregate No. 53, On
Subgrade Treatment Type IC
 - (A1) 165 #/syd. Hma Surface Type D-SMA, 9.5 mm On
275 #/syd. Hma Intermediate Type D, 19.0mm On
660 #/syd. Hma Base Type D, 25.0mm (2-Lifts) On
3" Compacted Aggregate No. 53, On
Subgrade Treatment Type IC
 - (C1) PCCP for Approaches 6" on
Dense Graded Subbase, on
Subgrade Treatment Type II
 - (C2) PCCP for Approaches 9" on
Dense Graded Subbase, on
Geogrid Type 1B, on
Subgrade Treatment Type II
 - (CR) Curb Ramp, Concrete
 - (F) Sidewalk, Concrete
 - (FT) Sidewalk Elevation Transition
 - (G) HMA Sidewalks:
140 #/syd. Hma Surface Type B On
220 #/syd. Hma Intermediate Type B On
6" Compacted Aggregate No. 53
Subgrade Treatment Type III
 - (GT) HMA Elevation Transition
 - (R) Milling, Asphalt 1 1/2" with
165 #/syd. Hma Surface Type D-SMA, 9.5 mm
 - (T) Asphalt Material For Tack Coat
 - (14) Concrete Roll Curb
 - (15) Combined Concrete Curb And Gutter
 - (26) Sodding (Nursery) W/topsoil
(4" As Required Under Sodding)
 - (27) Seed Mixture, U

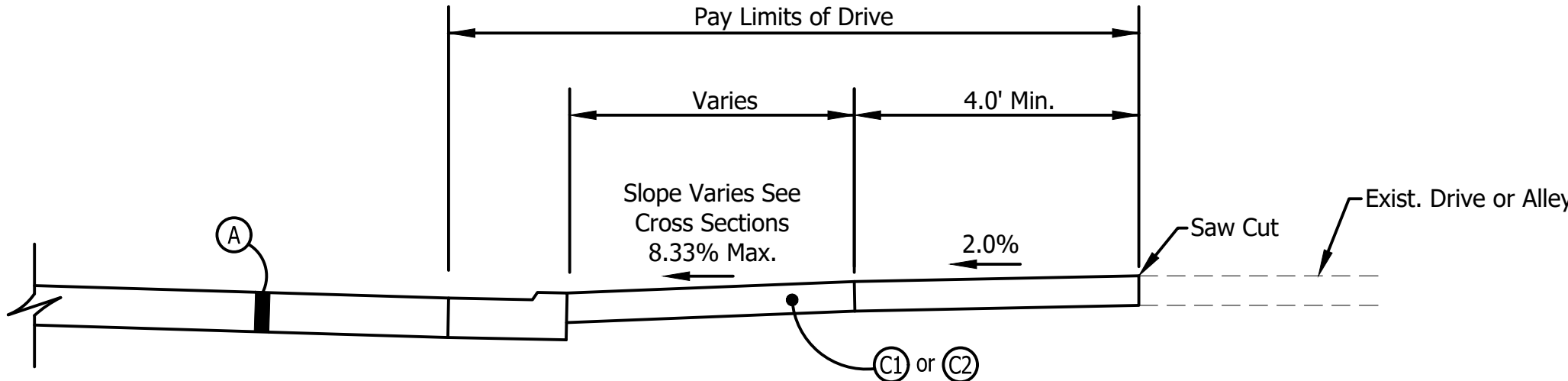


Plan

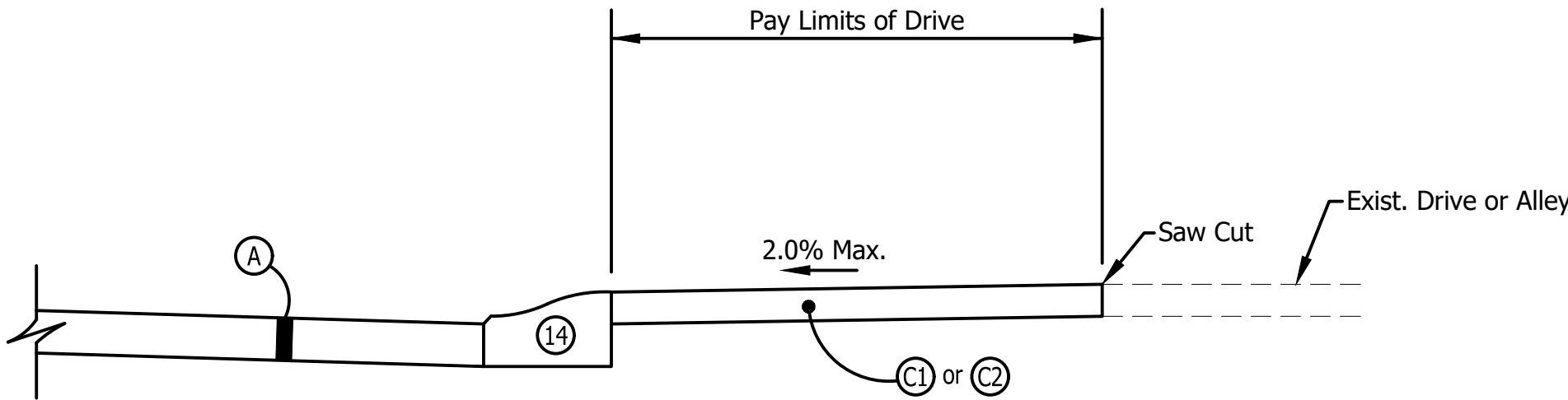


Profile

Note: All Preformed Joint Filler
to be Included in the Cost
of the Drive and Sidewalk



Section A-A



**Section A-A
(Concrete Roll Curb)**

* Concrete Roll Curb Locations

40+58.0 Rt.
43+04.2 Rt.
44+76.3 Rt.
49+67.6 Rt.
53+99.9 Rt.

Concrete Drives and Alley Details

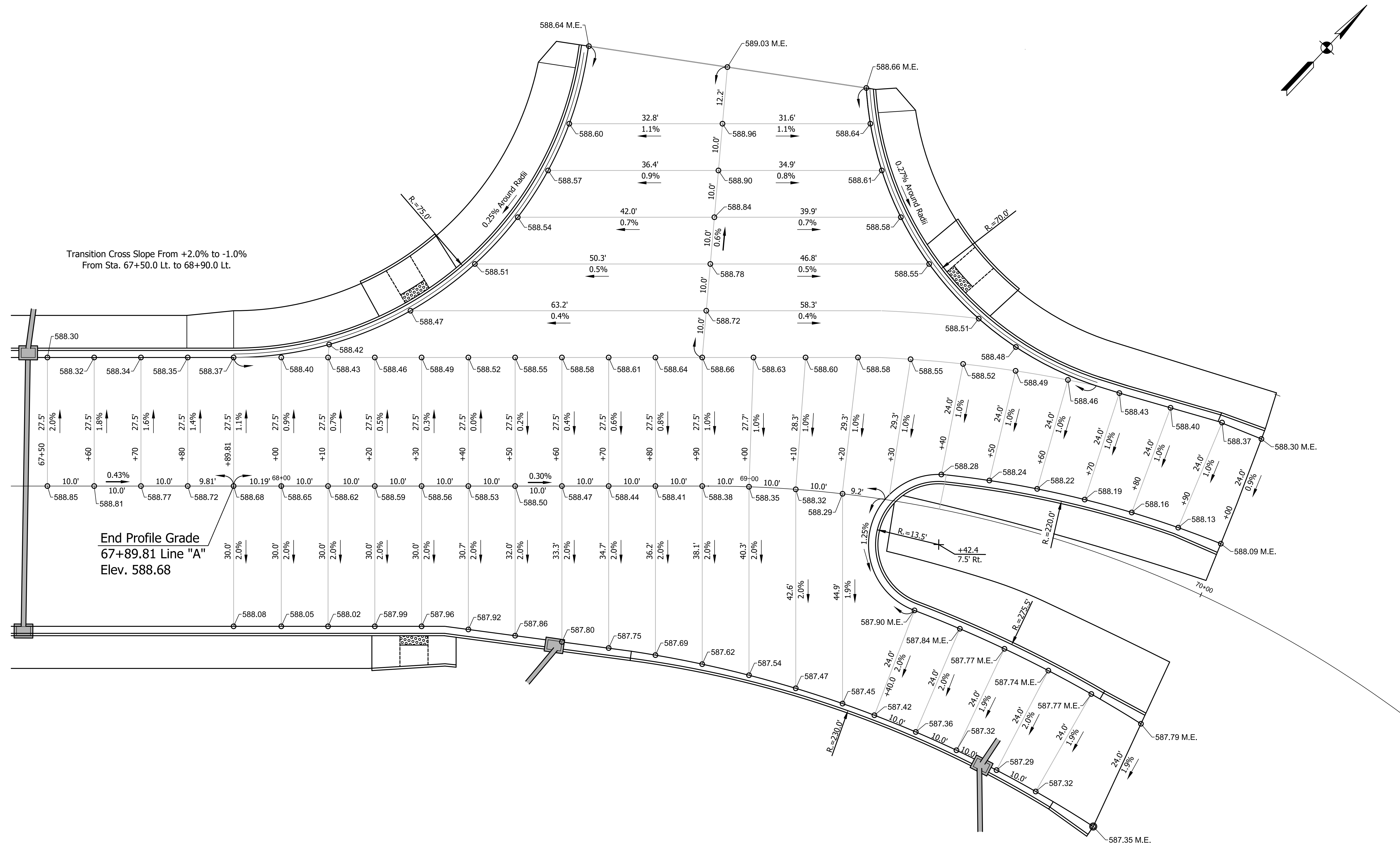
Not to Scale

RECOMMENDED FOR APPROVAL	
DESIGN	ENGINEER
DATE	
DESIGNED: B.M.S./C.E.S.	DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S.	CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
NOT TO SCALE	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	26 of XX
CONTRACT	PROJECT
R-44001	2101118



Transition Cross Slope From +2.0% to -1.0%
From Sta. 67+50.0 Lt. to 68+90.0 Lt.

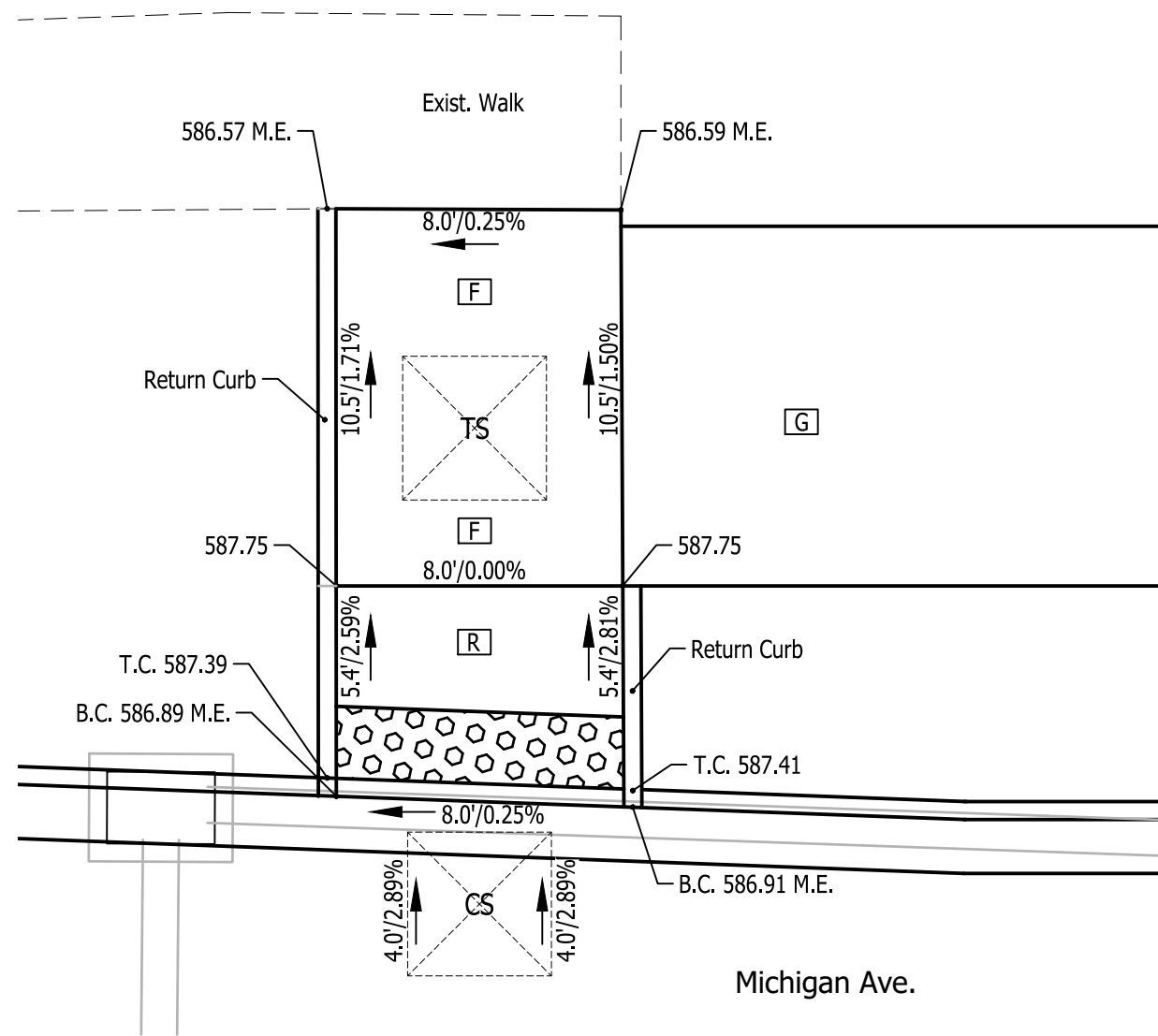
End Profile Grade
67+89.81 Line "A"
Elev. 588.68

RECOMMENDED FOR APPROVAL	
DESIGN ENGINEER	DATE
DESIGNED: B.M.S./C.E.S.	DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S.	CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

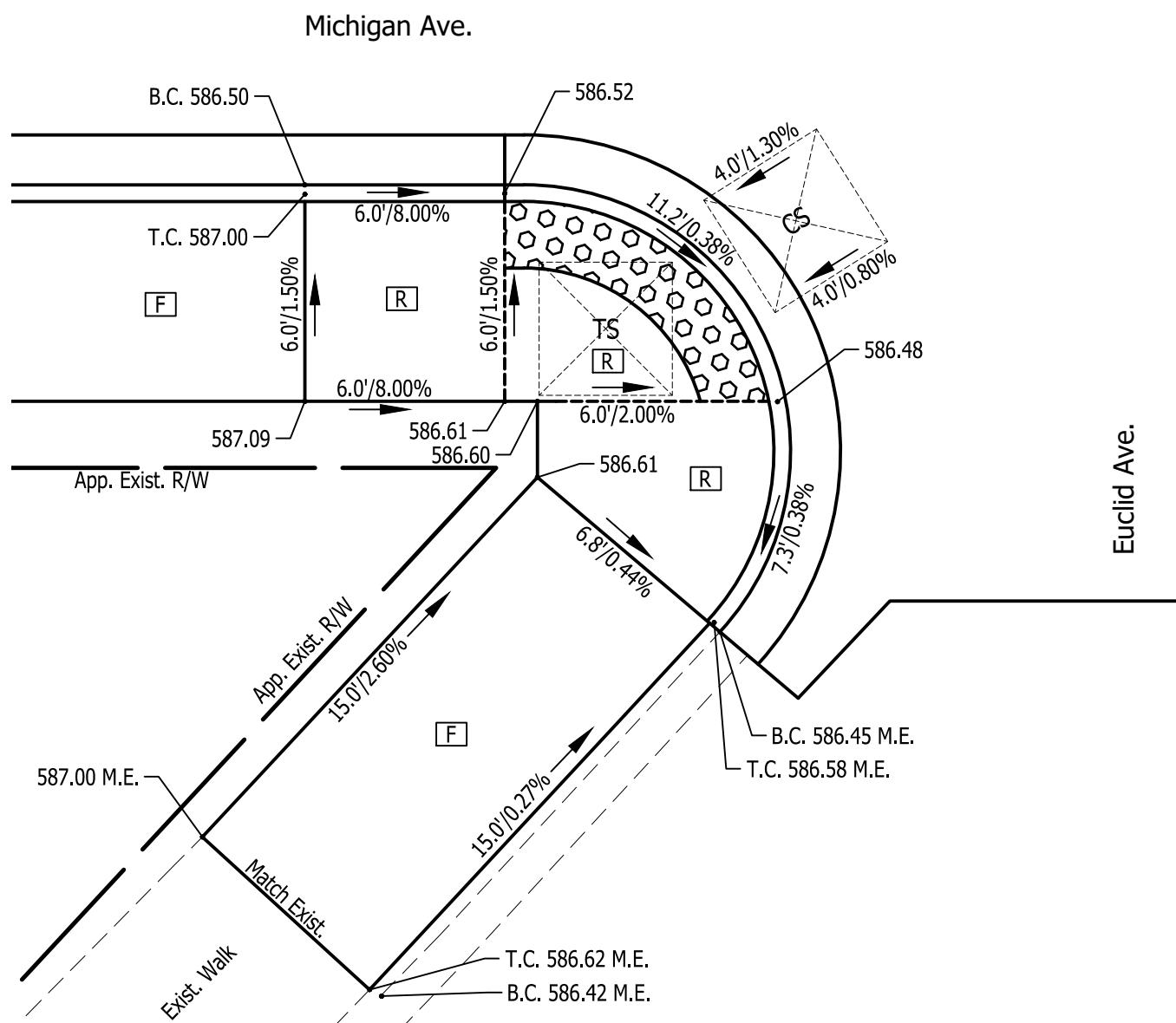
MICHIGAN AVENUE
SPOT ELEVATION

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	27 of XX
CONTRACT	PROJECT
R-44001	2101118



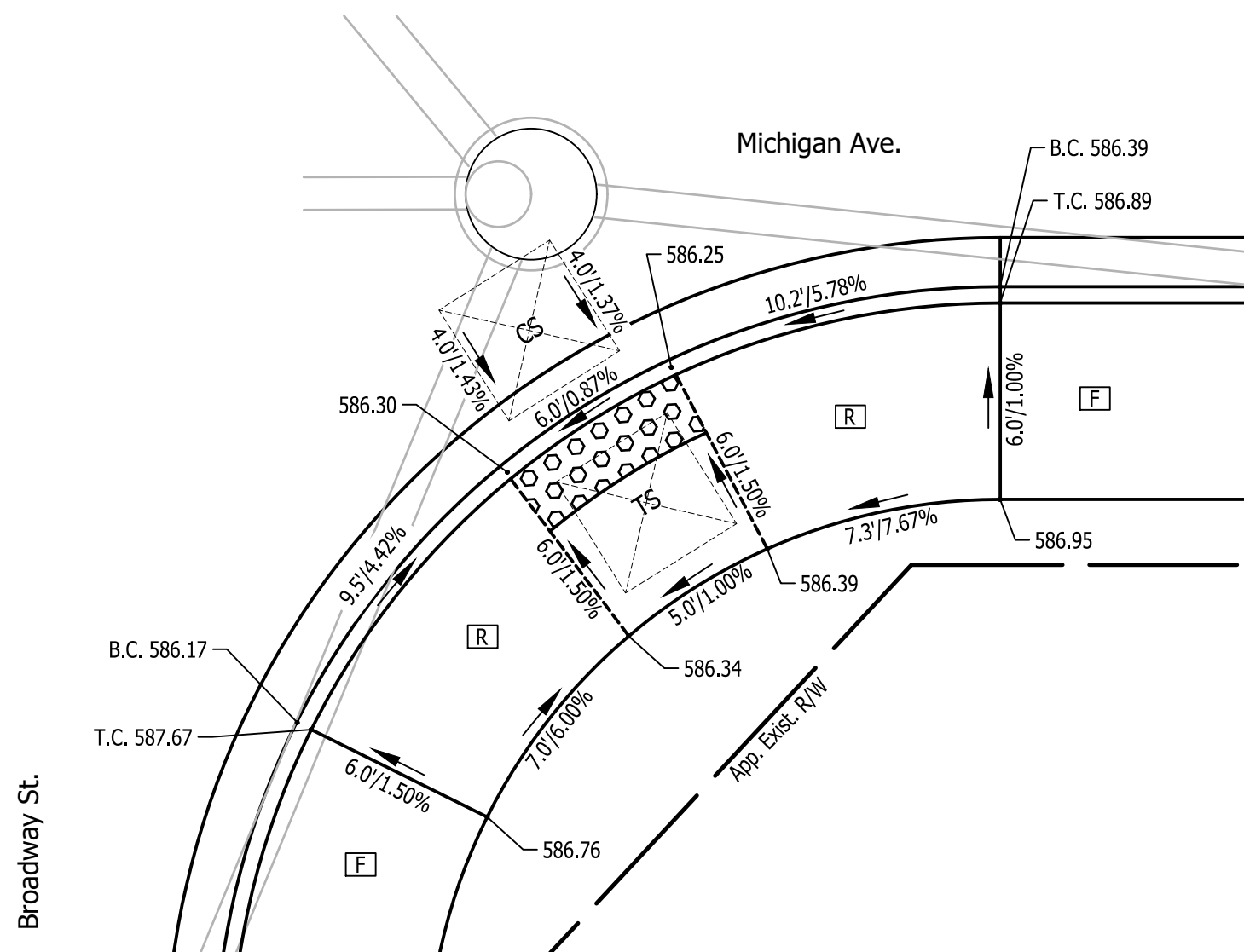
ADA Ramp @ 35+39.0 Lt.
One -Way Directional Perpendicular Ramp

Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		7 Sys.
Detectable Warning Surfaces		2 Sys.



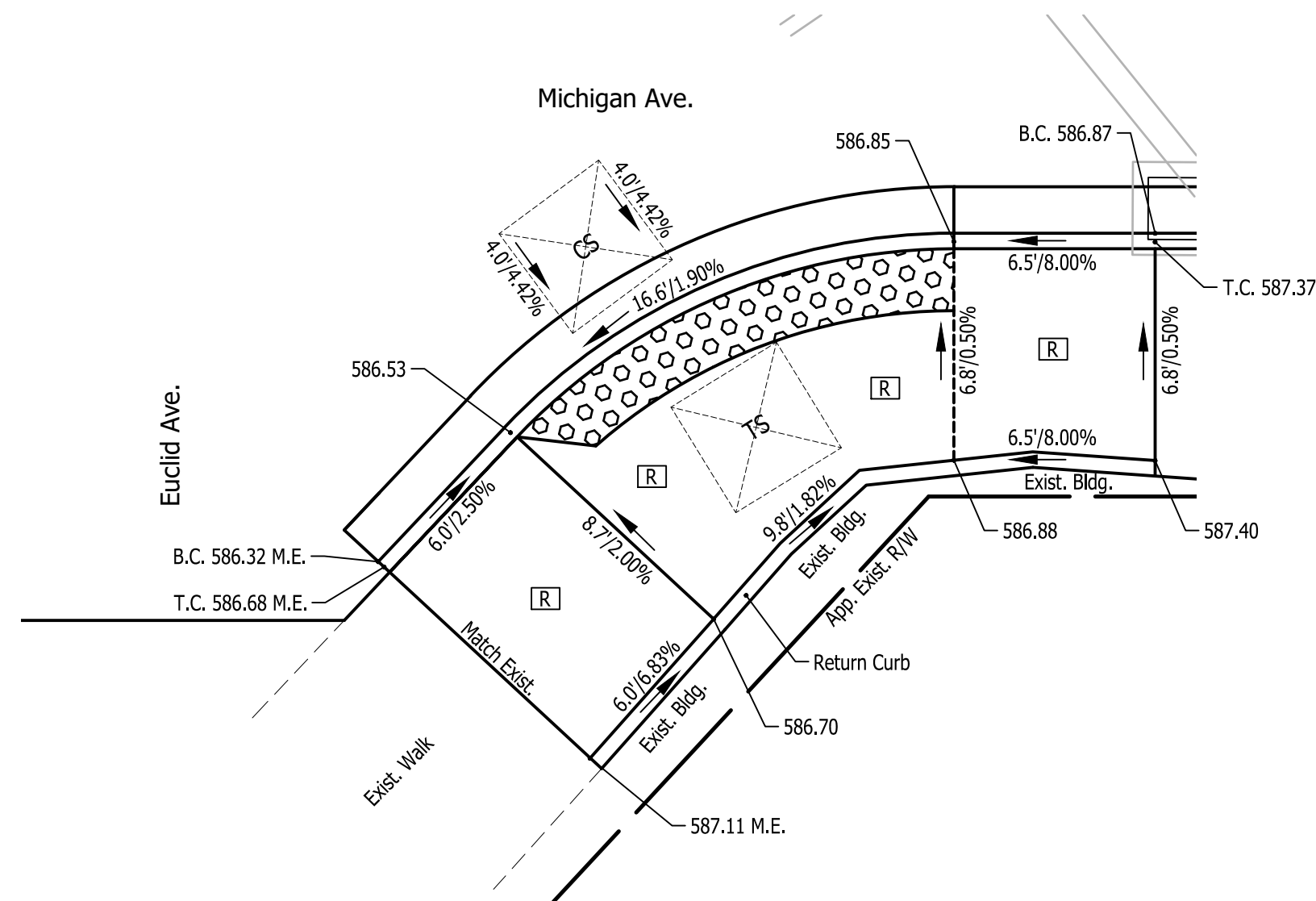
ADA Ramp S.E. Quad. Euclid St.
Depressed Corner Curb Ramp

Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		14 Sys.
Detectable Warning Surfaces		3 Sys.



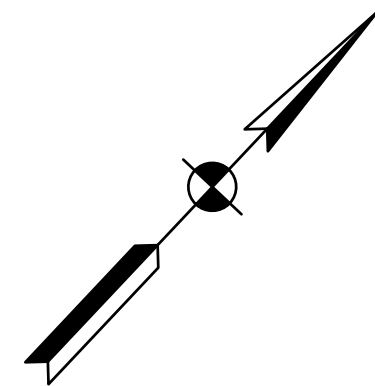
ADA Ramp N.E. Quad. Broadway St.
Parallel Curb Ramp

Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		17 Sys.
Detectable Warning Surfaces		2 Sys.



ADA Ramp N.E. Quad. Euclid St.
Parallel Curb Ramp

Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		25 Sys.
Detectable Warning Surfaces		4 Sys.



NOTE:
ALL ELEVATIONS SHOWN ARE SURFACE
ELEVATIONS ON RAMP OR SIDEWALK
UNLESS NOTED OTHERWISE.

LEGEND

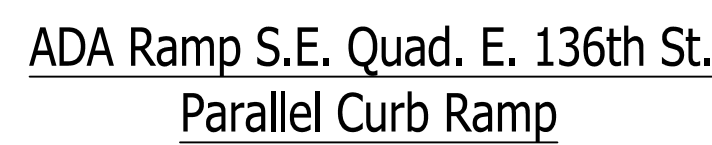
- [F] CONCRETE SIDEWALK
- [PS] FLARED SIDE
- [G] HMA SIDEWALK
- [R] CURB RAMP
- NEW PEDESTRIAN PUSHBUTTON ASSEMBLY WITH R10-3b (L OR R) CROSSWALK SIGN
- NEW (5' OR 12') PEDESTAL, WITH APS PUSH BUTTON AND R10-3A SIGN ON SIGNAL POLE FOUNDATION 24 IN. X 24 IN. X 36 IN.
- NEW SIGNAL CANTILEVER STRUCTURE SINGLE ARM (SIZE) FT. ON SIGNAL CANTILEVER STRUCTURE, DRILLED SHAFT FOUNDATION, A
- TS TURNING SPACE 4 ft. X 4 ft.
- PB PUSH BUTTON CLEAR SPACE 4 ft. X 4 ft.
- CS CLEAR SPACE
- B.C. = BOTTOM OF CURB
- M.E. = MATCH EXISTING ELEVATION
- T.C. = TOP OF CURB

RECOMMENDED FOR APPROVAL	
DESIGN	ENGINEER
DATE	
DESIGNED: B.M.S./C.E.S.	DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S.	CHECKED: S.H.S.

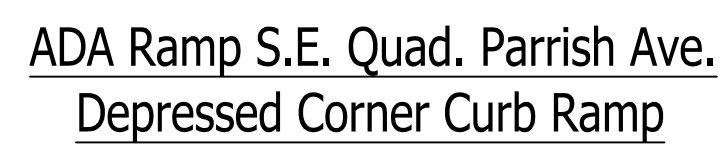
INDIANA
DEPARTMENT OF TRANSPORTATION

ADA RAMP DETAILS
SPOT ELEVATIONS

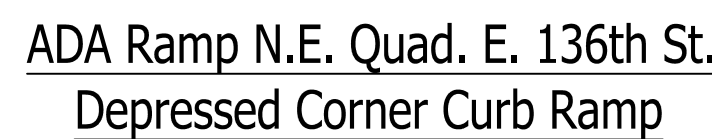
HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	28 of XX
CONTRACT	PROJECT
R-44001	2101118



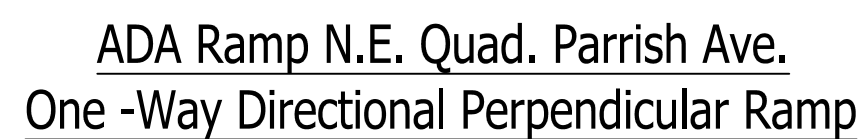
Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		15 Sys.
Detectable Warning Surfaces		2 Sys.



Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		15 Sys.
Detectable Warning Surfaces		3 Sys.











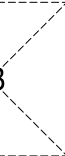

Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		19 Sys.
Detectable Warning Surfaces		3 Sys.

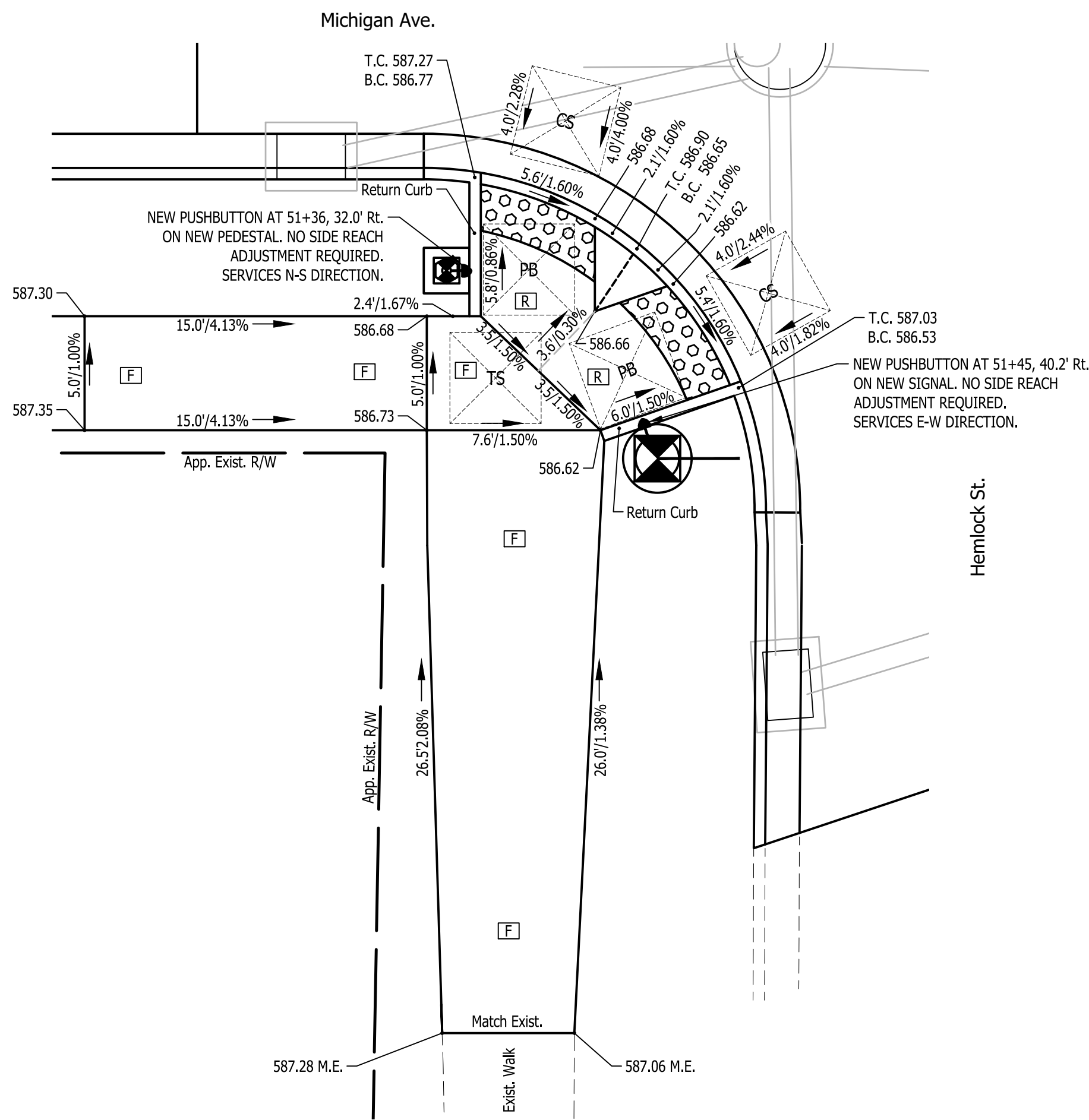


Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		5 Sys.
Detectable Warning Surfaces		2 Sys.

NOTE:
ALL ELEVATIONS SHOWN ARE SURFACE
ELEVATIONS ON RAMP OR SIDEWALK
UNLESS NOTED OTHERWISE.

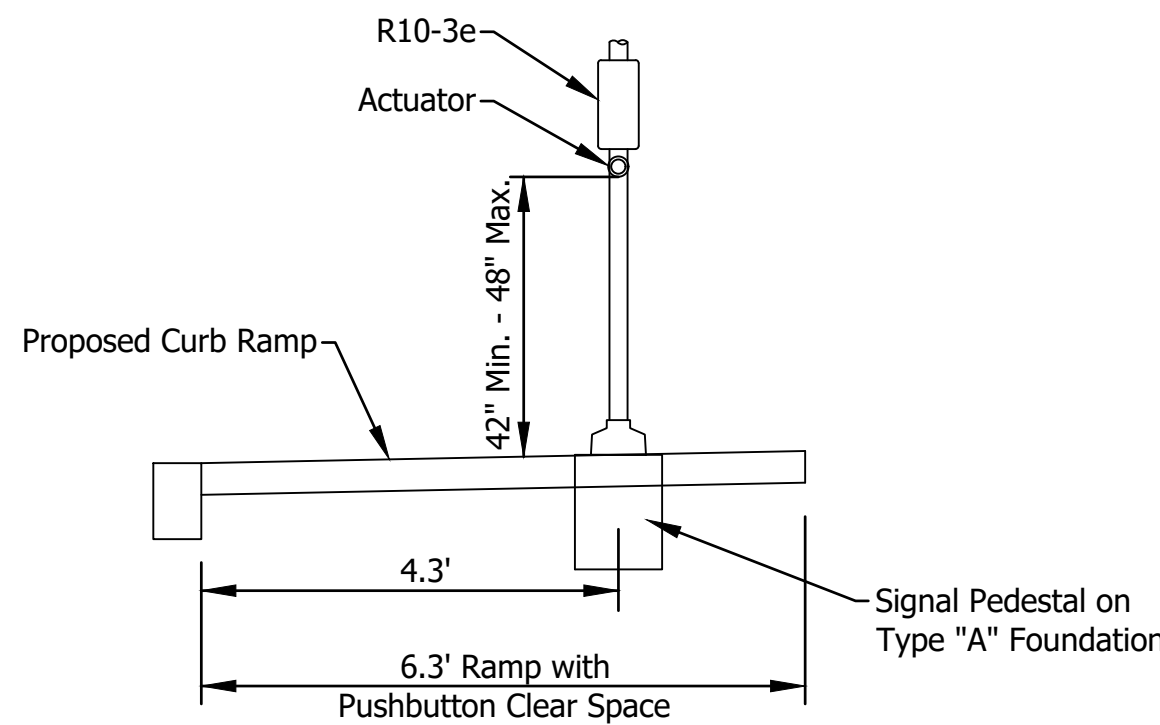
LEGEND

- | | |
|---|---|
|  | CONCRETE SIDEWALK |
|  | FLARED SIDE |
|  | HMA SIDEWALK |
|  | CURB RAMP |
|  | NEW PEDESTRIAN PUSHBUTTON ASSEMBLY WITH R10-3b (L OR R) CROSSWALK SIGN |
|  | NEW (5' OR 12") PEDESTAL, WITH APS PUSH BUTTON AND R10-3a SIGN ON SIGNAL POLE FOUNDATION 24 IN. X 24 IN. X 36 IN. |
|  | NEW SIGNAL CANTILEVER STRUCTURE SINGLE ARM (SIZE) FT. ON SIGNAL CANTILEVER STRUCTURE, DRILLED SHAFT FOUNDATION, A |
|  | TURNING SPACE 4 ft. X 4 ft. |
|  | PUSH BUTTON CLEAR SPACE 4 ft. X 4 ft. |
|  | CLEAR SPACE |
| B.C. = BOTTOM OF CURB | |
| M.E. = MATCH EXISTING ELEVATION | |
| T.C. = TOP OF CURB | |

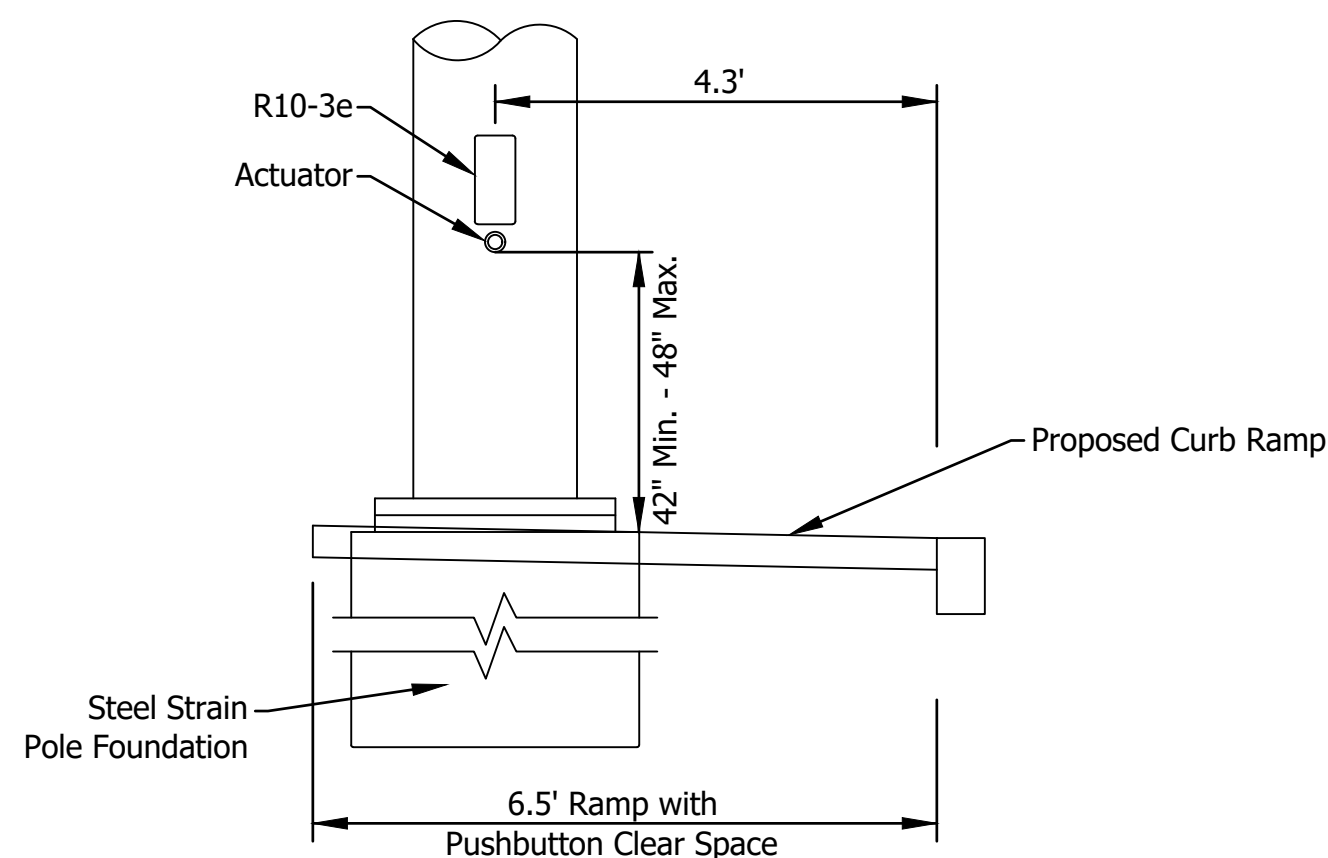


ADA Ramp S.E. Quad. Hemlock St.
Paired Parallel Ramp

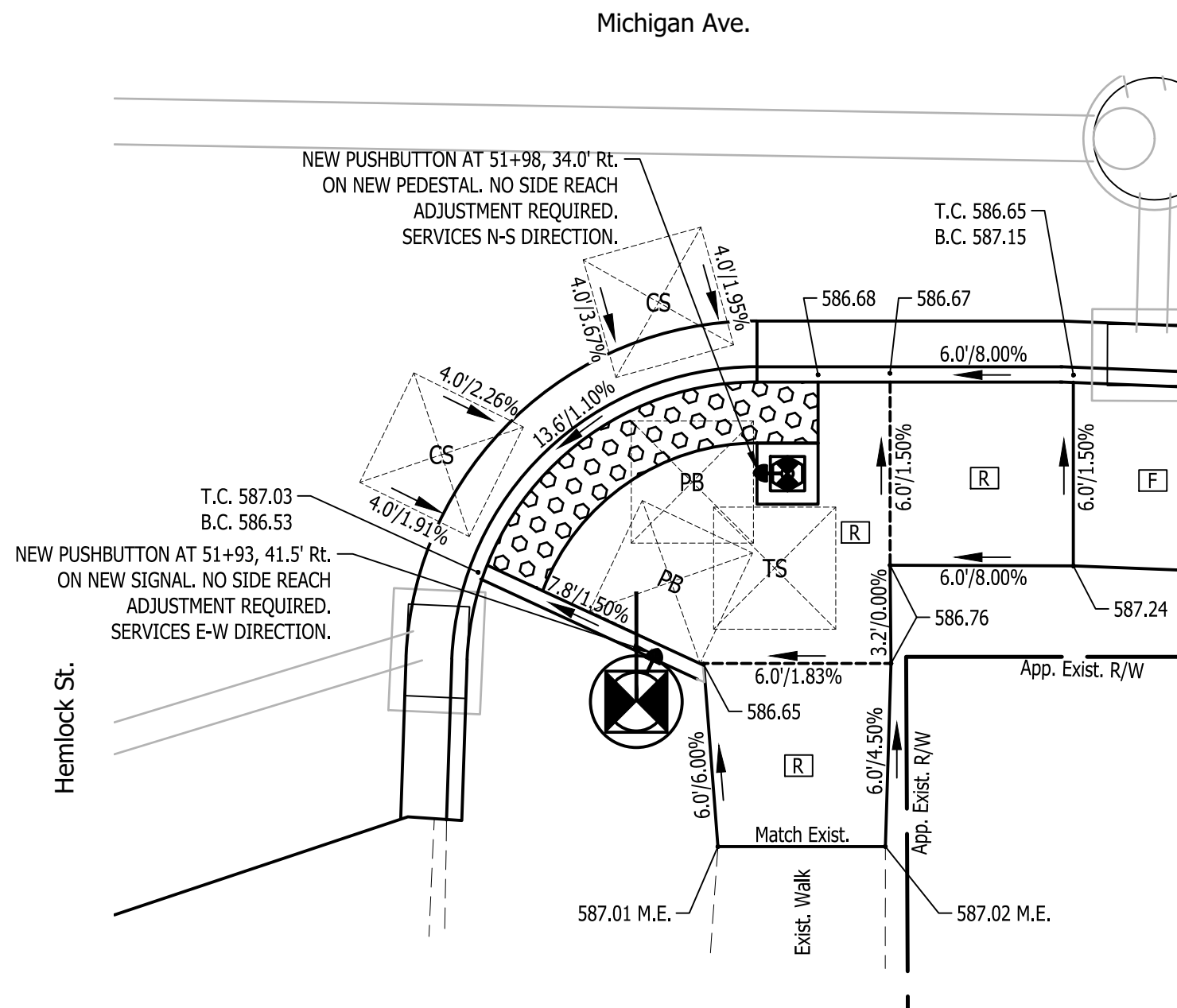
Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		12 Sys.
Detectable Warning Surfaces		3 Sys.



Pedestrian Pushbutton Assembly Elevation 51+36 Rt.
Not to Scale

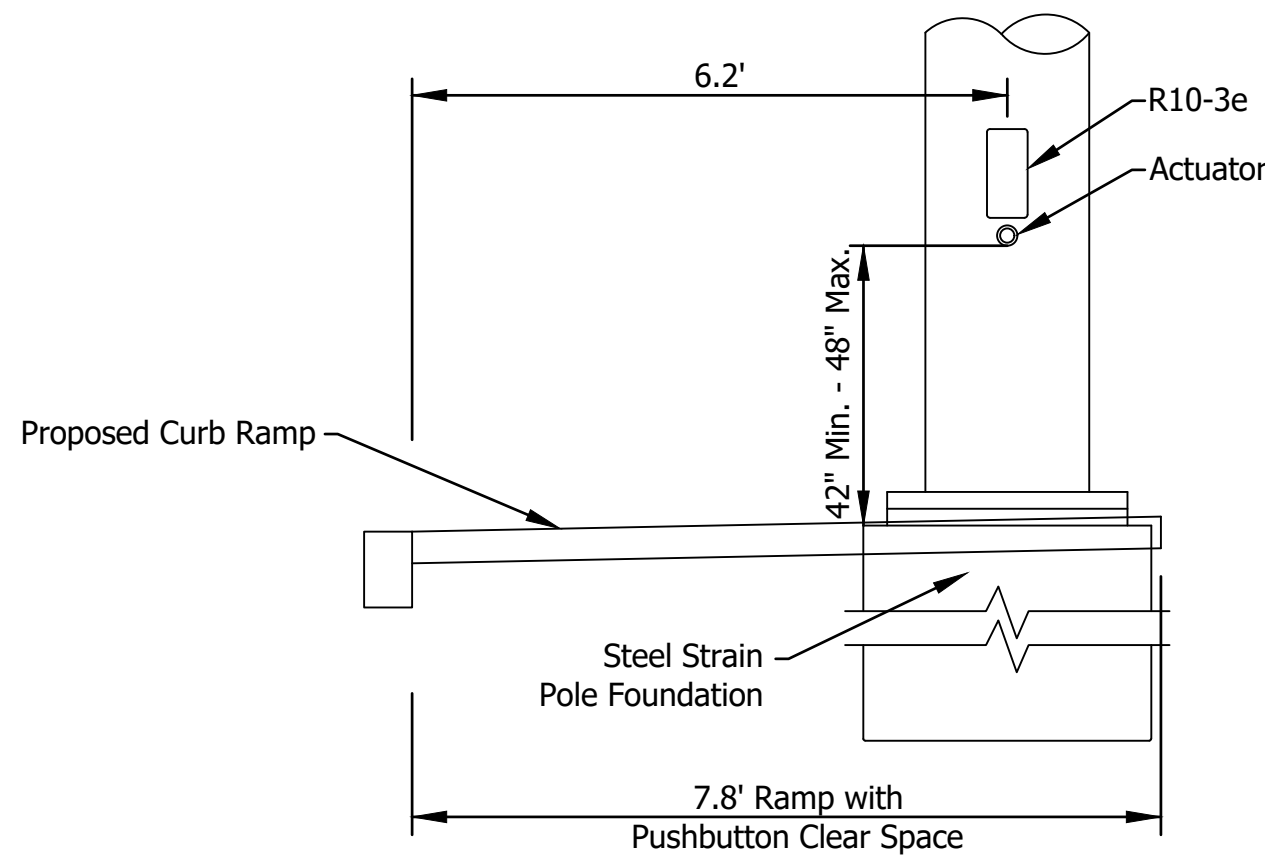


Pedestrian Pushbutton Assembly Elevation 51+45 Rt.
Not to Scale

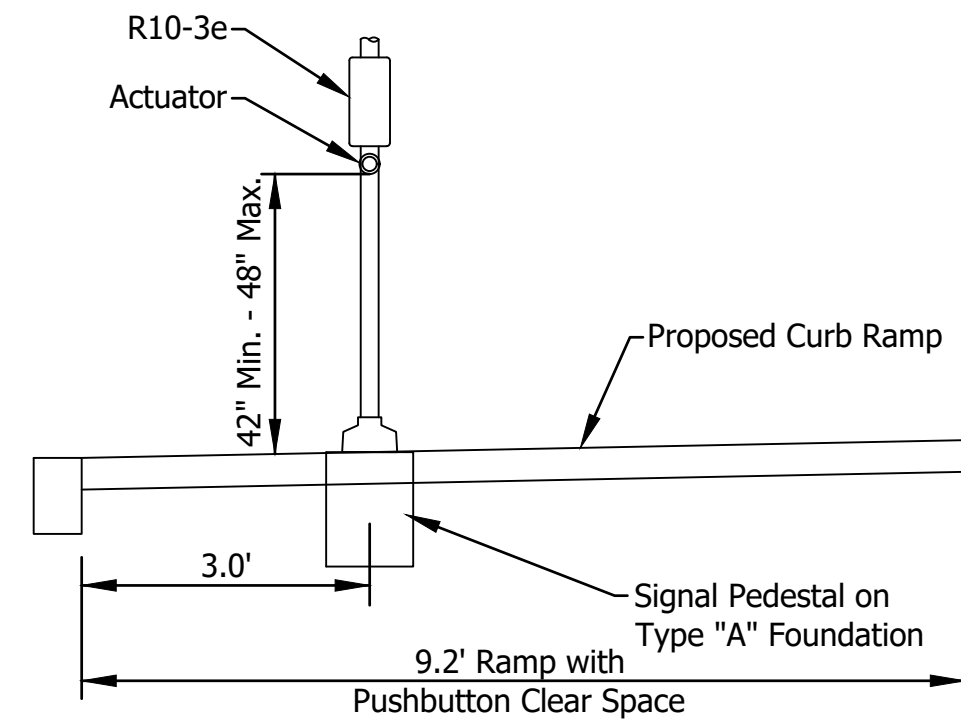


ADA Ramp N.E. Quad. Hemlock St.
Depressed Corner Curb Ramp

Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		21 Sys.
Detectable Warning Surfaces		3 Sys.



Pedestrian Pushbutton Assembly Elevation 51+93 Rt.
Not to Scale



Pedestrian Pushbutton Assembly Elevation 51+98 Rt.
Not to Scale

NOTE:
ALL ELEVATIONS SHOWN ARE SURFACE
ELEVATIONS ON RAMP OR SIDEWALK
UNLESS NOTED OTHERWISE.

- LEGEND
- [F] CONCRETE SIDEWALK
 - [FS] FLARED SIDE
 - [G] HMA SIDEWALK
 - [R] CURB RAMP

NEW PEDESTRIAN PUSHBUTTON ASSEMBLY
WITH R10-3b (L OR R) CROSSWALK SIGN

NEW (5' OR 12') PEDESTAL, WITH APS PUSH
BUTTON AND R10-3A SIGN ON SIGNAL POLE
FOUNDATION 24 IN. X 24 IN. X 36 IN.

NEW SIGNAL CANTILEVER STRUCTURE SINGLE
ARM (SIZE) FT. ON SIGNAL CANTILEVER
STRUCTURE, DRILLED SHAFT FOUNDATION, A

- TS TURNING SPACE 4 ft. X 4 ft.
- PB PUSH BUTTON CLEAR SPACE 4 ft. X 4 ft.
- CS CLEAR SPACE

B.C. = BOTTOM OF CURB
M.E. = MATCH EXISTING ELEVATION
T.C. = TOP OF CURB

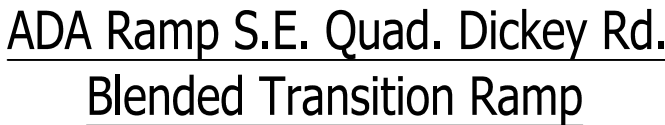
RECOMMENDED
FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

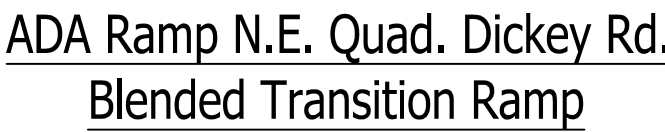
INDIANA
DEPARTMENT OF TRANSPORTATION

ADA RAMP DETAILS
SPOT ELEVATIONS

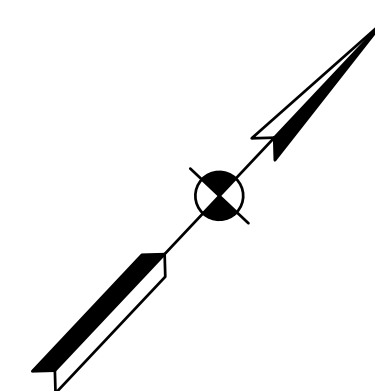
HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	30 of XX
CONTRACT	PROJECT
R-44001	2101118



Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		21 Sys.
Detectable Warning Surfaces		3 Sys.










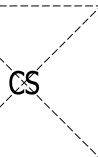


Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		27 Sys.
Detectable Warning Surfaces		4 Sys.



NOTE:
ALL ELEVATIONS SHOWN ARE SURFACE
ELEVATIONS ON RAMP OR SIDEWALK
UNLESS NOTED OTHERWISE.

LEGEND

	CONCRETE SIDEWALK
	FLARED SIDE
	HMA SIDEWALK
	CURB RAMP
	NEW PEDESTRIAN PUSHBUTTON ASSEMBLY WITH R10-3b (L OR R) CROSSWALK SIGN
	NEW (5' OR 12') PEDESTAL, WITH APS PUSH BUTTON AND R10-3A SIGN ON SIGNAL POLE FOUNDATION 24 IN. X 24 IN. X 36 IN.
	NEW SIGNAL CANTILEVER STRUCTURE SINGLE ARM (SIZE) FT. ON SIGNAL CANTILEVER STRUCTURE, DRILLED SHAFT FOUNDATION, A
	TURNING SPACE 4 ft. X 4 ft.
	PUSH BUTTON CLEAR SPACE 4 ft. X 4 ft.
	CLEAR SPACE

B.C. = BOTTOM OF CURB

M.E. = MATCH EXISTING ELEVATION

T.C. = TOP OF CURE

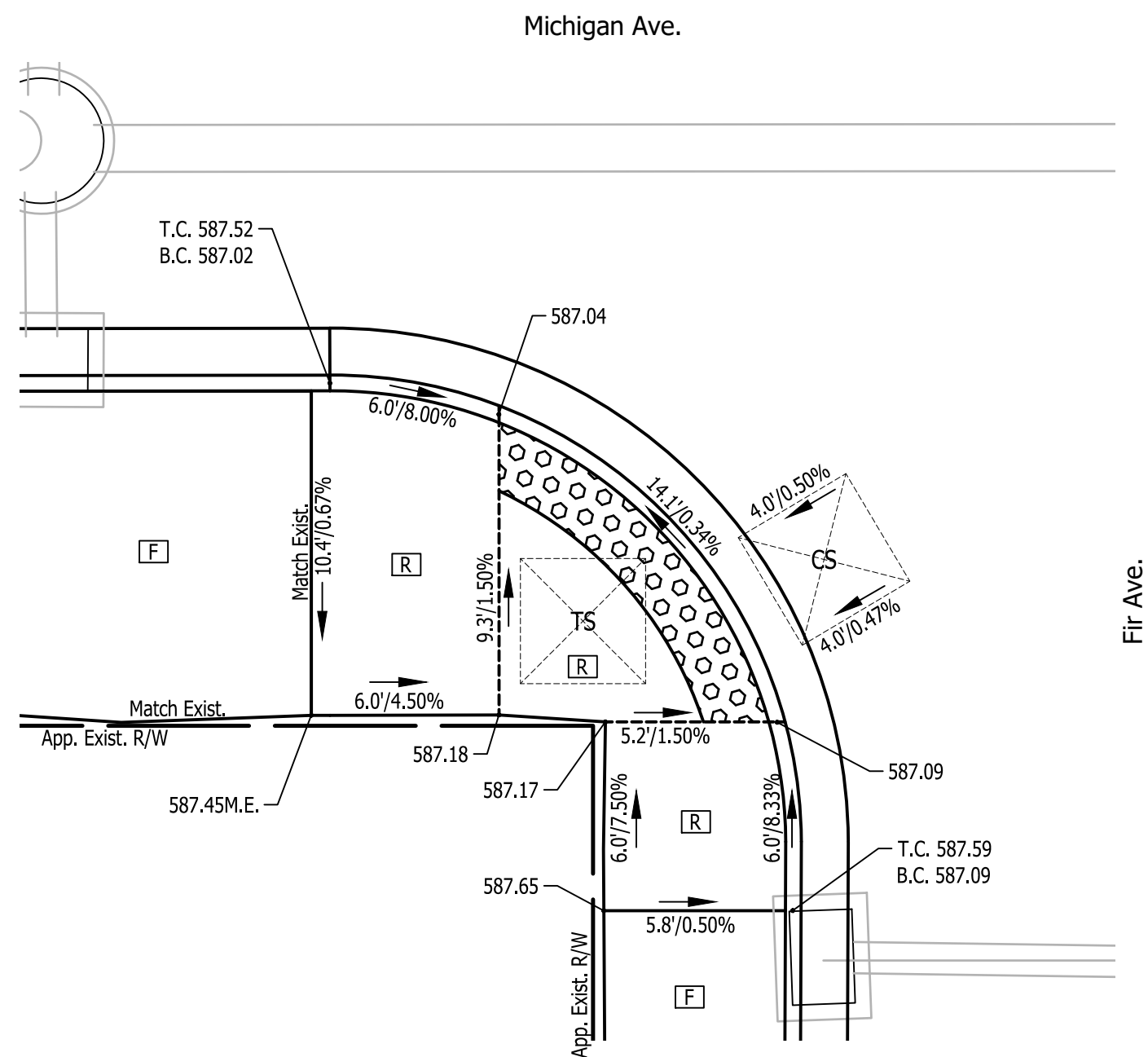
RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____	DATE _____
DESIGNED: _____	B.M.S./C.E.S.	DRAWN: _____	B.M.S.
CHECKED: _____	B.M.S./C.E.S.	CHECKED: _____	S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

ADA RAMP DETAILS

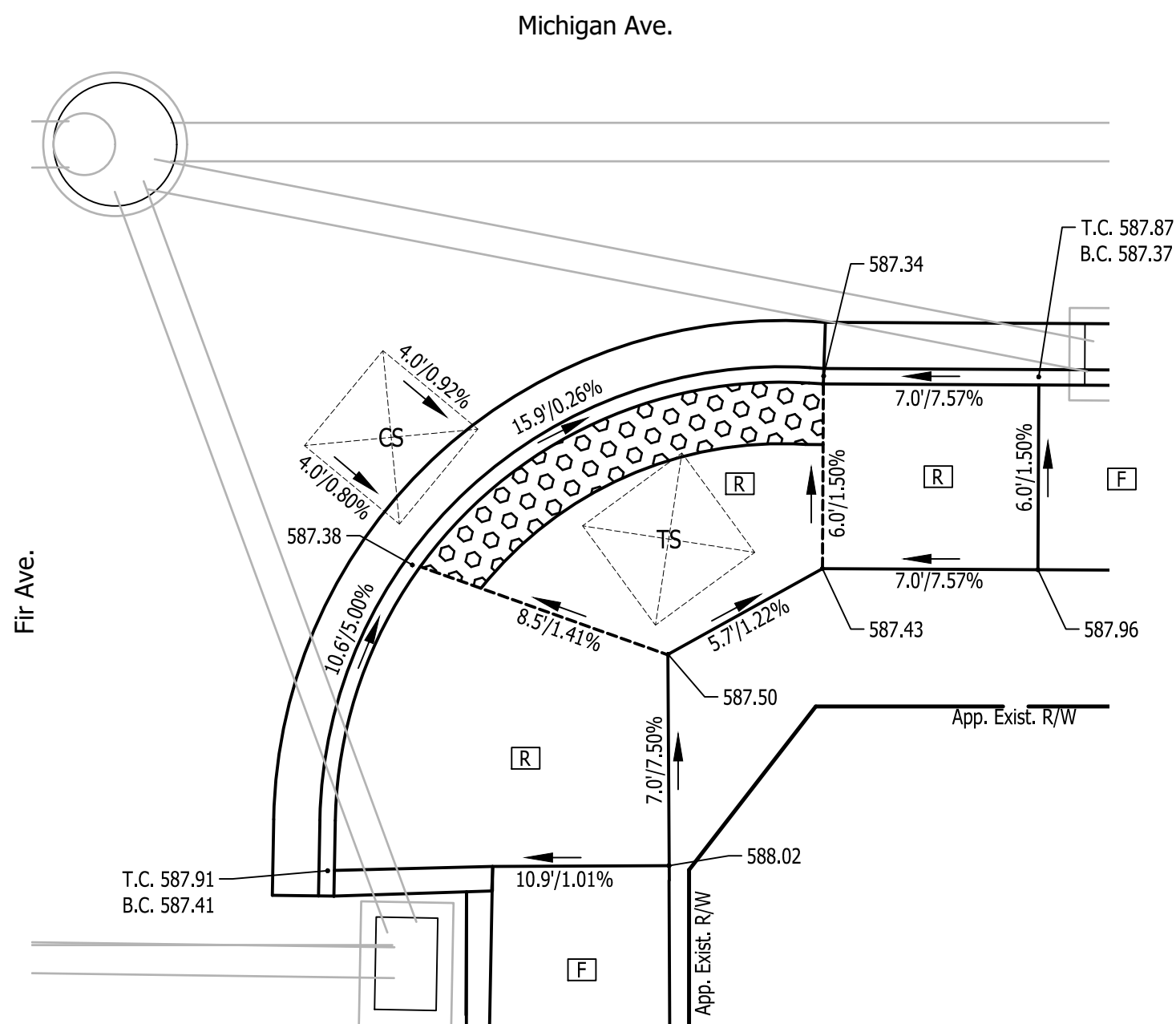
SPOT ELEVATIONS

HORIZONTAL SCALE	BRIDGE FILE		
1" = 5'	N/A		
VERTICAL SCALE	DESIGNATION		
N/A	2101118		
SURVEY BOOK	SHEETS		
N/A	31	of	XX
CONTRACT	PROJECT		
R-44001	2101118		



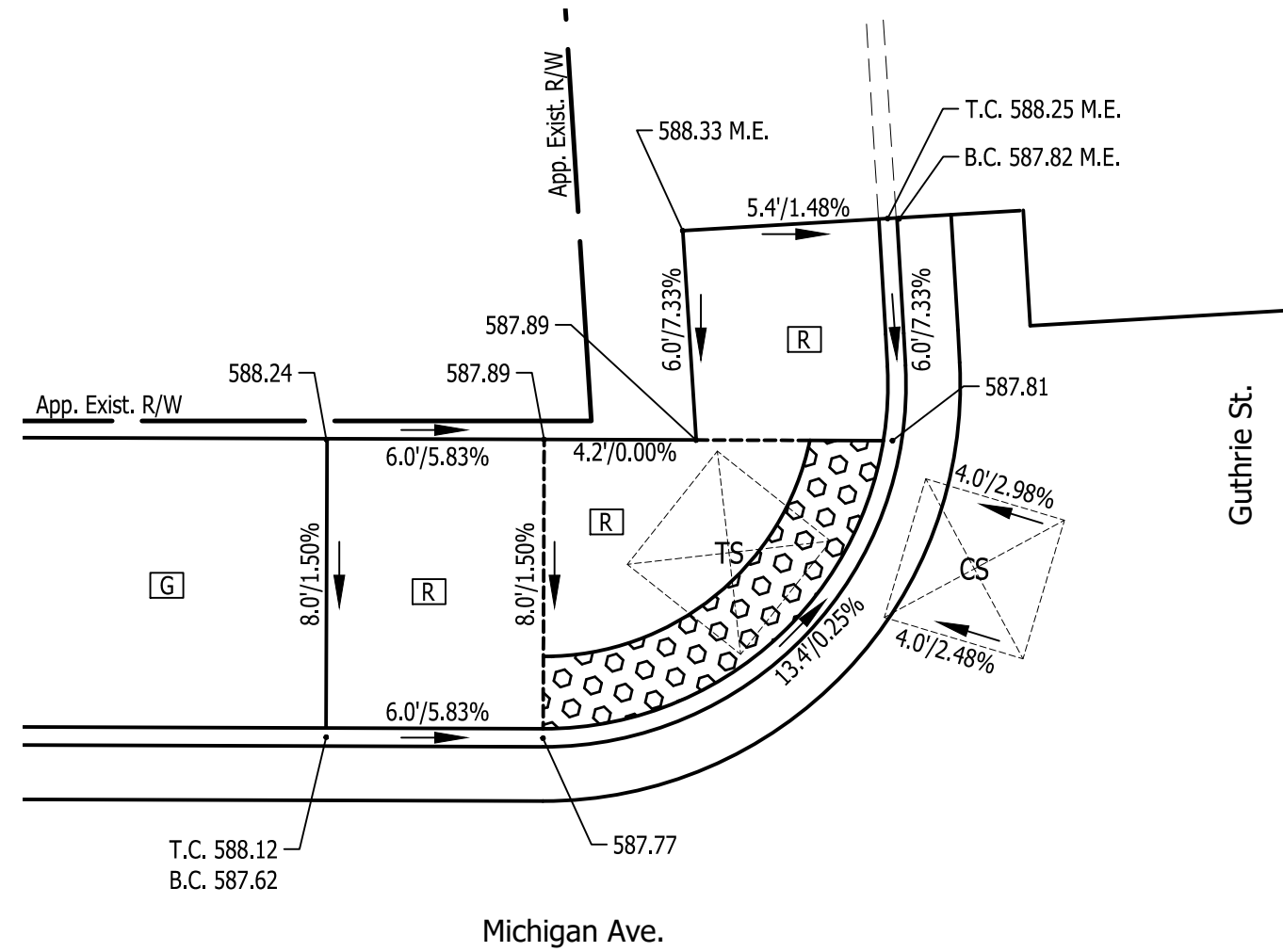
ADA Ramp S.E. Quad. Fir St.
Depressed Corner Curb Ramp

Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		18 Sys.
Detectable Warning Surfaces		3 Sys.



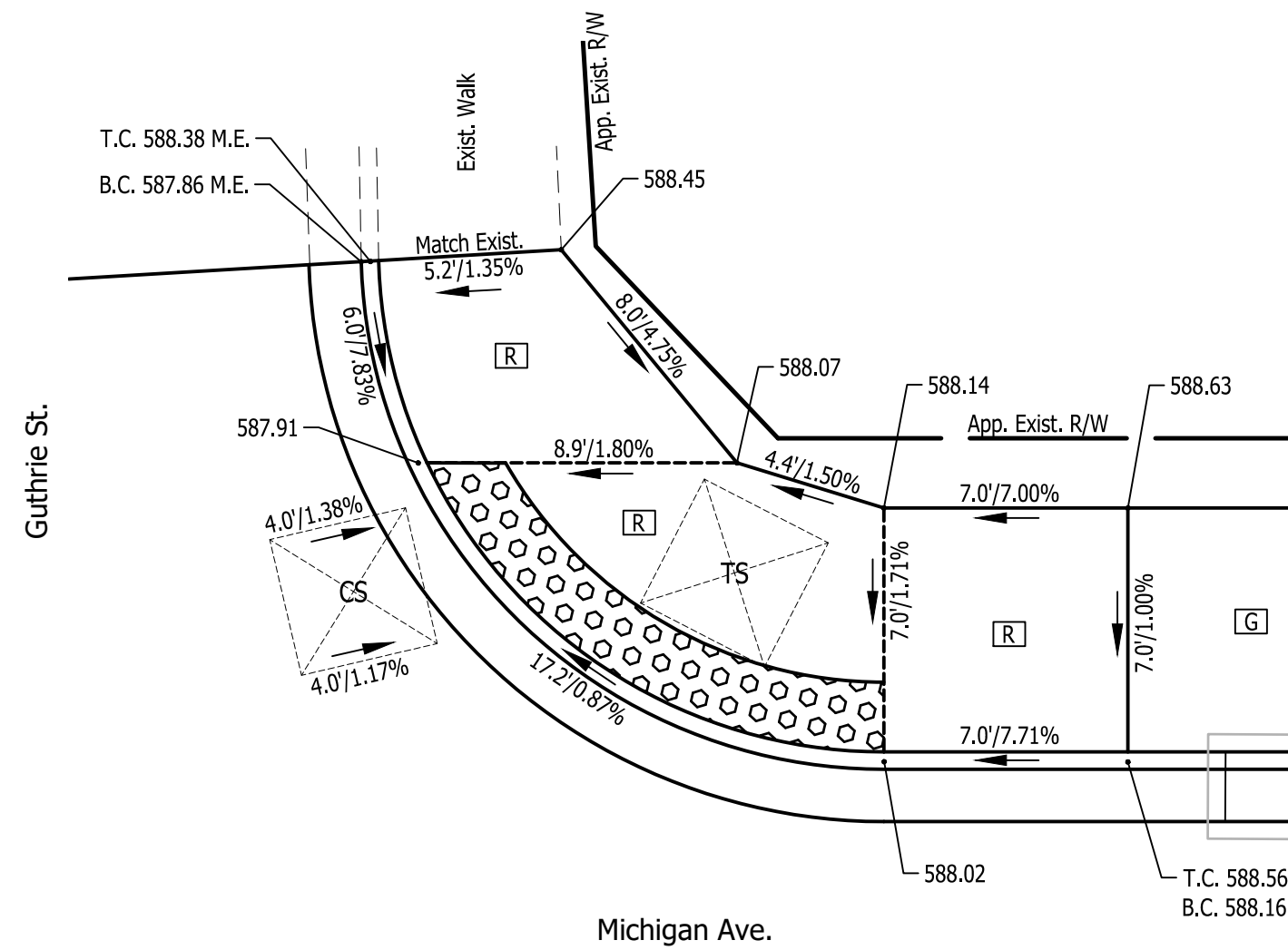
ADA Ramp N.E. Quad. Fir St.
Depressed Corner Curb Ramp

Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		25 Sys.
Detectable Warning Surfaces		3 Sys.



ADA Ramp S.W. Quad. Guthrie St.
Depressed Corner Curb Ramp

Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		17 Sys.
Detectable Warning Surfaces		3 Sys.



ADA Ramp N.W. Quad. Guthrie St.
Blended Transition Ramp

Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		21 Sys.
Detectable Warning Surfaces		4 Sys.

NOTE:
ALL ELEVATIONS SHOWN ARE SURFACE
ELEVATIONS ON RAMP OR SIDEWALK
UNLESS NOTED OTHERWISE.

- LEGEND**
- [F] CONCRETE SIDEWALK
 - [PS] FLARED SIDE
 - [G] HMA SIDEWALK
 - [R] CURB RAMP
 - NEW PEDESTRIAN PUSHBUTTON ASSEMBLY WITH R10-3b (L OR R) CROSSWALK SIGN
 - NEW (5' OR 12') PEDESTAL, WITH APS PUSH BUTTON AND R10-3A SIGN ON SIGNAL POLE FOUNDATION 24 IN. X 24 IN. X 36 IN.
 - NEW SIGNAL CANTILEVER STRUCTURE SINGLE ARM (SIZE) FT. ON SIGNAL CANTILEVER STRUCTURE, DRILLED SHAFT FOUNDATION, A
 - TS TURNING SPACE 4 ft. X 4 ft.
 - PB PUSH BUTTON CLEAR SPACE 4 ft. X 4 ft.
 - CS CLEAR SPACE
 - B.C. = BOTTOM OF CURB
 - M.E. = MATCH EXISTING ELEVATION
 - T.C. = TOP OF CURB

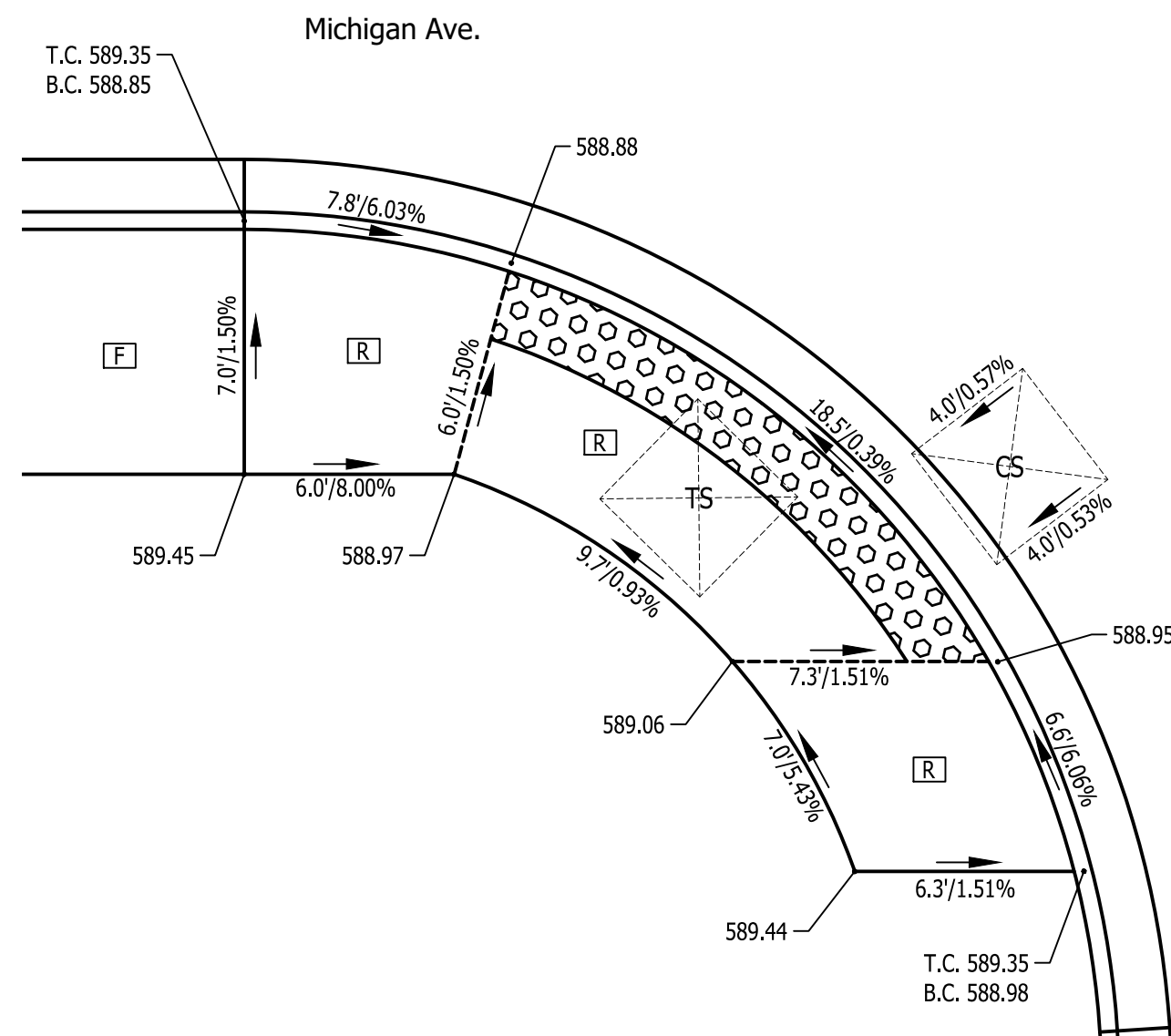
RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

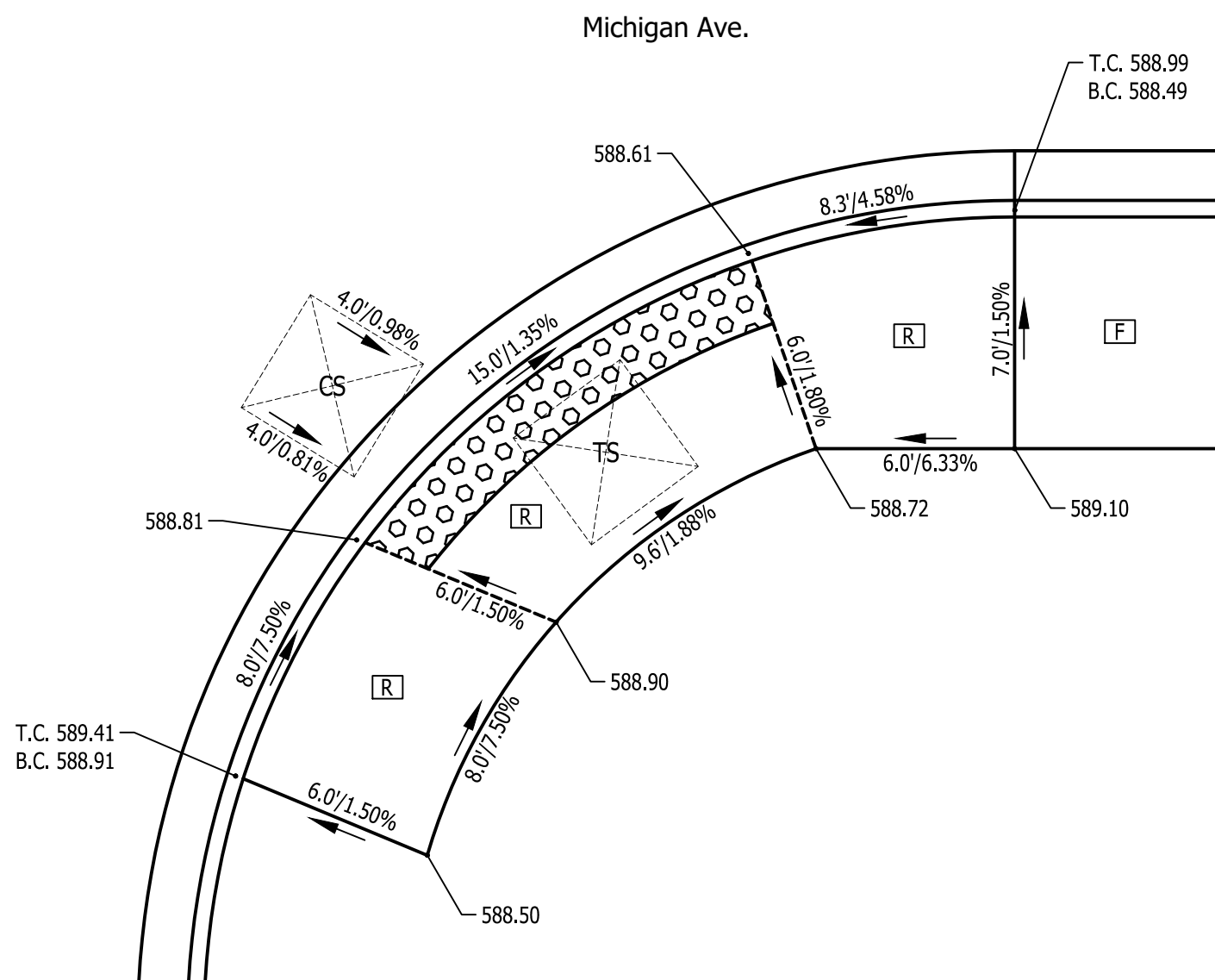
ADA RAMP DETAILS
SPOT ELEVATIONS

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEET/TS
N/A	33 of XX
CONTRACT	PROJECT
R-44001	2101118



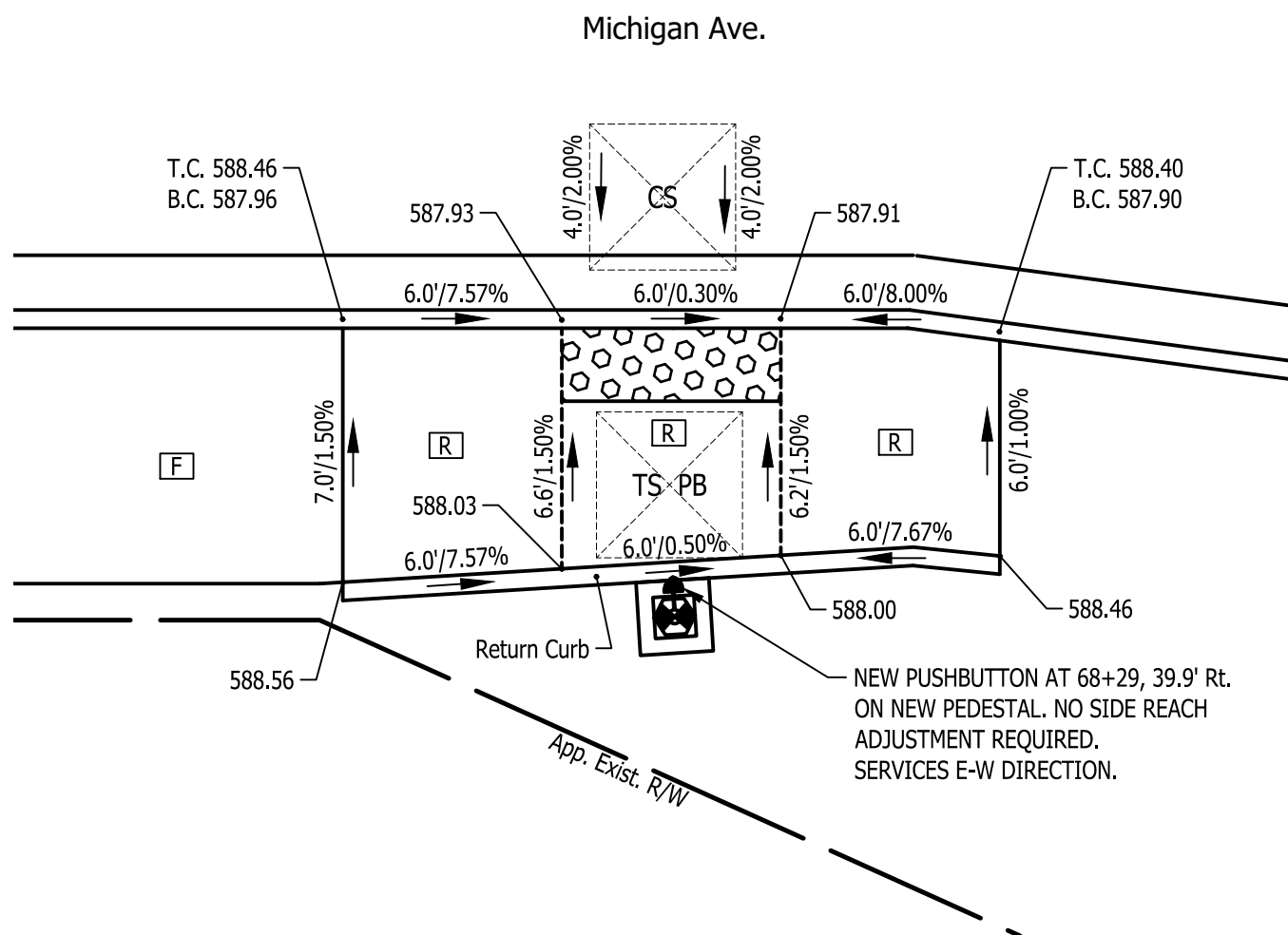
ADA Ramp S.E. Quad. St. Appr @ 66+44.4
Blended Transition Ramp

Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		21 Sys.
Detectable Warning Surfaces		4 Sys.



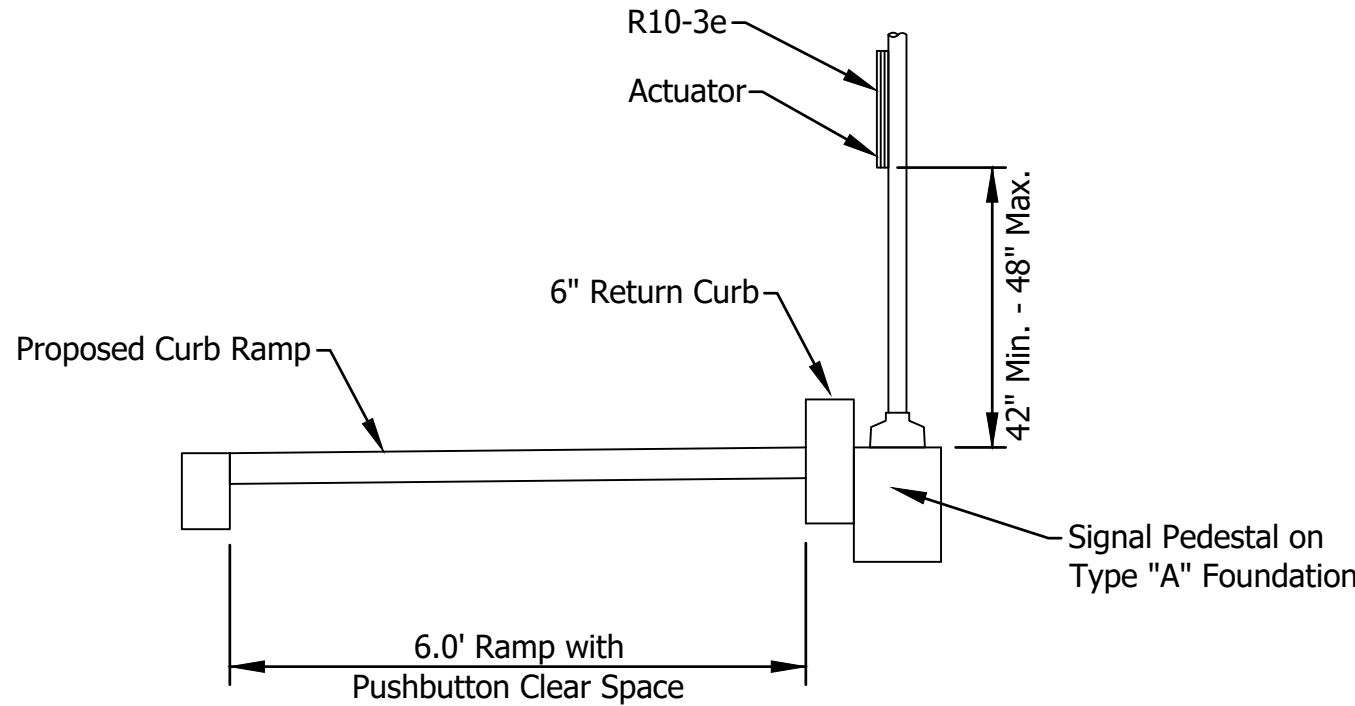
ADA Ramp N.E. Quad. St. Appr @ 66+44.4
Blended Transition Ramp

Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		21 Sys.
Detectable Warning Surfaces		4 Sys.



ADA Ramp @ 68+28.4 Rt.
Midblock Crossing Ramp

Summary Of Quantities		
Description	Quadrant	Quantity
Curb Ramp, Concrete		15 Sys.
Detectable Warning Surfaces		2 Sys.



Pedestrian Pushbutton Assembly Elevation 68+29 Lt.
Not to Scale

NOTE:
ALL ELEVATIONS SHOWN ARE SURFACE
ELEVATIONS ON RAMP OR SIDEWALK
UNLESS NOTED OTHERWISE.

- LEGEND**
- [F] CONCRETE SIDEWALK
 - [PS] FLARED SIDE
 - [G] HMA SIDEWALK
 - [R] CURB RAMP
 - NEW PEDESTRIAN PUSHBUTTON ASSEMBLY WITH R10-3b (L OR R) CROSSWALK SIGN
 - NEW (5' OR 12') PEDESTAL, WITH APS PUSH BUTTON AND R10-3A SIGN ON SIGNAL POLE FOUNDATION 24 IN. X 24 IN. X 36 IN.
 - NEW SIGNAL CANTILEVER STRUCTURE SINGLE ARM (SIZE) FT. ON SIGNAL CANTILEVER STRUCTURE, DRILLED SHAFT FOUNDATION, A
 - TS TURNING SPACE 4 ft. X 4 ft.
 - PB PUSH BUTTON CLEAR SPACE 4 ft. X 4 ft.
 - CS CLEAR SPACE
 - B.C. = BOTTOM OF CURB
 - M.E. = MATCH EXISTING ELEVATION
 - T.C. = TOP OF CURB

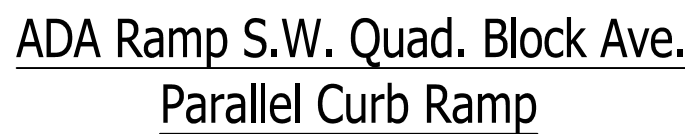
RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: B.M.S./C.E.S. DRAWN: B.M.S.
CHECKED: B.M.S./C.E.S. CHECKED: S.H.S.

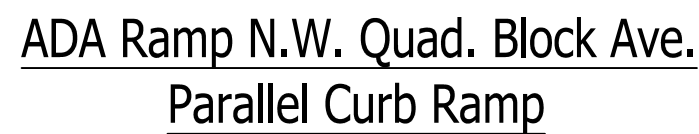
INDIANA
DEPARTMENT OF TRANSPORTATION

ADA RAMP DETAILS
SPOT ELEVATIONS

HORIZONTAL SCALE		BRIDGE FILE	
1" = 5'		N/A	
VERTICAL SCALE		DESIGNATION	
N/A		2101118	
SURVEY BOOK		SHEETS	
N/A		34 of XX	
CONTRACT		PROJECT	
R-44001		2101118	



Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		20 Sys.
Detectable Warning Surfaces		2 Sys.













Summary Of Quantities		
Description		Quantity
Curb Ramp, Concrete		21 Sys.
Detectable Warning Surfaces		2 Sys.

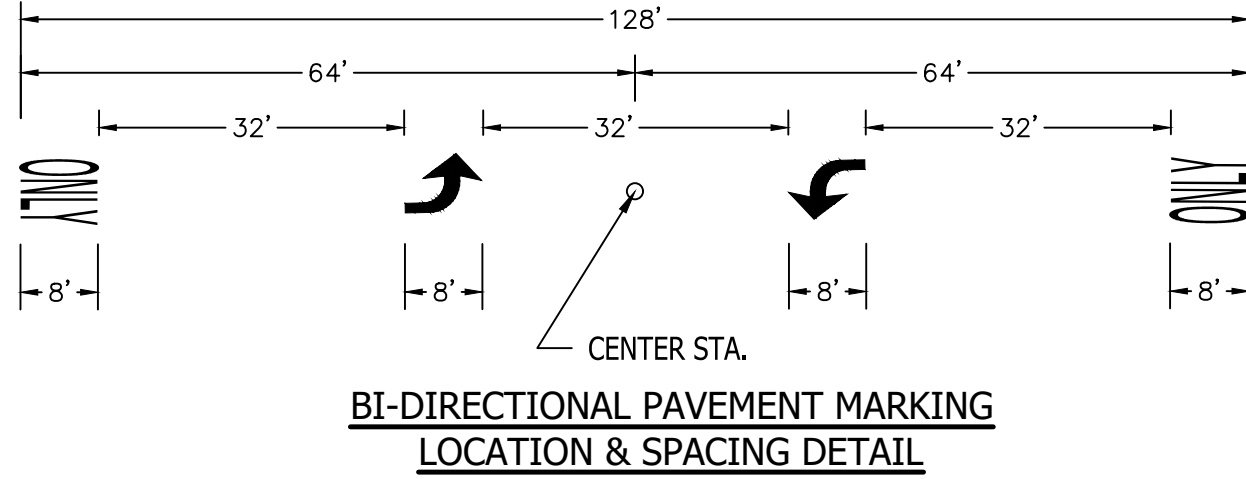
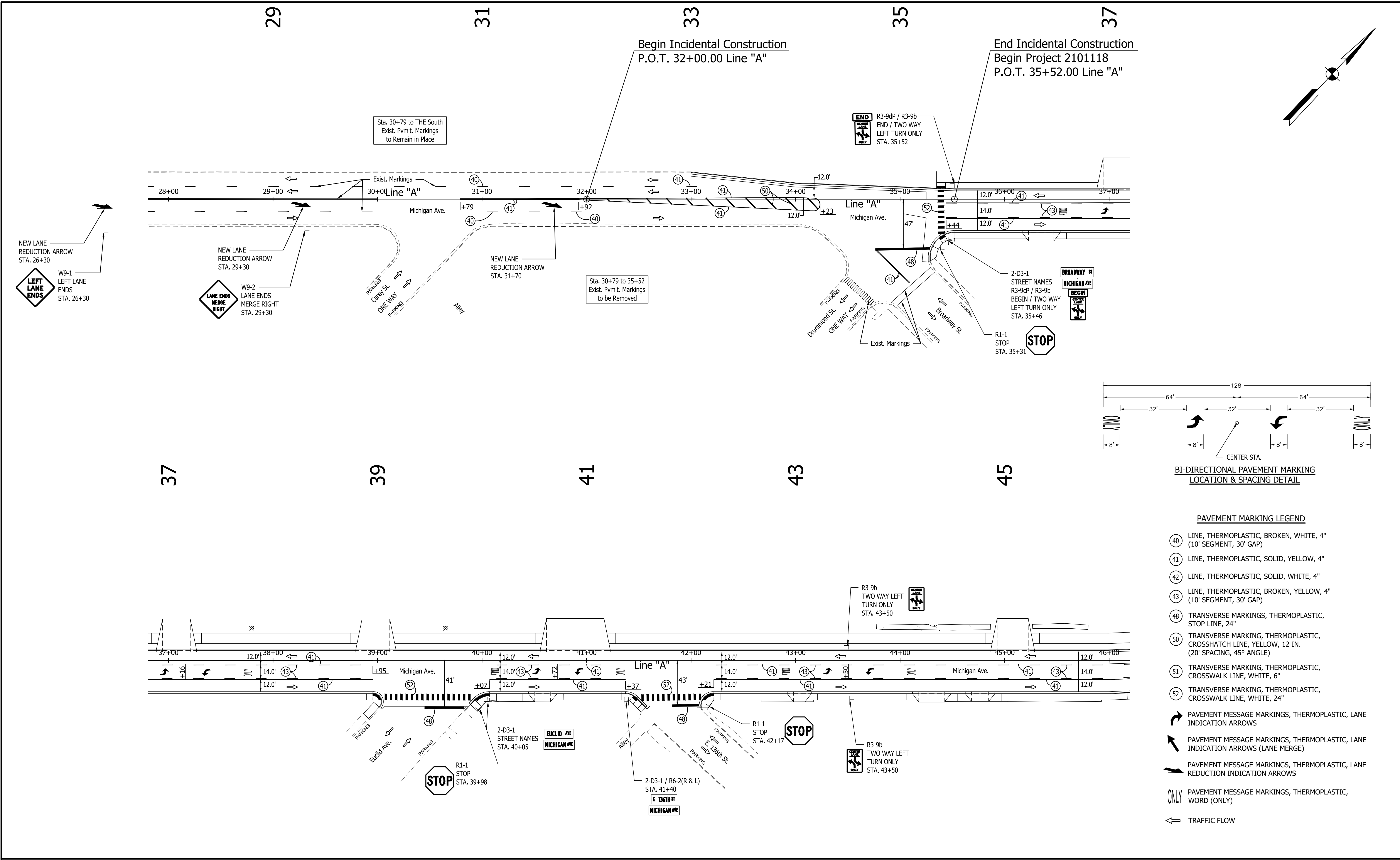


Sidewalk Ramp Summary of Quantities		
Description		Quantity
Curb Ramp, Concrete		427 Sys.
Detectable Warning Surfaces		71 Sys.

NOTE:
ALL ELEVATIONS SHOWN ARE SURFACE
ELEVATIONS ON RAMP OR SIDEWALK
UNLESS NOTED OTHERWISE.

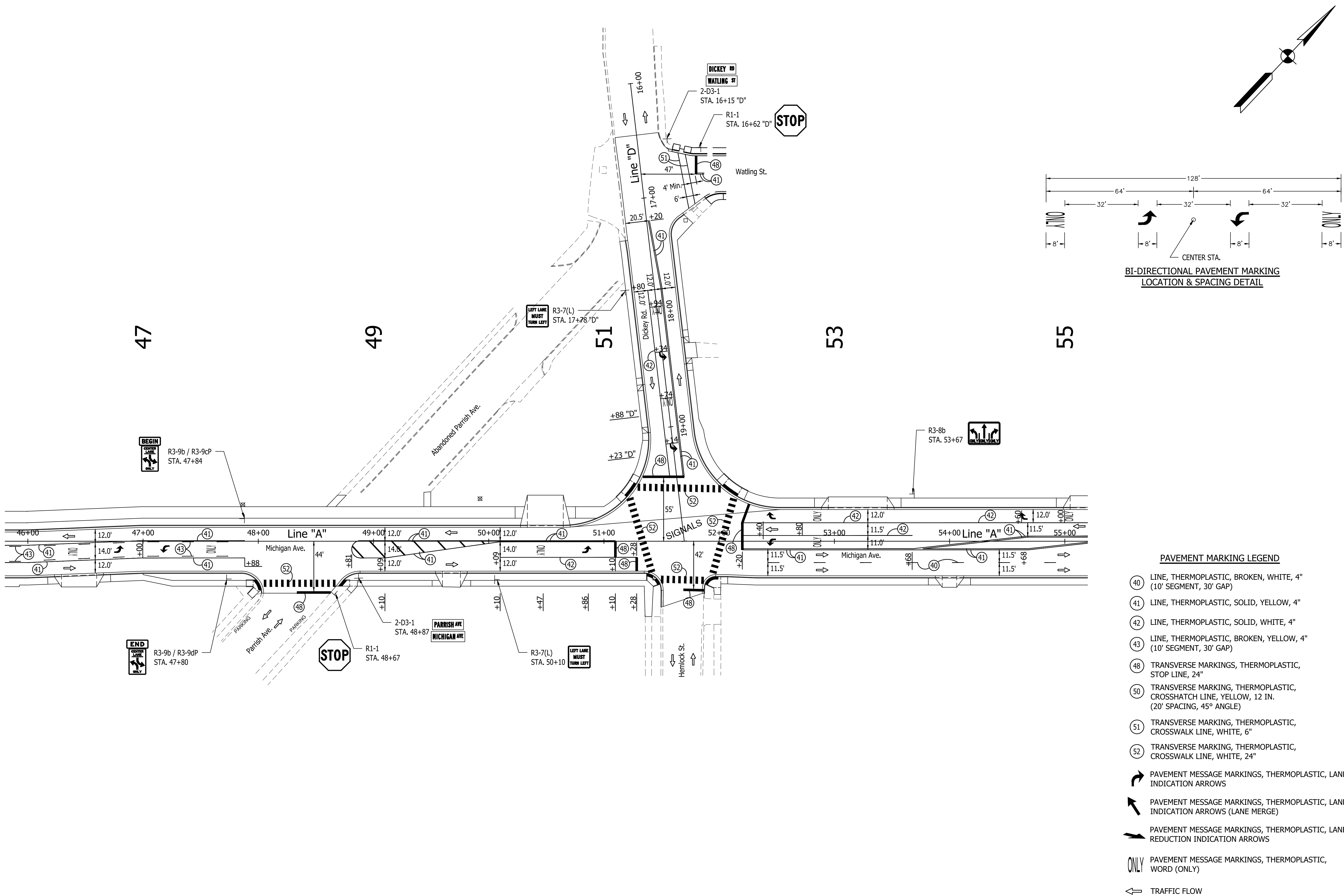
LEGEND

- | | |
|---|---|
|  | CONCRETE SIDEWALK |
|  | FLARED SIDE |
|  | HMA SIDEWALK |
|  | CURB RAMP |
|  | NEW PEDESTRIAN PUSHBUTTON ASSEMBLY WITH R10-3b (L OR R) CROSSWALK SIGN |
|  | NEW (5' OR 12') PEDESTAL, WITH APS PUSH BUTTON AND R10-3A SIGN ON SIGNAL POLE FOUNDATION 24 IN. X 24 IN. X 36 IN. |
|  | NEW SIGNAL CANTILEVER STRUCTURE SINGLE ARM (SIZE) FT. ON SIGNAL CANTILEVER STRUCTURE, DRILLED SHAFT FOUNDATION, A |
|  | TURNING SPACE 4 ft. X 4 ft. |
|  | PUSH BUTTON CLEAR SPACE 4 ft. X 4 ft. |
|  | CLEAR SPACE |
| | B.C. = BOTTOM OF CURB |
| | M.E. = MATCH EXISTING ELEVATION |
| | T.C. = TOP OF CURB |



- PAVEMENT MARKING LEGEND**
- 40 LINE, THERMOPLASTIC, BROKEN, WHITE, 4" (10' SEGMENT, 30' GAP)
 - 41 LINE, THERMOPLASTIC, SOLID, YELLOW, 4"
 - 42 LINE, THERMOPLASTIC, SOLID, WHITE, 4"
 - 43 LINE, THERMOPLASTIC, BROKEN, YELLOW, 4" (10' SEGMENT, 30' GAP)
 - 48 TRANSVERSE MARKINGS, THERMOPLASTIC, STOP LINE, 24"
 - 50 TRANSVERSE MARKING, THERMOPLASTIC, CROSSHATCH LINE, YELLOW, 12 IN. (20' SPACING, 45° ANGLE)
 - 51 TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 6"
 - 52 TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 24"
 - PAVEMENT MESSAGE MARKINGS, THERMOPLASTIC, LANE INDICATION ARROWS
 - PAVEMENT MESSAGE MARKINGS, THERMOPLASTIC, LANE INDICATION ARROWS (LANE MERGE)
 - PAVEMENT MESSAGE MARKINGS, THERMOPLASTIC, LANE REDUCTION INDICATION ARROWS
 - ONLY PAVEMENT MESSAGE MARKINGS, THERMOPLASTIC, WORD (ONLY)
 - TRAFFIC FLOW

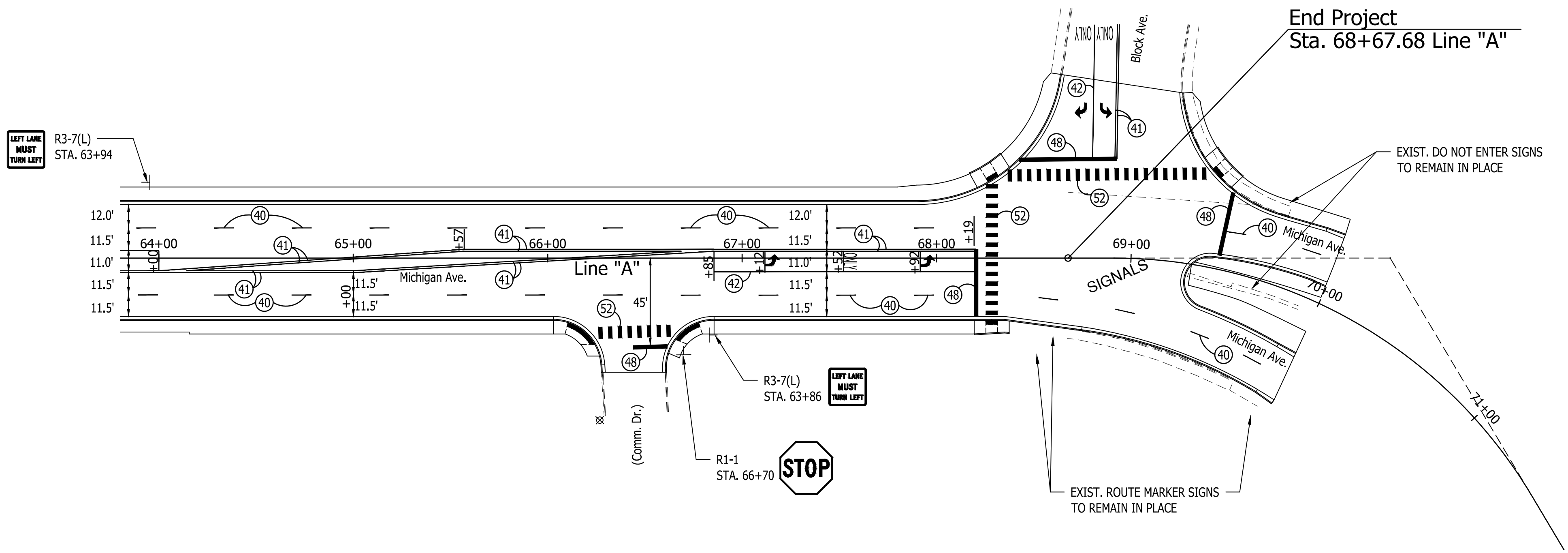
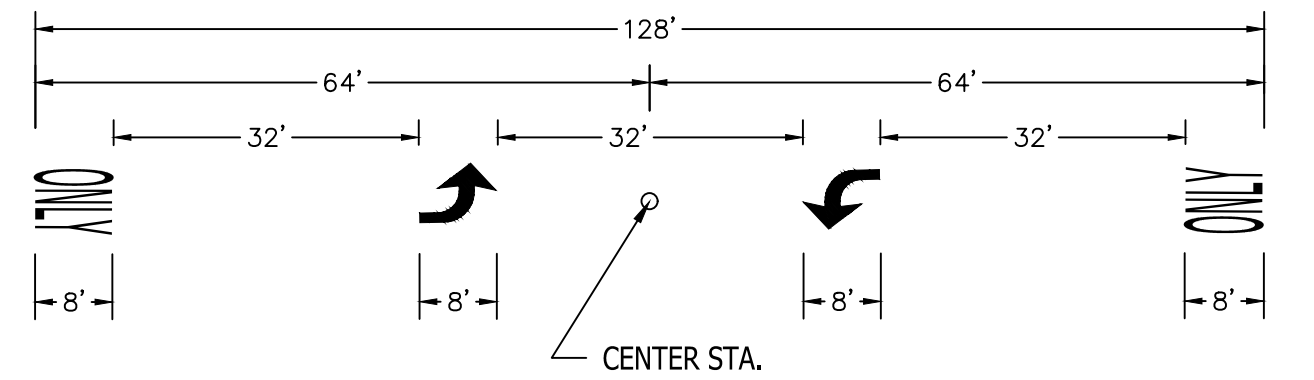
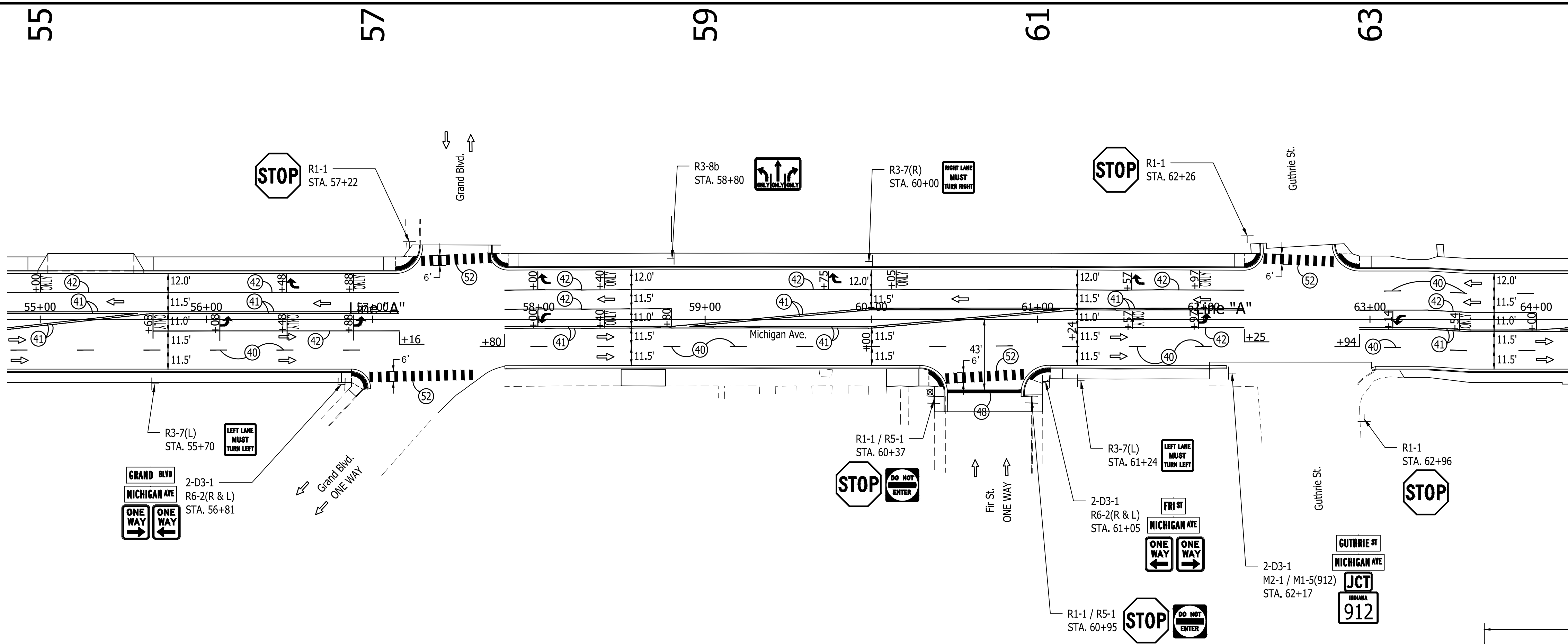
	RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____		DATE _____
	DESIGNED: _____ B.M.S./C.E.S.		DRAWN: _____ B.M.S./T.F.S.		
	CHECKED: _____ B.M.S./C.E.S.		CHECKED: _____ S.H.S.		
	INDIANA DEPARTMENT OF TRANSPORTATION				
	MICHIGAN AVENUE PAVEMENT MARKINGS AND SIGNS				
	HORIZONTAL SCALE		BRIDGE FILE		
	1" = 40'		N/A		
	VERTICAL SCALE		DESIGNATION		
	N/A		2101118		
	SURVEY BOOK		SHEETS		
N/A		36	of	XX	
CONTRACT		PROJECT			
R-44001		2101118			



RECOMMENDED FOR APPROVAL _____		
DESIGN ENGINEER _____		DATE _____
DESIGNED: B.M.S./C.E.S.	DRAWN: B.M.S./T.F.S.	
CHECKED: B.M.S./C.E.S.	CHECKED: S.H.S.	

INDIANA DEPARTMENT OF TRANSPORTATION	
MICHIGAN AVENUE PAVEMENT MARKINGS AND SIGNS	

HORIZONTAL SCALE	BRIDGE FILE	
1" = 40'	N/A	
VERTICAL SCALE	DESIGNATION	
N/A	2101118	
SURVEY BOOK	SHEETS	
N/A	37	of XX
CONTRACT	PROJECT	
R-44001	2101118	



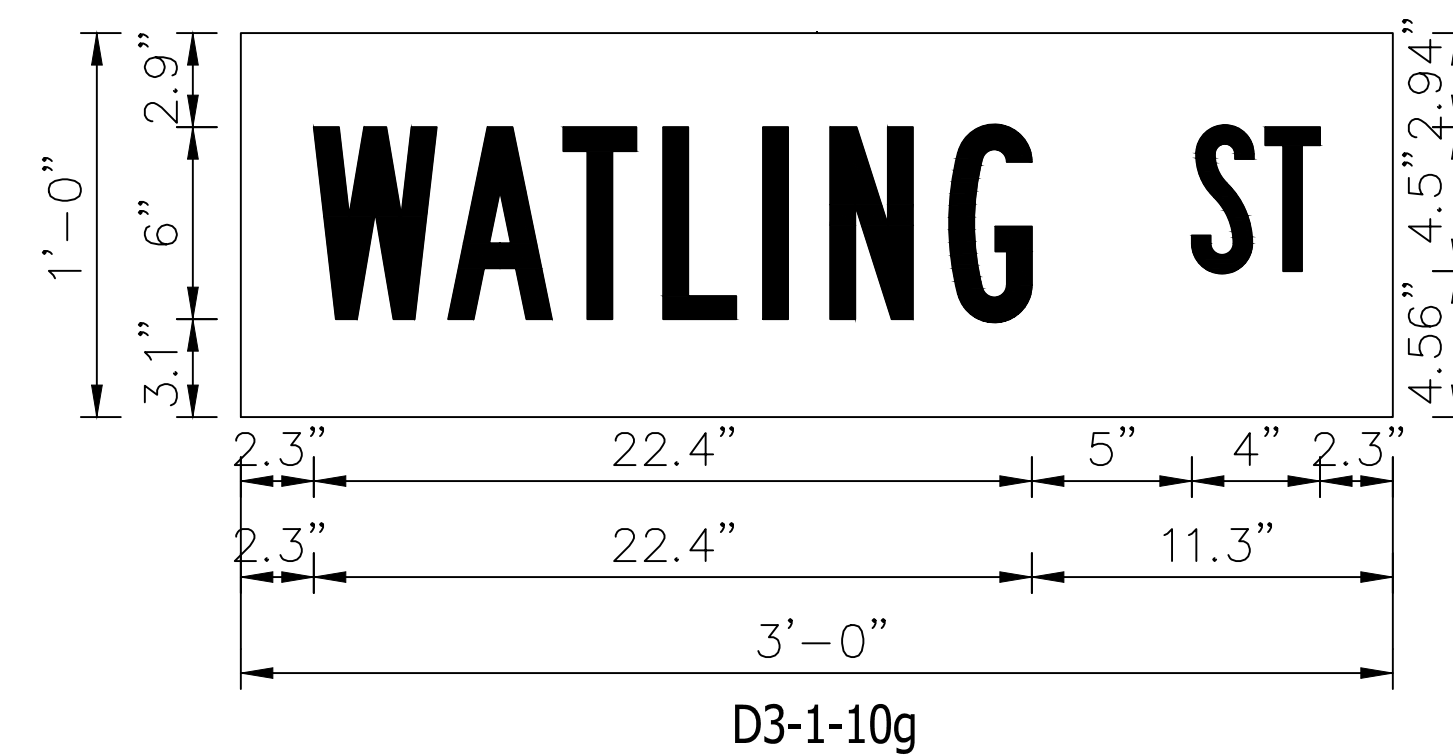
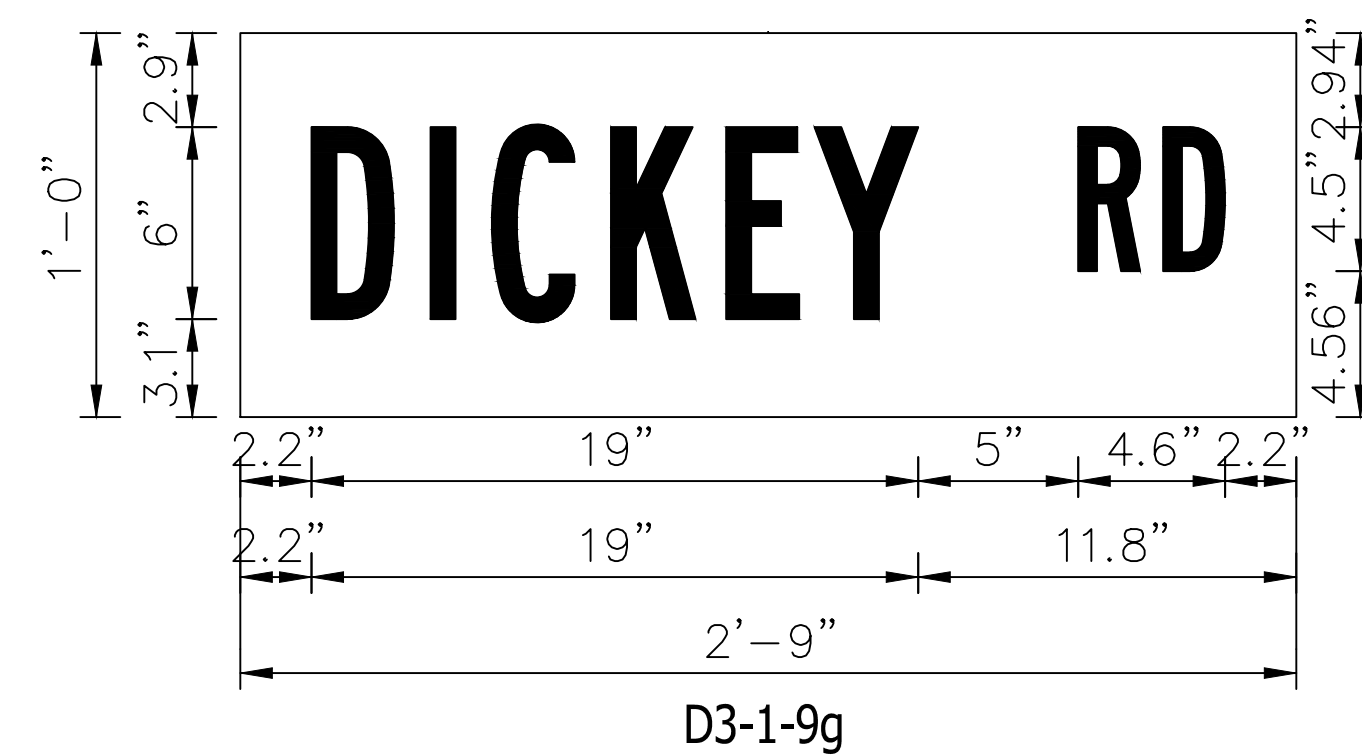
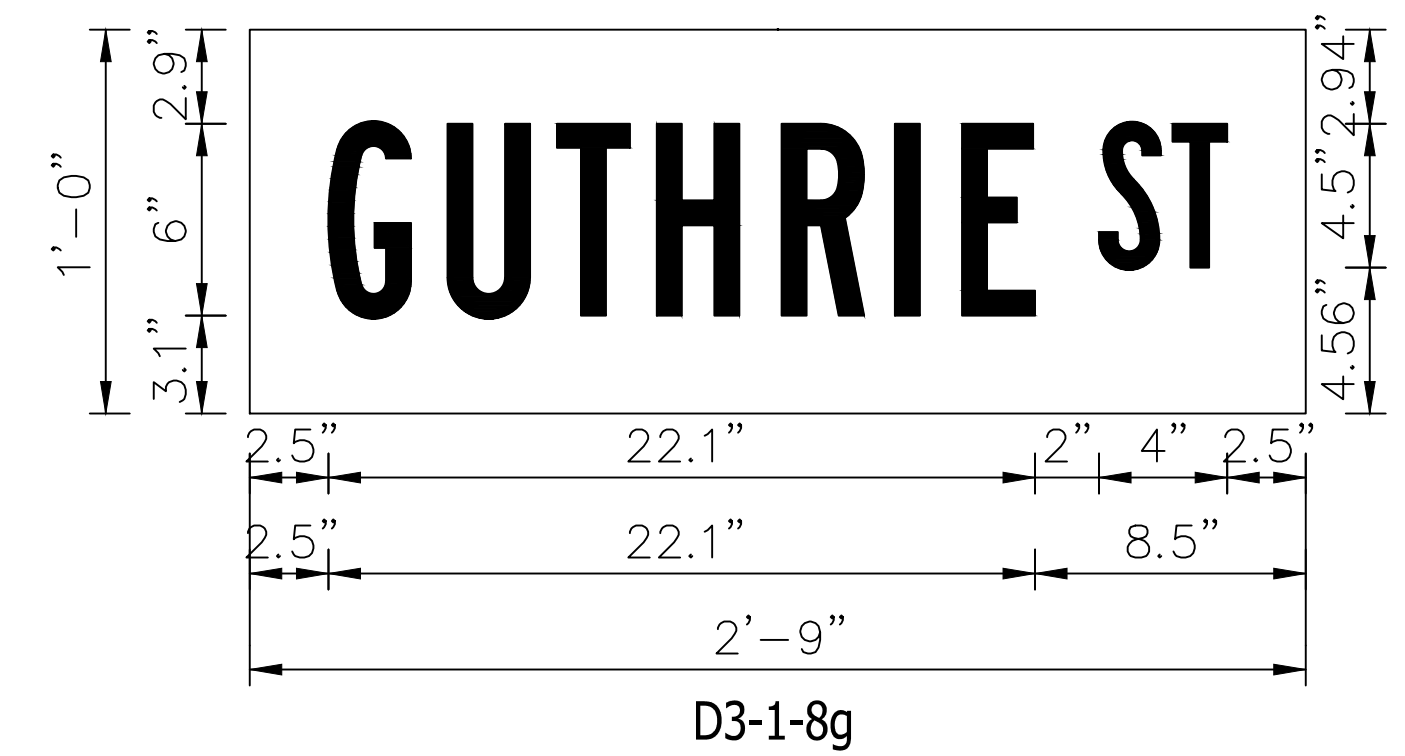
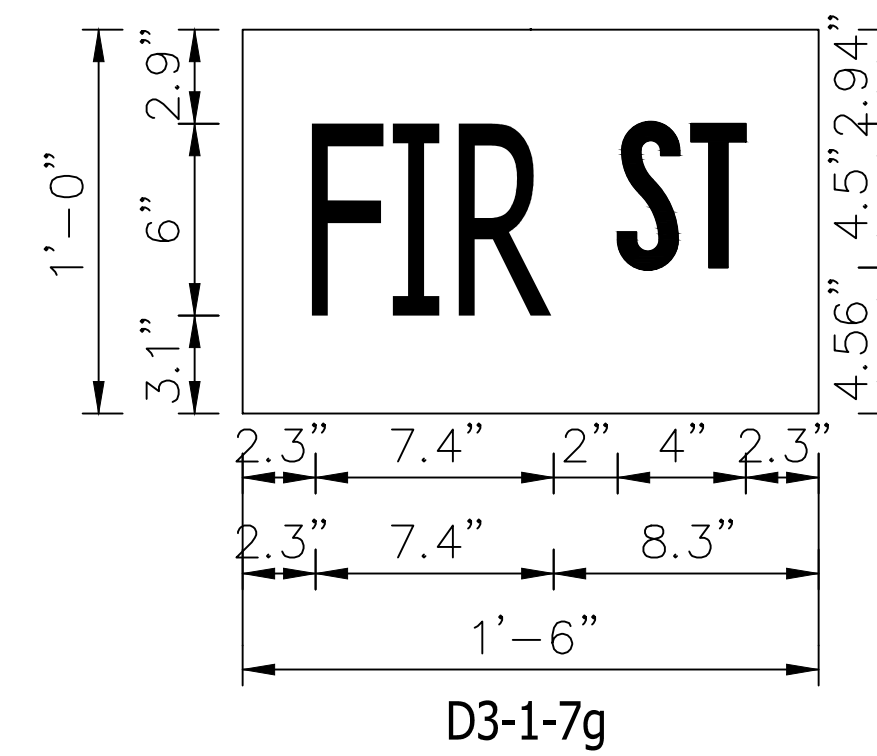
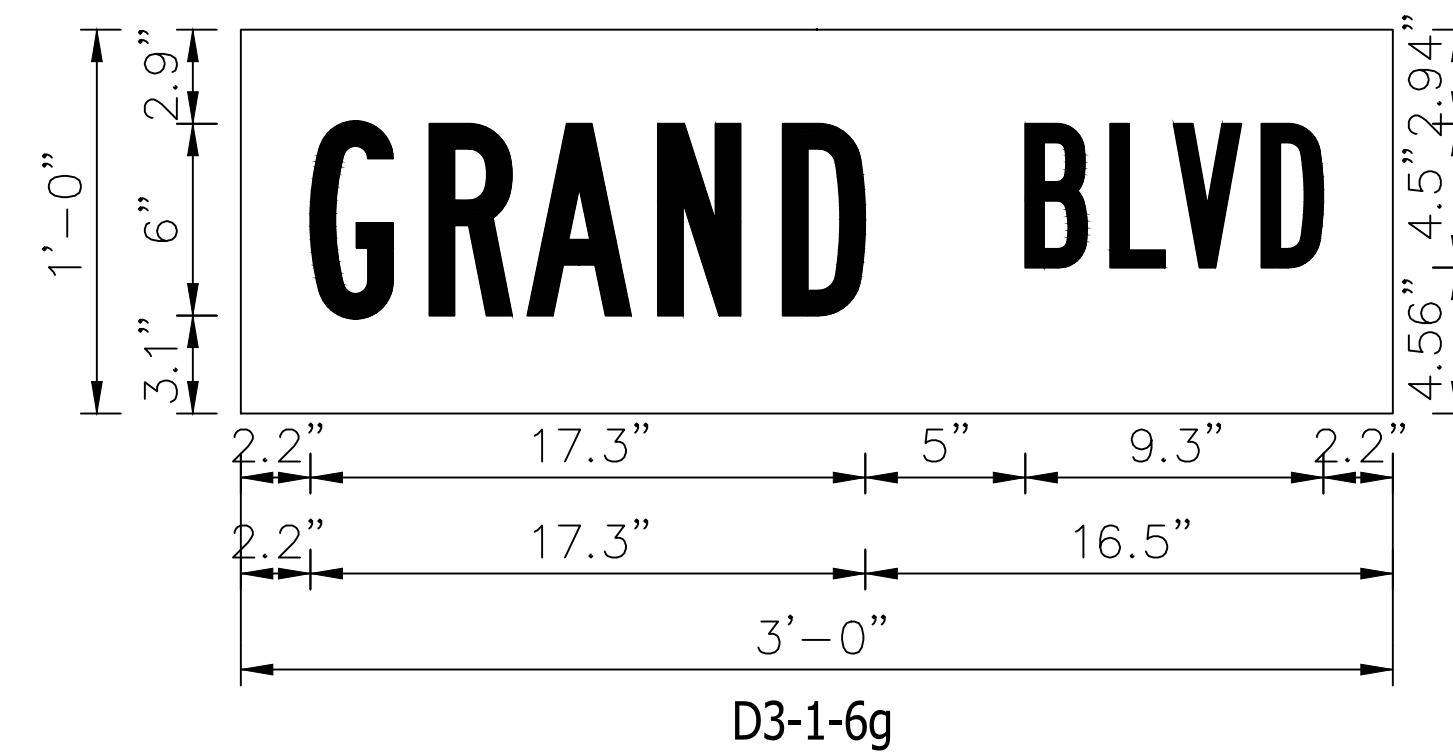
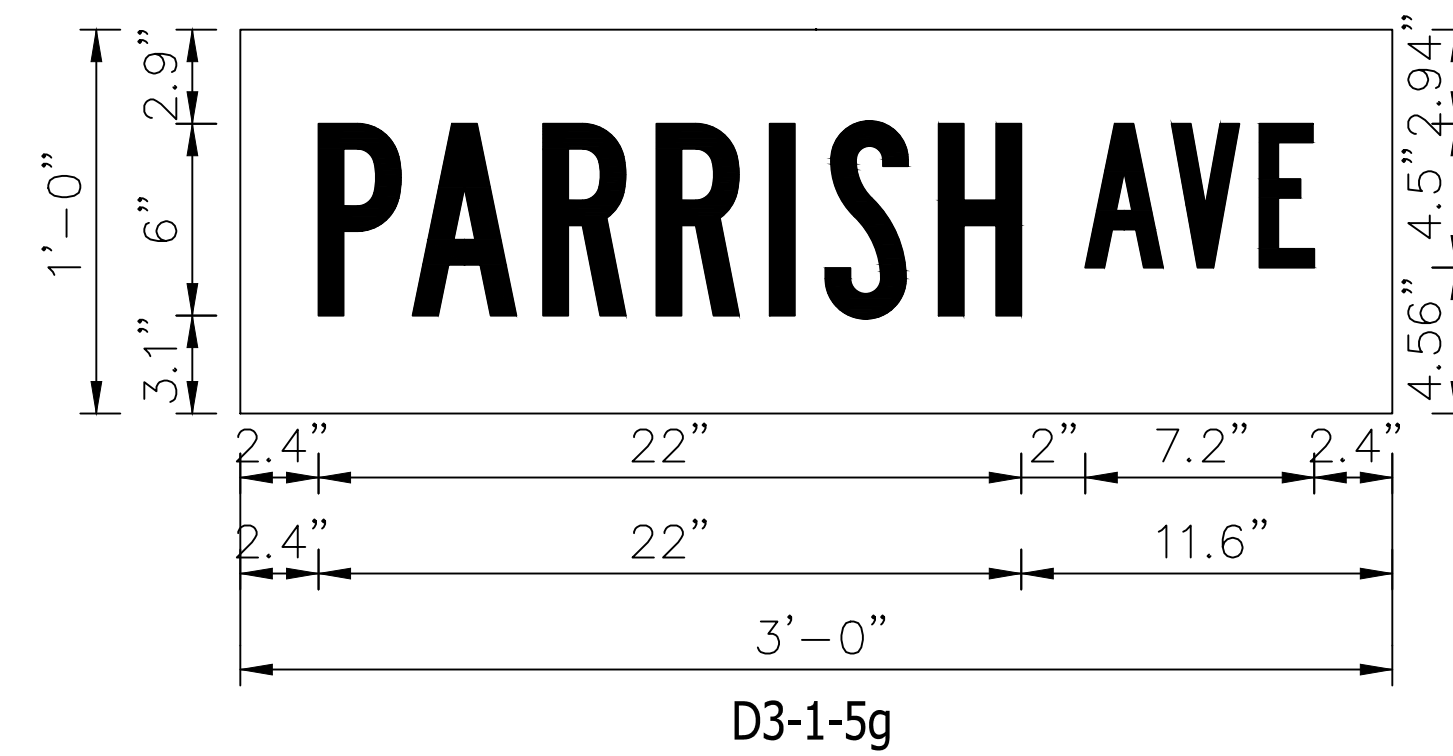
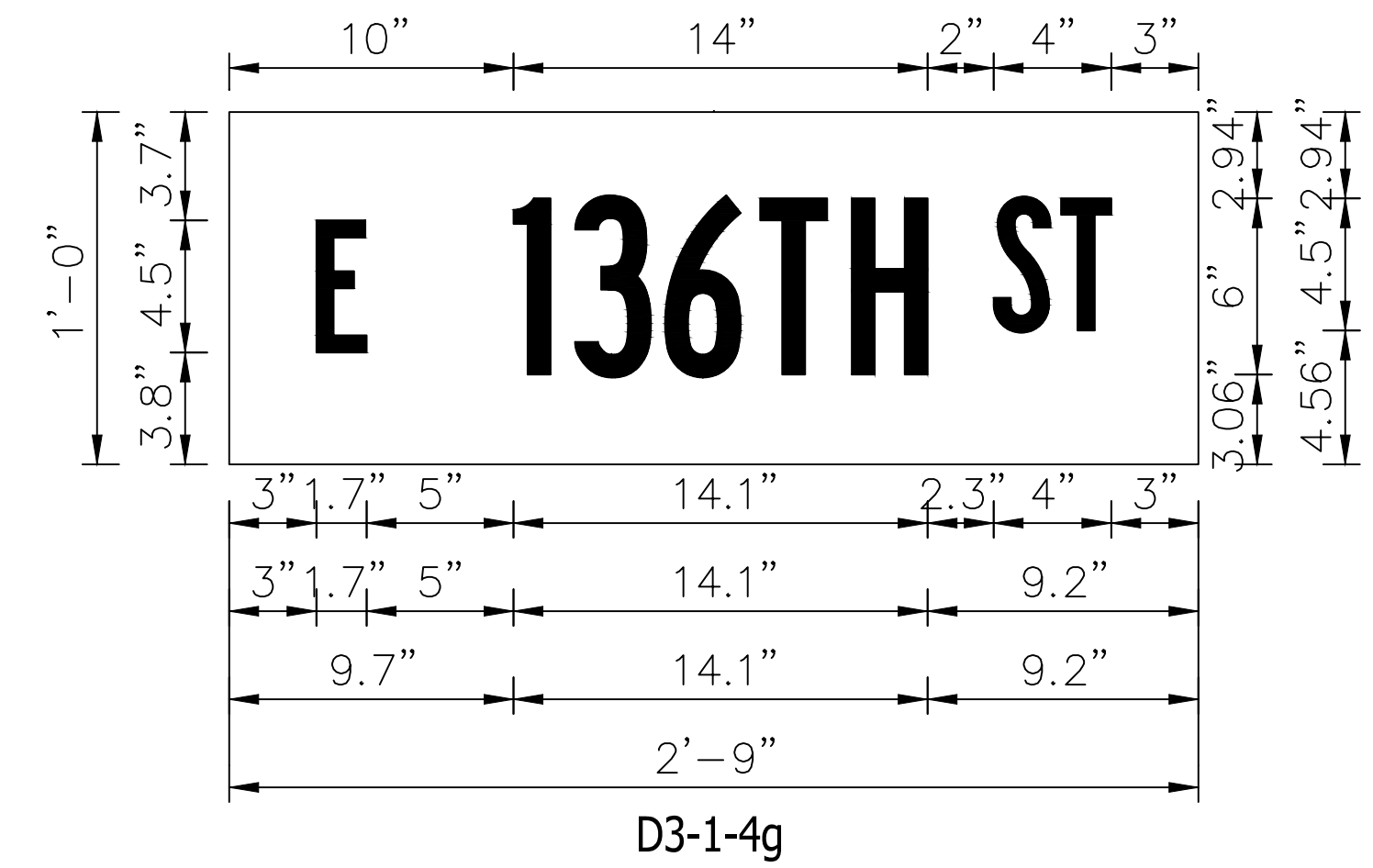
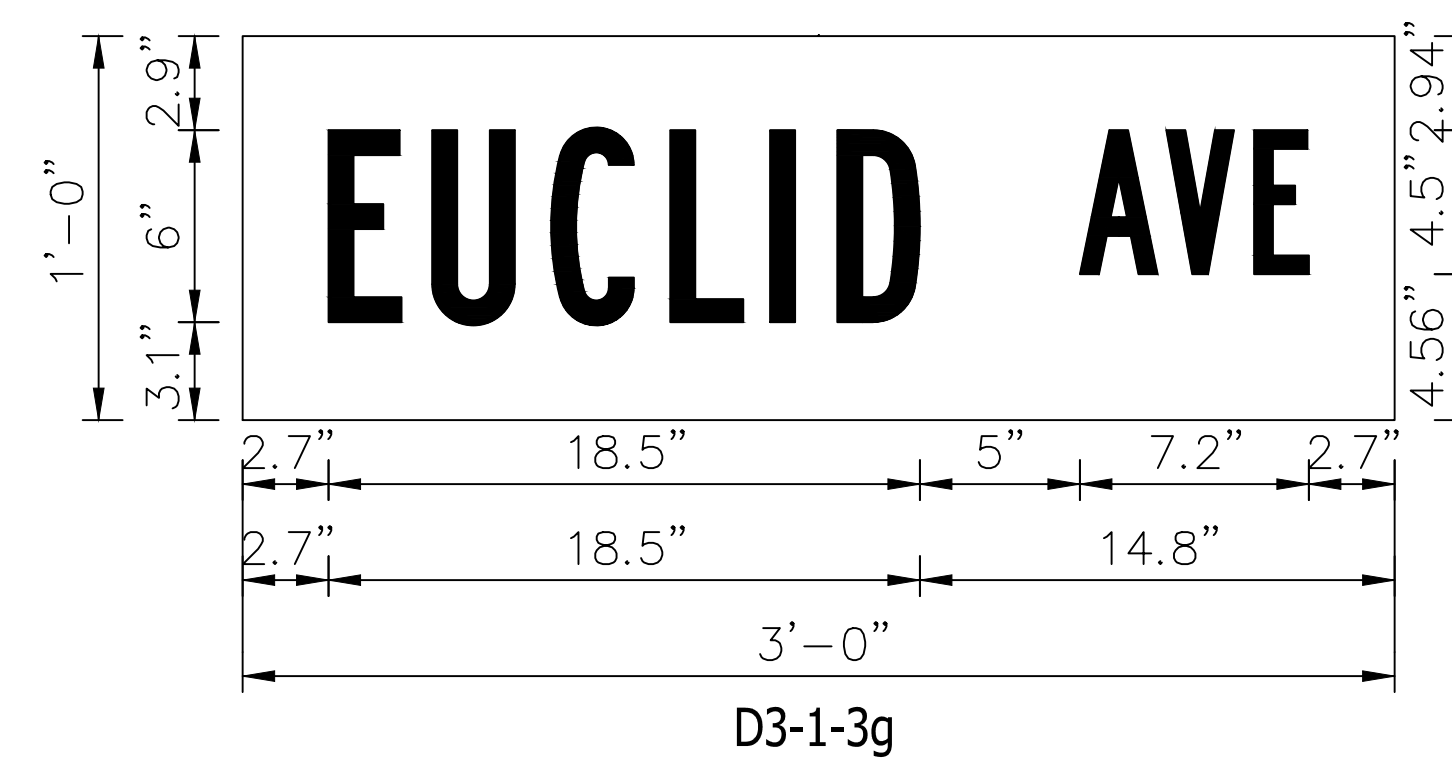
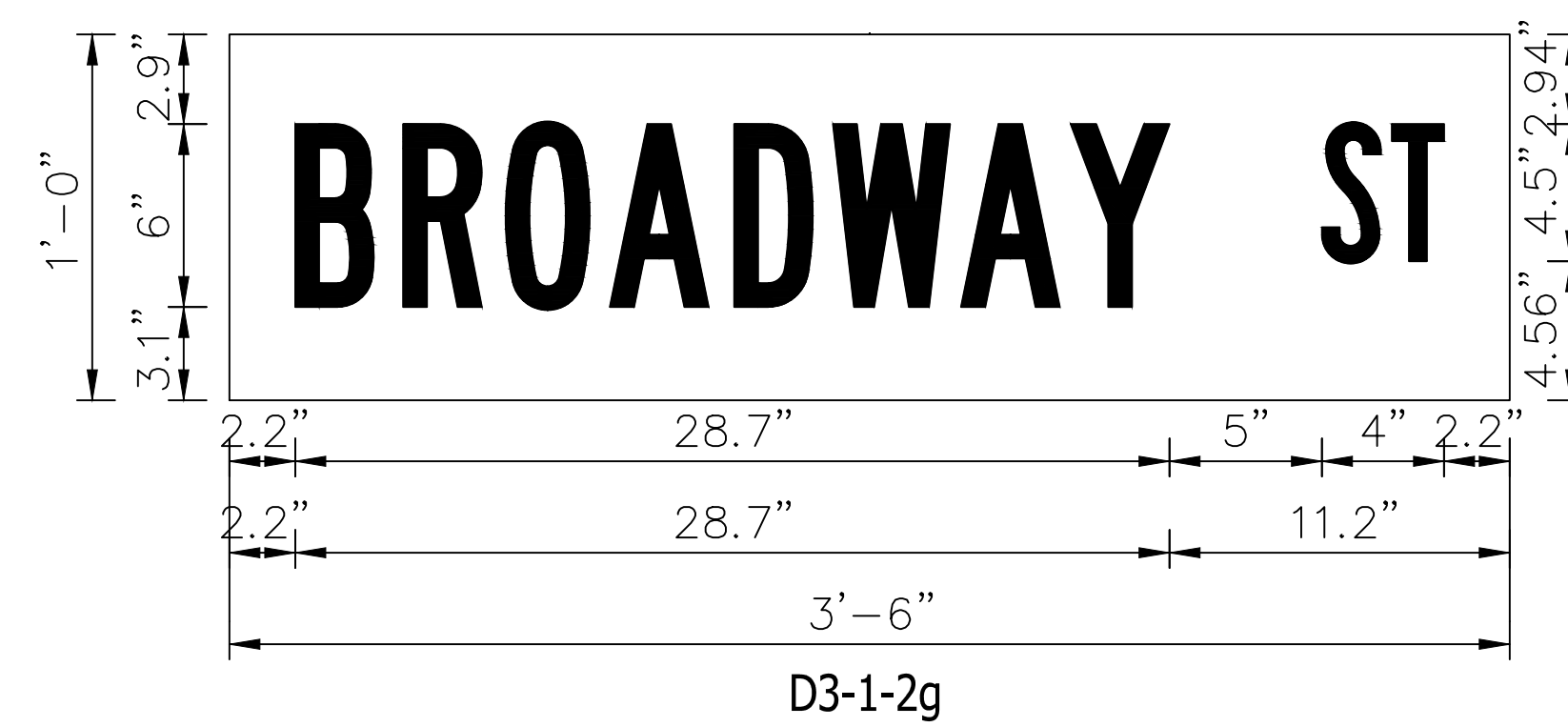
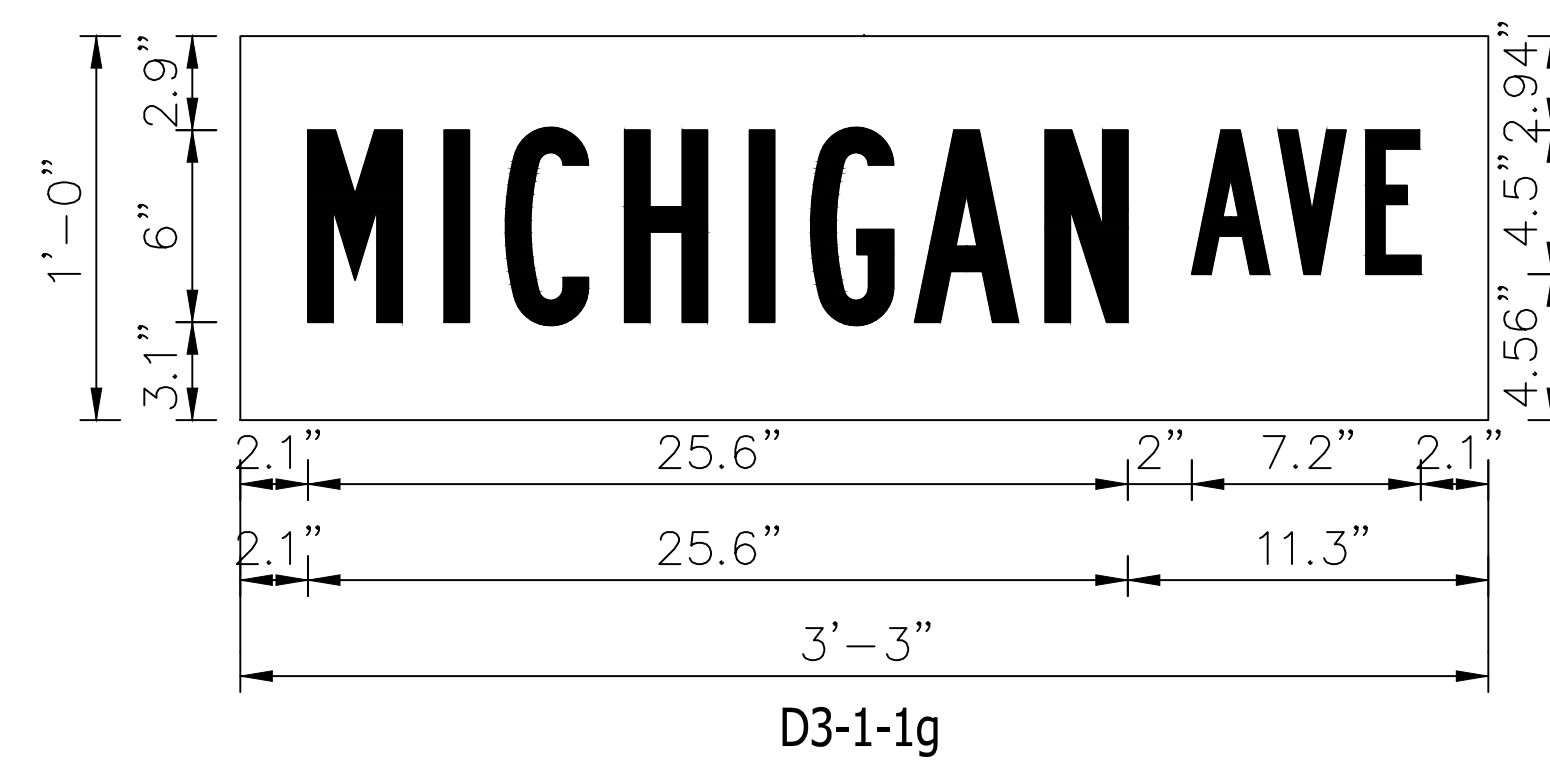
- PAVEMENT MARKING LEGEND**
- 40 LINE, THERMOPLASTIC, BROKEN, WHITE, 4" (10' SEGMENT, 30' GAP)
 - 41 LINE, THERMOPLASTIC, SOLID, YELLOW, 4"
 - 42 LINE, THERMOPLASTIC, SOLID, WHITE, 4"
 - 43 LINE, THERMOPLASTIC, BROKEN, YELLOW, 4" (10' SEGMENT, 30' GAP)
 - 48 TRANSVERSE MARKINGS, THERMOPLASTIC, STOP LINE, 24"
 - 50 TRANSVERSE MARKING, THERMOPLASTIC, CROSSHATCH LINE, YELLOW, 12 IN. (20' SPACING, 45° ANGLE)
 - 51 TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 6"
 - 52 TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 24"
 - PAVEMENT MESSAGE MARKINGS, THERMOPLASTIC, LANE INDICATION ARROWS
 - PAVEMENT MESSAGE MARKINGS, THERMOPLASTIC, LANE INDICATION ARROWS (LANE MERGE)
 - PAVEMENT MESSAGE MARKINGS, THERMOPLASTIC, LANE REDUCTION INDICATION ARROWS
 - ONLY PAVEMENT MESSAGE MARKINGS, THERMOPLASTIC, WORD (ONLY)
 - TRAFFIC FLOW

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: B.M.S./C.E.S.	DRAWN: B.M.S./T.F.S.	
CHECKED: B.M.S./C.E.S.	CHECKED: S.H.S.	

INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE
PAVEMENT MARKINGS AND SIGNS

HORIZONTAL SCALE	BRIDGE FILE
1" = 40'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	38 of XX
CONTRACT	PROJECT
R-44001	2101118



GROUND MOUNTED (D3-1-#g) STREET NAME SIGN
NOTES:

NOTES:



1. All ground mounted street name signs to be white copy on red background with no borders.
2. Actual sign size may vary according to manufacture recommendations.
3. Contractor to verify all street names prior to ordering any signs.
4. Sign shop drawings are to be submitted for review and approval prior to ordering any sign materials.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE N/A		BRIDGE FILE N/A	
				VERTICAL SCALE N/A		DESIGNATION 2101118	
DESIGNED: _____ B.M.S./C.E.S.		DRAWN: _____ B.M.S./T.F.S.		SURVEY BOOK N/A		SHEETS 39 of XX	
CHECKED: _____ B.M.S./C.E.S.		CHECKED: _____ S.H.S.		CONTRACT R-44001		PROJECT 2101118	
		MICHIGAN AVENUE PAVEMENT MARKINGS AND SIGNS					

STA.	SIDE	CODE	MESSAGE	SIZE	THICKNESS			SQ. POST TYPE 1	SQ. POST TYPE 2
					0.080 IN. THICK (SFT)	0.100 IN. THICK (SFT.)	DOUBLE SIDED 0.100 IN. THICK (SFT)	LFT.	LFT.
LINE "A" MICHIGAN AVE.									
26+30	RT	W9-1	LEFT LANE ENDS	36X36		9.00		11.5	
29+30	RT	W9-2	LANE ENDS MERGE RIGHT	36X36		9.00		11.5	
35+31	RT	R1-1	STOP	36X36		9.00		11.0	
35+46	RT	D3-1-2o	BROADWAY ST	42X12			3.50	12.0	
		D3-1-1o	MICHIGAN AVE	39X12			3.25		
		R3-9cP	BEGIN	30X12	2.50				
		R3-9b	TWO WAY LEFT TURN ONLY	24X36	6.00				
35+52	LT	R3-9dP	END	30X12	2.50			12.0	
		R3-9b	TWO WAY LEFT TURN ONLY	24X36	6.00				
39+98	RT	R1-1	STOP	36X36		9.00		11.0	
40+04	RT	D3-1-3o	EUCLOUD AVE	36X12			3.00	8.0	
		D3-1-1o	MICHIGAN AVE	39X12			3.25		
41+40	RT	D3-1-4o	E 136TH ST	33X12			2.75	8.0	
		D3-1-1o	MICHIGAN AVE	39X12			3.25		
42+17	RT	R1-1	STOP	36X36		9.00		11.0	
43+50	LT	R3-9b	TWO WAY LEFT TURN ONLY	24X36	6.00			11.0	
43+50	RT	R3-9b	TWO WAY LEFT TURN ONLY	24X36	6.00			11.0	
47+80	RT	R3-9dP	END	30X12	2.50			12.0	
		R3-9b	TWO WAY LEFT TURN ONLY	24X36	6.00				
47+84	LT	R3-9cP	BEGIN	30X12	2.50			12.0	
		R3-9b	TWO WAY LEFT TURN ONLY	24X36	6.00				
48+67	RT	R1-1	STOP	36X36		9.00		11.0	
48+87	RT	D3-1-5o	PARRISH AVE	36X12			3.00	8.0	
		D3-1-1o	MICHIGAN AVE	39X12			3.25		
50+10	RT	R3-7(L)	LEFT LANE MUST TURN LEFT	30X30	6.50			10.5	
53+67	LT	R3-8b	LEFT - THRU - RIGHT ARROWS ONLY	42X30		8.75		10.5	
55+70	LT	R3-7(L)	LEFT LANE MUST TURN LEFT	30X30	6.50			10.5	
56+81	LT	D3-1-6o	GRAND BLVD	36X12			3.00	10.5	
		D3-1-1o	MICHIGAN AVE	39X12			3.25		
		R6-2(R)	ONE WAY RIGHT	24X30	5.00				
		R6-2(L)	ONE WAY LEFT	24X30	5.00				
57+22	LT	R1-1	STOP	36X36		9.00		11.0	
58+80	LT	R3-8b	LEFT - THRU - RIGHT ARROWS ONLY	42X30		8.75		10.5	
60+00	LT	R3-7(R)	RIGHT LANE MUST TURN RIGHT	30X30	6.50			10.5	
60+37	RT	R1-1	STOP	36X36		9.00		11.0	
		R5-1	DO NOT ENTER (BACK OF STOP SIGN)	30X30	6.25				
60+95	RT	R1-1	STOP	36X36		9.00		11.0	
		R5-1	DO NOT ENTER (BACK OF STOP SIGN)	30X30	6.25				
61+05	RT	D3-1-7o	FIR ST	18X12			1.50	10.5	
		D3-1-1o	MICHIGAN AVE	39X12			3.25		
		R6-2(L)	ONE WAY LEFT	24X30	5.00				
		R6-2(R)	ONE WAY RIGHT	24X30	5.00				
61+24	RT	R3-7(L)	LEFT LANE MUST TURN LEFT	30X30	6.50			10.5	
62+17	RT	D3-1-8o	GUTHRIE ST	33X12			2.75	11.0	
		D3-1-1o	MICHIGAN AVE	39X12			3.25		
		M2-1	JCT	21X15	2.19				
		M1-5(912)	INDIANA 912	30X24	5.00				
62+26	LT	R1-1	STOP	36X36		9.00		11.0	
63+94	LT	R3-7(L)	LEFT LANE MUST TURN LEFT	30X30	6.50			10.5	
66+70	RT	R1-1	STOP	36X36		9.00		11.0	
63+86	RT	R3-7(L)	LEFT LANE MUST TURN LEFT	30X30	6.50			10.5	

STA.	SIDE	CODE	MESSAGE	SIZE	THICKNESS			SQ. POST TYPE 1	SQ. POST TYPE 2
					0.080 IN." THICK (SFT)	0.100 IN. THICK (SFT.)	DOUBLE SIDED 0.100 IN. THICK (SFT)	LFT.	LFT.
LINE "D" DICKEY RD									
16+15	LT	D3-1-9o	DICKEY RD	12X33			2.75	8.0	
		D3-1-10o	WATLING ST	12X36			3.00		
16+62	LT	R1-1	STOP	36X36		9.00		11.0	
17+87	RT	R3-7(L)	LEFT LANE MUST TURN LEFT	30X30	6.50			10.5	
SIGNALS OVERHEAD									
MICHIGAN AVE & DICKEY RD									
		D3-1-1o	MICHIGAN AVE	INTERNAL ILLUMUNATED					
		D3-2-1o	HEMLOCK ST -> / < DICKEY RD	INTERNAL ILLUMUNATED					
		D3-2-2o	DICKEY RD -> / < HEMLOCK ST	INTERNAL ILLUMUNATED					
		R10-10	LEFT TURN SIGNAL	30X36	7.50				
MICHIGAN AVE & DICKEY RD									
		D3-1-1o	MICHIGAN AVE	INTERNAL ILLUMUNATED					
		D3-1-3o	BLOCK AVE	INTERNAL ILLUMUNATED					
		R10-12	LEFT TURN YIELD ON GREEN	30X36	7.50				
TOTALS					146.19	125.50	48.00	361.50	0.00

SIGN SUMMARY TABLE		
DESCRIPTION	UNIT	QUANTITY
SIGN POST, SQUARE, TYPE 1, REINFORCED ANCHOR BASE	LFT.	361.50
SIGN, SHEET, AND SUPPORTS, REMOVE (UNDISTRIBUTED)	EACH	28.00
SIGN, SHEET, WITH LEGEND, 0.080 IN. THICKNESS	SFT.	146.19
SIGN, DOUBLED FACED, SHEET, WITH LEGEND, 0.100 IN THICKNESS	SFT.	48.00
SIGN, SHEET, WITH LEGEND, 0.100 IN. THICKNESS	SFT.	125.50
ILLUMINATED SIGN	EACH	4.00

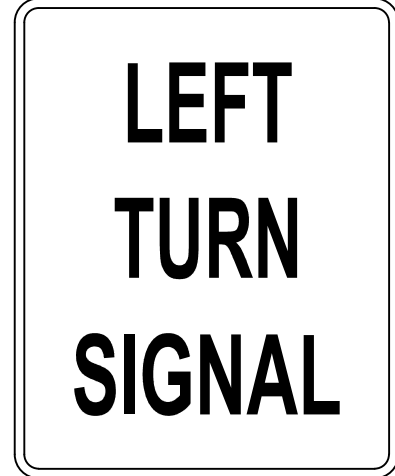
PAVEMENT MARKING SUMMARY TABLE		
PAY ITEM		TOTALS
		UNITS
④0	LINE, THERMOPLASTIC, BROKEN, WHITE, 4" (10' SEGMENT, 30' GAP)	714 Lft
④1	LINE, THERMOPLASTIC, SOLID, YELLOW, 4"	9104 Lft
④2	LINE, THERMOPLASTIC, SOLID, WHITE, 4"	2071 Lft
④3	LINE, THERMOPLASTIC, BROKEN, YELLOW, 4" (10' SEGMENT, 30' GAP)	577 Lft
④8	TRANSVERSE MARKINGS, THERMOPLASTIC, STOP LINE, 24"	568 Lft
⑤0	TRANSVERSE MARKING, THERMOPLASTIC, CROSSHATCH LINE, WHITE, 12" (45° - 2-FT. SPACING)	226 Lft
⑤1	TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 6"	101 Lft
⑤2	TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 24"	1138 Lft
ONLY	PAVEMENT MESSAGE MARKINGS, THERMOPLASTIC, WORD (ONLY)	26 Each
	PAVEMENT MESSAGE MARKINGS, THERMOPLASTIC, LANE INDICATION ARROWS	30 Each
	PAVEMENT MESSAGE MARKINGS, THERMOPLASTIC, LANE INDICATION ARROWS (LANE-REDUCTION TRANSITION)	

RECOMMENDED FOR APPROVAL _____	
DESIGN ENGINEER	DATE
DESIGNED: B.M.S./C.E.S.	DRAWN: B.M.S./T.F.S.
CHECKED: B.M.S./C.E.S.	CHECKED: S.H.S.

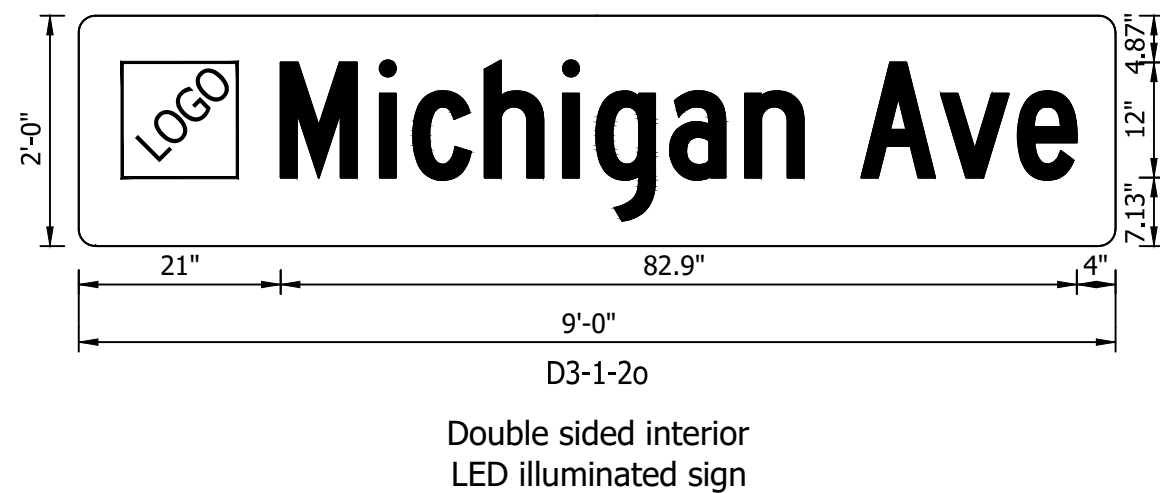
INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE
PAVEMENT MARKINGS AND SIGNS

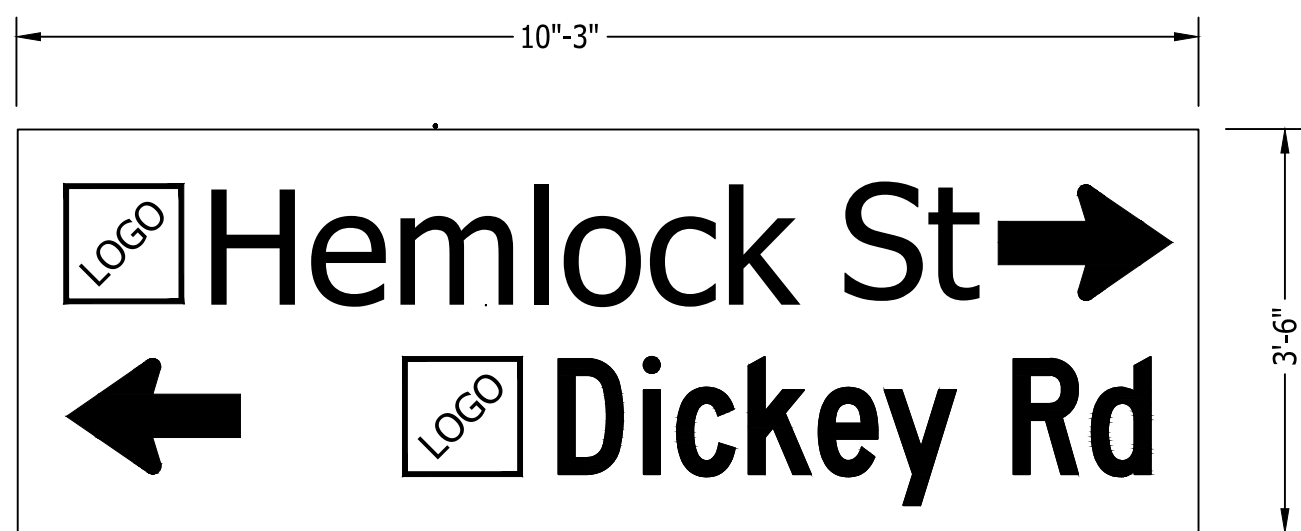
HORIZONTAL SCALE	BRIDGE FILE
N/A	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	40 of XX
CONTRACT	PROJECT
R-44001	2101118



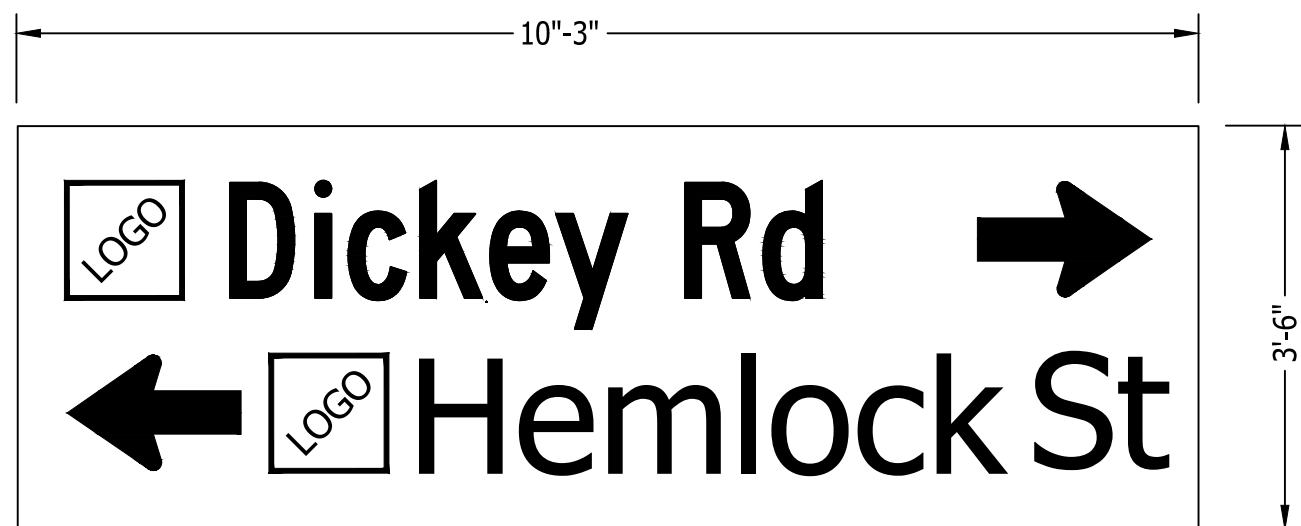
R10-10L
30"X36"



Double sided interior
LED illuminated sign

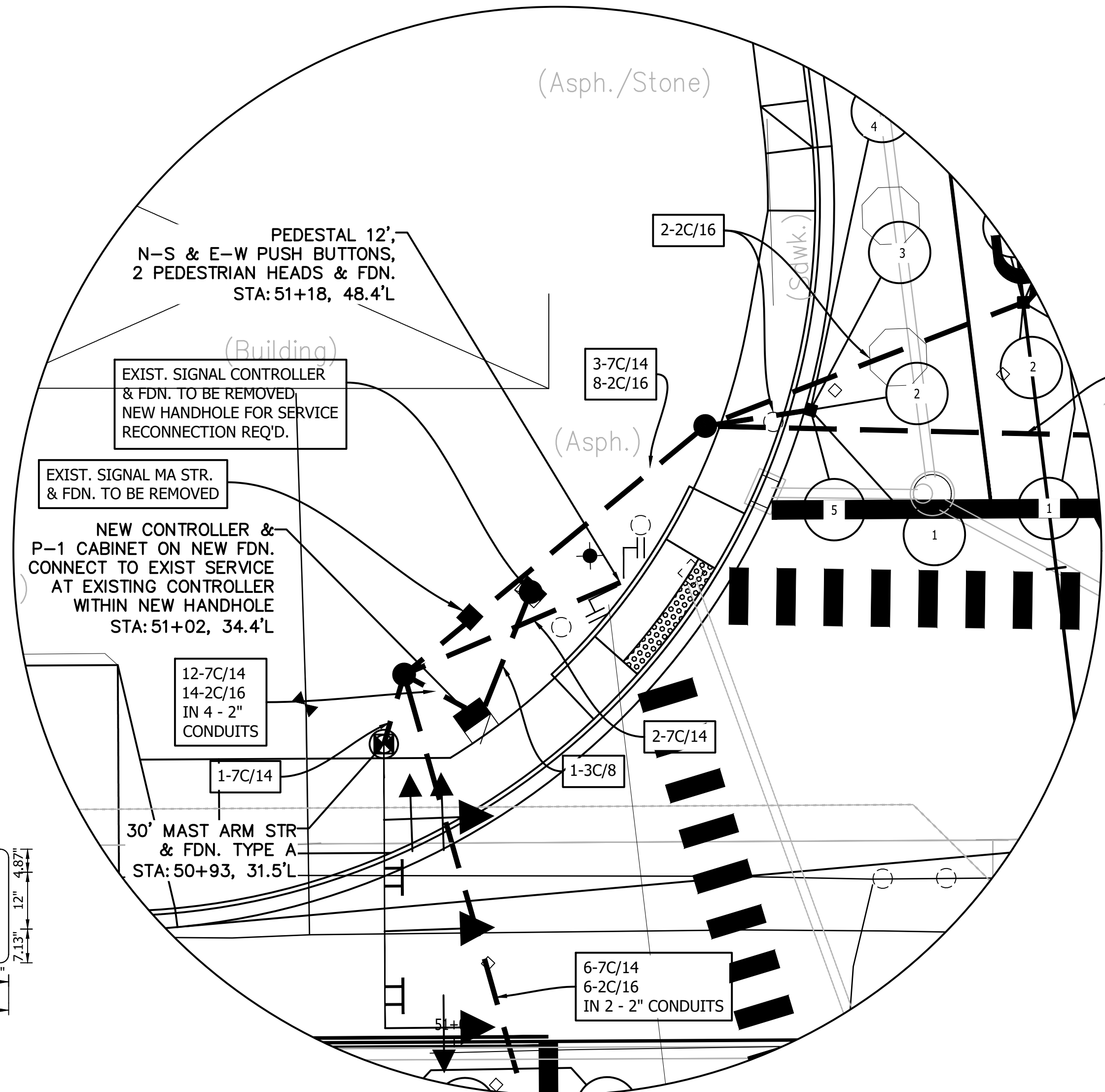


D3-2-1o
Facing NE Bound Michigan Ave.



D3-2-2o
Facing SW Bound Michigan Ave.
Overhead Back to Back
Internal LED Illuminated
Signs

All White Copy on
Red Background



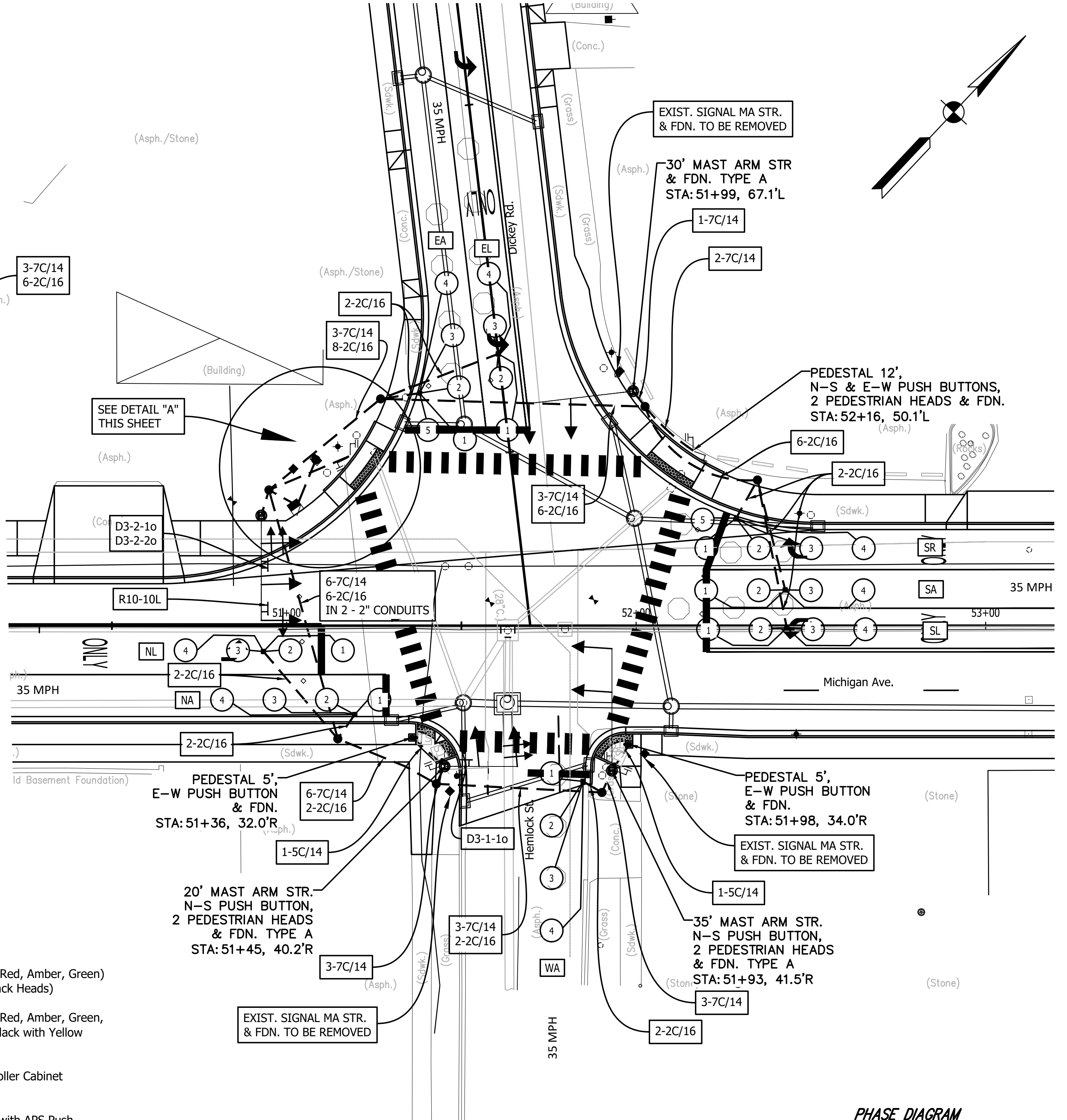
DETAIL "A"
SCALE 1" = 10'

OVERHEAD (D3-1-#o) STREET NAME SIGN NOTES:

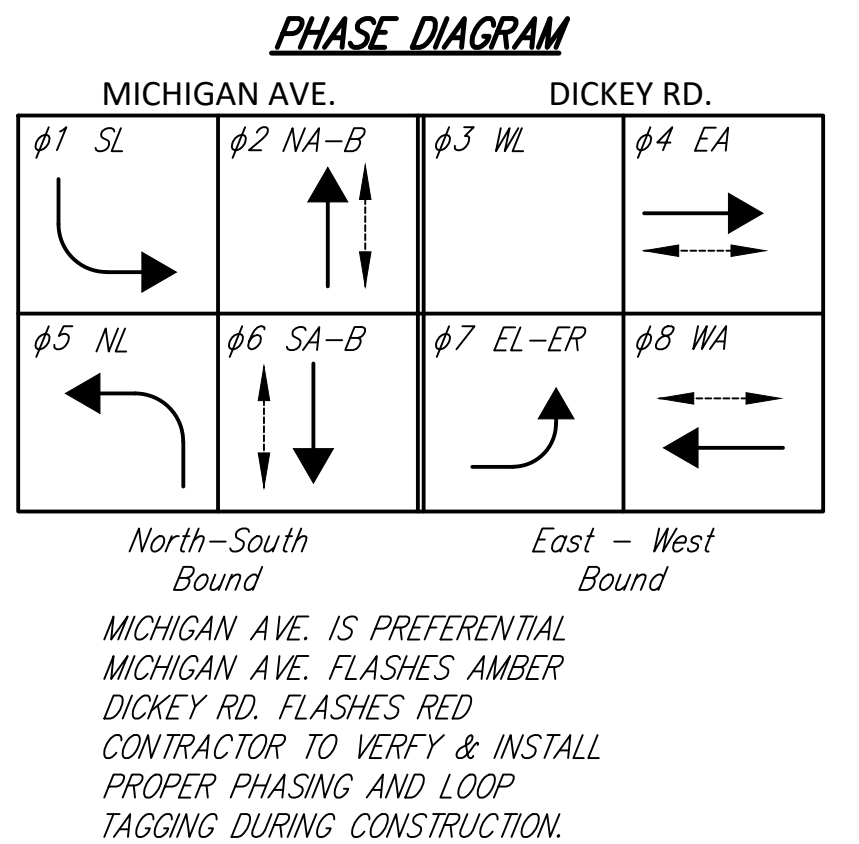
1. All overhead street name signs to be white copy on red background LED internal illuminated, with black metal frame.
2. Actual sign size may vary according to manufacture recommendations.
3. Contractor to verify all street names prior to ordering any signs.
4. Sign shop drawings are to be submitted for review and approval prior to ordering any sign materials.

LEGEND

- Traffic Signal Head, 3-Section 12" All LED (Red, Amber, Green) Back Plates (Black with Yellow Border & Black Heads)
- Traffic Signal Head, 5-Section 12" All LED (Red, Amber, Green, Amber Arrow, Green Arrow) Back Plates (Black with Yellow Border and Black Heads)
- New Controller and Cabinet, P-1 and Controller Cabinet Foundation, P1
- New (5' or 12') Pedestal (Black Structure), with APS Push Button and R10-3a Sign on Signal Pole Foundation 24 in. x 24 in. x 36 in. (See Ramp Details for Locations)
- New Signal Cantilever Structure Single Arm (Size) Ft. on Signal Cantilever Structure, Drilled Shaft Foundation, A (Black Structure)
- New Pedestrian Signal Head, Countdown, 18 in. (Black Heads)
- New Signal Handhole
- New Detector Housing
- New 2 Inch Galvanized Steel Conduit
- New Vehicle Loop Detection
- D3-# New Overhead Street Name Sign



LOOP TAGGING TABLE			
LANE	TAG NUMBER	COUNTING LOOPS	NON-COUNTING LOOPS
NL	NL5-1,2,3,4	4	1,2,3
NA	NA2-1,2,3,4	ALL	
WA	WA8-1,2,3,4	1,4	2,3
SL	SL1-1,2,3,4	4	1,2,3
SA	SA6-1,2,3,4	ALL	
SR	SR7-1,2,3,4,5	1,5	2,3,4
EL	EL7-1,2,3,4	2,3	1,4
EA	EA4-1,2,3,4,5	1,5	2,3,4



NOTES:

1. New signal controller to be connected to the existing signal service with a handhole at or near the existing controller, or as directed.
2. See ramp detail for push button pedestals locations.
3. Unused signal handholes are to be removed.
4. Additional conduits may be required per INDOT & NEC conduit capacity full requirements.

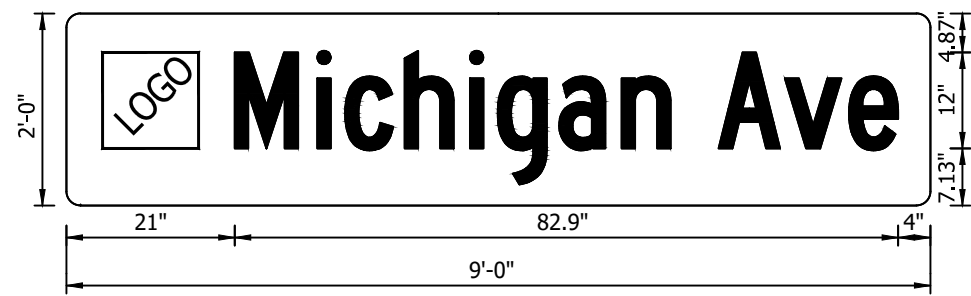
RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: T.F.S. DRAWN: J.P.H.
CHECKED: D.W.C. CHECKED: T.F.S.

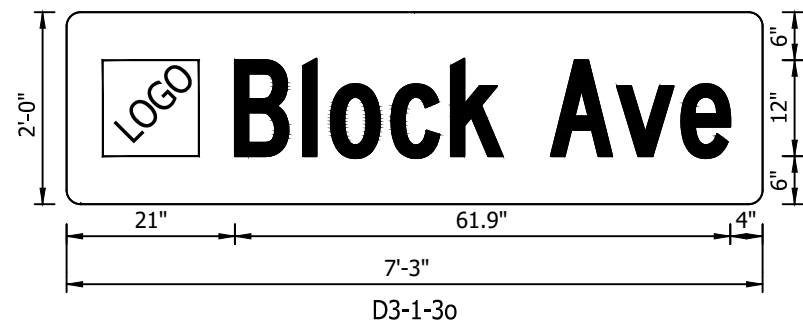
INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE
LIGHTING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	41 of XX
CONTRACT	PROJECT
R-44001	2101118



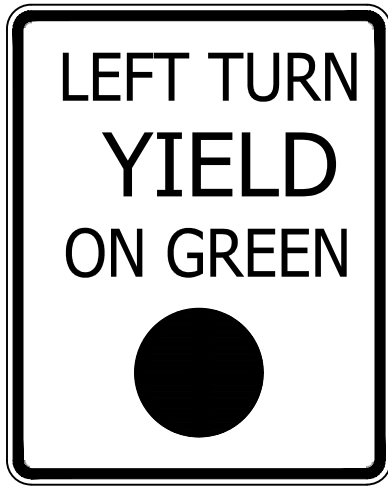
Single sided interior LED illuminated sign



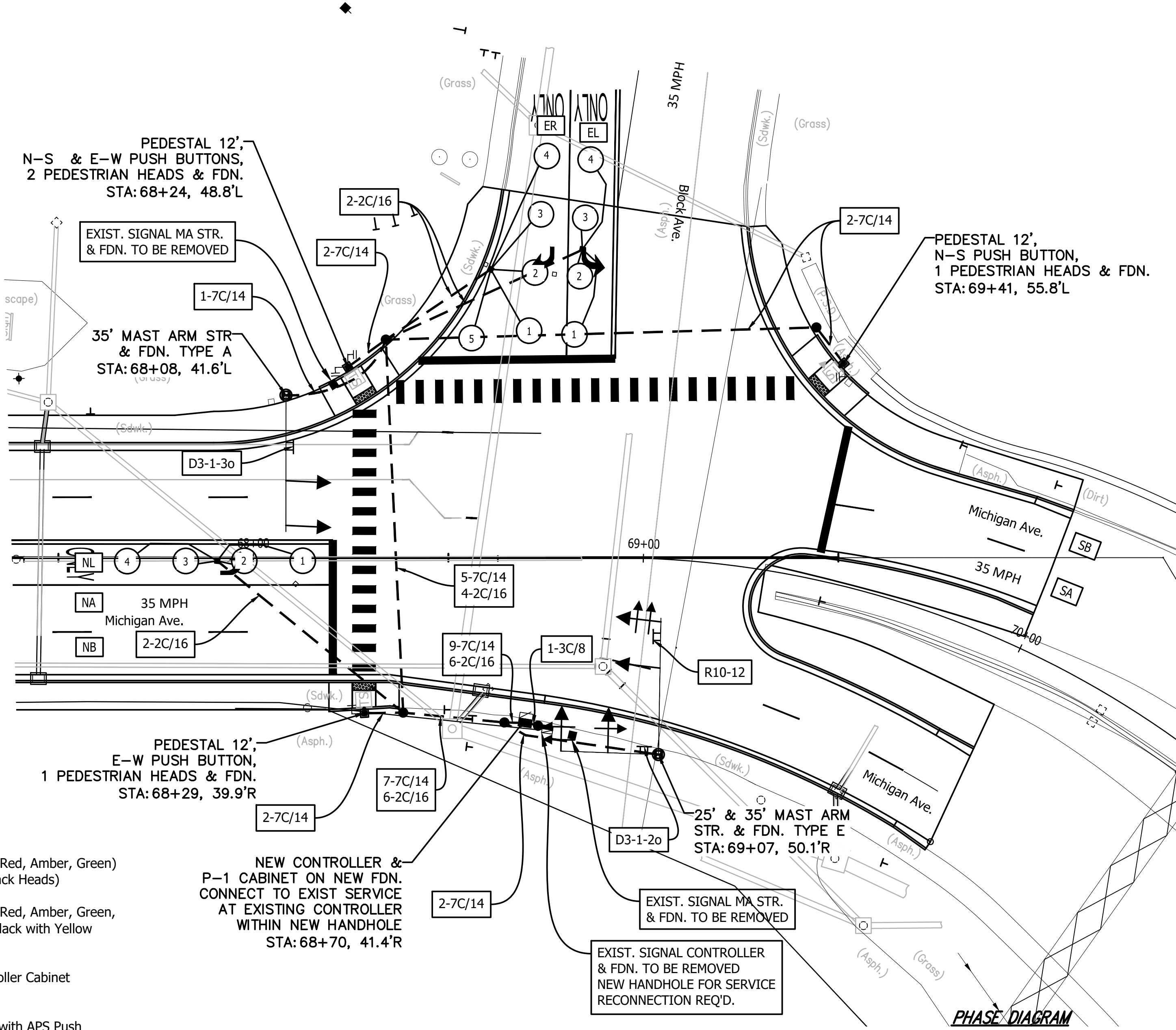
Double sided interior LED illuminated sign

OVERHEAD (D3-1-#o) STREET NAME SIGN NOTES:

1. All overhead street name signs to be white copy on red background LED internal illuminated, with black metal frame.
2. Actual sign size may vary according to manufacture recommendations.
3. Contractor to verify all street names prior to ordering any signs.
4. Sign shop drawings are to be submitted for review and approval prior to ordering any sign materials.



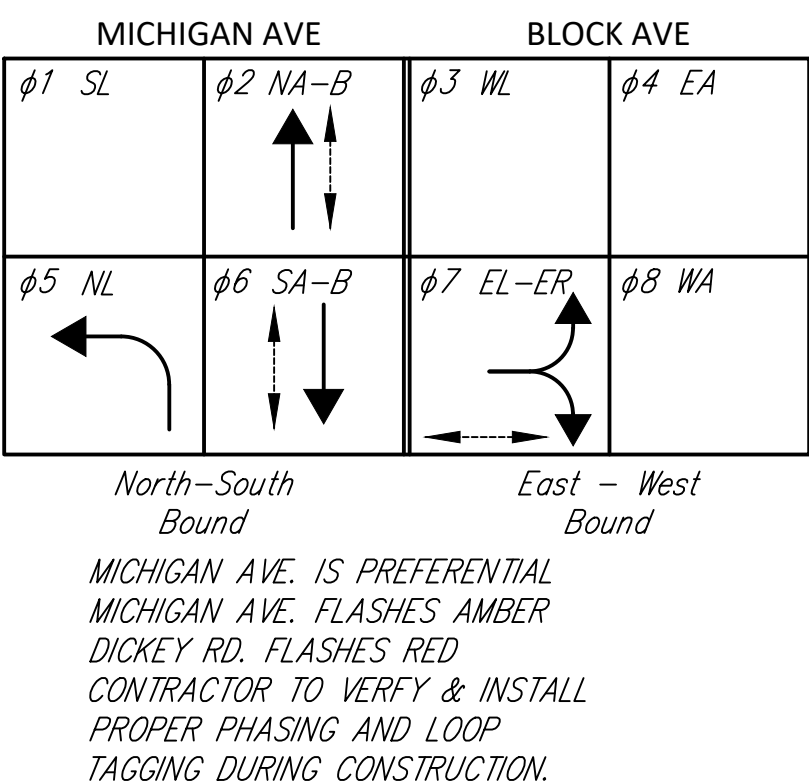
R10-12
30"x36"



LEGEND

- Traffic Signal Head, 3-Section 12" All LED (Red, Amber, Green) Back Plates (Black with Yellow Border & Black Heads)
- Traffic Signal Head, 5-Section 12" All LED (Red, Amber, Green, Amber Arrow, Green Arrow) Back Plates (Black with Yellow Border and Black Heads)
- New Controller and Cabinet, P-1 and Controller Cabinet Foundation, P1
- New (5' or 12') Pedestal (Black Structure), with APS Push Button and R10-3a Sign on Signal Pole Foundation 24 in. x 24 in. x 36 in. (See Ramp Details for Locations)
- New Signal Cantilever Structure Single Arm (Size) Ft. on Signal Cantilever Structure, Drilled Shaft Foundation, A (Black Structure)
- New Pedestrian Signal Head, Countdown, 18 in. (Black Heads)
- New Signal Handhole
- New Detector Housing
- New 2 Inch Galvanized Steel Conduit
- New Vehicle Loop Detection
- New Overhead Street Name Sign

LOOP TAGGING TABLE			
LANE	TAG NUMBER	COUNTING LOOPS	NON-COUNTING LOOPS
NL	NL5-1,2,3,4	4	1,2,3
EL	EL7-1,2,3,4	ALL	
ER	ER7-1,2,3,4,5	ALL	



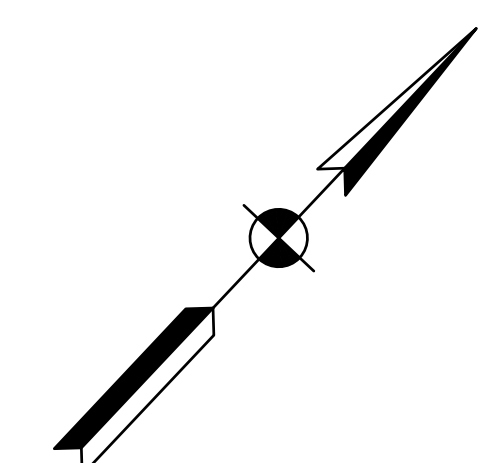
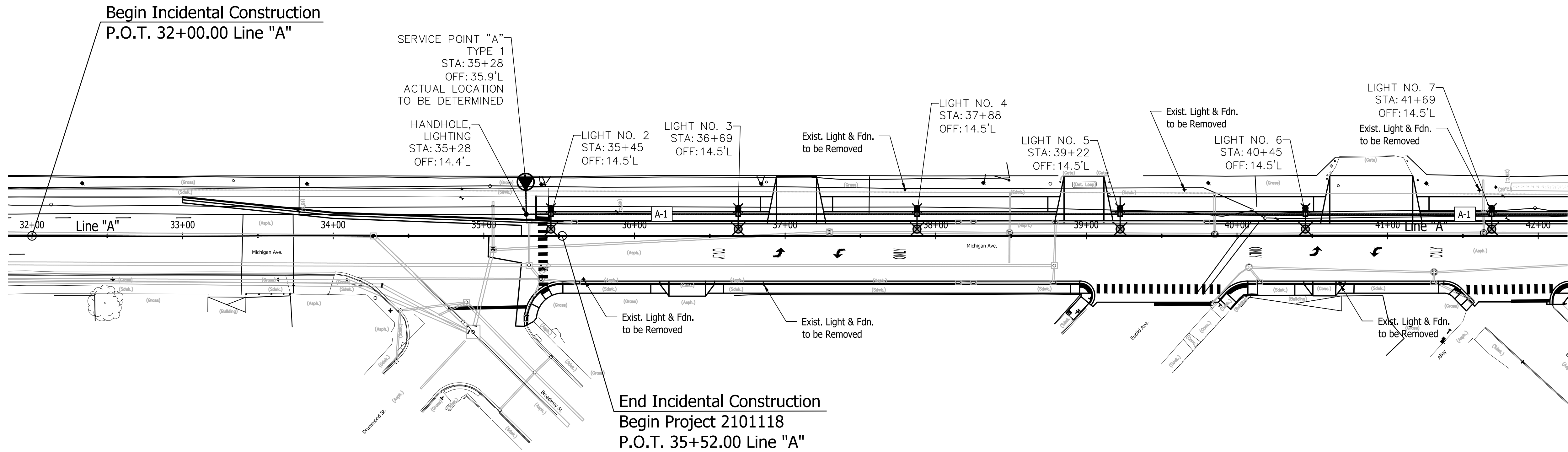
- NOTES:
1. New signal controller to be connected to the existing signal service with a handhole at or near the existing controller, or as directed.
 2. See ramp detail for push button pedestals locations.
 3. Unused signal handholes are to be removed.
 4. Additional conduits may be required per INDOT & NEC conduit capacity full requirements.

RECOMMENDED FOR APPROVAL		
DESIGN	ENGINEER	DATE
DESIGNED:	T.F.S.	DRAWN:
CHECKED:	D.W.C.	CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE
LIGHTING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	42 of XX
CONTRACT	PROJECT
R-44001	2101118



LEGEND

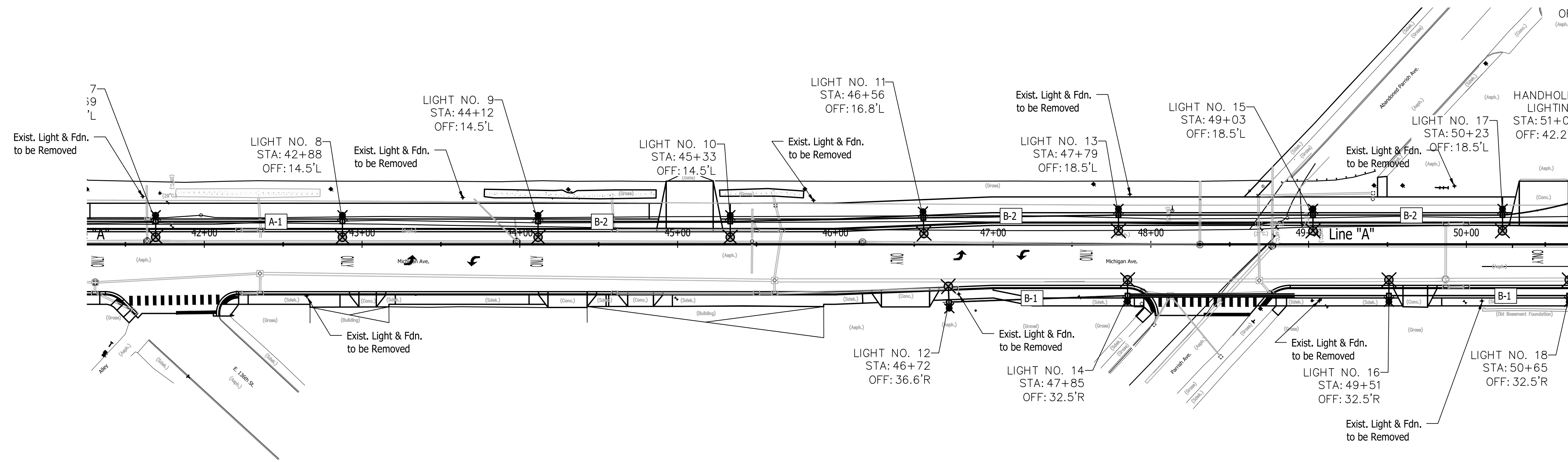
OVERHEAD LUMINAIRE, 25 FT. MOUNTING HEIGHT AND POST TOP LUMINAIRE 12 FT. MOUNTING HEIGHT AND 3 FT. DIA. x 8 FT. FOUNDATION (ANCHOR BASE)

SERVICE POINT TYPE 2 WITH WEATHER HEAD, RISER AND 5 FT. UTILITY CONNECTION DROP ON WOOD POLE

WIRE, NO. 6, COPPER, IN PLASTIC DUCT, IN TRENCH, 4 I/C

WIRE, NO. 6, COPPER, IN PLASTIC DUCT, IN CONDUIT 1C

LIGHTING CIRCUIT NUMBER

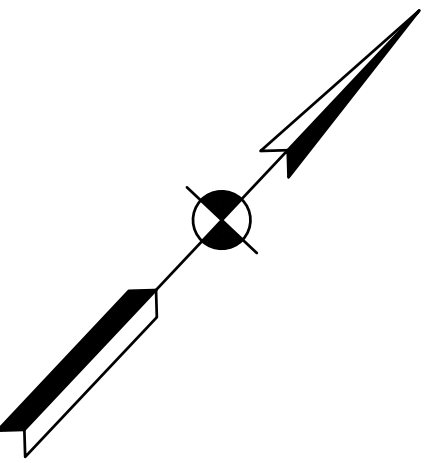
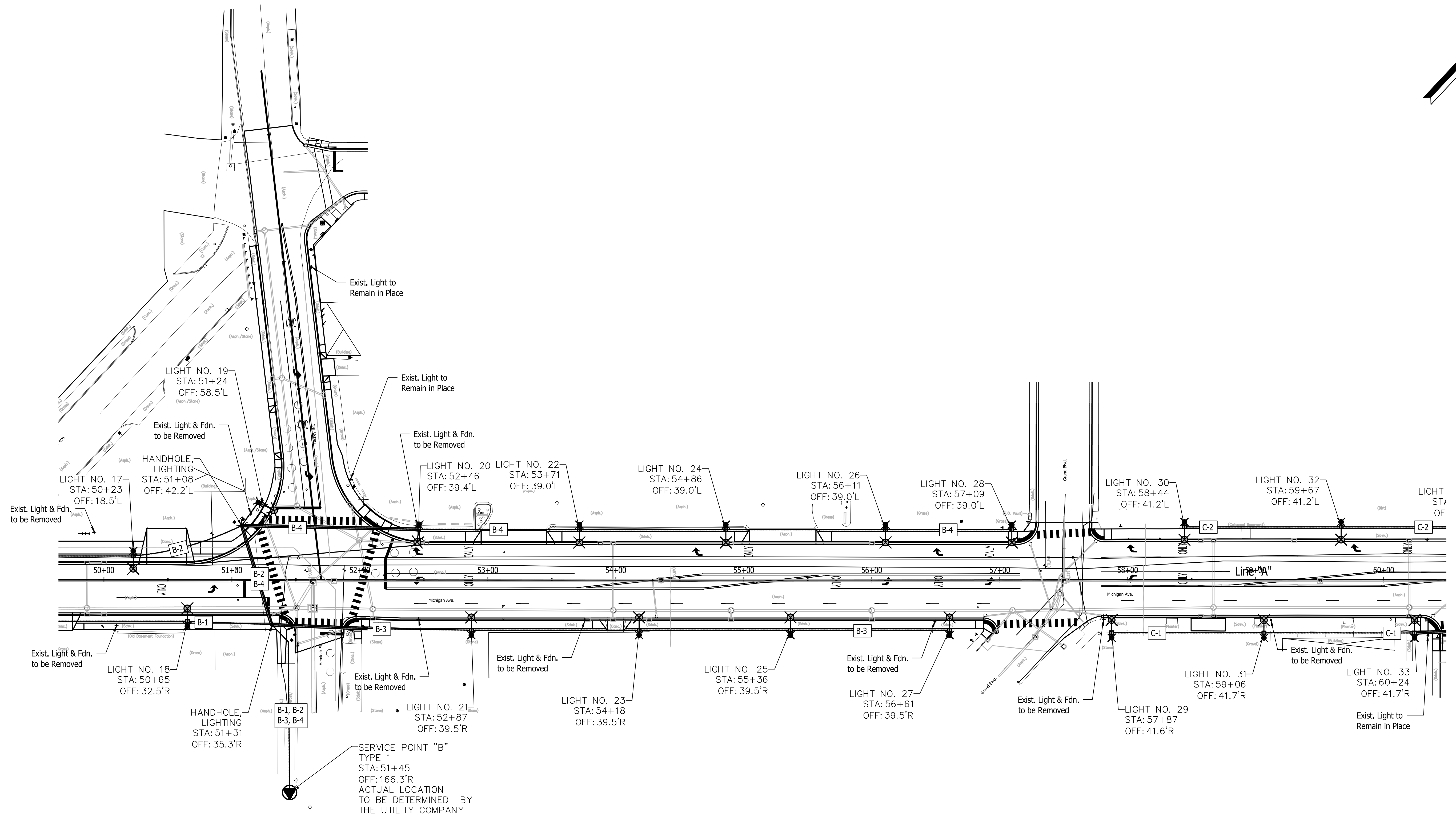


RECOMMENDED FOR APPROVAL	
DESIGN ENGINEER	DATE
DESIGNED: T.F.S.	DRAWN: J.P.H.
CHECKED: D.W.C.	CHECKED: T.F.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

MICHIGAN AVENUE
LIGHTING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 40'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	43 of XX
CONTRACT	PROJECT
R-44001	2101118



RECOMMENDED FOR APPROVAL	
DESIGN ENGINEER	DATE
DESIGNED: T.F.S.	DRAWN: J.P.H.
CHECKED: D.W.C.	CHECKED: T.F.S.

INDIANA
DEPARTMENT OF TRANSPORTATION

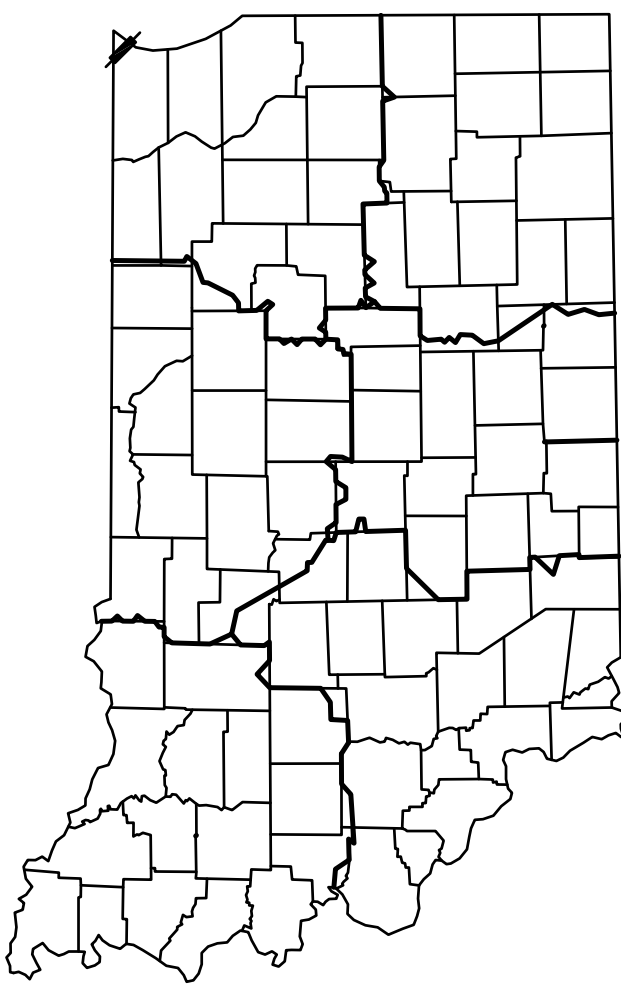
MICHIGAN AVENUE
LIGHTING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 40'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101118
SURVEY BOOK	SHEETS
N/A	44 of XX
CONTRACT	PROJECT
R-44001	2101118

INDIANA

CITY OF EAST CHICAGO

MICHIGAN AVENUE PHASE 2 RECONSTRUCTION PROJECT



PROJECT LOCATION SHOWN BY

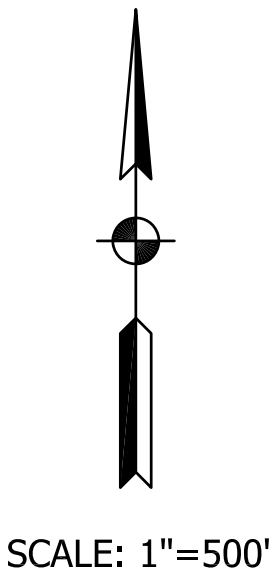
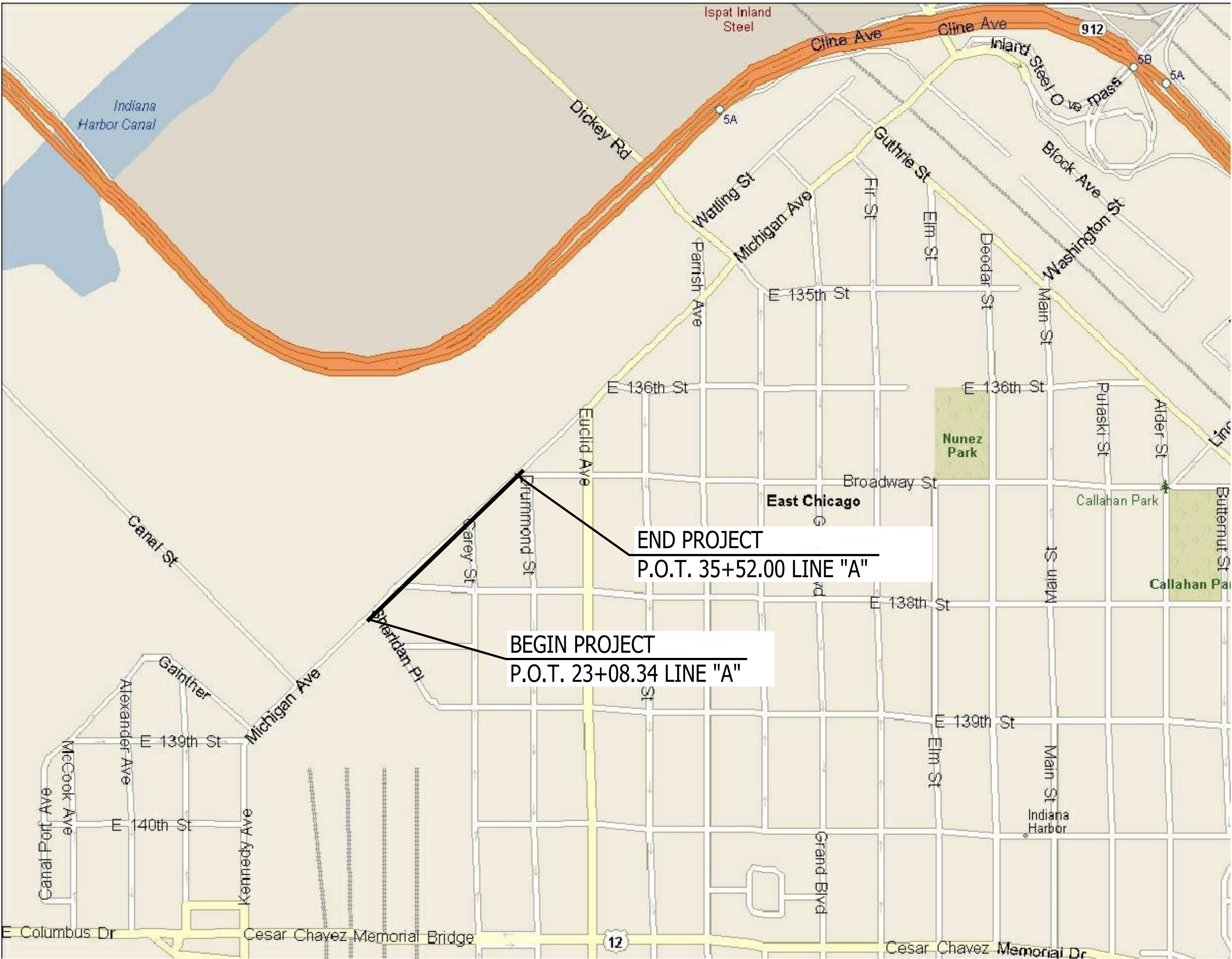
CITY OF EAST CHICAGO

BOARD OF PUBLIC WORKS

Valeriano Gomez, President

William Allen, Vice President

Winna Guzman, Member



THESE PLANS PREPARED BY:



5925 Lakeside Blvd.
Indianapolis, Indiana 46278
(317) 290-9549

CITY OF EAST CHICAGO

SEC. 21 & 22, T37N, R9W
NORTH TOWNSHIP
LAKE COUNTY, INDIANA

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2023 AND
THE CITY OF EAST CHICAGO STANDARDS TO
BE USED WITH THESE PLANS

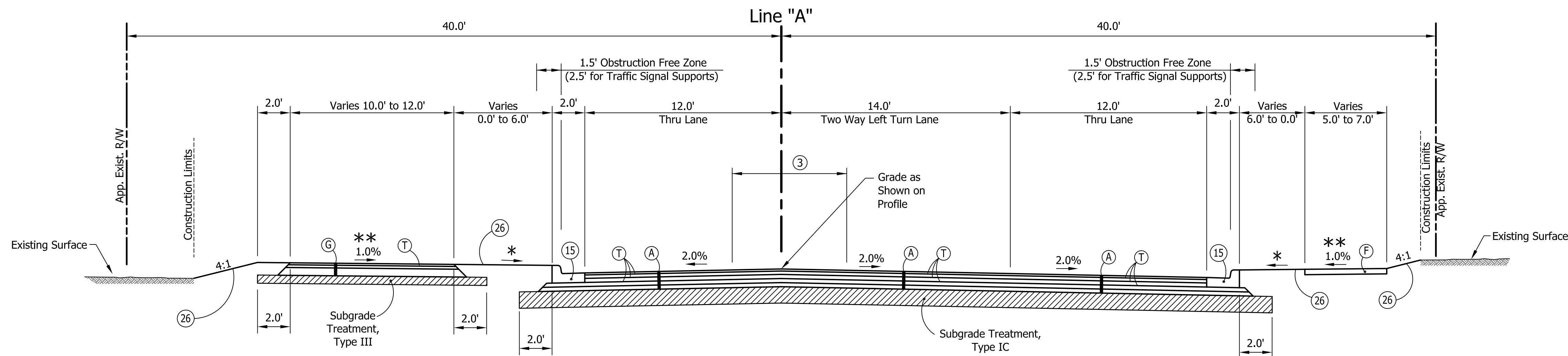
PLANS PREPARED BY:	FIRST GROUP ENGINEERING, INC.	(317) 290-9549
		PHONE NUMBER
CERTIFIED BY:		DATE
APPROVED FOR LETTING:		

CONTRACT	PROJECT
17-0066	MICHIGAN AVE. - EAST CHICAGO

DESIGNATION

SHEETS

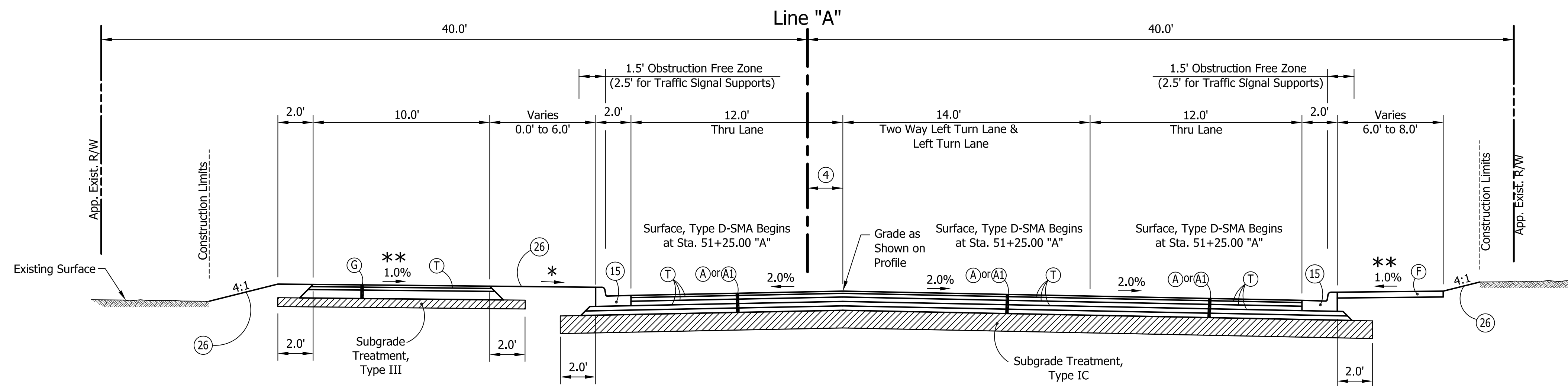
1 of XXX



Typical Cross Section
Sta. 26+00.00 to Sta. 27+90.00 Line "A"
SCALE: 1/4" = 1'-0"

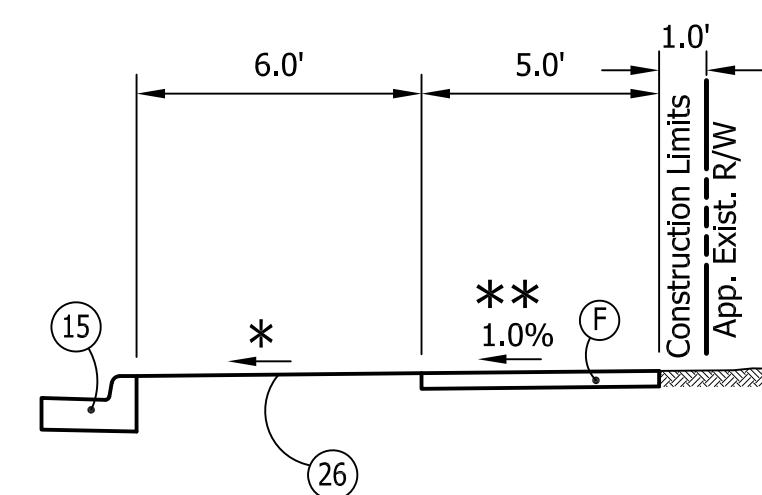
* Slope Varies, 6:1 Max.
** Slope Varies, Slope 1.0% Unless Shown
Otherwise on Cross Sections (2.0% Max.)

③ Profile Grade
3.0' Lt. From Station
26+00.00 to 26+50.00
Varies 3.0' Lt. to 4.0' Rt. From
Station 26+50.00 to 27+90.00

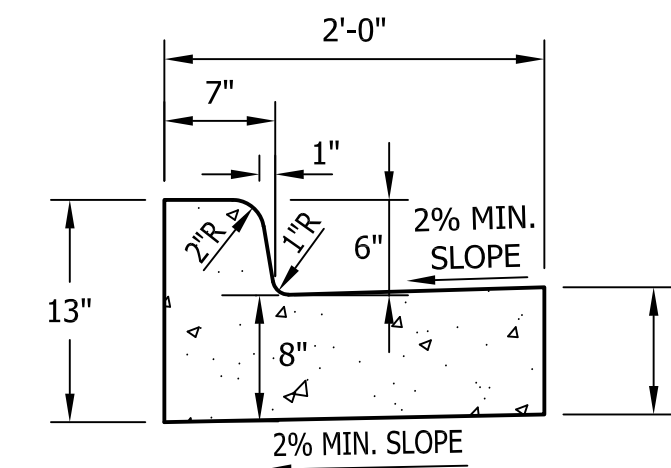


Typical Cross Section
Sta. 27+90.00 to Sta. 35+52.00 Line "A"
SCALE: 1/4" = 1'-0"

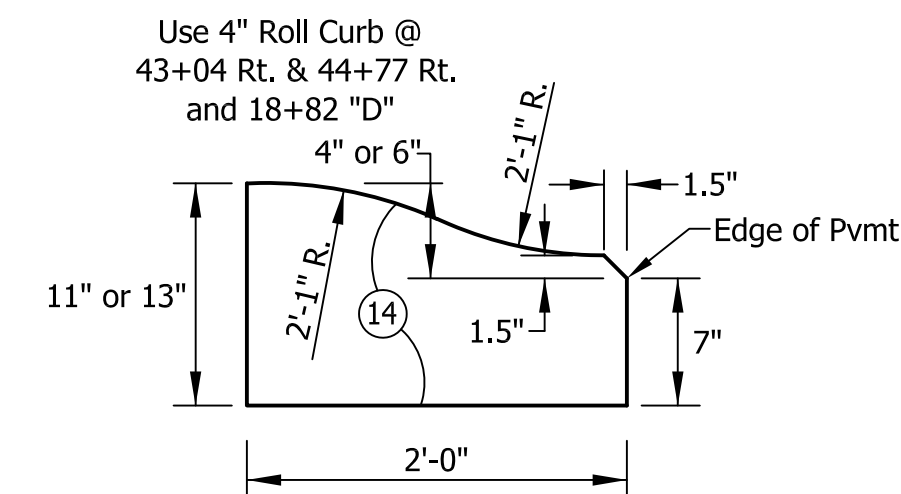
④ Profile Grade
4.0' Rt. From Station
27+90.00 to 46+00.00
Varies 4.0' Rt. to 0.0' From
Station 46+00.00 to 47+00.00
Line "A" From Station
47+00.00 to 51+50.00



Alternate Sidewalk Section
Sta. 47+00.00 to Sta. 51+50.00 Rt. Line "A"
SCALE: 1/4" = 1'-0"



Combined Concrete Curb & Gutter
SCALE: 1" = 1'



Roll Curb, Concrete Detail
SCALE: 1" = 1'

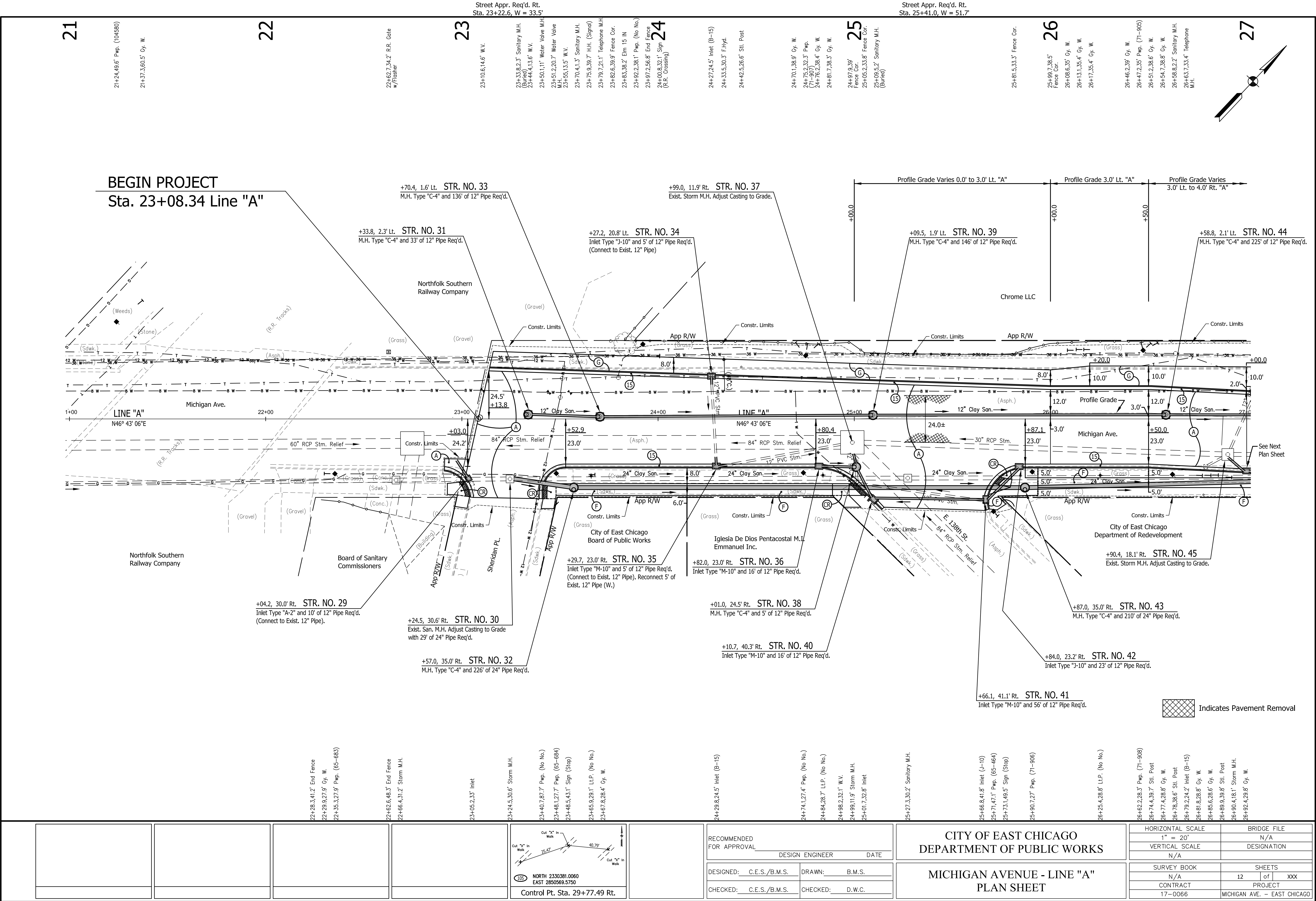
- Legend**
- ① 165 #/syd. Hma Surface Type D, 9.5 mm On 275 #/syd. Hma Intermediate Type D, 19.0mm On 660 #/syd. Hma Base Type D, 25.0mm (2-Lifts) On 3" Compacted Aggregate No. 53, On Subgrade Treatment Type IC
 - ①1 165 #/syd. Hma Surface Type D-SMA, 9.5 mm On 275 #/syd. Hma Intermediate Type D, 19.0mm On 660 #/syd. Hma Base Type D, 25.0mm (2-Lifts) On 3" Compacted Aggregate No. 53, On Subgrade Treatment Type IC
 - ①1 Conc. Pvmt. For Driveways, 6", On Subgrade Treatment Type II
 - ①2 Conc. Pvmt. For Driveways, 8", On Subgrade Treatment Type II
 - ①R Curb Ramp, Concrete
 - ①F Sidewalk, Concrete
 - ①FT Sidewalk Elevation Transition
 - ①G HMA Sidewalks:
140 #/syd. Hma Surface Type B On 220 #/syd. Hma Intermediate Type B On 6" Compacted Aggregate No. 53 Subgrade Treatment Type III
 - ①GT HMA Elevation Transition
 - ①H HMA for Median:
140 #/syd. Hma Surface Type B On 220 #/syd. Hma Intermediate Type B On 6" Compacted Aggregate No. 53
 - ①R Milling, Asphalt 1 1/2" with 165 #/syd. Hma Surface Type D-SMA, 9.5 mm
 - ①T Asphalt Material For Tack Coat
 - ①14 Concrete Roll Curb
 - ①15 Combined Concrete Curb And Gutter
 - ①26 Sodding (Nursery) W/topsoil (4" As Required Under Sodding)

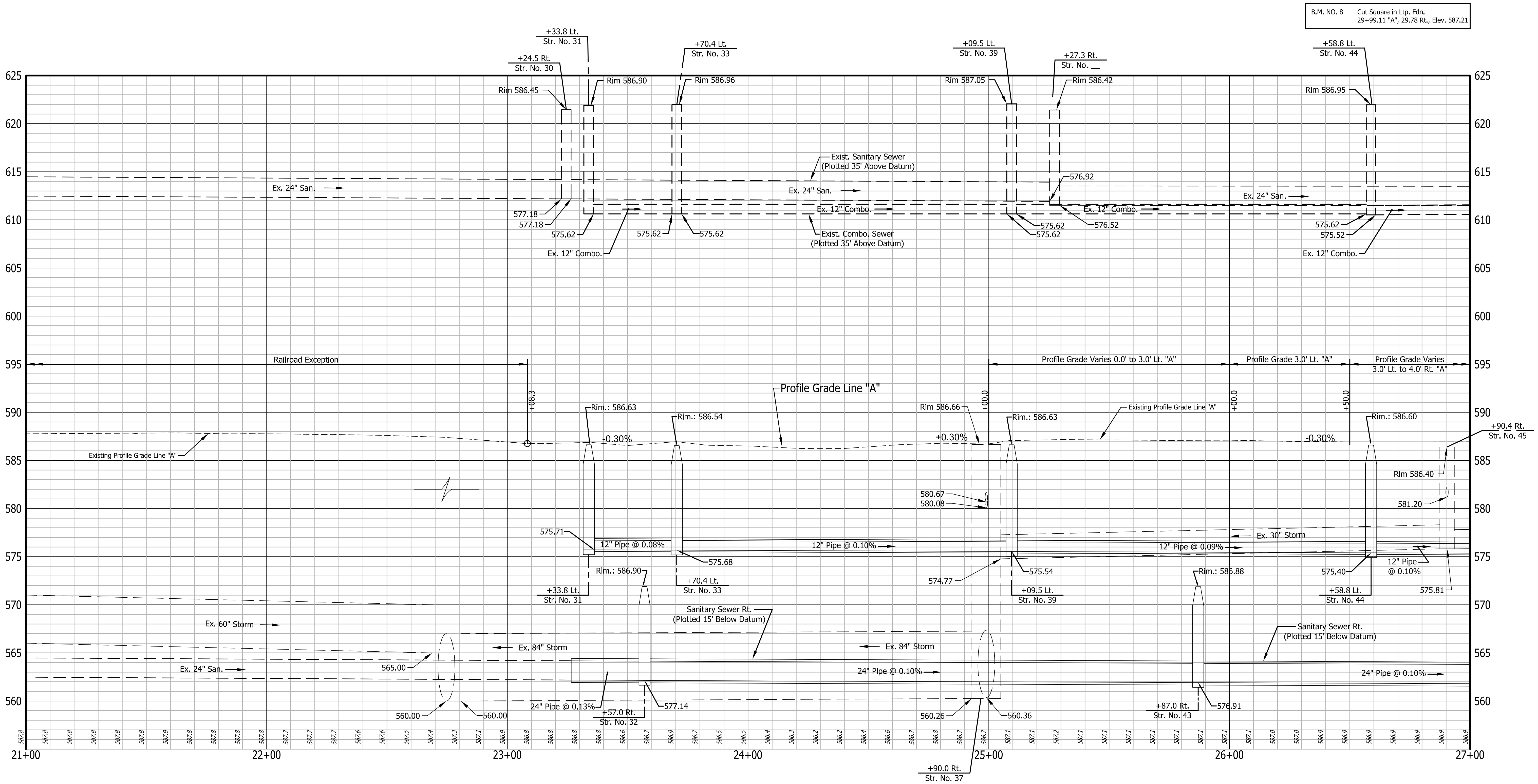
RECOMMENDED FOR APPROVAL	
DESIGNED: C.E.S./B.M.S.	DRAWN: C.E.S./B.M.S.
CHECKED: C.E.S./B.M.S.	CHECKED: D.W.C.

CITY OF EAST CHICAGO
DEPARTMENT OF PUBLIC WORKS

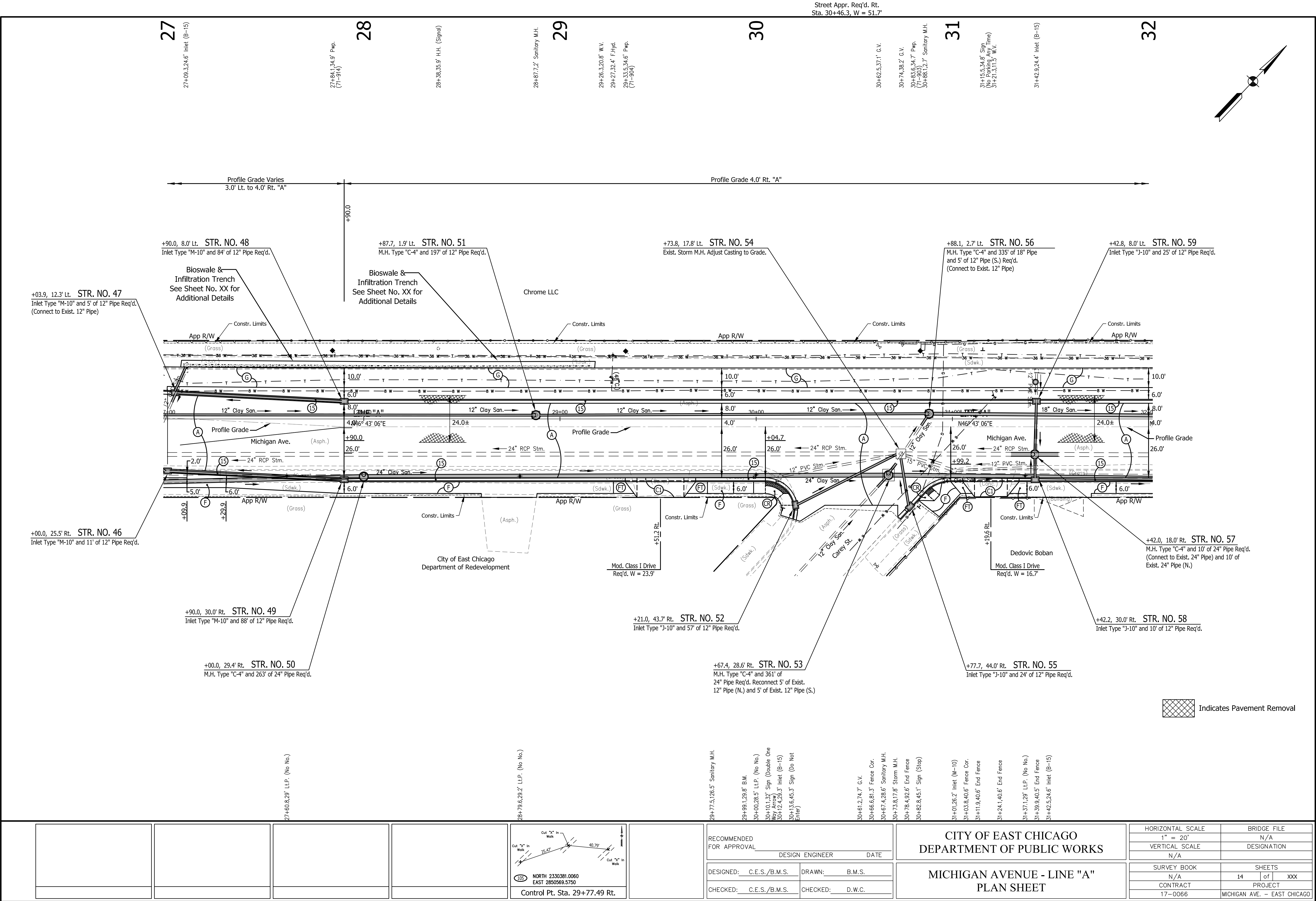
MICHIGAN AVENUE
TYPICAL CROSS SECTIONS

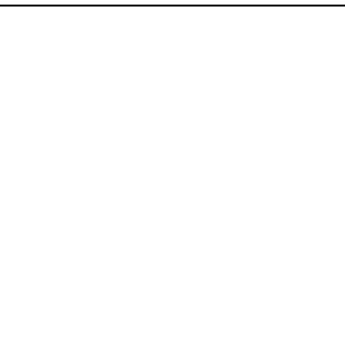
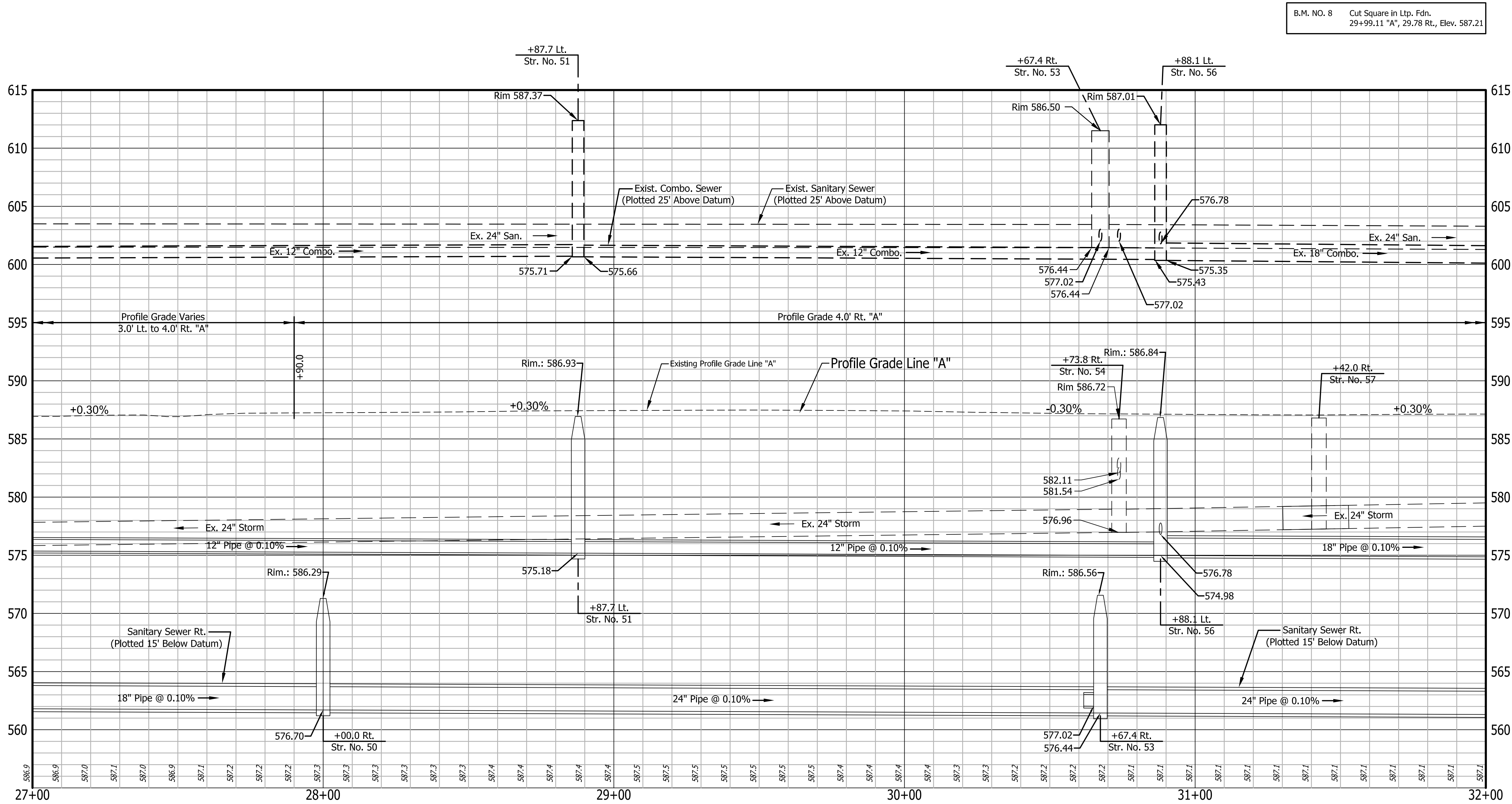
HORIZONTAL SCALE	BRIDGE FILE
1/4" = 1'-0"	N/A
VERTICAL SCALE	DESIGNATION
N/A	N/A
SURVEY BOOK	SHEETS
N/A	5 of XXX
CONTRACT	PROJECT
17-0066	MICHIGAN AVE. - EAST CHICAGO





	RECOMMENDED FOR APPROVAL		CITY OF EAST CHICAGO DEPARTMENT OF PUBLIC WORKS		HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
	DESIGNED: C.E.S./B.M.S.		DRAWN: B.M.S.		VERTICAL SCALE 1" = 5'	DESIGNATION
	CHECKED: C.E.S./B.M.S.		CHECKED: D.W.C.		SURVEY BOOK N/A	SHEETS 13 of xxx
					CONTRACT 17-0066	PROJECT MICHIGAN AVE. - EAST CHICAGO

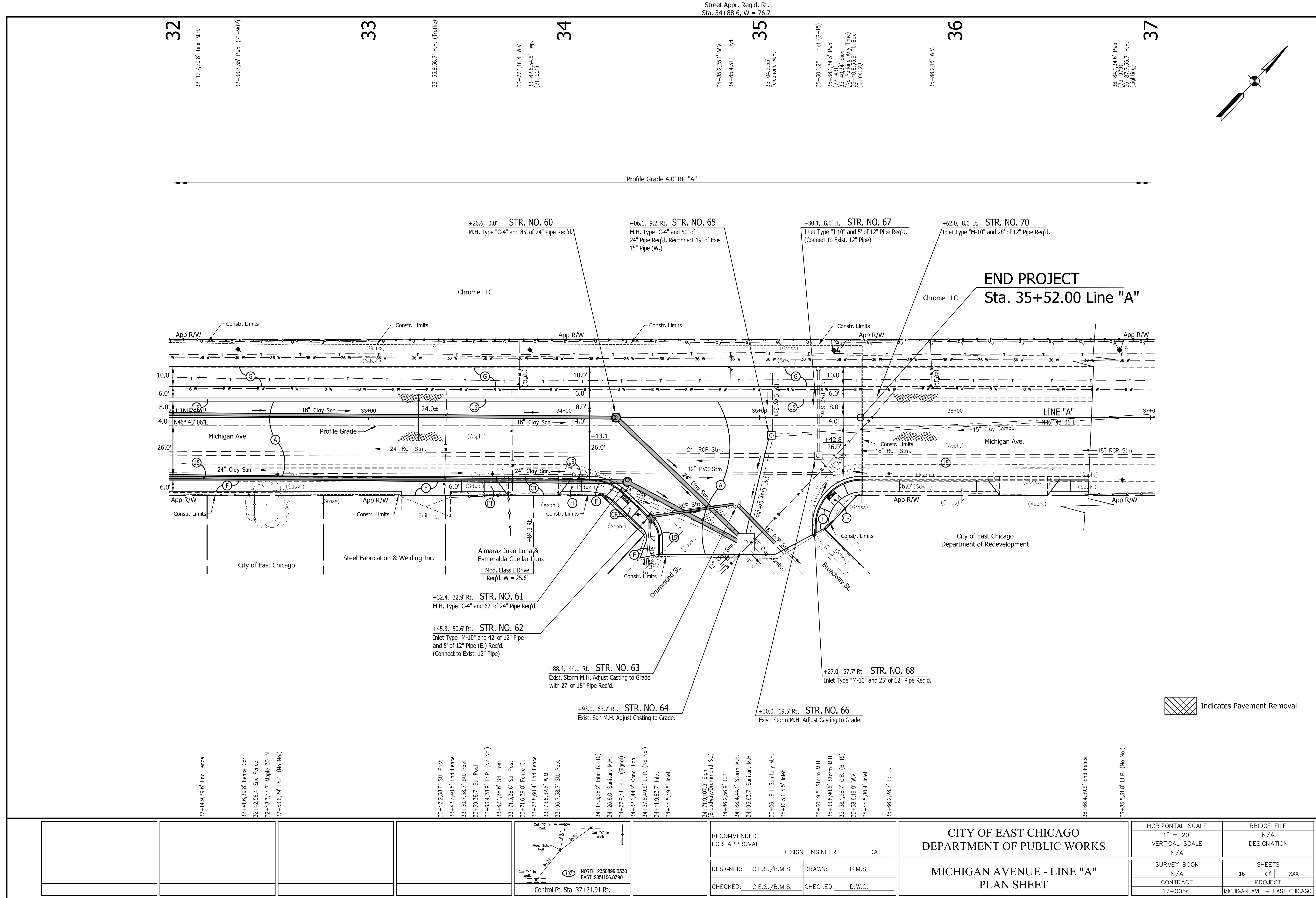


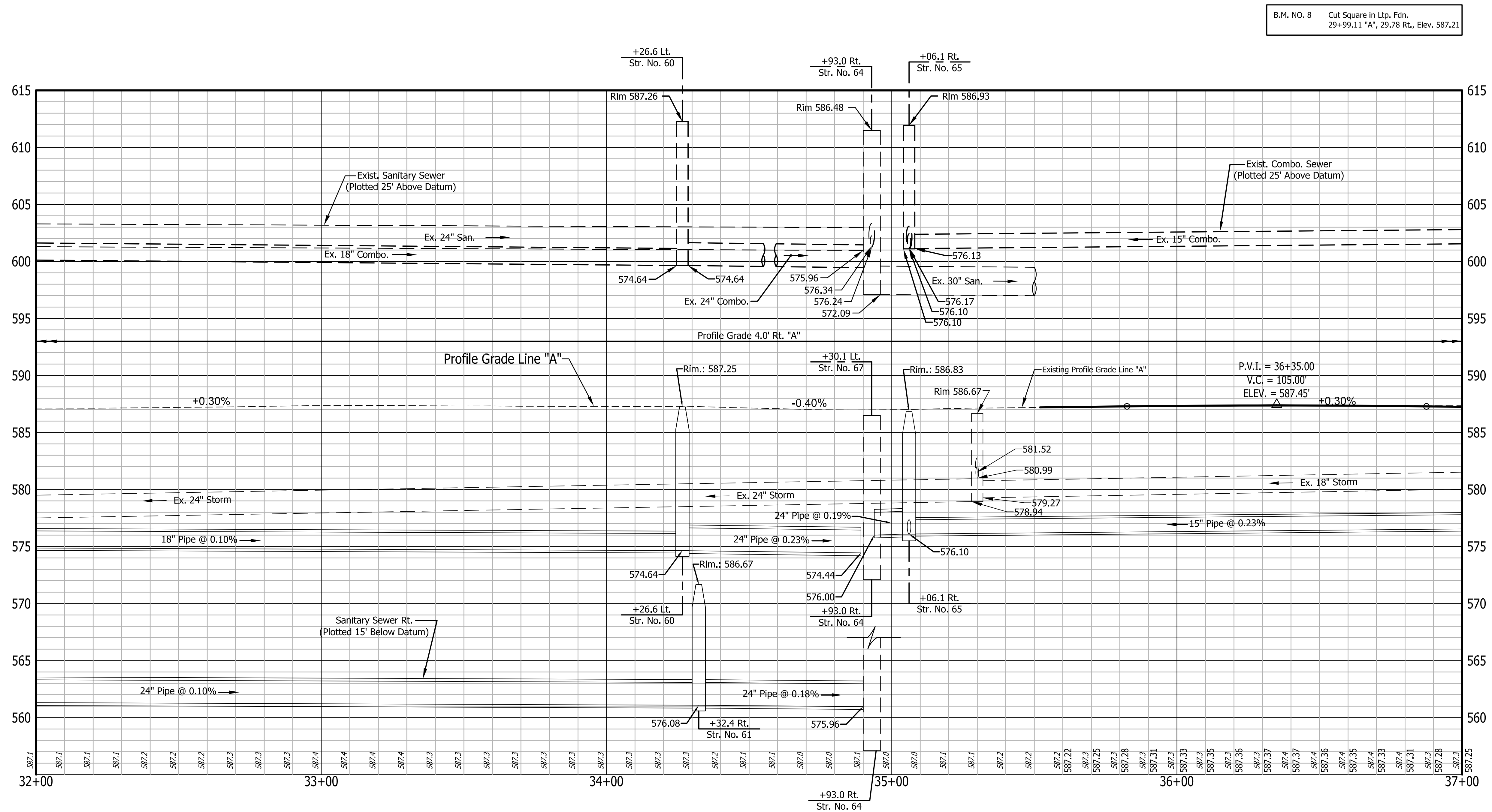


RECOMMENDED FOR APPROVAL	
DESIGNED: C.E.S./B.M.S.	DRAWN: B.M.S.
CHECKED: C.E.S./B.M.S.	CHECKED: D.W.C.

CITY OF EAST CHICAGO DEPARTMENT OF PUBLIC WORKS	
MICHIGAN AVENUE - LINE "A" PROFILE SHEET	

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
VERTICAL SCALE 1" = 5'	DESIGNATION
SURVEY BOOK N/A	SHEETS 15 of xxx
CONTRACT 17-0066	PROJECT MICHIGAN AVE. - EAST CHICAGO





RECOMMENDED
FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: C.E.S./B.M.S. DRAWN: B.M.S.
CHECKED: C.E.S./B.M.S. CHECKED: D.W.C.

CITY OF EAST CHICAGO
DEPARTMENT OF PUBLIC WORKS

MICHIGAN AVENUE - LINE "A"
PROFILE SHEET

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
VERTICAL SCALE 1" = 5'	DESIGNATION
SURVEY BOOK N/A	SHEETS 17 of xxx
CONTRACT 17-0066	PROJECT MICHIGAN AVE. - EAST CHICAGO

Categorical Exclusion

Appendix C

Early Coordination

August 17, 2023

Example Early Coordination Letter

Re: Agencies Early Coordination
Des. Number 2101118 & 2700594
Michigan Avenue (Ave.) Roadway Project
From Sheridan Place (PI) to 100 feet (ft.) north of Block Ave.
Lake County, Indiana

Dear <<position>>,

The City of East Chicago, with federal funding, proposes to proceed with a road reconstruction project in East Chicago, Lake County, Indiana (Des. Numbers 2101118 & 2700594). This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. **Please use the above Des. Number and project description in your reply.** We will incorporate your comments into the formal environmental study.

Project Location

The project is located on Michigan Ave. and Dickey Road (Rd.) in Lake County, Indiana. The project limits along Michigan Ave. extend from Sheridan Pl. to approximately 100 feet northeast of Block Ave, and the project limits along Dickey Rd. extend from Michigan Ave. to Watling St. Specifically, the project is located in North Civil Township, Sections 21 and 22 of Township 37 North, Range 9 West of the Whiting U.S. Geological Survey (USGS) Quadrangle. Refer to attached project area maps.

Existing Conditions

Within the project area, Michigan Ave. consists of four 11 ft. wide travel lanes (two in each direction) with 4 ft. to 11 ft. wide concrete sidewalks along each side of the roadway. Dickey Rd. consists of two 18 ft. wide travel lanes (one in each direction) with 5 ft. wide concrete sidewalks along each side of the roadway. The existing pavement of Michigan Ave. and Dickey Rd. is deteriorating and in poor condition. Most of the existing sidewalks are also in poor condition, and many of the existing curb ramps do not meet current Americans with Disabilities (ADA) requirements. The existing sanitary sewer lines, water lines, valves, and meters are outdated along the project area. The water valve cards indicate that most of the water lines were installed in the 1940s and 1950s. There are several locations where the water valves are inoperable and there have also been water line breaks. Sanitary sewer failures have also been an issue in the area. The surrounding land use is heavily urbanized with a mix of residential, commercial, and industrial properties. The existing right-of-way (ROW) width is 40 ft. in each direction from the roadway centerline (80 ft. wide total). Refer to attached project area photos.

The draft need of the project is due to poor pavement condition, old and inoperable utility lines, poor sidewalk condition, and many of the curb ramps do not meet ADA requirements. The draft purpose of the project is to restore the pavement condition, address inoperable and outdated sewer and water lines, and improve accessibility for pedestrians and bicyclists.

Proposed Conditions

Design and construction would occur in two phases. Phase 1 would be approximately 0.63 mile long and extend from Broadway Street (St.) to 100 feet north of Block Ave. Phase 2 would be approximately 0.24 mile long and extend from Sheridan Pl. to Broadway St. The proposed project would involve the following:

- Reconstruct the existing roadway pavement and curb and gutter of Michigan Ave. along the entire project area.
- Reconstruct the existing sidewalk along the east side of Michigan Ave. to provide a new 5 to 8 ft. wide ADA compliant sidewalk, except from Grand Blvd. to Guthrie St. where the existing sidewalk is in good condition.
- Replace the existing sidewalk along the west side of Michigan Ave. from Sheridan Pl. to Guthrie St. with a new 8 to 10 ft. wide paved asphalt multi-use path. The multi-use path would connect to an existing path/sidewalk along the north side of Guthrie St. The existing sidewalk from Guthrie St. to Block Ave. would be replaced with a new 5 ft. to 8 ft. wide sidewalk.
- Replace existing curb ramps with ADA compliant curb ramps.
- Replace the existing sanitary sewer lines, water lines, valves, and meters throughout the project area.
- Reduce the travel lane configuration from Sheridan Pl. to Dickey Rd. to include two 12 ft. wide travel lanes (one in each direction) with a 14 ft. wide center two-way left-turn lane (TWLTL).
- Reconfigure the cross-section from Dickey Rd. to Guthrie St. to include three 11.5 ft. wide travel lanes (two eastbound and one westbound), a westbound 12 ft. wide right-turn lane, and an 11 ft. wide center left-turn lane.
- Reconstruct the cross-section from Guthrie St. to Block Ave. (end of the project) to include four 11.5 ft. wide travel lanes (two in each direction) and an 11 ft. wide center left-turn lane.
- Reconstruct the existing roadway pavement and curb and gutter of Dickey Rd. from Michigan Ave. to Watling St.
- Replace the existing sidewalk along both sides of Dickey Rd. with a new 5 ft. wide ADA compliant sidewalk from Michigan Ave. to Watling St.
- Reconstruct all drive entrances within the project area.
- Upgrade or replace existing traffic signals to include pedestrian signals and pushbutton assemblies.
- Replace existing crosswalk pavement markings.
- Replace existing street lighting with decorative street lighting.
- Provide storm water management, such as bioswales and infiltration trenches at various locations (limited to grassy spaces).
- All work would occur within the existing City ROW; permanent and/or temporary ROW would not be required.

Construction is anticipated to begin in Spring of 2025. The preliminary maintenance of traffic (MOT) plan would include constructing the project in four phases. Phases 1-3 would include construction from Dickey Rd. to Block Ave. A combination of single lane closures and lane shifts during construction would occur. During phases 1-3, one lane in each direction will be maintained at all times. Phase 4 of construction would include construction from Sheridan Pl. to Dickey Rd. and would require the use of an urban detour. However, exact detour routes have not been determined at this time. It is important to note that this proposed portion of roadway to be constructed under Phase 4 would be constructed one block at a time to limit impacts. Access to all properties would be maintained during construction.

Resources

To identify potential environmental concerns within the project vicinity, a Red Flag Investigation is being completed by RQAW. Coordination with any applicable agencies/owners will occur.

Site visits were performed on October 11, 2022, and July 7, 2023, by RQAW to identify any ecological resources present within the project area. No streams or wetlands were observed within the project limits. A Waters of the U.S. Report will not be required.

The project is anticipated to qualify for the U.S. Fish and Wildlife Service (USFWS) Range-wide Programmatic Agreement for the Indiana bat and northern long-eared bat by completing the Information for Planning and Consultation (IPaC).

Coordination will occur with the INDOT Cultural Resources Office (CRO) to evaluate the project area for archaeological and historic resources and for Section 106 compliance. The results of this study will be forwarded to the State Historic Preservation Officer (SHPO) for review and concurrence, as appropriate.

Please provide your response within 30 calendar days from the date of this letter. However, if you feel an extension to the response time is necessary, a reasonable amount may be granted upon request. If you have any questions regarding this matter, please contact Harlan Ford (Environmental Department at RQAW, 317-588-1716, hford@rqaw.com) and/or Andrew Borden (INDOT Project Manager, 219-851-4481, Aborden1@indot.in.gov).

To reduce the file size of this letter, preliminary plans are not attached. Please contact Harlan Ford (contact information above) to request a copy of the preliminary plans.

Thank you in advance for your input,



Harlan Ford
Environmental Department
RQAW | DCCM

Appendices:

- ~~Appendix A: Project Area Maps and Photographs~~

**Project area maps and photographs have been removed to avoid duplication.
Please refer to Appendix B.**

Cc:

- INDOT LaPorte District (electronic coordination)
- Federal Highway Administration (electronic coordination)
- Natural Resources Conservation Service (electronic coordination)
- Indiana Department of Natural Resources (IDNR) Division of Fish and Wildlife (electronic coordination)
- U.S. Department of Housing and Urban Development (electronic coordination)
- U.S. Army Corps of Engineers, Chicago District (electronic coordination)
- National Park Service, Midwest Regional Office (electronic coordination)
- Northwestern Indiana Regional Planning Commission (electronic coordination)
- Lake County Council (electronic coordination)
- Lake County Board of Commissioners (USPS)
- Lake County Highway Department Superintendent (electronic coordination)
- Lake County Stormwater Quality/MS4 Coordinator (electronic coordination)
- Lake County Surveyor's Office (electronic coordination)
- INDOT Aviation (electronic coordination)
- IDEM Groundwater Section (electronic coordination)
- East Chicago Parks and Recreation Department (electronic coordination)
- East Chicago Mayors Office (electronic coordination)
- East Chicago Department of Water Works (USPS)
- East Chicago Utility Operations (USPS)
- East Chicago Police Department (USPS)
- East Chicago Fire Department (USPS)
- Grace Missionary Baptist Church (USPS)
- Lafarge Corporation and Phoenix Services LLC (USPS)
- Indiana Geological and Water Survey (electronic submission)

Organization and Project Information

Project ID: 2101118 & 2700594
Des. ID: 2101118 & 2700594
Project Title: Michigan Avenue Roadway Project
Name of Organization: RQAW
Requested by: Harlan Ford

Environmental Assessment Report

1. Geological Hazards:
 - High liquefaction potential
 - Floodway
2. Mineral Resources:
 - Bedrock Resource: High Potential
 - Sand and Gravel Resource: Low Potential
3. Active or abandoned mineral resources extraction sites:
 - Active Industrial Minerals Sites (2016) ([Industrial Minerals](#))

*All map layers from Indiana Map (maps.indiana.edu)

DISCLAIMER:

This document was compiled by Indiana University, Indiana Geological Survey, using data believed to be accurate; however, a degree of error is inherent in all data. This product is distributed "AS-IS" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability to a particular purpose or use. No attempt has been made in either the design or production of these data and document to define the limits or jurisdiction of any federal, state, or local government. The data used to assemble this document are intended for use only at the published scale of the source data or smaller (see the metadata links below) and are for reference purposes only. They are not to be construed as a legal document or survey instrument. A detailed on-the-ground survey and historical analysis of a single site may differ from these data and this document.

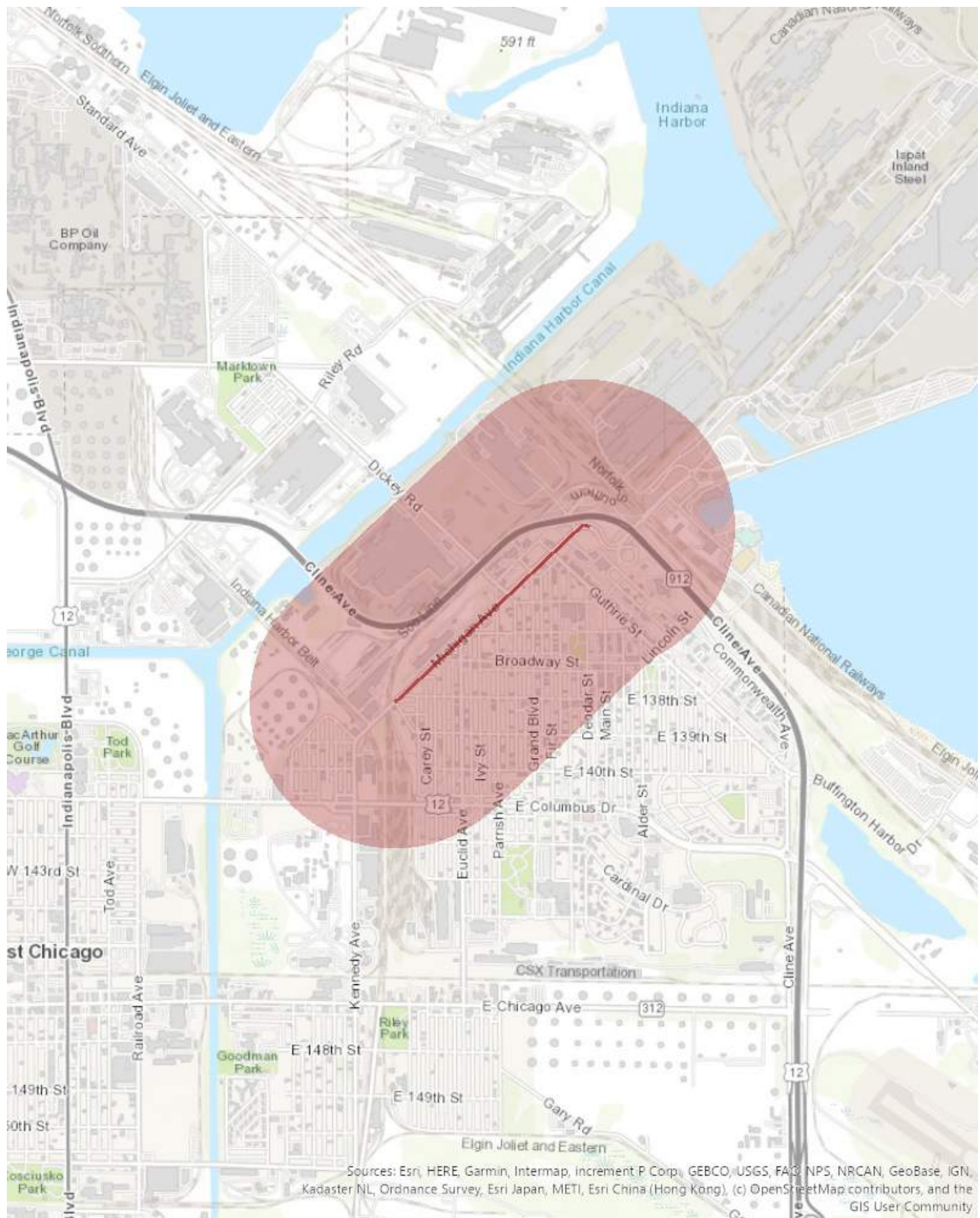
This information was furnished by Indiana Geological Survey

Address: 1001 E. 10th St., Bloomington, IN 47405

Email: IGSEnvir@indiana.edu

Phone: 812 855-7428

Date: August 17, 2023



Metadata:

- https://portal.igs.indiana.edu/arcgis/rest/services/Industrial_Minerals_Sites_2016/MapServer/info/metadata/metadata.xml?format=default&output=html
- https://portal.igs.indiana.edu/arcgis/rest/services/Seismic_Earthquake_Liquefaction_Potential/MapServer/info/metadata/metadata.xml?format=default&output=html
- https://portal.igs.indiana.edu/arcgis/rest/services/Industrial_Minerals_SandAndGravel_Resources/MapServer/info/metadata/metadata.xml?format=default&output=html
- https://gisdata.in.gov/server/rest/services/Hosted/FIRM_Flood_Hazard_Zones_2023/FeatureServer/info/metadata
- https://portal.igs.indiana.edu/arcgis/rest/services/Bedrock_Geology//MapServer/info/metadata/metadata.xml?format=default&output=html



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

August 29, 2023

RQAW

Attention: Harlan Ford
8770 North Street, Suite 110
Fishers, IN 46038

Dear Harlan Ford:

Re: Wellhead Protection Area
Proximity Determination
Des No 2101118 & 2700594
Michigan Avenue (Ave.) Roadway Project
From Sheridan Place (PI) to
100 feet (ft.) north of Block Ave.
Lake County, Indiana

Upon review of the above referenced project site, it has been determined that the proposed project area **is not located within** a Wellhead Protection Area. If the contact information is needed for the WHPA, please contact the reference located at the bottom of the letter for the appropriate information. The information is accurate to the best of our knowledge; however, there are in some cases a few factors that could impact the accuracy of this determination. Some Wellhead Protection Area Delineations have not been submitted, and many have not been approved by this office. In these cases, we use a 3,000-foot fixed radius buffer to make the proximity determination. To find the status of a Public Water Supply System's (PWSS's) Wellhead Protection Area Delineation please visit our tracking database at <http://www.in.gov/idem/cleanwater/2456.htm> and scroll to the bottom of the page.

The project area **is located within** a Source Water Assessment Area for a PWSS's surface water intake. The Source Water Assessment Area relates to the surface water drainage area that water could potentially flow and influence water quality for a PWSS's source of drinking water. The PWSS that could be impacted by the project are East Chicago Water Works, Hammond Water Works Department, and Indiana American Water – Northwest. A contact person for East Chicago Water Works is Winna Guzman, and they could be reached via e-mail and/or phone at: wguzman@eastchicago.com and 219-391-8469. A contact person for Hammond Water Works Department is Mark McLaughlin, and they could be reached via e-mail and/or phone at: mclaughlinm@gohammond.com and 219-853-6427. A contact person for Indiana American Water – Northwest is Christina Gosnell, and she could be reached via e-mail and/or phone at: christina.gosnell@amwater.com and 317-885-2408. The contact information is provided as a courtesy and reference for you if any issues arise that could



A State that Works

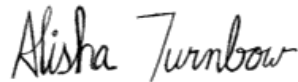
Please Reduce, Reuse, Recycle

potentially impact the water quality for the PWSS during the course of the project. It is not a requirement of IDEM that you contact the system regarding the project.

In the future, **please consider using this self-service tool** if it suits your needs. The Drinking Water Branch has a self-service tool which allows one to determine wellhead proximity without submitting the application form. Go to <https://www.in.gov/idem/cleanwater/pages/wellhead/> and use the instructions at the bottom of the page.

If you have any additional questions, please feel free to contact me at the address above or at 317-233-9158 and aturnbow@idem.in.gov.

Sincerely,

A handwritten signature in black ink that reads "Alisha Turnbow". The signature is written in a cursive, flowing style.

Alisha Turnbow,
Environmental Manager
Ground Water Section
Drinking Water Branch
Office of Water Quality

Electronic cc: Winna Guzman, East Chicago Water Works; Mark McLaughlin, Hammond Water Works Department; and Christina Gosnell, Indiana American Water – Northwest

From: Duane Alverson <alverda@lakecountyin.org>
Sent: Friday, August 18, 2023 9:07 AM
To: Harlan Ford
Cc: Aaron Lawson
Subject: RE: Early Coordination Letter for Des. Nos. 2101118 & 2700594

Caution: This e-mail originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks Harlan,

We have no comments.

Respectfully,

Duane A. Alverson, PE
Engineer



Lake County Highway Department
1100 East Monitor Street
Crown Point, IN 46307
Phone 219-663-0525
alverda@lakecountyin.org

From: Harlan Ford <hford@rqaw.com>
Sent: Friday, August 18, 2023 8:03 AM
To: Duane Alverson <alverda@lakecountyin.org>
Cc: Aaron Lawson <alawson@rqaw.com>
Subject: RE: Early Coordination Letter for Des. Nos. 2101118 & 2700594

External Email

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Mr. Alverson,

This project will not impact any bridge structures. The work on Dickey Road will only extend from Michigan Avenue to Watling Street.

Thank you,

Harlan Ford
Environmental Scientist

RQAW | DCCM
317-588-1716 p 423-458-5979 c

From: Duane Alverson <alverda@lakecountyin.org>
Sent: Friday, August 18, 2023 8:28 AM
To: Harlan Ford <hford@rqaw.com>
Subject: FW: Early Coordination Letter for Des. Nos. 2101118 & 2700594

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Harlan Ford,

Does this project impact any bridge structures.

I see the project includes Dickey Road, does it impact Bridge #365 Dickey Road over Indiana Harbor Canal

Thanks

Duane A. Alverson, PE
Engineer



Lake County Highway Department
1100 East Monitor Street
Crown Point, IN 46307
Phone 219-663-0525
alverda@lakecountyin.org

From: Smoljan, Jan S <smoljjs@lakecountyin.org>
Sent: Thursday, August 17, 2023 4:27 PM

To: Duane Alverson <alverda@lakecountyin.org>

Subject: FW: Early Coordination Letter for Des. Nos. 2101118 & 2700594

From: Harlan Ford <hford@rqaw.com>

Sent: Thursday, August 17, 2023 7:02 AM

To: Smoljan, Jan S <smoljjs@lakecountyin.org>

Subject: Early Coordination Letter for Des. Nos. 2101118 & 2700594

External Email

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—
Hello,

The City of East Chicago, with federal funding, proposes to proceed with a roadway project in East Chicago, Lake County, Indiana (Des. Numbers 2101118 & 2700594). The proposed project is located on Michigan Avenue and Dickey Road. The project limits along Michigan Ave. extend from Sheridan Pl. to approximately 100 feet northeast of Block Ave., and the project limits along Dickey Rd. extend from Michigan Ave. to Watling St. Attached, you will find an early coordination letter and appendix materials regarding the above referenced project. If you choose, these materials are for your review and comment for the environmental document.

Thank you for your time,

Harlan Ford

Environmental Scientist



A 8770 North Street, Suite 110, Fishers, IN 46038

P 317-588-1716 **C** 423-458-5979

RQAW.com | [f](#) [in](#) [@](#)

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From: Lewandowski, Tyler <TLewandowski@indot.IN.gov>
Sent: Thursday, August 17, 2023 9:09 AM
To: Harlan Ford
Subject: RE: Early Coordination Letter for Des. Nos. 2101118 & 2700594

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Good morning,

After review, no tall structure permit is required for the project if all equipment being used is under 100 feet in height. Please let our office know if you have any further questions.

Thank you,

Tyler Lewandowski
Project Manager
INDOT Office of Aviation
(317) 495-4875
tlewandowski@indot.in.gov
www.aviation.indot.in.gov



From: Harlan Ford <hford@rqaw.com>
Sent: Thursday, August 17, 2023 8:01 AM
To: Lewandowski, Tyler <TLewandowski@indot.IN.gov>
Subject: Early Coordination Letter for Des. Nos. 2101118 & 2700594

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Hello,

The City of East Chicago, with federal funding, proposes to proceed with a roadway project in East Chicago, Lake County, Indiana (Des. Numbers 2101118 & 2700594). The proposed project is located on Michigan Avenue and Dickey Road. The project limits along Michigan Ave. extend from Sheridan Pl. to approximately 100 feet northeast of Block Ave., and the project limits along Dickey Rd. extend from Michigan Ave. to Watling St. Attached, you will find an early coordination letter and appendix materials regarding the above referenced project. If you choose, these materials are for your review and comment for the environmental document.

Thank you for your time,

From: Michels, Stewart <SMichels@indot.IN.gov>
Sent: Friday, August 18, 2023 1:19 PM
To: Harlan Ford
Cc: Borden, Andrew A; Aaron Lawson
Subject: RE: Early Coordination Letter for Des. Nos. 2101118 & 2700594

Caution: This e-mail originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you very much, Harlan, for the great follow-up!
Best,
Stew

From: Harlan Ford <hford@rqaw.com>
Sent: Friday, August 18, 2023 12:06 PM
To: Michels, Stewart <SMichels@indot.IN.gov>
Cc: Borden, Andrew A <ABorden1@indot.IN.gov>; Aaron Lawson <alawson@rqaw.com>
Subject: RE: Early Coordination Letter for Des. Nos. 2101118 & 2700594

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Hey Stew,

Per our client, Des. No. 2700594 is a temporary Des. No. and may not be programmed into your system yet because it is currently listed as a future project. I have attached a screenshot from the NIRPC Draft 24-28 TIP listing for this Des. No.

Please note that Des. No. 2700594 was originally part of Des. No. 2101118, but due to funding the project was separated into two, hence the reason for the temporary Des. No. We will be completing one environmental document for the entire corridor, as it is against FHWA procedures to segment out corridor projects.

Thanks,

Harlan Ford
Environmental Scientist

RQAW | DCCM
317-588-1716 p 423-458-5979 c

From: Michels, Stewart <SMichels@indot.IN.gov>
Sent: Friday, August 18, 2023 12:17 PM
To: Harlan Ford <hford@rqaw.com>

Cc: Borden, Andrew A <ABorden1@indot.IN.gov>

Subject: RE: Early Coordination Letter for Des. Nos. 2101118 & 2700594

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Harlan,

Thank you for providing a copy of the early coordination letter for Des No 2101118 & 2700594 to the LaPorte District Environmental Services. I could not locate a Des No 2700594 as active in our system; otherwise, we do not have any comment at this time. Thank you, again, for contacting us.

Regards,

Stew

Stewart Michels
Environment Manager Supervisor
INDOT - LaPorte District
315 East Boyd Blvd.
LaPorte IN 46350
Office: (219) 325-7560
Cell: (219) 402-7315
Email: Smichels@INDOT.IN.gov
[Call Me on TEAMS](#)
[Chat/Message Me in TEAMS](#)



From: Harlan Ford <hford@rqaw.com>

Sent: Thursday, August 17, 2023 7:01 AM

To: Michels, Stewart <SMichels@indot.IN.gov>

Cc: Borden, Andrew A <ABorden1@indot.IN.gov>

Subject: Early Coordination Letter for Des. Nos. 2101118 & 2700594

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Hello,




The City of East Chicago, with federal funding, proposes to proceed with a roadway project in East Chicago, Lake County, Indiana (Des. Numbers 2101118 & 2700594). The proposed project is located on

Michigan Avenue and Dickey Road. The project limits along Michigan Ave. extend from Sheridan Pl. to approximately 100 feet northeast of Block Ave., and the project limits along Dickey Rd. extend from Michigan Ave. to Watling St. Attached, you will find an early coordination letter and appendix materials regarding the above referenced project. If you choose, these materials are for your review and comment for the environmental document.

Thank you for your time,

Harlan Ford
Environmental Scientist



A 8770 North Street, Suite 110, Fishers, IN 46038
P 317-588-1716 **C** 423-458-5979
RQAW.com |   

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From: Brian J Marciniak <Brian.Marciniak@amwater.com>
Sent: Tuesday, August 29, 2023 3:06 PM
To: Harlan Ford
Subject: FW: Early Coordination Letter for Des. Nos. 2101118 & 2700594
Attachments: [Proximity to WPA \(2101118 & 2700594\).pdf](#)

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Indiana American Water anticipates that this project will not impact our facilities or operations.

Thank you,
Brian

From: Christina L Gosnell <Christina.Gosnell@amwater.com>
Sent: Tuesday, August 29, 2023 2:04 PM
To: Brian J Marciniak <Brian.Marciniak@amwater.com>
Subject: FW: Early Coordination Letter for Des. Nos. 2101118 & 2700594

FYI

Thanks.

Christina Gosnell
Senior Manager Water Quality and Environmental Compliance
Indiana American Water Company
153 N. Emerson Ave
Greenwood, IN 46143
Tel: 317-885-2408
Cell: 812-344-8436
E-mail: Christina.Gosnell@amwater.com

August 17, 2023

Harlan Ford
RQAW Corporation
8770 North Street, Suite 110
Fishers, Indiana 46038

Dear Mr. Ford:

The proposed Roadway Protection Project in East Chicago in Lake County, Indiana (Des. No. 2101118 & 2700594) as referred to in your letter received on August 17, 2023, will not cause a conversion of prime farmland.

If you need additional information, please contact John Allen at 317-295-5859 or john.allen@usda.gov.

Sincerely,

JOHN ALLEN

Digitally signed by JOHN ALLEN
Date: 2023.08.18 07:09:13 -04'00'

JOHN ALLEN
State Soil Scientist

Enclosers

From: Jennifer Birchfield <jbirchfield@nirpc.org>
Sent: Wednesday, September 13, 2023 12:07 PM
To: Harlan Ford
Cc: Aaron Lawson
Subject: RE: DES 2101118 & 2700593

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Thank you, Harlan.



Jen Birchfield
Natural Resources Planner

Phone:
219-254-2511
Email:
jbirchfield@nirpc.org

6100 Southport Rd
Portage, IN 46368

www.nirpc.org

From: Harlan Ford <hford@rqaw.com>
Sent: Tuesday, September 12, 2023 12:42 PM
To: Jennifer Birchfield <jbirchfield@nirpc.org>
Cc: Aaron Lawson <alawson@rqaw.com>
Subject: RE: DES 2101118 & 2700593

Hey Jen,

Thank you for your response! Please see link at the bottom of this email for current preliminary plans. The infiltration trenches/bioswales are shown for Phase 1 plans from around stationing 42+00 to 45+50 and for Phase 2 plans from around stationing 27+00 to 29+00.

In regards to your comment below about considering projected increases in precipitation and peak flows when designing and sizing stormwater management. With this project, there is no projected increase in peak flows and there is no need to add any additional drainage basins when compared to the existing drainage basins. This is because the project is proposing to reduce the roadway width over the majority of the project area and there will actually be a reduction in the amount of impervious area. This also means there will actually be a reduction in peak flow of stormwater throughout the project area. This is also without considering the use of infiltration trenches, which are proposed as part of this project. Adding the infiltration trenches will actually carry much of the surface water into infiltration pipes and will disperse into highly pervious sandy soils.

You also mentioned below that there appears to be much plantable space and to consider planting native trees where appropriate to provide shade to roads and sidewalks, stormwater benefits, air quality buffering, and aesthetic benefits. In response to this, there is actually not as many plantable areas as

there may appear to be. This is mainly due to the presence of underground utilities and the need to stay within existing right-of-way. It's important to note that the City does own some of the adjacent properties, but they were purchased by the Redevelopment Commission. This means the land must be used for redevelopment, so nothing can be placed on these properties that would/could restrict later development. It is also important that this project remain in existing right-of-way and no new trees can be planted on the east side as the sidewalk will be right up against the right-of-way line and almost the entire west side is taken up by utilities. There are several utilities, many of which are major utilities such as a shallow 36" water line that must be avoided and many multi-conduit underground telephone and additional smaller water lines and gas lines. Trees are not desirable to plant in these areas due to expensive utility conflicts and potential for future damage caused by tree roots.

Please let us know if you have any additional questions or concerns.

 [Michigan Avenue Prelim. Plans](#)

Thanks,

Harlan Ford
Environmental Scientist

RQAW | DCCM
317-588-1716 p 423-458-5979 c

From: Jennifer Birchfield <jbirchfield@nirpc.org>
Sent: Thursday, September 7, 2023 12:38 PM
To: Harlan Ford <hford@rqaw.com>
Subject: DES 2101118 & 2700593

Caution: This e-mail originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Mr. Ford

Regarding DES 2101118 & 2700593, I am pleased to see that swales and infiltration trenches will be incorporated. If there are preliminary plans for these or other stormwater management practices, please provide them. Consider projected increases in precipitation and peak flows when designing and sizing stormwater management. Please ensure that long-term maintenance plans are detailed for stormwater practices. There appears to be much plantable space, consider planting native trees where appropriate to provide shade to roads and sidewalks, stormwater benefits, air quality buffering, and aesthetic benefits.

Thank you,



Jen Birchfield
Natural Resources Planner

Phone:
219-254-2511
Email:
jbirchfield@nirpc.org

6100 Southport Rd
Portage, IN 46368

www.nirpc.org

THIS IS NOT A PERMIT

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

DNR#: ER-25874

Request Received: August 17, 2023

Requestor:

Harlan Ford
RQAW Environmental
8770 North Street, Suite 110
Fishers, IN 46038

Project:

Michigan Avenue road reconstruction and some lane modifications, City of East Chicago; Des #2101118 & 2700594

- 1) Phase 1: 0.63-miles, from Broadway Street to 100' north of Block Avenue
- 2) Phase 2: 0.24-miles, from Sheridan Place to Broadway Street

County/Site Info: Lake County

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Regulatory Assessment:

Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project.

Natural Heritage Database:

The Natural Heritage Program's data have been checked. The State endangered Barn Owl (*Tyto alba*) has been identified within .5 mile of the project area.

Fish and Wildlife Comments:

Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project area:

A) Heritage Species

The proposed project does not support suitable habitat for Barn Owls. Thus, no significant negative effects are expected to the species.

B) Pavement Rehabilitation

Pavement rehabilitation projects typically do not have a significant impact on fish, wildlife, and botanical resources as long as best management practices (BMPs) are in place to limit the migration of Polycyclic aromatic hydrocarbons (PAHs) into local waterways. PAHs are a byproduct of asphalt and coal tar-based sealants and negatively impact aquatic systems. The use of sealants that are free of petroleum and coal tar-based products is encouraged whenever possible. Contaminated road runoff can significantly impact the

aquatic environment through increased turbidity and release of sediment into waterways which can be harmful to fish and other aquatic organisms, their eggs, and their food supply. Where possible, road runoff should be directed to riprap turnouts and sediment filtration prior to entering a stream to reduce impacts to aquatic species. We recommend the use of pollutant trapping technology such as storm drain inserts to reduce the runoff of roadside pollutants.

C) Drainage and Stormwater Management

The Division of Fish and Wildlife recommends considering a more sustainable approach to stormwater management. The traditional model of stormwater management aims to drain runoff as quickly as possible with the help of channels and pipes, which increases peak flows and costs of stormwater management. This type of solution only transfers drainage problems from one section of a basin to another. A more sustainable approach should aim to rebuild the natural water cycle by using storage techniques (retention basins, constructed wetlands, raingardens, etc.) and recharging groundwater using infiltration techniques (infiltration basins or trenches, pervious pavement, etc.). The following links give a good overview of traditional and sustainable stormwater management systems and their pros and cons for consideration during the design of the proposed project: <https://www.epa.gov/greeningepa/epa-facility-stormwater-management>; <https://www.epa.gov/greeningepa/stormwater-management-practices-epa-facilities>

D) LED Lighting

Most transportation corridor designers and municipalities are trending toward LED lighting. Certain types of LED lighting can have negative impacts on both human and wildlife health and safety. The Division of Fish and Wildlife strongly encourages visiting the International Dark-Sky Association's website to learn more about the potential negative impacts of improperly selected LED lighting systems, if required: <https://www.darksky.org/our-work/lighting/lighting-for-citizens/led-guide/>

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

1. Revegetate all bare and disturbed areas within the project area using a mixture of grasses (excluding all varieties of tall fescue), sedges, wildflowers, shrubs, and trees native to Northern Indiana as soon as possible upon completion. Turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas only.
2. Minimize and contain within the project limits all tree and brush clearing.
3. Do not cut any trees suitable for Indiana Bat or Northern Long-eared Bat roosting (3 inches or greater diameter-at-breast height, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
4. All excavated material must be properly spread or completely removed from the project site such that erosion and off-site sedimentation of the material is prevented.
5. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
6. If erosion control blankets are used, they shall be heavy-duty, biodegradable, and net free or use loose-woven/Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

Contact Staff:

Our agency appreciates this opportunity to be of service. Please contact me at RVanVoorhis@dnr.IN.gov or (317) 232-8163 if we can be of further assistance.

Rachel Van Voorhis
Rachel Van Voorhis
Environmental Coordinator
Division of Fish and Wildlife

Date: September 15, 2023



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273



In Reply Refer To:

February 09, 2024

Project Code: 2023-0122128

Project Name: Des. No. 2101118 & 2300726: Michigan Avenue Roadway Project in Lake County, Indiana

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - <http://www.fws.gov/midwest/endangered/section7/>

[s7process/index.html](https://www.fws.gov/s7process/index.html). This website contains step-by-step instructions which will help you determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process. For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both

migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Indiana Ecological Services Field Office

620 South Walker Street
Bloomington, IN 47403-2121
(812) 334-4261

PROJECT SUMMARY

Project Code: 2023-0122128

Project Name: Des. No. 2101118 & 2300726: Michigan Avenue Roadway Project in Lake County, Indiana

Project Type: Road/Hwy - Maintenance/Modification

Project Description: The City of East Chicago and the Federal Highway Administration intend to proceed with a road reconstruction project on Michigan Avenue from Sheridan Place to 0.09 mile north of Block Avenue, in East Chicago, Lake County, Indiana. Design and construction would occur in two phases. Phase 1 would be approximately 0.63 mile long and extend from Broadway Street (St.) to 100 feet north of Block Ave. Phase 2 would be approximately 0.24 mile long and extend from Sheridan Pl. to Broadway St. The proposed project would involve the following:

- Reconstruct the existing roadway pavement and curb and gutter of Michigan Ave. along the entire project area.
- Reconstruct the existing sidewalk along the east side of Michigan Ave. to provide a new 5 to 8 ft. wide ADA compliant sidewalk, except from Grand Blvd. to Guthrie St. where the existing sidewalk is in good condition.
- Replace the existing sidewalk along the west side of Michigan Ave. from Sheridan Pl. to Guthrie St. with a new 8 to 10 ft. wide paved asphalt multi-use path. The multi-use path would connect to an existing path/sidewalk along the north side of Guthrie St. The existing sidewalk from Guthrie St. to Block Ave. would be replaced with a new 5 ft. to 8 ft. wide sidewalk.
- Replace existing curb ramps with ADA compliant curb ramps.
- Replace the existing sanitary sewer lines, water lines, valves, and meters throughout the project area.
- Reduce the travel lane configuration from Sheridan Pl. to Dickey Rd. to include two 12 ft. wide travel lanes (one in each direction) with a 14 ft. wide center two-way left-turn lane (TWLTL).
- Reconfigure the cross-section from Dickey Rd. to Guthrie St. to include three 11.5 ft. wide travel lanes (two eastbound and one westbound), a westbound 12 ft. wide right-turn lane, and an 11 ft. wide center left-turn lane.
- Reconstruct the cross-section from Guthrie St. to Block Ave. (end of the project) to include four 11.5 ft. wide travel lanes (two in each direction) and an 11 ft. wide center left-turn lane.
- Reconstruct the existing roadway pavement and curb and gutter of Dickey Rd. from Michigan Ave. to Watling

St.

- Replace the existing sidewalk along both sides of Dickey Rd. with a new 5 ft. wide ADA compliant sidewalk from Michigan Ave. to Watling St.
- Reconstruct all drive entrances within the project area.
- Upgrade or replace existing traffic signals to include pedestrian signals and pushbutton assemblies.
- Replace existing crosswalk pavement markings.
- Replace existing street lighting with decorative street lighting.
- Provide storm water management, such as bioswales and infiltration trenches at various locations (limited to grassy spaces).
- All work would occur within the existing City right-of-way (ROW); permanent and/or temporary ROW would not be required.

Suitable summer bat habitat exists within the project area. There will be up to 0.1 acre of tree removal/trimming that will occur as a result of this project. The tree removal/trimming is only anticipated to occur on the southwest corner of Euclid Street. This tree was identified as an eastern cottonwood (*Populus deltoides*). INDOT LaPorte District performed a USFWS database check within 0.5 mile of the project area on January 25, 2023. No bats have been documented within 0.5 mile of the project area. Temporary lighting may be used as part of this project. New permanent lighting would be added as the existing street lighting would be replaced with decorative street lighting. Construction is anticipated to begin in Spring of 2025.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.648583599999995,-87.45289802071719,14z>



Counties: Lake County, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

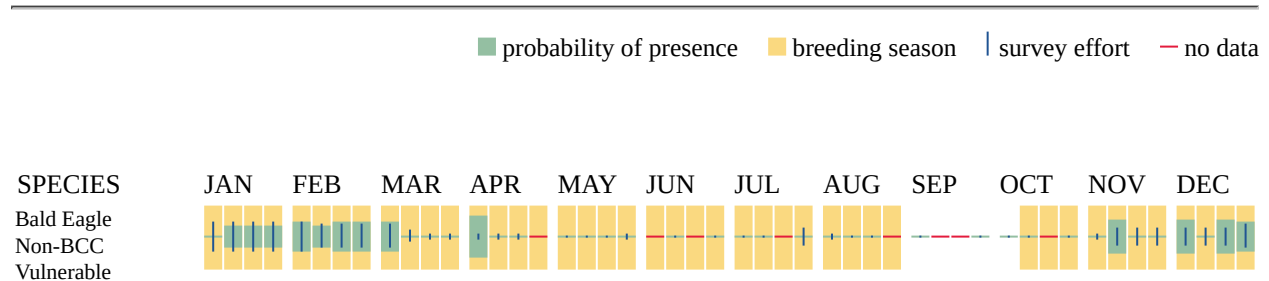
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE

SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

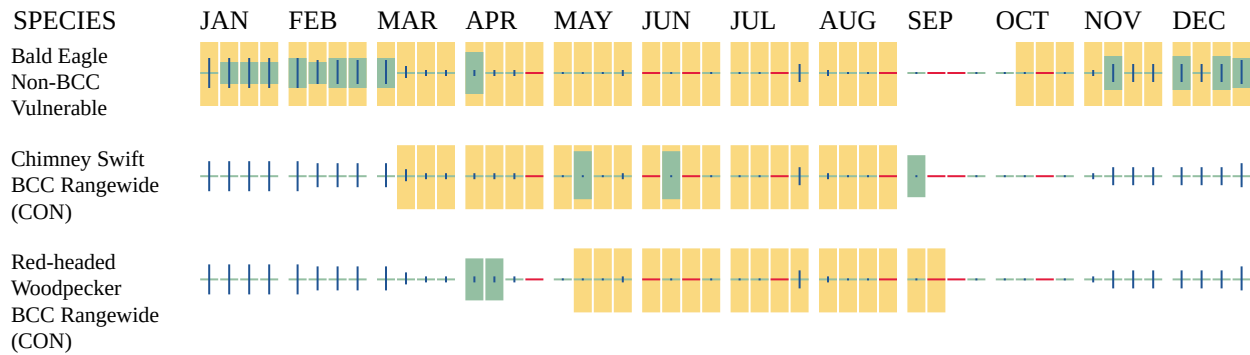
Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort — no data



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: RQAW Corporation
Name: Aaron Lawson
Address: 8770 North Street
Address Line 2: Suite 110
City: Fishers
State: IN
Zip: 46038
Email: alawson@rqaw.com
Phone: 3175881798

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273



In Reply Refer To:

August 30, 2023

Project code: 2023-0122128

Project Name: Des. No. 2101118 & 2700594: Michigan Avenue Roadway Project in Lake County, Indiana

Subject: Concurrence verification letter for the 'Des. No. 2101118 & 2700594: Michigan Avenue Roadway Project in Lake County, Indiana' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated August 30, 2023 to verify that the **Des. No. 2101118 & 2700594: Michigan Avenue Roadway Project in Lake County, Indiana** (Proposed Action) may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the endangered northern long-eared bat (*Myotis septentrionalis*). Consultation with the Service pursuant to section 7(a)(2) of ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances,

Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:

If your initial bridge/culvert or structure assessments failed to detect Indiana bats and/or NLEB use or occupancy, yet bats are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of the incident. In these instances, potential incidental take of Indiana bats and/or NLEBs may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- Monarch Butterfly *Danaus plexippus* Candidate
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

PROJECT DESCRIPTION

The following project name and description was collected in IPaC as part of the endangered species review process.

NAME

Des. No. 2101118 & 2700594: Michigan Avenue Roadway Project in Lake County, Indiana

DESCRIPTION

The City of East Chicago and the Federal Highway Administration intend to proceed with a road reconstruction project on Michigan Avenue from Sheridan Place to 0.09 mile north of Block Avenue, in East Chicago, Lake County, Indiana. Design and construction would occur in two phases. Phase 1 would be approximately 0.63 mile long and extend from Broadway Street (St.) to 100 feet north of Block Ave. Phase 2 would be approximately 0.24 mile long and extend from Sheridan Pl. to Broadway St. The proposed project would involve the following:

- Reconstruct the existing roadway pavement and curb and gutter of Michigan Ave. along the entire project area.
- Reconstruct the existing sidewalk along the east side of Michigan Ave. to provide a new 5 to 8 ft. wide ADA compliant sidewalk, except from Grand Blvd. to Guthrie St. where the existing sidewalk is in good condition.
- Replace the existing sidewalk along the west side of Michigan Ave. from Sheridan Pl. to Guthrie St. with a new 8 to 10 ft. wide paved asphalt multi-use path. The multi-use path would connect to an existing path/sidewalk along the north side of Guthrie St. The existing sidewalk from Guthrie St. to Block Ave. would be replaced with a new 5 ft. to 8 ft. wide sidewalk.
- Replace existing curb ramps with ADA compliant curb ramps.
- Replace the existing sanitary sewer lines, water lines, valves, and meters throughout the project area.
- Reduce the travel lane configuration from Sheridan Pl. to Dickey Rd. to include two 12 ft. wide travel lanes (one in each direction) with a 14 ft. wide center two-way left-turn lane (TWLTL).
- Reconfigure the cross-section from Dickey Rd. to Guthrie St. to include three 11.5 ft. wide travel lanes (two eastbound and one westbound), a westbound 12 ft. wide right-turn lane, and an 11 ft. wide center left-turn lane.
- Reconstruct the cross-section from Guthrie St. to Block Ave. (end of the project) to include four 11.5 ft. wide travel lanes (two in each direction) and an 11 ft. wide center left-turn lane.
- Reconstruct the existing roadway pavement and curb and gutter of Dickey Rd. from

Michigan Ave. to Watling St.

- Replace the existing sidewalk along both sides of Dickey Rd. with a new 5 ft. wide ADA compliant sidewalk from Michigan Ave. to Watling St.
- Reconstruct all drive entrances within the project area.
- Upgrade or replace existing traffic signals to include pedestrian signals and pushbutton assemblies.
- Replace existing crosswalk pavement markings.
- Replace existing street lighting with decorative street lighting.
- Provide storm water management, such as bioswales and infiltration trenches at various locations (limited to grassy spaces).
- All work would occur within the existing City right-of-way (ROW); permanent and/or temporary ROW would not be required.

Suitable summer bat habitat exists within the project area. There will be up to 0.1 acre of tree removal/trimming that will occur as a result of this project. The tree removal/trimming is only anticipated to occur on the southwest corner of Euclid Street. This tree was identified as an eastern cottonwood (*Populus deltoides*). INDOT LaPorte District performed a USFWS database check within 0.5 mile of the project area on January 25, 2023. No bats have been documented within 0.5 mile of the project area. Temporary lighting may be used as part of this project. New permanent lighting would be added as the existing street lighting would be replaced with decorative street lighting. Construction is anticipated to begin in Spring of 2025.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.648583599999995,-87.45289802071719,14z>



DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the endangered northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

QUALIFICATION INTERVIEW

1. Is the project within the range of the Indiana bat^[1]?

[1] See [Indiana bat species profile](#)

Automatically answered

Yes

2. Is the project within the range of the northern long-eared bat^[1]?

[1] See [northern long-eared bat species profile](#)

Automatically answered

No

3. Which Federal Agency is the lead for the action?

A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction^[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

[1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces^[1]?

[1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum^[1]?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

7. Is the project located **within** a karst area?

No

8. Is there *any* suitable^[1] summer habitat for Indiana Bat or NLEB **within** the project action area^[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the [User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat](#).

Yes

9. Will the project remove *any* suitable summer habitat^[1] and/or remove/trim any existing trees **within** suitable summer habitat?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

Yes

10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

No

11. Have presence/probable absence (P/A) summer surveys^{[1][2]} been conducted^{[3][4]} **within** the suitable habitat located within your project action area?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

[3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

[4] Negative presence/probable absence survey results obtained using the [summer survey guidance](#) are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

No

12. Does the project include activities **within documented Indiana bat habitat**^{[1][2]}?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

13. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors?

Yes

14. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors occur^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates.

B) During the inactive season

15. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

Yes

16. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

No

17. Are *all* trees that are being removed clearly demarcated?

Yes

18. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

No

19. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

No

20. Does the project include slash pile burning?

No

21. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

No

22. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)
No
23. Will the project involve the use of **temporary** lighting *during* the active season?
Yes
24. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?
Yes
25. Will the project install new or replace existing **permanent** lighting?
Yes
26. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **permanent** lighting will be installed or replaced?
Yes
27. Does the project include percussives or other activities (**not including tree removal/trimming or bridge/structure work**) that will increase noise levels above existing traffic/background levels?
Yes
28. Will the activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the active season^[1]?
[1] Coordinate with the local Service Field Office for appropriate dates.
Yes
29. Will *any* activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the inactive season^[1]?
[1] Coordinate with the local Service Field Office for appropriate dates.
Yes
30. Are *all* project activities that are **not associated with** habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?
Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.
Yes
31. Will the project raise the road profile **above the tree canopy**?
No

32. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the active season within undocumented habitat.

33. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) and/or increase noise levels above existing traffic/background levels consistent with a No Effect determination in this key?

Automatically answered

Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the inactive season

34. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the tree removal/trimming that occurs outside of the Indiana bat's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

35. **General AMM 1**

Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

Yes

36. **Tree Removal AMM 1**

Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal^[1] in excess of what is required to implement the project safely?

Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

[1] The word "trees" as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS' current summer survey guidance for our latest definitions of suitable habitat.

Yes

37. **Tree Removal AMM 3**

Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

Yes

38. **Tree Removal AMM 4**

Can the project avoid cutting down/removal of *all* (1) **documented**^[1] Indiana bat or NLEB roosts^[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

[1] The word documented means habitat where bats have actually been captured and/or tracked.

[2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry triangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

Yes

39. **Lighting AMM 1**

Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

Yes

40. **Lighting AMM 2**

Does the lead agency use the BUG (Backlight, Uplight, and Glare) system developed by the Illuminating Engineering Society^[1] to rate the amount of light emitted in unwanted directions?

[1] Refer to [The BUG System—A New Way To Control Stray Light](#)

Yes

41. **Lighting AMM 2**

Will the **permanent** lighting be designed to be as close to 0 for all three BUG ratings as possible, with a priority of "uplight" of 0 and "backlight" as low as practicable?

Yes

PROJECT QUESTIONNAIRE

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

N/A

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

N/A

3. How many acres^[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

[1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

0.1

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

This determination key result includes the commitment to implement the following Avoidance and Minimization Measures (AMMs):

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

LIGHTING AMM 2

When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable.

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

TREE REMOVAL AMM 4

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or **documented** foraging habitat any time of year.

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING NLEB OR INDIANA BAT

This key was last updated in IPaC on July 27, 2023. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the endangered **northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's [amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion \(dated March 23, 2023\) for Transportation Projects](#). The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation

Name: Lea Lilly

Address: 315 East Boyd Blvd.

City: LaPorte

State: IN

Zip: 46350

Email: llilly@indot.in.gov

Phone: 2193257461

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

Categorical Exclusion

Appendix D

**Section 106 of the National Historic
Preservation Act (NHPA)**

SECTION 1

Submittal of this form is only required for projects where Category B applies. Projects qualifying under Category A do not require submittal of this form. SECTION 2 (for Conditions of Category B.1 for curb/sidewalk) or SECTION 3 (for Conditions of Category B.9 for drainage structures) may be required as determined by INDOT-Cultural Resources Office (INDOT-CRO) review. INDOT-CRO will notify applicant if the Minor Projects PA does not apply.

Part I: Project Information-Completed by Applicant (Consultant/PM/Project Sponsor/INDOT District Staff)*

**A qualified professional historian (QP) is not required to complete Part I INDOT-Cultural Resources Office (INDOT-CRO) staff will be responsible for completion of Part II.*

Original Submission Date: 08/21/2023

Amended Submission Date*:

**Consult with INDOT-CRO to determine whether an amendment is required. For revisions/updates to original form, please detail in applicable sections below. Please use red font to distinguish the revisions/updates.*

Submitted By (Provide Name and Firm/Organization):

Hannah Kopf
RQAW | DCCM
8770 North St., Ste. 110
Fishers, IN 46028
O: 317.588.1798
hkopf@rqaw.com

Project Designation Number: 2101118 & 2700594

Route Number: Michigan Avenue

Feature crossed (if applicable): N/A

City/Township: East Chicago

County: Lake County

Project Description:*

**Provide a full project description—include the same level of specificity and detail as expected in the NEPA document—in order to ensure a timely review by INDOT-CRO staff. For bridge and culvert projects, include specific details on the rehab or replacement including potential changes to width, height and materials. Be sure to include the specific elements listed below as applicable.*

The City of East Chicago, with federal funding, proposes to proceed with a road reconstruction project on Michigan Avenue (Ave.) and Dickey Road (Rd.) in Lake County, Indiana. The project limits along Michigan Ave. extend from Sheridan Place (Pl.) to approximately 100 feet northeast of Block Ave, and the project limits along Dickey Rd. extend from Michigan Ave. to Watling Street (St.). The project is proposed to be completed in two phases. Phase I (Des. No. 2101118) extends from Broadway St. through Block Ave. Phase II (Des. No. 2700594) extends from Sheridan Pl. to Drummond St. The proposed project would involve the following:

- Reconstruct the existing roadway pavement and curb and gutter of Michigan Ave. along the entire project area;
- Replace the existing curb ramps with Americans with Disabilities (ADA) compliant curb ramps;
- Reconstruct the existing sidewalk along the east side of Michigan Ave. to provide a new 5- to 8-foot-wide ADA-compliant sidewalk, except from Grand Boulevard (Blvd.) to Guthrie St. where the existing sidewalk is in good condition;
- Replace the existing sidewalk along the west side of Michigan Ave. from Sheridan Place (Pl.) to Guthrie St. with a new 8- to 10-foot-wide paved asphalt multi-use path. The multi-use path will connect to an

existing path/sidewalk along the north side of Guthrie St. The existing sidewalk from Guthrie St. to Block Ave. will be replaced with a new ADA-compliant 5- to 8-foot-wide sidewalk;

- Replace the existing sanitary sewer lines, water lines, valves, and meters throughout the project area;
- Reduce the travel lane configuration from Sheridan Pl. to Dickey Road (Rd.) to include two 12-foot-wide travel lanes (one in each direction) with a 14-foot-wide center two-way left-turn lane (TWLTL);
- Reconfigure the cross-section from Dickey Rd. to Guthrie St. to include three 11.5-foot-wide travel lanes (two eastbound and one westbound), a westbound 12-foot-wide right-turn lane, and an 11-foot-wide wide center TWLTL;
- Reconstruct the cross-section from Guthrie St. to Block Ave. (end of the project) to include four 11.5-foot-wide travel lanes (two in each direction) and an 11.5-foot-wide center TWLTL;
- Reconstruct the existing roadway pavement and curb and gutter of Dickey Rd. from Michigan Ave. to Watling St.
- Replace the existing sidewalk along both sides of Dickey Rd. with a new 5-foot-wide ADA-compliant sidewalk from Michigan Ave. to Watling St.
- Reconstruct all drive entrances within the project area;
- Upgrade or replace existing traffic signals to include pedestrian signals and pushbutton assemblies;
- Replace existing crosswalk pavement markings;
- Replace existing street lighting with decorative street lighting, and;
- Provide storm water management, such as bioswales and infiltration trenches at various locations (limited to grassy spaces).

If the project includes any curb, curb ramp, or sidewalk work, please specify the location(s) of such work:

Curb Work: Curb and gutter work will occur along Michigan Avenue along the entire roadway and north and south of Dickey Road up to the intersection of Dickey Rd. and Watling St.

Curb Ramp Work:

There are 31 proposed curb ramps to receive work.

Intersection/Locations	Map No.	Quadrants
Michigan Ave. and Sheridan Pl.	1	South (S) and East (E)
Michigan Ave. and E. 138 th St.	1	S and E
Michigan Ave. and Carey St.	1	S and E
Michigan Ave. and Drummond St	2	S
Michigan Ave. and Broadway St.	2	North (N) and E
Michigan Ave. and Euclid Ave.	2	S and E
Michigan Ave. and the alleyway intersecting at E. 136 th St.	3	S and E
Michigan Ave. and Parrish Ave.	3	S and E
Michigan Ave. and Hemlock St. (southeast of Michigan Ave.)	4	S and E
Michigan Ave. and Dickey St. (northwest of Michigan Ave.)	4	N and West (W)
Michigan Ave. and Grand Blvd.	4	S, W, and N
Michigan Ave. and Fir St.	5	S and E
Michigan Ave. and Guthrie St.	5	W and N
Michigan Ave. and drive approximately 208 feet northeast of Guthrie St.	5	S and E
Michigan Ave. at Block Ave. and Callahan Pl.	5	S, W, and N

Sidewalk Work: Reconstruct the existing sidewalk along the east side of Michigan Ave. to provide a new 5- to 8-foot-wide ADA-compliant sidewalk, except from Grant Blvd. to Guthrie St. where the existing sidewalk is in good condition.

For bridge or small structure projects, please list feature crossed, structure number, NBI number, and structure type: N/A

For bridge projects, is the bridge included in INDOT's Historic Bridge Inventory (<https://www.in.gov/indot/2531.htm>)?

☐ Yes ☐ No

If yes, did the inventory determine the bridge eligible for or listed in the National Register of Historic Places? Please provide page # of entry in Historic Bridge Inventory.

☐ Yes ☐ No

Inventory Page # _____

Will there be right-of-way acquisition as part of this project?

☐ Yes ☒ No

All work would occur within the existing City right-of-way.

If yes was checked above, please check all that apply:

☐ Permanent ☐ Temporary ☐ Reacquisition

If applicable, identify right-of-way acquisition locations in text below and in attached mapping. Please specify how much (both temporary and permanent) and indicate what activities are included in the proposed right-of-way:

Is there any potential for additional temporary right-of-way to be needed later for purposes such as access, staging, etc.?

☐ Yes ☒ No

Archaeology (check one):

☒ **All proposed activities are presumed to occur in previously disturbed soils***

**INDOT-CRO will notify you if project area includes undisturbed soils and requires an archaeological reconnaissance.*

☐ **Project takes place in undisturbed soils and the archaeology report is included in submission or will be forthcoming***

** If an archaeology report is required, the Minor Projects PA Form will not be finalized until the report is reviewed and approved by INDOT-CRO. For INDOT-sponsored projects, INDOT-CRO may be able to complete the archaeological investigation. If you would like to request that INDOT-CRO complete an archaeological investigation, please contact the INDOT-CRO archaeology team lead. See CRM Pt. 1 Ch. 3 for current contact information.*

Please specify all applicable categories and condition(s) (highlight applicable conditions in yellow)*:

**Include full category text, including any conditions. INDOT-CRO will finalize categories upon their review.*

B-1. Replacement, repair, or installation of curbs, curb ramps, or sidewalks, including when such projects are associated with roadway work such as surface replacement, reconstruction, rehabilitation, or resurfacing

projects, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking, under the following conditions ***[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]***:

Condition A (Archaeological Resources)

One of the two conditions listed below must be satisfied (*EITHER Condition i or Condition ii must be satisfied*):

- i. **Work occurs in previously disturbed soils,** OR
- ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the Division of Historic Preservation and Archaeology (DHPA) and any archaeological site form information will be entered directly into the State Historic Architectural and Archaeological Database (SHAARD) by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

One of the two conditions listed below must be satisfied (*EITHER Condition i or Condition ii must be satisfied*):

1. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; *OR*
2. **Work occurs adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource under one of the two additional conditions listed below (*EITHER Condition a OR Condition b must be met and field work and documentation must be completed as described below*):**
 - a. No unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and historic brick or stone retaining walls are present in the project area adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; *OR*
 - b. **Unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and historic brick or stone retaining walls are present in the project area adjacent to or within a National Register-listed or National Register-eligible individual above-ground resource or district and ANY ONE of the conditions (1, 2, or 3) listed below must be fulfilled:**
 1. **Unusual features described above will not be impacted by the project. Firm commitments regarding the avoidance of these features must be listed in the MPPA determination form and the NEPA document and must be entered into the INDOT Project Commitments Database. These projects will also be flagged for quality assurance reviews by INDOT Cultural Resources Office during/after project construction.**
 2. Unusual features described above have been determined not to contribute to the significance of the historic resource by INDOT Cultural Resources Office in consultation with the SHPO based on an analysis and justification prepared by their staff or review of such information from other qualified professional historians.
 3. Impacts to unusual features described above have been determined by INDOT Cultural Resources Office to be so minimal that they do not diminish any of the characteristics that contribute to the significance of the historic resource, based on an analysis and justification prepared by their staff or review of such information from other qualified professional historians.

Field work and documentation required for fulfillment of condition B-ii:

When the project takes place adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource, it must be field checked by INDOT Cultural Resources Office staff or other qualified professional historian (meeting the Secretary of Interior's Professional Qualification

Minor Projects PA Project Submittal and Assessment Form

standards [48 Federal Register (FR) 44716]) and photographic documentation must be prepared illustrating both the presence and/or absence of any unusual features along the project route adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource. This documentation must be submitted to INDOT Cultural Resources Office for review.

The only exception would be when it is determined that previous projects along the project route have eliminated the possibility that unusual features adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource exist. In this situation, documentation illustrating the modifications made through previous projects, such as replacement of curbs, curb ramps, or sidewalks, including plan sheets or contract documents and current photographs of the project area, must be submitted to the INDOT Cultural Resources Office for review. With such approved documentation, a site visit by a qualified professional is not required, unless questions arise during the review process. INDOT Cultural Resources Office has the discretion to require the project applicant's qualified professional conduct a site visit when it is not clear if unusual features may be present in the project area.

- B-2. Installation of new lighting, signals, signage and other traffic control devices under the following conditions ***[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]***:

Condition A (Archaeological Resources)

One of the two conditions listed below must be met (*EITHER Condition i or Condition ii must be satisfied*):

- i. **Work occurs in previously disturbed soils;** OR
- ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the DHPA and any archaeological site form information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

- B-8. Construction of pedestrian facilities including trails, multi-use paths, greenways, and associated minor activities defined below, under the following conditions ***[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]***:

Condition A (Archaeological Resources)

One of the two conditions listed below must be met (*EITHER Condition i or Condition ii must be satisfied*):

- i. **Work occurs within areas previously disturbed by vertical and horizontal construction activities, including existing roadway, sidewalk, or rail bed, and is not on, within or adjacent to a National Register listed or eligible site;** OR
- ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the DHPA and any archaeological site form

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information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

Activities associated with this category include the following:

- Pavement surface installation, replacement, rehabilitation, resurfacing, and reconstruction work, including widening, laying down of crushed stone or gravel, shoulder treatments, pavement repair, seal coating, pavement grinding, pavement marking, etc.;
- Installation of new signals, signage, and other traffic control devices;
- Installation of new safety appurtenances such as guardrails and barriers;
- Installation of plant materials and hardscape landscaping elements, including, but not limited to bike racks, benches, trash cans, lighting, and other amenities;
- Trail heads and parking lots;
- Installation of pipes, culverts, and pedestrian bridges.

Check ☒ if SECTION 2: Minor Projects PA Category B-1, Condition B-ii Submission is included

Check ☐ if SECTION 3: Minor Projects PA Category B-9, Condition B-i-c-2 or B-ii-b-3 Submission is included

Part II: Completed by INDOT-CRO

Amendments will be shown in red font.

Information reviewed (please check all that apply):

General project location map ☒ USGS map ☒ Aerial photograph ☒ Soil survey data ☒

General project area photos ☒ Archaeology Reports ☒ Historic Property Reports ☐

Indiana Historic Buildings, Bridges, and Cemeteries Map/Interim Report ☒

Bridge inspection information/BIAS ☐ Historic Bridge Inventory Database ☐

SHAARD ☒ SHAARD GIS ☒ Streetview Imagery ☒ County GIS Data/Property Cards ☒

Other (please specify): Google Maps Streetview; Google Earth Pro (1985 through 2022 aerial photographs); Digital Elevation Model imagery, 2011 to 2020 (GIS)

Are there any commitments associated with this project? If yes, please explain and include in the Additional Comments Section below. yes ☐ no ☒

Does the project result in a de minimis impact to a Section 4(f) protected historic resource? If yes, please explain in the Additional Comments Section below. yes ☒ no ☐

Additional Comments:

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Above-ground Resources

An INDOT-Cultural Resources Office (CRO) historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 first performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for Lake County. No listed resources are present immediately adjacent to the project area, a distance that would serve as an adequate area of potential effects (APE) given the scope of the project and the surrounding terrain.

The Indiana Historic Sites and Structures Inventory (IHSSI) and National Register information for Lake County are available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). All sites were reviewed through the IHBBCM, which contains the most recently updated SHAARD information. Three IHSSI resources, IHSSI #089-679-33001-33003, are listed as demolished. No extant IHSSI documented resources are located immediately adjacent to the project area.

According to the IHSSI rating system, generally properties rated "contributing" do not possess the level of historical or architectural significance necessary to be considered individually National Register eligible, although they would contribute to a historic district. If they retain material integrity, properties rated "notable" might possess the necessary level of significance after further research. Properties rated "outstanding" usually possess the necessary level of significance to be considered National Register eligible if they retain material integrity. Historic districts identified in the IHSSI are usually considered eligible for the National Register.

The INDOT-CRO historian reviewed structures adjacent to the project area utilizing online aerial, street-view photography, and the Lake County GIS website. The project is located along a four-lane urban roadway between a residential area and a commercial/industrial area. All lighting work is limited to upgrading existing facilities and falls under Category A-5 of the Minor Projects PA (MPPA). Upgrades of existing signage falls under Category A-5 of the MPPA. The only area where new installation of a pedestrian signal/push button will occur is in the west corner of the intersection of Michigan Avenue and Block Avenue/Callahan Place. However, there is an existing traffic signal pole and other signage already present in this corner of the intersection. Due to the remainder of the scope of work being limited to the current roadbed, sidewalks, and the curbs/curb ramps, and the presence of the existing signage in the western quad of the intersection of Michigan Avenue and Block Avenue/Callahan Place, only those properties that immediately border the project area have any potential for impacts and are considered adjacent to the project for the purposes of this determination.

A qualified professional historian from RQAW who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 conducted field work on 7/27/2023 as dictated by the fieldwork and documentation requirements of Condition B-ii of Category B-1 of the MPPA to identify any previously unsurveyed resources that might be potentially eligible to the National Register and to determine the presence of any unusual features such as brick or stone sidewalks, curbs or sidewalks/curb ramps; stepped or elevated sidewalks, curbs or sidewalks/curb ramps; or any other feature whose replacement or modification might constitute an adverse effect.

One "notable"-rated resource, IHSSI #089-679-33018 (First Hungarian Reformed Church; 3602 Ivy Avenue; 1932) is located just south and east of the curb ramp work planned at Michigan Avenue and the alleyway at E 136th Street but is separated from the curb ramps by the alley and the 136th Street roadway. Though it is within view of the project area, the limited scope of the project and the orientation of the building (toward Ivy Street, away from the project area) limit any potential visual impact to the resource. Therefore, for the purposes of this determination, IHSSI #089-679-33018 is not considered adjacent to the project area as noted above.

Properties adjacent to the project area consist of vacant lots, parking lots, municipal buildings dating from the mid-twentieth century to the twenty-first century, commercial buildings dating from the early to late twentieth

Minor Projects PA Project Submittal and Assessment Form

century, industrial buildings dating between the early twentieth century to the twenty-first century, and a twenty-first-century multiple housing unit with commercial space.

One previously unsurveyed early twentieth century (c. 1928) brick commercial building at 3531 Michigan Avenue built in the twentieth century functional style features ornate detailing and banding in the upper half of the building with pilasters demarcating the five bays of the building. **These features appear to be stone or terracotta tiling.** The bases of the pilasters show prior damage and deterioration. The lower portion of the building appears to have been highly altered by brick infill, modern windows and doors, and a modern garage door. Despite these integrity issues, the building does appear to be potentially eligible for the National Register. However, work considered adjacent to this building is limited to sidewalk replacement. The sidewalk in front of the building is modern concrete, but it comes up to the face of the building. **A commitment to avoid damaging the deteriorated material at the base of the pilasters on the front of the building at 3531 Michigan Avenue will be made in order for Condition B-ii.b-1 to apply to this project. The commitment will be included in the environmental documentation for this project and entered into INDOT's Project Commitment Database. If the commitment cannot be maintained, INDOT-CRO will need to reassess this project.**

There is no evidence to suggest that any of the rest of the buildings adjacent to the project possess the cultural significance and/or material integrity necessary to be considered potentially eligible for the National Register. Therefore, this project falls under Category B-1 with the project commitment described above as well as Category B-2 and Category B-8 of the MPPA since activities described by the latter categories are outside and not adjacent to a National Register listed or eligible bridge, property, or historic district.

Based on the available information, as summarized above, no above-ground concerns exist as long as the project scope does not change.

Archaeological Resources

An INDOT CRO archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 reviewed the proposed project area, conducted a desktop review, and prepared an archaeological assessment. According to SHAARD, no archaeological sites have been previously recorded within or adjacent to the proposed project area.

The project is limited to the existing City of East Chicago R/W of Michigan Avenue from Sheridan Place to Block Avenue, which consists of the four-lane paved road flanked by sidewalks and driveways to existing commercial buildings as well as commercial and residential buildings that have been demolished and removed. The total project length along Michigan Avenue measures approximately 6,762 ft long and 80 ft wide (up to 40 ft measured from the centerline). Intersection realignments are planned within existing R/W of Michigan Avenue and cross streets.

Proposed sidewalk improvements and curb ramp upgrades are within areas that have been previously disturbed by road, curb, and curb ramp construction and buried utilities. The existing sanitary sewer lines, water lines, valves, and meters throughout the project area planned for replacement are within previously disturbed soils.

Other ground disturbance activities include installing bioswales and infiltration trenches where grassy spaces occur. These locations have been previously disturbed by the urbanization process of this commercial and residential area, then subsequent demolition of buildings since the early 2000s, and new building construction, such as the City of East Chicago Fire Station No. 2.

Since all work will be limited to previously disturbed soils, there are no archaeological concerns provided that the project scope and footprint do not change.

Minor Projects PA Project Submittal and Assessment Form

Accidental Discovery: If any archaeological artifacts or human remains are uncovered during construction, demolition, or earth moving activities, construction within 100 feet of the discovery will be stopped, and INDOT-CRO and the Division of Natural Resources-Division of Historic Preservation and Archaeology (DNR-DHPA) will be notified immediately.

INDOT-CRO staff reviewer(s): Kelyn Alexander and Dawn Alexander

INDOT Approval Date: 11/2/2023

Amendment Approval Date (if applicable):

****Be sure to attach this form to the National Environmental Policy Act documentation for this project. Also, the NEPA documentation shall reference and include the description of the specific stipulation in the PA that qualifies the project as exempt from further Section 106 review.*



Photo above of the southern end of the potentially National Register-eligible commercial building at 3531 Michigan Avenue. The red circles indicate three of the six pilasters that the sidewalk reconstruction activities should avoid damaging.

Categorical Exclusion

Appendix E

Red Flag and Hazardous Materials



Corporate Headquarters
8770 North St., Ste. 110
Fishers, IN 46038
317.588.1798

Date: August 28, 2023

To: Site Assessment & Management (SAM)
Environmental Policy Office - Environmental Services Division (ESD)
Indiana Department of Transportation (INDOT)
100 N Senate Avenue, Room N758-ES
Indianapolis, IN 46204

From: Celeste Johnston
RQAW Corporation
8770 North Street, Suite 110
Fishers, Indiana 46038
cjohnston@rqaw.com

Re: RED FLAG INVESTIGATION
DES # 2101118 & 2700594, Local Project
Road Reconstruction
Michigan Avenue, from Sheridan Place to 0.09 Mile North of Block Avenue
Lake County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: The City of East Chicago and the Federal Highway Administration intend to proceed with a road reconstruction project on Michigan Avenue from Sheridan Place to 0.09 mile north of Block Avenue, in East Chicago, Lake County, Indiana. The proposed project would involve reconstructing the pavement of Michigan Avenue, reconstructing the storm sewer and sanitary sewer networks, and reconstructing the sidewalks and curb ramps. The existing sidewalk along the northwest side of Michigan Avenue from Sheridan Place to Guthrie Street will be replaced with a new 8-foot to 12-foot wide multi-use path. The project would also involve reconstructing Dickey Road from Michigan Avenue to Watling Street.

Bridge Work Included in Project: Yes ☐ No ☒ Structure #(s) N/A

If this is a bridge project, is the bridge Historical? Yes ☐ No ☐ , Select ☐ Non-Select ☐

(Note: If the project involves a historical bridge, please include the bridge information in the Recommendations Section of the report).

Culvert Work Included in Project: Yes ☐ No ☒ Structure #(s) N/A

Proposed right of way: Temporary ☐ # Acres Permanent ☐ # Acres , Not Applicable ☒

Type and proposed depth of excavation: The maximum depth of excavation may reach up to fifteen (15) feet below ground surface (bgs) for reconstruction of the sanitary sewer network. General excavation activities may reach a depth of two (2) feet bgs for pavement and subgrade removal and replacement, and a depth of six (6) feet bgs for storm sewer reconstruction.

Maintenance of traffic (MOT): The MOT may consist of partial phase construction with a local detour route; however, details of the MOT are still under development. Access to affected properties will be provided during construction.

Work in waterway: Yes ☐ No ☒ Below ordinary high water mark: Yes ☐ No ☒

State Project: ☐ LPA: ☒

Any other factors influencing recommendations: Not Applicable (N/A)

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	25	Recreational Facilities	10
Airports ¹	1	Pipelines	16
Cemeteries	N/A	Railroads	9
Hospitals	N/A	Trails	1
Schools	1	Managed Lands	3

¹In order to complete the required airport review, a review of public-use airports within 3.8 miles (20,000 feet) is required.

Explanation:

Religious Facilities: Twenty-five (25) religious facilities are located within the 0.5 mile search radius. The nearest religious facility, Grace Missionary Baptist Church, is located southeast of the project area, near the intersection of Michigan Avenue and 136th Street. Coordination with the Grace Missionary Baptist Church will occur.

Airport: Although not located within the 0.5 mile search radius, one (1) public-use airport, Gary/Chicago International Airport, is located within 3.8 miles (20,000 feet) of the project area. The public-use airport is located approximately 1.9 miles southeast of the project area; therefore, early coordination with INDOT Aviation will occur.

Schools: One (1) school is located within the 0.5 mile search radius. The school, Abraham Lincoln Elementary School, is mapped 0.15 mile southeast of the project area but is actually located 0.20 mile southeast of the northeastern terminus of the project area. No impact is expected.

Recreational Facilities: Ten (10) recreational facilities are located within the 0.5 mile search radius. Although the icon associated with Penn Center Park is mapped 0.10 mile southeast of the project area, the facility is actually located adjacent to the project area near the intersection of Michigan Avenue and Guthrie Street. Coordination with the East Chicago Park and Recreation Department will occur.

Pipelines: Seventeen (16) pipelines are located within the 0.5 mile search radius. One (1) pipeline, Northern Indiana Public Service Co., crosses the southern end of the project area. Coordination with Northern Indiana Public Service Co. will occur.

Railroads: Nine (9) railroads are located within the 0.5 mile search radius. The nearest railroad, Norfolk Southern Railroad, is located adjacent to the southwest end of the project area. Coordination will occur with the Norfolk Southern Railroad.

Trails: One (1) trail is located within the 0.5 mile search radius. The open trail, Linear Park Trail, is located adjacent to the project area near the intersection of Michigan Avenue and Guthrie Street. Coordination with the East Chicago Park and Recreation Department will occur.

Managed Lands: Three (3) managed lands are located within the 0.5 mile search radius. The nearest managed land, Nunez Park, is located 0.20 mile southeast of the project area. No impact is expected.

WATER RESOURCES TABLE AND SUMMARY

Water Resources Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	N/A	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	2
Canal Structures – Historic	N/A	Lakes	4
NPS NRI Listed	N/A	Floodplain - DFIRM	3
NWI-Lines	N/A	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	3	Sinkhole Areas	N/A
Rivers and Streams	3	Sinking-Stream Basins	N/A

If unmapped water features are identified that might impact the project area, direct coordination with the appropriate agency, if applicable, will occur.

Explanation:

IDEM 303d Listed Streams and Lakes (Impaired): Three (3) IDEM 303d listed streams and lakes are located within the 0.5 mile search radius. The nearest IDEM 303d listed lake, Lake Michigan, is located 0.32 mile northeast of the project area. No impact is expected.

Rivers and Streams: Three (3) rivers and streams are located within the 0.5 mile search radius. The nearest stream, Indiana Harbor Canal, is located 0.33 mile northwest of the project area. No impact is expected.

National Wetlands Inventory (NWI) Wetlands: Two (2) NWI wetlands are located within the 0.5 mile search radius. The nearest NWI wetland is located 0.31 mile northeast of the project area. No impact is expected.

Lakes: Four (4) lakes are located within the 0.5 mile search radius. The nearest lake is located 0.25 mile east of the project area. No impact is expected.

Floodplain – DFIRM: Three (3) floodplain polygons are located within the 0.5 mile search radius. The nearest floodplain polygon is located 0.31 mile northeast of the project area. No impact is expected.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Petroleum Wells	N/A	Mineral Resources	4
Mines – Surface	N/A	Mines – Underground	N/A

Explanation:

Mineral Resources: Four (4) mineral resource facilities are located within the 0.5 mile search radius. Two (2) facilities, identified as LaFarge Corporation and Phoenix Services, LLC, are located 0.06 mile northwest of northern section of the project area. No impact is expected.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	7	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	*3	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	11	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	1	Brownfields	15
Construction Demolition Waste	N/A	Institutional Controls	11
Solid Waste Landfill	N/A	NPDES Facilities	17
Infectious/Medical Waste Sites	1	NPDES Pipe Locations	13
Leaking Underground Storage Tank (LUST) Sites	9	Notice of Contamination Sites	N/A

Unless otherwise noted, site specific details presented in this section were obtained from documents reviewed on the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC).

Explanation:

Resource Conservation Recovery Act (RCRA) Generator/Treatment, Storage, Disposal (TSD): Seven (7) RCRA Generators were identified within the 0.5 mile search radius. Four (4) RCRA Generator facility icons are located approximately 0.07 mile north of the northern terminus of the project area.

Primary Energy, Agency ID (AI) ID # 10840, located at 3210 Watling Street, is located 0.07 mile north of the project area.

The facility is also listed as Cokenergy LLC and Primary Energy. Primary Energy is a RCRA Large Quantity Generator. An inspection was conducted of the facility on February 2, 2022. Violations were discovered but corrected during the inspection. No impact is expected.

Harsco Metals, Arcelor Mittal Plant 2, AI ID # 12658, is located approximately 0.07 mile north of the northern terminus of the project area. A complete industrial waste inspection was conducted by IDEM on June 4, 2003. No violations were observed during the inspection. No impact is expected.

Arcelormittal USA Incorporated was identified as Cleveland-Cliffs Indiana Harbor East in the VFC files, AI ID # 11557, and is located adjacent to the west-northwest of the project area. The site is currently undergoing corrective action and groundwater monitoring activities for contamination from coke by-product COCs. While most groundwater flow appears to be away from the project area, one (1) groundwater flow path appears to be flowing toward the northwestern corner of the project area. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval. Coordination will occur with Gregory Rudloff (Rudloff.gregory@epa.gov), US EPA, before RFC.

State Cleanup Sites: Three (3) State Cleanup sites are mapped within the 0.5 mile search radius; however, two (2) sites are incorrectly mapped and are located outside the 0.5 mile radius. Arcelormittal Indiana Harbor LLC, 3001 Dickey Road, AI ID # 11555, is mapped 0.47 mile northwest of the project area but is located outside the 0.5 mile search radius. LCFA Crown Point, Cline and Indianapolis, AI ID # 24015, is located outside the 0.5 mile search radius. No impact is expected.

East Chicago, address not listed/intersection of 142nd Street and Carey Street, AI ID # 23197, is located 0.46 mile south/southeast of the project area. No files are available for this site in VFC. No impact is expected.

Underground Storage Tank (UST) Sites: Eleven (11) UST sites are located within the 0.5 mile search radius.

New Fire Station No. 2, 3350 Michigan Avenue, AI ID # 23298, is located adjacent to the project area at the northeast corner of the intersection of Michigan Avenue and Guthrie Street. No records were available for review in the IDEM VFC, even though the previous station at 3428 Guthrie has several records. No impact is expected.

Harsco Corporation, 3236 Watling, AI ID # 12658, is mapped 0.07 mile north of the project area; however, the UST/LUST site is 1.9 miles north of the project area. No impact is expected.

Voluntary Remediation Program: One (1) Voluntary Remediation Program site was identified within the 0.5 mile search radius.

ASF-Keystone Inc., 3761 Canal Street, AI ID # 15775, is mapped 0.15 mile northwest of the project area. The site operated as an industrial foundry from circa 1904 until 2001. The site received a Certification of Completion from IDEM on November 20, 2003. A Covenant Not to Sue was issued by IDEM on April 5, 2004. This site is also an Institutional Controls site through the use of a deed restriction. It appears that contamination was confined to the site. No impact is expected.

Infectious/Medical Waste Sites: One (1) infectious/medical waste site is located within the 0.5 mile search radius. Abrade Technologies, 3631 Canal Street, AI ID #24373, is located 0.42 mile northwest of the project area. According to a letter sent by IDEM on March 22, 2007, the Solid Waste Processing Facility Permit was denied. No further information is available in the VFC. No impact is expected.

Leaking Underground Storage Tank (LUST) Sites: Nine (9) LUST sites were identified within the 0.5 mile search radius.

Calumet Services, 3475 Michigan Avenue, AI ID # 20764, is located adjacent to the project area near the northeast corner of the intersection of Michigan Avenue and Hemlock Street. An ISC report, dated April 30, 2015, concluded that petroleum related contaminants of concern (COCs) are present in both soil and groundwater. On July 22, 2015, IDEM requested that a Further Site Investigation (FSI) be prepared to fully delineate the nature and extent of contamination to include volatile organic compounds (VOCs), polyaromatic hydrocarbons (PAHs), and metals in soil and groundwater. No files were available for review in the VFC documenting actions at this site past 2015. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Brownfields: Fifteen (15) Brownfield sites were identified within the 0.5 mile search radius. Four (4) Brownfield sites are located adjacent to the project area.

Bills K M Service, 1316 Broadway Street, AI ID # 18979, is located adjacent to the project area on the northeast corner of the intersection of Michigan Avenue and Broadway Street. The property was developed prior to the 1930s and has historically been utilized as a fueling station and auto repair facility with minor utilization as a restaurant and a retail shop. The property is currently vacant, and all site structures have been demolished. A Phase II site investigation was performed in December 2021/January 2022. The laboratory analytical report indicated the presence of benzo(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene, and lead in the soil above IDEM's 2022 Remediation Closure Guide (RCG) screening levels. Dissolved 2-methylnaphthalene, naphthalene, vinyl chloride, and lead were detected in the groundwater above the screening levels. No additional investigation has been completed on the site. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Michigan Company Infra-Metals, 3600 Michigan Avenue, AI ID # 22753, is located adjacent to the project area near the intersection of Michigan Avenue and 136th Street. The only file available for review in the VFC is from 2005 and discusses IDEM's procedures for site characterization for prospective buyers. No information was found about possible contamination on site. Infra Metals provided structural steel services. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Commercial Lot, 3487-3489 Michigan Avenue, AI ID # 105737, is located adjacent to the project area southwest of the intersection of Michigan Avenue and Hemlock Street. A Phase I (September 12, 2012) and Phase II (November 8, 2012) were completed for this site. The Phase I ESA indicated that the lots at 3483 and 3485 Michigan Avenue were historical UST site. In addition, the site to the north was an historical dry cleaner. The Phase II indicated that lead was present in the groundwater to the northeast and northwest. It also stated that not enough information was provided to determine potential contamination present on-site and off-site. No further information was found in the VFC concerning this site, but based on aerial imagery the building appears to have been demolished between March of 2013 and April of 2014. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Michigan Avenue Property, 3402 Michigan Avenue, AI ID # 24273, is located adjacent to the project area near the intersection of Michigan Avenue and Guthrie Street. No files are available for review in the VFC. The Phase I for 3487-3489 Michigan Avenue indicated that this location was previously the Intrurban Tavern; however, this property appeared to be a possible candidate for the Brownfields Program. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Institutional Controls: Eleven (11) Institutional Controls sites were identified within the 0.5 mile search radius. Two (2) institutional control sites are located near the project area.

North Harbor Properties; 3521-25, 3443, 3423, 3407-21 Fir Street; 3411, 3415, and 3428 Guthrie Street; AI ID # 127979, is located 0.03 mile southeast of the project area. An April 24, 2020, Phase I indicated that from 1915 to 1972 the Michigan Avenue property was used as a theater, commercial stores, and an automobile garage. A Phase II dated June 23, 2020, indicated that subsurface soil sampling was not completed near the Michigan Avenue property nor at depths greater than ten (10) feet. One (1) surface sample was collected for lead and arsenic on the Michigan Avenue property and laboratory results were less than RCG Screening Levels. An Environmental Restrictive Covenant (ERC) was recorded on the property on July 22, 2022. The ERC strictly prohibits the use and/or extraction of groundwater from the site. If excavation occurs in this area, it is possible that contamination may be encountered. Before proper removal and disposal of soil and/or groundwater, analysis for lead will be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination.

National Pollutant Discharge Elimination System (NPDES) Facilities: Seventeen (17) NPDES facilities are located within the 0.5 mile search radius.

Indiana Radiator, 3531 Michigan Avenue, Permit # INP000514, is located adjacent to the project area south of the intersection of Michigan Avenue and Parrish Avenue. The permit for this facility is pending. Coordination with Indiana Radiator will occur prior to RFC.

Watling Street Road Reconstruction, Watling Street and Grand Blvd, Permit # INR10P110, is adjacent to the northwest section of the project area on Grand Blvd. The permit was terminated on June 16, 2022. No impact is expected.

NPDES Pipe Locations: Thirteen (13) NPDES pipe locations are located within the 0.5 mile search radius. The nearest pipe location is 0.25 mile northwest of the project area. No impact is expected.

ECOLOGICAL INFORMATION SUMMARY

The Lake County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is provided at https://www.in.gov/dnr/nature-preserves/files/np_lake.pdf. A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did indicate the presence of ETR species within the 0.5 mile search radius. No further coordination is needed, however, if a Waters of the US Report is prepared for the project, coordination will need to occur with IDNR at a minimum.

Due to the nature of project activities, this project will fall under the guidelines set forth under the United States Fish and Wildlife Service (USFWS) Interim Policy for the Review of Highway Transportation Projects in Indiana dated May 29, 2013. No further coordination is necessary.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects."

RECOMMENDATIONS SECTION

Include recommendations from each section. If there are no recommendations, please indicate N/A:

INFRASTRUCTURE:

Religious Facilities: One (1) religious facility, Grace Missionary Baptist Church, is located adjacent to the project area southeast of the intersection of Michigan Avenue and 136th Street. Coordination with the Grace Missionary Baptist Church will occur.

Airports: One (1) public-use airport, Gary/Chicago International Airport, is located approximately 1.9 miles southeast of the project area. Early coordination with INDOT Aviation will occur.

Recreational Facilities: One (1) recreational facility, Penn Center Park, is located adjacent to the project area near the intersection of Michigan Avenue and Guthrie Street. Coordination with the East Chicago Park and Recreation Department will occur.

Pipelines: One (1) pipeline crosses the southern end of the project area. Coordination with the Northern Indiana Public Service Co. will occur.

Railroads: One (1) railroad, Norfolk Southern Railroad, is located adjacent to the southwest end of the project area. Coordination will occur with the Norfolk Southern Railroad.

Trails: One (1) open trail, the Linear Park Trail, is located adjacent to the project area near the intersection of Michigan Avenue and Guthrie Street. Coordination with the East Chicago Park and Recreation Department will occur.

WATER RESOURCES: N/A

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS:

RCRA Generator/Treatment, Storage, Disposal: Arcelormittal USA Incorporated was identified as Cleveland-Cliffs Indiana Harbor East in the VFC files, AI ID # 11557, and is located adjacent to the west-northwest of the project area. The site is currently undergoing corrective action and groundwater monitoring activities for contamination from coke by-product COCs. While most groundwater flow appears to be away from the project area, one (1) groundwater flow path appears to be flowing toward the northwestern corner of the project area. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval. Coordination will occur with Gregory Rudloff (Rudloff.gregory@epa.gov), US EPA, before RFC.

LUST Sites: Calumet Services, 3475 Michigan Avenue, AI ID # 20764, is located adjacent to the project area neon the northeast corner of the intersection of Michigan Avenue and Hemlock Street. An ISC report, dated April 30, 2015, concluded that petroleum related contaminants of concern (COCs) are present in both soil and groundwater. On July 22,

2015, IDEM requested that a Further Site Investigation (FSI) be prepared to fully delineate the nature and extent of contamination to include volatile organic compounds (VOCs), polyaromatic hydrocarbons (PAHs), and metals in soil and groundwater. No files were available for review in the VFC documenting actions at this site past 2015. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Brownfields: Bills K M Service, 1316 Broadway Street, AI ID # 18979, is located adjacent to the project area on the northeast corner of the intersection of Michigan Avenue and Broadway Street. The property was developed prior to the 1930s and has historically been utilized as a fueling station and auto repair facility with minor utilization as a restaurant and a retail shop. The property is currently vacant, and all site structures have been demolished. A Phase II site investigation was performed in December 2021/January 2022. The laboratory analytical report indicated the presence of benzo(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene, and lead in the soil above IDEM's 2022 Remediation Closure Guide (RCG) screening levels. Dissolved 2-methylnaphthalene, naphthalene, vinyl chloride, and lead were detected in the groundwater above the screening levels. No additional investigation has been completed on the site. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Michigan Company Infra-Metals, 3600 Michigan Avenue, AI ID # 22753, is located adjacent to the project area near the intersection of Michigan Avenue and 136th Street. The only file available for review in the VFC is from 2005 and discusses IDEM's procedures for site characterization for prospective buyers. No information was found about possible contamination on site. Infra Metals provided structural steel services. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

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Michigan Avenue Property, 3402 Michigan Avenue, AI ID # 24273, is located adjacent to the project area near the intersection of Michigan Avenue and Guthrie Street. No files are available for review in the VFC. The Phase I for 3487-3489 Michigan Avenue indicated that this location was previously the Intrurban Tavern; however, this property appeared to be a possible candidate for the Brownfields Program. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

Institutional Controls: North Harbor Properties; 3521-25, 3443, 3423, 3407-21 Fir Street; 3411, 3415, and 3428 Guthrie Street; AI ID # 127979, is located 0.03 mile southeast of the project area. An April 24, 2020, Phase I indicated that from 1915 to 1972 the Michigan Avenue property was used as a theater, commercial stores, and an automobile garage. A Phase II dated June 23, 2020, indicated that subsurface soil sampling was not completed near the Michigan Avenue property nor at depths greater than ten (10) feet. One (1) surface sample was collected for lead and arsenic on the Michigan Avenue property and laboratory results were less than RCG Screening Levels. An Environmental Restrictive

Covenant (ERC) was recorded on the property on July 22, 2022. The ERC strictly prohibits the use and/or extraction of groundwater from the site. If excavation occurs in this area, it is possible that contamination may be encountered. Before proper removal and disposal of soil and/or groundwater, analysis for lead will be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination.

NPDES Facilities: Indiana Radiator, 3531 Michigan Avenue, Permit # INP000514, is located adjacent to the project area south of the intersection of Michigan Avenue and Parrish Avenue. The permit for this facility is pending. Coordination with Indiana Radiator will occur prior to RFC.

ECOLOGICAL INFORMATION: If a Waters of the US Report is prepared for the project, coordination will need to occur with IDNR at a minimum. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects."

Peter
Washburn

Digitally signed by
Peter Washburn
Date: 2023.08.29
11:41:50 -04'00'

INDOT ESD concurrence: _____ (Signature)

Prepared by:
Celeste Johnston
Senior Environmental Scientist
RQAW Corporation

Graphics:

A map for each report section with a 0.5 mile search radius buffer around all project area(s) showing all items identified as possible items of concern is attached. If there is not a section map included, please change the YES to N/A:

SITE LOCATION: YES

INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES

HAZARDOUS MATERIAL CONCERNS: YES

Red Flag Investigation - Infrastructure

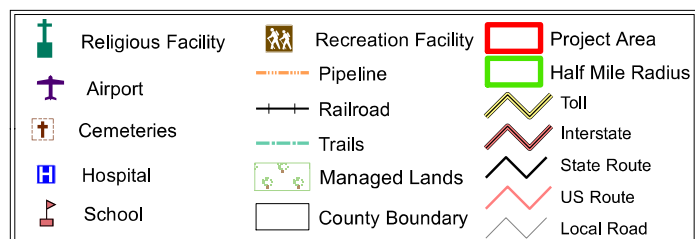
Michigan Avenue, from Sheridan Place to 0.09 Mile North of Block Avenue

Des. Nos. 2101118 & 2700594, Road Reconstruction

Lake County, Indiana



Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

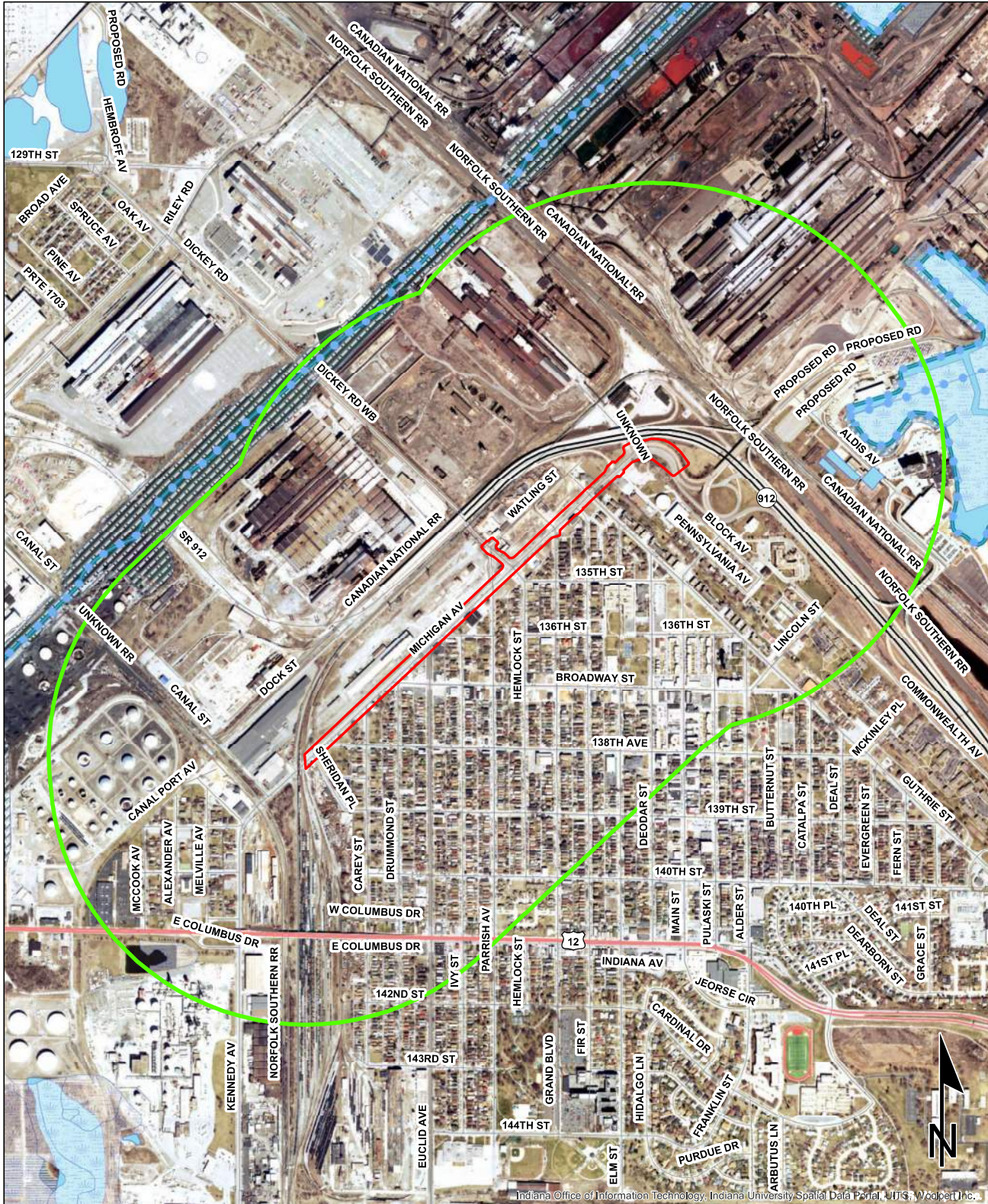


Red Flag Investigation - Water Resources

Michigan Avenue, from Sheridan Place to 0.09 Mile North of Block Avenue

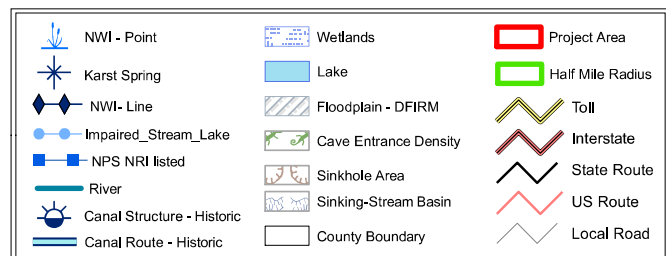
Des. Nos. 2101118 & 2700594, Road Reconstruction

Lake County, Indiana



Sources:
Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

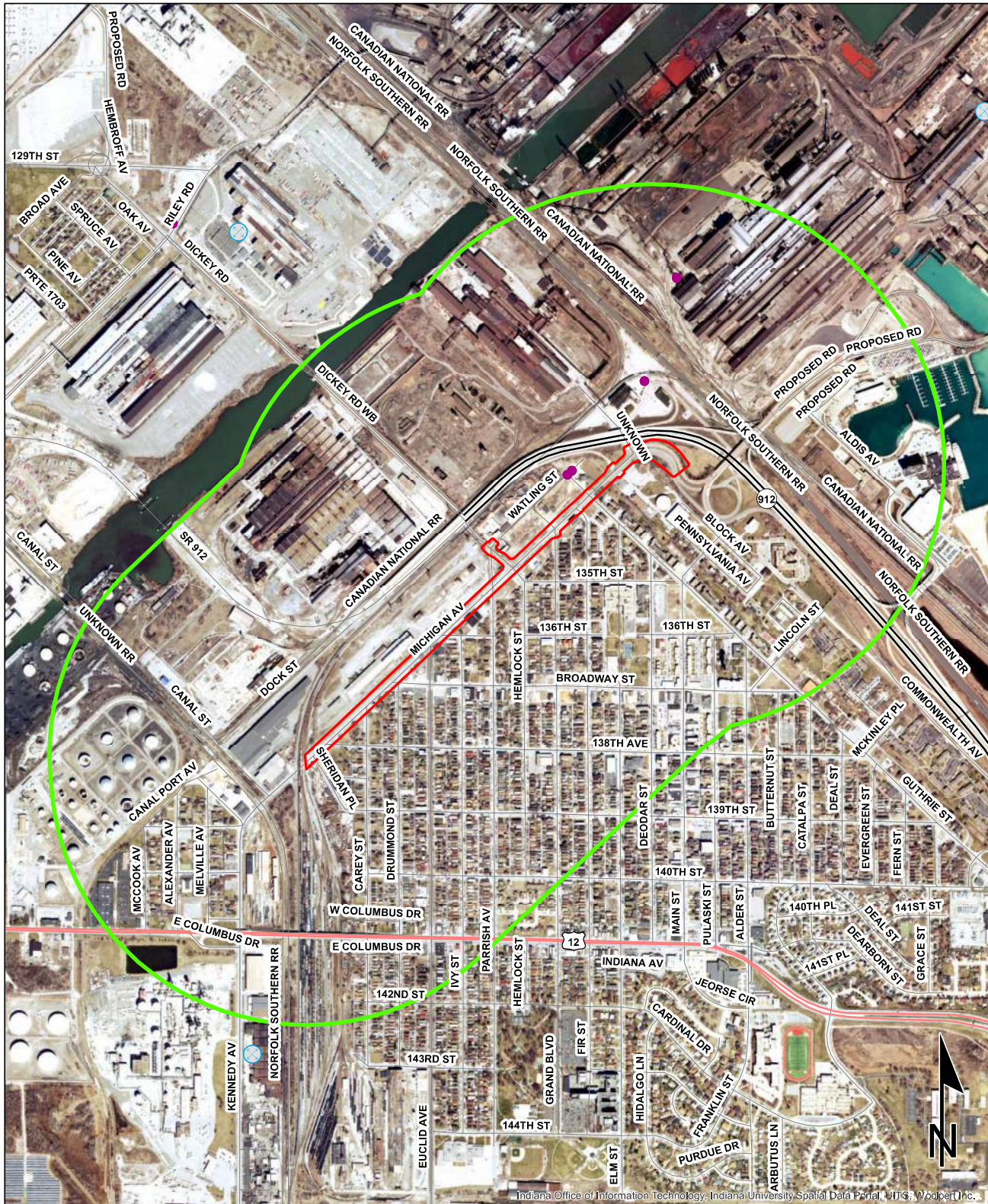


Red Flag Investigation - Mining/Mineral Exploration

Michigan Avenue, from Sheridan Place to 0.09 Mile North of Block Avenue

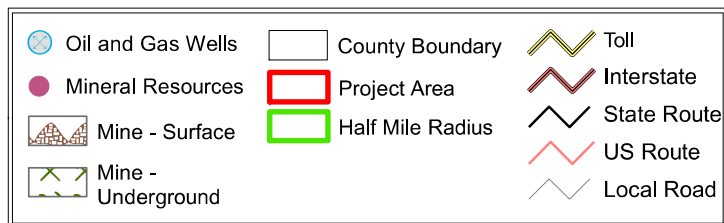
Des. Nos. 2101118 & 2700594, Road Reconstruction

Lake County, Indiana



Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

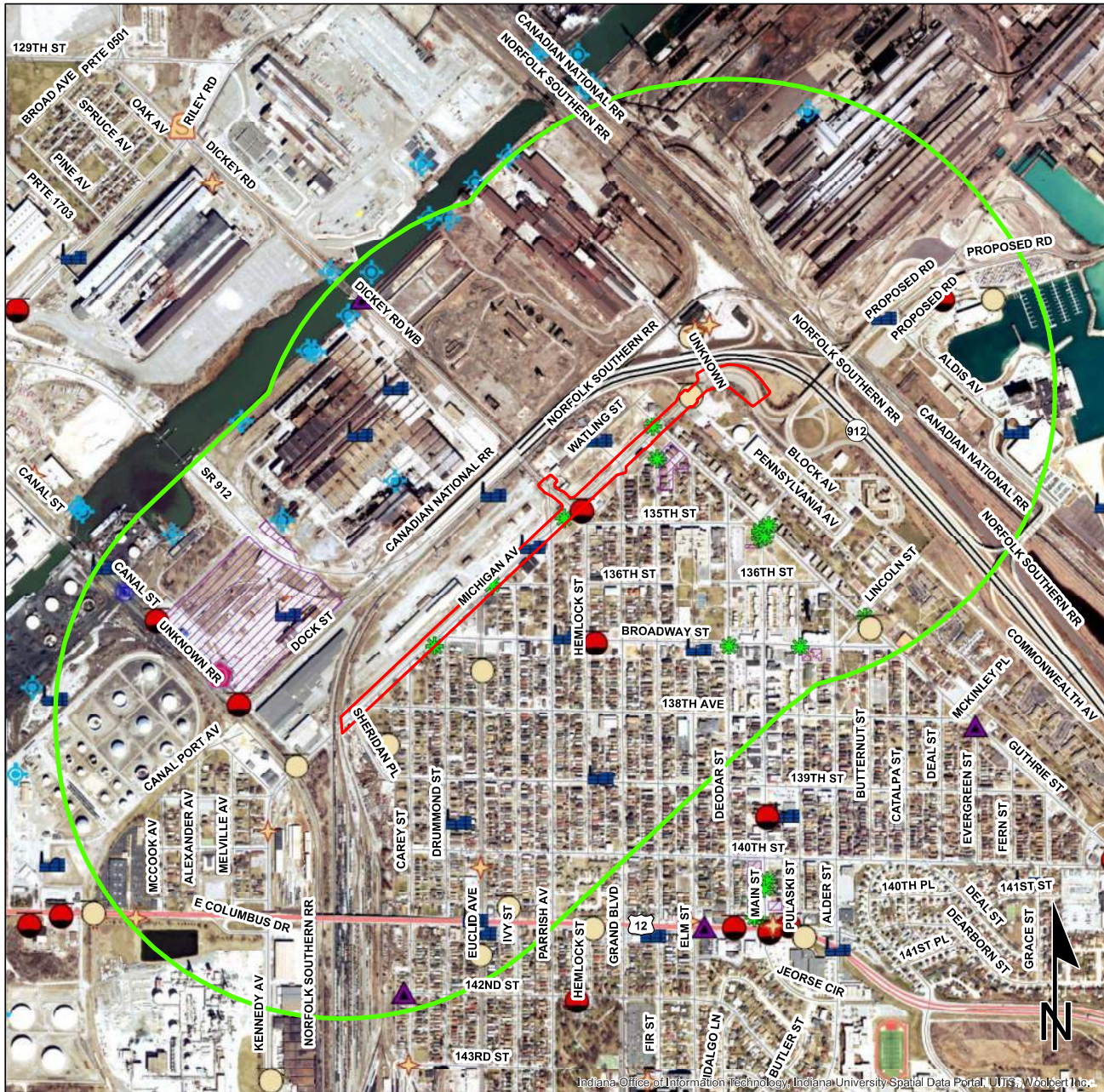


Red Flag Investigation - Hazardous Material Concerns

Michigan Avenue, from Sheridan Place to 0.09 Mile North of Block Avenue

Des. Nos. 2101118 & 2700594, Road Reconstruction

Lake County, Indiana



	Brownfield		RCRA Generator/TSD		Institutional Controls
	RCRA Corrective Action Sites		Restricted Waste Site		County Boundary
	Confined Feeding Operation		Septage Waste Site		Project Area
	Notice_of Contamination		Solid Waste Landfill		Half Mile Radius
	Construction/Demolition Site		State Cleanup Site		Toll
	Infectious/Medical Waste Site		Superfund		Interstate
	Leaking Underground Storage Tank		Tire Waste Site		State Route
	Manufactured Gas Plant		Underground Storage Tank		US Route
	NPDES Facilities		Voluntary Remediation Program		Local Road
	NPDES Pipe Locations		Waste Transfer Station		
	Open Dump Waste Site				

0.2 0.1 0 0.2
Miles

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

Des. No. 2101118 & 2300726

Appendix E: Red Flag Investigation and Hazardous Materials

Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83
 E15

Categorical Exclusion













Appendix F

Water Resources

IDNR Indiana Floodplain Information Portal (INFIP) Map
Michigan Avenue, from Sheridan Place to 0.01 Mile North of Block Avenue
Road Reconstruction Project
Lake County, Indiana
Des. No. 2101118 & 2300726



Legend

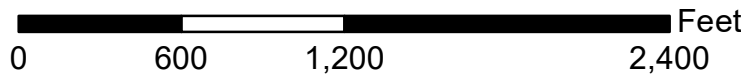
-  Project Area
-  FEMA Zone AE Floodway; FEMA Administrative Floodway
-  DNR Detailed Floodway
-  DNR Approximate Floodway
-  FEMA Zone A
-  FEMA Zone AE
-  DNR Detailed Fringe
-  DNR Approximate Fringe
-  Additional Floodplain Area; DNR .2 Percent Flood Hazard
-  FEMA Protected by Levee
-  FEMA Floodplain - Ponding (Depth)
-  FEMA Floodplain - Sheet Flow (Depth)

Map Datum: NAD 83
Map Projection: UTM Zone 16 North
This map is intended to serve as an aid in graphic representation only.
This information is not warranted for accuracy or other purposes.
Data obtained from the State of Indiana GIO Library.
Orthophotography obtained from Indiana Map Framework Data.

Indiana Department of Natural Resources, Division of Water, State of Indiana



IDNR INFIP Map



Township: North
County: Lake

Categorical Exclusion

Appendix G

Public Involvement

Aaron Lawson

From: Aaron Lawson
Sent: Monday, August 28, 2023 12:57 PM
To: Chuck Sims
Cc: Celeste Johnston; Joe Dabkowski
Subject: Michigan Ave. Reconstruction (Des. 2101118 & 2700594) - Public Involvement Plan

Hi Chuck,

Please see below for the public involvement plan for the Michigan Ave. reconstruction project (Des. Numbers 2101118 & 2700594). Per the current INDOT *Public Involvement Manual*, a public involvement plan is required for all projects. If you agree with the plan, please add this correspondence to the project file.

Public Involvement Plan

Michigan Ave. Roadway Reconstruction Project

From Sheridan Place to Block Avenue, East Chicago, Lake County, Indiana

Des. Numbers: 2101118 & 2700594

Formal Public Involvement – Legal Notice:

The Michigan Ave. reconstruction project in East Chicago, Lake County, Indiana (Des. Numbers 2101118 & 2700594) meets the minimum requirements described in the current *INDOT Public Involvement Manual* which requires the project sponsor, the City of East Chicago, to offer the public an opportunity to submit comments and / or request a public hearing.

The following steps will occur *after* the draft CE has been released for public involvement:

- A legal notice will appear in a widely circulated local publication and will be published twice, approximately 5 to 7 days apart. The legal notice will offer the public an opportunity to submit comments and / or request a public hearing.
- A copy of the legal notice will also be mailed to adjacent / impacted property owners along the project area.
- The draft CE and plan set will be available for viewing online and in-person at select locations when the first legal notice is published.
- The legal notice will provide the public 15 days to submit comments related to the project and / or request a public hearing.
- Any comments received will be addressed individually by the design team after the comment period expires. The comments and response to comments will be documented in the project file and CE document.
- The public involvement materials, such as the Publisher's Affidavit, copy of the legal notice, comments and response to comments (if received), property owners mailing list, and signature page of the CE document will be sent to the INDOT LaPorte District for review and certification.
- Upon certification of public involvement, the draft CE will be updated with the results of public involvement. Any comments received and response to comments will be reflected / summarized in the draft CE document.
- The updated draft CE will then be sent to INDOT for review and approval.

Thank you,

Aaron Lawson

Project Manager



A 8770 North Street, Suite 110, Fishers, IN 46038

P 317-588-1763 **C** 317-691-9210

RQAW.com |   

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Consulting Engineers
5925 Lakeside Blvd.
Indianapolis, IN 46278
Phone: (317) 290-9549
Fax: (317) 290-9560

6949 Kennedy Ave.
Unit F
Hammond, IN 46323
Phone: (219) 844-6752
Fax: (219) 844-6795

August 4, 2022

Project: Reconstruction of Michigan Ave. From Sheridan Place to Block Ave.

Example Notice of Entry Letter

East Chicago IN 46312

Dear Property Owner:

Our information indicates that you own or currently occupy property near the proposed project noted above. Our employees will be performing a survey of the project area in the near future. It may be necessary for them to come onto your property to complete this work. This is permitted by law per Indiana Code IC 8-23-7-26. They will show you their identification, if you are available, before coming onto your property. If you have sold this property, or it is occupied by someone else, please let us know the name and address of the new owner or current occupant so we may contact them regarding the survey.

At this stage, we generally do not know what effect, if any, our project can eventually have on your property. If we determine later that your property is involved, we will contact you with additional information.

The survey work may include the identification and mapping of wetlands and historic resources, archaeological investigations (which may involve the survey, testing, or excavation of identified archaeological sites) and various other environmental studies. The survey work will include mapping the location of features such as trees, buildings, fences, and drives, as well as obtaining ground elevations. This survey is needed for the proper planning and design of this drainage improvement and roadway project. Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If problems do occur, please contact our field crew or contact me at the telephone number or address shown above.

Sincerely,

A handwritten signature in black ink, appearing to read 'Benson G. Hinshaw', written in a cursive style.

Benson G. Hinshaw P.S.

STREETS – HIGHWAYS – TRAFFIC – STRUCTURES – WATER – SEWER – SURVEYING – RIGHT-OF-WAY SERVICES

ACTIVE MEMBERSHIPS:



Des. No. 2101118 & 2300726



Appendix G: Public Involvement



G3

Categorical Exclusion

Appendix H

Air Quality

**Federal Transit
Administration**
Region V
200 West Adams St., Suite 320
Chicago, IL 60606-5253



**U.S. Department
of Transportation**

Federal Highway Administration
Indiana Division
575 N. Pennsylvania St., Rm 254
Indianapolis, IN 46204-1576

September 1, 2023

Mr. Michael Smith
Commissioner
Indiana Department of Transportation
100 N Senate Ave. N955
Indianapolis, IN 46204

SUBJECT: Indiana FY2024-2028 STIP Approval and Associated Federal Planning Finding

Dear Mr. Smith:

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed our review of the FY2024-2028 Indiana Statewide Transportation Improvement Program (INSTIP), which was submitted by the Indiana Department of Transportation (INDOT) request letter dated August 23, 2023.

Based on our review of the information provided, certifications of the Statewide and Metropolitan transportation planning processes for and within the state of Indiana, and our participation in those transportation planning processes (including planning certification reviews conducted in Transportation Management Areas), FHWA and FTA are jointly approving the FY2024-2028 STIP, including the Metropolitan Planning Organization (MPO) Transportation Improvement Programs (TIPs) incorporated into the STIP by reference, subject to the corrective actions identified in the attached Federal Planning Finding (FPF) report. FHWA and FTA consider the projects in the 5th year for informational purposes only, and our approval does not exceed four years per 23 CFR 450.220(c).

FHWA and FTA are required under 23 CFR 450.220(b) to document and issue an FPF in conjunction with the approval of the FY2024-2028 STIP. At a minimum, the FPF verifies that the development of the STIP is consistent with the provisions of both the Statewide and Metropolitan transportation planning requirements. FHWA and FTA find that the Indiana FY2024-2028 STIP substantially meets the transportation planning requirements and are approving the STIP subject to the corrective actions outlined in the FPF. This approval is effective September 1, 2023 and is given with the understanding that an eligibility determination of individual projects for funding must be met, and INDOT must ensure the satisfaction of all administrative and statutory requirements, as well as address the corrective actions outlined in the attached report.

If you have questions or need additional information concerning our approval and the FPF, please contact Ms. Erica Tait of the FHWA Indiana Division at (317) 226-7481, or by email at erica.tait@dot.gov, or Mr. Tony Greep of the FTA Region 5 Office at (312) 353-1646, or by email at anthony.greep@dot.gov.

Sincerely,

**KELLEY
BROOKINS** Digitally signed by
KELLEY BROOKINS
Date: 2023.08.31
17:33:15 -05'00'

Kelley Brookins
Regional Administrator
FTA Region V

Sincerely,

**JERMAINE
R HANNON** Digitally signed by
JERMAINE R HANNON
Date: 2023.09.01
11:46:31 -04'00'

Jermaine R. Hannon
Division Administrator
FHWA Indiana Division



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-Executive Office
Indianapolis, Indiana 46204

PHONE: (855) 463-6848

Eric Holcomb, Governor
Michael Smith, Commissioner

August 28, 2023

Mr. Jermaine R. Hannon, Division Administrator
FHWA Indiana Division
575 North Pennsylvania St., Room 254
Indianapolis, IN 46204

Ms. Kelley Brookins, Regional Administrator
FTA Region 5
200 West Adams St.
Suite 320
Chicago, IL 60606-5253

Dear Mr. Hannon /Ms. Brookins:

The Indiana Department of Transportation is pleased to submit its FY 2024-2028 Statewide Transportation Improvement Program (STIP) for review and approval by your offices.

Included in the final submitted document is a listing of the state's expansion/preservation and local small urban and rural and rural transit projects. The following Metropolitan Planning Organization TIPs will be included in the FY 2024-2028 STIP by reference.

Area Plan Commission of Tippecanoe County (APCTC)	FY 2024-2028
<ul style="list-style-type: none">https://www.tippecanoe.in.gov/DocumentCenter/View/40728/FY-2024-2028-TIP-including-0-amendments	
Bloomington-Monroe County Metropolitan Planning Organization (BMCMPPO)	FY 2024-2028
<ul style="list-style-type: none">https://bloomington.in.gov/sites/default/files/2023-08/BMCMPPO%20FY%202024%20-%202028%20TIP%20-%2006-30-23%20-%20ADOPTED%20FINAL.pdf	
Columbus Area Metropolitan Planning Organization (CAMPO)	FY 2024-2028
<ul style="list-style-type: none">https://www.columbus.in.gov/planning/tip/	
Delaware-Muncie Metropolitan Plan Commission (DMMPC)	FY 2022-2025
<ul style="list-style-type: none"><i>Including Amendments/modifications through 2/14/23</i>https://www.co.delaware.in.us/egov/documents/1692987897_47263.pdf	
Evansville Metropolitan Planning Organization (EMPO)	FY 2024-2028
<ul style="list-style-type: none">http://www.evansvillempo.com/Docs/TIP/TIP_2024-2028/TIP_2024-2028.pdf	
Kokomo-Howard County Governmental Coordinating Council (KHCGCC)	FY 2022-2026
<ul style="list-style-type: none"><i>Including Amendments/modification through 7/28/23</i>https://www.kokomompo.com/project/tip-2020-2024/	

www.in.gov/dot/

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Kentuckiana Regional Planning and Development Agency (KIPDA)	FY 2023-2026
<ul style="list-style-type: none"> • https://www.kipda.org/wp-content/uploads/2023/05/FY2023-TIP-FINAL-5-25.pdf 	
Indianapolis Metropolitan Planning Organization (IMPO)	FY 2024-2027
<ul style="list-style-type: none"> • https://www.indympo.org/whats-underway/irtip 	
Michiana Area Council of Governments (MACOG)	FY 2024-2028
<ul style="list-style-type: none"> • http://www.macog.com/docs/transportation/tip/approved/fy2028tip_projects.pdf 	
Madison County Council of Governments (MCCOG)	FY 2022-2026
<ul style="list-style-type: none"> • <i>Including Amendments/modifications through 7/28/23</i> • https://irp.cdn-website.com/65a760a0/files/uploaded/TIP%202022-2026%20-%20updated%205-1-23.pdf 	
Northeastern Indiana Regional Coordinating Council (NIRCC)	FY 2024-2028
<ul style="list-style-type: none"> • https://www.nircc.com/uploads/1/2/9/8/129837621/final_2024-2028_tip_5-25-23.pdf 	
Northwestern Indiana Regional Planning Commission (NIRPC)	FY 2022-2026
<ul style="list-style-type: none"> • <i>Including Amendments/modifications through 7/25/23</i> • https://nirpc.org/2040-plan/mobility/transportation-improvement-program/ 	
Ohio-Kentucky-Indiana Regional Council of Governments (OKI)	FY 2024-2027
<ul style="list-style-type: none"> • https://www.oki.org/transportation-planning/transportation-improvement-program-tip/ 	
Terre Haute Area Metropolitan Planning Organization (THAMPO)	FY 2024-2028
<ul style="list-style-type: none"> • https://www.terrehautempo.com/images/THAMPO_2024_2028_AdoptionTIP.pdf 	

In addition, INDOT has expanded our public involvement process by taking advantage of virtual meeting techniques and allowing accessibility to online documents, materials, virtual meeting registration, recorded virtual meetings, and comment forms. INDOT also leveraged our planning partner contacts (MPOs, RPOs, LTAP), social media, and notifications sent to local libraries, housing authorities, senior aging centers, and local newspapers across the state.

We greatly appreciate FHWA/FTA support in the development of the STIP 2024-2028 and look forward to working together to achieve our mutual goals. Should you have any questions pertaining to this amendment, please contact April Leckie, STIP Administration at 317-232-5466 or at aleckie@indot.in.gov.

Sincerely,



Michael Smith, Commissioner
Indiana Department of Transportation

cc: (w/enclosure): Angelica Salgado, FTA
Cecilia Crenshaw, FTA
Erica Tait, FHWA
Lyndsay Quist, INDOT
Kristin Brier, INDOT
Kathy Eaton-McKalip, INDOT
Louis Feagans, INDOT

April Leckie, INDOT
Roy Nunnally, INDOT
Larry Buckel, INDOT
Jay Mitchell, INDOT
Jason Casteel, INDOT
Michael McNeil, INDOT

NIRPC FY 2024-2028 Draft TIP

Projects in Northwest Indiana

Chicago Urbanized Area (UZA)

Group 1 (Lake & Porter Counties) Project Listing																		
TIP ID	WORK TYPE	PROJECT TITLE	LEAD AGENCY	FEDERAL FUND TYPE	FED	STATE	LOC	PE	RW	CN	CE	2024	2025	2026	2027	2028	TOTAL YEAR	AQ EXEMPT
TIP ID	WORK TYPE	PROJECT TITLE	LEAD AGENCY	FED FUND	FED	STATE	LOC	PE	RW	CN	CE	2024	2025	2026	2027	2028	TOTAL YEAR	AQ EXEMPT
1601147	Bike/Pedestrian Facilities	Multi-use Trail Program / Bike/Pedestrian Facilities at Marquette Trail	Burns Harbor	CMAQ Chicago UZA	\$647,341	\$0	\$161,835	\$0	\$40,000	\$649,176	\$120,000	\$769,176	\$0	\$0	\$0	\$0	\$809,176	Exempt
2101110	Bike/Pedestrian Facilities	Complete Streets sidewalks on 133rd and Morris	Cedar Lake	TA Chicago UZA	\$1,861,300	\$0	\$465,325	\$137,500	\$0	\$2,189,125	\$0	\$0	\$2,189,125	\$0	\$0	\$0	\$2,326,625	Exempt
NIRPC 2700601 (temp)	Bike/Pedestrian Facilities	Founders Creek Trail- Lake Lemon to town park	Cedar Lake	STBG Chicago UZA	\$1,495,115	\$0	\$387,608	\$104,685	\$0	\$1,580,478	\$197,560	\$0	\$0	\$0	\$0	\$1,778,038	\$1,882,723	Exempt
NIRPC 2700603 (temp)	Pavement Rehabilitation/ PROTECT	133rd St Culvert Replacement / Road Raise	Cedar Lake	PROTECT Chicago UZA	\$454,504	\$0	\$158,035	\$44,409	\$0	\$505,005	\$63,125	\$44,409	\$568,130	\$0	\$0	\$0	\$612,539	Exempt
1902832	Other	Multi-use paths / Westchester-Liberty Phase 3	Chesterton	TA Chicago UZA	\$1,400,000	\$0	\$542,000	\$192,000	\$150,000	\$1,600,000	\$0	\$1,600,000	\$0	\$0	\$0	\$0	\$1,942,000	Exempt
2101117	Signal - Other	Installation of EVP devices on traffic signals	Chesterton	HSIP Chicago UZA	\$1,751,940	\$0	\$281,790	\$183,941	\$0	\$1,849,789	\$0	\$0	\$1,849,789	\$0	\$0	\$0	\$2,033,730	Exempt
1901948	Intersection Modification - Congestion	Intersection Modification - Congestion-Roundabout US 231 & 113th	Crown Point	STBG Chicago UZA	\$1,195,948	\$0	\$277,962	\$308,910	\$0	\$1,165,000	\$0	\$1,165,000	\$0	\$0	\$0	\$0	\$1,473,910	Exempt
NIRPC 2700661 (temp)	Bike/Pedestrian Facilities	Pennsy-Dyer Trail	Dyer	TAP Chicago UZA	\$1,724,801	\$0	\$1,365,325	\$81,800	\$975,000	\$1,807,401	\$225,925	\$81,800	\$0	\$975,000	\$2,033,326	\$0	\$3,090,126	Exempt
1601146	Bike/Pedestrian Facilities	Multi-use Trails Program / Bike/Pedestrian Facilities at Marquette Trail	East Chicago	CMAQ Chicago UZA	\$1,195,840	\$0	\$298,960	\$459,800	\$0	\$1,035,000	\$0	\$0	\$0	\$1,035,000	\$0	\$0	\$1,494,800	Exempt
2101118	Roadway Reconstruction/Rehabilitation	Michigan Ave Reconstruction Ph 1 - Michigan Ave from Sheridan Place to Block Ave	East Chicago	STBG Chicago UZA	\$3,592,206	\$0	\$1,438,052	\$540,000	\$0	\$4,490,258	\$0	\$0	\$0	\$4,490,258	\$0	\$0	\$5,030,258	Exempt
NIRPC 2700651 (temp)	Air Quality Implementation	CNG & EV vehicle purchase	East Chicago	CRP Chicago UZA / CMAQ Chicago UZA	\$866,493	\$0	\$399,017	\$1,265,510	\$0	\$0	\$0	\$0	\$370,000	\$450,000	\$0	\$445,510	\$1,265,510	Exempt
NIRPC 2700594 (temp)	Roadway Reconstruction/Rehabilitation	Michigan Ave Reconstruction Phase 2 - Michigan Ave from Sheridan Place to Broadway St.	East Chicago	STBG Chicago UZA	\$2,270,996	\$0	\$868,000	\$270,000	\$0	\$2,550,219	\$318,777	\$0	\$270,000	\$0	\$0	\$2,868,996	\$3,138,996	Exempt
1802975	Roadway Reconstruction/Rehabilitation	Road Rehabilitation (3R/4R) Airport Rd Phase 2	Gary	STBG Chicago UZA	\$716,800	\$0	\$179,200	\$0	\$0	\$896,000	\$0	\$896,000	\$0	\$0	\$0	\$0	\$896,000	Exempt
1802973	Roadway Reconstruction/Rehabilitation	Roadway Improvement Program / Road Reconstruction (3R/4R Standards) at 15th Ave	Gary	STBG Chicago UZA	\$3,196,000	\$0	\$819,000	\$245,000	\$20,000	\$3,750,000	\$0	\$0	\$3,750,000	\$0	\$0	\$0	\$4,015,000	Exempt
NIRPC 2600420 (temp)	Safety Upgrade	5th Ave Complete Streets	Gary	TAP Chicago UZA	\$300,000	\$0	\$5,825,000	\$0	\$375,000	\$5,750,000	\$0	\$375,000	\$0	\$0	\$5,750,000	\$0	\$6,125,000	Exempt
1902830	Signal - Other	Signal Modernization 5th Ave & Bigger St.	Gary	HSIP Chicago UZA	\$359,665	\$0	\$20,935	\$0	\$0	\$380,600	\$0	\$0	\$380,600	\$0	\$0	\$0	\$380,600	Exempt
NIRPC 2700602 (temp)	Planning/Study	Airport Rd Relocation Study	Gary	STBG Chicago UZA	\$400,000	\$0	\$200,000	\$600,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600,000	\$600,000	Exempt
2101119	Intersection Modification - Congestion	Roundabout at Broad St and Ave H	Griffith	STBG Chicago UZA	\$1,688,665	\$0	\$831,941	\$121,800	\$425,000	\$1,848,806	\$125,000	\$0	\$425,000	\$1,973,806	\$0	\$0	\$2,520,606	Exempt
2101128	Bridge Replacement	Trail on Michigan St bridge over Kennedy	Hammond	STBG Chicago UZA	\$720,314	\$0	\$180,079	\$0	\$0	\$900,393	\$0	\$0	\$900,393	\$0	\$0	\$0	\$900,393	Exempt
1901900	Other	Multi-use paths / Hammond Marquette Greenway	Hammond	TAP Chicago UZA	\$1,975,792	\$0	\$493,948	\$125,000	\$0	\$2,219,740	\$125,000	\$0	\$2,344,740	\$0	\$0	\$0	\$2,469,740	Exempt
2002586	Resurfacing	Hohman Complete Streets	Hammond	STBG Chicago UZA	\$1,200,000	\$0	\$1,684,000	\$309,000	\$0	\$2,575,000	\$0	\$0	\$2,575,000	\$0	\$0	\$0	\$2,884,000	Exempt
1901902	Roadway Reconstruction/Rehabilitation	Pavement Rehabilitation; complete Streets	Hammond	STBG Chicago UZA	\$3,220,000	\$0	\$1,288,000	\$483,000	\$0	\$4,025,000	\$0	\$0	\$4,025,000	\$0	\$0	\$0	\$4,508,000	Exempt
NIRPC 2700660 (temp)	Bike/Pedestrian Facilities	Marquette Greenway from 150th to East Chicago	Hammond	TAP Chicago UZA	\$635,614	\$0	\$308,000	\$101,000	\$0	\$748,990	\$93,624	\$101,000	\$0	\$0	\$842,614	\$0	\$943,614	Exempt
NIRPC 2700665 (temp)	Planning/Study	Columbia Ave 165th to Mich St - PEL Study	Hammond	STBG Chicago UZA	\$480,000	\$0	\$120,000	\$600,000	\$0	\$0	\$0	\$0	\$0	\$0	\$600,000	\$0	\$600,000	Exempt
NIRPC 2700614 (temp)	Roadway Reconstruction/Rehabilitation	Columbia Ave Roadway Rehabilitation 164th to River Dr	Hammond	STBG Chicago UZA	\$6,000,000	\$0	\$2,773,826	\$925,000	\$0	\$6,976,734	\$872,092	\$925,000	\$0	\$0	\$0	\$7,848,826	\$8,773,826	Exempt

Now Des 2300726

Northwestern Indiana Regional Planning Commission 2022-2026 Transportation Improvement Program

Local projects

Chicago Urbanized Area (UZA)

TIP ID	Work Type	Project Title	Lead Agency	Funding Type	FED	STATE	LOC	PE	RW	CN	CE	Funding In Prior Years	2022	2023	2024	2025	2026	Total Project Costs	Air Quality Exempt
1601147	Bike/Pedestrian Facilities	Multi-use Trail at Marquette Trail	Burns Harbor	CMAQ Chicago UZA	\$647,341	\$0	\$161,835	\$0	\$40,000	\$649,176	\$120,000	\$40,000	\$769,176	\$0	\$0	\$0	\$0	\$809,176	Yes
2101110	Bike/Pedestrian Facilities	Complete Streets sidewalks on 133rd and Morris	Cedar Lake	CMAQ Chicago UZA	\$1,861,300	\$0	\$437,825	\$110,000	\$0	\$2,189,125	\$0	\$0	\$0	\$110,000	\$0	\$2,189,125	\$0	\$2,299,125	Yes
1902832	Bike/Pedestrian Facilities	Multi-use paths / Westchester-Liberty Phase 3	Chesterton	TAP Chicago UZA	\$1,400,000	\$0	\$350,000	\$0	\$150,000	\$1,600,000	\$0	\$0	\$150,000	\$1,600,000	\$0	\$0	\$0	\$1,750,000	No
2101117	Signal - Other	Installation of EVP devices on traffic signals	Chesterton	STBG Chicago UZA	\$1,751,940	\$0	\$281,790	\$183,941	\$0	\$1,849,789	\$0	\$0	\$0	\$183,941	\$0	\$1,849,789	\$0	\$2,033,730	Yes
NIRPC 2700502	Bike/Pedestrian Facilities	Veterans Memorial and Pennsey Greenway Trails in Crown Pointe	Crown Point	TAP Chicago UZA	\$2,000,000	\$0	\$500,000	\$0	\$0	\$2,500,000	\$0	\$0	\$0	\$0	\$0	\$2,500,000	\$0	\$2,500,000	Yes
1901948	Intersection or Intersection Groups	Intersection Improvement-Roundabout US 231 & 113th	Crown Point	STBG Chicago UZA	\$1,195,948	\$0	\$277,962	\$308,910	\$0	\$1,165,000	\$0	\$308,910	\$0	\$1,165,000	\$0	\$0	\$0	\$1,473,910	Yes
1601146	Bike/Pedestrian Facilities	Multi-use Trails at Marquette Trail	East Chicago	CMAQ Chicago UZA	\$1,075,840	\$0	\$268,960	\$309,800	\$0	\$1,035,000	\$0	\$309,800	\$0	\$1,035,000	\$0	\$0	\$0	\$1,344,800	No
901321	Intersection or Intersection Groups	Intersection Improvement; Local Street	East Chicago	Federal Special-EDA	\$1,000,000	\$0	\$1,250,000	\$0	\$0	\$2,250,000	\$0	\$0	\$2,250,000	\$0	\$0	\$0	\$0	\$2,250,000	No
2101118	Pavement Reconstruction/R ehabilitation	Michigan Ave Reconstruction- FUTURE PROJECT	East Chicago	STBG Chicago UZA	\$3,592,206	\$0	\$898,052	\$0	\$0	\$4,490,258	\$0	\$0	\$0	\$0	\$0	\$0	\$4,490,258	\$4,490,258	Yes
900064	Roadway Reconstruction/R ehabilitation	Road Rehabilitation	East Chicago	DEMO	\$642,584	\$5,000,000	\$168,784	\$843,920	\$0	\$4,967,448	\$0	\$843,920	\$4,967,448	\$0	\$0	\$0	\$0	\$5,811,368	Yes
1802973	Pavement Reconstruction/R ehabilitation	Roadway Improvement/ Road Reconstruction at 15th Ave	Gary	STBG Chicago UZA	\$3,196,000	\$0	\$799,000	\$245,000	\$0	\$3,750,000	\$0	\$245,000	\$0	\$0	\$3,750,000	\$0	\$0	\$3,995,000	Yes

Categorical Exclusion

Appendix I

Additional Studies

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)

ProjectNumber	SubProjectCode	County	Property
1800005	1800005	Lake	Dowling Park
1800011	1800011	Lake	Tolleston Park
1800012	1800012	Lake	Washington Park
1800040	1800040	Lake	Homestead Park
1800055	1800055	Lake	Sheppard Memorial Park
1800059	1800059	Lake	Cheever Park
1800062	1800062	Lake	Leroy Township Park
1800063	1800063	Lake	Markley Memorial ParkEllendale Park
1800071	1800071	Lake	Cheever Park
1800087	1800087	Lake	Sheppard Memorial Park
1800102	1800102	Lake	Grand Boulevard Lake Recreation Area
1800108	1800108	Lake	Riverview Park
1800137	1800137	Lake	Northgate Park
1800150	1800150	Lake	Meadows Park
1800168	1800168	Lake	Sunnyside Park
1800170	1800170	Lake	Howe Park
1800189	1800189	Lake	Dowling Park
1800193	1800193	Lake	Harrison Park
1800194	1800194	Lake	Martin Luther King Jr. Park (Formerly Maywood Park
1800199	1800199	Lake	Ridgeway Park
1800202	1800202	Lake	Hatcher Park
1800206	1800206	Lake	Meadows Park
1800226	1800226	Lake	Hoosier Prairie Nature Preserve
1800227	1800227	Lake	Liberty Park
1800231	1800231	Lake	Pheasant Hills Community Park & Cherry Hill Tot-Lot
1800237	1800237	Lake	Wolf Lake Park (N & S)
1800239	1800239	Lake	Bluebird Park
1800253	1800253	Lake	Centennial Park
1800272	1800272	Lake	Wolf Lake Park (N & S)
1800273	1800273	Lake	Grand Kankakee Marsh County Park
1800302	1800302	Lake	Munster Community Park
1800329	1800329	Lake	Jackson Park
1800369	1800369H	Lake	Harrison Park
1800369	1800369D	Lake	Lemon Lake County Park
1800377	1800377	Lake	Main Square Park
1800386	1800386	Lake	Gibson Woods Nature Preserve & Tolleston Ridges Nature Preserve
1800405	1800405G	Lake	Clark and Pine Dune Swale Nature Preserve
1800414	1800414	Lake	Wolf Lake Park (N & S)
1800417	1800417	Lake	Centennial (Dan Rabin) Plaza & Trail
1800424	1800424	Lake	Lake Etta County Park
1800455	1800455	Lake	Deep River - Woods Mill County Park
1800464	1800464	Lake	Festival Park & Lakefront Park
1800473	1800473	Lake	Oak Ridge Prairie Co. Park
1800488	1800488	Lake	Marquette Park
1800489	1800489	Lake	Festival Park & Lakefront Park
1800522	1800522	Lake	Pavese Park
1800523	1800523	Lake	Lakewood Park
1800523.5	1800523.5	Lake	River Drive Park
1800528	1800528	Lake	Lowell Sports Park
1800533	1800533	Lake	Hobart City Ball Park
1800555	1800555	Lake	Scherwood Golf Course
1800580	1800580	Lake	Oak Ridge Park
1800586	1800586	Lake	Teibel Nature Park
1800586.1	1800586.1	Lake	Teibel Nature Park
1800590	1800590	Lake	Deep River County Park
1800622	1800622	Lake	Fireman's Park
1800636	1800636	Lake	Parrish Avenue Park

*Park names may have changed. If acquisition of publically owned land or impacts to publically owned land is anticipated, coordination with IDNR, Division of Outdoor Recreation, should occur.

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Project Location:

The proposed improvements on Kennedy Avenue begins at the intersection of Broadway Street and runs northeasterly 3,379.00 feet to the intersection of Block Avenue. The project also includes a 305-foot section of reconstruction on Dickey Road from Kennedy Ave. northwest to Watling Street, all in the City of East Chicago, Lake County, Indiana. Net length of both streets combined is 3684 feet or 0.70 mile. Center of project latitude N 41 degrees 38 minutes, 58 seconds, longitude W 87 degrees, 27 minutes, 05 seconds. Local street no RP location.

Project Need and Purpose:

Need: Both the motorized and non-motorized transportation modes are not well served on Michigan Ave. For the motorized components, the existing pavement and curbs are in very poor condition. The majority of the pavement has some or all of these failures: alligator cracking, depressions, potholes, rutting, longitudinal and transverse joint cracking and failures. so a resurface treatment was not considered.

The current non-motorized components do not serve the area well and in some cases are non-existent. Sidewalks are generally in poor condition with gaps. Most curb ramps are substandard and many driveway slopes across the sidewalks are also substandard. Underground water lines and sanitary sewers are very old with spot failures becoming more frequent.

Purpose: This is the first phase of the Michigan St rehabilitation. These improvements will provide a safer environment for all modes of travel and will incorporate a new roadway, a path and new sidewalks to improve access and safety for pedestrians and new water and sewer lines to replace the old and failing systems.

Existing Facility:

The existing pavement for Kennedy Avenue (4 to 5 lanes) and Dickey Road (3 lanes) is in poor condition. Sidewalks are old and many do not meet ADA requirements. All underground utilities are very old with spot failures commonplace.

Traffic Data:

Traffic volume on Kennedy Avenue from Broadway St. to Dickey Rd.: AADT (2025) = 2,608.

Traffic volume on Kennedy Avenue from Dickey Rd. to Block Ave.: AADT (2025) = 10,574.

Trucks on Kennedy Avenue from Dickey Rd. to Block Ave.: 18.1%

Identification of Proposal:

This project proposes the reconstruction of Kennedy Ave. and Dickey Rd. within the limits shown above. The plan includes new pavement, curb and gutter, sidewalks, storm and sanitary sewers, water lines and street lighting and signing. The design also includes two new traffic signals at the intersections of Michigan Ave. and Dickey St and at Block Ave. An 8 foot to 10-foot-wide multi-use path is planned along the west side of Michigan Ave. from Broadway St. north to Guthrie St. where it will connect to an existing path along the north side of Guthrie St. New sidewalk will be provided over the remainder of the project.

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Identification of Proposal (continued):

Due to an historic reduction of local traffic south of Dickey Rd., the four-lane section of Michigan Ave. from Broadway St. to Dickey Rd. will be reduced to a three-lane section consisting of one lane in each direction with a Two Way Left Turn Lane (TWLTL) in the middle. From Dickey Rd. to Block Ave. Michigan Ave. carries much more traffic due to a substantial amount of traffic bypassing Cline Ave. Besides higher traffic volumes, the traffic along this section of Michigan Ave. has a high volume of truck traffic so the lane configuration will basically remain the same with minor modifications. Kennedy Ave. from Dickey Rd. north will have two lanes northbound with left turn lanes. Southbound lanes from Block Ave. south to Dickey Rd. will have one through lane, a continuous right turn lane and left turn lanes.

Storm Drainage along Michigan Ave. is somewhat unique in that much of the storm sewers have already been separated from the sanitary (combination) sewers. The sewers from Broadway St. to Dickey Rd. were previously separated. This being the case, the life expectancy of these existing storm sewers is expected to last another 30 to 40 years so are not planned to be replaced with this project. Michigan Ave. from Broadway St. to Dickey Rd. will require new curb inlets to accommodate the new lane configuration and inlet spacing requirements but will tie into the existing storm system. With the lane reduction and highly pervious soils in the area, the actual runoff to the existing storm sewer system will be less than the existing. New storm sewers and inlets will be required from Dickey Rd. north to the end of the project to separate storm water from the combination sewer. It is important to note that all of the storm water for this project will still flow to existing relief sewers that flow southeast, then south and then then back west to the Michigan Avenue Storm Relief Pump Station located at the corner of Michigan Ave. and Sheridan Pl. There will be no additional storm water basins added to project area so will not be adding any storm water the overall system. Storm water runoff into the system will actually be reduced because of the lanes being reduced from 4 lanes to 3 lanes over much of the project thus reducing the area of impervious materials within the project. A Drainage Analysis will be included for this project under a separate document and will provide additional details.

Cost Estimate:

The preliminary estimated construction cost for this project is: \$ 5,340,000.00.

Environmental Issues:

An Environmental Document is required and will follow all state and federal requirements. This project is considered Phase One of a larger project that runs from Sheridan Place to Block Ave. This being the case, the environmental documentation for Phase One and Phase Two from Sheridan Pl. to Broadway St. will be combined as one environmental document.

The project area is highly industrialized with commercial areas and neighborhoods along the east side of the road. All of the area is considered disturbed ground with possible contaminants in the area. The environmental documentation will investigate and mitigate any environmental issues which will be incorporated into the project design and environmental commitments.

Permits anticipated are: IDEM Construction Stormwater General Permit (CSGP), formerly Rule 5 Permit.

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Right-of-Way Impacts:

This entire project falls within existing right of way so no permanent or temporary right of way will be acquired.

Maintenance of Traffic (MOT) during Construction :

MOT plans will follow INDOT Guidelines and Standards. Phases will be provided to allow continuous access with minimal interference to adjacent properties.