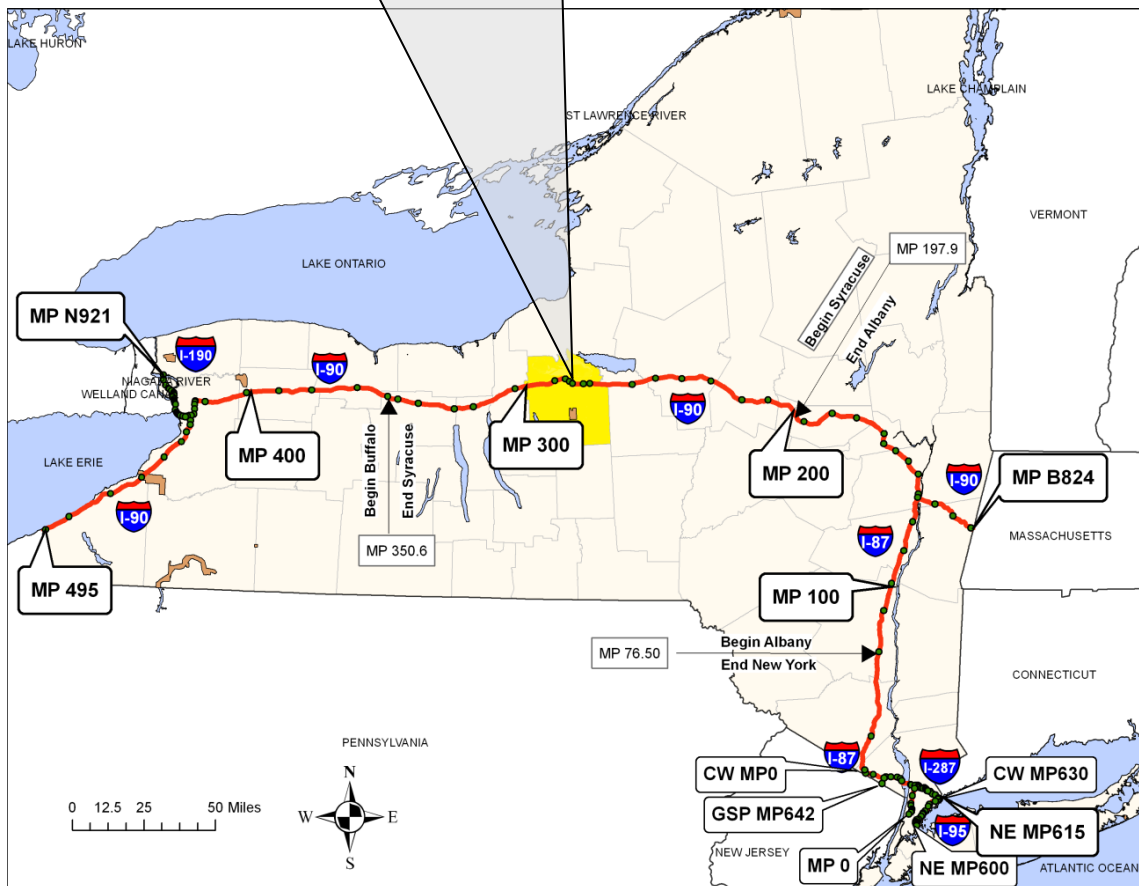


TRANSPORTATION

FINAL DESIGN REPORT

June 2017

Bridge Project
Interchange 35 Ramp over Interstate I-90
MP 278.93, BIN 5510090
PIN S52886 B413.1
Town of DeWitt
Onondaga County



PROJECT SHEET



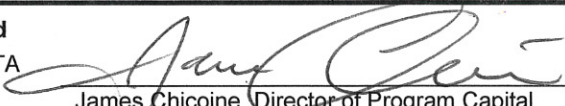
Thruway
Authority

PROJECT APPROVAL SHEET

(Pursuant to SAFETEA-LU Matrix)

A. Capital Plan Project Proposal Approved

The project is ready to be added to the NYSTA Capital Program



James Chicoine, Director of Program Capital Management

7/12/17
Date

B. Scope Approval

The project cost, schedule, and scope of work are consistent with the NYSTA Capital Program

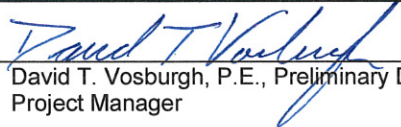
Scoping Concurrent w/Design (Approved by):


Thomas A. Mahar, P.E., Director of Engineering Support Services

7/12/17
Date

C. Public Hearing Certification (23 USC 128):


A public hearing was not required.


David T. Vosburgh, P.E., Preliminary Design Project Manager

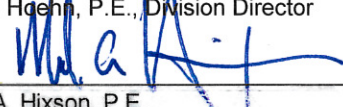
7/12/17
Date

D. Recommendation for Design Approval

This Project Design Report has been reviewed and meets my approval. The report documents the project needs and has evaluated appropriate alternatives.


Patrick Hoehn, P.E., Division Director

7/21/17
Date


Mark A. Hixson, P.E.
Director, Maintenance and Operations


7/24/17
Date


Timothy R. Conway, P.E., Director, Office of Design

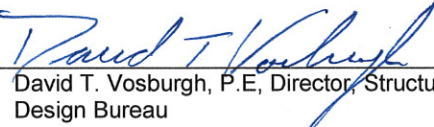
7/24/2017
Date

E. Recommendation for Design and Nonstandard Feature Approval

All requirements requisite to these actions and approvals have been met, the required independent quality control reviews separate from the functional group reviews have been accomplished, and the work is consistent with established standards, policies, regulations and procedures, except as otherwise noted and explained.


Albert Mastroianni, P.E., Director, Highway Design Bureau


7/12/17
Date


David T. Vosburgh, P.E., Director, Structures Design Bureau

7/12/17
Date

F. Nonstandard Feature Approval

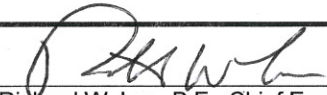
No nonstandard features have been created or will be retained.


Richard W. Lee, P.E., Chief Engineer

8/9/17
Date

G. Design Approval

The project cost, schedule, and scope of work are consistent with the NYSTA Capital Program. The required environmental determinations have been made and the preferred alternative for this project is ready for final design.


Richard W. Lee, P.E., Chief Engineer

8/9/17
Date

LIST OF PREPARERS

This report was prepared by the following Consultant staff:

James Hofmann, P.E., Project Manager, Stantec Consulting Services Inc.

Timothy Bradley, P.E., Structures Engineer, Stantec Consulting Services Inc.

Robert Cody, P.E., Transportation Engineer, Stantec Consulting Services

Description of Work Performed:

Prepared and supervised subconsultants for all report chapters and appendices for the Design Approval Document in accordance with established standards, policies, regulations and procedures, except as otherwise explained in this document.

Note: *It is a violation of law for any person, unless they are acting under the direction of a licensed professional engineer, architect, landscape architect, or land surveyor, to alter an item in any way. If an item bearing the stamp of a licensed professional is altered, the altering engineer, architect, landscape architect, or land surveyor shall stamp the document and include the notation "altered by" followed by their signature, the date of such alteration, and a specific description of the alteration.*



Timothy Bradley, P.E.
NYS License No. 063695



Robert Cody, P.E.
NYS License No. 068312

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COVER (Bridge Project / MP 278.93 BIN: 5510090)

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Hazardous Waste-Contaminated Materials Screening Report (February 2017)
Hazardous Waste-Contaminated Materials Technical Memorandum (Asbestos) (February 2017)
Wetland Delineation Letter Report (February 10, 2017)

CHAPTER 1 - EXECUTIVE SUMMARY

1.1. Introduction

This project proposes to replace the existing bridge carrying the Interchange 35 Ramp over Interstate 90 (BIN 5510090) located at milepost 278.93 in the Town of DeWitt, Onondaga County, New York.

This report will assess existing conditions, identify the overall project objectives, analyze alternative solutions, and discuss the social, economic and environmental effects on the community resulting from the implementation of the feasible alternative under consideration.

1.2. Purpose and Need

1.2.1. Where is the Project Located?

This project is located within the Town of DeWitt, Onondaga County. For more information, see Figure 1 – General Location Map and Figure 2 – Project Location Map.

- (1) Route number - N/A
- (2) Route name – Interchange 35 Ramp
- (3) SH number and official highway description - N/A
- (4) BIN and feature crossed – 5510090, Interstate 90 Eastbound and Westbound
- (5) City/Village/Township – Town of DeWitt
- (6) County - Onondaga
- (7) Length – 212 feet
- (8) Project Termini – Begin – 700 feet south of Interstate 90
 End – 600 feet north of Interstate 90

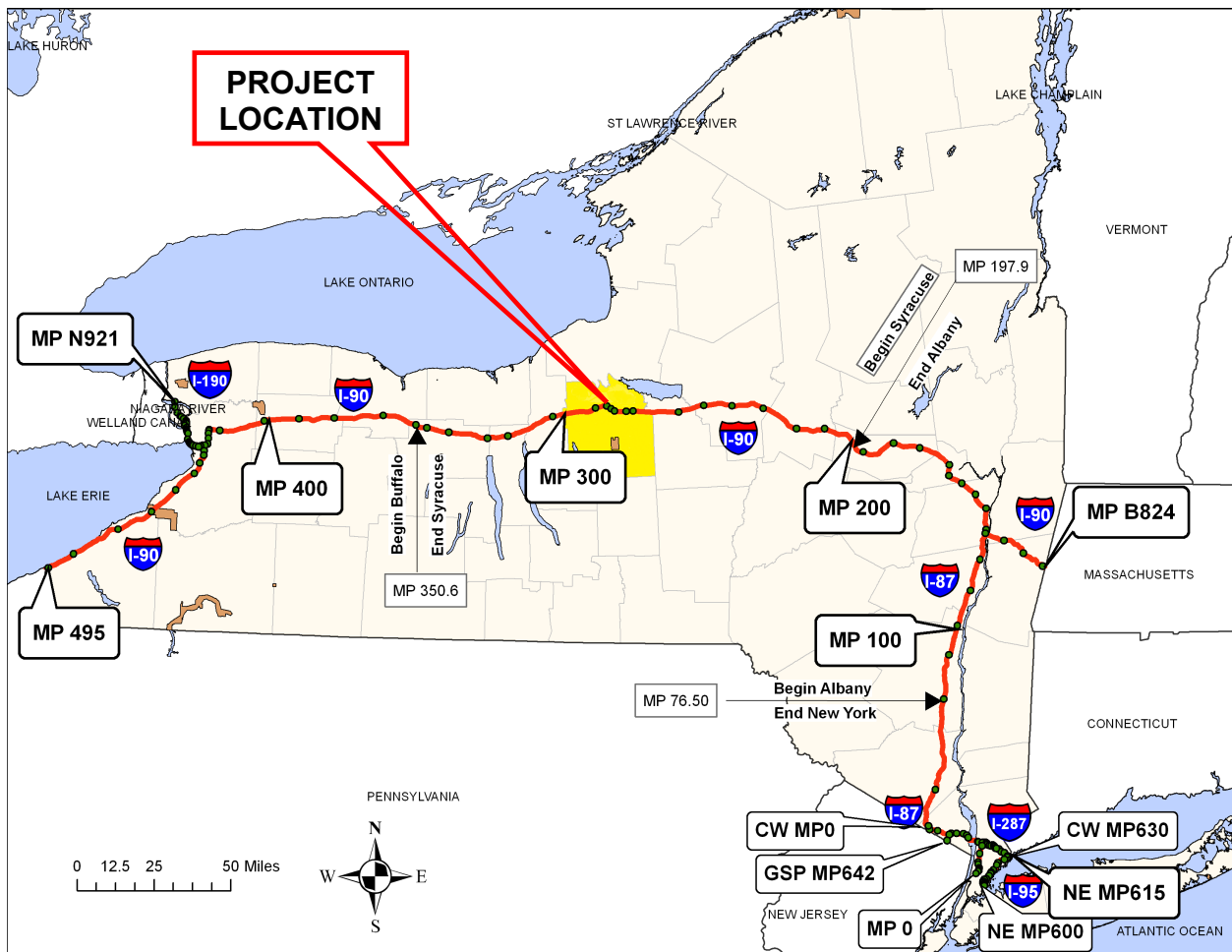


FIGURE 1 - GENERAL LOCATION MAP

NEW YORK STATE THRUWAY AUTHORITY
Interchange 35 Ramp over Interstate 90 Bridge Replacement
Town of DeWitt

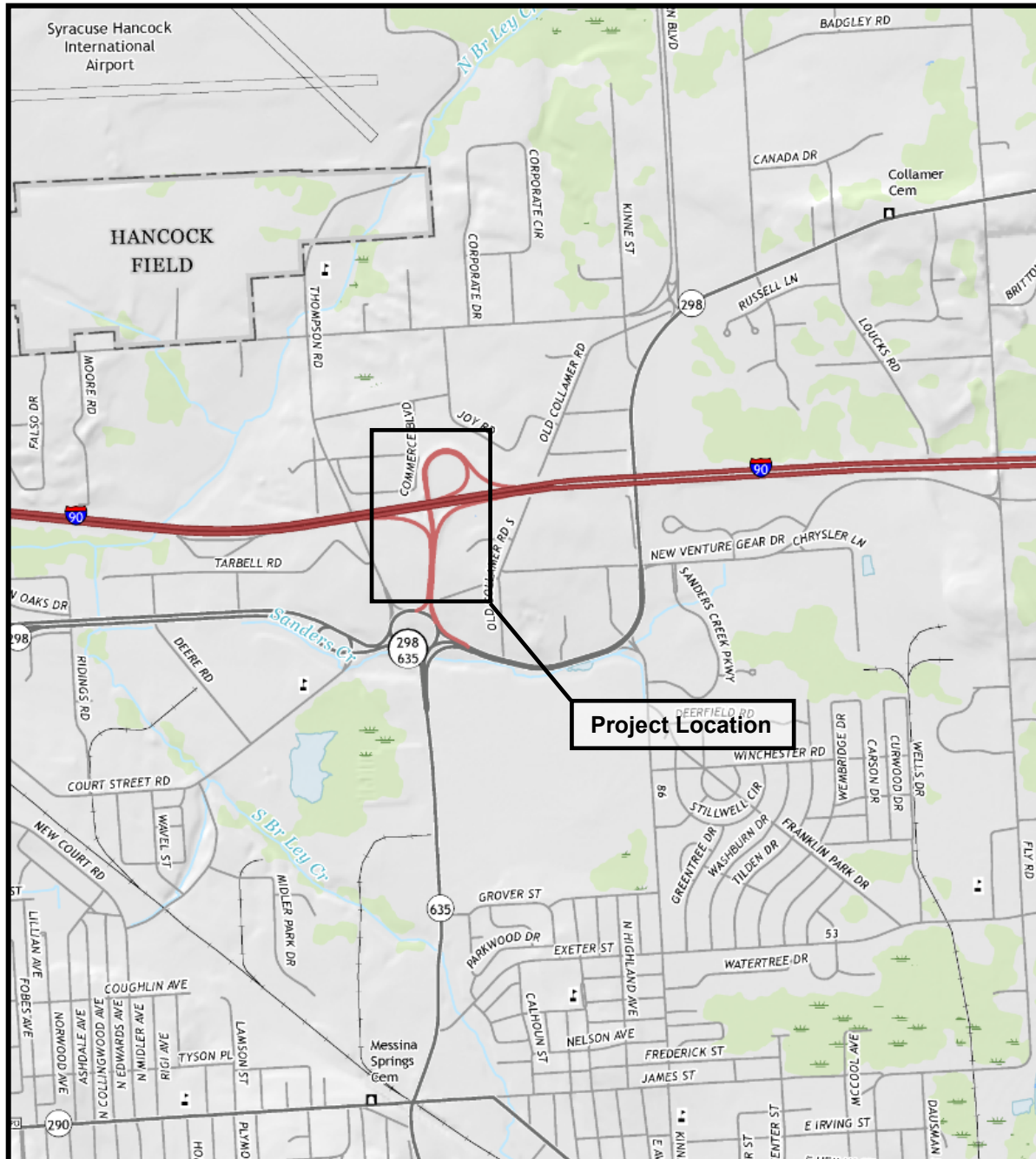


FIGURE 2 - PROJECT LOCATION MAP

NEW YORK STATE THRUWAY AUTHORITY
Interchange 35 Ramp over Interstate 90 Bridge Replacement
Town of DeWitt

1.2.2. Why is the Project Needed?

The need for a bridge replacement project was identified by the New York State Thruway Authority after review of Biennial Inspection Reports. The existing bridge has a current NYS General Recommendation of 4. The bridge is categorized as “Deficient” under the NYS definition based on a NYS Condition Rating less than 5.

1.2.3. What are the Objectives/Purposes of the Project?

The following project objectives have been identified:

- (1) Eliminate structural deficiencies and provide a safe crossing over Interstate 90 with a service life of at least 75 years.
- (2) Meet the objectives above in a socially, economically and environmentally sensitive manner.

1.3. What Alternative(s) Are Being Considered?

The following alternatives representing possible engineering solutions are presented in this report:

- Null or No Build Alternative
- Rehabilitation Alternative
- Reconstruction Alternative – Bridge Replacement

Null or No Build Alternative – Under this alternative the existing structure would remain. NYSTA maintenance forces would continue routine maintenance and repairs on the structure, as required, and the existing vertical clearance would be maintained. This alternative does not meet the project objectives, therefore has been eliminated from further review.

Rehabilitation Alternative – Under this alternative the existing structure would be rehabilitated to current standards. The superstructure repair scope would include replacement of the fascia stringers, repairs to the ends of all interior beams in all spans, repairs to the existing deck and safety walks as needed. Since ramp traffic flow across the structure must be maintained during construction, the superstructure would not be able to be raised to the minimum 14'-6" clearance required for a rehabilitated bridge.

Using staged construction, substructure repair work would include replacement of all bearings and removal and replacement of deteriorated concrete at all substructures. Cost estimates however, place the total cost for the rehabilitation option (\$2.25M; Refer to Appendix F for the Cost Estimate) close to the bridge replacement cost (approximately 95% of the full replacement cost).

Furthermore, this alternative does not allow for the increase in the vertical clearance over the Thruway mainline to 14'-6" (less than 16'-6" desired for new bridges) for the reasons stated above, and retaining the existing substructures in their current location will preclude any possibility of widening the right mainline shoulder widths to standard. This alternative is therefore eliminated from further review.

Reconstruction Alternative – Bridge Replacement – This alternative would include complete removal and replacement of the existing structure with a new bridge on an adjusted horizontal and vertical alignment. The replacement structure would accommodate a 46-foot clear-roadway width (out-to-out



width includes concrete safety shape barrier), providing for two 12-foot travel lanes, and 4 foot left shoulders and 6 foot right shoulders. For estimating purposes, the new bridge is assumed to be a two-span continuous steel girder superstructure with integral abutments and a single pier founded on piles. A monolithic concrete deck slab would be constructed with concrete approach slabs at each end of the bridge. The design build team will determine the final structure type and configuration. Approach roadway work would include ramp construction at each end of the bridge as required to tie the new alignment to the existing ramp alignment. This alternative meets all the project objectives.

For a more in-depth discussion of the design criteria see Section 3.2.3. Design Criteria for Feasible Alternative.

1.4 How will the Alternative(s) Affect the Environment?

Exhibit 1.4-A Environmental Summary			
NEPA Classification	No Federal Action	BY	NYSTA
SEQR Type:	Type II	BY	NYSTA

Anticipated Permits/Certifications/Coordination:

NYSDEC: State Pollutant Discharge Elimination System (SPDES) General Permit
US Fish and Wildlife
NYS Historic Preservation Office

1.5. What Are the Costs & Schedules?

The estimated construction cost for the preferred alternative is \$7.97M (includes final bridge design and construction inspection costs). The project will be funded solely by the New York State Thruway Authority. See Section 3.2, Exhibit 3.2.1 for a summary of alternative costs.

Design Approval is scheduled for July 2017. Construction is scheduled to last 30 months beginning in July 2018.

Exhibit 1.5 Project Schedule	
Activity	Date Occurred/Tentative
Letter of Intent	March 1, 2017
Request for Qualifications	April 1, 2017
Statement of Qualifications	May 1, 2017
Request for Proposals	July 1, 2017
Proposal Due Date	September 27, 2017

1.6. Which Alternative is Preferred?

The preferred alternative is the bridge replacement.

1.7. Who Will Decide Which Alternative Will Be Selected and How Can I Be Involved In This Decision?

The New York State Thruway Authority is responsible for making the decision on the preferred alternative for the project. When making the decision the Thruway will consider all comments received from the various review agencies.

Exhibit 1.7 Schedule of Milestone Dates	
Activity	Date Occurred/Tentative
Design Approval	July 2017
Proposal Due Date	September 27, 2017

For further information, questions or comments contact:

Timothy Conway, P.E. NYSTA
email: Timothy.Conway@thruway.ny.gov
Telephone: (518) 436-2988

New York State Thruway Authority
200 Southern Blvd.
Albany, New York 12209

The remainder of this report is a detailed technical evaluation of the existing conditions, the proposed alternatives, the impacts of the alternatives, copies of technical reports and plans and other supporting information.

CHAPTER 2 - PROJECT CONTEXT: HISTORY, TRANSPORTATION PLANS, CONDITIONS AND NEEDS

This chapter addresses the history and existing context of the project site including the existing conditions, deficiencies, and needs for this part of the Interstate 90 corridor including the bridge carrying the Interchange 35 Ramp over Interstate 90 at milepost 278.93.

2.1. Project History

Interstate 90, in the vicinity of milepost 278.93, is a full access controlled four-lane divided highway originally funded and constructed by the New York State Thruway Authority. The Thruway was constructed to serve as the primary transportation connecting link from the metropolitan region of New York City to upstate urbanized areas northerly to Albany, westerly to Buffalo, eventually terminating at the Pennsylvania State Line. The highway became part of the Eisenhower Interstate System following passage of the Federal-Aid Highway Act of 1956 and subsequent construction of its highway network. Currently the highway continues to serve its New York based patrons along with interstate and international travelers.

The Interchange 35 Ramp Bridge over the Thruway at MP 278.93 was constructed with the original highway in 1953. The structure has received numerous corrective maintenance repairs and is currently nearing the end of its service life.

This project was initially conceived due to advancing deterioration to various bridge components observed in routine biennial inspections. As the structure is currently rated as deficient, it was identified as a suitable candidate for rehabilitation or replacement once capital funding became available.

A recent decision was made to advance the project utilizing a design-build procurement package bundled with 7 other structures in the area.

2.2. Transportation Plans and Land Use

2.2.1. Local Plans for the Project Area

2.2.1.1. Local Master Plan

No local master plans will be affected by this project.

2.2.1.2. Local Private Development Plans

There are no approved developments planned within the project area that will impact traffic operations.

2.2.2. Transportation Corridor

2.2.2.1. Importance of the Project Route Segment

The New York State Thruway serves as one of the major connecting transportation network links within New York State and the Northeast. The highway is the primary mobility link between the New York metropolitan area and transportation links in northern and western New York. The Interchange 35 ramp bridge serves westbound traffic entering and exiting the Thruway mainline

2.2.2.2. Alternate Routes

There are no practical alternate routes for westbound Interchange 35 exiting and entering traffic.

2.2.2.3. Corridor Deficiencies and Needs

The existing bridge is structurally deficient and does not meet current vertical clearance requirements for interstate roadways. Replacement of this structure is necessary to maintain mobility of all operators using this segment of the interstate system. Continued deterioration and eventual load postings of the bridge would have a detrimental effect on motorists using the NYS Thruway.

2.2.2.4. Transportation Plans

This project is being progressed as a bridge replacement project which when bundled with seven other bridges within the Syracuse Division to be replaced will be let as a Design Build project. Since this project is 100% Thruway funded it has not been added to the Statewide Transportation Improvement Program (STIP).

2.2.2.5. Abutting Highway Segments and Future Plans for Abutting Highway Segments -

The existing Interchange 35 Ramp highway section to the north and south of the project bridge includes one (1) travel lane in each direction (13-14 ft wide lanes), serving both westbound entering and exiting mainline traffic, separated by a 4 ft. wide median with w-beam barrier. The outside shoulder width varies from 8 to 12 feet. To the north of the subject bridge is a loop ramp with posted advisory speeds of 25 and 30 mph. To the south is a straight segment leading directly to the toll plaza.

The existing Interstate 90 highway section through the project limits is typical of an urban interstate. Two travel lanes exist in each direction with 10 ft. outside shoulders and 4-6 ft. inside shoulders. In addition, a 12-foot-wide westbound acceleration lane is also present. Eastbound and westbound directions are separated by a grassed median and w-beam median barrier.

There are no current plans to reconstruct the adjacent sections of Interchange 35 Ramp or Interstate 90. There are however potential future plans to implement cashless tolling at the interchange, which may require related hardware and electronic components to be mounted to the new bridge structure. Also, the construction of a third travel lane (within the median area) in each direction is also a possibility, depending on future capacity needs.

2.3. Transportation Conditions, Deficiencies and Engineering Considerations

2.3.1. Operations (Traffic and Safety) & Maintenance

2.3.1.1. Functional Classification and National Highway System (NHS)

Exhibit - 2.3.1.1 Classification Data		
Route(s)	I-90	Interchange 35 Ramp
Functional Classification	Urban Principal Arterial – Interstate	Interchange Ramp
National Highway System (NHS)	Yes	Yes
Designated Truck Access Route	Yes	Yes
Qualifying Highway	N/A	N/A
Within 0.25 miles of a Qualifying Highway	No	No
Within the 16 ft. vertical clearance network	Yes	Yes

2.3.1.2. Control of Access

Access to I-90 is fully-controlled. The highway is a toll facility with access limited via toll booths at interchanges. The interchange ramp is also fully access-controlled.

2.3.1.3. Traffic Control Devices

There are no traffic signals within the project limits. All signs, pavement markings, delineators, mile markers and rumble strips conform to the latest guidelines and warrants.

2.3.1.4. Intelligent Transportation Systems (ITS)

The Thruway fiber optic ITS line (Transmit System) is located within the I-90 westbound right embankment area roughly parallel to I-90, extending under the ramp lanes to the east and is also mounted to the underside of the existing bridge superstructure. Associated antennas are also mounted to the bridge superstructure.

2.3.1.5. Speeds and Delay

Refer to Exhibit 2.3.1.5 for existing speed data along Interstate 90 and interchange ramp within the project limits:

Exhibit - 2.3.1.5 Speed Data		
Route	Interstate 90	Interchange 35 Ramp
Existing Speed Limit	65 MPH	25/30 MPH (Advisory Speed Limit)
Operating Speed and Method Used for Measurement	70 MPH ¹ (Estimated)	30 MPH ¹ (Estimated)
Travel Speed and Delay Runs for Existing Conditions	N/A ¹	N/A ¹
Travel Time and Delay Runs Estimates	N/A ¹	N/A ¹

¹ A speed study was not required for operational studies or for use in accident investigations since the project is a bridge replacement project and does not contain a high accident location.

2.3.1.6. Traffic Volumes

2.3.1.6. (1) Existing traffic volumes

Refer to Exhibit 2.3.1.6-1 for a summary of the traffic data:

Exhibit - 2.3.1.6-1 Existing and Forecast Traffic Volumes				
Route	Interstate 90			
Year	AADT	DHV	DDHV	% Trucks
Existing (2016)	31,890	4,064	2,032	19
ETC (2020)	33,847	4,314	2,157	19
ETC+10 (2030)	39,281	5,006	2,503	19
ETC+20 (2040)	45,587	5,810	2,905	19
ETC+30 (2050)	52,905	6,742	3,371	19
Route	Interchange 35 Ramp			
Year	AADT	DHV	DDHV	% Trucks
Existing (2016)	4,977	1,450	725	12
ETC (2020)	5,179	1,508	754	12
ETC+10 (2030)	5,721	1,666	833	12
ETC+20 (2040)	6,321	1,842	921	12
ETC+30 (2050)	6,981	2,142	1,091	12

An assumed annual growth rate of 1.5% on the mainline and 1.0% on the ramp was used for future traffic volume projections.

2.3.1.6. (2) Future no-build design year traffic volume forecasts

The Estimated Time of Completion, ETC+30 design year was selected per NYSDOT Project Develop Manual, Appendix 5. An ETC+30-year projection was completed as the project involves the replacement of a bridge.

2.3.1.7. Level of Service and Mobility

2.3.1.7. (1) Existing level of service and capacity analysis

Level of Service (LOS) defines traffic operating conditions in which "A" represents the best conditions (traffic that is free flowing with minimal delay) and "F" which represents the condition where upstream demand exceeds capacity on a regular basis (results in reduction in free flow speed and unacceptable delay). A LOS B, a situation where drivers begin to respond to the density of adjacent vehicles, is considered to be the minimum acceptable LOS for urban interstate highways on level or rolling terrain.

The results of the LOS analysis for the 30th highest hourly volume (30 HV), based on the 2000 Highway Capacity Manual indicates that the existing system operates at a LOS C.

2.3.1.7. (2) Future no-build design year level of service

Exhibit - 2.3.1.7-1 Thruway Mainline Service Summary	
	Level of Service (LOS)
Interstate 90	
Existing (2016)	B
ETC (2020)	B
ETC+10 (2030)	C
ETC+20 (2040)	C
ETC+30 (2050)	D
Interchange 35 Ramp	
Existing (2016)	B
ETC (2020)	B
ETC+10 (2030)	B
ETC+20 (2040)	B
ETC+30 (2050)	C

2.3.1.8. Safety Considerations, Accident History and Analysis

An accident analysis was conducted for the time period of 1/1/13 to 12/31/15. During that timeframe, a total of 19 accidents occurred on the ramp with no fatalities. A summary of the types of accidents is as follows:

Unsafe speed change: 26.3%
 Following too closely: 26.3%
 Reaction to uninvolved vehicle: 10.5%

There do not appear to be any existing highway geometric features that have contributed to the number or type of accidents that have occurred

2.3.1.9. Existing Police, Fire Protection and Ambulance Access

Troop T Zone 3 of the New York State Police is responsible for enforcement along Interstate 90 within the project limits. Access is available for enforcement and emergency responders via periodic gated connections with local roadways and directionally on the system via U-turns.

2.3.1.10. Parking Regulations and Parking Related Conditions

Parking is restricted by law on Interstate highways and ramps.

2.3.1.11. Lighting

There is no street lighting on Interstate 90 or Interchange 35 ramps within the project limits.

2.3.1.12. Ownership and Maintenance Jurisdiction

The New York State Thruway Authority operates and maintains the Thruway and the bridge (BIN 5510090) carrying the Interchange 35 Ramp over Interstate 90 within the project limits.

2.3.2. Multimodal

2.3.2.1. Pedestrians

Pedestrians are prohibited on Interstate Highways by state law.

2.3.2.2. Bicyclists

Bicyclists are prohibited on Interstate Highways by state law.

2.3.2.3. Transit

There are no transit providers with operating facilities within the project limits.

2.3.2.4. Airports, Railroad Stations, and Ports

There are no airports, railroad stations, or port entrances within or in the vicinity of the project limits.

2.3.2.5. Access to Recreation Areas (Parks, Trails, Waterways, State Lands)

There are no entrances to recreation areas within the project limits.

2.3.3. Infrastructure

2.3.3.1. Existing Highway Section

Typical sections, plans and profile sheets showing the existing interchange ramp highway section can be found in Appendix A. The existing ramp roadway appears to have had at least one (1) asphalt overlay. The pavement consists of two (2) 14-foot wide travel lanes separated by a 4-foot paved median and w-beam median barrier. The pavement consists of a 9-inch concrete slab on a 12-inch subbase course. The outer shoulders widths vary from 8 to 12 feet and were not constructed as full depth pavement.

The existing Interstate 90 highway section through the project limits is typical of an urban interstate. Two (2) travel lanes and an acceleration lane exist in the westbound direction and two lanes in the eastbound direction exist with 10 foot outside shoulders and 4-6 foot inside shoulders. Directly under the existing bridge in the westbound direction, the right shoulder width on the mainline narrows to approximately 4 feet due to the presence of the acceleration lane and the proximity of the existing bridge pier. The existing pavement section consists of 9" PCC pavement over a 12" subbase. The pavement section shows signs of asphalt concrete pavement overlay but overlay thickness is unknown.

2.3.3.2. Geometric Design Elements Not Meeting Standards

2.3.3.2.(1) Critical Design Elements

The following non-standard features have been identified within the project corridor:

<u>Roadway</u>	<u>Feature</u>	<u>Existing</u>	<u>Standard</u>
Interstate 90	Vertical Clearance	14'-3"	16'-6"
Interstate 90	Shoulder Width (right westbound)	4'-0"	10'-0"

2.3.3.2.(2) Other Design Parameters

The existing w-beam median barrier deflection distance extends into the opposing travel lane. Also, at ETC+30, the level of service on the mainline is expected to drop to LOS D, which is below the conventional minimum acceptable of LOS C.

2.3.3.3. Pavement and Shoulder

A pavement evaluation was not completed for this project as this is a bridge replacement project.

2.3.3.4. Drainage Systems

Stormwater drainage within the overall interchange area is accommodated by an open surface drainage system of swales and cross-culverts. There are no closed systems within the immediate area.

2.3.3.5. Geotechnical

Subsurface explorations were performed as part of the original bridge design in 1952. Three bore holes were advanced at the site to assess in-situ conditions. The soils at the time were determined to consist of a mixed layer of silts, sand, gravel and clay within 5 feet of the surface. Below 5 feet, the soils are generally soft, weathered shale. Three additional soil borings were performed in December 2016 that generally confirm the prior borings. Refer to Appendix E for boring logs.

2.3.3.6. Structure

2.3.3.6.(1) Description

There is one structure located within the project limits that carries the Exit 35 Ramp over Interstate 90.

- (a) BIN - 5510090
- (b) Feature carried and crossed – Exit 35 Ramp over Interstate 90.
- (c) Type of bridge, number and length of spans, etc. – The structure is a four span, steel multi-girder superstructure with span lengths of 37'-9", 58'-9", 65'-9" and 37'-6".
- (d) Width of travel lanes and shoulders – The bridge has a curb-to-curb width of 40 feet. There are two travel lanes that are 13'-0" feet wide, 5'-0" wide right shoulders and 2'-0" left shoulders.
- (e) Sidewalks – There are no sidewalks on the bridge.
- (f) Utilities carried – Fiber optic/ITS conduit and antennas are mounted to the superstructure

2.3.3.6.(2) Clearances (Horizontal/Vertical)

The minimum horizontal clearance is established by the location of the existing w-beam and box beam guiderail that borders the right edge of shoulder in both directions. As such, the horizontal clearance on the mainline is established at 4 feet, the width of the existing westbound right shoulder under the bridge.

The minimum horizontal clearance of 6 ft. on the ramp for this structure is located at each north/south approach at the beginning of the bridge.

Minimum vertical clearance to Interstate 90 is 14'-3", which is below current standards.

2.3.3.6.(3) History & Deficiencies

This bridge was constructed in 1953 under Contracts O.T 53-8, M.T. 53-8, S.T. 53-20 and R.C. 53-36.

A safety flag (No. 14-051) was issued for deck deterioration in bay 5 span 3 during the June 2014 biennial bridge inspection. The June 2016 biennial bridge inspection report indicates the deteriorated slab section was repaired and the flag was removed.

2.3.3.6.(4) Inspection

The bridge was last inspected on 06/14/2016. A full copy of the Inspection Report and the current bridge inventory can be found in Appendix D.

(a) NYS General Recommendation – 4

(b) Summary of Condition and Inspection Reports: The 2016 biennial inspection report assigns a generally fair to poor condition state at the abutments (CS-2 and CS-3).

The concrete deck is in good to fair condition with approximately 82% of the deck with a condition state of CS-1 and CS-2. Underside delamination is common as well as spalling along the deck fascia. The existing raised curb area/safety walks are in poor condition with surface spalling up to 1" deep.

The structural steel is in fair to poor condition. Beam ends at all piers have section loss of approximately 15%, all bearing stiffeners at the piers are in a similar state. The fascia girders in all spans have pitting on the webs up to ¼" deep creating a section loss of approximately 40%. The steel paint coating is also in a fair to poor condition with areas of light rust freckling, peeling and blistering paint, and active steel corrosion.

Piers are generally in good condition except for Pier 2. Pier 2 columns all have areas of spalled concrete (to 4" deep), with Column 2 having a full height area of spalling. The Pier 2 cap has areas of spalled, delaminated and cracked concrete along the top of the pier cap. All fixed bearings are in fair condition with built up pack rust hindering functionality. The bearings at Piers 1 and 3 are temporary bearings consisting of stacked laminated veneer lumber (LVL) with a sole plate but no masonry plate. The ends of several girders are touching at 75 degrees (temperature) and are slightly twisted, indicating that the bearings are not functioning properly.

The bearings at Pier 2 and the abutments have pack rust within the rockers hindering function. The current bearing system at Piers 1 and 3 also appear to be a temporary repair but has not been replaced with a permanent fix.

The joints at Piers 1 and 3 are in a severe condition state. Approximately 75% of the joint lengths are debonded. The seal is also weathered and cracked with heavy leakage that is causing deterioration of all elements below the joints.

2.3.3.6.(5) Restrictions

There are currently no load restrictions on the bridge.

2.3.3.6.(6) Future Conditions

If no maintenance actions are taken to address the conditions of this bridge the areas of deterioration will continue to a point where continued and more frequent maintenance will be necessary for the bridge. In addition, steel deterioration may progress to a point where load restrictions may be necessary.

2.3.3.6.(7) Waterway

There is no waterway associated with this bridge.

2.3.3.7. Hydraulics of Bridges and Culverts

There is no waterway associated with this bridge.

2.3.3.8. Guide Railing, Median Barriers and Impact Attenuators

Corrugated W-beam guide rail is present on the right side of both approaches to the bridge with non-standard corrugated rail mounted to original deteriorated bridge rails. W-beam median barrier exists between the opposing lanes of traffic.

On I-90, W-beam guide rail exists within the median to protect Pier 2, while standard pier protection in the form of concrete barrier that transitions to box beam rail shields Piers 1 and 3.

All of the approach guide rail and bridge rail are in fair condition.

2.3.3.9. Utilities

The following utility companies have been identified as holding NYSTA Utility Permits in the project area.

<u>Utility Company</u>	<u>Type of Utility</u>
G4S	Fiber optic
Buckeye Partners, LP	High pressure petroleum pipeline
Niagara Mohawk/National Grid	Aerial and Underground electric
Verizon	Telephone
Onondaga County Water Authority	Water

There is currently fiber optic/ITS communication lines and conduit mounted to the underside of the existing superstructure and antennas on top.

2.3.3.10. Railroad Facilities

There are no railroads within the project limits and no at-grade crossings within one mile that could impact traffic conditions.

2.3.4. Landscape and Environmental Enhancement Opportunities

This section focuses on the critical existing areas to identify potential enhancement opportunities related to the project and to help avoid and minimize impacts. Chapter 4 focuses on the impacts, enhancements, and mitigation.

2.3.4.1. Landscape**2.3.4.1.(1) Terrain**

The terrain throughout the project corridor is classified as rolling.

2.3.4.1.(2) Unusual Weather Conditions

There are no unusual weather conditions within the project area.

2.3.4.1.(3) Visual Resources

The subject bridge is located at the center of Interchange 35. The surrounding land use is primarily commercial and industrial. There are no practical opportunities for environmental enhancements within the project limits

CHAPTER 3 – ALTERNATIVES

This chapter discusses the alternatives considered and examines the engineering aspects for all feasible alternatives to address project objectives outlined in Chapter 1 of this report.

3.1. Alternatives Considered and Eliminated from Further Study

The following alternatives have been considered as possible solutions but eliminated from further study since they did not satisfy objectives of the project:

Null / No Build Alternative

The Null alternative would leave the existing structure in place and would not take any action beyond normal maintenance operations. Work required to correct current structural deficiencies is beyond the scope of normal maintenance. As the structure continues to deteriorate and it is deemed unsafe for normal traffic the bridge will be posted for reduced loading and eventually closed to all traffic.

This alternative will not satisfy the project objectives; therefore, it will be eliminated from further consideration.

Rehabilitation Alternative

Under this alternative, the existing structure would be rehabilitated to current standards. The superstructure repair scope would include replacement of the fascia stringers, repairs to the ends of all interior beams in all spans, and the existing deck and safety walks would be repaired as needed. Since ramp traffic flow across the structure must be maintained during construction, the superstructure would not be able to be raised to attain the minimum 14'-6" clearance required for a rehabilitated bridge. Lowering the mainline to achieve the required vertical clearance would therefore be required.

Substructure repair work would include replacement of all bearings and removal and replacement of deteriorated concrete at all substructures. Considering that the mainline would need to be lowered, the cost estimate places the total cost for the rehabilitation option (\$2.25M; Refer to Appendix F for the Cost Estimate) close to the bridge replacement cost (95% of replacement cost). Furthermore, although this option would eliminate the structural deficiencies, achieving a 75 year service life is considered to be impractical. This alternative is therefore eliminated from further review.

This alternative will not satisfy the project objectives; therefore, it will be removed from further consideration.

3.2. Feasible Build Alternatives

3.2.1. Description of Feasible Alternatives Reconstruction Alternative – Bridge Replacement

This alternative consists of a complete replacement of the existing bridge on an adjusted horizontal and vertical alignment. The new structure will be a conventional structure. Key elements of this alternative include:

- | | |
|-------------------|--|
| Geometry | <ul style="list-style-type: none"> The structure would be built on a horizontal alignment that shifts the centerline of the ramp roadway to the west by approximately 33 feet, so that traffic could be maintained on a portion of the existing structure while the new bridge is being constructed. The new vertical alignment will be increased by approximately 2.5 feet (max) in order to ensure the minimum vertical clearance of 16 feet 6 inches over the mainline lanes is achieved. Resultant grades would be nominally steeper but within the allowable values. |
| Operational | <ul style="list-style-type: none"> This alternative does not affect operations. |
| Control of Access | <ul style="list-style-type: none"> This alternative does not affect control of access. |
| Right of Way | <ul style="list-style-type: none"> No acquisition of right of way will be required. |
| Environmental | <ul style="list-style-type: none"> There are no significant environmental impacts from this project. |
| Project Costs | <ul style="list-style-type: none"> Total estimated cost of this alternative is \$7.97 M. |
| Project Goals | <ul style="list-style-type: none"> This alternative will meet the project objectives of increasing the service life of the structure to over 75 years and doing so in a socially, economically and environmentally sensitive manner. |

Exhibit 3.2.1 Activities		
		Alternative 1 (Replacement)
Construction	Bridge	\$2,390,940
	Highway	\$1,526,751
Subtotal (2017)		\$3,917,691
Incidentals (2017) 20%		\$783,538
Subtotal (2017)		\$4,701,229
Contingencies 15%		\$705,184
Subtotal (2017)		\$5,406,413
Potential Field Change Order 5%		\$270,321
Subtotal (2017)		\$5,676,734
Mobilization (4%)		\$227,069
Subtotal (2017)		\$5,903,803
Expected Award Amount – Inflated @ 5%/yr to midpoint of Construction (2019)		\$295,190
Final Bridge Design and Construction Inspection (30%)		\$1,771,035
Total Cost		\$7,970,028

3.2.2 Preferred Alternative

The preferred alternative is Reconstruction Alternative – Bridge Replacement. See Appendix A for proposed concept plans.

3.2.3. Design Criteria for Feasible Alternative(s)

3.2.3.1. Design Standards

Design criteria for this project are based on the New York State Thruway Authority mainline standards and NYSDOT Highway Design Manual standards for Urban Principal Arterial Interstates.

3.2.3.2. Critical Design Elements

The following table identifies critical design elements applicable to this project.

Exhibit 3.2.3.2.a Critical Design Elements for Interstate 90 – Mainline				
PIN:		S52886	NHS (Y/N):	Yes
Route No. & Name:		I-90, Syracuse Section Subdivision 8A, BIN 5510130	Functional Classification:	Urban Principal Arterial – Interstate (11)
Project Type:		Bridge Replacement & New Construction	Design Classification:	Interstate – HDM 2.7.1.1
% Trucks:		19%	Terrain:	Rolling
ADT:		52,905	Truck Access/Qualifying Hwy.	Access-Yes; Qualifying-Yes
Element		Standard	Existing Condition	Proposed Condition ²
1	Design Speed ¹	70 mph HDM Section 2.7.1.1 A	70 mph	70 mph
2	Lane Width	12 ft min HDM Section 2.7.1.1 B	12 ft.	No change
3	Shoulder Width	Left – 4 ft min, 8’ desired Right – 10 ft. min., 12’ desirable w/ barrier HDM Section 2.7.1.1 C	EB 10’ Rt/ 6’Lt WB 4’-10’ Rt/4’ Lt	12’ Rt No change Lt
4	Horizontal Curve Radius	1810 ft. @ e=8.0% HDM Section 2.7.1.1 D, Exhibit 2-2	Tangent	No change
5	Superelevation	8% Maximum HDM Section 2.7.1.1 E, Exhibit 2-2	NC	No change
6	Stopping Sight Distance	730 ft Minimum (Crest) HDM Section 2.7.1.1 F, Exhibit 2-2	1500 ft +	No change
7	Grade	4% HDM Section 2.7.1.1 G, Exhibit 2-2	0.55%	No change
8	Cross Slope	1.5% Min. to 2.5% Max. HDM Section 2.7.1.1 H	2%	No change
9	Vertical Clearance	14’-6” rehabilitation; 16’-6” replacement (Minimum) NYSTA Structure Design Manual	14’-2”	16’-6” (min.)
10	Design Loading Structural Capacity	NYSDOT LRFD Specifications AASHTO HL-93 Live Load and NYSDOT Design Permit Vehicle NYSDOT Bridge Manual, Section 2	None	N/A

Notes:

- The Divisional Traffic Engineer has concurred that the use of a Design Speed of **70** mph is consistent with the anticipated off-peak 85th percentile speed within the range of functional class speeds for the terrain and volume.
- Information on the mainline (Proposed Conditions) shall be used to establish the bridge replacement length that would be needed to accommodate future mainline roadway improvements (including widening) with no guide rail. No work on the mainline is proposed at this time.

Exhibit 3.2.3.2.b					
Critical Design Elements for Interstate 90, Interchange 35 – Entrance / Exit Ramps					
PIN:			NHS (Y/N):	Yes	
Route No. & Name:		I-90, Mohawk Section Subdivision 8B, Exit 35	Functional Classification:	Urban Principal Arterial – Other Roadways, Ramps (11)	
Project Type:		Bridge Replacement & New Construction	Design Classification:	Ramps (Turning Roadways for Grade Separated Highways) HDM 2.7.5.3	
% Trucks:		12	Terrain:	Rolling	
ADT:		6,981	Truck Access/Qualifying Hwy.	Access-Yes; Qualifying-Yes	
Element		Standard		Existing Condition	Proposed Condition
1	Design Speed	25 mph Minimum HDM Section 2.7.5.3 A		Ent. 25 mph Warning; Exit 30 mph Warning	30 mph
2	Lane Width	12 ft – one lane ramp (tangent w/ shoulders) 16 ft. – one lane ramp (300 ft curve radius) HDM Section 2.7.5.3.B, Exhibit 2-9 Case II Condition C		14 ft.	12-14 ft
3	Shoulder Width	4 ft Left, 6' Right Minimum HDM Section 2.7.5.3 C Exhibit 2-10a		2 ft Left 8-12 ft Right	4 ft Left 6-12 ft Right
4	Horizontal Curve Radius	214 ft min. (at e _{max} =8%) HDM Section 2.7.5.3 D, Exhibit 2-10a		315 ft Min	315 ft
5	Superelevation	8% Maximum HDM Section 2.7.5.3 E		8%	8% Max
6	Stopping Sight Distance	200 ft Minimum (Crest) HDM Section 2.7.5.3 F Exhibit 2-10a		465 ft	394 f
7	Grade	7% Max HDM Section 2.7.5.3 G, Exhibit 2-10a		3 %	4-7%
8	Cross Slope	1.5% Min. to 2.5% Max. HDM Section 2.7.5.3 H		1.56% NC 4.2% Normal Bank	2%t
9	Vertical Clearance	14'-6" rehabilitation; 16'-6" replacement (Minimum) NYSDOT Bridge Manual, Section 2		14'-2"	16'-6"
10	Design Loading Structural Capacity	NYSDOT LRFD Specifications AASHTO HL-93 Live Load and NYSDOT Design Permit Vehicle NYSDOT Bridge Manual, Section 2		HS20	HL-93
11	Pedestrian Accommodation / ADA	Complies with HDM Chapter 18 At Ramp Terminal with crossroad HDM Section 2.7.5.3 K		None	N/A

3.2.3.3. Other Design Parameters

The mainline traffic operation at ETC+30 is expected to drop to a LOS D, which is below the typical minimum of LOS C. If need be, at some future date, NYSTA has the ability to add a third lane in each direction within the median to improve traffic flow.

3.3. Engineering Considerations

3.3.1. Operations (Traffic and Safety) & Maintenance

3.3.1.1. Functional Classification and National Highway System

This project will not change the functional classification of either roadway.

3.3.1.2. Control of Access

Access control will remain unchanged on both roadways.

3.3.1.3. Traffic Control Devices

Traffic Signals: No new traffic signals are proposed.

Roadway Striping and Signage: Will be upgraded to current standards

3.3.1.4. Intelligent Transportation Systems (ITS)

No additional ITS measures are proposed

3.3.1.5. Speeds and Delay

The existing posted speed limits of both roadways will remain unchanged. Travel time estimates are not applicable for a bridge replacement project.

3.3.1.6. Traffic Volumes

No significant changes in traffic volumes are anticipated (see Section 2.3.1.6 for existing and future traffic volumes).

3.3.1.7. Level of Service and Mobility

Based on projected traffic volumes, the level of Services drops from LOS B to LOS D at ETC+30 (see Section 2.3.1.7 for existing and future Levels of Service).

3.3.1.8. – Work Zone Safety & Mobility

For the replacement of the bridge, construction zone traffic operations will include short term lane closures on the mainline to accommodate structure demolition and construction. Nighttime construction operation during critical phases is also viable. During construction of the new bridge, traffic will be maintained on portions of the existing and new bridges.

3.3.1.9. Safety Considerations, Accident History and Analysis

No accident reduction or preventative needs have been identified for this project. As part of the replacement scope existing substandard approach guide railing will be replaced and will meet current standards.

3.3.1.10. Impacts on Police, Fire Protection and Ambulance Access

No significant impacts to emergency vehicle access through the project site are anticipated during and upon project completion.

3.3.1.11. Parking Regulations and Parking Related Issues

No changes are proposed.

3.3.1.12. Lighting

No changes are proposed.

3.3.1.13. Ownership and Maintenance Jurisdiction

No changes are proposed. Refer to section 2.3.1.12.

3.3.1.14. Constructability Review

A review by the NYSTA Constructability review team of the NYSTA will take place as part of the RFP evaluation and during final design phases.

3.3.2. Multimodal

3.3.2.1. Pedestrians

Pedestrians are prohibited on Interstate Highways by state law.

3.3.2.2. Bicyclists

Bicyclists are prohibited on Interstate Highways by state law.

3.3.2.3. Transit

No changes are proposed.

3.3.2.4. Airports, Railroad Stations, and Ports

No changes are proposed.

3.3.2.5. Access to Recreation Areas (Parks, Trails, Waterways, and State Lands)

No changes are proposed.

3.3.3. Infrastructure

3.3.3.1. Proposed Highway Section

The Interchange 35 Ramp road within the project limits will be reconstructed to current standards for an urban interstate ramp. Fourteen-foot travel lanes will be provided on each approach to the new bridge. The left and right shoulder widths approaching the structure will be 4 feet and 8 feet, respectively. The new ramp bridge will consist of 2-12 foot travel lanes, 4 foot and 6 foot left and right shoulders, respectively, separated by a 2 foot median rail area.

No work, except for guide rail replacement/upgrade, is proposed on I-90 mainline. Refer to Appendix A for additional information.

3.3.3.1. (1) Right of Way

No right of way acquisitions will be required.

3.3.3.1. (2) Curb

Concrete fascia barriers are proposed on the ramp bridge. Open right shoulder sections are proposed on the approaches to the bridge. Box beam median barrier is proposed and will extend for the full length of the ramp.

3.3.3.1. (3) Grades

In general, the roadway approach grades to the proposed ramp bridge will be slightly steeper due to profile adjustments needed to achieve 16'-6" feet of clearance over the mainline travel lanes. The profile for the bridge replacement is a crest curve across the bridge.

3.3.3.1. (4) Intersection Geometry and Conditions

There are no intersections within the project limits.

3.3.3.1. (6) Roadside Elements

(a) Snow Storage, Sidewalks, Utility Strips, Bikeways, Bus Stops – There are no special roadside elements within the project limits. Snow storage will be accommodated in the area outside of the roadway shoulder.

(b) Driveways – Driveways do not exist on Interstate 90 or the ramps.

(c) Clear Zone - The clear zone width at the bridge along Interstate 90 will be set based on the current NYSTA standard of 30 feet from the outside edge of travel lane.

3.3.3.2. Special Geometric Design Elements

3.3.3.2. (1) Non-Standard Features

There are no non-standard features proposed.

3.3.3.3. Pavement and Shoulder

A pavement evaluation is not required for a bridge replacement project. Approach roadway sections will utilize a conventional pavement design section.

3.3.3.4. Drainage Systems

The existing system of median and roadside swales coupled with roadway cross-culverts will remain essentially unchanged. Adjustments to existing swales will be required to accommodate the shift in horizontal alignment of the interchange ramp, but all drainage patterns within the project limits will be maintained.

3.3.3.5. Geotechnical

Three (3) new soil borings were conducted at the project site. Based on the boring logs, the underlying soils consist of a mix of sand, silts and clay. Weathered shale and denser soils were encountered below 10 feet. The soils do not appear to be problematic for bridge design and/or construction. Refer to Appendix E for boring logs.

3.3.3.6. Structures

The existing bridge will be completely removed and replaced with a new structure. The new bridge will be constructed on an adjusted horizontal alignment. The vertical alignment will be increased so that the clearance over the mainline lanes is 16'-6" minimum.

3.3.3.6. (1) Description of Work

(a) Although the final bridge type will be proposed, designed and constructed by the design builder, for estimating purposes the new bridge is assumed to be a two span continuous steel girder bridge. The superstructure will consist of a reinforced concrete deck on weathering steel girders. A monolithic concrete deck slab will be constructed with concrete approach slabs at each end of the bridge. Concrete safety shape barriers will be constructed at each fascia and box beam median barrier will be used. The new substructures will consist of concrete integral abutments and one pier supported on piles.

(b) The bridge will carry two 12 foot north and southbound travel lanes with 6 foot right shoulders and 4 foot wide left shoulders (both directions). Refer to the typical section included in Appendix A.

(c) There are no utilities carried by the bridge except for fiber optic lines on the underside of the deck and antennas mounted to the superstructure.

3.3.3.6. (2) Clearances

Where 30 foot clear zones cannot be met and guide rail must be used, the horizontal clearances will be equal to the new shoulder widths. A 16'-6" (minimum) vertical clearance will be provided over the Thruway mainline.

3.3.3.6. (3) Live Load

The new bridge will be designed to carry HL-93 and the NYS Design Permit Vehicle.

3.3.3.6. (4) Associated Work

The existing bridge will be removed as required for construction of the new bridge. No special considerations have been identified and the construction of the new bridge is assumed to be routine.

The new bridge will be constructed on a shifted alignment, to allow traffic to continue using the existing bridge while the new bridge is being constructed. In order to establish the desired 16'-6" (minimum) vertical clearance over the mainline, profile adjustments to the ramp roadway will extend approximately 700 feet to the south and 600 feet to the north of the new bridge.

3.3.3.6. (5) Waterway

There are no waterways within the project limits.

3.3.3.7. Hydraulics of Bridges and Culverts

There are no waterways within the project limits.

3.3.3.8. Guide Railing, Median Barriers and Impact Attenuators

All guide rail within the project limits will be evaluated during final design for conformance to design standards and replaced or repaired, as needed..

3.3.3.9. Utilities

Existing utilities will be supported/maintained during and after construction. Also, the existing ITS facilities currently mounted to the existing bridge will need to be mounted to the new structure.

3.3.3.10. Railroad Facilities

There are no railroad facilities within the project limits.

3.3.4. Landscape and Environmental Enhancements**3.3.4.1. Landscape Development and Other Aesthetics Improvements**

No significant landscape or other aesthetic enhancements are planned for this project.

3.3.5. Miscellaneous

There are no other special or unique aspects to this project.

CHAPTER 4 SOCIAL, ECONOMIC and ENVIRONMENTAL CONDITIONS and CONSEQUENCES

4.1 Introduction

4.1.1 Environmental Classification

NEPA Classification -

This project is 100% Thruway funded; therefore, NEPA does not apply.

SEQR Classification -

In accordance with 6 NYCRR, Part 617, "State Environmental Quality Review", the Thruway has determined that this project is a SEQR Type II Action. No further SEQR processing is required. The New York State Thruway Authority is the SEQR lead agency. The project has been identified as a Type II action, per 6 NYCRR Part 617.5, Subdivision (c), Item 2. This permits the project to be classified as Type II since the project does not meet or exceed any of the thresholds in Section 617.4, and is of a scale and scope illustrated by the following:

- (2) replacement, rehabilitation or reconstruction of a structure or facility, in kind, on the same site, including upgrading buildings to meet building or fire codes, unless such action meets or exceeds any of the thresholds in Section 617.4 of this Part.

As stated in Section 617.4 (b), actions that meet the thresholds listed below are Type I if they are to be directly undertaken, funded or approved by an agency.

The proposed project does not include or result in:

- (1) the adoption of a municipality's land use plan, the adoption by any agency of a comprehensive resource management plan or the initial adoption of a municipality's comprehensive zoning regulations;
- (2) the adoption of changes in the allowable uses within any zoning district, affecting 25 or more acres of the district;
- (3) the granting of a zoning change, at the request of an applicant, for an action that meets or exceeds one or more of the thresholds given elsewhere in this list;
- (4) the acquisition, sale, lease, annexation or other transfer of 100 or more contiguous acres of land by a state or local agency;
- (5) construction of new residential units that meet or exceed the following thresholds:
 - (i) 10 units in municipalities that have not adopted zoning or subdivision regulations;
 - (ii) 50 units not to be connected (at the commencement of habitation) to existing community or public water and sewerage systems including sewage treatment works;
 - (iii) in a city, town or village having a population of less than 150,000, 250 units to be connected (at the commencement of habitation) to existing community or public water and sewerage systems including sewage treatment works;
 - (iv) in a city, town or village having a population of greater than 150,000 but less than 1,000,000, 1,000 units to be connected (at the commencement of habitation) to existing community or public water and sewerage systems including sewage treatment works; or
 - (v) in a city or town having a population of greater than 1,000,000, 2,500 units to be connected (at the commencement of habitation) to existing community or public water and sewerage systems including sewage treatment works;
- (6) activities, other than the construction of residential facilities, that meet or exceed any of the following thresholds; or the expansion of existing nonresidential facilities by more than 50 percent of any of the following thresholds:

- (i) a project or action that involves the physical alteration of 10 acres;
- (ii) a project or action that would use ground or surface water in excess of 2,000,000 gallons per day;
- (iii) parking for 1,000 vehicles; (iv) in a city, town or village having a population of 150,000 persons or less, a facility with more than 100,000 square feet of gross floor area;
- (v) in a city, town or village having a population of more than 150,000 persons, a facility with more than 240,000 square feet of gross floor area;
- (7) any structure exceeding 100 feet above original ground level in a locality without any zoning regulation pertaining to height;
- (8) any Unlisted action that includes a nonagricultural use occurring wholly or partially within an agricultural district (certified pursuant to Agriculture and Markets Law, article 25AA, sections 303 and 304) and exceeds 25 percent of any threshold established in this section;
- (9) any Unlisted action (unless the action is designed for the preservation of the facility or site) occurring wholly or partially within, or substantially contiguous to, any historic building, structure, facility, site or district or prehistoric site that is listed on the National Register of Historic Places, or that has been proposed by the New York State Board on Historic Preservation for a recommendation to the State Historic Preservation Officer for nomination for inclusion in the National Register, or that is listed on the State Register of Historic Places (The National Register of Historic Places is established by 36 *Code of Federal Regulations* [CFR] parts 60 and 63, 1994 [see section 617.17 of this Part]);
- (10) any Unlisted action, that exceeds 25 percent of any threshold in this section, occurring wholly or partially within or substantially contiguous to any publicly owned or operated parkland, recreation area or designated open space, including any site on the Register of National Natural Landmarks pursuant to 36 CFR part 62, 1994 (see section 617.17 of this Part); or
- (11) any Unlisted action that exceeds a Type I threshold established by an involved agency pursuant to section 617.14 of this Part.

4.1.2 Coordination with Agencies

NEPA Cooperating and Participating Agencies -

This project is 100% State funded; therefore, the FHWA NEPA requirements for Cooperating and Participating Agencies do not apply.

SEQR Cooperating and Participating Agencies -

The following agencies have been identified as involved and Interested Agencies under SEQR:

The New York State Department of Environmental Conservation (NYSDEC)
NYS Historic Preservation Office
US Fish and Wildlife

4.2 Social

The purpose of this section is to discuss the social environment of the site. This project involves the replacement of the Exit 35 Ramp over the New York State Thruway (I-90). This project involves the replacement of the existing bridge on a revised horizontal alignment. The vertical alignment will be raised in order to provide the required clearance over the Thruway. Minor improvements to the intersecting roadways may be required. Based on the scope of the project, no adverse effects to the surrounding social environment are anticipated as a result of this project.

4.2.1 Land Use

Demographics and Affected Population -

The project is located in the Town of DeWitt in Onondaga County. The project vicinity is heavily developed; with business parks predominant on the northwest and northeast quadrants, and a mixed use of hotels and chain restaurants predominant in the southwest and southeast quadrants.

The 2010 US Census reports that the Town has a population of 25,838 persons. The median reported age was 42.8, with 17.4% of the population being reported at age 65 or older. Approximately 89.7% of the population was identified as white. Based on data collected from the US Census' American Community Survey, approximately 10.8% of the Town's population identified as disabled under age 65 (although specific disabilities were not listed). This percentage is higher than the percentage for Onondaga County, 8.7%, and New York State, 7.4%. The Town had 7.9% of its population reported to be below the poverty level, which was below that year's national average of 13.5%.

This project is not located in a potential NYSDEC Environmental Justice Area.

Comprehensive Plans and Zoning -

Replacement of the existing bridge on the same general alignment will not conflict with any local community's comprehensive plans, nor will it affect local zoning.

4.2.2 Neighborhoods and Community Cohesion This section may contain the following subsections:

Community Cohesion -

The project will not divide neighborhoods, isolate part of a neighborhood, generate new development or otherwise affect community cohesion. During construction, a temporary detour will be in place, which will increase travel times. There will be no permanent effect on neighborhoods or community cohesion.

Home and Business Relocations -

Since this project involves the replacement of an existing bridge on a slightly shifted alignment, the proposed project would require no displacement of residences or businesses and there would be no relocation impacts.

4.2.3 Social Groups Benefited or Harmed

Elderly and/or Disabled Persons or Groups -

A review of US Census data in Section 4.2.1.1 indicates that there is no significant concentration of elderly or disabled persons in the project area. No social groups will be benefited or harmed as a result of this project.

Transit Dependent -

This project involves the replacement of an existing bridge on slightly shifted alignment and does not involve existing transit facilities such as bus or train stations, nor park and ride lots.

Low Income, Minority and Ethnic Groups (Environmental Justice) -

The project is not located in or near a potential NYSDEC environmental justice area.

4.2.4 School Districts, Recreational Areas, and Places of Worship**School Districts -**

The proposed project is within the East Syracuse-Minoa Central School District. There are no schools or school properties within or near the project corridor. During construction, traffic will be maintained on the existing bridge and there will be no change in travel times.

Recreational Areas -

There are no parks or recreational properties within or near the Project area. Thus, this project will have no impacts to existing recreational areas.

Places of Worship –

There are no places of worship within or near the project corridor. Thus, this project will have no impacts to existing places of worship.

4.3 Economic**4.3.1 Regional and Local Economies**

There will be no measurable or apparent adverse impact on the general economic conditions, tax base, employment opportunities, economic development zones, or property values within the project limits or surrounding area as a result of this project.

4.3.2 Business District Impacts

This project is not located within a defined business district. There will be no permanent adverse impact on businesses as a result of this project. During construction, a temporary detour will be in place that will increase travel times.

4.3.3 Specific Business Impacts

There will be no measurable or known adverse impacts to established businesses as a result of this project.

4.4 Environmental**4.4.1 Wetlands**

A site visit conducted on November 16, 2016, which identified wetlands adjacent to the site. The Wetland Delineation Letter Report is included in Appendix B.

State Freshwater Wetlands -

There are no NYSDEC regulated freshwater wetlands or regulated adjacent areas (100-feet) within the project area, as per the NYSDEC Environmental Resource Mapper. A site visit was performed to verify this. No further investigation is required and Environmental Conservation Law, Article 24 is satisfied.

State Tidal Wetlands -

A review of the NYSDEC GIS wetland data files indicates that there are no NYSDEC jurisdictional tidal wetlands or regulated adjacent areas within or near the project limits, and ECL Article 25 does not apply.

Federal Jurisdiction Wetlands -

A review of the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Maps indicated that mapped NWI wetlands are located to the southeast of the Project Area (see Wetland Delineation Letter Report, Appendix B).

The Project Area has been reviewed for wetlands in accordance with the criteria defined in the 1987 US Army Corps of Engineers Wetland Delineation Manual. The Wetland Delineation Letter Report is included in Appendix B. The Wetland Delineation Letter Report concluded:

Environmental Design and Research DPS (EDR) delineated two palustrine emergent (PEM) wetlands within the Project Area. These wetlands were identified based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology and total approximately 0.15 acre within the Project Area. These wetlands continue downslope, off-site, and appear to have a surface water connection to other waters of the United States, and therefore are likely to be considered jurisdictional by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act. However, final determination of the jurisdictional status must be made by the USACE. Due to the distance from the nearest NYSDEC regulated wetland (approximately 0.5 mile) and lack of hydrologic or significant habitat connectivity, in EDR's opinion these wetlands should not be regulated under Article 24 of the Environmental Conservation Law. Final determination of the jurisdictional status of all wetlands must be made by the USACE and NYSDEC.

Depending on the final project design, if the project will impact wetlands, wetland permitting through the USACE is expected to be authorized under a Nationwide Permit. If the project proceeds under a USACE Nationwide Permit, it is anticipated that a Blanket Section 401 Water Quality Certification (WQC) will also apply to this project. If wetland permits are necessary, work will not commence until the permits are acquired, and work will adhere to all permit conditions.

Executive Order 11990 -

Federal funding will not be used in the design or construction of this project. Therefore, the requirements of Executive Order 11990 do not apply to this project.

Mitigation Summary -

If necessary, depending on the final project design, appropriate measures will be taken to avoid and minimize wetland impacts. Note that if impacts to wetlands are 1/10 of an acre or less and a Nationwide Permit applies to the proposed activities, no wetland mitigation/monitoring plan would be required.

4.4.2 Surface Waterbodies and Watercourses

Surface Waters –

There are no surface water bodies such as lakes, rivers, or streams, within the Project Area.

Depending on the final project design, if the project will impact wetlands, wetland permitting through the USACE is expected to be authorized under a Nationwide Permit. If the project proceeds under a USACE Nationwide Permit, it is anticipated that a Blanket Section 401 Water Quality Certification (WQC) will also apply to this project.

The permit(s) will be obtained once the location and the extent of the impacts are ascertained. Work will not commence until the permit is acquired, and will adhere to any conditions set forth by the permit requirements.

Surface Water Classification and Standards -

Based upon a review of the NYSDEC GIS data for regulated streams, there are no surface waterways within the proposed project limits.

Stream Bed and Bank Protection -

Based upon a review of the NYSDEC GIS database, and as verified by a site visit, there are no protected streams, nor 50-foot regulated stream banks (on either side of a regulated stream) in the project area.

4.4.3 Wild, Scenic, and Recreational Rivers This section shall contain the following subsections:

State Wild, Scenic and Recreational Rivers -

There are no NYSDEC Designated, Study or Inventory State Wild, Scenic or Recreational Rivers within or adjacent to the Project Area. No further review is required.

National Wild and Scenic Rivers -

The project does not involve a National Wild and Scenic River as shown by the Nationwide Rivers Inventory List of National Wild and Scenic Rivers. No further review is required.

4.4.4 Navigable Waters

State Regulated Waters -

There are no state regulated navigable waters located within the Project Area that will be impacted by the project.

Office of General Services Lands and Navigable Waters -

There are no OGS underwater holdings located within the Project Area that will be impacted by the project.

Rivers and Harbors Act – Section 9 -

Since the project does not involve the construction or modification of any bridge, dam, dike, or causeway over any navigable water of the United States, Section 9 is not applicable.

Rivers and Harbors Act – Section 10 -

Since the project does not involve the creation of any obstruction to the navigable capacity of any of the waters of the United States, or in any manner alter or modify the course, location, condition, or capacity of any navigable water of the United States, Section 10 is not applicable.

4.4.5 Floodplains

State Flood Insurance Compliance Program -

As shown on the Federal Emergency Management Agency (FEMA) GIS data base for the 100 year floodplains, the Project Area is not located within a regulated floodplain.

Executive Order 11988 -

The project will not impact floodplains; therefore, EO 11988 does not apply.

4.4.6 Coastal Resources

State Coastal Zone Management Program –

The proposed project is not located in a State Coastal Zone Management (CZM) area, according to the Coastal Zone Area Map from the NYS Department of State's Coastal Zone Management Unit.

State Coastal Erosion Hazard Area -

The proposed project is not located in or near a Coastal Erosion Hazard Area.

Waterfront Revitalization and Coastal Resources Program -

According to NYS DOS "List of Approved Coastal Local Waterfront Revitalization Programs (LWRPs)," dated July 2016, the proposed project is not located in a Local Waterfront Revitalization Area. No further action is required.

Federal Coastal Barrier Resources Act (CBRA) and Coastal Barrier Improvement Act (CBIA) -

The proposed project is not located in, or near a coastal area under the jurisdiction of the Coastal Barrier Resources Act (CBRA) or the Coastal Barrier Improvement Act (CBIA).

4.4.7 Groundwater Resources, Aquifers, and Reservoirs

Aquifers -

NYSDEC aquifer GIS data files have been reviewed, and it has been determined that the proposed project is not located in an identified Primary Water Supply or Principal Aquifer Area. No further investigation for NYSDEC designated aquifers is required.

Drinking Water Supply Wells (Public and Private Wells) and Reservoirs -

There are no municipal drinking water wells, wellhead influence zones, or reservoirs within or near the project area, according to the *NYS Atlas of Community Water System Sources*, dated 1982, issued by the NYS Department of Health and the NYS Department of Environmental Conservation Water Wells GIS data.

4.4.8 Stormwater Management

A SPDES General Permit GP-0-15-002 will be required because the project includes more than one acre of soil disturbance. A Stormwater Pollution Prevention Plan (SWPPP) with the appropriate sediment and erosion control measures will be developed by the Design-Builder. Based on the SWPPP, permanent stormwater management practices may be required depending on the total amount of disturbance and changes in total impervious area.

The project corridor is located within a Total Maximum Daily Load (TMDL) Watershed (Onondaga Lake Watershed). This project should be evaluated for water quality treatment practices to reduce pollutant and phosphorous loadings.

4.4.9 General Ecology and Wildlife Resources

The Project Area encompasses a NYSTA Thruway bridge and portions of the Thruway in a highly disturbed, urban area. The Project Area includes primarily paved roadways and mowed lawn, and provides very limited habitat opportunities for wildlife.

Fish, Wildlife, and Waterfowl -

A cursory review of the Project Area indicates that there is not a special habitat or breeding area for certain species of plants or animals at or adjacent to the project.

Habitat Areas, Wildlife Refuges, and Wildfowl Refuges -

The proposed project is 100% State funded; therefore, Section 4(f) of the US Department of Transportation Act does not apply.

Endangered and Threatened Species -

Information regarding the occurrence of rare, threatened, and endangered species and significant natural communities in the project area was solicited from the New York Natural Heritage Program (NYNHP) and the U.S. Fish and Wildlife Service (USFWS). Consultation with the USFWS through the Information, Planning, and Conservation (IPaC) decision support system was conducted. The USFWS Official Species List (see Appendix B) indicated that three Federally Threatened species could potentially be present in the vicinity of the Project Area: the northern long-eared bat (*Myotis septentrionalis*), the Indiana bat (*Myotis sodalis*), and eastern massasauga (*Sistrurus catenatus*).

No clearing of trees greater than 3 inches in diameter at breast height is expected to be required for this project. Further, no evidence of bats was noted under the bridge during the site reconnaissance (guano, staining, etc.). As such, the project is not expected to impact habitat suitable for the Indiana bat or the northern long-eared bat. If it is determined during detailed design that clearing of trees greater than 3 inches in diameter at breast height is required, clearing activities will only be permitted during the winter clearing period of October 31st and March 31st.

The only documented occurrence of the eastern massasauga rattlesnake in Onondaga County is in the Cicero Swamp Wildlife Management Area, which is over 3 miles northeast of the Project Area. The delineated wetlands in the Project Area do not have extensive areas of sphagnum hummocks or other characteristics typical of suitable habitat for this species. Based on the lack of suitable habitat, the occurrence of eastern massasauga is considered unlikely.

According to the NYNHP, this office does not have any records of known occurrences of rare, or state-listed animals or plants, or significant natural communities within or immediately in the vicinity of the proposed project site.

Invasive Species -

This project includes an interstate highway bridge, exit ramp, and associated right of way. During the site reconnaissance for the project, typical roadside invasive species were identified at ground level including, but not limited to, common reed (*Phragmites australis*), and canary reed grass (*Phalaris arundinacea*).

Precautions will be taken to prevent the spread of invasive species, intentionally or accidentally, during project design and construction.

Roadside Vegetation Management -

Existing roadside vegetation consists primarily of maintained lawn areas. Efforts will be made to replace wildlife-supporting vegetation that is removed in the course of construction.

4.4.10 Critical Environmental Areas**State Critical Environmental Areas –**

According to information obtained from NYSDEC, the proposed project does not involve work in or near a Critical Environmental Area.

State Forest Preserve Lands -

According to information obtained from NYSDEC, the proposed project does not involve work in or near state forest preserve lands.

4.4.11 Historic and Cultural Resources This section may contain the following subsections:**National Heritage Areas Program -**

The proposed project will not impact areas identified as National Heritage Areas.

National Historic Preservation Act – Section 106 / State Historic Preservation Act – Section 14.09 -

A Project Submittal Package (PSP) has been prepared for the proposed project (see Appendix B). The PSP will be submitted to the Thruway's Preservation Officer for review.

Architectural Resources -

As stated in the PSP, the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) Cultural Resources Information System (CRIS) website was reviewed to determine the location of properties listed on the National Register of Historic Places (NRHP) within and immediately adjacent to the Area of Potential Effect (APE). No properties previously listed on, or determined eligible for, the NRHP are located within the APE.

Archaeological Resources -

As stated in the PSP, review of the NYSOPRHP CRIS website determined that the APE is not located in an archaeologically sensitive area, and there are no previously reported archaeological sites in the APE.

In addition, no previous cultural resources surveys have been conducted within or immediately adjacent to the proposed APE.

The land within and immediately adjacent to the APE has been heavily disturbed by the construction of the New York State Thruway and associated bridges and ramps. Therefore, the APE for the proposed project is considered to have low archaeological sensitivity for historic and prehistoric cultural resources.

Historic Bridges -

The bridge over I-90 was constructed in 1953 and is not eligible for inclusion on the NYSDOT Historic Bridge Inventory.

Historic Parkways -

This project does not have any potential to impact any Historic Parkways.

Native American Involvement -

The proposed project does not lie within Federal or Native-American-owned property. Further, the project is 100% State funded; therefore, the Act for the Preservation of American Antiquities does not apply.

Section 4(f) Involvement -

State Heritage Area Program -

The proposed project will not impact areas identified as State Heritage Areas.

National Heritage Areas Program -

The proposed project will not impact areas identified as National Heritage Areas.

National Registry of Natural Landmarks -

There are no listed nationally significant natural areas within, or adjacent to, the project area.

Section 4(f) Involvement -

The proposed project is 100% State funded. This section does not apply.

Section 6(f) Involvement -

The project does not impact parklands or facilities that have been partially or fully federally funded through the Land and Water Conservation Act. No further consideration under Section 6(f) is required.

Section 1010 Involvement -

This project does not involve the use of land from a park to which Urban Park and Recreation Recovery Program funds have been applied.

4.4.13 Visual Resources

The project will involve a temporary disturbance to the visual environment through the establishment of a project construction staging area. The staging area will be in place during construction and will be removed upon project completion. The bridge replacement will have a similar appearance in terms of span, design, and materials as the existing bridge. No significant permanent visual impacts are anticipated from the project.

4.4.14 Farmlands

State Farmland and Agricultural Districts -

Based on a review of the NYS Agricultural District Maps for Onondaga County, the proposed project is not located in or adjacent to an Agricultural District.

Federal Prime and Unique Farmland -

The proposed project is 100% State funded; therefore, the Federal Farmland Protection Policy Act does not apply.

4.4.15 Air Quality

Transportation Conformity –

The project is not located within a non-attainment area; therefore, the transportation conformity regulations, published by the EPA on August 15, 1997 (40 CFR Parts 51 and 93), do not apply.

Carbon Monoxide (CO) Microscale Analysis -

An air quality analysis for CO is not required since this project will not increase traffic volumes, reduce source-receptor distances by 10% or more, or change other existing conditions to such a degree as to jeopardize attainment of the National Ambient Air Quality Standards. The project does not require a project-level conformity determination.

Mesoscale Analysis -

A Mesoscale Analysis is not required for this project since it does not significantly affect air quality conditions over a large area and is not a regionally significant project.

Mobile Source Air Toxics (MSATs) Analysis -

This project modifies existing highway infrastructure and does not add capacity or new interchanges that would contribute to additional vehicular usage. It can therefore be concluded that the project will have no significant adverse impact on ambient MSAT levels.

Particulate Matter (PM) Analysis -

This project has been classified as a SEQRA Type II project and has been determined to result in no significant increase in traffic volumes. The project actions do not individually or cumulatively have a significant effect on PM emissions. It can therefore be concluded that the project will have no significant adverse impact on ambient PM levels.

Greenhouse Gas Analysis –

This project will not add capacity or new interchanges that will result in additional vehicular usage. It can therefore be concluded that the project will have no significant adverse impact on ambient greenhouse gas levels.

4.4.16 Energy

Construction of the project will involve the use of energy in the form of fuel for construction equipment. The completed project involves no direct energy consumption.

4.4.17 Noise

Construction equipment operation will cause noise levels to temporarily increase. The completed project will not significantly change either the horizontal or vertical alignment of the bridge, or increase the number of through-traffic lanes. Therefore, no long-term noise impact will occur as a result of the project.

4.4.18 Asbestos

Potential asbestos containing materials (ACMs) were not observed during this assessment. However, in accordance with 12 NYCRR 56, no demolition or renovation work shall be commenced by any owner or agent prior to completion of asbestos abatement performed by a licensed asbestos abatement contractor. If suspect asbestos containing materials not identified in this pre-demolition asbestos survey report are discovered during the demolition process, it is required that the presence, location and quantity of newly discovered material, be conveyed within twenty-four (24) hours of discovery to the owner or their representative. All activities must cease in the area where the presumed asbestos containing material or suspect miscellaneous ACM is found, until a licensed asbestos contractor appropriately assesses and manages the discovered materials

4.4.19 Hazardous Waste and Contaminated Materials

A Hazardous Waste/Contaminated Materials Site Screening has been conducted in accordance with the NYSDOT Environmental Procedures Manual, Chapter 5, to document the likely presence or absence of hazardous/contaminated environmental conditions. A hazardous/contaminated environmental condition is the presence or likely presence of any hazardous substances or petroleum products (including products currently in compliance with applicable regulations) on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.

The Hazardous Waste/Contaminated Materials Screening is included in Appendix B.

This assessment included a walkover reconnaissance of the Project Area on November 16, 2016, a review of existing information about past and current land use, and a review of published databases and government records, including Inactive Hazardous Waste Site Registry, Chemical and Petroleum Bulk Storage records, waste incident/chemical releases reports, and other federal, state, county, and local sources of information. In February 2017, Environmental Data Resource, Inc. was contracted by Environmental Design and Research DPC to provide a listing of published databases of hazardous waste sites in the vicinity of the Project Area. These databases provide a listing of sites of potential concern as identified by a review of Federal, State and local databases. This database review was supplemented with a review of published databases available through the NYSDEC web site. The environmental database report is available upon request.

The conclusions of this screening included the following:

The NYSTA Syracuse Section Maintenance facility on Thompson Road to the southwest of the Project Area is an identified Petroleum Bulk Storage (PBS) facility with current Aboveground Storage Tanks (ASTs) and former Underground Storage Tanks (USTs), and is a registered large quantity generator of hazardous waste. The locations of ASTs and former USTs on this property should be confirmed prior to excavation for the proposed project. If oil and/or hazardous materials (OHM) storage and/or generation locations are in close proximity to areas to be excavated for the project, these areas should be screened for potential contamination to ensure that sampling and potential disposal be completed as necessary.

Several releases have been reported within and immediately adjacent to the Project Area, including a leaking UST at the NYSTA tollbooth within the Project Area, a vehicle release mapped in the Project Area, and leaking abandoned USTs under the Thruway's parking lot adjacent to the west of the Project Area. Further, several properties north of the Project Area along Commerce Boulevard and Joy Road were identified on the database report as being users and generators of OHM, as well as being the sites of multiple releases of OHM. The reported releases at properties on and adjacent to the Project Area are listed as closed in the database report. However, due to the industrial character of the surrounding area, the number of releases, and the extensive current and past use of OHM near the Project Area, the potential for subsurface contamination at the Project Area remains.

Soil and/or groundwater sampling would be required to definitively determine whether the Project Area has been impacted.

No other significant hazardous waste/contaminated materials were identified within or adjacent to the Project Area during the course of the Hazardous Waste/Contaminated Materials Site Screening.

4.5 Construction Effects

4.5.1 Construction Impacts

Construction of the proposed project is expected to include traditional construction methods and products. The impacts of construction can therefore be reasonably anticipated and mitigated by using conventional methods. Construction impacts are temporary in nature. Temporary soil erosion and increased dust may occur from disturbance of soils during construction activities. Soil erosion and runoff can impact the water quality of nearby surface water bodies. A site-specific Stormwater Pollution Prevention Plan (SWPPP) will be developed that will include soil erosion control, dust control, and runoff control measures.

Construction of the proposed project may also have temporary noise impacts. The proposed project is an exit ramp of the NYS Thruway, and surrounding properties are largely commercial and/or industrial in nature. Temporary noise impacts are not expected to impact residences, and are not expected to have a significant adverse impact on nearby businesses.

4.6 Indirect and Secondary Effects

4.6.1 Indirect Socioeconomic Effects

The proposed project is a replacement of an existing bridge in the same location; therefore, the project is not expected to have indirect social or economic effects.

4.6.2 Social Consequences

The proposed project is a replacement of an existing bridge in the same location; therefore, the project will not affect land use, planning, or zoning. Existing adjacent properties will be minimally affected and no social groups will be harmed.

4.6.3 Economic Consequences

The proposed project is a replacement of an existing bridge in the same location; therefore, the project will not affect the regional or local economies. No business districts will be impacted, and no businesses will be relocated. Any economic impacts associated with the project will be minimal and temporary, resulting from construction impacts.

4.7 Cumulative Effects

No adverse cumulative effects are anticipated to result from the proposed project.

Appendix A Concept Plans

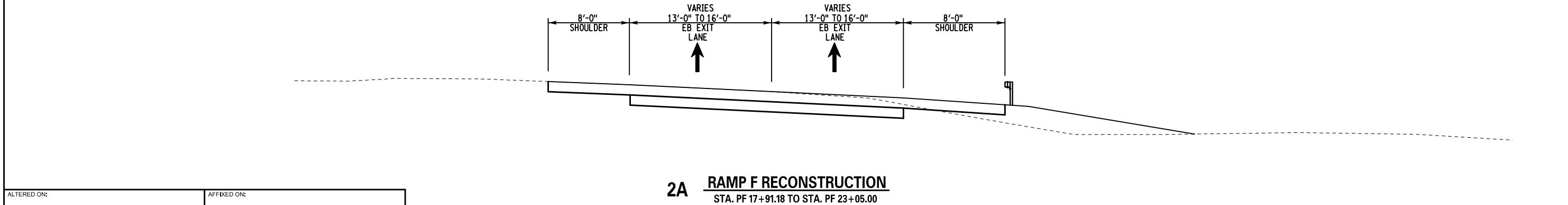
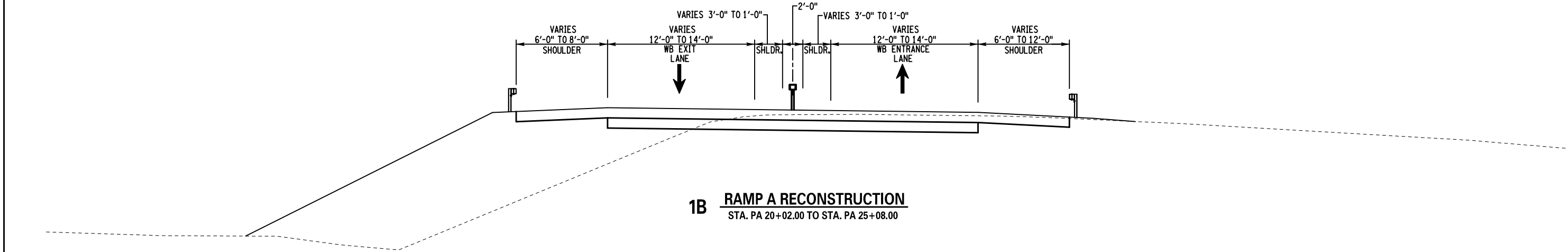
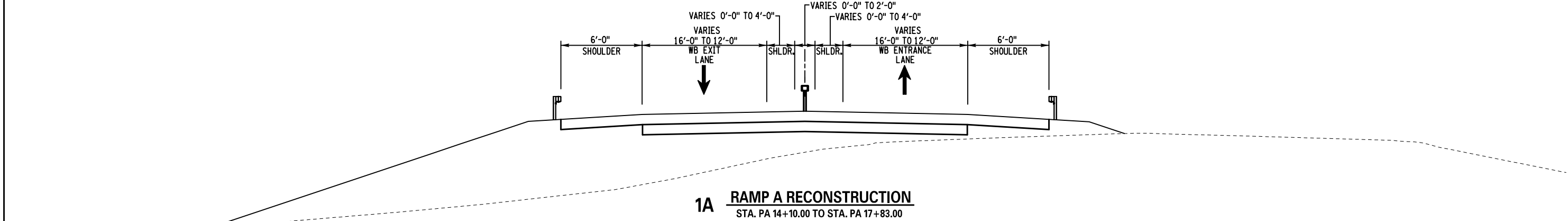
CHECKED BY: B. WALKER

DRAFTED BY: S. ROMEISER

CHECKED BY: R. CODY

DESIGNED BY: B. WALKER



DESIGN SUPERVISOR: J. HOFMANN



ALTERED ON:	AFFIXED ON:
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

 Thruway Authority	TITLE OF PROJECT INTERCHANGE 35 RAMP OVER INTERSTATE I-90 MP 278.93 / BIN 5510090	CONTRACT NUMBER: TAB 17-XX
	LOCATION OF PROJECT TOWN OF DEWITT ONONDAGA COUNTY	DATE: MAY 2017
	TITLE OF DRAWING TYPICAL SECTIONS RAMP A & RAMP F	DRAWING NUMBER: TYP-1

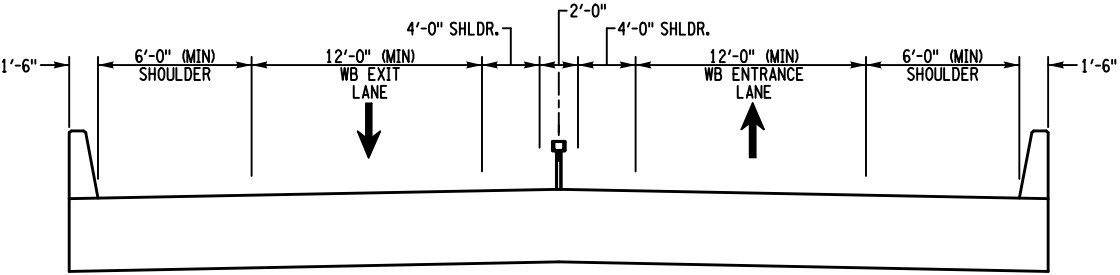
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DRAFTED BY: S. ROMEISER

CHECKED BY: R. CODY

DESIGNED BY: B. WALKER

DESIGN SUPERVISOR: J. HOFMANN




4A RAMP A BRIDGE OVER I-90 EB & WB
STA. PA 17+82 TO STA. PA 20+02
N.T.S.


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REVISIONS			
DATE	DESCRIPTION	BY	SYM.



Thruway
Authority



TITLE OF PROJECT
INTERCHANGE 35 RAMP OVER INTERSTATE I-90
MP 278.93 / BIN 5510090

LOCATION OF PROJECT
TOWN OF DEWITT
ONONDAGA COUNTY

TITLE OF DRAWING
TYPICAL SECTIONS
I-90 MAINLINE
BIN 5510090

CONTRACT NUMBER:
TAB 17-XX

DATE:
MAY 2017

DRAWING NUMBER:
TYP-2

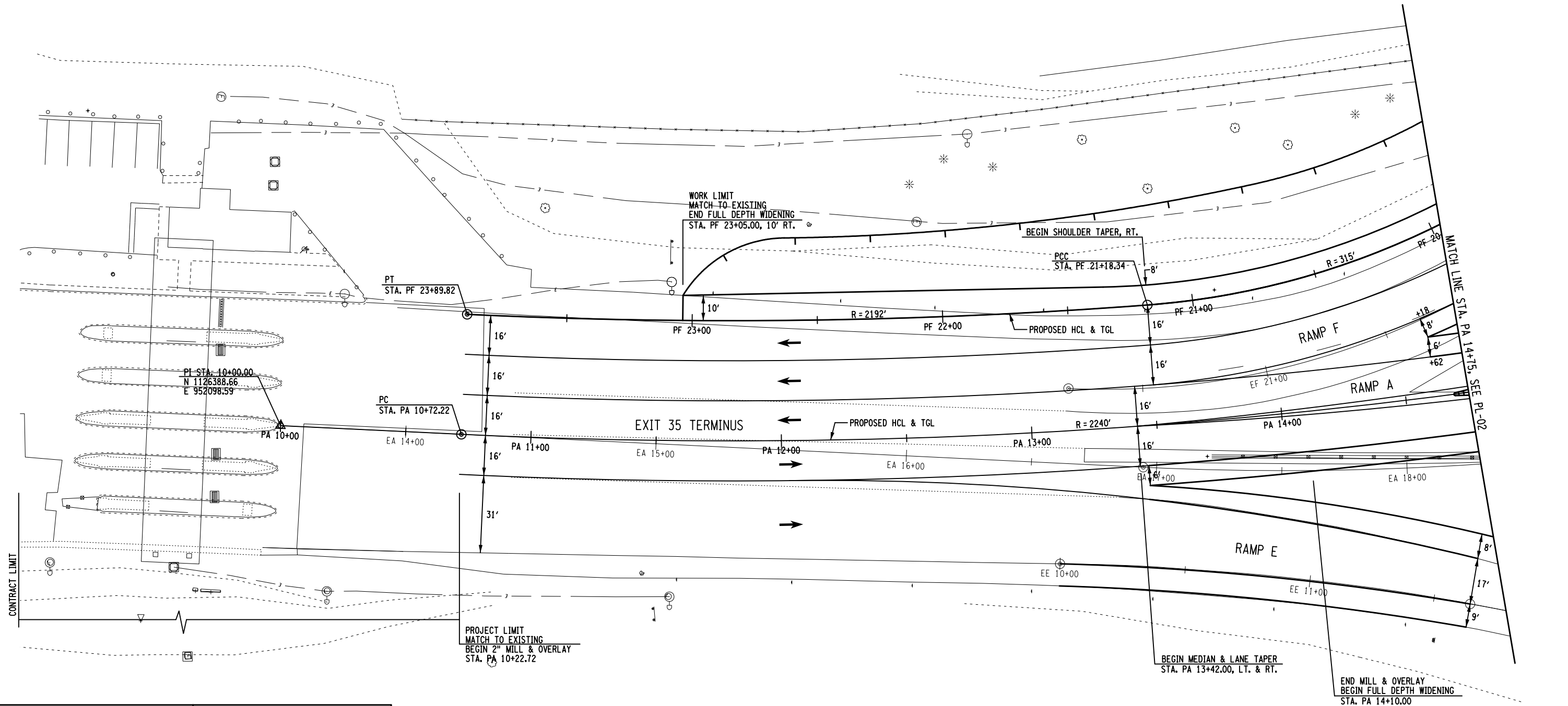
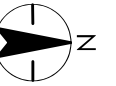
CHECKED BY: B. WALKER

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CHECKED BY: R. CODY

DESIGNED BY: B. WALKER


DESIGN SUPERVISOR: J. HOFMANN




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REVISIONS			
DATE	DESCRIPTION	BY	SYM.



Thruway
Authority



TITLE OF PROJECT
INTERCHANGE 35 RAMP OVER INTERSTATE I-90
MP 278.93 / BIN 5510090

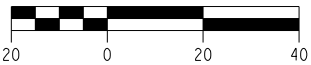
LOCATION OF PROJECT
TOWN OF DEWITT
ONONDAGA COUNTY

TITLE OF DRAWING
ROADWAY PLAN
STA. PA 10+00 TO STA. PA 14+75

CONTRACT NUMBER:
TAB 17-XX

DATE:
MAY 2017

DRAWING NUMBER:
PL-01



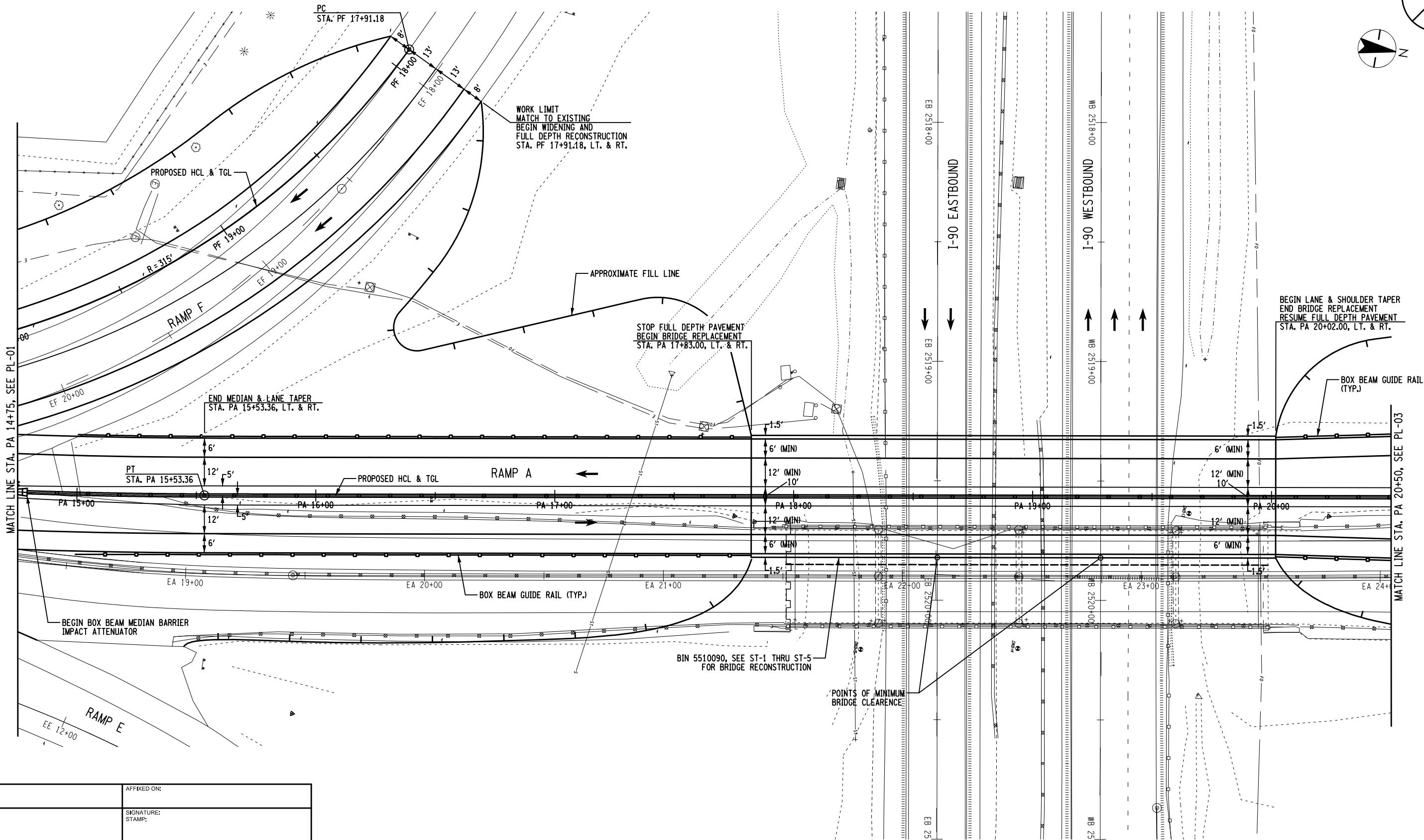
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DESIGNED BY: B. WALKER

DESIGN SUPERVISOR: J. HOFMANN



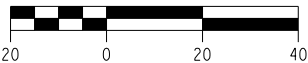
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SIGNATURE: STAMP:	SIGNATURE: STAMP:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE. THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.



TITLE OF PROJECT INTERCHANGE 35 RAMP OVER INTERSTATE I-90 MP 278.93 / BIN 5510090	CONTRACT NUMBER: TAB 17-XX
LOCATION OF PROJECT TOWN OF DEWITT ONONDAGA COUNTY	DATE: MAY 2017
TITLE OF DRAWING ROADWAY PLAN STA. PA 14+75 TO STA. PA 20+50	DRAWING NUMBER: PL-02



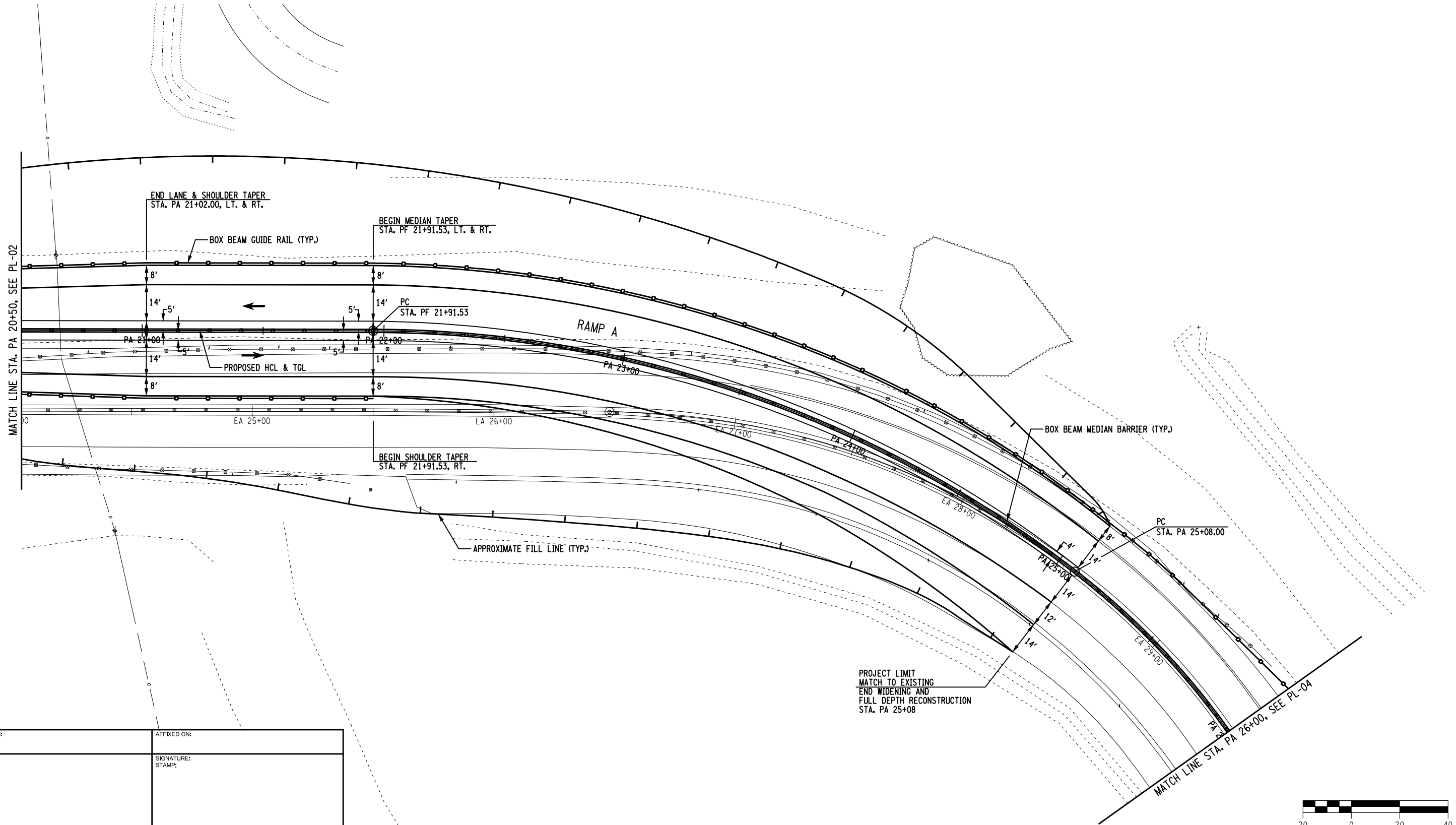
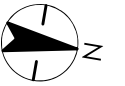
CHECKED BY: B. WALKER

DRAFTED BY: S. ROMEISER

CHECKED BY: R. CODY

DESIGNED BY: B. WALKER

DESIGN SUPERVISOR: J. HOFMANN



ALTERED ON:	AFFIXED ON:
SIGNATURE: STAMP:	SIGNATURE: STAMP:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.



Thruway
Authority



TITLE OF PROJECT
INTERCHANGE 35 RAMP OVER INTERSTATE I-90
MP 278.93 / BIN 5510090

LOCATION OF PROJECT
TOWN OF DEWITT
ONONDAGA COUNTY

TITLE OF DRAWING
ROADWAY PLAN
STA. PA 20+50 TO STA. PA 26+00

CONTRACT NUMBER:
TAB 17-XX

DATE:
MAY 2017

DRAWING NUMBER:
PL-03





ALTERED ON:	AFFIXED ON:
SIGNATURE: STAMP:	SIGNATURE: STAMP:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE. THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYM



TITLE OF PROJECT INTERCHANGE 35 RAMP OVER INTERSTATE I-90 MP 278.93 / BIN 5510090	CONTRACT NUMBER: TAB 17-XX
LOCATION OF PROJECT TOWN OF DEWITT ONONDAGA COUNTY	DATE: MAY 2017
TITLE OF DRAWING ROADWAY PLAN STA. PA 26+00 TO STA. ED 36+28	DRAWING NUMBER: PL-04

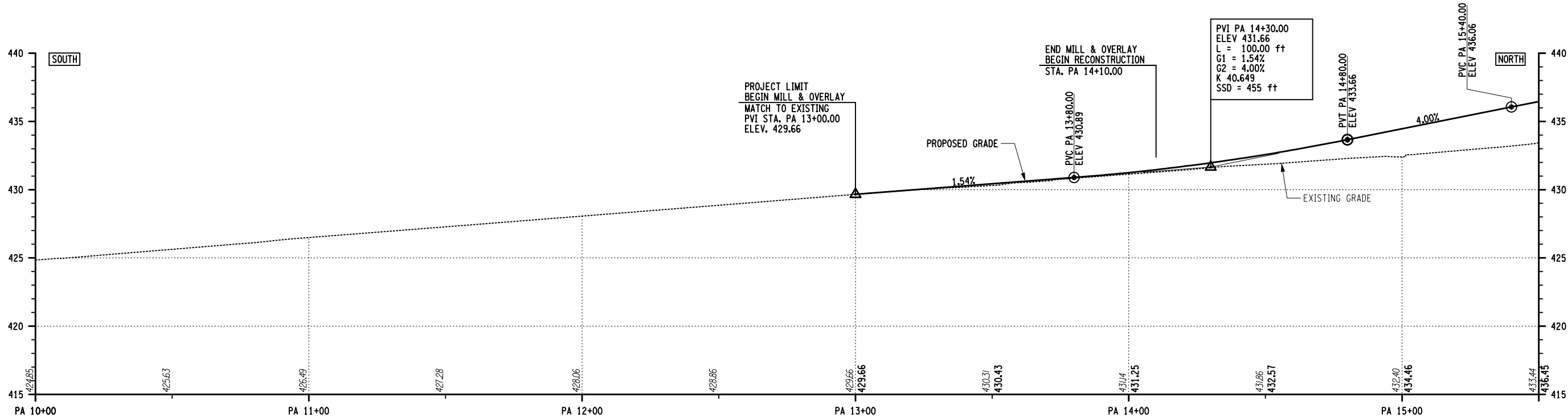
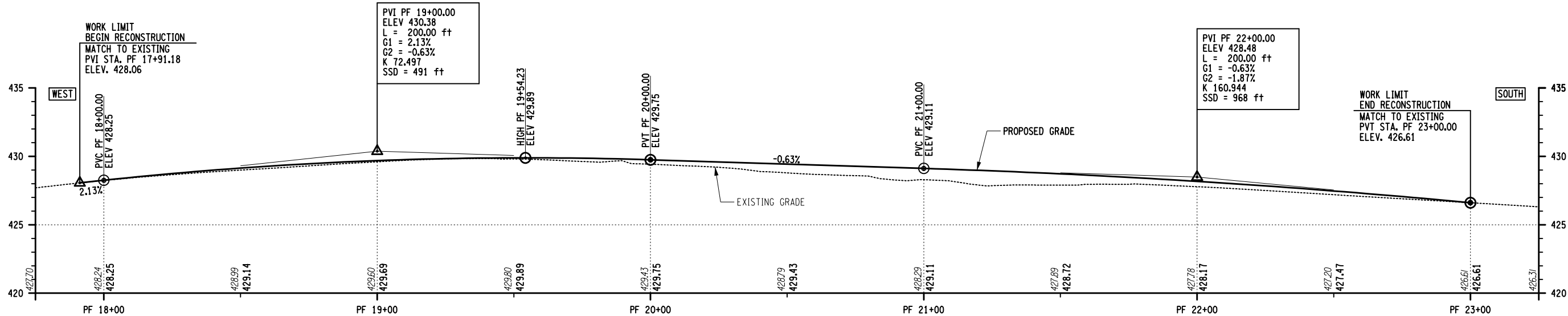
CHECKED BY: B. WALKER

DRAFTED BY: S. ROMEISER

CHECKED BY: R. CODY

DESIGNED BY: B. WALKER

DESIGN SUPERVISOR: J. HOFMANN



ALTERED ON:	AFFIXED ON:
SIGNATURE: STAMP:	SIGNATURE: STAMP:

GENERAL PROFILE NOTE:
FOR HORIZONTAL CONTROL LINE (HCL), SEE PLAN SHEETS
OR TYPICAL SECTIONS FOR MORE INFORMATION.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE. THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.

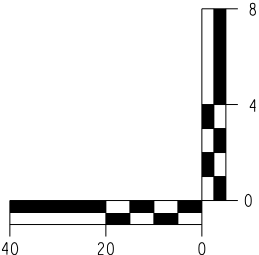


Thruway
Authority



TITLE OF PROJECT INTERCHANGE 35 RAMP OVER INTERSTATE I-90 MP 278.93 / BIN 5510090	CONTRACT NUMBER: TAB 17-XX
LOCATION OF PROJECT TOWN OF DEWITT ONONDAGA COUNTY	DATE: MAY 2017
TITLE OF DRAWING ROADWAY PROFILE STA. PF 17+75 TO STA. PF 23+25 STA. PA 10+00 TO STA. PA 15+50	DRAWING NUMBER: PRO-1

SUPERELEVATION LEGEND
----- DENOTES LEFT EP
----- DENOTES RIGHT EP
----- DENOTES TGL



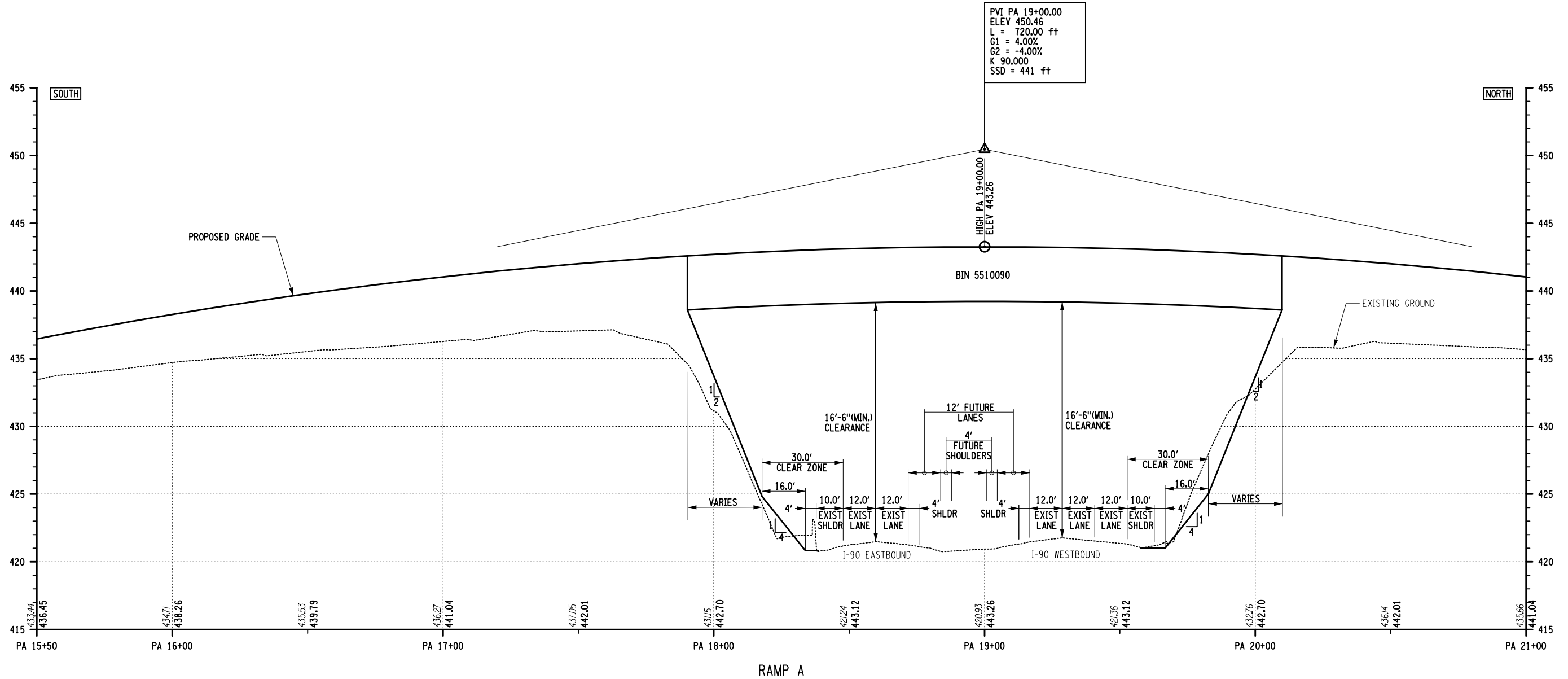
CHECKED BY: B. WALKER

DRAFTED BY: S. ROMEISER

CHECKED BY: R. CODY

DESIGNED BY: B. WALKER

DESIGN SUPERVISOR: J. HOFMANN



ALTERED ON:	AFFIXED ON:
SIGNATURE: STAMP:	SIGNATURE: STAMP:

GENERAL PROFILE NOTE:
FOR HORIZONTAL CONTROL LINE (HCL), SEE PLAN SHEETS
OR TYPICAL SECTIONS FOR MORE INFORMATION.

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.



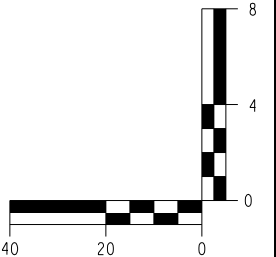
**Thruway
Authority**



TITLE OF PROJECT
INTERCHANGE 35 RAMP OVER INTERSTATE I-90
MP 278.93 / BIN 5510090
LOCATION OF PROJECT
TOWN OF DEWITT
ONONDAGA COUNTY
TITLE OF DRAWING
ROADWAY PROFILE
STA. PA 15+50 TO STA. PA 21+00

CONTRACT NUMBER:
TAB 17-XX
DATE:
MAY 2017
DRAWING NUMBER:
PRO-2

SUPERELEVATION LEGEND
----- DENOTES LEFT EP
----- DENOTES RIGHT EP
----- DENOTES TGL



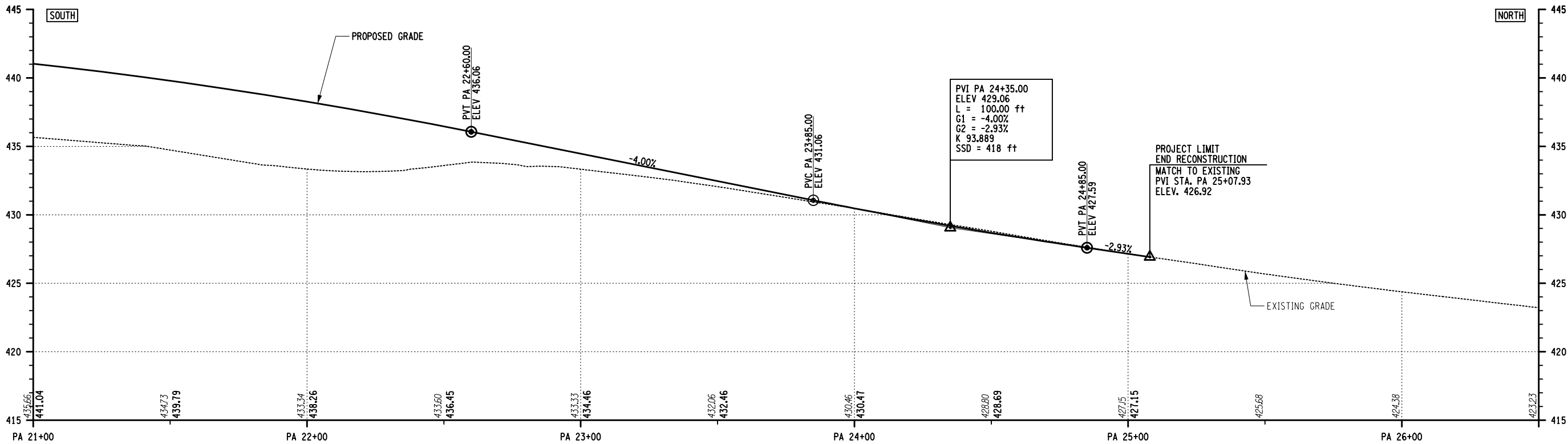
CHECKED BY: B. WALKER

DRAFTED BY: S. ROMEISER

CHECKED BY: R. CODY

DESIGNED BY: B. WALKER

DESIGN SUPERVISOR: J. HOFMANN



RAMP A

ALTERED ON:	AFFIXED ON:
SIGNATURE: STAMP:	SIGNATURE: STAMP:

GENERAL PROFILE NOTE:
FOR HORIZONTAL CONTROL LINE (HCL), SEE PLAN SHEETS
OR TYPICAL SECTIONS FOR MORE INFORMATION.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE. THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.



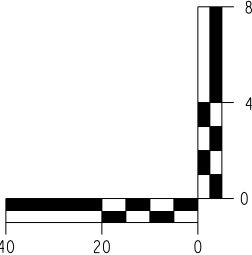
Thruway
Authority



TITLE OF PROJECT INTERCHANGE 35 RAMP OVER INTERSTATE I-90 MP 278.93 / BIN 5510090
LOCATION OF PROJECT TOWN OF DEWITT ONONDAGA COUNTY
TITLE OF DRAWING ROADWAY PROFILE STA. PA 21+00 TO STA. PA 26+50

CONTRACT NUMBER: TAB 17-XX
DATE: MAY 2017
DRAWING NUMBER: PRO-3

SUPERELEVATION LEGEND
----- DENOTES LEFT EP
----- DENOTES RIGHT EP
----- DENOTES TGL



LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
SPRING SEASON March 1 through May 31

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1
14	1	1	1	1	2	1	1
15	1	1	1	1	2	1	1
16	1	1	1	2	2	1	1
17	1	1	1	2	2	1	1
18	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
SUMMER SEASON June 1 through September 15

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	2	2	2
11	1	1	1	1	2	2	2
12	1	1	1	1	2	2	2
13	1	1	1	1	2	2	2
14	1	1	1	2	2	1	2
15	2	2	2	2	2	1	2
16	2	2	2	2	2	1	2
17	2	2	2	2	2	1	2
18	1	1	1	1	2	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
FALL SEASON September 16 through November 30

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
11	1	1	1	1	2	1	2
12	1	1	1	1	2	1	2
13	1	1	1	1	2	1	2
14	1	1	1	1	2	1	2
15	1	1	2	2	2	1	2
16	1	2	2	2	2	1	2
17	1	2	1	2	2	1	1
18	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
WINTER SEASON December 1 through February 28

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1
16	1	1	1	1	2	1	1
17	1	1	1	1	2	1	1
18	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
 SPRING SEASON March 1 through May 31

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	2	2	2	2	2	1	1
8	2	2	2	2	2	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1
12	1	1	1	1	2	1	1
13	1	1	1	1	2	1	1
14	1	1	1	1	2	1	1
15	1	1	2	2	2	1	1
16	1	1	2	2	2	1	1
17	1	1	2	2	2	1	1
18	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
 SUMMER SEASON June 1 through September 15

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	2	2	2	2	1	1
8	1	2	2	2	2	1	1
9	1	1	1	2	2	1	1
10	1	1	1	2	2	2	2
11	2	1	1	2	2	2	2
12	2	1	1	2	2	2	2
13	2	1	1	2	2	2	2
14	2	1	2	2	2	2	2
15	2	2	2	2	2	1	2
16	2	2	2	2	2	1	2
17	2	2	2	2	2	1	2
18	1	1	1	1	2	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
 FALL SEASON September 16 through November 30

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	2	2	2	2	2	1	1
8	2	2	2	2	2	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	2	1	1
11	1	1	1	1	2	1	2
12	1	1	1	1	2	1	2
13	1	1	1	1	2	1	2
14	1	1	1	1	2	1	2
15	2	2	2	2	2	1	2
16	2	2	2	2	2	1	2
17	2	2	2	2	2	1	2
18	1	1	1	1	2	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
 WINTER SEASON December 1 through February 28

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	2	2	2	2	2	1	1
8	2	2	2	2	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1
15	1	1	1	1	2	1	1
16	1	1	1	1	2	1	1
17	1	1	1	1	2	1	1
18	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
 SPRING SEASON March 1 through May 31

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1
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17	1	1	1	1	2	1	1
18	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
 SUMMER SEASON June 1 through September 15

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
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11	1	1	1	1	2	2	2
12	2	1	1	1	2	2	2
13	2	1	1	1	2	2	2
14	2	1	1	2	2	2	2
15	2	1	2	2	2	2	2
16	2	2	2	2	2	1	2
17	2	2	2	2	2	1	2
18	1	1	1	1	2	1	2
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
 FALL SEASON September 16 through November 30

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1
12	1	1	1	1	1	1	2
13	1	1	1	1	1	1	2
14	1	1	1	1	2	1	2
15	2	1	1	1	2	1	2
16	2	1	1	1	2	1	2
17	1	1	1	1	2	1	2
18	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
 WINTER SEASON December 1 through February 28

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1
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15	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
SPRING SEASON March 1 through May 31

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
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12	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1
14	1	1	1	1	2	1	1
15	2	2	2	2	2	1	1
16	2	2	2	2	2	1	1
17	2	2	2	2	2	1	1
18	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1
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21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
SUMMER SEASON June 1 through September 15

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
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6	1	1	1	1	1	1	1
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16	2	2	2	2	2	1	2
17	2	2	2	2	2	1	2
18	1	1	1	1	2	1	2
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20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
FALL SEASON September 16 through November 30

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1
12	1	1	1	1	1	1	2
13	1	1	1	1	2	1	2
14	2	1	2	1	2	1	2
15	2	2	2	2	2	1	2
16	2	2	2	2	2	1	2
17	2	2	2	2	2	1	2
18	1	1	1	1	2	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

LANES REQUIRED TO BE OPEN BY HOUR AND TIME OF DAY
WINTER SEASON December 1 through February 28

HR/DAY	MON	TUES	WEDS	THUR	FRI	SAT	SUN
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1
14	1	1	1	1	2	1	1
15	1	1	2	2	2	1	1
16	2	2	2	2	2	1	1
17	2	2	2	2	2	1	1
18	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1

Appendix B Environmental Agency Correspondence



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 LUKER ROAD
CORTLAND, NY 13045
PHONE: (607)753-9334 FAX: (607)753-9699
URL: www.fws.gov/northeast/nyfo/es/section7.htm

Consultation Code: 05E1NY00-2017-SLI-0241

November 07, 2016

Event Code: 05E1NY00-2017-E-00615

Project Name: NYSTA MP 278.93 Exit 35 Ramp

Subject: List of threatened and endangered species that may occur in your proposed project location, and/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 (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. 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 ESA, 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 ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: <http://www.fws.gov/northeast/nyfo/es/section7.htm>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (

http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Services wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

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 ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: NYSTA MP 278.93 Exit 35 Ramp

Official Species List

Provided by:

New York Ecological Services Field Office

3817 LUKER ROAD

CORTLAND, NY 13045

(607) 753-9334

<http://www.fws.gov/northeast/nyfo/es/section7.htm>

Consultation Code: 05E1NY00-2017-SLI-0241

Event Code: 05E1NY00-2017-E-00615

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Name: NYSTA MP 278.93 Exit 35 Ramp

Project Description: The purpose of this environmental review is to facilitate the preliminary design for the rehabilitation or replacement of an existing bridge.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: NYSTA MP 278.93 Exit 35 Ramp

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-76.09137296676636 43.092130194138505, -76.09154462814331 43.09291366894654, -76.09008550643921 43.09308603205923, -76.09021425247192 43.09424555311783, -76.09004259109497 43.094684285090636, -76.08961343765259 43.09493498766389, -76.08915209770203 43.09506033856562, -76.08862638473511 43.09507600741032, -76.08821868896483 43.094981994282094, -76.08796119689941 43.094833139867305, -76.08763933181763 43.09457460239211, -76.08746767044067 43.094198545934326, -76.08742475509644 43.09390083293419, -76.08751058578491 43.09368146453428, -76.0876715183258 43.09343075682934, -76.08785390853882 43.093250560032466, -76.0877251625061 43.092427915746214, -76.08931303024292 43.09233389855278, -76.08916282653809 43.091174341299805, -76.08916282653809 43.09024981370622, -76.0893666744232 43.08901970027136, -76.08932375907898 43.08872196209601, -76.08984947204588 43.088714126861326, -76.09006404876709 43.088808149611395, -76.0901391506195 43.08893351305365, -76.08999967575073 43.08952898590044, -76.089870929718 43.09109599204498, -76.09018206596375 43.09169927872185, -76.09073996543884 43.091926489046664, -



United States Department of Interior
Fish and Wildlife Service

Project name: NYSTA MP 278.93 Exit 35 Ramp

76.09130859375 43.09208318533128, -76.09137296676636 43.092130194138505)))

Project Counties: Onondaga, NY



United States Department of Interior
Fish and Wildlife Service

Project name: NYSTA MP 278.93 Exit 35 Ramp

Endangered Species Act Species List

There are a total of 3 threatened or endangered species on your 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. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	Status	Has Critical Habitat	Condition(s)
Indiana bat (<i>Myotis sodalis</i>) Population: Wherever found	Endangered		
Northern long-eared Bat (<i>Myotis septentrionalis</i>) Population: Wherever found	Threatened		
Reptiles			
eastern Massasauga (<i>Sistrurus catenatus</i>) Population: Wherever found	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: NYSTA MP 278.93 Exit 35 Ramp

Critical habitats that lie within your project area

There are no critical habitats within your project area.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish & Wildlife
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov



December 14, 2016

Caitlin Graff
Environmental Design & Research
217 Montgomery Street, Suite 1000
Syracuse, NY 13202

Re: NYSTA MP 278.93, Exit 35 Ramp over the New York State Thruway, East Syracuse,
BIN 5510090, EDR No. 16134-6
Town/City: DeWitt. County: Onondaga.

Dear Ms. Graff:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

We have no records of rare or state-listed animals or plants, or significant natural communities at the project site or in its immediate vicinity.

The absence of data does not necessarily mean that rare or state-listed species, significant natural communities, or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information that indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other resources may be required to fully assess impacts on biological resources.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities, and other significant habitats maintained in the Natural Heritage Database. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 7 Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

A handwritten signature in black ink, appearing to read "Nick Conrad", written in a cursive style.

Nicholas Conrad
Information Resources Coordinator
New York Natural Heritage Program

Section 106 Project Submittal Package

Replacement of Syracuse Division Bridges

Milepost 278.93: Exit 35 Ramp, East Syracuse, New York

BIN 5510090

Village of East Syracuse, Onondaga County, New York

NYSTA Project ID:

Prepared for:



New York State Thruway Authority
200 Southern Blvd.
P.O. Box 189
Albany, NY 12201-0189



Stantec
61 Commercial Street, Suite 100
Rochester, NY 14614
www.stantec.com

Prepared by:



**Environmental Design & Research,
Landscape Architecture, Engineering, & Environmental Services, D.P.C.**
217 Montgomery Street, Suite 1000
Syracuse, New York 13202
www.edrdpc.com

February 2017

NEW YORK STATE THRUWAY AUTHORITY (NYSTA) PROJECT SUBMITTAL PACKAGE
Section 106 of the National Historic Preservation Act

A Project Submittal Package is prepared by the NYSTA (Sponsor) or their consultants for federal aid transportation projects to provide sufficient information for NYSTA assessment of Section 106 obligations.

DATE February 10, 2017 NYSTA PROJECT ID _____ BINs 5510090

IDENTIFICATION

Project Name (if any) MP 278.93 Exit 35 Ramp, East Syracuse

Project Area Boundaries See attached mapping for limits of Projects. Section 1.1 contains a full description of Project limits.

(Indicate State or County Route # and/or local street name, and clearly defined endpoints)

County Onondaga

Town/City Syracuse

Village/Hamlet: East Syracuse

Have you consulted the NYSHPO web site at *<http://nysparks.state.ny.us> to determine the preliminary presence or absence of previously identified cultural resources within or adjacent to the project area? If yes: **X** Yes No

- Was the project site wholly or partially included within an identified archaeologically sensitive area? **X** Yes No
- Does the project site involve or is it substantially contiguous to a National Register of Historic Places listed property? Yes **X** No

*<http://nysparks.state.ny.us> then select **HISTORIC PRESERVATION** then **Historic Preservation Field Services Bureau** then **On Line Tools – CRIS**

ALL PROJECTS SUBMITTED FOR REVIEW SHOULD INCLUDE THE FOLLOWING INFORMATION

☒ **Project Description** – Attach a full description of the nature and extent of the work to be undertaken as part of this project. This should include, but not limited to, potential activities that might involve drainage, cutting, excavation, grading, filling, on-site detours, new sidewalks, right-of-way acquisition. Relevant portions of the project applications or environmental statements may be submitted. This could be from sections of the Draft Design Report/ Draft Scoping Document.

☒ **Location Maps** - Provide USGS Quad or DOT Planimetric map showing project area location. The map must clearly show street and road names surrounding the project area as well as all portions of the project.

☒ **Photos** - Provide clear, original color photographs of the entire project area keyed to a site plan. These photos should indicate:

- Buildings/structures more than 50 years old that are located along the property or on adjoining property
- Areas of prior ground disturbance (removal of original topsoil; filling and plowing are not considered disturbance)

LOCAL SPONSOR CONTACT

Name: Albert Mastroianni Title: Project Manager
Firm/Agency: New York State Thruway Authority
Address: 200 Southern Boulevard City: Albany State: NY Zip: 12201
Phone: 518-436-2909 E-Mail: Albert.mastroianni@thruway.ny.gov

Consultant Name: Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C.
Contact Information: 217 Montgomery Street, Suite 1000, Syracuse, NY 13202
Phone: (315) 471-0688

1.0 Project Information

The purpose of this Section 106 Project Submittal Package (PSP) is to document the potential for impact on cultural resources that may result from replacement of the New York State Thruway Exit 35 Ramp bridge over the New York State Thruway, at Milepoint (MP) 278.93 on the New York State Thruway, in the Village of East Syracuse, Onondaga County, New York (hereafter, the Project). This PSP was prepared by Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, D.P.C. (EDR) on behalf of the New York State Thruway Authority (NYSTA). This submittal was prepared by EDR cultural resources staff who meet the qualifications specified by the Secretary of the Interior's Standards for Historic Preservation and Archaeology per 36 CFR Part 61.

1.1 Project Location

The proposed Project consists of the replacement of the New York State Thruway Exit 35 Ramp bridge over the New York State Thruway, in the Village of East Syracuse, Onondaga County (see Attachment A). The existing steel multi-girder bridge is oriented north/south and was constructed in 1953.

The following terms are used throughout the PSP to describe the proposed action:

- **NYSTA MP 278.93: Exit 35 Ramp, (BIN 5510090) (the Project):** The proposed Project consists of the replacement an existing steel multi-girder bridge. The existing bridge carries NYS Thruway Exit 35 Ramp over the New York State Thruway (I-90). The existing bridge is approximately 200-feet in length, and was constructed circa 1953 (see Attachment B).
- **Area of Potential Effect (APE):** The APE for this Project is defined as a 1500-foot corridor extending in north and south along the Exit 35 Ramp from the existing bridge, as well as a 500-foot corridor east and west along the New York State Thruway (see Attachment A for limits of the APE).

1.2 Potential Impact on Historic-Architectural Resources

The New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) Cultural Resources Information System (CRIS) website was reviewed to determine the location of properties listed on the National Register of Historic Places (NRHP) within and immediately adjacent to the APE defined above. No properties previously listed on, or determined eligible for, the NRHP are located within the APE. Therefore, the proposed Project is not anticipated to affect historic properties previously listed on or eligible for the NRHP.

The proposed Project will include superstructure replacement. This approach will not significantly alter the appearance of the bridge, and therefore, the Project has no potential to adversely impact the setting of any historic resources.

The bridge was initially constructed as a part of the new Interstate 90 (New York State Thruway) circa 1953, as confirmed in the original bridge design plans (see Attachment B). EDR has reviewed the 2002 New York State Department of Transportation (NYSDOT) *Evaluation of National Register Eligibility: Task C3 of the Historic Bridge Inventory and Management Plan*, which does not identify BIN 5510090 as eligible for listing on the NRHP.

1.3 Archaeological Sensitivity

A review of the NYSOPRHP CRIS website determined that the APE is not located in an archaeologically sensitive area and there are no previously reported archaeological sites in the APE. In addition, no previous cultural resources surveys have been conducted within or immediately adjacent to the proposed APE.

A review of historic aerial photographs (see Attachment C) indicates that the land within and adjacent to the APE was primarily agricultural and undeveloped prior to the construction of the New York State Thruway. The east-west length of the APE was initially disturbed by construction of the Thruway in the early 1950s, and the entire APE has been significantly disturbed by additional construction of additional ramps throughout the late twentieth century. The land immediately adjacent to the APE has also been heavily developed for commercial and industrial uses throughout the late twentieth century.

The land within and immediately adjacent to the APE has been heavily disturbed by the construction of the New York State Thruway and associated bridges and ramps. Therefore, the APE for the proposed Project is considered to have low archaeological sensitivity for historic and prehistoric cultural resources.

1.4 Archaeological Impact Assessment

There are no previously reported archaeological sites in the APE. All ground disturbance will be restricted to the areas around existing bridge abutments and piers, which consist of made land built up during the construction of Interstate 90 (the New York State Thruway) circa 1953. Therefore, the proposed Project is not anticipated to impact any archaeological resources.

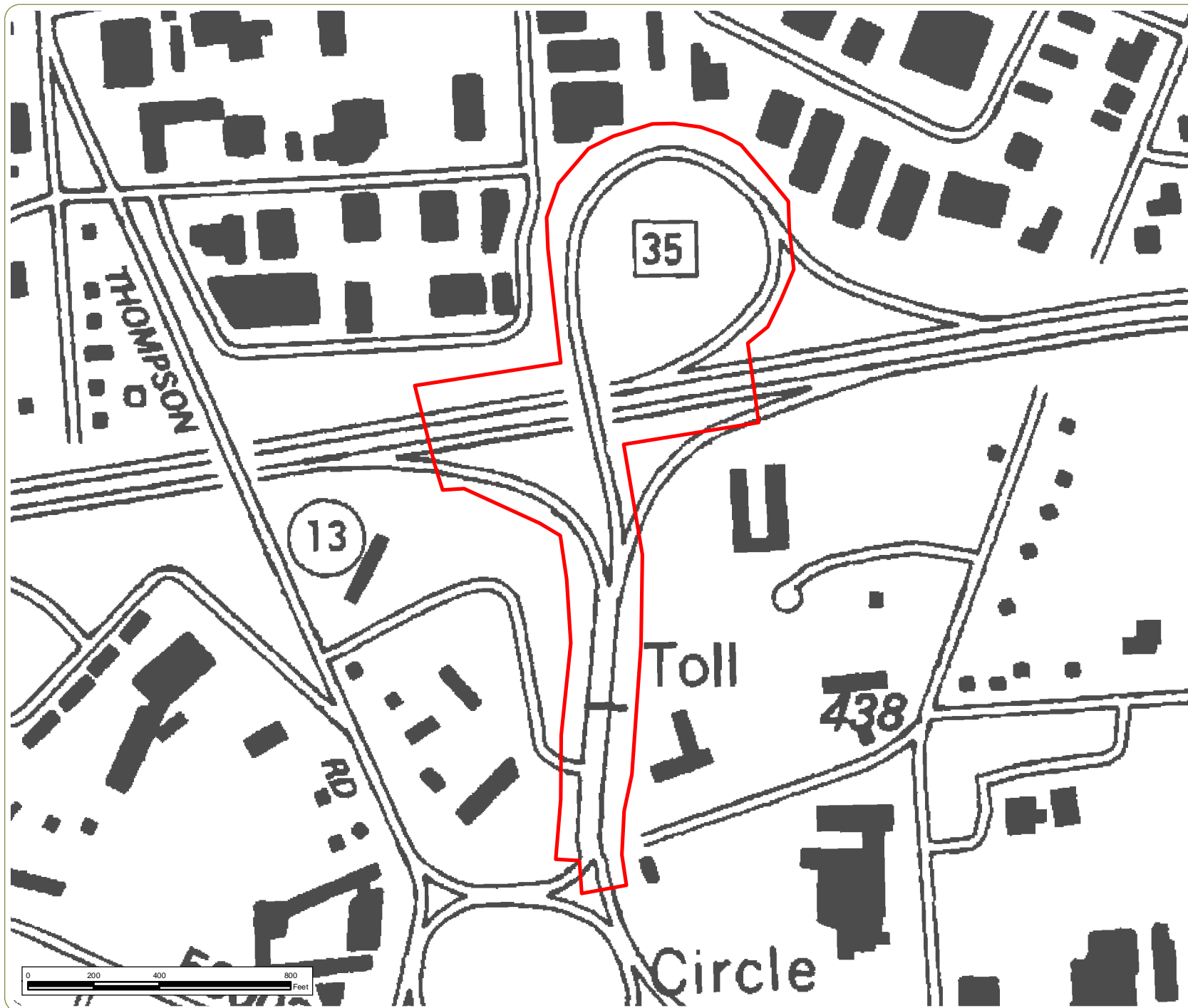
1.5 Photographs

A site visit was conducted by EDR staff on December 1st, 2016, in order to document existing conditions within the project area, including existing land use, visual character, and previous ground disturbance. Photograph locations are noted on a map included as Attachment D and selected photographs from this site visit are included as Attachment E.

LIST OF ATTACHMENTS

- Attachment A. Project Location Map
- Attachment B. 1953 Bridge Design Plans (Excerpt)
- Attachment C. Historic Aerial Photographs
- Attachment D. Photograph Locations
- Attachment E. Photographs

Attachment A:
Project Location Map



Replacement of Syracuse Division Bridges

MP 278.93: Exit 35 Ramp
(BIN 5510090)

Village of East Syracuse,
Onondaga County, New York

Attachment A:
Project Location

February 2017

 Area of Potential Effect

Notes:
1. Basemap: NYSDOT *Syracuse East, NY*
1:24000 planimetric quadrangles.
2. This is a color graphic. Reproduction
in grayscale may misrepresent the data.



www.edrdpc.com

Attachment B:
1953 Bridge Design Plans (Excerpt)

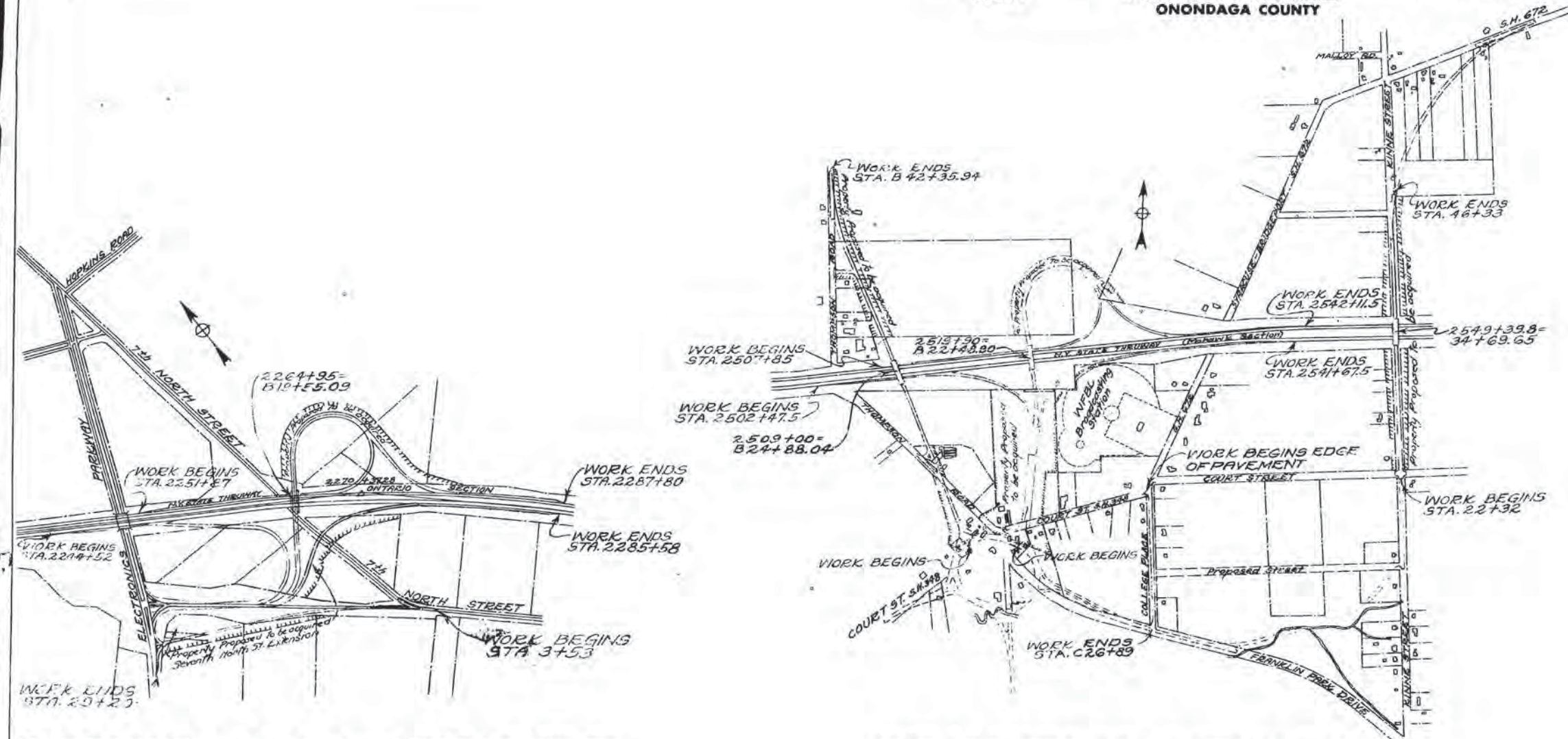


NEW YORK STATE THRUWAY AUTHORITY
PLANS FOR CONSTRUCTING ACCELERATION AND DECELERATION LANES ON A PORTION OF THE
NEW YORK STATE THRUWAY, ONTARIO SECTION: Subdivision 8A
 From Station 2244+52 to Station 2287+80, a length of 0.82 mile in the Town of Salina
AND FOR CONSTRUCTING THE
ELECTRONICS PARKWAY (HOPKINS ROAD) INTERCHANGE
 At Station 2264+95, a length of 1.51 miles in the Town of Salina
 A TOTAL LENGTH OF 2.33 MILES CONTRACT No. O.T. 53-8
AND FOR CONSTRUCTING ACCELERATION AND DECELERATION LANES ON A PORTION OF THE
NEW YORK STATE THRUWAY, MOHAWK SECTION: Subdivision 8B
 From Station 2502+47 to Station 2542+11.5, a length of 0.75 mile in the Town of DeWitt
AND FOR CONSTRUCTING THE
THOMPSON ROAD INTERCHANGE
 At Station 2519+90, a length of 1.30 miles in the Town of DeWitt
 A TOTAL LENGTH OF 2.05 MILES CONTRACT No. M.T. 53-8
AND FOR CONSTRUCTING PORTIONS OF
ELECTRONICS PARKWAY (HOPKINS ROAD)
 From Station 29+20 to Station 42+65, a length of 0.25 mile in the Town of Salina
EXTENSION OF SEVENTH NORTH STREET
 From Station 3+53 to Station 20+92, a length of 0.33 mile in the Town of Salina
THOMPSON ROAD
 From Station B 9+10 to Station B 42+36, a length of 0.78 mile in the Town of DeWitt
COLLEGE PLACE
 From Station C 15+00 to Station C 26+89, a length of 0.22 mile in the Town of DeWitt
 A TOTAL LENGTH OF 1.58 MILES CONTRACT No. S.T. 53-20
AND FOR RECONSTRUCTING A PORTION OF THE
SYRACUSE - BRIDGEPORT, PART 1 (KINNE ST.) S.H. No. 672
 Between Station 22+32 and Station 46+33, a length of 0.62 mile in the Town of DeWitt
 CONTRACT No. R.C. 53-36
 66 SHEETS A TOTAL COMBINED LENGTH OF 6.55 MILES
ONONDAGA COUNTY

COUNTY	SHEET No.	TOTAL SHEETS
ONONDAGA	1	66

N.Y. STATE THRUWAY, ONTARIO SECTION, SUBDIV. 8A
 INTERCHANGE AT ELECTRONICS PARKWAY (HOPKINS ROAD)
 N.Y. STATE THRUWAY, MOHAWK SECTION, SUBDIV. 8B
 INTERCHANGE AT THOMPSON ROAD

TYPE OF CONSTRUCTION	
Reinforced Cement Concrete Pavement	4.16 Miles
Asphalt Concrete, Type 1A, Opt.	0.37 Mile
Foundation Course-Gravel	0.20 Mile
Miscellaneous Work	1.85 Miles
Including	
H.G.S. Electronics P'kway Interchange Station 2264+95 Composite Beam, 4 Span, 2 @ 37' 9", 1 @ 64' 9", 1 @ 57' 9"	
H.G.S., Thompson Road, Station 2509+00 Comp. Beam, 4 Spans, 2 @ 39' 0", 1 @ 59' 10", 1 @ 67' 1"	
H.G.S., Thompson Road Interchange, Station 2519+90 Composite Beam, 4 Span, 1 @ 37' 0", 1 @ 64' 9", 1 @ 57' 9", 1 @ 37' 3"	
H.G.S., Kinne St. (Relocating of S.H. 672) Sta. 2549+40 Composite Beam, 4 Spans, 2 @ 37' 6", 2 @ 72' 9"	
STANDARD STRUCTURE SHEETS	
39-9, 46-4, 47-37, 49-65, 49-7, 49-42, 50-1R, 50-34, 51-3, 51-11R, 51-11W, 51-20, 51-21, 51-40, 52-17A, 52-17B, 52-17C, 52-17D, 52-43, 53-41, 53-106	
All work contemplated under this contract to be covered by and in conformity with the specifications adopted January 2, 1951, except as modified on these plans and in the itemized Proposal.	



INTERCHANGE AT ELECTRONICS PARKWAY

INTERCHANGE AT THOMPSON ROAD

Made By D. F. Huchut Traced By D. F. Huchut Checked By W. C. Hoffmann
 O.T. 53-8, M.T. 53-8, S.T. 53-20, R.C. 53-36

Prepared pursuant to the
 Highway Law and recommended by
 4/1/53 Engineer District No. 3
 O.T. 53-8, M.T. 53-8, S.T. 53-20, R.C. 53-36

NEW YORK STATE DEPARTMENT OF PUBLIC WORKS
 DIVISION OF CONSTRUCTION

Approved April 16, 1953
J. B. McMorran Chief Engineer

Approved April 16, 1953
E. T. Gawkins Deputy Chief Engineer

Approved April 16, 1953
E. W. Wendell Deputy Chief Engineer

Approved April 16, 1953
B. D. Tallamy Chairman
C. H. Lang Deputy Chief Engineer



LOCATION OF WORK

NEW YORK STATE THRUWAY AUTHORITY
 PLANS FOR CONSTRUCTING ACCELERATION AND DECELERATION LANES ON A PORTION OF THE
NEW YORK STATE THRUWAY, ONTARIO SECTION: Subdivision 8A
 From Station 2244+52 to Station 2287+80, a length of 0.75 mile in the Town of Salina
 AND FOR CONSTRUCTING THE
ELECTRONICS PARKWAY (HOPKINS ROAD) INTERCHANGE
 At Station 2264+95, a length of 1.74 miles in the Town of Salina
 A TOTAL LENGTH OF 2.49 MILES CONTRACT No. O.T. 53-8
 AND FOR CONSTRUCTING ACCELERATION AND DECELERATION LANES ON A PORTION OF THE
NEW YORK STATE THRUWAY, MOHAWK SECTION: Subdivision 8B
 From Station 2502+47 to Station 2542+11, a length of 0.93 mile in the Town of DeWitt
 AND FOR CONSTRUCTING THE
THOMPSON ROAD INTERCHANGE
 At Station 2519+90, a length of 1.40 miles in the Town of DeWitt
 A TOTAL LENGTH OF 2.33 MILES CONTRACT No. M.T. 53-8
 AND FOR CONSTRUCTING PORTIONS OF
ELECTRONICS PARKWAY (HOPKINS ROAD)
 From Station 29+20 to Station 42+65, a length of 0.32 mile in the Town of Salina
EXTENSION OF SEVENTH NORTH STREET
 From Station 3+53 to Station 20+92, a length of 0.44 mile in the Town of Salina
THOMPSON ROAD
 From Station B 9+10 to Station B 42+36, a length of 0.76 mile in the Town of DeWitt
COLLEGE PLACE
 From Station C 15+00 to Station C 26+89, a length of 0.23 mile in the Town of DeWitt
 A TOTAL LENGTH OF 1.65 MILES CONTRACT No. S.T. 53-20
 AND FOR RECONSTRUCTING A PORTION OF THE
SYRACUSE - BRIDGEPORT, PART 1 (KINNE ST.) S.H. No. 672
 Between Station 22+32 and Station 46+33, a length of 0.55 mile in the Town of DeWitt
 CONTRACT No. R.C. 53-36
 66 SHEETS A TOTAL COMBINED LENGTH OF 6.85 MILES
ONONDAGA COUNTY

COUNTY	SHEET No.	TOTAL SHEETS
ONONDAGA	1	66
N.Y. STATE THRUWAY, ONTARIO SECTION, SUB DIV. 8A		
INTERCHANGE AT ELECTRONICS PARKWAY (HOPKINS ROAD)		
N.Y. STATE THRUWAY, MOHAWK SECTION, SUB DIV. 8B		
INTERCHANGE AT THOMPSON ROAD		

TYPE OF CONSTRUCTION
 Reinforced Cement Concrete Pavement 6.49 Miles
 Asphalt Concrete, Type 1A, Opt. 0.38 Mile
 Foundation Course-Gravel 0.13 Mile
 Miscellaneous Work 0.02 Miles

Including
 H.G.S. Electronics Parkway Interchange Station 2264+95
 Composite Beam, 4 Spans, 2 @ 37' 9", 1 @ 64' 9",
 1 @ 57' 9"
 H.G.S., Thompson Road, Station 2509+00 Comp. Beam,
 4 Spans, 2 @ 39' 0", 1 @ 59' 10", 1 @ 67' 1"
 H.G.S., Thompson Road Interchange, Station 2519+90
 Composite Beam, 4 Spans, 1 @ 37' 0", 1 @ 64' 9",
 1 @ 57' 9", 1 @ 37' 3"
 H.G.S., Kinne St. (Relocating of S.H. 672) Sta. 2549+40
 Composite Beam, 4 Spans, 2 @ 37' 6", 2 @ 72' 9"

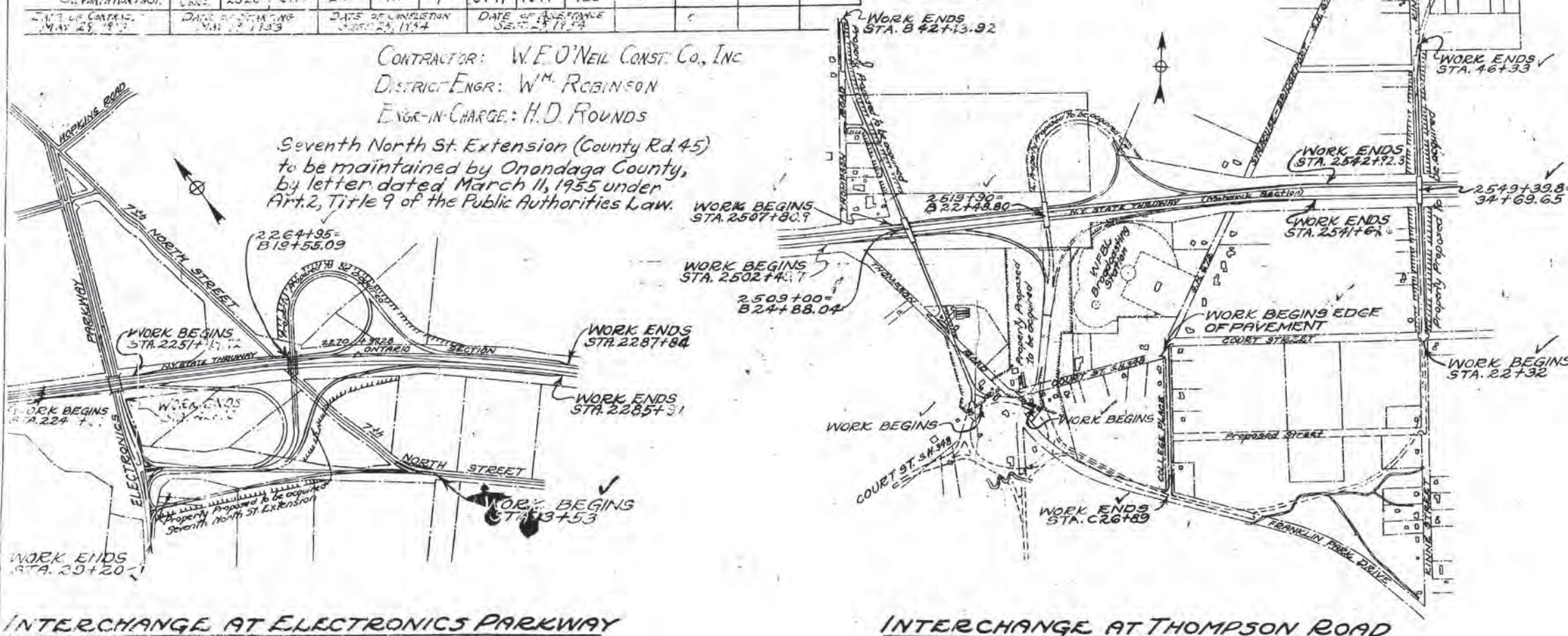
STANDARD STRUCTURE SHEETS
 39-9, 46-4, 47-37, 49-65, 49-7, 49-42, 50-1R, 50-34,
 51-3, 51-11R, 51-11W, 51-20, 51-21, 51-40, 52-17A,
 52-17B, 52-17C, 52-17D, 52-43, 53-41, 53-106

All work contemplated under this contract to be covered
 by and in conformity with the specifications adopted
 January 2, 1951, except as modified on these plans and
 in the Itemized Proposal.

CONTRACT NO.	TYPE	LENGTH FEET	WIDTH FEET	THICK TOP INCHES	S.Y. PAV. FEET	C.Y. CONC.	TONS #TOL	MATERIALS SPRINTSAND GEN. GRAVEL WASHER	CEMENT ALPHA	ASPH. CONC. LEHIGH	GRAVEL ACKERSON
MT 53-8	ASPH. CONC.	11,922	2.33	Various	Various	9"	24,680	5,817			
OT 53-8	ASPH. CONC.	13,170	2.49	Various	Various	9"	26,473	6,422			
RC 53-36	ASPH. CONC.	2,112	0.55	24'	24'	9"	5,794	1,448			710
ST 53-20	CONCRETE PAVEMENT	1,194	0.23	22'	34'	2 1/2"	3,326		FEDERAL	BARRETT	
"	THOMPSON ROAD	4,232	0.76	24'	24'	4"	8,970	2,243		N.A. AMER.	
"	HOPKINS ROAD	11,894	0.22	12'	12'	9"	11,571	2,339		CENTURY	
"	SEVENTH NORTH ST.	2,320	0.44	24'	24'	9"	6,797	1,699			
DATE OF CONTRACT	DATE OF STARTING	DATE OF COMPLETION	DATE OF ACCEPTANCE								
MAY 25, 1953	MAY 12, 1953	SEP 24, 1954	SEP 17, 54								

CONTRACTOR: W.E.O'NEIL CONST. CO., INC.
 DISTRICT ENGR: W.M. ROBINSON
 ENGR-IN-CHARGE: H.D. ROUNDS

Seventh North St. Extension (County Rd. 45)
 to be maintained by Onondaga County,
 by letter dated March 11, 1955 under
 Art. 2, Title 9 of the Public Authorities Law.



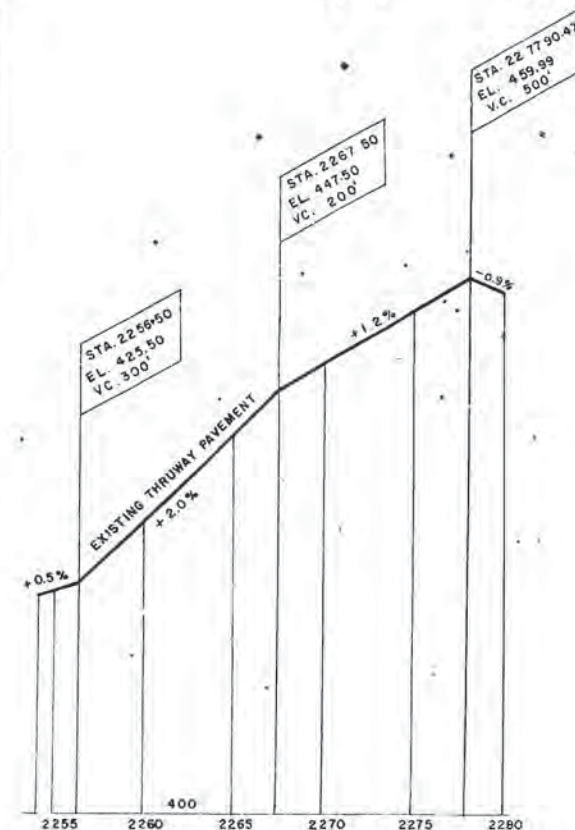
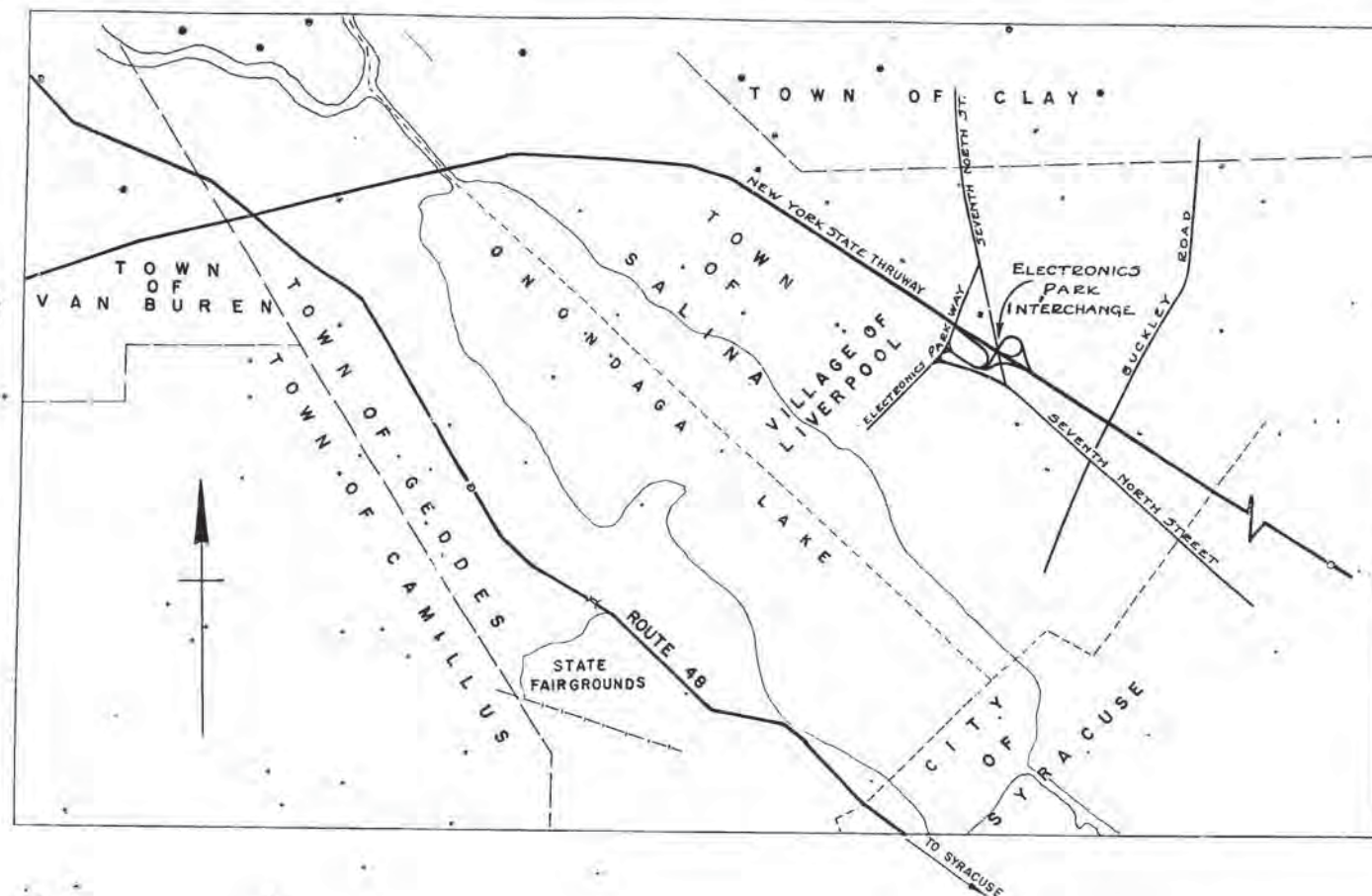
Thompson Road (County Road 13) to be
 maintained by Onondaga County, by
 letter dated March 16, 1955 under Art. 2,
 Title 9 of the Public Authorities Law.

Syracuse-Bridgeport, Pt. 1, S.H. 672 to
 be maintained by New York State Dept.
 of Public Works, by letter dated
 March 16, 1955 under Art. 2, Title 9
 of the Public Authorities Law.

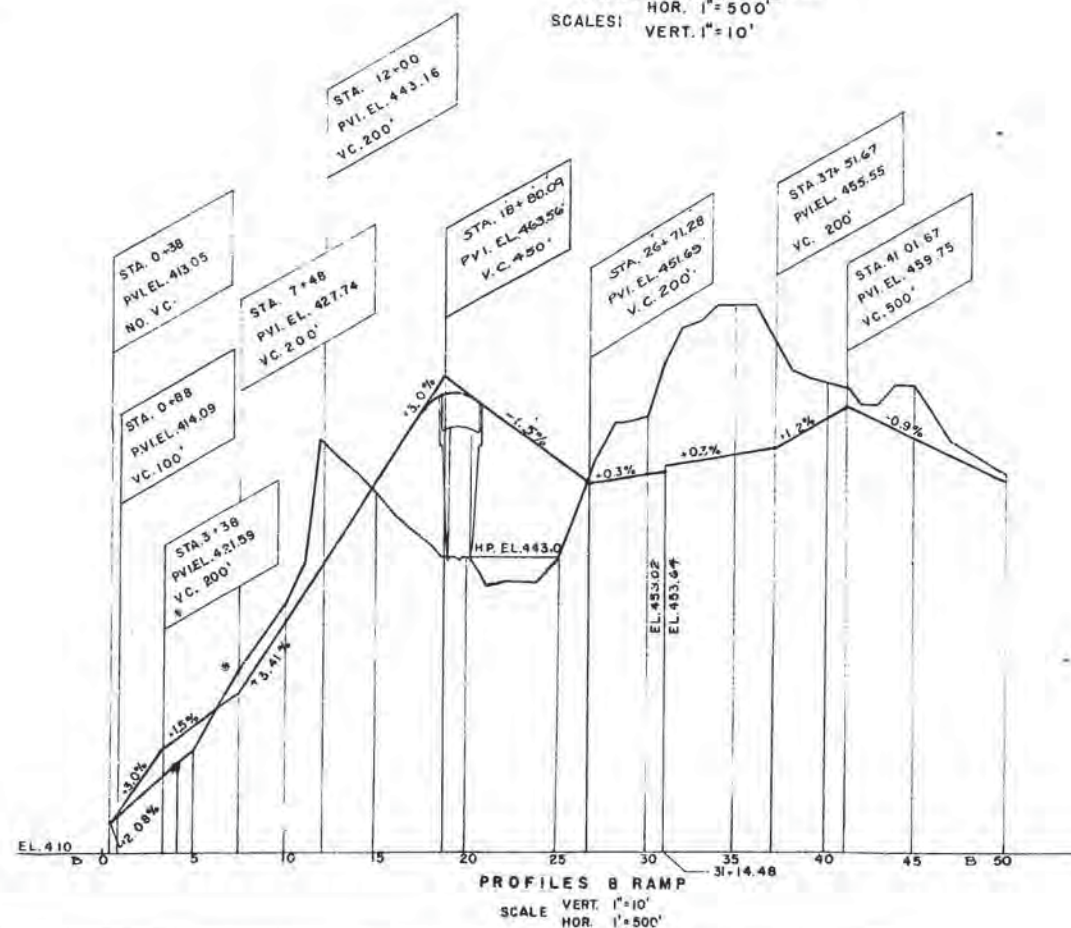
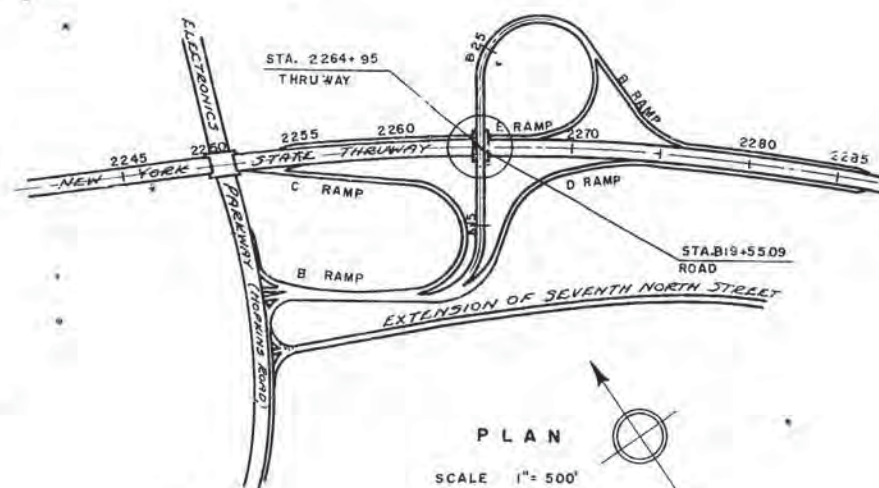
NEW YORK STATE DEPARTMENT OF PUBLIC WORKS DIVISION OF CONSTRUCTION	
Approved: <i>[Signature]</i> 1953	Chief Engineer
Approved: <i>[Signature]</i> Apr 16, 1953	Deputy Chief Engineer
Approved: <i>[Signature]</i> APR 16, 1953	Deputy Chief Engineer
NEW YORK STATE THRUWAY AUTHORITY	
B. D. TALLAMY, Chairman	
By: C. H. LANG	
Deputy Chief Engineer	

Prepared pursuant to the
 Highway Law and recommended by
 the District Engineer
 District No. 3

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	5	66
N.Y. STATE THRUWAY ONTARIO SECTION		
N.Y. STATE THRUWAY, ONTARIO SECTION, SUB DIV. 8A		
INTERCHANGE AT ELECTRONICS PARKWAY (HOPKINS ROAD)		



PROFILE ON THRUWAY
THEORETICAL GRADE
HOR. 1"=500'
VERT. 1"=10'



DEPARTMENT OF PUBLIC WORKS

RECOMMENDED

Joseph C. Frederick Feb 26, 1953
JOSEPH C. FEDERICK
ASST. DISTRICT ENGINEER
DATE

APPROVED

E.T. GAWKINS 3/1/53
E.T. GAWKINS
DEPUTY CHIEF ENGINEER
DATE

E.W. WENDELL MAR 1, 1953
E.W. WENDELL
DEPUTY CHIEF ENGINEER
DATE

J.B. MC MORRAN 3/2/53
J.B. MC MORRAN
CHIEF ENGINEER
DATE

APPROVED _____ 1953
NEW YORK STATE THRUWAY AUTHORITY

B.D. TALLAMY, CHAIRMAN

BY *C.H. LANG*
DEPUTY CHIEF ENGINEER

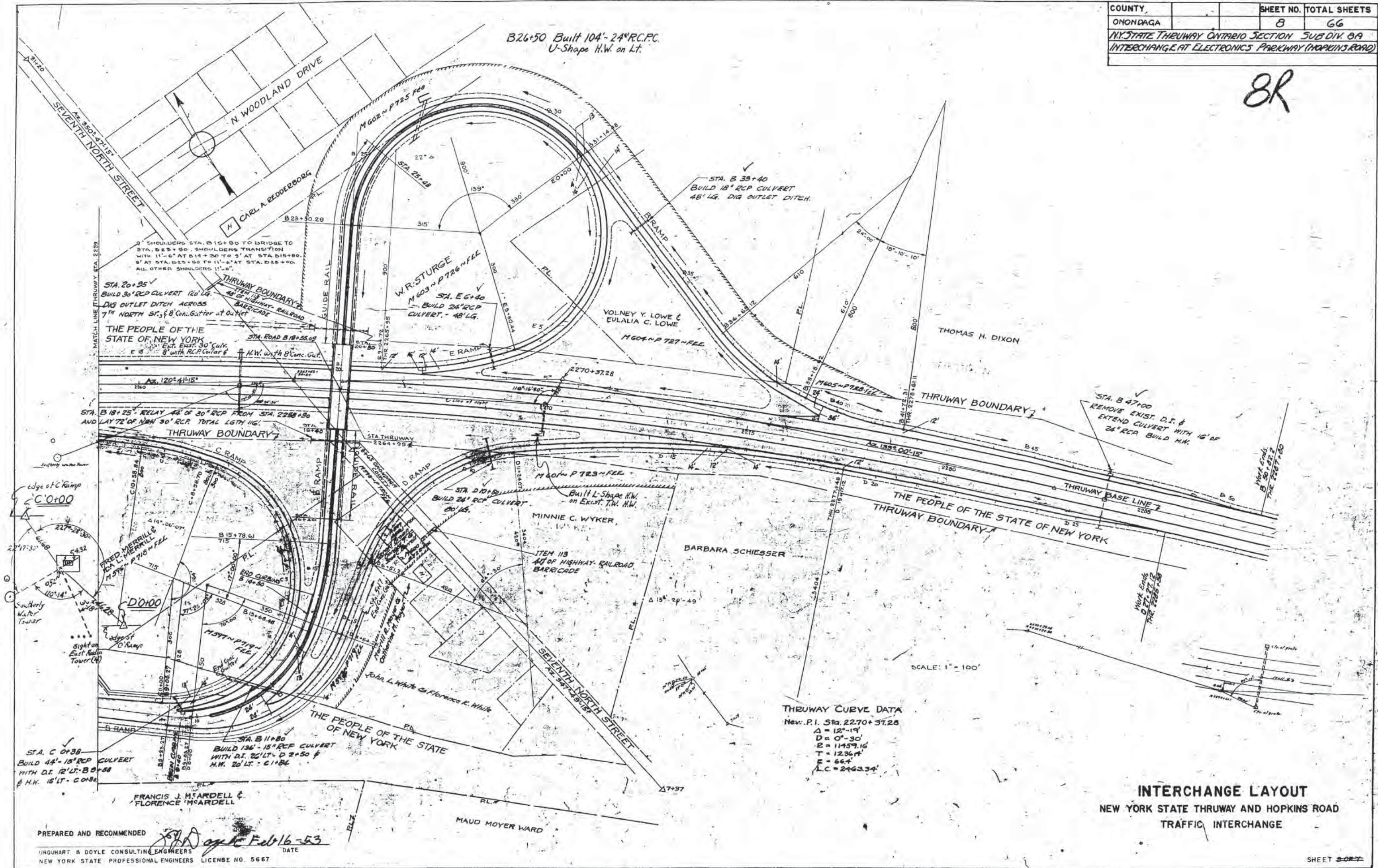
PRELIMINARY LAYOUT
NEW YORK STATE THRUWAY AND HOPKINS ROAD
TRAFFIC INTERCHANGE

PREPARED AND RECOMMENDED

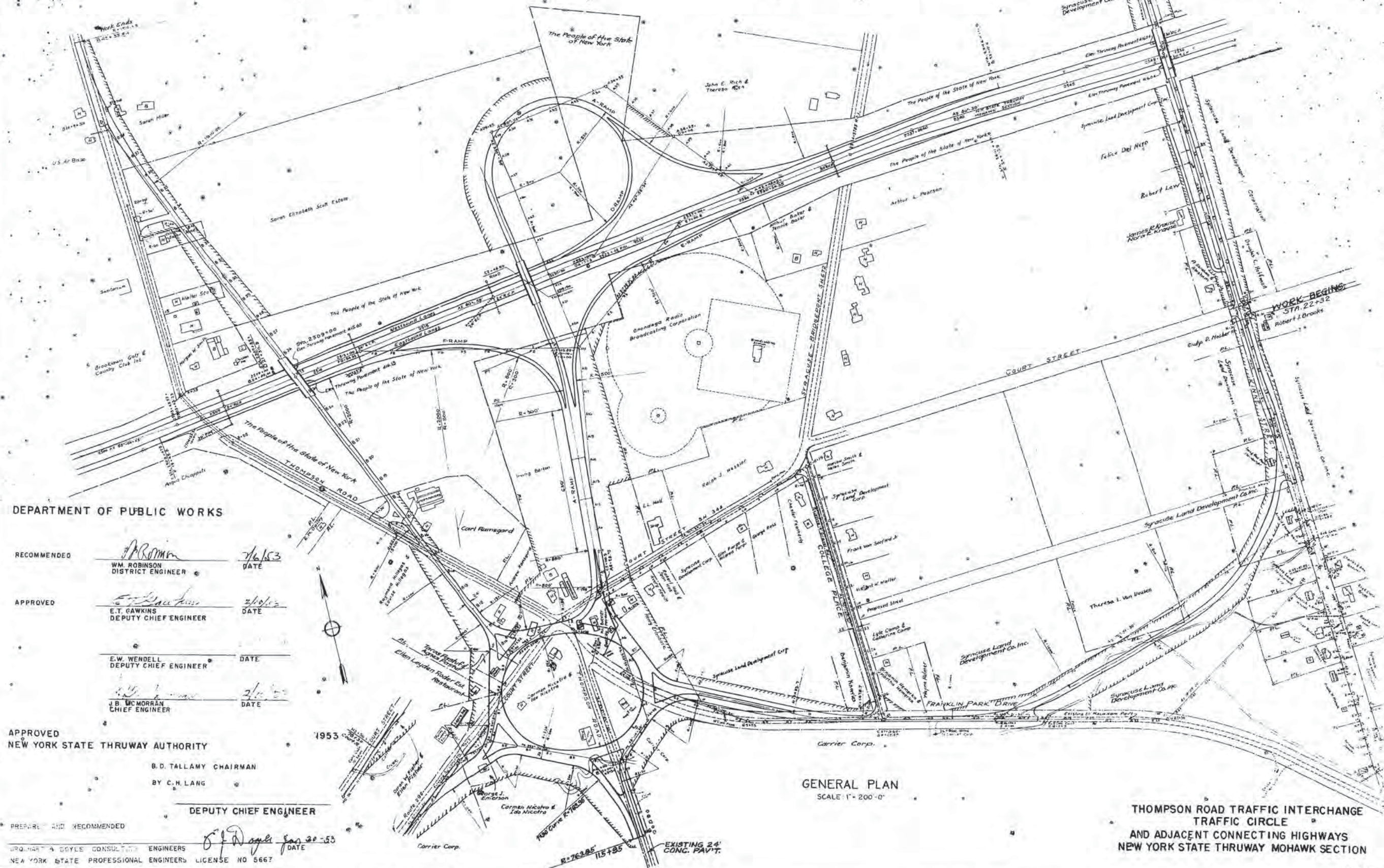
W.D. Doyle Feb 16, 1953
W.D. DOYLE CONSULTING ENGINEERS
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO. 5667
DATE

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	8	66
N.Y. STATE THRUWAY ONTARIO SECTION SUB DIV. 8A		
INTERCHANGE AT ELECTRONICS PARKWAY (HOPKINS ROAD)		

8R



COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	22	66
N.Y. STATE THRUWAY, MOHAWK SECTION SUBDIV. B.B.		
INTERCHANGE AT THOMPSON ROAD		



DEPARTMENT OF PUBLIC WORKS

RECOMMENDED

WM. ROBINSON
DISTRICT ENGINEER

7/6/53
DATE

APPROVED

E.T. GAWKINS
DEPUTY CHIEF ENGINEER

2/6/53
DATE

E.W. WENDELL
DEPUTY CHIEF ENGINEER

DATE

J.B. MC MORRAN
CHIEF ENGINEER

2/6/53
DATE

APPROVED
NEW YORK STATE THRUWAY AUTHORITY

B.D. TALLAMY CHAIRMAN
BY C.H. LANG

DEPUTY CHIEF ENGINEER

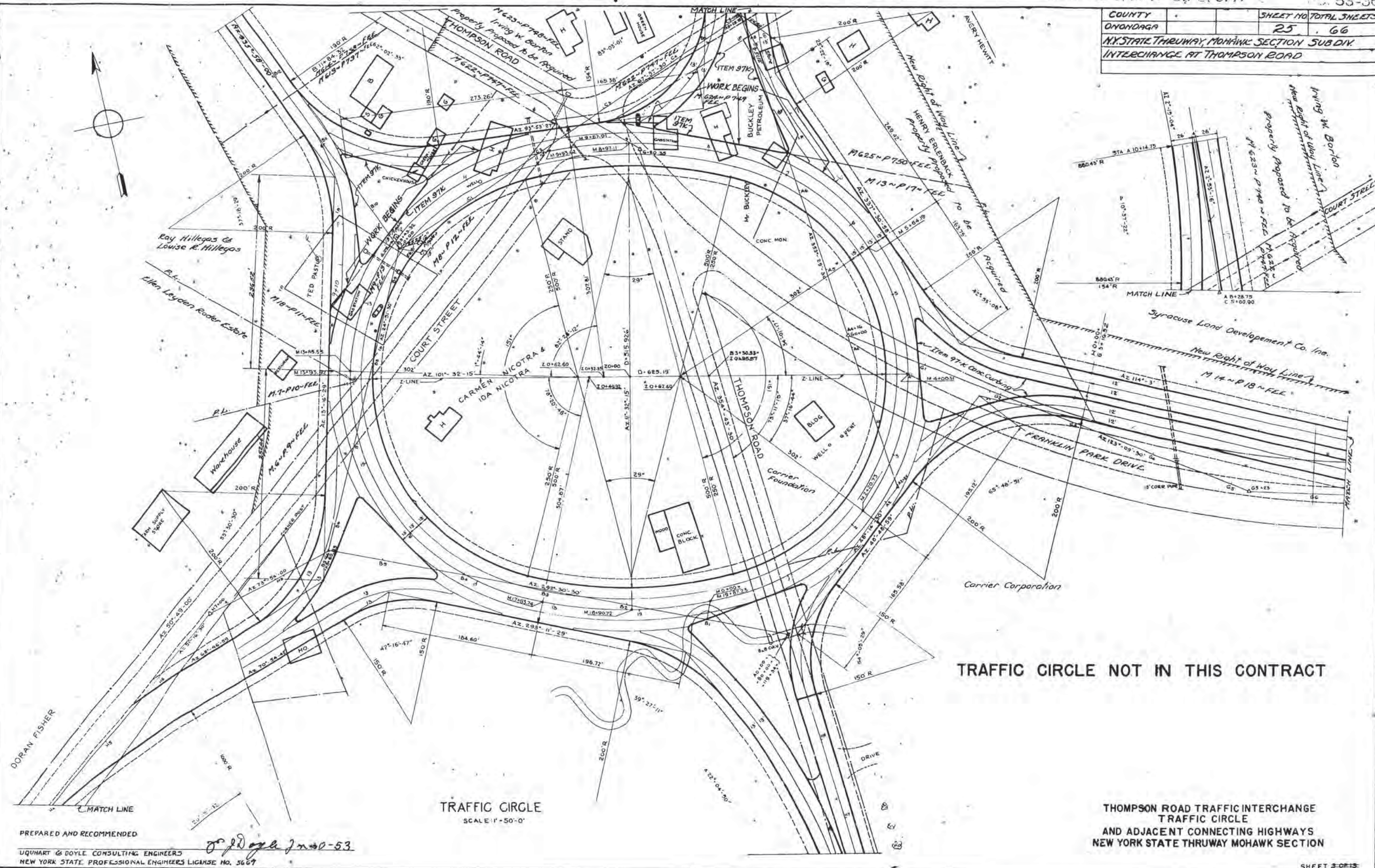
PREPARED AND RECOMMENDED

WILSON & DOYLE CONSULTING ENGINEERS
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO 5667

GENERAL PLAN
SCALE 1" = 200'-0"

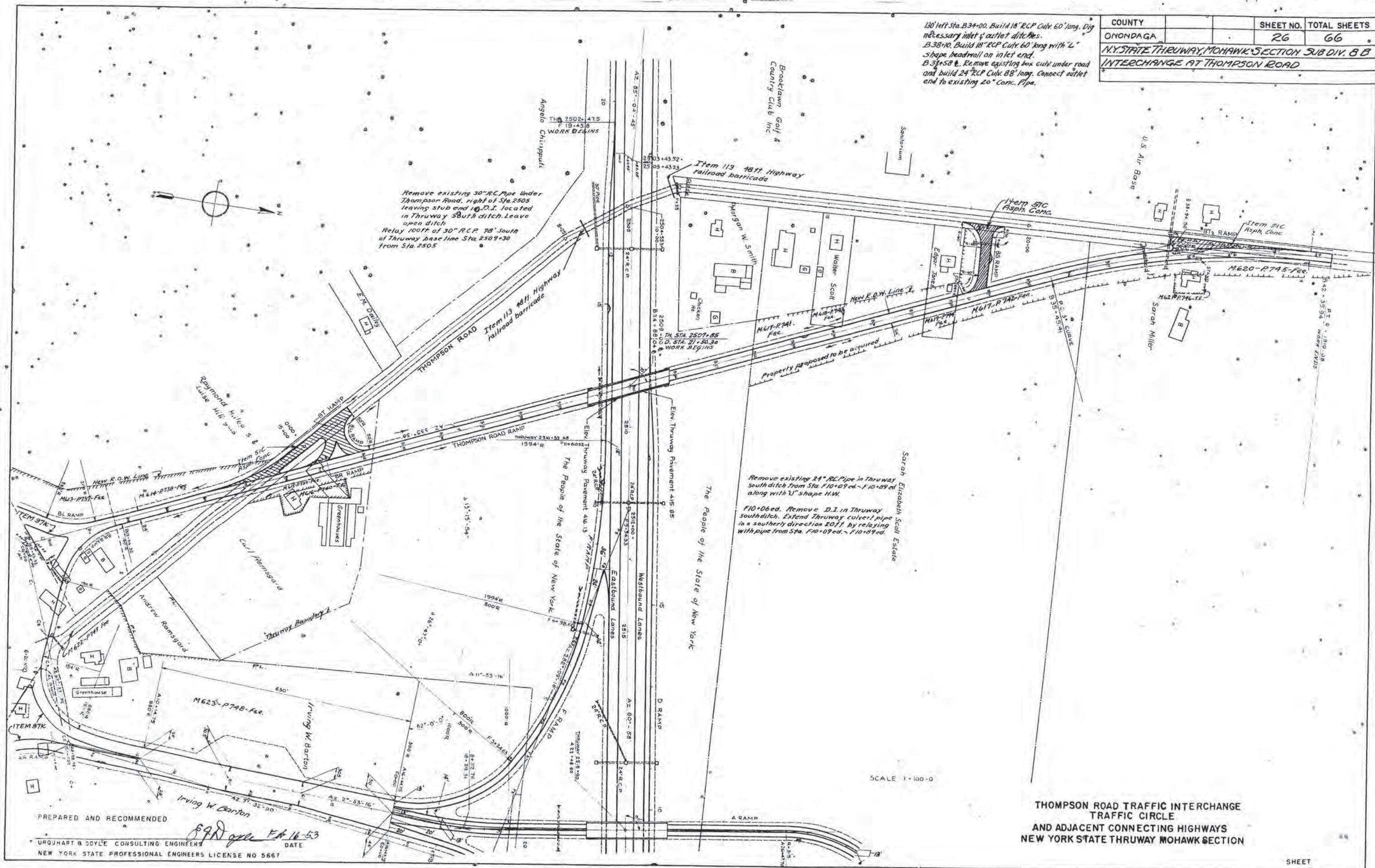
THOMPSON ROAD TRAFFIC INTERCHANGE
TRAFFIC CIRCLE
AND ADJACENT CONNECTING HIGHWAYS
NEW YORK STATE THRUWAY MOHAWK SECTION

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	25	66
NY STATE THRUWAY, MOHAWK SECTION SUB DIV.		
INTERCHANGE AT THOMPSON ROAD		



COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	26	66
N.Y. STATE THRUWAY, MOHAWK SECTION SUB DIV. B B		
INTERCHANGE AT THOMPSON ROAD		

130' left Sta. B34+00. Build 18" RCP Culv. 60' long. Dig necessary inlet & outlet ditches.
 B38+00. Build 18" RCP Culv. 60' long with "L" shape headwall on inlet end.
 B38+50 E. Remove existing box culv. under road and build 24" RCP Culv. 88' long. Connect outlet end to existing 20" conc. Pipe.



PREPARED AND RECOMMENDED

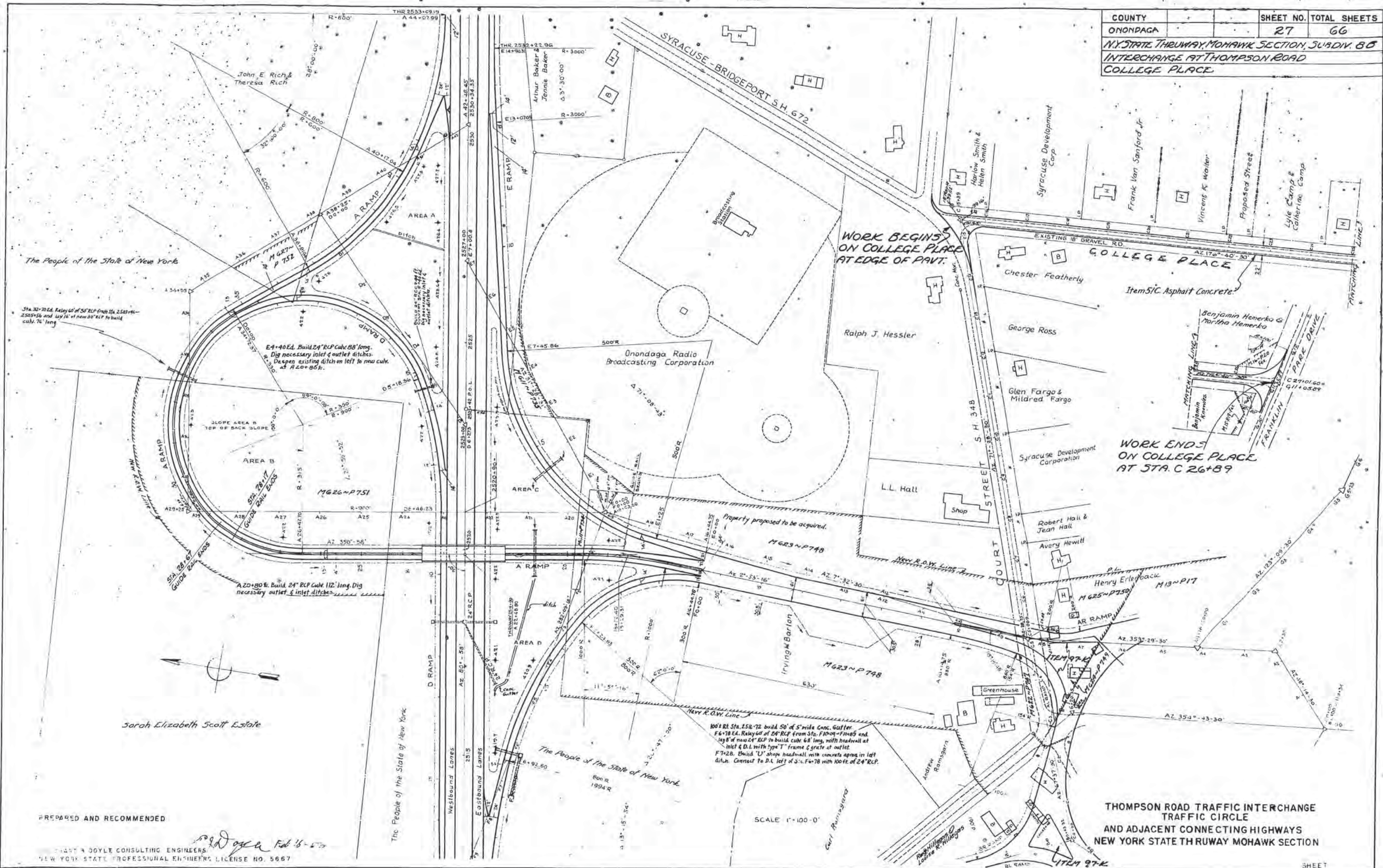
URQUHART & DOYLE CONSULTING ENGINEERS
 NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO 5667

89D gpc FA 16-53
 DATE

THOMPSON ROAD TRAFFIC INTERCHANGE
 TRAFFIC CIRCLE
 AND ADJACENT CONNECTING HIGHWAYS
 NEW YORK STATE THRUWAY MOHAWK SECTION

SHEET

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	27	66
N.Y. STATE THRUWAY, MOHAWK SECTION, S.W. DIV. 80		
INTERCHANGE AT THOMPSON ROAD		
COLLEGE PLACE		



PREPARED AND RECOMMENDED

THOMAS A. DOYLE CONSULTING ENGINEERS
 NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO. 5667

THOMPSON ROAD TRAFFIC INTERCHANGE
 TRAFFIC CIRCLE
 AND ADJACENT CONNECTING HIGHWAYS
 NEW YORK STATE THRUWAY MOHAWK SECTION

SHEET

Attachment C:
Historic Aerial Photographs



Exit 35 Ramp

I-90 Exit 35

East Syracuse, NY 13057

Inquiry Number: 4843392.5

February 02, 2017

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

02/02/17

Site Name:

Exit 35 Ramp
I-90 Exit 35
East Syracuse, NY 13057
EDR Inquiry # 4843392.5

Client Name:

Environmental Design & Research, d.p.c
217 Montgomery Street
Syracuse, NY 13202
Contact: Caitlin Graff



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2011	1"=500'	Flight Year: 2011	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2008	1"=500'	Flight Year: 2008	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1995	1"=500'	Acquisition Date: March 27, 1995	USGS/DOQQ
1988	1"=500'	Flight Date: October 31, 1988	NYDOT
1986	1"=500'	Flight Date: April 14, 1986	USGS
1978	1"=500'	Flight Date: September 13, 1978	USDA
1966	1"=500'	Flight Date: June 22, 1966	USDA
1959	1"=500'	Flight Date: May 25, 1959	USDA
1951	1"=500'	Flight Date: October 15, 1951	USDA
1938	1"=500'	Flight Date: July 05, 1938	USDA

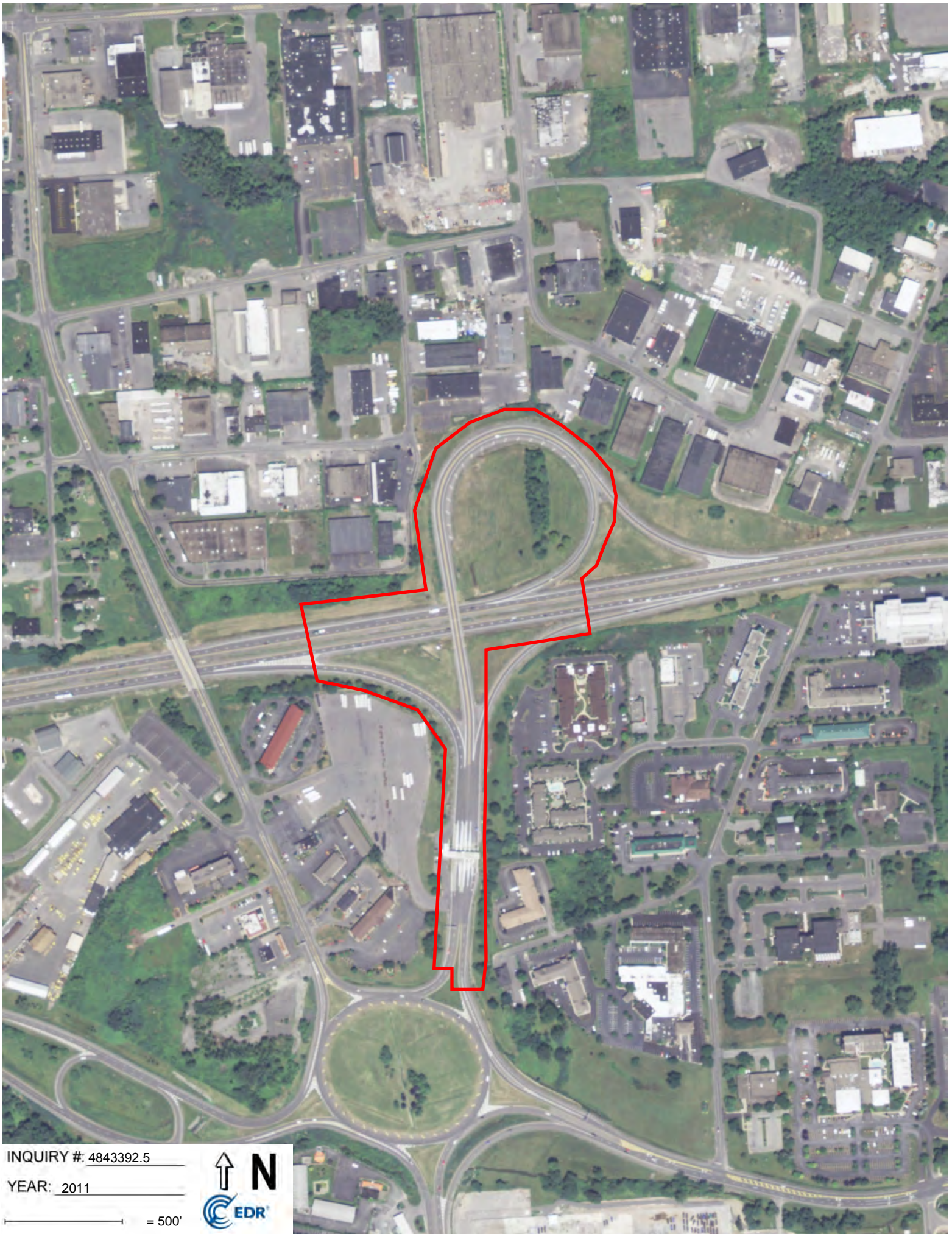
When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

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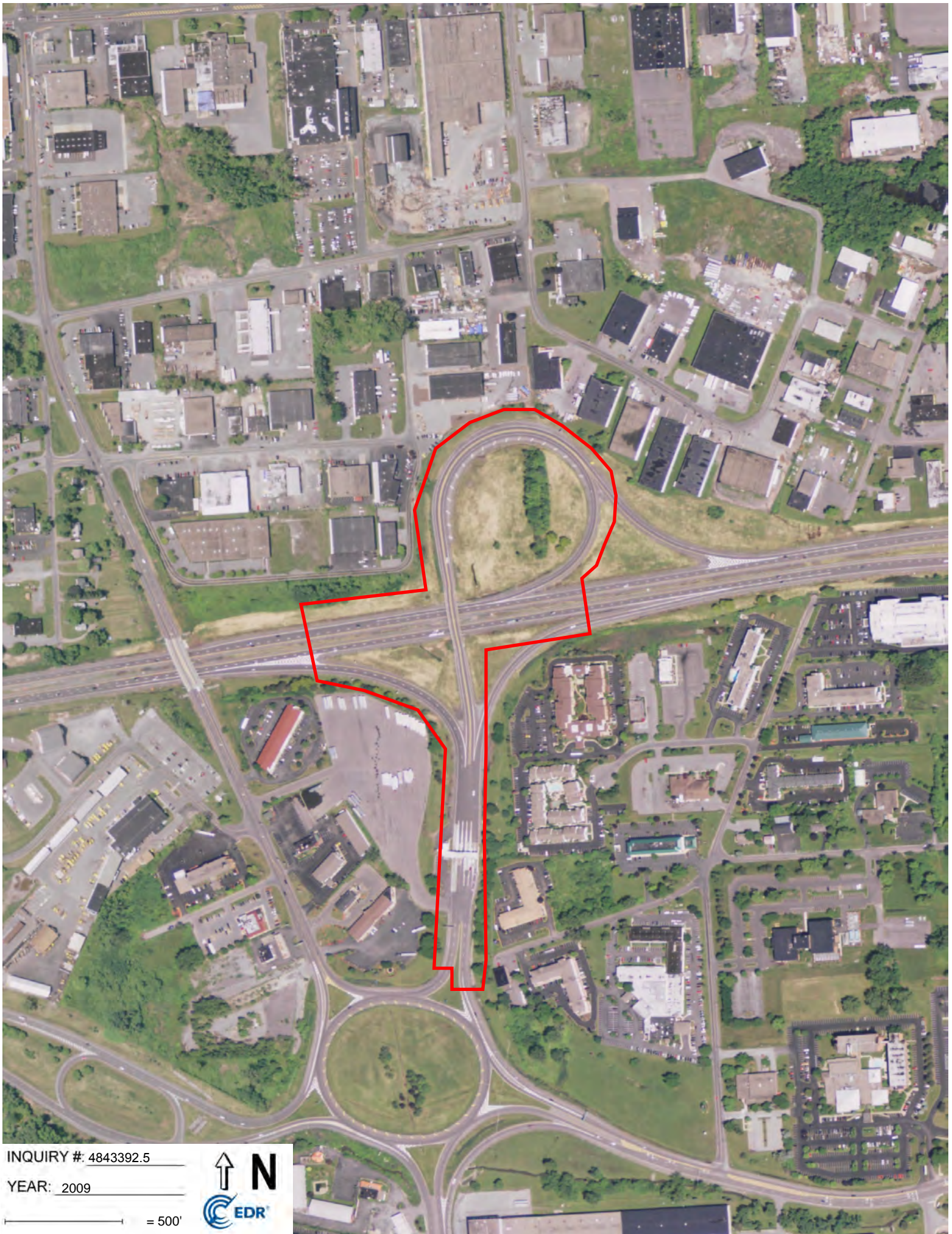


INQUIRY #: 4843392.5

YEAR: 2011

— = 500'



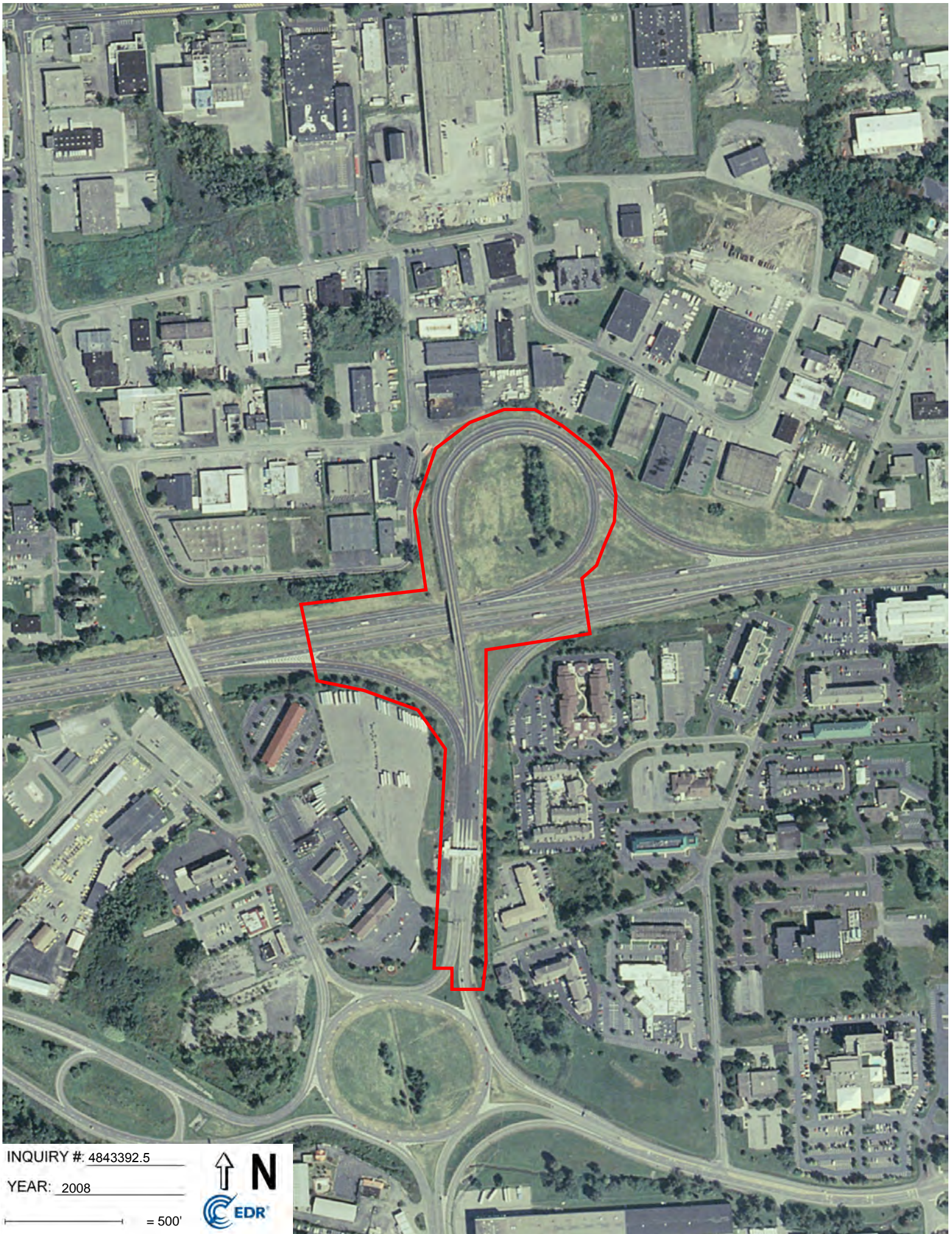


INQUIRY #: 4843392.5

YEAR: 2009

— = 500'



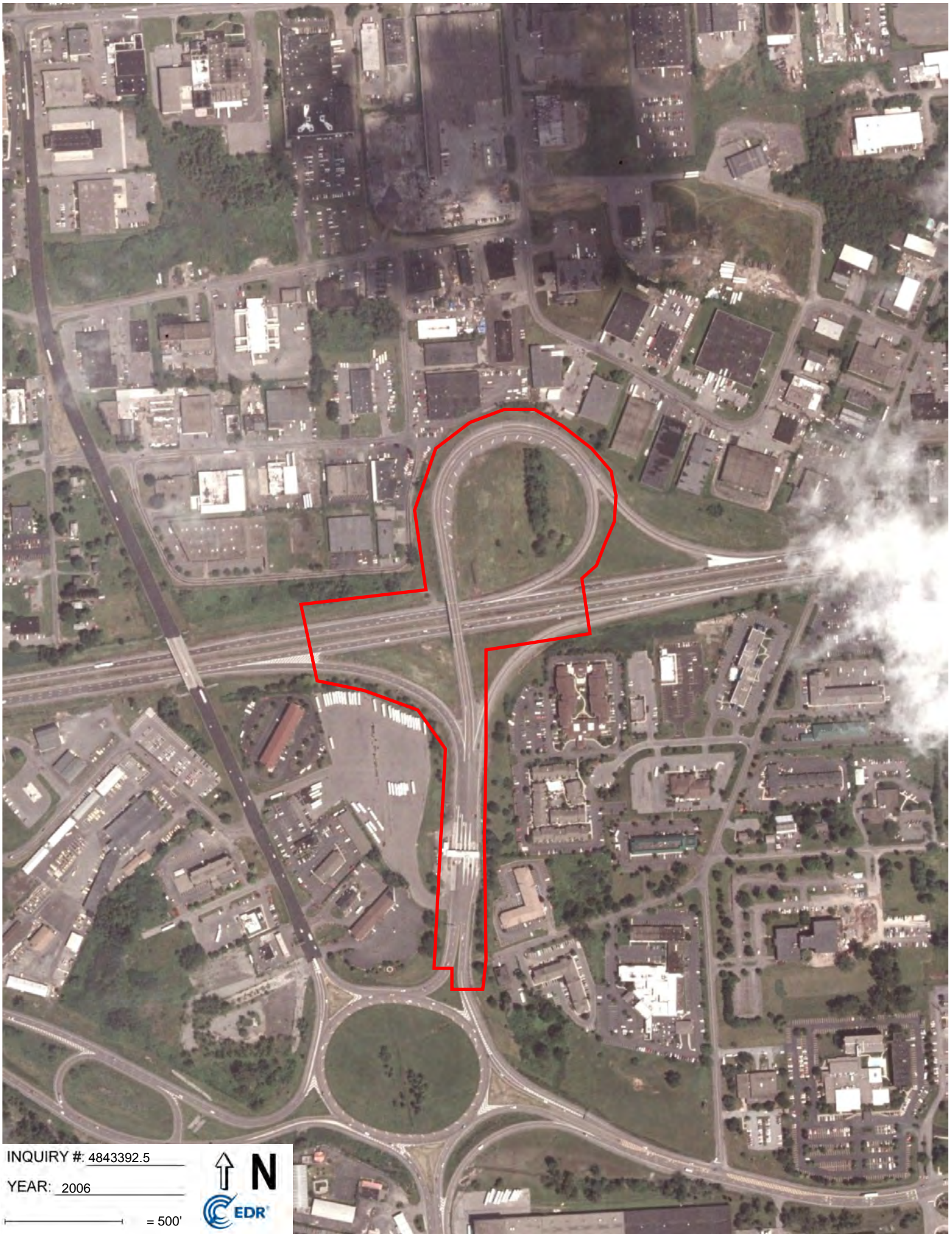


INQUIRY #: 4843392.5

YEAR: 2008

— = 500'





INQUIRY #: 4843392.5

YEAR: 2006

— = 500'



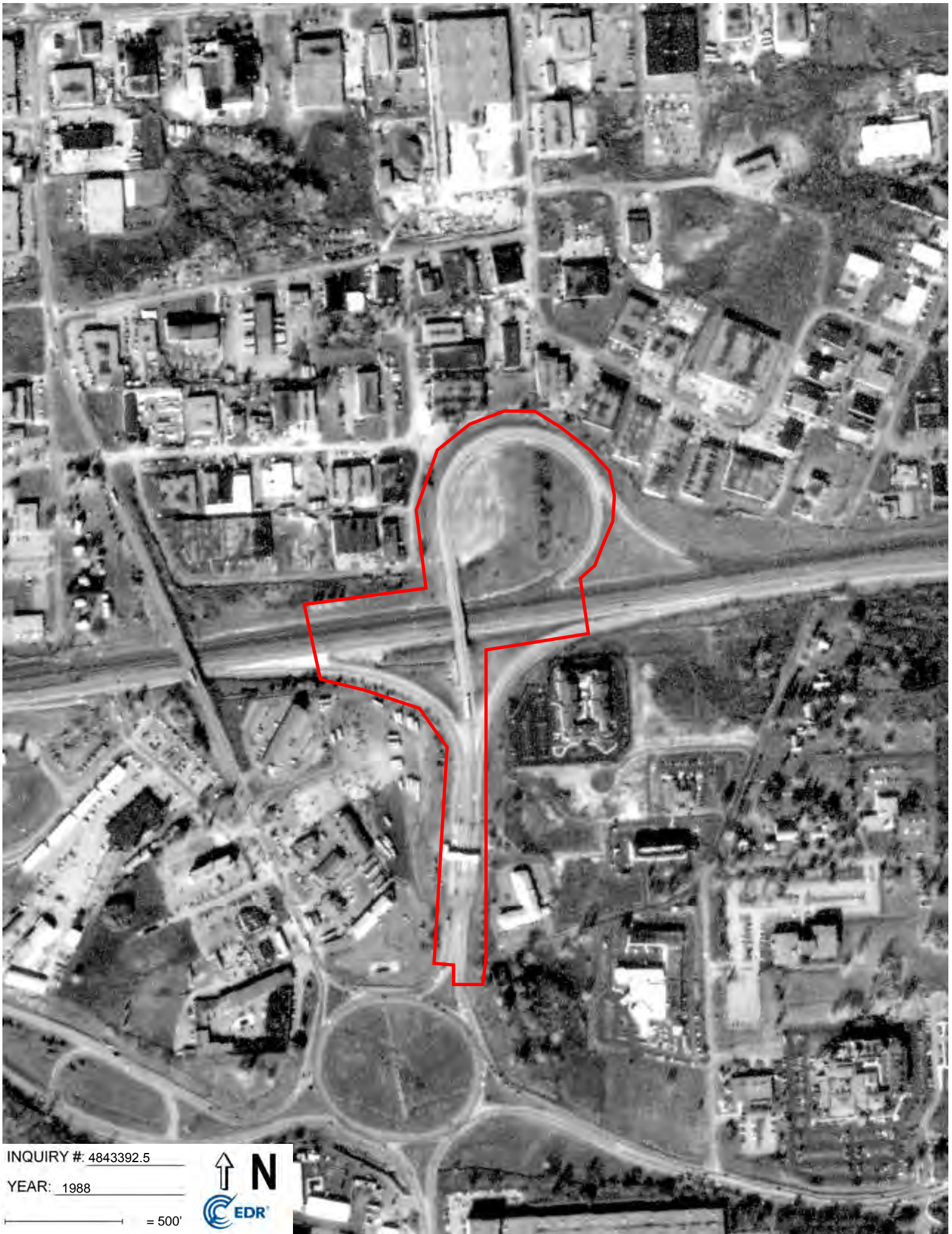


INQUIRY #: 4843392.5

YEAR: 1995

— = 500'





INQUIRY #: 4843392.5

YEAR: 1988

— = 500'



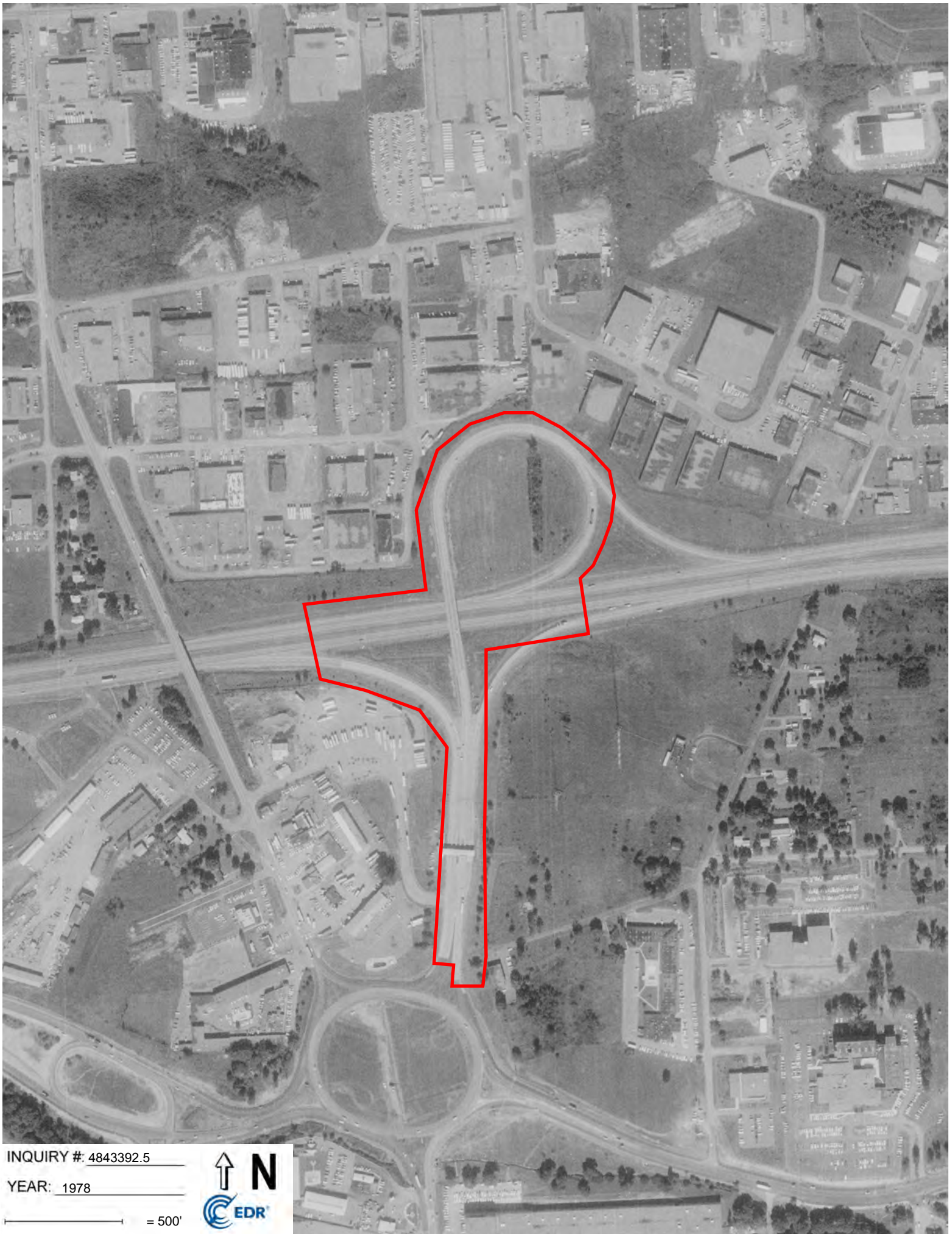


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YEAR: 1986

— = 500'



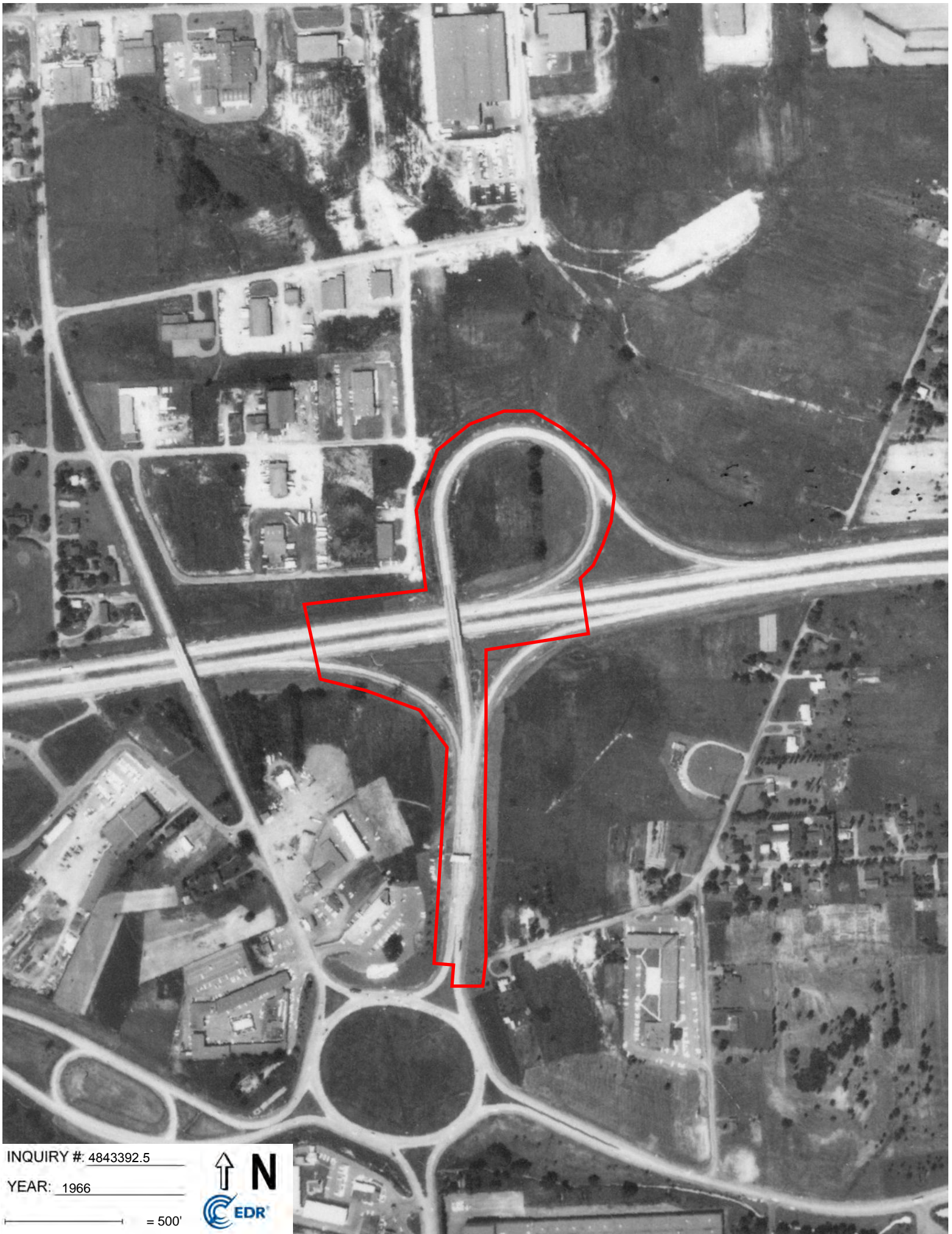


INQUIRY #: 4843392.5

YEAR: 1978

— = 500'



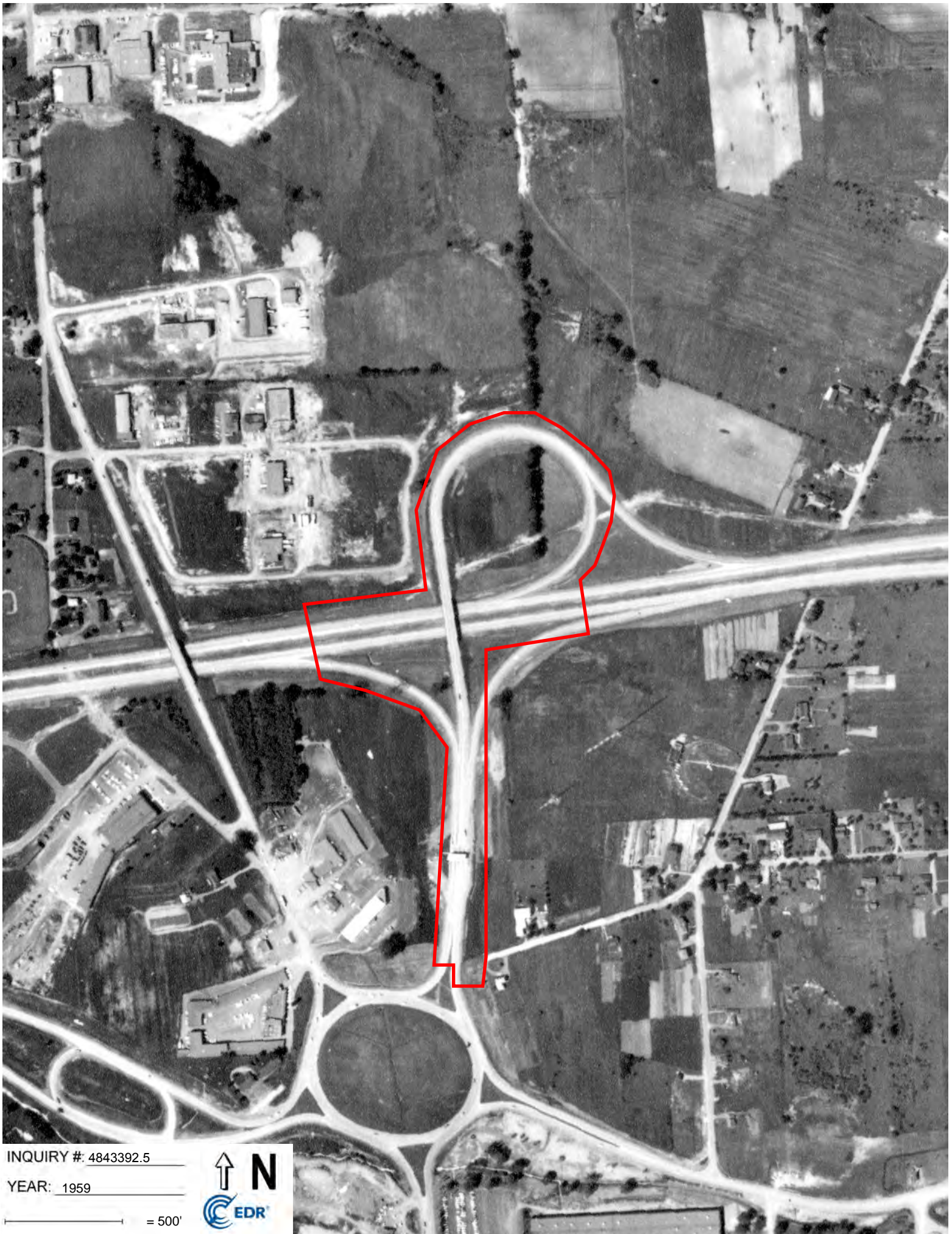


INQUIRY #: 4843392.5

YEAR: 1966

— = 500'



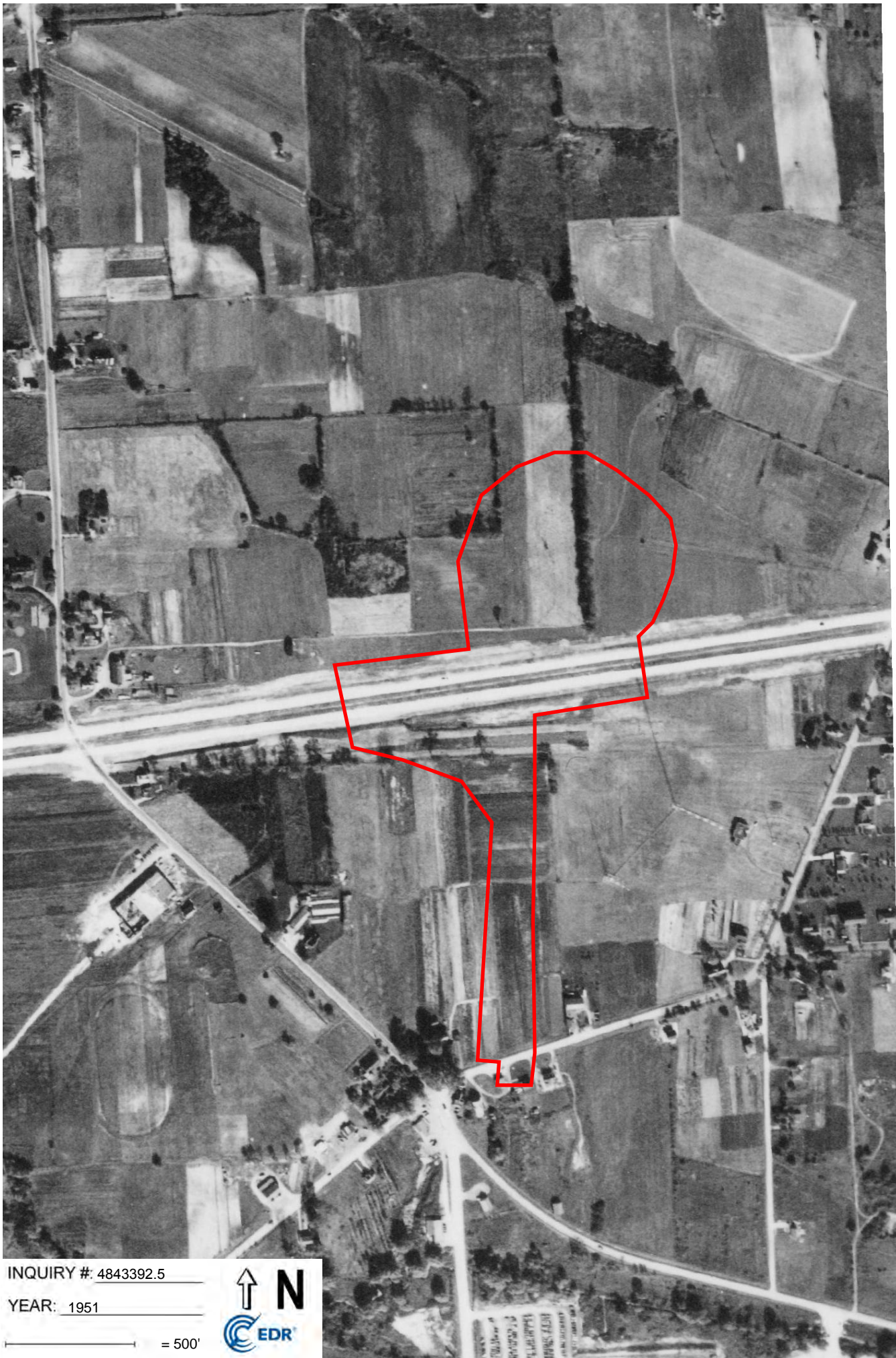


INQUIRY #: 4843392.5

YEAR: 1959

— = 500'



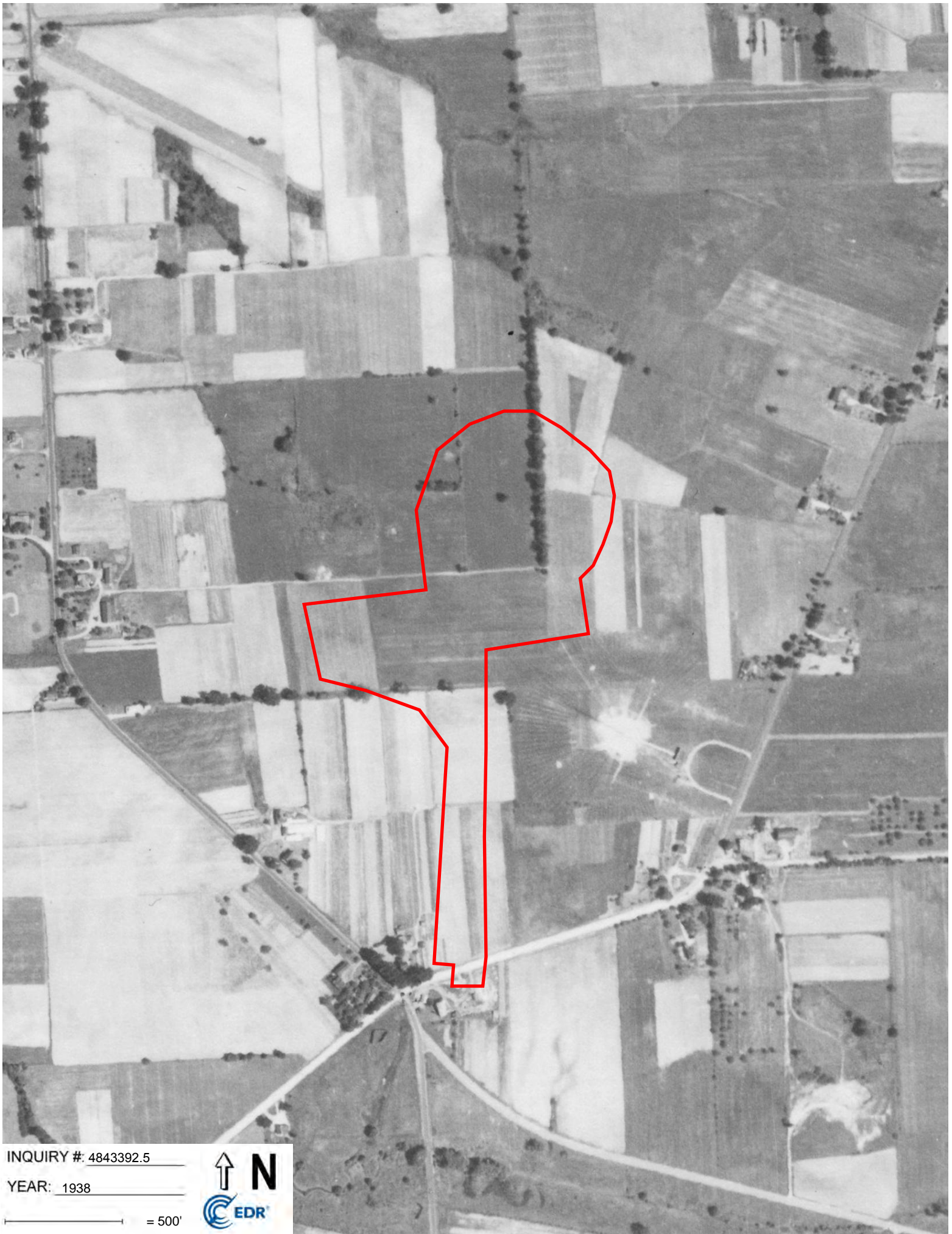


INQUIRY #: 4843392.5

YEAR: 1951

— = 500'





INQUIRY #: 4843392.5

YEAR: 1938

— = 500'



Attachment D:
Photograph Locations





Replacement of Syracuse Division Bridges

MP 278.93:
Exit 35 Ramp
(BIN 5510090)

Village of East Syracuse
Onondaga County
New York

Attachment D: Photograph Locations

February 2017

-  Photograph Location
 Area of Potential Effect

Notes:
1. Basemap: ESRI ArcGIS "World Imagery"
online map database.
2. This is a color graphic. Reproduction
in grayscale may misrepresent the data.

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA,
USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User
Community



Attachment E:
Photographs



Photo 1

View of the Exit 35 interchange showing cut-and-fill disturbance. From I-90 west bound off-ramp shoulder, view to the southwest.



Photo 2

View of the Exit 35 interchange showing cut-and-fill disturbance and grading. From I-90 west bound off-ramp shoulder, view to the south.

Replacement of Syracuse Division Bridges

MP 278.93: Exit 35 Ramp (BIN 5510090)

Village of East Syracuse, Onondaga County, New York

Attachment E: Photographs

Sheet 1 of 2



Photo 3

View of the Exit 35 interchange showing cut-and-fill disturbance. From toll booth intersection lanes, view to the north.

Replacement of Syracuse Division Bridges

MP 278.93: Exit 35 Ramp (BIN 5510090)

Village of East Syracuse, Onondaga County, New York

Attachment E: Photographs

Sheet 2 of 2

Appendix C Smart Growth Checklist

SMART GROWTH IMPACT STATEMENT

This Smart Growth Impact Statement is a tool to assist the New York State Thruway/Canal Corporation (NYSTA/CC) determine whether a NYSTA/CC-funded project is consistent with the State Smart Growth Public Infrastructure Criteria. Not all questions/answers may be relevant to all projects.

Project Name: **See Report Cover**

Project Number: **See Report Cover**

Date: **February 13, 2012**

Have any other entities issued a Smart Growth Impact Statement with regard to this project? (If so, attach same).

- ☐ Yes
- ☒ No

1. Does the project advance or otherwise involve the use, maintenance or improvement of existing infrastructure?

- ☒ Yes
- ☐ No
- ☐ Not relevant

Explain briefly: **Capital project advanced to address condition-based needs of highway system.**

2. Is the project located wholly or partially in a **municipal center**, characterized by any of the following: (check those that apply)

- ☐ A city or a village
- ☐ Area of concentrated and mixed land use that serves as a center for various activities including, but not limited to:
 - ☐ Central business district (e.g. the commercial and/or economic heart or center of the municipality)
 - ☐ Downtown area (such as a city's core (or center), which may include the [central business district](#) and functions as a “center” in a geographical, commercial, and community sense).
 - ☐ Brownfield Opportunity Area
(http://nyswaterfronts.com/BOA_projects.asp)
 - ☐ Downtown areas of Local Waterfront Revitalization Plan area
(http://nyswaterfronts.com/maps_regions.asp)
 - ☐ Locations of transit-oriented development (such as projects serving areas that have access to mass or public transit for residents)
 - ☐ Environmental Justice area
(<http://www.dec.ny.gov/public/899.html>)

- ☐ Hardship areas, which may include areas with high poverty rates, high unemployment, poor infrastructure, or other socio-demographic indicator considered below average.
- ☐ A developed area or area designated for concentrated infill development in a municipally approved comprehensive land use plan, LWRP or Brownfield Opportunity area plan? Hardship areas, which may include areas with high poverty rates, high unemployment, poor infrastructure, or other socio-demographic indicator considered below average.

Explain briefly: (Indicate if the project is located adjacent to municipal centers, in an area that exhibits strong land use, transportation, infrastructure and economic connections to an existing municipal center, or in an area designated for concentrated development in the future in a municipal or regional comprehensive plan.)

- ☒ Yes
- ☐ No
- ☐ Not relevant

If Yes, please describe: **as the NYS Thruway is an integral component of the nation's Interstate Highway System providing both regional and national transportation mobility as well as connecting areas of concentrated development both within and outside NYS.**

3. Does the project preserve and enhance the State's resources, including agricultural lands, forests, surface and groundwater, air quality, recreation and open space, scenic areas, and/or significant historic and archeological resources?
 - ☒ Yes
 - ☐ No
 - ☐ Not relevant

Explain briefly: **Project is developed consistent with all social, economic, and environmental policies and procedures. See project SEQR documentation.**

4. Does the project foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development and/or the integration of all income and age groups?
 - ☐ Yes
 - ☐ No
 - ☒ Not relevant

Explain briefly: **The NYS Thruway is a fully access-controlled highway system on an existing alignment.**

5. Does the project provide mobility through transportation choices, including improved public transportation and reduced automobile dependency?

☐ Yes
☐ No
☒ Not relevant

Explain briefly: **The NYS Thruway is a fully access-controlled highway system on an existing alignment.**

6. Does the project demonstrate coordination among state, regional, intermunicipal and local planning and governmental officials?

☐ Yes
☐ No
☒ Not relevant

Explain briefly: **Project is intended to only address corrective and preventative maintenance repairs to extend the useful life of the highway system. Coordination with environmental agencies and interested parties will occur to obtain permits and approvals consistent with regulatory requirements.**

(Demonstration of coordination may include SEQR coordination with involved and interested agencies, district formation, agreements between involved parties, letters of support, SPDES permit issuance/revision notices, etc.)

7. Does the project involve community-based planning and collaboration?

☐ Yes
☐ No
☒ Not relevant

Explain briefly: **Project is intended to only address corrective and preventative maintenance repairs to extend the useful life of the highway system.**

8. Does the project help ensure predictability in building and land use codes?

☐ Yes
☐ No
☒ Not relevant

Explain briefly:

9. Sustainability

a. Does the project promote sustainability by strengthening existing communities or creating new communities that reduce greenhouse gas emissions and do not compromise the needs of future generations?

- ☐ Yes
- ☐ No
- ☒ Not relevant

Explain briefly: **Project is intended to only address corrective and preventative maintenance repairs to extend the useful life of the highway system.**

b. During the development of the project, was there broad based public involvement?

- ☐ Yes
- ☒ No
- ☐ Not relevant

Explain the extent of public involvement (briefly): (Public involvement may include SEQR coordination with involved and interested agencies, SPDES permit issuance/revision notice, approval of Bond Resolution, formation of district, public hearings, ENB or other published notices, letters of support, etc.) **Not required by SEQR or needed based upon project type. Regulatory agencies will be provided an opportunity to comment on the project through their requirements associated with required of permits and approvals.**

c. If the project included development or implementation of all or part of a community plan, is there a governance structure in place (within the Authority and/or the local community) to ensure further implementation of the plan?

- ☐ Yes
- ☐ No
- ☒ Not relevant

If Yes, please describe:

NYSTA/CC SMART GROWTH IMPACT STATEMENT

The New York State Thruway Authority/ Canal Corporation (NYSTA/CC) has reviewed the available information regarding the following project and determined that it is consistent with the State Smart Growth Public Infrastructure Criteria: (check one)

Project Name: _____ **See Report Cover**

Project Number: _____ **See Report Cover**

- The project was developed in general consistency with the relevant Smart Growth Criteria.
- It was impracticable to develop this project in a manner consistent with the relevant Smart Growth Criteria for the following reasons:

ATTESTATION

I, as designee of the Chief Executive Officer of the NYSTA/CC, hereby attests that this project, to the extent practicable, meets the relevant criteria set forth above and, that to the extent that it is not practical to meet any relevant criterion, for the reasons given above.

See Report Signature Page

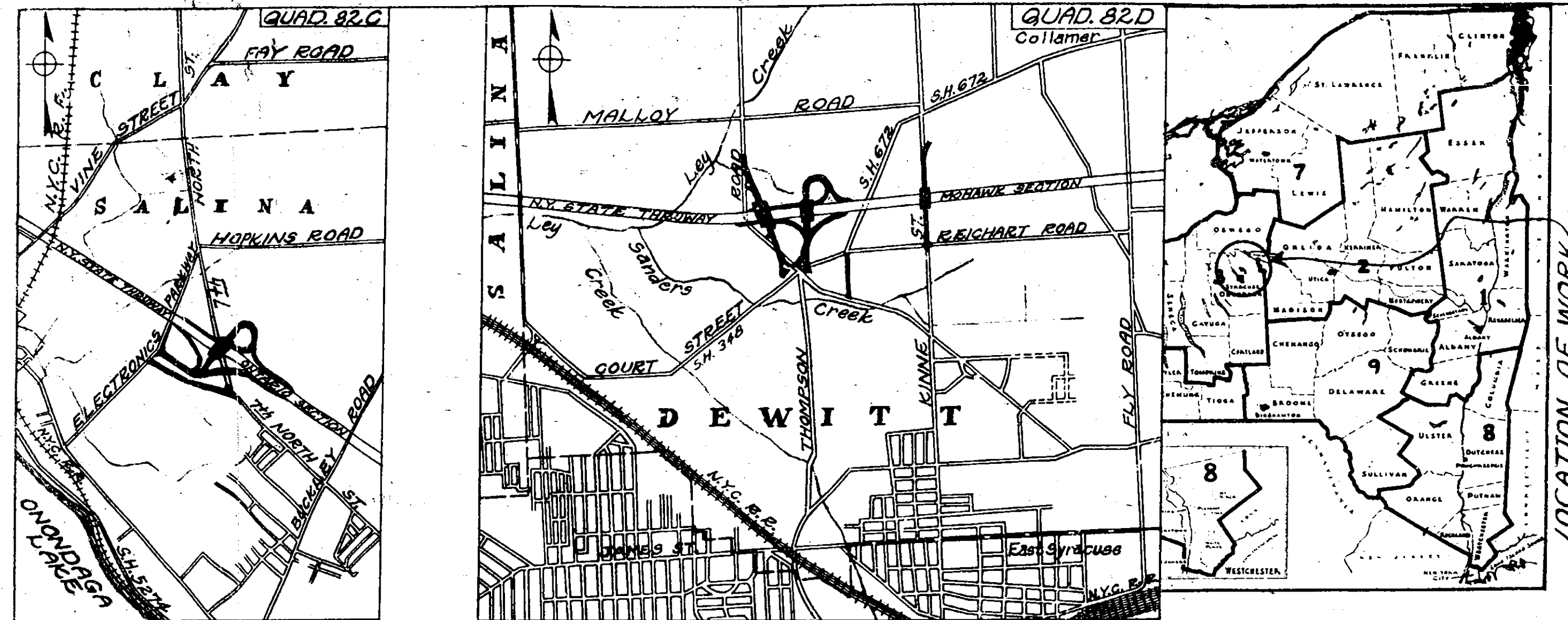
[signature]

[date]

See Report Signature Page

[print name & title]

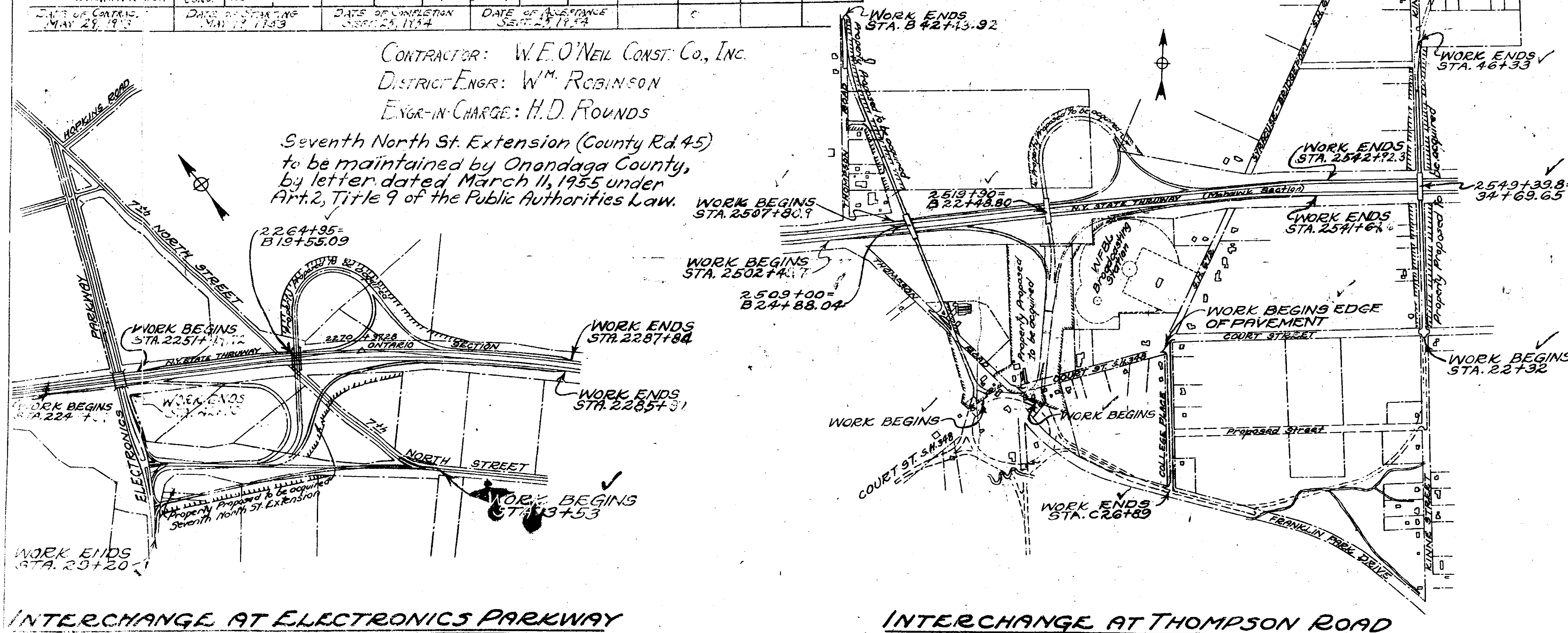
Appendix D Structure Information



CONTRACT NO.	TYPE	LENGTH FEET	WIDTH FEET	THICK OF TOP	S.Y. PAVE.	C.Y. CONC.	TONS OF TOP	MATERIALS SAND, GRAVEL, ASPHALT	CEMENT	ASPH. CONC.	GRAVEL ACCESS RD.
MT 53-8	REINF. CONC.	11,922	2.33	Various	Various	24,680	5,817	ALPHA			
OT 53-8	REINF. CONC.	13,170	2.49	Various	Various	26,473	6,422	ATLAS			
RC 53-36	REINF. CONC.	2,112	0.52	24'	44'	5,794	1,448	LEHIGH			710
ST 53-20 - Concrete Pave	REINF. CONC.	1,194	0.23	22'	34'	3,326	468	FEDERAL	BARRETT		
Thompson Road	REINF. CONC.	4,232	0.76	24'	44'	8,970	2,243	No. AMER.			
Hopkins Road	REINF. CONC.	11,89	0.22	12'	12'	11,57	239	CENTURY			
Seventh North St.	REINF. CONC.	2,320	0.48	24'	44'	6,797	1,699				
DATE OF CONTRACT	DATE OF STARTING	DATE OF COMPLETION	DATE OF ACCEPTANCE								
MAY 21, 1953	MAY 19, 1953	SEPT. 23, 1954	SEPT. 23, 1954								

CONTRACTOR: W.E. O'NEIL CONST. CO., INC.
DISTRICT ENGR: W.M. ROBINSON
ENGR-IN-CHARGE: H.D. ROUNDS

Seventh North St. Extension (County Rd 45)
to be maintained by Onondaga County,
by letter dated March 11, 1955 under
Art. 2, Title 9 of the Public Authorities Law.



INTERCHANGE AT ELECTRONICS PARKWAY

INTERCHANGE AT THOMPSON ROAD

NEW YORK STATE THRUWAY AUTHORITY
PLANS FOR CONSTRUCTING ACCELERATION AND DECELERATION LANES ON A PORTION OF THE
NEW YORK STATE THRUWAY, ONTARIO SECTION: Subdivision 8A
From Station 2244+52 to Station 2287+80, a length of 0.73 mile in the Town of Salina
AND FOR CONSTRUCTING THE
ELECTRONICS PARKWAY (HOPKINS ROAD) INTERCHANGE
At Station 2264+95, a length of 1.74 miles in the Town of Salina
A TOTAL LENGTH OF 2.47 MILES CONTRACT No. O.T. 53-8
AND FOR CONSTRUCTING ACCELERATION AND DECELERATION LANES ON A PORTION OF THE
NEW YORK STATE THRUWAY, MOHAWK SECTION: Subdivision 8B
From Station 2502+47 to Station 2542+11, a length of 0.93 mile in the Town of DeWitt
AND FOR CONSTRUCTING THE
THOMPSON ROAD INTERCHANGE
At Station 2519+90, a length of 1.40 miles in the Town of DeWitt
A TOTAL LENGTH OF 2.33 MILES CONTRACT No. M.T. 53-8
AND FOR CONSTRUCTING PORTIONS OF
ELECTRONICS PARKWAY (HOPKINS ROAD)
From Station 29+20 to Station 42+65, a length of 0.22 mile in the Town of Salina
EXTENSION OF SEVENTH NORTH STREET
From Station 3+53 to Station 20+92, a length of 0.44 mile in the Town of Salina
THOMPSON ROAD
From Station B 9+10 to Station B 42+36, a length of 0.76 mile in the Town of DeWitt
COLLEGE PLACE
From Station C 15+00 to Station C 26+89, a length of 0.23 mile in the Town of DeWitt
A TOTAL LENGTH OF 1.65 MILES CONTRACT No. S.T. 53-20
AND FOR RECONSTRUCTING A PORTION OF THE
SYRACUSE - BRIDGEPORT, PART 1 (KINNE ST.) S.H. No. 672
Between Station 22+32 and Station 46+33, a length of 0.55 mile in the Town of DeWitt
CONTRACT No. R.C. 53-36
A TOTAL COMBINED LENGTH OF 6.85 MILES
ONONDAGA COUNTY

66 SHEETS

COUNTY	SHEET No.	TOTAL SHEETS
ONONDAGA	1	66
N.Y. STATE THRUWAY, ONTARIO SECTION, SUB DIV. 8A		
INTERCHANGE AT ELECTRONICS PARKWAY (HOPKINS ROAD)		
N.Y. STATE THRUWAY, MOHAWK SECTION, SUB DIV. 8B		
INTERCHANGE AT THOMPSON ROAD		

TYPE OF CONSTRUCTION
Reinforced Cement Concrete Pavement 6.49 Miles
Asphalt Concrete, Type 1A, Opt. 0.38 Mile
Foundation Course-Gravel 0.13 Mile
Miscellaneous Work 0.02 Miles

Including
H.G.S. Electronics Parkway Interchange Station 2264+95
Composite Beam, 4 Spans, 2 @ 37' 9", 1 @ 64' 9",
1 @ 57' 9"

H.G.S., Thompson Road, Station 2509+00 Comp. Beam,
4 Spans, 2 @ 39' 0", 1 @ 59' 10", 1 @ 67' 1"

H.G.S., Thompson Road Interchange, Station 2519+90
Composite Beam, 4 Spans, 1 @ 37' 0", 1 @ 64' 9",
1 @ 57' 9", 1 @ 37' 3"

H.G.S., Kinne St. (Relocating of S.H. 672) Sta. 2549+40
Composite Beam, 4 Spans, 2 @ 37' 6", 2 @ 72' 9"

STANDARD STRUCTURE SHEETS
39-9, 46-4, 47-37, 49-65, 49-7, 49-42, 50-1R, 50-34,
51-3, 51-11R, 51-11W, 51-20, 51-21, 51-40, 52-17A,
52-17B, 52-17C, 52-17D, 52-43, 53-41, 53-106

All work contemplated under this contract to be covered
by and in conformity with the specifications adopted
January 2, 1951, except as modified on these plans and
in the Itemized Proposal.

Thompson Road (County Road 13) to be
maintained by Onondaga County, by
letter dated March 16, 1955 under Art. 2,
Title 9 of the Public Authorities Law.

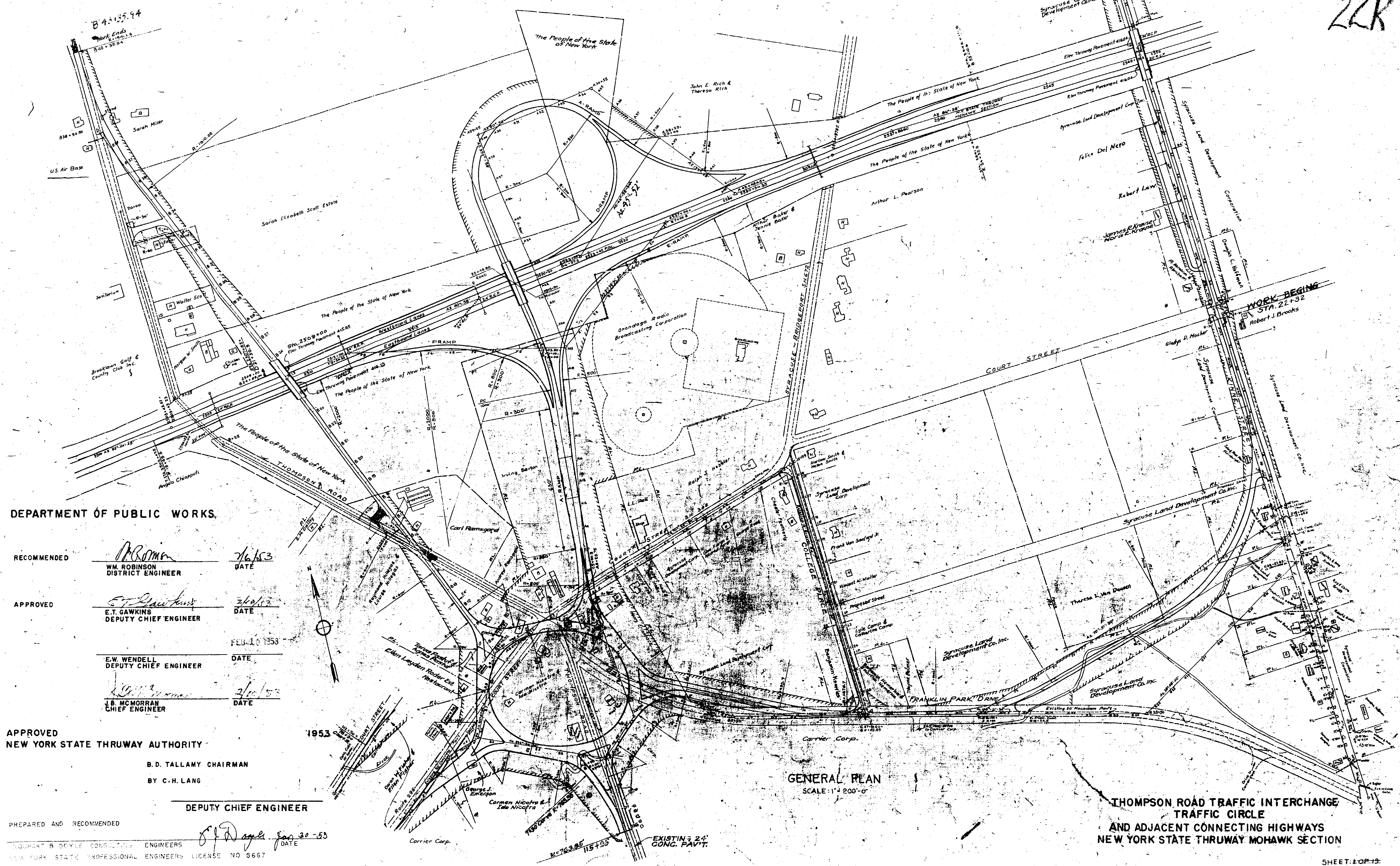
Syracuse-Bridgeport, Pt. 1, S.H. 672 to
be maintained by New York State Dept.
of Public Works, by letter dated
March 16, 1955 under Art. 2, Title 9
of the Public Authorities Law.

NEW YORK STATE DEPARTMENT OF PUBLIC WORKS DIVISION OF CONSTRUCTION	
Approved	1953
J. B. McMorran	Chief Engineer
Approved	1953
E. T. GAWKINS	Deputy Chief Engineer
Approved	APRIL 16, 1953
E. W. WENDELL	Deputy Chief Engineer
NEW YORK STATE THRUWAY AUTHORITY	
B. D. TALLAMY, Chairman	
By: C. H. LANG	Deputy Chief Engineer

Prepared pursuant to the
Highway Law and recommended by
the Engineer District No. 3

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	22	66
N.Y. STATE THRUWAY, MOHAWK SECTION SUBDIV. B B		
INTERCHANGE AT THOMPSON ROAD		

22R



DEPARTMENT OF PUBLIC WORKS.

RECOMMENDED W. Robinson 7/6/53
WM. ROBINSON
DISTRICT ENGINEER DATE

APPROVED E.T. GAWKINS 3/6/53
E.T. GAWKINS
DEPUTY CHIEF ENGINEER DATE

FEB 10 1953

APPROVED E.W. WENDELL
E.W. WENDELL
DEPUTY CHIEF ENGINEER DATE

J.B. MCMORRAN
J.B. MCMORRAN
CHIEF ENGINEER DATE

APPROVED
NEW YORK STATE THRUWAY AUTHORITY

B.D. TALLAMY CHAIRMAN
BY C.H. LANG

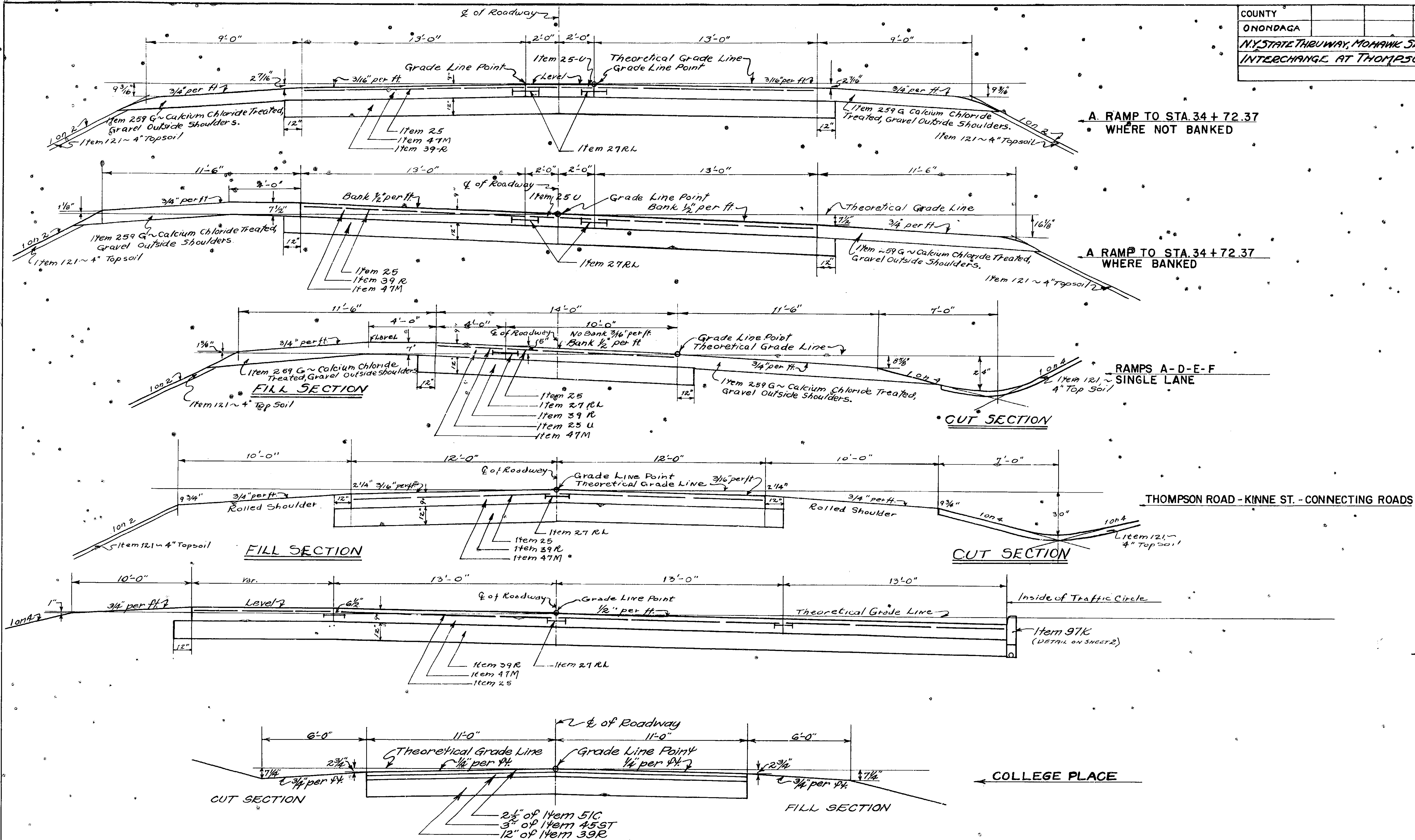
DEPUTY CHIEF ENGINEER

PREPARED AND RECOMMENDED Robert A. Boyle Jan 30-53
ROBERT A. BOYLE CONSULTING ENGINEERS DATE
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO 5667

GENERAL PLAN
SCALE: 1" = 200'-0"

THOMPSON ROAD TRAFFIC INTERCHANGE
TRAFFIC CIRCLE
AND ADJACENT CONNECTING HIGHWAYS
NEW YORK STATE THRUWAY MOHAWK SECTION

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	24	66
N.Y. STATE THRUWAY, MOHAWK SECTION SUBDIV. 8B		
INTERCHANGE AT THOMPSON ROAD		



PREPARED AND RECOMMENDED:

John Doyle Feb 16 - 63

URQUHART & DOYLE CONSULTING ENGINEERS
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO. 5667

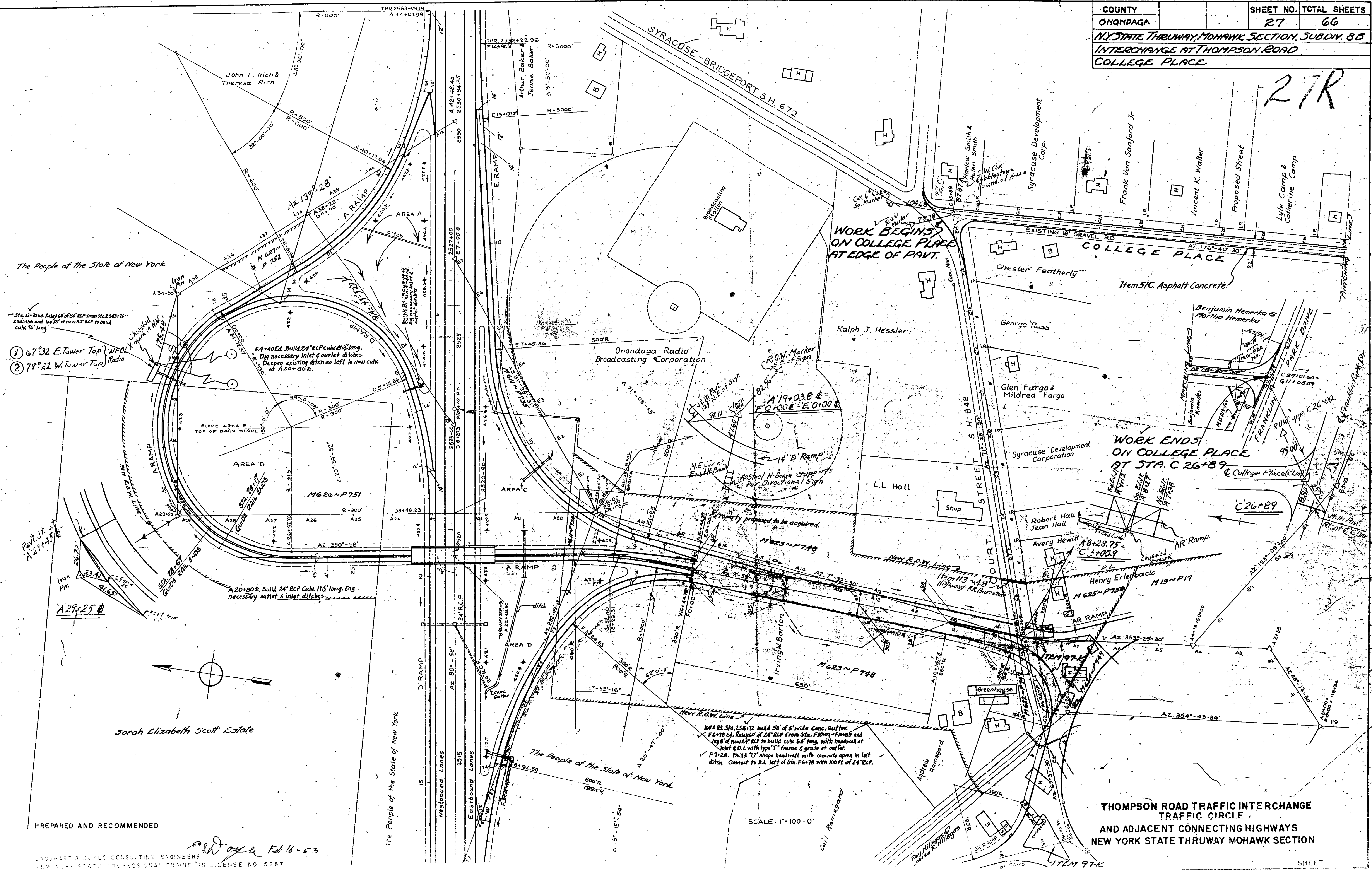
DATE

THOMPSON ROAD TRAFFIC INTERCHANGE
TRAFFIC CIRCLE
AND ADJACENT CONNECTING HIGHWAYS
NEW YORK STATE THRUWAY MOHAWK SECTION

SHEET

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	27	66
N.Y. STATE THRUWAY, MOHAWK SECTION, SUBDIV. B8		
INTERCHANGE AT THOMPSON ROAD		
COLLEGE PLACE		

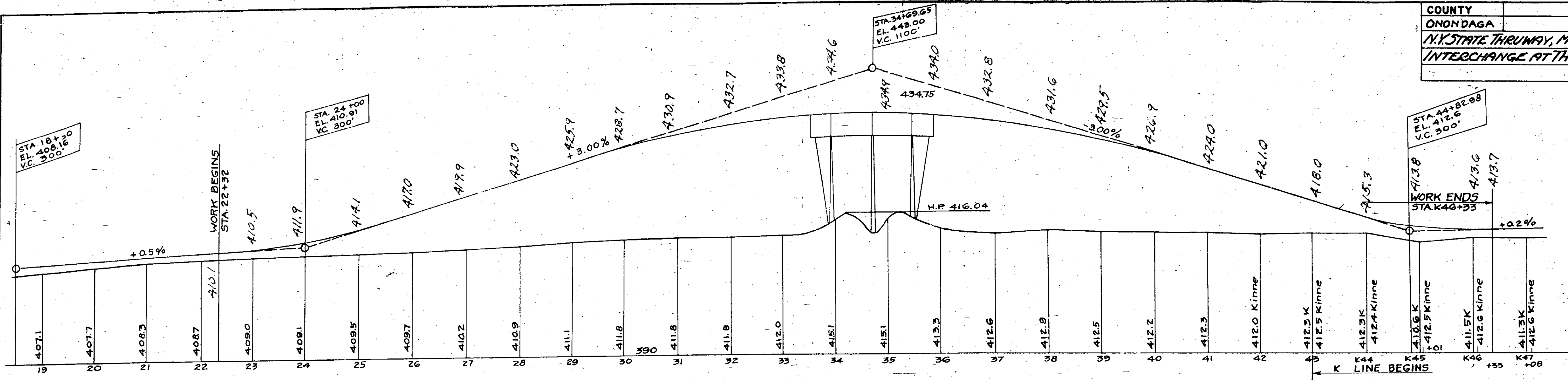
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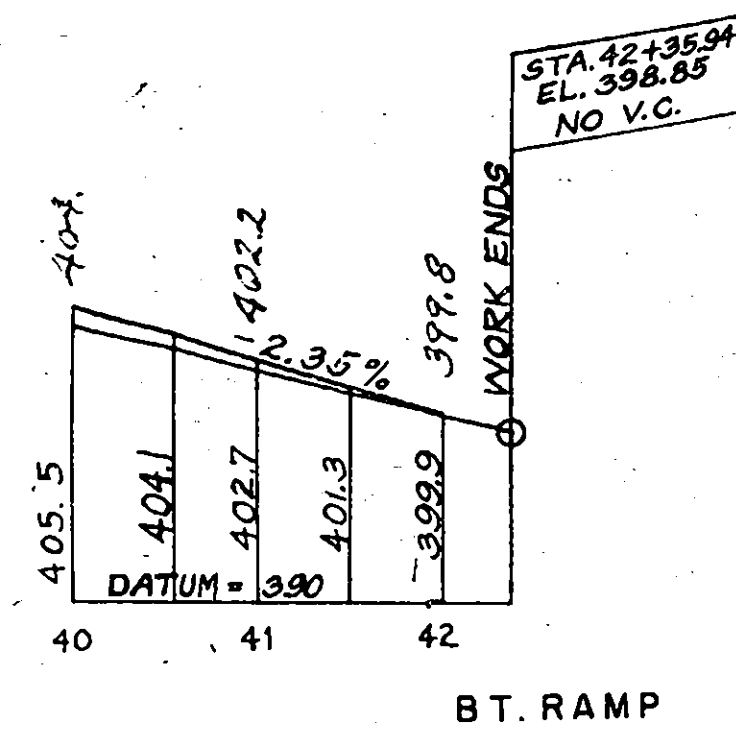
THOMPSON ROAD TRAFFIC INTERCHANGE
TRAFFIC CIRCLE
AND ADJACENT CONNECTING HIGHWAYS
NEW YORK STATE THRUWAY MOHAWK SECTION

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	31	66
N.Y. STATE THRUWAY, MOHAWK SECTION SUBDIV. 8D		
INTERCHANGE AT THOMPSON ROAD		

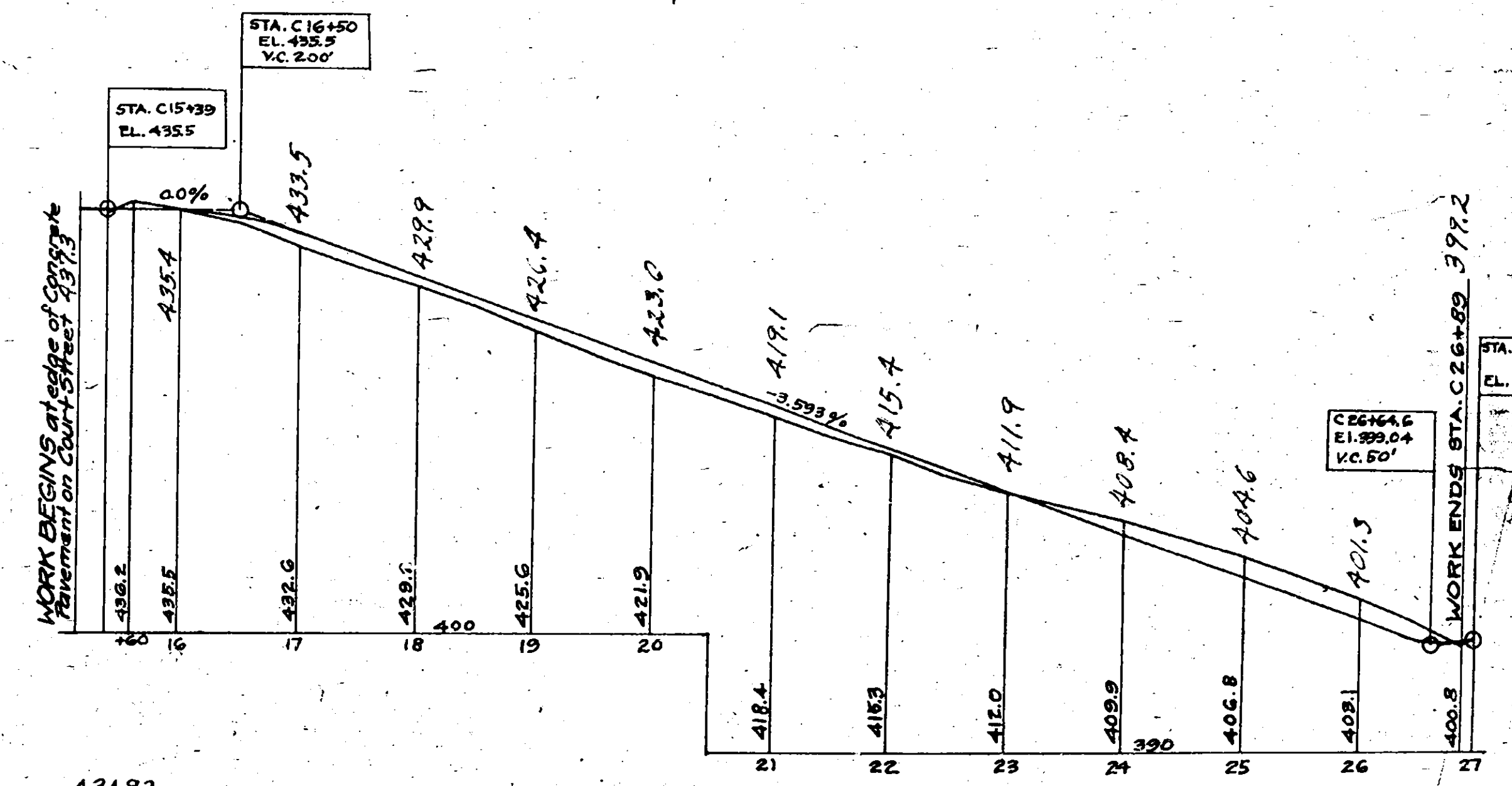
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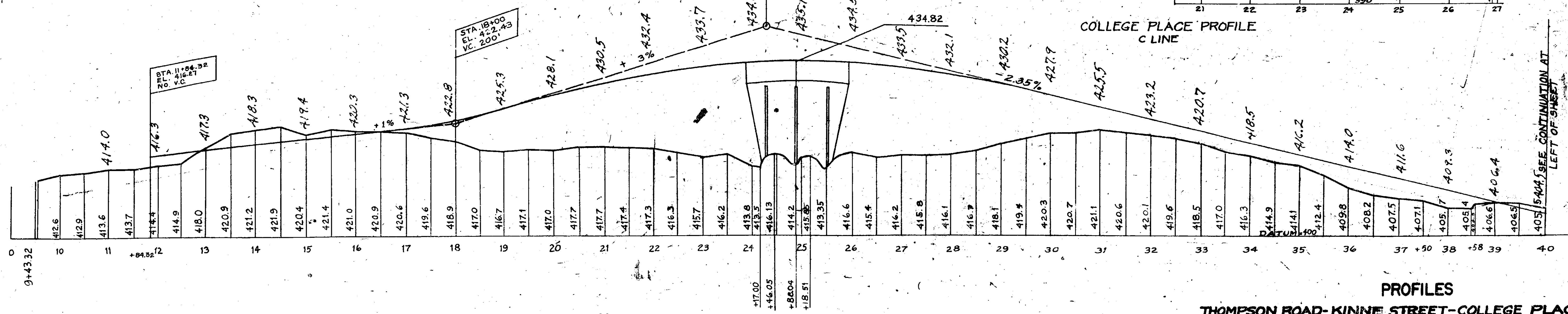
KINNE STREET PROFILE



BT. RAMP



COLLEGE PLACE PROFILE
C LINE



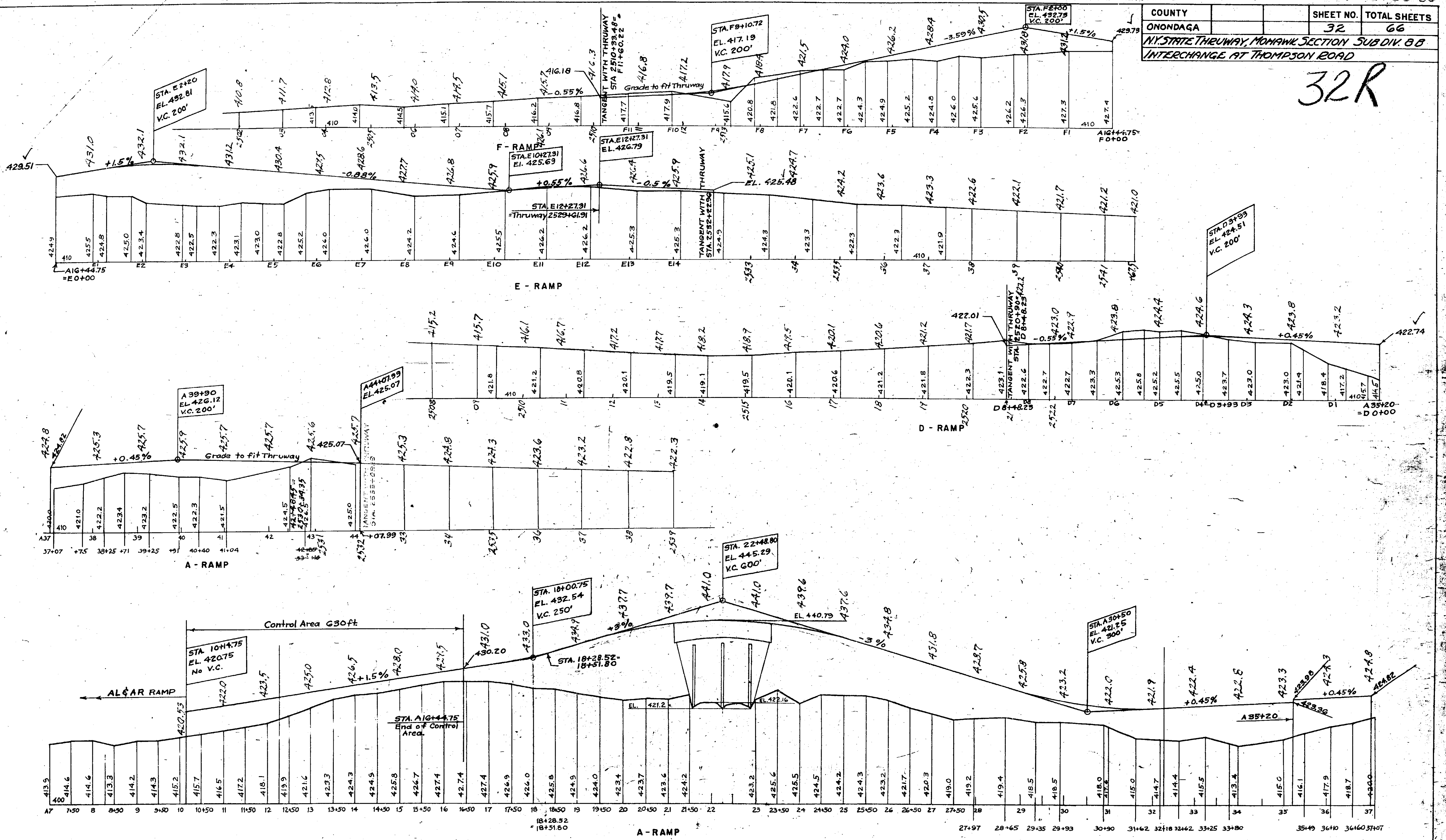
THOMPSON ROAD PROFILE
B LINE

PROFILES
THOMPSON ROAD-KINNE STREET-COLLEGE PLACE
MOHAWK SECTION
NEW YORK STATE THRUWAY

HOR. 1" = 100'-0"
SCALE: VERT. 1" = 10'-0"

for 30-53

32R



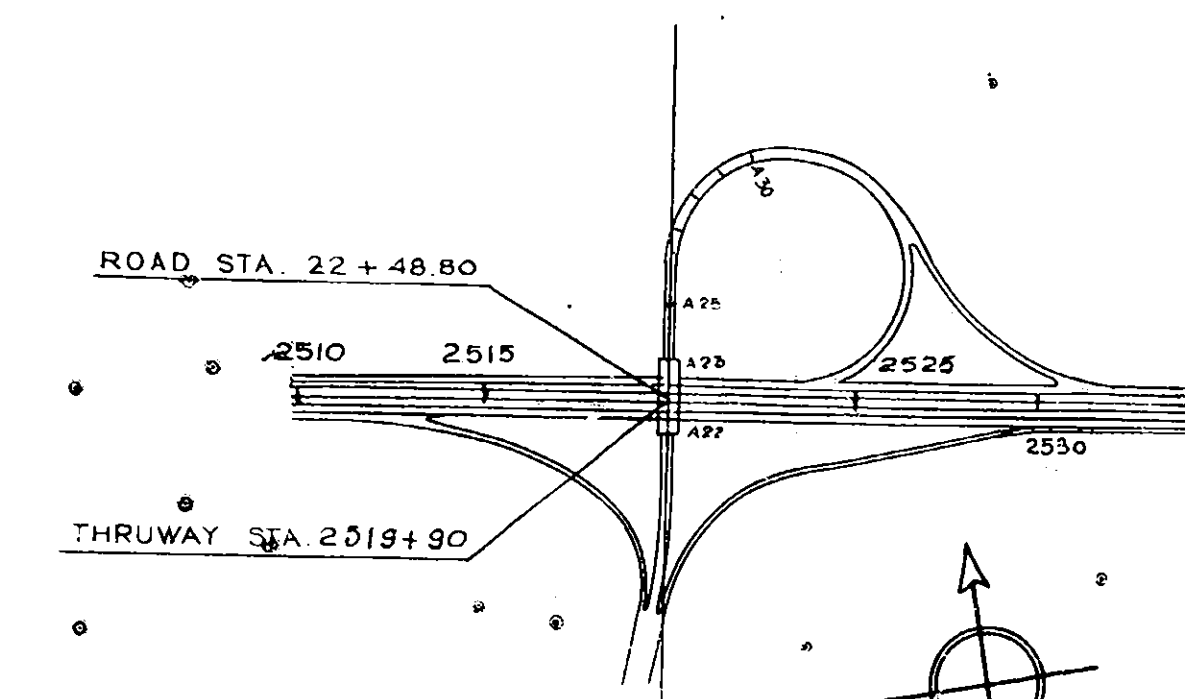
PREPARED AND RECOMMENDED:

 J. J. DOYLE Jan 30-53
 HIRSHWART & DOYLE CONSULTING ENGINEERS
 NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO 5667

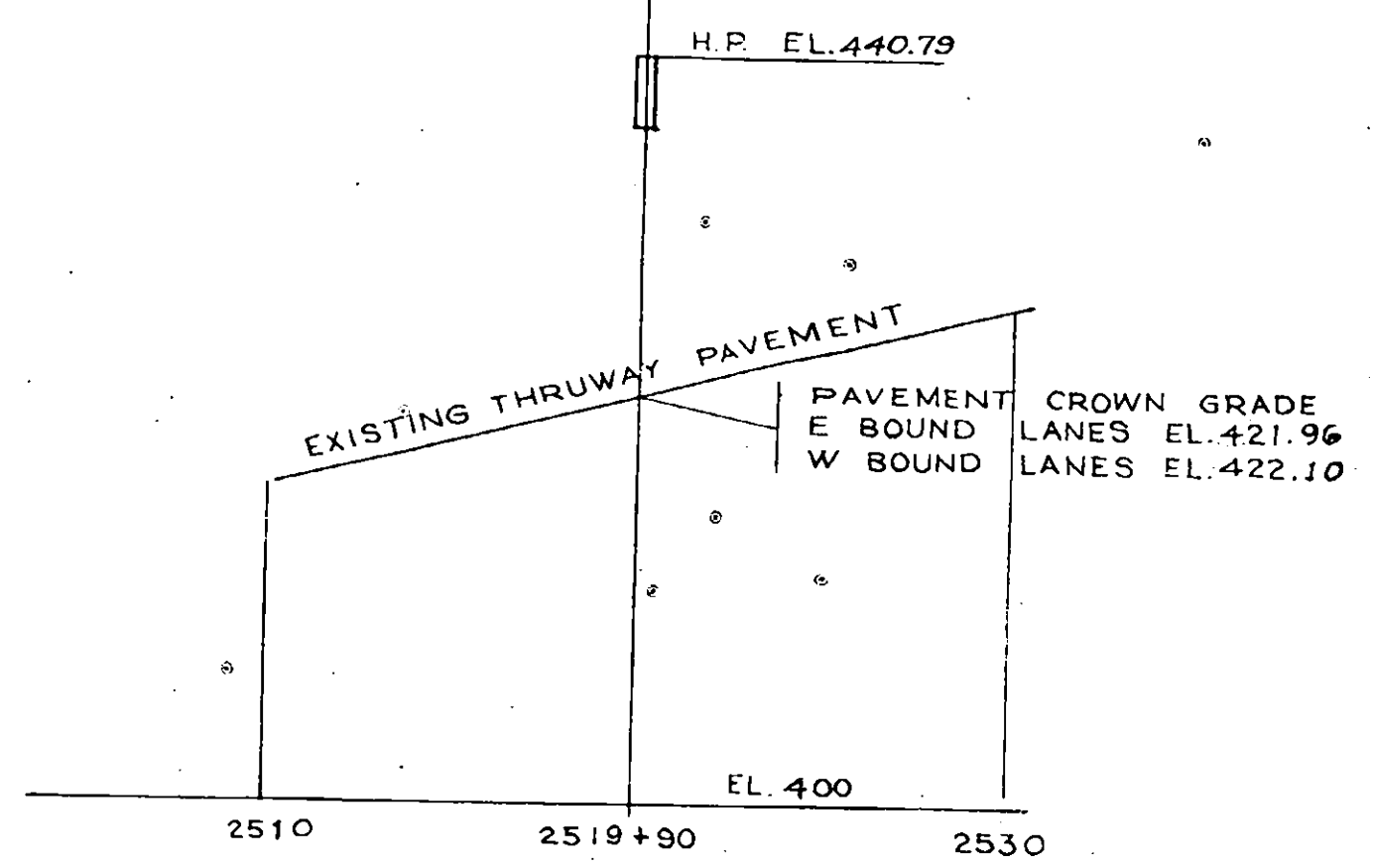
SCALE: HOR. 1"=100'
 VERT. 1"=10'

PROFILES
 THOMPSON ROAD INTERCHANGE
 MOHAWK SECTION
 NEW YORK STATE THRUWAY
 SHEET 32 OF 66

COUNTY		SHEET NO.	TOTAL SHEETS
ONONDAGA		44	66
N.Y. STATE THRUWAY, MOHAWK SECTION, SUBDIV. 8B			
INTERCHANGE AT THOMPSON ROAD			

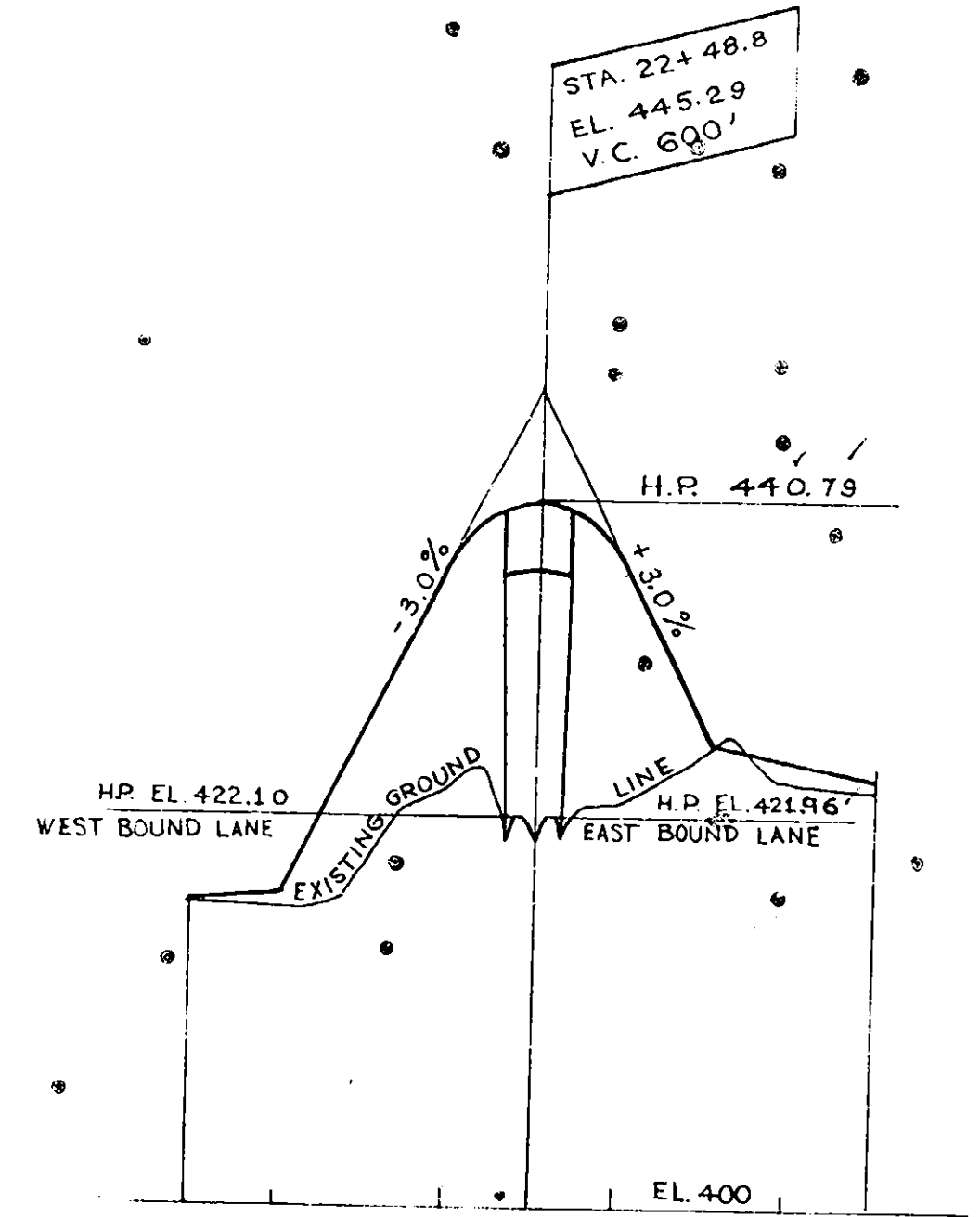


PLAN
SCALE 1"=500'



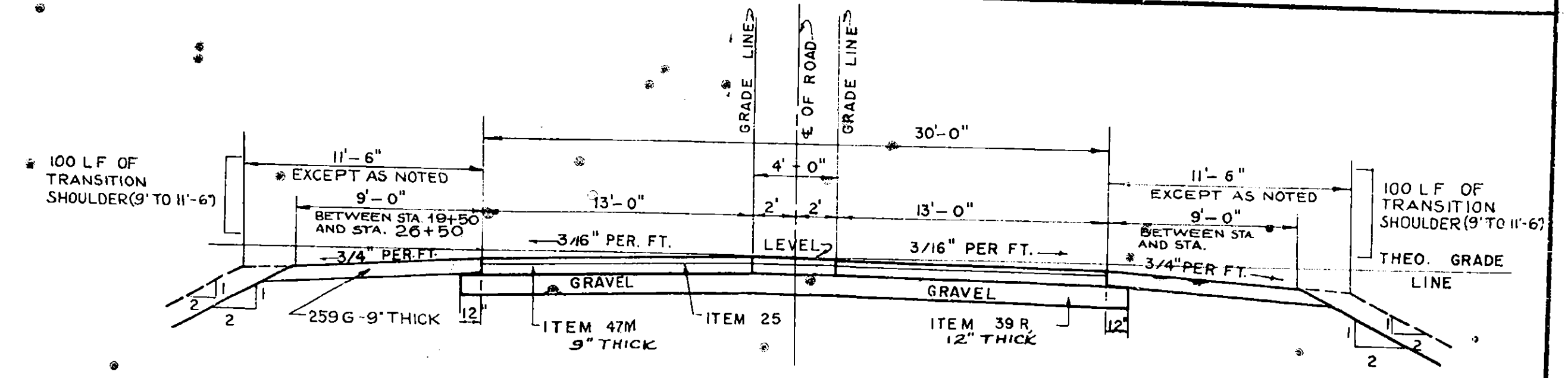
THRUWAY PROFILE

SCALES HOR 1"=500'
VERT 1"=10'

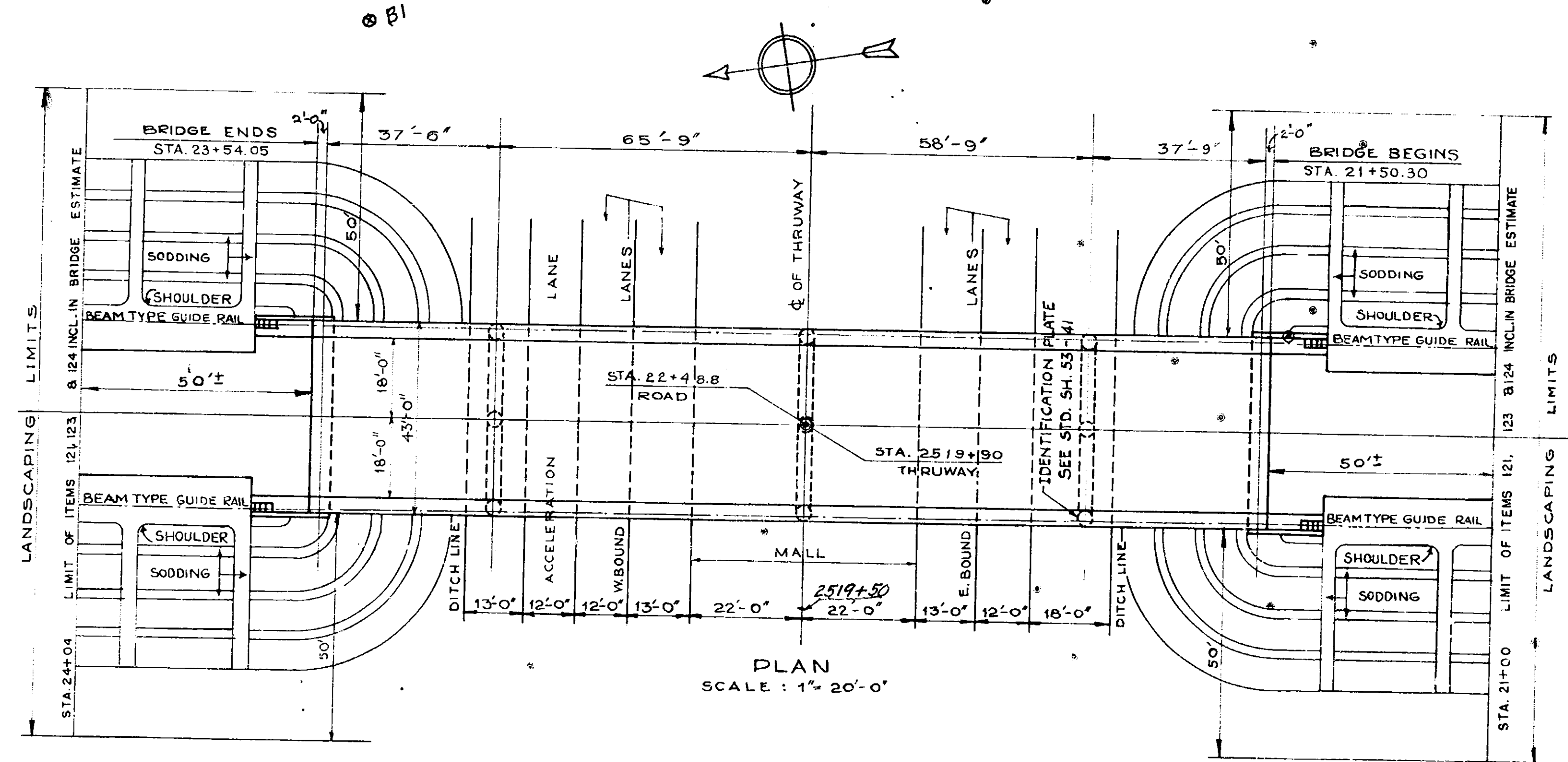


ROAD PROFILE

SCALES HOR 1"=500'
VERT 1"=10'



APPROACH SECTION
SCALE 3/16"=1'-0"



PLAN
SCALE 1"=20'-0"

DEPARTMENT OF PUBLIC WORKS

RECOMMENDED *W.M. Robinson* 7/1/53
WM. ROBINSON
DISTRICT ENGINEER
DATE

APPROVED *E.T. Gawkins* 7/1/53
E.T. GAWKINS
DEPUTY CHIEF ENGINEER
DATE

E.W. WENDELL
DEPUTY CHIEF ENGINEER
DATE

J.B. McMorran 7/1/53
J.B. MCMORRAN
CHIEF ENGINEER
DATE

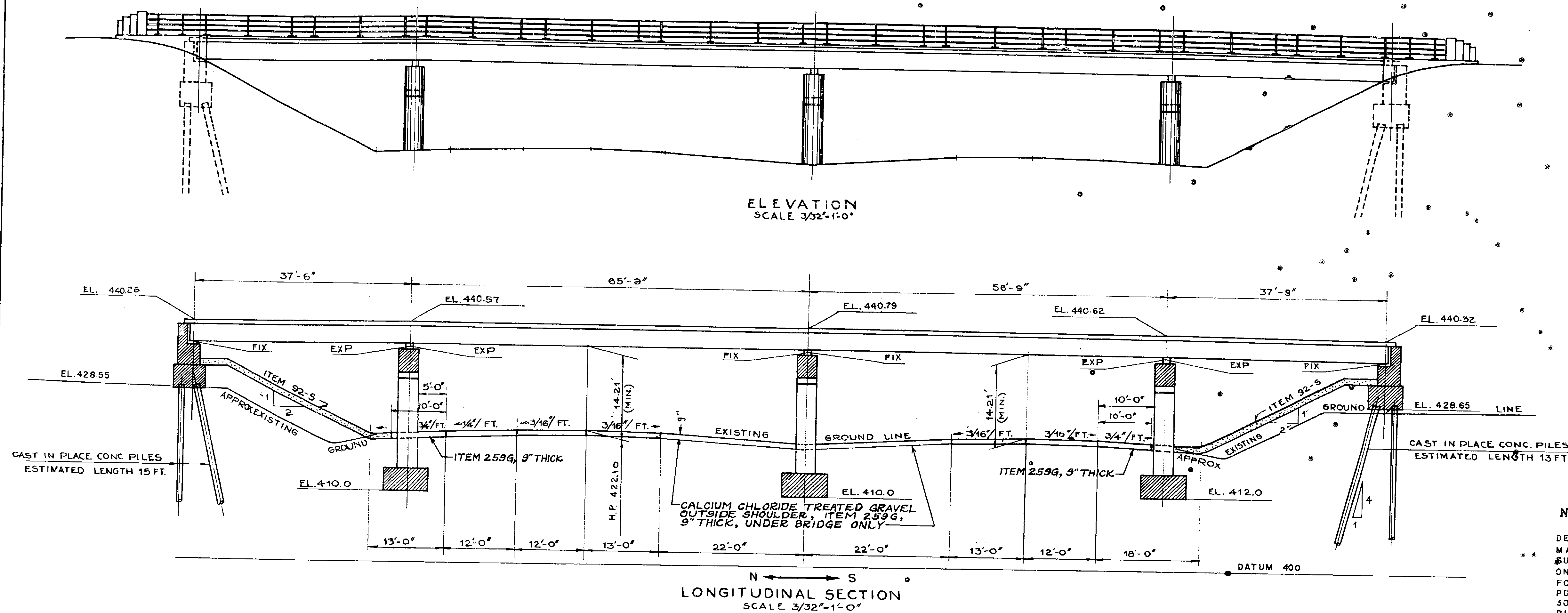
APPROVED *February 16* 1953
NEW YORK STATE THRUWAY AUTHORITY

B.D. TALLAMY CHAIRMAN
BY C.H. LANG
C.H. Lang
DEPUTY CHIEF ENGINEER

PRELIMINARY LAYOUT
THOMPSON ROAD INTERCHANGE
MOHAWK SECTION
NEW YORK STATE THRUWAY

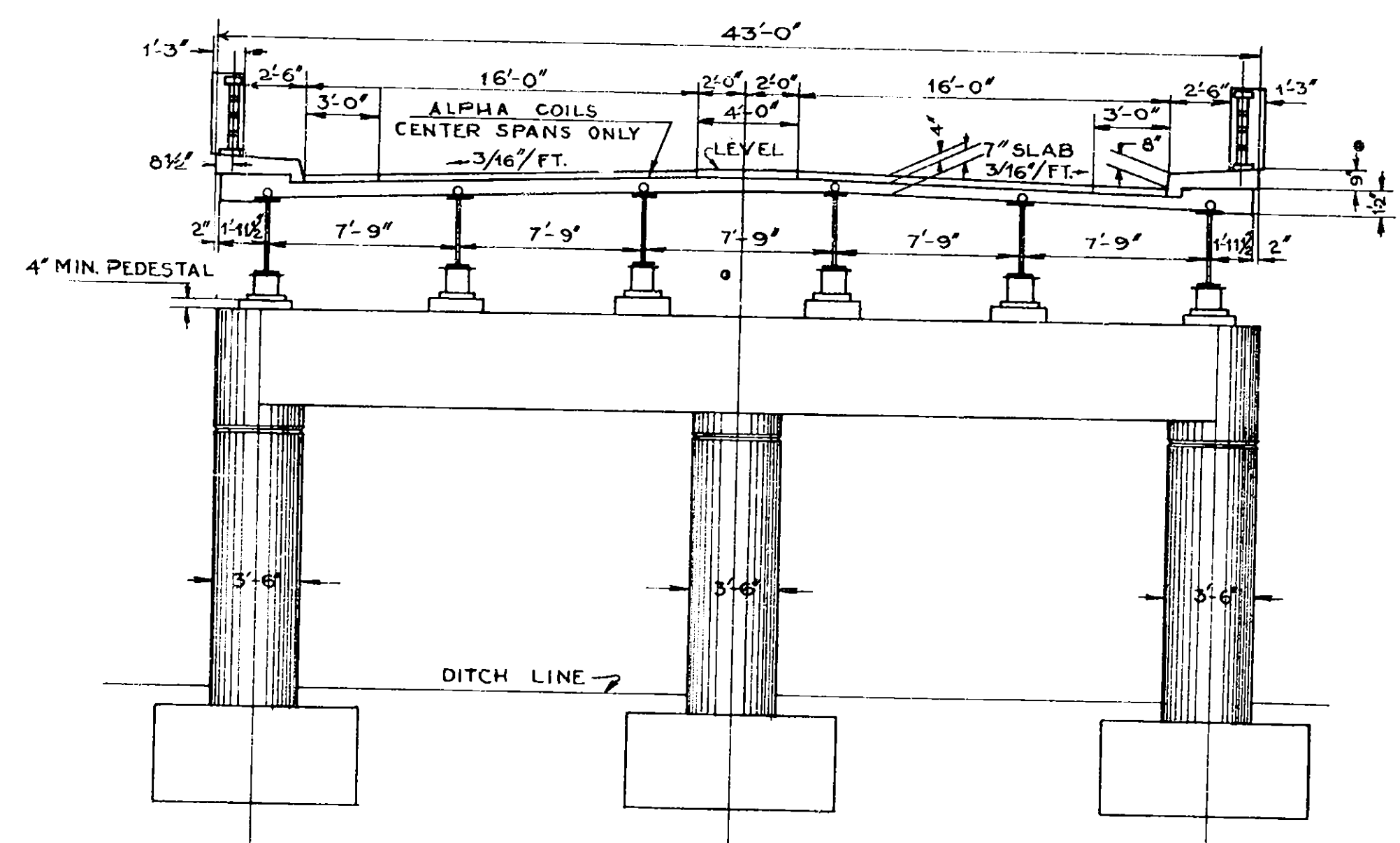
PREPARED AND RECOMMENDED
Urquhart & Doyle
URQUHART & DOYLE, CONSULTING ENGINEERS
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO 5667
DATE

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	45	66
N.Y. STATE THRUWAY, MOHAWK SECTION, SUBDIV. B.B.		
INTERCHANGE AT THOMPSON ROAD		



NOTE:

DESIGN SPECIFICATION A.A.S.H.O. 1949 - H20-S16 LOADING MODIFIED MATERIAL AND FABRICATION SPECIFICATIONS N.Y.S.D.P.W. JAN. 2, 1951. SUPERSTRUCTURE WF BEAMS, COMPOSITE CONSTRUCTION CENTER SPANS ONLY. FOUNDATION TREATMENT OF ABUTMENTS ON PILES; FOR DESIGN PURPOSES, THE ASSUMED LOAD PER PILE DOES NOT EXCEED 30 TONS. PIERS ON SPREAD FOOTINGS; FOR DESIGN PURPOSES, THE ASSUMED FOUNDATION PRESSURE DOES NOT EXCEED 2-1/2 TONS PER SQ. FT. TOP SOILING, SODDING AND SEEDING TO BE SHOWN ON BRIDGE CONTRACT PLANS, AND INCLUDED IN BRIDGE ESTIMATE FOR BOTH APPROACHES TO EXTENT NOTED IN PLAN.



PREPARED AND RECOMMENDED

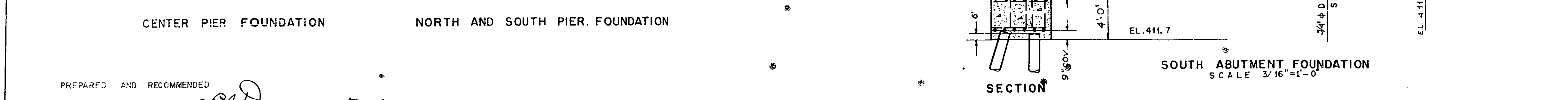
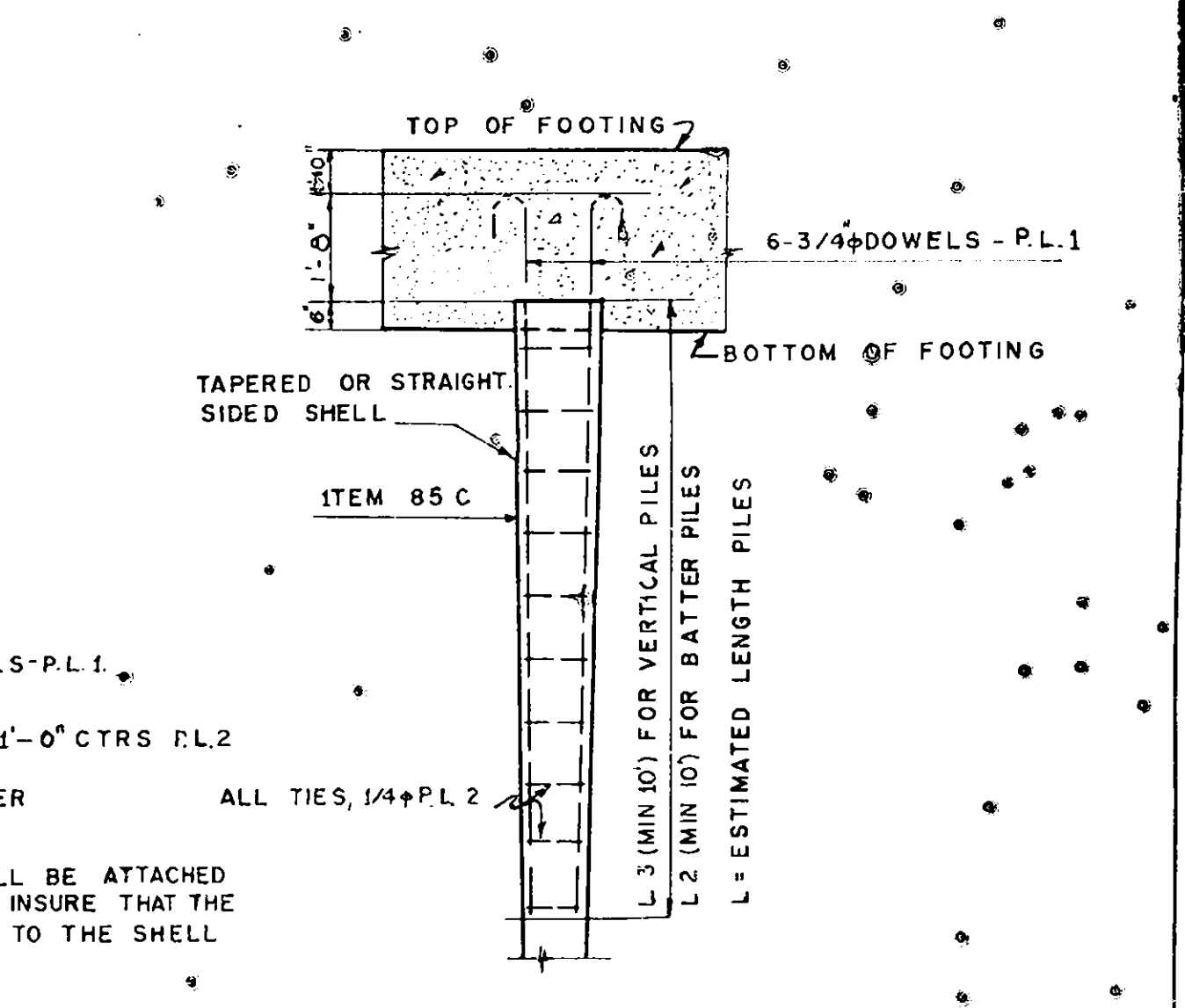
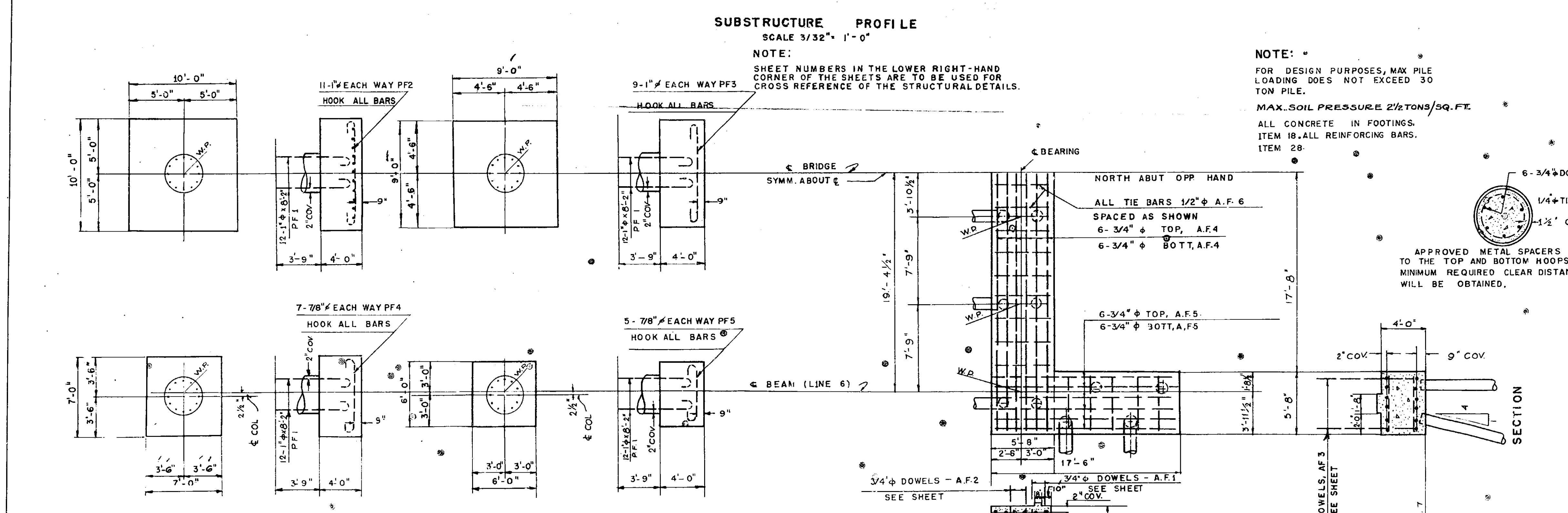
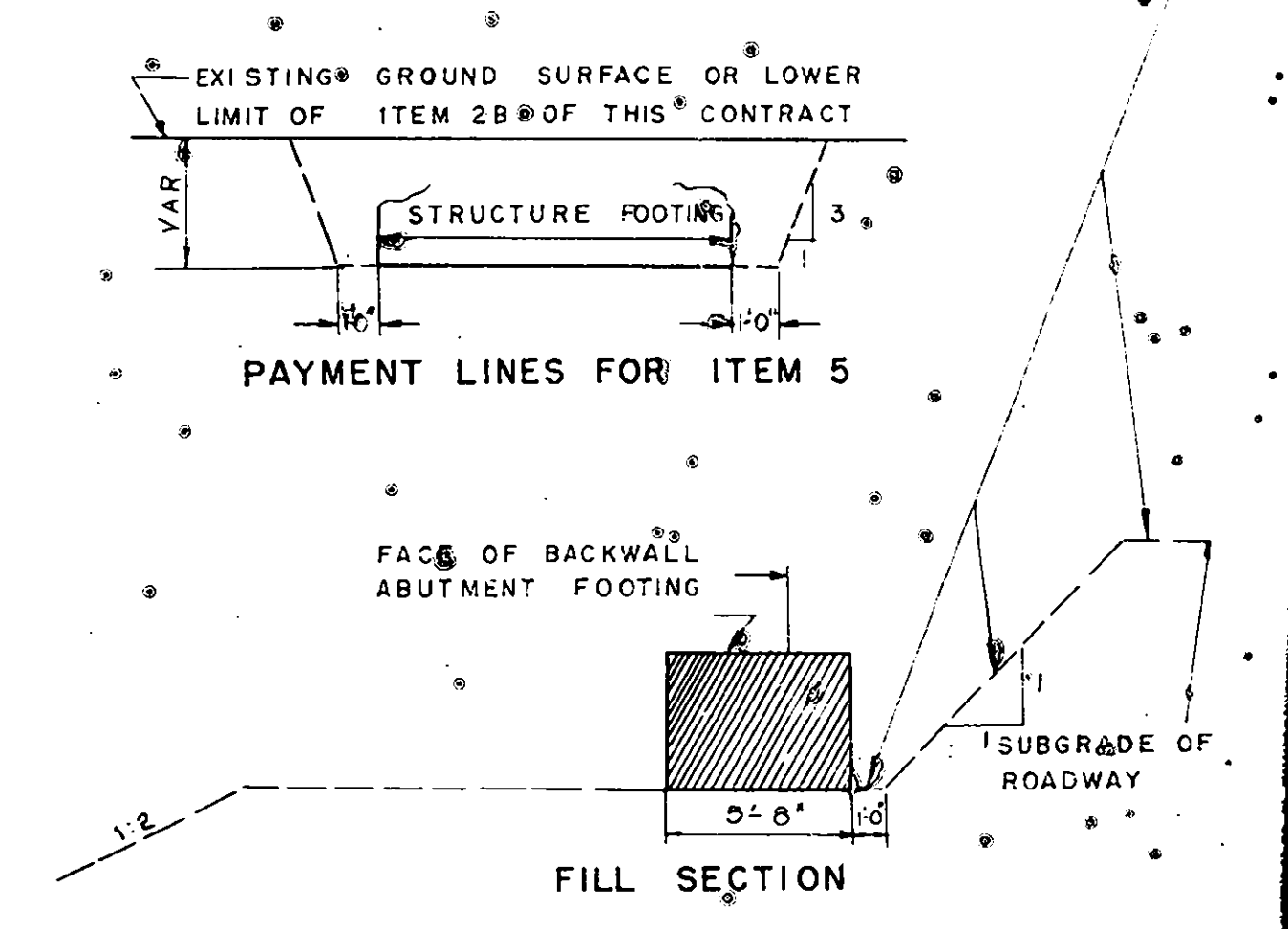
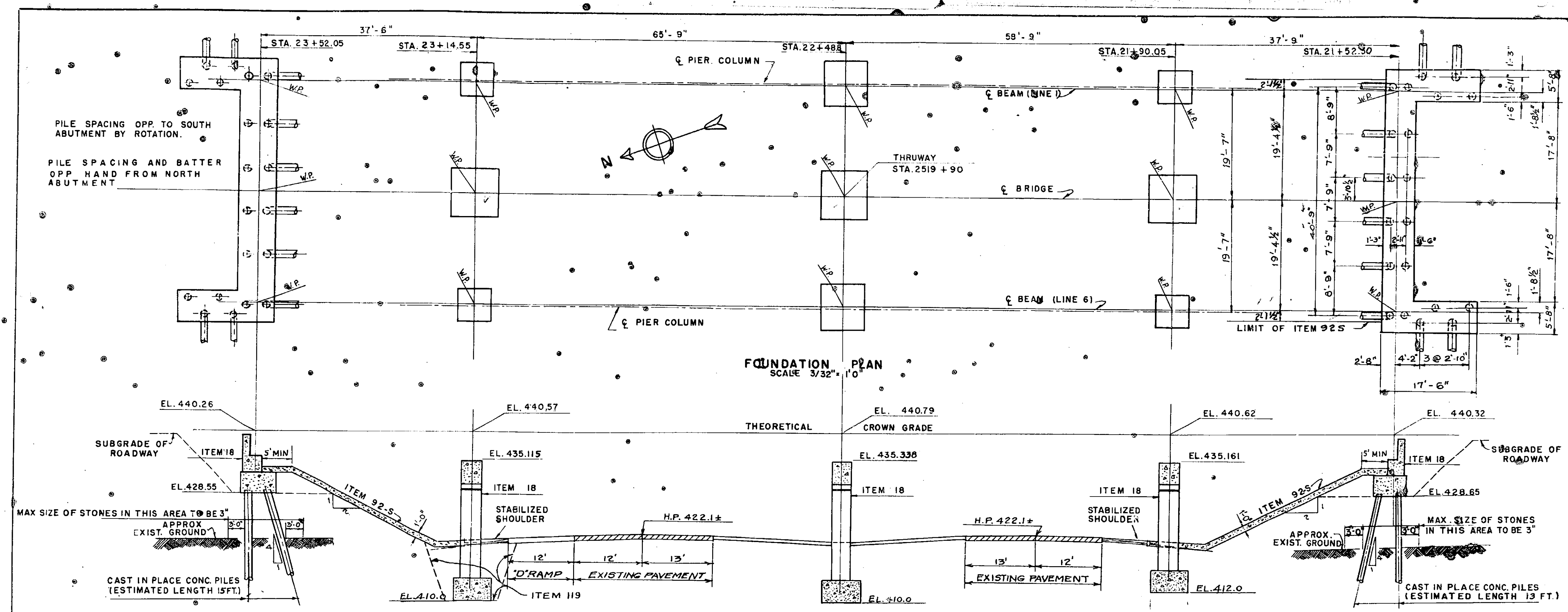
URQUHART & COYLE CONSULTING ENGINEERS
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO. 5667

DATE

PRELIMINARY LAYOUT
THOMPSON ROAD INTERCHANGE
MOHAWK SECTION
NEW YORK STATE THRUWAY

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	46	66
N.Y. STATE THRUWAY, MOHAWK SECTION SUBDIV. 8B		
INTERCHANGE AT THOMPSON ROAD		

NOTE:
PLACING OF PILES AND CONSTRUCTION OF THE ABUTMENTS WILL NOT BE PERMITTED UNTIL THE HIGHWAY EMBANKMENT ADJACENT TO THE STRUCTURE HAS BEEN PLACED AND CONSOLIDATED IN A MANNER AND FOR A PERIOD OF TIME SATISFACTORY TO THE DEPUTY CHIEF ENGINEER (BRIDGES).



CROSS REFERENCE
FOR DETAILS OF ABUTMENTS SEE SHEET 47
FOR DETAILS OF PIERS SEE SHEET 48
FOR DETAILS OF BARS SEE SHEET 54

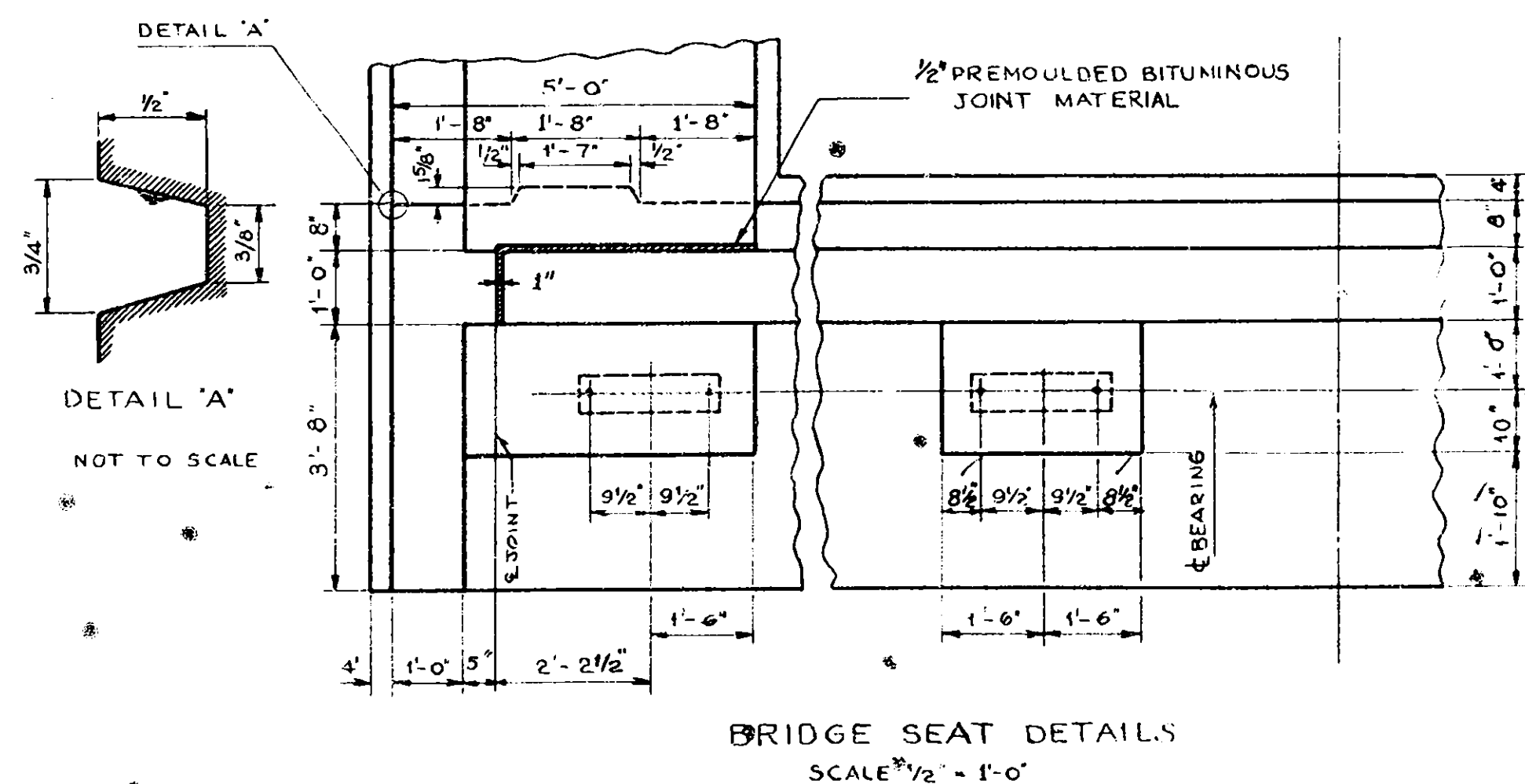
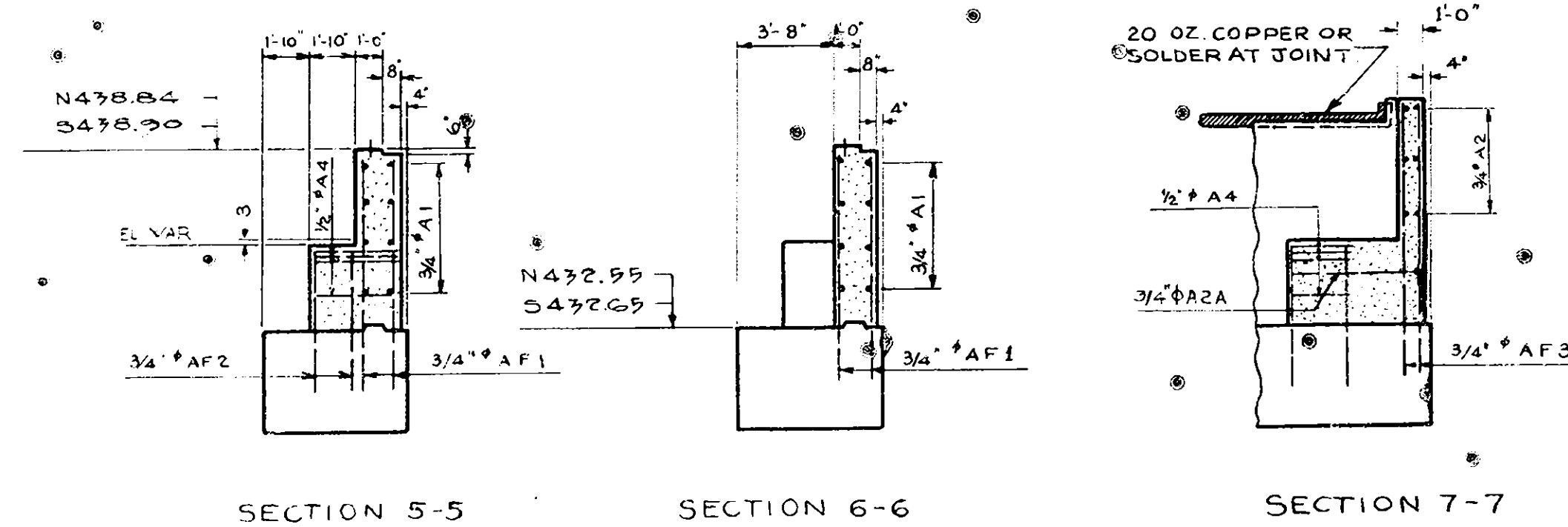
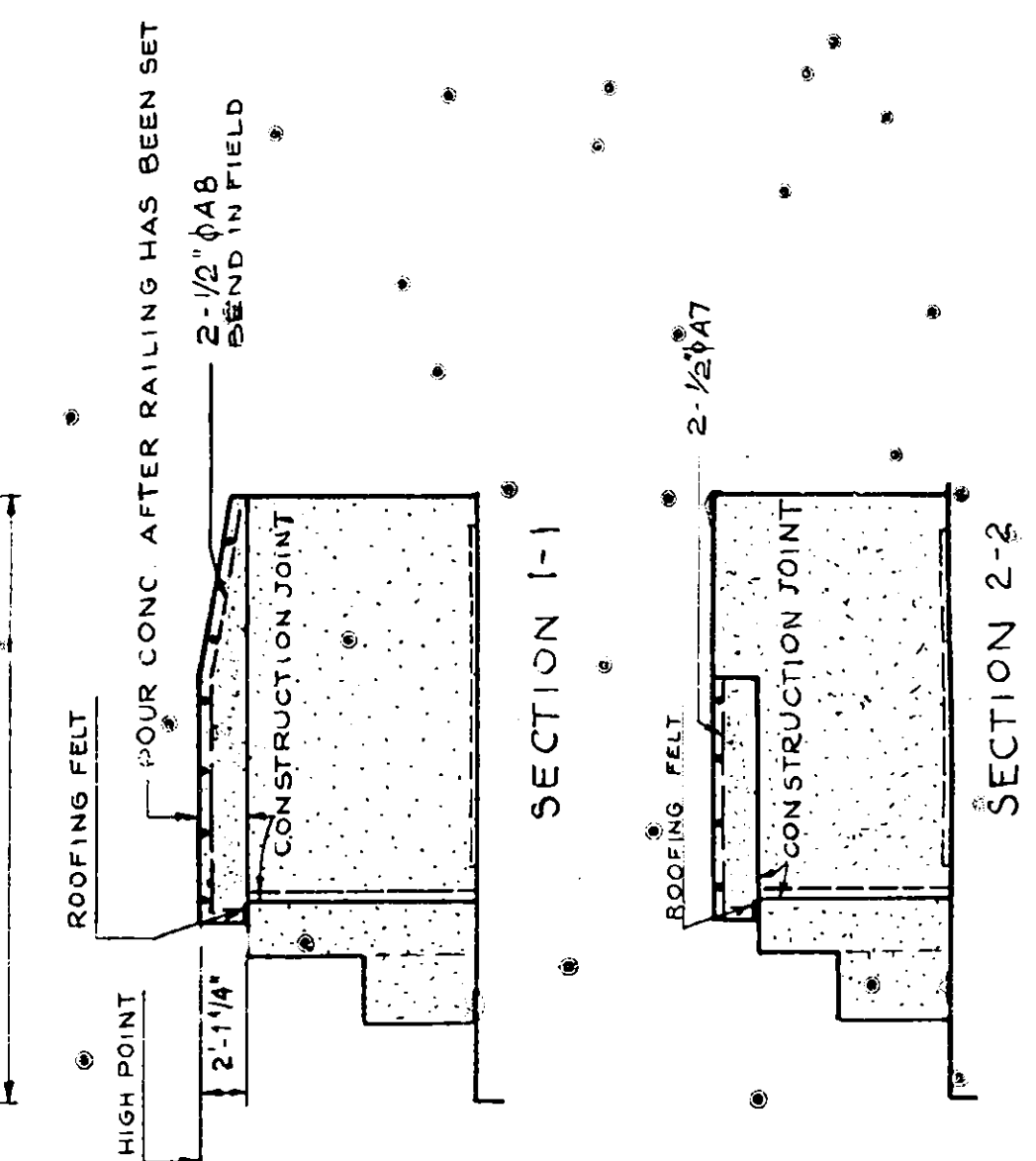
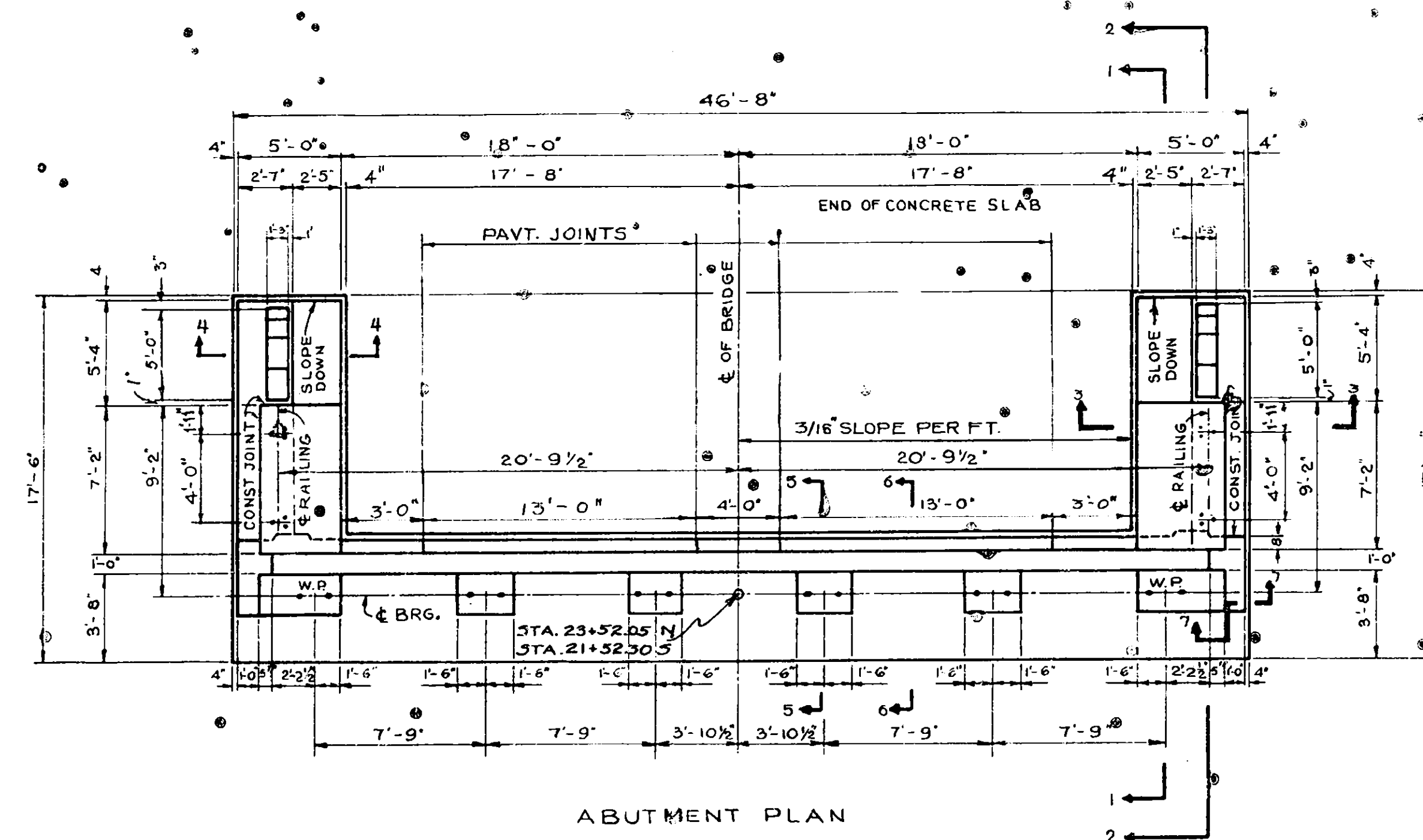
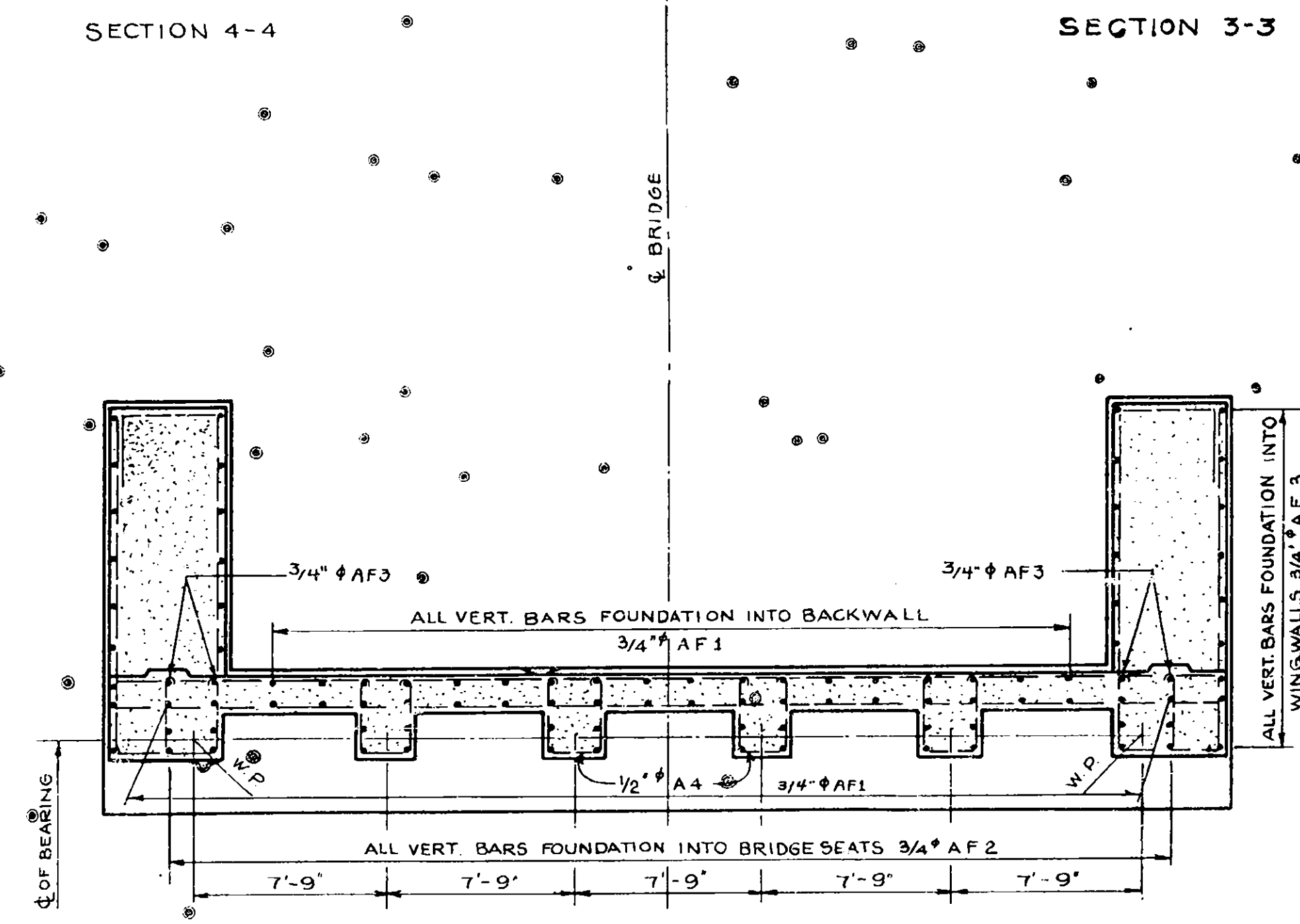
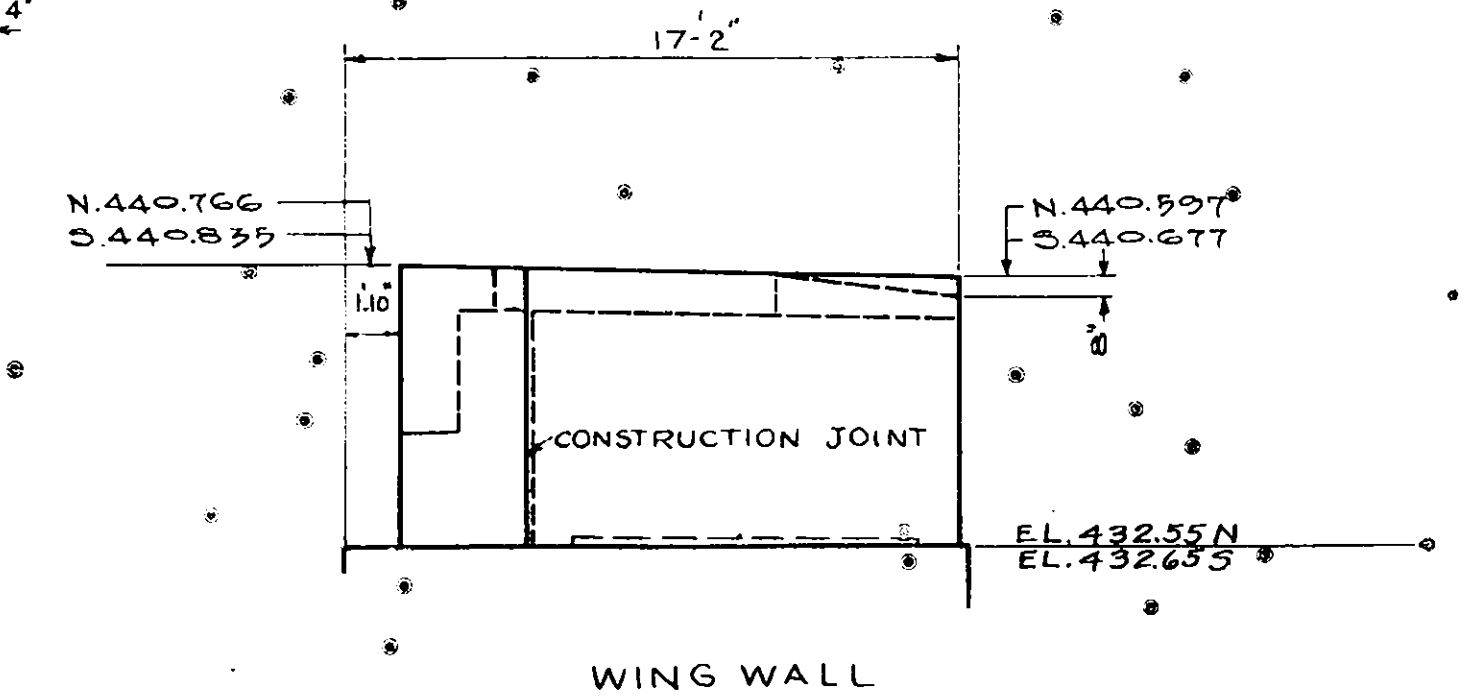
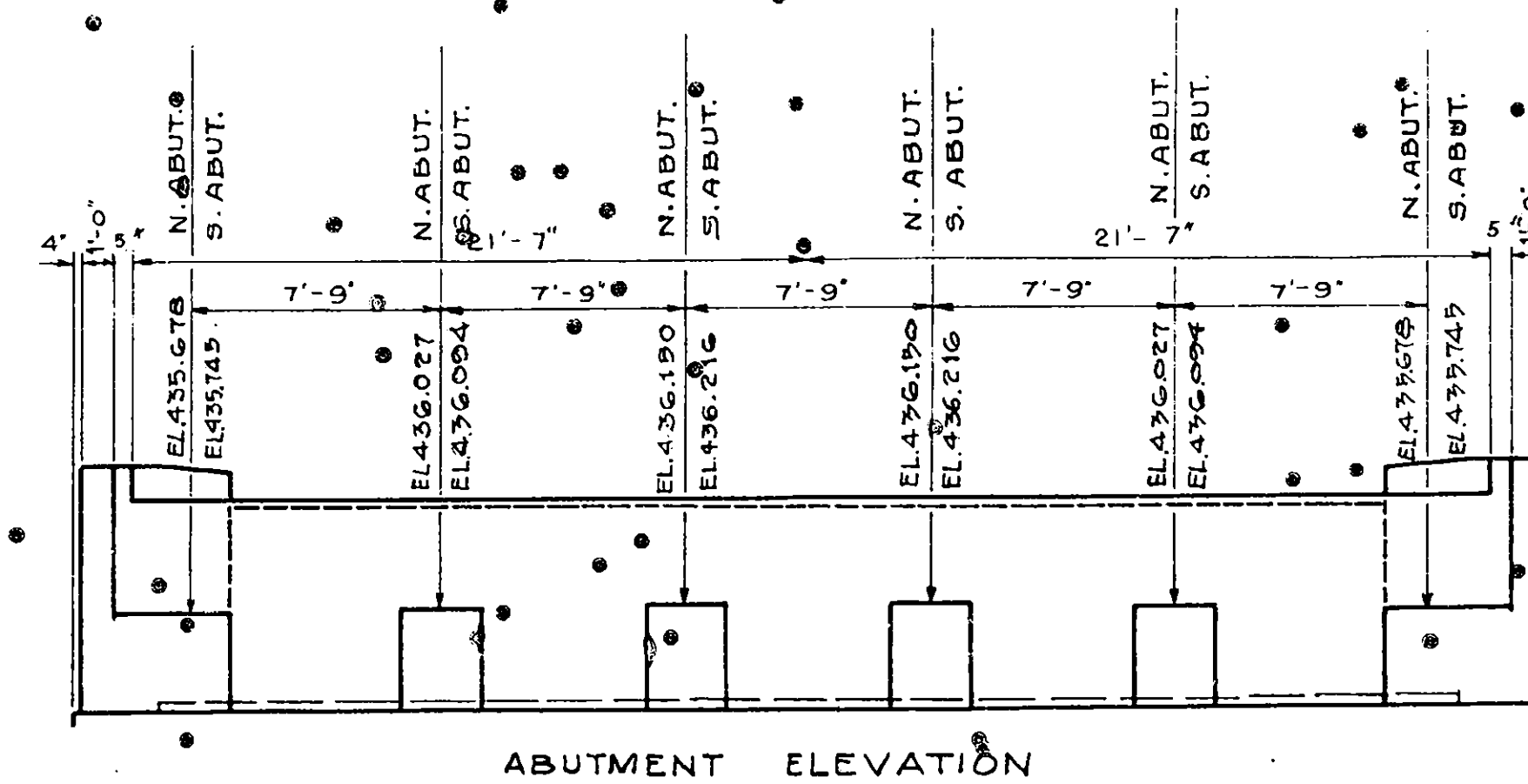
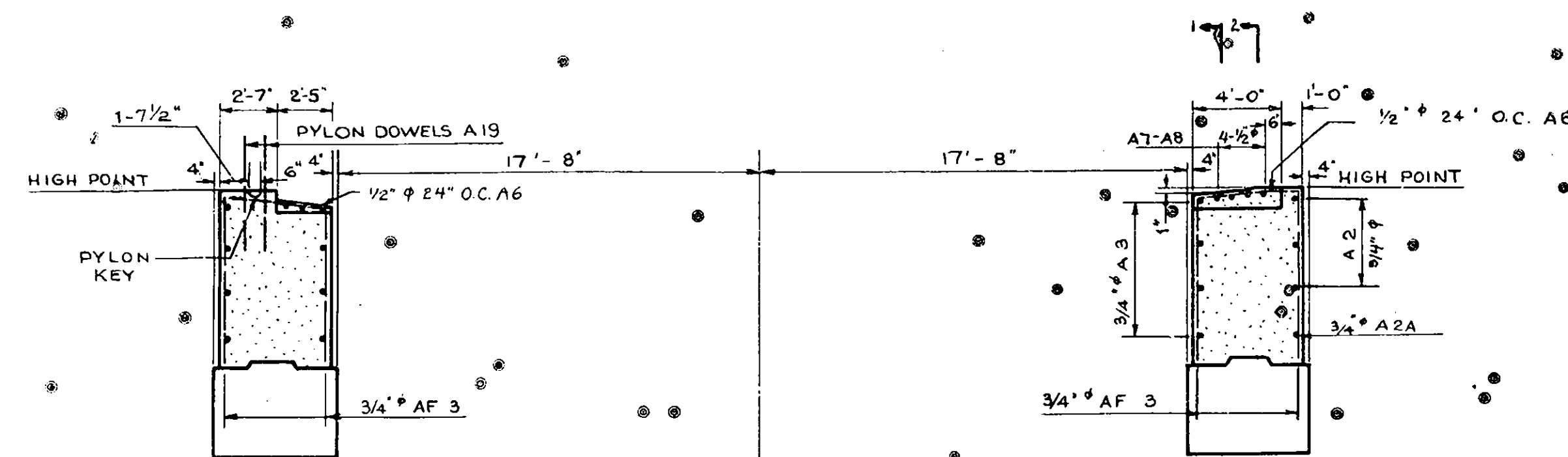
NOTE:
CROSS REFERENCE SHEET NUMBERS ARE THOSE SHOWN IN THE LOWER RIGHT HAND CORNER OF THE SHEETS.

SUBSTRUCTURE DETAILS
THOMPSON ROAD INTERCHANGE
MOHAWK SECTION
NEW YORK STATE THRUWAY

SHEET 46

PREPARED AND RECOMMENDED
URQUHART & DOYLE CONSULTING ENGINEERS
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO 5667
DATE FEB 16 1953

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	47	66
NY STATE THRUWAY, MOHAWK SECTION SUBDIV. 88 INTERCHANGE AT THOMPSON ROAD		



SCALE 3/16" = 1'-0", EXCEPT AS SHOWN

* CROSS REFERENCE

FOR LAYOUT OF ABUTMENTS SEE SHEET 46 *
FOR DETAILS OF REINFORCING BARS SEE SHEET 54 *
FOR DETAILS OF ANCHOR BOLTS SEE SHEET 52 *
FOR DETAILS OF ABUTMENT FOUNDATION SEE SHEET 46 *
FOR DETAILS OF PYLONS SEE SHEET 53 *
FOR DETAILS OF RAILING SEE SHEET 52 *
FOR STRINGER LAYOUT SEE SHEET 49

SUBSTRUCTURE DETAILS

THOMPSON ROAD INTERCHANGE

MOHAWK SECTION

NEW YORK STATE THRUWAY

SHEET 47

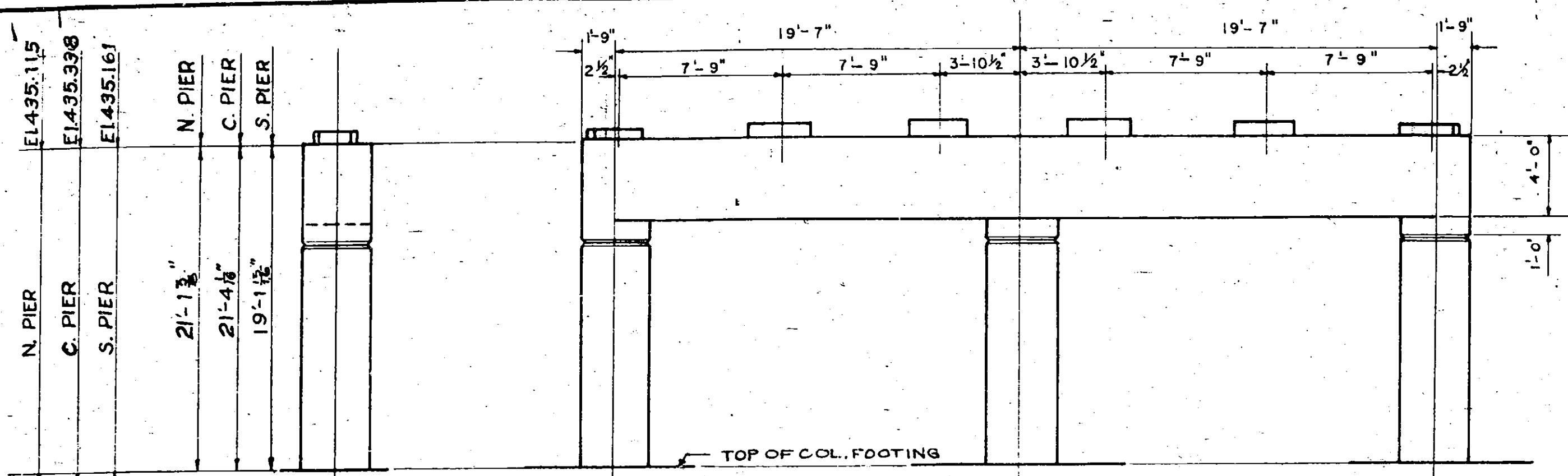
URQUHART & DOYLE^o CONSULTING ENGINEERS
NEW YORK STATE PROFESSIONAL ENGINEERS

LICENSE NO. 5667

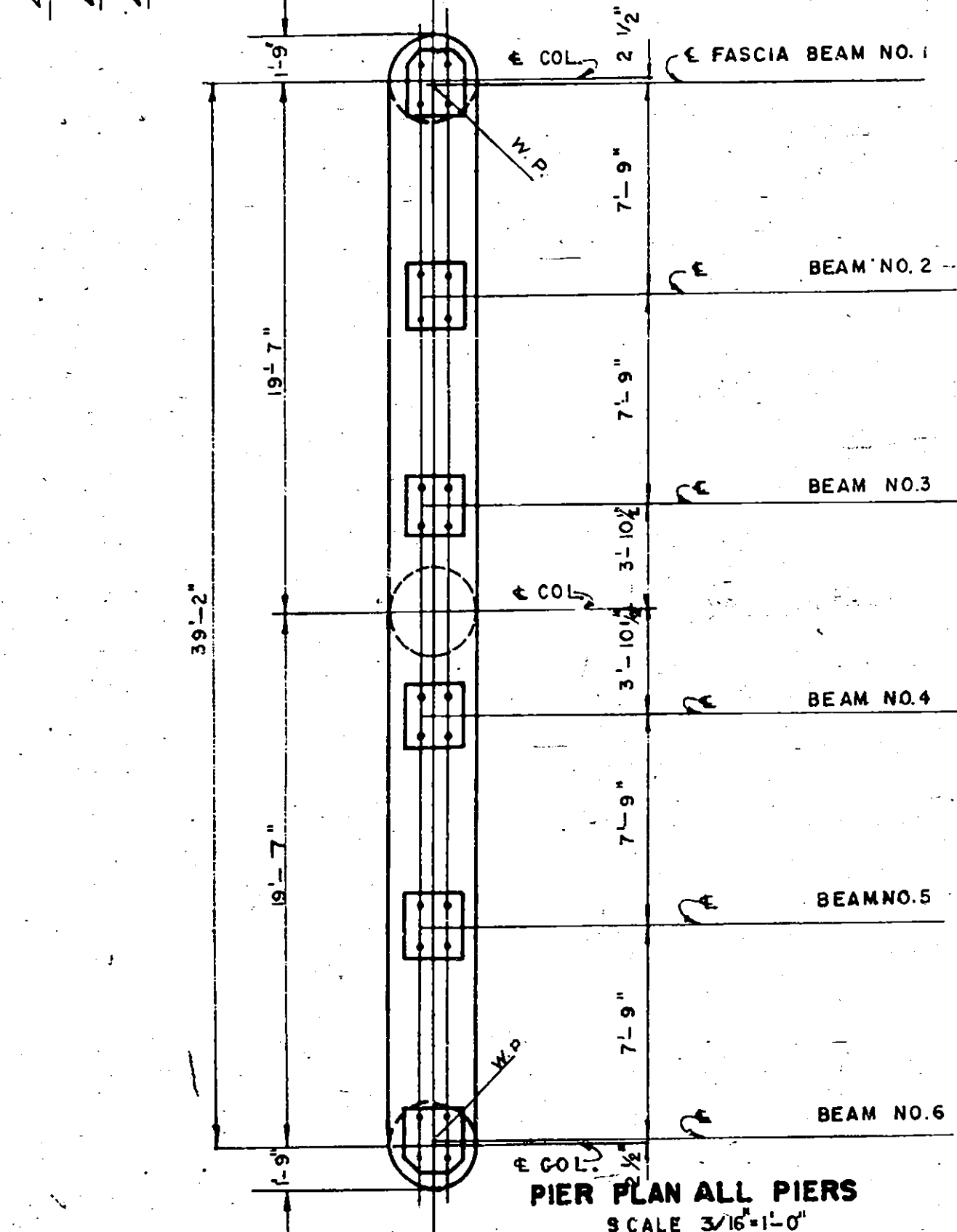
DATE _____

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	48	64
STATE THRUWAY, MOHAWK SECTION, SUBDIV. 8B		
INTERCHANGE AT THOMPSON ROAD		

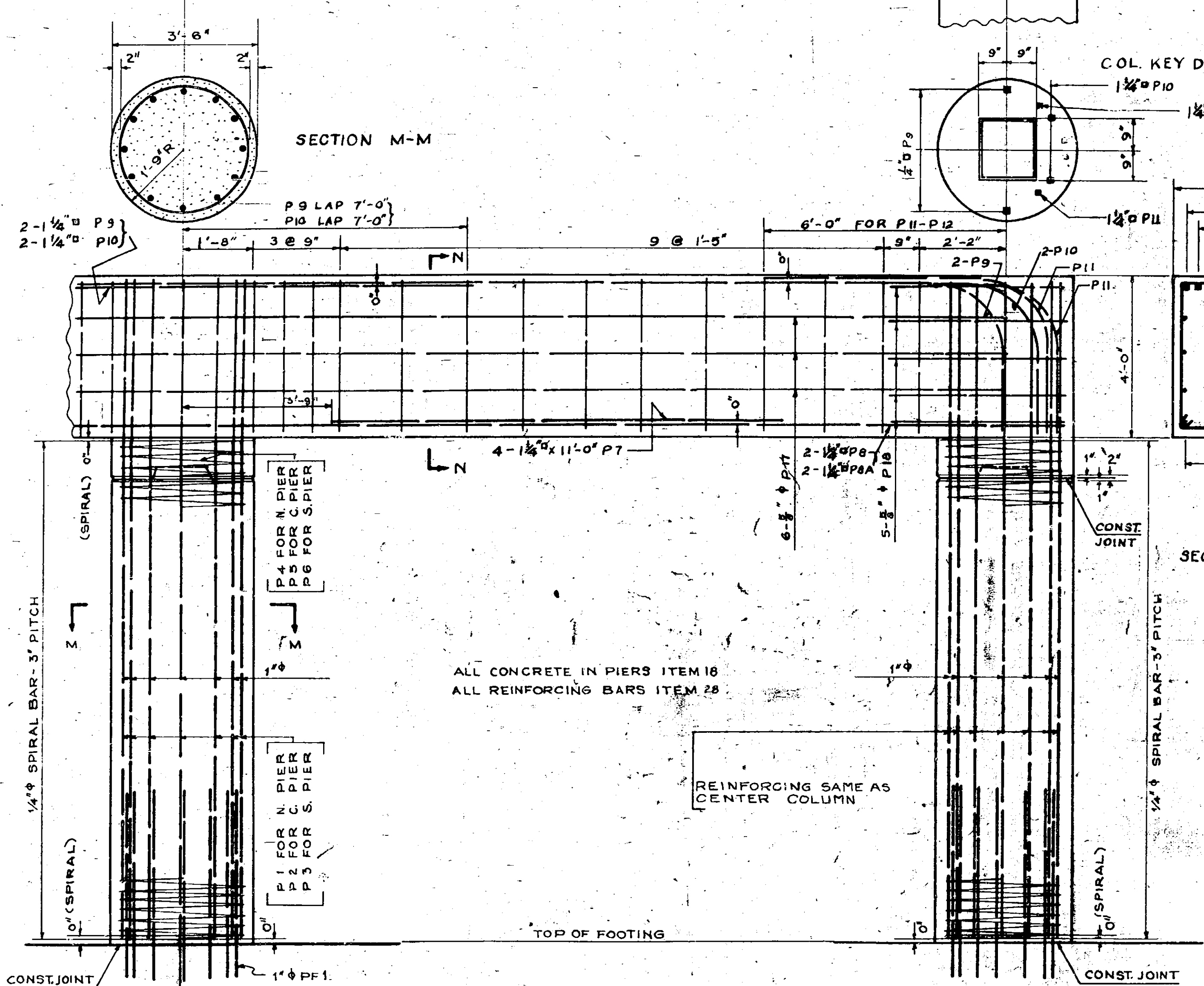
48R



SIDE ELEVATION ALL PIERS
SCALE 3/16"=1'-0"



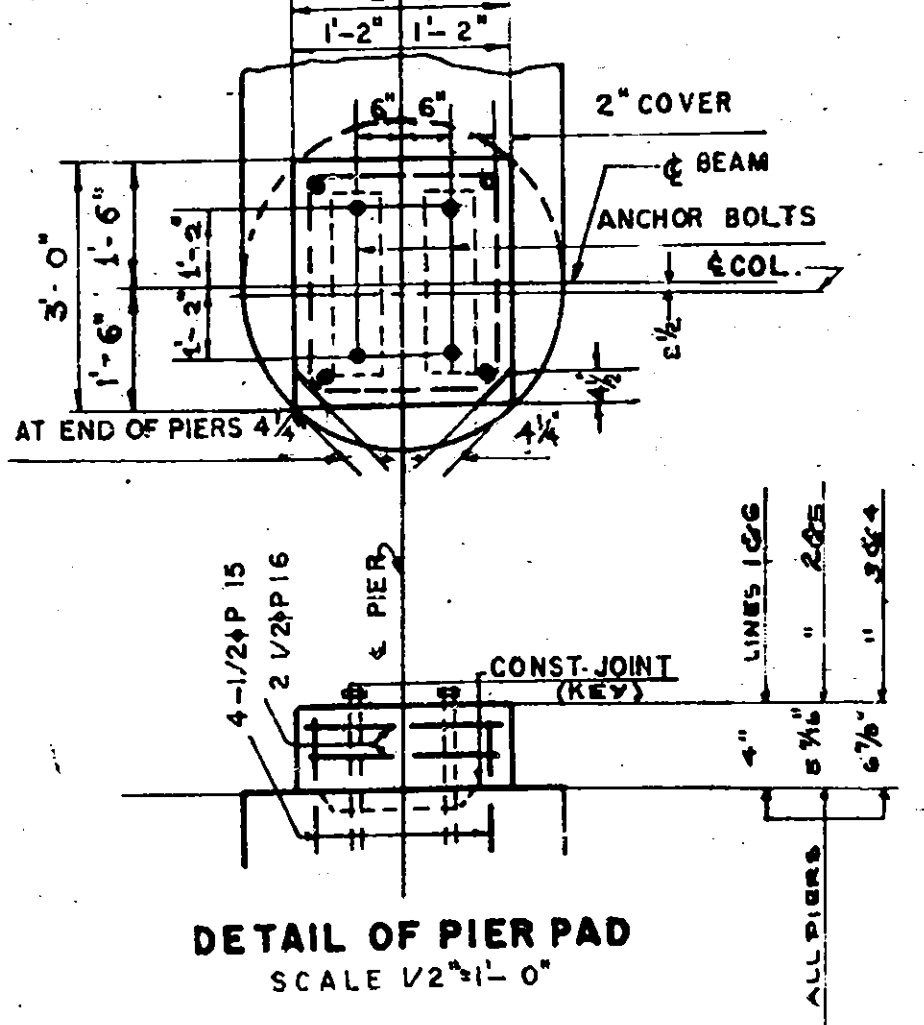
PIER PLAN ALL PIERS
SCALE 3/16"=1'-0"



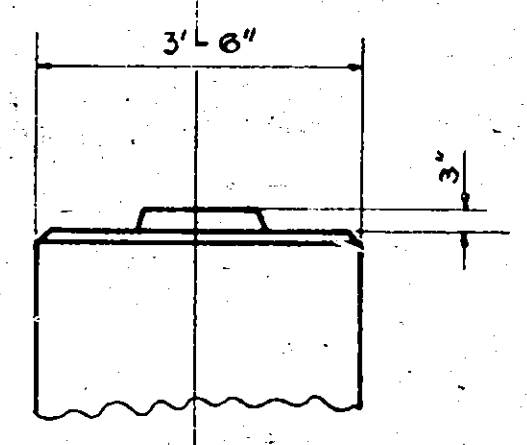
PIER DETAILS - ALL PIERS
SCALE 1/4"=1'-0"

CROSS REFERENCE

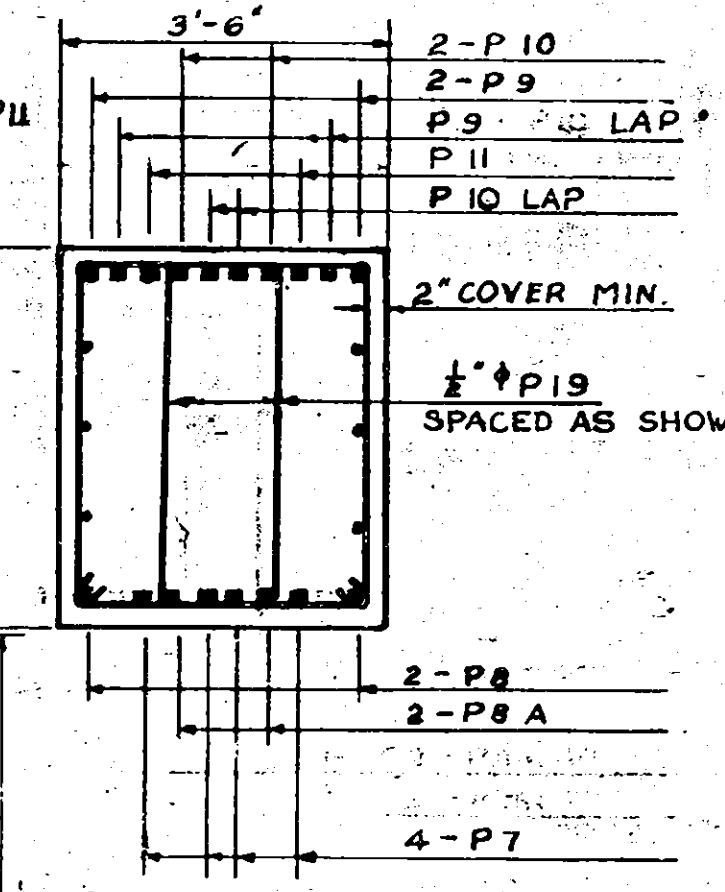
FOR LAYOUT OF PIERS SEE SHEET 46
FOR DETAILS OF REINFORCING BARS SEE SHEET 54
FOR DETAILS OF PIER FOUNDATIONS SEE SHEET 46
FOR DETAILS OF ANCHOR BOLTS SEE SHEET 52



DETAIL OF PIER PAD
SCALE 1/2"=1'-0"



COL. KEY DETAILS



SECTION N-N

ITEM NO.	DESCRIPTION	UNIT	NEAT	ROUNDED
5	TRENCH CULVERT & BRIDGE EXCAVATION	CY.	260	300
15-2	PORTLAND CEMENT, TYPE 2	BBL.	600	616
15-N	NATURAL CEMENT, TYPE N	BBL.	83	87
18	CLASS 1A CONCRETE FOR STRUCTURES	CY.	412	420
28	BAR REINFORCEMENT FOR STRUCTURES	LB.	45000	47000
65-C	CAST IN PLACE CONCRETE PILES	L.F.	560	700
87	FURNISHING EQUIPMENT FOR DRIVING PILES	L.S.	WEC	WEC
92-S	SCREEDED GRAVEL - LOOSE MEASURE	CY.	45	55
121	TOP SOIL PLACED FROM STOCK PILES	CY.	320	320
123	SEEDING	ACRE.	35	41
124	SODDING	S.Y.	400	420
119	RUN OF BANK GRAVEL FILL	CY.	140	150

SUBSTRUCTURE

GENERAL NOTES

CONSTRUCTION JOINTS SHALL BE PLACED ONLY AS AND WHERE SHOWN ON THE PLANS, EXCEPT WHERE PERMISSION IN WRITING IS GIVEN BY THE DEPUTY CHIEF ENGINEER (BRIDGES), IN WHICH CASE, HIS SUPPLEMENTAL INSTRUCTIONS SHALL BE STRICTLY FOLLOWED.

AFTER THE CONCRETE IS CURED, THE CONTRACTOR SHALL APPLY A WATER-PROOFING OIL TREATMENT, AS DESCRIBED IN THE SPECIFICATIONS FOR M-41W TO ALL EXPOSED SURFACES.

ALL SHOE BEARING SURFACES SHALL BE CAST 1/4" ABOVE ELEVATIONS SHOWN ON THE PLANS, AND AFTER THE CONCRETE IS CURED, SHALL BE BUSH-HAMMERED TO THE REQUIRED ELEVATIONS.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE SPECIAL NOTES FOR THIS STRUCTURE WHICH APPEAR IN THE PROPOSAL. PARTICULAR ATTENTION SHOULD BE GIVEN TO THE FOUNDATION NOTE WHICH BRIEFLY OUTLINES THE ANTICIPATED SUBSURFACE CONDITIONS AT THE SITE OF THE STRUCTURE, AND WHICH SPECIFIES CERTAIN REQUIREMENTS RELATIVE TO THE CONSTRUCTION.

BUILT ACCORDING TO PLAN

SUBSTRUCTURE DETAILS

THOMPSON ROAD INTERCHANGE

MOHAWK SECTION

NEW YORK STATE THRUWAY

SUPERSTRUCTURE

GENERAL NOTES

THE DESIGN OF THE STRUCTURE IS BASED ON A.A.S.H.O. SPECIFICATIONS, 1949, H20-S16-44 LOADING, AND CURRENT MODIFICATIONS AND ADDITIONS. ALL CONCRETE OF SUPERSTRUCTURE SHALL BE ITEM 18, EXCEPT CONCRETE OF PYLONS WHICH SHALL BE ITEM 19, AND CEMENT CONCRETE PAVEMENT, WHICH SHALL BE ITEM 47-BM. THE COST OF FURNISHING AND INSTALLING METAL EXPANSION MATERIAL, METAL WATER STOP, PREMOULDED BITUMINOUS JOINT MATERIAL, CAULKING COMPOUND, PARA-PLASTIC, SPONGE RUBBER, ASPHALT ROOFING FELT, ETC. SHALL BE INCLUDED IN THE BID PRICES OF THE RESPECTIVE CONCRETE ITEMS OF THE CONTRACT.

ALL MATERIALS, WORKMANSHIP, AND FABRICATION SHALL CONFORM TO NEW YORK STATE DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS, JANUARY 2, 1951, AND CURRENT MODIFICATIONS AND ADDITIONS.

WHERE CAULKING COMPOUND IS TO CONTACT CONCRETE SURFACES, SUCH CONCRETE SHALL BE THOROUGHLY CLEANED AND DRY, AND PRIMED WITH A PRIMING COAT AT LEAST 30 MINUTES BEFORE THE APPLICATION OF CAULKING COMPOUND. THIS WORK SHALL BE DONE BY EXPERIENCED MEN, AND THE COMPLETE OPERATION SHALL BE SPECIALLY DIRECTED BY THE ENGINEER.

CONSTRUCTION JOINTS SHALL BE PLACED ONLY AS AND WHERE SHOWN ON THE PLANS, EXCEPT WHEN PERMISSION IN WRITING IS GIVEN BY THE DEPUTY CHIEF ENGINEER OF BRIDGES, IN WHICH CASE HIS SUPPLEMENTAL INSTRUCTION SHALL BE STRICTLY FOLLOWED.

AFTER THE CONCRETE IS CURED, THE CONTRACTOR SHALL APPLY A WATERPROOFING OIL TREATMENT, AS DESCRIBED IN THE SPECIFICATIONS FOR M-41W TO ALL EXPOSED SURFACES EXCEPT THE UNDERSIDE OF SLABS. TWO APPLICATIONS OF WATERPROOFING OIL TREATMENT SHALL BE APPLIED AT THE TOP OF THE SLAB. THE SECOND APPLICATION SHALL BE APPLIED TWO DAYS PRIOR TO THE PLACING OF THE PAVEMENT OR SIDEWALK.

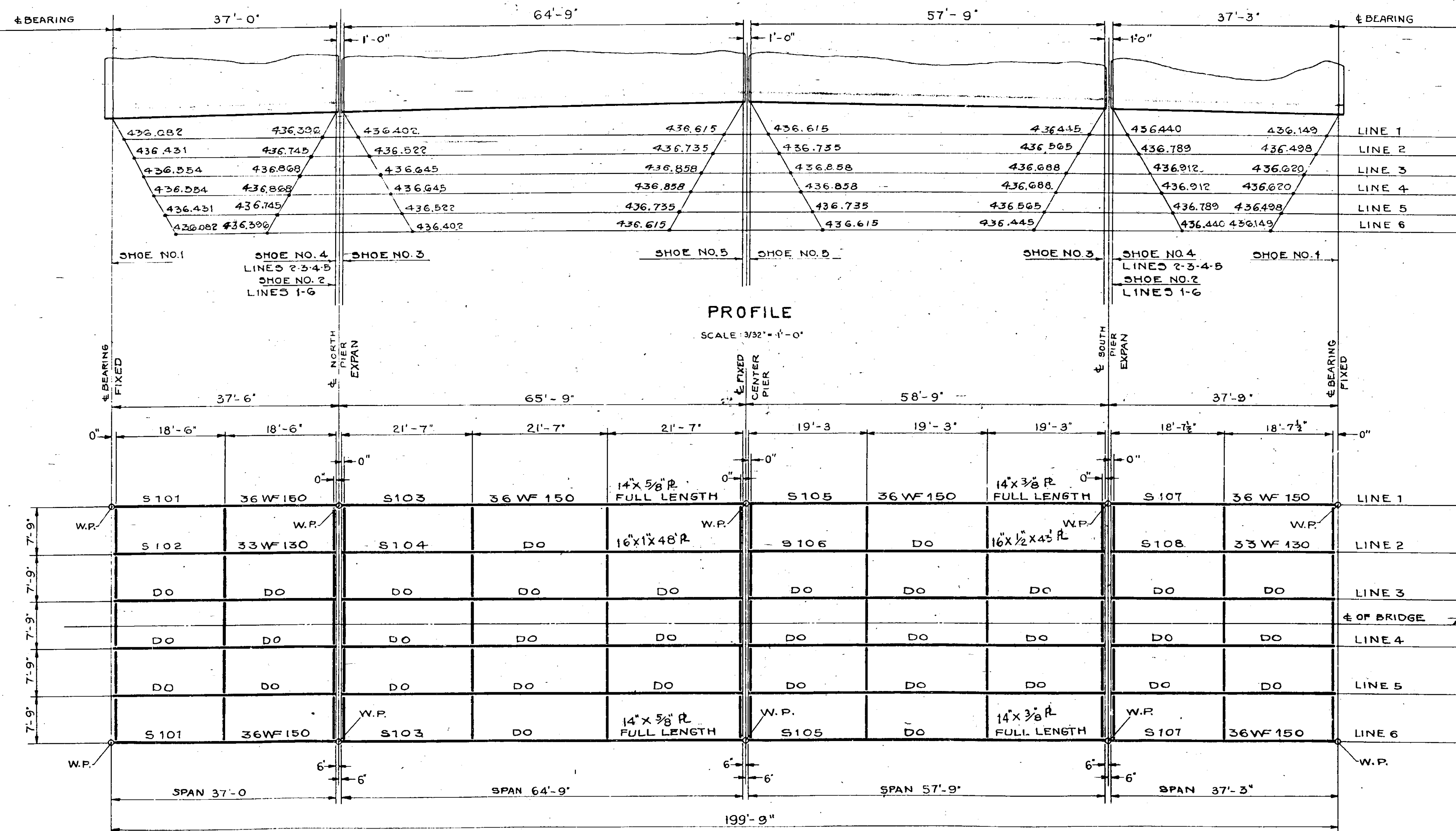
IMMEDIATELY BEFORE PLACING PAVEMENT CONCRETE, THE CONCRETE SURFACE OR SURFACES UPON WHICH IT IS TO BE PLACED SHALL BE THOROUGHLY WETTED DOWN CONTINUOUSLY FOR ONE HOUR, IF THE AIR TEMPERATURE IS ABOVE 50° F. PAYMENT FOR THIS WORK WILL BE INCLUDED IN THE PRICE BID FOR ITEM 47BM.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE SPECIAL NOTES FOR THIS STRUCTURE WHICH APPEAR IN THE PROPOSAL. PARTICULAR ATTENTION SHOULD BE GIVEN TO THE FOUNDATION NOTE WHICH BRIEFLY OUTLINES THE ANTICIPATED SUBSURFACE CONDITIONS OF THE STRUCTURE, AND WHICH SPECIFIES CERTAIN REQUIREMENTS RELATIVE TO CONSTRUCTION.

SUPERSTRUCTURE QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	NEAT	ROUNDED
15-2	PORTLAND CEMENT, TYPE 2	BBL.	376	397
15N	NATURAL CEMENT, TYPE N	BBL.	74	77
18	CLASS I A CONCRETE FOR STRUCTURES	C.Y.	266	280
19	CLASS I A CONCRETE FOR RAILINGS	C.Y.	25	3
28	BAR REINFORCEMENT FOR STRUCTURES	LB.	1,600	1,000
28B	SPIRAL BAR SHEAR CONNECTORS	LB.	2,060	2,160
29	STRUCTURAL STEEL	LB.	240,800	248,000
37	METAL RAILINGS	L.F.	442	445
47BM	CEMENT CONCRETE PAVEMENT	C.Y.	91	95
* 25F	STEEL FABRIC REINFORCEMENT	S.Y.	820	860
15-BA	PORTLAND CEMENT TYPE 1A	BBL.	136	142

* STEEL FABRIC REINFORCEMENT TO BE FURNISHED IN FLAT SHEETS



NOTE: ELEVATIONS ARE TO BOTTOM OF BOTTOM FLANGE.

BUILT ACCORDING TO PLAN

SUPERSTRUCTURE DETAILS

THOMPSON ROAD INTERCHANGE

MOHAWK SECTION

NEW YORK STATE THRUWAY

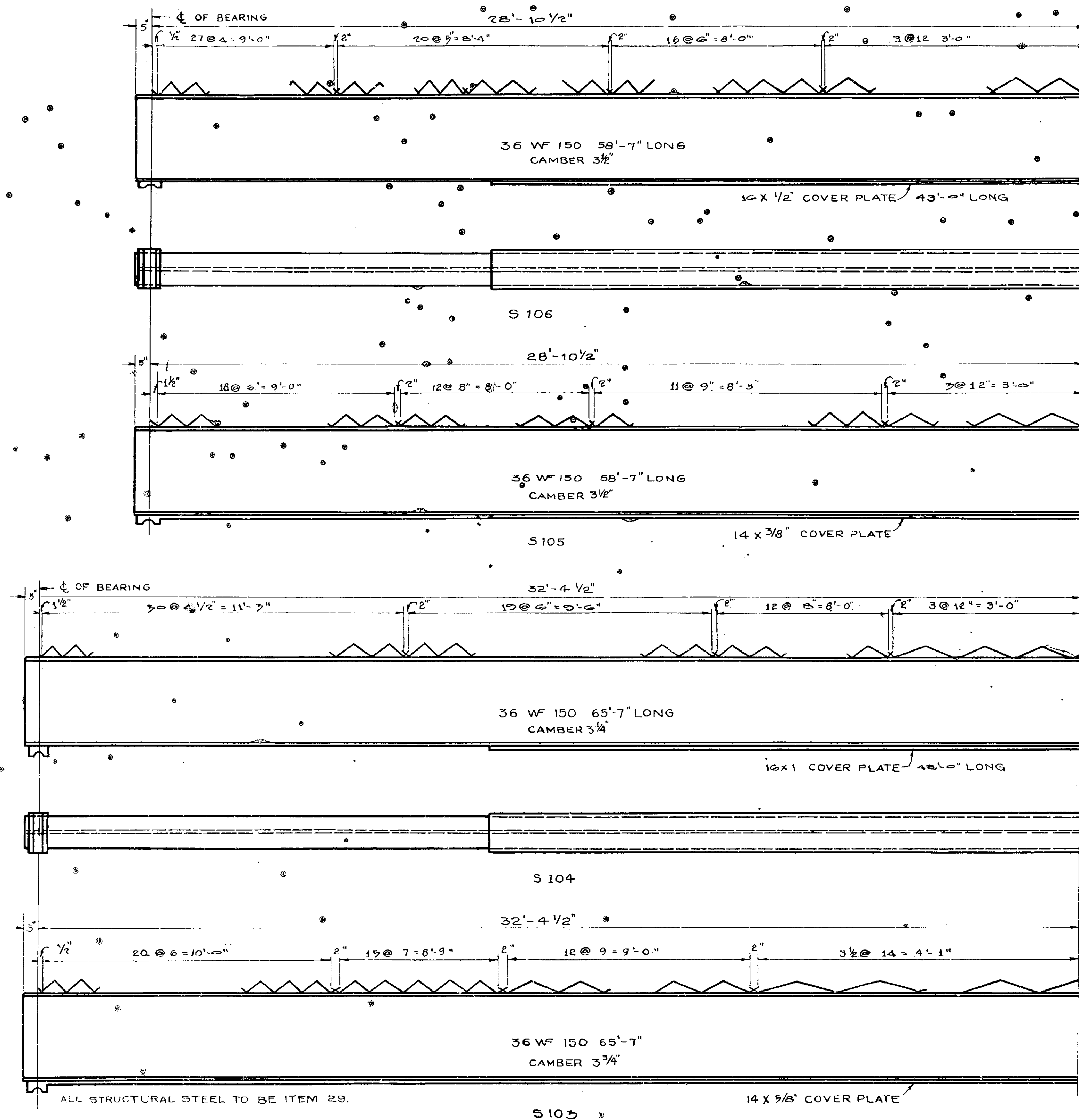
PREPARED AND RECOMMENDED:

URQUHART & DOYLE, CONSULTING ENGINEERS
NEW YORK STATE PROFESSIONAL ENGINEER LICENSE NO. 5667

DATE

SHEET 49

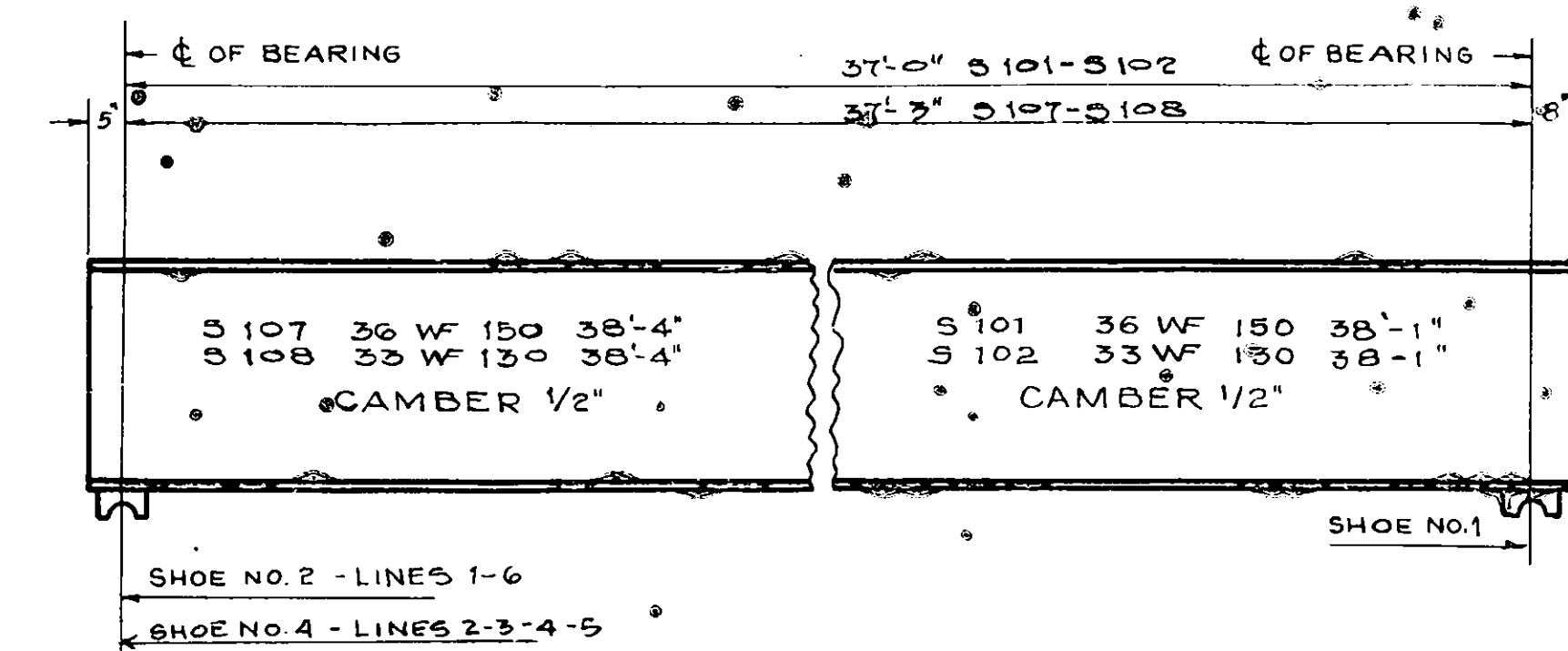
COUNTY	SHEET NO	TOTAL SHEETS
ONONDAGA	50	66
NEW YORK STATE THRUWAY, MOHAWK SECTION SUBDIV. 8B INTERCHANGE AT THOMPSON ROAD		



NOTE:

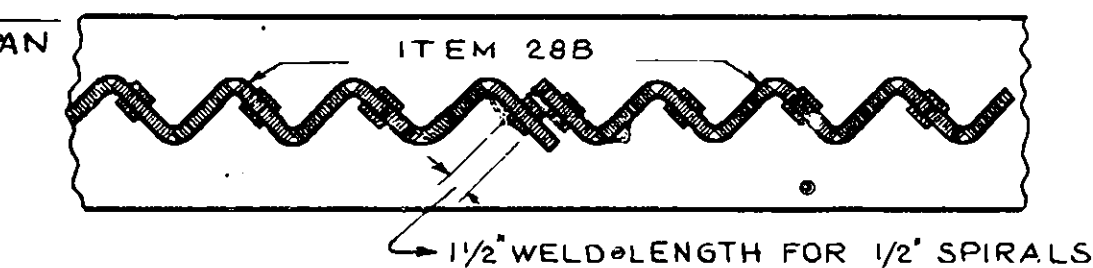
ALL COVER PLATES
TO BE WELDED WITH
5/16" CONTINUOUS
FILLET WELDS.

SCALE: 1/2" = 1'-0"
EXCEPT AS SHOWN
FOR SHOE DETAILS SEE SHEET 52

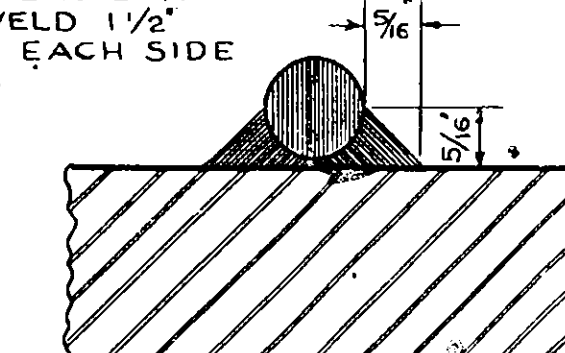


DO NOT PAINT SURFACE OF TOP FLANGE ON
WHICH WELDS ARE MADE

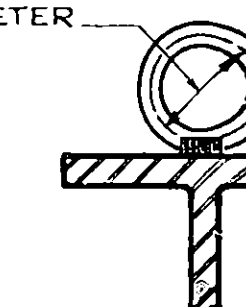
S 103, S 104, S 105, S 106.
TO BE SYMMETRICAL OVER SPAN



1/2" SPIRAL ROD 5/16"
FILLET WELD 1/2"
LONG ON EACH SIDE
OF ROD.



5" MEAN DIAMETER
OF 1/2" SPIRALS



NOTE:
EXTEND BAR
1/4 TURN BEYOND
END WELDS OF
UNIT.

SPIRAL DETAILS

NOT TO SCALE

ALL SPIRAL SHEAR BARS ARE ITEM 28B

SPECIAL NOTES FOR SPIRAL REINFORCEMENTS

THE CONTRACTOR'S AND ENGINEER'S ATTENTION IS CALLED TO THE POSSIBILITY OF INTERFERENCE BETWEEN THE REINFORCING STEEL IN THE SLAB AND THE BEAM SPIRALS. WHILE STEEL SPACING IS GIVEN AS 5/2 INCHES, IT IS TO BE UNDERSTOOD THAT 2 BARS IN EACH OF 11 IN. WILL FULFILL THIS REQUIREMENT IF NO TWO BARS ARE CLOSER THAN 1" LESS THAN REQUIRED SPACING OR FURTHER APART THAN 1" MORE THAN REQUIRED SPACING. IF NECESSARY, SOME BARS MAY BE THREADED THRU ONE OR MORE SPIRALS. ALL SPIRALS MUST HAVE TWO STRUCTURAL WELDS 5/16" x 1 1/2" LONG, AT EACH SIDE OF THE BAR AS SHOWN. 5/32" OR 3/16" DIAMETER ELECTRODES SHALL BE USED IN WELDING THE SPIRAL BAR REINFORCEMENT. SPECIAL PRECAUTIONS MUST BE EXERCISED WHERE WELDING CROSSES EDGE OF FLANGE TO AVOID ANY POSSIBILITY OF 'UNDERCUT' OR NICKS IN THE EDGE OF FLANGE.

SUPERSTRUCTURE DETAILS

THOMPSON ROAD INTERCHANGE

MOHAWK SECTION

NEW YORK STATE THRUWAY

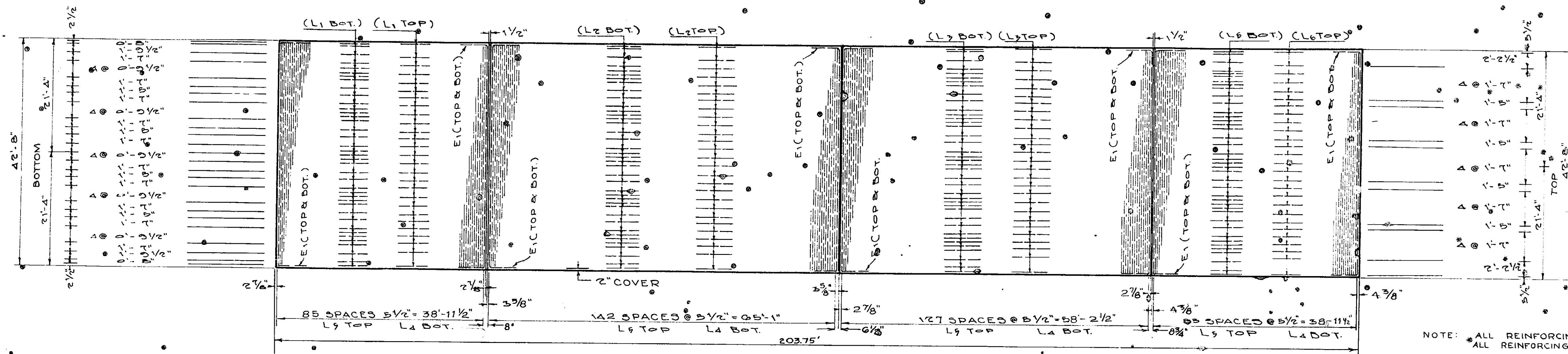
PREPARED AND RECOMMENDED:

URQUHART & DOYLE, CONSULTING ENGINEERS
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO. 5667

DATE

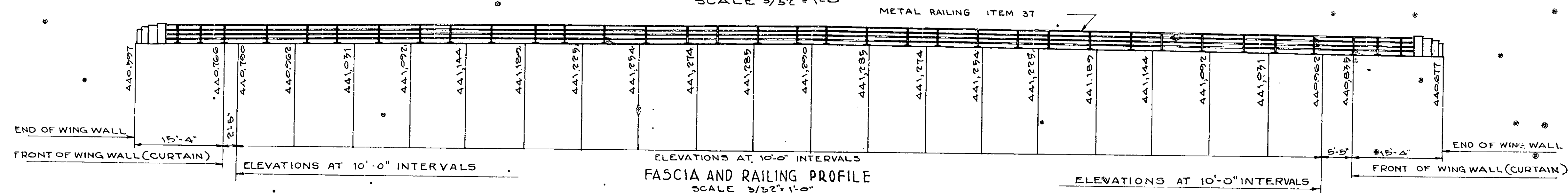
SHEET 50

COUNTY	SHEET NO.	TOTAL SHEETS
ORONDAGA	51	66
N.Y. STATE THRUWAY, MOHAWK SECTION SUBDIV. 8B		
INTERCHANGE AT THOMPSON ROAD		

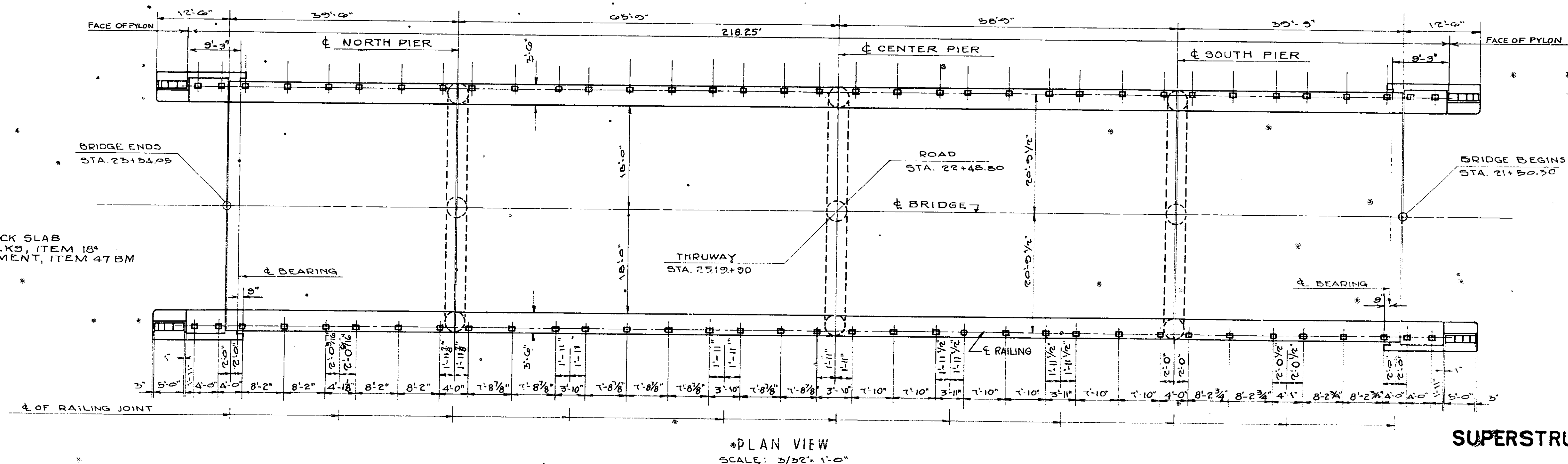


DECK SLAB DETAILS
SCALE 3/32" = 1'-0"

NOTE: ALL REINFORCING BARS ITEM 28
ALL REINFORCING BARS IN DECK SLAB 3/8" ϕ



FASCIA AND RAILING PROFILE
SCALE 3/32" = 1'-0"



PLAN VIEW
SCALE: 3/32" = 1'-0"

SUPERSTRUCTURE DETAILS

THOMPSON ROAD INTERCHANGE

MOHAWK SECTION

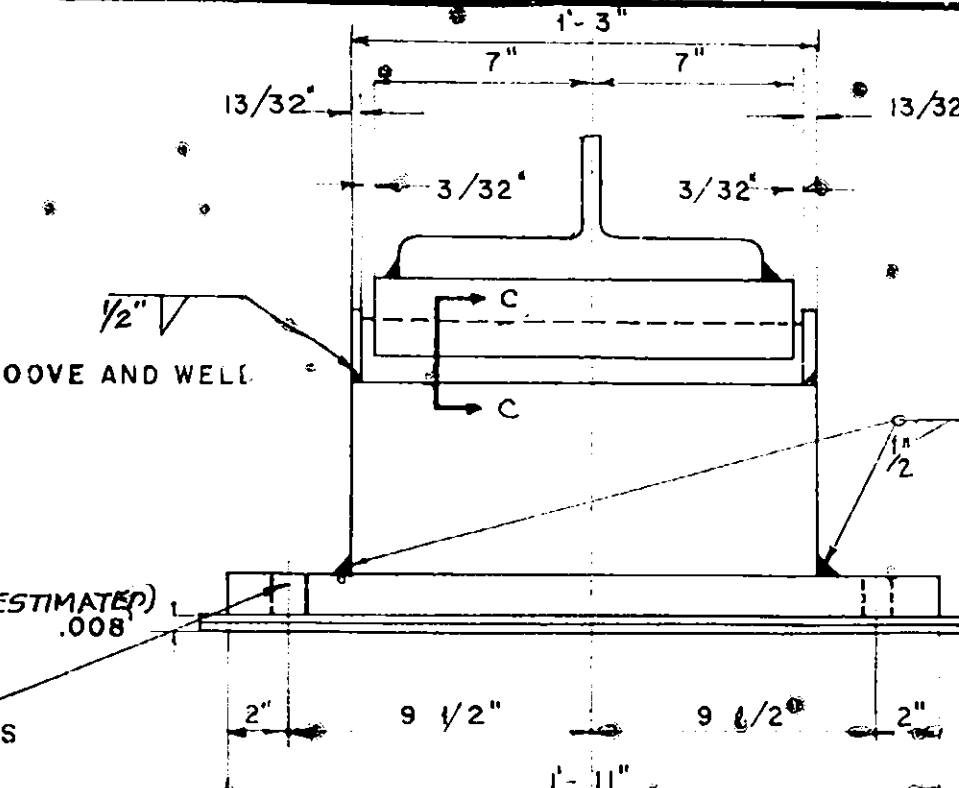
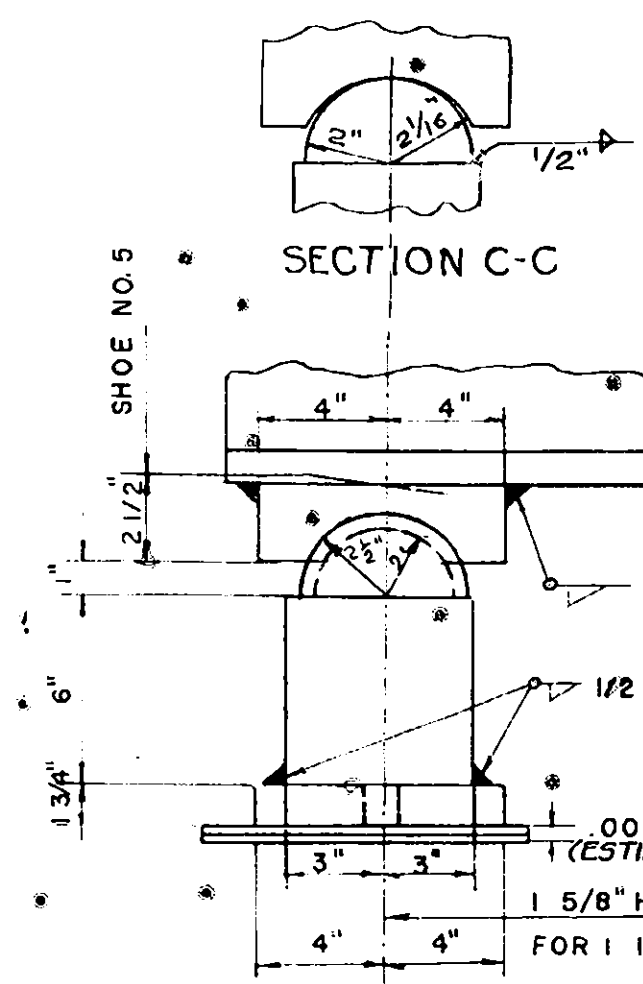
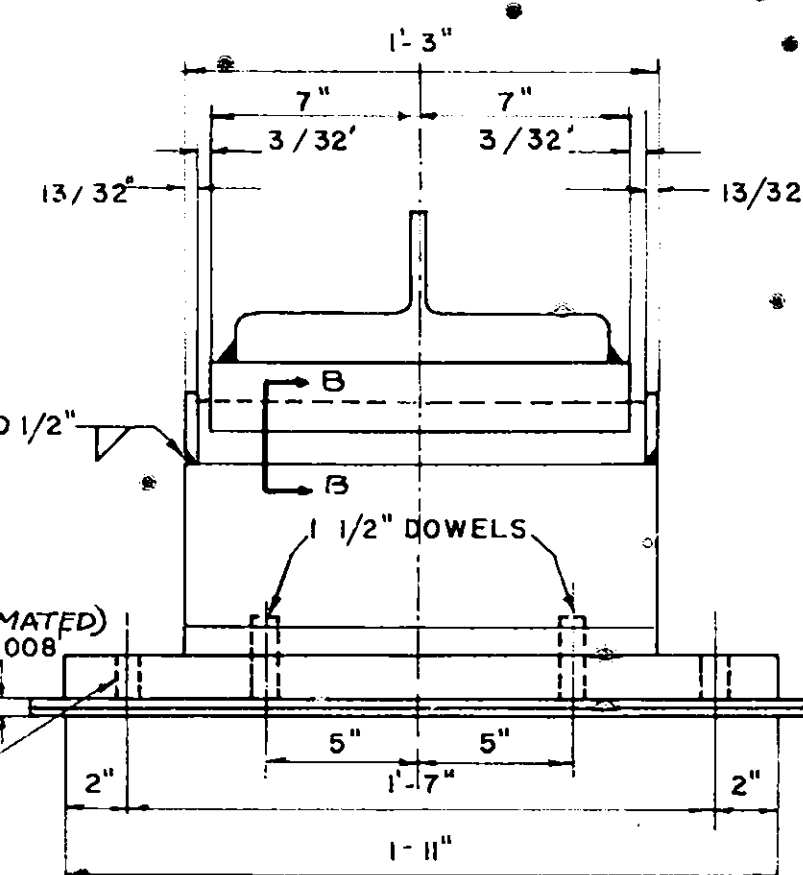
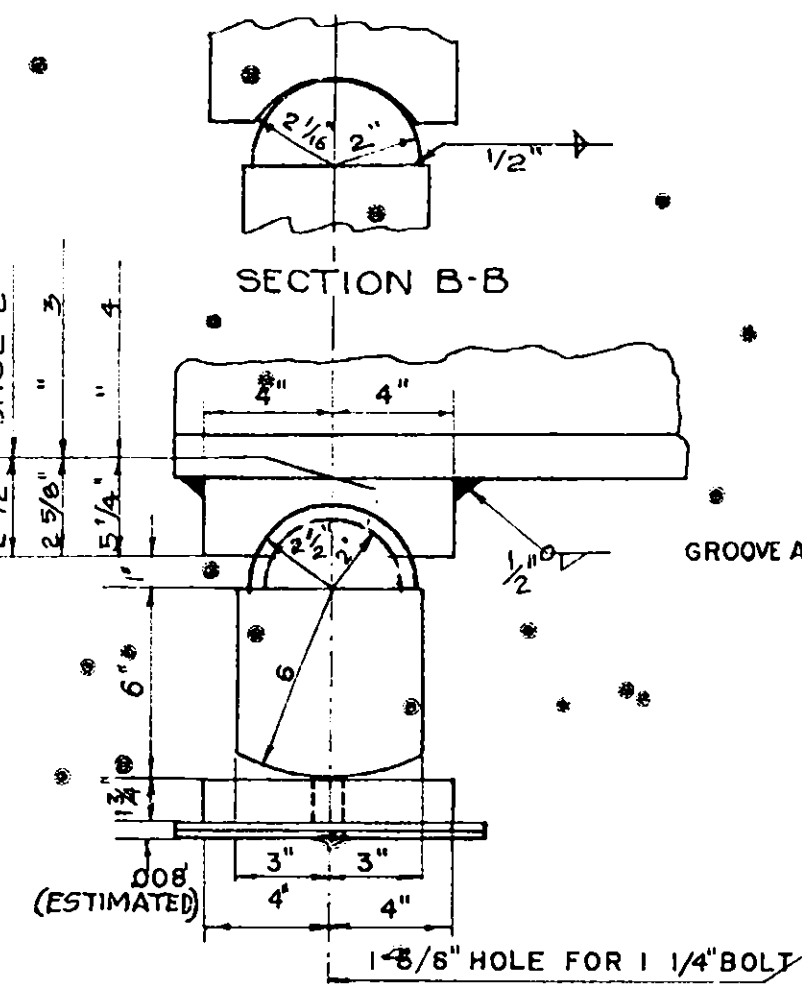
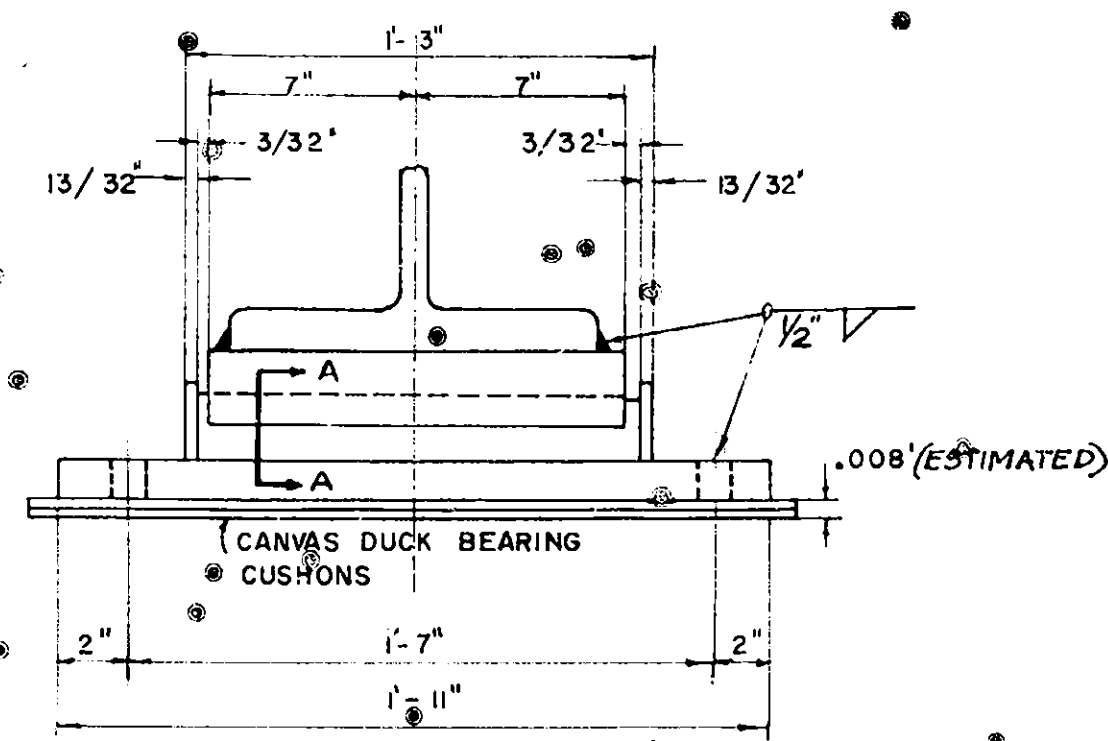
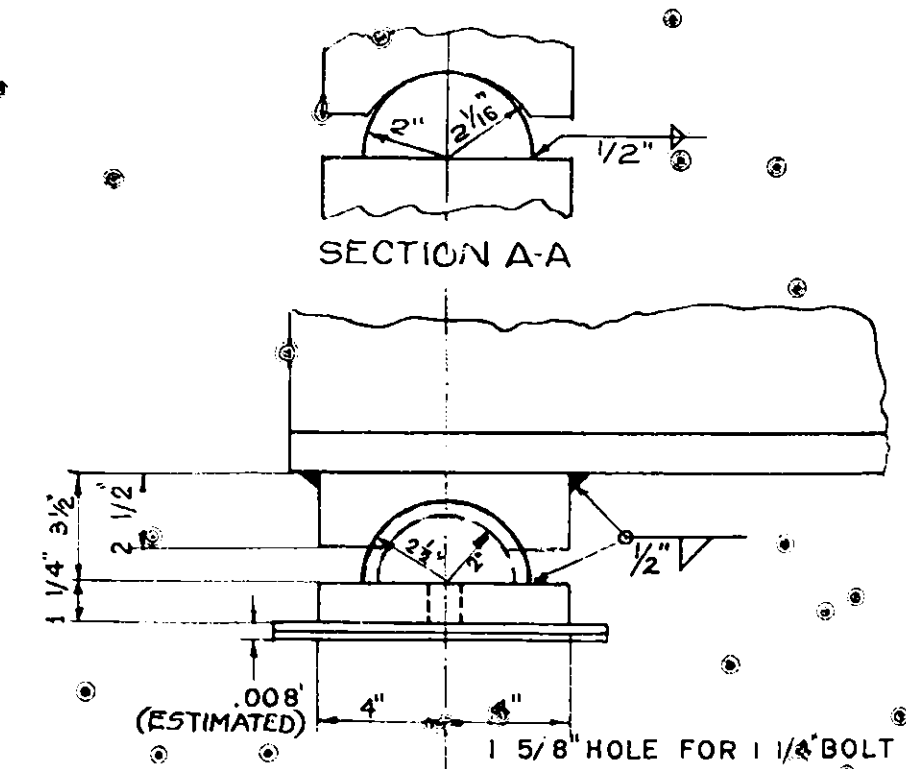
NEW YORK STATE THRUWAY

PREPARED AND RECOMMENDED

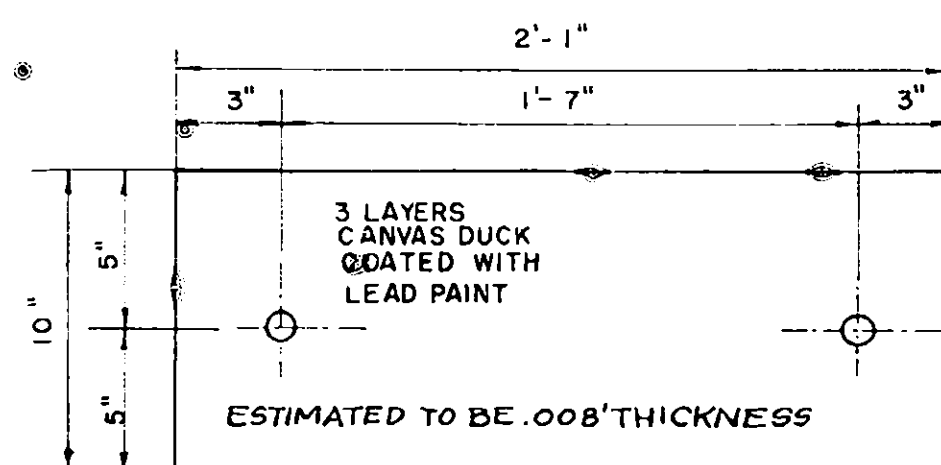
URQUHART & DOYLE CONSULTING ENGINEERS
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO 5667

B. J. Doyle Feb 16-53
DATE

COUNTY	SHEET NO.	TOTAL SHEETS
ONONDAGA	52	66
N.Y. STATE THRUWAY MOHAWK SECTION SUBDIV. 6 B		
INTERCHANGE AT THOMPSON ROAD		



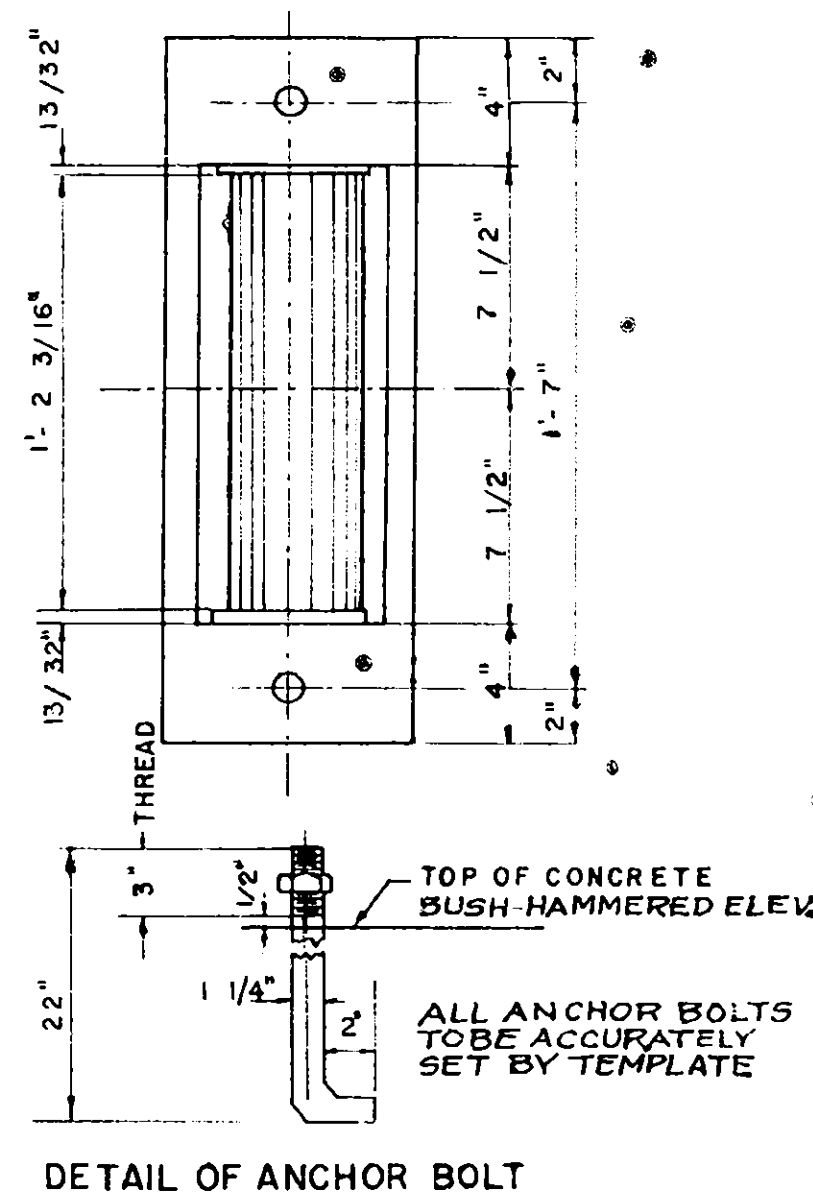
NOTE:
1/2" WELD ON ALL SHOES



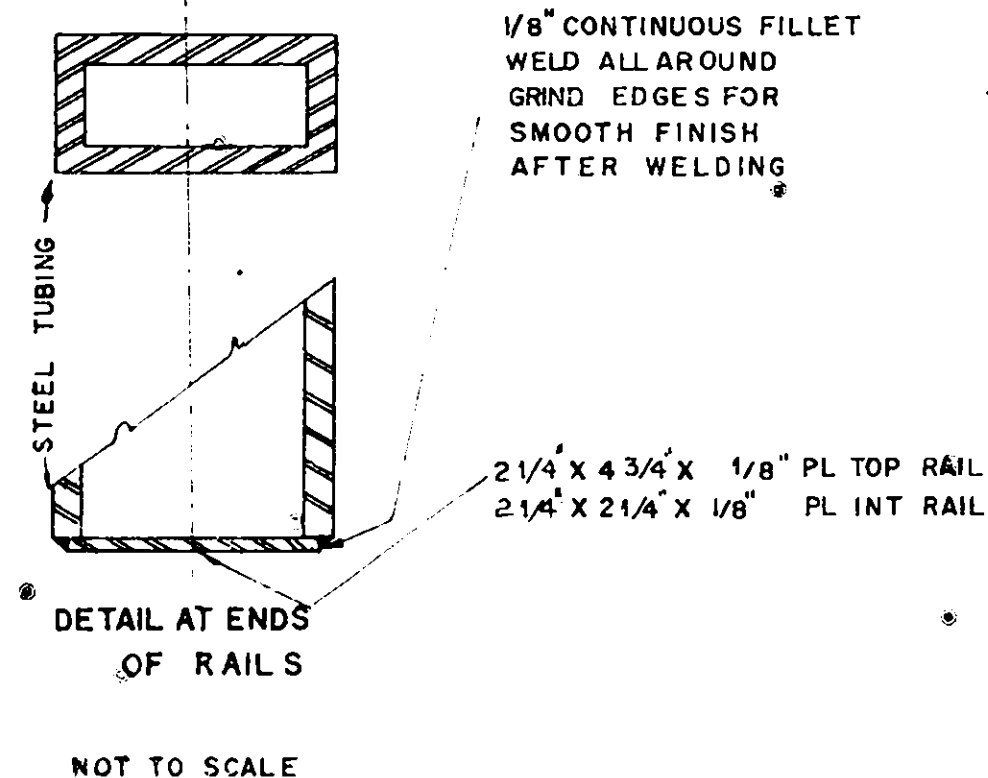
CANVAS DUCK BEARING CUSHION

ALL SHOES ITEM 29

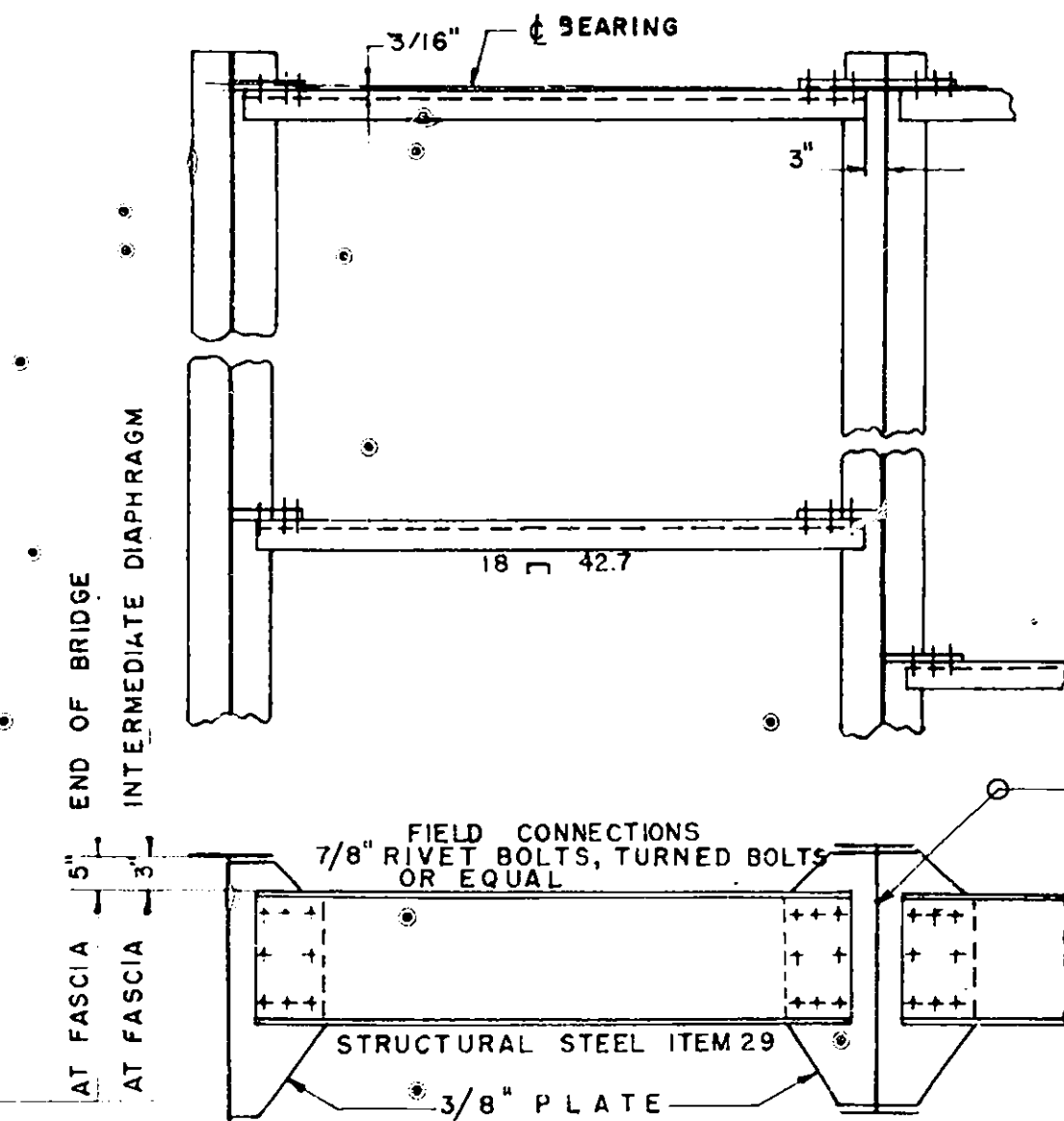
SCALE OF SHOES 2" = 1'-0"



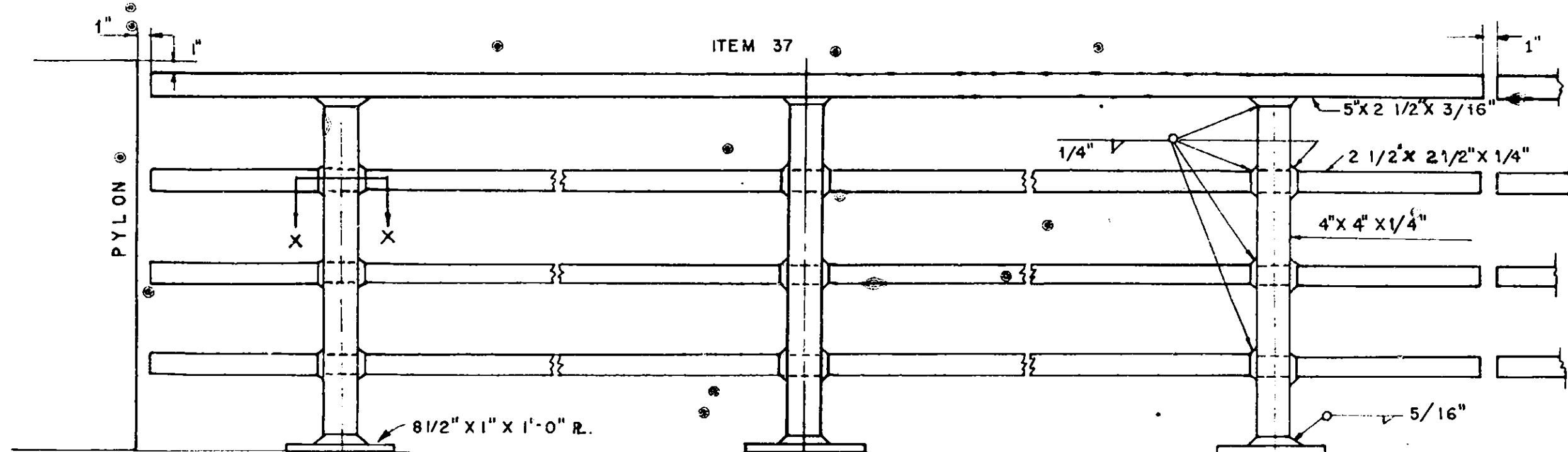
DETAIL OF ANCHOR BOLT



NOT TO SCALE



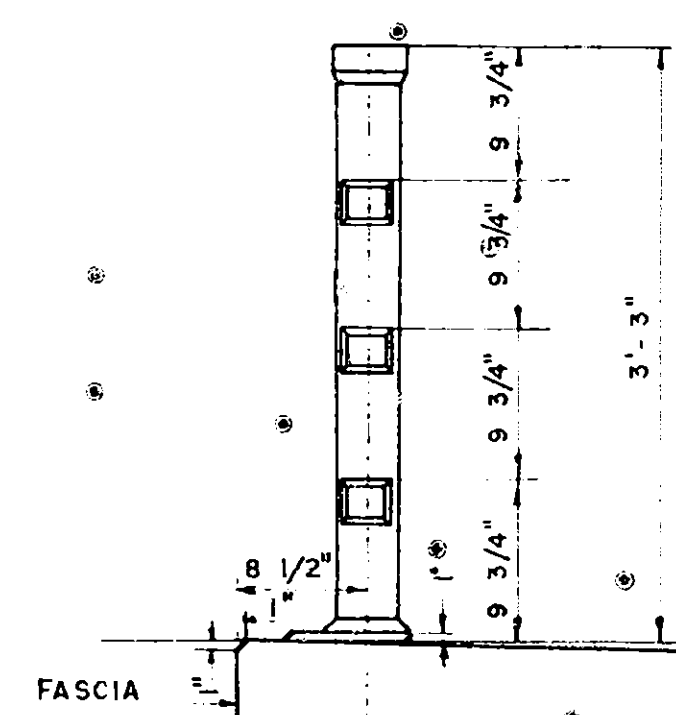
TYPICAL DIAPHRAGM DETAILS



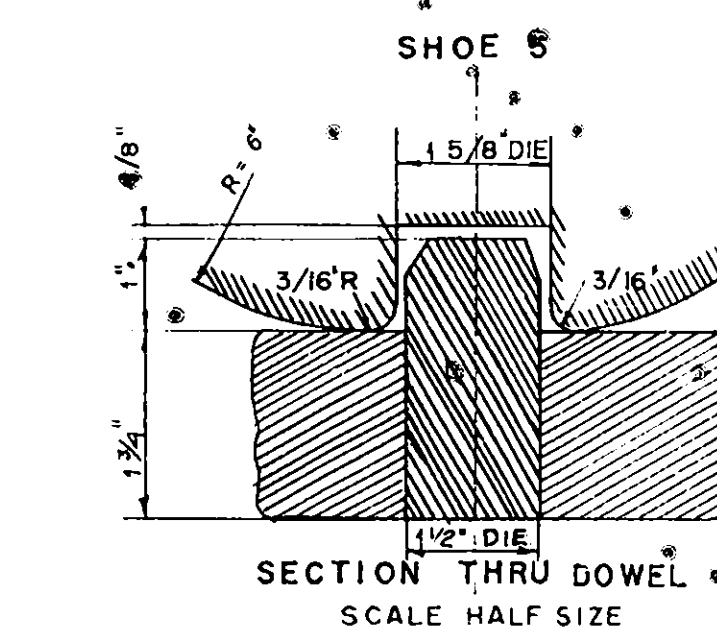
DIMENSIONS AS SHOWN ON RAILING PLAN

TYPICAL RAILING DETAIL
SCALE 1" = 1'-0"

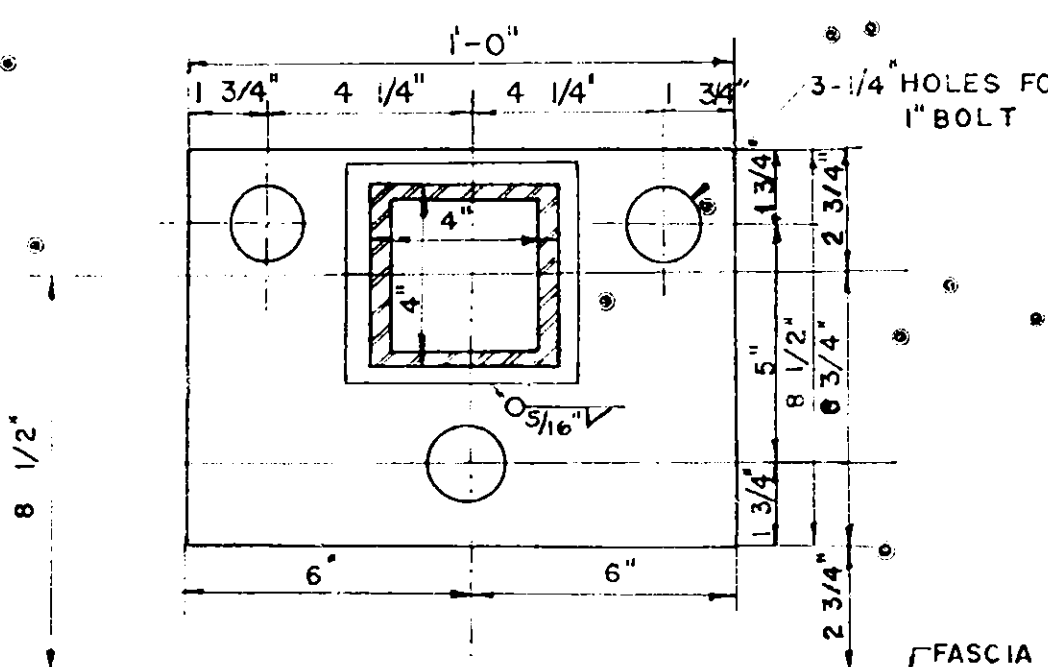
NOTE:
WHERE STEEL EXCEEDING ONE INCH IN THICKNESS IS TO BE WELDED, MILD STEEL ARC-WELDING ELECTRODES WITH COVERING OF LOW-HYDROGEN TYPE SHALL BE USED. THESE ELECTRODES MUST COMPLY WITH A.S.T.M. (A 233-48) REQUIREMENTS FOR CLASSIFICATION E 6015 OR E 6016. ALL RAILINGS ARE TO BE FABRICATED AND ERECTED SO THAT RAILS ARE PARALLEL TO EACH OTHER AND TO THE TOP OF THE FASCIA AND POSTS ARE TRULY VERTICAL. FOR NOTES AND DETAILS NOT SHOWN, SEE STD SHEET 53-106.



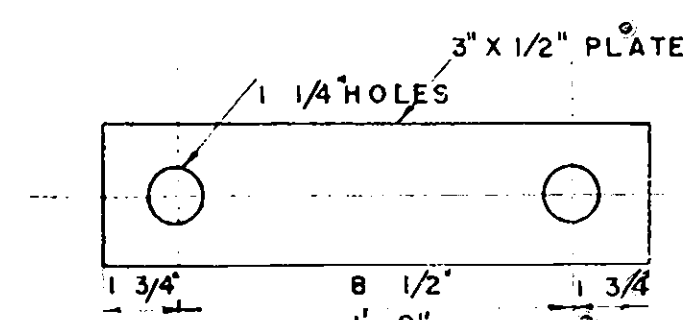
SECTION THRU RAILING



SECTION THRU DOWEL
SCALE HALF SIZE



RAIL POST BASE PLATE
SCALE 3" = 1'-0"



RAILING ANCHOR PLATE
SCALE 3" = 1'-0"

SUPERSTRUCTURE DETAILS

THOMPSON ROAD INTERCHANGE
MOHAWK SECTION
NEW YORK STATE THRUWAY

PREPARED AND RECOMMENDED

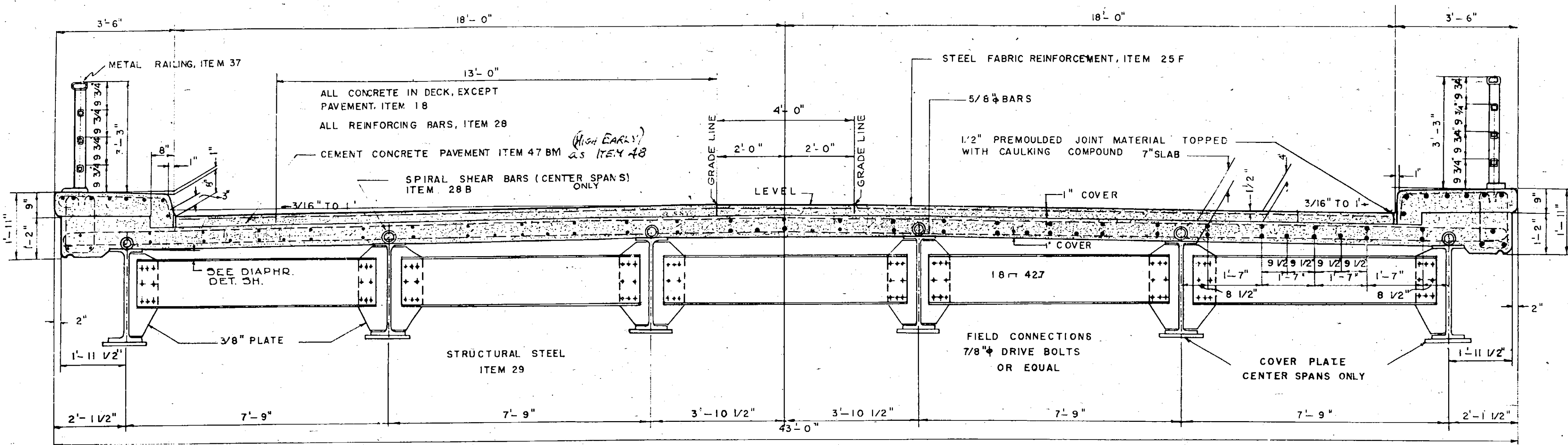
URQUHART & DOYLE, CONSULTING ENGINEERS
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO 5667

DATE

SECT. XX FULL SCALE

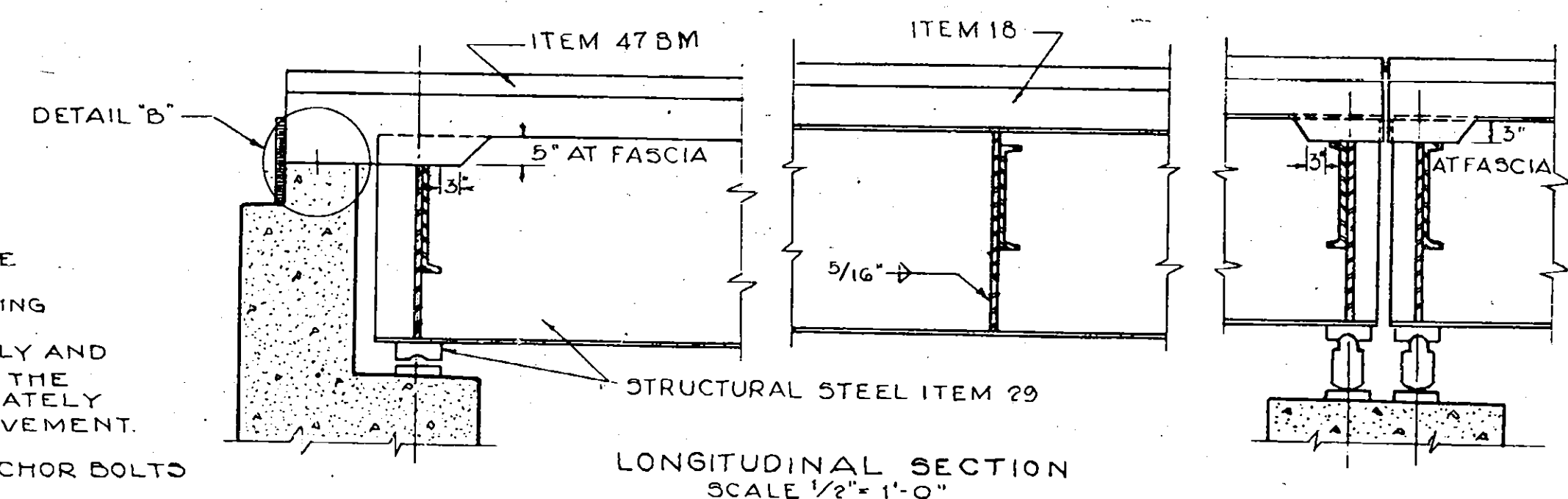
COUNTY	SHEET NO	TOTAL SHEETS
ONONDAGA	53	66
NEW YORK STATE THRUWAY, MOHAWK SECTION, SUBDIV. 8 B		
INTERCHANGE AT THOMPSON ROAD		

53R



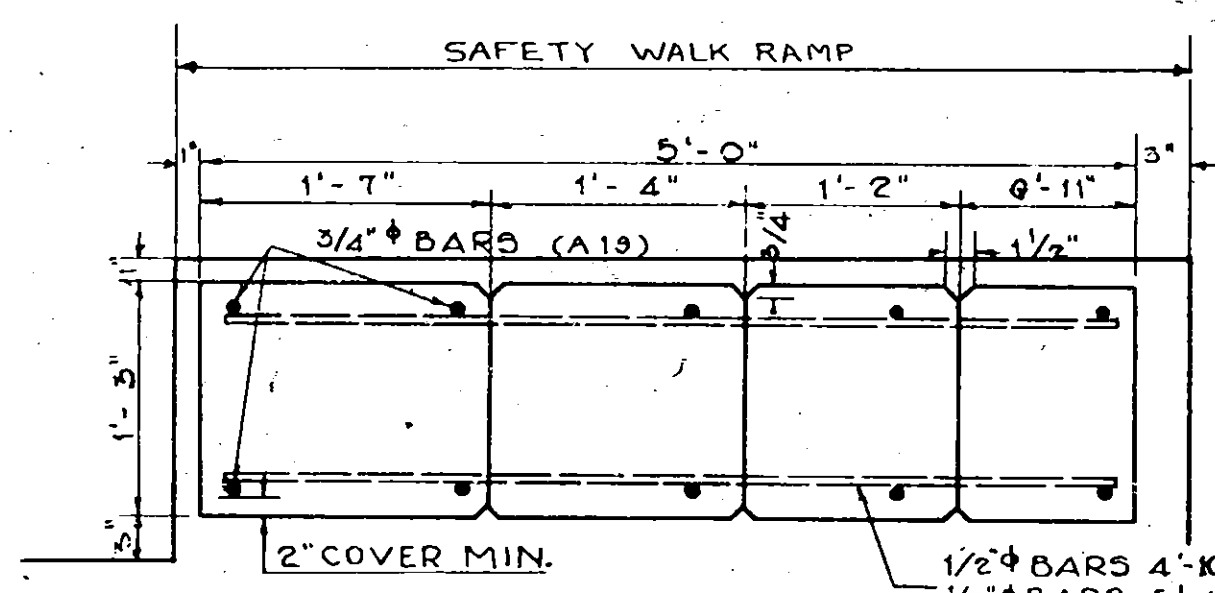
TRANSVERSE SECTION
SCALE: 1/2" = 1'-0"

NOTE:
IMMEDIATELY BEFORE PLACING CONCRETE PAVEMENT THE CONCRETE SURFACE OR SURFACES UPON WHICH IT IS TO BE PLACED SHALL BE THOROUGHLY WETTED DOWN CONTINUOUSLY FOR ONE HOUR IF THE AIR TEMPERATURE IS ABOVE 50°F. COST OF SAME TO BE UNDER ITEM 1WA.
CEMENT IN ITEM 47 BM TO BE PORTLAND CEMENT TYPE 1A, ITEM 15-3A.
CEMENT ITEMS 18 & 19 TO BE 7 PARTS PORTLAND CEMENT TYPE 2, ITEM 15-2 AND ONE PART NATURAL CEMENT TYPE N, ITEM 15 N.

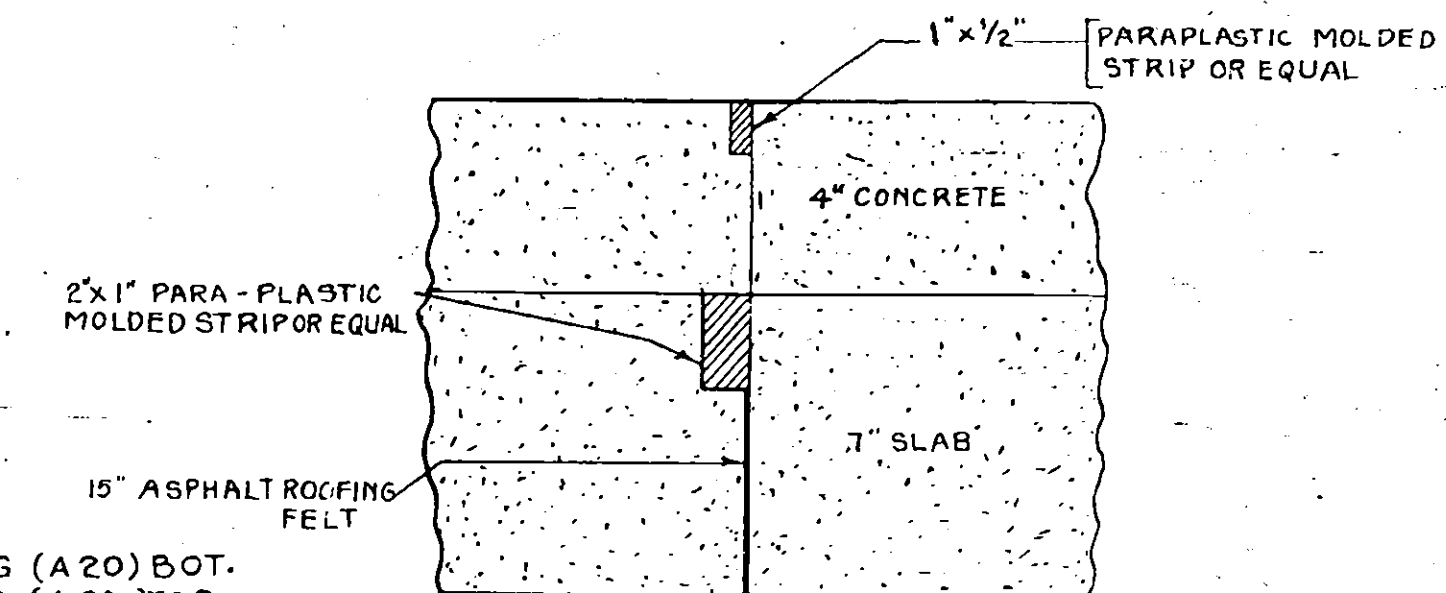


LONGITUDINAL SECTION
SCALE 1/2" = 1'-0"

NOTE
ALL DIAPHRAGMS SET LEVEL INTERMEDIATE DIAPHRAGMS PERPENDICULAR TO GIRDERS WITH TOPS 3" BELOW TOP OF FASCIA GIRDERS. TOPS OF END DIAPHRAGMS 5" BELOW TOP OF FASCIA GIRDERS.

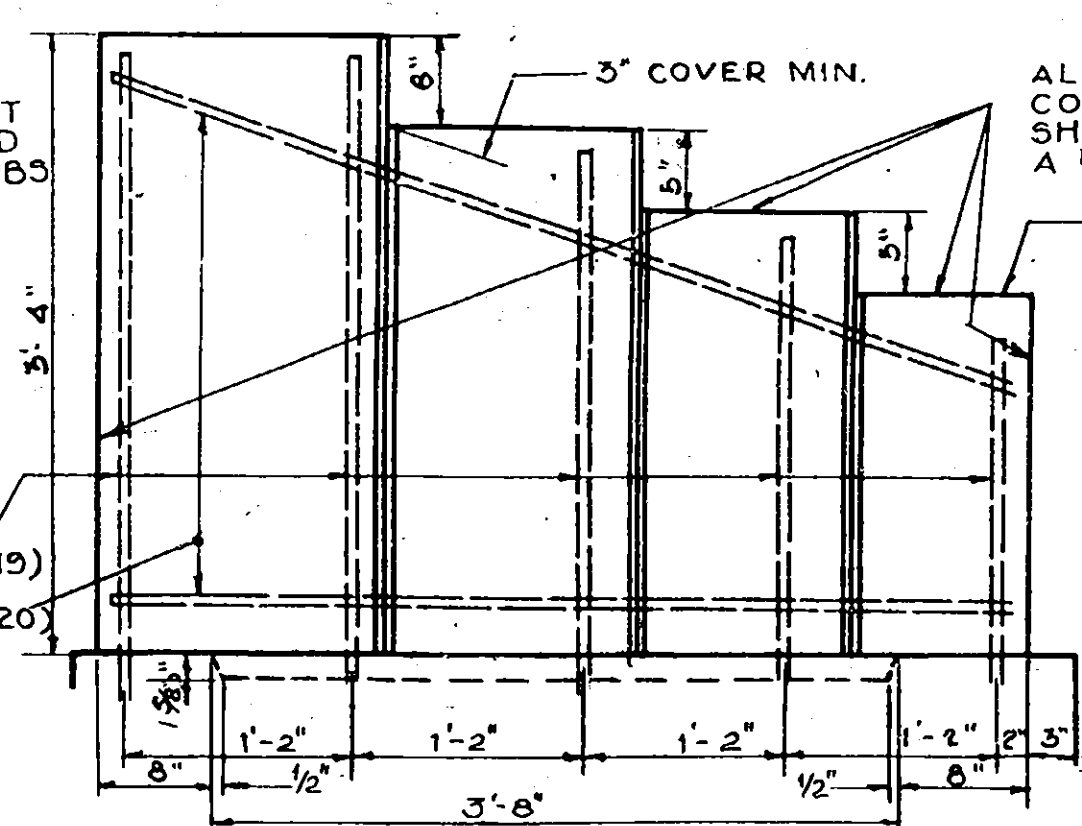


PLAN
SCALE 1" = 1'-0"



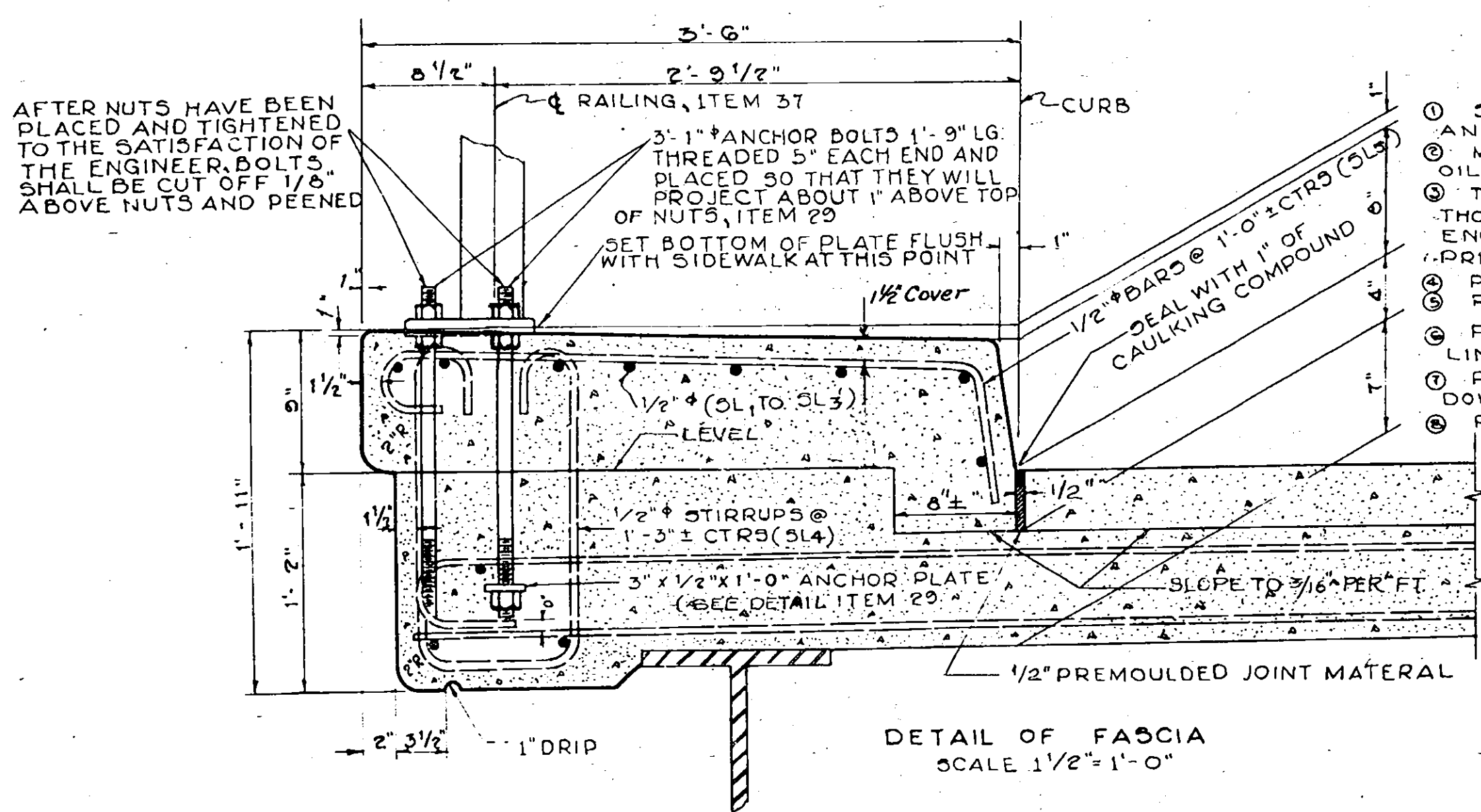
DETAIL OF JOINT OVER CENTER PIER
SCALE: 3" = 1'-0"

ALL CONCRETE IN PYLON ITEM 19



ELEVATION OF PYLON
SCALE 1" = 1'-0"

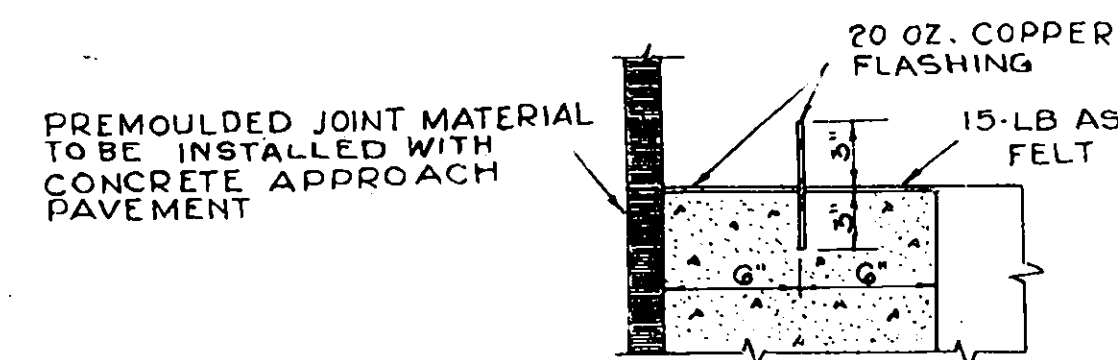
ALL UNCHAMFERED CORNERS OF PYLONS SHALL BE RUBBED TO A 1/4" RADIUS.
TOP SURFACE OF PYLONS SHALL BE PLACED PARALLEL TO GRADE.



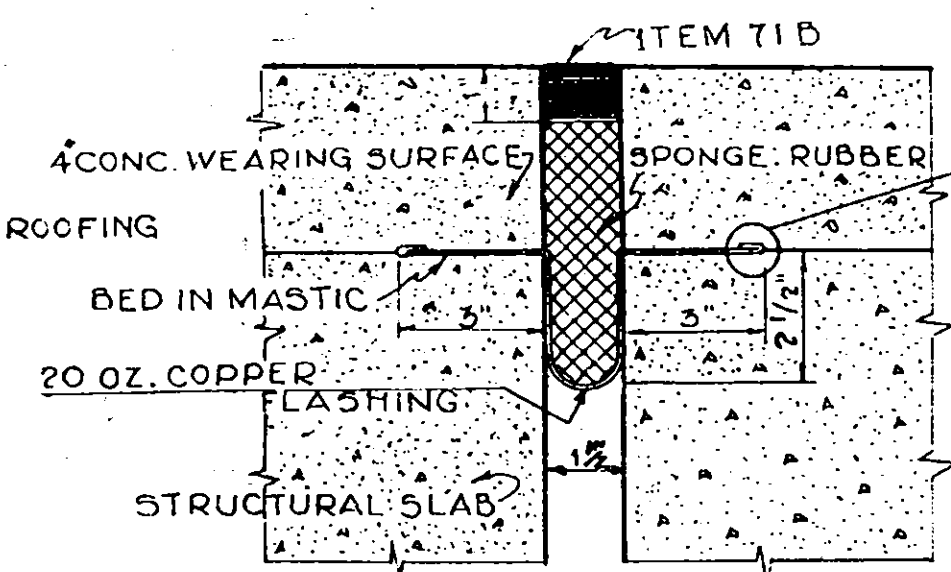
DETAIL OF FASCIA
SCALE 1/2" = 1'-0"

- CONSTRUCTION PROCEDURE
1. SET ANCHOR BOLTS BY MEANS OF TEMPLATE AND POUR SLAB.
 2. MAKE TWO APPLICATIONS OF WATER-PROOFING OIL TREATMENT M-41-W TO THE TOP OF SLAB.
 3. THE TOP OF THE SLAB SHALL BE CONTINUOUSLY AND THOROUGHLY WETTED DOWN, AS DIRECTED BY THE ENGINEER FOR AT LEAST ONE HOUR, IMMEDIATELY PRIOR TO THE PLACING OF THE ROADWAY PAVEMENT.
 4. POUR ROADWAY PAVEMENT.
 5. PLACE LOWER NUTS ON UPPER END OF ANCHOR BOLTS.
 6. PLACE RAILING ON LOWER NUTS AND ADJUST TO LINE AND GRADE.
 7. PLACE UPPER NUTS ON ANCHOR BOLTS TIGHTEN DOWN ON PLATES.
 8. POUR SIDEWALK TO PROPER LINE AND GRADE.

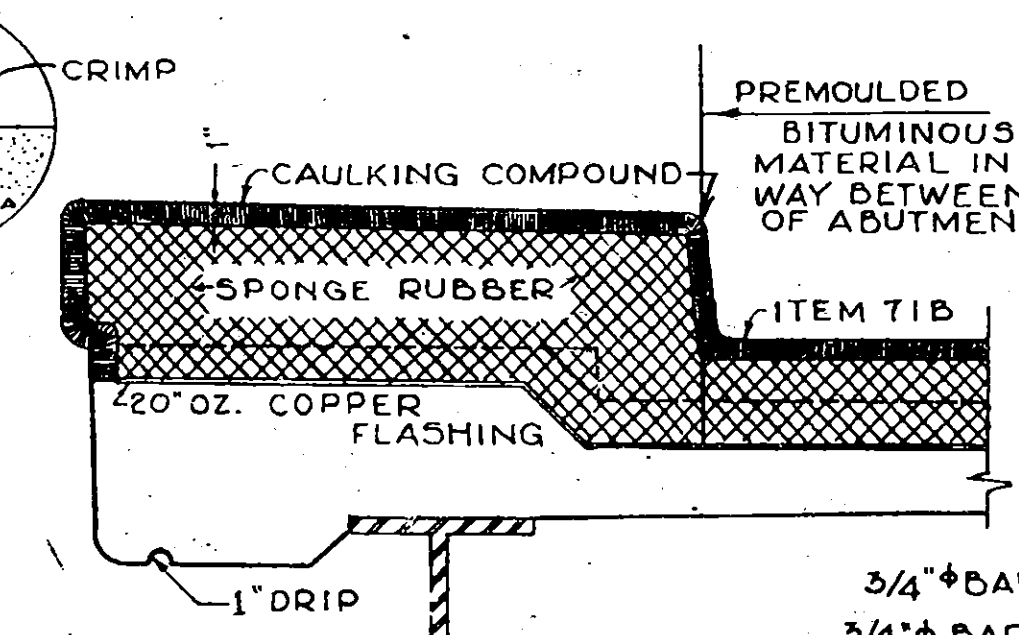
NOTE
FLASHINGS OR WATERSTOPS ARE TO BE PROTECTED FROM DAMAGE DURING THE COURSE OF CONSTRUCTION AS ORDERED BY THE ENGINEER BENDING OR ALTERING THE SHAPE AS SHOWN IN ANY MANNER WILL NOT BE ALLOWED.



DETAIL B
SCALE 1/2" = 1'-0"



DETAIL OF JOINT OVER N-S PIERS
SCALE 3" = 1'-0"



SECTION THRU SAFETY WALK AT JOINT
SCALE 1" = 1'-0"

NOTE
SPONGE RUBBER SHALL COMPLY WITH THE REQUIREMENTS FOR PREFORMED EXPANSION JOINT FILLERS FOR CONCRETE, A. S. T. M. DESIGNATION D 544.
ASPHALT ROOFING FELT SHALL COMPLY WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS OF A. S. T. M. DESIGNATION D 266.

BUILT ACCORDING TO PLAN

SUPERSTRUCTURE DETAILS
THOMPSON ROAD INTERCHANGE
MOHAWK SECTION
NEW YORK STATE THRUWAY

COUNTY	SHEET NO	TOTAL SHEETS
ONONDAGA	54	66
N.Y. STATE THRUWAY, MOHAWK SECTION SUBDIV. B B		
INTERCHANGE AT THOMPSON ROAD		

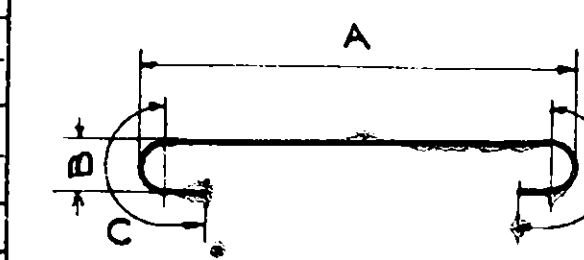
SUPERSTRUCTURE BAR LIST

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	LOCATION	MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	LOCATION
L1	3/4"	27	33'-0"	STR				TOP OF DECK SLAB (LONG.)									
L2	3/4"	33	33'-0"					BOTT.									
L2	5/8"	54	34'-9"					TOP									
L2	7/8"	78	34'-9"					BOTT.									
L3	5/8"	54	31'-3"					TOP									
L3	7/8"	78	31'-3"					BOTT.									
L4	435	42'-8"						BOTT. (TRANS) ALL SPANS									
L5	435	43'-8"	I	42-5	0-5	0-10		TOP									
E1	32	26'-0"	III	22-2	0-0	3-10		TOP & BOTT									
SL1	1/2"	32	39'-0"	STR				SIDEWALKS BOTH END SPANS (LONG.)									
SL2	32	34'-9"						N. CENTER SPAN									
SL3	32	31'-3"						S.									
SL4	336	4'-7"	VI	0-10	0-3	1-7		OF ALL SPANS (STRUT)									
SL5	205	4'-6"	II					(TRANS)									
A19	3/4"	40	5'-0"	STR				PYLONS (VERT.)									
A20	8	4'-10"						(HORIZ.)									
A20B	8	5'-1"															

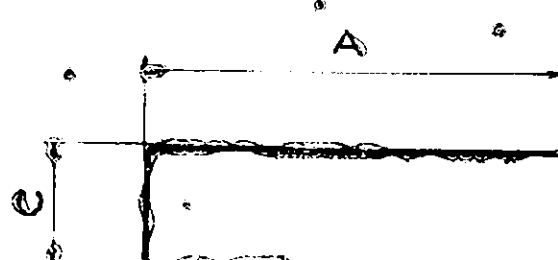
SUBSTRUCTURE BAR LIST

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	LOCATION
AF1	3/4"	80	9'-1"	STR				ABUTMENT FOOTINGS & BACK WALL
AF2	48	6'-7"						BRS SEATS
AF3	68	11'-3"						WING WALLS
AF4	24	46'-0"						ABUTMENT FOOTINGS
AF5	48	17'-0"						WINGWALL FOOTINGS
AF6	1/2"	112	5'-2"					ABUT. & WINGWALL FOOTINGS
PF1	1"	108	8'-0"	II	7-0	0-8	1-4	PIER FOOTINGS
PF2	1"	22	11'-6"	I	9-6	0-8	1-4	"
PF3	1"	36	10'-8"	I	8-8	0-8	1-4	"
PF4	7/8"	28	8'-3"	I	6-6	0-7	1-2	"
PF5	7/8"	40	6'-3"	I	4-6	0-7	1-2	"
A1	3/4"	16	45'-6"	STR				ABUT. BACK WALLS
A2	12	18'-1"	VII	15-0	2-6	0-7		WING WALLS
A2A	4	19'-8"	III	15-0	0-0	4-8		
A3	16	19'-6"	VII	11-10	3-0	4-7		
A4	1/2"	48	9'-6"	VI	2-4	0-4	3-2	BEARING SEATS
AG	3/4"	40	7'-0"	STR				WING WALLS TO PIERS
AG	1/2"	28	4'-6"	STR				WING WALLS
A7	8	6'-10"						
A8	8	11'-6"						
P1	1"	36	20'-11"	STR				N. PIER COLUMNS
P2	36	21'-2"						C
P3	36	19'-0"						S
P4	1/4"	66	30'-0"	X	17-1			N
P5	66	30'-0"			17-4			C
P6	66	30'-0"			15-1			S
P7	1 1/4"	24	11'-0"	STR				ALL PIER CAPS
P8	6	48'-4"	II	42-2	2-10			
PA	6	39'-0"	STR					
P9	12	29'-9"	IV	25-1	1-6	2-3		
P10	12	30'-9"			26-1	1-6	2-3	
P11	12	10'-8"			6-0	1-6	2-3	
P15	1/2"	72	1'-6"	STR				PIER PADS
P16	1/2"	36	10'-0"	V	2-0	0-3	2-8	
P17	3/8"	36	20'-8"	STR				PIER CAPS
P18	5/8"	30	10'-5"	VII	3-0	3-0	4-5	
P19	1 1/2"	168	13'-8"	V	2-1	0-3	3-8	
PL1	3/4"	240	8'-9"	II	8-0	0-6	1-0	ALL PILES (BASED ON EST. LENGTH)
PL2	1/4"	240	3'-0"	IX	0-8	0-0	0-0	(ASSUMED FOR 12" STR. PILES)

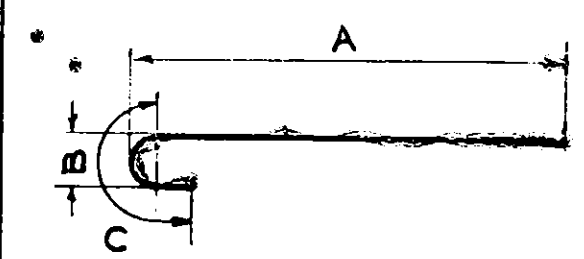
BAR DETAILS



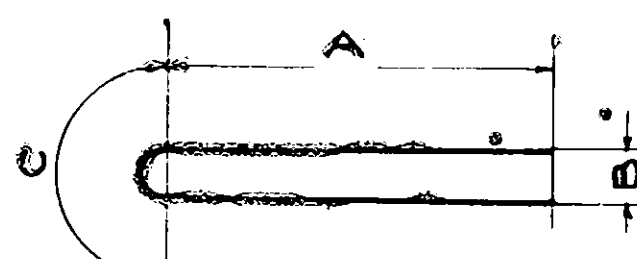
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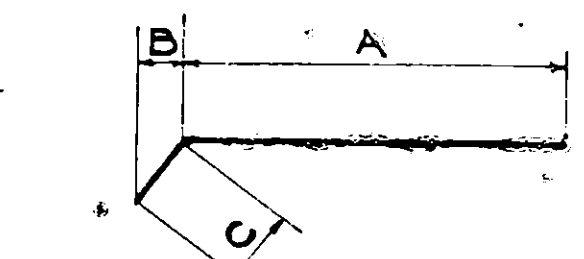
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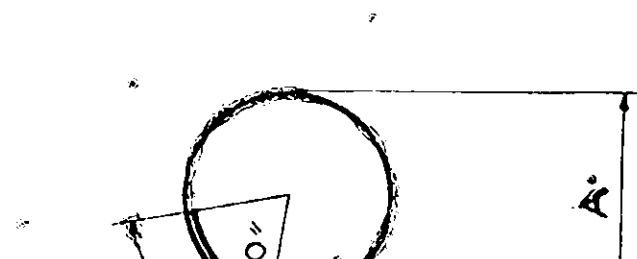
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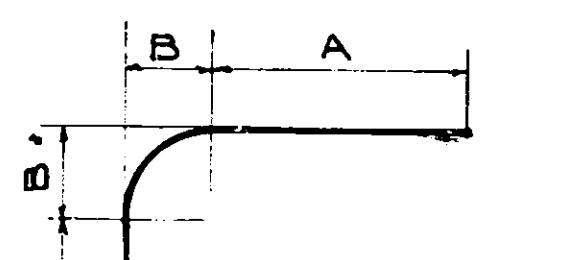
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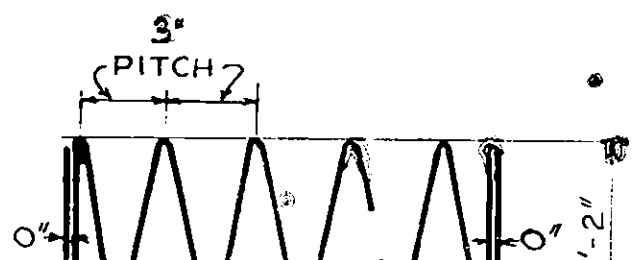
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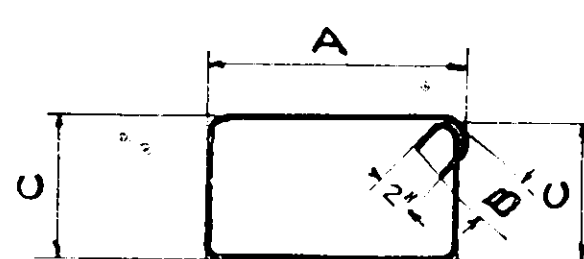
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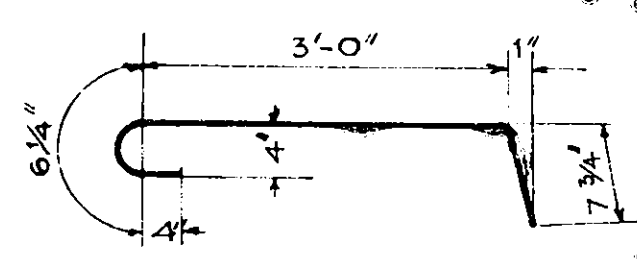
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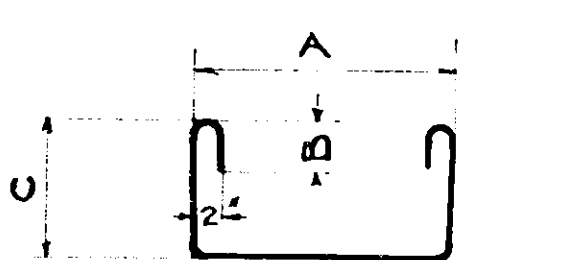
TYPE X



TYPE V



TYPE XI



TYPE VI

ALL REINFORCING BARS, ITEM 28

BAR LIST

THOMPSON ROAD INTERCHANGE
MOHAWK SECTION
NEW YORK STATE THRUWAY

PREPARED AND RECOMMENDED:

URQUHART & DOYLE, CONSULTING ENGINEERS
NEW YORK STATE PROFESSIONAL ENGINEERS LICENSE NO. 5667

DATE

E. J. Doyle Feb 16, 53

New York State Department of Transportation General Bridge Inspection Report

Inspection Date: June 14, 2016

Structure Information

BIN: 5510090

Feature Carried: EXIT 35 RAMP

Feature Crossed: 90IX

Orientation: 1 - NORTH

Region: 03 - SYRACUSE

County: ONONDAGA

Political Unit: Town of DEWITT

Approximate Year Built: 1954

Primary Owner: 2L - NYS Thruway Authority

Primary Maintenance Responsibility: 2L - NYS Thruway Authority

General Type Main Span: 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp

Number of Spans: 4

Postings

Posted Vertical Clearance On: Not Posted

Bridge Load Posting: Not Posted

Posted Vertical Clearance Under: Not Posted

Number of Flags Issued

Red PIA: 0

Red: 0

Yellow: 0

Safety PIA: 0

New York State Inspection Overview

General Recommendation: 4

Federal NBI Ratings

NBI Deck Condition: 5

NBI Channel Condition: N

NBI Superstructure Condition: 5

NBI Culvert Condition: N

NBI Substructure Condition: 4

Action Items

Non-Structural Condition Observations noted: NO

Vulnerability Reviews Recommended: Steel

Diving Inspection Requested: NO

Further Investigation Requested: NO

Inspector & Reviewer Signature Information

Inspection Signature: Mark E. Fabend, P.E. 085884-1

Date: August 04, 2016

Review Signature: Andre Bigos, P.E. 51640

Date: August 11, 2016

Report Printed: January 25, 2017 2:26:42

Special Emphasis Inspection

Special Emphasis Detail	"Other" Special Emphasis Detail Description	Hands-On Insp Performed	Hands-On Inspection Note
AASHTO Category D, E, and E' welded details	Cat E' welds ends cov plates interior girders Spans 2 & 3 Cat E welds at jacking stiffeners at piers	No	Exempted 2014
Steel Web Bearing Area	Web loss > 25% G1 Span 3 Over Pier 2	Yes	All special emphasis details were inspected 100% hands-on and no defects were observed. Mark E Fabend, PE 085884 6/2/2016.
Other (Unique & unusual features)	Welded repairs to impacted G5 & G6 in Span 3	Yes	All special emphasis details were inspected 100% hands-on and no defects were observed. Mark E Fabend, PE 085884 6/2/2016.

Additional Information

Overloads Observed

No overload vehicles observed during this inspection.

Notes to Next Inspector

The BIN plate is located on the Begin Backwall in Bay 2. A scissors truck and WB driving lane and Ramp and WB passing lane closures (both provided by NYSTA) were utilized to inspect this bridge. EB lane closures were not used during this inspection.

Improvements Observed

Previous Safety Flag (No. 14-051) for deck deterioration in Bay 5 of Span 3 repaired with localized full-depth deck replacement. Repair was completed and flag was removed by NYSTA on 6/30/2014.

Pedestrian Fence Height

None

Snow Fence

None

Element Quantities

Element Assessment Summary Table

Element	Total Quantity	Unit	CS-1	CS-2	CS-3	CS-4	CS-5
12 - Reinforced Concrete Deck	8761	ft ²	6251	930	1580		0
107 - Steel Open Girder/Beam	1202	ft		704	498		0
205 - Reinforced Concrete Column	9	each	5	1	3		0
215 - Reinforced Concrete Abutment	94	ft		51	43		0
220 - Reinforced Concrete Pile/Cap Footing	230	ft		94			136
227 - Reinforced Concrete Pile	40	each					40
234 - Reinforced Concrete Pier Cap	129	ft	82	15	32		0
302 - Compression Joint Seal	86	ft				86	0
313 - Fixed Bearing	24	each		24			0
316 - Other Bearing	24	each				24	0
330 - Metal Bridge Railing	611	ft		611			0
510 - Wearing Surfaces	7906	ft ²	7600	306			0
515 - Steel Protective Coating	14333	ft ²		10739	3594		0
800 - Scour	296	ft	42	254			0
810 - Sidewalk	285	ft ²		161	124		0
811 - Curb	409	ft	409				0
830 - Secondary Members	4	each		4			0
831 - Steel Beam End	24	each			24		0
850 - Backwall	88	ft		66	22		0
851 - Abutment Pedestal	12	each		4	8		0
852 - Pier Pedestal	18	each	12	2	4		0

Element Assessment by Span*

Element**	Total Quantity	Unit	CS-1	CS-2	CS-3	CS-4	CS-5
<i>Span Number : 1</i>							
BA215 - Reinforced Concrete Abutment	47	ft		17	30		0
BA220 - Reinforced Concrete Pile/Cap Footing	82	ft		47			35
BA227 - Reinforced Concrete Pile	20	each					20
BA313 - Fixed Bearing	6	each		6			0
515 - Steel Protective Coating	24	ft ²		16	8		0
BA850 - Backwall	44	ft		22	22		0
BA851 - Abutment Pedestal	6	each		2	4		0
PR220 - Reinforced Concrete Pile/Cap Footing	21	ft					21

BIN: 5510090 Bridge Inspection Report
Inspection Date: June 14, 2016

Element**	Total Quantity	Unit	CS-1	CS-2	CS-3	CS-4	CS-5
PR302 - Compression Joint Seal	43	ft				43	0
PR316 - Other Bearing	6	each				6	0
PR831 - Steel Beam End	6	each			6		0
12 - Reinforced Concrete Deck	1709	ft ²	1099	450	160		0
107 - Steel Open Girder/Beam	229	ft		137	92		0
515 - Steel Protective Coating	1917	ft ²		1725	192		0
330 - Metal Bridge Railing	119	ft		119			0
515 - Steel Protective Coating	751	ft ²		375	376		0
810 - Sidewalk	56	ft ²		28	28		0
Span Number : 2							
PR205 - Reinforced Concrete Column	3	each			3		0
PR220 - Reinforced Concrete Pile/Cap Footing	24	ft					24
PR234 - Reinforced Concrete Pier Cap	43	ft		11	32		0
PR316 - Other Bearing	6	each				6	0
PR831 - Steel Beam End	6	each			6		0
PR852 - Pier Pedestal	6	each		2	4		0
12 - Reinforced Concrete Deck	2526	ft ²	2126		400		0
107 - Steel Open Girder/Beam	352	ft		202	150		0
515 - Steel Protective Coating	3080	ft ²		2460	620		0
330 - Metal Bridge Railing	176	ft		176			0
515 - Steel Protective Coating	1093	ft ²		550	543		0
810 - Sidewalk	82	ft ²		41	41		0
Span Number : 3							
PR220 - Reinforced Concrete Pile/Cap Footing	21	ft					21
PR302 - Compression Joint Seal	43	ft				43	0
PR316 - Other Bearing	6	each				6	0
PR831 - Steel Beam End	6	each			6		0
12 - Reinforced Concrete Deck	2827	ft ²	1837	140	850		0
107 - Steel Open Girder/Beam	394	ft		230	164		0
515 - Steel Protective Coating	3448	ft ²		2760	688		0
330 - Metal Bridge Railing	197	ft		197			0
515 - Steel Protective Coating	1203	ft ²		600	603		0
Span Number : 4							
EA215 - Reinforced Concrete Abutment	47	ft		34	13		0
EA220 - Reinforced Concrete Pile/Cap Footing	82	ft		47			35
EA227 - Reinforced Concrete Pile	20	each					20
EA851 - Abutment Pedestal	6	each		2	4		0

Element**	Total Quantity	Unit	CS-1	CS-2	CS-3	CS-4	CS-5
PR316 - Other Bearing	6	each				6	0
PR831 - Steel Beam End	6	each			6		0
12 - Reinforced Concrete Deck	1699	ft ²	1189	340	170		0
107 - Steel Open Girder/Beam	227	ft		135	92		0
515 - Steel Protective Coating	1902	ft ²		1710	192		0
330 - Metal Bridge Railing	119	ft		119			0
515 - Steel Protective Coating	747	ft ²		375	372		0
810 - Sidewalk	55	ft ²			55		0

*For structures with 3 or less spans, all elements of all spans are shown.

For structures with 4 or more spans, elements (parent/child) with Condition State values of 3, 4, or 5 are shown.

** Elements with a prefix designate the locations of BA-Begin Abutment, BW-Begin Wingwall, EA-End Abutment, EW-End Wingwall, CO-Culvert Outlet, and PR-Pier. No prefix generally indicates the element is part of the superstructure.

Inspection Notes

General Comments

The bridge is located at MP 278.93 along the NYS Thruway (90IX) and is oriented North.

Element Condition Notes

Span 1: 12 - Reinforced Concrete Deck
Span 2: 12 - Reinforced Concrete Deck
Span 3: 12 - Reinforced Concrete Deck
Span 4: 12 - Reinforced Concrete Deck

Condition State 3 Note

Referenced Photo(s): 1, 4

Referenced Sketch(es): None

The left fascia in Span 1 is spalled for approx. 80% of its length for full-height by up to 2" deep with exposed and corroded rebar. The deck is in good to fair condition in approx. 90% of Span 1, 85% of Span 2, 70% of Span 3 and 90% of Span 4 with areas of mapcracking with light efflorescence. Approx. 10% of Span 1, 15% of Span 2, 30% of Span 3 and 10% of Span 4 is spalled up to 1.5" deep with exposed rebar, primarily around the scupper downspouts and over the piers. No loose concrete was observed during this inspection. Previous Safety Flag SF14-051 was issued during the 2014 inspection for deck deterioration in Span 3 Bay 5. The flag was removed by NYSTA personnel on 6/30/2014 after full depth deck repairs were completed.

Span 1: 107 - Steel Open Girder/Beam
Span 2: 107 - Steel Open Girder/Beam
Span 3: 107 - Steel Open Girder/Beam
Span 4: 107 - Steel Open Girder/Beam

Condition State 3 Note

Referenced Photo(s): 10, 14, 15

Referenced Sketch(es): None

The webs of all girders over each of the piers have section loss at the end 3-4". The section loss is typically 10-15%. However, these losses are located outside of the bearing stiffeners. The worst area of web section loss is in Span 3 on Girder G1 over Pier 2. At this location, there is 30% section loss on the bottom 2" of the web for 12" extending inward from the end of the girder. The bearing stiffeners of all girders over the piers typically have 10-20% section loss with the worst being up to 40% loss over Pier 2.

The top 16" of the Span 3 Girder G6 web over Pier 2 has an average section loss of 35%. This occurs over a length of approx. 8". The end 3" of the girder was measured to be 0.27" with 0.35" measured at 6.5" from the end of the girder.

Both fascia girders, in all spans, have areas of previous pitting on the bottom 8" of the girder webs and the bottom flanges. The pitting on the webs is up to 1/4" which results in approx. 40% section loss. Pitting on the girder bottom flanges is

estimated to be approx. 25% section loss on the outboard flange and <5% on the inboard flange, resulting in a total estimated section loss of approx. 10%.

The ends of Girders G1-G3 at Pier 1 and Girders G1-G4 at Pier 3 are touching and the webs are slightly twisted from previous overexpansion of the bearings. The worst location is Girder G1 over Pier 3 with up to 3/8" lateral misalignment/bending of the webs.

The CS-3 quantity for Span 1 consists of the end 4 feet of the 4 interior girders over the pier and the total 38 foot length of each fascia girder. Therefore, the total CS-3 quantity for Span 1 is 92 LF.

The CS-3 quantity for Span 2 consists of the end 4 feet of the 4 interior girders over both piers and the total 59 foot length of each fascia girder. Therefore, the total CS-3 quantity for Span 1 is 150 LF.

The CS-3 quantity for Span 3 consists of the end 4 feet of the 4 interior girders over both piers and the total 66 foot length of each fascia girder. Therefore, the total CS-3 quantity for Span 1 is 164 LF.

The CS-3 quantity for Span 4 consists of the end 4 feet of the 4 interior girders over the pier and the total 38 foot length of each fascia girder. Therefore, the total CS-3 quantity for Span 1 is 92 LF.

Span 1: 107 - Steel Open Girder/Beam-515 - Steel Protective Coating
Span 2: 107 - Steel Open Girder/Beam-515 - Steel Protective Coating
Span 3: 107 - Steel Open Girder/Beam-515 - Steel Protective Coating
Span 4: 107 - Steel Open Girder/Beam-515 - Steel Protective Coating

Condition State 3 Note

Referenced Photo(s): 1

Referenced Sketch(es): None

Most of the paint in Spans 1 and 4 is in fair condition. However, approx. 10% of the surface area of the steel framing is in poor condition with light rust freckling, peeling, blistering and active steel corrosion. Most of the paint system in Spans 2 and 3 is also in fair condition. However, approx. 20% of the surface area of the steel framing is in poor condition with light rust freckling, peeling, blistering and active steel corrosion on the bottom flanges of the girders, the lower portions of the webs and the outboard sides of the fascia girders. The rest of the paint is slightly faded.

Span 1: BA215 - Reinforced Concrete Abutment

Condition State 3 Note

Referenced Photo(s): 11, 12

Referenced Sketch(es): None

The begin abutment backwall has isolated areas of tight cracking with efflorescence and shallow spalls along the top of the backwall. There is moderate to heavy efflorescence buildup adjacent to the weep holes in Girder Bays 1-3. This combines for a total CS-3 quantity of 22 LF.

The pedestals supporting Girders G4 and G5 at the begin abutment have approx. 1 sqft shallow spalls on their end faces. The pedestal supporting Girder G6 is hollow sounding with delaminated concrete on the end and left faces. In addition, there is a 4 sqft by 2" deep spall on the top surface at the begin left, adjacent to the backwall. This spall slightly undermines the bearing by <5%. The concrete within the spall is solid. The pedestal supporting Girder G1 has a 1.3 sqft by up to 2" deep spall on the top right surface with no undermining of the bearing. This spall extends onto the right face of the pedestal for full height by 3" wide and up to 1" deep. This combines for a total CS-3 quantity of 3 LF per interior pedestal and 4 LF per fascia pedestal for a total of 14 LF.

Note, due to overlap of the pedestal and backwall CS-3 quantities, the total deteriorated length is 30 LF.

Span 1: BA220 - Reinforced Concrete Pile/Cap Footing
Span 1: PR220 - Reinforced Concrete Pile/Cap Footing
Span 2: PR220 - Reinforced Concrete Pile/Cap Footing
Span 3: PR220 - Reinforced Concrete Pile/Cap Footing
Span 4: EA220 - Reinforced Concrete Pile/Cap Footing

Condition State 5 Note

Referenced Photo(s): None

Referenced Sketch(es): None

The substructure footings were not visible for inspection. At the abutments, the wingwall footings were not visible, however the abutment footings were visible and in generally fair condition with minor deterioration observed at isolated locations.

Span 1: BA227 - Reinforced Concrete Pile Span 4: EA227 - Reinforced Concrete Pile <i>Referenced Photo(s):</i> None <i>Referenced Sketch(es):</i> None	Condition State 5 Note
The substructure piles were not visible for inspection.	
Span 1: PR302 - Compression Joint Seal Span 3: PR302 - Compression Joint Seal <i>Referenced Photo(s):</i> 10, 16 <i>Referenced Sketch(es):</i> None	Condition State 4 Note
The joints at Piers 1 and 3 are debonded for approx 75% of their lengths each. The seal is also weathered and cracked with heavy leakage onto the elements below, causing premature deterioration of the elements below.	
Span 1: BA313 - Fixed Bearing-515 - Steel Protective Coating Span 2: PR313 - Fixed Bearing-515 - Steel Protective Coating Span 3: PR313 - Fixed Bearing-515 - Steel Protective Coating Span 3: PR316 - Other Bearing-515 - Steel Protective Coating Span 4: EA313 - Fixed Bearing-515 - Steel Protective Coating <i>Referenced Photo(s):</i> 2 <i>Referenced Sketch(es):</i> None	Condition State 3 Note
The paint system on the bearings at the piers is in generally fair condition but slightly faded. The paint on the upper portions of the bearings at the abutments is in generally fair condition with no significant flaws. The paint on the lower portions of the bearings at the abutments is typically peeling and flaking.	
Span 1: PR316 - Other Bearing Span 2: PR316 - Other Bearing Span 3: PR316 - Other Bearing Span 4: PR316 - Other Bearing <i>Referenced Photo(s):</i> 8, 9, 10 <i>Referenced Sketch(es):</i> None	Condition State 4 Note
The bearings under the girders on Piers 1 and 3 are constructed of a sole plate with an LVL (laminated veneer lumber) stack and no masonry plate. The LVL stack is intended to function as the bearing pad. Although the bearing components are in materially fair condition, the functionality of these materials being used in such a way is suspect. The ends of several of the girders are touching at 75 degrees and slightly twisted. It could not be determined if this was from issues with the previous bearing system or this bearing system. It appears that the bearings were temporarily constructed this way, but have not been replaced with a permanent fix.	
Span 1: 330 - Metal Bridge Railing-515 - Steel Protective Coating Span 2: 330 - Metal Bridge Railing-515 - Steel Protective Coating Span 3: 330 - Metal Bridge Railing-515 - Steel Protective Coating Span 4: 330 - Metal Bridge Railing-515 - Steel Protective Coating <i>Referenced Photo(s):</i> 3 <i>Referenced Sketch(es):</i> None	Condition State 3 Note
The paint on the discontinuous steel rail is cracking and peeling on approx. 50% of its area throughout all spans. The galvanization on the thrie beam upgrade is in generally fair condition with light rust freckling at isolated locations.	
Span 1: 810 - Sidewalk Span 2: 810 - Sidewalk Span 4: 810 - Sidewalk <i>Referenced Photo(s):</i> 5 <i>Referenced Sketch(es):</i> None	Condition State 3 Note
The tops of the right sidewalks in Spans 1 and 2 are spalled approx. 9" wide by up to 1" deep with no exposed bars. The top of the right sidewalk in Span 4 is spalled 4" wide by up to 1" deep for full length of the span. The top of the left sidewalk in Span 4 is spalled full width by full length of the span.	

Span 1: PR831 - Steel Beam End Span 2: PR831 - Steel Beam End Span 3: PR831 - Steel Beam End Span 4: PR831 - Steel Beam End Referenced Photo(s): 10 Referenced Sketch(es): None	Condition State 3 Note
<p>The webs of all girders over each of the piers have section loss at the end 3-4". The section loss is typically 10-15%. However, these losses are located outside of the bearing stiffeners. The worst area of web section loss is in Span 3 on Girder G1 over Pier 2. At this location, there is 30% section loss on the bottom 2" of the web for 12" extending inward from the end of the girder. The bearing stiffeners of all girders over the piers typically have 10-20% section loss with the worst being up to 40% loss over Pier 2.</p> <p>Also, the top 16" of the Span 3 Girder G6 web over Pier 2 has an average section loss of 35%. This occurs over a length of approx. 8". The end 3" of the girder was measured to be 0.27" with 0.35" measured at 6.5" from the end of the girder.</p>	
Span 1: BA850 - Backwall Referenced Photo(s): 11 Referenced Sketch(es): None	Condition State 3 Note
<p>The begin abutment backwall has isolated areas of tight cracking with efflorescence and shallow spalls along the top of the backwall. There is moderate to heavy efflorescence buildup adjacent to the weep holes in Girder Bays 1-3.</p>	
Span 1: BA851 - Abutment Pedestal Referenced Photo(s): 12 Referenced Sketch(es): None	Condition State 3 Note
<p>The pedestals supporting Girders G4 and G5 at the begin abutment have approx. 1 sqft shallow spalls on their end faces. The pedestal supporting Girder G6 is hollow sounding with delaminated concrete on the end and left faces. In addition, there is a 4 sqft by 2" deep spall on the top surface at the begin left, adjacent to the backwall. This spall slightly undermines the bearing by <5%. The concrete within the spall is solid. The pedestal supporting Girder G1 has a 1.3 sqft by up to 2" deep spall on the top right surface with no undermining of the bearing. This spall extends onto the right face of the pedestal for full height by 3" wide and up to 1" deep.</p>	
Span 2: PR205 - Reinforced Concrete Column Referenced Photo(s): 6 Referenced Sketch(es): None	Condition State 3 Note
<p>The Pier 2 columns all have isolated spalls, light to moderate cracks and hollow and delaminated areas of concrete. The worst column is Column C2 which has a full height by up to 1'-6" wide by up to 4" deep spall with exposed rebar on the end face and a large area of delaminated concrete located between 2 full height vertical cracks on the begin face.</p>	
Span 2: PR234 - Reinforced Concrete Pier Cap Referenced Photo(s): 7 Referenced Sketch(es): None	Condition State 3 Note
<p>The underside of the pier cap, in the right column bay, is cracked with delaminated concrete and isolated spalls. There is a 5 sqft by up to 4" deep spall with exposed rebar near the center of the end face, at the top corner of the cap. The top surface of the cap, adjacent to the spall, is hollow sounding, but the concrete within the spalled area is solid. Also, there is a crack extending from the spall across the face of the pedestal under Girder G3. There are moderate to heavy cracks on the begin face of the cap, between the pedestals.</p>	
Span 2: PR852 - Pier Pedestal Referenced Photo(s): 7 Referenced Sketch(es): None	Condition State 3 Note
<p>The pedestals supporting Girders G1-G4 are deteriorated as follows: Pedestal 1 has light cracking with hollow sounding areas on the begin face and top surface. Pedestal 2 has light cracking and hollow sounding areas on the end face. Pedestal 3 has light to moderate cracking and hollow sounding areas on the begin face and cracking with delaminated concrete on the end face. Pedestal 4 has cracking and hollow sounding areas on the end face. Pedestals 5 and 6 have very minor</p>	

deterioration and rate CS-2.

Span 4: EA215 - Reinforced Concrete Abutment

Condition State 3 Note

Referenced Photo(s): 2, 13

Referenced Sketch(es): None

The pedestal supporting Girder G1 has a 1/16" wide vertical crack with no displacement down the entire face of the pedestal. However, the concrete is solid adjacent to the crack. The pedestals supporting Girders G4-G6 are spalled to varying degrees on their begin faces. The worst is a 1.5 sqft by up to 2" deep spall with exposed rebar on the begin face of the pedestal supporting Girder G5. No undermining of the bearings was observed. This combines for a CS-3 quantity of 3 LF per interior pedestal and 4 LF per fascia pedestal for a total of 13 LF.

Span 4: EA851 - Abutment Pedestal

Condition State 3 Note

Referenced Photo(s): 2, 13

Referenced Sketch(es): None

The pedestal supporting Girder G1 has a 1/16" wide vertical crack with no displacement down the entire face of the pedestal. However, the concrete is solid adjacent to the crack. The pedestals supporting Girders G4-G6 are spalled to varying degrees on their begin faces. The worst is a 1.5 sqft by up to 2" deep spall with exposed rebar on the begin face of the pedestal supporting Girder G5. No undermining of the bearings was observed.

Field Notes

Staff Present During Inspection

Name	Title	Organization
Admir Domazet	ATL	WSA Group
Mark Fabend	TL	WSA Group
NYSTA Crew	WZTC and Access	NYSTA

General Equipment Required for Inspection*

Access Type
13 - Walking
15 - Extension Ladder
19 - Up to 30 Foot Lift
29 - Lane Closure With Shadow Vehicle

* For span specific equipment requirements refer to the Active Inventory's "Access Needs" tab in BDIS.

Detailed Time & Weather Conditions

Field Date	Arrival	Departure	Temp (F)	Weather Conditions
06/02/2016	08:30 AM	01:00 PM	75	Rain
06/14/2016	08:00 AM	10:00 AM	55	Clear

Inspection Times (hours)

Time required for travel, inspection and report preparation	14
Lane closure usage	4
Railroad flagging time	No

Inspection Photographs

Photo Number: 1

Photo Filename: 278.93_5510090_PH_01.JPG

Attachment Description:
Span 3 Paint and Deck -
Looking Towards Begin in
Bay 2 (Typical Condition)



Photo Number: 2

Photo Filename: 278.93_5510090_PH_02.JPG

Attachment Description:
End Abutment Bearings,
Pedestals and Paint -
Looking at Right Side of
Girder G1



Photo Number: 3

Photo Filename: 278.93_5510090_PH_03.JPG

Attachment Description:
Span 3 Railing Paint -
Looking Towards Begin at
Right Side Railing (Typical
Condition)



Photo Number: 4

Photo Filename: 278.93_5510090_PH_04.JPG

Attachment Description:
Span 1 Fascia - Looking
Along Left Fascia Towards
End



Photo Number: 5

Photo Filename: 278.93_5510090_PH_05.JPG

Attachment Description:
Span 4 Sidewalk - Looking
Towards End Along Left
Sidewalk (Typical
Condition)



Photo Number: 6

Photo Filename: 278.93_5510090_PH_06.JPG

Attachment Description:
Pier 2 Column - Looking at
End Face Column C2
Towards Begin Right



Photo Number: 7

Photo Filename: 278.93_5510090_PH_07.JPG

Attachment Description:
Pier 2 Cap and Pedestals -
Looking at End Face in
Girder Bay 3 Towards Begin



Photo Number: 8

Photo Filename: 278.93_5510090_PH_08.JPG

Attachment Description:
Spans 3 and 4 Bearings -
Looking Towards End Left
at G5 Bearing Over Pier 3



Photo Number: 9

Photo Filename: 278.93_5510090_PH_09.JPG

Attachment Description:
Span 3 Bearings - Looking
Towards End Left at G3
Bearing Over Pier 3



Photo Number: 10

Photo Filename: 278.93_5510090_PH_10.JPG

Attachment Description:
Steel Beam Ends and
Bearings - Looking Towards
Left at Girder G1 Over Pier
3



Photo Number: 11

Photo Filename: 278.93_5510090_PH_11.JPG

Attachment Description:
Begin Abutment Backwall -
Looking Towards Begin in
Girder Bay 3



Photo Number: 12

Photo Filename: 278.93_5510090_PH_12.JPG

Attachment Description:
Begin Abutment Pedestals -
Looking at Left Face of
Pedestal 6



Photo Number: 13

Photo Filename: 278.93_5510090_PH_13.JPG

Attachment Description:
End Abutment Pedestals -
Looking at Begin Face of
Pedestal 5



Photo Number: 14

Photo Filename: 278.93_5510090_PH_14.JPG

Attachment Description:
Span 3 Primary Members -
Looking Towards Begin
Along Right Side of Girder
G6



Photo Number: 15

Photo Filename: 278.93_5510090_PH_15.JPG

Attachment Description:
Span 3 Primary Members -
Looking Towards Begin
Along Right Side of Girder
G6



Photo Number: 16

Photo Filename: 278.93_5510090_PH_16.JPG

Attachment Description:
Pier 1 Joint - Looking
Towards Right Across Joint
(Typical Condition)

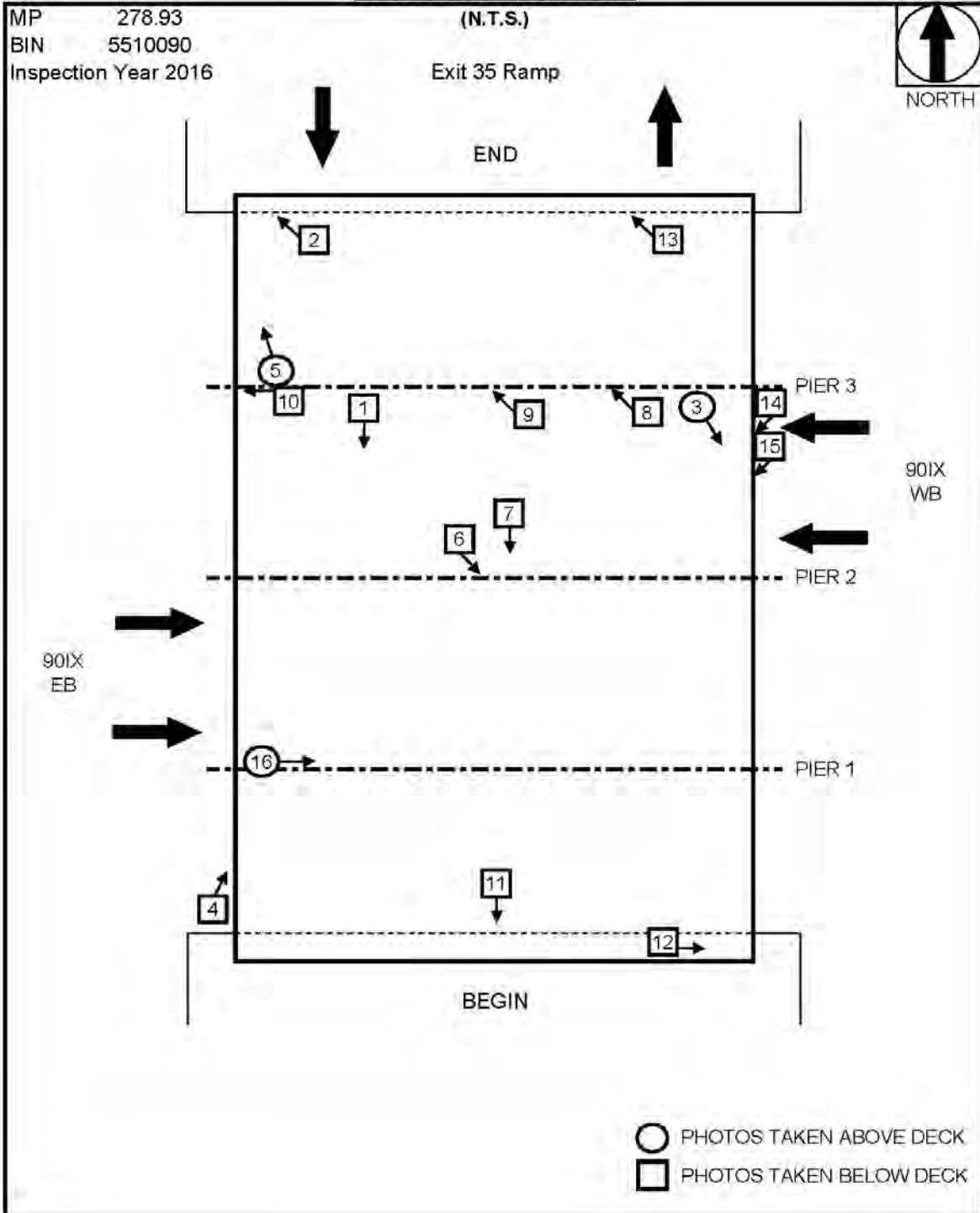


Inspection Sketches

Sketch Number: 17

Sketch Filename: 278.93_5510090_2016_PLP.jpg

PHOTO LOCATION PLAN



Sketch Description: Photo Location Plan

Sketch Number: 18

Sketch Filename: 278.93_5510090_2016_VertClear.jpg



MINIMUM BRIDGE UNDERCLEARANCE
MAINLINE BRIDGES
BUFFALO DIVISION
NEW YORK STATE THRUWAY AUTHORITY

MP: 278.93 SHEET 1 OF 1
BIN: 5510090 DATE: 6/14/2016

Bridge Orientation: North

Feature Crossed: 90 IX WB

TWY Traffic Direction:

Date	A	B	C	D	E	F	G	H	A'	B'	C'	D'	E'	F'	G'	H'
5/15/2008		14.86		14.59	14.70					14.51		14.17	14.20		14.34	
12/10/2009										14.49		14.16	14.20		14.40	
6/2/2010	15.15	14.84		14.58	14.70					14.49		14.13	14.20		14.39	
6/27/2011	15.06	14.84		14.56	14.70				14.68	14.49		14.14	14.19		14.40	
6/20/2012	15.06	14.84		14.56	14.70				14.70	14.53		14.19	14.28		14.41	14.44
6/17/2014	15.06	14.84		14.58	14.70				14.67	14.51		14.19	14.28		14.40	14.43
6/14/2016	15.07	14.88		14.61	14.74				14.72	14.57		14.26	14.33		14.43	14.43

REMARKS:

1. Measurements taken along Left Fascia Girder (G6).
2. 2016 - No significant changes to measurements since previous inspection.

NOTES:

- 1) Use appropriate profile sketch 'A' or 'B'
- 2) When using sketch 'B' use points E, D & B and E', D' & B' to record measurements for 2 lane sections.
- 3) When using sketch 'B', use point F for detached ramps only
- 4) H and H' measurements taken at any other needed location or NA. Note location in remarks.
- 5) Only one row of measurements should be recorded (i.e. only the lowest measurements of each point should be recorded).
- 6) For thruway ramp over other roadway use this form and specify "ramp" under thruway traffic direction column.
- 7) For riveted construction stringers, Dimensions shall be taken to the bottom of the rivet heads.

THRUWAY MAINLINE BRIDGE



THRUWAY MAINLINE BRIDGE



Sketch Description: Vertical Clearance Measurements

Sketch Number: 19

Sketch Filename: 278.93_5510090_2016_LRFV.jpg

NEW YORK STATE THRUWAY AUTHORITY
BRIDGE INSPECTION FIELD VERIFICATION OF LOAD RATING DATA

Date: 06/14/16

MP/BIN: 278.93 / 5510090

Feature Carried / Crossed: Exit 35 Ramp O/ 90IX

Dead Load:

WS Thickness & Material Shown on Plans - 7" RC Deck With 4" Average Asph Overlay

Changes Noted in Field: Note: Previous reports called for a 4" RC Deck

Railing Type Shown on Plans - 4 Rail Steel With Thrie Beam Upgrade

Changes Noted in Field: None

Other DL Contributions (e.g. utilities) on Plans - ITS conduit and sensors located in Spans 2 & 3 in Bay 1

Changes Noted in Field: None

Section Loss: 10% BF Loss Throughout, 30% Web Loss G1 at Beg Sp 3

Existing Documentation (sketches, etc.) ? - None

Location of Documentation (previous report, blue folder, etc.)? - None

New Section Loss noted? - None

Brief Description (attach sketches if helpful) - N/A

Additional Notes: None

Attachments: yes no (please circle)

Team Leader: Mark E Fabend

Signature: Mark E. Fabend

Date: June 14, 2016

Sketch Description: Load Rating Field Verification

Standard Photographs

278.93-STD-99-00-14BegApp.JPG



278.93-STD-99-00-14EnRtWW.JPG



278.93-STD-99-00-14EndAbt.JPG



278.93-STD-99-00-14EndApp.JPG



278.93-STD-99-00-14LookLt.JPG



278.93-STD-99-00-14LookRt.JPG



278.93-STD-99-00-14LtElev.JPG



278.93-STD-99-00-14P3Beg_.JPG



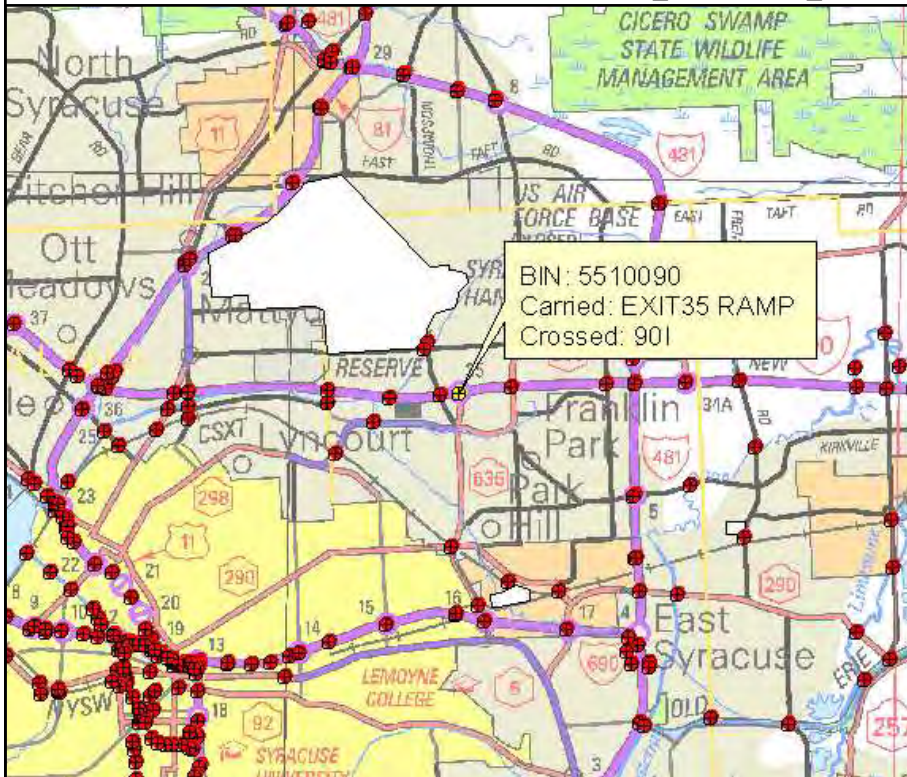
278.93-STD-99-00-14RtElev.JPG



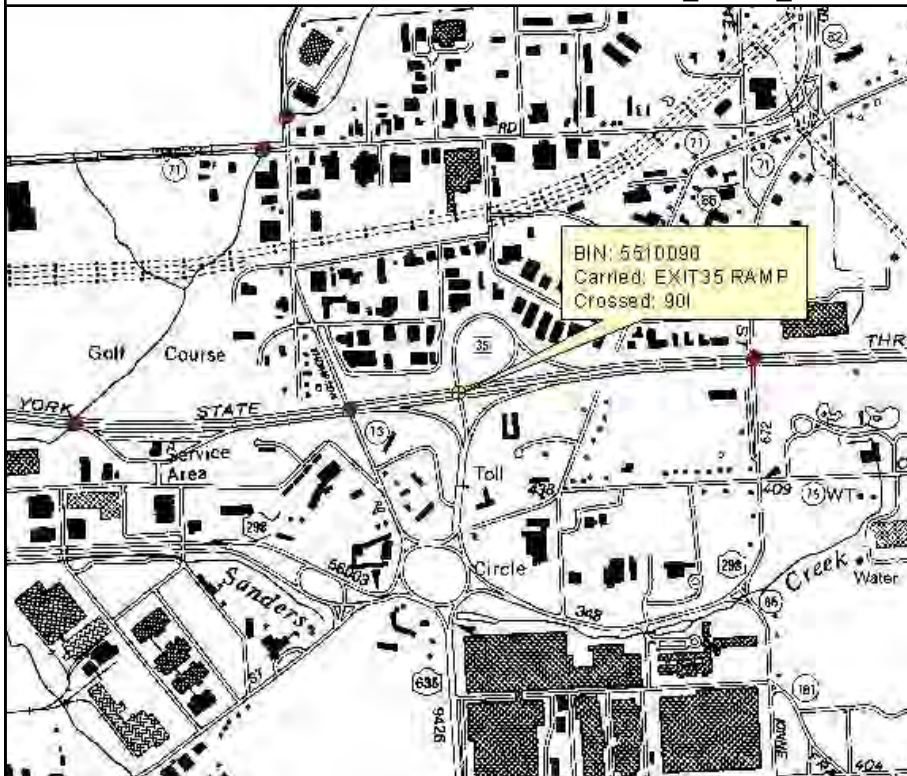
278.93-STD-99-00-14Under_.JPG



5510090_LOCATION_MAP.JPG



5510090_QUAD_MAP.JPG



Appendix E Soil Borings

SM 282 E 12/02

PSN _____ BORNUM FHB-13
DIVISION Syracuse
COUNTY Onondaga
PIN S52886
ROUTE Thruway Mainline
MILEPOST 278.93
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements



NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION
SUBSURFACE EXPLORATION LOG



HOLE FH-B
LINE _____
STA _____
OFFSET ft
SURF. ELEV. 421.4323, NAD 88
DEPTH TO WATER 9.6

COORDINATES (Lat) 43.092974°N (Long) 76.089867°W
DATE START 12/21/2016 DATE FINISH 12/22/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER WT OF HAMMER-CASING lb HAMMER FALL-CASING in
CASING O. D. in I. D. in WT OF HAMMER-SAMPLER 140 lb HAMMER FALL-SAMPLER 30 in
SAMPLER O. D. 2 in I. D. 1-3/8 in HAMMER TYPE Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.)				MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK
			0 6	6 12	12 18	18 24				
	0.0									-
		SS1	9	6	4	8	12.7%	12		3.0-3.4' Dark gray (SAND-SILT-CLAY) fill with 0 to 3% S - NPL gravel, little sand and clay, very stiff, massive soil structure, (ML-CL). 3.4-5.0' Brown gravelly (SILTY-SAND) fill with 20 to 40% gravel, little silt, compact, massive soil structure, (SM).
	5.0									
		SS2	3	1/12			14.4%	6		Brown (SAND-SILT-CLAY) fill with 3 to 7% gravel, little to S - LPL some sand, trace clay, very soft, massive soil structure, (ML-CL).
	10.0									
		SS3	10	13	21	25	9.9%	24		Brown (SANDY-SILT) fill with 3 to 7% gravel, little mostly W - NPL very fine to fine size sand, trace clay, dense, massive soil structure, (ML). Note: Driller noted change much harder below 16.0 feet.
	15.0									
		SS4	64	50/5			11.7%	11		Gray to reddish brown very weathered shale stone W - NPL fragments, very soft to soft.
	20.0									
		SS5	39	50/4			13.7%	10		Reddish brown gravelly (SANDY-SILT) with 10 to 20% M - LPL gravel and flat sided stone fragments, little sand, trace clay, very dense, massive soil structure, (ML) tending toward (ML-CL).
	25.0									

The subsurface information shown here was obtained for design and estimate purposes. It is made available so that users may have access to the same information available to the State. It is presented in good faith. By the nature of the exploration process, the information represents only a small fraction of the total volume of the material at the site. Interpolation between data samples may not be indicative of the actual material encountered.

DRILL RIG OPERATOR Andrew Kempisty
SOIL & ROCK DESCRIPTION Kyle Shearing
INSPECTOR Joe Dorety (Fisher)
BIN 5510090
STRUCTURE NAME Int. 35 Ramp/Thruway

SM 282 E 12/02

PSN _____ BORNUM FHB-13
DIVISION Syracuse
COUNTY Onondaga
PIN S52886
ROUTE Thruway Mainline
MILEPOST 278.93
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements



NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION
SUBSURFACE EXPLORATION LOG



HOLE FH-B
LINE _____
STA _____
OFFSET ft
SURF. ELEV. 421.4323, NAD 88
DEPTH TO WATER 9.6

COORDINATES (Lat) 43.092974°N (Long) 76.089867°W
DATE START 12/21/2016 DATE FINISH 12/22/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER WT OF HAMMER-CASING lb HAMMER FALL-CASING in
CASING O. D. in I. D. in WT OF HAMMER-SAMPLER 140 lb HAMMER FALL-SAMPLER 30 in
SAMPLER O. D. 2 in I. D. 1-3/8 in HAMMER TYPE Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.)					MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK
			0	6	12	18	24				
			6	12	18	24					
	25.0										-
		SS6	100/5					14.3%	5		Gray weathered shale stone fragments, very soft to soft. W - NPL
	30.0										-
		SS7	100/4					19.4%	4	2.9	33.0-33.4' Gray weathered shale and siltstone stone fragments, very soft to soft.
	35.0	RUN1									Note: Switched boring method to coring with a NQ-2 size double tubed wireline core barrel with diamond bit. Run #1: NQ-2 size diamond core barrel 33.4-38.3' Reddish brown to gray shale with occasional thin gypsum interbeds/seams, very soft to soft, clay, very fine, smooth, thinly to thickly laminated, very intensely fractured horizontally along bedding planes with some gravel like zones, core pieces range from (0.01-0.43') slightly weathered, driller noted about a 6" drop ~3.0-ft into the run, possible void, slightly pitted.
		RUN2								5	
	40.0										Recovery: 2.9'/4.9' = 59% RQD: 0.4'/4.9' = 8% Number of Pieces >4": 1 Number of Pieces total: >50
											Run #2: NQ-2 size diamond core barrel 38.3-43.3' Reddish brown to gray shale with occasional thin gypsum interbeds/seams, soft, clay, very fine, smooth, thinly to thickly laminated, moderately fractured horizontally along bedding planes, core pieces range from (0.03-1.2') fresh core breaks.
											Recovery: 5.0'/5.0' = 100% RQD: 3.5'/5.0' = 70% Number of Pieces >4": 4 Number of Pieces total: 11
											BOTTOM OF HOLE AT 43.30 ft

Note:
Advanced bore hole with 4 1/4" ID x 8" OD hollow stem auger casing with 5.0-foot interval sampling to 33.0 feet. Continued below with a NQ-2 size double tubed wireline core barrel with diamond bit to end of coring at 43.3 feet. Bore hole was backfilled with cuttings to ground surface upon completion.

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DRILL RIG OPERATOR Andrew Kempisty
SOIL & ROCK DESCRIPTION Kyle Shearing
INSPECTOR Joe Dorety (Fisher)
BIN 5510090
STRUCTURE NAME Int. 35 Ramp/Thruway

CONTRACT _____ CONTRACTOR Earth Dimensions, Inc.

SHEET 2 OF 3 HOLE FH-B

TWY-CAN SUBSURF EXPLORATION 7K16_BIN-5510090-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17

SM 282 E 12/02

PSN _____ BORNUM FHB-13
DIVISION Syracuse
COUNTY Onondaga
PIN S52886
ROUTE Thruway Mainline
MILEPOST 278.93
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements



NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION
SUBSURFACE EXPLORATION LOG



HOLE FH-B
LINE _____
STA _____
OFFSET ft
SURF. ELEV. 421.4323, NAD 88
DEPTH TO WATER 9.6

COORDINATES (Lat) 43.092974°N (Long) 76.089867°W
DATE START 12/21/2016 DATE FINISH 12/22/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER WT OF HAMMER-CASING _____ lb HAMMER FALL-CASING _____ in
CASING O. D. _____ in I. D. _____ in WT OF HAMMER-SAMPLER 140 lb HAMMER FALL-SAMPLER 30 in
SAMPLER O. D. 2 in I. D. 1-3/8 in HAMMER TYPE Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.)					MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK
			0	6	12	18	24				
			6	12	18	24					

DATE	TIME	DEPTH (ft.)			ARTESIAN HEAD HEIGHT ABOVE GROUND	FILLED WITH WATER AT END OF DAY
		HOLE	CASING	WATER		
21-Dec-16	16:00	30.00	30.00	NONE	NO	No
22-Dec-16	09:00	30.00	30.00	9.60	NO	No
22-Dec-16	11:45	43.30	33.00	8.00	NO	No

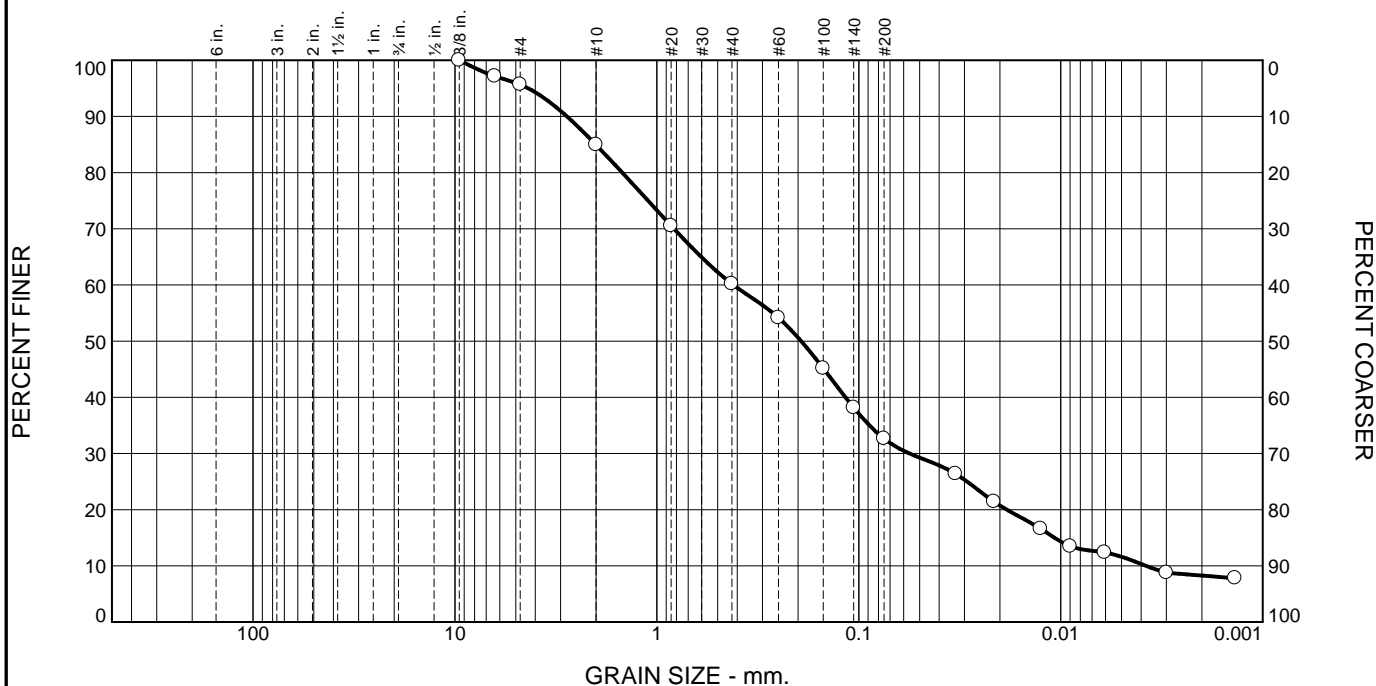
The subsurface information shown here was obtained for design and estimate purposes. It is made available so that users may have access to the same information available to the State. It is presented in good faith. By the nature of the exploration process, the information represents only a small fraction of the total volume of the material at the site. Interpolation between data samples may not be indicative of the actual material encountered.

DRILL RIG OPERATOR Andrew Kempisty
SOIL & ROCK DESCRIPTION Kyle Shearing
INSPECTOR Joe Dorety (Fisher)
BIN 5510090
STRUCTURE NAME Int. 35 Ramp/Thruway

CONTRACT _____ CONTRACTOR Earth Dimensions, Inc.

SHEET 3 OF 3 HOLE FH-B

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	4.3	10.8	24.7	27.6	21.0	11.6

TEST RESULTS (D422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.375"	100.0		
.25	97.1		
#4	95.7		
#10	84.9		
#20	70.5		
#40	60.2		
#60	54.2		
#100	45.2		
#140	38.2		
#200	32.6		
0.0332 mm.	26.4		
0.0214 mm.	21.4		
0.0126 mm.	16.6		
0.0090 mm.	13.5		
0.0061 mm.	12.4		
0.0030 mm.	8.8		
0.0014 mm.	7.8		

* (no specification provided)

Material Description		
ID#17-063		
Atterberg Limits (ASTM D 4318)		
PL=	LL=	PI=
Classification		
USCS (D 2487)=	AASHTO (M 145)=	
Coefficients		
D ₉₀ = 2.7884	D ₈₅ = 2.0085	D ₆₀ = 0.4179
D ₅₀ = 0.1929	D ₃₀ = 0.0561	D ₁₅ = 0.0107
D ₁₀ = 0.0038	C _u = 110.64	C _c = 2.00
Remarks		
Date Received: 2/9/17		Date Tested: 2/27/17
Tested By: ETC		
Checked By: JMA		
Title: LM		

Source of Sample: 6K16 & 7K16
Sample Number: FHB-13, SS2

Date Sampled:

3rd Rock, LLC

Client: Earth Dimensions, Inc.

Project: 6K16; 7K16

East Aurora, NY

Project No: 17-002

Figure

APPENDIX A
ROCK CORE EVALUATION SHEET

PSN _____
PIN 552886
BIN 5510090
Project Int. 35 Ramp/Thruway

Boring ID FHB-13
Surface Elevation _____
Depth From 33.4' to 43.3'
Number of Runs 2
Core Size NQ-2

Date Evaluated 12-22-16

Evaluator (s) Kyle Shearing

Top of Rock 28.0' (Depth) _____ (Elevation)

Top of Sound Rock 33.4' (Depth) _____ (Elevation)

Comments _____

RUN #1 Run Length 4.9

Depth Range: From 33.4' To 38.3'

RQD 0.4' (as measured) 8 %

Photo(s) _____

Rock Type Shale, with occasional thin gypsum interbeds/seams

Color Reddish brown to gray

Mineralogy, Grain Size, & Texture clay, very fine, smooth

Bedding Thinly to thickly laminated

Fractures Very intensely fractured horizontally along bedding planes; with some gravel like zones

Size Range of Pieces 0.01 - 0.43'

Hardness Very soft to soft

Weathering Slightly weathered

Additional Comments Recovery: 2.9' or 59%

Driller noted about a 6" drop approximately 3.0 feet into the run
(possible void) Slightly pitted

Number of Pieces > 4" : 1

Page 1 of y

Number of Pieces total: > 50

APPENDIX A
ROCK CORE EVALUATION SHEET (CONTINUED)

PSN _____ PIN 552886 Boring ID FHB-13

RUN # 2 Run Length 5.0' Depth Range: From 38.3' to 43.3'

RQD 3.5 (as measured) 70 % Photo(s) _____

Rock Type Shale, with occasional thin gypsum interbeds/seams

Color Reddish brown to gray

Mineralogy, Grain Size, & Texture Clay, very fine, smooth

Bedding Thinly to thickly laminated

Fractures Moderately fractured horizontally along bedding planes

Size Range of Pieces 0.03-1.2'

Hardness Soft

Weathering Fresh core breaks

Additional Comments Recovery: 5.0' or 100%

Number of Pieces >4" : 4

Number of Pieces total : 11

RUN # _____ Run Length _____ Depth Range: From _____ to _____

RQD _____ (as measured) _____ % Photo(s) _____

Rock Type _____

Color _____

Mineralogy, Grain Size, & Texture _____

Bedding _____

Fractures _____

Size Range of Pieces _____

Hardness _____

Weathering _____

Additional Comments _____

EDI # K16
 NYSTA
 Stattec/Fisher
 MP-282.62
 Tully/Bear Trail creek
 FH-K16
 MP-278.93
 Tully/Im. 35 RAMP
 DN-B-13

Date	Boring	MP	Rtn	Depth	Length	Rec	Rec %	RQD	RQD %	# of core pieces greater than 4"
12-1-16	FH-K-16	282.62	1	68.8-73.8	5.0	1.8	36%	0	0	0
12-1-16	FH-K-16	282.62	2	73.8-78.8	5.0	2.4	48%	0	0	0
12-1-16	FH-K-16	282.62	3	78.8-83.8	5.0	2.8	56%	0	0	0
12-1-16	FH-K-16	282.62	4	83.8-88.8	5.0	3.3	66%	0.8	16%	2
12-22-16	DN-B-13	278.93	1	33.4-38.3	4.9	2.9	59%	0.4	8%	1
12-22-16	DN-B-13	278.93	2	38.3-43.3	5.0	5.0	100%	3.5	70%	4



SM 282 E 12/02

PSN _____ BORNUM FHB-14
DIVISION Syracuse
COUNTY Onondaga
PIN S52886
ROUTE Thruway Mainline
MILEPOST 278.93
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements



NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION
SUBSURFACE EXPLORATION LOG



HOLE LINE STA _____
FH-B

OFFSET _____ ft

SURF. ELEV. 421.204, NAD 88

DEPTH TO WATER 7.7

COORDINATES (Lat) 43.092804°N (Long) 76.089615°W

DATE START 1/3/2017 DATE FINISH 1/3/2017

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER WT OF HAMMER-CASING lb HAMMER FALL-CASING in

CASING O. D. in I. D. in WT OF HAMMER-SAMPLER 140 lb HAMMER FALL-SAMPLER 30 in

SAMPLER O. D. 2 in I. D. 1-3/8 in HAMMER TYPE Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.)				MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK
			0 6	6 12	12 18	18 24				
	0.0									-
		SS1	6	6	7		10.5%	18		Brown (SANDY-SILT) fill with 3 to 7% gravel, little mostly M - NPL very fine to fine size sand, trace clay, compact, massive soil structure, (ML) tending toward (ML-CL).
	5.0									-
		SS2	1	11	39		12.6%	12		8.0-8.5' Brown (SILTY-SAND) fill with mostly very W to M - NPL fine to fine size sand, trace to little silt, very loose, massive soil structure, (SM). 8.5-9.0' Reddish brown (SANDY-SILT) with 5 to 10% gravel, little mostly very fine to fine size sand, compact, massive soil structure, (ML). 9.0-10.0' Bluish gray gravelly (SAND-SILT-CLAY) with 10 to 20% gravel, little sand and clay, very dense, massive soil structure, (ML-CL).
	10.0									-
		SS3	42	41	50/5		12.6%	17		13.0-14.0' Gray very gravelly (CLAYEY-SILT) with 60 to M - LPL 80% mostly shale stone fragments, little clay, very dense, massive soil structure, (ML-CL). 14.0-15.0' Reddish brownvery gravelly (SAND-SILT-CLAY) with 40 to 60% mostly shale stone fragments, little clay, trace to little sand, very dense, massive soil structure, (ML-CL). Note: Auger refusal at 18.0 feet. Continued below with 10.0-ft NQ2 core barrel with impregnated diamond bit.
	15.0									-
		RUN1							1.6	Run #1: NQ-2 size diamond core barrel 18.0-23.2' Gray to reddish brown shale, very soft to soft, sedimentary, very fine, smooth, thinly to thickly laminated, very intensely fractured, core pieces range from (0.01-0.25') moderately weathered with some areas completely weathered (saprolite). Recovery: 1.6'/5.2' = 31% RQD: 0' = 0% Number of Pieces >4": 0 Number of Pieces total: >50
	20.0									-
		RUN2							2.8	Run #2: NQ-2 size diamond core barrel 23.2-28.2' Reddish brown to gray shale, very soft to soft, sedimentary, very fine, smooth, thinly to thickly laminated, intensely fractured horizontally along bedding planes with some
	25.0									-

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DRILL RIG OPERATOR Andrew Kempisty

SOIL & ROCK DESCRIPTION Kyle Shearing

INSPECTOR Joe Dorety (Fisher)

BIN 5510090

STRUCTURE NAME

Int. 35 Ramp/Thruway

TWY-CAN SUBSURF EXPLORATION 7K16_BIN-5510090-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17

SM 282 E 12/02

PSN _____ BORNUM FHB-14
DIVISION Syracuse
COUNTY Onondaga
PIN S52886
ROUTE Thruway Mainline
MILEPOST 278.93
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements



NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION
SUBSURFACE EXPLORATION LOG



HOLE FH-B
LINE _____
STA _____
OFFSET ft
SURF. ELEV. 421.204, NAD 88
DEPTH TO WATER 7.7

COORDINATES (Lat) 43.092804°N (Long) 76.089615°W
DATE START 1/3/2017 DATE FINISH 1/3/2017

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER WT OF HAMMER-CASING _____ lb HAMMER FALL-CASING _____ in
CASING O. D. _____ in I. D. _____ in WT OF HAMMER-SAMPLER 140 lb HAMMER FALL-SAMPLER 30 in
SAMPLER O. D. 2 in I. D. 1-3/8 in HAMMER TYPE Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.)				MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK
			0	6	12	18				
	25.0									vertical fractures, core pieces range from (0.01-0.35'), slightly weathered.
										Recovery: 2.8'/5' = 56% RQD: 0.35'/5' = 7% Number of Pieces >4": 1 Number of Pieces total: >100
		RUN3							4.5	Run #3: NQ-2 size diamond core barrel 28.2-33.2 - Gray shale, moderately soft, sedimentary, very fine, smooth, thinly to thickly laminated, moderately fractured horizontally along bedding planes with an occasional high angle fracture, fresh weathering.
	30.0									Recovery: 4.5'/5' = 90% RQD: 2.5'/5' = 50% Number of Pieces >4": 6 Number of Pieces total: 23

BOTTOM OF HOLE AT 33.20 ft

*Note:
Advanced bore hole with 4 1/4" ID x 8" OD hollow stem auger casing with 5.0-foot interval sampling to 18.0 feet. Continued below with a NQ-2 size double tubed wireline core barrel with impregnated diamond bit to end of coring at 33.2 feet. Bore hole was backfilled with cuttings to ground surface upon completion.*

DATE	TIME	DEPTH (ft.)			ARTESIAN HEAD HEIGHT ABOVE GROUND	FILLED WITH WATER AT END OF DAY
		HOLE	CASING	WATER		
03-Jan-17	13:00	33.20	18.00	7.70	NO	No

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DRILL RIG OPERATOR Andrew Kempisty
SOIL & ROCK DESCRIPTION Kyle Shearing
INSPECTOR Joe Dorety (Fisher)
BIN 5510090
STRUCTURE NAME Int. 35 Ramp/Thruway

CONTRACT _____ CONTRACTOR Earth Dimensions, Inc.

SHEET 2 OF 2 HOLE FH-B

TWY-CAN SUBSURF EXPLORATION 7K16_BIN-5510090-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17

APPENDIX A
ROCK CORE EVALUATION SHEET

PSN _____
PIN 552886
BIN 5510090
Project Int. 35 Ramp/Thruway

Boring ID FHB-14
Surface Elevation _____
Depth From 18.0' to 33.2'
Number of Runs 3
Core Size NQ-2

Date Evaluated 01-03-17

Evaluator (s) Kyle Shearing

Top of Rock 18.0' (Depth) _____ (Elevation)

Top of Sound Rock 28.2' (Depth) _____ (Elevation)

Comments _____

RUN #1 Run Length 5.2

Depth Range: From 18.0' To 23.2'

RQD 0 (as measured) 0 %

Photo(s) _____

Rock Type Shale

Color Gray to reddish brown

Mineralogy, Grain Size, & Texture Sedimentary, very fine, smooth

Bedding Thinly to thickly laminated

Fractures very intensely fractured

Size Range of Pieces 0.01-0.25'

Hardness Very soft to soft

Weathering Moderately weathered with some areas completely weathered (saprolite)

Additional Comments Recovery: 1.6' or 31%

Number of Pieces > 4": 0

Number of Pieces total: > 50

APPENDIX A
ROCK CORE EVALUATION SHEET (CONTINUED)

PSN _____ PIN 552886 Boring ID FHB-14

RUN # 2 Run Length _____ Depth Range: From 23.2' to 28.2'

RQD 0.35' (as measured) 7 % Photo(s) _____

Rock Type Shale

Color Reddish brown to gray

Mineralogy, Grain Size, & Texture Sedimentary, very fine, smooth

Bedding Thinly to thickly laminated

Fractures Intensely fractured horizontally along bedding planes with some vertical fractures

Size Range of Pieces 0.01' - 0.35'

Hardness very soft to soft

Weathering Slightly weathered

Additional Comments Recovery 2.8' or 56%

Number of Pieces >4": 1

Number of Pieces total: >100

RUN # 3 Run Length 5.0' Depth Range: From 28.2' to 33.2'

RQD 2.5 (as measured) 50 % Photo(s) _____

Rock Type Shale

Color Gray

Mineralogy, Grain Size, & Texture Sedimentary very fine, smooth

Bedding Thinly to thickly laminated

Fractures Moderately fractured horizontally along bedding planes, with an occasional high angle fractured

Size Range of Pieces 0.03-0.55'

Hardness Moderately Soft

Weathering Fresh

Additional Comments Recovery: 4.5' or 90%

Number of Pieces >4": 6 Number of Pieces total: 23

7K16
NYSTA, Statrec/Fisher

Date	Boring	MP	Run	Depth	Length	RCC	%	RQD	# of Core Pieces
1-3-17	DN-B-14	278.93	1	18.0'-23.2'	5.2'	1.6	31%	0	0
1-3-17	DN-B-14	278.93	2	23.2'-28.2'	5.0'	2.8	56%	0.35	1
1-3-17	DN-B-14	278.93	3	28.2'-33.2'	5.0'	4.5	90%	2.55	6



SM 282 E 12/02

PSN _____ BORNUM FHB-15
DIVISION Syracuse
COUNTY Onondaga
PIN S52886
ROUTE Thruway Mainline
MILEPOST 278.93
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements



NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION
SUBSURFACE EXPLORATION LOG



HOLE LINE STA _____
FH-B
OFFSET _____ ft
SURF. ELEV. 421.5492, NAD 88
DEPTH TO WATER 3.0

COORDINATES (Lat) 43.092626°N (Long) 76.089574°W
DATE START 12/22/2016 DATE FINISH 12/23/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER WT OF HAMMER-CASING _____ lb HAMMER FALL-CASING _____ in
CASING O. D. _____ in I. D. _____ in WT OF HAMMER-SAMPLER 140 lb HAMMER FALL-SAMPLER 30 in
SAMPLER O. D. 2 in I. D. 1-3/8 in HAMMER TYPE Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.)				MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK
			0 6	6 12	12 18	18 24				
	0.0									-
		SS1	5	5	5	4	12.7%	6		Brown gravelly (SILTY-SAND) fill with 20 to 40% gravel, little silt, loose, massive soil structure, (SM). S - NPL
	5.0									Note: Driller noticed change at 6.0 feet, drilling became harder.
		SS2	9	18	23	24	8.8%	18		Reddish brown (SANDY-SILT) with 5 to 10% gravel, little sand, trace clay, dense, massive soil structure, (ML) tending toward (ML-CL). M - LPL
	10.0									Note: Driller noted change at 12.0 feet, drilling became very hard.
		SS3	48	50/4			13.8%	8		Reddish brown gravelly (SANDY-SILT) with 15 to 30% mostly flat sided stone fragments, little sand, trace to little clay, very dense, massive soil structure, (ML) tending toward (ML-CL). M - LPL
	15.0									
		SS4	100/5				12.7%	5		Reddish brown to gray very weathered shale stone fragments, very soft to soft.
	20.0	RUN1							2.6	Run #1: NQ-2 size diamond core barrel 18.5-23.0' Gray to reddish brown shale, very soft to soft, clay, very fine, smooth, thinly to thickly laminated, very intensely to intensely fractured from 18.5-19.5', intensely fractured from 19.5-23.0', core pieces range from (0.02-0.33') slightly weathered to fresh, driller noticed drop from 20.5 to 21.0 feet, slightly pitted.
		RUN2							2.9	Recovery: 2.6'/4.5' = 58% RQD: 0' = 0% Number of Pieces >4": 0 Number of Pieces total: >30
	25.0									Run #2: NQ-2 size diamond core barrel 23.0-28.0'

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DRILL RIG OPERATOR Andrew Kempisty
SOIL & ROCK DESCRIPTION Kyle Shearing
INSPECTOR Joe Dorety (Fisher)
BIN 5510090
STRUCTURE NAME Int. 35 Ramp/Thruway

TWY-CAN SUBSURF EXPLORATION 7K16_BIN-5510090-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17

SM 282 E 12/02

PSN _____ BORNUM FHB-15
DIVISION Syracuse
COUNTY Onondaga
PIN S52886
ROUTE Thruway Mainline
MILEPOST 278.93
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements



NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION
SUBSURFACE EXPLORATION LOG



HOLE FH-B
LINE _____
STA _____
OFFSET ft
SURF. ELEV. 421.5492, NAD 88
DEPTH TO WATER 3.0

COORDINATES (Lat) 43.092626°N (Long) 76.089574°W
DATE START 12/22/2016 DATE FINISH 12/23/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER WT OF HAMMER-CASING _____ lb HAMMER FALL-CASING _____ in
CASING O. D. _____ in I. D. _____ in WT OF HAMMER-SAMPLER 140 lb HAMMER FALL-SAMPLER 30 in
SAMPLER O. D. 2 in I. D. 1-3/8 in HAMMER TYPE Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.)				MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK
			0	6	12	18				
	25.0									Reddish brown to gray shale, very soft to soft, clay, very fine, smooth, thinly to thickly laminated, intensely fractured horizontally along bedding planes with a few near vertical fractures, core pieces range from (0.01-0.02') slightly weathered.
		RUN3							4.2	Recovery: 2.9'/5.0' = 58% RQD: 0' = 0% Number of Pieces >4": 0 Number of Pieces total: >50
	30.0									Run #3: NQ-2 size diamond core barrel 28.0-33.0' Gray shale, soft, clay, very fine, smooth, thinly to thickly laminated, moderately fractured horizontally along bedding planes, core pieces range from (0.04-1.0') core breaks appear fresh, core is slightly pitted with occasional vug.

Recovery: 4.2'/5.0' = 84%
RQD: 3.2'/50.' = 64
Number of Pieces >4": 6
Number of Pieces total: 21
BOTTOM OF HOLE AT 33.00 ft

Note:
Advanced bore hole with 4 1/4" ID x 8" OD hollow stem auger casing with 5.0-foot interval sampling to 18.5 feet. Continued below with a NQ-2 size double tubed wireline core barrel with diamond bit to end of coring at 33.0 feet. Bore hole was backfilled with cuttings to ground surface upon completion.

DATE	TIME	DEPTH (ft.)			ARTESIAN HEAD HEIGHT ABOVE GROUND	FILLED WITH WATER AT END OF DAY
		HOLE	CASING	WATER		
22-Dec-16	14:00	3.00	3.00	3.00	NO	No
22-Dec-16	16:00	18.50	18.50	9.50	NO	No
23-Dec-16	07:30	18.50	18.50	8.60	NO	No
23-Dec-16	10:15	33.00	18.50	8.60	NO	No

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DRILL RIG OPERATOR Andrew Kempisty
SOIL & ROCK DESCRIPTION Kyle Shearing
INSPECTOR Joe Dorety (Fisher)
BIN 5510090
STRUCTURE NAME Int. 35 Ramp/Thruway

CONTRACT _____ CONTRACTOR Earth Dimensions, Inc.

SHEET 2 OF 2 HOLE FH-B

7K16_BIN-5510090-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17
TWY-CAN SUBSURF EXPLORATION

APPENDIX A
ROCK CORE EVALUATION SHEET

PSN _____
PIN 5528866
BIN 5510090
Project Int. 35 Ramp/Thruway

Boring ID FHB-15
Surface Elevation _____
Depth From 18.5' to 33.0'
Number of Runs 3
Core Size NQ-2

Date Evaluated 12-23-16

Evaluator (s) Kyle Shearing

Top of Rock 18.0' (Depth) _____ (Elevation)

Top of Sound Rock 18.5' (Depth) _____ (Elevation)

Comments _____

RUN #1 Run Length 4.5

Depth Range: From 18.5' To 23.0'

RQD 0 (as measured) 0 %

Photo(s) _____

Rock Type Shale

Color Gray to reddish brown

Mineralogy, Grain Size, & Texture clay, very fine, smooth

Bedding Thinly to thickly laminated

Fractures Very intensely to intensely fractured from 18.5-19.5', intensely fractured from 19.5'-23.0'

Size Range of Pieces 0.02' - 0.33'

Hardness Very soft to soft

Weathering Slightly weathered to fresh

Additional Comments Recovery: 2.6' or 58%

Driller noted drop from 20.5' - 21.0'

Slightly pitted

Number of Pieces > 4": 0

Number of Pieces total: > 30

APPENDIX A
ROCK CORE EVALUATION SHEET (CONTINUED)

PSN _____ PIN S52886 Boring ID FHB-15

RUN # 2 Run Length 5.0 Depth Range: From 23.0' to 28.0'

RQD 0 (as measured) 0 % Photo(s) _____

Rock Type Shale

Color Reddish brown to gray

Mineralogy, Grain Size, & Texture clay, very fine, smooth

Bedding Thinly to thickly laminated

Fractures Intensely fractured horizontally along bedding planes with a few near vertical fractures

Size Range of Pieces 0.01-0.2'

Hardness Very soft to soft

Weathering Slightly weathered

Additional Comments Recovery: 2.9' or 58%

Number of Pieces >4": 0

Number of Pieces total: >50

RUN # 3 Run Length 5.0 Depth Range: From 28.0 to 33.0'

RQD 3.2 (as measured) 64 % Photo(s) _____

Rock Type Shale

Color Gray

Mineralogy, Grain Size, & Texture Clay, very fine, smooth

Bedding Thinly to thickly laminated

Fractures Moderately fractured horizontally along bedding planes

Size Range of Pieces 0.04' - 1.0'

Hardness Soft

Weathering Core breaks appear fresh

Additional Comments Recovery: 4.2' or 84% Number of Pieces >4": 6

Core is slightly pitted with occasional vug. Number of Pieces total: 21

EDI#7K16





**Compressive Properties Report
ASTM D7012**

Project: NYSTA Syr. Div.; EDI
Project No.: 17-002
Analyst: JMA
Date: 3/3/2017
Specimen Type: Rock Core, 2" Diameter, ~4" height

Borehole	Laboratory	Average	Average	Maximum	Maximum
<u>Number</u>	<u>ID No.</u>	<u>Diameter</u>	<u>Length</u>	<u>Load</u>	<u>Compressive</u>
		<u>in.</u>	<u>in.</u>	<u>lbf</u>	<u>psi</u>
FHB-13, 42.9'	17-072	1.967	4.037	19508	6420
DNB-14, 30.9'	17-073	1.966	3.989	8770.7	2889
DNB-15, 31.5'	17-074	1.970	4.004	11223	3682
FHK-16, 88.3'	17-075	1.968	4.327	3800.1	1249
FHK-17, 78.5'	17-076	1.801	3.717	5634.8	2212

Jaime M. Ciofalo

Respectfully Submitted,
3rd Rock, LLC



Water Content Test Results by ASTM D2216

Project: New York State Thruway

EDI Project No.: 7K16

Client: Earth Dimensions, Inc.

Project No: 16-008

Date: 01/04/17

Borehole No.	Sample Nos.	Depth, fbg	Lab ID No.	Natural Water Content, %
FH-B-13	S-1	3-5	16-550	12.7
	S-2	8-10	16-550	14.4
	S-3	13-15	16-550	9.9
	S-4	18-20	16-550	11.7
	S-5	23-25	16-550	13.7
	S-6	28-30	16-550	14.3
	S-7	33-33.3	16-550	19.4
FH-B-15	S-1	3-5	16-551	12.7
	S-2	8-10	16-551	8.8
	S-3	13-15	16-551	13.8
	S-4	18-18.4	16-551	12.7
FH-B-14	S-1	3-5	16-553	10.5
	S-2	8-10	16-553	12.6
	S-3	13-14.4	16-553	12.6

3rd Rock, LLC
580 Olean Road
East Aurora, NY 14052
(716)655-4933
(716)655-8638 fax

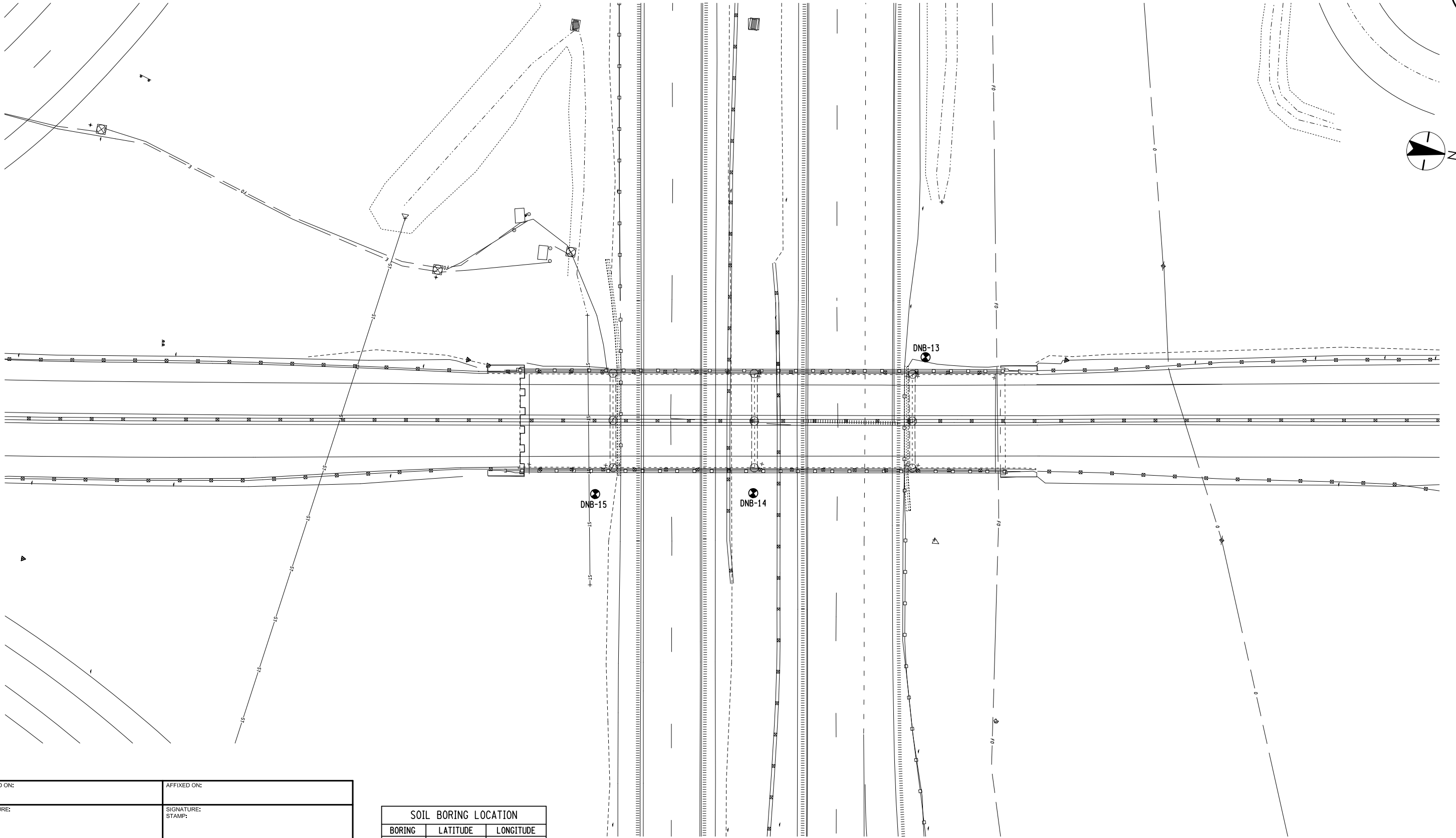
CHECKED BY: B. WALKER

DRAFTED BY: S. ROMEISER

CHECKED BY: R. CODY

DESIGNED BY: B. WALKER

DESIGN SUPERVISOR: J. HOFMANN



ALTERED ON:	AFFIXED ON:
SIGNATURE: STAMP:	SIGNATURE: STAMP:

SOIL BORING LOCATION		
BORING	LATITUDE	LONGITUDE
DNB-13	43.092974 N	-76.089867 E
DNB-14	43.092804 N	-76.089615 E
DNB-15	43.092626 N	-76.089574 E

SOIL BORING LOCATION PLAN

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE. THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.



TITLE OF PROJECT INTERCHANGE 35 RAMP OVER INTERSTATE I-90 MP 278.93 / BIN 5510090
LOCATION OF PROJECT TOWN OF DEWITT ONONDAGA COUNTY
TITLE OF DRAWING BORING LOCATION PLAN

CONTRACT NUMBER: TAB 17-XX
DATE: FEB. 2017
DRAWING NUMBER: BP-06

Appendix F Cost Estimate

U.S. CUSTOMARY UNITS **PRELIMINARY COST ESTIMATE WORKSHEET (NEW AND REPLACEMENT BRIDGES)**

P.I.N.	B.I.N.		5510090	OVER	PS&E	1/0/00	Anticipated Year of Construction	2018
BRIDGE	Exit Ramp 35				I-90			
NUMBER of SPANS:	2	SPAN ARRANGEMENT	108.25	108.25			WIDTH	53 ft
ABUTMENT TYPE	integral	SKEW	0.00	DEG	CURVED GIRDERS	no	RADIUS	0.00 ft
SUPERSTRUCTURE:	steel straight							
Alternate Design:	Timber	<input type="checkbox"/>	Inverset	<input type="checkbox"/>	Slab	<input type="checkbox"/>		
WZTC By:								
PREPARED BY:	DTC		DATE:	05/05/17				

Shoulder Break Area Calculation Data * See Shoulder Break Area Diagram for dimensions.

	0	21	122	53	10,918
	Average Skew (Degrees)	* Over Roadway Height (ft) (From Roadway to to bottom of culvert)	* Bottom Angle Length (ft) (Length of barrel for culvert)	Bridge Width (ft) (Width of opening for culvert)	* Shoulder Break Area (Square Feet)
1A.) Base:	\$130	DOT Regions 1 - 7 & 9 = \$115 steel, Multi-Span Add \$15; Regions 8 & 10 = \$173, Multi-Span Add \$27. DOT Regions 1 - 7 & 9 = \$129 adjacent concrete box, Multi-Span Add \$31; Regions 8 & 10 = \$149, Multi-Span Add \$43. DOT Regions 1 - 7 & 9 = \$165 next beam or spread box, Multi-Span Add \$31; Regions 8 & 10 = \$190, Multi-Span Add \$43. DOT Regions 1 - 7 & 9 = \$117 concrete I-beam or N.E. bulb-T, Multi-Span Add \$31; Regions 8 & 10 = \$135, Multi-Span Add \$43. RR Bridge = \$317. THIS IS NOT A BID PRICE PER SHOULDER BREAK AND SHOULD NOT BE THE SOLE FACTOR IN DETERMINING TYPE OF BRIDGE Notes: 1) Base costs are based on single span bridge designs with integral abutments with average pile lengths. 2) RR Bridge cost estimates based on a limited amount of in house data.			
1B.) Culverts & three sided structures with horizontal openings	\$0	Culvert - DOT Regions 1 - 7 & 9 = \$166 Regions 8 & 10 = \$249; 3 Sided Frame - DOT Regions 1 - 7 & 9 = \$176 Regions 8 & 10 = \$264. NO "BASE BRIDGE" COST SHOULD BE ENTERED IN SECTION 1 IF USING THESE COSTS.			
2.) Foundations:	\$10	Spread footing, add \$14. All abutment types footings on rock subtract \$20. 3 sided frame average pile length add \$3; Poor soil or pile length > 39 ft add \$17. Integral abutments average pile length add \$10; Poor soil or pile length > 39 ft add \$20. All other abutments & piers with average pile length add \$6; Poor soil or pile length > 39 ft add \$31.			
3.) Abutments:	\$0	Abutments 20 to 30 ft add \$8. MSE Walls supporting CIP stub abutments are addressed as contingencies below.			
4.) Cofferdams: Water depths based on bottom of footing to OHW elev. Divide cost on right by shoulder break ft ² &	\$0	Costs based on bridges up to 49 ft wide. Minor Water Diversion (Sand Bags) \$3500 per bridge. Abutments in 4 ft to 6 ft of water \$6,000 per unit. Substructure in 5 ft to 8 ft water \$15,000; 8 ft to 12 ft of water \$24,000 ; 12 ft to 14 ft of water \$26,000. Canal Pier Protection Cofferdam System \$145,000 per unit (Max Water Height Retained to 13 feet). Tremie Seals And Associated Forms \$200,000 per unit.			
5.) Span Adjustment:	\$20	Each foot > average span length of 66 feet add - Concrete 0.31 or Steel 0.46 \$/ Ft (Ex. 138 ft Conc. -> 72ft *0.31\$/Ft). Thru Truss add \$226. Use the span adjustment with trusses also.			
6.) Curved Girders:	\$0	1601 ft radius or less add \$16; 1601 ft to 2499 ft add \$3; 2499 ft to 3001 ft add \$3.			
7.) Long Wing Walls:	\$0	For total combined wingwall length > 60 ft calculate adjustment using the LongWingWallCosts worksheet.			
8.) Stage Construct.:	\$15	Minor wingwall \$12; WZTC On superstructure staged with sheet piling or GRES add \$15. WZTC On superstructure staged with H-Pile wall lagging add \$75. Down state multiply factor by 1.5.			
9.) Miscellaneous:	\$0	Bridge width less than 30 ft add \$50; Paint or galvanize steel girders add \$45; Paint steel trusses add \$50. Protection walls other than for staging.			
TOTAL BRIDGE COST					
\$ / ft² SB AREA =	\$175				

Shoulder Break Area (ft ²)	10,918	X Cost / ft ²	\$175	= BRIDGE ONLY COST	\$1,910,650
Contingencies:	Remove existing bridge				\$248,200
	Work Zone Traffic Control (WZTC)				Highway Estimate
	Detour structure				
	Channel work				
	Slope protection, other than for channel work				
	Utilities				
	Aesthetics (e.g. Form liners, decorative railing, lights & stone facades)				
	MSE for abutments. Specified "Plain" \$53, "As Shown" \$102 per ft ² of MSE				
	Overhead (e.g. Construction office, computer software & hardware, office supplies)				\$10,000
	Input as decimal for anticipated year of letting:				
Simple Inflation Rate For SFY:	13/14 to 14/15 - 3.0%; 14/15 to 15/16 - 3.0%; 15/16 to 16/17 - 3.0%;				0.060
	TOTAL BRIDGE SHARE (Includes additional 4 % for mobilization)				= \$ 2,390,940



Project: Interchange 35 Ramp Over Interstate I-90
 Project#: 192800033
 By: RW
 Date: 5/5/2017

ITEM	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	COST
201.06	CLEARING AND GRUBBING	LS	\$ 12,000.00	1	\$ 12,000.00
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	\$ 20.00	8,000	\$ 160,000.00
203.03	EMBANKMENT IN PLACE	CY	\$ 15.00	9,720	\$ 145,800.00
203.07	SELECT GRANULAR FILL	CY	\$ 47.00	7	\$ 329.00
304.12	SUBBASE COURSE, TYPE 2	CY	\$ 50.00	2,940	\$ 147,000.00
402.125203	12.5 F2 TOP COURSE HMA, 50 SERIES COMPACTION	TON	\$ 200.00	600	\$ 120,000.00
402.255903	25 F9 BINDER COURSE HMA, 50 SERIES COMPACTION	TON	\$ 150.00	1,500	\$ 225,000.00
402.376903	37.5 F9 BASE COURSE HMA, 60 SERIES COMPACTION	TON	\$ 125.00	2,960	\$ 370,000.00
407.0103	STRAIGHT TACK COAT	GAL	\$ 2.50	1,000	\$ 2,500.00
418.7603	ASPHALT PAVEMENT JOINT ADHESIVE	LF	\$ 1.00	5,580	\$ 5,580.00
603.541414	CORRUGATED ALUMINUM END SECTIONS, PIPE 24 INCH DIAMETER (2-2/3" X 1/2" CORRUGATION) 14 GAUGE	EA	\$ 850.00	1	\$ 850.00
603.9824	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN PIPE, 24 INCH	LF	\$ 100.00	31	\$ 3,100.00
606.1	BOX BEAM GUIDE RAILING	LF	\$ 30.00	1,385	\$ 41,550.00
606.11	BOX BEAM MEDIAN BARRIER	LF	\$ 30.00	1,820	\$ 54,600.00
606.73	REMOVE AND DISPOSING OF BOX BEAM GUIDE RAILING	LF	\$ 4.00	1,700	\$ 6,800.00
606.74	REMOVE AND DISPOSING OF BOX BEAM MEDIAN BARRIER	LF	\$ 4.00	1,925	\$ 7,700.00
610.1402	TOPSOIL - ROADSIDE	CY	\$ 66.00	503	\$ 33,198.00
610.1601	TURF ESTABLISHMENT - ROADSIDE	SY	\$ 1.00	3,020	\$ 3,020.00
654.513	REUSABLE IMPACT ATTENUATOR, TL 3, <= 2 FT OBSTRUCTION WIDTH	EA	\$ 32,000.00	2	\$ 64,000.00
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	\$ 1.00	5,200	\$ 5,200.00
685.12	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	\$ 1.00	2,350	\$ 2,350.00
698.04	ASPHALT PRICE ADJUSTMENT	DC	\$ 1.00	2,400	\$ 2,400.00
698.05	FUEL PRICE ADJUSTMENT	DC	\$ 1.00	400	\$ 400.00
698.06	STEEL / IRON PRICE ADJUSTMENT	DC	\$ 1.00	100	\$ 100.00
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	\$ 56,539.08	1	\$ 56,539.08
625.01	SURVEY OPERATIONS	LS	\$ 24,735.85	1	\$ 24,735.85
637.12	ENGINEER'S FIELD OFFICE - TYPE 2	MO	\$ 2,500.00	12	\$ 30,000.00
637.34	OFFICE TECHNOLOGY AND SUPPLIES	DC	\$ 1.00	2,000	\$ 2,000.00
SUBTOTAL					\$ 1,526,751.93



Project: Interchange 35 Ramp over Interstate I-90

Project #: 192800033

By: DC

Date: 5/5/17

ITEM	DESCRIPTION	UNIT	QTY	PRICE	TOTAL
402.125203	12.5 TOP COURSE HMA, 50 SERIES COMPACTION	TON	141	\$95.00	\$13,395.00
490.10	PRODUCTION COLD MILLING OF BITUMINOUS CONCRETE	SY	1,735	\$5.00	\$8,675.00
555.09	CONCRETE FOR STRUCTURES, CLASS HP	CY	122	\$1,065.00	\$129,930.00
555.0105	CONCRETE FOR STRUCTURES, CLASS A	CY	20	\$860.00	\$17,200.00
556.0203	GALVANIZED BAR REINFORCEMENT FOR CONCRETE STRUCTURES	LB	2,440	\$1.60	\$3,904.00
564.0501	STRUCTURAL STEEL TYPE 1	LS	1	\$199,000.00	\$199,000.00
565.2022	TYPE E.B. FIXED BEARINGS (56 TO 111K)	EA	24	\$1,475.00	\$35,400.00
565.2032	TYPE E.B. EXPANSION BEARINGS (56 TO 111K)	EA	24	\$1,650.00	\$39,600.00
567.60000015	REMOVAL OF EXISTING STEEL JOINT SYSTEMS	LF	129	\$75.00	\$9,675.00
567.60	ARMORLESS BRIDGE JOINT SYSTEM	LF	129	\$181.00	\$23,349.00
570.01	LEAD EXPOSURE CONTROL PLAN	LS	1	\$5,000.00	\$5,000.00
570.02	MEDICAL TESTING	DC	1	\$500.00	\$500.00
570.03	PERSONAL EXPOSURE MONITORING SAMPLE ANALYSIS	DC	1	\$500.00	\$500.00
570.04	DECONTAMINATION FACILITIES	CW	10	\$200.00	\$2,000.00
570.150001	CLASS A CONTAINMENT FOR PAINT REMOVAL	LS	1	\$57,332.00	\$57,332.00
571.03	DISPOSAL OF HAZARDOUS PAINT REMOVAL WASTE CONTAINING LEAD	LB	3,583	\$0.50	\$1,791.65
573.01NNNN	STRUCTURAL STEEL PAINTING FIELD APPLIED - TOTAL REMOVAL	LS	1	\$243,661.00	\$243,661.00
580.01	REMOVAL OF STRUCTURAL CONCRETE	CY	122	\$1,800.00	\$219,600.00
582.06	REMOVAL OF STRCUTURAL CONCRETE - REPLACEMENT WITH CLASS D CONCRETE	SF	2,800	\$140.00	\$392,000.00
582.07	REMOVAL OF STRUCTURAL CONCRETE - REPLACEMENT WITH VERTICAL AND OVERHEAD PATCHING MATERIAL	SF	1,200	\$295.00	\$354,000.00
	STEEL GIRDER END REPAIRS	EA	24	\$12,000.00	\$288,000.00
			Subtotal		\$2,044,512.65
699.040001	MOBILIZATION	LS	1	\$81,780.51	\$81,780.51
	INFLATION - 6%	LS	1	\$122,670.76	\$122,670.76

TOTAL BRIDGE REHAB (rounded)	\$2,249,000.00
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